

Calculated ephemeris on September-December ,2017 (J 2000.0, UTC 0:00)

Sep 2017

Date	R.A.	DEC	To Sun , AU	To Earth , AU
15	8:19:03.35	+1:29:32.6	5. 074 533	5. 692 847
16	8:19:47.11	+1:25:24.7	5. 077 966	5. 685 340
17	8:20:25.27	+1:21:14.3	5. 081 395	5. 677 340
18	8:21:03.01	+1:17:02.8	5. 084 819	5. 669 737
19	8:21:40.31	+1:12:50.4	5. 088 235	5. 661 704
20	8:22:17.18	+1:08:37.0	5. 091 650	5. 653 528
21	8:22:49.46	+1:04:35.2	5. 095 059	5. 644 943
22	8:23:29.54	+1:00:07.9	5. 098 464	5. 636 748
23	8:24:05.05	+0:55:52.1	5. 101 863	5. 628 138
24	8:24:40.07	+0:51:35.8	5. 105 258	5. 619 396
25	8:25:14.61	+0:47:18.8	5. 108 648	5. 610 519
26	8:25:48.68	+0:43:01.2	5. 112 034	5. 601 505
27	8:26:22.27	+0:38:43.0	5. 115 414	5. 592 356
28	8:26:55.35	+0:34:24.4	5. 118 789	5. 583 083
29	8:27:27.93	+0:30:05.3	5. 122 160	5. 573 676
30	8:28:00.01	+0:25:45.8	5. 125 525	5. 564 147

Oct 2017

Date	R.A.	DEC	To Sun , AU	To Earth , AU
1	8:28:31.57	+0:21:26.1	5. 128 886	5. 554 497
2	8:29:02.24	+0:17:06.5	5. 132 140	5. 544 594
3	8:29:32.76	+0:12:46.3	5. 135 491	5. 534 703
4	8:30:02.73	+0:08:26.0	5. 138 835	5. 524 702
5	8:30:32.19	+0:04:05.4	5. 142 178	5. 514 581
6	8:31:07.23	+0:00:33.8	5. 145 516	5. 504 793
7	8:31:29.47	-0:04:35.6	5. 148 849	5. 495 020
8	8:31:57.29	-0:08:56.1	5. 152 172	5. 483 571
9	8:32:24.54	-0:13:16.5	5. 155 502	5. 473 032
10	8:32:51.22	-0:17:36.7	5. 158 821	5. 462 385

11	8:33:17.35	-0:21:56.7	5. 162 136	5. 451 643
12	8:33:42.87	-0:26:16.4	5. 165 446	5. 440 799
13	8:34:07.82	-0:30:35.2	5. 168 751	5. 429 871
14	8:34:32.18	-0:34:54.7	5. 172 052	5. 418 842
15	8:34:55.94	-0:39:13.1	5. 175 348	5. 407 735
16	8:35:19.09	-0:43:31.0	5. 178 640	5. 396 545
17	8:35:41.64	-0:47:48.3	5. 181 926	5. 385 273
18	8:36:03.53	-0:52:04.8	5. 185 209	5. 373 912
19	8:36:24.86	-0:56:20.8	5. 188 486	5. 362 496
20	8:36:45.54	-1:00:35.7	5. 191 759	5. 351 005
21	8:37:05.57	-1:04:49.8	5. 195 026	5. 339 446
22	8:37:24.96	-1:09:02.9	5. 198 290	5. 327 827
23	8:37:43.70	-1:13:15.0	5. 201 548	5. 316 145
24	8:38:01.79	-1:17:25.9	5. 204 802	5. 304 409
25	8:38:19.32	-1:21:35.6	5. 208 050	5. 292 625
26	8:38:36.03	-1:25:44.2	5. 211 294	5. 280 690
27	8:38:52.07	-1:29:51.1	5. 214 534	5. 268 907
28	8:39:07.49	-1:33:56.7	5. 217 768	5. 256 988
29	8:39:22.21	-1:38:00.7	5. 220 998	5. 245 035
30	8:39:36.26	-1:42:03.2	5. 224 222	5. 233 051
31	8:39:48.25	-1:45:59.8	5. 227 442	5. 220 928

