

Geographic and Vertical Transformation Tables

ArcGIS Maps SDKs for Native Apps Version 200.4

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..... 81

Table 3: Geographic (datum) transformations: Geographic 2D offset method 82

Table 4: Geographic (datum) transformations: Geocentric translation method 83

Table 5: Geographic (datum) transformations: Coordinate frame (CF) and position vector (PV) methods..... 107

Table 6: Geographic (datum) transformations: Molodensky-Badekas method 121

Table 7: Geographic (datum) transformations: HARN, NADCON, and NTV2 methods 124

Table 8: Geographic transformation methods: well-known IDs..... 134

Table 9: Geographic transformation methods: parameters 135

Table 10: Vertical transformations: well-known IDs, accuracies, and areas of use 137

Table 11: Vertical transformations: Vertical offset method 153

Table 12: Vertical transformations: Vertical offset and slope method..... 155

Table 13: Vertical transformations: file-based methods..... 157

Table 14: Vertical transformation methods 167

Table 15: Vertical transformations: parameters 167

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_HARN_American_Samoa_East	1579	5.000	American Samoa - Ofu, Olesega and Ta'u islands	-14.3100	-169.7300	-14.1100	-169.3800
American_Samoa_1962_To_HARN_American_Samoa_West	1578	5.000	American Samoa - Tutuila island	-14.4300	-170.8800	-14.2000	-170.5100
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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_PTRO8_1	5027	2.000	Portugal - Azores C - onshore	38.3200	-28.9000	39.1400	-26.9700
Azores_Central_1995_To_PTRO8_2	5028	0.500	Portugal - Azores C - Faial onshore	38.4600	-28.9000	38.7000	-28.5400

