



Australian Government  
Geoscience Australia



Session: Asia Pacific Capacity Development Network Special Forum

# Geoscience Australia's (GA) Future Plans

Ryan Ruddick



# New Datum and Geoid Model

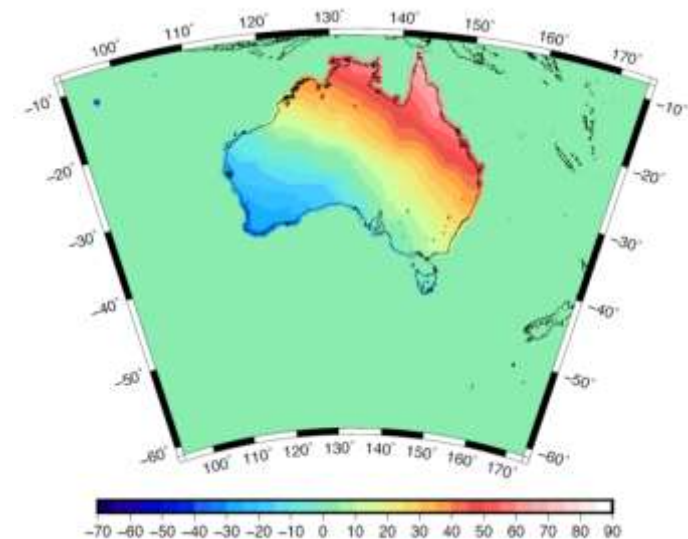
## Present

- The National coordinate reference system updated to the Geocentric Datum of Australian 2020 (GDA200) by the National Measurement Institute.
- Aligned to reference frame for satellite navigation systems.
- New National geoid model (AUSGeoid2020) with rigorous uncertainty.

