



WG 4.2 Vertical Reference Surface for Hydrography (VRSH)

FIG WW Athens 2004, 25 May, 07:30 am, Room 250 – Hotel Intercontinental

Present:

Ruth Adams – Comm 4 – Chair of meeting
Adam Greenland – Comm 4 Chair
Matt Higgins – Comm 5 Chair
Jerry Mills – Comm 4 - NOAA
Robert Sarib – Comm 5 Vice Chair
Steve Shipman – Comm 4 - IHB

1. Purpose of Meeting

To discuss the white paper (to be presented at WSH3.2 in Athens) and where we were going to go from here. Are we trying to develop a seamless reference frame or a vertical correction model so depths can be related to each other in a seamless manner?

2. IHO Resolution A2.5

We discussed this resolution – in particular the wording with respect to a seamless vertical surface. Should you specify a surface? If so, should it be the geoid or a geocentric surface? S44 already says that data should be referred to a geocentric datum. Discussion then focused on what weight the IHO had in the hydro arena: ultimately it is not a regulatory body, it can only make suggestions not dictate charting practice.

Resolution A2.5 is being reworked this October and perhaps by mid 2005 we will have a revised version?

Action – Steve Shipman to keep the WG informed on progress.

3. WG4.2 Link to the IAG

There are a few areas it would be good to tap into. Steve Shipman attends the ECGN meetings (European Combined Geodetic Network) which is a dynamic version of EUVN (European Union Vertical Network). We should be able to use best practice from the IAG. The IAG produces lots of good work but it isn't always known about.

For info, POL (Proudman Oceanographic Laboratory, UK) provides tidal specialism into the IAG group. They are writing guidelines to how to collect tide data, quality etc. Trevor Baker, POL, is writing a draft guideline document. It is currently focused on Europe but the plan is to enlarge it to a global focus. We should certainly look out for this when it is published.

There is an MOU between FIG and IAG. Comm 1 of the IAG has a WG relating to the reference frame and Comm 3 has one ref.: sea surface topography.



4. Publications from WG4.2

Discussions then turned to how exactly we develop a separation model and/or what this WG should be producing. One focus is to develop a simple/easy to understand definition of a seamless surface and/or separation model.

WG4.2 should aim to produce two documents:

- 4.1. First publication should be to *set the scene* – ie what is the point of a vertical surface separation model? What are we trying to achieve? (This document is primarily for hydrographers needing to raise the profile of their work, obtain funding etc). This should be a punchy two pager to get senior personnel buy-in.
- 4.2. Second publication should be *technical info* as to how you build a model, measure tides etc

Action – Ruth Adams to work on the papers above (with assistance from members of WG4.2). Ideally have draft in circulation for winter 2004.

The current white paper we've written is more a background document. Users need a hands-on manual.

5. Roundtable

Matt suggested Ruth perhaps attend a conference next year, Aug 05, in Cairns "Monitoring and Understanding a Dynamic Planet with Geodetic and Oceanographic Tools" which is a joint assembly of the IAG, IAPSO and IOBO. [IAG - International Association of Geodesy; IAPSO - International Association for the Physical Sciences of the Ocean; IOBO - International Association for Biological Oceanography].

This conference would be an excellent opportunity to run a workshop on vertical reference frames and Comm 5 is eager to support it. All the key players would be there.

Action – Matt Higgins to discuss with conference organisers possibility of WG4.2 holding roundtable meeting on vertical separation surfaces in Cairns Aug 05.

Ruth Adams

09 June 04