

Continued from Table 6 part 1

Table 6 part 2

The following five rows are preferred over the last three rows in Table 6 part 1.

$i$	H <sub>2</sub> Transition <sup>a</sup>	$E_p(\text{cm}^{-1})^a$	$I^a$	Uranian Satellites	$R'_{ui}$ <sup>b</sup>	$T(K)^c$
15	(2,1) S(2)	4642	0.44	Ring 4	1.666	2134
14	(3,2) S(4)	4699	0.09	Ring 5	1.652	2297 <sup>d</sup>
13	(1,0) S(1)	4713	1.60	Ring 5	1.652	
12	(2,1) S(3)	4823	0.56	Ring 6	1.637	2560 <sup>d</sup>
11	(3,2) S(5)	4841	0.11	Ring 6	1.637	

<sup>a</sup>Black and van Dishoeck (1987)

<sup>b</sup>NASA(2021),  $R'_{ui}$  are orbital radii of satellites from Ring 6 to Ophelia.

<sup>c</sup> $T$ 's from  $T = (E_p - E_b)/C'$ . This relationship is discussed in section 2.7 of the text.

<sup>d</sup> $T$  is calculated for this satellite using two close  $E_p$ 's. First the weighted average of the two  $E_p$ 's is determined using relative intensities ( $I$ 's) as weighting factors. Then  $T$  is calculated from  $T = (E_p - E_b)/C'$ , where  $E_p$  is the weighted average. See Figure 4.

<sup>e</sup>It was not possible to associate this spectral line with a satellite. Because its relative intensity ( $I$ ) is low, it is assumed it does not create resonance and it is not included in the analysis. See Figure 4.