Nov 2017

1	8:40:02.28	-1:50:03.2	5. 230 657	5. 208 989
2	8:40:14.21	-1:54:00.3	5. 233 867	5. 196 929
3	8:40:25.45	-1:57:55.6	5. 237 073	5. 184 848
4	8:40:35.97	-2:01:49.0	5. 240 274	5. 172 752
5	8:40:45.79	-2:05:40.3	5. 243 470	5. 160 648
6	8:40:54.88	-2:09:29.4	5. 246 662	5. 148 541
7	8:41:03.25	-2:13:16.4	5. 249 849	5. 136 429
8	8:41:10.89	-2:17:00.9	5. 253 032	5. 124 322
9	8:41:17.79	-2:20:43.2	5. 256 211	5. 112 217
10	8:41:23.96	-2:24:22.9	5. 259 384	5. 100 128
11	8:41:29.39	-2:28:00.1	5. 262 555	5. 088 053

12	8:41:34.07	-2:31:34.7	5. 265 720	5. 075 989
13	8:41:38.00	-2:35:06.5	5. 268 880	5. 063 953
14	8:41:41.18	-2:38:35.5	5. 272 035	5. 051 946
15	8:41:43.60	-2:42:01.6	5. 275 186	5. 039 970
16	8:41:45.27	-2:45:24.6	5. 278 332	5. 028 033
17	8:41:46.17	-2:48:44.6	5. 281 474	5. 016 137
18	8:41:46.32	-2:52:01.4	5. 284 610	5. 004 289
19	8:41:45.69	-2:55:14.9	5. 287 743	4. 992 490
20	8:41:44.31	-2:58:25.0	5. 290 870	4. 980 748
21	8:41:42.16	-3:01:31.6	5. 293 993	4. 969 070
22	8:41:39.24	-3:04:34.7	5. 297 111	4. 957 458
23	8:41:35.57	-3:07:34.1	5. 300 224	4. 945 923
24	8:41:31.11	-3:10:29.7	5. 303 333	4. 934 456
25	8:41:25.90	-3:13:21.5	5. 306 437	4. 923 074
26	8:41:19.92	-3:16:09.3	5. 309 537	4. 911 780
27	8:41:13.17	-3:18:53.2	5. 312 631	4. 900 547
28	8:41:05.67	-3:21:32.9	5. 315 721	4. 889 465
29	8:40:57.40	-3:24:08.4	5. 318 806	4. 878 462
30	8:40:48.37	-3:26:39.6	5. 321 886	4. 867 557

Dec 2017

1	8:40:41.46	-3:29:15.7	5. 324 962	4. 856 945
2	8:40:28.40	-3:31:28.8	5. 328 032	4. 846 093
3	8:40:16.76	-3:33:46.6	5. 331 099	4. 835 541
4	8:40:04.72	-3:35:59.8	5. 334 160	4. 825 109
5	8:39:44.20	-3:37:35.2	5. 337 217	4. 814 811
6	8:39:38.42	-3:40:11.9	5. 340 270	4. 804 646
7	8:39:24.16	-3:42:10.7	5. 343 318	4. 794 617
8	8:39:09.18	-3:44:04.5	5. 346 361	4. 784 737
9	8:38:53.46	-3:45:53.3	5. 349 401	4. 775 001
10	8:38:37.02	-3:47:37.0	5. 352 436	4. 765 417
11	8:38:19.87	-3:49:15.4	5. 355 466	4. 755 993
12	8:38:02.02	-3:50:48.6	5. 358 492	4. 746 733
13	8:37:43.47	-3:52:16.4	5. 361 513	4. 737 640

14	8:37:24.24	-3:53:38.8	5. 364 529	4. 728 722
15	8:37:04.31	-3:54:55.9	5. 367 541	4. 719 980
16	8:36:43.74	-3:56:07.2	5. 370 549	4. 711 421
17	8:36:27.59	-3:57:30.0	5. 373 551	4. 703 289
18	8:36:00.56	-3:58:12.8	5. 376 550	4. 694 868
19	8:35:38.02	-3:59:07.1	5. 379 543	4. 686 888
20	8:35:14.80	-3:59:55.5	5. 382 532	4. 679 107
21	8:34:51.06	-4:00:38.1	5. 385 517	4. 671 532
22	8:34:26.68	-4:01:14.7	5. 388 497	4. 664 171
23	8:34:01.70	-4:01:45.4	5. 391 472	4. 657 022
24	8:33:36.16	-4:02:10.0	5. 394 442	4. 650 096
25	8:33:10.04	-4:02:28.6	5. 397 408	4. 643 392
26	8:32:43.39	-4:02:41.1	5. 400 369	4. 636 917
27	8:32:16.20	-4:02:47.5	5. 403 326	4. 630 673
28	8:31:48.50	-4:02:47.7	5. 406 278	4. 624 667
29	8:31:20.30	-4:02:41.7	5. 409 225	4. 618 901
30	8:30:51.62	-4:02:29.6	5. 412 167	4. 613 379
31	8:30:22.48	-4:02:11.2	5. 415 105	4. 608 106