

ArcGIS Pro 3.5 Geographic and Vertical Transformation Tables

Note: Some numbers have been rounded for display. Area of use values are in degrees based upon WGS 1984. Transformation accuracies are approximate.

Table of Contents

Table 1: Geographic (datum) transformations: well-known IDs, accuracies and areas of use	1
Table 2: Geographic (datum) transformations: Longitude rotation, Null, and unit change methods.....	79
Table 3: Geographic (datum) transformations: Geographic 2D offset method	80
Table 4: Geographic (datum) transformations: Geocentric translation method	80
Table 5: Geographic (datum) transformations: Coordinate frame (CF) and position vector (PV) methods	105
Table 6: Geographic (datum) transformations: Molodensky-Badekas method	118
Table 7: Geographic (datum) transformations: HARN, NADCON, and NTV2 methods.....	122
Table 8: Geographic transformation methods: well-known IDs.....	130
Table 9: Geographic transformation methods: parameters.....	131
Table 10: Vertical transformations: well-known IDs, accuracies, and areas of use.....	133
Table 11: Vertical transformations: Vertical offset method	150
Table 12: Vertical transformations: Vertical offset and slope method	151
Table 13: Vertical transformations: file-based methods	153
Table 14: Vertical transformation methods.....	164
Table 15: Vertical transformations: parameters.....	164

Table 1: Geographic (datum) transformations: well-known IDs, accuracies and areas of use

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Abidjan_1987_To_WGS_1984	1470	2.000	Cote d'Ivoire (Ivory Coast)	1.0200	-8.6100	10.7400	-2.4800

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Abidjan_1987_To_WGS_1984_2	6872	2.000	Cote d'Ivoire (Ivory Coast) - offshore	1.0200	-7.5500	5.1900	-3.1100
Accra_To_WGS_1972_BE	1570	25.000	Ghana - offshore	1.4000	-3.7900	6.0600	2.1000
Accra_To_WGS_1984	1569	25.000	Ghana	1.4000	-3.7900	11.1600	2.1000
Accra_To_WGS_1984_3	15495	25.000	Ghana - offshore	1.4000	-3.7900	6.0600	2.1000
Accra_To_WGS_1984_4	6896	6.000	Ghana - onshore	4.6700	-3.2500	11.1600	1.2300
Aden_1925_To_WGS_1984_1	6910	Unknown	Yemen - South Yemen - mainland	12.5400	43.3700	19.0000	53.1400
Adindan_To_WGS_1984_1	1100	9.000	Africa - Eritrea, Ethiopia, South Sudan and Sudan	3.4000	21.8200	22.2400	47.9900
Adindan_To_WGS_1984_2	1101	44.000	Burkina Faso	9.3900	-5.5300	15.0900	2.4000
Adindan_To_WGS_1984_3	1102	44.000	Cameroon - onshore	1.6500	8.4500	13.0900	16.2100
Adindan_To_WGS_1984_4	1103	6.000	Ethiopia	3.4000	32.9900	14.8900	47.9900
Adindan_To_WGS_1984_5	1104	44.000	Mali	10.1400	-12.2500	25.0100	4.2600
Adindan_To_WGS_1984_6	1105	44.000	Senegal - onshore	12.2900	-17.5900	16.7000	-11.3600
Adindan_To_WGS_1984_7	1106	7.000	Africa - South Sudan and Sudan onshore	3.4900	21.8200	22.2400	38.6600
Afgooye_To_WGS_1984	1107	44.000	Somalia - onshore	-1.7100	40.9800	12.0300	51.4700
AGD_1966_To_GDA_1994	1278	5.000	Australia - onshore	-43.7000	112.8500	-9.8600	153.6900
AGD_1966_To_GDA_1994_10_NTv2_New_South_Wales_and_Victoria	1596	0.100	Australia - SE Australia (ACT NSW Vic)	-39.2000	140.9600	-28.1500	153.6900
AGD_1966_To_GDA_1994_11_NTv2	1803	0.500	Australia - onshore	-43.7000	112.8500	-9.8600	153.6900
AGD_1966_To_GDA_1994_12	15979	3.000	Australia - offshore	-47.2000	109.2300	-8.8800	163.2000
AGD_1966_To_GDA_1994_19	5827	0.500	Australia - Australian Capital Territory	-35.9300	148.7600	-35.1200	149.4000
AGD_1966_To_GDA_1994_2	1458	1.000	Australia - Australian Capital Territory	-35.9300	148.7600	-35.1200	149.4000
AGD_1966_To_GDA_1994_3	1459	1.000	Australia - Tasmania	-43.7000	143.7700	-39.5200	148.5500
AGD_1966_To_GDA_1994_4	1460	1.000	Australia - New South Wales and Victoria	-39.2000	140.9600	-28.1500	153.6900
AGD_1966_To_GDA_1994_8	1594	1.000	Australia - Tasmania	-43.7000	143.7700	-39.5200	148.5500
AGD_1966_To_GDA_1994_9	1595	1.000	Australia - Northern Territory	-26.0100	128.9900	-10.8600	138.0000
AGD_1966_To_GDA_1994_NTv2_Northern_Territory	1507	0.100	Australia - Northern Territory	-26.0100	128.9900	-10.8600	138.0000
AGD_1966_To_GDA_1994_NTv2_Tasmania	1506	0.100	Australia - Tasmania	-43.7000	143.7700	-39.5200	148.5500

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
AGD_1966_To_GDA_1994_NTV2_Victoria	1464	0.100	Australia - Victoria	-39.2000	140.9600	-33.9800	150.0400
AGD_1966_To_GDA2020_1	9185	0.050	Australia - Australian Capital Territory	-35.9300	148.7600	-35.1200	149.4000
AGD_1966_To_PNG_1994_1	5662	2.000	Papua New Guinea - PFTB	-8.2800	142.2400	-5.5900	144.7500
AGD_1966_To_PNG_1994_2	6937	1.000	Papua New Guinea - mainland onshore	-10.7600	140.8500	-2.5300	150.9600
AGD_1966_To_PNG_1994_3	6938	4.000	Papua New Guinea - mainland onshore	-10.7600	140.8500	-2.5300	150.9600
AGD_1966_To_PNG_1994_4	6939	1.000	Papua New Guinea - PFTB	-8.2800	142.2400	-5.5900	144.7500
AGD_1966_To_PNG_1994_5	6940	2.000	Papua New Guinea - PFTB	-8.2800	142.2400	-5.5900	144.7500
AGD_1966_To_PNG_1994_6	6941	0.500	Papua New Guinea - North Fly	-6.6000	140.8900	-5.0500	141.5400
AGD_1966_To_PNG_1994_7	6942	2.500	Papua New Guinea - North Fly	-6.6000	140.8900	-5.0500	141.5400
AGD_1966_To_WGS_1984	1108	6.000	Australia - onshore	-43.7000	112.8500	-9.8600	153.6900
AGD_1966_To_WGS_1984_12	1665	3.000	Australia - Australian Capital Territory	-35.9300	148.7600	-35.1200	149.4000
AGD_1966_To_WGS_1984_13	1666	3.000	Australia - New South Wales and Victoria	-39.2000	140.9600	-28.1500	153.6900
AGD_1966_To_WGS_1984_14	1667	3.000	Australia - Tasmania	-43.7000	143.7700	-39.5200	148.5500
AGD_1966_To_WGS_1984_15	1668	3.000	Australia - Northern Territory	-26.0100	128.9900	-10.8600	138.0000
AGD_1966_To_WGS_1984_16	15788	5.000	Australia - onshore	-43.7000	112.8500	-9.8600	153.6900
AGD_1966_To_WGS_1984_17_NTV2	15786	2.900	Australia - onshore	-43.7000	112.8500	-9.8600	153.6900
AGD_1966_To_WGS_1984_18	15980	3.000	Australia - offshore	-47.2000	109.2300	-8.8800	163.2000
AGD_1966_To_WGS_1984_19	5841	2.000	Papua New Guinea - PFTB	-8.2800	142.2400	-5.5900	144.7500
AGD_1966_To_WGS_1984_21	6943	5.000	Papua New Guinea - mainland onshore	-10.7600	140.8500	-2.5300	150.9600
AGD_1966_To_WGS_1984_22	6944	4.000	Papua New Guinea - PFTB	-8.2800	142.2400	-5.5900	144.7500

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
AGD_1966_To_WGS_1984_23	6945	4.000	Papua New Guinea - North Fly	-6.6000	140.8900	-5.0500	141.5400
AGD_1984_To_GDA_1994	1279	5.000	Australia – AGD84	-38.5300	109.2300	-9.3700	153.6100
AGD_1984_To_GDA_1994_2	1280	1.000	Australia - AGD84	-38.5300	109.2300	-9.3700	153.6100
AGD_1984_To_GDA_1994_3	1559	Unknown	Australia - Western Australia	-35.1900	112.8500	-13.6700	129.0100
AGD_1984_To_GDA_1994_4_NTV2_Western_Australia	1593	0.100	Australia - Western Australia	-35.1900	112.8500	-13.6700	129.0100
AGD_1984_To_GDA_1994_5_NTV2	1804	0.100	Australia - AGD84	-38.5300	109.2300	-9.3700	153.6100
AGD_1984_To_GDA_1994_NTV2_Queensland	108453	0.1	Australia - Queensland mainland	-29.1900	137.9900	-10.6500	153.6100
AGD_1984_To_WGS_1984_1	1109	4.000	Australia - AGD84	-38.5300	109.2300	-9.3700	153.6100
AGD_1984_To_WGS_1984_2	1236	5.000	Australia - AGD84	-38.5300	109.2300	-9.3700	153.6100
AGD_1984_To_WGS_1984_7	1669	3.000	Australia - AGD84	-38.5300	109.2300	-9.3700	153.6100
AGD_1984_To_WGS_1984_8	15789	5.000	Australia - AGD84	-38.5300	109.2300	-9.3700	153.6100
AGD_1984_To_WGS_1984_9_NTV2	15785	2.900	Australia - AGD84	-38.5300	109.2300	-9.3700	153.6100
AGD66_To_WGS_1984_20	6905	9.000	Australia - onshore	-43.7000	112.8500	-9.8600	153.6900
Ain_el_Abd_1970_To_MTRF-2000_1	8824	5.000	Saudi Arabia - onshore	16.3700	34.5100	32.1600	55.6700
Ain_el_Abd_To_KSA-GRF17_1	9362	2.000	Saudi Arabia - onshore	16.3700	34.5100	32.1600	55.6700
Ain_El_Abd_To_WGS_1984_1	1110	44.000	Bahrain - onshore	25.5300	50.3900	26.3400	50.8500
Ain_El_Abd_To_WGS_1984_2	1111	18.000	Saudi Arabia - onshore	16.3700	34.5100	32.1600	55.6700
Ain_el_Abd_To_WGS_1984_3	1055	1.000	Kuwait - onshore	28.5300	46.5400	30.0900	48.4800
Ain_El_Abd_To_WGS_1984_4	1056	1.000	Kuwait - onshore	28.5300	46.5400	30.0900	48.4800
Ain_El_Abd_To_WGS_1984_5	1057	1.000	Kuwait - north of 29.25°N	29.1000	46.5400	30.0900	48.4200
Ain_El_Abd_To_WGS_1984_6	1058	1.000	Kuwait - south of 29.25°N	28.5300	46.5400	29.4500	48.4800
Albanian_1987_To_ETRS_1989_1	7833	0.200	Albania - onshore	39.6400	19.2200	42.6700	21.0600
Albanian_1987_To_WGS_1984_1	7834	0.200	Albania - onshore	39.6400	19.2200	42.6700	21.0600
American_Samoa_1962_To_NAD_1983_HARN_3	8662	5.000	American Samoa - 2 main island groups	-14.4300	-170.8800	-14.1100	-169.3800
American_Samoa_1962_To_WGS_1984	1577	44.000	American Samoa - 2 main island groups	-14.4300	-170.8800	-14.1100	-169.3800
American_Samoa_1962_To_WGS_1984_2	1694	5.000	American Samoa - Tutuila island	-14.4300	-170.8800	-14.2000	-170.5100
American_Samoa_1962_To_WGS_1984_3	1695	5.000	American Samoa - Ofu, Olesega and Ta'u islands	-14.3100	-169.7300	-14.1100	-169.3800
Amersfoort_To_ETRS_1989	1751	0.600	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Amersfoort_To_ETRS_1989_3	15739	0.600	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_ETRS_1989_4	15740	0.550	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_ETRS_1989_5	4830	0.600	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_ETRS_1989_6	4831	0.500	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_ETRS_1989_8	9281	0.250	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_ETRS_1989_9	9282	0.000	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_ETRS_1989_MB	1066	0.600	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_ETRS_1989_NTV2	7000	0.100	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_WGS_1984	1112	1.100	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_WGS_1984_2	1672	1.100	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_WGS_1984_2008_MB	108457	0.500	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_WGS_1984_3	15934	1.050	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_WGS_1984_4	4833	0.600	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_WGS_1984_4X	108237	0.750	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Amersfoort_To_WGS_1984_NTV2	108042	0.200	Netherlands - onshore	50.7500	3.2000	53.7000	7.2200
Ammassalik_1958_To_Greenland_1996_1	15900	1.000	Greenland - Ammassalik area	65.5200	-38.8600	65.9100	-36.8100
Ammassalik_1958_To_WGS_1984_1	1800	1.000	Greenland - Ammassalik area	65.5200	-38.8600	65.9100	-36.8100
Anguilla_1957_To_WGS_1984_1	1447	10.000	Anguilla - onshore	18.1100	-63.2200	18.3300	-62.9200
Anna_1_1965_To_WGS_1984	15794	44.000	Cocos (Keeling) Islands - onshore	-12.2700	96.7600	-11.7600	96.9900
Antigua_1943_To_WGS_1984	1441	10.000	Antigua - onshore	16.9400	-61.9500	17.2200	-61.6100
Antigua_1943_To_WGS_1984_NGA	15811	44.000	Antigua - onshore	16.9400	-61.9500	17.2200	-61.6100
Aratu_To_SIRGAS_2000_1	5050	0.500	Brazil - Santos and Pelotas	-35.7100	-53.3800	-22.6600	-40.2000
Aratu_To_SIRGAS_2000_2	5052	0.500	Brazil - Campos	-25.9100	-42.0400	-20.4500	-37.1100
Aratu_To_SIRGAS_2000_3	5054	0.500	Brazil - Espirito Santo and Mucuri	-22.0400	-40.3700	-17.5900	-35.1800
Aratu_To_SIRGAS_2000_4	5056	0.500	Brazil - Cumuruxatiba, Jequitinhonha and Camamu-Almada	-17.7000	-39.2200	-13.0100	-34.6000
Aratu_To_SIRGAS_2000_5	5058	0.500	Brazil - Reconcavo and Jacuipe	-13.5700	-39.0900	-11.1800	-35.3100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Aratu_To_SIRGAS_2000_6	5060	0.500	Brazil - Tucano and Jatoba	-12.2700	-39.1400	-8.3900	-37.0900
Aratu_To_SIRGAS_2000_7	5062	0.500	Brazil - Sergipe and Alagoas	-13.5800	-37.3400	-8.7300	-32.0100
Aratu_To_SIRGAS_2000_8	5064	0.500	Brazil - Paraiba-Pernambuco	-10.1700	-35.1000	-4.6000	-29.1300
Aratu_To_SIRGAS_2000_9	5066	0.500	Brazil - Potiguar, Ceara and Barreirinhas	-6.5000	-44.7900	4.2600	-26.0000
Aratu_To_WGS_1984_1	15754	Unknown	Brazil - Campos; Espirito Santo and Santos basins	-28.4100	-48.8000	-17.5900	-35.1800
Aratu_To_WGS_1984_10	15710	5.000	Brazil - Campos	-25.9100	-42.0400	-20.4500	-37.1100
Aratu_To_WGS_1984_11	15711	5.000	Brazil - Santos	-28.4100	-48.8000	-22.6600	-40.2000
Aratu_To_WGS_1984_12	15712	5.000	Brazil - Espirito Santo and Mucuri	-22.0400	-40.3700	-17.5900	-35.1800
Aratu_To_WGS_1984_13	5051	1.000	Brazil - Santos and Pelotas	-35.7100	-53.3800	-22.6600	-40.2000
Aratu_To_WGS_1984_14	5053	1.000	Brazil - Campos	-25.9100	-42.0400	-20.4500	-37.1100
Aratu_To_WGS_1984_15	5055	1.000	Brazil - Espirito Santo and Mucuri	-22.0400	-40.3700	-17.5900	-35.1800
Aratu_To_WGS_1984_16	5057	1.000	Brazil - Cumuruxatiba, Jequitinhonha and Camamu-Almada	-17.7000	-39.2200	-13.0100	-34.6000
Aratu_To_WGS_1984_17	5059	1.000	Brazil - Reconcavo and Jacuipe	-13.5700	-39.0900	-11.1800	-35.3100
Aratu_To_WGS_1984_18	5061	1.000	Brazil - Tucano and Jatoba	-12.2700	-39.1400	-8.3900	-37.0900
Aratu_To_WGS_1984_19	5063	1.000	Brazil - Sergipe and Alagoas	-13.5800	-37.3400	-8.7300	-32.0100
Aratu_To_WGS_1984_2	1550	5.000	Brazil - Tucano basin north	-9.8000	-39.0400	-8.3900	-37.0900
Aratu_To_WGS_1984_20	5065	1.000	Brazil - Paraiba-Pernambuco	-10.1700	-35.1000	-4.6000	-29.1300
Aratu_To_WGS_1984_21	5067	1.000	Brazil - Potiguar, Ceara and Barreirinhas	-6.5000	-44.7900	4.2600	-26.0000
Aratu_To_WGS_1984_3	1551	5.000	Brazil - Tucano basin central	-10.6100	-39.1400	-9.7900	-37.9900

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Aratu_To_WGS_1984_4	1552	5.000	Brazil - Tucano basin south	-12.2700	-39.0700	-10.6000	-37.9800
Aratu_To_WGS_1984_5	10089	7.000	Brazil - Santos	-28.4100	-48.8000	-22.6600	-40.2000
Aratu_To_WGS_1984_6	10090	7.000	Brazil - Campos	-25.9100	-42.0400	-20.4500	-37.1100
Aratu_To_WGS_1984_7	10091	7.000	Brazil - Espirito Santo and Mucuri	-22.0400	-40.3700	-17.5900	-35.1800
Aratu_To_WGS_1984_8	10092	7.000	Brazil - Pelotas	-35.7100	-53.3800	-28.1100	-44.7100
Aratu_To_WGS_1984_9	10093	15.000	Brazil - offshore 18°S to 34°S	-34.0000	-53.3800	-18.0000	-35.1900
Arc_1950_To_WGS_1984_1	1113	44.000	Africa - Botswana, Eswatini, Lesotho, Malawi, Zambia, Zimbabwe	-30.6600	19.9900	-8.1900	35.9300
Arc_1950_To_WGS_1984_10	6906	17.000	Zimbabwe	-22.4200	25.2300	-15.6100	33.0800
Arc_1950_To_WGS_1984_11	6904	29.000	Malawi	-17.1400	32.6800	-9.3700	35.9300
Arc_1950_To_WGS_1984_2	1114	7.000	Botswana	-26.8800	19.9900	-17.7800	29.3800
Arc_1950_To_WGS_1984_4	1116	10.000	Lesotho	-30.6600	27.0100	-28.5700	29.4600
Arc_1950_To_WGS_1984_5	1117	27.000	Malawi	-17.1400	32.6800	-9.3700	35.9300
Arc_1950_To_WGS_1984_6	1118	26.000	Eswatini	-27.3200	30.7900	-25.7200	32.1400
Arc_1950_To_WGS_1984_8	1120	41.000	Zambia	-18.0800	21.9900	-8.1900	33.7100
Arc_1950_To_WGS_1984_9	1121	15.000	Zimbabwe	-22.4200	25.2300	-15.6100	33.0800
Arc_1960_To_WGS_1984	1122	35.000	Africa - Kenya and Tanzania	-11.7500	29.3400	4.6300	41.9100
Arc_1960_To_WGS_1984_2	1284	6.000	Kenya - onshore	-4.7200	33.9000	4.6300	41.9100
Arc_1960_To_WGS_1984_3	1285	15.000	Tanzania - onshore	-11.7500	29.3400	-0.9900	40.4800
Arc_1960_To_WGS_1984_4	3998	35.000	Burundi	-4.4500	28.9800	-2.3000	30.8600
Ascension_Island_1958_To_WGS_1984	15797	44.000	St Helena - Ascension Island	-8.0300	-14.4600	-7.8300	-14.2400
Astro_DOS_71-4_To_SHGD2015_1	7893	0.150	St Helena - St Helena Island	-16.0800	-5.8500	-15.8500	-5.5900
Astro_DOS_71-4_To_SHGD2015_2	7895	0.100	St Helena - St Helena Island	-16.0800	-5.8500	-15.8500	-5.5900
Astro_DOS_71-4_To_WGS_1984_2	7894	1.000	St Helena - St Helena Island	-16.0800	-5.8500	-15.8500	-5.5900

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Astro_1952_To_WGS_1984	15799	44.000	Japan - Minamitori-shima (Marcus Island) - onshore	24.2200	153.9100	24.3500	154.0500
ATRF_2014_To_GDA2020_Null	108442	0.005	Australia - GDA	-60.5500	93.4100	-8.4700	173.3400
ATS_1977_To_NAD_1983_1_Nova_Scotia	9105	0.500	Canada - Nova Scotia	43.4100	-66.2800	47.0800	-59.7300
ATS_1977_To_NAD_1983_CSRS_2_NTv2_Prince_Edward_Is	1846	1.500	Canada - Prince Edward Island	45.9000	-64.4900	47.0900	-61.9000
ATS_1977_To_NAD_1983_CSRS_NTv2_Maritimes	108302	Unknown	Canada - Maritime Provinces	43.4100	-69.0500	48.0700	-59.7300
ATS_1977_To_NAD_1983_CSRS_NTv2_New_Brunswick	1841	1.500	Canada - New Brunswick	44.5600	-69.0500	48.0700	-63.7000
ATS_1977_To_NAD_1983_CSRS_NTv2_Nova_Scotia	1850	1.500	Canada - Nova Scotia	43.4100	-66.2800	47.0800	-59.7300
ATS_1977_To_NAD_1983_CSRS_v2_1	9237	1.500	Canada - New Brunswick	44.5600	-69.0500	48.0700	-63.7000
ATS_1977_To_NAD_1983_CSRS_v2_2	9236	1.500	Canada - Prince Edward Island	45.9000	-64.4900	47.0900	-61.9000
ATS_1977_To_NAD_1983_CSRS_v3_3	9235	1.500	Canada - Nova Scotia	43.4100	-66.2800	47.0800	-59.7300
ATS_1977_To_NAD_1983_CSRS_v6_4_Nova_Scotia	9106	0.060	Canada - Nova Scotia	43.4100	-66.2800	47.0800	-59.7300
ATS_1977_To_WGS_1984_1	1688	1.000	Canada - New Brunswick	44.5600	-69.0500	48.0700	-63.7000
ATS_1977_To_WGS_1984_2	1689	1.000	Canada - Prince Edward Island	45.9000	-64.4900	47.0900	-61.9000
ATS_1977_To_WGS_1984_3	1851	1.000	Canada - Nova Scotia	43.4100	-66.2800	47.0800	-59.7300
Australian_Antarctic_1998_To_WGS_1984_1	1890	1.000	Antarctica - Australian sector	-90.0000	45.0000	-60.0000	160.0000
Ayabelle_Lighthouse_To_WGS_1984_2	6907	17.000	Djibouti - onshore	10.9400	41.7500	12.7200	43.4800
Ayabelle_To_WGS_1984	15800	44.000	Djibouti	10.9400	41.7500	12.7200	44.1500
Azores_Central_1948_To_WGS_1984_1	1886	6.000	Portugal - Azores C - onshore	38.3200	-28.9000	39.1400	-26.9700
Azores_Central_1995_To_PTRA08_1	5027	2.000	Portugal - Azores C - onshore	38.3200	-28.9000	39.1400	-26.9700
Azores_Central_1995_To_PTRA08_2	5028	0.500	Portugal - Azores C - Faial onshore	38.4600	-28.9000	38.7000	-28.5400
Azores_Central_1995_To_PTRA08_3	5029	0.200	Portugal - Azores C - Graciosa onshore	38.9700	-28.1300	39.1400	-27.8800
Azores_Central_1995_To_PTRA08_4	5030	1.000	Portugal - Azores C - Pico onshore	38.3200	-28.6100	38.6100	-27.9800
Azores_Central_1995_To_PTRA08_5	5031	0.800	Portugal - Azores C - S Jorge onshore	38.4800	-28.3700	38.8000	-27.7100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Azores_Central_1995_To_PTRA08_6	5032	0.600	Portugal - Azores C - Terceira onshore	38.5700	-27.4400	38.8600	-26.9700
Azores_Central_1995_To_WGS_1984_10	1980	5.000	Portugal - Azores C - onshore	38.3200	-28.9000	39.1400	-26.9700
Azores_Central_1995_To_WGS_1984_11	1981	1.000	Portugal - Azores C - onshore	38.3200	-28.9000	39.1400	-26.9700
Azores_Central_1995_To_WGS_1984_2	1972	5.000	Portugal - Azores C - Terceira onshore	38.5700	-27.4400	38.8600	-26.9700
Azores_Central_1995_To_WGS_1984_3	1973	1.000	Portugal - Azores C - Terceira onshore	38.5700	-27.4400	38.8600	-26.9700
Azores_Central_1995_To_WGS_1984_4	1974	5.000	Portugal - Azores C - Faial onshore	38.4600	-28.9000	38.7000	-28.5400
Azores_Central_1995_To_WGS_1984_5	1975	1.000	Portugal - Azores C - Faial onshore	38.4600	-28.9000	38.7000	-28.5400
Azores_Central_1995_To_WGS_1984_6	1976	5.000	Portugal - Azores C - Pico onshore	38.3200	-28.6100	38.6100	-27.9800
Azores_Central_1995_To_WGS_1984_7	1977	1.000	Portugal - Azores C - Pico onshore	38.3200	-28.6100	38.6100	-27.9800
Azores_Central_1995_To_WGS_1984_8	1978	5.000	Portugal - Azores C - S Jorge onshore	38.4800	-28.3700	38.8000	-27.7100
Azores_Central_1995_To_WGS_1984_9	1979	1.000	Portugal - Azores C - S Jorge onshore	38.4800	-28.3700	38.8000	-27.7100
Azores_Occidental_1939_To_PTRA08_1	5033	0.500	Portugal - Azores W - onshore	39.3000	-31.3400	39.7700	-31.0200
Azores_Occidental_1939_To_PTRA08_2	5034	0.200	Portugal - Azores W - Flores onshore	39.3000	-31.3400	39.5800	-31.0700
Azores_Occidental_1939_To_PTRA08_3	5035	0.300	Portugal - Azores W - Corvo onshore	39.6300	-31.1800	39.7700	-31.0200
Azores_Occidental_1939_To_WGS_1984_1	1887	35.000	Portugal - Azores W - onshore	39.3000	-31.3400	39.7700	-31.0200
Azores_Occidental_1939_To_WGS_1984_2	1982	5.000	Portugal - Azores W - onshore	39.3000	-31.3400	39.7700	-31.0200
Azores_Oriental_1940_To_WGS_1984_1	1885	44.000	Portugal - Azores E - onshore	36.8700	-25.9200	37.9600	-24.7200

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Azores_Oriental_1995_To_PTRA08_1	5024	2.000	Portugal - Azores E - onshore	36.8700	-25.9200	37.9600	-24.7200
Azores_Oriental_1995_To_PTRA08_2	5025	0.300	Portugal - Azores E - S Miguel onshore	37.6500	-25.9200	37.9600	-25.0800
Azores_Oriental_1995_To_PTRA08_3	5026	0.100	Portugal - Azores E - Santa Maria onshore	36.8700	-25.2600	37.0800	-24.9600
Azores_Oriental_1995_To_WGS_1984_2	1968	5.000	Portugal - Azores E - S Miguel onshore	37.6500	-25.9200	37.9600	-25.0800
Azores_Oriental_1995_To_WGS_1984_3	1969	1.000	Portugal - Azores E - S Miguel onshore	37.6500	-25.9200	37.9600	-25.0800
Azores_Oriental_1995_To_WGS_1984_4	1970	5.000	Portugal - Azores E - onshore	36.8700	-25.9200	37.9600	-24.7200
Azores_Oriental_1995_To_WGS_1984_5	1971	1.000	Portugal - Azores E - onshore	36.8700	-25.9200	37.9600	-24.7200
Bab_South_To_WGS_1984	108448	Unknown	Palau	1.6400	129.4800	11.4500	136.9800
Barbados_1938_To_WGS_1984_1	15793	3.000	Barbados - onshore	13.0000	-59.7100	13.3900	-59.3700
Barbados_1938_To_WGS_1984_2X	108376	0.150	Barbados - onshore	13.0000	-59.7100	13.3900	-59.3700
Batavia_Jakarta_To_Batavia	1759	0.000	Indonesia - Bali, Java and western Sumatra onshore	-8.9100	95.1600	5.9700	115.7700
Batavia_to_WGS_1984_1	8452	6.000	Indonesia - Bali, Java and western Sumatra onshore	-8.9100	95.1600	5.9700	115.7700
Batavia_To_WGS_1984_2	1813	5.000	Indonesia - Java Sea - offshore northwest Java	-6.8900	105.7700	-4.0700	110.0100
Batavia_To_WGS_1984_3	1814	5.000	Indonesia - Bali Sea west	-8.4600	112.8000	-6.8000	117.0100
BBT2000_to_WGS_1984_1	10478	1.000	Europe - Brenner	46.4500	11.0400	47.3300	11.9100
Beacon_E_1945_To_WGS_1984	15796	44.000	Japan - Iwo Jima	24.6700	141.2000	24.8900	141.4200
Beduaram_To_WGS_1972_BE_1	1839	15.000	Niger - southeast	12.8000	7.8100	16.7000	14.9000
Beduaram_To_WGS_1984_2	15849	15.000	Niger - southeast	12.8000	7.8100	16.7000	14.9000
Beijing_1954_To_WGS_1984_1	15918	1.000	China - Ordos basin	35.0000	107.0000	39.0000	110.0100
Beijing_1954_To_WGS_1984_2	15919	15.000	China - offshore - Yellow Sea	31.2300	119.2300	37.4000	125.0600
Beijing_1954_To_WGS_1984_3	15920	15.000	China - offshore - Pearl River basin	18.3100	110.1300	22.8900	116.7600

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Beijing_1954_To_WGS_1984_4	15921	1.000	China - Tarim - 77.5°E to 88°E and 37°N to 42°N	37.0000	77.4500	41.9900	88.0000
Beijing_1954_To_WGS_1984_5	15935	10.000	China - offshore - Bei Bu	17.8100	107.1500	21.6900	110.1700
Beijing_1954_To_WGS_1984_6	15936	1.000	China - Ordos basin	35.0000	107.0000	39.0000	110.0100
Bekaa_Valley_1920_To_WGS_1984_1	6911	Unknown	Lebanon - onshore	33.0600	35.0400	34.6500	36.6300
Belge_1950_Brussels_To_Belge_1950	1264	0.000	Belgium - onshore	49.5000	2.5000	51.5100	6.4000
Belge_1972_To_ETRS_1989_1	1652	1.000	Belgium - onshore	49.5000	2.5000	51.5100	6.4000
Belge_1972_To_ETRS_1989_2	15928	0.200	Belgium - onshore	49.5000	2.5000	51.5100	6.4000
Belge_1972_To_ETRS_1989_3	8369	0.010	Belgium - onshore	49.5000	2.5000	51.5100	6.4000
Belge_1972_To_WGS_1984_1	1609	1.000	Belgium - onshore	49.5000	2.5000	51.5100	6.4000
Belge_1972_To_WGS_1984_2	1610	5.000	Belgium - onshore	49.5000	2.5000	51.5100	6.4000
Belge_1972_To_WGS_1984_3	15929	0.200	Belgium - onshore	49.5000	2.5000	51.5100	6.4000
Bellevue_IGN_To_WGS_1984	15801	35.000	Vanuatu - southern islands	-20.3100	168.0900	-17.3700	169.9500
Bermuda_1957_To_Bermuda_2000_1	15969	1.000	Bermuda - onshore	32.2100	-64.8900	32.4300	-64.6100
Bermuda_1957_To_WGS_1984	1124	35.000	Bermuda - onshore	32.2100	-64.8900	32.4300	-64.6100
Bermuda_1957_To_WGS_1984_2	15970	1.000	Bermuda - onshore	32.2100	-64.8900	32.4300	-64.6100
Bermuda_2000_To_WGS_1984_1	15971	1.000	Bermuda	28.9100	-68.8300	35.7300	-60.7000
Bern_1898_Bern_To_CH1903	1765	0.000	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
BES2020_Saba_to_WGS_84_1	10648	0.500	BES Islands - Saba onshore	17.5600	-63.3100	17.7100	-63.1600
BES2020_Sint_Eustatius_to_WGS_84_1	10749	0.500	BES Islands - Sint Eustatius - onshore	17.4100	-63.0500	17.5800	-62.8800
BGS2005_To_ETRS_1989_1	8889	1.000	Bulgaria	41.2400	22.3600	44.2300	31.3500
BGS2005_To_WGS_1984_1	8890	1.000	Bulgaria	41.2400	22.3600	44.2300	31.3500
BH_ETRS89_to_ETRS89_1	10330	0.000	Bosnia and Herzegovina	42.5600	15.7400	45.2700	19.6200
BH_ETRS89_to_WGS_1984_1	10333	1.000	Bosnia and Herzegovina	42.5600	15.7400	45.2700	19.6200
Bioko_To_WGS_1984_1	6912	42.000	Equatorial Guinea - Bioko	3.1400	8.3700	3.8200	9.0200
Bissau_To_WGS_1984	1547	25.000	Guinea-Bissau - onshore	10.8700	-16.7700	12.6900	-13.6400
Bogota_Bogota_To_Bogota	1755	0.000	Colombia - mainland	-4.2300	-79.1000	12.5200	-66.8700
Bogota_Bogota_To_WGS_1984	8174	10.000	Colombia - mainland	-4.2300	-79.1000	12.5200	-66.8700
Bogota_To_MAGNA_Region_1_CF	15714	1.000	Colombia region 1	9.8000	-73.0000	12.5200	-71.0600
Bogota_To_MAGNA_Region_1_MB	15730	1.000	Colombia region 1	9.8000	-73.0000	12.5200	-71.0600
Bogota_To_MAGNA_Region_2_CF	15716	1.000	Colombia region 2	9.3900	-76.0800	11.5900	-73.0000

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Bogota_To_MAGNA_Region_2_MB	15731	1.000	Colombia region 2	9.3900	-76.0800	11.5900	-73.0000
Bogota_To_MAGNA_Region_3_CF	15718	1.000	Colombia region 3	8.0000	-77.4800	9.4000	-74.3900
Bogota_To_MAGNA_Region_3_MB	15732	1.000	Colombia region 3	8.0000	-77.4800	9.4000	-74.3900
Bogota_To_MAGNA_Region_4_CF	15720	1.000	Colombia region 4	5.0000	-74.4000	9.4000	-71.9900
Bogota_To_MAGNA_Region_4_MB	15733	1.000	Colombia region 4	5.0000	-74.4000	9.4000	-71.9900
Bogota_To_MAGNA_Region_5_CF	15722	1.000	Colombia region 5	5.0000	-77.9200	8.0100	-74.3900
Bogota_To_MAGNA_Region_5_MB	15734	1.000	Colombia region 5	5.0000	-77.9200	8.0100	-74.3900
Bogota_To_MAGNA_Region_6_CF	15724	1.000	Colombia region 6	3.0000	-77.6800	5.0100	-74.3900
Bogota_To_MAGNA_Region_6_MB	15735	1.000	Colombia region 6	3.0000	-77.6800	5.0100	-74.3900
Bogota_To_MAGNA_Region_7_CF	15726	1.000	Colombia region 7	-1.1300	-79.1000	3.0100	-74.0000
Bogota_To_MAGNA_Region_7_MB	15736	1.000	Colombia region 7	-1.1300	-79.1000	3.0100	-74.0000
Bogota_To_MAGNA_Region_8_CF	15728	1.000	Colombia region 8	-4.2300	-74.4000	7.1000	-66.8700
Bogota_To_MAGNA_Region_8_MB	15737	1.000	Colombia region 8	-4.2300	-74.4000	7.1000	-66.8700
Bogota_To_WGS_1984	1125	10.000	Colombia - mainland and offshore Caribbean	-4.2300	-79.1000	13.6800	-66.8700
Bogota_To_WGS_1984_2	1597	0.200	Colombia - Cusiana	4.7500	-73.0000	5.6800	-72.2500
Bogota_To_WGS_1984_Region_1_CF	15715	1.000	Colombia region 1	9.8000	-73.0000	12.5200	-71.0600
Bogota_To_WGS_1984_Region_2_CF	15717	1.000	Colombia region 2	9.3900	-76.0800	11.5900	-73.0000
Bogota_To_WGS_1984_Region_3_CF	15719	1.000	Colombia region 3	8.0000	-77.4800	9.4000	-74.3900
Bogota_To_WGS_1984_Region_4_CF	15721	1.000	Colombia region 4	5.0000	-74.4000	9.4000	-71.9900
Bogota_To_WGS_1984_Region_5_CF	15723	1.000	Colombia region 5	5.0000	-77.9200	8.0100	-74.3900
Bogota_To_WGS_1984_Region_6_CF	15725	1.000	Colombia region 6	3.0000	-77.6800	5.0100	-74.3900
Bogota_To_WGS_1984_Region_7_CF	15727	1.000	Colombia region 7	-1.1300	-79.1000	3.0100	-74.0000
Bogota_To_WGS_1984_Region_8_CF	15729	1.000	Colombia region 8	-4.2300	-74.4000	7.1000	-66.8700
Bonaire_2004_to_WGS_84_1	10770	1.000	BES Islands - Bonaire onshore	11.9700	-68.4700	12.3600	-68.1400
Bukit_Rimpah_To_WGS_1984	1126	Unknown	Indonesia - Banga & Belitung Islands	-3.3000	105.0700	-1.4400	108.3500
Cadastre_1997_To_RGM_2004_1	4478	0.100	Mayotte - onshore	-13.0500	44.9800	-12.6100	45.3500
Cadastre_1997_To_WGS_1984_1	4290	1.000	Mayotte - onshore	-13.0500	44.9800	-12.6100	45.3500
Camacupa_1948_to_RSAO13_3	9904	8.000	Angola - offshore block 7	-10.0900	12.6600	-9.4100	13.3900
Camacupa_1948_to_RSAO13_4	9905	10.000	Angola - offshore blocks 1 16 and 18	-8.3400	11.0800	-6.0300	12.7500
Camacupa_2015_To_RSAO13_1	8827	3.000	Angola	-18.0200	8.2000	-4.3800	24.0900
Camacupa_2015_To_WGS_1984_11	8882	3.000	Angola	-18.0200	8.2000	-4.3800	24.0900

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Camacupa_To_Camacupa_2015_1	8695	5.800	Angola - offshore blocks 2 3 17-18 and 31-33	-8.5900	10.4100	-6.0100	12.8400
Camacupa_To_Camacupa_2015_2	8696	4.200	Angola - offshore blocks 3 7 15 and 17	-10.0900	10.8300	-6.0300	13.3900
Camacupa_To_RSAO13_1	8883	3.000	Angola - offshore blocks 3 7 15 and 17	-10.0900	10.8300	-6.0300	13.3900
Camacupa_To_RSAO13_2	8884	5.000	Angola - offshore blocks 2 3 17-18 and 31-33	-8.5900	10.4100	-6.0100	12.8400
Camacupa_To_WGS_1972_BE_1	1317	10.000	Angola - Angola proper - offshore	-17.2600	8.2000	-6.0100	13.8600
Camacupa_To_WGS_1984_1	1318	10.000	Angola - offshore block 5	-8.5900	12.5800	-7.7500	13.4000
Camacupa_To_WGS_1984_10	1327	5.000	Angola - offshore blocks 2 3 17-18 and 31-33	-8.5900	10.4100	-6.0100	12.8400
Camacupa_To_WGS_1984_2	1319	25.000	Angola - offshore block 2	-7.0100	12.0800	-6.0100	12.8400
Camacupa_To_WGS_1984_3	1320	10.000	Angola - offshore blocks 1 and 16	-7.2600	11.0800	-6.0300	12.0900
Camacupa_To_WGS_1984_4	1321	10.000	Angola - offshore blocks 7 8 24 + WGC spec	-17.2600	8.2000	-6.0100	13.8600
Camacupa_To_WGS_1984_5	1322	3.000	Angola - offshore block 3	-7.3400	11.7400	-6.6600	12.5000
Camacupa_To_WGS_1984_6	1323	8.000	Angola - offshore block 7	-10.0900	12.6600	-9.4100	13.3900
Camacupa_To_WGS_1984_7	1324	3.000	Angola - offshore blocks 3 7 15 and 17	-10.0900	10.8300	-6.0300	13.3900
Camacupa_To_WGS_1984_8	1325	3.000	Angola - offshore block 2	-7.0100	12.0800	-6.0100	12.8400
Camacupa_To_WGS_1984_9	1326	10.000	Angola - offshore blocks 1 16 and 18	-8.3400	11.0800	-6.0300	12.7500
Camp_Area_To_WGS_1984	15802	Unknown	Antarctica - Camp McMurdo area	-77.9400	165.7300	-77.1700	167.4300
Campo_Inchauspe_To_POSGAR_1994_1	15782	5.000	Argentina - mainland onshore	-52.4300	-73.5900	-21.7800	-53.6500
Campo_Inchauspe_To_POSGAR_2007_1	5350	5.000	Argentina – mainland onshore	-52.4300	-73.5900	-21.7800	-53.6500
Campo_Inchauspe_To_WGS_1984	1127	9.000	Argentina - mainland onshore and offshore TdF	-54.9300	-73.5900	-21.7800	-53.6500

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Campo_Inchauspe_To_WGS_1984_2	1527	0.500	Argentina - Neuquen province Auca Mahuida area	-38.7500	-69.5000	-37.5000	-68.2500
Canton_1966_To_WGS_1984	15803	26.000	Kiribati - Phoenix Islands	-4.7600	-174.6000	-2.6800	-170.6600
Cape_Canaveral_To_WGS_1984	15804	6.000	North America - Bahamas and USA - Florida - onshore	20.8600	-82.3300	30.8300	-72.6800
Cape_To_Hartebeesthoek94	1504	15.000	South Africa - onshore	-34.8800	16.4500	-22.1300	32.9500
Cape_To_WGS_1984_1	1128	9.000	South Africa - onshore	-34.8800	16.4500	-22.1300	32.9500
Cape_To_WGS_1984_2	1129	15.000	South Africa - onshore	-34.8800	16.4500	-22.1300	32.9500
Carthage_Grad_To_Carthage	108338	1.000	Tunisia - offshore	33.2200	7.8100	38.4100	13.6700
Carthage_Paris_To_Carthage	1881	0.000	Tunisia - onshore	30.2300	7.4900	37.4000	11.5900
Carthage_(Paris)_to_WGS_1984_1	8636	14.000	Tunisia - onshore	30.2300	7.4900	37.4000	11.5900
Carthage_To_WGS_1984	1130	14.000	Tunisia	30.2300	7.4900	38.4100	13.6700
Carthage_To_WGS_1984_2	1538	1.000	Tunisia - offshore	33.2200	7.8100	38.4100	13.6700
CGRS_1993_To_ETRS_1989	108128	0.500	Cyprus - onshore	34.5900	32.2000	35.7400	34.6500
CGRS93_To_ETRS_1989_1	7720	0.100	Cyprus - onshore	34.5900	32.2000	35.7400	34.6500
CGRS_1993_To_WGS_1984	108129	1.000	Cyprus - onshore	34.5900	32.2000	35.7400	34.6500
CGRS93_To_WGS_1984_1	7721	1.000	Cyprus - onshore	34.5900	32.2000	35.7400	34.6500
CH1903+_To_CHTRF_1995	1509	0.100	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
CH1903+_To_CHTRF95_NTv2	108370	0.100	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
CH1903+_To_ETRS_1989_1	1647	0.100	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
CH1903+_To_ETRS_1989_NTv2	108369	0.100	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
CH1903+_To_WGS_1984_1	1676	1.000	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
CH1903_To_CHTRF95_1_NTv2	7673	0.25	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
CH1903_To_CH1903+_1_NTv2	15486	0.200	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
CH1903_To_ETRS_1989_1	1646	1.500	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
CH1903_To_ETRS_1989_2_NTv2	7674	0.25	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
CH1903_To_WGS_1984_1	1753	1.000	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
CH1903_To_WGS_1984_2	1766	1.5	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
CH1903_To_WGS_1984_3_NTv2	7788	1.5	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
Chatham_Island_1971_To_WGS_1984	1080	26.000	New Zealand - Chatham Islands group	-44.6400	-177.2500	-43.3000	-175.5400
Chatham_Islands_1979_To_NZGD_2000_1	1082	2.000	New Zealand - Chatham Islands group	-44.6400	-177.2500	-43.3000	-175.5400
Chatham_Islands_1979_To_WGS_1984_1	1081	2.000	New Zealand - Chatham Islands group	-44.6400	-177.2500	-43.3000	-175.5400
Chos_Malal_1914_To_Campo_Inchauspe	1528	10.000	Argentina - Neuquen province Auca Mahuida area	-38.7500	-69.5000	-37.5000	-68.2500
Chos_Malal_1914_To_WGS_1984	108096	10.500	Argentina - Neuquen province Auca Mahuida area	-38.7500	-69.5000	-37.5000	-68.2500
Chos_Malal_1914_To_WGS_1984_2	9257	2.500	Argentina - Mendoza - Cuyo basin	-36.3700	-69.4000	-31.9600	-66.4200
Chos_Malal_1914_To_WGS_1984_3	9258	2.500	Argentina - Neuquen province	-40.1700	-71.1900	-34.2600	-66.5200
CHTRF95_To_ETRS_1989_1	8895	0.000	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
CHTRF_1995_To_WGS_1984	1511	1.000	Europe - Liechtenstein and Switzerland	45.8200	5.9600	47.8100	10.4900
Chua_To_SIRGAS_2000_1	4069	5.000	Brazil - Distrito Federal	-15.9400	-48.1000	-15.3700	-47.1000
Chua_To_WGS_1984	1131	12.000	Paraguay - north of 22°S	-22.0000	-62.5700	-19.2900	-57.8100
Chua_To_WGS_1984_2	3972	5.000	Brazil - Distrito Federal	-15.9400	-48.1000	-15.3700	-47.1000
Chua_To_WGS_1984_3	4834	5.000	Brazil - Distrito Federal	-15.9400	-48.1000	-15.3700	-47.1000
CIGD11_To_WGS_1984_1	6177	1.000	Cayman Islands	17.5800	-83.6000	20.6800	-78.7200
Combani_1950_To_RGM_2004_1	5888	0.300	Mayotte - onshore	-13.0500	44.9800	-12.6100	45.3500
Combani_1950_To_WGS_1984_1	1916	10.000	Mayotte - onshore	-13.0500	44.9800	-12.6100	45.3500

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Conakry_1905_To_WGS_1984	1517	30.000	Guinea - onshore	7.1900	-15.1300	12.6800	-7.6500
Corrego_Alegre_1961_To_SIRGAS_2000_1	5525	2.000	Brazil - Corrego Alegre 1961	-27.5000	-58.1600	-14.9900	-38.8200
Corrego_Alegre_1961_To_WGS_1984_1	5540	2.000	Brazil - Corrego Alegre 1961	-27.5000	-58.1600	-14.9900	-38.8200
Corrego_Alegre_To_SAD_1969_1	6191	5.000	Brazil - Corrego Alegre 1970-1972	-33.7800	-58.1600	-2.6800	-34.7400
Corrego_Alegre_To_SIRGAS_2000_1	5526	2.000	Brazil - Corrego Alegre 1970-1972	-33.7800	-58.1600	-2.6800	-34.7400
Corrego_Alegre_To_SIRGAS_2000_2	6193	5.000	Brazil - Corrego Alegre 1970-1972	-33.7800	-58.1600	-2.6800	-34.7400
Corrego_Alegre_To_WGS_1984	1132	8.000	Brazil - Corrego Alegre 1970-1972	-33.7800	-58.1600	-2.6800	-34.7400
Corrego_Alegre_To_WGS_1984_2	5541	2.000	Brazil - Corrego Alegre 1970-1972	-33.7800	-58.1600	-2.6800	-34.7400
Corrego_Alegre_To_WGS_1984_3	6192	5.000	Brazil - Corrego Alegre 1970-1972	-33.7800	-58.1600	-2.6800	-34.7400
Corrego_Alegre_To_WGS_1984_4	6194	5.000	Brazil - Corrego Alegre 1970-1972	-33.7800	-58.1600	-2.6800	-34.7400
CR05_To_CR-SIRGAS_1	9751	0.500	Costa Rica	2.1500	-90.4500	11.7700	-81.4300
CR05_To_Ocotepeque_1935_MB	108013	0.500	Costa Rica - onshore	7.9800	-85.9700	11.2200	-82.5300
CR05_To_WGS_1984_1	5376	1.000	Costa Rica	2.1500	-90.4500	11.7700	-81.4300
CR05_To_WGS_1984_2	9752	1.000	Costa Rica	2.1500	-90.4500	11.7700	-81.4300
CSG_1967_To_RGFG_1995_1	1908	1.000	French Guiana - coastal area	3.4300	-54.4500	5.8100	-51.6100
CSG_1967_To_WGS_1984_1	1906	10.000	French Guiana - coastal area	3.4300	-54.4500	5.8100	-51.6100
D48_To_D96_2010_GI	108076	1.070	Slovenia	45.4200	13.3800	46.8800	16.6100
D48_To_D96_3tra_NTV2	108476	0.110	Slovenia - onshore	45.4200	13.3800	46.8800	16.6100
D48_To_ETRS_1989	108276	3.000	Slovenia	45.4200	13.3800	46.8800	16.6100
D48_To_WGS_1984	108277	3.000	Slovenia	45.4200	13.3800	46.8800	16.6100
D96_To_D48_Dolenjska	108081	0.308	Slovenia - Dolenjska	45.7000	14.4700	46.1200	15.7300
D96_To_D48_Gorenjska	108084	0.249	Slovenia - Gorenjska and N Primorsko	46.0500	13.3800	46.5300	14.8200
D96_To_D48_Jugovzhodna_Slovenija	108079	0.388	Slovenia - SE	45.4200	14.5500	46.2200	15.7300
D96_To_D48_Juzna_Slovenija	108080	0.137	Slovenia - southeastern	45.4200	14.5300	45.7700	15.3600

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
D96_To_D48_Osrednja_Slovenija	108086	0.185	Slovenia - central	45.9100	14.2100	46.3100	15.2800
D96_To_D48_Pomurje	108083	0.210	Slovenia - Pomurje	46.4700	15.9600	46.8800	16.6100
D96_To_D48_Primorska	108085	0.270	Slovenia - Primorska and Notranjska onshore	45.4400	13.4700	46.0800	14.5800
D96_To_D48_Severovzhodna_Slovenija	108078	0.504	Slovenia - NE	46.1400	14.5400	46.8800	16.6100
D96_To_D48_Stajerska	108082	0.368	Slovenia - Stajerska	46.1000	14.7400	46.7600	16.2700
D96_To_D48_Zahodna_Slovenija	108077	0.357	Slovenia - west of 14°30'E onshore	45.4400	13.3800	46.5300	14.5800
Dabola_To_WGS_1984	1518	25.000	Guinea - onshore	7.1900	-15.1300	12.6800	-7.6500
Datum_73_To_ETRS_1989_1	1657	2.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_73_To_ETRS_1989_2009_3par	5036	0.900	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_73_To_ETRS_1989_2009_7par	5037	0.400	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_73_To_ETRS_1989_3	1992	1.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_73_To_ETRS_1989_6	6189	0.100	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_73_To_WGS_1984_1	108110	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_73_To_WGS_1984_1_Prt2000	1658	2.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_73_To_WGS_1984_2009_3par	108155	0.900	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_73_To_WGS_1984_2009_7par	108153	0.400	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_73_To_WGS_1984_3	1983	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_73_To_WGS_1984_4	1987	1.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_73_To_WGS_1984_NTV2	108025	0.100	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Bessel_To_WGS_1984_1	108113	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Datum_Lisboa_Bessel_To_WGS_1984_2	108123	1.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Hayford_To_Datum_73_1	108222	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Hayford_To_Datum_73_2	108223	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Hayford_To_Datum_Lisboa_Bessel_1	108224	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Hayford_To_Datum_Lisboa_Bessel_2	108225	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Hayford_To_ETRS_1989_2009_3par	108158	1.700	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Hayford_To_ETRS_1989_2009_7par	108156	1.500	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Hayford_To_ETRS_1989_NTV2	108024	0.100	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Hayford_To_WGS_1984_1	108114	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Hayford_To_WGS_1984_2	108124	2.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Hayford_To_WGS_1984_2009_3par	108159	1.700	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Hayford_To_WGS_1984_2009_7par	108157	1.500	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Datum_Lisboa_Hayford_To_WGS_1984_NTV2	108023	0.100	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
DB_REF_To_ETRS_1989_1	5826	0.500	Germany - onshore	47.2700	5.8600	55.0900	15.0400
Dealul_Piscului_1933_To_WGS_1984_1	1995	10.000	Romania - onshore	43.6200	20.2600	48.2700	29.7400
Dealul_Piscului_1970_To_ETRS_1989_1X	108375	3.000	Romania	43.4400	20.2600	48.2700	31.4100
Dealul_Piscului_1970_To_WGS_1984_1	1996	10.000	Romania	43.4400	20.2600	48.2700	31.4100
Dealul_Piscului_1970_To_WGS_1984_2	1097	7.000	Romania	43.4400	20.2600	48.2700	31.4100
Dealul_Piscului_1970_To_WGS_1984_3X	108374	3.000	Romania	43.4400	20.2600	48.2700	31.4100
Deception_Island_To_WGS_1984	15812	35.000	Antarctica - Deception Island	-63.0800	-60.8900	-62.8200	-60.3500
Deir_ez_Zor_To_WGS_1972_BE	1584	5.000	Syria - Deir area	34.4900	39.3000	35.9000	40.8100
Deir_ez_Zor_To_WGS_1984_2	15741	5.000	Syria - Deir area	34.4900	39.3000	35.9000	40.8100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Deir_ez_Zor_To_WGS_1984_3	1586	Unknown	Syria - Al Whaleed area	35.3300	39.1500	35.9000	40.4100
Deir_ez_Zor_To_WGS_1984_4	1587	1.000	Syria - Shaddadeh area	35.7900	40.5000	36.5000	41.3900
Deir_ez_Zor_To_WGS_1984_5	15742	5.000	Syria - onshore	32.3100	35.6100	37.3000	42.3800
Deir_ez_Zor_To_WGS_1984_6	15743	0.500	Syria - Deir area	34.4900	39.3000	35.9000	40.8100
DGN95_to_SRGI2013_1	9472	0.200	Indonesia	-13.9500	92.0100	7.7900	141.4600
DGN_1995_To_WGS_1984_1	15912	1.000	Indonesia	-13.9500	92.0100	7.7900	141.4600
DHDN_To_ETRF_1989	108192	5.000	Germany - West Germany all states	47.2700	5.8600	55.0900	13.8400
DHDN_To_ETRS_1989	1309	5.000	Germany – West Germany all states	47.2700	5.8600	55.0900	13.8400
DHDN_to_ETRS89_(10)	9310	0.010	Germany – Saarland	49.1100	6.3500	49.6400	7.4100
DHDN_To_ETRS_1989_2	1776	3.000	Germany – West Germany all states	47.2700	5.8600	55.0900	13.8400
DHDN_To_ETRS_1989_3	1778	0.100	Germany – West Germany S	47.2700	6.1100	50.3400	13.8400
DHDN_To_ETRS_1989_4	1779	0.100	Germany – West Germany C	50.3300	5.8600	52.3400	12.0300
DHDN_To_ETRS_1989_5	1780	0.100	Germany – West Germany N	52.3300	6.5600	55.0900	11.5900
DHDN_To_ETRS_1989_6	1781	0.100	Germany – Thuringen	50.2000	9.8700	51.6500	12.6600
DHDN_To_ETRS_1989_7	1782	0.100	Germany – Saxony	50.2000	11.8900	51.6600	15.0400
DHDN_To_ETRS_1989_8_NTV2	15948	1.000	Germany – onshore	47.2700	5.8600	55.0900	15.0400
DHDN_to_ETRS89_9	9338	0.100	Germany - Baden- Wurttemberg	47.5400	7.5100	49.8000	10.5000
DHDN_to_ETRS89_11	9940	0.100	Germany - Hessen	49.3900	7.7700	51.6600	10.2400
DHDN_To_WGS_1984_1	1673	5.000	Germany - West Germany all states	47.2700	5.8600	55.0900	13.8400
DHDN_To_WGS_1984_2	1777	3.000	Germany - West Germany all states	47.2700	5.8600	55.0900	13.8400
DHDN_To_WGS_1984_3	15869	2.000	Germany - East Germany all states	50.2000	9.9200	54.7400	15.0400
DHDN_To_WGS_1984_3x	108206	0.100	Germany - West Germany S	47.2700	6.1100	50.3400	13.8400
DHDN_To_WGS_1984_4_NTV2	15949	1.000	Germany - onshore	47.2700	5.8600	55.0900	15.0400

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
DHDN_To_WGS_1984_4x	108207	0.100	Germany - West Germany C	50.3300	5.8600	52.3400	12.0300
DHDN_To_WGS_1984_5x	108208	0.100	Germany - West Germany N	52.3300	6.5600	55.0900	11.5900
DHDN_To_WGS_1984_6x	108209	0.100	Germany - Thuringen	50.2000	9.8700	51.6500	12.6600
DHDN_To_WGS_1984_7x	108210	0.100	Germany - Saxony	50.2000	11.8900	51.6600	15.0400
Dominica_1945_To_WGS_1984	1442	10.000	Dominica - onshore	15.1400	-61.5500	15.6900	-61.2000
DOS_1968_To_WGS_1984	108259	44.000	Solomon Islands - New Georgia - Ghizo (Gizo)	-8.8600	156.4400	-7.5200	158.2000
DOS_71_4_To_WGS_1984	15798	44.000	St Helena - St Helena Island	-16.0800	-5.8500	-15.8500	-5.5900
Douala_1948_To_WGS_1984_1	15873	10.000	Cameroon - coastal area	2.1600	8.4500	4.9900	10.4000
DRUKREF_03_To_WGS_1984_1	5267	1.000	Bhutan	26.7000	88.7400	28.3300	92.1300
Easter_Island_1967_To_WGS_1984	15806	44.000	Chile - Easter Island onshore	-27.2500	-109.5100	-27.0100	-109.1600
ED_1950_ED77_To_WGS_1984	1514	1.000	Iran	23.3400	44.0300	39.7800	63.3400
ED_1950_ED77_To_WGS_1984_2	1141	19.000	Iran	23.3400	44.0300	39.7800	63.3400
ED_1950_ED77_To_WGS_1984_3	1856	0.500	Iran - South Pars blocks 2 and 3	26.5800	52.0700	26.7100	52.2800
ED_1950_ED77_To_WGS_1984_4	1857	0.500	Iran - Lavan Island and Balal field	26.2100	52.4900	26.8700	53.4300
ED_1950_ED77_To_WGS_1984_5	1858	0.500	Iran - Kharg Island	29.1600	50.2200	29.3900	50.4200
ED_1950_ED77_To_WGS_1984_6	15745	0.200	Iran - South Pars block 11	26.4600	52.2200	26.6400	52.4100
ED_1950_To_ED_1987_2	1147	1.000	Norway - offshore north of 65°N; Svalbard	65.0000	-3.3500	84.7300	38.0100
ED_1950_To_ETRF_1989_1	108193	1.000	Norway - offshore north of 62°N; Svalbard	62.0000	-3.3500	84.7300	38.0100
ED_1950_To_ETRS_1989_1	1588	1.000	Norway - offshore north of 65°N; Svalbard	65.0000	-3.3500	84.7300	38.0100
ED_1950_To_ETRS_1989_10	1650	2.000	France	41.1500	-9.8600	51.5600	10.3800
ED_1950_To_ETRS_1989_12_NTV2_Spain_v2	15932	0.200	Spain - mainland and Balearic Islands onshore	35.2600	-9.3700	43.8200	4.3900
ED_1950_To_ETRS_1989_13	5040	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
ED_1950_To_ETRS_1989_15	9224	1.000	Europe - offshore North Sea - Germany and Netherlands east of 5°E	53.4900	3.3400	55.9200	8.8800
ED_1950_To_ETRS_1989_4	1626	1.000	Denmark - onshore	54.5000	7.9800	57.8100	15.2800
ED_1950_To_ETRS_1989_5	1628	1.000	Gibraltar	36.0000	-5.4200	36.1600	-4.8900
ED_1950_To_ETRS_1989_6	1630	1.500	Spain - Balearic Islands	38.5900	1.1200	40.1500	4.3900
ED_1950_To_ETRS_1989_7	1632	1.500	Spain - mainland except northwest	35.2600	-7.5400	43.5600	3.3900
ED_1950_To_ETRS_1989_8	1634	1.500	Spain - mainland northwest	41.5000	-9.3700	43.8200	-4.5000
ED_1950_To_ETRS_1989_9	1783	2.000	Turkey	34.4200	25.6200	43.4500	44.8300
ED_1950_To_ETRS_1989_NTV2_Baleares	108118	0.500	Spain - Balearic Islands - NTv2 grid	38.5900	1.1200	40.1500	4.3900
ED_1950_To_ETRS_1989_NTV2_BALR2009	108067	0.200	Spain - Balearic Islands - NTv2 grid	38.5900	1.1200	40.1500	4.3900
ED_1950_To_ETRS_1989_NTV2_Catalonia	5661	0.050	Spain - Catalonia onshore	40.4900	0.1600	42.8600	3.3900
ED_1950_To_ETRS_1989_NTV2_Peninsula	108126	0.500	Spain - Peninsula - NTv2 grid	35.8200	-9.3700	43.8200	3.3900
ED_1950_To_ETRS_1989_NTV2_PENR2009	108066	0.100	Spain - Peninsula - NTv2 grid	35.8200	-9.3700	43.8200	3.3900
ED_1950_To_WGS_1984_1	1133	10.000	Europe - west (DMA ED50 mean)	34.8800	-9.5600	71.2400	31.5900
ED_1950_To_WGS_1984_10	1142	44.000	Italy - Sardinia onshore	38.8200	8.0800	41.3100	9.8900
ED_1950_To_WGS_1984_11	1143	35.000	Italy - Sicily onshore	36.5900	12.3600	38.3500	15.7100
ED_1950_To_WGS_1984_12	1144	44.000	Malta - onshore	35.7400	14.2700	36.0500	14.6300
ED_1950_To_WGS_1984_13	1145	9.000	Europe - Portugal and Spain	35.2600	-9.5600	43.8200	3.3900
ED_1950_To_WGS_1984_16	1245	44.000	Tunisia	30.2300	7.4900	38.4100	13.6700
ED_1950_To_WGS_1984_17	1275	2.000	France	41.1500	-9.8600	51.5600	10.3800
ED_1950_To_WGS_1984_18	1311	1.000	Europe - common offshore	47.4200	-16.1000	63.8900	10.8600
ED_1950_To_WGS_1984_19	1440	Unknown	Greece - onshore	34.8800	19.5700	41.7500	28.3000
ED_1950_To_WGS_1984_2	1134	6.000	Europe - west central (by country)	42.3300	-4.8700	57.8000	17.1700

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
ED_1950_To_WGS_1984_23	1612	1.000	Norway - offshore north of 62°N; Svalbard	62.0000	-3.3500	84.7300	38.0100
ED_1950_To_WGS_1984_24	1613	1.000	Norway - North Sea - offshore south of 62°N	56.0800	1.3700	62.0100	10.8100
ED_1950_To_WGS_1984_25	1627	1.000	Denmark - onshore	54.5000	7.9800	57.8100	15.2800
ED_1950_To_WGS_1984_26	1629	1.000	Gibraltar	36.0000	-5.4200	36.1600	-4.8900
ED_1950_To_WGS_1984_27	1631	1.500	Spain - Balearic Islands	38.5900	1.1200	40.1500	4.3900
ED_1950_To_WGS_1984_28	1633	1.500	Spain - mainland except northwest	35.2600	-7.5400	43.5600	3.3900
ED_1950_To_WGS_1984_29	1635	1.500	Spain - mainland northwest	41.5000	-9.3700	43.8200	-4.5000
ED_1950_To_WGS_1984_3	1135	Unknown	Asia - Middle East - Iraq; Israel; Jordan; Lebanon; Kuwait; Saudi Arabia; Syria	16.3700	34.1700	37.3900	55.6700
ED_1950_To_WGS_1984_30	1784	2.000	Turkey	34.4200	25.6200	43.4500	44.8300
ED_1950_To_WGS_1984_31	1810	15.000	Egypt - Western Desert	25.7100	24.7000	31.6800	30.0000
ED_1950_To_WGS_1984_32	3904	5.000	Netherlands - offshore	51.4400	2.5300	55.7700	6.3700
ED_1950_To_WGS_1984_34	1989	1.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
ED_1950_To_WGS_1984_36	1998	1.000	Germany - offshore North Sea	53.5800	3.3400	55.9200	8.8800
ED_1950_To_WGS_1984_37	1087	2.500	Jordan	29.1800	34.8800	33.3800	39.3100
ED_1950_To_WGS_1984_38	1075	10.000	Asia - Middle East - Israel, Palestine Territory, Turkey - offshore	31.3500	28.0300	43.4500	41.4700
ED_1950_To_WGS_1984_39	1853	5.000	Ireland - Corrib and Errigal	53.7500	-12.5000	55.7600	-9.4900
ED_1950_To_WGS_1984_4	1136	26.000	Cyprus	32.8800	29.9500	36.2100	35.2000
ED_1950_To_WGS_1984_41_NTV2_Spain_v2	15933	1.000	Spain - mainland and Balearic Islands onshore	35.2600	-9.3700	43.8200	4.3900
ED_1950_To_WGS_1984_42	15964	5.000	Portugal - mainland - offshore	34.9100	-13.8700	41.8800	-7.2400
ED_1950_To_WGS_1984_5	1137	13.000	Egypt - Western Desert	25.7100	24.7000	31.6800	30.0000
ED_1950_To_WGS_1984_6	1138	6.000	Europe - British Isles and Channel Islands onshore	49.1100	-10.5600	60.9000	1.8400

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
ED_1950_To_WGS_1984_7	1139	7.000	Europe - Finland and Norway - onshore	57.9000	4.3900	71.2400	31.5900
ED_1950_To_WGS_1984_8	1140	44.000	Greece - onshore	34.8800	19.5700	41.7500	28.3000
ED_1950_To_WGS_1984_NGA_7PAR	108335	10.000	Europe - west (DMA ED50 mean)	34.8800	-9.5600	71.2400	31.5900
ED_1950_To_WGS_1984_NTv2_Baleares	108119	1.000	Spain - Balearic Islands - NTv2 grid	38.5900	1.1200	40.1500	4.3900
ED_1950_To_WGS_1984_NTv2_BALR2009	108069	0.900	Spain - Balearic Islands - NTv2 grid	38.5900	1.1200	40.1500	4.3900
ED_1950_To_WGS_1984_NTv2_Catalonia	108359	0.050	Spain - Catalonia onshore	40.4900	0.1600	42.8600	3.3900
ED_1950_To_WGS_1984_NTv2_Peninsula	108136	1.000	Spain - Peninsula - NTv2 grid	35.8200	-9.3700	43.8200	3.3900
ED_1950_To_WGS_1984_NTv2_PENR2009	108068	0.900	Spain - Peninsula - NTv2 grid	35.8200	-9.3700	43.8200	3.3900
ED_1950_To_WGS_1984_PT3	108111	Unknown	Portugal - mainland onshore	36.9500	-9.5600	42.1600	-6.1900
ED_1950_To_WGS_1984_PT7	108121	Unknown	Portugal - mainland onshore	36.9500	-9.5600	42.1600	-6.1900
ED_1987_To_ETRS_1989_1	4078	0.300	Europe - west	34.8800	-10.5600	84.7300	38.0100
ED_1987_To_WGS_1984_1	1146	0.800	Europe - North Sea	51.0300	-5.0500	62.0000	10.8600
ED_1987_To_WGS_1984_2	3905	1.000	Europe - west	34.8800	-10.5600	84.7300	38.0100
Egypt_1907_To_WGS_1972	1545	5.000	Egypt	21.8900	24.7000	33.8200	37.9100
ED50_to_ETRS89_16	9408	0.200	Spain - mainland onshore and Ceuta	35.8200	-9.3700	43.8200	3.3900
ED50_to_ETRS89_17	9409	0.200	Spain - Balearic Islands	38.5900	1.1200	40.1500	4.3900
ED50_to_IGM95_1	9735	0.200	Italy - 6°22'E to 18°40'E and north of 35°16'N; San Marino, Vatican City State	35.2600	6.3600	47.1000	18.6700
ED50_to_RDN2008_1	9736	0.200	Italy - 6°22'E to 18°40'E and north of 35°16'N; San Marino, Vatican City State	35.2600	6.3600	47.1000	18.6700
Egypt_1907_To_WGS_1984	1148	11.000	Egypt	21.8900	24.7000	33.8200	37.9100
Egypt_1907_To_WGS_1984_2	108043	5.000	Egypt	21.8900	24.7000	33.8200	37.9100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Egypt_1907_To_WGS_1984_3	1546	30.000	Egypt - Gulf of Suez	27.1900	32.3400	30.0100	34.2700
Egypt_1907_To_WGS_1984_4	7697	1.200	Egypt	21.8900	24.7000	33.8200	37.9100
Egypt_Gulf_of_Suez_S-650_TL_To_WGS_1972_BE_1	15792	5.000	Egypt - Gulf of Suez	27.1900	32.3400	30.0100	34.2700
Egypt_Gulf_of_Suez_S-650_TL_To_WGS_1984_2	15846	5.000	Egypt - Gulf of Suez	27.1900	32.3400	30.0100	34.2700
ELD_1979_To_LGD2006_1	15924	5.000	Libya - onshore	19.4900	9.3100	33.2300	25.2100
ELD_1979_To_WGS_1984_1	1859	20.000	Libya - Murzuq and En Naga	27.3200	18.3700	27.6700	18.7200
ELD_1979_To_WGS_1984_2	1860	0.500	Libya - Murzuq and En Naga	27.3200	18.3700	27.6700	18.7200
ELD_1979_To_WGS_1984_3	1861	2.000	Libya - Mabruk	29.6100	17.1300	30.0700	17.5100
ELD_1979_To_WGS_1984_4	1862	0.500	Libya - Mabruk	29.6100	17.1300	30.0700	17.5100
ELD_1979_To_WGS_1984_5	1863	6.000	Libya - Mabruk	29.6100	17.1300	30.0700	17.5100
ELD_1979_To_WGS_1984_6	15707	10.000	Libya - Amal	29.1000	20.8000	29.8000	21.4000
ELD_1979_To_WGS_1984_7	15778	0.500	Libya - Sirte NC192	27.5000	21.2500	28.0700	21.5900
ELD_1979_To_WGS_1984_8	15909	5.000	Libya - onshore	19.4900	9.3100	33.2300	25.2100
ELD_1979_To_WGS_1984_9	15923	2.000	Libya - Cyrenaica	32.0000	22.4900	32.8000	23.0000
Estonia_1937_To_ETRS_1989	108272	0.100	Estonia	57.5200	20.3700	60.0000	28.2000
Estonia_1937_To_WGS_1984_NGA	108261	4.700	Estonia	57.5200	20.3700	60.0000	28.2000
Estonia_1992_To_ETRF_1989	108194	0.100	Estonia - onshore	57.5200	21.7400	59.7500	28.2000
Estonia_1992_To_ETRS_1989	1331	0.100	Estonia - onshore	57.5200	21.7400	59.7500	28.2000
Estonia_1992_To_WGS_1984	1333	0.500	Estonia - onshore	57.5200	21.7400	59.7500	28.2000
Estonia_1997_To_ETRS_1989_1	1648	0.000	Estonia	57.5200	20.3700	60.0000	28.2000
Estonia_1997_To_WGS_1984_1	1649	1.000	Estonia	57.5200	20.3700	60.0000	28.2000
ETRF_1989_To_WGS_1984	108195	1.000	Europe – ETRF	33.2600	-16.1000	84.7300	38.0100
ETRF2000-PL_to_ETRS89_1	9703	0.000	Poland	49.0000	14.1400	55.9300	24.1500
ETRF2000-PL_to_WGS_1984_1	9772	1.000	Poland	49.0000	14.1400	55.9300	24.1500
ETRS_1989_to_EBBWV14-IRF_1	9941	0.000	UK - Newport to Ebbw Vale	51.5000	-3.3000	51.8500	-2.8900
ETRS_1989_to_FNL22-IRF_1	9975	0.000	UK - Inverness to Thurso	57.4000	-4.6000	58.6400	-3.0000
ETRS_1989_to_HULLEE13-IRF_1	9965	0.000	UK - Leeds to Hull	53.6000	-1.7000	53.9000	-0.2700
ETRS_1989_to_MOLDOR11-IRF_1	9878	0.000	UK - Manchester to Dore	53.2500	-2.4000	53.5500	-1.3900
ETRS_1989_to_MRH21-IRF_1	9867	0.000	UK - Cardiff to Lincoln	51.3500	-3.2700	53.2600	-0.3600
ETRS_1989_to_MWC18-IRF_1	10108	0.000	UK - Manchester, Wigan and Chester	53.0900	-3.1500	53.6500	-2.1000

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
ETRS_1989_To_NTF_3_NTV2	15959	1.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
ETRS_1989_to_SCM22-IRF_1	9970	0.000	UK - Motherwell to Inverness	55.7000	-4.4000	57.5500	-3.3000
ETRS_1989_To_S-JTSK [JTSK03]_1	8365	0.001	Slovakia	47.7300	16.8400	49.6100	22.5600
ETRS_1989_To_WGS_1984	1149	1.000	Europe – ETRF	33.2600	-16.1000	84.7300	38.0100
ETRS_1989_To_Xrail84_1	108050	0.500	UK - London	51.2000	-0.7000	51.8000	0.6000
ETRS89_to_AbInVA96_2020-IRF_1	9386	0.000	UK - Aberdeen to Inverness	57.1000	-4.3100	57.7100	-2.1000
ETRS89_to_CNH22-IRF_1	10192	0.000	UK - Crewe to Holyhead	53.0200	-4.7100	53.4600	-2.2800
ETRS89_to_COV23-IRF_1	10469	0.000	UK - Coventry	52.3000	-1.8500	52.5000	-1.3000
ETRS89_to_CWS13-IRF_1	10197	0.000	UK - Chester to Shrewsbury	52.5000	-3.1600	53.2600	-2.6500
ETRS89_to_DIBA15-IRF_1	10205	0.000	UK - Didcot to Banbury	51.5700	-1.4600	52.1100	-1.1500
ETRS89_to_DoPw22-IRF_1	10181	0.000	UK - Dovey Junction to Pwllheli	52.4500	-4.5100	53.0100	-3.8000
ETRS89_to_ECML14_IRF_1	10624	0.000	UK - London to Edinburgh	51.4500	-3.4500	56.1000	0.0500
ETRS89_to_ECML14_NB-IRF_1	9759	0.000	UK - Newcastle to Ashington	54.8500	-1.9000	55.3000	-1.3000
ETRS89_to_EOS21-IRF_1	9740	0.000	UK - Tweedmouth to Aberdeen	55.5500	-3.5600	57.2100	-1.9400
ETRS89_to_EWR2-IRF_1	9764	0.000	UK - Oxford to Bedford	51.7000	-1.4300	52.2400	-0.3600
ETRS89_to_GBK19-IRF_1	9454	0.000	UK - Glasgow to Kilmarnock	55.5500	-4.6500	55.9500	-4.0500
ETRS89_to_GSB-IRF_1	10263	0.500	Denmark - onshore Bornholm	54.9400	14.5900	55.3800	15.2500
ETRS89_to_GS-IRF_1	10259	0.500	Denmark - onshore Jutland, Funen, Zealand and Lolland	54.5100	8.0000	57.8000	12.8700
ETRS89_to_GWPBS22-IRF_1	10210	0.000	UK - London to Swansea	51.2500	-4.2600	52.0600	-0.1000
ETRS89_to_GWWAB22-IRF_1	10215	0.000	UK - Cardiff and the valleys	51.3500	-3.6000	51.8100	-3.1200
ETRS89_to_GWWWA22-IRF_1	10220	0.000	UK - Swansea to Fishguard	51.5500	-5.1600	52.0600	-3.6000
ETRS89_to_KK-IRF_1	10267	0.500	Denmark - Copenhagen	55.5100	12.2300	55.8200	12.7300

