Improvement of the Temperature and Moisture Retrievals in the Troposphere using AIRS and GPS Radio Occultation Measurements

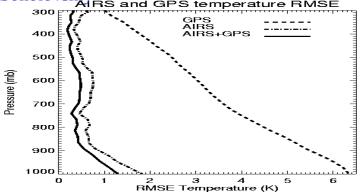
Shu-peng Ben Ho, Bill Kuo and Sergey Sokolovskiy and GPS temperature RMSE

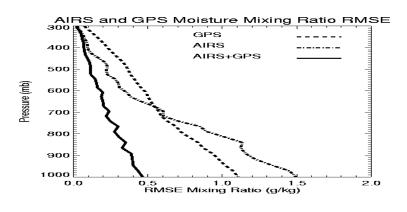
1. Purpose: to quantify GPS impacts on AIRS T/W retrievals and AIRS impacts on GPS N rets under SR and non-SR conditions

2. Outlines:

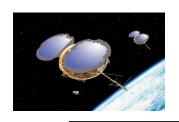
- Information content
- GPS T/W sensitivity at different altitudes
- Improvement of the GPS superrefraction effect using AIRS
- GPS impacts on AIRS retrievals

3. Conclusions





	AIRS	GPS	AIRS+GPS
DFS for Temperature	16.1	12.4	17.9
DFS for Water Vapor	10.2	20.5	23.6

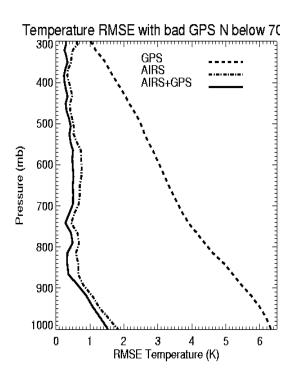


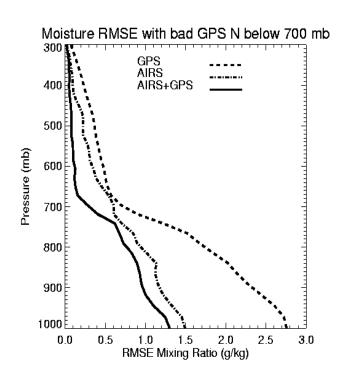
AIRS+GPS under SR

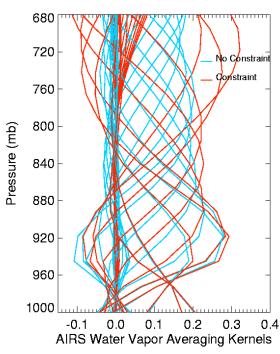


Temperature RMSE Water Vapor RMSE

Water Vapor **Averaging Kernels**









AIRS+GPS under SR



