

Éphémérides topocentriques de Neptune

Les temps sont donnés en TU pour Auch (0° 35' 0" E, 43° 38' 0" N, zone A).

	Date	Heure	A. D. (2020,0)	Décl. (2020,0)	Const.	Dist. T.	Dist. S.	Magn.	Diam.	Illum.	Élong.	Sépar.	Lever	Passage	Coucher	Altitude	Azimut	Azimut
	jj mm aaaa	hh:mm	topocentrique	topocentrique		UA	UA	mV	"	%	°	°	hh:mm	hh:mm	hh:mm	max.	lever	coucher
1	01 01 2020	00:00	23h 11m 2,6s	-6° 21' 45"	Aqr	30,315	29,933	7,92	2,2	100,0	66,3° E	66,3°	10:48	16:26	22:03	40,0°	98,3°	261,7°
2	02 01 2020	00:00	23h 11m 6,9s	-6° 21' 16"	Aqr	30,331	29,933	7,92	2,2	100,0	65,3° E	65,3°	10:44	16:22	21:59	40,0°	98,3°	261,8°
3	03 01 2020	00:00	23h 11m 11,3s	-6° 20' 47"	Aqr	30,347	29,933	7,92	2,2	100,0	64,3° E	64,3°	10:40	16:18	21:56	40,0°	98,2°	261,8°
4	04 01 2020	00:00	23h 11m 15,8s	-6° 20' 17"	Aqr	30,362	29,933	7,92	2,2	100,0	63,3° E	63,3°	10:36	16:14	21:52	40,0°	98,2°	261,8°
5	05 01 2020	00:00	23h 11m 20,4s	-6° 19' 46"	Aqr	30,378	29,933	7,92	2,2	100,0	62,3° E	62,3°	10:32	16:10	21:48	40,0°	98,2°	261,8°
6	06 01 2020	00:00	23h 11m 25,2s	-6° 19' 15"	Aqr	30,393	29,933	7,92	2,2	100,0	61,3° E	61,3°	10:28	16:06	21:44	40,1°	98,2°	261,8°
7	07 01 2020	00:00	23h 11m 30,1s	-6° 18' 42"	Aqr	30,408	29,933	7,93	2,2	100,0	60,3° E	60,3°	10:24	16:02	21:40	40,1°	98,2°	261,8°
8	08 01 2020	00:00	23h 11m 35,0s	-6° 18' 10"	Aqr	30,423	29,933	7,93	2,2	100,0	59,3° E	59,3°	10:21	15:59	21:37	40,1°	98,2°	261,8°
9	09 01 2020	00:00	23h 11m 40,1s	-6° 17' 36"	Aqr	30,438	29,933	7,93	2,2	100,0	58,3° E	58,3°	10:17	15:55	21:33	40,1°	98,2°	261,8°
10	10 01 2020	00:00	23h 11m 45,3s	-6° 17' 2"	Aqr	30,453	29,933	7,93	2,2	100,0	57,3° E	57,3°	10:13	15:51	21:29	40,1°	98,2°	261,9°
11	11 01 2020	00:00	23h 11m 50,6s	-6° 16' 27"	Aqr	30,467	29,933	7,93	2,2	100,0	56,3° E	56,3°	10:09	15:47	21:25	40,1°	98,1°	261,9°
12	12 01 2020	00:00	23h 11m 55,9s	-6° 15' 52"	Aqr	30,482	29,933	7,93	2,2	100,0	55,3° E	55,3°	10:05	15:43	21:21	40,1°	98,1°	261,9°
13	13 01 2020	00:00	23h 12m 1,4s	-6° 15' 16"	Aqr	30,496	29,933	7,93	2,2	100,0	54,3° E	54,3°	10:01	15:39	21:18	40,1°	98,1°	261,9°
14	14 01 2020	00:00	23h 12m 7,0s	-6° 14' 40"	Aqr	30,510	29,933	7,93	2,2	100,0	53,3° E	53,3°	09:57	15:36	21:14	40,1°	98,1°	261,9°
15	15 01 2020	00:00	23h 12m 12,7s	-6° 14' 3"	Aqr	30,524	29,933	7,93	2,2	100,0	52,3° E	52,3°	09:53	15:32	21:10	40,1°	98,1°	261,9°
