

Halifax, NS 2022 [$\phi=44.62^\circ$ $\lambda=-63.61^\circ$ UT-4h0m]

Moon: fraction illuminated and time of transit

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|----|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 1 | 0.01 11:07 | 0.01 13:00 | 0.01 11:40 | 0.01 12:42 | 0.01 12:50 | 0.06 14:01 | 0.08 14:26 | 0.17 15:22 | 0.31 16:21 | 0.39 17:04 | 0.58 19:00 | 0.65 19:26 |
| 2 | 0.00 12:14 | 0.04 13:54 | 0.00 12:32 | 0.03 13:26 | 0.04 13:37 | 0.11 14:51 | 0.13 15:13 | 0.25 16:05 | 0.42 17:13 | 0.50 18:06 | 0.69 19:53 | 0.75 20:11 |
| 3 | 0.02 13:19 | 0.10 14:44 | 0.02 13:20 | 0.08 14:10 | 0.09 14:25 | 0.17 15:41 | 0.21 15:57 | 0.34 16:49 | 0.53 18:10 | 0.61 19:08 | 0.79 20:41 | 0.83 20:55 |
| 4 | 0.07 14:21 | 0.17 15:31 | 0.06 14:05 | 0.14 14:56 | 0.15 15:15 | 0.25 16:29 | 0.29 16:41 | 0.45 17:35 | 0.64 19:11 | 0.72 20:08 | 0.87 21:28 | 0.90 21:40 |
| 5 | 0.14 15:17 | 0.26 16:15 | 0.12 14:50 | 0.21 15:43 | 0.23 16:06 | 0.34 17:15 | 0.39 17:23 | 0.56 18:25 | 0.75 20:14 | 0.82 21:04 | 0.93 22:13 | 0.95 22:26 |
| 6 | 0.23 16:08 | 0.35 16:58 | 0.19 15:34 | 0.29 16:33 | 0.31 16:57 | 0.44 18:00 | 0.49 18:07 | 0.67 19:19 | 0.84 21:17 | 0.90 21:57 | 0.98 22:58 | 0.99 23:15 |
| 7 | 0.32 16:55 | 0.44 17:41 | 0.27 16:18 | 0.38 17:23 | 0.40 17:46 | 0.54 18:44 | 0.60 18:52 | 0.77 20:19 | 0.92 22:17 | 0.96 22:46 | 1.00 23:44 | 1.00 |
| 8 | 0.42 17:39 | 0.54 18:25 | 0.36 17:04 | 0.47 18:14 | 0.50 18:34 | 0.64 19:27 | 0.70 19:40 | 0.86 21:23 | 0.97 23:14 | 0.99 23:33 | 1.00 | 0.99 00:05 |
| 9 | 0.52 18:21 | 0.63 19:11 | 0.46 17:52 | 0.57 19:04 | 0.60 19:20 | 0.74 20:13 | 0.80 20:34 | 0.94 22:29 | 1.00 | 1.00 | 0.98 00:32 | 0.97 00:56 |
| 10 | 0.62 19:03 | 0.72 19:59 | 0.55 18:41 | 0.66 19:54 | 0.69 20:06 | 0.83 21:01 | 0.89 21:32 | 0.98 23:33 | 0.99 00:06 | 0.99 00:19 | 0.94 01:21 | 0.93 01:48 |
| 11 | 0.71 19:46 | 0.80 20:49 | 0.64 19:32 | 0.75 20:42 | 0.79 20:51 | 0.91 21:53 | 0.95 22:36 | 1.00 | 0.97 00:55 | 0.95 01:05 | 0.88 02:12 | 0.87 02:39 |
| 12 | 0.79 20:31 | 0.87 21:40 | 0.73 20:23 | 0.83 21:29 | 0.87 21:36 | 0.97 22:50 | 0.99 23:44 | 0.99 00:33 | 0.92 01:42 | 0.90 01:52 | 0.81 03:04 | 0.80 03:28 |
| 13 | 0.86 21:17 | 0.93 22:31 | 0.81 21:13 | 0.90 22:15 | 0.93 22:24 | 1.00 23:53 | 1.00 | 0.95 01:28 | 0.85 02:29 | 0.83 02:40 | 0.73 03:55 | 0.72 04:14 |
| 14 | 0.92 22:06 | 0.97 23:22 | 0.88 22:03 | 0.96 23:01 | 0.98 23:15 | 1.00 | 0.98 00:50 | 0.88 02:19 | 0.77 03:15 | 0.75 03:30 | 0.65 04:46 | 0.63 04:58 |
| 15 | 0.96 22:56 | 0.99 | 0.94 22:51 | 0.99 23:48 | 1.00 | 0.96 01:00 | 0.92 01:53 | 0.80 03:07 | 0.68 04:02 | 0.66 04:21 | 0.55 05:34 | 0.54 05:41 |
| 16 | 0.99 23:47 | 1.00 00:11 | 0.98 23:38 | 1.00 | 0.99 00:10 | 0.91 02:07 | 0.85 02:50 | 0.71 03:53 | 0.59 04:50 | 0.57 05:13 | 0.46 06:19 | 0.44 06:22 |
| 17 | 1.00 | 0.98 00:58 | 1.00 | 0.98 00:37 | 0.95 01:11 | 0.82 03:11 | 0.76 03:42 | 0.62 04:38 | 0.49 05:40 | 0.47 06:04 | 0.36 07:03 | 0.34 07:04 |
