

Supported geographic (datum) transformations

Geographic Transformation Methods

Macro	code	name	parameters
PE_MTH_LONGITUDE_ROTATION	9603	Longitude Rotation	
PE_MTH_GEOCENTRIC_TRANSLATION	9601	Geocentric Translation (3-par.)	dx dy dz
PE_MTH_MOLODENSKY	9604	Molodensky	dx dy dz
PE_MTH_MOLODENSKY_ABRIDGED	9605	Abridged Molodensky	dx dy dz
PE_MTH_POSITION_VECTOR	9606	Position Vector (7-par.)	dx dy dz rx ry rz ds
PE_MTH_COORDINATE_FRAME	9607	Coordinate Frame (7-par.)	dx dy dz rx ry rz ds
PE_MTH_BURSA_WOLF	109607	Bursa-Wolf = 9607	dx dy dz rx ry rz ds
PE_MTH_NADCON	9613	NADCON	nd
PE_MTH_NTV2	9615	NTV2	nd
PE_MTH_HARN	109613	HARN/HPGN	nd
PE_MTH_MOLODENSKY_BADEKAS	9636	Molodensky-Badekas	dx dy dz rx ry rz ds xcr ycr zcr

Key to parameters

dx	Translation along X axis
dy	Translation along Y axis
dz	Translation along Z axis
rx	Rotation around X axis
ry	Rotation around Y axis
rz	Rotation around Z axis
ds	Scale difference (in arc-seconds)
nd	Dataset name
xcr	X Coordinate of Rotation Origin
ycr	Y Coordinate of Rotation Origin
zcr	Z Coordinate of Rotation Origin

Geographic (datum) transformation parameters

Macro	code	default	index
PE_PAR_X_AXIS_TRANSLATION	100040	0.0	PE_PARM_DX
PE_PAR_Y_AXIS_TRANSLATION	100041	0.0	PE_PARM_DY
PE_PAR_Z_AXIS_TRANSLATION	100042	0.0	PE_PARM_DZ
PE_PAR_X_AXIS_ROTATION	100043	0.0	PE_PARM_RX
PE_PAR_Y_AXIS_ROTATION	100044	0.0	PE_PARM_RY
PE_PAR_Z_AXIS_ROTATION	100045	0.0	PE_PARM_RZ
PE_PAR_SCALE_DIFFERENCE	100046	0.0	PE_PARM_DS
PE_PAR_NAME_DATASET	100047		PE_PARM_ND
PE_PAR_X_COORD_OF_ROTATION_ORIGIN	100048	0.0	PE_PARM_XCR
PE_PAR_Y_COORD_OF_ROTATION_ORIGIN	100049	0.0	PE_PARM_YCR
PE_PAR_Z_COORD_OF_ROTATION_ORIGIN	100050	0.0	PE_PARM_ZCR

Geographic (datum) transformation parameters

Macro	code	default	index
esriSRParameter_XAxisTranslation	100040	0.0	PE_PARM_DX
esriSRParameter_YAxisTranslation	100041	0.0	PE_PARM_DY
esriSRParameter_ZAxisTranslation	100042	0.0	PE_PARM_DZ
esriSRParameter_XAxisRotation	100043	0.0	PE_PARM_RX
esriSRParameter_YAxisRotation	100044	0.0	PE_PARM_RY
esriSRParameter_ZAxisRotation	100045	0.0	PE_PARM_RZ
esriSRParameter_ScaleDifference	100046	0.0	PE_PARM_DS
esriSRParameter_NameDataset	100047		PE_PARM_ND
esriSRParameter_X_CoordinateOfRotationOrigin	100048	0.0	PE_PARM_XCR
esriSRParameter_Y_CoordinateOfRotationOrigin	100049	0.0	PE_PARM_YCR
esriSRParameter_Z_CoordinateOfRotationOrigin	100050	0.0	PE_PARM_ZCR

Geographic (datum) transformations, three parameter

Name	Code	Method	dX	dY	dZ
Abidjan_1987_To_WGS_1984	1470	Geocentric_Translation	-124.76	53	466.79
Accra_To_WGS_1972_BE	1570	Geocentric_Translation	-171.16	17.29	323.31
Accra_To_WGS_1984	1569	Geocentric_Translation	-199	32	322
Adindan_To_WGS_1984_1	1100	Geocentric_Translation	-166	-15	204
Adindan_To_WGS_1984_2	1101	Geocentric_Translation	-118	-14	218
Adindan_To_WGS_1984_3	1102	Geocentric_Translation	-134	-2	210
Adindan_To_WGS_1984_4	1103	Geocentric_Translation	-165	-11	206

Adindan_To_WGS_1984_5	1104	Geocentric_Translation	-123	-20	220
Adindan_To_WGS_1984_6	1105	Geocentric_Translation	-128	-18	224
Adindan_To_WGS_1984_7	1106	Geocentric_Translation	-161	-14	205
Aigooye_To_WGS_1984	1107	Geocentric_Translation	-43	-163	45
AGD_1966_To_GDA_1994	1278	Geocentric_Translation	-127.8	-52.3	152.9
AGD_1966_To_WGS_1984	1108	Geocentric_Translation	-133	-48	148
AGD_1984_To_GDA_1994	1279	Geocentric_Translation	-128.5	-53	153.4
AGD_1984_To_WGS_1984_1	1109	Geocentric_Translation	-134	-48	149
Ain_El_Abd_To_WGS_1984_1	1110	Geocentric_Translation	-150	-250	-1
Ain_El_Abd_To_WGS_1984_2	1111	Geocentric_Translation	-143	-236	7
American_Samoa_1962_To_WGS_1984	1577	Geocentric_Translation	-115	118	426
Antigua_1943_To_WGS_1984	1441	Geocentric_Translation	-255	-15	71
Aratu_To_WGS_1984_1	1549	Geocentric_Translation	-158	315	-148
Aratu_To_WGS_1984_2	1550	Geocentric_Translation	-139.62	290.53	-150.29
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
Arc_1950_To_WGS_1984_1	1113	Geocentric_Translation	-143	-90	-294
Arc_1950_To_WGS_1984_2	1114	Geocentric_Translation	-138	-105	-289
Arc_1950_To_WGS_1984_3	1115	Geocentric_Translation	-153	-5	-292
Arc_1950_To_WGS_1984_4	1116	Geocentric_Translation	-125	-108	-295
Arc_1950_To_WGS_1984_5	1117	Geocentric_Translation	-161	-73	-317
Arc_1950_To_WGS_1984_6	1118	Geocentric_Translation	-134	-105	-295
Arc_1950_To_WGS_1984_7	1119	Geocentric_Translation	-169	-19	-278
Arc_1950_To_WGS_1984_8	1120	Geocentric_Translation	-147	-74	-283
Arc_1950_To_WGS_1984_9	1121	Geocentric_Translation	-142	-96	-293
Arc_1960_To_WGS_1984	1122	Geocentric_Translation	-160	-6	-302
Arc_1960_To_WGS_1984_2	1284	Geocentric_Translation	-157	-2	-299
Arc_1960_To_WGS_1984_3	1285	Geocentric_Translation	-175	-23	-303
Australian_Antarctic_1998_To_WGS_1984_1	1890	Geocentric_Translation	0	0	0
Azores_Central_1948_To_WGS_1984_1	1886	Geocentric_Translation	-104	167	-38
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_WGS_1984_1	1887	Geocentric_Translation	-425	-169	81
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	141	53
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
Batavia_Jakarta_To_WGS_1984	8178	Geocentric_Translation	-377	681	-50
Batavia_To_WGS_1984	1123	Geocentric_Translation	-377	681	-50
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
Beduarum_To_WGS_1972_BE_1	1839	Geocentric_Translation	-101	-111	187
Beige_1972_To_WGS_1984_2	1610	Geocentric_Translation	-125.8	79.9	-100.5
Bermuda_1957_To_WGS_1984	1124	Geocentric_Translation	-73	213	296
Bissau_To_WGS_1984	1547	Geocentric_Translation	-173	253	27
Bogota_Bogota_To_WGS_1984	8174	Geocentric_Translation	307	304	-318
Bogota_To_WGS_1984	1125	Geocentric_Translation	307	304	-318

Bogota_To_WGS_1984_2	1597	Geocentric_Translation	304.5	306.5	-318.1
Bukit_Rimpah_To_WGS_1984	1126	Geocentric_Translation	-384	664	-48
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
Camacupa_To_WGS_1984_2	1319	Geocentric_Translation	-40	-354	-224
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	-229.2
Camacupa_To_WGS_1984_6	1323	Geocentric_Translation	-43	-337	-233
Camacupa_To_WGS_1984_7	1324	Geocentric_Translation	-48	-345	-231
Camacupa_To_WGS_1984_8	1325	Geocentric_Translation	-48.6	-345.1	-230.8
Campo_Inchauspe_To_WGS_1984	1127	Geocentric_Translation	-148	136	90
Campo_Inchauspe_To_WGS_1984_2	1527	Geocentric_Translation	-154.5	150.7	100.4
Cape_To_WGS_1984_1	1504	Geocentric_Translation	-134.73	-110.92	-292.66
Cape_To_WGS_1984_2	1128	Geocentric_Translation	-136	-108	-292
Cape_To_WGS_1984_2	1129	Geocentric_Translation	-134.73	-110.92	-292.66
Carthage_To_WGS_1984	1130	Geocentric_Translation	-263	6	431
Carthage_To_WGS_1984_2	1538	Geocentric_Translation	-260.1	5.5	432.2
CH1903_To_ETRS_1989_1	1646	Geocentric_Translation	674.4	15.1	405.3
CH1903_To_WGS_1984_2	1510	Geocentric_Translation	674.374	15.056	405.346
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
Chatham_Island_1971_To_WGS_1984	108205	Geocentric_Translation	175	-38	113
Chos_Malal_1914_To_Campo_Inchauspe	1528	Geocentric_Translation	160	26	41
Chos_Malal_1914_To_WGS_1984	8517	Geocentric_Translation	5.5	176.7	141.4
CHTRF_1995_To_WGS_1984	1511	Geocentric_Translation	0	0	0
Chua_To_WGS_1984	1131	Geocentric_Translation	-134	229	-29
Combani_1950_To_WGS_1984_1	1916	Geocentric_Translation	-382	-59	-262
Conakry_1905_To_WGS_1984	1517	Geocentric_Translation	-23	259	-9
Corrego_Alegre_To_WGS_1984	1132	Geocentric_Translation	-206	172	-6
CSG_1967_To_WGS_1984_1	1906	Geocentric_Translation	-186	230	110
Dabola_To_WGS_1984	1518	Geocentric_Translation	-83	37	124
Datum_73_To_WGS_1984_1	108110	Geocentric_Translation	-223.237	110.193	36.649
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_WGS_1984_1	108114	Geocentric_Translation	-304.046	-60.576	103.64
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	-121	-77
Deir_ez_Zor_To_WGS_1984_2	1584	Geocentric_Translation	-174.6	-3.1	236.2
Deir_ez_Zor_To_WGS_1984_4	1585	Geocentric_Translation	-177.5	14.1	237.6
Deir_ez_Zor_To_WGS_1984_2	1587	Geocentric_Translation	-191.77	15.01	235.07
Dominica_1945_To_WGS_1984	1442	Geocentric_Translation	725	685	536
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_To_ETRS_1989_10	1650	Geocentric_Translation	-84	-97	-117
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	-98	-121
ED_1950_To_WGS_1984_10	1142	Geocentric_Translation	-97	-103	-120
ED_1950_To_WGS_1984_11	1143	Geocentric_Translation	-97	-88	-135
ED_1950_To_WGS_1984_12	1144	Geocentric_Translation	-107	-88	-149
ED_1950_To_WGS_1984_13	1145	Geocentric_Translation	-84	-107	-120
ED_1950_To_WGS_1984_16	1245	Geocentric_Translation	-112	-77	-145
ED_1950_To_WGS_1984_17	1275	Geocentric_Translation	-84	-97	-117
ED_1950_To_WGS_1984_19	1440	Geocentric_Translation	-86	-92.2	-127.5
ED_1950_To_WGS_1984_2	1134	Geocentric_Translation	-87	-96	-120
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	-106	-141
ED_1950_To_WGS_1984_4	1136	Geocentric_Translation	-104	-101	-140
ED_1950_To_WGS_1984_5	1137	Geocentric_Translation	-130	-117	-151
ED_1950_To_WGS_1984_6	1138	Geocentric_Translation	-86	-96	-120
ED_1950_To_WGS_1984_7	1139	Geocentric_Translation	-87	-95	-120
ED_1950_To_WGS_1984_8	1140	Geocentric_Translation	-84	-95	-130
ED_1950_To_WGS_1984_9	1141	Geocentric_Translation	-117	-132	-164
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	110	-13
Egypt_1907_To_WGS_1984_3	1546	Geocentric_Translation	-146.21	112.63	4.05
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
Estonia_1997_To_ETRS_1989_1	1648	Geocentric_Translation	0	0	0
Estonia_1997_To_WGS_1984_1	1649	Geocentric_Translation	0	0	0
European_1950_To_WGS_1984_33	1985	Geocentric_Translation	-87.987	-108.639	-121.593
Fahud_To_WGS_1984	1256	Geocentric_Translation	-346	-1	224
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
Fort_Desaix_To_WGS_1984_1	1909	Geocentric_Translation	186	482	151
Fort_Marigot_To_WGS_1984_1	1903	Geocentric_Translation	137	248	-430
Gandajika_1970_To_WGS_1984_1	1894	Geocentric_Translation	-133	-321	50
Garoua_To_WGS_1972_BE_1	1805	Geocentric_Translation	-56.1	-167.8	13.1
GGRS_1987_To_WGS_1984	1272	Geocentric_Translation	-199.87	74.79	246.62
Graciosa_Base_SW_1948_To_WGS_1984_1	108112	Geocentric_Translation	-106.226	166.366	-37.893
Grenada_1953_To_WGS_1984	1443	Geocentric_Translation	72	213.7	93
Guam_1963_To_HARN_Marianas_Rota	108137	Geocentric_Translation	-96.234	-252.601	258.222
Guam_1963_To_HARN_Marianas_Saipan	108138	Geocentric_Translation	-97.766	-255.817	255.702
Guam_1963_To_HARN_Marianas_Tinian_Aguajan	108139	Geocentric_Translation	-93.062	-255.309	256.696
Gunung_Segara_To_WGS_1984_1	1897	Geocentric_Translation	-403	684	41
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
Hanoi_1972_To_WGS_1984	1544	Geocentric_Translation	-17.51	-108.32	-62.39
Hartebeesthoek94_To_WGS_1984	1505	Geocentric_Translation	0	0	0
Herat_North_To_WGS_1984	1246	Geocentric_Translation	-333	-222	114
Hito_XVIII_1963_To_WGS_1984_2	1892	Geocentric_Translation	16	196	93
Hiorsey_1955_To_WGS_1984	1951	Geocentric_Translation	-73	46	-86
Hu_Tzu_Shan_To_WGS_1984	1152	Geocentric_Translation	-637	-549	-203

Hungarian_1972_To_WGS_1984_2	1831	Geocentric_Translation	57.01	-69.97	-9.29
IGM_1995_To_ETRS_1989_1	1098	Geocentric_Translation	0	0	0
IGM_1995_To_WGS_1984_1	1099	Geocentric_Translation	0	0	0
IGN56_Lifou_To_WGS_1984_1	1917	Geocentric_Translation	336	223	-231
IGN72_Grande_Terre_To_WGS_1984_1	1962	Geocentric_Translation	-13	-348	292
IGN72_Nuku_Hiva_To_WGS_1984_1	1914	Geocentric_Translation	84	274	65
IKBD_1992_To_WGS_1984_1	1993	Geocentric_Translation	0	0	0
Indian_1954_To_WGS_1984	1153	Geocentric_Translation	217	823	299
Indian_1960_To_WGS_1972_BE	1541	Geocentric_Translation	199	931	317
Indian_1960_To_WGS_1984_2	1542	Geocentric_Translation	198	881	317
Indian_1960_To_WGS_1984_3	1543	Geocentric_Translation	182	915	344
Indian_1975_To_WGS_1984	1154	Geocentric_Translation	209	818	290
Indian_1975_To_WGS_1984_2	1304	Geocentric_Translation	210	814	289
Indian_1975_To_WGS_1984_3	1537	Geocentric_Translation	204.64	834.74	293.8
Indonesian_1974_To_WGS_1984	1248	Geocentric_Translation	-24	-15	5
IRENET95_To_ETRF_1989	108197	Geocentric_Translation	0	0	0
IRENET95_To_ETRS_1989	1611	Geocentric_Translation	0	0	0
IRENET95_To_WGS_1984_1	1678	Geocentric_Translation	0	0	0
ISN_1993_To_WGS_1984_1	1952	Geocentric_Translation	0	0	0
Israel_To_WGS_1984	108215	Geocentric_Translation	-48	55	52
Jamaica_1969_To_WGS_1984_1	108101	Geocentric_Translation	-69	-207	-389
JGD_2000_To_WGS_1984	1826	Geocentric_Translation	-1.126	-0.077	-0.037
JGD_2000_To_WGS_1984_1	1826	Geocentric_Translation	0	0	0
Jordan_To_WGS_1984	108233	Geocentric_Translation	-86	-98	-119
KO_1949_To_WGS_1984_1	1915	Geocentric_Translation	145	-187	103
Kailanpur_1937_To_WGS_1984_1	1155	Geocentric_Translation	282	726	254
Kailanpur_1937_To_WGS_1984_2	1533	Geocentric_Translation	214	804	268
Kailanpur_1962_To_WGS_1984_1	1247	Geocentric_Translation	283	682	231
Kailanpur_1975_To_WGS_1984_1	1156	Geocentric_Translation	295	736	257
Kandawala_To_WGS_1984	1157	Geocentric_Translation	-97	787	86
Kertau_To_WGS_1984	1158	Geocentric_Translation	-11	851	5
Korean_1995_To_WGS_1984_1	1558	Geocentric_Translation	0	0	0
Kousseri_To_WGS_1972_BE_1	1806	Geocentric_Translation	-104.4	-136.6	201.2
La_Caoa_To_WGS_1984	1516	Geocentric_Translation	-273.5	110.6	-357.9
Leigon_To_WGS_1984	1159	Geocentric_Translation	-130	29	364
Liberia_1964_To_WGS_1984	1160	Geocentric_Translation	-90	40	88
Lisbon_1890_To_WGS_1984_1	1986	Geocentric_Translation	508.088	-191.042	565.223
Lisbon_To_WGS_1984_3	1984	Geocentric_Translation	-304.046	-60.576	103.64
LKS_1994_To_WGS_1984_1	1958	Geocentric_Translation	0	0	0
LKS_1994_To_WGS_1984	1283	Geocentric_Translation	0	0	0
Locodjo_1965_To_WGS_1984	1469	Geocentric_Translation	-125	53	467
Luzon_1911_To_WGS_1984_1	1161	Geocentric_Translation	-133	-77	-51
Luzon_1911_To_WGS_1984_2	1162	Geocentric_Translation	-133	-79	-72
Mahe_1971_To_WGS_1984	1164	Geocentric_Translation	41	-220	-134
Majuro_To_NAD_1983	108135	Geocentric_Translation	25.1	-275.6	222.6
Makassar_To_WGS_1984_1	1837	Geocentric_Translation	-587.8	519.75	145.76
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	-5.4	-100.3
Malongo_To_Mhast_1	1328	Geocentric_Translation	0	0	0
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
Massawa_To_WGS_1984	1165	Geocentric_Translation	639	405	60
Merchich_To_WGS_1984	1166	Geocentric_Translation	31	146	47
MGI_Ferro_To_WGS_1984	8263	Geocentric_Translation	682	-203	480
MGI_To_WGS_1984	1306	Geocentric_Translation	682	-203	480
MGI_To_WGS_1984_6	1794	Geocentric_Translation	695.5	-216.6	491.1
Mhast_To_WGS_1984_1	1329	Geocentric_Translation	-252.95	-4.11	-96.38
Midway_1961_To_WGS_1984	108218	Geocentric_Translation	409	-81	276
Midway_1961_To_WGS_1984_Old	108219	Geocentric_Translation	912	-58	1227
Minna_To_WGS_1984_1	1167	Geocentric_Translation	-81	-84	115
Minna_To_WGS_1984_10	1824	Geocentric_Translation	-93	-94	124
Minna_To_WGS_1984_2	1168	Geocentric_Translation	-92	-93	122
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
Monte_Mario_Rome_To_WGS_1984	8175	Geocentric_Translation	-225	-65	9
Monte_Mario_To_WGS_1984	1169	Geocentric_Translation	-225	-65	9
Montserrat_1958_To_WGS_1984	1444	Geocentric_Translation	174	359	365
MOP78_To_WGS_1984_1	1925	Geocentric_Translation	252	-132	-125
Mporaboko_To_WGS_1984	1163	Geocentric_Translation	-74	-130	42
Mporaboko_To_WGS_1984_2	1532	Geocentric_Translation	-80.7	-132.5	41.1
NAD_1927_To_WGS_1984_1	1170	Geocentric_Translation	-3	142	183
NAD_1927_To_WGS_1984_10	1179	Geocentric_Translation	-7	162	188
NAD_1927_To_WGS_1984_11	1180	Geocentric_Translation	-9	157	184
NAD_1927_To_WGS_1984_12	1181	Geocentric_Translation	-22	160	190
NAD_1927_To_WGS_1984_13	1182	Geocentric_Translation	4	159	188
NAD_1927_To_WGS_1984_14	1183	Geocentric_Translation	-7	139	181
NAD_1927_To_WGS_1984_15	1184	Geocentric_Translation	0	125	201
NAD_1927_To_WGS_1984_16	1185	Geocentric_Translation	-9	152	178
NAD_1927_To_WGS_1984_17	1186	Geocentric_Translation	11	114	195
NAD_1927_To_WGS_1984_18	1187	Geocentric_Translation	-12	130	190
NAD_1927_To_WGS_1984_2	1171	Geocentric_Translation	0	125	194
NAD_1927_To_WGS_1984_21	1249	Geocentric_Translation	-2	152	149
NAD_1927_To_WGS_1984_22	1250	Geocentric_Translation	2	204	105
NAD_1927_To_WGS_1984_3	1172	Geocentric_Translation	-10	158	187
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	160	176
NAD_1927_To_WGS_1984_5	1174	Geocentric_Translation	-9	161	179
NAD_1927_To_WGS_1984_6	1175	Geocentric_Translation	-8	159	175
NAD_1927_To_WGS_1984_7	1176	Geocentric_Translation	-5	135	172
NAD_1927_To_WGS_1984_8	1177	Geocentric_Translation	-4	154	178
NAD_1927_To_WGS_1984_9	1178	Geocentric_Translation	1	140	165
NAD_1983_CSRS98_To_WGS_1984	1473	Geocentric_Translation	0	0	0
NAD_1983_CSRS98_To_WGS_1984_1	1842	Geocentric_Translation	0	0	0
NAD_1983_HARN_To_WGS_1984	1580	Geocentric_Translation	0	0	0
NAD_1983_To_NAD_1983_CSRS98_4	1950	Geocentric_Translation	0	0	0
NAD_1983_To_WGS_1984_1	1188	Geocentric_Translation	0	0	0
NAD_1983_To_WGS_1984_2	1251	Geocentric_Translation	-2	0	4
NAD_1983_To_WGS_1984_3	1252	Geocentric_Translation	1	1	-1
Nahwan_1967_To_WGS_1984_1	1189	Geocentric_Translation	-247	-148	369

