

# On Current AusHydroid modelling activities at AHO

Kirco Arsov (Australia), Richard Cullen and Zarina Jayaswal

**Key words:** GNSS/GPS; Hydrography; Positioning; Reference frames; Reference systems

## SUMMARY

GNSS has enabled relatively quick, cost effective and reliable estimation of 3D coordinates with very high accuracy. Hydrographic Surveys are delivering nautical charts that are crucial for safety navigation on sea. Nowadays we use high accurate GNSS technology to relate the hydrographic data acquisition platforms (including bathymetric information) directly to the reference ellipsoid. Vertical land topography and ocean (bathymetry) data are collected for different purposes and are related to different vertical reference surfaces as datums. The need to merge these two datum types drives the need to resolve these differences. GNSS technology is the one that merges these two (land and Sea) datums through its reference ellipsoid. Therefore, the AusHydroid as ellipsoidal height of Lowest Astronomical Tide (LAT) is very important surface in Hydrography. It directly relates the Hydrographic datum (and Hydrographic measurements) to GNSS reference ellipsoid. □ This presentation is overview and update on the current AusHydroid modelling activities at AHO. It deals with current status, way forward and planning for the future AusHydroid modelling activities. It also stresses the need for more GNSS based Hydrographic surveys and will also touch base in development and assessment of satellite tidal models and incorporation of other satellite data (ex Satellite altimetry) into current AusHydroid development. □

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FIG Working Week 2025  
Collaboration, Innovation and Resilience: Championing a Digital Generation  
Brisbane, Australia, 6–10 April 2025