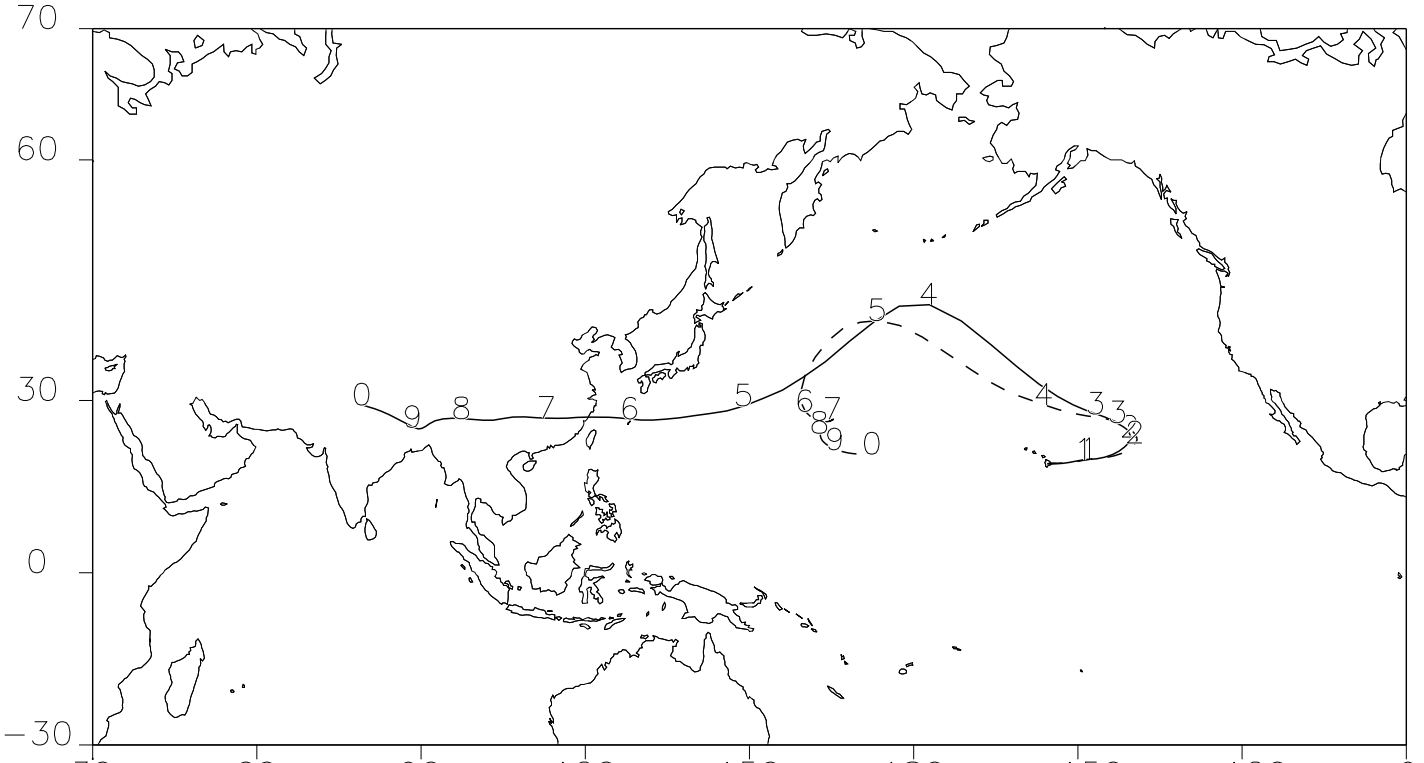
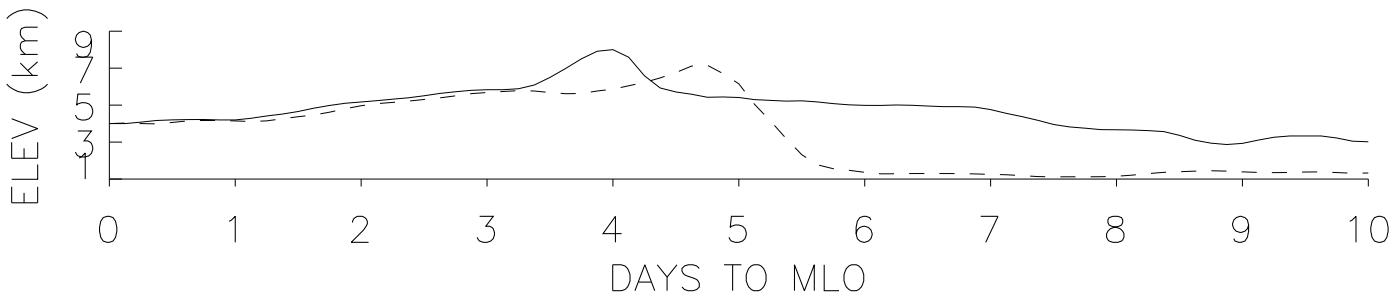
3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/1/2004 (Day of Year 92)
NCEP/NCAR Reanalysis 1 Data Set





00UT

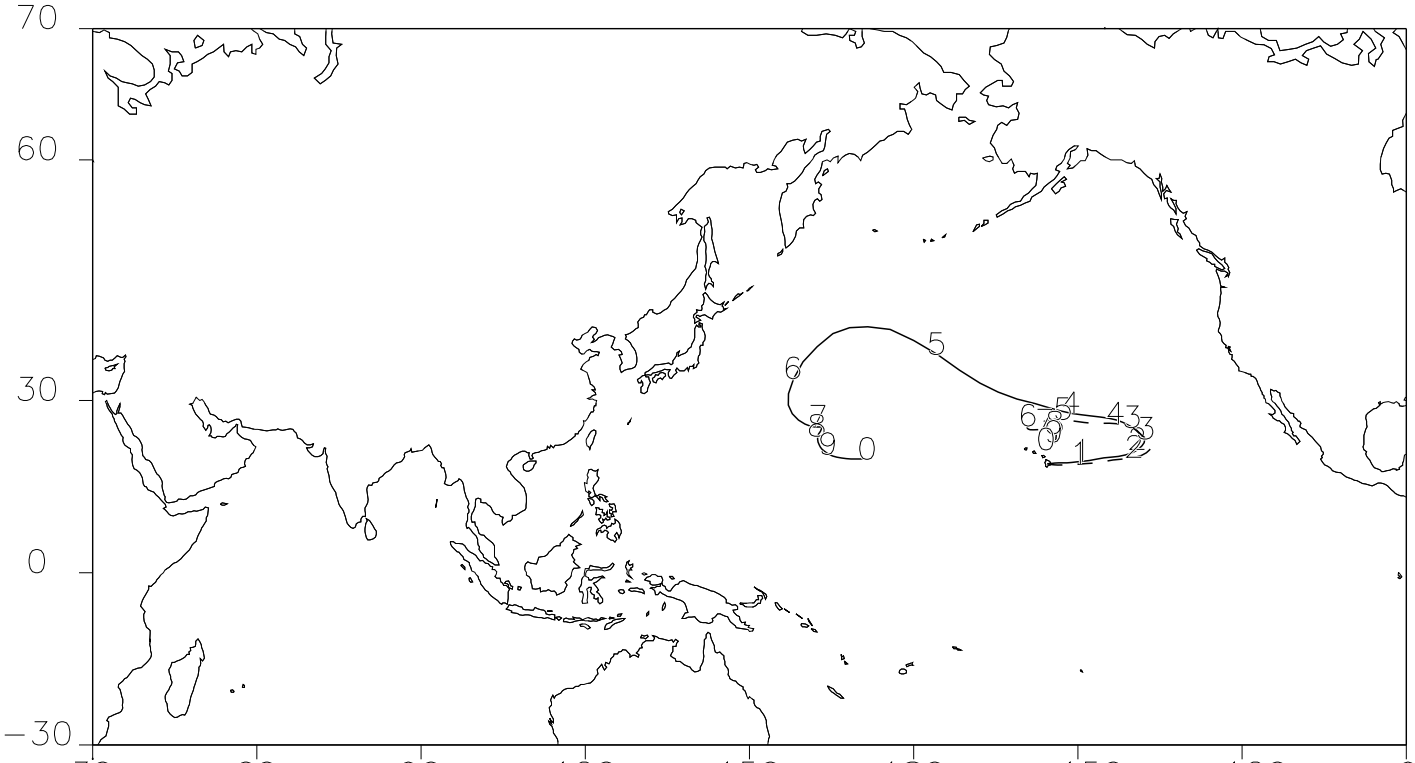
Day	km	hPa	C
0	4.0	632	3
1	4.2	616	3
2	5.2	544	−6
3	5.8	498	−10
4	8.0	359	−32
5	5.4	523	−9
6	5.0	552	−5
7	4.8	567	−3
8	3.7	651	4
9	2.9	715	10
10	3.0	709	8

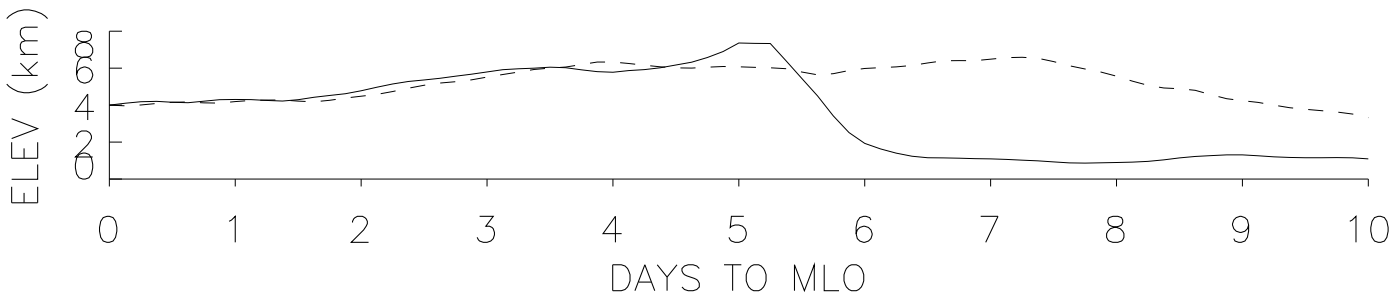
06UT

Day	km	hPa	C
0	4.0	632	3
1	4.1	620	2
2	5.0	560	−3
3	5.7	510	−10
4	5.9	495	−12
5	6.2	466	−19
6	1.4	869	13
7	1.3	878	14
8	1.2	888	15
9	1.4	863	12
10	1.3	868	13

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/1/2004 (Day of Year 92)
NCEP/NCAR Reanalysis 1 Data Set





12UT

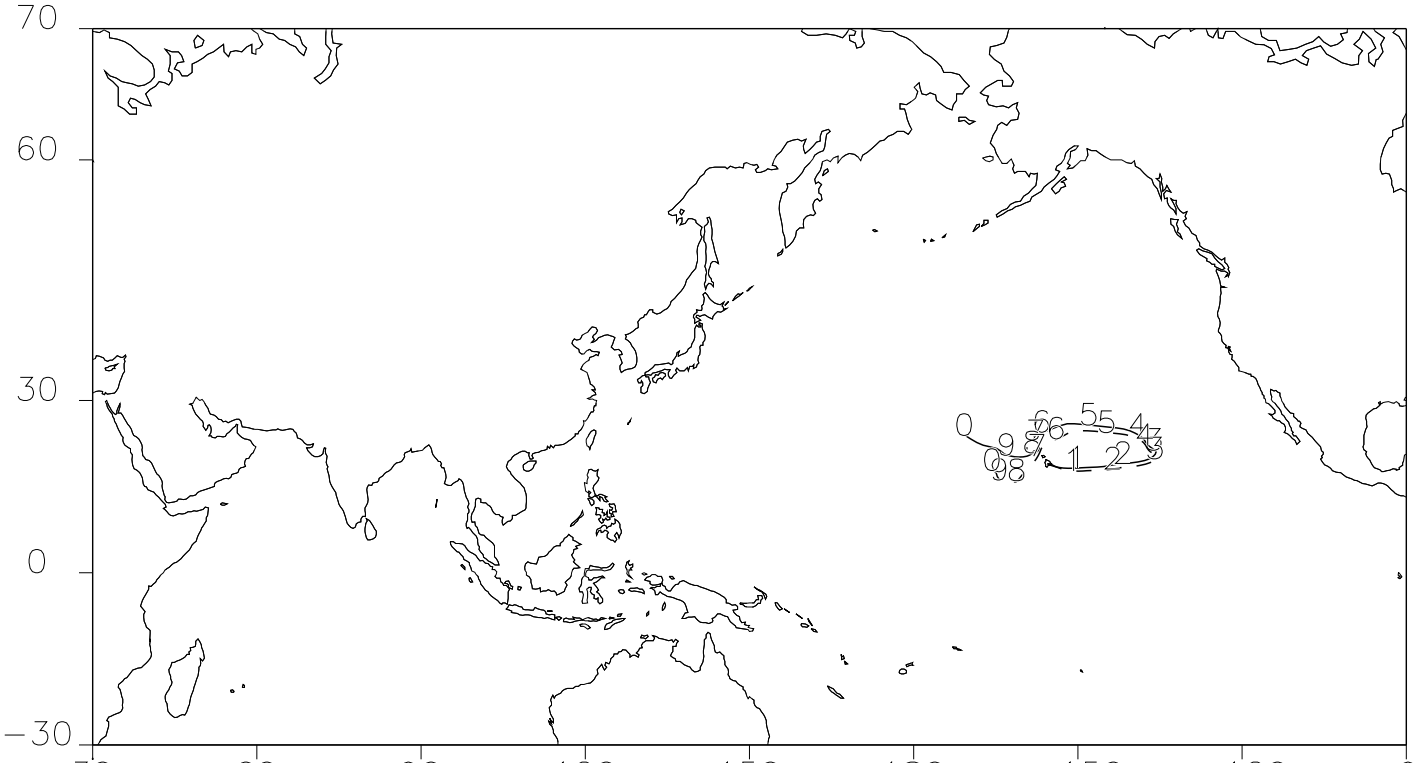
Day	km	hPa	C
0	4.0	631	2
1	4.3	607	0
2	4.8	572	−2
3	5.8	501	−11
4	5.8	501	−11
5	7.4	398	−26
6	1.9	805	9
7	1.1	897	16
8	0.9	916	17
9	1.3	873	14
10	1.1	894	15

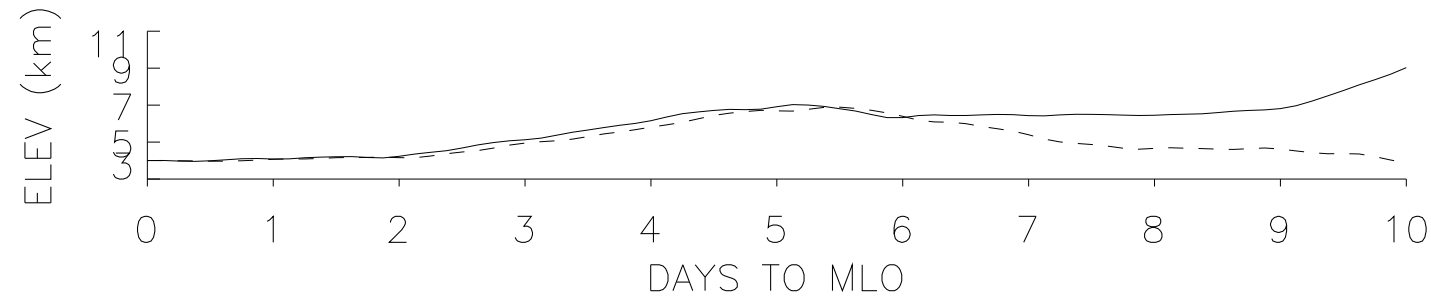
18UT

Day	km	hPa	C
0	4.0	632	3
1	4.2	618	2
2	4.5	595	0
3	5.5	521	−8
4	6.3	468	−15
5	6.1	484	−14
6	6.0	491	−12
7	6.5	460	−18
8	5.6	517	−11
9	4.2	611	−3
10	3.3	686	4

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/2/2004 (Day of Year 93)
NCEP/NCAR Reanalysis 1 Data Set





00UT

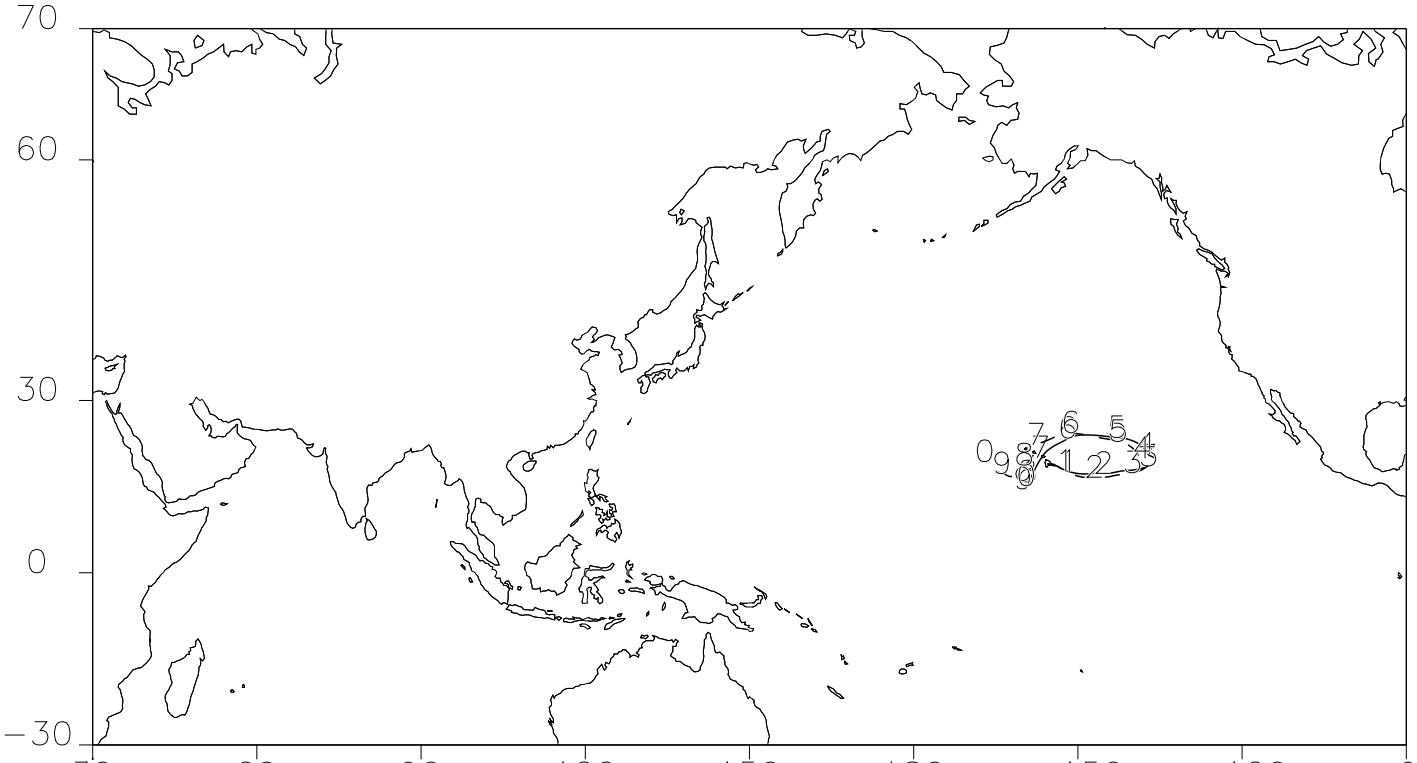
Day	km	hPa	C
0	4.0	631	2
1	4.1	624	3
2	4.2	613	2
3	5.1	547	−6
4	6.2	479	−14
5	6.9	432	−21
6	6.3	468	−16
7	6.4	462	−16
8	6.5	459	−16
9	6.8	436	−21
10	9.0	320	−39

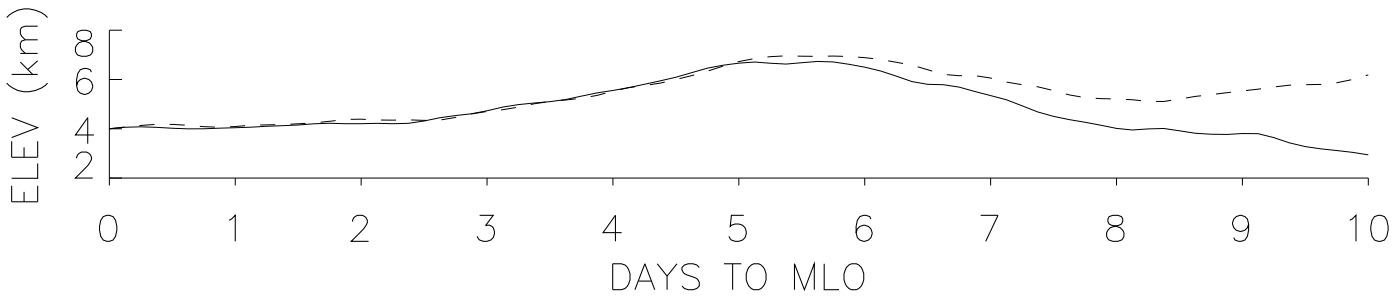
06UT

Day	km	hPa	C
0	4.0	632	1
1	4.1	626	2
2	4.2	619	2
3	4.9	561	−4
4	5.8	502	−11
5	6.7	447	−18
6	6.4	465	−15
7	5.4	530	−8
8	4.7	581	−2
9	4.6	582	−2
10	3.9	639	2

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/2/2004 (Day of Year 93)
NCEP/NCAR Reanalysis 1 Data Set





12UT

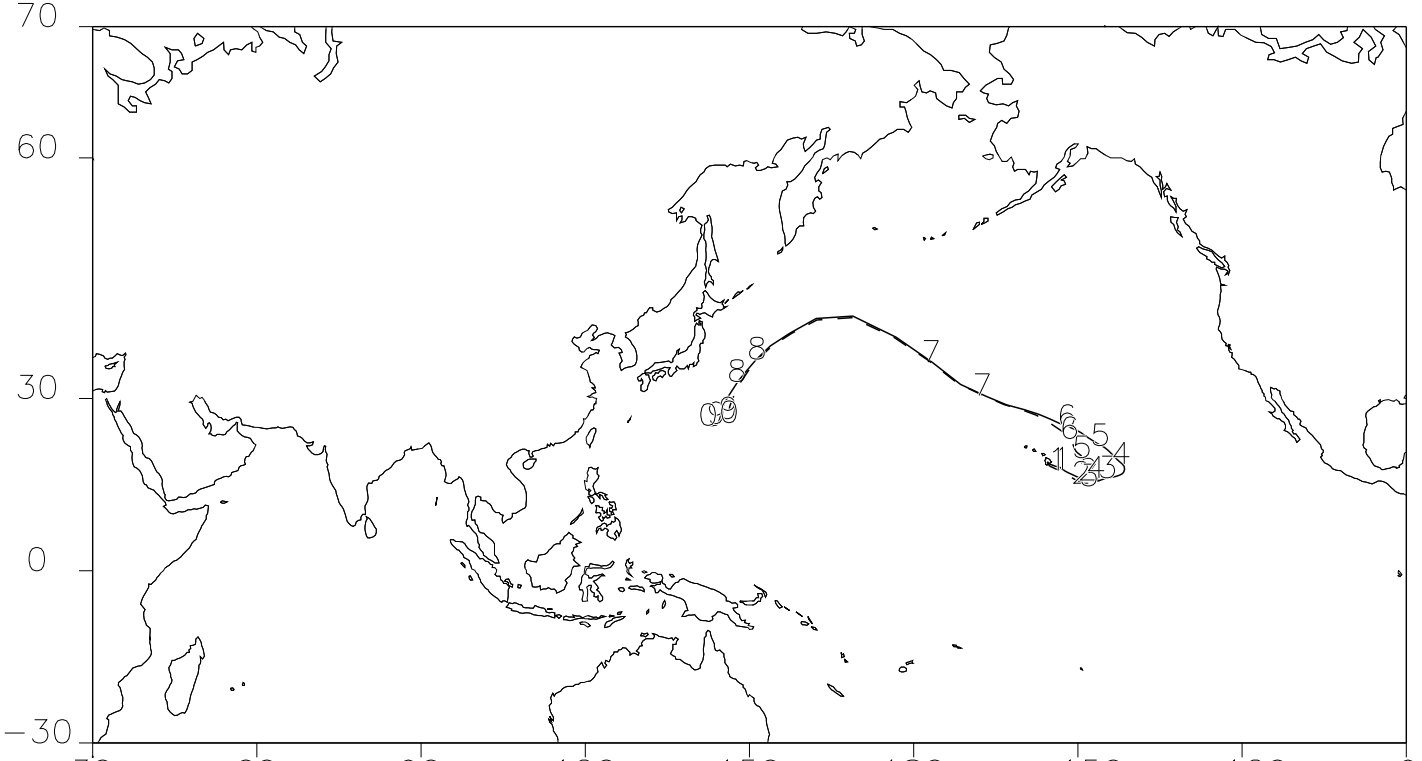
Day	km	hPa	C
0	4.0	631	1
1	4.0	627	2
2	4.2	613	0
3	4.7	575	−2
4	5.6	518	−9
5	6.7	447	−18
6	6.5	457	−17
7	5.3	532	−8
8	4.0	629	2
9	3.8	644	3
10	2.9	716	7

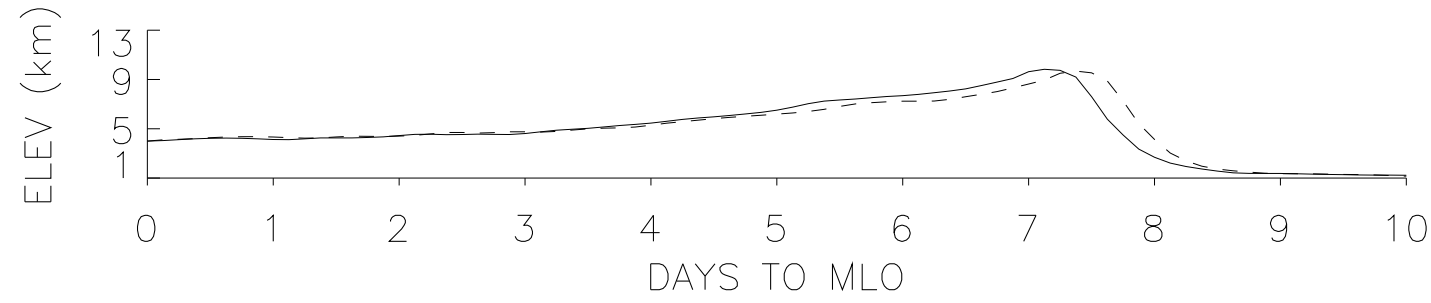
18UT

Day	km	hPa	C
0	4.0	631	1
1	4.1	625	2
2	4.4	602	1
3	4.7	578	−1
4	5.5	521	−8
5	6.7	445	−17
6	6.9	435	−19
7	6.1	486	−13
8	5.2	543	−6
9	5.5	519	−8
10	6.2	476	−15

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/3/2004 (Day of Year 94)
NCEP/NCAR Reanalysis 1 Data Set





00UT

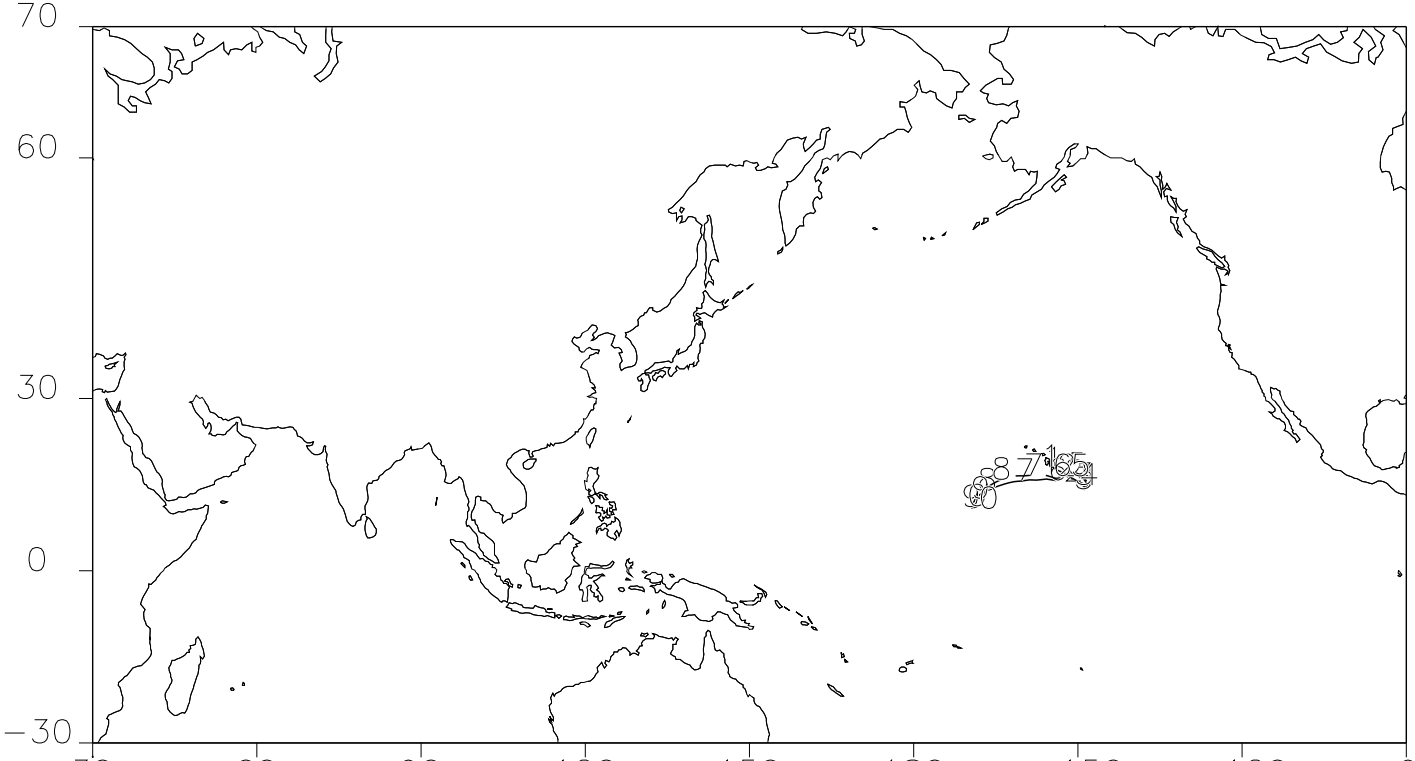
Day	km	hPa	C
0	4.0	630	1
1	4.1	621	1
2	4.4	597	1
3	4.6	584	−1
4	5.5	524	−6
5	6.5	458	−15
6	7.7	389	−26
7	9.6	284	−47
8	2.7	731	6
9	1.4	864	14
10	1.2	880	14

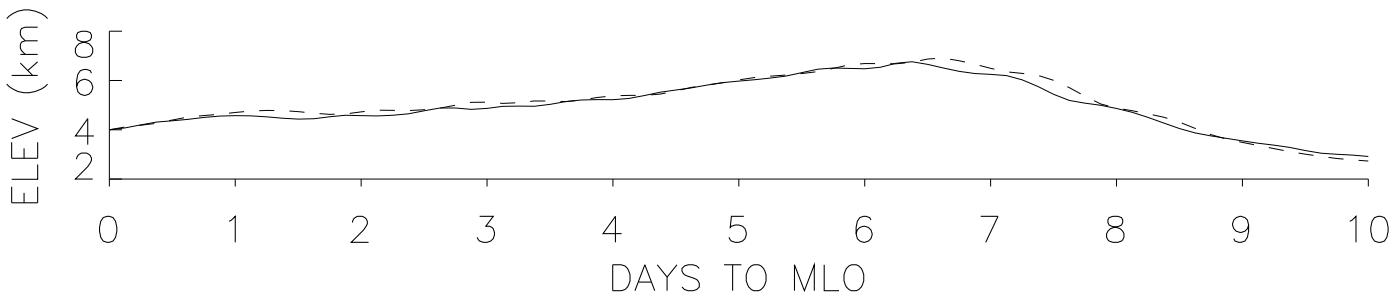
06UT

Day	km	hPa	C
0	4.0	631	1
1	4.3	606	−1
2	4.4	600	1
3	4.8	574	−1
4	5.3	537	−5
5	6.2	480	−12
6	7.2	416	−20
7	8.6	337	−36
8	4.1	607	−3
9	1.4	864	14
10	1.2	885	15

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/3/2004 (Day of Year 94)
NCEP/NCAR Reanalysis 1 Data Set





12UT

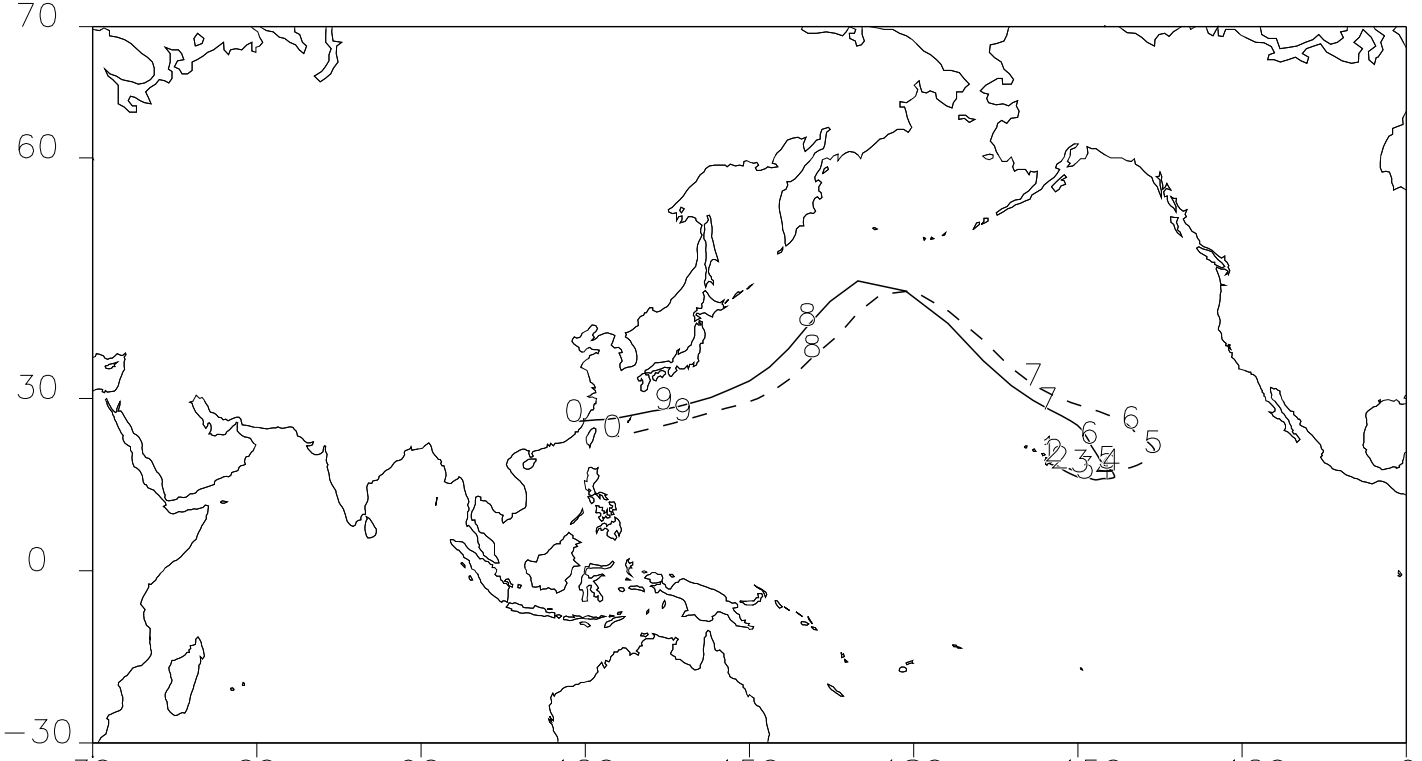
Day	km	hPa	C
0	4.0	631	1
1	4.6	587	−3
2	4.6	586	−2
3	4.9	564	−4
4	5.2	540	−6
5	6.0	492	−11
6	6.5	460	−13
7	6.2	475	−12
8	4.9	567	−3
9	3.5	666	7
10	2.9	719	9

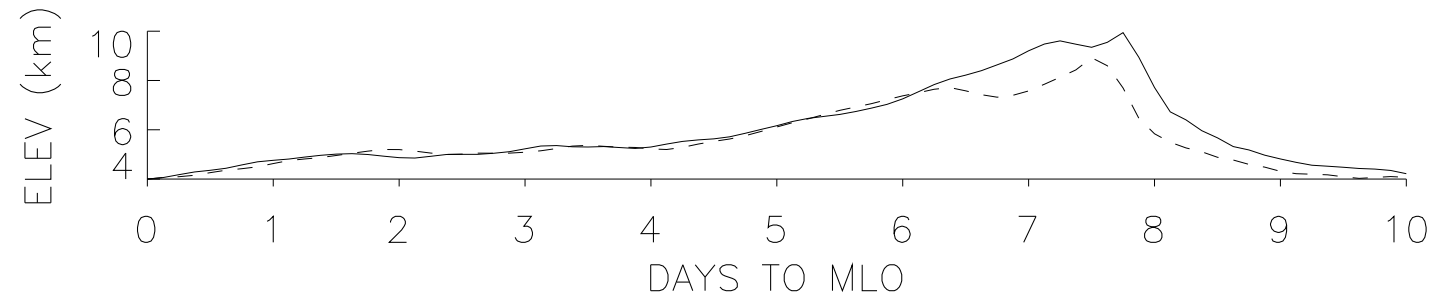
18UT

Day	km	hPa	C
0	4.0	632	1
1	4.7	578	−4
2	4.7	577	−2
3	5.1	549	−3
4	5.4	531	−6
5	6.0	490	−10
6	6.7	449	−15
7	6.5	460	−14
8	4.9	567	−3
9	3.5	672	6
10	2.7	735	10

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/4/2004 (Day of Year 95)
NCEP/NCAR Reanalysis 1 Data Set





00UT

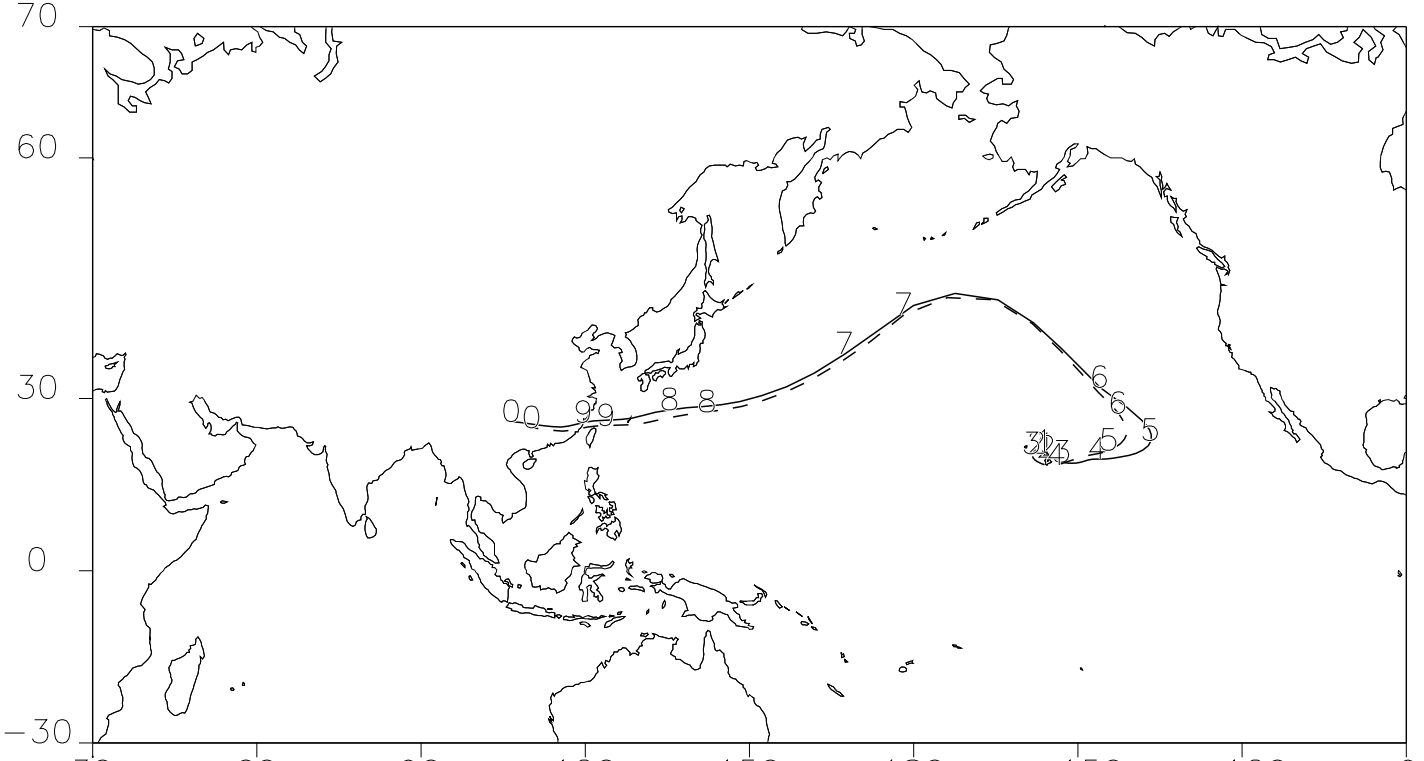
Day	km	hPa	C
0	4.0	630	0
1	4.8	573	−5
2	4.9	566	−4
3	5.2	541	−4
4	5.3	535	−4
5	6.2	479	−10
6	7.3	415	−20
7	9.2	312	−39
8	7.7	375	−27
9	4.8	563	−4
10	4.2	608	0

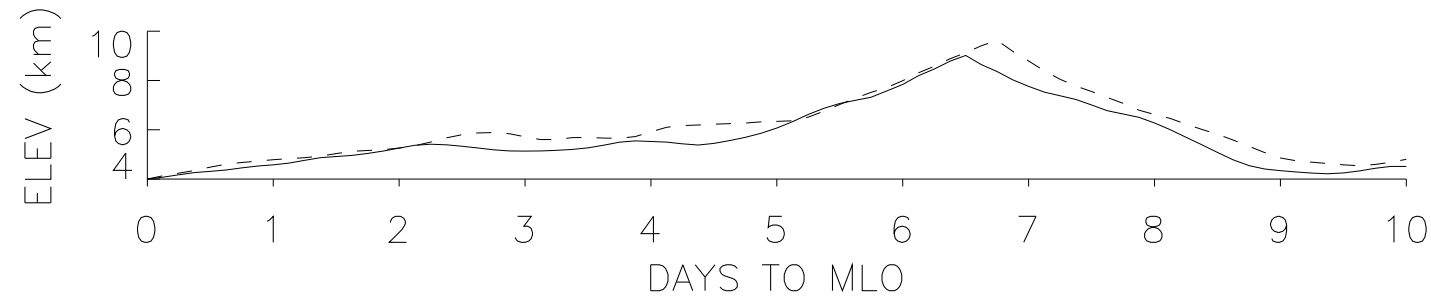
06UT

Day	km	hPa	C
0	4.0	631	1
1	4.6	584	−4
2	5.2	544	−6
3	5.1	551	−3
4	5.2	541	−3
5	6.1	483	−10
6	7.4	408	−21
7	7.6	390	−23
8	5.8	487	−13
9	4.3	601	−1
10	4.1	622	1

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/4/2004 (Day of Year 95)
NCEP/NCAR Reanalysis 1 Data Set





12UT

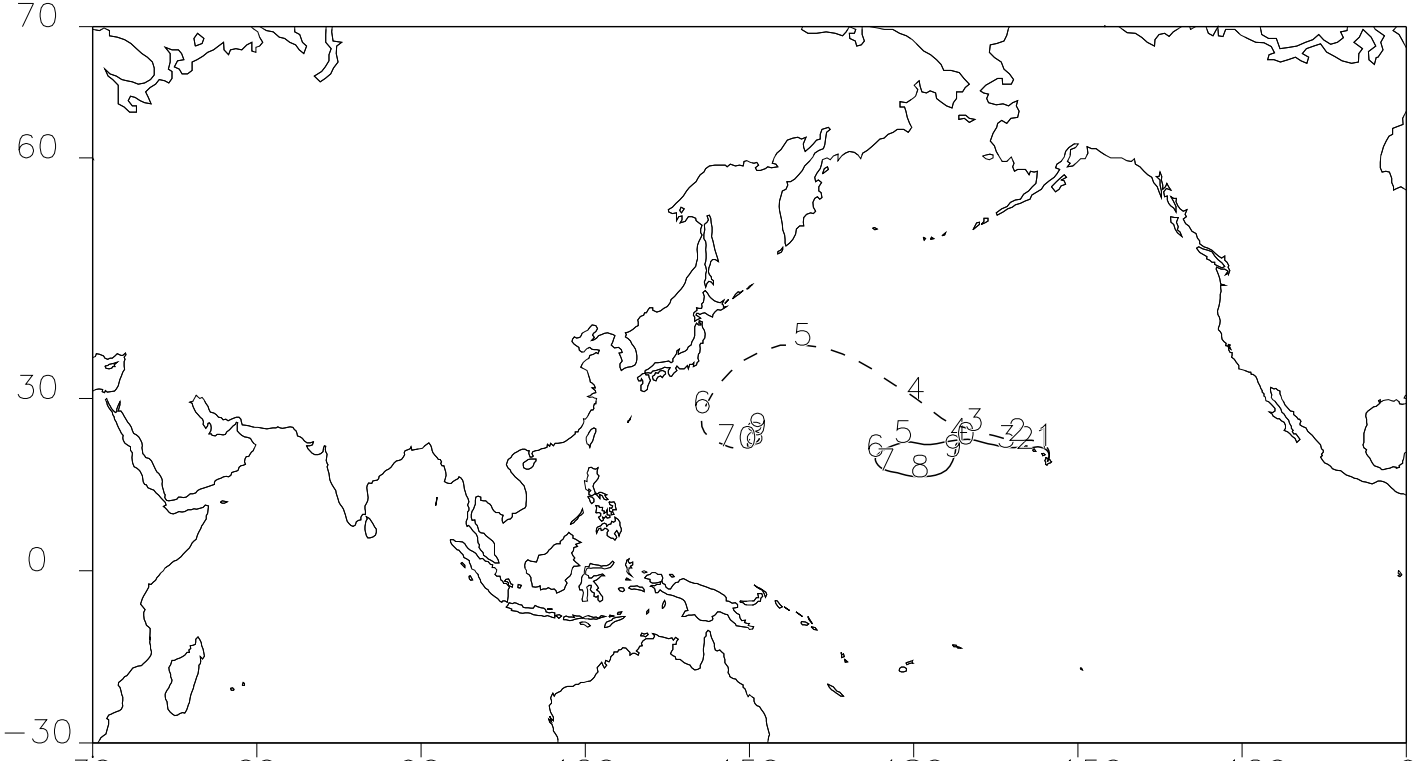
Day	km	hPa	C
0	4.0	631	1
1	4.6	587	−4
2	5.3	538	−7
3	5.1	547	−5
4	5.5	520	−6
5	6.1	485	−10
6	7.8	377	−28
7	7.8	371	−30
8	6.3	467	−15
9	4.3	601	0
10	4.5	586	0

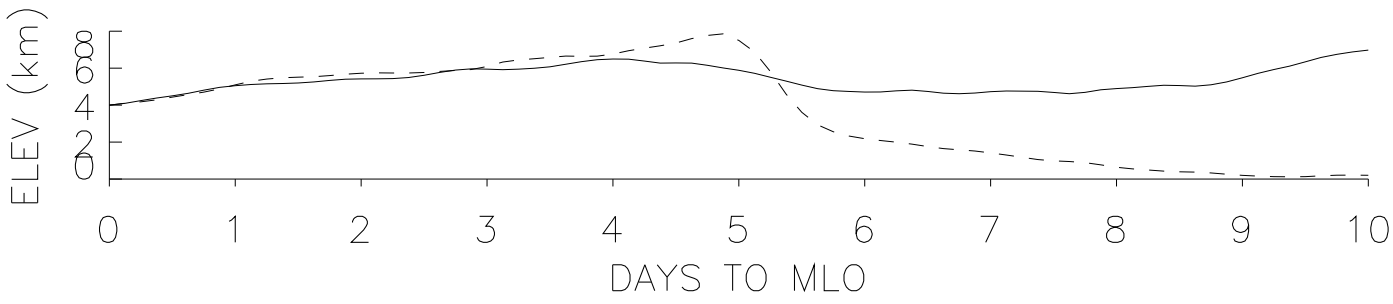
18UT

Day	km	hPa	C
0	4.0	631	1
1	4.8	572	−5
2	5.3	539	−7
3	5.7	509	−9
4	5.9	497	−8
5	6.3	471	−11
6	8.0	375	−26
7	8.8	319	−38
8	6.6	445	−18
9	4.9	564	−4
10	4.8	566	−2

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/5/2004 (Day of Year 96)
NCEP/NCAR Reanalysis 1 Data Set





00UT

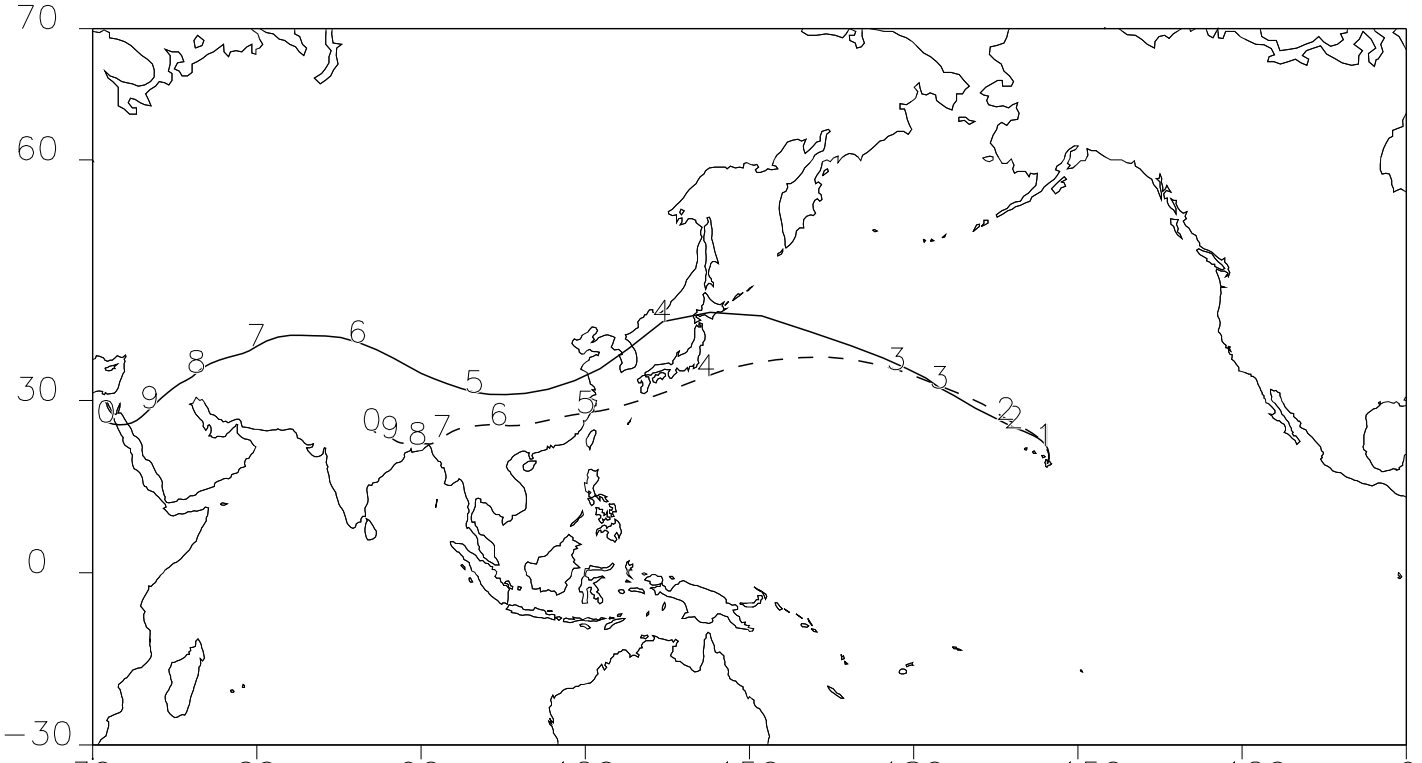
Day	km	hPa	C
0	4.0	630	1
1	5.1	552	-6
2	5.4	527	-8
3	5.9	492	-12
4	6.5	458	-16
5	5.9	499	-9
6	4.7	580	2
7	4.7	579	1
8	4.9	567	0
9	5.5	525	-6
10	7.0	430	-19

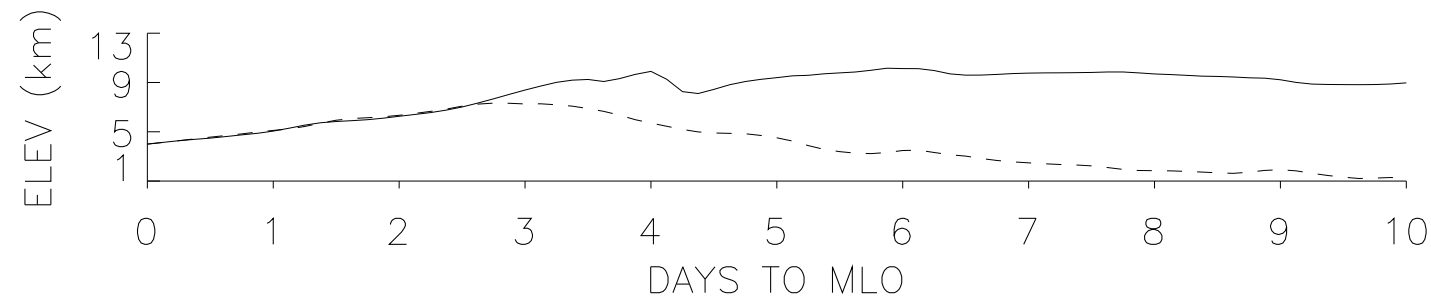
06UT

Day	km	hPa	C
0	4.0	631	3
1	5.1	549	-6
2	5.7	506	-11
3	6.1	482	-12
4	6.8	439	-18
5	7.5	391	-26
6	2.2	785	10
7	1.4	860	15
8	0.6	941	21
9	0.2	990	23
10	0.2	988	25

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/5/2004 (Day of Year 96)
NCEP/NCAR Reanalysis 1 Data Set





12UT

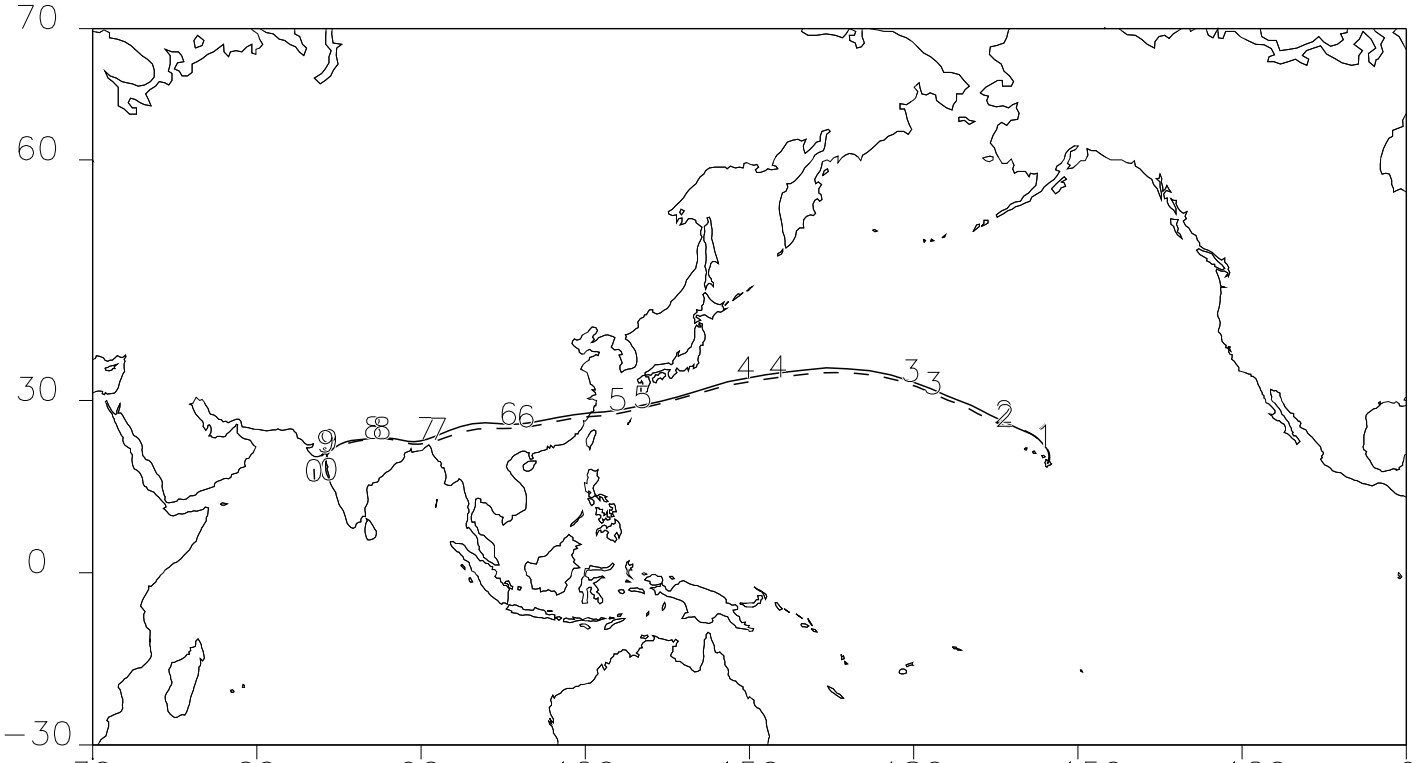
Day	km	hPa	C
0	4.0	631	3
1	5.1	552	-5
2	6.3	472	-15
3	8.4	349	-34
4	9.9	263	-55
5	9.4	299	-45
6	10.1	266	-51
7	9.8	284	-48
8	9.7	288	-47
9	9.2	309	-42
10	9.0	320	-39

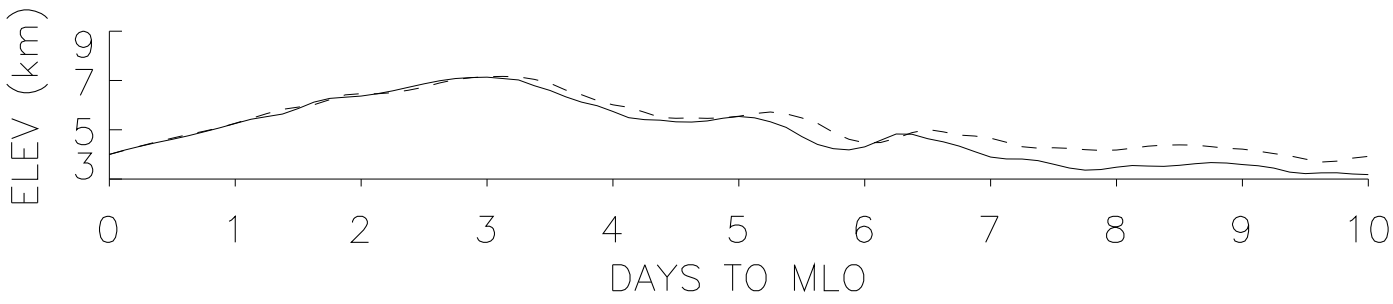
18UT

Day	km	hPa	C
0	4.0	632	3
1	5.1	549	-6
2	6.3	466	-16
3	7.3	407	-24
4	5.7	500	-11
5	4.5	589	-2
6	3.5	671	5
7	2.5	760	12
8	1.8	818	19
9	1.9	813	19
10	1.2	879	26

12UT - solid
18UT - dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/6/2004 (Day of Year 97)
NCEP/NCAR Reanalysis 1 Data Set





00UT

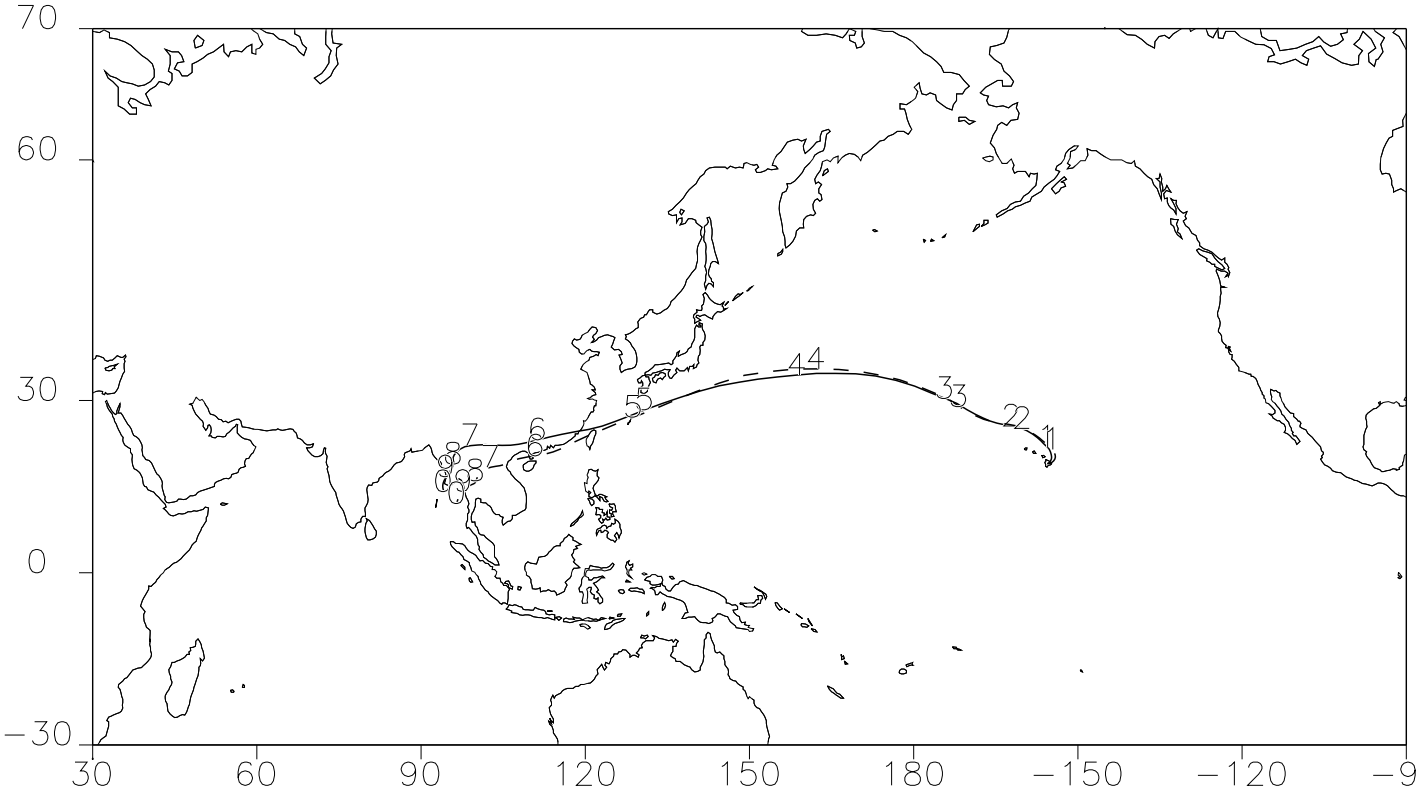
Day	km	hPa	C
0	4.0	631	4
1	5.3	538	−6
2	6.4	465	−15
3	7.1	416	−23
4	5.7	501	−11
5	5.5	516	−10
6	4.3	604	−1
7	3.9	638	2
8	3.5	672	5
9	3.6	663	6
10	3.2	696	8

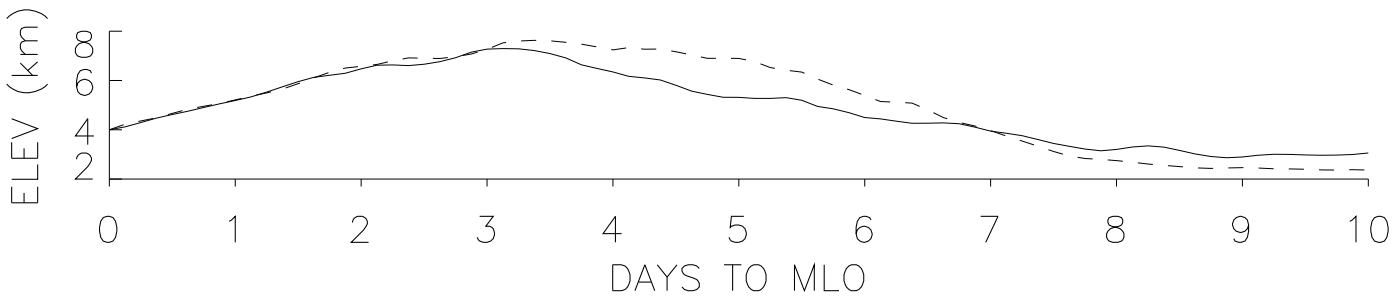
06UT

Day	km	hPa	C
0	4.0	632	5
1	5.3	539	−5
2	6.5	460	−15
3	7.2	417	−22
4	6.0	484	−12
5	5.5	516	−9
6	4.5	592	−1
7	4.7	583	−4
8	4.2	619	1
9	4.2	617	1
10	3.9	639	5

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/6/2004 (Day of Year 97)
NCEP/NCAR Reanalysis 1 Data Set





12UT

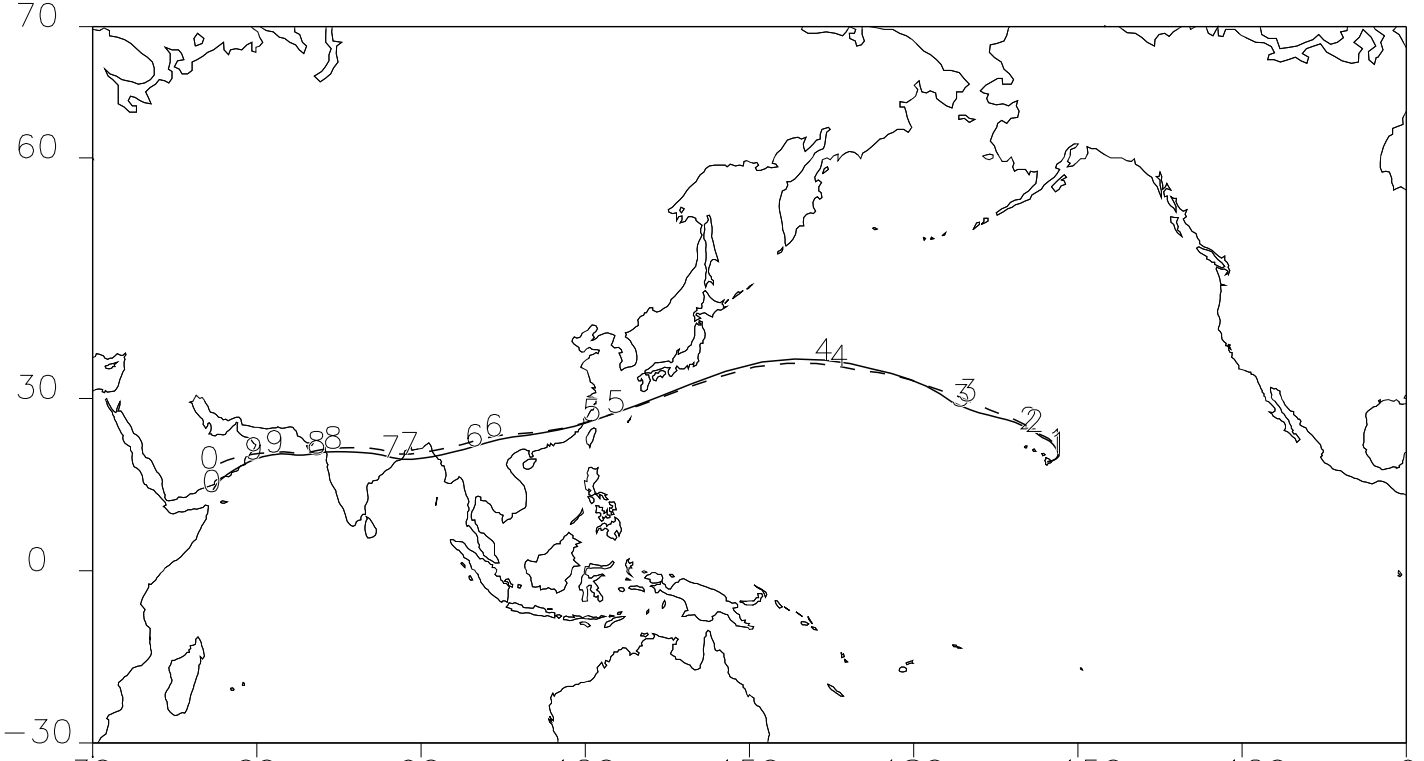
Day	km	hPa	C
0	4.0	631	4
1	5.2	544	−5
2	6.5	459	−16
3	7.3	412	−22
4	6.3	464	−14
5	5.3	532	−6
6	4.5	593	0
7	3.9	635	3
8	3.2	696	11
9	2.9	721	13
10	3.1	707	9

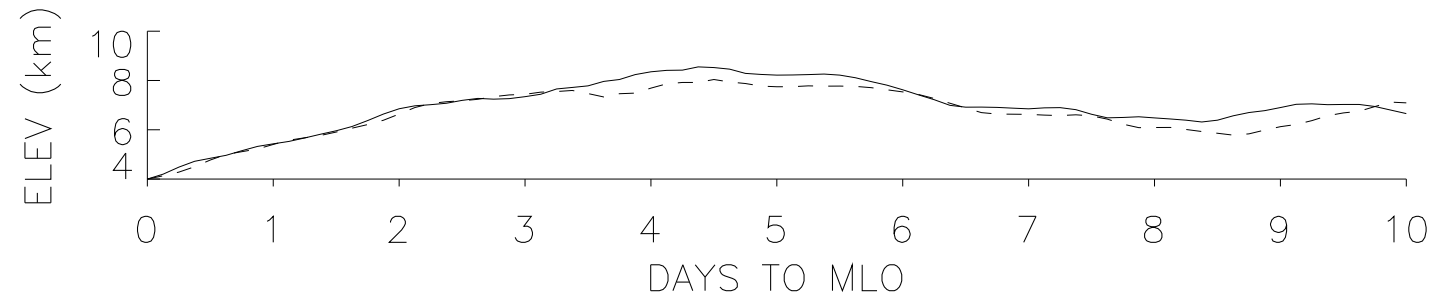
18UT

Day	km	hPa	C
0	4.0	632	4
1	5.2	543	−4
2	6.6	454	−16
3	7.3	412	−21
4	7.2	409	−22
5	6.9	432	−17
6	5.4	532	−6
7	4.0	636	3
8	2.7	736	14
9	2.5	761	15
10	2.4	771	15

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/7/2004 (Day of Year 98)
NCEP/NCAR Reanalysis 1 Data Set





00UT

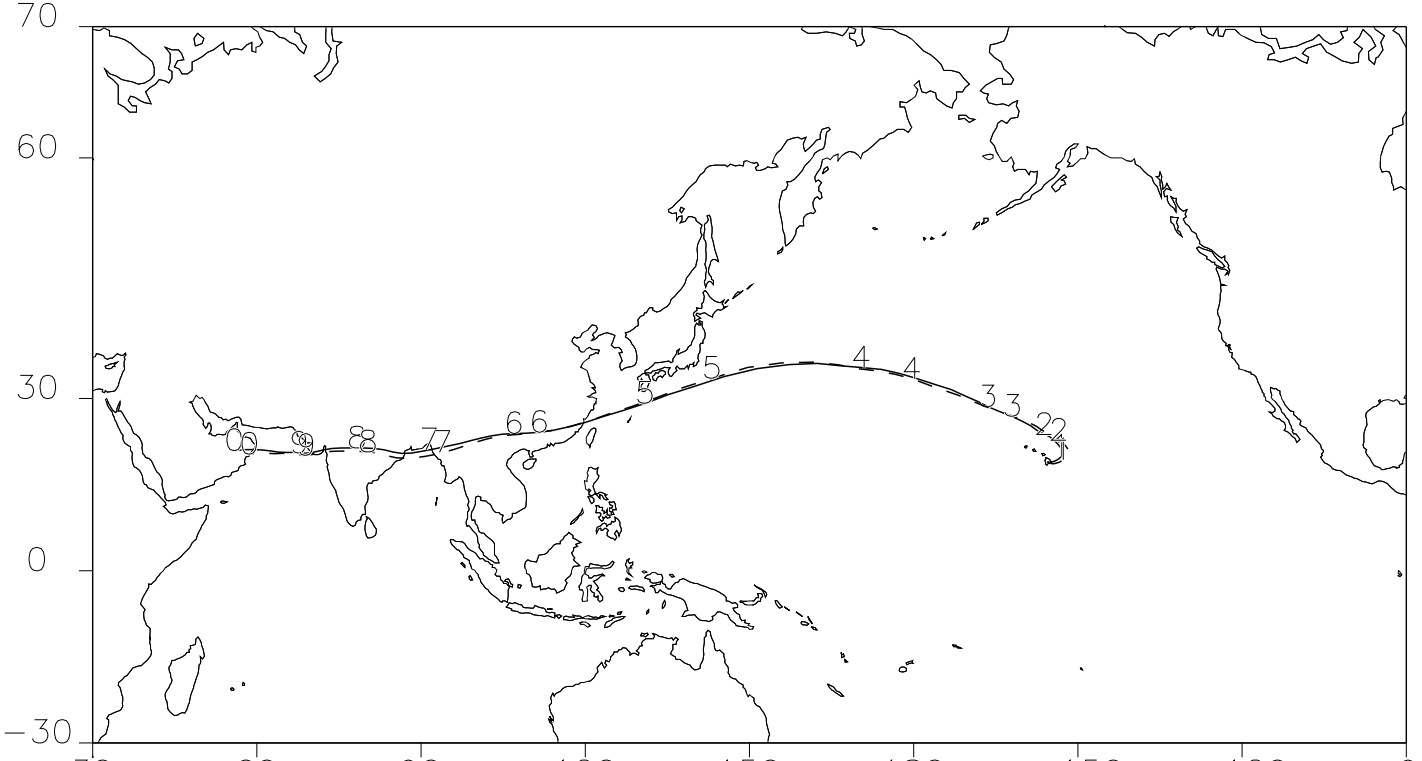
Day	km	hPa	C
0	4.0	630	4
1	5.4	527	−6
2	6.9	436	−18
3	7.3	408	−22
4	8.4	350	−30
5	8.2	361	−28
6	7.6	394	−23
7	6.8	438	−16
8	6.5	460	−11
9	6.9	436	−15
10	6.7	450	−12

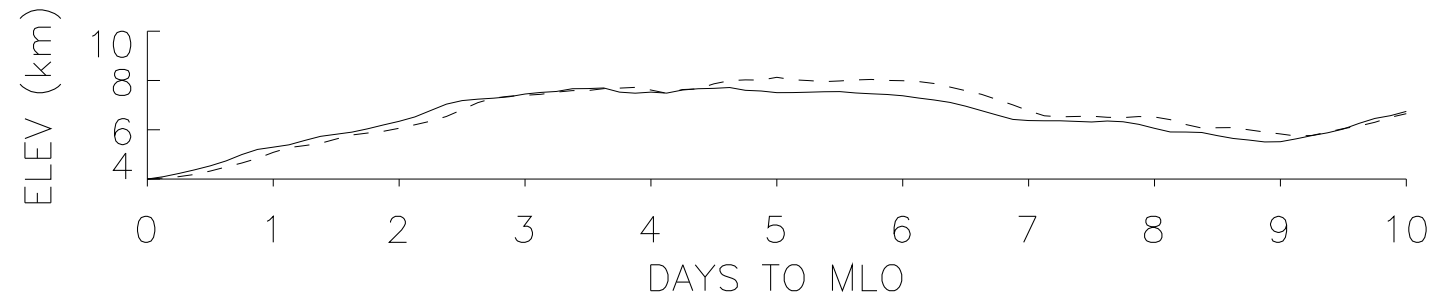
06UT

Day	km	hPa	C
0	4.0	632	4
1	5.4	530	−5
2	6.6	450	−15
3	7.4	402	−22
4	7.7	386	−24
5	7.7	384	−24
6	7.5	399	−23
7	6.6	452	−15
8	6.1	486	−10
9	6.1	483	−8
10	7.1	425	−18

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/7/2004 (Day of Year 98)
NCEP/NCAR Reanalysis 1 Data Set





12UT

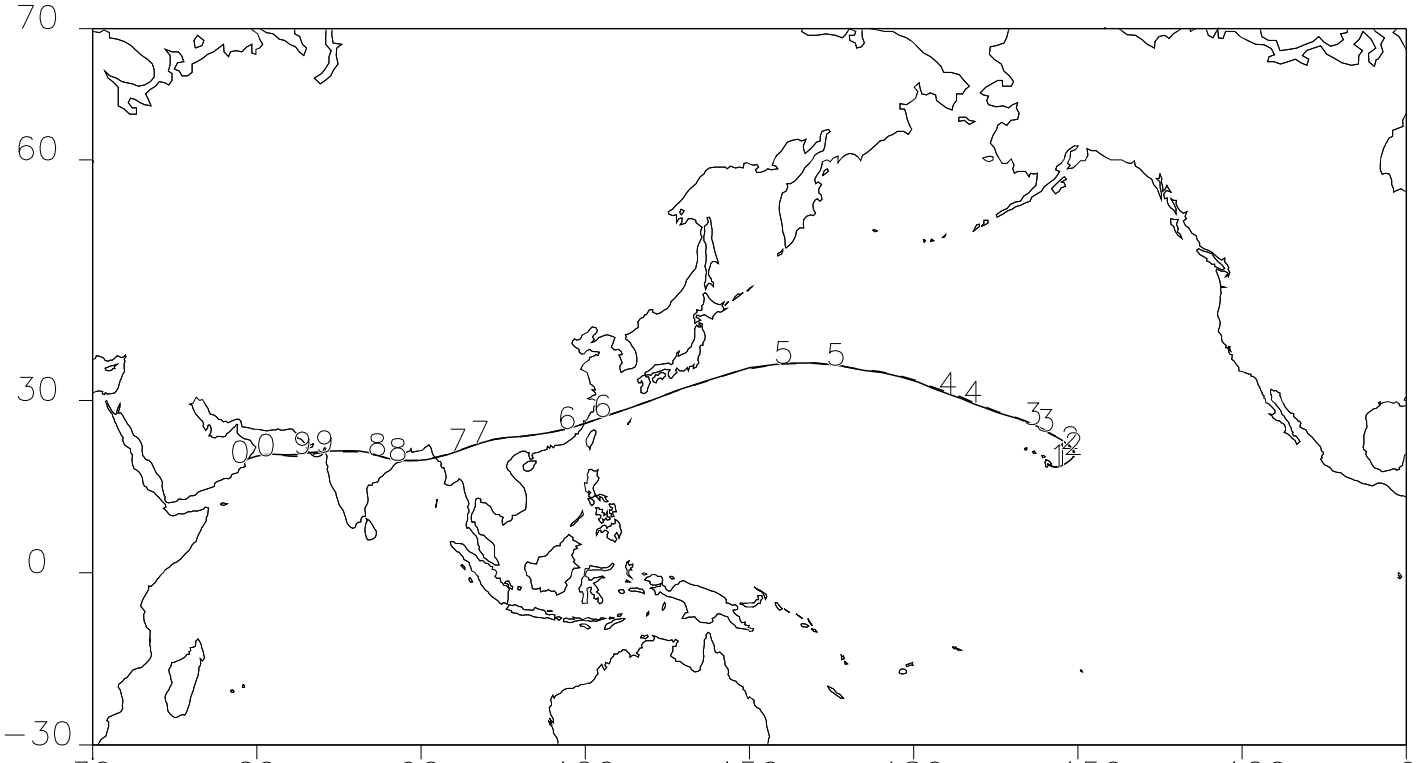
Day	km	hPa	C
0	4.0	630	4
1	5.3	536	−4
2	6.3	468	−13
3	7.4	402	−21
4	7.5	395	−23
5	7.5	396	−23
6	7.4	406	−22
7	6.4	466	−14
8	6.1	486	−10
9	5.5	521	−4
10	6.7	444	−15

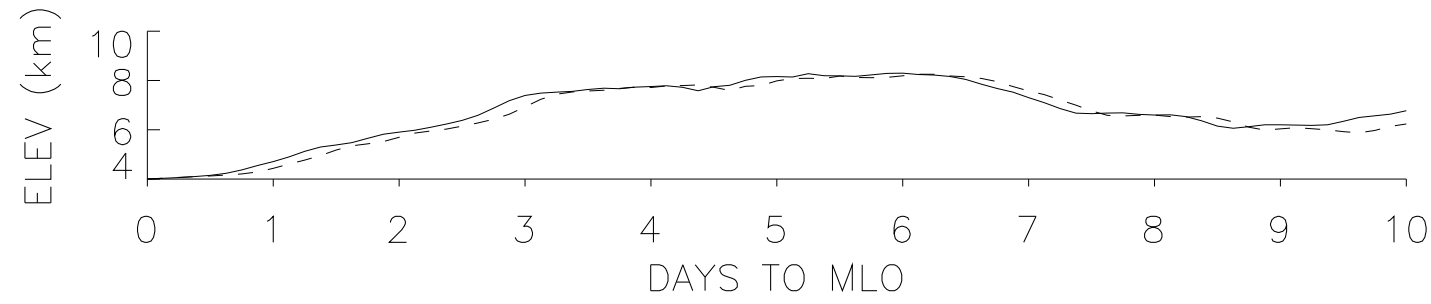
18UT

Day	km	hPa	C
0	4.0	631	5
1	5.1	553	−2
2	6.1	487	−10
3	7.4	405	−20
4	7.6	391	−23
5	8.1	360	−29
6	8.0	373	−26
7	6.8	444	−16
8	6.5	459	−13
9	5.8	503	−6
10	6.7	451	−13

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/8/2004 (Day of Year 99)
NCEP/NCAR Reanalysis 1 Data Set





