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# Observation of greenhouse gas vertical profiles in the boundary layer of the Mount Qomolangma region using a multirotor UAV

**Ying Zhou et al.**

*Correspondence to:* Yilong Wang (wangyilong@itpcas.ac.cn) and Minzheng Duan (dmz@mail.iap.ac.cn)

After submitting the paper, we received feedback from an anonymous reviewer noting that there is no radiation shield for the temperature sensor of the iMet XQ2. Consequently, uncertainty must be carefully considered when using the temperature and humidity data acquired. A comparison of the altitudes recorded by the iMET XQ2 with GPS measurements (Figure S1) shows that the differences are less than 7 meters, which is negligible compared to the vertical sampling resolution of approximately 100 meters. As a precaution, an analysis of variations in the atmospheric boundary layer has not been conducted due to potential interference. Future flights will consider using new sensors for improved accuracy.

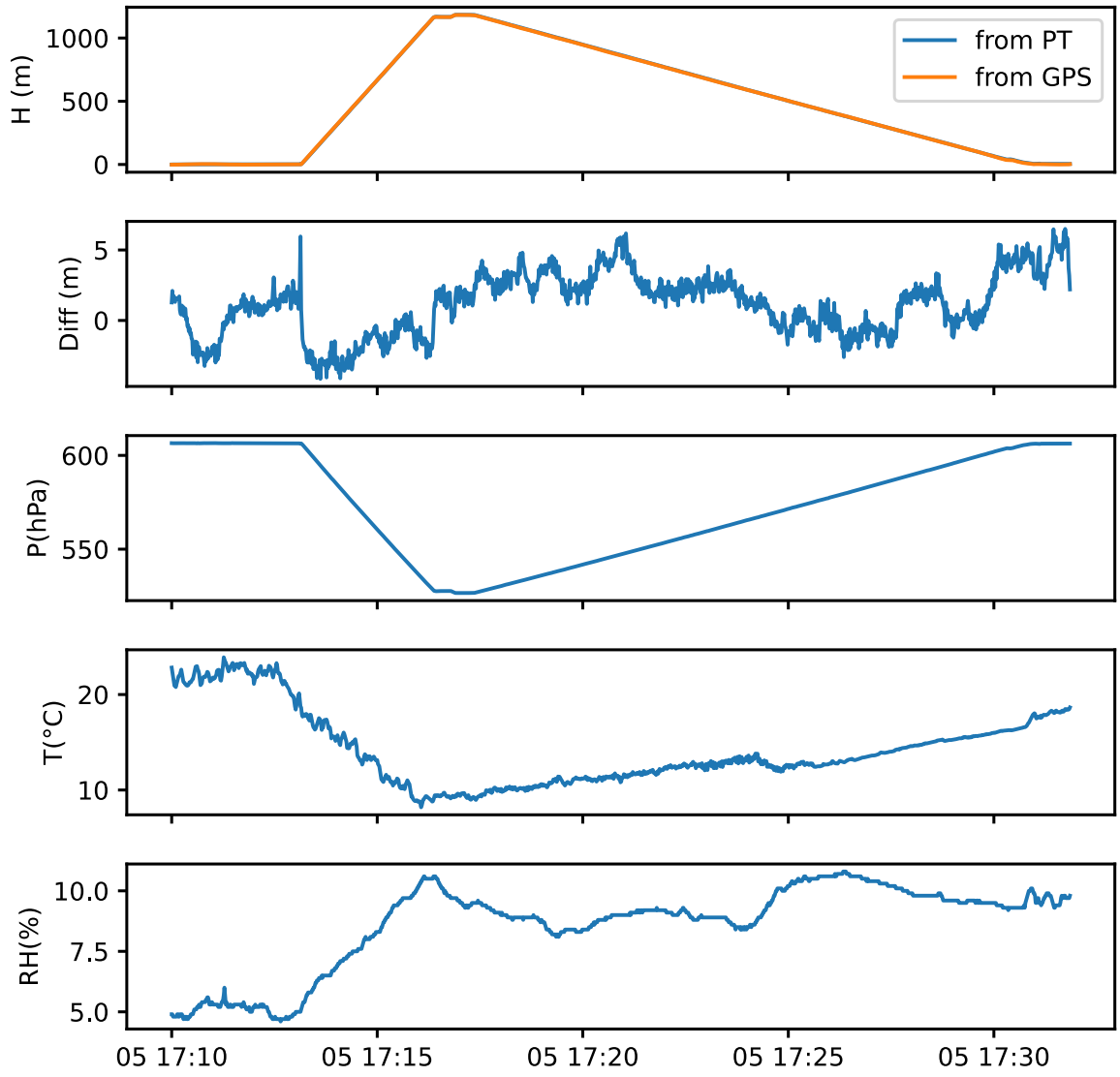


Figure S1. Comparison of GPS height (above ground level) and the height calculated from the iMET XQ2, alongside its measurements during flight, with the time shown in local time.