

# Coordinate systems and Reference systems supported by GeoDLL

## Language / Sprache:

This list of coordinate and reference systems supported by GeoDLL is in English language. An actual list in **English** you find on KilletSoft's website [https://www.killetsoft.de/p\\_gdll\\_e.htm](https://www.killetsoft.de/p_gdll_e.htm).

Diese Liste der von GeoDLL unterstützten Koordinaten- und Bezugssysteme ist in Englischer Sprache. Eine aktuelle Liste in **Deutsch** finden Sie auf der KilletSoft-Internetseite [https://www.killetsoft.de/p\\_gdll\\_d.htm](https://www.killetsoft.de/p_gdll_d.htm).

## Coordinate systems and Reference systems (datum shifts)

The list contains the coordinate systems and geodetic reference systems sorted on countries of the following continents and groups:

- European continent
- North American continent
- Central America and Caribbean
- South American continent
- Asian continent
- Near East and Middle East
- African continent
- Australian continent
- Polynesia, Indonesia, Micronesia
- Worldwide systems
- User definitions

[Begin of List]

--- European continent -----

Albania (AL)

Coordinate Systems

- 889 Albania TM 2010 Transverse Mercator coordinates
- 890 Albania LCC 2010 Lambert Conic Conformal coordinates
- 3 UTM coordinates (northern hemisphere)
- 4 Gauss-Krueger (6 degrees wide strips)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

Reference Systems

- 327 S42/58 (AL), Pulkovo, Krassowsky
- 612 Pulkovo1942(58) (EU-E  $\pm 1$ m), Pulkovo, Krassowsky
- 328 ALB86/2008 (AL), Pulkovo, Krassowsky
- 330 ALB86/1998 (AL 7Param.), Pulkovo, Krassowsky
- 332 ALB86/1998 (AL 3Param.), Pulkovo, Krassowsky
- 329 ETRF2000/2008 (AL), geocentric, GRS80
- 331 ETRF2000/1998 (AL), geocentric, GRS80
- 4 ETRS89 (EU), geocentric, GRS80
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

Austria (AT)

Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 619 Austria Bundesmeldenetz M28 (X > 5 Mio.)  
 620 Austria Bundesmeldenetz M31 (X > 5 Mio.)  
 621 Austria Bundesmeldenetz M34 (X > 5 Mio.)  
 14 Austria Bundesmeldenetz M28 (X < 5 Mio.)  
 15 Austria Bundesmeldenetz M31 (X < 5 Mio.)  
 16 Austria Bundesmeldenetz M34 (X < 5 Mio.)  
 622 Austria Gauss-Krueger M28 (West, X < 5 Mio.)  
 623 Austria Gauss-Krueger M31 (Central, X < 5 Mio.)  
 624 Austria Gauss-Krueger M34 (East, X < 5 Mio.)  
 29 Austria Gauss-Krueger M28 (West, X > 5 Mio.)  
 30 Austria Gauss-Krueger M31 (Central, X > 5 Mio.)  
 31 Austria Gauss-Krueger M34 (East, X > 5 Mio.)  
 13 Austria Lambert (new system, 47.5°)  
 12 Austria Lambert (old system, 48.0°)  
 612 Geographic coordinates (Ferro) [deg]  
 611 Geographic coordinates (Ferro) [deg,min,sec]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 769 MGI (AT NTv2 AT-GIS-GRID-2021 <±0.15m), Rauenberg, Bessel  
 770 ETRS89 (AT NTv2 AT-GIS-GRID-2021 <±0.15m), geocentric, GRS80  
 272 MGI (AT NTv2 AT-GIS-GRID-2014 <±0.35m), Rauenberg, Bessel  
 273 ETRS89 (AT NTv2 AT-GIS-GRID-2014 <±0.35m), geocentric, GRS80  
 4 ETRS89 (EU), geocentric, GRS80  
 5 MGI (AT/CZ), Hermannskogel, Bessel  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Belgium (BE)

### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 502 Belgian Lambert2008 coordinates  
 501 Belgian Lambert2005 coordinates  
 8 Belgian Lambert72 (2000) coordinates  
 974 Belgian Lambert72 (1972) coordinates  
 54 Belgian Lambert50 coordinates  
 529 Belgian Bonne coordinates  
 994 Geographic coordinates (Brussels) [deg]  
 34 Geographic coordinates (Greenwich) [gon]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

734 BD72 (BE 2014 NTv2 bd72lb72...08), Uckel, Hayford/Int.  
 735 ETRS89 (BE 2014 NTv2 bd72lb72...08), geocentric, GRS80  
 4 ETRS89 (EU), geocentric, GRS80  
 143 BD72 (BE 2000 <±0.2m), Uckel, Hayford/Int.

12 BD72 (BE 1972  $\pm 1$ m), Ukkel, Hayford/Int.  
 34 BD50 (BE), Royal de Belgique, Hayford/Int.  
 197 Bonne (BE), Royal de Belgique, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 6 NTF (FR), Paris Pantheon, Clarke IGN  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Bosnia / Herzegovina (BA)

##### Coordinate Systems

534 Balkans MGI Zones 5-8 Gauss-Krueger coordinates  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

704 MGI 1901 (BA), Hermannskogel, Bessel  
 210 MGI (SI/HR/BA), Hermannskogel, Bessel  
 4 ETRS89 (EU), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Bulgaria (BG)

##### Coordinate Systems

958 Bulgarian CCS2005 Lambert coordinates  
 499 Bulgarian BGS2000 Lambert coordinates  
 4 Gauss-Krueger (6 degrees wide strips)  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

700 BGS2005 (BG), geocentric, GRS80  
 124 BGS2000 (BG), geocentric, GRS80  
 125 S42/83 (BG), Pulkovo, Krassowsky  
 612 Pulkovo1942(58) (EU-E  $\pm 1$ m), Pulkovo, Krassowsky  
 4 ETRS89 (EU), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Croatia (HR)

##### Coordinate Systems

576 Croatian HTRS96 Transverse Mercator coord.  
 575 Croatian HDKS / HR1901 Gauss-Krueger coordinates  
 3 UTM coordinates (northern hemisphere)  
 534 Balkans MGI Zones 5-8 Gauss-Krueger coordinates  
 6 Geographic coordinates (Greenwich) [deg]

32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

Reference Systems

249 HTRS96 (HR <±1m), geocentric, GRS80  
 248 HDKS / HR1901G (HR <±1m), Hermannskogel, Bessel  
 4 ETRS89 (EU), geocentric, GRS80  
 210 MGI (SI/HR/BA), Hermannskogel, Bessel  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Cyprus (CY)

Coordinate Systems

887 Cyprus Local Transverse Mercator coordinates  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

Reference Systems

625 CGRS93 (CY), geocentric, WGS84  
 4 ETRS89 (EU), geocentric, GRS80  
 63 ED50 (CY), Potsdam, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Czechia (CZ)

Coordinate Systems

35 Krovak S-JTSK (Greenwich South/West positiv) coordinates  
 95 Krovak S-JTSK (Greenwich East/Nord negativ) coordinates  
 885 Krovak S-JTSK (Ferro South/West positiv) coordinates  
 886 Krovak S-JTSK (Ferro East/Nord negativ) coordinates  
 2 Gauss-Krueger coord. (3 degrees wide strips)  
 15 Austria Bundesmeldenetz M31 (X < 5 Mio.)  
 16 Austria Bundesmeldenetz M34 (X < 5 Mio.)  
 3 UTM coordinates (northern hemisphere)  
 612 Geographic coordinates (Ferro) [deg]  
 611 Geographic coordinates (Ferro) [deg,min,sec]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

Reference Systems

4 ETRS89 (EU), geocentric, GRS80  
 25 S-JTSK (CZ), Hermannskogel, Bessel  
 3 S42/83 (EU-E/AS[FSU] 1990 <±3m), Pulkovo, Krassowsky  
 612 Pulkovo1942(58) (EU-E <±1m), Pulkovo, Krassowsky  
 5 MGI (AT/CZ), Hermannskogel, Bessel  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 2 ED50 (EU), Potsdam, Hayford/Int.

107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Denmark (DK)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 604 Danish Transv. Merc. Kp2000 Jylland / Fyn (9.5°)  
 605 Danish Transverse Merc. Kp2000 Sjaelland (12°)  
 606 Danish Transverse Merc. Kp2000 Bornholm (15°)  
 607 Danish Transv. Merc. DKTM1 Western Jylland (9°)  
 608 Danish Transv. Merc. DKTM2 Eastern Jylland (10°)  
 609 Danish Transv. Merc. DKTM3 Sjaelland (11.75°)  
 610 Danish Transv. Merc. DKTM4 Bornholm (15°)  
 897 Geographic coordinates (Kopenhagen) [deg]  
 896 Geographic coordinates (Kopenhagen) [deg,min,sec]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

4 ETRS89 (EU), geocentric, GRS80  
 31 ED50 (DK), Potsdam, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Estonia (EE)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 103 Estonian Lambert Coordinates L-ESTxx  
 105 Baltic Transverse Mercator coord. TM Baltic93  
 758 Baltic CS63 zone C0 Transverse Mercator  
 759 Baltic CS63 zone C1 Transverse Mercator  
 760 Baltic CS63 zone C2 Transverse Mercator  
 4 Gauss-Krueger (6 degrees wide strips)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

4 ETRS89 (EU), geocentric, GRS80  
 57 EST97 (EE), geocentric, GRS80  
 587 EST92 (EE), geocentric, GRS80  
 58 S42 (EE), Pulkovo, Krassowsky  
 3 S42/83 (EU-E/AS[FSU] 1990 <±3m), Pulkovo, Krassowsky  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Faroe Islands (FO)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 990 Faroe TM coordinates  
 991 Faroe Lambert coordinates  
 992 Faroe Lambert FK89 coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 4 ETRS89 (EU), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 787 FD54 (FO), Faroe Islands, Hayford/Int.  
 788 FK89 (FO, ident. with FD54), Faroe Islands, Hayford/Int.  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Finland (FI)

##### Coordinate Systems

91 Finish Transv. Mercator Coord. TM35FIN  
 89 Finish Gauss-Krueger ETRS (1 degrees strips)  
 88 Finish Gauss-Krueger KKJ (3 degrees strips)  
 90 Finish Transv. Mercator Coord. KKJ Uniform  
 92 Finish Transv. Mercator Coord. VVJ Uniform  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

4 ETRS89 (EU), geocentric, GRS80  
 144 KKJ (FI 2002  $<\pm 1\text{m}$ ), Helsinki, Hayford/Int.  
 48 KKJ (FI 1992  $<\pm 5\text{m}$ ), Helsinki, Hayford/Int.  
 49 ED50 (FI), Potsdam, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### France (FR)

##### Coordinate Systems

763 French Lambert CC42 (zone 1) coordinates  
 764 French Lambert CC43 (zone 2) coordinates  
 765 French Lambert CC44 (zone 3) coordinates  
 766 French Lambert CC45 (zone 4) coordinates  
 767 French Lambert CC46 (zone 5) coordinates  
 768 French Lambert CC47 (zone 6) coordinates  
 769 French Lambert CC48 (zone 7) coordinates  
 770 French Lambert CC49 (zone 8) coordinates  
 771 French Lambert CC50 (zone 9) coordinates  
 10 French Lambert93 coordinates  
 953 French Lambert Zone I coordinates  
 954 French Lambert Zone II coordinates  
 955 French Lambert Zone III Coordinates  
 956 French Lambert Zone IV Coordinates

21 French Lambert North coordinates  
 22 French Lambert Centre coordinates  
 23 French Lambert South coordinates  
 24 French Lambert Corse coordinates  
 9 French Lambert Centre Etendu coordinates  
 743 French Lambert (1SP) Nord de Guerre coordinates  
 444 French Lambert (2SP) Nord de Guerre coordinates  
 996 TM 6 NETransverse Mercator coordinates  
 156 Geographic coordinates (Paris) [gon]  
 154 Geographic coordinates (Paris) [deg,min,sec]  
 155 Geographic coordinates (Paris) [deg]  
 34 Geographic coordinates (Greenwich) [gon]  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 270 NTF (FR NTv2 NTF\_R93  $<\pm 0.2\text{m}$ ), Paris, Clarke IGN  
 271 RGF93 (FR NTv2 NTF\_R93  $<\pm 0.2\text{m}$ ), geocentric, GRS80  
 164 NTF (FR NTv2 FRANCE  $<\pm 0.5\text{m}$ ), Paris, Clarke RGS  
 165 RGF93 (FR NTv2 FRANCE  $<\pm 0.5\text{m}$ ), geocentric, GRS80  
 24 RGF93 (FR), geocentric, GRS80  
 4 ETRS89 (EU), geocentric, GRS80  
 6 NTF (FR), Paris Pantheon, Clarke IGN  
 551 ATF (FR no\_defs), Paris, Plessis 1817  
 23 ED50 (FR), Potsdam, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Germany (DE) - General

### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 2 Gauss-Krueger coord. (3 degrees wide strips)  
 4 Gauss-Krueger (6 degrees wide strips)  
 566 German Lambert LAMGe coordinates  
 18 German Lambert mean coordinates  
 19 German Lambert zone west coordinates  
 20 German Lambert zone east coordinates  
 27 German Lambert Esri-ArcData coordinates  
 28 German Lambert LCC12 coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

4 ETRS89 (EU), geocentric, GRS80  
 1 DHDN/PD (DE 1995  $<\pm 5\text{m}$ ), Rauenberg, Bessel  
 17 DHDN/PD (DE 2001  $<\pm 3\text{m}$ ), Rauenberg, Bessel  
 18 DHDN/PD (DE Old States South  $<\pm 1\text{m}$ ), Rauenberg, Bessel  
 19 DHDN/PD (DE Old States Middle  $<\pm 1\text{m}$ ), Rauenberg, Bessel

20 DHDN/PD (DE Old States North  $<\pm 1\text{m}$ ), Rauenberg, Bessel  
 126 DHDN90 (DE 2007  $<\pm 3.0\text{m}$ ), Rauenberg, Bessel  
 162 DHDN90 (DE NTV2 BeTA2007  $<\pm 0.5\text{m}$ ), Rauenberg, Bessel  
 163 ETRS89 (DE NTV2 BeTA2007  $<\pm 0.5\text{m}$ ), geocentric, GRS80  
 9 RD83 (DE New States  $<\pm 1\text{m}$ ), Rauenberg, Bessel  
 21 PD83 (DE New States [TH]  $<\pm 1\text{m}$ ), Rauenberg, Bessel  
 671 S40/83 (DE New States 1990  $<\pm 3\text{m}$ ), Rauenberg, Bessel  
 112 S40/83 (DE New States 2004  $<\pm 0.5\text{m}$ ), Rauenberg, Bessel  
 118 S42/83 (DE New States 1990  $<\pm 3\text{m}$ ), Puklowo, Krassowsky  
 22 S42/83 (DE New States 2001  $<\pm 1\text{m}$ ), Pulkovo, Krassowsky  
 612 Pulkovo1942(58) (EU-E  $<\pm 1\text{m}$ ), Pulkovo, Krassowsky  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 768 DB\_REF(1) (DE Deutsche Bahn  $<\pm 1\text{m}$ ), Rauenberg, Bessel  
 247 DB\_REF(2) (DE Deutsche Bahn  $<\pm 1\text{m}$ ), Rauenberg, Bessel  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

## Germany (DE) - Federal States

### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 2 Gauss-Krueger coord. (3 degrees wide strips)  
 4 Gauss-Krueger (6 degrees wide strips)  
 492 German Soldner coord. Berlin (Mueggelberg new)  
 493 German Soldner coord. Berlin (Mueggelberg old)  
 495 German Soldner coordinates Berlin (Goetzer Berg)  
 50 German Soldner Bavaria (Munich, Y --> West)  
 618 German Soldner Bavaria (Munich, Y --> East)  
 894 German Soldner Baden (Mannheim[1], Y --> W, X --> S)  
 895 German Soldner Baden (Mannheim[2], Y --> W, X --> S)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

117 DHDN/Netz88 (DE-BE  $<\pm 0.2\text{m}$ ), Rauenberg, Bessel  
 127 DHDN90 (DE-BE 2007  $<\pm 0.2\text{m}$ ), Rauenberg, Bessel  
 628 DHDN90 (DE-BE NTV2 NTV2berlin  $<\pm 2\text{cm}$ ), Rauenberg, Bessel  
 629 ETRS89 (DE-BE NTV2 NTV2berlin  $<\pm 2\text{cm}$ ), geocentric, GRS80  
 110 S40/83 (DE-BB  $<\pm 0.2\text{m}$ ), Rauenberg, Bessel  
 111 S42/83 (DE-BB  $<\pm 0.2\text{m}$ ), Puklowo, Krassowsky  
 128 DHDN90 (DE-BB 2007  $<\pm 0.4\text{m}$ ), Rauenberg, Bessel  
 436 S42/83 (DE-BB NTV2 NTV2-BB  $<\pm 4\text{cm}$ ), Pulkovo, Krassowsky  
 437 ETRS89 (DE-BB NTV2 NTV2-BB  $<\pm 4\text{cm}$ ), geocentric, GRS80  
 666 DHDN90 (DE-BW NTV2 BWTA2017  $<\pm 5\text{cm}$ ), Rauenberg, Bessel  
 667 ETRS89 (DE-BW NTV2 BWTA2017  $<\pm 5\text{cm}$ ), geocentric, GRS80  
 114 DHDN/PD (DE-BW  $<\pm 0.5\text{m}$ ), Rauenberg, Bessel  
 129 DHDN90 (DE-BW 2007  $<\pm 0.4\text{m}$ ), Rauenberg, Bessel  
 438 DHDN90 (DE-BY 2014 NTV2 NTV2-Ba  $<\pm 5\text{cm}$ ), Rauenberg, Bessel  
 439 ETRS89 (DE-BY 2014 NTV2 NTV2-Ba  $<\pm 5\text{cm}$ ), geocentric, GRS80  
 650 DHDN90 (DE-BY 2019 NTV2 BY\_KanU\_Bwhl  $<\pm 2\text{cm}$ ), Rauenb., Bessel  
 651 ETRS89 (DE-BY 2019 NTV2 BY\_KanU\_Bwhl  $<\pm 2\text{cm}$ ), geoc., GRS80  
 652 DHDN90 (DE-BY 2019 NTV2 BY\_KanU\_MFr  $<\pm 2\text{cm}$ ), Rauenb., Bessel



653 ETRS89 (DE-BY 2019 NTv2 BY\_KanU\_MFr  $<\pm 2\text{cm}$ ), geoc., GRS80  
654 DHDN90 (DE-BY 2019 NTv2 BY\_KanU\_NBy  $<\pm 2\text{cm}$ ), Rauenb., Bessel  
655 ETRS89 (DE-BY 2019 NTv2 BY\_KanU\_NBy  $<\pm 2\text{cm}$ ), geoc., GRS80  
656 DHDN90 (DE-BY 2019 NTv2 BY\_KanU\_OBy  $<\pm 2\text{cm}$ ), Rauenb., Bessel  
657 ETRS89 (DE-BY 2019 NTv2 BY\_KanU\_OBy  $<\pm 2\text{cm}$ ), geoc., GRS80  
658 DHDN90 (DE-BY 2019 NTv2 BY\_KanU\_OFr  $<\pm 2\text{cm}$ ), Rauenb., Bessel  
659 ETRS89 (DE-BY 2019 NTv2 BY\_KanU\_OFr  $<\pm 2\text{cm}$ ), geoc., GRS80  
660 DHDN90 (DE-BY 2019 NTv2 BY\_KanU\_OPf  $<\pm 2\text{cm}$ ), Rauenb., Bessel  
661 ETRS89 (DE-BY 2019 NTv2 BY\_KanU\_OPf  $<\pm 2\text{cm}$ ), geoc., GRS80  
662 DHDN90 (DE-BY 2019 NTv2 BY\_KanU\_Schw  $<\pm 2\text{cm}$ ), Rauenb., Bessel  
663 ETRS89 (DE-BY 2019 NTv2 BY\_KanU\_Schw  $<\pm 2\text{cm}$ ), geoc., GRS80  
664 DHDN90 (DE-BY 2019 NTv2 BY\_KanU\_UFr  $<\pm 2\text{cm}$ ), Rauenb., Bessel  
665 ETRS89 (DE-BY 2019 NTv2 BY\_KanU\_UFr  $<\pm 2\text{cm}$ ), geoc., GRS80  
120 DHDN90 (DE-BY 2000  $<\pm 1.0\text{m}$ ), Rauenberg, Bessel  
130 DHDN90 (DE-BY 2007  $<\pm 0.7\text{m}$ ), Rauenberg, Bessel  
333 DHDN90 (DE-BY 2011  $<\pm 0.3\text{m}$ ), Rauenberg, Bessel  
33 SOLDNER (DE-BY  $<\pm 1\text{m}$ ), Munich, Laplace  
131 DHDN90 (DE-HB 2007  $<\pm 0.1\text{m}$ ), Rauenberg, Bessel  
442 DHDN90 (DE-HB NTv2 HBTa2010  $<\pm 5\text{cm}$ ), Rauenberg, Bessel  
443 ETRS89 (DE-HB NTv2 HBTa2010  $<\pm 5\text{cm}$ ), geocentric, GRS80  
115 DHDN/PD (DE-HE to 6/03  $<\pm 0.1\text{m}$ ), Rauenberg, Bessel  
116 DHDN/PD (DE-HE 7/03-12/07  $<\pm 0.1\text{m}$ ), Rauenberg, Bessel  
266 DHDN/PD (DE-HE from 12/07  $<\pm 0.1\text{m}$ ), Rauenberg, Bessel  
132 DHDN90 (DE-HE 2007  $<\pm 0.4\text{m}$ ), Rauenberg, Bessel  
286 DHDN90 (DE-HE NTv2 HeTA2010  $<\pm 4\text{cm}$ ), Rauenberg, Bessel  
287 ETRS89 (DE-HE NTv2 HeTA2010  $<\pm 4\text{cm}$ ), geocentric, GRS80  
440 DHDN90 (DE-HH NTv2 Beta\_FHH\_NW  $<\pm 5\text{cm}$ ), Rauenberg, Bessel  
441 ETRS89 (DE-HH NTv2 Beta\_FHH\_NW  $<\pm 5\text{cm}$ ), geocentric, GRS80  
792 DHDN90 (DE-HH NTv2 NTv2-HH  $<\pm 5\text{cm}$ ), Rauenberg, Bessel  
793 ETRS89 (DE-HH NTv2 NTv2-HH  $<\pm 5\text{cm}$ ), geocentric, GRS80  
794 DHDN90 (DE-HH NTv2 NTv2-Neuwerk  $<\pm 5\text{cm}$ ), Rauenberg, Bessel  
795 ETRS89 (DE-HH NTv2 NTv2-Neuwerk  $<\pm 5\text{cm}$ ), geocentric, GRS80  
133 DHDN90 (DE-HH 2007  $<\pm 0.2\text{m}$ ), Rauenberg, Bessel  
134 DHDN90 (DE-MV 2007  $<\pm 0.9\text{m}$ ), Rauenberg, Bessel  
633 RD83 (DE-MV NTv2 MVTR2010  $<\pm 2\text{cm}$ ), Rauenberg, Bessel  
634 ETRS89 (DE-MV NTv2 MVTR2010  $<\pm 2\text{cm}$ ), geocentric, GRS80  
635 S42/83 (DE-MV NTv2 MVTRS4283  $<\pm 2\text{cm}$ ), Pulkovo, Krassowsky  
636 ETRS89 (DE-MV NTv2 MVTRS4283  $<\pm 2\text{cm}$ ), geocentric, GRS80  
119 DHDN/PD (DE-NI  $<\pm 0.5\text{m}$ ), Rauenberg, Bessel  
135 DHDN90 (DE-NI 2007  $<\pm 0.7\text{m}$ ), Rauenberg, Bessel  
109 DHDN/Netz77 (DE-NW  $<\pm 1\text{m}$ ), Rauenberg, Bessel  
136 DHDN90 (DE-NW 2007  $<\pm 0.6\text{m}$ ), Rauenberg, Bessel  
343 DHDN90 (DE-NW 2009  $<\pm 1\text{m}$ ), Rauenberg, Bessel  
778 DHDN (DE-NW NTv2 NW\_GC1501), Rauenberg, Bessel  
779 ETRS89 (DE-NW NTv2 NW\_GC1501), geocentric, GRS80  
137 DHDN90 (DE-RP 2007  $<\pm 0.2\text{m}$ ), Rauenberg, Bessel  
138 DHDN90 (DE-SH 2007  $<\pm 0.4\text{m}$ ), Rauenberg, Bessel  
780 DHDN (DE-SH NTv2 SH2016A), Rauenberg, Bessel  
781 ETRS89 (DE-SH NTv2 SH2016A), geocentric, GRS80  
139 DHDN90 (DE-SL 2007  $<\pm 0.1\text{m}$ ), Rauenberg, Bessel  
346 DHDN/Netz97 (DE-SL 2007  $<\pm 1\text{m}$ ), Rauenberg, Bessel  
777 DHDN/Netz97 (DE-SL 2016  $<\pm 1\text{m}$ ), Rauenberg, Bessel  
344 DHDN90 (DE-SL NTv2 SeTa2009  $<\pm 2\text{cm}$ ), Rauenberg, Bessel  
345 ETRS89 (DE-SL NTv2 SeTa2009  $<\pm 2\text{cm}$ ), geocentric, GRS80

775 DHDN90 (DE-SL NTv2 SeTa2016  $\leq \pm 2\text{cm}$ ), Rauenberg, Bessel  
 776 ETRS89 (DE-SL NTv2 SeTa2016  $\leq \pm 2\text{cm}$ ), geocentric, GRS80  
 140 DHDN90 (DE-SN 2007  $\leq \pm 0.9\text{m}$ ), Rauenberg, Bessel  
 609 RD83 (DE-SN West  $\leq \pm 0.1\text{m}$ ), Rauenberg, Bessel  
 610 RD83 (DE-SN East  $\leq \pm 0.1\text{m}$ ), Rauenberg, Bessel  
 288 RD83 (DE-SN NTv2 SaeTA2010  $\leq \pm 5\text{cm}$ ), Rauenberg, Bessel  
 289 ETRS89 (DE-SN NTv2 SaeTA2010  $\leq \pm 5\text{cm}$ ), geocentric, GRS80  
 577 RD83 (DE-SN NTv2 NTv2\_SN  $\leq \pm 3\text{cm}$ ), Rauenberg, Bessel  
 578 ETRS89 (DE-SN NTv2 NTv2\_SN  $\leq \pm 3\text{cm}$ ), geocentric, GRS80  
 141 DHDN90 (DE-ST 2007  $\leq \pm 0.5\text{m}$ ), Rauenberg, Bessel  
 444 S42/83 (DE-ST NTv2 NTv2LSBB\_LSA  $\leq \pm 5\text{cm}$ ), Pulkovo, Krassowsky  
 445 ETRS89 (DE-ST NTv2 NTv2LSBB\_LSA  $\leq \pm 5\text{cm}$ ), geocentric, GRS80  
 113 PD83 (DE-TH  $\leq \pm 0.2\text{m}$ ), Rauenberg, Bessel  
 142 DHDN90 (DE-TH 2007  $\leq \pm 0.3\text{m}$ ), Rauenberg, Bessel  
 290 PD83 (DE-TH NTv2 NTv2GridTh  $\leq \pm 3\text{cm}$ ), Rauenberg, Bessel  
 291 ETRS89 (DE-TH NTv2 NTv2GridTh  $\leq \pm 3\text{cm}$ ), geocentric, GRS80  
 162 DHDN90 (DE NTv2 BeTA2007  $\leq \pm 0.5\text{m}$ ), Rauenberg, Bessel  
 163 ETRS89 (DE NTv2 BeTA2007  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 1 DHDN/PD (DE 1995  $\leq \pm 5\text{m}$ ), Rauenberg, Bessel  
 17 DHDN/PD (DE 2001  $\leq \pm 3\text{m}$ ), Rauenberg, Bessel  
 22 S42/83 (DE New States 2001  $\leq \pm 1\text{m}$ ), Pulkovo, Krassowsky  
 4 ETRS89 (EU), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Germany (DE) - Lagestatus