00UT

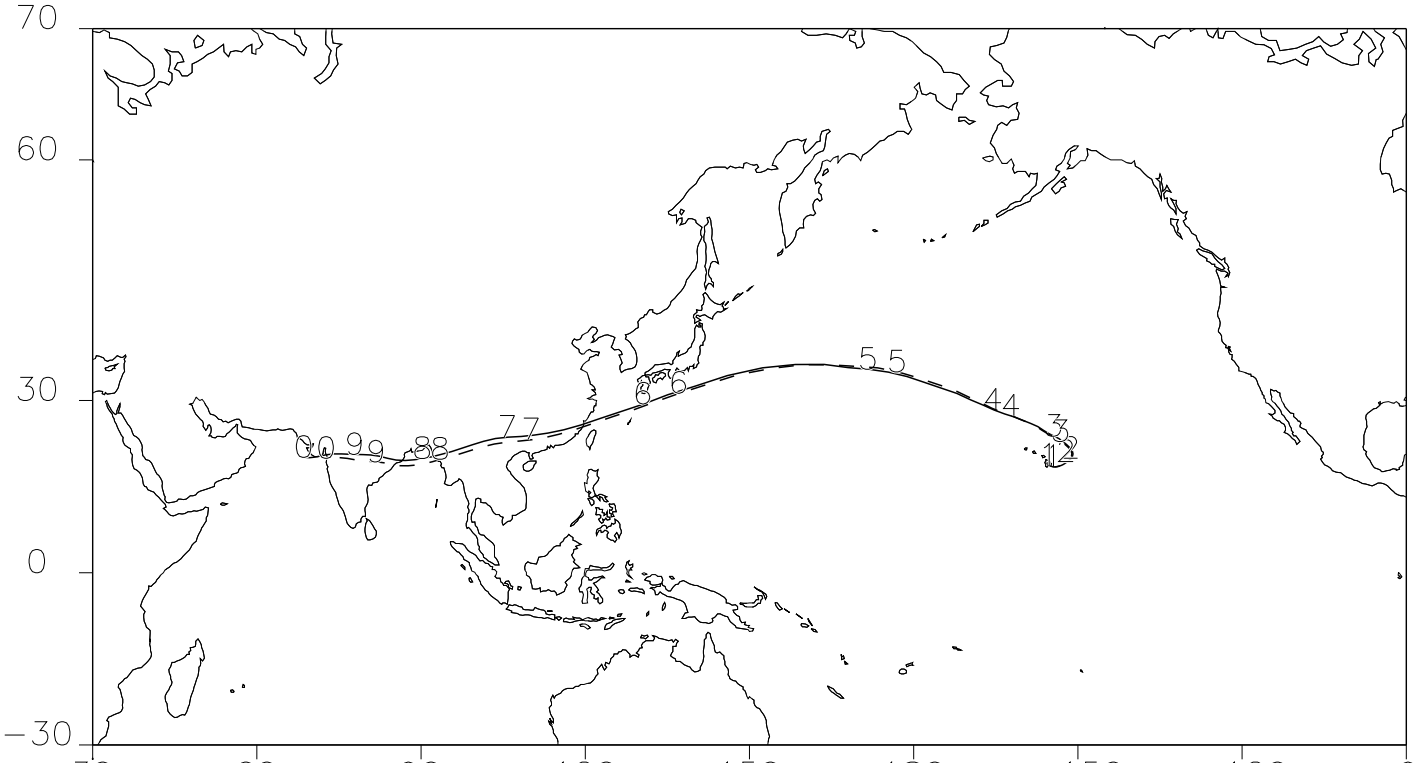
Day	km	hPa	C
0	4.0	630	4
1	4.7	578	0
2	5.9	496	−10
3	7.4	405	−21
4	7.8	384	−25
5	8.2	358	−29
6	8.3	357	−29
7	7.3	411	−21
8	6.6	452	−14
9	6.2	477	−9
10	6.8	443	−15

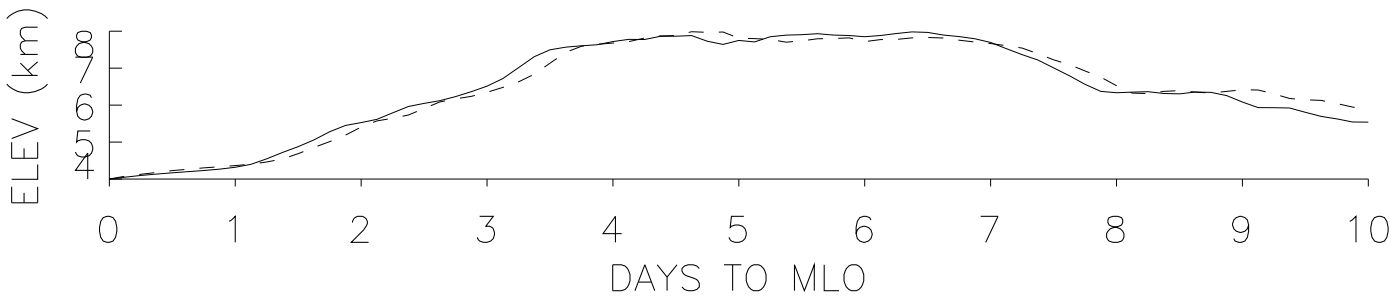
06UT

Day	km	hPa	C
0	4.0	630	4
1	4.4	599	2
2	5.7	511	−7
3	6.9	433	−17
4	7.7	387	−24
5	8.0	370	−27
6	8.2	361	−28
7	7.6	397	−24
8	6.6	455	−14
9	6.0	489	−9
10	6.2	477	−9

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/8/2004 (Day of Year 99)
NCEP/NCAR Reanalysis 1 Data Set





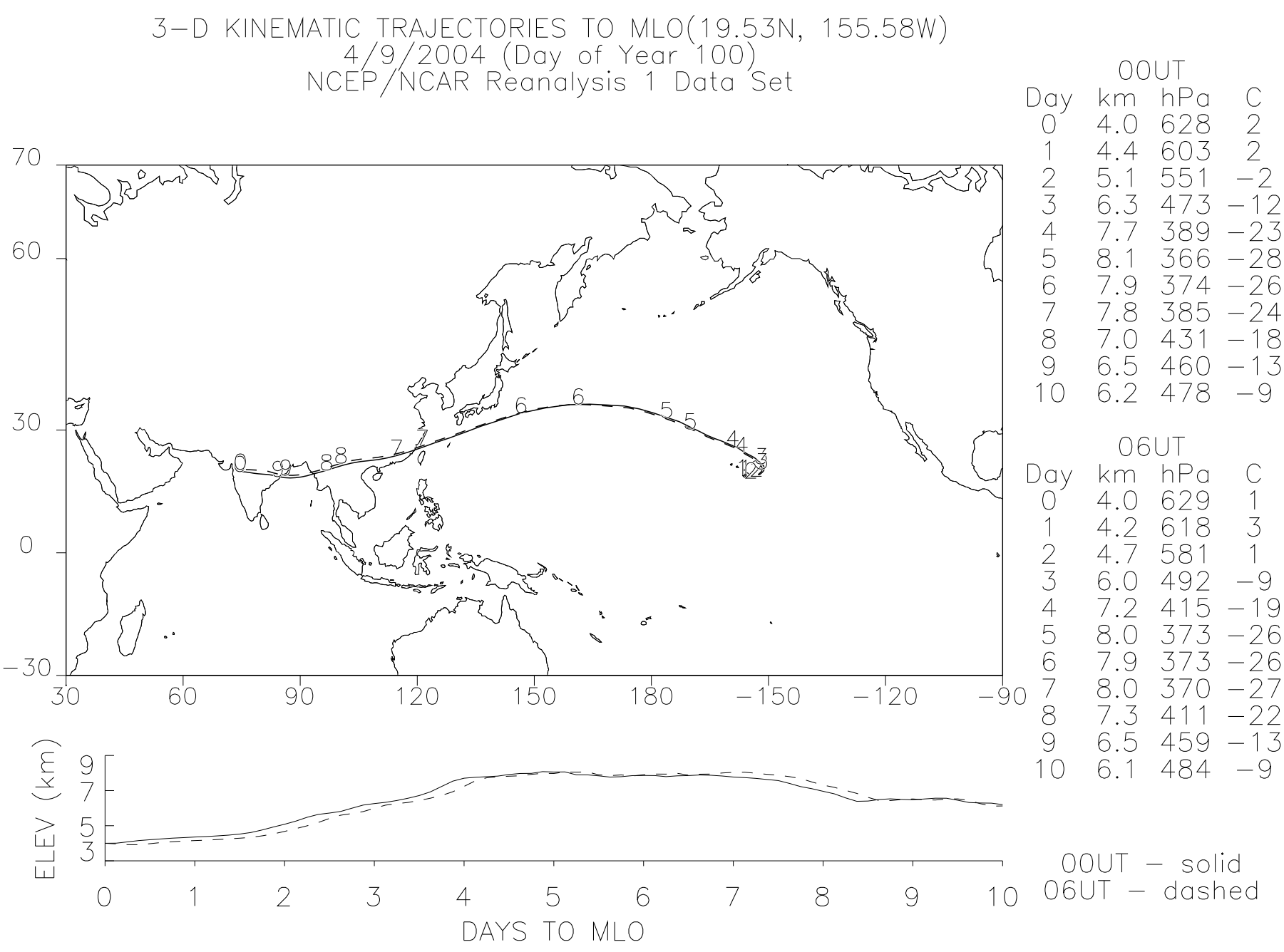
12UT

Day	km	hPa	C
0	4.0	629	3
1	4.3	606	3
2	5.5	521	−6
3	6.5	457	−14
4	7.7	387	−23
5	7.8	383	−24
6	7.9	378	−25
7	7.7	389	−24
8	6.3	469	−13
9	6.1	485	−10
10	5.5	520	−4

18UT

Day	km	hPa	C
0	4.0	630	3
1	4.4	603	3
2	5.4	530	−5
3	6.3	469	−12
4	7.7	390	−22
5	7.8	379	−25
6	7.7	383	−25
7	7.7	391	−23
8	6.5	459	−14
9	6.4	466	−12
10	5.9	498	−7

12UT − solid
18UT − dashed



00UT

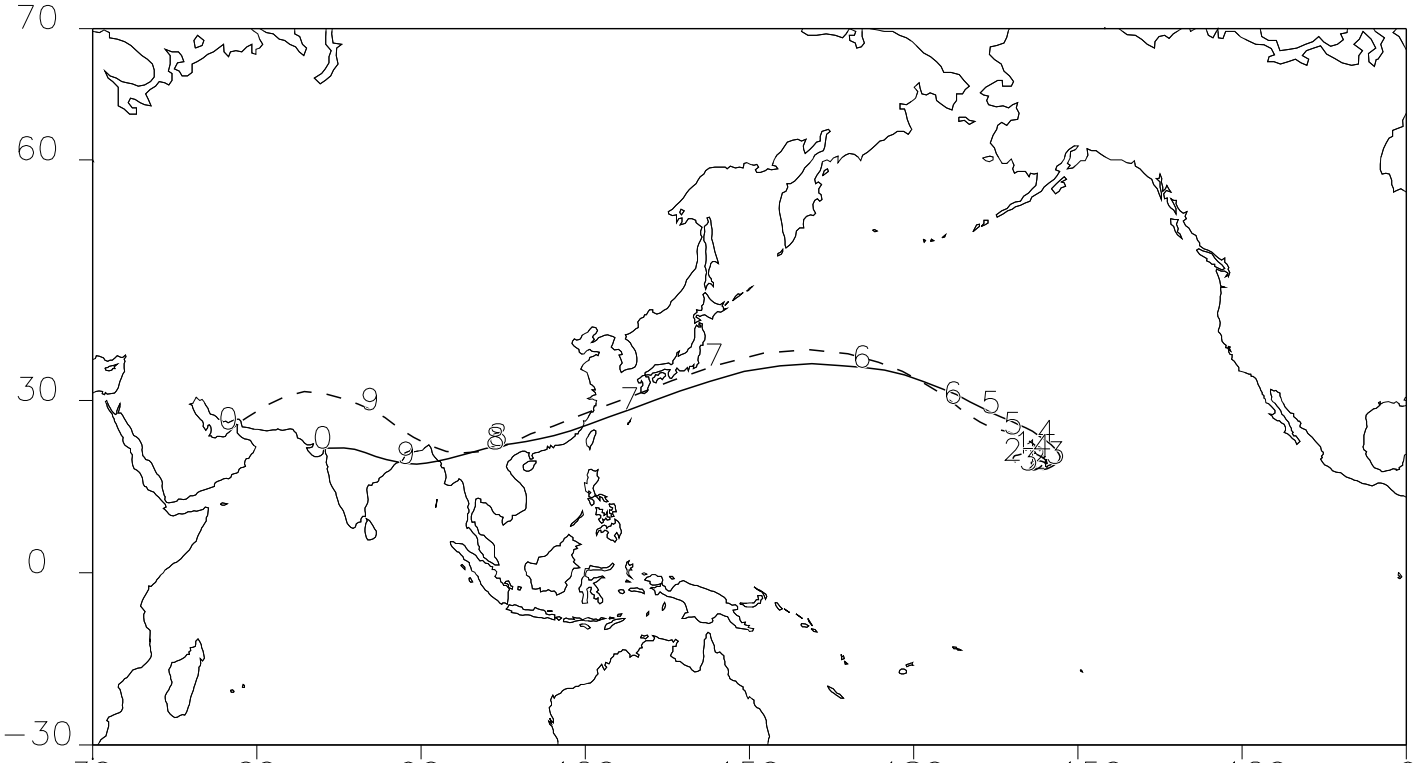
Day	km	hPa	C
0	4.0	628	2
1	4.4	603	2
2	5.1	551	−2
3	6.3	473	−12
4	7.7	389	−23
5	8.1	366	−28
6	7.9	374	−26
7	7.8	385	−24
8	7.0	431	−18
9	6.5	460	−13
10	6.2	478	−9

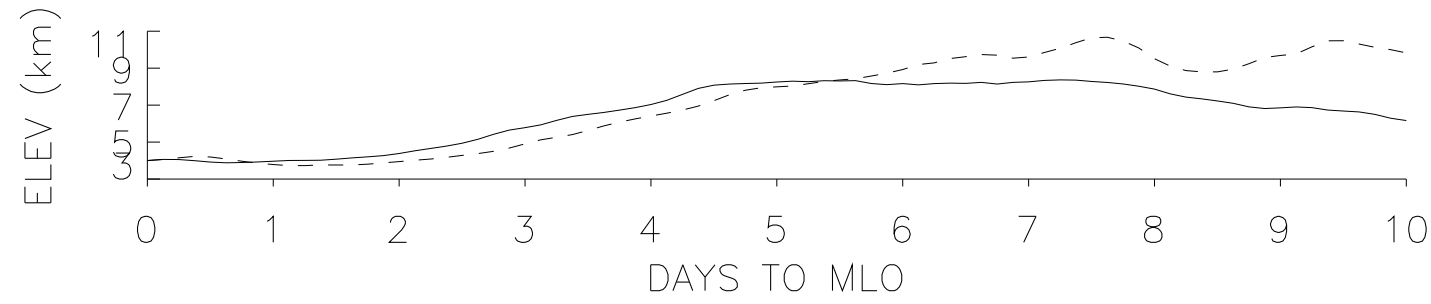
06UT

Day	km	hPa	C
0	4.0	629	1
1	4.2	618	3
2	4.7	581	1
3	6.0	492	−9
4	7.2	415	−19
5	8.0	373	−26
6	7.9	373	−26
7	8.0	370	−27
8	7.3	411	−22
9	6.5	459	−13
10	6.1	484	−9

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/9/2004 (Day of Year 100)
NCEP/NCAR Reanalysis 1 Data Set





12UT

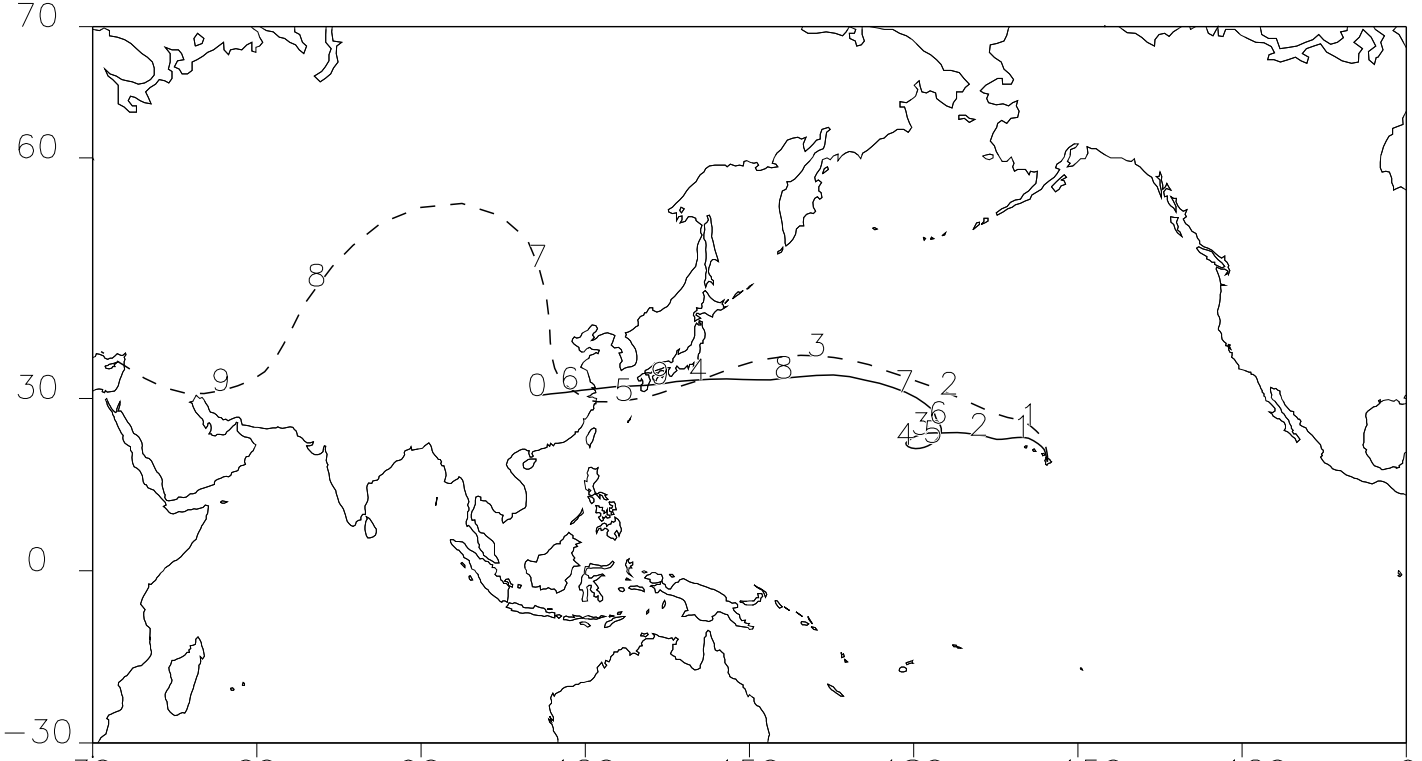
Day	km	hPa	C
0	4.0	628	0
1	4.0	632	3
2	4.4	601	2
3	5.8	504	−7
4	7.0	427	−17
5	8.3	360	−27
6	8.2	362	−27
7	8.3	357	−28
8	7.9	380	−25
9	6.9	438	−16
10	6.2	479	−10

18UT

Day	km	hPa	C
0	4.0	629	0
1	3.8	647	3
2	3.9	635	5
3	4.9	565	0
4	6.4	466	−12
5	8.0	376	−25
6	8.9	327	−33
7	9.6	286	−41
8	9.5	301	−37
9	9.7	293	−40
10	9.8	286	−41

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/10/2004 (Day of Year 101)
NCEP/NCAR Reanalysis 1 Data Set

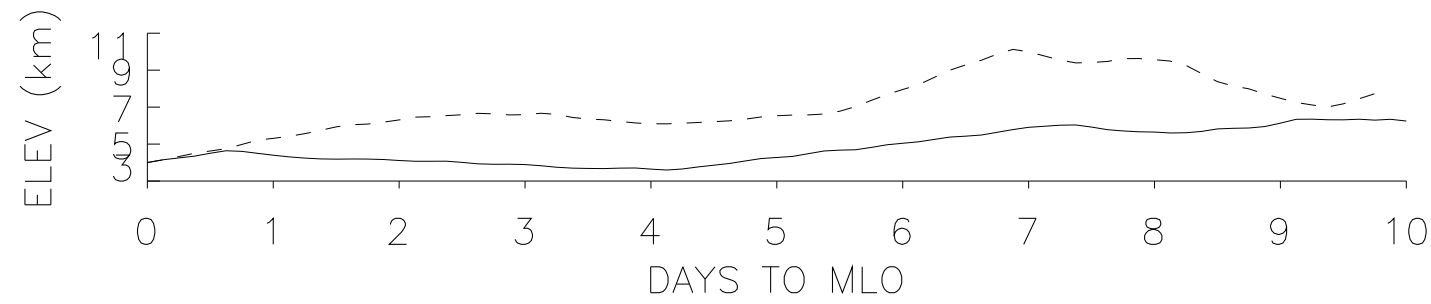


00UT

Day	km	hPa	C
0	4.0	629	0
1	4.4	597	-4
2	4.1	620	2
3	3.9	640	5
4	3.6	662	8
5	4.3	613	5
6	5.0	555	-5
7	5.9	494	-13
8	5.7	509	-12
9	6.1	474	-17
10	6.2	466	-18

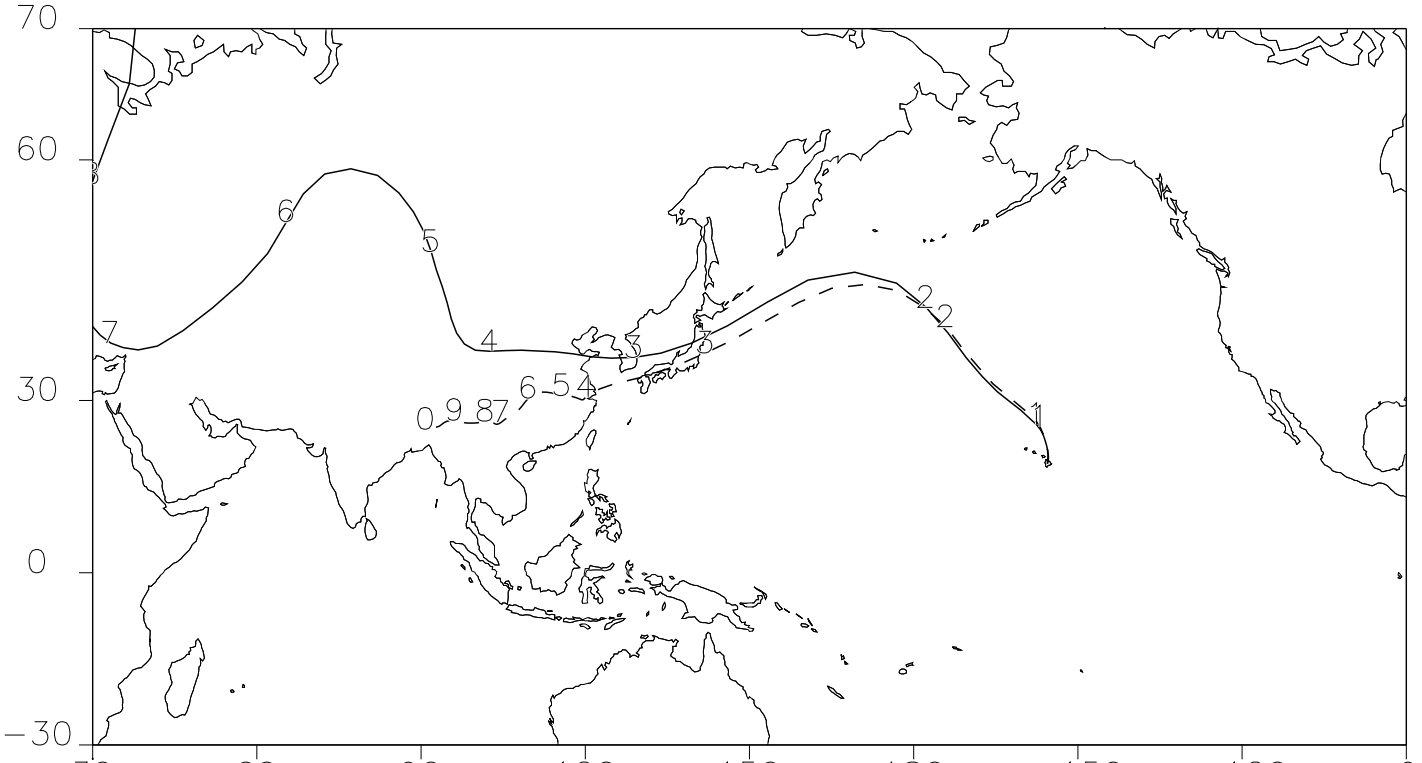
06UT

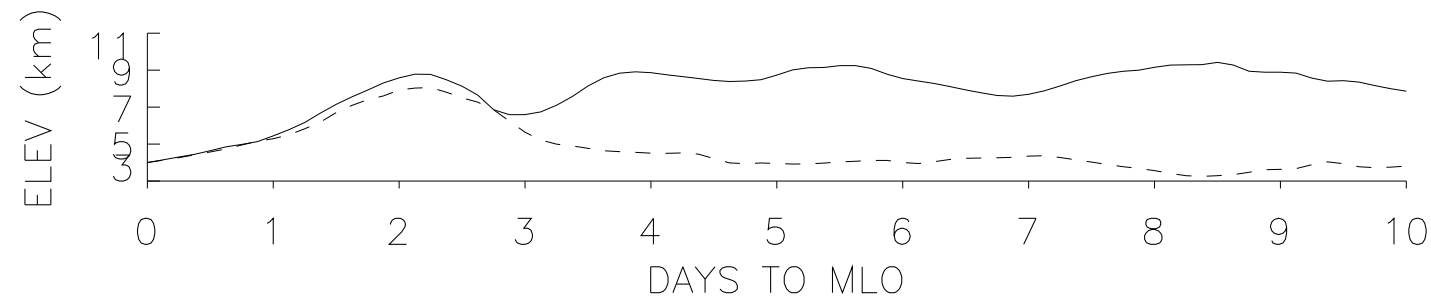
Day	km	hPa	C
0	4.0	631	1
1	5.3	531	-11
2	6.3	462	-20
3	6.6	443	-22
4	6.1	476	-17
5	6.5	451	-20
6	8.0	370	-34
7	10.0	265	-54
8	9.6	287	-49
9	7.5	393	-29



00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/10/2004 (Day of Year 101)
NCEP/NCAR Reanalysis 1 Data Set





12UT

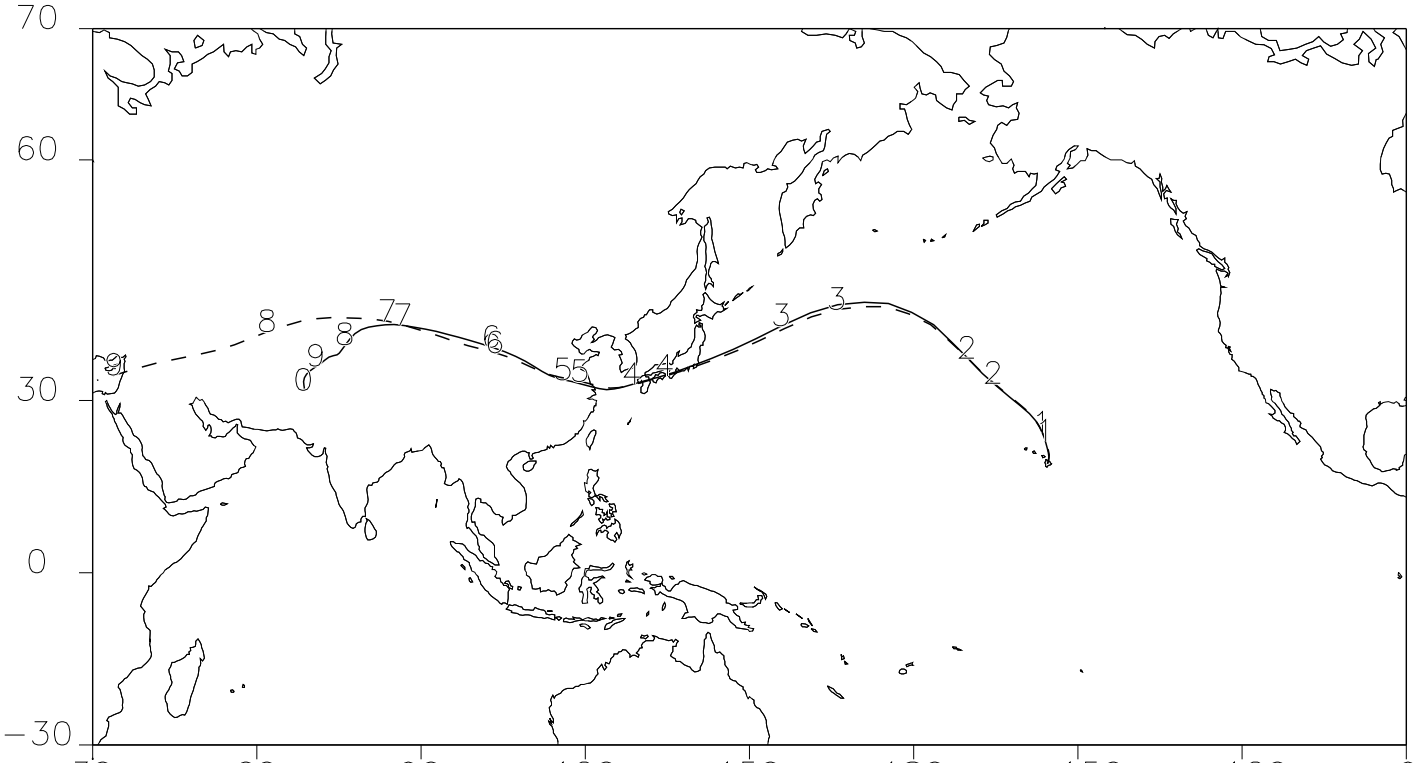
Day	km	hPa	C
0	4.0	630	1
1	5.4	521	-13
2	8.6	322	-46
3	6.6	432	-28
4	8.9	317	-48
5	8.7	320	-48
6	8.5	325	-47
7	7.7	369	-40
8	9.2	291	-56
9	8.9	299	-52
10	7.9	354	-42

18UT

Day	km	hPa	C
0	4.0	632	2
1	5.3	533	-11
2	7.9	359	-37
3	5.6	493	-19
4	4.5	587	-7
5	4.0	628	-2
6	4.0	625	-2
7	4.3	604	-3
8	3.6	664	2
9	3.6	660	0
10	3.8	645	2

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/11/2004 (Day of Year 102)
NCEP/NCAR Reanalysis 1 Data Set

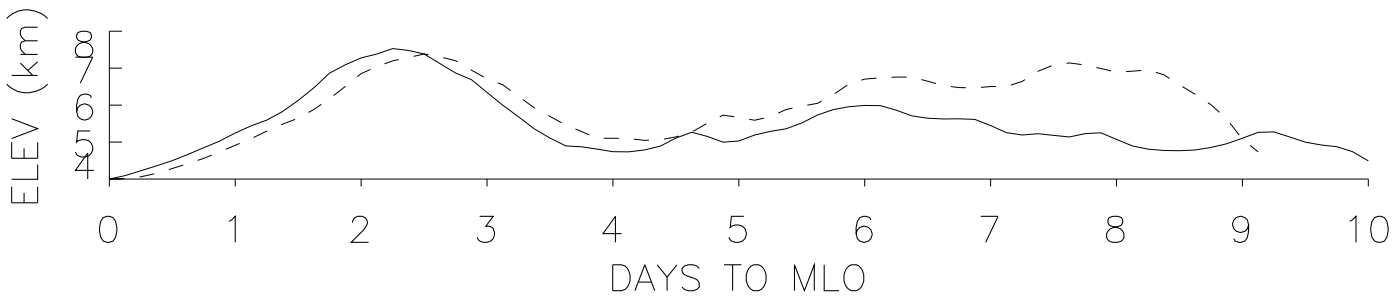


00UT

Day	km	hPa	C
0	4.0	631	2
1	5.2	537	−11
2	7.3	400	−30
3	6.3	448	−24
4	4.7	568	−9
5	5.0	546	−12
6	6.0	480	−21
7	5.4	519	−13
8	5.1	544	−10
9	5.1	544	−11
10	4.5	590	−5

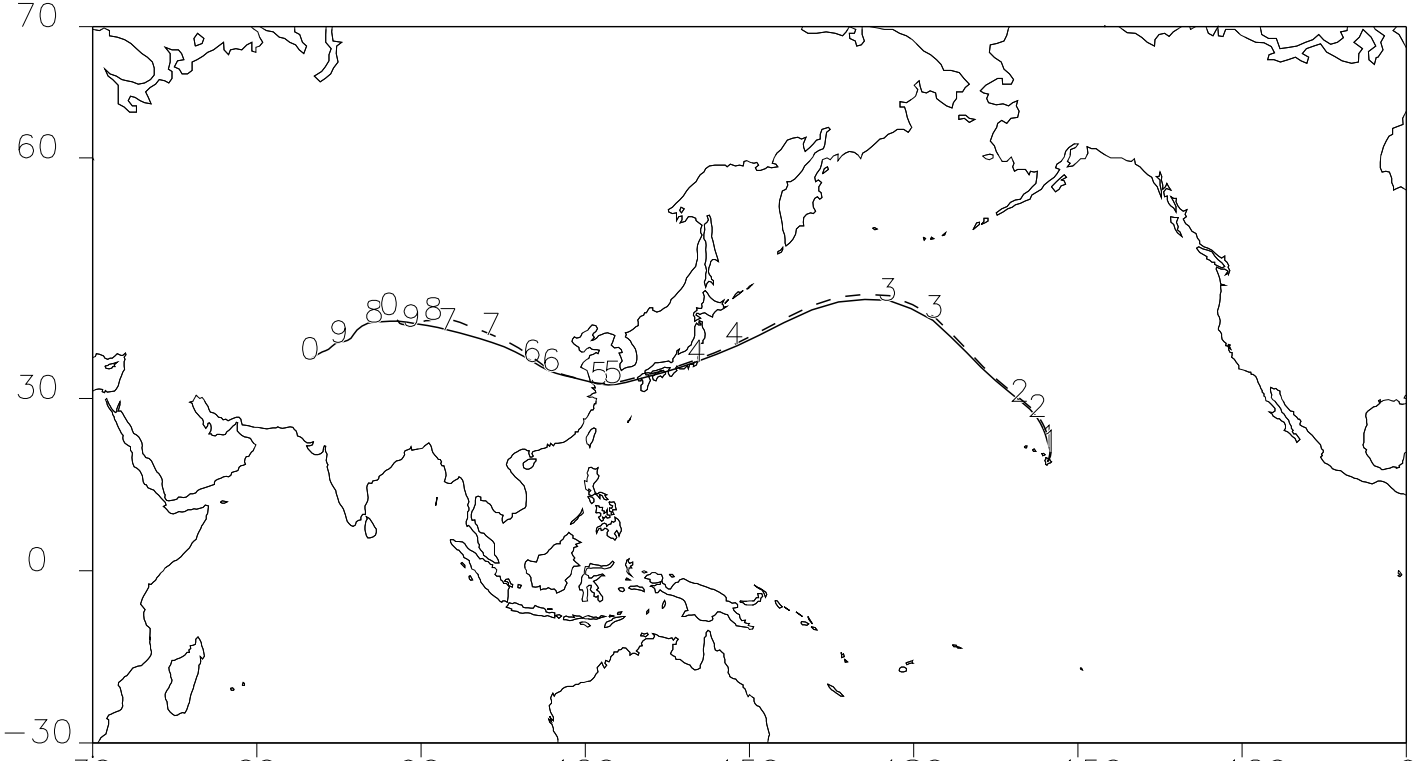
06UT

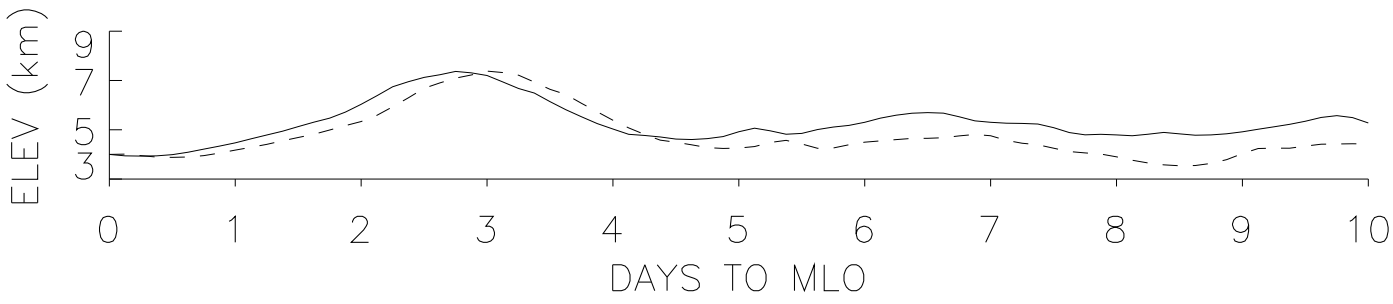
Day	km	hPa	C
0	4.0	632	2
1	4.9	562	−6
2	6.9	428	−27
3	6.7	426	−26
4	5.1	539	−11
5	5.7	502	−17
6	6.7	437	−26
7	6.5	452	−22
8	6.9	423	−26
9	5.1	541	−11



00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/11/2004 (Day of Year 102)
NCEP/NCAR Reanalysis 1 Data Set





12UT

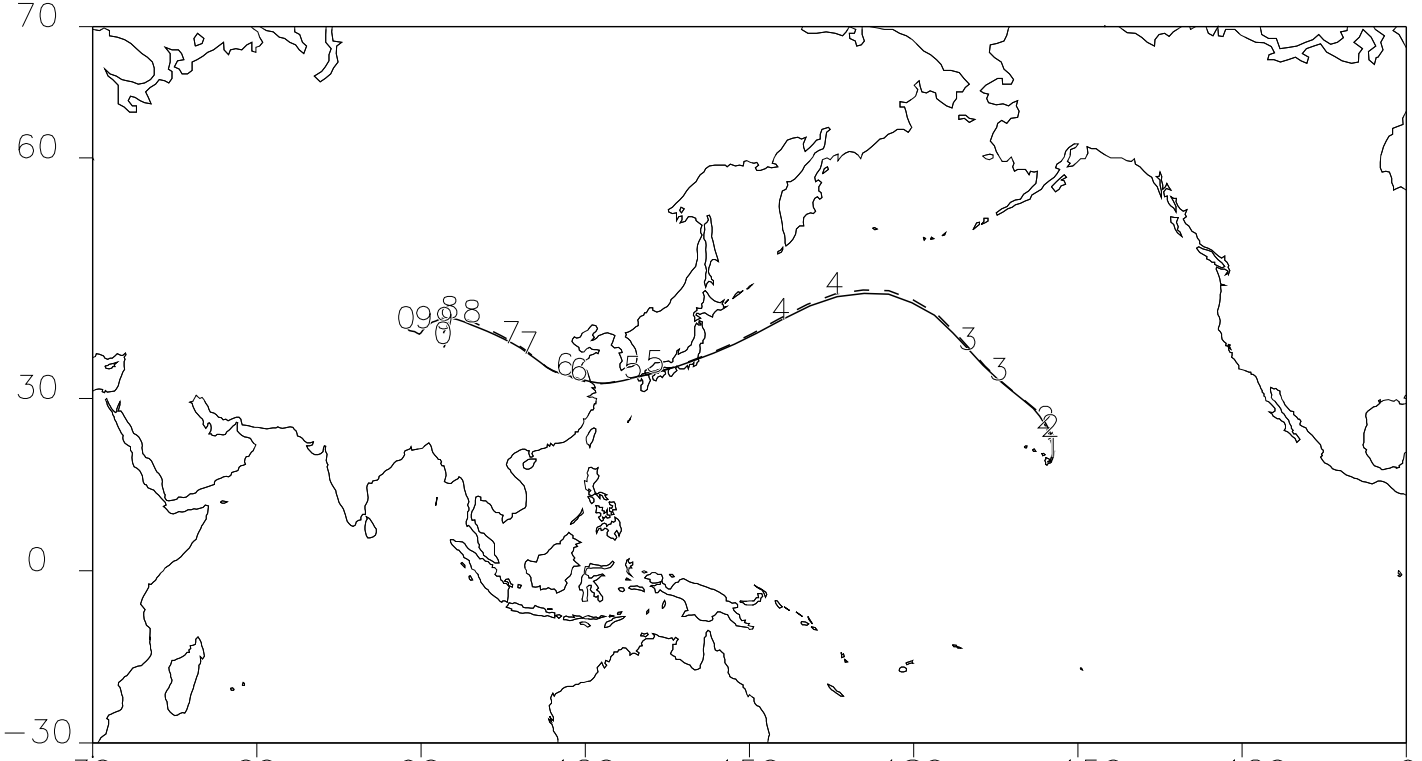
Day	km	hPa	C
0	4.0	631	2
1	4.5	594	−3
2	6.0	480	−19
3	7.2	397	−31
4	5.0	542	−11
5	4.9	555	−10
6	5.3	526	−15
7	5.3	529	−13
8	4.8	565	−8
9	4.9	557	−7
10	5.3	533	−11

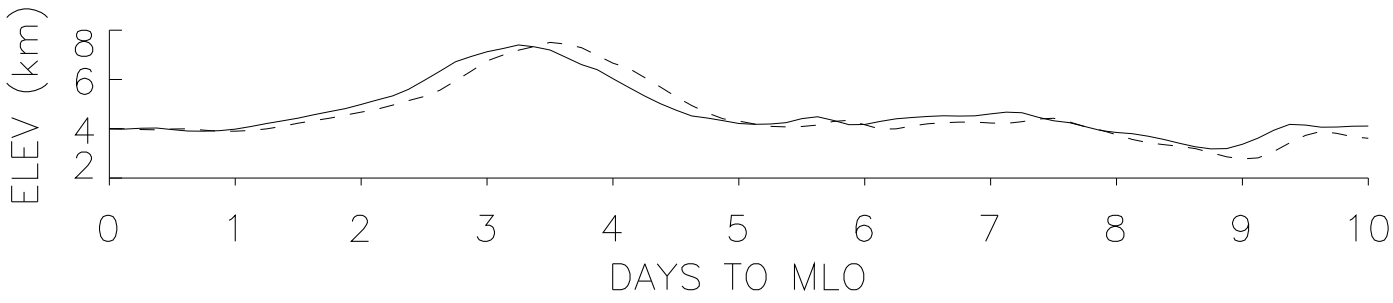
18UT

Day	km	hPa	C
0	4.0	631	2
1	4.2	618	0
2	5.3	530	−12
3	7.4	389	−32
4	5.4	512	−16
5	4.3	604	−6
6	4.5	585	−8
7	4.8	565	−11
8	3.9	631	−3
9	4.0	622	−4
10	4.4	592	−8

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/12/2004 (Day of Year 103)
NCEP/NCAR Reanalysis 1 Data Set





00UT

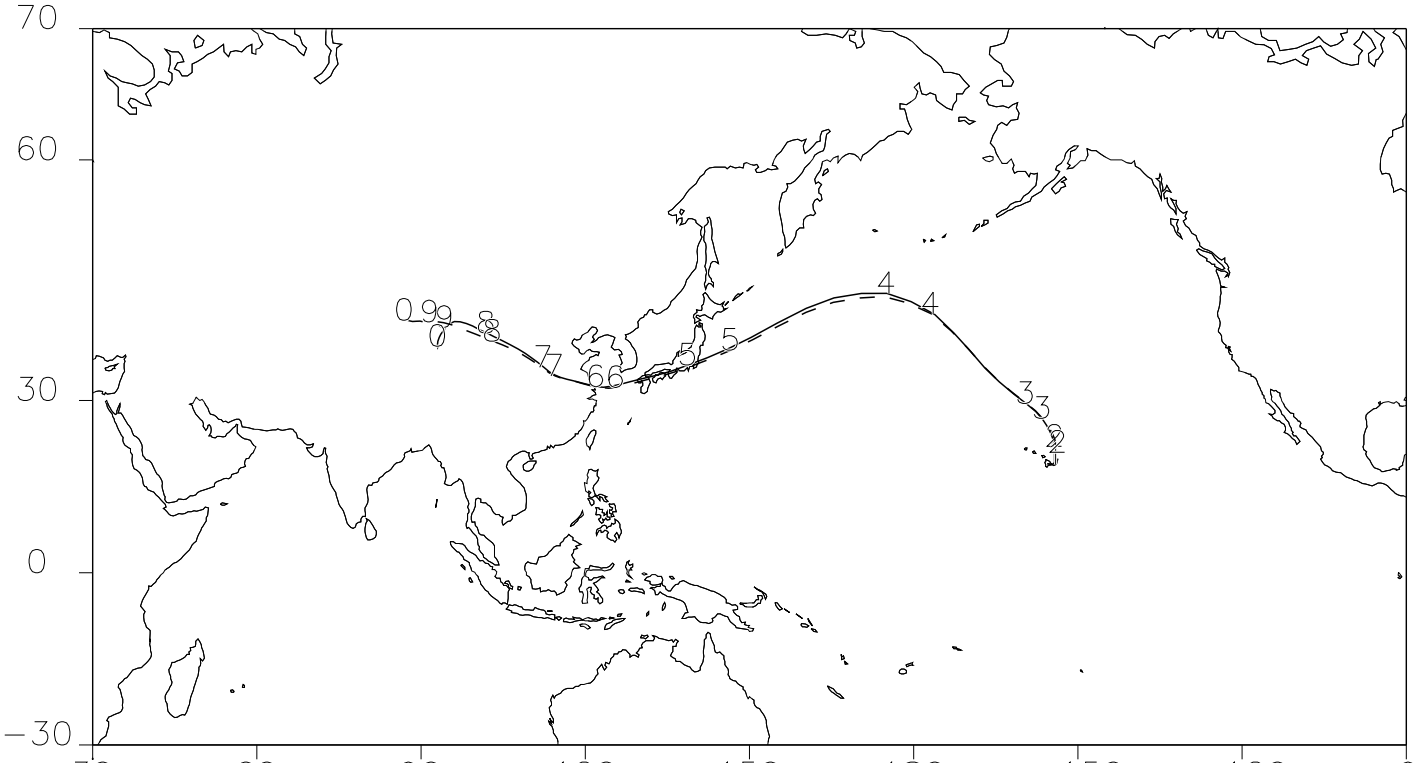
Day	km	hPa	C
0	4.0	630	1
1	4.0	632	1
2	5.0	555	−9
3	7.1	407	−30
4	6.0	466	−23
5	4.2	606	−7
6	4.2	609	−5
7	4.6	575	−10
8	3.8	635	−2
9	3.4	676	0
10	4.1	616	−5

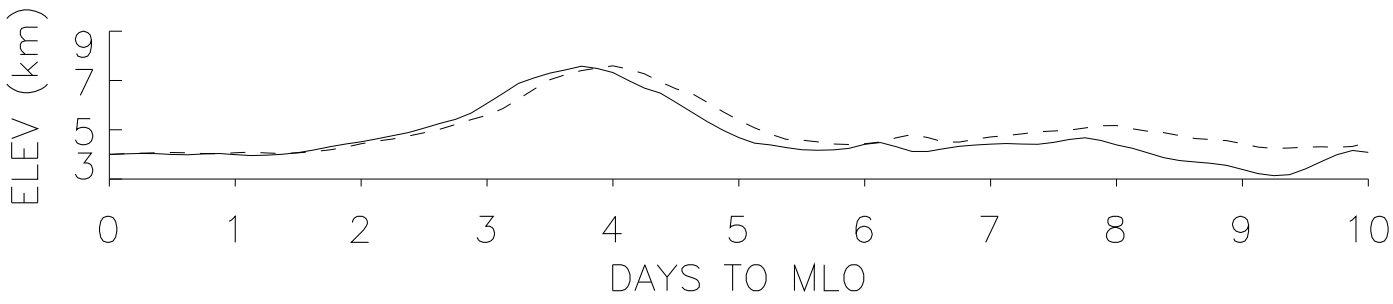
06UT

Day	km	hPa	C
0	4.0	631	2
1	3.9	640	2
2	4.7	579	−5
3	6.8	432	−27
4	6.7	425	−28
5	4.3	597	−7
6	4.2	610	−5
7	4.2	604	−6
8	3.8	643	−1
9	2.8	729	7
10	3.6	659	−1

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/12/2004 (Day of Year 103)
NCEP/NCAR Reanalysis 1 Data Set





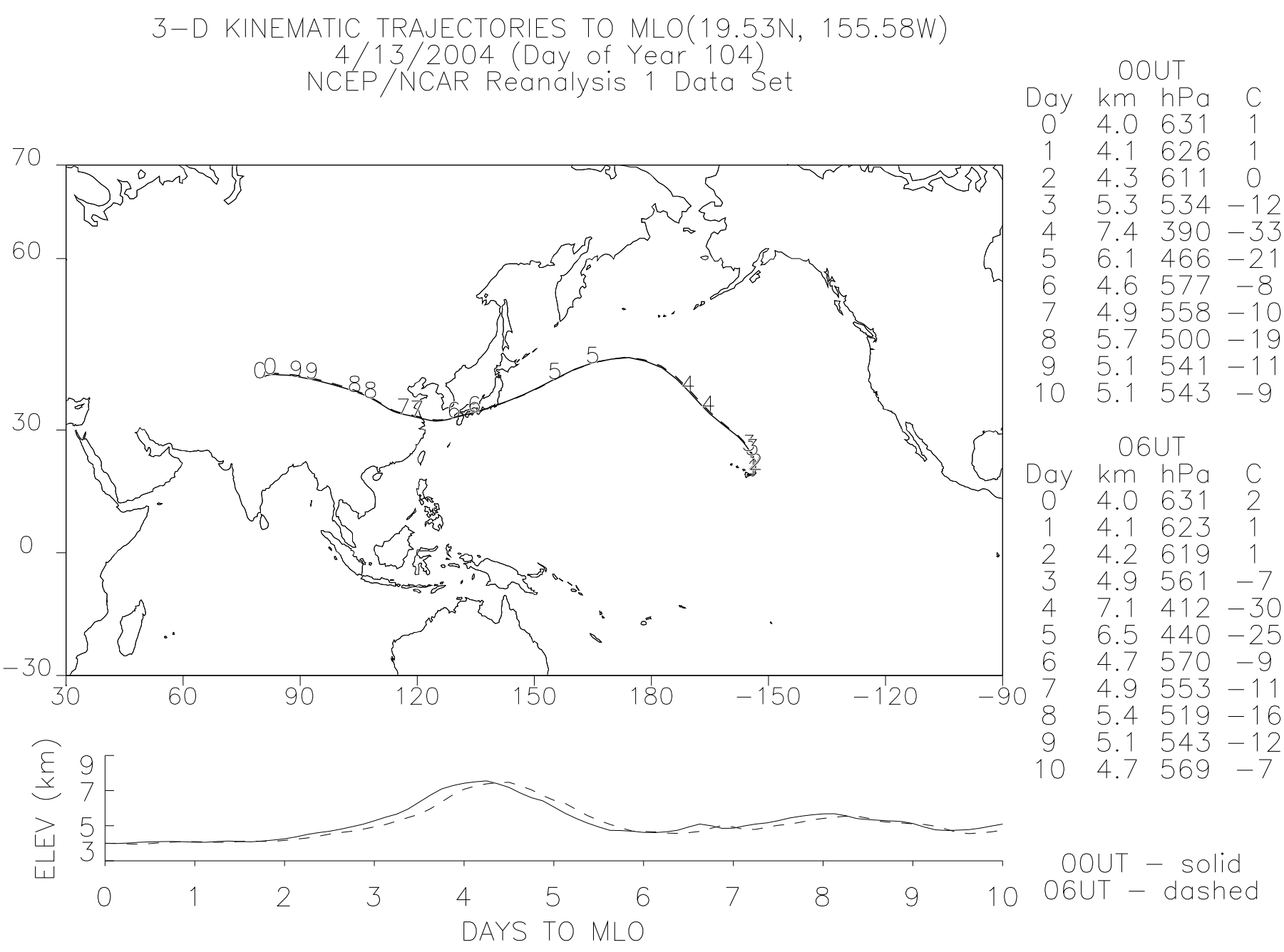
12UT

Day	km	hPa	C
0	4.0	630	1
1	4.0	631	2
2	4.5	591	−4
3	6.1	477	−20
4	7.3	389	−32
5	4.7	567	−9
6	4.4	593	−7
7	4.4	590	−7
8	4.4	594	−6
9	3.4	674	3
10	4.1	619	−3

18UT

Day	km	hPa	C
0	4.0	631	1
1	4.1	626	2
2	4.4	598	−2
3	5.6	512	−14
4	7.6	376	−34
5	5.4	513	−16
6	4.4	591	−6
7	4.7	569	−10
8	5.2	536	−14
9	4.4	590	−7
10	4.5	587	−7

12UT – solid
18UT – dashed



00UT

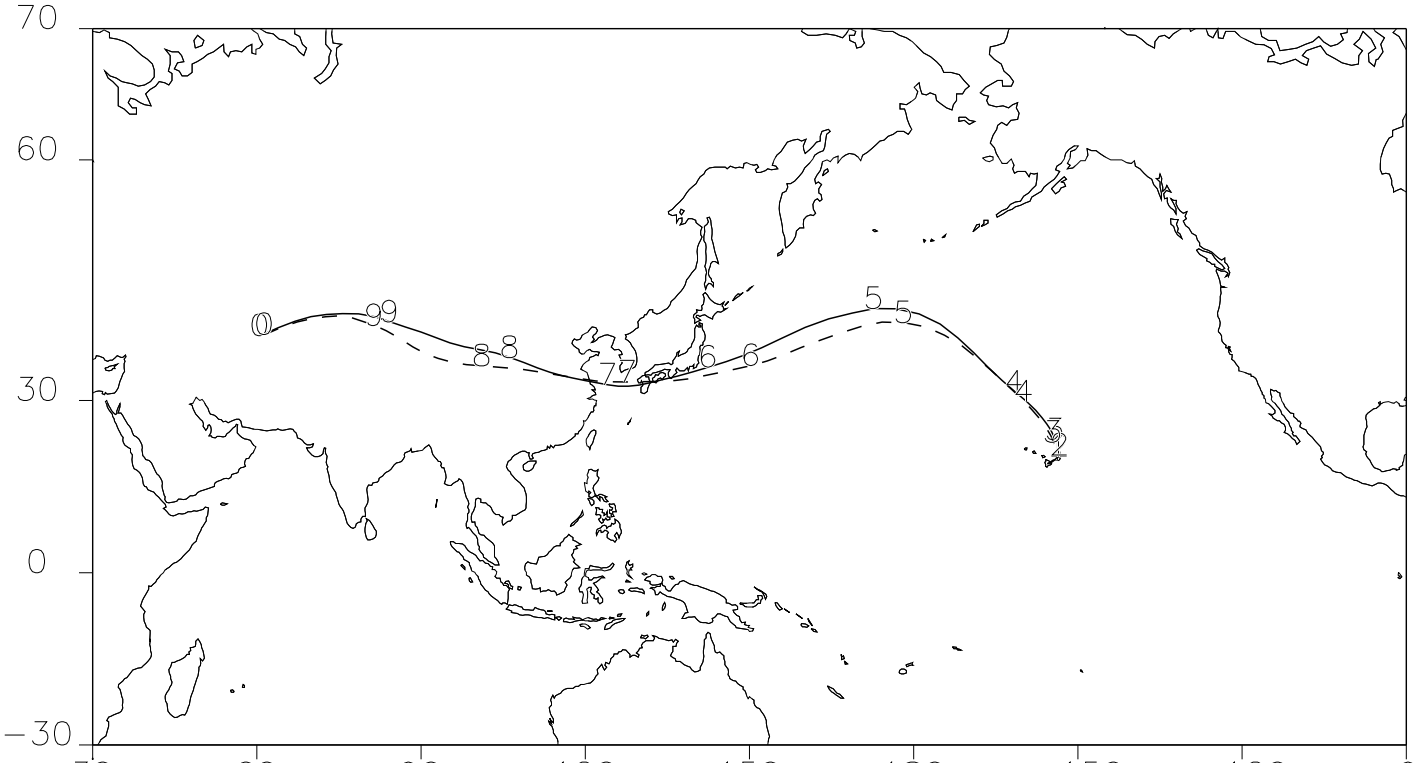
Day	km	hPa	C
0	4.0	631	1
1	4.1	626	1
2	4.3	611	0
3	5.3	534	−12
4	7.4	390	−33
5	6.1	466	−21
6	4.6	577	−8
7	4.9	558	−10
8	5.7	500	−19
9	5.1	541	−11
10	5.1	543	−9

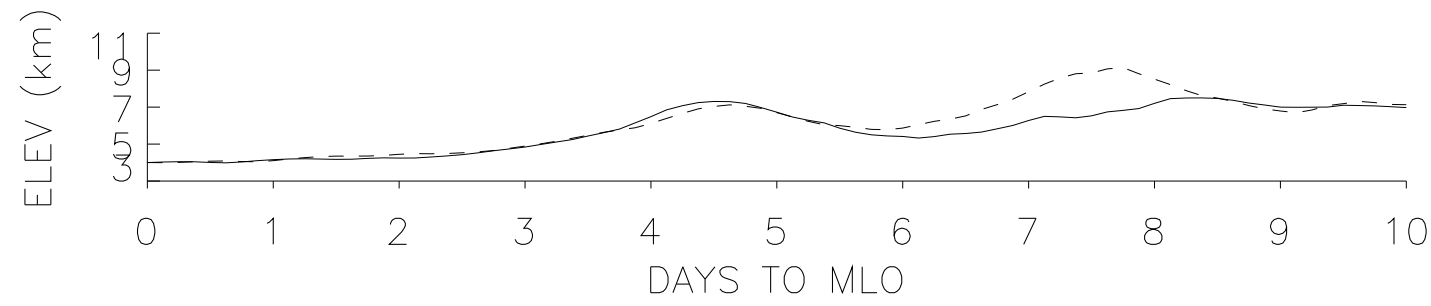
06UT

Day	km	hPa	C
0	4.0	631	2
1	4.1	623	1
2	4.2	619	1
3	4.9	561	−7
4	7.1	412	−30
5	6.5	440	−25
6	4.7	570	−9
7	4.9	553	−11
8	5.4	519	−16
9	5.1	543	−12
10	4.7	569	−7

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/13/2004 (Day of Year 104)
NCEP/NCAR Reanalysis 1 Data Set





12UT

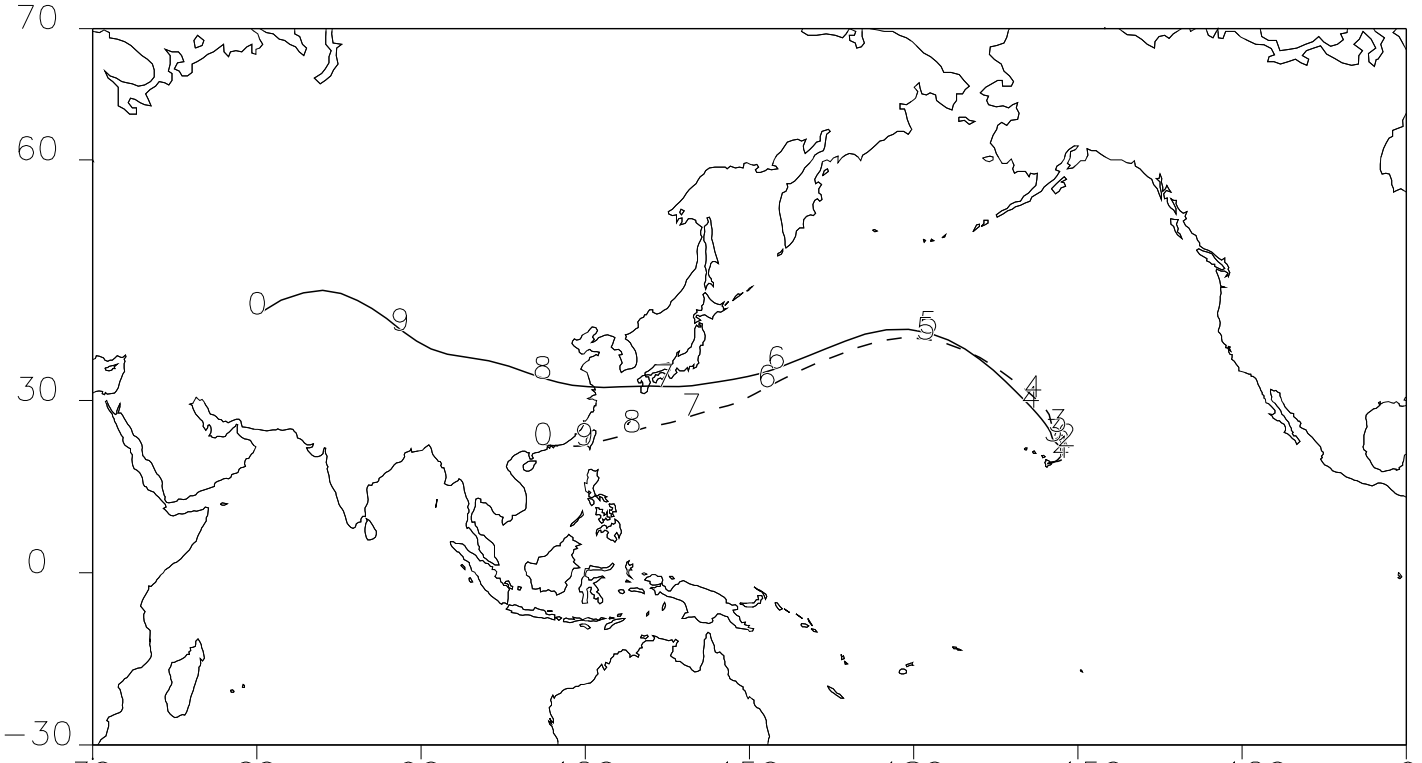
Day	km	hPa	C
0	4.0	630	1
1	4.2	618	0
2	4.2	612	0
3	4.8	566	−6
4	6.5	450	−24
5	6.7	426	−27
6	5.4	517	−12
7	6.3	464	−20
8	7.2	406	−31
9	7.0	422	−27
10	7.0	419	−26

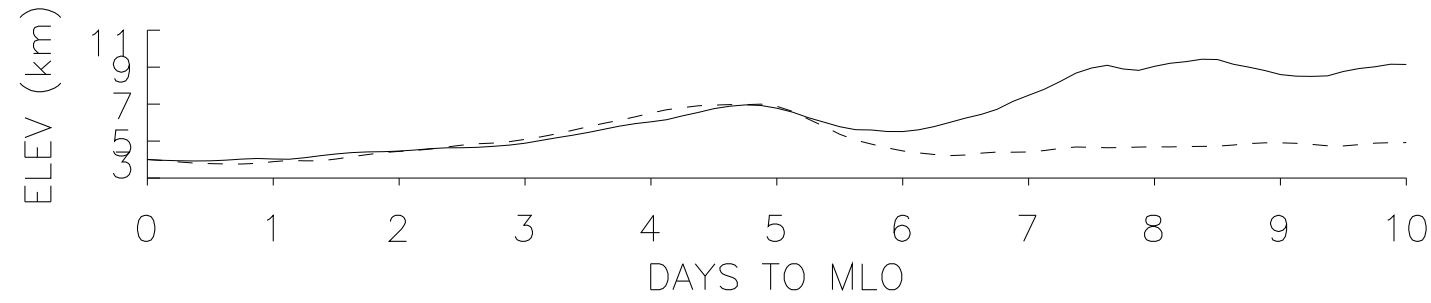
18UT

Day	km	hPa	C
0	4.0	631	2
1	4.1	623	0
2	4.4	597	−1
3	4.9	564	−5
4	6.1	477	−18
5	6.7	430	−26
6	5.9	487	−16
7	7.8	374	−33
8	8.5	339	−41
9	6.8	436	−23
10	7.1	411	−26

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/14/2004 (Day of Year 105)
NCEP/NCAR Reanalysis 1 Data Set





00UT

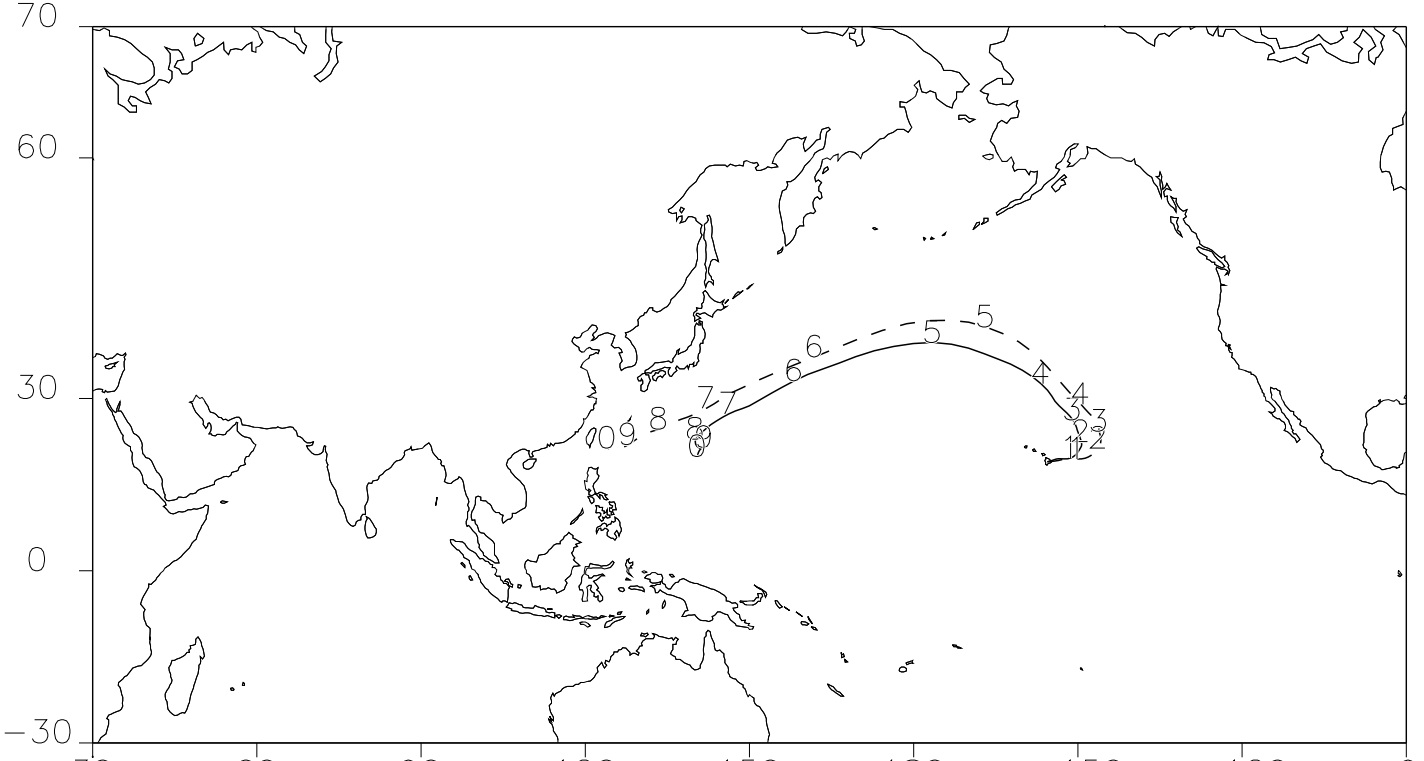
Day	km	hPa	C
0	4.0	631	1
1	4.0	628	1
2	4.5	595	-3
3	4.9	564	-5
4	6.0	482	-19
5	6.8	427	-27
6	5.5	513	-12
7	7.5	394	-28
8	9.0	312	-46
9	8.6	335	-41
10	9.1	304	-46

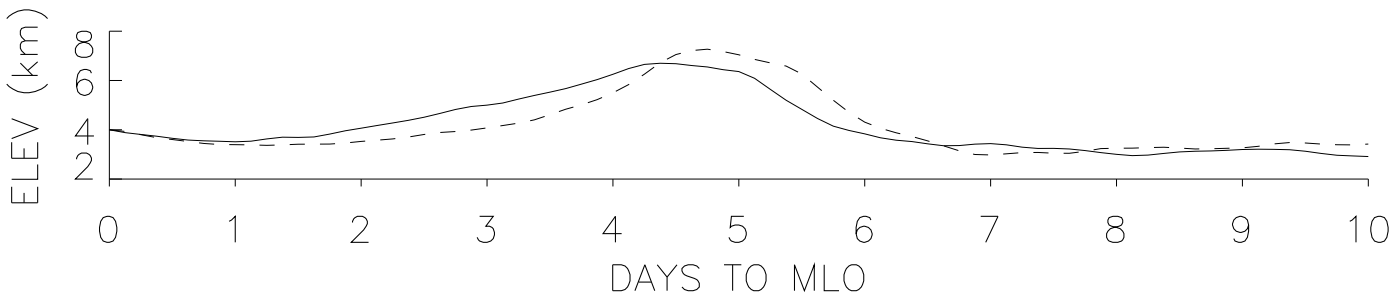
06UT

Day	km	hPa	C
0	4.0	632	1
1	3.9	640	2
2	4.4	597	-2
3	5.1	550	-7
4	6.5	453	-20
5	6.9	423	-24
6	4.5	588	-4
7	4.4	596	-1
8	4.7	576	-4
9	4.9	561	-5
10	4.9	562	-5

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/14/2004 (Day of Year 105)
NCEP/NCAR Reanalysis 1 Data Set





12UT

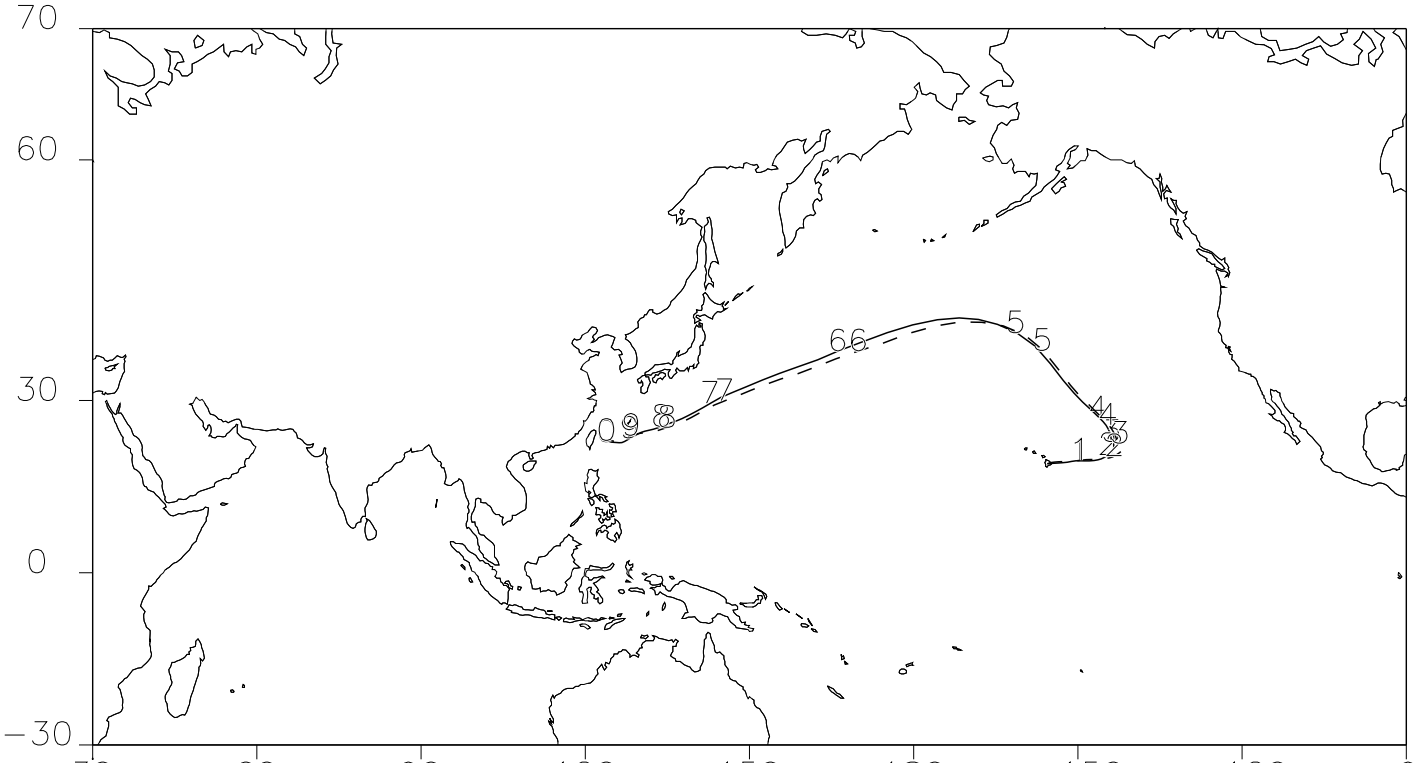
Day	km	hPa	C
0	4.0	631	1
1	3.5	669	4
2	4.1	624	−1
3	5.0	555	−8
4	6.3	469	−20
5	6.4	456	−20
6	3.8	639	−1
7	3.4	676	4
8	3.0	713	9
9	3.2	696	8
10	2.9	720	9

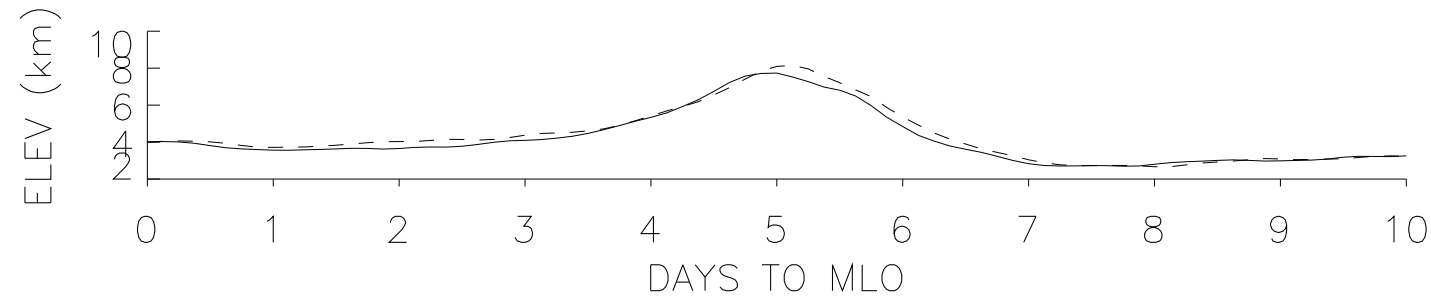
18UT

Day	km	hPa	C
0	4.0	632	1
1	3.4	680	6
2	3.5	669	4
3	4.1	624	−1
4	5.5	519	−13
5	7.0	412	−27
6	4.3	594	−7
7	3.0	710	6
8	3.3	689	6
9	3.3	688	5
10	3.4	676	4

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/15/2004 (Day of Year 106)
NCEP/NCAR Reanalysis 1 Data Set





00UT

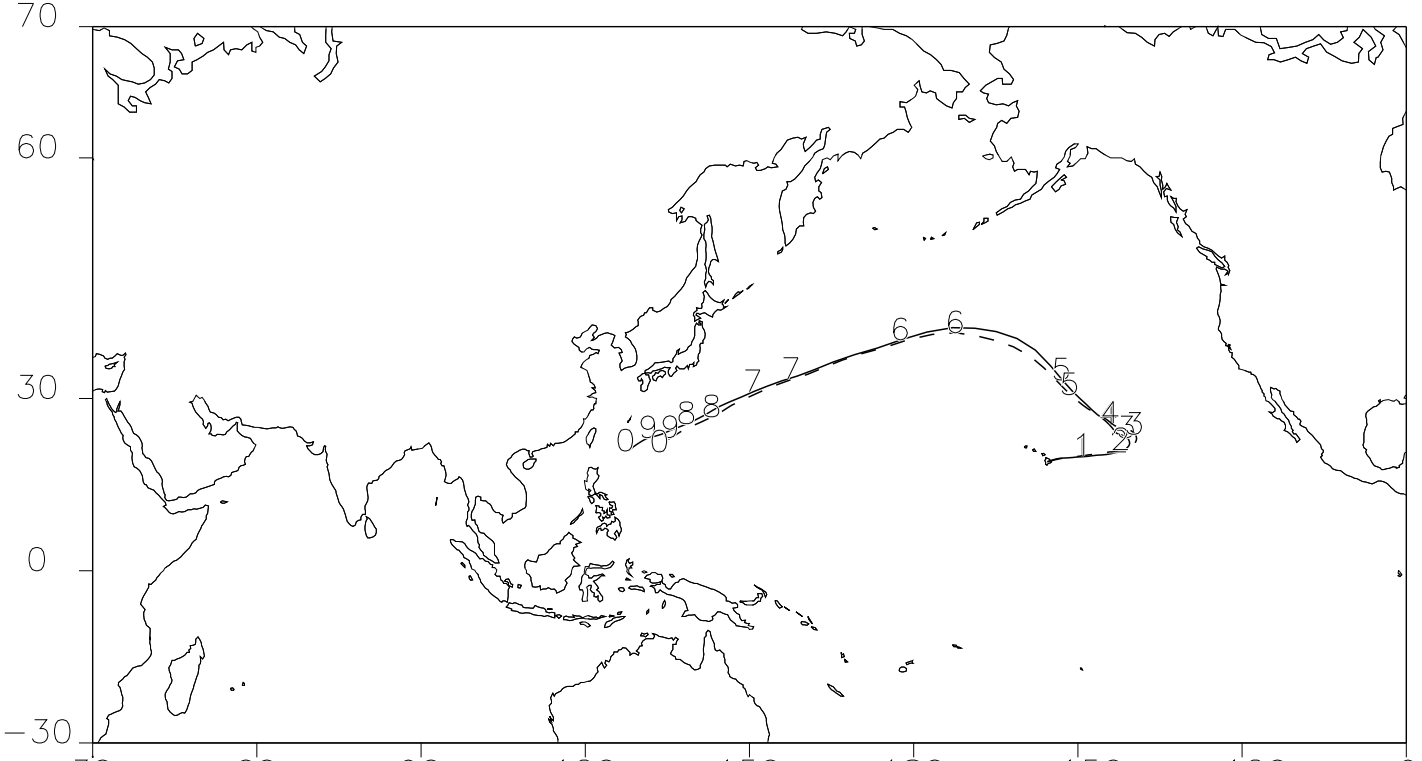
Day	km	hPa	C
0	4.0	631	1
1	3.6	666	4
2	3.7	657	3
3	4.1	621	−1
4	5.3	530	−11
5	7.7	373	−33
6	4.8	554	−11
7	2.8	723	6
8	2.8	728	8
9	3.0	711	7
10	3.3	690	5

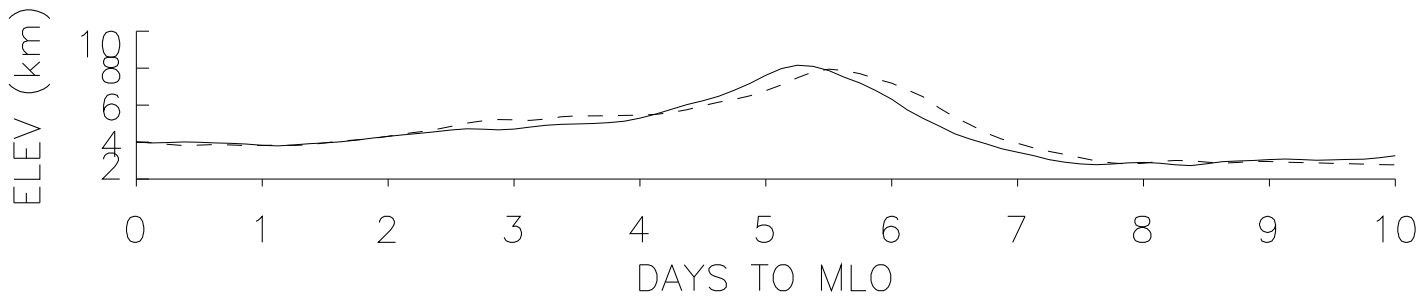
06UT

Day	km	hPa	C
0	4.0	631	1
1	3.7	655	4
2	4.0	628	0
3	4.4	601	−1
4	5.4	526	−10
5	8.1	357	−35
6	5.4	518	−14
7	3.0	702	5
8	2.7	739	8
9	3.1	701	7
10	3.2	691	6

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/15/2004 (Day of Year 106)
NCEP/NCAR Reanalysis 1 Data Set





12UT

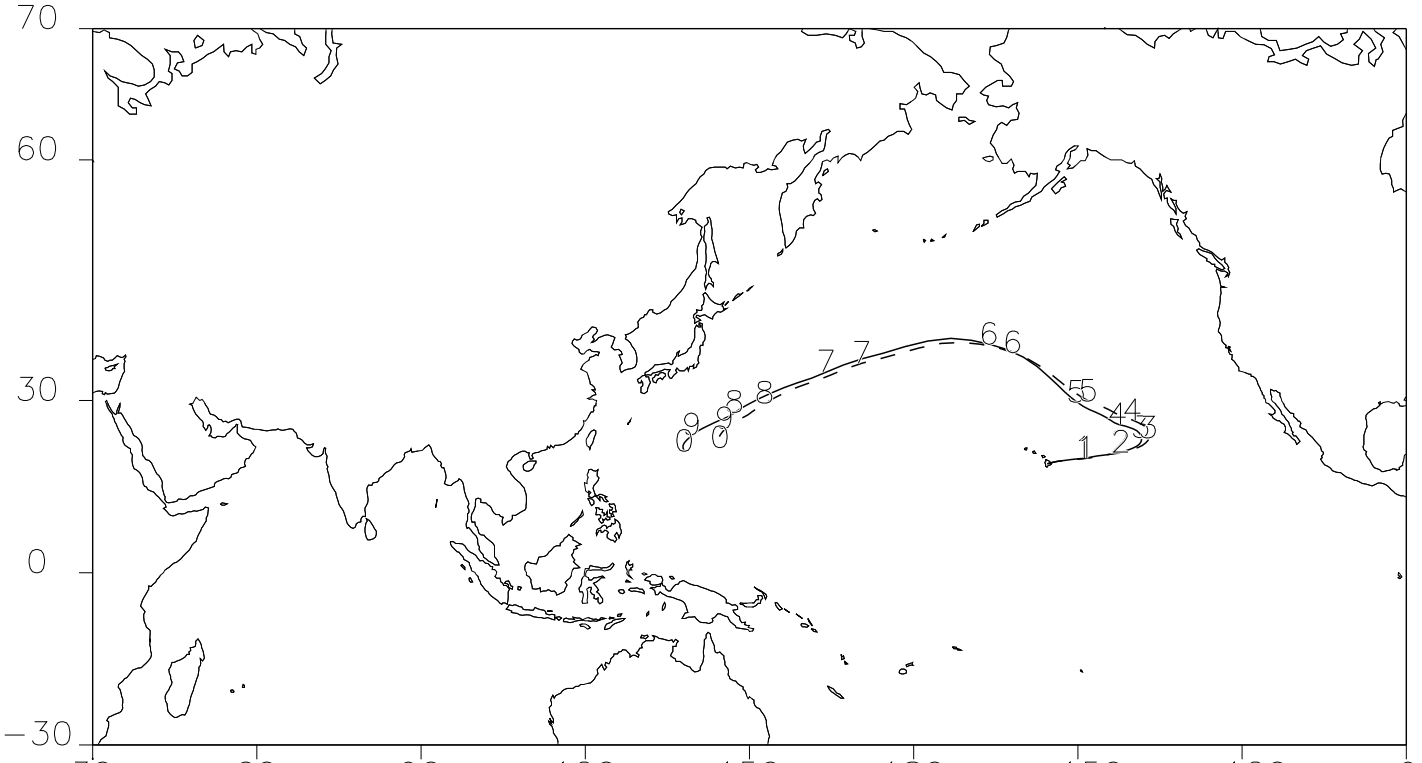
Day	km	hPa	C
0	4.0	630	0
1	3.8	645	2
2	4.3	606	−2
3	4.7	575	−5
4	5.3	533	−9
5	7.6	387	−29
6	6.3	455	−20
7	3.5	670	1
8	2.9	720	8
9	3.1	706	7
10	3.3	690	6

