



International GNSS Service Overview and Status

IGS Central Bureau
NASA/JPL

Ruth Neilan

FIG - International Federation of Surveyors

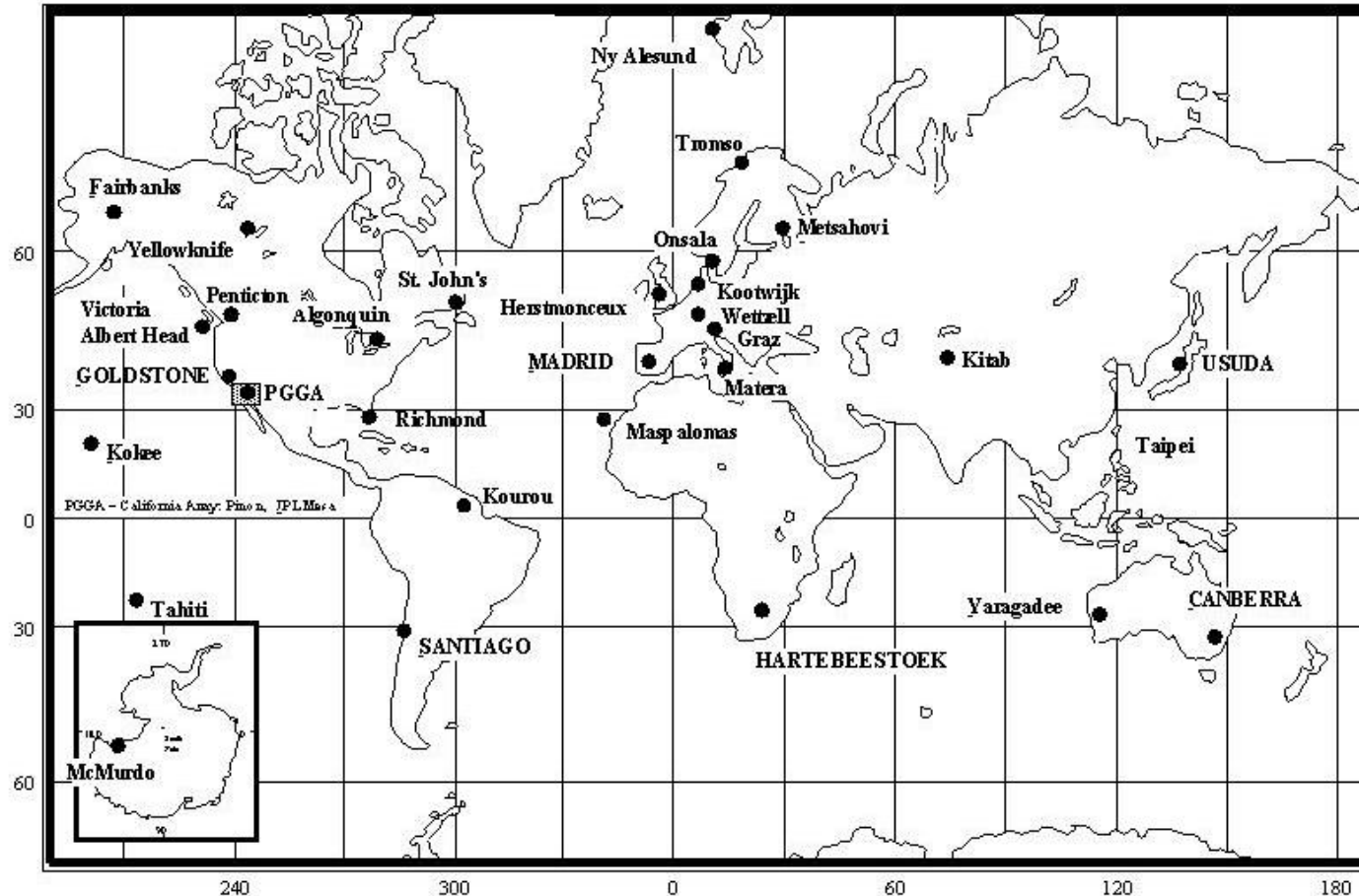
Seminar: Reference Frames in Practice

May 2, 2016

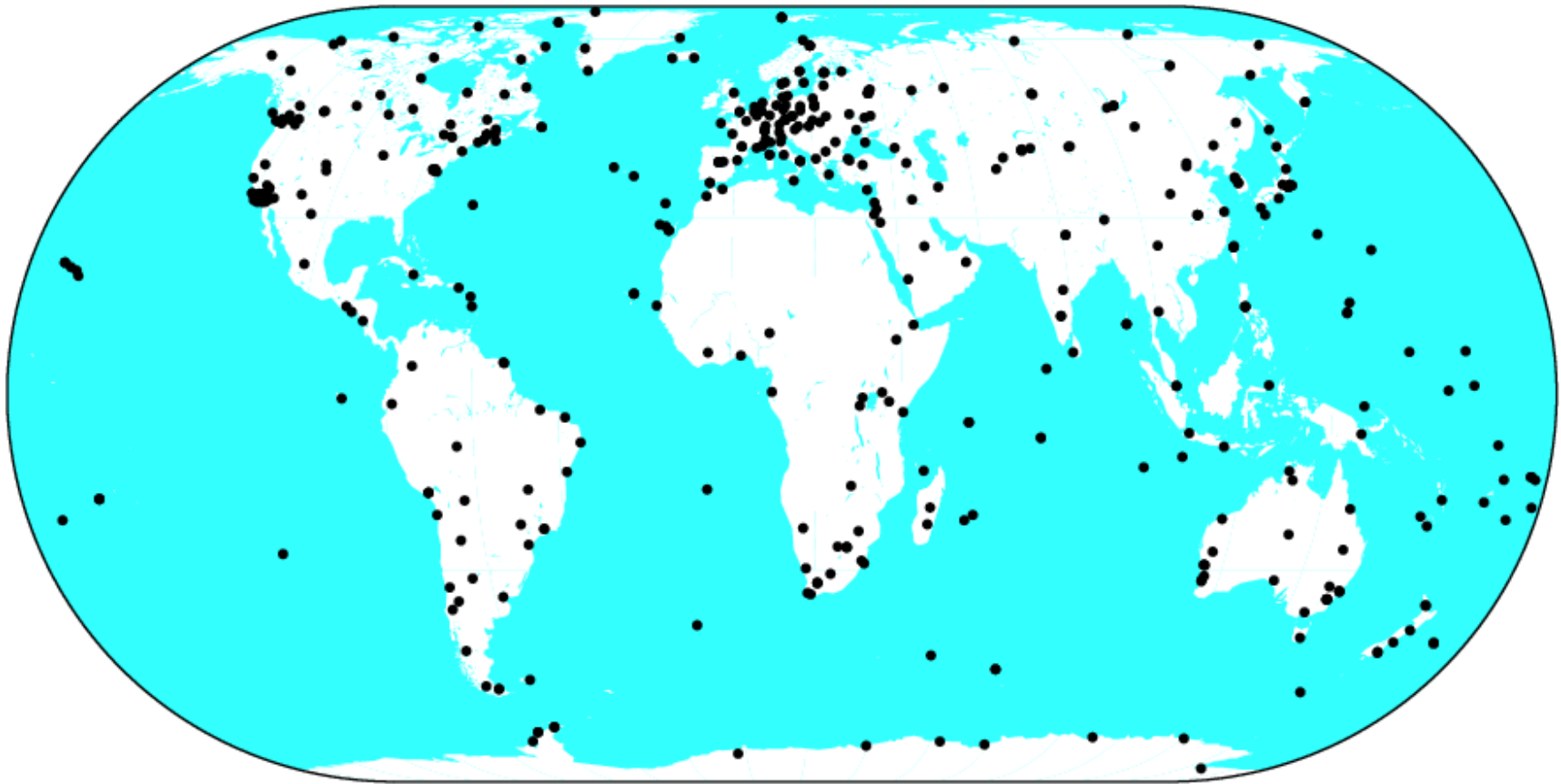
Christchurch, New Zealand

- Expand participation with IGS MGEX – Multi-GNSS Experiment, many in Real-Time
 - Large data set for research and analysis, mission and project support
 - With Multi-GNSS SIRGAS, APREF, AFREF, EUREF and other countries can support evolution of the reference frame, common and robust
- Expand Real-time participation and access IGS Real-time Service
 - All data and products openly available – for **ALL** IGS data and products
- Contribute to the UN Global Geodetic Reference Frame initiative within the UN Global Geospatial Information Management (UNGGIM, UN GGRF)

<http://www.unggrf.org>



IGS Network, 1992 Pilot Project ~ 30 stations



GMT 2015 Sep 27 18:52:48

IGS Network September 2015 –
500+ stations, 110+ countries, 200+ organizations

igs.org and still active igscb.jpl.nasa.gov/network/netindex.html

GNSS Futures

2016 IGS Workshop.

IGS Workshop, 8–12 February 2016, Sydney, NSW, Australia

IGS Real-Time Service