Nahnwan_1967_To_WGS_1984_2	1190	Geocentric_Translation	-243	-192	477
Nahnwan_1967_To_WGS_1984_3	1191	Geocentric_Translation	-249	-156	381
Nahnwan_1967_To_WGS_1984_4	1531	Geocentric_Translation	-245	-153.9	382.8
Nahnwan_1967_To_WGS_1984_5	1536	Geocentric_Translation	-250.2	-153.09	391.7
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	374	172
Naparima_1972_To_WGS_1984	1192	Geocentric_Translation	-10	375	165
Naparima_1972_To_WGS_1984_2	8212	Geocentric_Translation	-0.465	372.095	171.736
Naparima_1972_To_WGS_1984_3	1307	Geocentric_Translation	-2	374	172
New_Zealand_1949_To_NZGD_2000_1_3PAR	1566	Geocentric_Translation	54.4	-20.1	183.1
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	-93	310
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
NTF_Paris_To_ED_1950	8186	Geocentric_Translation	-84	37	437
NTF_Paris_To_RGF_1993_1	108102	Geocentric_Translation	-168	-60	320
NTF_Paris_To_WGS_1972	8188	Geocentric_Translation	-168	-72	314
NTF_Paris_To_WGS_1984	8094	Geocentric_Translation	-168	-60	-320
NTF_To_ED_1950	1276	Geocentric_Translation	-84	37	437
NTF_To_ETRS_1989_1	1651	Geocentric_Translation	-168	-60	320
NTF_To_RGF_1993_1	108130	Geocentric_Translation	-168	-60	320
NTF_To_WGS_1972	1277	Geocentric_Translation	-168	-72	314
NTF_To_WGS_1984	1193	Geocentric_Translation	-168	-60	320
NZGD_1949_To_WGS_1984	1151	Geocentric_Translation	84	-22	209
NZGD_2000_To_WGS_1984_1	1565	Geocentric_Translation	0	0	0
Observ_Meteorologico_1939_To_WGS_1984_1	108116	Geocentric_Translation	-422.651	-172.995	84.02
Old_Hawaiian_To_WGS_1984_1	108008	Geocentric_Translation	61	-285	-181
Old_Hawaiian_To_WGS_1984_2	108009	Geocentric_Translation	89	-279	-183
Old_Hawaiian_To_WGS_1984_3	108010	Geocentric_Translation	45	-290	-172
Old_Hawaiian_To_WGS_1984_4	108011	Geocentric_Translation	65	-290	-190
Old_Hawaiian_To_WGS_1984_5	108012	Geocentric_Translation	58	-283	-182
OSGB_1936_To_WGS_1984_1	1195	Geocentric_Translation	375	-111	431
OSGB_1936_To_WGS_1984_2	1196	Geocentric_Translation	371	-112	434
OSGB_1936_To_WGS_1984_3	1197	Geocentric_Translation	371	-111	434
OSGB_1936_To_WGS_1984_4	1198	Geocentric_Translation	384	-111	425
OSGB_1936_To_WGS_1984_5	1199	Geocentric_Translation	370	-108	434
Palestine_1923_To_WGS_1984_1X	108220	Geocentric_Translation	-181	-122	225
Palestine_1923_To_WGS_1984_2X	108232	Geocentric_Translation	-219.247	-73.802	269.529
Petrels_1972_To_WGS_1984_1	1921	Geocentric_Translation	365	194	166
Piton_des_Neiges_To_WGS_1984_1	1911	Geocentric_Translation	94	-948	-1292
Pohnpei_To_NAD_1983	108133	Geocentric_Translation	-89.121	-348.182	260.871
Point58_To_WGS_1984_1	1880	Geocentric_Translation	-106	-129	165
Pointe_Geologie_Perroud_1950_To_WGS_1984_1	1922	Geocentric_Translation	325	154	172
Pointe_Noire_To_WGS_1984	1200	Geocentric_Translation	-148	51	-291
Pointe_Noire_To_WGS_1984_2	1801	Geocentric_Translation	-145	52.7	-291.6
Porto_Santo_1936_To_WGS_1984_1	108115	Geocentric_Translation	-502.862	-247.438	312.724
Porto_Santo_1995_To_WGS_1984_2	1966	Geocentric_Translation	-502.862	-247.438	312.724
POSGAR_1998_To_SIRGAS_1	1774	Geocentric_Translation	0	0	0
POSGAR_1998_To_WGS_1984_1	1773	Geocentric_Translation	0	0	0
POSGAR_To_WGS_1984_1	1598	Geocentric_Translation	0	0	0
PSAD_1956_To_WGS_1984_1	1201	Geocentric_Translation	-288	175	-376

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_2	1202	Geocentric_Translation	-270	188	-388
PSAD_1956_To_WGS_1984_3	1203	Geocentric_Translation	-270	183	-390
PSAD_1956_To_WGS_1984_4	1204	Geocentric_Translation	-305	243	-442
PSAD_1956_To_WGS_1984_5	1205	Geocentric_Translation	-282	169	-371
PSAD_1956_To_WGS_1984_6	1206	Geocentric_Translation	-278	171	-367
PSAD_1956_To_WGS_1984_7	1207	Geocentric_Translation	-298	159	-369
PSAD_1956_To_WGS_1984_8	1208	Geocentric_Translation	-279	175	-379
PSAD_1956_To_WGS_1984_9	1209	Geocentric_Translation	-295	173	-371
Puerto_Rico_To_WGS_1984_3	1893	Geocentric_Translation	11	72	-101
Pulkovo_1942_To_WGS_1984	1254	Geocentric_Translation	28	-130	-95
Pulkovo_1942_To_WGS_1984_3	1287	Geocentric_Translation	28	-121	-77
Pulkovo_1942_To_WGS_1984_4	1288	Geocentric_Translation	23	-124	-82
Pulkovo_1942_To_WGS_1984_5	1289	Geocentric_Translation	26	-121	-78
Pulkovo_1942_To_WGS_1984_6	1290	Geocentric_Translation	24	-124	-82
Pulkovo_1942_To_WGS_1984_7	1291	Geocentric_Translation	15	-130	-84
Pulkovo_1942_To_WGS_1984_8	1292	Geocentric_Translation	24	-130	-92
Pulkovo_1942_To_WGS_1984_9	1293	Geocentric_Translation	28	-121	-77
Qatar_1974_To_WGS_1984_1	1561	Geocentric_Translation	-128	-283	22
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	138	-189
Qornoq_To_WGS_1984	8111	Geocentric_Translation	164	138	-189
Rassadran_To_WGS_1984	1512	Geocentric_Translation	-133.63	-157.5	-158.62
REGVEN_To_SIRGAS_1	1767	Geocentric_Translation	0	0	0
REGVEN_To_WGS_1984_1	1768	Geocentric_Translation	0	0	0
Reykjavik_1900_To_WGS_1984_1	1994	Geocentric_Translation	-28	199	5
RGF_1993_To_ETRF_1989_1	108199	Geocentric_Translation	0	0	0
RGF_1993_To_ETRS_1989_1	1591	Geocentric_Translation	0	0	0
RGF_1993_To_WGS_1984_1	1671	Geocentric_Translation	0	0	0
RGFG_1995_To_WGS_1984_1	1907	Geocentric_Translation	2	2	-2
RGNC_1991_To_WGS_1984_1	1920	Geocentric_Translation	0	0	0
RGR_1992_To_WGS_1984_1	1912	Geocentric_Translation	0	0	0
RRAF_1991_To_WGS_1984_1	1934	Geocentric_Translation	0	0	0
SAD_1969_To_WGS_1984_1	1864	Geocentric_Translation	-57	1	-41
SAD_1969_To_WGS_1984_10	1873	Geocentric_Translation	-61	2	-33
SAD_1969_To_WGS_1984_11	1874	Geocentric_Translation	-58	0	-44
SAD_1969_To_WGS_1984_12	1875	Geocentric_Translation	-45	12	-33
SAD_1969_To_WGS_1984_13	1876	Geocentric_Translation	-45	8	-33
SAD_1969_To_WGS_1984_14	1877	Geocentric_Translation	-66.87	4.37	-38.52
SAD_1969_To_WGS_1984_2	1865	Geocentric_Translation	-62	-1	-37
SAD_1969_To_WGS_1984_3	1866	Geocentric_Translation	-61	2	-48
SAD_1969_To_WGS_1984_4	1867	Geocentric_Translation	-60	-2	-41
SAD_1969_To_WGS_1984_5	1868	Geocentric_Translation	-75	-1	-44
SAD_1969_To_WGS_1984_6	1869	Geocentric_Translation	-44	6	-36
SAD_1969_To_WGS_1984_7	1870	Geocentric_Translation	-48	3	-44
SAD_1969_To_WGS_1984_8	1871	Geocentric_Translation	-47	26	-42
SAD_1969_To_WGS_1984_9	1872	Geocentric_Translation	-53	3	-47
Saint_Pierre_et_Miquelon_1950_To_WGS_1984_1	1923	Geocentric_Translation	30	430	368

Sainte_Anne_To_WGS_1984_1	1904	Geocentric_Translation	-467	-16	-300
Samboja_To_WGS_1984	1282	Geocentric_Translation	-404.78	-685.68	-45.47
Sao_Braz_To_WGS_1984_1	108117	Geocentric_Translation	-204.619	140.176	55.226
Sapper_Hill_1943_To_WGS_1984	1225	Geocentric_Translation	-355	21	72
Schwarzeck_To_WGS_1984	1226	Geocentric_Translation	616	97	-251
Schwarzeck_To_WGS_1984_2	1271	Geocentric_Translation	615.64	102.08	-255.81
Segora_To_WGS_1984	1286	Geocentric_Translation	-403	684	41
Selvagem_Grande_1938_To_WGS_1984_1	1965	Geocentric_Translation	-289	-124	60
Sierra_Leone_1968_To_WGS_1984	1614	Geocentric_Translation	-88	4	101
SIRGAS_To_WGS_1984_1	1581	Geocentric_Translation	0	0	0
South_Yemen_To_WGS_1984_1	1682	Geocentric_Translation	-76	-138	67
South_Yemen_To_Yemen_NGN_1996	1539	Geocentric_Translation	-76	-138	67
St_Kitts_1955_To_WGS_1984	1445	Geocentric_Translation	9	183	236
St_Lucia_1955_To_WGS_1984	1446	Geocentric_Translation	-149	128	296
St_Vincent_1945_To_WGS_1984_1	1959	Geocentric_Translation	195.671	332.517	274.607
SWEREF99_To_ETRS_1989_1	1878	Geocentric_Translation	0	0	0
SWEREF99_To_WGS_1984_1	1879	Geocentric_Translation	0	0	0
Tahaa_To_WGS_1984_1	1913	Geocentric_Translation	65	342	77
Tahiti_To_WGS_1984_1	1924	Geocentric_Translation	162	117	154
Tananarive_1925_Paris_To_WGS_1984	8176	Geocentric_Translation	-189	-242	-91
Tananarive_1925_To_WGS_1984	1227	Geocentric_Translation	-189	-242	-91
Timbalai_1948_To_WGS_1984	1228	Geocentric_Translation	-679	669	-48
Timbalai_1948_To_WGS_1984_2	1592	Geocentric_Translation	-678	670	-48
Timbalai_1948_To_WGS_1984_3	1615	Geocentric_Translation	-726.282	703.611	-48.999
TM65_To_WGS_1984	1229	Geocentric_Translation	506	-122	611
TM75_To_WGS_1984_3	1956	Geocentric_Translation	506	-122	611
Tokyo_To_JGD_2000_1	108103	Geocentric_Translation	-146.414	507.337	680.507
Tokyo_To_WGS_1984_1	1230	Geocentric_Translation	-148	507	685
Tokyo_To_WGS_1984_2	1231	Geocentric_Translation	-148	507	685
Tokyo_To_WGS_1984_2001	108106	Geocentric_Translation	-147.54	507.26	680.47
Tokyo_To_WGS_1984_3	1232	Geocentric_Translation	-146	507	687
Tokyo_To_WGS_1984_4	1233	Geocentric_Translation	-158	507	676
Tokyo_To_WGS_1984_5	1305	Geocentric_Translation	-147	506	687
Trinidad_1903_To_WGS_1984	1296	Geocentric_Translation	-61.702	284.488	472.052
Voirol_1875_Paris_To_WGS_1984	8211	Geocentric_Translation	-73	-247	227
Voirol_1875_To_WGS_1984	1294	Geocentric_Translation	-73	-247	227
Voirol_Unifie_1960_Paris_To_WGS_1984	8177	Geocentric_Translation	-123	-206	219
Voirol_Unifie_1960_To_WGS_1984	8158	Geocentric_Translation	-123	-206	219
Yacare_To_WGS_1984	1234	Geocentric_Translation	-155	171	37
Yemen_NGN_1996_To_WGS_1984	1540	Geocentric_Translation	0	0	0
Yoff_To_WGS_1972_1	1828	Geocentric_Translation	-37	157	85
Zanderij_To_WGS_1984	1235	Geocentric_Translation	-265	120	-358

Geographic transformations, Combined three parameter and longitude rotation

Name	Code	dX	dY	dZ	rX	rY	rZ	ds
Batavia_Jakarta_To_WGS_1984	8178	-377	681	-50	-0.374	-0.374	-0.329	-2.955
Bogota_Bogota_To_WGS_1984	8174	307	304	-318	0.141	0.141	0.116	2.733
Monte_Marzio_Rome_To_WGS_1984	8175	-225	-65	9	-0.26	-0.26	-0.437	-0.613
MGI_Ferro_To_WGS_1984	8263	682	-203	480	0.067	0.067	0.129	2.499
NTF_Paris_To_ED_1950	8186	-84	37	437	-0.557	-0.557	-0.178	-1.854
NTF_Paris_To_WGS_1984	8094	-168	-60	-320	-0.374	-0.374	-0.329	-2.955
NTF_Paris_To_RGF_1993_1	108102	-168	-60	320	0.067	0.067	-0.437	-0.613
NTF_Paris_To_WGS_1972	8188	-168	-72	314	0.067	0.067	0.129	2.499
Tananarive_1925_Paris_To_WGS_1984	8176	-189	-242	-91	-0.557	-0.557	-0.178	-1.854
Voiron_Unifie_Paris_To_WGS_1984	8177	-123	-206	219	-0.443	-0.443	-0.277	-0.191
Voiron_1875_Paris_To_WGS_1984	8211	-73	-247	227	-0.443	-0.443	-0.277	-0.191