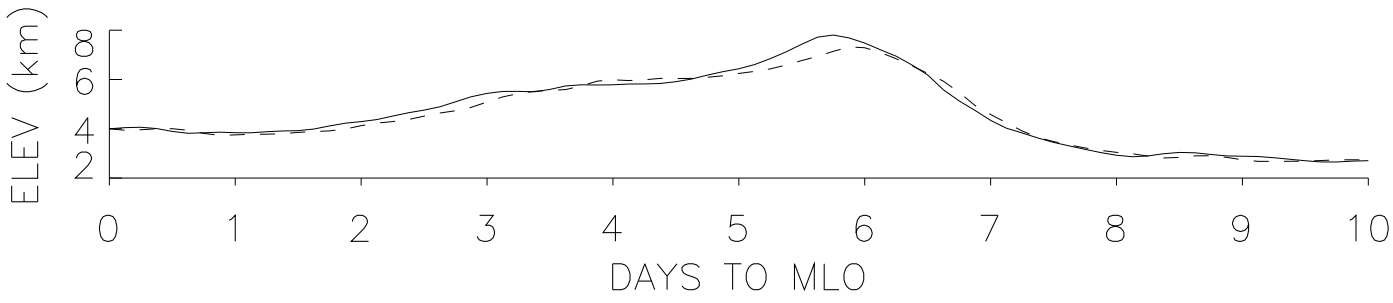
18UT

Day	km	hPa	C
0	4.0	631	1
1	3.8	646	3
2	4.3	607	−1
3	5.2	540	−8
4	5.5	523	−10
5	6.8	437	−21
6	7.2	405	−26
7	3.9	628	−3
8	2.9	723	7
9	2.9	716	8
10	2.8	730	9

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/16/2004 (Day of Year 107)
NCEP/NCAR Reanalysis 1 Data Set





00UT

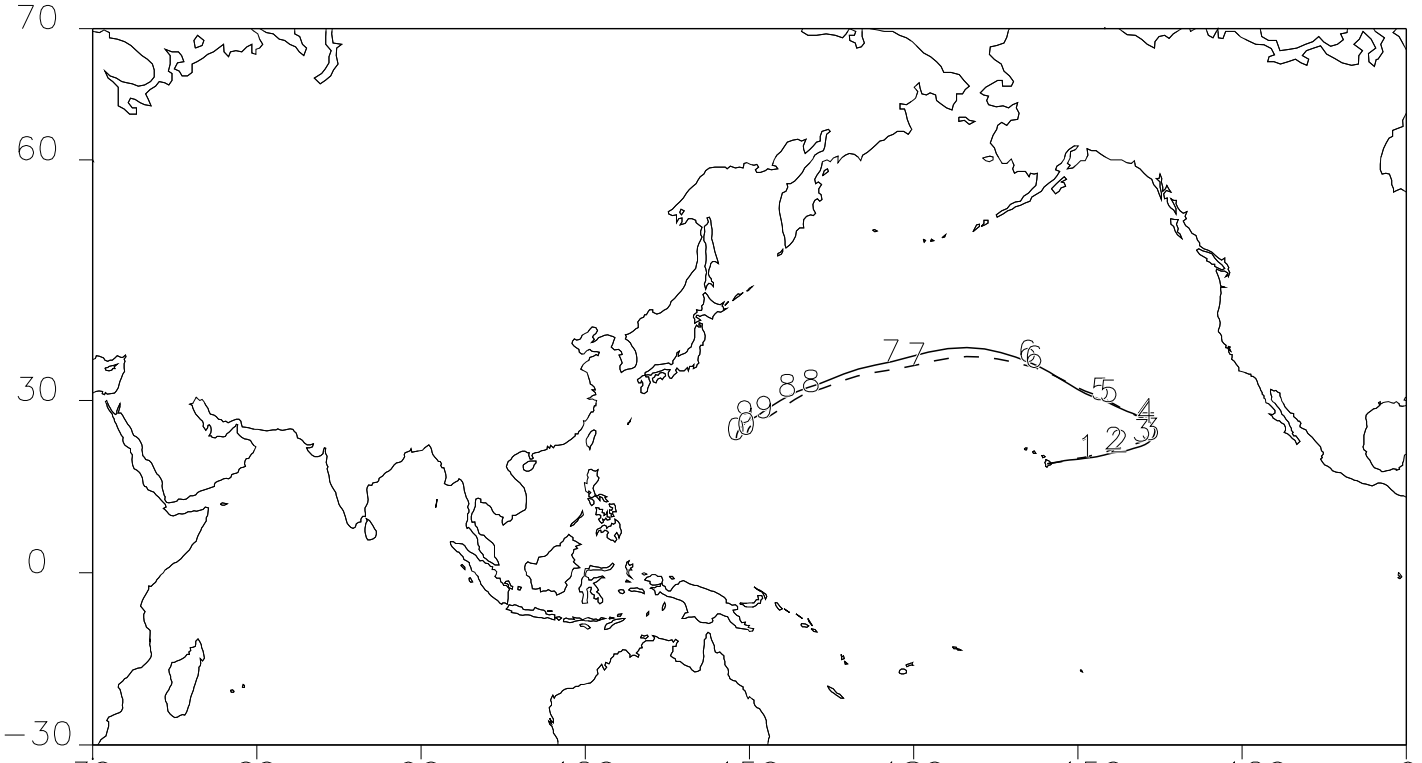
Day	km	hPa	C
0	4.0	630	1
1	3.8	643	2
2	4.3	608	−1
3	5.4	524	−10
4	5.8	500	−13
5	6.4	458	−19
6	7.5	391	−29
7	4.3	597	−6
8	2.9	717	6
9	2.9	723	8
10	2.7	739	10

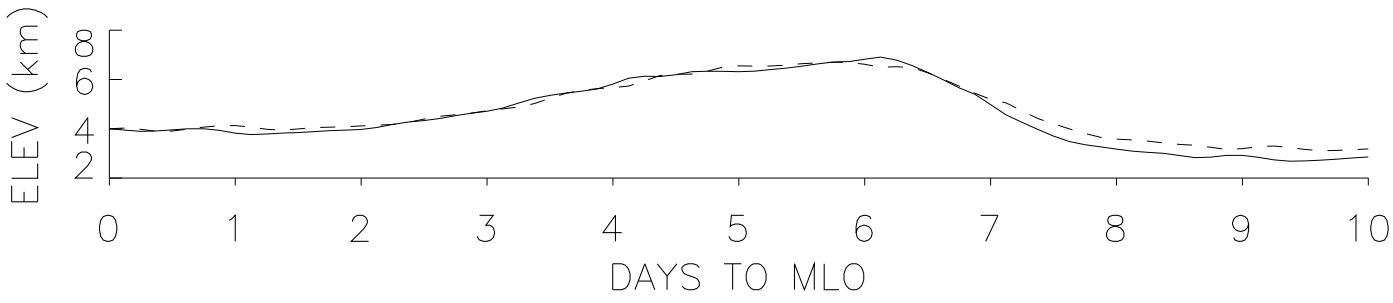
06UT

Day	km	hPa	C
0	4.0	631	0
1	3.8	651	3
2	4.1	623	1
3	5.1	549	−7
4	6.0	488	−14
5	6.2	470	−18
6	7.3	404	−27
7	4.6	578	−7
8	3.0	705	5
9	2.7	735	9
10	2.7	735	10

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/16/2004 (Day of Year 107)
NCEP/NCAR Reanalysis 1 Data Set





12UT

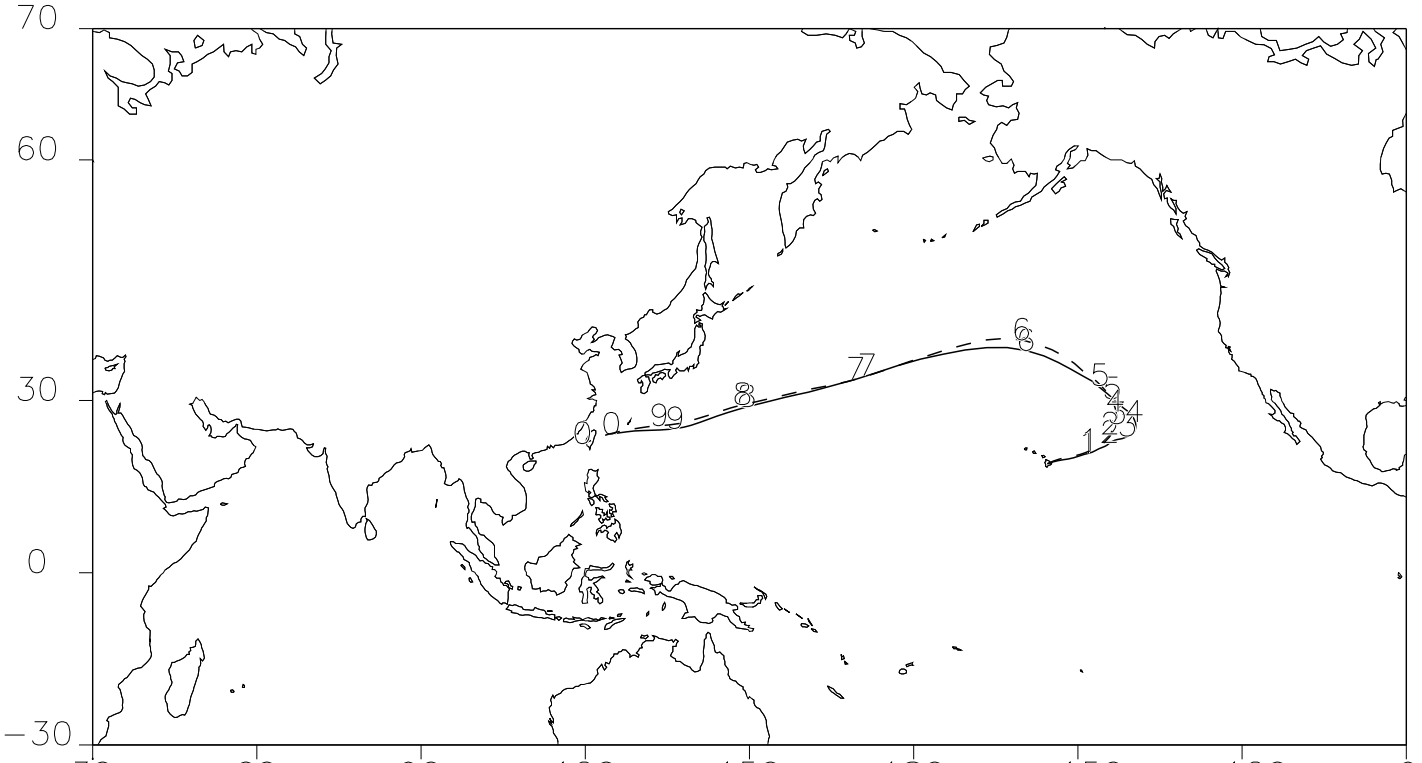
Day	km	hPa	C
0	4.0	630	0
1	3.8	643	1
2	4.0	633	2
3	4.7	576	−4
4	5.8	497	−14
5	6.3	464	−19
6	6.8	432	−24
7	5.0	549	−10
8	3.2	696	4
9	2.9	721	8
10	2.9	728	9

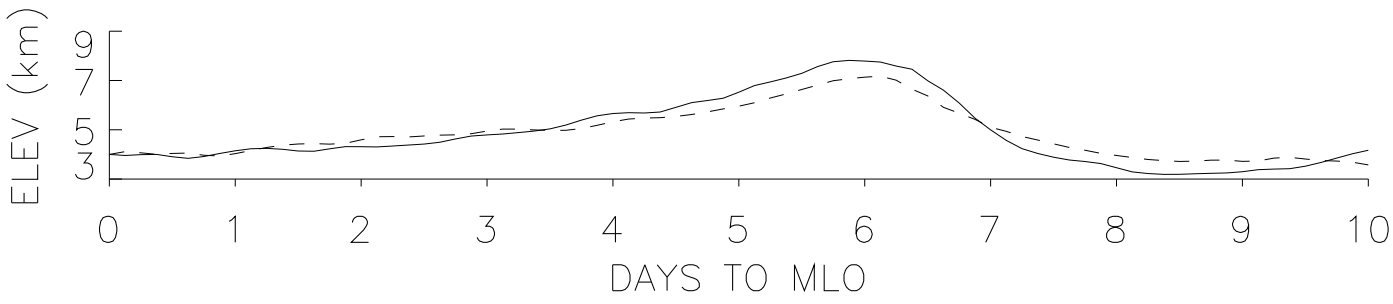
18UT

Day	km	hPa	C
0	4.0	632	1
1	4.1	621	−1
2	4.1	623	0
3	4.7	576	−5
4	5.7	508	−12
5	6.6	451	−20
6	6.6	446	−22
7	5.2	535	−10
8	3.6	661	1
9	3.2	696	7
10	3.2	699	8

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/17/2004 (Day of Year 108)
NCEP/NCAR Reanalysis 1 Data Set





00UT

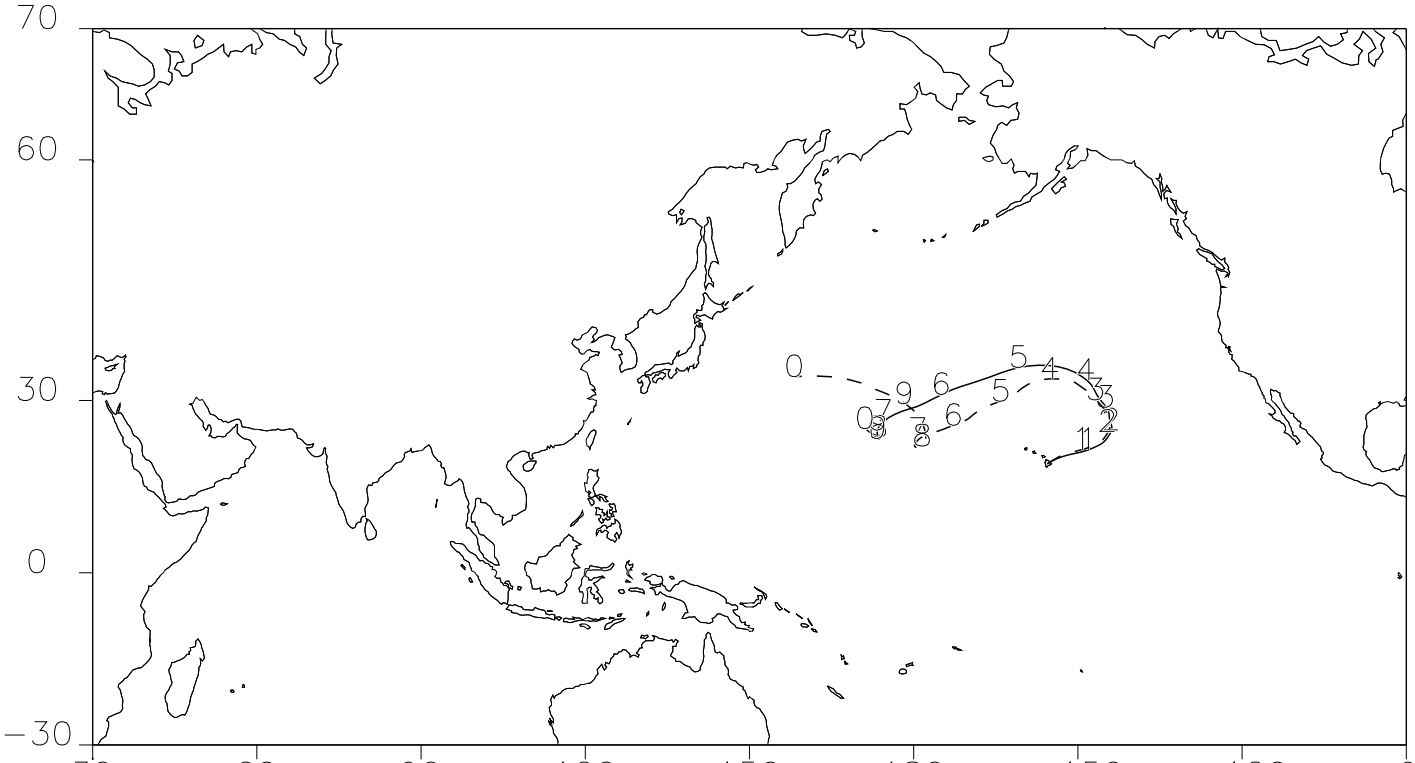
Day	km	hPa	C
0	4.0	631	1
1	4.1	619	0
2	4.3	606	−3
3	4.8	572	−5
4	5.7	509	−13
5	6.5	452	−20
6	7.8	376	−32
7	5.0	549	−9
8	3.5	671	1
9	3.3	686	6
10	4.2	616	−1

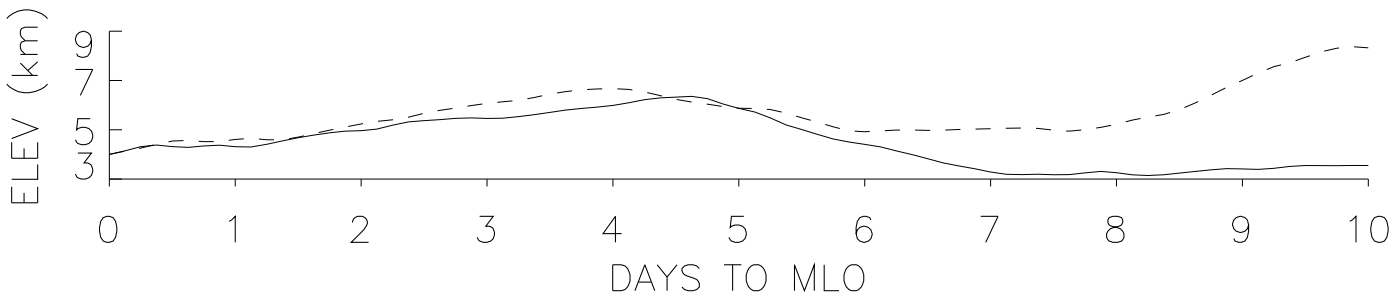
06UT

Day	km	hPa	C
0	4.0	632	2
1	4.0	629	1
2	4.6	586	−5
3	4.9	562	−7
4	5.3	533	−11
5	6.0	489	−17
6	7.1	411	−28
7	5.1	540	−10
8	4.0	629	−2
9	3.7	649	3
10	3.6	664	4

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/17/2004 (Day of Year 108)
NCEP/NCAR Reanalysis 1 Data Set





12UT

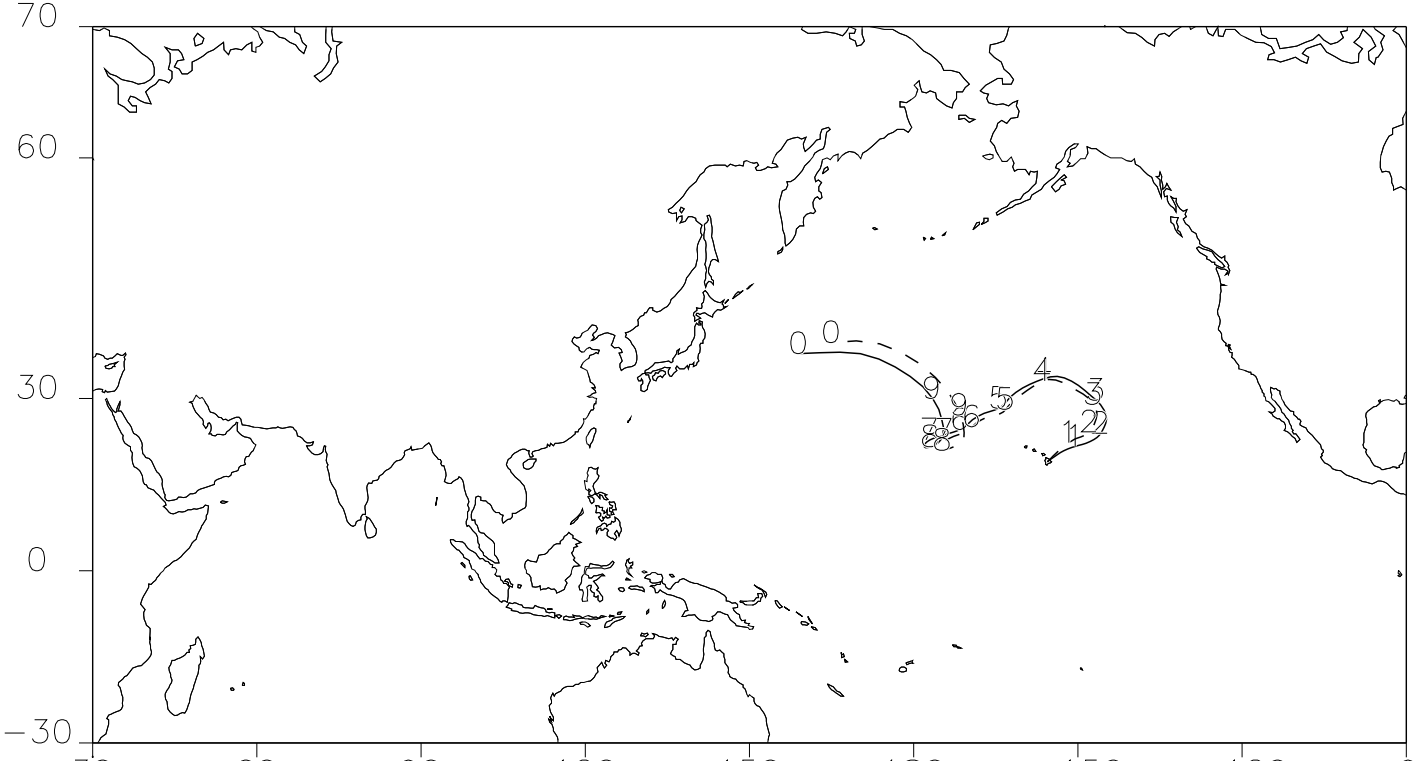
Day	km	hPa	C
0	4.0	631	1
1	4.3	606	−1
2	5.0	558	−8
3	5.5	524	−12
4	6.0	488	−17
5	5.9	494	−17
6	4.4	598	−4
7	3.3	690	5
8	3.3	694	8
9	3.4	679	7
10	3.5	667	6

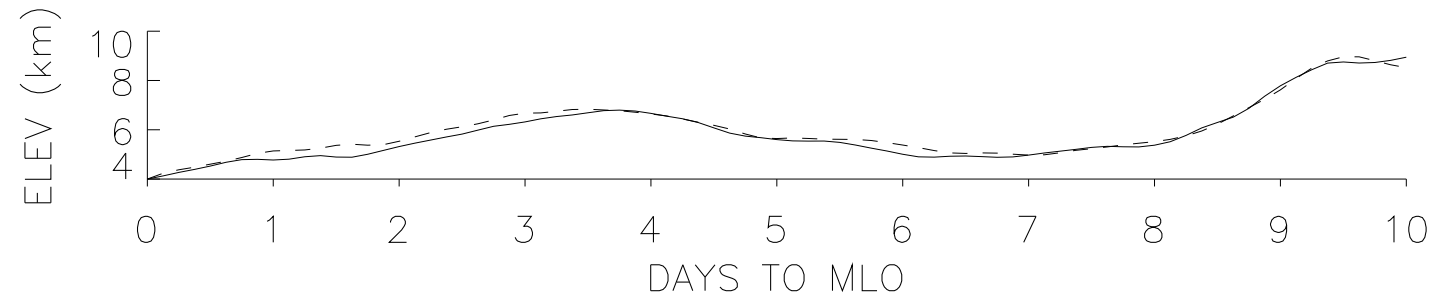
18UT

Day	km	hPa	C
0	4.0	633	1
1	4.6	586	−3
2	5.2	540	−9
3	6.1	484	−17
4	6.7	447	−21
5	5.9	496	−15
6	4.9	562	−5
7	5.0	555	−3
8	5.2	543	−4
9	7.0	427	−21
10	8.3	351	−33

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/18/2004 (Day of Year 109)
NCEP/NCAR Reanalysis 1 Data Set





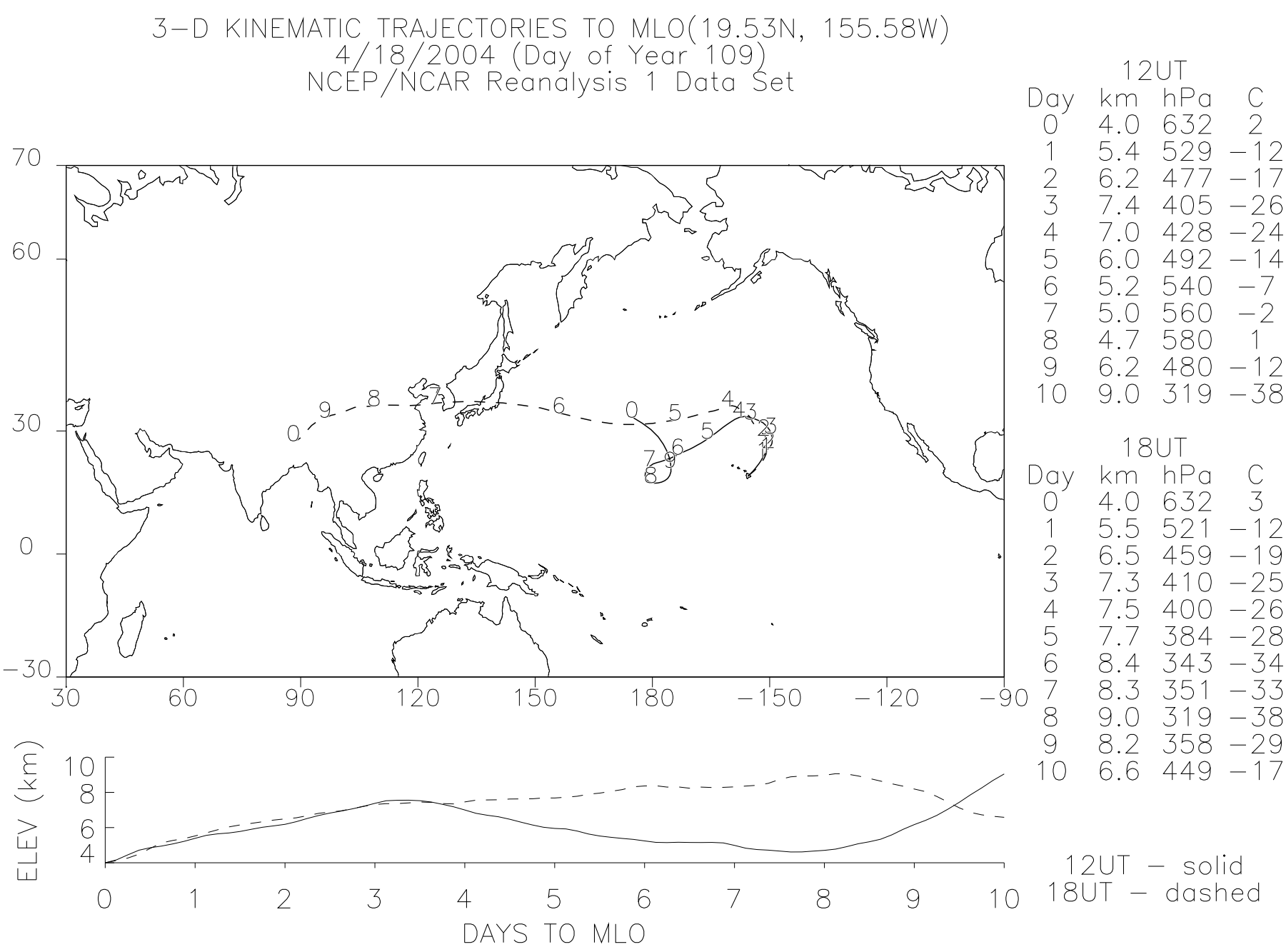
00UT

Day	km	hPa	C
0	4.0	632	1
1	4.8	573	−5
2	5.3	534	−9
3	6.3	468	−19
4	6.7	447	−21
5	5.6	515	−12
6	5.0	557	−5
7	5.0	561	−2
8	5.4	534	−5
9	7.8	383	−27
10	8.9	319	−38

06UT

Day	km	hPa	C
0	4.0	633	2
1	5.1	548	−9
2	5.5	520	−11
3	6.7	446	−20
4	6.6	449	−21
5	5.6	512	−12
6	5.4	530	−9
7	5.0	561	−3
8	5.5	524	−6
9	7.6	392	−25
10	8.5	338	−35

00UT – solid
06UT – dashed



12UT

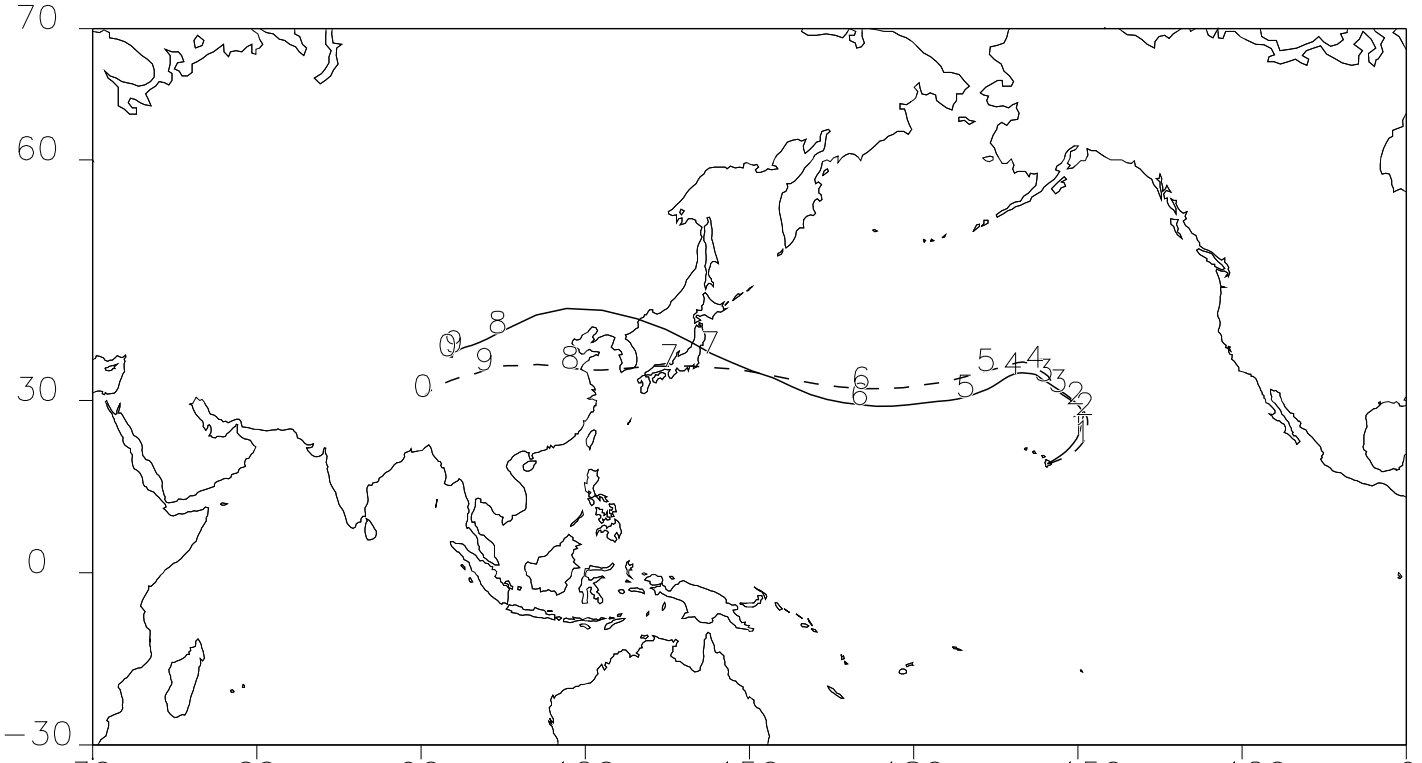
Day	km	hPa	C
0	4.0	632	2
1	5.4	529	−12
2	6.2	477	−17
3	7.4	405	−26
4	7.0	428	−24
5	6.0	492	−14
6	5.2	540	−7
7	5.0	560	−2
8	4.7	580	1
9	6.2	480	−12
10	9.0	319	−38

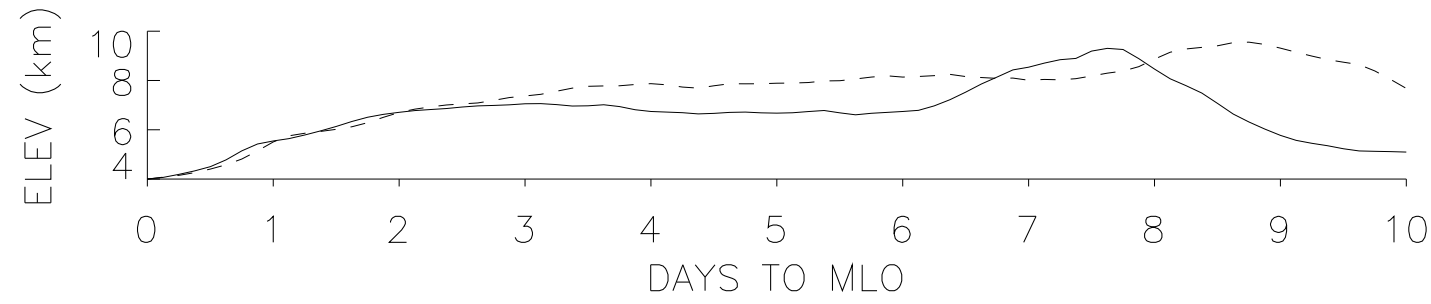
18UT

Day	km	hPa	C
0	4.0	632	3
1	5.5	521	−12
2	6.5	459	−19
3	7.3	410	−25
4	7.5	400	−26
5	7.7	384	−28
6	8.4	343	−34
7	8.3	351	−33
8	9.0	319	−38
9	8.2	358	−29
10	6.6	449	−17

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/19/2004 (Day of Year 110)
NCEP/NCAR Reanalysis 1 Data Set





00UT

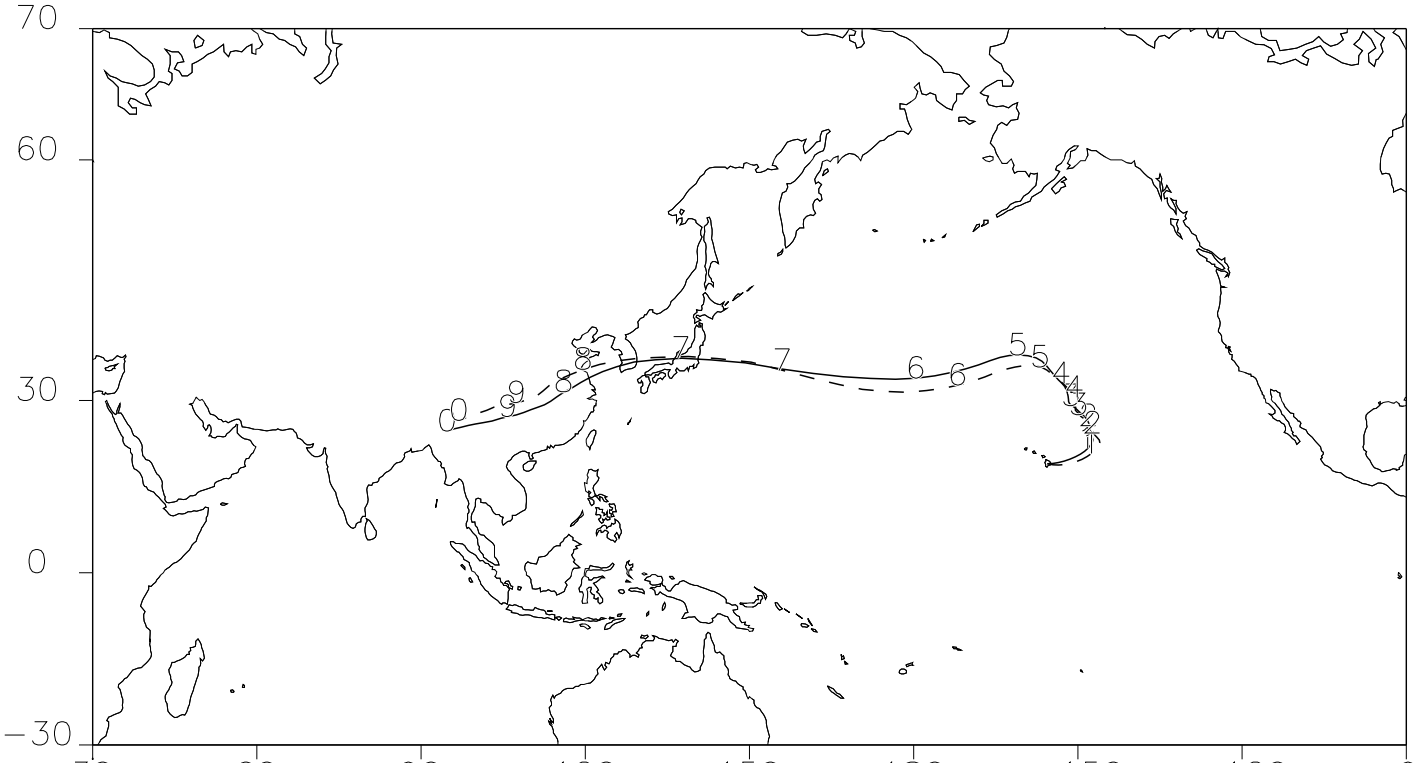
Day	km	hPa	C
0	4.0	632	5
1	5.5	518	−11
2	6.7	444	−21
3	7.1	425	−23
4	6.7	443	−20
5	6.7	444	−20
6	6.7	437	−21
7	8.5	334	−39
8	8.5	339	−39
9	5.8	494	−14
10	5.1	540	−12

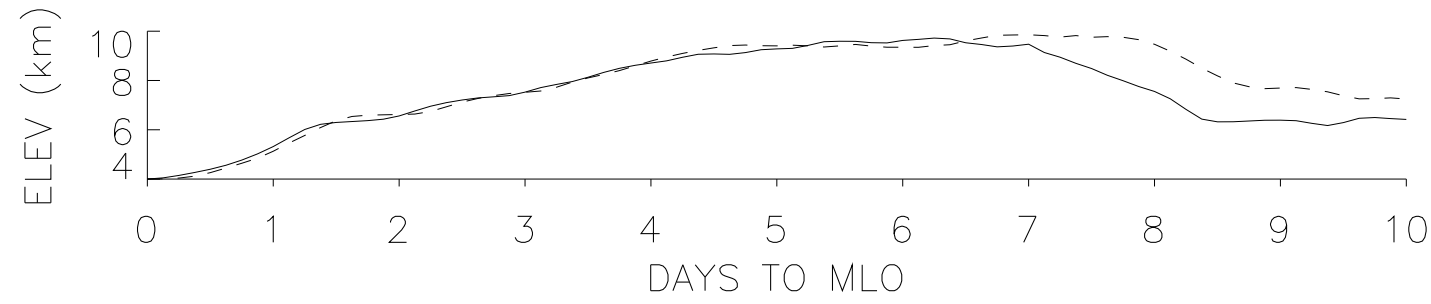
06UT

Day	km	hPa	C
0	4.0	633	5
1	5.5	521	−10
2	6.7	445	−20
3	7.4	407	−25
4	7.9	379	−29
5	7.9	375	−30
6	8.1	356	−32
7	8.0	366	−30
8	8.9	325	−36
9	9.3	304	−42
10	7.7	386	−26

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/19/2004 (Day of Year 110)
NCEP/NCAR Reanalysis 1 Data Set





12UT

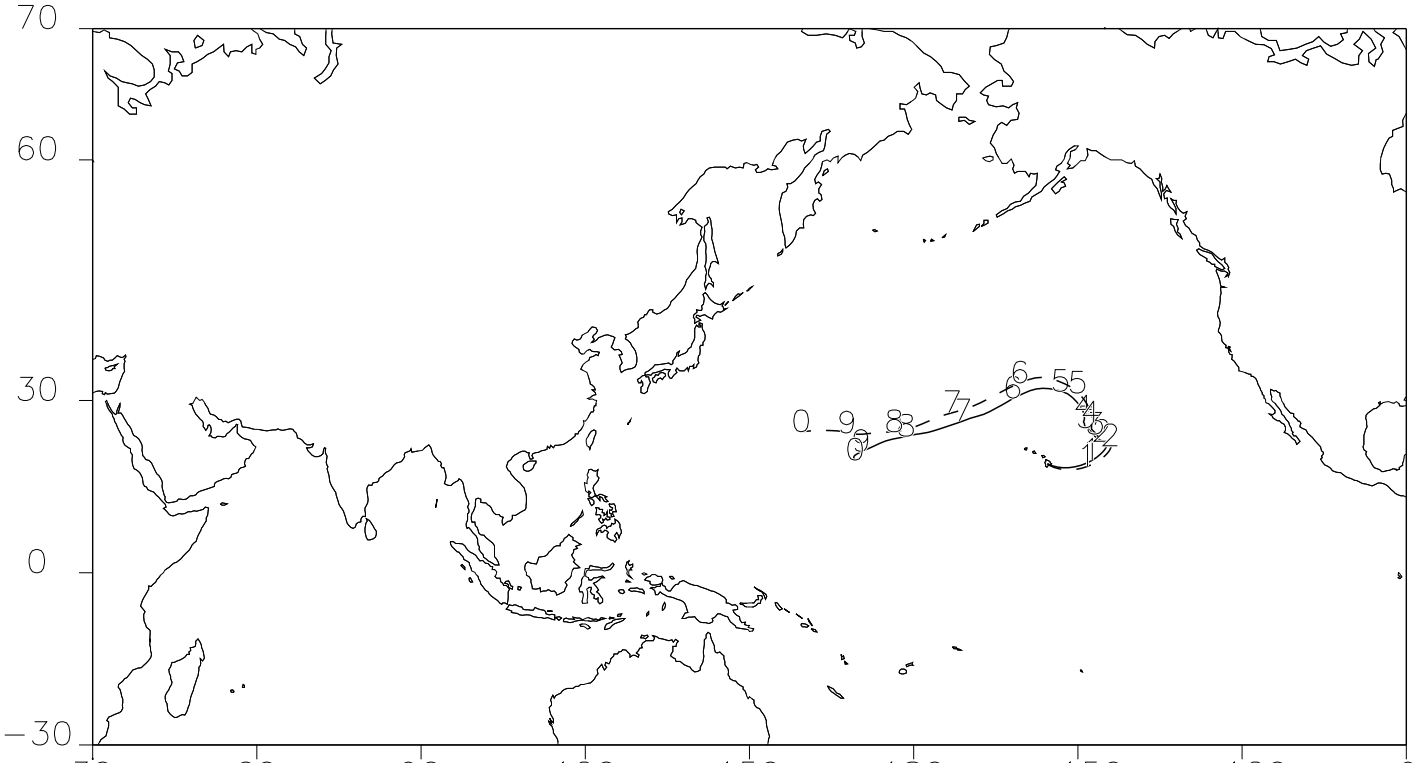
Day	km	hPa	C
0	4.0	632	5
1	5.3	533	−8
2	6.6	452	−20
3	7.5	397	−26
4	8.7	336	−35
5	9.3	307	−42
6	9.6	288	−41
7	9.5	294	−41
8	7.6	393	−23
9	6.4	460	−14
10	6.4	459	−15

18UT

Day	km	hPa	C
0	4.0	632	5
1	5.1	548	−5
2	6.6	450	−20
3	7.5	399	−25
4	8.8	333	−35
5	9.4	303	−42
6	9.3	303	−39
7	9.9	276	−45
8	9.5	298	−40
9	7.7	386	−24
10	7.2	411	−21

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/20/2004 (Day of Year 111)
NCEP/NCAR Reanalysis 1 Data Set

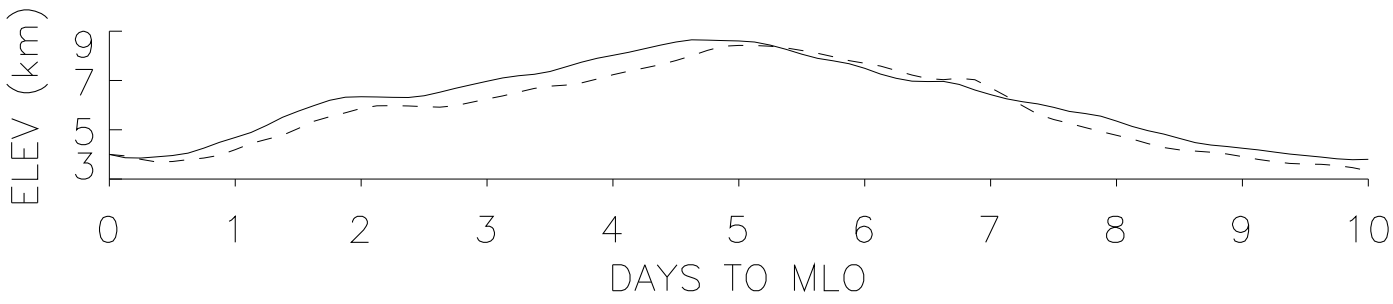


00UT

Day	km	hPa	C
0	4.0	632	4
1	4.7	580	−1
2	6.3	466	−17
3	7.0	429	−21
4	8.0	371	−30
5	8.6	342	−34
6	7.5	399	−25
7	6.4	461	−17
8	5.4	532	−7
9	4.3	613	3
10	3.8	649	7

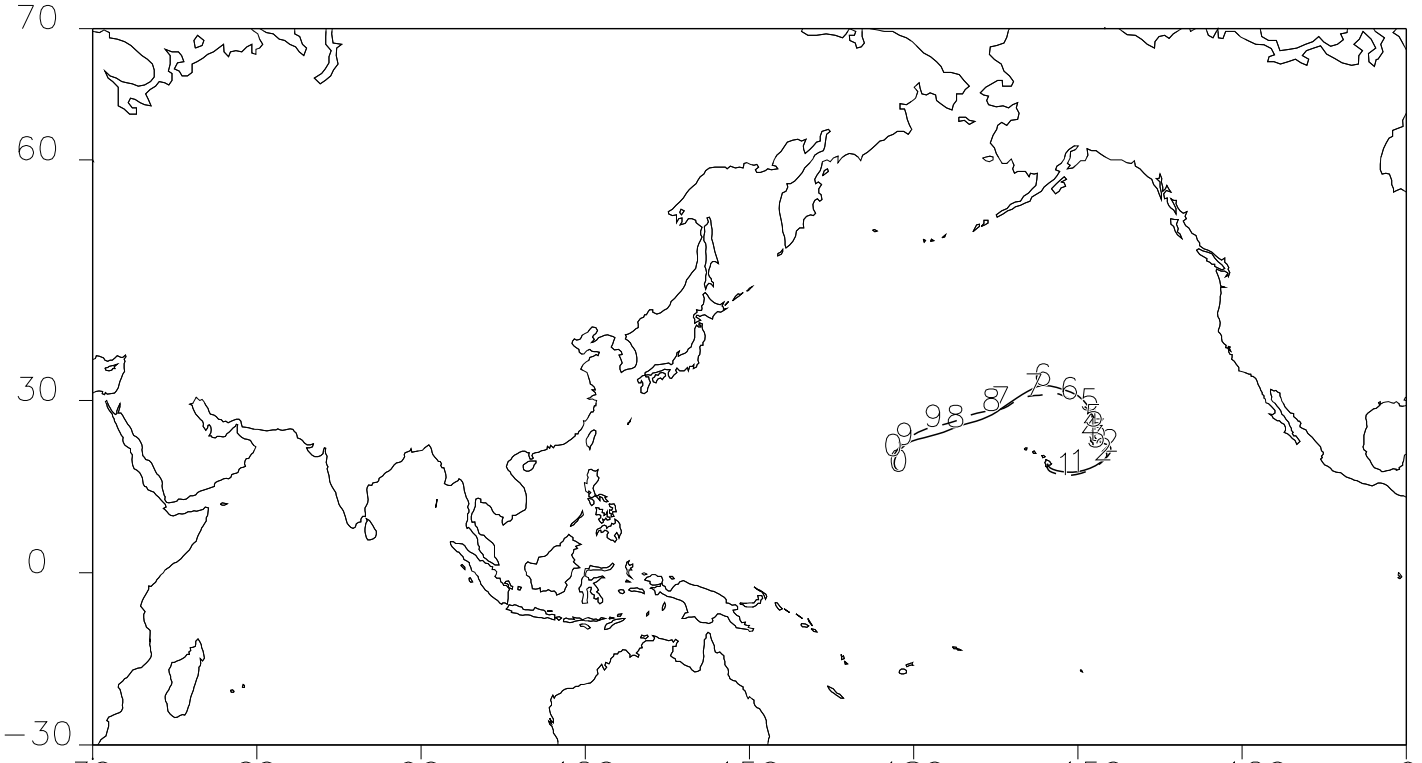
06UT

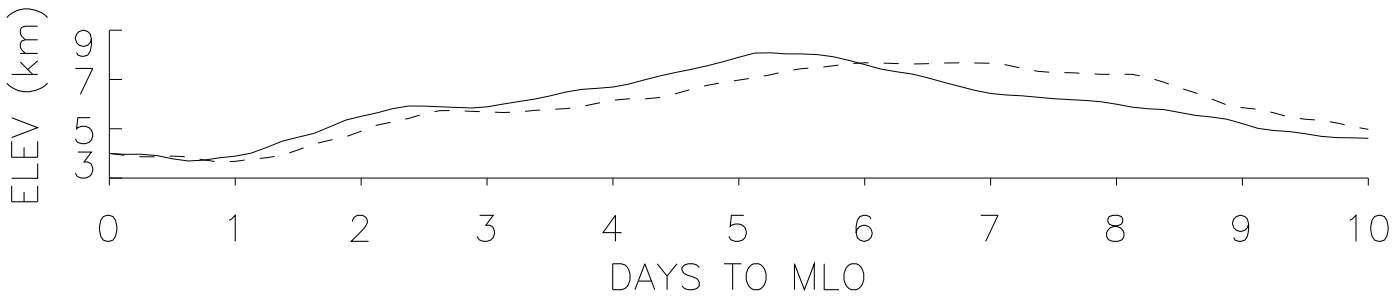
Day	km	hPa	C
0	4.0	633	4
1	4.2	617	2
2	5.9	497	−13
3	6.2	473	−16
4	7.2	414	−24
5	8.4	351	−33
6	7.7	388	−28
7	6.7	443	−18
8	4.8	570	−4
9	3.9	636	1
10	3.3	685	6



00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/20/2004 (Day of Year 111)
NCEP/NCAR Reanalysis 1 Data Set





12UT

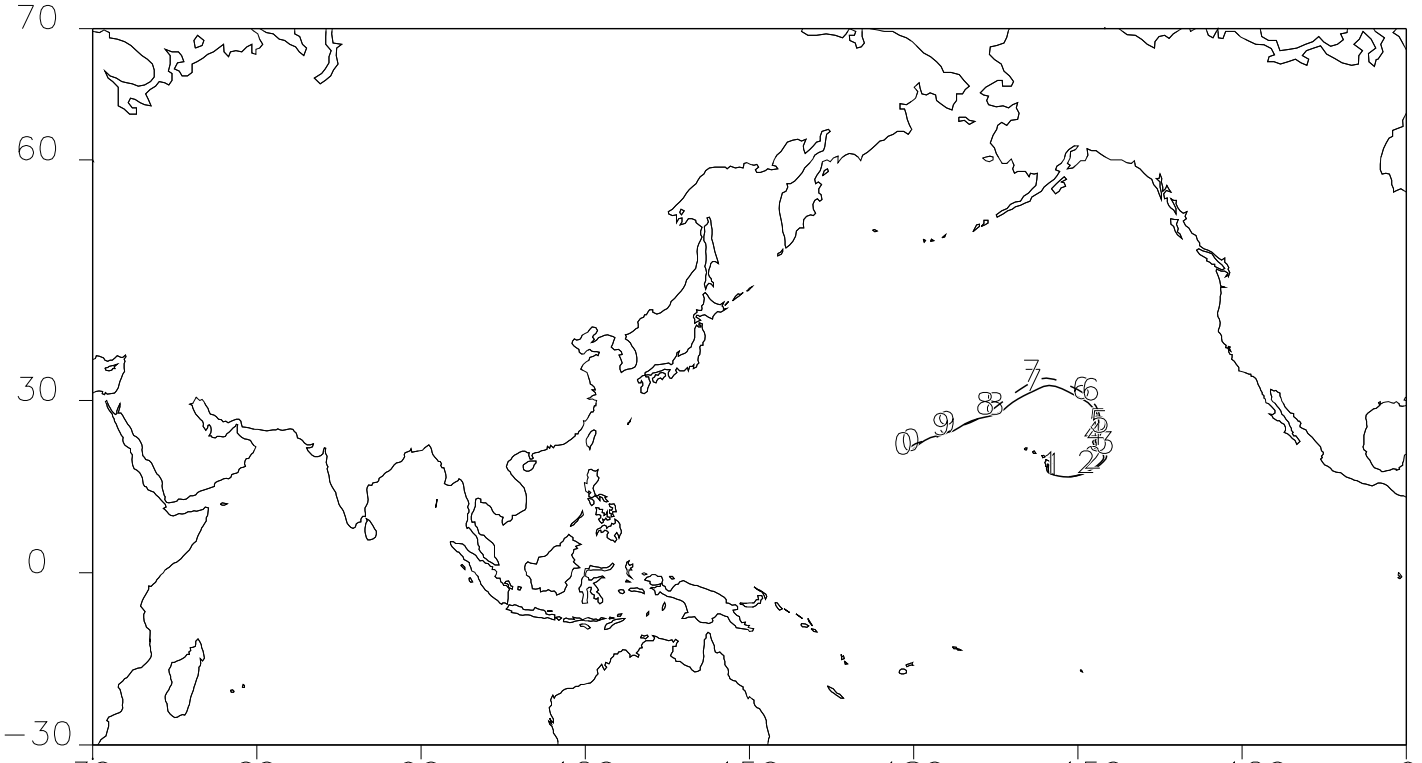
Day	km	hPa	C
0	4.0	631	3
1	3.9	639	5
2	5.5	520	−10
3	5.9	494	−15
4	6.7	445	−20
5	7.9	377	−29
6	7.6	394	−28
7	6.4	461	−18
8	6.0	489	−13
9	5.2	544	−4
10	4.6	587	2

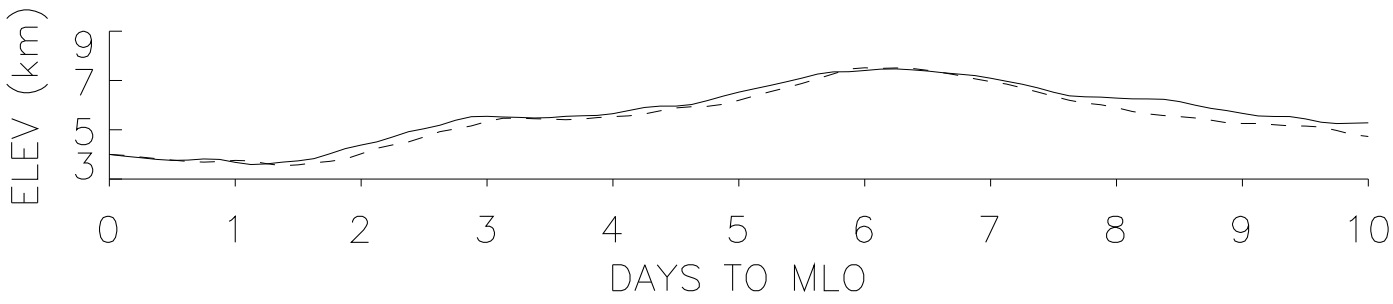
18UT

Day	km	hPa	C
0	4.0	631	3
1	3.7	657	7
2	4.9	564	−4
3	5.7	510	−12
4	6.2	480	−16
5	7.0	429	−21
6	7.7	390	−27
7	7.7	391	−26
8	7.2	415	−23
9	5.9	498	−11
10	5.0	560	−1

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/21/2004 (Day of Year 112)
NCEP/NCAR Reanalysis 1 Data Set





00UT

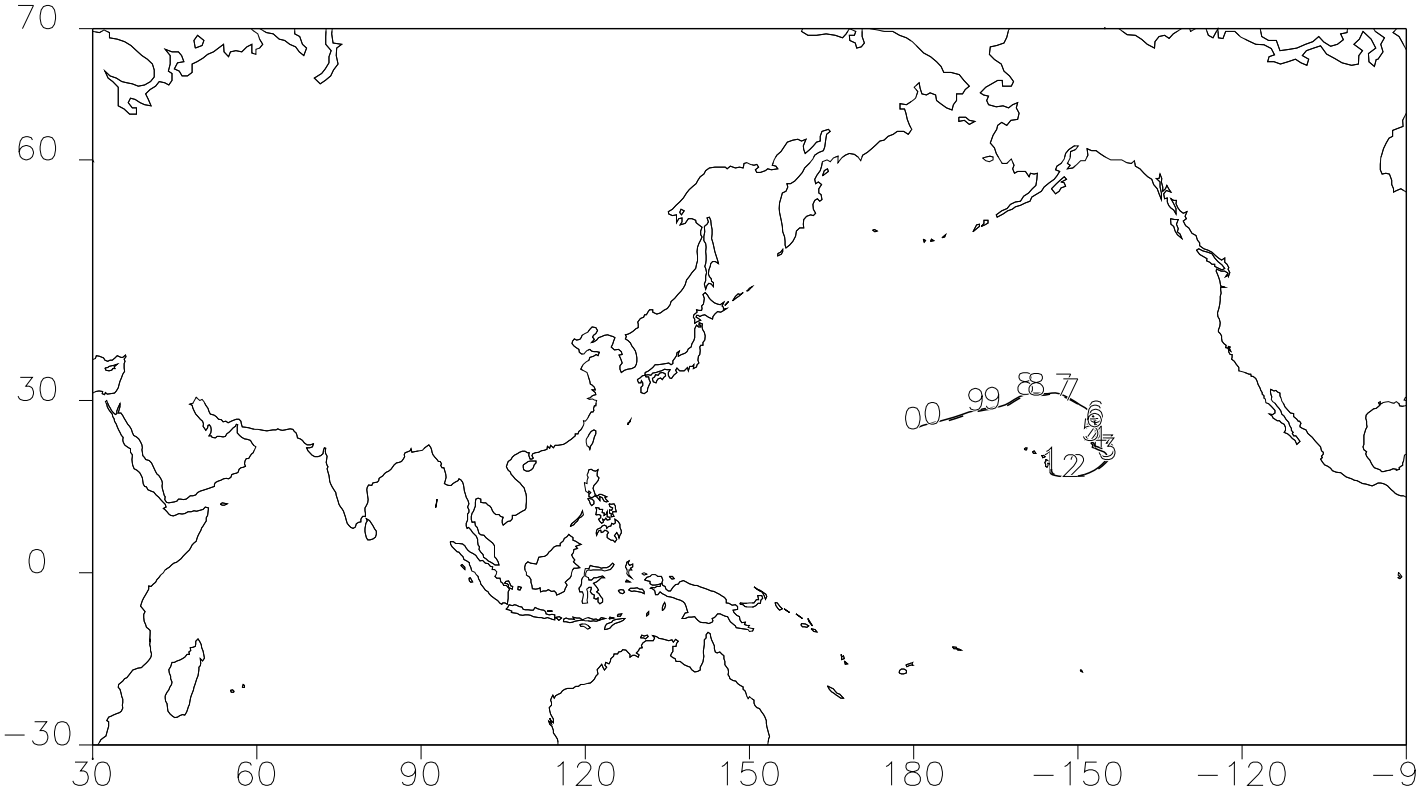
Day	km	hPa	C
0	4.0	630	3
1	3.7	656	5
2	4.4	602	1
3	5.5	517	−11
4	5.7	511	−12
5	6.5	456	−18
6	7.4	404	−26
7	7.1	422	−23
8	6.3	470	−17
9	5.7	512	−10
10	5.3	540	−4

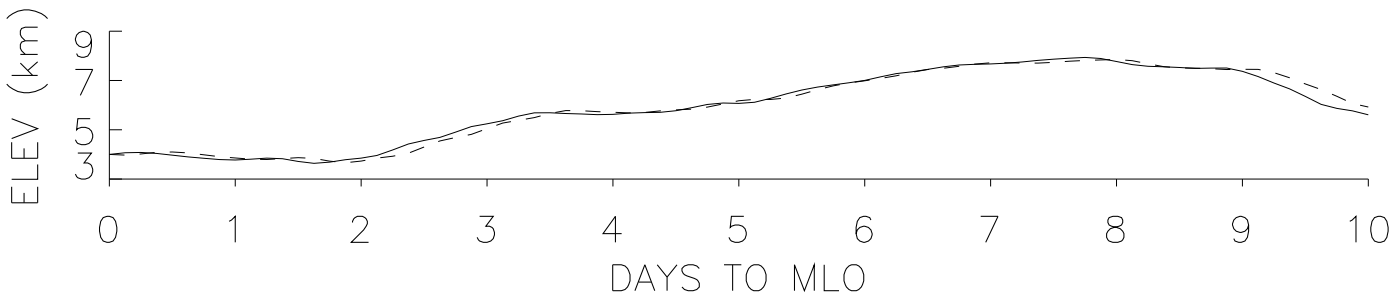
06UT

Day	km	hPa	C
0	4.0	631	2
1	3.8	652	5
2	4.0	630	3
3	5.3	532	−9
4	5.5	520	−11
5	6.2	477	−16
6	7.5	398	−26
7	7.0	430	−23
8	5.9	495	−13
9	5.3	538	−7
10	4.7	578	0

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/21/2004 (Day of Year 112)
NCEP/NCAR Reanalysis 1 Data Set





12UT

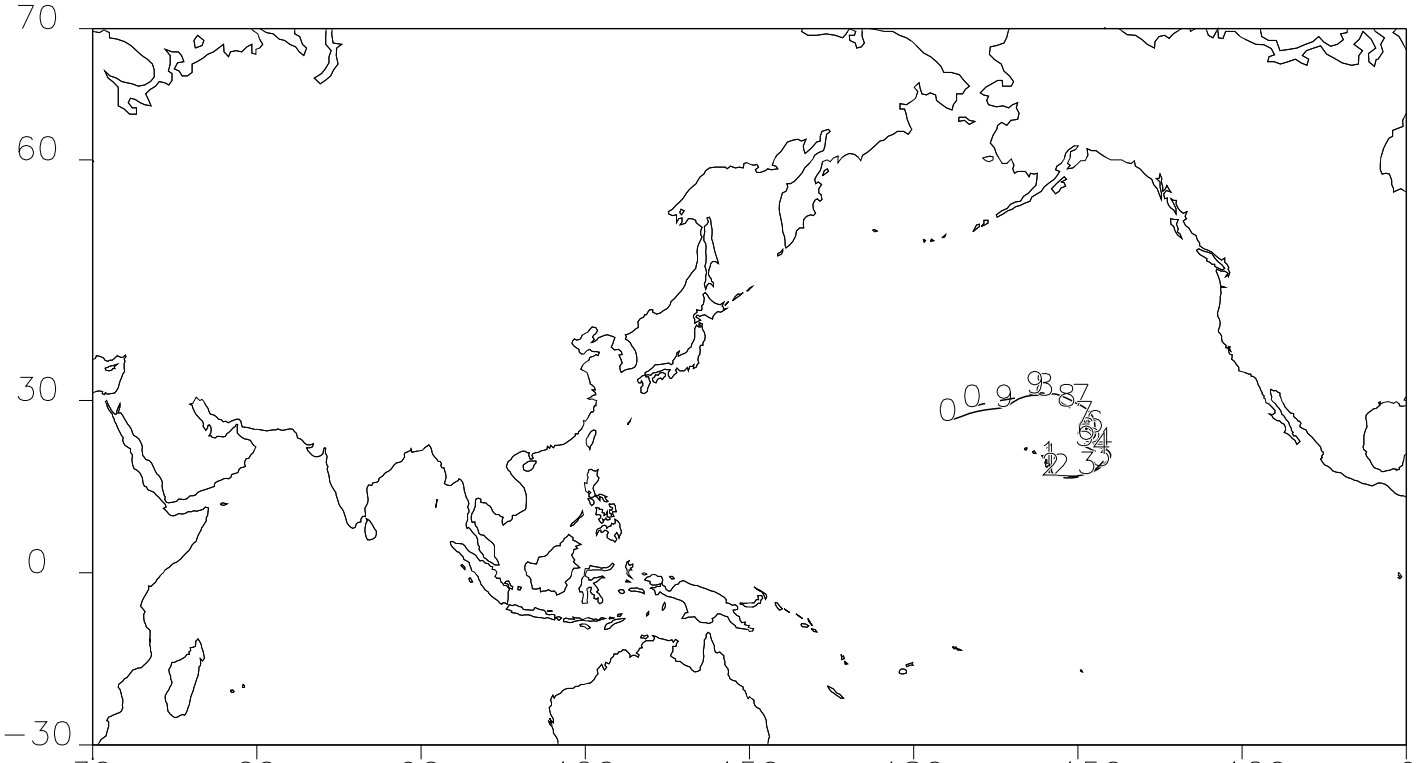
Day	km	hPa	C
0	4.0	630	1
1	3.8	649	4
2	3.8	642	5
3	5.2	538	−8
4	5.6	512	−13
5	6.1	483	−16
6	7.0	426	−22
7	7.7	390	−28
8	7.8	385	−27
9	7.4	406	−24
10	5.6	516	−8

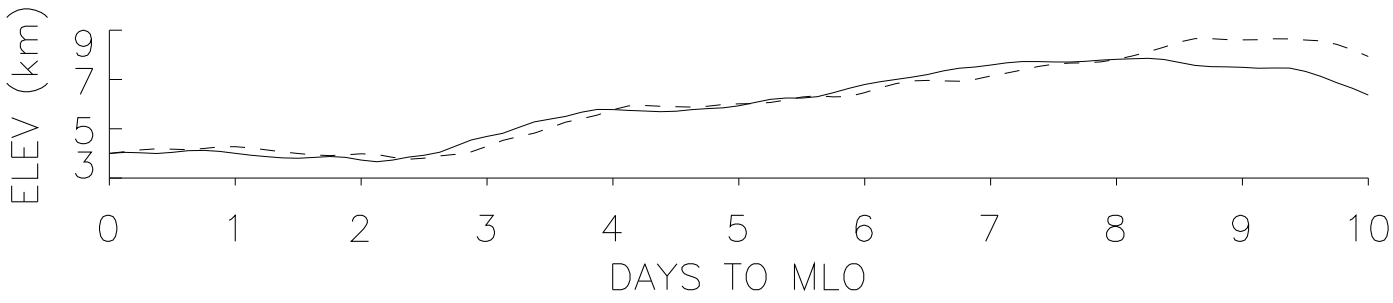
18UT

Day	km	hPa	C
0	4.0	631	2
1	3.9	643	4
2	3.7	653	6
3	5.0	554	−5
4	5.7	508	−12
5	6.2	479	−16
6	7.0	428	−21
7	7.7	388	−28
8	7.9	381	−28
9	7.5	401	−24
10	5.9	493	−12

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/22/2004 (Day of Year 113)
NCEP/NCAR Reanalysis 1 Data Set





00UT

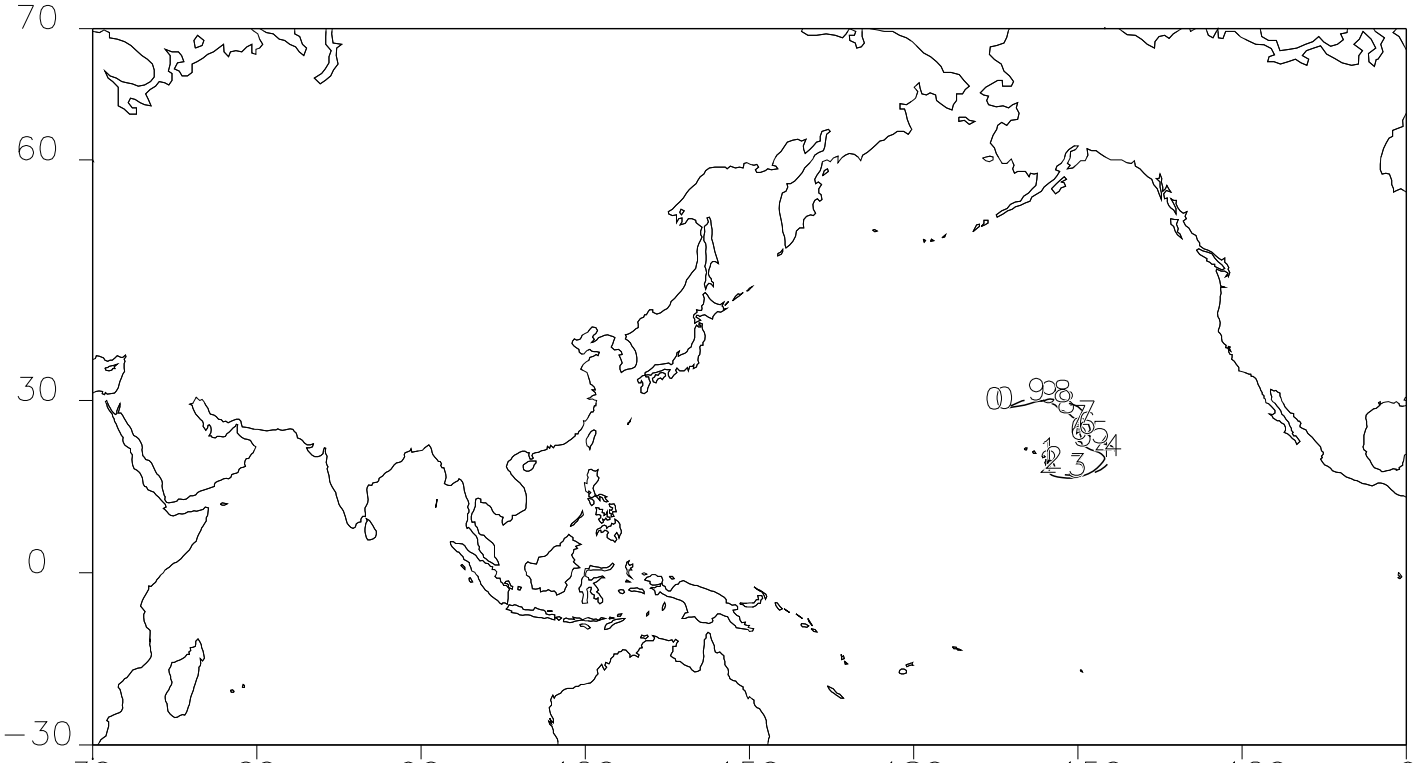
Day	km	hPa	C
0	4.0	630	2
1	4.0	630	3
2	3.7	652	5
3	4.7	579	−2
4	5.8	501	−12
5	5.9	493	−14
6	6.8	440	−20
7	7.6	395	−27
8	7.8	383	−27
9	7.5	399	−25
10	6.4	465	−15

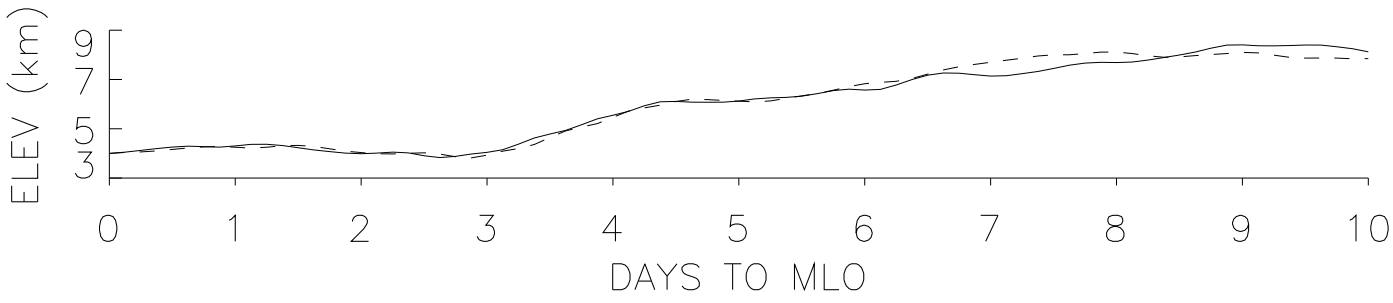
06UT

Day	km	hPa	C
0	4.0	631	2
1	4.3	610	0
2	4.0	634	4
3	4.3	610	2
4	5.8	503	−12
5	6.0	488	−15
6	6.5	460	−18
7	7.1	420	−22
8	7.8	383	−28
9	8.6	342	−33
10	7.9	375	−28

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/22/2004 (Day of Year 113)
NCEP/NCAR Reanalysis 1 Data Set





12UT

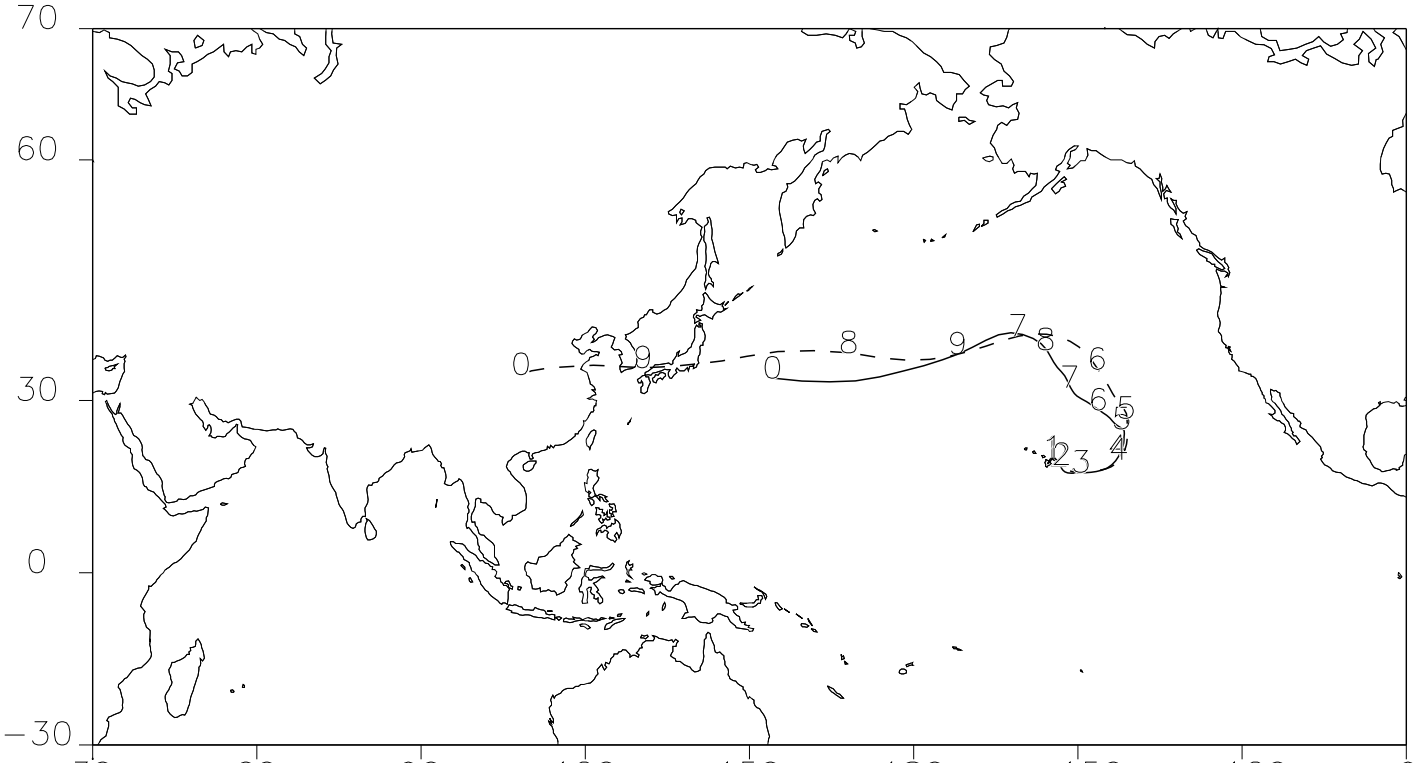
Day	km	hPa	C
0	4.0	630	2
1	4.3	606	−1
2	4.0	632	3
3	4.0	627	4
4	5.5	517	−10
5	6.1	479	−16
6	6.6	452	−19
7	7.1	419	−23
8	7.7	390	−27
9	8.4	352	−32
10	8.1	366	−29

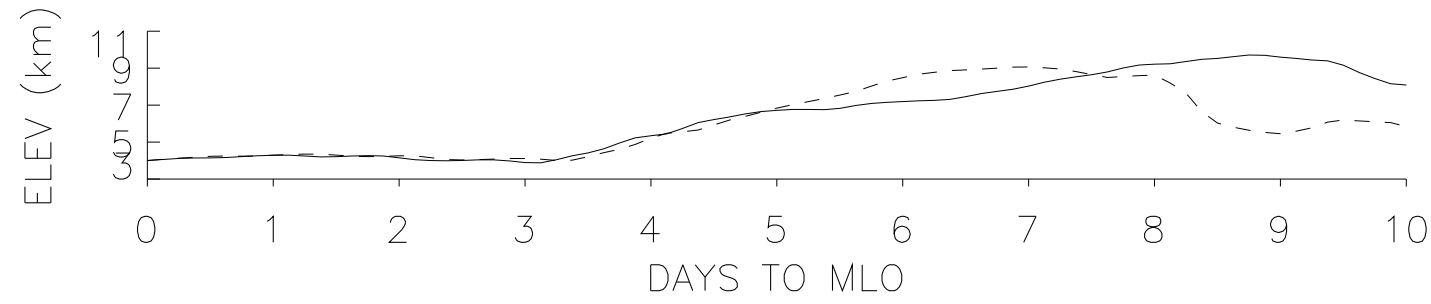
18UT

Day	km	hPa	C
0	4.0	632	2
1	4.3	612	0
2	4.0	629	3
3	3.9	637	5
4	5.5	525	−8
5	6.1	481	−15
6	6.8	439	−20
7	7.7	389	−26
8	8.1	367	−31
9	8.1	368	−29
10	7.8	380	−27

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/23/2004 (Day of Year 114)
NCEP/NCAR Reanalysis 1 Data Set





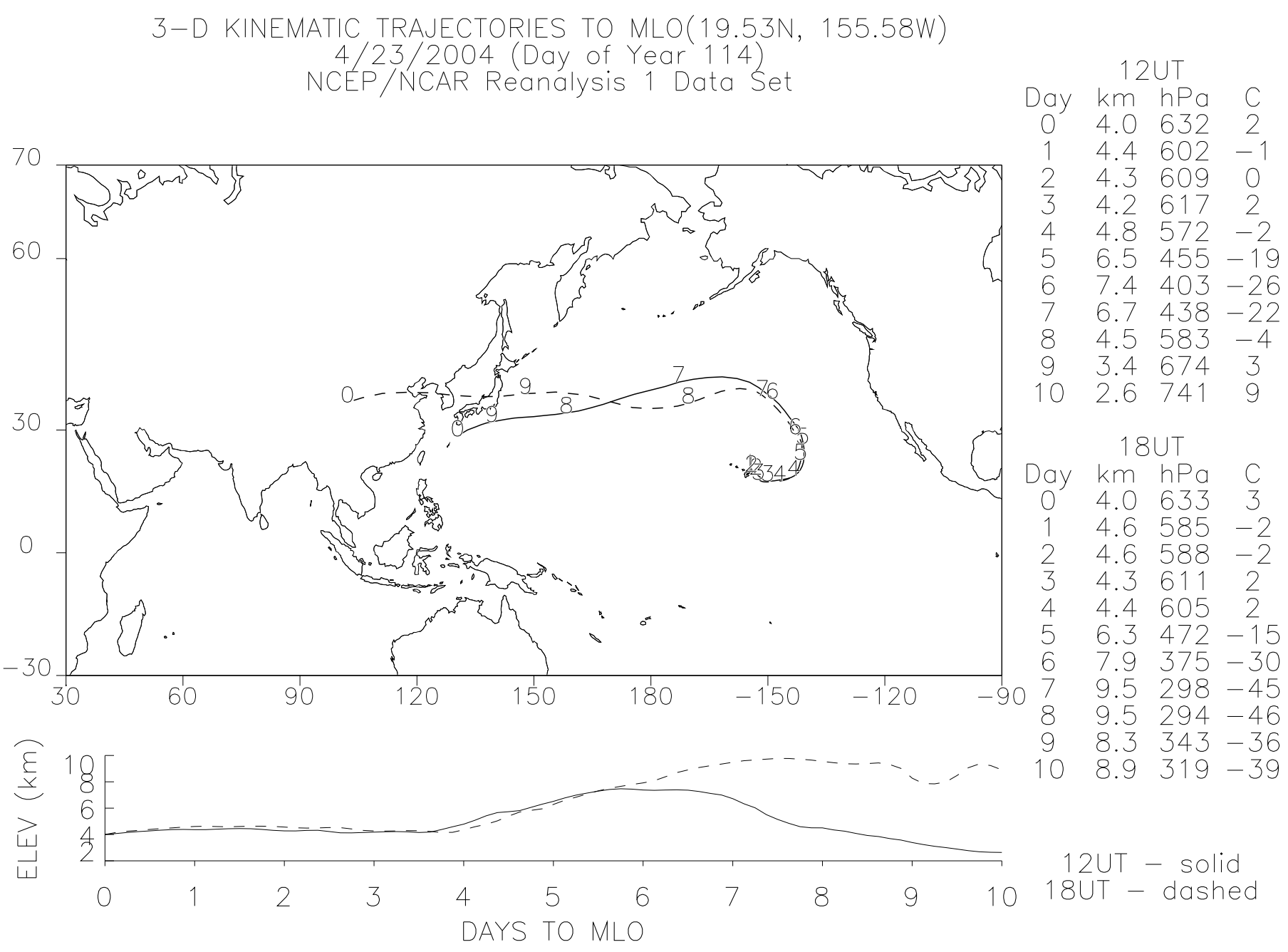
00UT

Day	km	hPa	C
0	4.0	631	2
1	4.3	608	1
2	4.1	619	3
3	3.9	639	5
4	5.3	533	−8
5	6.7	442	−21
6	7.2	415	−24
7	8.0	371	−30
8	9.2	312	−39
9	9.6	289	−43
10	8.1	358	−31