| 18 | 0.99 00:38 | 0.94 01:44 | 0.99 00:24 | 0.93 01:30 | 0.89 02:15 | 0.73 04:09 | 0.66 04:30 | 0.52 05:23 | 0.40 06:31 | 0.38 06:53 | 0.27 07:46 | 0.24 07:48 |
| 19 | 0.96 01:28 | 0.88 02:30 | 0.96 01:10 | 0.86 02:26 | 0.80 03:20 | 0.62 05:02 | 0.56 05:16 | 0.42 06:10 | 0.31 07:22 | 0.29 07:41 | 0.18 08:29 | 0.16 08:34 |
| 20 | 0.91 02:16 | 0.80 03:15 | 0.91 01:57 | 0.77 03:26 | 0.70 04:24 | 0.51 05:51 | 0.46 06:00 | 0.33 06:58 | 0.22 08:12 | 0.20 08:26 | 0.11 09:13 | 0.08 09:25 |
| 21 | 0.85 03:02 | 0.71 04:02 | 0.84 02:47 | 0.67 04:29 | 0.59 05:24 | 0.41 06:36 | 0.36 06:44 | 0.24 07:47 | 0.15 09:01 | 0.13 09:11 | 0.05 09:59 | 0.03 10:22 |
| 22 | 0.76 03:47 | 0.61 04:51 | 0.75 03:39 | 0.56 05:32 | 0.48 06:18 | 0.31 07:20 | 0.27 07:28 | 0.17 08:38 | 0.09 09:48 | 0.07 09:54 | 0.01 10:48 | 0.00 11:24 |
| 23 | 0.67 04:31 | 0.49 05:43 | 0.64 04:35 | 0.44 06:33 | 0.37 07:08 | 0.22 08:02 | 0.19 08:15 | 0.10 09:29 | 0.04 10:33 | 0.03 10:38 | 0.00 11:43 | 0.01 12:30 |
| 24 | 0.56 05:16 | 0.38 06:40 | 0.53 05:35 | 0.33 07:29 | 0.27 07:54 | 0.15 08:46 | 0.12 09:03 | 0.05 10:19 | 0.01 11:17 | 0.00 11:23 | 0.02 12:42 | 0.04 13:37 |
| 25 | 0.45 06:04 | 0.27 07:40 | 0.41 06:36 | 0.24 08:21 | 0.18 08:38 | 0.09 09:31 | 0.07 09:53 | 0.02 11:07 | 0.00 12:01 | 0.00 12:11 | 0.06 13:46 | 0.10 14:41 |
| 26 | 0.34 06:54 | 0.18 08:43 | 0.30 07:38 | 0.15 09:09 | 0.11 09:20 | 0.04 10:17 | 0.03 10:43 | 0.00 11:53 | 0.01 12:45 | 0.03 13:02 | 0.13 14:51 | 0.18 15:41 |
| 27 | 0.24 07:49 | 0.10 09:45 | 0.21 08:37 | 0.08 09:55 | 0.06 10:03 | 0.01 11:06 | 0.01 11:34 | 0.01 12:38 | 0.05 13:30 | 0.08 13:57 | 0.22 15:55 | 0.28 16:34 |
| 28 | 0.14 08:49 | 0.04 10:45 | 0.12 09:32 | 0.04 10:38 | 0.02 10:47 | 0.00 11:56 | 0.00 12:23 | 0.03 13:21 | 0.11 14:18 | 0.16 14:57 | 0.32 16:55 | 0.39 17:23 |
| 29 | 0.07 09:52 | | 0.06 10:24 | 0.01 11:21 | 0.00 11:33 | 0.01 12:47 | 0.02 13:11 | 0.07 14:04 | 0.18 15:09 | 0.25 16:00 | 0.43 17:50 | 0.49 18:10 |
| 30 | 0.02 10:57 | | 0.02 11:12 | 0.00 12:05 | 0.00 12:20 | 0.03 13:37 | 0.05 13:56 | 0.13 14:48 | 0.28 16:05 | 0.36 17:03 | 0.54 18:40 | 0.60 18:54 |
| 31 | 0.00 12:00 | | 0.00 11:58 | | 0.02 13:10 | | 0.10 14:40 | 0.21 15:33 | | 0.47 18:03 | | 0.70 19:39 |

Planets: time of transit on the 15th of the month

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Mercury | 13:23 | 10:43 | 11:28 | 13:05 | 12:48 | 10:40 | 12:16 | 13:52 | 12:56 | 11:05 | 12:15 | 13:33 |
| Venus | 11:36 | 09:40 | 09:23 | 09:29 | 09:39 | 09:56 | 10:28 | 11:07 | 11:36 | 11:55 | 12:24 | 13:08 |
| Mars | 10:06 | 09:43 | 09:20 | 08:51 | 08:18 | 07:41 | 07:03 | 06:20 | 05:27 | 04:13 | 02:10 | 23:21 |
| Jupiter | 14:57 | 13:22 | 11:57 | 10:22 | 08:47 | 07:03 | 05:15 | 03:12 | 01:00 | 22:43 | 20:33 | 18:37 |
| Saturn | 13:39 | 11:52 | 10:14 | 08:24 | 06:32 | 04:31 | 02:29 | 00:19 | 22:05 | 20:02 | 18:02 | 16:12 |

github.com/johanley/planisphere