16	16 01 2020	00:00	23h 12m 18,4s	-6° 13' 25"	Aqr	30,537	29,933	7,93	2,2	100,0	51,3° E	51,3°	09:49	15:28	21:06	40,1°	98,1°	261,9°
17	17 01 2020	00:00	23h 12m 24,3s	-6° 12' 47"	Aqr	30,551	29,933	7,94	2,2	100,0	50,3° E	50,3°	09:46	15:24	21:02	40,2°	98,1°	262,0°
18	18 01 2020	00:00	23h 12m 30,2s	-6° 12' 8"	Aqr	30,564	29,933	7,94	2,2	100,0	49,3° E	49,3°	09:42	15:20	20:59	40,2°	98,0°	262,0°
19	19 01 2020	00:00	23h 12m 36,3s	-6° 11' 28"	Aqr	30,577	29,933	7,94	2,2	100,0	48,3° E	48,3°	09:38	15:16	20:55	40,2°	98,0°	262,0°
20	20 01 2020	00:00	23h 12m 42,4s	-6° 10' 48"	Aqr	30,590	29,933	7,94	2,2	100,0	47,4° E	47,4°	09:34	15:13	20:51	40,2°	98,0°	262,0°
21	21 01 2020	00:00	23h 12m 48,7s	-6° 10' 8"	Aqr	30,603	29,933	7,94	2,2	100,0	46,4° E	46,4°	09:30	15:09	20:47	40,2°	98,0°	262,0°
22	22 01 2020	00:00	23h 12m 55,0s	-6° 9' 27"	Aqr	30,616	29,932	7,94	2,2	100,0	45,4° E	45,4°	09:26	15:05	20:44	40,2°	98,0°	262,0°
23	23 01 2020	00:00	23h 13m 1,4s	-6° 8' 45"	Aqr	30,628	29,932	7,94	2,2	100,0	44,4° E	44,4°	09:22	15:01	20:40	40,2°	98,0°	262,0°
24	24 01 2020	00:00	23h 13m 7,9s	-6° 8' 3"	Aqr	30,640	29,932	7,94	2,2	100,0	43,4° E	43,4°	09:19	14:57	20:36	40,2°	97,9°	262,1°
25	25 01 2020	00:00	23h 13m 14,5s	-6° 7' 21"	Aqr	30,652	29,932	7,94	2,2	100,0	42,4° E	42,4°	09:15	14:53	20:32	40,3°	97,9°	262,1°
26	26 01 2020	00:00	23h 13m 21,1s	-6° 6' 38"	Aqr	30,664	29,932	7,94	2,2	100,0	41,4° E	41,4°	09:11	14:50	20:28	40,3°	97,9°	262,1°
27	27 01 2020	00:00	23h 13m 27,9s	-6° 5' 54"	Aqr	30,675	29,932	7,94	2,2	100,0	40,4° E	40,4°	09:07	14:46	20:25	40,3°	97,9°	262,1°
28	28 01 2020	00:00	23h 13m 34,7s	-6° 5' 10"	Aqr	30,686	29,932	7,95	2,2	100,0	39,4° E	39,5°	09:03	14:42	20:21	40,3°	97,9°	262,1°
29	29 01 2020	00:00	23h 13m 41,6s	-6° 4' 26"	Aqr	30,697	29,932	7,95	2,2	100,0	38,5° E	38,5°	08:59	14:38	20:17	40,3°	97,9°	262,1°
30	30 01 2020	00:00	23h 13m 48,5s	-6° 3' 41"	Aqr	30,708	29,932	7,95	2,2	100,0	37,5° E	37,5°	08:55	14:34	20:13	40,3°	97,8°	262,2°
31	31 01 2020	00:00	23h 13m 55,6s	-6° 2' 55"	Aqr	30,718	29,932	7,95	2,2	100,0	36,5° E	36,5°	08:51	14:30	20:10	40,3°	97,8°	262,2°
32	01 02 2020	00:00	23h 14m 2,7s	-6° 2' 10"	Aqr	30,729	29,932	7,95	2,2	100,0	35,5° E	35,5°	08:48	14:27	20:06	40,4°	97,8°	262,2°
33	02 02 2020	00:00	23h 14m 9,8s	-6° 1' 24"	Aqr	30,739	29,932	7,95	2,2	100,0	34,5° E	34,5°	08:44	14:23	20:02	40,4°	97,8°	262,2°
