

<http://lnfm1.sai.msu.ru/neb/nss/nsszph517he.htm>

v5.19.11 Planet: Jupiter (DE405)

Planet

Observatory N: 388 - Tokyo-Mitaka

Timescale: UTC

Mean equator and equinox of J2000. ICRF.

Mutual events of satellites:

Date	begin: h	m	s	end: h	m	s	Type	Dur (m)	Impact	m	Δm	limb (")	dist (")	Planet (°)	Sun (°)	Moon phase		
2021	1	8	8	18	55	8	33	48	2E3	14.9	0.845	4.9	0.044	122.62	9.41	7.117	-6.778	0.358
2021	1	21	22	26	13	22	36	48	201	10.6	0.419	5.1	0.288	79.58		2.437	6.025	0.564
2021	1	21	22	41	10	22	53	57	2E1	12.8	0.072	5.1	0.884	79.66	3.08	5.168	8.646	0.565
2021	2	22	21	54	35	22	2	29	2E1	7.9	0.054	5.1	0.896	76.55	9.32	15.106	6.140	0.696
2021	3	6	20	37	36	20	39	15	1E2	1.6	0.941	5.1	0.015	30.56	22.42	8.498	-6.105	0.441
2021	3	6	21	31	39	21	34	47	102	3.1	0.576	5.1	0.186	20.27		17.921	4.834	0.438
2021	3	8	20	18	0	20	29	12	1E4	11.2	0.512	5.2	0.249	113.42	44.90	6.100	-9.542	0.302
2021	3	10	20	0	32	20	5	44	302	5.2	0.522	4.8	0.262	49.50		4.062	-12.532	0.168
2021	3	17	21	12	3	21	16	20	3E2	4.3	0.857	4.8	0.072	32.31	45.36	20.768	4.046	0.278
2021	3	26	20	21	24	20	27	14	2E1	5.8	0.382	5.0	0.509	72.55	26.32	17.448	-3.620	0.857
2021	3	28	18	58	24	19	14	11	1E3	15.8	0.852	4.7	0.040	50.19	23.03	3.604	-19.520	0.973
2021	4	5	19	52	49	20	0	7	203	7.3	0.130	4.7	0.283	103.79		18.415	-6.457	0.399
2021	4	7	18	32	43	18	37	35	1E2	4.9	0.330	5.0	0.581	60.69	37.76	5.146	-21.266	0.270
2021	4	12	18	24	49	18	29	45	103	4.9	0.630	4.6	0.120	52.82		6.888	-21.183	0.049
2021	4	13	19	39	35	20	30	51	304	51.3	0.398	4.8	0.182	234.36		20.861	-6.827	0.109
2021	4	14	20	45	41	20	50	49	1E2	5.1	0.196	4.9	0.626	67.28	40.44	31.281	6.612	0.171
2021	4	15	19	10	45	19	14	32	301	3.8	0.771	4.6	0.085	40.98		17.141	-11.836	0.227
2021	4	19	17	50	19	18	38	28	4E1	48.2	0.642	5.0	0.446	71.55	72.29	4.917	-25.024	0.469
2021	4	19	18	32	25	18	39	5	1E3	6.7	0.623	4.6	0.213	13.75	57.73	12.793	-17.806	0.471
2021	4	19	18	32	10	18	46	5	4E3	13.9	0.032	4.8	1.393	14.90	128.06	12.747	-17.850	0.471
2021	4	20	18	2	51	18	41	18	4E2	38.4	0.682	5.2	0.363	55.83	60.80	7.958	-22.657	0.535
2021	4	22	19	16	30	19	22	29	3E1	6.0	0.594	4.5	0.324	15.63	64.83	22.285	-8.903	0.676
2021	4	27	18	31	34	18	34	20	2E1	2.8	0.867	4.9	0.048	67.40	44.50	17.668	-15.854	0.944
2021	4	28	18	56	43	19	4	15	1E4	7.5	0.438	5.0	0.332	48.13	109.89	22.547	-11.115	0.865
2021	4	29	20	7	25	20	56	45	204	49.3	0.805	5.1	0.030	111.52		33.392	2.513	0.784
2021	5	4	20	46	22	20	47	11	2E1	0.8	0.989	4.8	0.001	65.90	48.38	39.252	11.186	0.425
2021	5	6	19	57	36	20	5	21	3E2	7.8	0.567	4.5	0.351	79.16	73.97	35.324	1.978	0.299
2021	5	9	16	33	47	16	39	19	1E2	5.5	0.225	4.8	0.626	89.69	46.58	3.744	-30.228	0.124
2021	5	16	18	48	29	18	53	58	1E2	5.5	0.343	4.7	0.549	95.79	47.18	31.306	-9.073	0.309
2021	5	25	15	36	22	15	44	45	2E3	8.4	0.203	4.4	0.867	20.67	87.89	3.904	-31.803	0.940