Geographic (datum) transformations, seven parameter

Name	Code	Method	dX	dY	dZ	rX	rY	rZ	ds
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_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_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	-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
Amersfoort_To_ETRF_1989	108191	Coordinate_Frame	-117.763	-51.51	139.061	-0.292	-0.443	-0.277	-0.191
Amersfoort_To_ETRS_1989	1751	Coordinate_Frame	565.036	49.914	465.839	0.409394	-0.359705	1.868491	4.0772
Amersfoort_To_WGS_1984	1112	Coordinate_Frame	565.036	49.914	465.839	0.409394	-0.359705	1.868491	4.0772
Amersfoort_To_WGS_1984_2	1672	Position_Vector	593.16	26.15	478.54	-1.304398	-0.103297	-1.144502	4.0775
Ammassalik_1958_To_WGS_1984_1	1800	Coordinate_Frame	565.04	49.91	465.84	0.409394	-0.359705	1.868491	4.0772
Azores_Central_1995_To_WGS_1984_11	1981	Coordinate_Frame	-45	417	-3.5	0	0	0.814	-0.6
Azores_Central_1995_To_WGS_1984_3	1973	Coordinate_Frame	-103.088	162.481	-28.276	-0.167	-0.082	-0.168	-1.504
Azores_Central_1995_To_WGS_1984_5	1975	Coordinate_Frame	-105.854	165.589	-38.312	0.003	0.026	-0.024	-0.048
Azores_Central_1995_To_WGS_1984_7	1977	Coordinate_Frame	-104	162.924	-38.882	0.075	0.071	-0.051	-0.388
Azores_Central_1995_To_WGS_1984_9	1979	Coordinate_Frame	-95.323	166.098	-69.942	0.215	1.031	-0.047	1.922
Azores_Oriental_1995_To_WGS_1984_3	1969	Coordinate_Frame	-100.306	161.246	-48.761	0.192	0.385	-0.076	0.131
Azores_Oriental_1995_To_WGS_1984_5	1971	Coordinate_Frame	-211.939	137.626	58.3	0.089	-0.251	-0.079	0.384
Azores_Oriental_1995_To_WGS_1984_7	1977	Coordinate_Frame	-208.719	129.685	52.092	0.195	0.014	-0.327	0.198

Belge_1972_To_ETRS_1989_1	1652	Position_Vector	-99.1	53.3	-112.5	0.419	-0.83	1.885	-1
Belge_1972_To_WGS_1984_1	1609	Coordinate_Frame	-99.059	53.322	-112.486	-0.419	0.83	-1.885	-1
Camacupa_To_WGS_1984_3	1320	Position_Vector	-37.2	-370.6	-224	0	0	0.554	0.219
Camacupa_To_WGS_1984_9	1326	Position_Vector	-41.057	-374.564	-226.287	0	0	0.554	0.219
CH1903_To_WGS_1984_1	1508	Coordinate_Frame	660.077	13.551	369.344	0.804816	0.577692	0.952236	5.66
Chatham_Islands_1979_To_NZGD_2000_1108203		Coordinate_Frame	174.05	-25.49	112.57	0	0	-0.554	0.2263
Chatham_Islands_1979_To_WGS_1984_1108204		Coordinate_Frame	174.05	-25.49	112.57	0	0	-0.554	0.2263
CSG_1967_To_RGFG_1995_1	1908	Position_Vector	-193.066	236.993	105.447	0.4814	-0.8074	0.1276	1.5649
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_3	1992	Coordinate_Frame	-231.034	102.615	26.836	-0.615	0.198	-0.881	1.786
Datum_73_To_WGS_1984_2	108120	Coordinate_Frame	-239.749	88.181	30.488	-0.26	-0.08	-1.21	2.23
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_2108123		Coordinate_Frame	631.392	-66.551	481.442	-1.09	4.445	4.487	-4.43
Datum_Lisboa_Hayford_To_Datum_73_2108223		Coordinate_Frame	-49.137	-179.924	95.757	1.955	-0.328	1.423	-6.827
Datum_Lisboa_Hayford_To_Datum_Lisboa_Bessel_2		Coordinate_Frame	-920.281	-25.191	-355.2	2.781	-4.855	-4.276	-0.168
Datum_Lisboa_Hayford_To_WGS_1984_2108124		Coordinate_Frame	-288.885	-91.744	126.244	1.69	-0.41	0.21	-4.6
Deir_ez_Zor_To_WGS_1984_3	1586	Position_Vector	-175.09	1.218	238.831	-0.047	0.019	0.808	0.1698
DHDN_To_ETRF_1989	108192	Coordinate_Frame	582	105	414	-1.04	-0.35	3.08	8.3
DHDN_To_ETRS_1989	1309	Coordinate_Frame	582	105	414	-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	1779	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	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	440.2	-0.054	0.057	-2.797	2.55
DHDN_To_WGS_1984_1	1673	Coordinate_Frame	582	105	414	-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_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	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	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	-0.390459	-0.141704	-0.570116	0.609
ED_1950_To_ETRF_1989_1	108193	Position_Vector	-116.641	-56.931	-110.559	4.327	4.464	-4.444	-3.52
ED_1950_To_ETRS_1989_1	1588	Position_Vector	-116.641	-56.931	-110.559	4.327	4.464	-4.444	-3.52
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	-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	0.468	1.05
ED_1950_To_WGS_1984_18	1311	Position_Vector	-89.5	-93.8	-123.1	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	-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	0.468	1.05
ED_1950_To_WGS_1984_31	1810	Position_Vector	-84	-103	-122.5	0	0	0.554	0.2263
ED_1950_To_WGS_1984_32	1999	Position_Vector	-83.11	-97.38	-117.22	0.005693	-0.04469	0.04428	1.218
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_PT7	108121	Coordinate_Frame	-68.863	-134.888	-111.49	0.53	0.14	-0.57	-3.4
ED_1987_To_WGS_1984_1	1146	Position_Vector	-82.981	-99.719	-110.709	-0.1047	0.031002	0.080402	-0.3143
ED_1987_To_WGS_1984_2	1960	Position_Vector	-83.11	-97.38	-117.22	0.005693	-0.04469	0.04428	1.218
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
Estonia_1992_To_ETRS_1989	1331	Coordinate_Frame	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
ETRS_1989_To_WGS_1984	1149	Position_Vector	0	0	0	0	0	0	0
EUREF_FIN_To_ETRS_1989	108226	Coordinate_Frame	0	0	0	0	0	0	0
EUREF_FIN_To_WGS_1984	108227	Coordinate_Frame	0	0	0	0	0	0	0
Fahud_To_WGS_1984_2	1438	Position_Vector	-333.102	-11.02	230.69	0	0	0.554	0.219
Fort_Desaix_To_WGS_1984_2	1910	Position_Vector	126.93	547.94	130.41	-2.7867	5.1612	-0.8584	13.8227
GDA_1994_To_WGS_1984	1150	Position_Vector	0	0	0	0	0	0	0
Graciosa_Base_SW_1948_To_WGS_1984_2108122		Coordinate_Frame							
Helle_1954_To_WGS_1984_1	1957	Position_Vector	-103.088	162.481	-28.276	-0.17	-0.08	-0.17	-1.5
Hito_XVIII_1963_To_WGS_1984	1529	Position_Vector	982.6087	552.753	-540.873	6.681627	-31.611492	-19.848161	16.805
Hong_Kong_1980_To_WGS_1984_1	1825	Position_Vector	18.38	192.45	96.82	0.056	-0.142	-0.2	-0.0013
Hungarian_1972_To_ETRF_1989_1	108196	Coordinate_Frame	-162.619	-276.959	-161.764	0.067753	-2.243649	-1.158827	-1.094246
Hungarian_1972_To_ETRS_1989_1	1829	Coordinate_Frame	56	-75.77	-15.31	0.37	0.2	0.21	1.01
Hungarian_1972_To_WGS_1984_1	1830	Coordinate_Frame	56	-75.77	-15.31	0.37	0.2	0.21	1.01
IGN53_Maire_To_WGS_1984_1	1928	Position_Vector	56	-75.77	-15.31	0.37	0.2	0.21	1.01
IGN56_Lifou_To_WGS_1984_2	1927	Position_Vector	-408.809	366.856	-412.987	1.8842	-0.5308	2.1655	-121.0993
IGN72_Grande_Terre_To_WGS_1984_2	1963	Position_Vector	137.092	131.66	91.475	-1.9436	-11.5993	-4.3321	-7.4824
Indian_1960_To_WGS_1984_1	8532	Position_Vector	97.295	-263.247	310.882	-1.5999	0.8386	3.1409	13.3259
Indian_1975_To_WGS_1984_4	1812	Position_Vector	199	931	318.9	0	0	0.814	-0.38
Indonesian_1974_To_WGS_1984_2	1832	Position_Vector	293	836	318	0.5	1.6	-2.8	2.1
Indonesian_1974_To_WGS_1984_3	1833	Coordinate_Frame	2.691	-14.757	4.724	0	0	0.774	-0.6
ITRF_1988_To_ITRF_2000_1	1942	Position_Vector	-1.977	-13.06	-9.993	-0.364	-0.254	-0.689	-1.037
ITRF_1989_To_ITRF_2000_1	1943	Position_Vector	-0.0247	-0.0115	0.0979	-0.0001	0	0.00018	-0.00895
ITRF_1990_To_ITRF_2000_1	1942	Position_Vector	-0.0297	-0.0475	0.0739	0	0	0.00018	0.00585
ITRF_1991_To_ITRF_2000_1	1941	Position_Vector	-0.0247	-0.0235	0.0359	0	0	0.00018	-0.00245
ITRF_1992_To_ITRF_2000_1	1940	Position_Vector	-0.0267	-0.0275	0.0199	0	0	0.00018	-0.00215
ITRF_1993_To_ITRF_2000_1	1939	Position_Vector	-0.0147	-0.0135	0.0139	0	0	0.00018	-0.00075
ITRF_1994_To_ITRF_2000_1	1938	Position_Vector	-0.0127	-0.0065	0.0209	0.00039	-0.0008	0.00114	-0.00195
ITRF_1996_To_ITRF_2000_1	1937	Position_Vector	-0.0067	-0.0061	0.0185	0	0	0	-0.00155
ITRF_1997_To_ITRF_2000_1	1936	Position_Vector	-0.0067	-0.0061	0.0185	0	0	0	-0.00155
KKJ_To_ETRS_1989_1	1638	Position_Vector	-90.7	-106.1	-119.2	4.09	0.218	-1.05	1.37
KKJ_To_ETRS_1989_2	108228	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	1639	Position_Vector	-90.7	-106.1	-119.2	4.09	0.218	-1.05	1.37
KKJ_To_WGS_1984_2	108230	Coordinate_Frame	-96.0617	-82.4278	-121.7535	-4.80107	-0.34543	1.37646	1.4964
Lisbon_1890_To_WGS_1984_2	1990	Coordinate_Frame	631.392	-66.551	481.442	-1.09	4.445	4.487	-4.43
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	-1.592	0.145	-0.89	-4.46
Lisbon_To_WGS_1984_2	1944	Position_Vector	-282.1	-72.2	120	-1.592	0.145	-0.89	-4.46
Lisbon_To_WGS_1984_4	1988	Coordinate_Frame	-288.885	-91.744	126.244	1.691	-0.41	0.211	-4.598
Luxembourg_1930_To_ETRS_1989_1	1642	Position_Vector	-192.986	13.673	-39.309	-0.4099	-2.9332	2.6881	0.43
Luxembourg_1930_To_WGS_1984_1	1643	Position_Vector	-192.986	13.673	-39.309	-0.4099	-2.9332	2.6881	0.43
MGI_To_ETRS_1989_1	1619	Position_Vector	557.3	90.1	463.9	5.137	1.474	5.297	2.42
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_WGS_1984_2	8415	Position_Vector	577.326	90.129	463.919	5.136599	1.4742	5.297044	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
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	-112	125.9	0	0	0.814	-0.38
Monte_Mario_To_ETRS_1989_1	1659	Position_Vector	-104.1	-49.1	-9.9	0.971	-2.917	0.714	-11.68
Monte_Mario_To_ETRS_1989_2	1661	Position_Vector	-168.6	-34	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	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
Moznet_To_WGS_1984	1302	Coordinate_Frame	0	0	0	0	0	0	0
NAD_1983_CSRS98_To_WGS_1984_2	1946	Coordinate_Frame	-0.991	1.9072	0.5129	-0.02579	-0.00965	-0.01166	0
NAD_1983_HARN_To_WGS_1984_2	1900	Coordinate_Frame	-0.9738	1.9453	0.5486	-0.027551	-0.010049	-0.011359	0
NAD_1983_HARN_To_WGS_1984_3	1901	Coordinate_Frame	-0.991	1.9072	0.5129	-0.02579	-0.00965	-0.01166	0
NAD_1983_To_WGS_1984_4	1308	Coordinate_Frame	-0.9738	1.9453	0.5486	-0.027551	-0.010049	-0.011359	0
NAD_1983_To_WGS_1984_5	1515	Coordinate_Frame	-0.991	1.9072	0.5129	-0.02579	-0.00965	-0.01166	0
NEA74_Noumea_To_WGS_1984_1	1932	Position_Vector	-166.207	-154.777	254.831	-37.5444	7.7011	-10.2025	-30.8698
New_Zealand_1949_To_NZGD_2000_2_7PAR1701		Coordinate_Frame							
NGO_1948_To_ETRS_1989_1	1653	Position_Vector	59.47	-5.04	187.44	-0.47	0.1	-1.024	-4.5993
NGO_1948_To_WGS_1984	1654	Coordinate_Frame	278.3	93	474.5	7.889	0.05	-6.61	6.21
Nord_Sahara_1959_To_WGS_1984_3	8562	Position_Vector	319.08	37.81	463.57	-6.297059	1.290393	5.712916	10.819
Nord_Sahara_1959_To_WGS_1984_4	1815	Position_Vector	-156	-87.2	287.8	0	0	0.814	-0.38
NZGD_1949_To_WGS_1984_2	1564	Coordinate_Frame	-152.9	43.8	358.3	2.714	1.386	-2.788	-6.743
OSGB_1936_To_ED_1950_UKOOA	1315	Position_Vector	59.47	-5.04	187.44	-0.47	0.1	-1.024	-4.5993
OSGB_1936_To_WGS_1984_Petroleum	1314	Position_Vector	535.948	-31.357	665.16	0.15	0.247	0.998	-21.669
OSNI_1952_To_WGS_1984_1	1955	Position_Vector	446.448	-125.157	542.06	0.15	0.247	0.842	-20.489
PDO_1993_To_WGS_1972	1616	Position_Vector	482.5	-130.6	564.6	-1.042	-0.214	-0.631	8.15
PDO_1993_To_WGS_1984	1439	Position_Vector	-182.046	-225.604	168.884	-0.616	-1.655	7.824	16.641
PDO_1993_To_WGS_1984_3	1617	Position_Vector	-180.624	-225.516	173.919	-0.81	-1.898	8.336	16.71006
Piton_des_Neiges_To_RGR_1992_1	1926	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	789.524	-626.486	-89.904	0.6006	76.7946	-10.5788	-32.3241
Porto_Santo_1936_To_WGS_1984_2	108125	Coordinate_Frame	-178.3	-316.7	-131.5	5.278	6.077	10.979	19.166
Porto_Santo_1995_To_WGS_1984_3	1967	Coordinate_Frame	-210.502	-66.902	-48.476	-2.094	15.067	5.817	0.485
Pulkovo_1942_Adj_1958_To_ETRS_1989_11644		Position_Vector	-210.502	-66.902	-48.476	-2.094	15.067	5.817	0.485
	33.4			-146.6	-76.3	-0.359	-0.053	0.844	-0.84

Pulkovo_1942_Adj_1958_To_WGS_1984_11645	Position_Vector	33.4	-146.6	-76.3	-0.359	-0.053	0.844	-0.84
Pulkovo_1942_Adj_1983_To_ETRS_1989_11674	Coordinate_Frame	24	-123	-94	-0.02	0.25	0.13	1.1
Pulkovo_1942_Adj_1983_To_ETRS_1989_21775	Position_Vector	24.9	-126.4	-93.2	-0.063	-0.247	-0.041	1.01
Pulkovo_1942_Adj_1983_To_WGS_1984_11675	Coordinate_Frame	24	-123	-94	-0.02	0.25	0.13	1.1
Pulkovo_1942_To_Estonia_1992	Coordinate_Frame	1332	97.00027	-60.74046	-0.99548	-0.58147	-0.2418	-4.5981
Pulkovo_1942_To_ETRF_1989	Coordinate_Frame	108198	-123	-94	-0.02	0.25	0.13	1.1
Pulkovo_1942_To_ETRS_1989	Coordinate_Frame	1310	-123	-94	-0.02	0.25	0.13	1.1
Pulkovo_1942_To_LKS_1994	Coordinate_Frame	1274	-18.55	-69.339	-2.508	-1.832	2.611	-4.239
Pulkovo_1942_To_WGS_1984_10	Coordinate_Frame	1303	-108.842	-119.585	1.455	-0.761	0.737	0.549
Pulkovo_1942_To_WGS_1984_12	Position_Vector	43.822	-97.54127	-60.92546	-1.01378	-0.58117	-0.2348	-4.6121
Pulkovo_1942_To_WGS_1984_13	Coordinate_Frame	21.58719	-135	-84.5	0	0	0.554	0.2263
Pulkovo_1942_To_WGS_1984_14	Position_Vector	686.1	-123.5	-574.4	8.045	-23.366	10.791	-2.926
Pulkovo_1942_To_WGS_1984_15	Position_Vector	926.4	-715.9	-186.4	-10.364	-20.78	26.452	-7.224
Pulkovo_1942_To_WGS_1984_15	Position_Vector	1809	-18.55	-69.339	-2.508	-1.832	2.611	-4.239
Pulkovo_1942_To_WGS_1984_2	Coordinate_Frame	1679	-303.65872	-11.00061	1.164298	0.174458	1.096259	3.657065
QND_1995_To_WGS_1984_1	Position_Vector	1840	-119.4248	-11.00061	0	0	0.814	-0.6
Qornoq_1927_To_WGS_1984_2	Position_Vector	1798	127.533	-159.789	0	0	10.568	32.2083
RGR_1992_To_Piton_des_Neiges_1	Position_Vector	1964	627.333	89.685	-0.6072	-76.8019	10.568	32.2083
RT90_To_ETRS_1989_2	Coordinate_Frame	414.1	41.3	603.1	0.855	-2.141	7.023	0
RT90_To_WGS_1984	Coordinate_Frame	419.3836	99.3335	591.3451	-0.850389	-1.817277	7.862238	-0.99496
RT90_To_WGS_1984_2	Coordinate_Frame	1437	414.1	603.1	0.855	-2.141	7.023	0
S_JTSK_To_ETRS_1989_1	Position_Vector	1896	85.7	462.8	4.998	1.587	5.261	3.56
S_JTSK_To_ETRS_1989_2	Position_Vector	1622	68.7	451.5	7.92	4.073	4.251	5.71
S_JTSK_To_Pulkovo_1942	Position_Vector	1624	206.7	540.8	4.998	1.587	5.261	3.56
S_JTSK_To_WGS_1984_1	Position_Vector	108202	544.8	206.7	4.998	1.587	5.261	3.56
S_JTSK_To_WGS_1984_2	Position_Vector	1623	570.8	462.8	4.998	1.587	5.261	3.56
S_JTSK_To_WGS_1984_2	Position_Vector	1625	559	451.5	7.92	4.073	4.251	5.71
Sainte Anne To WGS_1984_2	Position_Vector	1905	68.7	451.5	7.92	4.073	4.251	5.71
Sao Braz_To_WGS_1984_2	Position_Vector	1905	-5.63	-304.12	0.4362	-0.8374	0.2563	1.8984
Scoresbysund_1952_To_WGS_1984_1	Coordinate_Frame	108127	129.685	52.092	0.2	0.01	-0.33	0.2
ST71_Belep_To_WGS_1984_1	Position_Vector	1799	326	-102.5	0	0	0.814	-0.6
ST84_Ile_des_Pins_To_WGS_1984_1	Position_Vector	1931	-480.26	-643.429	16.3119	20.1721	-4.0349	-111.7002
ST87_Ouvea_To_WGS_1984_1	Position_Vector	1930	244.416	168.114	-8.9353	7.7523	12.5953	14.268
SWEREF99_To_RT90	Position_Vector	1919	-122.383	103.344	3.5107	-4.9668	-5.7047	4.4798
	Coordinate_Frame	108212	-414.097857	-603.062718	-0.855043	2.141347	-7.022721	0
Tete_To_Moznet_1	Coordinate_Frame	1297	-87.39	-101.716	0.058	-4.001	2.062	9.366
Tete_To_Moznet_2	Coordinate_Frame	1298	-57.097	-156.768	2.158	-1.524	0.982	-0.359
Tete_To_Moznet_3	Coordinate_Frame	1299	-91.999	-114.591	0.14	-3.363	2.217	11.748
Tete_To_Moznet_4	Coordinate_Frame	1300	-51.66	-112.482	-0.953	-4.6	2.368	0.586
Tete_To_Moznet_5	Coordinate_Frame	1301	168.975	-166.145	-0.198	-5.926	2.356	-57.104
Tete_To_WGS_1984_1	Coordinate_Frame	1683	-87.39	-101.716	0.058	-4.001	2.062	9.366
Tete_To_WGS_1984_2	Coordinate_Frame	1684	-57.097	-156.768	2.158	-1.524	0.982	-0.359
Tete_To_WGS_1984_3	Coordinate_Frame	1685	-91.999	-114.591	0.14	-3.363	2.217	11.748
Tete_To_WGS_1984_4	Coordinate_Frame	1686	-51.66	-112.482	-0.953	-4.6	2.368	0.586
Tete_To_WGS_1984_5	Coordinate_Frame	1687	168.975	-166.145	-0.198	-5.926	2.356	-57.104
Timbalai_1948_To_WGS_1984_4	Position_Vector	1852	689.2	-52.5	0	0	4.28	9.4
TM65_To_ETRS_1989_1	Position_Vector	1640	-130.6	564.6	-1.042	-0.214	-0.631	8.15
TM65_To_WGS_1984_2	Position_Vector	1641	-130.6	564.6	-1.042	-0.214	-0.631	8.15
TM75_To_ETRS_1989_2	Position_Vector	1953	-130.6	564.6	-1.042	-0.214	-0.631	8.15

