



Space Weather and GNSS training

French spoken

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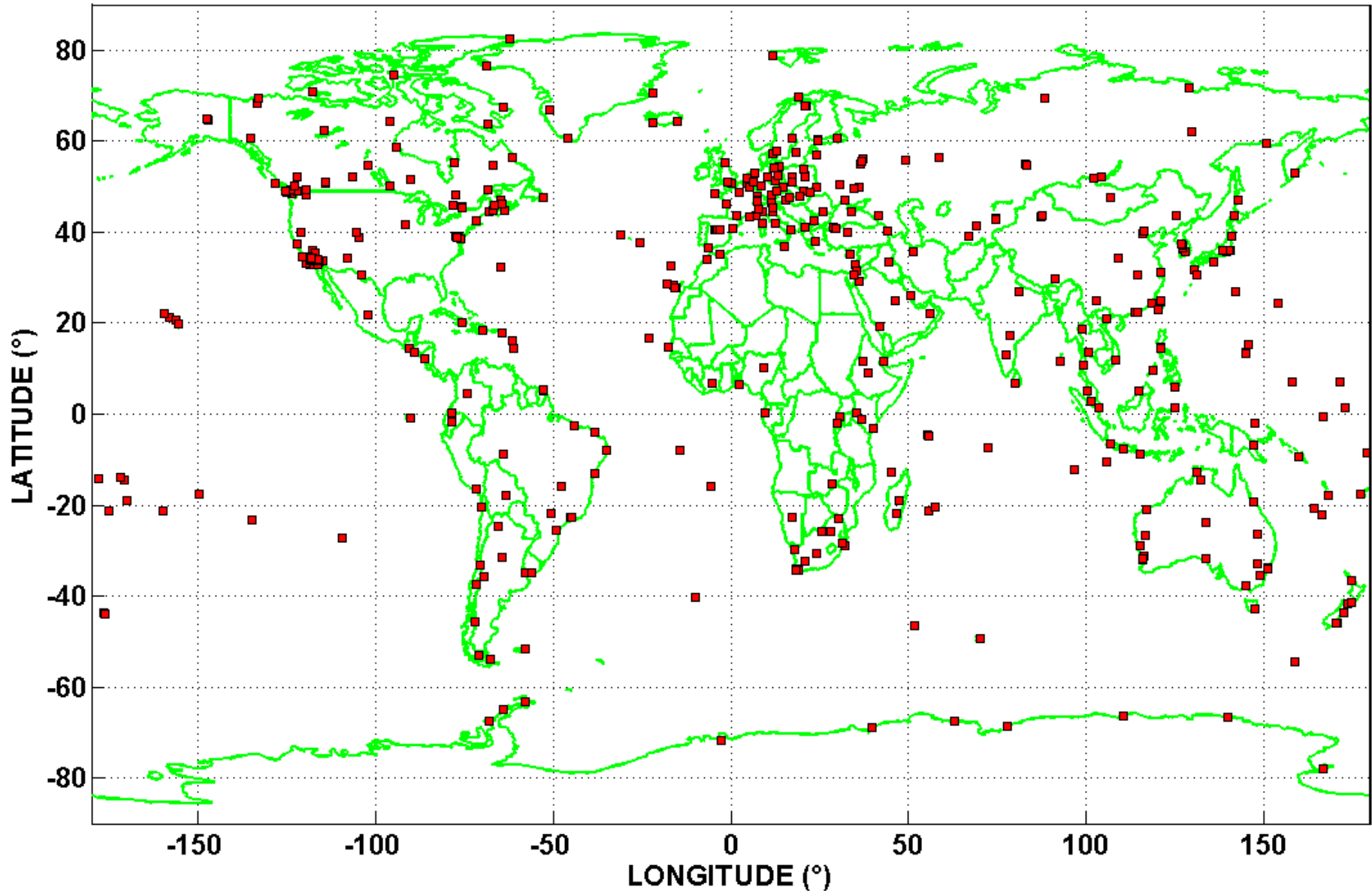
Training in 2017

- **GNSS and Space Weather effects on Ionosphere**
 - January 16-20, Master GNSS CRASTE-LF/Morocco
 - 19 participants from Cameroon, Morocco, Niger, RCA, Tunisia
- **GNSS and Space Weather effects on Ionosphere**
 - February 13-17, National School of Telecommunications/France
 - 6 to 8 participants from Algeria, Burkina Faso, Egypt, Morocco
- **ISWI / SPACE WEATHER Maghreb-West Africa each 2 years**
 - 16-18 October University Houphouët Boigny/Abidjan-Côte d'Ivoire
 - 44 participants from Algeria, Burkina Faso, Cameroon, Côte d'Ivoire, DRC, Guinea Conakry, Morocco, RC, Rwanda
 - Teachers from Algeria, Burkina Faso, Côte d'Ivoire, France, Morocco

