



Preliminary GPS orbit combination results of the IGS 2nd reprocessing campaign

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International GNSS Service (IGS) has contributed to the International Terrestrial Reference Frame by reprocessing historic GPS network data and submitting Terrestrial Reference Frame solutions and Earth Rotation Parameters. For the 2nd reprocessing campaign, Analysis Centers (ACs) used up to 21 years of GPS observation data with daily integrations. IERS2010 conventions are applied to model the physical effects of the Earth. Total eight ACs have participated (7 Global solutions, and 2 Tide Gauge solutions) by reprocessing entire time series in a consistent way using the latest models and methodology. IGS combined daily SINEX TRF and EOP combinations have already been submitted to the IERS for ITRF2013. This presentation mainly focuses on the preliminary quality assessment of the reprocessed AC orbits. Quality of the orbit products are examined by examining the repeatability between daily AC satellite ephemeris. Power spectral analysis shows the background noise characteristics of each AC products, and its periodic behaviors.