

## International GPS Service Quick Reference Card

rev. 23 Aug 2001

The foundation of the IGS is a global network of over 200 permanent, continuously operating, geodetic-quality GPS tracking sites. The station data are archived at three Global Data Centers and five Regional Data Centers. Seven Analysis Centers regularly process the data and contribute products to an Analysis Center Coordinator, who produces the official IGS combined products. The Central Bureau is responsible for day-to-day management of the IGS consistent with policies set by the IGS' International Governing Board.

The IGS classic product set of satellite orbits, clocks, earth rotation parameters, and station positions is augmented by newer products born from IGS Working Groups and Pilot Projects: tropospheric zenith path delay, ionospheric grid total electron content, precise time transfer, International GLONASS Service pilot project, low-earth orbiters, real-time working group, and sea level & tide gauges.

The IGS reference frame coordinator determines site coordinates and velocities in the International Terrestrial Reference Frame (ITRF), and organizes the IGS contribution to ITRF.

This reference card provides information on accessing the IGS data and products, IGS informational email lists, and IGS publications. Please direct questions to the IGS Central Bureau:

Jet Propulsion Laboratory  
4800 Oak Grove Dr. MS 238-540  
Pasadena, CA 91109 USA

[igs@igs.jpl.nasa.gov](mailto:igs@igs.jpl.nasa.gov)

<http://igs.jpl.nasa.gov>

tel: +1 818 354 5434

fax: +1 818 393 6686

## IGS Tracking Station Data

*observation, navigation, and meteorological data files*

**Format:**

RINEX V2

**Defined at:**

<ftp://igs.jpl.nasa.gov/igs/data/format/rinex210.txt>

**Alternate format:**

Hatanaka compressed RINEX

**Translators at:**

<ftp://igs.jpl.nasa.gov/igs/software/compress>

**Global Data Center locations:**

<ftp://cddisa.gsfc.nasa.gov/gps/gpsdata/>

<ftp://lox.ucsd.edu/pub/rinex/>

[nav/](#)

[met/](#)

<ftp://igs.eng.ign.fr/pub/igs/data/>

**Regional Data Center locations:**

<ftp://auslig.gov.au/igs/>

<ftp://gracie.grdl.noaa.gov/dist/ignet/>

<ftp://bodhi.jpl.nasa.gov/pub/pro/>

<ftp://ludwig.hartrao.ac.za/rinex/>

<ftp://igs.ifag.de/GS/obs>

*hourly RINEX data from a subnetwork of the IGS stations*

**Available at:**

<ftp://cddisa.gsfc.nasa.gov/gps/nrtdata/>

<ftp://igs.eng.ign.fr/pub/igs/nrt/data>

<ftp://igs.ifag.de/GS/nrt>

<ftp://lox.ucsd.edu/pub/nrtdata>

**Further Data Center information:**

<ftp://igs.jpl.nasa.gov/center/data/>

<http://igs.jpl.nasa.gov/organization/centers.html>

For IGS Station information, including Operational Data Center contacts, please see

<http://igs.jpl.nasa.gov/> (click Tracking Network)

or site logs:

<ftp://igs.jpl.nasa.gov/pub/station/log/>

## IGS Products

*orbits, clocks, erp*

**Format:**

sp3

**Defined at:**

<ftp://igs.jpl.nasa.gov/igs/data/format/sp3.txt>

**clocks**

**format:**

clock RINEX

**Defined at:**

[ftp://igs.jpl.nasa.gov/pub/data/format/rinex\\_clock.txt](ftp://igs.jpl.nasa.gov/pub/data/format/rinex_clock.txt)

*erp, station positions*

**format:**

SINEX

**Defined at:**

<ftp://igs.jpl.nasa.gov/pub/data/format/sinex.txt>

**CB Product location:**

<ftp://igs.jpl.nasa.gov/igs/product/>

**Global Data Center Product locations:**

<ftp://cddisa.gsfc.nasa.gov/gps/products/>

<ftp://lox.ucsd.edu/pub/products/>

<ftp://igs.eng.ign.fr/pub/igs/products>

*ionosphere products*

**Format:**

IONEX

**Defined at:**

<ftp://igs.jpl.nasa.gov/igs/data/format/ionex1.pdf>

**Global Data Center locations:**

<ftp://cddisa.gsfc.nasa.gov/gps/products/> /iono

<ftp://igs.eng.ign.fr/pub/igs/iono/>

*troposphere zenith path delay*

**Format:**

SINEX\_TRO

**Defined at:**

[ftp://igs.jpl.nasa.gov/igs/data/format/sinex\\_tropo.txt](ftp://igs.jpl.nasa.gov/igs/data/format/sinex_tropo.txt)

