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## **Tropospheric GPS solution IPW and meteorological sources - conformity study**

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I will describe several interesting results of IPW time series comparisons and analyses. IPW (Integrated Precipitable Water) is important meteorological parameter easily derivable from GPS tropospheric solutions (ZTD's). IPW values from other sources can be much more problematic through various technical shortages. I have made quite many comparisons of different static solutions (mainly IGS and EPN) with three meteorological water vapour data sources: radiosoundings, sun photometer (CIMEL, Central Geophysical Observatory PAS, Belsk, data - courtesy of J. Krzyscin) and input fields of operational numerical prediction model COSMO-LM (maintained by Polish Institute of Meteorology and Water Management, data made accessible by A. Mazur). Results which lead to the conclusion of IPW coming from GPS high quality will be presented. Some other analyses show value of GPS IPW as a geophysical tool.