##### Coordinate Systems

494 Lagestatus 100, Gauss-Krueger 3 deg. str., DHDN  
 583 Lagestatus 100, Country HE, GK 3 deg. str., DHDN  
 468 Lagestatus 101, Gauss-Krueger 3 deg. str., DHDN  
 478 Lagestatus 110, Gauss-Krueger 3 deg. str., RD83  
 479 Lagestatus 111, Gauss-Krueger Strip 4 , RD83  
 480 Lagestatus 112, Gauss-Krueger Strip 5, RD83  
 481 Lagestatus 120, Gauss-Krueger 3 deg. str., PD83  
 482 Lagestatus 121, Geogr. Coord. [deg], PD83  
 483 Lagestatus 121, Geogr. Coord. [deg,min,sec], PD83  
 484 Lagestatus 130, Gauss-Krueger 3 deg. str., S40/83  
 485 Lagestatus 140, Gauss-Krueger 6 deg. str., S42/83  
 486 Lagestatus 150, Gauss-Krueger 3 deg. str., S42/83  
 487 Lagestatus 151, Geogr. Coord. [deg], S42/83  
 488 Lagestatus 151, Geogr. Coord. [deg,min,sec], S42/83  
 466 Lagestatus 177, Gauss-Krueger 3 deg. str., DHDN/Netz77  
 637 Lagestatus 310 (HH), UTM Coordinates, ETRS89  
 638 Lagestatus 320 (HH), Gauss-Krueger 3 deg. str., ETRS89  
 472 Lagestatus 450, UTM Coordinates, ED50  
 470 Lagestatus 489, UTM Coordinates, ETRS89  
 489 Lagestatus 500, Soldner Berlin Muegg. (new), DHDN/Netz88  
 490 Lagestatus 600, Soldner Berlin Muegg. (old), DHDN/Netz88  
 491 Lagestatus 650, Soldner Berlin Goetzer Berg, DHDN/Netz88  
 469 Lagestatus 801, Geogr. Coord. [deg], DHDN  
 475 Lagestatus 801, Geogr. Coord. [deg,min,sec], DHDN  
 473 Lagestatus 850, Geogr. Coord. [deg], ED50  
 477 Lagestatus 850, Geogr. Coord. [deg,min,sec], ED50

467 Lagestatus 877, Geogr. Koord. [deg], DHDN/Netz77  
 474 Lagestatus 877, Geogr. [deg,min,sec], DHDN/Netz77  
 471 Lagestatus 889, Geogr. Coord. [deg], ETRS89  
 476 Lagestatus 889, Geogr. Coord. [deg,min,sec], ETRS89  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 4 ETRS89 (EU), geocentric, GRS80  
 1 DHDN/PD (DE 1995 <±5m), Rauenberg, Bessel  
 17 DHDN/PD (DE 2001 <±3m), Rauenberg, Bessel  
 109 DHDN/Netz77 (DE-NW <±1m), Rauenberg, Bessel  
 117 DHDN/Netz88 (DE-BE <±0.2m), Rauenberg, Bessel  
 266 DHDN/PD (DE-HE from 12/07 <±0.1m), Rauenberg, Bessel  
 9 RD83 (DE New States <±1m), Rauenberg, Bessel  
 21 PD83 (DE New States [TH] <±1m), Rauenberg, Bessel  
 118 S42/83 (DE New States 1990 <±3m), Puklowo, Krassowsky  
 22 S42/83 (DE New States 2001 <±1m), Pulkovo, Krassowsky  
 112 S40/83 (DE New States 2004 <±0.5m), Rauenberg, Bessel  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Germany (DE) - Prussian Land Register

##### Coordinate Systems

113 Prussian Land Register Kucklinsberg (1,RU)  
 114 Prussian Land Register Paulinen (2,PL)  
 115 Prussian Land Register Markushof (3,PL)  
 116 Prussian Land Register Turmberg (4,PL)  
 117 Prussian Land Register Kauernik (5,PL)  
 118 Prussian Land Register Thorn (6,PL)  
 119 Prussian Land Register Heinrichsthal (7,PL)  
 120 Prussian Land Register Gollenberg (8,PL)  
 121 Prussian Land Register Gnesen (9,PL)  
 122 Prussian Land Register Josephsberg (10,PL)  
 123 Prussian Land Register Schroda (11,PL)  
 124 Prussian Land Register Pschow (12,PL)  
 125 Prussian Land Register Rummelsberg (13,PL)  
 126 Prussian Land Register Groeditzberg (14,PL)  
 127 Prussian Land Register Kaltenborn (15,DE)  
 128 Prussian Land Register Bahn (16,PL)  
 41 Prussian Land Register Greifswald (17,DE)  
 42 Prussian Land Register Greifswald (17+,DE)  
 40 Prussian Land Register Mueggelberg Berlin (18,DE)  
 39 Prussian Land Register Mueggelberg Berlin (18+,DE)  
 129 Prussian Land Register Goetzer Berg (19,DE)  
 130 Prussian Land Register Torgau (20,DE)  
 131 Prussian Land Register Burkersroda (21,DE)  
 132 Prussian Land Register Inselsberg (22,DE)  
 133 Prussian Land Register Magdeburg (23,DE)  
 134 Prussian Land Register Ostenfeld (24,DE)  
 135 Prussian Land Register Rathkruegen (25,DE)

136 Prussian Land Register Bungsberg (26,DE)  
 137 Prussian Land Register Celle (27,DE)  
 138 Prussian Land Register Kaltenborn (28,DE)  
 139 Prussian Land Register Silberberg (29,DE)  
 140 Prussian Land Register Windberg (30,DE)  
 141 Prussian Land Register Hermannsdenkmal (31,DE)  
 142 Prussian Land Register Muenster (32,DE)  
 43 Prussian Land Register Bochum (33,DE)  
 976 Prussian Land Register Bochum (33+,DE)  
 143 Prussian Land Register Homert (34,DE)  
 144 Prussian Land Register Kassel (35,DE)  
 145 Prussian Land Register Schaumburg (36,DE)  
 146 Prussian Land Register Fleckert (37,DE)  
 147 Prussian Land Register Koeln (38,DE)  
 148 Prussian Land Register Langschoss (39,DE)  
 149 Prussian Land Register Rissenthal (40,DE)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 1 DHDN/PD (DE 1995 <±5m), Rauenberg, Bessel  
 17 DHDN/PD (DE 2001 <±3m), Rauenberg, Bessel  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### GPS Measurements - ITRS epochs

##### Coordinate Systems

6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 3 UTM coordinates (northern hemisphere)  
 500 Cartesian coordinates

##### Reference Systems

220 ETRS89 (EU ITRS epoch 1989), GRS80  
 221 ITRS24 (EU GPS measurements in license year 2024), WGS84  
 225 ITRS89 (EU GPS measurements epoch 1989), WGS84  
 226 ITRS90 (EU GPS measurements epoch 1990), WGS84  
 227 ITRS91 (EU GPS measurements epoch 1991), WGS84  
 228 ITRS92 (EU GPS measurements epoch 1992), WGS84  
 229 ITRS93 (EU GPS measurements epoch 1993), WGS84  
 230 ITRS94 (EU GPS measurements epoch 1994), WGS84  
 231 ITRS95 (EU GPS measurements epoch 1995), WGS84  
 232 ITRS96 (EU GPS measurements epoch 1996), WGS84  
 233 ITRS97 (EU GPS measurements epoch 1997), WGS84  
 234 ITRS98 (EU GPS measurements epoch 1998), WGS84  
 235 ITRS99 (EU GPS measurements epoch 1999), WGS84  
 236 ITRS00 (EU GPS measurements epoch 2000), WGS84  
 237 ITRS01 (EU GPS measurements epoch 2001), WGS84  
 238 ITRS02 (EU GPS measurements epoch 2002), WGS84  
 239 ITRS03 (EU GPS measurements epoch 2003), WGS84  
 240 ITRS04 (EU GPS measurements epoch 2004), WGS84  
 241 ITRS05 (EU GPS measurements epoch 2005), WGS84

242 ITRS06 (EU GPS measurements epoch 2006), WGS84  
 243 ITRS07 (EU GPS measurements epoch 2007), WGS84  
 244 ITRS08 (EU GPS measurements epoch 2008), WGS84  
 245 ITRS09 (EU GPS measurements epoch 2009), WGS84  
 246 ITRS10 (EU GPS measurements epoch 2010), WGS84  
 268 ITRS11 (EU GPS measurements epoch 2011), WGS84  
 269 ITRS12 (EU GPS measurements epoch 2012), WGS84  
 301 ITRS13 (EU GPS measurements epoch 2013), WGS84  
 354 ITRS14 (EU GPS measurements epoch 2014), WGS84  
 604 ITRS15 (EU GPS measurements epoch 2015), WGS84  
 605 ITRS16 (EU GPS measurements epoch 2016), WGS84  
 631 ITRS17 (EU GPS measurements epoch 2017), WGS84  
 648 ITRS18 (EU GPS measurements epoch 2018), WGS84  
 696 ITRS19 (EU GPS measurements epoch 2019), WGS84  
 697 ITRS20 (EU GPS measurements epoch 2020), WGS84  
 730 ITRS21 (EU GPS measurements epoch 2021), WGS84  
 731 ITRS22 (EU GPS measurements epoch 2022), WGS84  
 740 ITRS23 (EU GPS measurements epoch 2023), WGS84  
 796 ITRS24 (EU GPS measurements epoch 2024), WGS84  
 797 ITRS25 (EU GPS measurements epoch 2025), WGS84  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

## Great Britain (GB)

### Coordinate Systems

5 British Transverse Mercator coordinates  
 658 BNG British National Grid (Centimeter grid mesh)  
 53 BNG British National Grid (Meter grid mesh)  
 657 BNG British National Grid (100 meter grid mesh)  
 660 ING Irish National Grid (Centimeter grid mesh)  
 56 ING Irish National Grid (Meter grid mesh)  
 659 ING Irish National Grid (100 meter grid mesh)  
 506 Jersey (GB) Transverse Mercator coordinates  
 507 Guernsey (GB) Grid coordinates  
 995 TM 0 N Transverse Mercator coordinates  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

681 OSGB36 (GB-UK NTV2 OSTN15\_OSGBtoETRS <±0.1m), Herstmonceux, Airy  
 682 ETRS89 (GB-UK NTV2 OSTN15\_OSGBtoETRS <±0.1m), geoc., GRS80  
 684 OSGB36 (GB-UK NTV2 OSTN15\_ETRSStoOSGB <±0.1m), Herstmonceux, Airy  
 683 ETRS89 (GB-UK NTV2 OSTN15\_ETRSStoOSGB <±0.1m), geoc., GRS80  
 304 OSGB36 (GB-UK NTV2 OSTN02\_N <±0.1m), Herstmonceux, Airy  
 305 ETRS89 (GB-UK NTV2 OSTN02\_N <±0.1m), geocentric, GRS80  
 172 OSGB36 (GB-Engl+Wales NTV2 ENGLAND <±0.5m), Herstmonceux, Airy  
 173 ETRS89 (GB-Engl+Wales NTV2 ENGLAND <±0.5m), geoc., GRS80  
 174 OSGB36 (GB-Scotl. NTV2 SCOTLAND <±0.5m), Herstmonceux, Airy  
 175 ETRS89 (GB-Scotland NTV2 SCOTLAND <±0.5m), geocentric, GRS80  
 4 ETRS89 (EU), geocentric, GRS80  
 13 OSGB36 (GB/IE), Herstmonceux, Airy

586 ED50 (North Sea  $\leq \pm 2\text{m}$ ), Potsdam, Hayford/Int.  
 802 OSGB70 SN (GB/IE), Herstmonceux, Airy  
 624 IRENET95 (IE), geocentric, GRS80  
 35 TM65/OSNI52 (IE  $\leq \pm 1\text{m}$ ), Slieve Donard, Airy modified  
 623 TM75 (IE  $\leq \pm 1\text{m}$ ), Slieve Donard, Airy modified  
 756 TM75 (IE NTv2 TM75\_ETRS89  $\leq \pm 0.3\text{m}$ ), Slieve Donard, Airy mod.  
 757 ETRS89 (IE NTv2 TM75\_ETRS89  $\leq \pm 0.3\text{m}$ ), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 758 ED50 (GB/IE  $\leq \pm 3\text{m}$ ), Potsdam, Hayford/Int.  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Greece (GR)

### Coordinate Systems

99 Greek Transverse Mercator coordinates HGRS87/EGSA87  
 100 Greek UTM Coordinates (reduced Zone No.)  
 108 Greek Transverse Mercator coord. TM3 west zone  
 109 Greek Transverse Mercator coord. TM3 middle zone  
 110 Greek Transverse Mercator coord. TM3 east zone  
 111 Geographic coordinates (Athens) [deg,min,sec]  
 112 Geographic coordinates (Athens) [deg]  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

54 HGRS87/EGSA87 (GR), Dionysos, GRS80  
 55 ED50 (GR), Potsdam, Hayford/Int.  
 65 HELLENIC (GR  $\leq \pm 3\text{m}$ ), Athens, Bessel  
 4 ETRS89 (EU), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Greenland (GL)

### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 980 Greenland Lambert zone 5 east coordinates  
 981 Greenland Lambert zone 6 east coordinates  
 982 Greenland Lambert zone 7 east coordinates  
 989 Greenland Lambert zone 8 east coordinates  
 983 Greenland Lambert zone 2 west coordinates  
 984 Greenland Lambert zone 3 west coordinates  
 985 Greenland Lambert zone 4 west coordinates  
 986 Greenland Lambert zone 5 west coordinates  
 987 Greenland Lambert zone 6 west coordinates  
 988 Greenland Lambert zone 7 west coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]

500 Cartesian coordinates  
 Reference Systems  
 783 GR96 (GL <±1m), geocentric, GRS80  
 784 Ammassalik 1958 (GL <±1m), Ammassalik, Hayford/Int.  
 785 Scoresbysund 1952 (GL <±1m), Scoresbysund, Hayford/Int.  
 786 Qornoq 1927 (GL <±1m), Qornoq, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Hungary (HU)

Coordinate Systems  
 61 Hungarian EOVS coordinates  
 4 Gauss-Krueger (6 degrees wide strips)  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 43 HD72 (HU 1995), Szölöhegy, GRS67  
 687 HD72 (HU 2002), Szölöhegy, GRS67  
 685 HD72 (HU 2014 NTV2 Etrs2Eov\_kor), Szölöhegy, GRS67  
 686 ETRS89 (HU 2014 NTV2 Etrs2Eov\_kor), geocentric, GRS80  
 3 S42/83 (EU-E/AS[FSU] 1990 <±3m), Pulkovo, Krassowsky  
 4 ETRS89 (EU), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Iceland (IS)

Coordinate Systems  
 969 Iceland Lambert 2016 coordinates  
 901 Iceland Lambert 2004 coordinates  
 898 Iceland Lambert 1993 coordinates  
 899 Iceland Lambert 1955 coordinates  
 900 Iceland Lambert 1900 coordinates  
 3 UTM coordinates (northern hemisphere)  
 998 LAEA-Iceland Lambert Azimuthal Equal Area  
 151 LAEA-Europe Pan-European Lambert Azim. Equal Area  
 150 LCC-Europe Pan-European Lambert Conformal Conic  
 897 Geographic coordinates (Copenhagen) [deg]  
 896 Geographic coordinates (Copenhagen) [deg,min,sec]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 675 ISN2004 (IS), geocentric, GRS80  
 750 ISN2004 (IS NTV2 ISN2004\_ISN2016), geocentric, GRS80  
 751 ISN2016 (IS NTV2 ISN2004\_ISN2016), geocentric, GRS80  
 672 ISN93 (IS), geocentric, GRS80

748 ISN93 (IS NTv2 ISN93\_ISN2016), geocentric, GRS80  
 749 ISN2016 (IS NTv2 ISN93\_ISN2016), geocentric, GRS80  
 754 ISN2016 (IS =WGS84=), geocentric, WGS84  
 753 ISN2004 (IS =WGS84=), geocentric, WGS84  
 752 ISN93 (IS =WGS84=), geocentric, WGS84  
 673 Hjorsey 1955 (IS), Hjorsey, Hayford/International  
 674 Reykjavik 1900 (IS), Reykjavik, Danish Andrae  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### INSPIRE© (Europe)

##### Coordinate Systems

535 TMzn-Europe Pan-European Transverse Mercator (UTM)  
 150 LCC-Europe Pan-European Lambert Conformal Conic  
 151 LAEA-Europe Pan-European Lambert Azim. Equal Area  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

4 ETRS89 (EU), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Ireland / Northern Ireland (IE)

##### Coordinate Systems

527 Irish ITM Transverse Mercator coordinates  
 55 IG Irish Grid Transverse Mercator coordinates  
 660 ING Irish National Grid (Centimeter grid mesh)  
 56 ING Irish National Grid (Meter grid mesh)  
 659 ING Irish National Grid (100 meter grid mesh)  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

624 IRENET95 (IE), geocentric, GRS80  
 4 ETRS89 (EU), geocentric, GRS80  
 35 TM65/OSNI52 (IE  $\leq \pm 1\text{m}$ ), Slieve Donard, Airy modified  
 623 TM75 (IE  $\leq \pm 1\text{m}$ ), Slieve Donard, Airy modified  
 756 TM75 (IE NTv2 TM75\_ETRS89  $\leq \pm 0.3\text{m}$ ), Slieve Donard, Airy mod.  
 757 ETRS89 (IE NTv2 TM75\_ETRS89  $\leq \pm 0.3\text{m}$ ), geocentric, GRS80  
 13 OSGB36 (GB/IE), Herstmonceux, Airy  
 802 OSGB70 SN (GB/IE), Herstmonceux, Airy  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 758 ED50 (GB/IE  $\leq \pm 3\text{m}$ ), Potsdam, Hayford/Int.  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file



## Italy (IT)

### Coordinate Systems

- 965 Italian Transv. Mercator RDN zone EN/NE
- 966 Italian Transv. Mercator RDN zone 12 EN/NE
- 967 Italian Transverse Mercator Emilia-Romagna
- 25 Italian Gauss-Boaga west zone
- 26 Italian Gauss-Boaga east zone
- 3 UTM coordinates (northern hemisphere)
- 152 Geographic coordinates (Roma) [deg,min,sec]
- 153 Geographic coordinates (Roma) [deg]
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 713 RDN2008 (IT), geocentric, GRS80
- 608 IGM95 (IT), geocentric, WGS84
- 4 ETRS89 (EU), geocentric, GRS80
- 588 ED50 (IT NTv2 NadED50), Potsdam, Hayford/Int.
- 589 WGS84 (IT NTv2 NadED50), geocentric, WGS84
- 590 ROMA40 (IT NTv2 NadRoma40), Monte Mario, Hayford/Int.
- 591 WGS84 (IT NTv2 NadRoma40), geocentric, WGS84
- 592 ROMA40 (IT NTv2 NadRoma40ED50), Monte Mario, Hayford/Int.
- 593 ED50 (IT NTv2 NadRoma40ED50), Potsdam, Hayford/Int.
- 15 ROMA40 (IT), Monte Mario, Hayford/Int.
- 28 ROMA40 (IT-peninsular  $<\pm 4\text{m}$ ), Monte Mario, Hayford/Int.
- 29 ROMA40 (IT-Sardinia  $<\pm 4\text{m}$ ), Monte Mario, Hayford/Int.
- 30 ROMA40 (IT-Sicily  $<\pm 4\text{m}$ ), Monte Mario, Hayford/Int.
- 2 ED50 (EU), Potsdam, Hayford/Int.
- 50 ED50 (IT Sardinia), Potsdam, Hayford/Int.
- 51 ED50 (IT Sicily), Potsdam, Hayford/Int.
- 554 Genova1902 (IT contry wide 7par.  $\pm 2.5\text{m}$ ), Genova, Bessel
- 555 Genova1902 (IT contry wide 3par.  $\pm 10\text{m}$ ), Genova, Bessel
- 556 Genova1902 (IT north 3Par.), Genova, Bessel
- 557 Old Monte Mario (IT central), Monte Mario, Bessel
- 558 Castanea1910 (IT south), Castanea, Bessel
- 559 Guardia Vecchia (IT Sardinia), Maddalena, Bessel
- 594 ROMA40 (IT Em-Rom NTv2 RerAd400MMED50), MM, Hayford/Int.
- 595 ED50 (IT Em-Rom NTv2 RerAd400MMED50), Potsdam, Hayford/Int.
- 596 ROMA40 (IT Em-Rom NTv2 RerAd400MMETRS89), MM, Hayford/Int.
- 597 ETRS89 (IT Em-Rom NTv2 RerAd400MMETRS89), geoc., GRS80
- 598 ROMA40 (IT Em-Rom NTv2 RerMmED50K2), MM, Hayford/Int.
- 599 ED50 (IT Em-Rom NTv2 RerMmED50K2), Potsdam, Hayford/Int.
- 600 ROMA40 (IT Em-Rom NTv2 RerMmETRS89K2), MM, Hayford/Int.
- 601 ETRS89 (IT Em-Rom NTv2 RerMmETRS89K2), geoc., GRS80
- 602 ED50 (IT Em-Rom NTv2 RerED50ETRS89K2), Potsd., Hayford/Int.
- 603 ETRS89 (IT Em-Rom NTv2 RerED50ETRS89K2), geoc., GRS80
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## Kosovo (XK)

### Coordinate Systems

625 KOSOVAREF01 Gauss-Krueger coordinates  
 534 Balkans MGI Zones 5-8 Gauss-Krueger coordinates  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 723 KOSOVAREF01 (XK <±1m), geocentric, GRS80  
 724 MGI (XK <±1m), Hermannskogel, Bessel  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Latvia (LV)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 107 Latvian Transverse Mercator coord. LKS92  
 105 Baltic Transverse Mercator coord. TM Baltic93  
 758 Baltic CS63 zone C0 Transverse Mercator  
 759 Baltic CS63 zone C1 Transverse Mercator  
 760 Baltic CS63 zone C2 Transverse Mercator  
 4 Gauss-Krueger (6 degrees wide strips)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

61 Latvia LKS92 (LV), geocentric, GRS80  
 4 ETRS89 (EU), geocentric, GRS80  
 62 S42 (LV), Pulkovo, Krassowsky  
 3 S42/83 (EU-E/AS[FSU] 1990 <±3m), Pulkovo, Krassowsky  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Liechtenstein (LI)

##### Coordinate Systems

36 Swiss grid coordinates 1995 (LV95)  
 7 Swiss grid coordinates New Grid (1903M, LV03)  
 888 Swiss grid coordinates Old Grid (1903C, LV03C-G, Greenw.)  
 104 Swiss grid coordinates Old Grid (1903C, LV03C, Bern)  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

4 ETRS89 (EU), geocentric, GRS80  
 26 CH1903 (CH/LI), Bern, Bessel  
 8 CH1903+ (CH/LI 1993), Zimmerwald, Bessel  
 27 CHTRS95 (CH/LI), geocentric, GRS80  
 347 CH1903 (CH/LI NTV2 chenx06etrs <±0.5m), Bern, Bessel

348 ETRS89 (CH/LI NTv2 chenyx06etrs  $<\pm 0.5\text{m}$ ), geocentric, GRS80  
 214 CH1903 (CH/LI NTv2 chenyx06a  $<\pm 0.5\text{m}$ ), Bern, Bessel  
 215 CH1903+ (CH/LI NTv2 chenyx06a  $<\pm 0.5\text{m}$ ), Zimmerwald, Bessel  
 626 CH1903 (CH/LI NTv2 chenyx06etrs  $<\pm 2\text{m}$ ), Bern, Bessel  
 627 CHTRF95 (CH/LI NTv2 chenyx06etrs  $<\pm 2\text{m}$ ), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Lithuania (LT)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 106 Lithuanian Transverse Mercator coord. LKS94  
 105 Baltic Transverse Mercator coord. TM Baltic93  
 758 Baltic CS63 zone C0 Transverse Mercator  
 759 Baltic CS63 zone C1 Transverse Mercator  
 760 Baltic CS63 zone C2 Transverse Mercator  
 4 Gauss-Krueger (6 degrees wide strips)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

4 ETRS89 (EU), geocentric, GRS80  
 59 Lithuania LKS94 (LT), geocentric, GRS80  
 60 S42 (LT), Pulkovo, Krassowsky  
 3 S42/83 (EU-E/AS[FSU] 1990  $<\pm 3\text{m}$ ), Pulkovo, Krassowsky  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Luxembourg (LU)

##### Coordinate Systems

17 Luxemburgian Transverse Mercator  
 3 UTM coordinates (northern hemisphere)  
 34 Geographic coordinates (Greenwich) [gon]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

4 ETRS89 (EU), geocentric, GRS80  
 14 LUREF (LU), Habay, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 6 NTF (FR), Paris Pantheon, Clarke IGN  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Malta (MT)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)

6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 64 ED50 (MT), Potsdam, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Montenegro (ME)

Coordinate Systems  
 534 Balkans MGI Zones 5-8 Gauss-Krueger coordinates  
 625 KOSOVAREF01 Gauss-Krueger coordinates  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 211 MGI (RS/ME/MK), Hermannskogel, Bessel  
 4 ETRS89 (EU), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Netherlands (NL)

Coordinate Systems  
 3 UTM coordinates (northern hemisphere)  
 11 Netherlands RD New Stereographic coordinates  
 756 Netherlands RD Old Stereographic coordinates  
 757 TM 5 NE Transverse Mercator Coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 4 ETRS89 (EU), geocentric, GRS80  
 755 Amersfoort (NL 2020  $<\pm 0.25\text{m}$ ), Amersfoort, Bessel  
 706 Amersfoort (NL NTV2 RDTRANS2018  $<\pm 5\text{mm}$ ), Amersfoort, Bessel  
 707 ETRS89 (NL NTV2 RDTRANS2018  $<\pm 5\text{mm}$ ), geocentric, GRS80  
 705 Amersfoort (NL 2018  $<\pm 0.1\text{m}$ ), Amersfoort, Bessel  
 560 Amersfoort (NL NTV2 RDTRANS2008  $<\pm 5\text{mm}$ ), Amersfoort, Bessel  
 561 ETRS89 (NL NTV2 RDTRANS2008  $<\pm 5\text{mm}$ ), geocentric, GRS80  
 207 Amersfoort (NL 2008  $<\pm 0.1\text{m}$ ), Amersfoort, Bessel  
 145 Amersfoort (NL 2004  $<\pm 0.3\text{m}$ ), Amersfoort, Bessel  
 7 Amersfoort (NL 2000  $<\pm 0.5\text{m}$ ), Amersfoort, Bessel  
 586 ED50 (North Sea  $<\pm 2\text{m}$ ), Potsdam, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

