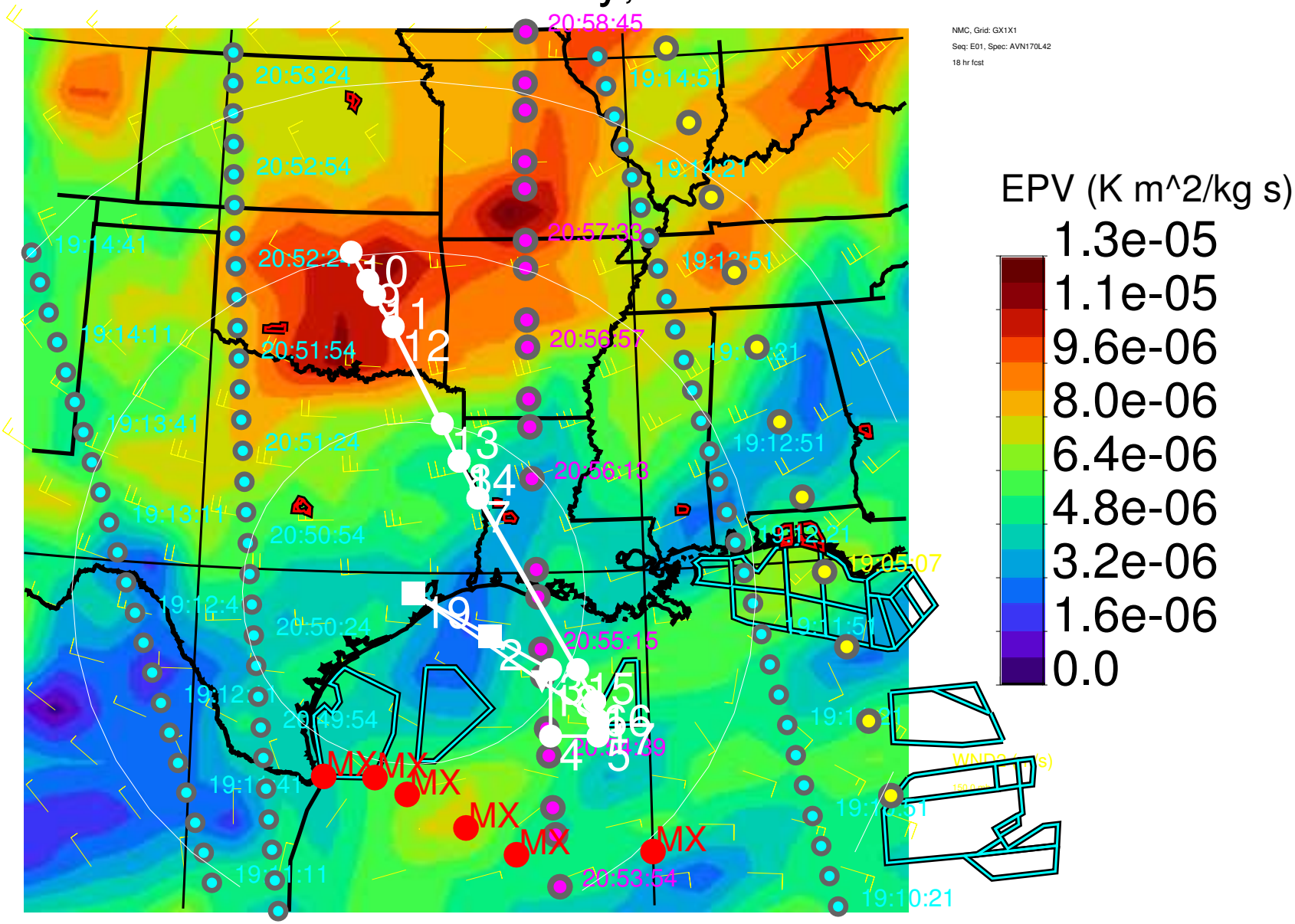
