

| Symbol (units) | Parameter | Value | Uncertainty | Reference |
|---|--|--|--|--|
| ν_i (kHz) | Resonant line frequency at 22 GHz at 183 GHz | 22235079.85 183310087 | 0.05 1 | Kukulich (1969) Golubiatnikov et al. (2006) |
| S_i (Hz cm ²) | Resonant line intensity at 22 GHz at 183 GHz | 1.3161×10^{-14} 2.3222×10^{-12} | 1 % 1 % | Polyansky et al. (2018) Tretyakov (2016) |
| n_S (unitless) | Resonant line intensity temperature-dependence exponent | 2.5 | 0.5 % | Gamache et al. (2017) This work |
| E_{low} (cm ⁻¹) | Resonant line lower-state energy at 22 GHz at 183 GHz | 446.5106590 136.163927 | 4×10^{-8} % 7×10^{-7} % | Tennyson et al. (2013) |
| γ_a (GHz bar ⁻¹) | Resonant line air broadening at 22 GHz at 183 GHz | 2.688 2.945 | 0.039 0.015 | Koshelev et al. (2018) Tretyakov (2016) |
| γ_w (GHz bar ⁻¹) | Resonant line water broadening at 22 GHz at 183 GHz | 13.281 14.77 | 0.039 0.37 | Koshelev et al. (2018) Tretyakov (2016) |
| n_a (unitless) | Resonant line air-broadening temperature-dependence exponent at 22 GHz at 183 GHz | 0.70 0.74 | 0.05 0.03 | Payne et al. (2008) Tretyakov (2016) |
| n_w (unitless) | Resonant line water-broadening temperature-dependence exponent at 22 GHz at 183 GHz | 1.20 0.78 | 0.5 0.08 | Cazzoli et al. (2007) Bauer et al. (1989) Tretyakov (2016) |
| R (unitless) | Resonant line shift-to-broadening ratio at 22 GHz at 183 GHz | -0.0089 -0.0245 | 0.0106 0.0026 | Koshelev et al. (2018) Tretyakov (2016) |
| C_f (km ⁻¹ mb ⁻² GHz ⁻²) | Foreign-broadened continuum | 5.96×10^{-10} | 5.5×10^{-11} | Rosenkranz (1998) Turner et al. (2009) |
| C_s (km ⁻¹ mb ⁻² GHz ⁻²) | Self-broadened continuum | 1.42×10^{-8} | 3.2×10^{-9} | Rosenkranz (1998) Turner et al. (2009) |
| n_{cf} (unitless) | Foreign-broadened continuum temperature-dependence exponent | 0.0 | 0.8 | Rosenkranz (1998) Tretyakov (2016) Koshelev et al. (2011) |
| n_{cs} (unitless) | Self-broadened continuum temperature-dependence exponent | 4.5 | 0.6 | Rosenkranz (1998) Tretyakov (2016) Koshelev et al. (2011) |