Cheng-Yung
Huang
Associate Researcher
Wen-Hao Yeh, Assistant Researcher
Kun-Lin Chen, Associate Researcher
Oral
The weather front forms when the moist air over the Pacific meets the cooler continental air mass during May and June. As the front moves back and forth depending on the strength of cool and warm air masses, it brings heavy and prolonged rainfall to eastern China and Taiwan. The rates of extremely heavy rain and torrential rain have increased dramatically along with the Climate change, global warning and air pollution increase. The planetary boundary layer (PBL) or atmospheric boundary layer (ABL) is the part of the atmosphere closest to the earth's surface where turbulent processes often dominate the vertical redistribution of sensible heat, moisture, momentum, and aerosols/pollution. The radio occultation profiles had been proven a powerful to observe the atmospheric parameters. The bending angle, refraction profile and SNR profiles will be used to detect the boundary layer around Taiwan during plum rain fall season. Consider to the profiles number of RO data, we will focus ours study on the data in 2013, and compare these results with other weather model. The results will validate the capability of radio occultation for detecting the boundary layers height for plum rainfall.
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