Overview of the update and extension for the CO_2 line list in HITRAN2020

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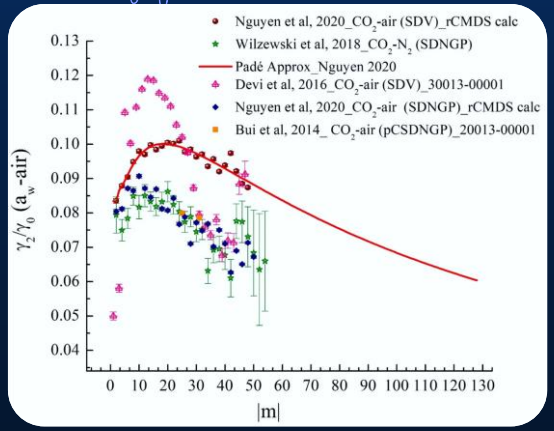
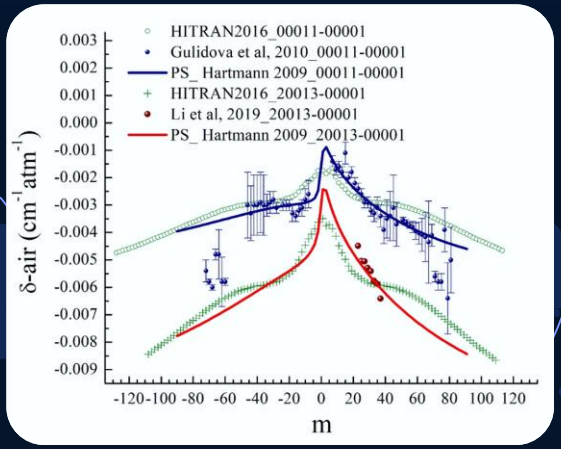


- Line positions and line intensities
- Line half-widths & their temperature exponent
- Pressure shifts
- Speed dependence of the line half-widths & their temperature exponent for CO_2 were introduced to HITRAN for the first time
- The CO_2 line mixing (LM) package
- Validation



New Output Format

Parameter	Units	C | Fortran Format	Err
$\gamma_{SDV\_0\_air}(296)$	$cm^{-1}\cdot atm^{-1}$	F6.4	✓
$n_{SDV\_air}(296)$		F7.4	✓
$\gamma_{SDV\_2\_air}(296)$	$cm^{-1}\cdot atm^{-1}$	F6.4	✓
$n_{\gamma_{SDV\_2\_air}}(296)$		F4.2	✓
$\delta_{SDV\_0\_air}(296)$	$cm^{-1}\cdot atm^{-1}$	F9.6	✓
$\gamma_{SDV\_0\_self}(296)$	$cm^{-1}\cdot atm^{-1}$	F6.4	✓
$n_{SDV\_self}(296)$		F7.4	✓
$\gamma_{SDV\_2\_self}(296)$	$cm^{-1}\cdot atm^{-1}$	F6.4	✓
$Y_{SDV\_air}(296)$		E10.3	✓
$Y_{SDV\_self}(296)$		E10.3	✓