Websites with GPS data free

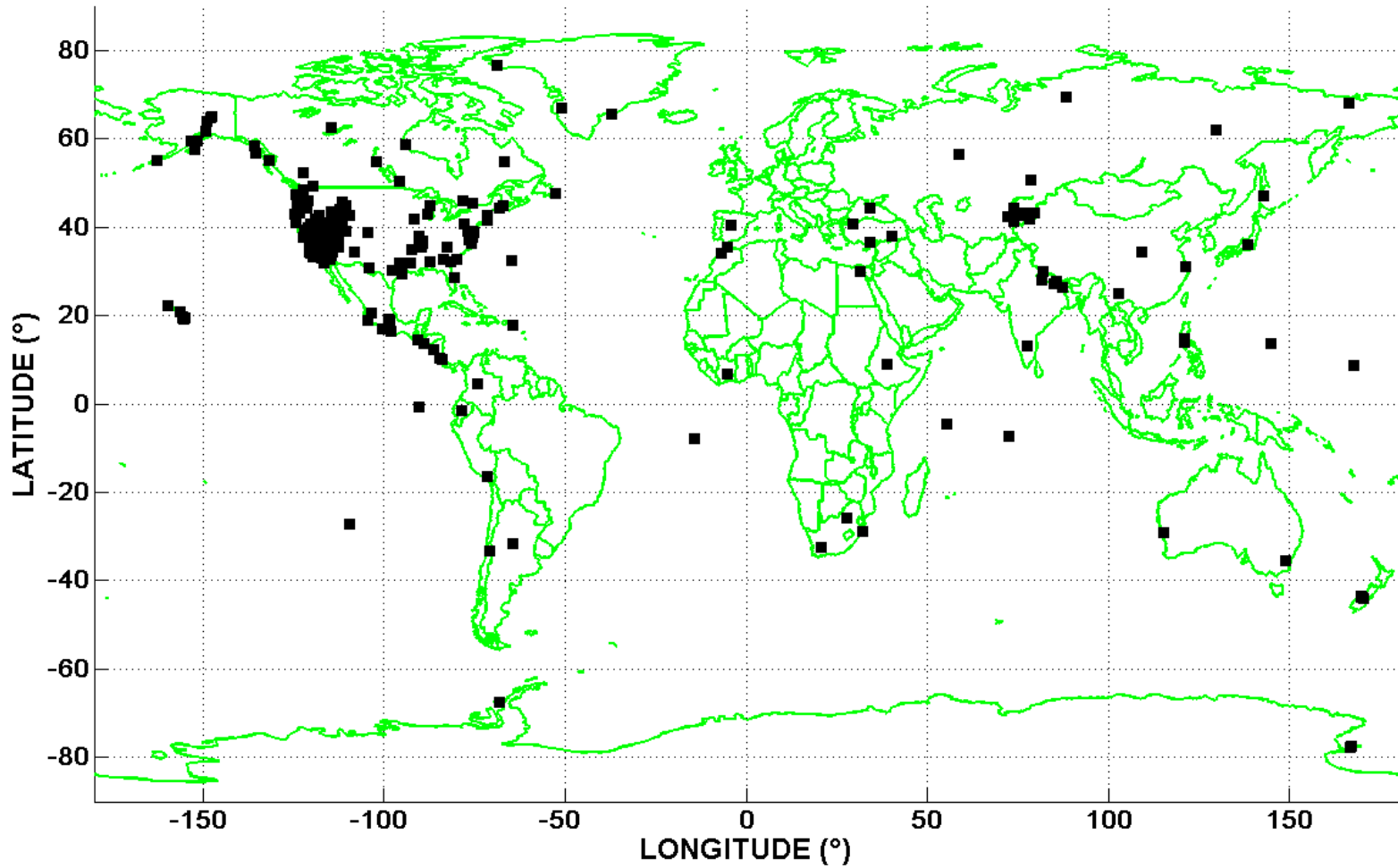
- IGS network: <http://www.igs.org/about/data-centers>
- CDDIS (USA) - 1992-now: <ftp://cddis.gsfc.nasa.gov/gnss/data/daily/>
- SOPAC (USA) - 1988-now: <ftp://garner.ucsd.edu/pub/rinex/>
- IGN (France) - 1990-now: <ftp://igs.ensg.eu/pub/igs/data/>
- KASI (South Korea) - 1993-now: <ftp://nfs.kasi.re.kr/gps/data/daily/>
- BKG (Germany) - 1991-now: <ftp://igs.bkg.bund.de/IGS/obs/C>
- China - 1990-now: <ftp://igs.gnsswhu.cn/pub/gps/data/daily/>
- UNAVCO (USA) - 1992-now: <ftp://data-out.unavco.org/pub/rinex/obs/> *specific website*
- AFREF (South Africa) - 2004-now: <ftp://ftp.afrefdata.org/> *! only stations in Africa*
- AuScope (Australia) - 1993-now: <ftp://ftp.ga.gov.au/geodesy-outgoing/gnss/data/daily/> *! stations in Australia and Pacific*
- TIGA - 1990-now: <ftp://ftp.sonel.org/gps/data/> *! stations near sea*
- NOAA - 1994-now: <ftp://geodesy.noaa.gov/cors/rinex/> *! stations mainly in the USA*