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
ETRS89_to_MALS09-IRF_1	10225	0.000	UK - London to Leamington Spa	51.4500	-2.2600	52.9100	-0.0500
ETRS89_to_MML07-IRF_1	9369	0.000	UK - London to Sheffield	51.4600	-1.8900	53.4200	0.1600
ETRS89_to_Ostenfeld-IRF_1	10271	1.000	Denmark - northern Schleswig	54.8000	8.3700	55.4700	10.1600
ETRS89_to_OxWo08-IRF_1	10230	0.000	UK - Oxford to Worcester	51.6500	-2.3100	52.2600	-1.1500
ETRS89_to_RBEP12-IRF_1	10278	0.000	UK - Reading to Penzance	50.0500	-5.6300	51.7100	-0.8500
ETRS89_to_S34J-IRF_1	10161	0.030	Denmark - onshore Jutland and Funen	54.6700	8.0000	57.8000	11.2900
ETRS89_to_S34S-IRF_1	10251	0.030	Denmark - onshore Zealand and Lolland	54.5100	10.7900	56.7900	12.8700
ETRS89_to_S45B-IRF_1	10255	0.030	Denmark - onshore Bornholm	54.9400	14.5900	55.3800	15.2500
ETRS89_to_ShAb07-IRF_1	10186	0.000	UK - Shrewsbury to Aberystwyth	52.3700	-4.1600	52.7700	-2.6000
ETRS89_to_SMITB20-IRF_1	10273	0.000	UK - Okehampton to Penstone	50.6500	-4.1100	50.8600	-3.6000
ETRS89_to_SYC20-IRF_1	10238	0.000	UK - Shrewsbury to Crewe	52.6500	-2.9100	53.1600	-2.3000
ETRS89_to_TPEN11-IRF_1	9365	0.000	UK - Liverpool to Leeds	53.3200	-3.1400	53.9000	-1.3400
ETRS89_to_WC05-IRF_1	10629	0.000	UK - London to Glasgow	51.4000	-4.3300	55.9200	-0.0400
EUREF_FIN_To_ETRS_1989	10706	1.000	Finland	58.8400	19.0800	70.0900	31.5900
EUREF_FIN_To_WGS_1984	10701	1.000	Finland	58.8400	19.0800	70.0900	31.5900
European_1950_To_WGS_1984_33	1985	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
European_1979_To_WGS_1984	15752	6.000	Europe - west	34.8800	-10.5600	84.7300	38.0100
Fahud_To_WGS_1984	1256	10.000	Oman - mainland	16.5900	51.9900	26.4200	59.9100
Fahud_To_WGS_1984_2	1438	25.000	Oman - mainland	16.5900	51.9900	26.4200	59.9100
Fahud_To_WGS_1984_3	6908	7.000	Oman - mainland	16.5900	51.9900	26.4200	59.9100
Fatu_Iva_1972_To_RGPF_1	8835	2.000	French Polynesia - Marquesas Islands - Fatu Hiva	-10.6000	-138.7500	-10.3600	-138.5400
Fatu_Iva_1972_To_WGS_1984_1	15772	2.000	French Polynesia - Marquesas Islands - Fatu Hiva	-10.6000	-138.7500	-10.3600	-138.5400

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Fatu_Iva_1972_To_WGS_1984_2	8842	2.000	French Polynesia - Marquesas Islands - Fatu Hiva	-10.6000	-138.7500	-10.3600	138.5400
FD_1954_To_ED_1950_1	15866	0.000	Faroe Islands - onshore	61.3300	-7.4900	62.4100	-6.3300
FD_1958_To_WGS_1984	1513	0.500	Iran - Kangan district	27.3000	51.8000	28.2000	53.0100
FD_1958_To_WGS_1984_2	1854	0.500	Iran - Lavan Island and Balal field	26.2100	52.4900	26.8700	53.4300
FD_1958_To_WGS_1984_3	1855	0.500	Iran - Kharg Island	29.1600	50.2200	29.3900	50.4200
FEH2010_To_WGS_1984_1	5599	1.000	Europe - Fehmarnbelt outer	54.3300	10.6600	54.8300	12.0100
Fiji_1956_To_WGS_1984_1	15875	7.000	Fiji - main islands	-19.2200	176.8100	-16.1000	-179.7700
Fiji_1986_To_WGS_1984_1	15876	2.000	Fiji - onshore	-20.8100	176.8100	-12.4200	-178.1500
Fiji_1986_To_WGS_1984_2	15877	40.000	Fiji - main islands	-19.2200	176.8100	-16.1000	-179.7700
Fort_Desaix_To_RGAF09_1	5491	0.100	Martinique - onshore	14.3500	-61.2900	14.9300	-60.7600
Fort_Desaix_To_WGS_1984_1	1909	10.000	Martinique - onshore	14.3500	-61.2900	14.9300	-60.7600
Fort_Desaix_To_WGS_1984_2	1910	0.100	Martinique - onshore	14.3500	-61.2900	14.9300	-60.7600
Fort_Marigot_To_RGAF09_1	5493	10.000	Guadeloupe - St Martin and St Barthelemy - onshore	17.8200	-63.2100	18.1700	-62.7300
Fort_Marigot_To_WGS_1984_1	1903	10.000	Guadeloupe - St Martin and St Barthelemy - onshore	17.8200	-63.2100	18.1700	-62.7300
Fort_Thomas_1955_To_WGS_1984	108262	44.000	St Kitts and Nevis	16.3400	-63.6300	17.6700	-62.2000
Gambia_To_WGS_1984_1	6913	43.000	Gambia - onshore	13.0500	-16.8800	13.8300	-13.7900
Gan_1970_To_WGS_1984_1	15713	44.000	Maldives - onshore	-0.6900	72.8100	7.0800	73.6900
Garoua_To_WGS_1972_BE_1	1805	5.000	Cameroon - Garoua area	8.9200	12.9000	9.8700	14.1900
GDA_1994_To_GDA2020_1	8048	0.010	Australia - GDA	-60.5500	93.4100	-8.4700	173.3400
GDA_1994_To_GDA2020_NTV2_2_Conformal_and_Distortion	8447	0.05	Australia - onshore	-43.7000	112.8500	-9.8600	153.6900
GDA_1994_To_GDA2020_NTV2_3_Conformal	8446	0.05	Australia - onshore	-43.7000	112.8500	-9.8600	153.6900
GDA_1994_To_GDA2020_NTV2_4_Christmas	8444	0.050	Christmas Island - onshore	-10.6300	105.4800	-10.3600	105.7700
GDA_1994_To_GDA2020_NTV2_5_Cocos_Keeling	8445	0.050	Cocos (Keeling) Islands - onshore	-12.2700	96.7600	-11.7600	96.9900

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
GDA_1994_To_GDA2020_NTV2_CPD_plus_Lord_Howe_Norfolk	108443	0.050	Australia - Lord Howe and Norfolk Islands onshore	-32.3333	158.8000	-28.6333	168.3333
GDA_1994_To_WGS_1984_NTV2_CPD_plus_Lord_Howe_Norfolk	108441	3.100	Australia - Lord Howe and Norfolk Islands onshore	-32.3333	158.8000	-28.6333	168.3333
GDA_1994_To_WGS_1984	1150	3.200	Australia - GDA	-60.5500	93.4100	-8.4700	173.3400
GDA_1994_To_WGS_1984_2	9688	3.000	Australia - GDA	-60.5500	93.4100	-8.4700	173.3400
GDA_1994_To_WGS_1984_3	9689	3.100	Australia - onshore	-43.7000	112.8500	-9.8600	153.6900
GDA2020_To_WGS_1984_2	8450	3.000	Australia - GDA	-60.5500	93.4100	-8.4700	173.3400
GDA2020_To_WGS_1984_Transit_1	8887	3.000	Australia - GDA	-60.5500	93.4100	-8.4700	173.3400
GDBD2009_To_WGS_1984_1	6701	1.000	Brunei	4.0100	112.3700	6.3100	115.3700
GDM2000_to_WGS_1984_1	10543	1.000	Malaysia	0.8500	98.0200	7.8100	119.6100
GGD_To_ITRF_1993	108368	0.030	Georgia - onshore	41.0100	39.9900	43.5900	46.7200
GGD_To_Pulkovo_1942	108367	0.110	Georgia - onshore	41.0100	39.9900	43.5900	46.7200
GGRS_1987_To_WGS_1984	1272	1.000	Greece - onshore	34.8800	19.5700	41.7500	28.3000
Graciosa_1948_To_PTRA08_1_3par	108240	0.190	Portugal - Azores C - onshore	38.3200	-28.9000	39.1400	-26.9700
Graciosa_1948_To_PTRA08_1_7par	108184	0.180	Portugal - Azores C - onshore	38.3200	-28.9000	39.1400	-26.9700
Graciosa_1948_To_PTRA08_2_3par	108241	0.068	Portugal - Azores C - Faial onshore	38.4600	-28.9000	38.7000	-28.5400
Graciosa_1948_To_PTRA08_2_7par	108185	0.005	Portugal - Azores C - Faial onshore	38.4600	-28.9000	38.7000	-28.5400
Graciosa_1948_To_PTRA08_3_3par	108242	0.064	Azores - Graciosa Island	38.9700	-28.1300	39.1400	-27.8800
Graciosa_1948_To_PTRA08_3_7par	108186	0.004	Azores - Graciosa Island	38.9700	-28.1300	39.1400	-27.8800
Graciosa_1948_To_PTRA08_4_3par	108243	0.100	Portugal - Azores C - Pico onshore	38.3200	-28.6100	38.6100	-27.9800
Graciosa_1948_To_PTRA08_4_7par	108187	0.400	Portugal - Azores C - Pico onshore	38.3200	-28.6100	38.6100	-27.9800
Graciosa_1948_To_PTRA08_5_3par	108244	0.700	Portugal - Azores C - S Jorge onshore	38.4800	-28.3700	38.8000	-27.7100
Graciosa_1948_To_PTRA08_5_7par	108188	0.007	Portugal - Azores C - S Jorge onshore	38.4800	-28.3700	38.8000	-27.7100
Graciosa_1948_To_PTRA08_6_3par	108245	0.070	Portugal - Azores C - Terceira onshore	38.5700	-27.4400	38.8600	-26.9700

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Graciosa_1948_To_PTRA08_6_7par	108189	0.005	Portugal - Azores C - Terceira onshore	38.5700	-27.4400	38.8600	-26.9700
Graciosa_1948_To_WGS_1984_1_3par	108292	0.300	Portugal - Azores C - onshore	38.3200	-28.9000	39.1400	-26.9700
Graciosa_1948_To_WGS_1984_1_7par	108246	0.500	Portugal - Azores C - onshore	38.3200	-28.9000	39.1400	-26.9700
Graciosa_1948_To_WGS_1984_2_3par	108293	0.200	Portugal - Azores C - Faial onshore	38.4600	-28.9000	38.7000	-28.5400
Graciosa_1948_To_WGS_1984_2_7par	108247	0.010	Portugal - Azores C - Faial onshore	38.4600	-28.9000	38.7000	-28.5400
Graciosa_1948_To_WGS_1984_3_3par	108294	0.100	Azores - Graciosa Island	38.9700	-28.1300	39.1400	-27.8800
Graciosa_1948_To_WGS_1984_3_7par	108248	0.010	Azores - Graciosa Island	38.9700	-28.1300	39.1400	-27.8800
Graciosa_1948_To_WGS_1984_4_3par	108295	0.300	Portugal - Azores C - Pico onshore	38.3200	-28.6100	38.6100	-27.9800
Graciosa_1948_To_WGS_1984_4_7par	108249	0.500	Portugal - Azores C - Pico onshore	38.3200	-28.6100	38.6100	-27.9800
Graciosa_1948_To_WGS_1984_5_3par	108296	0.900	Portugal - Azores C - S Jorge onshore	38.4800	-28.3700	38.8000	-27.7100
Graciosa_1948_To_WGS_1984_5_7par	108250	0.010	Portugal - Azores C - S Jorge onshore	38.4800	-28.3700	38.8000	-27.7100
Graciosa_1948_To_WGS_1984_6_3par	108297	0.200	Portugal - Azores C - Terceira onshore	38.5700	-27.4400	38.8600	-26.9700
Graciosa_1948_To_WGS_1984_6_7par	108251	0.010	Portugal - Azores C - Terceira onshore	38.5700	-27.4400	38.8600	-26.9700
Graciosa_Base_SW_1948_To_WGS_1984_1	108112	5.000	Portugal - Azores C - onshore	38.3200	-28.9000	39.1400	-26.9700
Graciosa_Base_SW_1948_To_WGS_1984_2	108122	1.000	Portugal - Azores C - onshore	38.3200	-28.9000	39.1400	-26.9700
Grand_Cayman_1959_To_CIGD11_1	6136	0.300	Cayman Islands - Grand Cayman	19.2100	-81.4600	19.4100	-81.0400
Grand_Cayman_1959_To_WGS_1984_1	15830	1.000	Cayman Islands - Grand Cayman	19.2100	-81.4600	19.4100	-81.0400
Grand_Cayman_1959_To_WGS_1984_2	6142	1.000	Cayman Islands - Grand Cayman	19.2100	-81.4600	19.4100	-81.0400

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Grand_Comoros_To_WGS_1984_1	5521	Unknown	Comoros - Njazidja (Grande Comore)	-11.9900	43.1600	-11.3100	43.5500
Greek_Athens_To_Greek	1761	0.000	Greece - onshore	34.8800	19.5700	41.7500	28.3000
Greek_(Athens)_to_WGS_1984_1	8644	5.000	Greece - onshore	34.8800	19.5700	41.7500	28.3000
Greek_To_GGRS_1987	1891	5.000	Greece - onshore	34.8800	19.5700	41.7500	28.3000
Greenland_1996_To_WGS_1984_1	15879	1.000	Greenland	56.3800	-75.0000	87.0200	7.9900
Grenada_1953_To_WGS_1984	1443	10.000	Grenada - main island - onshore	11.9400	-61.8400	12.2900	-61.5400
GSK-2011_to_WGS_1984_1	9773	1.000	Russia	39.8700	18.9200	85.1900	-168.9700
Guam_1963_To_HARN_Marianas_Rota	108137	Unknown	Northern Marianas - Rota	14.0000	145.0000	14.7500	146.0000
Guam_1963_To_HARN_Marianas_Saipan	108138	Unknown	Northern Marianas - Saipan	14.7500	145.0000	15.5000	146.0000
Guam_1963_To_HARN_Marianas_Tinian_Aguijan	108139	Unknown	Northern Marianas - Tinian and Aguijan	14.7500	145.5000	15.1333	145.7500
Guam_1963_To_NAD_1983_HARN_2	8665	5.000	Pacific - Guam and NMI - onshore	13.1800	144.5800	20.6100	146.1200
Guam_1963_To_WGS_1984_1	1070	6.000	Guam - onshore	13.1800	144.5800	13.7000	145.0100
Guam_1963_To_WGS_1984_2	1069	5.000	Guam - onshore	13.1800	144.5800	13.7000	145.0100
Guam_1963_To_WGS_1984_Saipan	108299	Unknown	Northern Marianas - Saipan	14.7500	145.0000	15.5000	146.0000
Gulshan_303_To_WGS_1984_1	15779	1.000	Bangladesh	18.5600	88.0100	26.6400	92.6700
Gulshan_303_to_WGS_1984_2	9679	1.000	Bangladesh	18.5600	88.0100	26.6400	92.6700
Gunung_Segara_Jakarta_To_Gunung_Segara	1883	0.000	Indonesia - Kalimantan E	-4.2400	114.5500	4.2900	119.0600
Gunung_Segara_To_WGS_1984_1	1897	Unknown	Indonesia - Kalimantan E	-4.2400	114.5500	4.2900	119.0600
Gunung_Segara_To_WGS_1984_2	1898	5.000	Indonesia - Kalimantan SE	-4.2400	114.5500	0.0000	117.9900
Gunung_Segara_To_WGS_1984_3	1899	10.000	Indonesia - northeast Kalimantan	-0.0600	116.9600	4.2900	119.0600
Gunung_Segara_To_WGS_1984_4	1838	1.000	Indonesia - Kalimantan - Mahakam delta	-1.2400	116.7200	0.0000	117.9900
GUX_1_To_WGS_1984	108263	44.000	Solomon Islands - Guadalcanal Island	-9.9800	159.5500	-9.2000	160.8800
Hanoi_1972_To_WGS_1984	1544	5.000	Vietnam - onshore Vung Tau area	9.0300	105.4900	11.0400	107.5800
Hartebeesthoek94_To_WGS_1984	1505	1.000	South Africa	-50.3200	13.3300	-22.1300	42.8500
HD1909_To_WGS_1984_1	3817	3.000	Hungary	45.7400	16.1100	48.5800	22.9000

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Helle_1954_To_WGS_1984_1	1957	1.000	Jan Mayen - onshore	70.7500	-9.1700	71.2400	-7.8700
Herat_North_To_WGS_1984	1246	Unknown	Afghanistan	29.4000	60.5000	38.4800	74.9200
Hermannskogel_To_WGS_1984	108264	Unknown	Europe - former Yugoslavia onshore	40.8500	13.3800	46.8800	23.0400
Hito_XVIII_1963_To_WGS_1984	1529	0.500	Argentina - Tierra del Fuego onshore	-55.1100	-68.6400	-52.5900	-63.7300
Hito_XVIII_1963_To_WGS_1984_2	1892	44.000	Chile - Tierra del Fuego	-55.9600	-74.8300	-51.9900	-66.3300
Hito_XVIII_1963_To_WGS_1984_3	9263	2.500	Argentina - Tierra del Fuego onshore	-55.1100	-68.6400	-52.5900	-63.7300
Hjorsey_1955_To_WGS_1984	1951	7.000	Iceland - mainland	63.3400	-24.6600	66.5900	-13.3800
Hjorsey_1955_To_WGS_1984_2	6909	7.000	Iceland - mainland	63.3400	-24.6600	66.5900	-13.3800
Hong_Kong_1963_67_To_WGS_1984	15842	1.000	Hong Kong	22.1300	113.7600	22.5800	114.5100
Hong_Kong_1980_to_Hong_Kong_Geodetic_CS_1	9913	1.000	Hong Kong	22.1300	113.7600	22.5800	114.5100
Hong_Kong_1980_To_ITRF_1996	108337	1.000	Hong Kong	22.1300	113.7600	22.5800	114.5100
Hong_Kong_1980_To_WGS_1984_1	1825	1.000	Hong Kong	22.1300	113.7600	22.5800	114.5100
Hong_Kong_Geodetic_CS_to_WGS_1984_1	8439	1.000	Hong Kong	22.1300	113.7600	22.5800	114.5100
HS2-IRF_to_ETRS89_1	9302	0.000	UK - London to Birmingham and Crewe	51.4500	-2.7500	53.3000	0.0000
HTRS96_To_ETRS_1989_1	15966	0.000	Croatia	41.6200	13.0000	46.5400	19.4300
HTRS96_To_WGS_1984_1	15967	1.000	Croatia	41.6200	13.0000	46.5400	19.4300
Hungarian_1972_To_ETRF_1989_1	108196	1.000	Hungary	45.7400	16.1100	48.5800	22.9000
Hungarian_1972_To_ETRS_1989_1	1829	0.500	Hungary	45.7400	16.1100	48.5800	22.9000
Hungarian_1972_To_ETRS_1989_2	1449	0.400	Hungary	45.7400	16.1100	48.5800	22.9000
Hungarian_1972_To_WGS_1984_1	1830	1.000	Hungary	45.7400	16.1100	48.5800	22.9000
Hungarian_1972_To_WGS_1984_2	1831	1.000	Hungary	45.7400	16.1100	48.5800	22.9000
Hungarian_1972_To_WGS_1984_3	1448	1.000	Hungary	45.7400	16.1100	48.5800	22.9000
Hungarian_1972_To_WGS_1984_4	1242	1.000	Hungary	45.7400	16.1100	48.5800	22.9000
Hu_Tzu_Shan_To_WGS_1984	1152	26.000	Taiwan – onshore - mainland and Penghu	21.8700	119.2500	25.3400	122.0600
IGCB_1955_To_WGS_1984_1	15787	5.000	Congo DR (Zaire) - Bas Congo	-6.0400	12.1700	-4.2800	16.2800
IGD05_To_IG05_Intermediate_CRS	7140	0.000	Asia - Middle East - Israel and Palestine Territory onshore	29.4500	34.1700	33.2800	35.6900

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
IGD05(2012)_To_IG05(2012)_Intermediate_CRS	6993	0.000	Asia - Middle East - Israel and Palestine Territory onshore	29.4500	34.1700	33.2800	35.6900
IGD05_To_IGD05(2012)	6992	0.050	Israel	29.4500	32.9900	33.5300	35.6900
IGM_1995_To_ETRS_1989_1	1098	0.000	Italy - including San Marino and Vatican	34.7600	5.9300	47.1000	18.9900
IGM_1995_To_WGS_1984_1	1099	1.000	Italy - including San Marino and Vatican	34.7600	5.9300	47.1000	18.9900
IGM95_to_RDN2008_1	9737	0.010	Italy - 6°22'E to 18°40'E and north of 35°16'N; San Marino, Vatican City State	35.2600	6.3600	47.1000	18.6700
IGN53_Mare_To_RGNC_1991-93_1	15884	2.000	New Caledonia - Mare	-21.7100	167.7500	-21.3200	168.1900
IGN53_Mare_To_RGNC_1991-93_2	15891	0.100	New Caledonia - Mare	-21.7100	167.7500	-21.3200	168.1900
IGN53_Mare_To_WGS_1984_1	1928	1.000	New Caledonia - Mare	-21.7100	167.7500	-21.3200	168.1900
IGN53_Mare_To_WGS_1984_2	15783	5.000	New Caledonia - Mare	-21.7100	167.7500	-21.3200	168.1900
IGN53_Mare_To_WGS_1984_3	15901	2.000	New Caledonia - Mare	-21.7100	167.7500	-21.3200	168.1900
IGN56_Lifou_To_RGNC_1991-93_1	15883	1.000	New Caledonia - Lifou	-21.2400	166.9800	-20.6200	167.5200
IGN56_Lifou_To_RGNC_1991-93_2	15890	0.100	New Caledonia - Lifou	-21.2400	166.9800	-20.6200	167.5200
IGN56_Lifou_To_WGS_1984_1	1917	10.000	New Caledonia - Lifou	-21.2400	166.9800	-20.6200	167.5200
IGN56_Lifou_To_WGS_1984_2	1927	1.000	New Caledonia - Lifou	-21.2400	166.9800	-20.6200	167.5200
IGN56_Lifou_To_WGS_1984_3	15902	1.000	New Caledonia - Lifou	-21.2400	166.9800	-20.6200	167.5200
IGN63_Hiva_Oa_To_RGPF_1	8843	0.500	French Polynesia - Marquesas Islands - Hiva Oa	-9.8900	-139.2300	-9.6400	-138.7500
IGN63_Hiva_Oa_To_RGPF_2	8845	2.000	French Polynesia - Marquesas Islands - Tahuata	-10.0800	-139.1900	-9.8600	-138.9800
IGN63_Hiva_Oa_To_WGS_1984_1	15773	2.000	French Polynesia - Marquesas Islands - Hiva Oa	-9.8900	-139.2300	-9.6400	-138.7500
IGN63_Hiva_Oa_To_WGS_1984_2	15774	2.000	French Polynesia - Marquesas Islands - Tahuata	-10.0800	-139.1900	-9.8600	-138.9800

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
IGN63_Hiva_Oa_To_WGS_1984_3	8844	2.000	French Polynesia - Marquesas Islands - Hiva Oa	-9.8900	-139.2300	-9.6400	-138.7500
IGN63_Hiva_Oa_To_WGS_1984_4	8846	2.000	French Polynesia - Marquesas Islands - Tahuata	-10.0800	-139.1900	-9.8600	-138.9800
IGN72_Grande_Terre_To_RGNC_1991-93_1	15882	2.000	New Caledonia - Grande Terre	-22.4500	163.9200	-20.0300	167.0900
IGN72_Grande_Terre_To_RGNC_1991-93_2	15887	0.300	New Caledonia - Grande Terre	-22.4500	163.9200	-20.0300	167.0900
IGN72_Grande_Terre_To_RGNC_1991-93_3	15888	0.100	New Caledonia - Grande Terre - Noumea	-22.3700	166.3500	-22.1900	166.5400
IGN72_Grande_Terre_To_WGS_1984_1	1962	10.000	New Caledonia - Grande Terre	-22.4500	163.9200	-20.0300	167.0900
IGN72_Grande_Terre_To_WGS_1984_2	1963	1.000	New Caledonia - Grande Terre	-22.4500	163.9200	-20.0300	167.0900
IGN72_Grande_Terre_To_WGS_1984_3	15903	2.000	New Caledonia - Grande Terre	-22.4500	163.9200	-20.0300	167.0900
IGN72_Nuku_Hiva_To_RGPF_1	8847	0.500	French Polynesia - Marquesas Islands - Nuku Hiva	-9.0100	-140.3100	-8.7200	-139.9600
IGN72_Nuku_Hiva_To_RGPF_2	8849	2.000	French Polynesia - Marquesas Islands - Ua Huka	-9.0000	-139.6600	-8.8100	-139.4400
IGN72_Nuku_Hiva_To_RGPF_3	8851	0.500	French Polynesia - Marquesas Islands - Ua Pou	-9.5700	-140.2100	-9.2700	-139.9500
IGN72_Nuku_Hiva_To_WGS_1984_1	1914	10.000	French Polynesia - Marquesas Islands - Nuku Hiva, Ua Huka and Ua Pou	-9.5700	-140.3100	-8.7200	-139.4400
IGN72_Nuku_Hiva_To_WGS_1984_2	15775	1.000	French Polynesia - Marquesas Islands - Nuku Hiva	-9.0100	-140.3100	-8.7200	-139.9600

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
IGN72_Nuku_Hiva_To_WGS_1984_3	15776	2.000	French Polynesia - Marquesas Islands - Ua Huka	-9.0000	-139.6600	-8.8100	-139.4400
IGN72_Nuku_Hiva_To_WGS_1984_4	15777	1.000	French Polynesia - Marquesas Islands - Ua Pou	-9.5700	-140.2100	-9.2700	-139.9500
IGN72_Nuku_Hiva_To_WGS_1984_5	8848	1.000	French Polynesia - Marquesas Islands - Nuku Hiva	-9.0100	-140.3100	-8.7200	-139.9600
IGN72_Nuku_Hiva_To_WGS_1984_6	8850	2.000	French Polynesia - Marquesas Islands - Ua Huka	-9.0000	-139.6600	-8.8100	-139.4400
IGN72_Nuku_Hiva_To_WGS_1984_7	8852	1.000	French Polynesia - Marquesas Islands - Ua Pou	-9.5700	-140.2100	-9.2700	-139.9500
IGRS_To_WGS_1984_1	3894	0.000	Iraq	29.0600	38.7900	37.3900	48.7500
IKBD_1992_To_WGS_1984_1	1993	0.000	Asia - Middle East - Iraq-Kuwait boundary	29.0600	46.3600	30.3200	48.6100
Indian_1954_To_WGS_1984	1153	21.000	Thailand - onshore	5.6300	97.3400	20.4600	105.6400
Indian_1960_To_WGS_1972_BE	1541	25.000	Vietnam - offshore Cuu Long basin	7.9900	106.5400	11.1500	110.0000
Indian_1960_To_WGS_1984_1	108097	27.000	Vietnam - offshore Cuu Long basin	7.9900	106.5400	11.1500	110.0000
Indian_1960_To_WGS_1984_2	1542	44.000	Vietnam - 14°N to 18°N onshore	14.0000	105.6100	18.0100	109.3600
Indian_1960_To_WGS_1984_3	1543	44.000	Vietnam - Con Son Island	8.5700	106.4800	8.8300	106.8000
Indian_1975_To_WGS_1984	1154	5.000	Thailand - onshore and Gulf of Thailand	5.6300	97.3400	20.4600	105.6400
Indian_1975_To_WGS_1984_2	1304	5.000	Thailand - onshore and Gulf of Thailand	5.6300	97.3400	20.4600	105.6400
Indian_1975_To_WGS_1984_3	1537	1.000	Thailand - Bongkot field	6.7400	102.1600	8.1600	103.0500
Indian_1975_To_WGS_1984_4	1812	3.000	Thailand - onshore	5.6300	97.3400	20.4600	105.6400
Indonesian_1974_To_DGN_1995_1	15911	3.000	Indonesia - onshore	-10.9800	95.1600	5.9700	141.0100
Indonesian_1974_To_WGS_1984	1248	44.000	Indonesia - onshore	-10.9800	95.1600	5.9700	141.0100
Indonesian_1974_To_WGS_1984_2	1832	25.000	Indonesia - onshore	-10.9800	95.1600	5.9700	141.0100
Indonesian_1974_To_WGS_1984_3	1833	3.000	Indonesia - onshore	-10.9800	95.1600	5.9700	141.0100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
IRENET95_To_ETRF_1989	108197	0.000	Europe - Ireland (Republic and Ulster) - onshore	51.3900	-10.5600	55.4300	-5.3400
IRENET95_To_ETRS_1989	1611	0.000	Europe - Ireland (Republic and Ulster) - onshore	51.3900	-10.5600	55.4300	-5.3400
IRENET95_To_WGS_1984_1	1678	1.000	Europe - Ireland (Republic and Ulster) - onshore	51.3900	-10.5600	55.4300	-5.3400
ISN_1993_To_ISN_2004	108214	0.050	Iceland - NADCON	63.2700	-24.6500	66.6600	-13.2500
ISN_1993_To_WGS_1984_1	1952	1.000	Iceland	59.9600	-30.8700	69.5900	-5.5500
ISN_2004_To_ISN_1993	108216	0.050	Iceland - NADCON	63.2700	-24.6500	66.6600	-13.2500
ISN_2004_To_WGS_1984_1	5327	1.000	Iceland	59.9600	-30.8700	69.5900	-5.5500
ISN2004_To_ISN2016_1	9233	0.050	Iceland - onshore	63.2400	-24.6600	66.6200	-13.3800
ISN2016_to_WGS_1984_1	9291	1.000	Iceland	59.9600	-30.8700	69.5900	-5.5500
ISN93_To_ISN2016_1	9232	0.050	Iceland - online	63.2400	-24.6600	66.6200	-13.3800
Israel_To_WGS_1984	1073	2.000	Israel, Palestine Territory, and Jordan	29.1900	32.9900	33.5300	39.3000
Israel_1993_to_WGS_1984_2	9676	0.500	Asia - Middle East - Israel and Palestine Territory onshore	29.4500	34.1700	33.2800	35.6900
ISTS_061_1968_To_WGS_1984	15813	44.000	South Georgia - onshore	-54.9500	-38.0800	-53.9300	-35.7400
ISTS_073_1969_To_WGS_1984	15808	44.000	British Indian Ocean Territory - Diego Garcia	-7.4900	72.3000	-7.1800	72.5500
ITRF_1988_To_ITRF_2000_1	108034	0.010	World	-90.0000	-180.0000	90.0000	180.0000
ITRF_1989_To_ITRF_2000_1	108033	0.010	World	-90.0000	-180.0000	90.0000	180.0000
ITRF_1990_To_ITRF_2000_1	108032	0.010	World	-90.0000	-180.0000	90.0000	180.0000
ITRF_1991_To_ITRF_2000_1	108031	0.010	World	-90.0000	-180.0000	90.0000	180.0000
ITRF_1992_To_ITRF_2000_1	108030	0.010	World	-90.0000	-180.0000	90.0000	180.0000
ITRF_1993_To_ITRF_2000_1	108029	0.010	World	-90.0000	-180.0000	90.0000	180.0000
ITRF_1994_To_ITRF_2000_1	108028	0.010	World	-90.0000	-180.0000	90.0000	180.0000
ITRF_1996_To_ITRF_2000_1	108027	0.010	World	-90.0000	-180.0000	90.0000	180.0000
ITRF_1997_To_ITRF_2000_1	108026	0.010	World	-90.0000	-180.0000	90.0000	180.0000
ITRF_2000_To_ITRF_2005_1	108036	0.010	World	-90.0000	-180.0000	90.0000	180.0000

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
ITRF_2000_To_NAD_1983_2011	108353	0.100	USA - CONUS and Alaska; PRVI	14.9200	167.6500	74.7100	-63.8800
ITRF_2000_To_NAD_1983_CORS96	108150	0.100	USA - CONUS and Alaska; PRVI	14.9200	167.6500	74.7100	-63.8800
ITRF_2000_To_NAD_1983_HARN	108281	0.100	USA (all states)	15.5600	167.6500	74.7100	-65.6900
ITRF_2000_To_WGS_1984	108280	0.000	World	-90.0000	-180.0000	90.0000	180.0000
ITRF_2005_To_ITRF_2008_2	108052	0.010	World	-90.0000	-180.0000	90.0000	180.0000
ITRF_2008_To_ITRF_2014_7par	108074	0.010	World	-90.0000	-180.0000	90.0000	180.0000
ITRF_2008_To_IG05(2012)_Intermediate_CRS	9186	0.050	Asia - Middle East - Israel and Palestine Territory onshore	29.4500	34.1700	33.2800	35.6900
ITRF_2008_To_NAD_1983_2011	108360	0.030	USA - CONUS and Alaska; PRVI	14.9200	167.6500	74.7100	-63.8800
ITRF_2008_To_NAD_1983_MA11	108361	0.050	Pacific - US interests Mariana plate	1.6400	129.4800	23.9000	149.5500
ITRF_2008_To_NAD_1983_PA11	108362	0.050	Pacific - US interests Pacific plate	-17.5600	157.4700	31.8000	-151.2700
ITRF_2014_To_GDA2020_Null	108061	0.005	Australia - GDA	-60.5500	93.4100	-8.4700	173.3400
ITRF_2014_To_NAD83_2011_At_Epoch_2010.0_FE	108379	999.000	USA - CONUS and Alaska; PRVI	14.9200	167.6500	74.7100	-63.8800
ITRF_2014_To_NAD83_MA11_At_Epoch_2010.0_FE	108381	999.000	Pacific - US interests Mariana plate	1.6400	129.4800	23.9000	149.5500
ITRF_2014_To_NAD_1983_CSRS_v7_7par	108075	0.000	Canada	38.2100	-141.0100	86.4600	-47.7300
ITRF_2014_To_NAD83_PA11_At_Epoch_2010.0_FE	108380	999.000	NAD83 PA11 - US interests Pacific plate	-17.5600	151.3000	31.8000	-151.2700
ITRF_2014_To_Segara_1	10589	0.200	Indonesia - Kalimantan - Mahakam delta	-1.2400	116.7200	0.0000	117.9900
JAD_2001_To_WGS_1984	15925	0.000	Jamaica	14.0800	-80.6000	19.3600	-74.5100
Jamaica_1969_To_JAD_2001_1	15926	0.500	Jamaica - onshore	17.6400	-78.4300	18.5800	-76.1700
Jamaica_1969_To_WGS_1972_1	10086	15.000	Jamaica - onshore	17.6400	-78.4300	18.5800	-76.1700
Jamaica_1969_To_WGS_1972_2	1083	10.000	Jamaica - onshore	17.6400	-78.4300	18.5800	-76.1700
Jamaica_1969_To_WGS_1984_1	1084	5.000	Jamaica - onshore	17.6400	-78.4300	18.5800	-76.1700
Jamaica_1969_To_WGS_1984_2	1085	2.000	Jamaica - onshore	17.6400	-78.4300	18.5800	-76.1700
Jamaica_1969_To_WGS_1984_3	15927	1.000	Jamaica - onshore	17.6400	-78.4300	18.5800	-76.1700
JGD_2000_To_JGD_2011_NTV2_1	6713	0.500	Japan – northern Honshu	34.8400	135.4200	41.5800	142.1400

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
JGD_2000_To_JGD_2011_2_Null	6698	1.000	Japan excluding northern main province	17.0900	122.3800	46.0500	157.6500
JGD_2000_To_WGS_1984	108107	4.000	South Korea	28.6000	122.7100	40.2700	134.2800
JGD_2000_To_WGS_1984_1	1826	1.000	Japan	17.0900	122.3800	46.0500	157.6500
JGD2000_to_WGS_1984_2	9896	1.000	Japan - northern Honshu	34.8400	135.4200	41.5800	142.1400
JGD_2011_To_WGS_1984	108053	0.000	Japan - onshore	20.3700	122.8300	45.5400	154.0500
JGD2011_to_WGS_1984_1	9936	1.000	Japan	17.0900	122.3800	46.0500	157.6500
Johnston_Island_1961_To_WGS_1984	15809	44.000	Johnston Island	16.6700	-169.5900	16.7900	-169.4700
Jordan_To_WGS_1984	108233	Unknown	Jordan	29.1800	34.8800	33.3800	39.3100
Jouik_1961_To_WGS_1984_1	15870	1.000	Mauritania - north coast	19.3700	-17.0800	21.3400	-15.8800
Kalianpur_1937_To_WGS_1984_1	1155	18.000	Bangladesh - onshore	20.5200	88.0100	26.6400	92.6700
Kalianpur_1937_To_WGS_1984_2	1533	5.000	Myanmar (Burma) - Moattama area	9.4800	93.9400	17.8700	99.6600
Kalianpur_1962_To_WGS_1984_1	1247	Unknown	Pakistan - onshore	23.6400	60.8600	37.0700	77.8300
Kalianpur_1962_To_WGS_1984_2	15701	1.000	Pakistan - offshore Indus	21.0500	64.0000	25.3900	68.2400
Kalianpur_1962_To_WGS_1984_3	15702	3.000	Pakistan - Badin and Mehran	24.0000	67.7400	25.6400	69.8700
Kalianpur_1962_To_WGS_1984_4	15703	3.000	Pakistan - Karachi	24.6900	66.8300	25.7600	68.0000
Kalianpur_1962_To_WGS_1984_5	9234	3.000	Pakistan - East Sind	24.1600	68.2700	28.6100	71.1400
Kalianpur_1962_To_WGS_1984_6	15494	3.000	Pakistan - Gambat	25.8800	68.2400	27.6700	69.3000
Kalianpur_1975_To_WGS_1984_1	1156	22.000	Asia - India mainland and Nepal	8.0200	68.1300	35.5100	97.4200
Kandawala_To_WGS_1984	1157	35.000	Sri Lanka - onshore	5.8600	79.6400	9.8800	81.9500
Karbala_1979_PolSERVICE_To_IGRS_1	5077	0.300	Iraq - onshore	29.0600	38.7900	37.3900	48.6100
Karbala_1979_PolSERVICE_To_WGS_1984_1	15872	5.000	Iraq - Basra area	29.8700	46.4600	31.0900	48.6100
Karbala_1979_PolSERVICE_To_WGS_1984_2	5078	0.300	Iraq - onshore	29.0600	38.7900	37.3900	48.6100
Katanga_1955_To_RGRDC_2005_1	4065	1.500	Congo DR (Zaire) - Katanga - Lubumbashi area	-12.0100	26.3800	-11.1300	27.7500
Katanga_1955_To_RGRDC_2005_2	4067	0.500	Congo DR (Zaire) - Katanga - Lubumbashi area	-12.0100	26.3800	-11.1300	27.7500
Katanga_1955_To_WGS_1984_1	4066	1.500	Congo DR (Zaire) - Katanga - Lubumbashi area	-12.0100	26.3800	-11.1300	27.7500

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Katanga_1955_To_WGS_1984_2	4068	1.000	Congo DR (Zaire) - Katanga - Lubumbashi area	-12.0100	26.3800	-11.1300	27.7500
Kerguelen_Island_1949_To_WGS_1984_1	15850	10.000	French Southern Territories - Kerguelen onshore	-49.7800	68.6900	-48.6000	70.6200
Kertau_RSO_To_Kertau_1	15896	0.000	Asia - Malaysia (west) and Singapore	1.1300	99.5900	6.7200	104.6000
Kertau_To_WGS_1984	1158	15.000	Asia - Malaysia (west including SCS) and Singapore	1.1300	99.5900	7.8100	105.8200
KGD2002_To_WGS_1984_1	15831	1.000	South Korea	28.6000	122.7100	40.2700	134.2800
KKJ_To_ETRS_1989_1_Old	1638	1.500	Finland - onshore	59.7500	19.2400	70.0900	31.5900
KKJ_To_EUREF_FIN	10098	1.000	Finland - onshore	59.7500	19.2400	70.0900	31.5900
KKJ_To_WGS_1984_1_Old	1639	1.500	Finland - onshore	59.7500	19.2400	70.0900	31.5900
KKJ_To_WGS_1984_2_JHS153	10099	0.500	Finland - onshore	59.7500	19.2400	70.0900	31.5900
KOC_To_WGS_1984_1	1059	1.000	Kuwait - onshore	28.5300	46.5400	30.0900	48.4800
Korean_1985_To_KGD_2002_1	5189	1.000	South Korea - onshore	33.1400	124.5300	38.6400	131.0100
Korean_1985_To_WGS_1984_1	5191	1.000	South Korea - onshore	33.1400	124.5300	38.6400	131.0100
Korean_1995_To_WGS_1984_1	1558	2.000	South Korea - onshore	33.1400	124.5300	38.6400	131.0100
KOSOVAREF01_To_WGS_1984_1	9144	1.000	Kosovo	41.8500	19.9700	43.2500	21.8000
Kousseri_To_WGS_1972_BE_1	1806	5.000	Cameroon - N'Djamena area	11.7000	14.1700	12.7700	15.0900
KSA-GRF17_To_WGS_1984_1	9383	1.000	Saudi Arabia	16.2900	34.4400	32.1600	55.6700
KUDAMS_To_WGS_1984_1	1061	1.000	Kuwait - Kuwait City	29.1700	47.7800	29.4500	48.1600
KUDAMS_To_WGS_1984_2	1062	1.000	Kuwait - Kuwait City	29.1700	47.7800	29.4500	48.1600
Kusaie_1951_To_WGS_1984	15810	44.000	Micronesia - Kosrae (Kusaie)	5.2100	162.8500	5.4300	163.1000
Kyrg-06_to_WGS_1984_1	9768	1.000	Kyrgyzstan	39.1900	69.2400	43.2200	80.2900
La_Canoa_To_PSAD56_1	8674	0.000	Venezuela - onshore	0.6400	-73.3800	12.2500	-59.8000
La_Canoa_To_REGVEN_1	1771	15.000	Venezuela - onshore	0.6400	-73.3800	12.2500	-59.8000
La_Canoa_To_SIRGAS	108217	15.000	Venezuela - onshore	0.6400	-73.3800	12.2500	-59.8000
La_Canoa_To_WGS_1984	1516	2.500	Venezuela - east	3.5600	-67.4900	10.8000	-59.8000
La_Canoa_To_WGS_1984_2	1096	15.000	Venezuela - onshore	0.6400	-73.3800	12.2500	-59.8000
Lao_1993_To_Lao_1997_1	1064	0.150	Laos	13.9200	100.0900	22.5000	107.6400
Lao_1997_To_WGS_1984_1	1065	5.000	Laos	13.9200	100.0900	22.5000	107.6400

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Leigon_To_WGS_1984	1159	5.000	Ghana	1.4000	-3.7900	11.1600	2.1000
Le_Pouce_1934_To_WGS_1984_1	15784	2.000	Mauritius - mainland	-20.5700	57.2500	-19.9400	57.8500
LGD2006_To_WGS_1984_1	15908	0.100	Libya	19.4900	9.3100	35.2300	26.2100
Liberia_1964_To_WGS_1984	1160	26.000	Liberia - onshore	4.2900	-11.5200	8.5200	-7.3600
LibRef21_to_WGS_84_1	10803	1.000	Liberia	1.0200	-13.5900	8.5200	-7.3600
Lisbon_1890_Lisbon_To_Lisbon	1991	0.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_1890_(Lisbon)_to_WGS_1984_1	8648	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_1890_(Lisbon)_to_WGS_1984_2	8649	1.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_1890_To_ETRS_1989_1	5039	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_1890_To_WGS_1984_1	1986	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_1890_To_WGS_1984_2	1990	1.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_Lisbon_To_Lisbon	1756	0.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_Lisbon_To_WGS_1984_2	5838	2.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_To_ETRS_1989_1	1655	3.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_To_ETRS_1989_2	1997	2.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_To_ETRS_1989_3	5038	7.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_To_ETRS_1989_4	6188	0.100	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_To_WGS_1984_1	1656	3.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_To_WGS_1984_3	1984	5.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Lisbon_To_WGS_1984_4	1988	2.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Lisbon_To_WGS_1984_5	6898	43.000	Portugal - mainland - onshore	36.9500	-9.5600	42.1600	-6.1900
Little_Cayman_1961_To_CIGD11_1	6137	0.150	Cayman Islands - Little Cayman and Cayman Brac	19.6300	-80.1400	19.7800	-79.6900
Little_Cayman_1961_To_WGS_1984_1	15814	44.000	Cayman Islands - Little Cayman and Cayman Brac	19.6300	-80.1400	19.7800	-79.6900
Little_Cayman_1961_To_WGS_1984_2	15829	1.000	Cayman Islands - Little Cayman and Cayman Brac	19.6300	-80.1400	19.7800	-79.6900
Little_Cayman_1961_To_WGS_1984_3	6143	1.000	Cayman Islands - Little Cayman and Cayman Brac	19.6300	-80.1400	19.7800	-79.6900
LKS_1992_To_ETRS_1989_1	8891	0.000	Latvia	55.6700	19.0600	58.0900	28.2400
LKS_1992_To_WGS_1984_1	1958	1.000	Latvia	55.6700	19.0600	58.0900	28.2400
LKS_1994_To_ETRS_1989_1	8892	0.000	Lithuania	53.8900	19.0200	56.4500	26.8200
LKS_1994_To_WGS_1984	1283	1.000	Lithuania	53.8900	19.0200	56.4500	26.8200
Locodjo_1965_To_WGS_1984	1469	15.000	Cote d'Ivoire (Ivory Coast) - Abidjan area	5.1500	-4.2200	5.5400	-3.8500
LUREF_To_ETRS_1989_1	1642	1.010	Luxembourg	49.4400	5.7300	50.1900	6.5300
LUREF_To_ETRS_1989_2	1078	0.110	Luxembourg	49.4400	5.7300	50.1900	6.5300
LUREF_To_ETRS_1989_3	5485	1.000	Luxembourg	49.4400	5.7300	50.1900	6.5300
LUREF_To_ETRS_1989_4	5483	0.100	Luxembourg	49.4400	5.7300	50.1900	6.5300
LUREF_To_WGS_1984_1	1643	1.010	Luxembourg	49.4400	5.7300	50.1900	6.5300
LUREF_To_WGS_1984_2	1079	0.510	Luxembourg	49.4400	5.7300	50.1900	6.5300
LUREF_To_WGS_1984_3	5486	1.000	Luxembourg	49.4400	5.7300	50.1900	6.5300
LUREF_To_WGS_1984_4	5484	0.500	Luxembourg	49.4400	5.7300	50.1900	6.5300
Luzon_1911_To_WGS_1984_1	1161	17.000	Philippines - onshore excluding Mindanao	7.7500	116.8900	19.4500	125.8800
Luzon_1911_To_WGS_1984_2	1162	44.000	Philippines - Mindanao onshore	4.9900	119.7600	10.5200	126.6500
Macao_1920_to_WGS_1984_1	8438	1.000	Macao	22.0600	113.5200	22.2300	113.6800
Macao_2008_To_ITRF_2005	108038	1.000	Macao	22.1000	113.5200	22.2200	113.6000
Macao_2008_to_Macao_1920_1	8435	999.000	Macao	22.0600	113.5200	22.2300	113.6800
Macao_2008_To_Observatorio_Meteorologico_1965_1	108039	3.000	Macao	22.1000	113.5200	22.2200	113.6000

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Macao_2008_To_WGS_1984	108037	1.000	Macao	22.1000	113.5200	22.2200	113.6000
Macao_2008_to_WGS_1984_1	8436	1.000	Macao	22.0600	113.5200	22.2300	113.6800
MAGNA-SIRGAS_2018_to_WGS_1984_1	10149	1.000	Colombia	-4.2300	-84.7700	15.5100	-66.8700
MAGNA_To_SIRGAS	108290	1.000	Colombia	-4.2300	-84.7700	15.5100	-66.8700
MAGNA_To_WGS_1984_1	15738	1.000	Colombia	-4.2300	-84.7700	15.5100	-66.8700
Mahe_1971_To_WGS_1984	1164	44.000	Seychelles - Mahe Island	-4.8600	55.3000	-4.5000	55.5900
Majuro_To_WGS_1984	108449	Unknown	Marshall Islands	1.7700	157.4700	17.8800	175.5200
Makassar_Jakarta_To_Makassar	1260	0.000	Indonesia - Sulawesi SW	-6.5400	118.7100	-1.8800	120.7800
Makassar_(Jakarta)_to_WGS_1984_1	8638	999.000	Indonesia - Sulawesi SW	-6.5400	118.7100	-1.8800	120.7800
Makassar_To_WGS_1984_1	1837	Unknown	Indonesia - Sulawesi SW	-6.5400	118.7100	-1.8800	120.7800
Malongo_1987_to_RSA013_1	9906	5.000	Africa - Angola (Cabinda) and DR Congo (Zaire) - offshore	-6.0400	10.5300	-5.0500	12.3700
Malongo_1987_To_WGS_1984_1	1330	10.000	Africa - Angola (Cabinda) and DR Congo (Zaire) - offshore	-6.0400	10.5300	-5.0500	12.3700
Malongo_1987_To_WGS_1984_2	1557	5.000	Africa - Angola (Cabinda) and DR Congo (Zaire) - offshore	-6.0400	10.5300	-5.0500	12.3700
Malongo_1987_To_WGS_1984_3	15791	10.000	Africa - Angola (Cabinda) and DR Congo (Zaire) - offshore	-6.0400	10.5300	-5.0500	12.3700
Manoca_1962_To_WGS_1972_BE_1	1902	5.000	Cameroon - coastal area	2.1600	8.4500	4.9900	10.4000
Manoca_1962_To_WGS_1984_1	1796	0.500	Cameroon - coastal area	2.1600	8.4500	4.9900	10.4000
Manoca_To_WGS_1984_1	1316	Unknown	Cameroon	1.6500	8.3200	13.0900	16.2100
MARCARIO_SOLIS_To_WGS_1984_1	5377	1.000	Panama	5.0000	-84.3200	12.5100	-77.0400
MARGEN_To_WGS_1984_1	5374	1.000	Bolivia	-22.9100	-69.6600	-9.6700	-57.5200
Massawa_To_WGS_1984	1165	44.000	Eritrea	12.3600	36.4400	18.1000	43.3100
Maupiti_1983_To_RGPF_1	15759	0.500	French Polynesia - Society Islands - Maupiti	-16.5700	-152.3900	-16.3400	-152.1400
Maupiti_1983_To_WGS_1984_1	15771	1.000	French Polynesia - Society Islands - Maupiti	-16.5700	-152.3900	-16.3400	-152.1400
Maupiti_1983_To_WGS_1984_2	8853	1.000	French Polynesia - Society Islands - Maupiti	-16.5700	-152.3900	-16.3400	-152.1400
Mauritania_1999_To_WGS_1984_1	15860	1.000	Mauritania	14.7200	-20.0400	27.3000	-4.8000

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Merchich_To_WGS_1984	1166	7.000	Morocco - onshore	27.6600	-13.2400	35.9700	-1.0100
Mexican_Datum_1993_To_WGS_1984_1	4832	1.000	Mexico	12.1000	-122.1900	32.7200	-84.6400
Mexico_ITRF2008_To_WGS_1984_1	6373	1.000	Mexico	12.1000	-122.1900	32.7200	-84.6400
MGI_1901_To_ETRS_1989_2	3963	1.000	Croatia - onshore	42.3400	13.4300	46.5400	19.4300
MGI_1901_To_ETRS_1989_3	3914	1.000	Slovenia	45.4200	13.3800	46.8800	16.6100
MGI_1901_To_ETRS_1989_5	6205	1.000	North Macedonia	40.8500	20.4500	42.3600	23.0400
MGI_1901_To_ETRS_1989_6	7675	0.500	Serbia and Kosovo	41.8500	18.81	46.1900	23.0100
MGI_1901_To_ETRS_1989_7	8680	1.000	Bosnia and Herzegovina	42.5600	15.7400	45.2700	19.6200
MGI_1901_To_KOSOVAREF01_1	9142	1.000	Kosovo	41.8500	19.9700	43.2500	21.8000
MGI_1901_To_Slovenia_1996_1	3916	1.000	Slovenia	45.4200	13.3800	46.8800	16.6100
MGI_1901_To_Slovenia_1996_10	3927	0.300	Slovenia - Primorska and Notranjska onshore	45.4400	13.4700	46.0800	14.5800
MGI_1901_To_Slovenia_1996_11	3928	0.300	Slovenia - central	45.9100	14.2100	46.3100	15.2800
MGI_1901_To_Slovenia_1996_12	8689	1.070	Slovenia – onshore	45.4200	13.3800	46.8800	16.6100
MGI_1901_To_Slovenia_1996_2	3918	0.500	Slovenia - west of 14°30'E onshore	45.4400	13.3800	46.5300	14.5800
MGI_1901_To_Slovenia_1996_3	3919	0.500	Slovenia - NE	46.1400	14.5400	46.8800	16.6100
MGI_1901_To_Slovenia_1996_3tra_NTV2	108475	0.110	Slovenia - onshore	45.4200	13.3800	46.8800	16.6100
MGI_1901_To_Slovenia_1996_4	3921	0.500	Slovenia - SE	45.4200	14.5500	46.2200	15.7300
MGI_1901_To_Slovenia_1996_5	3922	0.300	Slovenia - southeastern	45.4200	14.5300	45.7700	15.3600
MGI_1901_To_Slovenia_1996_6	3923	0.300	Slovenia - Dolenjska	45.7000	14.4700	46.1200	15.7300
MGI_1901_To_Slovenia_1996_7	3924	0.300	Slovenia - Stajerska	46.1000	14.7400	46.7600	16.2700
MGI_1901_To_Slovenia_1996_8	3925	0.300	Slovenia - Pomurje	46.4700	15.9600	46.8800	16.6100
MGI_1901_To_Slovenia_1996_9	3926	0.300	Slovenia - Gorenjska and N Primorsko	46.0500	13.3800	46.5300	14.8200
MGI_1901_to_SRB-ETRS89_8	9495	0.460	Serbia	42.2300	18.8100	46.1900	23.0100
MGI_1901_to_SRB-ETRS89_9	9496	0.030	Serbia	42.2300	18.8100	46.1900	23.0100
MGI_1901_To_WGS_1984_1	3962	5.000	Europe - former Yugoslavia onshore	40.8500	13.3800	46.8800	23.0400
MGI_1901_To_WGS_1984_10	6206	2.000	North Macedonia	40.8500	20.4500	42.3600	23.0400
MGI_1901_To_WGS_1984_11	7676	1.000	Serbia and Kosovo	41.8500	18.8100	46.1900	23.0100
MGI_1901_To_WGS_1984_13	8823	1.000	Bosnia and Herzegovina	42.5600	15.7400	45.2700	19.6200
MGI_1901_To_WGS_1984_14	9143	1.000	Kosovo	41.8500	19.9700	43.2500	21.8000
MGI_1901_to_WGS_1984_15	9486	1.000	Serbia	42.2300	18.8100	46.1900	23.0100
MGI_1901_To_WGS_1984_16	8688	1.300	Slovenia – onshore	45.4200	13.3800	46.8800	16.6100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
MGI_1901_To_WGS_1984_4	3964	1.000	Croatia - onshore	42.3400	13.4300	46.5400	19.4300
MGI_1901_To_WGS_1984_5	3915	1.000	Slovenia	45.4200	13.3800	46.8800	16.6100
MGI_1901_To_WGS_1984_6	3965	10.000	Montenegro - onshore	41.7900	18.4500	43.5600	20.3800
MGI_1901_To_WGS_1984_9	3917	1.000	Slovenia	45.4200	13.3800	46.8800	16.6100
MGI_Ferro_To_MGI	3895	0.000	Austria	46.4000	9.5300	49.0200	17.1700
MGI_Ferro_To_MGI_1901_1	3913	1.000	Europe - former Yugoslavia onshore	40.8500	13.3800	46.8800	23.0400
MGI_Ferro_To_WGS_1984	108094	5.000	Europe - former Yugoslavia onshore	40.8500	13.3800	46.8800	23.0400
MGI_Ferro_To_WGS_1984_1	3966	5.000	Europe - former Yugoslavia onshore	40.8500	13.3800	46.8800	23.0400
MGI_Ferro_To_WGS_1984_2	3896	1.500	Austria	46.4000	9.5300	49.0200	17.1700
MGI_To_ETRS_1989_Serbia	108072	0.500	Serbia and Kosovo	41.8500	18.8100	46.1900	23.0100
MGI_To_ETRS_1989_1	1619	1.500	Austria	46.4000	9.5300	49.0200	17.1700
MGI_To_ETRS_1989_2	1620	1.000	Croatia	41.6200	13.0000	46.5400	19.4300
MGI_To_ETRS_1989_3	1785	1.000	Slovenia	45.4200	13.3800	46.8800	16.6100
MGI_To_ETRS_1989_4	1024	1.000	Austria - Styria	46.6400	13.5800	47.8400	16.1700
MGI_To_ETRS_1989_5	5891	0.150	Austria	46.4000	9.5300	49.0200	17.1700
MGI_To_ETRS_1989_8	9910	0.140	Austria	46.4000	9.5300	49.0200	17.1700
MGI_To_WGS_1984	1306	Unknown	Europe - former Yugoslavia onshore	40.8500	13.3800	46.8800	23.0400
MGI_To_WGS_1984_Serbia	108073	1.000	Serbia and Kosovo	41.8500	18.8100	46.1900	23.0100
MGI_To_WGS_1984_2	108095	1.500	Austria	46.4000	9.5300	49.0200	17.1700
MGI_To_WGS_1984_3	1618	1.500	Austria	46.4000	9.5300	49.0200	17.1700
MGI_To_WGS_1984_4	1621	1.000	Croatia	41.6200	13.0000	46.5400	19.4300
MGI_To_WGS_1984_5	1786	1.000	Slovenia	45.4200	13.3800	46.8800	16.6100
MGI_To_WGS_1984_6	1794	Unknown	Montenegro - onshore	41.7900	18.4500	43.5600	20.3800
MGI_To_WGS_1984_8	1194	0.500	Austria - Styria	46.6400	13.5800	47.8400	16.1700
Mhast_offshore_To_WGS_1972_BE_1	15790	10.000	Africa - Angola (Cabinda) and DR Congo (Zaire) - offshore	-6.0400	10.5300	-5.0500	12.3700
Midway_1961_To_WGS_1984	15818	44.000	Midway Islands - Sand and Eastern Islands	28.1300	-177.4500	28.2800	-177.3100
Midway_1961_To_WGS_1984_Old	15817	45.000	Midway Islands - Sand and Eastern Islands	28.1300	-177.4500	28.2800	-177.3100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Minna_To_WGS_1984_1	1167	44.000	Cameroon - onshore	1.6500	8.4500	13.0900	16.2100
Minna_To_WGS_1984_10	1824	25.000	Nigeria - Gongola Basin	8.7800	9.4100	11.6300	12.1300
Minna_To_WGS_1984_11	1067	8.000	Nigeria - offshore blocks OPL 210, 213, 217 and 218	3.2400	4.4100	5.5400	6.2900
Minna_To_WGS_1984_12	15705	8.000	Nigeria - offshore blocks OPL 215 and 221	3.2500	5.0200	4.2300	7.3100
Minna_To_WGS_1984_13	15706	7.000	Nigeria - offshore deep water	1.9200	2.6600	6.1400	7.8200
Minna_To_WGS_1984_14	15755	7.000	Nigeria - OML 58	5.0500	6.5300	5.3600	6.8400
Minna_To_WGS_1984_15	15493	5.000	Nigeria - 4°N to 5°N, 6°E to 8°E	3.9900	5.9900	5.0100	8.0100
Minna_To_WGS_1984_16	6196	5.000	Nigeria - OML 124	5.5600	6.7200	5.7400	6.9700
Minna_To_WGS_1984_2	1168	15.000	Nigeria	1.9200	2.6600	13.9000	14.6500
Minna_To_WGS_1984_3	1754	5.000	Nigeria - south	4.2200	4.3500	6.9500	9.4500
Minna_To_WGS_1984_4	1818	12.000	Nigeria - offshore deep water	1.9200	2.6600	6.1400	7.8200
Minna_To_WGS_1984_6	1820	12.000	Nigeria - offshore blocks OPL 209, 219 and 220	3.2500	4.0100	5.5400	6.9600
Minna_To_WGS_1984_7	1821	6.000	Nigeria - offshore blocks OML 99-102 and OPL 222 and 223	3.2500	7.1600	4.5100	8.2500
Minna_To_WGS_1984_8	1822	10.000	Nigeria - offshore blocks OPL 209-213 and 316	4.2200	3.8300	6.3100	5.1700
Minna_To_WGS_1984_9	1823	8.000	Nigeria - offshore blocks OPL 217-223	3.2400	5.5800	3.8600	8.0000
MMN_To_WGS_1984_1	9261	2.500	Argentina - Tierra del Fuego onshore	-55.1100	-68.6400	-52.5900	-63.7300
MMS_To_WGS_1984_1	9262	2.500	Argentina - Tierra del Fuego onshore	-55.1100	-68.6400	-52.5900	-63.7300
MOLDREF99_To_ETRS_1989_1	5584	0.100	Moldova	45.4400	26.6300	48.4700	30.1300
MOLDREF99_To_WGS_1984_1	5585	1.000	Moldova	45.4400	26.6300	48.4700	30.1300
MONREF_1997_To_MSK_1942_1	108286	Unknown	Mongolia	41.5800	87.7600	52.1500	119.9400
MONREF_1997_To_MSK_1942_2	108287	Unknown	Mongolia	41.5800	87.7600	52.1500	119.9400
MONREF_1997_To_Pulkovo_1942_1	108288	Unknown	Mongolia	41.5800	87.7600	52.1500	119.9400
MONREF_1997_To_Pulkovo_1942_2	108289	Unknown	Mongolia	41.5800	87.7600	52.1500	119.9400

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
MONREF_1997_To_WGS_1984	108054	1.0	Mongolia	41.5800	87.7600	52.1500	119.9400
Monte_Mario_Rome_To_Monte_Mario	1262	0.000	Italy - including San Marino and Vatican	34.7600	5.9300	47.1000	18.9900
Monte_Mario_Rome_To_WGS_1984	8175	44.000	Italy - Sardinia onshore	38.8200	8.0800	41.3100	9.8900
Monte_Mario_to_ED50_1	9732	0.100	Italy - 6°22'E to 18°40'E and north of 35°16'N; San Marino, Vatican City State	35.2600	6.3600	47.1000	18.6700
Monte_Mario_To_ETRS_1989_1	1659	4.000	Italy - mainland	37.8600	6.6200	47.1000	18.5800
Monte_Mario_To_ETRS_1989_2	1661	4.000	Italy - Sardinia onshore	38.8200	8.0800	41.3100	9.8900
Monte_Mario_To_ETRS_1989_3	1663	4.000	Italy - Sicily onshore	36.5900	12.3600	38.3500	15.7100
Monte_Mario_to_IGM95_4	9733	0.100	Italy - 6°22'E to 18°40'E and north of 35°16'N; San Marino, Vatican City State	35.2600	6.3600	47.1000	18.6700
Monte_Mario_to_RDN2008_5	9734	0.100	Italy - 6°22'E to 18°40'E and north of 35°16'N; San Marino, Vatican City State	35.2600	6.3600	47.1000	18.6700
Monte_Mario_To_WGS_1984	1169	44.000	Italy - Sardinia onshore	38.8200	8.0800	41.3100	9.8900
Monte_Mario_To_WGS_1984_10	1093	10.000	Italy - Sicily Strait east of 13°E	35.2200	13.0000	37.4800	15.1600
Monte_Mario_To_WGS_1984_11	1094	10.000	Italy - Sicily Strait west of 13°E	35.2800	10.6800	38.4500	13.0100
Monte_Mario_To_WGS_1984_2	1662	4.000	Italy - Sardinia onshore	38.8200	8.0800	41.3100	9.8900
Monte_Mario_To_WGS_1984_3	1664	4.000	Italy - Sicily onshore	36.5900	12.3600	38.3500	15.7100
Monte_Mario_To_WGS_1984_4	1660	4.000	Italy - mainland	37.8600	6.6200	47.1000	18.5800
Monte_Mario_To_WGS_1984_5	1088	10.000	Italy - Adriatic - North Ancona	43.6200	12.2200	45.7300	13.9600
Monte_Mario_To_WGS_1984_6	1089	10.000	Italy - Adriatic - South Ancona / North Gargano	41.9500	13.6100	44.0400	16.1400
Monte_Mario_To_WGS_1984_7	1090	10.000	Italy - Adriatic - South Gargano	40.7200	15.9500	42.2800	18.6300
Monte_Mario_To_WGS_1984_8	1091	10.000	Italy - Otranto channel	39.7700	17.9500	41.0300	18.9900
Monte_Mario_To_WGS_1984_9	1092	10.000	Italy - north Ionian Sea	37.6700	16.5500	40.4700	18.9300

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Montserrat_1958_To_WGS_1984	1444	44.000	Montserrat - onshore	16.6200	-62.2900	16.8700	-62.0800
Moorea_1987_To_RGPF_2	8831	0.500	French Polynesia - Society Islands - Moorea	-17.6300	-150.0000	-17.4100	-149.7300
Moorea_1987_To_WGS_1984_2	8832	1.000	French Polynesia - Society Islands - Moorea	-17.6300	-150.0000	-17.4100	-149.7300
MOP78_To_WGS_1984_1	1925	10.000	Wallis and Futuna - Wallis	-13.4100	-176.2500	-13.1600	-176.0700
MOP78_To_WGS_1984_2	15847	10.000	Wallis and Futuna - Wallis	-13.4100	-176.2500	-13.1600	-176.0700
Moznet_To_WGS_1984	1302	1.000	Mozambique	-27.7100	30.2100	-10.0900	43.0300
Mporaloko_To_WGS_1984	1163	44.000	Gabon	-6.3700	7.0300	2.3200	14.5200
Mporaloko_To_WGS_1984_2	1532	0.500	Gabon	-6.3700	7.0300	2.3200	14.5200
MTRF-2000_To_KSA-GRF17_1	9361	0.100	Saudi Arabia	16.2900	34.4400	32.1600	55.6700
MTRF-2000_To_WGS_1984_(G1150)	8822	1.000	Saudi Arabia	16.2900	34.4400	32.1600	55.6700
NAD_1927_CGQ77_To_NAD_1983_2	1575	1.500	Canada - Quebec	44.9900	-79.8500	62.6200	-57.1000
NAD_1927_CGQ77_To_NAD_1983_CSRS	1845	1.500	Canada - Quebec	44.9900	-79.8500	62.6200	-57.1000
NAD_1927_CGQ77_To_NAD_1983_CSRS_v2_1	9240	1.500	Canada - Quebec	44.9900	-79.8500	62.6200	-57.1000
NAD_1927_CGQ77_To_WGS_1984_3	1691	1.000	Canada - Quebec	44.9900	-79.8500	62.6200	-57.1000
NAD_1927_Def76_To_NAD_1983_CSRS_v3_1_Ontario	9109	1.000	Canada - Ontario	41.6700	-95.1600	56.9000	-74.3500
NAD_1927_DEF_1976_To_NAD_1983_NTV2_Ontario	1463	1.000	Canada - Ontario	41.6700	-95.1600	56.9000	-74.3500
NAD_1927_DEF_1976_To_WGS_1984_1	1690	1.000	Canada - Ontario	41.6700	-95.1600	56.9000	-74.3500
NAD_1927_To_NAD_1983_6	1573	1.500	Canada - Quebec	44.9900	-79.8500	62.6200	-57.1000
NAD_1927_To_NAD_1983_7	8555	0.150	USA - CONUS and GoM	23.8200	-124.7900	49.3800	-66.9100
NAD_1927_To_NAD_1983_8	8549	0.500	USA - Alaska	51.3000	172.4200	71.4000	-129.9900
NAD_1927_To_NAD_1983_9_Saskatchewan	9111	1.500	Canada - Saskatchewan	49.0000	-110.0000	60.0100	-101.3400
NAD_1927_To_NAD_1983_CSRS_1	1844	1.500	Canada - Quebec	44.9900	-79.8500	62.6200	-57.1000
NAD_1927_To_NAD_1983_CSRS_2	1847	1.500	Canada - Saskatchewan	49.0000	-110.0000	60.0100	-101.3400
NAD_1927_To_NAD_1983_CSRS_4	6209	1.500	Canada - New Brunswick	44.5600	-69.0500	48.0700	-63.7000
NAD_1927_To_NAD_1983_CSRS_NTV2_New_Brunswick	108040	0.500	Canada - New Brunswick	44.5600	-69.0500	48.0700	-63.7000
NAD_1927_To_NAD_1983_CSRS_v2_1	9239	1.500	Canada - Quebec	44.9900	-79.8500	62.6200	-57.1000
NAD_1927_To_NAD_1983_CSRS_v2_4	9238	0.800	Canada - New Brunswick	44.5600	-69.0500	48.0700	-63.7000
NAD_1927_To_NAD_1983_CSRS_v2_7_British_Columbia	9112	1.500	Canada - British Columbia	48.2500	-139.0400	60.0100	-114.0800
NAD_1927_To_NAD_1983_CSRS_v3_2	9242	1.500	Canada - Saskatchewan	49.0000	-110.0000	60.0100	-101.3400
NAD_1927_To_NAD_1983_CSRS_v3_5_Ontario	9107	1.500	Canada - Ontario ex. Toronto	41.6700	-95.1600	56.9000	-74.3500

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD_1927_To_NAD_1983_CSRS_v3_6_Toronto	9108	1.000	Canada - Ontario - Toronto	43.5800	-79.6400	43.8600	-79.1100
NAD_1927_To_NAD_1983_CSRS_v3_8_BC_CRD	9113	1.500	Canada - British Columbia - CRD	48.2500	-124.5200	49.0600	-123.0000
NAD_1927_To_NAD_1983_CSRS_v3_9_BC_NVI	9114	1.500	Canada - British Columbia - north Vancouver Is	48.4800	-128.5000	50.9300	-123.4900
NAD_1927_To_NAD_1983_CSRS_v4_10_BC_mainland	9115	1.500	Canada - British Columbia - mainland	48.9900	-139.0400	60.0100	-114.0800
NAD_1927_to_NAD83(CSRS)v2_2	9886	1.500	Canada - Saskatchewan	49.0000	-110.0000	60.0100	-101.3400
NAD_1927_To_NAD_1983_NTV2_Canada	1313	1.500	Canada - NAD27	40.0000	-141.0100	83.1700	-44.0000
NAD_1927_To_SIRGAS_2000_7Par_Panama	108062	1.000	Panama - onshore	7.1500	-83.0400	9.6800	-77.1900
NAD_1927_To_WGS_1984_1	1170	16.000	Caribbean - central (DMA tfm)	13.0000	-85.0100	23.2500	-59.3700
NAD_1927_To_WGS_1984_10	1179	13.000	Canada - Alberta and British Columbia	48.2500	-139.0400	60.0100	-109.9800
NAD_1927_To_WGS_1984_11	1180	12.000	Canada - Manitoba and Ontario	41.6700	-102.0000	60.0100	-74.3500
NAD_1927_To_WGS_1984_12	1181	9.000	Canada - eastern provinces	43.4100	-79.8500	62.6200	-52.5400
NAD_1927_To_WGS_1984_13	1182	8.000	Canada - NWT; Nunavut; Saskatchewan	49.0000	-136.4600	83.1700	-60.7200
NAD_1927_To_WGS_1984_14	1183	10.000	Canada - Yukon	59.9900	-141.0100	69.7000	-123.9100
NAD_1927_To_WGS_1984_15	1184	35.000	Panama - Canal Zone	8.8200	-80.0700	9.4500	-79.4600
NAD_1927_To_WGS_1984_16	1185	44.000	Cuba - onshore	19.7700	-85.0100	23.2500	-74.0700
NAD_1927_To_WGS_1984_17	1186	44.000	Greenland - Hayes Peninsula	75.8600	-73.2900	79.2000	-60.9800
NAD_1927_To_WGS_1984_18	1187	12.000	Mexico - onshore	14.5100	-118.4700	32.7200	-86.6800
NAD_1927_To_WGS_1984_2	1171	10.000	Central America - Belize to Costa Rica	7.9800	-92.2900	18.4900	-82.5300
NAD_1927_To_WGS_1984_21	1249	15.000	USA - Alaska - Aleutian Islands east of 180°E	51.5400	-178.3000	54.3400	-164.8400
NAD_1927_To_WGS_1984_22	1250	18.000	USA - Alaska - Aleutian Islands west of 180°W	51.3000	172.4200	53.0700	179.8600
NAD_1927_To_WGS_1984_3	1172	20.000	Canada - NAD27	40.0000	-141.0100	83.1700	-44.0000
NAD_1927_To_WGS_1984_30	1530	3.000	Cuba	18.8300	-87.0100	25.5100	-73.5700

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD_1927_To_WGS_1984_32	1703	1.000	Canada - Saskatchewan	49.0000	-110.0000	60.0100	-101.3400
NAD_1927_To_WGS_1984_33	1693	1.000	Canada - NAD27	40.0000	-141.0100	83.1700	-44.0000
NAD_1927_To_WGS_1984_34	1692	1.000	Canada - Quebec	44.9900	-79.8500	62.6200	-57.1000
NAD_1927_To_WGS_1984_4	1173	10.000	USA - CONUS - onshore	24.4100	-124.7900	49.3800	-66.9100
NAD_1927_To_WGS_1984_5	1174	11.000	USA - CONUS east of Mississippi River - onshore	24.4100	-97.2200	49.3800	-66.9100
NAD_1927_To_WGS_1984_6	1175	7.000	USA - CONUS west of Mississippi River - onshore	25.8300	-124.7900	49.0500	-89.6400
NAD_1927_To_WGS_1984_7	1176	12.000	USA - Alaska mainland	54.3400	-168.2600	71.4000	-129.9900
NAD_1927_To_WGS_1984_79_CONUS	15851	5.000	USA - CONUS including EEZ	23.8100	-129.1700	49.3800	-65.6900
NAD_1927_To_WGS_1984_8	1177	8.000	Bahamas - main islands onshore	20.8600	-79.0400	27.2900	-72.6800
NAD_1927_To_WGS_1984_80	15852	5.000	USA - GoM - east of 87.25°W	23.8200	-87.2500	30.2500	-81.1700
NAD_1927_To_WGS_1984_81	15853	5.000	USA - GoM - 95°W to 87.25°W	25.6100	-95.0000	30.2300	-87.2500
NAD_1927_To_WGS_1984_82	15854	5.000	USA - GoM - west of 95°W	25.9700	-97.2200	28.9700	-95.0000
NAD_1927_To_WGS_1984_83	15855	5.000	Mexico - offshore GoM - Tampico area	21.5100	-98.1000	22.7500	-96.8900
NAD_1927_To_WGS_1984_84	15856	8.000	USA - GoM OCS	23.8200	-97.2200	30.2500	-81.1700
NAD_1927_To_WGS_1984_85	15864	5.000	USA - Alaska including EEZ	47.8800	167.6500	74.7100	-129.9900
NAD_1927_To_WGS_1984_86	15913	5.000	Mexico - offshore GoM - Campeche area N	20.8700	-94.3300	23.0100	-88.6700
NAD_1927_To_WGS_1984_87	15699	5.000	Mexico - offshore GoM - Campeche area S	17.8500	-94.7900	20.8900	-89.7500
NAD_1927_To_WGS_1984_88	15978	1.000	Cuba	18.8300	-87.0100	25.5100	-73.5700
NAD_1927_To_WGS_1984_89	7698	1.0	Panama - onshore	7.15	-83.0400	9.6800	-77.1900
NAD_1927_To_WGS_1984_9	1178	44.000	Bahamas (San Salvador Island) - onshore	23.9000	-74.6000	24.1900	-74.3700
NAD_1983_(2011)_to_WGS_1984_1	9774	2.000	USA - CONUS and Alaska; PRVI	14.9200	167.6500	74.7100	-63.8800