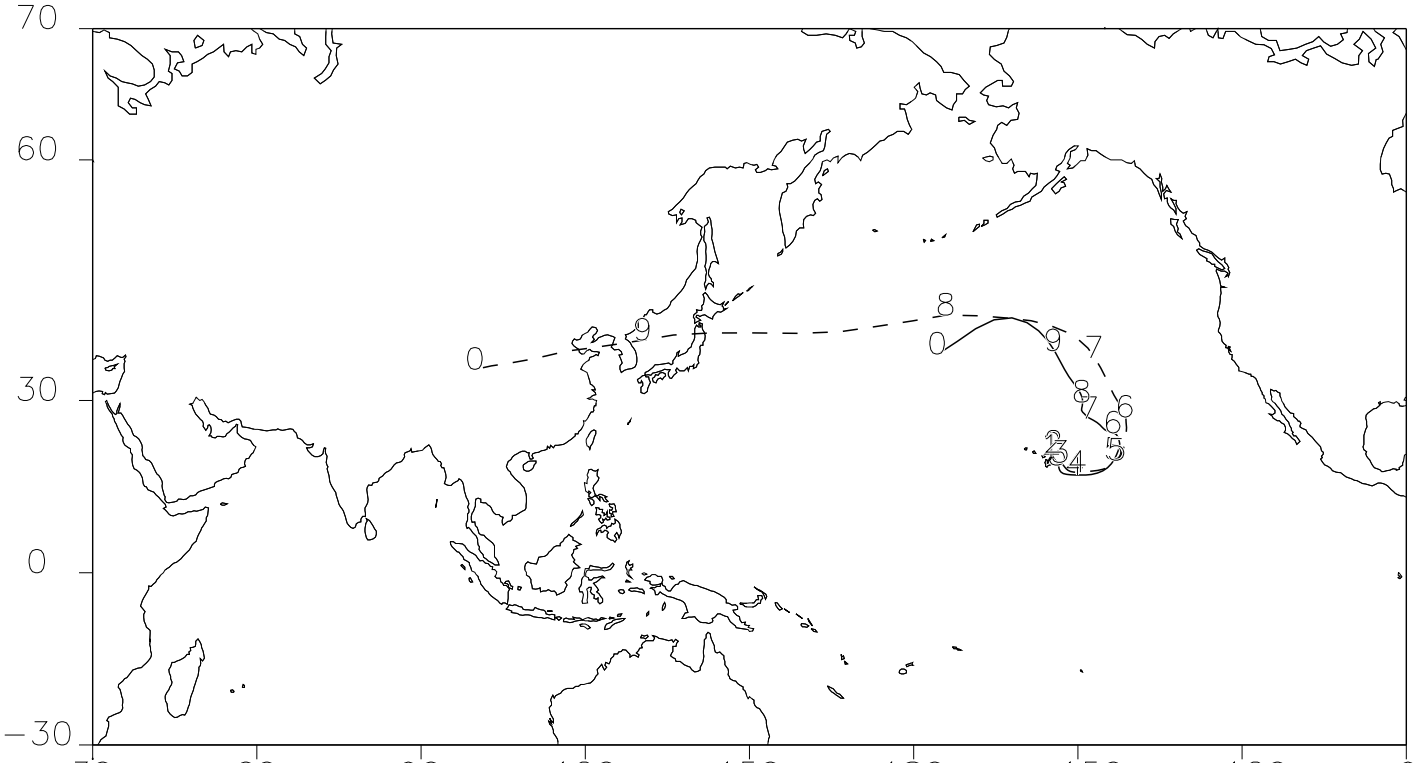
06UT

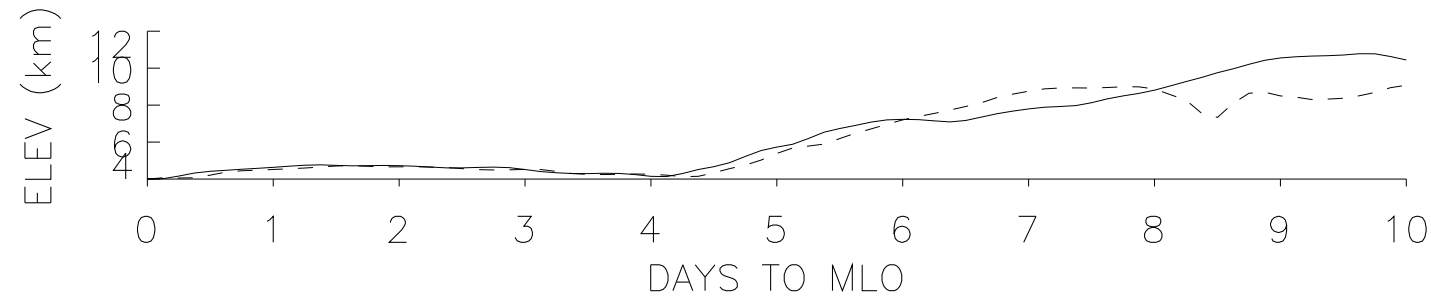
Day	km	hPa	C
0	4.0	632	2
1	4.3	608	0
2	4.3	611	1
3	4.1	623	3
4	5.2	543	−6
5	6.8	436	−21
6	8.5	344	−37
7	9.1	316	−41
8	8.6	328	−38
9	5.5	514	−13
10	5.8	492	−17

00UT – solid
06UT – dashed


3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/23/2004 (Day of Year 114)
NCEP/NCAR Reanalysis 1 Data Set
70
60
30
0
-30
30
60
90
120
150
180
-150
-120
-90
ELEV (km)
10
8
6
4
2
0
1
2
3
4
5
6
7
8
9
10
DAYS TO MLO
12UT
Day km hPa C
0 4.0 632 2
1 4.4 602 -1
2 4.3 609 0
3 4.2 617 2
4 4.8 572 -2
5 6.5 455 -19
6 7.4 403 -26
7 6.7 438 -22
8 4.5 583 -4
9 3.4 674 3
10 2.6 741 9
18UT
Day km hPa C
0 4.0 633 3
1 4.6 585 -2
2 4.6 588 -2
3 4.3 611 2
4 4.4 605 2
5 6.3 472 -15
6 7.9 375 -30
7 9.5 298 -45
8 9.5 294 -46
9 8.3 343 -36
10 8.9 319 -39
12UT - solid
18UT - dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/24/2004 (Day of Year 115)
NCEP/NCAR Reanalysis 1 Data Set





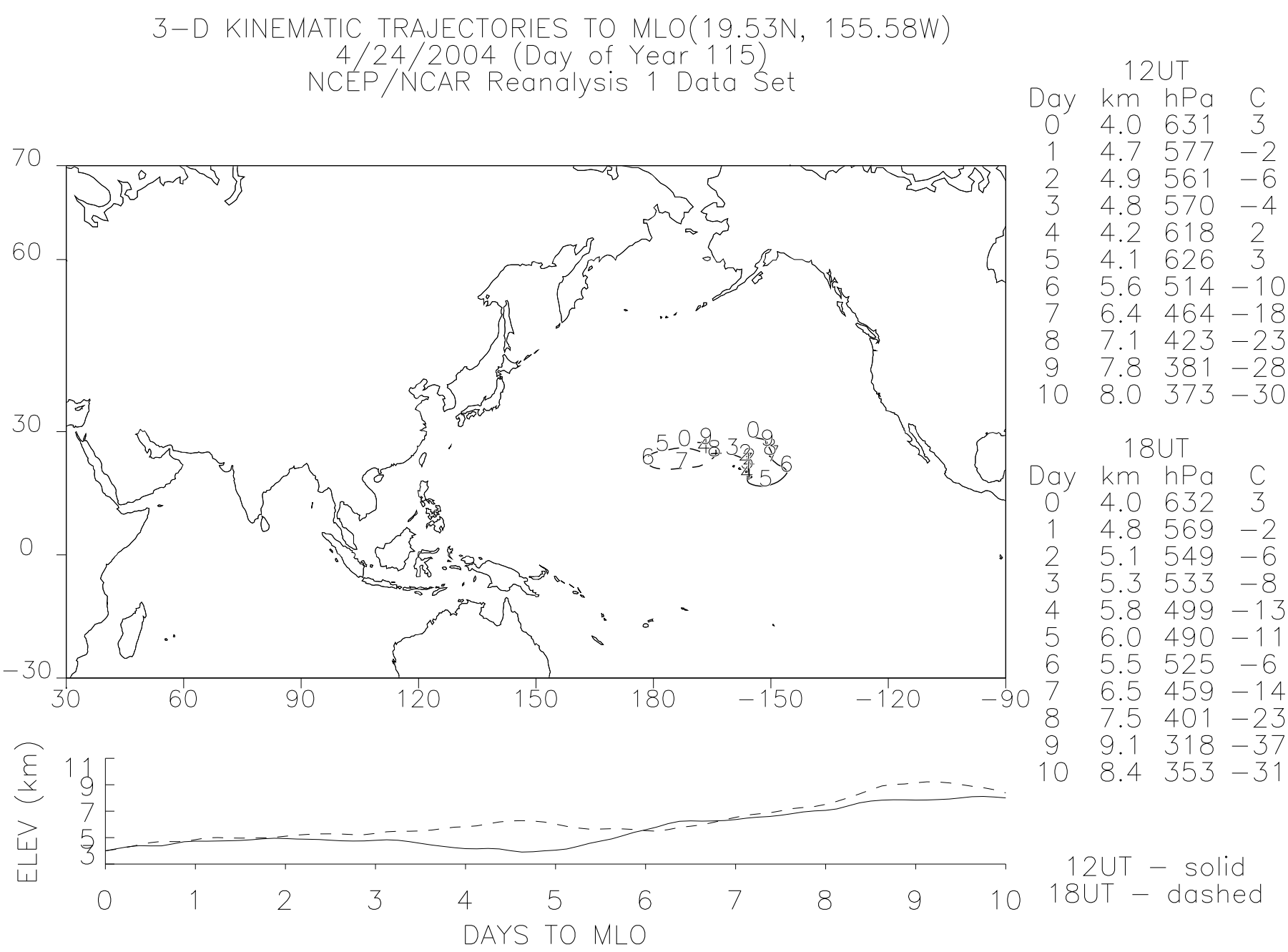
00UT

Day	km	hPa	C
0	4.0	632	3
1	4.6	583	-2
2	4.7	576	-3
3	4.5	592	0
4	4.1	619	3
5	5.7	507	-11
6	7.2	413	-24
7	7.8	383	-27
8	8.8	332	-36
9	10.6	255	-51
10	10.4	253	-51

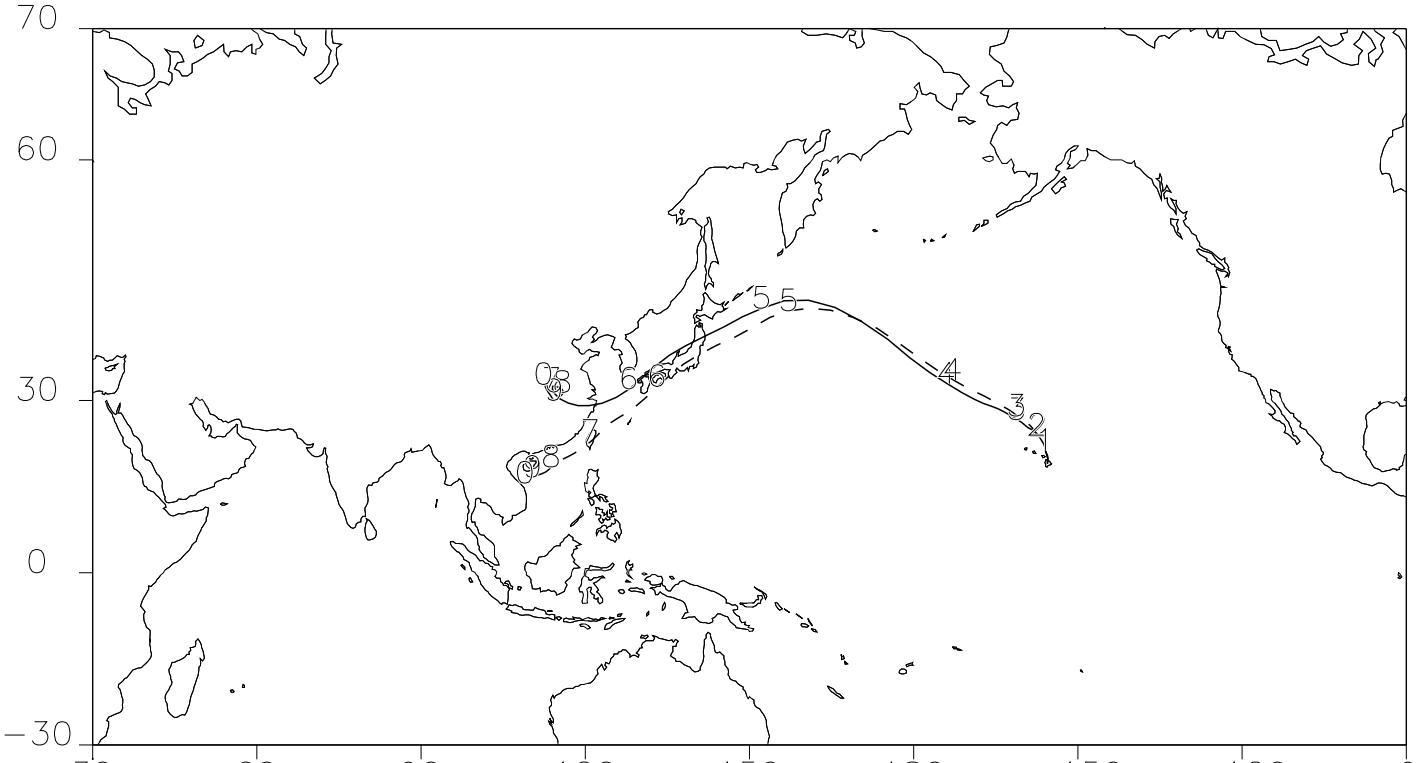
06UT

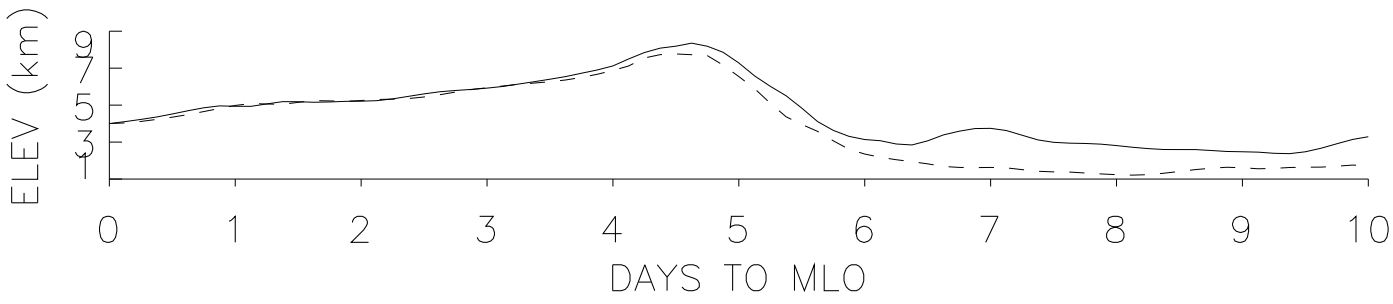
Day	km	hPa	C
0	4.0	632	2
1	4.5	593	-1
2	4.7	581	-3
3	4.5	591	-1
4	4.3	612	2
5	5.4	531	-7
6	7.2	415	-24
7	8.8	331	-39
8	8.9	316	-43
9	8.5	330	-40
10	9.1	312	-42

00UT – solid
06UT – dashed


3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/24/2004 (Day of Year 115)
NCEP/NCAR Reanalysis 1 Data Set
70
60
30
0
-30
30
60
90
120
150
180
-150
-120
-90
ELEV (km)
11
9
7
5
3
0
1
2
3
4
5
6
7
8
9
10
DAYS TO MLO
12UT
Day km hPa C
0 4.0 631 3
1 4.7 577 -2
2 4.9 561 -6
3 4.8 570 -4
4 4.2 618 2
5 4.1 626 3
6 5.6 514 -10
7 6.4 464 -18
8 7.1 423 -23
9 7.8 381 -28
10 8.0 373 -30
18UT
Day km hPa C
0 4.0 632 3
1 4.8 569 -2
2 5.1 549 -6
3 5.3 533 -8
4 5.8 499 -13
5 6.0 490 -11
6 5.5 525 -6
7 6.5 459 -14
8 7.5 401 -23
9 9.1 318 -37
10 8.4 353 -31
12UT - solid
18UT - dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/25/2004 (Day of Year 116)
NCEP/NCAR Reanalysis 1 Data Set





00UT

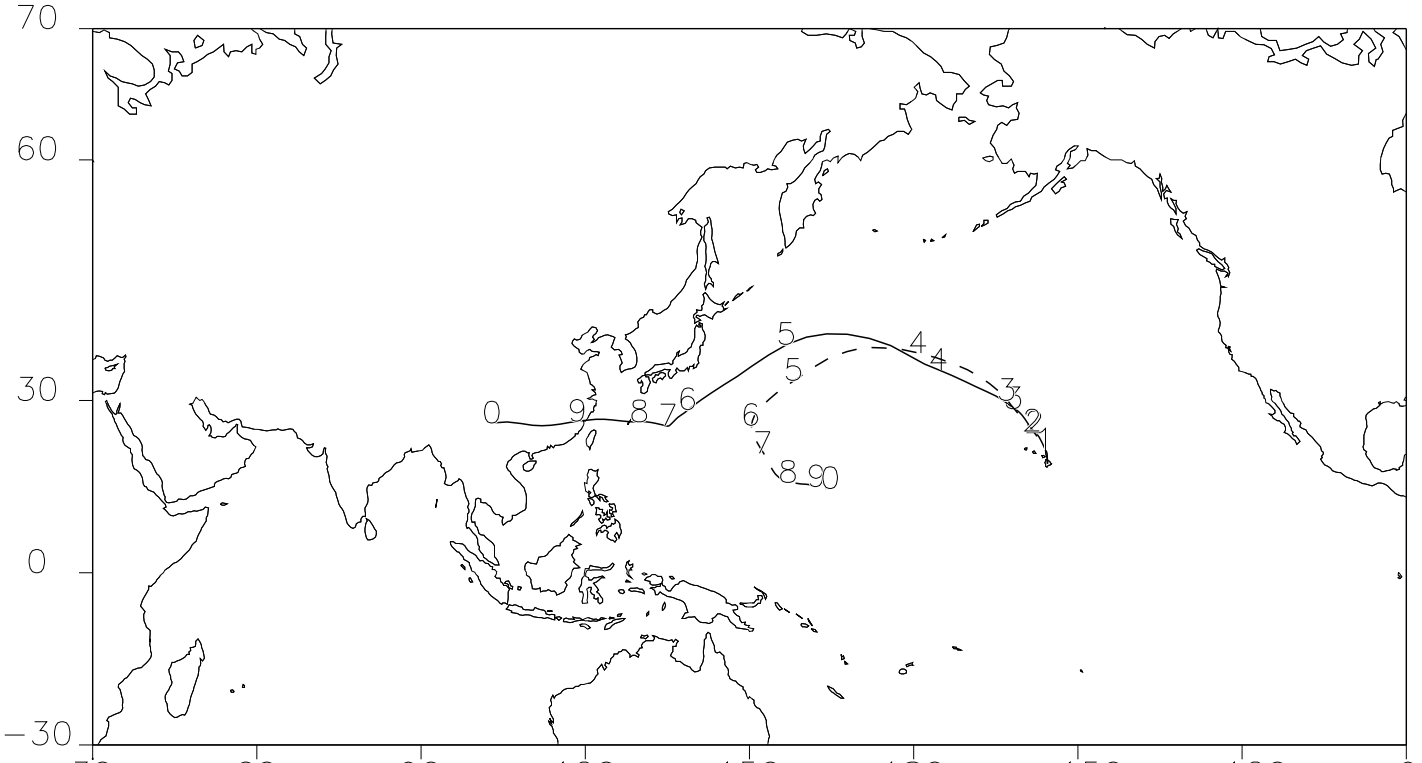
Day	km	hPa	C
0	4.0	630	3
1	4.9	562	−2
2	5.2	542	−6
3	5.9	493	−12
4	7.1	415	−24
5	7.3	397	−27
6	3.1	691	4
7	3.7	639	−5
8	2.8	721	3
9	2.5	754	5
10	3.3	681	−4

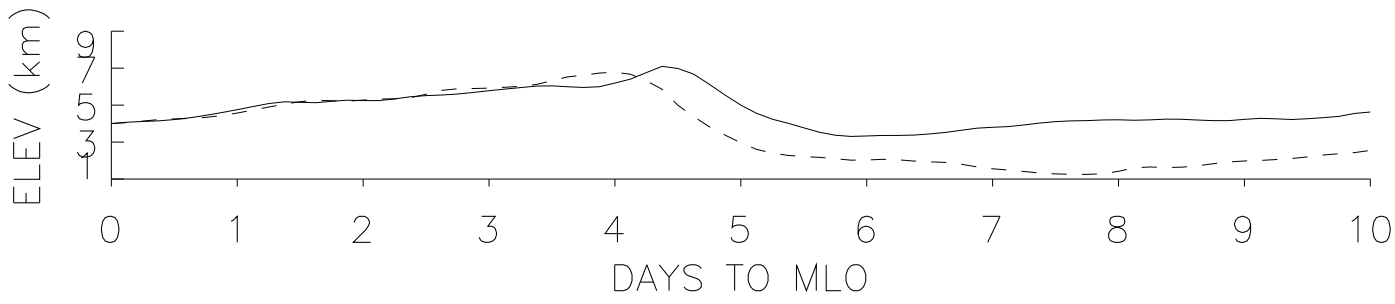
06UT

Day	km	hPa	C
0	4.0	630	3
1	5.0	559	−3
2	5.2	540	−5
3	5.9	492	−11
4	6.9	428	−21
5	6.5	441	−20
6	2.4	763	10
7	1.6	836	17
8	1.2	876	21
9	1.6	841	18
10	1.7	829	18

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/25/2004 (Day of Year 116)
NCEP/NCAR Reanalysis 1 Data Set





12UT

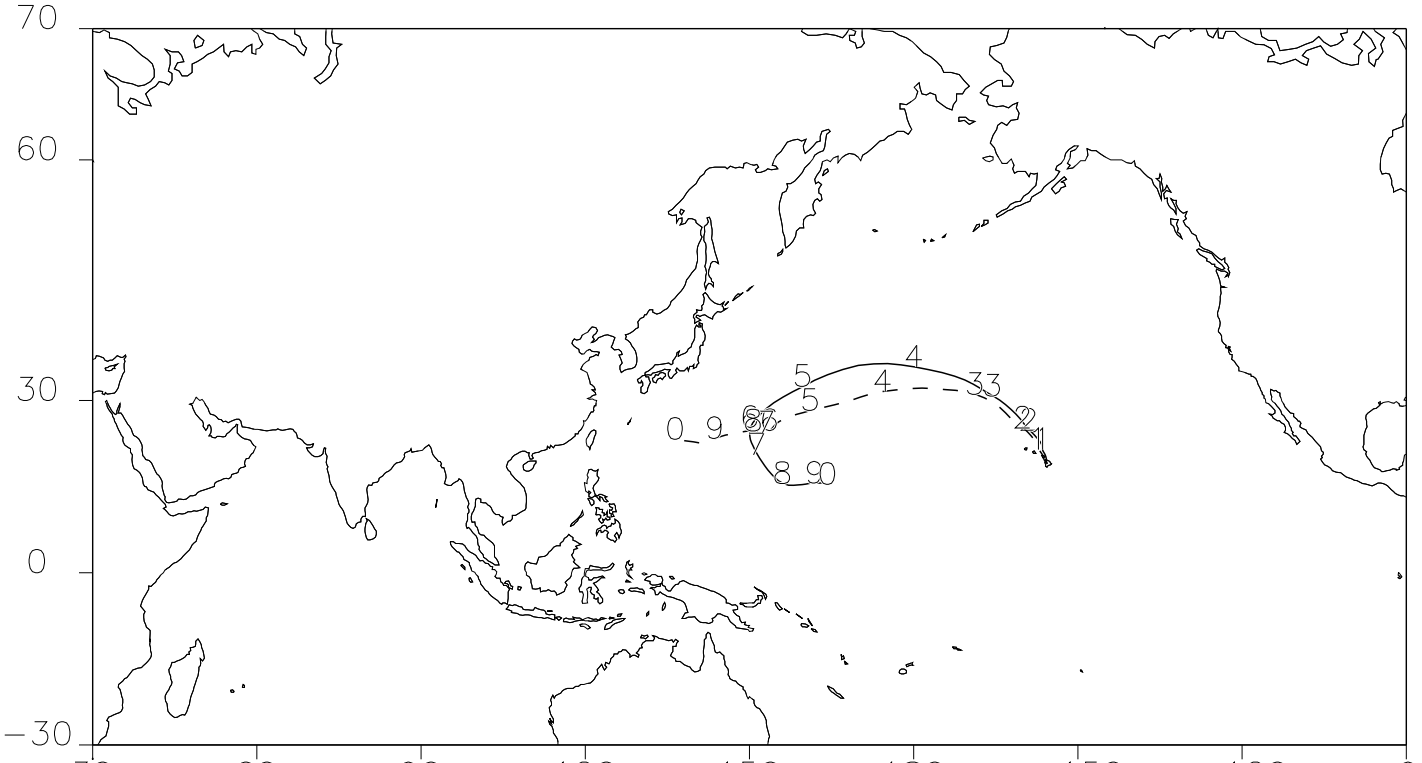
Day	km	hPa	C
0	4.0	629	3
1	4.8	574	−2
2	5.2	540	−6
3	5.8	502	−10
4	6.2	471	−14
5	5.0	547	−6
6	3.3	686	8
7	3.8	648	5
8	4.2	612	1
9	4.2	608	0
10	4.6	578	−4

18UT

Day	km	hPa	C
0	4.0	629	3
1	4.6	589	−1
2	5.3	539	−5
3	5.9	493	−11
4	6.8	432	−21
5	3.0	711	7
6	2.0	803	14
7	1.6	848	16
8	1.4	859	19
9	2.0	806	15
10	2.5	752	12

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/26/2004 (Day of Year 117)
NCEP/NCAR Reanalysis 1 Data Set

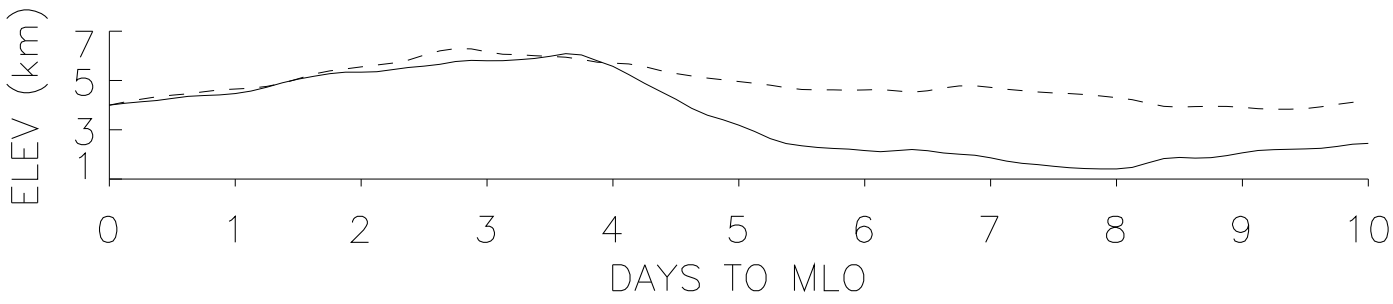


00UT

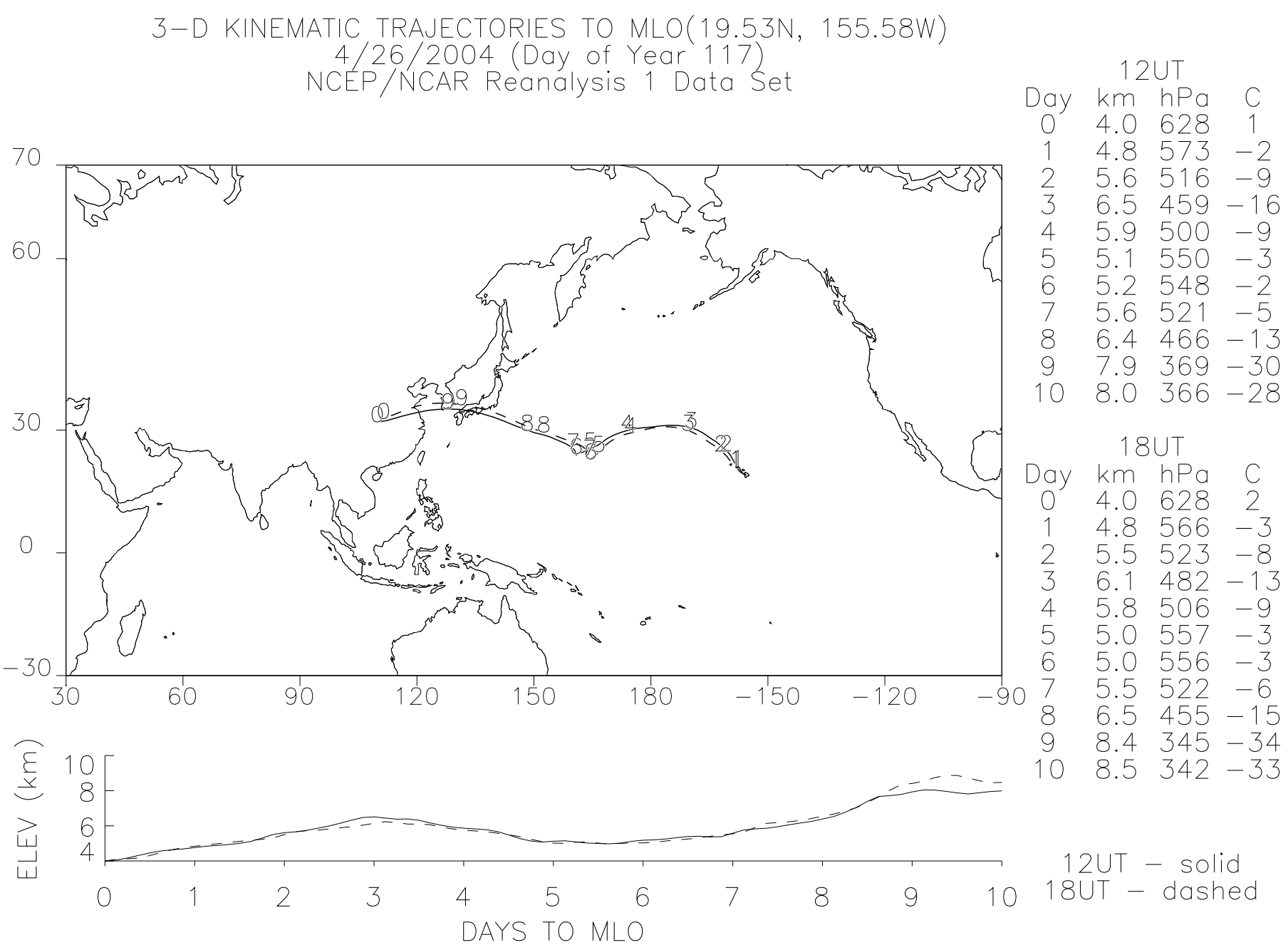
Day	km	hPa	C
0	4.0	629	2
1	4.5	595	0
2	5.3	534	−5
3	5.8	503	−9
4	5.6	513	−9
5	3.2	694	6
6	2.2	793	13
7	1.9	820	15
8	1.4	861	19
9	2.1	798	16
10	2.4	763	13

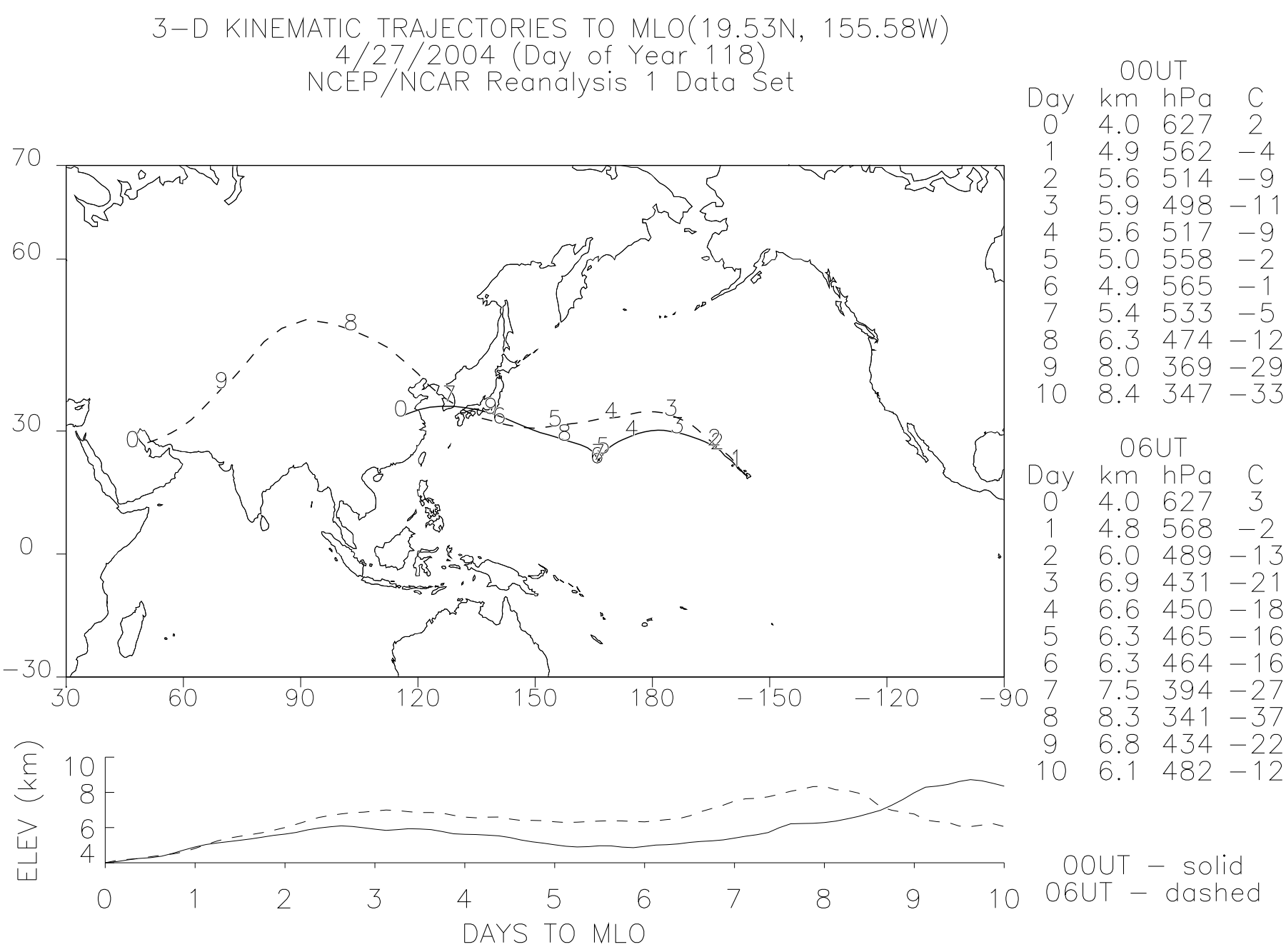
06UT

Day	km	hPa	C
0	4.0	629	2
1	4.7	581	−1
2	5.6	520	−7
3	6.2	479	−13
4	5.7	507	−10
5	5.0	559	−3
6	4.6	587	1
7	4.7	580	0
8	4.3	608	1
9	3.9	635	5
10	4.2	613	3

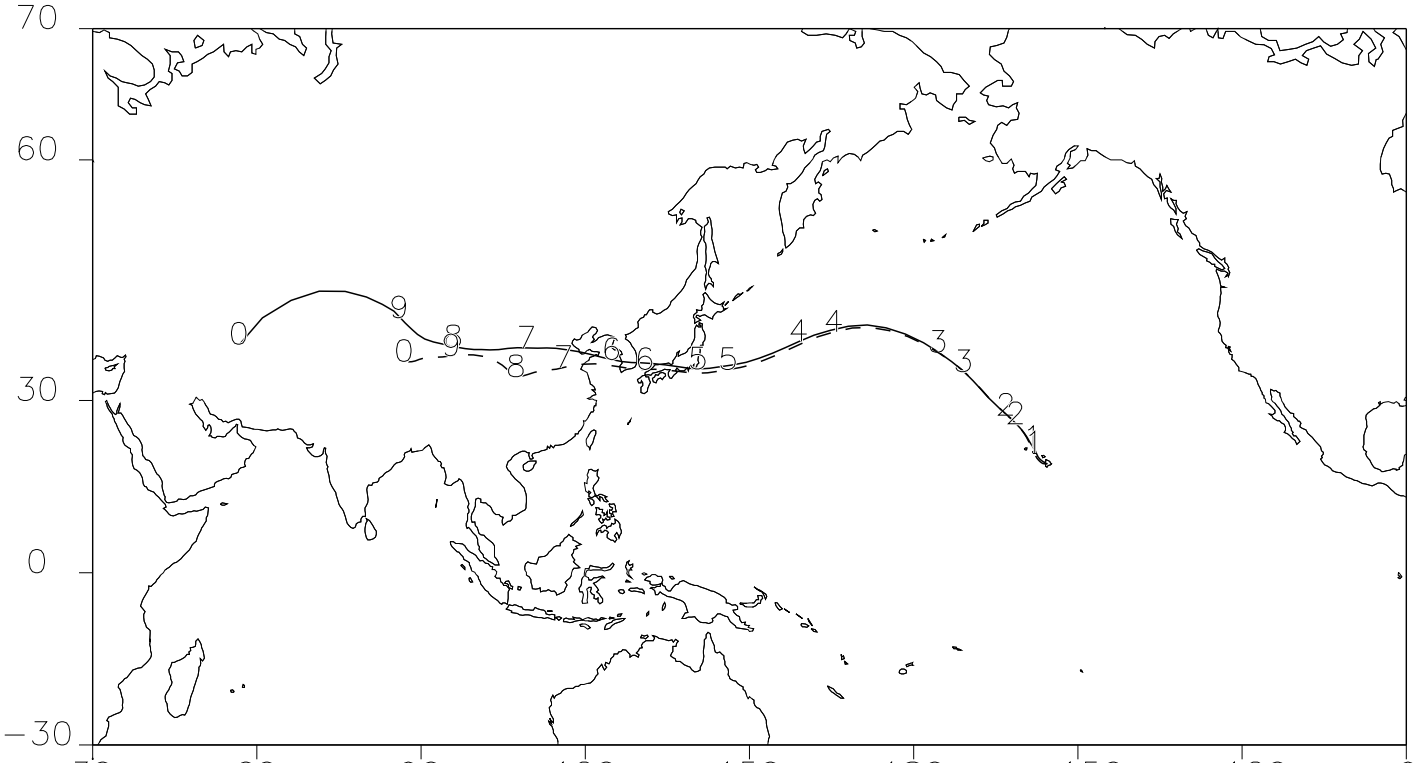


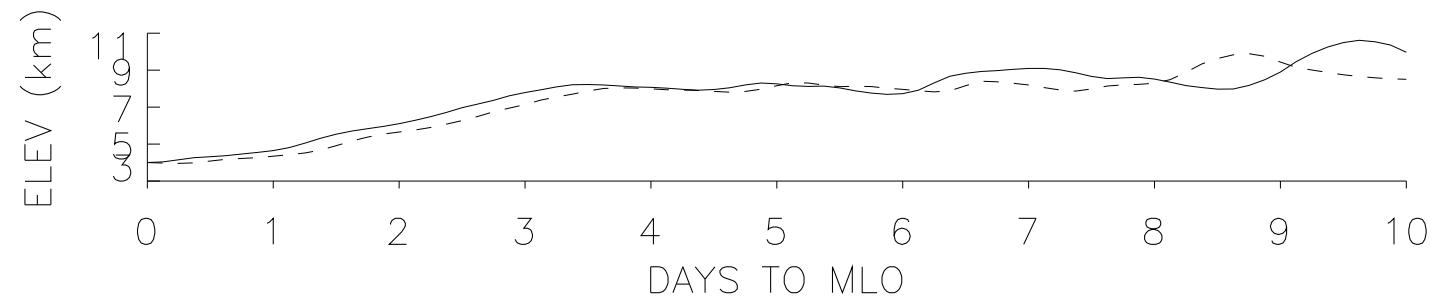
00UT − solid
06UT − dashed


3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/26/2004 (Day of Year 117)
NCEP/NCAR Reanalysis 1 Data Set
70
60
30
0
-30
30
60
90
120
150
180
-150
-120
-90
0
1
8.8
7.5
6.6
4
3
2
1
ELEV (km)
10
8
6
4
0
1
2
3
4
5
6
7
8
9
10
DAYS TO MLO
12UT
Day km hPa C
0 4.0 628 1
1 4.8 573 -2
2 5.6 516 -9
3 6.5 459 -16
4 5.9 500 -9
5 5.1 550 -3
6 5.2 548 -2
7 5.6 521 -5
8 6.4 466 -13
9 7.9 369 -30
10 8.0 366 -28
18UT
Day km hPa C
0 4.0 628 2
1 4.8 566 -3
2 5.5 523 -8
3 6.1 482 -13
4 5.8 506 -9
5 5.0 557 -3
6 5.0 556 -3
7 5.5 522 -6
8 6.5 455 -15
9 8.4 345 -34
10 8.5 342 -33
12UT - solid
18UT - dashed


3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/27/2004 (Day of Year 118)
NCEP/NCAR Reanalysis 1 Data Set
70
60
30
0
-30
30
60
90
120
150
180
-150
-120
-90
ELEV (km)
10
8
6
4
0
1
2
3
4
5
6
7
8
9
10
DAYS TO MLO
00UT
Day km hPa C
0 4.0 627 2
1 4.9 562 -4
2 5.6 514 -9
3 5.9 498 -11
4 5.6 517 -9
5 5.0 558 -2
6 4.9 565 -1
7 5.4 533 -5
8 6.3 474 -12
9 8.0 369 -29
10 8.4 347 -33
06UT
Day km hPa C
0 4.0 627 3
1 4.8 568 -2
2 6.0 489 -13
3 6.9 431 -21
4 6.6 450 -18
5 6.3 465 -16
6 6.3 464 -16
7 7.5 394 -27
8 8.3 341 -37
9 6.8 434 -22
10 6.1 482 -12
00UT - solid
06UT - dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/27/2004 (Day of Year 118)
NCEP/NCAR Reanalysis 1 Data Set





12UT

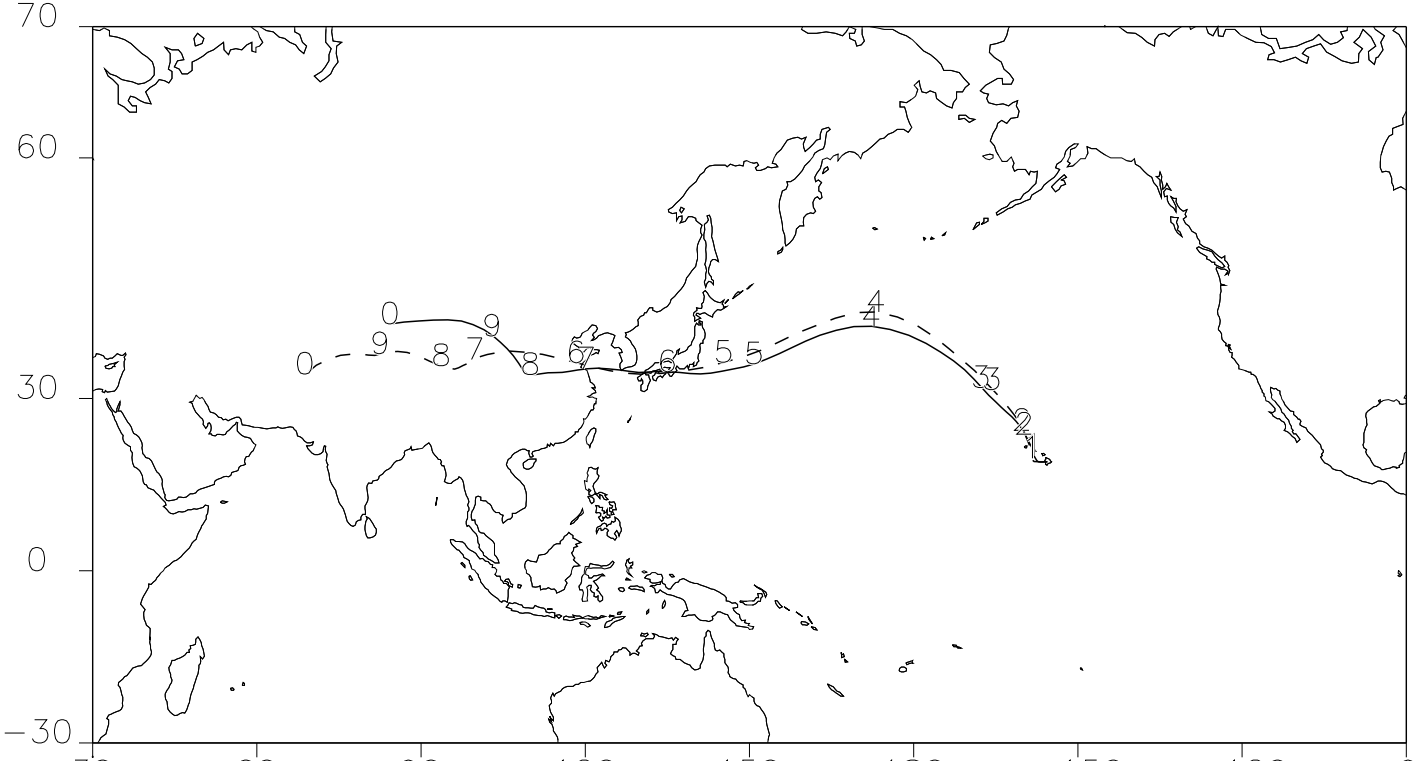
Day	km	hPa	C
0	4.0	627	3
1	4.6	579	-2
2	6.1	481	-14
3	7.8	382	-28
4	8.1	360	-31
5	8.3	353	-32
6	7.7	382	-28
7	9.1	315	-39
8	8.5	342	-35
9	8.9	321	-40
10	10.0	267	-51

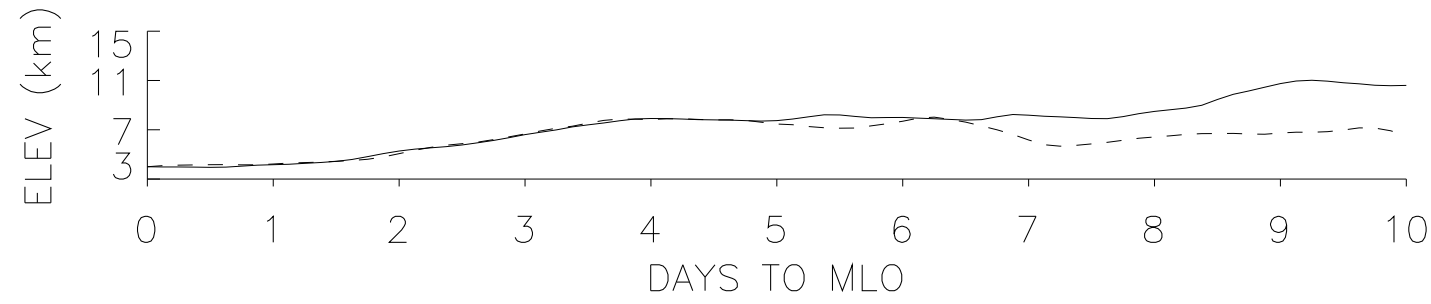
18UT

Day	km	hPa	C
0	4.0	629	4
1	4.3	602	0
2	5.7	510	-11
3	7.1	419	-23
4	8.0	365	-31
5	8.2	357	-31
6	8.0	369	-30
7	8.2	360	-30
8	8.3	356	-31
9	9.4	299	-42
10	8.5	343	-34

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/28/2004 (Day of Year 119)
NCEP/NCAR Reanalysis 1 Data Set





00UT

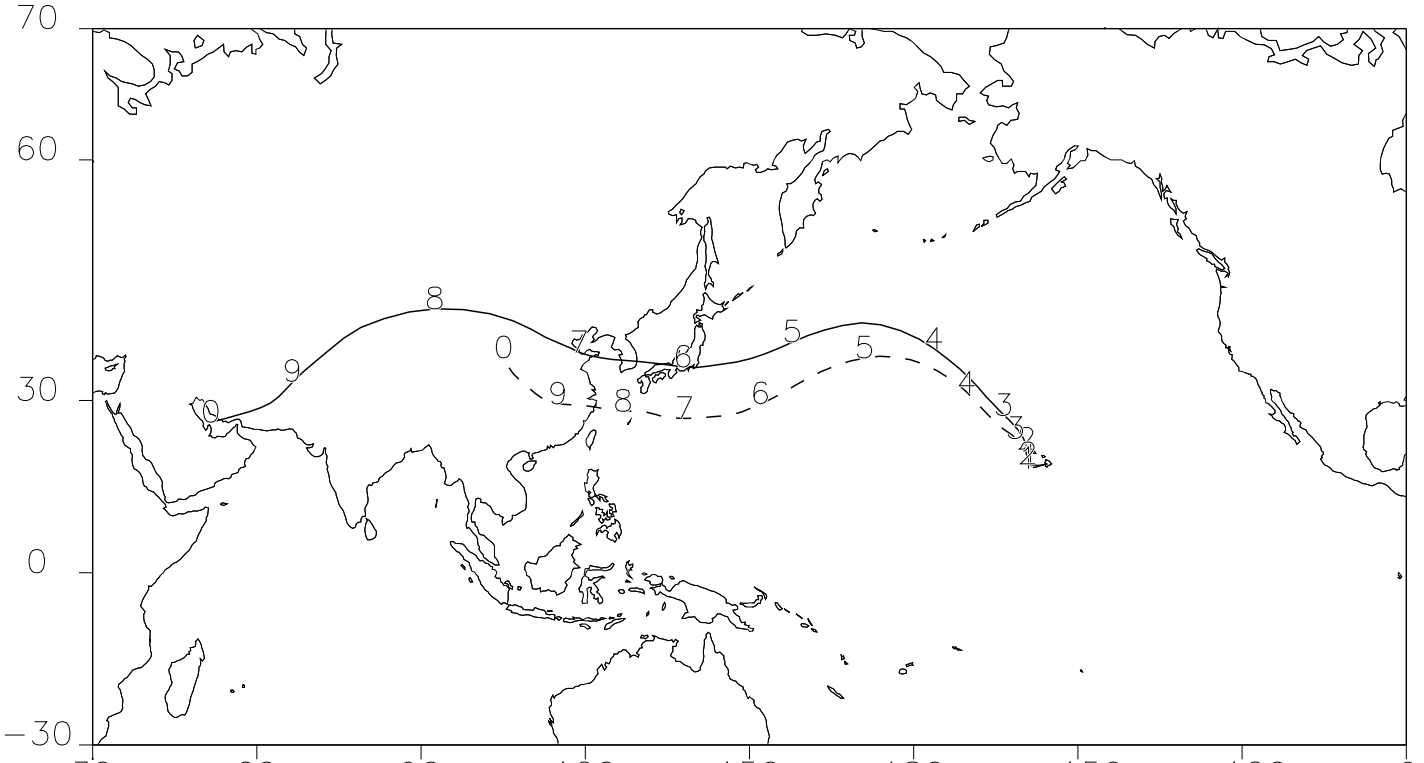
Day	km	hPa	C
0	4.0	629	4
1	4.2	615	1
2	5.3	536	−7
3	6.6	451	−18
4	7.9	371	−31
5	7.7	378	−28
6	8.0	367	−30
7	8.2	361	−30
8	8.5	347	−32
9	10.8	243	−56
10	10.6	248	−54

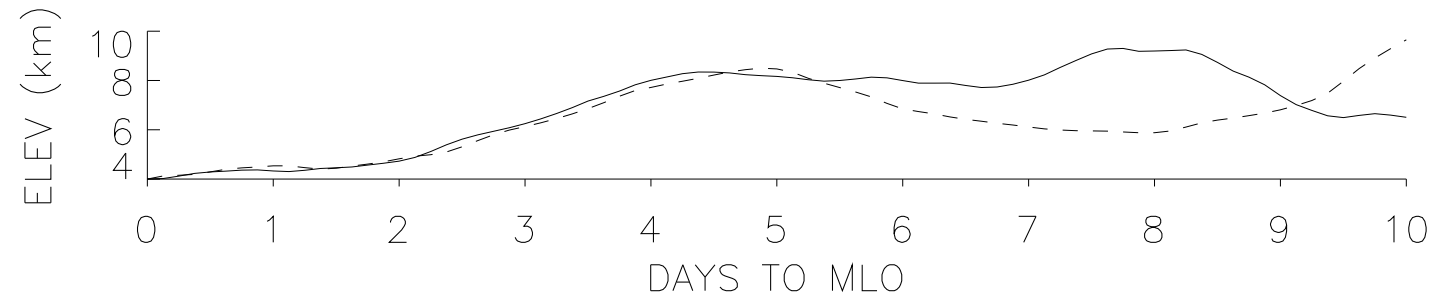
06UT

Day	km	hPa	C
0	4.0	629	3
1	4.2	611	3
2	5.1	550	−4
3	6.7	446	−19
4	7.8	374	−29
5	7.5	391	−26
6	7.7	384	−26
7	6.2	477	−11
8	6.4	463	−13
9	6.7	442	−16
10	6.5	454	−15

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/28/2004 (Day of Year 119)
NCEP/NCAR Reanalysis 1 Data Set





12UT

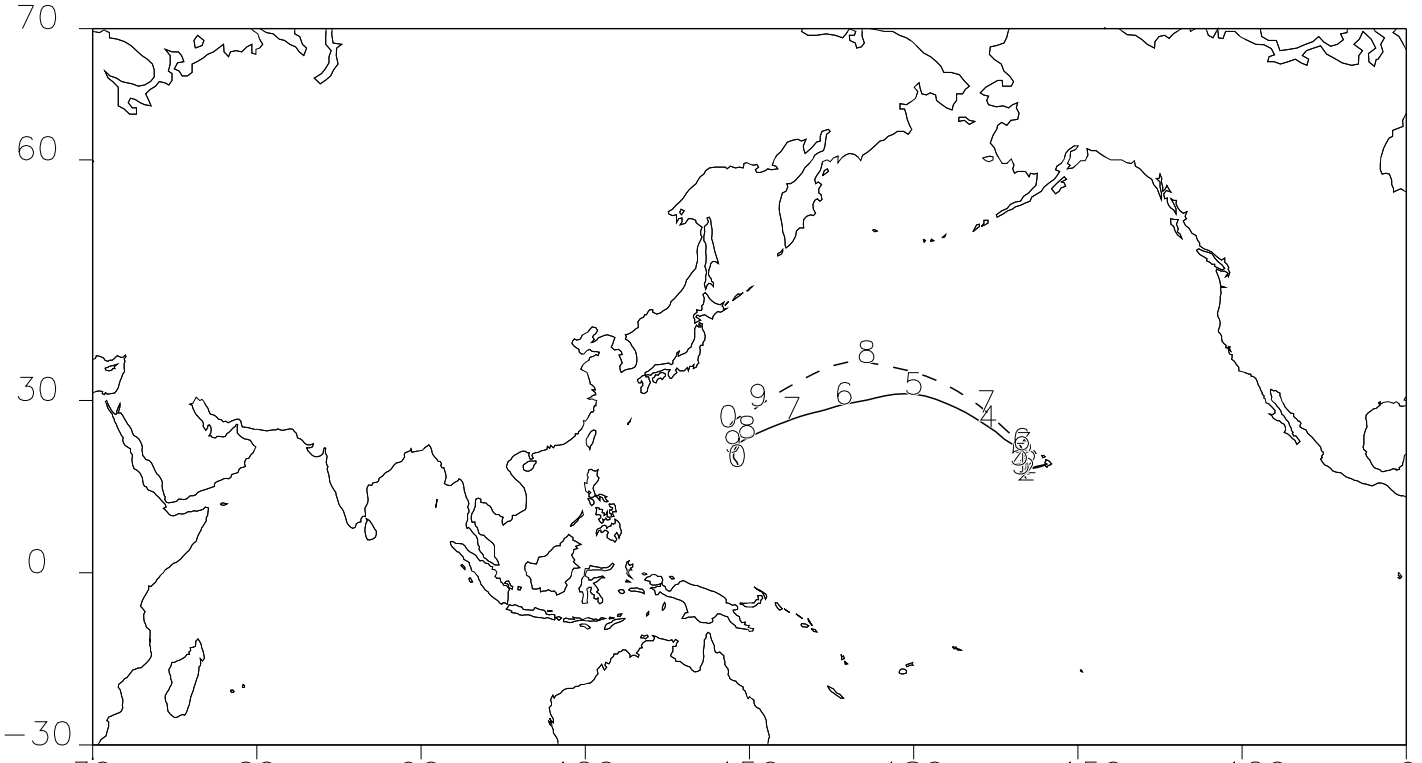
Day	km	hPa	C
0	4.0	629	3
1	4.3	603	2
2	4.7	573	−2
3	6.2	472	−15
4	8.0	370	−30
5	8.2	355	−31
6	8.0	366	−30
7	8.0	368	−29
8	9.2	308	−41
9	7.4	403	−25
10	6.5	454	−16

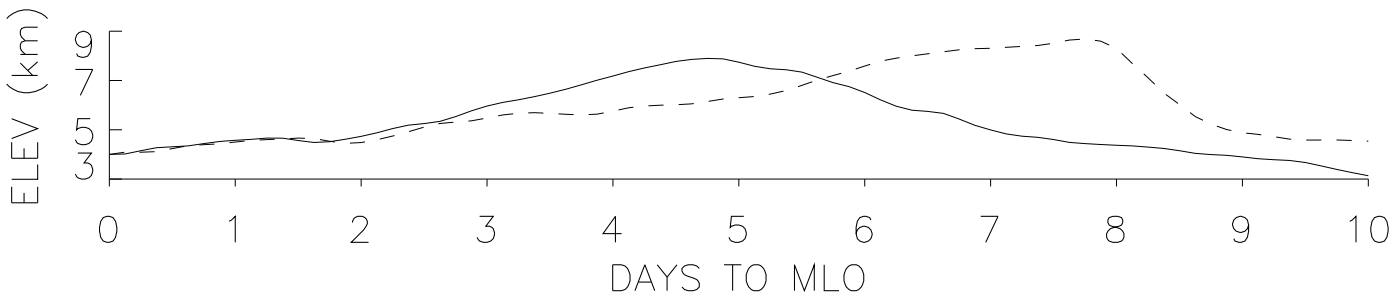
18UT

Day	km	hPa	C
0	4.0	631	3
1	4.5	589	1
2	4.8	567	−2
3	6.1	480	−13
4	7.7	389	−26
5	8.5	345	−34
6	6.8	433	−19
7	6.1	480	−11
8	5.9	496	−11
9	6.8	438	−18
10	9.7	288	−46

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/29/2004 (Day of Year 120)
NCEP/NCAR Reanalysis 1 Data Set





00UT

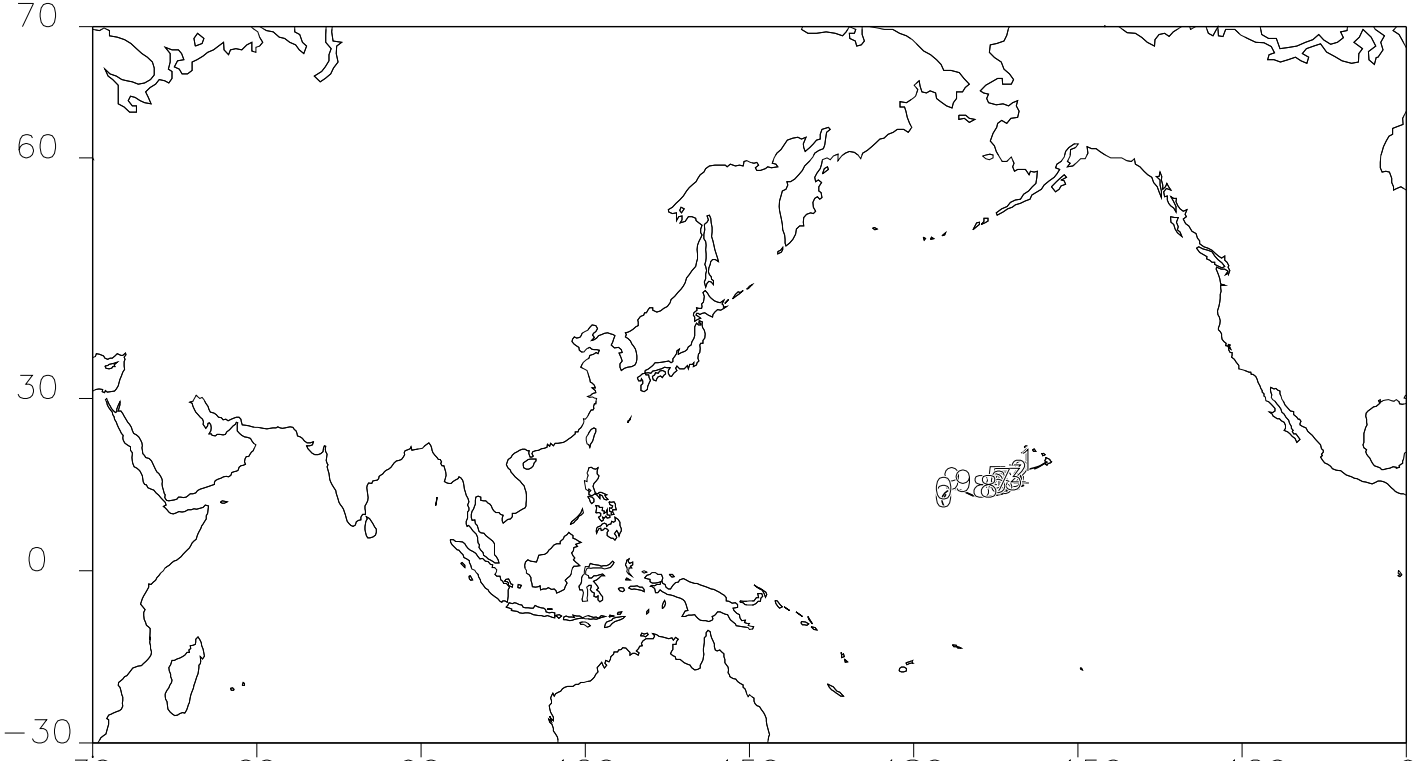
Day	km	hPa	C
0	4.0	630	4
1	4.6	586	0
2	4.7	573	−2
3	6.0	491	−10
4	7.2	420	−20
5	7.7	389	−25
6	6.5	458	−16
7	5.0	557	−4
8	4.4	604	1
9	3.9	643	5
10	3.1	703	10

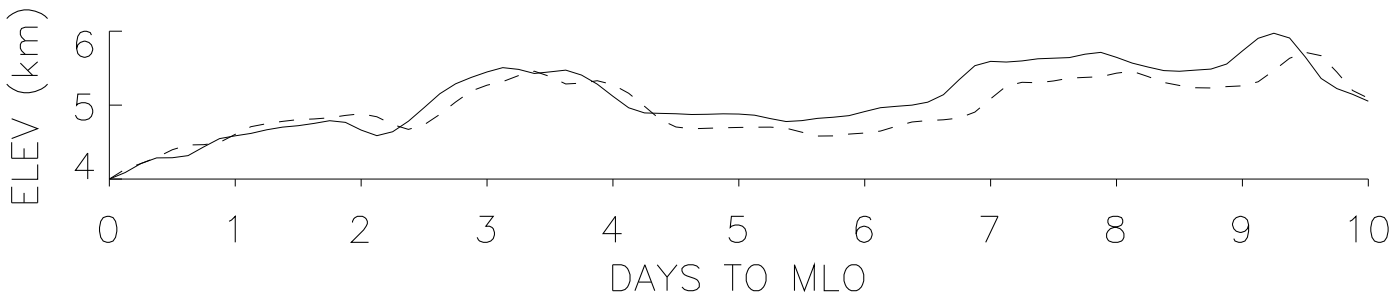
06UT

Day	km	hPa	C
0	4.0	631	4
1	4.5	592	0
2	4.5	592	1
3	5.5	522	−6
4	5.8	506	−7
5	6.3	473	−9
6	7.6	399	−18
7	8.3	359	−26
8	8.3	355	−29
9	4.9	566	−1
10	4.5	593	3

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/29/2004 (Day of Year 120)
NCEP/NCAR Reanalysis 1 Data Set





12UT

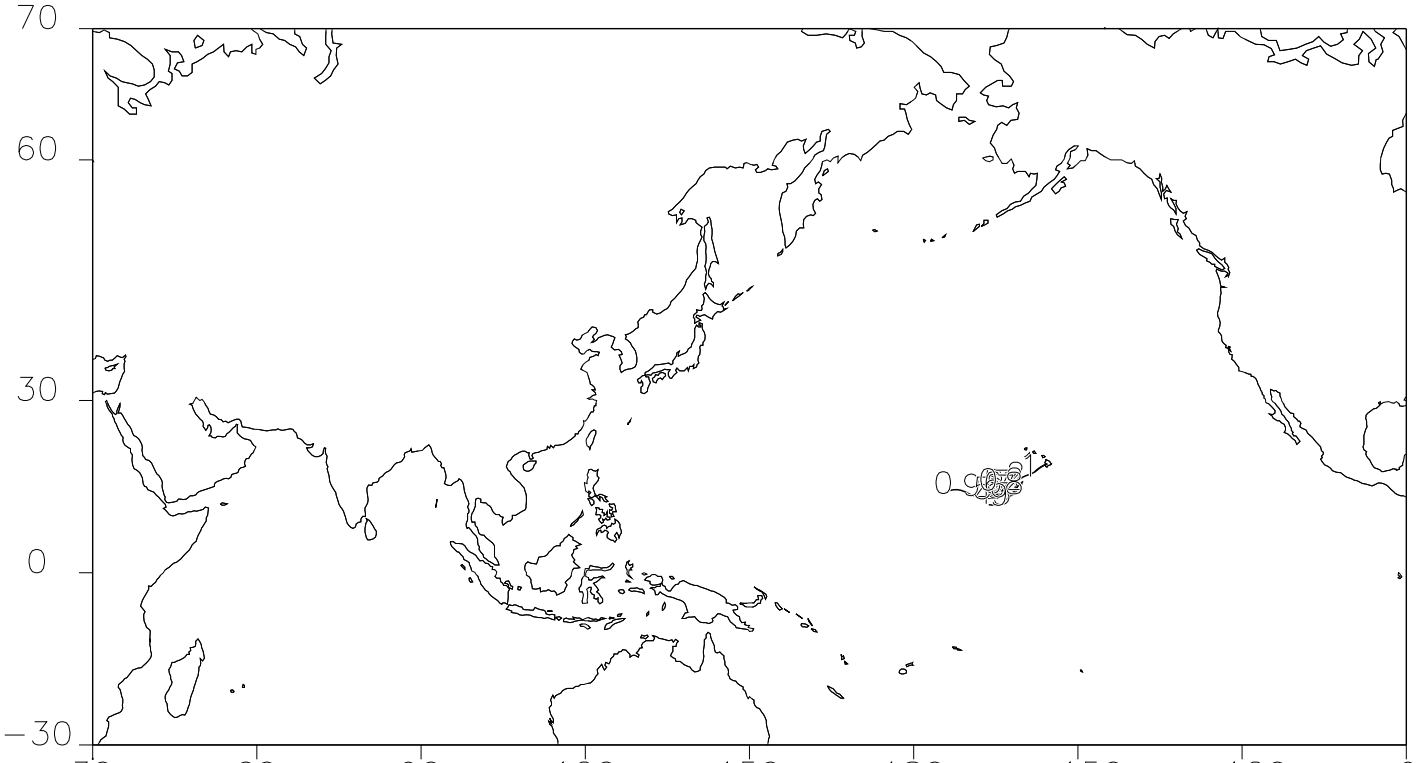
Day	km	hPa	C
0	4.0	630	4
1	4.6	585	−1
2	4.7	579	−1
3	5.4	524	−5
4	5.1	548	−2
5	4.9	566	−1
6	4.9	565	−1
7	5.6	518	−5
8	5.6	513	−6
9	5.7	509	−6
10	5.1	555	−2

18UT

Day	km	hPa	C
0	4.0	632	5
1	4.6	585	0
2	4.9	564	−2
3	5.3	536	−4
4	5.3	537	−4
5	4.7	579	0
6	4.6	586	1
7	5.1	552	−2
8	5.4	527	−4
9	5.3	540	−3
10	5.1	552	−2

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/30/2004 (Day of Year 121)
NCEP/NCAR Reanalysis 1 Data Set

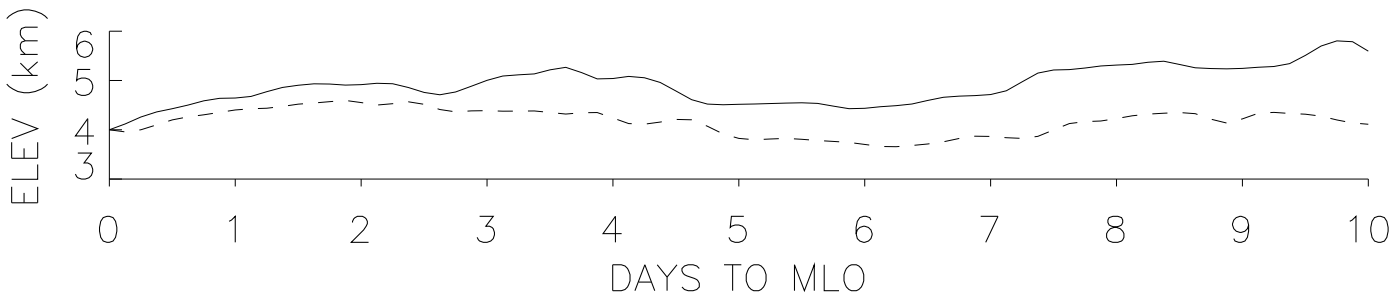


00UT

Day	km	hPa	C
0	4.0	631	4
1	4.6	582	0
2	4.9	561	−2
3	5.0	554	−2
4	5.0	552	−3
5	4.5	592	1
6	4.4	599	2
7	4.7	578	1
8	5.3	535	−3
9	5.2	540	−3
10	5.6	518	−6

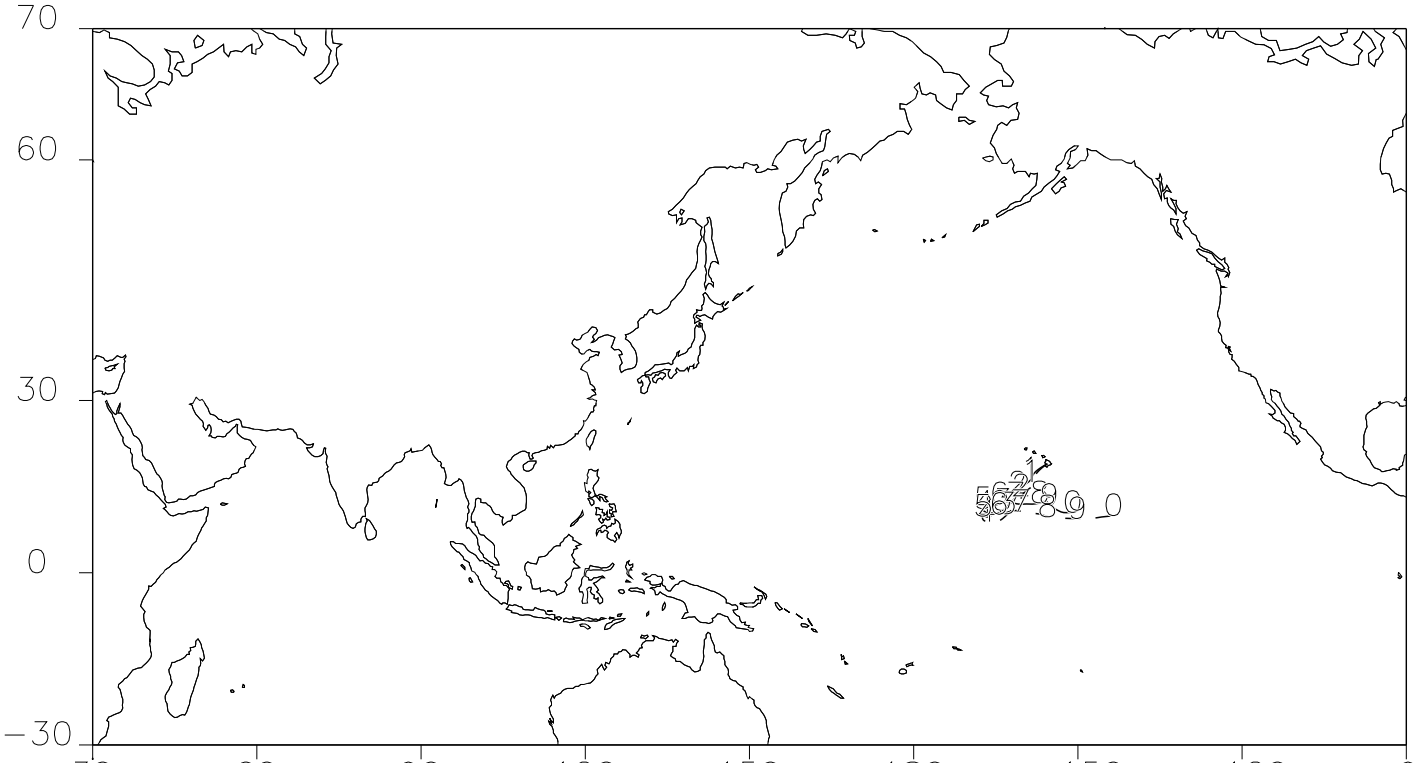
06UT

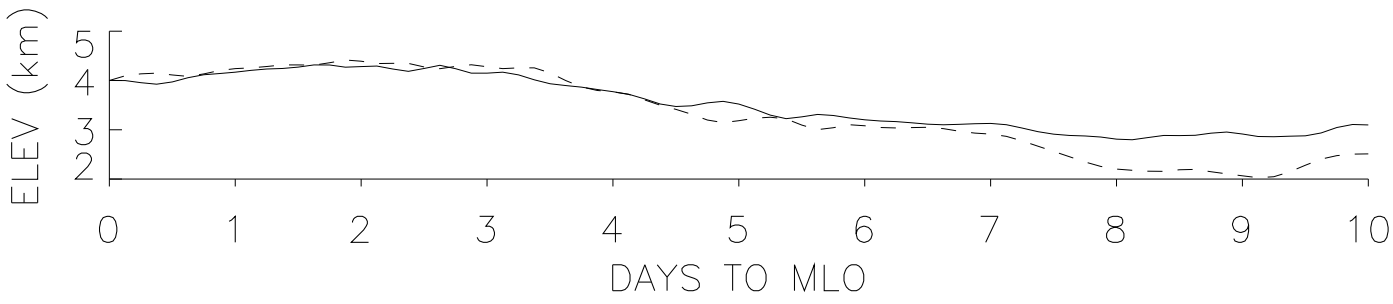
Day	km	hPa	C
0	4.0	632	4
1	4.4	601	2
2	4.6	588	0
3	4.4	598	0
4	4.2	611	1
5	3.8	644	5
6	3.7	656	6
7	3.9	642	5
8	4.2	614	2
9	4.2	613	4
10	4.1	623	4



00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/30/2004 (Day of Year 121)
NCEP/NCAR Reanalysis 1 Data Set





12UT

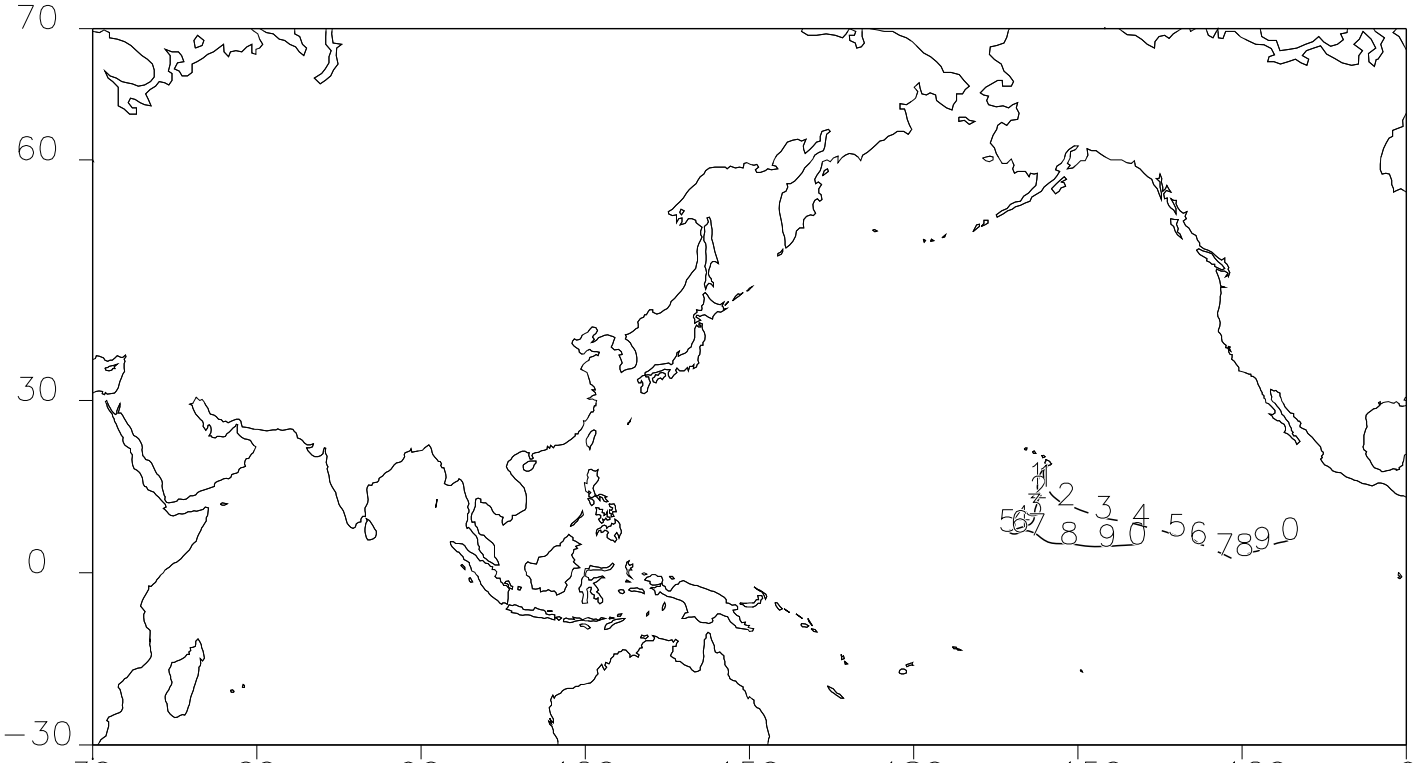
Day	km	hPa	C
0	4.0	631	4
1	4.2	618	3
2	4.3	608	1
3	4.1	618	2
4	3.8	647	4
5	3.5	669	7
6	3.2	696	9
7	3.1	702	9
8	2.8	729	11
9	2.9	719	10
10	3.1	702	9

18UT

Day	km	hPa	C
0	4.0	633	4
1	4.2	614	3
2	4.4	601	2
3	4.3	608	2
4	3.8	648	5
5	3.2	696	9
6	3.1	705	10
7	2.9	721	11
8	2.2	784	13
9	2.1	798	14
10	2.5	756	11

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/1/2004 (Day of Year 122)
NCEP/NCAR Reanalysis 1 Data Set

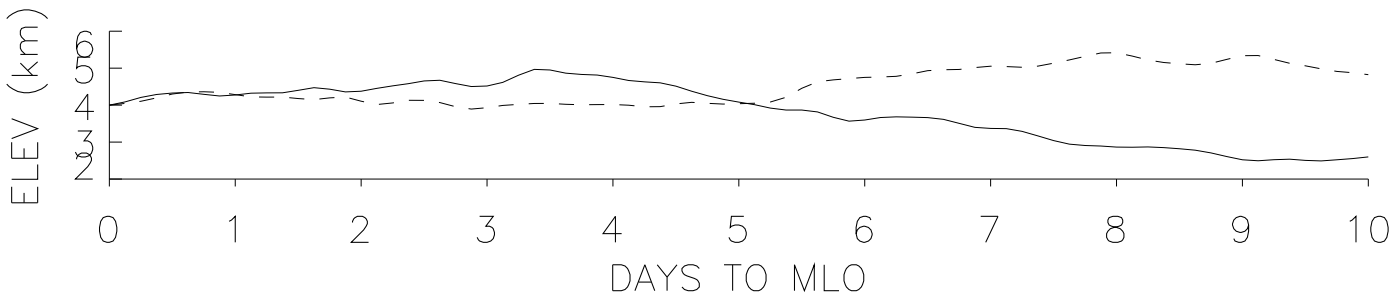


00UT

Day	km	hPa	C
0	4.0	632	4
1	4.3	610	3
2	4.4	602	3
3	4.5	590	2
4	4.7	573	1
5	4.1	623	5
6	3.6	663	7
7	3.4	681	9
8	2.9	723	11
9	2.5	752	13
10	2.6	745	13