34	03 02 2020	00:00	23h 14m 17,1s	-6° 0' 37"	Aqr	30,749	29,932	7,95	2,2	100,0	33,5° E	33,6°	08:40	14:19	19:58	40,4°	97,8°	262,2°
35	04 02 2020	00:00	23h 14m 24,4s	-5° 59' 50"	Aqr	30,758	29,932	7,95	2,2	100,0	32,6° E	32,6°	08:36	14:15	19:55	40,4°	97,8°	262,3°
36	05 02 2020	00:00	23h 14m 31,8s	-5° 59' 3"	Aqr	30,768	29,932	7,95	2,2	100,0	31,6° E	31,6°	08:32	14:11	19:51	40,4°	97,7°	262,3°
37	06 02 2020	00:00	23h 14m 39,2s	-5° 58' 15"	Aqr	30,777	29,932	7,95	2,2	100,0	30,6° E	30,6°	08:28	14:08	19:47	40,4°	97,7°	262,3°
38	07 02 2020	00:00	23h 14m 46,7s	-5° 57' 27"	Aqr	30,785	29,932	7,95	2,2	100,0	29,6° E	29,6°	08:24	14:04	19:43	40,4°	97,7°	262,3°
39	08 02 2020	00:00	23h 14m 54,3s	-5° 56' 39"	Aqr	30,794	29,932	7,95	2,2	100,0	28,6° E	28,7°	08:21	14:00	19:40	40,4°	97,7°	262,3°
40	09 02 2020	00:00	23h 15m 1,9s	-5° 55' 50"	Aqr	30,802	29,932	7,95	2,2	100,0	27,7° E	27,7°	08:17	13:56	19:36	40,4°	97,7°	262,3°
41	10 02 2020	00:00	23h 15m 9,5s	-5° 55' 1"	Aqr	30,810	29,932	7,95	2,2	100,0	26,7° E	26,7°	08:13	13:52	19:32	40,5°	97,6°	262,4°
42	11 02 2020	00:00	23h 15m 17,3s	-5° 54' 12"	Aqr	30,818	29,932	7,95	2,2	100,0	25,7° E	25,7°	08:09	13:49	19:28	40,5°	97,6°	262,4°
43	12 02 2020	00:00	23h 15m 25,0s	-5° 53' 22"	Aqr	30,826	29,932	7,96	2,2	100,0	24,7° E	24,8°	08:05	13:45	19:25	40,5°	97,6°	262,4°
44	13 02 2020	00:00	23h 15m 32,8s	-5° 52' 32"	Aqr	30,833	29,932	7,96	2,2	100,0	23,8° E	23,8°	08:01	13:41	19:21	40,5°	97,6°	262,4°
45	14 02 2020	00:00	23h 15m 40,7s	-5° 51' 42"	Aqr	30,840	29,932	7,96	2,2	100,0	22,8° E	22,8°	07:57	13:37	19:17	40,5°	97,6°	262,4°
46	15 02 2020	00:00	23h 15m 48,6s	-5° 50' 51"	Aqr	30,847	29,932	7,96	2,2	100,0	21,8° E	21,8°	07:54	13:33	19:13	40,5°	97,5°	262,5°
47	16 02 2020	00:00	23h 15m 56,6s	-5° 50' 1"	Aqr	30,853	29,932	7,96	2,2	100,0	20,8° E	20,9°	07:50	13:30	19:10	40,5°	97,5°	262,5°
48	17 02 2020	00:00	23h 16m 4,5s	-5° 49' 10"	Aqr	30,859	29,932	7,96	2,2	100,0	19,9° E	19,9°	07:46	13:26	19:06	40,6°	97,5°	262,5°
49	18 02 2020	00:00	23h 16m 12,6s	-5° 48' 18"	Aqr	30,865	29,932	7,96	2,2	100,0	18,9° E	18,9°	07:42	13:22	19:02	40,6°	97,5°	262,5°
50	19 02 2020	00:00	23h 16m 20,7s	-5° 47' 27"	Aqr	30,871	29,932	7,96	2,2	100,0	17,9° E	17,9°	07:38	13:18	18:58	40,6°	97,5°	262,5°