## North Macedonia (MK)

### Coordinate Systems

- 999 Macdonien Gauss-Krueger coordinates
- 1001 Macdonien truncated Gauss-Krueger coordinates
- 534 Balkans MGI Zones 5-8 Gauss-Krueger coordinates
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 803 MGI 1901 (MK  $\pm 0.7$ m), Hermannskogel, Bessel
- 211 MGI (RS/ME/MK), Hermannskogel, Bessel
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## Norway (NO)

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 68 Norwegian Transv. Mercator NGO1948 Zone I
- 69 Norwegian Transv. Mercator NGO1948 Zone II
- 70 Norwegian Transv. Mercator NGO1948 Zone III
- 71 Norwegian Transv. Mercator NGO1948 Zone IV
- 72 Norwegian Transv. Mercator NGO1948 Zone V
- 73 Norwegian Transv. Mercator NGO1948 Zone VI
- 74 Norwegian Transv. Mercator NGO1948 Zone VII
- 75 Norwegian Transv. Mercator NGO1948 Zone VIII
- 671 Norwegian Transv. Mercator NTM Zone 5
- 672 Norwegian Transv. Mercator NTM Zone 6
- 673 Norwegian Transv. Mercator NTM Zone 7
- 674 Norwegian Transv. Mercator NTM Zone 8
- 675 Norwegian Transv. Mercator NTM Zone 9
- 676 Norwegian Transv. Mercator NTM Zone 10
- 677 Norwegian Transv. Mercator NTM Zone 11
- 678 Norwegian Transv. Mercator NTM Zone 12
- 679 Norwegian Transv. Mercator NTM Zone 13
- 680 Norwegian Transv. Mercator NTM Zone 14
- 681 Norwegian Transv. Mercator NTM Zone 15
- 682 Norwegian Transv. Mercator NTM Zone 16
- 683 Norwegian Transv. Mercator NTM Zone 17
- 684 Norwegian Transv. Mercator NTM Zone 18
- 685 Norwegian Transv. Mercator NTM Zone 19
- 686 Norwegian Transv. Mercator NTM Zone 20
- 687 Norwegian Transv. Mercator NTM Zone 21
- 688 Norwegian Transv. Mercator NTM Zone 22
- 689 Norwegian Transv. Mercator NTM Zone 23
- 690 Norwegian Transv. Mercator NTM Zone 24
- 691 Norwegian Transv. Mercator NTM Zone 25
- 692 Norwegian Transv. Mercator NTM Zone 26
- 693 Norwegian Transv. Mercator NTM Zone 27
- 694 Norwegian Transv. Mercator NTM Zone 28
- 695 Norwegian Transv. Mercator NTM Zone 29

696 Norwegian Transv. Mercator NTM Zone 30  
 970 Norway EPSG Arctic 3-11 Lambert Conformal Conic  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

Reference Systems

46 NGO1948 (NO), Oslo, Bessel modified  
 4 ETRS89 (EU), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 159 ED50 (NO >62° 1991), Potsdam, Hayford/Int.  
 160 ED50 (NO >62° 2001), Potsdam, Hayford/Int.  
 161 ED50 (NO <62° 2001), Potsdam, Hayford/Int.  
 47 ED50 (NO FI 1990), Potsdam, Hayford/Int.  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Poland (PL)

Coordinate Systems

38 Polish Gauss-Krueger 2000/15-24 (3 degrees strips)  
 37 Polish Gauss-Krueger coordinates 1992/19  
 44 Polish Stereographic 1965 zone 1  
 45 Polish Stereographic 1965 zone 2  
 46 Polish Stereographic 1965 zone 3  
 47 Polish Stereographic 1965 zone 4  
 48 Polish Transverse Mercator 1965 zone 5  
 49 Polish Stereographic GUGiK coordinates  
 96 Polish Gauss-Krueger 1942/15-24 (3 degrees strips)  
 97 Polish Gauss-Krueger 1942/15-21 (6 degrees strips)  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

Reference Systems

4 ETRS89 (EU), geocentric, GRS80  
 32 S42/58 (PL Uklad 1965), Pulkovo, Krassowsky  
 612 Pulkovo1942(58) (EU-E <±1m), Pulkovo, Krassowsky  
 53 S42/83 (PL), Pulkovo, Krassowsky  
 3 S42/83 (EU-E/AS[FSU] 1990 <±3m), Pulkovo, Krassowsky  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Portugal (PT)

Coordinate Systems

754 Portugese Transverse Mercator TM06  
 58 Portugese Transversal Mercator DLX/SHGA coord.  
 496 Portugese Transversal Mercator DLX/SHGM coord.  
 59 Portugese Transversal Mercator D73/SHG73 coord.

528 Portugese Bonne B-DLX coordinates  
 150 LCC-Europe Pan-European Lambert Conformal Conic  
 151 LAEA-Europe Pan-European Lambert Azim. Equal Area  
 3 UTM coordinates (northern hemisphere)  
 753 Geographic coordinates (Lisbon) [deg]  
 752 Geographic coordinates (Lisbon) [deg,min,sec]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 736 D73 (PT 2011 NTv2 D73\_ETRS89\_geo), Melrica, Hayford/Int.  
 737 ETRS89 (PT 2011 NTv2 D73\_ETRS89\_geo), geocentric, GRS80  
 738 DLX (PT 2011 NTv2 DLX\_ETRS89\_geo), Lisbon, Hayford/Int.  
 739 ETRS89 (PT 2011 NTv2 DLX\_ETRS89\_geo), geocentric, GRS80  
 216 D73 (PT 2008 NTv2 PT73\_E89 <±0.5m), Melrica, Hayford/Int.  
 217 ETRS89 (PT 2008 NTv2 PT73\_E89 <±0.5m), geocentric, GRS80  
 218 DLX (PT 2008 NTv2 PTLX\_E89 <±0.5m), Lisbon, Hayford/Int.  
 219 ETRS89 (PT 2008 NTv2 PTLX\_E89 <±0.5m), geocentric, GRS80  
 282 B-DLX (PT 2008 NTv2 PTBL\_E89 <±0.5m), Lissabon, Bessel  
 283 ETRS89 (PT 2008 NTv2 PTBL\_E89 <±0.5m), geocentric, GRS80  
 284 ED50 (PT 2008 NTv2 PTED\_E89 <±0.5m), Potsdam, Hayford/Int.  
 285 ETRS89 (PT 2008 NTv2 PTED\_E89 <±0.5m), geocentric, GRS80  
 4 ETRS89 (EU), geocentric, GRS80  
 41 D73 (PT), Melrica, Hayford/Int.  
 40 DLX (PT), Lisbon, Hayford/Int.  
 196 B-DLX (PT), Lisbon, Bessel  
 725 PTRAO8 (PT islands <±1m), geocentric, GRS80  
 42 ED50 (PT), Potsdam, Hayford/Int.  
 198 Porto Santo 1995 (PT Madeira), Base SE, Hayford/Int.  
 575 Porto Santo 1936 (PT Madeira), Base SE, Hayford/Int.  
 576 Selvagem Grande (PT Madeira), Marco Astro, Hayford/Int.  
 199 Azores Oriental 1995 (PT Azores), Sao Braz, Hayford/Int.  
 200 Azores Central 1995 (PT Azores), Gracioso, Hayford/Int.  
 573 Azores Oriental 1940 (PT Azores), Sao Braz, Hayford/Int.  
 574 Azores Central 1948 (PT Azores), Gracioso, Hayford/Int.  
 572 Azores Occidental 1939 (PT Azores), Flores, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Romania (RO)

### Coordinate Systems

497 Romanian Stereo70 Stereographic coordinates  
 498 Romanian Stereo33 Stereographic coordinates  
 4 Gauss-Krueger (6 degrees wide strips)  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

121 Stereo70 (RO <±3m), Dealul Piscului, Krassowsky

765 Stereo70 (RO NTv2 Stereo70\_ETRS89), Dea. Pisc., Krassowsky  
 766 ETRS89 (RO NTv2 Stereo70\_ETRS89), geocentric, GRS80  
 122 Stereo33 (RO  $\leq \pm 3\text{m}$ ), Dealul Piscului, Hayford/Int.  
 123 S42/83 (RO  $\leq \pm 3\text{m}$ ), Pulkovo, Krassowsky  
 3 S42/83 (EU-E/AS[FSU] 1990  $\leq \pm 3\text{m}$ ), Pulkovo, Krassowsky  
 767 Pulkovo1942(58) (RO  $\leq \pm 0.5\text{m}$ ), Pulkovo, Krassowsky  
 612 Pulkovo1942(58) (EU-E  $\leq \pm 1\text{m}$ ), Pulkovo, Krassowsky  
 4 ETRS89 (EU), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Russian Federation (RU)

### Coordinate Systems

971 Russian Gauss-Krueger coordinates GSK 3GK  
 4 Gauss-Krueger (6 degrees wide strips)  
 2 Gauss-Krueger coord. (3 degrees wide strips)  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

695 GSK-2011 (RU), geocentric, GSK-2011  
 611 Pulkovo1995 (EU-E/AS[FSU] 2008  $\leq \pm 1\text{m}$ ), Pulkovo, Krassowsky  
 435 Pulkovo1942 (EU-E/AS[FSU] 2008  $\leq \pm 3\text{m}$ ), Pulkovo, Krassowsky  
 434 S42/2001 (EU-E/AS[FSU]  $\leq \pm 4\text{m}$ ), Pulkovo, Krassowsky  
 103 S42/1993 (EU-E/AS[FSU]  $\leq \pm 4.5\text{m}$ ), Pulkovo, Krassowsky  
 3 S42/83 (EU-E/AS[FSU] 1990  $\leq \pm 3\text{m}$ ), Pulkovo, Krassowsky  
 104 S42/3Par. (EU-E/AS[FSU]), Pulkovo, Krassowsky  
 694 PZ-90 Gost 2010 (RU), geocentric, PZ-90  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 106 PZ-90 Roßbach 1996 (Worldwide GLONASS), geoc., PZ-90  
 105 PZ-90 Misra 1996 (Worldwide GLONASS), geoc., PZ-90  
 108 PZ-90 Boykov 1993 (Worldwide GLONASS), geoc., PZ-90  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Serbia (RS)

### Coordinate Systems

534 Balkans MGI Zones 5-8 Gauss-Krueger coordinates  
 625 KOSOVAREF01 Gauss-Krueger coordinates  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

701 MGI 1901 (RS  $\pm 0.5\text{m}$ ), Hermannskogel, Bessel  
 211 MGI (RS/ME/MK), Hermannskogel, Bessel  
 702 SREF98 (RS), geocentric, GRS80  
 703 SRB\_ETRS89 (RS), geocentric, GRS80



- 4 ETRS89 (EU), geocentric, GRS80
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

#### Slovakia (SK)

##### Coordinate Systems

- 35 Krovak S-JTSK (Greenwich South/West positiv) coordinates
- 95 Krovak S-JTSK (Greenwich East/Nord negativ) coordinates
- 885 Krovak S-JTSK (Ferro South/West positiv) coordinates
- 886 Krovak S-JTSK (Ferro East/Nord negativ) coordinates
- 4 Gauss-Krueger (6 degrees wide strips)
- 15 Austria Bundesmeldenetz M31 (X < 5 Mio.)
- 16 Austria Bundesmeldenetz M34 (X < 5 Mio.)
- 3 UTM coordinates (northern hemisphere)
- 612 Geographic coordinates (Ferro) [deg]
- 611 Geographic coordinates (Ferro) [deg,min,sec]
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

##### Reference Systems

- 4 ETRS89 (EU), geocentric, GRS80
- 630 S-JTSK (SK 2006  $\leq \pm 1\text{m}$ ), Hermannskogel, Bessel
- 52 S-JTSK (SK 2000), Hermannskogel, Bessel
- 3 S42/83 (EU-E/AS[FSU] 1990  $\leq \pm 3\text{m}$ ), Pulkovo, Krassowsky
- 5 MGI (AT/CZ), Hermannskogel, Bessel
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 2 ED50 (EU), Potsdam, Hayford/Int.
- 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

#### Slovenia (SI)

##### Coordinate Systems

- 101 Slovenian Transverse Mercator coord. D48
- 102 Slovenian Transverse Mercator coord. D48+
- 534 Balkans MGI Zones 5-8 Gauss-Krueger coordinates
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

##### Reference Systems

- 56 D48 (SI), Hermannskogel, Bessel
- 210 MGI (SI/HR/BA), Hermannskogel, Bessel
- 3 S42/83 (EU-E/AS[FSU] 1990  $\leq \pm 3\text{m}$ ), Pulkovo, Krassowsky
- 4 ETRS89 (EU), geocentric, GRS80
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 2 ED50 (EU), Potsdam, Hayford/Int.
- 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90

- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## Spain (ES)

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 51 UTMref (MGRS) (Meter grid mesh)
- 57 Spanish Lambert MADRID coordinates
- 157 Geographic coordinates (Madrid) [deg,min,sec]
- 158 Geographic coordinates (Madrid) [deg]
- 150 LCC-Europe Pan-European Lambert Conformal Conic
- 151 LAEA-Europe Pan-European Lambert Azim. Equal Area
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 278 ED50 (ES Pen NTv2 PENR2009  $<\pm 0.1\text{m}$ ), Potsdam, Hayford/Int.
- 279 ETRS89 (ES Pen NTv2 PENR2009  $<\pm 0.1\text{m}$ ), geocentric, GRS80
- 280 ED50 (ES Bal NTv2 BALR2009  $<\pm 0.1\text{m}$ ), Potsdam, Hayford/Int.
- 281 ETRS89 (ES Bal NTv2 BALR2009  $<\pm 0.1\text{m}$ ), geocentric, GRS80
- 276 ED50 (ES Pen+Bal NTv2 SPED2ET(03)  $<\pm 0.15\text{m}$ ), Pd, Hayford/Int.
- 277 ETRS89 (ES Pen+Bal NTv2 SPED2ET(03)  $<\pm 0.15\text{m}$ ), geoc., GRS80
- 36 MADRID1870 (ES  $<\pm 7\text{m}$ ), Madrid, Struve
- 352 Pico Nieves 1984 (ES-Canares  $<\pm 20\text{m}$ ), P. Nieves, Hayford/Int.
- 353 REGCAN95 (ES-Canares), geocentric, GRS80
- 37 ED50 (ES EST99 peninsular), Potsdam, Hayford/Int.
- 38 ED50 (ES ZNW99 northwest), Potsdam, Hayford/Int.
- 39 ED50 (ES BAL99 Balearic isl.), Potsdam, Hayford/Int.
- 4 ETRS89 (EU), geocentric, GRS80
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## Sweden (SE)

### Coordinate Systems

- 93 Swedish Transv. Mercator SWEREF99 TM (15°)
- 592 Swedish Transverse Mercator SWEREF99 (12°)
- 593 Swedish Transverse Mercator SWEREF99 (13° 30')
- 594 Swedish Transverse Mercator SWEREF99 (15°)
- 595 Swedish Transverse Mercator SWEREF99 (16° 30')
- 596 Swedish Transverse Mercator SWEREF99 (18°)
- 597 Swedish Transverse Mercator SWEREF99 (14° 15')
- 598 Swedish Transverse Mercator SWEREF99 (15° 45')
- 599 Swedish Transverse Mercator SWEREF99 (17° 15')
- 600 Swedish Transverse Mercator SWEREF99 (18° 45')
- 601 Swedish Transverse Mercator SWEREF99 (20° 15')
- 602 Swedish Transverse Mercator SWEREF99 (21° 45')
- 603 Swedish Transverse Mercator SWEREF99 (23° 15')
- 62 Swedish Transv. Mercator RT90 7.5gonV
- 63 Swedish Transv. Mercator RT90 5gonV
- 64 Swedish Transv. Mercator RT90 2.5gonV
- 65 Swedish Transv. Mercator RT90 0gon

66 Swedish Transv. Mercator RT90 2.5gonO  
 67 Swedish Transv. Mercator RT90 5gonO  
 762 Swedish Transv. Mercator RT90 7.5gonO  
 76 Swedish Transv. Mercator RT R01 Skåne 2.5gonV  
 77 Swedish Transv. Mercator RT R02 Halland 2.5gonV  
 78 Swedish Transv. Mercator RT R03 Karlshamn 2.5gonV  
 79 Swedish Transv. Mercator RT R04 Göteborg 2.5gonV  
 80 Swedish Transv. Mercator RT R05 Vänern 2.5gonV  
 81 Swedish Transv. Mercator RT R06 Småland 2.5gonV  
 82 Swedish Transv. Mercator RT R07 Örebro 2.5gonV  
 83 Swedish Transv. Mercator RT R08 Gotland 2.5gonV  
 84 Swedish Transv. Mercator RT R09 Stockholm 2.5gonV  
 85 Swedish Transv. Mercator RT R10 Gävle-Dala 2.5gonV  
 86 Swedish Transv. Mercator RT R1 2.5gonV1 Ume  
 87 Swedish Transv. Mercator RT R12 Luleå 2.5gonV  
 94 Swedish Transv. Mercator coord. FME (13° 35')  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

#### Reference Systems

45 SWEREF99 (SE), geocentric, GRS80  
 274 SWEREF93 (SE), geocentric, GRS80  
 44 RT90 (SE), Stockholm, Bessel  
 4 ETRS89 (EU), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Switzerland (CH)

##### Coordinate Systems

36 Swiss grid coordinates 1995 (LV95)  
 7 Swiss grid coordinates New Grid (1903M, LV03)  
 104 Swiss grid coordinates Old Grid (1903C, LV03C, Bern)  
 888 Swiss grid coordinates Old Grid (1903C, LV03C-G, Greenw.)  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

4 ETRS89 (EU), geocentric, GRS80  
 26 CH1903 (CH/LI), Bern, Bessel  
 8 CH1903+ (CH/LI 1993), Zimmerwald, Bessel  
 27 CHTRS95 (CH/LI), geocentric, GRS80  
 347 CH1903 (CH/LI NTv2 chenyx06etrs <±0.5m), Bern, Bessel  
 348 ETRS89 (CH/LI NTv2 chenyx06etrs <±0.5m), geocentric, GRS80  
 214 CH1903 (CH/LI NTv2 chenyx06a <±0.5m), Bern, Bessel  
 215 CH1903+ (CH/LI NTv2 chenyx06a <±0.5m), Zimmerwald, Bessel  
 626 CH1903 (CH/LI NTv2 chenyx06etrs <±2m), Bern, Bessel  
 627 CHTRF95 (CH/LI NTv2 chenyx06etrs <±2m), geocentric, GRS80  
 16 GRANIT87 (CH), Zimmerwald, Bessel

- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 2 ED50 (EU), Potsdam, Hayford/Int.
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

#### Turkey (TR)

##### Coordinate Systems

- 645 Turkey TUREF/TM27 Transverse Mercator
- 646 Turkey TUREF/TM30 Transverse Mercator
- 647 Turkey TUREF/TM33 Transverse Mercator
- 648 Turkey TUREF/TM36 Transverse Mercator
- 649 Turkey TUREF/TM39 Transverse Mercator
- 650 Turkey TUREF/TM42 Transverse Mercator
- 651 Turkey TUREF/TM45 Transverse Mercator
- 150 LCC-Europe Pan-European Lambert Conformal Conic
- 151 LAEA-Europe Pan-European Lambert Azim. Equal Area
- 3 UTM coordinates (northern hemisphere)
- 2 Gauss-Krueger coord. (3 degrees wide strips)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

##### Reference Systems

- 303 TUREF (TR), geocentric, GRS80
- 302 ED50 (TR  $<\pm 2\text{m}$ ), Potsdam, Hayford/Int.
- 4 ETRS89 (EU), geocentric, GRS80
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

#### Ukraine (UA)

##### Coordinate Systems

- 751 Ukrainian Gauss-Krueger TM (3 degrees wide strips)
- 2 Gauss-Krueger coord. (3 degrees wide strips)
- 4 Gauss-Krueger (6 degrees wide strips)
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

##### Reference Systems

- 562 UCS2000 (UA 2012  $<\pm 1\text{m}$ ), Pulkovo, Krassowsky
- 563 UCS2000 (UA 2008  $<\pm 5\text{m}$ ), Pulkovo, Krassowsky
- 564 S42/83 (UA 2012  $<\pm 3.5\text{m}$ ), Pulkovo, Krassowsky
- 3 S42/83 (EU-E/AS[FSU] 1990  $<\pm 3\text{m}$ ), Pulkovo, Krassowsky
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

#### Multinational Coordinate Systems

##### Coordinate Systems

- 535 TMzn-Europe Pan-European Transverse Mercator (UTM)
- 150 LCC-Europe Pan-European Lambert Conformal Conic

151 LAEA-Europe Pan-European Lambert Azim. Equal Area  
 574 Europe Albers Equal Area Conic coordinates  
 957 Caspian Sea Mercator coordinates  
 995 TM 0 N Transverse Mercator coordinates  
 757 TM 5 NE Transverse Mercator Coordinates  
 996 TM 6 NE Transverse Mercator coordinates  
 51 UTMref (MGRS) (Meter grid mesh)  
 105 Baltic Transverse Mercator coord. TM Baltic93  
 758 Baltic CS63 zone C0 Transverse Mercator  
 759 Baltic CS63 zone C1 Transverse Mercator  
 760 Baltic CS63 zone C2 Transverse Mercator  
 534 Balkans MGI Zones 5-8 Gauss-Krueger coordinates  
 625 KOSOVAREF01 Gauss-Krueger coordinates  
 3 UTM coordinates (northern hemisphere)  
 2 Gauss-Krueger coord. (3 degrees wide strips)  
 4 Gauss-Krueger (6 degrees wide strips)  
 33 Geographic coordinates (Greenwich) [sec]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 4 ETRS89 (EU), geocentric, GRS80  
 2 ED50 (EU), Potsdam, Hayford/Int.  
 586 ED50 (North Sea <±2m), Potsdam, Hayford/Int.  
 23 ED50 (FR), Potsdam, Hayford/Int.  
 3 S42/83 (EU-E/AS[FSU] 1990 <±3m), Pulkovo, Krassowsky  
 612 Pulkovo1942(58) (EU-E <±1m), Pulkovo, Krassowsky  
 435 Pulkovo1942 (EU-E/AS[FSU] 2008 <±3m), Pulkovo, Krassowsky  
 350 Pulkovo1942 (EU-E/AS[FSU] no\_defs), Pulkovo, Krassowsky  
 586 ED50 (North Sea <±2m), Potsdam, Hayford/Int.  
 611 Pulkovo1995 (EU-E/AS[FSU] 2008 <±1m), Pulkovo, Krassowsky  
 351 Pulkovo1995 (EU-E/AS[FSU] no\_defs), Pulkovo, Krassowsky  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 106 PZ-90 Roßbach 1996 (Worldwide GLONASS), geoc., PZ-90  
 105 PZ-90 Misra 1996 (Worldwide GLONASS), geoc., PZ-90  
 108 PZ-90 Boykov 1993 (Worldwide GLONASS), geoc., PZ-90  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 192 WGS72BE (Worldwide), geocentric, WGS72  
 210 MGI (SI/HR/BA), Hermannskogel, Bessel  
 211 MGI (RS/ME/MK), Hermannskogel, Bessel  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

--- North American continent -----

Canada Alberta (CA-AB)

Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 707 CA Alberta 3TM (111.0W) Transverse Mercator  
 708 CA Alberta 3TM (114.0W) Transverse Mercator  
 709 CA Alberta 3TM (117.0W) Transverse Mercator  
 710 CA Alberta 3TM (120.0W) Transverse Mercator

705 CA Alberta 10TM (Forest) Transverse Mercator  
 706 CA Alberta 10TM (Resource) Transverse Mercator  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80  
 790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80  
 76 NAD27 (CA-BC+AB <±8m), Kansas, Clarke  
 763 NAD83 (CA-AB NTv2 ABCSRSv7), geocentric, GRS80  
 764 NAD83(CSRS) (CA-AB NTv2 ABCSRSv7), geocentric, GRS80  
 426 NAD83 (CA-AB NTv2 ABCSRSv4), geocentric, GRS80  
 427 NAD83(CSRS) (CA-AB NTv2 ABCSRSv4), geocentric, GRS80  
 166 NAD27 (CA NTv2 NTV2\_0 <±0.5m), Kansas, Clarke  
 167 NAD83 (CA NTv2 NTV2\_0 <±0.5m), geocentric, GRS80  
 73 NAD27 (US+CA <±15m), Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Canada British Columbia (CA-BC)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 704 CA British Columbia (BC) Albers coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80  
 790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80  
 76 NAD27 (CA-BC+AB <±8m), Kansas, Clarke  
 400 NAD27 (CA-BC NTv2 BC\_27\_98), Kansas, Clarke  
 401 NAD83(CSRS98) (CA-BC NTv2 BC\_27\_98), geocentric, GRS80  
 402 NAD27 (CA-BC NTv2 BC\_27\_05), Kansas, Clarke  
 403 NAD83(CSRS05) (CA-BC NTv2 BC\_27\_05), geocentric, GRS80  
 404 NAD83(NMIP93) (CA-BC NTv2 BC\_93\_98/BC\_CSRS), geoc., GRS80  
 405 NAD83(CSRS98) (CA-BC NTv2 BC\_93\_98/BC\_CSRS), geoc., GRS80  
 406 NAD83(NMIP93) (CA-BC NTv2 BC\_93\_05), geocentric, GRS80  
 407 NAD83(CSRS05) (CA-BC NTv2 BC\_93\_05), geocentric, GRS80  
 166 NAD27 (CA NTv2 NTV2\_0 <±0.5m), Kansas, Clarke  
 167 NAD83 (CA NTv2 NTV2\_0 <±0.5m), geocentric, GRS80  
 73 NAD27 (US+CA <±15m), Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Canada Manitoba (CA-MB)

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 430 CA MTM zone 15 Transverse Mercator coordinates
- 431 CA MTM zone 16 Transverse Mercator coordinates
- 432 CA MTM zone 17 Transverse Mercator coordinates
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80
- 790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80
- 77 NAD27 (CA-ON+MB  $<\pm 9\text{m}$ ), Kansas, Clarke
- 73 NAD27 (US+CA  $<\pm 15\text{m}$ ), Kansas, Clarke
- 166 NAD27 (CA NTv2 NTV2\_0  $<\pm 0.5\text{m}$ ), Kansas, Clarke
- 167 NAD83 (CA NTv2 NTV2\_0  $<\pm 0.5\text{m}$ ), geocentric, GRS80
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## Canada New Brunswick (CA-NB)