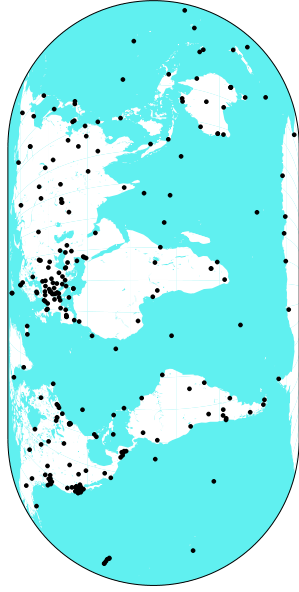
**Global Data Center Locations:**

<ftp://cddisa.gsfc.nasa.gov/gps/products/> /trop

<ftp://igs.eng.ign.fr/pub/igs/tropo>

<ftp://lox.ucsd.edu/pub/troposphere/>

## Useful IGS network summaries



**Central Bureau Information System**  
<http://igs.cb.jpl.nasa.gov> (click Tracking Network)  
Station lists & maps

**SINEX template**  
<ftp://igs.cb.jpl.nasa.gov/pub/station/general/igs.snx>  
tabulation of station parameters vs. time for input to analysis

**Site log history and summary**  
<ftp://igs.cb.jpl.nasa.gov/pub/station/general/oghist.txt>  
<ftp://igs.cb.jpl.nasa.gov/pub/station/general/ogsum.txt>

**ITRF Station Locations**  
<http://laireg.eng.ign.fr/ITRF/solutions.html>

**Global DC daily data latency files**  
[ftp://cddisa.gsfc.nasa.gov/pub/reports/gpsdata/check\\_import.cddisa](ftp://cddisa.gsfc.nasa.gov/pub/reports/gpsdata/check_import.cddisa)  
[ftp://igs.eng.ign.fr/pub/igs/data/check\\_import.ign](ftp://igs.eng.ign.fr/pub/igs/data/check_import.ign)  
[ftp://lox.ucsd.edu/pub/rinex/check\\_import.sio](ftp://lox.ucsd.edu/pub/rinex/check_import.sio)

**Global DC hourly data latency files**  
[ftp://cddisa.gsfc.nasa.gov/pub/reports/gpsdata/check\\_hourly.cddisa](ftp://cddisa.gsfc.nasa.gov/pub/reports/gpsdata/check_hourly.cddisa)  
[ftp://igs.eng.ign.fr/pub/nrt/data/check\\_hourly.ign](ftp://igs.eng.ign.fr/pub/nrt/data/check_hourly.ign)  
[ftp://lox.ucsd.edu/pub/nrtdata/check\\_hourly.sio](ftp://lox.ucsd.edu/pub/nrtdata/check_hourly.sio)

**igsnet**  
<ftp://igs.cb.jpl.nasa.gov/mail/igsnet/>  
weekly report by station giving quality, quantity, and latency scores  
(documented at <ftp://igs.cb.jpl.nasa.gov/igscb/data/network/igsnet.doc>)

## IGS email lists

**IGSMail: Important IGS announcements**  
Archived at <http://igs.cb.jpl.nasa.gov> (click MAIL)  
and <ftp://igs.cb.jpl.nasa.gov/igscb/mail/igsmail>

**IGS Report: Analysis reports**  
Archived at <http://igs.cb.jpl.nasa.gov/> (click MAIL)  
and <ftp://igs.cb.jpl.nasa.gov/igscb/mail/igsreport>

**igsnet: weekly station performance**  
Archived at <ftp://igs.cb.jpl.nasa.gov/igscb/mail/igsnet>

For other project-related mailing lists please see the MAIL area at <http://igs.cb.jpl.nasa.gov>

For subscription information send an email message with 'help' in the body to:  
[majordomo@igs.cb.jpl.nasa.gov](mailto:majordomo@igs.cb.jpl.nasa.gov)

## IGS Analysis Center Coordination

<http://www.aiub.unibe.ch/acc.html>

## IGS Projects and Working Groups

IGS Reference Frame Working Group:  
Remi Ferland ([ferland@geod.emr.ca](mailto:ferland@geod.emr.ca))

IGS/BIPM Time Transfer Project:  
Jim Ray ([jimr@maia.usno.navy.mil](mailto:jimr@maia.usno.navy.mil))

Towards an IGS Combined Ionosphere Product:  
Joachim Feltens ([Joachim.Feltens@esa.int](mailto:Joachim.Feltens@esa.int))

IGS Combination of Tropospheric Estimates:  
Gerd Gendt ([gend@gfz-potsdam.de](mailto:gend@gfz-potsdam.de))

Working Group on Low-Earth Orbiters:  
Michael Watkins ([Michael.M.Watkins@jpl.nasa.gov](mailto:Michael.M.Watkins@jpl.nasa.gov))

International GLONASS Pilot Service Project:  
Jim Slater ([slaterj@nima.mil](mailto:slaterj@nima.mil))

Tide Gauge Benchmark Monitoring PP (TIGA)  
Tilo Schoene ([tschoene@gfz-potsdam.de](mailto:tschoene@gfz-potsdam.de))

Real Time Working Group:  
Mark Caissy ([caissy@nican.gc.ca](mailto:caissy@nican.gc.ca))  
Ron Muellerschoen ([Ron.Muellerschoen@jpl.nasa.gov](mailto:Ron.Muellerschoen@jpl.nasa.gov))

For further information see  
<http://igs.cb.jpl.nasa.gov/igscb/projects/projindex.html>