IGS NETWORK (01/12/2016)



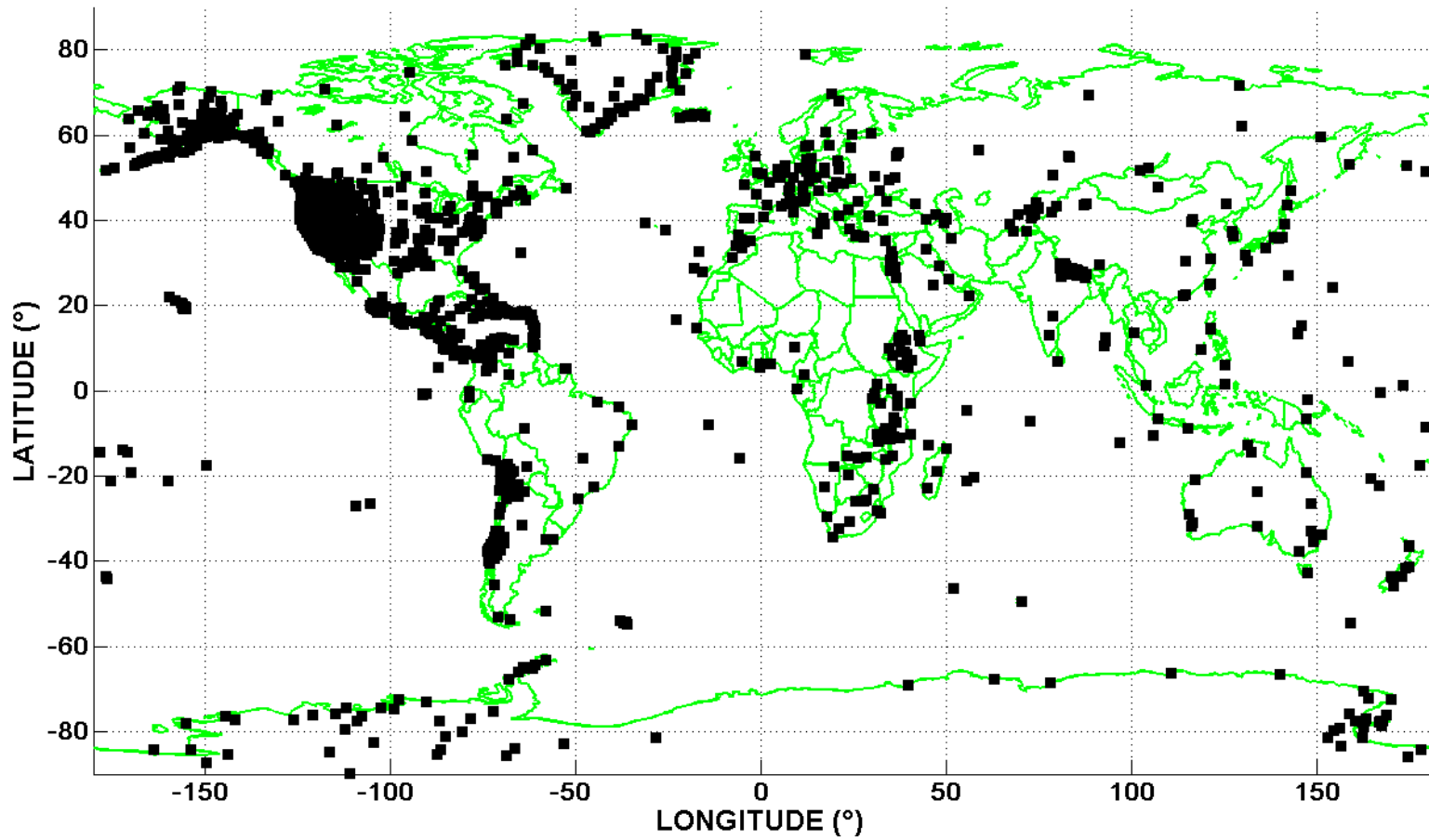
~509 GPS

UNAVCO/2000



~2828 GPS

UNAVCO/2015



GPS / AFRICA (2016)