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD_1983_CORS96_To_NAD_1983_2011	108357	0.100	USA (all states)	15.5600	167.6500	74.7100	-65.6900
NAD_1983_CORS96_To_NAD_1983_HARN	108148	0.100	USA (all states)	15.5600	167.6500	74.7100	-65.6900
NAD_1983_CORS96_To_NAD_1983_NSRS2007	108149	0.100	USA (all states)	15.5600	167.6500	74.7100	-65.6900
NAD_1983_CSRS_To_NAD_1983_CSRS_v2_Quebec	108382	1.500	Canada - Quebec	44.9900	-79.8500	62.6200	-57.1000
NAD_1983_CSRS_To_WGS_1984	1473	6.000	Canada - CSRS98	44.6100	-120.0000	62.5600	-57.1000
NAD_1983_CSRS_To_WGS_1984_1	1842	1.000	Canada	38.2100	-141.0100	86.4600	-40.7300
NAD_1983_CSRS_To_WGS_1984_2	1946	0.100	Canada	38.2100	-141.0100	86.4600	-40.7300
NAD_1983_CSRS_v2_To_NAD_1983_CSRS_v3_1_BC_CRD	9120	0.100	Canada - British Columbia - CRD	48.2500	-124.5200	49.0600	-123.0000
NAD_1983_CSRS_v2_To_NAD_1983_CSRS_v3_2_BC_NVI	9121	0.100	Canada - British Columbia - north Vancouver Is	48.4800	-128.5000	50.9300	-123.4900
NAD_1983_CSRS_v2_To_NAD_1983_CSRS_v4_1	10615	0.100	Canada - British Columbia - mainland	48.9900	-139.0400	60.0100	-114.0800
NAD_1983_FBN_To_MA11_NADCON5_3D_Guam_CNMI_1	8866	0.050	Pacific - Guam and NMI - onshore	13.1800	144.5800	20.6100	146.1200
NAD_1983_FBN_To_NSRS2007_NADCON5_3D_CONUS_1	8862	0.050	USA - CONUS and GoM	23.8200	-124.7900	49.3800	-66.9100
NAD_1983_FBN_To_NSRS2007_NADCON5_3D_PRVI_2	8868	0.050	Caribbean - Puerto Rico and US Virgin Islands - onshore	17.6200	-67.9700	18.5700	-64.5100
NAD_1983_FBN_To_PA11_NADCON5_3D_American_Samoa_1	8864	0.050	American Samoa - 2 main island groups and Rose Island	-14.5900	-170.8800	-14.1100	-168.0900
NAD_1983_HARN_Corrected_To_FBN_NADCON5_3D_PRVI_1	8867	0.050	Caribbean - Puerto Rico and US Virgin Islands - onshore	17.6200	-67.9700	18.5700	-64.5100
NAD_1983_HARN_PACP00_MARP00_To_WGS_1984	108307	Unknown	Pacific - USA interests Pacific and Mariana plates	-17.5600	129.4800	31.8000	-151.2700
NAD_1983_HARN_To_FBN_NADCON5_3D_American_Samoa_2	8863	0.050	American Samoa - 2 main island groups and Rose Island	-14.5900	-170.8800	-14.1100	-168.0900
NAD_1983_HARN_To_FBN_NADCON5_3D_CONUS_1	8861	0.050	USA - CONUS and GoM	23.8200	-124.7900	49.3800	-66.9100
NAD_1983_HARN_To_FBN_NADCON5_3D_Guam_CNMI_3	8865	0.050	Pacific - Guam and NMI - onshore	13.1800	144.5800	20.6100	146.1200
NAD_1983_HARN_To_HARN_Adjusted_WCCS_Chippewa	108063	0.000	USA - Wisconsin	42.4800	-92.8900	47.3100	-86.2500

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD_1983_HARN_To_HARN_Corrected_NADCON5_3D_PRVI_1	9181	0.050	Caribbean - Puerto Rico and US Virgin Islands - onshore	17.6200	-67.9700	18.5700	-64.5100
NAD_1983_HARN_To_NAD_1983_2011	108355	0.100	USA (all states)	15.5600	167.6500	74.7100	-65.6900
NAD_1983_HARN_To_NAD_1983_MA11	108377	1.000	Pacific - US interests Mariana plate	1.6400	129.4800	23.9000	149.5500
NAD_1983_HARN_To_NAD_1983_NSRS2007_1	4461	0.100	USA - CONUS - onshore	24.4100	-124.7900	49.3800	-66.9100
NAD_1983_HARN_TO_NAD_1983_NSRS2007_2	8551	0.050	USA - Alaska including EEZ	47.8800	167.6500	74.7100	-129.9900
NAD_1983_HARN_To_NAD_1983_PA11_1	108450	1.000	Pacific - US interests Pacific plate	-17.5600	157.4700	31.8000	-151.2700
NAD_1983_HARN_To_PA11_NADCON5_3D_Hawaii_1	8661	0.050	USA - Hawaii - onshore	18.8700	-160.3000	22.2900	-154.7400
NAD_1983_HARN_To_WGS_1984	1580	1.000	USA - HARN	-14.5900	144.5800	71.4000	-64.5100
NAD_1983_HARN_To_WGS_1984_2	1900	0.100	USA - CONUS - onshore	24.4100	-124.7900	49.3800	-66.9100
NAD_1983_HARN_To_WGS_1984_3	1901	0.100	USA - CONUS - onshore	24.4100	-124.7900	49.3800	-66.9100
NAD_1983_HARN_To_WGS_1984_Saipan	108300	Unknown	Northern Marianas - Saipan	14.7500	145.0000	15.5000	146.0000
NAD_1983_MARP00_To_WGS_1984	108018	0.100	Pacific - US interests Mariana plate	1.6400	129.4800	23.9000	149.5500
NAD_1983_NSRS2007_To_2011_NADCON5_3D_CONUS_1	8559	0.050	USA - CONUS and GoM	23.8200	-124.7900	49.3800	-66.9100
NAD_1983_NSRS2007_To_2011_NADCON5_3D_PRVI_3	8673	0.050	Caribbean - Puerto Rico and US Virgin Islands - onshore	17.6200	-67.9700	18.5700	-64.5100
NAD_1983_NSRS2007_To_NAD_1983_2011	108356	0.100	USA (all states)	15.5600	167.6500	74.7100	-65.6900
NAD_1983_NSRS2007_TO_NAD_1983_2011_2	8552	0.050	USA - Alaska	51.3000	172.4200	71.4000	-129.9900
NAD_1983_NSRS2007_To_WGS_1984_1	15931	1.000	USA - CONUS and Alaska; PRVI	14.9200	167.6500	74.7100	-63.8800
NAD_1983_PACP00_To_WGS_1984	108017	0.100	Pacific - US interests Pacific plate	-17.5600	157.4700	31.8000	-151.2700
NAD_1983_to_NAD83(CSRS)v2_2	9887	1.500	Canada - Saskatchewan	49.0000	-110.0000	60.0100	-101.3400
NAD_1983_To_NAD_1983_CSRS_1	1843	1.500	Canada - Quebec	44.9900	-79.8500	62.6200	-57.1000
NAD_1983_To_NAD_1983_CSRS_2	1848	1.500	Canada - Saskatchewan	49.0000	-110.0000	60.0100	-101.3400
NAD_1983_To_NAD_1983_CSRS_3	1849	1.500	Canada - Alberta	48.9900	-120.0000	60.0000	-109.9800
NAD_1983_To_NAD_1983_CSRS_4	1950	2.000	Canada - Atlantic offshore	40.0400	-67.7500	64.2100	-43.9900
NAD_1983_To_NAD_1983_CSRS_v2_1	9241	1.500	Canada - Quebec	44.9900	-79.8500	62.6200	-57.1000

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD_1983_To_NAD_1983_CSRS_v2_6_BC	9116	0.100	Canada - British Columbia	48.2500	-139.0400	60.0100	-114.0800
NAD_1983_To_NAD_1983_CSRS_v3_2	9243	1.500	Canada - Saskatchewan	49.0000	-110.0000	60.0100	-101.3400
NAD_1983_To_NAD_1983_CSRS_v3_5_Ontario	9110	0.100	Canada - Ontario	41.6700	-95.1600	56.9000	-74.3500
NAD_1983_To_NAD_1983_CSRS_v3_7_BC_CRD	9117	0.100	Canada - British Columbia - CRD	48.2500	-124.5200	49.0600	-123.0000
NAD_1983_To_NAD_1983_CSRS_v3_8_BC_NVI	9118	0.100	Canada - British Columbia - north Vancouver Is	48.4800	-128.5000	50.9300	-123.4900
NAD_1983_To_NAD_1983_CSRS_v4_3	9244	1.500	Canada - Alberta	48.9900	-120.0000	60.0000	-109.9800
NAD_1983_To_NAD_1983_CSRS_v4_9_BC_mainland	9119	0.100	Canada - British Columbia - mainland	48.9900	-139.0400	60.0100	-114.0800
NAD_1983_To_NAD_1983_HARN_47	8556	0.050	USA - CONUS and GoM	23.8200	-124.7900	49.3800	-66.9100
NAD_1983_To_NAD_1983_HARN_48	8550	0.150	USA - Alaska including EEZ	47.8800	167.6500	74.7100	-129.9900
NAD_1983_To_NAD_1983_HARN_49	8660	0.050	USA - Hawaii - onshore	18.8700	-160.3000	22.2900	-154.7400
NAD_1983_To_NAD_1983_HARN_50	8669	0.150	Caribbean - Puerto Rico and US Virgin Islands - onshore	17.6200	-67.9700	18.5700	-64.5100
NAD_1983_To_WGS_1984_1	1188	4.000	North America - Canada and USA (CONUS, Alaska mainland)	23.8100	-172.5400	86.4600	-47.7400
NAD_1983_To_WGS_1984_2	1251	8.000	USA - Alaska - Aleutian Islands	51.3000	172.4200	54.3400	-164.8400
NAD_1983_To_WGS_1984_3	1252	4.000	USA - Hawaii - main islands	15.5600	-163.7400	25.5800	-151.2700
NAD_1983_To_WGS_1984_4	1308	2.000	USA - CONUS - onshore	24.4100	-124.7900	49.3800	-66.9100
NAD_1983_To_WGS_1984_5	1515	1.000	USA (all states)	15.5600	167.6500	74.7100	-65.6900
NAD_1983_To_WGS_1984_6	1696	1.000	Canada - Quebec	44.9900	-79.8500	62.6200	-57.1000
NAD_1983_To_WGS_1984_7	1697	1.000	Canada - Saskatchewan	49.0000	-110.0000	60.0100	-101.3400
NAD_1983_To_WGS_1984_8	1702	1.000	Canada - Alberta	48.9900	-120.0000	60.0000	-109.9800
NAD_1983_To_WGS_1984_Alabama_21	1717	1.000	USA - Alabama	30.1400	-88.4800	35.0200	-84.8900
NAD_1983_To_WGS_1984_Arizona_32	1728	1.000	USA - Arizona	31.3300	-114.8100	37.0100	-109.0400
NAD_1983_To_WGS_1984_Arkansas_12	1708	1.000	USA - Arkansas	33.0100	-94.6200	36.5000	-89.6400
NAD_1983_To_WGS_1984_Colorado_16	1712	1.000	USA - Colorado	36.9800	-109.0600	41.0100	-102.0400

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD_1983_To_WGS_1984_CT_MA_NH_RI_VT_29	1725	1.000	USA - New England - south (CT, MA, NH, RI, VT)	40.9800	-73.7300	45.3100	-69.8600
NAD_1983_To_WGS_1984_DE_MD_24	1720	1.000	USA - Delaware and Maryland	37.9700	-79.4900	39.8500	-74.9700
NAD_1983_To_WGS_1984_eastern_ID_MT_19	1715	1.000	USA - Idaho and Montana - east of 113°W	41.9900	-113.0000	49.0100	-104.0400
NAD_1983_To_WGS_1984_east_Texas_38	1734	1.000	USA - Texas east of 100°W	25.8300	-100.0000	34.5800	-93.5000
NAD_1983_To_WGS_1984_Florida_18	1714	1.000	USA - Florida	24.4100	-87.6300	31.0100	-79.9700
NAD_1983_To_WGS_1984_Georgia_17	1713	1.000	USA - Georgia	30.3600	-85.6100	35.0100	-80.7700
NAD_1983_To_WGS_1984_Hawaii_onshore_45	1741	1.000	USA - Hawaii - onshore	18.8700	-160.3000	22.2900	-154.7400
NAD_1983_To_WGS_1984_Illinois_52	1748	1.000	USA - Illinois	36.9700	-91.5200	42.5100	-87.0200
NAD_1983_To_WGS_1984_Indiana_46	1742	1.000	USA - Indiana	37.7700	-88.1000	41.7700	-84.7800
NAD_1983_To_WGS_1984_Iowa_13	1709	1.000	USA - Iowa	40.3600	-96.6500	43.5100	-90.1400
NAD_1983_To_WGS_1984_Kansas_47	1743	1.000	USA - Kansas	36.9800	-102.0600	40.0100	-94.5800
NAD_1983_To_WGS_1984_Kentucky_22	1718	1.000	USA - Kentucky	36.4900	-89.5700	39.1500	-81.9500
NAD_1983_To_WGS_1984_Louisiana_23	1719	1.000	USA - Louisiana	28.8500	-94.0500	33.0300	-88.7500
NAD_1983_To_WGS_1984_Maine_25	1721	1.000	USA - Maine	43.0400	-71.0900	47.4700	-66.9100
NAD_1983_To_WGS_1984_Michigan_26	1722	1.000	USA - Michigan	41.6900	-90.4200	48.3200	-82.1300
NAD_1983_To_WGS_1984_Minnesota_14	1710	1.000	USA - Minnesota	43.4900	-97.2200	49.3800	-89.4900
NAD_1983_To_WGS_1984_Mississippi_27	1723	1.000	USA - Mississippi	30.0100	-91.6500	35.0100	-88.0900
NAD_1983_To_WGS_1984_Missouri_15	1711	1.000	USA - Missouri	35.9800	-95.7700	40.6100	-89.1000
NAD_1983_To_WGS_1984_Nebraska_28	1724	1.000	USA - Nebraska	39.9900	-104.0600	43.0100	-95.3000
NAD_1983_To_WGS_1984_Nevada_48	1744	1.000	USA - Nevada	34.9900	-120.0000	42.0000	-114.0300
NAD_1983_To_WGS_1984_New_Jersey_53	1749	1.000	USA - New Jersey	38.8700	-75.6000	41.3600	-73.8800
NAD_1983_To_WGS_1984_New_Mexico_30	1726	1.000	USA - New Mexico	31.3300	-109.0600	37.0000	-102.9900
NAD_1983_To_WGS_1984_New_York_31	1727	1.000	USA - New York	40.4700	-79.7700	45.0200	-71.8000
NAD_1983_To_WGS_1984_North_Carolina_55	15835	1.000	USA - North Carolina	33.8300	-84.3300	36.5900	-75.3800
NAD_1983_To_WGS_1984_North_Dakota_33	1729	1.000	USA - North Dakota	45.9300	-104.0700	49.0100	-96.5500
NAD_1983_To_WGS_1984_northern_California_43	1739	1.000	USA - California - north of 36.5°N	36.5000	-124.4500	42.0100	-116.5400
NAD_1983_To_WGS_1984_Ohio_49	1745	1.000	USA - Ohio	38.4000	-84.8300	42.3300	-80.5100
NAD_1983_To_WGS_1984_Oklahoma_34	1730	1.000	USA - Oklahoma	33.6200	-103.0000	37.0100	-94.4200
NAD_1983_To_WGS_1984_OR_WA_41	1737	1.000	USA - Oregon and Washington	41.9800	-124.7900	49.0500	-116.4700

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD_1983_To_WGS_1984_Pennsylvania_57	15839	1.000	USA - Pennsylvania	39.7100	-80.5300	42.5300	-74.7000
NAD_1983_To_WGS_1984_PR_VI_onshore_35	1731	1.000	Caribbean - Puerto Rico and US Virgin Islands - onshore	17.6200	-67.9700	18.5700	-64.5100
NAD_1983_To_WGS_1984_South_Carolina_56	15837	1.000	USA - South Carolina	32.0500	-83.3600	35.2100	-78.5200
NAD_1983_To_WGS_1984_South_Dakota_36	1732	1.000	USA - South Dakota	42.4800	-104.0700	45.9500	-96.4300
NAD_1983_To_WGS_1984_southern_California_54	1750	1.000	USA - California - south of 36.5°N	32.5300	-121.9800	36.5000	-114.1200
NAD_1983_To_WGS_1984_Tennessee_37	1733	1.000	USA - Tennessee	34.9800	-90.3100	36.6800	-81.6500
NAD_1983_To_WGS_1984_Utah_50	1746	1.000	USA - Utah	36.9900	-114.0500	42.0100	-109.0400
NAD_1983_To_WGS_1984_Virginia_40	1736	1.000	USA - Virginia	36.5400	-83.6800	39.4600	-75.3100
NAD_1983_To_WGS_1984_western_ID_MT_20	1716	1.000	USA - Idaho and Montana - west of 113°W	41.9900	-117.2400	49.0100	-113.0000
NAD_1983_To_WGS_1984_west_Texas_39	1735	1.000	USA - Texas west of 100°W	28.0400	-106.6600	36.5000	-100.0000
NAD_1983_To_WGS_1984_West_Virginia_51	1747	1.000	USA - West Virginia	37.2000	-82.6500	40.6400	-77.7200
NAD_1983_To_WGS_1984_Wisconsin_42	1738	1.000	USA - Wisconsin	42.4800	-92.8900	47.3100	-86.2500
NAD_1983_To_WGS_1984_Wyoming_44	1740	1.000	USA - Wyoming	40.9900	-111.0600	45.0100	-104.0500
NAD83_to_NAD83(2011)_1	8971	1.000	USA - GoM OCS	23.8200	-97.2200	30.2500	-81.1700
NAD83_to_NAD83(CSRs)v6_10	9550	0.100	Canada - Newfoundland	46.5600	-59.4800	51.6800	-52.5400
NAD83_to_NAD83(CSRs)v7_1	9795	0.100	Canada - Alberta	48.9900	-120.0000	60.0000	-109.9800
Nahrwan_1967_To_WGS_1984_1	1189	44.000	Oman - Masirah Island	20.1200	58.5800	20.7400	59.0100
Nahrwan_1967_To_WGS_1984_10	15953	5.000	UAE - Dubai municipality	24.8500	54.8400	25.3400	55.5500
Nahrwan_1967_To_WGS_1984_11	6998	5.000	UAE - Abu Dhabi	22.6300	51.5000	25.6400	56.0300
Nahrwan_1967_To_WGS_1984_12	6999	0.150	UAE - Abu Dhabi - onshore	22.6300	51.5600	24.9500	56.0300
Nahrwan_1967_To_WGS_1984_13	7002	1.000	UAE - Abu Dhabi island	24.2400	54.2000	24.6400	54.7100
Nahrwan_1967_To_WGS_1984_14	7003	1.000	UAE - Abu Dhabi - onshore west of 54°E	22.7600	51.5600	24.3200	54.0100
Nahrwan_1967_To_WGS_1984_15	7004	1.000	UAE - Abu Dhabi - onshore east of 54°E	22.6300	53.9900	24.9500	56.0300
Nahrwan_1967_To_WGS_1984_2	1190	35.000	Saudi Arabia - onshore Gulf coast	24.6300	47.9500	28.5700	50.8100
Nahrwan_1967_To_WGS_1984_3	1191	44.000	UAE	22.6300	51.5000	26.2700	57.1300
Nahrwan_1967_To_WGS_1984_4	1531	0.500	UAE - Abu al Bu Khoosh	25.3300	53.0300	25.5400	53.4000

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Nahrwan_1967_To_WGS_1984_5	1536	1.000	Qatar - offshore	24.6400	50.5500	27.0500	53.0400
Nahrwan_1967_To_WGS_1984_7	15937	2.000	UAE - Abu Dhabi - offshore	24.0000	51.5000	25.6400	54.8500
Nahrwan_1967_To_WGS_1984_8	15938	5.000	UAE - Abu Dhabi - offshore	24.0000	51.5000	25.6400	54.8500
Nahrwan_1967_To_WGS_1984_9	15952	5.000	UAE - Dubai - offshore	24.9400	54.0600	25.8000	55.3000
Nahrwan_To_WGS_1984_6	7033	30.000	Iraq - onshore	29.0600	38.7900	37.3900	48.6100
Nakhl-e_Ghanem_To_WGS_1984_6	15746	0.200	Iran - Tombak LNG plant	27.6300	52.0900	27.8100	52.2600
Naparima_1955_To_WGS_1984_2	1555	1.000	Trinidad and Tobago - Trinidad - onshore	9.9900	-61.9800	10.9000	-60.8500
Naparima_1955_To_WGS_1984_3	1556	26.000	Trinidad and Tobago - Trinidad - onshore	9.9900	-61.9800	10.9000	-60.8500
Naparima_1972_To_WGS_1984	1192	33.000	Trinidad and Tobago - Tobago - onshore	11.0800	-60.9000	11.4100	-60.4400
Naparima_1972_To_WGS_1984_3	1307	26.000	Trinidad and Tobago - Tobago - onshore	11.0800	-60.9000	11.4100	-60.4400
NEA74_Noumea_To_RGNC_1991-93_1	15886	1.000	New Caledonia - Grande Terre - Noumea	-22.3700	166.3500	-22.1900	166.5400
NEA74_Noumea_To_RGNC_1991-93_2	15889	0.100	New Caledonia - Grande Terre - Noumea	-22.3700	166.3500	-22.1900	166.5400
NEA74_Noumea_To_WGS_1984_1	1932	1.000	New Caledonia - Grande Terre - Noumea	-22.3700	166.3500	-22.1900	166.5400
NEA74_Noumea_To_WGS_1984_2	15904	1.000	New Caledonia - Grande Terre - Noumea	-22.3700	166.3500	-22.1900	166.5400
Nepal_Nagarkot_TO_WGS_1984_1	108015	10.000	Nepal	26.3400	80.0600	30.4300	88.2100
Nepal_Nagarkot_To_WGS_1984_1_EPSG	6208	0.300	Nepal	26.3400	80.0600	30.4300	88.2100
Nepal_Nagarkot_To_WGS_1984_2	108016	5.000	Nepal	26.3400	80.0600	30.4300	88.2100
New_Zealand_1949_To_NZGD_2000_1_3PAR	1566	5.000	New Zealand - onshore and nearshore	-47.6500	165.8700	-33.8900	179.2700
New_Zealand_1949_To_NZGD_2000_2_7PAR	1701	4.000	New Zealand - onshore and nearshore	-47.6500	165.8700	-33.8900	179.2700
New_Zealand_1949_To_NZGD_2000_3_NTv2	1568	0.200	New Zealand - onshore and nearshore	-47.6500	165.8700	-33.8900	179.2700
NGN_To_WGS_1984_1	1060	1.000	Kuwait - onshore	28.5300	46.5400	30.0900	48.4800
NGO_1948_Oslo_To_ETRS_1989_1	108146	3.000	Norway - onshore	57.9000	4.3900	71.2400	31.3200
NGO_1948_Oslo_To_NGO_1948	1762	0.000	Norway - onshore	57.9000	4.3900	71.2400	31.3200

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NGO_1948_Oslo_To_WGS_1984	108145	5.000	Norway - onshore	57.9000	4.3900	71.2400	31.3200
NGO_1948_Oslo_To_WGS_1984_1	108147	3.000	Norway - onshore	57.9000	4.3900	71.2400	31.3200
NGO_1948_To_ETRS_1989_1	1653	3.000	Norway - onshore	57.9000	4.3900	71.2400	31.3200
NGO_1948_To_WGS_1984	108201	5.000	Norway - onshore	57.9000	4.3900	71.2400	31.3200
NGO_1948_To_WGS_1984_1	1654	3.000	Norway - onshore	57.9000	4.3900	71.2400	31.3200
Nord_Sahara_1959_to_RGSH2020_1	10339	5.000	Algeria - District 3	25.0000	1.0000	32.0000	3.3000
Nord_Sahara_1959_to_RGSH2020_2	10340	100.000	Algeria - In Amenas	27.5000	8.8300	28.3000	9.9200
Nord_Sahara_1959_to_RGSH2020_3	10341	100.000	Algeria - Hassi Bir Reikaz	31.7500	7.1600	32.4200	8.0000
Nord_Sahara_1959_to_RGSH2020_4	10342	5.000	Algeria - Hassi Mouina licence area	29.2500	0.0000	31.0000	1.2500
Nord_Sahara_1959_to_RGSH2020_5	10343	5.000	Algeria - Ahnet licence area	26.0600	1.2400	27.5100	2.9200
Nord_Sahara_1959_to_RGSH2020_6	10344	100.000	Algeria - Ain Tsila	27.4000	7.6600	28.1000	8.2700
Nord_Sahara_1959_To_WGS_1972_BE	1560	8.000	Algeria - Hassi Messaoud	31.4800	5.5900	32.0900	6.5000
Nord_Sahara_1959_To_WGS_1984	1253	44.000	Algeria - onshore	18.9700	-8.6700	37.1400	11.9900
Nord_Sahara_1959_To_WGS_1984_2	1255	44.000	Algeria - north of 32°N	31.9900	-2.9500	37.1400	9.0900
Nord_Sahara_1959_To_WGS_1984_3	108098	10.000	Algeria - Hassi Messaoud	31.4800	5.5900	32.0900	6.5000
Nord_Sahara_1959_To_WGS_1984_4	1815	5.000	Algeria - District 3	25.0000	1.0000	32.0000	3.3000
Nord_Sahara_1959_To_WGS_1984_5	1816	100.000	Algeria - In Amenas	27.5000	8.8300	28.3000	9.9200
Nord_Sahara_1959_To_WGS_1984_6	1817	100.000	Algeria - Hassi Bir Reikaz	31.7500	7.1600	32.4200	8.0000
Nord_Sahara_1959_To_WGS_1984_7	15874	5.000	Algeria - Hassi Mouina licence area	29.2500	0.0000	31.0000	1.2500
Nord_Sahara_1959_To_WGS_1984_8	5630	5.000	Algeria - Ahnet licence area	26.0600	1.2400	27.5100	2.9200
Nord_Sahara_1959_To_WGS_1984_9	5660	1.000	Algeria	18.9700	-8.6700	38.8000	11.9900
Nord_Sahara_1959_To_WGS_1984_10	7442	100.000	Algeria - Ain Tsila	27.4000	7.6600	28.1000	8.2700
Nord_Sahara_1959_to_WGS_1984_11	10296	1.000	Algeria	18.9700	-8.6700	38.8000	11.9900
Nouakchott_1965_To_WGS_1984_1	15709	5.000	Mauritania - Nouakchutt	17.8900	-16.1100	18.2500	-15.8300
NTF_Paris_To_ED_1950	8186	2.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
NTF_Paris_To_NTF	1763	0.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
NTF_Paris_To_RGF_1993_1	108102	2.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NTF_(Paris)_to_RGF93_v1_2	7811	1.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
NTF_Paris_To_WGS_1972	8188	2.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
NTF_Paris_To_WGS_1984	8094	3.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
NTF_To_ED_1950	1276	2.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
NTF_To_ETRS_1989_1	1651	2.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
NTF_To_RGF_1993_1	108130	2.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
NTF_To_WGS_1972	1277	2.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
NTF_To_WGS_1984	1193	2.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
NZGD_1949_To_WGS_1984	1151	8.000	New Zealand - onshore and nearshore	-47.6500	165.8700	-33.8900	179.2700
NZGD_1949_To_WGS_1984_2	1564	4.000	New Zealand - onshore and nearshore	-47.6500	165.8700	-33.8900	179.2700
NZGD_1949_To_WGS_1984_3_NTV2	1670	1.000	New Zealand - onshore and nearshore	-47.6500	165.8700	-33.8900	179.2700
NZGD_1949_To_WGS_1984_4	15975	5.000	New Zealand - onshore and nearshore	-47.6500	165.8700	-33.8900	179.2700
NZGD_2000_To_WGS_1984_1	1565	1.000	New Zealand	-55.9500	160.6000	-25.8800	-171.2000
Observatorio_To_WGS_1984_1	6900	17.000	Mozambique - south	-26.8700	31.2900	-19.8400	35.6500
Observatorio_Meteorologico_1939_To_PTROA08_1_3par	108344	0.060	Portugal - Azores W - onshore	39.3000	-31.3400	39.7700	-31.0200
Observatorio_Meteorologico_1939_To_PTROA08_1_7par	108341	0.030	Portugal - Azores W - onshore	39.3000	-31.3400	39.7700	-31.0200
Observatorio_Meteorologico_1939_To_PTROA08_2_3par	108345	0.056	Azores - Flores Island	39.3500	-31.3000	39.5000	-31.1000
Observatorio_Meteorologico_1939_To_PTROA08_2_7par	108342	0.020	Azores - Flores Island	39.3500	-31.3000	39.5000	-31.1000
Observatorio_Meteorologico_1939_To_PTROA08_3_3par	108346	0.064	Portugal - Azores W - Corvo onshore	39.6300	-31.1800	39.7700	-31.0200
Observatorio_Meteorologico_1939_To_PTROA08_3_7par	108343	0.070	Portugal - Azores W - Corvo onshore	39.6300	-31.1800	39.7700	-31.0200

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Observatorio_Meteorologico_1939_To_WGS_1984_1	108116	5.000	Portugal - Azores W - onshore	39.3000	-31.3400	39.7700	-31.0200
Observatorio_Meteorologico_1939_To_WGS_1984_1_3par	108350	0.100	Portugal - Azores W - onshore	39.3000	-31.3400	39.7700	-31.0200
Observatorio_Meteorologico_1939_To_WGS_1984_1_7par	108347	0.060	Portugal - Azores W - onshore	39.3000	-31.3400	39.7700	-31.0200
Observatorio_Meteorologico_1939_To_WGS_1984_2_3par	108351	0.080	Azores - Flores Island	39.3500	-31.3000	39.5000	-31.1000
Observatorio_Meteorologico_1939_To_WGS_1984_2_7par	108348	0.050	Azores - Flores Island	39.3500	-31.3000	39.5000	-31.1000
Observatorio_Meteorologico_1939_To_WGS_1984_3_3par	108352	0.085	Portugal - Azores W - Corvo onshore	39.6300	-31.1800	39.7700	-31.0200
Observatorio_Meteorologico_1939_To_WGS_1984_3_7par	108349	0.100	Portugal - Azores W - Corvo onshore	39.6300	-31.1800	39.7700	-31.0200
Observatorio_Meteorologico_1965_To_WGS_1984_2	108234	Unknown	Macao	22.0600	113.5200	22.2300	113.6800
Ocotepeque_1935_To_CR05	6890	8.000	Costa Rica - onshore	7.9800	-85.9700	11.2200	-82.5300
Ocotepeque_1935_To_NAD_1927_1	6888	9.000	Central America - Guatemala to Costa Rica	7.9800	-92.2900	17.8300	-82.5300
Ocotepeque_1935_To_WGS_1984_1	5470	8.000	Costa Rica - onshore	7.9800	-85.9700	11.2200	-82.5300
Ocotepeque_1935_To_WGS_1984_2	5473	5.000	Costa Rica - onshore	7.9800	-85.9700	11.2200	-82.5300
Ocotepeque_1935_To_WGS_1984_3PAR	6891	14.000	Central America - Guatemala to Costa Rica	7.9800	-92.2900	17.8300	-82.5300
Ocotepeque_1935_To_WGS_1984_RN	108283	Unknown	Costa Rica - onshore	7.9800	-85.9700	11.2200	-82.5300
Old_Hawaiian_Intl_1924_To_WGS_1984_Hawaii	108331	44.000	USA - Hawaii - island of Hawaii - onshore	18.8700	-156.1000	20.3300	-154.7400
Old_Hawaiian_Intl_1924_To_WGS_1984_Kauai	108332	35.000	USA - Hawaii - Kauai - onshore	21.8100	-159.8500	22.2900	-159.2300
Old_Hawaiian_Intl_1924_To_WGS_1984_Maui	108333	44.000	USA - Hawaii - Maui; Kahoolawe; Lanai; Molokai - onshore	20.4500	-157.3600	21.2600	-155.9300
Old_Hawaiian_Intl_1924_To_WGS_1984_Mean	108330	38.000	USA - Hawaii - onshore	18.8700	-160.3000	22.2900	-154.7400
Old_Hawaiian_Intl_1924_To_WGS_1984_Oahu	108334	14.000	USA - Hawaii - Oahu - onshore	21.2000	-158.3300	21.7500	-157.6100
Old_Hawaiian_To_NAD_1983_2	8561	0.200	USA - Hawaii - onshore	18.8700	-160.3000	22.2900	-154.7400
Old_Hawaiian_To_WGS_1984_1	15824	38.000	USA - Hawaii - onshore	18.8700	-160.3000	22.2900	-154.7400
Old_Hawaiian_To_WGS_1984_2	15825	44.000	USA - Hawaii - island of Hawaii - onshore	18.8700	-156.1000	20.3300	-154.7400

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Old_Hawaiian_To_WGS_1984_3	15826	35.000	USA - Hawaii - Kauai - onshore	21.8100	-159.8500	22.2900	-159.2300
Old_Hawaiian_To_WGS_1984_4	15827	44.000	USA - Hawaii - Maui; Kahoolawe; Lanai; Molokai - onshore	20.4500	-157.3600	21.2600	-155.9300
Old_Hawaiian_To_WGS_1984_5	15828	14.000	USA - Hawaii - Oahu - onshore	21.2000	-158.3300	21.7500	-157.6100
Old_Hawaiian_To_WGS_1984_8	15840	2.000	USA - Hawaii - onshore	18.8700	-160.3000	22.2900	-154.7400
ONGD14_To_WGS_1984_1	7377	0.100	Oman	14.3300	51.9900	26.7400	63.3800
ONGD14_To_WGS_1984_2	7433	2.000	Oman	14.3300	51.9900	26.7400	63.3800
ONGD17_To_ITRF_1989	108371	0.100	Oman	14.3300	51.9900	26.7400	63.3800
ONGD17_To_WGS_1984	108372	0.100	Oman	14.3300	51.9900	26.7400	63.3800
OSGB_1936_To_ED_1950_UKOOA	1315	2.000	UK - Great Britain; Isle of Man	49.7900	-8.8200	60.9400	1.9200
OSGB_1936_To_ETRS_1989_1	5338	0.040	UK - Great Britain; Isle of Man	49.7900	-8.8200	60.9400	1.9200
OSGB_1936_To_WGS_1984_1	1195	21.000	UK - Great Britain; Isle of Man	49.7900	-8.8200	60.9400	1.9200
OSGB_1936_To_WGS_1984_2	1196	10.000	UK - England	49.8100	-6.5000	55.8500	1.8400
OSGB_1936_To_WGS_1984_3	1197	21.000	UK - England and Wales, Isle of Man	49.8100	-6.5000	55.8500	1.8400
OSGB_1936_To_WGS_1984_4	1198	18.000	UK - Scotland	54.5700	-8.7400	60.9000	-0.6500
OSGB_1936_To_WGS_1984_5	1199	35.000	UK - Wales	51.2800	-5.3400	53.4800	-2.6500
OSGB_1936_To_WGS_1984_7	5339	1.000	UK - Great Britain; Isle of Man	49.7900	-8.8200	60.9400	1.9200
OSGB_1936_To_WGS_1984_8	5622	3.000	UK - Wytch Farm	50.5300	-2.2000	50.8000	-1.6800
OSGB_1936_To_WGS_1984_8_BAD_DX	108089	5.000	UK - Wytch Farm	50.5300	-2.2000	50.8000	-1.6800
OSGB_1936_To_WGS_1984_NGA_7PAR	108336	21.000	UK - Great Britain; Isle of Man	49.7900	-8.8200	60.9400	1.9200
OSGB_1936_To_WGS_1984_Petroleum	1314	2.000	UK - Great Britain; Isle of Man	49.7900	-8.8200	60.9400	1.9200
OSGB_1936_To_Xrail84_NTV2	108059	0.500	UK - London	51.2000	-0.7000	51.8000	0.6000
OSGB36_to_ETRS89_2	7709	0.030	UK - Britain and UKCS 49°45'N to 61°N, 9°W to 2°E	49.7500	-9.0100	61.0100	2.0100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
OSGB36_to_WGS_1984_9	7710	1.000	UK - Britain and UKCS 49°45'N to 61°N, 9°W to 2°E	49.7500	-9.0100	61.0100	2.0100
OSNI_1952_To_WGS_1984_1	1955	1.000	UK - Northern Ireland - onshore	53.9600	-8.1800	55.3600	-5.3400
Padang_1884_Jakarta_To_Padang_1884	1758	0.000	Indonesia - Sumatra	-5.9900	95.1600	5.9700	106.1300
Padang_To_WGS_1984_1	108452	6.00	Indonesia - Sumatra	-5.9900	95.1600	5.9700	106.1300
Palestine_1923_To_Israel_1	1071	1.500	Israel, Palestine, and Jordan	29.1900	32.9900	33.5300	39.3000
Palestine_1923_To_WGS_1984_1	1074	2.000	Israel, Palestine, and Jordan	29.1900	32.9900	33.5300	39.3000
Palestine_1923_To_WGS_1984_1X	108220	1.500	Asia - Middle East - Israel, Jordan and Palestine onshore	29.1800	34.1700	33.3800	39.3100
Palestine_1923_To_WGS_1984_2	108099	3.500	Asia - Middle East - Israel and Palestine onshore	29.4500	34.1700	33.2800	35.6900
Palestine_1923_To_WGS_1984_2X	108232	Unknown	Palestine	31.2100	34.1700	32.5500	35.5800
Pampa_del_Castillo_To_WGS_1984_1	15845	25.000	Argentina - Comodoro Rivadavia	-46.7000	-69.5000	-45.1900	-67.1000
Pampa_del_Castillo_To_WGS_1984_2	9259	2.500	Argentina - 44°S to 47.5°S	-47.5000	-72.3600	-43.9900	-63.2400
PD/83_To_ETRS_1989_1	15867	0.100	Germany - Thuringen	50.2000	9.8700	51.6500	12.6600
PD/83_To_WGS_1984_1_NTV2	15955	1.000	Germany - East Germany all states	50.2000	9.9200	54.7400	15.0400
PD/83_To_WGS_1984_7PAR	108070	0.500	Germany - Thuringen	50.2000	9.8700	51.6500	12.6600
PDO_1993_To_WGS_1972	1616	1.200	Oman - onshore	16.5900	51.9900	26.5800	59.9100
PDO_1993_To_WGS_1984	1439	0.500	Oman - onshore	16.5900	51.9900	26.5800	59.9100
PDO_1993_To_WGS_1984_3	1617	0.500	Oman - block 4	19.5800	56.5000	21.1700	59.0200
Perroud_1950_To_RGTAAF07_1	7083	0.500	Antarctica - Adelie Land - Petrels island	-66.7800	139.4400	-66.1000	141.5000
Peru96_To_WGS_1984_1	5378	1.000	Peru	-21.0500	-84.6800	-0.0300	-68.6700
Petrels_1972_To_WGS_1984_1	1921	10.000	Antarctica - Adelie Land - Petrels island	-66.7800	139.4400	-66.1000	141.5000
Pico_de_Las_Nieves_To_WGS_1984	15815	44.000	Spain - Canary Islands onshore	27.5800	-18.2200	29.4700	-13.3700
Pitcairn_1967_To_WGS_1984	15819	44.000	Pitcairn - Pitcairn Island	-25.1400	-130.1600	-25.0000	-130.0100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Pitcairn_2006_To_WGS_1984_1	15972	1.000	Pitcairn - Pitcairn Island	-25.1400	-130.1600	-25.0000	-130.0100
PN68_to_WGS_1984_1	9743	44.000	Spain – Canary Islands onshore	27.5800	-18.2200	29.4700	-13.3700
PNG94_To_WGS_1984_1	5553	10.000	Papua New Guinea	-14.7500	139.2000	2.5800	162.8100
Pohnpei_To_WGS_1984	108303	Unknown	Micronesia	-1.1900	135.2700	13.4300	165.6800
Point58_To_WGS_1984_1	1880	44.000	Africa – Burkina Faso and SW Niger	11.8300	-4.6400	14.2300	4.0000
Pointe_Geologie_Perroud_1950_To_WGS_1984_1	1922	10.000	Antarctica – Adelie Land coastal area	-67.1300	136.0000	-65.6100	142.0000
Pointe_Noire_To_WGS_1984	1200	44.000	Congo	-6.9100	8.8400	3.7200	18.6500
Pointe_Noire_To_WGS_1984_2	1801	4.000	Congo – coastal area and offshore	-6.9100	8.8400	-3.5500	12.3400
Pointe_Noire_To_WGS_1984_3	1802	0.150	Congo – coastal area and offshore	-6.9100	8.8400	-3.5500	12.3400
Porto_Santo_1936_To_PTRA08_1_3par	108163	0.300	Portugal – Madeira archipelago onshore	32.3500	-17.3100	33.1500	-16.2300
Porto_Santo_1936_To_PTRA08_1_7par	108160	0.050	Portugal – Madeira archipelago onshore	32.3500	-17.3100	33.1500	-16.2300
Porto_Santo_1936_To_PTRA08_2_3par	108164	0.140	Madeira Archipelago – Madeira Island onshore	32.5800	-17.3100	32.9300	-16.6600
Porto_Santo_1936_To_PTRA08_2_7par	108161	0.050	Madeira Archipelago – Madeira Island onshore	32.5800	-17.3100	32.9300	-16.6600
Porto_Santo_1936_To_PTRA08_3_3par	108165	0.120	Madeira Archipelago – Porto Santo Island onshore	32.9600	-16.4400	33.1500	-16.2300
Porto_Santo_1936_To_PTRA08_3_7par	108162	0.002	Madeira Archipelago – Porto Santo Island onshore	32.9600	-16.4400	33.1500	-16.2300
Porto_Santo_1936_To_WGS_1984_1	1888	44.000	Portugal – Madeira archipelago onshore	32.3500	-17.3100	33.1500	-16.2300
Porto_Santo_1936_To_WGS_1984_1_3par	108169	0.500	Portugal – Madeira archipelago onshore	32.3500	-17.3100	33.1500	-16.2300
Porto_Santo_1936_To_WGS_1984_1_7par	108166	0.100	Portugal – Madeira archipelago onshore	32.3500	-17.3100	33.1500	-16.2300

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Porto_Santo_1936_To_WGS_1984_1_IGP	108115	5.000	Portugal – Madeira and Porto Santo islands onshore	32.5800	-17.3100	33.1500	-16.2300
Porto_Santo_1936_To_WGS_1984_2	108125	1.000	Portugal – Madeira and Porto Santo islands onshore	32.5800	-17.3100	33.1500	-16.2300
Porto_Santo_1936_To_WGS_1984_2_3par	108170	0.300	Madeira Archipelago – Madeira Island onshore	32.5800	-17.3100	32.9300	-16.6600
Porto_Santo_1936_To_WGS_1984_2_7par	108167	0.100	Madeira Archipelago – Madeira Island onshore	32.5800	-17.3100	32.9300	-16.6600
Porto_Santo_1936_To_WGS_1984_3_3par	108171	0.300	Madeira Archipelago – Porto Santo Isl. Onshore	32.9600	-16.4400	33.1500	-16.2300
Porto_Santo_1936_To_WGS_1984_3_7par	108168	0.010	Madeira Archipelago – Porto Santo Isl. Onshore	32.9600	-16.4400	33.1500	-16.2300
Porto_Santo_1995_To_PTURA08_1	5021	2.000	Portugal – Madeira archipelago onshore	32.3500	-17.3100	33.1500	-16.2300
Porto_Santo_1995_To_PTURA08_2	5022	1.000	Portugal – Madeira island onshore	32.5800	-17.3100	32.9300	-16.6600
Porto_Santo_1995_To_PTURA08_3	5023	0.200	Portugal – Porto Santo island onshore	32.9600	-16.4400	33.1500	-16.2300
Porto_Santo_1995_To_WGS_1984_2	1966	5.000	Portugal – Madeira and Porto Santo islands onshore	32.5800	-17.3100	33.1500	-16.2300
Porto_Santo_1995_To_WGS_1984_3	1967	1.000	Portugal – Madeira and Porto Santo islands onshore	32.5800	-17.3100	33.1500	-16.2300
POSGAR_1994_To_WGS_1984_1	1210	1.000	Argentina	-58.4100	-73.5900	-21.7800	-52.6300
POSGAR_1998_To_SIRGAS_1	1774	0.000	Argentina	-58.4100	-73.5900	-21.7800	-52.6300
POSGAR_1998_To_WGS_1984_1	1773	1.000	Argentina	-58.4100	-73.5900	-21.7800	-52.6300
POSGAR_2007_To_SIRGAS_2000_1	5497	1.000	Argentina	-58.4100	-73.5900	-21.7800	-52.6300
POSGAR_2007_To_WGS_1984_1	5351	1.000	Argentina	-58.4100	-73.5900	-21.7800	-52.6300
POSGAR_2007_To_WGS_1984_2	9264	0.500	Argentina	-58.4100	-73.5900	-21.7800	-52.6300
POSGAR_To_WGS_1984_1	1598	Unknown	Argentina	-58.4100	-73.5900	-21.7800	-52.6300
PRS_1992_To_WGS_1984_1	15708	0.050	Philippines	3.0000	116.0400	22.1800	129.9500
PSAD_1956_To_REGVEN	1769	15.000	Venezuela – onshore	0.6400	-73.3800	12.2500	-59.8000

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
PSAD_1956_To_SIRGAS_1	3971	5.000	Ecuador – mainland onshore	-5.0100	-81.0300	1.4500	-75.2100
PSAD_1956_To_SIRGAS-Chile_2002_1	6949	5.000	Chile - onshore north of 26°S	-26.0000	-70.7900	-17.5000	-67.0000
PSAD_1956_To_SIRGAS-Chile_2002_2	6950	5.000	Chile - onshore 26°S to 36°S	-36.0000	-72.8700	-26.0000	-68.2800
PSAD_1956_To_SIRGAS-Chile_2002_3	6951	5.000	Chile - onshore 36°S to 43.5°S	-43.5000	-74.4800	-35.9900	-70.3900
PSAD56_to_SIRGAS-Chile_2010_1	9339	5.000	Chile - onshore north of 26°S	-26.0000	-70.7900	-17.5000	-67.0000
PSAD56_to_SIRGAS-Chile_2010_2	9340	5.000	Chile - onshore 26°S to 36°S	-36.0000	-72.8700	-26.0000	-68.2800
PSAD56_to_SIRGAS-Chile_2010_3	9341	5.000	Chile - onshore 36°S to 43.5°S	-43.5000	-74.4800	-35.9900	-70.3900
PSAD56_to_SIRGAS-Chile_2013_1	9342	5.000	Chile - onshore north of 26°S	-26.0000	-70.7900	-17.5000	-67.0000
PSAD56_to_SIRGAS-Chile_2013_2	9343	5.000	Chile - onshore 26°S to 36°S	-36.0000	-72.8700	-26.0000	-68.2800
PSAD56_to_SIRGAS-Chile_2013_3	9344	5.000	Chile - onshore 36°S to 43.5°S	-43.5000	-74.4800	-35.9900	-70.3900
PSAD56_to_SIRGAS-Chile_2016_1	9345	5.000	Chile - onshore north of 26°S	-26.0000	-70.7900	-17.5000	-67.0000
PSAD56_to_SIRGAS-Chile_2016_2	9346	5.000	Chile - onshore 26°S to 36°S	-36.0000	-72.8700	-26.0000	-68.2800
PSAD56_to_SIRGAS-Chile_2016_3	9347	5.000	Chile - onshore 36°S to 43.5°S	-43.5000	-74.4800	-35.9900	-70.3900
PSAD56_to_SIRGAS-Chile_2021_1	10135	5.000	Chile - onshore north of 26°S	-26.0000	-70.7900	-17.5000	-67.0000
PSAD56_to_SIRGAS-Chile_2021_2	10136	5.000	Chile - onshore 26°S to 36°S	-36.0000	-72.8700	-26.0000	-68.2800
PSAD56_to_SIRGAS-Chile_2021_3	10137	5.000	Chile - onshore 36°S to 43.5°S	-43.5000	-74.4800	-35.9900	-70.3900
PSAD_1956_To_WGS_1984_1	1201	42.000	South America - Bolivia; Chile; Ecuador; Guyana; Peru; Venezuela	-43.5000	-81.4100	12.2500	-56.4700
PSAD_1956_To_WGS_1984_10	1582	3.000	Bolivia - Madidi	-14.4300	-68.9600	-13.5600	-67.7900

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
PSAD_1956_To_WGS_1984_11	1583	0.500	Bolivia - Block 20	-21.7100	-63.4400	-21.0900	-62.9500
PSAD_1956_To_WGS_1984_12	1811	10.000	Brazil - Amazon cone shelf	-1.0500	-51.6400	5.6000	-48.0000
PSAD_1956_To_WGS_1984_13	1095	15.000	Venezuela - onshore	0.6400	-73.3800	12.2500	-59.8000
PSAD_1956_To_WGS_1984_14	3990	5.000	Ecuador - mainland onshore	-5.0100	-81.0300	1.4500	-75.2100
PSAD_1956_To_WGS_1984_15	6971	5.000	Chile - onshore north of 26°S	-26.0000	-70.7900	-17.5000	-67.0000
PSAD_1956_To_WGS_1984_16	6972	5.000	Chile - onshore 26°S to 36°S	-36.0000	-72.8700	-26.0000	-68.2800
PSAD_1956_To_WGS_1984_17	6973	5.000	Chile - onshore 36°S to 43.5°S	-43.5000	-74.4800	-35.9900	-70.3900
PSAD_1956_To_WGS_1984_2	1202	19.000	Bolivia	-22.9100	-69.6600	-9.6700	-57.5200
PSAD_1956_To_WGS_1984_3	1203	44.000	Chile - onshore north of 21°30'S	-21.5100	-70.4900	-17.5000	-68.1800
PSAD_1956_To_WGS_1984_4	1204	35.000	Chile - onshore 39°S to 43.5°S	-43.5000	-74.4800	-38.9900	-71.3800
PSAD_1956_To_WGS_1984_5	1205	26.000	Colombia - mainland	-4.2300	-79.1000	12.5200	-66.8700
PSAD_1956_To_WGS_1984_6	1206	7.000	Ecuador - mainland onshore	-5.0100	-81.0300	1.4500	-75.2100
PSAD_1956_To_WGS_1984_7	1207	17.000	Guyana	1.1800	-61.3900	10.7000	-55.7700
PSAD_1956_To_WGS_1984_8	1208	16.000	Peru - onshore	-18.3500	-81.4100	-0.0300	-68.6700
PSAD_1956_To_WGS_1984_9	1209	23.000	Venezuela - onshore	0.6400	-73.3800	12.2500	-59.8000
PTRA08_To_WGS_1984_1	4905	1.000	Portugal - Azores and Madeira	29.2400	-35.5800	43.0700	-12.4800
Puerto_Rico_To_NAD_1983_2	8668	0.150	Caribbean - Puerto Rico and US Virgin Islands - onshore	17.6200	-67.9700	18.5700	-64.5100
Puerto_Rico_To_WGS_1984_3	1893	6.000	Caribbean - Puerto Rico and Virgin Islands - onshore	17.6200	-67.9700	18.7800	-64.2500
Puerto_Rico_To_WGS_1984_4	15841	2.000	Puerto Rico - onshore	17.8700	-67.9700	18.5700	-65.1900
Pulkovo_1942_Adj_1958_To_Albanian_1987_1	7836	1.000	Albania	39.6300	18.4600	42.6700	21.0600
Pulkovo_1942_Adj_1958_To_ETRS_1989_1	1644	1.000	Poland - onshore	49.0000	14.1400	54.8900	24.1500
Pulkovo_1942_Adj_1958_To_ETRS_1989_3	15993	10.000	Romania	43.4400	20.2600	48.2700	31.4100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Pulkovo_1942_Adj_1958_To_ETRS_1989_4	15994	3.000	Romania	43.4400	20.2600	48.2700	31.4100
Pulkovo_1942_Adj_1958_To_WGS_1984_1	1645	1.000	Poland - onshore	49.0000	14.1400	54.8900	24.1500
Pulkovo_1942_Adj_1958_To_WGS_1984_18	15496	10.000	Romania	43.4400	20.2600	48.2700	31.4100
Pulkovo_1942_Adj_1958_To_WGS_1984_19	15995	3.000	Romania	43.4400	20.2600	48.2700	31.4100
Pulkovo_1942_Adj_1958_To_WGS_1984_22	7835	2.000	Albania - north of 41°18'N and east of 19°09'E	41.3000	19.1400	42.6700	20.6300
Pulkovo_1942_Adj_1958_To_WGS_1984_4	15997	6.000	Poland - onshore	49.0000	14.1400	54.8900	24.1500
Pulkovo_1942_Adj_1958_To_WGS_1984_8	15999	6.000	Albania - onshore	39.6400	19.2200	42.6700	21.0600
Pulkovo_1942_Adj_1958_To_WGS_1984_9	15497	7.000	Romania	43.4400	20.2600	48.2700	31.4100
Pulkovo_1942_Adj_1983_To_ETRS_1989_1	1674	2.000	Germany - East Germany all states	50.2000	9.9200	54.7400	15.0400
Pulkovo_1942_Adj_1983_To_ETRS_1989_2	1775	0.100	Germany - East Germany all states	50.2000	9.9200	54.7400	15.0400
Pulkovo_1942_Adj_1983_To_WGS_1984_1	1675	2.000	Germany - East Germany all states	50.2000	9.9200	54.7400	15.0400
Pulkovo_1942_Adj_1983_To_WGS_1984_3	15996	4.000	Hungary	45.7400	16.1100	48.5800	22.9000
Pulkovo_1942_Adj_1983_To_WGS_1984_5	15998	5.000	Europe - Czechoslovakia	47.7300	12.0900	51.0600	22.5600
Pulkovo_1942_To_Estonia_1992	1332	9.000	Estonia - onshore	57.5200	21.7400	59.7500	28.2000
Pulkovo_1942_To_LKS_1994	1274	9.000	Lithuania - onshore	53.8900	20.8600	56.4500	26.8200
Pulkovo_1942_To_PZ_1990_1	15844	4.000	Europe - FSU onshore	35.1400	19.5700	81.9100	-168.9700
Pulkovo_1942_To_Ukraine_2000_1	5586	3.500	Ukraine	43.1800	22.1500	52.3800	40.1800
Pulkovo_1942_To_WGS_1984	1254	Unknown	Russia - onshore	41.1900	19.5800	85.2000	-168.9700
Pulkovo_1942_To_WGS_1984_10	1303	2.000	Kazakhstan - Caspian Sea	41.1500	48.9000	46.9700	53.1500
Pulkovo_1942_To_WGS_1984_12	1334	9.000	Estonia - onshore	57.5200	21.7400	59.7500	28.2000
Pulkovo_1942_To_WGS_1984_13	1807	10.000	Azerbaijan	37.8900	44.7700	42.5900	51.7300
Pulkovo_1942_To_WGS_1984_14	1808	5.000	Asia - FSU - Azerbaijan and Georgia	37.8900	39.9900	43.5900	51.7300
Pulkovo_1942_To_WGS_1984_15	1809	2.000	Azerbaijan - coastal area Baku to Astara	38.3100	48.9300	40.3300	50.4000
Pulkovo_1942_To_WGS_1984_16	15865	4.500	Europe - FSU onshore	35.1400	19.5700	81.9100	-168.9700
Pulkovo_1942_To_WGS_1984_17	1267	4.000	Russia - onshore	41.1900	19.5800	85.2000	-168.9700
Pulkovo_1942_To_WGS_1984_2	1679	9.000	Lithuania - onshore	53.8900	20.8600	56.4500	26.8200
Pulkovo_1942_To_WGS_1984_20	5044	3.000	Russia - onshore	41.1900	19.5800	85.2000	-168.9700
Pulkovo_1942_To_WGS_1984_21	6899	5.000	Estonia - onshore	57.5200	21.7400	59.7500	28.2000
Pulkovo_1942_To_WGS_1984_6	1290	4.000	Latvia - onshore	55.6700	20.8700	58.0900	28.2400

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Pulkovo_1942_To_WGS_1984_7	1291	44.000	Kazakhstan	40.5900	46.4900	55.4500	87.3500
Pulkovo_1942_To_WGS_1984_9	1293	7.000	Romania	43.4400	20.2600	48.2700	31.4100
Pulkovo_1995_To_PZ_1990_GOST	1257	1.000	Russia	39.8700	18.9200	85.1900	-168.9700
Pulkovo_1995_To_WGS_1984_1	1281	1.000	Russia	39.8700	18.9200	85.1900	-168.9700
Pulkovo_1995_To_WGS_1984_2	5043	1.000	Russia	39.8700	18.9200	85.1900	-168.9700
PZ_1990_To_WGS_1984_1	15843	1.500	World	-90.0000	-180.0000	90.0000	180.0000
PZ_1990_To_WGS_1984_GOST	1244	0.500	Russia	39.8700	18.9200	85.1900	-168.9700
Qatar_1974_To_WGS_1984_1	1561	35.000	Qatar - onshore	24.5500	50.6900	26.2000	51.6800
Qatar_1974_To_WGS_1984_2	1562	1.000	Qatar - offshore	24.6400	50.5500	27.0500	53.0400
Qatar_1974_To_WGS_1984_3	1563	1.000	Qatar - onshore	24.5500	50.6900	26.2000	51.6800
QND_1995_To_WGS_1984_1	1840	0.000	Qatar - onshore	24.5500	50.6900	26.2000	51.6800
Qornoq_1927_To_Greenland_1996_1	15957	1.000	Greenland - west coast	59.7400	-73.2900	79.0000	-42.5200
Qornoq_1927_To_WGS_1984_1	1797	48.000	Greenland - west coast	59.7400	-73.2900	79.0000	-42.5200
Qornoq_1927_To_WGS_1984_2	1798	1.000	Greenland - west coast	59.7400	-73.2900	79.0000	-42.5200
Rassadiran_To_WGS_1984	1512	0.500	Iran - Taheri refinery	27.3900	52.5000	27.6100	52.7100
RD/83_To_ETRS_1989_1	15868	0.100	Germany - East Germany all states	50.2000	9.9200	54.7400	15.0400
RD/83_To_ETRS_1989_2_NTV2	6948	0.030	Germany - Saxony	50.2000	11.8900	51.6600	15.0400
RD/83_To_WGS_1984_1_NTV2	15954	1.000	Germany - East Germany all states	50.2000	9.9200	54.7400	15.0400
RD/83_To_WGS_1984_7PAR	108071	0.500	Germany - Saxony	50.2000	11.8900	51.6600	15.0400
RDN2008_To_ETRS_1989_1	6710	0.000	Italy	34.7600	5.9300	47.1000	18.9900
RDN2008_To_WGS_1984_1	6711	1.000	Italy	34.7600	5.9300	47.1000	18.9900
REGCAN95_To_WGS_1984_1	4084	1.000	Spain - Canary Islands	24.6000	-21.9300	32.7600	-11.7500
REGVEN_To_SIRGAS_1	1767	0.020	Venezuela	0.6400	-73.3800	16.7500	-58.9500
REGVEN_To_WGS_1984_1	1768	1.000	Venezuela	0.6400	-73.3800	16.7500	-58.9500
Reunion_1947_To_RGR_1992_1	1926	0.100	Reunion - onshore	-21.4200	55.1600	-20.8100	55.9100
Reunion_1947_To_WGS_1984_2	15751	44.000	Reunion - onshore	-21.4200	55.1600	-20.8100	55.9100
Reykjavik_1900_To_WGS_1984_1	1994	10.000	Iceland - mainland	63.3400	-24.6600	66.5900	-13.3800
RGAF09_To_WGS_1984_1	5501	1.000	Caribbean - French Antilles	14.0800	-63.6600	18.5300	-57.5200
RGF_1993_To_ETRF_1989_1	108199	0.000	France	41.1500	-9.8600	51.5600	10.3800
RGF_1993_To_ETRS_1989_1	1591	0.000	France	41.1500	-9.8600	51.5600	10.3800

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
RGF_1993_To_NTF_NTV2	15958	1.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
RGF_1993_To_WGS_1984_1	1671	1.000	France	41.1500	-9.8600	51.5600	10.3800
RGF93_v1_to_RGF93_v2_1	9882	0.050	France	41.1500	-9.8600	51.5600	10.3800
RGF93_v2b_to_ETRS_1989_1	9790	0.010	France	41.1500	-9.8600	51.5600	10.3800
RGF93_v2b_to_NTF_2	9891	1.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
RGF93_v2b_to_WGS_1984_1	9792	1.000	France	41.1500	-9.8600	51.5600	10.3800
RGF93_v2_to_ETRS_1989_1	9789	0.020	France	41.1500	-9.8600	51.5600	10.3800
RGF93_v2_to_NTF_2	9890	1.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
RGF93_v2_to_RGF93_v2b	9788	0.005	France	41.1500	-9.8600	51.5600	10.3800
RGF93_v2_to_WGS_1984_1	9791	1.000	France	41.1500	-9.8600	51.5600	10.3800
RGFG_1995_To_WGS_1984_2	4840	2.000	French Guiana	2.1100	-54.6100	8.8800	-49.4500
RGM_2004_To_WGS_1984_1	4476	1.000	Mayotte	-14.4900	43.6800	-11.3300	46.7000
RGM04_to_RGM23_1	10682	0.100	Mayotte	-14.4900	43.6800	-11.3300	46.7000
RGM23_to_WGS_84_1	10684	1.000	Mayotte	-14.4900	43.6800	-11.3300	46.7000
RGNC15_to_WGS_1984_1	10324	1.000	New Caledonia	-26.4500	156.2500	-14.8300	174.2800
RGNC_1991-93_To_IGN72_Grande_Terre_6_NTV2	15962	0.100	New Caledonia - Grande Terre	-22.4500	163.9200	-20.0300	167.0900
RGNC_1991-93_To_NEA74_Noumea_4_NTV2	1295	0.050	New Caledonia - Grande Terre - Noumea	-22.3700	166.3500	-22.1900	166.5400
RGNC_1991-93_To_WGS_1984_1	15880	1.000	New Caledonia	-26.4500	156.2500	-14.8300	174.2800
RGNC_1991_To_IGN72_Grande_Terre_NTV2	108471	0.100	New Caledonia - Grande Terre	-22.4500	163.9200	-20.0300	167.0900
RGNC_1991_To_NEA74_Noumea_NTV2	108472	Unknown	New Caledonia - Grande Terre - Noumea	-22.3700	166.3500	-22.1900	166.5400
RGNC_1991_To_WGS_1984_1	1920	1.000	New Caledonia	-26.4500	156.2500	-14.8300	174.2800
RGNC91-93_to_RGNC15_1	10321	1.000	New Caledonia - Belep, Grande Terre, Ile des Pins, Loyalty Islands	-22.7300	163.5400	-19.5000	168.1900
RGPF_To_WGS_1984_1	8828	0.500	French Polynesia	-31.2400	-158.1300	-4.5200	-131.9700
RGPF_To_WGS_1984_2	15833	1.000	French Polynesia	-31.2400	-158.1300	-4.5200	-131.9700
RGR_1992_To_Reunion_1947_1	1964	0.100	Reunion - onshore	-21.4200	55.1600	-20.8100	55.9100
RGR_1992_To_WGS_1984_1	1912	1.000	Reunion	-24.7200	51.8300	-18.2800	58.2400
RGRDC_2005_To_WGS_1984_1	4064	1.000	Congo DR (Zaire) - south	-13.4600	11.7900	-3.4100	29.8100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
RGSPM_2006_To_WGS_1984_1	4477	1.000	St Pierre and Miquelon	43.4100	-57.1000	47.3700	-55.9000
RGTAAF07_to_WGS_1984_1	9770	1.000	French Southern and Antarctic Territories	-67.1300	37.9800	-20.9100	142.0000
RGWF96_To_WGS_1984_1	9769	1.000	Wallis and Futuna	-15.9400	179.4900	-9.8400	-174.2700
RRAF_1991_To_RGAF09_1	5494	0.100	Martinique	14.0800	-62.8200	16.3600	-57.5200
RRAF_1991_To_RGAF09_2	5495	0.100	Guadeloupe - Grande-Terre and surrounding islands - onshore	15.8000	-61.8500	16.5500	-60.9700
RRAF_1991_To_RGAF09_3	5496	0.100	Guadeloupe - St Martin and St Barthelemy - onshore	17.8200	-63.2100	18.1700	-62.7300
RRAF_1991_To_WGS_1984_1	4560	1.000	Caribbean - French Antilles	14.0800	-63.6600	18.5300	-57.5200
RSOA13_To_WGS_1984_1	8819	1.000	Angola	-18.0200	8.2000	-4.3800	24.0900
RSRGD2000_To_WGS_1984_1	15974	1.000	Antarctica - Ross Sea Region	-90.0000	144.9900	-59.9900	-144.9900
RT38_Stockholm_To_RT38	1760	0.000	Sweden - onshore	55.2800	10.9300	69.0700	24.1700
RT90_To_ETRS_1989_1	1437	0.500	Sweden	54.9600	10.0300	69.0700	24.1700
RT90_To_ETRS_1989_2	1787	Unknown	Sweden	54.9600	10.0300	69.0700	24.1700
RT90_To_SWEREF99_1	1895	0.100	Sweden	54.9600	10.0300	69.0700	24.1700
RT90_To_WGS_1984	1680	1.000	Sweden	54.9600	10.0300	69.0700	24.1700
RT90_To_WGS_1984_2	1896	1.000	Sweden	54.9600	10.0300	69.0700	24.1700
SAD_1969_To_SIRGAS-Chile_2002_1	7448	5.000	Chile - onshore north of 32°S	-32.0000	-71.7700	-17.5000	-67.0000
SAD_1969_To_SIRGAS-Chile_2002_2	6968	5.000	Chile - onshore 32°S to 36°S	-36.0000	-72.8700	-31.9900	-69.7700
SAD_1969_To_SIRGAS-Chile_2002_3	7449	5.000	Chile - onshore 36°S to 43.5°S	-43.5000	-74.4800	-35.9900	-70.3900
SAD_1969_To_SIRGAS-Chile_2002_4	6970	5.000	Chile – Tierra del Fuego	-55.9600	-74.8300	-51.9900	-66.3300
SAD69_to_SIRGAS-Chile_2010_4	9348	5.000	Chile – Tierra del Fuego	-55.9600	-74.8300	-51.9900	-66.3300
SAD69_to_SIRGAS-Chile_2013_4	9349	5.000	Chile – Tierra del Fuego	-55.9600	-74.8300	-51.9900	-66.3300
SAD69_to_SIRGAS-Chile_2016_4	9350	5.000	Chile – Tierra del Fuego	-55.9600	-74.8300	-51.9900	-66.3300
SAD69_to_SIRGAS-Chile_2021_(4)	10138	5.000	Chile – Tierra del Fuego	-55.9600	-74.8300	-51.9900	-66.3300
SAD_1969_96_To_SIRGAS_2000_1	5529	0.500	Brazil – onshore south of 14°S and east of 53°W	-33.7800	-60.5800	4.4300	-34.7400

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
SAD_1969_96_To_SIRGAS_2000_2	5881	5.000	Brazil	-35.7100	-74.0100	7.0400	-25.2800
SAD_1969_96_To_WGS_1984_1	5543	0.500	Brazil – onshore south of 14°S and east of 53°W	-33.7800	-60.5800	4.4300	-34.7400
SAD_1969_96_To_WGS_1984_2	6195	5.000	Brazil	-35.7100	-74.0100	7.0400	-25.2800
SAD_1969_To_SIRGAS_2000_1	15485	5.000	Brazil	-35.7100	-74.0100	7.0400	-25.2800
SAD_1969_To_SIRGAS_2000_2	5528	1.000	Brazil – onshore south of 14°S and east of 53°W	-33.7800	-60.5800	4.4300	-34.7400
SAD_1969_To_WGS_1984_1	1864	19.000	South America – onshore north of 45°S	-45.0000	-81.4100	12.5200	-34.7400
SAD_1969_To_WGS_1984_10	1873	26.000	Paraguay	-27.5900	-62.6500	-19.2900	-54.2400
SAD_1969_To_WGS_1984_11	1874	9.000	Peru – onshore	-18.3500	-81.4100	-0.0300	-68.6700
SAD_1969_To_WGS_1984_12	1875	44.000	Trinidad and Tobago – Trinidad – onshore	9.9900	-61.9800	10.9000	-60.8500
SAD_1969_To_WGS_1984_13	1876	8.000	Venezuela – onshore	0.6400	-73.3800	12.2500	-59.8000
SAD_1969_To_WGS_1984_14	1877	5.000	Brazil	-35.7100	-74.0100	7.0400	-25.2800
SAD_1969_To_WGS_1984_15	5542	1.000	Brazil – onshore south of 14°S and east of 53°W	-33.7800	-60.5800	4.4300	-34.7400
SAD_1969_To_WGS_1984_16	5882	5.000	Brazil	-35.7100	-74.0100	7.0400	-25.2800
SAD_1969_To_WGS_1984_17	6974	5.000	Chile – onshore north of 32°S	-32.0000	-71.7700	-17.5000	-67.0000
SAD_1969_To_WGS_1984_18	6975	5.000	Chile – onshore 32°S to 36°S	-36.0000	-72.8700	-31.9900	-69.7700
SAD_1969_To_WGS_1984_19	6976	5.000	Chile – onshore 36°S to 43.5°S	-43.5000	-74.4800	-35.9900	-70.3900
SAD_1969_To_WGS_1984_2	1865	9.000	Argentina – mainland onshore	-52.4300	-73.5900	-21.7800	-53.6500
SAD_1969_To_WGS_1984_20	6977	5.000	Chile – Tierra del Fuego	-55.9600	-74.8300	-51.9900	-66.3300
SAD_1969_To_WGS_1984_3	1866	26.000	Bolivia	-22.9100	-69.6600	-9.6700	-57.5200
SAD_1969_To_WGS_1984_4	1867	8.000	Brazil – onshore south of 14°S and east of 53°W	-33.7800	-60.5800	4.4300	-34.7400
SAD_1969_To_WGS_1984_5	1868	21.000	Chile – onshore north of 45°S	-45.0000	-75.2200	-17.5000	-67.0000
SAD_1969_To_WGS_1984_6	1869	10.000	Colombia – mainland	-4.2300	-79.1000	12.5200	-66.8700
SAD_1969_To_WGS_1984_7	1870	6.000	Ecuador – mainland onshore	-5.0100	-81.0300	1.4500	-75.2100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
SAD_1969_To_WGS_1984_8	1871	44.000	Ecuador – Galapagos onshore	-1.4100	-91.7200	0.1800	-89.1900
SAD_1969_To_WGS_1984_9	1872	12.000	Guyana – onshore	1.1800	-61.3900	8.5800	-56.4700
Sainte_Anne_To_RGAF09_1	5492	10.000	Guadeloupe – Grande-Terre and surrounding islands – onshore	15.8000	-61.8500	16.5500	-60.9700
Sainte_Anne_To_WGS_1984_1	1904	10.000	Guadeloupe – Grande-Terre and surrounding islands – onshore	15.8000	-61.8500	16.5500	-60.9700
Sainte_Anne_To_WGS_1984_2	1905	0.100	Guadeloupe – Grande-Terre and surrounding islands – onshore	15.8000	-61.8500	16.5500	-60.9700
Saint_Pierre_et_Miquelon_1950_To_RGSPM_2006	108088	1.000	St Pierre and Miquelon – onshore	46.6900	-56.4800	47.1900	-56.0700
Saint_Pierre_et_Miquelon_1950_To_WGS_1984_(G1150)	8270	1.000	St Pierre and Miquelon – onshore	46.6900	-56.4800	47.1900	-56.0700
Saint_Pierre_et_Miquelon_1950_To_WGS_1984_1	1923	10.000	St Pierre and Miquelon – onshore	46.6900	-56.4800	47.1900	-56.0700
Santo_DOS_1965_To_WGS_1984	15820	44.000	Vanuatu – northern islands	-17.3200	166.4700	-14.5700	168.7100
Sao_Braz_To_PTRA08_1_3par	108175	0.800	Portugal – Azores E – onshore	36.8700	-25.9200	37.9600	-24.7200
Sao_Braz_To_PTRA08_1_7par	108172	0.025	Portugal – Azores E – onshore	36.8700	-25.9200	37.9600	-24.7200
Sao_Braz_To_PTRA08_2_3par	108176	0.800	Portugal – Azores E – S Miguel onshore	37.6500	-25.9200	37.9600	-25.0800
Sao_Braz_To_PTRA08_2_7par	108173	0.030	Portugal – Azores E – S Miguel onshore	37.6500	-25.9200	37.9600	-25.0800
Sao_Braz_To_PTRA08_3_3par	108177	0.800	Azores – Santa Maria Island	36.9000	-25.2500	37.1000	-24.9500
Sao_Braz_To_PTRA08_3_7par	108174	0.010	Azores – Santa Maria Island	36.9000	-25.2500	37.1000	-24.9500
Sao_Braz_To_WGS_1984_1	108117	5.000	Portugal – Azores E – onshore	36.8700	-25.9200	37.9600	-24.7200

