

DC-8 Payload

ARCTAS 2008

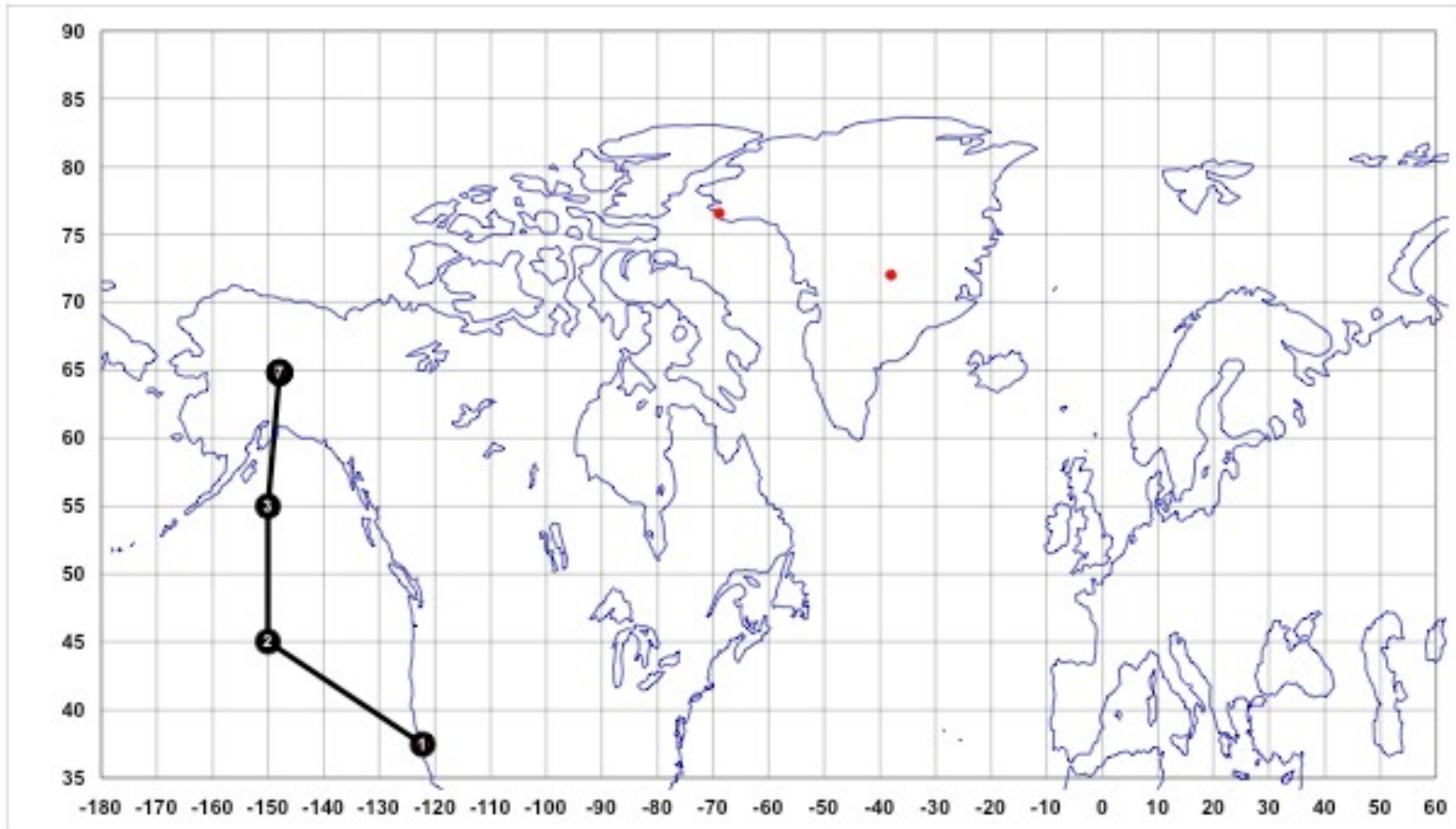


Spring Deployment Nominal Schedule

April

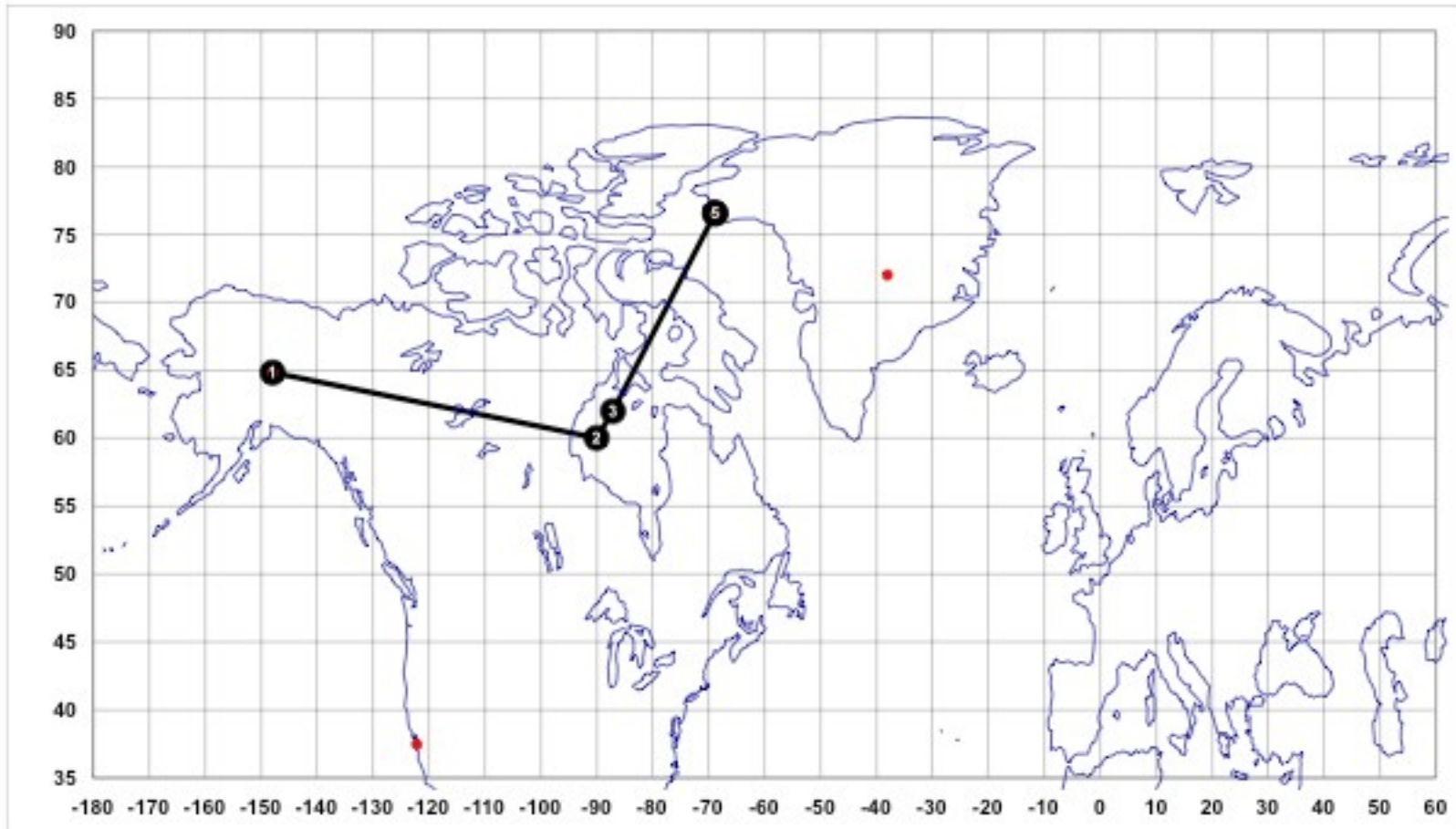
1	Transit Palmdale to Fairbanks via North Pacific
2	
3	
4	Fairbanks to Thule via Hudson Bay
5	Thule to Fairbanks via Alert/high Arctic/Barrow
6	<i>Hard down day</i>
7	
8	Fairbanks to Thule via Hudson Bay
9	
10	Thule local
11	Thule to Fairbanks via Alert/high Arctic/Barrow
12	<i>Hard down day</i>
13	
14	Fairbanks local to Barrow and high Arctic
15	
16	Fairbanks local to Bering Sea
17	
18	
19	
20	
21	Transit Fairbanks to Palmdale via Yellow Knife (HIPPO)

