

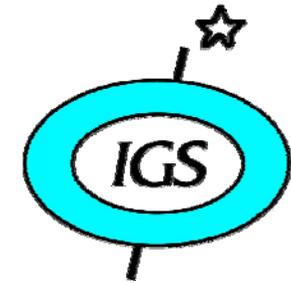
WG D – Monitoring and Reference Stations

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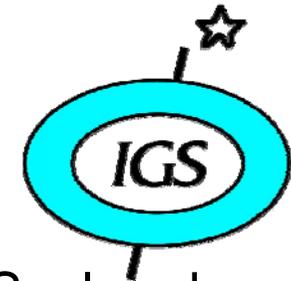
Chair of Governing Board, International GNSS Service (IGS)

Tasks of WG D



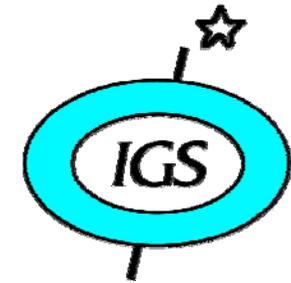
- Following the initial ICG work plan, WG D so far mainly considered three specific assignments:
 - Definition of site quality and integrity techniques
 - Promotion of a common geodetic reference frame, taking into account existing (regional) reference frames
 - Support to countries developing GNSS and its applications, in particular AFREF Project
- WG D is co-chaired by IAG, IGS, FIG

Conclusions from WG D meeting, Bangalore



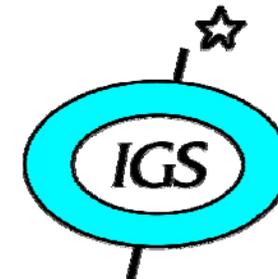
- Promotion of IGS Site Guidelines as best practice for GNSS; already adopted by more than 200 organisations and several regional networks (EUREF, AFREF, SIRGAS, ...); review, refinement, extension as needed
- Additional applications could include DGNSS networks and RTK reference stations
- Proposal to ICG to establish a WG on Geodetic References in ICG was presented to ICG Plenary
- Consider bringing a legal basis to International Terrestrial Reference System/Frame, as for international time standards
- Proposal to include reference frame and timing system information on the ICG Providers “Template for information sharing ...”
- Support to IAG initiative to place laser retro-reflectors on all GNSS spacecraft
- Recommend densification of IGS network in areas with sparse cover