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 433 CA New Brunswick NAD83 Stereographic coordinates
- 434 CA New Brunswick ATS77 Stereographic coordinates
- 712 CA New Brunswick NAD27 Stereographic coordinates
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80
- 790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80
- 359 ATS77 (CA-NB  $<\pm 2\text{m}$  KilletSoft), geocentric, ATS77
- 74 NAD27 (CA-NL+PE+NS+NB+QC  $<\pm 6\text{m}$ ), Kansas, Clarke
- 73 NAD27 (US+CA  $<\pm 15\text{m}$ ), Kansas, Clarke
- 408 NAD27 (CA-NB NTv2 NB2783v2), Kansas, Clarke
- 409 NAD83(CSRS) (CA-NB NTv2 NB2783v2), geocentric, GRS80
- 410 ATS77 (CA-NB NTv2 NB7783v2), geocentric, ATS77
- 411 NAD83(CSRS) (CA-NB NTv2 NB7783v2), geocentric, GRS80
- 166 NAD27 (CA NTv2 NTV2\_0  $<\pm 0.5\text{m}$ ), Kansas, Clarke
- 167 NAD83 (CA NTv2 NTV2\_0  $<\pm 0.5\text{m}$ ), geocentric, GRS80
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## Canada Newfoundland and Labrador (CA-NL)

## Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 413 CA MTM zone 1 Transverse Mercator coordinates
- 415 CA MTM zone 2 Transverse Mercator coordinates
- 416 CA MTM zone 3 Transverse Mercator coordinates
- 417 CA MTM zone 4 Transverse Mercator coordinates
- 419 CA MTM zone 5 Transverse Mercator coordinates
- 421 CA MTM zone 6 Transverse Mercator coordinates
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

## Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80
- 790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80
- 74 NAD27 (CA-NL+PE+NS+NB+QC  $<\pm 6\text{m}$ ), Kansas, Clarke
- 73 NAD27 (US+CA  $<\pm 15\text{m}$ ), Kansas, Clarke
- 360 NAD27 (CA-QC+NL NTv2 NA27NA83/QUE27-83), Kansas, Clarke
- 361 NAD83 (CA-QC+NL NTv2 NA27NA83/QUE27-83), geocentric, GRS80
- 362 NAD27 (CA-QC+NL NTv2 NA27SCRS/QUE27-98), Kansas, Clarke
- 363 NAD83(SCRS) (CA-QC+NL NTv2 NA27SCRS/QUE27-98), geoc., GRS80
- 364 NAD27(CGQ77) (CA-QC+NL NTv2 CQ77NA83/CGQ77-83), Kan., Clarke
- 365 NAD83 (CA-QC+NL NTv2 CQ77NA83/CGQ77-83), geocentric, GRS80
- 366 NAD27(CGQ77) (CA-QC+NL NTv2 CQ77SCRS/CGQ77-98), Kan., Clarke
- 367 NAD83(SCRS) (CA-QC+NL NTv2 CQ77SCRS/CGQ77-98), geoc., GRS80
- 368 NAD83 (CA-QC+NL NTv2 NA83SCRS/NAD83-98), geoc., GRS80
- 369 NAD83(SCRS) (CA-QC+NL NTv2 NA83SCRS/NAD83-98), geoc., GRS80
- 761 NAD83 (CA-NL NTv2 NLCSRSV4A), geocentric, GRS80
- 762 NAD83(CSRS) (CA-NL NTv2 NLCSRSV4A), geocentric, GRS80
- 166 NAD27 (CA NTv2 NTV2\_0  $<\pm 0.5\text{m}$ ), Kansas, Clarke
- 167 NAD83 (CA NTv2 NTV2\_0  $<\pm 0.5\text{m}$ ), geocentric, GRS80
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## Canada Northwest Territories (CA-NT)

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 713 CA Northwest Territories Lambert coordinates
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80
- 790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80
- 75 NAD27 (CA-NT+NU+SK  $<\pm 5\text{m}$ ), Kansas, Clarke
- 73 NAD27 (US+CA  $<\pm 15\text{m}$ ), Kansas, Clarke
- 166 NAD27 (CA NTv2 NTV2\_0  $<\pm 0.5\text{m}$ ), Kansas, Clarke



167 NAD83 (CA NTv2 NTV2\_0  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Canada Nova Scotia (CA-NS)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 416 CA MTM zone 3 Transverse Mercator coordinates  
 418 CA MTM Nova Scotia zone 4 Transv. Mercator  
 420 CA MTM Nova Scotia zone 5 Transv. Mercator  
 1002 CA MTM Nova Scotia 1997 zone 4 Transv. Mercator  
 1003 CA MTM Nova Scotia 1997 zone 5 Transv. Mercator  
 1004 CA MTM Nova Scotia 2010 zone 4 Transv. Mercator  
 1005 CA MTM Nova Scotia 2010 zone 5 Transv. Mercator  
 1006 CA Quebec) Albers Equal Area coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80  
 790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80  
 79 ATS77 (CA-NS+PE  $\leq \pm 1\text{m}$  KilletSoft), geocentric, ATS77  
 74 NAD27 (CA-NL+PE+NS+NB+QC  $\leq \pm 6\text{m}$ ), Kansas, Clarke  
 73 NAD27 (US+CA  $\leq \pm 15\text{m}$ ), Kansas, Clarke  
 428 ATS77 (CA-NS NTv2 NS7783v2), geocentric, ATS77  
 429 NAD83(CSRS98) (CA-NS NTv2 NS7783v2), geocentric, GRS80  
 430 ATS77 (CA-NS NTv2 GS7783  $\pm 2\text{m}$   $\pm 2\text{m}$ ), geocentric, ATS77  
 431 NAD83 (CA-NS NTv2 GS7783  $\pm 2\text{m}$   $\pm 2\text{m}$ ), geocentric, GRS80  
 166 NAD27 (CA NTv2 NTV2\_0  $\leq \pm 0.5\text{m}$ ), Kansas, Clarke  
 167 NAD83 (CA NTv2 NTV2\_0  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Canada Nunavut (CA-NU)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 713 CA Northwest Territories Lambert coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80  
 790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80  
 75 NAD27 (CA-NT+NU+SK  $\leq \pm 5\text{m}$ ), Kansas, Clarke

73 NAD27 (US+CA  $\leq \pm 15\text{m}$ ), Kansas, Clarke  
 166 NAD27 (CA NTV2 NTV2\_0  $\leq \pm 0.5\text{m}$ ), Kansas, Clarke  
 167 NAD83 (CA NTV2 NTV2\_0  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Canada Ontario (CA-ON)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 423 CA MTM zone 8 Transverse Mercator coordinates  
 424 CA MTM zone 9 Transverse Mercator coordinates  
 425 CA MTM zone 10 Transverse Mercator coordinates  
 426 CA MTM zone 11 Transverse Mercator coordinates  
 427 CA MTM zone 12 Transverse Mercator coordinates  
 428 CA MTM zone 13 Transverse Mercator coordinates  
 429 CA MTM zone 14 Transverse Mercator coordinates  
 430 CA MTM zone 15 Transverse Mercator coordinates  
 431 CA MTM zone 16 Transverse Mercator coordinates  
 432 CA MTM zone 17 Transverse Mercator coordinates  
 702 CA MNR Ontario Lambert (85.0W) coordinates  
 703 CA Teranet Ontario Lambert (84.0W) coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80  
 790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80  
 77 NAD27 (CA-ON+MB  $\leq \pm 9\text{m}$ ), Kansas, Clarke  
 73 NAD27 (US+CA  $\leq \pm 15\text{m}$ ), Kansas, Clarke  
 412 NAD27(1974) (CA-ON NTV2 ON27CSv1), Kansas, Clarke  
 413 NAD83(CSRS) (CA-ON NTV2 ON27CSv1), geocentric, GRS80  
 414 NAD27(1976) (CA-ON NTV2 ON76CSv1), Kansas, Clarke  
 415 NAD83(CSRS) (CA-ON NTV2 ON76CSv1), geocentric, GRS80  
 416 NAD83(ORIG) (CA-ON NTV2 ON83CSv1), geocentric, GRS80  
 417 NAD83(CSRS) (CA-ON NTV2 ON83CSv1), geocentric, GRS80  
 418 NAD27(1976) (CA-ON NTV2 MAY76v20), Kansas, Clarke  
 419 NAD83(ORIG) (CA-ON NTV2 MAY76v20), geocentric, GRS80  
 166 NAD27 (CA NTV2 NTV2\_0  $\leq \pm 0.5\text{m}$ ), Kansas, Clarke  
 167 NAD83 (CA NTV2 NTV2\_0  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Canada Prince Edward Island (CA-PE)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 416 CA MTM zone 3 Transverse Mercator coordinates  
 435 CA Prince Edward Isl. NAD83 Stereographic coord.

436 CA Prince Edward Isl. ATS77 Stereographic coord.  
6 Geographic coordinates (Greenwich) [deg]  
32 Geographic coordinates (Greenwich) [deg,min]  
1 Geographic coordinates (Greenwich) [deg,min,sec]  
500 Cartesian coordinates

Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80  
790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80  
79 ATS77 (CA-NS+PE <±1m KilletSoft), geocentric, ATS77  
74 NAD27 (CA-NL+PE+NS+NB+QC <±6m), Kansas, Clarke  
73 NAD27 (US+CA <±15m), Kansas, Clarke  
432 ATS77 (CA-PE NTv2 PE7783v2), geocentric, ATS77  
433 NAD83(CSRS98) (CA-PE NTv2 PE7783v2), geoc., GRS80  
166 NAD27 (CA NTv2 NTV2\_0 <±0.5m), Kansas, Clarke  
167 NAD83 (CA NTv2 NTV2\_0 <±0.5m), geocentric, GRS80  
10 WGS84 (Worldwide GPS), geocentric, WGS84  
11 WGS72 (Worldwide), geocentric, WGS72  
208 Source Reference System in an arbitrary NTv2 file  
209 Target Reference System in an arbitrary NTv2 file

#### Canada Quebec (CA-QC)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
414 CA MTM Quebec zone 2 Transverse Mercator coord.  
416 CA MTM zone 3 Transverse Mercator coordinates  
417 CA MTM zone 4 Transverse Mercator coordinates  
419 CA MTM zone 5 Transverse Mercator coordinates  
421 CA MTM zone 6 Transverse Mercator coordinates  
422 CA MTM zone 7 Transverse Mercator coordinates  
423 CA MTM zone 8 Transverse Mercator coordinates  
424 CA MTM zone 9 Transverse Mercator coordinates  
425 CA MTM zone 10 Transverse Mercator coordinates  
670 CA MTQ Quebec Lambert (70.0W) coordinates  
437 CA Quebec Lambert (68.5W) coordinates  
1006 CA Quebec) Albers Equal Area coordinates  
6 Geographic coordinates (Greenwich) [deg]  
32 Geographic coordinates (Greenwich) [deg,min]  
1 Geographic coordinates (Greenwich) [deg,min,sec]  
500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80  
790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80  
74 NAD27 (CA-NL+PE+NS+NB+QC <±6m), Kansas, Clarke  
73 NAD27 (US+CA <±15m), Kansas, Clarke  
360 NAD27 (CA-QC+NL NTv2 NA27NA83/QUE27-83), Kansas, Clarke  
361 NAD83 (CA-QC+NL NTv2 NA27NA83/QUE27-83), geocentric, GRS80  
362 NAD27 (CA-QC+NL NTv2 NA27SCRS/QUE27-98), Kansas, Clarke  
363 NAD83(SCRS) (CA-QC+NL NTv2 NA27SCRS/QUE27-98), geoc., GRS80  
364 NAD27(CGQ77) (CA-QC+NL NTv2 CQ77NA83/CGQ77-83), Kan., Clarke  
365 NAD83 (CA-QC+NL NTv2 CQ77NA83/CGQ77-83), geocentric, GRS80

366 NAD27(CGQ77) (CA-QC+NL NTv2 CQ77SCRS/CGQ77-98), Kan., Clarke  
 367 NAD83(SCRS) (CA-QC+NL NTv2 CQ77SCRS/CGQ77-98), geoc., GRS80  
 368 NAD83 (CA-QC+NL NTv2 NA83SCRS/NAD83-98), geoc., GRS80  
 369 NAD83(SCRS) (CA-QC+NL NTv2 NA83SCRS/NAD83-98), geoc., GRS80  
 166 NAD27 (CA NTv2 NTV2\_0 <±0.5m), Kansas, Clarke  
 167 NAD83 (CA NTv2 NTV2\_0 <±0.5m), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Canada Saskatchewan (CA-SK)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80  
 790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80  
 75 NAD27 (CA-NT+NU+SK <±5m), Kansas, Clarke  
 73 NAD27 (US+CA <±15m), Kansas, Clarke  
 420 NAD27 (CA-SK NTv2 SK27-83), Kansas, Clarke  
 421 NAD83 (CA-SK NTv2 SK27-83), geocentric, GRS80  
 422 NAD27 (CA-SK NTv2 SK27-98), Kansas, Clarke  
 423 NAD83(CSRS98) (CA-SK NTv2 SK27-98), geocentric, GRS80  
 424 NAD83 (CA-SK NTv2 SK83-98), geocentric, GRS80  
 425 NAD83(CSRS98) (CA-SK NTv2 SK83-98), geocentric, GRS80  
 166 NAD27 (CA NTv2 NTV2\_0 <±0.5m), Kansas, Clarke  
 167 NAD83 (CA NTv2 NTV2\_0 <±0.5m), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Canada Yukon (CA-YT)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 711 CA Yukon (YT) Albers coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80  
 790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80  
 78 NAD27 (CA-YT <±8m), Kansas, Clarke  
 73 NAD27 (US+CA <±15m), Kansas, Clarke  
 166 NAD27 (CA NTv2 NTV2\_0 <±0.5m), Kansas, Clarke

- 167 NAD83 (CA NTv2 NTV2\_0  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## Canada Multinational Coordinate Systems

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 714 Canada Statistics Lambert coordinates
- 715 Canada Atlas Lambert coordinates
- 572 Canada Albers Equal Area Conic coordinates
- 567 North America Albers Equal Area coordinates
- 413 CA MTM zone 1 Transverse Mercator coordinates
- 415 CA MTM zone 2 Transverse Mercator coordinates
- 416 CA MTM zone 3 Transverse Mercator coordinates
- 417 CA MTM zone 4 Transverse Mercator coordinates
- 419 CA MTM zone 5 Transverse Mercator coordinates
- 421 CA MTM zone 6 Transverse Mercator coordinates
- 422 CA MTM zone 7 Transverse Mercator coordinates
- 423 CA MTM zone 8 Transverse Mercator coordinates
- 424 CA MTM zone 9 Transverse Mercator coordinates
- 425 CA MTM zone 10 Transverse Mercator coordinates
- 426 CA MTM zone 11 Transverse Mercator coordinates
- 427 CA MTM zone 12 Transverse Mercator coordinates
- 428 CA MTM zone 13 Transverse Mercator coordinates
- 429 CA MTM zone 14 Transverse Mercator coordinates
- 430 CA MTM zone 15 Transverse Mercator coordinates
- 431 CA MTM zone 16 Transverse Mercator coordinates
- 432 CA MTM zone 17 Transverse Mercator coordinates

- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 166 NAD27 (CA NTv2 NTV2\_0  $\leq \pm 0.5\text{m}$ ), Kansas, Clarke
- 167 NAD83 (CA NTv2 NTV2\_0  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80
- 791 NAD83(CSRs)v7 (US+CA), geocentric, GRS80
- 790 NAD83(CSRs)v6 (US+CA), geocentric, GRS80
- 370 NAD83(NSRS/CSRs) (US+CA ITRS-Epoche 1997), GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 451 NAD83 (US+CA =ITRS86=), geocentric, GRS80
- 73 NAD27 (US+CA  $\leq \pm 15\text{m}$ ), Kansas, Clarke
- 74 NAD27 (CA-NL+PE+NS+NB+QC  $\leq \pm 6\text{m}$ ), Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## French Saint-Pierre and Miquelon (FX)

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 34 Geographic coordinates (Greenwich) [gon]
- 6 Geographic coordinates (Greenwich) [deg]

32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 149 RGSPM06 (FX), geocentric, GRS80  
 150 SPM1950 (FX), astron., Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## GPS Measurements - ITRS epochs

### Coordinate Systems

6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 3 UTM coordinates (northern hemisphere)  
 500 Cartesian coordinates

### Reference Systems

72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 451 NAD83 (US+CA =ITRS86=), geocentric, GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 791 NAD83(CSRS)v7 (US+CA), geocentric, GRS80  
 790 NAD83(CSRS)v6 (US+CA), geocentric, GRS80  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 371 NAD83(NSRS/CSRS) (US+CA ITRS epoch 1988), GRS80  
 372 ITRS24 (US+CA GPS measurements in license year 2024), WGS84  
 373 ITRS88 (US+CA GPS measurements epoch 1988), WGS84  
 374 ITRS89 (US+CA GPS measurements epoch 1989), WGS84  
 375 ITRS90 (US+CA GPS measurements epoch 1990), WGS84  
 376 ITRS91 (US+CA GPS measurements epoch 1991), WGS84  
 377 ITRS92 (US+CA GPS measurements epoch 1992), WGS84  
 378 ITRS93 (US+CA GPS measurements epoch 1993), WGS84  
 379 ITRS94 (US+CA GPS measurements epoch 1994), WGS84  
 380 ITRS95 (US+CA GPS measurements epoch 1995), WGS84  
 381 ITRS96 (US+CA GPS measurements epoch 1996), WGS84  
 382 ITRS97 (US+CA GPS measurements epoch 1997), WGS84  
 383 ITRS98 (US+CA GPS measurements epoch 1998), WGS84  
 384 ITRS99 (US+CA GPS measurements epoch 1999), WGS84  
 385 ITRS00 (US+CA GPS measurements epoch 2000), WGS84  
 386 ITRS01 (US+CA GPS measurements epoch 2001), WGS84  
 387 ITRS02 (US+CA GPS measurements epoch 2002), WGS84  
 388 ITRS03 (US+CA GPS measurements epoch 2003), WGS84  
 389 ITRS04 (US+CA GPS measurements epoch 2004), WGS84  
 390 ITRS05 (US+CA GPS measurements epoch 2005), WGS84  
 391 ITRS06 (US+CA GPS measurements epoch 2006), WGS84  
 392 ITRS07 (US+CA GPS measurements epoch 2007), WGS84  
 393 ITRS08 (US+CA GPS measurements epoch 2008), WGS84  
 394 ITRS09 (US+CA GPS measurements epoch 2009), WGS84  
 395 ITRS10 (US+CA GPS measurements epoch 2010), WGS84  
 396 ITRS11 (US+CA GPS measurements epoch 2011), WGS84  
 397 ITRS12 (US+CA GPS measurements epoch 2012), WGS84

398 ITRS13 (US+CA GPS measurements epoch 2013), WGS84  
 399 ITRS14 (US+CA GPS measurements epoch 2014), WGS84  
 606 ITRS15 (US+CA GPS measurements epoch 2015), WGS84  
 607 ITRS16 (US+CA GPS measurements epoch 2016), WGS84  
 632 ITRS17 (US+CA GPS measurements epoch 2017), WGS84  
 649 ITRS18 (US+CA GPS measurements epoch 2018), WGS84  
 698 ITRS19 (US+CA GPS measurements epoch 2019), WGS84  
 699 ITRS20 (US+CA GPS measurements epoch 2020), WGS84  
 732 ITRS21 (US+CA GPS measurements epoch 2021), WGS84  
 733 ITRS22 (US+CA GPS measurements epoch 2022), WGS84  
 741 ITRS23 (US+CA GPS measurements epoch 2023), WGS84  
 798 ITRS24 (US+CA GPS measurements epoch 2024), WGS84  
 799 ITRS25 (US+CA GPS measurements epoch 2025), WGS84  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Alabama (US-AL)

##### Coordinate Systems

159 US-SPCS 1983 (101) Alabama east Mercator coord.  
 161 US-SPCS 1983 (102) Alabama west Mercator coord.  
 160 US-SPCS 1927 (101) Alabama east Mercator coord.  
 162 US-SPCS 1927 (102) Alabama west Mercator coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 452 NAD83(HARN) (US-AL NTv2 ALHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 453 NAD83 (US-AL NTv2 ALHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Alaska (US-AK)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 442 US-SPCS 1983 (5001) Alaska 1 Hotine Oblique Merc.  
 163 US-SPCS 1983 (5002) Alaska 2 Transv. Mercator coord.  
 165 US-SPCS 1983 (5003) Alaska 3 Transv. Mercator coord.  
 167 US-SPCS 1983 (5004) Alaska 4 Transv. Mercator coord.  
 169 US-SPCS 1983 (5005) Alaska 5 Transv. Mercator coord.  
 171 US-SPCS 1983 (5006) Alaska 6 Transv. Mercator coord.  
 173 US-SPCS 1983 (5007) Alaska 7 Transv. Mercator coord.  
 175 US-SPCS 1983 (5008) Alaska 8 Transv. Mercator coord.  
 177 US-SPCS 1983 (5009) Alaska 9 Transv. Mercator coord.

179 US-SPCS 1983 (5010) Alaska 10 Lambert coordinates  
 443 US-SPCS 1927 (5001) Alaska 1 Hotine Oblique Merc.  
 164 US-SPCS 1927 (5002) Alaska 2 Transv. Mercator coord.  
 166 US-SPCS 1927 (5003) Alaska 3 Transv. Mercator coord.  
 168 US-SPCS 1927 (5004) Alaska 4 Transv. Mercator coord.  
 170 US-SPCS 1927 (5005) Alaska 5 Transv. Mercator coord.  
 172 US-SPCS 1927 (5006) Alaska 6 Transv. Mercator coord.  
 174 US-SPCS 1927 (5007) Alaska 7 Transv. Mercator coord.  
 176 US-SPCS 1927 (5008) Alaska 8 Transv. Mercator coord.  
 178 US-SPCS 1927 (5009) Alaska 9 Transv. Mercator coord.  
 180 US-SPCS 1927 (5010) Alaska 10 Lambert coordinates  
 571 Alaska Albers Equal Area Conic coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 69 NAD27 (US-AK), Meade's Ranch Kansas, Clarke  
 70 NAD27 (US-AK Aleutian east), Kansas, Clarke  
 71 NAD27 (US-AK Aleutian west), Kansas, Clarke  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 67 NAD27 (US west), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA American Samoa (US-AS)

##### Coordinate Systems

181 US-SPCS 1927 (5300) American Samoa Lambert coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

80 American Samoa 1962 (US-AS), Samoa, Clarke  
 448 NAD83(NSRS PA11) (US), geocentric, GRS80  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 454 NAD83(HARN) (US-AS[east] NTv2 ESHPGN  $\pm 0.1$ m), geocent., GRS80  
 455 NAD83 (US-AS[east] NTv2 ESHPGN  $\pm 0.1$ m), geocentric, GRS80  
 456 NAD83(HARN) (US-AS[west] NTv2 WSHPGN  $\pm 0.1$ m), geocent., GRS80  
 457 NAD83 (US-AS[west] NTv2 WSHPGN  $\pm 0.1$ m), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 67 NAD27 (US west), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file



## USA Arizona (US-AZ)

### Coordinate Systems

- 182 US-SPCS 1983 (202) Arizona central Mercator coord.
- 184 US-SPCS 1983 (201) Arizona east Mercator coord.
- 186 US-SPCS 1983 (203) Arizona west Mercator coord.
- 183 US-SPCS 1927 (202) Arizona central Mercator coord.
- 185 US-SPCS 1927 (201) Arizona east Mercator coord.
- 187 US-SPCS 1927 (203) Arizona west Mercator coord.
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 458 NAD83(HARN) (US-AZ NTv2 AZHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 459 NAD83 (US-AZ NTv2 AZHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 67 NAD27 (US west), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA Arkansas (US-AR)

### Coordinate Systems

- 188 US-SPCS 1983 (301) Arkansas north Lambert coord.
- 190 US-SPCS 1983 (302) Arkansas south Lambert coord.
- 189 US-SPCS 1927 (301) Arkansas north Lambert coord.
- 191 US-SPCS 1927 (302) Arkansas south Lambert coord.
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 460 NAD83(HARN) (US-AR NTv2 ARHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 461 NAD83 (US-AR NTv2 ARHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA California (US-CA)

## Coordinate Systems

- 192 US-SPCS 1983 (401) California zone 1 Lambert coord.
- 194 US-SPCS 1983 (402) California zone 2 Lambert coord.
- 196 US-SPCS 1983 (403) California zone 3 Lambert coord.
- 198 US-SPCS 1983 (404) California zone 4 Lambert coord.
- 200 US-SPCS 1983 (405) California zone 5 Lambert coord.
- 202 US-SPCS 1983 (406) California zone 6 Lambert coord.
- 193 US-SPCS 1927 (401) California Zone I Lambert coord.
- 195 US-SPCS 1927 (402) California zone II Lambert coord.
- 197 US-SPCS 1927 (403) California zone III Lambert coord.
- 199 US-SPCS 1927 (404) California zone IV Lambert coord.
- 201 US-SPCS 1927 (405) California zone V Lambert coord.
- 203 US-SPCS 1927 (406) California zone VI Lambert coord.
- 204 US-SPCS 1927 (407) California zone VII Lambert coord.
- 720 US California Albers Equal Area coordinates
  - 3 UTM coordinates (northern hemisphere)
  - 6 Geographic coordinates (Greenwich) [deg]
  - 32 Geographic coordinates (Greenwich) [deg,min]
  - 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

## Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 462 NAD83(HARN) (US-CA[north] NTv2 CNHPGN  $\pm 0.1$ m), geoc., GRS80
- 463 NAD83 (US-CA[north] NTv2 CNHPGN  $\pm 0.1$ m), geocentric, GRS80
- 464 NAD83(HARN) (US-CA[south] NTv2 CSHPGN  $\pm 0.1$ m), geoc., GRS80
- 465 NAD83 (US-CA[south] NTv2 CSHPGN  $\pm 0.1$ m), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 67 NAD27 (US west), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA Colorado (US-CO)

### Coordinate Systems

- 205 US-SPCS 1983 (502) Colorado central Lambert coord.
- 207 US-SPCS 1983 (501) Colorado north Lambert coord.
- 209 US-SPCS 1983 (503) Colorado south Lambert coord.
- 206 US-SPCS 1927 (502) Colorado central Lambert coord.
- 208 US-SPCS 1927 (501) Colorado north Lambert coord.
- 210 US-SPCS 1927 (503) Colorado south Lambert coord.
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80

466 NAD83(HARN) (US-CO NTv2 COHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 467 NAD83 (US-CO NTv2 COHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 67 NAD27 (US west), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Connecticut (US-CT)

##### Coordinate Systems

211 US-SPCS 1983 (600) Connecticut Lambert coordinates  
 212 US-SPCS 1927 (600) Connecticut Lambert coordinates  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 508 NAD83(HARN) (US-CT,MA,RI,NH,VT NTv2 NEHPGN  $\pm 0.1\text{m}$ ), gc, GRS80  
 509 NAD83 (US-CT,MA,RI,NH,VT NTv2 NEHPGN  $\pm 0.1\text{m}$ ), geoc., GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Delaware (US-DE)

##### Coordinate Systems

213 US-SPCS 1983 (700) Delaware Transv. Mercator coord.  
 214 US-SPCS 1927 (700) Delaware Transv. Mercator coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 494 NAD83(HARN) (US-MD,DE NTv2 MDHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 495 NAD83 (US-MD,DE NTv2 MDHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## USA Florida (US-FL)

