



Corrigendum

Corrigendum to “In search of water vapor on Jupiter: Laboratory measurements of the microwave properties of water vapor under simulated jovian conditions” [Icarus 212 (2011) 210–223]

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On page 218, the Van Vleck–Weisskopf lineshape given in Eq. (37) is in error. A modified Van Vleck–Weisskopf lineshape is used following Rosenkranz (1998), and should be corrected to read:

$$F_{VW_{modified}} = \frac{1}{\pi} \left(\frac{v}{v_i} \right)^2 \left[\left(\frac{\Delta v_i}{(v - v_i)^2 + \Delta v_i^2} - \frac{\Delta v_i}{750^2 + \Delta v_i^2} \right) + \left(\frac{\Delta v_i}{(v + v_i)^2 + \Delta v_i^2} - \frac{\Delta v_i}{750^2 + \Delta v_i^2} \right) \right], \quad (37)$$

where v , v_i , and Δv_i are in GHz.

In addition, the units for line intensities listed in Table 4 (page 218) were omitted and should be $\text{cm}^2 \times \text{Hz}$ per molecule.

Finally, the units for the empirically derived constants for the new water vapor model given in Table 6 (page 219) were omitted and are now listed in the revised Table 6.

Acknowledgments

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Reference

Rosenkranz, P.W., 1998. Water vapor microwave continuum absorption: A comparison of measurements and models. *Radio Science* 33, 919–928.

Table 6

Empirically derived constants for the new water vapor model.

C_w	$4.36510480961 \times 10^{-7}$	$\text{km}^{-1} \times (\text{mbars} \times \text{GHz})^{-2}$
$x_{\text{continuum}}$	13.361979981	
$n_{\text{continuum}}$	6.76418487001	
C_w'	$2.10003048186 \times 10^{-26}$	$\text{km}^{-1} \times \text{mbars}^{-n_{\text{continuum}}} \times \text{GHz}^{-2}$
$x'_{\text{continuum}}$	0.0435525417274	
C_{H_2}	$5.07722009423 \times 10^{-11}$	$\text{km}^{-1} \times (\text{mbars} \times \text{GHz})^{-2}$
C_{H_e}	$1.03562010226 \times 10^{-10}$	$\text{km}^{-1} \times (\text{mbars} \times \text{GHz})^{-2}$

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