

Totality on the Tundra – Total Solar Eclipse of 1 August 2008

Observing Sites and Potential Sites (ps)

Issue Date: 2008-07-02

| Observation Site | Start of C1 (UT) | Sun Altitude at C1 (deg) | Start of C2 (UT) | Sun Altitude at C2 (deg) | Totality Duration | Site Elev. est. (m) | Latitude ~ | Longitude ~ |
|---|------------------|--------------------------|------------------|--------------------------|-------------------|---------------------|-------------|--------------|
| Comments: | | | | | | | | |
| All times given in UTC. | | | | | | | | |
| References to horizons and views refer to line of sight towards the eclipse unless otherwise noted. | | | | | | | | |
| In all cases herein C1 occurs with the Sun below the horizon. | | | | | | | | |
| Aerial Interception | 08:31:59.6 | - 01.1° | 09:21:55.9 | + 01.0° | 1 m 31.4 s | n/a | 69°07'00" N | 101°41'13" W |
| <p>If aerial interception due to overcast or ground fog then following flight path for starboard view of eclipse. (NOTE: flight path unadjusted for winds aloft, adjustments to be calculated and made by pilot).</p> <ul style="list-style-type: none"> - 08:???:? variable departure to arrive at waypoint 68°58' N, 101°02' W for 09:12:00 - 09:12:00 ETA at waypoint 68°58' N, 101°02' W, turn left heading 305 True, level flight - 09:21:55.9 C2 (at centerline intercept point) - 09:22:41.5 centerline intercept point 69°07'00" N, 101°41'13" W - 09:23:27.2 C3 (at centerline intercept point) - 09:33:30 return to YCB (this gives us ~ 10 minutes either side of C2 & C3) | | | | | | | | |
| Site 01 | 08:32:02.1 | - 01.2° | 09:21:57.4 | + 00.9° | 1 m 31.2 s | 27 m | 69°05'07" N | 101°48'37" W |
| <p>Fred Hamilton suggested this site, or at least nearby along the coast. Access via coast ~0.8 km to E. Low tide. Eskers or raised beaches with hill to immediate W, 160' (47.8 m) marker. Potential for polar bears along coast.</p> | | | | | | | | |

| | | | | | | | | |
|---|------------|---------|------------|---------|------------|------|-------------|--------------|
| Site 02 | 08:31:58.8 | - 01.0° | 09:21:56.8 | + 01.0° | 1 m 31.5 s | 10 m | 69°11'51" N | 101°33'41" W |
| Esker on N end of Taylor Island, clear view across water towards Admiralty Island 24 km away, hill with 37' (11.3 m) marker ~ 1.75 km away and ~ 30° E of eclipse line. Access via lake ~ 0.5 km to SW. Potential for polar bears. | | | | | | | | |
| Site 03 | 08:31:58.8 | - 01.4° | 09:21:49.3 | + 00.6° | 1 m 30.9 s | 6 m | 68°49'31" N | 102°00'00" W |
| Horizon clear across the water. Access on NW coast, low tide, no foreshore flats (source: topo map Queen Maud Gulf 67B). Ice may pack on N coast beyond NW point as current E to W through Icebreaker Channel. Potential for fog if waters ice-filled. Potential for polar bears along coast. | | | | | | | | |
| Site 04 | 08:32:22.1 | - 00.9° | 09:22:24.6 | + 01.2° | 1 m 26.2 s | 25 m | 69°26'16" N | 102°04'45" W |
| Site on esker right on W shore of 1.6 x 1.3 km lake 7 km NW of Cape Adelaide, clear to horizon. Potential for polar bears. | | | | | | | | |
| Site 05-A | 08:32:17.2 | - 01.2° | 09:22:12.3 | + 00.8° | 1 m 29.0 s | 41 m | 69°06'48" N | 102°17'47" W |
| On esker or hill, terrain slopes towards eclipse with slightly lower foreground hills ~1 km away. Access via 1.6 km NW-SE lake 0.3 km to NE. | | | | | | | | |
| Site 05-B | 08:32:17.1 | - 01.2° | 09:22:12.0 | + 00.8° | 1 m 29.0 s | 43 m | 69°06'32" N | 102°17'48" W |
| Ditto for Site 05-A, slightly higher, 0.5 km S of Site 05-A. | | | | | | | | |
| Site 06 | 08:32:23.6 | - 01.2° | 09:22:19.1 | + 00.8° | 1 m 27.1 s | 60 m | 69°08'00" N | 102°29'25" W |
| On hill, terrain slopes towards eclipse with large hilly terrain of similar elev. 5 km towards horizon. Large hill of ~90 m some 20° left of view to eclipse (may interfere with partial phase view). Access via 2.8 km NW-SE lake 0.3 km to NE. | | | | | | | | |