### Coordinate Systems

- 215 US-SPCS 1983 (901) Florida east Mercator coord.
- 217 US-SPCS 1983 (903) Florida north Lambert coord.
- 219 US-SPCS 1983 (902) Florida west Mercator coord.
- 216 US-SPCS 1927 (901) Florida east Mercator coord.
- 218 US-SPCS 1927 (903) Florida north Lambert coord.
- 220 US-SPCS 1927 (902) Florida west Mercator coord.
- 721 US Florida GDL Albers Equal Area coordinates
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 468 NAD83(HARN) (US-FL NTv2 FLHPGN  $\pm 0.1$ m), geocentric, GRS80
- 469 NAD83 (US-FL NTv2 FLHPGN  $\pm 0.1$ m), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA Georgia (US-GA)

### Coordinate Systems

- 221 US-SPCS 1983 (1001) Georgia east Mercator coord.
- 223 US-SPCS 1983 (1002) Georgia west Mercator coord.
- 222 US-SPCS 1927 (1001) Georgia east Mercator coord.
- 224 US-SPCS 1927 (1002) Georgia west Mercator coord.
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 470 NAD83(HARN) (US-GA NTv2 GAHPGN  $\pm 0.1$ m), geocentric, GRS80
- 471 NAD83 (US-GA NTv2 GAHPGN  $\pm 0.1$ m), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA Hawaii (US-HI)

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 225 US-SPCS 1983 (5101) Hawaii 1 Transv. Mercator coord.
- 227 US-SPCS 1983 (5102) Hawaii 2 Transv. Mercator coord.
- 229 US-SPCS 1983 (5103) Hawaii 3 Transv. Mercator coord.
- 231 US-SPCS 1983 (5104) Hawaii 4 Transv. Mercator coord.
- 233 US-SPCS 1983 (5105) Hawaii 5 Transv. Mercator coord.
- 226 US-SPCS 1927 (5101) Hawaii 1 Transv. Mercator coord.
- 228 US-SPCS 1927 (5102) Hawaii 2 Transv. Mercator coord.
- 230 US-SPCS 1927 (5103) Hawaii 3 Transv. Mercator coord.
- 232 US-SPCS 1927 (5104) Hawaii 4 Transv. Mercator coord.
- 234 US-SPCS 1927 (5105) Hawaii 5 Transv. Mercator coord.
- 570 Hawaii Albers Equal Area Conic coordinates
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 448 NAD83(NSRS PA11) (US), geocentric, GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 474 NAD83(HARN) (US-HI NTv2 HIHPGN  $\pm 0.1$ m), geocentric, GRS80
- 475 NAD83 (US-HI NTv2 HIHPGN  $\pm 0.1$ m), geocentric, GRS80
- 82 Old Hawaiian mean (US-HI), Oahu, Clarke
- 450 Tern Isl. 1961 (US-HI  $\leq \pm 25$ m), Sorol Atoll, Hayford/Int.
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 67 NAD27 (US west), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA Idaho (US-ID)

### Coordinate Systems

- 235 US-SPCS 1983 (1102) Idaho central Mercator coord.
- 237 US-SPCS 1983 (1101) Idaho east Transv. Mercator
- 236 US-SPCS 1927 (1102) Idaho central Mercator coord.
- 238 US-SPCS 1927 (1101) Idaho east Transv. Mercator
- 239 US-SPCS 1983 (1103) Idaho west Transv. Mercator
- 240 US-SPCS 1927 (1103) Idaho west Transv. Mercator
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 476 NAD83(HARN) (US-ID,MT[east] NTv2 EMHPGN  $\pm 0.1$ m), geoc., GRS80

477 NAD83 (US-ID,MT[east] NTv2 EMHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 478 NAD83(HARN) (US-ID,MT[west] NTv2 WMHPGN  $\pm 0.1\text{m}$ ), geoc., GRS80  
 479 NAD83 (US-ID,MT[west] NTv2 WMHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 67 NAD27 (US west), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Illinois (US-IL)

##### Coordinate Systems

241 US-SPCS 1983 (1201) Illinois east Mercator coord.  
 243 US-SPCS 1983 (1202) Illinois west Mercator coord.  
 242 US-SPCS 1927 (1201) Illinois east Mercator coord.  
 244 US-SPCS 1927 (1202) Illinois west Mercator coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 480 NAD83(HARN) (US-IL NTv2 ILHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 481 NAD83 (US-IL NTv2 ILHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Indiana (US-IN)

##### Coordinate Systems

245 US-SPCS 1983 (1301) Indiana east Mercator coord.  
 247 US-SPCS 1983 (1302) Indiana west Mercator coord.  
 246 US-SPCS 1927 (1301) Indiana east Mercator coord.  
 248 US-SPCS 1927 (1302) Indiana west Mercator coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 482 NAD83(HARN) (US-IN NTv2 INHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 483 NAD83 (US-IN NTv2 INHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke

68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
10 WGS84 (Worldwide GPS), geocentric, WGS84  
11 WGS72 (Worldwide), geocentric, WGS72  
208 Source Reference System in an arbitrary NTV2 file  
209 Target Reference System in an arbitrary NTV2 file

#### USA Iowa (US-IA)

##### Coordinate Systems

249 US-SPCS 1983 (1401) Iowa north Lambert coordinates  
251 US-SPCS 1983 (1402) Iowa south Lambert coordinates  
250 US-SPCS 1927 (1401) Iowa north Lambert coordinates  
252 US-SPCS 1927 (1402) Iowa south Lambert coordinates  
3 UTM coordinates (northern hemisphere)  
6 Geographic coordinates (Greenwich) [deg]  
32 Geographic coordinates (Greenwich) [deg,min]  
1 Geographic coordinates (Greenwich) [deg,min,sec]  
500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
446 NAD83(NSRS 2007) (US), geocentric, GRS80  
447 NAD83(NSRS 2011) (US), geocentric, GRS80  
72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
484 NAD83(HARN) (US-IA NTV2 IAHPGN  $\pm 0.1$ m), geocentric, GRS80  
485 NAD83 (US-IA NTV2 IAHPGN  $\pm 0.1$ m), geocentric, GRS80  
66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
10 WGS84 (Worldwide GPS), geocentric, WGS84  
11 WGS72 (Worldwide), geocentric, WGS72  
208 Source Reference System in an arbitrary NTV2 file  
209 Target Reference System in an arbitrary NTV2 file

#### USA Kansas (US-KS)

##### Coordinate Systems

253 US-SPCS 1983 (1501) Kansas north Lambert coord.  
255 US-SPCS 1983 (1502) Kansas south Lambert coord.  
254 US-SPCS 1927 (1501) Kansas north Lambert coord.  
256 US-SPCS 1927 (1502) Kansas south Lambert coord.  
3 UTM coordinates (northern hemisphere)  
6 Geographic coordinates (Greenwich) [deg]  
32 Geographic coordinates (Greenwich) [deg,min]  
1 Geographic coordinates (Greenwich) [deg,min,sec]  
500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
446 NAD83(NSRS 2007) (US), geocentric, GRS80  
447 NAD83(NSRS 2011) (US), geocentric, GRS80  
72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
486 NAD83(HARN) (US-KS NTV2 KSHPGN  $\pm 0.1$ m), geocentric, GRS80  
487 NAD83 (US-KS NTV2 KSHPGN  $\pm 0.1$ m), geocentric, GRS80  
66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
67 NAD27 (US west), Meade's Ranch Kansas, Clarke  
10 WGS84 (Worldwide GPS), geocentric, WGS84  
11 WGS72 (Worldwide), geocentric, WGS72  
208 Source Reference System in an arbitrary NTV2 file

## 209 Target Reference System in an arbitrary NTv2 file

### USA Kentucky (US-KY)

#### Coordinate Systems

- 723 US-SPCS 1983 Kentucky Single Zone Lambert coord.
- 257 US-SPCS 1983 (1601) Kentucky north Lambert coord.
- 259 US-SPCS 1983 (1602) Kentucky south Lambert coord.
- 258 US-SPCS 1927 (1601) Kentucky north Lambert coord.
- 260 US-SPCS 1927 (1602) Kentucky south Lambert coord.
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

#### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 488 NAD83(HARN) (US-KY NTv2 KYHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 489 NAD83 (US-KY NTv2 KYHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

### USA Louisiana (US-LA)

#### Coordinate Systems

- 261 US-SPCS 1983 (1701) Louisiana north Lambert coord.
- 263 US-SPCS 1983 (1703) Louisiana offshore Lambert coord.
- 265 US-SPCS 1983 (1702) Louisiana south Lambert coord.
- 262 US-SPCS 1927 (1701) Louisiana north Lambert coord.
- 264 US-SPCS 1927 (1703) Louisiana offshore Lambert coord.
- 266 US-SPCS 1927 (1702) Louisiana south Lambert coord.
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

#### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 490 NAD83(HARN) (US-LA NTv2 LAHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 491 NAD83 (US-LA NTv2 LAHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file



## USA Maine (US-ME)

### Coordinate Systems

- 267 US-SPCS 1983 (1801) Maine east Transv. Mercator
- 269 US-SPCS 1983 (1802) Maine west Transv. Mercator
- 268 US-SPCS 1927 (1801) Maine east Transv. Mercator
- 270 US-SPCS 1927 (1802) Maine west Transv. Mercator
- 724 US-SPCS 1983 Maine CS2000 East Transv. Mercator
- 725 US-SPCS 1983 Maine CS2000 Central Transv. Mercator
- 726 US-SPCS 1983 Maine CS2000 West Transv. Mercator
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 492 NAD83(HARN) (US-ME NTv2 MEHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 493 NAD83 (US-ME NTv2 MEHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA Maryland (US-MD)

### Coordinate Systems

- 271 US-SPCS 1983 (1900) Maryland Lambert coordinates
- 272 US-SPCS 1927 (1900) Maryland Lambert coordinates
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 494 NAD83(HARN) (US-MD,DE NTv2 MDHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 495 NAD83 (US-MD,DE NTv2 MDHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA Massachusetts (US-MA)

### Coordinate Systems

273 US-SPCS 1983 (2002) Massachusetts island Lambert  
 275 US-SPCS 1983 (2001) Massachusetts mainland Lambert  
 274 US-SPCS 1927 (2002) Massachusetts island Lambert  
 276 US-SPCS 1927 (2001) Massachusetts mainland Lambert  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 508 NAD83(HARN) (US-CT,MA,RI,NH,VT NTv2 NEHPGN  $\pm 0.1\text{m}$ ), gc, GRS80  
 509 NAD83 (US-CT,MA,RI,NH,VT NTv2 NEHPGN  $\pm 0.1\text{m}$ ), geoc., GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Michigan (US-MI)

##### Coordinate Systems

727 US-SPCS 1983 Michigan Oblique Mercator coordinates  
 281 US-SPCS 1983 (2111) Michigan north Lambert coord.  
 277 US-SPCS 1983 (2112) Michigan central Lambert coord.  
 283 US-SPCS 1983 (2113) Michigan south Lambert coord.  
 282 US-SPCS 1927 (2111) Michigan north Lambert coord.  
 278 US-SPCS 1927 (2112) Michigan central Lambert coord.  
 284 US-SPCS 1927 (2113) Michigan south Lambert coord.  
 280 US-SPCS 1927 (2101) Michigan east Mercator coord.  
 279 US-SPCS 1927 (2102) Michigan central Mercator coord.  
 285 US-SPCS 1927 (2103) Michigan west Mercator coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 496 NAD83(HARN) (US-MI NTv2 MIHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 497 NAD83 (US-MI NTv2 MIHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## USA Minnesota (US-MN) - General

### Coordinate Systems

- 286 US-SPCS 1983 (2202) Minnesota central Lambert coord.
- 288 US-SPCS 1983 (2201) Minnesota north Lambert coord.
- 290 US-SPCS 1983 (2203) Minnesota south Lambert coord.
- 287 US-SPCS 1927 (2202) Minnesota central Lambert coord.
- 289 US-SPCS 1927 (2201) Minnesota north Lambert coord.
- 291 US-SPCS 1927 (2203) Minnesota south Lambert coord.
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 498 NAD83(HARN) (US-MN NTv2 MNHPGN  $\pm 0.1$ m), geocentric, GRS80
- 499 NAD83 (US-MN NTv2 MNHPGN  $\pm 0.1$ m), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA Minnesota (US-MN) - Counties

### Coordinate Systems

- 858 Minnesota County Aitkin Transverse Mercator coordinates
- 772 Minnesota County Anoka Lambert coordinates
- 773 Minnesota County Becker Lambert coordinates
- 774 Minnesota County Beltrami/North Lambert coordinates
- 775 Minnesota County Beltrami/South Lambert coordinates
- 776 Minnesota County Benton Lambert coordinates
- 777 Minnesota County Big Stone Lambert coordinates
- 778 Minnesota County Blue Earth Lambert coordinates
- 779 Minnesota County Brown Lambert coordinates
- 780 Minnesota County Carlton Lambert coordinates
- 781 Minnesota County Carver Lambert coordinates
- 782 Minnesota County Cass/North Lambert coordinates
- 783 Minnesota County Cass/South Lambert coordinates
- 784 Minnesota County Chippewa Lambert coordinates
- 785 Minnesota County Chisago Lambert coordinates
- 859 Minnesota County Clay Transverse Mercator coordinates
- 860 Minnesota County Clearwater Transverse Mercator coordinates
- 786 Minnesota County Cook/North Lambert coordinates
- 787 Minnesota County Cook/South Lambert coordinates
- 788 Minnesota County Cottonwood Lambert coordinates
- 789 Minnesota County Crow Wing Lambert coordinates
- 790 Minnesota County Dakota Lambert coordinates
- 791 Minnesota County Dodge Lambert coordinates
- 792 Minnesota County Douglas Lambert coordinates
- 793 Minnesota County Faribault Lambert coordinates

794 Minnesota County Fillmore Lambert coordinates  
795 Minnesota County Freeborn Lambert coordinates  
796 Minnesota County Goodhue Lambert coordinates  
797 Minnesota County Grant Lambert coordinates  
798 Minnesota County Hennepin Lambert coordinates  
799 Minnesota County Houston Lambert coordinates  
861 Minnesota County Hubbard Transverse Mercator coordinates  
800 Minnesota County Isanti Lambert coordinates  
801 Minnesota County Itasca/North Lambert coordinates  
802 Minnesota County Itasca/South Lambert coordinates  
803 Minnesota County Jackson Lambert coordinates  
804 Minnesota County Kanabec Lambert coordinates  
805 Minnesota County Kandiyohi Lambert coordinates  
806 Minnesota County Kittson Lambert coordinates  
807 Minnesota County Koochiching Lambert coordinates  
808 Minnesota County Lac Qui Parle Lambert coordinates  
862 Minnesota County Lake Transverse Mercator coordinates  
809 Minnesota County Lake of the Woods/North Lambert coordinates  
810 Minnesota County Lake of the Woods/South Lambert coordinates  
811 Minnesota County Le Sueur Lambert coordinates  
812 Minnesota County Lincoln Lambert coordinates  
813 Minnesota County Lyon Lambert coordinates  
814 Minnesota County Mahnomen Lambert coordinates  
815 Minnesota County Marshall Lambert coordinates  
816 Minnesota County Martin Lambert coordinates  
817 Minnesota County McLeod Lambert coordinates  
818 Minnesota County Meeker Lambert coordinates  
863 Minnesota County Mille Lacs Transverse Mercator coordinates  
819 Minnesota County Morrison Lambert coordinates  
820 Minnesota County Mower Lambert coordinates  
821 Minnesota County Murray Lambert coordinates  
822 Minnesota County Nicollet Lambert coordinates  
823 Minnesota County Nobles Lambert coordinates  
824 Minnesota County Norman Lambert coordinates  
825 Minnesota County Olmsted Lambert coordinates  
826 Minnesota County Otter Tail Lambert coordinates  
827 Minnesota County Pennington Lambert coordinates  
828 Minnesota County Pine Lambert coordinates  
829 Minnesota County Pipestone Lambert coordinates  
830 Minnesota County Polk Lambert coordinates  
831 Minnesota County Pope Lambert coordinates  
832 Minnesota County Ramsey Lambert coordinates  
833 Minnesota County Red Lake Lambert coordinates  
834 Minnesota County Redwood Lambert coordinates  
835 Minnesota County Renville Lambert coordinates  
836 Minnesota County Rice Lambert coordinates  
837 Minnesota County Rock Lambert coordinates  
838 Minnesota County Roseau Lambert coordinates  
839 Minnesota County Scott Lambert coordinates  
840 Minnesota County Sherburne Lambert coordinates  
841 Minnesota County Sibley Lambert coordinates  
842 Minnesota County St. Louis/Central Lambert coordinates  
843 Minnesota County St. Louis/North Lambert coordinates  
844 Minnesota County St. Louis/South Lambert coordinates

845 Minnesota County Stearns Lambert coordinates  
 846 Minnesota County Steele Lambert coordinates  
 847 Minnesota County Stevens Lambert coordinates  
 848 Minnesota County Swift Lambert coordinates  
 849 Minnesota County Todd Lambert coordinates  
 850 Minnesota County Traverse Lambert coordinates  
 851 Minnesota County Wabasha Lambert coordinates  
 852 Minnesota County Wadena Lambert coordinates  
 853 Minnesota County Waseca Lambert coordinates  
 864 Minnesota County Washington Transverse Mercator coordinates  
 854 Minnesota County Watonwan Lambert coordinates  
 865 Minnesota County Wilkin Transverse Mercator coordinates  
 855 Minnesota County Winona Lambert coordinates  
 856 Minnesota County Wright Lambert coordinates  
 857 Minnesota County Yellow Medicine Lambert coordinates

6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

#### Reference Systems

447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 498 NAD83(HARN) (US-MN NTv2 MNHPGN  $\pm 0.1$ m), geocentric, GRS80  
 499 NAD83 (US-MN NTv2 MNHPGN  $\pm 0.1$ m), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

### USA Mississippi (US-MS)

#### Coordinate Systems

728 US-SPCS 1983 Mississippi Transverse Mercator  
 292 US-SPCS 1983 (2301) Mississippi east Mercator coord.  
 294 US-SPCS 1983 (2302) Mississippi west Mercator coord.  
 293 US-SPCS 1927 (2301) Mississippi east Mercator coord.  
 295 US-SPCS 1927 (2302) Mississippi west Mercator coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

#### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 500 NAD83(HARN) (US-MS NTv2 MSHPGN  $\pm 0.1$ m), geocentric, GRS80  
 501 NAD83 (US-MS NTv2 MSHPGN  $\pm 0.1$ m), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file

## 209 Target Reference System in an arbitrary NTv2 file

### USA Missouri (US-MO)

#### Coordinate Systems

- 298 US-SPCS 1983 (2401) Missouri east Mercator coord.
- 296 US-SPCS 1983 (2402) Missouri central Mercator coord.
- 300 US-SPCS 1983 (2403) Missouri west Mercator coord.
- 299 US-SPCS 1927 (2401) Missouri east Mercator coord.
- 297 US-SPCS 1927 (2402) Missouri central Mercator coord.
- 301 US-SPCS 1927 (2403) Missouri west Mercator coord.

- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

#### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 502 NAD83(HARN) (US-MO NTv2 MOHPGN  $\pm 0.1$ m), geocentric, GRS80
- 503 NAD83 (US-MO NTv2 MOHPGN  $\pm 0.1$ m), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

### USA Montana (US-MT)

#### Coordinate Systems

- 302 US-SPCS 1983 (2500) Montana Lambert coordinates
- 304 US-SPCS 1927 (2501) Montana north Lambert coord.
- 303 US-SPCS 1927 (2502) Montana central Lambert coord.
- 305 US-SPCS 1927 (2503) Montana south Lambert coord.

- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

#### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 476 NAD83(HARN) (US-ID,MT[east] NTv2 EMHPGN  $\pm 0.1$ m), geoc., GRS80
- 477 NAD83 (US-ID,MT[east] NTv2 EMHPGN  $\pm 0.1$ m), geocentric, GRS80
- 478 NAD83(HARN) (US-ID,MT[west] NTv2 WMHPGN  $\pm 0.1$ m), geoc., GRS80
- 479 NAD83 (US-ID,MT[west] NTv2 WMHPGN  $\pm 0.1$ m), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 67 NAD27 (US west), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file

## 209 Target Reference System in an arbitrary NTv2 file

### USA Nebraska (US-NE)

#### Coordinate Systems

- 306 US-SPCS 1983 (2600) Nebraska Lambert coordinates
  - 307 US-SPCS 1927 (2601) Nebraska north Lambert coord.
  - 308 US-SPCS 1927 (2602) Nebraska south Lambert coord.
  - 3 UTM coordinates (northern hemisphere)
  - 6 Geographic coordinates (Greenwich) [deg]
  - 32 Geographic coordinates (Greenwich) [deg,min]
  - 1 Geographic coordinates (Greenwich) [deg,min,sec]
  - 500 Cartesian coordinates
- #### Reference Systems
- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
  - 446 NAD83(NSRS 2007) (US), geocentric, GRS80
  - 447 NAD83(NSRS 2011) (US), geocentric, GRS80
  - 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
  - 504 NAD83(HARN) (US-NE NTv2 NBHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
  - 505 NAD83 (US-NE NTv2 NBHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
  - 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
  - 67 NAD27 (US west), Meade's Ranch Kansas, Clarke
  - 10 WGS84 (Worldwide GPS), geocentric, WGS84
  - 11 WGS72 (Worldwide), geocentric, WGS72
  - 208 Source Reference System in an arbitrary NTv2 file
  - 209 Target Reference System in an arbitrary NTv2 file

### USA Nevada (US-NV)

#### Coordinate Systems

- 311 US-SPCS 1983 (2701) Nevada east Mercator coord.
  - 309 US-SPCS 1983 (2702) Nevada central Mercator coord.
  - 313 US-SPCS 1983 (2703) Nevada west Mercator coord.
  - 312 US-SPCS 1927 (2701) Nevada east Mercator coord.
  - 310 US-SPCS 1927 (2702) Nevada central Mercator coord.
  - 314 US-SPCS 1927 (2703) Nevada west Mercator coord.
  - 3 UTM coordinates (northern hemisphere)
  - 6 Geographic coordinates (Greenwich) [deg]
  - 32 Geographic coordinates (Greenwich) [deg,min]
  - 1 Geographic coordinates (Greenwich) [deg,min,sec]
  - 500 Cartesian coordinates
- #### Reference Systems
- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
  - 446 NAD83(NSRS 2007) (US), geocentric, GRS80
  - 447 NAD83(NSRS 2011) (US), geocentric, GRS80
  - 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
  - 506 NAD83(HARN) (US-NV NTv2 NVHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
  - 507 NAD83 (US-NV NTv2 NVHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
  - 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
  - 67 NAD27 (US west), Meade's Ranch Kansas, Clarke
  - 10 WGS84 (Worldwide GPS), geocentric, WGS84
  - 11 WGS72 (Worldwide), geocentric, WGS72
  - 208 Source Reference System in an arbitrary NTv2 file
  - 209 Target Reference System in an arbitrary NTv2 file

### USA New Hampshire (US-NH)

## Coordinate Systems

- 315 US-SPCS 1983 (2800) New Hampshire Mercator coord.
- 316 US-SPCS 1927 (2800) New Hampshire Mercator coord.
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

## Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 508 NAD83(HARN) (US-CT,MA,RI,NH,VT NTv2 NEHPGN  $\pm 0.1\text{m}$ ), gc, GRS80
- 509 NAD83 (US-CT,MA,RI,NH,VT NTv2 NEHPGN  $\pm 0.1\text{m}$ ), geoc., GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA New Jersey (US-NJ)

### Coordinate Systems

- 317 US-SPCS 1983 (2900) New Jersey Transv. Mercator
- 318 US-SPCS 1927 (2900) New Jersey Transv. Mercator
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 510 NAD83(HARN) (US-NJ NTv2 NJHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 511 NAD83 (US-NJ NTv2 NJHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA New Mexico (US-NM)

### Coordinate Systems

- 321 US-SPCS 1983 (3001) New Mexico east Mercator coord.
- 319 US-SPCS 1983 (3002) New Mexico central Mercator
- 323 US-SPCS 1983 (3003) New Mexico west Mercator coord.
- 322 US-SPCS 1927 (3001) New Mexico east Mercator coord.
- 320 US-SPCS 1927 (3002) New Mexico central Mercator
- 324 US-SPCS 1927 (3003) New Mexico west Mercator coord.
- 3 UTM coordinates (northern hemisphere)



6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 512 NAD83(HARN) (US-NM NTv2 NMHPGN  $\pm 0.1$ m), geocentric, GRS80  
 513 NAD83 (US-NM NTv2 NMHPGN  $\pm 0.1$ m), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 67 NAD27 (US west), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA New York (US-NY)

##### Coordinate Systems

327 US-SPCS 1983 (3101) New York east Mercator coord.  
 325 US-SPCS 1983 (3102) New York central Mercator coord.  
 331 US-SPCS 1983 (3103) New York west Mercator coord.  
 329 US-SPCS 1983 (3104) New York Long Island Lambert  
 328 US-SPCS 1927 (3101) New York east Mercator coord.  
 326 US-SPCS 1927 (3102) New York central Mercator coord.  
 332 US-SPCS 1927 (3103) New York west Mercator coord.  
 330 US-SPCS 1927 (3104) New York Long Island Lambert  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 514 NAD83(HARN) (US-NY NTv2 NYHPGN  $\pm 0.1$ m), geocentric, GRS80  
 515 NAD83 (US-NY NTv2 NYHPGN  $\pm 0.1$ m), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA North Carolina (US-NC)

##### Coordinate Systems

333 US-SPCS 1983 (3200) North Carolina Lambert coord.  
 334 US-SPCS 1927 (3200) North Carolina Lambert coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]

1 Geographic coordinates (Greenwich) [deg,min,sec]  
500 Cartesian coordinates  
Reference Systems  
370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
446 NAD83(NSRS 2007) (US), geocentric, GRS80  
447 NAD83(NSRS 2011) (US), geocentric, GRS80  
72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
516 NAD83(HARN) (US-NC NTv2 NCHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
517 NAD83 (US-NC NTv2 NCHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
10 WGS84 (Worldwide GPS), geocentric, WGS84  
11 WGS72 (Worldwide), geocentric, WGS72  
208 Source Reference System in an arbitrary NTv2 file  
209 Target Reference System in an arbitrary NTv2 file

#### USA North Dakota (US-ND)

Coordinate Systems  
335 US-SPCS 1983 (3301) North Dakota north Lambert coord.  
337 US-SPCS 1983 (3302) North Dakota south Lambert coord.  
336 US-SPCS 1927 (3301) North Dakota north Lambert coord.  
338 US-SPCS 1927 (3302) North Dakota south Lambert coord.  
3 UTM coordinates (northern hemisphere)  
6 Geographic coordinates (Greenwich) [deg]  
32 Geographic coordinates (Greenwich) [deg,min]  
1 Geographic coordinates (Greenwich) [deg,min,sec]  
500 Cartesian coordinates  
Reference Systems  
370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
446 NAD83(NSRS 2007) (US), geocentric, GRS80  
447 NAD83(NSRS 2011) (US), geocentric, GRS80  
72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
518 NAD83(HARN) (US-ND NTv2 NDHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
519 NAD83 (US-ND NTv2 NDHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
67 NAD27 (US west), Meade's Ranch Kansas, Clarke  
10 WGS84 (Worldwide GPS), geocentric, WGS84  
11 WGS72 (Worldwide), geocentric, WGS72  
208 Source Reference System in an arbitrary NTv2 file  
209 Target Reference System in an arbitrary NTv2 file