51	20 02 2020	00:00	23h 16m 28,8s	-5° 46' 36"	Aqr	30,876	29,932	7,96	2,2	100,0	16,9° E	17,0°	07:34	13:14	18:55	40,6°	97,4°	262,6°
52	21 02 2020	00:00	23h 16m 37,0s	-5° 45' 44"	Aqr	30,881	29,932	7,96	2,2	100,0	16,0° E	16,0°	07:30	13:11	18:51	40,6°	97,4°	262,6°
53	22 02 2020	00:00	23h 16m 45,1s	-5° 44' 52"	Aqr	30,886	29,932	7,96	2,2	100,0	15,0° E	15,0°	07:27	13:07	18:47	40,6°	97,4°	262,6°
54	23 02 2020	00:00	23h 16m 53,4s	-5° 44' 0"	Aqr	30,891	29,932	7,96	2,2	100,0	14,0° E	14,1°	07:23	13:03	18:43	40,6°	97,4°	262,6°
55	24 02 2020	00:00	23h 17m 1,6s	-5° 43' 7"	Aqr	30,895	29,932	7,96	2,2	100,0	13,1° E	13,1°	07:19	12:59	18:40	40,7°	97,4°	262,6°
56	25 02 2020	00:00	23h 17m 9,9s	-5° 42' 15"	Aqr	30,899	29,932	7,96	2,2	100,0	12,1° E	12,1°	07:15	12:55	18:36	40,7°	97,3°	262,7°
57	26 02 2020	00:00	23h 17m 18,1s	-5° 41' 22"	Aqr	30,903	29,932	7,96	2,2	100,0	11,1° E	11,2°	07:11	12:52	18:32	40,7°	97,3°	262,7°
58	27 02 2020	00:00	23h 17m 26,5s	-5° 40' 30"	Aqr	30,906	29,932	7,96	2,2	100,0	10,1° E	10,2°	07:07	12:48	18:28	40,7°	97,3°	262,7°
59	28 02 2020	00:00	23h 17m 34,8s	-5° 39' 37"	Aqr	30,909	29,932	7,96	2,2	100,0								

Éphémérides topocentriques de Neptune (suite)

Les temps sont donnés en TU pour Auch (0° 35' 0" E, 43° 38' 0" N, zone A).

	Date	Heure	A. D. (2020,0)	Décl. (2020,0)	Const.	Dist. T.	Dist. S.	Magn.	Diam.	Illum.	Élong.	Sépar.	Lever	Passage	Coucher	Altitude	Azimut	Azimut
	jj mm aaaa	hh:mm	topocentrique	topocentrique		UA	UA	mV	"	%	°	°	hh:mm	hh:mm	hh:mm	max.	lever	coucher
301	27 10 2020	00:00	23h 19m 18,4s	-5° 35' 8"	Aqr	29,224	29,928	7,84	2,3	100,0	134,4° E	134,4°	15:09	20:50	02:35	40,8°	97,2°	262,8°
302	28 10 2020	00:00	23h 19m 14,5s	-5° 35' 31"	Aqr	29,237	29,928	7,84	2,3	100,0	133,4° E	133,4°	15:05	20:46	02:31	40,8°	97,2°	262,8°
303	29 10 2020	00:00	23h 19m 10,8s	-5° 35' 53"	Aqr	29,249	29,928	7,84	2,3	100,0	132,4° E	132,4°	15:02	20:42	02:27	40,8°	97,2°	262,8°
304	30 10 2020	00:00	23h 19m 7,2s	-5° 36' 14"	Aqr	29,262	29,928	7,84	2,3	100,0	131,4° E	131,4°	14:58	20:38	02:23	40,8°	97,2°	262,8°
305	31 10 2020	00:00	23h 19m 3,7s	-5° 36' 35"	Aqr	29,276	29,928	7,84	2,3	100,0	130,4° E	130,4°	14:54	20:34	02:19	40,8°	97,2°	262,8°
306	01 11 2020	00:00	23h 19m 0,3s	-5° 36' 55"	Aqr	29,289	29,928	7,84	2,3	100,0	129,4° E	129,3°	14:50	20:30	02:15	40,8°	97,2°	262,8°