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	37.47	45	55	64.82	64.82	64.82	64.82							
Longitude	-122.12	-150	-150	-147.85	-147.85	-147.85	-147.85							
Cum. Flt. Time	0:00	4:16	6:12	8:06	8:06	8:06	8:06	END	END	END	END	END	END	END
Leg Flt. Time		4:16	1:55	1:54	0:00	0:00	0:00	END	END	END	END	END	END	END
Local Time	8:30	12:46	14:42	16:36	16:36	16:36	16:36	END	END	END	END	END	END	END
UTC	7:30	11:46	13:42	15:36	15:36	15:36	15:36	END	END	END	END	END	END	END
Spiral														
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													



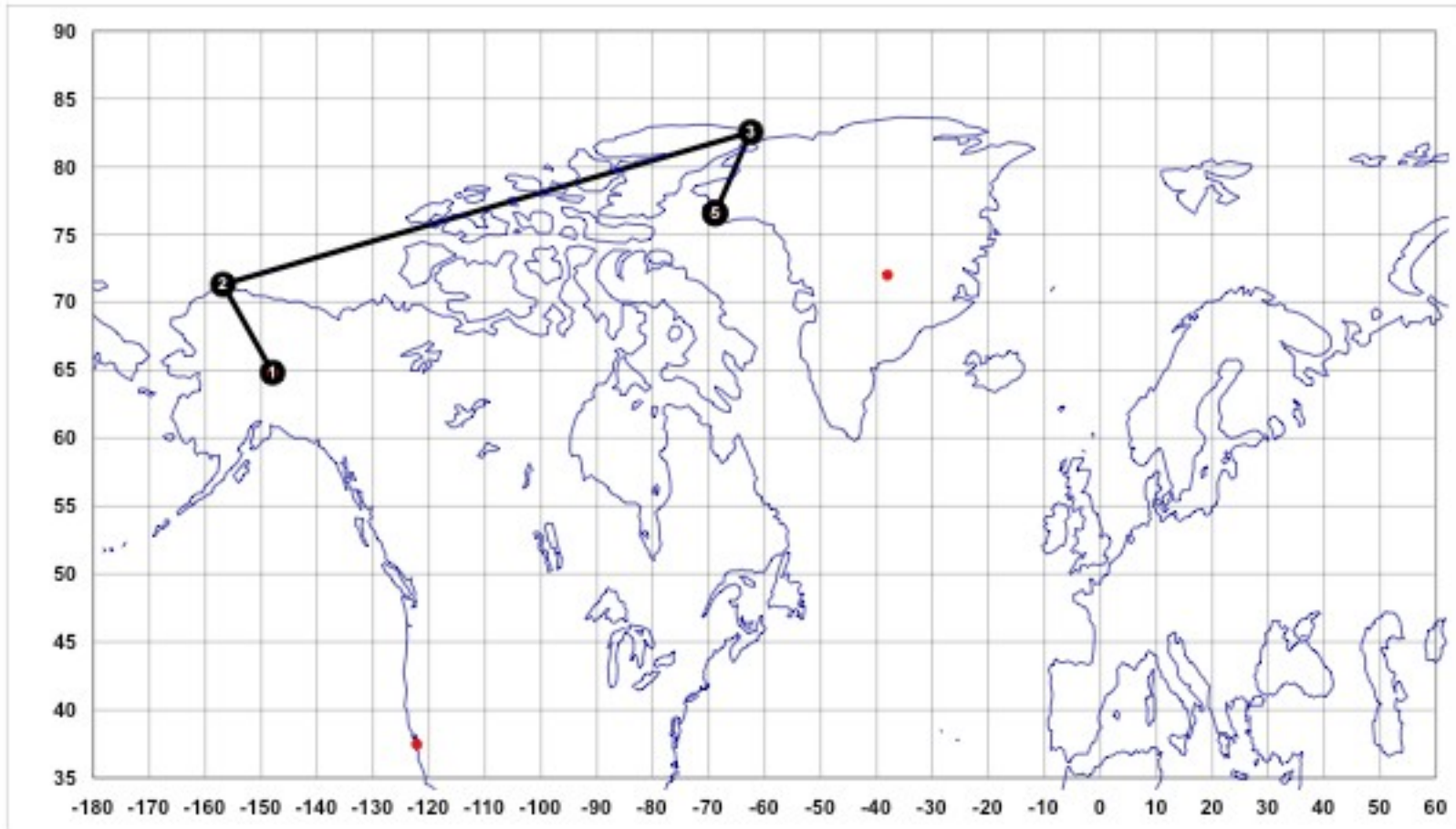
Palmdale/Fairbanks transit: 8 hrs 6 min

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	64.82	60	62	76.53	76.53									
Longitude	-147.85	-90	-87	-68.78	-68.78									
Cum. Flt. Time	0:00	5:03	5:32	8:34	8:34	END	END	END	END	END	END	END	END	END
Leg Flt. Time		5:03	0:28	3:02	0:00	END	END	END	END	END	END	END	END	END
Local Time	8:30	13:33	14:02	17:04	17:04	END	END	END	END	END	END	END	END	END
UTC	7:30	12:33	13:02	16:04	16:04	END	END	END	END	END	END	END	END	END
Spiral														
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													



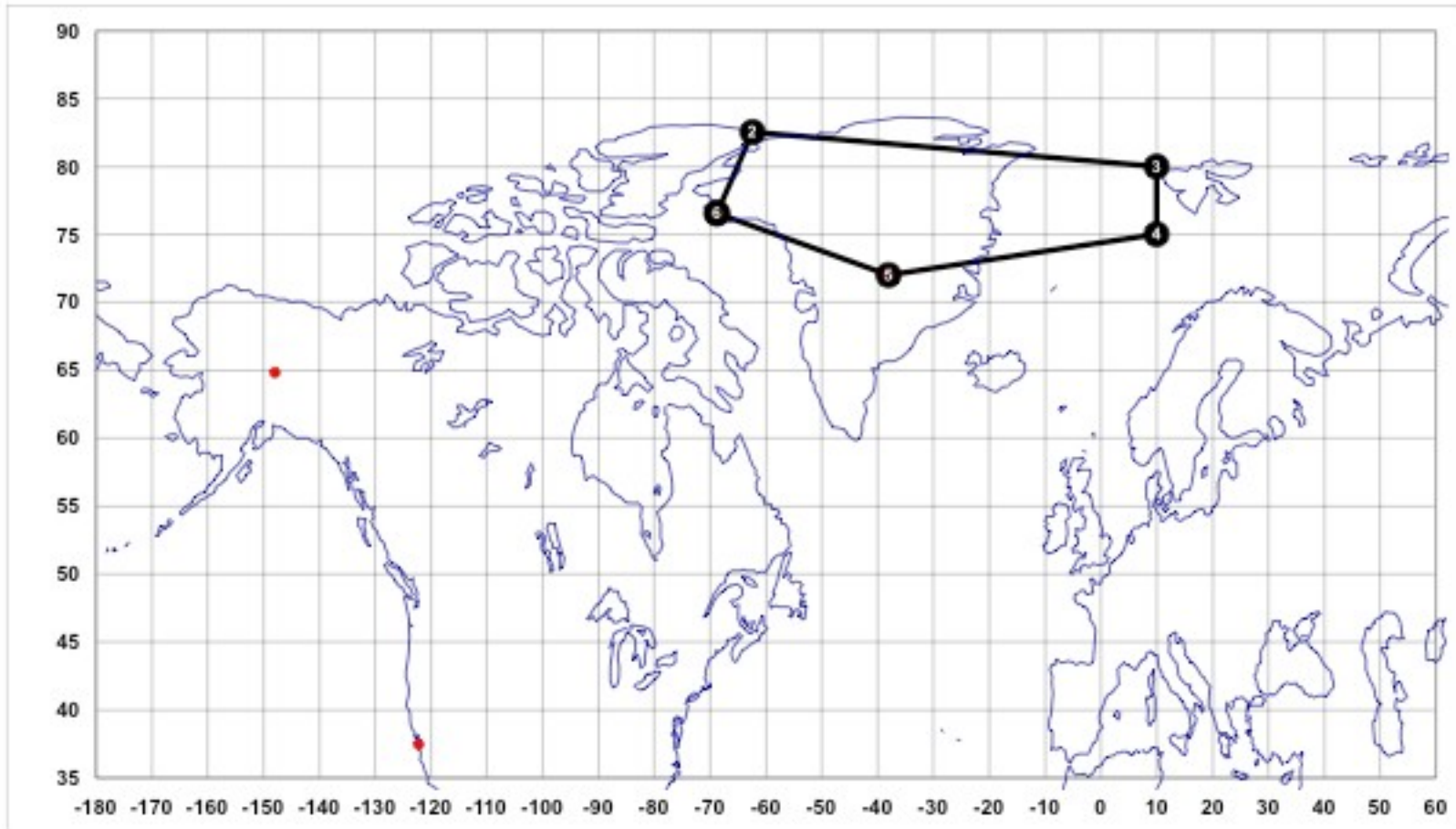
Fairbanks to Hudson Bay to Thule: 8 hrs 34 min (repeat 2 times)