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Bogota_To_MAGNA_Region_2_CF	15716	1.000	Colombia region 2	9.3900	-76.0800	11.5900	-73.0000
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
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	6.5800	55.0900	11.5900
DHDN_To_ETRS_1989_6	1781	0.100	Germany – Thuringen	50.2000	9.9200	51.6400	12.5600
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	6.5800	55.0900	11.5900
DHDN_To_WGS_1984_6x	108209	0.100	Germany - Thuringen	50.2000	9.9200	51.6400	12.5600
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	54.5100	8.0000	57.8000	15.2500
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	54.5100	8.0000	57.8000	15.2500
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	51.4500	2.5300	55.7700	6.4100
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	53.6000	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	62.0100	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	18.670
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 by country	32.8800	-16.1000	84.7300	40.1800
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_OSGB_1936_OSTN15	108057	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
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 by country	32.8800	-16.1000	84.7300	40.1800
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_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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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	51.7000	-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	-4.1000	50.8500	-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
EUREF_FIN_To_ETRS_1989	108226	1.000	Finland	58.8400	19.0800	70.0900	31.5900
EUREF_FIN_To_WGS_1984	108227	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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Fatu_Iva_1972_To_WGS_1984_1	15772	2.000	French Polynesia - Marquesas Islands - Fatu Hiva	-10.6000	-138.7500	-10.3600	-138.5400
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
GDA_1994_To_GDA2020_NTV2_5_Cocos_Keeling	8445	0.050	Cocos (Keeling) Islands - onshore	-12.2700	96.7600	-11.7600	96.9900
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Graciosa_1948_To_PTRA08_6_3par	108245	0.070	Portugal - Azores C - Terceira onshore	38.5700	-27.4400	38.8600	-26.9700
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Grand_Cayman_1959_To_WGS_1984_2	6142	1.000	Cayman Islands - Grand Cayman	19.2100	-81.4600	19.4100	-81.0400
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_Guam	1068	5.000	Guam - onshore	13.1800	144.5800	13.7000	145.0100
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_NAD_1983_HARN_Rota	108305	Unknown	Northern Marianas - Rota	14.0000	145.0000	14.7500	146.0000
Guam_1963_To_NAD_1983_HARN_Saipan	108304	Unknown	Northern Marianas - Saipan	14.7500	145.0000	15.5000	146.0000
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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	China - Hong Kong	22.1300	113.7600	22.5800	114.5100
Hong_Kong_1980_to_Hong_Kong_Geodetic_CS_1	9913	1.000	China - Hong Kong	22.1300	113.7600	22.5800	114.5100
Hong_Kong_1980_To_ITRF_1996	108337	1.000	China - Hong Kong	22.1300	113.7600	22.5800	114.5100
Hong_Kong_1980_To_WGS_1984_1	1825	1.000	China - Hong Kong	22.1300	113.7600	22.5800	114.5100
Hong_Kong_Geodetic_CS_to_WGS_1984_1	8439	1.000	China - 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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
IGN63_Hiva_Oa_To_WGS_1984_2	15774	2.000	French Polynesia - Marquesas Islands - Tahuata	-10.0800	-139.1900	-9.8600	-138.9800
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
IGN72_Nuku_Hiva_To_WGS_1984_2	15775	1.000	French Polynesia - Marquesas Islands - Nuku Hiva	-9.0100	-140.3100	-8.7200	-139.9600
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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_COR96	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
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	Korea, Republic of (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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Katanga_1955_To_WGS_1984_1	4066	1.500	Congo DR (Zaire) - Katanga - Lubumbashi area	-12.0100	26.3800	-11.1300	27.7500
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
KKJ_To_ETRS_1989_1_Old	1638	1.500	Finland - onshore	59.7500	19.2400	70.0900	31.5900
KKJ_To_ETRS_1989_2	10098	0.500	Finland - onshore	59.7500	19.2400	70.0900	31.5900
KKJ_To_EUREF_FIN	108229	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	1.000	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
KGD2002_To_WGS_1984_1	15831	1.000	Korea, Republic of (South Korea)	28.6000	122.7100	40.2700	134.2800
Korean_1985_To_KGD_2002_1	5189	1.000	Korea, Republic of (South Korea) - onshore	33.1400	124.5300	38.6400	131.0100
Korean_1985_To_WGS_1984_1	5191	1.000	Korea, Republic of (South Korea) - onshore	33.1400	124.5300	38.6400	131.0100
Korean_1995_To_WGS_1984_1	1558	2.000	Korea, Republic of (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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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	China - 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	China - 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
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	China - 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_RSAO13_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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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_Alaska	1243	0.500	USA - Alaska including EEZ	47.8800	167.6500	74.7100	-129.9900
NAD_1927_To_NAD_1983_CSRS_1	1844	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_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
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_NADCON	1241	0.150	USA - CONUS including EEZ	23.8100	-129.1700	49.3800	-65.6900
NAD_1927_To_NAD_1983_NTV2_Canada	1313	1.500	Canada - NAD27	40.0000	-141.0100	83.1700	-44.0000
NAD_1927_To_NAD_1983_PR_VI	108003	0.050	Caribbean - Puerto Rico and Virgin Islands - onshore	17.6200	-67.9700	18.7800	-64.2500
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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_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_BC_mainland	9122	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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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_NSRS2007_GEOCON_Alaska	108045	0.050	USA - Alaska	51.3000	172.4200	71.4000	-129.9900
NAD_1983_HARN_To_NSRS2007_GEOCON_CONUS	108044	0.050	USA - CONUS - onshore	24.4100	-124.7900	49.3800	-66.9100
NAD_1983_HARN_To_NSRS2007_GEOCON_Puerto_Rico_Virgin_Islands	108046	0.050	Caribbean - Puerto Rico and US Virgin Islands - onshore	17.6200	-67.9700	18.5700	-64.5100
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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_GEOCON11_Alaska	108048	0.050	USA - Alaska	51.3000	172.4200	71.4000	-129.9900
NAD_1983_NSRS2007_To_2011_GEOCON11_CONUS	108047	0.050	USA - CONUS - onshore	24.4100	-124.7900	49.3800	-66.9100
NAD_1983_NSRS2007_To_2011_GEOCON11_Puerto_Rico_Virgin_Islands	108049	0.050	Caribbean - Puerto Rico and US Virgin Islands - onshore	17.6200	-67.9700	18.5700	-64.5100
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_HARN_Alabama	1474	0.050	USA - Alabama	30.1400	-88.4800	35.0200	-84.8900
NAD_1983_To_HARN_Arizona	1475	0.050	USA - Arizona	31.3300	-114.8100	37.0100	-109.0400
NAD_1983_To_HARN_Arkansas	1704	0.050	USA - Arkansas	33.0100	-94.6200	36.5000	-89.6400
NAD_1983_To_HARN_CA_N	1476	0.050	USA - California - north of 36.5°N	36.5000	-124.4500	42.0100	-116.5400
NAD_1983_To_HARN_CA_S	1477	0.050	USA - California - south of 36.5°N	32.5300	-121.9800	36.5000	-114.1200
NAD_1983_To_HARN_Colorado	1478	0.050	USA - Colorado	36.9800	-109.0600	41.0100	-102.0400
NAD_1983_To_HARN_East_MT_ID	1481	0.050	USA - Idaho and Montana - east of 113°W	41.9900	-113.0000	49.0100	-104.0400
NAD_1983_To_HARN_East_Texas	1498	0.050	USA - Texas east of 100°W	25.8300	-100.0000	34.5800	-93.5000
NAD_1983_To_HARN_Florida	1480	0.050	USA - Florida	24.4100	-87.6300	31.0100	-79.9700
NAD_1983_To_HARN_Georgia	1479	0.050	USA - Georgia	30.3600	-85.6100	35.0100	-80.7700
NAD_1983_To_HARN_Hawaii	1520	0.050	USA - Hawaii - onshore	18.8700	-160.3000	22.2900	-154.7400
NAD_1983_To_HARN_Illinois	1553	0.050	USA - Illinois	36.9700	-91.5200	42.5100	-87.0200