TM75_To_WGS_1984_2	1954	Position_Vector	482.5	-130.6	564.6	-1.042	-0.214	-0.631	8.15
WGS_1972_To_WGS_1984_1	1237	Position_Vector	0	0	4.5	0	0	0.554	0.2263
WGS_1972_To_WGS_1984_2	1238	Position_Vector	0	0	4.5	0	0	0.554	0.219
WGS_1984_To_Observatorio_Meteor_1965_1108211		Coordinate_Frame							
WGS_1984_To_FT90	108213	Coordinate_Frame	148.635396	339.470115	157.265381	32.87685	-76.963371	-32.622853	-8.204889
			-414.097857	-41.338149	-603.062718	-0.855043	2.141347	-7.022721	0

Geographic (datum) transformations, Molodensky-Badekas

Name	Code	dX	dY	dZ	rX	rY	rZ	zcr
Amersfoort_To_ETRS_1989_MB	108231	593.032	26	478.741	0.409394	-0.359705	1.868491	5012970.306
La_Canoa_To_REGVEN_1	1771	-270.933	115.599	4.0772	3903453.148	368135.313	2.381	974809.808
La_Canoa_To_SIRGAS	108217	-270.933	115.599	-5.109	2464351.594	-5783466.613	2.381	974809.808
La_Canoa_To_WGS_1984_2	1096	-270.933	115.599	-360.226	-5.266	-1.238	2.381	974809.808
MGI_To_WGS_1984_7	1795	408.0895	-288.9616	-5.109	2464351.594	-5783466.613	2.381	974809.808
Observatorio_Meteorologico_1965_To_WGS_1984_2	108234	-203.35	-302.66	791.5498	-4.078682	0.022669	9.825424	4302370.077
PSAD_1956_To_REGVEN	1769	-270.933	115.599	94.060626	4444943.025	1518098.483	32.412	2391581.09
PSAD_1956_To_WGS_1984_13	1095	-270.933	115.599	-155.23	-33.338	76.825	2.381	974809.808
WGS_1984_To_Observatorio_Meteorologico_1965_2	108235	203.35	302.66	7.926	-2361564.77	5417538.39	-32.4	2391425.86

Geographic (datum) transformations, NADCON and HARN

Name	Code	Method	Dataset name
NAD_1927_To_NAD_1983_NADCON	1241	NADCON	conus
NAD_1927_To_NAD_1983_Alaska	1243	NADCON	alaska
NAD_1927_To_NAD_1983_PR_VI	108003	NADCON	prvi
American_Samoa_1962_To_HARN_American_Samoa_East	1579	NADCON	eshpgn
American_Samoa_1962_To_HARN_American_Samoa_West	1578	NADCON	wshpgn
Guam_1963_To_HARN_Guam	108143	NADCON	guhpgn
Old_Hawaiian_To_NAD_1983	1454	NADCON	hawaii
Puerto_Rico_To_NAD_1983	1461	NADCON	prvi

St_George_To_NAD_1983	1457	NADCON	stgeorge
St_Lawrence_To_NAD_1983	1455	NADCON	stlmc
St_Paul_To_NAD_1983	1456	NADCON	stpaul
NAD_1983_To_HARN_Alabama	8419	HARN	alhpgn
NAD_1983_To_HARN_Arizona	8420	HARN	azhpgn
NAD_1983_To_HARN_Arkansas	1704	HARN	arhpgn
NAD_1983_To_HARN_CA_N	8421	HARN	crhpgn
NAD_1983_To_HARN_CA_S	8422	HARN	cshpgn
NAD_1983_To_HARN_Colorado	8423	HARN	cohpgn
NAD_1983_To_HARN_Georgia	8424	HARN	gahpgn
NAD_1983_To_HARN_Florida	8425	HARN	flhpgn
NAD_1983_To_HARN_Hawaii	8501	HARN	hihpgn
NAD_1983_To_HARN_Illinois	8551	HARN	ilhpgn
NAD_1983_To_HARN_Indiana	8502	HARN	inhpgn
NAD_1983_To_HARN_Iowa	1705	HARN	iahpgn
NAD_1983_To_HARN_Kansas	8503	HARN	kshpgn
NAD_1983_To_HARN_Kentucky	8428	HARN	kyhpgn
NAD_1983_To_HARN_Louisiana	8429	HARN	lahpgn
NAD_1983_To_HARN_MD_DE	8430	HARN	mdhpgn
NAD_1983_To_HARN_Maine	8431	HARN	mehpgn
NAD_1983_To_HARN_Michigan	8432	HARN	mihpgn
NAD_1983_To_HARN_Minnesota	1706	HARN	mnhpgn
NAD_1983_To_HARN_Mississippi	8433	HARN	mshpgn
NAD_1983_To_HARN_Missouri	1707	HARN	mohpgn
NAD_1983_To_HARN_East_MT_ID	8426	HARN	emhpgn
NAD_1983_To_HARN_West_MT_ID	8427	HARN	wmhpgn
NAD_1983_To_HARN_Nebraska	8435	HARN	nbhpgn
NAD_1983_To_HARN_Nevada	8504	HARN	nvhpgn
NAD_1983_To_HARN_New_England	8435	HARN	nehpgn
NAD_1983_To_HARN_New_Jersey	8552	HARN	njhpgn
NAD_1983_To_HARN_New_Mexico	8436	HARN	nyhpgn
NAD_1983_To_HARN_New_York	8437	HARN	nmhpgn
NAD_1983_To_HARN_North_Dakota	8438	HARN	ndhpgn
NAD_1983_To_HARN_Ohio	8505	HARN	ohhpgn
NAD_1983_To_HARN_Oklahoma	8439	HARN	okhpgn
NAD_1983_To_HARN_PR_VI	8440	HARN	pvhpgn
NAD_1983_To_HARN_South_Dakota	8441	HARN	sdhpgn
NAD_1983_To_HARN_Tennessee	8442	HARN	tnhpgn
NAD_1983_To_HARN_East_Texas	8443	HARN	ethpgn
NAD_1983_To_HARN_West_Texas	8444	HARN	wthpgn
NAD_1983_To_HARN_Utah	8506	HARN	uthpgn
NAD_1983_To_HARN_Virginia	8445	HARN	vahpgn
NAD_1983_To_HARN_WA_OR	8446	HARN	wohpgn
NAD_1983_To_HARN_West_Virginia	8507	HARN	wvhpgn
NAD_1983_To_HARN_Wisconsin	8447	HARN	wihpgn
NAD_1983_To_HARN_Wyoming	8448	HARN	wyhpgn

Geographic (datum) transformations, NTV2

Name	Code	Method	Dataset name
AGD_1966_To_GDA_1994_1_NTV2	1803	NTV2	A66_National_13_09_01
AGD_1966_To_GDA_1994_NTV2_New_South_Wales_&_Victoria	1596	NTV2	SEAust_21_06_00
AGD_1966_To_GDA_1994_NTV2_Northern_Territory	8452	NTV2	nt_0599
AGD_1966_To_GDA_1994_NTV2_Tasmania	8451	NTV2	Tas_1098
AGD_1966_To_GDA_1994_NTV2_Victoria	8407	NTV2	Vic_0799
AGD_1984_To_GDA_1994_NTV2_Queensland	108453	NTV2	QLD_0900
AGD_1984_To_GDA_1994_3	1559	NTV2	wa_0400
AGD_1984_To_GDA_1994_4_NTV2_Western_Australia	1593	NTV2	wa_0700
AGD_1984_To_GDA_1994_5_NTV2	1804	NTV2	National_84_02_07_01
ATS_1977_To_NAD_1983_CSRS98_NTV2_Maritime	108302	NTV2	GS7783
ATS_1977_To_NAD_1983_CSRS98_NTV2_New_Brunswick	1841	NTV2	NB7783v2
ATS_1977_To_NAD_1983_CSRS98_NTV2_Nova_Scotia	1850	NTV2	NS7783v2
ATS_1977_To_NAD_1983_CSRS98_2_NTV2_Prince_Edward_Is	1846	NTV2	PE7783v2
NAD_1927_CGQ77_To_NAD_1983_CSRS98	1845	NTV2	CGQ77-98
NAD_1927_CGQ77_To_NAD_1983_CSRS98_2	1847	NTV2	SK27-98
NAD_1927_CGQ77_To_NAD_1983_2	1575	NTV2	CGQ77-83
NAD_1927_Def_1976_To_NAD_1983_NTV2_Ontario	8405	NTV2	May76v20
NAD_1927_To_NAD_1983_CSRS98_1	1845	NTV2	QUE27-98
NAD_1927_To_NAD_1983_NTV2_Canada	8244	NTV2	Ntv2_0
NAD_1927_To_NAD_1983_6	1573	NTV2	QUE27-83
NAD_1983_To_NAD_1983_CSRS98_1	1843	NTV2	NAD83-98
NAD_1983_To_NAD_1983_CSRS98_2	1848	NTV2	SK83-98
NAD_1983_To_NAD_1983_CSRS98_3	1849	NTV2	AB_CSRS
New_Zealand_1949_To_NZGD_2000_3_NTV2	1568	NTV2	nzgd2kgrid0005
NZGD_1949_To_WGS_1984_3_NTV2	1670	NTV2	nzgd2kgrid0005
RGF_1993_To_NTF_NTV2	108470	NTV2	rgf93_ntf
RGNC_1991_To_IGN72_Grande_Terre_NTV2	108471	NTV2	RGNC91_IGN72GrandeTerre
RGNC_1991_To_NEA74_Noumea_NTV2	108472	NTV2	RGNC91_NEA74Noumea

Transformations by Longitude Rotation Method

Non-Greenwich prime meridians of to Greenwich

macro	code	area of use
PE_GT_BATAVIA_JAKARTA_TO_BATAVIA	8172	Batavia (Jakarta) to Batavia
PE_GT_BELGE_1950_BRUSSELS_TO_BELGE_1950	8168	Belge 1950(Brussels) to Belge 1950
PE_GT_BERN_1898_BERN_TO_BERN_1898	8161	Bern 1898 (Bern) to Bern 1898

PE_GT_BOGOTA_BOGOTA_TO_BOGOTA	8162	Bogota (Bogota) to Bogota
PE_GT_CARTHAGE_PARIS_TO_CARTHAGE	1881	Carthage (Paris) to Carthage
PE_GT_GREEK_ATHENS_TO_GREEK	8179	Greek(Athens) to Greek
PE_GT_GUNUNG_SEGARA_JAKARTA_TO_GUNUNG_SEGARA	1883	Gunung Segara (Jakarta) to Gunung Segara
PE_GT_LISBON_LISBON_TO_LISBON	8163	Lisbon (Lisbon) to Lisbon
PE_GT_MAKASSAR_JAKARTA_TO_MAKASSAR	8164	Makassar (Jakarta) to Makassar
PE_GT_MGI_FERRO_TO_MGI	8165	MGI (Ferro) to MGI
PE_GT_MONTE_MARIO_ROME_TO_MONTE_MARIO	8166	Monte Mario (Rome) to Monte Mario
PE_GT_NORD_SAHARA_1959_PARIS_TO_NORD_SAHARA_1959	1882	Nord Sahara 1959 (Paris) to Nord Sahara 1959
PE_GT_NGO_1948_OSLO_TO_NGO_1948	8411	NGO 1948 (Oslo) to NGO 1948
PE_GT_NTF_PARIS_TO_NTF	8160	NTF (Paris) to NTF
PE_GT_PADANG_1884_JAKARTA_TO_PADANG_1884	8167	Padang 1884(Jakarta) to Padang 1884
PE_GT_RT38_STOCKHOLM_TO_RT38	8173	RT38 (Stockholm) to RT38
PE_GT_S_JTSK_FERRO_TO_S_JTSK	1884	S-JTSK (Ferro) to S-JTSK
PE_GT_TANANARIVE_1925_PARIS_TO_TANANARIVE_1925	8169	Tananarive 1925 (Paris) to Tananarive 1925
PE_GT_VOIROL_1875_PARIS_TO_VOIROL_1875	8170	Voiron 1875 (Paris) to Voiron 1875
PE_GT_VOIROL_UNIFIE_1960_PARIS_TO_VOIROL_UNIFIE_1960	8171	Voiron Unifie 1960 (Paris) to Voiron Unifie 1960

Transformations by NADCON/HARN Grid Method

macro	code	area of use
NAD27 - NAD83 grid-based transformations		
PE_GT_NAD_1927_TO_NAD_1983_NADCON	1241	NAD27 to NAD83—CONUS (lower 48 states)
PE_GT_NAD_1927_TO_NAD_1983_AK	1243	NAD27 to NAD83—Alaska
PE_GT_NAD_1927_TO_NAD_1983_PRVI	108003	NAD27 to NAD83—Puerto Rico-Virgin Island
Old non-NAD27—NAD83 grid-based transformations		
PE_GT_OLD_HAWAIIAN_TO_NAD_1983	1454	Old Hawaiian to NAD83
PE_GT_PUERTO_RICO_TO_NAD_1983	1461	Puerto Rico to NAD83—Puerto Rico-Virgin Island
PE_GT_ST_GEORGE_TO_NAD_1983	1457	St. George Island to NAD83
PE_GT_ST_LAWRENCE_TO_NAD_1983	1455	St. Lawrence Island to NAD83
PE_GT_ST_PAUL_TO_NAD_1983	1456	St. Paul Island to NAD83
HARN (HPGN) grid-based transformations		
PE_GT_SAMOA_1962_TO_HARN_ES	1579	American Samoa HARN – Ofu, Olosega, Ta'u Islands
PE_GT_SAMOA_1962_TO_HARN_WS	1578	American Samoa HARN – Aunu'u and Tutuila Islands
PE_GT_GUAM_1963_TO_HARN_GUAM	108143	Guam HARN
PE_GT_NAD_1983_TO_HARN_AL	8419	Alabama HARN
PE_GT_NAD_1983_TO_HARN_AZ	8420	Arizona HARN
PE_GT_NAD_1983_TO_HARN_AR	1704	Arkansas HARN
PE_GT_NAD_1983_TO_HARN_CN	8421	California North HARN - above 37N
PE_GT_NAD_1983_TO_HARN_CS	8422	California South HARN - below 37N
PE_GT_NAD_1983_TO_HARN_CO	8423	Colorado HARN

PE_GT_NAD_1983_TO_HARN_FL
PE_GT_NAD_1983_TO_HARN_GA
PE_GT_NAD_1983_TO_HARN_HI
PE_GT_NAD_1983_TO_HARN_IA
PE_GT_NAD_1983_TO_HARN_IL
PE_GT_NAD_1983_TO_HARN_IN
PE_GT_NAD_1983_TO_HARN_KS
PE_GT_NAD_1983_TO_HARN_KY
PE_GT_NAD_1983_TO_HARN_LA
PE_GT_NAD_1983_TO_HARN_MD
PE_GT_NAD_1983_TO_HARN_ME
PE_GT_NAD_1983_TO_HARN_MI
PE_GT_NAD_1983_TO_HARN_MN
PE_GT_NAD_1983_TO_HARN_MS
PE_GT_NAD_1983_TO_HARN_MO
PE_GT_NAD_1983_TO_HARN_EM
PE_GT_NAD_1983_TO_HARN_WM
PE_GT_NAD_1983_TO_HARN_NV
PE_GT_NAD_1983_TO_HARN_NY
PE_GT_NAD_1983_TO_HARN_NJ
PE_GT_NAD_1983_TO_HARN_NM
PE_GT_NAD_1983_TO_HARN_ND
PE_GT_NAD_1983_TO_HARN_OH
PE_GT_NAD_1983_TO_HARN_OK
PE_GT_NAD_1983_TO_HARN_PV
PE_GT_NAD_1983_TO_HARN_SD
PE_GT_NAD_1983_TO_HARN_TN
PE_GT_NAD_1983_TO_HARN_ET
PE_GT_NAD_1983_TO_HARN_UT
PE_GT_NAD_1983_TO_HARN_VA
PE_GT_NAD_1983_TO_HARN_WO
PE_GT_NAD_1983_TO_HARN_WV
PE_GT_NAD_1983_TO_HARN_WI
PE_GT_NAD_1983_TO_HARN_WY

8425 Florida HARN
8424 Georgia HARN
8501 Hawaii HARN
1705 Iowa HARN
8551 Illinois HARN
8502 Indiana HARN
8503 Kansas HARN
8428 Kentucky HARN
8429 Louisiana HARN
8430 Maryland & Delaware HARN
8431 Maine HARN
8432 Michigan HARN
1706 Minnesota HARN
8433 Mississippi HARN
1707 Missouri HARN
8426 Idaho & Montana HARN-E of 113W
8427 Idaho & Montana HARN-W of 113W
8435 Nebraska HARN
8504 Nevada HARN
8435 New England-CT,MA,NH,RI,VT HARN
108437 New Jersey HARN
8436 New Mexico HARN
8437 New York HARN
8438 North Dakota HARN
8505 Ohio HARN
8439 Oklahoma HARN
8440 Puerto Rico & Virgin Islands HARN
8441 South Dakota HARN
8442 Tennessee HARN
8443 Texas HARN - E of 100W
8444 Texas HARN - W of 100W
8506 Utah HARN
8445 Virginia HARN
8446 Washington & Oregon HARN
8507 West Virginia HARN
8447 Wisconsin HARN
8448 Wyoming HARN