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	64.82	71.3	82.51	76.53	76.53									
Longitude	-147.85	-156.75	-62.35	-68.78	-68.78									
Cum. Flt. Time	0:00	1:24	5:22	6:33	6:33	END	END	END	END	END	END	END	END	END
Leg Flt. Time		1:24	3:58	1:10	0:00	END	END	END	END	END	END	END	END	END
Local Time	8:30	9:54	13:52	15:03	15:03	END	END	END	END	END	END	END	END	END
UTC	7:30	8:54	12:52	14:03	14:03	END	END	END	END	END	END	END	END	END
Spiral														
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													



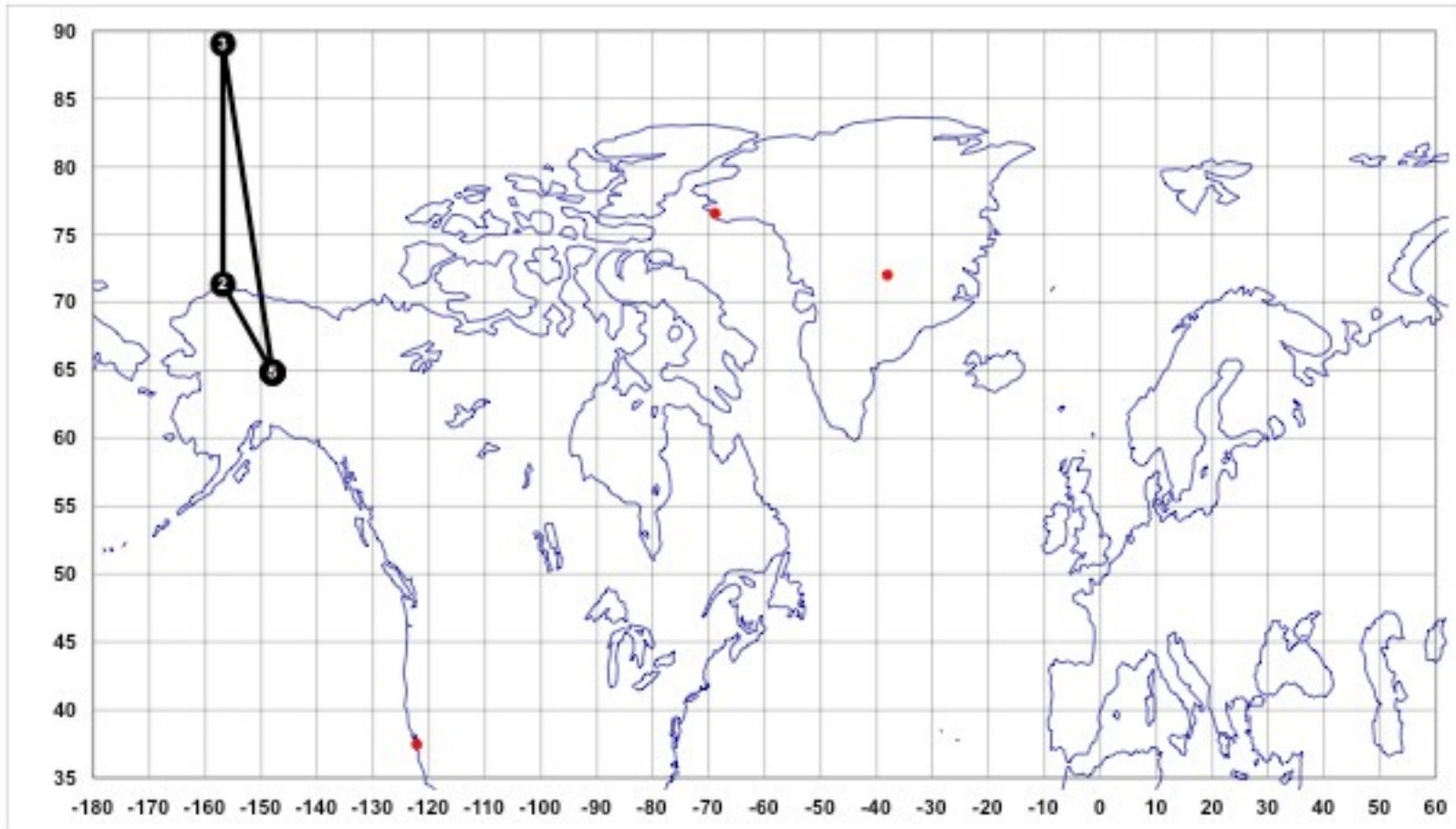
Fairbanks to Barrow to Alert to Thule: 6 hrs 33 min (repeat 2 times)

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	76.53	82.51	80	75	72	76.53								
Longitude	-68.78	-62.35	10	10	-38	-68.78								
Cum. Flt. Time	0:00	1:10	3:11	4:09	6:46	8:34	END	END	END	END	END	END	END	END
Leg Flt. Time		1:10	2:01	0:57	2:36	1:48	END	END	END	END	END	END	END	END
Local Time	8:30	9:40	11:41	12:39	15:16	17:04	END	END	END	END	END	END	END	END
UTC	7:30	8:40	10:41	11:39	14:16	16:04	END	END	END	END	END	END	END	END
Spiral														
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													



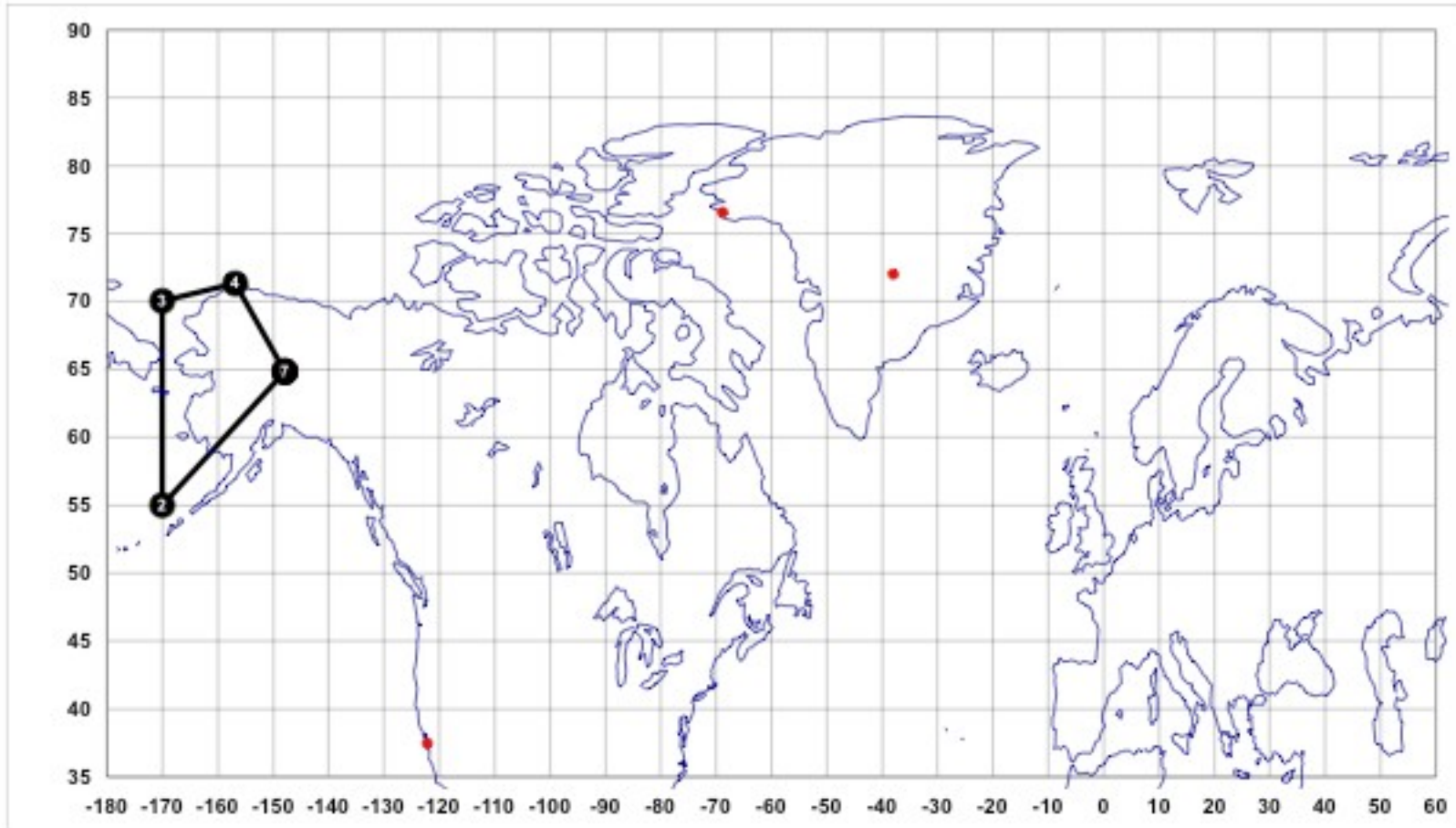
Thule to Alert to ship to Summit to Thule: 8 hrs 34 min

