

# SPECTRA

Sergio DeSouza-Machado

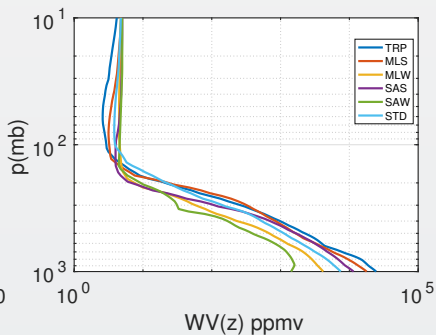
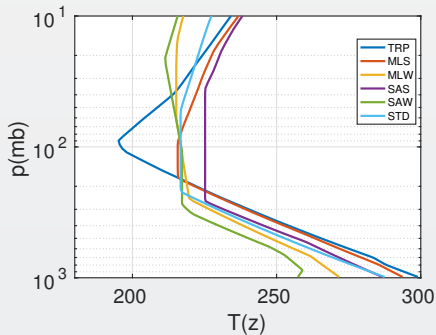
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University of Maryland Baltimore County (UMBC)

April 30, 2018

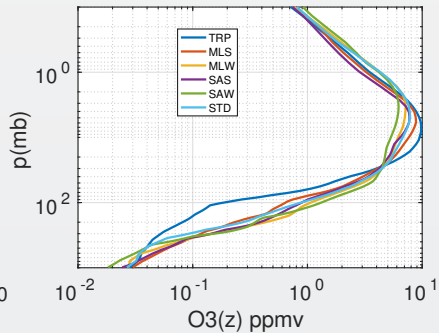
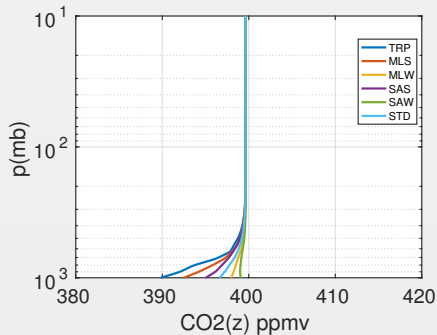
# Atmospheric Profiles

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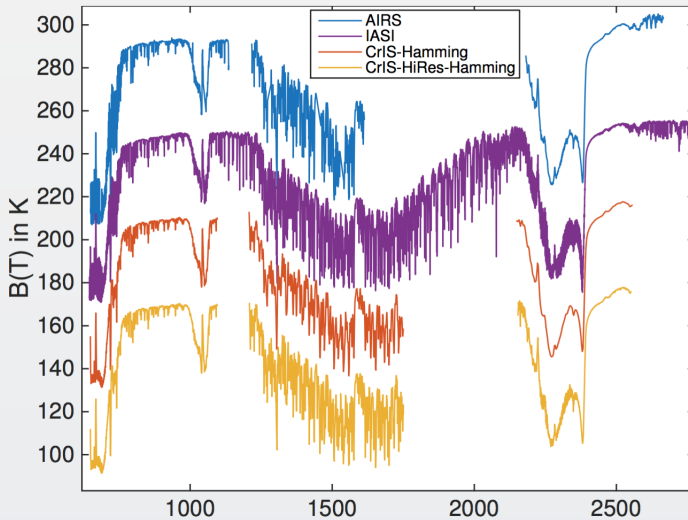
# Typical T,WV profiles



# Typical CO<sub>2</sub>,O<sub>3</sub> profiles



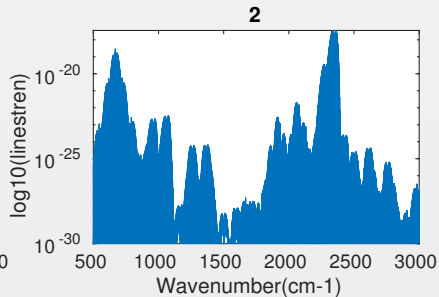
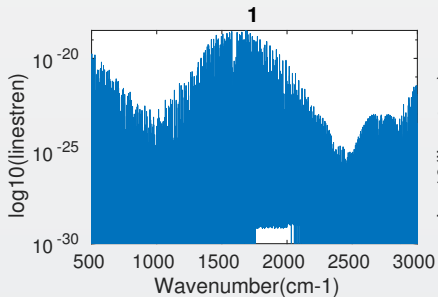
# Different instruments