Transformations by NADCON/HARN Grid Method

Name	Code	Area of Use
NAD27 - NAD83 grid-based transformations		
NAD_1927_To_NAD_1983_NADCON	1241	NAD27 to NAD83—CONUS (lower 48 states)
NAD_1927_To_NAD_1983_Alaska	1243	NAD27 to NAD83—Alaska
NAD_1927_To_NAD_1983_PR_VI	108003	NAD27 to NAD83—Puerto Rico-Virgin Island
Old non-NAD27—NAD83 grid-based transformations		
Old_Hawaiian_To_NAD_1983	1454	Old Hawaiian to NAD83
Puerto_Rico_To_NAD_1983	1461	Puerto Rico to NAD83—Puerto Rico-Virgin Island
St_George_To_NAD_1983	1457	St. George Island to NAD83
St_Lawrence_To_NAD_1983	1455	St. Lawrence Island to NAD83
St_Paul_To_NAD_1983	1456	St. Paul Island to NAD83
HARN (HPGN) grid-based transformations		
American_Samoa_1962_To_HARN_American_Samoa_East	1579	American Samoa HARN – Ofu, Olosega, Ta'u Islands
American_Samoa_1962_To_HARN_American_Samoa_West	1578	American Samoa HARN – Aunu'u and Tutuila Islands
Guam_1963_To_HARN_Guam	108143	Guam HARN
NAD_1983_To_HARN_Alabama	8419	Alabama HARN
NAD_1983_To_HARN_Arizona	8420	Arizona HARN
NAD_1983_To_HARN_Arkansas	1704	Arkansas HARN
NAD_1983_To_HARN_CA_N	8421	California North HARN - above 37N
NAD_1983_To_HARN_CA_S	8422	California South HARN - below 37N
NAD_1983_To_HARN_Colorado	8423	Colorado HARN
NAD_1983_To_HARN_Florida	8425	Florida HARN
NAD_1983_To_HARN_Georgia	8424	Georgia HARN
NAD_1983_To_HARN_Hawaii	8501	Hawai'i HARN
NAD_1983_To_HARN_Illinois	8551	Illinois HARN
NAD_1983_To_HARN_Indiana	8502	Indiana HARN
NAD_1983_To_HARN_Iowa	1705	Iowa HARN
NAD_1983_To_HARN_Kansas	8503	Kansas HARN
NAD_1983_To_HARN_Kentucky	8428	Kentucky HARN
NAD_1983_To_HARN_Louisiana	8429	Louisiana HARN
NAD_1983_To_HARN_MD_DE	8430	Maryland & Delaware HARN
NAD_1983_To_HARN_Maine	8431	Maine HARN
NAD_1983_To_HARN_Michigan	8432	Michigan HARN
NAD_1983_To_HARN_Minnesota	1706	Minnesota HARN
NAD_1983_To_HARN_Mississippi	8433	Mississippi HARN
NAD_1983_To_HARN_Missouri	1707	Missouri HARN
NAD_1983_To_HARN_East_MT_ID	8426	Idaho & Montana HARN—E of 113W
NAD_1983_To_HARN_West_MT_ID	8427	Idaho & Montana HARN—W of 113W
NAD_1983_To_HARN_Nebraska	8435	Nebraska HARN
NAD_1983_To_HARN_Nevada	8504	Nevada HARN
NAD_1983_To_HARN_New_England	8435	New England—CT,MA,NH,RI,VT HARN
NAD_1983_To_HARN_New_Jersey	108437	New Jersey HARN
NAD_1983_To_HARN_New_Mexico	8436	New Mexico HARN

NAD_1983_To_HARN_New_York	8437	New York HARN
NAD_1983_To_HARN_North_Dakota	8438	North Dakota HARN
NAD_1983_To_HARN_Ohio	8505	Ohio HARN
NAD_1983_To_HARN_Oklahoma	8439	Oklahoma HARN
NAD_1983_To_HARN_PR_VI	8440	Puerto Rico & Virgin Islands HARN
NAD_1983_To_HARN_South_Dakota	8441	South Dakota HARN
NAD_1983_To_HARN_Tennessee	8442	Tennessee HARN
NAD_1983_To_HARN_East_Texas	8443	Texas HARN - E of 100W
NAD_1983_To_HARN_West_Texas	8444	Texas HARN - W of 100W
NAD_1983_To_HARN_Utah	8506	Utah HARN
NAD_1983_To_HARN_Virginia	8445	Virginia HARN
NAD_1983_To_HARN_WA_OR	8446	Washington & Oregon HARN
NAD_1983_To_HARN_West_Virginia	8507	West Virginia HARN
NAD_1983_To_HARN_Wisconsin	8447	Wisconsin HARN
NAD_1983_To_HARN_Wyoming	8448	Wyoming HARN

NADCON/HARN grid extents

Name	Area of Interest	MinLon	MinLat	MaxLon	MaxLat
ALASKA	Alaska	-194.0	46.0	-128.0	77.0
CONUS	lower 48 states	-131.0	20.0	-63.0	50.0
HAWAII	Hawai'i	-161.0	18.0	-154.0	23.0
PRVI	Puerto Rico/Virgin Islands	-68.0	17.0	-64.0	19.0
STGEORGE	St George, AK	-171.0	56.0	-169.0	57.0
STLRNC	St Lawrence, AK	-172.0	62.0	-168.0	64.0
STPAUL	St Paul, AK	-171.0	57.0	-169.0	58.0
ALHPGN	Alabama	-90.0	30.0	-84.0	36.0
ARHPGN	Arkansas	-95.0	32.0	-88.75	37.0
AZHPGN	Arizona	-116.0	30.0	-108.0	38.0
CNHPGN	California-North of 37 N	-125.0	36.0	-114.0	43.0
COHPGN	Colorado	-110.0	36.0	-101.0	42.0
CSHPGN	California-South of 37 N	-122.0	32.0	-113.0	37.0
EMHPGN	Idaho/Montana-East of 113 W	-113.0	41.0	-103.0	50.0
ESHPGN	American Samoa	-171.0	-14.0	-165.0	-20.0
ETHPGN	Texas-East of 100 W	-100.0	25.0	-87.75	35.0
FLHPGN	Florida	-88.0	24.0	-80.0	32.0
GAHPGN	Georgia	-86.0	30.0	-80.0	36.0
GUHPGN	Guam	141.0	13.0	147.0	19.0
HIHPGN	Hawai'i	-162.0	18.0	-154.0	24.0
IAHPGN	Iowa	-98.0	40.0	-89.0	44.0
ILHPGN	Illinois	-92.0	36.0	-85.0	43.0
INHPGN	Indiana	-89.0	37.0	-80.5	45.5
KSHPGN	Kansas	-103.0	36.0	-94.0	41.0
KYHPGN	Kentucky	-90.0	36.0	-81.0	40.0
LAHPGN	Louisiana	-95.0	27.0	-88.0	34.0

MDHPGN	Maryland and Delaware	-80.0	37.0	-74.0	41.0
MEHPGN	Maine	-72.0	42.0	-66.0	48.0
MIHPGN	Michigan	-91.0	41.0	-82.0	48.0
MNHPGN	Minnesota	-98.0	43.0	-88.0	50.0
MOHPGN	Missouri	-97.0	35.0	-88.0	42.0
MSHPGN	Mississippi	-92.0	29.0	-86.0	36.0
NBHPGN	Nebraska	-104.5	39.5	-94.5	43.5
NDHPGN	North Dakota	-105.0	45.0	-95.0	50.0
NEHPGN	NH, VT, CT, MA, RI	-75.0	40.0	-69.0	46.0
NJHPGN	New Jersey	-76.0	38.0	-70.0	44.0
NMHPGN	New Mexico	-110.0	31.0	-101.0	38.0
NVHPGN	Nevada	-120.5	34.5	-113.5	42.5
NYHPGN	New York	-81.0	40.0	-70.0	46.0
OHHPGN	Ohio	-86.0	38.0	-80.0	43.0
OKHPGN	Oklahoma	-104.0	33.0	-94.0	38.0
PVHPGN	Puerto Rico, Virgin Islands	-68.0	17.0	-62.0	21.0
SDHPGN	South Dakota	-105.0	41.0	-95.0	47.0
TNHPGN	Tennessee	-91.0	34.0	-81.0	37.0
UTHPGN	Utah	-115.0	36.0	-107.0	43.0
VAHPGN	Virginia	-84.0	36.0	-75.0	40.0
WIHPGN	Wisconsin	-94.0	42.0	-86.0	48.0
WMHPGN	Idaho/Montana-West of 113 W	-119.0	41.0	-109.0	50.0
WOHPGN	Washington/Oregon	-125.0	41.0	-116.0	50.0
WSPGN	American Samoa	-171.0	-14.0	-165.0	-20.0
WTHPGN	Texas-West of 100 W	-107.0	25.0	-99.0	37.0
WVHPGN	West Virginia	-84.0	36.0	-77.0	41.0
WYHPGN	Wyoming	-111.5	40.5	-103.5	45.5

Geographic transformations by area of interest - Africa

area of use	code	name
Algeria	1253	Nord Sahara_1959_To_WGS_1984
Algeria	1882	Nord_Sahara_1959_Paris_To_Nord_Sahara_1959
Algeria - District 3 (In Salah)	1815	Nord_Sahara_1959_To_WGS_1984_4
Algeria - Hassi Bir Reikaz	1817	Nord_Sahara_1959_To_WGS_1984_6
Algeria - Hassi Messaoud area	1560	Nord_Sahara_1959_To_WGS_1972_BE
Algeria - Hassi Messaoud area	8562	Nord_Sahara_1959_To_WGS_1984_3
Algeria - In Amenas block	1816	Nord_Sahara_1959_To_WGS_1984_5
Algeria - N of 35g (31 30') N	1294	Voiron_1875_To_WGS_1984
Algeria - N of 35g (31 30') N	1266	Voiron_1875_Paris_To_Voiron_1875
Algeria - N of 35g (31 30') N	8211	Voiron_1875_Paris_To_WGS_1984
Algeria - N of 35g (31 30') N	8158	Voiron_Unifie_1960_To_WGS_1984
Algeria - N of 35g (31 30') N	8171	Voiron_Unifie_1960_Paris_To_Voiron_Unifie_1960
Algeria - N of 35g (31 30') N	8177	Voiron_Unifie_1960_Paris_To_WGS_1984
Angola - Cabinda Offshore	1328	Malongo_1987_To_Mhast_1
Angola - Cabinda Offshore	1330	Malongo_1987_To_WGS_1984_1
Angola - Cabinda Offshore	1557	Malongo_1987_To_WGS_1984_2

Angola - Cabinda offshore	1329	Mhast_To_WGS_1984_1
Angola - Offshore	1317	Camacupa_To_WGS_1972_BE_1
Angola - Offshore block 1 & 16	1320	Camacupa_To_WGS_1984_3
Angola - Offshore block 1 & 16	1326	Camacupa_To_WGS_1984_9
Angola - Offshore block 2	1319	Camacupa_To_WGS_1984_2
Angola - Offshore block 2	1325	Camacupa_To_WGS_1984_8
Angola - Offshore block 2, 3, & 17	1327	Camacupa_To_WGS_1984_10
Angola - Offshore block 3	1322	Camacupa_To_WGS_1984_5
Angola - Offshore block 3, 7, 15, & 17	1324	Camacupa_To_WGS_1984_7
Angola - Offshore block 5	1318	Camacupa_To_WGS_1984_1
Angola - Offshore block 7	1323	Camacupa_To_WGS_1984_6
Angola - Offshore block 7 & 8	1321	Camacupa_To_WGS_1984_4
Bahrain	1110	Ain_El_Abd_To_WGS_1984_1
Botswana	1113	Arc_1950_To_WGS_1984_1
Botswana	1114	Arc_1950_To_WGS_1984_2
Burkina Faso	1101	Adindan_To_WGS_1984_2
Burkina Faso - central	1880	Point58_To_WGS_1984_1
Burundi	1115	Arc_1950_To_WGS_1984_3
Cameroon	1102	Adindan_To_WGS_1984_3
Cameroon	1316	Manoca_To_WGS_1984_1
Cameroon	1902	Manoca_1962_To_WGS_1972_BE_1
Cameroon	1167	Mirna_To_WGS_1984_1
Cameroon - coastal area	1796	Manoca_1962_To_WGS_1984_1
Cameroon - Garoua area	1805	Garoua_To_WGS_1972_BE_1
Cameroon - NDjamena area	1806	Kousseri_To_WGS_1972_BE_1
Congo - coastal area & offshore	1801	Pointe_Noire_To_WGS_1984_2
Congo - coastal area and offshore	1802	Pointe_Noire_To_WGS_1984_3
Cote D'Ivoire	1470	Abidjan_1987_To_WGS_1984
Cote D'Ivoire	1469	Locodjo_1965_To_WGS_1984
Egypt	1137	ED_1950_To_WGS_1984_5
Egypt	1545	Egypt_1907_To_WGS_1972
Egypt	1148	Egypt_1907_To_WGS_1984
Egypt - Gulf of Suez	1546	Egypt_1907_To_WGS_1984_3
Egypt - western desert	1810	ED_1950_To_WGS_1984_31
Ethiopia	1100	Adindan_To_WGS_1984_1
Ethiopia	1103	Adindan_To_WGS_1984_4
Ethiopia (Eritrea)	1165	Massawa_To_WGS_1984
Gabon	1163	Mporaloko_To_WGS_1984
Gabon	1532	Mporaloko_To_WGS_1984_2
Ghana	1569	Accra_To_WGS_1984
Ghana	1159	Leigon_To_WGS_1984
Ghana - Offshore	1570	Accra_To_WGS_1972_BE
Gibraltar	1628	ED_1950_To_ETRS_1989_5
Gibraltar	1133	ED_1950_To_WGS_1984_1
Gibraltar	1629	ED_1950_To_WGS_1984_26
Guinea-Bissau	1547	Bissau_To_WGS_1984
Guinea	1517	Conakry_1905_To_WGS_1984
Guinea	1518	Dabola_To_WGS_1984
Kenya	1122	Arc_1960_To_WGS_1984
Kenya	1284	Arc_1960_To_WGS_1984_2
Lesotho	1116	Arc_1950_To_WGS_1984_4

Liberia	1160	Liberia_1964_To_WGS_1984
Libya - Mabruk field	1861	ELD_1979_To_WGS_1984_3
Libya - Mabruk field	1862	ELD_1979_To_WGS_1984_4
Libya - Mabruk field	1863	ELD_1979_To_WGS_1984_5
Libya - Murzuq field	1859	ELD_1979_To_WGS_1984_1
Libya - Murzuq field	1860	ELD_1979_To_WGS_1984_2
Madagascar	1227	Tananarive_1925_To_WGS_1984
Madagascar	1265	Tananarive_1925_Paris_To_Tananarive_1925
Madagascar	8176	Tananarive_1925_Paris_To_WGS_1984
Malawi	1113	Arc_1950_To_WGS_1984_1
Malawi	1117	Arc_1950_To_WGS_1984_5
Mali	1104	Adindan_To_WGS_1984_5
Morocco	1166	Merchich_To_WGS_1984
Mozambique	1302	Moznet_To_WGS_1984
Mozambique	1297	Tete_To_Moznet_1
Mozambique	1683	Tete_To_WGS_1984_1
Mozambique - Gaza, Inhambane, S Sofala and S Manhica, between 20 S – 24 S	1299	Tete_To_Moznet_3
Mozambique - Gaza, Inhambane, & southern parts of Sofala & Manhica (between 24S and 20S)	1685	Tete_To_WGS_1984_3
Mozambique - Maputo & S Gaza Province, south of approx. 24 S	1298	Tete_To_Moznet_2
Mozambique - Maputo and southern part of Gaza (S of 24S)	1684	Tete_To_WGS_1984_2
Mozambique - Nampula, Niassa and Cabo Delgado, north of 16 S	1301	Tete_To_Moznet_5
Mozambique - Nampula, Niassa, and Cabo Delgado (N of 16S)	1687	Tete_To_WGS_1984_5
Mozambique - Sofala N of Beira Corridor, Manhica, Tete & Zambezia, 16 S – 20 S	1300	Tete_To_Moznet_4
Mozambique - Sofala N of Beira corridor, Manhica, Tete & Zambezia (between 20S and 16S)	1686	Tete_To_WGS_1984_4
Namibia	1226	Schwarzeck_To_WGS_1984
Namibia	1271	Schwarzeck_To_WGS_1984_2
Niger - SW, near 12N	1880	Point58_To_WGS_1984_1
Nigeria	1168	Minna_To_WGS_1984_2
Nigeria - offshore beyond continental shelf	1818	Minna_To_WGS_1984_4
Nigeria - offshore beyond continental shelf	1820	Minna_To_WGS_1984_6
Nigeria - offshore beyond continental shelf	1821	Minna_To_WGS_1984_7
Nigeria - offshore beyond continental shelf	1822	Minna_To_WGS_1984_8
Nigeria - offshore beyond continental shelf	1823	Minna_To_WGS_1984_9
Nigeria - south	1534	Minna_To_WGS_1984_3
Nigeria - south	1824	Minna_To_WGS_1984_10
Nigeria - southeast	1839	Beduarum_To_WGS_1972_BE_1
Saudi Arabia	1111	Ain_El_Abd_To_WGS_1984_2
Senegal	1105	Adindan_To_WGS_1984_6
Senegal	1828	Yoff_To_WGS_1972_1
Sierra Leone	1614	Sierra_Leone_1968_To_WGS_1984
Somalia	1107	Afgooye_To_WGS_1984
South Africa	1504	Cape_To_Hartebeesthoek94
South Africa	1128	Cape_To_WGS_1984_1

South Africa	1129	Cape_To_WGS_1984_2
South Africa	1505	Hartebeesthoek94_To_WGS_1984
Sudan	1100	Adindan_To_WGS_1984_1
Sudan	1106	Adindan_To_WGS_1984_7
Swaziland	1113	Arc_1950_To_WGS_1984_1
Swaziland	1118	Arc_1950_To_WGS_1984_6
Tanzania	1122	Arc_1960_To_WGS_1984
Tanzania	1285	Arc_1960_To_WGS_1984_3
Tunisia	1130	Carthage_To_WGS_1984
Tunisia	1881	Carthage_Paris_To_Carthage
Tunisia	1245	ED_1950_To_WGS_1984_16
Tunisia - Offshore	1538	Carthage_To_WGS_1984_2
Zaire	1113	Arc_1950_To_WGS_1984_1
Zaire	1119	Arc_1950_To_WGS_1984_7
Zambia	1120	Arc_1950_To_WGS_1984_8
Zimbabwe	1113	Arc_1950_To_WGS_1984_1
Zimbabwe	1121	Arc_1950_To_WGS_1984_9