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	64.82	71.3	89	64.82	64.82									
Longitude	-147.85	-156.75	-156.75	-147.85	-147.85									
Cum. Flt. Time	0:00	1:24	4:49	9:29	9:29	END	END	END	END	END	END	END	END	END
Leg Flt. Time		1:24	3:24	4:40	0:00	END	END	END	END	END	END	END	END	END
Local Time	8:30	9:54	13:19	17:59	17:59	END	END	END	END	END	END	END	END	END
UTC	7:30	8:54	12:19	16:59	16:59	END	END	END	END	END	END	END	END	END
Spiral														
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													

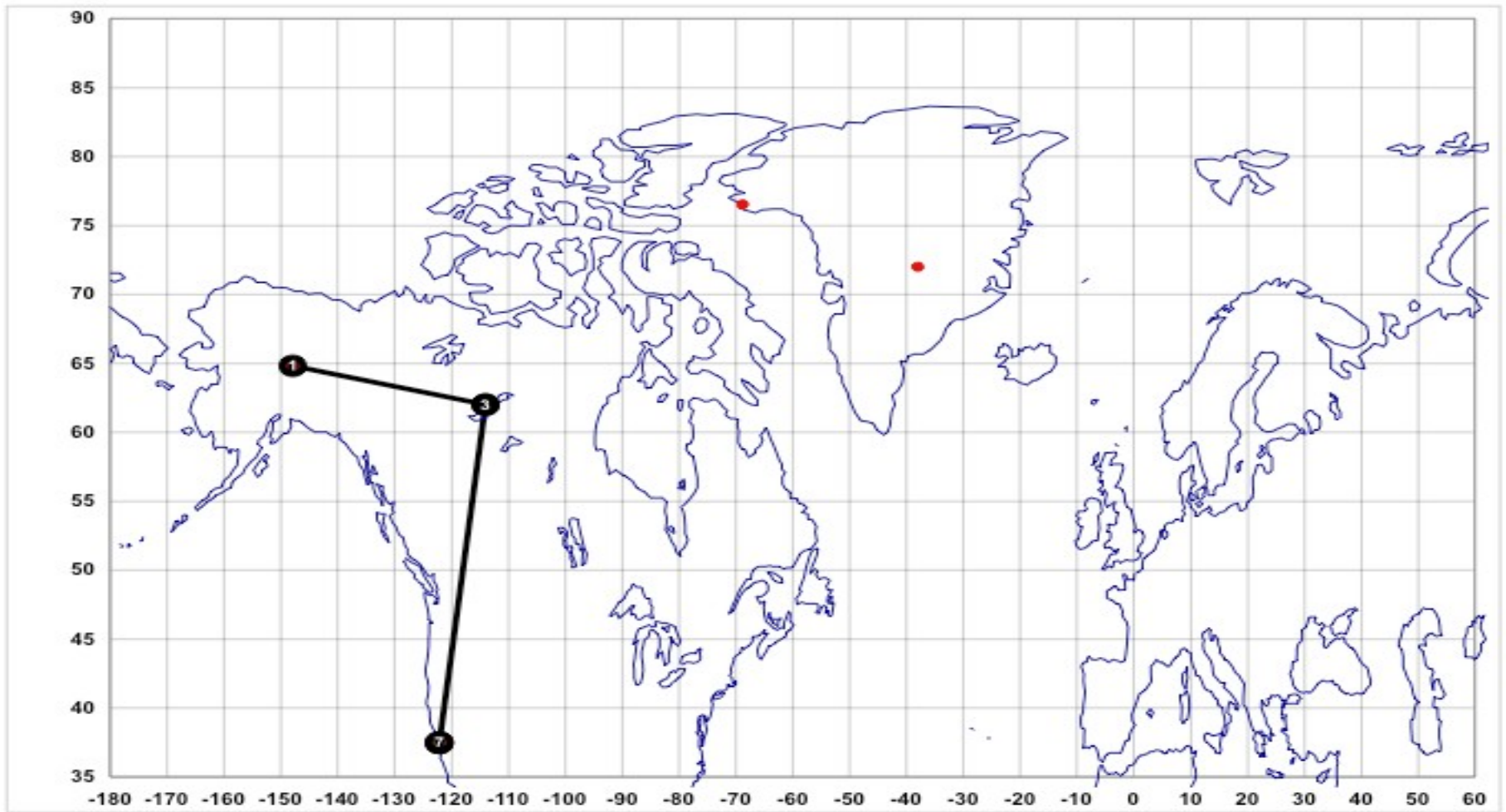


Fairbanks to Barrow to North Pole to Fairbanks: 9 hrs 29 min

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	64.82	55	70	71.3	64.82	64.82	64.82							
Longitude	-147.85	-170	-170	-156.75	-147.85	-147.85	-147.85							
Cum. Flt. Time	0:00	2:49	5:43	6:36	8:00	8:00	8:00	END	END	END	END	END	END	END
Leg Flt. Time		2:49	2:53	0:52	1:24	0:00	0:00	END	END	END	END	END	END	END
Local Time	8:30	11:19	14:13	15:06	16:30	16:30	16:30	END	END	END	END	END	END	END
UTC	7:30	10:19	13:13	14:06	15:30	15:30	15:30	END	END	END	END	END	END	END
Spiral														
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													



Fairbanks/Bering Sea/Barrow/Fairbanks: 8 hrs

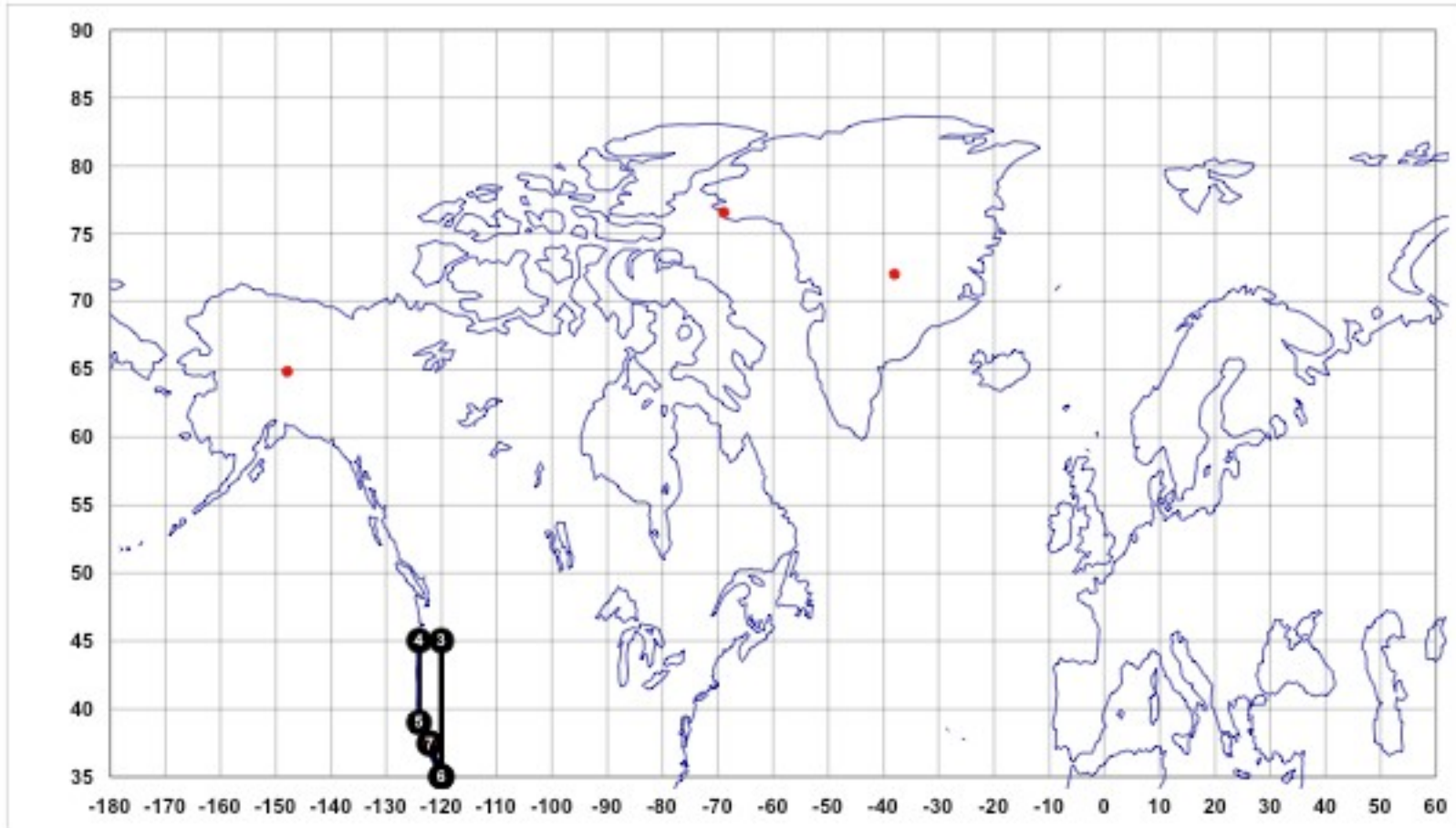


Fairbanks/Yellow Knife/Palmdale transit: 8 hrs 15 min (includes spiral w/HIAPER near YK)

