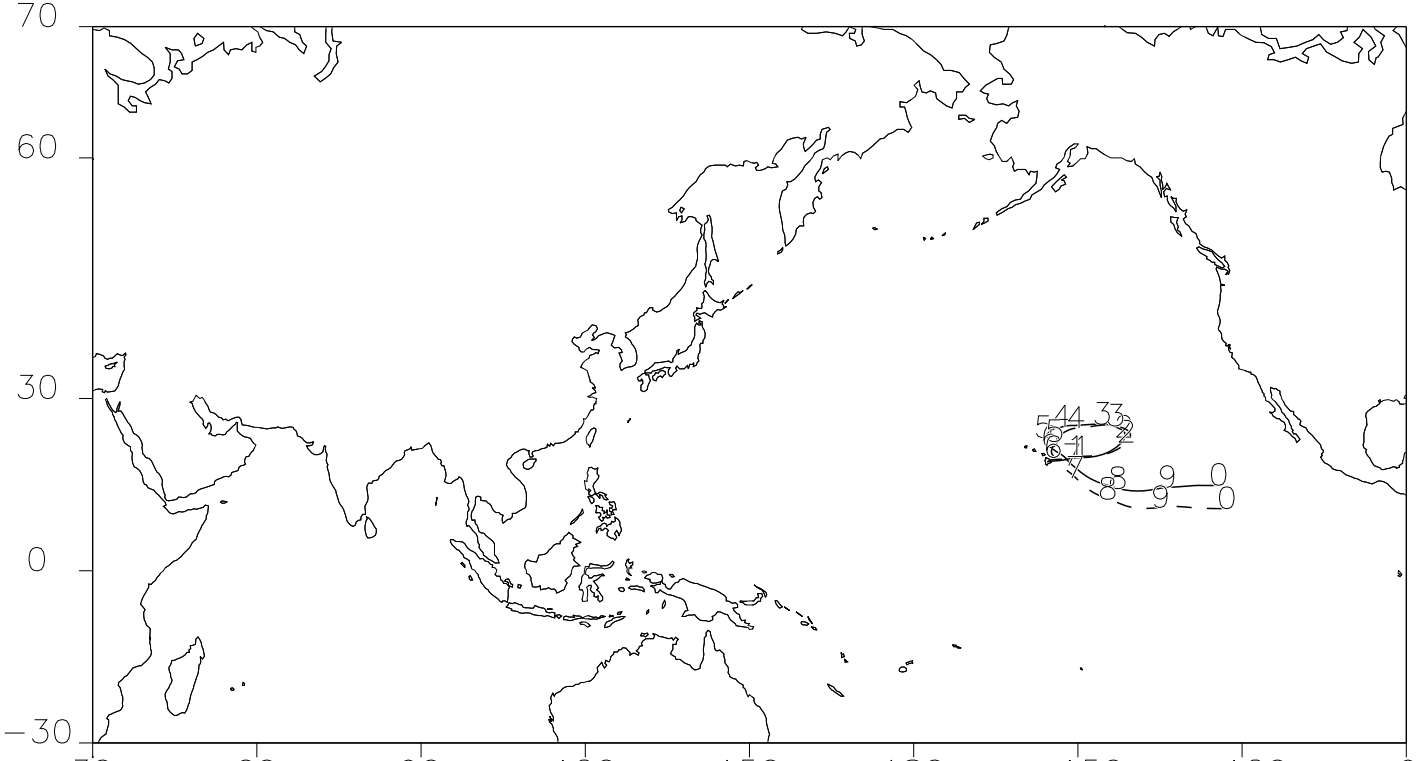
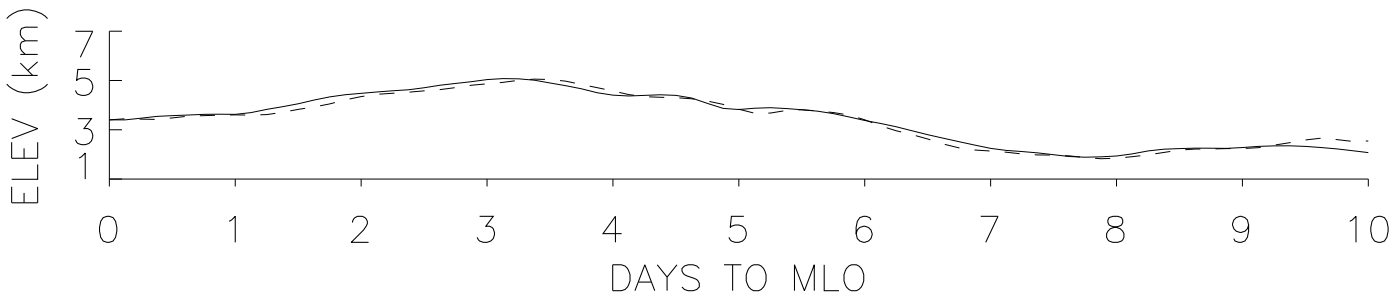
3-D KINEMATIC TRAJECTORIES TO MLO(19.53N, 155.58W)
4/1/2004 (Day of Year 92)
NCEP/NCAR Reanalysis 1 Data Set





00UT

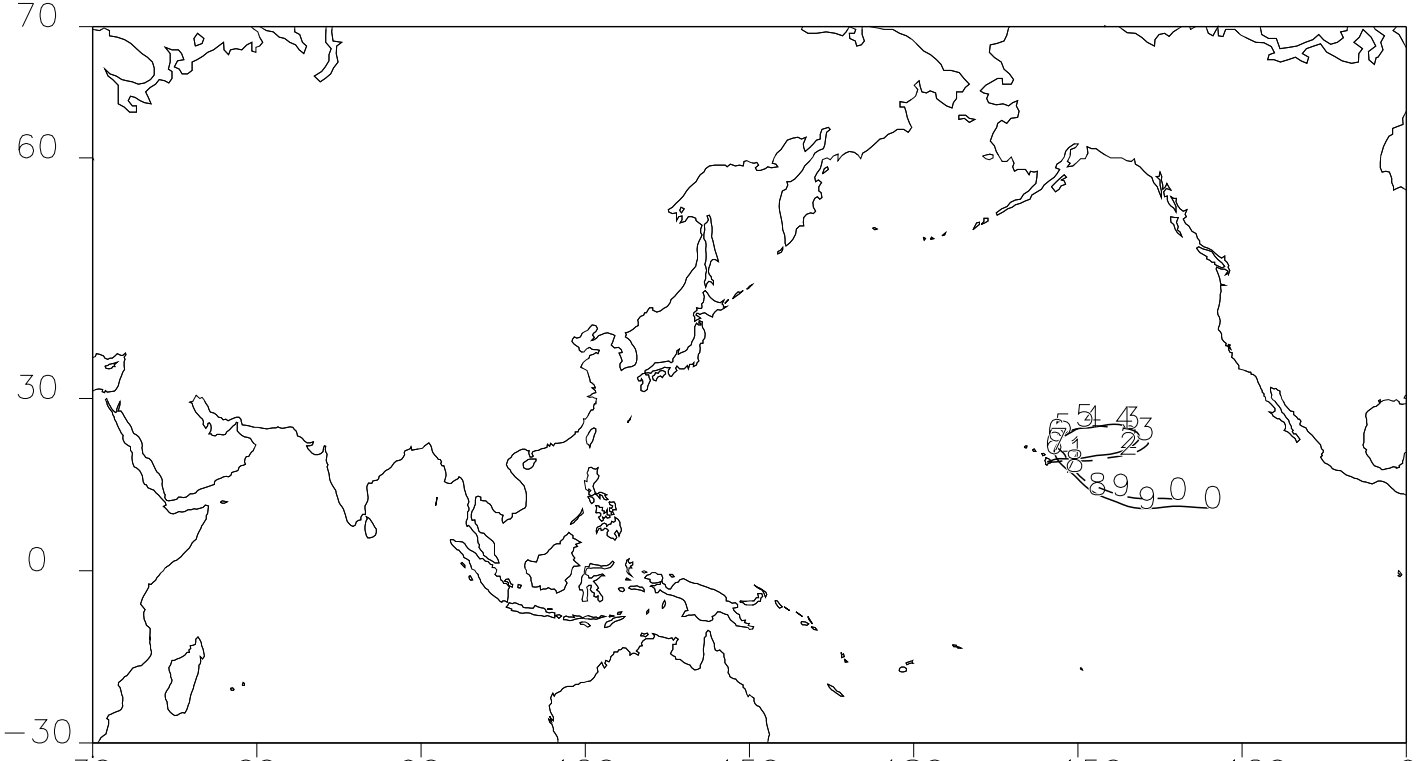
Day	km	hPa	C
0	3.4	680	6
1	3.6	661	6
2	4.5	594	−2
3	5.0	554	−6
4	4.4	600	−3
5	3.8	645	0
6	3.4	682	4
7	2.2	780	10
8	1.9	807	16
9	2.3	775	15
10	2.1	795	18

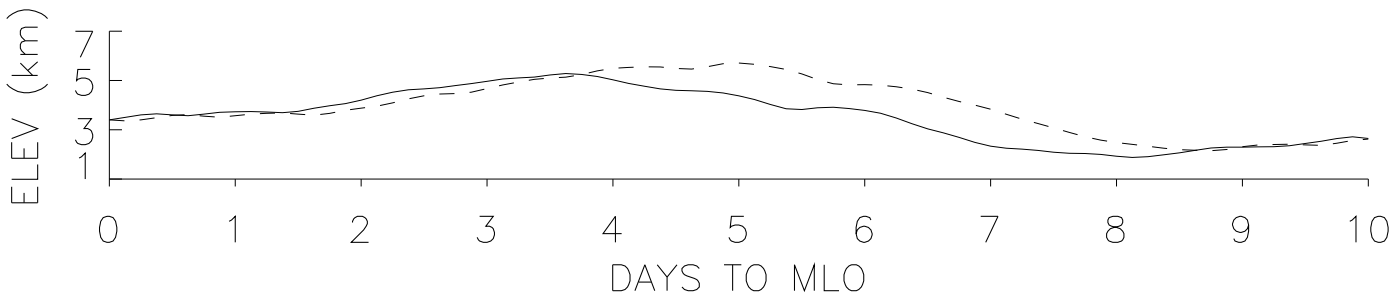
06UT

Day	km	hPa	C
0	3.4	681	6
1	3.6	663	5
2	4.3	605	0
3	4.9	567	−5
4	4.6	588	−3
5	3.8	646	0
6	3.4	681	5
7	2.1	792	12
8	1.8	817	17
9	2.2	780	15
10	2.5	752	14

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

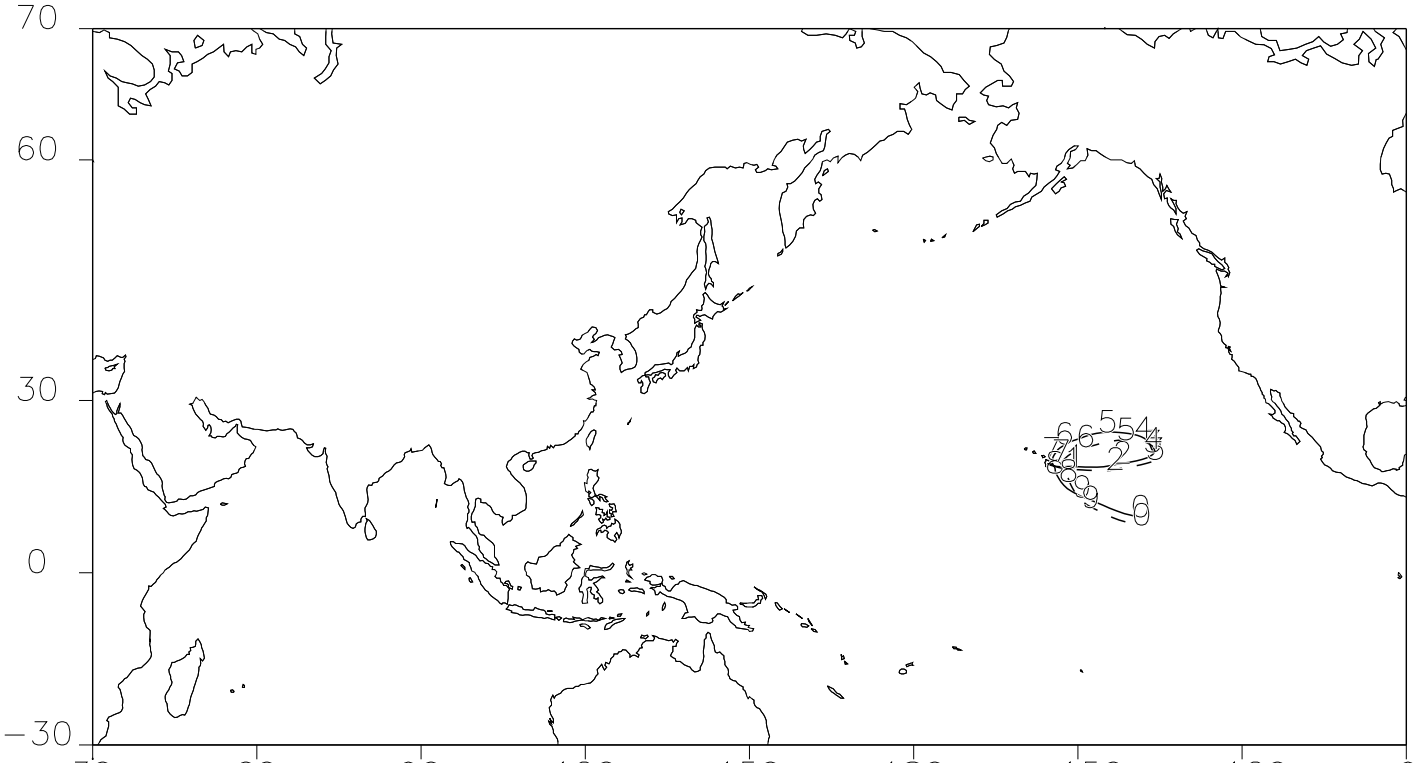
Day	km	hPa	C
0	3.4	679	5
1	3.7	652	3
2	4.2	615	0
3	5.0	558	−6
4	5.0	553	−7
5	4.4	602	−4
6	3.8	649	2
7	2.3	772	10
8	1.9	809	14
9	2.3	773	13
10	2.6	741	12

18UT

Day	km	hPa	C
0	3.4	681	6
1	3.6	667	5
2	3.9	642	3
3	4.7	581	−3
4	5.5	523	−10
5	5.7	508	−13
6	4.8	570	−5
7	3.8	646	1
8	2.5	760	10
9	2.3	773	13
10	2.6	745	13

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

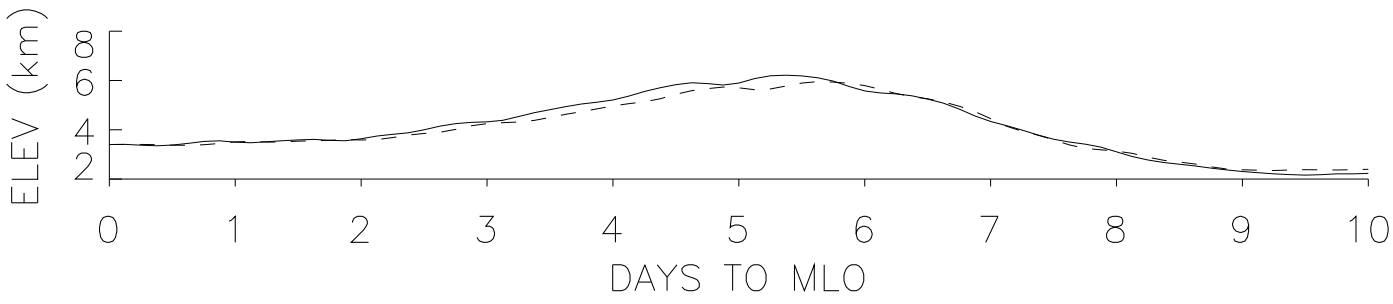


00UT

Day	km	hPa	C
0	3.4	679	5
1	3.5	671	6
2	3.6	659	5
3	4.3	606	−1
4	5.2	542	−8
5	5.9	495	−14
6	5.6	517	−11
7	4.3	605	−1
8	3.1	702	6
9	2.3	772	11
10	2.2	777	14

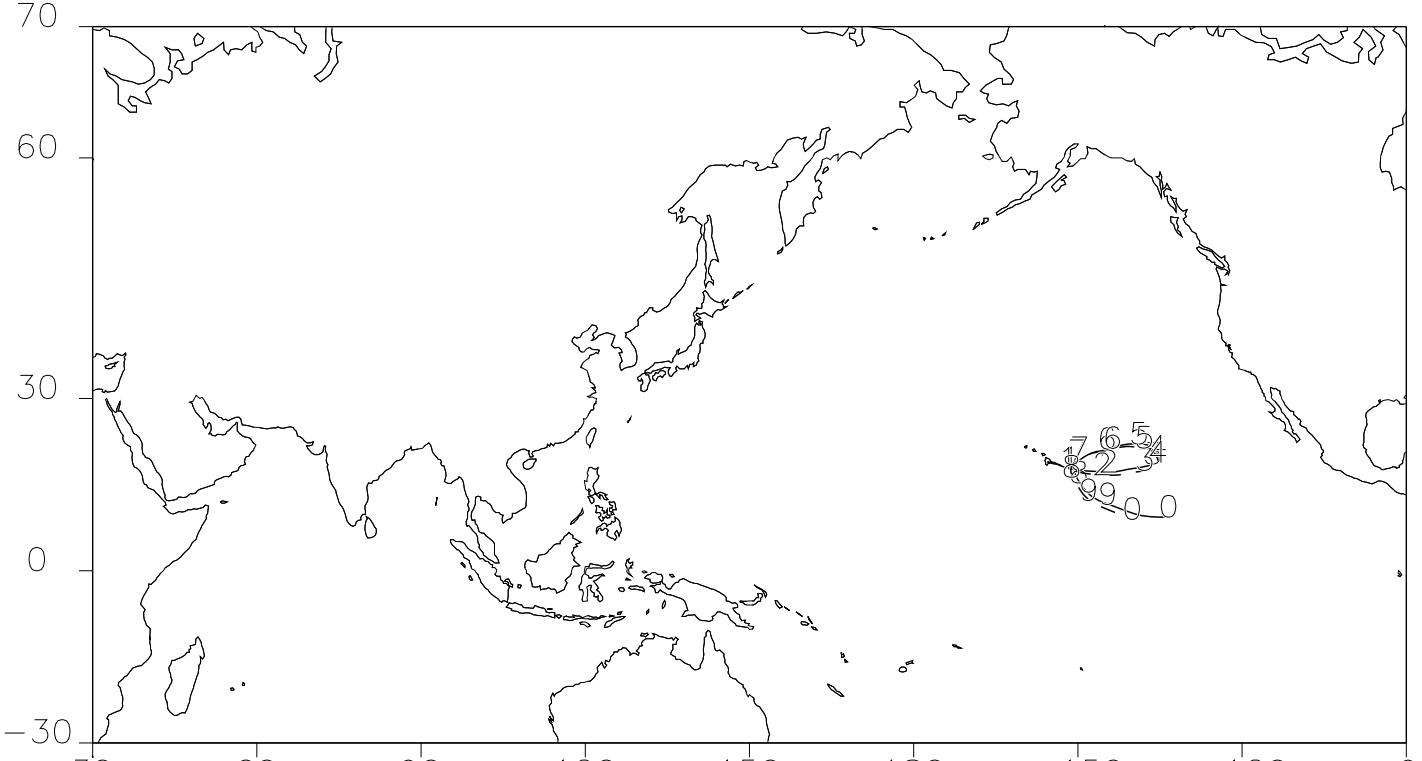
06UT

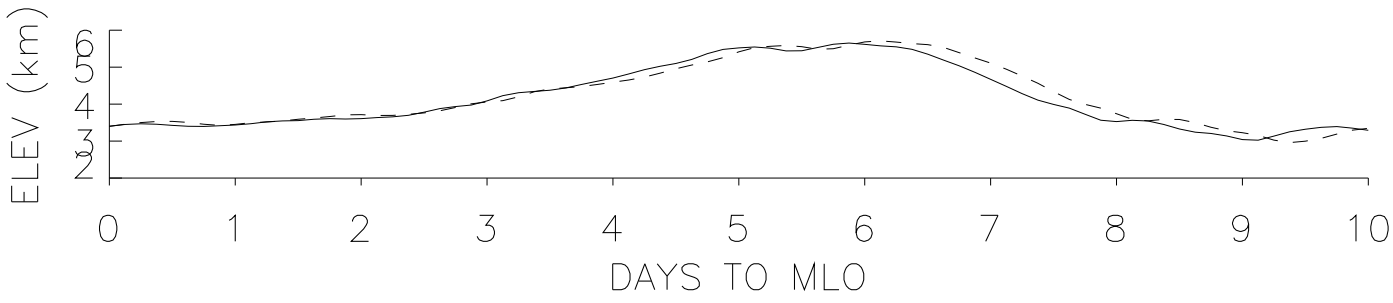
Day	km	hPa	C
0	3.4	680	6
1	3.5	671	5
2	3.6	664	5
3	4.2	612	0
4	5.0	560	−7
5	5.7	509	−11
6	5.8	504	−11
7	4.5	599	0
8	3.1	702	7
9	2.4	767	13
10	2.4	765	13



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

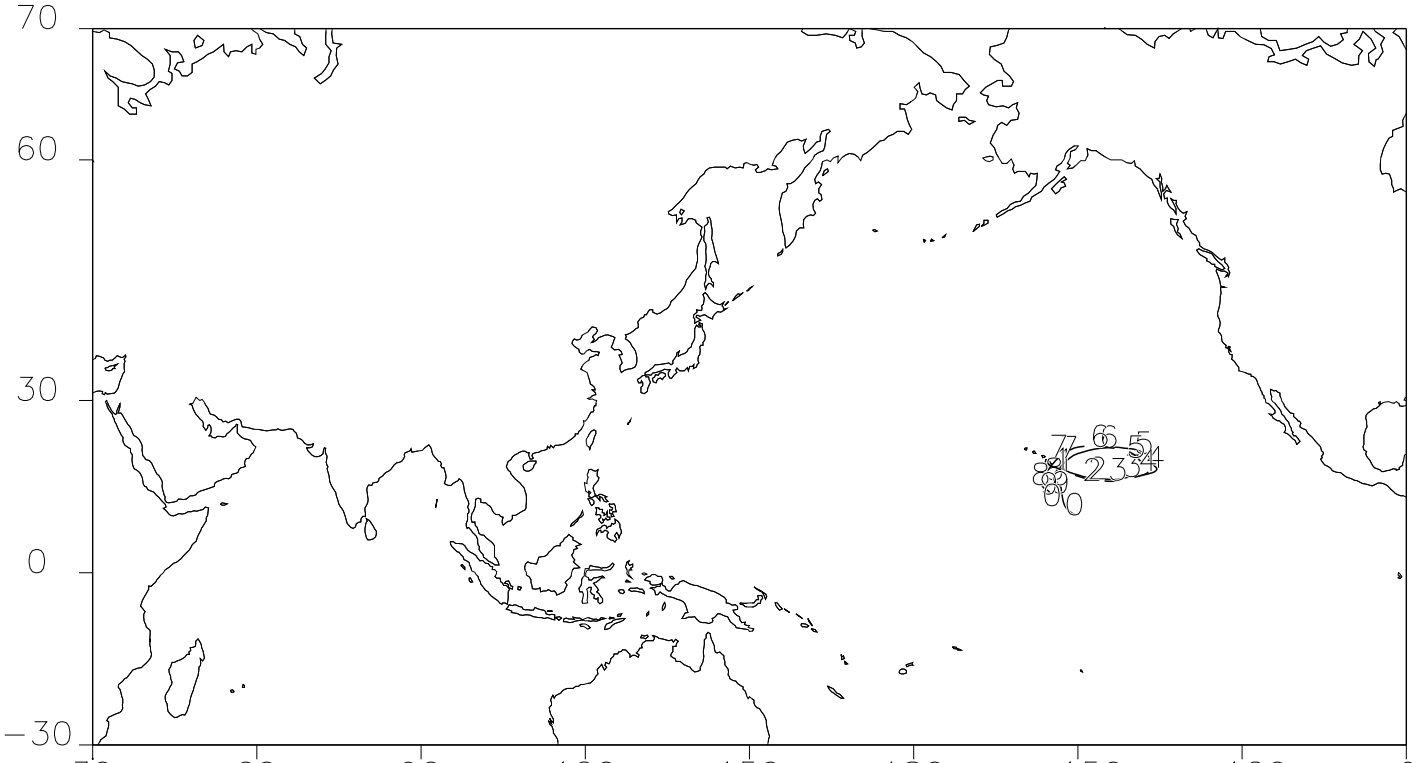
Day	km	hPa	C
0	3.4	679	5
1	3.4	676	6
2	3.6	661	3
3	4.1	623	1
4	4.7	577	-4
5	5.5	520	-11
6	5.6	515	-11
7	4.7	582	-3
8	3.5	669	5
9	3.0	707	9
10	3.3	685	9

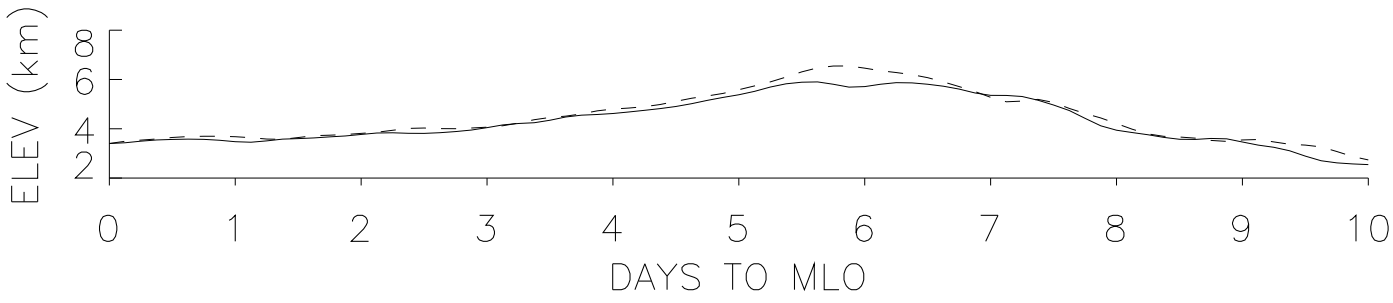
18UT

Day	km	hPa	C
0	3.4	680	6
1	3.5	676	6
2	3.7	654	5
3	4.1	627	2
4	4.6	587	-3
5	5.4	529	-9
6	5.7	511	-12
7	5.1	551	-6
8	3.7	654	4
9	3.2	695	8
10	3.3	683	8

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

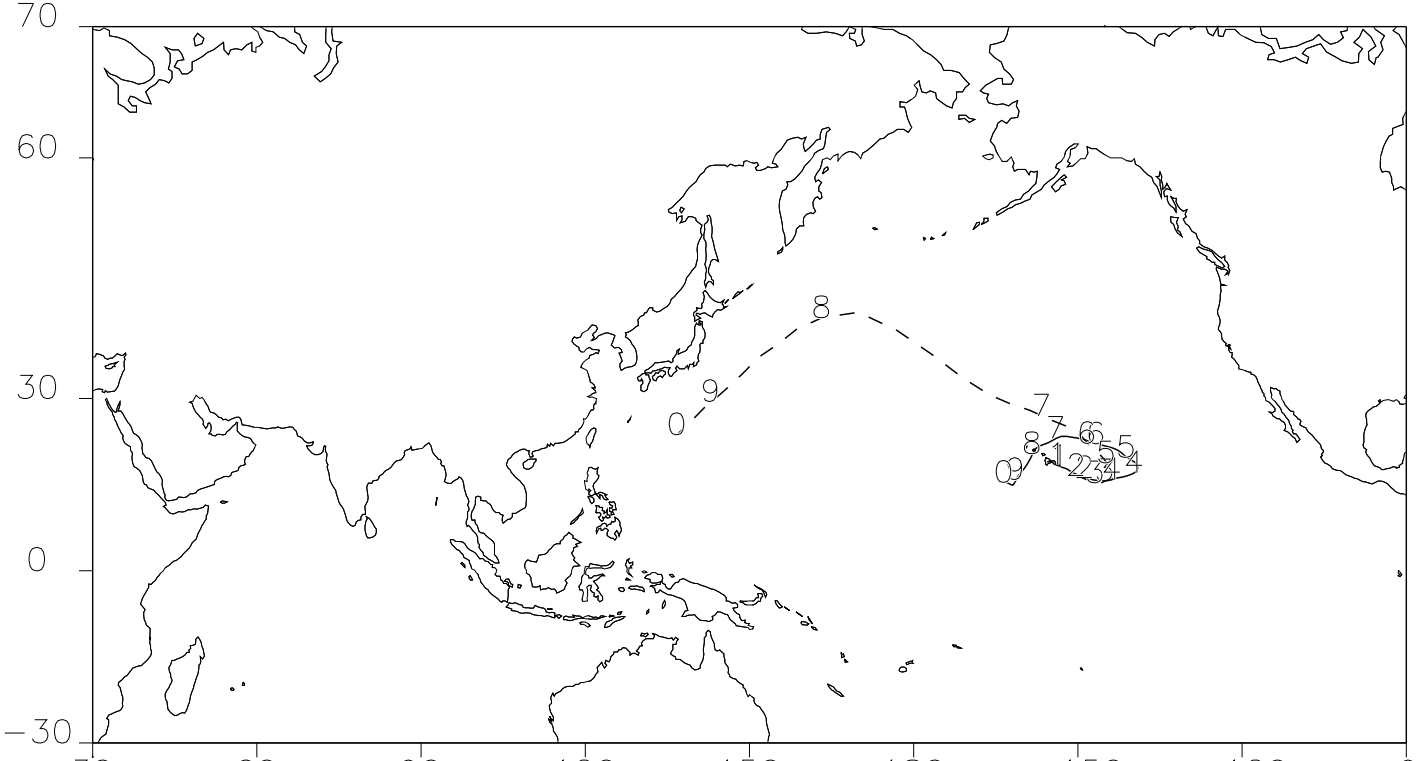
Day	km	hPa	C
0	3.4	679	5
1	3.5	673	5
2	3.8	648	5
3	4.0	626	2
4	4.6	583	−3
5	5.4	531	−8
6	5.7	508	−11
7	5.4	532	−9
8	3.9	636	4
9	3.5	672	5
10	2.5	748	11

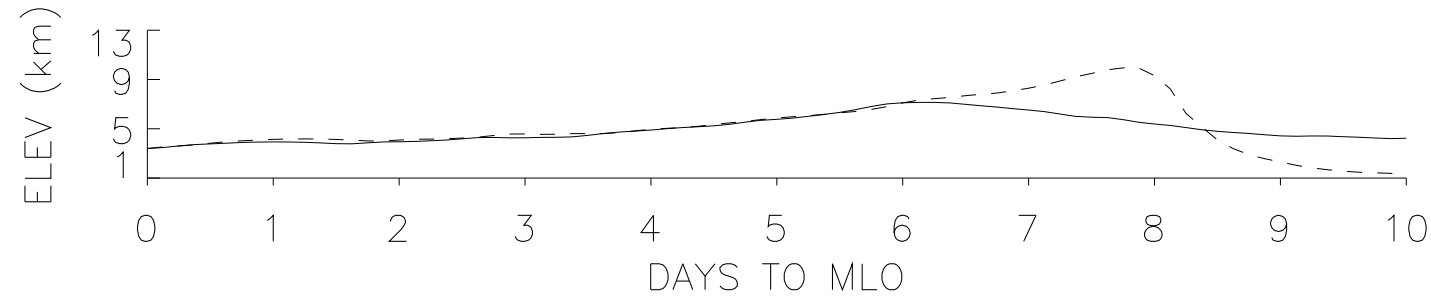
06UT

Day	km	hPa	C
0	3.4	680	5
1	3.7	657	4
2	3.8	646	5
3	4.1	625	3
4	4.8	571	−3
5	5.6	518	−9
6	6.5	462	−15
7	5.3	539	−7
8	4.2	616	3
9	3.5	668	7
10	2.7	734	9

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

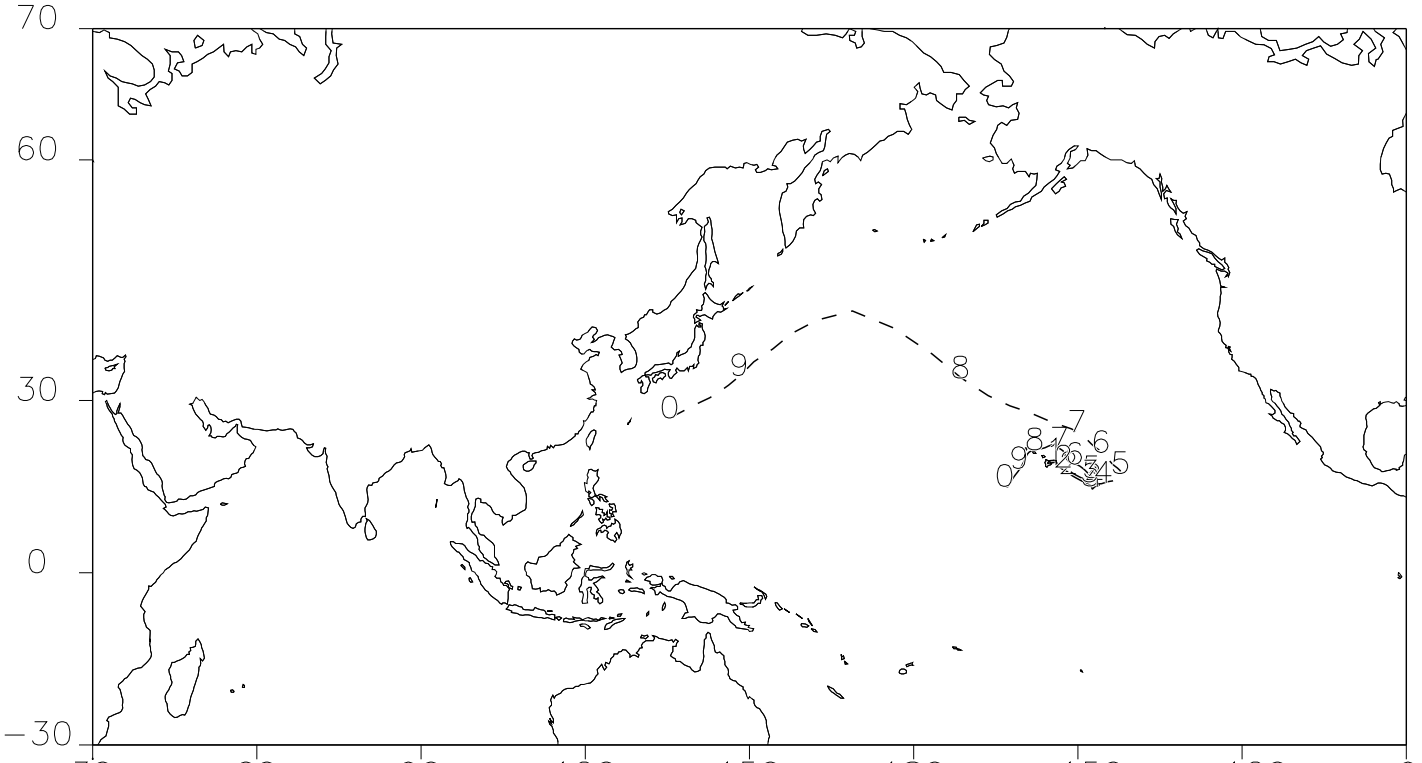
Day	km	hPa	C
0	3.4	679	5
1	3.9	636	1
2	3.9	634	3
3	4.3	608	0
4	4.9	563	−3
5	5.8	504	−10
6	7.1	422	−20
7	6.5	456	−16
8	5.4	530	−9
9	4.4	598	0
10	4.2	611	0

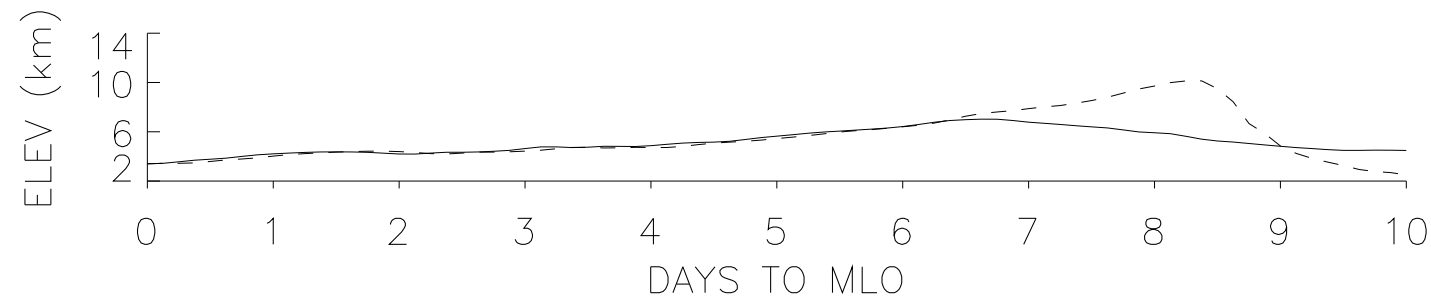
18UT

Day	km	hPa	C
0	3.4	680	5
1	4.1	621	−1
2	4.1	625	2
3	4.6	588	0
4	5.0	560	−2
5	5.9	499	−9
6	7.1	424	−19
7	8.3	358	−31
8	9.3	298	−42
9	2.3	768	10
10	1.3	866	16

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

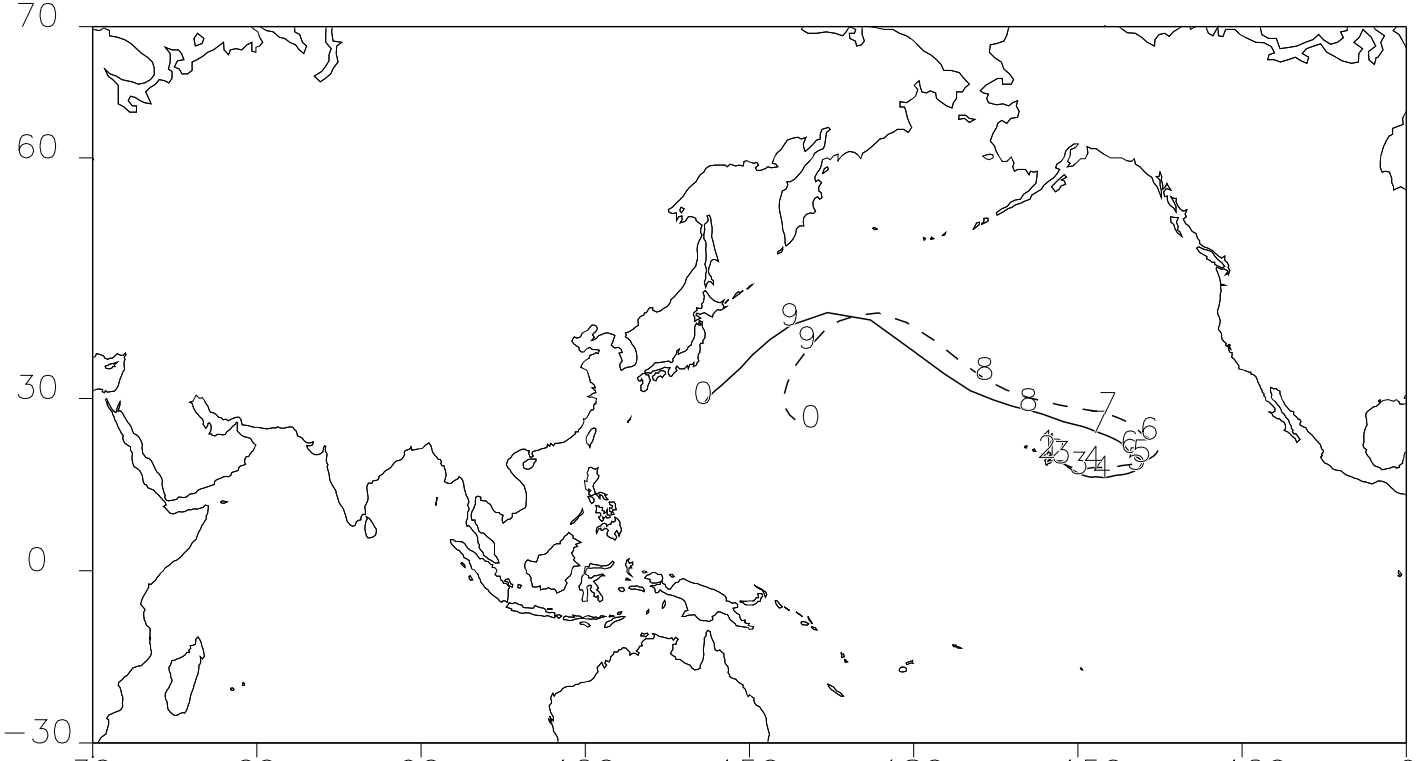
Day	km	hPa	C
0	3.4	679	5
1	4.2	614	-1
2	4.2	615	0
3	4.6	582	0
4	4.9	565	-2
5	5.6	512	-7
6	6.4	465	-13
7	6.8	442	-17
8	5.9	494	-12
9	4.8	569	-4
10	4.5	593	-1

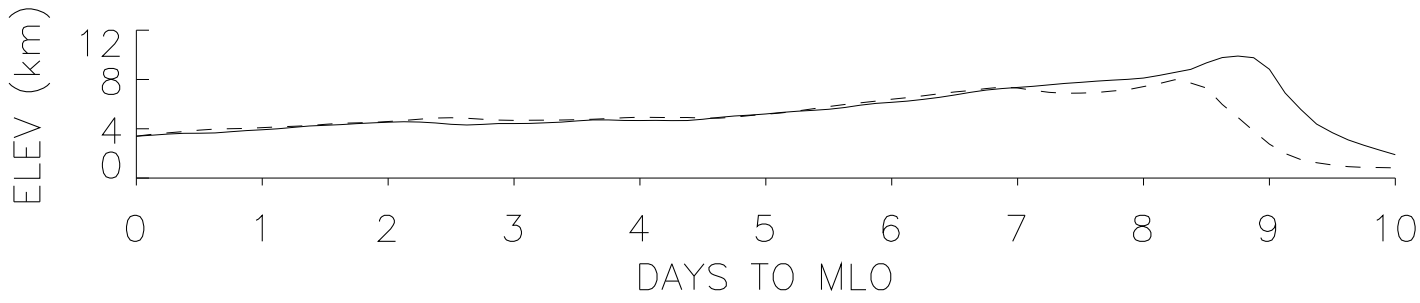
06UT

Day	km	hPa	C
0	3.4	680	5
1	4.0	630	0
2	4.4	602	-2
3	4.4	599	1
4	4.7	576	-1
5	5.4	526	-6
6	6.4	466	-14
7	7.9	381	-25
8	9.7	283	-46
9	4.8	556	-6
10	2.5	750	9

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

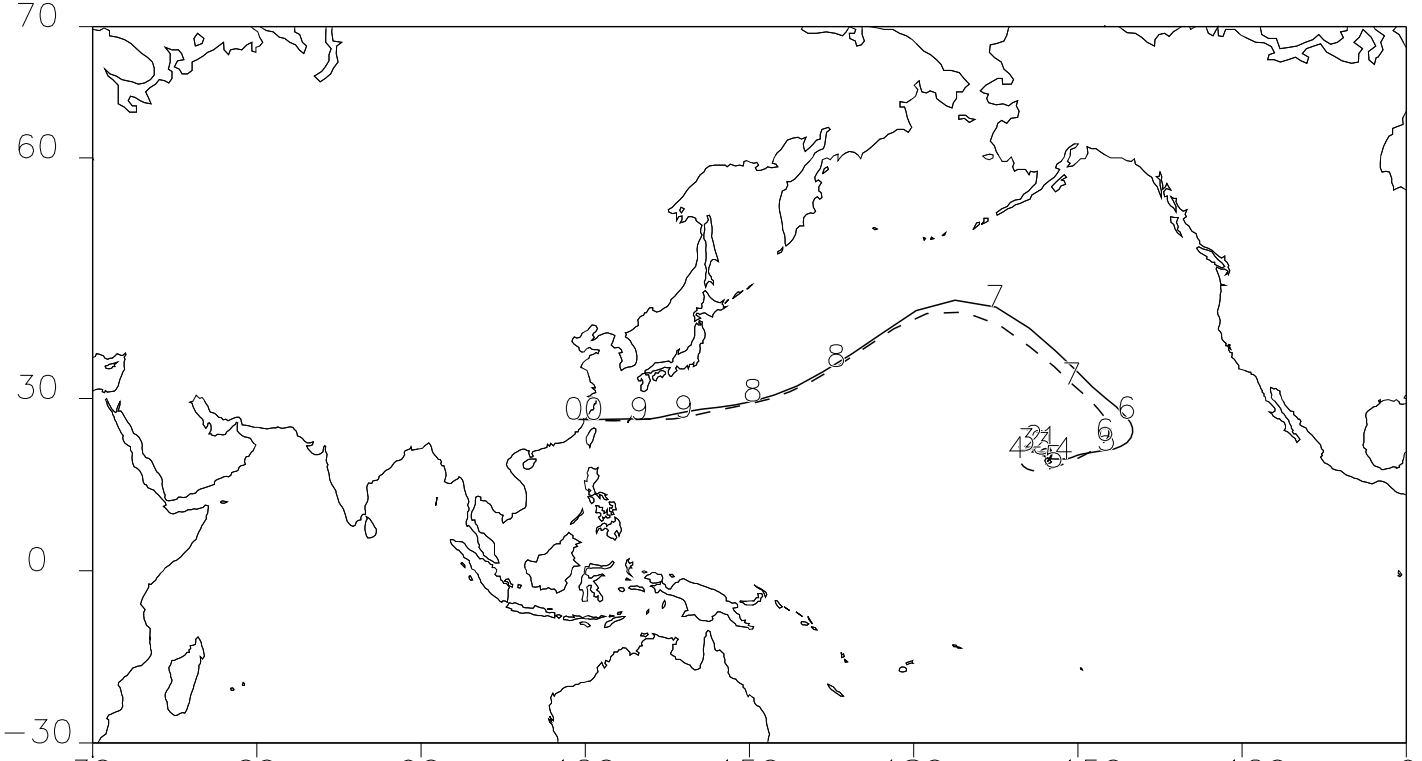
Day	km	hPa	C
0	3.4	679	5
1	3.9	637	1
2	4.5	590	−3
3	4.4	598	−1
4	4.7	579	−2
5	5.2	541	−4
6	6.1	480	−12
7	7.4	407	−22
8	8.1	365	−30
9	8.8	319	−38
10	1.9	809	11

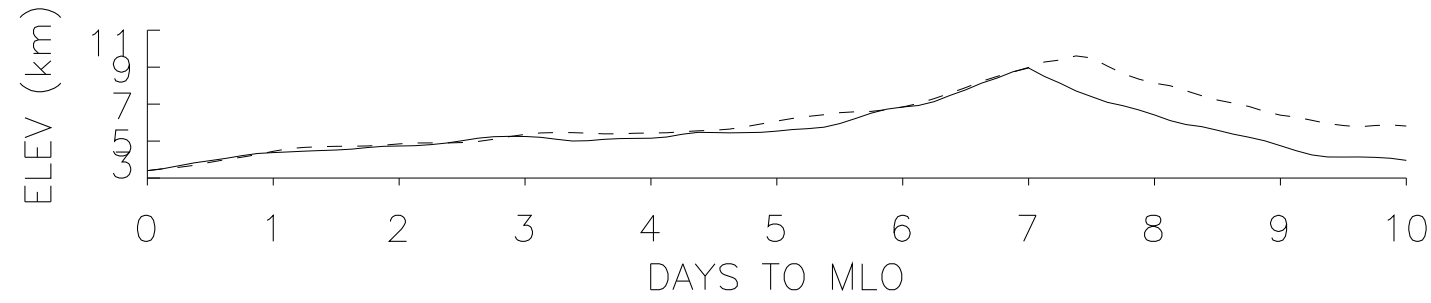
18UT

Day	km	hPa	C
0	3.4	680	5
1	4.1	624	−1
2	4.6	587	−3
3	4.7	581	−2
4	4.9	563	−2
5	5.2	545	−4
6	6.4	465	−14
7	7.3	411	−21
8	7.4	397	−25
9	2.8	722	5
10	0.8	925	17

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

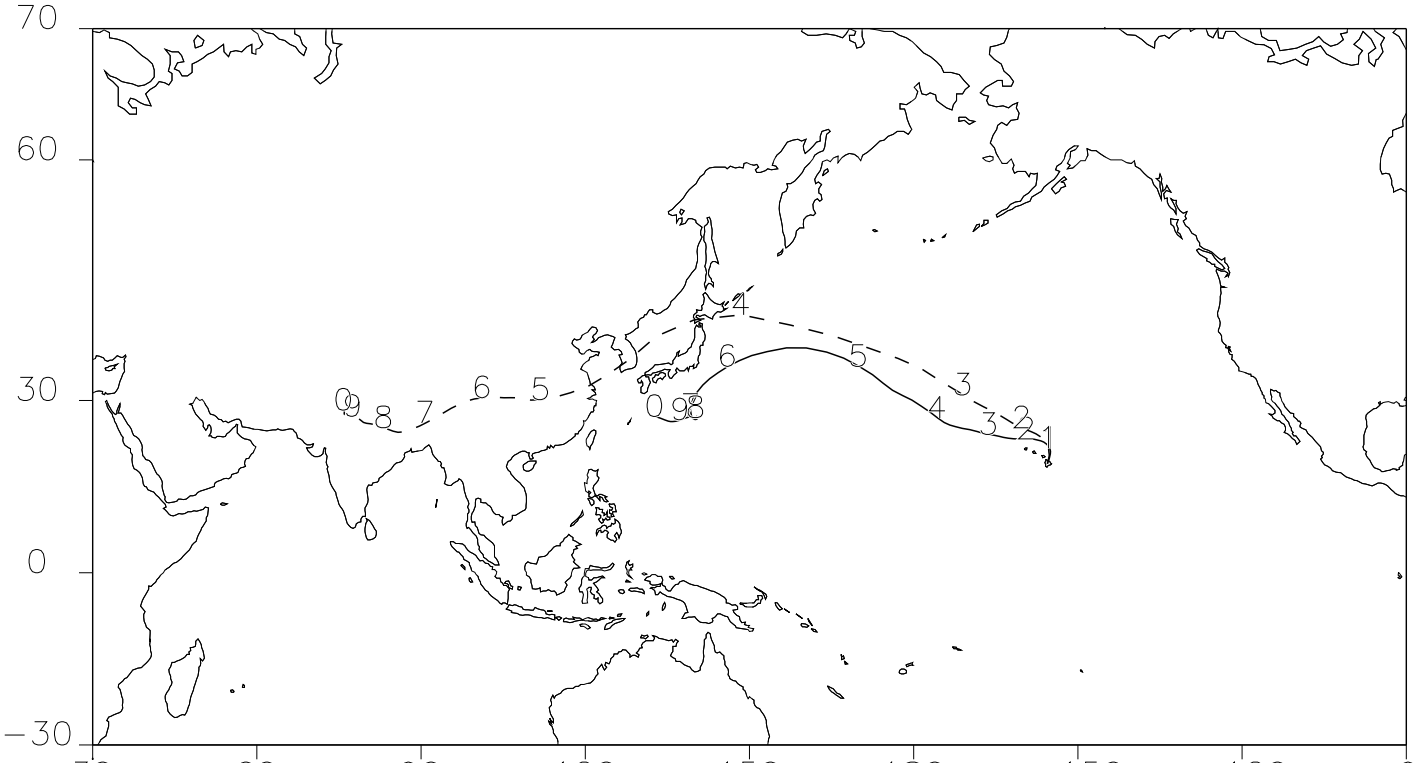
Day	km	hPa	C
0	3.4	679	5
1	4.4	601	-3
2	4.7	575	-4
3	5.2	539	-6
4	5.2	547	-4
5	5.5	521	-5
6	6.8	437	-17
7	9.0	312	-40
8	6.4	457	-16
9	4.8	571	-5
10	4.0	628	1