307	02 11 2020	00:00	23h 18m 57,0s	-5° 37' 15"	Aqr	29,302	29,928	7,84	2,3	100,0	128,3° E	128,3°	14:46	20:26	02:11	40,7°	97,2°	262,8°
308	03 11 2020	00:00	23h 18m 53,8s	-5° 37' 33"	Aqr	29,316	29,928	7,85	2,3	100,0	127,3° E	127,3°	14:42	20:22	02:07	40,7°	97,3°	262,8°
309	04 11 2020	00:00	23h 18m 50,7s	-5° 37' 51"	Aqr	29,330	29,928	7,85	2,3	100,0	126,3° E	126,3°	14:38	20:18	02:03	40,7°	97,3°	262,7°
310	05 11 2020	00:00	23h 18m 47,7s	-5° 38' 9"	Aqr	29,344	29,928	7,85	2,3	100,0	125,3° E	125,3°	14:34	20:14	01:59	40,7°	97,3°	262,7°
311	06 11 2020	00:00	23h 18m 44,9s	-5° 38' 25"	Aqr	29,358	29,928	7,85	2,3	100,0	124,3° E	124,3°	14:30	20:10	01:55	40,7°	97,3°	262,7°
312	07 11 2020	00:00	23h 18m 42,1s	-5° 38' 41"	Aqr	29,373	29,928	7,85	2,3	100,0	123,3° E	123,3°	14:26	20:06	01:51	40,7°	97,3°	262,7°
313	08 11 2020	00:00	23h 18m 39,4s	-5° 38' 57"	Aqr	29,388	29,928	7,85	2,3	100,0	122,3° E	122,2°	14:22	20:02	01:47	40,7°	97,3°	262,7°
314	09 11 2020	00:00	23h 18m 36,9s	-5° 39' 11"	Aqr	29,402	29,928	7,85	2,3	100,0	121,2° E	121,2°	14:18	19:58	01:43	40,7°	97,3°	262,7°
315	10 11 2020	00:00	23h 18m 34,5s	-5° 39' 25"	Aqr	29,417	29,928	7,85	2,3	100,0	120,2° E	120,2°	14:14	19:54	01:39	40,7°	97,3°	262,7°
316	11 11 2020	00:00	23h 18m 32,1s	-5° 39' 38"	Aqr	29,432	29,928	7,85	2,3	100,0	119,2° E	119,2°	14:10	19:50	01:35	40,7°	97,3°	262,7°
317	12 11 2020	00:00	23h 18m 29,9s	-5° 39' 50"	Aqr	29,448	29,928	7,86	2,3	100,0	118,2° E	118,2°	14:06	19:47	01:31	40,7°	97,3°	262,7°
318	13 11 2020	00:00	23h 18m 27,8s	-5° 40' 2"	Aqr	29,463	29,928	7,86	2,3	100,0	117,2° E	117,2°	14:02	19:43	01:27	40,7°	97,3°	262,7°
319	14 11 2020	00:00	23h 18m 25,8s	-5° 40' 12"	Aqr	29,479	29,928	7,86	2,3	100,0	116,2° E	116,2°	13:58	19:39	01:23	40,7°	97,3°	262,7°
320	15 11 2020	00:00	23h 18m 24,0s	-5° 40' 22"	Aqr	29,494	29,928	7,86	2,3	100,0	115,1° E	115,1°	13:54	19:35	01:19	40,7°	97,3°	262,7°
321	16 11 2020	00:00	23h 18m 22,3s	-5° 40' 31"	Aqr	29,510	29,928	7,86	2,3	100,0	114,1° E	114,1°	13:50	19:31	01:15	40,7°	97,3°	262,7°
322	17 11 2020	00:00	23h 18m 20,7s	-5° 40' 40"	Aqr	29,526	29,928	7,86	2,3	100,0	113,1° E	113,1°	13:46	19:27	01:11	40,7°	97,3°	262,7°
323	18 11 2020	00:00	23h 18m 19,2s	-5° 40' 47"	Aqr	29,542	29,928	7,86	2,3	100,0	112,1° E	112,1°	13:42	19:23	01:07	40,7°	97,3°	262,7°