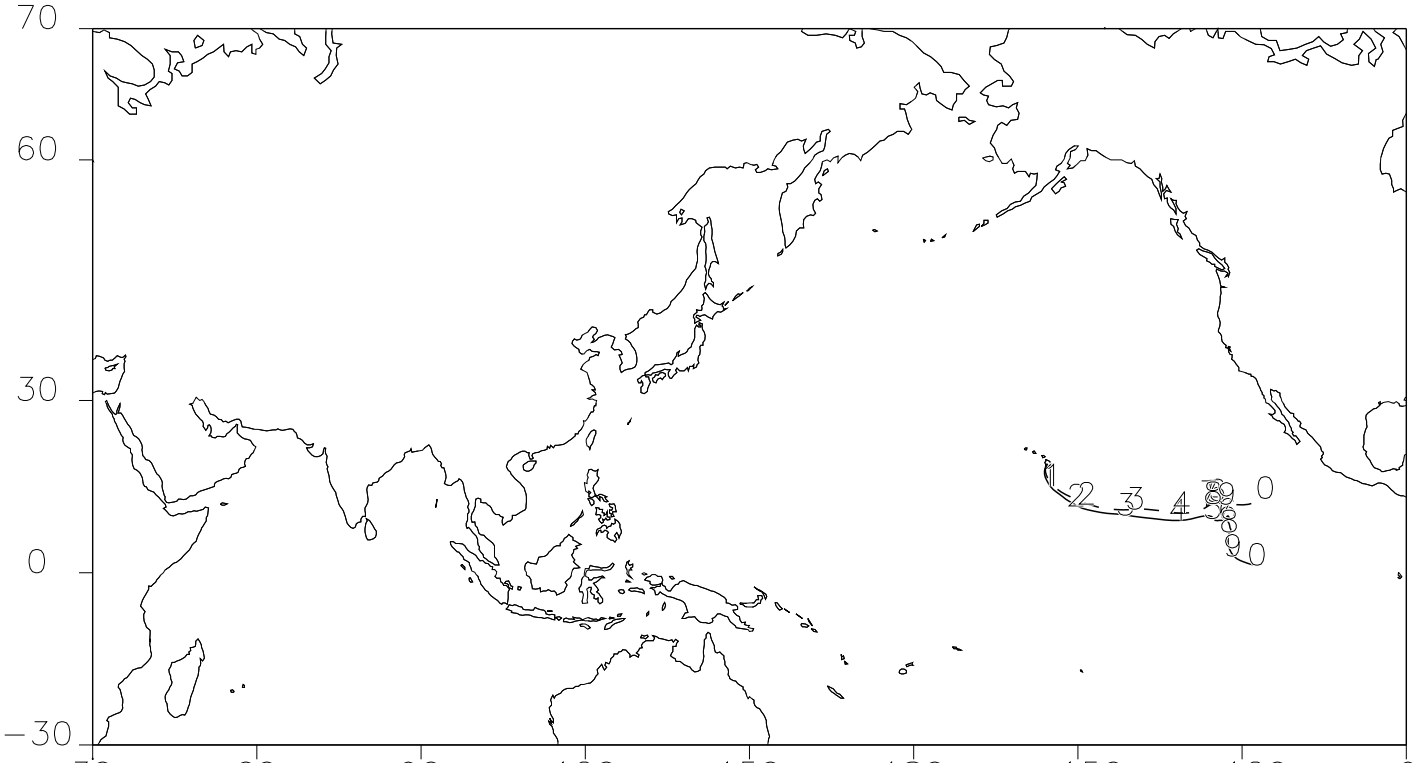
06UT

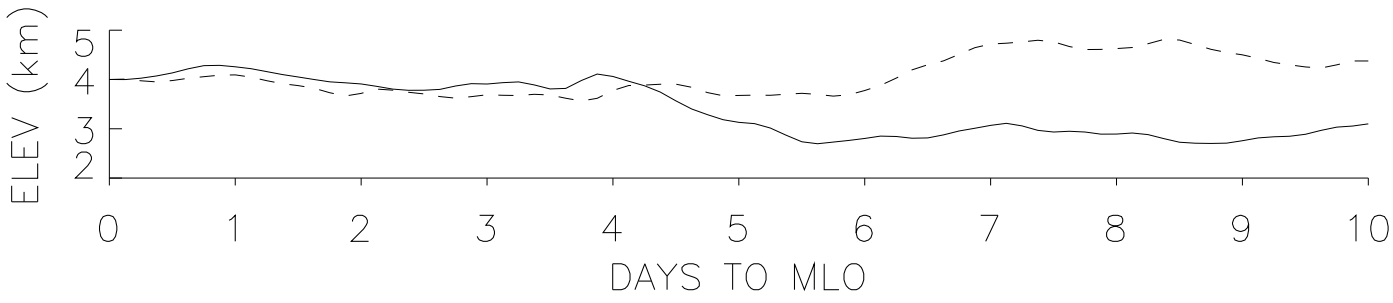
Day	km	hPa	C
0	4.0	632	4
1	4.3	610	3
2	4.1	624	5
3	3.9	637	6
4	4.0	629	6
5	4.0	628	7
6	4.8	576	1
7	5.1	555	0
8	5.4	530	−3
9	5.3	536	−2
10	4.8	571	1



00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/1/2004 (Day of Year 122)
NCEP/NCAR Reanalysis 1 Data Set





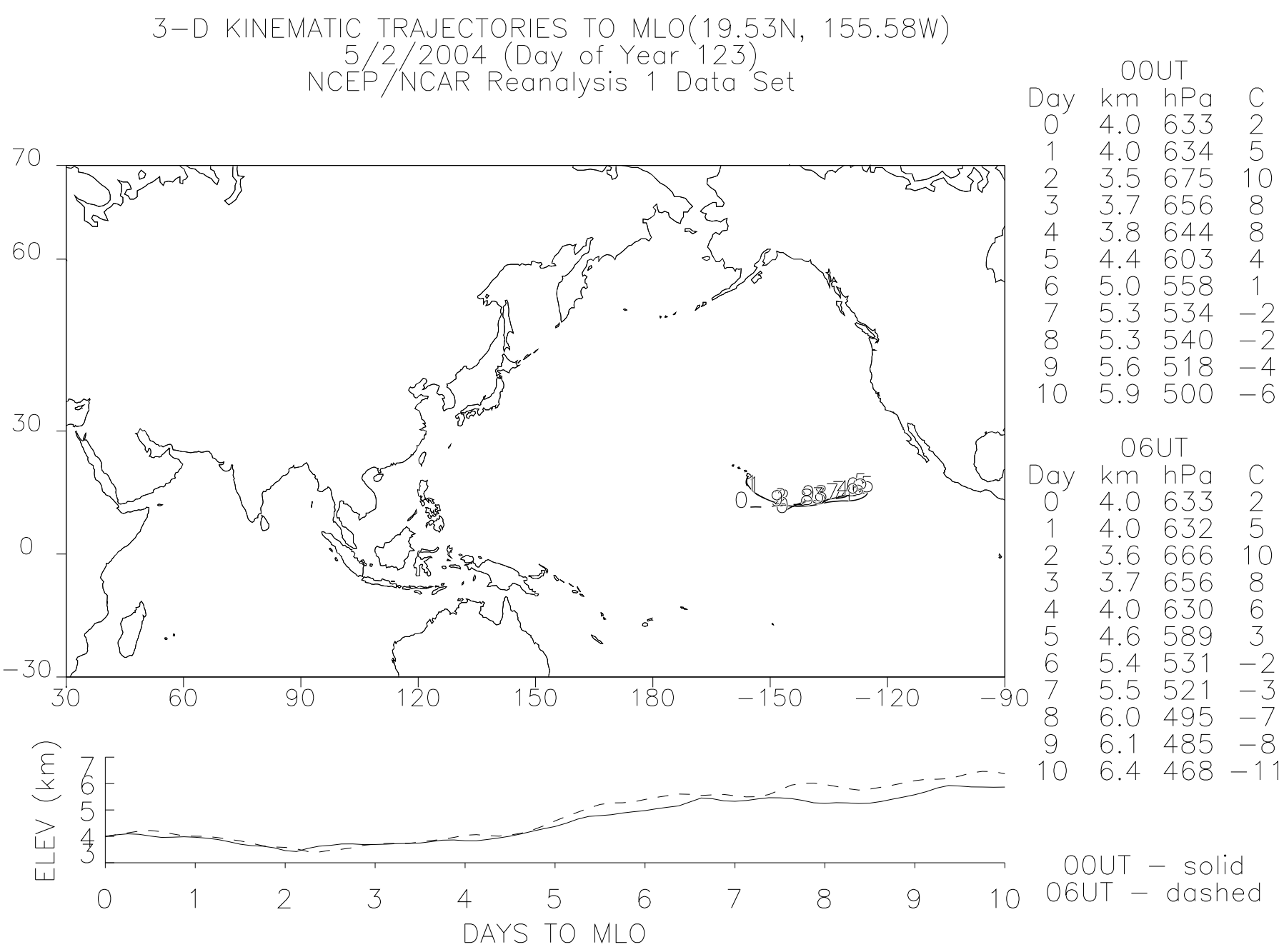
12UT

Day	km	hPa	C
0	4.0	632	3
1	4.3	611	3
2	3.9	638	6
3	3.9	637	6
4	4.1	625	5
5	3.1	699	12
6	2.8	728	12
7	3.1	704	8
8	2.9	720	9
9	2.8	732	11
10	3.1	701	10

18UT

Day	km	hPa	C
0	4.0	633	2
1	4.1	626	5
2	3.7	655	8
3	3.7	657	8
4	3.8	650	8
5	3.7	658	9
6	3.8	649	9
7	4.7	579	2
8	4.6	586	4
9	4.5	596	5
10	4.4	605	5

12UT – solid
18UT – dashed



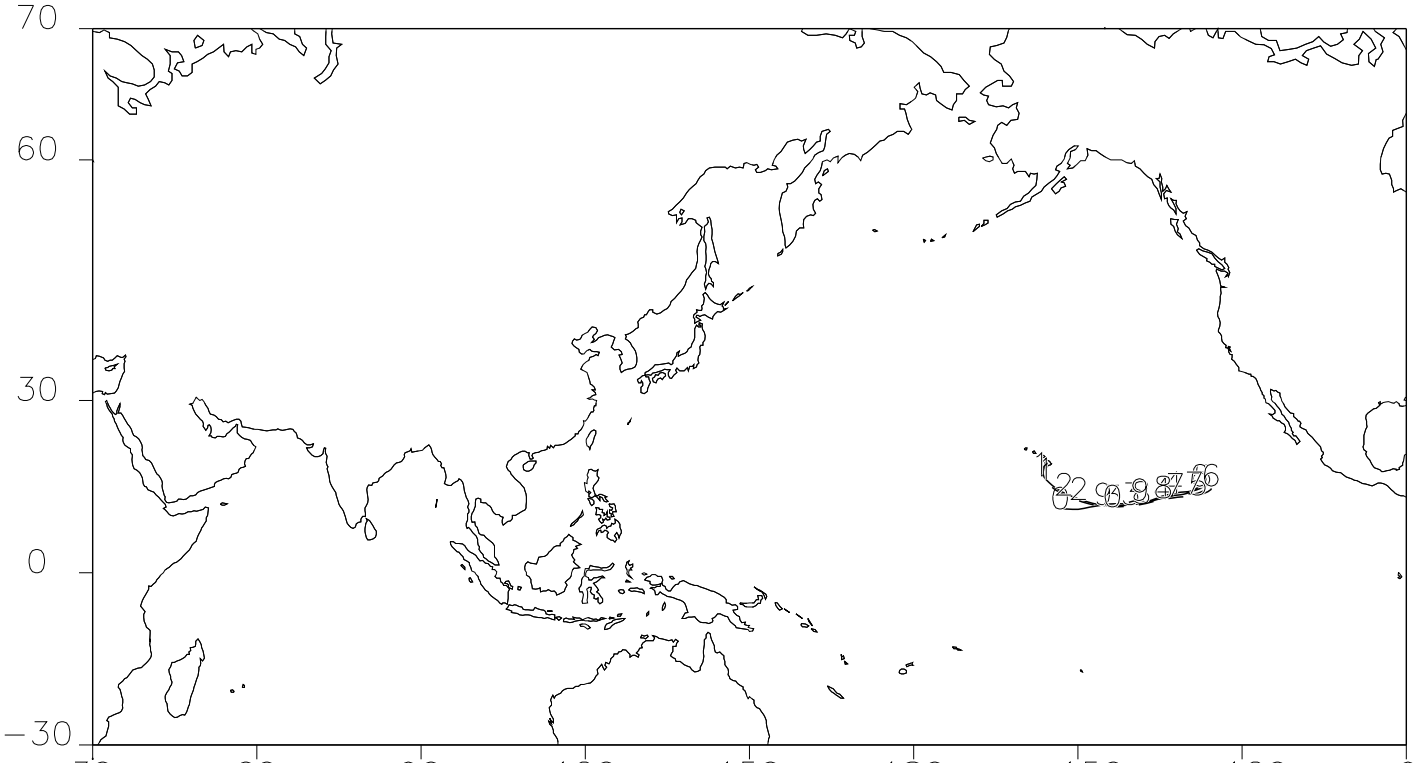
00UT

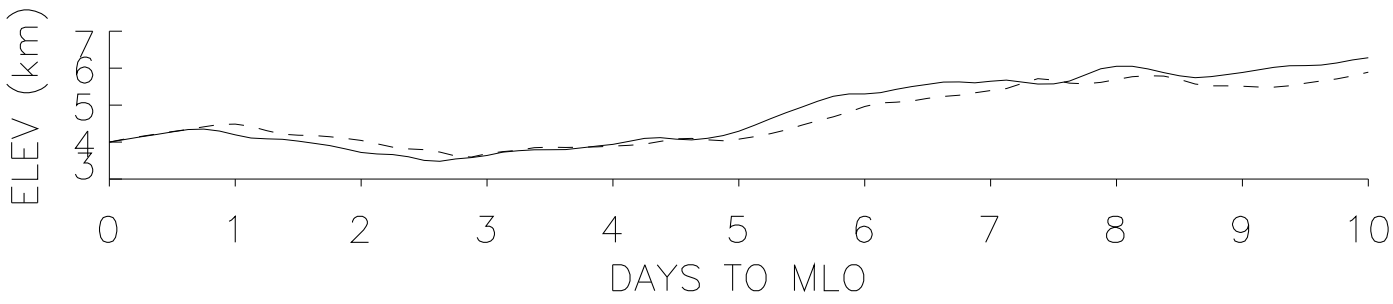
Day	km	hPa	C
0	4.0	633	2
1	4.0	634	5
2	3.5	675	10
3	3.7	656	8
4	3.8	644	8
5	4.4	603	4
6	5.0	558	1
7	5.3	534	-2
8	5.3	540	-2
9	5.6	518	-4
10	5.9	500	-6

06UT

Day	km	hPa	C
0	4.0	633	2
1	4.0	632	5
2	3.6	666	10
3	3.7	656	8
4	4.0	630	6
5	4.6	589	3
6	5.4	531	-2
7	5.5	521	-3
8	6.0	495	-7
9	6.1	485	-8
10	6.4	468	-11

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/2/2004 (Day of Year 123)
NCEP/NCAR Reanalysis 1 Data Set





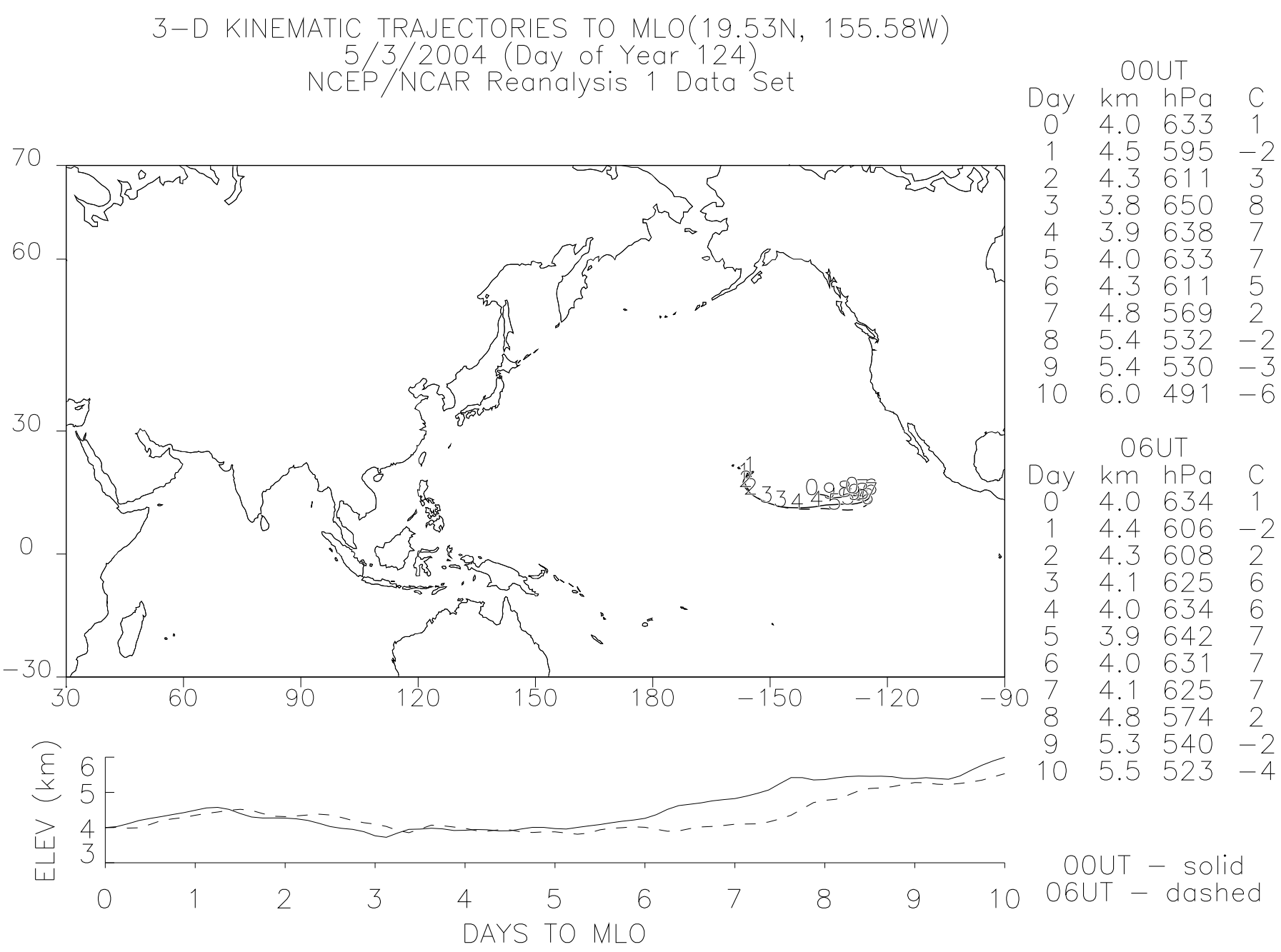
12UT

Day	km	hPa	C
0	4.0	633	2
1	4.2	616	2
2	3.7	653	8
3	3.6	659	8
4	3.9	636	6
5	4.3	609	4
6	5.3	536	−2
7	5.6	512	−4
8	6.1	487	−8
9	5.9	498	−7
10	6.3	474	−10

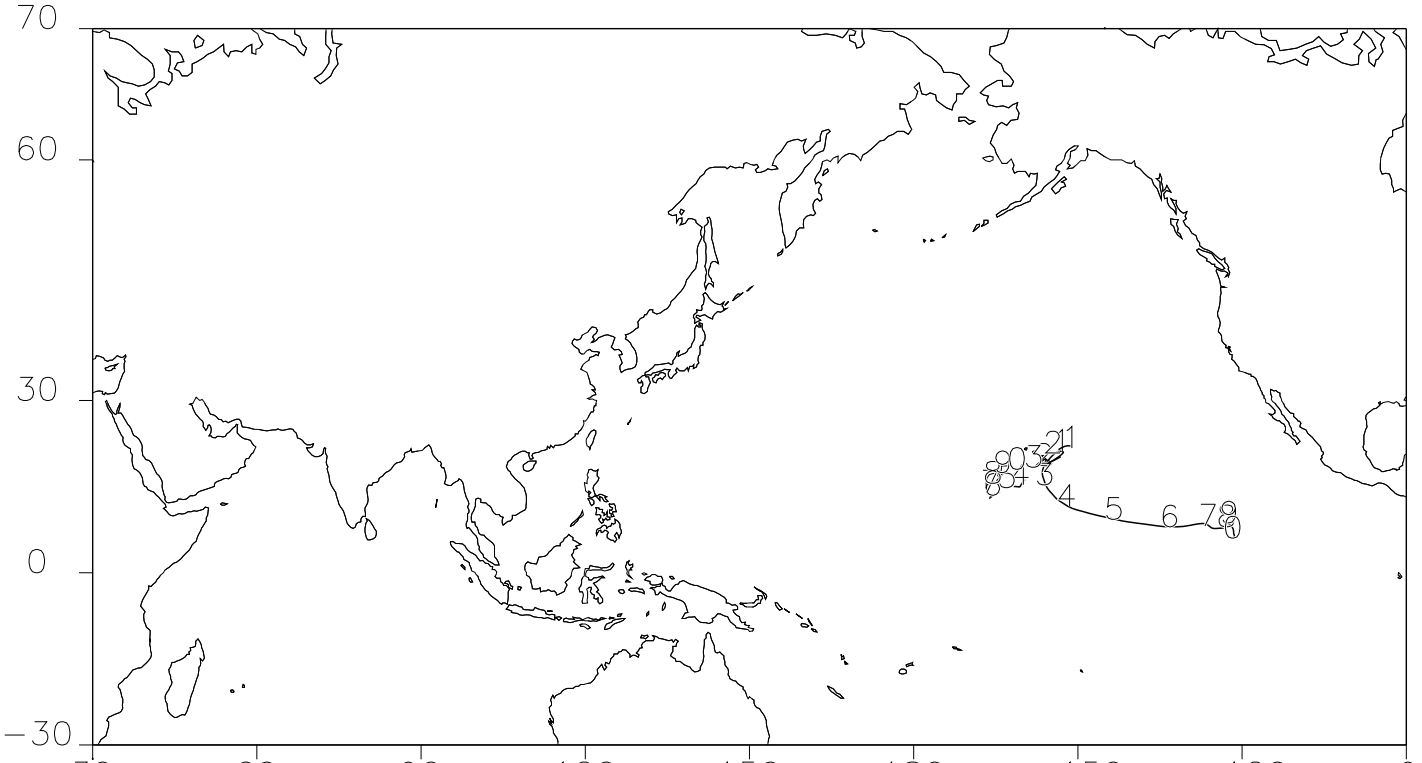
18UT

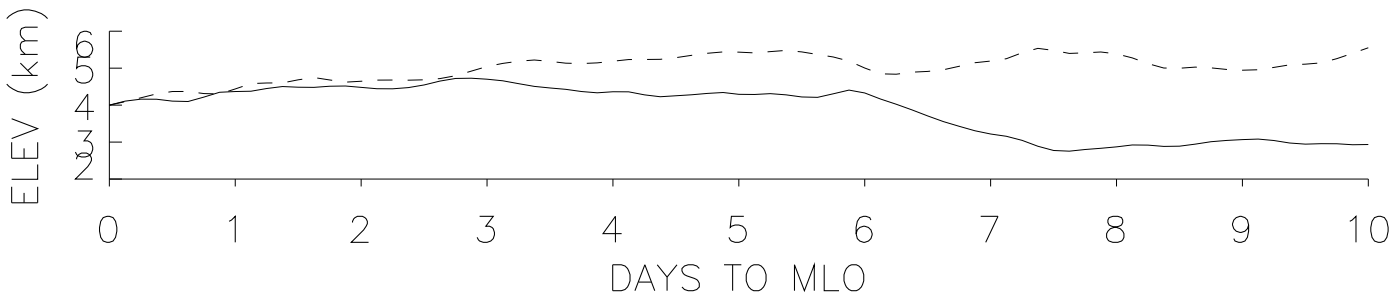
Day	km	hPa	C
0	4.0	634	2
1	4.5	596	−1
2	4.0	630	6
3	3.7	658	8
4	3.9	641	7
5	4.1	627	7
6	5.0	562	0
7	5.4	531	−2
8	5.7	512	−5
9	5.5	524	−4
10	5.9	499	−6

12UT − solid
18UT − dashed


3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/3/2004 (Day of Year 124)
NCEP/NCAR Reanalysis 1 Data Set
70
60
30
0
-30
30
60
90
120
150
180
-150
-120
-90
ELEV (km)
6
5
4
3
0
1
2
3
4
5
6
7
8
9
10
DAYS TO MLO
00UT
Day km hPa C
0 4.0 633 1
1 4.5 595 -2
2 4.3 611 3
3 3.8 650 8
4 3.9 638 7
5 4.0 633 7
6 4.3 611 5
7 4.8 569 2
8 5.4 532 -2
9 5.4 530 -3
10 6.0 491 -6
06UT
Day km hPa C
0 4.0 634 1
1 4.4 606 -2
2 4.3 608 2
3 4.1 625 6
4 4.0 634 6
5 3.9 642 7
6 4.0 631 7
7 4.1 625 7
8 4.8 574 2
9 5.3 540 -2
10 5.5 523 -4
00UT - solid
06UT - dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/3/2004 (Day of Year 124)
NCEP/NCAR Reanalysis 1 Data Set





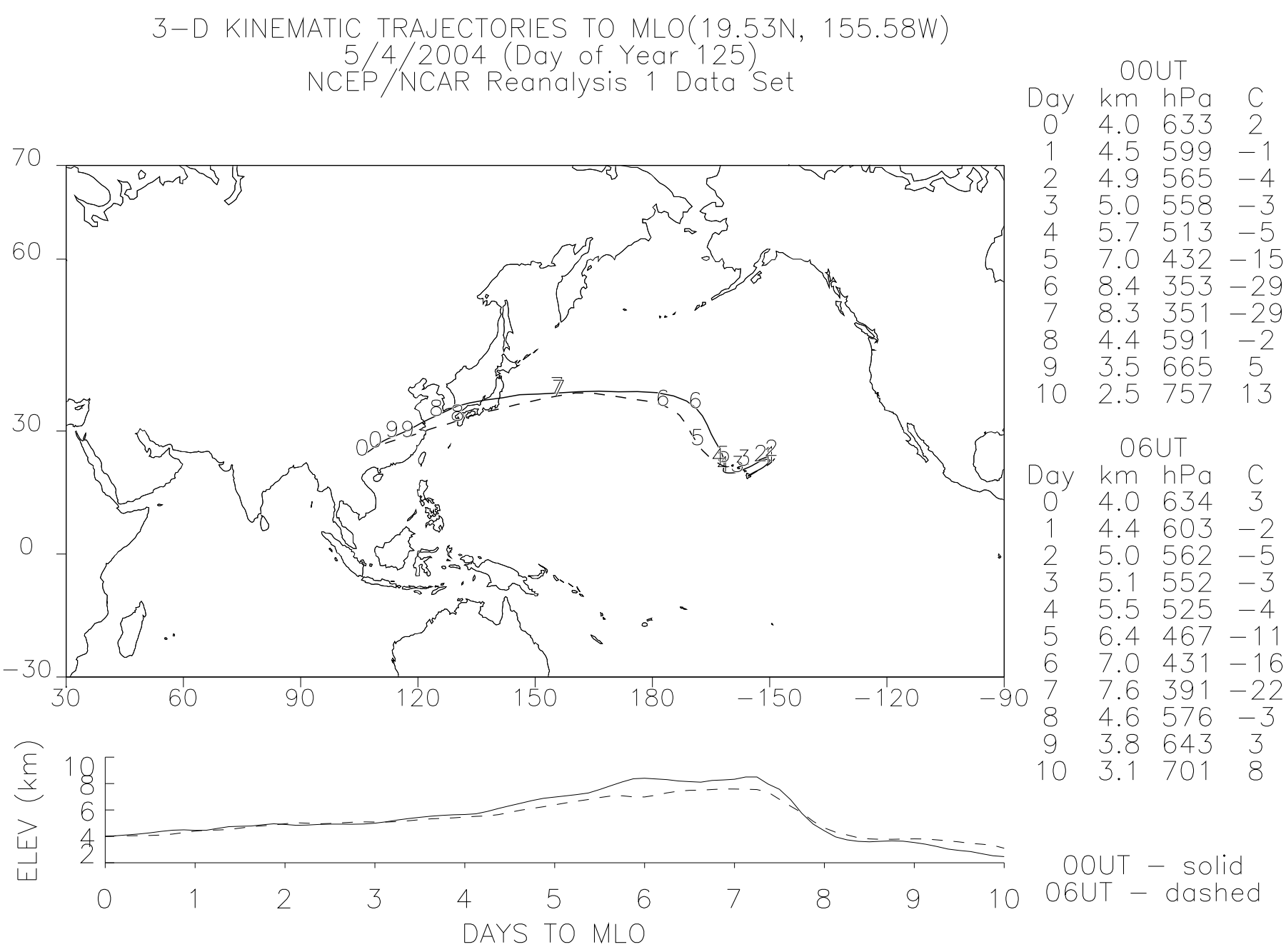
12UT

Day	km	hPa	C
0	4.0	633	1
1	4.4	605	−1
2	4.5	595	0
3	4.7	579	0
4	4.4	604	2
5	4.3	608	3
6	4.3	604	3
7	3.2	692	11
8	2.9	722	12
9	3.1	705	8
10	2.9	717	9

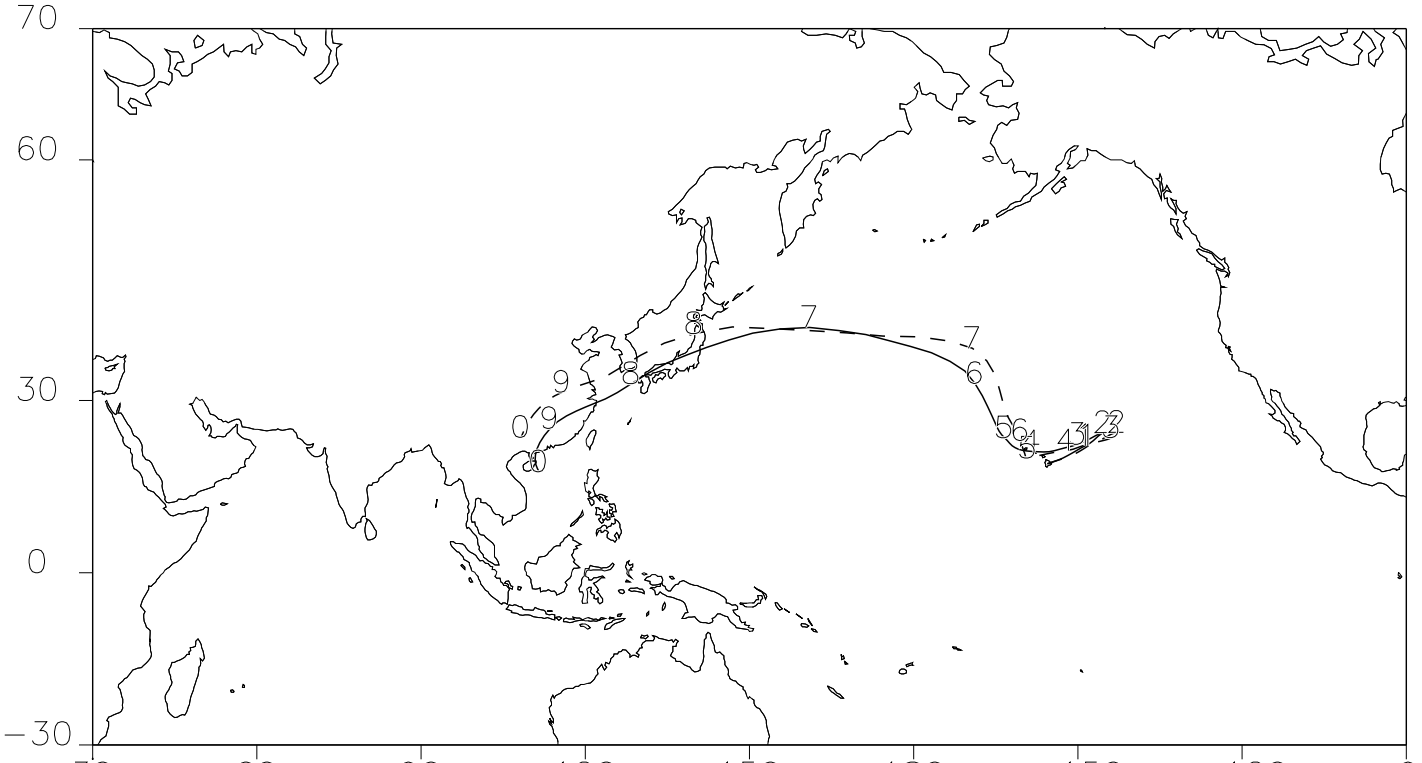
18UT

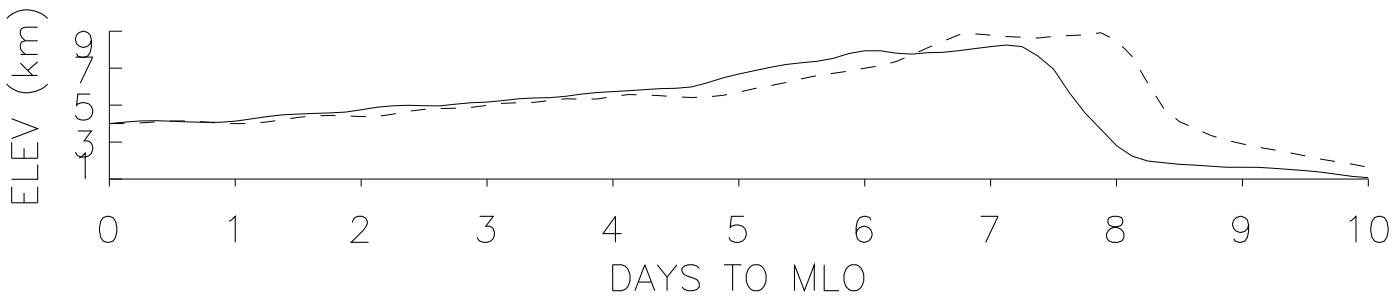
Day	km	hPa	C
0	4.0	634	1
1	4.4	600	−1
2	4.6	584	−2
3	5.0	556	−3
4	5.2	545	−3
5	5.4	527	−3
6	5.0	555	−2
7	5.2	541	−4
8	5.4	529	−5
9	4.9	562	−2
10	5.6	521	−3

12UT – solid
18UT – dashed


3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/4/2004 (Day of Year 125)
NCEP/NCAR Reanalysis 1 Data Set
70
60
30
0
-30
30
60
90
120
150
180
-150
-120
-90
ELEV (km)
10
8
6
4
2
0
1
2
3
4
5
6
7
8
9
10
DAYS TO MLO
00UT
Day km hPa C
0 4.0 633 2
1 4.5 599 -1
2 4.9 565 -4
3 5.0 558 -3
4 5.7 513 -5
5 7.0 432 -15
6 8.4 353 -29
7 8.3 351 -29
8 4.4 591 -2
9 3.5 665 5
10 2.5 757 13
06UT
Day km hPa C
0 4.0 634 3
1 4.4 603 -2
2 5.0 562 -5
3 5.1 552 -3
4 5.5 525 -4
5 6.4 467 -11
6 7.0 431 -16
7 7.6 391 -22
8 4.6 576 -3
9 3.8 643 3
10 3.1 701 8
00UT - solid
06UT - dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/4/2004 (Day of Year 125)
NCEP/NCAR Reanalysis 1 Data Set





12UT

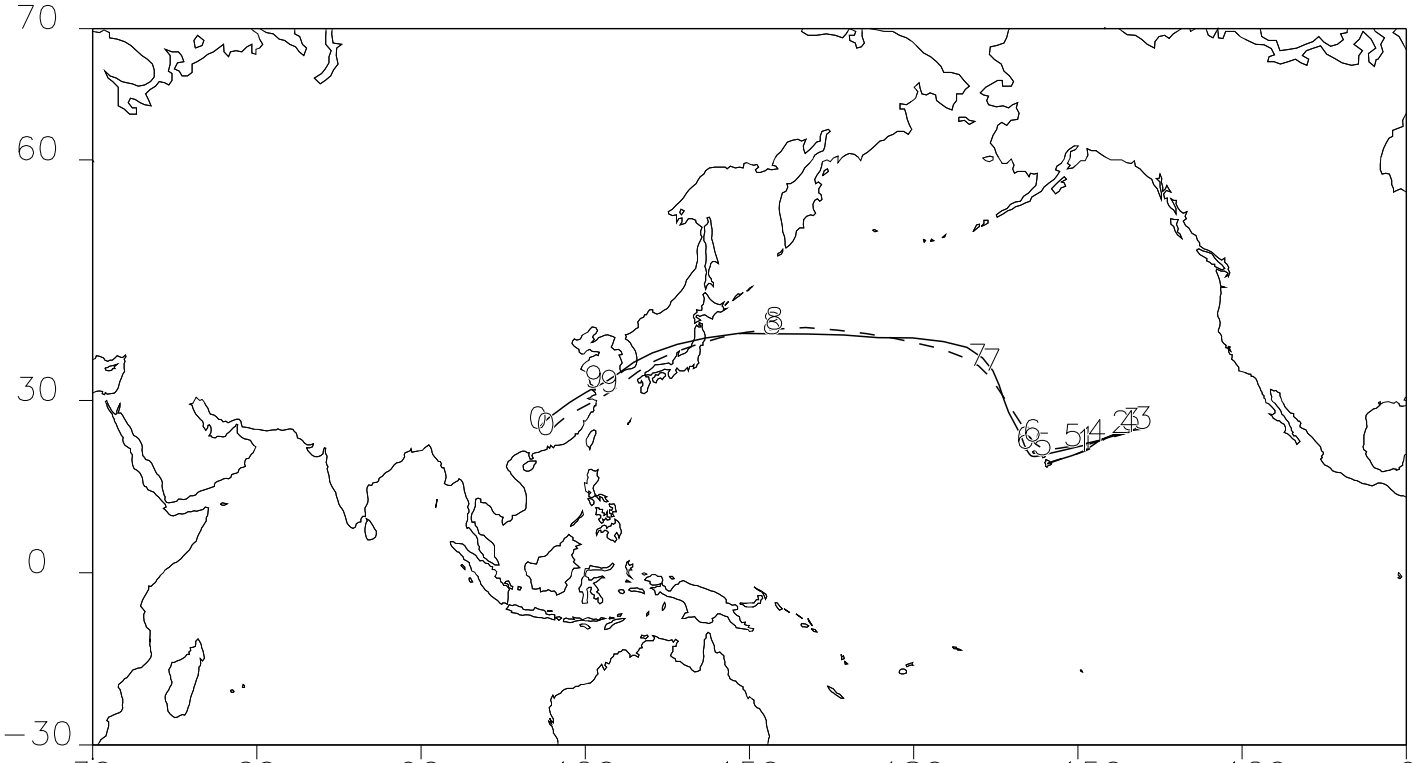
Day	km	hPa	C
0	4.0	632	2
1	4.1	622	0
2	4.7	577	−2
3	5.2	546	−4
4	5.7	507	−7
5	6.7	449	−13
6	7.9	377	−24
7	8.2	358	−26
8	2.8	716	8
9	1.6	835	16
10	1.1	893	23

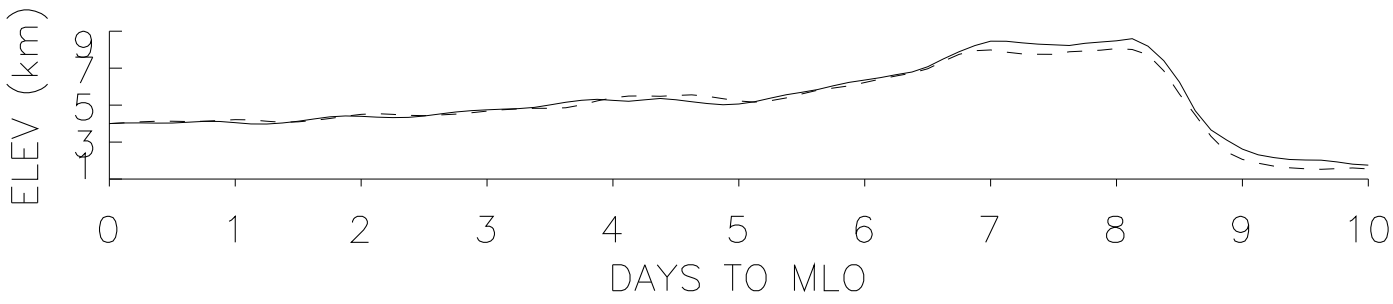
18UT

Day	km	hPa	C
0	4.0	633	3
1	4.0	634	2
2	4.4	604	1
3	5.0	560	−4
4	5.5	526	−5
5	5.7	510	−6
6	7.0	430	−15
7	8.8	332	−33
8	8.5	336	−31
9	2.9	714	8
10	1.6	836	18

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/5/2004 (Day of Year 126)
NCEP/NCAR Reanalysis 1 Data Set





00UT

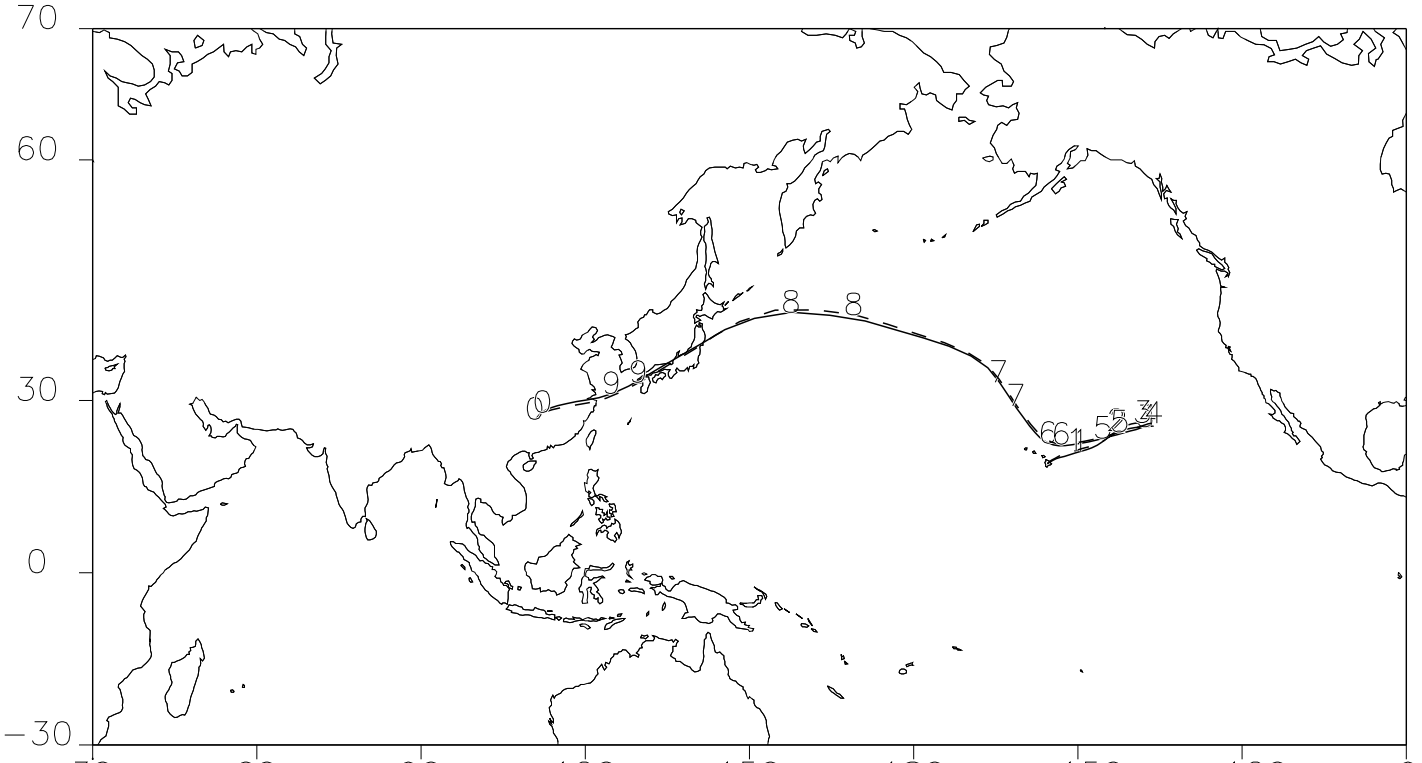
Day	km	hPa	C
0	4.0	632	3
1	4.0	629	2
2	4.4	602	0
3	4.7	577	−3
4	5.3	539	−4
5	5.1	553	−2
6	6.4	468	−11
7	8.5	348	−31
8	8.5	339	−31
9	2.6	737	8
10	1.8	825	15

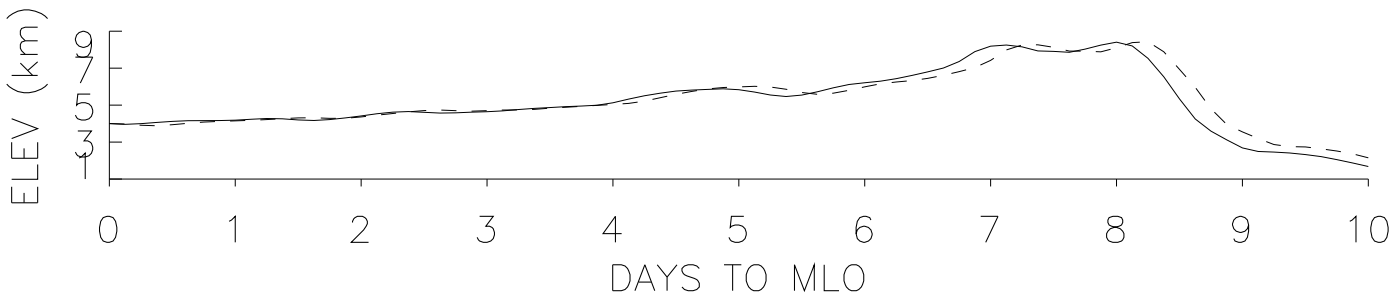
06UT

Day	km	hPa	C
0	4.0	632	3
1	4.2	617	1
2	4.5	596	0
3	4.7	584	−1
4	5.4	531	−6
5	5.2	541	−4
6	6.2	476	−10
7	8.0	373	−25
8	8.1	361	−27
9	2.1	787	13
10	1.5	846	16

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/5/2004 (Day of Year 126)
NCEP/NCAR Reanalysis 1 Data Set





12UT

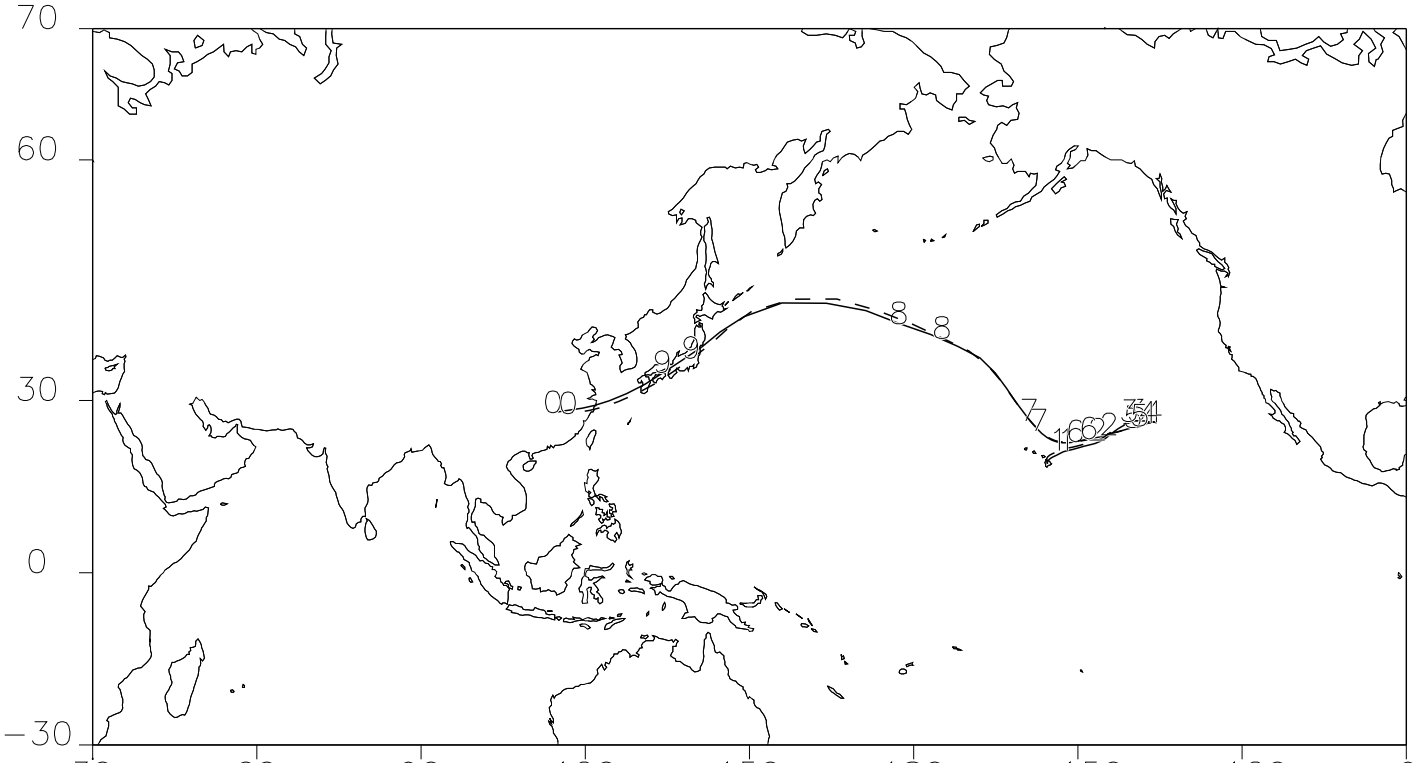
Day	km	hPa	C
0	4.0	630	2
1	4.2	617	1
2	4.4	601	0
3	4.6	585	−1
4	5.1	549	−4
5	5.8	500	−9
6	6.2	476	−10
7	8.2	361	−28
8	8.4	342	−30
9	2.7	729	9
10	1.7	828	16

18UT

Day	km	hPa	C
0	4.0	631	2
1	4.1	622	2
2	4.4	606	1
3	4.7	582	−1
4	5.0	557	−4
5	6.0	492	−10
6	6.0	490	−9
7	7.4	403	−19
8	8.1	358	−27
9	3.6	653	4
10	2.1	784	12

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/6/2004 (Day of Year 127)
NCEP/NCAR Reanalysis 1 Data Set

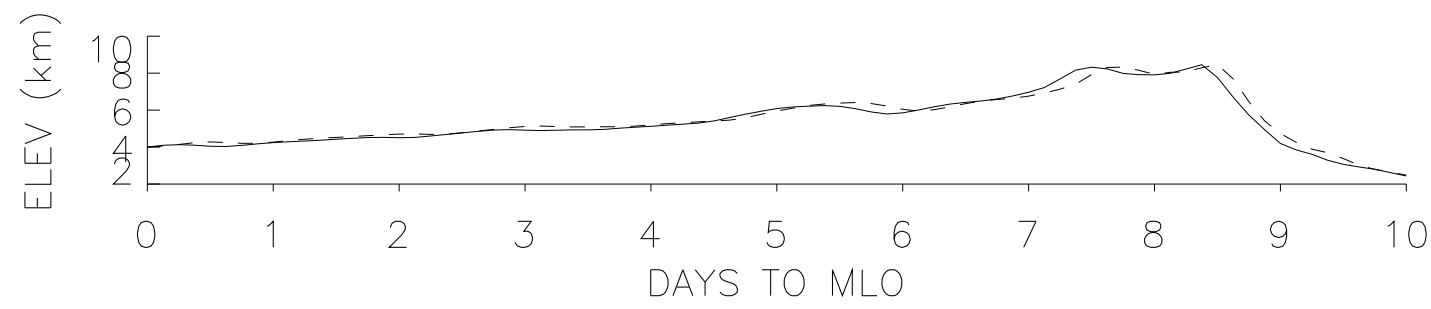


00UT

Day	km	hPa	C
0	4.0	629	2
1	4.2	614	2
2	4.5	595	-1
3	4.9	565	-3
4	5.1	550	-4
5	6.1	485	-10
6	5.9	499	-8
7	7.0	429	-16
8	7.9	370	-25
9	4.2	600	0
10	2.4	757	10

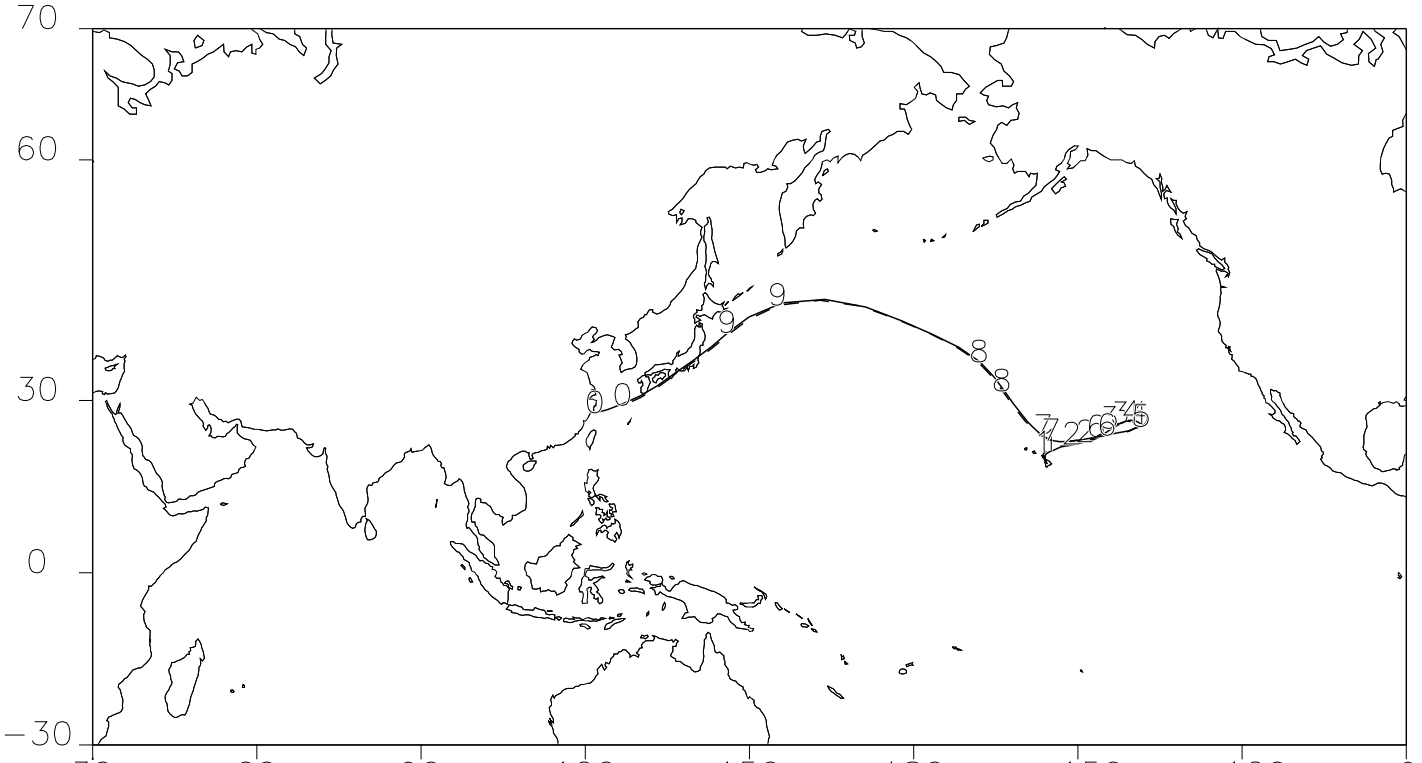
06UT

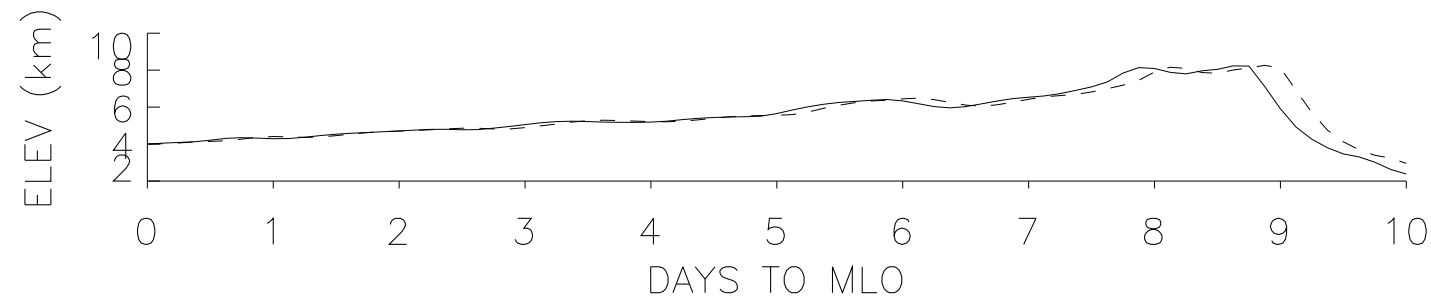
Day	km	hPa	C
0	4.0	629	2
1	4.3	611	1
2	4.7	581	-3
3	5.1	552	-5
4	5.2	546	-4
5	5.9	495	-9
6	6.0	487	-10
7	6.8	442	-14
8	7.9	372	-25
9	4.7	561	-4
10	2.5	752	11



00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/6/2004 (Day of Year 127)
NCEP/NCAR Reanalysis 1 Data Set





12UT

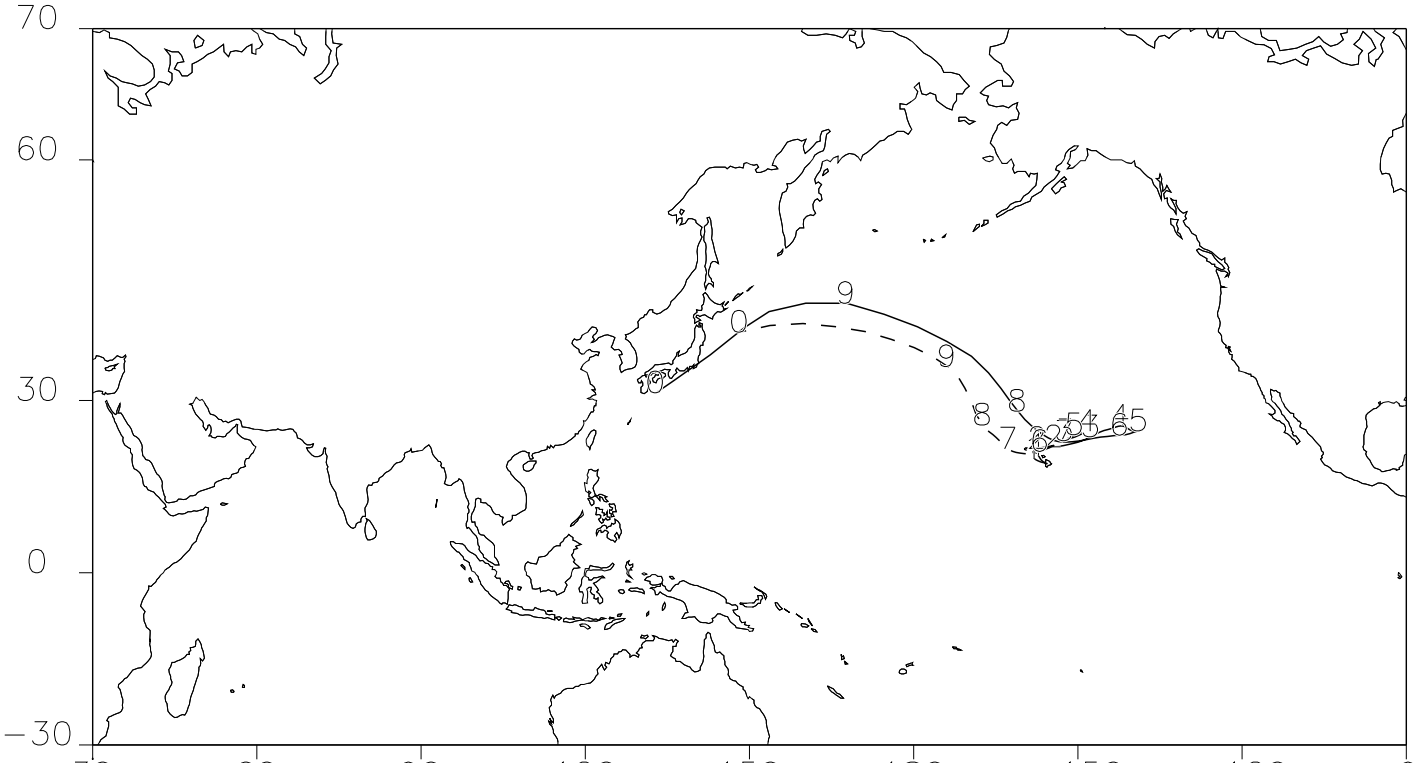
Day	km	hPa	C
0	4.0	628	2
1	4.3	608	−1
2	4.7	579	−3
3	5.1	555	−5
4	5.2	546	−5
5	5.7	513	−7
6	6.3	468	−13
7	6.5	456	−13
8	8.1	366	−27
9	5.9	482	−12
10	2.4	762	11

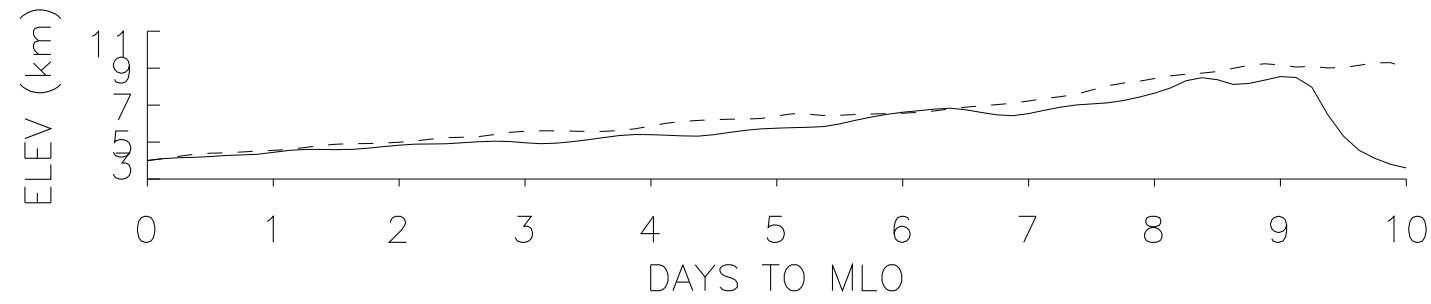
18UT

Day	km	hPa	C
0	4.0	629	2
1	4.4	600	−1
2	4.7	581	−2
3	4.9	568	−3
4	5.2	545	−5
5	5.6	522	−7
6	6.4	463	−13
7	6.4	463	−12
8	7.9	378	−24
9	8.1	354	−30
10	3.0	708	7

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/7/2004 (Day of Year 128)
NCEP/NCAR Reanalysis 1 Data Set





00UT

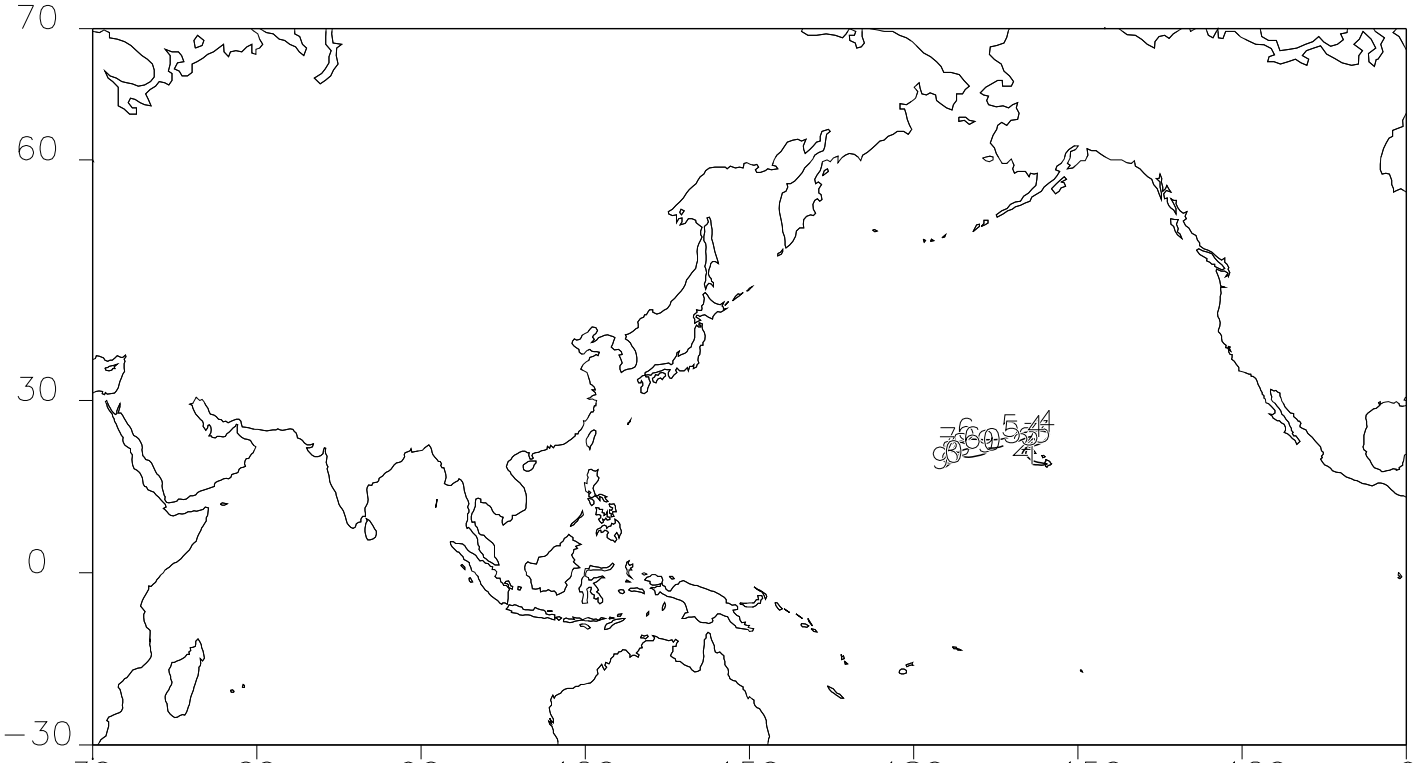
Day	km	hPa	C
0	4.0	628	2
1	4.4	595	−1
2	4.8	571	−3
3	5.0	562	−5
4	5.4	531	−7
5	5.8	508	−8
6	6.6	453	−13
7	6.5	456	−13
8	7.6	392	−21
9	8.5	336	−31
10	3.6	652	3

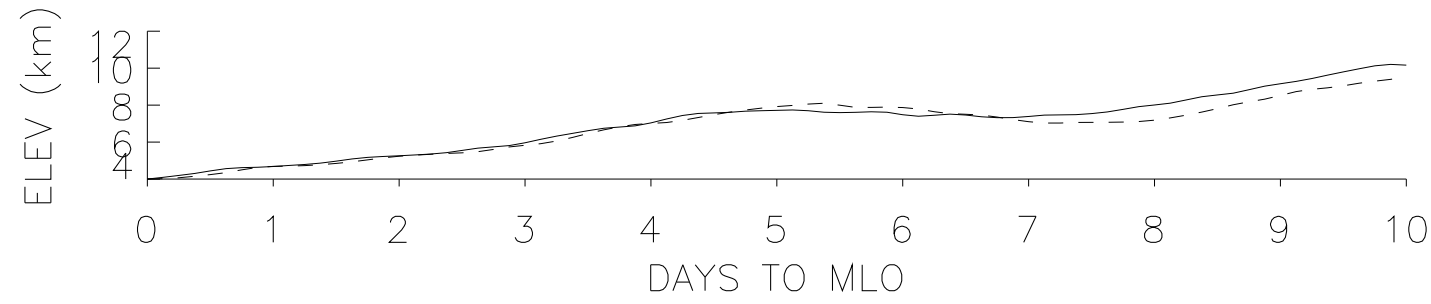
06UT

Day	km	hPa	C
0	4.0	629	2
1	4.6	587	−2
2	5.0	558	−5
3	5.6	519	−11
4	5.9	500	−12
5	6.4	465	−14
6	6.6	456	−13
7	7.2	418	−17
8	8.4	354	−26
9	9.2	318	−33
10	9.0	315	−34

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/7/2004 (Day of Year 128)
NCEP/NCAR Reanalysis 1 Data Set





12UT

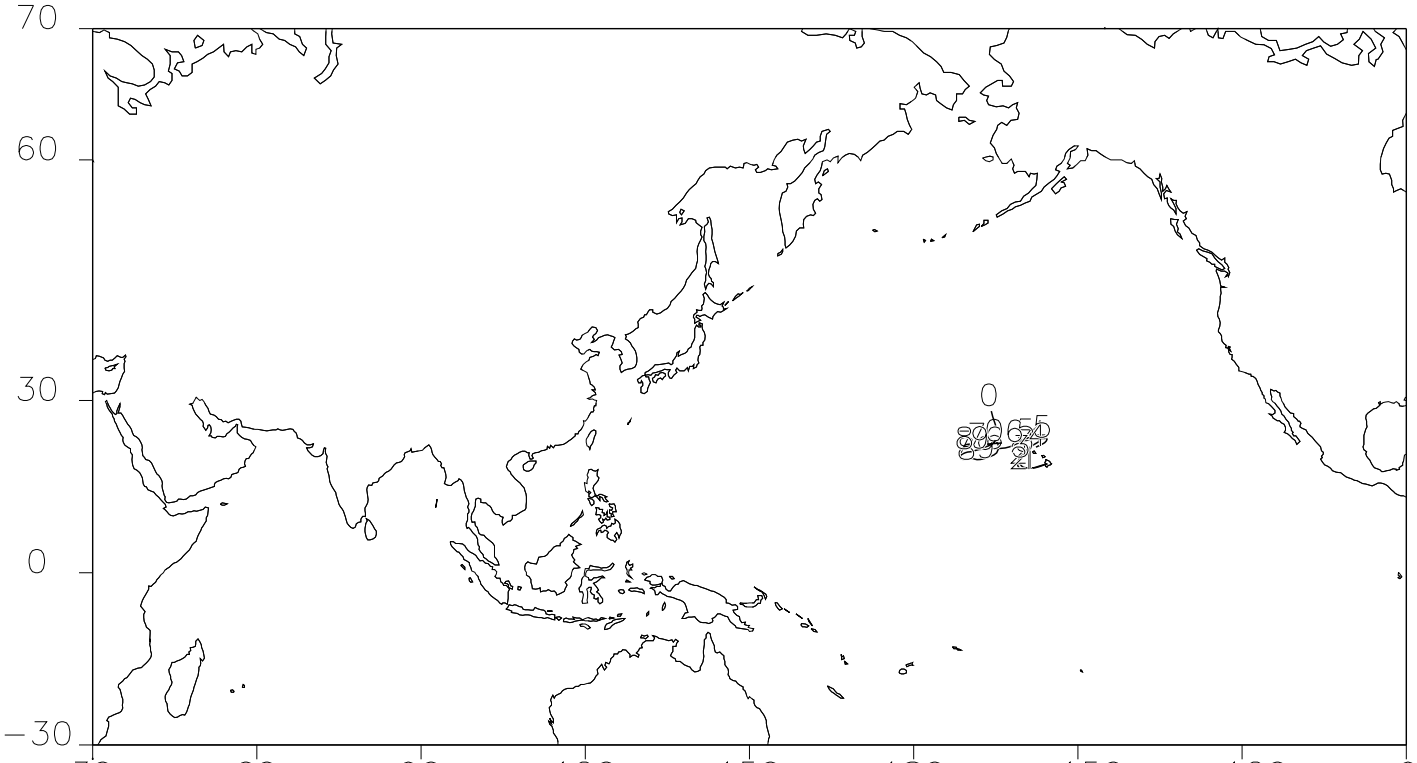
Day	km	hPa	C
0	4.0	628	2
1	4.7	577	-2
2	5.3	538	-7
3	6.0	494	-12
4	7.0	428	-21
5	7.7	390	-24
6	7.5	403	-21
7	7.4	409	-19
8	8.0	377	-24
9	9.2	320	-33
10	10.2	276	-43

18UT

Day	km	hPa	C
0	4.0	629	1
1	4.7	578	-2
2	5.2	540	-7
3	5.8	503	-11
4	7.0	430	-19
5	7.9	379	-26
6	7.9	382	-23
7	7.1	425	-17
8	7.2	420	-18
9	8.5	349	-28
10	9.5	302	-37

12UT - solid
18UT - dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/8/2004 (Day of Year 129)
NCEP/NCAR Reanalysis 1 Data Set

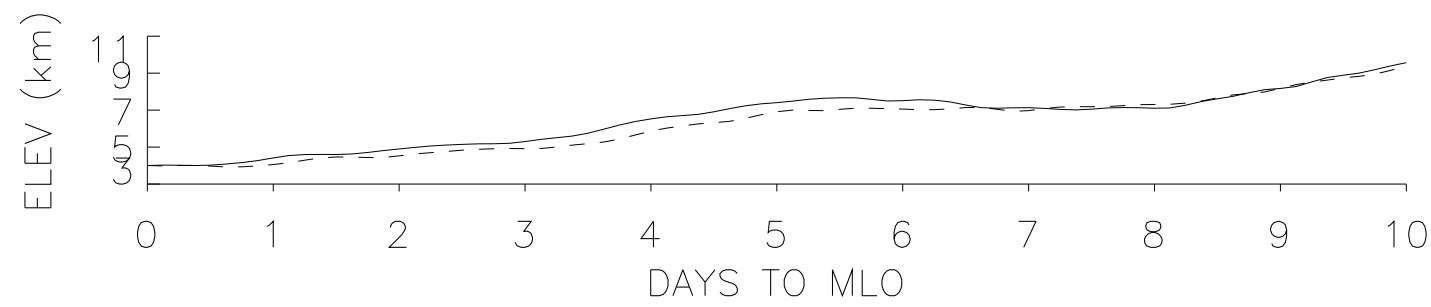


00UT

Day	km	hPa	C
0	4.0	629	2
1	4.4	598	0
2	4.9	563	−3
3	5.3	538	−7
4	6.5	459	−16
5	7.4	407	−22
6	7.5	401	−22
7	7.1	424	−17
8	7.1	426	−16
9	8.2	367	−26
10	9.6	301	−37

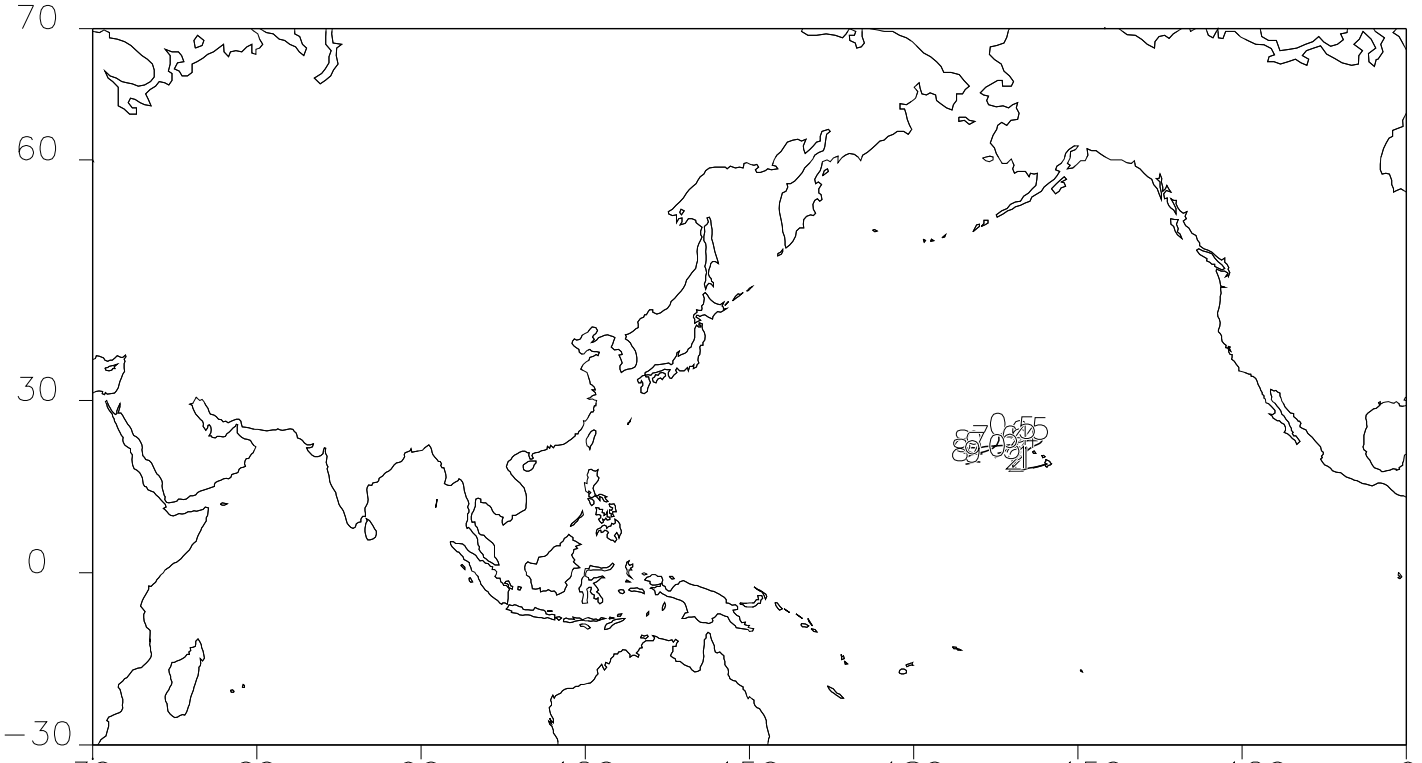
06UT

Day	km	hPa	C
0	4.0	629	2
1	4.1	625	2
2	4.5	589	−1
3	4.9	564	−4
4	5.9	501	−11
5	6.9	436	−19
6	7.1	426	−18
7	7.0	432	−16
8	7.3	414	−17
9	8.2	368	−25
10	9.4	309	−36



00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/8/2004 (Day of Year 129)
NCEP/NCAR Reanalysis 1 Data Set

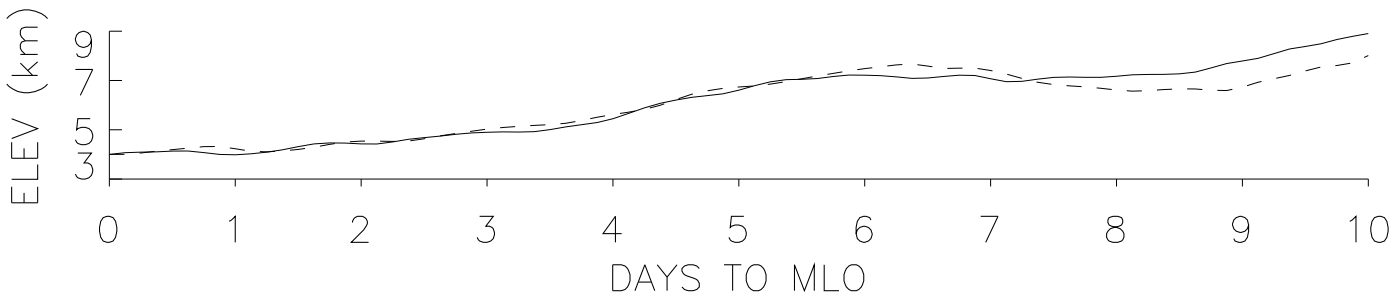


12UT

Day	km	hPa	C
0	4.0	628	2
1	4.0	629	2
2	4.4	597	1
3	4.9	564	−4
4	5.4	528	−8
5	6.6	453	−17
6	7.2	418	−19
7	7.1	426	−18
8	7.2	421	−17
9	7.8	388	−22
10	8.9	331	−32

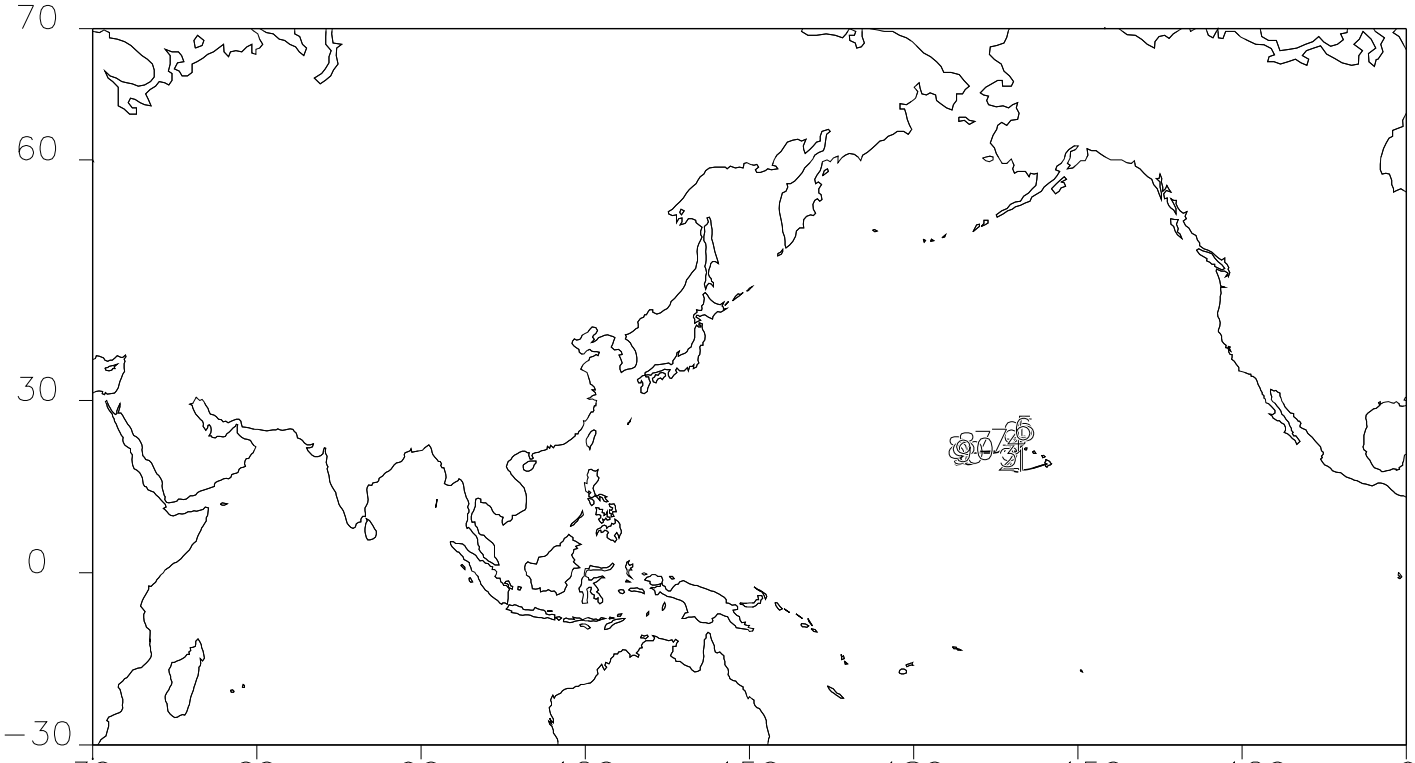
18UT

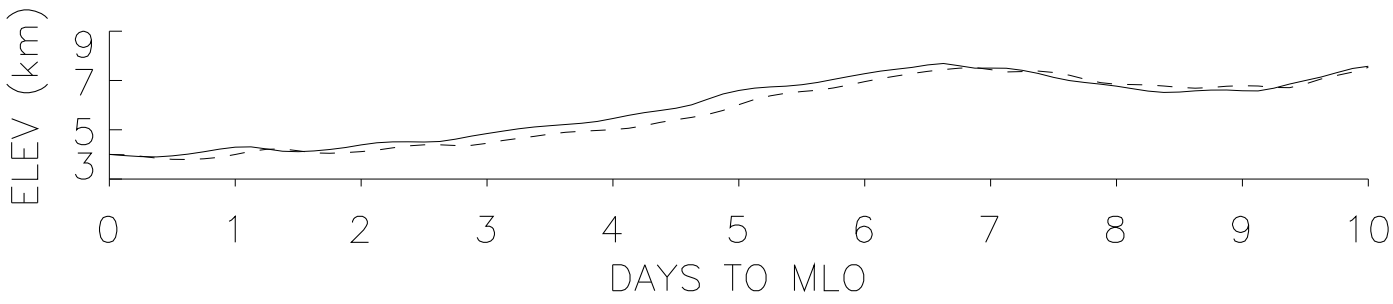
Day	km	hPa	C
0	4.0	629	3
1	4.2	611	0
2	4.5	588	0
3	5.0	555	−5
4	5.6	517	−9
5	6.7	446	−18
6	7.5	403	−22
7	7.4	407	−20
8	6.6	454	−13
9	6.7	447	−13
10	8.0	376	−24