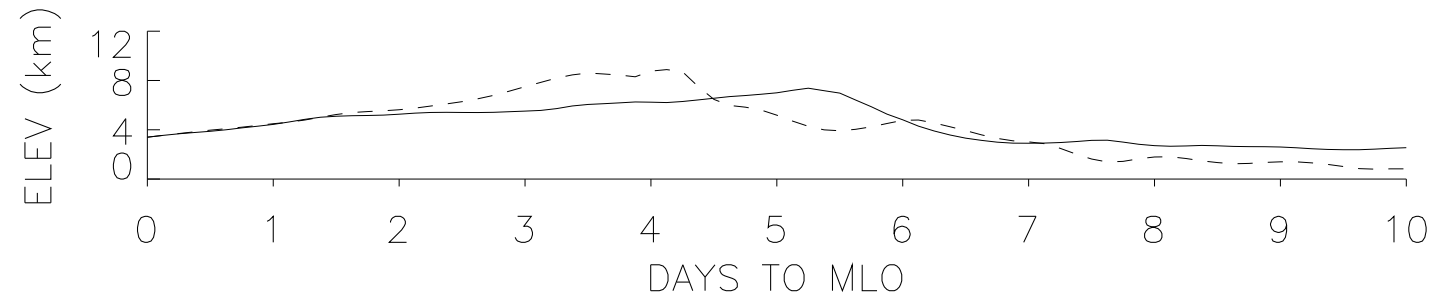
06UT

Day	km	hPa	C
0	3.4	680	6
1	4.4	597	-2
2	4.8	567	-5
3	5.4	532	-8
4	5.4	528	-6
5	6.1	486	-10
6	6.8	440	-15
7	9.0	322	-36
8	8.1	358	-31
9	6.4	460	-15
10	5.8	498	-9

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

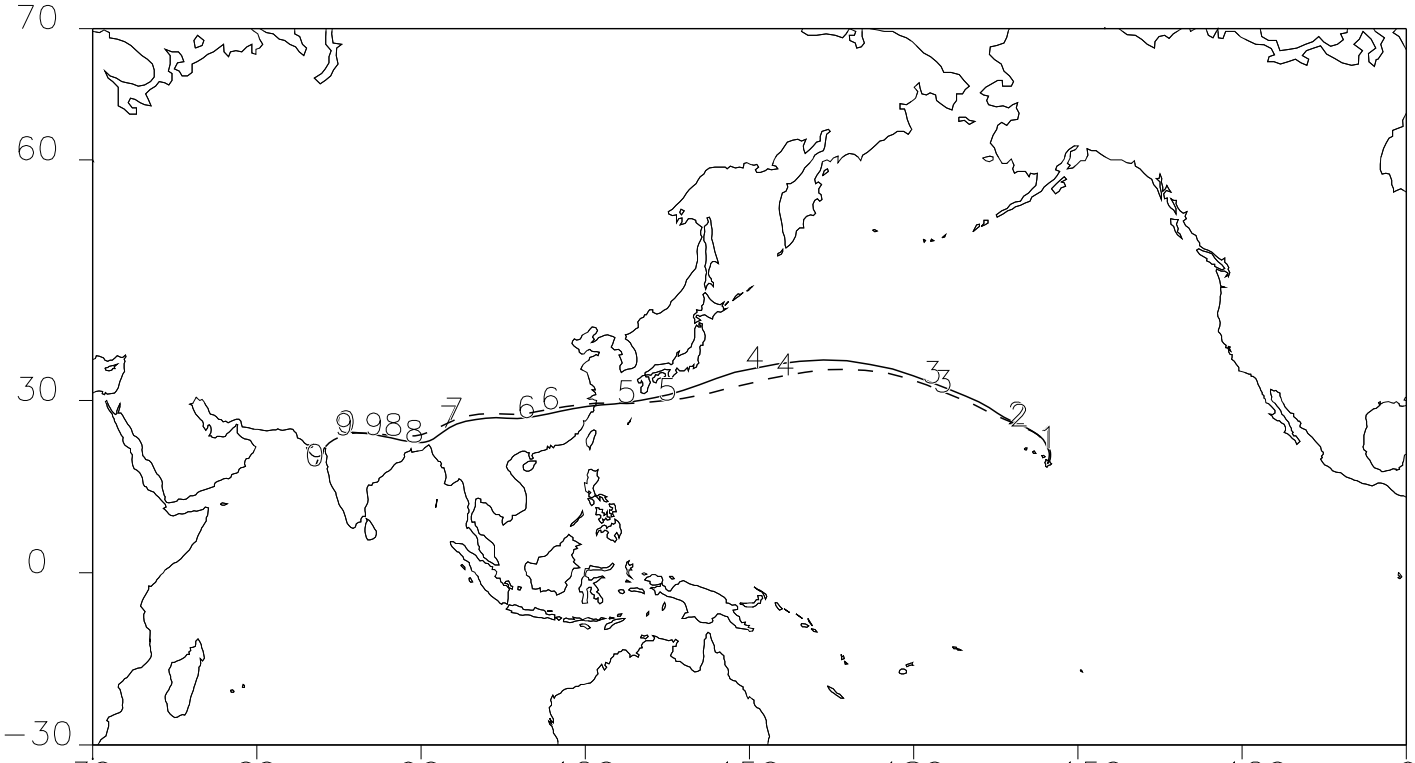
Day	km	hPa	C
0	3.4	679	6
1	4.4	597	−2
2	5.3	537	−8
3	5.5	520	−9
4	6.2	473	−13
5	7.0	422	−22
6	4.8	563	−10
7	2.9	720	4
8	2.7	736	4
9	2.6	745	5
10	2.5	749	6

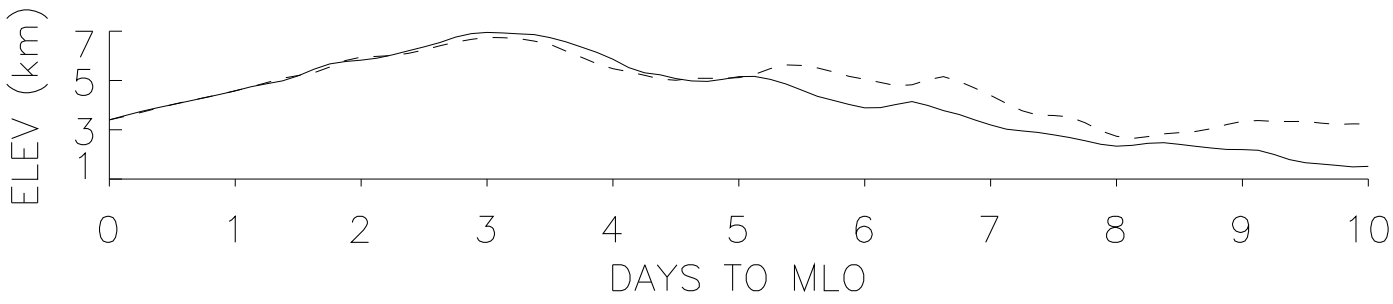
18UT

Day	km	hPa	C
0	3.4	680	7
1	4.5	594	−2
2	5.6	513	−11
3	7.5	395	−27
4	8.8	312	−42
5	5.2	536	−13
6	4.8	567	−9
7	3.0	709	7
8	1.8	823	18
9	1.4	862	20
10	0.8	919	22

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

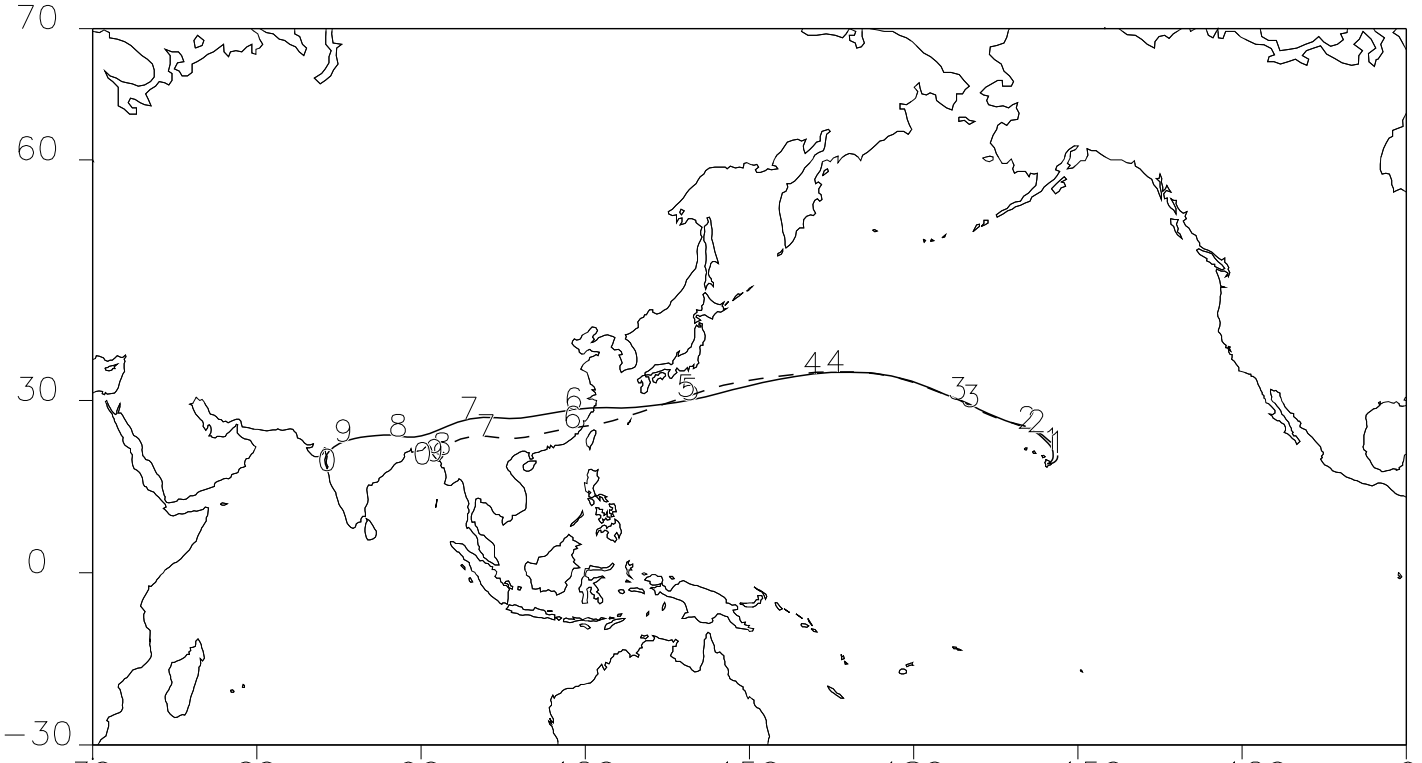
Day	km	hPa	C
0	3.4	679	7
1	4.6	586	−2
2	5.8	499	−12
3	7.0	425	−23
4	5.9	491	−14
5	5.2	541	−8
6	3.9	635	0
7	3.2	695	6
8	2.3	771	15
9	2.2	784	15
10	1.5	847	18

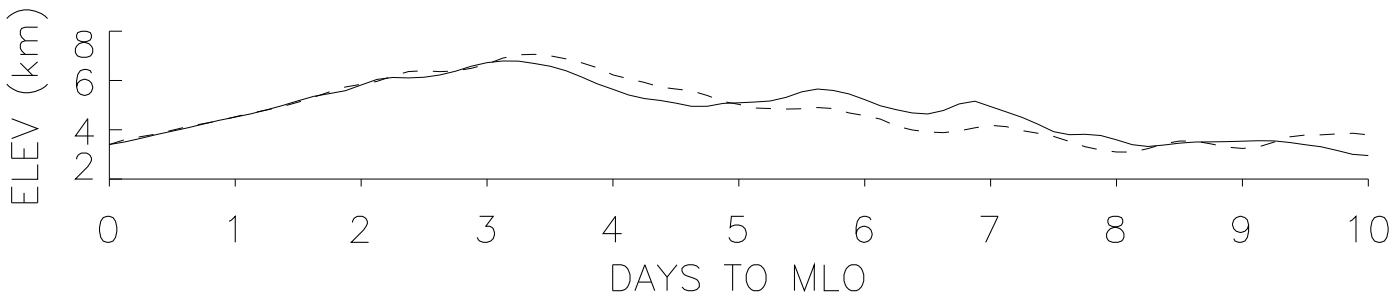
06UT

Day	km	hPa	C
0	3.4	680	8
1	4.6	588	−1
2	5.9	492	−12
3	6.7	439	−20
4	5.5	518	−10
5	5.1	544	−6
6	5.0	548	−7
7	4.4	600	−3
8	2.7	737	11
9	3.3	686	6
10	3.2	694	7

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

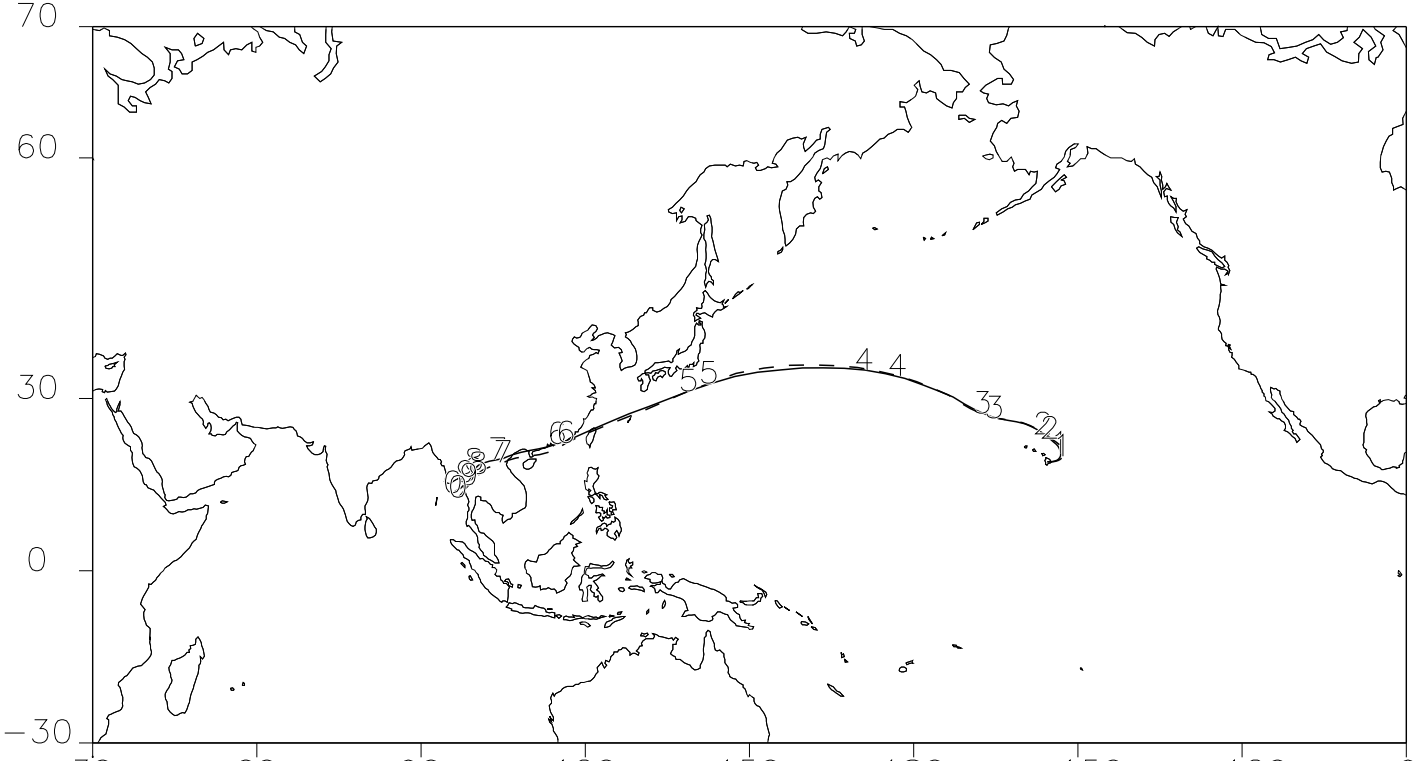
Day	km	hPa	C
0	3.4	679	7
1	4.5	592	−1
2	5.8	500	−11
3	6.7	443	−20
4	5.6	509	−10
5	5.1	548	−5
6	5.2	536	−8
7	4.9	557	−7
8	3.6	663	5
9	3.5	668	6
10	3.0	716	10

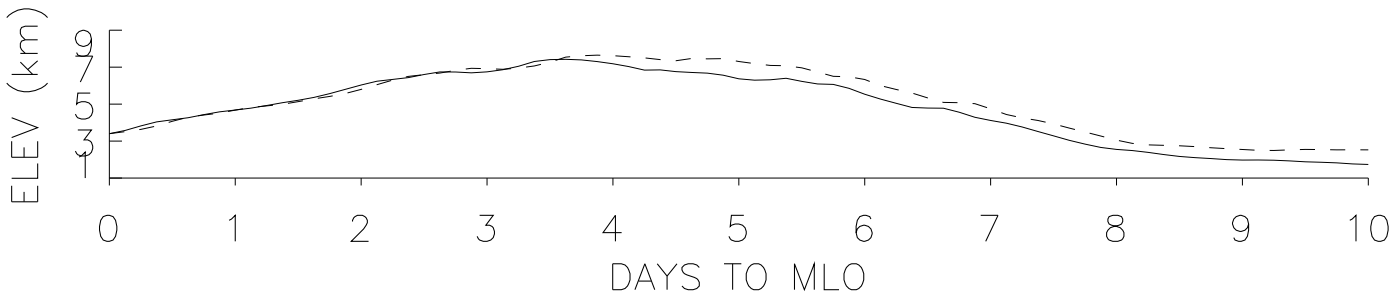
18UT

Day	km	hPa	C
0	3.4	680	8
1	4.5	592	0
2	5.8	499	−11
3	6.7	446	−18
4	6.2	470	−15
5	5.0	549	−5
6	4.6	587	−1
7	4.2	616	−1
8	3.1	705	10
9	3.2	693	11
10	3.8	650	7

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

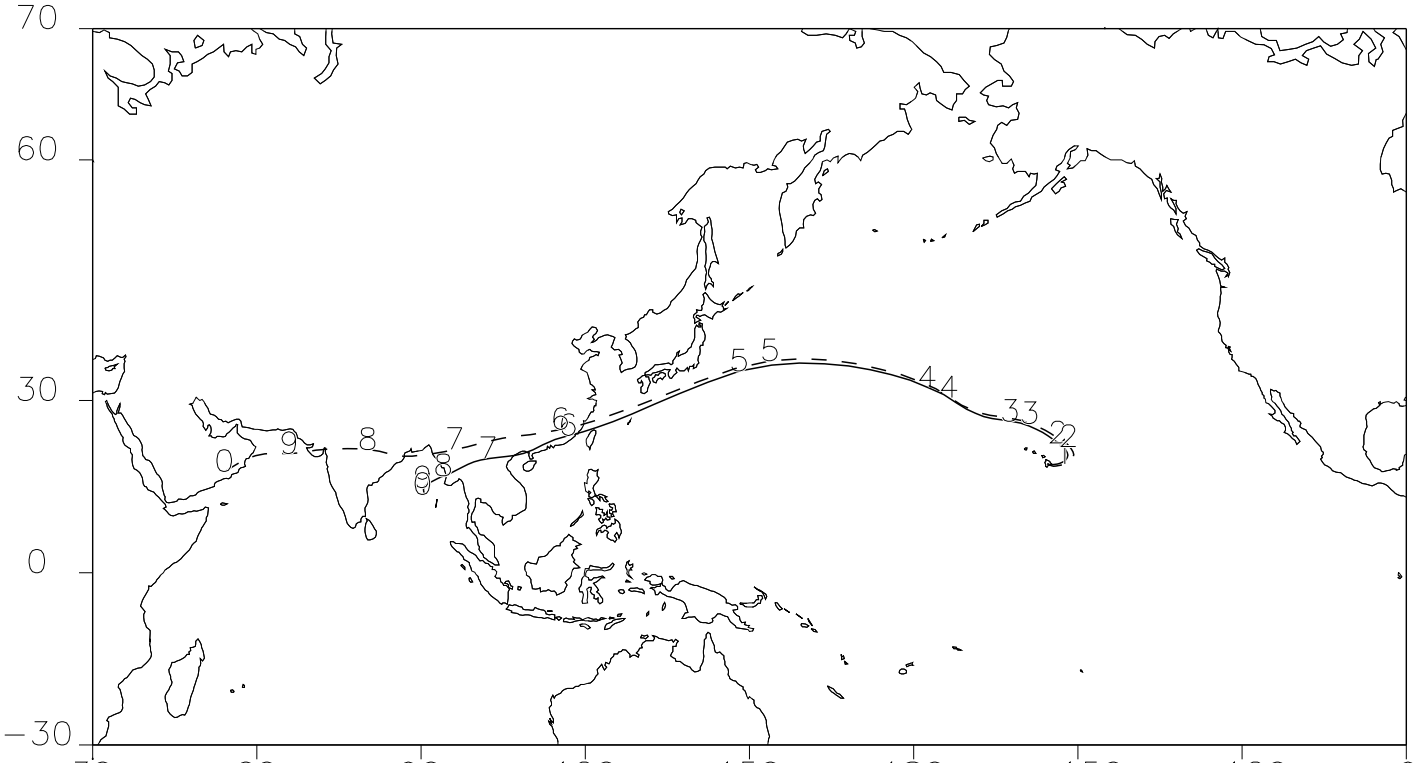
Day	km	hPa	C
0	3.4	678	8
1	4.7	580	−1
2	6.0	486	−12
3	6.7	442	−18
4	7.2	413	−22
5	6.4	462	−14
6	5.5	521	−7
7	4.1	623	3
8	2.5	752	15
9	2.0	805	18
10	1.7	829	20

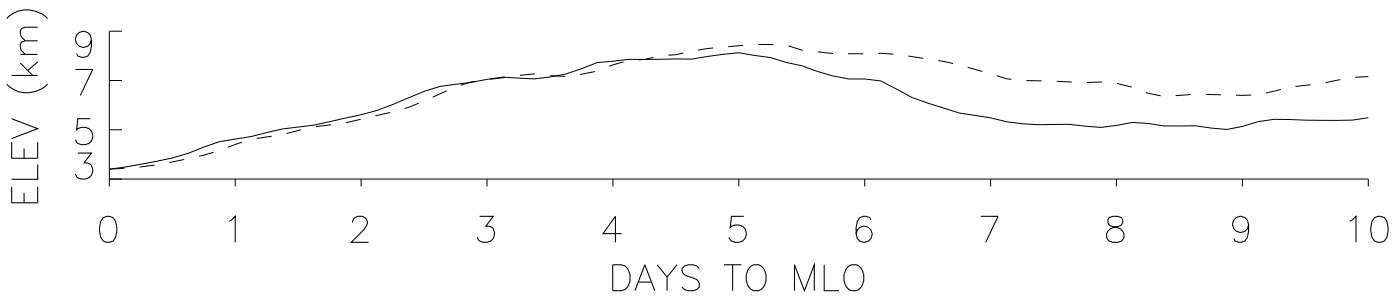
06UT

Day	km	hPa	C
0	3.4	680	8
1	4.7	581	0
2	5.8	503	−10
3	6.9	432	−19
4	7.6	390	−25
5	7.3	406	−20
6	6.3	469	−12
7	4.7	577	−1
8	3.1	711	10
9	2.5	755	14
10	2.5	757	14

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

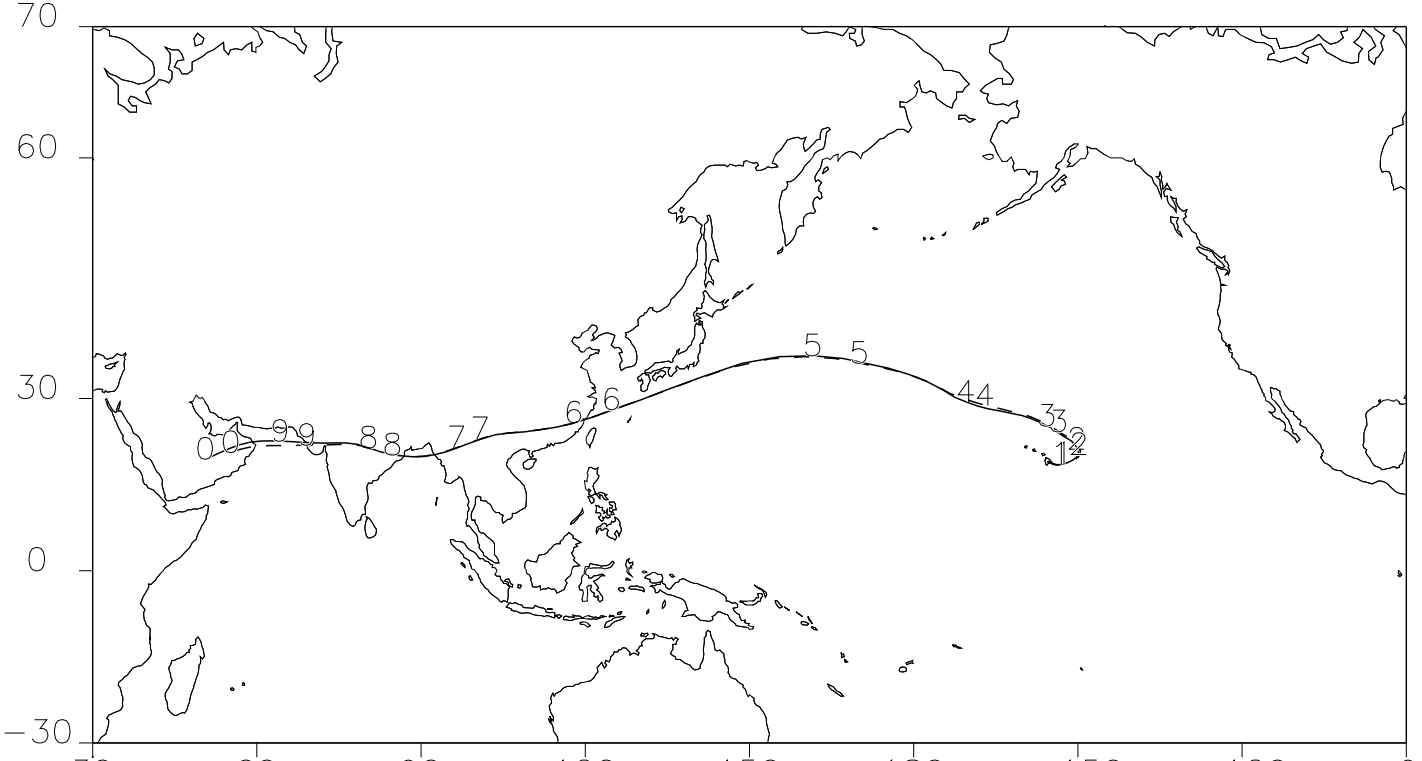
Day	km	hPa	C
0	3.4	679	8
1	4.6	584	0
2	5.6	515	−8
3	7.0	425	−19
4	7.8	383	−25
5	8.1	362	−28
6	7.1	425	−17
7	5.5	524	−6
8	5.2	545	−2
9	5.1	548	0
10	5.5	525	−2

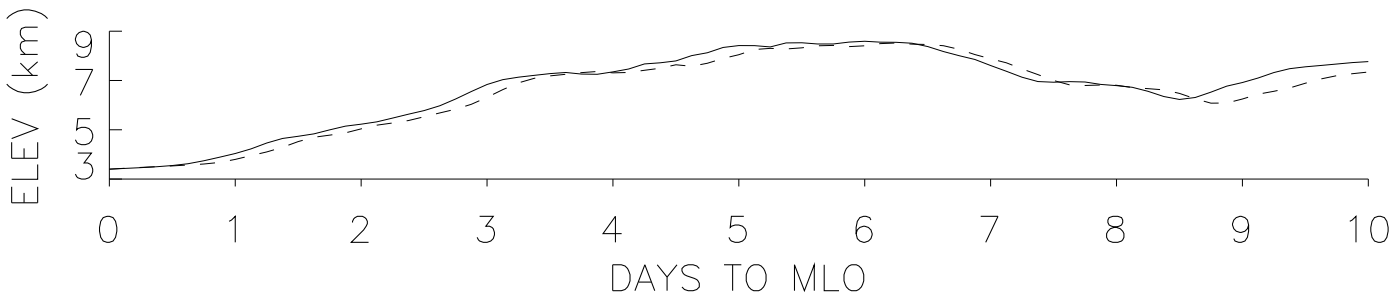
18UT

Day	km	hPa	C
0	3.4	679	8
1	4.4	601	2
2	5.4	528	−6
3	7.0	426	−19
4	7.6	391	−23
5	8.4	344	−31
6	8.1	368	−26
7	7.3	414	−21
8	6.9	437	−16
9	6.4	468	−10
10	7.2	423	−17

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

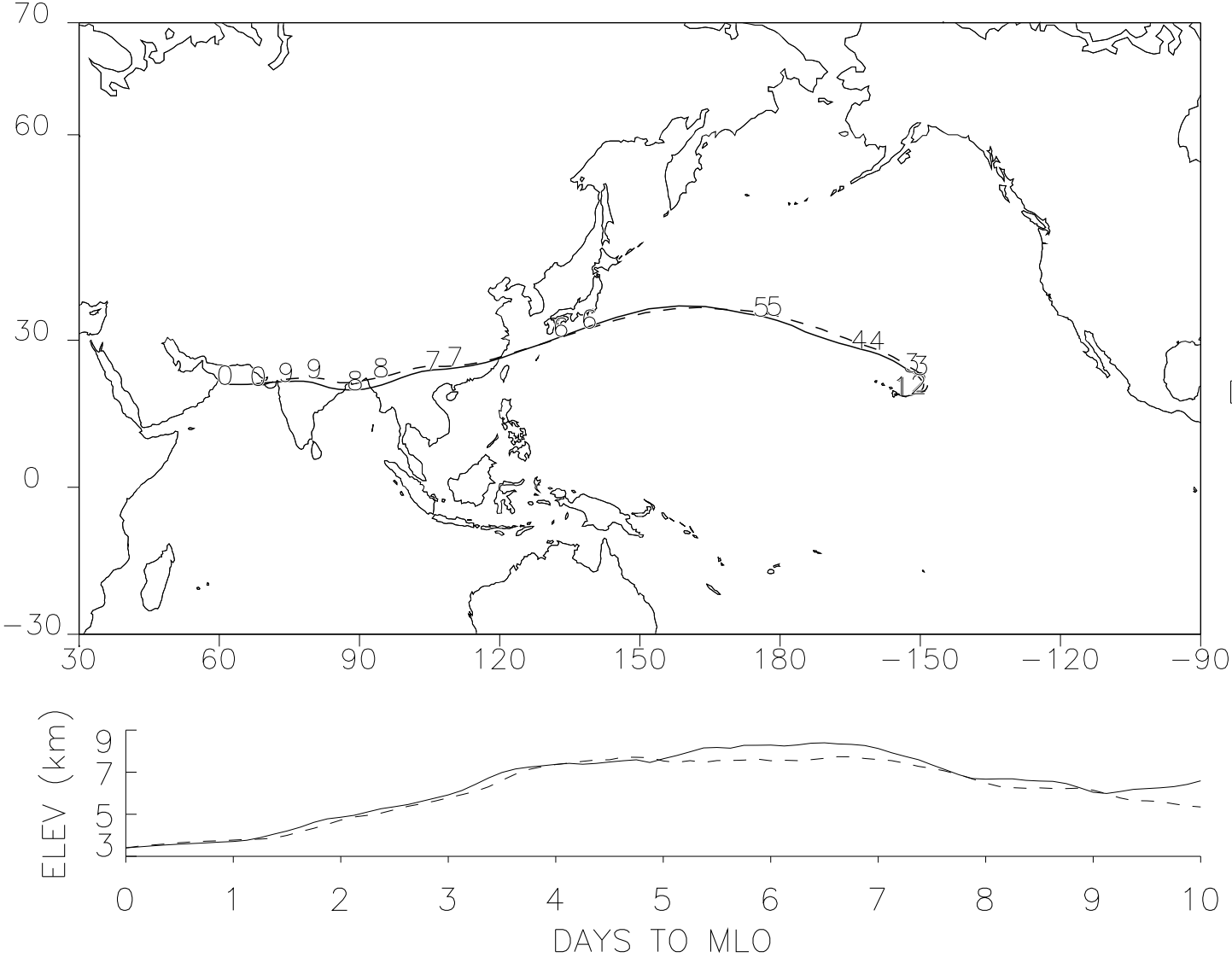
Day	km	hPa	C
0	3.4	679	7
1	4.0	627	4
2	5.2	541	−5
3	6.8	436	−18
4	7.3	407	−22
5	8.4	346	−31
6	8.6	342	−31
7	7.6	394	−24
8	6.8	440	−16
9	6.9	434	−16
10	7.8	386	−24

06UT

Day	km	hPa	C
0	3.4	678	7
1	3.8	647	5
2	5.0	555	−3
3	6.3	469	−14
4	7.3	409	−21
5	8.0	366	−27
6	8.4	349	−30
7	7.9	380	−27
8	6.8	442	−16
9	6.2	475	−11
10	7.3	411	−20

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

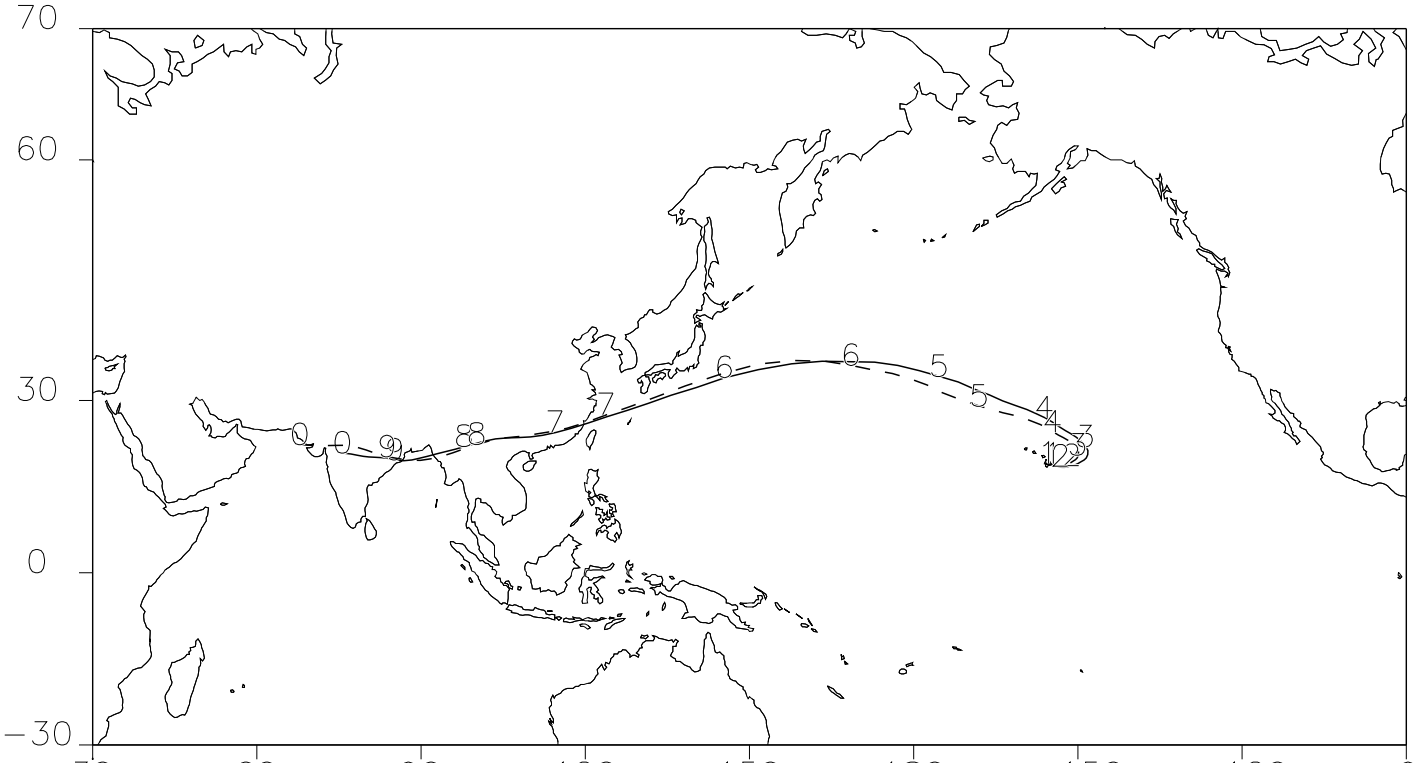
Day	km	hPa	C
0	3.4	677	6
1	3.7	653	5
2	4.9	566	−2
3	5.9	494	−11
4	7.4	405	−21
5	7.6	390	−23
6	8.3	354	−29
7	8.1	366	−28
8	6.7	448	−15
9	6.0	486	−10
10	6.6	454	−12

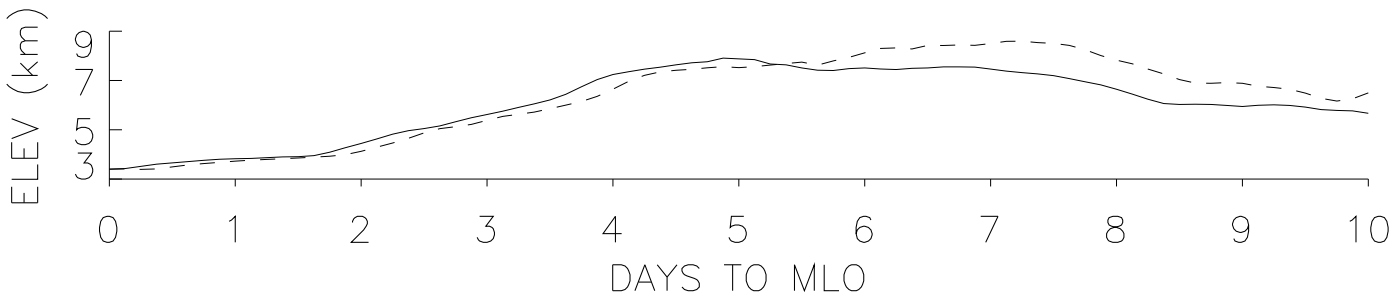
18UT

Day	km	hPa	C
0	3.4	678	6
1	3.8	649	6
2	4.7	578	0
3	5.8	504	−9
4	7.4	406	−21
5	7.5	393	−23
6	7.5	391	−24
7	7.6	393	−24
8	6.5	460	−16
9	6.1	481	−12
10	5.3	535	−3

12UT − solid
18UT − dashed

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





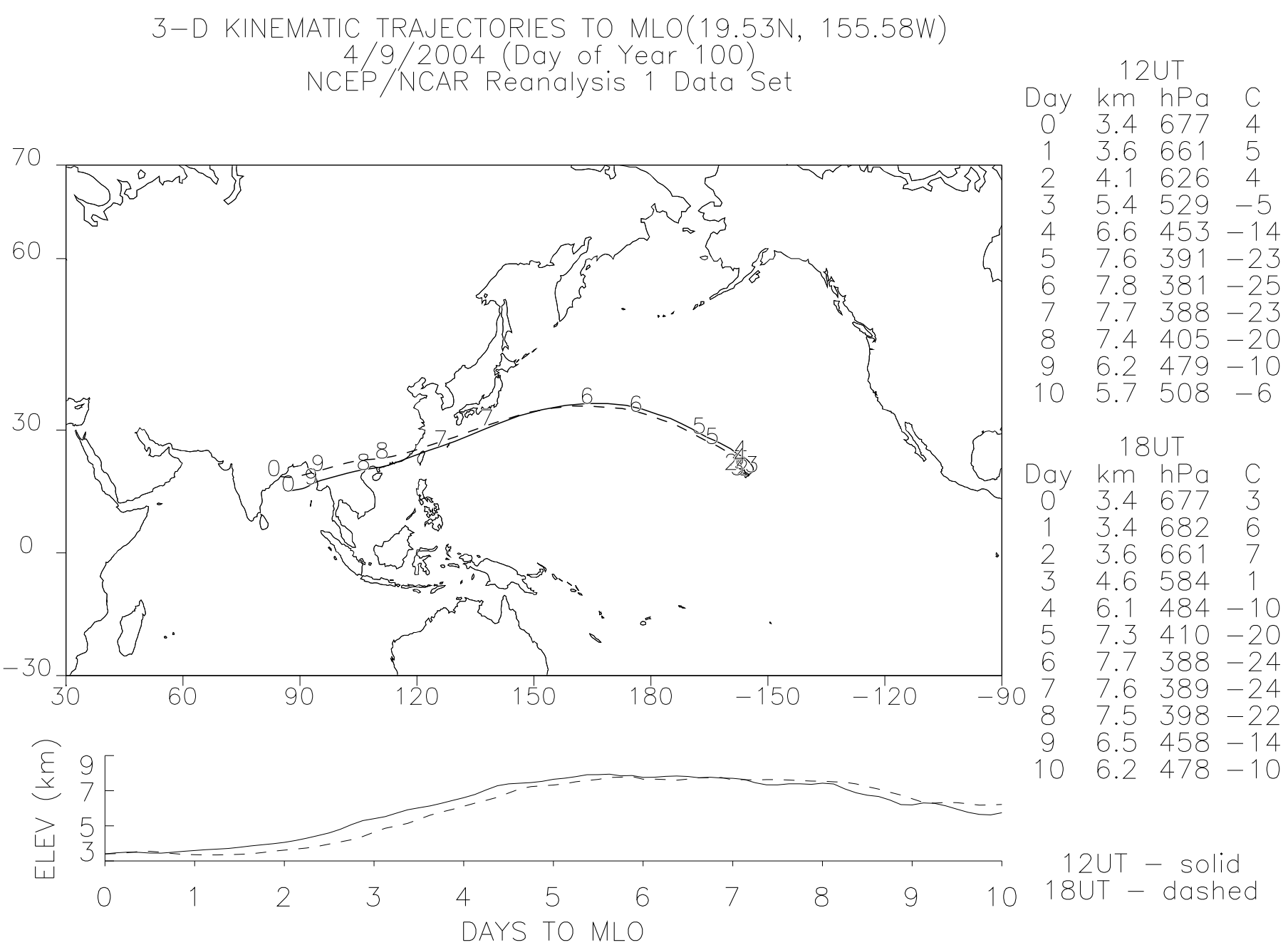
00UT

Day	km	hPa	C
0	3.4	677	4
1	3.8	644	5
2	4.4	597	2
3	5.6	514	−8
4	7.2	413	−21
5	7.9	374	−28
6	7.5	392	−24
7	7.5	401	−22
8	6.6	449	−17
9	5.9	493	−10
10	5.7	511	−6

06UT

Day	km	hPa	C
0	3.4	678	4
1	3.7	652	5
2	4.1	622	4
3	5.4	531	−5
4	6.6	449	−16
5	7.5	397	−23
6	8.1	363	−28
7	8.5	345	−30
8	7.8	383	−26
9	6.9	437	−16
10	6.5	460	−13

00UT − solid
06UT − dashed



12UT

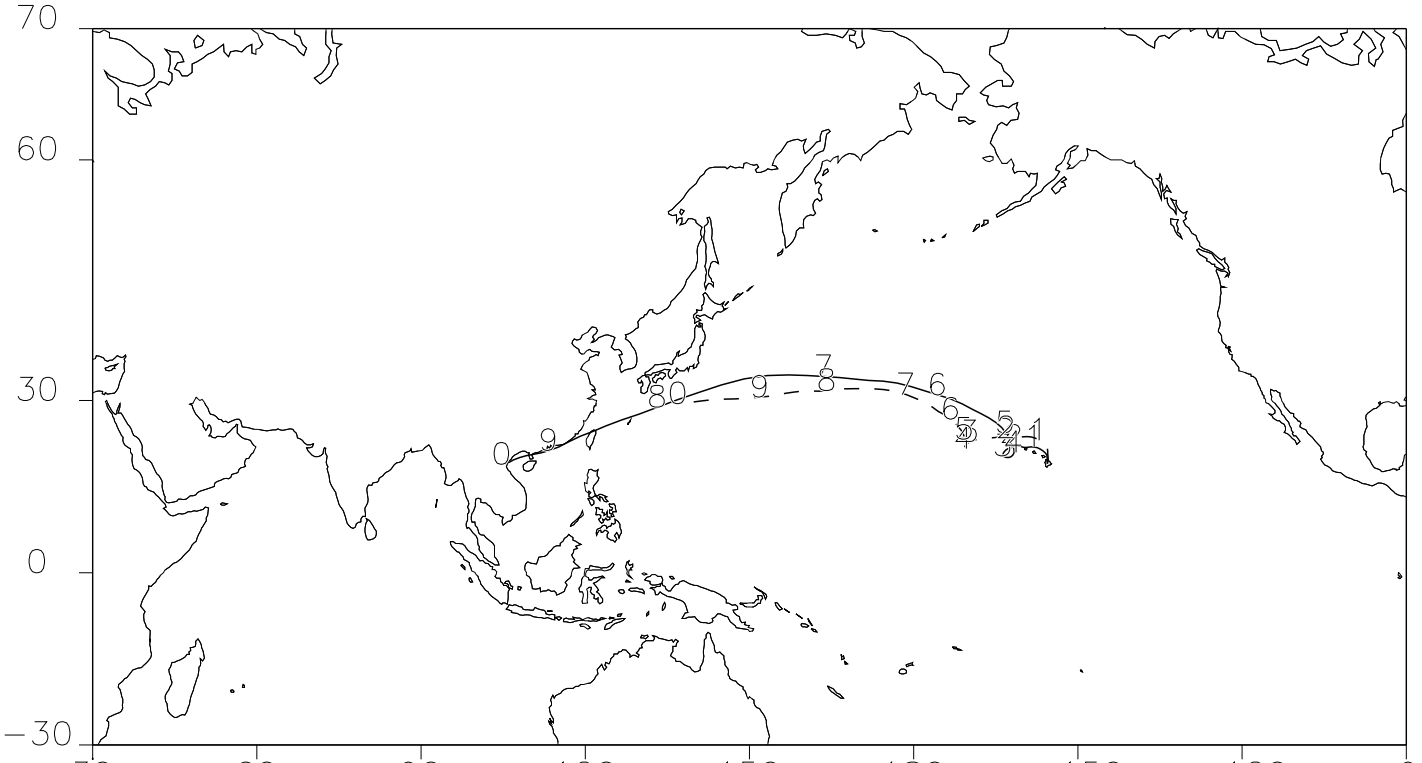
Day	km	hPa	C
0	3.4	677	4
1	3.6	661	5
2	4.1	626	4
3	5.4	529	−5
4	6.6	453	−14
5	7.6	391	−23
6	7.8	381	−25
7	7.7	388	−23
8	7.4	405	−20
9	6.2	479	−10
10	5.7	508	−6

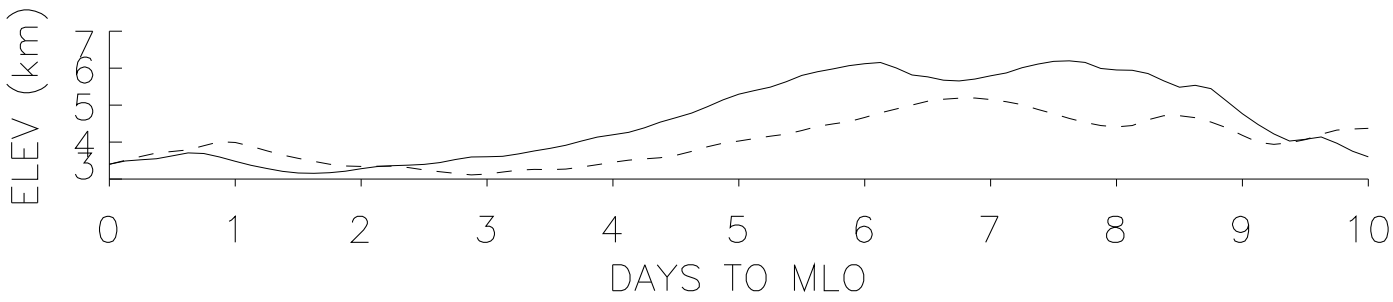
18UT

Day	km	hPa	C
0	3.4	677	3
1	3.4	682	6
2	3.6	661	7
3	4.6	584	1
4	6.1	484	−10
5	7.3	410	−20
6	7.7	388	−24
7	7.6	389	−24
8	7.5	398	−22
9	6.5	458	−14
10	6.2	478	−10