Enable Precise Point Positioning
at worldwide scales



IGS Presents

Videos to enlighten and inspire



IGS Multi-GNSS Experiment

Tracking, collating, and analyzing
all available GNSS signals

IGS
MGEX

Real-Time Service

IGS Real-Time Service

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all available GNSS signals

IGS

MGEX

New

2015-09-17 [Guide to Using IGS Products Updated](#)

2015-08-05 [Release of RINEX Version 3.03](#)

2015-07-21 [Multi GNSS Antenna Phase Center Model Introduced](#)

2015-07-09 [43 MGEX Stations Added to IGS Network](#)

2015-05-26 [2014 IGS Technical Report](#)

2015-01-01 [2015 Strategic Implementation Plan](#)

Events

2015-08-03 [United Nations Committee of Experts on Global Ge...](#)

2015-08-10 [GGOS Geodetic Metadata Workshop](#)

2015-09-14 [ION GNSS](#)

2015-10-27 [Fifth International Galileo Science Colloquium](#)

2015-11-01 [International Committee on GNSS, 10th Meeting](#)

2016-02-08 [IGS Workshop "GNSS Futures" *NEW DATES*](#)

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Network

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<http://igs.org>

IGS – FIG Reference Frames in Practice Christchurch, NZ May 2, 2016

- International Committee on GNSS