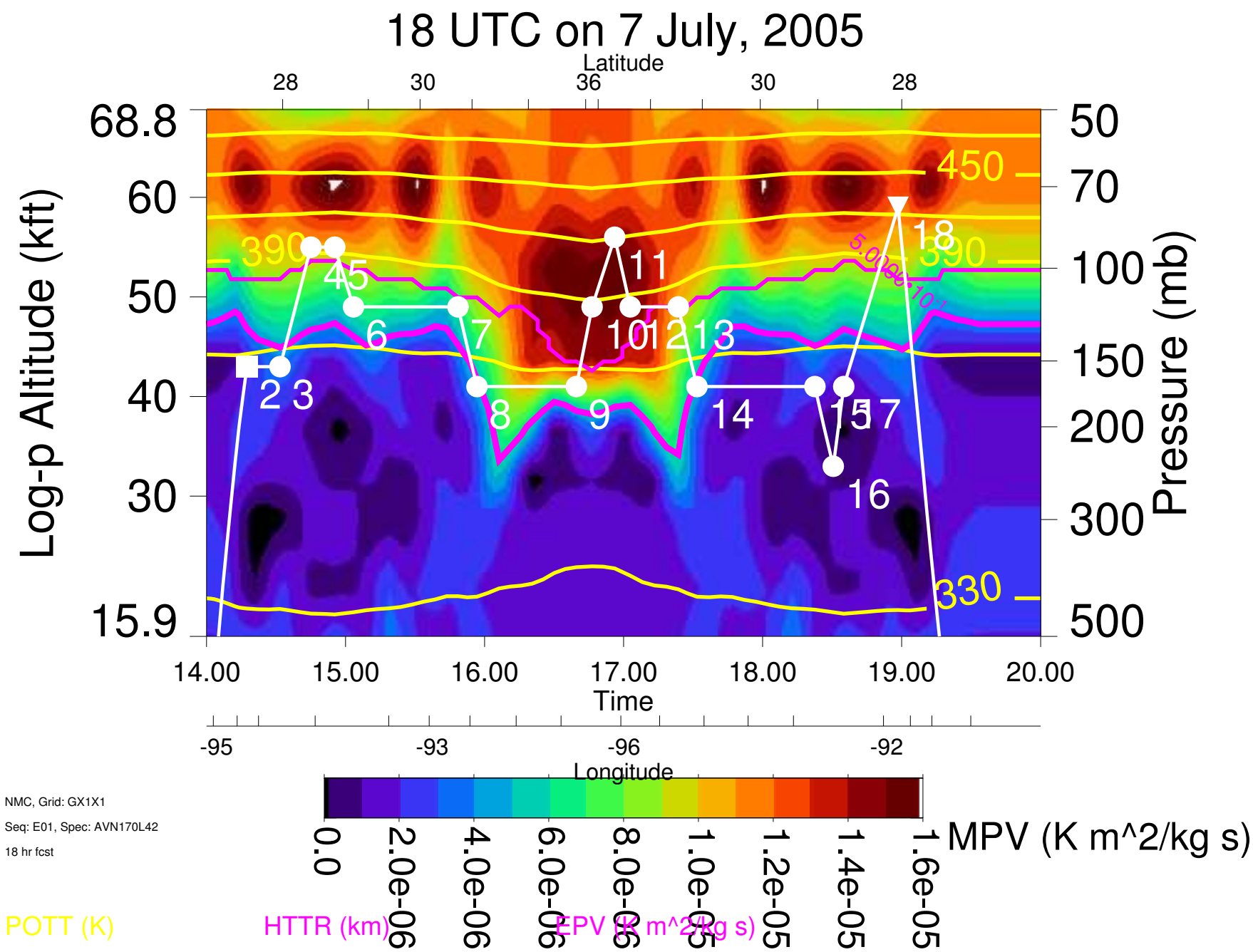
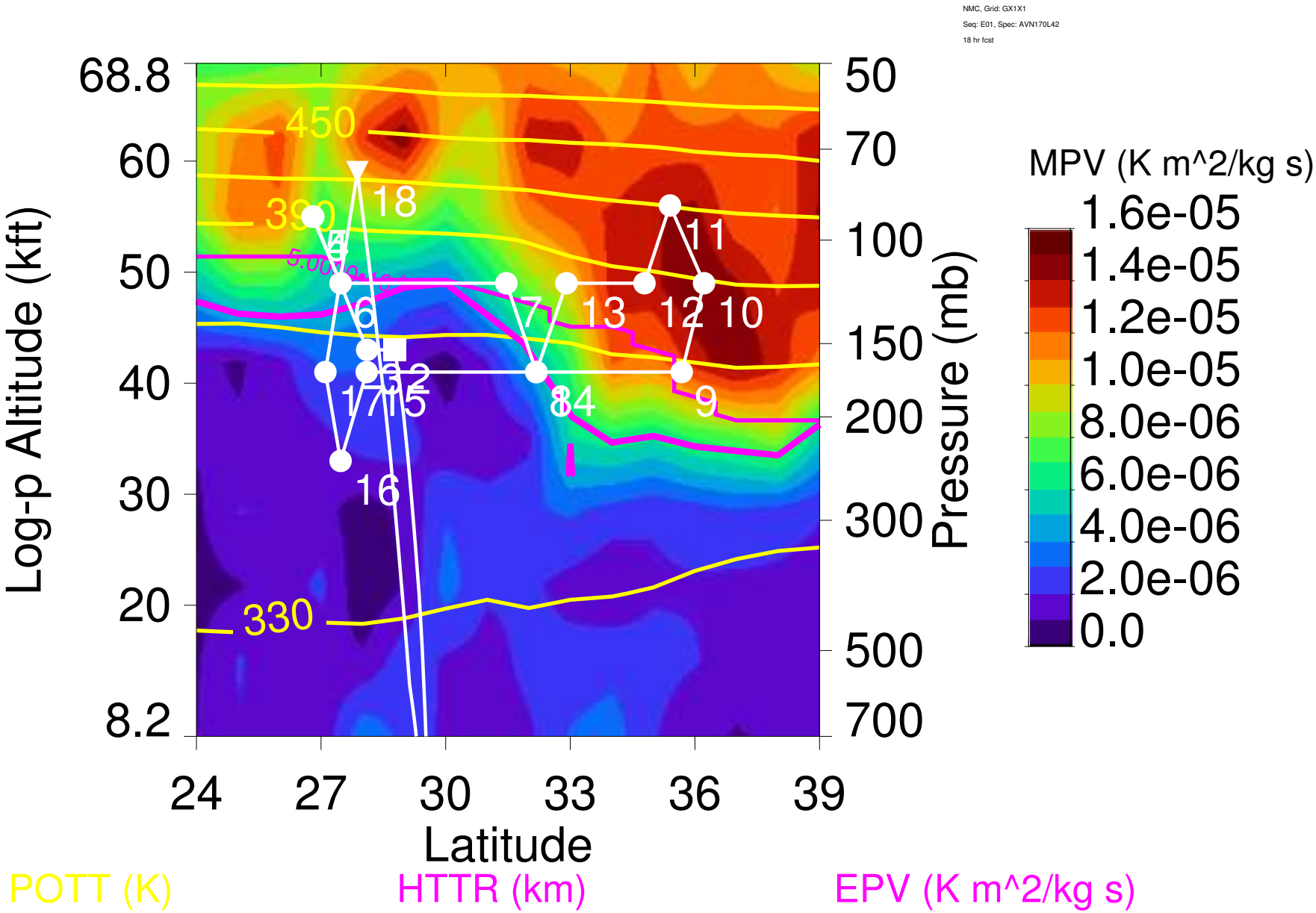
18 UTC on 7 July, 2005 at 380.0 K