#### USA Ohio (US-OH)

Coordinate Systems  
339 US-SPCS 1983 (3401) Ohio north Lambert coordinates  
341 US-SPCS 1983 (3402) Ohio south Lambert coordinates  
340 US-SPCS 1927 (3401) Ohio north Lambert coordinates  
342 US-SPCS 1927 (3402) Ohio south Lambert coordinates  
3 UTM coordinates (northern hemisphere)  
6 Geographic coordinates (Greenwich) [deg]  
32 Geographic coordinates (Greenwich) [deg,min]  
1 Geographic coordinates (Greenwich) [deg,min,sec]  
500 Cartesian coordinates  
Reference Systems  
370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80

446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 520 NAD83(HARN) (US-OH NTv2 OHHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 521 NAD83 (US-OH NTv2 OHHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Oklahoma (US-OK)

##### Coordinate Systems

343 US-SPCS 1983 (3501) Oklahoma north Lambert coord.  
 345 US-SPCS 1983 (3502) Oklahoma south Lambert coord.  
 344 US-SPCS 1927 (3501) Oklahoma north Lambert coord.  
 346 US-SPCS 1927 (3502) Oklahoma south Lambert coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 522 NAD83(HARN) (US-OK NTv2 OKHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 523 NAD83 (US-OK NTv2 OKHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 67 NAD27 (US west), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Oregon (US-OR)

##### Coordinate Systems

729 US Oregon state-wide Lambert coordinates  
 347 US-SPCS 1983 (3601) Oregon north Lambert coord.  
 349 US-SPCS 1983 (3602) Oregon south Lambert coord.  
 348 US-SPCS 1927 (3601) Oregon north Lambert coord.  
 350 US-SPCS 1927 (3602) Oregon south Lambert coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80

542 NAD83(HARN) (US-WA,OR NTv2 WOHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 543 NAD83 (US-WA,OR NTv2 WOHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 67 NAD27 (US west), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Pennsylvania (US-PA)

##### Coordinate Systems

351 US-SPCS 1983 (3701) Pennsylvania north Lambert coord.  
 353 US-SPCS 1983 (3702) Pennsylvania south Lambert coord.  
 352 US-SPCS 1927 (3701) Pennsylvania north Lambert coord.  
 354 US-SPCS 1927 (3702) Pennsylvania south Lambert coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 524 NAD83(HARN) (US-PA NTv2 PAHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 525 NAD83 (US-PA NTv2 PAHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Rhode Island (US-RI)

##### Coordinate Systems

357 US-SPCS 1983 (3800) Rhode Island Mercator coord.  
 358 US-SPCS 1927 (3800) Rhode Island Mercator coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 508 NAD83(HARN) (US-CT,MA,RI,NH,VT NTv2 NEHPGN  $\pm 0.1\text{m}$ ), gc, GRS80  
 509 NAD83 (US-CT,MA,RI,NH,VT NTv2 NEHPGN  $\pm 0.1\text{m}$ ), geoc., GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72

- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

#### USA South Carolina (US-SC)

##### Coordinate Systems

- 359 US-SPCS 1983 (3900) South Carolina Lambert coord.
  - 360 US-SPCS 1927 (3901) South Carolina north Lambert
  - 361 US-SPCS 1927 (3902) South Carolina south Lambert
  - 3 UTM coordinates (northern hemisphere)
  - 6 Geographic coordinates (Greenwich) [deg]
  - 32 Geographic coordinates (Greenwich) [deg,min]
  - 1 Geographic coordinates (Greenwich) [deg,min,sec]
  - 500 Cartesian coordinates
- ##### Reference Systems
- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
  - 446 NAD83(NSRS 2007) (US), geocentric, GRS80
  - 447 NAD83(NSRS 2011) (US), geocentric, GRS80
  - 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
  - 528 NAD83(HARN) (US-SC NTV2 SCHPGN  $\pm 0.1$ m), geocentric, GRS80
  - 529 NAD83 (US-SC NTV2 SCHPGN  $\pm 0.1$ m), geocentric, GRS80
  - 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
  - 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
  - 10 WGS84 (Worldwide GPS), geocentric, WGS84
  - 11 WGS72 (Worldwide), geocentric, WGS72
  - 208 Source Reference System in an arbitrary NTV2 file
  - 209 Target Reference System in an arbitrary NTV2 file

#### USA South Dakota (US-SD)

##### Coordinate Systems

- 362 US-SPCS 1983 (4001) South Dakota north Lambert coord.
  - 364 US-SPCS 1983 (4002) South Dakota south Lambert coord.
  - 363 US-SPCS 1927 (4001) South Dakota north Lambert coord.
  - 365 US-SPCS 1927 (4002) South Dakota south Lambert coord.
  - 3 UTM coordinates (northern hemisphere)
  - 6 Geographic coordinates (Greenwich) [deg]
  - 32 Geographic coordinates (Greenwich) [deg,min]
  - 1 Geographic coordinates (Greenwich) [deg,min,sec]
  - 500 Cartesian coordinates
- ##### Reference Systems
- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
  - 446 NAD83(NSRS 2007) (US), geocentric, GRS80
  - 447 NAD83(NSRS 2011) (US), geocentric, GRS80
  - 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
  - 530 NAD83(HARN) (US-SD NTV2 SDHPGN  $\pm 0.1$ m), geocentric, GRS80
  - 531 NAD83 (US-SD NTV2 SDHPGN  $\pm 0.1$ m), geocentric, GRS80
  - 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
  - 67 NAD27 (US west), Meade's Ranch Kansas, Clarke
  - 10 WGS84 (Worldwide GPS), geocentric, WGS84
  - 11 WGS72 (Worldwide), geocentric, WGS72
  - 208 Source Reference System in an arbitrary NTV2 file
  - 209 Target Reference System in an arbitrary NTV2 file

#### USA Tennessee (US-TN)

##### Coordinate Systems

366 US-SPCS 1983 (4100) Tennessee Lambert coordinates  
 367 US-SPCS 1927 (4100) Tennessee Lambert coordinates  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 532 NAD83(HARN) (US-TN NTv2 TNHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 533 NAD83 (US-TN NTv2 TNHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Texas (US-TX)

##### Coordinate Systems

730 US Texas state-wide Lambert coordinates  
 731 US Texas state-wide Albers Equal Area coordinates  
 370 US-SPCS 1983 (4201) Texas north Lambert coordinates  
 372 US-SPCS 1983 (4202) Texas north central Lambert  
 368 US-SPCS 1983 (4203) Texas central Lambert coord.  
 374 US-SPCS 1983 (4205) Texas south Lambert coordinates  
 376 US-SPCS 1983 (4204) Texas south central Lambert  
 371 US-SPCS 1927 (4201) Texas north Lambert coordinates  
 373 US-SPCS 1927 (4202) Texas north central Lambert  
 369 US-SPCS 1927 (4203) Texas central Lambert coord.  
 375 US-SPCS 1927 (4205) Texas south Lambert coordinates  
 377 US-SPCS 1927 (4204) Texas south central Lambert  
 732 US Texas Lambert State Mapping System  
 733 US Texas Lambert Shackleford System  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 534 NAD83(HARN) (US-TX[east] NTv2 ETHPGN  $\pm 0.1\text{m}$ ), geoc., GRS80  
 535 NAD83 (US-TX[east] NTv2 ETHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 536 NAD83(HARN) (US-TX[west] NTv2 WTHPGN  $\pm 0.1\text{m}$ ), geoc., GRS80  
 537 NAD83 (US-TX[west] NTv2 WTHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 67 NAD27 (US west), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84

- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

#### USA Utah (US-UT)

##### Coordinate Systems

- 380 US-SPCS 1983 (4301) Utah north Lambert coordinates
- 378 US-SPCS 1983 (4302) Utah central Lambert coord.
- 382 US-SPCS 1983 (4303) Utah south Lambert coordinates
- 381 US-SPCS 1927 (4301) Utah north Lambert coordinates
- 379 US-SPCS 1927 (4302) Utah central Lambert coord.
- 383 US-SPCS 1927 (4303) Utah south Lambert coordinates
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

##### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 538 NAD83(HARN) (US-UT NTv2 UTHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 539 NAD83 (US-UT NTv2 UTHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 67 NAD27 (US west), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

#### USA Vermont (US-VT)

##### Coordinate Systems

- 384 US-SPCS 1983 (4400) Vermont Transv. Mercator coord.
- 385 US-SPCS 1927 (4400) Vermont Transv. Mercator coord.
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

##### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 508 NAD83(HARN) (US-CT,MA,RI,NH,VT NTv2 NEHPGN  $\pm 0.1\text{m}$ ), gc, GRS80
- 509 NAD83 (US-CT,MA,RI,NH,VT NTv2 NEHPGN  $\pm 0.1\text{m}$ ), geoc., GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA Virginia (US-VA)

### Coordinate Systems

- 734 US Virginia state-wide Lambert coordinates
- 387 US-SPCS 1983 (4501) Virginia north Lambert coord.
- 389 US-SPCS 1983 (4502) Virginia south Lambert coord.
- 388 US-SPCS 1927 (4501) Virginia north Lambert coord.
- 390 US-SPCS 1927 (4502) Virginia south Lambert coord.
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 540 NAD83(HARN) (US-VA NTv2 VAHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 541 NAD83 (US-VA NTv2 VAHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 68 NAD27 (US east), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA Washington (US-WA)

### Coordinate Systems

- 391 US-SPCS 1983 (4601) Washington north Lambert coord.
- 393 US-SPCS 1983 (4602) Washington south Lambert coord.
- 392 US-SPCS 1927 (4601) Washington north Lambert coord.
- 394 US-SPCS 1927 (4602) Washington south Lambert coord.
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80
- 446 NAD83(NSRS 2007) (US), geocentric, GRS80
- 447 NAD83(NSRS 2011) (US), geocentric, GRS80
- 72 NAD83 (US+CA =WGS84=), geocentric, GRS80
- 542 NAD83(HARN) (US-WA,OR NTv2 WOHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 543 NAD83 (US-WA,OR NTv2 WOHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke
- 67 NAD27 (US west), Meade's Ranch Kansas, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## USA West Virginia (US-WV)

### Coordinate Systems

- 395 US-SPCS 1983 (4701) West Virginia north Lambert



397 US-SPCS 1983 (4702) West Virginia south Lambert  
 396 US-SPCS 1927 (4701) West Virginia north Lambert  
 398 US-SPCS 1927 (4702) West Virginia south Lambert  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 544 NAD83(HARN) (US-WV NTv2 WVHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 545 NAD83 (US-WV NTv2 WVHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Wisconsin (US-WI)

##### Coordinate Systems

735 US Wisconsin WMT83 Transverse Mercator coordinates  
 736 US Wisconsin WMT27 Transverse Mercator coordinates  
 401 US-SPCS 1983 (4801) Wisconsin north Lambert coord.  
 399 US-SPCS 1983 (4802) Wisconsin central Lambert coord.  
 403 US-SPCS 1983 (4803) Wisconsin south Lambert coord.  
 402 US-SPCS 1927 (4801) Wisconsin north Lambert coord.  
 400 US-SPCS 1927 (4802) Wisconsin central Lambert coord.  
 404 US-SPCS 1927 (4803) Wisconsin south Lambert coord.  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 546 NAD83(HARN) (US-WI NTv2 WIHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 547 NAD83 (US-WI NTv2 WIHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### USA Wyoming (US-WY)

##### Coordinate Systems

405 US-SPCS 1983 (4901) Wyoming east Mercator coord.

407 US-SPCS 1983 (4902) Wyoming east central Mercator  
 411 US-SPCS 1983 (4903) Wyoming west central Mercator  
 409 US-SPCS 1983 (4904) Wyoming west Mercator coord.  
 406 US-SPCS 1927 (4901) Wyoming east Mercator coord.  
 408 US-SPCS 1927 (4902) Wyoming east central Mercator  
 412 US-SPCS 1927 (4903) Wyoming west central Mercator  
 410 US-SPCS 1927 (4904) Wyoming west Mercator coord.  
 997 US Wyoming Lambert coordinates  
     3 UTM coordinates (northern hemisphere)  
     6 Geographic coordinates (Greenwich) [deg]  
    32 Geographic coordinates (Greenwich) [deg,min]  
     1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
     Reference Systems  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
    72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 548 NAD83(HARN) (US-WY NTv2 WYHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 549 NAD83 (US-WY NTv2 WYHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
    66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
    67 NAD27 (US west), Meade's Ranch Kansas, Clarke  
    10 WGS84 (Worldwide GPS), geocentric, WGS84  
    11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## USA Multinational Coordinate Systems

### Coordinate Systems

565 US National Grid (USNG) Mercator coordinates  
 438 US National Atlas Lambert Azimuthal Equal Area  
 568 USA Conus Albers Equal Area coordinates  
 569 USA Contiguos Albers Equal Area coordinates  
 567 North America Albers Equal Area coordinates  
     3 UTM coordinates (northern hemisphere)  
 1007 UTM coordinates [ftUS] (northern hemisphere)  
    51 UTMref (MGRS) (Meter grid mesh)  
    33 Geographic coordinates (Greenwich) [sec]  
     6 Geographic coordinates (Greenwich) [deg]  
    32 Geographic coordinates (Greenwich) [deg,min]  
     1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 448 NAD83(NSRS PA11) (US), geocentric, GRS80  
    72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 451 NAD83 (US+CA =ITRS86=), geocentric, GRS80  
    73 NAD27 (US+CA  $<\pm 15\text{m}$ ), Kansas, Clarke  
    66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
    67 NAD27 (US west), Meade's Ranch Kansas, Clarke  
    68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
    10 WGS84 (Worldwide GPS), geocentric, WGS84

11 WGS72 (Worldwide), geocentric, WGS72  
 192 WGS72BE (Worldwide), geocentric, WGS72  
 81 GRS80a Authalic Sphere (Worldwide), geocentric, Sphere  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

--- Central America and Caribbean -----

French Guadeloupe (GP)

Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 34 Geographic coordinates (Greenwich) [gon]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

Reference Systems

153 RRAF (GP,MQ), geocentric, GRS80  
 156 IGN1949 (GP), Fort-Marigot, Hayford/Int.  
 155 IGN1948 (GP), Ste-Anne, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

French Martinique (MQ)

Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 34 Geographic coordinates (Greenwich) [gon]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

Reference Systems

153 RRAF (GP,MQ), geocentric, GRS80  
 154 Fort-Desaix1952 (MQ), Fort-Desaix, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

Mexico (MX)

Coordinate Systems

577 Mexico Lambert Conformal Conic coordinates  
 578 Mexico Albers Equal Area Conic coordinates  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

Reference Systems

580 Mexico ITRF2008 (MX), geocentric, GRS80  
 579 Mexico ITRF92 (MX), geocentric, GRS80  
 250 NAD27 (MX whole country  $<\pm 12\text{m}$ ), MR Kansas, Clarke  
 251 NAD27 (MX Eastern Gulf  $<\pm 5$ ), MR Kansas, Clarke  
 252 NAD27 (MX Central Gulf  $<\pm 5$ ), MR Kansas, Clarke

253 NAD27 (MX Western Gulf  $\leq \pm 5$ ), MR Kansas, Clarke  
 254 NAD27 (MX Tampico Area  $\leq \pm 5$ ), MR Kansas, Clarke  
 255 NAD27 (MX Campeche North Area  $\leq \pm 5$ ), MR Kansas, Clarke  
 256 NAD27 (MX Campeche South Area  $\leq \pm 5$ ), MR Kansas, Clarke  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### USA Puerto Rico (PR)

##### Coordinate Systems

355 US-SPCS 1983 (5200) Puerto Rico/Virgin Islands Lambert  
 386 US-SPCS 1927 (5202) Puerto Rico/VI/St. Croix Lambert  
 356 US-SPCS 1927 (5201) Puerto Rico/Virgin Islands Lambert  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

581 Puerto Rico (US-PR,VI), Cardona Island, Clarke  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 526 NAD83(HARN) (US-PR,VI NTV2 PVHPGN  $\pm 0.1$ m), geocentric, GRS80  
 527 NAD83 (US-PR,VI NTV2 PVHPGN  $\pm 0.1$ m), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### USA Virgin Islands (VI)

##### Coordinate Systems

355 US-SPCS 1983 (5200) Puerto Rico/Virgin Islands Lambert  
 386 US-SPCS 1927 (5202) Puerto Rico/VI/St. Croix Lambert  
 356 US-SPCS 1927 (5201) Puerto Rico/Virgin Islands Lambert  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

581 Puerto Rico (US-PR,VI), Cardona Island, Clarke  
 370 NAD83(NSRS/CSRS) (US+CA ITRS-Epoche 1997), GRS80  
 446 NAD83(NSRS 2007) (US), geocentric, GRS80  
 447 NAD83(NSRS 2011) (US), geocentric, GRS80  
 72 NAD83 (US+CA =WGS84=), geocentric, GRS80  
 526 NAD83(HARN) (US-PR,VI NTV2 PVHPGN  $\pm 0.1$ m), geocentric, GRS80

527 NAD83 (US-PR,VI NTv2 PVHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80  
 66 NAD27 (US Conus), Meade's Ranch Kansas, Clarke  
 68 NAD27 (US east), Meade's Ranch Kansas, Clarke  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Multinational Coordinate Systems

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 60 UTM coordinates (southern hemisphere)  
 51 UTMref (MGRS) (Meter grid mesh)  
 33 Geographic coordinates (Greenwich) [sec]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 192 WGS72BE (Worldwide), geocentric, WGS72  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

--- South American continent -----

#### Argentina (AR)

##### Coordinate Systems

60 UTM coordinates (southern hemisphere)  
 579 Argentinean Gauss-Krueger coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

182 SIRGAS (South America =WGS84=), geocentric, GRS80  
 257 POSGAR (AR), geocentric, GRS80  
 263 SAD69 (AR  $< \pm 7\text{m}$ ), Chua, GRS67(2)  
 258 CAI1969 (AR), Campo Inchauspe, Hayford/Int.  
 259 CAI1969 (AR Neuquen), Campo Inchauspe, Hayford/Int.  
 261 HITO1963 (AR Tierra Fuego), Hito XVIII, Hayford/Int.  
 260 CHOMA1914 (AR Neuquen), Chos Malal, Hayford/Int.  
 262 Pampa Castillo (AR Comodoro Riv.), Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Brazil (BR)

##### Coordinate Systems

60 UTM coordinates (southern hemisphere)  
 3 UTM coordinates (northern hemisphere)

652 Brazil Petrobras Mercator coordinates  
 653 Brazil Polyconic coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

Reference Systems

310 SIRGAS2000 (South America  $<\pm 1\text{m}$ ), geocentric, GRS80  
 311 Chua (BR  $<\pm 5\text{m}$   $<2000$ ), Chua, Hayford/Int.  
 312 Chua (BR  $<\pm 5\text{m}$   $>2000$ ), Chua, Hayford/Int.  
 313 CorAI70/72 (BR  $<\pm 8\text{m}$ ), Corrego Alegre, Hayford/Int.  
 314 SAD69 (BR  $<\pm 5\text{m}$ ), Chua, GRS67 modified  
 315 SAD69(96) (BR  $<\pm 5\text{m}$ ), Chua, GRS67 modified  
 582 PSAD56 (BR  $<\pm 10\text{m}$ ), La Canoa, Hayford/Int.  
 316 Aratu (BR-Campos  $<\pm 5\text{m}$ ), Aratu, Hayford/Int.  
 317 Aratu (BR-Santos  $<\pm 5\text{m}$ ), Aratu, Hayford/Int.  
 318 Aratu (BR-Esprito/Mucuri  $<\pm 5\text{m}$ ), Aratu, Hayford/Int.  
 319 CorAI1961 (BR NTv2 CA61\_003  $<\pm 2\text{m}$ ), Cor. Alegre, Hayford/Int.  
 320 SIRGAS2000 (BR NTv2 CA61\_003  $<\pm 2\text{m}$ ), geocentric, GRS80  
 321 CorAI70/72 (BR NTv2 CA7072\_003  $<\pm 2\text{m}$ ), Cor. Al., Hayford/Int.  
 322 SIRGAS2000 (BR NTv2 CA7072\_003  $<\pm 2\text{m}$ ), geocentric, GRS80  
 323 SAD69 (BR NTv2 SAD69\_003  $<\pm 1\text{m}$ ), Chua, GRS67 modified  
 324 SIRGAS2000 (BR NTv2 SAD69\_003  $<\pm 1\text{m}$ ), geocentric, GRS80  
 325 SAD69(96) (BR NTv2 SAD96\_003  $<\pm 0.5\text{m}$ ), Chua, GRS67 modified  
 326 SIRGAS2000 (BR NTv2 SAD96\_003  $<\pm 0.5\text{m}$ ), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Chile (CL)

### Coordinate Systems

60 UTM coordinates (southern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

714 SIRGAS (CL =WGS84=), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 720 SAD69 (CL  $<32^\circ\text{S}$   $<\pm 2\text{m}$ ), Chua, GRS67 modified  
 721 SAD69 (CL  $>32^\circ\text{S}$   $<36^\circ\text{S}$   $<\pm 2\text{m}$ ), Chua, GRS67 modified  
 722 SAD69 (CL  $>36^\circ\text{S}$   $<43.5^\circ\text{S}$   $<\pm 4\text{m}$ ), Chua, GRS67 modified  
 715 Easter Island 1967 (CL  $<\pm 25\text{m}$ ), Easter Island, Hayford/Int.  
 716 Hito XVIII 1963 (CL  $<\pm 25\text{m}$ ), Tierra del Fuego, Hayford/Int.  
 717 PSAD56 (CL  $<26^\circ\text{S}$   $<\pm 10\text{m}$ ), La Canoa, Hayford/Int.  
 718 PSAD56 (CL  $>26^\circ\text{S}$   $<36^\circ\text{S}$   $<\pm 10\text{m}$ ), La Canoa, Hayford/Int.  
 719 PSAD56 (CL  $>36^\circ\text{S}$   $<43.5^\circ\text{S}$   $<\pm 10\text{m}$ ), La Canoa, Hayford/Int.  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Colombia (CO)

### Coordinate Systems

3 UTM coordinates (northern hemisphere)

60 UTM coordinates (southern hemisphere)  
 665 Colombia MAGNA-SIRGAS Far West Zone  
 666 Colombia MAGNA-SIRGAS West Zone  
 667 Colombia MAGNA-SIRGAS Bogota Zone  
 668 Colombia MAGNA-SIRGAS East Central Zone  
 669 Colombia MAGNA-SIRGAS East Zone  
 697 Colombia Bogota 1975 West Zone  
 698 Colombia Bogota 1975 Bogota Zone  
 699 Colombia Bogota 1975 East Central Zone  
 700 Colombia Bogota 1975 East Zone  
 701 Geographic Coordinates (Bogota) [deg]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 355 MAGNA-SIRGAS (CO  $<\pm 1$ m), geocentric, GRS80  
 356 Bogota 1975 (CO  $<\pm 6$ m), Bogota Observatory, Hayford/Int.  
 357 SAD69 (CO  $<\pm 6$ m), Chua, GRS67(2)  
 358 PSAD56 (CO  $<\pm 15$ m), La Canoa, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### French Guiana (GF)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 34 Geographic coordinates (Greenwich) [gon]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

157 RGFG95 (GF), geocentric, GRS80  
 158 CSG1967 (GF), Diane à Kourou, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### South Georgia / Sandwich Islands (GS)

##### Coordinate Systems

722 South Georgia / Sandwich Islands Lambert coord.  
 60 UTM coordinates (southern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

583 South Georgia 1968 (GS  $<\pm 25$ m), ISTS061, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

## Uruguay (UR)

### Coordinate Systems

- 60 UTM coordinates (southern hemisphere)
- 34 Geographic coordinates (Greenwich) [gon]
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 182 SIRGAS (South America =WGS84=), geocentric, GRS80
- 183 YACARE (UR), Yacare, Hayford/Int.
- 184 SAD69 (UR  $<\pm 10\text{m}$ ), Chua, GRS67(2)
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

## Venezuela (VE)

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 60 UTM coordinates (southern hemisphere)
- 903 Venezuela ICN Regional coordinates
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 691 REGVEN (VE  $<\pm 1\text{m}$ ), geozentic, GRS80
- 689 SAD69 (VE  $<\pm 6\text{m}$ ), Chua, GRS67 modifiert
- 688 PSAD56 (VE  $<\pm 10\text{m}$ ), La Canoa, Hayford/Int.
- 690 La Canoa (VE  $<\pm 3\text{m}$ ), La Canoa, Hayford/Int.
- 692 La Canoa (VE NTV2 canoa\_wgs84  $<\pm 2\text{m}$ ), La Canoa, Hayford/Int.
- 693 WGS84 (VE NTV2 canoa\_wgs84  $<\pm 2\text{m}$ ), geozentrisch, WGS84
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

## Multinational Coordinate Systems

### Coordinate Systems

- 581 South America Lambert Conformal Conic coord.
- 580 South America Albers Equal Area coordinates
- 3 UTM coordinates (northern hemisphere)
- 60 UTM coordinates (southern hemisphere)
- 51 UTMref (MGRS) (Meter grid mesh)
- 33 Geographic coordinates (Greenwich) [sec]
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 182 SIRGAS (South America =WGS84=), geocentric, GRS80
- 310 SIRGAS2000 (South America  $<\pm 1\text{m}$ ), geocentric, GRS80
- 584 SIRGAS1995 (South America  $<\pm 1\text{m}$ ), geocentric, GRS80
- 264 SAD69 (South America), Chua, GRS67(2)



585 PSAD56 (South America  $\leq \pm 30\text{m}$ ), La Canoa, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 192 WGS72BE (Worldwide), geocentric, WGS72  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

--- Asian continent -----

Afghanistan (AF)

Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

Reference Systems

10 WGS84 (Worldwide GPS), geocentric, WGS84  
 91 Herat North (AF), Herat North, Hayford/Int.  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

Armenia (AM)

Coordinate Systems

716 Armenia ARM\_PCS/GCS/GKz8 Transverse Mercator  
 717 CS63 Zone A1 Transverse Mercator coordinates  
 718 CS63 Zone A2 Transverse Mercator coordinates  
 719 CS63 Zone A3 Transverse Mercator coordinates  
 866 CS63 Zone A4 Transverse Mercator coordinates  
 4 Gauss-Krueger (6 degrees wide strips)  
 2 Gauss-Krueger coord. (3 degrees wide strips)  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

Reference Systems

435 Pulkovo1942 (EU-E/AS[FSU] 2008  $\leq \pm 3\text{m}$ ), Pulkovo, Krassowsky  
 434 S42/2001 (EU-E/AS[FSU]  $\leq \pm 4\text{m}$ ), Pulkovo, Krassowsky  
 103 S42/1993 (EU-E/AS[FSU]  $\leq \pm 4.5\text{m}$ ), Pulkovo, Krassowsky  
 104 S42/3Par. (EU-E/AS[FSU]), Pulkovo, Krassowsky  
 3 S42/83 (EU-E/AS[FSU] 1990  $\leq \pm 3\text{m}$ ), Pulkovo, Krassowsky  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