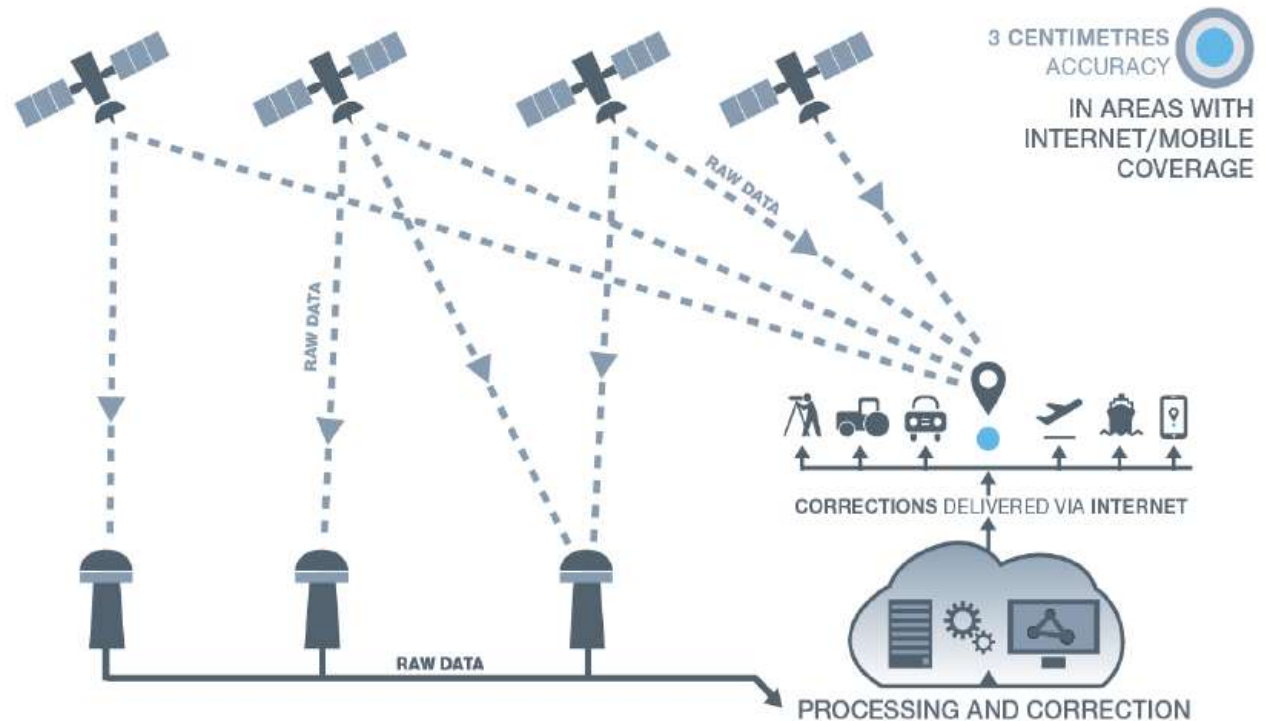


## Future

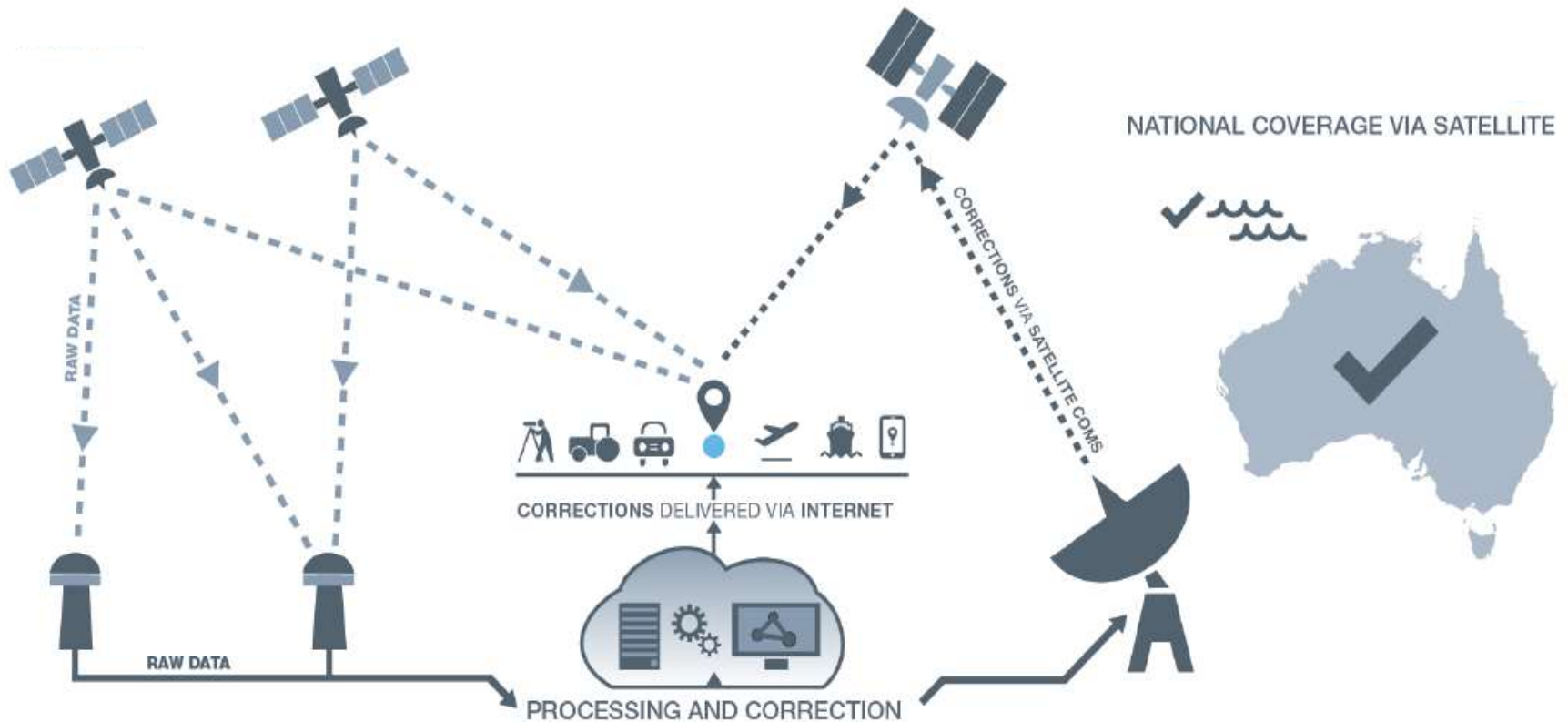
- Australian Terrestrial Reference Frame (ATRF).
- Time-dependent reference frame.