Actions from WG A



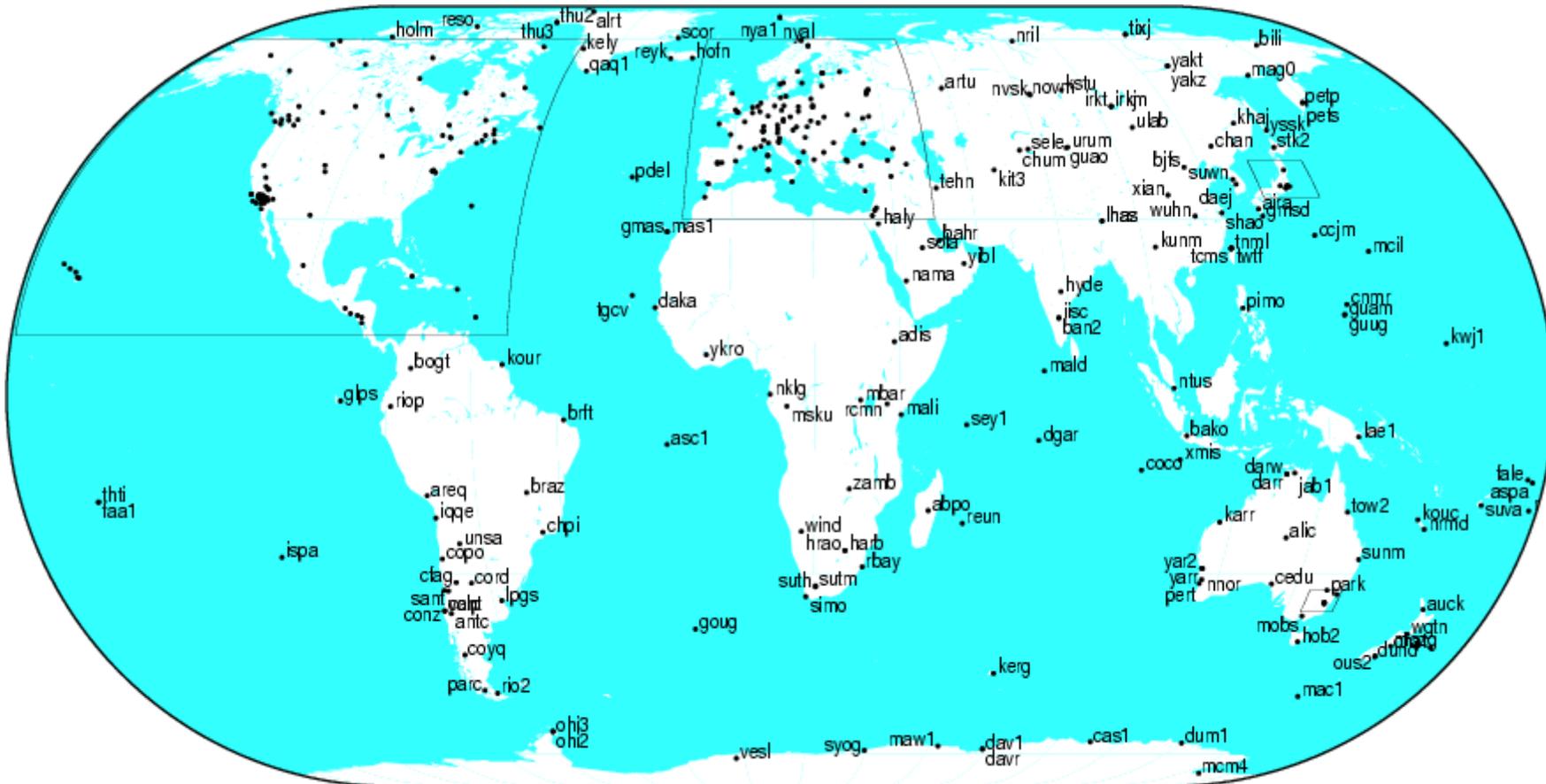
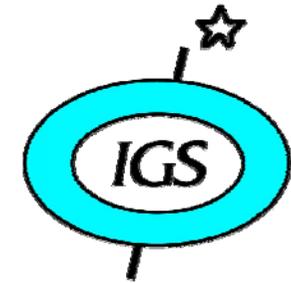
- FIG and IGS to draft a paper on relative importance of GNSS interoperability from the perspective of various user applications (open)
- EUPOS and IGS to draft a definition of interoperability applicable to ground-based differential GNSS (DGNSS) networks
 - Reference data to be exchanged using international standards
 - Service quality (accuracy, integrity, reliability, availability) to be at a similar level for neighbouring DGNSS's or in same area
 - Use of standard reference frames, with known transformation parameters, but preferably ITRF

Some IGS/IAG Highlights 2008



- Galileo: IGS/IAG centres are involved in
 - 13 station global Galileo Experimental Sensor Station network, now tracking GIOVE-A & -B
 - Galileo Geodetic Reference Provider Prototype
- Implementation of IGS Strategic Plan 2008-2012
- Steady progress with GGOS and AFREF
- Continuing independent monitoring of operational GNSS's (currently GPS, GLONASS) and their spatial and time references

