

ABSTRACT:

This paper presents an accuracy assessment of IWV data obtained from one year of GPS measurements in Peninsular Malaysia and the correlation between this GPS-derived IWV and radiosonde-derived IWV. Four GPS stations in close proximity to existing radiosonde stations are assessed; the root mean square errors of the GPS-derived IWVs are 3.447kg/m², 3.786kg/m², 4.122kg/m² and 4.253kg/m² and their linear correlation coefficients are 0.877, 0.797, 0.851 and 0.849, respectively. Such strong correlations indicate that GPS data has the potential to be used for water vapor observation in Peninsular Malaysia for locations with few weather stations.