

# 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 ~
<b>Comments:</b> <b>All times given in UTC.</b> <b>References to horizons and views refer to line of sight towards the eclipse unless otherwise noted.</b> <b>In all cases herein C1 occurs with the Sun below the horizon.</b>								
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"> <li>- 08:??:?? variable departure to arrive at waypoint 68°58' N, 101°02' W for 09:12:00</li> <li>- 09:12:00 ETA at waypoint 68°58' N, 101°02' W, turn left heading 305 True, level flight</li> <li>- 09:21:55.9 C2 (at centerline intercept point)</li> <li>- 09:22:41.5 centerline intercept point 69°07'00" N, 101°41'13" W</li> <li>- 09:23:27.2 C3 (at centerline intercept point)</li> <li>- 09:33:30 return to YCB (this gives us ~ 10 minutes either side of C2 &amp; C3)</li> </ul>								
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 steadily 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 interfere 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).								