CARB Collaboration Nominal Schedule

June 18	CARB 1 (test flight?)
19	
20	CARB 2
21	
22	CARB 3
23	
24	CARB 4? (only if #1 goes badly)

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	37.47	35	45	45	39	35	37.47							
Longitude	-122.12	-120	-120	-124	-124	-120	-122.12							
Cum. Flt. Time	0:00	0:34	2:30	3:00	4:12	5:11	5:46	END	END	END	END	END	END	END
Leg Flt. Time		0:34	1:55	0:32	1:09	0:59	0:34	END	END	END	END	END	END	END
Local Time	8:30	9:04	11:00	11:33	12:42	13:41	14:16	END	END	END	END	END	END	END
UTC	7:30	8:04	10:00	10:33	11:42	12:41	13:16	END	END	END	END	END	END	END
Spiral														
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													

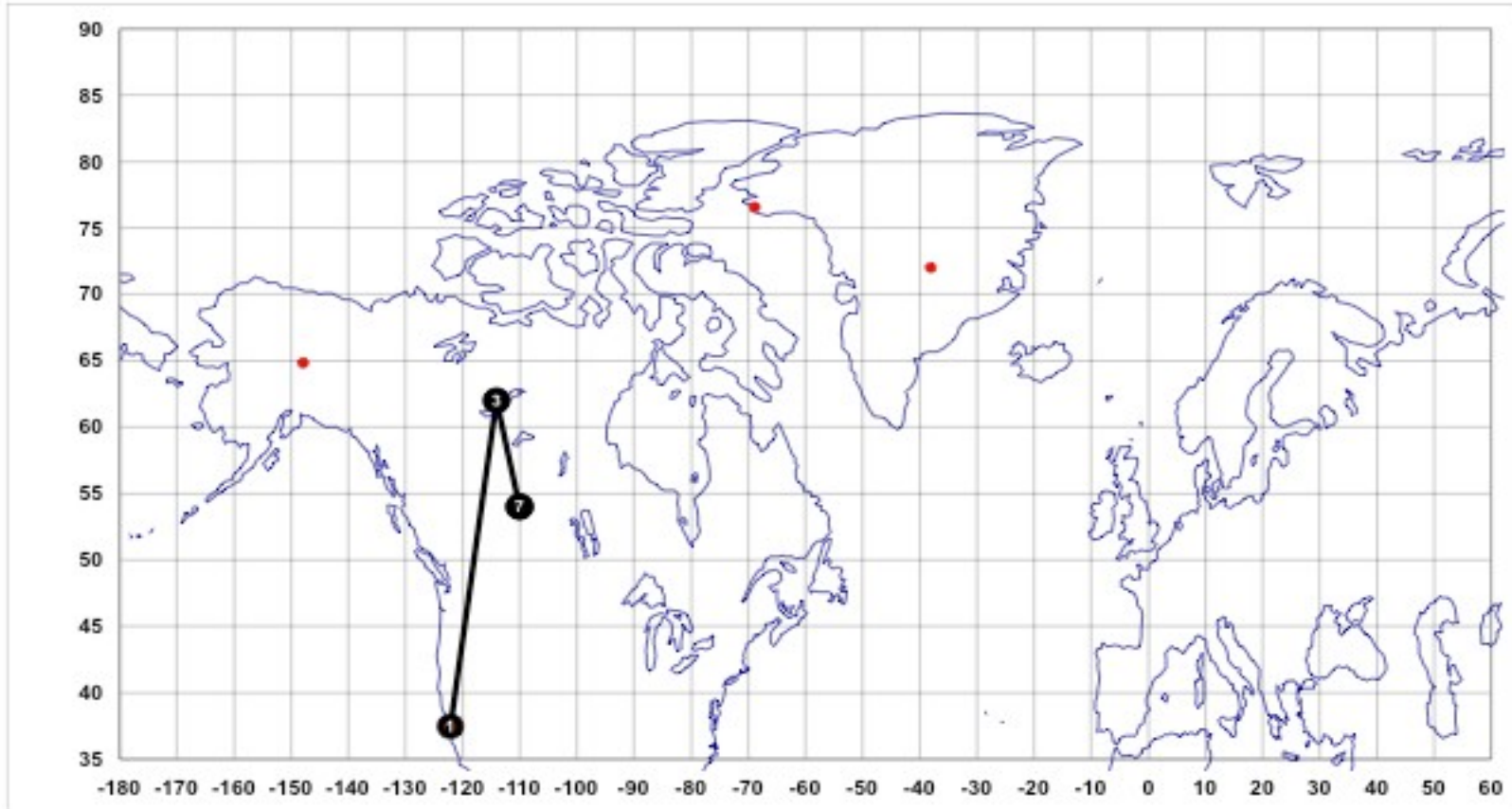


California tour: 5 hrs 46 min (repeat 3 times)

June/July Canadian Campaign (very) Nominal Schedule

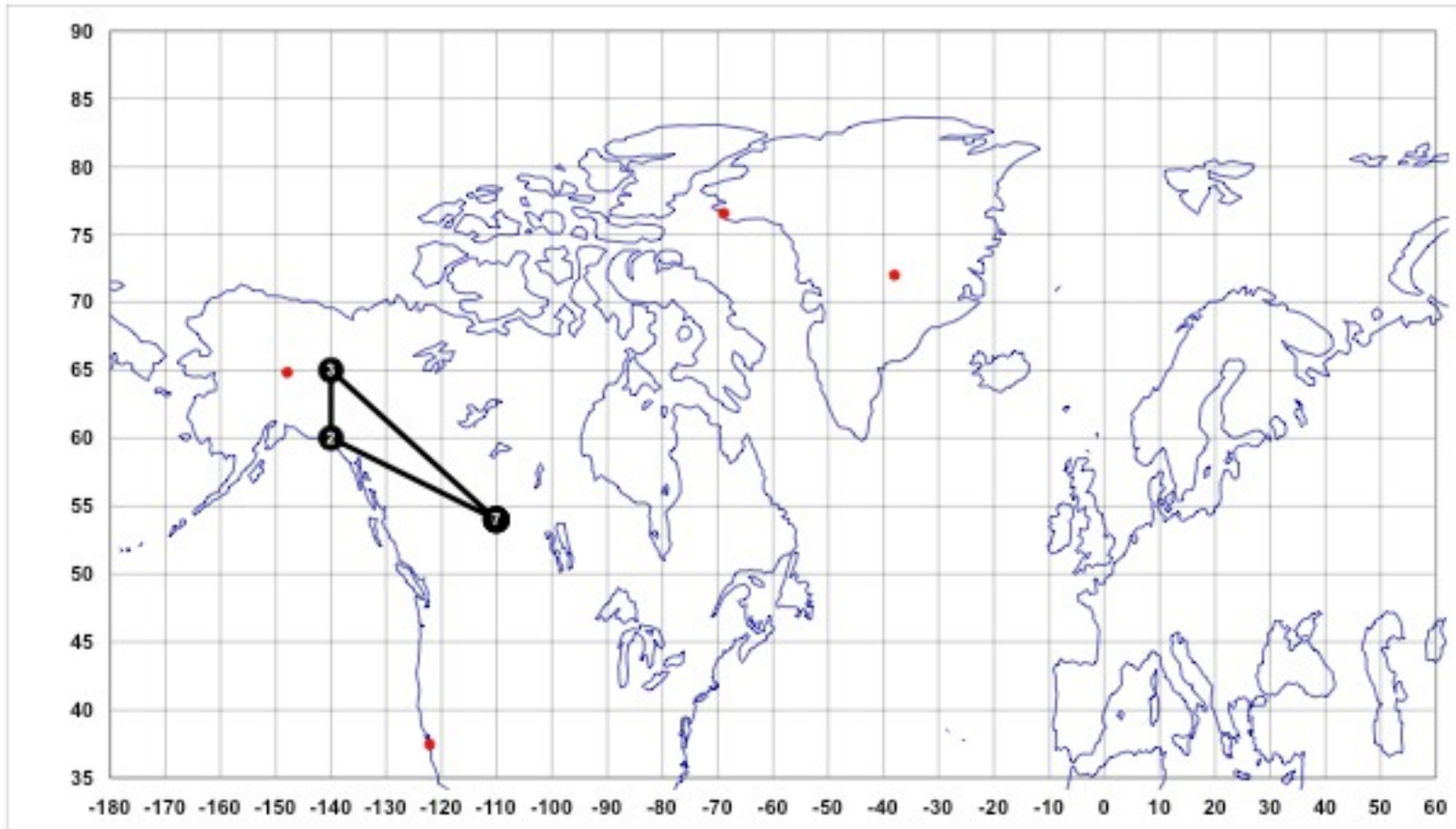
June 26	Transit Palmdale to Cold Lake via Yellow Knife (HIPPO/Hiaper)
27	
28	
29	Cold Lake 1 Fires, to north west
30	
July 1	Cold Lake 2 Fires, near Yellow Knife?
2	
3	Cold Lake 3 Fires, southern Canada? Manitoba/Ontario
4	
5	Cold Lake 4, carbon cycle contrast tundra/wetlands/boreal forest
6	<i>Hard down day</i>
7	
8	Cold Lake 5 Fires, suitcase to east, coordinate with Europeans
9	Cold Lake 6 Fires, suitcase back west, coordinate with Europeans
10	
11	
12	
13	
14	
15	Transit Cold Lake to Palmdale, carbon cycle enroute (croplands)