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Sao_Braz_To_WGS_1984_1_3par	108181	0.900	Portugal – Azores E – onshore	36.8700	-25.9200	37.9600	-24.7200
Sao_Braz_To_WGS_1984_1_7par	108178	0.035	Portugal – Azores E – onshore	36.8700	-25.9200	37.9600	-24.7200
Sao_Braz_To_WGS_1984_2	108127	1.000	Portugal – Azores E – onshore	36.8700	-25.9200	37.9600	-24.7200
Sao_Braz_To_WGS_1984_2_3par	108182	0.900	Portugal – Azores E – S Miguel onshore	37.6500	-25.9200	37.9600	-25.0800
Sao_Braz_To_WGS_1984_2_7par	108179	0.040	Portugal – Azores E – S Miguel onshore	37.6500	-25.9200	37.9600	-25.0800
Sao_Braz_To_WGS_1984_3_3par	108183	0.900	Azores – Santa Maria Island	36.9000	-25.2500	37.1000	-24.9500
Sao_Braz_To_WGS_1984_3_7par	108180	0.030	Azores – Santa Maria Island	36.9000	-25.2500	37.1000	-24.9500
Sapper_Hill_1943_To_WGS_1984	1225	2.000	Falkland Islands – East Falkland Island	-52.5100	-59.9800	-51.1600	-57.6000
Schwarzeck_To_WGS_1984	1226	35.000	Namibia	-30.6400	8.2400	-16.9500	25.2700
Schwarzeck_To_WGS_1984_2	1271	Unknown	Namibia	-30.6400	8.2400	-16.9500	25.2700
Scoresbysund_1952_To_Greenland_1996_1	15899	1.000	Greenland – Scoresbysund area	68.6600	-29.6900	74.5800	-19.8900
Scoresbysund_1952_To_WGS_1984_1	1799	1.000	Greenland – Scoresbysund area	68.6600	-29.6900	74.5800	-19.8900
Segara_(Jakarta)_to_WGS_1984_1	8641	999.000	Indonesia - Kalimantan E	-4.2400	114.5500	4.2900	119.0600
Selvagem_Grande_1938_To_WGS_1984_1	1965	44.000	Portugal - Selvagens onshore	29.9800	-16.1100	30.2100	-15.7900
SHGD2015_To_Astro_DOS_71-4_2	9226	0.100	St Helena - St Helena Island	-16.0800	-5.8500	-15.8500	-5.5900
SHGD2015_To_WGS_1984_1	7892	1.000	St Helena - St Helena Island	-16.0800	-5.8500	-15.8500	-5.5900
Sierra_Leone_1968_To_WGS_1984	1614	26.000	Sierra Leone - onshore	6.8800	-13.3500	10.0000	-10.2600
SIRGAS_1995_to_SIRGAS_2000_1	9979	0.006	South America - SIRGAS 1995 by country	-59.8700	-113.2100	16.7500	-26.0000
SIRGAS_2000_to_SIRGAS-CON_SIR17P01_1	9980	0.020	Latin America - Central America and South America	-59.8700	-122.1900	32.7200	-25.2800

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
SIRGAS_2000_To_WGS_1984_1	15894	1.000	Latin America - SIRGAS 2000 by country	-59.8700	-122.1900	32.7200	-25.2800
SIRGAS-ES2007.8_To_WGS_1984_1	5395	1.000	El Salvador	9.9700	-91.4300	14.4400	-87.6500
SIRGAS-ROU98_To_WGS_1984_1	5384	1.000	Uruguay	-37.7700	-58.4900	-30.0900	-50.0100
SIRGAS_To_WGS_1984_1	1581	2.000	South America - SIRGAS 1995 by country	-59.8700	-113.2100	16.7500	-26.0000
S_JTSK/05_Ferro_To_S_JTSK/05_1	5238	1.000	Czechia	48.5800	12.0900	51.0600	18.8600
S_JTSK/05_Ferro_To_WGS_1984_1	5240	1.000	Czechia	48.5800	12.0900	51.0600	18.8600
S_JTSK/05_To_ETRS_1989_1	5226	0.000	Czechia	48.5800	12.0900	51.0600	18.8600
S_JTSK/05_To_WGS_1984_1	5227	1.000	Czechia	48.5800	12.0900	51.0600	18.8600
S-JTSK [JTSK03]_To_ETRS_1989_1	8367	0.001	Slovakia	47.7300	16.8400	49.6100	22.5600
S-JTSK [JTSK03]_To_S-JTSK_1	8364	0.050	Slovakia	47.7300	16.8400	49.6100	22.5600
S-JTSK [JTSK03]_To_WGS_1984_1	8368	1.000	Slovakia	47.7300	16.8400	49.6100	22.5600
S_JTSK_Ferro_To_S_JTSK	1884	0.000	Europe - Czechoslovakia	47.7300	12.0900	51.0600	22.5600
S_JTSK_FERRO_To_WGS_1984_2	5230	1.100	Slovakia	47.7300	16.8400	49.6100	22.5600
S_JTSK_Ferro_To_WGS_1984_3	5242	1.000	Czechia	48.5800	12.0900	51.0600	18.8600
S_JTSK_To_ETRS_1989_1	1622	1.000	Czechia	48.5800	12.0900	51.0600	18.8600
S_JTSK_To_ETRS_1989_2	1624	1.000	Slovakia	47.7300	16.8400	49.6100	22.5600
S_JTSK_To_ETRS_1989_3	4829	0.500	Slovakia	47.7300	16.8400	49.6100	22.5600
S_JTSK_To_ETRS_1989_4	4827	1.000	Slovakia	47.7300	16.8400	49.6100	22.5600
S_JTSK_To_Pulkovo_1942	108202	1.000	Czechia	48.5800	12.0900	51.0600	18.8600
S_JTSK_To_S_JTSK/05_1	5241	0.000	Czechia	48.5800	12.0900	51.0600	18.8600
S_JTSK_To_WGS_1984_1	1623	1.000	Czechia	48.5800	12.0900	51.0600	18.8600
S_JTSK_To_WGS_1984_2	1625	1.000	Slovakia	47.7300	16.8400	49.6100	22.5600
S_JTSK_To_WGS_1984_4	4836	1.000	Slovakia	47.7300	16.8400	49.6100	22.5600
S_JTSK_To_WGS_1984_5	5239	1.000	Czechia	48.5800	12.0900	51.0600	18.8600
S_JTSK_To_WGS_1984_NGA	15965	6.000	Europe - Czechoslovakia	47.7300	12.0900	51.0600	22.5600
S-JTSK (Ferro)_to_WGS_1984_1	8642	1.000	Czechia	48.5800	12.0900	51.0600	18.8600
SLD99_To_WGS_1984_1	5236	14.000	Sri Lanka - onshore	5.8600	79.6400	9.8800	81.9500
Slovenia_1996_To_ETRS_1989_1	15977	0.000	Slovenia	45.4200	13.3800	46.8800	16.6100
Slovenia_1996_To_WGS_1984_1	15976	1.000	Slovenia	45.4200	13.3800	46.8800	16.6100
Solomon_1968_To_WGS_1984_1	15805	44.000	Solomon Islands - New Georgia - Ghizo (Gizo)	-8.8600	156.4400	-7.5200	158.2000

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Solomon_1968_To_WGS_1984_2	15807	44.000	Solomon Islands - Guadalcanal Island	-9.9800	159.5500	-9.2000	160.8800
South_Asia_Singapore_To_WGS_1984	108269	Unknown	Singapore	1.1300	103.5900	1.4700	104.0700
South_East_Island_1943_To_WGS_1984_1	6914	1.000	Seychelles - Seychelles Bank	-4.8600	55.1500	-3.6600	56.0100
South_East_Island_1943_To_WGS_1984_2	6926	1.000	Seychelles - Seychelles Bank	-4.8600	55.1500	-3.6600	56.0100
South_Yemen_To_WGS_1984_1	1682	5.000	Yemen - South Yemen - mainland	12.5400	43.3700	19.0000	53.1400
South_Yemen_To_Yemen_NGN_1996	1539	5.000	Yemen - South Yemen - mainland	12.5400	43.3700	19.0000	53.1400
SRB_ETRS89_To_ETRS_1989_1	8893	0.000	Serbia	42.2300	18.8100	46.1900	23.0100
SRB_ETRS89_To_WGS_1984_1	8894	1.000	Serbia	42.2300	18.8100	46.1900	23.0100
SREF98_To_ETRS_1989_1	4076	0.000	Serbia	42.2300	18.8100	46.1900	23.0100
SREF98_To_WGS_1984_1	4077	1.000	Serbia	42.2300	18.8100	46.1900	23.0100
ST71_Belep_To_WGS_1984_1	1931	1.000	New Caledonia - Belep	-19.8500	163.5400	-19.5000	163.7500
ST84_Ile_des_Pins_To_RGNC_1991-93_1	15893	0.100	New Caledonia - Ile des Pins	-22.7300	167.3600	-22.4900	167.6100
ST84_Ile_des_Pins_To_WGS_1984_1	1930	1.000	New Caledonia - Ile des Pins	-22.7300	167.3600	-22.4900	167.6100
ST84_Ile_des_Pins_To_WGS_1984_2	15848	10.000	New Caledonia - Ile des Pins	-22.7300	167.3600	-22.4900	167.6100
ST87_Ouvea_To_RGNC_1991-93_1	15885	0.500	New Caledonia - Ouvéa	-20.7700	166.4400	-20.3400	166.7100
ST87_Ouvea_To_RGNC_1991-93_2	15892	0.100	New Caledonia - Ouvéa	-20.7700	166.4400	-20.3400	166.7100
ST87_Ouvea_To_WGS_1984_2	15881	1.000	New Caledonia - Ouvéa	-20.7700	166.4400	-20.3400	166.7100
St_George_Island_To_NAD_1983_2	8546	0.150	USA - Alaska - St. George Island	56.4900	-169.8800	56.6700	-169.3800
St_George_To_WGS_1984_1	1698	1.500	USA - Alaska - St. George Island	56.4900	-169.8800	56.6700	-169.3800
St_Helena_Tritan_To_SHGD2015_1	7897	0.050	St Helena - St Helena Island	-16.0800	-5.8500	-15.8500	-5.5900
St_Helena_Tritan_To_WGS_1984_1	7898	1.000	St Helena - St Helena Island	-16.0800	-5.8500	-15.8500	-5.5900
St_Kitts_1955_To_WGS_1984	1445	10.000	St Kitts and Nevis - onshore	17.0600	-62.9200	17.4600	-62.5000

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
St_Kitts_1955_To_WGS_1984_2	15750	44.000	St Kitts and Nevis - onshore	17.0600	-62.9200	17.4600	-62.5000
St_Lawrence_Island_To_NAD_1983_2	8547	0.500	USA - Alaska - St. Lawrence Island	62.8900	-171.9700	63.8400	-168.5900
St_Lawrence_To_WGS_1984_1	1699	1.500	USA - Alaska - St. Lawrence Island	62.8900	-171.9700	63.8400	-168.5900
St_Lucia_1955_To_WGS_1984	1446	10.000	St Lucia - onshore	13.6600	-61.1300	14.1600	-60.8200
St_Lucia_1955_To_WGS_1984_2	6897	2.000	St Lucia - onshore	13.6600	-61.1300	14.1600	-60.8200
St_Paul_Island_To_NAD_1983_2	8548	0.500	USA - Alaska - St. Paul Island	57.0600	-170.5100	57.2800	-170.0400
St_Paul_To_WGS_1984_1	1700	1.500	USA - Alaska - St. Paul Island	57.0600	-170.5100	57.2800	-170.0400
S_TUREF_To_ETRS_1989_1	5260	0.100	Turkey	34.4200	25.6200	43.4500	44.8300
St_Vincent_1945_To_WGS_1984_1	1959	1.000	St Vincent and the Grenadines - onshore	12.5400	-61.5200	13.4400	-61.0700
SVY21_To_WGS_1984_1	8886	1.000	Singapore	1.1300	103.5900	1.4700	104.0700
SWEREF99_To_ETRS_1989_1	1878	0.000	Sweden	54.9600	10.0300	69.0700	24.1700
SWEREF99_To_RT90	108212	Unknown	Sweden	54.9600	10.0300	69.0700	24.1700
SWEREF99_To_WGS_1984_1	1879	1.000	Sweden	54.9600	10.0300	69.0700	24.1700
Tahaa_1954_To_RGPF_1	8833	0.500	French Polynesia - Society Islands - Bora Bora, Huahine, Raiatea, Tahaa	-16.9600	-151.9100	-16.1700	-150.8900
Tahaa_1954_To_WGS_1984_1	1913	10.000	French Polynesia - Society Islands - Bora Bora, Huahine, Raiatea, Tahaa	-16.9600	-151.9100	-16.1700	-150.8900
Tahaa_1954_To_WGS_1984_2	15770	1.000	French Polynesia - Society Islands - Bora Bora, Huahine, Raiatea, Tahaa	-16.9600	-151.9100	-16.1700	-150.8900
Tahaa_1954_To_WGS_1984_3	8834	1.000	French Polynesia - Society Islands - Bora Bora, Huahine, Raiatea, Tahaa	-16.9600	-151.9100	-16.1700	-150.8900

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Tahiti_1952_To_WGS_1984_1	1924	10.000	French Polynesia - Society Islands - Moorea and Tahiti	-17.9300	-150.0000	-17.4100	-149.0900
Tahiti_1979_To_RGPF_1	8829	0.500	French Polynesia - Society Islands - Tahiti	-17.9300	-149.7000	-17.4400	-149.0900
Tahiti_1979_To_WGS_1984_1	4835	1.000	French Polynesia - Society Islands - Tahiti	-17.9300	-149.7000	-17.4400	-149.0900
Tahiti_1979_To_WGS_1984_2	8830	1.000	French Polynesia - Society Islands - Tahiti	-17.9300	-149.7000	-17.4400	-149.0900
Tananarive_1925_Paris_To_Tananarive_1925	1265	0.000	Madagascar - onshore	-25.6400	43.1800	-11.8900	50.5600
Tananarive_1925_Paris_To_WGS_1984	8176	100.000	Madagascar - onshore	-25.6400	43.1800	-11.8900	50.5600
Tananarive_1925_To_WGS_1984	1227	Unknown	Madagascar - onshore and nearshore	-26.5900	42.5300	-11.6900	51.0300
Tananarive_Paris_To_WGS_1984_2	6874	3.000	Madagascar - onshore	-25.6400	43.1800	-11.8900	50.5600
Tananarive_To_WGS_1984_2	6873	3.000	Madagascar - onshore and nearshore	-26.5900	42.5300	-11.6900	51.0300
Tapi_Aike_To_WGS_1984_1	9260	5.000	Argentina - south Santa Cruz	-52.4300	-73.2800	-50.3300	-68.3000
Tern_Island_1961_To_WGS_1984	15795	44.000	USA - Hawaii - Tern Island and Sorel Atoll	23.6900	-166.3600	23.9300	-166.0300
Tete_To_Moznet_1	1297	30.000	Mozambique - onshore	-26.8700	30.2100	-10.4200	40.9000
Tete_To_Moznet_2	1298	1.000	Mozambique - A	-26.8700	31.9100	-23.9100	34.5000
Tete_To_Moznet_3	1299	4.000	Mozambique - B	-24.9100	31.2900	-19.7400	35.6500
Tete_To_Moznet_4	1300	3.000	Mozambique - C	-19.9100	30.2100	-14.0100	39.1800
Tete_To_Moznet_5	1301	10.000	Mozambique - D	-16.9400	34.3600	-10.4200	40.9000
Tete_To_WGS_1984_1	1683	30.000	Mozambique - onshore	-26.8700	30.2100	-10.4200	40.9000
Tete_To_WGS_1984_2	1684	1.000	Mozambique - A	-26.8700	31.9100	-23.9100	34.5000
Tete_To_WGS_1984_3	1685	4.000	Mozambique - B	-24.9100	31.2900	-19.7400	35.6500
Tete_To_WGS_1984_4	1686	3.000	Mozambique - C	-19.9100	30.2100	-14.0100	39.1800
Tete_To_WGS_1984_5	1687	10.000	Mozambique - D	-16.9400	34.3600	-10.4200	40.9000
Tete_To_WGS_1984_6	6901	17.000	Mozambique - onshore	-26.8700	30.2100	-10.4200	40.9000
TGD2005_to_WGS_1984_1	9771	1.000	Tonga	-25.6800	-179.0800	-14.1400	-171.2800
Timbalai_1948_To_GDBD2009_1	5878	1.000	Brunei	4.0100	112.3700	6.3100	115.3700
Timbalai_1948_To_WGS_1984	1228	19.000	Asia - Brunei and East Malaysia	0.8500	109.3100	7.6700	119.6100
Timbalai_1948_To_WGS_1984_2	1592	5.000	Brunei	4.0100	112.3700	6.3100	115.3700

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Timbalai_1948_To_WGS_1984_3	1615	100.000	Brunei - onshore	4.0100	114.0900	5.1100	115.3700
Timbalai_1948_To_WGS_1984_4	1852	5.000	Malaysia - East Malaysia - offshore SCS	1.5600	109.3100	7.6700	117.3100
Timbalai_1948_To_WGS_1984_5	5249	1.000	Brunei	4.0100	112.3700	6.3100	115.3700
Timbalai_1948_To_WGS_1984_6	6902	6.000	Brunei - onshore	4.0100	114.0900	5.1100	115.3700
TM65_To_ETRS_1989_1	1640	1.000	Europe - Ireland (Republic and Ulster) - onshore	51.3900	-10.5600	55.4300	-5.3400
TM65_To_WGS_1984	1229	Unknown	Europe - Ireland (Republic and Ulster) - onshore	51.3900	-10.5600	55.4300	-5.3400
TM65_To_WGS_1984_2	1641	1.000	Europe - Ireland (Republic and Ulster) - onshore	51.3900	-10.5600	55.4300	-5.3400
TM75_To_ETRS_1989_2	1953	1.000	Europe - Ireland (Republic and Ulster) - onshore	51.3900	-10.5600	55.4300	-5.3400
TM75_To_ETRS_1989_3_NTv2	6946	0.410	Europe - Ireland (Republic and Ulster) - onshore	51.3900	-10.5600	55.4300	-5.3400
TM75_To_WGS_1984_2	1954	1.000	Europe - Ireland (Republic and Ulster) - onshore	51.3900	-10.5600	55.4300	-5.3400
TM75_To_WGS_1984_3	1956	6.000	Europe - Ireland (Republic and Ulster) - onshore	51.3900	-10.5600	55.4300	-5.3400
TM75_To_WGS_1984_4_NTv2	6947	1.000	Europe - Ireland (Republic and Ulster) - onshore	51.3900	-10.5600	55.4300	-5.3400
Tokyo_1892_to_Korean_1985_1	5134	0.000	Korea, Republic of (South Korea) - onshore	33.1400	124.5300	38.6400	131.0100
Tokyo_1892_to_Tokyo_1	5133	0.000	Asia - Japan and Korea	20.3700	122.8300	45.5400	154.0500
Tokyo_1892_to_WGS_84_1	5192	1.000	Korea, Republic of (South Korea) - onshore	33.1400	124.5300	38.6400	131.0100
Tokyo_To_JGD_2000_1	15483	4.000	Japan - onshore	20.3700	122.8300	45.5400	154.0500

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Tokyo_To_JGD_2000_NTv2	6712	1.000	Japan - onshore	20.3700	122.8300	45.5400	154.0500
Tokyo_To_JGD_2011_2_NTv2	6740	0.200	Japan onshore excluding northern main province	20.3700	122.8300	45.5400	154.0500
Tokyo_To_WGS_1984_1	1230	29.000	Asia - Japan and South Korea	20.3700	122.8300	45.5400	145.8700
Tokyo_To_WGS_1984_108	15484	9.000	Japan - onshore	20.3700	122.8300	45.5400	154.0500
Tokyo_To_WGS_1984_2	1231	13.000	Japan - onshore mainland and adjacent islands	30.1800	128.3100	45.5400	145.8700
Tokyo_To_WGS_1984_2001	108106	4.000	Japan - onshore	20.3700	122.8300	45.5400	154.0500
Tokyo_To_WGS_1984_3	1232	13.000	Korea, Republic of (South Korea) - onshore	33.1400	124.5300	38.6400	131.0100
Tokyo_To_WGS_1984_4	1233	29.000	Japan - Okinawa	23.9800	122.8300	26.9100	131.3800
Tokyo_To_WGS_1984_5	1305	4.000	Korea, Republic of (South Korea) - onshore	33.1400	124.5300	38.6400	131.0100
Tokyo_To_WGS_1984_NTv2	108109	1.000	Japan - onshore	20.3700	122.8300	45.5400	154.0500
Trinidad_1903_To_WGS_1984	1296	2.000	Trinidad and Tobago - Trinidad	9.8300	-62.0900	11.5100	-60.0000
Trinidad_1903_To_WGS_1984_2	10085	3.000	Trinidad and Tobago - Trinidad	9.8300	-62.0900	11.5100	-60.0000
Tristan_1968_To_WGS_1984	15816	44.000	St Helena - Tristan da Cunha	-40.4200	-12.7600	-37.0000	-9.8000
TUREF_To_WGS_1984_1	5261	1.000	Turkey	34.4200	25.6200	43.4500	44.8300
TWD_1997_To_WGS_1984_1	3830	1.000	Taiwan	17.3600	114.3200	26.9600	123.6100
UCS-2000_to_ETRS_1989_1	9901	1.000	Ukraine	43.1800	22.1500	52.3800	40.1800
Ukraine_2000_To_ITRF_2005_1	108035	1.000	Ukraine	43.1800	22.1500	52.3800	40.1800
Ukraine_2000_To_WGS_1984_1	5590	5.000	Ukraine	43.1800	22.1500	52.3800	40.1800
Ukraine_2000_To_WGS_1984_2	5840	1.000	Ukraine	43.1800	22.1500	52.3800	40.1800
UZGD2024_to_WGS_84_1	10771	1.000	Uzbekistan	37.1800	55.9900	45.5800	73.1700
Vanua_Levu_1915_To_WGS_1984_1	15878	50.000	Fiji - Vanua Levu and Taveuni	-17.0700	178.4200	-16.1000	-179.7700
Vientiane_1982_To_Lao_1997_1	1063	2.000	Laos	13.9200	100.0900	22.5000	107.6400
Viti_Levu_1912_To_WGS_1984_1	15897	44.000	Fiji - Viti Levu	-18.3200	177.1900	-17.2500	178.7500
Viti_Levu_1912_To_WGS_1984_2	6895	5.000	Fiji - Viti Levu	-18.3200	177.1900	-17.2500	178.7500
Viti_Levu_1916_To_WGS_1984	15821	44.000	Fiji - Viti Levu	-18.3200	177.1900	-17.2500	178.7500
VN_2000_To_WGS_1984_1	5194	1.000	Vietnam - DBSCL 02 and 03	9.3500	104.2400	11.0400	107.1100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
VN_2000_To_WGS_1984_2	6960	1.000	Vietnam - onshore	8.3300	102.1400	23.4000	109.5300
Voirol_1875_Grad_To_Voirol_1875	108339	Unknown	Algeria - north of 32°N	31.9900	-2.9500	37.1400	9.0900
Voirol_1875_Grad_To_WGS_1984	108278	44.000	Algeria - north of 32°N	31.9900	-2.9500	37.1400	9.0900
Voirol_1875_Paris_To_Voirol_1875	1266	0.000	Algeria - north of 32°N	31.9900	-2.9500	37.1400	9.0900
Voirol_1875_Paris_To_WGS_1984	8211	100.000	Algeria - north of 32°N	31.9900	-2.9500	37.1400	9.0900
Voirol_1875_To_WGS_1984	1294	Unknown	Algeria - north of 32°N	31.9900	-2.9500	37.1400	9.0900
Voirol_1879_Grad_To_Voirol_1879	108340	0.000	Algeria - north of 32°N	31.9900	-2.9500	37.1400	9.0900
Voirol_Unifie_1960_Grad_To_WGS_1984	108265	44.000	Algeria - north of 32°N	31.9900	-2.9500	37.1400	9.0900
Voirol_Unifie_1960_Paris_To_Voirol_Unifie_1960	108092	0.000	Algeria - north of 32°N	31.9900	-2.9500	37.1400	9.0900
Voirol_Unifie_1960_Paris_To_WGS_1984	108090	44.000	Algeria - north of 32°N	31.9900	-2.9500	37.1400	9.0900
Wake_Eniwetok_1960_To_WGS_1984	15822	6.000	Pacific - Marshall Islands, Wake - onshore	8.6600	162.2700	19.3800	167.8200
Wake_Island_1952_To_WGS_1984	15823	44.000	Wake - onshore	19.2200	166.5500	19.3800	166.7200
WGS_1972_BE_To_WGS_1972_1	1239	2.000	World	-90.0000	-180.0000	90.0000	180.0000
WGS_1972_BE_To_WGS_1984_1	1240	2.000	World - WGS72 BE to WGS 84 - by country	-90.0000	-180.0000	90.0000	180.0000
WGS_1972_To_WGS_1984_1	1237	2.000	World	-90.0000	-180.0000	90.0000	180.0000
WGS_1972_To_WGS_1984_2	1238	2.000	World	-90.0000	-180.0000	90.0000	180.0000
WGS_1984_G1150_To_G1674_Fixed_At_2007.5_KD	108468	0.404	World	-90.0000	-180.0000	90.0000	180.0000
WGS_1984_G1674_To_G1762_Fixed_At_2012.5_KD	108469	0.040	World	-90.0000	-180.0000	90.0000	180.0000
WGS_1984_G1762_To_G2139_Fixed_At_2016.0_NGA	108474	0.010	World	-90.0000	-180.0000	90.0000	180.0000
WGS_1984_G2139_To_G2296_Fixed_At_2024.0_NGA	108477	0.010	World	-90.0000	-180.0000	90.0000	180.0000
WGS_1984_G2296_To_ITRF2020_NGA	108478	0.010	World	-90.0000	-180.0000	90.0000	180.0000
WGS_1984_G730_To_G873_Fixed_At_1995.5_KD	108466	0.121	World	-90.0000	-180.0000	90.0000	180.0000
WGS_1984_G873_To_G1150_Fixed_At_1999.5_KD	108467	0.202	World	-90.0000	-180.0000	90.0000	180.0000
WGS_1984_Transit_To_G730_Fixed_At_1990.5_KD	108465	0.283	World	-90.0000	-180.0000	90.0000	180.0000
WGS_1984_(ITRF00)_To_NAD_1983	108190	0.100	USA - CONUS and Alaska; PRVI	14.9200	167.6500	74.7100	-63.8800
WGS_1984_(ITRF00)_To_NAD_1983_2011	108354	0.100	USA - CONUS and Alaska; PRVI	14.9200	167.6500	74.7100	-63.8800
WGS_1984_(ITRF00)_To_NAD_1983_CORS96	108151	0.100	USA - CONUS and Alaska; PRVI	14.9200	167.6500	74.7100	-63.8800
WGS_1984_(ITRF00)_To_NAD_1983_HARN	108282	0.100	USA (all states)	15.5600	167.6500	74.7100	-65.6900
WGS_1984_(ITRF08)_To_NAD_1983_2011	108363	0.030	USA - CONUS and Alaska; PRVI	14.9200	167.6500	74.7100	-63.8800

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
WGS_1984_(ITRF08)_To_NAD_1983_MA11	108364	0.050	Pacific - US interests Mariana plate	1.6400	129.4800	23.9000	149.5500
WGS_1984_(ITRF08)_To_NAD_1983_PA11	108365	0.050	Pacific - US interests Pacific plate	-17.5600	151.3000	31.8000	-151.2700
WGS_1984_To_Ain_El_Abd_1970_MB	108366	0.100	Bahrain	25.5300	50.2600	27.1700	51.1300
WGS_1984_To_GDA2020_3	9690	3.100	Australia - GDA	-60.5500	93.4100	-8.4700	173.3400
WGS_1984_To_GDA2020_4	9691	3.200	Australia - onshore	-43.7000	112.8500	-9.8600	153.6900
WGS_1984_To_GDA2020_NTV2_CPD_plus_Lord_Howe_Norfolk	108440	3.200	Australia - Lord Howe and Norfolk Islands onshore	-32.3333	158.8000	-28.6333	168.3333
WGS_1984_To_IG05(2012)_Intermediate_CRS	9189	0.100	Asia - Middle East - Israel and Palestine Territory onshore	29.4500	34.1700	33.2800	35.6900
WGS_1984_To_Israel_CoordFrame	108021	1.000	Israel, Palestine Territory, and Jordan	29.1900	32.9900	33.5300	39.300
WGS_1984_To_KUDAMS_KM_2019	108451	0.300	Kuwait	28.5300	46.5400	30.0900	49.5300
WGS_1984_To_MSK_1942	108055	999.0	Mongolia	41.5800	87.7600	52.1500	119.9400
WGS_1984_To_NTF_NTV2	15960	1.000	France - onshore - mainland and Corsica	41.3100	-4.8700	51.1400	9.6300
WGS_1984_To_Observatorio_Meteorologico_1965_1	108211	Unknown	Macao	22.0600	113.5200	22.2300	113.6800
WGS_1984_To_Observatorio_Meteorologico_1965_2	108235	Unknown	Macao	22.0600	113.5200	22.2300	113.6800
WGS_1984_To_Ocotepeque_1935_MB	108014	0.500	Costa Rica - onshore	7.9800	-90.4500	11.2200	-82.5300
WGS_1984_To_OSGB_1936_OSTN15	108058	1.000	UK - Britain and UKCS 49°45'N to 61°N, 9°W to 2°E	49.7500	-9.0100	61.0100	2.0100
WGS_1984_To_Pulkovo_1942	108056	Unknown	Mongolia	41.5800	87.7600	52.1500	119.9400
WGS_1984_To_RT90	108213	Unknown	Sweden	54.9600	10.0300	69.0700	24.1700
WGS_1984_To_Xrail84_1	108051	0.500	UK - London	51.2000	-0.7000	51.8000	0.6000
Yacare_To_SIRGAS-ROU98_1	5385	1.500	Uruguay - onshore	-35.0000	-58.4900	-30.0900	-53.0900
Yacare_To_WGS_1984	1234	Unknown	Uruguay - onshore	-35.0000	-58.4900	-30.0900	-53.0900
Yacare_To_WGS_1984_2	5386	1.500	Uruguay - onshore	-35.0000	-58.4900	-30.0900	-53.0900
Yemen_NGN_1996_To_WGS_1984	1540	1.000	Yemen	8.9500	41.0800	19.0000	57.9600
Yoff_To_WGS_1972_1	1828	25.000	Senegal	10.6400	-20.2200	16.7000	-11.3600
Yoff_To_WGS_1984_2	6903	5.000	Senegal	10.6400	-20.2200	16.7000	-11.3600
Zanderij_To_WGS_1984	1235	11.000	Suriname	1.8300	-58.0800	9.3500	-52.6600

Table 2: Geographic (datum) transformations: Longitude rotation, null, and unit change methods

Geographic (datum) Transformation Name	WKID	Method
ATRF_2014_To_GDA2020_Null	108442	Null
Batavia_Jakarta_To_Batavia	1759	Longitude_Rotation
Belge_1950_Brussels_To_Belge_1950	1264	Longitude_Rotation
Bern_1898_Bern_To_CH1903	1765	Longitude_Rotation
Bogota_Bogota_To_Bogota	1755	Longitude_Rotation
Carthage_Grad_To_Carthage	108338	Unit_Change
Carthage_Paris_To_Carthage	1881	Longitude_Rotation
Greek_Athens_To_Greek	1761	Longitude_Rotation
Gunung_Segara_Jakarta_To_Gunung_Segara	1883	Longitude_Rotation
ITRF_2014_To_GDA2020_Null	108061	Null
JGD_2011_To_WGS_1984	108053	Null
Lisbon_1890_Lisbon_To_Lisbon	1991	Longitude_Rotation
Lisbon_Lisbon_To_Lisbon	1756	Longitude_Rotation
Makassar_Jakarta_To_Makassar	1260	Longitude_Rotation
MGI_Ferro_To_MGI	3895	Longitude_Rotation
MONREF_1997_To_WGS_1984	108054	Null
Monte_Mario_Rome_To_Monte_Mario	1262	Longitude_Rotation
NAD_1983_HARN_To_HARN_Adjusted_WCCS_Chippewa	108063	Null
NGO_1948_Oslo_To_NGO_1948	1762	Longitude_Rotation
NTF_Paris_To_NTF	1763	Longitude_Rotation
Padang_1884_Jakarta_To_Padang_1884	1758	Longitude_Rotation
RT38_Stockholm_To_RT38	1760	Longitude_Rotation
S_JTSK/05_Ferro_To_S_JTSK/05_1	5238	Longitude_Rotation
S_JTSK_Ferro_To_S_JTSK	1884	Longitude_Rotation
Tananarive_1925_Paris_To_Tananarive_1925	1265	Longitude_Rotation
Voirol_1875_Grad_To_Voirol_1875	108339	Unit_Change
Voirol_1875_Paris_To_Voirol_1875	1266	Longitude_Rotation
Voirol_1879_Grad_To_Voirol_1879	108340	Unit_Change
Voirol_Unifie_1960_Paris_To_Voirol_Unifie_1960	108092	Longitude_Rotation

Table 3: Geographic (datum) transformations: Geographic 2D offset method

Geographic (datum) Transformation Name	WKID	Method	dlon (seconds)	dlat (seconds)
Anguilla_1957_To_WGS_1984_1	1447	Geographic_2D_Offset	4.4	-18.0
Greek_To_GGRS_1987	1891	Geographic_2D_Offset	0.28	-5.86
Greek_(Athens)_to_WGS_1984_1	8644	Geographic_2D_Offset	0.28	-5.86
MGI_Ferro_To_MGI_1901_1	3913	Geographic_2D_Offset	-63586.02	0.0
S_JTSK_To_S_JTSK/05_1	5241	Geographic_2D_Offset	0.0	0.0

Table 4: Geographic (datum) transformations: Geocentric translation method

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Abidjan_1987_To_WGS_1984	1470	Geocentric_Translation	-124.76	53.0	466.79
Abidjan_1987_To_WGS_1984_2	6872	Geocentric_Translation	-123.1	53.2	465.4
Accra_To_WGS_1972_BE	1570	Geocentric_Translation	-171.16	17.29	323.31
Accra_To_WGS_1984	1569	Geocentric_Translation	-199.0	32.0	322.0
Accra_To_WGS_1984_4	6896	Geocentric_Translation	-170.0	33.0	326.0
Aden_1925_To_WGS_1984_1	6910	Geocentric_Translation	-24.0	-203.0	268.0
Adindan_To_WGS_1984_1	1100	Geocentric_Translation	-166.0	-15.0	204.0
Adindan_To_WGS_1984_2	1101	Geocentric_Translation	-118.0	-14.0	218.0
Adindan_To_WGS_1984_3	1102	Geocentric_Translation	-134.0	-2.0	210.0
Adindan_To_WGS_1984_4	1103	Geocentric_Translation	-165.0	-11.0	206.0
Adindan_To_WGS_1984_5	1104	Geocentric_Translation	-123.0	-20.0	220.0
Adindan_To_WGS_1984_6	1105	Geocentric_Translation	-128.0	-18.0	224.0
Adindan_To_WGS_1984_7	1106	Geocentric_Translation	-161.0	-14.0	205.0
Afgooye_To_WGS_1984	1107	Geocentric_Translation	-43.0	-163.0	45.0
AGD_1966_To_GDA_1994	1278	Geocentric_Translation	-127.8	-52.3	152.9
AGD_1966_To_PNG_1994_1	5662	Geocentric_Translation	-124.0	-60.0	153.0
AGD_1966_To_PNG_1994_3	6938	Geocentric_Translation	-129.0	-58.0	152.0
AGD_1966_To_PNG_1994_5	6940	Geocentric_Translation	-131.3	-55.3	151.8
AGD_1966_To_PNG_1994_7	6942	Geocentric_Translation	-137.4	-58.9	150.4
AGD_1966_To_WGS_1984	1108	Geocentric_Translation	-133.0	-48.0	148.0
AGD_1966_To_WGS_1984_16	15788	Geocentric_Translation	-127.8	-52.3	152.9
AGD_1966_To_WGS_1984_19	5841	Geocentric_Translation	-124.0	-60.0	154.0
AGD_1966_To_WGS_1984_21	6943	Geocentric_Translation	-129.0	-58.0	152.0
AGD_1966_To_WGS_1984_22	6944	Geocentric_Translation	-131.3	-55.3	151.8
AGD_1966_To_WGS_1984_23	6945	Geocentric_Translation	-137.4	-58.9	150.4

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
AGD_1984_To_GDA_1994	1279	Geocentric_Translation	-128.5	-53.0	153.4
AGD_1984_To_WGS_1984_1	1109	Geocentric_Translation	-134.0	-48.0	149.0
AGD_1984_To_WGS_1984_8	15789	Geocentric_Translation	-128.5	-53.0	153.4
AGD66_To_WGS_1984_20	6905	Geocentric_Translation	-128.0	-52.0	153.0
Ain_el_Abd_To_KSA-GRF17_1	9362	Geocentric_Translation	13.8714	-83.9721	101.674
Ain_El_Abd_To_WGS_1984_1	1110	Geocentric_Translation	-150.0	-250.0	-1.0
Ain_El_Abd_To_WGS_1984_2	1111	Geocentric_Translation	-143.0	-236.0	7.0
Ain_el_Abd_To_WGS_1984_3	1055	Geocentric_Translation	-145.7	-249.1	1.5
American_Samoa_1962_To_WGS_1984	1577	Geocentric_Translation	-115.0	118.0	426.0
Anna_1_1965_To_WGS_1984	15794	Geocentric_Translation	-491.0	-22.0	435.0
Antigua_1943_To_WGS_1984	1441	Geocentric_Translation	-255.0	-15.0	71.0
Antigua_1943_To_WGS_1984_NGA	15811	Geocentric_Translation	-270.0	13.0	62.0
Aratu_To_SIRGAS_2000_1	5050	Geocentric_Translation	-157.84	308.54	-146.6
Aratu_To_SIRGAS_2000_2	5052	Geocentric_Translation	-160.31	314.82	-142.25
Aratu_To_SIRGAS_2000_3	5054	Geocentric_Translation	-161.11	310.25	-144.64
Aratu_To_SIRGAS_2000_4	5056	Geocentric_Translation	-160.4	302.29	-144.19
Aratu_To_SIRGAS_2000_5	5058	Geocentric_Translation	-153.54	302.33	-152.37
Aratu_To_SIRGAS_2000_6	5060	Geocentric_Translation	-151.5	300.09	-151.15
Aratu_To_SIRGAS_2000_7	5062	Geocentric_Translation	-156.8	298.41	-147.41
Aratu_To_SIRGAS_2000_8	5064	Geocentric_Translation	-157.4	295.05	-150.19
Aratu_To_SIRGAS_2000_9	5066	Geocentric_Translation	-151.99	287.04	-147.45
Aratu_To_WGS_1984_1	15754	Geocentric_Translation	-158.0	315.0	-148.0
Aratu_To_WGS_1984_10	15710	Geocentric_Translation	-160.0	315.0	-142.0
Aratu_To_WGS_1984_11	15711	Geocentric_Translation	-158.0	309.0	-147.0
Aratu_To_WGS_1984_12	15712	Geocentric_Translation	-161.0	310.0	-145.0
Aratu_To_WGS_1984_13	5051	Geocentric_Translation	-157.84	308.54	-146.6
Aratu_To_WGS_1984_14	5053	Geocentric_Translation	-160.31	314.82	-142.25
Aratu_To_WGS_1984_15	5055	Geocentric_Translation	-161.11	310.25	-144.64
Aratu_To_WGS_1984_16	5057	Geocentric_Translation	-160.4	302.29	-144.19
Aratu_To_WGS_1984_17	5059	Geocentric_Translation	-153.54	302.33	-152.37
Aratu_To_WGS_1984_18	5061	Geocentric_Translation	-151.5	300.09	-151.15
Aratu_To_WGS_1984_19	5063	Geocentric_Translation	-156.8	298.41	-147.41
Aratu_To_WGS_1984_2	1550	Geocentric_Translation	-139.62	290.53	-150.29
Aratu_To_WGS_1984_20	5065	Geocentric_Translation	-157.4	295.05	-150.19
Aratu_To_WGS_1984_21	5067	Geocentric_Translation	-151.99	287.04	-147.45

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Aratu_To_WGS_1984_3	1551	Geocentric_Translation	-141.15	293.44	-150.56
Aratu_To_WGS_1984_4	1552	Geocentric_Translation	-142.48	296.03	-149.74
Aratu_To_WGS_1984_5	10089	Geocentric_Translation	-163.466	317.396	-147.538
Aratu_To_WGS_1984_6	10090	Geocentric_Translation	-170.0	305.0	-145.0
Aratu_To_WGS_1984_7	10091	Geocentric_Translation	-162.904	312.531	-137.109
Aratu_To_WGS_1984_8	10092	Geocentric_Translation	-158.0	309.0	-151.0
Aratu_To_WGS_1984_9	10093	Geocentric_Translation	-161.0	308.0	-142.0
Arc_1950_To_WGS_1984_1	1113	Geocentric_Translation	-143.0	-90.0	-294.0
Arc_1950_To_WGS_1984_10	6906	Geocentric_Translation	-145.0	-97.0	-292.0
Arc_1950_To_WGS_1984_11	6904	Geocentric_Translation	-179.0	-81.0	-314.0
Arc_1950_To_WGS_1984_2	1114	Geocentric_Translation	-138.0	-105.0	-289.0
Arc_1950_To_WGS_1984_3	1115	Geocentric_Translation	-153.0	-5.0	-292.0
Arc_1950_To_WGS_1984_4	1116	Geocentric_Translation	-125.0	-108.0	-295.0
Arc_1950_To_WGS_1984_5	1117	Geocentric_Translation	-161.0	-73.0	-317.0
Arc_1950_To_WGS_1984_6	1118	Geocentric_Translation	-134.0	-105.0	-295.0
Arc_1950_To_WGS_1984_7	1119	Geocentric_Translation	-169.0	-19.0	-278.0
Arc_1950_To_WGS_1984_8	1120	Geocentric_Translation	-147.0	-74.0	-283.0
Arc_1950_To_WGS_1984_9	1121	Geocentric_Translation	-142.0	-96.0	-293.0
Arc_1960_To_WGS_1984	1122	Geocentric_Translation	-160.0	-6.0	-302.0
Arc_1960_To_WGS_1984_2	1284	Geocentric_Translation	-157.0	-2.0	-299.0
Arc_1960_To_WGS_1984_3	1285	Geocentric_Translation	-175.0	-23.0	-303.0
Arc_1960_To_WGS_1984_4	3998	Geocentric_Translation	-153.0	-5.0	-292.0
Ascension_Island_1958_To_WGS_1984	15797	Geocentric_Translation	-205.0	107.0	53.0
Astro_1952_To_WGS_1984	15799	Geocentric_Translation	124.0	-234.0	-25.0
Astro_DOS_71-4_To_SHGD2015_1	7893	Geocentric_Translation	-323.65	551.39	-491.22
Astro_DOS_71-4_To_WGS_1984_2	7894	Geocentric_Translation	-323.65	551.39	-491.22
Australian_Antarctic_1998_To_WGS_1984_1	1890	Geocentric_Translation	0.0	0.0	0.0
Ayabelle_Lighthouse_To_WGS_1984_2	6907	Geocentric_Translation	-77.0	-128.0	142.0
Ayabelle_To_WGS_1984	15800	Geocentric_Translation	-79.0	-129.0	145.0
Azores_Central_1948_To_WGS_1984_1	1886	Geocentric_Translation	-104.0	167.0	-38.0
Azores_Central_1995_To_PTROA08_1	5027	Geocentric_Translation	-105.679	166.1	-37.322
Azores_Central_1995_To_PTROA08_2	5028	Geocentric_Translation	-105.377	165.769	-36.965
Azores_Central_1995_To_PTROA08_3	5029	Geocentric_Translation	-105.359	165.804	-37.05
Azores_Central_1995_To_PTROA08_4	5030	Geocentric_Translation	-105.531	166.39	-37.326
Azores_Central_1995_To_PTROA08_5	5031	Geocentric_Translation	-105.756	165.972	-37.313
Azores_Central_1995_To_PTROA08_6	5032	Geocentric_Translation	-106.235	166.236	-37.768

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Azores_Central_1995_To_WGS_1984_10	1980	Geocentric_Translation	-106.226	166.366	-37.893
Azores_Central_1995_To_WGS_1984_2	1972	Geocentric_Translation	-106.301	166.27	-37.916
Azores_Central_1995_To_WGS_1984_4	1974	Geocentric_Translation	-106.248	166.244	-37.845
Azores_Central_1995_To_WGS_1984_6	1976	Geocentric_Translation	-106.044	166.655	-37.876
Azores_Central_1995_To_WGS_1984_8	1978	Geocentric_Translation	-106.253	166.239	-37.854
Azores_Occidental_1939_To_PTRA08_1	5033	Geocentric_Translation	-423.058	-172.868	83.772
Azores_Occidental_1939_To_PTRA08_2	5034	Geocentric_Translation	-423.053	-172.871	83.771
Azores_Occidental_1939_To_PTRA08_3	5035	Geocentric_Translation	-423.024	-172.923	83.83
Azores_Occidental_1939_To_WGS_1984_1	1887	Geocentric_Translation	-425.0	-169.0	81.0
Azores_Occidental_1939_To_WGS_1984_2	1982	Geocentric_Translation	-422.651	-172.995	84.02
Azores_Oriental_1940_To_WGS_1984_1	1885	Geocentric_Translation	-203.0	141.0	53.0
Azores_Oriental_1995_To_PTRA08_1	5024	Geocentric_Translation	-204.926	140.353	55.063
Azores_Oriental_1995_To_PTRA08_2	5025	Geocentric_Translation	-204.519	140.159	55.404
Azores_Oriental_1995_To_PTRA08_3	5026	Geocentric_Translation	-205.808	140.771	54.326
Azores_Oriental_1995_To_WGS_1984_2	1968	Geocentric_Translation	-204.633	140.216	55.199
Azores_Oriental_1995_To_WGS_1984_4	1970	Geocentric_Translation	-204.619	140.176	55.226
Bab_South_To_NAD_1983	108134	Geocentric_Translation	-185.583	-230.096	281.361
Barbados_1938_To_WGS_1984_1	15793	Geocentric_Translation	31.95	300.99	419.19
Batavia_Jakarta_To_WGS_1984	8178	Geocentric_Translation	-377.0	681.0	-50.0
Batavia_To_WGS_1984	1123	Geocentric_Translation	-377.0	681.0	-50.0
Batavia_to_WGS_1984_1	8452	Geocentric_Translation	-377.0	681.0	-50.0
Batavia_To_WGS_1984_2	1813	Geocentric_Translation	-378.873	676.002	-46.255
Batavia_To_WGS_1984_3	1814	Geocentric_Translation	-377.7	675.1	-52.2
BBT2000_to_WGS_1984_1	10478	Geocentric_Translation	0.0	0.0	0.0
Beacon_E_1945_To_WGS_1984	15796	Geocentric_Translation	145.0	75.0	-272.0
Beduaram_To_WGS_1972_BE_1	1839	Geocentric_Translation	-101.0	-111.0	187.0
Beduaram_To_WGS_1984_2	15849	Geocentric_Translation	-106.0	-87.0	188.0
Beijing_1954_To_WGS_1984_1	15918	Geocentric_Translation	12.646	-155.176	-80.863
Beijing_1954_To_WGS_1984_4	15921	Geocentric_Translation	15.8	-154.4	-82.3
Beijing_1954_To_WGS_1984_6	15936	Geocentric_Translation	11.911	-154.833	-80.079
Bekaa_Valley_1920_To_WGS_1984_1	6911	Geocentric_Translation	-183.0	-15.0	273.0
Belge_1972_To_WGS_1984_2	1610	Geocentric_Translation	-125.8	79.9	-100.5
Bellevue_IGN_To_WGS_1984	15801	Geocentric_Translation	-127.0	-769.0	472.0
Bermuda_1957_To_WGS_1984	1124	Geocentric_Translation	-73.0	213.0	296.0
Bermuda_2000_To_WGS_1984_1	15971	Geocentric_Translation	0.0	0.0	0.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
BES2020_Saba_to_WGS_84_1	10648	Geocentric_Translation	0.0	0.0	0.0
BES2020_Sint_Eustatius_to_WGS_84_1	10749	Geocentric_Translation	0.0	0.0	0.0
BGS2005_To_ETRS_1989_1	8889	Geocentric_Translation	0.0	0.0	0.0
BGS2005_To_WGS_1984_1	8890	Geocentric_Translation	0.0	0.0	0.0
BH_ETRS89_to_ETRS89_1	10330	Geocentric_Translation	0.0	0.0	0.0
BH_ETRS89_to_WGS_1984_1	10333	Geocentric_Translation	0.0	0.0	0.0
Bioko_To_WGS_1984_1	6912	Geocentric_Translation	-235.0	-110.0	393.0
Bissau_To_WGS_1984	1547	Geocentric_Translation	-173.0	253.0	27.0
Bogota_Bogota_To_WGS_1984	8174	Geocentric_Translation	307.0	304.0	-318.0
Bogota_To_WGS_1984	1125	Geocentric_Translation	307.0	304.0	-318.0
Bogota_To_WGS_1984_2	1597	Geocentric_Translation	304.5	306.5	-318.1
Bonaire_2004_to_WGS_84_1	10770	Geocentric_Translation	0.0	0.0	0.0
Bukit_Rimpah_To_WGS_1984	1126	Geocentric_Translation	-384.0	664.0	-48.0
Cadastre_1997_To_RGM_2004_1	4478	Geocentric_Translation	-381.788	-57.501	-256.673
Cadastre_1997_To_WGS_1984_1	4290	Geocentric_Translation	-381.788	-57.501	-256.673
Camacupa_To_RSAO13_1	8883	Geocentric_Translation	-48.0	-345.0	-231.0
Camacupa_To_RSAO13_2	8884	Geocentric_Translation	-50.9	-347.6	-231.0
Camacupa_1948_to_RSAO13_3	9904	Geocentric_Translation	-43.0	-337.0	-233.0
Camacupa_To_WGS_1972_BE_1	1317	Geocentric_Translation	-37.2	-370.6	-228.5
Camacupa_To_WGS_1984_1	1318	Geocentric_Translation	-42.01	-332.21	-229.75
Camacupa_To_WGS_1984_10	1327	Geocentric_Translation	-50.9	-347.6	-231.0
Camacupa_To_WGS_1984_2	1319	Geocentric_Translation	-40.0	-354.0	-224.0
Camacupa_To_WGS_1984_4	1321	Geocentric_Translation	-41.8	-342.2	-228.2
Camacupa_To_WGS_1984_5	1322	Geocentric_Translation	-55.5	-348.0	-229.2
Camacupa_To_WGS_1984_6	1323	Geocentric_Translation	-43.0	-337.0	-233.0
Camacupa_To_WGS_1984_7	1324	Geocentric_Translation	-48.0	-345.0	-231.0
Camacupa_To_WGS_1984_8	1325	Geocentric_Translation	-48.6	-345.1	-230.8
Camp_Area_To_WGS_1984	15802	Geocentric_Translation	-104.0	-129.0	239.0
Campo_Inchauspe_To_POSGAR_1994_1	15782	Geocentric_Translation	-148.0	136.0	90.0
Campo_Inchauspe_To_POSGAR_2007_1	5350	Geocentric_Translation	-148.0	136.0	90.0
Campo_Inchauspe_To_WGS_1984	1127	Geocentric_Translation	-148.0	136.0	90.0
Campo_Inchauspe_To_WGS_1984_2	1527	Geocentric_Translation	-154.5	150.7	100.4
Canton_1966_To_WGS_1984	15803	Geocentric_Translation	298.0	-304.0	-375.0
Cape_Canaveral_To_WGS_1984	15804	Geocentric_Translation	-2.0	151.0	181.0
Cape_To_Hartebeesthoek94	1504	Geocentric_Translation	-134.73	-110.92	-292.66
Cape_To_WGS_1984_1	1128	Geocentric_Translation	-136.0	-108.0	-292.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Cape_To_WGS_1984_2	1129	Geocentric_Translation	-134.73	-110.92	-292.66
Carthage_To_WGS_1984	1130	Geocentric_Translation	-263.0	6.0	431.0
Carthage_To_WGS_1984_2	1538	Geocentric_Translation	-260.1	5.5	432.2
Carthage_(Paris)_to_WGS_1984_1	8636	Geocentric_Translation	-263.0	6.0	431.0
CH1903+_To_CHTRF_1995	1509	Geocentric_Translation	674.374	15.056	405.346
CH1903+_To_ETRS_1989_1	1647	Geocentric_Translation	674.374	15.056	405.346
CH1903+_To_WGS_1984_1	1676	Geocentric_Translation	674.374	15.056	405.346
CH1903_To_ETRS_1989_1	1646	Geocentric_Translation	674.4	15.1	405.3
CH1903_To_WGS_1984_2	1766	Geocentric_Translation	674.374	15.056	405.346
Chatham_Island_1971_To_WGS_1984	1080	Geocentric_Translation	175.0	-38.0	113.0
Chos_Malal_1914_To_Campo_Inchauspe	1528	Geocentric_Translation	160.0	26.0	41.0
Chos_Malal_1914_To_WGS_1984	108096	Geocentric_Translation	5.5	176.7	141.4
Chos_Malal_1914_To_WGS_1984_2	9257	Geocentric_Translation	8.88	184.86	106.69
Chos_Malal_1914_To_WGS_1984_3	9258	Geocentric_Translation	15.75	164.93	126.18
CHTRF95_To_ETRS_1989_1	8895	Geocentric_Translation	0.0	0.0	0.0
CHTRF_1995_To_WGS_1984	1511	Geocentric_Translation	0.0	0.0	0.0
Chua_To_SIRGAS_2000_1	4069	Geocentric_Translation	-144.35	242.88	-33.2
Chua_To_WGS_1984	1131	Geocentric_Translation	-134.0	229.0	-29.0
Chua_To_WGS_1984_2	3972	Geocentric_Translation	-143.87	243.37	-33.52
Chua_To_WGS_1984_3	4834	Geocentric_Translation	-144.35	242.88	-33.2
CIGD11_To_WGS_1984_1	6177	Geocentric_Translation	0.0	0.0	0.0
Combani_1950_To_WGS_1984_1	1916	Geocentric_Translation	-382.0	-59.0	-262.0
Conakry_1905_To_WGS_1984	1517	Geocentric_Translation	-23.0	259.0	-9.0
Corrego_Alegre_To_SAD_1969_1	6191	Geocentric_Translation	-138.7	164.4	34.4
Corrego_Alegre_To_SIRGAS_2000_2	6193	Geocentric_Translation	-206.05	168.28	-3.82
Corrego_Alegre_To_WGS_1984	1132	Geocentric_Translation	-206.0	172.0	-6.0
Corrego_Alegre_To_WGS_1984_3	6192	Geocentric_Translation	-205.57	168.77	-4.12
Corrego_Alegre_To_WGS_1984_4	6194	Geocentric_Translation	-206.05	168.28	-3.82
CR05_To_WGS_1984_1	5376	Geocentric_Translation	0.0	0.0	0.0
CSG_1967_To_WGS_1984_1	1906	Geocentric_Translation	-186.0	230.0	110.0
Dabola_To_WGS_1984	1518	Geocentric_Translation	-83.0	37.0	124.0
Datum_73_To_ETRS_1989_2009_3par	5036	Geocentric_Translation	-223.15	110.132	36.711
Datum_73_To_WGS_1984_1	108110	Geocentric_Translation	-223.237	110.193	36.649
Datum_73_To_WGS_1984_2009_3par	108155	Geocentric_Translation	-223.15	110.132	36.711
Datum_73_To_WGS_1984_3	1983	Geocentric_Translation	-223.237	110.193	36.649

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Datum_Lisboa_Bessel_To_WGS_1984_1	108113	Geocentric_Translation	508.088	-191.042	565.223
Datum_Lisboa_Hayford_To_Datum_73_1	108222	Geocentric_Translation	-80.809	-170.77	66.991
Datum_Lisboa_Hayford_To_Datum_Lisboa_Bessel_1	108224	Geocentric_Translation	-812.134	130.465	-461.583
Datum_Lisboa_Hayford_To_ETRS_1989_2009_3par	108158	Geocentric_Translation	-303.861	-60.693	103.607
Datum_Lisboa_Hayford_To_WGS_1984_1	108114	Geocentric_Translation	-304.046	-60.576	103.64
Datum_Lisboa_Hayford_To_WGS_1984_2009_3par	108159	Geocentric_Translation	-303.861	-60.693	103.607
Dealul_Piscului_1933_To_WGS_1984_1	1995	Geocentric_Translation	103.25	-100.4	-307.19
Dealul_Piscului_1970_To_WGS_1984_1	1996	Geocentric_Translation	44.107	-116.147	-54.648
Dealul_Piscului_1970_To_WGS_1984_2	1097	Geocentric_Translation	28.0	-121.0	-77.0
Deception_Island_To_WGS_1984	15812	Geocentric_Translation	260.0	12.0	-147.0
Deir_ez_Zor_To_WGS_1972_BE	1584	Geocentric_Translation	-174.6	-3.1	236.2
Deir_ez_Zor_To_WGS_1984_2	15741	Geocentric_Translation	-187.5	14.1	237.6
Deir_ez_Zor_To_WGS_1984_4	1587	Geocentric_Translation	-191.77	15.01	235.07
Deir_ez_Zor_To_WGS_1984_5	15742	Geocentric_Translation	-190.421	8.532	238.69
DGN_1995_To_WGS_1984_1	15912	Geocentric_Translation	0.0	0.0	0.0
Dominica_1945_To_WGS_1984	1442	Geocentric_Translation	725.0	685.0	536.0
DOS_1968_To_WGS_1984	108259	Geocentric_Translation	230.0	-199.0	-752.0
DOS_71_4_To_WGS_1984	15798	Geocentric_Translation	-320.0	550.0	-494.0
Douala_1948_To_WGS_1984_1	15873	Geocentric_Translation	-206.1	-174.7	-87.7
DRUKREF_03_To_WGS_1984_1	5267	Geocentric_Translation	0.0	0.0	0.0
Easter_Island_1967_To_WGS_1984	15806	Geocentric_Translation	211.0	147.0	111.0
ED_1950_ED77_To_WGS_1984_2	1141	Geocentric_Translation	-117.0	-132.0	-164.0
ED_1950_ED77_To_WGS_1984_3	1856	Geocentric_Translation	-122.89	-159.08	-168.74
ED_1950_ED77_To_WGS_1984_4	1857	Geocentric_Translation	-84.78	-107.55	-137.25
ED_1950_ED77_To_WGS_1984_5	1858	Geocentric_Translation	-123.92	-155.515	-157.721
ED_1950_ED77_To_WGS_1984_6	15745	Geocentric_Translation	-123.02	-158.95	-168.47
ED_1950_To_ETRS_1989_10	1650	Geocentric_Translation	-84.0	-97.0	-117.0
ED_1950_To_ETRS_1989_13	5040	Geocentric_Translation	-87.987	-108.639	-121.593
ED_1950_To_ETRS_1989_5	1628	Geocentric_Translation	-116.8	-106.4	-154.4
ED_1950_To_WGS_1984_1	1133	Geocentric_Translation	-87.0	-98.0	-121.0
ED_1950_To_WGS_1984_10	1142	Geocentric_Translation	-97.0	-103.0	-120.0
ED_1950_To_WGS_1984_11	1143	Geocentric_Translation	-97.0	-88.0	-135.0
ED_1950_To_WGS_1984_12	1144	Geocentric_Translation	-107.0	-88.0	-149.0
ED_1950_To_WGS_1984_13	1145	Geocentric_Translation	-84.0	-107.0	-120.0
ED_1950_To_WGS_1984_16	1245	Geocentric_Translation	-112.0	-77.0	-145.0
ED_1950_To_WGS_1984_17	1275	Geocentric_Translation	-84.0	-97.0	-117.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
ED_1950_To_WGS_1984_19	1440	Geocentric_Translation	-86.0	-92.2	-127.5
ED_1950_To_WGS_1984_2	1134	Geocentric_Translation	-87.0	-96.0	-120.0
ED_1950_To_WGS_1984_26	1629	Geocentric_Translation	-116.8	-106.4	-154.4
ED_1950_To_WGS_1984_3	1135	Geocentric_Translation	-103.0	-106.0	-141.0
ED_1950_To_WGS_1984_37	1087	Geocentric_Translation	-112.0	-110.3	-140.2
ED_1950_To_WGS_1984_38	1075	Geocentric_Translation	-89.05	-87.03	-124.56
ED_1950_To_WGS_1984_39	1853	Geocentric_Translation	-82.31	-95.23	-114.96
ED_1950_To_WGS_1984_4	1136	Geocentric_Translation	-104.0	-101.0	-140.0
ED_1950_To_WGS_1984_42	15964	Geocentric_Translation	-86.277	-108.879	-120.181
ED_1950_To_WGS_1984_5	1137	Geocentric_Translation	-130.0	-117.0	-151.0
ED_1950_To_WGS_1984_6	1138	Geocentric_Translation	-86.0	-96.0	-120.0
ED_1950_To_WGS_1984_7	1139	Geocentric_Translation	-87.0	-95.0	-120.0
ED_1950_To_WGS_1984_8	1140	Geocentric_Translation	-84.0	-95.0	-130.0
ED_1950_To_WGS_1984_9	108275	Geocentric_Translation	-117.0	-132.0	-164.0
ED_1950_To_WGS_1984_PT3	108111	Geocentric_Translation	-86.277	-108.879	-120.181
Egypt_1907_To_WGS_1972	1545	Geocentric_Translation	-121.8	98.1	-15.2
Egypt_1907_To_WGS_1984	1148	Geocentric_Translation	-130.0	110.0	-13.0
Egypt_1907_To_WGS_1984_3	1546	Geocentric_Translation	-146.21	112.63	4.05
Egypt_Gulf_of_Suez_S-650_TL_To_WGS_1972_BE_1	15792	Geocentric_Translation	-123.0	98.0	2.0
Egypt_Gulf_of_Suez_S-650_TL_To_WGS_1984_2	15846	Geocentric_Translation	-146.21	112.63	4.05
ELD_1979_To_LGD2006_1	15924	Geocentric_Translation	92.5515	10.8194	-149.8852
ELD_1979_To_WGS_1984_1	1859	Geocentric_Translation	-69.06	-90.71	-142.56
ELD_1979_To_WGS_1984_2	1860	Geocentric_Translation	-113.997	-97.076	-152.312
ELD_1979_To_WGS_1984_3	1861	Geocentric_Translation	-114.5	-96.1	-151.9
ELD_1979_To_WGS_1984_6	15707	Geocentric_Translation	-118.996	-111.177	-198.687
ELD_1979_To_WGS_1984_7	15778	Geocentric_Translation	-114.7	-98.5	-150.7
ELD_1979_To_WGS_1984_8	15909	Geocentric_Translation	-115.8543	-99.0583	-152.4616
ELD_1979_To_WGS_1984_9	15923	Geocentric_Translation	-117.7	-100.3	-152.4
Estonia_1937_To_ETRS_1989	108272	Geocentric_Translation	372.87	149.23	585.29
Estonia_1937_To_WGS_1984_NGA	108261	Geocentric_Translation	374.0	150.0	588.0
Estonia_1997_To_ETRS_1989_1	1648	Geocentric_Translation	0.0	0.0	0.0
Estonia_1997_To_WGS_1984_1	1649	Geocentric_Translation	0.0	0.0	0.0
ETRF2000-PL_to_ETRS89_1	9703	Geocentric_Translation	0.0	0.0	0.0
ETRF2000-PL_to_WGS_1984_1	9772	Geocentric_Translation	0.0	0.0	0.0
EUREF-FIN_to_ETRS89_1	10706	Geocentric_Translation	0.0	0.0	0.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
EUREF-FIN_to_WGS_84_1	10701	Geocentric_Translation	0.0	0.0	0.0
European_1950_To_WGS_1984_33	1985	Geocentric_Translation	-87.987	-108.639	-121.593
European_1979_To_WGS_1984	15752	Geocentric_Translation	-86.0	-98.0	-119.0
Fahud_To_WGS_1984	1256	Geocentric_Translation	-346.0	-1.0	224.0
Fahud_To_WGS_1984_3	6908	Geocentric_Translation	-345.0	3.0	223.0
FD_1954_To_ED_1950_1	15866	Geocentric_Translation	-153.33	-169.41	86.39
FD_1958_To_WGS_1984	1513	Geocentric_Translation	-241.54	-163.64	396.06
FD_1958_To_WGS_1984_2	1854	Geocentric_Translation	-239.1	-170.02	397.5
FD_1958_To_WGS_1984_3	1855	Geocentric_Translation	-244.72	-162.773	400.75
FEH2010_To_WGS_1984_1	5599	Geocentric_Translation	0.0	0.0	0.0
Fiji_1956_To_WGS_1984_1	15875	Geocentric_Translation	265.025	384.929	-194.046
Fort_Desaix_To_WGS_1984_1	1909	Geocentric_Translation	186.0	482.0	151.0
Fort_Marigot_To_WGS_1984_1	1903	Geocentric_Translation	137.0	248.0	-430.0
Fort_Thomas_1955_To_WGS_1984	108262	Geocentric_Translation	-7.0	215.0	225.0
Gambia_To_WGS_1984_1	6913	Geocentric_Translation	-63.0	176.0	185.0
Gan_1970_To_WGS_1984_1	15713	Geocentric_Translation	-133.0	-321.0	50.0
Garoua_To_WGS_1972_BE_1	1805	Geocentric_Translation	-56.1	-167.8	13.1
GDA2020_To_WGS_1984_2	8450	Geocentric_Translation	0.0	0.0	0.0
GDA2020_To_WGS_1984_Transit_1	8887	Geocentric_Translation	0.0	0.0	0.0
GDBD2009_To_WGS_1984_1	6701	Geocentric_Translation	0.0	0.0	0.0
GDM2000_to_WGS_1984_1	10543	Geocentric_Translation	0.0	0.0	0.0
GGRS_1987_To_WGS_1984	1272	Geocentric_Translation	-199.87	74.79	246.62
Graciosa_1948_To_PTRA08_1_3par	108240	Geocentric_Translation	-105.679	166.1	-37.322
Graciosa_1948_To_PTRA08_2_3par	108241	Geocentric_Translation	-105.377	165.769	-36.965
Graciosa_1948_To_PTRA08_3_3par	108242	Geocentric_Translation	-105.359	165.804	-37.05
Graciosa_1948_To_PTRA08_4_3par	108243	Geocentric_Translation	-105.531	166.39	-37.326
Graciosa_1948_To_PTRA08_5_3par	108244	Geocentric_Translation	-105.756	165.972	-37.313
Graciosa_1948_To_PTRA08_6_3par	108245	Geocentric_Translation	-106.235	166.236	-37.768
Graciosa_1948_To_WGS_1984_1_3par	108292	Geocentric_Translation	-105.679	166.1	-37.322
Graciosa_1948_To_WGS_1984_2_3par	108293	Geocentric_Translation	-105.377	165.769	-36.965
Graciosa_1948_To_WGS_1984_3_3par	108294	Geocentric_Translation	-105.359	165.804	-37.05
Graciosa_1948_To_WGS_1984_4_3par	108295	Geocentric_Translation	-105.531	166.39	-37.326
Graciosa_1948_To_WGS_1984_5_3par	108296	Geocentric_Translation	-105.756	165.972	-37.313
Graciosa_1948_To_WGS_1984_6_3par	108297	Geocentric_Translation	-106.235	166.236	-37.768
Graciosa_Base_SW_1948_To_WGS_1984_1	108112	Geocentric_Translation	-106.226	166.366	-37.893
Grand_Cayman_1959_To_WGS_1984_1	15830	Geocentric_Translation	67.8	106.1	138.8

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Grand_Comoros_To_WGS_1984_1	5521	Geocentric_Translation	-963.0	510.0	-359.0
Greenland_1996_To_WGS_1984_1	15879	Geocentric_Translation	0.0	0.0	0.0
Grenada_1953_To_WGS_1984	1443	Geocentric_Translation	72.0	213.7	93.0
GSK-2011_to_WGS_1984_1	9773	Geocentric_Translation	0.0	0.0	0.0
Guam_1963_To_HARN_Marianas_Rota	108137	Geocentric_Translation	-96.234	-252.601	258.222
Guam_1963_To_HARN_Marianas_Saipan	108138	Geocentric_Translation	-91.766	-255.817	255.702
Guam_1963_To_HARN_Marianas_Tinian_Aguijan	108139	Geocentric_Translation	-93.062	-255.309	256.696
Guam_1963_To_WGS_1984_1	1070	Geocentric_Translation	-100.0	-248.0	259.0
Guam_1963_To_WGS_1984_Saipan	108299	Geocentric_Translation	59.935	118.4	-10.871
Gulshan_303_To_WGS_1984_1	15779	Geocentric_Translation	283.7	735.9	261.1
Gulshan_303_to_WGS_1984_2	9679	Geocentric_Translation	283.729	735.942	261.143
Gunung_Segara_To_WGS_1984_1	1897	Geocentric_Translation	-403.0	684.0	41.0
Gunung_Segara_To_WGS_1984_2	1898	Geocentric_Translation	-387.06	636.53	46.29
Gunung_Segara_To_WGS_1984_3	1899	Geocentric_Translation	-403.4	681.12	46.56
Gunung_Segara_To_WGS_1984_4	1838	Geocentric_Translation	-404.78	685.68	45.47
GUX_1_To_WGS_1984	108263	Geocentric_Translation	252.0	-209.0	-751.0
Hanoi_1972_To_WGS_1984	1544	Geocentric_Translation	-17.51	-108.32	-62.39
Hartebeesthoek94_To_WGS_1984	1505	Geocentric_Translation	0.0	0.0	0.0
Herat_North_To_WGS_1984	1246	Geocentric_Translation	-333.0	-222.0	114.0
Hermannskogel_To_WGS_1984	108264	Geocentric_Translation	682.0	-203.0	480.0
Hito_XVIII_1963_To_WGS_1984_2	1892	Geocentric_Translation	16.0	196.0	93.0
Hito_XVIII_1963_To_WGS_1984_3	9263	Geocentric_Translation	18.2	190.7	100.9
Hjorsey_1955_To_WGS_1984	1951	Geocentric_Translation	-73.0	46.0	-86.0
Hjorsey_1955_To_WGS_1984_2	6909	Geocentric_Translation	-73.0	47.0	-83.0
Hong_Kong_1963_67_To_WGS_1984	15842	Geocentric_Translation	-156.0	-271.0	-189.0
Hong_Kong_Geodetic_CS_to_WGS_1984_1	8439	Geocentric_Translation	0.0	0.0	0.0
HTRS96_To_ETRS_1989_1	15966	Geocentric_Translation	0.0	0.0	0.0
HTRS96_To_WGS_1984_1	15967	Geocentric_Translation	0.0	0.0	0.0
Hungarian_1972_To_WGS_1984_2	1831	Geocentric_Translation	57.01	-69.97	-9.29
Hungarian_1972_To_WGS_1984_4	1242	Geocentric_Translation	52.17	-71.82	-14.9
Hu_Tzu_Shan_To_WGS_1984	1152	Geocentric_Translation	-637.0	-549.0	-203.0
IGCB_1955_To_WGS_1984_1	15787	Geocentric_Translation	-79.9	-158.0	-168.9
IGM_1995_To_ETRS_1989_1	1098	Geocentric_Translation	0.0	0.0	0.0
IGM_1995_To_WGS_1984_1	1099	Geocentric_Translation	0.0	0.0	0.0
IGN53_Mare_To_RGNC_1991-93_1	15884	Geocentric_Translation	287.58	177.78	-135.41

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
IGN53_Mare_To_WGS_1984_2	15783	Geocentric_Translation	287.0	178.0	-136.0
IGN53_Mare_To_WGS_1984_3	15901	Geocentric_Translation	287.58	177.78	-135.41
IGN56_Lifou_To_RGNC_1991-93_1	15883	Geocentric_Translation	335.47	222.58	-230.94
IGN56_Lifou_To_WGS_1984_1	1917	Geocentric_Translation	336.0	223.0	-231.0
IGN56_Lifou_To_WGS_1984_3	15902	Geocentric_Translation	335.47	222.58	-230.94
IGN72_Grande_Terre_To_RGNC_1991-93_1	15882	Geocentric_Translation	-11.64	-348.6	291.98
IGN72_Grande_Terre_To_WGS_1984_1	1962	Geocentric_Translation	-13.0	-348.0	292.0
IGN72_Grande_Terre_To_WGS_1984_3	15903	Geocentric_Translation	-11.64	-348.6	291.98
IGN72_Nuku_Hiva_To_WGS_1984_1	1914	Geocentric_Translation	84.0	274.0	65.0
IGRS_To_WGS_1984_1	3894	Geocentric_Translation	0.0	0.0	0.0
IKBD_1992_To_WGS_1984_1	1993	Geocentric_Translation	0.0	0.0	0.0
Indian_1954_To_WGS_1984	1153	Geocentric_Translation	217.0	823.0	299.0
Indian_1960_To_WGS_1972_BE	1541	Geocentric_Translation	199.0	931.0	317.0
Indian_1960_To_WGS_1984_2	1542	Geocentric_Translation	198.0	881.0	317.0
Indian_1960_To_WGS_1984_3	1543	Geocentric_Translation	182.0	915.0	344.0
Indian_1975_To_WGS_1984	1154	Geocentric_Translation	209.0	818.0	290.0
Indian_1975_To_WGS_1984_2	1304	Geocentric_Translation	210.0	814.0	289.0
Indian_1975_To_WGS_1984_3	1537	Geocentric_Translation	204.64	834.74	293.8
Indonesian_1974_To_WGS_1984	1248	Geocentric_Translation	-24.0	-15.0	5.0
IRENET95_To_ETRF_1989	108197	Geocentric_Translation	0.0	0.0	0.0
IRENET95_To_ETRS_1989	1611	Geocentric_Translation	0.0	0.0	0.0
IRENET95_To_WGS_1984_1	1678	Geocentric_Translation	0.0	0.0	0.0
ISN_1993_To_WGS_1984_1	1952	Geocentric_Translation	0.0	0.0	0.0
ISN_2004_To_WGS_1984_1	5327	Geocentric_Translation	0.0	0.0	0.0
ISN2016_to_WGS_1984_1	9291	Geocentric_Translation	0.0	0.0	0.0
Israel_To_WGS_1984	1073	Geocentric_Translation	-48.0	55.0	52.0
ISTS_061_1968_To_WGS_1984	15813	Geocentric_Translation	-794.0	119.0	-298.0
ISTS_073_1969_To_WGS_1984	15808	Geocentric_Translation	208.0	-435.0	-229.0
ITRF_2000_To_WGS_1984	108280	Geocentric_Translation	0.0	0.0	0.0
JAD_2001_To_WGS_1984	15925	Geocentric_Translation	0.0	0.0	0.0
Jamaica_1969_To_WGS_1972_1	10086	Geocentric_Translation	48.0	208.0	382.0
Jamaica_1969_To_WGS_1972_2	1083	Geocentric_Translation	50.0	212.0	381.0
Jamaica_1969_To_WGS_1984_1	1084	Geocentric_Translation	70.0	207.0	389.5
Jamaica_1969_To_WGS_1984_2	1085	Geocentric_Translation	65.334	212.46	387.63
JGD_2000_To_JGD_2011_2_Null	6698	Geocentric_Translation	0.0	0.0	0.0
JGD_2000_To_WGS_1984	108107	Geocentric_Translation	-1.126	-0.077	-0.037