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

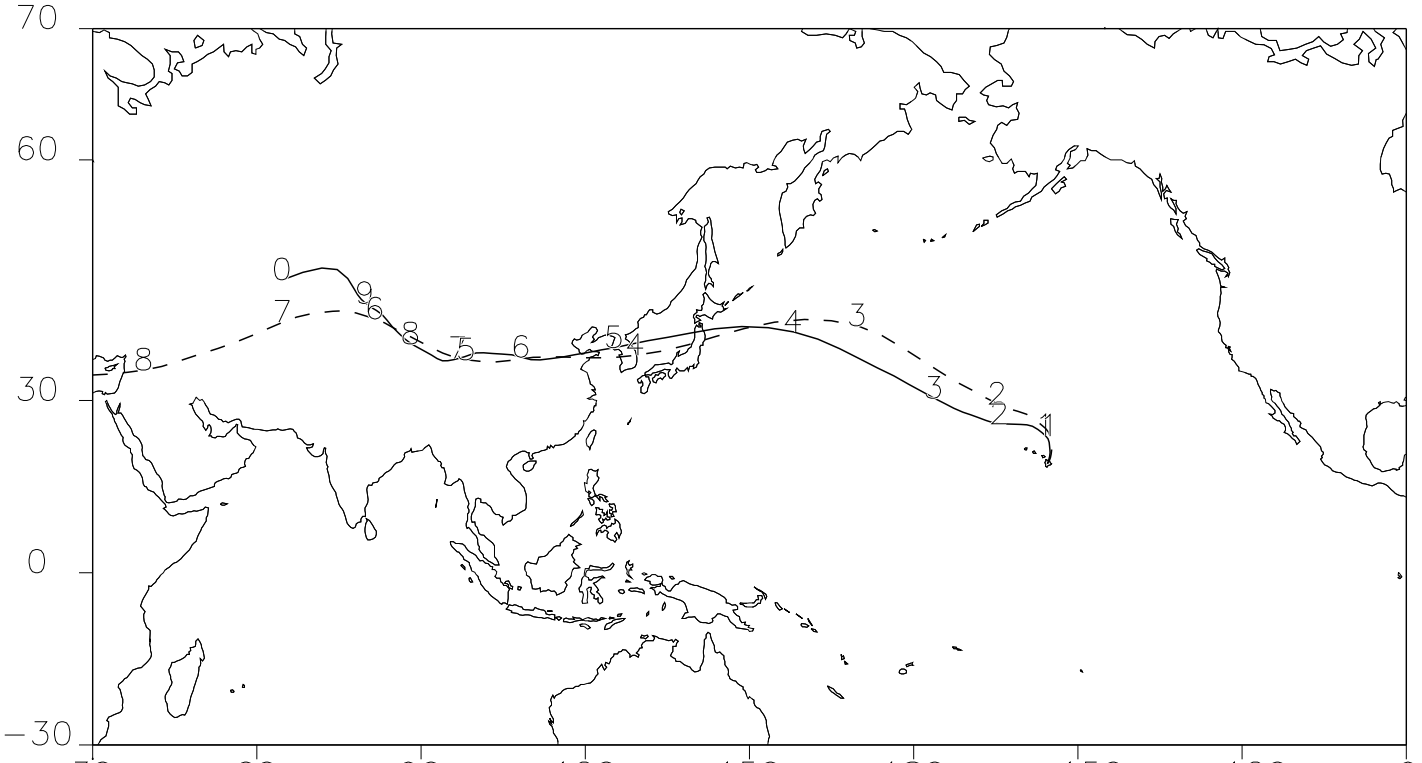
Day	km	hPa	C
0	3.4	678	4
1	3.5	670	2
2	3.3	688	7
3	3.6	662	7
4	4.2	616	3
5	5.3	536	-7
6	6.1	480	-16
7	5.8	499	-12
8	6.0	489	-12
9	4.8	575	-2
10	3.6	664	7

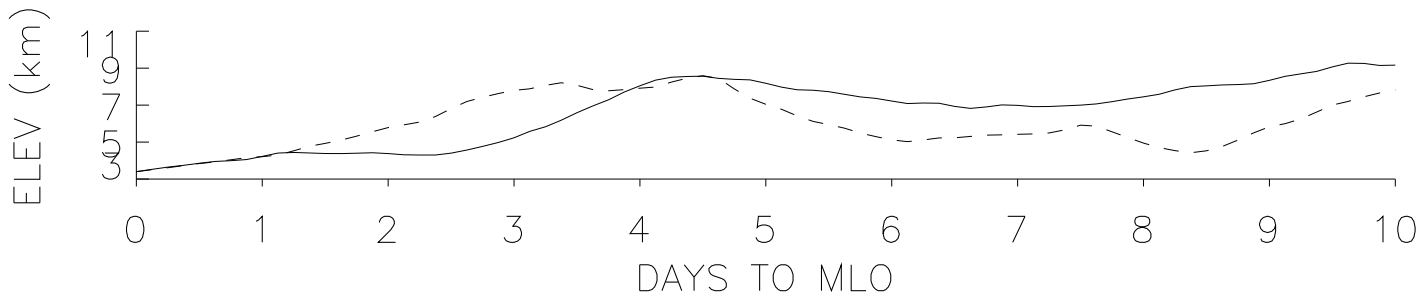
06UT

Day	km	hPa	C
0	3.4	680	5
1	4.0	629	-1
2	3.3	682	5
3	3.1	700	9
4	3.5	676	8
5	4.0	630	4
6	4.7	582	-2
7	5.2	544	-8
8	4.4	599	-3
9	4.2	614	-1
10	4.4	596	-4

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

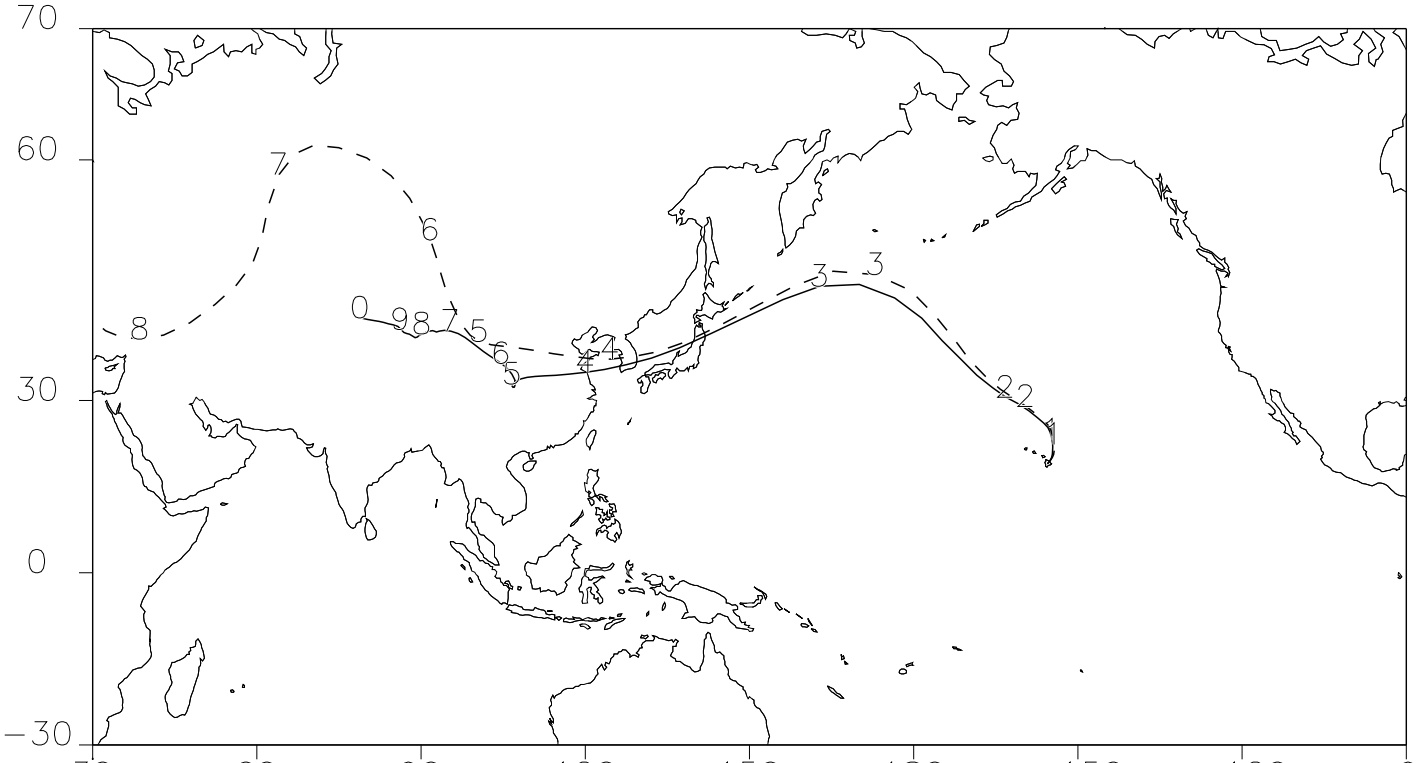
Day	km	hPa	C
0	3.4	679	4
1	4.2	610	−4
2	4.4	598	−4
3	5.2	534	−12
4	8.0	356	−39
5	8.2	350	−40
6	7.2	407	−29
7	7.0	424	−23
8	7.4	396	−30
9	8.3	347	−38
10	9.2	303	−45

18UT

Day	km	hPa	C
0	3.4	680	5
1	4.2	612	−3
2	5.8	495	−18
3	7.8	366	−37
4	7.9	362	−37
5	7.0	418	−29
6	5.1	544	−11
7	5.4	517	−15
8	4.9	549	−10
9	5.8	489	−17
10	7.8	366	−36

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	3.4	679	5
1	4.2	612	-3
2	6.2	469	-23
3	7.9	349	-41
4	5.8	493	-20
5	4.1	617	-3
6	4.6	577	-7
7	4.1	618	-3
8	3.7	649	-2
9	4.4	595	-7
10	5.0	552	-11

06UT

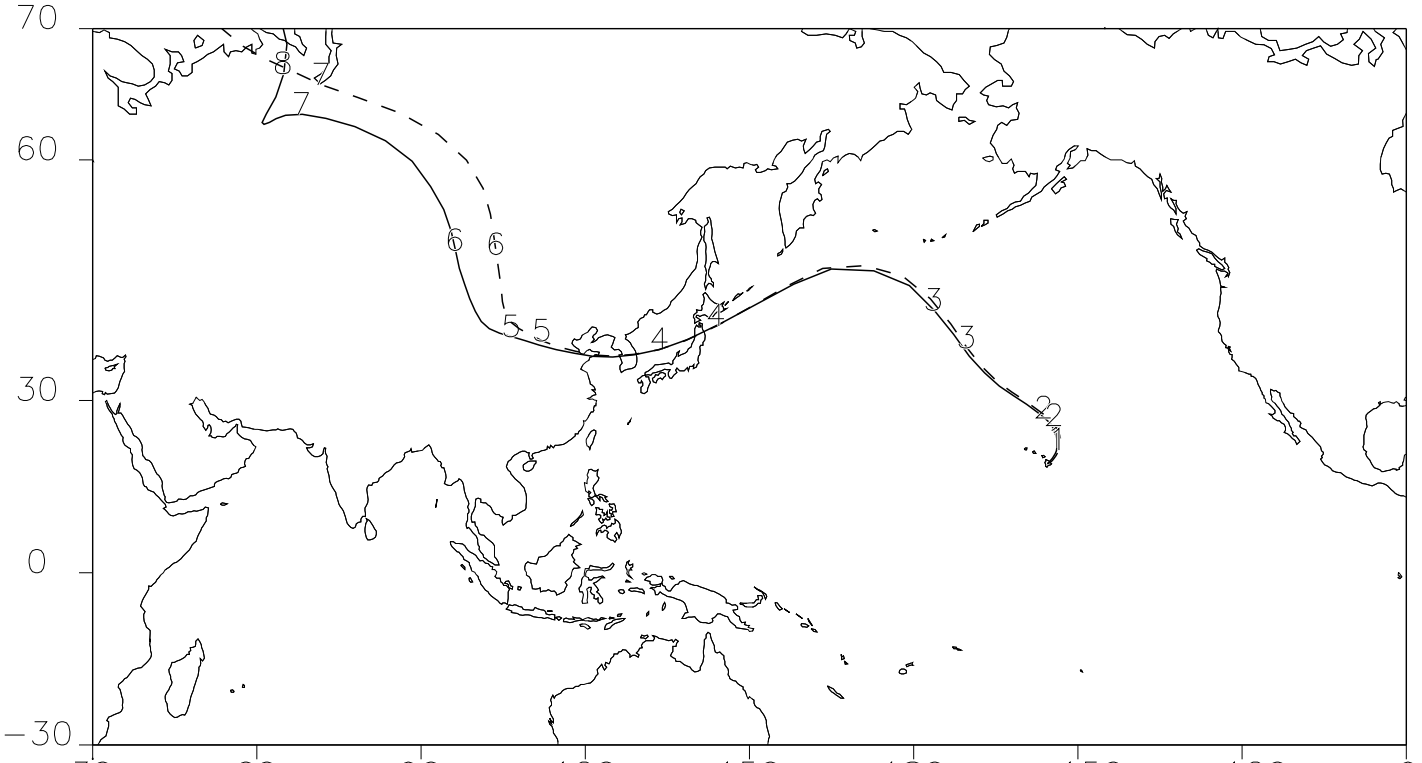
Day	km	hPa	C
0	3.4	681	5
1	4.1	627	-1
2	5.6	510	-16
3	8.3	329	-45
4	5.9	481	-24
5	7.8	369	-40
6	8.5	330	-47
7	8.7	314	-50
8	7.2	396	-35

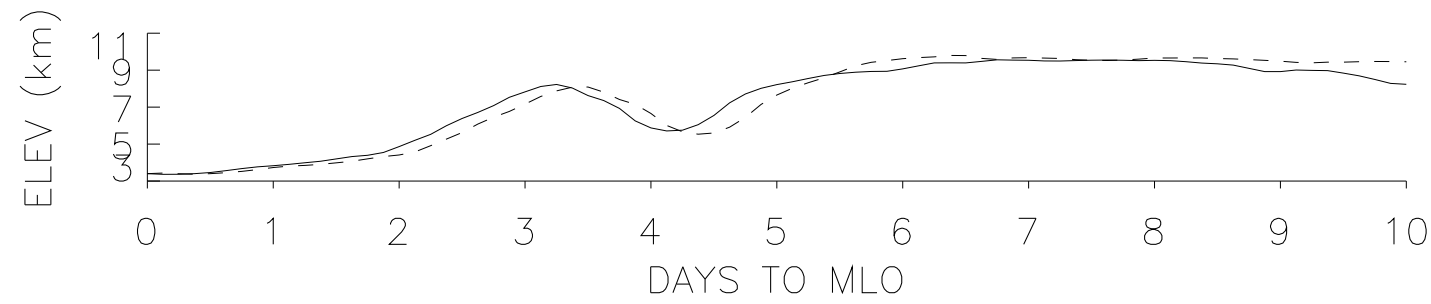
ELEV (km)

DAYS TO MLO

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





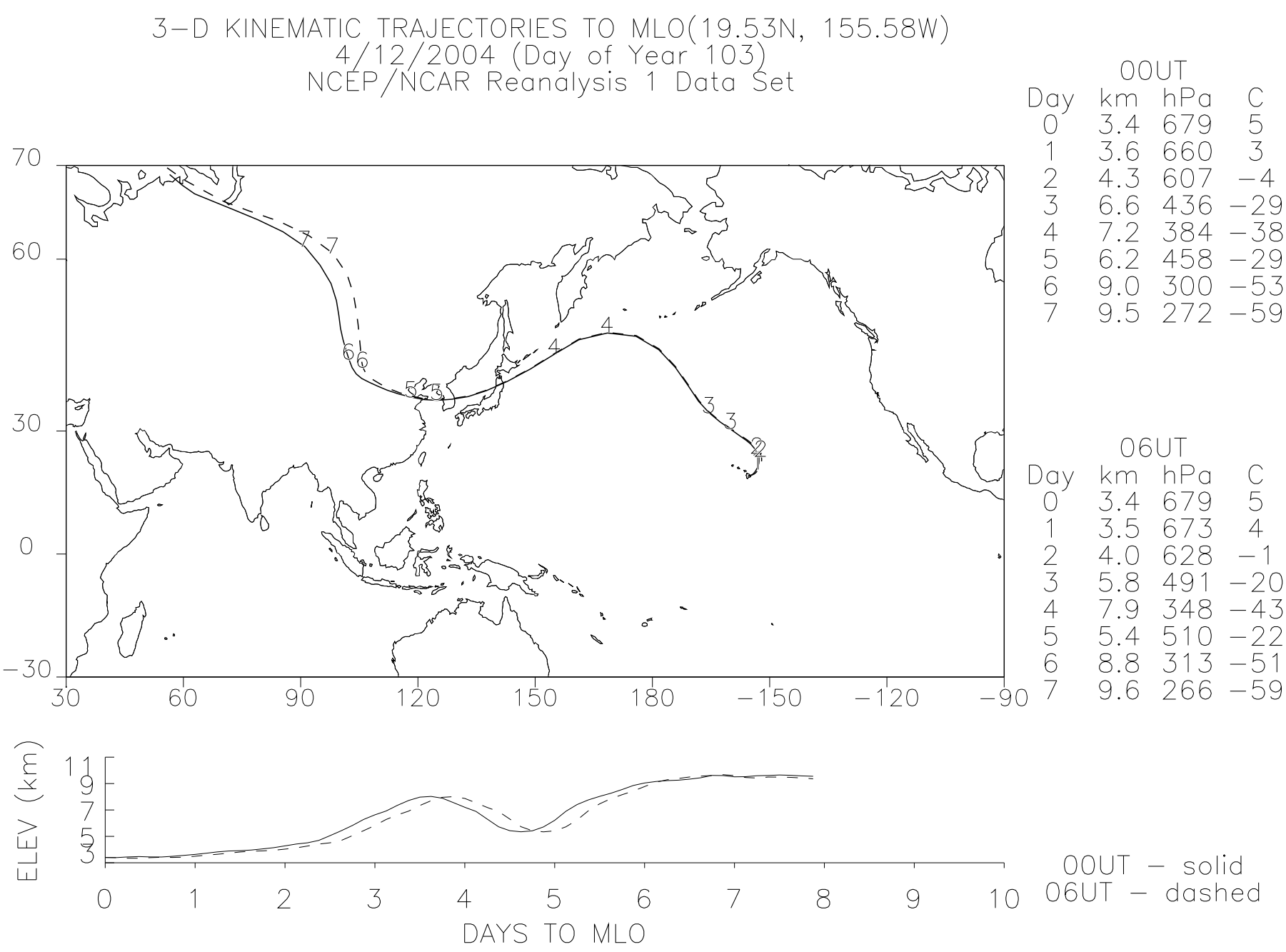
12UT

Day	km	hPa	C
0	3.4	679	5
1	3.8	644	0
2	4.9	561	−11
3	7.8	358	−41
4	5.9	475	−26
5	8.2	345	−44
6	9.1	300	−53
7	9.5	275	−59
8	9.5	267	−59
9	8.9	291	−52
10	8.2	331	−46

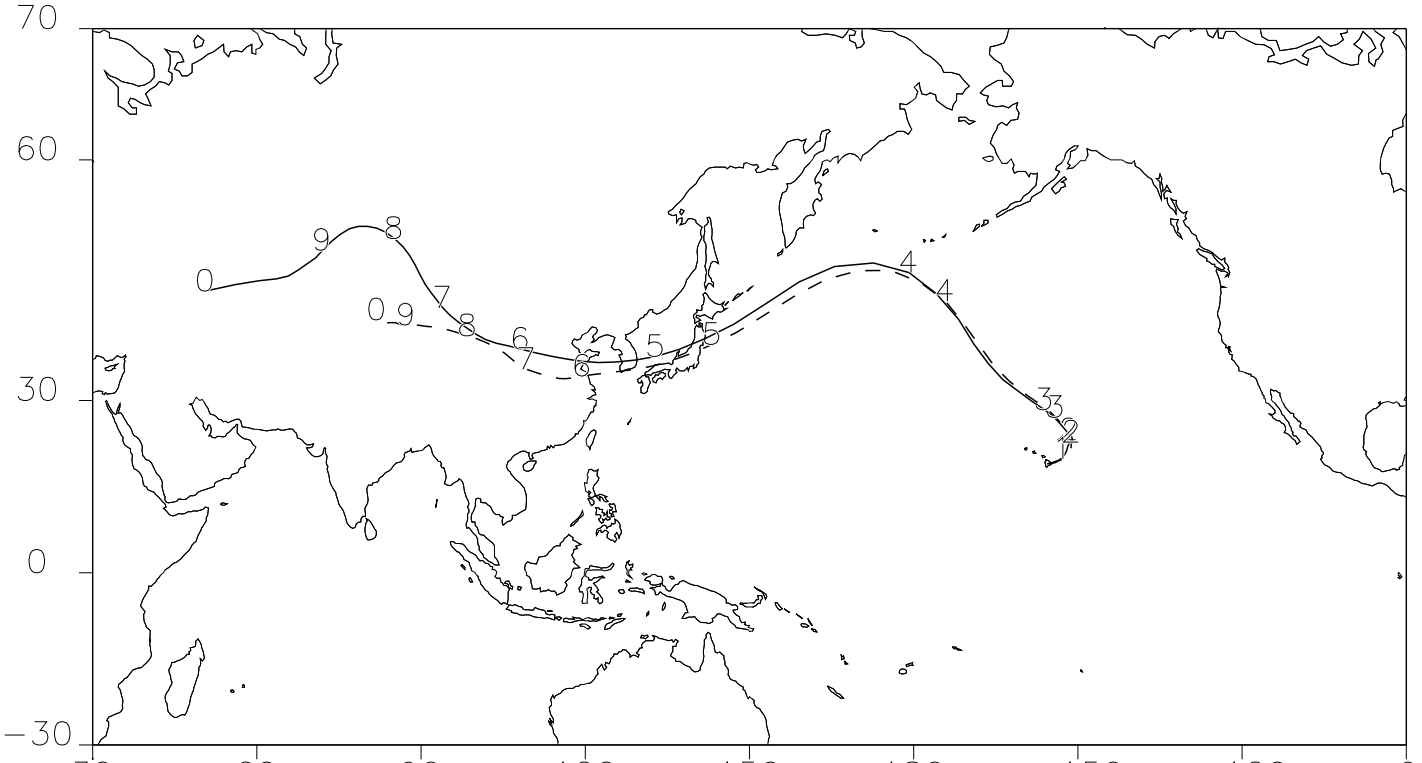
18UT

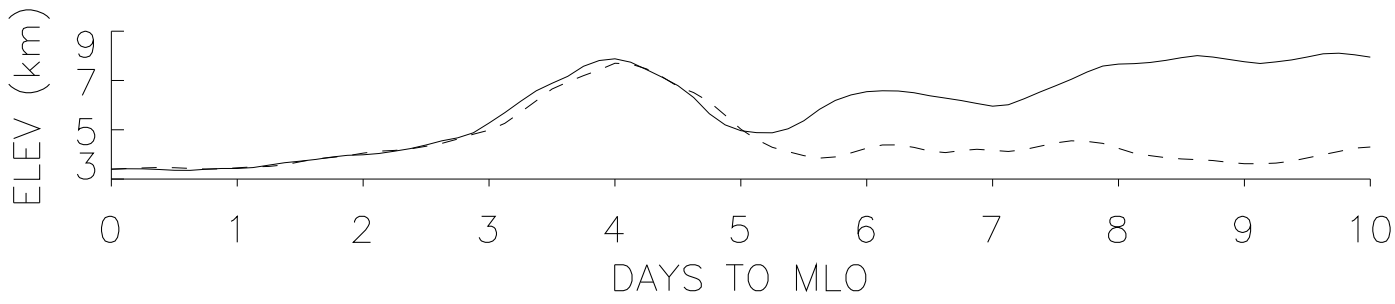
Day	km	hPa	C
0	3.4	680	5
1	3.7	653	2
2	4.4	596	−5
3	7.2	400	−34
4	6.7	419	−33
5	7.7	374	−41
6	9.6	271	−57
7	9.7	265	−60
8	9.7	263	−58
9	9.5	269	−55
10	9.5	276	−52

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 3.4 679 5
1 3.6 660 3
2 4.3 607 -4
3 6.6 436 -29
4 7.2 384 -38
5 6.2 458 -29
6 9.0 300 -53
7 9.5 272 -59
06UT
Day km hPa C
0 3.4 679 5
1 3.5 673 4
2 4.0 628 -1
3 5.8 491 -20
4 7.9 348 -43
5 5.4 510 -22
6 8.8 313 -51
7 9.6 266 -59
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
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

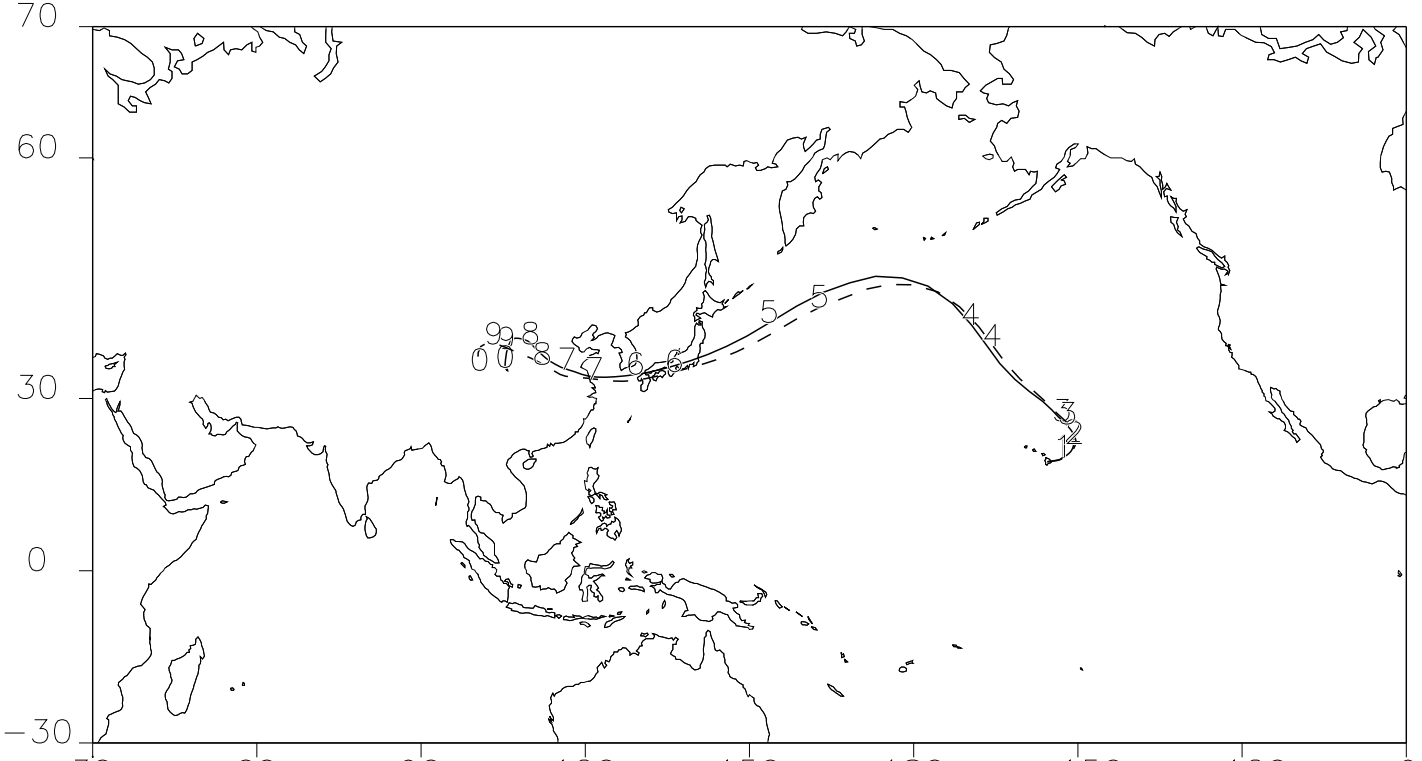
Day	km	hPa	C
0	3.4	678	5
1	3.4	677	5
2	4.0	631	−2
3	5.3	530	−15
4	7.9	352	−42
5	5.0	540	−18
6	6.5	441	−30
7	6.0	479	−25
8	7.7	375	−38
9	7.8	369	−37
10	7.9	349	−41

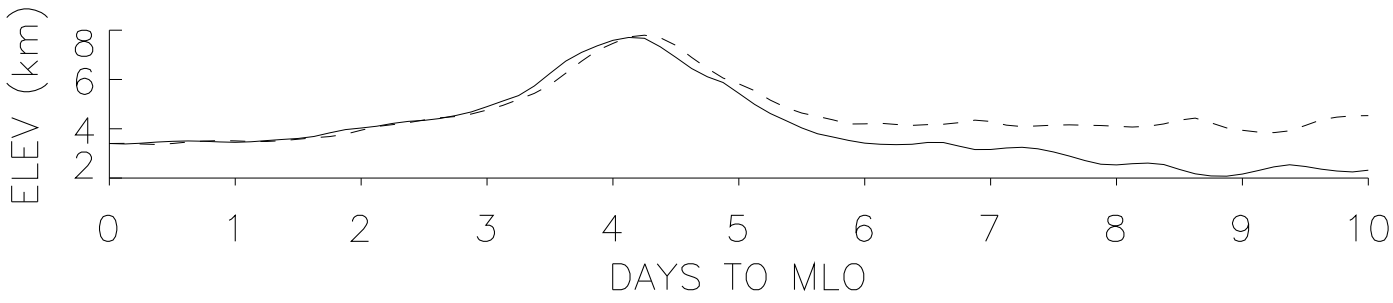
18UT

Day	km	hPa	C
0	3.4	679	5
1	3.5	675	5
2	4.1	627	−1
3	5.0	553	−10
4	7.7	366	−38
5	5.0	533	−17
6	4.3	603	−9
7	4.2	612	−5
8	4.2	605	−7
9	3.6	655	−1
10	4.3	601	−5

12UT − solid
18UT − dashed

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





00UT

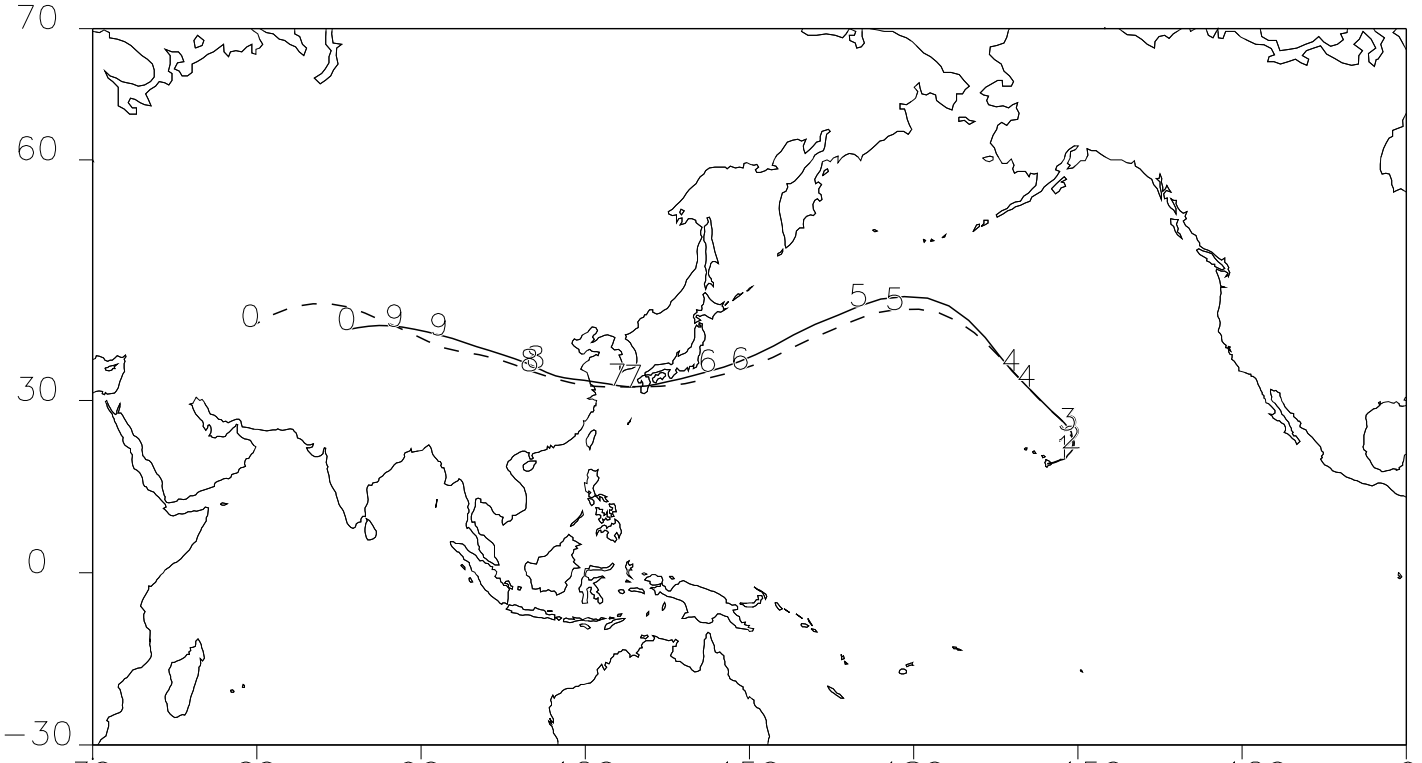
Day	km	hPa	C
0	3.4	679	4
1	3.5	675	5
2	4.0	628	0
3	4.9	560	−10
4	7.6	376	−36
5	5.4	504	−19
6	3.4	670	−2
7	3.2	692	1
8	2.5	742	6
9	2.2	783	5
10	2.3	775	3

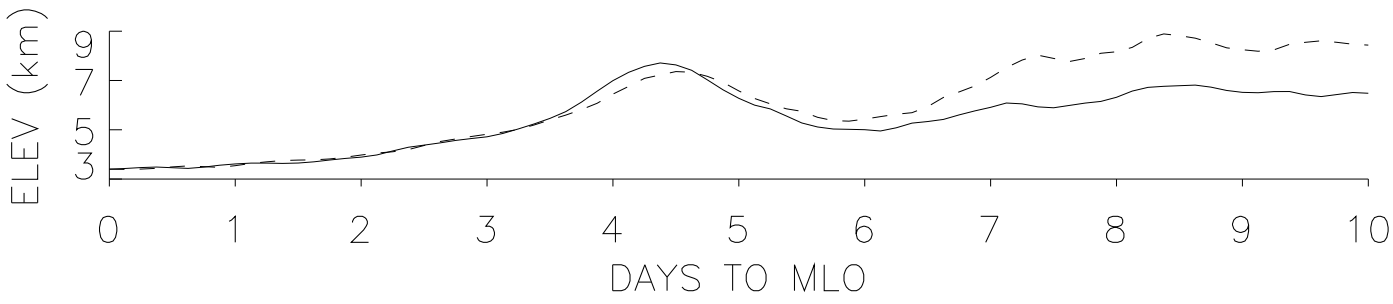
06UT

Day	km	hPa	C
0	3.4	679	6
1	3.5	670	5
2	3.9	636	1
3	4.8	572	−7
4	7.5	386	−34
5	5.8	479	−20
6	4.2	606	−6
7	4.3	600	−6
8	4.1	614	−3
9	3.9	629	0
10	4.5	588	−3

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

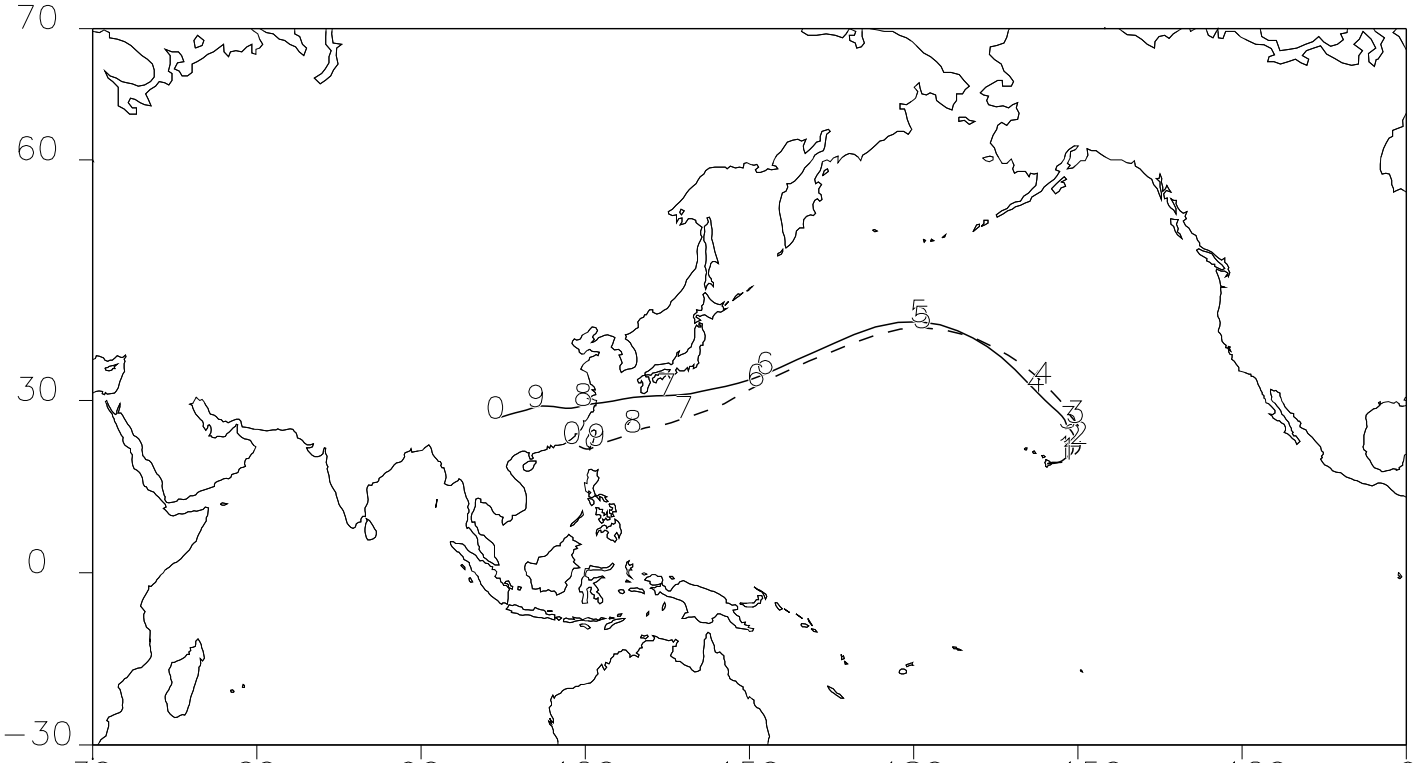
Day	km	hPa	C
0	3.4	679	5
1	3.6	661	3
2	3.9	639	1
3	4.7	575	−7
4	7.0	416	−29
5	6.3	452	−24
6	5.0	547	−9
7	5.9	487	−17
8	6.3	459	−22
9	6.5	450	−22
10	6.5	451	−22

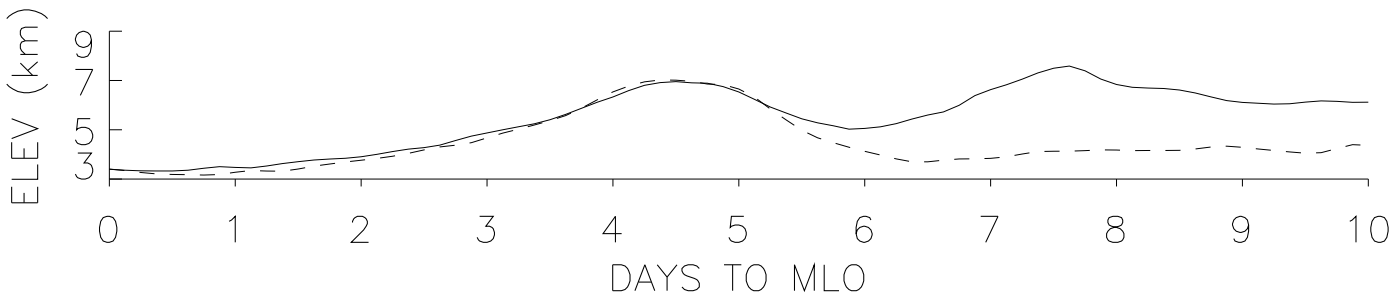
18UT

Day	km	hPa	C
0	3.4	680	6
1	3.5	668	4
2	4.0	633	1
3	4.8	569	−7
4	6.4	453	−22
5	6.6	435	−27
6	5.4	516	−13
7	7.1	413	−26
8	8.2	355	−38
9	8.2	354	−37
10	8.4	339	−39

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

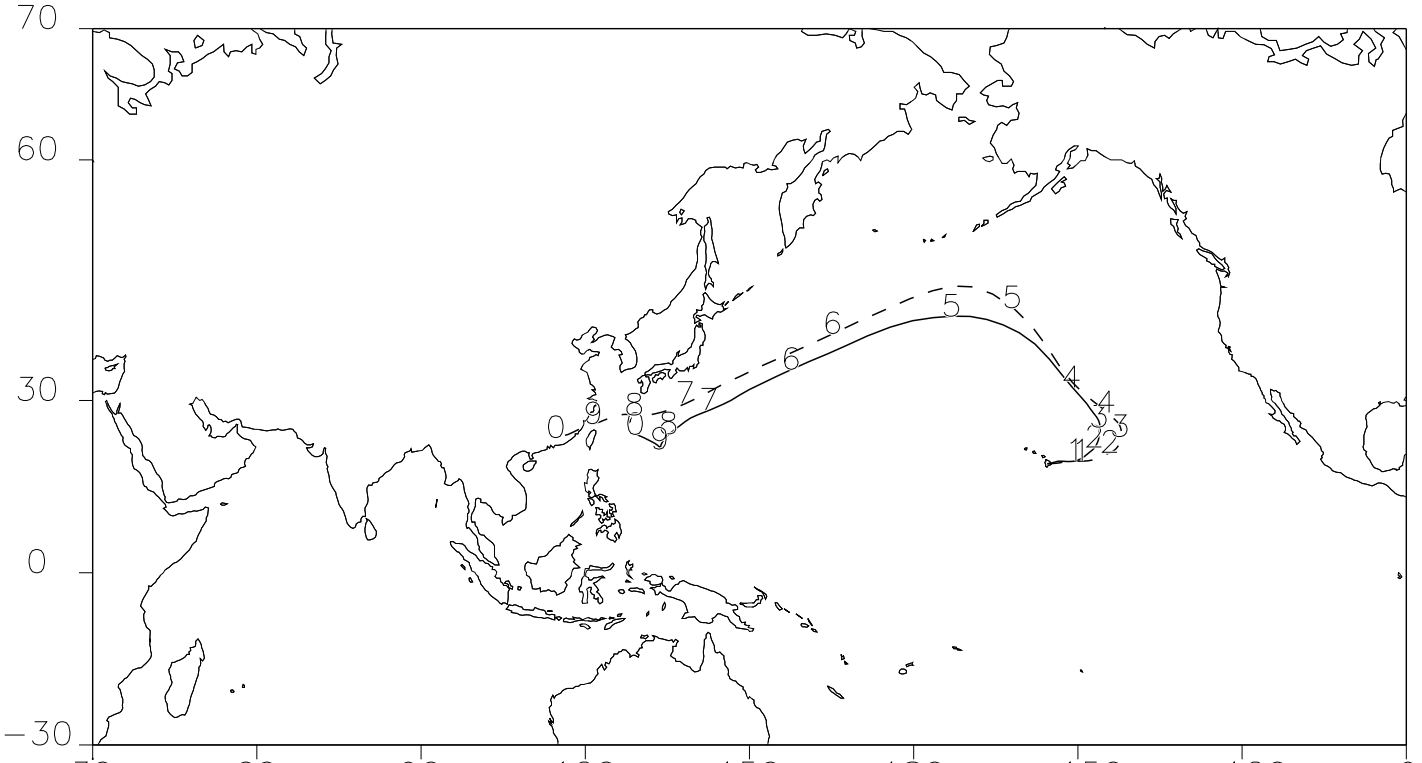
Day	km	hPa	C
0	3.4	679	5
1	3.5	673	4
2	3.9	638	0
3	4.9	564	−7
4	6.3	461	−22
5	6.5	440	−25
6	5.1	545	−8
7	6.6	445	−20
8	6.8	431	−22
9	6.1	476	−16
10	6.1	479	−15

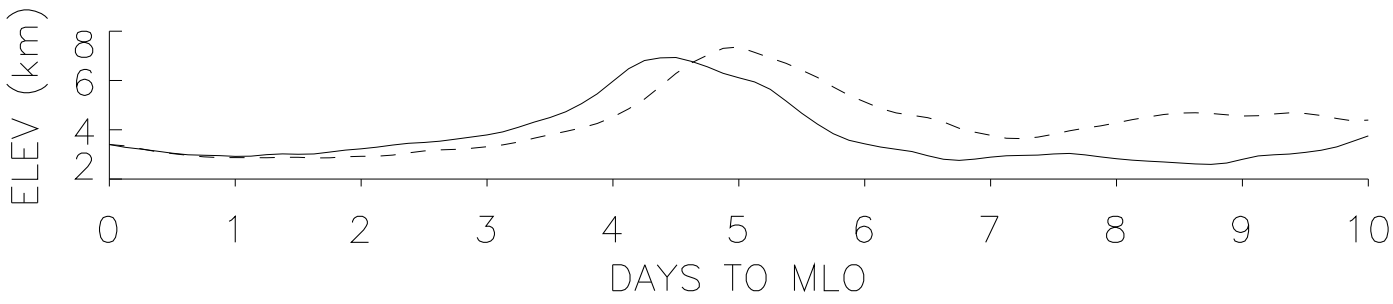
06UT

Day	km	hPa	C
0	3.4	680	5
1	3.3	690	6
2	3.8	649	2
3	4.7	580	−6
4	6.5	450	−22
5	6.7	434	−24
6	4.1	613	−3
7	3.8	641	2
8	4.2	614	0
9	4.3	606	−1
10	4.4	602	−1

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

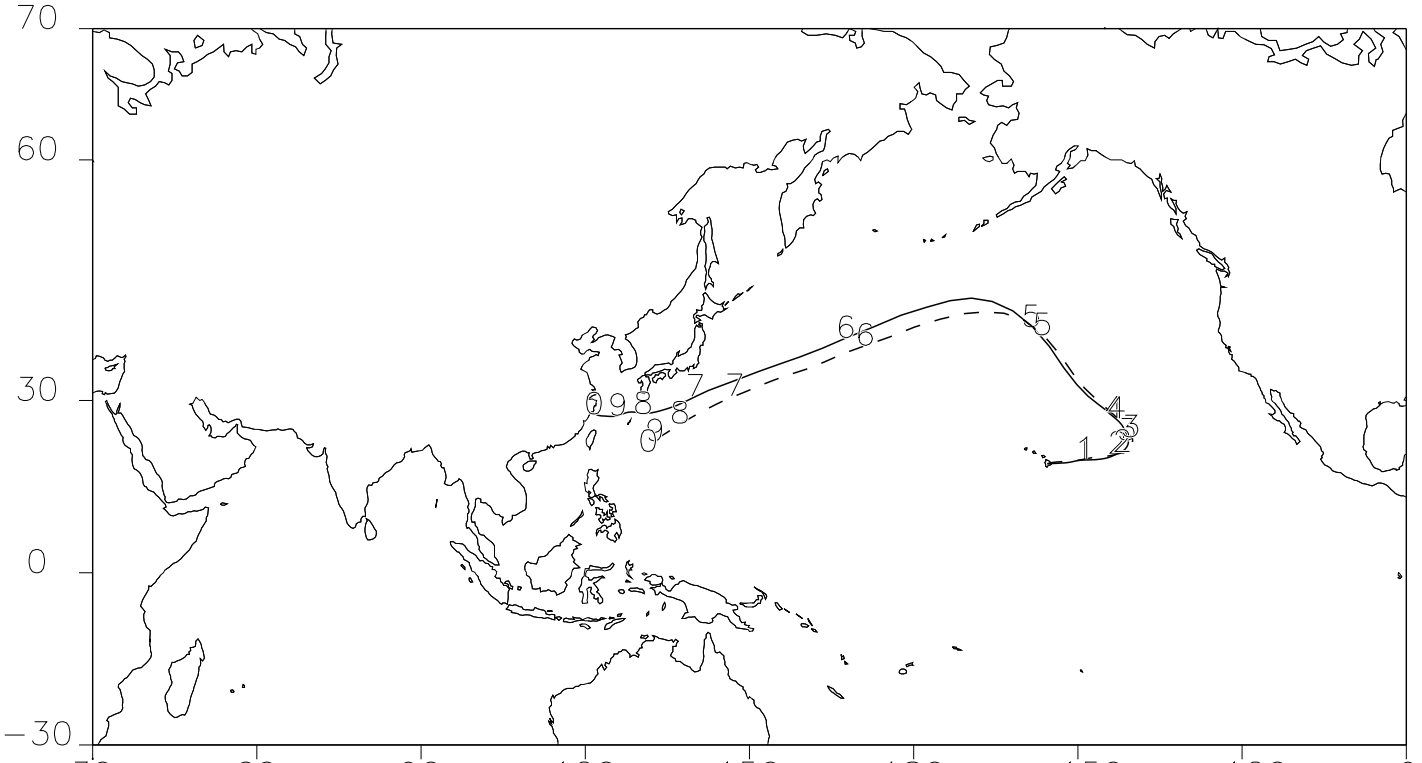
Day	km	hPa	C
0	3.4	679	5
1	2.9	719	7
2	3.2	693	5
3	3.8	646	0
4	6.0	484	−19
5	6.1	466	−22
6	3.4	668	0
7	2.9	720	6
8	2.8	726	8
9	2.8	729	9
10	3.8	648	3

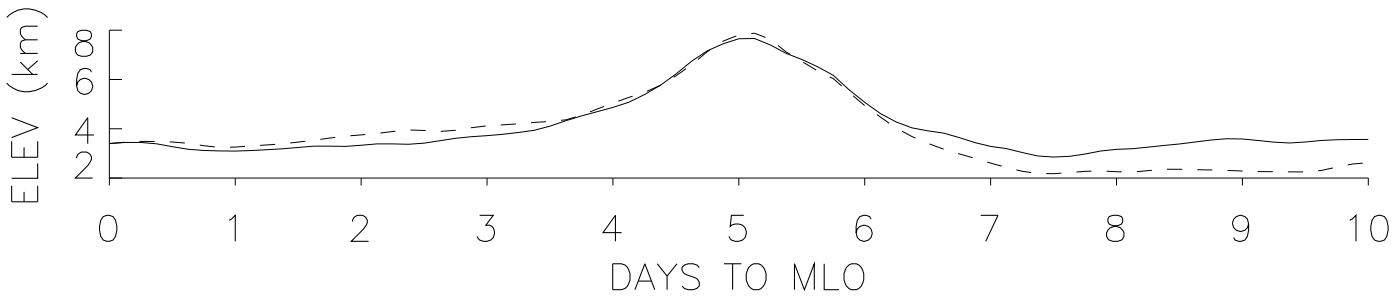
18UT

Day	km	hPa	C
0	3.4	680	6
1	2.9	725	9
2	2.9	720	7
3	3.3	686	4
4	4.5	589	−6
5	7.4	388	−33
6	5.1	527	−15
7	3.8	642	1
8	4.3	605	−2
9	4.6	583	−5
10	4.4	598	−2