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	37.47	62	62	54	54	54	54							
Longitude	-122.12	-114	-114	-110	-110	-110	-110							
Cum. Flt. Time	0:00	4:49	5:19	6:55	6:55	6:55	6:55	END	END	END	END	END	END	END
Leg Flt. Time		4:49	0:00	1:35	0:00	0:00	0:00	END	END	END	END	END	END	END
Local Time	8:30	13:19	13:49	15:25	15:25	15:25	15:25	END	END	END	END	END	END	END
UTC	7:30	12:19	12:49	14:25	14:25	14:25	14:25	END	END	END	END	END	END	END
Spiral		0:30	0:00											
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													



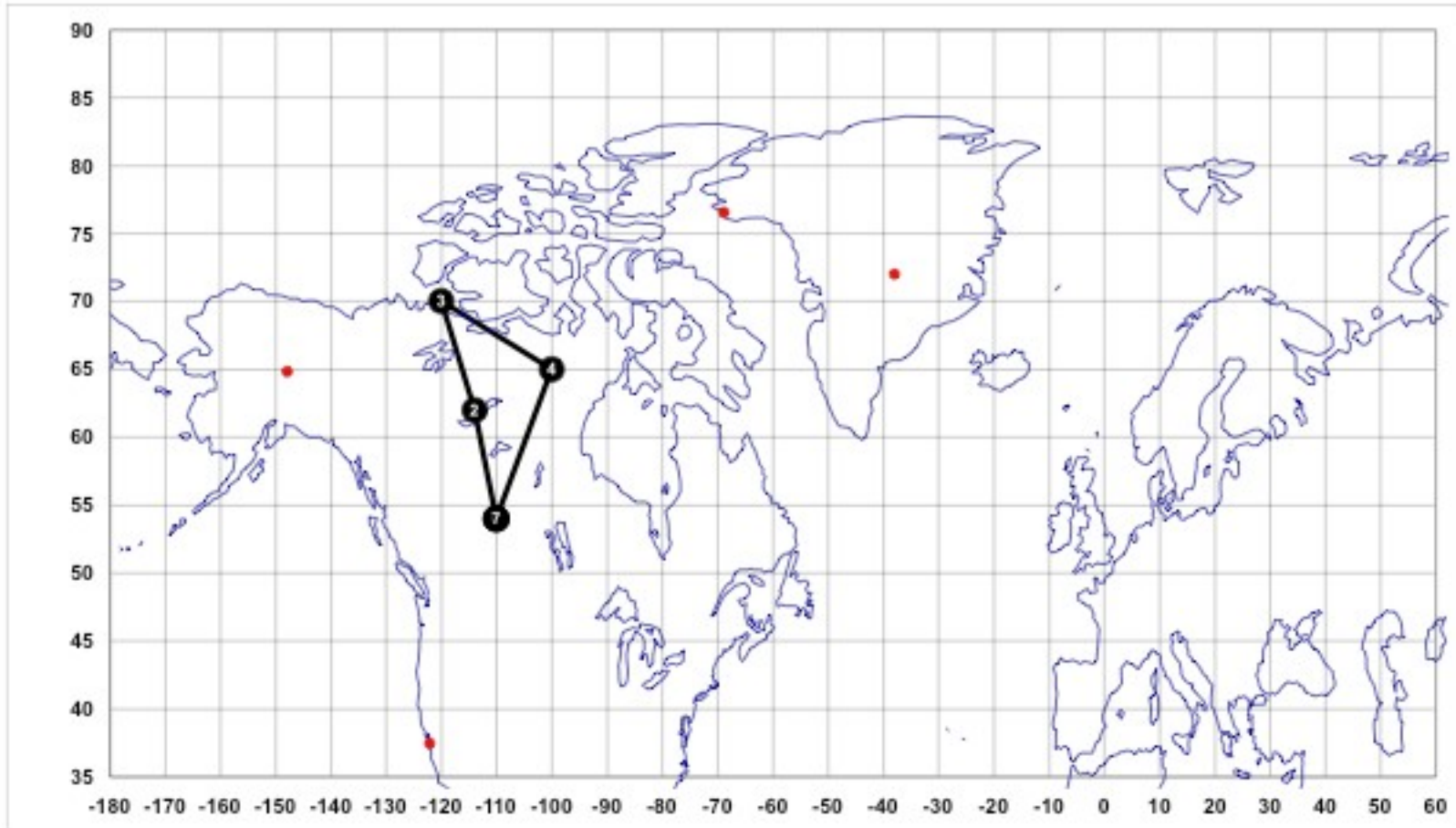
Palmdale/Yellow Knife/Cold Lake 6hrs 55 min (includes spiral with HIAPER)

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	54	60	65	54	54	54	54							
Longitude	-110	-140	-140	-110	-110	-110	-110							
Cum. Flt. Time	0:00	3:19	4:17	7:51	7:51	7:51	7:51	END	END	END	END	END	END	END
Leg Flt. Time		3:19	0:57	3:34	0:00	0:00	0:00	END	END	END	END	END	END	END
Local Time	8:30	11:49	12:47	16:21	16:21	16:21	16:21	END	END	END	END	END	END	END
UTC	7:30	10:49	11:47	15:21	15:21	15:21	15:21	END	END	END	END	END	END	END
Spiral														
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													