Azerbaijan (AZ)

Coordinate Systems

719 CS63 Zone A3 Transverse Mercator coordinates  
 866 CS63 Zone A4 Transverse Mercator coordinates

4 Gauss-Krueger (6 degrees wide strips)  
 2 Gauss-Krueger coord. (3 degrees wide strips)  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 435 Pulkovo1942 (EU-E/AS[FSU] 2008 <±3m), Pulkovo, Krassowsky  
 434 S42/2001 (EU-E/AS[FSU] <±4m), Pulkovo, Krassowsky  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Bangladesh (BD)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 445 BTM Bangladesh Transverse Mercator coordinates  
 446 India zone IIb (Bangladesh) Lambert coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

550 Gulshan 303 (BD), Dhaka, Everest 1830/1937  
 297 Kalianpur 1880 (IN,BD), Kalianpur, Everest 1830/1880  
 298 Kalianpur 1937 (IN,BD), Kalianpur, Everest 1830/1937  
 300 Kalianpur 1975 (IN,BD), Kalianpur, Everest 1830/1975  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### China (CN)

##### Coordinate Systems

655 Chinese Gauss-Krueger CM75E-135E (3 degrees strips)  
 656 Chinese Gauss-Krueger CM75E-135E (6 degrees strips)  
 3 UTM coordinates (northern hemisphere)  
 975 Hong Kong Transverse Mercator Grid coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

334 CGCS2000 (CN), geocentric, CGCS2000  
 335 Beijing1954 (CN), Pulkovo, Krassowsky  
 336 Beijing1954 (CN, Yellow Sea), Pulkovo, Krassowsky  
 337 Beijing1954 (CN, South China Sea), Pulkovo, Krassowsky  
 338 Beijing1954 (CN, Tarim Basin), Pulkovo, Krassowsky  
 339 Beijing1954 (CN, Bei Bu Basin), Pulkovo, Krassowsky  
 340 Beijing1954 (CN, Ordos Basin), Pulkovo, Krassowsky  
 349 Beijing1954 (CN no\_defs), Pulkovo, Krassowsky

341 New Beijing (CN no\_defs), Pulkovo, Krassowsky  
 342 Xian1980 (CN no\_defs), Xian Observatory, IAG 1975  
 760 Hong Kong 1980 (CN), Kowloon, Hayford/Int.  
 759 Hong Kong 1963 (CN), Kowloon, Clarke 1858  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Georgia (GE)

##### Coordinate Systems

717 CS63 Zone A1 Transverse Mercator coordinates  
 718 CS63 Zone A2 Transverse Mercator coordinates  
 719 CS63 Zone A3 Transverse Mercator coordinates  
 866 CS63 Zone A4 Transverse Mercator coordinates  
 4 Gauss-Krueger (6 degrees wide strips)  
 2 Gauss-Krueger coord. (3 degrees wide strips)  
 3 UTM coordinates (northern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

435 Pulkovo1942 (EU-E/AS[FSU] 2008 <±3m), Pulkovo, Krassowsky  
 434 S42/2001 (EU-E/AS[FSU] <±4m), Pulkovo, Krassowsky  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### India (IN)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 639 Indian Lambert Zone 0 coordinates  
 640 Indian Lambert Zone I coordinates  
 641 Indian Lambert Zone IIa coordinates  
 642 Indian Lambert Zone IIb coordinates  
 643 Indian Lambert Zone III coordinates  
 644 Indian Lambert Zone IV coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

297 Kalianpur 1880 (IN,BD), Kalianpur, Everest 1830/1880  
 298 Kalianpur 1937 (IN,BD), Kalianpur, Everest 1830/1937  
 299 Kalianpur 1962 (IN), Kalianpur, Everest 1830/1962  
 300 Kalianpur 1975 (IN,BD), Kalianpur, Everest 1830/1975  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

#### Japan (JP)

## Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 447 Japan Plane Rectangular CS I Mercator coordinates
- 448 Japan Plane Rectangular CS II Mercator coordinates
- 449 Japan Plane Rectangular CS III Mercator coordinates
- 450 Japan Plane Rectangular CS IV Mercator coordinates
- 456 Japan Plane Rectangular CS X Mercator coordinates
- 451 Japan Plane Rectangular CS V Mercator coordinates
- 452 Japan Plane Rectangular CS VI Mercator coordinates
- 453 Japan Plane Rectangular CS VII Mercator coordinates
- 454 Japan Plane Rectangular CS VIII Mercator coordinates
- 455 Japan Plane Rectangular CS IX Mercator coordinates
- 457 Japan Plane Rectangular CS XI Mercator coordinates
- 458 Japan Plane Rectangular CS XII Mercator coordinates
- 459 Japan Plane Rectangular CS XIII Mercator coordinates
- 460 Japan Plane Rectangular CS XIV Mercator coordinates
- 461 Japan Plane Rectangular CS XV Mercator coordinates
- 462 Japan Plane Rectangular CS XVI Mercator coordinates
- 463 Japan Plane Rectangular CS XVII Mercator coordinates
- 464 Japan Plane Rectangular CS XVIII Mercator coordinates
- 465 Japan Plane Rectangular CS XIX Mercator coordinates
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

## Reference Systems

- 93 JGD2000 (JP 2000  $<\pm 1\text{m}$ ), geocentric, GRS80
- 92 JGD2000 (JP 1994  $<\pm 1\text{m}$ ), geocentric, GRS80
- 728 JGD2000 (JP 2011 NTv2 touhoku...2011), geocentric, GRS80
- 729 JGD2011 (JP 2011 NTv2 touhoku...2011), geocentric, GRS80
- 726 Tokyo (JP 2003 NTv2 tky2jgd), Nikon, Bessel
- 727 JGD2000 (JP 2003 NTv2 tky2jgd), geocentric, GRS80
- 789 JGD2011 (JP 1994  $<\pm 1\text{m}$ ), geocentric, GRS80
- 94 Tokyo (JP 1993  $<\pm 5\text{m}$ ), Nikon, Bessel
- 95 Tokyo (JP 1996  $<\pm 3\text{m}$ ), Nikon, Bessel
- 96 Tokyo (JP 1997  $<\pm 3\text{m}$ ), Nikon, Bessel
- 97 Tokyo (JP Okinawa  $<\pm 15\text{m}$ ), Nikon, Bessel
- 98 Tokyo (JP Okinawa KR  $<\pm 15\text{m}$ ), Nikon, Bessel
- 99 Markus Isl. 1952 (JP  $<\pm 25\text{m}$ ), Astron. Stat., Hayford/Int.
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## North-Korea (KP)

### Coordinate Systems

- 872 Korea West Belt Transverse Mercator coordinates
- 873 Korea Central Belt Transverse Mercator coordinates
- 874 Korea East Belt Transverse Mercator coordinates
- 875 Korea East Sea Belt Transverse Mercator coordinates
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]

500 Cartesian coordinates

#### Reference Systems

616 Tokyo 1892 (KR,KP  $<\pm 10\text{m}$ ), Nikon-Keido-Genten, Bessel

10 WGS84 (Worldwide GPS), geocentric, WGS84

208 Source Reference System in an arbitrary NTV2 file

209 Target Reference System in an arbitrary NTV2 file

#### Pakistan (PK)

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)

639 Indian Lambert Zone 0 coordinates

640 Indian Lambert Zone I coordinates

641 Indian Lambert Zone IIa coordinates

6 Geographic coordinates (Greenwich) [deg]

32 Geographic coordinates (Greenwich) [deg,min]

1 Geographic coordinates (Greenwich) [deg,min,sec]

500 Cartesian coordinates

##### Reference Systems

297 Kalianpur 1880 (IN,BD), Kalianpur, Everest 1830/1880

299 Kalianpur 1962 (IN), Kalianpur, Everest 1830/1962

10 WGS84 (Worldwide GPS), geocentric, WGS84

11 WGS72 (Worldwide), geocentric, WGS72

208 Source Reference System in an arbitrary NTV2 file

209 Target Reference System in an arbitrary NTV2 file

#### South-Korea (KR)

##### Coordinate Systems

867 Korea West Belt 2010 Transverse Mercator coordinates

868 Korea Central Belt 2010 Transverse Mercator coordinates

869 Korea East Belt 2010 Transverse Mercator coordinates

870 Korea East Sea Belt 2010 Transverse Mercator coordinates

871 Korea Unified Belt Transverse Mercator coordinates

872 Korea West Belt Transverse Mercator coordinates

873 Korea Central Belt Transverse Mercator coordinates

874 Korea East Belt Transverse Mercator coordinates

875 Korea East Sea Belt Transverse Mercator coordinates

876 Korea Central Belt Jeju Transverse Mercator coordinates

877 Korea Modified West Belt Transverse Mercator coordinates

878 Korea Modified Central Belt Transverse Mercator coordinates

879 Korea Modified Central Belt Jeju Transverse Mercator coord.

880 Korea Modified East Belt Transverse Mercator coordinates

881 Korea Modified East Sea Belt Transverse Mercator coord.

3 UTM coordinates (northern hemisphere)

6 Geographic coordinates (Greenwich) [deg]

32 Geographic coordinates (Greenwich) [deg,min]

1 Geographic coordinates (Greenwich) [deg,min,sec]

500 Cartesian coordinates

##### Reference Systems

613 Korea 2000 (KR  $<\pm 1\text{m}$ ), geocentric, GRS80

614 Korean 1995 (KR  $<\pm 2\text{m}$ ), geocentric, WGS84

615 Korean 1985 (KR  $<\pm 1\text{m}$ ), Suwon, Bessel

616 Tokyo 1892 (KR,KP  $<\pm 10\text{m}$ ), Nikon-Keido-Genten, Bessel

617 Tokyo 1918 (KR  $<\pm 2\text{m}$ ), Nikon-Keido-Genten, Bessel

10 WGS84 (Worldwide GPS), geocentric, WGS84

- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

#### Sri Lanka (LK)

##### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
  - 635 Sri Lanka Kandawala Transverse Mercator
  - 636 Sri Lanka SL\_GRID\_99 Transverse Mercator
  - 6 Geographic coordinates (Greenwich) [deg]
  - 32 Geographic coordinates (Greenwich) [deg,min]
  - 1 Geographic coordinates (Greenwich) [deg,min,sec]
  - 500 Cartesian coordinates
- ##### Reference Systems
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
  - 294 Kandawala (LK 3Param.), Kandawala, Everest 1830/1937
  - 295 Kandawala (LK 7Param.), Kandawala, Everest 1830/1937
  - 296 SLD99 (LK), Diyatalawa, Everest 1830/1937
  - 208 Source Reference System in an arbitrary NTv2 file
  - 209 Target Reference System in an arbitrary NTv2 file

#### Uzbekistan (UZ)

##### Coordinate Systems

- 4 Gauss-Krueger (6 degrees wide strips)
  - 3 UTM coordinates (northern hemisphere)
  - 6 Geographic coordinates (Greenwich) [deg]
  - 32 Geographic coordinates (Greenwich) [deg,min]
  - 1 Geographic coordinates (Greenwich) [deg,min,sec]
  - 500 Cartesian coordinates
- ##### Reference Systems
- 100 SC42 / S42 (UZ), Kitab Observatory, Krassowsky
  - 101 SC42 / S42 (KZ+UZ?  $<\pm 2\text{m}$ ), Pulkovo, Krassowsky
  - 102 SC42 / S42 (KZ+UZ?  $<\pm 25\text{m}$ ), Pulkovo, Krassowsky
  - 10 WGS84 (Worldwide GPS), geocentric, WGS84
  - 11 WGS72 (Worldwide), geocentric, WGS72
  - 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90
  - 208 Source Reference System in an arbitrary NTv2 file
  - 209 Target Reference System in an arbitrary NTv2 file

#### Vietnam (VN)

##### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
  - 524 Vietnamese VN2000 coordinates (6 degrees strips)
  - 523 Vietnamese VN2000 coordinates (3 degrees strips)
  - 526 Vietnamese GK106NE Gauss-Krueger coordinates
  - 525 Vietnamese TM106NE Transverse Mercator coord.
  - 4 Gauss-Krueger (6 degrees wide strips)
  - 2 Gauss-Krueger coord. (3 degrees wide strips)
  - 6 Geographic coordinates (Greenwich) [deg]
  - 32 Geographic coordinates (Greenwich) [deg,min]
  - 1 Geographic coordinates (Greenwich) [deg,min,sec]
  - 500 Cartesian coordinates
- ##### Reference Systems
- 188 VN2000 (VN), Hanoi, WGS84
  - 189 Hanoi1972 (VN  $<\pm 5\text{m}$ ), Pulkovo, Krassowsky

190 Indian1960 (VN, onshore), Kalianpur, Everest 1830/1937  
 191 Indian1960 (VN, Con Son Isl.), Kalianpur, Everest 1830/1937  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 192 WGS72BE (Worldwide), geocentric, WGS72  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

## Multinational Coordinate Systems

### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 60 UTM coordinates (southern hemisphere)  
 51 UTMref (MGRS) (Meter grid mesh)  
 2 Gauss-Krueger coord. (3 degrees wide strips)  
 4 Gauss-Krueger (6 degrees wide strips)  
 33 Geographic coordinates (Greenwich) [sec]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 192 WGS72BE (Worldwide), geocentric, WGS72  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 611 Pulkovo1995 (EU-E/AS[FSU] 2008 <±1m), Pulkovo, Krassowsky  
 435 Pulkovo1942 (EU-E/AS[FSU] 2008 <±3m), Pulkovo, Krassowsky  
 351 Pulkovo1995 (EU-E/AS[FSU] no\_defs), Pulkovo, Krassowsky  
 350 Pulkovo1942 (EU-E/AS[FSU] no\_defs), Pulkovo, Krassowsky  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

--- Near East and Middle East -----

## Arabian Peninsula ((AE,BH,KW,OM,SA)

### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 742 Saudi Arabian Aramco Lambert coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

306 Nahrwan 1967 (AE,AZ <±5m), South base, Clarke RGS  
 224 Nahrwan 1967 (AE <±25m), South base, Clarke RGS  
 222 Nahrwan 1967 (OM <±25m), South base, Clarke RGS  
 223 Nahrwan 1967 (SA <±20m), South base, Clarke RGS  
 307 Ain el Abd 1970 (SA <±10m), Ain el Abd, Hayford/Int.  
 308 Ain el Abd 1970 (BA <±25m), Ain el Abd, Hayford/Int.  
 309 Ain el Abd 1970 (KW <±1m), Ain el Abd, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

## Israel (IL)

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 533 Israelian ITM (new) Transverse Mercator coordinates
- 532 Israelian ICS (old) Grid Cassini-Soldner coordinates
- 531 Israelian Palestine Grid Cassini-Soldner coord.
- 530 Israelian Palestine Belt Transv. Mercator coord.
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 201 Israel New Datum 1989 (IL  $<\pm 2\text{m}$ ), Urim 3Par, GRS80
- 202 Israel Old Datum 1923 (IL  $<\pm 10\text{m}$ ), Jerus. 3Par, Clarke Ben.
- 203 Israel New Datum 1989 (IL), Urim 7Par., GRS80
- 204 Israel Old Datum 1923 (IL), Jerusalem 7Par, Clarke Ben.
- 205 ED50 (IL onshore), U.S. DMA 1993, Hayford/Int.
- 206 ED50 (IL offshore), TPAO 1987, Hayford/Int.
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

## Lebanon (LB)

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 978 Syrian Levant Stereographic Coordinates (SY/LB)
- 979 Syrian Lambert Coordinates (SY/LB)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 782 Deir ez Zor (LB  $<\pm 1\text{m}$ ), Deir, Clarke IGN
- 771 Deir ez Zor (SY/LB  $<\pm 5\text{m}$ ), Deir, Clarke IGN
- 773 Deir Ez Zor (LB NTV2 LB\_DeirEzZor  $<\pm 0.5\text{m}$ ), Deir, Clarke IGN
- 772 WGS84 (LB NTV2 LB\_DeirEzZor  $<\pm 0.5\text{m}$ ), geocentric, WGS84
- 774 Bekaa Valley 1920 (LB), Bekaa Valley, Clarke RGS
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

## Syria (SY)

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 978 Syrian Levant Stereographic Coordinates (SY/LB)
- 979 Syrian Lambert Coordinates (SY/LB)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 771 Deir ez Zor (SY/LB  $<\pm 5\text{m}$ ), Deir, Clarke IGN



10 WGS84 (Worldwide GPS), geocentric, WGS84  
208 Source Reference System in an arbitrary NTv2 file  
209 Target Reference System in an arbitrary NTv2 file

#### Multinational Coordinate Systems

##### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
60 UTM coordinates (southern hemisphere)  
51 UTMref (MGRS) (Meter grid mesh)  
33 Geographic coordinates (Greenwich) [sec]  
6 Geographic coordinates (Greenwich) [deg]  
32 Geographic coordinates (Greenwich) [deg,min]  
1 Geographic coordinates (Greenwich) [deg,min,sec]  
500 Cartesian coordinates

##### Reference Systems

10 WGS84 (Worldwide GPS), geocentric, WGS84  
11 WGS72 (Worldwide), geocentric, WGS72  
192 WGS72BE (Worldwide), geocentric, WGS72  
208 Source Reference System in an arbitrary NTv2 file  
209 Target Reference System in an arbitrary NTv2 file

--- African continent -----

#### French Mayotte (YT)

##### Coordinate Systems

60 UTM coordinates (southern hemisphere)  
34 Geographic coordinates (Greenwich) [gon]  
6 Geographic coordinates (Greenwich) [deg]  
32 Geographic coordinates (Greenwich) [deg,min]  
1 Geographic coordinates (Greenwich) [deg,min,sec]  
500 Cartesian coordinates

##### Reference Systems

146 RGM04 (YT), geocentric, GRS80  
147 Combani1950 (YT), Base Combani I, Hayford/Int.  
148 Cadastre1997 (YT), Base Combani I, Hayford/Int.  
10 WGS84 (Worldwide GPS), geocentric, WGS84  
208 Source Reference System in an arbitrary NTv2 file  
209 Target Reference System in an arbitrary NTv2 file

#### French Réunion (RE)

##### Coordinate Systems

60 UTM coordinates (southern hemisphere)  
503 French Réunion Gauss-Laborde coordinates  
34 Geographic coordinates (Greenwich) [gon]  
6 Geographic coordinates (Greenwich) [deg]  
32 Geographic coordinates (Greenwich) [deg,min]  
1 Geographic coordinates (Greenwich) [deg,min,sec]  
500 Cartesian coordinates

##### Reference Systems

151 RGR92 (RE), geocentric, GRS80  
152 PdN (RE), Piton des Neiges, Hayford/Int.  
10 WGS84 (Worldwide GPS), geocentric, WGS84  
208 Source Reference System in an arbitrary NTv2 file  
209 Target Reference System in an arbitrary NTv2 file

## Mauritius (MU)

### Coordinate Systems

- 883 Mauritius Grid 2012 LGM2012 Lambert (2SP) coordinates
- 882 Mauritius Grid 1994 Le Pouce Lambert (1SP) coordinates
- 884 Rodrigues Transversal Mercator coordinates
- 60 UTM coordinates (southern hemisphere)
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 618 GDM 2008 (MU  $<\pm 1\text{m}$ ), geocentric, WGS84
- 619 Le Pouce 1934 (MU 7Par 2008  $<\pm 1\text{m}$ ), Le Pouce, Clarke RGS
- 620 Le Pouce 1934 (MU 3Par 2008  $<\pm 1\text{m}$ ), Le Pouce, Clarke RGS
- 621 Le Pouce 1934 (MU 3Par 1994  $<\pm 2\text{m}$ ), Le Pouce, Clarke RGS
- 622 Rodrigues (MU no\_defs), Le Pouce, Clarke RGS
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

## Morocco (MA)

### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 738 Moroccan Lambert 1SP Zone 1 (Nord Maroc)
- 739 Moroccan Lambert 1SP Zone 2 (Sud Maroc)
- 740 Moroccan Lambert 1SP Zone 3 (Sahara Nord)
- 741 Moroccan Lambert 1SP Zone 4 (Sahara Sud)
- 614 Moroccan Lambert 2SP Zone I (Nord Maroc)
- 615 Moroccan Lambert 2SP Zone II (Sud Maroc, Agadir)
- 616 Moroccan Lambert 2SP Zone III (Sahara Nord, La'youn)
- 617 Moroccan Lambert 2SP Zone IV ((Sahara Sud, Ad-Dakhla)
- 613 Moroccan Lambert Impetus coordinates
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 275 Merchich (MA), Merchich, Clarke IGN
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

## South Afrika (ZA)

### Coordinate Systems

- 60 UTM coordinates (southern hemisphere)
- 626 South African Lo17 Transverse Mercator
- 627 South African Lo19 Transverse Mercator
- 628 South African Lo21 Transverse Mercator
- 629 South African Lo23 Transverse Mercator
- 630 South African Lo25 Transverse Mercator
- 631 South African Lo27 Transverse Mercator
- 632 South African Lo29 Transverse Mercator

633 South African Lo31 Transverse Mercator  
 634 South African Lo33 Transverse Mercator  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 292 Hartebeesthoek94 (ZA), geocentric, WGS84  
 293 Cape (ZA), Buffelsfontein, Clarke Arc 1880  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

## Multinational Coordinate Systems

### Coordinate Systems

573 Africa Albers Equal Area Conic coordinates  
 3 UTM coordinates (northern hemisphere)  
 60 UTM coordinates (southern hemisphere)  
 51 UTMref (MGRS) (Meter grid mesh)  
 33 Geographic coordinates (Greenwich) [sec]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 192 WGS72BE (Worldwide), geocentric, WGS72  
 107 PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90  
 208 Source Reference System in an arbitrary NTV2 file  
 209 Target Reference System in an arbitrary NTV2 file

--- Australian continent -----

## Australia (AU) General

### Coordinate Systems

902 MGA2020 (UTM) - Map Grid of Australia (AU) Transv. Merc.  
 587 MGA94 (UTM) - Map Grid of Australia (AU) Transv. Merc.  
 588 AMG (UTM) - Australian Map Grid (AU) Transv. Mercator  
 584 ANG - Australian National Grid (yards) coord.  
 441 PSMA (AU) Lambert Conformal Conic coordinates  
 746 GALCC (AU) Lambert Conformal Conic coordinates  
 748 AUS (AU) Albers Equal Area coordinates  
 749 ACRESLC (AU) Lambert Conformal Conic coordinates  
 60 UTM coordinates (southern hemisphere)  
 51 UTMref (MGRS) (Meter grid mesh)  
 33 Geographic coordinates (Greenwich) [sec]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

680 GDA2020 (AU <±1m), geocentric, GRS80  
 742 GDA94 (AU <±1m), geocentric, GRS80

676 GDA94 (AU NTv2 GDA94\_GDA2020\_C  $\leq \pm 10\text{cm}$ ), geoc., GRS80  
 677 GDA2020 (AU NTv2 GDA94\_GDA2020\_C  $\leq \pm 10\text{cm}$ ), geoc., GRS80  
 678 GDA94 (AU NTv2 GDA94\_GDA2020\_CD  $\leq \pm 10\text{cm}$ ), geoc., GRS80  
 679 GDA2020 (AU NTv2 GDA94\_GDA2020\_CD  $\leq \pm 10\text{cm}$ ), geoc., GRS80  
 637 GDA2020 (AU fixed for GPS epoch 2017), geocentric, GRS80  
 638 GDA2020 (AU fixed for GPS epoch 2018), geocentric, GRS80  
 639 GDA2020 (AU fixed for GPS epoch 2019), geocentric, GRS80  
 640 GDA2020 (AU fixed for GPS epoch 2020), geocentric, GRS80  
 168 AGD66 (AU NTv2 A66\_NAT  $\leq \pm 0.5\text{m}$ ), Johnston, ANS  
 169 GDA94 (AU NTv2 A66\_NAT  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 170 AGD84 (AU NTv2 A84\_NAT  $\leq \pm 0.5\text{m}$ ), Johnston, ANS  
 171 GDA94 (AU NTv2 A84\_NAT  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 83 GDA94 (AU =WGS84=  $\leq \pm 5\text{m}$ ), geocentric, GRS80  
 84 AGD84 (AU  $\leq \pm 1\text{m}$ ), Johnston, ANS  
 85 AGD84 Higgins (AU  $\leq \pm 4\text{m}$ ), Johnston, ANS  
 86 AGD66 (AU  $\leq \pm 1\text{m}$ ), Johnston, ANS  
 267 ANG Australian National Grid (AU  $\leq \pm 80\text{m}$ ), 3P, Clarke 1858  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Australia Capital Territory (AU-ACT)

##### Coordinate Systems

750 ACT SGC (AU) Transverse Mercator coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

637 GDA2020 (AU fixed for GPS epoch 2017), geocentric, GRS80  
 638 GDA2020 (AU fixed for GPS epoch 2018), geocentric, GRS80  
 639 GDA2020 (AU fixed for GPS epoch 2019), geocentric, GRS80  
 640 GDA2020 (AU fixed for GPS epoch 2020), geocentric, GRS80  
 168 AGD66 (AU NTv2 A66\_NAT  $\leq \pm 0.5\text{m}$ ), Johnston, ANS  
 169 GDA94 (AU NTv2 A66\_NAT  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 170 AGD84 (AU NTv2 A84\_NAT  $\leq \pm 0.5\text{m}$ ), Johnston, ANS  
 171 GDA94 (AU NTv2 A84\_NAT  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 742 GDA94 (AU  $\leq \pm 1\text{m}$ ), geocentric, GRS80  
 83 GDA94 (AU =WGS84=  $\leq \pm 5\text{m}$ ), geocentric, GRS80  
 84 AGD84 (AU  $\leq \pm 1\text{m}$ ), Johnston, ANS  
 86 AGD66 (AU  $\leq \pm 1\text{m}$ ), Johnston, ANS  
 87 AGD66 (AU-ACT), Johnston, ANS  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Australia Northern Territory (AU-NT)

##### Coordinate Systems

6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

637 GDA2020 (AU fixed for GPS epoch 2017), geocentric, GRS80  
 638 GDA2020 (AU fixed for GPS epoch 2018), geocentric, GRS80  
 639 GDA2020 (AU fixed for GPS epoch 2019), geocentric, GRS80  
 640 GDA2020 (AU fixed for GPS epoch 2020), geocentric, GRS80  
 168 AGD66 (AU NTv2 A66\_NAT  $\leq \pm 0.5\text{m}$ ), Johnston, ANS  
 169 GDA94 (AU NTv2 A66\_NAT  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 170 AGD84 (AU NTv2 A84\_NAT  $\leq \pm 0.5\text{m}$ ), Johnston, ANS  
 171 GDA94 (AU NTv2 A84\_NAT  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 90 AGD66 (AU-NT), Johnston, ANS  
 742 GDA94 (AU  $\leq \pm 1\text{m}$ ), geocentric, GRS80  
 83 GDA94 (AU =WGS84=  $\leq \pm 5\text{m}$ ), geocentric, GRS80  
 84 AGD84 (AU  $\leq \pm 1\text{m}$ ), Johnston, ANS  
 742 GDA94 (AU  $\leq \pm 1\text{m}$ ), geocentric, GRS80  
 86 AGD66 (AU  $\leq \pm 1\text{m}$ ), Johnston, ANS  
 87 AGD66 (AU-ACT), Johnston, ANS  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Australia New South Wales (AU-NSW)