12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/9/2004 (Day of Year 130)
NCEP/NCAR Reanalysis 1 Data Set





00UT

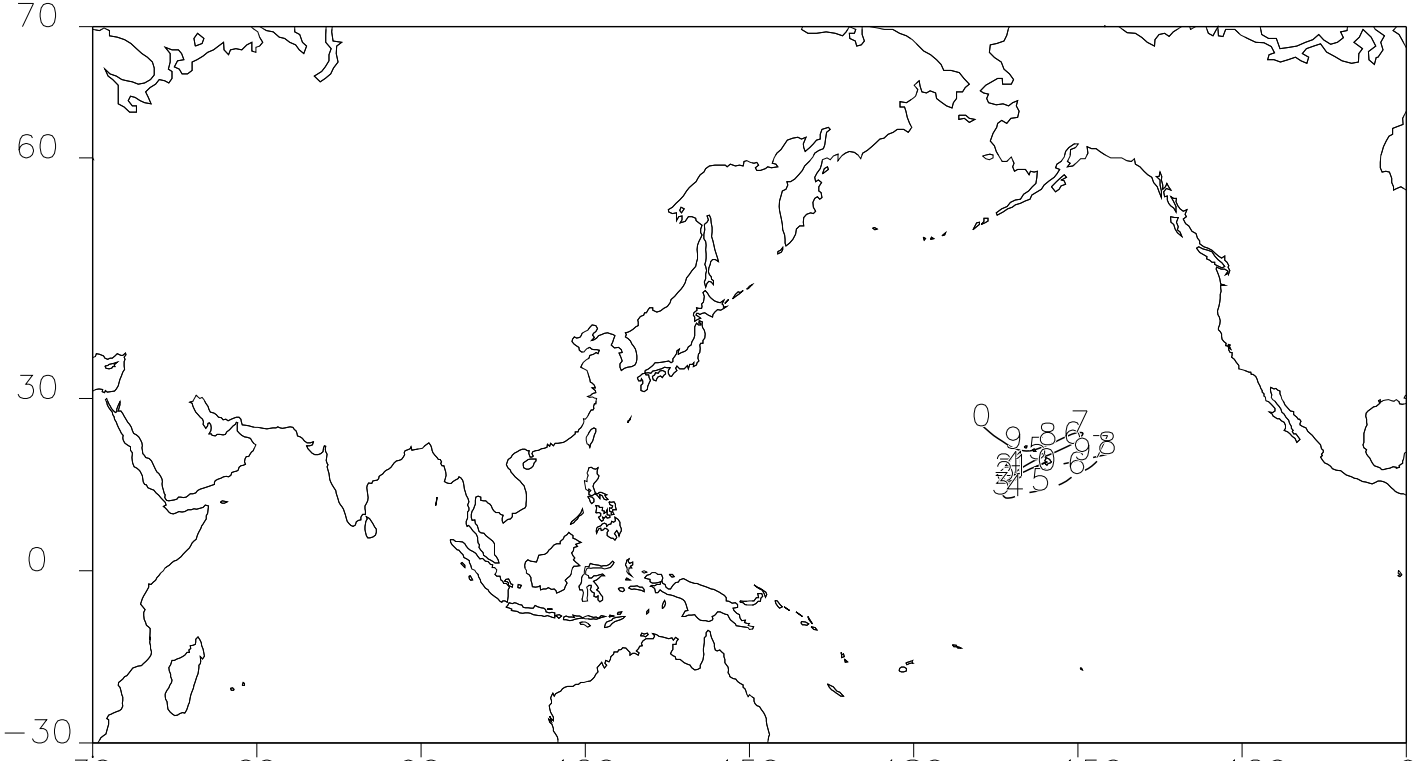
Day	km	hPa	C
0	4.0	629	3
1	4.3	606	1
2	4.4	600	1
3	4.8	567	−3
4	5.5	527	−8
5	6.6	455	−17
6	7.3	414	−21
7	7.5	402	−22
8	6.8	445	−15
9	6.6	456	−12
10	7.6	399	−22

06UT

Day	km	hPa	C
0	4.0	629	3
1	4.0	629	3
2	4.1	620	2
3	4.5	595	0
4	5.0	558	−5
5	6.0	491	−12
6	7.0	433	−19
7	7.4	405	−22
8	6.8	439	−16
9	6.8	443	−13
10	7.5	401	−21

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/9/2004 (Day of Year 130)
NCEP/NCAR Reanalysis 1 Data Set

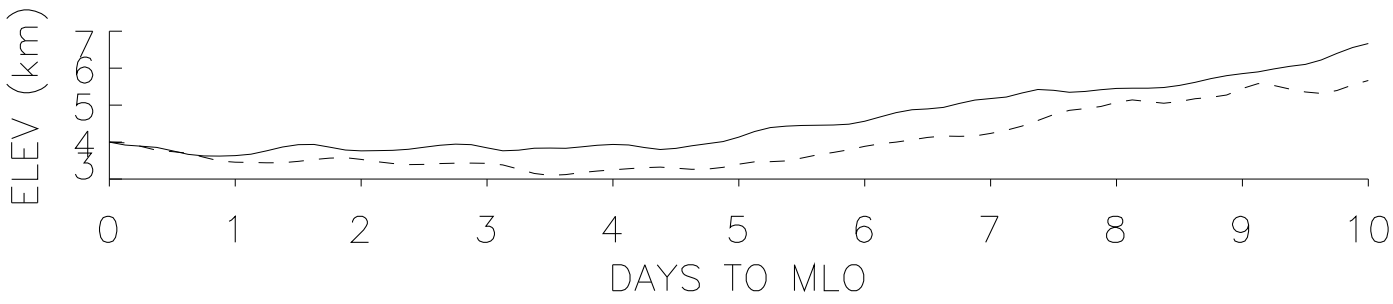


12UT

Day	km	hPa	C
0	4.0	629	3
1	3.6	658	5
2	3.8	647	4
3	3.8	641	4
4	3.9	636	3
5	4.1	622	2
6	4.6	590	−3
7	5.2	546	−5
8	5.5	526	−6
9	5.9	500	−7
10	6.7	451	−12

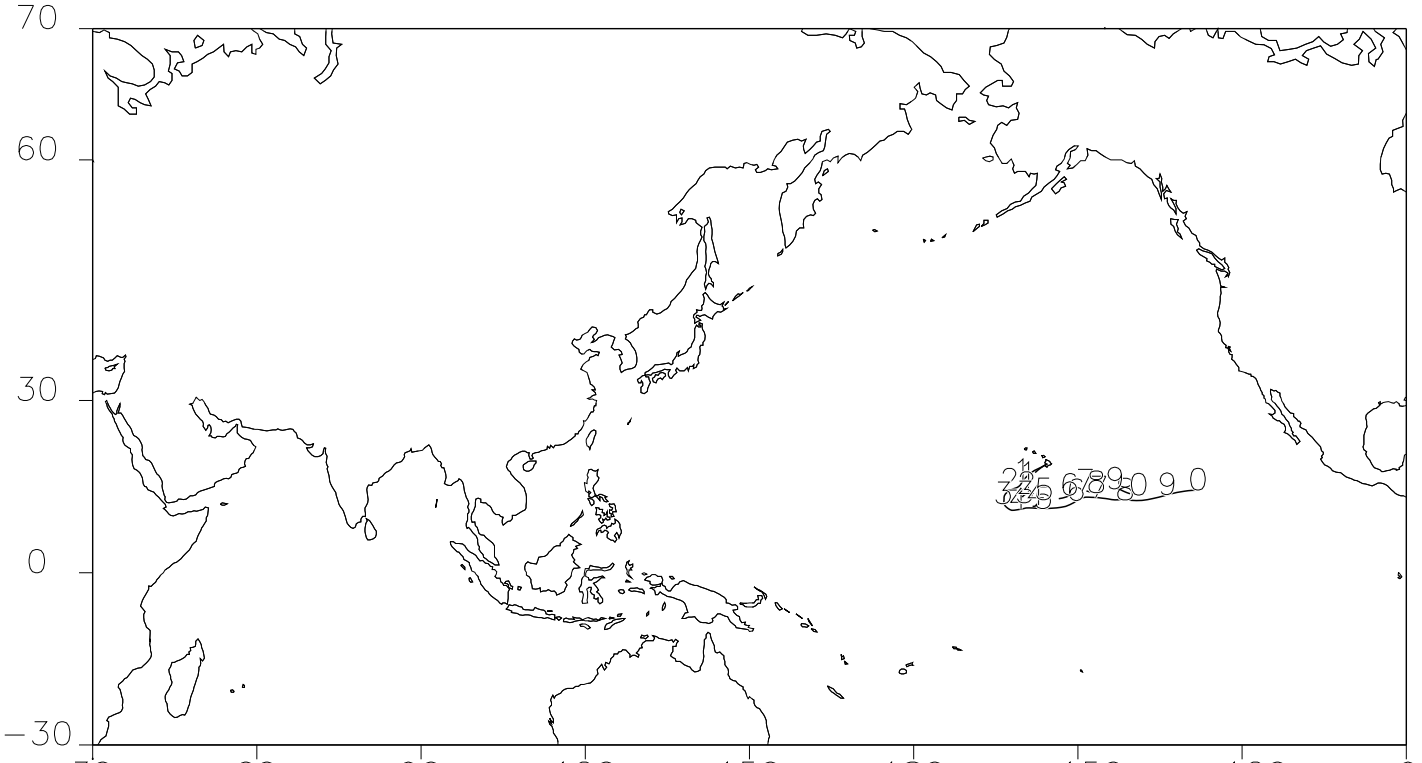
18UT

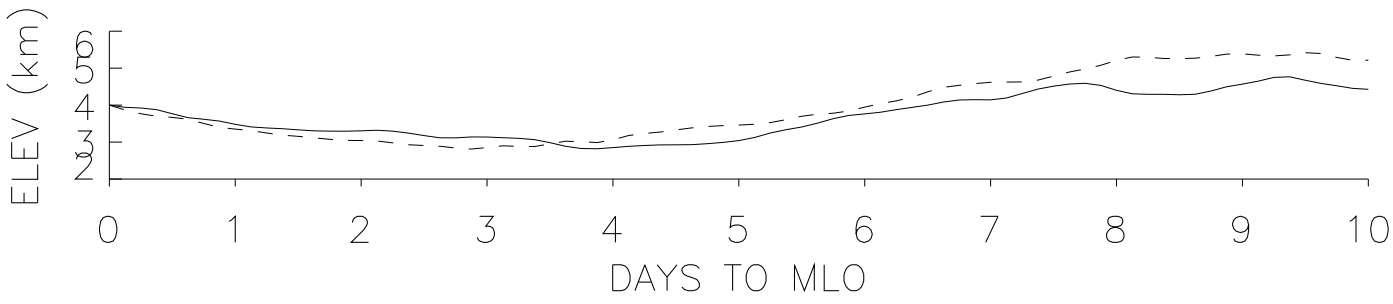
Day	km	hPa	C
0	4.0	629	3
1	3.5	673	7
2	3.5	667	6
3	3.4	675	7
4	3.2	691	8
5	3.4	680	8
6	3.9	642	3
7	4.2	615	1
8	5.1	555	−5
9	5.5	529	−6
10	5.7	513	−6



12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/10/2004 (Day of Year 131)
NCEP/NCAR Reanalysis 1 Data Set





00UT

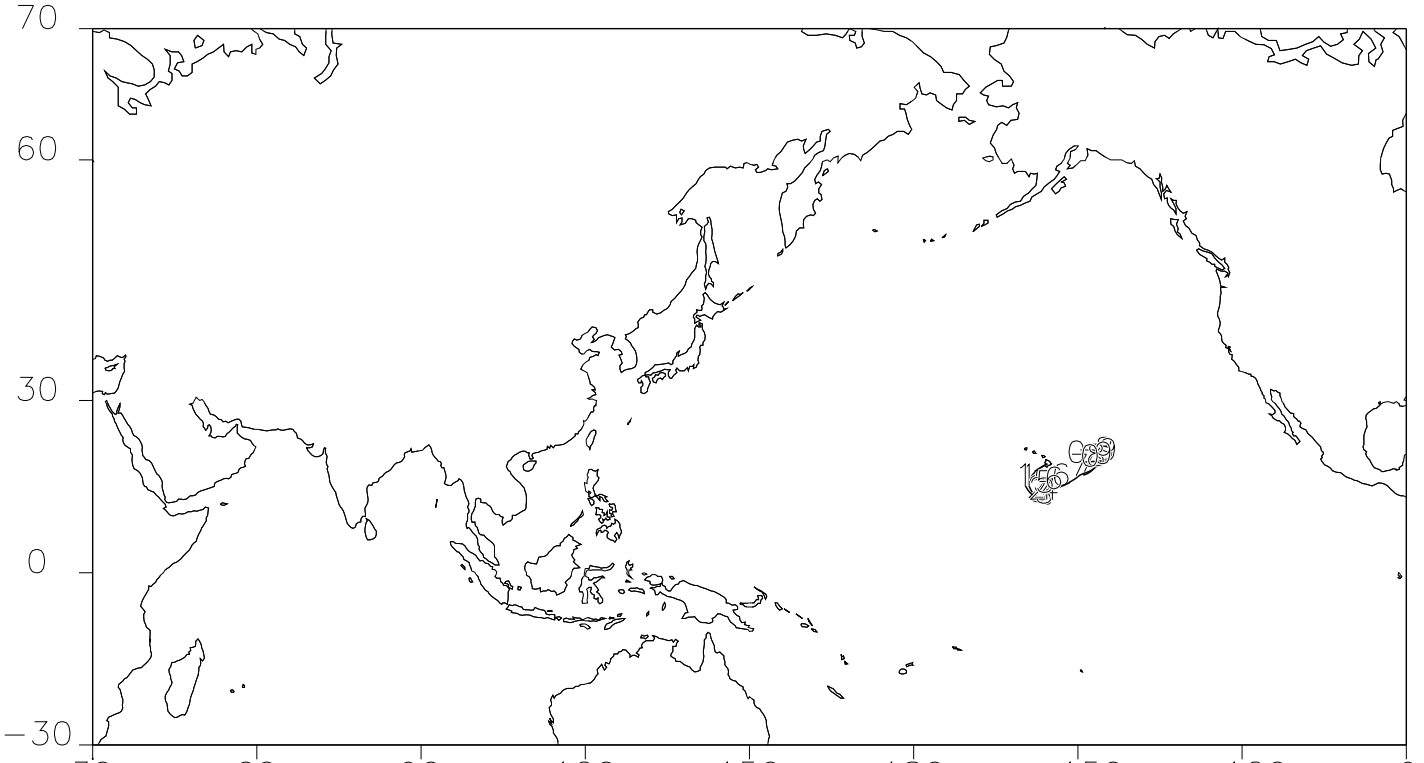
Day	km	hPa	C
0	4.0	628	3
1	3.5	671	7
2	3.3	686	8
3	3.1	699	9
4	2.9	723	12
5	3.0	707	11
6	3.8	649	6
7	4.1	620	4
8	4.4	600	3
9	4.6	589	3
10	4.4	599	6

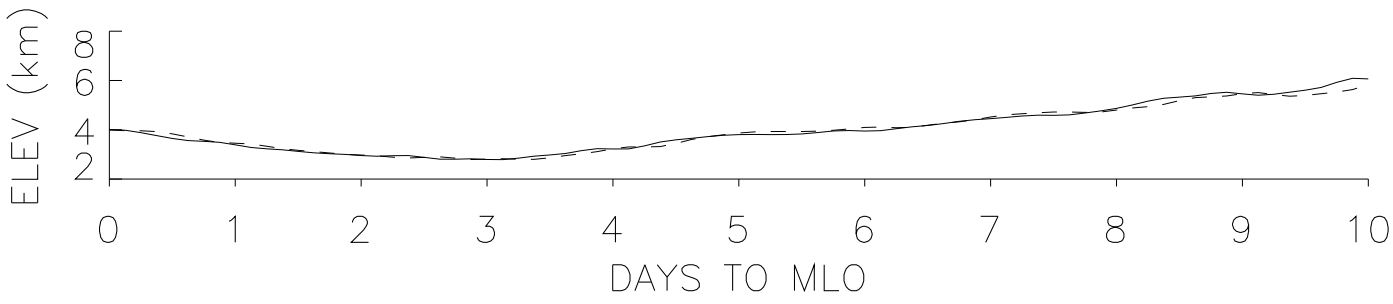
06UT

Day	km	hPa	C
0	4.0	629	2
1	3.4	681	9
2	3.0	707	10
3	2.9	723	11
4	3.1	705	11
5	3.5	674	9
6	3.9	636	5
7	4.6	586	0
8	5.2	544	−3
9	5.4	533	−4
10	5.2	546	−2

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/10/2004 (Day of Year 131)
NCEP/NCAR Reanalysis 1 Data Set





12UT

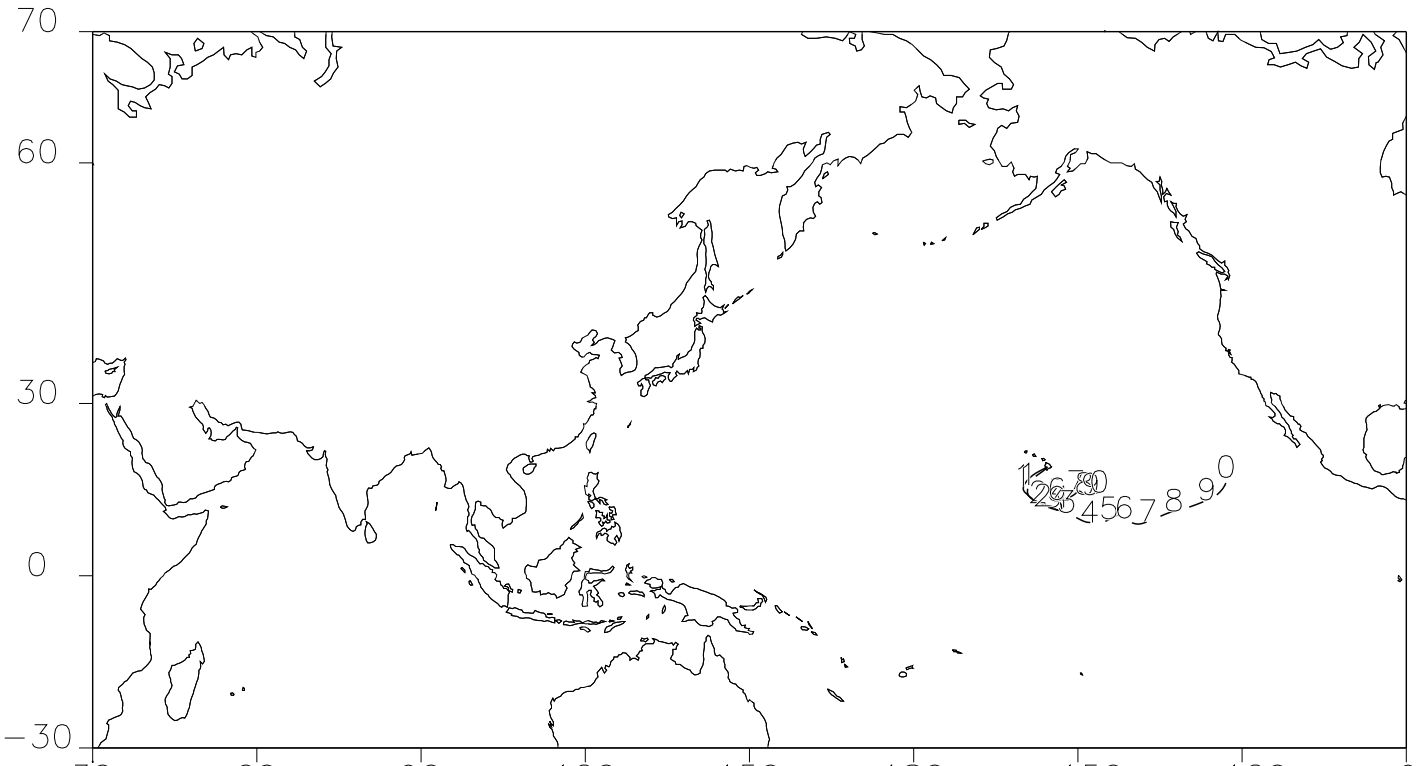
Day	km	hPa	C
0	4.0	629	2
1	3.4	678	8
2	3.0	715	10
3	2.8	729	11
4	3.2	691	9
5	3.8	646	5
6	3.9	634	4
7	4.5	597	-1
8	4.9	568	-4
9	5.5	527	-7
10	6.1	487	-11

18UT

Day	km	hPa	C
0	4.0	630	2
1	3.5	673	7
2	3.0	714	11
3	2.8	728	12
4	3.2	691	10
5	3.9	641	5
6	4.1	625	4
7	4.5	593	-1
8	4.8	573	-2
9	5.5	527	-7
10	5.8	504	-9

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/11/2004 (Day of Year 132)
NCEP/NCAR Reanalysis 1 Data Set

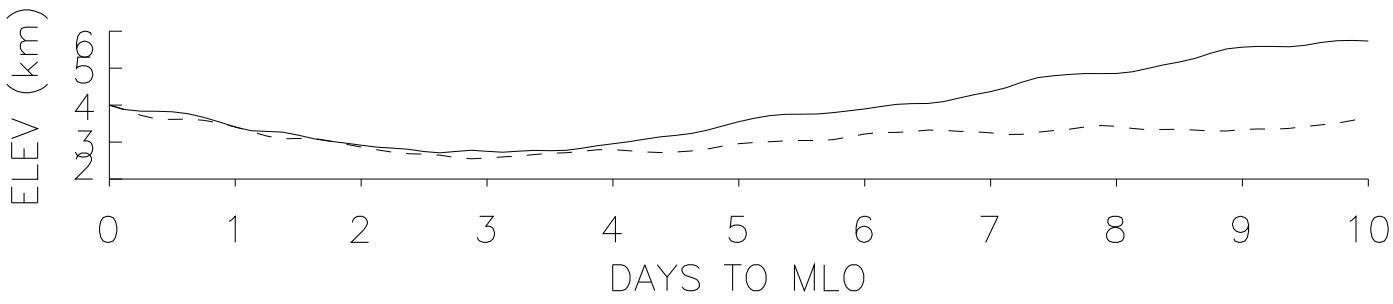


00UT

Day	km	hPa	C
0	4.0	629	2
1	3.4	676	8
2	2.9	719	11
3	2.7	733	13
4	3.0	715	12
5	3.6	665	8
6	3.9	638	6
7	4.4	603	1
8	4.9	567	−2
9	5.6	518	−6
10	5.7	509	−7

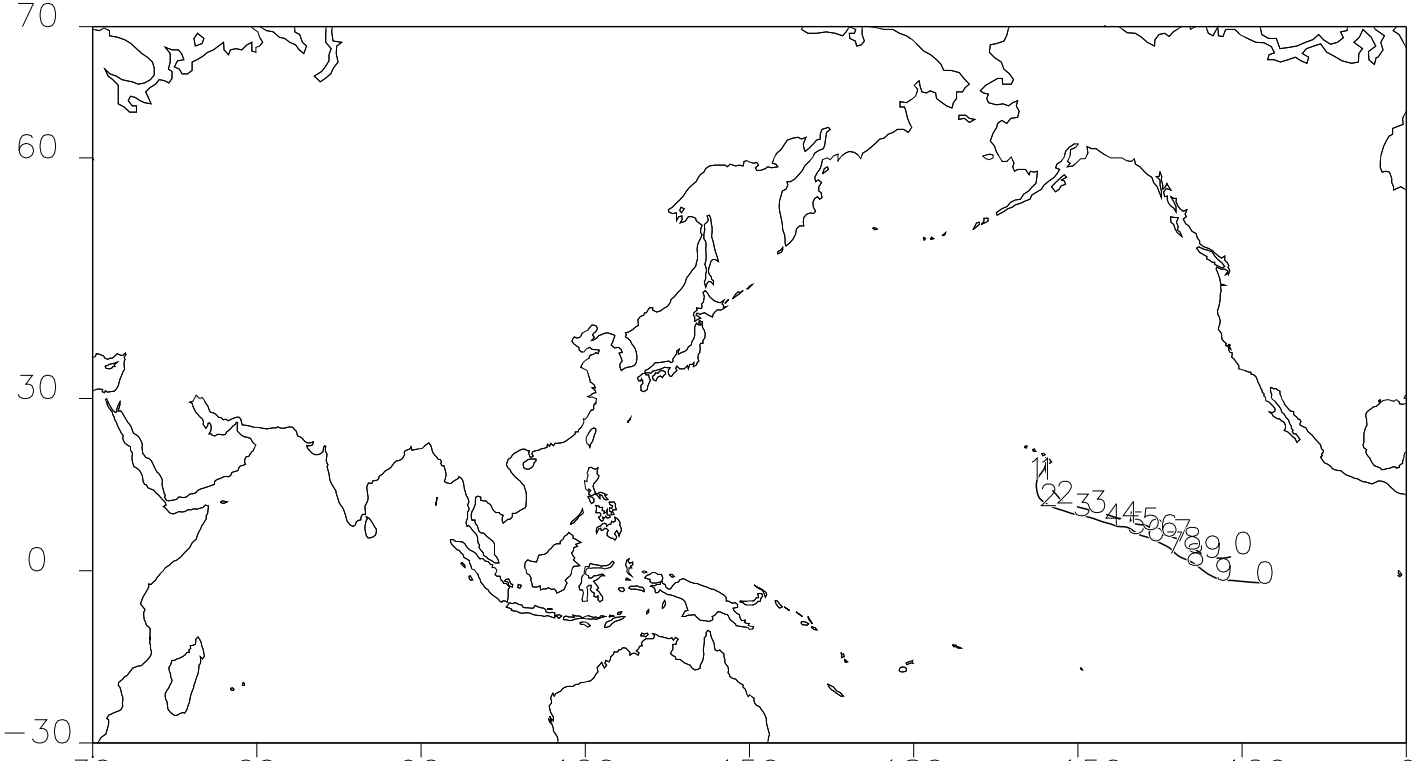
06UT

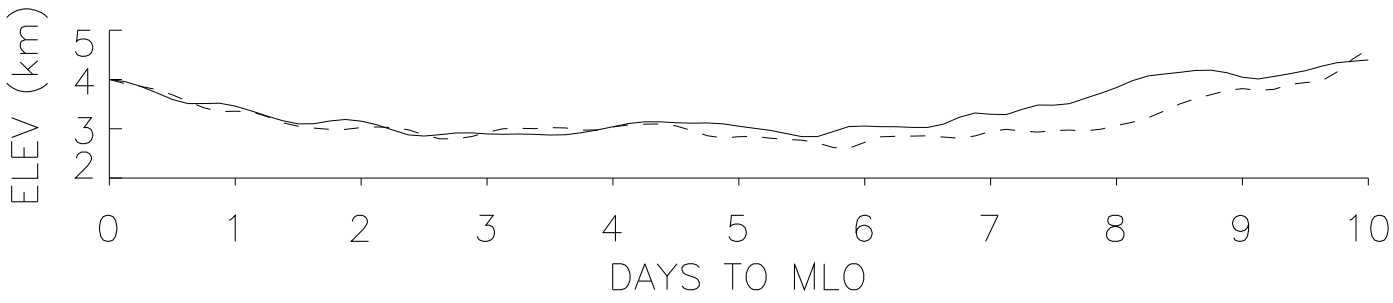
Day	km	hPa	C
0	4.0	630	2
1	3.4	677	7
2	2.9	722	12
3	2.6	750	14
4	2.8	729	13
5	3.0	714	12
6	3.2	694	12
7	3.2	691	12
8	3.4	676	9
9	3.3	685	12
10	3.7	659	9



00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/11/2004 (Day of Year 132)
NCEP/NCAR Reanalysis 1 Data Set





12UT

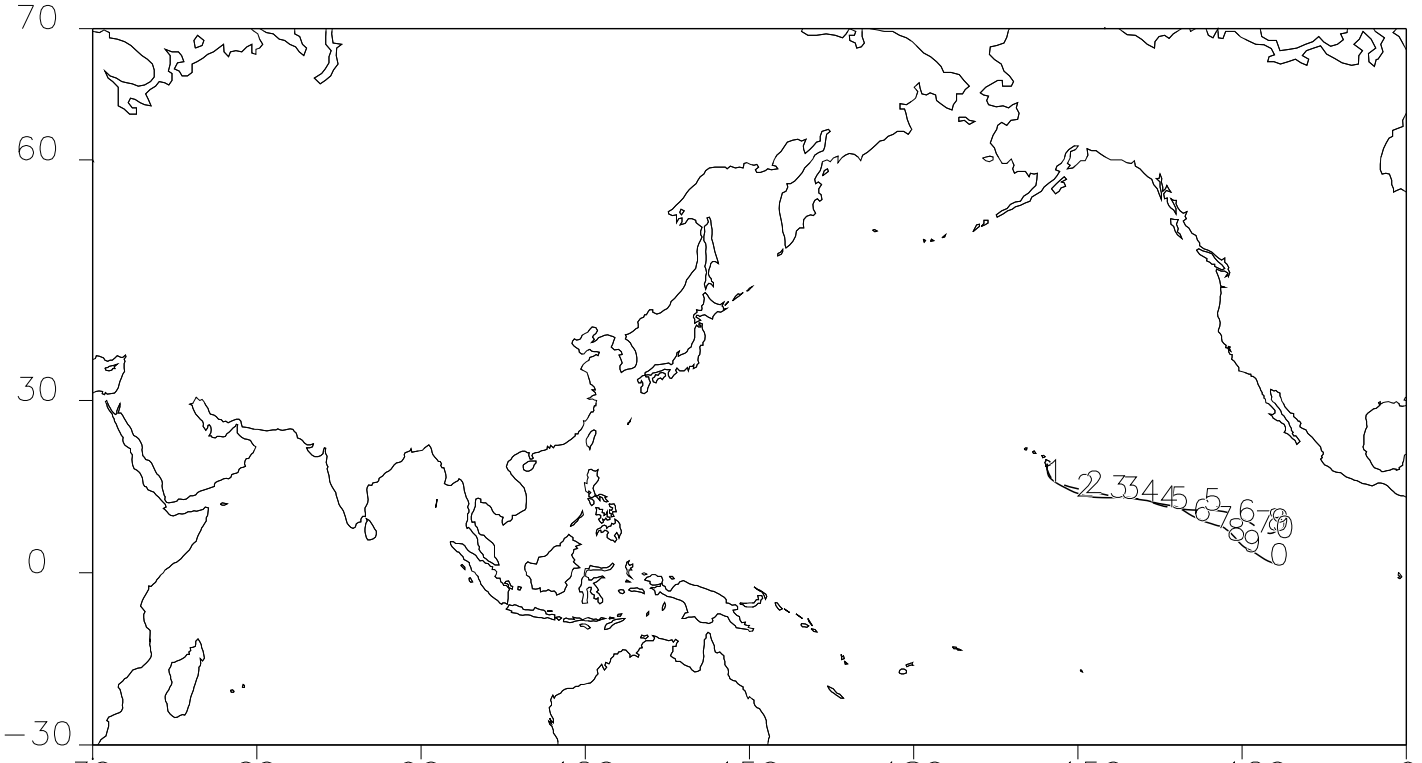
Day	km	hPa	C
0	4.0	629	2
1	3.5	672	6
2	3.2	698	9
3	2.9	720	12
4	3.0	708	12
5	3.1	704	11
6	3.1	704	10
7	3.3	685	9
8	3.8	641	6
9	4.0	624	6
10	4.4	599	4

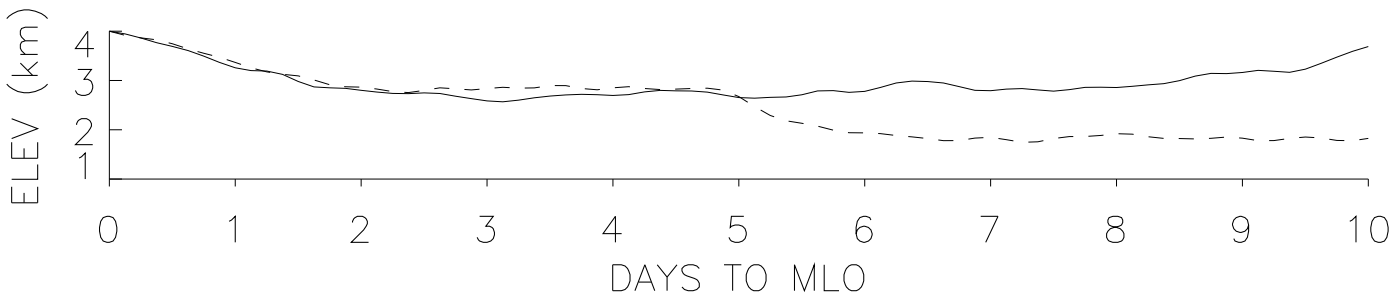
18UT

Day	km	hPa	C
0	4.0	630	2
1	3.4	683	8
2	3.0	710	9
3	2.9	719	12
4	3.0	710	13
5	2.8	725	12
6	2.7	735	12
7	2.9	717	11
8	3.1	707	11
9	3.8	644	6
10	4.6	586	3

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/12/2004 (Day of Year 133)
NCEP/NCAR Reanalysis 1 Data Set





00UT

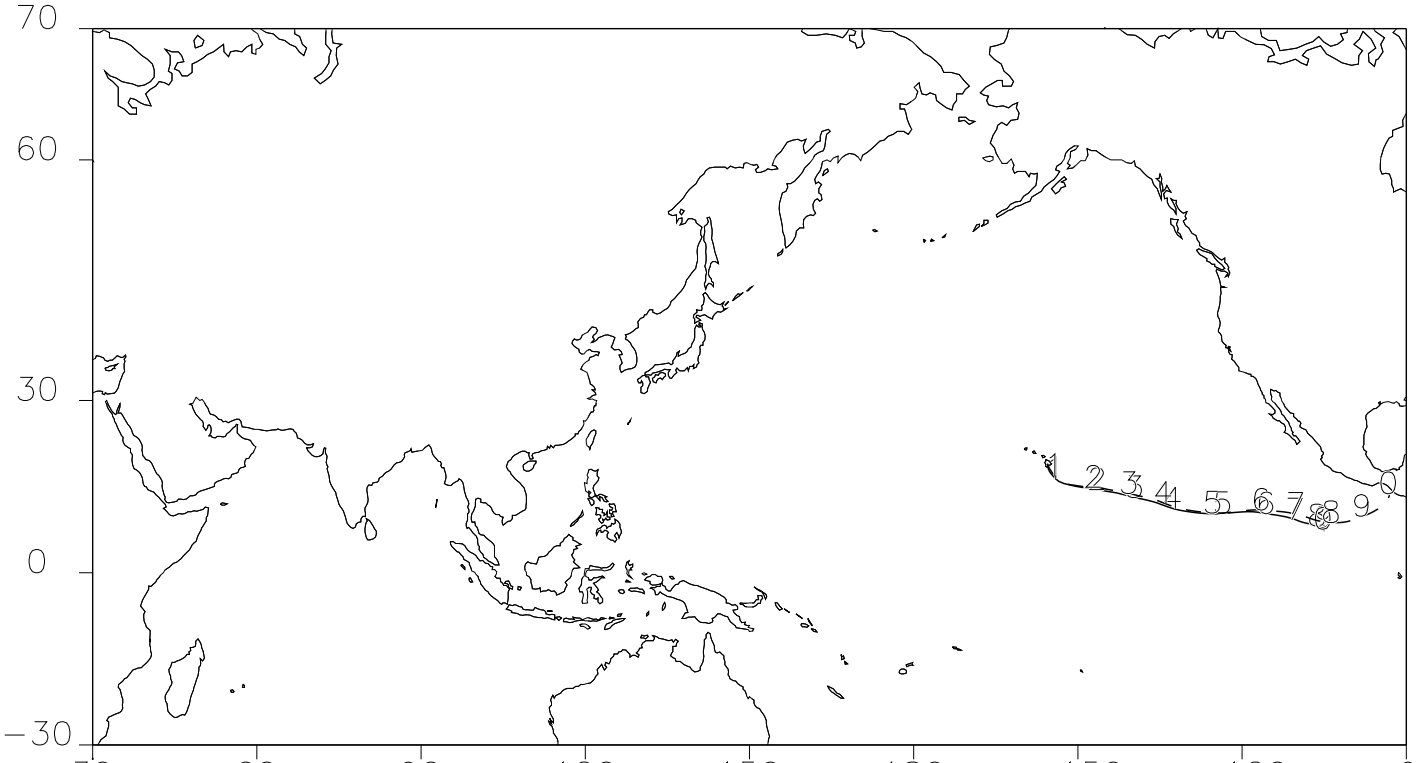
Day	km	hPa	C
0	4.0	630	2
1	3.3	690	9
2	2.8	729	10
3	2.6	748	12
4	2.7	738	12
5	2.7	741	12
6	2.8	728	13
7	2.8	728	11
8	2.9	721	11
9	3.2	695	8
10	3.7	653	7

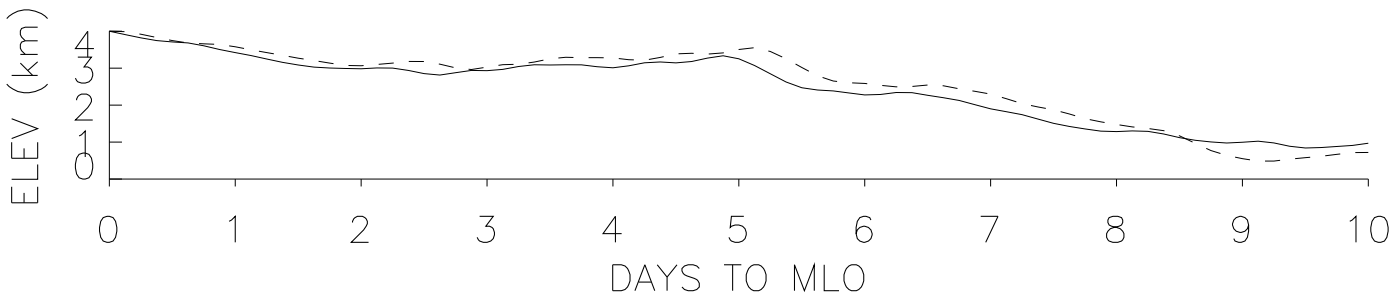
06UT

Day	km	hPa	C
0	4.0	631	2
1	3.4	681	8
2	2.9	724	10
3	2.8	727	11
4	2.9	726	12
5	2.7	743	11
6	1.9	810	13
7	1.8	818	13
8	1.9	811	14
9	1.8	819	15
10	1.8	820	16

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/12/2004 (Day of Year 133)
NCEP/NCAR Reanalysis 1 Data Set





12UT

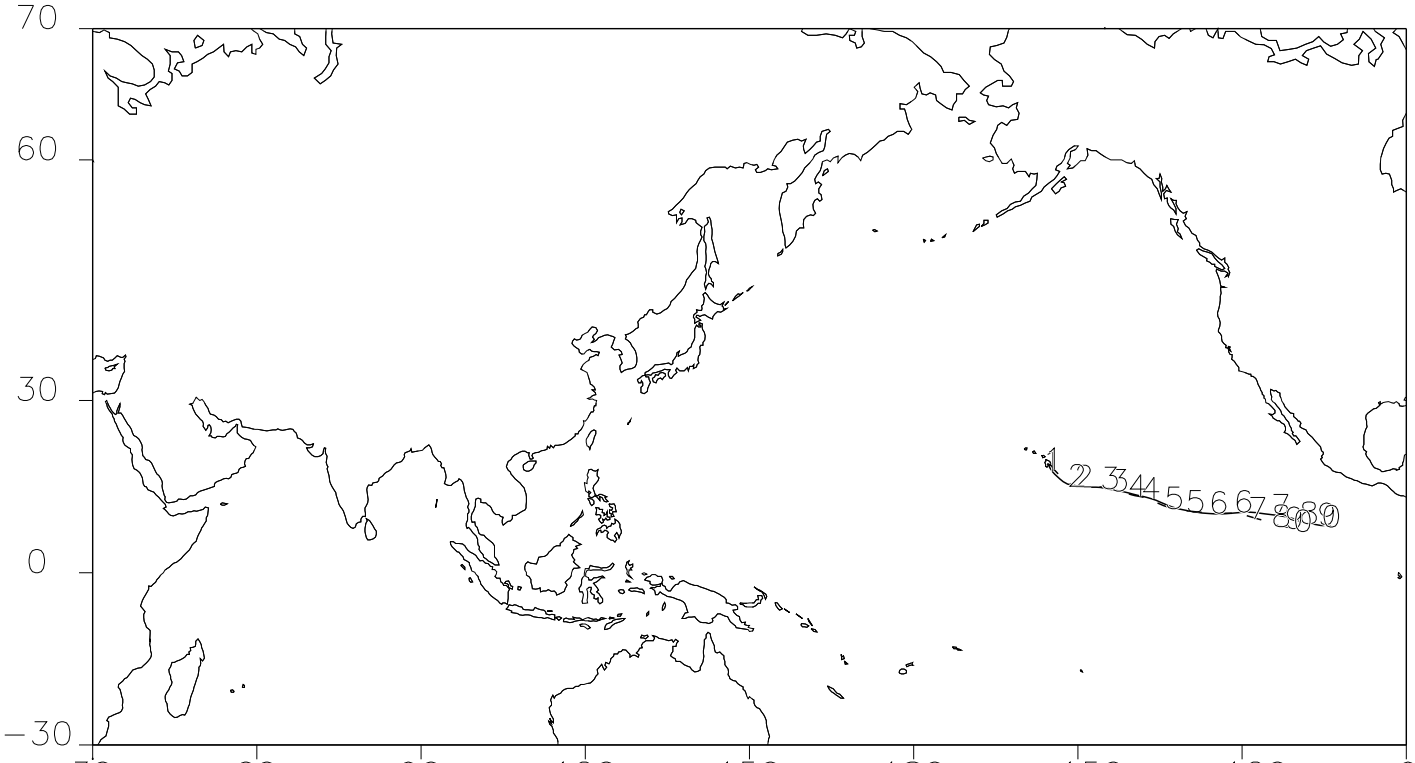
Day	km	hPa	C
0	4.0	631	2
1	3.4	676	7
2	3.0	713	10
3	2.9	717	10
4	3.0	711	10
5	3.3	691	7
6	2.3	776	12
7	1.9	810	13
8	1.3	872	17
9	1.0	900	20
10	1.0	902	21

18UT

Day	km	hPa	C
0	4.0	631	2
1	3.6	664	6
2	3.1	707	10
3	3.0	711	10
4	3.3	690	9
5	3.5	672	9
6	2.6	750	11
7	2.3	776	12
8	1.5	854	16
9	0.6	950	25
10	0.7	931	24

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/13/2004 (Day of Year 134)
NCEP/NCAR Reanalysis 1 Data Set

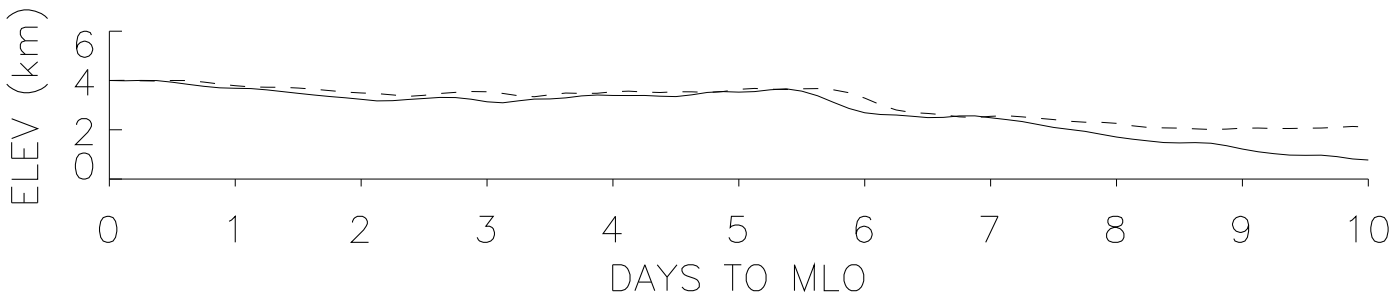


00UT

Day	km	hPa	C
0	4.0	631	3
1	3.7	656	5
2	3.2	693	10
3	3.1	700	9
4	3.4	679	8
5	3.5	668	9
6	2.7	738	10
7	2.5	755	11
8	1.7	829	15
9	1.2	879	18
10	0.8	922	23

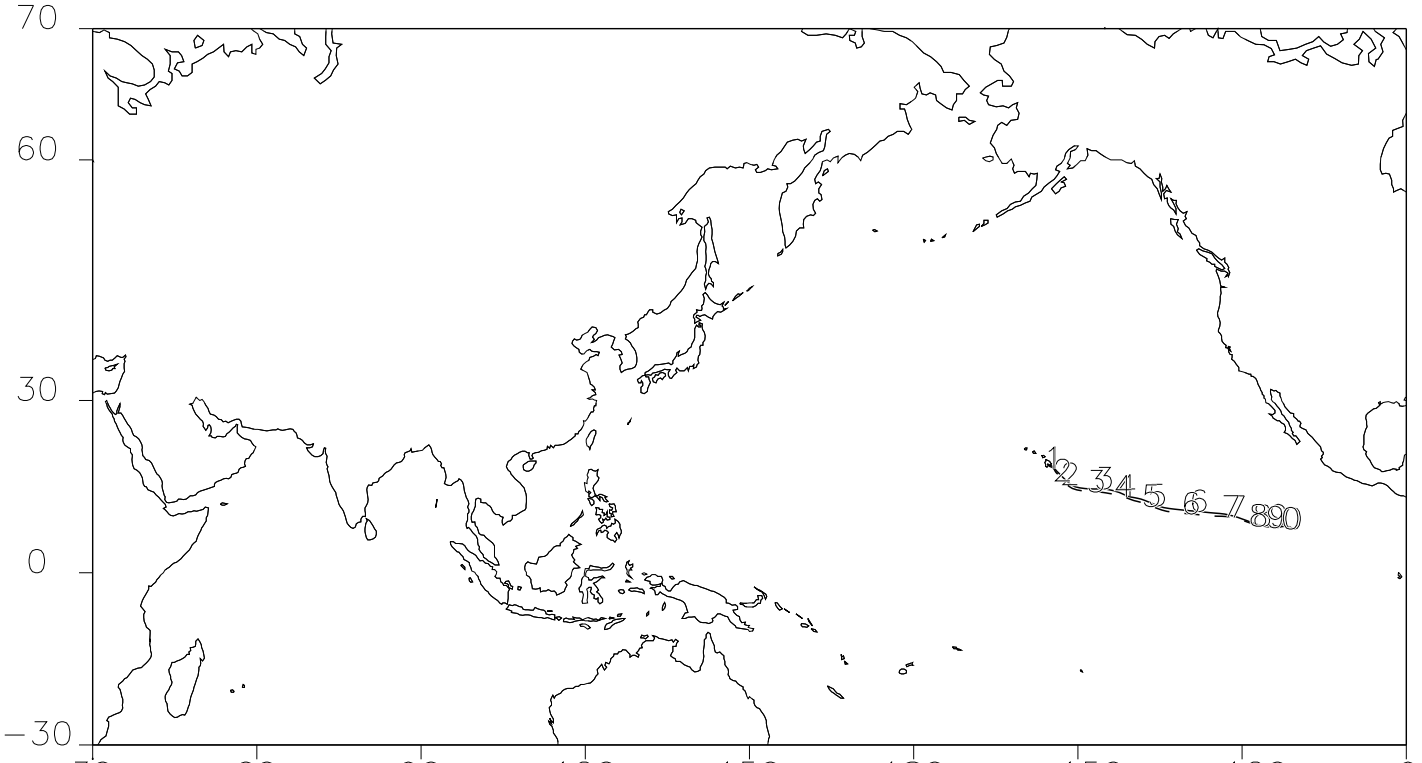
06UT

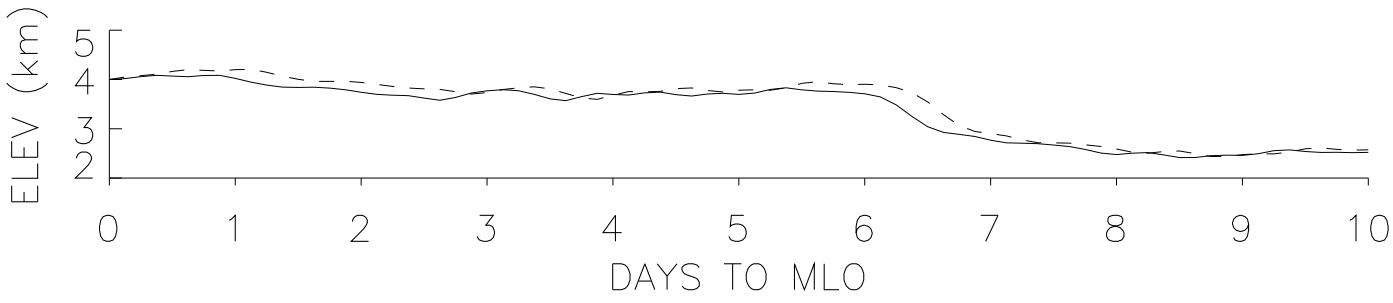
Day	km	hPa	C
0	4.0	632	3
1	3.8	648	4
2	3.5	671	8
3	3.5	668	6
4	3.5	668	8
5	3.6	661	8
6	3.3	690	8
7	2.5	753	11
8	2.3	779	12
9	2.1	797	13
10	2.1	792	14



00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/13/2004 (Day of Year 134)
NCEP/NCAR Reanalysis 1 Data Set





12UT

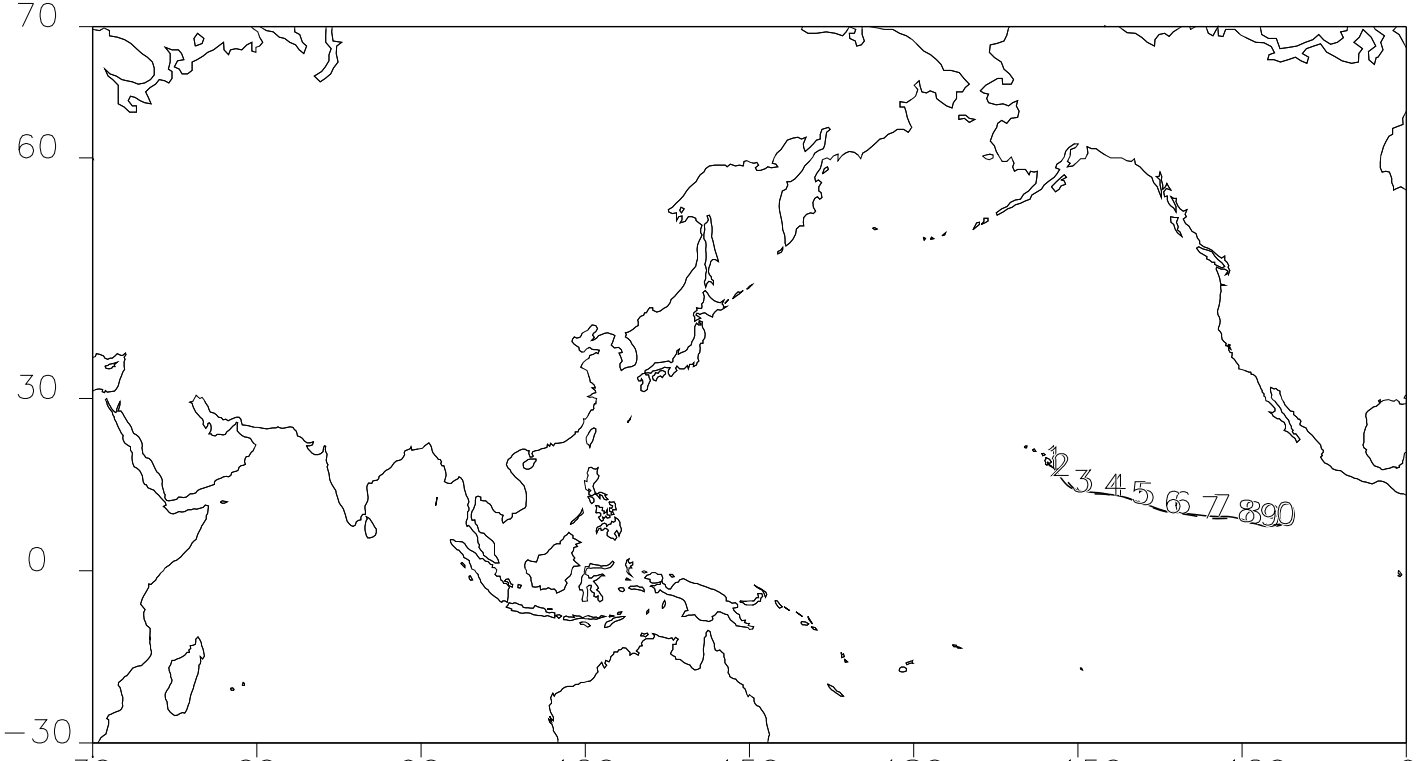
Day	km	hPa	C
0	4.0	631	3
1	4.0	629	2
2	3.7	650	6
3	3.8	648	5
4	3.7	654	7
5	3.7	654	7
6	3.7	653	6
7	2.8	730	10
8	2.5	755	12
9	2.5	758	11
10	2.5	752	11

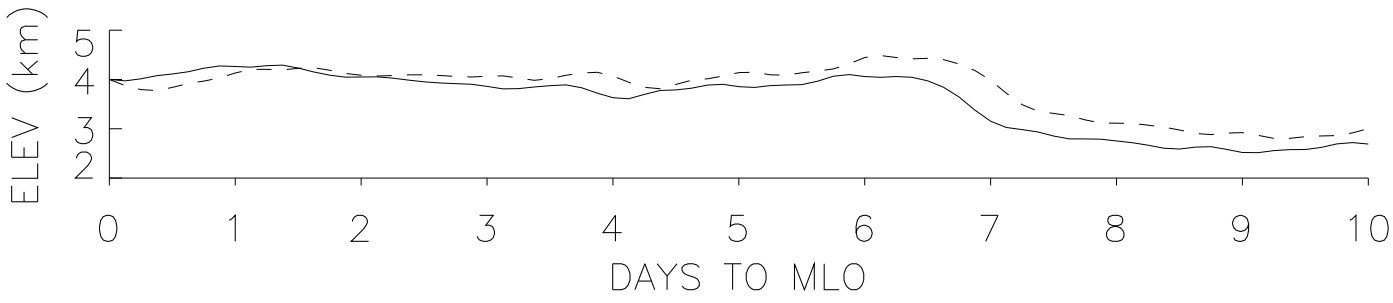
18UT

Day	km	hPa	C
0	4.0	631	4
1	4.2	616	2
2	3.9	635	4
3	3.7	653	6
4	3.7	657	7
5	3.8	649	7
6	3.9	641	7
7	2.9	721	11
8	2.6	748	11
9	2.5	759	12
10	2.6	750	11

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/14/2004 (Day of Year 135)
NCEP/NCAR Reanalysis 1 Data Set





00UT

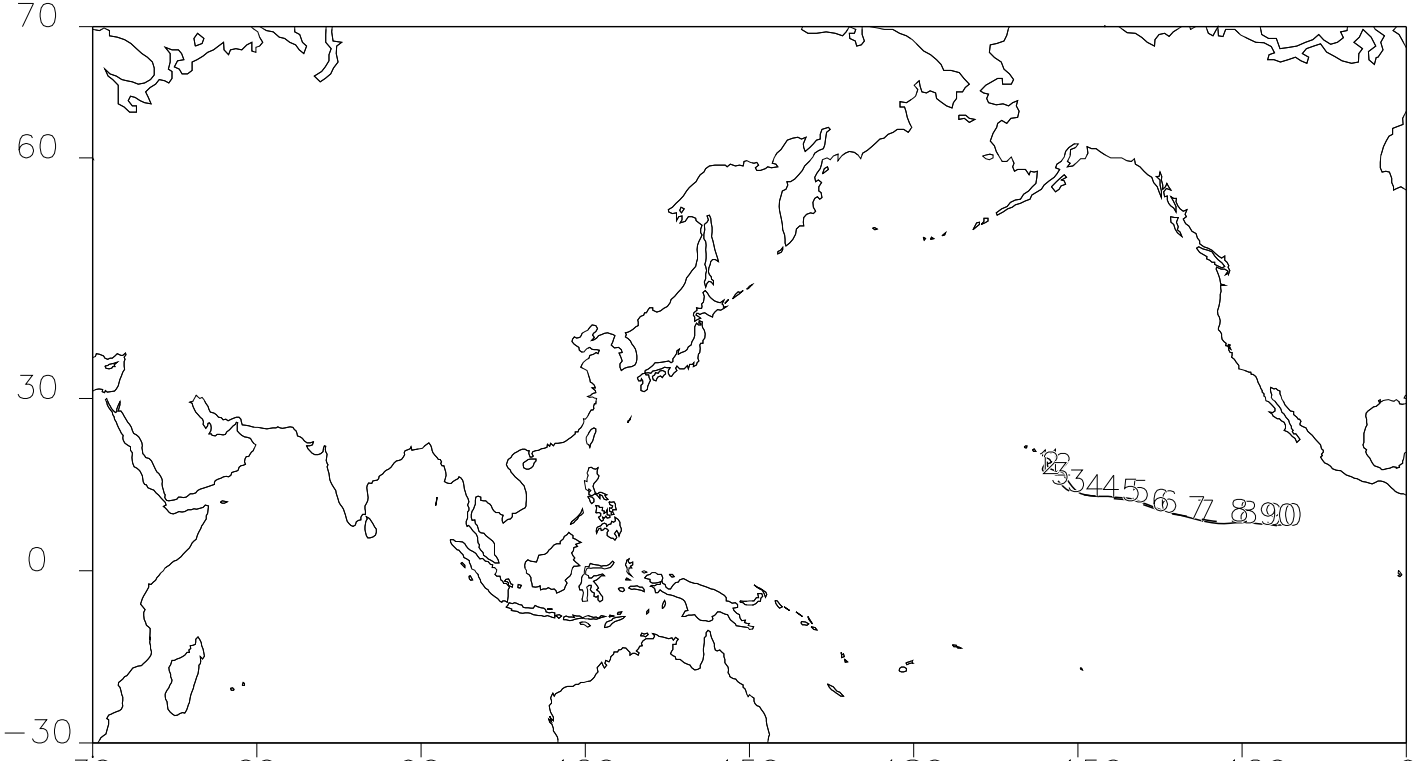
Day	km	hPa	C
0	4.0	631	5
1	4.3	611	2
2	4.1	627	4
3	3.9	641	6
4	3.6	659	7
5	3.9	642	7
6	4.1	626	6
7	3.2	697	9
8	2.8	731	10
9	2.5	752	12
10	2.7	737	10

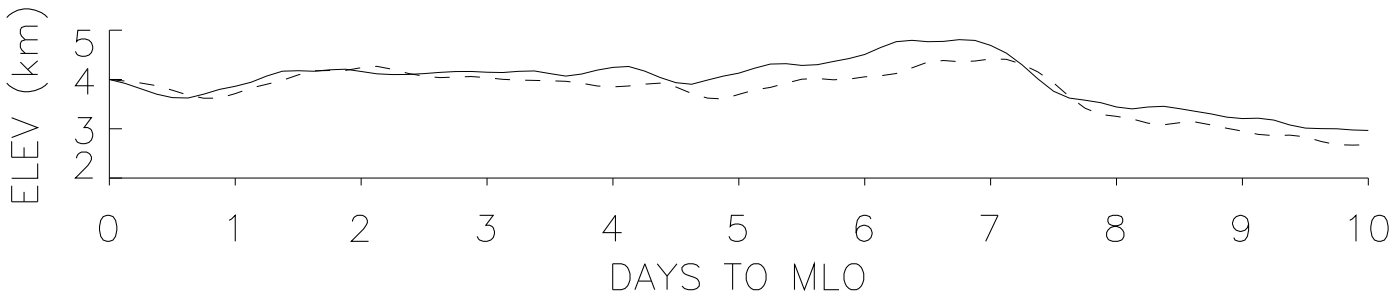
06UT

Day	km	hPa	C
0	4.0	632	5
1	4.1	622	3
2	4.1	624	3
3	4.1	626	6
4	4.1	625	4
5	4.1	621	6
6	4.4	599	5
7	4.0	633	6
8	3.1	703	9
9	2.9	720	10
10	3.0	712	9

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/14/2004 (Day of Year 135)
NCEP/NCAR Reanalysis 1 Data Set





12UT

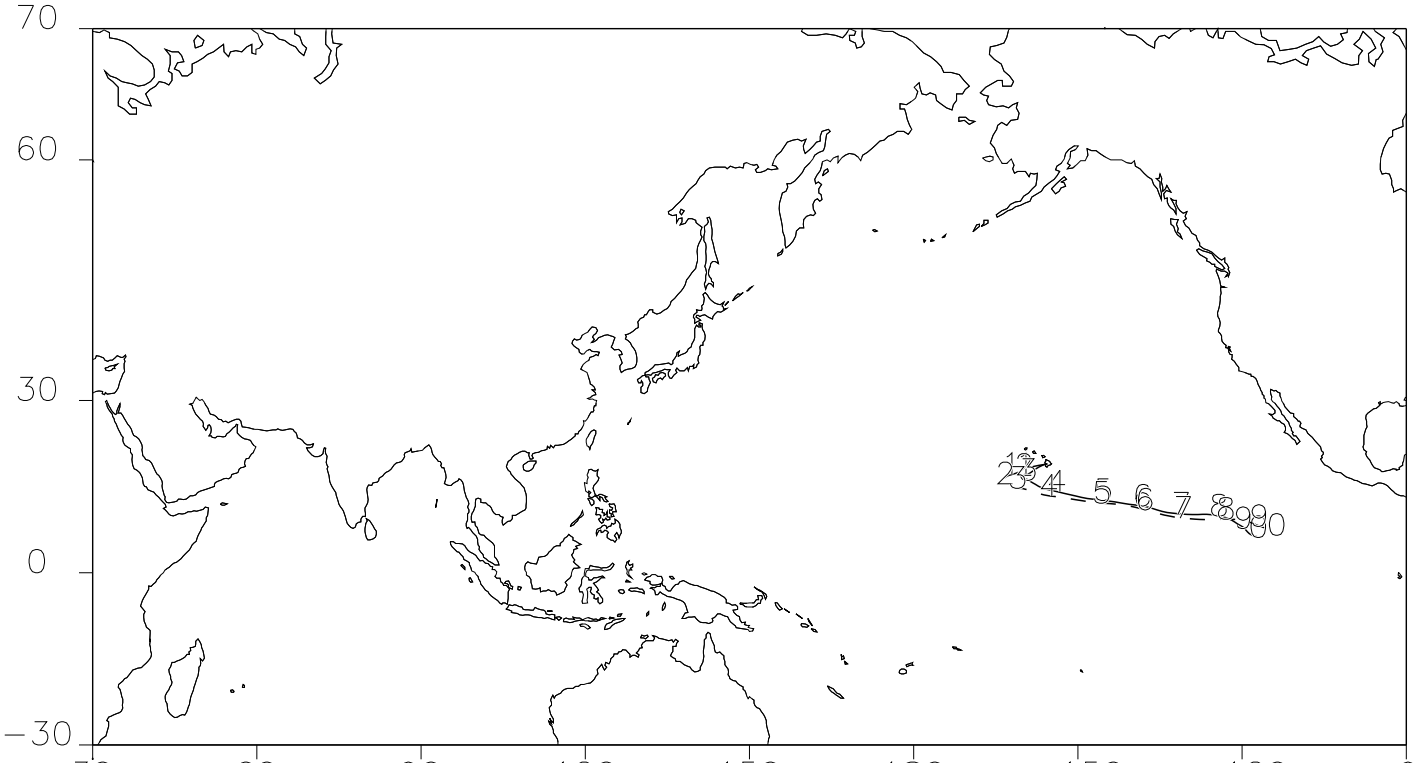
Day	km	hPa	C
0	4.0	631	4
1	3.9	642	5
2	4.2	618	3
3	4.1	618	5
4	4.2	611	3
5	4.1	620	6
6	4.5	593	4
7	4.7	579	2
8	3.4	673	7
9	3.2	692	9
10	3.0	713	9

18UT

Day	km	hPa	C
0	4.0	632	5
1	3.7	654	7
2	4.2	613	2
3	4.0	628	5
4	3.8	643	6
5	3.7	655	8
6	4.1	628	6
7	4.4	601	4
8	3.3	692	9
9	3.0	717	10
10	2.7	741	11

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/15/2004 (Day of Year 136)
NCEP/NCAR Reanalysis 1 Data Set

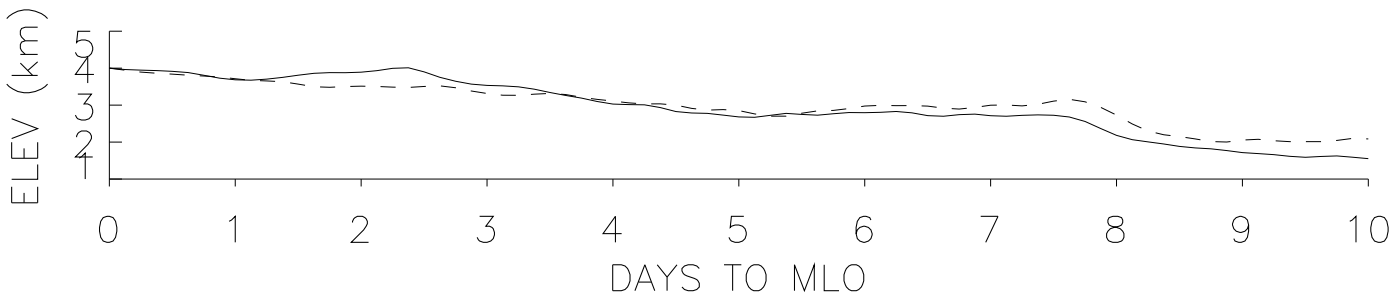


00UT

Day	km	hPa	C
0	4.0	632	5
1	3.7	656	7
2	3.9	639	4
3	3.5	667	7
4	3.0	708	11
5	2.7	739	11
6	2.8	729	11
7	2.7	736	12
8	2.2	784	13
9	1.7	827	14
10	1.6	844	14

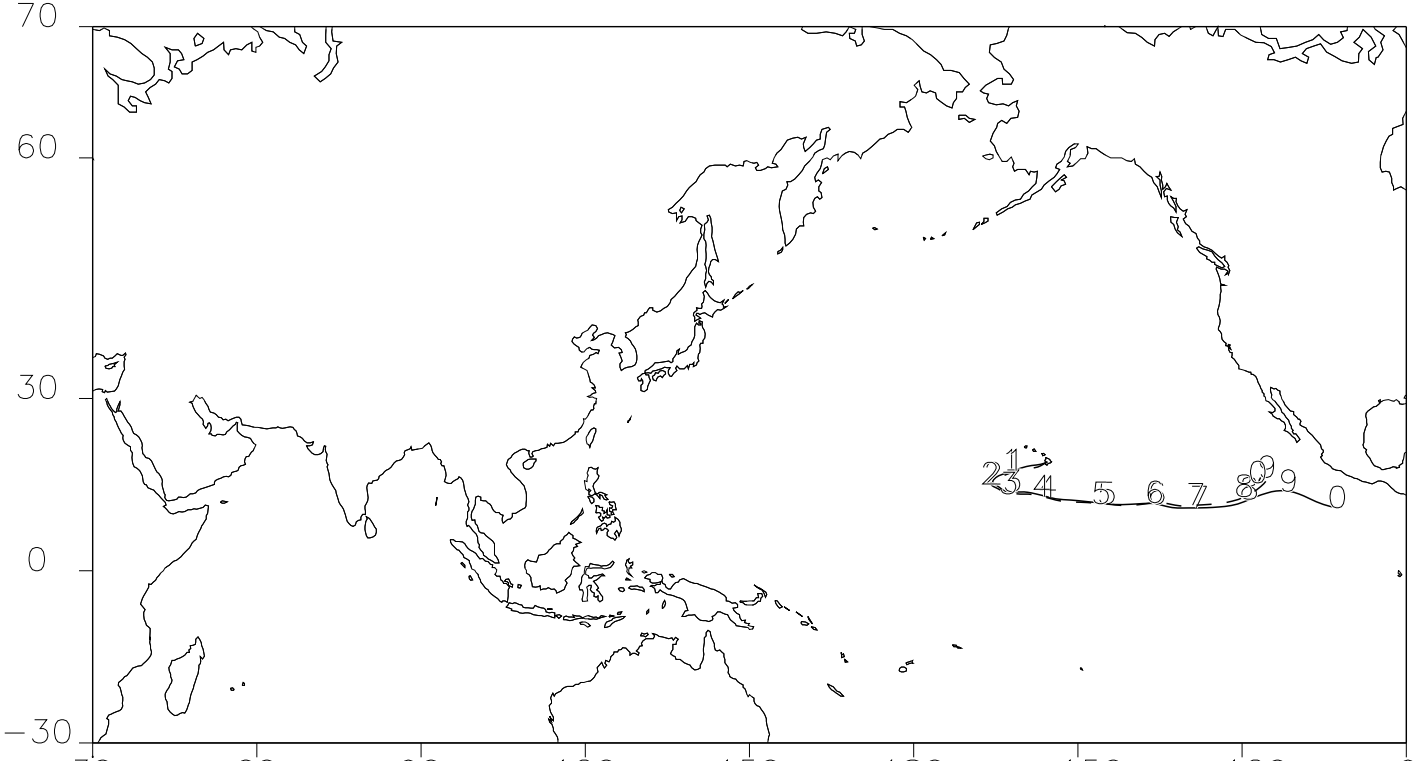
06UT

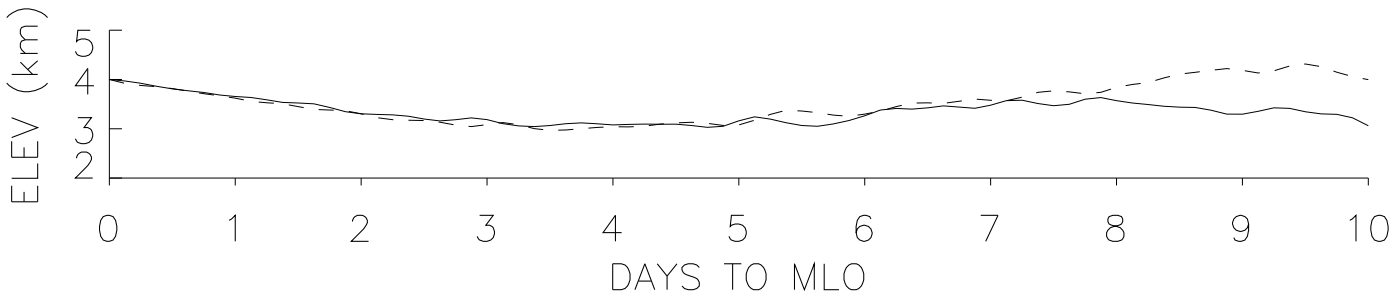
Day	km	hPa	C
0	4.0	632	4
1	3.7	653	6
2	3.5	670	7
3	3.3	686	8
4	3.1	702	11
5	2.9	724	10
6	3.0	715	10
7	3.0	714	11
8	2.7	738	10
9	2.1	799	13
10	2.1	796	13



00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/15/2004 (Day of Year 136)
NCEP/NCAR Reanalysis 1 Data Set





12UT

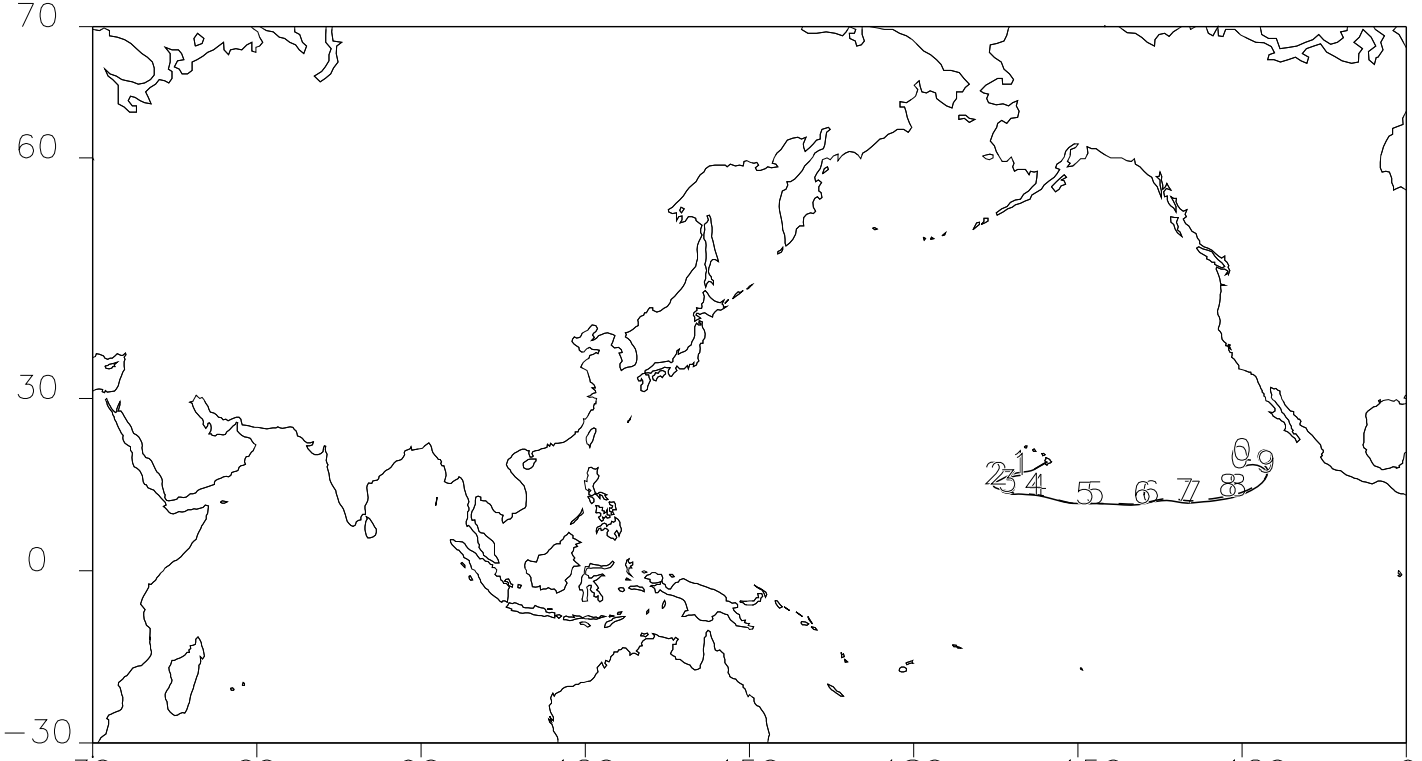
Day	km	hPa	C
0	4.0	632	4
1	3.7	658	6
2	3.3	686	9
3	3.2	696	9
4	3.1	703	11
5	3.2	697	8
6	3.3	689	7
7	3.5	672	8
8	3.6	665	6
9	3.3	688	9
10	3.1	706	9

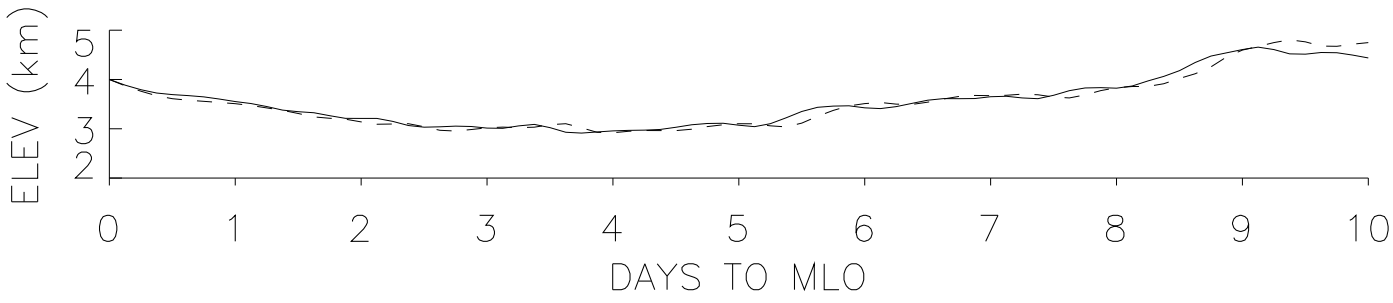
18UT

Day	km	hPa	C
0	4.0	633	5
1	3.6	661	7
2	3.3	687	9
3	3.1	704	11
4	3.0	707	11
5	3.1	705	10
6	3.3	688	9
7	3.6	665	9
8	3.8	646	7
9	4.2	619	4
10	4.0	631	5

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/16/2004 (Day of Year 137)
NCEP/NCAR Reanalysis 1 Data Set





00UT

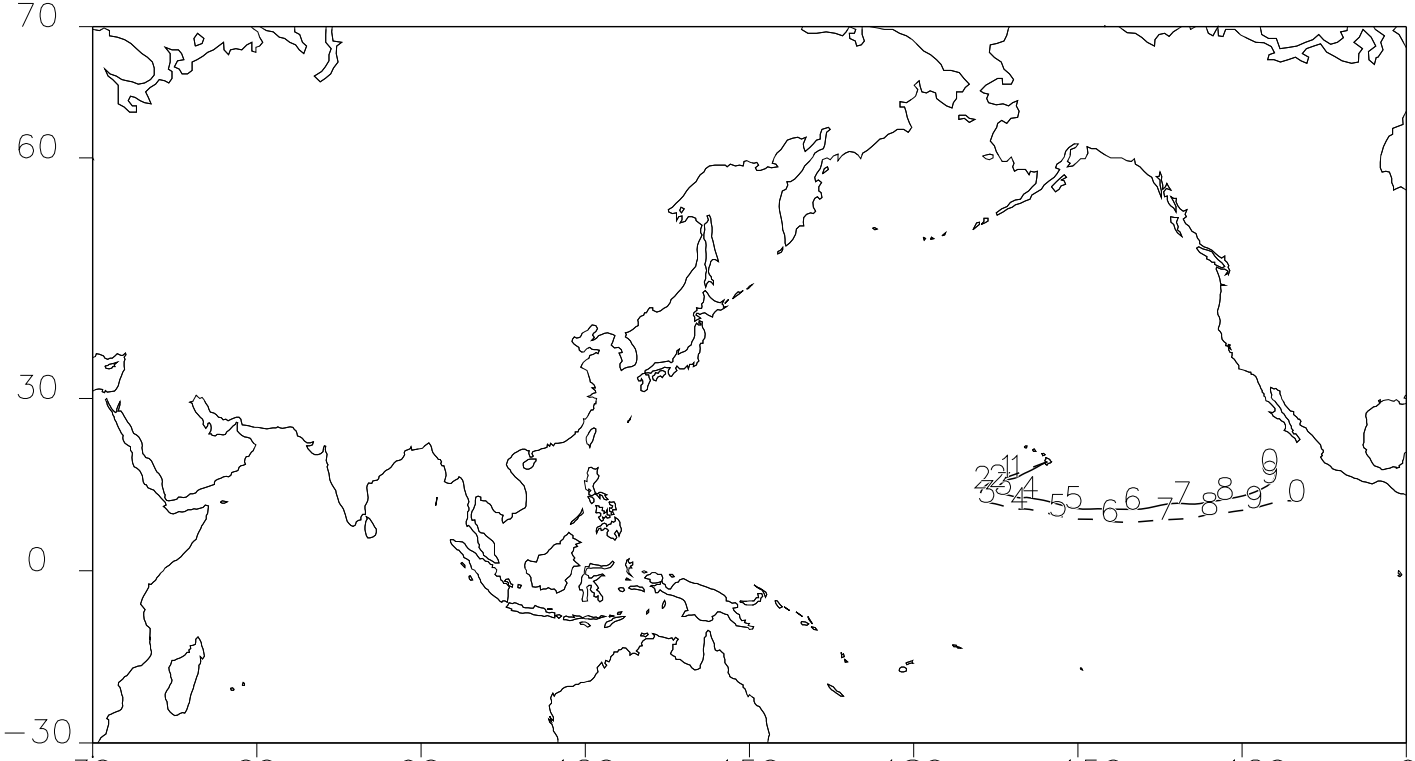
Day	km	hPa	C
0	4.0	632	5
1	3.6	667	8
2	3.2	694	9
3	3.0	710	11
4	3.0	714	11
5	3.1	704	10
6	3.4	676	8
7	3.7	658	7
8	3.8	645	7
9	4.6	586	2
10	4.4	596	5