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD_1983_To_HARN_Indiana	1521	0.050	USA - Indiana	37.7700	-88.1000	41.7700	-84.7800
NAD_1983_To_HARN_Iowa	1705	0.050	USA - Iowa	40.3600	-96.6500	43.5100	-90.1400
NAD_1983_To_HARN_Kansas	1522	0.050	USA - Kansas	36.9900	-102.0600	40.0100	-94.5800
NAD_1983_To_HARN_Kentucky	1483	0.050	USA - Kentucky	36.4900	-89.5700	39.1500	-81.9500
NAD_1983_To_HARN_Louisiana	1484	0.050	USA - Louisiana	28.8500	-94.0500	33.0300	-88.7500
NAD_1983_To_HARN_Maine	1486	0.050	USA - Maine	43.0400	-71.0900	47.4700	-66.9100
NAD_1983_To_HARN_MD_DE	1485	0.050	USA - Delaware and Maryland	37.9700	-79.4900	39.8500	-74.9700
NAD_1983_To_HARN_Michigan	1487	0.050	USA - Michigan	41.6900	-90.4200	48.3200	-82.1300
NAD_1983_To_HARN_Minnesota	1706	0.050	USA - Minnesota	43.4900	-97.2200	49.3800	-89.4900
NAD_1983_To_HARN_Mississippi	1488	0.050	USA - Mississippi	30.0100	-91.6500	35.0100	-88.0900
NAD_1983_To_HARN_Missouri	1707	0.050	USA - Missouri	35.9800	-95.7700	40.6100	-89.1000
NAD_1983_To_HARN_Montana_Idaho	108298	0.050	USA - Idaho and Montana	41.0000	-119.0000	49.3800	-104.0000
NAD_1983_To_HARN_Nebraska	1489	0.050	USA - Nebraska	39.9900	-104.0600	43.0100	-95.3000
NAD_1983_To_HARN_Nevada	1523	0.050	USA - Nevada	34.9900	-120.0000	42.0000	-114.0300
NAD_1983_To_HARN_New_England	1490	0.050	USA - New England - south (CT, MA, NH, RI, VT)	40.9800	-73.7300	45.3100	-69.8600
NAD_1983_To_HARN_New_Jersey	1554	0.050	USA - New Jersey	38.8700	-75.6000	41.3600	-73.8800
NAD_1983_To_HARN_New_Mexico	1491	0.050	USA - New Mexico	31.3300	-109.0600	37.0000	-102.9900
NAD_1983_To_HARN_New_York	1492	0.050	USA - New York	40.4700	-79.7700	45.0200	-71.8000
NAD_1983_To_HARN_North_Carolina	15834	0.050	USA - North Carolina	33.8300	-84.3300	36.5900	-75.3800
NAD_1983_To_HARN_North_Dakota	1493	0.050	USA - North Dakota	45.9300	-104.0700	49.0100	-96.5500
NAD_1983_To_HARN_Ohio	1524	0.050	USA - Ohio	38.4000	-84.8300	42.3300	-80.5100
NAD_1983_To_HARN_Oklahoma	1494	0.050	USA - Oklahoma	33.6200	-103.0000	37.0100	-94.4200
NAD_1983_To_HARN_OR_WA	108291	0.050	USA - Oregon and Washington	41.9800	-124.7900	49.0500	-116.4700
NAD_1983_To_HARN_Pennsylvania	15838	0.050	USA - Pennsylvania	39.7100	-80.5300	42.5300	-74.7000
NAD_1983_To_HARN_PR_VI	1495	0.050	Caribbean - Puerto Rico and US Virgin Islands - onshore	17.6200	-67.9700	18.5700	-64.5100
NAD_1983_To_HARN_South_Carolina	15836	0.050	USA - South Carolina	32.0500	-83.3600	35.2100	-78.5200
NAD_1983_To_HARN_South_Dakota	1496	0.050	USA - South Dakota	42.4800	-104.0700	45.9500	-96.4300
NAD_1983_To_HARN_Tennessee	1497	0.050	USA - Tennessee	34.9800	-90.3100	36.6800	-81.6500
NAD_1983_To_HARN_Utah	1525	0.050	USA - Utah	36.9900	-114.0500	42.0100	-109.0400
NAD_1983_To_HARN_Virginia	1500	0.050	USA - Virginia	36.5400	-83.6800	39.4600	-75.3100