 - <http://www.unoosa.org/oosa/en/ourwork/icg/icg.html>
(Or google ICG UN OOSA)
 - Forum for System Providers as Members to meet along with Associate Members and observers
 - Providers: GPS, GLONASS, Galileo, Beidou, QZSS, IRNS
 - Annual meetings – Next in Sochi, Russia Nov 6-11, 2016
- Involvement in ICG
 - ‘WG-D’ Reference Frames, Timing and Applications
 - Co-Chaired by IAG, IGS, FIG (likely suspects)
 - Task Force on International GNSS Monitoring and Assessment (IGMA)

- GGOS
 - <http://www.ggos.org>
 - A key entity of the International Association of Geodesy (IAG)
 - Integrates the IAG Services, IGS, IERS, ILRS, IVS, IDS, IGFS
- GGOS has three key focus areas as working groups:
 - 1 – Geohazards (Dr. John LaBrecque, USA, retired NASA)
 - See the Call for Participation at IGS.org for
 - *GNSS Augmented Tsunami Early Warning (GATEW)*
 - 2 – Unified Height Systems (Dr. Laura Sanchez, DGFI, Germany)
 - 3 – Sea Level Change (Dr. Tilo Schöne, GFZ , Germany)

How Big is Africa? *Our Maps are lying to us*

**It's so big that
all the countries
shown fit within
the continent
of Africa...**



Thank-you!

Explore igs.org!

Acknowledging the support and efforts of:
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