A plan of GPS down-looking observation set up on a air plane

Takayuki Yoshihara[1], Toshitaka Tsuda[1]

[1] RASC, Kyoto Univ.

We have a plan of an GPS application for observing water vapor profile by using a technique which is similar to GPS downlooking observation. In the case of normal down-looking observation, High-sampling GPS receiver is set up on the top of an isolated mountain. In our plan, the same GPS raceiver will be set up on a airplane and we aim to estimate water vapor profile below a height of the airplane. In the future, if this GPS receiving system is set up on civilian airplanes, we will be able to regularly obtain water vapor information on the sea, where it is more difficult to observe water vapor than on land.