##### Coordinate Systems

589 GDA (AU-NSW) Lambert Conformal Conic coordinates  
 591 ISG - Integrated Survey Grid (AU-NSW) coordinates  
 590 NSW (AU-NSW) Lambert Conformal Conic coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

637 GDA2020 (AU fixed for GPS epoch 2017), geocentric, GRS80  
 638 GDA2020 (AU fixed for GPS epoch 2018), geocentric, GRS80  
 639 GDA2020 (AU fixed for GPS epoch 2019), geocentric, GRS80  
 640 GDA2020 (AU fixed for GPS epoch 2020), geocentric, GRS80  
 168 AGD66 (AU NTv2 A66\_NAT  $\leq \pm 0.5\text{m}$ ), Johnston, ANS  
 169 GDA94 (AU NTv2 A66\_NAT  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 170 AGD84 (AU NTv2 A84\_NAT  $\leq \pm 0.5\text{m}$ ), Johnston, ANS  
 171 GDA94 (AU NTv2 A84\_NAT  $\leq \pm 0.5\text{m}$ ), geocentric, GRS80  
 89 AGD66 (AU-VIC/NSW), Johnston, ANS  
 742 GDA94 (AU  $\leq \pm 1\text{m}$ ), geocentric, GRS80  
 83 GDA94 (AU =WGS84=  $\leq \pm 5\text{m}$ ), geocentric, GRS80  
 84 AGD84 (AU  $\leq \pm 1\text{m}$ ), Johnston, ANS  
 86 AGD66 (AU  $\leq \pm 1\text{m}$ ), Johnston, ANS  
 87 AGD66 (AU-ACT), Johnston, ANS  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Australia South Australia (AU-SA)

##### Coordinate Systems

745 SA (AU) Lambert Conformal Conic coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

## Reference Systems

- 637 GDA2020 (AU fixed for GPS epoch 2017), geocentric, GRS80
- 638 GDA2020 (AU fixed for GPS epoch 2018), geocentric, GRS80
- 639 GDA2020 (AU fixed for GPS epoch 2019), geocentric, GRS80
- 640 GDA2020 (AU fixed for GPS epoch 2020), geocentric, GRS80
- 168 AGD66 (AU NTv2 A66\_NAT  $<\pm 0.5\text{m}$ ), Johnston, ANS
- 169 GDA94 (AU NTv2 A66\_NAT  $<\pm 0.5\text{m}$ ), geocentric, GRS80
- 170 AGD84 (AU NTv2 A84\_NAT  $<\pm 0.5\text{m}$ ), Johnston, ANS
- 171 GDA94 (AU NTv2 A84\_NAT  $<\pm 0.5\text{m}$ ), geocentric, GRS80
- 742 GDA94 (AU  $<\pm 1\text{m}$ ), geocentric, GRS80
- 83 GDA94 (AU =WGS84=  $<\pm 5\text{m}$ ), geocentric, GRS80
- 84 AGD84 (AU  $<\pm 1\text{m}$ ), Johnston, ANS
- 86 AGD66 (AU  $<\pm 1\text{m}$ ), Johnston, ANS
- 87 AGD66 (AU-ACT), Johnston, ANS
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## Australia Queensland (AU-QLD)

### Coordinate Systems

- 747 BCSG02 (AU) Transverse Mercator coordinates
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 637 GDA2020 (AU fixed for GPS epoch 2017), geocentric, GRS80
- 638 GDA2020 (AU fixed for GPS epoch 2018), geocentric, GRS80
- 639 GDA2020 (AU fixed for GPS epoch 2019), geocentric, GRS80
- 640 GDA2020 (AU fixed for GPS epoch 2020), geocentric, GRS80
- 168 AGD66 (AU NTv2 A66\_NAT  $<\pm 0.5\text{m}$ ), Johnston, ANS
- 169 GDA94 (AU NTv2 A66\_NAT  $<\pm 0.5\text{m}$ ), geocentric, GRS80
- 170 AGD84 (AU NTv2 A84\_NAT  $<\pm 0.5\text{m}$ ), Johnston, ANS
- 171 GDA94 (AU NTv2 A84\_NAT  $<\pm 0.5\text{m}$ ), geocentric, GRS80
- 83 GDA94 (AU =WGS84=  $<\pm 5\text{m}$ ), geocentric, GRS80
- 742 GDA94 (AU  $<\pm 1\text{m}$ ), geocentric, GRS80
- 84 AGD84 (AU  $<\pm 1\text{m}$ ), Johnston, ANS
- 86 AGD66 (AU  $<\pm 1\text{m}$ ), Johnston, ANS
- 87 AGD66 (AU-ACT), Johnston, ANS
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 208 Source Reference System in an arbitrary NTv2 file
- 209 Target Reference System in an arbitrary NTv2 file

## Australia Tasmania (AU-TAS)

### Coordinate Systems

- 585 ANG - Australian Nat. Grid (AU-TAS,yards) coord.
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 637 GDA2020 (AU fixed for GPS epoch 2017), geocentric, GRS80
- 638 GDA2020 (AU fixed for GPS epoch 2018), geocentric, GRS80
- 639 GDA2020 (AU fixed for GPS epoch 2019), geocentric, GRS80

640 GDA2020 (AU fixed for GPS epoch 2020), geocentric, GRS80  
 168 AGD66 (AU NTv2 A66\_NAT <±0.5m), Johnston, ANS  
 169 GDA94 (AU NTv2 A66\_NAT <±0.5m), geocentric, GRS80  
 170 AGD84 (AU NTv2 A84\_NAT <±0.5m), Johnston, ANS  
 171 GDA94 (AU NTv2 A84\_NAT <±0.5m), geocentric, GRS80  
 267 ANG Australian National Grid (AU <±80m), 3P, Clarke 1858  
 742 GDA94 (AU <±1m), geocentric, GRS80  
 83 GDA94 (AU =WGS84= <±5m), geocentric, GRS80  
 84 AGD84 (AU <±1m), Johnston, ANS  
 88 AGD66 (AU-TAS), Johnston, ANS  
 86 AGD66 (AU <±1m), Johnston, ANS  
 87 AGD66 (AU-ACT), Johnston, ANS  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Australia Victoria (AU-VIC)

##### Coordinate Systems

440 VICGRID94 (AU-VIC) Lambert Conformal Conic coord.  
 439 VICGRID66 (AU-VIC) Lambert Conformal Conic coord.  
 586 VICGRID-TM / Pseudo-AMG (AU-VIC) Transv. Merc.  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

637 GDA2020 (AU fixed for GPS epoch 2017), geocentric, GRS80  
 638 GDA2020 (AU fixed for GPS epoch 2018), geocentric, GRS80  
 639 GDA2020 (AU fixed for GPS epoch 2019), geocentric, GRS80  
 640 GDA2020 (AU fixed for GPS epoch 2020), geocentric, GRS80  
 168 AGD66 (AU NTv2 A66\_NAT <±0.5m), Johnston, ANS  
 169 GDA94 (AU NTv2 A66\_NAT <±0.5m), geocentric, GRS80  
 170 AGD84 (AU NTv2 A84\_NAT <±0.5m), Johnston, ANS  
 171 GDA94 (AU NTv2 A84\_NAT <±0.5m), geocentric, GRS80  
 742 GDA94 (AU <±1m), geocentric, GRS80  
 83 GDA94 (AU =WGS84= <±5m), geocentric, GRS80  
 84 AGD84 (AU <±1m), Johnston, ANS  
 86 AGD66 (AU <±1m), Johnston, ANS  
 87 AGD66 (AU-ACT), Johnston, ANS  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### Australia Western Australia (AU-WA)

##### Coordinate Systems

993 PCG2020 - Perth Coastal Grid (AU-WA) Transv. Mercator  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

##### Reference Systems

637 GDA2020 (AU fixed for GPS epoch 2017), geocentric, GRS80  
 638 GDA2020 (AU fixed for GPS epoch 2018), geocentric, GRS80  
 639 GDA2020 (AU fixed for GPS epoch 2019), geocentric, GRS80

640 GDA2020 (AU fixed for GPS epoch 2020), geocentric, GRS80  
 168 AGD66 (AU NTv2 A66\_NAT  $<\pm 0.5\text{m}$ ), Johnston, ANS  
 169 GDA94 (AU NTv2 A66\_NAT  $<\pm 0.5\text{m}$ ), geocentric, GRS80  
 170 AGD84 (AU NTv2 A84\_NAT  $<\pm 0.5\text{m}$ ), Johnston, ANS  
 171 GDA94 (AU NTv2 A84\_NAT  $<\pm 0.5\text{m}$ ), geocentric, GRS80  
 742 GDA94 (AU  $<\pm 1\text{m}$ ), geocentric, GRS80  
 83 GDA94 (AU =WGS84=  $<\pm 5\text{m}$ ), geocentric, GRS80  
 84 AGD84 (AU  $<\pm 1\text{m}$ ), Johnston, ANS  
 86 AGD66 (AU  $<\pm 1\text{m}$ ), Johnston, ANS  
 87 AGD66 (AU-ACT), Johnston, ANS  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## GPS Measurements - ITRS epochs

### Coordinate Systems

6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 587 MGA94 (UTM) - Map Grid of Australia (AU) Transv. Merc.  
 60 UTM coordinates (southern hemisphere)  
 6 Geographic coordinates (Greenwich) [deg]  
 500 Cartesian coordinates

### Reference Systems

641 GDA2020 (AU ITRS epoch 2020), GRS80  
 642 ITRS (AU GPS measurements epoch 2018), WGS84  
 643 ITRS14 (AU GPS measurements epoch 2014), WGS84  
 644 ITRS15 (AU GPS measurements epoch 2015), WGS84  
 645 ITRS16 (AU GPS measurements epoch 2016), WGS84  
 646 ITRS17 (AU GPS measurements epoch 2017), WGS84  
 647 ITRS18 (AU GPS measurements epoch 2018), WGS84  
 743 ITRS19 (AU GPS measurements epoch 2019), WGS84  
 744 ITRS20 (AU GPS measurements epoch 2020), WGS84  
 745 ITRS21 (AU GPS measurements epoch 2021), WGS84  
 746 ITRS22 (AU GPS measurements epoch 2022), WGS84  
 747 ITRS23 (AU GPS measurements epoch 2023), WGS84  
 800 ITRS24 (AU GPS measurements epoch 2024), WGS84  
 801 ITRS25 (AU GPS measurements epoch 2025), WGS84  
 637 GDA2020 (AU fixed for GPS epoch 2017), geocentric, GRS80  
 638 GDA2020 (AU fixed for GPS epoch 2018), geocentric, GRS80  
 639 GDA2020 (AU fixed for GPS epoch 2019), geocentric, GRS80  
 640 GDA2020 (AU fixed for GPS epoch 2020), geocentric, GRS80  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## New Zealand (NZ)

### Coordinate Systems

60 UTM coordinates (southern hemisphere)  
 508 New Zealand NZTM2000 Transverse Mercator coord.  
 509 New Zealand oi-CITM2000 Chatham Isl. TM coord.  
 761 New Zealand Circuit 2000 Chatham Isl. TM coord.  
 510 New Zealand oi-AKTM2000 Auckland Isl. TM coord.  
 511 New Zealand oi-CATM2000 Campbell Isl. TM coord.



512 New Zealand oi-AITM2000 Antipodes Isl. TM coord.  
 513 New Zealand oi-RITM2000 Raoul Isl. Transv. Merc. coord.  
 537 New Zealand mc-EDENTM2000 Transverse Mercator  
 538 New Zealand mc-PLENTM2000 Transverse Mercator  
 539 New Zealand mc-POVETM2000 Transverse Mercator  
 540 New Zealand mc-HAWKTM2000 Transverse Mercator  
 541 New Zealand mc-TARATM2000 Transverse Mercator  
 542 New Zealand mc-TUHITM2000 Transverse Mercator  
 543 New Zealand mc-WANGTM2000 Transverse Mercator  
 544 New Zealand mc-WAIRTM2000 Transverse Mercator  
 545 New Zealand mc-WELLTM2000 Transverse Mercator  
 546 New Zealand mc-COLLTM2000 Transverse Mercator  
 547 New Zealand mc-NELSTM2000 Transverse Mercator  
 548 New Zealand mc-KARATM2000 Transverse Mercator  
 549 New Zealand mc-BULLTM2000 Transverse Mercator  
 550 New Zealand mc-GREYTM2000 Transverse Mercator  
 551 New Zealand mc-AMURTM2000 Transverse Mercator  
 552 New Zealand mc-MARLTM2000 Transverse Mercator  
 553 New Zealand mc-HOKITM2000 Transverse Mercator  
 554 New Zealand mc-OKARTM2000 Transverse Mercator  
 555 New Zealand mc-JACKTM2000 Transverse Mercator  
 556 New Zealand mc-PEATM2000 Transverse Mercator  
 557 New Zealand mc-GAWLTM2000 Transverse Mercator  
 558 New Zealand mc-TIMATM2000 Transverse Mercator  
 559 New Zealand mc-LINDTM2000 Transverse Mercator  
 560 New Zealand mc-NICHTM2000 Transverse Mercator  
 561 New Zealand mc-YORKTM2000 Transverse Mercator  
 562 New Zealand mc-OBSETM2000 Transverse Mercator  
 563 New Zealand mc-TAIETM2000 Transverse Mercator  
 564 New Zealand mc-BLUFTM2000 Transverse Mercator  
 517 New Zealand NZCS2000 Contin. Shelf Lambert coord.  
 536 New Zealand DGLC2000 Darwin Glacier Lambert coord.  
 516 New Zealand CITM1979 Chatham Isl. Transv. Merc. coord.  
 514 New Zealand NIYG1949 North Island Transv. Merc. coord.  
 515 New Zealand SIYG1949 South Island Transv. Merc. coord.  
 973 New Zealand Mercator 41 coordinates  
 972 New Zealand NIWA Albers Equal Area coordinates  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 180 NZGD2000 (NZ), geocentric, GRS80  
 177 NZGD2000 (NZ NTv2 NZGD2KGR  $\leq \pm 0.5$ m), geocentric, GRS80  
 176 NZGD1949 (NZ NTv2 NZGD2KGR  $\leq \pm 0.5$ m), Papatahi, Hayford/Int.  
 181 RSRGD2000 (NZ, Ross Sea Reg.), geocentric, GRS80  
 179 CIGD1979 (NZ Chatham Isl.  $\leq \pm 2$ m), Astro, Hayford/Int.  
 213 CIGD1971 (NZ Chatham Isl.  $\leq \pm 15$ m), Astro, Hayford/Int.  
 178 NZGD1949 (NZ  $\leq \pm 4$ m 7Par), Papatahi, Hayford/Int.  
 212 NZGD1949 (NZ  $\leq \pm 5$ m, 3Par), Papatahi, Hayford/Int.  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Multinational Coordinate Systems

### Coordinate Systems

- 968 PDC (Pazific) Mercator coordinates
- 33 Geographic coordinates (Greenwich) [sec]
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 192 WGS72BE (Worldwide), geocentric, WGS72
- 449 NAD83(NSRS MA11) (US), geocentric, GRS80
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

--- Polynesia, Indonesia, Micronesia -----

## French Polynesia (PF)

### Coordinate Systems

- 60 UTM coordinates (southern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 565 RGPF (PF  $\pm 0.5\text{m}$ ), geocentric, GRS80
- 193 Tahiti52 (PF Tahiti  $\pm 10\text{m}$ ), Tahiti, Hayford/Int.
- 567 Tahiti79 (PF Tahiti  $\pm 1\text{m}$ ), Tahiti, Hayford/Int.
- 194 Tahaa54 (PF Tahaa  $\pm 1\text{m}$ ), Tahaa, Hayford/Int.
- 568 Fatulva72 (PF Fatu [H]iva  $\pm 2\text{m}$ ), Fatu Huku, Hayford/Int.
- 569 Moorea87 (PF Moorea  $\pm 1\text{m}$ ), Tahiti, Hayford/Int.
- 570 Maupiti83 (PF Maupiti  $\pm 1\text{m}$ ), Pitiahe, Hayford/Int.
- 566 IGN63 (PF Hiva Oa  $\pm 1\text{m}$ ), Atuona, Hayford/Int.
- 195 IGN72 (PF Nuku Hiva  $\pm 1\text{m}$ ), Taiohae, Hayford/Int.
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

## Guam (US-GU)

### Coordinate Systems

- 737 Guam Map Grid Transverse Mercator coordinates
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

### Reference Systems

- 449 NAD83(NSRS MA11) (US), geocentric, GRS80
- 472 NAD83(HARN) (US-GU NTV2 GUHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 473 NAD83 (US-GU NTV2 GUHPGN  $\pm 0.1\text{m}$ ), geocentric, GRS80
- 571 Guam1963 (US-GU  $\pm 3\text{m}$ ), Tagcha, Clarke

- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 11 WGS72 (Worldwide), geocentric, WGS72
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

#### Philippines (PH)

##### Coordinate Systems

- 3 UTM coordinates (northern hemisphere)
- 518 Philippines PTM zone I Transverse Mercator coord.
- 519 Philippines PTM zone II Transverse Mercator coord.
- 520 Philippines PTM zone III Transverse Mercator coord.
- 521 Philippines PTM zone IV Transverse Mercator coord.
- 522 Philippines PTM zone V Transverse Mercator coord.
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

##### Reference Systems

- 185 PRS92 (PH), Balanacan, Clarke
- 186 Luzon1911 (PH, excl. Mindanao  $<\pm 10\text{m}$ ), Balanacan, Clarke
- 187 Luzon1911 (PH, Mindanao  $<\pm 25\text{m}$ ), Balanacan, Clarke
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

#### Singapore (SG)

##### Coordinate Systems

- 654 Singapore SVY21 Transverse Mercator
- 744 Singapore Grid Cassini-Soldner coordinates
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

##### Reference Systems

- 552 Kertau 1968 (MY,SG), Kertau, Everest 1830/Mod.
- 553 SVY21 (SG), Base7, WGS84
- 10 WGS84 (Worldwide GPS), geocentric, WGS84
- 208 Source Reference System in an arbitrary NTV2 file
- 209 Target Reference System in an arbitrary NTV2 file

#### Taiwan (TW)

##### Coordinate Systems

- 891 Taiwan TM2 zone 119 Transverse Mercator coordinates
- 892 Taiwan TM2 zone 121 Transverse Mercator coordinates
- 3 UTM coordinates (northern hemisphere)
- 6 Geographic coordinates (Greenwich) [deg]
- 32 Geographic coordinates (Greenwich) [deg,min]
- 1 Geographic coordinates (Greenwich) [deg,min,sec]
- 500 Cartesian coordinates

##### Reference Systems

- 668 TWD97 (TW  $<\pm 1\text{m}$ ), geocentric, GRS80
- 669 TWD67 (TW), Hu Tzu Shan, GRS67 modified
- 670 Hu Tzu Shan 1950 (TW  $<\pm 15\text{m}$ ), Hu Tzu Shan, Hayford/Int.

10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

## Multinational Coordinate Systems

### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 60 UTM coordinates (southern hemisphere)  
 51 UTMref (MGRS) (Meter grid mesh)  
 33 Geographic coordinates (Greenwich) [sec]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

### Reference Systems

10 WGS84 (Worldwide GPS), geocentric, WGS84  
 11 WGS72 (Worldwide), geocentric, WGS72  
 192 WGS72BE (Worldwide), geocentric, WGS72  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

--- Worldwide systems -----

## International Coordinate Systems

### Coordinate Systems

3 UTM coordinates (northern hemisphere)  
 60 UTM coordinates (southern hemisphere)  
 661 UTMref (MGRS) (Centimeter grid mesh)  
 51 UTMref (MGRS) (Meter grid mesh)  
 662 UTMref (MGRS) (10 meter grid mesh)  
 663 UTMref (MGRS) (100 meter grid mesh)  
 664 UTMref (MGRS) (Kilometer grid mesh)  
 977 UTM Grid Coordinates (Meter grid mesh)  
 755 World Mercator coordinates  
 2 Gauss-Krueger coord. (3 degrees wide strips)  
 4 Gauss-Krueger (6 degrees wide strips)  
 504 Plate Carrée EquiRectangular coordinates  
 505 Gall Isographic coordinates  
 968 PDC (Pazific) Mercator coordinates  
 959 (Google) Plus Code / Open Location Code (8+7 Center)  
 960 (Google) Plus Code / Open Location Code (8+7 SW-Corner)  
 961 (Google) Plus Code / Open Location Code (8+2 Center)  
 962 (Google) Plus Code / Open Location Code (8+2 SW-Corner)  
 963 (Google) Plus Code / Open Location Code (2/4 Center)  
 964 (Google) Plus Code / Open Location Code (2/4 SW-Corner)  
 893 NAC-Code [(c) NAC Geographic Products Inc.]  
 98 GEOREF Code (Aircraft Navigation)  
 52 QTH Code (Maidenhead)  
 34 Geographic coordinates (Greenwich) [gon]  
 33 Geographic coordinates (Greenwich) [sec]  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates

## Reference Systems

10	WGS84 (Worldwide GPS), geocentric, WGS84
11	WGS72 (Worldwide), geocentric, WGS72
192	WGS72BE (Worldwide), geocentric, WGS72
107	PZ-90 Roßbach 2000 (Worldwide GLONASS), geoc., PZ-90
106	PZ-90 Roßbach 1996 (Worldwide GLONASS), geoc., PZ-90
105	PZ-90 Misra 1996 (Worldwide GLONASS), geoc., PZ-90
81	GRS80a Authalic Sphere (Worldwide), geocentric, Sphere
208	Source Reference System in an arbitrary NTV2 file
209	Target Reference System in an arbitrary NTV2 file

## Google/OSM World/Pixel/Tile Coordinates

### Coordinate Systems

582	Google Spherical Mercator coordinates
952	Google World Coordinates, Range 0-256
904	Google Pixel Coordinates Zoom Factor 0
905	Google Pixel Coordinates Zoom Factor 1
906	Google Pixel Coordinates Zoom Factor 2
907	Google Pixel Coordinates Zoom Factor 3
908	Google Pixel Coordinates Zoom Factor 4
909	Google Pixel Coordinates Zoom Factor 5
910	Google Pixel Coordinates Zoom Factor 6
911	Google Pixel Coordinates Zoom Factor 7
912	Google Pixel Coordinates Zoom Factor 8
913	Google Pixel Coordinates Zoom Factor 9
914	Google Pixel Coordinates Zoom Factor 10
915	Google Pixel Coordinates Zoom Factor 11
916	Google Pixel Coordinates Zoom Factor 12
917	Google Pixel Coordinates Zoom Factor 13
918	Google Pixel Coordinates Zoom Factor 14
919	Google Pixel Coordinates Zoom Factor 15
920	Google Pixel Coordinates Zoom Factor 16
921	Google Pixel Coordinates Zoom Factor 17
922	Google Pixel Coordinates Zoom Factor 18
923	Google Pixel Coordinates Zoom Factor 19
924	Google Pixel Coordinates Zoom Factor 20
925	Google Pixel Coordinates Zoom Factor 21
926	Google Pixel Coordinates Zoom Factor 22
927	Google Pixel Coordinates Zoom Factor 23
928	Google Tiles Coordinates Zoom Factor 0
929	Google Tiles Coordinates Zoom Factor 1
930	Google Tiles Coordinates Zoom Factor 2
931	Google Tiles Coordinates Zoom Factor 3
932	Google Tiles Coordinates Zoom Factor 4
933	Google Tiles Coordinates Zoom Factor 5
934	Google Tiles Coordinates Zoom Factor 6
935	Google Tiles Coordinates Zoom Factor 7
936	Google Tiles Coordinates Zoom Factor 8
937	Google Tiles Coordinates Zoom Factor 9
938	Google Tiles Coordinates Zoom Factor 10
939	Google Tiles Coordinates Zoom Factor 11
940	Google Tiles Coordinates Zoom Factor 12
941	Google Tiles Coordinates Zoom Factor 13
942	Google Tiles Coordinates Zoom Factor 14

943 Google Tiles Coordinates Zoom Factor 15  
 944 Google Tiles Coordinates Zoom Factor 16  
 945 Google Tiles Coordinates Zoom Factor 17  
 946 Google Tiles Coordinates Zoom Factor 18  
 947 Google Tiles Coordinates Zoom Factor 19  
 948 Google Tiles Coordinates Zoom Factor 20  
 949 Google Tiles Coordinates Zoom Factor 21  
 950 Google Tiles Coordinates Zoom Factor 22  
 951 Google Tiles Coordinates Zoom Factor 23  
 959 (Google) Plus Code / Open Location Code (8+7 Center)  
 960 (Google) Plus Code / Open Location Code (8+7 SW-Corner)  
 961 (Google) Plus Code / Open Location Code (8+2 Center)  
 962 (Google) Plus Code / Open Location Code (8+2 SW-Corner)  
 963 (Google) Plus Code / Open Location Code (2/4 Center)  
 964 (Google) Plus Code / Open Location Code (2/4 SW-Corner)  
 6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 500 Cartesian coordinates  
 Reference Systems  
 265 Google Spherical Mercator (weltweit), geocentric, WGS84  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### GPS Measurements - ITRS epochs

##### Coordinate Systems

6 Geographic coordinates (Greenwich) [deg]  
 32 Geographic coordinates (Greenwich) [deg,min]  
 1 Geographic coordinates (Greenwich) [deg,min,sec]  
 3 UTM coordinates (northern hemisphere)  
 60 UTM coordinates (southern hemisphere)  
 500 Cartesian coordinates

##### Reference Systems

712 ITRF2014 [WGS84 G1934] (worldwide), geocentric, WGS84  
 711 ITRF2008 [WGS84 G1762] (worldwide), geocentric, WGS84  
 710 ITRF2005 [WGS84 G1674] (worldwide), geocentric, WGS84  
 709 ITRF2000 [WGS84 G1150] (worldwide), geocentric, WGS84  
 708 ITRF90 [WGS84 G730] (worldwide), geocentric, WGS84  
 10 WGS84 (Worldwide GPS), geocentric, WGS84  
 208 Source Reference System in an arbitrary NTv2 file  
 209 Target Reference System in an arbitrary NTv2 file

#### --- User definitions -----

##### User-defined systems

##### Coordinate Systems

1000 First user-defined Coordinate System  
 (must be defined by function setUserCoordSys1())  
 1100 Second user-defined Coordinate System  
 (must be defined by function setUserCoordSys2())

##### Reference Systems

0 Standard Reference System  
 (see: Coordinate Systems / Standard RefSys)  
 1000 User-defined geodetic Reference System

(must be defined by function setuserrefsys())

- 1100 Without Reference System Transition on standard ellipsoids
  - 1150 Without Reference System Transition on user defined ellipsoids
  - 1200 Without Reference System Transition and Ellipsoid Transition
- [End of List]

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