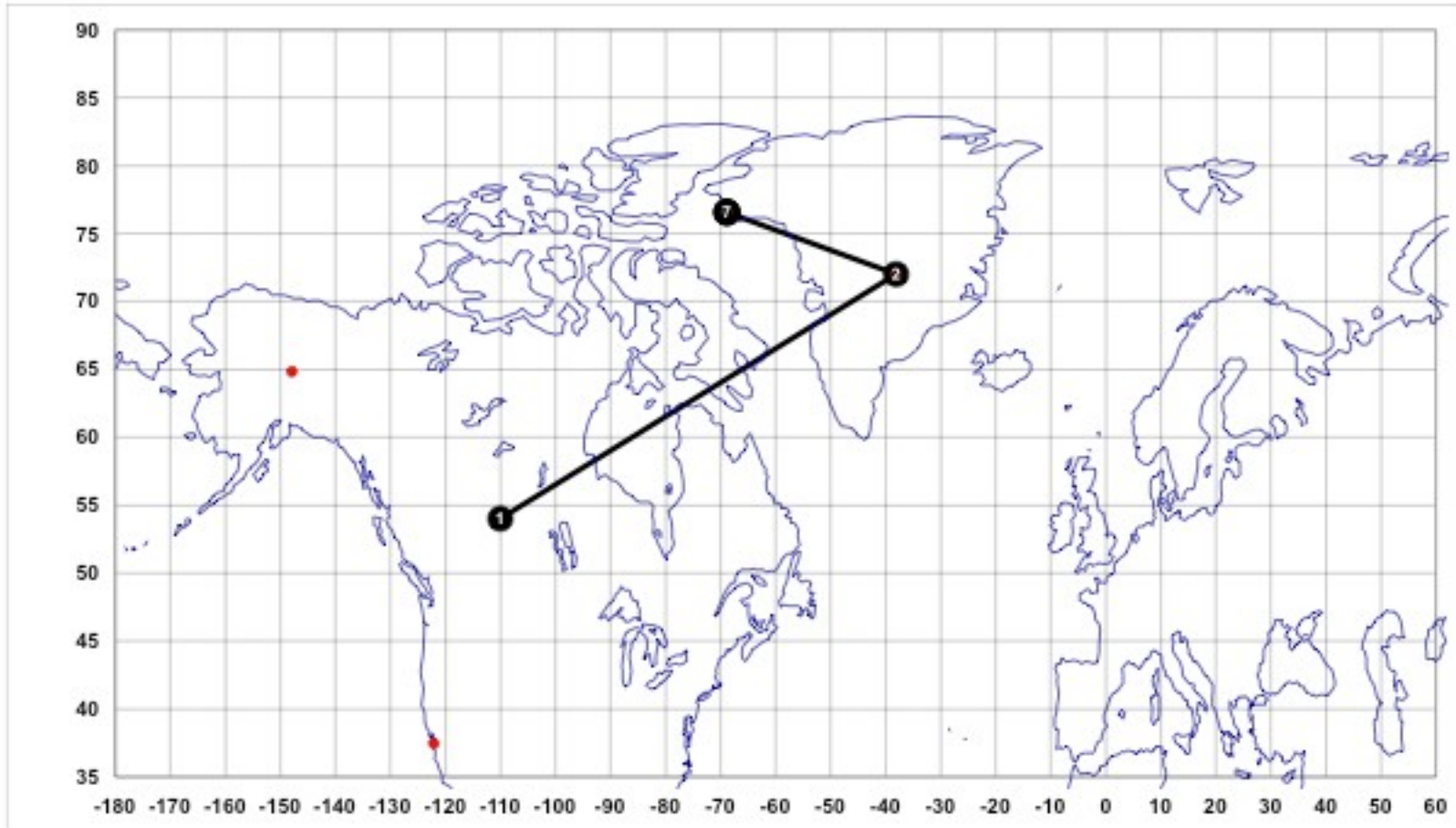
Fire plumes to NW: 7 hrs 51 min

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	54	62	70	65	54	54	54							
Longitude	-110	-114	-120	-100	-110	-110	-110							
Cum. Flt. Time	0:00	1:35	3:12	4:57	7:17	7:17	7:17	END	END	END	END	END	END	END
Leg Flt. Time		1:35	1:36	1:45	2:19	0:00	0:00	END	END	END	END	END	END	END
Local Time	8:30	10:05	11:42	13:27	15:47	15:47	15:47	END	END	END	END	END	END	END
UTC	7:30	9:05	10:42	12:27	14:47	14:47	14:47	END	END	END	END	END	END	END
Spiral														
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													



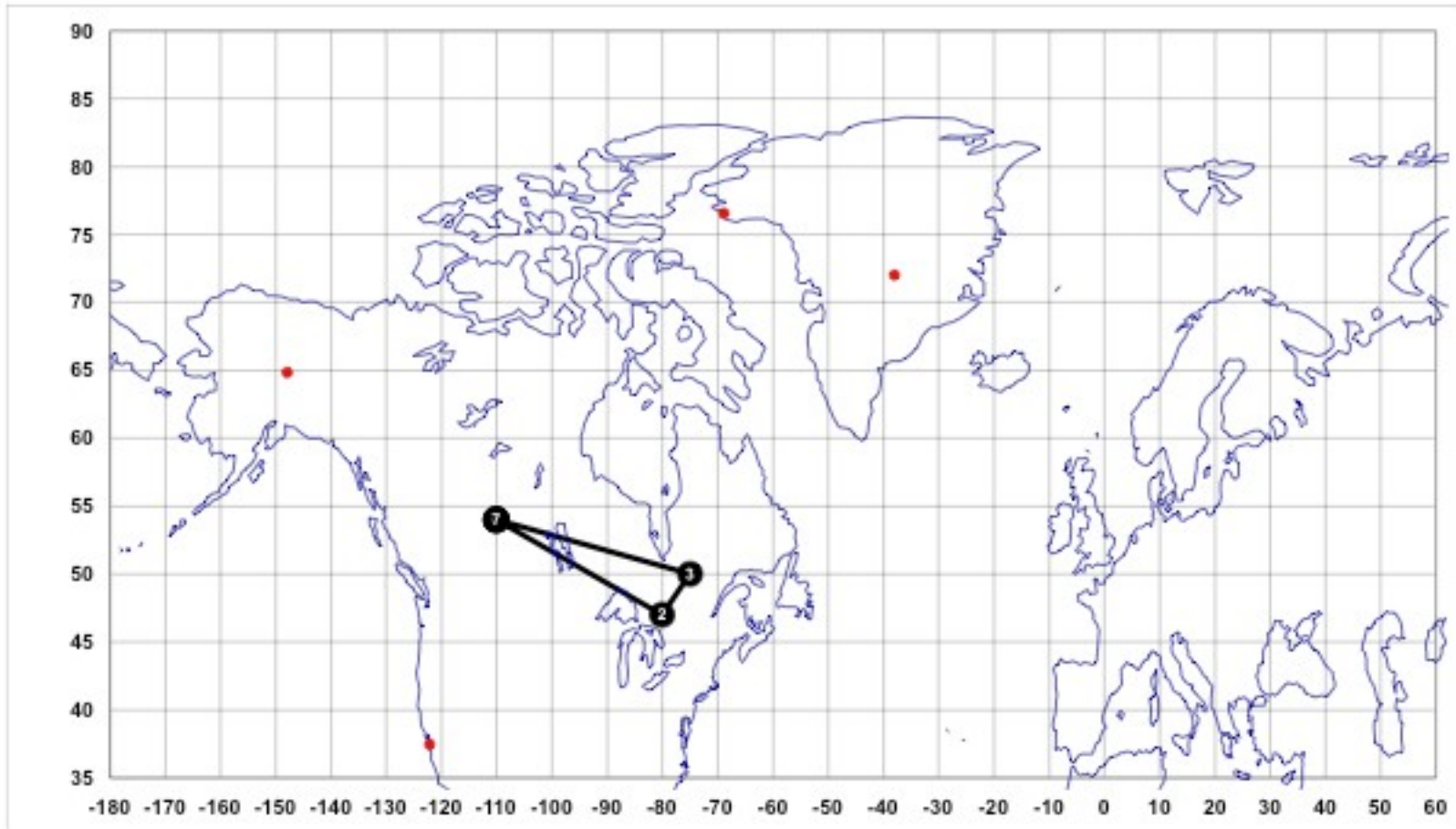
Fire plumes near Yellow Knife: 7 hrs 17 min

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	54	72	76.53	76.53	76.53	76.53	76.53							
Longitude	-110	-38	-68.78	-68.78	-68.78	-68.78	-68.78							
Cum. Flt. Time	0:00	6:37	8:25	8:25	8:25	8:25	8:25	END	END	END	END	END	END	END
Leg Flt. Time		6:37	1:48	0:00	0:00	0:00	0:00	END	END	END	END	END	END	END
Local Time	8:30	15:07	16:55	16:55	16:55	16:55	16:55	END	END	END	END	END	END	END
UTC	7:30	14:07	15:55	15:55	15:55	15:55	15:55	END	END	END	END	END	END	END
Spiral		0:00	0:00											
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													



