

Atmos. Meas. Tech. Discuss., referee comment RC2
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Comment on amt-2021-113

Anonymous Referee #2

Referee comment on "A new zenith hydrostatic delay model for real-time retrievals of GNSS-PWV" by Longjiang Li et al., Atmos. Meas. Tech. Discuss.,
<https://doi.org/10.5194/amt-2021-113-RC2>, 2021

Review of 'A New ZHD Model for Real-Time Retrievals of GNSS-PWV' by Li Longjiang

The authors established a GZHD model using BP-ANN method trained by globally distributed radiosonde data and COSMIC-1 data. Then the GZHD model was evaluated. However, the evaluations have a problem: the period of test data repeated the period of training data. Therefore the performance of GZHD model at the time away from the training period is unknown. No information about the real-time availability of GZHD model is shown. According to my experience in training this type of data-driven model, the evaluations in the study may overestimated the accuracy of the new model. Therefore detailed evaluations in the period different from the training dataset, which should be more important than the evaluations presented by the authors, must be added.

Line 52: Add a reference of GPT.

Line 100: The color in figure 1(d) agrees very well with the terrain, e.g. the Tibet Plateau. Please explain it.