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

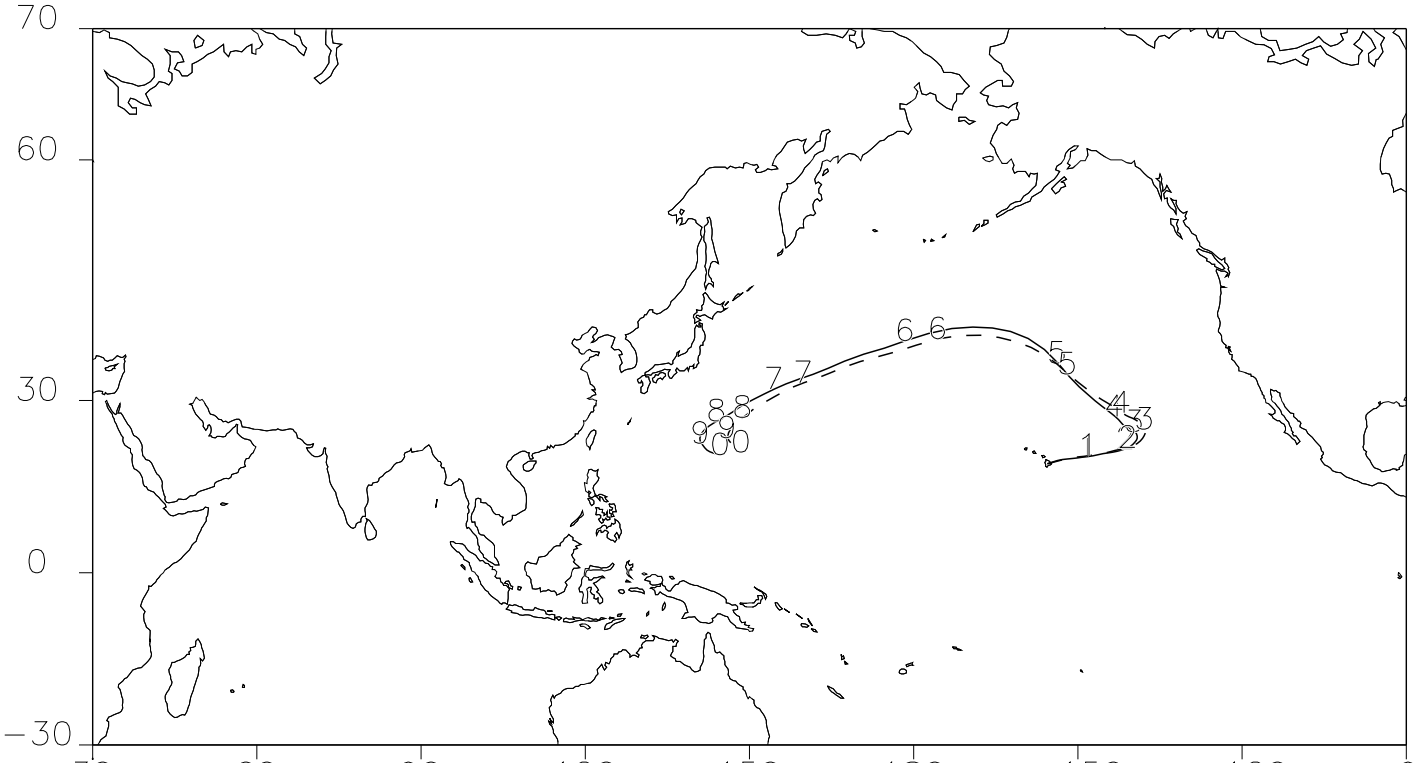
Day	km	hPa	C
0	3.4	679	5
1	3.1	705	7
2	3.3	684	5
3	3.7	651	2
4	4.9	563	−9
5	7.7	374	−35
6	5.1	533	−14
7	3.3	682	2
8	3.2	696	4
9	3.6	660	2
10	3.6	663	2

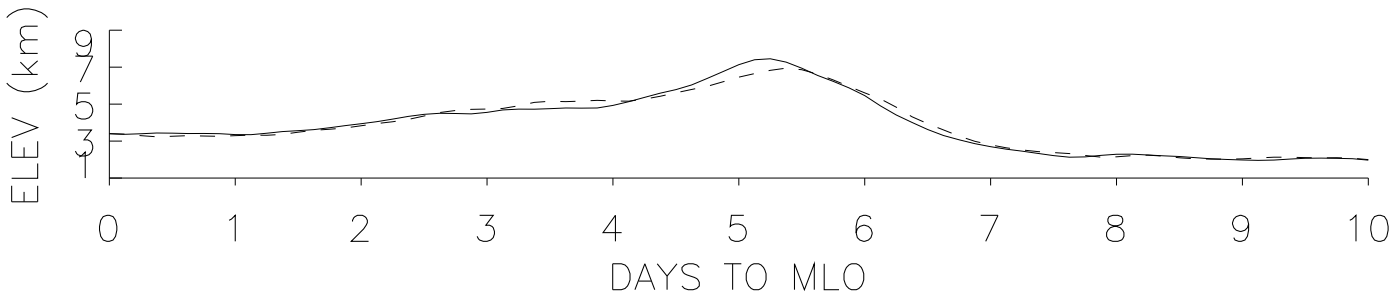
06UT

Day	km	hPa	C
0	3.4	680	4
1	3.3	693	7
2	3.7	650	2
3	4.1	620	0
4	5.0	552	−9
5	7.8	370	−35
6	4.9	546	−12
7	2.6	740	7
8	2.3	777	9
9	2.3	774	9
10	2.6	743	9

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

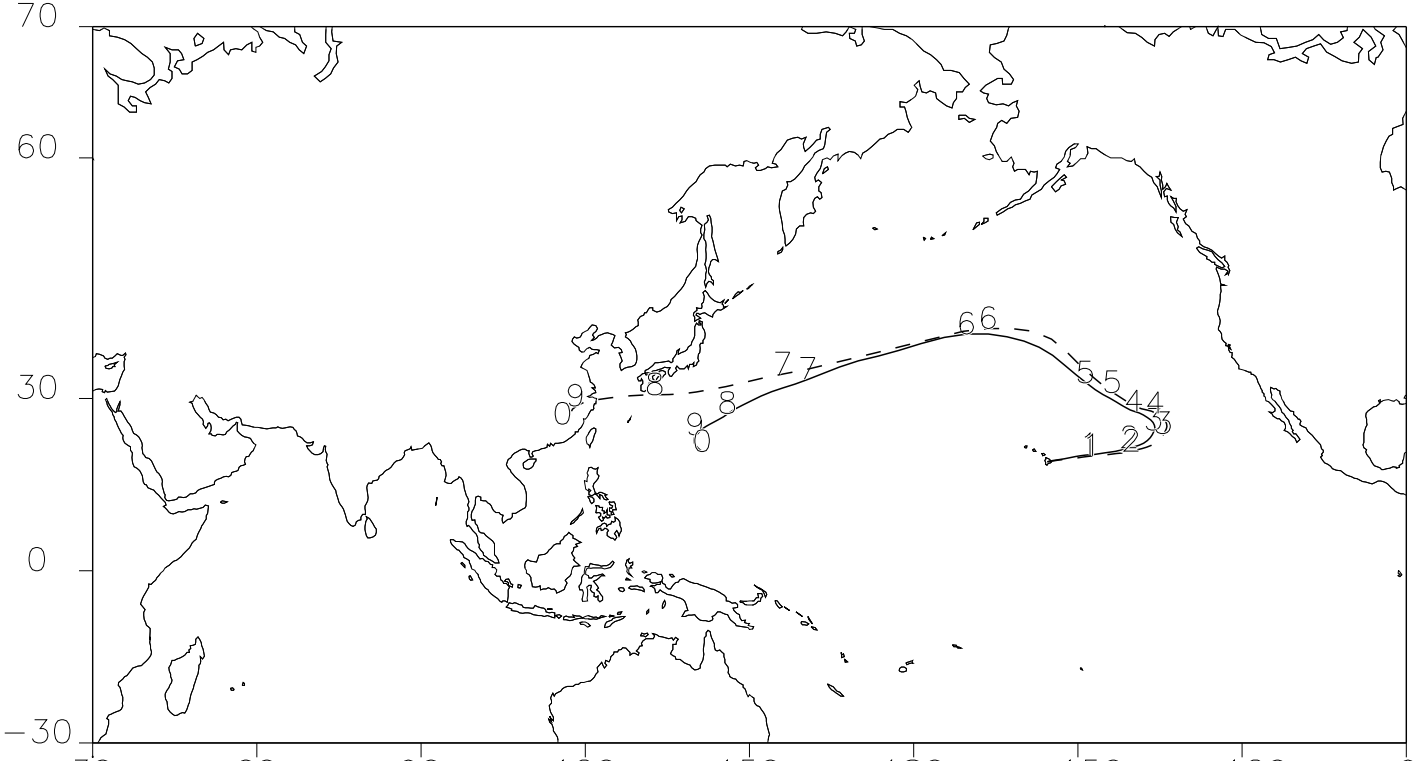
Day	km	hPa	C
0	3.4	678	3
1	3.4	683	6
2	3.9	634	1
3	4.6	586	−4
4	4.9	558	−8
5	7.1	411	−27
6	5.5	510	−14
7	2.7	735	6
8	2.3	777	10
9	2.0	807	13
10	2.0	807	15

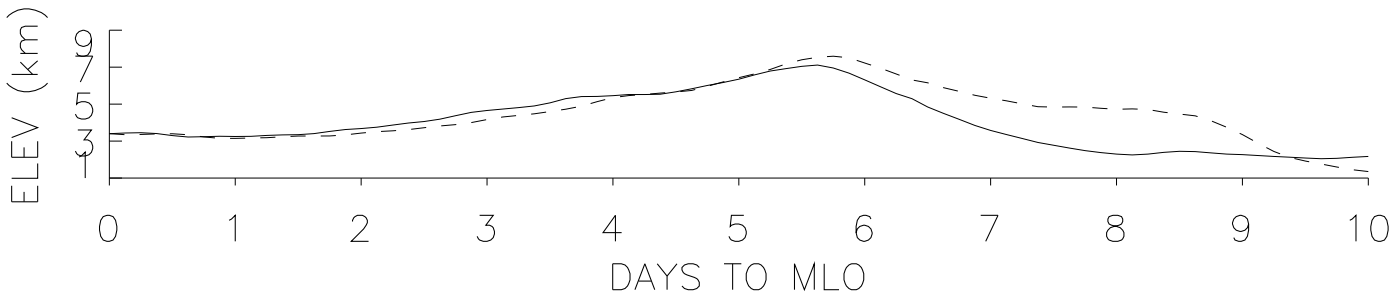
18UT

Day	km	hPa	C
0	3.4	680	4
1	3.3	689	6
2	3.8	645	3
3	4.7	574	−6
4	5.2	541	−9
5	6.5	454	−21
6	5.6	501	−15
7	2.8	725	4
8	2.1	788	11
9	2.0	801	13
10	2.0	804	14

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





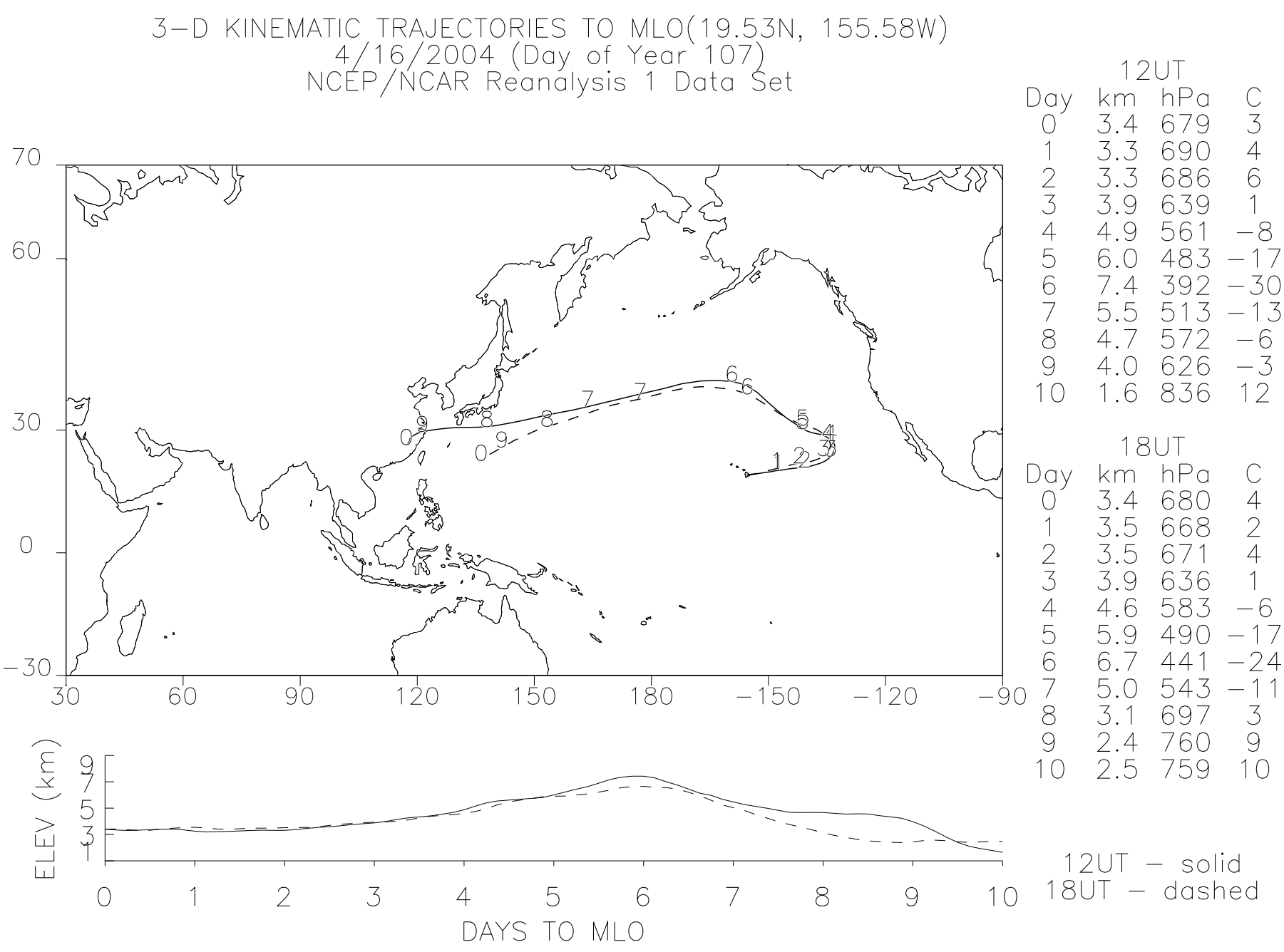
00UT

Day	km	hPa	C
0	3.4	679	3
1	3.2	692	6
2	3.7	656	3
3	4.7	579	−5
4	5.5	521	−12
5	6.4	461	−20
6	6.3	457	−21
7	3.6	658	−1
8	2.3	774	10
9	2.3	780	11
10	2.2	788	13

06UT

Day	km	hPa	C
0	3.4	679	4
1	3.1	701	6
2	3.4	678	6
3	4.2	617	−1
4	5.4	529	−10
5	6.4	457	−20
6	7.2	403	−29
7	5.3	523	−13
8	4.7	567	−7
9	3.4	679	1
10	1.3	864	13

00UT – solid
06UT – dashed



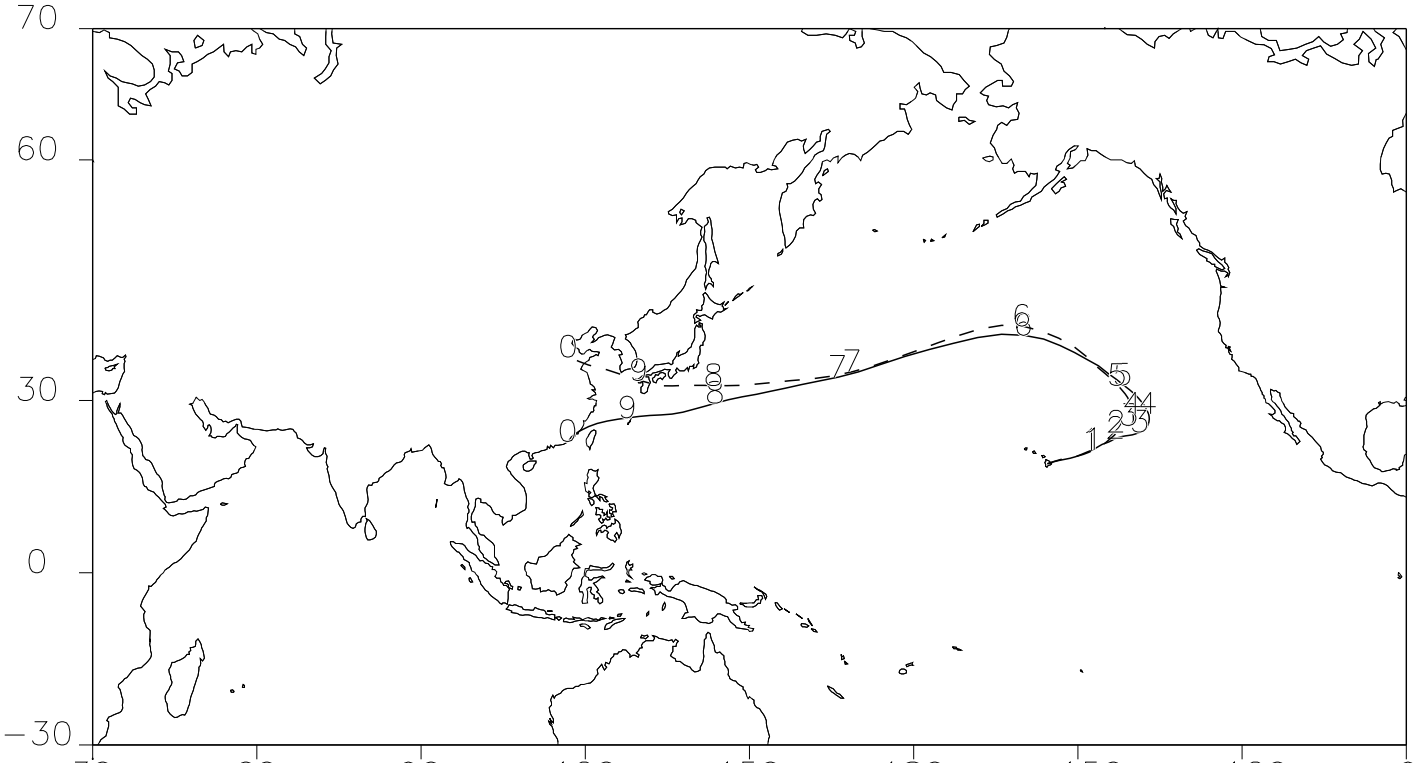
12UT

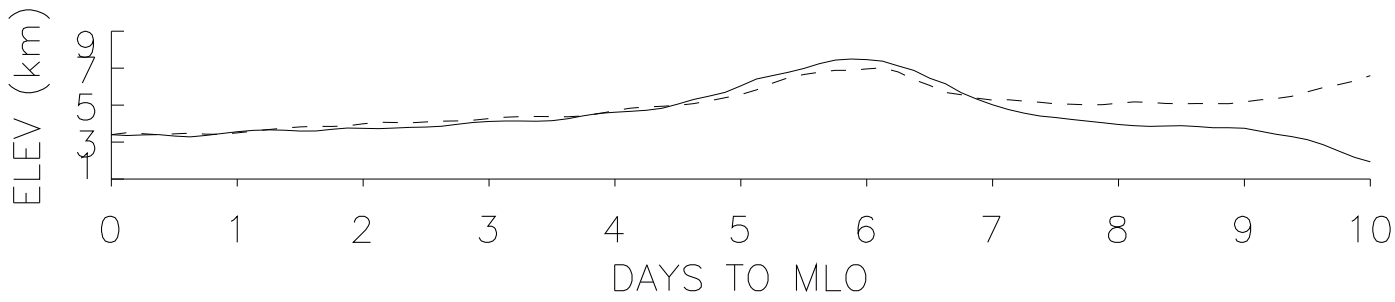
Day	km	hPa	C
0	3.4	679	3
1	3.3	690	4
2	3.3	686	6
3	3.9	639	1
4	4.9	561	-8
5	6.0	483	-17
6	7.4	392	-30
7	5.5	513	-13
8	4.7	572	-6
9	4.0	626	-3
10	1.6	836	12

18UT

Day	km	hPa	C
0	3.4	680	4
1	3.5	668	2
2	3.5	671	4
3	3.9	636	1
4	4.6	583	-6
5	5.9	490	-17
6	6.7	441	-24
7	5.0	543	-11
8	3.1	697	3
9	2.4	760	9
10	2.5	759	10

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





00UT

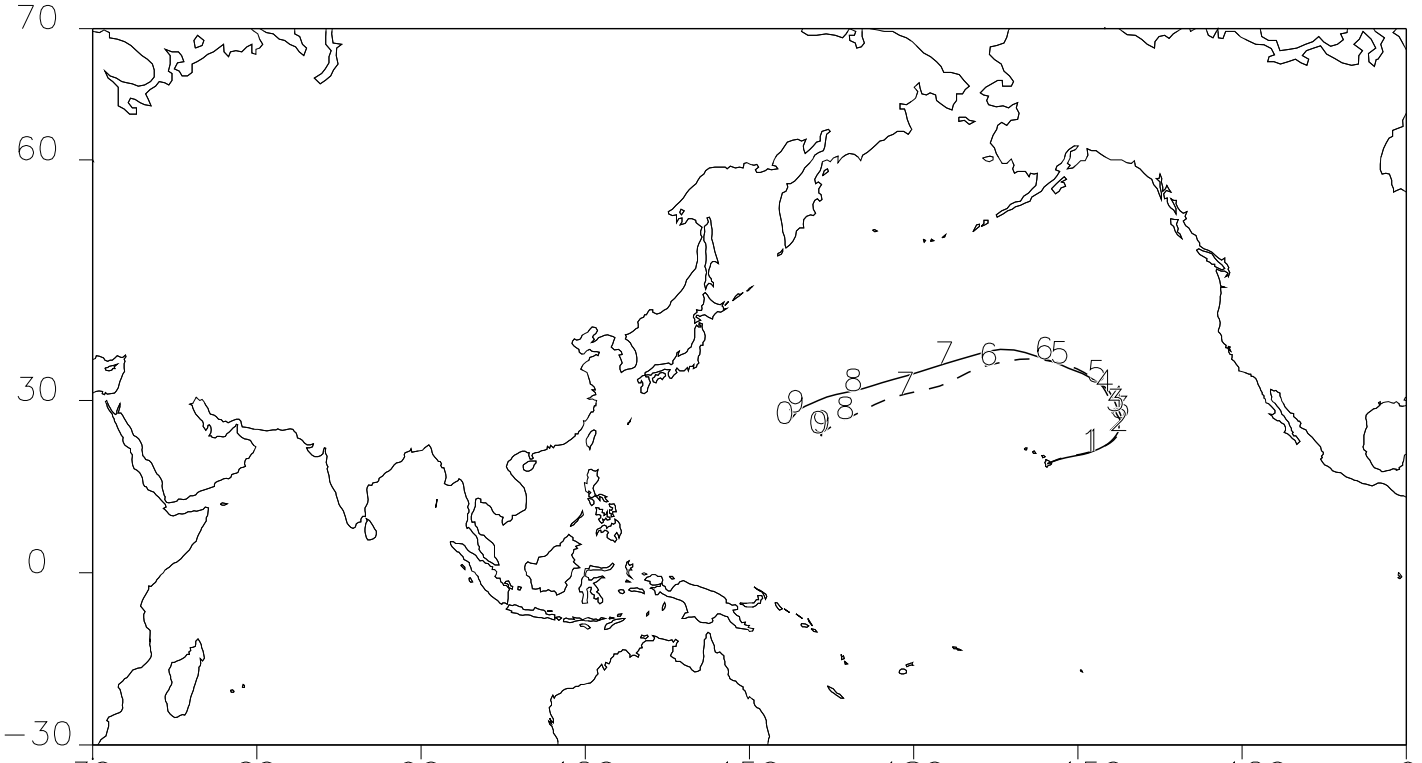
Day	km	hPa	C
0	3.4	679	5
1	3.6	666	3
2	3.7	651	1
3	4.1	622	−1
4	4.6	582	−6
5	6.0	481	−19
6	7.5	391	−33
7	5.0	546	−11
8	4.0	629	−2
9	3.7	645	0
10	1.9	808	12

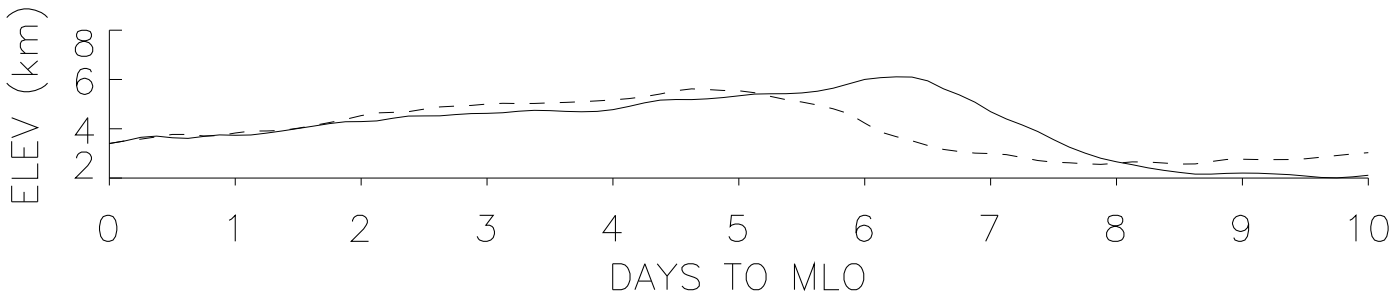
06UT

Day	km	hPa	C
0	3.4	681	6
1	3.5	672	4
2	4.0	633	−1
3	4.3	612	−2
4	4.7	577	−6
5	5.6	513	−15
6	7.0	419	−29
7	5.3	525	−13
8	5.1	539	−12
9	5.2	532	−12
10	6.6	438	−28

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

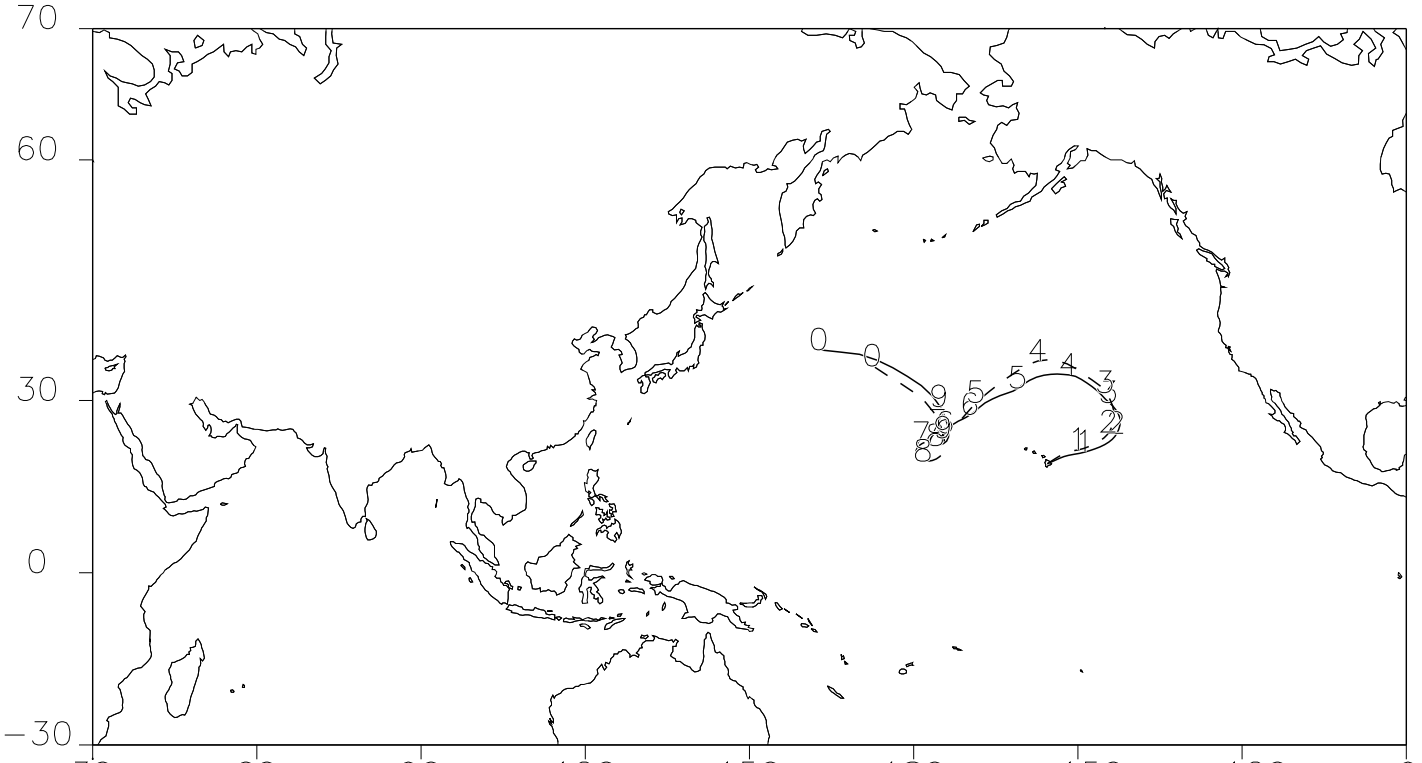
Day	km	hPa	C
0	3.4	680	5
1	3.7	651	2
2	4.3	607	−4
3	4.6	584	−6
4	4.8	571	−7
5	5.3	529	−14
6	6.0	483	−18
7	4.7	572	−9
8	2.7	741	6
9	2.2	786	10
10	2.1	795	12

18UT

Day	km	hPa	C
0	3.4	681	5
1	3.8	646	3
2	4.5	590	−5
3	5.0	557	−9
4	5.2	544	−11
5	5.5	515	−14
6	4.2	608	−5
7	3.0	711	3
8	2.6	748	9
9	2.8	734	10
10	3.0	710	11

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

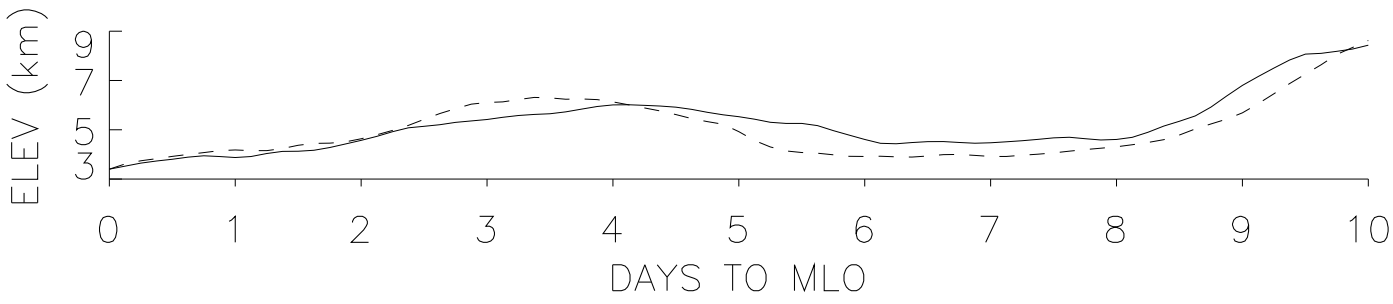


00UT

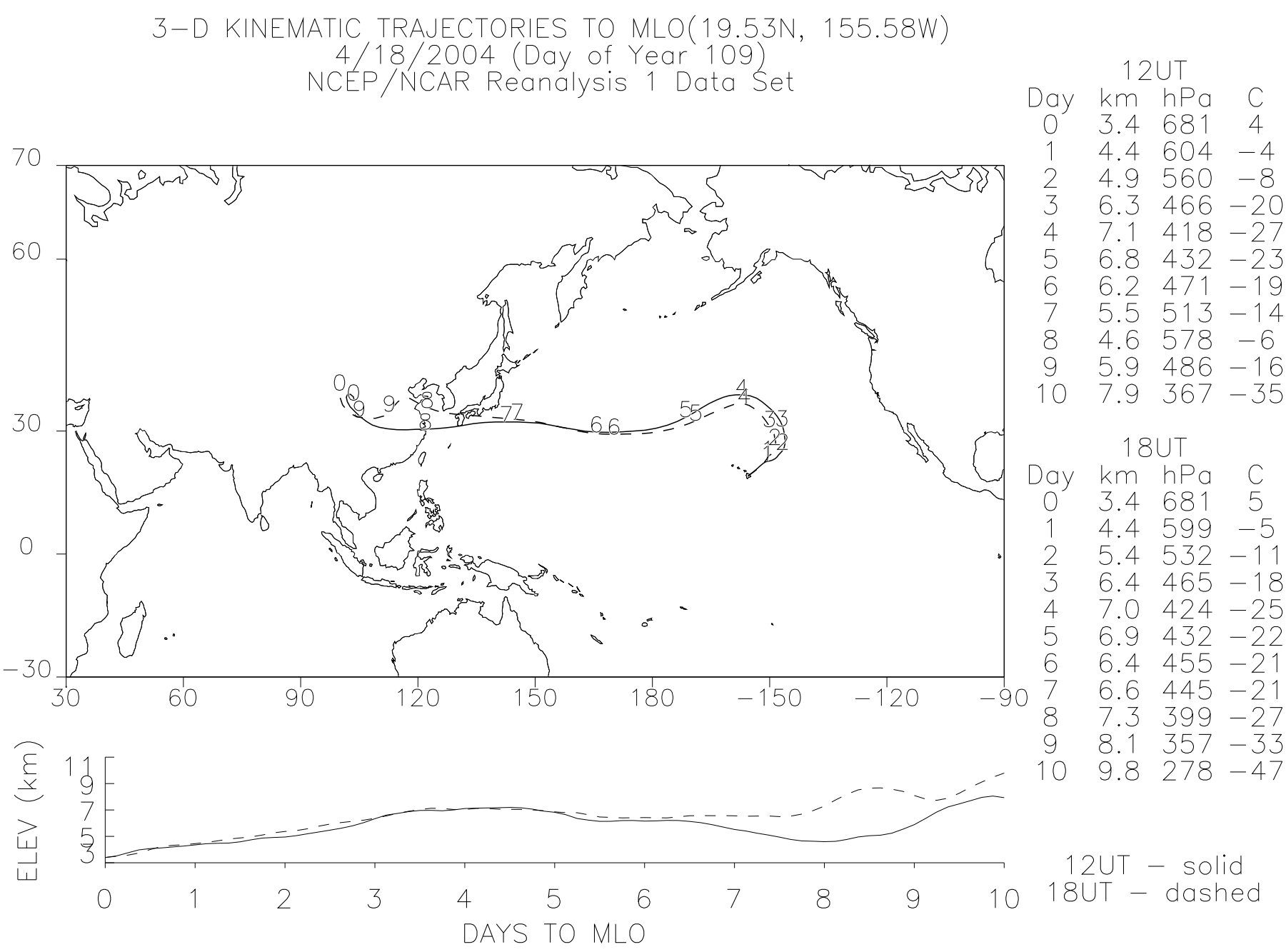
Day	km	hPa	C
0	3.4	680	4
1	3.9	641	1
2	4.6	587	−4
3	5.4	527	−13
4	6.0	488	−18
5	5.5	519	−13
6	4.6	585	−4
7	4.5	597	0
8	4.6	588	1
9	6.8	438	−21
10	8.4	343	−35

06UT

Day	km	hPa	C
0	3.4	681	5
1	4.2	618	−1
2	4.6	583	−4
3	6.1	480	−19
4	6.1	479	−19
5	4.9	560	−8
6	3.9	637	2
7	3.9	639	4
8	4.3	609	3
9	5.7	510	−10
10	8.6	336	−37



00UT – solid
06UT – dashed



12UT

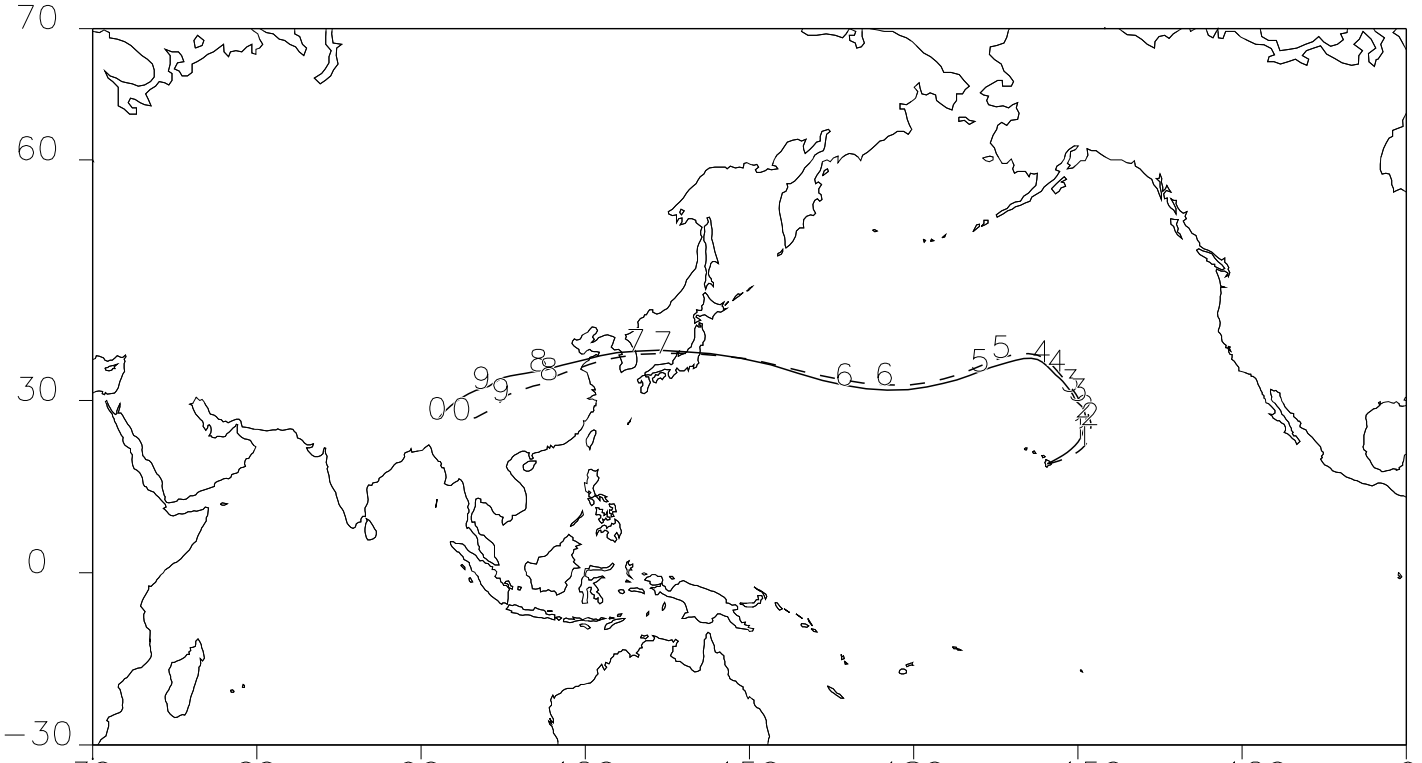
Day	km	hPa	C
0	3.4	681	4
1	4.4	604	−4
2	4.9	560	−8
3	6.3	466	−20
4	7.1	418	−27
5	6.8	432	−23
6	6.2	471	−19
7	5.5	513	−14
8	4.6	578	−6
9	5.9	486	−16
10	7.9	367	−35

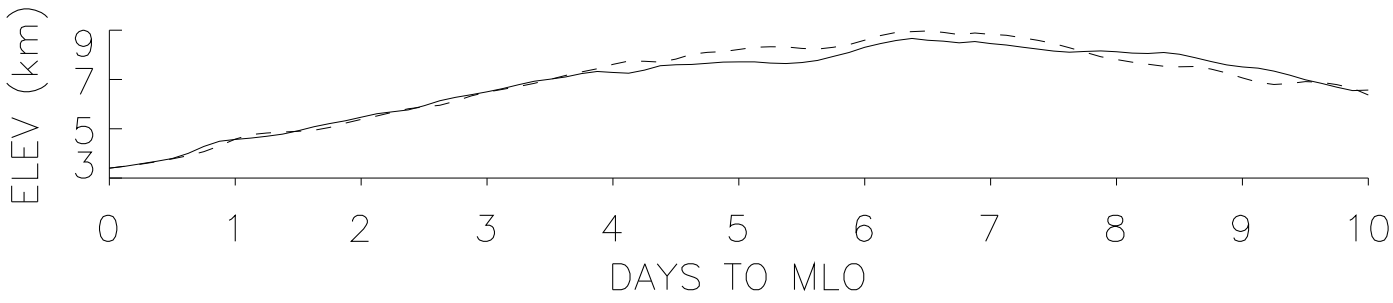
18UT

Day	km	hPa	C
0	3.4	681	5
1	4.4	599	−5
2	5.4	532	−11
3	6.4	465	−18
4	7.0	424	−25
5	6.9	432	−22
6	6.4	455	−21
7	6.6	445	−21
8	7.3	399	−27
9	8.1	357	−33
10	9.8	278	−47

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





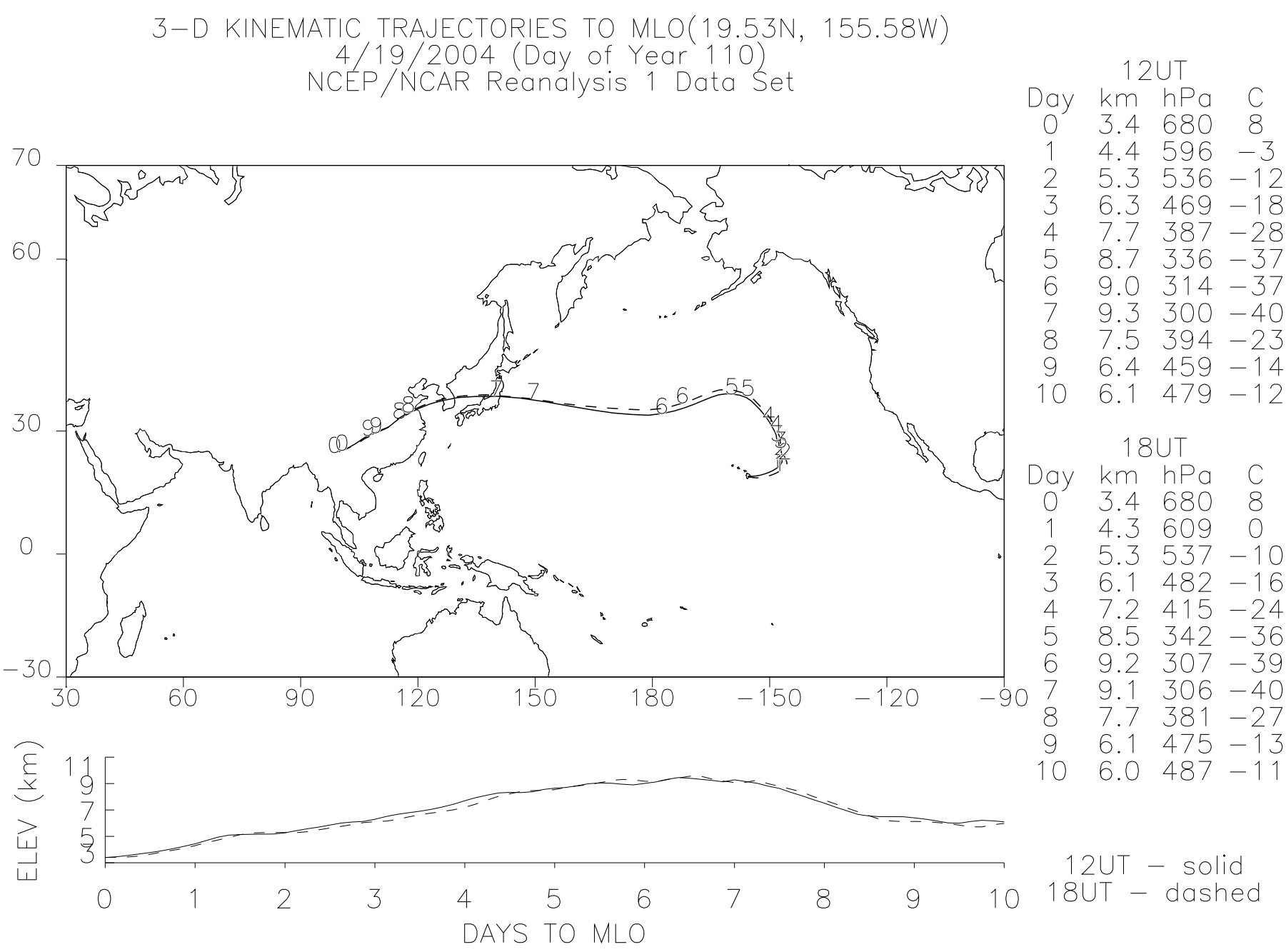
00UT

Day	km	hPa	C
0	3.4	680	8
1	4.6	588	−6
2	5.5	523	−12
3	6.5	458	−19
4	7.3	411	−25
5	7.7	383	−29
6	8.3	348	−34
7	8.5	341	−35
8	8.1	361	−30
9	7.5	394	−23
10	6.6	449	−17

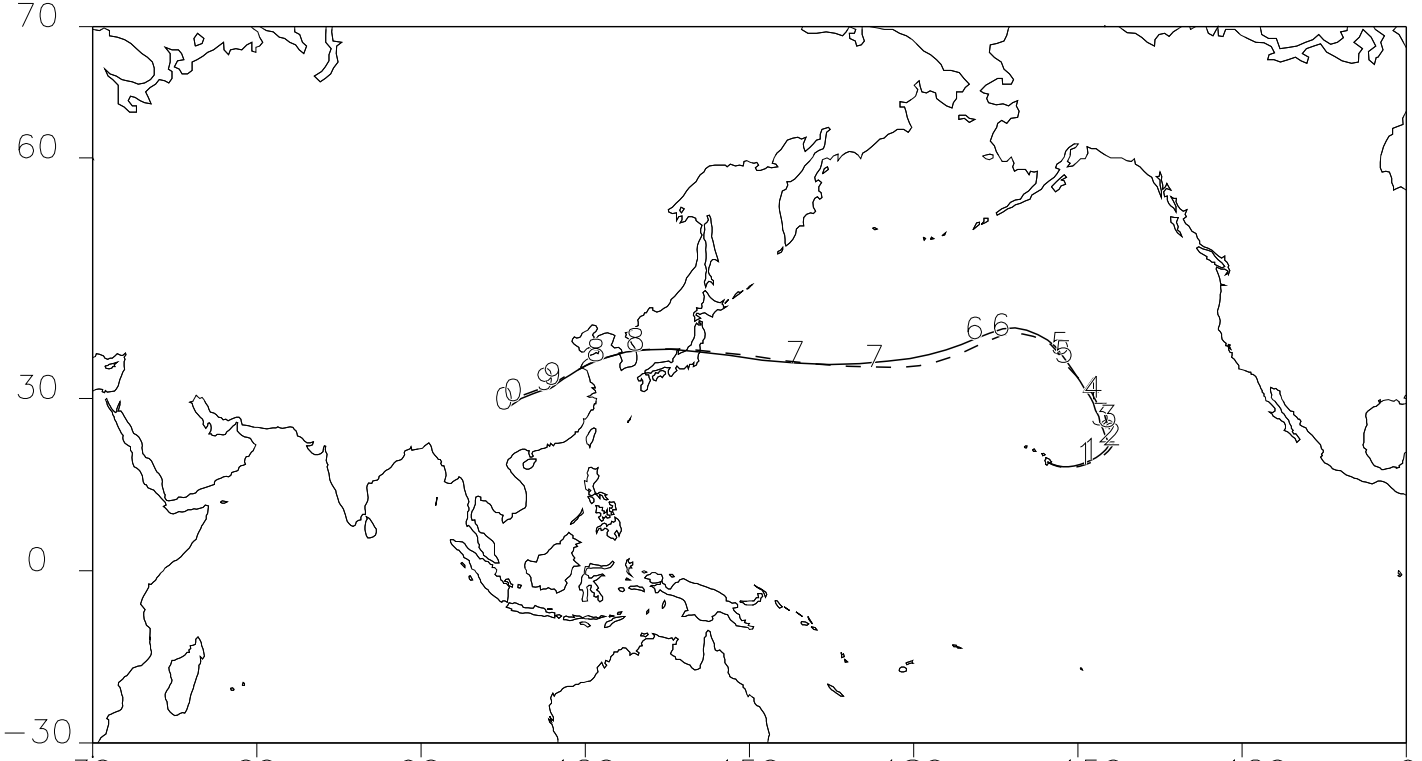
06UT

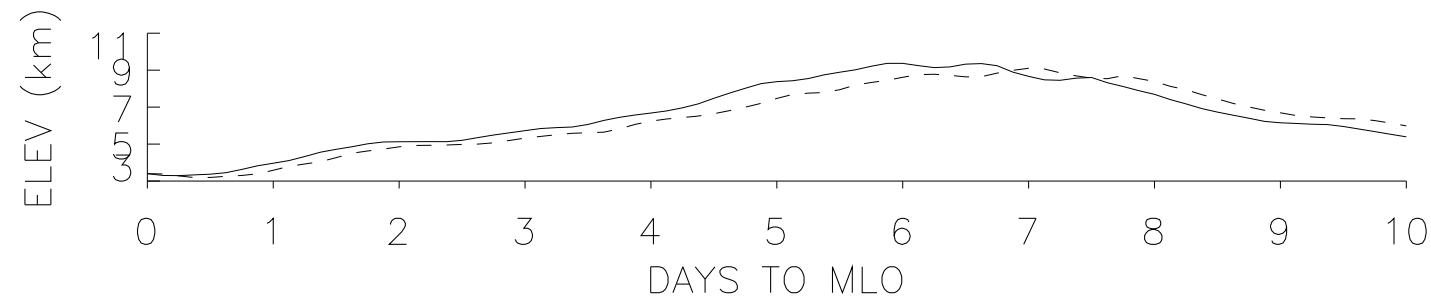
Day	km	hPa	C
0	3.4	681	8
1	4.6	587	−5
2	5.4	530	−11
3	6.5	458	−19
4	7.6	393	−27
5	8.2	358	−33
6	8.6	333	−34
7	8.8	323	−37
8	7.8	379	−26
9	7.1	420	−19
10	6.4	463	−14

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
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 3.4 680 8
1 4.4 596 -3
2 5.3 536 -12
3 6.3 469 -18
4 7.7 387 -28
5 8.7 336 -37
6 9.0 314 -37
7 9.3 300 -40
8 7.5 394 -23
9 6.4 459 -14
10 6.1 479 -12
18UT
Day km hPa C
0 3.4 680 8
1 4.3 609 0
2 5.3 537 -10
3 6.1 482 -16
4 7.2 415 -24
5 8.5 342 -36
6 9.2 307 -39
7 9.1 306 -40
8 7.7 381 -27
9 6.1 475 -13
10 6.0 487 -11
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