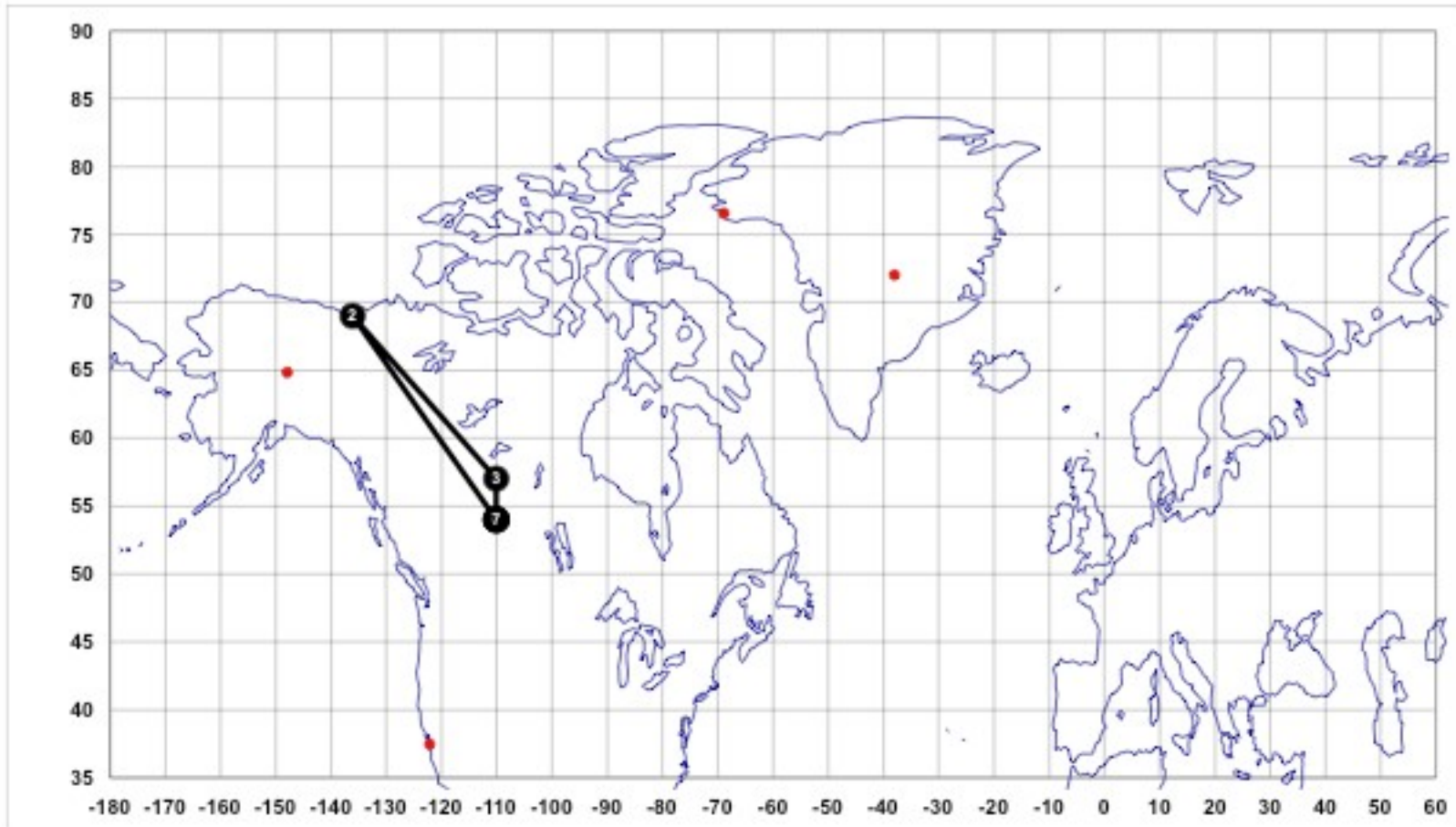
Cold Lake/central Greenland suitcase: Co-ordinate with Europeans 8 hr 25 min to Thule
7 hr 55 min if land at Kanger (10 h 40 m if back to Goose, 9 h 20 m to Iqaluit)

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	54	47	50	54	54	54	54							
Longitude	-110	-80	-75	-110	-110	-110	-110							
Cum. Flt. Time	0:00	3:53	4:44	8:55	8:55	8:55	8:55	END	END	END	END	END	END	END
Leg Flt. Time		3:53	0:51	4:11	0:00	0:00	0:00	END	END	END	END	END	END	END
Local Time	8:30	12:23	13:14	17:25	17:25	17:25	17:25	END	END	END	END	END	END	END
UTC	7:30	11:23	12:14	16:25	16:25	16:25	16:25	END	END	END	END	END	END	END
Spiral														
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													



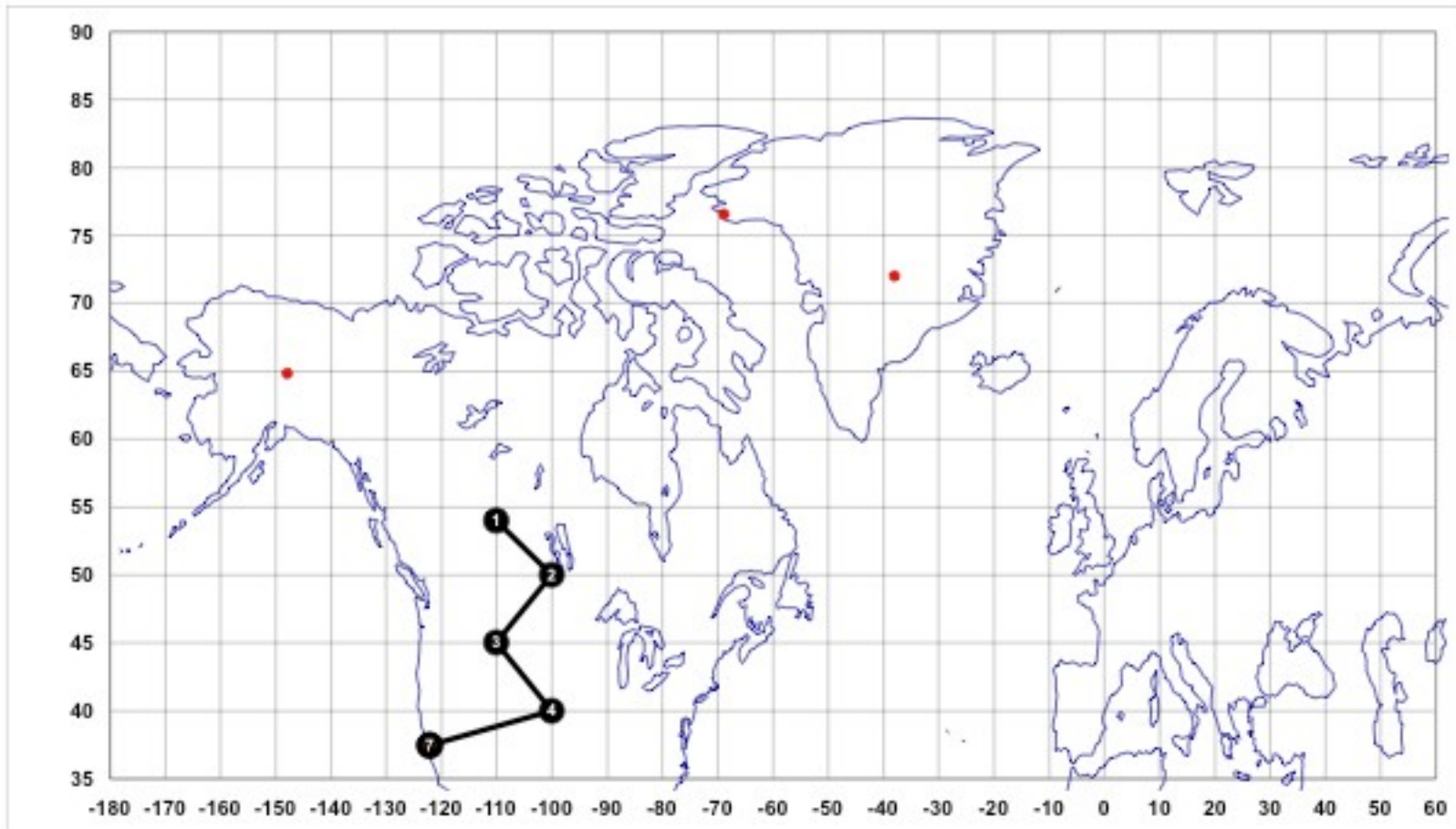
Fire plumes to SE: 8 hrs 55 min

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	54	69	57	54	54	54	54							
Longitude	-110	-136	-110	-110	-110	-110	-110							
Cum. Flt. Time	0:00	3:41	6:53	7:28	7:28	7:28	7:28	END	END	END	END	END	END	END
Leg Flt. Time		3:41	3:11	0:34	0:00	0:00	0:00	END	END	END	END	END	END	END
Local Time	8:30	12:11	15:23	15:58	15:58	15:58	15:58	END	END	END	END	END	END	END
UTC	7:30	11:11	14:23	14:58	14:58	14:58	14:58	END	END	END	END	END	END	END
Spiral														
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													



Carbon cycle, natural biome transect (tundra, wetlands, boreal forest): 7 hrs 28 min

Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Latitude	54	50	45	40	37.47	37.47	37.47							
Longitude	-110	-100	-110	-100	-122.12	-122.12	-122.12							
Cum. Flt. Time	0:00	1:24	3:02	4:45	8:06	8:06	8:06	END	END	END	END	END	END	END
Leg Flt. Time		1:24	1:37	1:43	3:21	0:00	0:00	END	END	END	END	END	END	END
Local Time	8:30	9:54	11:32	13:15	16:36	16:36	16:36	END	END	END	END	END	END	END
UTC	7:30	8:54	10:32	12:15	15:36	15:36	15:36	END	END	END	END	END	END	END
Spiral														
Leg Speed (m/s)	160	160	160	160	160	160	160	160	160	160	160	160	160	160
UTC diff:	-1													



Cold Lake/Palmdale transit with carbon cycle croplands transect: 8 hrs 6 min