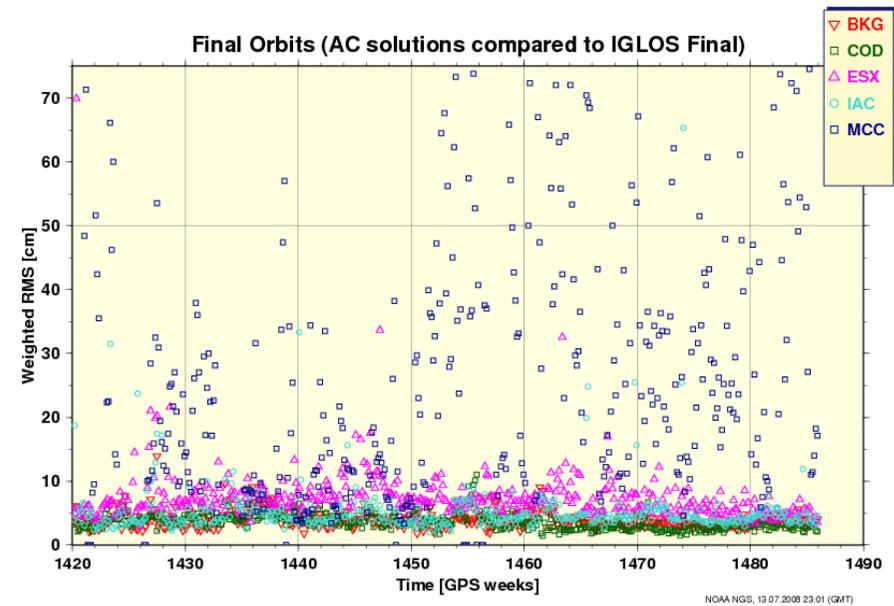
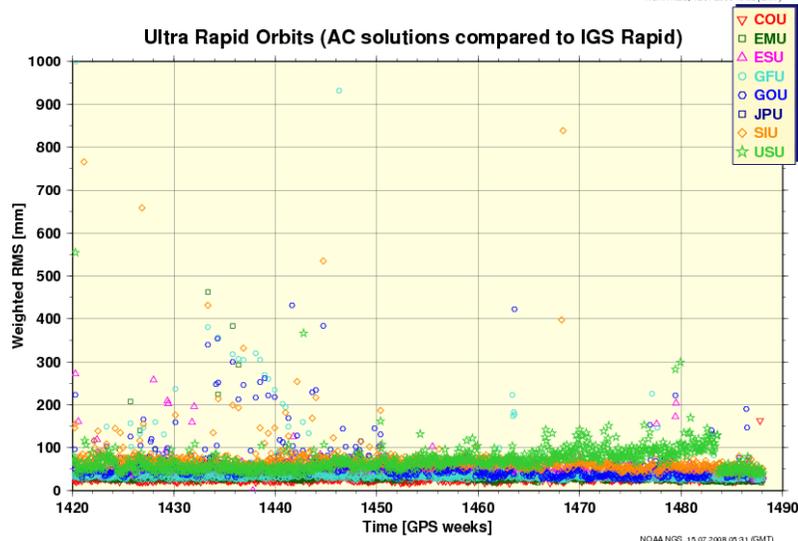
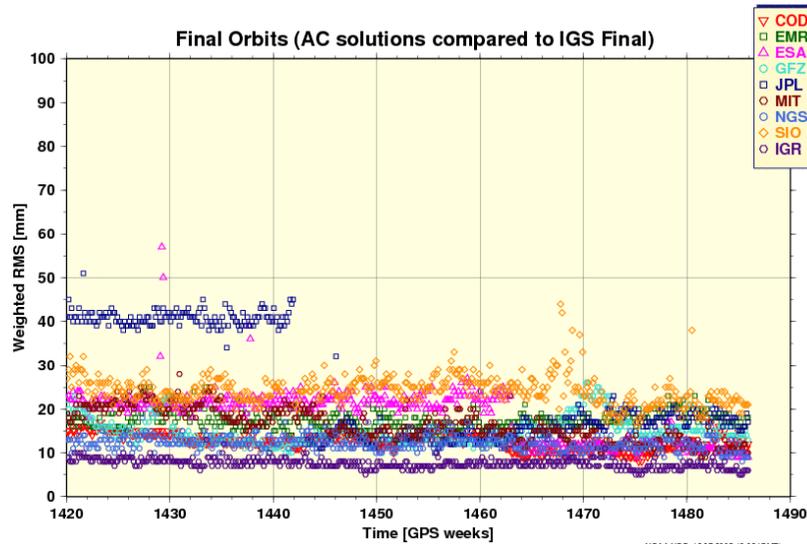
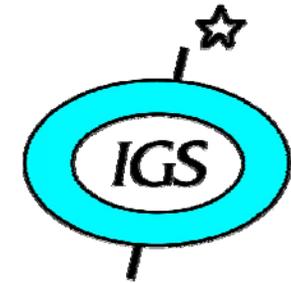
IGS Tracking Network



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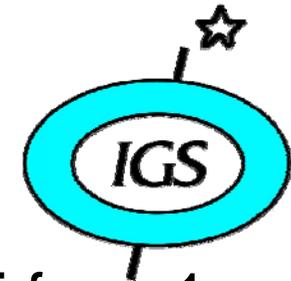
IGG Expert Meeting on GNSS & Services
Montreal, Canada, 15 July 2008

IGS GPS Ultras/Finals & GLONASS



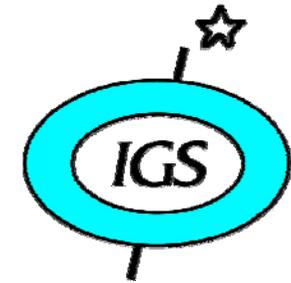
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IGS Analysis Centre Workshop 2008



- IGS Analysis Centre workshop was held at Miami from 1 to 5 June 2008
(<http://www.ngs.noaa.gov/IGSWorkshop2008>)
- Organised by NGS/NOAA, who recently took over the AC Coordination function from GFZ Potsdam for a 4 year term
- Over 120 participants from space agencies, research institutes, industry from all over the world
- Topics included:
 - Real-time (33 organisations participating in Pilot Project)
 - Re-processing (data 1994-; 8 Analysis Centres, 4 Combination Centres)
 - Antenna phase centre
 - Site standards (antenna monuments, receivers for new signals)
 - Analysis standards
- Governing Board set up new Infrastructure Committee

GNSS at Malindi, Kenya



Collocated monitoring of GPS, Galileo/Giove, GLONASS (also at Kourou and Tahiti)