# National Positioning: CORS Infrastructure

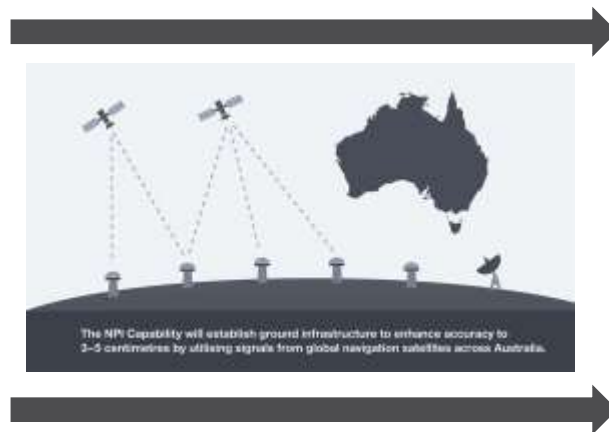


# National Positioning: Satellite Delivery (SBAS)





# National Positioning: Analysis Centre Software



Positioning



Orbits/clocks



Timing



QA'd Data



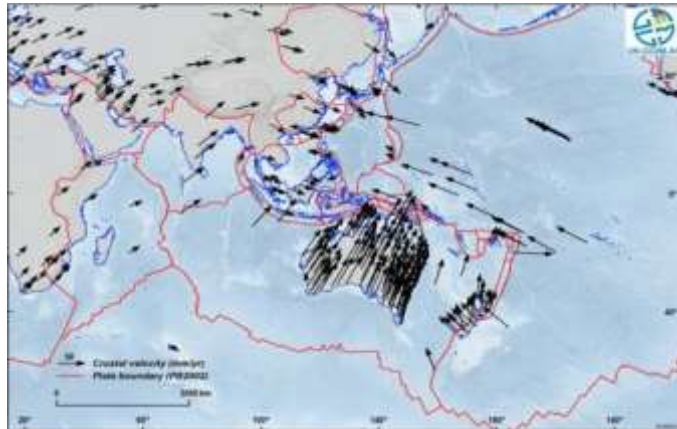
Atmosphere



Open software

# Asia Pacific Reference Frame Project (APREF)

- Over 600 stations from 30 countries.
- Data routinely processed by four Analysis Centres.
- SINEX file made available via FTP.
- Analysis aligned to the IGS14 reference frame (IGS realisations of ITRF2014).





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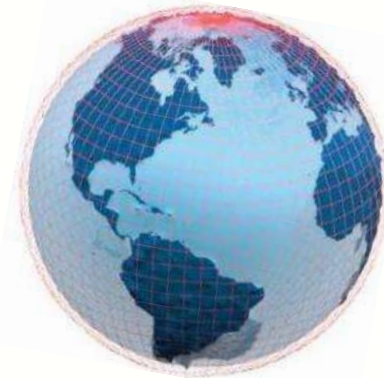
# UN-GGIM-AP Working Group 1 (Focus)

UN-GGIM Geodesy

Regional Height  
System Unification

Regional Reference  
Frame (APREF,  
APRGP)

Regional Capacity  
Building



UN-GGIM

United Nations Initiative on  
Global Geospatial Information Management

*"Positioning geospatial information to address global challenges"*

[ggim.un.org](http://ggim.un.org)