Geographic transformations by area of interest - Asia

area of use	code	name
Afghanistan	1246	Herat_North_To_WGS_1984
Bahrain	1110	Ain_El_Abd_To_WGS_1984_1
Bangladesh	1155	Kalianpur_1937_To_WGS_1984_1
Brunei Darussalam	1228	Timbalai_1948_To_WGS_1984
Brunei Darussalam - Offshore	1592	Timbalai_1948_To_WGS_1984_2
Brunei Darussalam - Onshore	1615	Timbalai_1948_To_WGS_1984_3
Congo	1200	Pointe_Noire_To_WGS_1984
Hong Kong	1825	Hong_Kong_1980_To_WGS_1984_1
India	1156	Kalianpur_1975_To_WGS_1984_1
Indonesia	1883	Gunung_Segara_Jakarta_To_Gunung_Segara
Indonesia	1248	Indonesian_1974_To_WGS_1984
Indonesia	1832	Indonesian_1974_To_WGS_1984_2
Indonesia	1833	Indonesian_1974_To_WGS_1984_3
Indonesia - Bangka and Belitung Islands	1126	Bukit_Rimpah_To_WGS_1984
Indonesia - Kalimantan	1286	Segora_To_WGS_1984
Indonesia - E Kalimantan	1898	Gunung_Segara_To_WGS_1984_2
Indonesia - E Kalimantan, Mahakam delta area	1838	Gunung_Segara_To_WGS_1984_4
Indonesia - E Kalimantan, Mahakam Delta Area	8196	Samboja_To_WGS_1984
Indonesia - eastern Java Sea	1814	Batavia_To_WGS_1984_3
Indonesia - Java Sea - offshore northwest Java	1813	Batavia_To_WGS_1984_2
Indonesia - Kalimantan	1897	Gunung_Segara_To_WGS_1984_1
Indonesia - northeast Kalimantan	1899	Gunung_Segara_To_WGS_1984_3
Indonesia - southwest Sulawesi	1837	Makassar_To_WGS_1984_1
Indonesia - Sumatra	1123	Batavia_To_WGS_1984
Indonesia - Sumatra	1759	Batavia_Jakarta_To_Batavia

Indonesia - Sumatra	8178	Batavia_Jakarta_To_WGS_1984
Iran	1141	ED_1950_To_WGS_1984_9
Iran	1514	ED_1950_ED77_To_WGS_1984
Iran - Kangan District	1513	FD_1958_To_WGS_1984
Iran - Kharg Island	1858	ED_1950_ED77_To_WGS_1984_5
Iran - Kharg Island	1855	FD_1958_To_WGS_1984_3
Iran - Lavan Island & Balal field	1857	ED_1950_ED77_To_WGS_1984_4
Lavan Island & Balal field	1854	FD_1958_To_WGS_1984_2
Iran - South Pars field blocks 2 & 3	1856	ED_1950_ED77_To_WGS_1984_3
Iran - Tehari Refinery	1512	Rassadiran_To_WGS_1984
Iraq	1135	ED_1950_To_WGS_1984_3
Iraq-Kuwait Boundary	1993	IKBD_1992_To_WGS_1984_1
Israel	1135	ED_1950_To_WGS_1984_3
Israel	108215	Israel_To_WGS_1984
Japan	1826	JGD_2000_To_WGS_1984_1
Japan	1826	JGD_2000_To_WGS_1984
Japan	108103	Tokyo_To_JGD_2000_1
Japan	1230	Tokyo_To_WGS_1984_1
Japan	1231	Tokyo_To_WGS_1984_2
Japan	108106	Tokyo_To_WGS_1984_2001
Japan	108233	Jordan_To_WGS_1984
Jordan	1558	Korean_1995_To_WGS_1984_1
Republic of Korea	1230	Tokyo_To_WGS_1984_1
Korea	1232	Tokyo_To_WGS_1984_3
Korea	1993	IKBD_1992_To_WGS_1984_1
Kuwait-Iraq Boundary	108234	Observatorio_Meteorologico_1965_To_WGS_1984_1
Macau	108211	WGS_1984_To_Observatorio_Meteor_1965_1
Macau	108235	WGS_1984_To_Observatorio_Meteorologico_1965_2
Malaysia - Sabah, Sarawak	1228	Timbalai_1948_To_WGS_1984
Malaysia - Sabah, Sarawak, offshore	1852	Timbalai_1948_To_WGS_1984_4
Myanmar - Moattama Area	1533	Kalianpur_1937_To_WGS_1984_2
Nepal	1156	Kalianpur_1975_To_WGS_1984_1
Okinawa	1230	Tokyo_To_WGS_1984_1
Okinawa	1233	Tokyo_To_WGS_1984_4
Oman	1616	PDO_1993_To_WGS_1972
Oman	1439	PDO_1993_To_WGS_1984
Oman - block 4	1617	PDO_1993_To_WGS_1984_3
Oman - Nasirah Island	1189	Nahwan_1967_To_WGS_1984_1
Pakistan	1247	Kalianpur_1962_To_WGS_1984_1
Palestine	108220	Palestine_1923_To_WGS_1984_1X
Palestine	108232	Palestine_1923_To_WGS_1984_2X
Philippines (excluding Mindanao)	1161	Luzon_1911_To_WGS_1984_1
Philippines (Mindanao)	1162	Luzon_1911_To_WGS_1984_2
Qatar	1536	Nahwan_1967_To_WGS_1984_5
Qatar	1561	Qatar_1974_To_WGS_1984_1
Qatar	1840	QND_1995_To_WGS_1984_1
Qatar - Offshore	1562	Qatar_1974_To_WGS_1984_2
Qatar - Onshore	1563	Qatar_1974_To_WGS_1984_3
Singapore	1158	Kertau_To_WGS_1984
Saudi Arabia	1190	Nahwan_1967_To_WGS_1984_2
South Korea	1305	Tokyo_To_WGS_1984_5

South Yemen	1539	South_Yemen_To_Yemen_NGN_1996
Sri Lanka	1157	Kandawala_To_WGS_1984
Syrian Arab Republic	1585	Deir_Ez_Zor_To_WGS_1984_2
Syrian Arab Republic	1135	ED_1950_To_WGS_1984_3
Syrian Arab Republic - Al Whaleed Area	1586	Deir_Ez_Zor_To_WGS_1984_3
Syrian Arab Republic - Deir Area (35 22 N, 40 06 E)	1584	Deir_Ez_Zor_To_WGS_1972_BE
Syrian Arab Republic - Shaddadeh Area (36 N, 41 E)	1587	Deir_Ez_Zor_To_WGS_1984_4
Taiwan	1152	Hu_Tzu_Shan_To_WGS_1984
Thailand	1153	Indian_1954_To_WGS_1984
Thailand	1154	Indian_1975_To_WGS_1984
Thailand	1304	Indian_1975_To_WGS_1984_2
Thailand	1812	Indian_1975_To_WGS_1984_4
Thailand - Bongkot Field	1537	Indian_1975_To_WGS_1984_3
Turkey	1783	ED_1950_To_ETRS_1989_9
Turkey	1784	ED_1950_To_WGS_1984_30
United Arab Emirates	1191	Nahrwan_1967_To_WGS_1984_3
United Arab Emirates - Abu Al Bu Koosh	1531	Nahrwan_1967_To_WGS_1984_4
Vietnam	1153	Indian_1954_To_WGS_1984
Vietnam - Meekong Delta	1544	Hanoi_1972_To_WGS_1984
Vietnam - Near 16 N	1542	Indian_1960_To_WGS_1984_2
Vietnam - Offshore	1541	Indian_1960_To_WGS_1972_BE
Vietnam - Offshore	8532	Indian_1960_To_WGS_1984_1
Vietnam - Con Son Island	1543	Indian_1960_To_WGS_1984_3
West Malaysia	1158	Kertau_To_WGS_1984
Yemen - South	1682	South_Yemen_To_WGS_1984_1
Yemen	1540	Yemen_NGN_1996_To_WGS_1984

Geographic transformations by area of interest: Europe

area of use	code	name
Albania	1292	Pulkovo_1942_To_WGS_1984_8
Austria	1133	ED_1950_To_WGS_1984_1
Austria	1134	ED_1950_To_WGS_1984_2
Austria	1619	MGI_To_ETRS_1989_1
Austria	1618	MGI_To_WGS_1984_2
Austria	1618	MGI_To_WGS_1984_3
Austria	1794	MGI_To_WGS_1984_6
Azerbaijan	1807	Pulkovo_1942_To_WGS_1984_13
Azerbaijan - coastal area Baku to Astara	1809	Pulkovo_1942_To_WGS_1984_15
Azerbaijan	1808	Pulkovo_1942_To_WGS_1984_14
Azores - central, Faial island	1974	Azores_Central_1995_To_WGS_1984_4
Azores - central, Pico island	1976	Azores_Central_1995_To_WGS_1984_6
Azores - central, Pico island	1977	Azores_Central_1995_To_WGS_1984_7
Azores - central, Sao Jorge island	1978	Azores_Central_1995_To_WGS_1984_8

Azores - central, Sao Jorge island	1979	Azores_Central_1995_To_WGS_1984_9
Azores - central, Terceira island	1972	Azores_Central_1995_To_WGS_1984_2
Azores - central, Terceira island	1973	Azores_Central_1995_To_WGS_1984_3
Azores - central, Terceira island	1975	Azores_Central_1995_To_WGS_1984_5
Azores - Faial, Graciosa, Pico, Sao Jorge, and Terceira island	1980	Azores_Central_1995_To_WGS_1984_10
Azores - Faial, Graciosa, Pico, Sao Jorge, and Terceira island	1981	Azores_Central_1995_To_WGS_1984_11
Azores - Flores, Corvo islands	1982	Azores_Occidental_1989_To_WGS_1984_2
Azores - Santa Maria and Sao Miguel islands	1970	Azores_Oriental_1995_To_WGS_1984_4
Azores - Santa Maria and Sao Miguel islands	1971	Azores_Oriental_1995_To_WGS_1984_5
Azores - Sao Miguel island	1968	Azores_Oriental_1995_To_WGS_1984_2
Azores - Sao Miguel island	1969	Azores_Oriental_1995_To_WGS_1984_3
Belgium	1264	Belge_1950.Brussels_To_Belge_1950
Belgium	1652	Belge_1972_To_ETRS_1989_1
Belgium	1609	Belge_1972_To_WGS_1984_1
Belgium	1610	Belge_1972_To_WGS_1984_2
Belgium	1133	ED_1950_To_WGS_1984_1
Boznia and Herzegovina	1306	MGI_To_WGS_1984
Bosnia and Herzegovina	1786	MGI_To_WGS_1984_5
Bosnia and Herzegovina	1757	MGI_Ferro_To_MGI
Bosnia and Herzegovina	8263	MGI_Ferro_To_WGS_1984
Croatia	1620	MGI_To_ETRS_1989_2
Croatia	1306	MGI_To_WGS_1984
Croatia	1621	MGI_To_WGS_1984_4
Croatia	1786	MGI_To_WGS_1984_5
Croatia	1757	MGI_Ferro_To_MGI
Croatia	8263	MGI_Ferro_To_WGS_1984
Cyprus	1136	ED_1950_To_WGS_1984_4
Czech Republic	1289	Pulkovo_1942_To_WGS_1984_5
Czech Republic	1622	S_JTSK_To_ETRS_1989_1
Czech Republic	108202	S_JTSK_To_Pulkovo_1942
Czech Republic	1623	S_JTSK_To_WGS_1984_1
Czech Republic	1884	S_JTSK_Ferro_To_S_JTSK
Denmark	1626	ED_1950_To_ETRS_1989_4
Denmark	1627	ED_1950_To_WGS_1984_25
Denmark	1133	ED_1950_To_WGS_1984_1
Denmark	1134	ED_1950_To_WGS_1984_2
Denmark - North Sea south of 62 N	1146	ED_1987_To_WGS_1984_1
England	1315	OSGB_1936_To_ED_1950_UKOOA
England	1195	OSGB_1936_To_WGS_1984_1
England	1196	OSGB_1936_To_WGS_1984_2
England	1197	OSGB_1936_To_WGS_1984_3
England	1314	OSGB_1936_To_WGS_1984_Petroleum
Estonia	1331	Estonia_1992_To_ETRF_1989
Estonia	1333	Estonia_1992_To_WGS_1984
Estonia	1649	Estonia_1997_To_ETRS_1989_1
Estonia	1649	Estonia_1997_To_WGS_1984_1
Estonia	1332	Pulkovo_1942_To_Estonia_1992
Estonia	1334	Pulkovo_1942_To_WGS_1984_12
Europe	1149	ETRF_1989_To_WGS_1984
Europe - west	1960	ED_1987_To_WGS_1984_2
Finland	1133	ED_1950_To_WGS_1984_1

Finland	1139	ED_1950_To_WGS_1984_7
Finland	108226	EUREF_FIN_To_ETRS_1989
Finland	108227	EUREF_FIN_To_WGS_1984
Finland	1638	KKJ_To_ETRS_1989_1
Finland	108228	KKJ_To_ETRS_1989_2
Finland	108229	KKJ_To_EUREF_FIN
Finland	1639	KKJ_To_WGS_1984_1
Finland	108230	KKJ_To_WGS_1984_2
France	1650	ED_1950_To_ETRS_1989_10
France	1133	ED_1950_To_WGS_1984_1
France	1134	ED_1950_To_WGS_1984_2
France	1275	ED_1950_To_WGS_1984_17
France	1276	NTF_To_ED_1950
France	1651	NTF_To_ETRS_1989_1
France	108130	NTF_To_RGF_1993_1
France	1277	NTF_To_WGS_1972
France	1193	NTF_To_WGS_1984
France	8186	NTF_Paris_To_ED_1950
France	1764	NTF_Paris_To_NTF
France	108102	NTF_Paris_To_RGF_1993_1
France	8188	NTF_Paris_To_WGS_1972
France	8094	NTF_Paris_To_WGS_1984
France	1591	RGF_1993_To_ETRF_1989_1
France	108470	RGF_1993_To_NTF_NTV2
France	1671	RGF_1993_To_WGS_1984_1
France	1671	RGF_1993_To_WGS_1984_14
Georgia	1808	Pulkovo_1942_To_WGS_1984_14
Germany - between 50 20 N and 52 20 N	108207	DHDN_To_WGS_1984_4x
Germany - Former East Germany	1310	Pulkovo_1942_To_ETRF_1989
Germany - former East Germany	1674	Pulkovo_1942_Adj_1983_To_ETRS_1989_1
Germany - former East Germany	1775	Pulkovo_1942_Adj_1983_To_ETRS_1989_2
Germany - former East Germany	1675	Pulkovo_1942_Adj_1983_To_WGS_1984_1
Germany - former West Germany	1309	DHDN_To_ETRF_1989
Germany - former West Germany	1133	ED_1950_To_WGS_1984_1
Germany - former West Germany	1134	ED_1950_To_WGS_1984_2
Germany - N of 52 20 N	108208	DHDN_To_WGS_1984_5x
Germany - North Sea south of 62 N	1146	ED_1987_To_WGS_1984_1
Germany - offshore, North Sea	1998	ED_1950_To_WGS_1984_36
Germany - S of 50 20 N	108206	DHDN_To_WGS_1984_3x
Germany - Sachsen	1782	DHDN_To_ETRS_1989_7
Germany - Sachsen	108210	DHDN_To_WGS_1984_7x
Germany - Thuringen	1781	DHDN_To_ETRS_1989_6
Germany - Thuringen	108209	DHDN_To_WGS_1984_6x
Germany - West	1776	DHDN_To_ETRS_1989_2
Germany - West	1673	DHDN_To_WGS_1984_1
Germany - West	1777	DHDN_To_WGS_1984_2
Germany - West, between 50 20 N and 52 20 N	1779	DHDN_To_ETRS_1989_4
Germany - West, N of 52 20 N	1780	DHDN_To_ETRS_1989_5
Germany - West, S of 50 20 N	1778	DHDN_To_ETRS_1989_3
Gibraltar	1628	ED_1950_To_ETRS_1989_5
Gibraltar	1133	ED_1950_To_WGS_1984_1
Gibraltar	1629	ED_1950_To_WGS_1984_26

Greece	1133	ED_1950_To_WGS_1984_1
Greece	1140	ED_1950_To_WGS_1984_8
Greece	1440	ED_1950_To_WGS_1984_19
Greece	1272	GGRS_1987_To_WGS_1984
Greece	1761	Greek_Athens_To_Greek
Greenland	1798	Qornoq_1927_To_WGS_1984_2
Greenland - Ammassalik area	1800	Ammassalik_1958_To_WGS_1984_1
Greenland - Scoresbysund area	1799	Scoresbysund_1952_To_WGS_1984_1
Greenland - south	1797	Qornoq_1927_To_WGS_1984_1
Greenland - south	8111	Qornoq_To_WGS_1984
Hungary	8182	Hungarian_1972_To_ETRF_1989_1
Hungary	1830	Hungarian_1972_To_WGS_1984_1
Hungary	1831	Hungarian_1972_To_WGS_1984_2
Hungary	1287	Pulkovo_1942_To_WGS_1984_3
Iceland	108105	Hjorsey_1955_To_WGS_1984
Iceland	1952	ISN_1993_To_WGS_1984_1
Iceland	1994	Reykjavik_1900_To_WGS_1984_1
Ireland	1138	ED_1950_To_WGS_1984_6
Ireland	1678	IRENET95_To_WGS_1984_1
Ireland	1955	OSNI_1952_To_WGS_1984_1
Ireland	1640	TM65_To_ETRS_1989_1
Ireland	1229	TM65_To_WGS_1984
Ireland	1641	TM65_To_WGS_1984_2
Ireland	1953	TM75_To_ETRS_1989_2
Ireland	1954	TM75_To_WGS_1984_2
Ireland	1956	TM75_To_WGS_1984_3
Ireland	1195	OSGB_1936_To_WGS_1984_1
Isle of Man	1197	OSGB_1936_To_WGS_1984_3
Italy	1133	ED_1950_To_WGS_1984_1
Italy	1098	IGM_1995_To_ETRS_1989_1
Italy	1099	IGM_1995_To_WGS_1984_1
Italy	1262	Monte_Mario_Rome_To_Monte_Mario
Italy - mainland	1659	Monte_Mario_To_ETRS_1989_1
Italy - mainland	1660	Monte_Mario_To_WGS_1984_4
Italy - Sardinia	1142	ED_1950_To_WGS_1984_10
Italy - Sardinia	1661	Monte_Mario_To_ETRS_1989_2
Italy - Sardinia	1169	Monte_Mario_To_WGS_1984
Italy - Sardinia	1662	Monte_Mario_To_WGS_1984_2
Italy - Sicily	1143	ED_1950_To_WGS_1984_11
Italy - Sicily	1663	Monte_Mario_To_ETRS_1989_3
Italy - Sicily	1664	Monte_Mario_To_WGS_1984_3
Jan Mayen (Norway)	1957	Helle_1954_To_WGS_1984_1
Jordan	1135	ED_1950_To_WGS_1984_3
Kazakhstan	1291	Pulkovo_1942_To_WGS_1984_7
Kazakhstan - Caspian	1303	Pulkovo_1942_To_WGS_1984_10
Kuwait	1135	ED_1950_To_WGS_1984_3
Latvia	1958	LKS_1992_To_WGS_1984_1
Latvia	1290	Pulkovo_1942_To_WGS_1984_6
Lebanon	1135	ED_1950_To_WGS_1984_3
Liechtenstein	8161	Bern_1898_Bern_To_Bern_1898
Liechtenstein	1519	Bern_1898_Bern_To_CH1903