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NAD_1983_To_HARN_WA_OR	1501	0.050	USA - Oregon and Washington	41.9800	-124.7900	49.0500	-116.4700
NAD_1983_To_HARN_West_MT_ID	1482	0.050	USA - Idaho and Montana - west of 113°W	41.9900	-117.2400	49.0100	-113.0000
NAD_1983_To_HARN_West_Texas	1499	0.050	USA - Texas west of 100°W	28.0400	-106.6600	36.5000	-100.0000
NAD_1983_To_HARN_West_Virginia	1526	0.050	USA - West Virginia	37.2000	-82.6500	40.6400	-77.7200
NAD_1983_To_HARN_Wisconsin	1502	0.050	USA - Wisconsin	42.4800	-92.8900	47.3100	-86.2500
NAD_1983_To_HARN_Wyoming	1503	0.050	USA - Wyoming	40.9900	-111.0600	45.0100	-104.0500
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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_PTRA08_1_3par	108344	0.060	Portugal - Azores W - onshore	39.3000	-31.3400	39.7700	-31.0200
Observatorio_Meteorologico_1939_To_PTRA08_1_7par	108341	0.030	Portugal - Azores W - onshore	39.3000	-31.3400	39.7700	-31.0200
Observatorio_Meteorologico_1939_To_PTRA08_2_3par	108345	0.056	Azores - Flores Island	39.3500	-31.3000	39.5000	-31.1000
Observatorio_Meteorologico_1939_To_PTRA08_2_7par	108342	0.020	Azores - Flores Island	39.3500	-31.3000	39.5000	-31.1000
Observatorio_Meteorologico_1939_To_PTRA08_3_3par	108346	0.064	Portugal - Azores W - Corvo onshore	39.6300	-31.1800	39.7700	-31.0200
Observatorio_Meteorologico_1939_To_PTRA08_3_7par	108343	0.070	Portugal - Azores W - Corvo onshore	39.6300	-31.1800	39.7700	-31.0200
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	China - 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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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	1454	0.200	USA - Hawaii - onshore	18.8700	-160.3000	22.2900	-154.7400
Old_Hawaiian_To_NAD_1983_2	8561	0.200	USA - Hawaii - onshore	18.8700	-160.3000	22.2900	-154.7400
Old_Hawaiian_To_NAD_1983_HARN_Hawaii	108306	0.050	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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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 Territory, and Jordan	29.1900	32.9900	33.5300	39.3000
Palestine_1923_To_WGS_1984_1	1074	2.000	Israel, Palestine Territory, 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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
Palestine_1923_To_WGS_1984_2	108099	3.500	Asia - Middle East - Israel and Palestine Territory onshore	29.4500	34.1700	33.2800	35.6900
Palestine_1923_To_WGS_1984_2X	108232	Unknown	Asia - Middle East - Israel, Jordan and Palestine onshore	29.1800	34.1700	33.3800	39.3100
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	9.9200	51.6400	12.5600
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	9.9200	51.6400	12.5600
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_RGTA07_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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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_PTRA08_1	5021	2.000	Portugal – Madeira archipelago onshore	32.3500	-17.3100	33.1500	-16.2300
Porto_Santo_1995_To_PTRA08_2	5022	1.000	Portugal – Madeira island onshore	32.5800	-17.3100	32.9300	-16.6600
Porto_Santo_1995_To_PTRA08_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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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	1461	0.050	Caribbean - Puerto Rico and Virgin Islands - onshore	17.6200	-67.9700	18.7800	-64.2500
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
RSAO13_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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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_To_NAD_1983	1457	0.500	USA - Alaska - St. George Island	56.4900	-169.8800	56.6700	-169.3800
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
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_To_NAD_1983	1455	0.500	USA - Alaska - St. Lawrence Island	62.8900	-171.9700	63.8400	-168.5900
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
St_Paul_To_NAD_1983	1456	0.500	USA - Alaska - St. Paul Island	57.0600	-170.5100	57.2800	-170.0400
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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_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
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

Geographic (datum) Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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	China - Macao	22.0600	113.5200	22.2300	113.6800
WGS_1984_To_Observatorio_Meteorologico_1965_2	108235	Unknown	China - 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	1.0	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