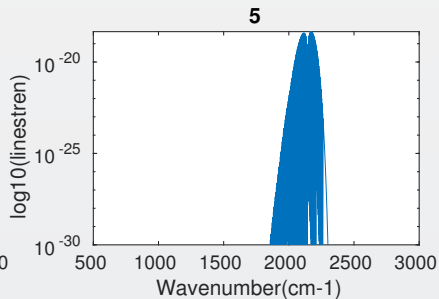
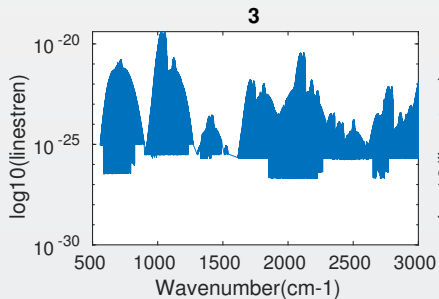
## HITRAN line strength

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# WV and CO<sub>2</sub>



# O3 and CO

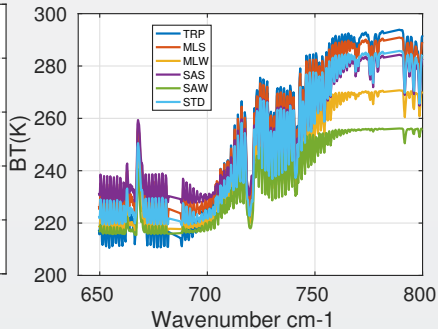
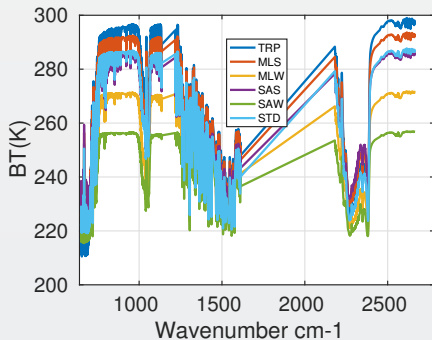




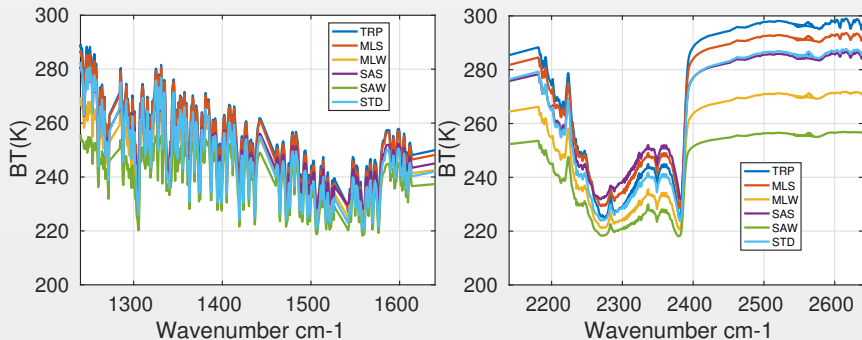
## Typical Spectra

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# Typical TOA nadir spectra



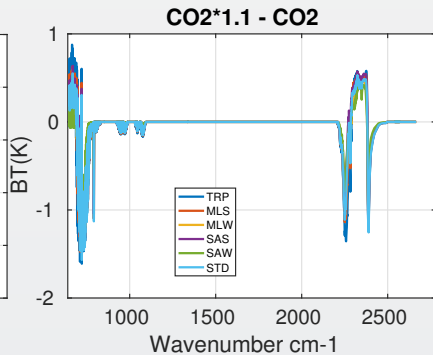
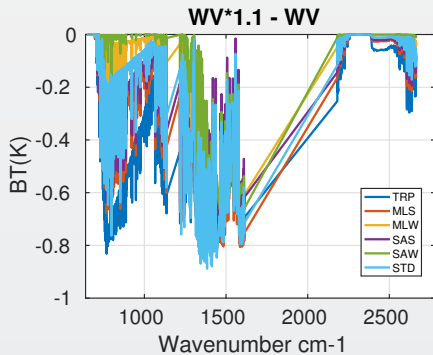
# Typical TOA nadir spectra



## Typical Jacobians

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# Perturb gas by 1.1



# Perturb gas by 1.1