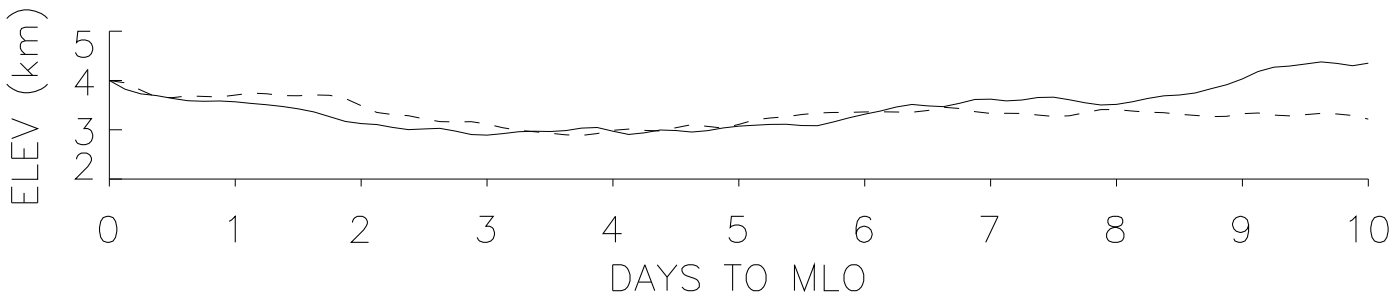
06UT

Day	km	hPa	C
0	4.0	633	4
1	3.5	671	8
2	3.1	700	10
3	3.0	711	11
4	2.9	719	11
5	3.1	702	11
6	3.5	669	8
7	3.7	658	8
8	3.8	647	7
9	4.6	589	2
10	4.7	576	3

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/16/2004 (Day of Year 137)
NCEP/NCAR Reanalysis 1 Data Set





12UT

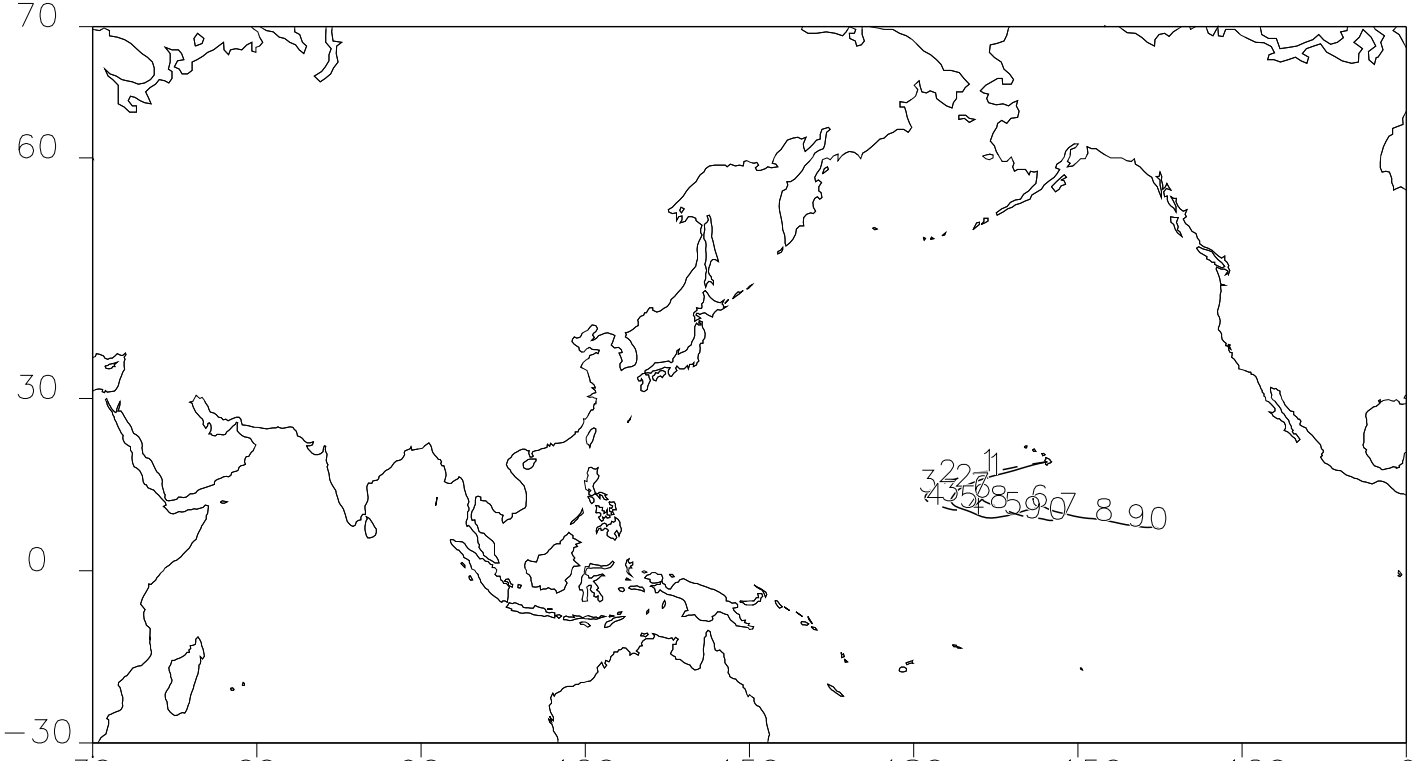
Day	km	hPa	C
0	4.0	632	4
1	3.6	666	8
2	3.1	702	11
3	2.9	721	11
4	3.0	714	11
5	3.1	703	11
6	3.3	683	8
7	3.6	659	7
8	3.5	669	8
9	4.0	629	4
10	4.4	604	2

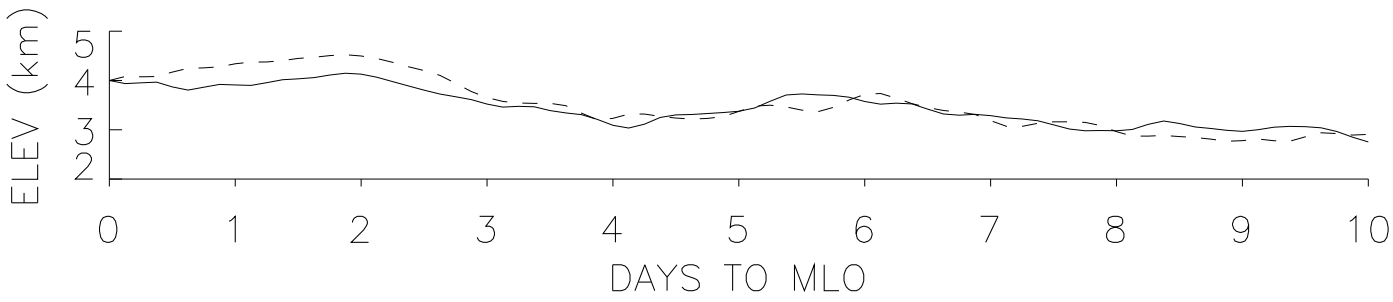
18UT

Day	km	hPa	C
0	4.0	631	3
1	3.7	655	7
2	3.5	672	9
3	3.1	703	11
4	3.0	712	12
5	3.1	701	12
6	3.4	681	9
7	3.3	684	9
8	3.4	679	9
9	3.3	687	8
10	3.2	696	10

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/17/2004 (Day of Year 138)
NCEP/NCAR Reanalysis 1 Data Set





00UT

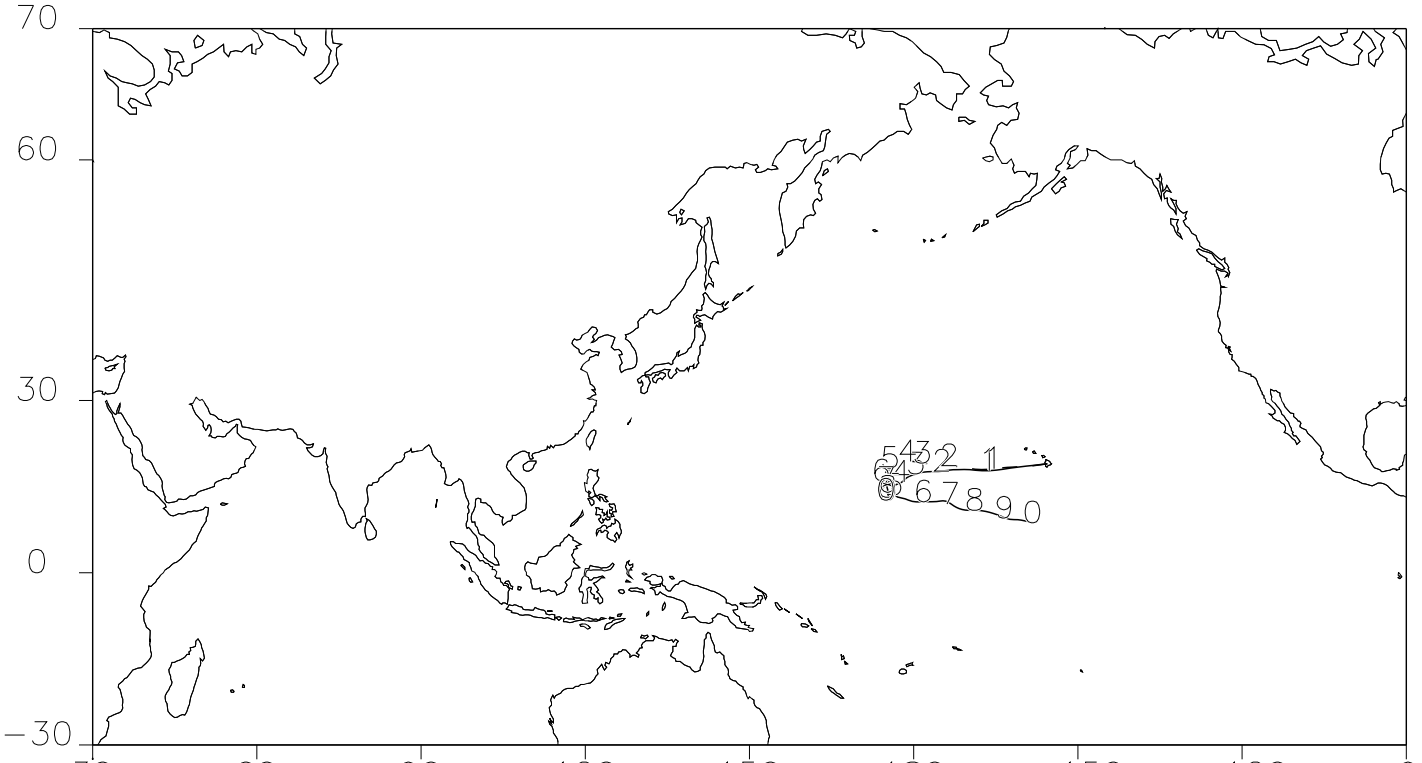
Day	km	hPa	C
0	4.0	631	4
1	3.9	639	6
2	4.1	622	4
3	3.5	669	9
4	3.1	703	13
5	3.4	679	11
6	3.6	663	9
7	3.3	687	8
8	3.0	713	12
9	3.0	714	12
10	2.8	731	13

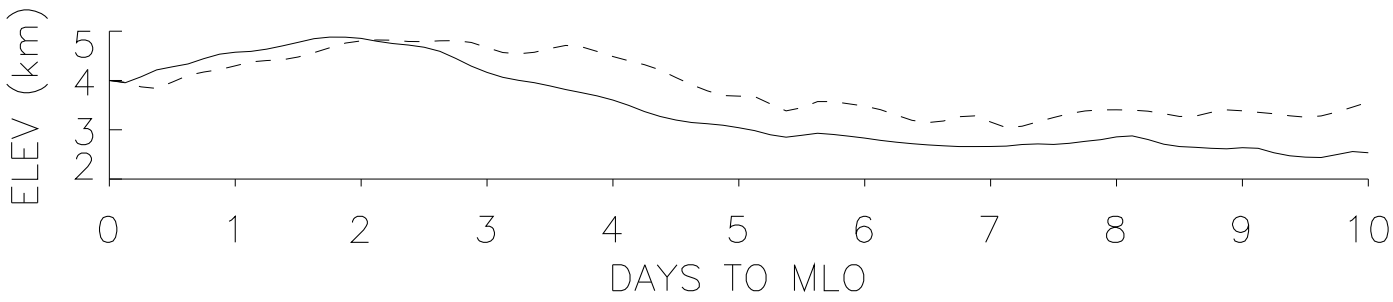
06UT

Day	km	hPa	C
0	4.0	632	5
1	4.3	606	2
2	4.5	594	2
3	3.7	658	8
4	3.2	692	11
5	3.4	680	10
6	3.7	652	7
7	3.2	696	11
8	3.0	714	11
9	2.8	730	13
10	2.9	719	12

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/17/2004 (Day of Year 138)
NCEP/NCAR Reanalysis 1 Data Set





12UT

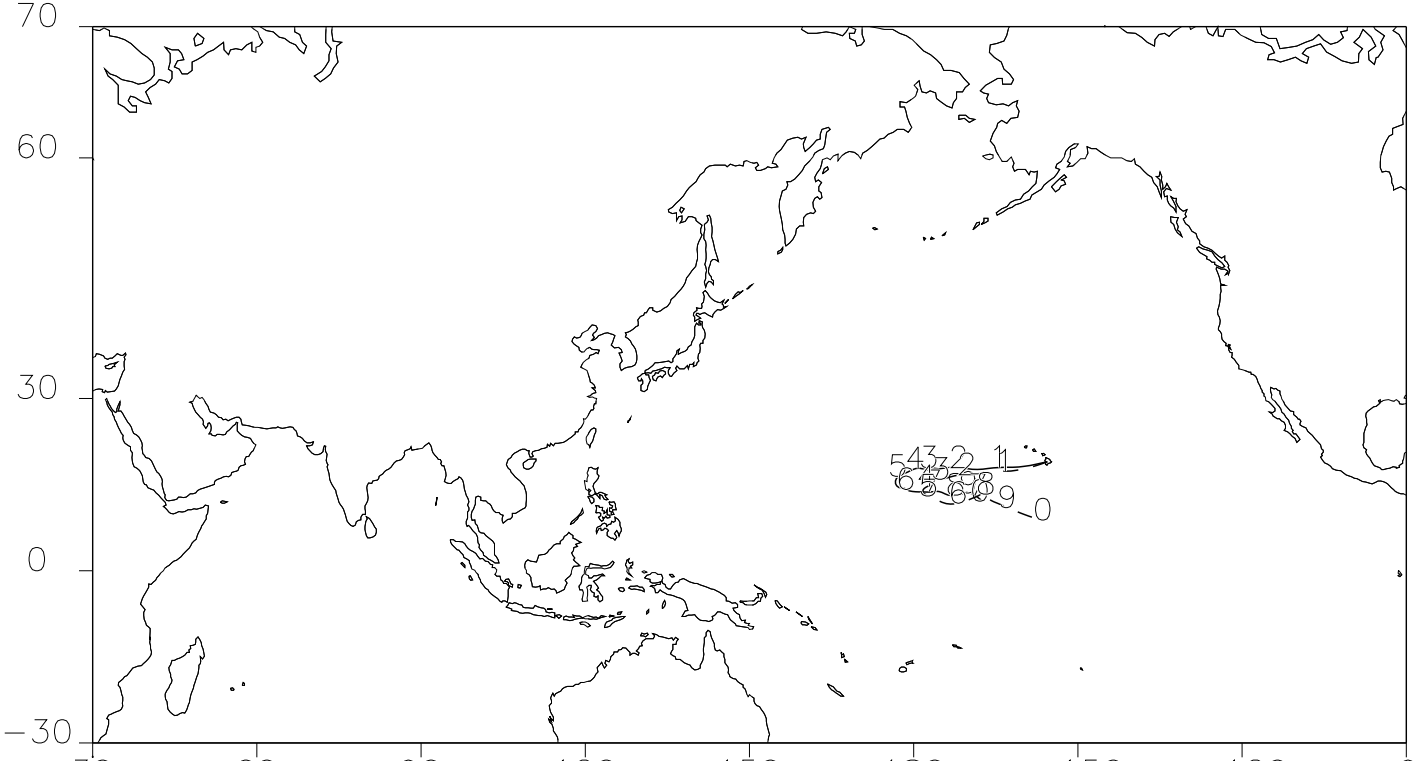
Day	km	hPa	C
0	4.0	631	5
1	4.6	589	2
2	4.9	568	0
3	4.2	618	3
4	3.6	662	6
5	3.0	708	11
6	2.8	726	12
7	2.7	741	14
8	2.9	724	11
9	2.6	743	12
10	2.5	752	13

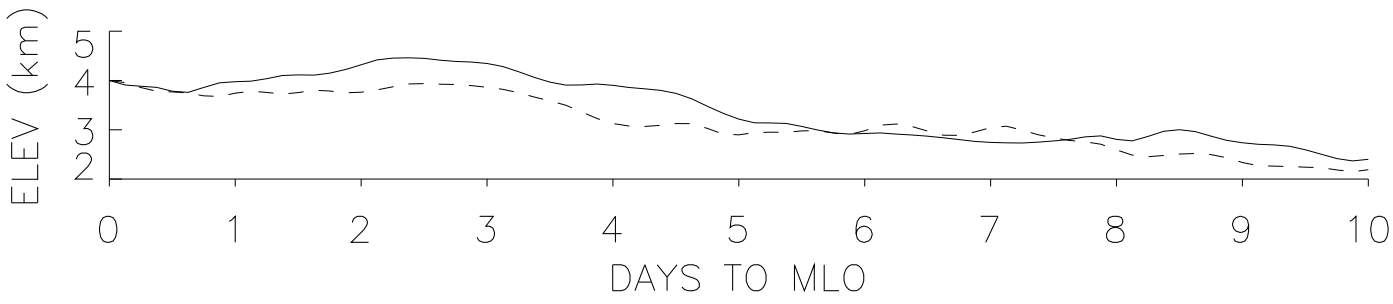
18UT

Day	km	hPa	C
0	4.0	631	6
1	4.3	608	2
2	4.8	571	-1
3	4.7	580	-1
4	4.5	593	-1
5	3.7	654	4
6	3.5	671	7
7	3.2	698	10
8	3.4	677	8
9	3.4	678	8
10	3.6	664	8

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/18/2004 (Day of Year 139)
NCEP/NCAR Reanalysis 1 Data Set





00UT

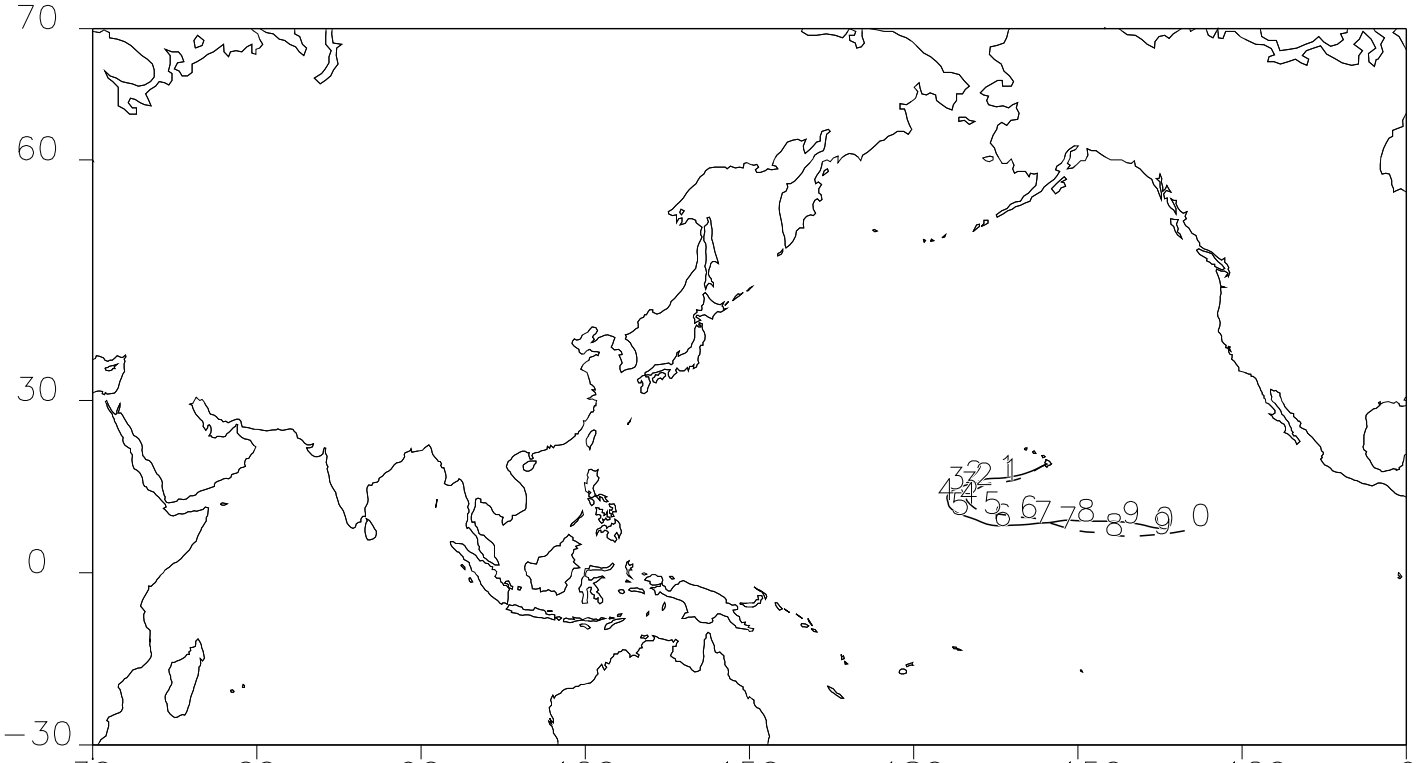
Day	km	hPa	C
0	4.0	630	4
1	4.0	633	5
2	4.3	607	3
3	4.3	605	2
4	3.9	638	4
5	3.2	694	9
6	2.9	718	12
7	2.7	734	14
8	2.8	728	13
9	2.7	734	11
10	2.4	764	13

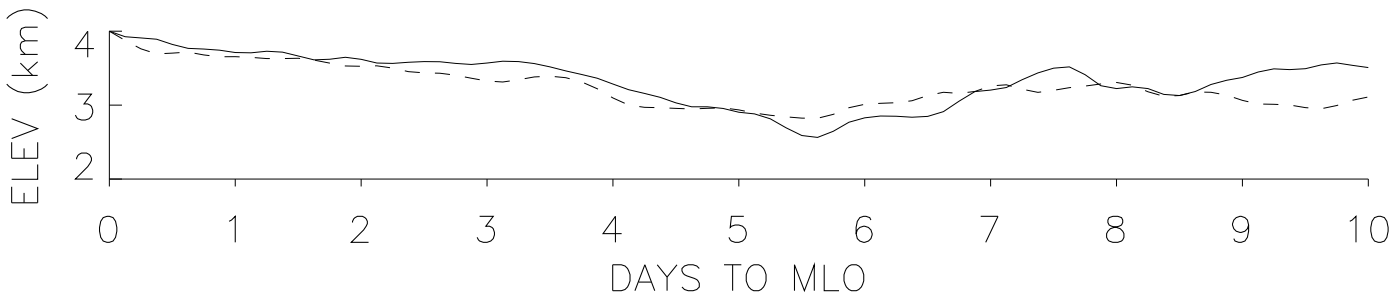
06UT

Day	km	hPa	C
0	4.0	631	5
1	3.7	652	7
2	3.8	651	6
3	3.9	642	5
4	3.1	700	10
5	2.9	720	12
6	3.0	712	12
7	3.0	708	11
8	2.6	747	12
9	2.3	769	13
10	2.2	784	14

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/18/2004 (Day of Year 139)
NCEP/NCAR Reanalysis 1 Data Set





12UT

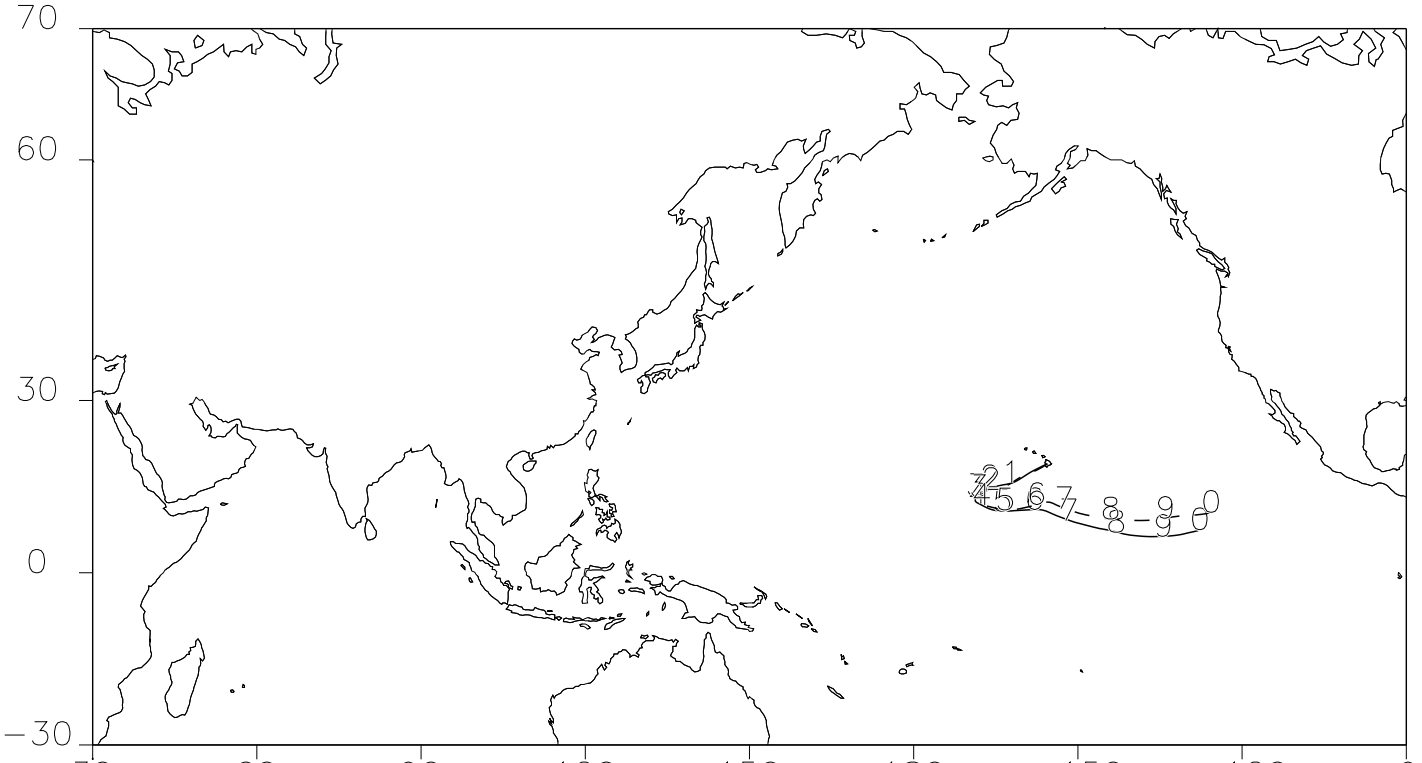
Day	km	hPa	C
0	4.0	631	4
1	3.7	655	7
2	3.6	663	8
3	3.6	666	8
4	3.3	689	9
5	2.9	719	12
6	2.8	725	13
7	3.2	692	11
8	3.2	691	9
9	3.4	679	10
10	3.5	669	8

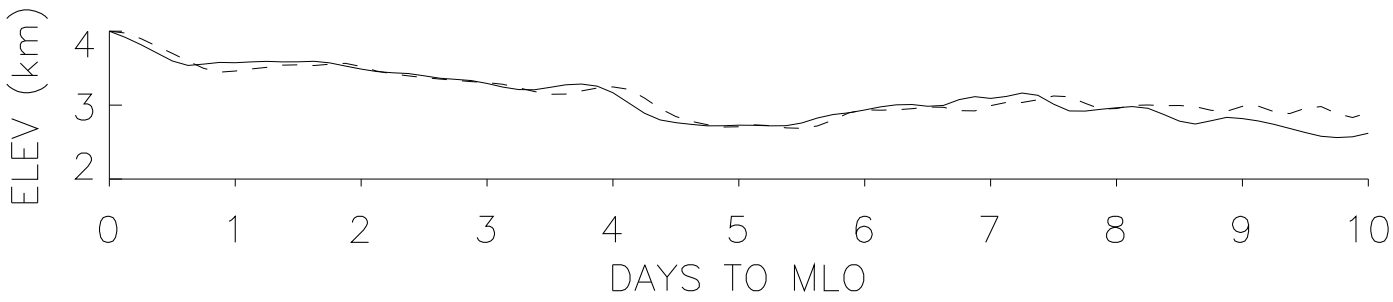
18UT

Day	km	hPa	C
0	4.0	632	5
1	3.7	659	7
2	3.5	669	8
3	3.3	686	10
4	3.1	704	11
5	2.9	718	11
6	3.0	710	12
7	3.3	689	11
8	3.3	685	9
9	3.1	706	11
10	3.1	703	10

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/19/2004 (Day of Year 140)
NCEP/NCAR Reanalysis 1 Data Set





00UT

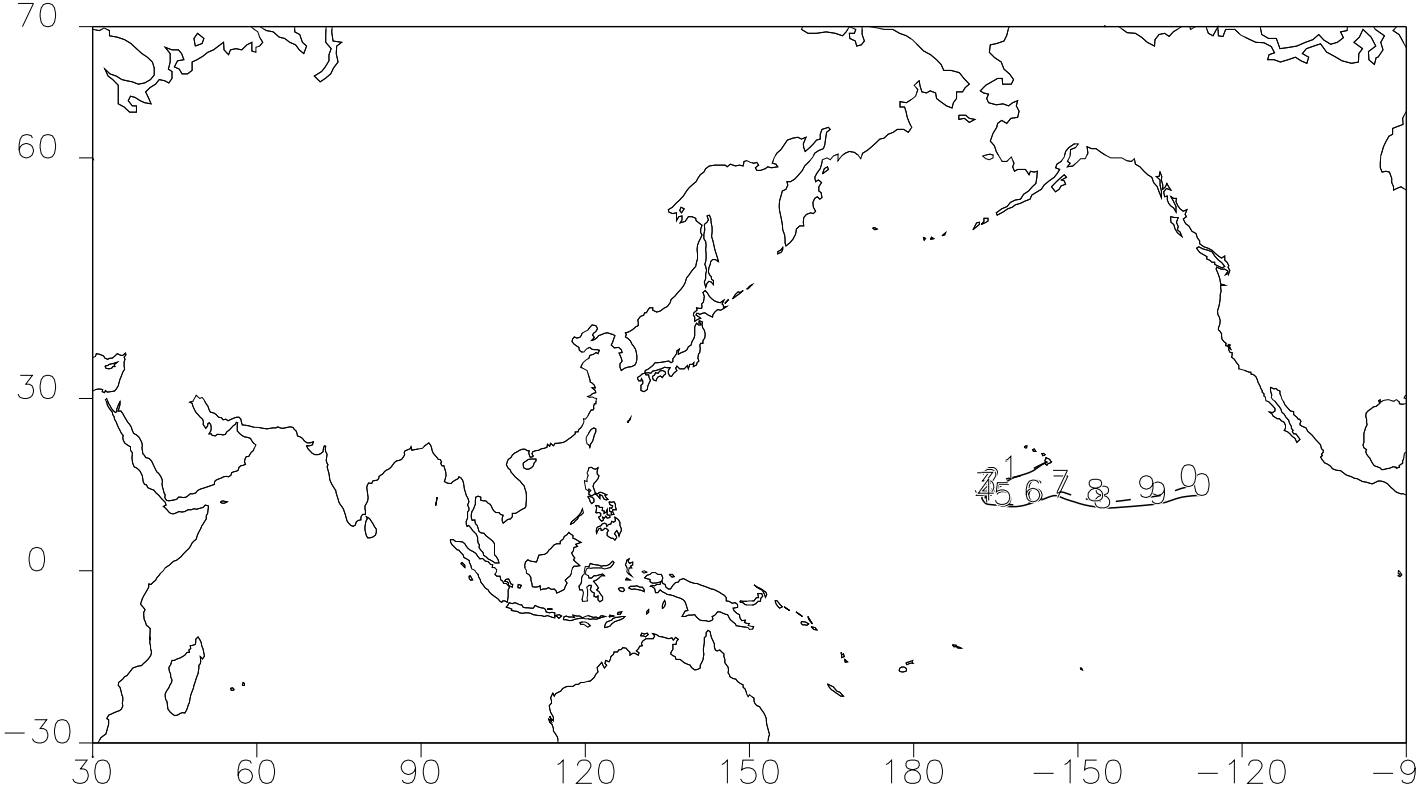
Day	km	hPa	C
0	4.0	632	4
1	3.6	664	7
2	3.5	673	9
3	3.3	690	10
4	3.2	699	10
5	2.7	735	12
6	2.9	717	13
7	3.1	702	13
8	3.0	712	10
9	2.8	725	11
10	2.6	744	12

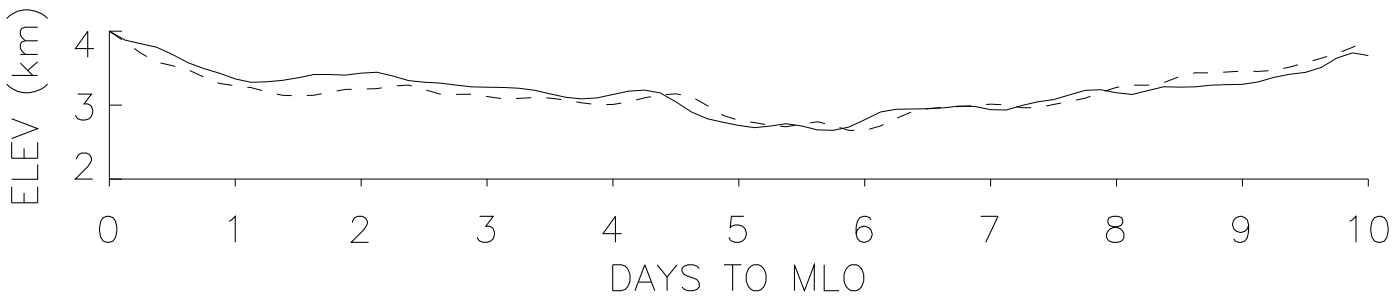
06UT

Day	km	hPa	C
0	4.0	633	3
1	3.5	674	8
2	3.5	670	9
3	3.3	689	10
4	3.2	693	10
5	2.7	738	13
6	2.9	718	12
7	3.0	712	12
8	3.0	715	12
9	3.0	712	10
10	2.9	722	11

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/19/2004 (Day of Year 140)
NCEP/NCAR Reanalysis 1 Data Set





12UT

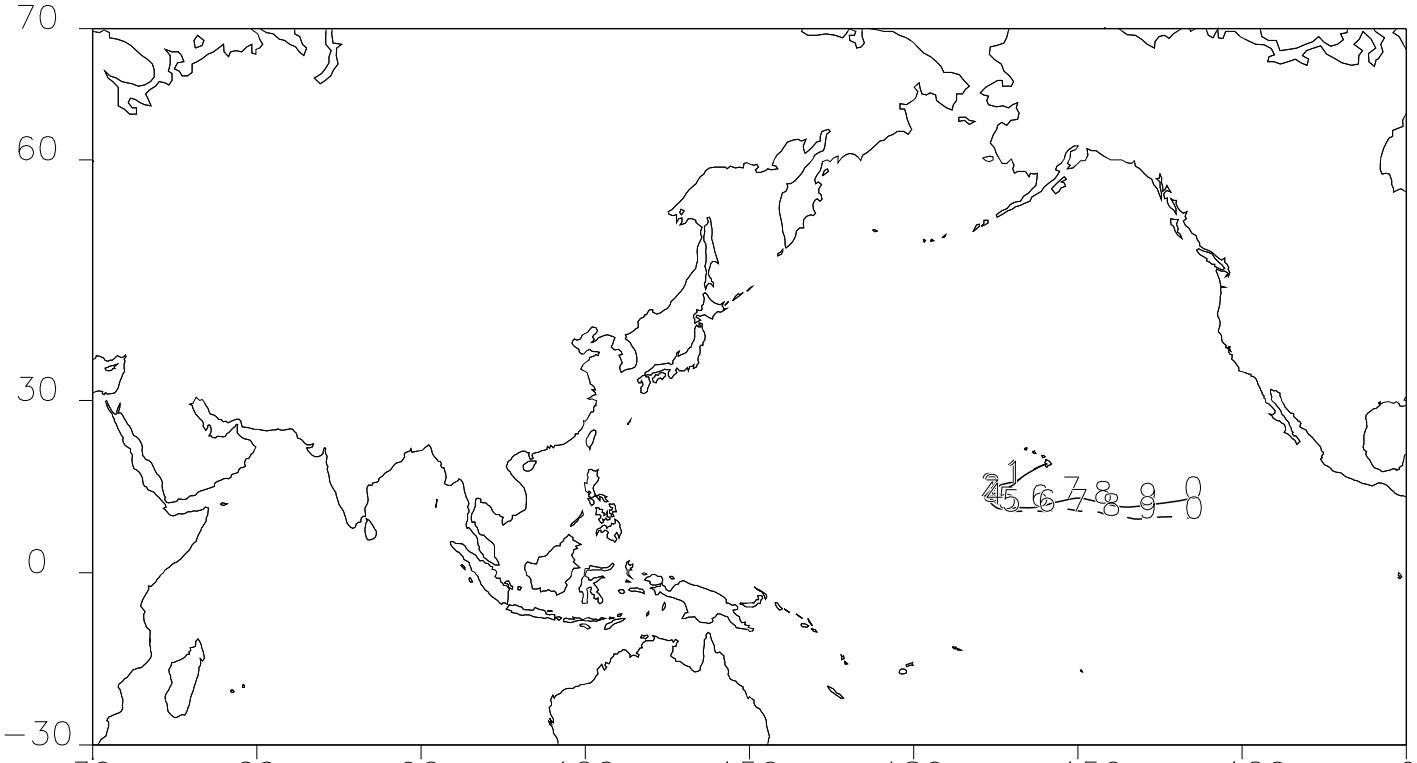
Day	km	hPa	C
0	4.0	632	4
1	3.4	682	9
2	3.4	678	9
3	3.2	694	11
4	3.1	702	11
5	2.7	736	13
6	2.8	728	12
7	2.9	716	11
8	3.2	696	11
9	3.3	687	9
10	3.7	656	8

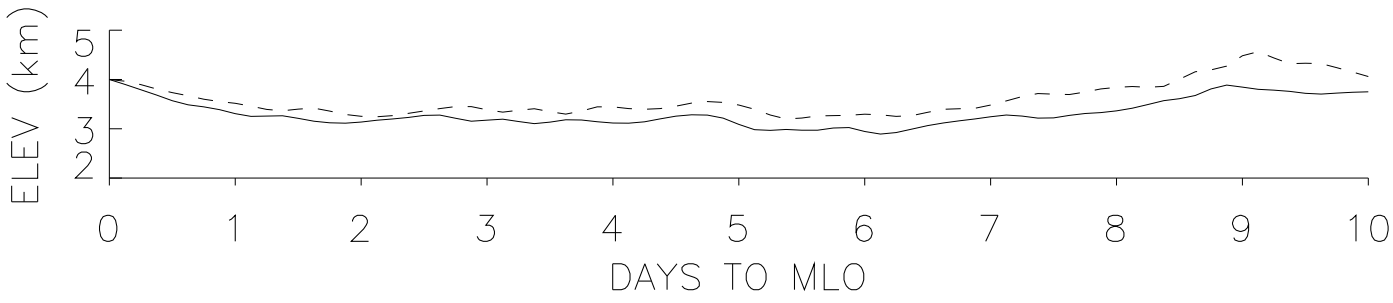
18UT

Day	km	hPa	C
0	4.0	632	3
1	3.3	692	9
2	3.2	695	10
3	3.1	704	11
4	3.0	712	12
5	2.8	731	13
6	2.7	742	13
7	3.0	711	11
8	3.2	691	11
9	3.5	674	8
10	3.9	642	8

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/20/2004 (Day of Year 141)
NCEP/NCAR Reanalysis 1 Data Set





00UT

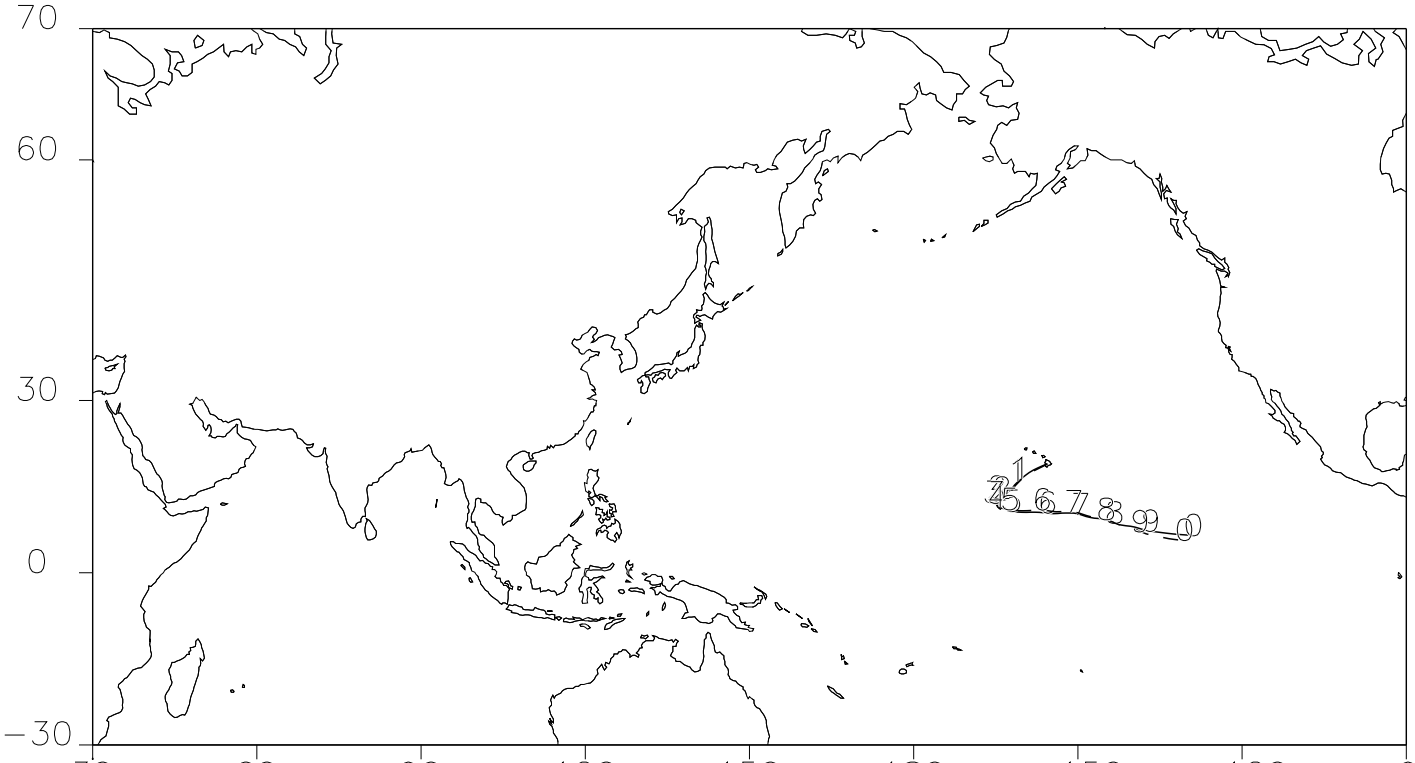
Day	km	hPa	C
0	4.0	632	3
1	3.3	687	9
2	3.1	701	11
3	3.2	699	12
4	3.1	704	12
5	3.1	706	11
6	2.9	716	12
7	3.2	691	12
8	3.4	680	10
9	3.8	641	7
10	3.7	650	8

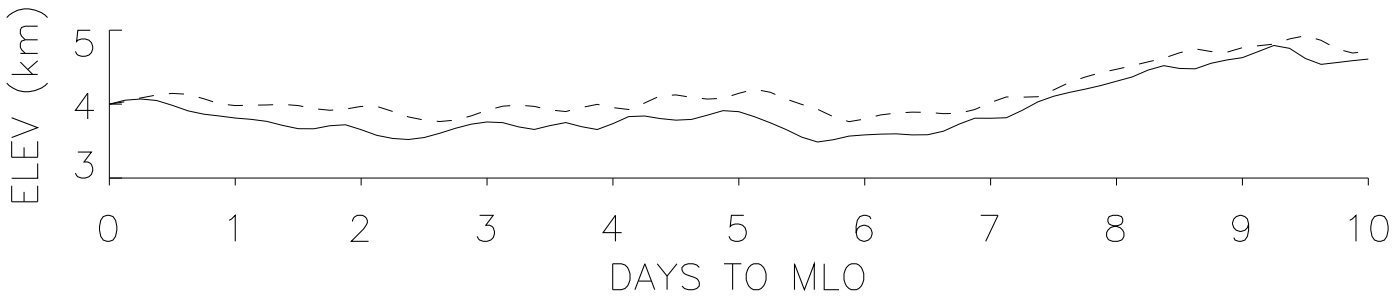
06UT

Day	km	hPa	C
0	4.0	633	4
1	3.5	670	8
2	3.3	692	10
3	3.4	682	11
4	3.4	677	9
5	3.5	674	9
6	3.3	687	11
7	3.5	672	12
8	3.8	643	9
9	4.5	595	5
10	4.1	625	8

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/20/2004 (Day of Year 141)
NCEP/NCAR Reanalysis 1 Data Set





12UT

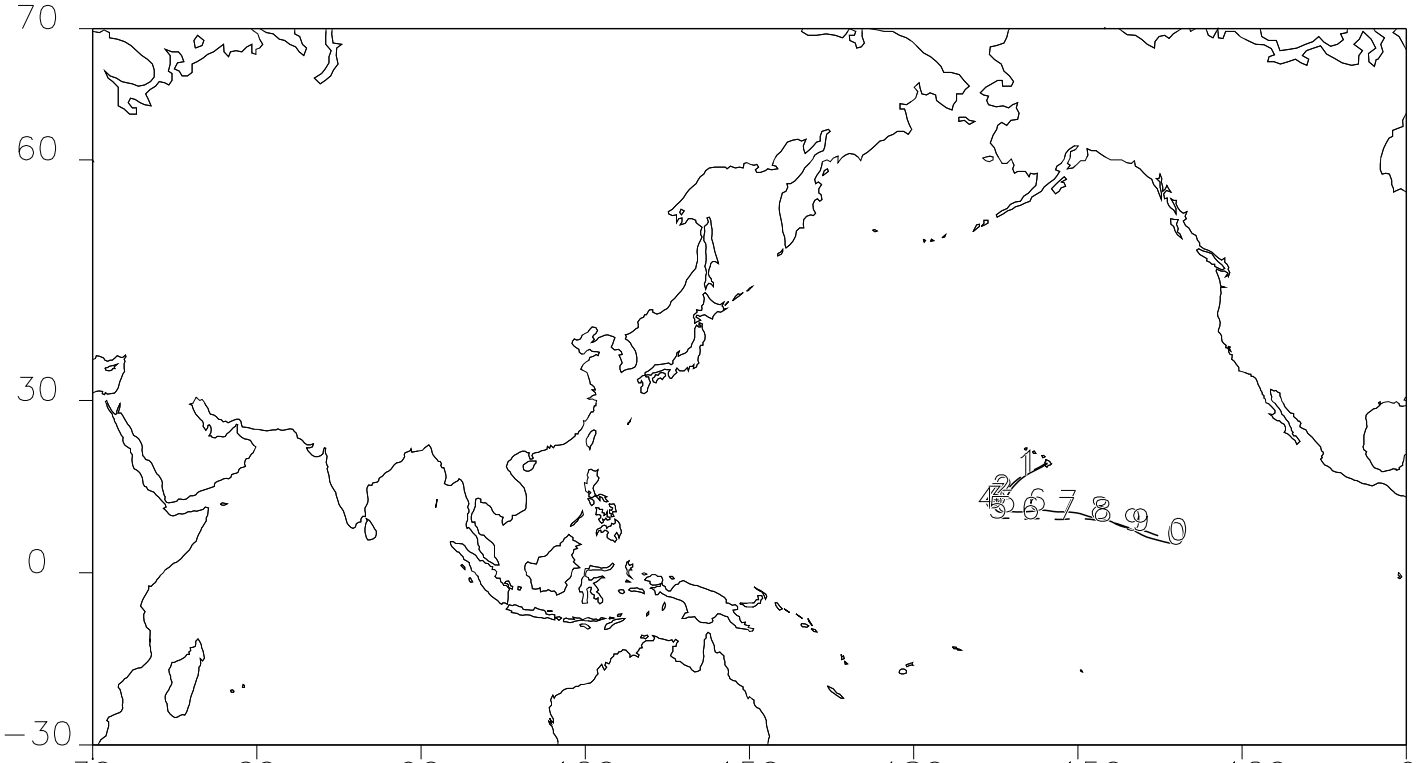
Day	km	hPa	C
0	4.0	633	3
1	3.8	647	6
2	3.7	658	8
3	3.8	651	7
4	3.7	654	8
5	3.9	640	6
6	3.6	664	9
7	3.8	645	9
8	4.3	606	7
9	4.6	582	4
10	4.6	583	4

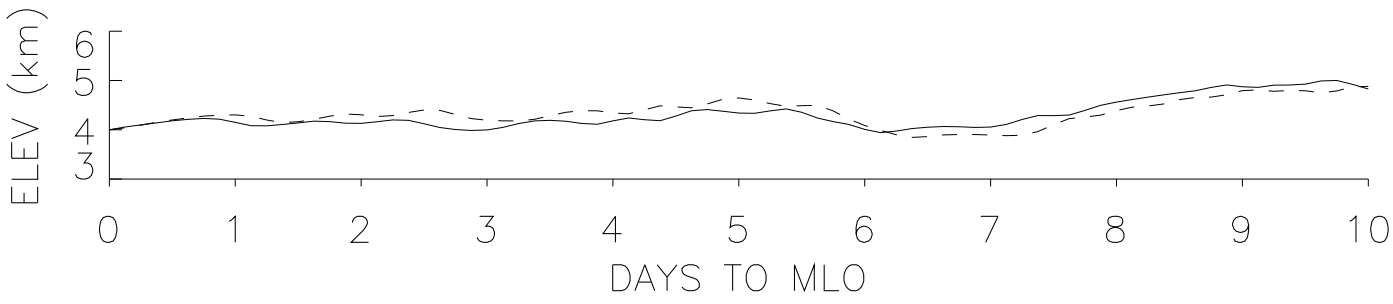
18UT

Day	km	hPa	C
0	4.0	634	4
1	4.0	633	4
2	4.0	635	7
3	3.9	639	7
4	4.0	636	7
5	4.1	621	5
6	3.8	647	8
7	4.0	629	8
8	4.5	596	7
9	4.8	575	4
10	4.7	577	4

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/21/2004 (Day of Year 142)
NCEP/NCAR Reanalysis 1 Data Set





00UT

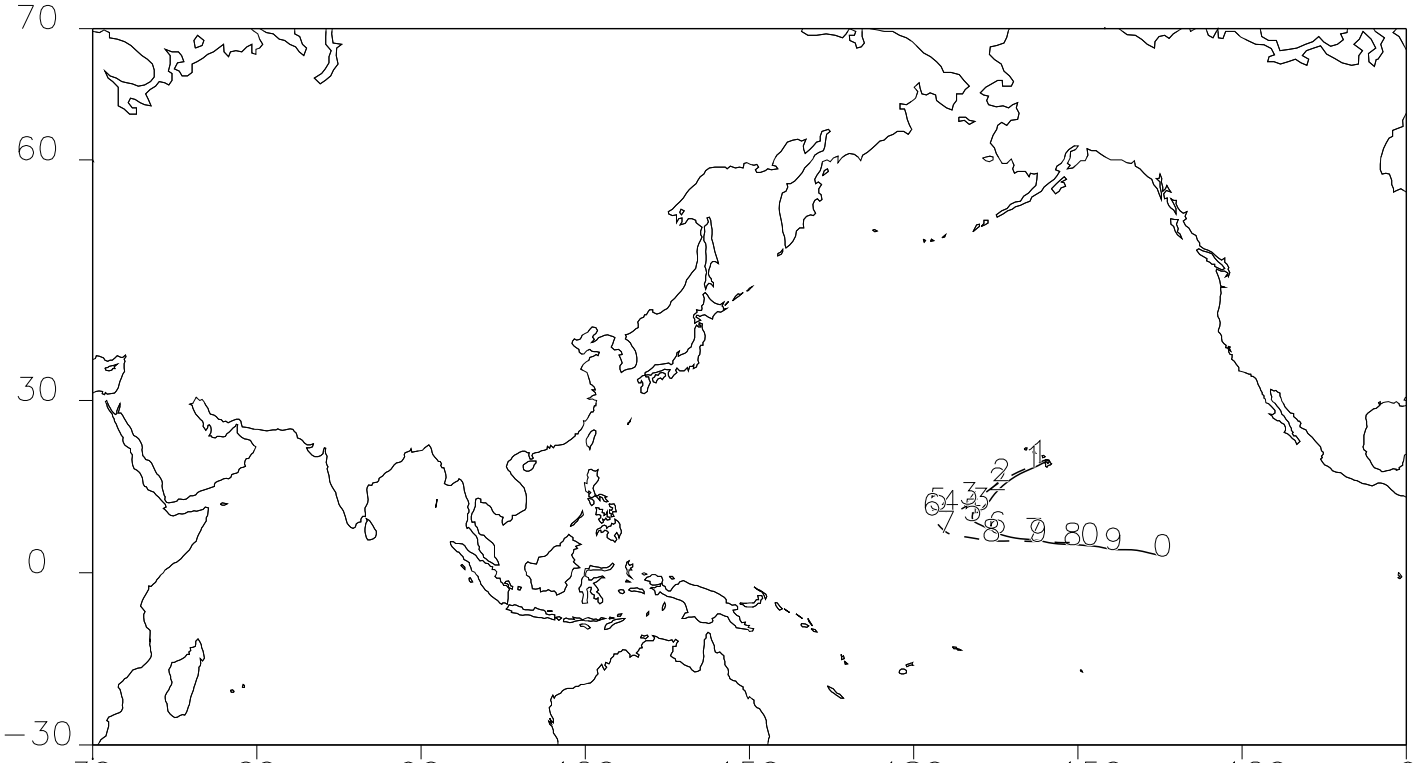
Day	km	hPa	C
0	4.0	634	4
1	4.1	620	3
2	4.1	622	6
3	4.0	632	7
4	4.2	619	6
5	4.3	607	5
6	4.0	631	7
7	4.1	626	8
8	4.6	589	6
9	4.9	565	3
10	4.8	567	3

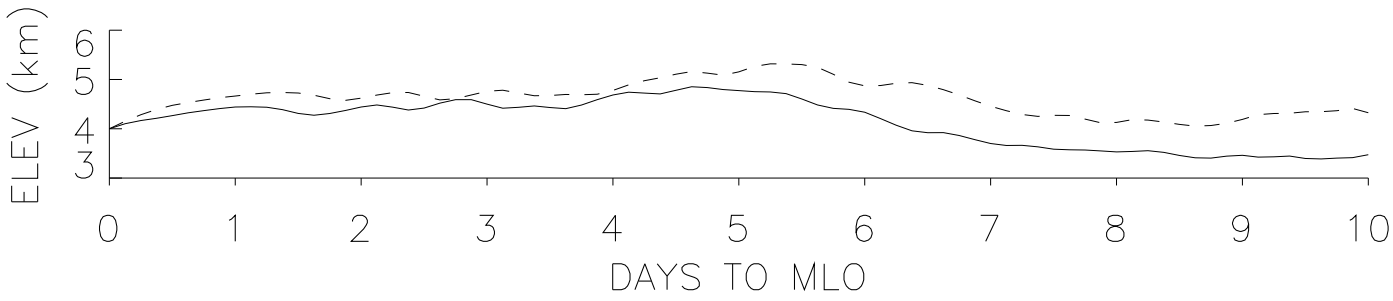
06UT

Day	km	hPa	C
0	4.0	635	4
1	4.3	610	3
2	4.3	609	4
3	4.2	617	6
4	4.3	607	6
5	4.6	585	2
6	4.1	625	6
7	3.9	639	8
8	4.4	602	7
9	4.8	573	4
10	4.9	566	2

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/21/2004 (Day of Year 142)
NCEP/NCAR Reanalysis 1 Data Set





12UT

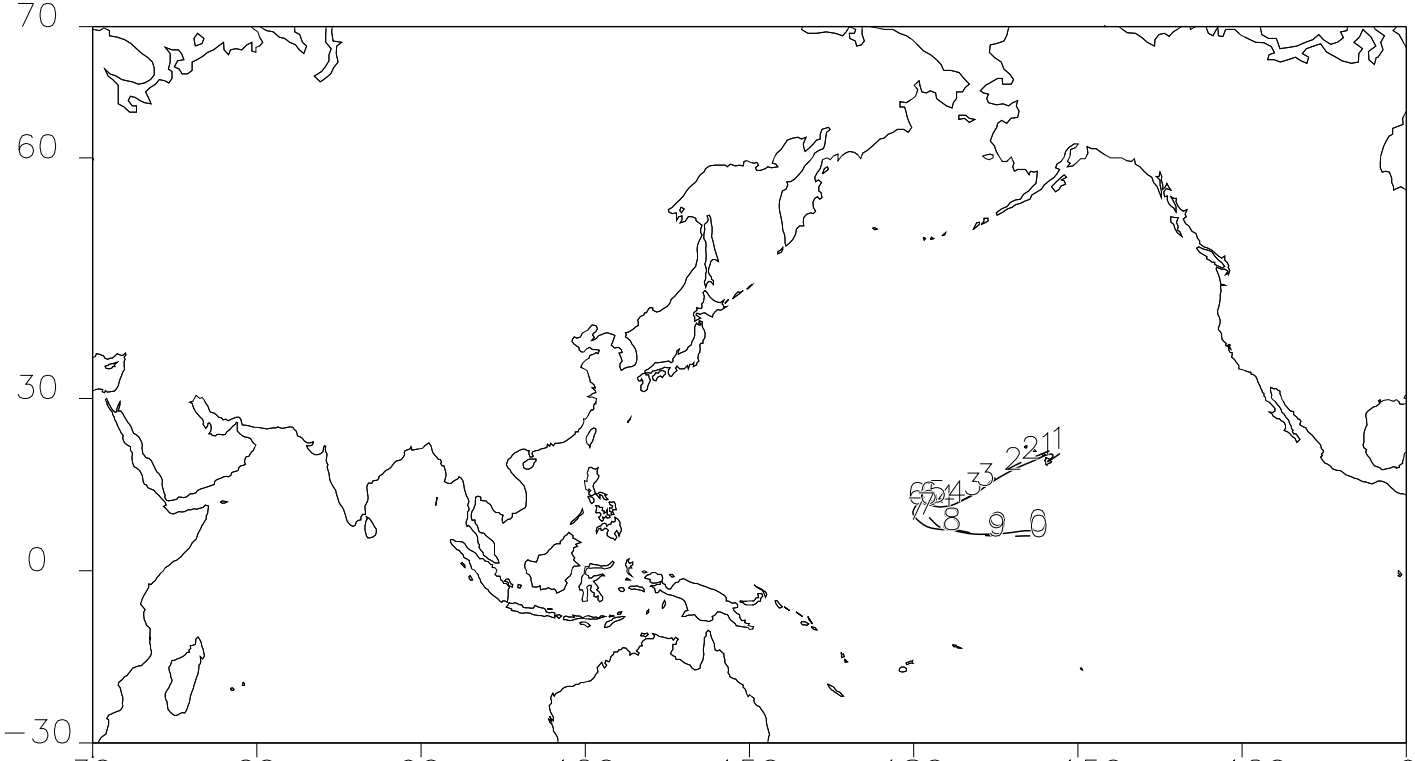
Day	km	hPa	C
0	4.0	634	4
1	4.4	599	1
2	4.4	599	3
3	4.5	595	4
4	4.7	582	2
5	4.8	576	2
6	4.3	606	3
7	3.7	654	9
8	3.5	666	10
9	3.5	671	9
10	3.5	669	9

18UT

Day	km	hPa	C
0	4.0	635	4
1	4.7	583	0
2	4.6	585	1
3	4.8	576	2
4	4.8	574	1
5	5.2	548	-1
6	4.9	568	1
7	4.5	596	4
8	4.1	621	6
9	4.2	615	6
10	4.3	605	5

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/22/2004 (Day of Year 143)
NCEP/NCAR Reanalysis 1 Data Set

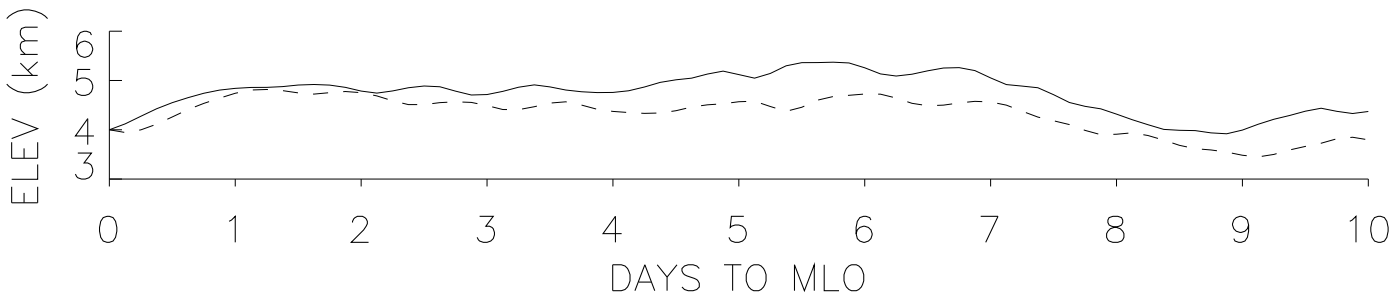


00UT

Day	km	hPa	C
0	4.0	635	4
1	4.8	571	−1
2	4.8	573	0
3	4.7	579	2
4	4.8	576	1
5	5.1	551	−1
6	5.3	542	−1
7	5.1	555	0
8	4.3	606	5
9	4.0	631	8
10	4.4	601	7

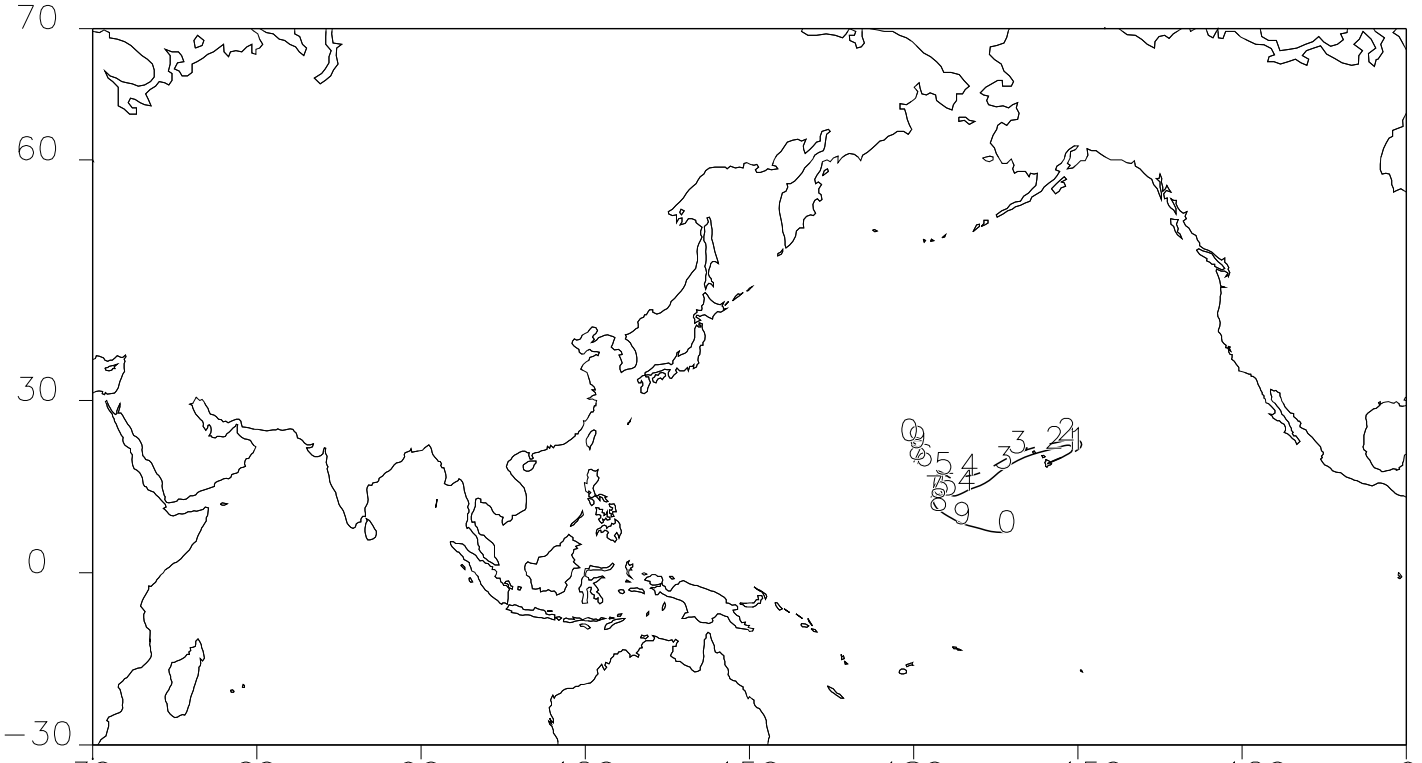
06UT

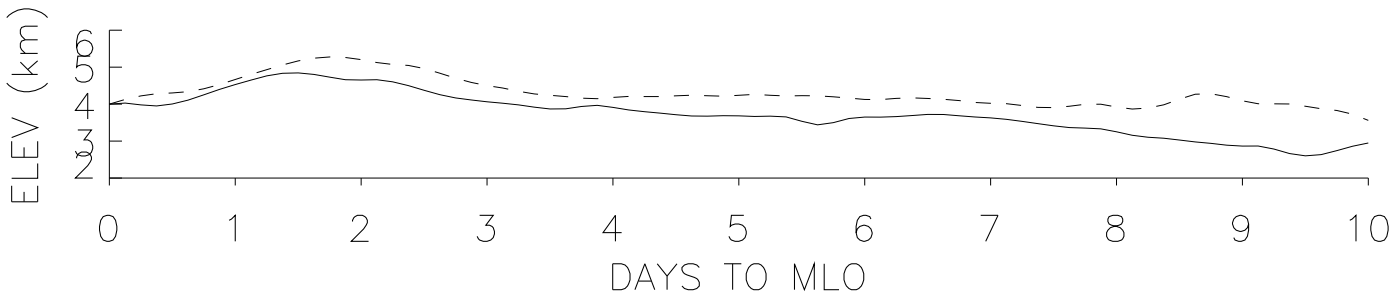
Day	km	hPa	C
0	4.0	635	5
1	4.7	579	−1
2	4.8	576	−1
3	4.5	594	2
4	4.4	603	5
5	4.6	590	2
6	4.7	579	2
7	4.6	589	2
8	3.9	638	7
9	3.5	671	11
10	3.8	646	9



00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/22/2004 (Day of Year 143)
NCEP/NCAR Reanalysis 1 Data Set





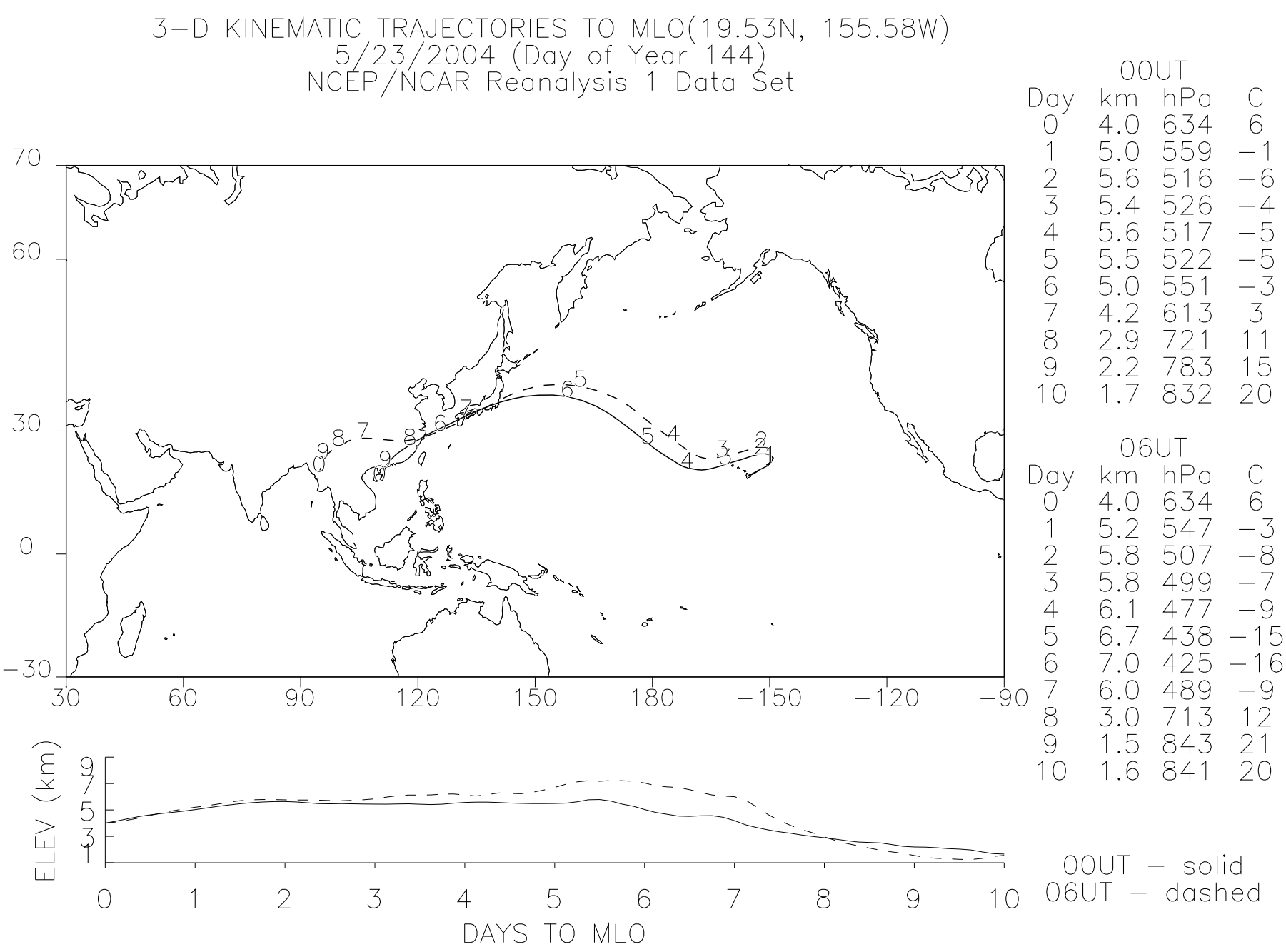
12UT

Day	km	hPa	C
0	4.0	634	5
1	4.5	594	0
2	4.7	583	-2
3	4.1	626	4
4	3.9	638	6
5	3.7	658	7
6	3.7	661	8
7	3.6	662	8
8	3.3	691	9
9	2.9	722	12
10	2.9	715	12

18UT

Day	km	hPa	C
0	4.0	635	6
1	4.7	585	-1
2	5.2	545	-5
3	4.5	592	0
4	4.2	617	5
5	4.2	612	3
6	4.1	621	4
7	4.0	629	4
8	3.9	636	3
9	4.1	622	1
10	3.6	662	3

12UT – solid
18UT – dashed



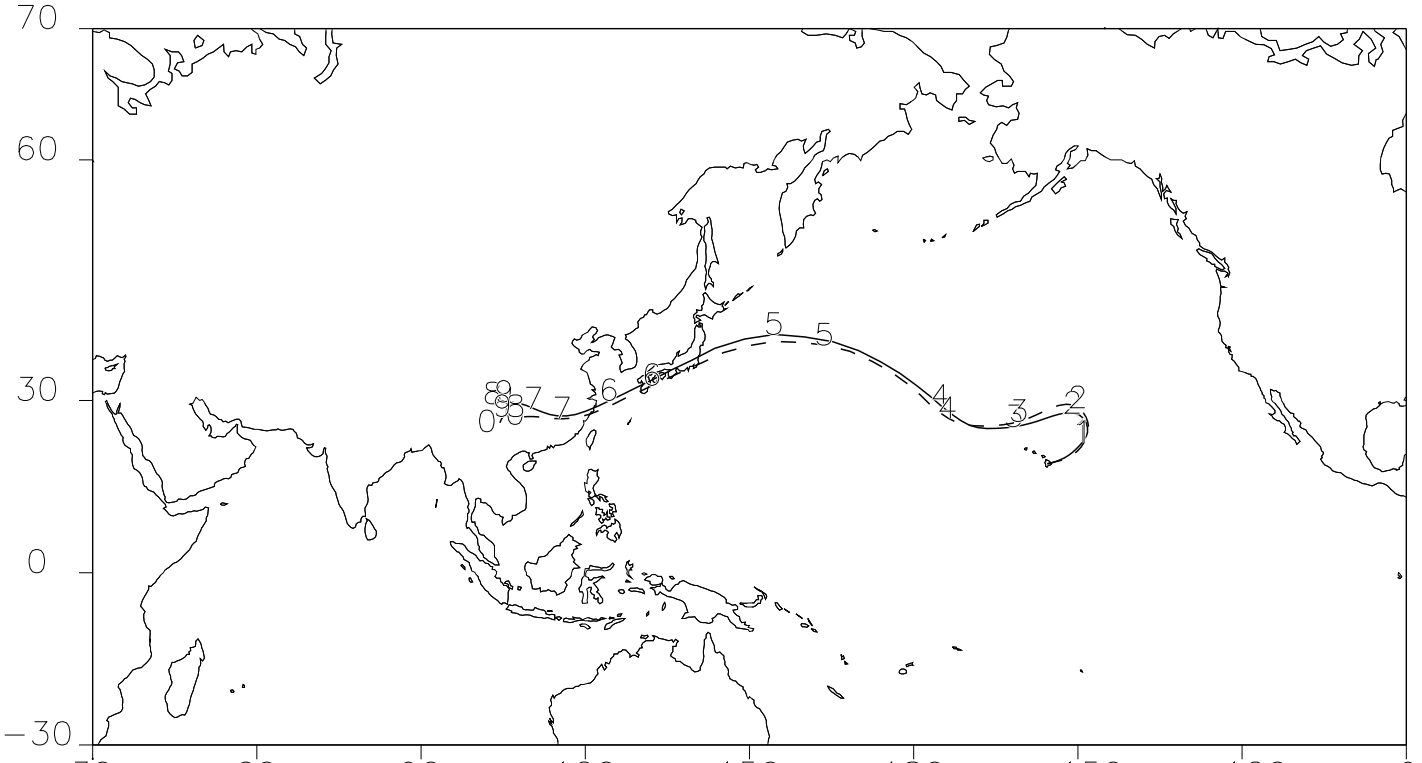
00UT

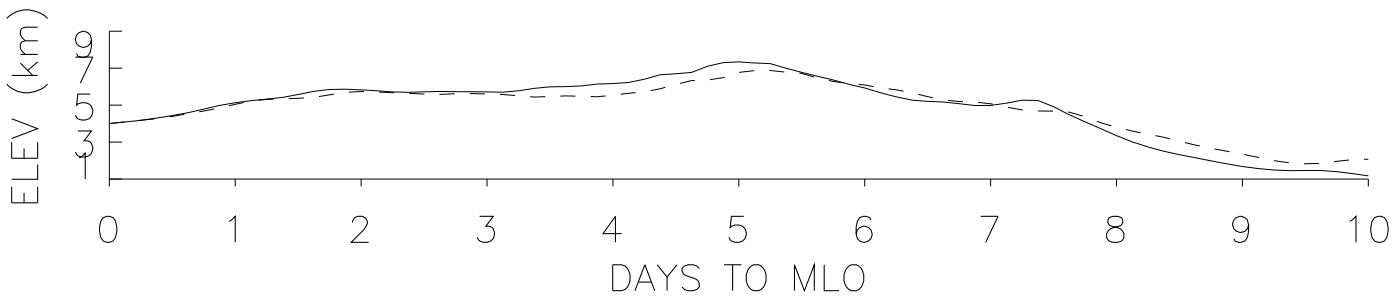
Day	km	hPa	C
0	4.0	634	6
1	5.0	559	-1
2	5.6	516	-6
3	5.4	526	-4
4	5.6	517	-5
5	5.5	522	-5
6	5.0	551	-3
7	4.2	613	3
8	2.9	721	11
9	2.2	783	15
10	1.7	832	20

06UT

Day	km	hPa	C
0	4.0	634	6
1	5.2	547	-3
2	5.8	507	-8
3	5.8	499	-7
4	6.1	477	-9
5	6.7	438	-15
6	7.0	425	-16
7	6.0	489	-9
8	3.0	713	12
9	1.5	843	21
10	1.6	841	20

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/23/2004 (Day of Year 144)
NCEP/NCAR Reanalysis 1 Data Set





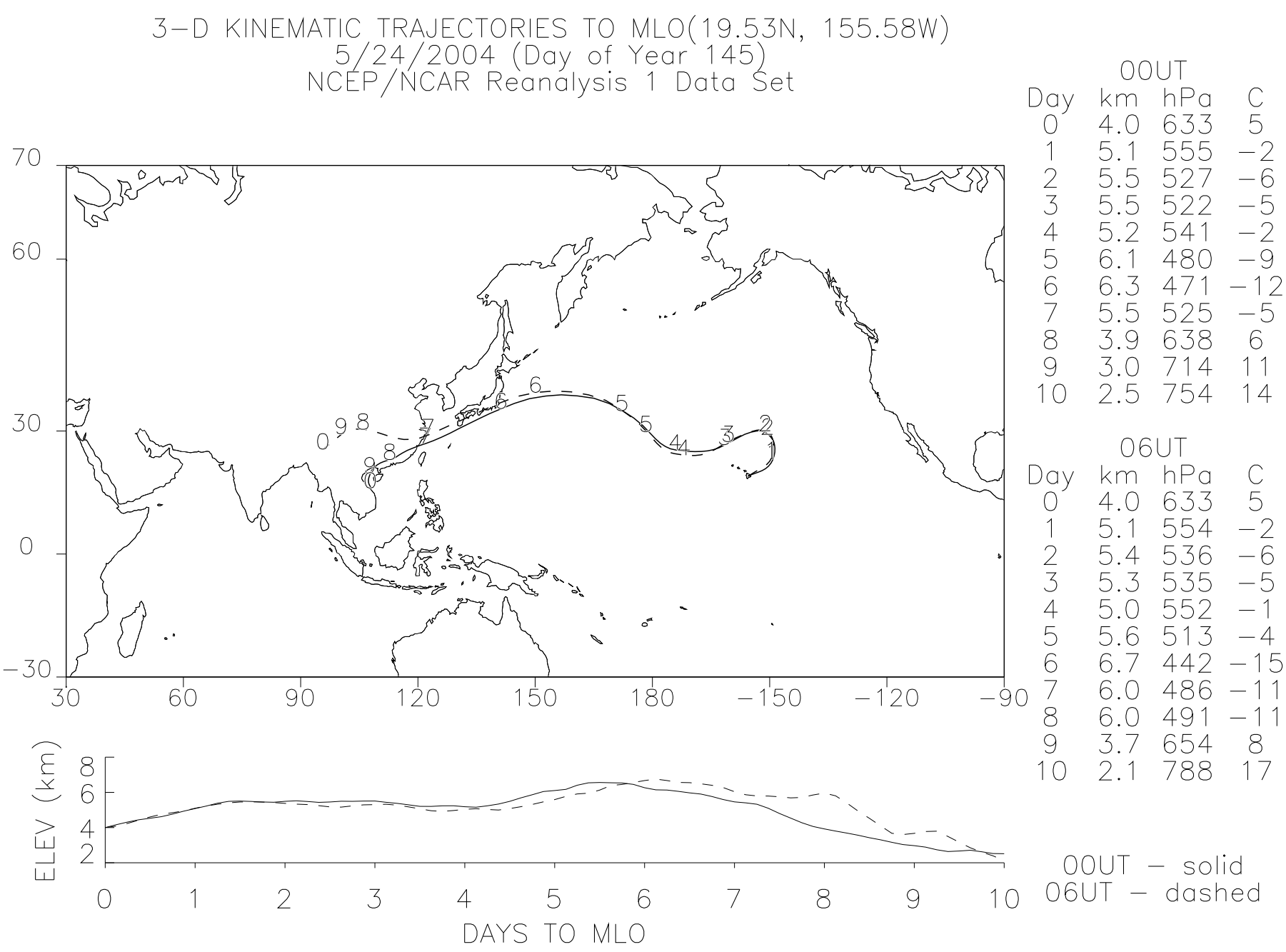
12UT

Day	km	hPa	C
0	4.0	633	5
1	5.1	551	−3
2	5.8	503	−8
3	5.7	507	−7
4	6.2	475	−10
5	7.3	402	−21
6	5.9	492	−10
7	5.0	555	−4
8	3.3	680	7
9	1.7	828	15
10	1.2	879	17