Date	begin: h	m	s	end: h	m	s	Type	Dur (m)	Impact	m	Δm	limb('')	dist('')	Planet(°)	Sun(°)	Moon phase
2021	6	1	18 50 43	18	58	20	2E3	7.6	0.429	4.4	0.475	13.41	90.42 :	38.691	-6.960	0.529
2021	6	10	14 44 56	14	49	43	1E2	4.8	0.693	4.6	0.164	115.24	44.21 :	5.603	-31.485	0.015
2021	6	11	17 42 55	18	22	23	3E1	39.5	0.087	4.2	0.567	101.88	46.45 :	35.589	-17.106	0.084
2021	6	12	14 58 43	15	10	2	3E1	11.3	0.357	4.2	0.559	104.24	62.09 :	9.712	-31.190	0.139
2021	6	15	16 31 16	16	36	58	1E3	5.7	0.576	4.2	0.272	60.21	81.73 :	27.859	-25.618	0.336
2021	6	17	17 3 1	17	7	22	1E2	4.4	0.779	4.5	0.099	119.97	41.77 :	33.508	-22.208	0.473
2021	6	19	18 10 20	18	18	56	3E1	8.6	0.537	4.1	0.372	101.21	65.14 :	41.039	-13.115	0.620
2021	6	22	19 14 57	19	19	54	1E3	4.9	0.717	4.1	0.143	73.12	78.19 :	42.672	-2.671	0.851
2021	6	24	19 22 18	19	26	5	1E2	3.8	0.855	4.5	0.052	124.16	38.62 :	42.161	-1.489	0.986
2021	7	22	19 38 53	20	4	30	3E4	25.6	0.970	4.2	0.003	235.65	37.58 :	27.874	-1.422	0.904
2021	8	8	18 3 49	18	57	17	302	53.5	0.113	4.0	0.465	47.28	:	30.336	-20.600	0.030
2021	8	8	20 13 42	21	18	44	3E2	65.0	0.635	4.0	0.205	84.22	7.68 :	8.608	2.644	0.034
2021	8	16	10 3 28	10	35	15	3E2	31.8	0.093	4.0	0.465	198.37	2.00 :	4.156	-7.261	0.559
2021	8	16	10 43 58	10	53	44	302	9.8	0.927	4.0	0.015	199.65	:	11.774	-14.692	0.561
2021	8	22	13 59 3	15	2	39	3E2	63.6	0.017	4.0	0.465	44.73	0.41 :	40.092	-41.724	0.971
2021	8	22	14 33 54	15	26	54	302	53.0	0.281	4.0	0.456	38.09	:	40.843	-42.880	0.970
2021	8	23	14 47 28	15	8	44	3E2	21.3	0.436	4.0	0.420	205.28	5.58 :	40.642	-43.288	0.917
2021	8	30	19 2 52	19	15	28	3E2	12.6	0.766	4.0	0.120	205.20	13.26 :	2.924	-14.560	0.470
2021	11	16	10 26 56	10	43	37	301	16.7	0.841	4.3	0.049	30.45	:	34.335	-34.642	0.818