Liechtenstein	1509	CH1903_Plus_To_CHTRF_1995
Liechtenstein	1508	CH1903_To_WGS_1984_1
Liechtenstein	1510	CH1903_To_WGS_1984_2
Liechtenstein	1511	CHTRF_1995_To_WGS_1984
Lithuania	1283	LKS_1994_To_WGS_1984
Lithuania	1274	Pulkovo_1942_To_LKS_1994
Lithuania	1679	Pulkovo_1942_To_WGS_1984_2
Luxembourg	1133	ED_1950_To_WGS_1984_1
Luxembourg	1642	Luxembourg_1930_To_ETRS_1989_1
Luxembourg	1643	Luxembourg_1930_To_WGS_1984_1
Madeira and Porto Santo islands	1966	Porto_Santo_1995_To_WGS_1984_2
Madeira and Porto Santo islands	1967	Porto_Santo_1995_To_WGS_1984_3
Malta	1144	ED_1950_To_WGS_1984_12
Netherlands	1751	Amersfoort_To_ETRF_1989
Netherlands	108231	Amersfoort_To_ETRS_1989_MB
Netherlands	1112	Amersfoort_To_WGS_1984
Netherlands	1672	Amersfoort_To_WGS_1984_2
Netherlands	1133	ED_1950_To_WGS_1984_1
Netherlands	1134	ED_1950_To_WGS_1984_2
Netherlands	1146	ED_1987_To_WGS_1984_1
Netherlands - offshore	1999	ED_1950_To_WGS_1984_32
Netherlands - offshore, North Sea	1611	IRENET95_To_ETRF_1989
Northern Ireland	1955	OSNI_1952_To_WGS_1984_1
Northern Ireland	1640	TM65_To_ETRS_1989_1
Northern Ireland	1641	TM65_To_WGS_1984_2
Northern Ireland	1953	TM75_To_ETRS_1989_2
Northern Ireland	1954	TM75_To_WGS_1984_2
Northern Ireland	1956	TM75_To_WGS_1984_3
Northern Ireland	1139	ED_1950_To_WGS_1984_7
Norway	1133	ED_1950_To_WGS_1984_1
Norway - onshore	1653	NGO_1948_To_ETRS_1989_1
Norway	108201	NGO_1948_To_WGS_1984
Norway	1762	NGO_1948_Oslo_To_NGO_1948
Norway - North Sea south of 62 N	1146	ED_1987_To_WGS_1984_1
Norway - Offshore north of 62 N, Svalbard	1612	ED_1950_To_WGS_1984_23
Norway - Offshore north of 62 N	1613	ED_1950_To_WGS_1984_24
Norway - Offshore north of 65 N	1147	ED_1950_To_ED_1987_2
Norway - Offshore north of 65 N, Svalbard	1588	ED_1950_To_ETRF_1989_1
Norway - Offshore north of 65 N, Svalbard		
and Jan Mayen Islands		
Oman	1256	Fahud_To_WGS_1984
Oman	1438	Fahud_To_WGS_1984_2
Poland	1288	Pulkovo_1942_To_WGS_1984_4
Poland	1644	Pulkovo_1942_Adj_1958_To_ETRS_1989_1
Poland	1645	Pulkovo_1942_Adj_1958_To_WGS_1984_1
Portugal	108110	Datum_73_To_WGS_1984_1
Portugal	108120	Datum_73_To_WGS_1984_2
Portugal	108113	Datum_Lisboa_Bessel_To_WGS_1984_1
Portugal	108123	Datum_Lisboa_Bessel_To_WGS_1984_2
Portugal	108114	Datum_Lisboa_Hayford_To_WGS_1984_1
Portugal	108124	Datum_Lisboa_Hayford_To_WGS_1984_2

Portugal	1133	ED_1950_To_WGS_1984_1
Portugal	1145	ED_1950_To_WGS_1984_13
Portugal	108111	ED_1950_To_WGS_1984_PT3
Portugal	108121	ED_1950_To_WGS_1984_PT7
Portugal	1756	Lisbon_Lisbon_To_Lisbon
Portugal	1657	Datum_73_To_ETRS_1989_1
Portugal	1992	Datum_73_To_ETRS_1989_3
Portugal	1983	Datum_73_To_WGS_1984_3
Portugal	1987	Datum_73_To_WGS_1984_4
Portugal	1989	ED_1950_To_WGS_1984_34
Portugal	1985	European_1950_To_WGS_1984_33
Portugal	108222	Lisboa_Hayford_To_Datum_73_1
Portugal	108223	Lisboa_Hayford_To_Datum_73_2
Portugal	108224	Lisboa_Hayford_To_Lisboa_Bessel_1
Portugal	108225	Lisboa_Hayford_To_Lisboa_Bessel_2
Portugal	1991	Lisbon_1890_Lisbon_To_Lisbon
Portugal	1986	Lisbon_1890_To_WGS_1984_1
Portugal	1990	Lisbon_1890_To_WGS_1984_2
Portugal	1655	Lisbon_To_ETRS_1989_1
Portugal	1997	Lisbon_To_ETRS_1989_2
Portugal	1984	Lisbon_To_WGS_1984_3
Portugal	1988	Lisbon_To_WGS_1984_4
Portugal - Flores, Convo	1887	Azores_Occidental_1939_To_WGS_1984_1
Portugal - Graciosa, Terceira, Sao Jorge, Pico, Faial	1886	Azores_Central_1948_To_WGS_1984_1
Portugal - onshore	1944	Lisbon_To_WGS_1984_2
Portugal - Sao Miguel and Santa Maria	1885	Azores_Oriental_1940_To_WGS_1984_1
Portugal - Selvagens islands	1965	Selvagem_Grande_1938_To_WGS_1984_1
Romania	1995	Dealul_Piscului_1933_To_WGS_1984_1
Romania	1996	Dealul_Piscului_1970_To_WGS_1984_1
Romania	1097	Dealul_Piscului_1970_To_WGS_1984_2
Romania	1293	Pulkovo_1942_To_WGS_1984_9
Russia	1254	Pulkovo_1942_To_WGS_1984
Saudi Arabia	1111	Ain_El_Abd_To_WGS_1984_2
Saudi Arabia	1135	ED_1950_To_WGS_1984_3
Scotland	1315	OSGB_1936_To_ED_1950_UKOOA
Scotland	1195	OSGB_1936_To_WGS_1984_1
Scotland, including Shetland Islands	1198	OSGB_1936_To_WGS_1984_4
Scotland	1314	OSGB_1936_To_WGS_1984_Petroleum
Serbia	1306	MGI_To_WGS_1984
Serbia	1786	MGI_To_WGS_1984_5
Serbia	1757	MGI_Ferro_To_MGI
Serbia	8263	MGI_Ferro_To_WGS_1984
Slovakia	1624	S_JTSK_To_ETRS_1989_2
Slovakia	1625	S_JTSK_To_WGS_1984_2
Slovakia	1884	S_JTSK_Ferro_To_S_JTSK
Slovenia	1785	MGI_To_ETRS_1989_3
Slovenia	1306	MGI_To_WGS_1984
Slovenia	1786	MGI_To_WGS_1984_5
Slovenia	1757	MGI_Ferro_To_MGI
Slovenia	8263	MGI_Ferro_To_WGS_1984
Spain	1133	ED_1950_To_WGS_1984_1

Spain	1145	ED_1950_To_WGS_1984_13
Spain - Balearic Islands	1630	ED_1950_To_ETRS_1989_6
Spain - Balearic Islands	1631	ED_1950_To_WGS_1984_27
Spain - mainland except NW (N of 41.5N, W of 4.5W)	1632	ED_1950_To_ETRS_1989_7
Spain - mainland except NW (N of 41.5N, W of 4.5W)	1633	ED_1950_To_WGS_1984_28
Spain - northwest (N of 41.5N, W of 4.5W)	1635	ED_1950_To_WGS_1984_29
Spain - northwest (N of 41.5N, W of 4.5W)	1634	ED_1950_To_ETRS_1989_8
Sweden	1133	ED_1950_To_WGS_1984_1
Sweden	1760	RT38_Stockholm_To_RT38
Sweden	1787	RT90_To_ETRS_1989_2
Sweden	1437	RT90_To_WGS_1984
Sweden	1896	RT90_To_WGS_1984_2
Sweden	1878	SWEREF99_To_ETRS_1989_1
Sweden	108212	SWEREF99_To_RT90
Sweden	1879	SWEREF99_To_WGS_1984_1
Sweden	108213	WGS_1984_To_RT90
Switzerland	8161	Bern_1898_Bern_To_Bern_1898
Switzerland	1519	Bern_1898_Bern_To_CH1903
Switzerland	1646	CH1903_To_ETRS_1989_1
Switzerland	1508	CH1903_To_WGS_1984_1
Switzerland	1510	CH1903_To_WGS_1984_2
Switzerland	1509	CH1903+_To_CHTRF_1995
Switzerland	1647	CH1903+_To_ETRS_1989_1
Switzerland	1676	CH1903+_To_WGS_1984_1
Switzerland	1511	CHTRF_1995_To_WGS_1984
Switzerland	1133	ED_1950_To_WGS_1984_1
Switzerland	1134	ED_1950_To_WGS_1984_2
Switzerland	1315	OSGB_1936_To_ED_1950_UKOOA
United Kingdom - North Sea	1314	OSGB_1936_To_WGS_1984_Petroleum
United Kingdom - North Sea	1146	ED_1987_To_WGS_1984_1
United Kingdom - North Sea south of 62 N	1311	ED_1950_To_WGS_1984_18
United Kingdom - Offshore east of 6 W	1138	ED_1950_To_WGS_1984_6
United Kingdom	1315	OSGB_1936_To_ED_1950_UKOOA
Wales	1195	OSGB_1936_To_WGS_1984_1
Wales	1197	OSGB_1936_To_WGS_1984_3
Wales	1199	OSGB_1936_To_WGS_1984_5
Wales	1314	OSGB_1936_To_WGS_1984_Petroleum
Yugoslavia - Montenegro	1795	MGI_To_WGS_1984_7

Geographic transformations by area of interest: North America

area of use	code	name
Alabama	1474	NAD_1983_To_HARN_Alabama
Alaska	1243	NAD_1927_To_NAD_1983_Alaska
Alaska	1176	NAD_1927_To_WGS_1984_7
Alaska	1188	NAD_1983_To_WGS_1984_1

Alaska - Aleutians	1251	NAD_1983_To_WGS_1984_2
Alaska - Aleutians east of 180 E	1249	NAD_1927_To_WGS_1984_21
Alaska - Aleutians west of 180 E	1250	NAD_1927_To_WGS_1984_22
Alberta	1602	NAD_1983_To_NAD_1983_CSRS98_3
Arkansas	108140	NAD_1983_To_HARN_Arkansas
Arizona	1475	NAD_1983_To_HARN_Arizona
Alberta	1179	NAD_1927_To_WGS_1984_10
Antigua	1170	NAD_1927_To_WGS_1984_1
Bahamas (except San Salvador Island)	1177	NAD_1927_To_WGS_1984_8
Bahamas (San Salvador Island)	1178	NAD_1927_To_WGS_1984_9
Barbados	1170	NAD_1927_To_WGS_1984_1
Barbuda	1170	NAD_1927_To_WGS_1984_1
Belize	1171	NAD_1927_To_WGS_1984_2
British Columbia	1179	NAD_1927_To_WGS_1984_10
Caiicos Islands	1170	NAD_1927_To_WGS_1984_1
California North - above 37 N	1476	NAD_1983_To_HARN_CA_N
California South - below 37 N	1477	NAD_1983_To_HARN_CA_S
Canada	1313	NAD_1927_To_NAD_1983_NTV2_Canada
Canada	1172	NAD_1927_To_WGS_1984_3
Canada	1188	NAD_1983_To_WGS_1984_1
Canada	1842	NAD_1983_CSRS98_To_WGS_1984_1
Canada	1946	NAD_1983_CSRS98_To_WGS_1984_2
Central America	1188	NAD_1983_To_WGS_1984_1
Colorado	1478	NAD_1983_To_HARN_Colorado
Connecticut	1490	NAD_1983_To_HARN_New_England
Costa Rica	1171	NAD_1927_To_WGS_1984_2
Cuba	1170	NAD_1927_To_WGS_1984_1
Cuba	1185	NAD_1927_To_WGS_1984_16
Cuba	1530	NAD_1927_To_WGS_1984_30
Delaware	1485	NAD_1983_To_HARN_MD_DE
Dominica	1442	Dominica_1945_To_WGS_1984
Dominican Republic	1170	NAD_1927_To_WGS_1984_1
El Salvador	1171	NAD_1927_To_WGS_1984_2
Florida	1480	NAD_1983_To_HARN_Florida
Georgia	1479	NAD_1983_To_HARN_Georgia
Grand Cayman	1170	NAD_1927_To_WGS_1984_1
Greenland (Hayes Peninsula)	1186	NAD_1927_To_WGS_1984_17
Grenada	1443	Grenada_1953_To_WGS_1984
Guatemala	1171	NAD_1927_To_WGS_1984_2
Guam	108143	Guam_1963_To_HARN_Guam
Hawai'i	1520	NAD_1983_To_HARN_Hawaii
Hawai'i	1252	NAD_1983_To_WGS_1984_3
Hawai'i	1454	Old_Hawaiian_To_NAD_1983
Hawai'i	108008	Old_Hawaiian_To_WGS_1984_1
Hawai'i (Island)	108009	Old_Hawaiian_To_WGS_1984_2
Hawai'i - Kauai	108010	Old_Hawaiian_To_WGS_1984_3
Hawai'i - Maui	108011	Old_Hawaiian_To_WGS_1984_4
Hawai'i - Oahu	108012	Old_Hawaiian_To_WGS_1984_5
Honduras	1171	NAD_1927_To_WGS_1984_2
Idaho - East of 113 W	1481	NAD_1983_To_HARN_East_MT_ID
Idaho - West of 113 W	1482	NAD_1983_To_HARN_West_MT_ID

Illinois	1553	NAD_1983_To_HARN_Illinois
Indiana	1521	NAD_1983_To_HARN_Indiana
Iowa	1705	NAD_1983_To_HARN_Iowa
Jamaica	108101	Jamaica_1969_To_WGS_1984_1
Jamaica	1170	NAD_1927_To_WGS_1984_1
Kansas	1522	NAD_1983_To_HARN_Kansas
Kentucky	1483	NAD_1983_To_HARN_Kentucky
Louisiana	1484	NAD_1983_To_HARN_Louisiana
Maine	1486	NAD_1983_To_HARN_Maine
Manitoba	1180	NAD_1927_To_WGS_1984_11
Maritimes	108302	ATS_1977_To_NAD_1983_CSRS98_NTV2_Maritimes
Maryland	1485	NAD_1983_To_HARN_MD_DE
Massachusetts	1490	NAD_1983_To_HARN_New_England
Mexico	1187	NAD_1927_To_WGS_1984_18
Mexico	1188	NAD_1983_To_WGS_1984_1
Michigan	1487	NAD_1983_To_HARN_Michigan
Minnesota	1706	NAD_1983_To_HARN_Minnesota
Mississippi	1488	NAD_1983_To_HARN_Mississippi
Missouri	1707	NAD_1983_To_HARN_Missouri
Montana - East of 113 W	1481	NAD_1983_To_HARN_East_MT_ID
Montana - West of 113 W	1482	NAD_1983_To_HARN_West_MT_ID
Montserrat	1444	Montserrat_1958_To_WGS_1984
Nebraska	1489	NAD_1983_To_HARN_Nebraska
Nevada	1523	NAD_1983_To_HARN_Nevada
New Brunswick	1472	ATS_1977_To_NAD_1983_CSRS98_NTV2_New_Brunswick
New Brunswick	1181	NAD_1927_To_WGS_1984_12
New Brunswick	1473	NAD_1983_CSRS98_To_WGS_1984
New Brunswick - offshore	1950	NAD_1983_To_NAD_1983_CSRS98_4
Newfoundland	1181	NAD_1927_To_WGS_1984_12
Newfoundland - offshore	1950	NAD_1983_To_NAD_1983_CSRS98_4
New Hampshire	1490	NAD_1983_To_HARN_New_England
New Jersey	1507	NAD_1983_To_HARN_New_Jersey
New Mexico	1491	NAD_1983_To_HARN_New_Mexico
New York	1492	NAD_1983_To_HARN_New_York
North Dakota	1493	NAD_1983_To_HARN_North_Dakota
Nicaragua	1171	NAD_1927_To_WGS_1984_2
Northwest Territories	1182	NAD_1927_To_WGS_1984_13
Nova Scotia	1850	ATS_1977_To_NAD_1983_CSRS98_NTV2_Nova_Scotia
Nova Scotia	1181	NAD_1927_To_WGS_1984_12
Nova Scotia - offshore	1950	NAD_1983_To_NAD_1983_CSRS98_4
Ohio	1524	NAD_1983_To_HARN_Ohio
Oklahoma	1494	NAD_1983_To_HARN_Oklahoma
Ontario	1180	NAD_1927_To_WGS_1984_11
Ontario	1463	NAD_1927_DEF_1976_To_NAD_1983_NTV2_Ontario
Oregon	1501	NAD_1983_To_HARN_WA_OR
Panama (Canal Zone)	1184	NAD_1927_To_WGS_1984_15
Prince Edward Island	1599	
ATS_1977_To_NAD_1983_CSRS98_2_NTV2_Prince_Edward_Is		
Puerto Rico	108003	NAD_1927_To_NAD_1983_PR_VI
Puerto Rico	1495	NAD_1983_To_HARN_PR_VI
Puerto Rico	1461	Puerto_Rico_To_NAD_1983

Puerto Rico	1893	Puerto_Rico_To_WGS_1984_3
Quebec	1573	NAD_1927_To_NAD_1983_6
Quebec	1574	NAD_1927_To_NAD_1983_CSRS98_1
Quebec	1181	NAD_1927_To_WGS_1984_12
Quebec	1575	NAD_1927_CGQ77_To_NAD_1983_2
Quebec	1576	NAD_1927_CGQ77_To_NAD_1983_CSRS98
Quebec	1572	NAD_1983_To_NAD_1983_CSRS98_1
Rhode Island	1490	NAD_1983_To_HARN_New_England
Rota Island - Northern Mariana Islands	108137	Guam_1963_To_HARN_Marianas_Rota
St. Christopher-Nevis	1445	St_Kitts_1955_To_WGS_1984
St. George Island	1457	St_George_To_NAD_1983
St. Lawrence Island	1455	St_Lawrence_To_NAD_1983
St. Lucia	1446	St_Lucia_1955_To_WGS_1984
St. Paul Island	1456	St_Paul_To_NAD_1983
Saipan Island - Northern Mariana Islands	108138	Guam_1963_To_HARN_Marianas_Saipan
Saskatchewan	1600	NAD_1927_To_NAD_1983_CSRS98_2
Saskatchewan	1182	NAD_1927_To_WGS_1984_13
Saskatchewan	1601	NAD_1983_To_NAD_1983_CSRS98_2
Saskatchewan	1496	NAD_1983_To_HARN_South_Dakota
South Dakota	1497	NAD_1983_To_HARN_Tennessee
Tennessee	1499	NAD_1983_To_HARN_West_Texas
Texas - West of 100 W	1498	NAD_1983_To_HARN_East_Texas
Texas - East of 100 W	1498	NAD_1983_To_HARN_East_Texas
Tinian and Aguijan Island - Northern Mariana Islands	108139	Guam_1963_To_HARN_Marianas_Tinian_Aguijan
United States	1515	NAD_1983_To_WGS_1984_5
United States	1580	NAD_1983_HARN_To_WGS_1984
United States (contiguous 48 states)	1241	NAD_1927_To_NAD_1983_NADCON
United States (contiguous 48 states)	1173	NAD_1927_To_WGS_1984_4
United States (contiguous 48 states)	1188	NAD_1983_To_WGS_1984_1
United States (contiguous 48 states)	1900	NAD_1983_HARN_To_WGS_1984_2
United States (contiguous 48 states)	1901	NAD_1983_HARN_To_WGS_1984_3
United States (contiguous 48 states)	1174	NAD_1927_To_WGS_1984_5
Mississippi River including MN, MO, and LA)	1175	NAD_1927_To_WGS_1984_6
United States (contiguous states west of Mississippi River)	1308	NAD_1983_To_WGS_1984_4
United States - CORS ITRF96	1525	NAD_1983_To_HARN_Utah
Utah	1490	NAD_1983_To_HARN_New_England
Vermont	108003	NAD_1927_To_NAD_1983_PR_VI
Virgin Islands	1495	NAD_1983_To_HARN_PR_VI
Virgin Islands	1461	Puerto_Rico_To_NAD_1983
Virgin Islands	1893	Puerto_Rico_To_WGS_1984_3
Virginia	1500	NAD_1983_To_HARN_Virginia
Washington	1501	NAD_1983_To_HARN_WA_OR
West Virginia	1526	NAD_1983_To_HARN_West_Virginia
Wisconsin	1502	NAD_1983_To_HARN_Wisconsin
Wyoming	1503	NAD_1983_To_HARN_Wyoming
Yukon	1183	NAD_1927_To_WGS_1984_14

