

UN-GGIM-AP WG1- Geodetic Reference Framework for Sustainable Development

Chair

Dr. John Dawson, Australia

Vice Chairs

Dr. Yamin Dang, China

Dr. Farokh Tavakoli, Iran

Mr. Basara Miyahara, Japan

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Mr. Graeme Blick, New Zealand



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WG1 - Activity

1. Asia Pacific Reference Frame (APREF) and the Asia Pacific Regional Geodetic Project (APRGP)
2. Asia Pacific Regional Height System Unification
3. Support geodetic capacity building
4. General Assembly Resolution on *A Global Geodetic Reference Frame (GGRF) for Sustainable Development*



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WG1 Activity - Regional Reference Frame

- APREF and APRGP
- Provide access to global latitude, longitude and height (i.e. access to ITRF)
- Encourage GNSS data sharing
- Make linkages between national datums
- Geodetic capacity building



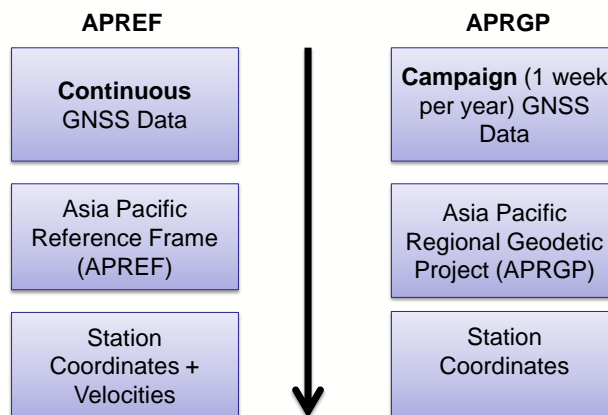
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WG1 Activity - Regional Reference Frame



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WG1 Activity - Regional Reference Frame

APREF

- 3 x analysis centres (Australia x 2 + China)
- 620 GNSS stations
- 28 Member States

APRGP

- Annual campaign since 1997 (20)
- 2015, 2016, 2017 reports



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WG1 Activity - Regional Reference Frame

- Daily GNSS RINEX data, see <ftp://ftp.ga.gov.au/geodesy-outgoing/gnss/data/daily/>
- Weekly coordinate estimates in SINEX format, see <ftp://ftp.ga.gov.au/geodesy-outgoing/gnss/solutions/apref/>
- APREF network and time-series plots, see <http://192.104.43.25/status/solutions/analysis.html>



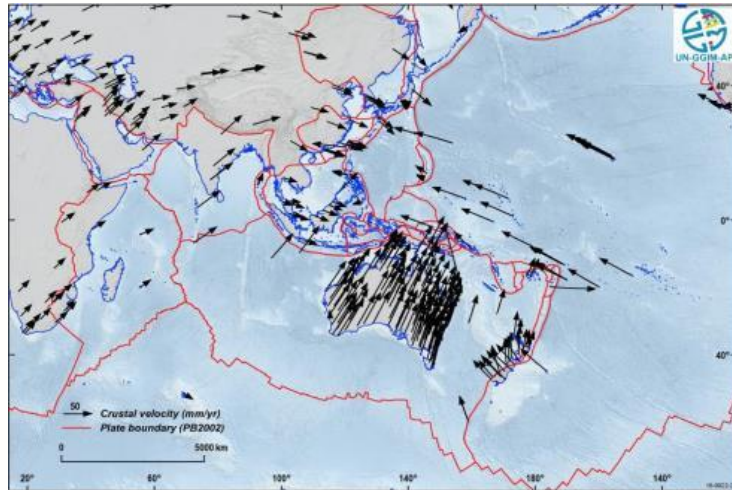
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WG1 Activity - Regional Reference Frame



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WG1 Activity - Regional Reference Frame

Record 2016/20 | eCat 101401

Report on the Analysis of the Asia Pacific Regional Geodetic Project (APRGP) GPS Campaign 2015

G. Hu

Record 2017/17 | eCat 101401

Report on the Analysis of the Asia Pacific Regional Geodetic Project (APRGP) GPS Campaign 2016

Record 2018/23 | eCat 121942

Report on the Analysis of the Asia Pacific Regional Geodetic Project (APRGP) GPS Campaign 2017

G. Hu



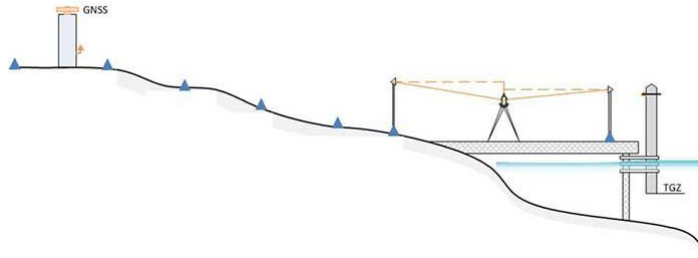
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WG1 Activity – Height System Unification



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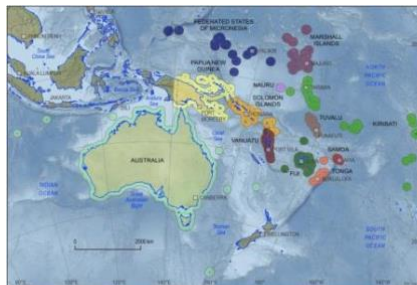
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WG1 Activity – Height System Unification

- Global height system questionnaire (in progress)
- A report on the connections between ellipsoidal height systems of 13 Pacific Islands countries has been prepared



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WG1 Activity – Geodetic Capacity Building

- Seven technical workshops in partnership with FIG, IAG, UNOOSA and national agencies: China, NZ, Malaysia, Japan
- Pacific Geospatial and Surveying Council Meetings
- Focus: reference frames, Datum Unification and Kinematics, operational aspects of GNSS CORS



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WG1 Activity – GGRF

- Engagement in UN GGRF Resolution development
- UN SCoG membership
- United Nations World Geospatial Information Congress (UNWGIC), Deqing, Zhejiang Province, China, 19-21 November 2018. The session titled **Global, regional and national geodetic frameworks: an essential building block for a better world**



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