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
JGD_2000_To_WGS_1984_1	1826	Geocentric_Translation	0.0	0.0	0.0
JGD2011_to_WGS_1984_1	9936	Geocentric_Translation	0.0	0.0	0.0
Johnston_Island_1961_To_WGS_1984	15809	Geocentric_Translation	189.0	-79.0	-202.0
Jordan_To_WGS_1984	108233	Geocentric_Translation	-86.0	-98.0	-119.0
Jouik_1961_To_WGS_1984_1	15870	Geocentric_Translation	-80.01	253.26	291.19
Kalianpur_1937_To_WGS_1984_1	1155	Geocentric_Translation	282.0	726.0	254.0
Kalianpur_1937_To_WGS_1984_2	1533	Geocentric_Translation	214.0	804.0	268.0
Kalianpur_1962_To_WGS_1984_1	1247	Geocentric_Translation	283.0	682.0	231.0
Kalianpur_1962_To_WGS_1984_2	15701	Geocentric_Translation	275.57	676.78	229.6
Kalianpur_1962_To_WGS_1984_3	15702	Geocentric_Translation	278.9	684.39	226.05
Kalianpur_1962_To_WGS_1984_4	15703	Geocentric_Translation	271.905	669.593	231.495
Kalianpur_1962_To_WGS_1984_6	15494	Geocentric_Translation	274.164	677.282	226.704
Kalianpur_1975_To_WGS_1984_1	1156	Geocentric_Translation	295.0	736.0	257.0
Kandawala_To_WGS_1984	1157	Geocentric_Translation	-97.0	787.0	86.0
Karbala_1979_PolSERVICE_To_IGRS_1	5077	Geocentric_Translation	70.995	-335.916	262.898
Karbala_1979_PolSERVICE_To_WGS_1984_1	15872	Geocentric_Translation	84.1	-320.1	218.7
Karbala_1979_PolSERVICE_To_WGS_1984_2	5078	Geocentric_Translation	70.995	-335.916	262.898
Katanga_1955_To_RGRDC_2005_1	4065	Geocentric_Translation	-103.746	-9.614	-255.95
Katanga_1955_To_WGS_1984_1	4066	Geocentric_Translation	-103.746	-9.614	-255.95
Kerguelen_Island_1949_To_WGS_1984_1	15850	Geocentric_Translation	145.0	-187.0	103.0
Kertau_RSO_To_Kertau_1	15896	Geocentric_Translation	0.0	0.0	0.0
Kertau_To_WGS_1984	1158	Geocentric_Translation	-11.0	851.0	5.0
KGD2002_To_WGS_1984_1	15831	Geocentric_Translation	0.0	0.0	0.0
KOC_To_WGS_1984_1	1059	Geocentric_Translation	-294.7	-200.1	525.5
Korean_1995_To_WGS_1984_1	1558	Geocentric_Translation	0.0	0.0	0.0
KOSOVAREF01_To_WGS_1984_1	9144	Geocentric_Translation	0.0	0.0	0.0
Kousseri_To_WGS_1972_BE_1	1806	Geocentric_Translation	-104.4	-136.6	201.2
KUDAMS_To_WGS_1984_1	1061	Geocentric_Translation	-20.8	11.3	2.4
Kusaie_1951_To_WGS_1984	15810	Geocentric_Translation	647.0	1777.0	-1124.0
Kyrg-06_to_WGS_1984_1	9768	Geocentric_Translation	0.0	0.0	0.0
La_Canoa_To_PSAD56_1	8674	Geocentric_Translation	0.0	0.0	0.0
La_Canoa_To_WGS_1984	1516	Geocentric_Translation	-273.5	110.6	-357.9
Lao_1993_To_Lao_1997_1	1064	Geocentric_Translation	-0.652	1.619	0.213
Lao_1997_To_WGS_1984_1	1065	Geocentric_Translation	44.585	-131.212	-39.544
LC5_1961_To_WGS_1984	108268	Geocentric_Translation	42.0	124.0	147.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Leigon_To_WGS_1984	1159	Geocentric_Translation	-130.0	29.0	364.0
Le_Pouce_1934_To_WGS_1984_1	15784	Geocentric_Translation	-770.1	158.4	-498.2
LGD2006_To_WGS_1984_1	15908	Geocentric_Translation	-208.4058	-109.8777	-2.5764
Liberia_1964_To_WGS_1984	1160	Geocentric_Translation	-90.0	40.0	88.0
LibRef21_to_WGS_84_1	10803	Geocentric_Translation	0.0	0.0	0.0
Lisbon_1890_(Lisbon)_to_WGS_1984_1	8648	Geocentric_Translation	508.088	-191.042	565.223
Lisbon_1890_To_ETRS_1989_1	5039	Geocentric_Translation	508.088	-191.042	565.223
Lisbon_1890_To_WGS_1984_1	1986	Geocentric_Translation	508.088	-191.042	565.223
Lisbon_To_ETRS_1989_3	5038	Geocentric_Translation	-303.861	-60.693	103.607
Lisbon_To_WGS_1984_3	1984	Geocentric_Translation	-304.046	-60.576	103.64
Lisbon_To_WGS_1984_5	6898	Geocentric_Translation	-306.0	-62.0	105.0
Little_Cayman_1961_To_WGS_1984_1	15814	Geocentric_Translation	42.0	124.0	147.0
Little_Cayman_1961_To_WGS_1984_2	15829	Geocentric_Translation	44.4	109.0	151.7
LKS_1992_To_ETRS_1989_1	8891	Geocentric_Translation	0.0	0.0	0.0
LKS_1992_To_WGS_1984_1	1958	Geocentric_Translation	0.0	0.0	0.0
LKS_1994_To_ETRS_1989_1	8892	Geocentric_Translation	0.0	0.0	0.0
LKS_1994_To_WGS_1984	1283	Geocentric_Translation	0.0	0.0	0.0
Locodjo_1965_To_WGS_1984	1469	Geocentric_Translation	-125.0	53.0	467.0
Luzon_1911_To_WGS_1984_1	1161	Geocentric_Translation	-133.0	-77.0	-51.0
Luzon_1911_To_WGS_1984_2	1162	Geocentric_Translation	-133.0	-79.0	-72.0
Macao_2008_To_ITRF_2005	108038	Geocentric_Translation	0.0	0.0	0.0
Macao_2008_To_WGS_1984	108037	Geocentric_Translation	0.0	0.0	0.0
Macao_2008_to_WGS_1984_1	8436	Geocentric_Translation	0.0	0.0	0.0
MAGNA-SIRGAS_2018_to_WGS_1984_1	10149	Geocentric_Translation	0.0	0.0	0.0
MAGNA_To_SIRGAS	108290	Geocentric_Translation	0.0	0.0	0.0
MAGNA_To_WGS_1984_1	15738	Geocentric_Translation	0.0	0.0	0.0
Mahe_1971_To_WGS_1984	1164	Geocentric_Translation	41.0	-220.0	-134.0
Majuro_To_NAD_1983	108135	Geocentric_Translation	25.1	-275.6	222.6
Makassar_(Jakarta)_to_WGS_1984_1	8638	Geocentric_Translation	-587.8	519.75	145.76
Makassar_To_WGS_1984_1	1837	Geocentric_Translation	-587.8	519.75	145.76
Malongo_1987_to_RSAO13_1	9906	Geocentric_Translation	-254.1	-5.36	-100.29
Malongo_1987_To_WGS_1984_1	1330	Geocentric_Translation	-252.95	-4.11	-96.38
Malongo_1987_To_WGS_1984_2	1557	Geocentric_Translation	-254.1	-5.36	-100.29
Malongo_1987_To_WGS_1984_3	15791	Geocentric_Translation	-259.99	-5.28	-97.09
Manoca_1962_To_WGS_1972_BE_1	1902	Geocentric_Translation	-56.7	-171.8	-40.6
Manoca_1962_To_WGS_1984_1	1796	Geocentric_Translation	-70.9	-151.8	-41.4

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Manoca_To_WGS_1984_1	1316	Geocentric_Translation	-70.9	-151.8	-41.4
MARCARIO_SOLIS_To_WGS_1984_1	5377	Geocentric_Translation	0.0	0.0	0.0
MARGEN_To_WGS_1984_1	5374	Geocentric_Translation	0.0	0.0	0.0
Massawa_To_WGS_1984	1165	Geocentric_Translation	639.0	405.0	60.0
Maupiti_1983_To_RGPF_1	15759	Geocentric_Translation	217.037	86.959	23.956
Maupiti_1983_To_WGS_1984_1	15771	Geocentric_Translation	217.037	86.959	23.956
Mauritania_1999_To_WGS_1984_1	15860	Geocentric_Translation	0.0	0.0	0.0
Merchich_To_WGS_1984	1166	Geocentric_Translation	31.0	146.0	47.0
Mexican_Datum_1993_To_WGS_1984_1	4832	Geocentric_Translation	0.0	0.0	0.0
Mexico_ITRF2008_To_WGS_1984_1	6373	Geocentric_Translation	0.0	0.0	0.0
MGI_1901_To_WGS_1984_1	3962	Geocentric_Translation	682.0	-203.0	480.0
MGI_1901_To_WGS_1984_6	3965	Geocentric_Translation	695.5	-216.6	491.1
MGI_Ferro_To_WGS_1984	108094	Geocentric_Translation	682.0	-203.0	480.0
MGI_Ferro_To_WGS_1984_1	3966	Geocentric_Translation	682.0	-203.0	480.0
MGI_To_WGS_1984	1306	Geocentric_Translation	682.0	-203.0	480.0
MGI_To_WGS_1984_6	1794	Geocentric_Translation	695.5	-216.6	491.1
Mhast_offshore_To_WGS_1972_BE_1	15790	Geocentric_Translation	-255.0	-29.0	-105.0
Midway_1961_To_WGS_1984	15818	Geocentric_Translation	403.0	-81.0	277.0
Midway_1961_To_WGS_1984_Old	15817	Geocentric_Translation	912.0	-58.0	1227.0
Minna_To_WGS_1984_1	1167	Geocentric_Translation	-81.0	-84.0	115.0
Minna_To_WGS_1984_10	1824	Geocentric_Translation	-93.0	-94.0	124.0
Minna_To_WGS_1984_11	1067	Geocentric_Translation	-92.1	-89.9	114.9
Minna_To_WGS_1984_13	15706	Geocentric_Translation	-93.6	-83.7	113.8
Minna_To_WGS_1984_14	15755	Geocentric_Translation	-90.2	-87.32	114.17
Minna_To_WGS_1984_15	15493	Geocentric_Translation	-94.031	-83.317	116.708
Minna_To_WGS_1984_16	6196	Geocentric_Translation	-93.179	-87.124	114.338
Minna_To_WGS_1984_2	1168	Geocentric_Translation	-92.0	-93.0	122.0
Minna_To_WGS_1984_6	1820	Geocentric_Translation	-93.2	-93.31	121.156
Minna_To_WGS_1984_7	1821	Geocentric_Translation	-88.98	-83.23	113.55
Minna_To_WGS_1984_8	1822	Geocentric_Translation	-92.726	-90.304	115.735
Minna_To_WGS_1984_9	1823	Geocentric_Translation	-93.134	-86.647	114.196
MMN_To_WGS_1984_1	9261	Geocentric_Translation	-9.5	122.9	138.2
MMS_To_WGS_1984_1	9262	Geocentric_Translation	-78.1	101.6	133.3
MOLDREF99_To_ETRS_1989_1	5584	Geocentric_Translation	0.0	0.0	0.0
MOLDREF99_To_WGS_1984_1	5585	Geocentric_Translation	0.0	0.0	0.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
MONREF_1997_To_MSK_1942_2	108287	Geocentric_Translation	-12.621213	138.667640	73.996139
MONREF_1997_To_Pulkovo_1942_2	108289	Geocentric_Translation	-12.621213	138.667640	73.996139
Monte_Mario_Rome_To_WGS_1984	8175	Geocentric_Translation	-225.0	-65.0	9.0
Monte_Mario_To_WGS_1984	1169	Geocentric_Translation	-225.0	-65.0	9.0
Monte_Mario_To_WGS_1984_10	1093	Geocentric_Translation	-229.08	-65.73	20.21
Monte_Mario_To_WGS_1984_11	1094	Geocentric_Translation	-230.47	-56.08	22.43
Monte_Mario_To_WGS_1984_5	1088	Geocentric_Translation	-223.7	-67.38	1.34
Monte_Mario_To_WGS_1984_6	1089	Geocentric_Translation	-225.4	-67.7	7.85
Monte_Mario_To_WGS_1984_7	1090	Geocentric_Translation	-227.1	-68.1	14.4
Monte_Mario_To_WGS_1984_8	1091	Geocentric_Translation	-231.61	-68.21	13.93
Monte_Mario_To_WGS_1984_9	1092	Geocentric_Translation	-225.06	-67.37	14.61
Montserrat_1958_To_WGS_1984	1444	Geocentric_Translation	174.0	359.0	365.0
MOP78_To_WGS_1984_1	1925	Geocentric_Translation	252.0	-132.0	-125.0
MOP78_To_WGS_1984_2	15847	Geocentric_Translation	253.0	-132.0	-127.0
Mporaloko_To_WGS_1984	1163	Geocentric_Translation	-74.0	-130.0	42.0
Mporaloko_To_WGS_1984_2	1532	Geocentric_Translation	-80.7	-132.5	41.1
MTRF-2000_To_WGS_1984_(G1150)	8822	Geocentric_Translation	0.0	0.0	0.0
NAD_1927_To_WGS_1984_1	1170	Geocentric_Translation	-3.0	142.0	183.0
NAD_1927_To_WGS_1984_10	1179	Geocentric_Translation	-7.0	162.0	188.0
NAD_1927_To_WGS_1984_11	1180	Geocentric_Translation	-9.0	157.0	184.0
NAD_1927_To_WGS_1984_12	1181	Geocentric_Translation	-22.0	160.0	190.0
NAD_1927_To_WGS_1984_13	1182	Geocentric_Translation	4.0	159.0	188.0
NAD_1927_To_WGS_1984_14	1183	Geocentric_Translation	-7.0	139.0	181.0
NAD_1927_To_WGS_1984_15	1184	Geocentric_Translation	0.0	125.0	201.0
NAD_1927_To_WGS_1984_16	1185	Geocentric_Translation	-9.0	152.0	178.0
NAD_1927_To_WGS_1984_17	1186	Geocentric_Translation	11.0	114.0	195.0
NAD_1927_To_WGS_1984_18	1187	Geocentric_Translation	-12.0	130.0	190.0
NAD_1927_To_WGS_1984_2	1171	Geocentric_Translation	0.0	125.0	194.0
NAD_1927_To_WGS_1984_21	1249	Geocentric_Translation	-2.0	152.0	149.0
NAD_1927_To_WGS_1984_22	1250	Geocentric_Translation	2.0	204.0	105.0
NAD_1927_To_WGS_1984_3	1172	Geocentric_Translation	-10.0	158.0	187.0
NAD_1927_To_WGS_1984_30	1530	Geocentric_Translation	-4.2	135.4	181.9
NAD_1927_To_WGS_1984_4	1173	Geocentric_Translation	-8.0	160.0	176.0
NAD_1927_To_WGS_1984_5	1174	Geocentric_Translation	-9.0	161.0	179.0
NAD_1927_To_WGS_1984_6	1175	Geocentric_Translation	-8.0	159.0	175.0
NAD_1927_To_WGS_1984_7	1176	Geocentric_Translation	-5.0	135.0	172.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
NAD_1927_To_WGS_1984_8	1177	Geocentric_Translation	-4.0	154.0	178.0
NAD_1927_To_WGS_1984_80	15852	Geocentric_Translation	-3.0	154.0	177.0
NAD_1927_To_WGS_1984_81	15853	Geocentric_Translation	-7.0	151.0	175.0
NAD_1927_To_WGS_1984_82	15854	Geocentric_Translation	-7.0	151.0	178.0
NAD_1927_To_WGS_1984_83	15855	Geocentric_Translation	-8.0	125.0	190.0
NAD_1927_To_WGS_1984_84	15856	Geocentric_Translation	-7.0	158.0	172.0
NAD_1927_To_WGS_1984_86	15913	Geocentric_Translation	0.0	125.0	196.0
NAD_1927_To_WGS_1984_87	15699	Geocentric_Translation	-2.0	124.7	196.0
NAD_1927_To_WGS_1984_9	1178	Geocentric_Translation	1.0	140.0	165.0
NAD_1983_(2011)_to_WGS_1984_1	9774	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_CORS96_To_NAD_1983_2011	108357	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_CORS96_To_NAD_1983_HARN	108148	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_CORS96_To_NAD_1983_NSRS2007	108149	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_CSRS_To_WGS_1984	1473	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_CSRS_To_WGS_1984_1	1842	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_HARN_To_NAD_1983_2011	108355	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_HARN_To_NAD_1983_MA11	108377	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_HARN_To_NAD_1983_NSRS2007_1	4461	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_HARN_To_NAD_1983_PA11	108378	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_HARN_To_WGS_1984	1580	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_HARN_To_WGS_1984_Saipan	108300	Geocentric_Translation	1.2	0.4	0.55
NAD_1983_NSRS2007_To_NAD_1983_2011	108356	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_NSRS2007_To_WGS_1984_1	15931	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_To_NAD_1983_CSRS_4	1950	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_To_WGS_1984_1	1188	Geocentric_Translation	0.0	0.0	0.0
NAD_1983_To_WGS_1984_2	1251	Geocentric_Translation	-2.0	0.0	4.0
NAD_1983_To_WGS_1984_3	1252	Geocentric_Translation	1.0	1.0	-1.0
NAD83_to_NAD83(2011)_1	8971	Geocentric_Translation	0.0	0.0	0.0
Nahrwan_1967_To_WGS_1984_1	1189	Geocentric_Translation	-247.0	-148.0	369.0
Nahrwan_1967_To_WGS_1984_10	15953	Geocentric_Translation	-250.7	-157.9	380.4
Nahrwan_1967_To_WGS_1984_2	1190	Geocentric_Translation	-243.0	-192.0	477.0
Nahrwan_1967_To_WGS_1984_3	1191	Geocentric_Translation	-249.0	-156.0	381.0
Nahrwan_1967_To_WGS_1984_4	1531	Geocentric_Translation	-245.0	-153.9	382.8
Nahrwan_1967_To_WGS_1984_5	1536	Geocentric_Translation	-250.2	-153.09	391.7
Nahrwan_1967_To_WGS_1984_6	15871	Geocentric_Translation	-242.2	-144.9	370.3

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Nahrwan_1967_To_WGS_1984_7	15937	Geocentric_Translation	-245.8	-152.2	382.9
Nahrwan_1967_To_WGS_1984_9	15952	Geocentric_Translation	-244.2	-149.8	379.3
Nahrwan_To_WGS_1984_6	7033	Geocentric_Translation	-242.2	-144.9	370.3
Nakhl-e_Ghanem_To_WGS_1984_6	15746	Geocentric_Translation	0.0	-0.15	0.68
Naparima_1955_To_WGS_1984_2	1555	Geocentric_Translation	-0.465	372.095	171.736
Naparima_1955_To_WGS_1984_3	1556	Geocentric_Translation	-2.0	374.0	172.0
Naparima_1972_To_WGS_1984	1192	Geocentric_Translation	-10.0	375.0	165.0
Naparima_1972_To_WGS_1984_2	108093	Geocentric_Translation	-0.465	372.095	171.736
Naparima_1972_To_WGS_1984_3	1307	Geocentric_Translation	-2.0	374.0	172.0
NEA74_Noumea_To_RGNC_1991-93_1	15886	Geocentric_Translation	-10.18	-350.43	291.37
NEA74_Noumea_To_WGS_1984_2	15904	Geocentric_Translation	-10.18	-350.43	291.37
Nepal_Nagarkot_To_WGS_1984_1	108015	Geocentric_Translation	296.0	732.0	273.0
Nepal_Nagarkot_To_WGS_1984_1_EPSG	6208	Geocentric_Translation	293.17	726.18	245.36
Nepal_Nagarkot_To_WGS_1984_2	108016	Geocentric_Translation	296.207	731.545	273.001
New_Zealand_1949_To_NZGD_2000_1_3PAR	1566	Geocentric_Translation	54.4	-20.1	183.1
NGN_To_WGS_1984_1	1060	Geocentric_Translation	-3.2	-5.7	2.8
Nord_Sahara_1959_to_RGSH2020_2	10340	Geocentric_Translation	-95.7	10.2	158.9
Nord_Sahara_1959_to_RGSH2020_3	10341	Geocentric_Translation	-165.914	-70.607	305.009
Nord_Sahara_1959_to_RGSH2020_4	10342	Geocentric_Translation	-169.559	-72.34	303.102
Nord_Sahara_1959_to_RGSH2020_5	10343	Geocentric_Translation	-168.52	-72.05	304.3
Nord_Sahara_1959_to_RGSH2020_6	10344	Geocentric_Translation	-181.7	64.7	247.2
Nord_Sahara_1959_To_WGS_1972_BE	1560	Geocentric_Translation	-156.5	-87.2	285.9
Nord_Sahara_1959_To_WGS_1984	1253	Geocentric_Translation	-186.0	-93.0	310.0
Nord_Sahara_1959_To_WGS_1984_2	1255	Geocentric_Translation	-123.0	-206.0	219.0
Nord_Sahara_1959_To_WGS_1984_5	1816	Geocentric_Translation	-95.7	10.2	158.9
Nord_Sahara_1959_To_WGS_1984_6	1817	Geocentric_Translation	-165.914	-70.607	305.009
Nord_Sahara_1959_To_WGS_1984_7	15874	Geocentric_Translation	-169.559	-72.34	303.102
Nord_Sahara_1959_To_WGS_1984_8	5630	Geocentric_Translation	-168.52	-72.05	304.3
Nouakchott_1965_To_WGS_1984_1	15709	Geocentric_Translation	124.5	-63.5	-281.0
NTF_Paris_To_ED_1950	8186	Geocentric_Translation	-84.0	37.0	437.0
NTF_Paris_To_RGF_1993_1	108102	Geocentric_Translation	-168.0	-60.0	320.0
NTF_Paris_To_WGS_1972	8188	Geocentric_Translation	-168.0	-72.0	314.0
NTF_Paris_To_WGS_1984	8094	Geocentric_Translation	-168.0	-60.0	320.0
NTF_To_ED_1950	1276	Geocentric_Translation	-84.0	37.0	437.0
NTF_To_ETRS_1989_1	1651	Geocentric_Translation	-168.0	-60.0	320.0
NTF_To_RGF_1993_1	108130	Geocentric_Translation	-168.0	-60.0	320.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
NTF_To_WGS_1972	1277	Geocentric_Translation	-168.0	-72.0	314.0
NTF_To_WGS_1984	1193	Geocentric_Translation	-168.0	-60.0	320.0
NZGD_1949_To_WGS_1984	1151	Geocentric_Translation	84.0	-22.0	209.0
NZGD_1949_To_WGS_1984_4	15975	Geocentric_Translation	54.4	-20.1	183.1
NZGD_2000_To_WGS_1984_1	1565	Geocentric_Translation	0.0	0.0	0.0
Observatorio_To_WGS_1984_1	6900	Geocentric_Translation	-132.0	-110.0	-335.0
Observatorio_Meteorologico_1939_To_PTRA08_1_3par	108344	Geocentric_Translation	-423.058	-172.868	83.772
Observatorio_Meteorologico_1939_To_PTRA08_2_3par	108345	Geocentric_Translation	-423.053	-172.871	83.771
Observatorio_Meteorologico_1939_To_PTRA08_3_3par	108346	Geocentric_Translation	-423.024	-172.923	83.83
Observatorio_Meteorologico_1939_To_WGS_1984_1	108116	Geocentric_Translation	-422.651	-172.995	84.02
Observatorio_Meteorologico_1939_To_WGS_1984_1_3par	108350	Geocentric_Translation	-423.058	-172.868	83.772
Observatorio_Meteorologico_1939_To_WGS_1984_2_3par	108351	Geocentric_Translation	-423.053	-172.871	83.771
Observatorio_Meteorologico_1939_To_WGS_1984_3_3par	108352	Geocentric_Translation	-423.024	-172.923	83.83
Ocatepeque_1935_To_CR05	6890	Geocentric_Translation	213.11	9.37	-74.95
Ocatepeque_1935_To_NAD_1927_1	6888	Geocentric_Translation	205.435	-29.099	-292.202
Ocatepeque_1935_To_WGS_1984_1	5470	Geocentric_Translation	213.11	9.37	-74.95
Ocatepeque_1935_To_WGS_1984_3PAR	6891	Geocentric_Translation	205.0	96.0	-98.0
Old_Hawaiian_Intl_1924_To_WGS_1984_Hawaii	108331	Geocentric_Translation	229.0	-222.0	-348.0
Old_Hawaiian_Intl_1924_To_WGS_1984_Kauai	108332	Geocentric_Translation	185.0	-233.0	-337.0
Old_Hawaiian_Intl_1924_To_WGS_1984_Maui	108333	Geocentric_Translation	205.0	-233.0	-355.0
Old_Hawaiian_Intl_1924_To_WGS_1984_Mean	108330	Geocentric_Translation	201.0	-228.0	-346.0
Old_Hawaiian_Intl_1924_To_WGS_1984_Oahu	108334	Geocentric_Translation	198.0	-226.0	-347.0
Old_Hawaiian_To_WGS_1984_1	15824	Geocentric_Translation	61.0	-285.0	-181.0
Old_Hawaiian_To_WGS_1984_2	15825	Geocentric_Translation	89.0	-279.0	-183.0
Old_Hawaiian_To_WGS_1984_3	15826	Geocentric_Translation	45.0	-290.0	-172.0
Old_Hawaiian_To_WGS_1984_4	15827	Geocentric_Translation	65.0	-290.0	-190.0
Old_Hawaiian_To_WGS_1984_5	15828	Geocentric_Translation	58.0	-283.0	-182.0
ONGD14_To_WGS_1984_2	7443	Geocentric_Translation	0.0	0.0	0.0
OSGB_1936_To_WGS_1984_1	1195	Geocentric_Translation	375.0	-111.0	431.0
OSGB_1936_To_WGS_1984_2	1196	Geocentric_Translation	371.0	-112.0	434.0
OSGB_1936_To_WGS_1984_3	1197	Geocentric_Translation	371.0	-111.0	434.0
OSGB_1936_To_WGS_1984_4	1198	Geocentric_Translation	384.0	-111.0	425.0
OSGB_1936_To_WGS_1984_5	1199	Geocentric_Translation	370.0	-108.0	434.0
OSGB_1936_To_WGS_1984_8	5622	Geocentric_Translation	370.936	-108.938	435.682
OSGB_1936_To_WGS_1984_8_BAD_DX	108089	Geocentric_Translation	370.396	-108.938	435.682

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Palestine_1923_To_Israel_1	1071	Geocentric_Translation	-181.0	-122.0	225.0
Palestine_1923_To_WGS_1984_1X	108220	Geocentric_Translation	-181.0	-122.0	225.0
Palestine_1923_To_WGS_1984_2	108099	Geocentric_Translation	-229.0	-67.0	277.0
Palestine_1923_To_WGS_1984_2X	108232	Geocentric_Translation	-219.247	-73.802	269.529
Pampa_del_Castillo_To_WGS_1984_1	15845	Geocentric_Translation	27.5	14.0	186.4
Pampa_del_Castillo_To_WGS_1984_2	9259	Geocentric_Translation	-233.43	6.65	173.64
Perroud_1950_To_RGTA07_1	7083	Geocentric_Translation	324.912	153.282	172.026
Peru96_To_WGS_1984_1	5378	Geocentric_Translation	0.0	0.0	0.0
Petrels_1972_To_WGS_1984_1	1921	Geocentric_Translation	365.0	194.0	166.0
Pico_de_Las_Nieves_To_WGS_1984	15815	Geocentric_Translation	-307.0	-92.0	127.0
Pitcairn_1967_To_WGS_1984	15819	Geocentric_Translation	185.0	165.0	42.0
Pitcairn_2006_To_WGS_1984_1	15972	Geocentric_Translation	0.0	0.0	0.0
PN68_to_WGS_1984_1	9743	Geocentric_Translation	-307.0	-92.0	127.0
PNG94_To_WGS_1984_1	5553	Geocentric_Translation	0.0	0.0	0.0
Pohnpei_To_NAD_1983	108133	Geocentric_Translation	-89.121	-348.182	260.871
Pohnpei_To_WGS_1984	108303	Geocentric_Translation	-89.121	-348.182	260.871
Point58_To_WGS_1984_1	1880	Geocentric_Translation	-106.0	-129.0	165.0
Pointe_Geologie_Perroud_1950_To_WGS_1984_1	1922	Geocentric_Translation	325.0	154.0	172.0
Pointe_Noire_To_WGS_1984	1200	Geocentric_Translation	-148.0	51.0	-291.0
Pointe_Noire_To_WGS_1984_2	1801	Geocentric_Translation	-145.0	52.7	-291.6
Porto_Santo_1936_To_PTRA08_1_3par	108163	Geocentric_Translation	-503.229	-247.375	312.582
Porto_Santo_1936_To_PTRA08_2_3par	108164	Geocentric_Translation	-503.174	-247.255	312.316
Porto_Santo_1936_To_PTRA08_3_3par	108165	Geocentric_Translation	-503.3	-247.574	313.025
Porto_Santo_1936_To_WGS_1984_1	1888	Geocentric_Translation	-499.0	-249.0	314.0
Porto_Santo_1936_To_WGS_1984_1_3par	108169	Geocentric_Translation	-503.229	-247.375	312.582
Porto_Santo_1936_To_WGS_1984_1_IGP	108115	Geocentric_Translation	-502.862	-247.438	312.724
Porto_Santo_1936_To_WGS_1984_2_3par	108170	Geocentric_Translation	-503.174	-247.255	312.316
Porto_Santo_1936_To_WGS_1984_3_3par	108171	Geocentric_Translation	-503.3	-247.574	313.025
Porto_Santo_1995_To_PTRA08_1	5021	Geocentric_Translation	-503.229	-247.375	312.582
Porto_Santo_1995_To_PTRA08_3	5023	Geocentric_Translation	-503.3	-247.574	313.025
Porto_Santo_1995_To_WGS_1984_2	1966	Geocentric_Translation	-502.862	-247.438	312.724
POSGAR_1994_To_WGS_1984_1	1210	Geocentric_Translation	0.0	0.0	0.0
POSGAR_1998_To_SIRGAS_1	1774	Geocentric_Translation	0.0	0.0	0.0
POSGAR_1998_To_WGS_1984_1	1773	Geocentric_Translation	0.0	0.0	0.0
POSGAR_2007_To_SIRGAS_2000_1	5497	Geocentric_Translation	0.0	0.0	0.0
POSGAR_2007_To_WGS_1984_1	5351	Geocentric_Translation	0.0	0.0	0.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
POSGAR_2007_To_WGS_1984_2	9264	Geocentric_Translation	-0.41	0.46	-0.35
POSGAR_To_WGS_1984_1	1598	Geocentric_Translation	0.0	0.0	0.0
PSAD_1956_To_SIRGAS-Chile_2002_1	6949	Geocentric_Translation	-302.0	272.0	-360.0
PSAD_1956_To_SIRGAS-Chile_2002_2	6950	Geocentric_Translation	-328.0	340.0	-329.0
PSAD_1956_To_SIRGAS-Chile_2002_3	6951	Geocentric_Translation	-352.0	403.0	-287.0
PSAD56_to_SIRGAS-Chile_2010_1	9339	Geocentric_Translation	-302.0	272.0	-360.0
PSAD56_to_SIRGAS-Chile_2010_2	9340	Geocentric_Translation	-328.0	340.0	-329.0
PSAD56_to_SIRGAS-Chile_2010_3	9341	Geocentric_Translation	-352.0	403.0	-287.0
PSAD56_to_SIRGAS-Chile_2013_1	9342	Geocentric_Translation	-302.0	272.0	-360.0
PSAD56_to_SIRGAS-Chile_2013_2	9343	Geocentric_Translation	-328.0	340.0	-329.0
PSAD56_to_SIRGAS-Chile_2013_3	9344	Geocentric_Translation	-352.0	403.0	-287.0
PSAD56_to_SIRGAS-Chile_2016_1	9345	Geocentric_Translation	-302.0	272.0	-360.0
PSAD56_to_SIRGAS-Chile_2016_2	9346	Geocentric_Translation	-328.0	340.0	-329.0
PSAD56_to_SIRGAS-Chile_2016_3	9347	Geocentric_Translation	-352.0	403.0	-287.0
PSAD56_to_SIRGAS-Chile_2021_1	10135	Geocentric_Translation	-302.0	272.0	-360.0
PSAD56_to_SIRGAS-Chile_2021_2	10136	Geocentric_Translation	-328.0	340.0	-329.0
PSAD56_to_SIRGAS-Chile_2021_3	10137	Geocentric_Translation	-352.0	403.0	-287.0
PSAD_1956_To_WGS_1984_1	1201	Geocentric_Translation	-288.0	175.0	-376.0
PSAD_1956_To_WGS_1984_10	1582	Geocentric_Translation	-259.73	173.12	-398.27
PSAD_1956_To_WGS_1984_11	1583	Geocentric_Translation	-307.7	265.3	-363.5
PSAD_1956_To_WGS_1984_12	1811	Geocentric_Translation	-291.87	106.37	-364.52
PSAD_1956_To_WGS_1984_15	6971	Geocentric_Translation	-302.0	272.0	-360.0
PSAD_1956_To_WGS_1984_16	6972	Geocentric_Translation	-328.0	340.0	-329.0
PSAD_1956_To_WGS_1984_17	6973	Geocentric_Translation	-352.0	403.0	-287.0
PSAD_1956_To_WGS_1984_2	1202	Geocentric_Translation	-270.0	188.0	-388.0
PSAD_1956_To_WGS_1984_3	1203	Geocentric_Translation	-270.0	183.0	-390.0
PSAD_1956_To_WGS_1984_4	1204	Geocentric_Translation	-305.0	243.0	-442.0
PSAD_1956_To_WGS_1984_5	1205	Geocentric_Translation	-282.0	169.0	-371.0
PSAD_1956_To_WGS_1984_6	1206	Geocentric_Translation	-278.0	171.0	-367.0
PSAD_1956_To_WGS_1984_7	1207	Geocentric_Translation	-298.0	159.0	-369.0
PSAD_1956_To_WGS_1984_8	1208	Geocentric_Translation	-279.0	175.0	-379.0
PSAD_1956_To_WGS_1984_9	1209	Geocentric_Translation	-295.0	173.0	-371.0
PTRA08_To_WGS_1984_1	4905	Geocentric_Translation	0.0	0.0	0.0
Puerto_Rico_To_WGS_1984_3	1893	Geocentric_Translation	11.0	72.0	-101.0
Pulkovo_1942_Adj_1958_To_Albanian_1987_1	7836	Geocentric_Translation	0.0	0.0	0.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Pulkovo_1942_Adj_1958_To_WGS_1984_18	15496	Geocentric_Translation	44.107	-116.147	-54.648
Pulkovo_1942_Adj_1958_To_WGS_1984_22	7835	Geocentric_Translation	74.5	-112.5	-44.3
Pulkovo_1942_Adj_1958_To_WGS_1984_4	15997	Geocentric_Translation	23.0	-124.0	-82.0
Pulkovo_1942_Adj_1958_To_WGS_1984_8	15999	Geocentric_Translation	24.0	-130.0	-92.0
Pulkovo_1942_Adj_1958_To_WGS_1984_9	15497	Geocentric_Translation	28.0	-121.0	-77.0
Pulkovo_1942_Adj_1983_To_WGS_1984_3	15996	Geocentric_Translation	28.0	-121.0	-77.0
Pulkovo_1942_Adj_1983_To_WGS_1984_5	15998	Geocentric_Translation	26.0	-121.0	-78.0
Pulkovo_1942_To_Ukraine_2000_1	5586	Geocentric_Translation	0.0	0.0	0.0
Pulkovo_1942_To_WGS_1984	1254	Geocentric_Translation	28.0	-130.0	-95.0
Pulkovo_1942_To_WGS_1984_21	6899	Geocentric_Translation	22.0	-126.0	-85.0
Pulkovo_1942_To_WGS_1984_3	1287	Geocentric_Translation	28.0	-121.0	-77.0
Pulkovo_1942_To_WGS_1984_4	1288	Geocentric_Translation	23.0	-124.0	-82.0
Pulkovo_1942_To_WGS_1984_5	1289	Geocentric_Translation	26.0	-121.0	-78.0
Pulkovo_1942_To_WGS_1984_6	1290	Geocentric_Translation	24.0	-124.0	-82.0
Pulkovo_1942_To_WGS_1984_7	1291	Geocentric_Translation	15.0	-130.0	-84.0
Pulkovo_1942_To_WGS_1984_8	1292	Geocentric_Translation	24.0	-130.0	-92.0
Pulkovo_1942_To_WGS_1984_9	1293	Geocentric_Translation	28.0	-121.0	-77.0
Pulkovo_1995_To_PZ_1990_GOST	1257	Geocentric_Translation	25.9	-130.94	-81.76
Qatar_1974_To_WGS_1984_1	1561	Geocentric_Translation	-128.0	-283.0	22.0
Qatar_1974_To_WGS_1984_2	1562	Geocentric_Translation	-128.16	-282.42	21.93
Qatar_1974_To_WGS_1984_3	1563	Geocentric_Translation	-128.033	-283.697	21.052
Qornoq_1927_To_WGS_1984_1	1797	Geocentric_Translation	164.0	138.0	-189.0
Rassadiran_To_WGS_1984	1512	Geocentric_Translation	-133.63	-157.5	-158.62
RDN2008_To_ETRS_1989_1	6710	Geocentric_Translation	0.0	0.0	0.0
RDN2008_To_WGS_1984_1	6711	Geocentric_Translation	0.0	0.0	0.0
REGCAN95_To_WGS_1984_1	4084	Geocentric_Translation	0.0	0.0	0.0
REGVEN_To_SIRGAS_1	1767	Geocentric_Translation	0.0	0.0	0.0
REGVEN_To_WGS_1984_1	1768	Geocentric_Translation	0.0	0.0	0.0
Reunion_1947_To_WGS_1984_2	15751	Geocentric_Translation	94.0	-948.0	-1262.0
Reykjavik_1900_To_WGS_1984_1	1994	Geocentric_Translation	-28.0	199.0	5.0
RGAF09_To_WGS_1984_1	5501	Geocentric_Translation	0.0	0.0	0.0
RGF_1993_To_ETRF_1989_1	108199	Geocentric_Translation	0.0	0.0	0.0
RGF_1993_To_ETRS_1989_1	1591	Geocentric_Translation	0.0	0.0	0.0
RGF_1993_To_WGS_1984_1	1671	Geocentric_Translation	0.0	0.0	0.0
RGF93_v1_to_RGF93_v2_1	9882	Geocentric_Translation	0.0	0.0	0.0
RGF93_v2b_to_ETRS_1989_1	9790	Geocentric_Translation	0.0	0.0	0.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
RGF93_v2b_to_WGS_1984_1	9792	Geocentric_Translation	0.0	0.0	0.0
RGF93_v2_to_ETRS_1989_1	9789	Geocentric_Translation	0.0	0.0	0.0
RGF93_v2_to_WGS_1984_1	9791	Geocentric_Translation	0.0	0.0	0.0
RGFG_1995_To_WGS_1984_2	4840	Geocentric_Translation	0.0	0.0	0.0
RGM_2004_To_WGS_1984_1	4476	Geocentric_Translation	0.0	0.0	0.0
RGM04_to_RGM23_1	10682	Geocentric_Translation	-0.5377	0.3946	0.3608
RGM23_to_WGS_84_1	10684	Geocentric_Translation	0.0	0.0	0.0
RGNC15_to_WGS_1984_1	10324	Geocentric_Translation	0.0	0.0	0.0
RGNC_1991-93_To_WGS_1984_1	15880	Geocentric_Translation	0.0	0.0	0.0
RGNC_1991_To_WGS_1984_1	1920	Geocentric_Translation	0.0	0.0	0.0
RGNC91-93_to_RGNC15_1	10321	Geocentric_Translation	-0.584	-1.117	1.125
RGPF_To_WGS_1984_2	15833	Geocentric_Translation	0.0	0.0	0.0
RGR_1992_To_WGS_1984_1	1912	Geocentric_Translation	0.0	0.0	0.0
RGRDC_2005_To_WGS_1984_1	4064	Geocentric_Translation	0.0	0.0	0.0
RGSH2020_to_WGS_1984_1	10264	Geocentric_Translation	0.0	0.0	0.0
RGSPM_2006_To_WGS_1984_1	4477	Geocentric_Translation	0.0	0.0	0.0
RGTAAF07_to_WGS_1984_1	9770	Geocentric_Translation	0.0	0.0	0.0
RGWF96_To_WGS_1984_1	9769	Geocentric_Translation	0.0	0.0	0.0
RRAF_1991_To_WGS_1984_1	4560	Geocentric_Translation	0.0	0.0	0.0
RSOA13_To_WGS_1984_1	8819	Geocentric_Translation	0.0	0.0	0.0
RSRGD2000_To_WGS_1984_1	15974	Geocentric_Translation	0.0	0.0	0.0
SAD69_to_SIRGAS-Chile_2010_4	9348	Geocentric_Translation	-79.0	13.0	-14.0
SAD69_to_SIRGAS-Chile_2013_4	9349	Geocentric_Translation	-79.0	13.0	-14.0
SAD69_to_SIRGAS-Chile_2016_4	9350	Geocentric_Translation	-79.0	13.0	-14.0
SAD69_to_SIRGAS-Chile_2021_(4)	10138	Geocentric_Translation	-79.0	13.0	-14.0
SAD_1969_96_To_SIRGAS_2000_2	5881	Geocentric_Translation	-67.35	3.88	-38.22
SAD_1969_96_To_WGS_1984_2	6195	Geocentric_Translation	-67.35	3.88	-38.22
SAD_1969_To_SIRGAS_2000_1	15485	Geocentric_Translation	-67.35	3.88	-38.22
SAD_1969_To_SIRGAS-Chile_2002_1	7448	Geocentric_Translation	-59.0	-11.0	-52.0
SAD_1969_To_SIRGAS-Chile_2002_2	6968	Geocentric_Translation	-64.0	0.0	-32.0
SAD_1969_To_SIRGAS-Chile_2002_3	7449	Geocentric_Translation	-72.0	10.0	-32.0
SAD_1969_To_SIRGAS-Chile_2002_4	6970	Geocentric_Translation	-79.0	13.0	-14.0
SAD_1969_To_WGS_1984_1	1864	Geocentric_Translation	-57.0	1.0	-41.0
SAD_1969_To_WGS_1984_10	1873	Geocentric_Translation	-61.0	2.0	-33.0
SAD_1969_To_WGS_1984_11	1874	Geocentric_Translation	-58.0	0.0	-44.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
SAD_1969_To_WGS_1984_12	1875	Geocentric_Translation	-45.0	12.0	-33.0
SAD_1969_To_WGS_1984_13	1876	Geocentric_Translation	-45.0	8.0	-33.0
SAD_1969_To_WGS_1984_14	1877	Geocentric_Translation	-66.87	4.37	-38.52
SAD_1969_To_WGS_1984_16	5882	Geocentric_Translation	-67.35	3.88	-38.22
SAD_1969_To_WGS_1984_17	6974	Geocentric_Translation	-59.0	-11.0	-52.0
SAD_1969_To_WGS_1984_18	6975	Geocentric_Translation	-64.0	0.0	-32.0
SAD_1969_To_WGS_1984_19	6976	Geocentric_Translation	-72.0	10.0	-32.0
SAD_1969_To_WGS_1984_2	1865	Geocentric_Translation	-62.0	-1.0	-37.0
SAD_1969_To_WGS_1984_20	6977	Geocentric_Translation	-79.0	13.0	-14.0
SAD_1969_To_WGS_1984_3	1866	Geocentric_Translation	-61.0	2.0	-48.0
SAD_1969_To_WGS_1984_4	1867	Geocentric_Translation	-60.0	-2.0	-41.0
SAD_1969_To_WGS_1984_5	1868	Geocentric_Translation	-75.0	-1.0	-44.0
SAD_1969_To_WGS_1984_6	1869	Geocentric_Translation	-44.0	6.0	-36.0
SAD_1969_To_WGS_1984_7	1870	Geocentric_Translation	-48.0	3.0	-44.0
SAD_1969_To_WGS_1984_8	1871	Geocentric_Translation	-47.0	26.0	-42.0
SAD_1969_To_WGS_1984_9	1872	Geocentric_Translation	-53.0	3.0	-47.0
Sainte_Anne_To_WGS_1984_1	1904	Geocentric_Translation	-467.0	-16.0	-300.0
Saint_Pierre_et_Miquelon_1950_To_WGS_1984_1	1923	Geocentric_Translation	30.0	430.0	368.0
Saint_Pierre_et_Miquelon_1950_To_WGS_1984_(G1150)	8270	Geocentric_Translation	11.363	424.148	373.13
Santo_DOS_1965_To_WGS_1984	15820	Geocentric_Translation	170.0	42.0	84.0
Sao_Braz_To_PTRA08_1_3par	108175	Geocentric_Translation	-204.926	140.353	55.063
Sao_Braz_To_PTRA08_2_3par	108176	Geocentric_Translation	-204.519	140.159	55.404
Sao_Braz_To_PTRA08_3_3par	108177	Geocentric_Translation	-205.808	140.771	54.326
Sao_Braz_To_WGS_1984_1	108117	Geocentric_Translation	-204.619	140.176	55.226
Sao_Braz_To_WGS_1984_1_3par	108181	Geocentric_Translation	-204.926	140.353	55.063
Sao_Braz_To_WGS_1984_2_3par	108182	Geocentric_Translation	-204.519	140.159	55.404
Sao_Braz_To_WGS_1984_3_3par	108183	Geocentric_Translation	-205.808	140.771	54.326
Sapper_Hill_1943_To_WGS_1984	1225	Geocentric_Translation	-355.0	21.0	72.0
Schwarzeck_To_WGS_1984	1226	Geocentric_Translation	616.0	97.0	-251.0
Schwarzeck_To_WGS_1984_2	1271	Geocentric_Translation	615.64	102.08	-255.81
Segara_(Jakarta)_to_WGS_1984_1	8641	Geocentric_Translation	-403.0	684.0	41.0
Segora_To_WGS_1984	1286	Geocentric_Translation	-403.0	684.0	41.0
Selvagem_Grande_1938_To_WGS_1984_1	1965	Geocentric_Translation	-289.0	-124.0	60.0
SHGD2015_To_WGS_1984_1	7892	Geocentric_Translation	0.0	0.0	0.0
Sierra_Leone_1968_To_WGS_1984	1614	Geocentric_Translation	-88.0	4.0	101.0
SIRGAS_2000_To_WGS_1984_1	15894	Geocentric_Translation	0.0	0.0	0.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
SIRGAS-ES2007.8_To_WGS_1984_1	5395	Geocentric_Translation	0.0	0.0	0.0
SIRGAS-ROU98_To_WGS_1984_1	5384	Geocentric_Translation	0.0	0.0	0.0
SIRGAS_To_WGS_1984_1	1581	Geocentric_Translation	0.0	0.0	0.0
S_JTSK_To_WGS_1984_NGA	15965	Geocentric_Translation	589.0	76.0	480.0
Slovenia_1996_To_ETRS_1989_1	15977	Geocentric_Translation	0.0	0.0	0.0
Slovenia_1996_To_WGS_1984_1	15976	Geocentric_Translation	0.0	0.0	0.0
Solomon_1968_To_WGS_1984_1	15805	Geocentric_Translation	230.0	-199.0	-752.0
Solomon_1968_To_WGS_1984_2	15807	Geocentric_Translation	252.0	-209.0	-751.0
South_Asia_Singapore_To_WGS_1984	108269	Geocentric_Translation	7.0	-10.0	-26.0
South_East_Island_1943_To_WGS_1984_1	6914	Geocentric_Translation	-43.685	-179.785	-267.721
South_Yemen_To_WGS_1984_1	1682	Geocentric_Translation	-76.0	-138.0	67.0
South_Yemen_To_Yemen_NGN_1996	1539	Geocentric_Translation	-76.0	-138.0	67.0
SRB_ETRS89_To_ETRS_1989_1	8893	Geocentric_Translation	0.0	0.0	0.0
SRB_ETRS89_To_WGS_1984_1	8894	Geocentric_Translation	0.0	0.0	0.0
SREF98_To_ETRS_1989_1	4076	Geocentric_Translation	0.0	0.0	0.0
SREF98_To_WGS_1984_1	4077	Geocentric_Translation	0.0	0.0	0.0
ST84_Ile_des_Pins_To_WGS_1984_2	15848	Geocentric_Translation	-13.0	-348.0	292.0
ST87_Ouvea_To_RGNC_1991-93_1	15885	Geocentric_Translation	-56.263	16.136	-22.856
ST87_Ouvea_To_WGS_1984_2	15881	Geocentric_Translation	-56.263	16.136	-22.856
St_Helena_Tritan_To_SHGD2015_1	7897	Geocentric_Translation	-0.077	0.079	0.086
St_Helena_Tritan_To_WGS_1984_1	7898	Geocentric_Translation	-0.077	0.079	0.086
St_Kitts_1955_To_WGS_1984	1445	Geocentric_Translation	9.0	183.0	236.0
St_Kitts_1955_To_WGS_1984_2	15750	Geocentric_Translation	-7.0	215.0	225.0
St_Lucia_1955_To_WGS_1984	1446	Geocentric_Translation	-149.0	128.0	296.0
St_Lucia_1955_To_WGS_1984_2	6897	Geocentric_Translation	-153.0	153.0	307.0
St_Vincent_1945_To_WGS_1984_1	1959	Geocentric_Translation	195.671	332.517	274.607
SVY21_To_WGS_1984_1	8886	Geocentric_Translation	0.0	0.0	0.0
SWEREF99_To_ETRS_1989_1	1878	Geocentric_Translation	0.0	0.0	0.0
SWEREF99_To_WGS_1984_1	1879	Geocentric_Translation	0.0	0.0	0.0
Tahaa_1954_To_WGS_1984_1	1913	Geocentric_Translation	65.0	342.0	77.0
Tahiti_1952_To_WGS_1984_1	1924	Geocentric_Translation	162.0	117.0	154.0
Tananarive_1925_Paris_To_WGS_1984	8176	Geocentric_Translation	-189.0	-242.0	-91.0
Tananarive_1925_To_WGS_1984	1227	Geocentric_Translation	-189.0	-242.0	-91.0
Tananarive_Paris_To_WGS_1984_2	6874	Geocentric_Translation	-198.383	-240.517	-107.909
Tananarive_To_WGS_1984_2	6873	Geocentric_Translation	-198.383	-240.517	-107.909

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Tapi_Aike_To_WGS_1984_1	9260	Geocentric_Translation	-192.26	65.72	132.08
Tern_Island_1961_To_WGS_1984	15795	Geocentric_Translation	114.0	-116.0	-333.0
Tete_To_WGS_1984_6	6901	Geocentric_Translation	-80.0	-100.0	-228.0
TGD2005_to_WGS_1984_1	9771	Geocentric_Translation	0.0	0.0	0.0
Timbalai_1948_To_WGS_1984	1228	Geocentric_Translation	-679.0	669.0	-48.0
Timbalai_1948_To_WGS_1984_2	1592	Geocentric_Translation	-678.0	670.0	-48.0
Timbalai_1948_To_WGS_1984_3	1615	Geocentric_Translation	-726.282	703.611	-48.999
Timbalai_1948_To_WGS_1984_6	6902	Geocentric_Translation	-679.0	667.0	-49.0
TM65_To_WGS_1984	1229	Geocentric_Translation	506.0	-122.0	611.0
TM75_To_WGS_1984_3	1956	Geocentric_Translation	506.0	-122.0	611.0
Tokyo_To_JGD_2000_1	15483	Geocentric_Translation	-146.414	507.337	680.507
Tokyo_To_WGS_1984_1	1230	Geocentric_Translation	-148.0	507.0	685.0
Tokyo_To_WGS_1984_108	15484	Geocentric_Translation	-146.414	507.337	680.507
Tokyo_To_WGS_1984_2	1231	Geocentric_Translation	-148.0	507.0	685.0
Tokyo_To_WGS_1984_2001	108106	Geocentric_Translation	-147.54	507.26	680.47
Tokyo_To_WGS_1984_3	1232	Geocentric_Translation	-146.0	507.0	687.0
Tokyo_To_WGS_1984_4	1233	Geocentric_Translation	-158.0	507.0	676.0
Tokyo_To_WGS_1984_5	1305	Geocentric_Translation	-147.0	506.0	687.0
Trinidad_1903_To_WGS_1984	1296	Geocentric_Translation	-61.702	284.488	472.052
Trinidad_1903_To_WGS_1984_2	10085	Geocentric_Translation	-61.0	285.2	471.6
Tristan_1968_To_WGS_1984	15816	Geocentric_Translation	-632.0	438.0	-609.0
TUREF_To_WGS_1984_1	5261	Geocentric_Translation	0.0	0.0	0.0
TWD_1997_To_WGS_1984_1	3830	Geocentric_Translation	0.0	0.0	0.0
UCS-2000_to_ETRS_1989_1	9901	Geocentric_Translation	24.0	-121.0	-76.0
Ukraine_2000_To_ITRF_2005_1	108035	Geocentric_Translation	24.0	-121.0	-76.0
Ukraine_2000_To_WGS_1984_2	5840	Geocentric_Translation	24.0	-121.0	-76.0
UZGD2024_to_WGS_84_1	10771	Geocentric_Translation	0.0	0.0	0.0
Vanua_Levu_1915_To_WGS_1984_1	15878	Geocentric_Translation	51.0	391.0	-36.0
Vientiane_1982_To_Lao_1997_1	1063	Geocentric_Translation	-2.227	6.524	2.178
Viti_Levu_1912_To_WGS_1984_1	15897	Geocentric_Translation	51.0	391.0	-36.0
Viti_Levu_1912_To_WGS_1984_2	6895	Geocentric_Translation	98.0	390.0	-22.0
Viti_Levu_1916_To_WGS_1984	15821	Geocentric_Translation	51.0	391.0	-36.0
Voirol_1875_Grad_To_WGS_1984	108278	Geocentric_Translation	-73.0	-247.0	227.0
Voirol_1875_Paris_To_WGS_1984	8211	Geocentric_Translation	-73.0	-247.0	227.0
Voirol_1875_To_WGS_1984	1294	Geocentric_Translation	-73.0	-247.0	227.0
Voirol_Unifie_1960_Grad_To_WGS_1984	108265	Geocentric_Translation	-123.0	-206.0	219.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Voirol_Unifie_1960_Paris_To_WGS_1984	108090	Geocentric_Translation	-123.0	-206.0	219.0
Voirol_Unifie_1960_To_WGS_1984	108091	Geocentric_Translation	-123.0	-206.0	219.0
Wake_Eniwetok_1960_To_WGS_1984	15822	Geocentric_Translation	102.0	52.0	-38.0
Wake_Island_1952_To_WGS_1984	15823	Geocentric_Translation	276.0	-57.0	149.0
Yacare_To_WGS_1984	1234	Geocentric_Translation	-155.0	171.0	37.0
Yemen_NGN_1996_To_WGS_1984	1540	Geocentric_Translation	0.0	0.0	0.0
Yoff_To_WGS_1972_1	1828	Geocentric_Translation	-37.0	157.0	85.0
Yoff_To_WGS_1984_2	6903	Geocentric_Translation	-30.0	190.0	89.0
Zanderij_To_WGS_1984	1235	Geocentric_Translation	-265.0	120.0	-358.0

Table 5: Geographic (datum) transformations: Coordinate frame (CF) and position vector (PV) methods

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
Accra_To_WGS_1984_3	15495	Position_Vector	-171.16	17.29	325.21	0.0	0.0	0.814	-0.38
AGD_1966_To_GDA_1994_12	15979	Coordinate_Frame	-117.808	-51.536	137.784	-0.303	-0.446	-0.234	-0.29
AGD_1966_To_GDA_1994_19	5827	Coordinate_Frame	-129.164	-41.188	130.718	-0.246	-0.374	-0.329	-2.955
AGD_1966_To_GDA_1994_2	1458	Coordinate_Frame	-129.193	-41.212	130.73	-0.246	-0.374	-0.329	-2.955
AGD_1966_To_GDA_1994_3	1459	Coordinate_Frame	-120.695	-62.73	165.46	-0.109	0.141	0.116	2.733
AGD_1966_To_GDA_1994_4	1460	Coordinate_Frame	-119.353	-48.301	139.484	-0.415	-0.26	-0.437	-0.613
AGD_1966_To_GDA_1994_8	1594	Coordinate_Frame	-120.271	-64.543	161.632	-0.217	0.067	0.129	2.499
AGD_1966_To_GDA_1994_9	1595	Coordinate_Frame	-124.133	-42.003	137.4	0.008	-0.557	-0.178	-1.854
AGD_1966_To_GDA2020_1	9185	Coordinate_Frame	-136.9703	-37.5638	124.4242	-0.25676	-0.42966	-0.30077	-4.61966
AGD_1966_To_PNG_1994_2	6937	Position_Vector	-0.41	-2.37	2.0	3.592	3.698	3.989	8.843
AGD_1966_To_PNG_1994_4	6939	Position_Vector	-131.876	-54.554	453.346	-5.2155	-8.2042	0.09	5.02
AGD_1966_To_PNG_1994_6	6941	Position_Vector	45.928	-177.212	336.867	-4.6039	-3.0921	0.5729	36.796
AGD_1966_To_WGS_1984_12	1665	Coordinate_Frame	-129.193	-41.212	130.73	-0.246	-0.374	-0.329	-2.955
AGD_1966_To_WGS_1984_13	1666	Coordinate_Frame	-119.353	-48.301	139.484	-0.415	-0.26	-0.437	-0.613
AGD_1966_To_WGS_1984_14	1667	Coordinate_Frame	-120.271	-64.543	161.632	-0.217	0.067	0.129	2.499
AGD_1966_To_WGS_1984_15	1668	Coordinate_Frame	-124.133	-42.003	137.4	0.008	-0.557	-0.178	-1.854
AGD_1966_To_WGS_1984_18	15980	Coordinate_Frame	-117.808	-51.536	137.784	-0.303	-0.446	-0.234	-0.29
AGD_1984_To_GDA_1994_2	1280	Coordinate_Frame	-117.763	-51.51	139.061	-0.292	-0.443	-0.277	-0.191
AGD_1984_To_WGS_1984_2	1236	Coordinate_Frame	-116.0	-50.47	141.69	-0.23	-0.39	-0.344	0.0983
AGD_1984_To_WGS_1984_7	1669	Coordinate_Frame	-117.763	-51.51	139.061	-0.292	-0.443	-0.277	-0.191
Ain_el_Abd_1970_To_MTRF-2000_1	8824	Coordinate_Frame	-61.15	-315.86	-3.51	0.41	0.74	-3.52	1.36
Ain_El_Abd_To_WGS_1984_4	1056	Coordinate_Frame	-85.645	-273.077	-79.708	-2.289	1.421	-2.532	3.194
Ain_El_Abd_To_WGS_1984_5	1057	Coordinate_Frame	-202.234	-168.351	-63.51	-3.545	-0.659	1.945	2.1
Ain_El_Abd_To_WGS_1984_6	1058	Coordinate_Frame	-18.944	-379.364	-24.063	-0.04	0.764	-6.431	3.657
Albanian_1987_To_ETRS_1989_1	7833	Coordinate_Frame	-44.183	-0.58	-38.489	2.3867	2.7072	-3.5196	-8.2703

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
Albanian_1987_To_WGS_1984_1	7834	Coordinate_Frame	-44.183	-0.58	-38.489	2.3867	2.7072	-3.5196	-8.2703
Amersfoort_To_ETRS_1989	1751	Coordinate_Frame	565.036	49.914	465.839	0.40939439	-0.35970520	1.86849100	4.0772
Amersfoort_To_ETRS_1989_3	15739	Coordinate_Frame	565.2369	50.0087	465.658	0.40685733	-0.35073268	1.87034738	4.0812
Amersfoort_To_ETRS_1989_5	4830	Coordinate_Frame	565.4171	50.3319	465.5524	0.39895739	-0.34398782	1.87740164	4.0725
Amersfoort_To_ETRS_1989_8	9281	Coordinate_Frame	565.7381	50.4018	465.2904	0.39502598	-0.33077243	1.87607329	4.07244
Amersfoort_To_WGS_1984	1112	Position_Vector	593.16	26.15	478.54	-1.30439801	-0.10329745	-1.14450153	4.0775
Amersfoort_To_WGS_1984_2	1672	Coordinate_Frame	565.04	49.91	465.84	0.40939439	-0.35970520	1.86849100	4.0772
Amersfoort_To_WGS_1984_3	15934	Coordinate_Frame	565.2369	50.0087	465.658	0.40685733	-0.35073268	1.87034738	4.0812
Amersfoort_To_WGS_1984_4	4833	Coordinate_Frame	565.4171	50.3319	465.5524	0.39895739	-0.34398782	1.87740164	4.0725
Ammassalik_1958_To_Greenland_1996_1	15900	Position_Vector	-45.0	417.0	-3.5	0.0	0.0	0.814	-0.6
Ammassalik_1958_To_WGS_1984_1	1800	Position_Vector	-45.0	417.0	-3.5	0.0	0.0	0.814	-0.6
Astro_DOS_71-4_To_SHGD2015_2	7895	Position_Vector	-112.854	12.27	-18.913	2.1692	16.8896	17.1961	-19.54517
Azores_Central_1995_To_WGS_1984_11	1981	Coordinate_Frame	-103.088	162.481	-28.276	-0.167	-0.082	-0.168	-1.504
Azores_Central_1995_To_WGS_1984_3	1973	Coordinate_Frame	-105.854	165.589	-38.312	0.003	0.026	-0.024	-0.048
Azores_Central_1995_To_WGS_1984_5	1975	Coordinate_Frame	-104.0	162.924	-38.882	0.075	0.071	-0.051	-0.338
Azores_Central_1995_To_WGS_1984_7	1977	Coordinate_Frame	-95.323	166.098	-69.942	0.215	1.031	-0.047	1.922
Azores_Central_1995_To_WGS_1984_9	1979	Coordinate_Frame	-100.306	161.246	-48.761	0.192	0.385	-0.076	0.131
Azores_Oriental_1995_To_WGS_1984_3	1969	Coordinate_Frame	-211.939	137.626	58.3	0.089	-0.251	-0.079	0.384
Azores_Oriental_1995_To_WGS_1984_5	1971	Coordinate_Frame	-208.719	129.685	52.092	0.195	0.014	-0.327	0.198
Barbados_1938_To_WGS_1984_2X	108376	Coordinate_Frame	-267.434	173.496	181.814	13.4704	-8.7154	-7.3926	14.7492
Beijing_1954_To_WGS_1984_2	15919	Position_Vector	15.53	-113.82	-41.38	0.0	0.0	0.814	-0.38
Beijing_1954_To_WGS_1984_3	15920	Position_Vector	31.4	-144.3	-74.8	0.0	0.0	0.814	-0.38
Beijing_1954_To_WGS_1984_5	15935	Position_Vector	18.0	-136.8	-73.7	0.0	0.0	0.814	-0.38
Belge_1972_To_ETRS_1989_1	1652	Position_Vector	-99.1	53.3	-112.5	0.419	-0.83	1.885	-1.0
Belge_1972_To_ETRS_1989_2	15928	Coordinate_Frame	-106.868628	52.297783	-103.723893	-0.33657	0.456955	-1.842183	-1.2747
Belge_1972_To_WGS_1984_1	1609	Coordinate_Frame	-99.059	53.322	-112.486	-0.419	0.83	-1.885	-1.0
Belge_1972_To_WGS_1984_3	15929	Coordinate_Frame	-106.868628	52.297783	-103.723893	-0.33657	0.456955	-1.842183	-1.2747
Bermuda_1957_To_Bermuda_2000_1	15969	Coordinate_Frame	-292.295	248.758	429.447	-4.9971	-2.99	-6.6906	1.0289
Bermuda_1957_To_WGS_1984_2	15970	Coordinate_Frame	-292.295	248.758	429.447	-4.9971	-2.99	-6.6906	1.0289
Bogota_To_MAGNA_Region_1_CF	15714	Coordinate_Frame	-806.413	-263.5	-622.671	12.41421856	-2.99084175	-39.03468639	-20.81616
Bogota_To_MAGNA_Region_2_CF	15716	Coordinate_Frame	100.783	187.382	-47.0	-9.22383005	2.42380330	-8.30827833	-13.56561
Bogota_To_MAGNA_Region_3_CF	15718	Coordinate_Frame	336.026	348.565	252.978	-17.24128944	-6.30649282	1.56204977	-5.771909
Bogota_To_MAGNA_Region_4_CF	15720	Coordinate_Frame	963.273	486.386	190.997	-16.48503603	-1.66882584	21.69284905	-13.89914
Bogota_To_MAGNA_Region_5_CF	15722	Coordinate_Frame	-90.29	247.559	-21.989	-8.69688535	-4.18803363	-12.80826685	2.181658
Bogota_To_MAGNA_Region_6_CF	15724	Coordinate_Frame	-0.562	244.299	-456.938	6.86687099	-8.25267346	-9.29677972	3.74656
Bogota_To_MAGNA_Region_7_CF	15726	Coordinate_Frame	-305.356	222.004	-30.023	-9.69049386	1.03196820	-19.75739418	6.325747
Bogota_To_MAGNA_Region_8_CF	15728	Coordinate_Frame	221.899	274.136	-397.554	2.80844591	-0.44850859	-2.81017235	-2.199943
Bogota_To_WGS_1984_Region_1_CF	15715	Coordinate_Frame	-806.413	-263.5	-622.671	12.41421856	-2.99084175	-39.03468639	-20.81616
Bogota_To_WGS_1984_Region_2_CF	15717	Coordinate_Frame	100.783	187.382	-47.0	-9.22383005	2.42380303	-8.30827833	-13.56561
Bogota_To_WGS_1984_Region_3_CF	15719	Coordinate_Frame	336.026	348.565	252.978	-17.24128944	-6.30649282	1.56204977	-5.771909
Bogota_To_WGS_1984_Region_4_CF	15721	Coordinate_Frame	963.273	486.386	190.997	-16.48503603	-1.66882584	21.69284905	-13.89914
Bogota_To_WGS_1984_Region_5_CF	15723	Coordinate_Frame	-90.29	247.559	-21.989	-8.69688535	-4.18803363	-12.80826685	2.181658
Bogota_To_WGS_1984_Region_6_CF	15725	Coordinate_Frame	-0.562	244.299	-456.938	6.86687099	-8.25267346	-9.29677972	3.74656

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
Bogota_To_WGS_1984_Region_7_CF	15727	Coordinate_Frame	-305.356	222.004	-30.023	-9.69049386	1.03196820	-19.75739418	6.325747
Bogota_To_WGS_1984_Region_8_CF	15729	Coordinate_Frame	221.899	274.136	-397.554	2.80844591	-0.44850859	-2.81017235	-2.199943
Camacupa_2015_To_RSAO13_1	8827	Coordinate_Frame	-93.799	-132.737	-219.073	1.844	-0.648	6.37	-0.169
Camacupa_2015_To_WGS_1984_11	8882	Coordinate_Frame	-93.799	-132.737	-219.073	1.844	-0.648	6.37	-0.169
Camacupa_To_Camacupa_2015_1	8695	Coordinate_Frame	42.899	-214.863	-11.927	-1.844	0.648	-6.37	0.169
Camacupa_To_Camacupa_2015_2	8696	Coordinate_Frame	45.799	-212.263	-11.927	-1.844	0.648	-6.37	0.169
Camacupa_1948_to_RSAO13_4	9905	Position_Vector	-41.057	-374.564	-226.287	0.0	0.0	0.554	0.219
Camacupa_To_WGS_1984_3	1320	Position_Vector	-37.2	-370.6	-224.0	0.0	0.0	0.554	0.219
Camacupa_To_WGS_1984_9	1326	Position_Vector	-41.057	-374.564	-226.287	0.0	0.0	0.554	0.219
CGRS_1993_To_ETRS_1989	108128	Position_Vector	8.846	-4.394	-1.122	-0.00237	-0.146528	0.130428	0.783926
CGRS93_To_ETRS_1989_1	7720	Coordinate_Frame	8.846	-4.394	-1.122	0.00237	0.146528	-0.130428	0.783926
CGRS_1993_To_WGS_1984	108129	Position_Vector	8.846	-4.394	-1.122	-0.00237	-0.146528	0.130428	0.783926
CGRS93_To_WGS_1984_1	7721	Coordinate_Frame	8.846	-4.394	-1.122	0.00237	0.146528	-0.130428	0.783926
CH1903_To_WGS_1984_1	1753	Coordinate_Frame	660.077	13.551	369.344	0.804816	0.577692	0.952236	5.66
Chatham_Islands_1979_To_NZGD_2000_1	1082	Coordinate_Frame	174.05	-25.49	112.57	0.0	0.0	-0.554	0.2263
Chatham_Islands_1979_To_WGS_1984_1	1081	Coordinate_Frame	174.05	-25.49	112.57	0.0	0.0	-0.554	0.2263
Combani_1950_To_RGM_2004_1	5888	Position_Vector	-599.928	-275.552	-195.665	-0.0835	-0.4715	0.0602	49.2814
CR05_To_CR-SIRGAS_1	8968	Coordinate_Frame	-0.16959	0.35312	0.51846	-0.03385	0.16325	-0.03446	0.03693
CR05_To_WGS_1984_2	8969	Coordinate_Frame	-0.16959	0.35312	0.51846	-0.03385	0.16325	-0.03446	0.03693
CSG_1967_To_RGFG_1995_1	1908	Position_Vector	-193.066	236.993	105.447	0.4814	-0.8074	0.1276	1.5649
D48_To_D96_2010_GI	108076	Coordinate_Frame	476.08	125.947	417.81	-4.610862	-2.388137	11.942335	9.896638
D48_To_ETRS_1989	108276	Position_Vector	426.62	142.62	460.09	4.98	4.49	-12.42	-17.1
D48_To_WGS_1984	108277	Position_Vector	426.62	142.62	460.09	4.98	4.49	-12.42	-17.1
D96_To_D48_Dolenjska	108081	Coordinate_Frame	-481.871	-129.173	-420.608	5.096868	2.423927	-11.524756	-8.872387
D96_To_D48_Gorenjska	108084	Coordinate_Frame	-438.775	-109.403	-377.696	4.933923	2.503267	-11.26993	-18.814763
D96_To_D48_Jugovzhodna_Slovenija	108079	Coordinate_Frame	-485.018	-129.747	-423.199	4.880531	2.348721	-11.745346	-8.231637
D96_To_D48_Juzna_Slovenija	108080	Coordinate_Frame	-502.101	-131.516	-433.704	6.054862	2.498236	-10.429331	-5.188197
D96_To_D48_Osrednja_Slovenija	108086	Coordinate_Frame	-465.328	-122.305	-403.609	4.387757	2.265582	-12.157415	-12.73019
D96_To_D48_Pomurje	108083	Coordinate_Frame	-523.882	-151.289	-480.592	3.706371	2.315828	-13.400341	2.972511
D96_To_D48_Primorska	108085	Coordinate_Frame	-465.715	-115.127	-397.622	5.743906	2.510737	-10.415817	-13.558204
D96_To_D48_Severovzhodna_Slovenija	108078	Coordinate_Frame	-491.556	-135.972	-440.4	3.683681	2.232141	-13.171698	-5.421926
D96_To_D48_Stajerska	108082	Coordinate_Frame	-477.73	-130.719	-424.46	3.790572	2.246488	-12.99207	-8.828735
D96_To_D48_Zahodna_Slovenija	108077	Coordinate_Frame	-453.674	-112.561	-388.287	5.343297	2.485394	-10.836743	-15.958238
Datum_73_To_ETRS_1989_1	1657	Position_Vector	-238.2	85.2	29.9	0.166	0.046	1.248	2.03
Datum_73_To_ETRS_1989_2009_7par	5037	Position_Vector	-230.994	102.591	25.199	0.633	-0.239	0.9	1.95
Datum_73_To_ETRS_1989_3	1992	Coordinate_Frame	-231.034	102.615	26.836	-0.615	0.198	-0.881	1.786
Datum_73_To_WGS_1984_1_Prt2000	1658	Position_Vector	-238.2	85.2	29.9	0.166	0.046	1.248	2.03
Datum_73_To_WGS_1984_2009_7par	108153	Position_Vector	-230.994	102.591	25.199	0.633	-0.239	0.9	1.95
Datum_73_To_WGS_1984_4	1987	Coordinate_Frame	-239.749	88.181	30.488	-0.263	-0.082	-1.211	2.229
Datum_Lisboa_Bessel_To_WGS_1984_2	108123	Coordinate_Frame	631.392	-66.551	481.442	-1.09	4.445	4.487	-4.43
Datum_Lisboa_Hayford_To_Datum_73_2	108223	Coordinate_Frame	-49.137	-179.924	95.757	1.955	-0.328	1.423	-6.827

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
Datum_Lisboa_Hayford_To_Datum_Lisboa_Bessel_2	108225	Coordinate_Frame	-920.281	-25.191	-355.2	2.781	-4.855	-4.276	-0.168
Datum_Lisboa_Hayford_To_ETRS_1989_2009_7par	108156	Position_Vector	-283.088	-70.693	117.445	-1.157	0.059	-0.652	-4.058
Datum_Lisboa_Hayford_To_WGS_1984_2	108124	Coordinate_Frame	-288.885	-91.744	126.244	1.69	-0.41	0.21	-4.6
Datum_Lisboa_Hayford_To_WGS_1984_2009_7par	108157	Position_Vector	-283.088	-70.693	117.445	-1.157	0.059	-0.652	-4.058
DB_REF_To_ETRS_1989_1	5826	Coordinate_Frame	584.9636	107.7175	413.8067	-1.11552146	-0.28243399	3.13844906	7.992235
Dealul_Piscului_1970_To_ETRS_1989_1X	108375	Coordinate_Frame	2.3287	-147.0425	-92.0802	0.3092483	-0.32482185	-0.49729934	5.68906266
Dealul_Piscului_1970_To_WGS_1984_3X	108374	Coordinate_Frame	2.3287	-147.0425	-92.0802	0.3092483	-0.32482185	-0.49729934	5.68906266
Deir_ez_Zor_To_WGS_1984_3	1586	Position_Vector	-175.09	1.218	238.831	-0.047	0.019	0.808	0.1698
Deir_ez_Zor_To_WGS_1984_6	15743	Position_Vector	-83.58	-397.54	458.78	-17.595	-2.847	4.256	3.225
DGN95_to_SRGI2013_1	9472	Coordinate_Frame	-0.2773	0.0534	0.4819	0.019285759	-0.005899173	0.001998706	-0.028
DHDN_To_ETRF_1989	108192	Coordinate_Frame	582.0	105.0	414.0	-1.04	-0.35	3.08	8.3
DHDN_To_ETRS_1989	1309	Coordinate_Frame	582.0	105.0	414.0	-1.04	-0.35	3.08	8.3
DHDN_To_ETRS_1989_2	1776	Position_Vector	598.1	73.7	418.2	0.202	0.045	-2.455	6.7
DHDN_To_ETRS_1989_3	1778	Position_Vector	597.1	71.4	412.1	0.894	0.068	-1.563	7.58
DHDN_To_ETRS_1989_4	1779	Position_Vector	584.8	67.0	400.3	0.105	0.013	-2.378	10.29
DHDN_To_ETRS_1989_5	1780	Position_Vector	590.5	69.5	411.6	-0.796	-0.052	-3.601	8.3
DHDN_To_ETRS_1989_6	1781	Position_Vector	599.4	72.4	419.2	-0.062	-0.022	-2.723	6.46
DHDN_To_ETRS_1989_7	1782	Position_Vector	612.4	77.0	440.2	-0.054	0.057	-2.797	2.55
DHDN_To_WGS_1984_1	1673	Coordinate_Frame	582.0	105.0	414.0	-1.04	-0.35	3.08	8.3
DHDN_To_WGS_1984_2	1777	Position_Vector	598.1	73.7	418.2	0.202	0.045	-2.455	6.7
DHDN_To_WGS_1984_3	15869	Position_Vector	612.4	77.0	440.2	-0.054	0.057	-2.797	2.55
DHDN_To_WGS_1984_3x	108206	Position_Vector	597.1	71.4	412.1	0.894	0.068	-1.563	7.58
DHDN_To_WGS_1984_4x	108207	Position_Vector	584.8	67.0	400.3	0.105	0.013	-2.378	10.29
DHDN_To_WGS_1984_5x	108208	Position_Vector	590.5	69.5	411.6	-0.796	-0.052	-3.601	8.3
DHDN_To_WGS_1984_6x	108209	Position_Vector	599.4	72.4	419.2	-0.062	-0.022	-2.723	6.46
DHDN_To_WGS_1984_7x	108210	Position_Vector	612.4	77.0	440.2	-0.054	0.057	-2.797	2.55
ED_1950_ED77_To_WGS_1984	1514	Position_Vector	-110.33	-97.73	-119.85	0.3423	1.1634	0.2715	0.063
ED_1950_To_ED_1987_2	1147	Position_Vector	-1.51	-0.84	-3.5	-0.39045928	-0.14170392	-0.57011592	0.609
ED_1950_To_ETRF_1989_1	108193	Position_Vector	-116.641	-56.931	-110.559	0.893	0.921	-0.917	-3.52
ED_1950_To_ETRS_1989_1	1588	Position_Vector	-116.641	-56.931	-110.559	0.89250782	0.92076610	-0.91664080	-3.52
ED_1950_To_ETRS_1989_15	9224	Position_Vector	-157.89	-17.16	-78.41	2.118	2.697	-1.434	-5.38
ED_1950_To_ETRS_1989_4	1626	Position_Vector	-81.1	-89.4	-115.8	0.485	0.024	0.413	-0.54
ED_1950_To_ETRS_1989_6	1630	Position_Vector	-181.5	-90.3	-187.2	0.144	0.492	-0.394	17.57
ED_1950_To_ETRS_1989_7	1632	Position_Vector	-131.0	-100.3	-163.4	-1.244	-0.02	-1.144	9.39
ED_1950_To_ETRS_1989_8	1634	Position_Vector	-178.4	-83.2	-221.3	0.54	-0.532	-0.126	21.2
ED_1950_To_ETRS_1989_9	1783	Position_Vector	-84.1	-101.8	-129.7	0.0	0.0	0.468	1.05
ED_1950_To_WGS_1984_18	1311	Position_Vector	-89.5	-93.8	-123.1	0.0	0.0	-0.156	1.2
ED_1950_To_WGS_1984_23	1612	Position_Vector	-116.641	-56.931	-110.559	0.893	0.921	-0.917	-3.52
ED_1950_To_WGS_1984_24	1613	Position_Vector	-90.365	-101.13	-123.384	0.333	0.077	0.894	1.994
ED_1950_To_WGS_1984_25	1627	Position_Vector	-81.1	-89.4	-115.8	0.485	0.024	0.413	-0.54