Geographic transformations by area of interest: South America

area of use	code	name
Argentina	1127	Campo_Inchauspe_To_WGS_1984
Argentina	1774	POSGAR_1998_To_SIRGAS_1
Argentina	1773	POSGAR_1998_To_WGS_1984_1
Argentina	1864	SAD_1969_To_WGS_1984_1
Argentina	1865	SAD_1969_To_WGS_1984_2
Argentina - Neuquen Province, Chos Malal Area	1527	Campo_Inchauspe_To_WGS_1984_2
Argentina - Neuquen Province, Chos Malal Area	1528	Chos_Malal_1914_To_Campo_Inchauspe
Argentina - Neuquen Province, Chos Malal Area	8517	Chos_Malal_1914_To_WGS_1984
Argentina - Tierra Del Fuego	1529	Hito_XVIII_1963_To_WGS_1984
Bolivia	1201	PSAD_1956_To_WGS_1984_1
Bolivia	1202	PSAD_1956_To_WGS_1984_2
Bolivia	1864	SAD_1969_To_WGS_1984_1
Bolivia	1866	SAD_1969_To_WGS_1984_3
Bolivia - block 20	1583	PSAD_1956_To_WGS_1984_11
Bolivia - Mladidi	1582	PSAD_1956_To_WGS_1984_10
Brazil	1132	Corrego_Alegre_To_WGS_1984
Brazil	1864	SAD_1969_To_WGS_1984_1
Brazil	1867	SAD_1969_To_WGS_1984_4
Brazil	1548	SAD_1969_To_WGS_1984_14
Brazil - Campos, Espiritu Santo, Santos Basin	1549	Aratu_To_WGS_1984_1
Brazil - offshore Amazon cone	1811	PSAD_1956_To_WGS_1984_12
Brazil - Tucano Basin North	1550	Aratu_To_WGS_1984_2
Brazil - Tucano Basin Central	1551	Aratu_To_WGS_1984_3
Brazil - Tucano Basin South	1552	Aratu_To_WGS_1984_4
Chile	1864	SAD_1969_To_WGS_1984_1
Chile	1868	SAD_1969_To_WGS_1984_5
Chile (Northern, near 19 S)	1203	PSAD_1956_To_WGS_1984_3
Chile (Southern, near 43 S)	1204	PSAD_1956_To_WGS_1984_4
Chile - Tierra del Fuego	1892	Hito_XVIII_1963_To_WGS_1984_2
Colombia	1755	Bogota_Bogota_To_Bogota
Colombia	8174	Bogota_Bogota_To_WGS_1984
Colombia	1125	Bogota_To_WGS_1984
Colombia	1201	PSAD_1956_To_WGS_1984_1
Colombia	1205	PSAD_1956_To_WGS_1984_5
Colombia	1864	SAD_1969_To_WGS_1984_1
Colombia	1869	SAD_1969_To_WGS_1984_6
Colombia - Casanare, BP Cusiana/Cupiagua Field Areas	1597	Bogota_To_WGS_1984_2
Ecuador	1201	PSAD_1956_To_WGS_1984_1
Ecuador	1206	PSAD_1956_To_WGS_1984_6
Ecuador	1864	SAD_1969_To_WGS_1984_1
Ecuador	1870	SAD_1969_To_WGS_1984_7
Ecuador (Baltra, Galapagos)	1871	SAD_1969_To_WGS_1984_8
Falkland Islands (East Falkland Island)	1225	Sapper_Hill_1943_To_WGS_1984

French Guiana	1908	CSG_1967_To_RGFG_1995_1
French Guiana	1906	CSG_1967_To_WGS_1984_1
French Guiana	1907	RGFG_1995_To_WGS_1984_1
Guyana	1201	PSAD_1956_To_WGS_1984_1
Guyana	1207	PSAD_1956_To_WGS_1984_7
Guyana	1864	SAD_1969_To_WGS_1984_1
Guyana	1872	SAD_1969_To_WGS_1984_9
Paraguay	1131	Chua_To_WGS_1984
Paraguay	1864	SAD_1969_To_WGS_1984_1
Paraguay	1873	SAD_1969_To_WGS_1984_10
Peru	1201	PSAD_1956_To_WGS_1984_1
Peru	1208	PSAD_1956_To_WGS_1984_8
Peru	1864	SAD_1969_To_WGS_1984_1
Peru	1874	SAD_1969_To_WGS_1984_11
South America	1598	POSGAR_To_WGS_1984_1
South America	1581	SIRGAS_To_WGS_1984_1
Suriname	1235	Zanderij_To_WGS_1984
Trinidad	1555	Naparima_1955_To_WGS_1984_2
Trinidad	1556	Naparima_1955_To_WGS_1984_3
Trinidad and Tobago	1192	Naparima_1972_To_WGS_1984
Trinidad and Tobago	8212	Naparima_1972_To_WGS_1984_2
Trinidad and Tobago	1307	Naparima_1972_To_WGS_1984_3
Trinidad and Tobago	1864	SAD_1969_To_WGS_1984_1
Trinidad and Tobago	1875	SAD_1969_To_WGS_1984_12
Trinidad and Tobago	1296	Trinidad_1903_To_WGS_1984
Uruguay	1234	Yacare_To_WGS_1984
Venezuela	1771	La_Canoa_To_REGVEN_1
Venezuela	108217	La_Canoa_To_SIRGAS
Venezuela	1096	La_Canoa_To_WGS_1984_2
Venezuela	1769	PSAD_1956_To_REGVEN
Venezuela	1209	PSAD_1956_To_WGS_1984_9
Venezuela	1201	PSAD_1956_To_WGS_1984_1
Venezuela	1095	PSAD_1956_To_WGS_1984_13
Venezuela	1767	REGVEN_To_SIRGAS_1
Venezuela	1768	REGVEN_To_WGS_1984_1
Venezuela	1864	SAD_1969_To_WGS_1984_1
Venezuela	1876	SAD_1969_To_WGS_1984_13
Venezuela - Delta Amacuro, Anzoategui, Bolivar, Monagas, Sucre States	1516	La_Canoa_To_WGS_1984

Geographic transformations by area of interest: Australia and New Zealand

area of use	code	name
Australia	1278	AGD_1966_To_GDA_1994
Australia	1803	AGD_1966_To_GDA_1994_11_NTV2
Australia	1108	AGD_1966_To_WGS_1984

Australia	1279	AGD_1984_To_GDA_1994
Australia	1280	AGD_1984_To_GDA_1994_2
Australia	1804	AGD_1984_To_GDA_1994_5_NTV2
Australia	1109	AGD_1984_To_WGS_1984_1
Australia	1236	AGD_1984_To_WGS_1984_2
Australia	1669	AGD_1984_To_WGS_1984_7
Australia	1150	GDA_1994_To_WGS_1984
Australian Capital Territory	1596	AGD_1966_To_GDA_1994_10_New_South_Wales_&_Victoria
Australian Capital Territory	1458	AGD_1966_To_GDA_1994_2
Chatham Island	108205	Chatham_Island_1971_To_WGS_1984
Chatham Island	108203	Chatham_Islands_1979_To_NZGD_2000_1
Chatham Island	108204	Chatham_Islands_1979_To_WGS_1984_1
New South Wales	1460	AGD_1966_To_GDA_1994_4
New South Wales	1596	AGD_1966_To_GDA_1994_10_New_South_Wales_&_Victoria
New South Wales	1665	AGD_1966_To_WGS_1984_12
Australian Capital Territory	1666	AGD_1966_To_WGS_1984_13
New South Wales	1566	New_Zealand_1949_To_NZGD_2000_1_3PAR
New Zealand	1701	New_Zealand_1949_To_NZGD_2000_2_7PAR
New Zealand	1568	New_Zealand_1949_To_NZGD_2000_3_NTV2
New Zealand	1151	NZGD_1949_To_WGS_1984
New Zealand	1564	NZGD_1949_To_WGS_1984_2
New Zealand	1670	NZGD_1949_To_WGS_1984_3_NTV2
New Zealand	1565	NZGD_2000_To_WGS_1984_1
Northern Territory	1595	AGD_1966_To_GDA_1994_9
Northern Territory	1507	AGD_1966_To_GDA_1994_NTV2_Northern_Territory
Northern Territory	1668	AGD_1966_To_WGS_1984_15
Queensland	108453	AGD_1984_To_GDA_1994_NTV2_Queensland
Tasmania	1459	AGD_1966_To_GDA_1994_3
Tasmania	1594	AGD_1966_To_GDA_1994_8
Tasmania	1506	AGD_1966_To_GDA_1994_NTV2_Tasmania
Tasmania	1667	AGD_1966_To_WGS_1984_14
Victoria	1460	AGD_1966_To_GDA_1994_4
Victoria	1596	AGD_1966_To_GDA_1994_10_NTV2_New_South_Wales_&_Victoria
Victoria	1464	AGD_1966_To_GDA_1994_NTV2_Victoria
Victoria	1666	AGD_1966_To_WGS_1984_13
Western Australia	1559	AGD_1984_To_GDA_1994_3
Western Australia	1596	AGD_1984_To_GDA_1994_4_NTV2_Western_Australia

Geographic transformations by area of interest: Oceans and Antarctica

area of use	code	name
American Samoa	1577	American_Samoa_1962_To_WGS_1984
Antarctica	1890	Australian_Antarctic_1998_To_WGS_1984_1
Antarctica - Terre Adelie	1921	Petrels_1972_To_WGS_1984_1
Antarctica - Terre Adelie	1922	Pointe_Geologie_Perroud_1950_To_WGS_1984_1
Antigua Island	1441	Antigua_1943_To_WGS_1984

Antilles - Guadeloupe and Martinique	1934	RRAF_1991_To_WGS_1984_1
Azores - central, Faial island	1974	Azores_Central_1995_To_WGS_1984_4
Azores - central, Pico island	1976	Azores_Central_1995_To_WGS_1984_6
Azores - central, Pico island	1977	Azores_Central_1995_To_WGS_1984_7
Azores - central, Sao Jorge island	1978	Azores_Central_1995_To_WGS_1984_8
Azores - central, Sao Jorge island	1979	Azores_Central_1995_To_WGS_1984_9
Azores - central, Terceira island	1972	Azores_Central_1995_To_WGS_1984_2
Azores - central, Terceira island	1973	Azores_Central_1995_To_WGS_1984_3
Azores - central, Terceira island	1975	Azores_Central_1995_To_WGS_1984_5
Azores - Faial, Graciosa, Pico, Sao Jorge, and Terceira island	1980	Azores_Central_1995_To_WGS_1984_10
Azores - Faial, Graciosa, Pico, Sao Jorge, and Terceira island	1981	Azores_Central_1995_To_WGS_1984_11
Azores - Flores, Corvo islands	1982	Azores_Occidental_1939_To_WGS_1984_2
Azores - Santa Maria and Sao Miguel islands	1970	Azores_Oriental_1995_To_WGS_1984_4
Azores - Santa Maria and Sao Miguel islands	1971	Azores_Oriental_1995_To_WGS_1984_5
Azores - Sao Miguel island	1968	Azores_Oriental_1995_To_WGS_1984_2
Azores - Sao Miguel island	1969	Azores_Oriental_1995_To_WGS_1984_3
Babelthuap Island - Republic of Palau	108134	Bab_South_To_NAD_1983
Bermuda	8024	Bermuda_1957_To_WGS_1984
Chatham Island	108205	Chatham_Island_1971_To_WGS_1984
Chatham Island	108203	Chatham_Islands_1979_To_NZGD_2000_1
Chatham Island	108204	Chatham_Islands_1979_To_WGS_1984_1
Corvo & Flores Islands (Azores)	108116	Observ_Meteorologico_1939_To_WGS_1984_1
Faial, Graciosa, Pico, Sao Jorge, & Terceira Islands (Azores)	108112	Graciosa_1948_To_WGS_1984_1
Faial, Graciosa, Pico, Sao Jorge, & Terceira Islands (Azores)	108122	Graciosa_1948_To_WGS_1984_2
Flores, Corvo	1887	Azores_Occidental_1939_To_WGS_1984_1
Graciosa, Terceira, Sao Jorge, Pico, Faial	1886	Azores_Central_1948_To_WGS_1984_1
Guadeloupe - Basse-Terre, Grande-Terre, Desiride, Marie-Galante, Les Saintes	1904	Sainte_Anne_To_WGS_1984_1
Guadeloupe - Basse-Terre, Grande-Terre, Desiride, Marie-Galante, Les Saintes	1905	Sainte_Anne_To_WGS_1984_2
Guadeloupe - St. Martin & St. Barthelemy islands	1903	Fort_Marigot_To_WGS_1984_1
Hawaii	1454	Old_Hawaiian_To_NAD_1983
Hawaii	108008	Old_Hawaiian_To_WGS_1984_1
Hawaii (Island)	108009	Old_Hawaiian_To_WGS_1984_2
Hawaii - Kauai	108010	Old_Hawaiian_To_WGS_1984_3
Hawaii - Maui	108011	Old_Hawaiian_To_WGS_1984_4
Hawaii - Oahu	108012	Old_Hawaiian_To_WGS_1984_5
Hawaii - Guam	108143	Guam_1963_To_HARN_Guam
Jan Mayen (Norway)	1957	Helle_1954_To_WGS_1984_1
Kerguelen Island	1915	KO_1949_To_WGS_1984_1
Madeira and Porto Santo islands	1966	Porto_Santo_1995_To_WGS_1984_2
Madeira and Porto Santo islands	1967	Porto_Santo_1995_To_WGS_1984_3
Mahe Island	1164	Mahe_1971_To_WGS_1984
Majuro - Republic of Marshall Islands	108135	Majuro_To_NAD_1983
Maldives	1894	Gandajika_1970_To_WGS_1984_1
Marqueses - Nuku Hiva	1914	IGN72_Nuku_Hiva_To_WGS_1984_1
Martinique	1909	Fort_Desaix_To_WGS_1984_1
Martinique	1910	Fort_Desaix_To_WGS_1984_2
Mayotte	1916	Combani_1950_To_WGS_1984_1

Midway Island	108218	Midway_1961_To_WGS_1984
Midway Island	108219	Midway_1961_To_WGS_1984_Old
New Caledonia	108471	RGNC_1991_To_IGN72_Grande_Terre_NTV2
New Caledonia	108472	RGNC_1991_To_NEA74_Noumea_NTV2
New Caledonia	1920	RGNC_1991_To_WGS_1984_1
New Caledonia - Belep	1931	ST71_Belep_To_WGS_1984_1
New Caledonia - Grande Terre	1962	IGN72_Grande_Terre_To_WGS_1984_1
New Caledonia - Grande Terre	1963	IGN72_Grande_Terre_To_WGS_1984_2
New Caledonia - Ile des Pins	1930	ST84_Ile_des_Pins_To_WGS_1984_1
New Caledonia - Lifou	1917	IGN56_Lifou_To_WGS_1984_1
New Caledonia - Lifou	1927	IGN56_Lifou_To_WGS_1984_2
New Caledonia - Mare	1928	IGN53_Mare_To_WGS_1984_1
New Caledonia - Noumea district on Grande Terre	1932	NEA74_Noumea_To_WGS_1984_1
New Caledonia - Ouvéa	1919	ST87_Ouvea_To_WGS_1984_1
Ofu, Olosega, & Ta'u Islands	1579	American_Samoa_1962_To_HARN_American_Samoa_East
Pohnpei - Fed. States of Micronesia	108133	Pohnpei_To_NAD_1983
Porto Santo & Madeira Islands	108115	Porto_Santo_1936_To_WGS_1984_1
Porto Santo & Madeira Islands	108125	Porto_Santo_1936_To_WGS_1984_2
Reunion	1926	Piton_des_Neiges_To_RGR_1992_1
Reunion	1911	Piton_des_Neiges_To_WGS_1984_1
Reunion	1964	RGR_1992_To_Piton_des_Neiges_1
Reunion	1912	RGR_1992_To_WGS_1984_1
Rota Island - Northern Mariana Islands	108137	Guam_1963_To_HARN_Marianas_Rota
Saint Pierre et Miquelon	1923	Saint_Pierre_et_Miquelon_1950_To_WGS_1984_1
Saipan Island - Northern Mariana Islands	108138	Guam_1963_To_HARN_Marianas_Saipan
Sao Miguel and Santa Maria Islands (Azores)	1885	Azores_Oriental_1940_To_WGS_1984_1
Sao Miguel and Santa Maria Islands (Azores)	108117	Sao_Braz_To_WGS_1984_1
Sao Miguel and Santa Maria Islands (Azores)	108127	Sao_Braz_To_WGS_1984_2
Selvagens islands	1965	Selvagem_Grande_1938_To_WGS_1984_1
Society Islands - Bora Bora, Huahin, Raiatea, Tahaa	1913	Tahaa_To_WGS_1984_1
Society Islands - Moorea and Tahiti	1924	Tahiti_To_WGS_1984_1
St. Vincent and the Grenadines	1959	St_Vincent_1945_To_WGS_1984_1
Tinian and Aguijan Island - Northern Mariana Islands	108139	Guam_1963_To_HARN_Marianas_Tinian_Aguijan
Turks Islands	8070	NAD_1927_To_WGS_1984_1
Tutuila & Aunu'u Islands	1578	American_Samoa_1962_To_HARN_American_Samoa_West
Wallis and Futuna - Wallis	1925	MOP78_To_WGS_1984_1

Geographic transformations by area of interest: World

area of use code name

World	1943	ITRF_1988_To_ITRF_2000_1
World	1942	ITRF_1989_To_ITRF_2000_1
World	1941	ITRF_1990_To_ITRF_2000_1
World	1940	ITRF_1991_To_ITRF_2000_1
World	1939	ITRF_1992_To_ITRF_2000_1
World	1938	ITRF_1993_To_ITRF_2000_1

World
World
World
World
World

1937 ITRF_1994_To_ITRF_2000_1
1936 ITRF_1996_To_ITRF_2000_1
1935 ITRF_1997_To_ITRF_2000_1
1237 WGS_1972_To_WGS_1984_1
1238 WGS_1972_To_WGS_1984_2