Geographic (datum) Transformation Name	WKID	Method
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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_PTRA08_1	5027	Geocentric_Translation	-105.679	166.1	-37.322
Azores_Central_1995_To_PTRA08_2	5028	Geocentric_Translation	-105.377	165.769	-36.965
Azores_Central_1995_To_PTRA08_3	5029	Geocentric_Translation	-105.359	165.804	-37.05
Azores_Central_1995_To_PTRA08_4	5030	Geocentric_Translation	-105.531	166.39	-37.326
Azores_Central_1995_To_PTRA08_5	5031	Geocentric_Translation	-105.756	165.972	-37.313
Azores_Central_1995_To_PTRA08_6	5032	Geocentric_Translation	-106.235	166.236	-37.768
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Bogota_To_WGS_1984_2	1597	Geocentric_Translation	304.5	306.5	-318.1
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
Ocotepeque_1935_To_CR05	6890	Geocentric_Translation	213.11	9.37	-74.95
Ocotepeque_1935_To_NAD_1927_1	6888	Geocentric_Translation	205.435	-29.099	-292.202
Ocotepeque_1935_To_WGS_1984_1	5470	Geocentric_Translation	213.11	9.37	-74.95
Ocotepeque_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
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_RGTAAF07_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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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_PTAA08_1_3par	108163	Geocentric_Translation	-503.229	-247.375	312.582
Porto_Santo_1936_To_PTAA08_2_3par	108164	Geocentric_Translation	-503.174	-247.255	312.316
Porto_Santo_1936_To_PTAA08_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_PTAA08_1	5021	Geocentric_Translation	-503.229	-247.375	312.582
Porto_Santo_1995_To_PTAA08_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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)
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
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
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
EUREF_FIN_To_ETRS_1989	108226	Coordinate_Frame	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EUREF_FIN_To_WGS_1984	108227	Coordinate_Frame	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
ITRF_2000_To_NAD_1983_COR596	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
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_ETRS_1989_2	10098	Coordinate_Frame	-96.0617	-82.4278	-121.7535	-4.80107	-0.34543	1.37646	1.4964
KKJ_To_EUREF_FIN	108229	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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
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_PACPO0_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_PACPO0_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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
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_PTRA08_1_7par	108341	Position_Vector	-487.978	-226.275	102.787	-0.743	1.677	2.087	1.485
Observatorio_Meteorologico_1939_To_PTRA08_2_7par	108342	Position_Vector	-511.151	-181.269	139.609	1.05	2.703	1.798	3.071
Observatorio_Meteorologico_1939_To_PTRA08_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
Ocotepeque_1935_To_WGS_1984_2	5473	Coordinate_Frame	213.116	9.358	-74.946	2.35141879	-0.06146691	6.39420899	-5.22
Ocotepeque_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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
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
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

Geographic (datum) Transformation Name	WKID	Method	dx (m)	dy (m)	dz (m)	rx (arc-seconds)	ry (arc-seconds)	rz (arc-seconds)	ds (ppm)
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
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_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

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_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
		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

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)
		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				
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				

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)
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
		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

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)
		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

Geographic (datum) Transformation Name	WKID	Method	File name
American_Samoa_1962_To_HARN_American_Samoa_East	1579	HARN	Dataset_eshpgn
American_Samoa_1962_To_HARN_American_Samoa_West	1578	HARN	Dataset_wshpgn
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
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

Geographic (datum) Transformation Name	WKID	Method	File name
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
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_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

Geographic (datum) Transformation Name	WKID	Method	File name
ETRS89_to_GWVWA22-IRF_1	10220	NTv2	Dataset_TN15-ETRS89-to-GWVWA22-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
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
ETRS_1989_To_NTF_3_NTV2	15959	NTv2	Dataset_france/rgf93_ntf
ETRS_1989_To_OSGB_1936_OSTN15	108057	NTv2	Dataset_uk/OSTN15_NTV2
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_HARN_Guam	1068	HARN	Dataset_guhpgn
Guam_1963_To_NAD_1983_HARN_Rota	108305	HARN	Dataset_c2hpgn
Guam_1963_To_NAD_1983_HARN_Saipan	108304	HARN	Dataset_c1hpgn
Guam_1963_To_NAD_1983_HARN_2	8665	NADCON5	Dataset_nadcon5.gu63.nad83_1993.guamcnmi.lat.trn.20160901

Geographic (datum) Transformation Name	WKID	Method	File name
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/touhokutaiheiyouoki2011
JGD2000_to_WGS_1984_2	9896	NTv2	Dataset_japan/touhokutaiheiyouoki2011
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
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_NAD_1983_Alaska	1243	NADCON	Dataset_alaska
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

Geographic (datum) Transformation Name	WKID	Method	File name
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_NADCON	1241	NADCON	Dataset_conus
NAD_1927_To_NAD_1983_NTv2_Canada	1313	NTv2	Dataset_canada/Ntv2_0
NAD_1927_To_NAD_1983_PR_VI	108003	NADCON	Dataset_prvi
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_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_BC_mainland	9122	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
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_HARN_Alabama	1474	HARN	Dataset_alhpgn
NAD_1983_To_HARN_Arizona	1475	HARN	Dataset_azhpgn