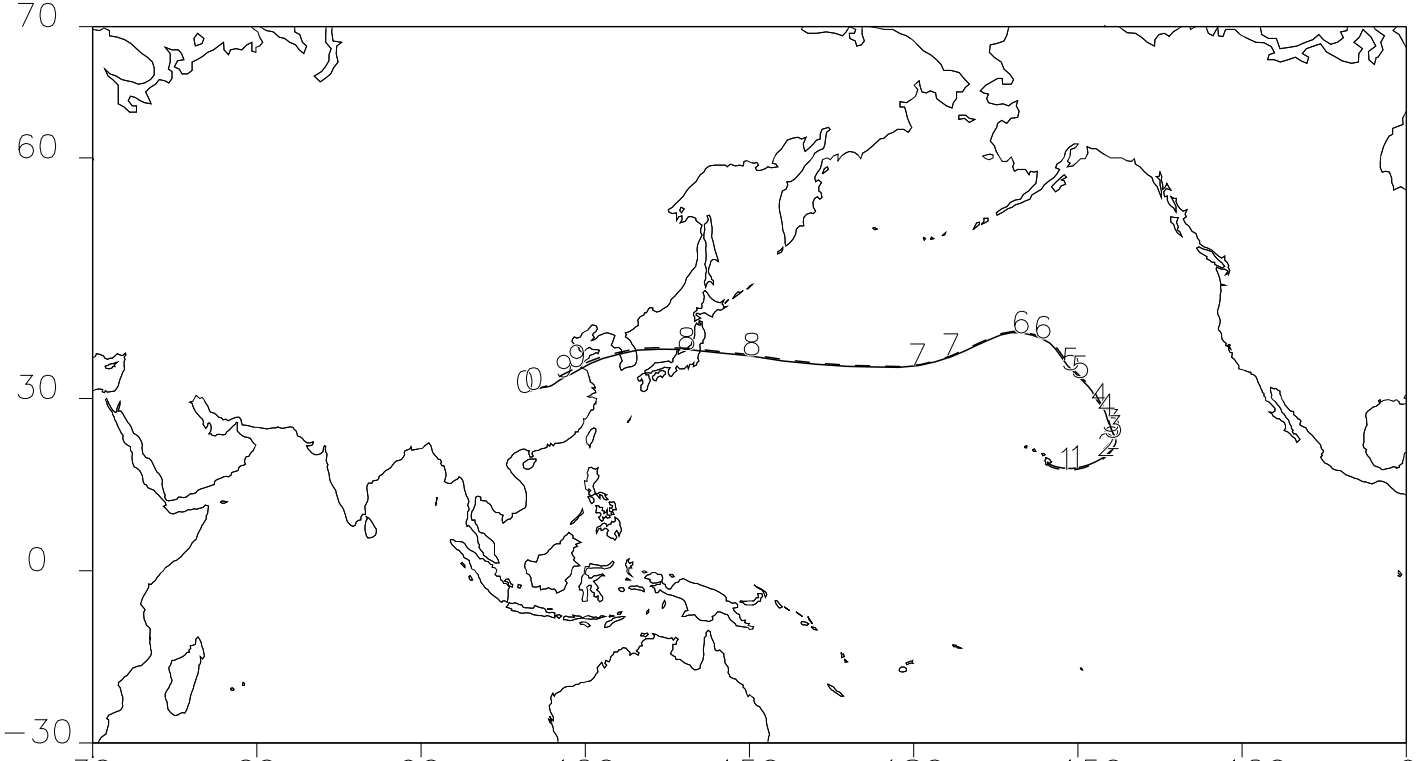
Day	km	hPa	C
0	3.4	680	7
1	4.0	634	3
2	5.1	546	-9
3	5.7	506	-13
4	6.7	446	-21
5	8.4	351	-34
6	9.4	299	-43
7	8.7	324	-38
8	7.7	382	-28
9	6.2	474	-13
10	5.4	524	-6

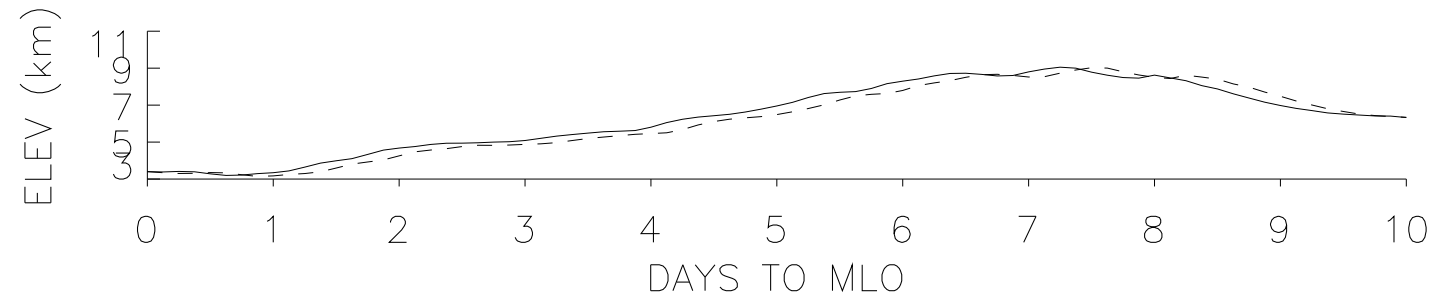
06UT

Day	km	hPa	C
0	3.4	681	7
1	3.6	665	6
2	4.9	566	-6
3	5.3	534	-11
4	6.2	473	-18
5	7.5	400	-26
6	8.6	336	-37
7	9.1	305	-40
8	8.4	344	-35
9	6.7	441	-17
10	6.0	485	-11

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

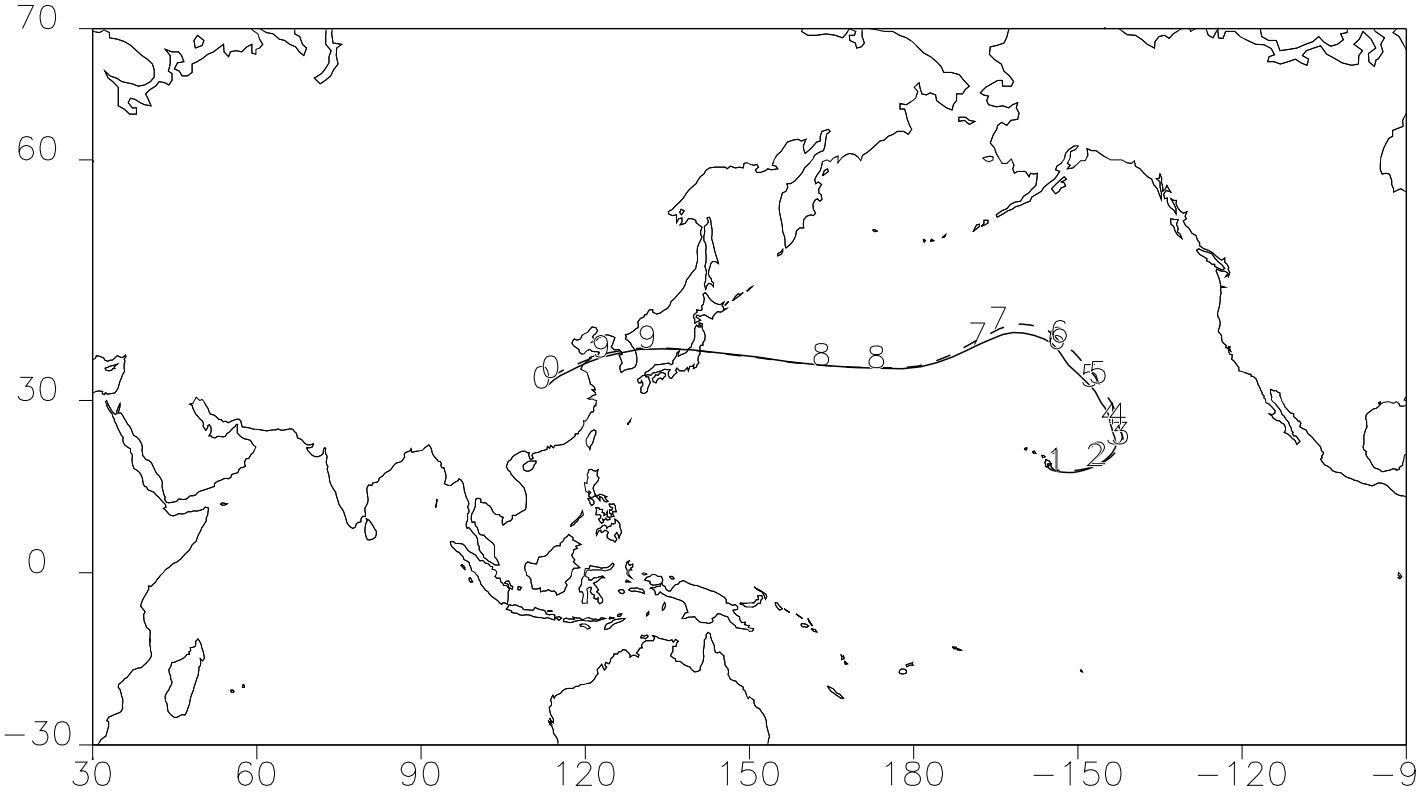
Day	km	hPa	C
0	3.4	679	6
1	3.3	683	8
2	4.7	578	-4
3	5.1	548	-10
4	5.8	500	-15
5	7.0	429	-23
6	8.3	352	-35
7	8.8	322	-36
8	8.6	331	-36
9	7.0	424	-20
10	6.3	463	-14

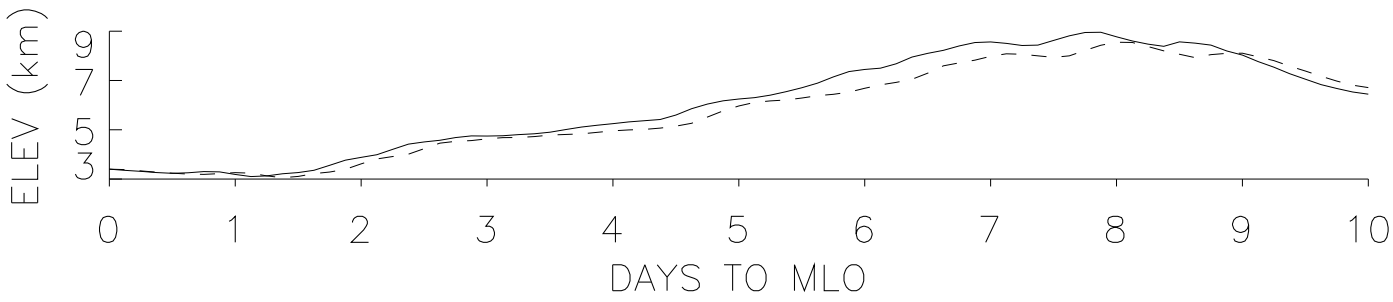
18UT

Day	km	hPa	C
0	3.4	680	6
1	3.2	699	9
2	4.3	612	0
3	4.9	565	-7
4	5.5	525	-12
5	6.5	457	-20
6	7.8	380	-31
7	8.5	336	-35
8	8.5	333	-36
9	7.5	395	-26
10	6.3	462	-15

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





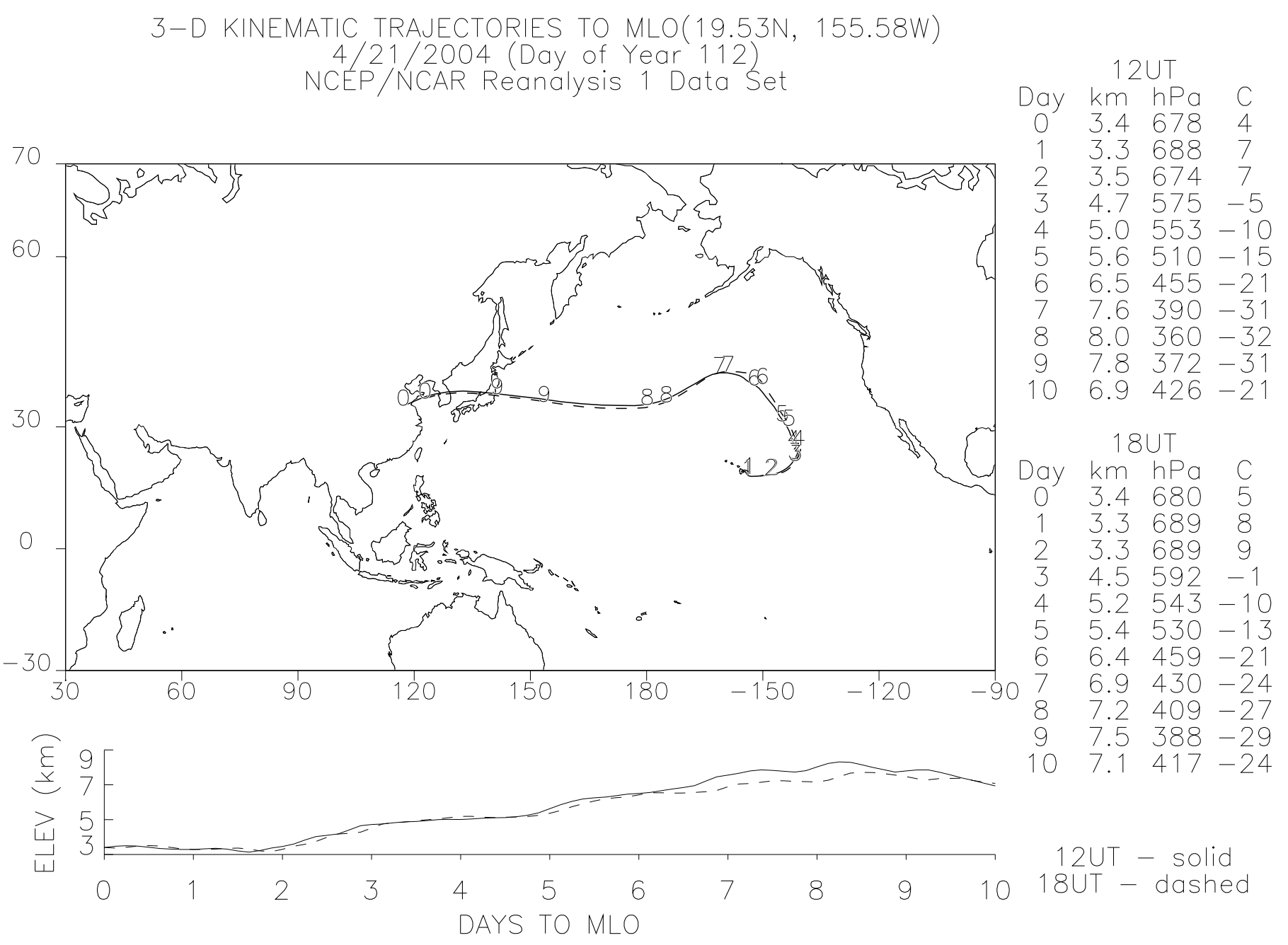
00UT

Day	km	hPa	C
0	3.4	679	6
1	3.2	697	8
2	3.9	641	4
3	4.7	573	−7
4	5.2	538	−10
5	6.2	472	−18
6	7.4	400	−28
7	8.6	336	−37
8	8.8	319	−39
9	8.0	364	−31
10	6.4	456	−16

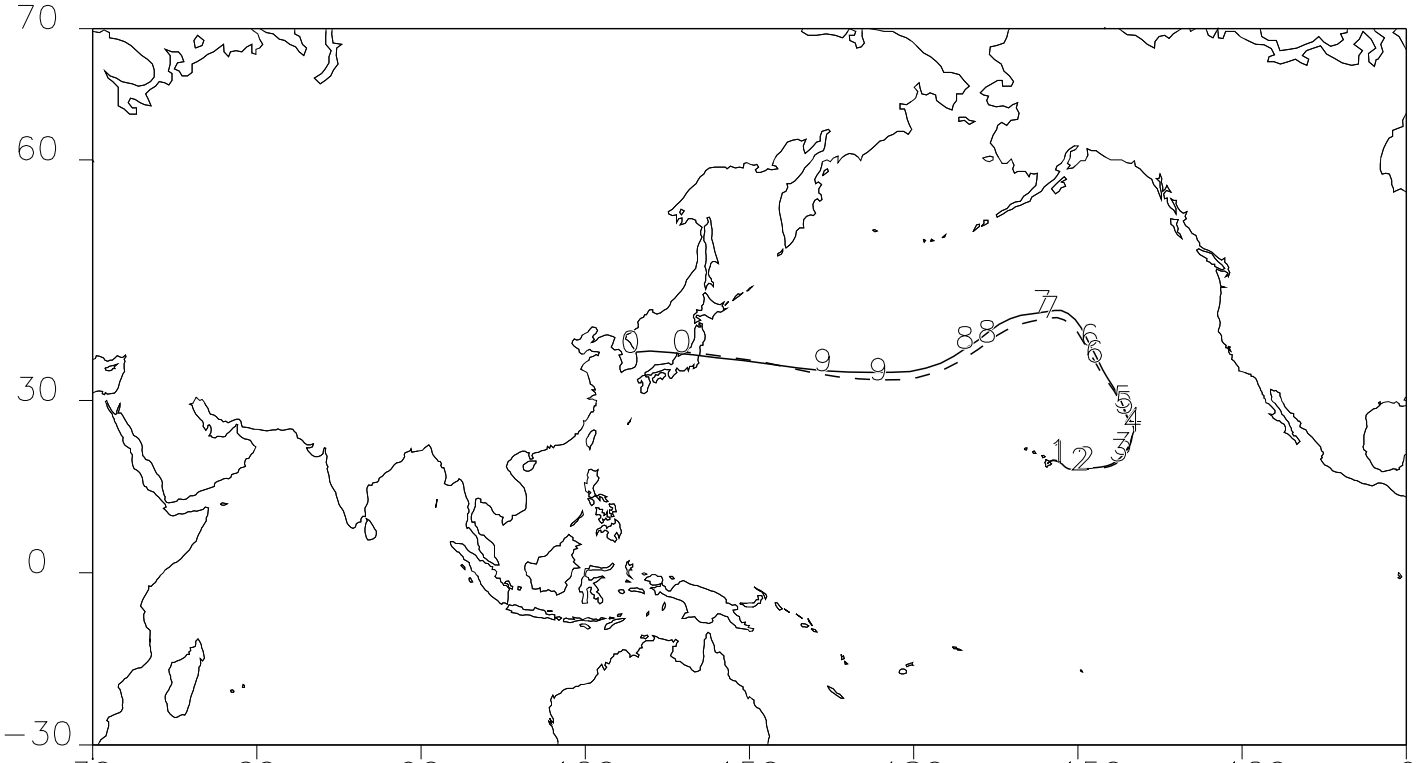
06UT

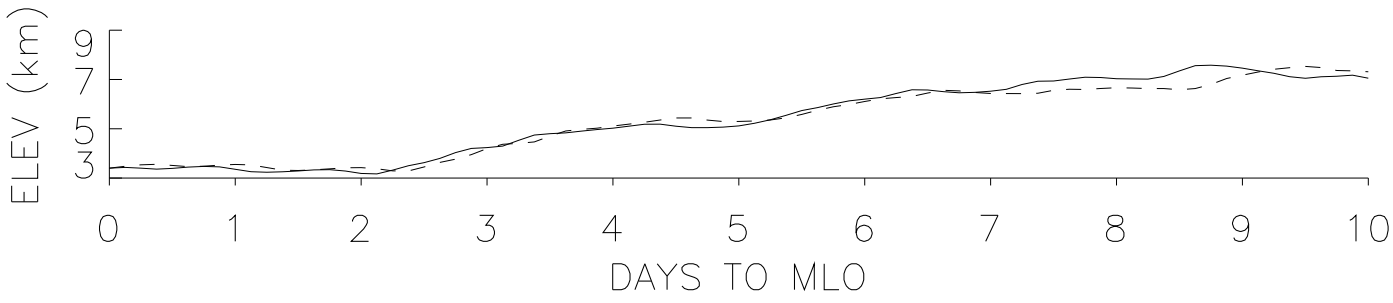
Day	km	hPa	C
0	3.4	679	5
1	3.3	692	8
2	3.6	663	6
3	4.6	582	−5
4	5.0	559	−8
5	6.0	489	−18
6	6.7	445	−22
7	8.0	367	−33
8	8.6	330	−37
9	8.1	357	−33
10	6.7	440	−18

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
70
60
30
0
-30
30
60
90
120
150
180
-150
-120
-90
ELEV (km)
9
7
5
3
0
1
2
3
4
5
6
7
8
9
10
DAYS TO MLO
12UT
Day km hPa C
0 3.4 678 4
1 3.3 688 7
2 3.5 674 7
3 4.7 575 -5
4 5.0 553 -10
5 5.6 510 -15
6 6.5 455 -21
7 7.6 390 -31
8 8.0 360 -32
9 7.8 372 -31
10 6.9 426 -21
18UT
Day km hPa C
0 3.4 680 5
1 3.3 689 8
2 3.3 689 9
3 4.5 592 -1
4 5.2 543 -10
5 5.4 530 -13
6 6.4 459 -21
7 6.9 430 -24
8 7.2 409 -27
9 7.5 388 -29
10 7.1 417 -24
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

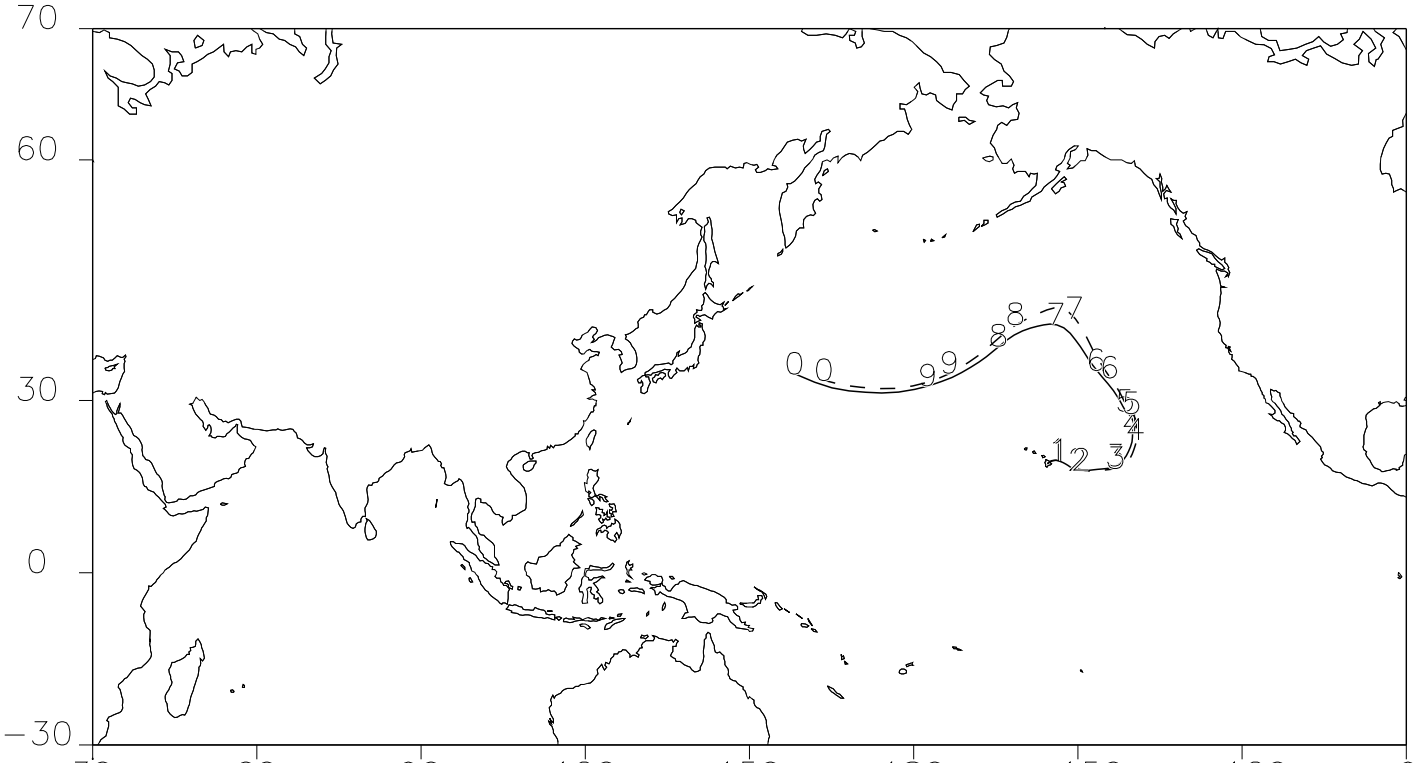
Day	km	hPa	C
0	3.4	679	6
1	3.4	683	7
2	3.2	697	8
3	4.2	613	0
4	5.0	552	-9
5	5.1	546	-11
6	6.2	473	-21
7	6.5	453	-22
8	7.0	417	-26
9	7.5	387	-31
10	7.1	416	-25

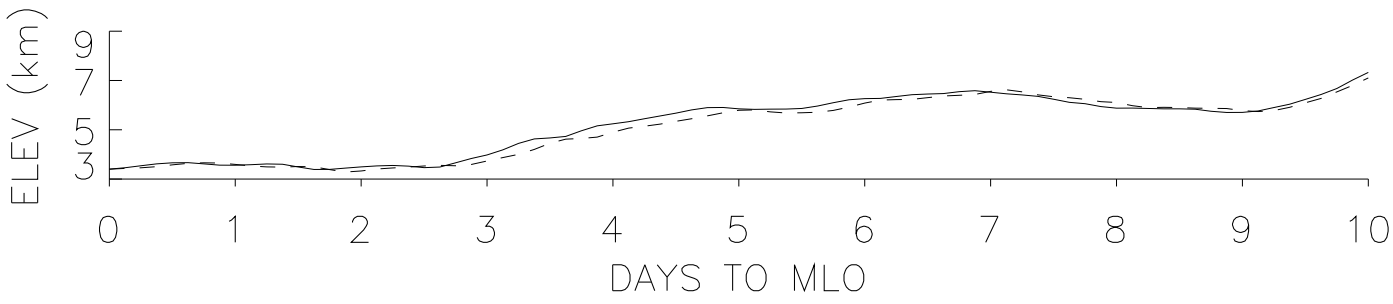
06UT

Day	km	hPa	C
0	3.4	679	6
1	3.6	667	4
2	3.4	679	7
3	4.2	617	2
4	5.1	547	-8
5	5.3	534	-11
6	6.1	479	-20
7	6.4	459	-21
8	6.7	441	-23
9	7.2	405	-28
10	7.3	399	-26

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

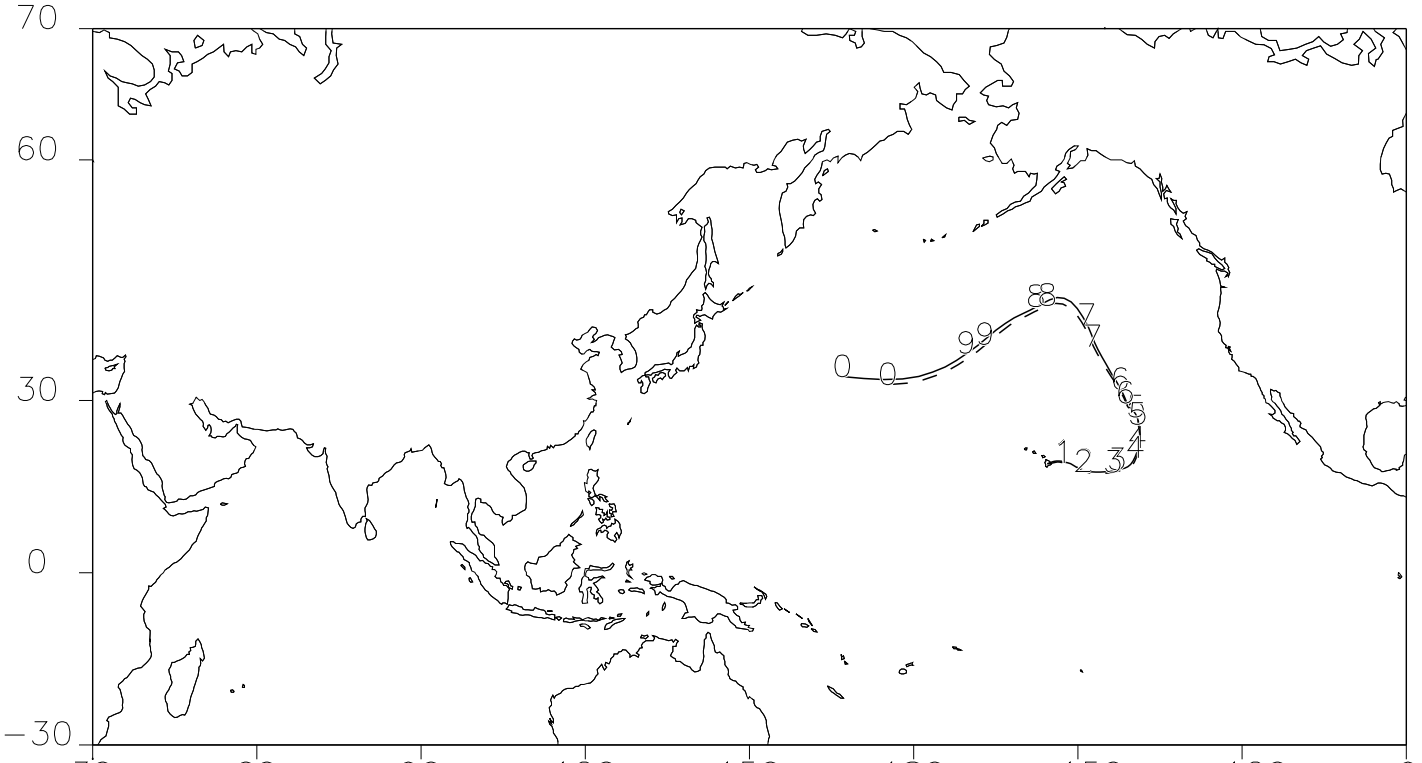
Day	km	hPa	C
0	3.4	679	5
1	3.6	665	3
2	3.5	671	6
3	4.0	632	3
4	5.2	537	-9
5	5.8	495	-16
6	6.3	469	-21
7	6.5	453	-22
8	5.9	493	-16
9	5.7	501	-18
10	7.3	397	-28

18UT

Day	km	hPa	C
0	3.4	680	6
1	3.6	663	4
2	3.3	687	7
3	3.7	653	5
4	4.9	563	-5
5	5.8	501	-15
6	6.1	481	-19
7	6.6	450	-22
8	6.1	477	-18
9	5.8	496	-18
10	7.1	409	-28

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

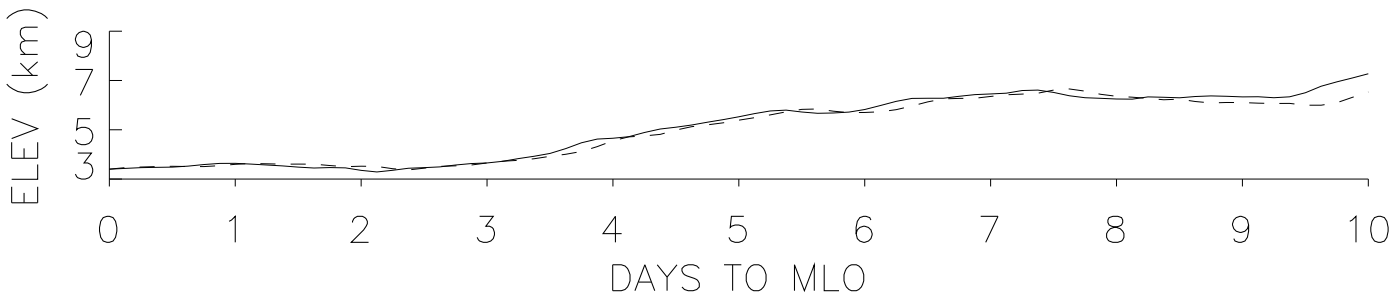


00UT

Day	km	hPa	C
0	3.4	679	5
1	3.6	659	4
2	3.4	683	6
3	3.7	658	4
4	4.7	580	−4
5	5.5	517	−13
6	5.8	497	−16
7	6.5	456	−23
8	6.2	469	−20
9	6.3	460	−22
10	7.3	399	−30

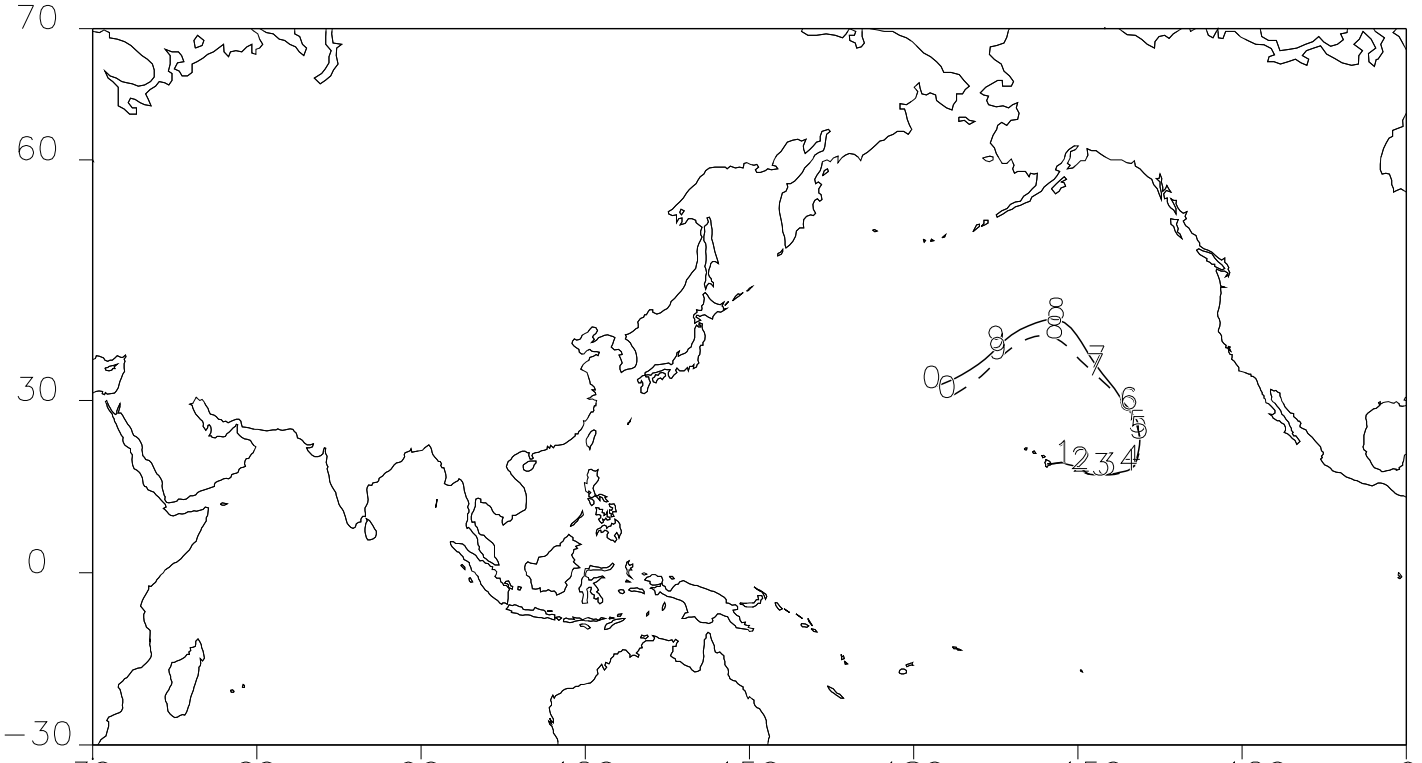
06UT

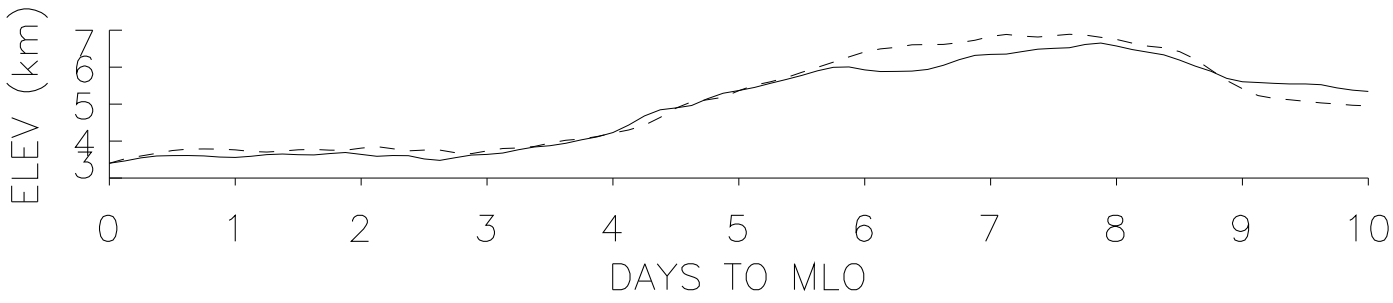
Day	km	hPa	C
0	3.4	680	5
1	3.6	663	4
2	3.5	670	5
3	3.7	660	5
4	4.6	589	−2
5	5.4	528	−11
6	5.7	506	−15
7	6.4	463	−22
8	6.4	462	−21
9	6.1	476	−19
10	6.5	444	−23



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





12UT

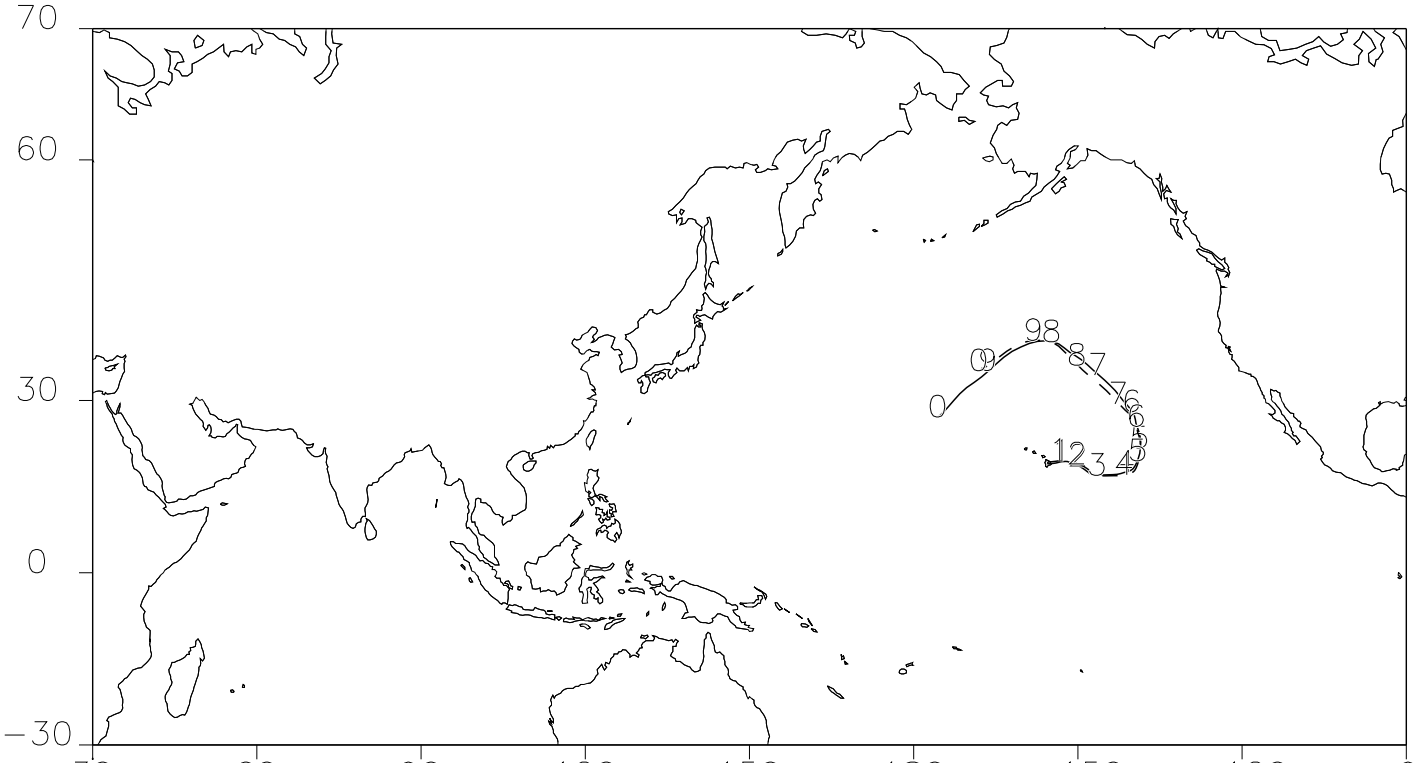
Day	km	hPa	C
0	3.4	680	6
1	3.6	665	4
2	3.6	658	4
3	3.6	659	4
4	4.2	612	1
5	5.4	529	−10
6	5.9	490	−16
7	6.3	463	−21
8	6.6	450	−22
9	5.6	510	−14
10	5.3	526	−14

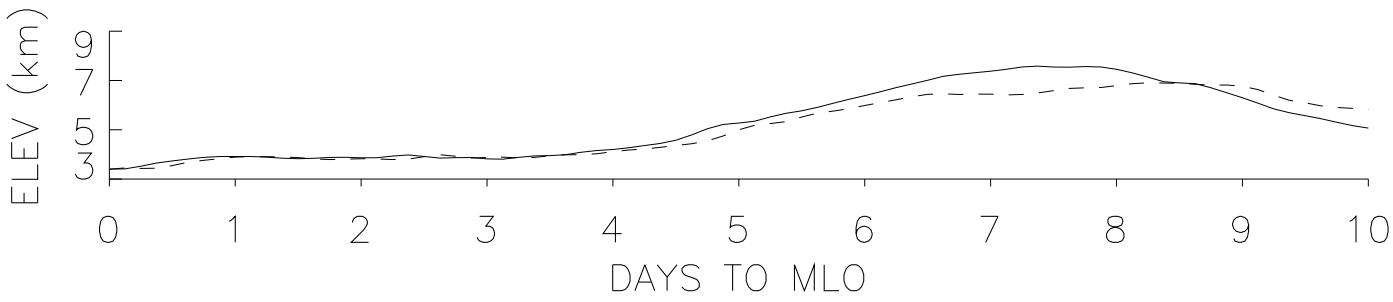
18UT

Day	km	hPa	C
0	3.4	681	6
1	3.8	651	3
2	3.8	646	3
3	3.7	652	4
4	4.2	615	2
5	5.4	531	−8
6	6.4	461	−20
7	6.8	435	−24
8	6.8	440	−22
9	5.4	525	−11
10	5.0	556	−8

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

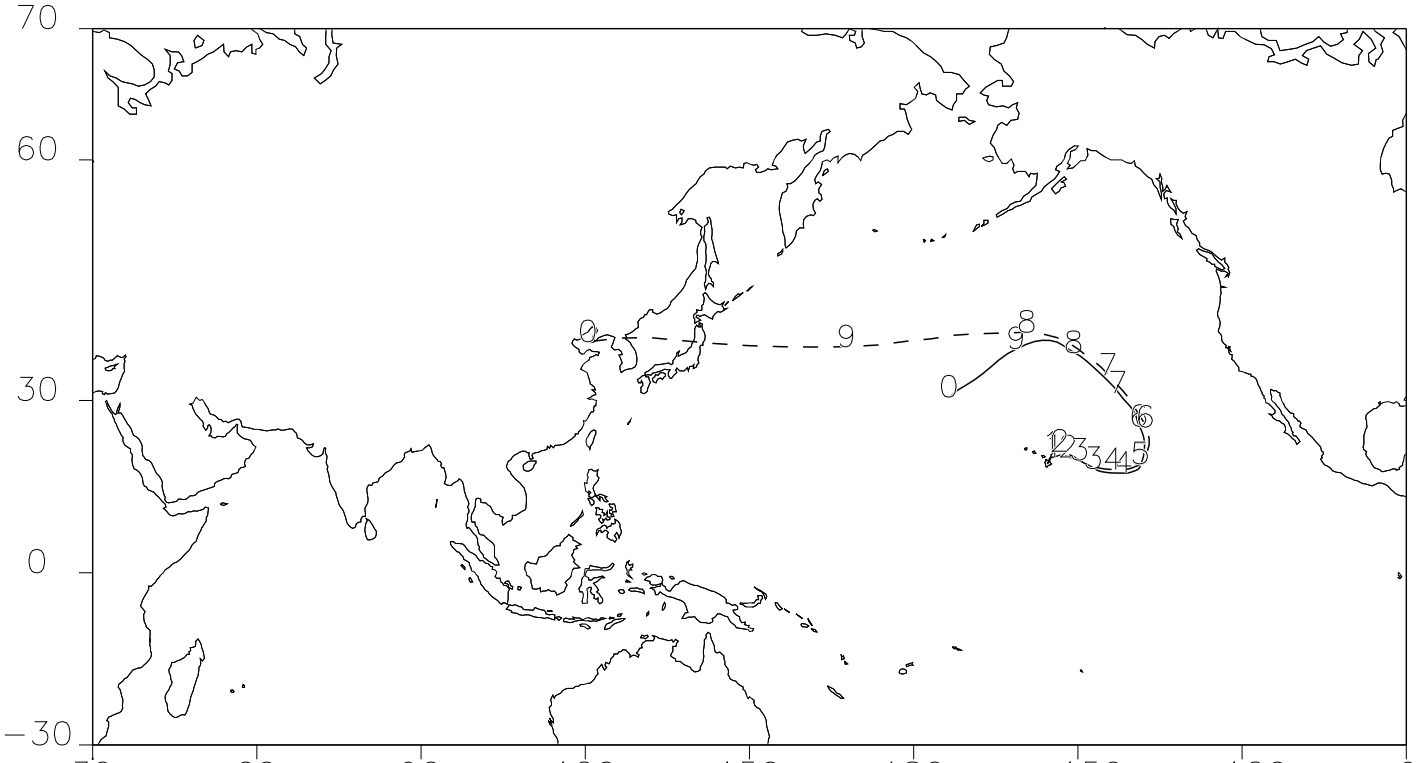
Day	km	hPa	C
0	3.4	680	6
1	3.9	637	2
2	3.9	641	3
3	3.8	644	3
4	4.2	615	2
5	5.3	536	−8
6	6.4	462	−19
7	7.4	402	−28
8	7.5	400	−27
9	6.3	469	−17
10	5.1	549	−7

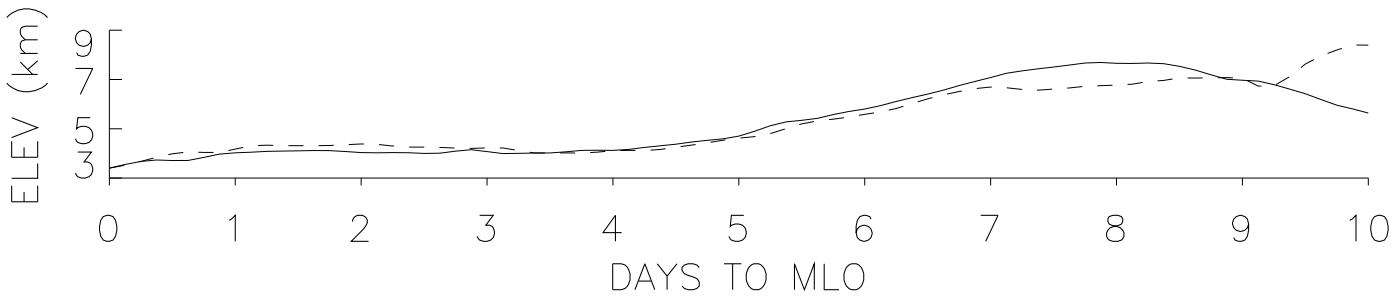
06UT

Day	km	hPa	C
0	3.4	681	5
1	3.9	641	2
2	3.8	645	3
3	3.9	641	3
4	4.1	623	3
5	5.0	557	−5
6	6.0	488	−15
7	6.4	459	−20
8	6.8	438	−22
9	6.8	440	−22
10	5.8	496	−14

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





12UT

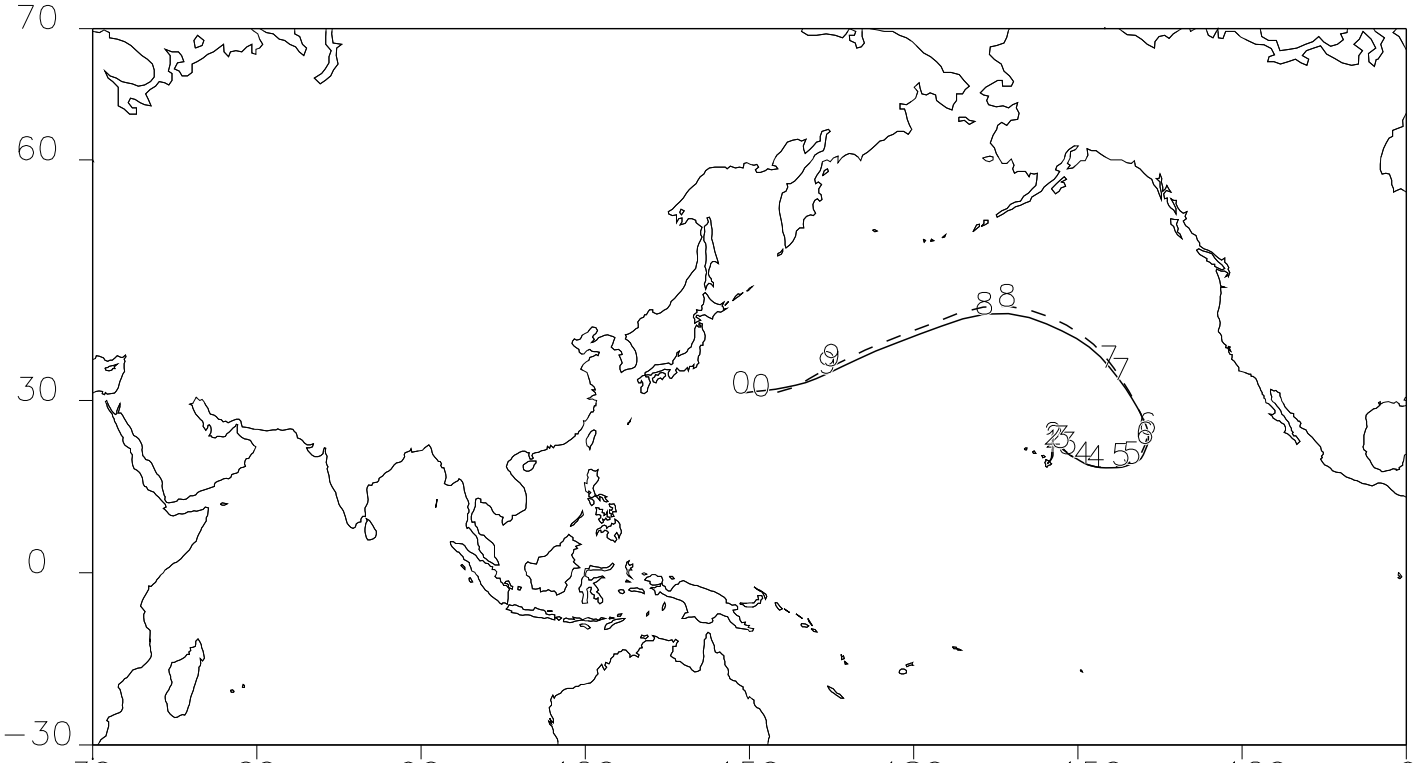
Day	km	hPa	C
0	3.4	679	5
1	4.0	630	1
2	4.0	628	1
3	4.1	624	2
4	4.1	620	2
5	4.7	577	−3
6	5.8	499	−14
7	7.1	419	−26
8	7.7	387	−30
9	7.0	428	−23
10	5.6	509	−12