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
ED_1950_To_WGS_1984_27	1631	Position_Vector	-181.5	-90.3	-187.2	0.144	0.492	-0.394	17.57
ED_1950_To_WGS_1984_28	1633	Position_Vector	-131.0	-100.3	-163.4	-1.244	-0.02	-1.144	9.39
ED_1950_To_WGS_1984_29	1635	Position_Vector	-178.4	-83.2	-221.3	0.54	-0.532	-0.126	21.2
ED_1950_To_WGS_1984_30	1784	Position_Vector	-84.1	-101.8	-129.7	0.0	0.0	0.468	1.05
ED_1950_To_WGS_1984_31	1810	Position_Vector	-84.0	-103.0	-122.5	0.0	0.0	0.554	0.2263
ED_1950_To_WGS_1984_32	3904	Position_Vector	-83.11	-97.38	-117.22	0.00569291	-0.04469758	0.04428505	0.1218
ED_1950_To_WGS_1984_34	1989	Coordinate_Frame	-74.292	-135.889	-104.967	0.524	0.136	-0.61	-3.761
ED_1950_To_WGS_1984_36	1998	Position_Vector	-157.89	-17.16	-78.41	2.118	2.697	-1.434	-5.38
ED_1950_To_WGS_1984_NGA_7PAR	108335	Coordinate_Frame	-102.0	-102.0	-129.0	0.413	-0.184	0.385	2.4664
ED_1950_To_WGS_1984_PT7	108121	Coordinate_Frame	-68.863	-134.888	-111.49	0.53	0.14	-0.57	-3.4
ED_1987_To_ETRS_1989_1	4078	Position_Vector	-83.11	-97.38	-117.22	0.00569291	-0.04469758	0.04428505	0.1218
ED_1987_To_WGS_1984_1	1146	Position_Vector	-82.981	-99.719	-110.709	-0.10470002	0.03100160	0.08040202	-0.3143
ED_1987_To_WGS_1984_2	3905	Position_Vector	-83.11	-97.38	-117.22	0.00569291	-0.04469758	0.04428505	0.1218
Egypt_1907_To_WGS_1984_2	108043	Position_Vector	-121.8	98.1	-10.7	0.0	0.0	0.554	0.2263
ELD_1979_To_WGS_1984_4	1862	Position_Vector	-194.513	-63.978	-25.759	-3.4027	3.756	-3.352	-0.9175
ELD_1979_To_WGS_1984_5	1863	Coordinate_Frame	-389.691	64.502	210.209	-0.086	-14.314	6.39	0.9264
Estonia_1992_To_ETRF_1989	108194	Coordinate_Frame	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Estonia_1992_To_ETRS_1989	1331	Coordinate_Frame	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Estonia_1992_To_WGS_1984	1333	Coordinate_Frame	0.055	-0.541	-0.185	-0.0183	0.0003	0.007	-0.014
ETRF_1989_To_WGS_1984	108195	Position_Vector	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ETRS_1989_To_S-JTSK [JTSK03]_1	8365	Coordinate_Frame	-485.014055	-169.473618	-483.842943	7.78625453	4.39770887	4.10248899	0.0
ETRS_1989_To_WGS_1984	1149	Position_Vector	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ETRS_1989_To_Xrail84_1	108050	Position_Vector	19.019	115.122	-97.287	3.577824	-3.484437	-2.767646	18.6084754
Fahud_To_WGS_1984_2	1438	Position_Vector	-333.102	-11.02	230.69	0.0	0.0	0.554	0.219
Fatu_Iva_1972_To_RGPF_1	8835	Position_Vector	347.103	1078.125	2623.922	33.8875	-70.6773	9.3943	186.074
Fatu_Iva_1972_To_WGS_1984_1	15772	Coordinate_Frame	347.103	1078.125	2623.922	33.8875	-70.6773	9.3943	186.074
Fatu_Iva_1972_To_WGS_1984_2	8842	Position_Vector	347.175	1077.618	2623.677	33.9058	-70.6776	9.4013	186.0647
Fiji_1986_To_WGS_1984_1	15876	Position_Vector	0.0	0.0	4.5	0.0	0.0	0.554	0.2263
Fiji_1986_To_WGS_1984_2	15877	Coordinate_Frame	-35.173	136.571	-36.964	1.37	-0.842	-4.718	-1.537
Fort_Desaix_To_RGAF09_1	5491	Position_Vector	127.744	547.069	118.359	-3.1116	4.9509	-0.8837	14.1012
Fort_Desaix_To_WGS_1984_2	1910	Position_Vector	126.93	547.94	130.41	-2.7867	5.1612	-0.8584	13.8227
Fort_Marigot_To_RGAF09_1	5493	Position_Vector	151.613	253.832	-429.084	-0.0506	0.0958	-0.5974	-0.3971
GDA_1994_To_GDA2020_1	8048	Coordinate_Frame	0.06155	-0.01087	-0.04019	-0.0394924	-0.0327221	-0.0328979	-0.009994
GDA_1994_To_WGS_1984	1150	Position_Vector	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GDA_1994_To_WGS_1984_2	9688	Coordinate_Frame	0.06155	-0.01087	-0.04019	-0.0394924	-0.0327221	-0.0328979	-0.009994
Graciosa_1948_To_PTRA08_1_7par	108184	Position_Vector	-185.391	122.266	35.989	0.12	3.18	2.046	-1.053
Graciosa_1948_To_PTRA08_2_7par	108185	Position_Vector	-76.822	257.457	-12.817	2.136	-0.033	-2.392	-0.031
Graciosa_1948_To_PTRA08_3_7par	108186	Position_Vector	-210.371	49.768	0.808	-2.036	3.046	3.709	0.934
Graciosa_1948_To_PTRA08_4_7par	108187	Position_Vector	-364.422	243.651	274.822	5.477	12.092	1.538	2.243
Graciosa_1948_To_PTRA08_5_7par	108188	Position_Vector	-201.545	109.048	32.218	-0.286	3.471	2.443	0.309
Graciosa_1948_To_PTRA08_6_7par	108189	Position_Vector	-216.355	107.044	48.015	-0.204	4.158	2.605	0.297
Graciosa_1948_To_WGS_1984_1_7par	108246	Position_Vector	-185.391	122.266	35.989	0.12	3.18	2.046	-1.053

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
Graciosa_1948_To_WGS_1984_2_7par	108247	Position_Vector	-76.822	257.457	-12.817	2.136	-0.033	-2.392	-0.031
Graciosa_1948_To_WGS_1984_3_7par	108248	Position_Vector	-210.371	49.768	0.808	-2.036	3.046	3.709	0.934
Graciosa_1948_To_WGS_1984_4_7par	108249	Position_Vector	-364.422	243.651	274.822	5.477	12.092	1.538	2.243
Graciosa_1948_To_WGS_1984_5_7par	108250	Position_Vector	-201.545	109.048	32.218	-0.286	3.471	2.443	0.309
Graciosa_1948_To_WGS_1984_6_7par	108251	Position_Vector	-216.355	107.044	48.015	-0.204	4.158	2.605	0.297
Graciosa_Base_SW_1948_To_WGS_1984_2	108122	Coordinate_Frame	-103.088	162.481	-28.276	-0.17	-0.08	-0.17	-1.5
Grand_Cayman_1959_To_CIGD11_1	6136	Coordinate_Frame	-179.483	-69.379	-27.584	7.862	-8.163	-6.042	-13.925
Grand_Cayman_1959_To_WGS_1984_2	6142	Coordinate_Frame	-179.483	-69.379	-27.584	7.862	-8.163	-6.042	-13.925
HD1909_To_WGS_1984_1	3817	Coordinate_Frame	595.48	121.69	515.35	-4.115	2.9383	-0.853	-3.408
Helle_1954_To_WGS_1984_1	1957	Position_Vector	982.6087	552.753	-540.873	6.68162663	-31.61149241	-19.84816100	16.805
Hito_XVIII_1963_To_WGS_1984	1529	Position_Vector	18.38	192.45	96.82	0.056	-0.142	-0.2	-0.0013
Hong_Kong_1980_To_ITRF_1996	108337	Coordinate_Frame	-162.619	-276.959	-161.764	-0.067753	2.243648	1.158828	-1.094246
Hong_Kong_1980_To_WGS_1984_1	1825	Coordinate_Frame	-162.619	-276.959	-161.764	0.067753	-2.243648	-1.158828	-1.094246
Hungarian_1972_To_ETRF_1989_1	108196	Coordinate_Frame	56.0	-75.77	-15.31	0.37	0.2	0.21	1.01
Hungarian_1972_To_ETRS_1989_1	1829	Coordinate_Frame	56.0	-75.77	-15.31	0.37	0.2	0.21	1.01
Hungarian_1972_To_ETRS_1989_2	1449	Coordinate_Frame	52.684	-71.194	-13.975	0.312	0.1063	0.3729	1.0191
Hungarian_1972_To_WGS_1984_1	1830	Coordinate_Frame	56.0	-75.77	-15.31	0.37	0.2	0.21	1.01
Hungarian_1972_To_WGS_1984_3	1448	Coordinate_Frame	52.684	-71.194	-13.975	0.312	0.1063	0.3729	1.0191
IGD05_To_IG05_Intermediate_CRS	7140	Coordinate_Frame	-23.8085	-17.5937	-17.801	-0.3306	-1.85706	1.64828	5.4374
IGD05(2012)_To_IG05(2012)_Intermediate_CRS	6993	Coordinate_Frame	-24.0024	-17.1032	-17.8444	-0.33009	-1.85269	1.66969	5.4248
IGD05_To_IGD05(2012)	6992	Coordinate_Frame	0.2255	-0.3709	-0.1171	-0.00388	0.00063	-0.0182	0.013443
IGN53_Mare_To_RGNC_1991-93_2	15891	Coordinate_Frame	-408.809	366.857	-412.987	-1.8843	0.5308	-2.1657	-121.0994
IGN53_Mare_To_WGS_1984_1	1928	Position_Vector	-408.809	366.856	-412.987	1.8842	-0.5308	2.1655	-121.0993
IGN56_Lifou_To_RGNC_1991-93_2	15890	Coordinate_Frame	137.092	131.675	91.478	1.9435	11.5995	4.3316	-7.4801
IGN56_Lifou_To_WGS_1984_2	1927	Position_Vector	137.092	131.66	91.475	-1.9436	-11.5993	-4.3321	-7.4824
IGN63_Hiva_Oa_To_RGPF_1	8843	Position_Vector	410.721	55.049	80.746	-2.5779	-2.3514	-0.6664	17.3311
IGN63_Hiva_Oa_To_RGPF_2	8845	Position_Vector	374.715	-58.407	-0.957	-16.2111	-11.4626	-5.5357	-0.5409
IGN63_Hiva_Oa_To_WGS_1984_1	15773	Coordinate_Frame	410.721	55.049	80.746	-2.5779	-2.3514	-0.6664	17.3311
IGN63_Hiva_Oa_To_WGS_1984_2	15774	Coordinate_Frame	374.716	-58.407	-0.957	-16.2111	-11.4626	-5.5357	-0.5409
IGN63_Hiva_Oa_To_WGS_1984_3	8844	Position_Vector	410.793	54.542	80.501	-2.5596	-2.3517	-0.6594	17.3218
IGN63_Hiva_Oa_To_WGS_1984_4	8846	Position_Vector	374.787	-58.914	-1.202	-16.1928	-11.4629	-5.5287	-0.5502
IGN72_Grande_Terre_To_RGNC_1991-93_2	15887	Coordinate_Frame	97.297	-263.243	310.879	1.5999	-0.8387	-3.1409	13.326
IGN72_Grande_Terre_To_RGNC_1991-93_3	15888	Coordinate_Frame	48.812	-205.932	343.993	3.442742	0.499871	-4.087799	6.521525
IGN72_Grande_Terre_To_WGS_1984_2	1963	Position_Vector	97.295	-263.247	310.882	-1.5999	0.8386	3.1409	13.3259
IGN72_Nuku_Hiva_To_RGPF_1	8847	Coordinate_Frame	165.732	216.72	180.505	-0.6434	-0.4512	-0.0791	7.4204
IGN72_Nuku_Hiva_To_RGPF_2	8849	Coordinate_Frame	1363.785	1362.687	398.811	-4.5322	-6.7579	-1.0574	268.361
IGN72_Nuku_Hiva_To_RGPF_3	8851	Coordinate_Frame	259.551	297.612	197.833	1.4866	2.1224	0.4612	27.0249
IGN72_Nuku_Hiva_To_WGS_1984_2	15775	Coordinate_Frame	165.732	216.72	180.505	-0.6434	-0.4512	-0.0791	7.4204
IGN72_Nuku_Hiva_To_WGS_1984_3	15776	Coordinate_Frame	1363.785	1362.687	398.811	-4.5322	-6.7579	-1.0574	268.361
IGN72_Nuku_Hiva_To_WGS_1984_4	15777	Coordinate_Frame	259.551	297.612	197.833	1.4866	2.1224	0.4612	27.0249
IGN72_Nuku_Hiva_To_WGS_1984_5	8848	Position_Vector	165.804	216.213	180.26	-0.6251	-0.4515	-0.0721	7.4111
IGN72_Nuku_Hiva_To_WGS_1984_6	8850	Position_Vector	1363.857	1362.18	398.566	-4.5139	-6.7582	-1.0504	268.3517

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
IGN72_Nuku_Hiva_To_WGS_1984_7	8852	Position_Vector	259.623	297.105	197.588	1.5049	2.1221	0.4682	27.0156
Indian_1960_To_WGS_1984_1	108097	Position_Vector	199.0	931.0	318.9	0.0	0.0	0.814	-0.38
Indian_1975_To_WGS_1984_4	1812	Position_Vector	293.0	836.0	318.0	0.5	1.6	-2.8	2.1
Indonesian_1974_To_DGN_1995_1	15911	Coordinate_Frame	-1.977	-13.06	-9.993	-0.364	-0.254	-0.689	-1.037
Indonesian_1974_To_WGS_1984_2	1832	Position_Vector	2.691	-14.757	4.724	0.0	0.0	0.774	-0.6
Indonesian_1974_To_WGS_1984_3	1833	Coordinate_Frame	-1.977	-13.06	-9.993	-0.364	-0.254	-0.689	-1.037
Israel_1993_to_WGS_1984_2	9676	Coordinate_Frame	23.772	17.49	17.859	0.3132	1.85274	-1.67299	-5.4262
ITRF_1988_To_ITRF_2000_1	108034	Position_Vector	-0.0247	-0.0115	0.0979	-0.0001	0.0	0.00018	-0.00895
ITRF_1989_To_ITRF_2000_1	108033	Position_Vector	-0.0297	-0.0475	0.0739	0.0	0.0	0.00018	0.00585
ITRF_1990_To_ITRF_2000_1	108032	Position_Vector	-0.0247	-0.0235	0.0359	0.0	0.0	0.00018	-0.00245
ITRF_1991_To_ITRF_2000_1	108031	Position_Vector	-0.0267	-0.0275	0.0199	0.0	0.0	0.00018	-0.00215
ITRF_1992_To_ITRF_2000_1	108030	Position_Vector	-0.0147	-0.0135	0.0139	0.0	0.0	0.00018	-0.00075
ITRF_1993_To_ITRF_2000_1	108029	Position_Vector	-0.0127	-0.0065	0.0209	0.00039	-0.0008	0.00114	-0.00195
ITRF_1994_To_ITRF_2000_1	108028	Position_Vector	-0.0067	-0.0061	0.0185	0.0	0.0	0.0	-0.00155
ITRF_1996_To_ITRF_2000_1	108027	Position_Vector	-0.0067	-0.0061	0.0185	0.0	0.0	0.0	-0.00155
ITRF_1997_To_ITRF_2000_1	108026	Position_Vector	-0.0067	-0.0061	0.0185	0.0	0.0	0.0	-0.00155
ITRF_2000_To_ITRF_2005_1	108036	Position_Vector	-0.0001	0.0008	0.0058	0.0	0.0	0.0	-0.0004
ITRF_2000_To_NAD_1983_2011	108353	Coordinate_Frame	0.9956	-1.9013	-0.5215	0.025915	0.009426	0.011599	0.00062
ITRF_2000_To_NAD_1983_CORS96	108150	Coordinate_Frame	0.9956	-1.9013	-0.5215	0.025915	0.009426	0.011599	0.00062
ITRF_2000_To_NAD_1983_HARN	108281	Coordinate_Frame	0.9956	-1.9013	-0.5215	0.025915	0.009426	0.011599	0.00062
ITRF_2005_To_ITRF_2008_2	108052	Position_Vector	0.002	0.0009	0.0047	0.0	0.0	0.0	-0.00094
ITRF_2008_To_IG05(2012)_Intermediate_CRS	9186	Coordinate_Frame	-23.772	-17.49	-17.859	-0.3132	-1.85274	1.67299	5.4262
ITRF_2008_To_ITRF_2014_7par	108074	Position_Vector	-0.0016	-0.0019	-0.0024	0.0	0.0	0.0	0.00002
ITRF_2008_To_NAD_1983_2011	108360	Coordinate_Frame	0.99343	-1.90331	-0.52655	0.02591467	0.00942645	0.01159935	0.00171504
ITRF_2008_To_NAD_1983_MA11	108361	Coordinate_Frame	0.908	-2.0161	-0.5653	0.028971	0.01042	0.008928	0.0011
ITRF_2008_To_NAD_1983_PA11	108362	Coordinate_Frame	0.908	-2.0161	-0.5653	0.027741	0.013469	0.002712	0.0011
ITRF_2014_To_NAD83_2011_At_Epoch_2010.0_FE	108379	Coordinate_Frame	1.0053	-1.90921	-0.54157	0.02678138	-0.00042027	0.01093206	0.00036891
ITRF_2014_To_NAD_1983_CSRS_v7_7par	108075	Position_Vector	1.0053	-1.9092	-0.5416	-0.0267814	0.0004203	-0.0109321	0.00037
ITRF_2014_To_NAD83_MA11_At_Epoch_2010.0_FE	108381	Coordinate_Frame	0.9109	-2.0129	-0.5863	0.028711	0.011785	0.004417	0.00212
ITRF_2014_To_NAD83_PA11_At_Epoch_2010.0_FE	108380	Coordinate_Frame	0.9109	-2.0129	-0.5863	0.022749	0.02656	-0.025706	0.00212
ITRF_2014_To_Segara_1	10589	Coordinate_Frame	407.379	-685.226	-52.577	-0.318	0.107	-0.058	0.207
Jamaica_1969_To_JAD_2001_1	15926	Coordinate_Frame	-33.722	153.789	94.959	8.581	4.478	-4.54	8.95
Jamaica_1969_To_WGS_1984_3	15927	Coordinate_Frame	-33.722	153.789	94.959	8.581	4.478	-4.54	8.95
Kalianpur_1962_To_WGS_1984_5	9234	Coordinate_Frame	230.25	632.76	161.03	-1.114	1.115	1.212	12.584
KKJ_To_ETRS_1989_1_Old	1638	Position_Vector	-90.7	-106.1	-119.2	4.09	0.218	-1.05	1.37
KKJ_To_EUREF_FIN	10098	Coordinate_Frame	-96.0617	-82.4278	-121.7535	-4.80107	-0.34543	1.37646	1.4964
KKJ_To_WGS_1984_1_Old	1639	Position_Vector	-90.7	-106.1	-119.2	4.09	0.218	-1.05	1.37
KKJ_To_WGS_1984_2_JHS153	10099	Coordinate_Frame	-96.0617	-82.4278	-121.7535	-4.80107	-0.34543	1.37646	1.4964
KSA-GRF17_To_WGS_1984_1	9383	Position_Vector	0.0	0.0	0.0	-0.008393	0.000749	-0.010276	0.0

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
KUDAMS_To_WGS_1984_2	1062	Coordinate_Frame	226.702	-193.337	-35.371	2.229	4.391	-9.238	0.9798
Lisbon_1890_To_WGS_1984_2	1990	Coordinate_Frame	631.392	-66.551	481.442	-1.09	4.445	4.487	-4.43
Lisbon_1890_(Lisbon)_to_WGS_1984_2	8649	Coordinate_Frame	631.392	-66.551	481.442	-1.09	4.445	4.487	-4.43
Lisbon_Lisbon_To_WGS_1984_2	5838	Coordinate_Frame	-288.885	-91.744	126.244	1.691	-0.41	0.211	-4.598
Lisbon_To_ETRS_1989_1	1655	Position_Vector	-280.9	-89.8	130.2	-1.721	0.355	-0.371	-5.92
Lisbon_To_ETRS_1989_2	1997	Position_Vector	-282.1	-72.2	120.0	-1.529	0.145	-0.89	-4.46
Lisbon_To_WGS_1984_1	1656	Position_Vector	-280.9	-89.8	130.2	-1.721	0.355	-0.371	-5.92
Lisbon_To_WGS_1984_4	1988	Coordinate_Frame	-288.885	-91.744	126.244	1.691	-0.41	0.211	-4.598
Little_Cayman_1961_To_CIGD11_1	6137	Coordinate_Frame	8.853	-52.644	180.304	0.393	2.323	-2.96	-24.081
Little_Cayman_1961_To_WGS_1984_3	6143	Coordinate_Frame	8.853	-52.644	180.304	0.393	2.323	-2.96	-24.081
LUREF_To_ETRS_1989_1	1642	Position_Vector	-192.986	13.673	-39.309	-0.4099	-2.9332	2.6881	0.43
LUREF_To_ETRS_1989_3	5485	Coordinate_Frame	-189.6806	18.3463	-42.7695	0.33746	3.09264	-2.53861	0.4598
LUREF_To_WGS_1984_1	1643	Position_Vector	-192.986	13.673	-39.309	-0.4099	-2.9332	2.6881	0.43
LUREF_To_WGS_1984_3	5486	Coordinate_Frame	-189.6806	18.3463	-42.7695	0.33746	3.09264	-2.53861	0.4598
Maupiti_1983_To_WGS_1984_2	8853	Position_Vector	217.109	86.452	23.711	0.0183	-0.0003	0.007	-0.0093
MGI_1901_To_ETRS_1989_2	3963	Position_Vector	551.7	162.9	467.9	6.04	1.96	-11.38	-4.82
MGI_1901_To_ETRS_1989_3	3914	Position_Vector	426.9	142.6	460.1	4.91	4.49	-12.42	17.1
MGI_1901_To_ETRS_1989_5	6205	Coordinate_Frame	517.4399	228.7318	579.7954	-4.045	-4.304	15.612	-8.312
MGI_1901_To_ETRS_1989_6	7675	Coordinate_Frame	577.88891	165.22205	391.18289	-4.9145	0.94729	13.05098	7.78664
MGI_1901_To_ETRS_1989_7	8680	Position_Vector	489.88	183.912	533.711	5.76545	4.69994	-12.58211	1.00646
MGI_1901_To_KOSOVAREF01_1	9142	Position_Vector	628.54052	192.2538	498.43507	-13.79189	-0.81467	41.21533	-17.40368
MGI_1901_To_Slovenia_1996_1	3916	Coordinate_Frame	409.545	72.164	486.872	-3.085957	-5.46911	11.020289	17.919665
MGI_1901_To_Slovenia_1996_10	3927	Coordinate_Frame	355.845	274.282	462.979	-9.086933	-6.491055	14.502181	20.888647
MGI_1901_To_Slovenia_1996_11	3928	Coordinate_Frame	400.629	90.651	472.249	-3.261138	-5.263404	11.83739	20.022676
MGI_1901_To_Slovenia_1996_12	8689	Coordinate_Frame	476.080	125.947	417.810	-4.610862	-2.388137	11.942335	9.896638
MGI_1901_To_Slovenia_1996_2	3918	Coordinate_Frame	315.393	186.223	499.609	-6.445954	-8.131631	13.208641	23.449046
MGI_1901_To_Slovenia_1996_3	3919	Coordinate_Frame	464.939	-21.478	504.497	0.403	-4.228747	9.954942	12.795378
MGI_1901_To_Slovenia_1996_4	3921	Coordinate_Frame	459.968	82.193	458.756	-3.565234	-3.700593	10.860523	15.507563
MGI_1901_To_Slovenia_1996_5	3922	Coordinate_Frame	427.914	105.528	510.908	-4.992523	-5.898813	10.306673	12.431493
MGI_1901_To_Slovenia_1996_6	3923	Coordinate_Frame	468.63	81.389	445.221	-3.839242	-3.262525	10.566866	16.132726
MGI_1901_To_Slovenia_1996_7	3924	Coordinate_Frame	439.5	-11.77	494.976	-0.026585	-4.65641	10.155824	16.270002
MGI_1901_To_Slovenia_1996_8	3925	Coordinate_Frame	524.442	3.275	519.002	0.013287	-3.119714	10.232693	4.184981
MGI_1901_To_Slovenia_1996_9	3926	Coordinate_Frame	281.529	45.963	537.515	-2.570437	-9.648271	10.759507	26.465548
MGI_1901_to_SRB-ETRS89_8	9495	Coordinate_Frame	577.84843	165.45019	390.43652	-4.93131	0.96052	13.05072	7.86546
MGI_1901_To_WGS_1984_10	6206	Coordinate_Frame	521.748	229.489	590.921	-4.029	-4.488	15.521	-9.78
MGI_1901_To_WGS_1984_11	7676	Coordinate_Frame	577.88891	165.22205	391.18289	-4.9145	0.94729	13.05098	7.78664
MGI_1901_To_WGS_1984_13	8823	Position_Vector	489.88	183.912	533.711	5.76545	4.69994	-12.58211	1.00646
MGI_1901_To_WGS_1984_14	9143	Position_Vector	628.54052	192.2538	498.43507	-13.79189	-0.81467	41.21533	-17.40368
MGI_1901_to_WGS_1984_15	9486	Coordinate_Frame	577.84843	165.45019	390.43652	-4.93131	0.96052	13.05072	7.86546
MGI_1901_To_WGS_1984_16	8688	Coordinate_Frame	476.080	125.947	417.810	-4.610862	-2.388137	11.942335	9.896638
MGI_1901_To_WGS_1984_4	3964	Position_Vector	551.7	162.9	467.9	6.04	1.96	-11.38	-4.82
MGI_1901_To_WGS_1984_5	3915	Position_Vector	426.9	142.6	460.1	4.91	4.49	-12.42	17.1
MGI_1901_To_WGS_1984_9	3917	Coordinate_Frame	409.545	72.164	486.872	-3.085957	-5.46911	11.020289	17.919665

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
MGI_Ferro_To_WGS_1984_2	3896	Position_Vector	577.326	90.129	463.919	5.137	1.474	5.297	2.4232
MGI_To_ETRS_1989_Serbia	108072	Coordinate_Frame	577.88891	165.22205	391.18289	-4.9145	0.94729	13.05098	7.78664
MGI_To_ETRS_1989_1	1619	Position_Vector	577.326	90.129	463.919	5.137	1.474	5.297	2.4232
MGI_To_ETRS_1989_2	1620	Position_Vector	551.7	162.9	467.9	6.04	1.96	-11.38	-4.82
MGI_To_ETRS_1989_3	1785	Position_Vector	426.9	142.6	460.1	4.91	4.49	-12.42	17.1
MGI_To_ETRS_1989_4	1024	Coordinate_Frame	601.705	84.263	485.227	-4.7354	-1.3145	-5.393	-2.3887
MGI_To_WGS_1984_Serbia	108073	Coordinate_Frame	577.88891	165.22205	391.18289	-4.9145	0.94729	13.05098	7.78664
MGI_To_WGS_1984_2	108095	Position_Vector	577.326	90.129	463.919	5.1365988	1.4742	5.2970436	2.4232
MGI_To_WGS_1984_3	1618	Position_Vector	577.326	90.129	463.919	5.137	1.474	5.297	2.4232
MGI_To_WGS_1984_4	1621	Position_Vector	551.7	162.9	467.9	6.04	1.96	-11.38	-4.82
MGI_To_WGS_1984_5	1786	Position_Vector	426.9	142.6	460.1	4.91	4.49	-12.42	17.1
MGI_To_WGS_1984_8	1194	Coordinate_Frame	601.705	84.263	485.227	-4.7354	-1.3145	-5.393	-2.3887
Minna_To_WGS_1984_12	15705	Position_Vector	-83.13	-104.95	114.63	0.0	0.0	0.554	0.0
Minna_To_WGS_1984_3	1754	Position_Vector	-111.92	-87.85	114.5	1.875	0.202	0.219	0.032
Minna_To_WGS_1984_4	1818	Position_Vector	-89.0	-112.0	125.9	0.0	0.0	0.814	-0.38
MONREF_1997_To_MSK_1942_1	108286	Coordinate_Frame	78.042178	204.518613	77.4498615	-1.77367097	3.31979173	-1.04260771	-4.9510577
MONREF_1997_To_Pulkovo_1942_1	108288	Coordinate_Frame	78.042178	204.518613	77.4498615	-1.77367097	3.31979173	-1.04260771	-4.9510577
Monte_Mario_To_ETRS_1989_1	1659	Position_Vector	-104.1	-49.1	-9.9	0.971	-2.917	0.714	-11.68
Monte_Mario_To_ETRS_1989_2	1661	Position_Vector	-168.6	-34.0	38.6	-0.374	-0.679	-1.379	-9.48
Monte_Mario_To_ETRS_1989_3	1663	Position_Vector	-50.2	-50.4	84.8	-0.69	-2.012	0.459	-28.08
Monte_Mario_To_WGS_1984_2	1662	Position_Vector	-168.6	-34.0	38.6	-0.374	-0.679	-1.379	-9.48
Monte_Mario_To_WGS_1984_3	1664	Position_Vector	-50.2	-50.4	84.8	-0.69	-2.012	0.459	-28.08
Monte_Mario_To_WGS_1984_4	1660	Position_Vector	-104.1	-49.1	-9.9	0.971	-2.917	0.714	-11.68
Moorea_1987_To_RGPF_1	15757	Coordinate_Frame	215.525	149.593	176.229	3.2624	1.692	1.1571	10.4773
Moorea_1987_To_RGPF_2	8831	Position_Vector	218.697	151.257	176.995	3.5048	2.004	1.281	10.991
Moorea_1987_To_WGS_1984_1	15769	Coordinate_Frame	215.525	149.593	176.229	3.2624	1.692	1.1571	10.4773
Moorea_1987_To_WGS_1984_2	8832	Position_Vector	218.769	150.75	176.75	3.5231	2.0037	1.288	10.9817
Moznet_To_WGS_1984	1302	Coordinate_Frame	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MTRF-2000_To_KSA-GRF17_1	9361	Position_Vector	0.0469	-0.2827	0.0866	0.00559	-0.004981	0.023108	-0.008051
NAD_1927_To_SIRGAS_2000_7Par_Panama	108062	Coordinate_Frame	-32.3841359	180.409046	120.844258	2.1545854	0.1498782	-0.5742915	8.1049164
NAD_1927_To_WGS_1984_88	15978	Coordinate_Frame	2.478	149.752	197.726	-0.526	-0.498	0.501	0.685
NAD_1927_To_WGS_1984_89	7698	Coordinate_Frame	-32.3841359	180.409046	120.844258	2.1545854	0.1498782	-0.5742915	8.1049164
NAD_1983_CSRS_To_WGS_1984_2	1946	Coordinate_Frame	-0.991	1.9072	0.5129	-0.02578991	-0.00965010	-0.01165994	0.0
NAD_1983_HARN_PACP00_MARP00_To_WGS_1984	108307	Coordinate_Frame	-0.9102	2.0141	0.5602	-0.029039	-0.010065	-0.010101	0.0
NAD_1983_HARN_To_WGS_1984_2	1900	Coordinate_Frame	-0.9738	1.9453	0.5486	-0.02755079	-0.01004922	-0.01135900	0.0
NAD_1983_HARN_To_WGS_1984_3	1901	Coordinate_Frame	-0.991	1.9072	0.5129	-0.02578991	-0.00965010	-0.01165994	0.0
NAD_1983_MARP00_To_WGS_1984	108018	Coordinate_Frame	-0.9102	2.0141	0.5602	-0.029039	-0.010065	-0.010101	0.0
NAD_1983_PACP00_To_WGS_1984	108017	Coordinate_Frame	-0.9102	2.0141	0.5602	-0.029039	-0.010065	-0.010101	0.0
NAD_1983_To_WGS_1984_4	1308	Coordinate_Frame	-0.9738	1.9453	0.5486	-0.02755079	-0.01004922	-0.011359	0.0
NAD_1983_To_WGS_1984_5	1515	Coordinate_Frame	-0.991	1.9072	0.5129	-0.02578991	-0.00965010	-0.01165994	0.0
Nahrwan_1967_To_WGS_1984_8	15938	Position_Vector	-225.4	-158.7	380.8	0.0	0.0	0.814	-0.38

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
Nahrwan_1967_To_WGS_1984_11	6998	Coordinate_Frame	-233.4	-160.7	381.5	0.0	0.0	-0.554	0.2263
Nahrwan_1967_To_WGS_1984_12	6999	Coordinate_Frame	-253.4392	-148.452	386.5267	-0.15605	-0.43	0.1013	-0.0424
Nahrwan_1967_To_WGS_1984_13	7002	Coordinate_Frame	-246.1633	-152.9047	382.6047	-0.0989	-0.1382	-0.0768	0.0000021
Nahrwan_1967_To_WGS_1984_14	7003	Coordinate_Frame	-242.8907	-149.0671	384.416	-0.19044	-0.24987	-0.13925	0.0001746
Nahrwan_1967_To_WGS_1984_15	7004	Coordinate_Frame	-246.734	-153.4345	382.1477	0.116617	0.165167	0.091327	0.0000194
NEA74_Noumea_To_RGNC_1991-93_2	15889	Coordinate_Frame	-166.0684	-154.7826	254.8282	37.545982	-7.7018261	10.2029182	-30.84
NEA74_Noumea_To_WGS_1984_1	1932	Position_Vector	-166.207	-154.777	254.831	-37.5444	7.7011	-10.2025	-30.8598
New_Zealand_1949_To_NZGD_2000_2_7PAR	1701	Coordinate_Frame	59.47	-5.04	187.44	-0.47	0.1	-1.024	-4.5993
NGO_1948_Oslo_To_ETRS_1989_1	108146	Position_Vector	278.3	93.0	474.5	7.889	0.05	-6.61	6.21
NGO_1948_Oslo_To_WGS_1984	108145	Coordinate_Frame	319.08	37.81	463.57	-6.2970588	1.2903926	5.71291634	10.819
NGO_1948_Oslo_To_WGS_1984_1	108147	Position_Vector	278.3	93.0	474.5	7.889	0.05	-6.61	6.21
NGO_1948_To_ETRS_1989_1	1653	Position_Vector	278.3	93.0	474.5	7.889	0.05	-6.61	6.21
NGO_1948_To_WGS_1984	108201	Coordinate_Frame	319.08	37.81	463.57	-6.2970588	1.2903926	5.71291634	10.819
NGO_1948_To_WGS_1984_1	1654	Position_Vector	278.3	93.0	474.5	7.889	0.05	-6.61	6.21
Nord_Sahara_1959_to_RGSH2020_1	10339	Position_Vector	-152.9	43.8	358.3	2.714	1.386	-2.788	-6.743
Nord_Sahara_1959_to_WGS_1984_11	10296	Position_Vector	-267.407	-47.068	446.357	-0.179423	5.577661	-1.27762	1.204866
Nord_Sahara_1959_To_WGS_1984_3	108098	Position_Vector	-156.0	-87.2	287.8	0.0	0.0	0.814	-0.38
Nord_Sahara_1959_To_WGS_1984_4	1815	Position_Vector	-152.9	43.8	358.3	2.714	1.386	-2.788	-6.743
Nord_Sahara_1959_To_WGS_1984_9	5660	Position_Vector	-209.3622	-87.8162	404.6198	0.0046	3.4784	0.5805	-1.4547
NZGD_1949_To_WGS_1984_2	1564	Coordinate_Frame	59.47	-5.04	187.44	-0.47	0.1	-1.024	-4.5993
Observatorio_Meteorologico_1939_To_PTROA8_1_7par	108341	Position_Vector	-487.978	-226.275	102.787	-0.743	1.677	2.087	1.485
Observatorio_Meteorologico_1939_To_PTROA8_2_7par	108342	Position_Vector	-511.151	-181.269	139.609	1.05	2.703	1.798	3.071
Observatorio_Meteorologico_1939_To_PTROA8_3_7par	108343	Position_Vector	-1333.976	-487.235	945.031	6.674	35.963	20.438	-11.187
Observatorio_Meteorologico_1939_To_WGS_1984_1_7par	108347	Position_Vector	-487.978	-226.275	102.787	-0.743	1.677	2.087	1.485
Observatorio_Meteorologico_1939_To_WGS_1984_2_7par	108348	Position_Vector	-511.151	-181.269	139.609	1.05	2.703	1.798	3.071
Observatorio_Meteorologico_1939_To_WGS_1984_3_7par	108349	Position_Vector	-1333.976	-487.235	945.031	6.674	35.963	20.438	-11.187
Ocotepaque_1935_To_WGS_1984_2	5473	Coordinate_Frame	213.116	9.358	-74.946	2.35141879	-0.06146691	6.39420899	-5.22
Ocotepaque_1935_To_WGS_1984_RN	108283	Position_Vector	6.41	-49.05	-11.28	1.5657	0.5242	6.9718	-5.7649
ONGD14_To_WGS_1984_1	7377	Coordinate_Frame	0.819	-0.5762	-1.6446	0.00378	0.03317	-0.00318	0.0693
ONGD17_To_ITRF_1989	108371	Coordinate_Frame	1.16835	-1.42001	-2.24431	0.00822	0.05508	-0.01818	0.23388
ONGD17_To_WGS_1984	108372	Coordinate_Frame	1.16835	-1.42001	-2.24431	0.00822	0.05508	-0.01818	0.23388
OSGB_1936_To_ED_1950_UKOOA	1315	Position_Vector	535.948	-31.357	665.16	0.15	0.247	0.998	-21.689
OSGB_1936_To_WGS_1984_NGA_7PAR	108336	Coordinate_Frame	446.0	-99.0	544.0	-0.945	-0.261	-0.435	-20.8927
OSGB_1936_To_WGS_1984_Petroleum	1314	Position_Vector	446.448	-125.157	542.06	0.15	0.247	0.842	-20.489
OSNI_1952_To_WGS_1984_1	1955	Position_Vector	482.5	-130.6	564.6	-1.042	-0.214	-0.631	8.15
Palestine_1923_To_WGS_1984_1	1074	Position_Vector	-275.7224	94.7824	340.8944	-8.001	-4.42	-11.821	1.0
PD/83_To_ETRS_1989_1	15867	Position_Vector	599.4	72.4	419.2	-0.062	-0.022	-2.723	6.46
PD/83_To_WGS_1984_7PAR	108070	Position_Vector	599.4	72.4	419.2	-0.062	-0.022	-2.723	6.46

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
PDO_1993_To_WGS_1972	1616	Position_Vector	-182.046	-225.604	168.884	-0.616	-1.655	7.824	16.641
PDO_1993_To_WGS_1984	1439	Position_Vector	-180.624	-225.516	173.919	-0.81	-1.898	8.336	16.71006
PDO_1993_To_WGS_1984_3	1617	Position_Vector	-191.808	-250.512	167.861	-0.792	-1.653	8.558	20.703
Pointe_Noire_To_WGS_1984_3	1802	Position_Vector	-178.3	-316.7	-131.5	5.278	6.077	10.979	19.166
Porto_Santo_1936_To_PTRA08_1_7par	108160	Position_Vector	-160.41	-21.066	-99.282	2.437	-17.25	-7.446	0.168
Porto_Santo_1936_To_PTRA08_2_7par	108161	Position_Vector	-303.956	224.556	214.306	9.405	-6.626	-12.583	1.327
Porto_Santo_1936_To_PTRA08_3_7par	108162	Position_Vector	-494.088	-312.129	279.877	-1.423	-1.013	1.59	-0.748
Porto_Santo_1936_To_WGS_1984_1_7par	108166	Position_Vector	-160.41	-21.066	-99.282	2.437	-17.25	-7.446	0.168
Porto_Santo_1936_To_WGS_1984_2	108125	Coordinate_Frame	-210.502	-66.902	-48.476	-2.094	15.067	5.817	0.485
Porto_Santo_1936_To_WGS_1984_2_7par	108167	Position_Vector	-303.956	224.556	214.306	9.405	-6.626	-12.583	1.327
Porto_Santo_1936_To_WGS_1984_3_7par	108168	Position_Vector	-494.088	-312.129	279.877	-1.423	-1.013	1.59	-0.748
Porto_Santo_1995_To_PTRA08_2	5022	Position_Vector	-303.956	224.556	214.306	9.405	-6.626	-12.583	1.327
Porto_Santo_1995_To_WGS_1984_3	1967	Coordinate_Frame	-210.502	-66.902	-48.476	-2.094	15.067	5.817	0.485
PRS_1992_To_WGS_1984_1	15708	Coordinate_Frame	-127.62	-67.24	-47.04	3.068	-4.903	-1.578	-1.06
PSAD_1956_To_SIRGAS_1	3971	Coordinate_Frame	-60.31	245.935	31.008	-12.324	-3.755	7.37	0.447
PSAD_1956_To_WGS_1984_14	3990	Coordinate_Frame	-60.31	245.935	31.008	-12.324	-3.755	7.37	0.447
Pulkovo_1942_Adj_1958_To_ETRS_1989_1	1644	Position_Vector	33.4297	-146.5746	-76.2865	-0.35867	-0.05283	0.84354	-0.8407728
Pulkovo_1942_Adj_1958_To_ETRS_1989_3	15993	Coordinate_Frame	68.1564	32.7756	80.2249	2.20333014	2.19256447	-2.54166911	-0.1415533
Pulkovo_1942_Adj_1958_To_ETRS_1989_4	15994	Coordinate_Frame	2.3287	-147.0425	-92.0802	0.3092483	-0.32482185	-0.49729934	5.68906266
Pulkovo_1942_Adj_1958_To_WGS_1984_1	1645	Position_Vector	33.4	-146.6	-76.3	-0.359	-0.053	0.844	-0.84
Pulkovo_1942_Adj_1958_To_WGS_1984_19	15995	Coordinate_Frame	2.329	-147.042	-92.08	0.309	-0.325	-0.497	5.69
Pulkovo_1942_Adj_1983_To_ETRS_1989_1	1674	Coordinate_Frame	24.0	-123.0	-94.0	-0.02	0.25	0.13	1.1
Pulkovo_1942_Adj_1983_To_ETRS_1989_2	1775	Position_Vector	24.9	-126.4	-93.2	-0.063	-0.247	-0.041	1.01
Pulkovo_1942_Adj_1983_To_WGS_1984_1	1675	Coordinate_Frame	24.0	-123.0	-94.0	-0.02	0.25	0.13	1.1
Pulkovo_1942_To_Estonia_1992	1332	Coordinate_Frame	21.53219	-97.00027	-60.74046	-0.99548	-0.58147	-0.2418	-4.5981
Pulkovo_1942_To_LKS_1994	1274	Coordinate_Frame	-40.595	-18.55	-69.339	-2.508	-1.832	2.611	-4.299
Pulkovo_1942_To_PZ_1990_1	15844	Coordinate_Frame	25.0	-141.0	-80.0	0.0	-0.35	-0.66	0.0
Pulkovo_1942_To_WGS_1984_10	1303	Position_Vector	43.822	-108.842	-119.585	1.455	-0.761	0.737	0.549
Pulkovo_1942_To_WGS_1984_12	1334	Coordinate_Frame	21.58719	-97.54127	-60.92546	-1.01378	-0.58117	-0.2348	-4.6121
Pulkovo_1942_To_WGS_1984_13	1807	Position_Vector	27.0	-135.0	-84.5	0.0	0.0	0.554	0.2263
Pulkovo_1942_To_WGS_1984_14	1808	Position_Vector	686.1	-123.5	-574.4	8.045	-23.366	10.791	-2.926
Pulkovo_1942_To_WGS_1984_15	1809	Position_Vector	926.4	-715.9	-186.4	-10.364	-20.78	26.452	-7.224
Pulkovo_1942_To_WGS_1984_16	15865	Coordinate_Frame	25.0	-141.0	-78.5	0.0	-0.35	-0.736	0.0
Pulkovo_1942_To_WGS_1984_17	1267	Coordinate_Frame	23.92	-141.27	-80.9	0.0	-0.35	-0.82	-0.12
Pulkovo_1942_To_WGS_1984_2	1679	Coordinate_Frame	-40.595	-18.55	-69.339	-2.508	-1.832	2.611	-4.299
Pulkovo_1942_To_WGS_1984_20	5044	Coordinate_Frame	23.57	-140.95	-79.8	0.0	-0.35	-0.79	-0.22
Pulkovo_1995_To_WGS_1984_1	1281	Coordinate_Frame	24.82	-131.21	-82.66	0.0	0.0	-0.16	-0.12
Pulkovo_1995_To_WGS_1984_2	5043	Coordinate_Frame	24.47	-130.89	-81.56	0.0	0.0	-0.13	-0.22
PZ_1990_To_WGS_1984_1	15843	Coordinate_Frame	0.0	0.0	1.5	0.0	0.0	-0.076	0.0
PZ_1990_To_WGS_1984_GOST	1244	Coordinate_Frame	-1.08	-0.27	-0.9	0.0	0.0	-0.16	-0.12
QND_1995_To_WGS_1984_1	1840	Position_Vector	-119.4248	-303.65872	-11.00061	1.164298	0.174458	1.096259	3.657065
Qornoq_1927_To_Greenland_1996_1	15957	Position_Vector	163.511	127.533	-159.789	0.0	0.0	0.814	-0.6

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
Qornoq_1927_To_WGS_1984_2	1798	Position_Vector	163.511	127.533	-159.789	0.0	0.0	0.814	-0.6
RD/83_To_ETRS_1989_1	15868	Position_Vector	612.4	77.0	440.2	-0.054	0.057	-2.797	2.55
RD/83_To_WGS_1984_7PAR	108071	Position_Vector	612.4	77.0	440.2	-0.054	0.057	-2.797	2.55
Reunion_1947_To_RGR_1992_1	1926	Position_Vector	789.524	-626.486	-89.904	0.6006	76.7946	-10.5788	-32.3241
RGF93_v2_to_RGF93_v2b	9788	Position_Vector	-0.017	0.058	0.009	0.001305	0.00068	-0.001467	-0.00072
RGPf_To_WGS_1984_1	8828	Position_Vector	0.072	-0.507	-0.245	0.0183	-0.0003	0.007	-0.0093
RGR_1992_To_Reunion_1947_1	1964	Position_Vector	-789.99	627.333	89.685	-0.6072	-76.8019	10.568	32.2083
RRAF_1991_To_RGAF09_1	5494	Position_Vector	0.7696	-0.8692	-12.0631	-0.32511	-0.21041	-0.0239	0.2829
RRAF_1991_To_RGAF09_2	5495	Position_Vector	1.2239	2.4156	-1.7598	0.038	-0.16101	-0.04925	0.2387
RRAF_1991_To_RGAF09_3	5496	Position_Vector	14.6642	5.2493	0.1981	-0.06838	0.09141	-0.58131	-0.4067
RT90_To_ETRS_1989_1	1437	Coordinate_Frame	419.3836	99.3335	591.3451	-0.850389	-1.817277	7.862238	-0.99496
RT90_To_ETRS_1989_2	1787	Coordinate_Frame	414.1	41.3	603.1	0.855	-2.141	7.023	0.0
RT90_To_SWEREF99_1	1895	Coordinate_Frame	414.097857	41.338149	603.062718	0.85504343	-2.14134652	7.02272095	0.0
RT90_To_WGS_1984	1680	Coordinate_Frame	419.3836	99.3335	591.3451	-0.850389	-1.817277	7.862238	-0.99496
RT90_To_WGS_1984_2	1896	Coordinate_Frame	414.097857	41.338149	603.062718	0.85504343	-2.14134652	7.02272095	0.0
Saint_Pierre_et_Miquelon_1950_To_RGSPM_2006	108088	Position_Vector	-95.593	573.763	173.442	-0.9602	1.251	-1.3918	42.6265
Sainte_Anne_To_RGAF09_1	5492	Position_Vector	-471.06	-3.212	-305.843	0.4752	-0.9978	0.2068	2.1353
Sainte_Anne_To_WGS_1984_2	1905	Position_Vector	-472.29	-5.63	-304.12	0.4362	-0.8374	0.2563	1.8984
Sao_Braz_To_PTRA08_1_7par	108172	Position_Vector	-269.089	186.247	155.667	2.005	3.606	-0.366	0.097
Sao_Braz_To_PTRA08_2_7par	108173	Position_Vector	-249.507	179.302	119.92	1.406	2.423	-0.479	0.952
Sao_Braz_To_PTRA08_3_7par	108174	Position_Vector	-440.296	58.548	296.265	1.128	10.202	4.559	-0.438
Sao_Braz_To_WGS_1984_1_7par	108178	Position_Vector	-269.089	186.247	155.667	2.005	3.606	-0.366	0.097
Sao_Braz_To_WGS_1984_2	108127	Coordinate_Frame	-208.719	129.685	52.092	0.2	0.01	-0.33	0.2
Sao_Braz_To_WGS_1984_2_7par	108179	Position_Vector	-249.507	179.302	119.92	1.406	2.423	-0.479	0.952
Sao_Braz_To_WGS_1984_3_7par	108180	Position_Vector	-440.296	58.548	296.265	1.128	10.202	4.559	-0.438
Scoresbysund_1952_To_Greenland_1996_1	15899	Position_Vector	105.0	326.0	-102.5	0.0	0.0	0.814	-0.6
Scoresbysund_1952_To_WGS_1984_1	1799	Position_Vector	105.0	326.0	-102.5	0.0	0.0	0.814	-0.6
SHGD2015_To_Astro_DOS_71-4_2	9226	Position_Vector	112.771	-12.282	18.935	-2.1692	-16.8896	-17.1961	19.54517
S_JTSK/05_Ferro_To_WGS_1984_1	5240	Coordinate_Frame	572.213	85.334	461.94	-4.9732	-1.529	-5.2484	3.5378
S_JTSK/05_To_ETRS_1989_1	5226	Coordinate_Frame	572.213	85.334	461.94	-4.9732	-1.529	-5.2484	3.5378
S_JTSK/05_To_WGS_1984_1	5227	Coordinate_Frame	572.213	85.334	461.94	-4.9732	-1.529	-5.2484	3.5378
S-JTSK_[JTSK03]_To_ETRS_1989_1	8367	Coordinate_Frame	485.021	169.465	483.839	-7.786342	-4.397554	-4.102655	0.0
S-JTSK_[JTSK03]_To_WGS_1984_1	8368	Coordinate_Frame	485.021	169.465	483.839	-7.786342	-4.397554	-4.102655	0.0
S-JTSK_(Ferro)_to_WGS_1984_1	8642	Position_Vector	570.8	85.7	462.8	4.998	1.587	5.261	3.56
S_JTSK_FERRO_To_WGS_1984_2	5230	Position_Vector	485.0	169.5	483.8	7.786	4.398	4.103	0.0
S_JTSK_Ferro_To_WGS_1984_3	5242	Coordinate_Frame	572.213	85.334	461.94	-4.9732	-1.529	-5.2484	3.5378
S_JTSK_To_ETRS_1989_1	1622	Position_Vector	570.8	85.7	462.8	4.998	1.587	5.261	3.56
S_JTSK_To_ETRS_1989_2	1624	Position_Vector	559.0	68.7	451.5	7.92	4.073	4.251	5.71
S_JTSK_To_ETRS_1989_4	4827	Position_Vector	485.0	169.5	483.8	7.786	4.398	4.103	0.0
S_JTSK_To_Pulkovo_1942	108202	Position_Vector	544.8	206.7	540.8	4.998	1.587	5.261	3.56
S_JTSK_To_WGS_1984_1	1623	Position_Vector	570.8	85.7	462.8	4.998	1.587	5.261	3.56
S_JTSK_To_WGS_1984_2	1625	Position_Vector	559.0	68.7	451.5	7.92	4.073	4.251	5.71

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
S_JTSK_To_WGS_1984_4	4836	Position_Vector	485.0	169.5	483.8	7.786	4.398	4.103	0.0
S_JTSK_To_WGS_1984_5	5239	Coordinate_Frame	572.213	85.334	461.94	-4.9732	-1.529	-5.2484	3.5378
SLD99_To_WGS_1984_1	5236	Coordinate_Frame	-0.293	766.95	87.713	-0.195704	-1.695068	-3.473016	-0.039338
South_East_Island_1943_To_WGS_1984_2	6926	Position_Vector	-76.269	-16.683	68.562	-6.275	10.536	-4.286	-13.686
ST71_Belep_To_WGS_1984_1	1931	Position_Vector	-480.26	-438.32	-643.429	16.3119	20.1721	-4.0349	-111.7002
ST84_Ile_des_Pins_To_RGNC_1991-93_1	15893	Coordinate_Frame	244.42	85.352	168.129	8.936	-7.752	-12.5952	14.2723
ST84_Ile_des_Pins_To_WGS_1984_1	1930	Position_Vector	244.416	85.339	168.114	-8.9353	7.7523	12.5953	14.268
ST87_Ouvea_To_RGNC_1991-93_2	15892	Coordinate_Frame	-122.386	-188.707	103.334	-3.511	4.9665	5.7048	4.4799
S_TUREF_To_ETRS_1989_1	5260	Position_Vector	0.023	0.036	-0.068	0.00176	0.00912	-0.01136	0.00439
SWEREF99_To_RT90	108212	Coordinate_Frame	-414.105526	-41.326550	-603.058247	-0.85511634	2.14131741	-7.02272983	0.0
Tahaa_1954_To_RGPF_1	8833	Position_Vector	72.438	345.918	79.486	-1.6045	-0.8823	-0.5565	1.3746
Tahaa_1954_To_WGS_1984_2	15770	Coordinate_Frame	72.438	345.918	79.486	-1.6045	-0.8823	-0.5565	1.3746
Tahaa_1954_To_WGS_1984_3	8834	Position_Vector	72.51	345.411	79.241	-1.5862	-0.8826	-0.5495	1.3653
Tahiti_1979_To_RGPF_1	8829	Position_Vector	221.525	152.948	176.768	2.3847	1.3896	0.877	11.4741
Tahiti_1979_To_WGS_1984_1	4835	Coordinate_Frame	221.525	152.948	176.768	2.3847	1.3896	0.877	11.4741
Tahiti_1979_To_WGS_1984_2	8830	Position_Vector	221.597	152.441	176.523	2.403	1.3893	0.884	11.4648
Tete_To_Moznet_1	1297	Coordinate_Frame	-115.064	-87.39	-101.716	0.058	-4.001	2.062	9.366
Tete_To_Moznet_2	1298	Coordinate_Frame	-82.875	-57.097	-156.768	2.158	-1.524	0.982	-0.359
Tete_To_Moznet_3	1299	Coordinate_Frame	-138.527	-91.999	-114.591	0.14	-3.363	2.217	11.748
Tete_To_Moznet_4	1300	Coordinate_Frame	-73.472	-51.66	-112.482	-0.953	-4.6	2.368	0.586
Tete_To_Moznet_5	1301	Coordinate_Frame	219.315	168.975	-166.145	-0.198	-5.926	2.356	-57.104
Tete_To_WGS_1984_1	1683	Coordinate_Frame	-115.064	-87.39	-101.716	0.058	-4.001	2.062	9.366
Tete_To_WGS_1984_2	1684	Coordinate_Frame	-82.875	-57.097	-156.768	2.158	-1.524	0.982	-0.359
Tete_To_WGS_1984_3	1685	Coordinate_Frame	-138.527	-91.999	-114.591	0.14	-3.363	2.217	11.748
Tete_To_WGS_1984_4	1686	Coordinate_Frame	-73.472	-51.66	-112.482	-0.953	-4.6	2.368	0.586
Tete_To_WGS_1984_5	1687	Coordinate_Frame	219.315	168.975	-166.145	-0.198	-5.926	2.356	-57.104
Timbalai_1948_To_GDBD2009_1	5878	Coordinate_Frame	-689.5937	623.84046	-65.93566	0.02331	-1.17094	0.80054	5.88536
Timbalai_1948_To_WGS_1984_4	1852	Position_Vector	-533.4	669.2	-52.5	0.0	0.0	4.28	9.4
Timbalai_1948_To_WGS_1984_5	5249	Coordinate_Frame	-689.5937	623.84046	-65.93566	0.02331	-1.17094	0.80054	5.88536
TM65_To_ETRS_1989_1	1640	Position_Vector	482.53	-130.596	564.557	-1.042	-0.214	-0.631	8.15
TM65_To_WGS_1984_2	1641	Position_Vector	482.53	-130.596	564.557	-1.042	-0.214	-0.631	8.15
TM75_To_ETRS_1989_2	1953	Position_Vector	482.53	-130.596	564.557	-1.042	-0.214	-0.631	8.15
TM75_To_WGS_1984_2	1954	Position_Vector	482.53	-130.596	564.557	-1.042	-0.214	-0.631	8.15
Ukraine_2000_To_WGS_1984_1	5590	Coordinate_Frame	25.0	-141.0	-78.5	0.0	-0.35	-0.736	0.0
VN_2000_To_WGS_1984_1	5194	Coordinate_Frame	-192.873	-39.382	-111.202	0.00205	0.0005	-0.00335	0.0188
VN_2000_To_WGS_1984_2	6960	Coordinate_Frame	-191.904414	-39.303183	-111.450328	-0.00928836	0.01975479	-0.00427372	0.25290628
WGS_1972_BE_To_WGS_1972_1	1239	Position_Vector	0.0	0.0	-2.6	0.0	0.0	0.26	-0.6063
WGS_1972_BE_To_WGS_1984_1	1240	Position_Vector	0.0	0.0	1.9	0.0	0.0	0.814	-0.38
WGS_1972_To_WGS_1984_1	1237	Position_Vector	0.0	0.0	4.5	0.0	0.0	0.554	0.2263
WGS_1972_To_WGS_1984_2	1238	Position_Vector	0.0	0.0	4.5	0.0	0.0	0.554	0.219
WGS_1984_G1150_To_G1674_Fixed_At_2007.5_KD	108468	Coordinate_Frame	-0.00265	0.00135	0.0277	-0.00027	0.00027	-0.00038	0.00188

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
WGS_1984_G1674_To_G1762_Fixed_At_2012.5_KD	108469	Coordinate_Frame	-0.004	0.003	0.004	0.00027	-0.00027	0.00038	-0.0069
WGS_1984_G1762_To_G2139_Fixed_At_2016.0_NGA	108474	Coordinate_Frame	0.0058	-0.0064	0.007	0.00008	0.00004	0.00012	-0.0044
WGS_1984_G2139_To_G2296_Fixed_At_2024.0_NGA	108477	Coordinate_Frame	0.0026	0.0054	-0.0009	-0.00001	-0.00007	0.0	0.00006
WGS_1984_G2296_To_ITRF2020_NGA	108478	Coordinate_Frame	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WGS_1984_G730_To_G873_Fixed_At_1995.5_KD	108466	Coordinate_Frame	-0.02	-0.016	0.014	0.0	0.0	0.0	-0.00069
WGS_1984_G873_To_G1150_Fixed_At_1999.5_KD	108467	Coordinate_Frame	0.0011	-0.008	0.0143	0.0	0.0	0.00005	0.001505
WGS_1984_Transit_To_G730_Fixed_At_1990.5_KD	108465	Coordinate_Frame	-0.058	0.521	0.239	0.0183	-0.0003	0.007	0.0107
WGS_1984_(ITRF00)_To_NAD_1983	108190	Coordinate_Frame	0.9956	-1.9013	-0.5215	0.025915	0.009426	0.011599	0.00062
WGS_1984_(ITRF00)_To_NAD_1983_2011	108354	Coordinate_Frame	0.9956	-1.9013	-0.5215	0.025915	0.009426	0.011599	0.00062
WGS_1984_(ITRF00)_To_NAD_1983_CORS96	108151	Coordinate_Frame	0.9956	-1.9013	-0.5215	0.025915	0.009426	0.011599	0.00062
WGS_1984_(ITRF00)_To_NAD_1983_HARN	108282	Coordinate_Frame	0.9956	-1.9013	-0.5215	0.025915	0.009426	0.011599	0.00062
WGS_1984_(ITRF08)_To_NAD_1983_2011	108363	Coordinate_Frame	0.99343	-1.90331	-0.52655	0.02591467	0.00942645	0.01159935	0.00171504
WGS_1984_(ITRF08)_To_NAD_1983_MA11	108364	Coordinate_Frame	0.908	-2.0161	-0.5653	0.028971	0.01042	0.008928	0.0011
WGS_1984_(ITRF08)_To_NAD_1983_PA11	108365	Coordinate_Frame	0.908	-2.0161	-0.5653	0.027741	0.013469	0.002712	0.0011
WGS_1984_To_GDA2020_3	9690	Coordinate_Frame	0.06155	-0.01087	-0.04019	-0.0394924	-0.0327221	-0.0328979	-0.009994
WGS_1984_To_IG05(2012)_Intermediate_CRS	9189	Coordinate_Frame	-23.772	-17.49	-17.859	-0.3132	-1.85274	1.67299	5.4262
WGS_1984_To_Israel_CoordFrame	108021	Coordinate_Frame	-24.0024	-17.1032	-17.8444	-0.33009	-1.85269	1.66969	5.4248
WGS_1984_To_KUDAMS_KM_2019	108451	Coordinate_Frame	-6.1075	-6.4151	-4.9032	1.16158	1.29682	1.91627	0.0
WGS_1984_To_MSK_1942	108055	Coordinate_Frame	78.0421780	204.518613	77.4498615	-1.773670970	3.319791732	-1.042607713	-4.9510577
WGS_1984_To_Observatorio_Meteorologico_1965_1	108211	Coordinate_Frame	148.635396	339.470115	157.265381	32.87685	-76.963371	-32.622853	-8.204889
WGS_1984_To_Pulkovo_1942	108056	Coordinate_Frame	78.0421780	204.518613	77.4498615	-1.773670970	3.319791732	-1.042607713	-4.9510577
WGS_1984_To_RT90	108213	Coordinate_Frame	-414.097857	-41.338149	-603.062718	-0.85504343	2.14134652	-7.02272095	0.0
WGS_1984_To_Xrail84_1	108051	Position_Vector	19.019	115.122	-97.287	3.577824	-3.484437	-2.767646	18.6084754
Yacare_To_SIRGAS_1	15963	Position_Vector	-124.45	183.74	44.64	-0.4384	0.5446	-0.9706	-2.1365
Yacare_To_SIRGAS-ROU98_1	5385	Position_Vector	-124.45	183.74	44.64	-0.4384	0.5446	-0.9706	-2.1365
Yacare_To_WGS_1984_2	5386	Position_Vector	-124.45	183.74	44.64	-0.4384	0.5446	-0.9706	-2.1365

Table 6: Geographic (datum) transformations: Molodensky-Badekas method

Geographic (datum) Transformation Name	WKID	dx (m) X0 (m)	dy (m) Y0 (m)	dz (m) Z0 (m)	rx (seconds)	ry (seconds)	rz (seconds)	ds (ppm)
Amersfoort_To_ETRS_1989_4	15740	593.0297	26.0038	478.7534	0.40685733	-0.35073268	1.87034738	4.0812
		3903453.1482	368135.3134	5012970.3051				
Amersfoort_To_ETRS_1989_6	4831	593.0248	25.9984	478.7459	0.39895739	-0.34398782	1.87740164	4.0725

Geographic (datum) Transformation Name	WKID	dx (m) X0 (m)	dy (m) Y0 (m)	dz (m) Z0 (m)	rx (seconds)	ry (seconds)	rz (seconds)	ds (ppm)
		3903453.1482	368135.3134	5012970.3051				
Amersfoort_To_ETRS_1989_MB	1066	593.032	26.0	478.741	0.40939439	-0.35970520	1.86849100	4.0772
		3903453.148	368135.313	5012970.306				
Amersfoort_To_WGS_1984_2008_MB	108457	593.0248	25.9984	478.7459	0.39895739	-0.34398782	1.87740164	4.0725
		3903453.1482	368135.3134	5012970.3051				
Amersfoort_To_WGS_1984_4X	108237	593.0297	26.0038	478.7534	0.40685733	-0.35073268	1.87034738	4.0812
		3903453.1482	368135.3134	5012970.3051				
Bogota_To_MAGNA_Region_1_MB	15730	300.449	293.757	-317.306	12.41421444	-2.99084382	-39.03468639	-20.81615
		1891881.173	-5961263.267	1248403.057				
Bogota_To_MAGNA_Region_2_MB	15731	308.833	282.519	-314.571	-9.22384242	2.42379092	-8.30830721	-13.56561
		1625036.59	-6054644.061	1172969.151				
Bogota_To_MAGNA_Region_3_MB	15732	311.118	289.167	-310.641	-17.24129356	-6.30649282	1.56205225	-5.771882
		1555622.801	-6105353.313	991255.656				
Bogota_To_MAGNA_Region_4_MB	15733	306.666	315.063	-318.837	-16.48504015	-1.66882626	21.69284905	-13.89912
		1845222.398	-6058604.495	769132.398				
Bogota_To_MAGNA_Region_5_MB	15734	307.871	305.803	-311.992	-8.69688329	-4.18803363	-12.80826891	2.181655
		1594396.206	-6143812.398	648855.829				
Bogota_To_MAGNA_Region_6_MB	15735	302.934	307.805	-312.121	6.86687099	-8.25267346	-9.29677766	3.746562
		1558280.49	-6167355.092	491954.2193				
Bogota_To_MAGNA_Region_7_MB	15736	295.282	321.293	-311.001	-9.69049386	1.03196902	-19.75739005	6.325744
		1564000.62	-6180004.879	243257.9554				
Bogota_To_MAGNA_Region_8_MB	15737	302.529	317.979	-319.08	2.80843147	-0.44851375	-2.81018885	-2.199976
		1738580.767	-6120500.388	491473.3064				
CR05_To_Ocotepeque_1935_MB	108013	-213.116	-9.358	74.946	2.3514188	-0.0614669	6.394209	5.22
		617749.7118	-6250547.7336	1102063.6099				

Geographic (datum) Transformation Name	WKID	dx (m) X0 (m)	dy (m) Y0 (m)	dz (m) Z0 (m)	rx (seconds)	ry (seconds)	rz (seconds)	ds (ppm)
Egypt_1907_To_WGS_1984_4	7697	-127.535	113.495	-12.7	1.603747	-0.153612	-5.364408	5.33745
		4854969.728	2945552.013	2868447.61				
GGD_To_ITRF93	108368	-15.6260	126.0343	79.3775	-1.27530	-1.42112	2.69445	4.5284
		3445619.6689	3275369.7555	4236015.9558				
GGD_To_Pulkovo_1942	108368	-15.6260	126.0343	79.3775	-1.27530	-1.42112	2.69445	4.5284
		3445619.6689	3275369.7555	4236015.9558				
Katanga_1955_To_RGRDC_2005_2	4067	-102.283	-10.277	-257.396	-3.976	-0.002	-6.203	12.315
		5580868.818	2826402.46	-1243557.996				
Katanga_1955_To_WGS_1984_2	4068	-102.283	-10.277	-257.396	-3.976	-0.002	-6.203	12.315
		5580868.818	2826402.46	-1243557.996				
Korean_1985_To_KGD2002_1	5189	-145.907	505.034	685.756	-1.162	2.347	1.592	6.342
		-3159521.31	4068151.32	3748113.85				
Korean_1985_To_WGS_1984_1	5191	-145.907	505.034	685.756	-1.162	2.347	1.592	6.342
		-3159521.31	4068151.32	3748113.85				
La_Canoa_To_REGVEN_1	1771	-270.933	115.599	-360.226	-5.266	-1.238	2.381	-5.109
		2464351.594	-5783466.613	974809.808				
La_Canoa_To_SIRGAS	108217	-270.933	115.599	-360.226	-5.266	-1.238	2.381	-5.109
		2464351.594	-5783466.613	974809.808				
La_Canoa_To_WGS_1984_2	1096	-270.933	115.599	-360.226	-5.266	-1.238	2.381	-5.109
		2464351.594	-5783466.613	974809.808				
LUREF_To_ETRS_1989_2	1078	-265.983	76.918	20.182	0.4099	2.9332	-2.6881	0.43
		4098647.674	442843.139	4851251.093				
LUREF_To_ETRS_1989_4	5483	-265.8867	76.9851	20.2667	0.33746	3.09264	-2.53861	0.4598
		4103620.3943	440486.4235	4846923.4558				
LUREF_To_WGS_1984_2	1079	-265.983	76.918	20.182	0.4099	2.9332	-2.6881	0.43

Geographic (datum) Transformation Name	WKID	dx (m) X0 (m)	dy (m) Y0 (m)	dz (m) Z0 (m)	rx (seconds)	ry (seconds)	rz (seconds)	ds (ppm)
		4098647.674	442843.139	4851251.093				
LUREF_To_WGS_1984_4	5484	-265.8867	76.9851	20.2667	0.33746	3.09264	-2.53861	0.4598
		4103620.3943	440486.4235	4846923.4558				
Macao_2008_To_Observatorio_Meteorologico_1965_1	108039	202.865	303.99	155.873	34.067	-76.126	-32.647	-6.096
		-2361757.652	5417232.187	2391453.053				
Macao_1920_to_WGS_1984_1	8438	-202.865	-303.99	-155.873	-34.079	76.126	32.66	6.096
		-2361554.788	5417536.177	2391608.926				
Macao_2008_to_Macao_1920_1	8435	202.865	303.99	155.873	34.067	-76.126	-32.647	-6.096
		-2361757.652	5417232.187	2391453.053				
Observatorio_Meteorologico_1965_To_WGS_1984_2	108234	-203.35	-302.66	-155.23	-33.338	76.825	32.412	7.926
		-2361564.77	5417538.39	2391581.09				
PSAD_1956_To_REGVEN	1769	-270.933	115.599	-360.226	-5.266	-1.238	2.381	-5.109
		2464351.594	-5783466.613	974809.808				
PSAD_1956_To_WGS_1984_13	1095	-270.933	115.599	-360.226	-5.266	-1.238	2.381	-5.109
		2464351.594	-5783466.613	974809.808				
S_JTSK_To_ETRS_1989_3	4829	558.7	68.8	452.2	-8.025	-4.105	-4.295	5.74
		3977358.114	1407223.203	4765441.589				
Tokyo_1892_to_WGS_84_1	5192	-145.907	505.034	685.756	-1.162	2.347	1.592	6.342
		-3159521.31	4068151.32	3748113.85				
WGS_1984_To_Ain_El_Abd_1970_MB	108366	151.9082	251.0907	-0.2276	-0.91646	-1.0469	3.21042	-5.2723
		3641909.2287	4425312.2897	2789434.9636				
WGS_1984_To_Observatorio_Meteorologico_1965_2	108235	203.35	302.66	155.23	33.326	-76.831	-32.4	-7.926
		-2361768.11	5417235.73	2391425.86				
WGS_1984_To_Ocotepeque_1935_MB	108014	-213.116	-9.358	74.946	2.3514188	-0.0614669	6.394209	5.22
		617749.7118	-6250547.7336	1102063.6099				

Table 7: Geographic (datum) transformations: HARN, NADCON, NADCON5, and NTV2 methods

Geographic (datum) Transformation Name	WKID	Method	File name
AGD_1966_To_GDA_1994_10_NTV2_New_South_Wales_and_Victoria	1596	NTv2	Dataset_australia/SEAust_21_06_00
AGD_1966_To_GDA_1994_11_NTV2	1803	NTv2	Dataset_australia/A66_National_13_09_01
AGD_1966_To_GDA_1994_NTV2_Northern_Territory	1507	NTv2	Dataset_australia/nt_0599
AGD_1966_To_GDA_1994_NTV2_Tasmania	1506	NTv2	Dataset_australia/Tas_1098
AGD_1966_To_GDA_1994_NTV2_Victoria	1464	NTv2	Dataset_australia/Vic_0799
AGD_1966_To_WGS_1984_17_NTV2	15786	NTv2	Dataset_australia/A66_National_13_09_01
AGD_1984_To_GDA_1994_3	1559	NTv2	Dataset_australia/wa_0400
AGD_1984_To_GDA_1994_4_NTV2_Western_Australia	1593	NTv2	Dataset_australia/WA_0700
AGD_1984_To_GDA_1994_5_NTV2	1804	NTv2	Dataset_australia/National_84_02_07_01
AGD_1984_To_GDA_1994_NTV2_Queensland	108453	NTv2	Dataset_australia/QLD_0900
AGD_1984_To_WGS_1984_9_NTV2	15785	NTv2	Dataset_australia/National_84_02_07_01
American_Samoa_1962_To_NAD_1983_HARN_3	8662	NADCON5	Dataset_nadcon5.as62.nad83_1993.as.lat.trn.20160901
American_Samoa_1962_To_WGS_1984_2	1694	HARN	Dataset_wshpgn
American_Samoa_1962_To_WGS_1984_3	1695	HARN	Dataset_eshpgn
Amersfoort_To_ETRS_1989_NTV2	7000	NTv2	Dataset_netherlands/rdtrans2008
Amersfoort_To_ETRS_1989_9	9282	NTv2	Dataset_netherlands/rdtrans2018
Amersfoort_To_WGS_1984_NTV2	108042	NTv2	Dataset_netherlands/rdtrans2008
ATS_1977_To_NAD_1983_CSRS_2_NTV2_Prince_Edward_Is	1846	NTv2	Dataset_canada/PE7783V2
ATS_1977_To_NAD_1983_CSRS_NTV2_Maritimes	108302	NTv2	Dataset_canada/GS7783
ATS_1977_To_NAD_1983_CSRS_NTV2_New_Brunswick	1841	NTv2	Dataset_canada/NB7783v2
ATS_1977_To_NAD_1983_CSRS_NTV2_Nova_Scotia	1850	NTv2	Dataset_canada/NS778301
ATS_1977_To_NAD_1983_CSRS_v2_1	9237	NTv2	Dataset_canada/NB7783v2
ATS_1977_To_NAD_1983_CSRS_v2_2	9236	NTv2	Dataset_canada/PE7783V2
ATS_1977_To_NAD_1983_CSRS_v3_3	9235	NTv2	Dataset_canada/NS778301
ATS_1977_To_NAD_1983_CSRS_v6_4_Nova_Scotia	9106	NTv2	Dataset_canada/NS778302
ATS_1977_To_NAD_1983_1_Nova_Scotia	9105	NTv2	Dataset_canada/GS7783
ATS_1977_To_WGS_1984_1	1688	NTv2	Dataset_canada/NB7783v2
ATS_1977_To_WGS_1984_2	1689	NTv2	Dataset_canada/PE7783V2
ATS_1977_To_WGS_1984_3	1851	NTv2	Dataset_canada/NS778301
Belge_1972_To_ETRS_1989_3	8369	NTv2	Dataset_belgium/BD72LB72_ETRS89LB08
CH1903_To_CH1903+_1_NTV2	15486	NTv2	Dataset_switzerland/CHENYX06