Geographic (datum) Transformation Name	WKID	Method	File name
NAD_1983_To_HARN_Arkansas	1704	HARN	Dataset_arhp gn
NAD_1983_To_HARN_CA_N	1476	HARN	Dataset_cnhp gn
NAD_1983_To_HARN_CA_S	1477	HARN	Dataset_cshp gn
NAD_1983_To_HARN_Colorado	1478	HARN	Dataset_cohp gn
NAD_1983_To_HARN_East_MT_ID	1481	HARN	Dataset_emhp gn
NAD_1983_To_HARN_East_Texas	1498	HARN	Dataset_ethp gn
NAD_1983_To_HARN_Florida	1480	HARN	Dataset_flhp gn
NAD_1983_To_HARN_Georgia	1479	HARN	Dataset_gahp gn
NAD_1983_To_HARN_Hawaii	1520	HARN	Dataset_hihp gn
NAD_1983_To_HARN_Illinois	1553	HARN	Dataset_ilhp gn
NAD_1983_To_HARN_Indiana	1521	HARN	Dataset_inhp gn
NAD_1983_To_HARN_Iowa	1705	HARN	Dataset_iahp gn
NAD_1983_To_HARN_Kansas	1522	HARN	Dataset_kshp gn
NAD_1983_To_HARN_Kentucky	1483	HARN	Dataset_kyhp gn
NAD_1983_To_HARN_Louisiana	1484	HARN	Dataset_lahp gn
NAD_1983_To_HARN_Maine	1486	HARN	Dataset_mehp gn
NAD_1983_To_HARN_MD_DE	1485	HARN	Dataset_mdhp gn
NAD_1983_To_HARN_Michigan	1487	HARN	Dataset_mihp gn
NAD_1983_To_HARN_Minnesota	1706	HARN	Dataset_mnhp gn
NAD_1983_To_HARN_Mississippi	1488	HARN	Dataset_mshp gn
NAD_1983_To_HARN_Missouri	1707	HARN	Dataset_mohp gn
NAD_1983_To_HARN_Montana_Idaho	108298	HARN	Dataset_imhp gn
NAD_1983_To_HARN_Nebraska	1489	HARN	Dataset_nbhp gn
NAD_1983_To_HARN_Nevada	1523	HARN	Dataset_nvhp gn
NAD_1983_To_HARN_New_England	1490	HARN	Dataset_nehp gn
NAD_1983_To_HARN_New_Jersey	1554	HARN	Dataset_njhp gn
NAD_1983_To_HARN_New_Mexico	1491	HARN	Dataset_nmhp gn
NAD_1983_To_HARN_New_York	1492	HARN	Dataset_nyhp gn
NAD_1983_To_HARN_North_Carolina	15834	HARN	Dataset_nchp gn
NAD_1983_To_HARN_North_Dakota	1493	HARN	Dataset_ndhp gn
NAD_1983_To_HARN_Ohio	1524	HARN	Dataset_ohhp gn
NAD_1983_To_HARN_Oklahoma	1494	HARN	Dataset_okhp gn
NAD_1983_To_HARN_OR_WA	108291	HARN	Dataset_wohp gn
NAD_1983_To_HARN_Pennsylvania	15838	HARN	Dataset_pahp gn
NAD_1983_To_HARN_PR_VI	1495	HARN	Dataset_pvhp gn
NAD_1983_To_HARN_South_Carolina	15836	HARN	Dataset_schp gn

Geographic (datum) Transformation Name	WKID	Method	File name
NAD_1983_To_HARN_South_Dakota	1496	HARN	Dataset_sdhpgn
NAD_1983_To_HARN_Tennessee	1497	HARN	Dataset_tnhpgn
NAD_1983_To_HARN_Utah	1525	HARN	Dataset_uthpgn
NAD_1983_To_HARN_Virginia	1500	HARN	Dataset_vahpgn
NAD_1983_To_HARN_WA_OR	1501	HARN	Dataset_wohpgn
NAD_1983_To_HARN_West_MT_ID	1482	HARN	Dataset_wmhpgn
NAD_1983_To_HARN_West_Texas	1499	HARN	Dataset_wthpgn
NAD_1983_To_HARN_West_Virginia	1526	HARN	Dataset_wvhpgn
NAD_1983_To_HARN_Wisconsin	1502	HARN	Dataset_wihpgn
NAD_1983_To_HARN_Wyoming	1503	HARN	Dataset_wyhp gn
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_mdhp gn

Geographic (datum) Transformation Name	WKID	Method	File name
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
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_nvhpgn
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

Geographic (datum) Transformation Name	WKID	Method	File name
NAD_1983_To_WGS_1984_west_Texas_39	1735	HARN	Dataset_wthpgn
NAD_1983_To_WGS_1984_West_Virginia_51	1747	HARN	Dataset_wvhpgn
NAD_1983_To_WGS_1984_Wisconsin_42	1738	HARN	Dataset_wihpgn
NAD_1983_To_WGS_1984_Wyoming_44	1740	HARN	Dataset_wyhpgn
NAD83_to_NAD83(CSRs)v6_10	9550	NTv2	Dataset_canada/NLCRSV4A
NAD83_to_NAD83(CSRs)v7_1	9795	NTv2	Dataset_canada/ABCSRSV7
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	1454	NADCON	Dataset_hawaii
Old_Hawaiian_To_NAD_1983_2	8561	NADCON5	Dataset_nadcon5.ohd.nad83_1986.hawaii.lat.trn.20160901
Old_Hawaiian_To_NAD_1983_HARN_Hawaii	108306	HARN	Dataset_ohdhihpgn
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_OSTN15_NTv2_OSGBtoETRS
OSGB_1936_To_WGS_1984_7	5339	NTv2	Dataset_uk/OSTN02_NTv2
OSGB36_to_WGS_1984_9	7710	NTv2	Dataset_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
Puerto_Rico_To_NAD_1983	1461	NADCON	Dataset_prvi
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

