

## Refractivity profile retrieved from Down-looking GPS occultation : measurement and data processing

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The GPS radio wave propagating through the atmosphere is slowed and bent by ionospheric and neutral atmospheric refractivities. These effects can be detected as phase delay of carrier wave. Down-looking GPS (DL) occultation can produce the atmospheric refractive index profile near the Earth surface using the phase delay for the GPS signal transmitted from an occulting GPS satellite. Then DL occultation measurement experiment was carried out on the top of Mt. Fuji from July 10 to September 25, 2001. We develop the data processing software for DL occultation. Using this software, the bending angle and impact parameter, which are important parameters for retrieving the atmospheric refractivity profile, are derived from observed phase delay. We will report the preliminary results of DL occultation data analysis.