Geographic (datum) Transformation Name	WKID	Method	File name
CH1903_To_CHTRF95_1_NTv2	7673	NTv2	Dataset_switzerland/CHENyx06_ETRS
CH1903_To_ETRS_1989_2_NTv2	7674	NTv2	Dataset_switzerland/CHENyx06_ETRS
CH1903_To_WGS_1984_3_NTv2	7788	NTv2	Dataset_switzerland/CHENyx06_ETRS
CH1903+_To_CHTRF95_NTv2	108370	NTv2	Dataset_switzerland/ntv2-ch03p-etrs
CH1903+_To_ETRS_1989_NTv2	108369	NTv2	Dataset_switzerland/ntv2-ch03p-etrs
Corrego_Alegre_1961_To_SIRGAS_2000_1	5525	NTv2	Dataset_brazil/CA61_003
Corrego_Alegre_1961_To_WGS_1984_1	5540	NTv2	Dataset_brazil/CA61_003
Corrego_Alegre_To_SIRGAS_2000_1	5526	NTv2	Dataset_brazil/CA7072_003
Corrego_Alegre_To_WGS_1984_2	5541	NTv2	Dataset_brazil/CA7072_003
D48_To_D96_3tra_NTv2	108476	NTv2	Dataset_slovenia/SI_D48_D96_GRID
Datum_73_To_ETRS_1989_6	6189	NTv2	Dataset_portugal/D73_ETRS89_geo
Datum_73_To_WGS_1984_NTv2	108025	NTv2	Dataset_portugal/D73_ETRS89_geo
Datum_Lisboa_Hayford_To_ETRS_1989_NTv2	108024	NTv2	Dataset_portugal/DLX_ETRS89_geo
Datum_Lisboa_Hayford_To_WGS_1984_NTv2	108023	NTv2	Dataset_portugal/DLX_ETRS89_geo
DHDN_to_ETRS89_(10)	9310	NTv2	Dataset_germany/SeTa2016
DHDN_to_ETRS89_11	9940	NTv2	Dataset_germany/HeTa2010
DHDN_To_ETRS_1989_8_NTv2	15948	NTv2	Dataset_germany/BETA2007
DHDN_to_ETRS89_9	9338	NTv2	Dataset_germany/BWTA2017
DHDN_To_WGS_1984_4_NTv2	15949	NTv2	Dataset_germany/BETA2007
ED50_to_ETRS89_16	9408	NTv2	Dataset_spain/PENR2009
ED50_to_ETRS89_17	9409	NTv2	Dataset_spain/BALR2009
ED50_to_IGM95_1	9735	NTv2	Dataset_italy/35160622_47161840_E50_F89
ED50_to_RDN2008_1	9736	NTv2	Dataset_italy/35160622_47161840_E50_F00
ED_1950_To_ETRS_1989_12_NTv2_Spain_v2	15932	NTv2	Dataset_spain/SPED2ETV2
ED_1950_To_ETRS_1989_NTv2_Baleares	108118	NTv2	Dataset_spain/baleares
ED_1950_To_ETRS_1989_NTv2_BALR2009	108067	NTv2	Dataset_spain/BALR2009
ED_1950_To_ETRS_1989_NTv2_Catalonia	5661	NTv2	Dataset_spain/100800401
ED_1950_To_ETRS_1989_NTv2_Peninsula	108126	NTv2	Dataset_spain/peninsula
ED_1950_To_ETRS_1989_NTv2_PENR2009	108066	NTv2	Dataset_spain/PENR2009
ED_1950_To_WGS_1984_41_NTv2_Spain_v2	15933	NTv2	Dataset_spain/SPED2ETV2
ED_1950_To_WGS_1984_NTv2_Baleares	108119	NTv2	Dataset_spain/baleares
ED_1950_To_WGS_1984_NTv2_BALR2009	108069	NTv2	Dataset_spain/BALR2009
ED_1950_To_WGS_1984_NTv2_Catalonia	108359	NTv2	Dataset_spain/100800401
ED_1950_To_WGS_1984_NTv2_Peninsula	108136	NTv2	Dataset_spain/peninsula
ED_1950_To_WGS_1984_NTv2_PENR2009	108068	NTv2	Dataset_spain/PENR2009

Geographic (datum) Transformation Name	WKID	Method	File name
ETRS89_to_AbInvA96_2020-IRF_1	9386	NTv2	Dataset_uk/TN15-ETRS89-to-AbInvA96_2020-IRF
ETRS89_to_CNH22-IRF_1	10192	NTv2	Dataset_TN15-ETRS89-to-CNH22-IRF
ETRS89_to_COV23-IRF_1	10469	NTv2	Dataset_TN15-ETRS89-to-COV23-IRF
ETRS89_to_CWS13-IRF_1	10197	NTv2	Dataset_TN15-ETRS89-to-CWS13-IRF
ETRS89_to_DIBA15-IRF_1	10205	NTv2	Dataset_TN15-ETRS89-to-DIBA15-IRF
ETRS89_to_DoPw22-IRF_1	10181	NTv2	Dataset_TN15-ETRS89-to-DoPw22-IRF
ETRS89_to_ECML14_IRF_1	10624	NTv2	Dataset_TN15-ETRS89-to-ECML14-IRF
ETRS89_to_ECML14_NB-IRF_1	9759	NTv2	Dataset_uk/TN15-ETRS89-to-ECML14_NB-IRF
ETRS89_to_EOS21-IRF_1	9740	NTv2	Dataset_uk/TN15-ETRS89-to-EOS21-IRF
ETRS89_to_EWR2-IRF_1	9764	NTv2	Dataset_uk/TN15-ETRS89-to-EWR2-IRF
ETRS89_to_GBK19-IRF_1	9454	NTv2	Dataset_uk/TN15-ETRS89-to-GBK19-IRF
ETRS89_to_GSB-IRF_1	10263	NTv2	Dataset_gsb_2022
ETRS89_to_GS-IRF_1	10259	NTv2	Dataset_gs_2022
ETRS89_to_GWPBS22-IRF_1	10210	NTv2	Dataset_TN15-ETRS89-to-GWPBS22-IRF
ETRS89_to_GWWAB22-IRF_1	10215	NTv2	Dataset_TN15-ETRS89-to-GWWAB22-IRF
ETRS89_to_GWWWA22-IRF_1	10220	NTv2	Dataset_TN15-ETRS89-to-GWWWA22-IRF
ETRS89_to_KK-IRF_1	10267	NTv2	Dataset_kk_2022
ETRS89_to_MALS09-IRF_1	10225	NTv2	Dataset_TN15-ETRS89-to-MALS09-IRF
ETRS89_to_MML07-IRF_1	9369	NTv2	Dataset_uk/TN15-ETRS89-to-MML07-IRF
ETRS89_to_Ostenfeld-IRF_1	10271	NTv2	Dataset_os_2022
ETRS89_to_OxWo08-IRF_1	10230	NTv2	Dataset_TN15-ETRS89-to-OxWo08-IRF
ETRS89_to_RBEP12-IRF_1	10278	NTv2	Dataset_TN15-ETRS89-to-RBEP12-IRF
ETRS89_to_S34J-IRF_1	10161	NTv2	Dataset_s34j_2022
ETRS89_to_S34S-IRF_1	10251	NTv2	Dataset_s34s_2022
ETRS89_to_S45B-IRF_1	10255	NTv2	Dataset_s45b_2022
ETRS89_to_ShAb07-IRF_1	10186	NTv2	Dataset_TN15-ETRS89-to-ShAb07-IRF
ETRS89_to_SMITB20-IRF_1	10273	NTv2	Dataset_TN15-ETRS89-to-SMITB20-IRF
ETRS89_to_SYC20-IRF_1	10238	NTv2	Dataset_TN15-ETRS89-to-SYC20-IRF
ETRS89_to_TPEN11-IRF_1	9365	NTv2	Dataset_uk/TN15-ETRS89-to-TPEN11-IRF
ETRS89_to_WC05_IRF_1	10629	NTv2	Dataset_TN15-ETRS89-to-WC05-IRF
ETRS_1989_to_EBBWV14-IRF_1	9941	NTv2	Dataset_uk/TN15-ETRS89-to-EBBWV14-IRF
ETRS_1989_to_FNL22-IRF_1	9975	NTv2	Dataset_uk/TN15-ETRS89-to-FNL22-IRF
ETRS_1989_to_HULLEE13-IRF_1	9965	NTv2	Dataset_uk/TN15-ETRS89-to-HULLEE13-IRF
ETRS_1989_to_MOLDOR11-IRF_1	9878	NTv2	Dataset_uk/TN15-ETRS89-to-MOLDOR11-IRF
ETRS_1989_to_MRH21-IRF_1	9867	NTv2	Dataset_uk/TN15-ETRS89-to-MRH21-IRF
ETRS_1989_to_MWC18-IRF_1	10108	NTv2	Dataset_uk/TN15-ETRS89-to-MWC18-IRF

Geographic (datum) Transformation Name	WKID	Method	File name
ETRS_1989_To_NTF_3_NTV2	15959	NTv2	Dataset_france/rgf93_ntf
ETRS_1989_to_SCM22-IRF_1	9970	NTv2	Dataset_uk/TN15-ETRS89-to-SCM22-IRF
GDA_1994_To_GDA2020_NTV2_2_Conformal_and_Distortion	8447	NTv2	Dataset_australia/GDA94_GDA2020_conformal_and_distortion
GDA_1994_To_GDA2020_NTV2_3_Conformal	8446	NTv2	Dataset_australia/GDA94_GDA2020_conformal
GDA_1994_To_GDA2020_NTV2_4_Christmas	8444	NTv2	Dataset_australia/GDA94_GDA2020_conformal_christmas_island
GDA_1994_To_GDA2020_NTV2_5_Cocos_Keeling	8445	NTv2	Dataset_australia/GDA94_GDA2020_conformal_cocos_island
GDA_1994_To_GDA2020_NTV2_CPD_plus_Lord_Howe_Norfolk	108443	NTv2	Dataset_australia/gda94_gda2020_CPD_plus_lordhowe_norfolk
GDA_1994_To_WGS_1984_NTV2_CPD_plus_Lord_Howe_Norfolk	108441	NTv2	Dataset_australia/gda94_gda2020_CPD_plus_lordhowe_norfolk
GDA_1994_To_WGS_1984_3	9689	NTv2	Dataset_australia/GDA94_GDA2020_conformal_and_distortion
Guam_1963_To_NAD_1983_HARN_2	8665	NADCON5	Dataset_nadcon5.gu63.nad83_1993.guamcnmi.lat.trn.20160901
Guam_1963_To_WGS_1984_2	1069	HARN	Dataset_guhpgn
HS2-IRF_to_ETRS89_1	9302	NTv2	Dataset_uk/HS2TN15_NTV2
ISN_1993_To_ISN_2004	108214	NADCON	Dataset_icegrid2004
IGM95_to_RDN2008_1	9737	NTv2	Dataset_italy/35160622_47161840_F89_F00
ISN_2004_To_ISN_1993	108216	NADCON	Dataset_ICEGRID93
ISN2004_To_ISN2016_1	9233	NTv2	Dataset_iceland/ISN2004_ISN2016
ISN93_To_ISN2016_1	9232	NTv2	Dataset_iceland/ISN93_ISN2016
JGD_2000_To_JGD_2011_NTV2_1	6713	NTv2	Dataset_japan/touhokutaiheiyouuki2011
JGD2000_to_WGS_1984_2	9896	NTv2	Dataset_japan/touhokutaiheiyouuki2011
Lisbon_To_ETRS_1989_4	6188	NTv2	Dataset_portugal/DLX_ETRS89_geo
MGI_To_ETRS_1989_5	5891	NTv2	Dataset_austria/AT_GIS_GRID
MGI_To_ETRS_1989_8	9910	NTv2	Dataset_austria/AT_GIS_GRID_2021_09_28
MGI_1901_To_Slovenia_1996_3tra_NTV2	108475	NTv2	Dataset_slovenia/SI_D48_D96_GRID
MGI_1901_to_SRB-ETRS89_9	9496	NTv2	Dataset_serbia/MGI1901_TO_SRBETRS89_NTV2
Monte_Mario_to_ED50_1	9732	NTv2	Dataset_italy/35160622_47161840_R40_E50
Monte_Mario_to_IGM95_4	9733	NTv2	Dataset_italy/35160622_47161840_R40_F89
Monte_Mario_to_RDN2008_5	9734	NTv2	Dataset_italy/35160622_47161840_R40_F00
NAD_1927_CGQ77_To_NAD_1983_2	1575	NTv2	Dataset_canada/CGQ77-83
NAD_1927_CGQ77_To_NAD_1983_CSRS	1845	NTv2	Dataset_canada/CGQ77-98
NAD_1927_CGQ77_To_NAD_1983_CSRS_v2_1	9240	NTv2	Dataset_canada/CGQ77-98
NAD_1927_CGQ77_To_WGS_1984_3	1691	NTv2	Dataset_canada/CGQ77-98
NAD_1927_Def76_To_NAD_1983_CSRS_v3_1_Ontario	9109	NTv2	Dataset_canada/ON76CSv1
NAD_1927_DEF_1976_To_NAD_1983_NTV2_Ontario	1463	NTv2	Dataset_canada/May76V20
NAD_1927_DEF_1976_To_WGS_1984_1	1690	NTv2	Dataset_canada/May76V20

Geographic (datum) Transformation Name	WKID	Method	File name
NAD_1927_To_NAD_1983_6	1573	NTv2	Dataset_canada/QUE27-83
NAD_1927_To_NAD_1983_7	8555	NADCON5	Dataset_nadcon5.nad27.nad83_1986.conus.lat.trn.20160901
NAD_1927_To_NAD_1983_8	8549	NADCON5	Dataset_nadcon5.nad27.nad83_1986.alaska.lat.trn.20160901
NAD_1927_To_NAD_1983_9_Saskatchewan	9111	NTv2	Dataset_SK27-83
NAD_1927_to_NAD83(CSRs)v2_2	9886	NTv2	Dataset_canada/SK27-98
NAD_1927_To_NAD_1983_CSRS_1	1844	NTv2	Dataset_canada/QUE27-98
NAD_1927_To_NAD_1983_CSRS_2	1847	NTv2	Dataset_canada/SK27-98
NAD_1927_To_NAD_1983_CSRS_4	6209	NTv2	Dataset_canada/NB2783v2
NAD_1927_To_NAD_1983_CSRS_NTV2_New_Brunswick	108040	NTv2	Dataset_canada/NB2783v2
NAD_1927_To_NAD_1983_CSRS_v2_1	9239	NTv2	Dataset_canada/QUE27-98
NAD_1927_To_NAD_1983_CSRS_v2_4	9238	NTv2	Dataset_canada/NB2783v2
NAD_1927_To_NAD_1983_CSRS_v2_7_British_Columbia	9112	NTv2	Dataset_canada/BC_27_98
NAD_1927_To_NAD_1983_CSRS_v3_2	9242	NTv2	Dataset_canada/SK27-98
NAD_1927_To_NAD_1983_CSRS_v3_5_Ontario	9107	NTv2	Dataset_canada/ON27CSv1
NAD_1927_To_NAD_1983_CSRS_v3_6_Toronto	9108	NTv2	Dataset_canada/TOR27CSv1
NAD_1927_To_NAD_1983_CSRS_v3_8_BC_CRD	9113	NTv2	Dataset_canada/CRD27_00
NAD_1927_To_NAD_1983_CSRS_v3_9_BC_NVI	9114	NTv2	Dataset_canada/NVI27_05
NAD_1983_To_NAD_1983_CSRS_v4_9_BC_mainland	9119	NTv2	Dataset_canada/BC_93_05
NAD_1927_To_NAD_1983_CSRS_v4_10_BC_mainland	9115	NTv2	Dataset_BC_27_05
NAD_1927_To_NAD_1983_NTV2_Canada	1313	NTv2	Dataset_canada/Ntv2_0
NAD_1927_To_WGS_1984_32	1703	NTv2	Dataset_canada/SK27-98
NAD_1927_To_WGS_1984_33	1693	NTv2	Dataset_canada/Ntv2_0
NAD_1927_To_WGS_1984_34	1692	NTv2	Dataset_canada/QUE27-98
NAD_1927_To_WGS_1984_79_CONUS	15851	NADCON	Dataset_conus
NAD_1927_To_WGS_1984_85	15864	NADCON	Dataset_alaska
NAD_1983_CSRS_To_NAD_1983_CSRS_v2_Quebec	108382	NTv2	Dataset_canada/NA83SCRS
NAD_1983_CSRS_v2_To_NAD_1983_CSRS_v3_1_BC_CRD	9120	NTv2	Dataset_CRD98_00
NAD_1983_CSRS_v2_To_NAD_1983_CSRS_v3_2_BC_NVI	9121	NTv2	Dataset_NVI98_05
NAD_1983_CSRS_v2_To_NAD_1983_CSRS_v4_1	10615	NTv2	Dataset_BC_98_05
NAD_1983_FBN_To_MA11_NADCON5_3D_Guam_CNMI_1	8866	NADCON5	Dataset_nadcon5.nad83_2002.nad83_ma11.guamcnmi.lat.trn.20160901
NAD_1983_FBN_To_NSRS2007_NADCON5_3D_CONUS_1	8862	NADCON5	Dataset_nadcon5.nad83_fbn.nad83_2007.conus.lat.trn.20160901
NAD_1983_FBN_To_NSRS2007_NADCON5_3D_PRVI_2	8868	NADCON5	Dataset_nadcon5.nad83_2002.nad83_2007.prvi.lat.trn.20160901
NAD_1983_FBN_To_PA11_NADCON5_3D_American_Samoa_1	8864	NADCON5	Dataset_nadcon5.nad83_2002.nad83_pa11.as.lat.trn.20160901
NAD_1983_HARN_Corrected_To_FBN_NADCON5_3D_PRVI_1	8867	NADCON5	Dataset_nadcon5.nad83_1997.nad83_2002.prvi.lat.trn.20160901
NAD_1983_HARN_To_FBN_NADCON5_3D_American_Samoa_2	8863	NADCON5	Dataset_nadcon5.nad83_1993.nad83_2002.as.lat.trn.20160901
NAD_1983_HARN_To_FBN_NADCON5_3D_CONUS_1	8861	NADCON5	Dataset_nadcon5.nad83_harn.nad83_fbn.conus.lat.trn.20160901

Geographic (datum) Transformation Name	WKID	Method	File name
NAD_1983_HARN_To_FBN_NADCON5_3D_Guam_CNMI_3	8865	NADCON5	Dataset_nadcon5.nad83_1993.nad83_2002.guamcnmi.lat.trn.20160901
NAD_1983_HARN_To_HARN_Corrected_NADCON5_3D_PRVI_1	9181	NADCON5	Dataset_nadcon5.nad83_1993.nad83_1997.prvi.lat.trn.20160901
NAD_1983_HARN_To_NAD_1983_NSRS2007_2	8551	NADCON5	Dataset_nadcon5.nad83_1992.nad83_2007.alaska.lat.trn.20160901
NAD_1983_HARN_To_PA11_NADCON5_3D_Hawaii_1	8661	NADCON5	Dataset_nadcon5.nad83_1993.nad83_pa11.hawaii.lat.trn.20160901
NAD_1983_NSRS2007_To_2011_NADCON5_3D_CONUS_1	8559	NADCON5	Dataset_nadcon5.nad83_2007.nad83_2011.conus.lat.trn.20160901
NAD_1983_NSRS2007_To_2011_NADCON5_3D_PRVI_3	8673	NADCON5	Dataset_nadcon5.nad83_2007.nad83_2011.prvi.lat.trn.20160901
NAD_1983_NSRS2007_To_NAD_1983_2011_2	8552	NADCON5	Dataset_nadcon5.nad83_2007.nad83_2011.alaska.lat.trn.20160901
NAD_1983_To_NAD_1983_CSRS_1	1843	NTv2	Dataset_canada/NAD83-98
NAD_1983_To_NAD_1983_CSRS_2	1848	NTv2	Dataset_canada/SK83-98
NAD_1983_To_NAD_1983_CSRS_3	1849	NTv2	Dataset_canada/AB_CSRS
NAD_1983_To_NAD_1983_CSRS_v2_1	9241	NTv2	Dataset_canada/NAD83-98
NAD_1983_to_NAD83(CSRS)v2_2	9887	NTv2	Dataset_canada/SK83-98
NAD_1983_To_NAD_1983_CSRS_v2_6_BC	9116	NTv2	Dataset_BC_93_98
NAD_1983_To_NAD_1983_CSRS_v3_2	9243	NTv2	Dataset_canada/SK83-98
NAD_1983_To_NAD_1983_CSRS_v3_5_Ontario	9110	NTv2	Dataset_ON83CSv1
NAD_1983_To_NAD_1983_CSRS_v3_7_BC_CRD	9117	NTv2	Dataset_CRD93_00
NAD_1983_To_NAD_1983_CSRS_v3_8_BC_NVI	9118	NTv2	Dataset_NVI93_05
NAD_1983_To_NAD_1983_CSRS_v4_3	9244	NTv2	Dataset_canada/AB_CSRS
NAD_1983_To_NAD_1983_CSRS_v4_9_BC_mainland	9119	NTv2	Dataset_canada/BC_93_05
NAD_1983_To_NAD_1983_HARN_47	8556	NADCON5	Dataset_nadcon5.nad83_1986.nad83_harn.conus.lat.trn.20160901
NAD_1983_To_NAD_1983_HARN_48	8550	NADCON5	Dataset_nadcon5.nad83_1986.nad83_1992.alaska.lat.trn.20160901
NAD_1983_To_NAD_1983_HARN_49	8660	NADCON5	Dataset_nadcon5.nad83_1986.nad83_1993.hawaii.lat.trn.20160901
NAD_1983_To_NAD_1983_HARN_50	8669	NADCON5	Dataset_nadcon5.nad83_1986.nad83_1993.prvi.lat.trn.20160901
NAD_1983_To_WGS_1984_6	1696	NTv2	Dataset_canada/NAD83-98
NAD_1983_To_WGS_1984_7	1697	NTv2	Dataset_canada/SK83-98
NAD_1983_To_WGS_1984_8	1702	NTv2	Dataset_canada/AB_CSRS
NAD_1983_To_WGS_1984_Alabama_21	1717	HARN	Dataset_alhpgn
NAD_1983_To_WGS_1984_Arizona_32	1728	HARN	Dataset_azhpgn
NAD_1983_To_WGS_1984_Arkansas_12	1708	HARN	Dataset_arhpgn
NAD_1983_To_WGS_1984_Colorado_16	1712	HARN	Dataset_cohpgn
NAD_1983_To_WGS_1984_CT_MA_NH_RI_VT_29	1725	HARN	Dataset_nehpgn
NAD_1983_To_WGS_1984_DE_MD_24	1720	HARN	Dataset_mdhpgn
NAD_1983_To_WGS_1984_eastern_ID_MT_19	1715	HARN	Dataset_emhpgn
NAD_1983_To_WGS_1984_east_Texas_38	1734	HARN	Dataset_ethpgn
NAD_1983_To_WGS_1984_Florida_18	1714	HARN	Dataset_flhpgn

Geographic (datum) Transformation Name	WKID	Method	File name
NAD_1983_To_WGS_1984_Georgia_17	1713	HARN	Dataset_gahpgn
NAD_1983_To_WGS_1984_Hawaii_onshore_45	1741	HARN	Dataset_hihpgn
NAD_1983_To_WGS_1984_Illinois_52	1748	HARN	Dataset_ilhpgn
NAD_1983_To_WGS_1984_Indiana_46	1742	HARN	Dataset_inhpgn
NAD_1983_To_WGS_1984_Iowa_13	1709	HARN	Dataset_iahpgn
NAD_1983_To_WGS_1984_Kansas_47	1743	HARN	Dataset_kshpgn
NAD_1983_To_WGS_1984_Kentucky_22	1718	HARN	Dataset_kyhpgn
NAD_1983_To_WGS_1984_Louisiana_23	1719	HARN	Dataset_lahpgn
NAD_1983_To_WGS_1984_Maine_25	1721	HARN	Dataset_mehpgn
NAD_1983_To_WGS_1984_Michigan_26	1722	HARN	Dataset_mihpgn
NAD_1983_To_WGS_1984_Minnesota_14	1710	HARN	Dataset_mnhpgn
NAD_1983_To_WGS_1984_Mississippi_27	1723	HARN	Dataset_mshpgn
NAD_1983_To_WGS_1984_Missouri_15	1711	HARN	Dataset_mohpgn
NAD_1983_To_WGS_1984_Nebraska_28	1724	HARN	Dataset_nbhpgn
NAD_1983_To_WGS_1984_Nevada_48	1744	HARN	Dataset_nvhp gn
NAD_1983_To_WGS_1984_New_Jersey_53	1749	HARN	Dataset_njhpgn
NAD_1983_To_WGS_1984_New_Mexico_30	1726	HARN	Dataset_nmhpgn
NAD_1983_To_WGS_1984_New_York_31	1727	HARN	Dataset_nyhpgn
NAD_1983_To_WGS_1984_North_Carolina_55	15835	HARN	Dataset_nchpgn
NAD_1983_To_WGS_1984_North_Dakota_33	1729	HARN	Dataset_ndhpgn
NAD_1983_To_WGS_1984_northern_California_43	1739	HARN	Dataset_cnhpgn
NAD_1983_To_WGS_1984_Ohio_49	1745	HARN	Dataset_ohhpgn
NAD_1983_To_WGS_1984_Oklahoma_34	1730	HARN	Dataset_okhpgn
NAD_1983_To_WGS_1984_OR_WA_41	1737	HARN	Dataset_wohpgn
NAD_1983_To_WGS_1984_Pennsylvania_57	15839	HARN	Dataset_pahpgn
NAD_1983_To_WGS_1984_PR_VI_onshore_35	1731	HARN	Dataset_pvhpgn
NAD_1983_To_WGS_1984_South_Carolina_56	15837	HARN	Dataset_schpgn
NAD_1983_To_WGS_1984_South_Dakota_36	1732	HARN	Dataset_sdhpgn
NAD_1983_To_WGS_1984_southern_California_54	1750	HARN	Dataset_cshpgn
NAD_1983_To_WGS_1984_Tennessee_37	1733	HARN	Dataset_tnhpgn
NAD_1983_To_WGS_1984_Utah_50	1746	HARN	Dataset_uthpgn
NAD_1983_To_WGS_1984_Virginia_40	1736	HARN	Dataset_vahpgn
NAD_1983_To_WGS_1984_western_ID_MT_20	1716	HARN	Dataset_wmhpgn
NAD_1983_To_WGS_1984_west_Texas_39	1735	HARN	Dataset_wthpgn
NAD_1983_To_WGS_1984_West_Virginia_51	1747	HARN	Dataset_vvhpgn
NAD_1983_To_WGS_1984_Wisconsin_42	1738	HARN	Dataset_wihpgn

Geographic (datum) Transformation Name	WKID	Method	File name
NAD_1983_To_WGS_1984_Wyoming_44	1740	HARN	Dataset_wyhpgn
NAD83_to_NAD83(CSRs)v6_10	9550	NTv2	Dataset_canada/NLCSRSV4A
NAD83_to_NAD83(CSRs)v7_1	9795	NTv2	Dataset_canada/ABCRSV7
New_Zealand_1949_To_NZGD_2000_3_NTv2	1568	NTv2	Dataset_newzealand/nzgd2kgrid0005
NTF_(Paris)_to_RGF93_v1_2	7811	NTv2	Dataset_rgf93_ntf
NZGD_1949_To_WGS_1984_3_NTv2	1670	NTv2	Dataset_newzealand/nzgd2kgrid0005
Old_Hawaiian_To_NAD_1983_2	8561	NADCON5	Dataset_nadcon5.ohd.nad83_1986.hawaii.lat.trn.20160901
Old_Hawaiian_To_WGS_1984_8	15840	NADCON	Dataset_hawaii
OSGB_1936_To_ETRS_1989_1	5338	NTv2	Dataset_uk/OSTN02_NTv2
OSGB36_to_ETRS89_2	7709	NTv2	Dataset_uk/OSTN15_NTv2_OSGBtoETRS
OSGB_1936_To_WGS_1984_7	5339	NTv2	Dataset_uk/OSTN02_NTv2
OSGB36_to_WGS_1984_9	7710	NTv2	Dataset_uk/OSTN15_NTv2_OSGBtoETRS
OSGB_1936_To_Xrail84_NTv2	108059	NTv2	Dataset_uk/osgb36_xrail84
PD/83_To_WGS_1984_1_NTv2	15955	NTv2	Dataset_germany/BETA2007
PD_83_to_ETRS89_2	10677	NTv2	Dataset_germany/de_tlb_g_thueringen_NTv2gridTH
Puerto_Rico_To_NAD_1983_2	8668	NADCON5	Dataset_nadcon5.pr40.nad83_1986.prvi.lat.trn.20160901
Puerto_Rico_To_WGS_1984_4	15841	NADCON	Dataset_prvi
RD/83_To_ETRS_1989_2_NTv2	6948	NTv2	Dataset_germany/NTv2_SN
RD/83_To_WGS_1984_1_NTv2	15954	NTv2	Dataset_germany/BETA2007
RGF_1993_To_NTF_NTv2	15958	NTv2	Dataset_france/rgf93_ntf
RGF93_v2b_to_NTF_2	9891	NTv2	Dataset_france/rgf93_ntf
RGF93_v2_to_NTF_2	9890	NTv2	Dataset_france/rgf93_ntf
RGNC_1991-93_To_IGN72_Grande_Terre_6_NTv2	15962	NTv2	Dataset_france/RGNC1991_IGN72GrandeTerre
RGNC_1991-93_To_NEA74_Noumea_4_NTv2	1295	NTv2	Dataset_france/RGNC1991_NEA74Noumea
RGNC_1991_To_IGN72_Grande_Terre_NTv2	108471	NTv2	Dataset_france/RGNC1991_IGN72GrandeTerre
RGNC_1991_To_NEA74_Noumea_NTv2	108472	NTv2	Dataset_france/RGNC1991_NEA74Noumea
SAD_1969_96_To_SIRGAS_2000_1	5529	NTv2	Dataset_brazil/SAD96_003
SAD_1969_96_To_WGS_1984_1	5543	NTv2	Dataset_brazil/SAD96_003
SAD_1969_To_SIRGAS_2000_2	5528	NTv2	Dataset_brazil/SAD69_003
SAD_1969_To_WGS_1984_15	5542	NTv2	Dataset_brazil/SAD69_003
S-JTSK [JTSK03] To S-JTSK_1	8364	NADCON	Dataset_Slovakia_JTSK03_to_JTSK
SIRGAS_1995_to_SIRGAS_2000_1	9979	NTv2	Dataset_chile/SIRGAS1995-to-SIRGAS2000
SIRGAS_2000_to_SIRGAS-CON_SIR17P01_1	9980	NTv2	Dataset_chile/SIRGAS2000-to-SIRGAS-CONSIR17P01
St_George_Island_To_NAD_1983_2	8546	NADCON5	Dataset_nadcon5.sg1952.nad83_1986.stgeorge.lat.trn.20160901
St_George_To_WGS_1984_1	1698	NADCON	Dataset_stgeorge

Geographic (datum) Transformation Name	WKID	Method	File name
St_Lawrence_Island_To_NAD_1983_2	8547	NADCON5	Dataset_nadcon5.sl1952.nad83_1986.stlawrence.lat.trn.20160901
St_Lawrence_To_WGS_1984_1	1699	NADCON	Dataset_stlrc
St_Paul_Island_To_NAD_1983_2	8548	NADCON5	Dataset_nadcon5.sp1952.nad83_1986.stpaul.lat.trn.20160901
St_Paul_To_WGS_1984_1	1700	NADCON	Dataset_stpaul
TM75_To_ETRS_1989_3_NTv2	6946	NTv2	Dataset_ireland/tm75_etr89
TM75_To_WGS_1984_4_NTv2	6947	NTv2	Dataset_ireland/tm75_etr89
Tokyo_To_JGD_2000_NTv2	6712	NTv2	Dataset_japan/ky2jgd
Tokyo_To_JGD_2011_2_NTv2	6740	NTv2	Dataset_japan/ky2jgd
Tokyo_To_WGS_1984_NTv2	108109	NTv2	Dataset_japan/ky2jgd
WGS_1984_To_GDA2020_4	9691	NTv2	Dataset_australia/GDA94_GDA2020_conformal_and_distortion
WGS_1984_To_GDA2020_NTv2_CPD_plus_Lord_Howe_Norfolk	108440	NTv2	Dataset_australia/gda94_gda2020_CPD_plus_lordhowe_norfolk
WGS_1984_To_NTF_NTv2	15960	NTv2	Dataset_france/rgf93_ntf

Table 8: Geographic transformation methods: well-known IDs

Geographic Transformation Method Name	WKID
Bursa_Wolf	109607
Coordinate_Frame	9607
Geocentric_Translation	9603
GEOCON	109614
Geographic_2D_Offset	9619
HARN	109613
Longitude_Rotation	9601
Molodensky	9604
Molodensky_Abridged	9605
Molodensky_Badekas	9636
NADCON	9613
NADCON5	109615
NTv2	9615
Null	109600
Position_Vector	9606
Unit_Change	109601

Table 9: Geographic transformation methods: parameters

Geographic Transformation Method Name	Parameter Name	Default Value	Array Position	Default Unit
Bursa_Wolf	X_Axis_Translation	0	0	Meter
	Y_Axis_Translation	0	1	Meter
	Z_Axis_Translation	0	2	Meter
	X_Axis_Rotation	0	3	Arc-second
	Y_Axis_Rotation	0	4	Arc-second
	Z_Axis_Rotation	0	5	Arc-second
	Scale_Difference	0	6	Parts-per-million (PPM)
Coordinate_Frame	X_Axis_Translation	0	0	Meter
	Y_Axis_Translation	0	1	Meter
	Z_Axis_Translation	0	2	Meter
	X_Axis_Rotation	0	3	Arc-second
	Y_Axis_Rotation	0	4	Arc-second
	Z_Axis_Rotation	0	5	Arc-second
	Scale_Difference	0	6	Parts-per-million (PPM)
Geocentric_Translation	X_Axis_Translation	0	0	Meter
	Y_Axis_Translation	0	1	Meter
	Z_Axis_Translation	0	2	Meter
GEOCON	Dataset_	0	15	File name
Geographic_2D_Offset	Longitude_Offset	0	10	Arc-second
	Latitude_Offset	0	11	Arc-second
HARN	Dataset_	0	15	File name
Longitude_Rotation				
Molodensky	X_Axis_Translation	0	0	Meter
	Y_Axis_Translation	0	1	Meter

Geographic Transformation Method Name	Parameter Name	Default Value	Array Position	Default Unit
	Z_Axis_Translation	0	2	Meter
Molodensky_Abridged	X_Axis_Translation	0	0	Meter
	Y_Axis_Translation	0	1	Meter
	Z_Axis_Translation	0	2	Meter
Molodensky_Badekas	X_Axis_Translation	0	0	Meter
	Y_Axis_Translation	0	1	Meter
	Z_Axis_Translation	0	2	Meter
	X_Axis_Rotation	0	3	Arc-second
	Y_Axis_Rotation	0	4	Arc-second
	Z_Axis_Rotation	0	5	Arc-second
	Scale_Difference	0	6	Parts-per-million (PPM)
	X_Coordinate_of_Rotation_Origin	0	7	Meter
	Y_Coordinate_of_Rotation_Origin	0	8	Meter
	Z_Coordinate_of_Rotation_Origin	0	9	Meter
NADCON	Dataset_	0	15	File name
NADCON5	Dataset_	0	15	File name
NTv2	Dataset_	0	15	File name
Null				
Position_Vector	X_Axis_Translation	0	0	Meter
	Y_Axis_Translation	0	1	Meter
	Z_Axis_Translation	0	2	Meter
	X_Axis_Rotation	0	3	Arc-second
	Y_Axis_Rotation	0	4	Arc-second
	Z_Axis_Rotation	0	5	Arc-second
	Scale_Difference	0	6	Parts-per-million (PPM)

Geographic Transformation Method Name	Parameter Name	Default Value	Array Position	Default Unit
Unit_Change				

Table 10: Vertical transformations: well-known IDs, accuracies, and areas of use

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
AIOC95_Depth_To_Caspian_1	5403	0	Azerbaijan - offshore and Sangachal	37.89	48.66	42.59	51.73
Alicante_Height_To_EVRF2019_Height_1	9646	0.082	Spain - mainland onshore	35.95	-9.37	43.82	3.39
Alicante_Height_To_EVRF2019_Mean-Tide_Height_1	9647	0.078	Spain - mainland onshore	35.95	-9.37	43.82	3.39
Alicante_To_EVRS_2000_1	5429	0.1	Spain and Gibraltar - onshore	35.95	-9.37	43.82	3.39
Antalya_Height_To_EVRF2019_Height_2	9551	0.02	Turkey - onshore	35.81	25.62	42.15	44.83
Antalya_Height_To_EVRF2019_Mean-Tide_Height_2	9552	0.02	Turkey - onshore	35.81	25.62	42.15	44.83
Auckland_1946_Height_To_NZGD2000_Height_1	110063	0.12	New Zealand - North Island - Auckland vcrs	-37.67	174	-36.12	176.17
Baltic_1957_Height_To_EVRF2019_Height_1	9745	0.01	Czechia	48.58	12.09	51.06	18.86
Baltic_1957_Height_To_EVRF2019_Mean-Tide_Height_1	9744	0.01	Czechia	48.58	12.09	51.06	18.86
Baltic_1977_Height_To_EVRF2019_Height_1	9902	0.068	Ukraine - onshore	44.32	22.15	52.38	40.18
Baltic_1977_Height_To_EVRF2019_Mean-Tide_Height_1	9903	0.064	Ukraine - onshore	44.32	22.15	52.38	40.18
Baltic_1982_Height_To_EVRF_2007_Height_1	5200	0.1	Bulgaria - onshore	41.24	22.36	44.23	28.68
Baltic_1982_Height_To_EVRF2019_Height_1	9571	0.048	Bulgaria - onshore	41.24	22.36	44.23	28.68
Baltic_1982_Height_To_EVRF2019_Mean-Tide_Height_1	9572	0.042	Bulgaria - onshore	41.24	22.36	44.23	28.68
Baltic_1982_To_EVRS_2000_1	5416	0.1	Bulgaria - onshore	41.24	22.36	44.23	28.68
Baltic_1986_Height_To_EVRF2007-PL_Height_1	9662	0.04	Poland - onshore	49	14.14	54.89	24.15
Baltic_1986_Height_To_EVRF2019_Height_1	9652	0.02	Poland - onshore	49	14.14	54.89	24.15
Baltic_1986_Height_To_EVRF2019_Mean-Tide_Height_1	9653	0.02	Poland - onshore	49	14.14	54.89	24.15
Baltic_Depth_To_AIOC95_Depth_1	5445	0	Azerbaijan - offshore and Sangachal	37.89	48.66	42.59	51.73

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Baltic_Depth_To_AIOC95_Height_1	5446	0	Azerbaijan - offshore and Sangachal	37.89	48.66	42.59	51.73
Baltic_Depth_To_Caspian_Depth_1	5440	0	Asia - FSU - Caspian Sea	37.35	46.95	46.97	53.93
Baltic_Depth_To_Caspian_Height_1	5441	0	Asia - FSU - Caspian Sea	37.35	46.95	46.97	53.93
Baltic_Height_To_AIOC95_Height_1	5443	0	Azerbaijan - offshore and Sangachal	37.89	48.66	42.59	51.73
Baltic_Height_To_Baltic_Depth_1	5442	0	Europe - FSU, Czechoslovakia - onshore	35.14	12.09	77.79	-169.57
Baltic_Height_To_Black_Sea_Height_1	5447	0	Georgia - onshore	41.04	39.99	43.59	46.72
Baltic_Height_To_Caspian_Height_1	5438	0	Asia - FSU - Caspian Sea	37.35	46.95	46.97	53.93
Baltic_Height_To_EVRF_2007_Height_1	5202	0.1	Czechia	48.58	12.09	51.06	18.86
Baltic_Height_To_EVRF_2007_Height_2	5203	0.1	Estonia - onshore	57.52	21.74	59.75	28.2
Baltic_Height_To_EVRF_2007_Height_3	5204	0.1	Lithuania - onshore	53.89	20.86	56.45	26.82
Baltic_Height_To_EVRF_2007_Height_4	5210	0.1	Latvia - onshore	55.67	20.87	58.09	28.24
Baltic_Height_To_EVRS_2000_Height_1	5436	0.1	Estonia - onshore	57.52	21.74	59.75	28.2
Baltic_Height_To_EVRS_2000_Height_4	5201	0.1	Czechia	48.58	12.09	51.06	18.86
Baltic_Height_To_EVRS_2000_Height_5	5209	0.1	Latvia - onshore	55.67	20.87	58.09	28.24
Baltic_height_To_LAS07_height	110058	999.0	Lithuania - onshore	53.89	20.86	56.45	26.82
Baltic_To_AIOC95_Depth_1	5402	0	Azerbaijan - offshore and Sangachal	37.89	48.66	42.59	51.73
Baltic_To_Caspian_1	5400	0	Asia - FSU - Caspian Sea	37.35	46.95	46.97	53.93
Baltic_To_EVRS_2000_2	5437	0.1	Lithuania - onshore	53.89	20.86	56.45	26.82
Baltic_To_EVRS_2000_3	5435	0.1	Slovakia	47.73	16.84	49.61	22.56
Belfast_Height_To_Malin_Head_Height_1	5452	0.01	UK - Northern Ireland - onshore	53.96	-8.18	55.36	-5.34
BGS2005_Height_To_EVRF2019_Height_1	9670	0.036	Bulgaria - onshore	41.24	22.36	44.23	28.68
BGS2005_Height_To_EVRF2019_Mean-Tide_Height_1	9671	0.032	Bulgaria - onshore	41.24	22.36	44.23	28.68
Bluff_1955_Height_To_NZGD2000_Height_1	110064	0.12	New Zealand - South Island - Bluff vcrs	-46.71	168.01	-46.26	168.86
Bonaire_2004_To_Bonaire_Height_1	10767	0.25	BES Islands - Bonaire onshore	11.97	-68.47	12.36	-68.14
Cascais_Height_To_EVRF2019_Height_2	9553	0.028	Portugal - mainland - onshore	36.95	-9.56	42.16	-6.19
Cascais_Height_To_EVRF2019_Mean-Tide_Height_2	9554	0.024	Portugal - mainland - onshore	36.95	-9.56	42.16	-6.19
Cascais_To_EVRS_2000_1	5427	0.1	Portugal - mainland - onshore	36.95	-9.56	42.16	-6.19
CGVD28_Height_To_CGVD28(HTv2_0)_Height_1	10620	0.05	Canada - CGVD28	41.67	-141.01	69.81	-52.54

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
CGVD2013(CGG2013a)_epoch1997_Height_To_CGVD28_Height_NAD83(CSRS)	110121	0.062	Canada - CGVD28	41.67	-141.01	69.81	-52.54
CGVD2013(CGG2013a)_epoch2002_Height_To_CGVD28_Height_NAD83(CSRS)	110120	0.061	Canada - CGVD28	41.67	-141.01	69.81	-52.54
CGVD2013(CGG2013a)_epoch2010_Height_To_CGVD28_Height_NAD83(CSRS)	110119	0.06	Canada - CGVD28	41.67	-141.01	69.81	-52.54
CGVD2013(CGG2013a)_epoch2010_Height_To_CGVD28_Height_NAD83(CSRS)v6	110118	0.06	Canada - CGVD28	41.67	-141.01	69.81	-52.54
CH1903+_To_LHN95_Height_CHGeo2004	110160	0.03	Europe - Liechtenstein and Switzerland	45.82	5.96	47.81	10.49
CH1903+_To_LN02_Height_CHGeo2004_Htrans	110159	0.1	Europe - Liechtenstein and Switzerland	45.82	5.96	47.81	10.49
CHTRF95_To_LHN95_Height	110076	0.05	Europe - Liechtenstein and Switzerland	45.82	5.96	47.81	10.49
CHTRF95_To_LN02_Height_CHGeo2004_Htrans_2	110155	0.1	Europe - Liechtenstein and Switzerland	45.82	5.96	47.81	10.49
Constanta_Height_To_EVRF_2007_Height_1	5206	0.1	Romania - onshore	43.62	20.26	48.27	29.74
Constanta_Height_To_EVRF2019_Height_1	9583	0.12	Romania - onshore	43.62	20.26	48.27	29.74
Constanta_Height_To_EVRF2019_Mean-Tide_Height_1	9645	0.02	Romania - onshore	43.62	20.26	48.27	29.74
Constanta_Height_To_EVRS_2000_Height_1	5205	0.1	Romania - onshore	43.62	20.26	48.27	29.74
D96_to_SVS2000_ht_SLO_AMG2000E_Trst	110023	0.2	Slovenia - onshore	45.42	13.38	46.88	16.61
D96_to_SVS2010_ht_SLO_VRP2016_Koper	110022	0.1	Slovenia - onshore	45.42	13.38	46.88	16.61
DHHN2016_(height)_To_EVRF_2007_(height)_1	7838	0.1	Germany - onshore	47.27	5.86	55.09	15.04
DHHN2016_Height_To_EVRF2019_Height_2	9555	0.02	Germany - onshore	47.27	5.86	55.09	15.04
DHHN2016_Height_To_EVRF2019_Mean-Tide_Height_2	9556	0.008	Germany - onshore	47.27	5.86	55.09	15.04
DHHN85_Height_To_EVRF_2007_Height_1	5212	0.1	Germany - West Germany all states	47.27	5.86	55.09	13.84
DHHN85_To_EVRS_2000_1	5421	0.1	Germany - West Germany all states	47.27	5.86	55.09	13.84
DHHN92_Height_To_EVRF_2007_Height_1	5211	0.1	Germany - onshore	47.27	5.86	55.09	15.04
DHHN92_To_EVRS_2000_1	5420	0.1	Germany - onshore	47.27	5.86	55.09	15.04
DNN_To_EVRS_2000_1	5417	0.1	Denmark - onshore	54.5	7.98	57.81	15.28

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Dunedin_1958_Height_To_NZGD2000_Height_1	110065	0.12	New Zealand - South Island - Dunedin vcrs	-46.4	167.73	-43.82	171.28
Dunedin-Bluff_1960_Height_To_NZGD2000_Height_1	110066	0.12	New Zealand - South Island - Dunedin-Bluff vcrs	-46.73	166.37	-44.52	169.95
EGM2008_height_To_Kiunga_height_1	7654	0.0	Papua New Guinea - onshore south of 5°S and west of 144°E	-9.35	140.85	-5	144.01
EGM2008_height_to_POM08_height_1	7874	0	Papua New Guinea - onshore - Central province and Gulf province east of 144°E	-10.42	144.4	-6.67	149.67
EGM96_Geoid_m_To_ftIntl	110168	0	World	-90	-180	90	180
EGM96_Geoid_m_To_ftUS	110169	0	World	-90	-180	90	180
EGM96_height_To_Kumul_34_height_1	7653	0.0	Papua New Guinea - PFTB	-8.28	142.24	-5.59	144.75
EGM96_height_to_POM96_height_1	7873	0	Papua New Guinea - onshore - Central province and Gulf province east of 144°E	-10.42	144.4	-6.67	149.67
EH2000_Height_To_EVRF2019_Height_1	9664	0.002	Estonia - onshore	57.52	21.74	59.75	28.2
EH2000_Height_To_EVRF2019_Mean-Tide_Height_1	9665	0.004	Estonia - onshore	57.52	21.74	59.75	28.2
EOMA_1980_To_EVRS_2000_1	5424	0.1	Hungary	45.74	16.11	48.58	22.9
EOMA_1980_Height_To_EVRF2019_Height_1	9577	0.006	Hungary	45.74	16.11	48.58	22.9
EOMA_1980_Height_To_EVRF2019_Mean-Tide_Height_1	9578	0.01	Hungary	45.74	16.11	48.58	22.9
Estonia_1997_height_To_EVRF2007_height_EGM2008	110140	1	Estonia - onshore	57.52	21.74	59.75	28.2
Estonia_1997_height_To_EVRF2007_height_EGM96	110139	1.5	Estonia - onshore	57.52	21.74	59.75	28.2
Estonia_1997_To_EH2000_Height_EST-GEOID2017	110154	0.005	Estonia - onshore	57.52	21.74	59.75	28.2
ETRF2000-PL_To_Baltic_1986_Height_1	9717	0.03	Poland - onshore	49	14.14	54.89	24.15
ETRF2000-PL_To_EVRF2007-PL_Height_1	9719	0.03	Poland - onshore	49	14.14	54.89	24.15
ETRF2000-PL_To_EVRF2007-PL_Height_2	10347	0.02	Poland - onshore	49	14.14	54.89	24.15
ETRS89_Height_To_Alicante_Height_1	9410	0.05	Spain - mainland onshore	35.95	-9.37	43.82	3.39
ETRS89_To_HS2-VRF_height_HS2GM15_1	9304	0.001	UK - London to Birmingham and Crewe	51.45	-2.75	53.3	0
ETRF93_To_LN02_Height_CHGeo2004_Htrans_2	110157	0.1	Europe – Liechtenstein and Switzerland	45.82	5.96	47.81	10.49
ETRS89_DREF91_2016_To_DHHN2016_Height_1	10294	0.02	Germany	47.27	3.34	55.92	15.04
ETRS89_Height_To_Cascais_Height_GeodPT08	10544	0.04	Portugal – mainland – onshore	36.95	-9.56	42.16	-6.19
ETRS89_Height_To_Ceuta_2_Height_1	9414	0.05	Spain – Ceuta	35.82	-5.4	35.97	-5.24

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
ETRS89_Height_To_EVRF2000_Austria_Height_1	9276	0.05	Austria	46.4	9.53	49.02	17.17
ETRS89_Height_To_Ibiza_Height_1	9413	0.05	Spain – Balearic Islands – Ibiza	38.77	1.12	39.17	1.68
ETRS89_Height_To_Mallorca_Height_1	9411	0.05	Spain – Balearic Islands – Mallorca	39.07	2.23	40.02	3.55
ETRS89_Height_To_Menorca_Height_1	9412	0.05	Spain – Balearic Islands – Menorca	39.75	3.73	40.15	4.39
ETRS89_Height_To_NAP_Height_nlgeo2018	9283	0.001	Netherlands – onshore	50.75	3.2	53.7	7.22
ETRS89_Height_To_Oostende_Height_hBG18	9908	0.02	Belgium – onshore	49.5	2.5	51.51	6.4
ETRS89_to_Alboran_Height_1	10360	0.05	Spain - Alboran	35.88	-3.1	36	-2.96
ETRS89_to_Baltic_1957_Height_1_SK	110129	0.03	Slovakia	47.73	16.84	49.61	22.56
ETRS89_To_Baltic_1957_Height_2_CR2005	10567	0.03	Czechia	48.58	12.09	51.06	18.86
ETRS89_To_Belfast_Height_2_OSGM15	7958	0.014	UK – Northern Ireland – onshore	53.96	-8.18	55.36	-5.34
ETRS89_To_British_Isles_Height_OSGM15_Belfast	9916	0.014	UK – Northern Ireland – onshore	53.96	-8.18	55.36	-5.34
ETRS89_To_British_Isles_Height_OSGM15_GB	9914	0.03	UK – Britain and UKCS 49°45'N to 61°N, 9°W to 2°E	49.75	-9.01	61.01	2.01
ETRS89_To_British_Isles_Height_OSGM15_Malin	9918	0.023	Europe - Ireland (Republic and Ulster) - onshore	51.39	-10.56	55.43	-5.34
ETRS89_To_DHHN2016_Height_1	9925	0.1	Germany - onshore	47.27	5.86	55.09	15.04
ETRS89_To_DNN_Height	110163	0.1	Denmark - onshore	54.5	7.98	57.81	15.28
ETRS89_To_Douglas_Height_2_OSGM15	7717	0.03	Isle of Man	54.02	-4.87	54.44	-4.27
ETRS89_To_DVR90(2013)_Height_1	10491	0.03	Denmark - onshore	54.51	8	57.8	15.25
ETRS89_To_EVRF2007_Height_EGG2015	110082	0.1	Europe - EVRF2007	35.95	-9.56	71.24	31.59
ETRS89_to_EVRF2007_Height_1_SK	110130	0.03	Slovakia	47.73	16.84	49.61	22.5
ETRS89_to_Formentera_Height_1	10358	0.05	Spain - Balearic Islands - Formentera	38.59	1.31	38.86	1.65
ETRS89_To_FVR09_Height	110165	0.1	Faroe Islands - onshore	61.33	-7.49	62.41	-6.33
ETRS89_To_Lerwick_Height_2_OSGM15	7714	0.018	UK – Shetland Islands onshore	59.83	-1.78	60.87	-0.67
ETRS89_To_LN02_Height_CHGeo2004_Htrans_2	110156	0.1	Europe – Liechtenstein and Switzerland	45.82	5.96	47.81	10.49
ETRS89_To_Malin_Head_Height_2_OSGM15	7959	0.023	Europe – Ireland (Republic and Ulster) – onshore	51.39	-10.56	55.43	-5.34
ETRS89_to_Melilla_Height_1	10362	0.05	Spain - Melilla	35.26	-2.98	35.38	-2.88
ETRS89_To_N2000_Height_FIN2005N00	110199	0.02	Finland - onshore	59.75	19.24	70.09	31.59
ETRS89_To_N60_Height_FIN2000	110197	0.03	Finland - onshore	59.75	19.24	70.09	31.59

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
ETRS89_To_Newlyn_Height_2_OSGM15	7711	0.008	UK – Great Britain mainland onshore	49.93	-7.06	58.71	1.8
ETRS89_To_NN2000_Height_1	9485	0.02	Norway - onshore	57.9	4.39	71.24	31.32
ETRS89_To_NN54_Height_1	9484	0.02	Norway - onshore	57.9	4.39	71.24	31.32
ETRS89_To_ODN_Offshore_Height_1_OSGM15	7713	0.02	UK – offshore 49°45'N to 61°N, 9°W to 2°E	49.75	-9.01	61.01	2.01
ETRS89_To_ODN_Orkney_Height_2_OSGM15	7712	0.017	UK – Orkney Islands onshore	58.72	-3.48	59.41	-2.34
ETRS89_To_St_Marys_Height_2_OSGM15	7716	0.01	UK – Scilly Isles onshore	49.86	-6.41	49.99	-6.23
ETRS89_To_Stornoway_Height_2_OSGM15	7715	0.011	UK – Outer Hebrides onshore	56.76	-7.72	58.54	-6.1
EUREF-FIN_To_N2000_Height_FIN2005N00	10695	0.02	Finland - onshore	59.75	19.24	70.09	31.59
EUREF-FIN_To_N2000_Height_FIN2023N2000_2	10697	0.014	Finland - onshore	59.75	19.24	70.09	31.59
EUREF-FIN_To_N60_Height_FIN2000	10693	0.03	Finland - onshore	59.75	19.24	70.09	31.59
EVRF2000_Height_To_EVRF2019_Height_ETRS89	110224	0.015	Europe - EVRF2000	35.95	-9.56	71.24	31.59
EVRF2007_Height_To_EVRF2019_Height_ETRS89	110225	0.015	Europe - EVRF2007	35.95	-9.56	71.24	31.59
EVRF2007-PL_Height_To_EVRF2019_Height_1	9654	0.006	Poland – onshore	49	14.14	54.89	24.15
EVRF2007-PL_Height_To_EVRF2019_Mean-Tide_Height_1	9655	0.012	Poland – onshore	49	14.14	54.89	24.15
EVRF2019_Height_To_EVRF2019_Mean-Tide_Height	9710	0	Europe – EVRF2019	35.95	-9.56	77.07	69.15
GDA2020_Height_To_AHD_Height_AUSGeoid2020_1	8451	0.03	Australia Christmas and Cocos – onshore	-43.7	96.76	-9.86	153.69
GDA2020_To_AVWS_Height_2	9692	0.1	Australia – GDA	-60.55	93.41	-8.47	173.34
GDA94_Height_To_AHD_Height_AUSGeoid09_49	5656	0.03	Australia – onshore	-43.7	112.85	-9.86	153.69
GDA94_Height_To_AHD_Height_AUSGeoid98	110219	0.05	Australia - mainland	-39.2	112.85	-10.65	153.69
GDA94_Height_To_AHD_Tasmania_Height_AUSGeoid09_2	5657	0.03	Australia - Tasmania mainland onshore	-43.7	144.55	-40.24	148.44
Genoa_Height_To_EVRF_2007_Height_1	5215	0.1	Italy - mainland	37.86	6.62	47.1	18.58
Genoa_Height_To_EVRF_2007_Height_2	5217	0.1	Italy - Sicily onshore	36.59	12.36	38.35	15.71
Genoa_Height_To_EVRS_2000_Height_1	5213	0.1	Italy - mainland	37.86	6.62	47.1	18.58
Genoa_Height_To_EVRS_2000_Height_2	5216	0.1	Italy - Sicily onshore	36.59	12.36	38.35	15.71
Genoa_1942_Height_to_Catania_1965_height_1	9726	0.01	Italy - Sicily onshore	36.59	12.36	38.35	15.71
Genoa_1942_Height_To_EVRF2019_Height_1	9900	0.124	Italy - mainland west of 16°E	39.65	6.62	47.10	16.53
Genoa_1942_Height_To_EVRF2019_Mean-Tide_Height_1	9921	0.108	Italy - mainland west of 16°E	39.65	6.62	47.10	16.53
GHA_Height_To_EVRF2000_Austria_Height_1	9275	0.05	Austria	46.4	9.53	49.02	17.17
GHA_Height_To_EVRF2019_Height_2	9557	0.136	Austria	46.4	9.53	49.02	17.17

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
GHA_Height_To_EVRF2019_Mean-Tide_Height_2	9558	0.13	Austria	46.4	9.53	49.02	17.17
GHA_To_EVRF_2007_height_1	5557	0.1	Austria	46.4	9.53	49.02	17.17
GHA_To_EVRS_2000_1	5415	0.1	Austria	46.4	9.53	49.02	17.17
Gisborne_1926_Height_To_NZGD2000_Height_1	110067	0.12	New Zealand - North Island - Gisborne vcrs	-39.04	176.41	-37.49	178.63
Greenland_1996_To_GVR2000_Height	110166	0.15	Greenland - 59°N to 84°N	59	-75	84.01	-10
Greenland_1996_To_GVR2016_Height	110167	0.1	Greenland - 58°N to 85°N	58	-75	85.01	-6.99
GUV63_To_GUV604_NAD83_FBN_VERTCON3	110214	0.054	Guam - onshore	13.18	144.58	13.7	145.01
GUV63_To_GUV604_NAD83_HARN_VERTCON3	110213	0.054	Guam - onshore	13.18	144.58	13.7	145.01
GUV63_To_GUV604_NAD83_MA11_VERTCON3	110216	0.054	Guam - onshore	13.18	144.58	13.7	145.01
GUV63_To_GUV604_NAD83_MARP00_VERTCON3	110215	0.054	Guam - onshore	13.18	144.58	13.7	145.01
HKPD_depth_To_HKCD_depth_1	7977	0	China - Hong Kong - offshore	22.13	113.76	22.58	114.51
HVRS_1971_Height_To_EVRF_2007_Height_1	5197	0.1	Croatia - onshore	42.34	13.43	46.54	19.43
HVRS_1971_Height_To_EVRS_2000_Height_1	5196	0.1	Croatia - onshore	42.34	13.43	46.54	19.43
ISN2004_To_ISH2004_Height_1	9956	0.05	Iceland - onshore	63.24	-24.66	66.62	-13.38
ISN2016_To_ISH2004_Height_1	9958	0.05	Iceland - onshore	63.24	-24.66	66.62	-13.38
ISN93_To_ISH2004_Height_1	9954	0.05	Iceland - onshore	63.24	-24.66	66.62	-13.38
ITRF_1997_Height_To_CGVD28_Height_GSD95	110223	0.6	Canada - Alberta	48.99	-120	60	-109.98
ITRF_2005_To_SA_LLD_Height_1	9280	0.07	South Africa - onshore	-34.88	16.45	-22.13	32.95
ITRF_2008_Height_To_CGVD2013(CGG2013a)_Height_2	9125	0.03	Canada	38.21	-141.01	86.46	-40.73
ITRF_2008_Height_To_CGVD2013(CGG2013)_Height_1	9124	0.03	Canada	38.21	-141.01	86.46	-40.73
JGD_2000_To_JGD_2000_Vertical_Height_1	110059	10	Japan – onshore mainland	30.94	129.30	45.54	145.87
JGD_2011_To_JGD_2011_Vertical_Height_1	110060	2	Japan – onshore mainland	30.94	129.30	45.54	145.87
JGD2000_vertical_(height)_to_JGD2011_(vertical)_height_1	6699	0.01	Japan - onshore mainland excluding eastern main province	30.94	129.3	45.54	145.87
KOC_CD_Height_To_Kuwait_PWD_Height_1	5450	0.1	Kuwait - onshore	28.53	46.54	30.09	48.48
KOC_CD_Height_To_Kuwait_WD_Depth_Ft_Intl_1	5453	0.1	Kuwait - onshore	28.53	46.54	30.09	48.48
KOC_CD_To_KOC_WD_1	5413	0.1	Kuwait - onshore	28.53	46.54	30.09	48.48
KOC_CD_height_To_KOC_WD_height_1	7980	0.1	Kuwait - onshore	28.53	46.54	30.09	48.48
KOC_WD_Depth_To_Kuwait_PWD_Height_1	5455	0.1	Kuwait - onshore	28.53	46.54	30.09	48.48
Kuwait_PWD_height_To_KOC_WD_height_1	7981	0.1	Kuwait - onshore	28.53	46.54	30.09	48.48
LAS07_Height_To_EVRF2019_Height_1	9667	0.01	Lithuania - onshore	53.89	20.86	56.45	26.82

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
LAS07_Height_To_EVRF2019_Mean-Tide_Height_2	9668	0.014	Lithuania - onshore	53.89	20.86	56.45	26.82
Latvia_2000_height_To_EVRF2007_height_1	7701	0.1	Latvia - onshore	55.67	20.87	58.09	28.24
Latvia_2000_Height_To_EVRF2019_Height_1	9579	0.006	Latvia - onshore	55.67	20.87	58.09	28.24
Latvia_2000_Height_To_EVRF2019_Mean-Tide_Height_1	9580	0.008	Latvia - onshore	55.67	20.87	58.09	28.24
LN02_Height_To_EVRF2019_Height_2	10822	0.146	Europe - Liechtenstein and Switzerland	45.82	5.96	47.81	10.49
LN02_Height_To_EVRF2019_Mean-Tide_Height_2	10823	0.142	Europe - Liechtenstein and Switzerland	45.82	5.96	47.81	10.49
LKS_1992_To_Latvia_2000_Height_LV14	110152	0.065	Latvia - onshore	55.67	20.87	58.09	28.24
LKS_1992_To_Latvia_2000_Height_RIGA20	110151	0.025	Latvia - Riga City	56.8573	23.9336	57.0862	24.3245
LKS_1994_To_LAS07_Height_LIT20G	110153	0.03	Lithuania - onshore	53.89	20.86	56.45	26.82
LN02_To_EVRS_2000_1	5431	0.1	Europe - Liechtenstein and Switzerland	45.82	5.96	47.81	10.49
LN_1902_Height_To_EVRF_2007_Height_1	5207	0.1	Europe - Liechtenstein and Switzerland	45.82	5.96	47.81	10.49
Lyttelton_1937_Height_To_NZGD2000_Height_1	110068	0.11	New Zealand - South Island - Lyttelton vcrs	-44.92	168.95	-41.6	173.77
MGI_To_EVRF2000_Austria_Height_1	9277	0.05	Austria	46.4	9.53	49.02	17.17
Moturiki_1953_Height_To_NZGD2000_Height_1	110069	0.12	New Zealand - North Island - Moturiki vcrs	-40.59	174.57	-37.52	177.26
MSL_Hawaii_Height_m_To_ftUS	110170	0	USA - Hawaii - onshore	18.87	-160.3	22.29	-154.74
N2000_Height_To_EVRF2019_Height_1	9573	0.004	Finland - onshore	59.75	19.24	70.09	31.59
N2000_Height_To_EVRF2019_Mean-Tide_Height_1	9574	0.024	Finland - onshore	59.75	19.24	70.09	31.59
N60_To_EVRS_2000_1	5432	0.1	Finland - onshore	59.75	19.24	70.09	31.59
NAD_1983_2011_Height_To_NAVD88_CONUS_GEOID18_Height_3	9229	0.0139	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NAD_1983_2011_Height_To_NAVD88_CONUS_GEOID18_Height_3	9229	0.0139	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NAD_1983_2011_Height_To_PRVD02_GEOID18_Height_2	9230	0.0139	Puerto Rico - onshore	17.87	-67.97	18.57	-65.19
NAD_1983_2011_Height_To_VIVD09_Height_GEOID18_2	9231	0.0139	Virgin Islands, US - onshore	17.62	-65.09	18.44	-64.51
NAD_1983_2011_To_NAVD88_Alaska_GEOID12B_Height	6327	0.017	USA - Alaska	51.3	172.42	71.40	-129.99

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD_1983_2011_To_NAVD88_CONUS_GEOID12B_Height	6326	0.017	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NAD_1983_2011_To_NAVD88_Height_Alaska_GEOID09	110173	0.02	USA - Alaska	51.3	172.42	71.40	-129.99
NAD_1983_2011_To_NAVD88_Height_CONUS_GEOID09	110172	0.02	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NAD_1983_2011_To_PRVD02_GEOID12B_Height	7646	0.017	Puerto Rico - onshore	17.87	-67.97	18.57	-65.19
NAD_1983_2011_To_PRVD02_Height_GEOID09	110177	0.02	Puerto Rico - onshore	17.87	-67.97	18.57	-65.19
NAD_1983_2011_To_VIVD09_GEOID12B_Height	7647	0.017	Virgin Islands, US - onshore	17.62	-65.09	18.44	-64.51
NAD_1983_2011_To_VIVD09_Height_GEOID09	110178	0.02	Virgin Islands, US - onshore	17.62	-65.09	18.44	-64.51
NAD_1983_CORS96_To_NAVD88_Height_CONUS_GEOID99	110200	0.046	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NAD_1983_FBN_To_ASVD02_Height_GEOID09_1	9170	0.02	American Samoa - Tutuila island	-14.43	-170.88	-14.2	-170.51
NAD_1983_FBN_To_GUVD04_Height_GEOID09_1	9171	0.02	Guam - onshore	13.18	144.58	13.7	145.01
NAD_1983_FBN_To_NAVD88_Height_CONUS_GEOID03	9168	0.024	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NAD_1983_FBN_To_NAVD88_Height_CONUS_GEOID99	110190	0.046	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NAD_1983_FBN_To_NMVD03_Height_GEOID09_1	9172	0.02	Northern Mariana Islands - Rota, Saipan and Tinian	14.06	145.06	15.35	145.89
NAD_1983_HARN_To_AVD88_Height_GEOID99_4	9163	0.05	USA - CONUS north of 41°N, east of 78°W - onshore	41	-78	47.47	-66.91
NAD_1983_HARN_To_MSL_Hawaii_Height_GEOID03	110189	0.024	USA - Hawaii - onshore	18.87	-160.3	22.29	-154.74
NAD_1983_HARN_To_MSL_Hawaii_Height_GEOID09	110176	0.02	USA - Hawaii - onshore	18.87	-160.3	22.29	-154.74
NAD_1983_HARN_To_MSL_Hawaii_Height_GEOID99	110194	0.046	USA - Hawaii - onshore	18.87	-160.3	22.29	-154.74
NAD_1983_HARN_To_NAVD88_Height_Alaska_GEOID03	110187	0.024	USA - Alaska	51.3	172.42	71.40	-129.99
NAD_1983_HARN_To_NAVD88_Height_Alaska_GEOID06_9	9169	0.024	USA - Alaska	51.3	172.42	71.40	-129.99
NAD_1983_HARN_To_NAVD88_Height_Alaska_GEOID99	110192	0.046	USA - Alaska	51.3	172.42	71.40	-129.99
NAD_1983_HARN_To_NAVD88_Height_CONUS_GEOID99	110191	0.046	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NAD_1983_HARN_To_NAVD88_Height_GEOID99_1	9160	0.05	USA - CONUS north of 41°N, west of 112°W - onshore	41	-124.79	49.05	-112
NAD_1983_HARN_To_NAVD88_Height_GEOID99_2	9161	0.05	USA - CONUS north of 41°N, 112°W to 95°W	41	-112	49.38	-95

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD_1983_HARN_To_NAVD88_Height_GEOID99_3	9162	0.05	USA - CONUS north of 41°N, 95°W to 78°W	41	-95	49.37	-77.99
NAD_1983_HARN_To_NAVD88_Height_GEOID99_5	9164	0.05	USA - CONUS south of 41°N, west of 112°W - onshore	31.64	-124.45	41	-112
NAD_1983_HARN_To_NAVD88_Height_GEOID99_6	9165	0.05	USA - CONUS south of 41°N, 112°W to 95°W - onshore	25.83	-112	41.01	-94.99
NAD_1983_HARN_To_NAVD88_Height_GEOID99_7	9166	0.05	USA - CONUS south of 41°N, 95°W to 78°W - onshore	24.41	-95	41.01	-77.99
NAD_1983_HARN_To_NAVD88_Height_GEOID99_8	9167	0.05	USA - CONUS south of 41°N, east of 78°W - onshore	33.84	-78	41.01	-71.90
NAD_1983_MA11_To_GUVD04_GEOID12B_Height	7648	0.017	Guam - onshore	13.18	144.58	13.7	145.01
NAD_1983_MA11_To_GUVD04_Height_GEOID09	110181	0.02	Guam - onshore	13.18	144.58	13.7	145.01
NAD_1983_MA11_To_NMVD03_GEOID12B_Height	7649	0.017	Northern Mariana Islands - Rota, Saipan and Tinian	14.06	145.06	15.35	145.89
NAD_1983_MA11_To_NMVD03_Height_GEOID09	110183	0.02	Northern Mariana Islands - Rota, Saipan and Tinian	14.06	145.06	15.35	145.89
NAD_1983_MARP00_To_GUVD04_Height_GEOID09	110182	0.02	Guam - onshore	13.18	144.58	13.7	145.01
NAD_1983_MARP00_To_NMVD03_Height_GEOID09	110184	0.02	Northern Mariana Islands - Rota, Saipan and Tinian	14.06	145.06	15.35	145.89
NAD_1983_NSRS2007_To_NAVD88_Height_Alaska_GEOID06	110185	0.024	USA - Alaska	51.3	172.42	71.40	-129.99
NAD_1983_NSRS2007_To_NAVD88_Height_Alaska_GEOID09_2	9174	0.02	USA - Alaska	51.3	172.42	71.40	-129.99
NAD_1983_NSRS2007_To_NAVD88_Height_CONUS_GEOID03	110186	0.024	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NAD_1983_NSRS2007_To_NAVD88_Height_CONUS_GEOID09_1	9173	0.02	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NAD_1983_NSRS2007_To_PRVD02_Height_GEOID09_1	9175	0.02	Puerto Rico - onshore	17.87	-67.97	18.57	-65.19
NAD_1983_NSRS2007_To_VIVD09_Height_GEOID09_1	9176	0.02	Virgin Islands, US - onshore	17.62	-65.09	18.44	-64.51
NAD_1983_PA11_Height_To_MSL_Hawaii_Height_GEOID12B	110171	0.017	USA - Hawaii - onshore	18.87	-160.3	22.29	-154.74
NAD_1983_PA11_To_ASVD02_GEOID12B_Height	7650	0.017	American Samoa - Tutuila island	-14.43	-170.88	-14.2	-170.51
NAD_1983_PA11_To_ASVD02_Height_GEOID09	110179	0.02	American Samoa - Tutuila island	-14.43	-170.88	-14.2	-170.51
NAD_1983_PA11_To_MSL_Hawaii_Height_GEOID09	110174	0.02	USA - Hawaii - onshore	18.87	-160.3	22.29	-154.74
NAD_1983_PACP00_To_ASVD02_Height_GEOID09	110180	0.02	American Samoa - Tutuila island	-14.43	-170.88	-14.2	-170.51
NAD_1983_PACP00_To_MSL_Hawaii_Height_GEOID03	110188	0.024	USA - Hawaii - onshore	18.87	-160.3	22.29	-154.74

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD_1983_PACP00_To_MSL_Hawaii_Height_GEOID09	110175	0.02	USA - Hawaii - onshore	18.87	-160.3	22.29	-154.74
NAD_1983_PACP00_To_MSL_Hawaii_Height_GEOID99	110193	0.046	USA - Hawaii - onshore	18.87	-160.3	22.29	-154.74
NAD_1983_To_NAVD88_Alaska_GEOID12B_Height	110032	0.017	USA - Alaska	51.3	172.42	71.40	-129.99
NAD_1983_To_NAVD88_CONUS_GEOID12B_Height	110031	0.017	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NAD_1983_To_PRVD02_GEOID12B_Height	110034	0.017	Puerto Rico - onshore	17.87	-67.97	18.57	-65.19
NAD_1983_To_VIVD09_GEOID12B_Height	110006	0.017	Virgin Islands, US - onshore	17.62	-65.09	18.44	-64.51
NAD83(CSRS)_epoch1997_Height_To_CGVD28_Height_HT2	110117	0.05	Canada - CGVD28	41.67	-141.01	69.81	-52.54
NAD83(CSRS)_epoch2002_Height_To_CGVD28_Height_HT2	110116	0.05	Canada - CGVD28	41.67	-141.01	69.81	-52.54
NAD83(CSRS)_epoch2010_Height_To_CGVD2013(CGG2013a)_Height	110112	0.03	Canada	38.21	-141.01	86.46	-40.73
NAD83(CSRS)_epoch2010_Height_To_CGVD2013(CGG2013)_Height	110113	0.03	Canada	38.21	-141.01	86.46	-40.73
NAD83(CSRS)_epoch2010_Height_To_CGVD28_Height_HT2	110115	0.05	Canada - CGVD28	41.67	-141.01	69.81	-52.54
NAD83(CSRS)_Height_To_CGVD28_Height_GSD95	110222	0.6	Canada - Alberta	48.99	-120	60	-109.98
NAD83(CSRS)v2_to_CGVD2013a(1997)_Height_1	10112	0.05	Canada	38.21	-141.01	86.46	-40.73
NAD83(CSRS)v2_to_CGVD28_Height_1	9984	0.05	Canada - CGVD28	41.67	-141.01	69.81	-52.54
NAD83(CSRS)v2_To_CGVD28(HTv2_0)_Height_1	10590	0.01	Canada - CGVD28(HTv2.0)	41.00	-141.01	84.00	-48.00
NAD83(CSRS)v3_to_CGVD2013a(1997)_Height_1	10111	0.05	Canada	38.21	-141.01	86.46	-40.73
NAD83(CSRS)v3_to_CGVD28_Height_1	9983	0.05	Canada - CGVD28	41.67	-141.01	69.81	-52.54
NAD83(CSRS)v3_To_CGVD28(HTv2_0)_Height_1	10609	0	Canada - CGVD28(HTv2.0)	41.00	-141.01	84.00	-48.00
NAD83(CSRS)v4_to_CGVD2013a(2002)_Height_1	10110	0.05	Canada	38.21	-141.01	86.46	-40.73
NAD83(CSRS)v4_to_CGVD28_Height_1	9985	0.05	Canada - CGVD28	41.67	-141.01	69.81	-52.54
NAD83(CSRS)v4_To_CGVD28(HTv2_0)_Height_1	10610	0.02	Canada - CGVD28(HTv2.0)	41.00	-141.01	84.00	-48.00
NAD83(CSRS)v6_Height_To_CGVD28_Height_HT2	9986	0.05	Canada - CGVD28	41.67	-141.01	69.81	-52.54
NAD83(CSRS)v6_To_CGVD28(HTv2_0)_Height_1	10821	0.03	Canada - CGVD28(HTv2.0)	41.00	-141.01	84.00	-48.00
NAD83(CSRS)v6_Height_To_CGVD2013(CGG2013a)_Height_1	9247	0.03	Canada	38.21	-141.01	86.46	-40.73
NAD83(CSRS)v6_Height_To_CGVD2013(CGG2013)_Height_1	9246	0.03	Canada	38.21	-141.01	86.46	-40.73
NAD83(CSRS)v7_to_CGVD2013a(2010)_Height_1	10109	0.03	Canada	38.21	-141.01	86.46	-40.73
NAD83(CSRS)v7_to_CGVD28_Height_1	9987	0.05	Canada - CGVD28	41.67	-141.01	69.81	-52.54
NAD83(CSRS)v7_To_CGVD28(HTv2_0)_Height_1	10612	0.03	Canada - CGVD28(HTv2.0)	41.00	-141.01	84.00	-48.00
NAD83(CSRS)v8_to_CGVD2013a(2010)_Height_1	10417	0.03	Canada	38.21	-141.01	86.46	-40.73
NAD83(CSRS)v8_to_CGVD28_Height_1	10418	0.05	Canada - CGVD28	41.67	-141.01	69.81	-52.54