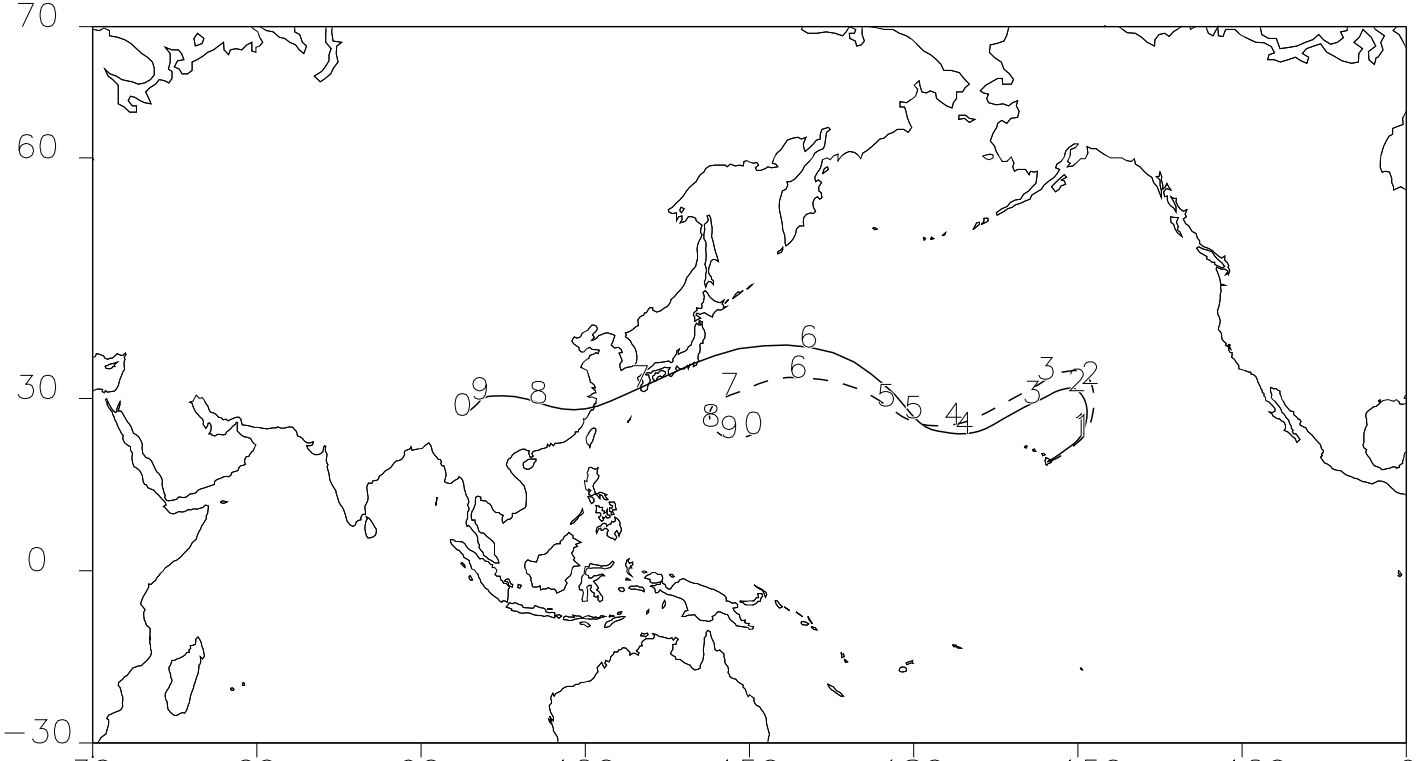
18UT

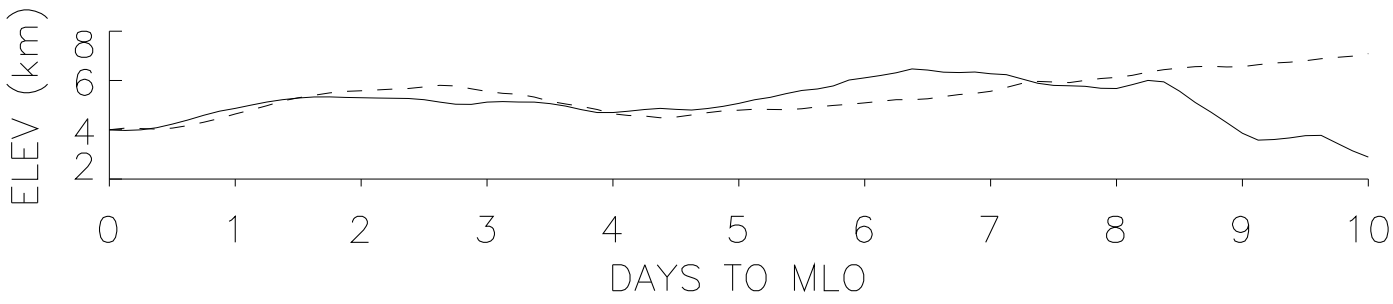
Day	km	hPa	C
0	4.0	634	5
1	5.0	558	−3
2	5.7	510	−8
3	5.6	514	−6
4	5.5	516	−5
5	6.8	435	−17
6	6.1	481	−12
7	5.1	551	−3
8	3.8	646	4
9	2.3	767	14
10	2.1	792	15

12UT − solid
18UT − dashed


3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/24/2004 (Day of Year 145)
NCEP/NCAR Reanalysis 1 Data Set
70
60
30
0
-30
30
60
90
120
150
180
-150
-120
-90
ELEV (km)
8
6
4
2
0
1
2
3
4
5
6
7
8
9
10
DAYS TO MLO
00UT
Day km hPa C
0 4.0 633 5
1 5.1 555 -2
2 5.5 527 -6
3 5.5 522 -5
4 5.2 541 -2
5 6.1 480 -9
6 6.3 471 -12
7 5.5 525 -5
8 3.9 638 6
9 3.0 714 11
10 2.5 754 14
06UT
Day km hPa C
0 4.0 633 5
1 5.1 554 -2
2 5.4 536 -6
3 5.3 535 -5
4 5.0 552 -1
5 5.6 513 -4
6 6.7 442 -15
7 6.0 486 -11
8 6.0 491 -11
9 3.7 654 8
10 2.1 788 17
00UT - solid
06UT - dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/24/2004 (Day of Year 145)
NCEP/NCAR Reanalysis 1 Data Set





12UT

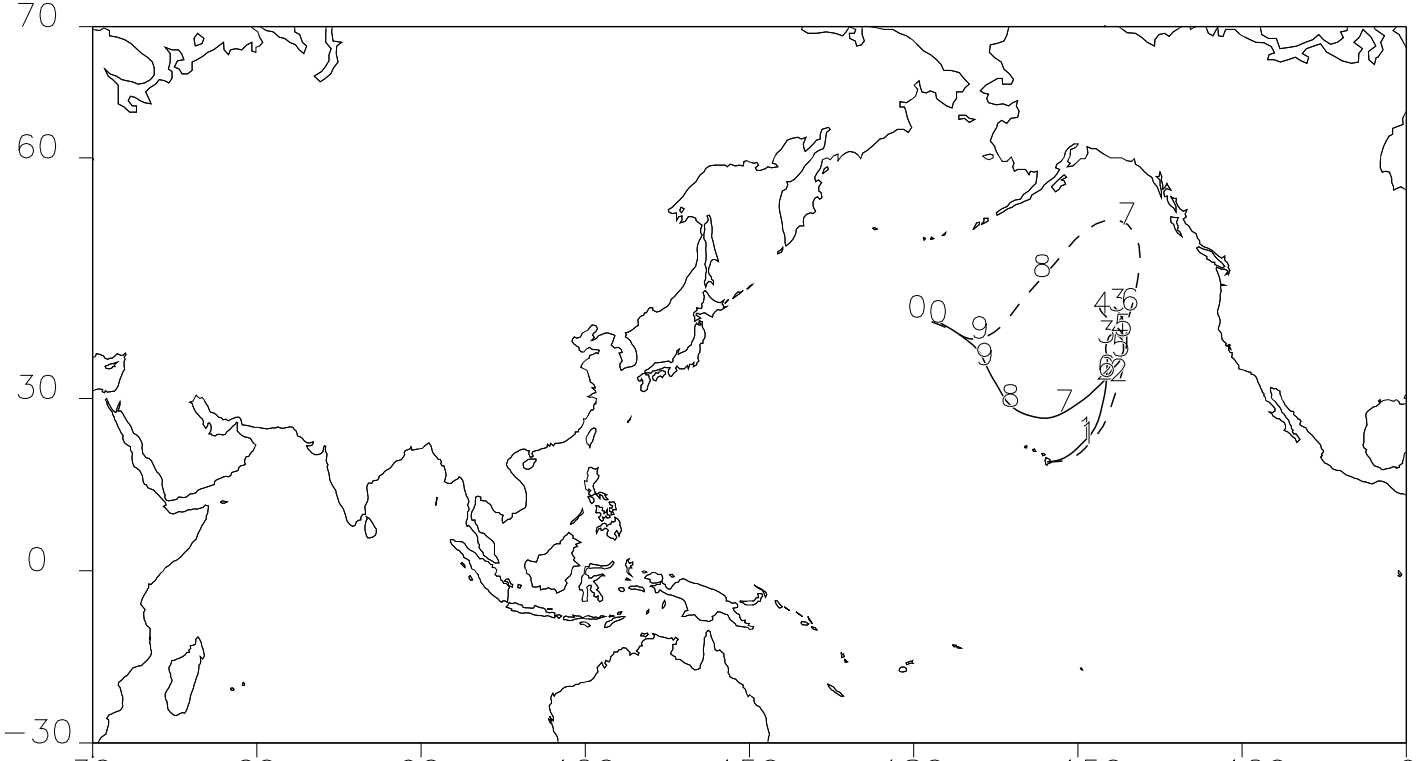
Day	km	hPa	C
0	4.0	632	4
1	4.9	569	−1
2	5.3	540	−4
3	5.1	549	−4
4	4.7	577	1
5	5.1	550	0
6	6.1	478	−11
7	6.3	471	−12
8	5.7	508	−8
9	3.9	638	6
10	2.9	716	12

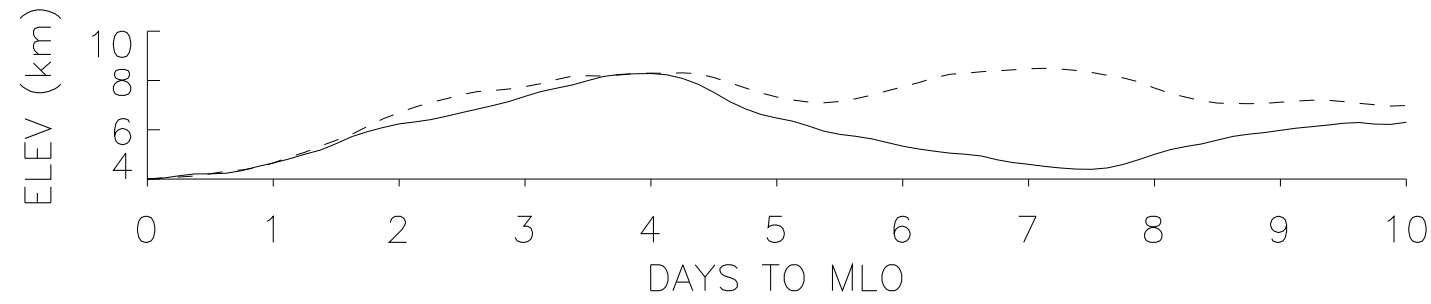
18UT

Day	km	hPa	C
0	4.0	633	5
1	4.6	586	0
2	5.6	520	−8
3	5.6	519	−8
4	4.6	578	−1
5	4.8	568	0
6	5.1	550	−3
7	5.6	521	−4
8	6.1	486	−5
9	6.6	460	−8
10	7.1	428	−13

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/25/2004 (Day of Year 146)
NCEP/NCAR Reanalysis 1 Data Set





00UT

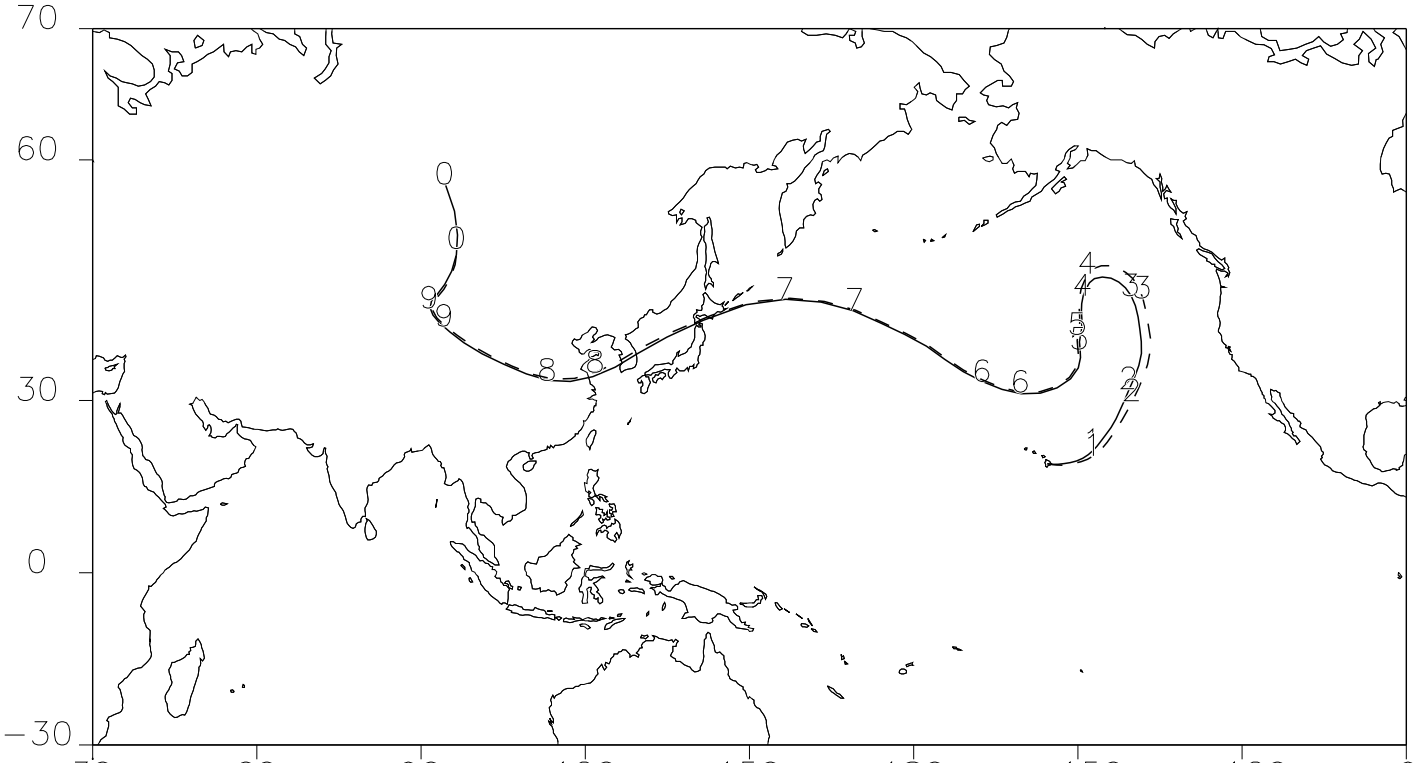
Day	km	hPa	C
0	4.0	632	5
1	4.7	583	-1
2	6.2	478	-13
3	7.4	410	-23
4	8.3	357	-33
5	6.5	458	-18
6	5.3	532	-9
7	4.6	581	-3
8	5.0	552	-7
9	6.0	487	-16
10	6.3	463	-19

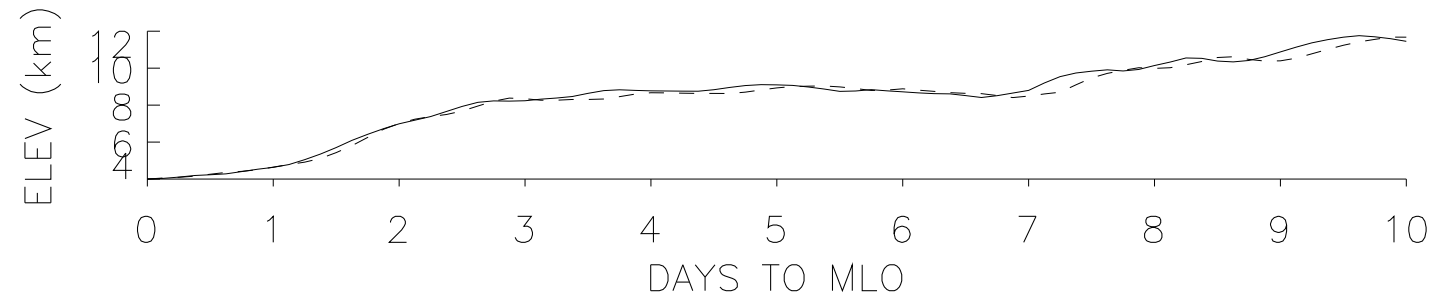
06UT

Day	km	hPa	C
0	4.0	632	5
1	4.7	583	1
2	6.7	448	-16
3	7.8	388	-27
4	8.3	357	-33
5	7.3	408	-24
6	7.7	385	-28
7	8.5	344	-34
8	7.7	380	-28
9	7.1	416	-22
10	7.0	422	-20

00UT - solid
06UT - dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/25/2004 (Day of Year 146)
NCEP/NCAR Reanalysis 1 Data Set





12UT

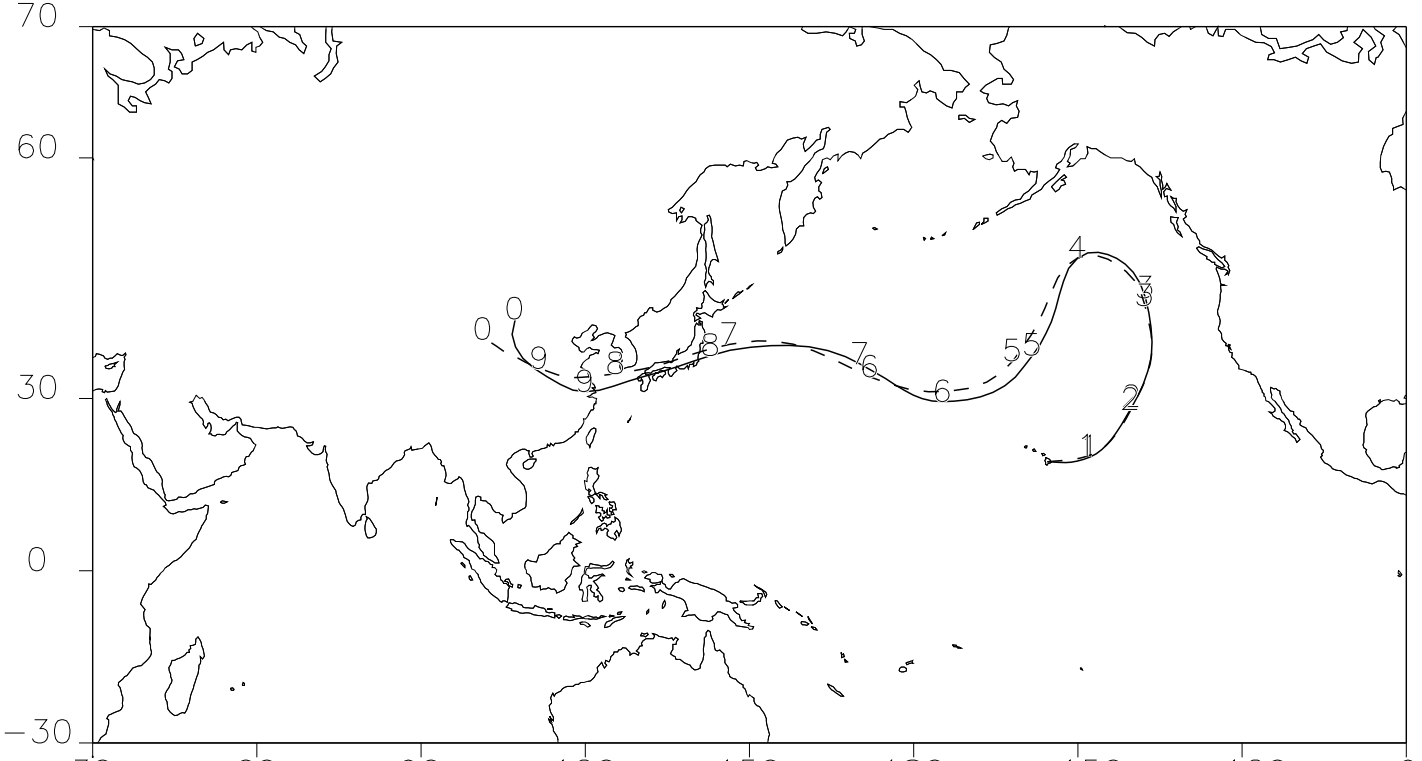
Day	km	hPa	C
0	4.0	632	4
1	4.6	584	-1
2	7.0	428	-20
3	8.2	360	-32
4	8.8	333	-37
5	9.1	313	-42
6	8.7	327	-38
7	8.8	317	-38
8	10.1	267	-47
9	10.9	240	-52
10	11.5	216	-57

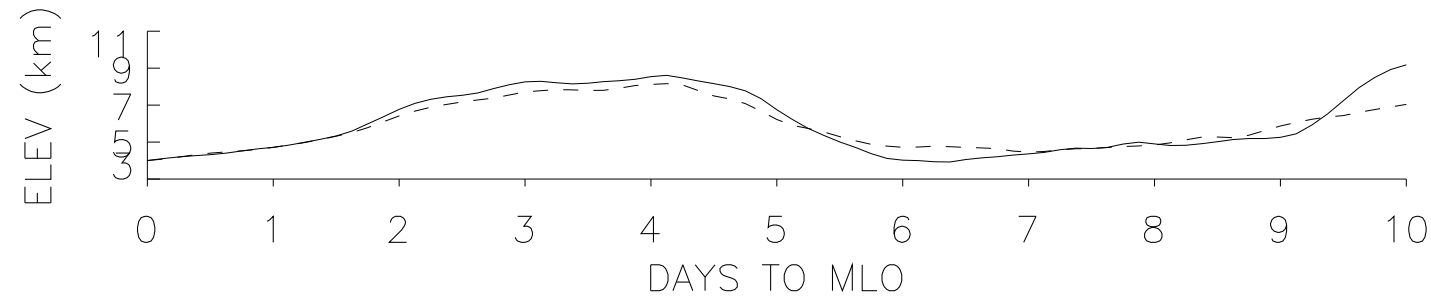
18UT

Day	km	hPa	C
0	4.0	633	4
1	4.6	583	-1
2	7.0	428	-20
3	8.3	354	-32
4	8.7	338	-36
5	8.9	322	-39
6	8.9	320	-40
7	8.5	333	-35
8	10.0	273	-47
9	10.4	258	-49
10	11.7	209	-59

12UT - solid
18UT - dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/26/2004 (Day of Year 147)
NCEP/NCAR Reanalysis 1 Data Set





00UT

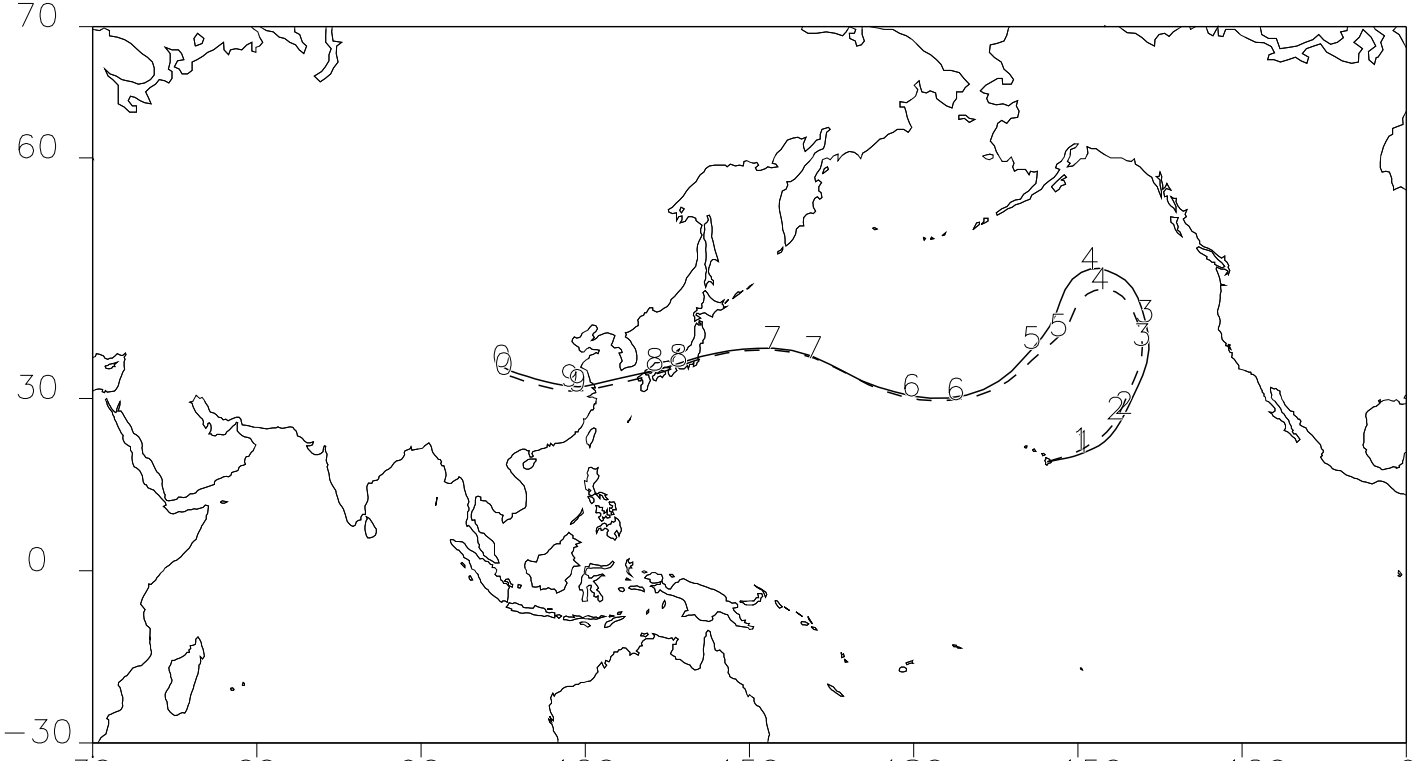
Day	km	hPa	C
0	4.0	633	5
1	4.7	578	0
2	6.8	440	−18
3	8.3	359	−31
4	8.5	344	−34
5	6.7	436	−22
6	4.0	622	2
7	4.4	598	0
8	4.9	558	−5
9	5.3	534	−8
10	9.2	303	−47

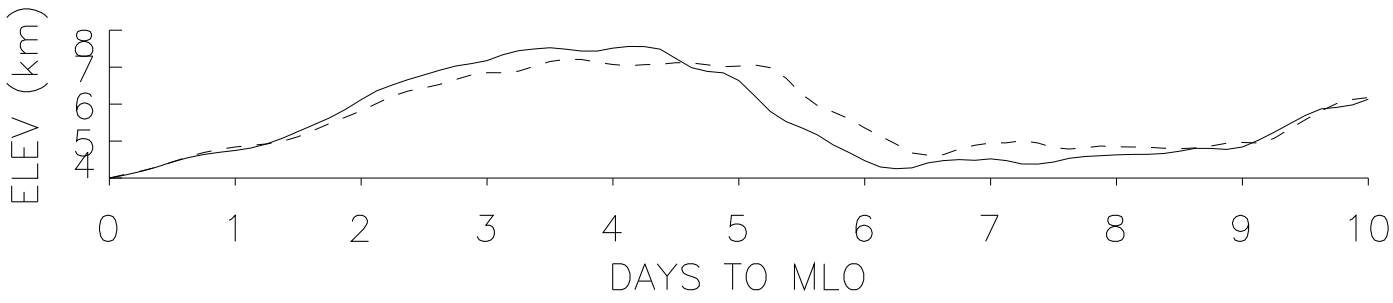
06UT

Day	km	hPa	C
0	4.0	633	5
1	4.7	578	1
2	6.4	463	−15
3	7.7	388	−26
4	8.1	366	−28
5	6.2	466	−17
6	4.7	566	−5
7	4.5	589	−3
8	4.8	560	−8
9	5.9	490	−19
10	7.0	420	−27

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/26/2004 (Day of Year 147)
NCEP/NCAR Reanalysis 1 Data Set





12UT

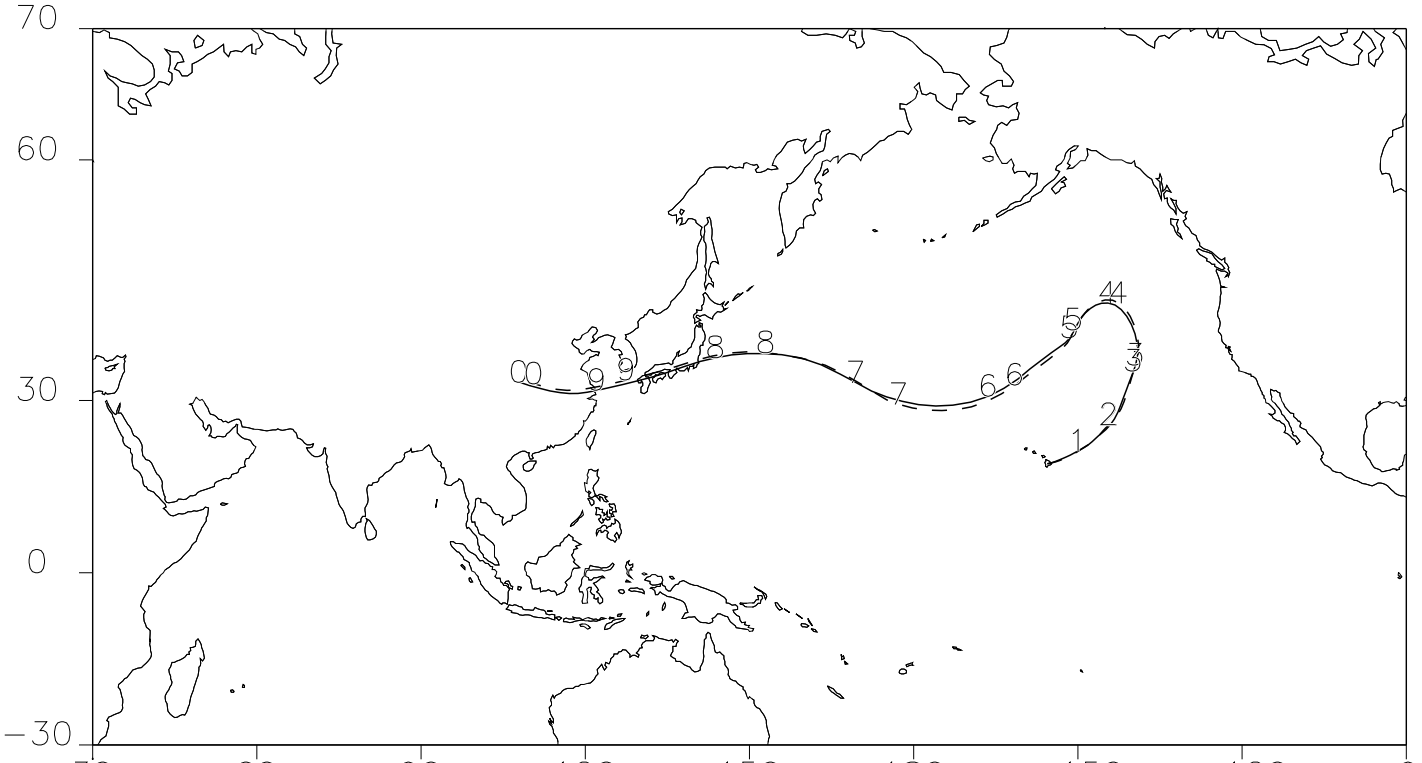
Day	km	hPa	C
0	4.0	632	4
1	4.7	576	0
2	6.1	482	−13
3	7.2	417	−22
4	7.5	398	−23
5	6.6	443	−18
6	4.5	586	−3
7	4.5	586	−4
8	4.6	576	−5
9	4.8	562	−7
10	6.1	475	−18

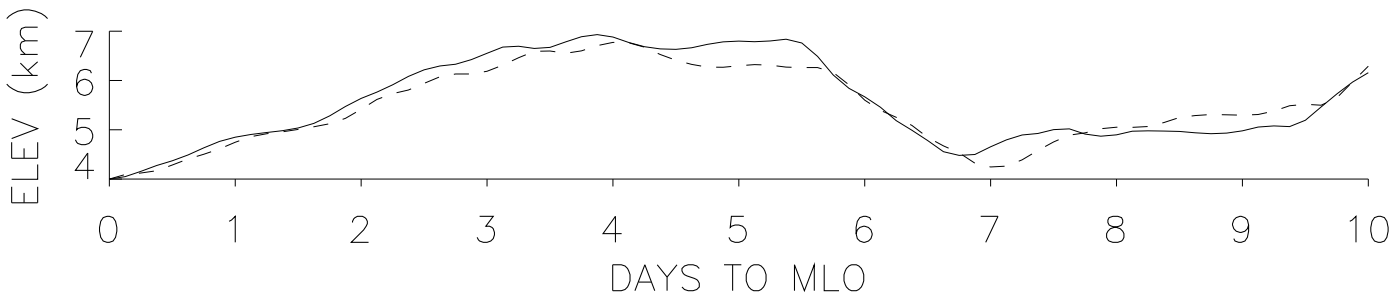
18UT

Day	km	hPa	C
0	4.0	634	5
1	4.8	571	0
2	5.8	503	−9
3	6.9	437	−19
4	7.1	425	−18
5	7.0	425	−20
6	5.4	522	−10
7	4.9	554	−5
8	4.8	560	−6
9	5.0	554	−7
10	6.2	474	−18

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/27/2004 (Day of Year 148)
NCEP/NCAR Reanalysis 1 Data Set





00UT

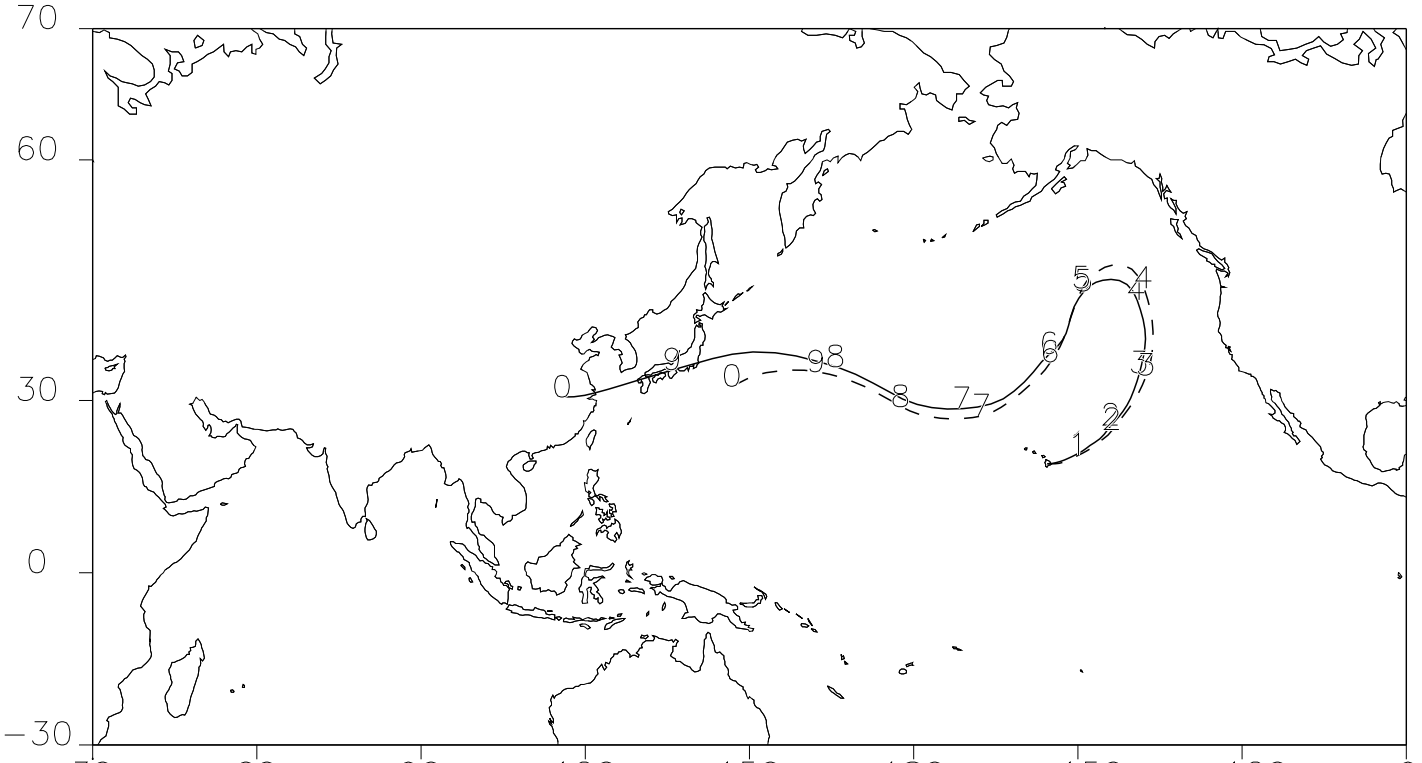
Day	km	hPa	C
0	4.0	633	5
1	4.8	569	0
2	5.6	515	−7
3	6.6	455	−16
4	6.9	437	−17
5	6.8	440	−18
6	5.7	504	−11
7	4.7	576	−3
8	4.9	558	−7
9	5.0	553	−8
10	6.2	474	−19

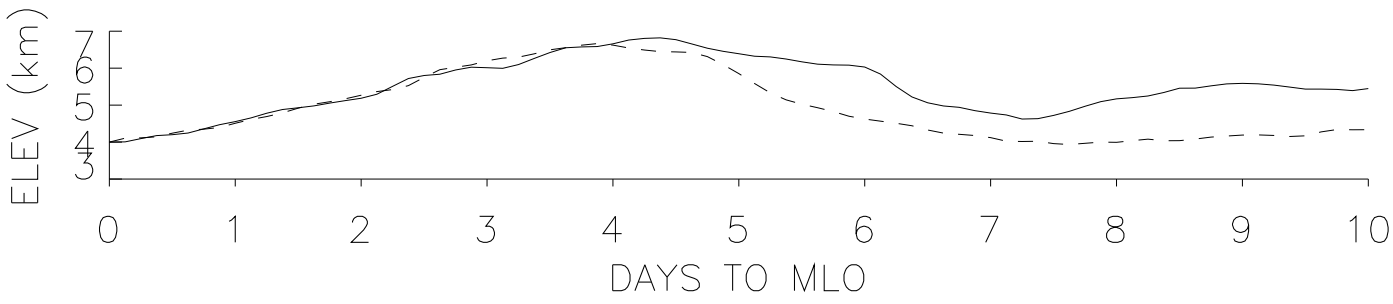
06UT

Day	km	hPa	C
0	4.0	633	6
1	4.7	577	0
2	5.4	530	−6
3	6.2	478	−13
4	6.8	443	−16
5	6.3	472	−14
6	5.6	509	−11
7	4.2	605	1
8	5.1	548	−7
9	5.3	529	−10
10	6.3	465	−20

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/27/2004 (Day of Year 148)
NCEP/NCAR Reanalysis 1 Data Set





12UT

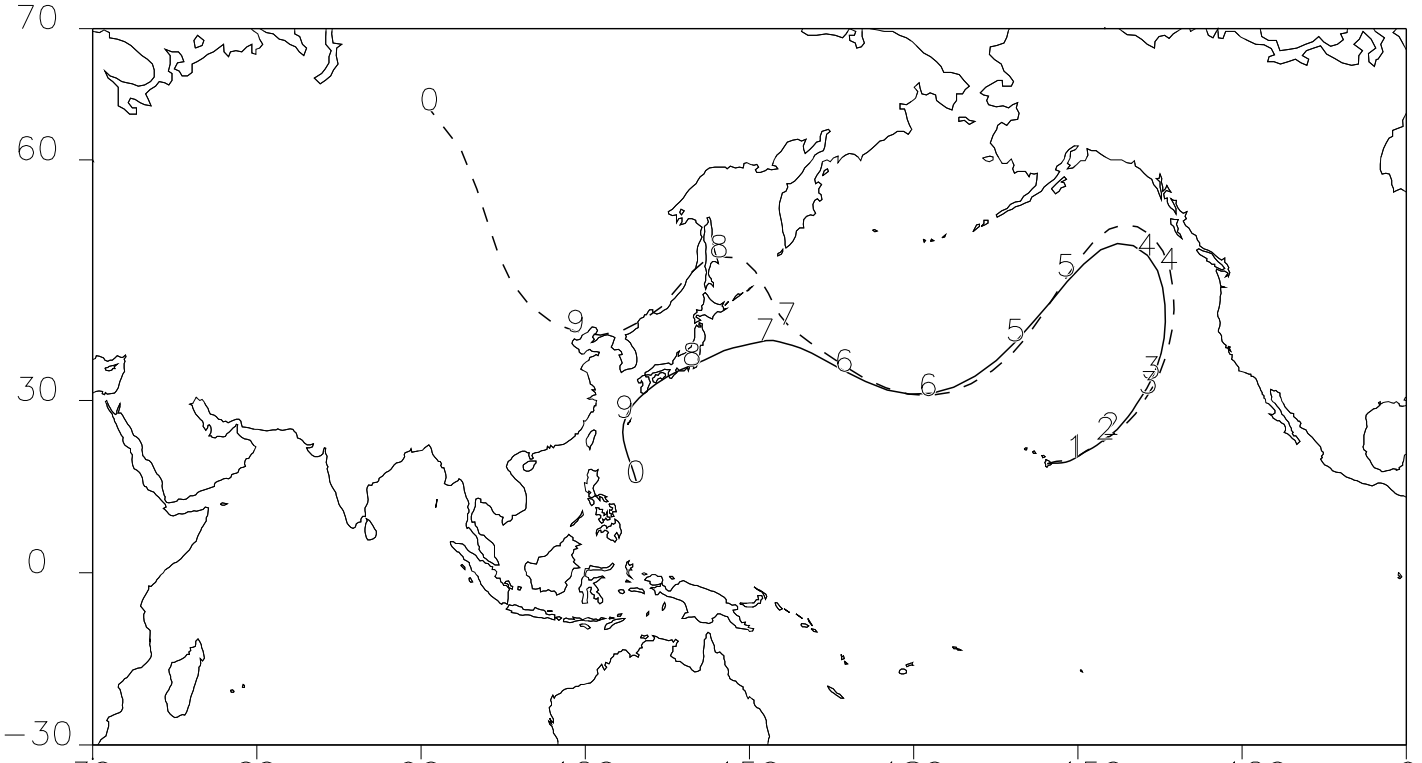
Day	km	hPa	C
0	4.0	631	4
1	4.6	590	1
2	5.2	545	−4
3	6.0	489	−12
4	6.7	447	−18
5	6.4	464	−15
6	6.0	484	−15
7	4.8	565	−4
8	5.2	539	−6
9	5.6	510	−10
10	5.4	521	−10

18UT

Day	km	hPa	C
0	4.0	632	6
1	4.5	595	1
2	5.3	540	−5
3	6.2	477	−13
4	6.6	449	−18
5	5.9	498	−12
6	4.6	583	−4
7	4.1	616	1
8	4.0	626	4
9	4.2	614	1
10	4.3	606	1

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/28/2004 (Day of Year 149)
NCEP/NCAR Reanalysis 1 Data Set

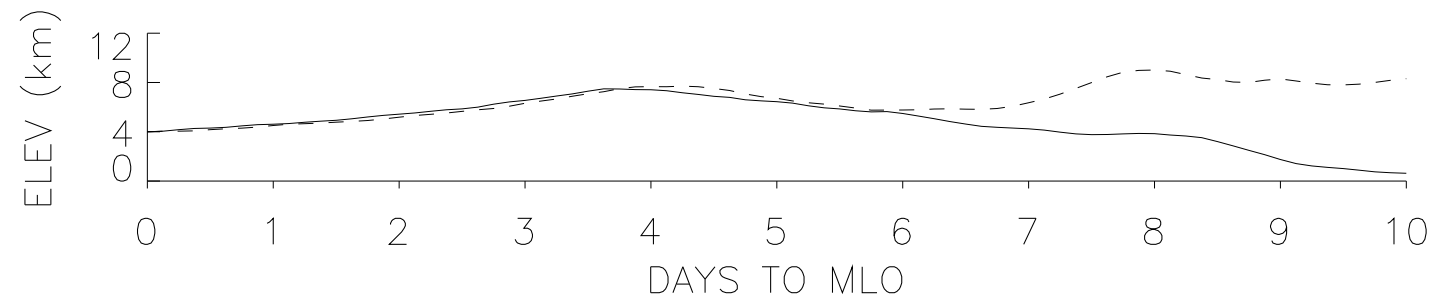


00UT

Day	km	hPa	C
0	4.0	631	5
1	4.6	586	1
2	5.4	528	−7
3	6.5	455	−16
4	7.4	402	−23
5	6.4	452	−17
6	5.5	512	−10
7	4.2	606	1
8	3.8	634	2
9	1.7	822	16
10	0.6	940	24

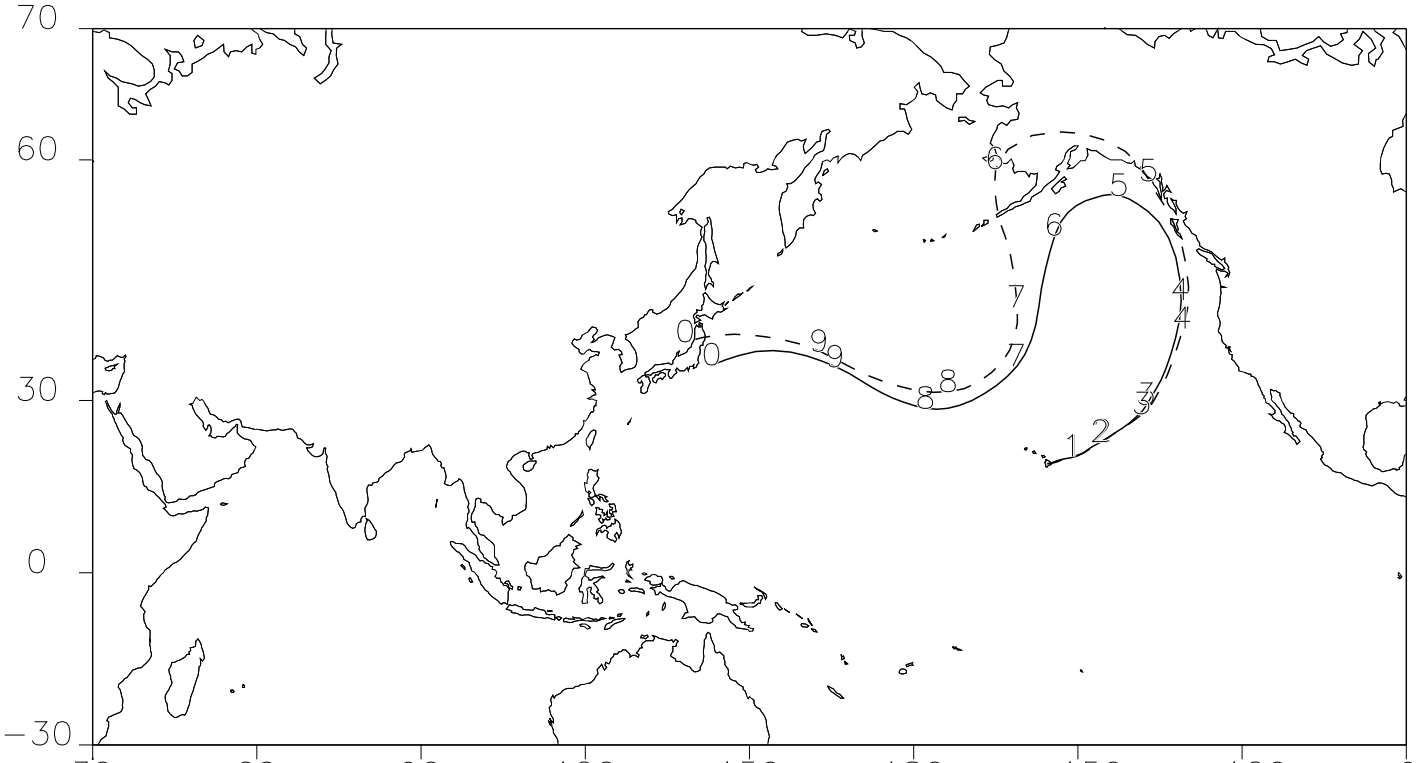
06UT

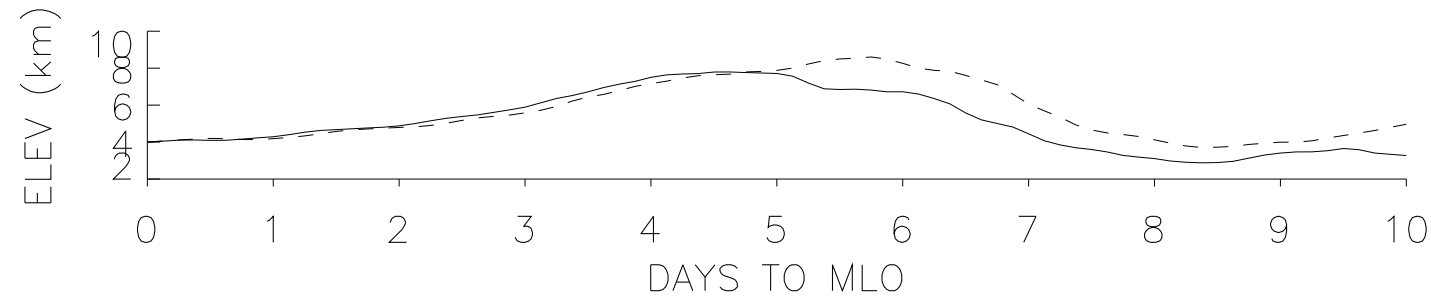
Day	km	hPa	C
0	4.0	632	5
1	4.5	594	2
2	5.2	546	−6
3	6.3	470	−14
4	7.7	387	−25
5	6.7	437	−20
6	5.8	492	−14
7	6.4	459	−17
8	9.0	311	−44
9	8.3	342	−39
10	8.3	342	−37



00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/28/2004 (Day of Year 149)
NCEP/NCAR Reanalysis 1 Data Set





12UT

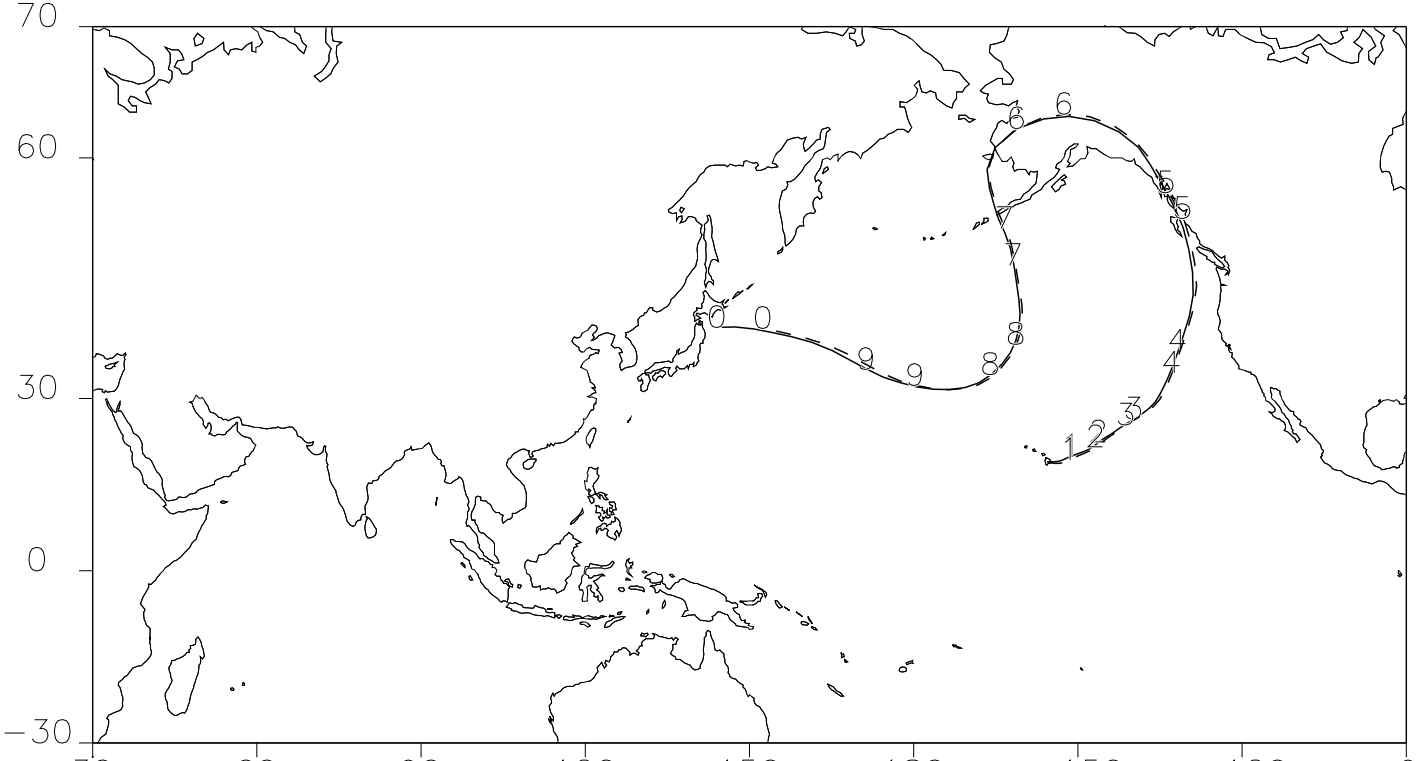
Day	km	hPa	C
0	4.0	630	4
1	4.3	609	2
2	4.9	567	−3
3	5.9	496	−11
4	7.5	396	−24
5	7.7	382	−27
6	6.7	439	−19
7	4.4	589	−6
8	3.1	696	6
9	3.4	673	3
10	3.3	685	3

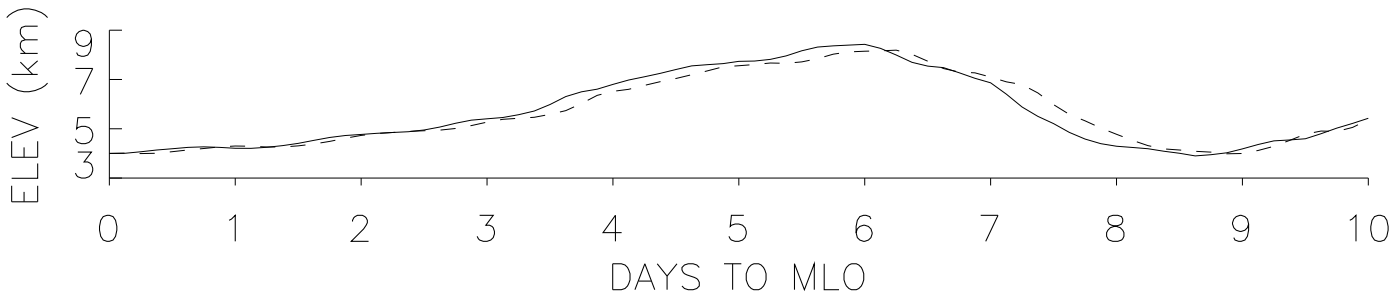
18UT

Day	km	hPa	C
0	4.0	631	4
1	4.2	617	4
2	4.8	574	−2
3	5.6	517	−9
4	7.2	415	−22
5	7.9	371	−30
6	8.3	348	−33
7	6.1	473	−19
8	4.1	608	−5
9	4.0	622	−2
10	5.0	545	−11

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/29/2004 (Day of Year 150)
NCEP/NCAR Reanalysis 1 Data Set





00UT

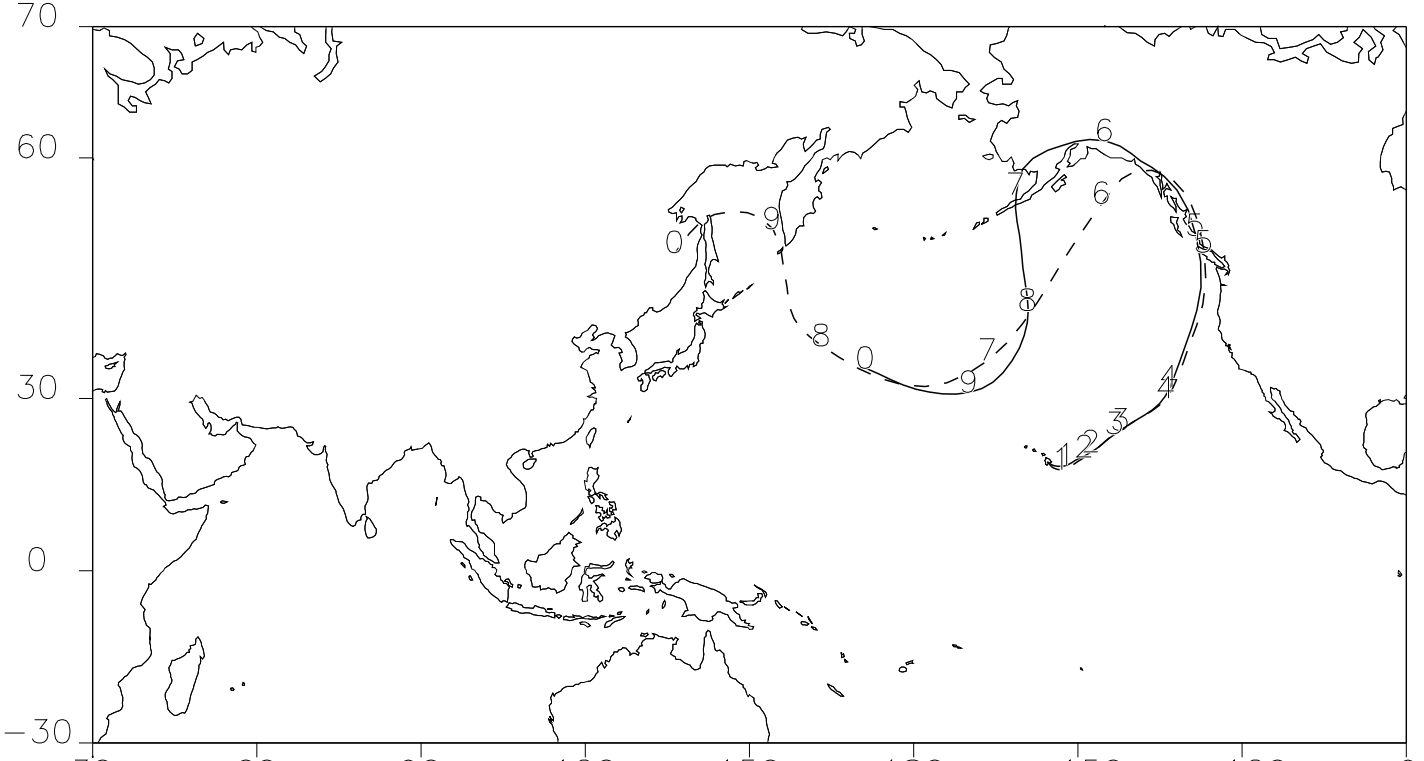
Day	km	hPa	C
0	4.0	630	4
1	4.2	615	4
2	4.8	575	−1
3	5.4	529	−8
4	6.8	437	−19
5	7.7	379	−28
6	8.4	339	−36
7	6.9	425	−24
8	4.3	597	−7
9	4.2	606	−3
10	5.4	514	−15

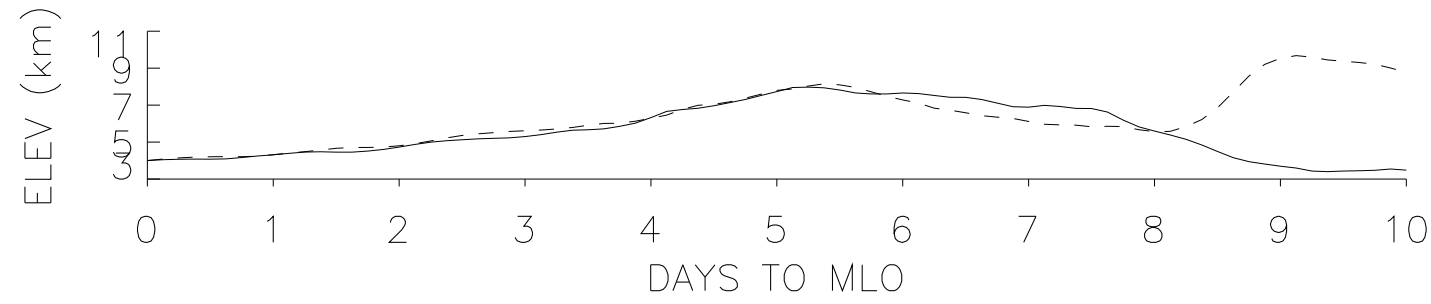
06UT

Day	km	hPa	C
0	4.0	630	5
1	4.3	609	3
2	4.7	578	0
3	5.3	540	−6
4	6.5	455	−16
5	7.6	389	−26
6	8.1	354	−34
7	7.1	411	−26
8	4.8	562	−10
9	4.0	618	−3
10	5.4	520	−12

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/29/2004 (Day of Year 150)
NCEP/NCAR Reanalysis 1 Data Set





12UT

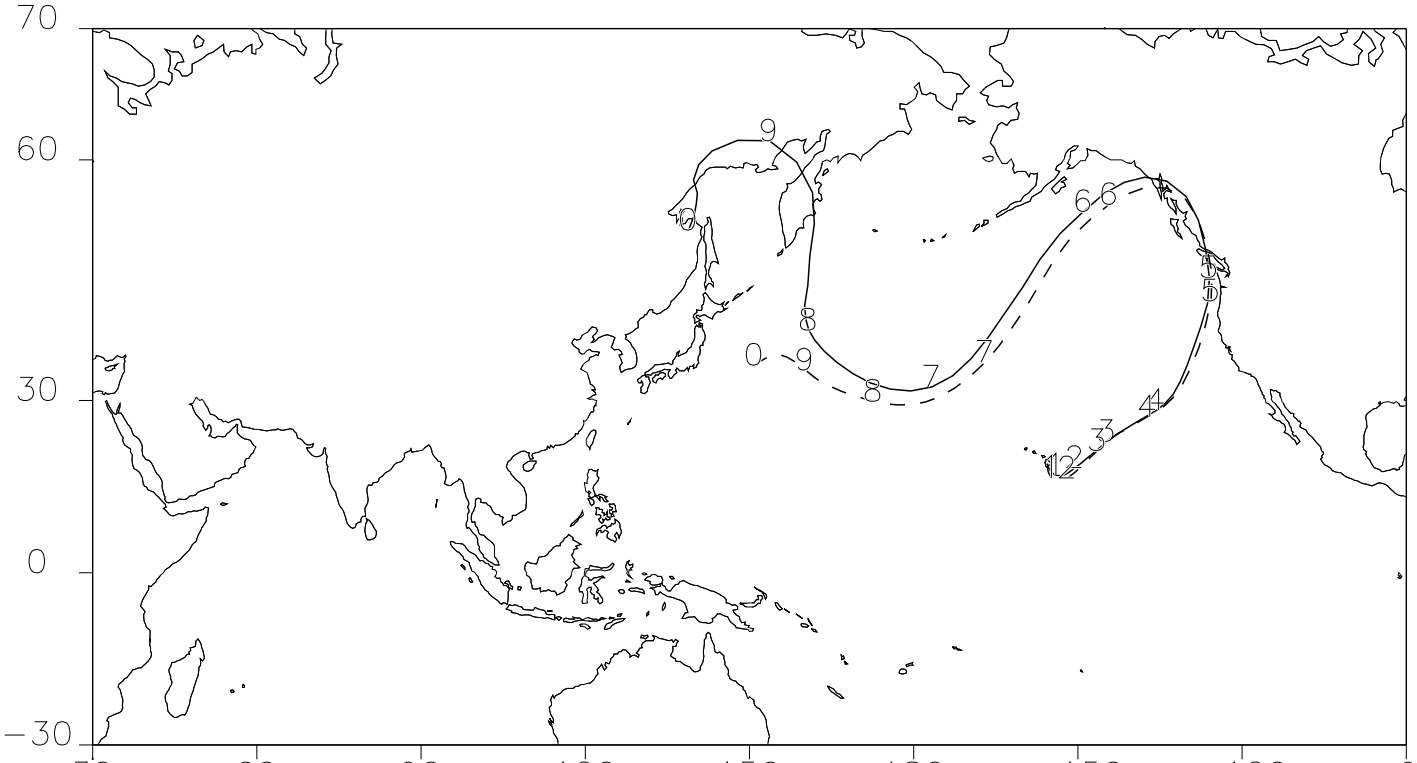
Day	km	hPa	C
0	4.0	631	5
1	4.3	606	3
2	4.7	577	−1
3	5.3	537	−7
4	6.3	467	−14
5	7.7	379	−28
6	7.7	382	−29
7	6.9	424	−24
8	5.6	506	−16
9	3.7	644	0
10	3.5	665	3

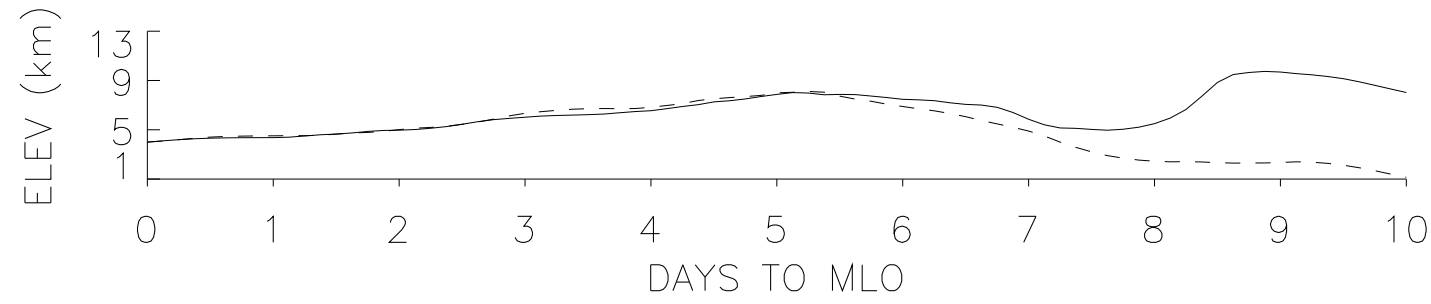
18UT

Day	km	hPa	C
0	4.0	631	5
1	4.3	606	3
2	4.8	572	0
3	5.6	517	−8
4	6.3	471	−13
5	7.8	377	−28
6	7.3	403	−24
7	6.1	468	−18
8	5.6	506	−11
9	9.5	287	−50
10	8.8	315	−46

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/30/2004 (Day of Year 151)
NCEP/NCAR Reanalysis 1 Data Set





00UT

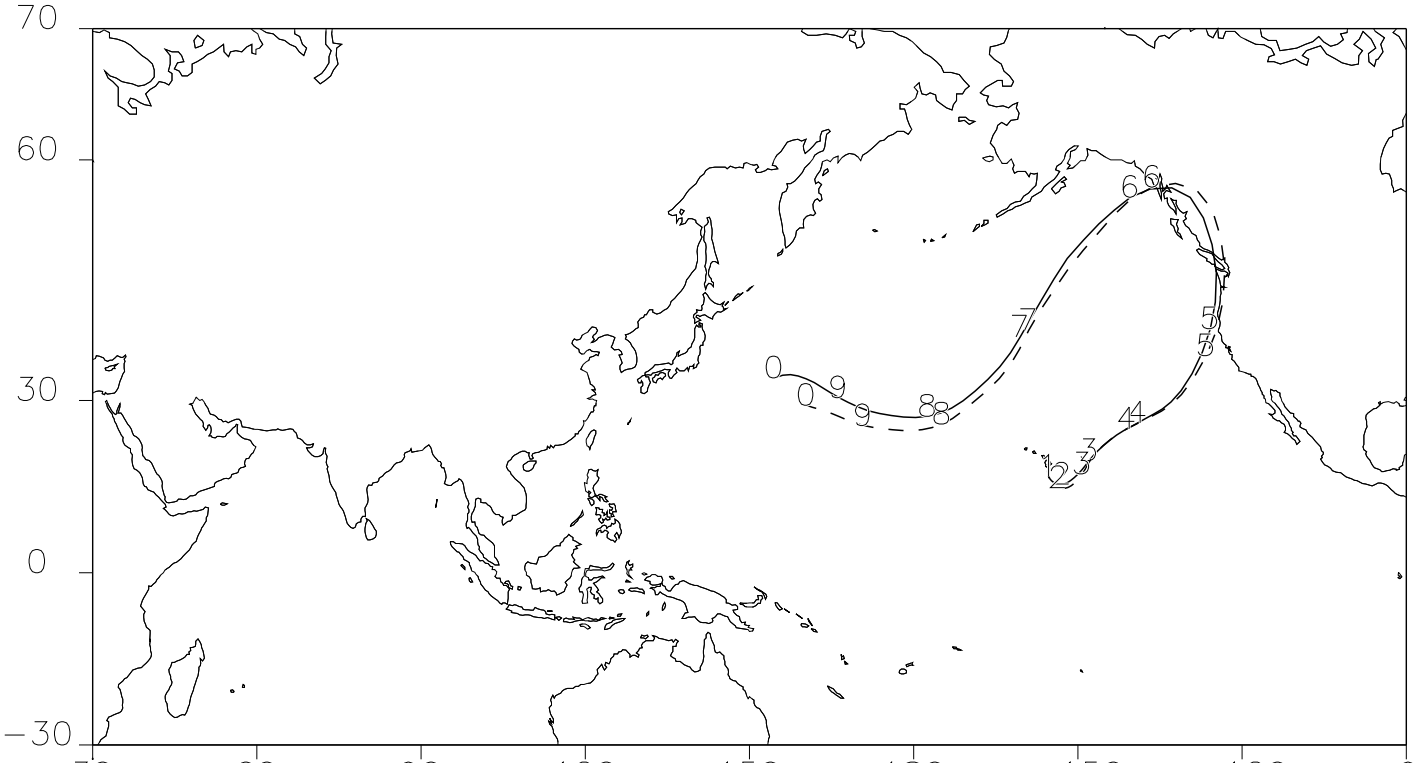
Day	km	hPa	C
0	4.0	632	5
1	4.4	602	3
2	5.0	559	−1
3	6.0	490	−11
4	6.5	456	−16
5	7.9	374	−28
6	7.5	390	−27
7	5.8	483	−17
8	5.5	511	−13
9	9.7	277	−52
10	8.0	354	−38

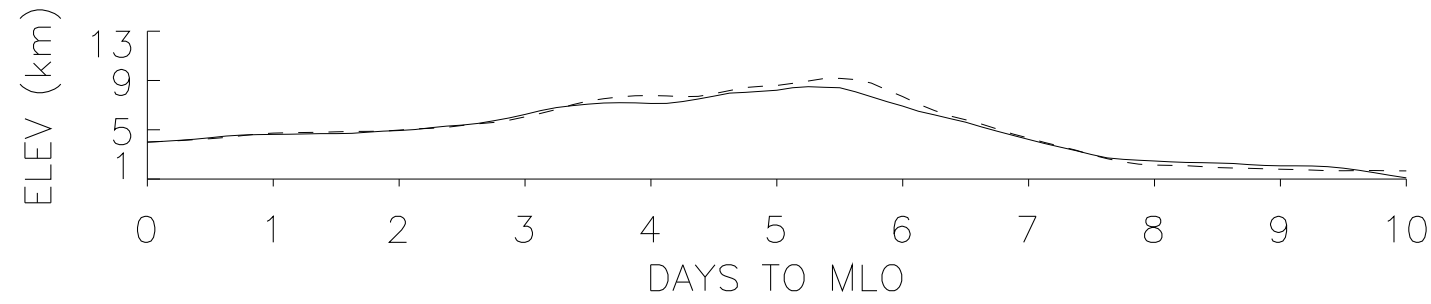
06UT

Day	km	hPa	C
0	4.0	632	4
1	4.5	592	2
2	5.0	557	−1
3	6.3	471	−12
4	6.8	440	−16
5	8.0	369	−28
6	6.9	426	−20
7	4.9	551	−8
8	2.4	751	7
9	2.3	765	10
10	1.1	882	16

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/30/2004 (Day of Year 151)
NCEP/NCAR Reanalysis 1 Data Set





12UT

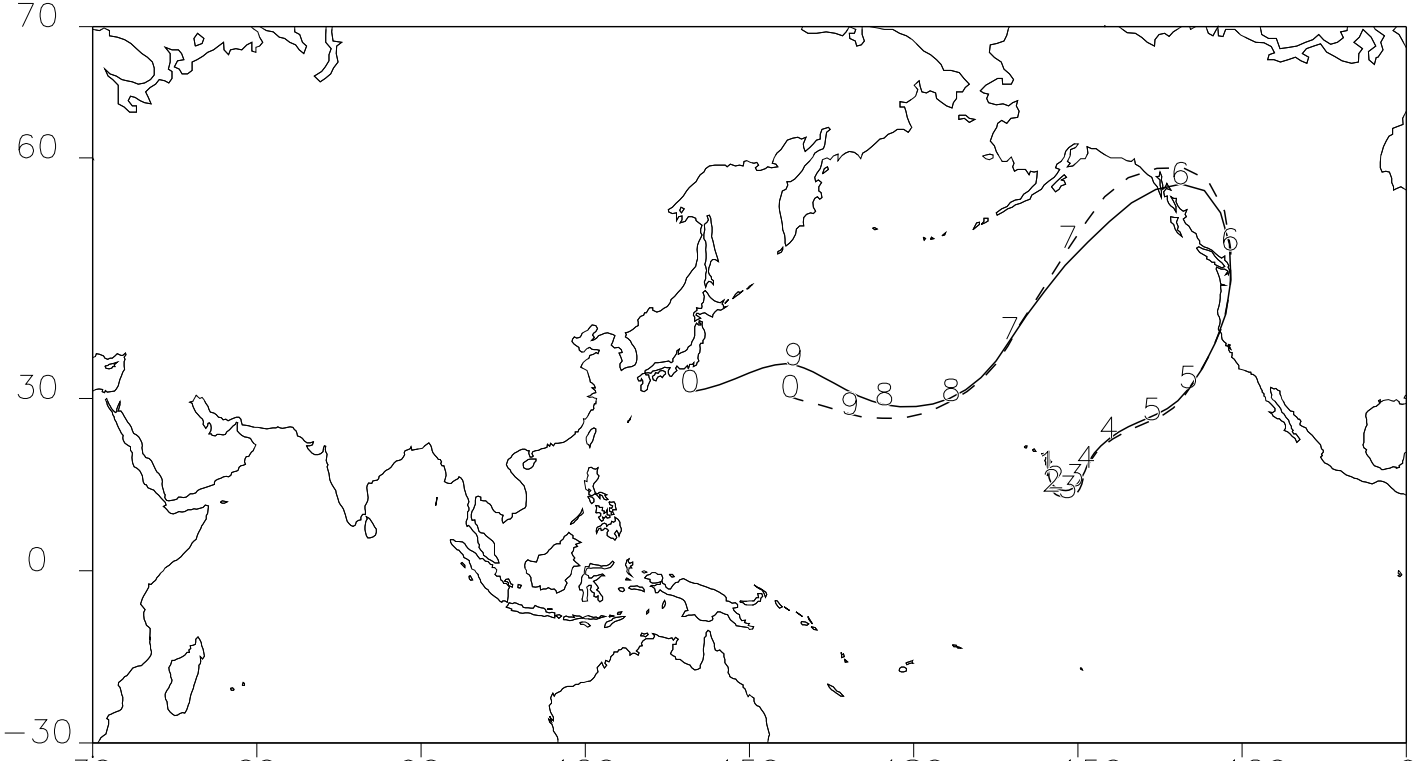
Day	km	hPa	C
0	4.0	632	4
1	4.6	584	2
2	4.9	561	0
3	6.2	475	-12
4	7.1	422	-19
5	8.2	358	-29
6	6.9	425	-19
7	4.2	605	-2
8	2.5	754	9
9	2.1	791	11
10	1.1	890	17

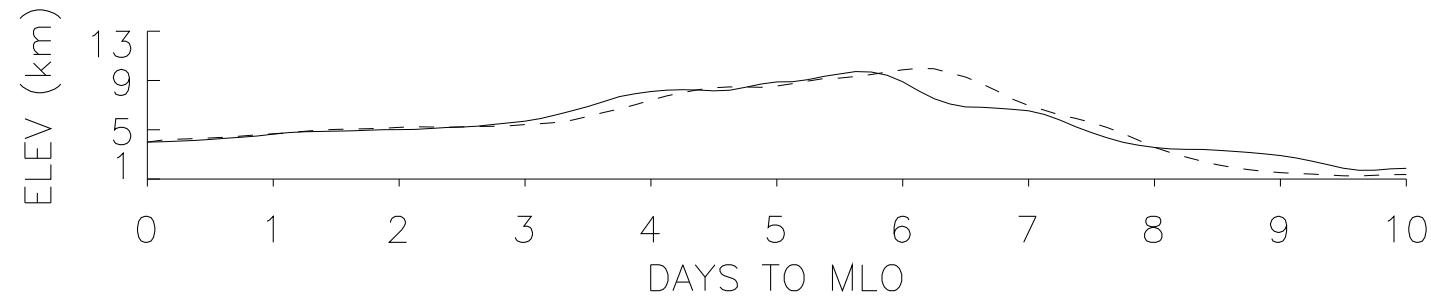
18UT

Day	km	hPa	C
0	4.0	633	4
1	4.7	577	1
2	5.0	558	-1
3	6.0	488	-8
4	7.8	388	-23
5	8.6	340	-31
6	7.7	382	-24
7	4.3	598	-2
8	2.1	786	12
9	1.8	819	14
10	1.7	834	16

12UT - solid
18UT - dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/31/2004 (Day of Year 152)
NCEP/NCAR Reanalysis 1 Data Set





00UT

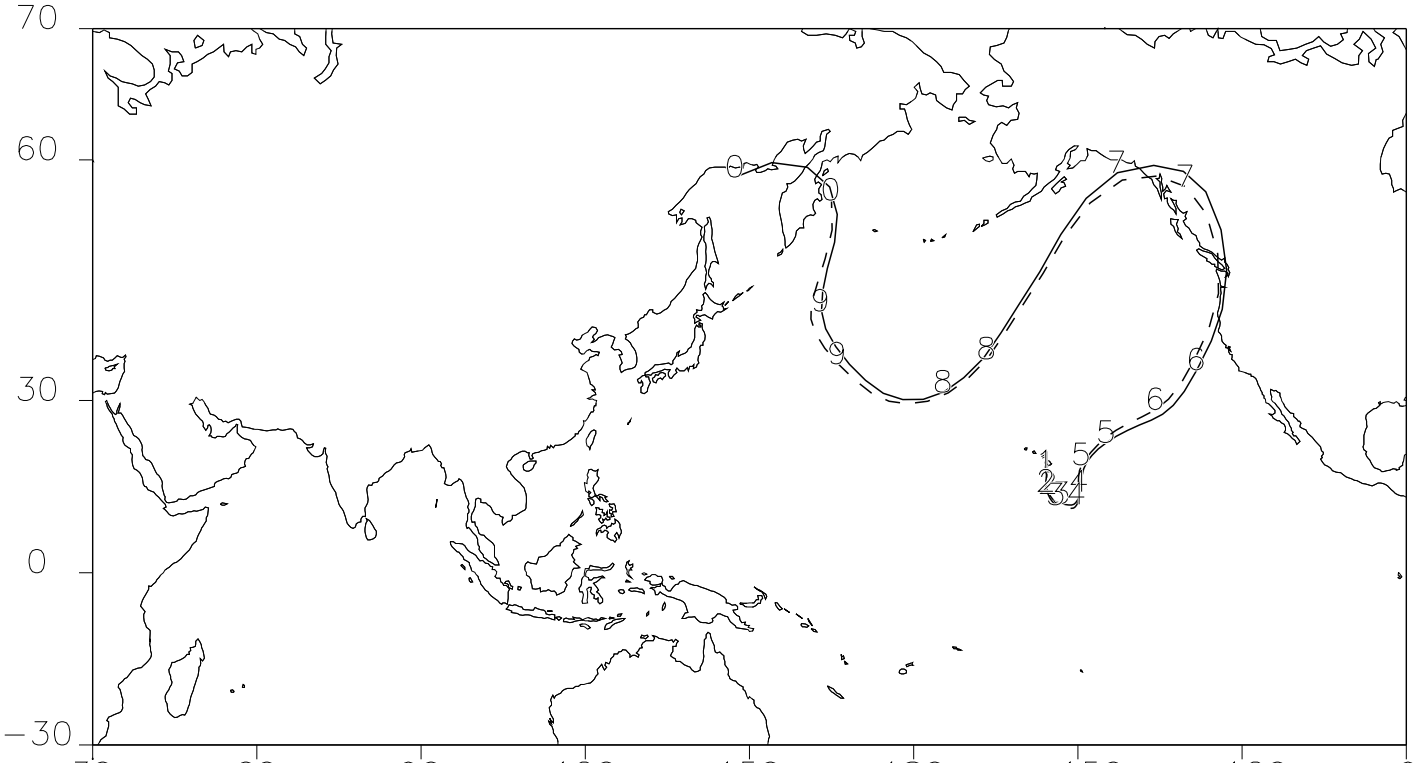
Day	km	hPa	C
0	4.0	633	4
1	4.6	584	2
2	5.0	556	−1
3	5.7	510	−5
4	8.1	370	−26
5	8.9	329	−33
6	8.9	323	−33
7	6.5	446	−17
8	3.6	656	2
9	2.9	712	8
10	1.9	803	14

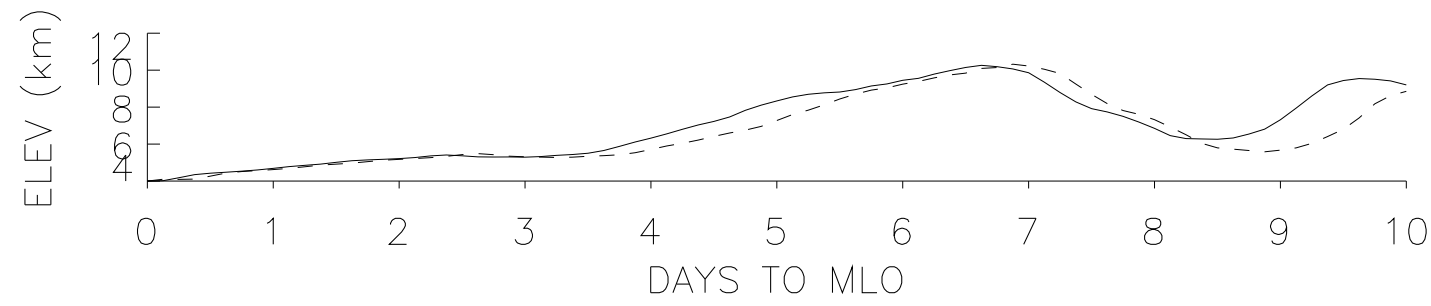
06UT

Day	km	hPa	C
0	4.0	634	4
1	4.7	582	1
2	5.2	544	−2
3	5.4	529	−2
4	7.4	408	−19
5	8.6	348	−30
6	9.9	277	−43
7	7.0	419	−21
8	3.6	656	2
9	1.5	846	15
10	1.4	863	18

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
5/31/2004 (Day of Year 152)
NCEP/NCAR Reanalysis 1 Data Set





12UT

Day	km	hPa	C
0	4.0	633	4
1	4.7	581	0
2	5.2	543	−2
3	5.3	536	−2
4	6.3	470	−9
5	8.3	358	−29
6	9.5	298	−40
7	9.9	278	−43
8	6.9	425	−21
9	7.3	397	−26
10	9.2	301	−45

18UT

Day	km	hPa	C
0	4.0	633	4
1	4.6	587	0
2	5.2	546	−2
3	5.3	535	−3
4	5.7	509	−4
5	7.3	416	−17
6	9.2	314	−36
7	10.2	266	−46
8	7.3	397	−24
9	5.7	498	−11
10	8.9	317	−44

12UT – solid
18UT – dashed