18 UTC on 7 July, 2005
Latitude
28
30
36
30
28
Log-p Altitude (kft)
68.8
60
50
40
30
15.9
Pressure (mb)
50
70
100
150
200
300
500
450
390
330
5.0e-10
14.00
15.00
16.00
17.00
18.00
19.00
20.00
Time
-95
-93
-96
-92
Longitude
NMC, Grid: GX1X1
Seq: E01, Spec: AVN170L42
18 hr fcst
0.0
2.0e-06
4.0e-06
6.0e-06
8.0e-06
1.0e-05
1.2e-05
1.4e-05
1.6e-05
MPV (K m^2/kg s)
POTT (K)
HTTR (km)
EPV (K m^2/kg s)

18 UTC on 7 July, 2005 at -94.0 Longitude



Flight Plan 2005-07-07i

INFORMATION ABOUT THE PROPOSED WAY POINTS ON THIS FLIGHT:

All waypoints are approximate;
Most lie along a line between
27o 28’N 91o 11’W
and
36o 13’N 96o 46’W

PT #	LAT	LON	GMT TIME	SZA	ALT (kft)	DIST (nmi)
Takeoff						
1	29o 36’N	95o 10’W	14:00	59.3	0.0	0.00
reach altitude; start 15 min leg at FL430 to let instruments adjust						
2	28o 47’N	93o 28’W	14:17	54.2	43.0	101.84
end 15 min leg at FL430; climb to FL530						
3	28o 07’N	92o 08’W	14:32	50.0	43.0	80.99
begin 10-15 min leg at FL530 to dry instruments out						
4	26o 49’N	92o 09’W	14:45	47.2	55.0	77.78
end 10-15 min leg; descend to FL490						
5	26o 48’N	91o 07’W	14:55	44.0	55.0	55.30
Start on line. First leg: FL490						
6	27o 28’N	91o 11’W	15:03	42.2	49.0	40.67
end of first leg. descend to FL410 (as permitted)						
7	31o 28’N	93o 44’W	15:49	34.7	49.0	273.98
second leg, still northward on line, at FL410						
8	32o 11’N	94o 09’W	15:57	33.4	41.0	48.55
end of second leg; climb to FL490						
9	35o 41’N	96o 21’W	16:40	27.5	41.0	236.52
turn and continue ascending to max alt						
10	36o 13’N	96o 46’W	16:46	26.7	49.0	38.19
At max alt, descend back to FL490						
11	35o 24’N	96o 11’W	16:56	24.2	56.0	56.96
begin third leg, south along line, at FL490						
12	34o 47’N	95o 43’W	17:03	22.3	49.0	43.17
end third leg; descend to FL410						
13	32o 54’N	94o 33’W	17:24	16.9	49.0	126.94
begin fourth leg, still south along line, at FL410						
14	32o 11’N	94o 10’W	17:32	14.8	41.0	47.87
end fourth leg; dip to FL330 (or as low as permitted)						
15	28o 06’N	91o 32’W	18:23	6.3	41.0	280.06
Bottom of dip; ascend to FL410						
16	27o 28’N	91o 11’W	18:30	7.0	33.0	42.25
Turn and head home;climbing to max alt						
17	27o 06’N	91o 07’W	18:35	7.5	41.0	22.20
begin descent						
18	27o 52’N	92o 20’W	18:58	11.4	59.0	79.28
Land						
19	29o 36’N	95o 10’W	19:33	16.8	0.0	181.89

Flight Plan 2005-07-07i

Meteorological Data: Date: 2005-07-07 Hour: 18 Source: NMC Sequence: E01 Special: AVN170L42 (18-hr forecast)

	Date	Time (GMT)	Lat (deg)	Lon (deg)	Location
Takeoff:	2005-07-07	14:00	29o 36’N	95o 10’W	NASA Johnson
Landing:	2005-07-07	19:34	29o 36’N	95o 10’W	NASA Johnson