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD83(CSRS)v8_To_CGVD28(HTv2_0)_Height_1	10613	0.03	Canada - CGVD28(HTv2.0)	41.00	-141.01	84.00	-48.00
NAP_Height_To_EVRF2019_Height_1	9581	0.016	Netherlands - onshore	50.75	3.2	53.7	7.22
NAP_Height_To_EVRF2019_Mean-Tide_Height_1	9582	0.012	Netherlands - onshore	50.75	3.2	53.7	7.22
NAP_To_EVRS_2000_1	5425	0.1	Netherlands - onshore	50.75	3.2	53.7	7.22
Napier_1962_Height_To_NZGD2000_Height_1	110070	0.12	New Zealand - North Island - Hawkes Bay mc Napier vcrs	-40.57	175.8	-38.87	178.07
Nelson_1955_Height_To_NZGD2000_Height_1	110071	0.12	New Zealand - South Island - Nelson vcrs	-42.44	171.82	-40.44	174.46
Newlyn_(height)_to_EVRF2000_(height)_(1)	4651	0.1	UK - Great Britain mainland onshore	49.93	-7.06	58.71	1.8
Newlyn_To_EVRS_2000_1	110083	0.1	UK - Great Britain mainland onshore	49.93	-7.06	58.71	1.8
NGF_IGN69_Height_To_EVRF2019_Height_1	9575	0.108	France - mainland onshore	42.33	-4.87	51.14	8.23
NGF_IGN69_Height_To_EVRF2019_Mean-Tide_Height_1	9576	0.086	France - mainland onshore	42.33	-4.87	51.14	8.23
NGF_IGN69_To_EVRS_2000_1	5419	0.1	France - mainland onshore	42.33	-4.87	51.14	8.23
NAVD88_Depth_(m)_To_USFT	110029	0	USA - CONUS and Alaska - onshore	24.41	-168.26	71.40	-66.91
NAVD88_Height_(m)_To_Depth_USFT	110030	0	USA - CONUS and Alaska - onshore	24.41	-168.26	71.40	-66.91
NAVD88_Height_(m)_To_IFT	110027	0	USA - onshore - AZ MI MT ND OR SC	31.33	-124.6	49.01	-78.52
NAVD88_Height_(m)_To_USFT	110026	0	USA - CONUS and Alaska - onshore	24.41	-168.26	71.40	-66.91
NAVD88_Height_To_Depth	110024	0	North America - Mexico and USA - onshore	14.51	172.42	71.40	-66.91
NAVD88_Height_USFT_To_IFT	110028	0	USA - onshore - AZ MI MT ND OR SC	31.33	-124.6	49.01	-78.52
NAVD88_USFT_Height_To_Depth	110025	0	USA - CONUS and Alaska - onshore	24.41	-168.26	71.40	-66.91
NGVD29_ftUS_Height_To_Depth	110218	0	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NGVD29_Height_ftUS_To_m	110217	0	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NGVD29_To_NAVD88_NAD27_Alaska_VERTCON3	110208	0.026	USA - Alaska	51.3	172.42	71.40	-129.99
NGVD29_To_NAVD88_NAD27_CONUS_VERTCON3	110201	0.024	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NGVD29_To_NAVD88_NAD83_2011_Alaska_VERTCON3	110212	0.026	USA - Alaska	51.3	172.42	71.40	-129.99
NGVD29_To_NAVD88_NAD83_2011_CONUS_VERTCON3	110207	0.024	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NGVD29_To_NAVD88_NAD83_Alaska_VERTCON3	110209	0.026	USA - Alaska	51.3	172.42	71.40	-129.99
NGVD29_To_NAVD88_NAD83_CONUS_VERTCON3	110202	0.024	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NGVD29_To_NAVD88_NAD83_CORS96_CONUS_VERTCON3	110204	0.024	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NGVD29_To_NAVD88_NAD83_FBN_CONUS_VERTCON3	110205	0.024	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NGVD29_To_NAVD88_NAD83_HARN_Alaska_VERTCON3	110210	0.026	USA - Alaska	51.3	172.42	71.40	-129.99
NGVD29_To_NAVD88_NAD83_HARN_CONUS_VERTCON3	110203	0.024	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NGVD29_To_NAVD88_NAD83_NSRS2007_Alaska_VERTCON3	110211	0.026	USA - Alaska	51.3	172.42	71.40	-129.99
NGVD29_To_NAVD88_NAD83_NSRS2007_CONUS_VERTCON3	110206	0.024	USA - CONUS - onshore	24.41	-124.79	49.38	-66.91
NN54_To_EVRS_2000_1	5426	0.1	Norway - onshore	57.9	4.39	71.24	31.32
NVN99_To_EVRS_2000_1	5428	0.1	Slovenia - onshore	45.42	13.38	46.88	16.61
NZGD2000_To_NZGD2009_Height_2	9325	0.1	New Zealand	-55.95	160.6	-25.88	-171.2
NZGD2000_To_NZGD2016_Height_1	9326	0.1	New Zealand	-55.95	160.6	-25.88	-171.2
NZVD2009_To_Auckland_1	4442	0.05	New Zealand - North Island - Auckland vcrcs	-37.67	174	-36.12	176.17
NZVD2009_To_Bluff_1	4451	0.05	New Zealand - South Island - Bluff vcrcs	-46.71	168.01	-46.26	168.86
NZVD2009_To_Dunedin_1	4450	0.07	New Zealand - South Island - Dunedin vcrcs	-46.4	167.73	-43.82	171.28
NZVD2009_To_Dunedin_Bluff_1960_1	4453	0.04	New Zealand - South Island - Dunedin-Bluff vcrcs	-46.73	166.37	-44.52	169.95
NZVD2009_To_Gisborne_1	4445	0.02	New Zealand - North Island - Gisborne vcrcs	-39.04	176.41	-37.49	178.63
NZVD2009_To_Lyttelton_1	4449	0.09	New Zealand - South Island - Lyttelton vcrcs	-44.92	168.95	-41.6	173.77
NZVD2009_To_Moturiki_1	4443	0.06	New Zealand - North Island - Moturiki vcrcs	-40.59	174.57	-37.52	177.26
NZVD2009_To_Napier_1	4446	0.05	New Zealand - North Island - Hawkes Bay mc Napier vcrcs	-40.57	175.8	-38.87	178.07
NZVD2009_To_Nelson_1	4444	0.07	New Zealand - South Island - Nelson vcrcs	-42.44	171.82	-40.44	174.46

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NZVD2009_To_One_Tree_Point_1	4441	0.03	New Zealand - North Island - One Tree vcrs	-36.41	172.61	-34.36	174.83
NZVD2009_To_Stewart_Island_1	4452	0.15	New Zealand - Stewart Island	-47.33	167.29	-46.63	168.34
NZVD2009_To_Taranaki_1	4447	0.05	New Zealand - North Island - Taranaki vcrs	-39.92	173.68	-38.41	174.95
NZVD2009_To_Wellington_1	4448	0.04	New Zealand - North Island - Wellington vcrs	-41.67	174.52	-40.12	176.55
NZVD2016_Height_To_Auckland_1946_Height_1	7860	0.02	New Zealand - North Island - Auckland vcrs	-37.67	174	-36.12	176.17
NZVD2016_Height_To_Bluff_1955_Height_1	7861	0.02	New Zealand - South Island - Bluff vcrs	-46.71	168.01	-46.26	168.86
NZVD2016_Height_To_Dunedin_1958_Height_1	7862	0.02	New Zealand - South Island - Dunedin vcrs	-46.4	167.73	-43.82	171.28
NZVD2016_Height_To_Dunedin-Bluff_1960_Height_1	7863	0.02	New Zealand - South Island - Dunedin-Bluff vcrs	-46.73	166.37	-44.52	169.95
NZVD2016_Height_To_Gisborne_1926_Height_1	7864	0.02	New Zealand - North Island - Gisborne vcrs	-39.04	176.41	-37.49	178.63
NZVD2016_Height_To_Lyttelton_1937_Height_1	7865	0.01	New Zealand - South Island - Lyttleton vcrs	-44.92	168.95	-41.6	173.77
NZVD2016_Height_To_Moturiki_1953_Height_1	7866	0.02	New Zealand - North Island - Moturiki vcrs	-40.59	174.57	-37.52	177.26
NZVD2016_Height_To_Napier_1962_Height_1	7867	0.02	New Zealand - North Island - Hawkes Bay mc Napier vcrs	-40.57	175.8	-38.87	178.07
NZVD2016_Height_To_Nelson_1955_Height_1	7868	0.02	New Zealand - South Island - Nelson vcrs	-42.44	171.82	-40.44	174.46
NZVD2016_Height_To_One_Tree_Point_1964_Height_1	7869	0.01	New Zealand - North Island - One Tree vcrs	-36.41	172.61	-34.36	174.83
NZVD2016_Height_To_Stewart_Island_1977_Height_1	7870	0.18	New Zealand - Stewart Island	-47.33	167.29	-46.63	168.34
NZVD2016_Height_To_Taranaki_1970_Height_1	7871	0.02	New Zealand - North Island - Taranaki vcrs	-39.92	173.68	-38.41	174.95
NZVD2016_Height_To_Wellington_1953_Height_1	7872	0.02	New Zealand - North Island - Wellington vcrs	-41.67	174.52	-40.12	176.55
ODN_Height_To_EVRF2019_Height_2	9561	0.024	UK - Great Britain mainland onshore	49.93	-7.06	58.71	1.8

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
ODN_Height_To_EVRF2019_Mean-Tide_Height_2	9562	0.02	UK - Great Britain mainland onshore	49.93	-7.06	58.71	1.8
One_Tree_Point_1964_Height_To_NZGD2000_Height_1	110072	0.11	New Zealand - North Island - One Tree vcrs	-36.41	172.61	-34.36	174.83
Oostende_Height_To_EVRF_2007_Height_1	5199	0.1	Belgium - onshore	49.5	2.5	51.51	6.4
Oostende_Height_To_EVRF2019_Height_2	9563	0.042	Belgium - onshore	49.5	2.5	51.51	6.4
Oostende_Height_To_EVRF2019_Mean-Tide_Height_2	9564	0.04	Belgium - onshore	49.5	2.5	51.51	6.4
Oostende_Height_To_EVRS_2000_Height_1	5198	0.1	Belgium - onshore	49.5	2.5	51.51	6.4
PNG94_To_PNG08_Height_1	7655	0.2	Papua New Guinea - 0°N to 12°S and 140°E to 158°E	-12	140	0.01	158.01
Poolbeg_height_(m)_To_Belfast_height_1	7966	0.1	UK – Northern Ireland - onshore	53.96	-8.18	55.36	-5.34
Poolbeg_height_(m)_To_Malin_Head_height_1	7964	0.1	Europe - Ireland (Republic and Ulster) - onshore	51.39	-10.56	55.43	-5.34
Poolbeg_Height_To_Belfast_Height_1	5449	0.1	UK - Northern Ireland - onshore	53.96	-8.18	55.36	-5.34
Poolbeg_Height_To_Malin_Head_Height_1	5448	0.1	Europe - Ireland (Republic and Ulster) - onshore	51.39	-10.56	55.43	-5.34
POSGAR_2007_To_SRVN16_Height_1	9256	0.05	Argentina - onshore	-55.11	-73.59	-21.78	-53.65
PTRA08_Height_To_Cais_da_Figueirinha-Angra_do_Heroismo_Height_GeodAz2014	110146	0.1	Portugal - Azores C - Terceira onshore	38.57	-27.44	38.86	-26.97
PTRA08_Height_To_Cais_da_Madalena_Height_GeodAz2014	110144	0.1	Portugal - Azores C - Pico onshore	38.32	-28.61	38.61	-27.98
PTRA08_Height_To_Cais_das_Velas_Height_GeodAz2014	110142	0.1	Portugal - Azores C - S Jorge onshore	38.48	-28.37	38.8	-27.71
PTRA08_Height_To_Cais_da_Vila_do_Porto_Height_GeodAz2014	110147	0.1	Portugal - Azores E onshore - Santa Maria and Formigas	36.87	-25.26	37.34	-24.72
PTRA08_Height_To_Horta_Height_GeodAz2014	110143	0.1	Portugal - Azores C - Faial onshore	38.46	-28.9	38.7	-28.54
PTRA08_Height_To_Ponta_Delgada_Height_GeodAz2014	110148	0.1	Portugal - Azores E - S Miguel onshore	37.65	-25.92	37.96	-25.08
PTRA08_Height_To_Santa_Cruz_da_Graciosa_Height_GeodAz2014	110145	0.1	Portugal - Azores C - Graciosa onshore	38.97	-28.13	39.14	-27.88
REGCAN95_Height_To_El_Hierro_Height_1	9421	0.05	Spain - Canary Islands - El Hierro	27.58	-18.22	27.9	-17.83
REGCAN95_Height_To_Fuerteventura_Height_1	9416	0.05	Spain - Canary Islands - Fuerteventura	27.99	-14.58	28.81	-13.75

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
REGCAN95_Height_To_Gran_Canaria_Height_1	9417	0.05	Spain - Canary Islands - Gran Canaria	27.68	-15.88	28.23	-15.31
REGCAN95_Height_To_La_Gomera_Height_1	9419	0.05	Spain - Canary Islands - La Gomera	27.95	-17.39	28.26	-17.03
REGCAN95_Height_To_Lanzarote_Height_1	9415	0.05	Spain - Canary Islands - Lanzarote	28.78	-13.95	29.47	-13.37
REGCAN95_Height_To_La_Palma_Height_1	9420	0.05	Spain - Canary Islands - La Palma	28.4	-18.06	28.9	-17.66
REGCAN95_Height_To_Tenerife_Height_1	9418	0.05	Spain - Canary Islands - Tenerife	27.93	-16.96	28.63	-16.08
RGAF09_To_Guadeloupe_1988_Height_2	9133	0.05	Guadeloupe - Grande-Terre and Basse-Terre - onshore	15.88	-61.85	16.55	-61.15
RGAF09_To_IGN_1988_LS_Height_2	9134	0.1	Guadeloupe - Les Saintes - onshore	15.8	-61.68	15.94	-61.52
RGAF09_To_IGN_1988_MG_Height_2	9135	0.1	Guadeloupe - Marie-Galante - onshore	15.8	-61.39	16.05	-61.13
RGAF09_To_IGN_1988_SB_Height_2	9187	0.1	Guadeloupe - St Barthelemy - onshore	17.82	-62.92	17.98	-62.73
RGAF09_To_IGN_1988_SM_Height_2	9188	0.1	Guadeloupe - St Martin - onshore	18.01	-63.21	18.17	-62.96
RGAF09_To_IGN_2008_LD_Height_1	9131	0.2	Guadeloupe - La Desirade - onshore	16.26	-61.13	16.38	-60.97
RGAF09_To_Martinique_1987_Height_2	9136	0.05	Martinique - onshore	14.35	-61.29	14.93	-60.76
RGF_1993_Height_To_NGF-IGN69_Height_RAF18_3	110061	0.01	France – mainland onshore	42.33	-4.87	51.14	8.23
RGF93_v2b_To_NGF-IGN69_Height_RAF20_5	9876	0.01	France - mainland onshore	42.33	-4.87	51.14	8.23
RGF93_v2b_To_NGF-IGN78_Height_RAC23_3	10506	0.02	France - Corsica onshore	41.31	8.5	43.07	9.63
RGF93_v2_To_NGF-IGN69_Height_RAF18_3	8885	0.01	France - mainland onshore	42.33	-4.87	51.14	8.23
RGF93_v2_To_NGF-IGN78_Height_RAC09_2	8372	0.05	France - Corsica onshore	41.31	8.5	43.07	9.63
RGSPM06_To_Danger_1950_Height_2	9228	0.05	St Pierre and Miquelon - onshore	46.69	-56.48	47.19	-56.07
RH2000_Height_To_EVRF_2007_Height_1	5208	0.1	Sweden – onshore	55.28	10.93	69.07	24.17
RH2000_Height_To_EVRF2019_Height_1	9648	0.006	Sweden – onshore	55.28	10.93	69.07	24.17
RH2000_Height_To_EVRF2019_Mean-Tide_Height_1	9649	0.032	Sweden – onshore	55.28	10.93	69.07	24.17
RH70_To_EVRS_2000_1	5430	0.1	Sweden – onshore	55.28	10.93	69.07	24.17
RRAF_1991_To_IGN_2008_LD_Height_1	9132	0.2	Guadeloupe - La Desirade - onshore	16.26	-61.13	16.38	-60.97

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
SHGD2015_To_SHVD2015_Height_EGM2008_2.5x2.5	110195	0.5	St Helena - St Helena Island	-16.08	-5.85	-15.85	-5.59
Slovenia_1996_To_SVS2010_Height_1	10247	0.1	Slovenia - onshore	45.42	13.38	46.88	16.61
SNN76_To_EVRS_2000_1	5422	0.1	Germany – East Germany all states	50.2	9.92	54.74	15.04
Stewart_Island_1977_Height_To_NZGD2000_Height_1	110073	0.28	New Zealand – Stewart Island	-47.33	167.29	-46.63	168.34
SVS2000_Height_To_SVS2010_Height_1	10685	0.02	Slovenia - onshore	45.42	13.38	46.88	16.61
SVS2010_Height_To_EVRF2019_Height_2	9565	0.006	Slovenia – onshore	45.42	13.38	46.88	16.61
SVS2010_Height_To_EVRF2019_Mean-Tide_Height_2	9566	0.008	Slovenia – onshore	45.42	13.38	46.88	16.61
SWEREF99_To_RH2000_Height_SWEN17	110162	0.03	Sweden - onshore	55.28	10.93	69.07	24.17
SWEREF99_To_RH70_Height_SWEN17	110161	0.03	Sweden - onshore	55.28	10.93	69.07	24.17
Taranaki_1970_Height_To_NZGD2000_Height_1	110074	0.12	New Zealand – North Island – Taranaki vcrs	-39.92	173.68	-38.41	174.95
Trieste_Height_To_EVRF2019_Height_2	9567	0.042	North Macedonia	40.85	20.45	42.36	23.04
Trieste_Height_To_EVRF2019_Height_3	9569	0.012	Bosnia and Herzegovina	42.56	15.74	45.27	19.62
Trieste_Height_To_EVRF2019_Mean-Tide_Height_2	9568	0.044	North Macedonia	40.85	20.45	42.36	23.04
Trieste_Height_To_EVRF2019_Mean-Tide_Height_3	9570	0.01	Bosnia and Herzegovina	42.56	15.74	45.27	19.62
Vienna_height_To_GHA_height_1	9371	0	Austria – Vienna	48.12	16.18	48.34	16.59
Wellington_1953_Height_To_NZGD2000_Height_1	110075	0.12	New Zealand – North Island – Wellington vcrs	-41.67	174.52	-40.12	176.55
WGS_1984_To_EGM_1984_Geoid_1	110008	1	World	-90	-180	90	180
WGS_1984_To_EGM_1984_Geoid_2	110085	1	World	-90	-180	90	180
WGS_1984_To_EGM_1996_Geoid_1	110007	1.5	World	-90	-180	90	180
WGS_1984_To_EGM_1996_Geoid_2	110084	5.0	World	-90	-180	90	180
WGS_1984_To_EGM_1996_Geoid_BCNS_3	110220	1	World	-90	-180	90	180
WGS_1984_To_LN02_Height_CHGeo2004_Htrans_2	110158	0.12	Europe - Liechtenstein and Switzerland	45.82	5.96	47.81	10.49
WGS_1984_To_MSL_Height_EGM2008_1x1	110099	0.5	World	-90	-180	90	180
WGS_1984_To_QVD_Height_QG2020	110226	0.012	Qatar - onshore	24.55	50.69	26.2	51.68
WGS_1984_To_WGS_1984_EGM2008_1x1_Height	110018	0.2	World	-90	-180	90	180
WGS_1984_To_WGS_1984_EGM2008_2.5x2.5_Height	110019	0.25	World	-90	-180	90	180
WGS_1984_To_WGS_1984_EGM2008_2.5x2.5_Height_BCNS	110221	0.2	World	-90	-180	90	180

Table 11: Vertical transformations: Vertical offset method

Vertical Transformation Name	WKID	Method	Z Shift
AIOC95_Depth_To_Caspian_1	5403	Vertical_Offset	-1.7
Antalya_Height_To_EVRF2019_Height_2	9551	Vertical_Offset	-0.394
Antalya_Height_To_EVRF2019_Mean-Tide_Height_2	9552	Vertical_Offset	-0.448
Baltic_Depth_To_AIOC95_Depth_1	5445	Vertical_Offset	-26.3
Baltic_Depth_To_AIOC95_Height_1	5446	Vertical_Offset	26.3
Baltic_Depth_To_Caspian_Depth_1	5440	Vertical_Offset	-28
Baltic_Depth_To_Caspian_Height_1	5441	Vertical_Offset	28
Baltic_Height_To_AIOC95_Height_1	5443	Vertical_Offset	26.3
Baltic_Height_To_Baltic_Depth_1	5442	Vertical_Offset	0
Baltic_Height_To_Black_Sea_Height_1	5447	Vertical_Offset	0.4
Baltic_Height_To_Caspian_Height_1	5438	Vertical_Offset	28
Baltic_To_AIOC95_Depth_1	5402	Vertical_Offset	-26.3
Baltic_To_Caspian_1	5400	Vertical_Offset	-28
Belfast_Height_To_Malin_Head_Height_1	5452	Vertical_Offset	-0.037
Cascais_To_EVRS_2000_1	5427	Vertical_Offset	-0.315
CGVD28_Height_To_CGVD28(HTv2_0)_Height_1	10620	Vertical_Offset	0
EGM2008_height_To_Kiunga_height_1	7654	Vertical_Offset	-3.0
EGM2008_height_to_POM08_height_1	7874	Vertical_Offset	-0.93
EGM96_height_To_Kumul_34_height_1	7653	Vertical_Offset	-0.87
EGM96_height_to_POM96_height_1	7873	Vertical_Offset	-1.58
Genoa_1942_Height_to_Catania_1965_height_1	9726	Vertical_Offset	0.141
HKPD_depth_To_HKCD_depth_1	7977	Vertical_Offset	-0.146
JGD2000_vertical_(height)_to_JGD2011_(vertical)_height_1	6699	Vertical_Offset	0.0
KOC_CD_Height_To_Kuwait_PWD_Height_1	5450	Vertical_Offset	-0.49
KOC_CD_Height_To_Kuwait_WD_Depth_Ft_Intl_1	5453	Vertical_Offset	15.55
KOC_CD_height_To_KOC_WD_height_1	7980	Vertical_Offset	-4.74
KOC_CD_To_KOC_WD_1	5413	Vertical_Offset	4.74
KOC_WD_Depth_To_Kuwait_PWD_Height_1	5455	Vertical_Offset	4.25
Kuwait_PWD_height_To_KOC_WD_height_1	7981	Vertical_Offset	-4.25
N60_To_EVRS_2000_1	5432	Vertical_Offset	0.213
NAP_To_EVRS_2000_1	5425	Vertical_Offset	-0.005
NGF_IGN69_To_EVRS_2000_1	5419	Vertical_Offset	-0.486
NZVD2009_To_Auckland_1	4442	Vertical_Offset	0.34

Vertical Transformation Name	WKID	Method	Z Shift
NZVD2009_To_Bluff_1	4451	Vertical_Offset	0.36
NZVD2009_To_Dunedin_1	4450	Vertical_Offset	0.49
NZVD2009_To_Dunedin_Bluff_1960_1	4453	Vertical_Offset	0.38
NZVD2009_To_Gisborne_1	4445	Vertical_Offset	0.34
NZVD2009_To_Lyttelton_1	4449	Vertical_Offset	0.47
NZVD2009_To_Moturiki_1	4443	Vertical_Offset	0.24
NZVD2009_To_Napier_1	4446	Vertical_Offset	0.2
NZVD2009_To_Nelson_1	4444	Vertical_Offset	0.29
NZVD2009_To_One_Tree_Point_1	4441	Vertical_Offset	0.06
NZVD2009_To_Stewart_Island_1	4452	Vertical_Offset	0.39
NZVD2009_To_Taranaki_1	4447	Vertical_Offset	0.32
NZVD2009_To_Wellington_1	4448	Vertical_Offset	0.44
ODN_Height_To_EVRF2019_Mean-Tide_Height_2	9562	Vertical_Offset	-0.17
Poolbeg_Height_To_Belfast_Height_1	5449	Vertical_Offset	-2.7
Poolbeg_Height_To_Malin_Head_Height_1	5448	Vertical_Offset	-2.7
Poolbeg_height_(m)_To_Belfast_height_1	7966	Vertical_Offset	-2.7
Poolbeg_height_(m)_To_Malin_Head_height_1	7964	Vertical_Offset	-2.7
Vienna_height_To_GHA_height_1	9371	Vertical_Offset	156.68

Table 12: Vertical transformations: Vertical offset and slope method

Vertical Transformation Name	WKID	Method	Z shift	Difference in latitude	Difference in longitude	Inclina- tion North	Inclina- tion East
Alicante_To_EVRS_2000_1	5429	Vertical_Offset_and_Slope	-0.486	40.77222222222222	-3.659722222222222	-0.003	0.006
Baltic_1957_Height_To_EVRF2019_Height_1	9745	Vertical_Offset_and_Slope	0.142	49.91666666666666	15.25	0.026	0.006
Baltic_1957_Height_To_EVRF2019_Mean-Tide_Height_1	9744	Vertical_Offset_and_Slope	0.13	49.91666666666666	15.25	0.036	0.006
Baltic_1982_Height_To_EVRF_2007_Height_1	5200	Vertical_Offset_and_Slope	0.228	42.625	25.376666666666667	-0.009	-0.003
Baltic_1982_To_EVRS_2000_1	5416	Vertical_Offset_and_Slope	0.182	42.625	25.376666666666667	0.001	-0.004
Baltic_Height_To_EVRF_2007_Height_1	5202	Vertical_Offset_and_Slope	0.13	49.91666666666666	15.25	0.026	0
Baltic_Height_To_EVRF_2007_Height_2	5203	Vertical_Offset_and_Slope	0.195	58.7	25.866666666666667	0.009	-0.013

Vertical Transformation Name	WKID	Method	Z shift	Difference in latitude	Difference in longitude	Inclina- tion North	Inclina- tion East
Baltic_Height_To_EVRF_2007_Height_3	5204	Vertical_Offset_and_Slope	0.121	55.3	24.01666666666667	0.053	0
Baltic_Height_To_EVRF_2007_Height_4	5210	Vertical_Offset_and_Slope	0.154	56.96666666666667	24.88333333333333	0.016	-0.012
Baltic_Height_To_EVRS_2000_Height_1	5436	Vertical_Offset_and_Slope	0.133	58.7	25.86666666666667	-0.014	0.005
Baltic_Height_To_EVRS_2000_Height_4	5201	Vertical_Offset_and_Slope	0.116	49.91666666666666	15.25	0.036	0
Baltic_Height_To_EVRS_2000_Height_5	5209	Vertical_Offset_and_Slope	0.105	56.96666666666667	24.88333333333333	0	0.004
Baltic_height_To_LAS07_height	110058	Vertical_Offset_and_Slope	0.1425	55.3	24.01666666666667	0.06076	0.03375
Baltic_To_EVRS_2000_2	5437	Vertical_Offset_and_Slope	0.102	55.3	24.01666666666667	0	0.002
Baltic_To_EVRS_2000_3	5435	Vertical_Offset_and_Slope	0.122	48.63333333333333	19.25	0.02	0
Constanta_Height_To_EVRF_2007_Height_1	5206	Vertical_Offset_and_Slope	0.062	46.01666666666667	24.81666666666667	-0.005	0.008
Constanta_Height_To_EVRS_2000_Height_1	5205	Vertical_Offset_and_Slope	0.028	46.01666666666667	24.81666666666667	0.002	0.002
DHHN2016_(height)_To_EVRF_2007_(height)_1	7838	Vertical_Offset_and_Slope	0.014	51.05	10.21666666666667	-0.01	0
DHHN85_Height_To_EVRF_2007_Height_1	5212	Vertical_Offset_and_Slope	0.017	51.05	8.666666666666666	-0.011	0.005
DHHN85_To_EVRS_2000_1	5421	Vertical_Offset_and_Slope	0.017	51.05	8.666666666666666	-0.002	0.003
DHHN92_Height_To_EVRF_2007_Height_1	5211	Vertical_Offset_and_Slope	0.015	51.05	10.21666666666667	-0.01	0.002
DHHN92_To_EVRS_2000_1	5420	Vertical_Offset_and_Slope	0.014	51.05	10.21666666666667	-0.001	0
DNN_To_EVRS_2000_1	5417	Vertical_Offset_and_Slope	0.011	56.03333333333333	9.233333333333333	0.003	0.011
EOMA_1980_To_EVRS_2000_1	5424	Vertical_Offset_and_Slope	0.14	46.98333333333333	19.58333333333333	0.008	-0.002
Genoa_Height_To_EVRF_2007_Height_1	5215	Vertical_Offset_and_Slope	-0.259	42.58333333333333	12.96666666666667	-0.036	0
Genoa_Height_To_EVRF_2007_Height_2	5217	Vertical_Offset_and_Slope	-0.333	37.5	14.3	-0.051	0
Genoa_Height_To_EVRS_2000_Height_1	5213	Vertical_Offset_and_Slope	-0.309	42.58333333333333	12.96666666666667	-0.03	0
Genoa_Height_To_EVRS_2000_Height_2	5216	Vertical_Offset_and_Slope	-0.402	37.5	14.3	-0.079	0
GHA_To_EVRF_2007_height_1	5557	Vertical_Offset_and_Slope	-0.335	47.53333333333333	14.45	-0.065	-0.06

Vertical Transformation Name	WKID	Method	Z shift	Difference in latitude	Difference in longitude	Inclina- tion North	Inclina- tion East
GHA_To_EVRS_2000_1	5415	Vertical_Offset_and_Slope	-0.356	47.53333333333333	14.45	-0.057	-0.058
HVRS_1971_Height_To_EVRF_2007_Height_1	5197	Vertical_Offset_and_Slope	-0.313	45.35	16.36666666666667	-0.016	-0.018
HVRS_1971_Height_To_EVRS_2000_Height_1	5196	Vertical_Offset_and_Slope	-0.343	45.35	16.36666666666667	-0.007	-0.016
Latvia_2000_height_To_EVRF2007_height_1	7701	Vertical_Offset_and_Slope	0.003	56.96666666666667	24.88333333333333	0	0.0074
LN02_To_EVRS_2000_1	5431	Vertical_Offset_and_Slope	-0.245	46.91666666666666	8.183333333333334	-0.21	-0.032
LN_1902_Height_To_EVRF_2007_Height_1	5207	Vertical_Offset_and_Slope	-0.225	46.91666666666666	8.183333333333334	-0.221	-0.033
Newlyn_(height)_to_EVRF2000_(height)_1	4651	Vertical_Offset_and_Slope	0.070	54.58333333333334	-2.25	0.044	0
Newlyn_To_EVRS_2000_1	110083	Vertical_Offset_and_Slope	0.070	54.58333333333334	-2.25	0.044	0
NN54_To_EVRS_2000_1	5426	Vertical_Offset_and_Slope	-0.001	62.93333333333333	11.16666666666667	-0.01	0.034
NVN99_To_EVRS_2000_1	5428	Vertical_Offset_and_Slope	-0.411	46	15	-0.033	0.008
Oostende_Height_To_EVRF_2007_Height_1	5199	Vertical_Offset_and_Slope	-2.317	50.71666666666667	4.766666666666667	-0.031	0
Oostende_Height_To_EVRS_2000_Height_1	5198	Vertical_Offset_and_Slope	-2.311	50.71666666666667	4.766666666666667	-0.016	0
RH2000_Height_To_EVRF_2007_Height_1	5208	Vertical_Offset_and_Slope	-0.008	61.9	15.8	-0.0006	-0.0003
RH70_To_EVRS_2000_1	5430	Vertical_Offset_and_Slope	0.005	64	16.23333333333333	-0.012	0
SNN76_To_EVRS_2000_1	5422	Vertical_Offset_and_Slope	0.157	52.53333333333333	13.16666666666667	0.007	0.005

Table 13: Vertical transformations: file-based methods

Vertical Transformation Name	WKID	Method	File Name
Alicante_Height_To_EVRF2019_Height_1	9646	Vertical_Offset_with_Grid	Dataset_es_2019z
Alicante_Height_To_EVRF2019_Mean-Tide_Height_1	9647	Vertical_Offset_with_Grid	Dataset_es_2019m
Auckland_1946_Height_To_NZGD2000_Height_1	110063	GEOID	Dataset_auckland_1946_to_nzgd2000
Baltic_1977_Height_To_EVRF2019_Height_1	9902	Vertical_Offset_with_Grid	Dataset_ua_2019z

Vertical Transformation Name	WKID	Method	File Name
Baltic_1977_Height_To_EVRF2019_Mean-Tide_Height_1	9903	Vertical_Offset_ with_Grid	Dataset_ua_2019m
Baltic_1982_Height_To_EVRF2019_Height_1	9571	Vertical_Offset_ with_Grid	Dataset_bgalt_2019z
Baltic_1982_Height_To_EVRF2019_Mean-Tide_Height_1	9572	Vertical_Offset_ with_Grid	Dataset_bgalt_2019m
Baltic_1986_Height_To_EVRF2007-PL_Height_1	9662	Vertical_Offset_ with_Grid	Dataset_gugik-evrf2007
Baltic_1986_Height_To_EVRF2019_Height_1	9652	Vertical_Offset_ with_Grid	Dataset_pl86_2019z
Baltic_1986_Height_To_EVRF2019_Mean-Tide_Height_1	9653	Vertical_Offset_ with_Grid	Dataset_pl86_2019m
BGS2005_Height_To_EVRF2019_Height_1	9670	Vertical_Offset_ with_Grid	Dataset_bgneu_2019z
BGS2005_Height_To_EVRF2019_Mean-Tide_Height_1	9671	Vertical_Offset_ with_Grid	Dataset_bgneu_2019m
Bluff_1955_Height_To_NZGD2000_Height_1	110064	GEOID	Dataset_bluff_1955_to_nzgd2000
Bonaire_2004_To_Bonaire_Height_1	10767	GEOID	Dataset_bongeo2004
Cascais_Height_To_EVRF2019_Height_2	9553	Vertical_Offset_ with_Grid	Dataset_pt_2019z
Cascais_Height_To_EVRF2019_Mean-Tide_Height_2	9554	Vertical_Offset_ with_Grid	Dataset_pt_2019m
CGVD2013(CGG2013a)_epoch1997_Height_To_CGVD28_Height_NAD83(CSRS)	110121	Vertical_Offset_ with_Grid	Dataset_HT2_1997_CGG2013a
CGVD2013(CGG2013a)_epoch2002_Height_To_CGVD28_Height_NAD83(CSRS)	110120	Vertical_Offset_ with_Grid	Dataset_HT2_2002v70_CGG2013a
CGVD2013(CGG2013a)_epoch2010_Height_To_CGVD28_Height_NAD83(CSRS)	110119	Vertical_Offset_ with_Grid	Dataset_HT2_2010v70_CGG2013a
CGVD2013(CGG2013a)_epoch2010_Height_To_CGVD28_Height_NAD83(CSRS)v6	110118	Vertical_Offset_ with_Grid	Dataset_HT2_2010v70_CGG2013a
CH1903+_To_LHN95_Height_CHGeo2004	110160	GEOID	Dataset_CHGeo2004_Bessel
CH1903+_To_LN02_Height_CHGeo2004_Htrans	110159	GEOID	Dataset_CHGeo2004_Htrans_Bessel
CHTRF95_To_LHN95_Height	110076	GEOID	Dataset_chgeo2004_ETRS
CHTRF95_To_LN02_Height_CHGeo2004_Htrans_2	110155	GEOID	Dataset_chgeo2004_htrans_ETRS_corr
Constanta_Height_To_EVRF2019_Height_1	9583	Vertical_Offset_ with_Grid	Dataset_ro_2019z

Vertical Transformation Name	WKID	Method	File Name
Constanta_Height_To_EVRF2019_Mean-Tide_Height_1	9645	Vertical_Offset_ with_Grid	Dataset_ro_2019m
D96_to_SVS2000_ht_SLO_AMG2000E_Trst	110023	GEOID	Dataset_SLO_AMG2000E-Trst
D96_to_SVS2010_ht_SLO_VRP2016_Koper	110022	GEOID	Dataset_SLO_VRP2016-Koper
DHHN2016_Height_To_EVRF2019_Height_2	9555	Vertical_Offset_ with_Grid	Dataset_de_2019z
DHHN2016_Height_To_EVRF2019_Mean-Tide_Height_2	9556	Vertical_Offset_ with_Grid	Dataset_de_2019m
Dunedin_1958_Height_To_NZGD2000_Height_1	110065	GEOID	Dataset_dunedin_1958_to_nzgd2000
Dunedin-Bluff_1960_Height_To_NZGD2000_Height_1	110066	GEOID	Dataset_Dunedin-Bluff_1960_to_nzgd2000
EH2000_Height_To_EVRF2019_Height_1	9664	Vertical_Offset_ with_Grid	Dataset_ee_2019z
EH2000_Height_To_EVRF2019_Mean-Tide_Height_1	9665	Vertical_Offset_ with_Grid	Dataset_ee_2019m
EOMA_1980_Height_To_EVRF2019_Height_1	9577	Vertical_Offset_ with_Grid	Dataset_hu_2019z
EOMA_1980_Height_To_EVRF2019_Mean-Tide_Height_1	9578	Vertical_Offset_ with_Grid	Dataset_hu_2019m
Estonia_1997_To_EH2000_Height_EST-GEOID2017	110154	GEOID	Dataset_EST-GEOID2017
Estonia_1997_height_To_EVRF2007_height_EGM2008	110140	EGM96	Dataset_egm2008-1.grd
Estonia_1997_height_To_EVRF2007_height_EGM96	110139	EGM96	Dataset_egm96.grd
ETRF2000-PL_To_Baltic_1986_Height_1	9717	GEOID	Dataset_gugik-geoid2011-PL-KRON86-NH
ETRF2000-PL_To_EVRF2007-PL_Height_1	9719	GEOID	Dataset_gugik-geoid2011-PL-EVRF2007-NH
ETRF2000-PL_To_EVRF2007-PL_Height_2	10347	GEOID	Dataset_Model_quasi-geoidy-PL-geoid2021-PL-EVRF2007-NH
ETRF93_To_LHN95_Height_CHGeo2004	110127	GEOID	Dataset_chgeo2004_ETRS
ETRF93_To_LN02_Height_CHGeo2004_Htrans_2	110157	GEOID	Dataset_chgeo2004_htrans_ETRS_corr
ETRS89_DREF91_2016_To_DHHN2016_Height_1	10294	GEOID	Dataset_GCG2016
ETRS89_Height_To_Alicante_Height_1	9410	GEOID	Dataset_EGM08_RED NAP
ETRS89_Height_To_Cascais_Height_GeodPT08	10544	GEOID	Dataset_GeodPT08
ETRS89_Height_To_Ceuta_2_Height_1	9414	GEOID	Dataset_EGM08_RED NAP
ETRS89_Height_To_EVRF2000_Austria_Height_1	9276	GEOID	Dataset_GEOID_GRS80_Oesterreich
ETRS89_Height_To_Ibiza_Height_1	9413	GEOID	Dataset_EGM08_RED NAP
ETRS89_Height_To_Mallorca_Height_1	9411	GEOID	Dataset_EGM08_RED NAP
ETRS89_Height_To_Menorca_Height_1	9412	GEOID	Dataset_EGM08_RED NAP
ETRS89_Height_To_NAP_Height_nlgeo2018	9283	GEOID	Dataset_nlgeo2018
ETRS89_Height_To_Oostende_Height_hBG18	9908	GEOID	Dataset_hBG18

Vertical Transformation Name	WKID	Method	File Name
ETRS89_to_Alboran_Height_1	10360	GEOID	Dataset_EGM08_RED NAP
ETRS89_to_Baltic_1957_Height_1_SK	110129	GEOID	Dataset_Slovakia_ETRS89h_to_Baltic1957
ETRS89_To_Baltic_1957_Height_2_CR2005	10567	GEOID	Dataset_CR2005
ETRS89_To_Belfast_Height_2_OSGM15	7958	GEOID	Dataset_OSGM15_Belfast
ETRS89_To_British_Isles_Height_OSGM15_Belfast	9916	GEOID	Dataset_OSGM15_Belfast
ETRS89_To_British_Isles_Height_OSGM15_GB	9914	GEOID	Dataset_OSGM15_Great_Britain
ETRS89_To_British_Isles_Height_OSGM15_Malin	9918	GEOID	Dataset_OSGM15_Malin
ETRS89_To_DHHN2016_Height_1	9925	GEOID	Dataset_GCG2016
ETRS89_To_DNN_Height	110163	GEOID	Dataset_dnn_2018
ETRS89_To_Douglas_Height_2_OSGM15	7717	GEOID	Dataset_OSGM15_Great_Britain
ETRS89_To_DVR90(2013)_Height_1	10491	GEOID	Dataset_dvr90_2013
ETRS89_to_EVRF2007_Height_1_SK	110130	GEOID	Dataset_Slovakia_ETRS89h_to_EVRF2007
ETRS89_To_EVRF2007_Height_EGG2015	110082	GEOID	Dataset_EGG2015-qg_g10m15m
ETRS89_to_Formentera_Height_1	10358	GEOID	Dataset_EGM08_RED NAP
ETRS89_To_FVR09_Height	110165	GEOID	Dataset_fvr09
ETRS89_To_HS2-VRF_height_HS2GM15_1	9304	GEOID	Dataset_HS2GM15
ETRS89_To_Lerwick_Height_2_OSGM15	7714	GEOID	Dataset_OSGM15_Great_Britain
ETRS89_To_LHN95_Height_CHGeo2004	110126	GEOID	Dataset_chgeo2004_ETRS
ETRS89_To_LN02_Height_CHGeo2004_Htrans_2	110156	GEOID	Dataset_chgeo2004_htrans_ETRS_corr
ETRS89_To_Malin_Head_Height_2_OSGM15	7959	GEOID	Dataset_OSGM15_Malin
ETRS89_to_Meliilla_Height_1	10362	GEOID	Dataset_EGM08_RED NAP
ETRS89_To_Newlyn_Height_2_OSGM15	7711	GEOID	Dataset_OSGM15_Great_Britain
ETRS89_To_N2000_Height_FIN2005N00	110199	GEOID	Dataset_FIN2005N00
ETRS89_To_N60_Height_FIN2000	110197	GEOID	Dataset_FIN2000_block
ETRS89_To_NN2000_Height_1	9485	GEOID	Dataset_HREF2018B_NN2000_EUREF89
ETRS89_To_NN54_Height_1	9484	GEOID	Dataset_href2008a
ETRS89_To_ODN_Offshore_Height_1_OSGM15	7713	GEOID	Dataset_OSGM15_Great_Britain
ETRS89_To_ODN_Orkney_Height_2_OSGM15	7712	GEOID	Dataset_OSGM15_Great_Britain
ETRS89_To_St_Marys_Height_2_OSGM15	7716	GEOID	Dataset_OSGM15_Great_Britain
ETRS89_To_Stornoway_Height_2_OSGM15	7715	GEOID	Dataset_OSGM15_Great_Britain
EUREF-FIN_To_N2000_Height_FIN2005N00	10695	GEOID	Dataset_FIN2005N00
EUREF-FIN_To_N2000_Height_FIN2023N2000_2	10697	GEOID	Dataset_FIN2023N2000
EUREF-FIN_To_N60_Height_FIN2000	10693	GEOID	Dataset_FIN2000_block
EVRF2000_Height_To_EVRF2019_Height_ETRS89	110224	Vertical_Offset_ with_Grid	Dataset_idw_evrf_2000_to_2019z

Vertical Transformation Name	WKID	Method	File Name
EVRF2007_Height_To_EVRF2019_Height_ETRS89	110225	Vertical_Offset_ with_Grid	Dataset_idw_evrf_2007_to_2019z
EVRF2007-PL_Height_To_EVRF2019_Height_1	9654	Vertical_Offset_ with_Grid	Dataset_pl07_2019z
EVRF2007-PL_Height_To_EVRF2019_Mean-Tide_Height_1	9655	Vertical_Offset_ with_Grid	Dataset_pl07_2019m
GDA2020_Height_To_AHD_Height_AUSGeoid2020_1	8451	GEOID	Dataset_AUSGeoid2020_windows_binary
GDA2020_To_AVWS_Height_2	9692	GEOID	Dataset_AGQG_20201120
GDA94_Height_To_AHD_Height_AUSGeoid09_49	5656	GEOID	Dataset_AUSGeoid09_GDA94_V1.01_DOV_windows
GDA94_Height_To_AHD_Height_AUSGeoid98	110219	GEOID	Dataset_AUSGeoid98
GDA94_Height_To_AHD_Tasmania_Height_AUSGeoid09_2	5657	GEOID	Dataset_AUSGeoid09_GDA94_V1.01_DOV_windows
Genoa_1942_Height_To_EVRF2019_Height_1	9900	Vertical_Offset_ with_Grid	Dataset_it_2019z
Genoa_1942_Height_To_EVRF2019_Mean-Tide_Height_1	9921	Vertical_Offset_ with_Grid	Dataset_it_2019m
GHA_Height_To_EVRF2000_Austria_Height_1	9275	Vertical_Offset_ with_Grid	Dataset_GV_HoehenGrid_V1
GHA_Height_To_EVRF2019_Height_2	9557	Vertical_Offset_ with_Grid	Dataset_at_2019z
GHA_Height_To_EVRF2019_Mean-Tide_Height_2	9558	Vertical_Offset_ with_Grid	Dataset_at_2019m
Gisborne_1926_Height_To_NZGD2000_Height_1	110067	GEOID	Dataset_gisborne_1926_to_nzgd2000
Greenland_1996_To_GVR2000_Height	110166	GEOID	Dataset_gvr2000_2006
Greenland_1996_To_GVR2016_Height	110167	GEOID	Dataset_gvr2016_2016
GUVD63_To_GUVD04_NAD83_FBN_VERTCON3	110214	VERTCON3	Dataset_vertcon_3.0_20190601.guvd63.guvd04.guam.oh.tn
GUVD63_To_GUVD04_NAD83_HARN_VERTCON3	110213	VERTCON3	Dataset_vertcon_3.0_20190601.guvd63.guvd04.guam.oh.tn
GUVD63_To_GUVD04_NAD83_MA11_VERTCON3	110216	VERTCON3	Dataset_vertcon_3.0_20190601.guvd63.guvd04.guam.oh.tn
GUVD63_To_GUVD04_NAD83_MARP00_VERTCON3	110215	VERTCON3	Dataset_vertcon_3.0_20190601.guvd63.guvd04.guam.oh.tn
ISN2004_To_ISH2004_Height_1	9956	GEOID	Dataset_Icegeoid_ISN2004
ISN2016_To_ISH2004_Height_1	9958	GEOID	Dataset_Icegeoid_ISN2016
ISN93_To_ISH2004_Height_1	9954	GEOID	Dataset_Icegeoid_ISN93
ITRF_1997_Height_To_CGVD28_Height_GSD95	110223	GEOID	Dataset_NGSD95
ITRF_2005_To_SA_LLD_Height_1	9280	GEOID	Dataset_SAGEOID2010
ITRF_2008_Height_To_CGVD2013(CGG2013a)_Height_2	9125	GEOID	Dataset_CGG2013ai08
ITRF_2008_Height_To_CGVD2013(CGG2013)_Height_1	9124	GEOID	Dataset_CGG2013i08
JGD_2000_To_JGD_2000_Vertical_Height_1	110059	GEOID	Dataset_JGEOID2008

Vertical Transformation Name	WKID	Method	File Name
JGD_2011_To_JGD_2011_Vertical_Height_1	110060	GEOID	Dataset_GSIGEOID2011
LAS07_Height_To_EVRF2019_Height_1	9667	Vertical_Offset_ with_Grid	Dataset_lt_2019z
LAS07_Height_To_EVRF2019_Mean-Tide_Height_2	9668	Vertical_Offset_ with_Grid	Dataset_lt_2019m
Latvia_2000_Height_To_EVRF2019_Height_1	9579	Vertical_Offset_ with_Grid	Dataset_lv_2019z
Latvia_2000_Height_To_EVRF2019_Mean-Tide_Height_1	9580	Vertical_Offset_ with_Grid	Dataset_lv_2019m
LN02_Height_To_EVRF2019_Height_2	10822	Vertical_Offset_ with_Grid	Dataset_ch_2019z
LN02_Height_To_EVRF2019_Mean-Tide_Height_2	10823	Vertical_Offset_ with_Grid	Dataset_ch_2019m
LKS_1992_To_Latvia_2000_Height_LV14	110152	GEOID	Dataset_LV14
LKS_1992_To_Latvia_2000_Height_RIGA20	110151	GEOID	Dataset_RIGA2
LKS_1994_To_LAS07_Height_LIT20G	110153	GEOID	Dataset_LIT20G
Lyttelton_1937_Height_To_NZGD2000_Height_1	110068	GEOID	Dataset_lyttelton_1937_to_nzgd2000
MGI_To_EVRF2000_Austria_Height_1	9277	GEOID	Dataset_GEOID_BESSEL_Oesterreich
Moturiki_1953_Height_To_NZGD2000_Height_1	110069	GEOID	Dataset_moturiki_1953_to_nzgd2000
N2000_Height_To_EVRF2019_Height_1	9573	Vertical_Offset_ with_Grid	Dataset_fi_2019z
N2000_Height_To_EVRF2019_Mean-Tide_Height_1	9574	Vertical_Offset_ with_Grid	Dataset_fi_2019m
NAD_1983_2011_Height_To_NAVD88_CONUS_GEOID18_Height_3	9229	GEOID	Dataset_g2018u0
NAD_1983_2011_Height_To_PRVD02_GEOID18_Height_2	9230	GEOID	Dataset_g2018p0
NAD_1983_2011_Height_To_VIVD09_Height_GEOID18_2	9231	GEOID	Dataset_g2018p0
NAD_1983_2011_To_NAVD88_Alaska_GEOID12B_Height	6327	GEOID	Dataset_g2012ba0
NAD_1983_2011_To_NAVD88_CONUS_GEOID12B_Height	6326	GEOID	Dataset_g2012bu0
NAD_1983_2011_To_NAVD88_Height_Alaska_GEOID09	110173	GEOID	Dataset_geoid09_ak
NAD_1983_2011_To_NAVD88_Height_CONUS_GEOID09	110172	GEOID	Dataset_geoid09_conus
NAD_1983_2011_To_PRVD02_GEOID12B_Height	7646	GEOID	Dataset_g2012bp0
NAD_1983_2011_To_PRVD02_Height_GEOID09	110177	GEOID	Dataset_g2009p01
NAD_1983_2011_To_VIVD09_GEOID12B_Height	7647	GEOID	Dataset_g2012bp0
NAD_1983_2011_To_VIVD09_Height_GEOID09	110178	GEOID	Dataset_g2009p01
NAD_1983_CORS96_To_NAVD88_Height_CONUS_GEOID99	110200	GEOID	Dataset_geoid99_conus
NAD_1983_FBN_To_ASVD02_Height_GEOID09_1	9170	GEOID	Dataset_g2009s01

Vertical Transformation Name	WKID	Method	File Name
NAD_1983_FBN_To_GUVD04_Height_GEOID09_1	9171	GEOID	Dataset_g2009g01
NAD_1983_FBN_To_NAVD88_Height_CONUS_GEOID03	9168	GEOID	Dataset_geoid03_conus
NAD_1983_FBN_To_NAVD88_Height_CONUS_GEOID99	110190	GEOID	Dataset_geoid99_conus
NAD_1983_FBN_To_NMVD03_Height_GEOID09_1	9172	GEOID	Dataset_g2009g01
NAD_1983_HARN_To_AVD88_Height_GEOID99_4	9163	GEOID	Dataset_g1999u04
NAD_1983_HARN_To_MSL_Hawaii_Height_GEOID03	110189	GEOID	Dataset_g2003h01
NAD_1983_HARN_To_MSL_Hawaii_Height_GEOID09	110176	GEOID	Dataset_g2009h01
NAD_1983_HARN_To_MSL_Hawaii_Height_GEOID99	110194	GEOID	Dataset_g1999h01
NAD_1983_HARN_To_NAVD88_Height_Alaska_GEOID03	110187	GEOID	Dataset_geoid03_ak
NAD_1983_HARN_To_NAVD88_Height_Alaska_GEOID06_9	9169	GEOID	Dataset_geoid06_ak
NAD_1983_HARN_To_NAVD88_Height_Alaska_GEOID99	110192	GEOID	Dataset_geoid99_ak
NAD_1983_HARN_To_NAVD88_Height_CONUS_GEOID99	110191	GEOID	Dataset_geoid99_conus
NAD_1983_HARN_To_NAVD88_Height_GEOID99_1	9160	GEOID	Dataset_g1999u01
NAD_1983_HARN_To_NAVD88_Height_GEOID99_2	9161	GEOID	Dataset_g1999u02
NAD_1983_HARN_To_NAVD88_Height_GEOID99_3	9162	GEOID	Dataset_g1999u03
NAD_1983_HARN_To_NAVD88_Height_GEOID99_5	9164	GEOID	Dataset_g1999u05
NAD_1983_HARN_To_NAVD88_Height_GEOID99_6	9165	GEOID	Dataset_g1999u06
NAD_1983_HARN_To_NAVD88_Height_GEOID99_7	9166	GEOID	Dataset_g1999u07
NAD_1983_HARN_To_NAVD88_Height_GEOID99_8	9167	GEOID	Dataset_g1999u08
NAD_1983_MA11_To_GUVD04_GEOID12B_Height	7648	GEOID	Dataset_g2012bg0
NAD_1983_MA11_To_GUVD04_Height_GEOID09	110181	GEOID	Dataset_g2009g01
NAD_1983_MA11_To_NMVD03_GEOID12B_Height	7649	GEOID	Dataset_g2012bg0
NAD_1983_MA11_To_NMVD03_Height_GEOID09	110183	GEOID	Dataset_g2009g01
NAD_1983_MARP00_To_GUVD04_Height_GEOID09	110182	GEOID	Dataset_g2009g01
NAD_1983_MARP00_To_NMVD03_Height_GEOID09	110184	GEOID	Dataset_g2009g01
NAD_1983_NSRS2007_To_NAVD88_Height_Alaska_GEOID06	110185	GEOID	Dataset_geoid06_ak
NAD_1983_NSRS2007_To_NAVD88_Height_Alaska_GEOID09_2	9174	GEOID	Dataset_geoid09_ak
NAD_1983_NSRS2007_To_NAVD88_Height_CONUS_GEOID03	110186	GEOID	Dataset_geoid03_conus
NAD_1983_NSRS2007_To_NAVD88_Height_CONUS_GEOID09_1	9173	GEOID	Dataset_geoid09_conus
NAD_1983_NSRS2007_To_PRVD02_Height_GEOID09_1	9175	GEOID	Dataset_g2009p01
NAD_1983_NSRS2007_To_VIVD09_Height_GEOID09_1	9176	GEOID	Dataset_g2009p01
NAD_1983_PA11_Height_To_MSL_Hawaii_Height_GEOID12B	110171	GEOID	Dataset_g2012bh0
NAD_1983_PA11_To_ASVD02_GEOID12B_Height	7650	GEOID	Dataset_g2012bs0
NAD_1983_PA11_To_ASVD02_Height_GEOID09	110179	GEOID	Dataset_g2009s01
NAD_1983_PA11_To_MSL_Hawaii_Height_GEOID09	110174	GEOID	Dataset_g2009h01

Vertical Transformation Name	WKID	Method	File Name
NAD_1983_PACP00_To_ASVD02_Height_GEOID09	110180	GEOID	Dataset_g2009s01
NAD_1983_PACP00_To_MSL_Hawaii_Height_GEOID03	110188	GEOID	Dataset_g2003h01
NAD_1983_PACP00_To_MSL_Hawaii_Height_GEOID09	110175	GEOID	Dataset_g2009h01
NAD_1983_PACP00_To_MSL_Hawaii_Height_GEOID99	110193	GEOID	Dataset_g1999h01
NAD_1983_To_NAVD88_Alaska_GEOID12B_Height	110032	GEOID	Dataset_g2012ba0
NAD_1983_To_NAVD88_CONUS_GEOID12B_Height	110031	GEOID	Dataset_g2012bu0
NAD_1983_To_PRVD02_GEOID12B_Height	110034	GEOID	Dataset_g2012bp0
NAD_1983_To_VIVD09_GEOID12B_Height	110006	GEOID	Dataset_g2012bp0
NAD83(CSRS)_epoch1997_Height_To_CGVD28_Height_HT2	110117	GEOID	Dataset_HT2_1997
NAD83(CSRS)_epoch2002_Height_To_CGVD28_Height_HT2	110116	GEOID	Dataset_HT2_2002v70
NAD83(CSRS)_epoch2010_Height_To_CGVD2013(CGG2013a)_Height	110112	GEOID	Dataset_CGG2013an83
NAD83(CSRS)_epoch2010_Height_To_CGVD2013(CGG2013)_Height	110113	GEOID	Dataset_CGG2013n83
NAD83(CSRS)_epoch2010_Height_To_CGVD28_Height_HT2	110115	GEOID	Dataset_HT2_2010v70
NAD83(CSRS)_Height_To_CGVD28_Height_GSD95	110222	GEOID	Dataset_NGSD95n83
NAD83(CSRS)v2_to_CGVD2013a(1997)_Height_1	10112	GEOID	Dataset_CGG2013an83
NAD83(CSRS)v2_to_CGVD28_Height_1	9984	GEOID	Dataset_HT2_1997
NAD83(CSRS)v2_To_CGVD28(HTv2_0)_Height_1	10590	GEOID	Dataset_HT2_1997
NAD83(CSRS)v3_to_CGVD2013a(1997)_Height_1	10111	GEOID	Dataset_CGG2013an83
NAD83(CSRS)v3_to_CGVD28_Height_1	9983	GEOID	Dataset_HT2_1997
NAD83(CSRS)v3_To_CGVD28(HTv2_0)_Height_1	10609	GEOID	Dataset_HT2_1997
NAD83(CSRS)v4_to_CGVD2013a(2002)_Height_1	10110	GEOID	Dataset_CGG2013an83
NAD83(CSRS)v4_to_CGVD28_Height_1	9985	GEOID	Dataset_HT2_2002v70
NAD83(CSRS)v4_To_CGVD28(HTv2_0)_Height_1	10610	GEOID	Dataset_HT2_2002v70
NAD83(CSRS)v6_Height_To_CGVD2013(CGG2013a)_Height_1	9247	GEOID	Dataset_CGG2013an83
NAD83(CSRS)v6_Height_To_CGVD2013(CGG2013)_Height_1	9246	GEOID	Dataset_CGG2013n83
NAD83(CSRS)v6_Height_To_CGVD28_Height_HT2	9986	GEOID	Dataset_HT2_2010v70
NAD83(CSRS)v6_To_CGVD28(HTv2_0)_Height_1	10821	GEOID	Dataset_HT2_2010v70
NAD83(CSRS)v7_to_CGVD2013a(2010)_Height_1	10109	GEOID	Dataset_CGG2013an83
NAD83(CSRS)v7_to_CGVD28_Height_1	9987	GEOID	Dataset_HT2_2010v70
NAD83(CSRS)v7_To_CGVD28(HTv2_0)_Height_1	10612	GEOID	Dataset_HT2_2010v70
NAD83(CSRS)v8_to_CGVD2013a(2010)_Height_1	10417	GEOID	Dataset_CGG2013an83
NAD83(CSRS)v8_to_CGVD28_Height_1	10418	GEOID	Dataset_HT2_2010v70
NAD83(CSRS)v8_To_CGVD28(HTv2_0)_Height_1	10613	GEOID	Dataset_HT2_2010v70

Vertical Transformation Name	WKID	Method	File Name
NAP_Height_To_EVRF2019_Height_1	9581	Vertical_Offset_ with_Grid	Dataset_nl_2019z
NAP_Height_To_EVRF2019_Mean-Tide_Height_1	9582	Vertical_Offset_ with_Grid	Dataset_nl_2019m
Napier_1962_Height_To_NZGD2000_Height_1	110070	GEOID	Dataset_napier_1962_to_nzgd2000
Nelson_1955_Height_To_NZGD2000_Height_1	110071	GEOID	Dataset_nelson_1955_to_nzgd2000
NGF_IGN69_Height_To_EVRF2019_Height_1	9575	Vertical_Offset_ with_Grid	Dataset_fr_2019z
NGF_IGN69_Height_To_EVRF2019_Mean-Tide_Height_1	9576	Vertical_Offset_ with_Grid	Dataset_fr_2019m
NGVD29_To_NAVD88_NAD27_Alaska_VERTCON3	110208	VERTCON3	Dataset_vertcon_3.0_20190601.ngvd29.navd88.alaska.oht.trn
NGVD29_To_NAVD88_NAD27_CONUS_VERTCON3	110201	VERTCON3	Dataset_vertcon_3.0_20190601.ngvd29.navd88.conus.oht.trn
NGVD29_To_NAVD88_NAD83_2011_Alaska_VERTCON3	110212	VERTCON3	Dataset_vertcon_3.0_20190601.ngvd29.navd88.alaska.oht.trn
NGVD29_To_NAVD88_NAD83_2011_CONUS_VERTCON3	110207	VERTCON3	Dataset_vertcon_3.0_20190601.ngvd29.navd88.conus.oht.trn
NGVD29_To_NAVD88_NAD83_Alaska_VERTCON3	110209	VERTCON3	Dataset_vertcon_3.0_20190601.ngvd29.navd88.alaska.oht.trn
NGVD29_To_NAVD88_NAD83_CONUS_VERTCON3	110202	VERTCON3	Dataset_vertcon_3.0_20190601.ngvd29.navd88.conus.oht.trn
NGVD29_To_NAVD88_NAD83_CORS96_CONUS_VERTCON3	110204	VERTCON3	Dataset_vertcon_3.0_20190601.ngvd29.navd88.conus.oht.trn
NGVD29_To_NAVD88_NAD83_FBN_CONUS_VERTCON3	110205	VERTCON3	Dataset_vertcon_3.0_20190601.ngvd29.navd88.conus.oht.trn
NGVD29_To_NAVD88_NAD83_HARN_Alaska_VERTCON3	110210	VERTCON3	Dataset_vertcon_3.0_20190601.ngvd29.navd88.alaska.oht.trn
NGVD29_To_NAVD88_NAD83_HARN_CONUS_VERTCON3	110203	VERTCON3	Dataset_vertcon_3.0_20190601.ngvd29.navd88.conus.oht.trn
NGVD29_To_NAVD88_NAD83_NSRS2007_Alaska_VERTCON3	110211	VERTCON3	Dataset_vertcon_3.0_20190601.ngvd29.navd88.alaska.oht.trn
NGVD29_To_NAVD88_NAD83_NSRS2007_CONUS_VERTCON3	110206	VERTCON3	Dataset_vertcon_3.0_20190601.ngvd29.navd88.conus.oht.trn
NZGD2000_To_NZGD2009_Height_2	9325	GEOID	Dataset_nzgeoid2009
NZGD2000_To_NZGD2016_Height_1	9326	GEOID	Dataset_New_Zealand_Quasigeoid_2016
NZVD2016_Height_To_Auckland_1946_Height_1	7860	GEOID	Dataset_auckland_1946_to_nzvd2016
NZVD2016_Height_To_Bluff_1955_Height_1	7861	GEOID	Dataset_bluff_1955_to_nzvd2016
NZVD2016_Height_To_Dunedin_1958_Height_1	7862	GEOID	Dataset_dunedin_1958_to_nzvd2016
NZVD2016_Height_To_Dunedin-Bluff_1960_Height_1	7863	GEOID	Dataset_Dunedin-Bluff_1960_to_nzvd2016
NZVD2016_Height_To_Gisborne_1926_Height_1	7864	GEOID	Dataset_gisborne_1926_to_nzvd2016
NZVD2016_Height_To_Lyttelton_1937_Height_1	7865	GEOID	Dataset_lyttelton_1937_to_nzvd2016
NZVD2016_Height_To_Moturiki_1953_Height_1	7866	GEOID	Dataset_moturiki_1953_to_nzvd2016
NZVD2016_Height_To_Napier_1962_Height_1	7867	GEOID	Dataset_napier_1962_to_nzvd2016
NZVD2016_Height_To_Nelson_1955_Height_1	7868	GEOID	Dataset_nelson_1955_to_nzvd2016
NZVD2016_Height_To_One_Tree_Point_1964_Height_1	7869	GEOID	Dataset_one_tree_point_1964_to_nzvd2016
NZVD2016_Height_To_Stewart_Island_1977_Height_1	7870	GEOID	Dataset_stewart_island_1977_to_nzvd2016

Vertical Transformation Name	WKID	Method	File Name
NZVD2016_Height_To_Taranaki_1970_Height_1	7871	GEOID	Dataset_taranaki_1970_to_nzvd2016
NZVD2016_Height_To_Wellington_1953_Height_1	7872	GEOID	Dataset_wellington_1953_to_nzvd2016
ODN_Height_To_EVRF2019_Height_2	9561	Vertical_Offset_ with_Grid	Dataset_gb_2019z
One_Tree_Point_1964_Height_To_NZGD2000_Height_1	110072	GEOID	Dataset_one_tree_point_1964_to_nzgd2000
Oostende_Height_To_EVRF2019_Height_2	9563	Vertical_Offset_ with_Grid	Dataset_be_2019z
Oostende_Height_To_EVRF2019_Mean-Tide_Height_2	9564	Vertical_Offset_ with_Grid	Dataset_be_2019m
PNG94_To_PNG08_Height_1	7655	GEOID	Dataset_PNG08
POSGAR_2007_To_SRVN16_Height_1	9256	GEOID	Dataset_GEOIDE-Ar16
PTRA08_Height_To_Cais_da_Figueirinha- Angra_do_Heroismo_Height_GeodAz2014	110146	GEOID	Dataset_GeodAz2014
PTRA08_Height_To_Cais_da_Madalena_Height_GeodAz2014	110144	GEOID	Dataset_GeodAz2014
PTRA08_Height_To_Cais_das_Velas_Height_GeodAz2014	110142	GEOID	Dataset_GeodAz2014
PTRA08_Height_To_Cais_da_Vila_do_Porto_Height_ GeodAz2014	110147	GEOID	Dataset_GeodAz2014
PTRA08_Height_To_Horta_Height_GeodAz2014	110143	GEOID	Dataset_GeodAz2014
PTRA08_Height_To_Ponta_Delgada_Height_GeodAz2014	110148	GEOID	Dataset_GeodAz2014
PTRA08_Height_To_Santa_Cruz_da_Graciosa_Height_ GeodAz2014	110145	GEOID	Dataset_GeodAz2014
REGCAN95_Height_To_El_Hierro_Height_1	9421	GEOID	Dataset_EGM08_RED NAP_Canarias
REGCAN95_Height_To_Fuerteventura_Height_1	9416	GEOID	Dataset_EGM08_RED NAP_Canarias
REGCAN95_Height_To_Gran_Canaria_Height_1	9417	GEOID	Dataset_EGM08_RED NAP_Canarias
REGCAN95_Height_To_La_Gomera_Height_1	9419	GEOID	Dataset_EGM08_RED NAP_Canarias
REGCAN95_Height_To_Lanzarote_Height_1	9415	GEOID	Dataset_EGM08_RED NAP_Canarias
REGCAN95_Height_To_La_Palma_Height_1	9420	GEOID	Dataset_EGM08_RED NAP_Canarias
REGCAN95_Height_To_Tenerife_Height_1	9418	GEOID	Dataset_EGM08_RED NAP_Canarias
RGAF09_To_Guadeloupe_1988_Height_2	9133	GEOID	Dataset_RAGTBT2016
RGAF09_To_IGN_1988_LS_Height_2	9134	GEOID	Dataset_RALS2016
RGAF09_To_IGN_1988_MG_Height_2	9135	GEOID	Dataset_RAMG2016
RGAF09_To_IGN_1988_SB_Height_2	9187	GEOID	Dataset_gg10_sbv2
RGAF09_To_IGN_1988_SM_Height_2	9188	GEOID	Dataset_gg10_smv2
RGAF09_To_IGN_2008_LD_Height_1	9131	GEOID	Dataset_RALD2016
RGAF09_To_Martinique_1987_Height_2	9136	GEOID	Dataset_RAMART2016
RGF_1993_Height_To_NGF-IGN69_Height_RAF18_3	110061	GEOID	Dataset_RAF18

Vertical Transformation Name	WKID	Method	File Name
RGF93_v2b_To_NGF-IGN69_Height_RAF20_5	9876	GEOID	Dataset_RAF20
RGF93_v2b_To_NGF-IGN78_Height_RAC23_3	10506	GEOID	Dataset_RAC23
RGF93_v2_To_NGF-IGN69_Height_RAF18_3	8885	GEOID	Dataset_RAF18
RGF93_v2_To_NGF-IGN78_Height_RAC09_2	8372	GEOID	Dataset_RAC09
RGSPM06_To_Danger_1950_Height_2	9228	GEOID	Dataset_RASPM2018
RH2000_Height_To_EVRF2019_Height_1	9648	Vertical_Offset_ with_Grid	Dataset_se_2019z
RH2000_Height_To_EVRF2019_Mean-Tide_Height_1	9649	Vertical_Offset_ with_Grid	Dataset_se_2019m
RRAF_1991_To_IGN_2008_LD_Height_1	9132	GEOID	Dataset_RALDW842016
SHGD2015_To_SHVD2015_Height_EGM2008_2.5x2.5	110195	EGM96	Dataset_egm2008-25.grd
Slovenia_1996_To_SVS2010_Height_1	10247	GEOID	Dataset_SLO_VRP2016-Koper
Stewart_Island_1977_Height_To_NZGD2000_Height_1	110073	GEOID	Dataset_stewart_island_1977_to_nzgd2000
SVS2000_Height_To_SVS2010_Height_1	10685	Vertical_Offset_ with_Grid	Dataset_SLO-VTP2024
SVS2010_Height_To_EVRF2019_Height_2	9565	Vertical_Offset_ with_Grid	Dataset_si_2019z
SVS2010_Height_To_EVRF2019_Mean-Tide_Height_2	9566	Vertical_Offset_ with_Grid	Dataset_si_2019m
SWEREF99_To_RH2000_Height_SWEN17	110162	GEOID	Dataset_SWEN17_RH2000
SWEREF99_To_RH70_Height_SWEN17	110161	GEOID	Dataset_SWEN17_RH70
Taranaki_1970_Height_To_NZGD2000_Height_1	110074	GEOID	Dataset_taranaki_1970_to_nzgd2000
Trieste_Height_To_EVRF2019_Height_2	9567	Vertical_Offset_ with_Grid	Dataset_mk_2019z
Trieste_Height_To_EVRF2019_Height_3	9569	Vertical_Offset_ with_Grid	Dataset_ba_2019z
Trieste_Height_To_EVRF2019_Mean-Tide_Height_2	9568	Vertical_Offset_ with_Grid	Dataset_mk_2019m
Trieste_Height_To_EVRF2019_Mean-Tide_Height_3	9570	Vertical_Offset_ with_Grid	Dataset_ba_2019m
Wellington_1953_Height_To_NZGD2000_Height_1	110075	GEOID	Dataset_wellington_1953_to_nzgd2000
WGS_1984_To_EGM_1984_Geoid_1	110008	EGM84	Dataset_egm84.grd
WGS_1984_To_EGM_1984_Geoid_2	110085	EGM84_Natural_ Spline	Dataset_egm84.grd
WGS_1984_To_EGM_1996_Geoid_1	110007	EGM96	Dataset_egm96.grd

Vertical Transformation Name	WKID	Method	File Name
WGS_1984_To_EGM_1996_Geoid_2	110084	EGM96_Natural_Spline	Dataset_egm96.grd
WGS_1984_To_EGM_1996_Geoid_BCNS_3	110220	EGM96	Dataset_egm96.grd
WGS_1984_To_LHN95_Height_CHGeo2004	110128	GEOID	Dataset_chgeo2004_ETRS
WGS_1984_To_LN02_Height_CHGeo2004_Htrans_2	110158	GEOID	Dataset_chgeo2004_htrans_ETRS_corr
WGS_1984_To_MSL_Height_EGM2008_1x1	110099	EGM96	Dataset_egm2008-1.grd
WGS_1984_To_QVD_Height_QG2020	110226	GEOID	Dataset_QG2020_Rev1
WGS_1984_To_WGS_1984_EGM2008_1x1_Height	110018	EGM96	Dataset_egm2008-1.grd
WGS_1984_To_WGS_1984_EGM2008_2.5x2.5_Height	110019	EGM96	Dataset_egm2008-25.grd
WGS_1984_To_WGS_1984_EGM2008_2.5x2.5_Height_BCNS	110221	EGM96	Dataset_egm2008-25.grd

Table 14: Vertical transformation methods

Vertical Method Name	WKID
EGM84	129861
EGM84_Natural_Spline	129961
EGM96	129661
EGM96_Natural_Spline	129761
GEOID	129665
VDATUM	129601
VERTCON	129658
VERTCON3	129659
Vertical_Offset	129616
Vertical_Offset_and_Slope	129657
Vertical_Offset_with_Grid	129617
Zero_Tide_to_Mean_Tide_EVRF2019	129605

Table 15: Vertical transformations: parameters

Vertical Method Name	Parameter Name	Default Value	Array Position	Default Unit
EGM84	Dataset_	0	15	File name
EGM84_Natural_Spline	Dataset_	0	15	File name
EGM96	Dataset_	0	15	File name

Vertical Method Name	Parameter Name	Default Value	Array Position	Default Unit
EGM96_Natural_Spline	Dataset_	0	15	File name
GEOID	Dataset_	0	15	File name
VDATUM	Dataset_	0	15	File name
VERTCON	Dataset_	0	15	File name
VERTCON3	Dataset_	0	15	File name
Vertical_Offset	Vertical_Offset	0	0	Meter
Vertical_Offset_and_Slope	Vertical_Offset	0	0	Meter
	Longitude_Of_Evaluation	0	2	Degree
	Latitude_Of_Evaluation	0	6	Degree
	Inclination_North	0	13	Arc-second
	Inclination_East	0	14	Arc-second
Vertical_Offset_with_Grid	Dataset_	0	15	File name
Zero_Tide_to_Mean_Tide_EVRF2019				