324	19 11 2020	00:00	23h 18m 17,8s	-5° 40' 54"	Aqr	29,558	29,928	7,86	2,3	100,0	111,1° E	111,1°	13:38	19:19	01:03	40,7°	97,3°	262,7°
325	20 11 2020	00:00	23h 18m 16,6s	-5° 41' 0"	Aqr	29,574	29,928	7,86	2,3	100,0	110,1° E	110,1°	13:34	19:15	00:59	40,7°	97,3°	262,7°
326	21 11 2020	00:00	23h 18m 15,5s	-5° 41' 5"	Aqr	29,591	29,928	7,87	2,3	100,0	109,1° E	109,0°	13:31	19:11	00:55	40,7°	97,3°	262,7°
327	22 11 2020	00:00	23h 18m 14,5s	-5° 41' 10"	Aqr	29,607	29,928	7,87	2,3	100,0	108,0° E	108,0°	13:27	19:07	00:51	40,7°	97,3°	262,7°
328	23 11 2020	00:00	23h 18m 13,6s	-5° 41' 13"	Aqr	29,624	29,928	7,87	2,3	100,0	107,0° E	107,0°	13:23	19:03	00:47	40,7°	97,3°	262,7°
329	24 11 2020	00:00	23h 18m 12,8s	-5° 41' 16"	Aqr	29,640	29,928	7,87	2,3	100,0	106,0° E	106,0°	13:19	18:59	00:43	40,7°	97,3°	262,7°
330	25 11 2020	00:00	23h 18m 12,2s	-5° 41' 18"	Aqr	29,657	29,927	7,87	2,3	100,0	105,0° E	105,0°	13:15	18:55	00:39	40,7°	97,3°	262,7°
331	26 11 2020	00:00	23h 18m 11,7s	-5° 41' 19"	Aqr	29,674	29,927	7,87	2,3	100,0	104,0° E	104,0°	13:11	18:51	00:36	40,7°	97,3°	262,7°
332	27 11 2020	00:00	23h 18m 11,3s	-5° 41' 19"	Aqr	29,691	29,927	7,87	2,3	100,0	103,0° E	103,0°	13:07	18:47	00:32	40,7°	97,3°	262,7°
333	28 11 2020	00:00	23h 18m 11,1s	-5° 41' 19"	Aqr	29,708	29,927	7,87	2,3	100,0	102,0° E	102,0°	13:03	18:43	00:28	40,7°	97,3°	262,7°
334	29 11 2020	00:00	23h 18m 11,0s	-5° 41' 18"	Aqr	29,725	29,927	7,88	2,3	100,0	100,9° E	100,9°	12:59	18:39	00:24	40,7°	97,3°	262,7°
335	30 11 2020	00:00	23h 18m 11,0s	-5° 41' 15"	Aqr	29,742	29,927	7,88	2,3	100,0	99,9° E	99,9°	12:55	18:35	00:20	40,7°	97,3°	262,7°
336	01 12 2020	00:00	23h 18m 11,2s	-5° 41' 12"	Aqr	29,759	29,927	7,88	2,3	100,0	98,9° E	98,9°	12:51	18:32	00:16	40,7°	97,3°	262,7°
337	02 12 2020	00:00	23h 18m 11,4s	-5° 41' 9"	Aqr	29,776	29,927	7,88	2,3	100,0	97,9° E	97,9°	12:47	18:28	00:12	40,7°	97,3°	262,7°
338	03 12 2020	00:00	23h 18m 11,8s	-5° 41' 4"	Aqr	29,793	29,927	7,88	2,2	100,0	96,9° E	96,9°	12:43	18:24	00:08	40,7°	97,3°	262,7°
339	04 12 2020	00:00	23h 18m 12,4s	-5° 40' 59"	Aqr	29,810	29,927	7,88	2,2	100,0	95,9° E	95,9°	12:39	18:20	00:04	40,7°	97,3°	262,7°
340	05 12 2020	00:00	23h 18m 13,0s	-5° 40' 53"	Aqr	29,828	29,927	7,88	2,2	100,0	94,9° E	94,9°	12:35	18:16	23:56	40,7°	97,3°	262,7°
