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An experiment with monthly and seasonal variability of water vapor by the use of GPS observations at the permanent GPS station in Iran (Tehran-2005)

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Using GPS observations of permanent GPS station (TEHN) of the National Cartography Center (NCC) of Iran, Zenith Tropospheric Delays (ZTD) during the whole period of the year 2005 (i.e. from January 2005 till December 2005) is computed. For the same period Zenith Hydrostatic Delay (ZHD) is also calculated from pressure and temperature observations at the same station. Having computed ZTD and ZHD, precipitable water vapor (PWV) of the atmosphere is computed at 2-hour time intervals for the whole year. The resulted time series of PWV is analyzed for the monthly and seasonal variations. The details of our experiment with the computations of PWV using GPS observations at the permanent GPS station and the performed variation analysis will be shared.