Geographic (datum) Transformation Name	WKID	Method	File name
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_To_NAD_1983	1457	NADCON	Dataset_stgeorge
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
St_Lawrence_To_NAD_1983	1455	NADCON	Dataset_stlrnc
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_stlrnc
St_Paul_To_NAD_1983	1456	NADCON	Dataset_stpaul
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
WGS_1984_To_OSGB_1936_OSTN15	108058	NTv2	Dataset_uk/OSTN15_NTv2

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

Geographic Transformation Method Name	WKID
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

Geographic Transformation Method Name	Parameter Name	Default Value	Array Position	Default Unit
HARN	Dataset_	0	15	File name
Longitude_Rotation				
Molodensky	X_Axis_Translation	0	0	Meter
	Y_Axis_Translation	0	1	Meter
	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

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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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
Cascais_Height_To_EVRF2019_Height_2	9553	0.028	Portugal - mainland - onshore	36.95	-9.56	42.16	-6.19

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
CGVD2013(CGG2013a)_epoch1997_Height_To_CGVD28_Height_NAD83(CSRS)	110121	0.062	Canada - CGVD28	41.67	-141.01	69.8	-59.73
CGVD2013(CGG2013a)_epoch2002_Height_To_CGVD28_Height_NAD83(CSRS)	110120	0.061	Canada - CGVD28	41.67	-141.01	69.8	-59.73
CGVD2013(CGG2013a)_epoch2010_Height_To_CGVD28_Height_NAD83(CSRS)	110119	0.06	Canada - CGVD28	41.67	-141.01	69.8	-59.73
CGVD2013(CGG2013a)_epoch2010_Height_To_CGVD28_Height_NAD83(CSRS)v6	110118	0.06	Canada - CGVD28	41.67	-141.01	69.8	-59.73
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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	54.51	8.00	57.8	15.25
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
ETRS89_Height_To_Cascais_Height_GeodPT08	110141	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
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_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 – offshore 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_DNN_Height	110163	0.1	Denmark - onshore	54.51	8	57.8	15.25
ETRS89_To_Douglas_Height_2_OSGM15	7717	0.03	Isle of Man – onshore	54.02	-4.87	54.44	-4.27
ETRS89_To_DVR90_Height	110164	0.01	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	110198	0.02	Finland - onshore	59.75	19.24	70.09	31.59
EUREF-FIN_To_N60_Height_FIN2000	110196	0.03	Finland - onshore	59.75	19.24	70.09	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 – 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
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
GUVD63_To_GUVD04_NAD83_FBN_VERTCON3	110214	0.054	Guam - onshore	13.18	144.58	13.7	145.01
GUVD63_To_GUVD04_NAD83_HARN_VERTCON3	110213	0.054	Guam - onshore	13.18	144.58	13.7	145.01
GUVD63_To_GUVD04_NAD83_MA11_VERTCON3	110216	0.054	Guam - onshore	13.18	144.58	13.7	145.01
GUVD63_To_GUVD04_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_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
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
LHN95_Height_To_EVRF2019_Height_2	9559	0.146	Europe - Liechtenstein and Switzerland	45.82	5.96	47.81	10.49
LHN95_Height_To_EVRF2019_Mean-Tide_Height_2	9560	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
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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)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	69.8	-59.73
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	69.8	-59.73
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	69.8	-59.73
NAD83(CSRS)v6_Height_To_CGVD28_Height_HT2	9986	0.05	Canada - CGVD28	41.67	-141.01	69.8	-59.73
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	69.8	-59.73
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	69.8	-59.73
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NZVD2009_To_Auckland_1	4442	0.05	New Zealand - North Island - Auckland vcrs	-37.67	174	-36.12	176.17
NZVD2009_To_Bluff_1	4451	0.05	New Zealand - South Island - Bluff vcrs	-46.71	168.01	-46.26	168.86
NZVD2009_To_Dunedin_1	4450	0.07	New Zealand - South Island - Dunedin vcrs	-46.4	167.73	-43.82	171.28
NZVD2009_To_Dunedin_Bluff_1960_1	4453	0.04	New Zealand - South Island - Dunedin-Bluff vcrs	-46.73	166.37	-44.52	169.95
NZVD2009_To_Gisborne_1	4445	0.02	New Zealand - North Island - Gisborne vcrs	-39.04	176.41	-37.49	178.63
NZVD2009_To_Lyttelton_1	4449	0.09	New Zealand - South Island - Lyttelton vcrs	-44.92	168.95	-41.6	173.77
NZVD2009_To_Moturiki_1	4443	0.06	New Zealand - North Island - Moturiki vcrs	-40.59	174.57	-37.52	177.26
NZVD2009_To_Napier_1	4446	0.05	New Zealand - North Island - Hawkes Bay mc Napier vcrs	-40.57	175.8	-38.87	178.07
NZVD2009_To_Nelson_1	4444	0.07	New Zealand - South Island - Nelson vcrs	-42.44	171.82	-40.44	174.46
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
NZVD2016_Height_To_Lyttelton_1937_Height_1	7865	0.01	New Zealand - South Island - Lyttelton 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
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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
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
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