341	06 12 2020	00:00	23h 18m 13,8s	-5° 40' 46"	Aqr	29,845	29,927	7,88	2,2	100,0	93,9° E	93,9°	12:32	18:12	23:52	40,7°	97,3°	262,7°
342	07 12 2020	00:00	23h 18m 14,7s	-5° 40' 38"	Aqr	29,862	29,927	7,89	2,2	100,0	92,8° E	92,8°	12:28	18:08	23:48	40,7°	97,3°	262,7°
343	08 12 2020	00:00	23h 18m 15,7s	-5° 40' 29"	Aqr	29,880	29,927	7,89	2,2	100,0	91,8° E	91,8°	12:24	18:04	23:45	40,7°	97,3°	262,7°
344	09 12 2020	00:00	23h 18m 16,9s	-5° 40' 20"	Aqr	29,897	29,927	7,89	2,2	100,0	90,8° E	90,8°	12:20	18:00	23:41	40,7°	97,3°	262,7°
345	10 12 2020	00:00	23h 18m 18,2s	-5° 40' 10"	Aqr	29,914	29,927	7,89	2,2	100,0	89,8° E	89,8°	12:16	17:56	23:37	40,7°	97,3°	262,7°
346	11 12 2020	00:00	23h 18m 19,6s	-5° 39' 59"	Aqr	29,932	29,927	7,89	2,2	100,0	88,8° E	88,8°	12:12	17:52	23:33	40,7°	97,3°	262,7°
347	12 12 2020	00:00	23h 18m 21,1s	-5° 39' 47"	Aqr	29,949	29,927	7,89	2,2	100,0	87,8° E	87,8°	12:08	17:48	23:29	40,7°	97,3°	262,7°
348	13 12 2020	00:00	23h 18m 22,8s	-5° 39' 34"	Aqr	29,966	29,927	7,89	2,2	100,0	86,8° E	86,8°	12:04	17:45	23:25	40,7°	97,3°	262,7°
349	14 12 2020	00:00	23h 18m 24,6s	-5° 39' 21"	Aqr	29,984	29,927	7,89	2,2	100,0	85,8° E	85,8°	12:00	17:41	23:21	40,7°	97,3°	262,7°
350	15 12 2020	00:00	23h 18m 26,6s	-5° 39' 6"	Aqr	30,001	29,927	7,90	2,2	100,0	84,8° E	84,8°	11:56	17:37	23:17	40,7°	97,3°	262,7°
351	16 12 2020	00:00	23h 18m 28,6s	-5° 38' 51"	Aqr	30,018	29,927	7,90	2,2	100,0	83,8° E	83,8°	11:52	17:33	23:13	40,7°	97,3°	262,7°
352	17 12 2020	00:00	23h 18m 30,8s	-5° 38' 35"	Aqr	30,035	29,927	7,90	2,2	100,0	82,8° E	82,8°	11:48	17:29	23:10	40,7°	97,3°	262,7°
353	18 12 2020	00:00	23h 18m 33,2s	-5° 38' 19"	Aqr	30,053	29,927	7,90	2,2	100,0	81,7° E	81,7°	11:44	17:25	23:06	40,7°	97,3°	262,7°
354	19 12 2020	00:00	23h 18m 35,6s	-5° 38' 1"	Aqr	30,070	29,927	7,90	2,2	100,0	80,7° E	80,7°	11:41	17:21	23:02	40,7°	97,3°	262,7°
355	20 12 2020	00:00	23h 18m 38,2s	-5° 37' 43"	Aqr	30,087	29,927	7,90	2,2	100,0	79,7° E	79,7°	11:37	17:17	22:58	40,7°	97,2°	262,8°
356	21 12 2020	00:00	23h 18m 40,8s	-5° 37' 24"	Aqr	30,104	29,927	7,90	2,2	100,0	78,7° E	78,7°	11:33	17:13	22:54	40,7°	97,2°	262,8°
357	22 12 2020	00:00	23h 18m 43,7s	-5° 37' 4"	Aqr	30,121	29,927	7,90	2,2	100,0	77,7° E	77,7°	11:29	17:10	22:50	40,8°	97,2°	262,8°
358	23 12 2020	00:00	23h 18m 46,6s	-5° 36' 43"	Aqr	30,138	29,927	7,91	2,2	100,0	76,7° E	76,7°	11:25	17:06	2			