| | | | | | | | | |
|---|------------|---------|------------|---------|------------|-------|-------------|--------------|
| Site 07 | 08:32:37.6 | - 01.2 | 09:22:35.1 | + 00.8° | 1 m 21.0 s | 29 m | 69°10'13" N | 102°55'44" W |
| Clear view over a lake for the first 4.5 km followed by the ground rising to approximately the same elevation at 6 km distance. Just off to the right of the line of sight the terrain rises steadier to higher elevations, but this should not interfere with observing. Access via 1 x 3 km lake 0.5 km NE. | | | | | | | | |
| Site 08-A | 08:32:53.5 | - 01.1° | 09:22:58.7 | + 00.9° | 1 m 08.2s | 27 m | 69°20'01" N | 103°17'06" W |
| On esker. Access via two lakes E and W of site, each ~ 0.5 km distance. View over 1 km terrain of similar height then slopes towards immediate larger lake and Albert Edward Bay on far horizon. May have to hike to higher elevation within 1.25 km. | | | | | | | | |
| Site 08-B | 08:32:55.2 | - 01.1° | 09:23:00.8 | + 00.9° | 1 m 06.7 s | 34 m | 69°19'57" N | 103°20'37" W |
| On hill with terrain of similar height for up to 5 km, then terrain sloping down towards Albert Edward Bay. Slightly higher hill to left in foreground may interference with partial before C2. May have to hike to higher elevation within 2 km. Access via large lake 0.7 km to E. Not as good as Site 08-A | | | | | | | | |
| Site 08-C | 08:32:59.1 | - 01.2° | 09:23:03.4 | + 00.7° | 1 m 04.5 s | 103 m | 69°14'11" N | 103°35'15" W |
| On height of land with clear view towards eclipse. Land slopes to Albert Edward Bay with foreground hills estimated elev. of 60 m. Access via 1.90 x 2.25 km lake 1.2 km to E, seems deep (satellite and topo). | | | | | | | | |
| Site 09-A | 08:32:59.2 | - 00.9° | 09:23:12.0 | + 01.0° | 59.1 s | 46 m | 69°31'04" N | 103°16'18" W |
| On an esker, overlooking and access via 1.6 x 1.8 km lake 0.2 km to NE. Clear view to horizon. | | | | | | | | |

| | | | | | | | | |
|---|------------|---------|------------|---------|------------|------|-------------|--------------|
| Site 09-B | 08:33:04.5 | - 01.0° | 09:23:17.6 | + 00.9° | 54.0 s | 68 m | 69°26'48" N | 103°32'00" W |
| On height of land, terrain hilly with foreground heights (4.5 km) to 60 m. Spot marker at site top of 227' (69.2 m). Access via 2.5 x 5.5 km lake 0.35 km to S and E, seems deep (satellite and topo). | | | | | | | | |
| Site 09-C | 08:33:06.8 | - 01.1° | 09:23:19.1 | +00.8° | 52.4 s | 93 m | 69°22'59" N | 103°41'01" W |
| Height of land, clear view to eclipse. Access via S end of 8 km long N-S finger lake 0.8 km NE, seems deep (satellite and topo). | | | | | | | | |
| ps 01-A | 08:31:56.9 | - 00.7° | 09:22:01.3 | + 01.4° | 1 m 31.8 s | 18 m | 69°30'00" N | 101°07'07" W |
| Part-way up spine of esker on Admiralty Island. Clear view to horizon over relatively flat terrain and water. Access via 1 x 2.5 km lake 0.35 km to NW, however lake appears to be very shallow and likely not suitable for landing. Potential for fog if waters ice-filled. Potential for polar bears. | | | | | | | | |
| ps -1-B | 08:32:02.8 | - 00.6° | 09:22:08.1 | + 01.4° | 1 m 31.0 s | 17 m | 69°33'55" N | 101°14'38" W |
| On esker on Admiralty Island. Clear view to horizon over relatively flat terrain and water. Access via 1.8 x 3 km lake 1.0 km to S, however lake appears to be very shallow and likely not suitable for landing. Potential for fog if waters ice-filled. Potential for polar bears. | | | | | | | | |
| ps 02 | 08:32:05.1 | - 01.1° | 09:22:01.2 | + 00.9° | 1 m 31.0 s | 29 m | 69°08'19" N | 101°50'53" W |
| Alternate to Site 01, on W side of same hill. View has terrain of similar height (est. 2 m higher) 2.5 km and 4.0 km away, thereafter the terrain slopes downwards. Access via 1.5 km lake to NW. | | | | | | | | |
| ps 03-A | 08:32:17.0 | - 01.1° | 09:22:13.0 | + 00.9° | 1 m 28.9 s | 29 m | 69°09'23" N | 102°14'16" W |
| On hilly terrain with foreground hill of similar height about 2.5 km down line of view, thereafter the terrain slopes downwards. Access via 1 x 1 km lake 0.5 km to W. | | | | | | | | |

| | | | | | | | | |
|--|------------|---------|------------|---------|------------|------|-------------|--------------|
| ps 03-B | 08:32:18.3 | - 01.1° | 09:22:14.7 | + 00.9° | 1 m 28.5 s | 30 m | 69°10'18" N | 102°15'59" W |
| On hilly terrain with foreground hill of similar height about 1.0 km down line of view, thereafter the terrain slopes downwards. Access via 1 x 1.3 km lake 0.3 km to NW. | | | | | | | | |
| ps 03-C | 08:32:19.8 | - 01.1° | 09:22:16.1 | + 00.9° | 1 m 28.1 s | 32 m | 69°10'26" N | 102°18'43" W |
| On hilly terrain with foreground hill of similar height about 2.5 km down line of view, thereafter the terrain slopes downwards. Access via 1 x 1.3 km lake 0.4 km to NE. | | | | | | | | |
| ps 04 | 08:33:04.3 | - 00.9° | 09:23:19.7 | + 01.0° | 52.5 s | 65 m | 69°31'16" N | 103°26'29" W |
| On height of land, clear view to the eclipse. Access via 1.5 x 6.0 km Komatik Lake 0.5 km to E, seems deep (satellite and topo). | | | | | | | | |