

Table 2. Orbital radii of satellites and rings of Uranus, Jupiter and Neptune in units of equatorial radius of the respective planet. For Jupiter and Neptune,  $R_{Tji}$  and  $R_{Tni}$  are orbital radii transformed using Eqns (1) and (2) respectively.

$i$	Uranian Satellites	$R_{ui}''^a$	$R_{ui}'^a$	$R_{ui}^a$	Jovian Satellites	$R_{Tji}^b$	Neptunian Satellites	$R_{Tji}^c$
11&12	Ring 6	1.637						
13&14	Ring 5	1.652						
15	Ring 4	1.666						
15	Ring $\alpha$		1.750					
13&14	Ring $\beta$		1.787					
11&12	Ring $\eta$		1.846					
10	Ring $\gamma$		1.863					
9	Ring $\delta$		1.900					
7	Cordelia		1.948					
5&6	Ring $\lambda$		1.957					
3&4	Ring $\epsilon$		2.006					
1	Ophelia		2.105					
1	Bianca			2.316				
3&4	Cressida			2.418			Naiad	2.393
5&6	Desdemona			2.453			Thalassa	2.465
7	Juliet			2.520			Despina	2.560
9	Portia			2.586			Rings LeV&Las <sup>d</sup>	2.586
10	Rosalind			2.735			Ring Arago	2.742
	Cupid <sup>e</sup>			2.911				
11	Belinda			2.946	Metis	2.951	Galatea & Unnamed ring	2.926
12	Perdita			2.990	Adrastea	2.959	Ring Adams	2.963
13&14	Puck			3.365	Amalthea	3.380	Larissa	3.375
15	Mab			3.824	Thebe	3.706	Hippocamp	4.606
16	Miranda			5.082	Io	5.311	Proteus	5.084
17	Ariel			7.469	Europa	7.312		
18	Umbriel			10.407	Ganymede	10.518		
19	Titania			17.070	Callisto	17.040		
20	Oberon			22.830				

Note: Each satellite is assigned an index ( $i$ ) consisting of one or two integers. Satellites in the same row have the same  $i$ . The indexing system is explained in sections 2.1.c, 2.2a and 2.2b.

<sup>a</sup>NASA(2021)

$R_{ui}''$  refers to orbital radii from Ring 6 to Ring 4.

$R_{ui}'$  refers to orbital radii from Ring  $\alpha$  to Ophelia.

$R_{ui}$  refers to orbital radii from Bianca to Oberon.

<sup>b</sup>NASA(2021) transformed with Eqn (1) as described in sections 2.1.c

<sup>c</sup>NASA(2021) transformed with Eqn (2) as described in sections 2.1.c

<sup>d</sup>Rings LeV&Las stands for Rings LeVerrier and Lassell

<sup>e</sup>See text concerning why the orbital radius of Cupid does not have an index nor is it used in the analysis.