The Ionosphere Working group started the routine generation of the combined Ionosphere Vertical Total Electron Content (TEC) maps in June 1998. This has been the main activity so far performed by the eight IGS Ionosphere Associate Analysis Centers (IAACs): CODE/Switzerland, ESOC/Germany), JPL/U.S.A, UPC/Spain, CAS/China, WHU/China, NRCan/Canada and OPTIMAP/Germany. Independent computation of rapid and final VTEC maps is used by the each analysis centers: Each IAAC compute the rapid and final TEC maps independently and with different approaches. Their GIMs are used by the UWM/Poland, since 2007, to generate the IGS combined GIMs. Since 2015 UWM/Poland generate also IGS TEC fluctuations maps.

CHARTER

The IGS Ionosphere Working Group is a long-term working group (WG). It exploits the permanent IGS network of stations and the IGS infrastructure to derive global IGS ionosphere maps and IGS ionosphere models. The WG's major task consists of the routine provision of IGS Global Ionosphere Maps (final, rapid, real-time and predicted) based on a combination of ionosphere maps regularly produced by IGS Ionosphere Associate Analysis Centers (IAACs) and IGS TEC fluctuation product generated by UWM (ROTI polar maps).

1) Products
    a) final IGS GIMs
    b) rapid IGS GIMs
    c) predicted IGS GIMs for 1 and 2 days ahead
    d) IGS TEC fluctuation product generated by UWM (ROTI polar maps).

2) Key Issues:

    a) Activities of new IGS ionosphere Associated Analysis Centres: NRCan, CAS, WHU, OPTIMAP (GIMs) and UWM (ROTI maps).
    b) Looking for optimal ways to combine IGS Global Ionospheric Maps (GIMs) in real-time.

3. Key accomplishments

a) Four new IGS ionospheric processing centres (NRCan, CAS, WHU and OPTIMAP) have been introduced to the IGS community – already present in CDDIS,
b) IGS TEC fluctuation product generated by UWM (ROTI polar maps) – already present in CDDIS,
c) Looking for optimal ways to combine IGS Global Ionospheric Maps (GIMs) in real-time

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