Vertical Transformation Name	WKID	Accuracy (m)	Area of Use	Minimum Latitude	Minimum Longitude	Maximum Latitude	Maximum Longitude
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	World	-90	-180	90	180
WGS_1984_To_EGM_1996_Geoid_2	110084	1.05	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_WGS_1984_EGM2008_1x1_Height	110018	0.5	World	-90	-180	90	180
WGS_1984_To_WGS_1984_EGM2008_2.5x2.5_Height	110019	0.5	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
EGM2008_height_To_Kiunga_height_1	7654	Vertical_Offset	-3.0

Vertical Transformation Name	WKID	Method	Z Shift
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
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	25.37666666666667	-0.009	-0.003
Baltic_1982_To_EVRS_2000_1	5416	Vertical_Offset_and_Slope	0.182	42.625	25.37666666666667	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	25.86666666666667	0.009	-0.013
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

Vertical Transformation Name	WKID	Method	Z shift	Difference in latitude	Difference in longitude	Inclina- tion North	Inclina- tion East
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	42.58333333333334	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	42.58333333333334	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
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

Vertical Transformation Name	WKID	Method	Z shift	Difference in latitude	Difference in longitude	Inclina- tion North	Inclina- tion East
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
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
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_Heig ht_NAD83(CSRS)	110121	Vertical_Offset_ with_Grid	Dataset_HT2_1997_CGG2013a

Vertical Transformation Name	WKID	Method	File Name
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
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

Vertical Transformation Name	WKID	Method	File Name
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	110141	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
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_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_DNN_Height	110163	GEOID	Dataset_dnn_2018
ETRS89_To_Douglas_Height_2_OSGM15	7717	GEOID	Dataset_OSGM15_Great_Britain
ETRS89_To_DVR90_Height	110164	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_Melilla_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

Vertical Transformation Name	WKID	Method	File Name
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	110198	GEOID	Dataset_FIN2005N00
EUREF-FIN_To_N60_Height_FIN2000	110196	GEOID	Dataset_FIN2000_block
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_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_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

Vertical Transformation Name	WKID	Method	File Name
JGD_2000_To_JGD_2000_Vertical_Height_1	110059	GEOID	Dataset_JGEOID2008
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
LHN95_Height_To_EVRF2019_Height_2	9559	Vertical_Offset_ with_Grid	Dataset_ch_2019z
LHN95_Height_To_EVRF2019_Mean-Tide_Height_2	9560	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

Vertical Transformation Name	WKID	Method	File Name
NAD_1983_COR96_To_NAVD88_Height_CONUS_GEOID99	110200	GEOID	Dataset_geoid99_conus
NAD_1983_FBN_To_ASVD02_Height_GEOID09_1	9170	GEOID	Dataset_g2009s01
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

Vertical Transformation Name	WKID	Method	File Name
NAD_1983_PA11_To_MSL_Hawaii_Height_GEOID09	110174	GEOID	Dataset_g2009h01
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)v2_to_CGVD2013a(1997)_Height_1	10112	GEOID	Dataset_CGG2013an83
NAD83(CSRS)v2_to_CGVD28_Height_1	9984	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)v4_to_CGVD2013a(2002)_Height_1	10110	GEOID	Dataset_CGG2013an83
NAD83(CSRS)v4_to_CGVD28_Height_1	9985	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)v7_to_CGVD2013a(2010)_Height_1	10109	GEOID	Dataset_CGG2013an83
NAD83(CSRS)v7_to_CGVD28_Height_1	9987	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
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

Vertical Transformation Name	WKID	Method	File Name
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
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

Vertical Transformation Name	WKID	Method	File Name
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
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

Vertical Transformation Name	WKID	Method	File Name
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
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
WGS_1984_To_EGM_1996_Geoid_2	110084	EGM96_Natural_ Spline	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_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

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
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 Method Name	Parameter Name	Default Value	Array Position	Default Unit
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				