P5281: **Speed Dependent Voigt Database using Dual Comb Absorption of H_2O from 6650-7540 cm^{-1} and up to 1100 K**

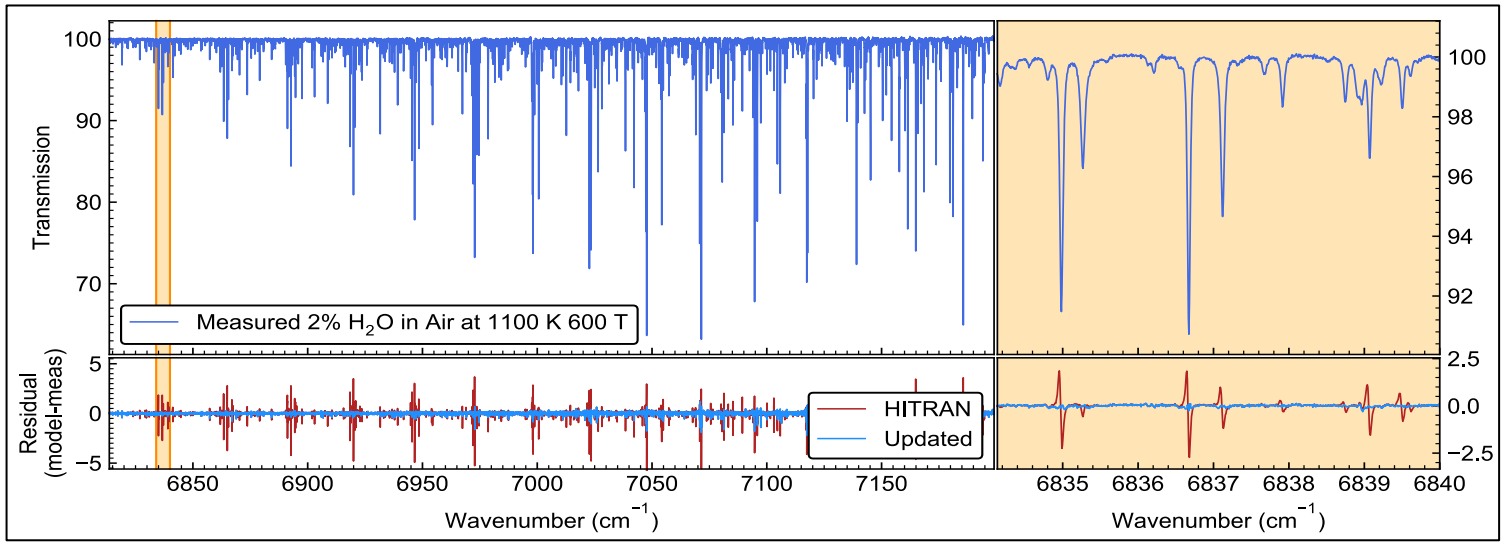
Scott Egbert[a], Nathan Malarich[a], David Yun[a], Keeyoon Sung[b], Sean Coburn[a], Brian Drouin[b], Gregory Rieker[a] - [a]University of Colorado Boulder and [b]Jet Propulsion Laboratory

Creating a water database based on HITRAN using dual comb laser measurements from 6650-7540 cm^{-1}

- 28 datasets of pure H_2O
  - 300-1100 K
  - 1-16 Torr
- 28 datasets of 2% H_2O in air
  - 300-1100 K
  - 40-600 Torr

Have processed 6800-7200 cm^{-1}

Largest updates are to air pressure shift for high temperature lines



	Parameter	number of features
Pure Water	Line Position, ν	2298
	Line Strength, S_{296}	2309
	qSDVP Self Widths, γ_{self} n_{self} $a_{w,self}$	541
	Self Pressure Shift, δ_{self} δ'_{self}	254
	"New" Features	76
Air-Water	qSDVP Air Widths, γ_{air} n_{air} $a_{w,air}$	478
	Air Pressure Shift, δ_{air} δ'_{air}	454