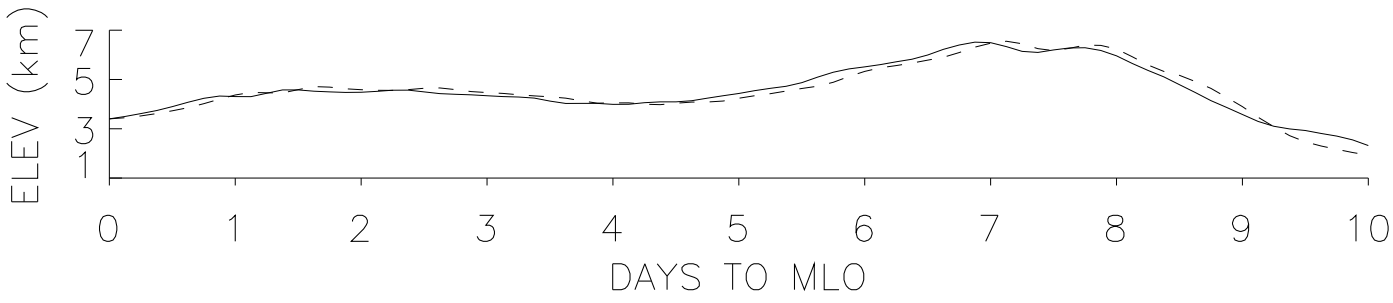
18UT

Day	km	hPa	C
0	3.4	680	6
1	4.2	619	1
2	4.4	602	−1
3	4.2	614	0
4	4.1	623	2
5	4.6	585	−1
6	5.6	515	−11
7	6.7	442	−23
8	6.8	437	−23
9	7.1	409	−27
10	8.4	339	−38

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

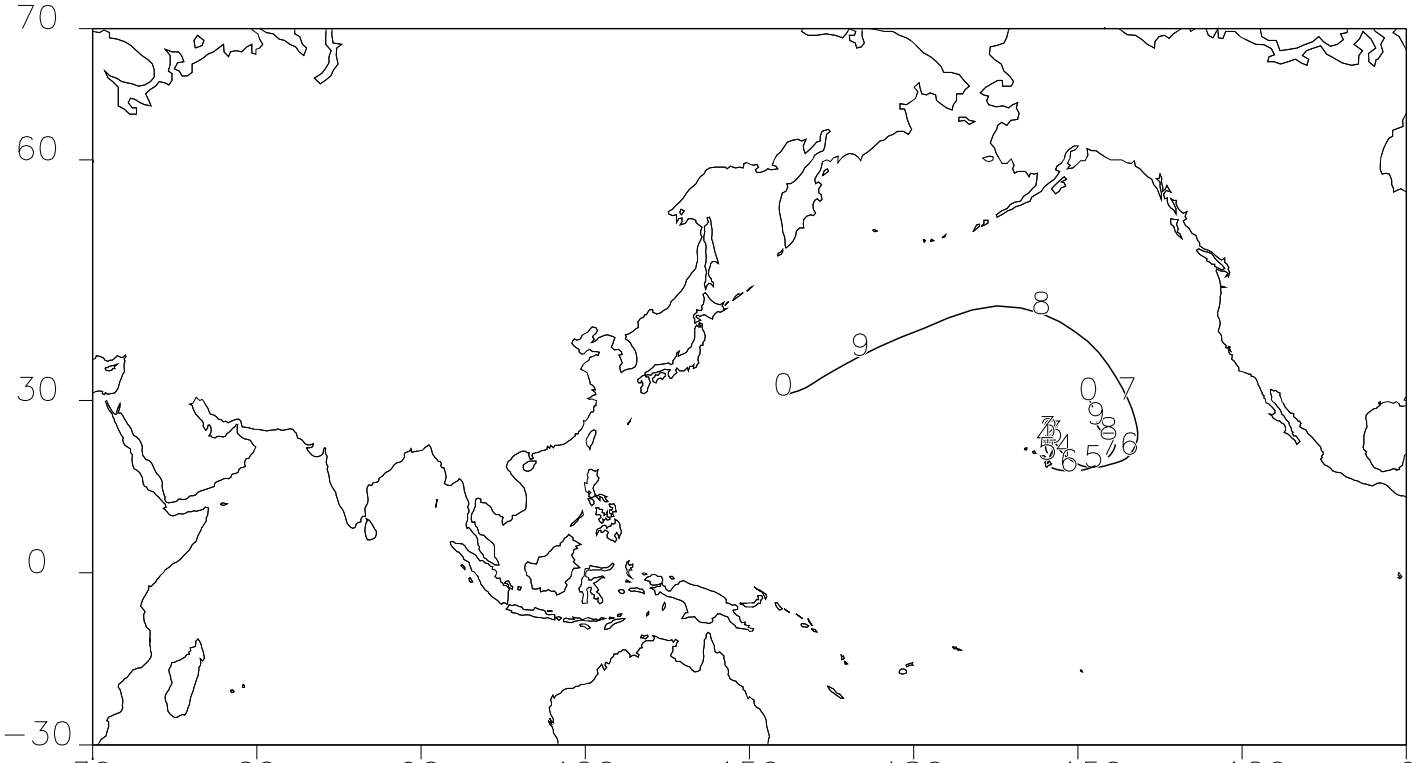
Day	km	hPa	C
0	3.4	679	6
1	4.3	608	1
2	4.5	594	−2
3	4.3	604	0
4	4.0	631	3
5	4.4	598	0
6	5.5	519	−11
7	6.5	453	−22
8	6.0	484	−17
9	3.6	656	0
10	2.3	767	10

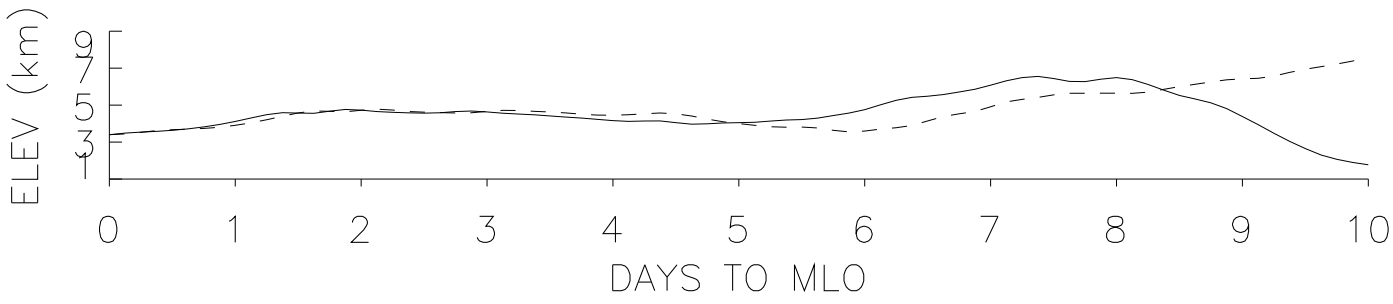
06UT

Day	km	hPa	C
0	3.4	678	6
1	4.4	603	0
2	4.6	588	−2
3	4.5	595	−2
4	4.0	628	2
5	4.2	614	2
6	5.3	534	−8
7	6.5	455	−21
8	6.2	465	−19
9	3.9	628	−2
10	1.9	803	11

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

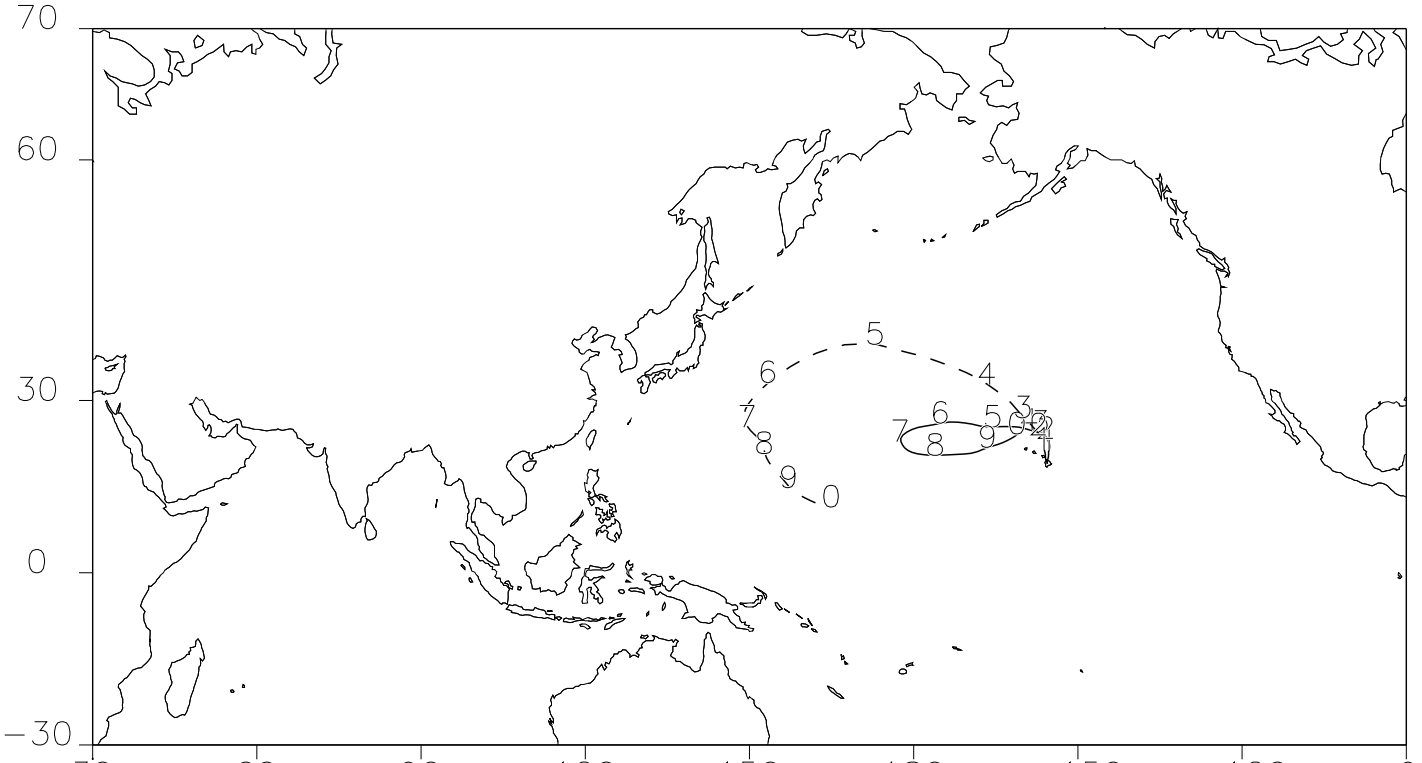
Day	km	hPa	C
0	3.4	678	6
1	4.1	622	1
2	4.7	577	−4
3	4.6	583	−4
4	4.2	617	0
5	4.1	627	2
6	4.8	573	−3
7	6.1	481	−17
8	6.5	450	−21
9	4.4	591	−4
10	1.8	820	11

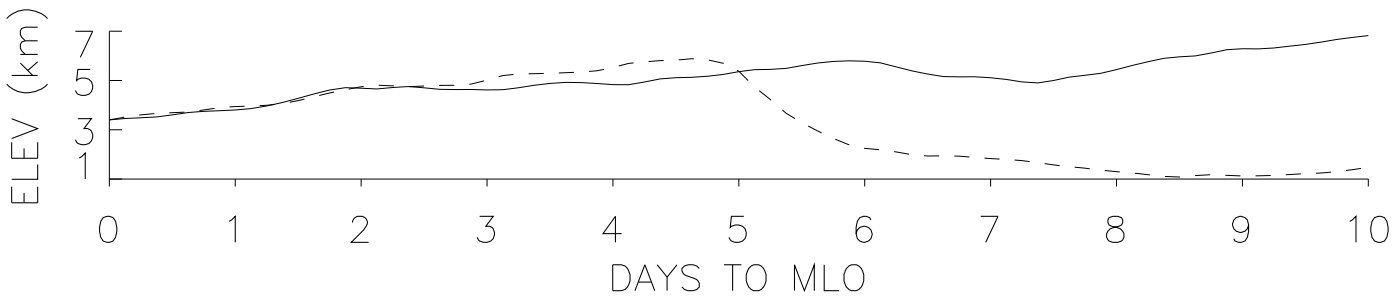
18UT

Day	km	hPa	C
0	3.4	677	6
1	3.9	639	3
2	4.7	578	−3
3	4.7	582	−4
4	4.5	596	−2
5	4.0	631	3
6	3.6	664	7
7	4.9	563	−4
8	5.6	512	−13
9	6.4	463	−18
10	7.6	393	−27

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

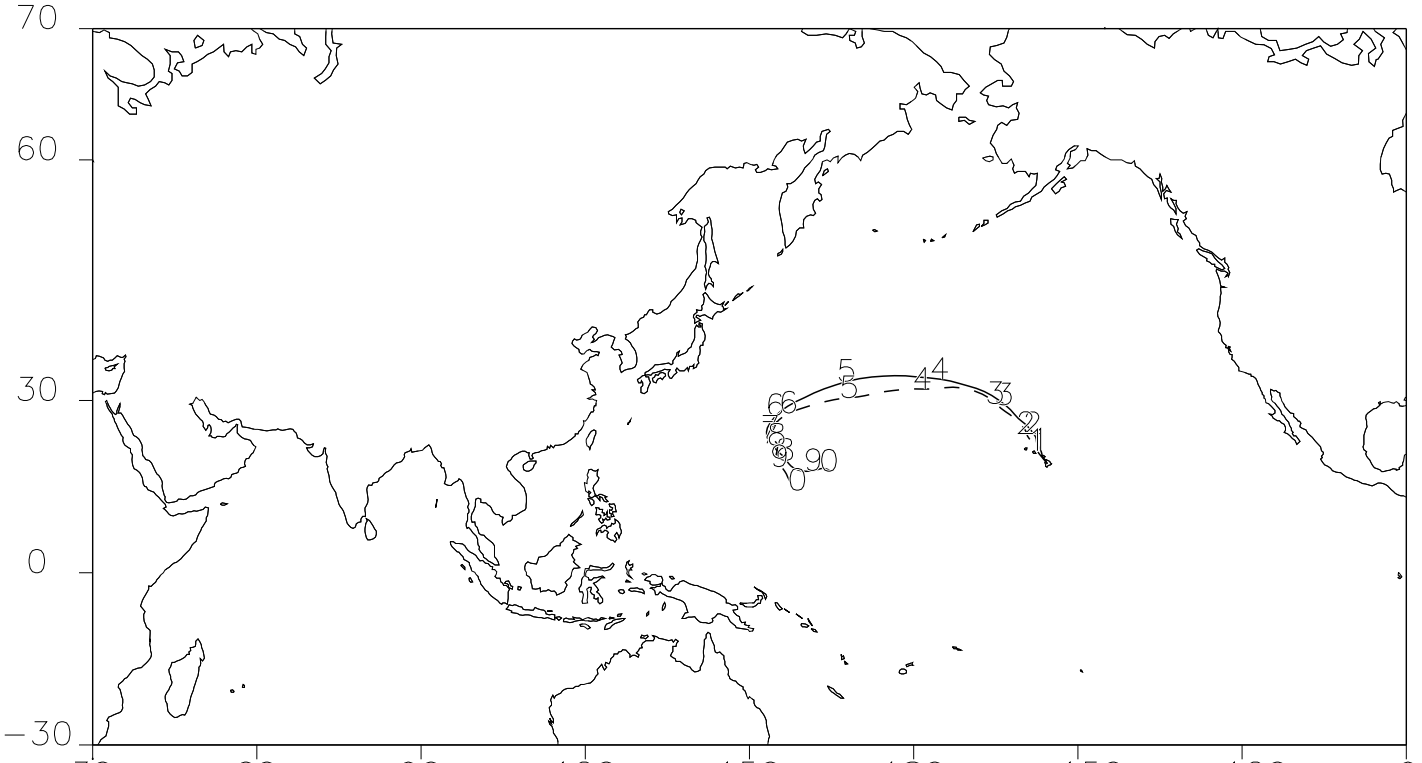
Day	km	hPa	C
0	3.4	677	5
1	3.8	646	3
2	4.7	580	-2
3	4.6	585	-3
4	4.8	568	-5
5	5.4	531	-9
6	5.8	505	-10
7	5.1	554	-3
8	5.4	529	-6
9	6.3	473	-13
10	6.8	440	-19

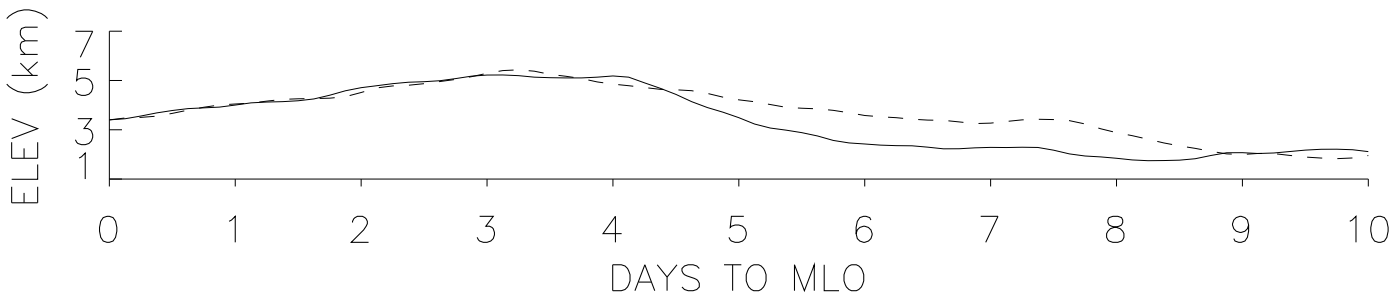
06UT

Day	km	hPa	C
0	3.4	677	5
1	3.9	635	2
2	4.7	576	-3
3	5.0	556	-5
4	5.5	516	-9
5	5.4	521	-10
6	2.2	779	10
7	1.8	822	15
8	1.3	872	18
9	1.1	888	22
10	1.5	853	19

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





12UT

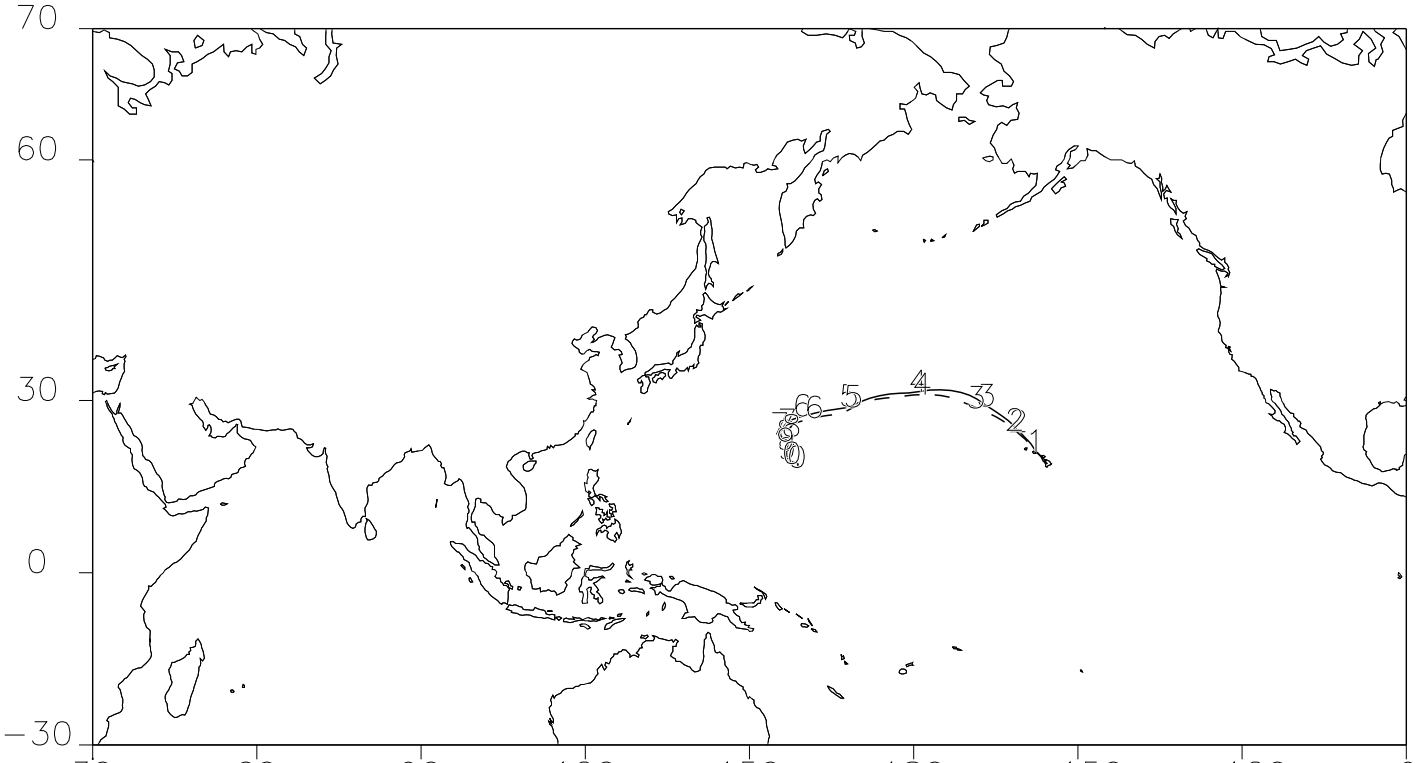
Day	km	hPa	C
0	3.4	676	4
1	4.0	629	2
2	4.7	578	−3
3	5.2	542	−6
4	5.2	543	−7
5	3.5	669	4
6	2.4	767	12
7	2.3	782	13
8	1.8	822	16
9	2.1	799	15
10	2.1	794	15

18UT

Day	km	hPa	C
0	3.4	676	5
1	4.0	625	2
2	4.5	593	−1
3	5.3	537	−7
4	4.9	566	−4
5	4.2	613	0
6	3.6	664	5
7	3.3	693	7
8	2.9	724	9
9	2.0	803	15
10	2.0	807	16

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

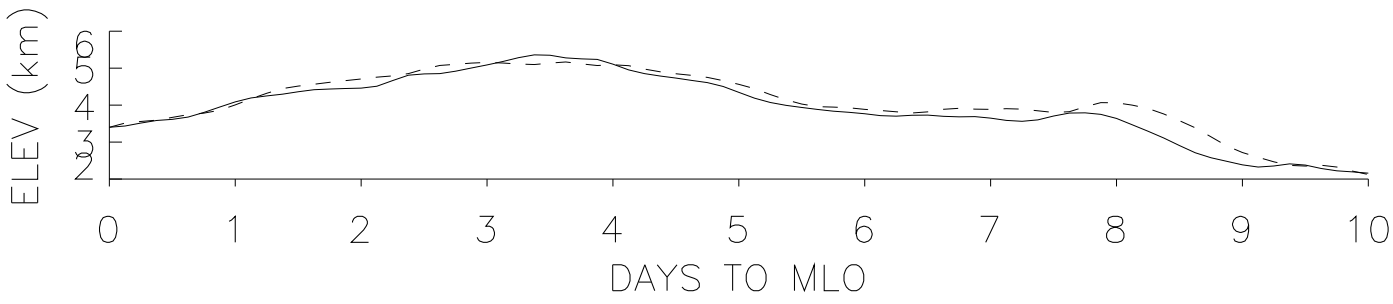


00UT

Day	km	hPa	C
0	3.4	676	5
1	4.1	622	1
2	4.5	597	0
3	5.1	552	−5
4	5.1	550	−6
5	4.3	605	0
6	3.8	651	4
7	3.6	663	5
8	3.6	663	5
9	2.4	769	12
10	2.2	790	16

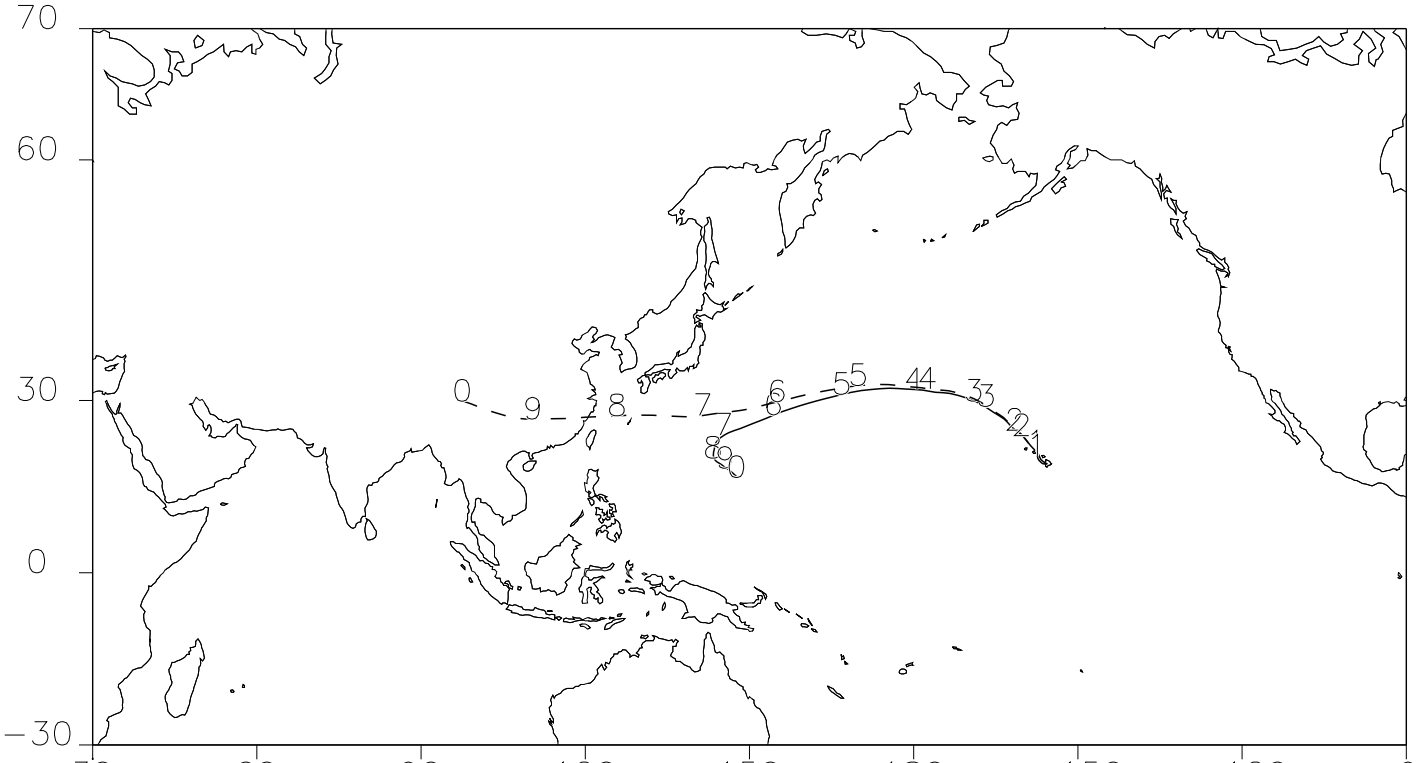
06UT

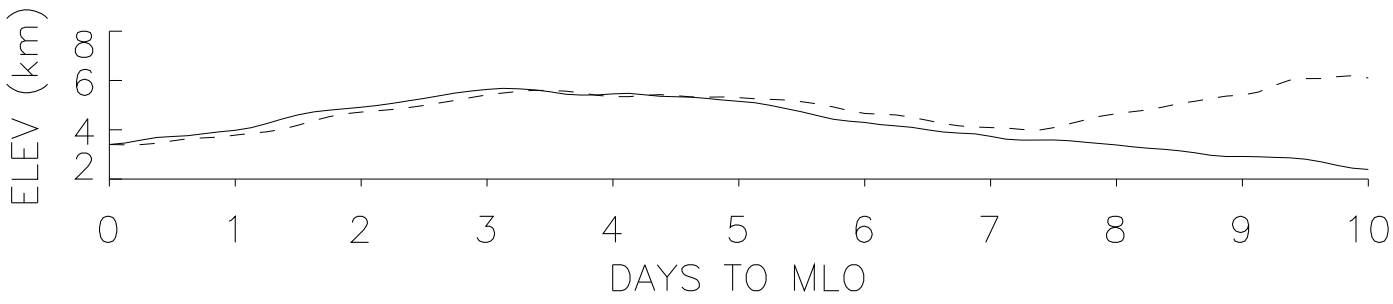
Day	km	hPa	C
0	3.4	675	5
1	4.0	628	2
2	4.7	577	−2
3	5.2	548	−6
4	5.1	551	−6
5	4.6	588	−1
6	3.9	640	3
7	3.9	643	4
8	4.1	629	2
9	2.7	738	10
10	2.1	792	15



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





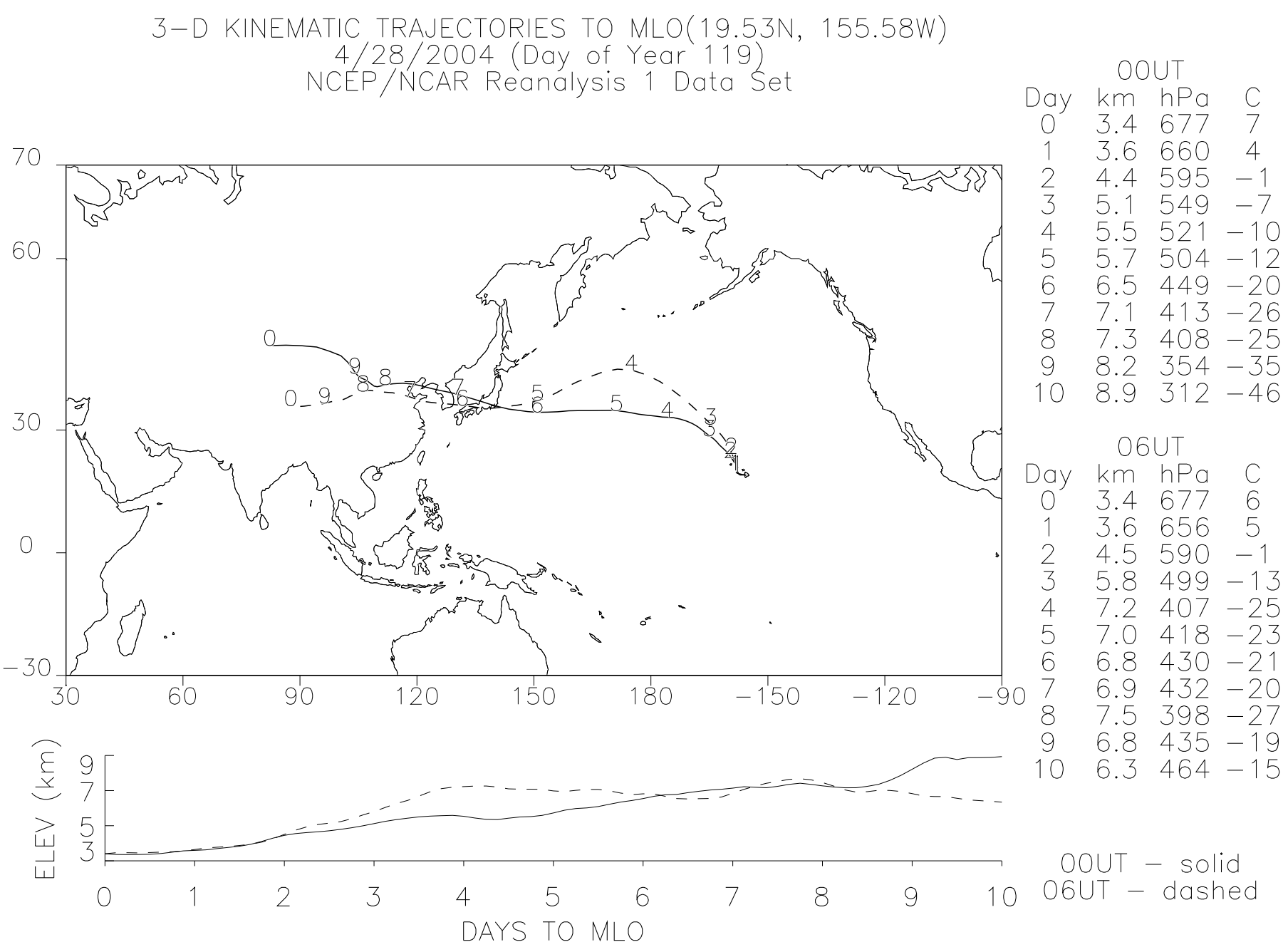
12UT

Day	km	hPa	C
0	3.4	675	6
1	4.0	629	1
2	4.9	562	−4
3	5.6	514	−10
4	5.5	527	−9
5	5.2	545	−7
6	4.3	608	0
7	3.7	655	6
8	3.4	684	10
9	2.9	721	12
10	2.4	766	15

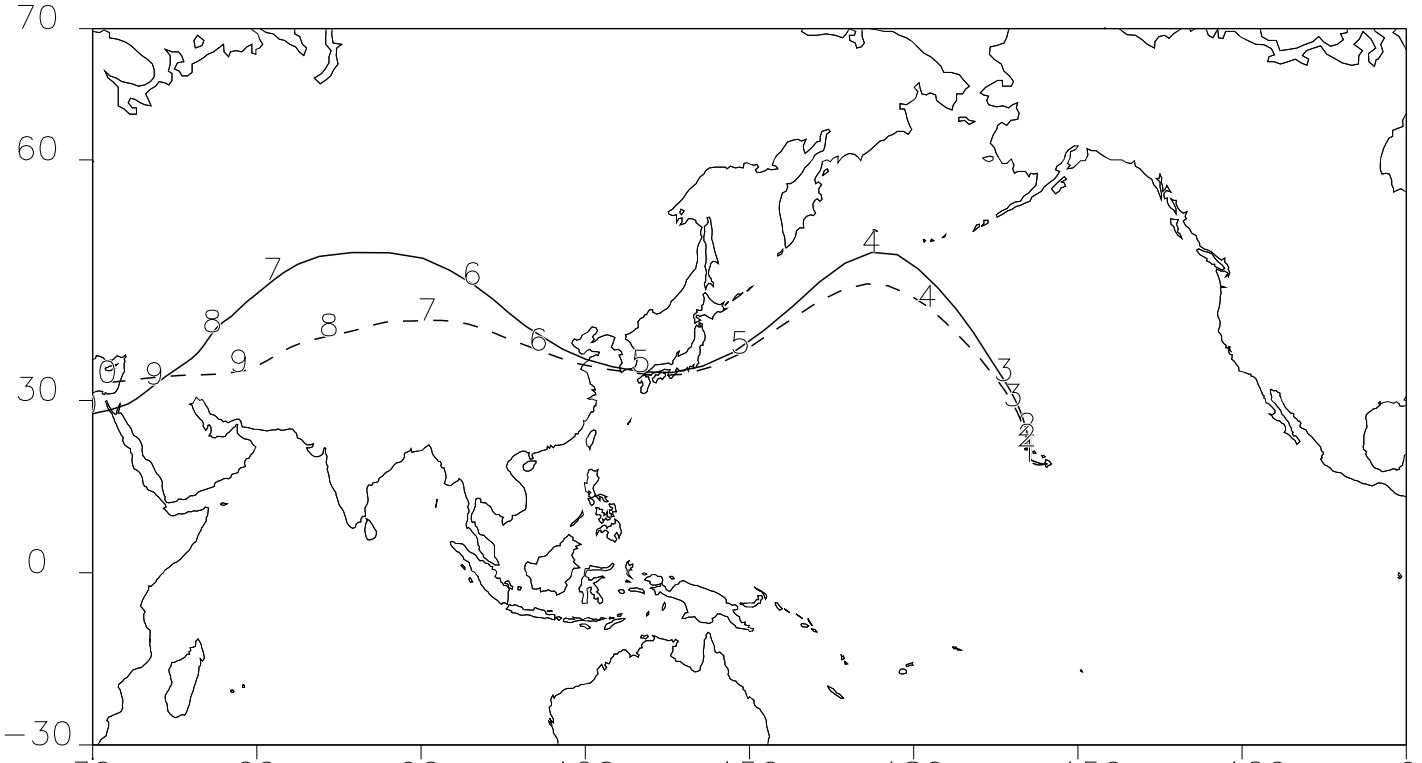
18UT

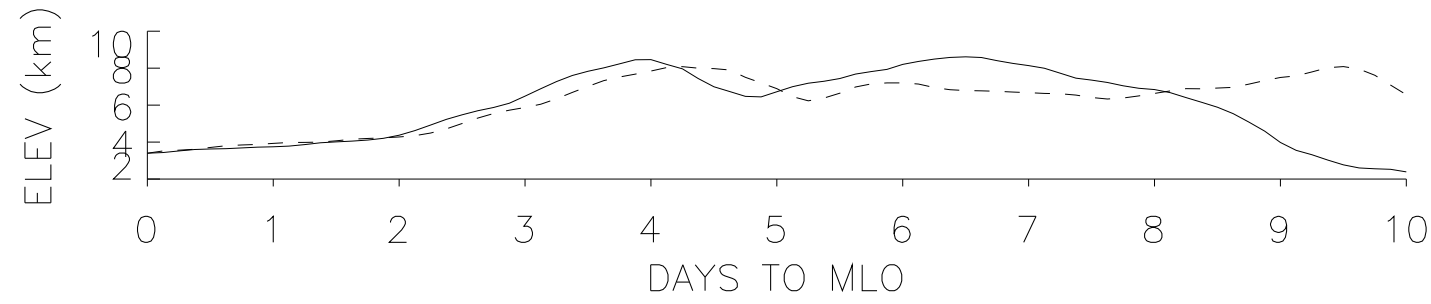
Day	km	hPa	C
0	3.4	678	6
1	3.8	645	3
2	4.7	575	−3
3	5.4	528	−8
4	5.3	533	−8
5	5.3	533	−9
6	4.7	577	−4
7	4.1	621	2
8	4.7	579	−3
9	5.4	524	−10
10	6.1	477	−17

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
70
60
30
0
-30
30
60
90
120
150
180
-150
-120
-90
ELEV (km)
9
7
5
3
0
1
2
3
4
5
6
7
8
9
10
DAYS TO MLO
00UT
Day km hPa C
0 3.4 677 7
1 3.6 660 4
2 4.4 595 -1
3 5.1 549 -7
4 5.5 521 -10
5 5.7 504 -12
6 6.5 449 -20
7 7.1 413 -26
8 7.3 408 -25
9 8.2 354 -35
10 8.9 312 -46
06UT
Day km hPa C
0 3.4 677 6
1 3.6 656 5
2 4.5 590 -1
3 5.8 499 -13
4 7.2 407 -25
5 7.0 418 -23
6 6.8 430 -21
7 6.9 432 -20
8 7.5 398 -27
9 6.8 435 -19
10 6.3 464 -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

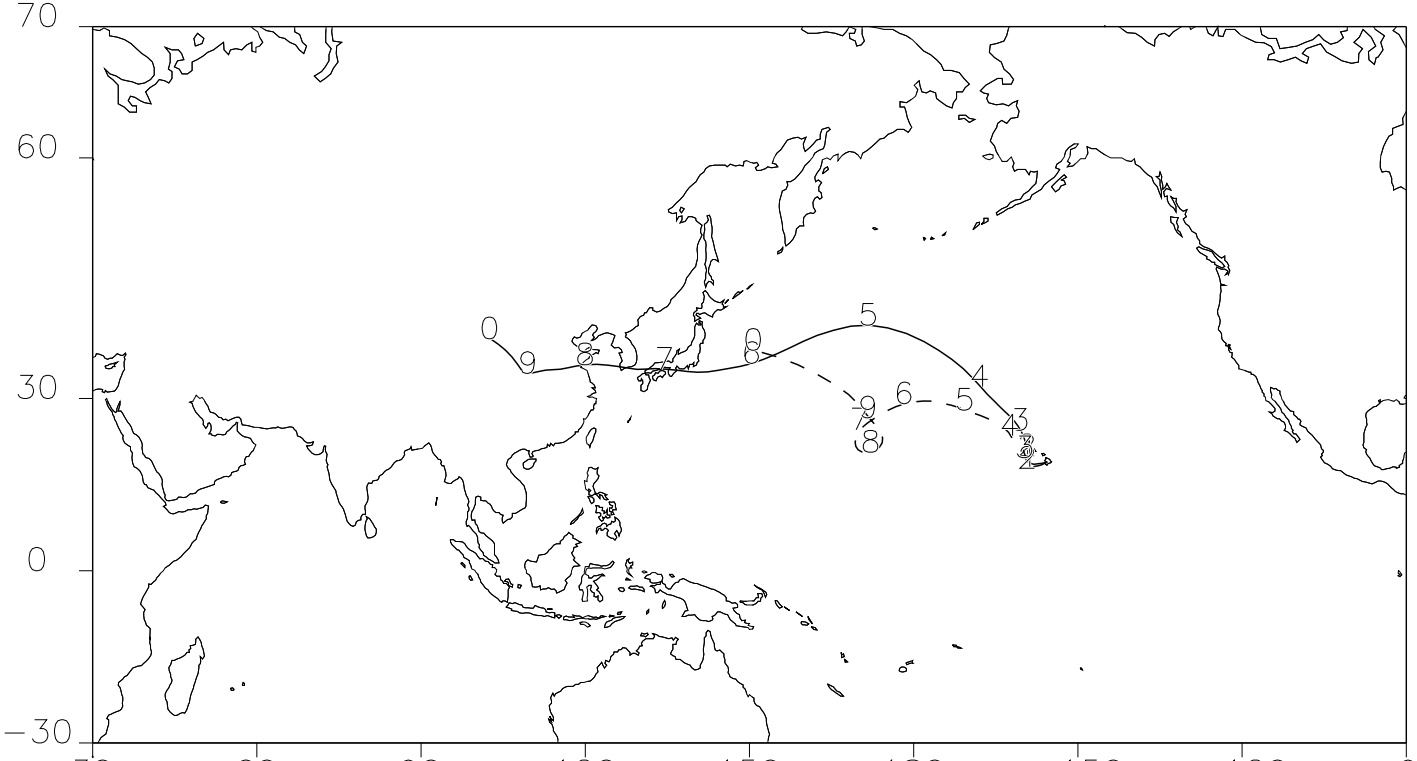
Day	km	hPa	C
0	3.4	677	6
1	3.7	648	4
2	4.4	599	-1
3	6.5	454	-19
4	8.5	335	-38
5	6.7	429	-24
6	8.2	349	-38
7	8.1	350	-39
8	6.8	421	-29
9	4.0	620	-6
10	2.4	765	14

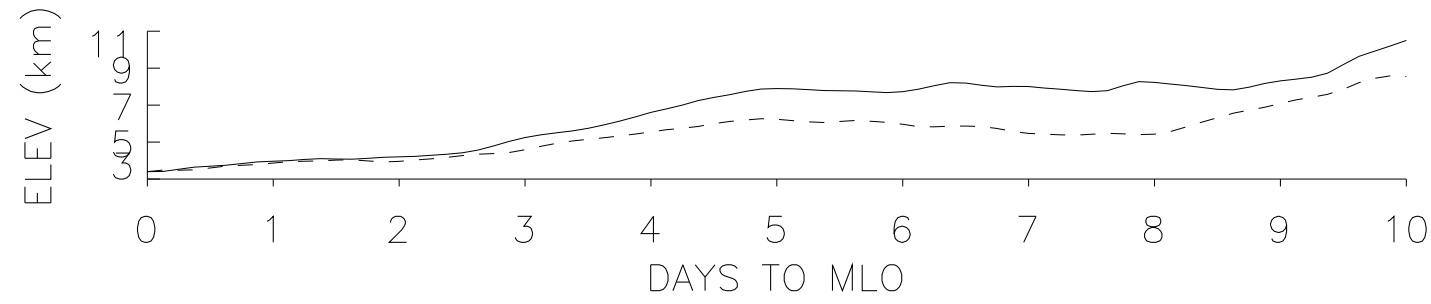
18UT

Day	km	hPa	C
0	3.4	679	6
1	3.9	635	4
2	4.3	607	1
3	5.9	494	-14
4	7.8	373	-30
5	6.9	417	-24
6	7.2	409	-27
7	6.7	441	-22
8	6.6	445	-22
9	7.5	392	-30
10	6.6	443	-24

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

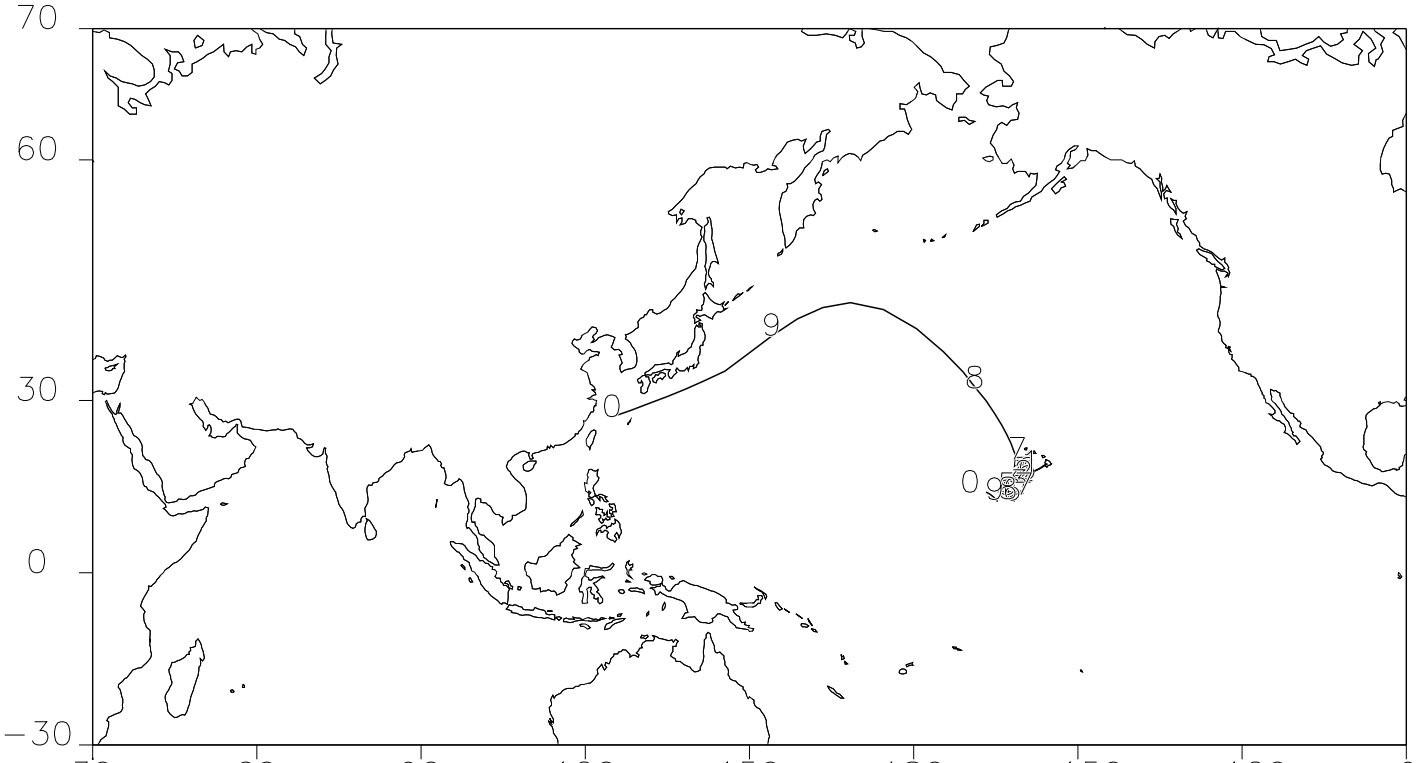
Day	km	hPa	C
0	3.4	678	7
1	4.0	632	4
2	4.2	612	1
3	5.2	538	−6
4	6.6	451	−18
5	7.9	371	−30
6	7.7	379	−28
7	8.0	367	−30
8	8.2	358	−31
9	8.3	356	−31
10	10.5	253	−54

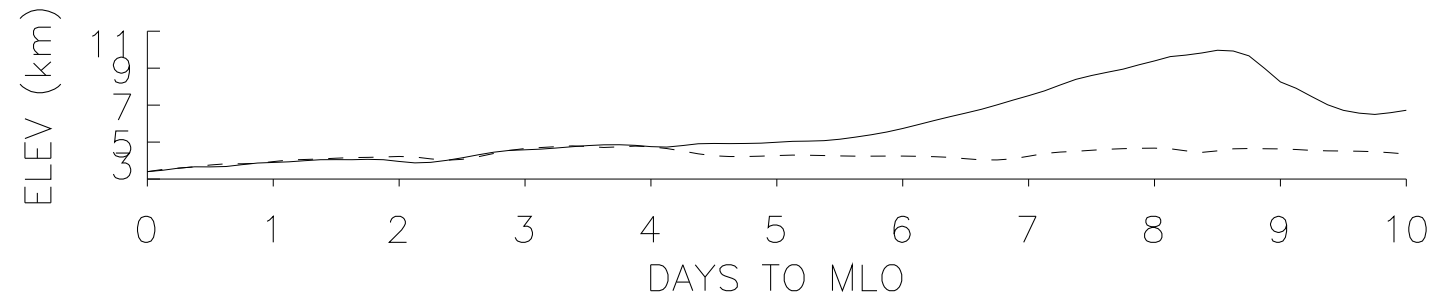
06UT

Day	km	hPa	C
0	3.4	680	7
1	3.9	640	4
2	4.0	631	4
3	4.6	585	−1
4	5.6	519	−8
5	6.2	477	−13
6	6.0	493	−11
7	5.5	526	−5
8	5.4	529	−3
9	7.1	426	−16
10	8.5	343	−32