Latitude (degrees)	Longitude (degrees)	Time (GMT)	Wind Corrected Time	Altitude (feet)	Distance to Next Pt (nmi)	True Bearing (degrees)	Temperature (celsius)	Wind Speed (knots)	Wind Direction (degrees)	Wnd Corr Angle (degrees)	SZA (degrees)	Sun Azim. Rel A/C (degrees)
* 29o 36’N	95o 10’W	14:00	14:00	0 000	101.84	118.54	16.40	11	282 WNW	999 L	59.3	-38.5
* 28o 47’N	93o 28’W	14:17	14:17	43 000	27.00	119.37	-64.19	13	276 W	0 R	54.2	-37.5
28o 33’N	93o 01’W	14:22	14:22	43 000	53.99	119.58	-64.49	12	274 W	0 R	52.8	-37.2
* 28o 07’N	92o 08’W	14:32	14:31	43 000	25.93	-179.14	-71.65	4	213 SSW	1 R	50.0	-97.6
27o 41’N	92o 09’W	14:36	14:35	47 000	51.85	-179.14	-76.09	5	110 ESE	0 L	49.1	-97.5
* 26o 49’N	92o 09’W	14:45	14:44	55 000	27.65	91.02	-75.63	10	45 NE	1 L	47.2	-7.6
26o 48’N	91o 38’W	14:51	14:50	55 000	27.65	91.26	-75.77	10	41 NE	1 L	45.4	-7.1
* 26o 48’N	91o 07’W	14:55	14:55	55 000	40.67	-4.26	-74.50	4	163 SSE	0 R	44.0	89.0
* 27o 28’N	91o 11’W	15:03	15:03	49 000	91.33	-28.46	-73.94	3	162 SSE	0 R	42.2	114.6
28o 48’N	92o 01’W	15:19	15:18	49 000	91.33	-28.84	-72.56	4	310 NW	0 L	39.5	117.9
30o 08’N	92o 51’W	15:34	15:33	49 000	91.33	-29.26	-71.35	20	287 WNW	1 L	37.1	121.4
* 31o 28’N	93o 44’W	15:49	15:49	49 000	48.55	-26.42	-66.68	46	265 W	4 L	34.7	122.1
* 32o 11’N	94o 09’W	15:57	15:58	41 000	26.28	-26.89	-60.21	53	252 WSW	7 L	33.4	124.8
32o 35’N	94o 23’W	16:01	16:02	41 000	78.84	-27.02	-59.93	54	250 WSW	9 L	32.7	126.2
33o 45’N	95o 07’W	16:16	16:17	41 000	78.84	-27.41	-60.74	34	270 W	7 L	30.6	130.8
34o 54’N	95o 51’W	16:30	16:32	41 000	52.56	-27.83	-61.06	34	285 WNW	5 L	28.6	135.9
* 35o 41’N	96o 21’W	16:40	16:43	41 000	38.19	-32.19	-63.51	16	325 NW	2 L	27.5	143.7
* 36o 13’N	96o 46’W	16:46	16:50	49 000	56.96	149.56	-63.96	12	299 WNW	0 L	26.7	-35.6
* 35o 24’N	96o 11’W	16:56	16:59	56 000	43.17	148.54	-64.68	24	292 WNW	1 R	24.2	-32.1
* 34o 47’N	95o 43’W	17:03	17:06	49 000	95.21	152.23	-64.92	29	290 WNW	2 R	22.3	-34.0
33o 23’N	94o 50’W	17:18	17:20	49 000	31.74	152.73	-67.70	31	280 W	3 R	18.2	-29.7
* 32o 54’N	94o 33’W	17:24	17:25	49 000	47.87	155.66	-65.72	46	265 W	4 R	16.9	-30.6
* 32o 11’N	94o 10’W	17:32	17:33	41 000	84.02	150.27	-60.63	49	250 WSW	7 R	14.8	-21.7
30o 58’N	93o 21’W	17:47	17:48	41 000	84.02	150.70	-60.46	37	254 WSW	7 R	11.1	-11.6
29o 44’N	92o 34’W	18:02	18:03	41 000	84.02	151.10	-60.54	23	251 WSW	4 R	7.9	6.7

	28o 31’N	91o 47’W	18:17	18:18	41 000	28.01	151.47	-60.70	21	262	W	3	R	6.3	39.9
*	28o 06’N	91o 32’W	18:23	18:23	41 000	42.25	153.20	-51.99	30	209	SSW	4	R	6.3	51.6
*	27o 28’N	91o 11’W	18:30	18:31	33 000	22.20	171.18	-60.70	19	248	WSW	4	R	7.0	52.6
*	27o 06’N	91o 07’W	18:35	18:36	41 000	31.71	-54.08	-67.84	9	270	W	2	R	7.5	-73.8
	27o 25’N	91o 36’W	18:44	18:45	48 200	47.57	-54.30	-75.90	4	87	E	1	L	9.0	-68.0
*	27o 52’N	92o 20’W	18:58	18:59	59 000	181.89	-54.63	-73.69	7	39	NE	1	R	11.4	-61.9
*	29o 36’N	95o 10’W	19:33	19:33	0 000	N/A	N/A	31.56	6	191	S	0	R	16.8	N/A

* Denotes a way point