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

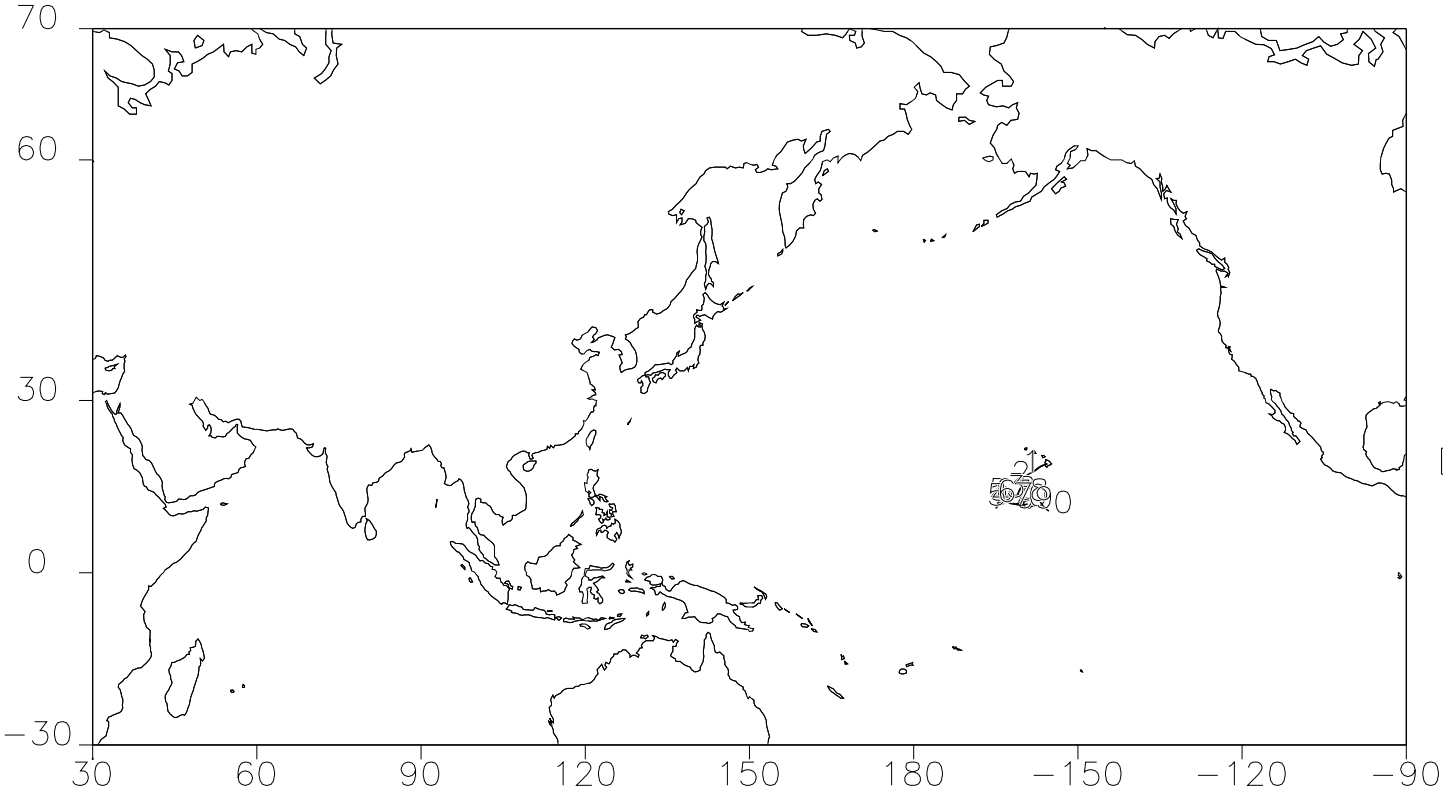
Day	km	hPa	C
0	3.4	679	7
1	3.9	637	4
2	4.0	632	3
3	4.6	585	−1
4	4.8	573	0
5	5.0	558	−2
6	5.7	509	−5
7	7.5	402	−19
8	9.4	303	−39
9	8.3	350	−31
10	6.7	444	−14

18UT

Day	km	hPa	C
0	3.4	680	9
1	3.9	635	3
2	4.2	612	2
3	4.7	580	−2
4	4.7	574	−2
5	4.3	610	2
6	4.2	614	3
7	4.2	614	3
8	4.7	581	0
9	4.6	584	1
10	4.4	606	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

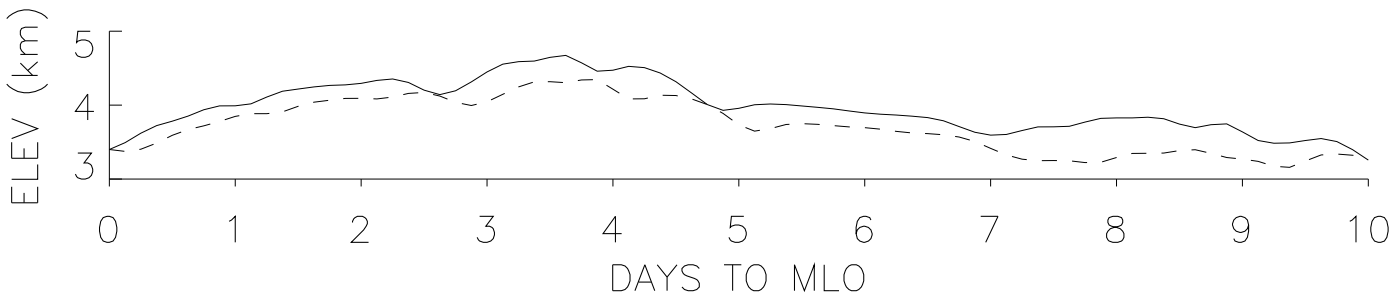


00UT

Day	km	hPa	C
0	3.4	679	8
1	4.0	631	4
2	4.3	606	2
3	4.4	594	0
4	4.5	593	0
5	4.0	634	5
6	3.9	640	5
7	3.6	663	7
8	3.8	644	5
9	3.6	659	7
10	3.3	690	9

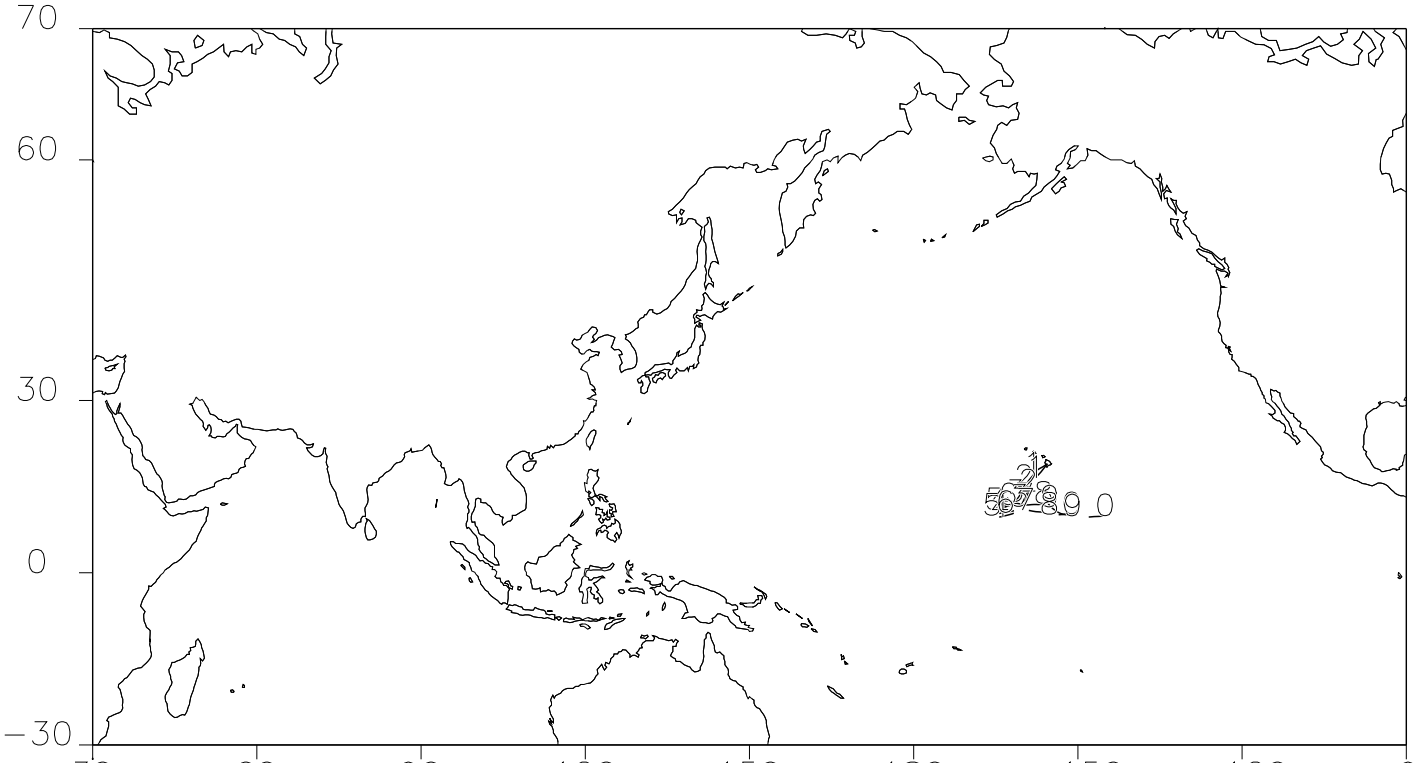
06UT

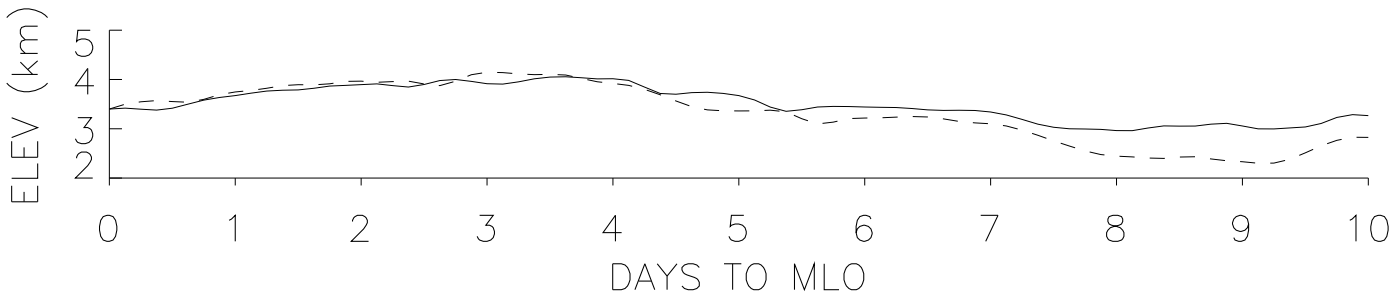
Day	km	hPa	C
0	3.4	680	8
1	3.8	643	5
2	4.1	622	3
3	4.0	624	3
4	4.2	613	1
5	3.7	651	6
6	3.7	656	6
7	3.4	678	8
8	3.3	689	9
9	3.3	690	10
10	3.3	689	10



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

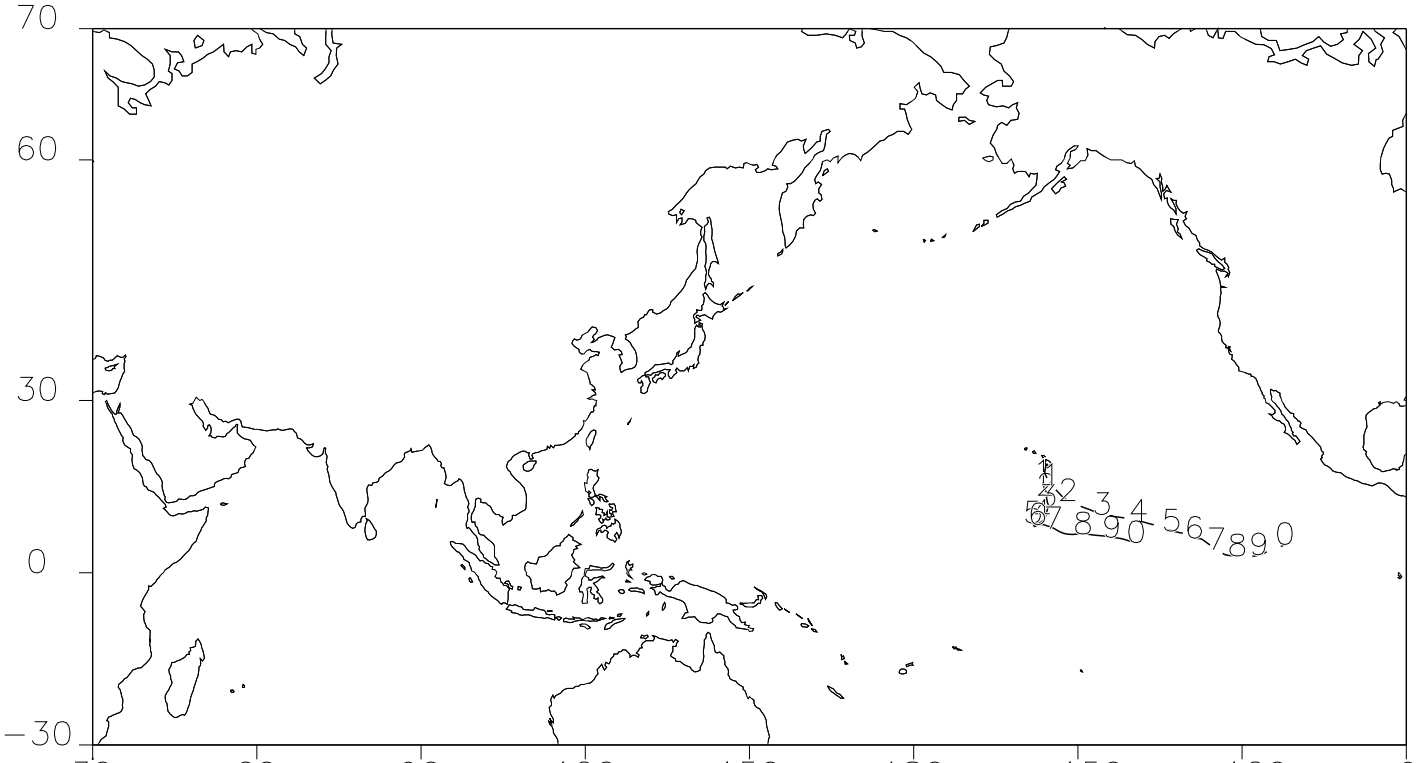
Day	km	hPa	C
0	3.4	679	7
1	3.7	657	6
2	3.9	638	4
3	3.9	636	3
4	4.0	628	3
5	3.7	656	6
6	3.4	676	8
7	3.3	685	8
8	3.0	715	11
9	3.1	707	10
10	3.3	689	8

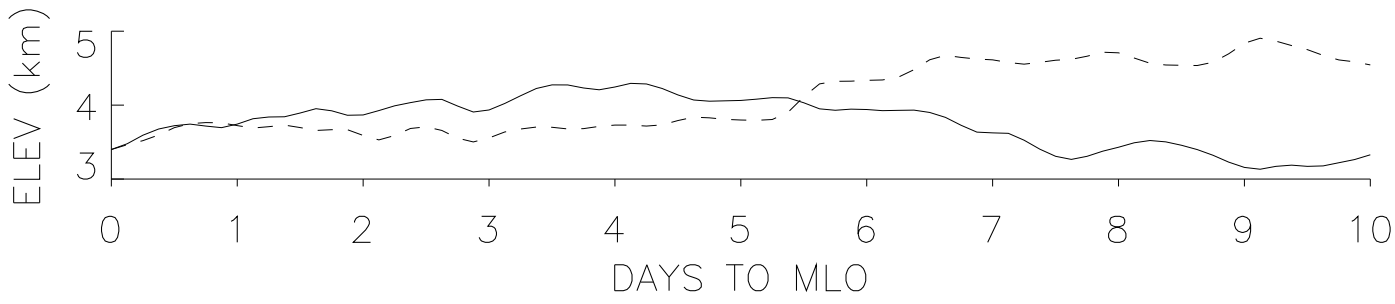
18UT

Day	km	hPa	C
0	3.4	681	8
1	3.7	652	7
2	4.0	634	4
3	4.1	618	2
4	3.9	636	4
5	3.4	681	8
6	3.2	694	9
7	3.1	705	10
8	2.4	762	12
9	2.3	773	13
10	2.8	728	10

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

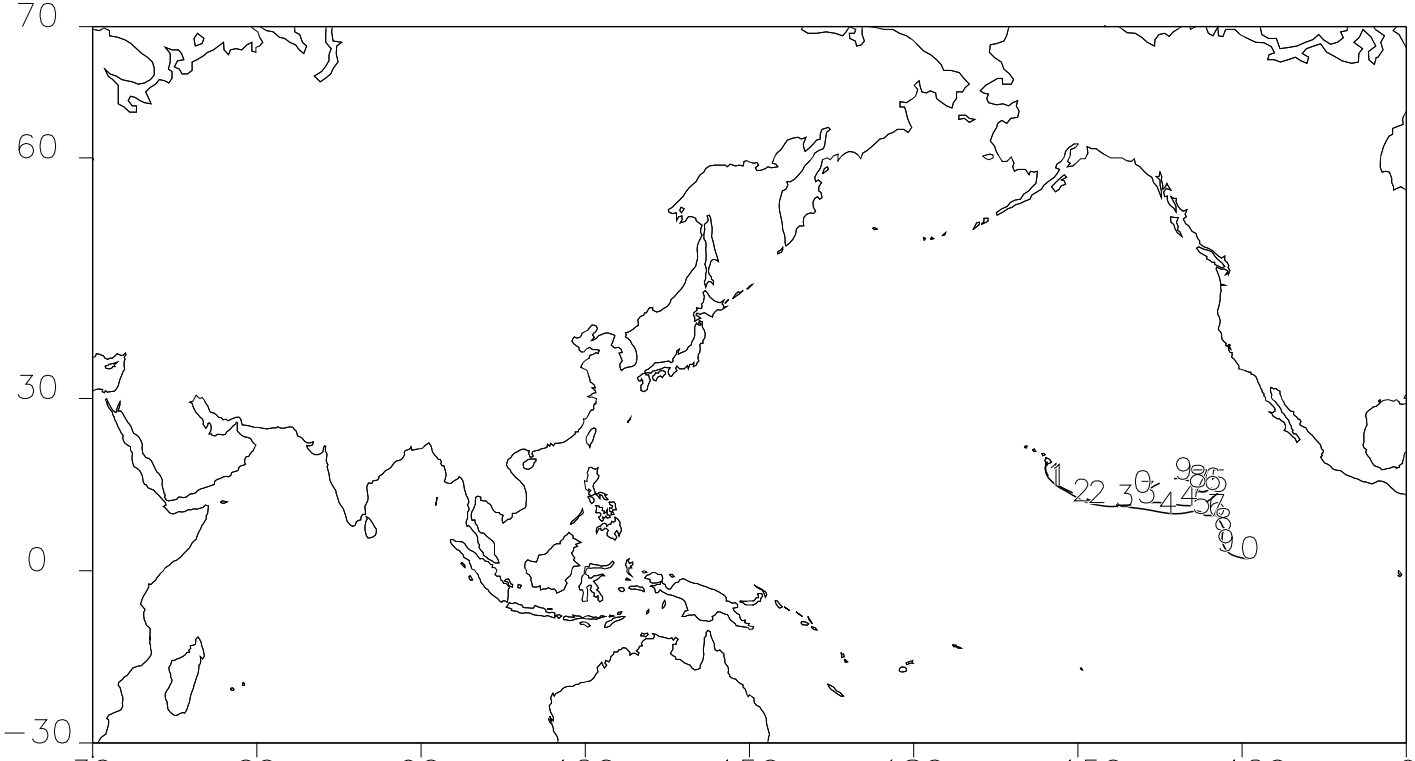
Day	km	hPa	C
0	3.4	680	8
1	3.7	651	6
2	3.9	641	6
3	3.9	634	6
4	4.2	610	4
5	4.1	624	5
6	3.9	635	5
7	3.6	661	8
8	3.4	675	9
9	3.2	698	12
10	3.3	683	10

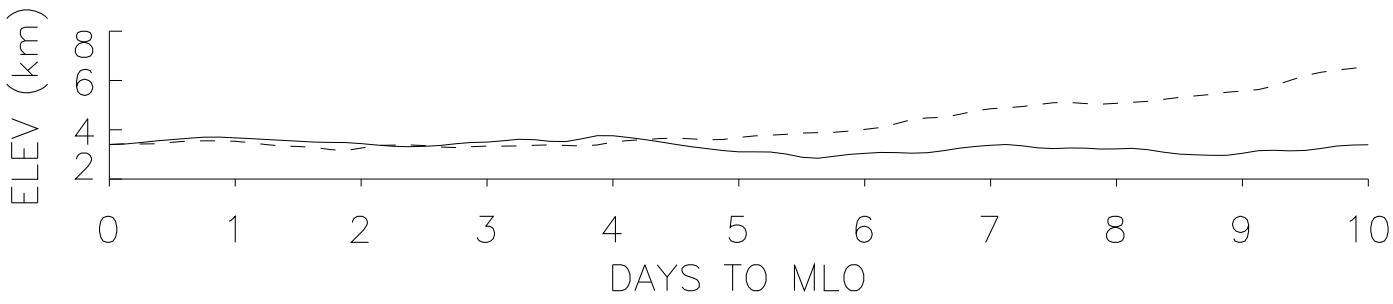
06UT

Day	km	hPa	C
0	3.4	681	8
1	3.7	654	8
2	3.6	665	9
3	3.6	666	9
4	3.7	652	7
5	3.8	647	8
6	4.3	606	4
7	4.6	586	2
8	4.7	580	2
9	4.8	571	1
10	4.5	591	3

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

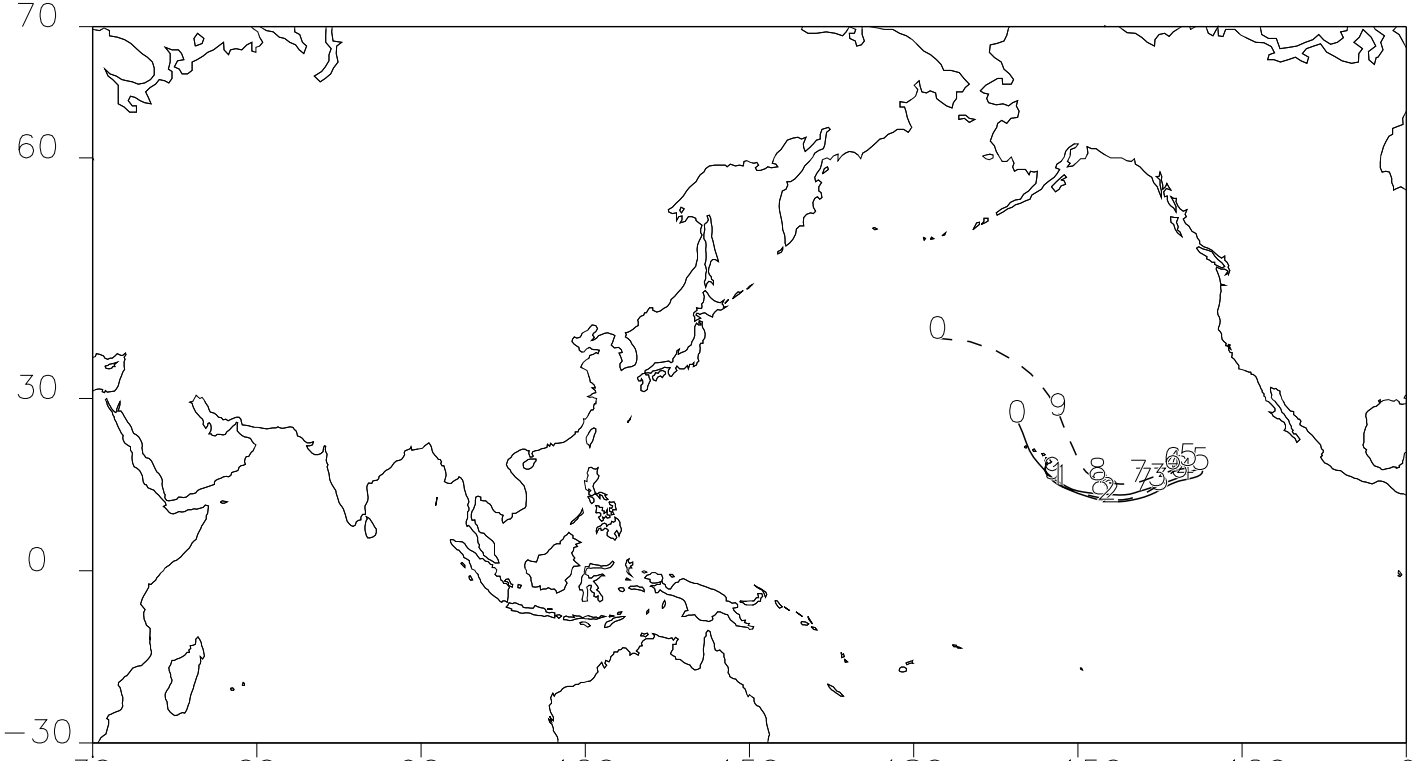
Day	km	hPa	C
0	3.4	680	7
1	3.7	657	7
2	3.4	676	9
3	3.5	670	9
4	3.8	649	7
5	3.1	701	12
6	3.0	707	11
7	3.4	679	7
8	3.2	692	8
9	3.0	707	10
10	3.4	678	8

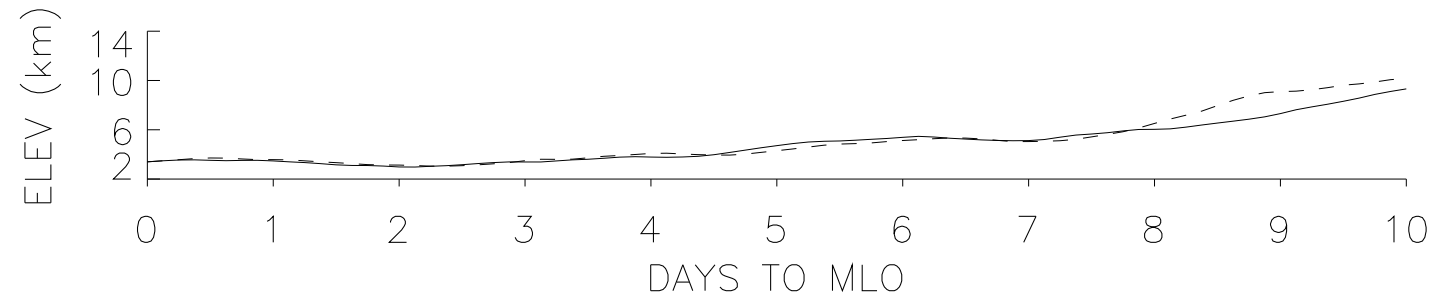
18UT

Day	km	hPa	C
0	3.4	682	7
1	3.5	670	9
2	3.3	693	11
3	3.3	686	11
4	3.5	673	10
5	3.7	657	8
6	4.0	630	7
7	4.9	569	0
8	5.1	554	−1
9	5.6	520	−5
10	6.6	456	−12

12UT – solid
18UT – dashed

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





00UT

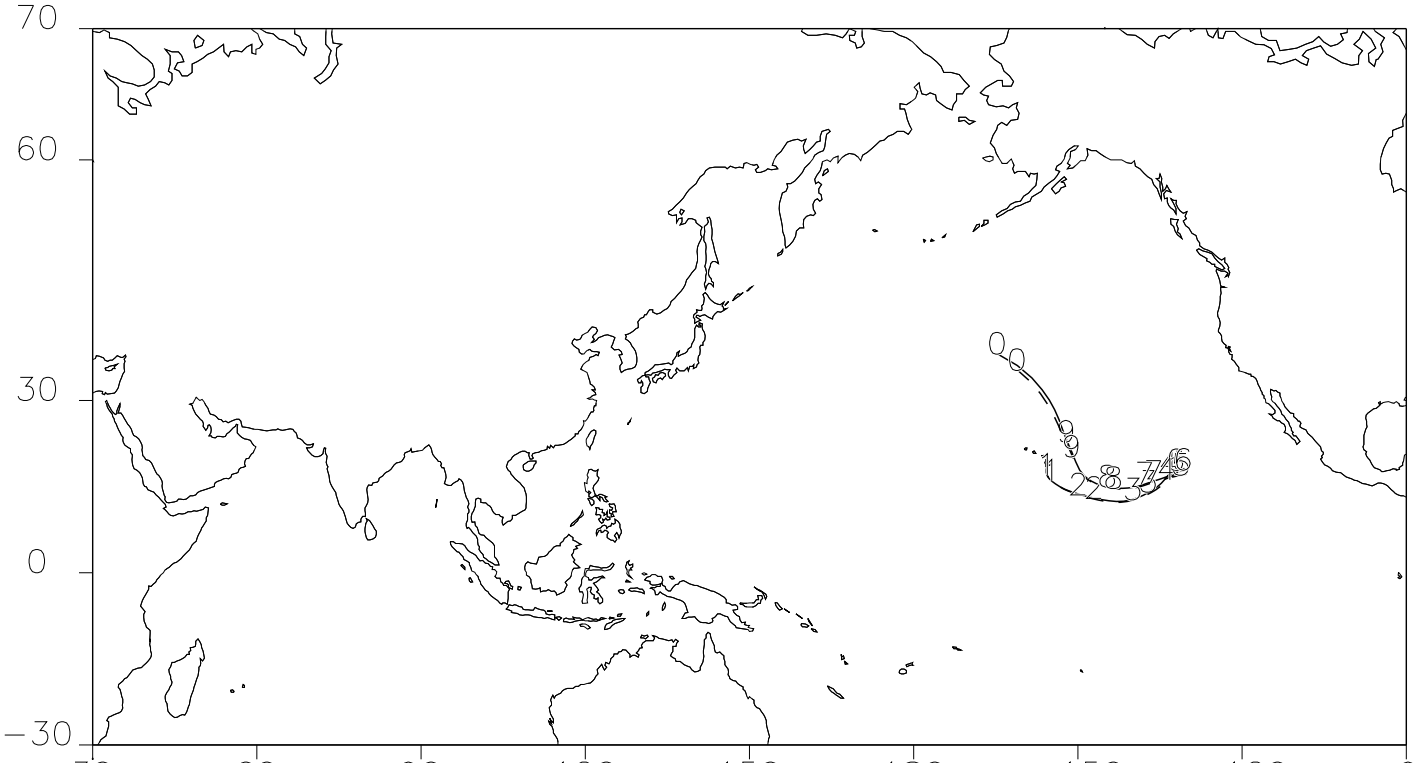
Day	km	hPa	C
0	3.4	681	7
1	3.5	674	9
2	3.0	714	13
3	3.4	681	11
4	3.8	648	7
5	4.7	578	1
6	5.4	529	−4
7	5.1	548	−1
8	6.0	488	−7
9	7.3	413	−18
10	9.3	310	−38

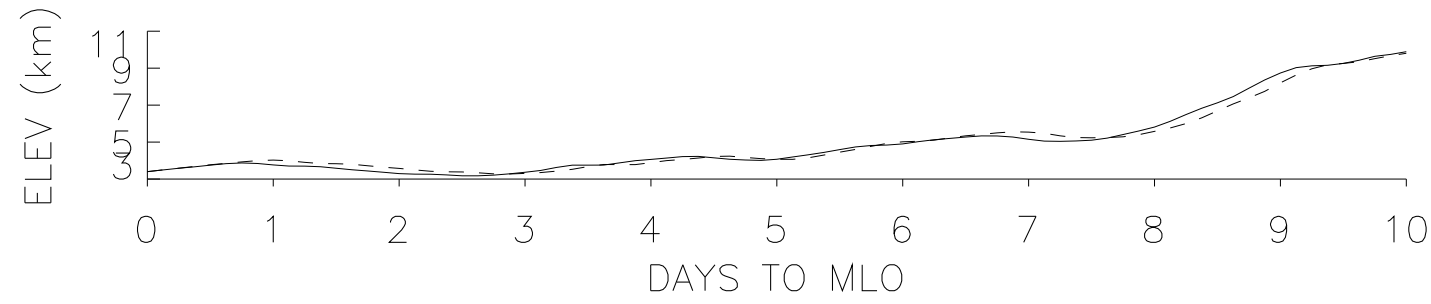
06UT

Day	km	hPa	C
0	3.4	682	6
1	3.6	666	8
2	3.1	703	13
3	3.5	674	9
4	4.1	628	5
5	4.3	609	3
6	5.1	549	−3
7	5.0	554	−1
8	6.5	459	−12
9	9.1	320	−36
10	10.2	266	−45

00UT − solid
06UT − dashed

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





12UT

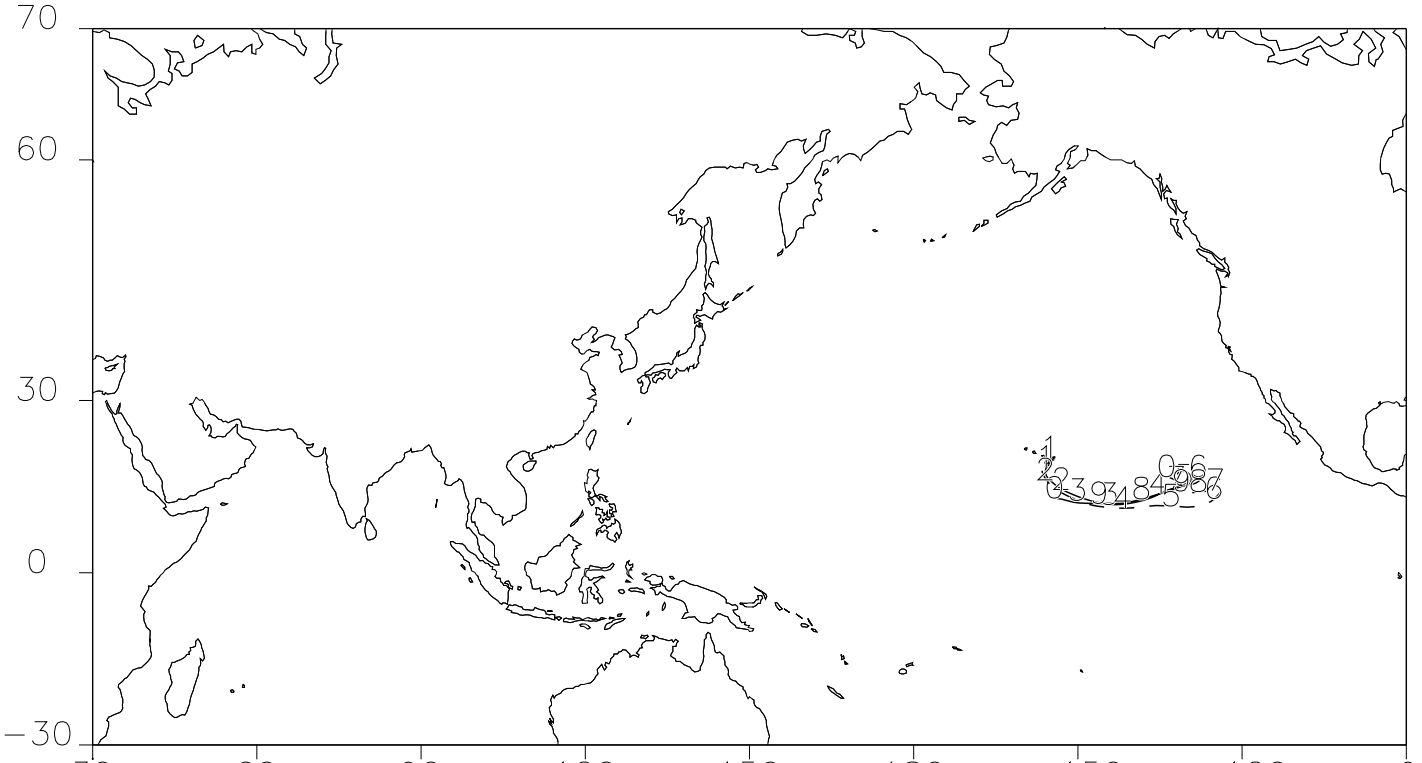
Day	km	hPa	C
0	3.4	682	7
1	3.8	650	5
2	3.3	688	11
3	3.4	682	10
4	4.1	627	5
5	4.1	626	4
6	4.9	563	−2
7	5.1	545	−2
8	5.8	501	−7
9	8.7	337	−32
10	9.9	280	−42

18UT

Day	km	hPa	C
0	3.4	682	7
1	4.0	631	3
2	3.6	667	9
3	3.3	689	11
4	3.9	643	7
5	4.1	628	5
6	5.0	557	−2
7	5.5	520	−5
8	5.6	518	−5
9	8.2	365	−26
10	9.8	287	−41

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

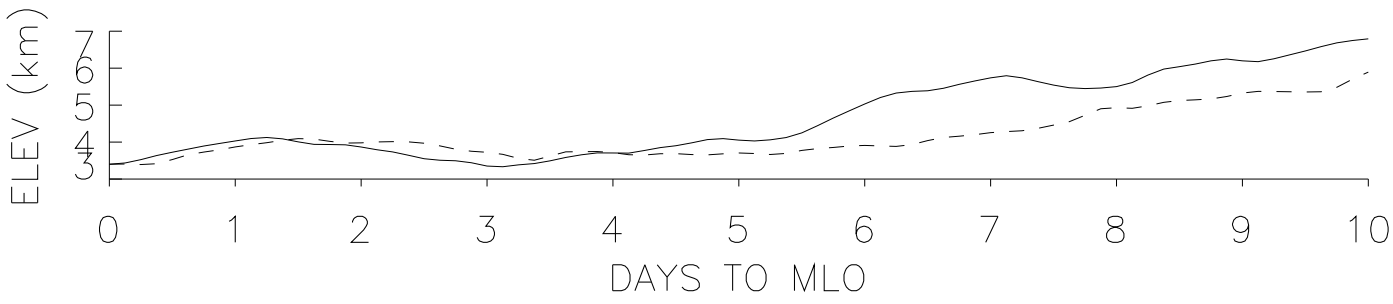


00UT

Day	km	hPa	C
0	3.4	682	6
1	4.0	630	2
2	3.9	642	6
3	3.4	683	11
4	3.7	655	8
5	4.1	627	6
6	5.0	556	−1
7	5.7	506	−6
8	5.5	523	−2
9	6.2	479	−8
10	6.8	443	−13

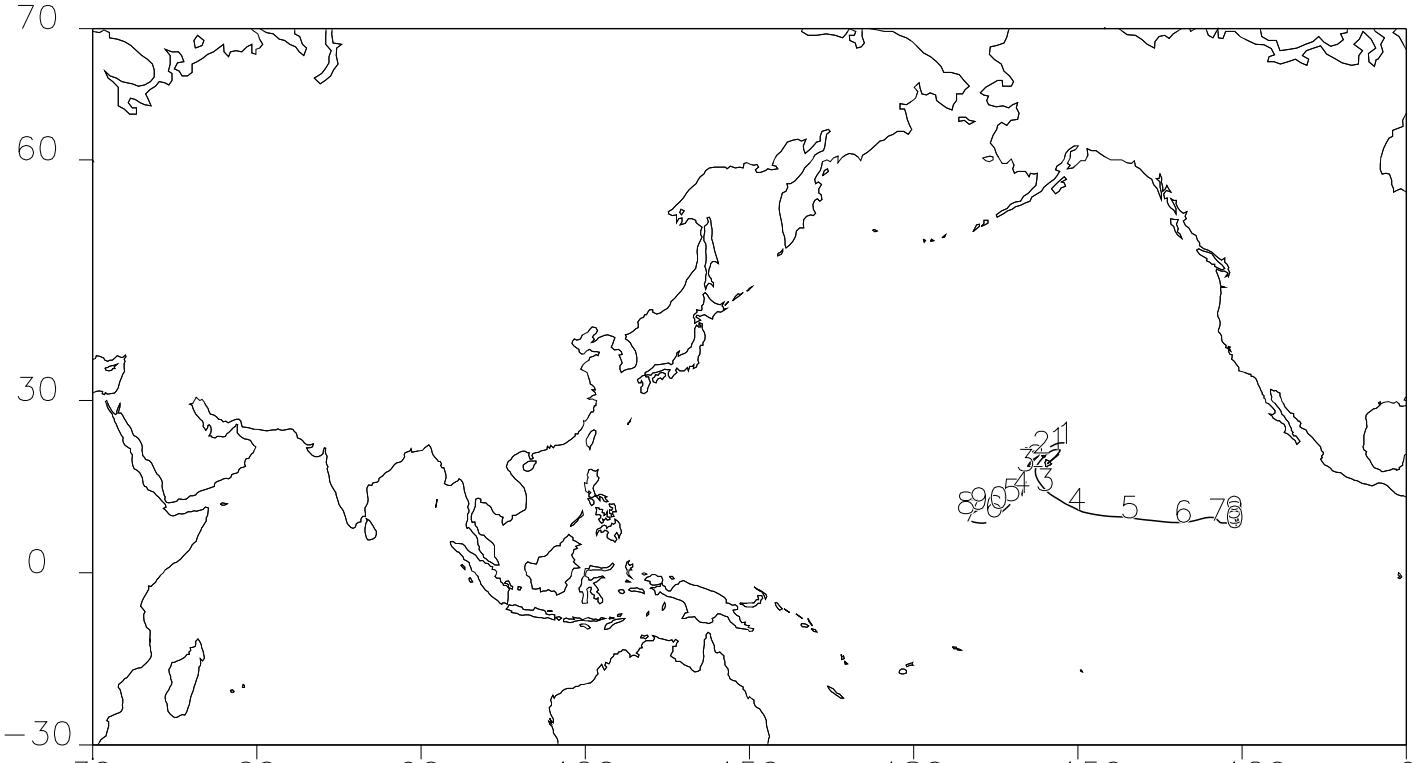
06UT

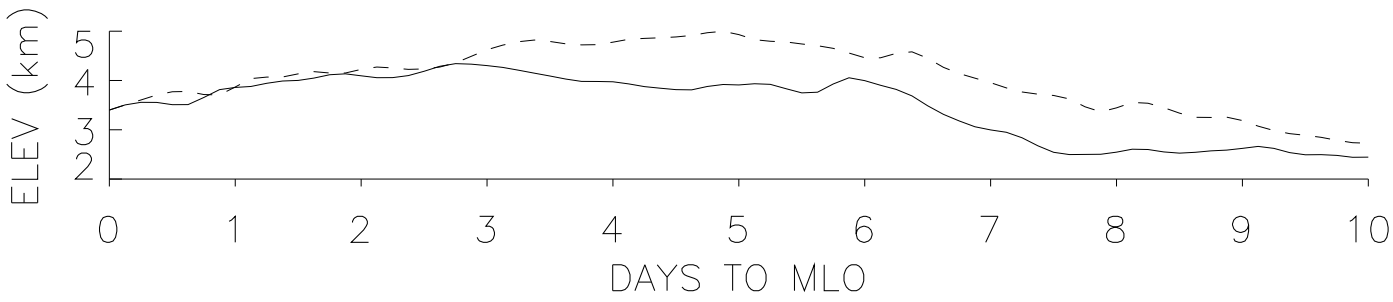
Day	km	hPa	C
0	3.4	683	5
1	3.9	644	2
2	4.0	634	5
3	3.7	654	9
4	3.7	655	8
5	3.7	656	8
6	3.9	639	7
7	4.3	612	6
8	4.9	563	0
9	5.3	537	−2
10	5.9	499	−6



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





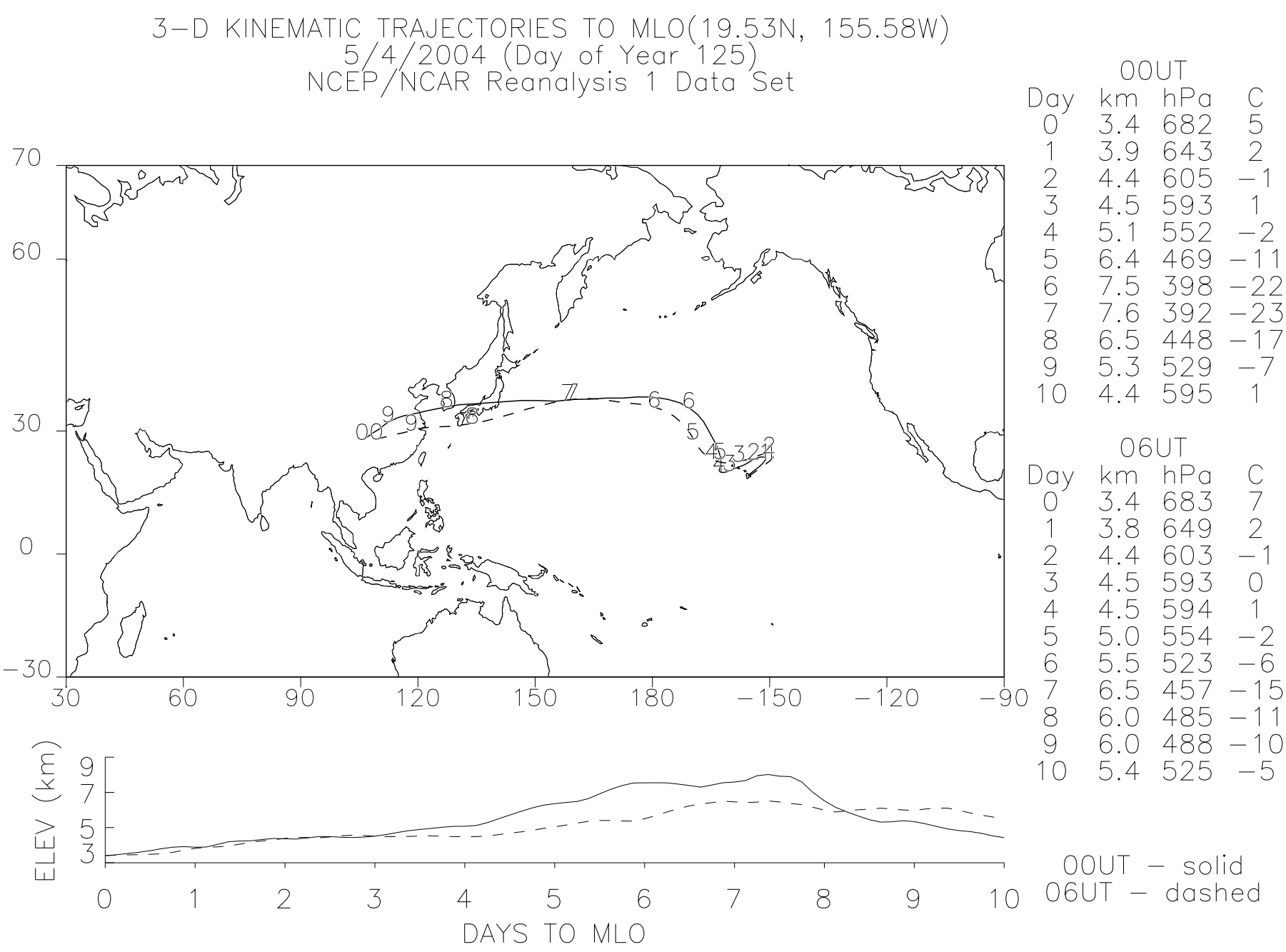
12UT

Day	km	hPa	C
0	3.4	681	5
1	3.9	644	3
2	4.1	624	2
3	4.3	608	3
4	4.0	633	5
5	3.9	637	6
6	4.0	630	6
7	3.0	711	12
8	2.5	750	12
9	2.6	743	10
10	2.4	761	11

18UT

Day	km	hPa	C
0	3.4	683	5
1	3.9	644	3
2	4.2	615	0
3	4.6	586	0
4	4.8	574	0
5	4.9	562	0
6	4.5	595	1
7	4.0	633	4
8	3.4	674	8
9	3.2	697	9
10	2.7	737	12

12UT – solid
18UT – dashed



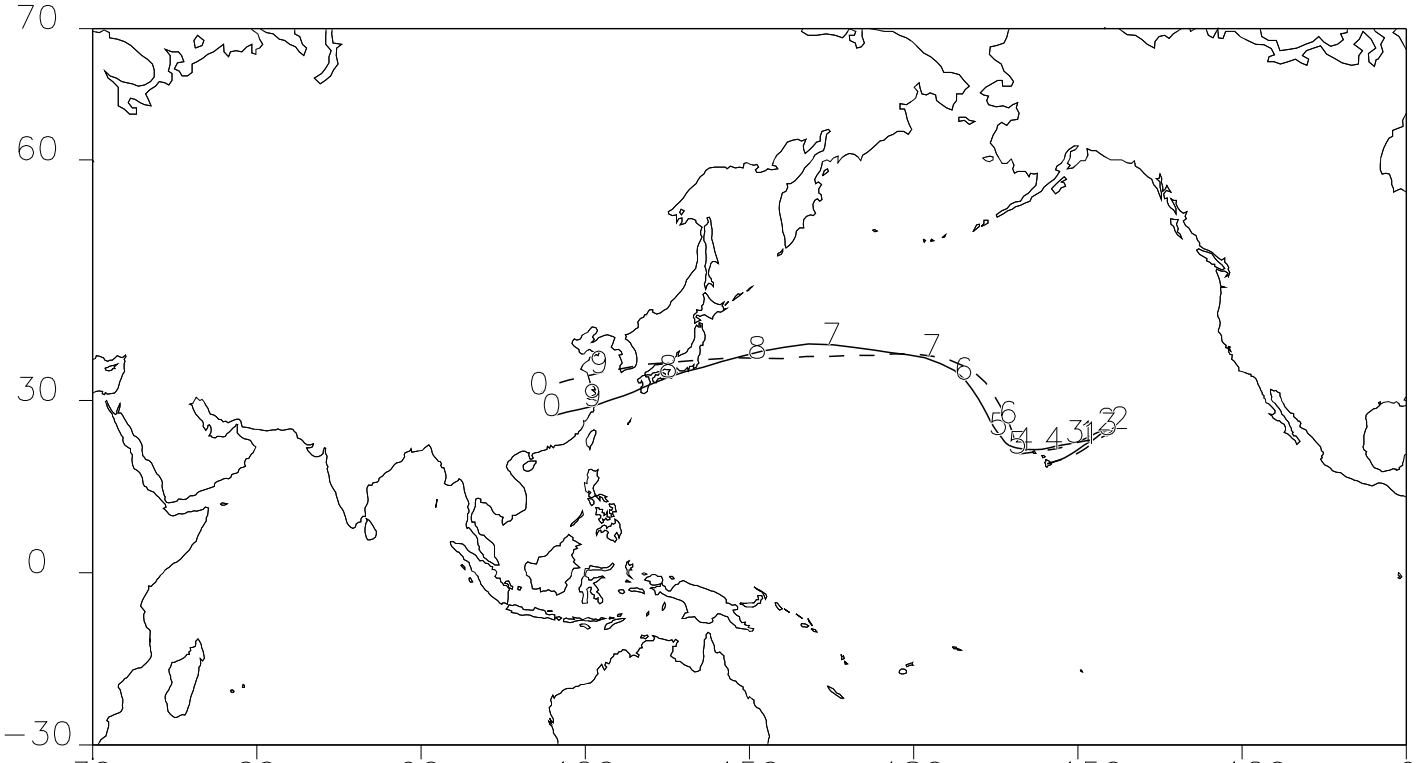
00UT

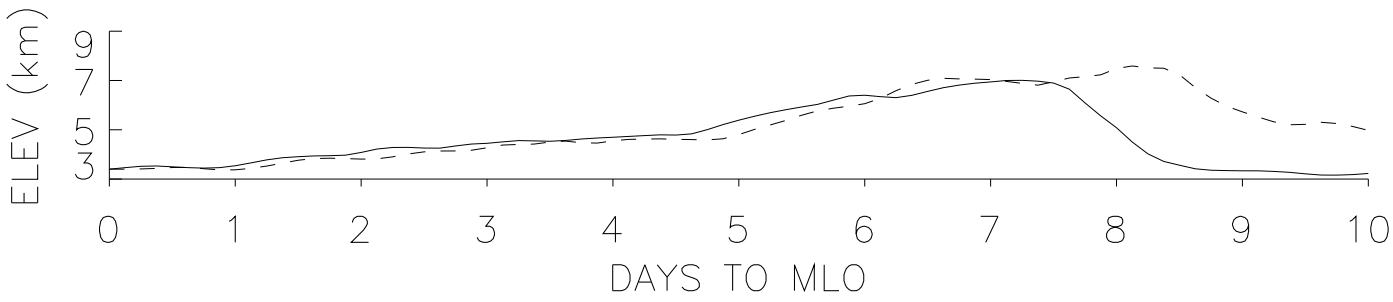
Day	km	hPa	C
0	3.4	682	5
1	3.9	643	2
2	4.4	605	−1
3	4.5	593	1
4	5.1	552	−2
5	6.4	469	−11
6	7.5	398	−22
7	7.6	392	−23
8	6.5	448	−17
9	5.3	529	−7
10	4.4	595	1

06UT

Day	km	hPa	C
0	3.4	683	7
1	3.8	649	2
2	4.4	603	−1
3	4.5	593	0
4	4.5	594	1
5	5.0	554	−2
6	5.5	523	−6
7	6.5	457	−15
8	6.0	485	−11
9	6.0	488	−10
10	5.4	525	−5

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





12UT

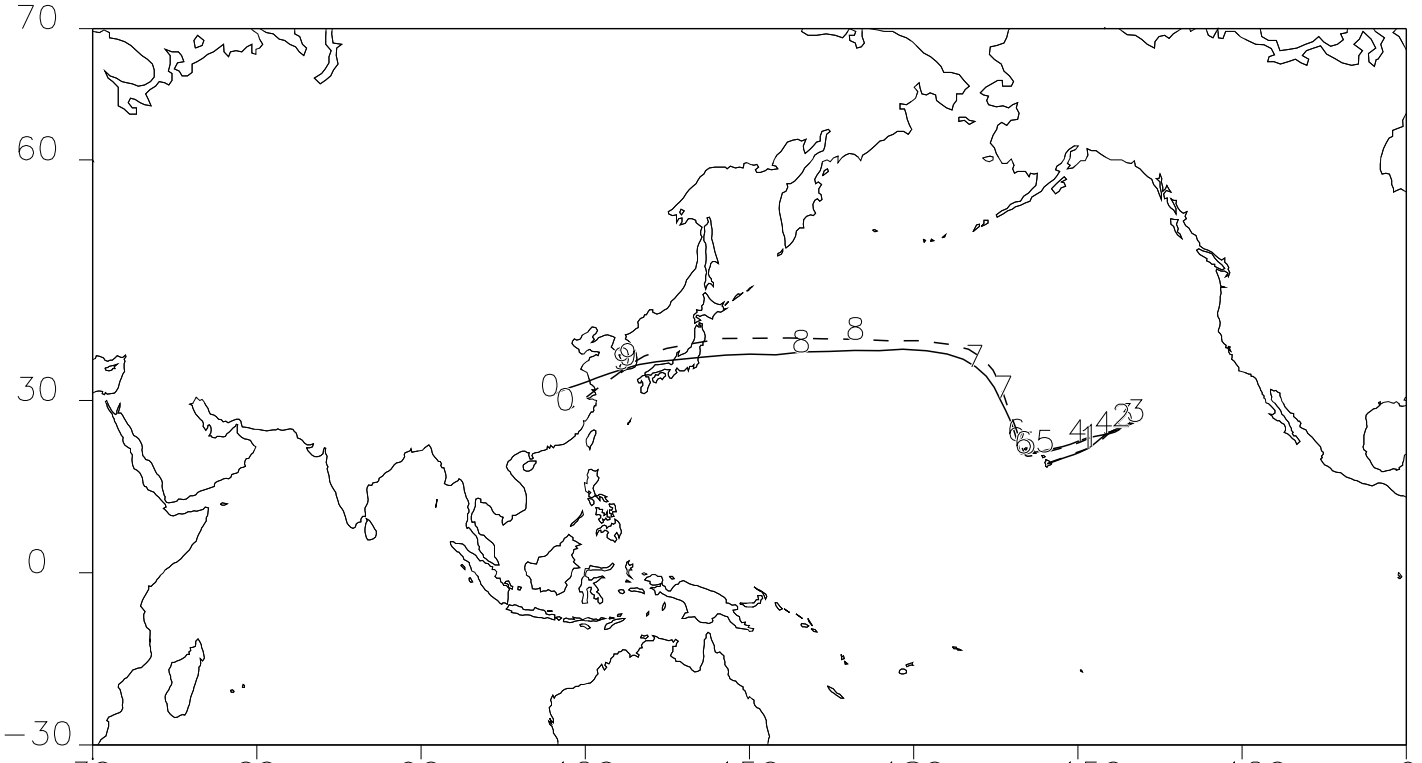
Day	km	hPa	C
0	3.4	680	6
1	3.5	670	3
2	4.1	626	1
3	4.4	597	0
4	4.7	578	0
5	5.4	530	−4
6	6.4	464	−12
7	6.9	428	−18
8	5.1	542	−6
9	3.3	682	6
10	3.2	691	7

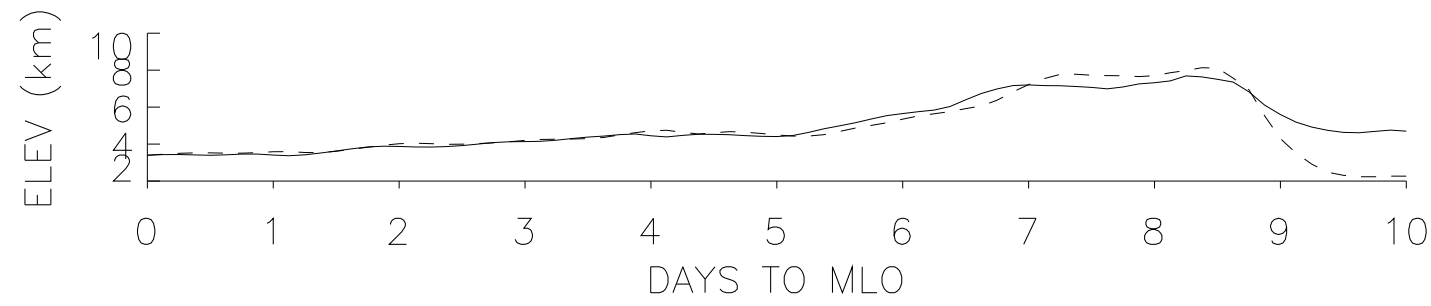
18UT

Day	km	hPa	C
0	3.4	682	6
1	3.4	685	5
2	3.8	649	3
3	4.3	613	1
4	4.5	590	0
5	4.8	571	0
6	6.1	486	−9
7	7.0	425	−19
8	7.5	395	−22
9	5.7	500	−11
10	5.0	555	−5

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

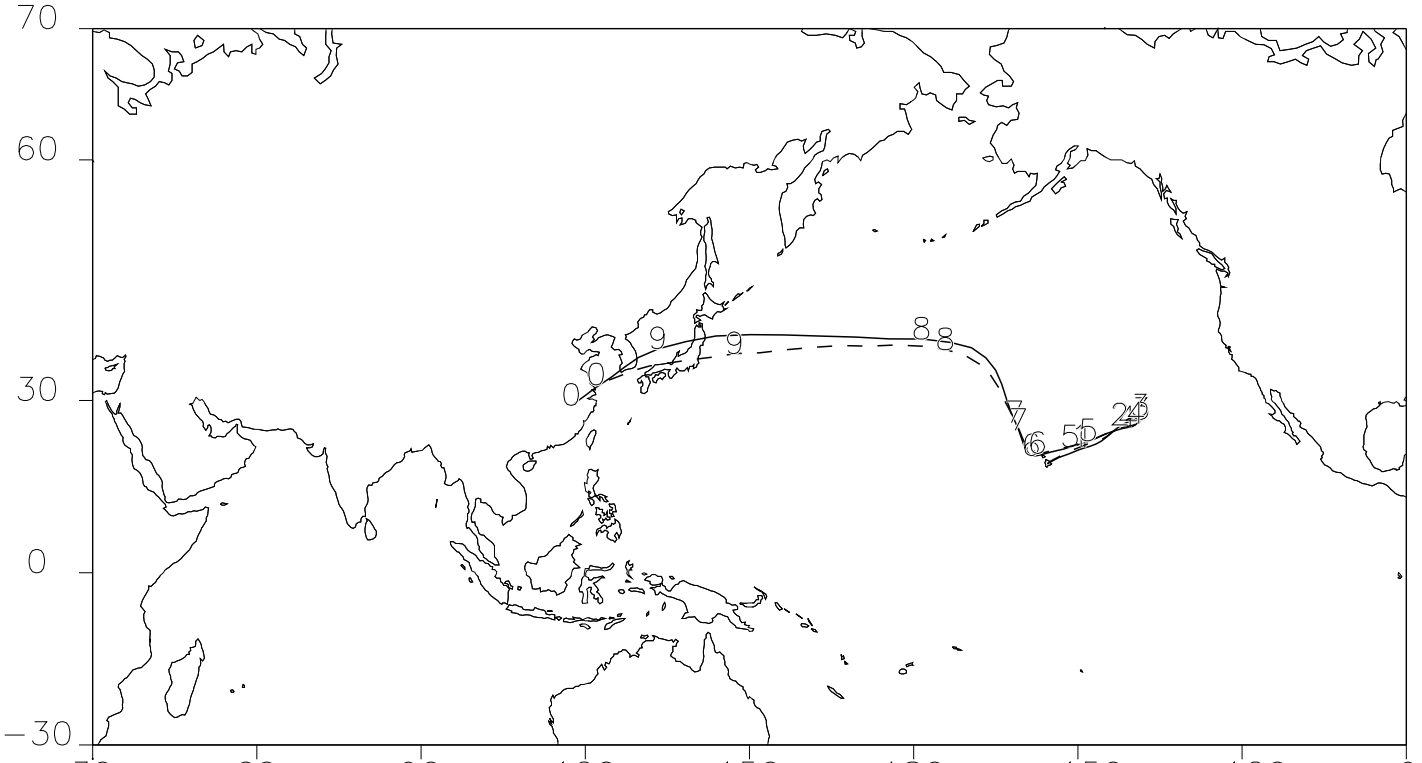
Day	km	hPa	C
0	3.4	681	6
1	3.4	681	5
2	3.9	643	2
3	4.1	623	0
4	4.4	597	0
5	4.4	599	2
6	5.7	512	-6
7	7.2	416	-21
8	7.3	405	-21
9	5.6	506	-10
10	4.7	574	-3

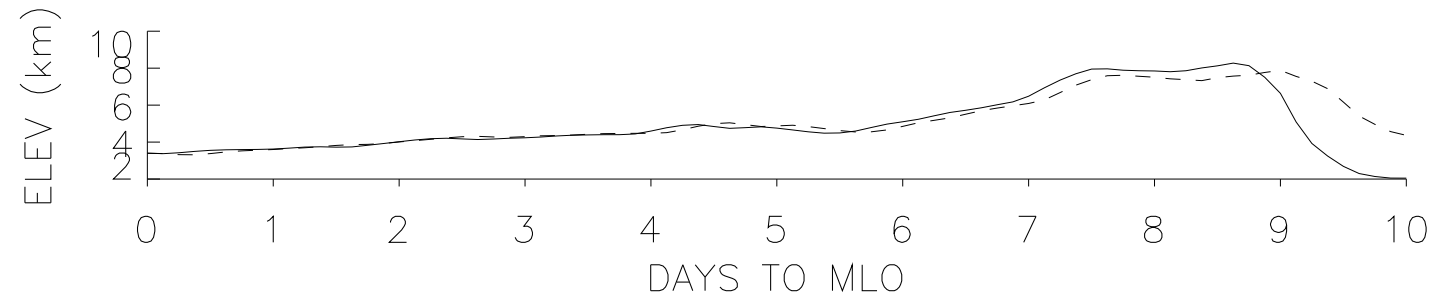
06UT

Day	km	hPa	C
0	3.4	680	6
1	3.6	667	5
2	4.0	632	2
3	4.2	619	1
4	4.7	578	-2
5	4.5	593	1
6	5.3	533	-4
7	7.2	414	-20
8	7.7	383	-24
9	4.3	596	-2
10	2.3	775	11

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

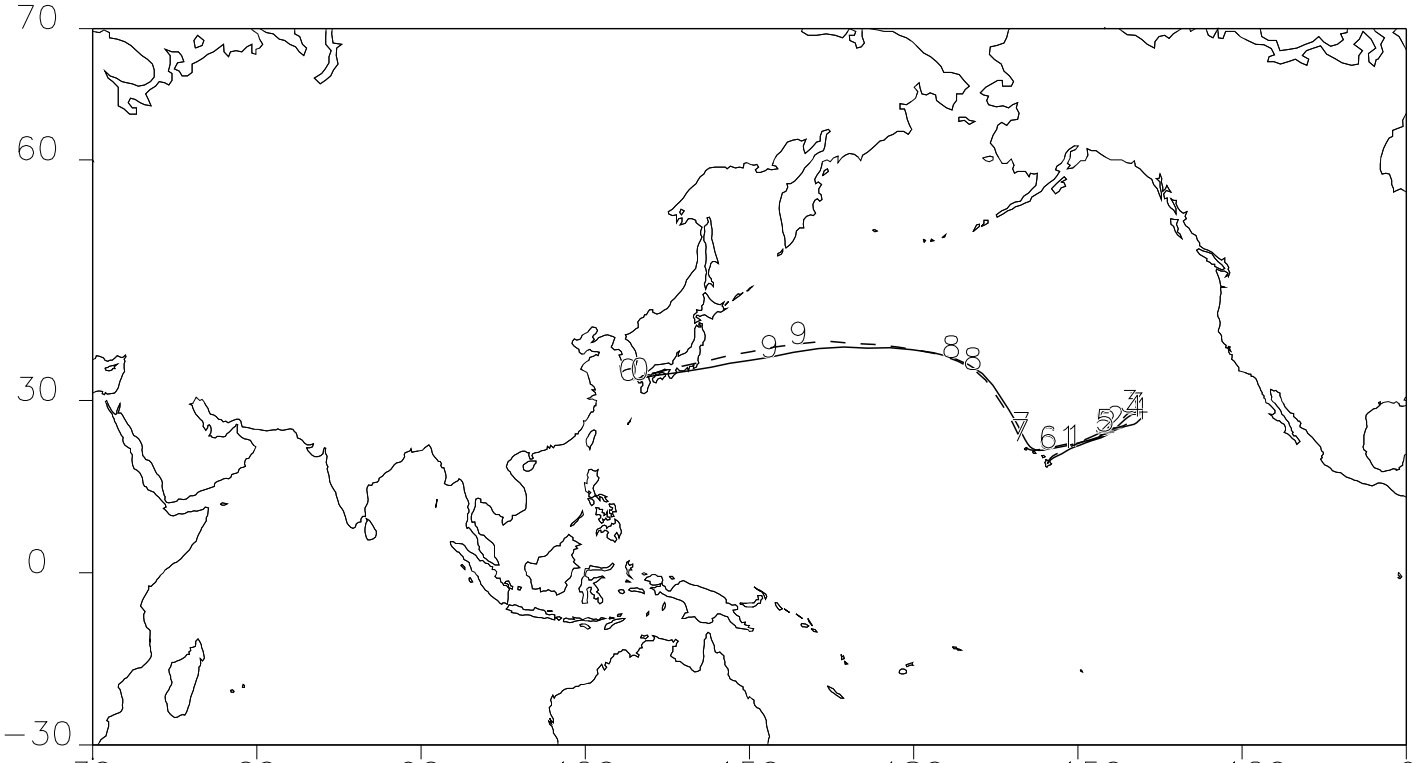
Day	km	hPa	C
0	3.4	679	5
1	3.6	662	5
2	4.0	632	2
3	4.2	615	1
4	4.6	586	−1
5	4.8	573	−2
6	5.1	550	−2
7	6.5	457	−15
8	7.8	377	−25
9	6.6	436	−17
10	2.1	794	12

18UT

Day	km	hPa	C
0	3.4	679	6
1	3.6	665	6
2	4.0	633	2
3	4.3	612	2
4	4.5	598	0
5	4.9	567	−2
6	4.9	568	−1
7	6.1	484	−9
8	7.5	397	−23
9	7.9	373	−25
10	4.4	598	−1

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

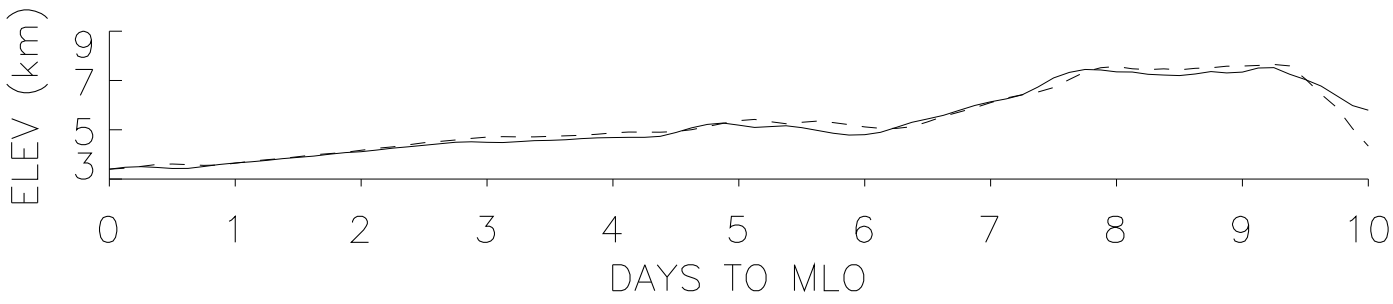


00UT

Day	km	hPa	C
0	3.4	677	6
1	3.7	660	5
2	4.1	625	2
3	4.5	596	0
4	4.7	582	−1
5	5.2	544	−4
6	4.8	571	0
7	6.1	481	−9
8	7.4	407	−19
9	7.3	404	−21
10	5.8	496	−11

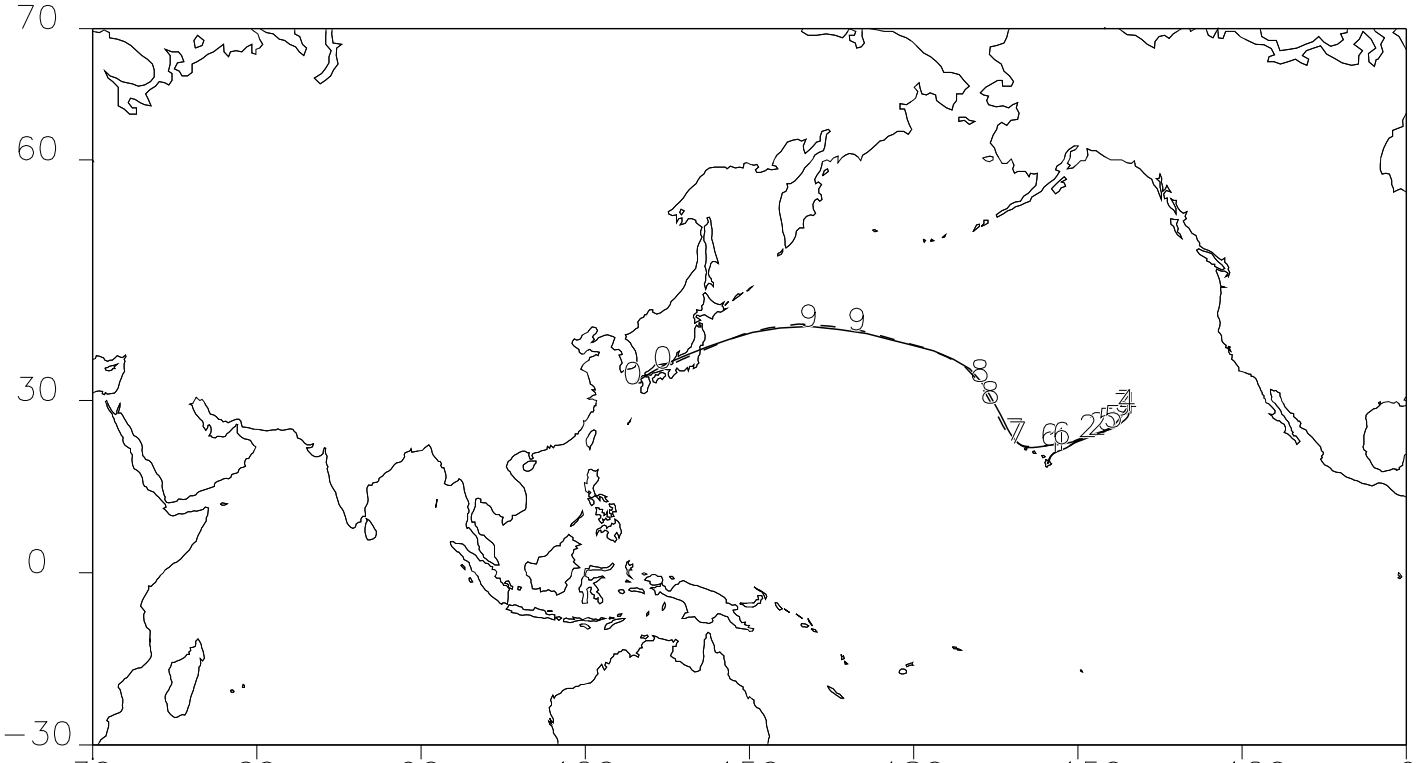
06UT

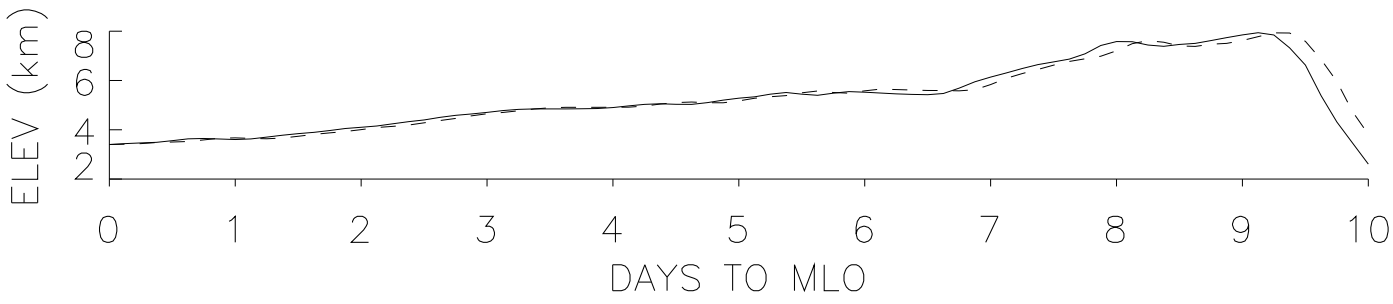
Day	km	hPa	C
0	3.4	677	5
1	3.6	660	5
2	4.2	621	1
3	4.7	582	−1
4	4.9	569	−2
5	5.4	532	−5
6	5.1	548	−3
7	6.1	483	−9
8	7.6	396	−21
9	7.6	390	−22
10	4.3	597	−2



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

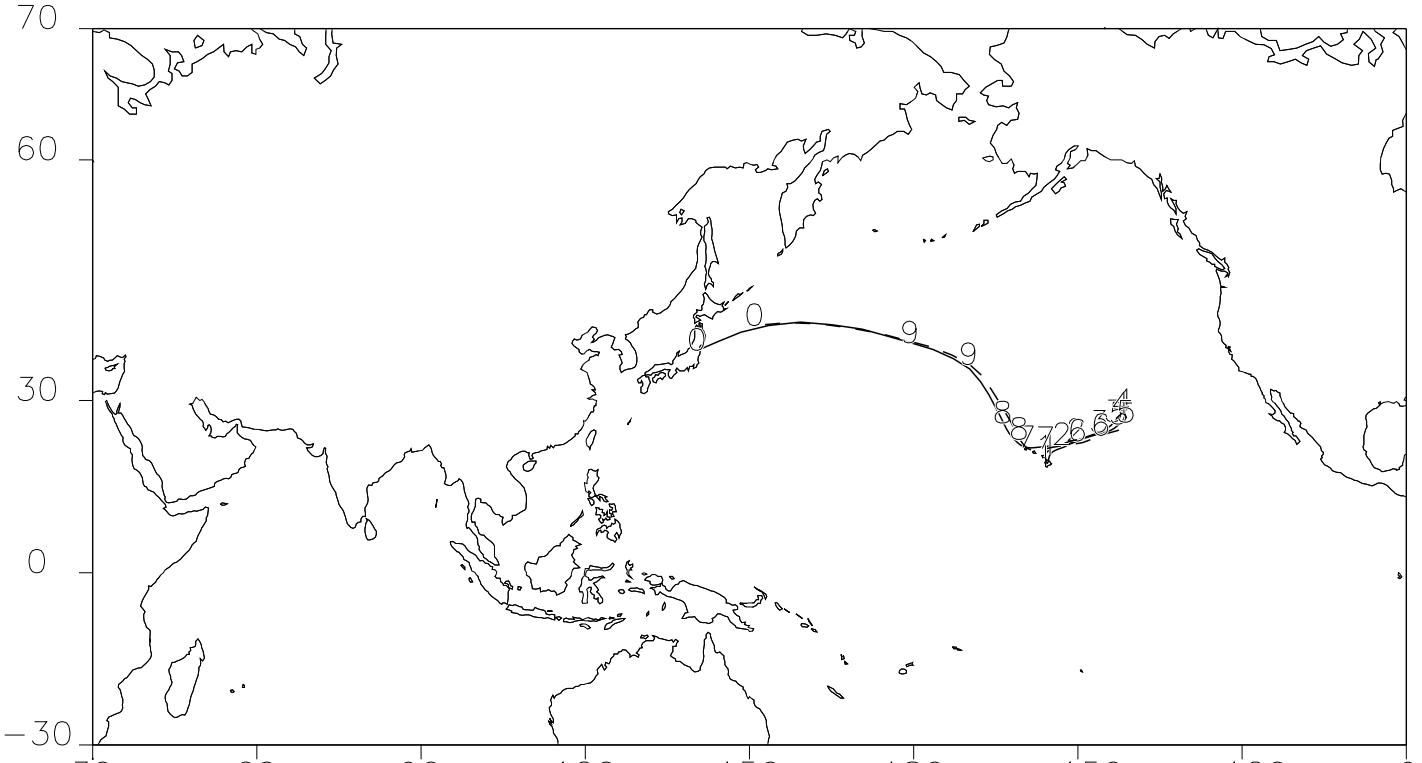
Day	km	hPa	C
0	3.4	676	4
1	3.6	662	4
2	4.1	625	2
3	4.7	581	−2
4	4.9	566	−3
5	5.3	537	−4
6	5.5	520	−6
7	6.1	482	−9
8	7.6	395	−22
9	7.8	374	−24
10	2.6	734	8

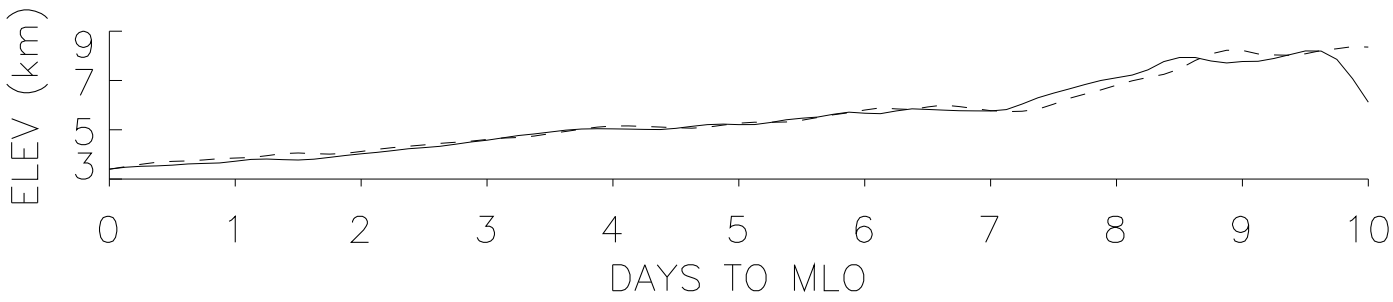
18UT

Day	km	hPa	C
0	3.4	677	5
1	3.7	657	4
2	4.0	633	4
3	4.6	586	−1
4	4.9	566	−2
5	5.2	547	−4
6	5.6	518	−6
7	5.8	501	−7
8	7.2	418	−18
9	7.6	387	−21
10	3.8	632	3

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

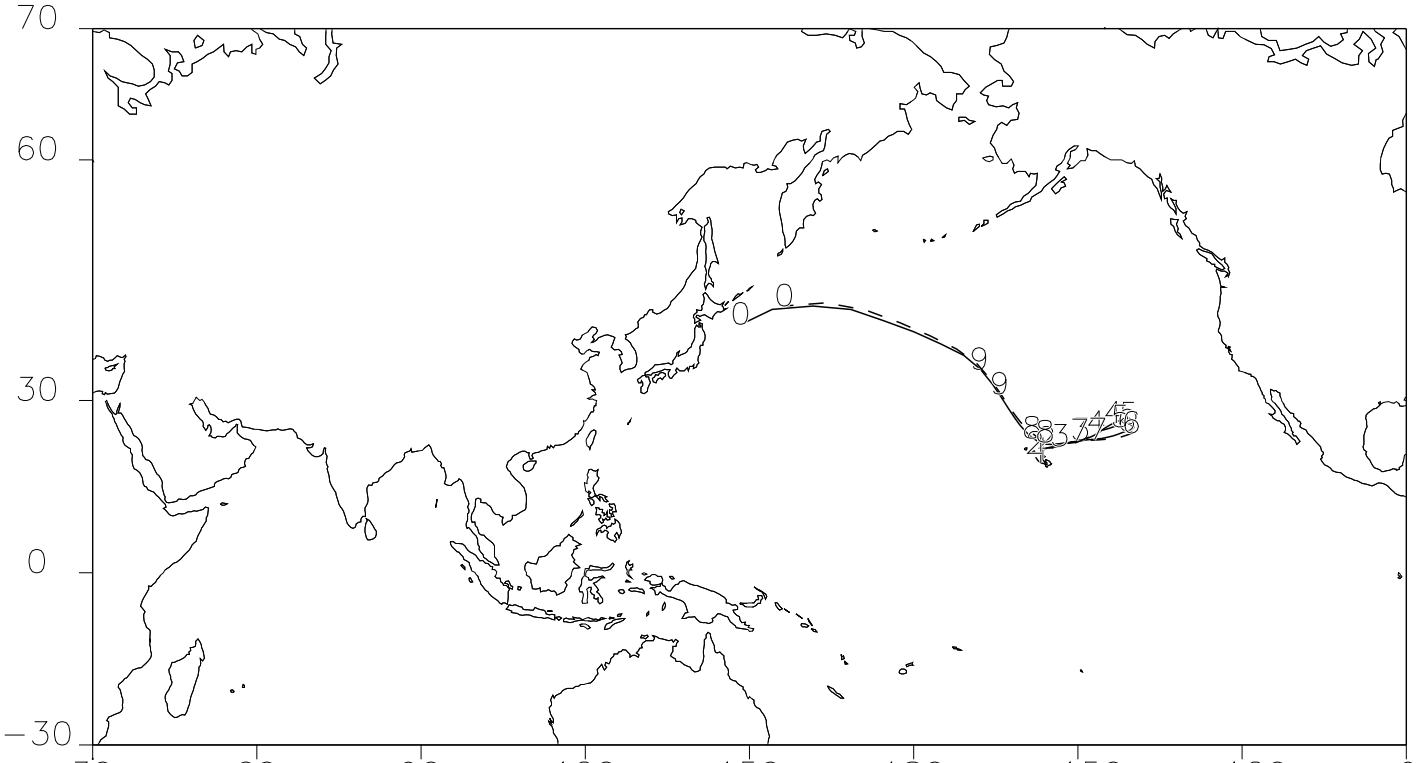
Day	km	hPa	C
0	3.4	677	5
1	3.7	651	3
2	4.0	631	3
3	4.6	591	−1
4	5.0	557	−4
5	5.2	544	−5
6	5.7	511	−6
7	5.8	505	−6
8	7.1	424	−16
9	7.8	383	−22
10	6.1	469	−13

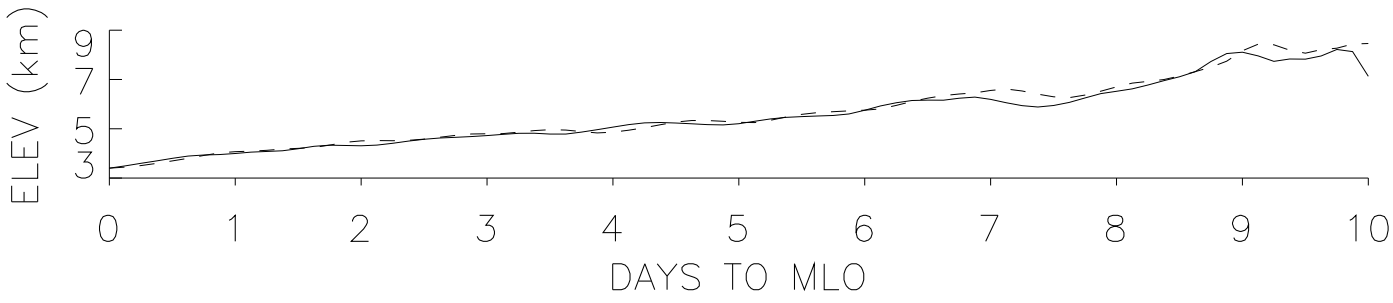
06UT

Day	km	hPa	C
0	3.4	677	5
1	3.9	640	2
2	4.1	623	1
3	4.6	588	−2
4	5.2	549	−5
5	5.3	541	−5
6	5.8	503	−7
7	5.8	504	−7
8	6.8	441	−14
9	8.2	362	−26
10	8.4	345	−30

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

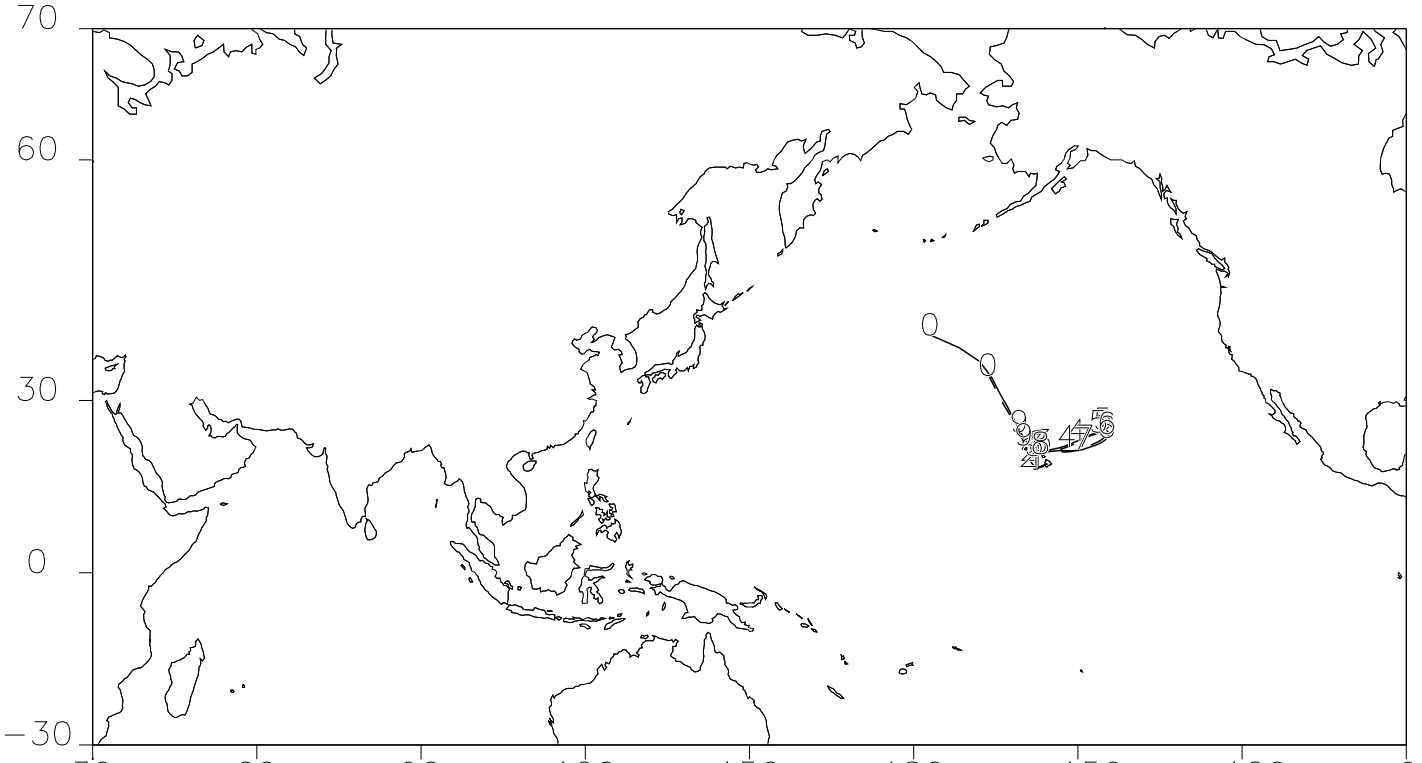
Day	km	hPa	C
0	3.4	676	5
1	4.0	628	1
2	4.3	607	−1
3	4.7	578	−3
4	5.1	554	−5
5	5.2	544	−5
6	5.8	506	−7
7	6.2	477	−11
8	6.5	457	−12
9	8.1	366	−26
10	7.1	409	−20

18UT

Day	km	hPa	C
0	3.4	677	5
1	4.1	623	1
2	4.5	592	−2
3	4.8	574	−3
4	4.9	570	−4
5	5.3	541	−5
6	5.8	508	−9
7	6.6	457	−13
8	6.7	447	−13
9	8.2	365	−26
10	8.5	338	−32

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

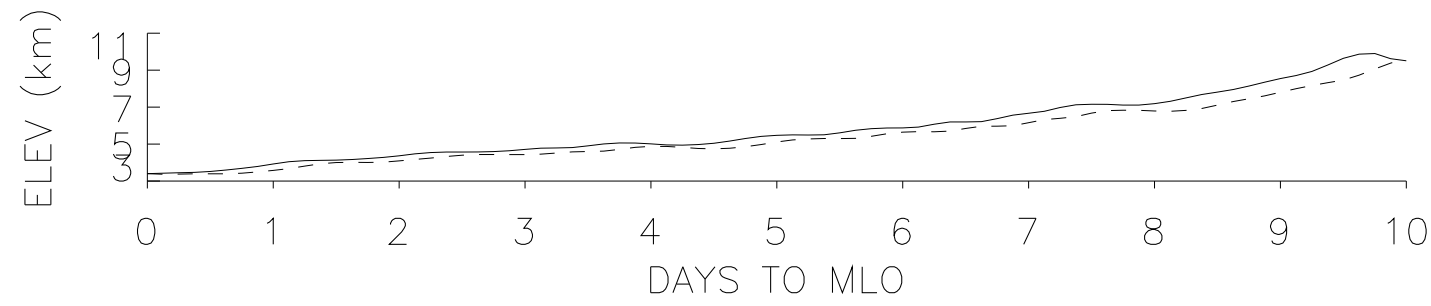


00UT

Day	km	hPa	C
0	3.4	677	5
1	3.9	635	3
2	4.4	601	0
3	4.7	579	-2
4	5.0	559	-5
5	5.5	526	-7
6	5.9	499	-10
7	6.7	450	-13
8	7.2	420	-17
9	8.5	348	-28
10	9.5	298	-36

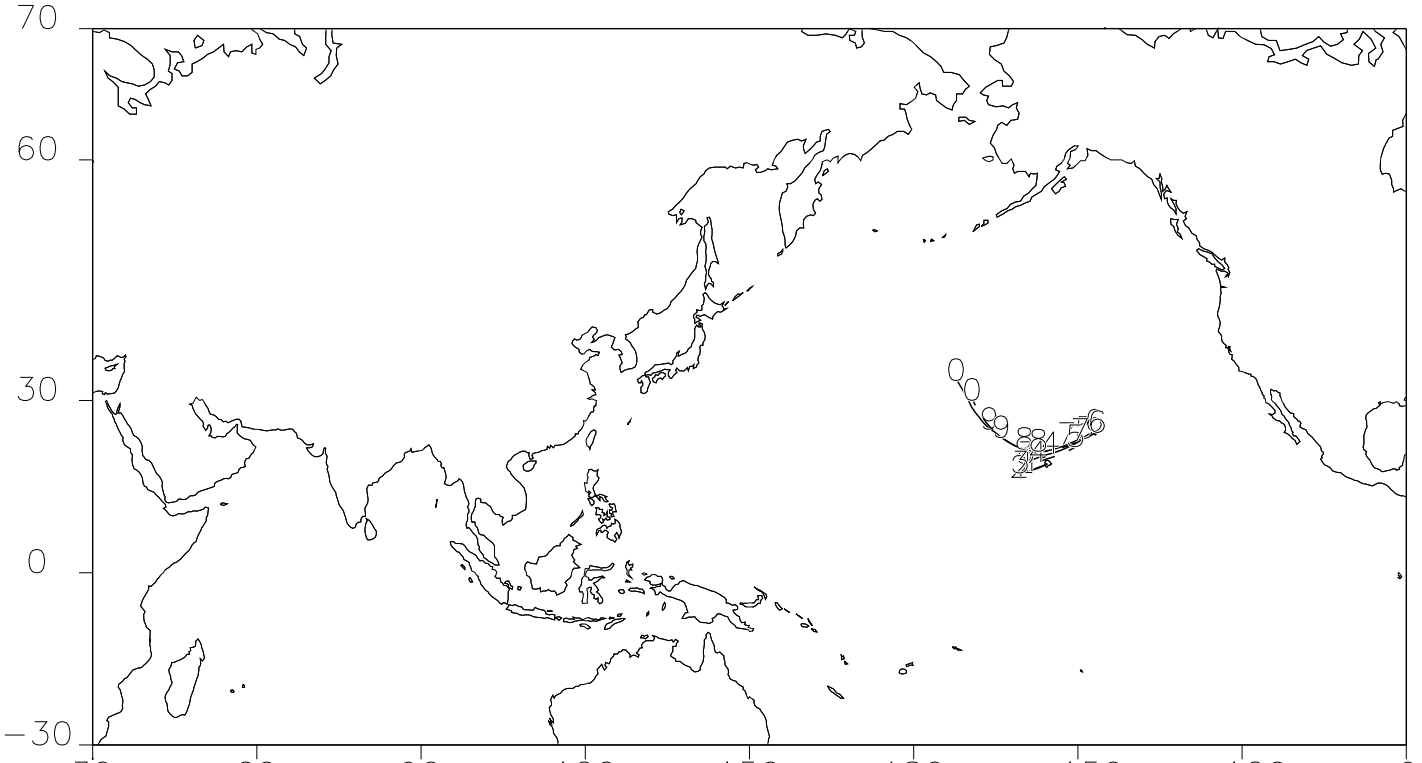
06UT

Day	km	hPa	C
0	3.4	678	5
1	3.6	663	4
2	4.1	622	2
3	4.4	599	0
4	4.9	569	-5
5	5.1	552	-6
6	5.6	515	-9
7	6.2	481	-10
8	6.8	442	-14
9	7.8	386	-21
10	9.6	296	-38



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

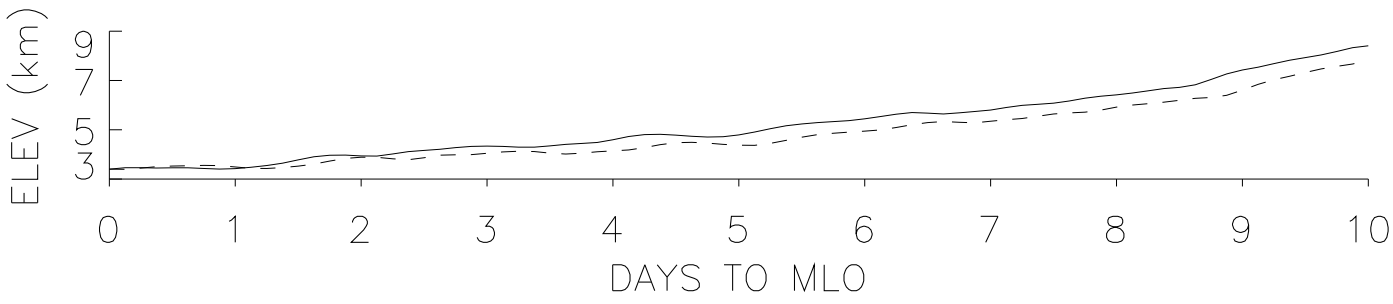


12UT

Day	km	hPa	C
0	3.4	677	5
1	3.4	675	5
2	3.9	633	3
3	4.3	605	0
4	4.6	588	-2
5	4.8	574	-4
6	5.4	527	-7
7	5.8	503	-8
8	6.4	464	-11
9	7.4	407	-18
10	8.4	355	-28

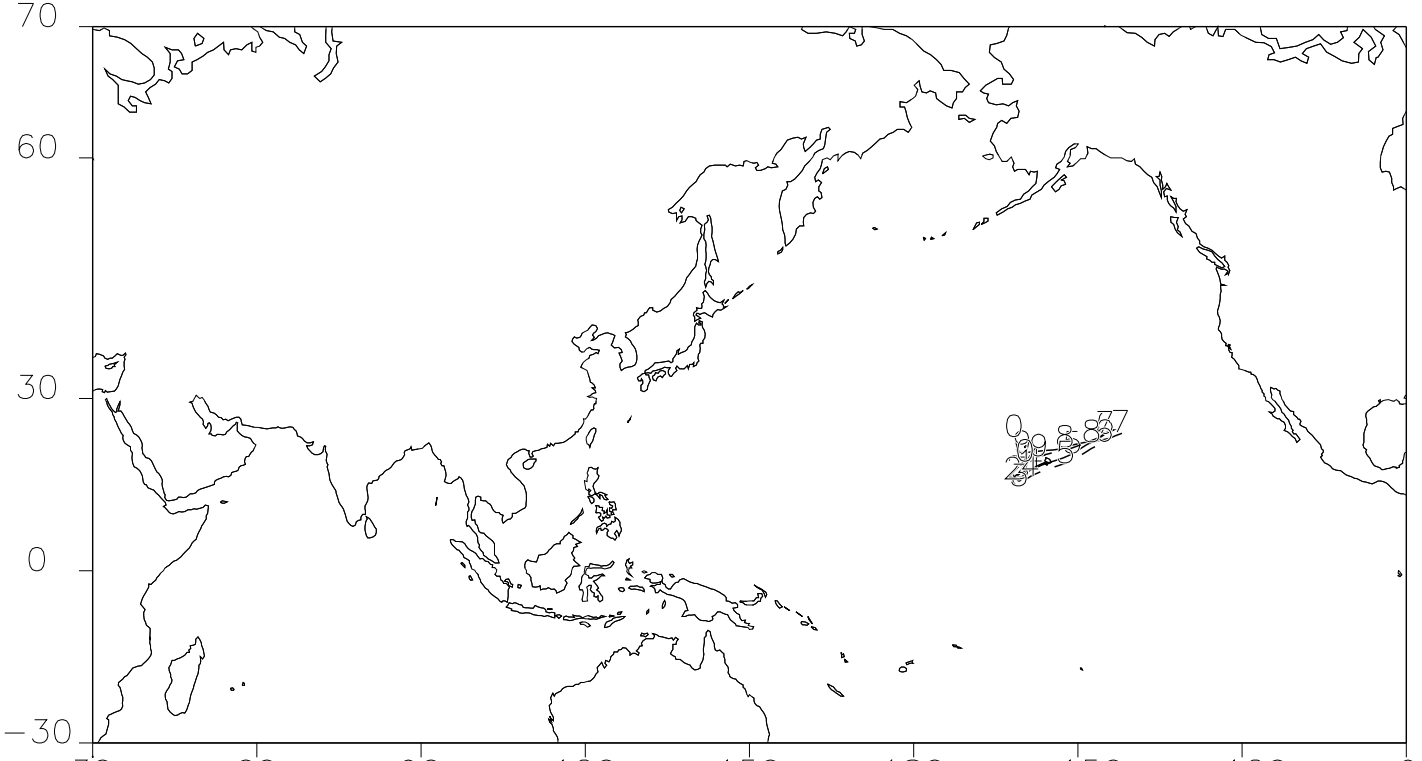
18UT

Day	km	hPa	C
0	3.4	677	6
1	3.5	670	4
2	3.9	638	3
3	4.0	627	2
4	4.1	622	2
5	4.4	605	-1
6	4.9	563	-3
7	5.3	535	-6
8	5.9	496	-8
9	6.6	453	-12
10	7.8	385	-22



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

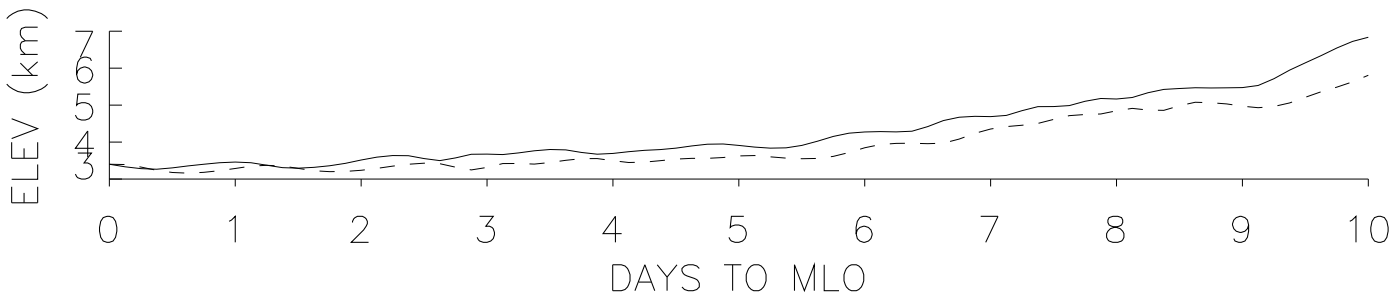


00UT

Day	km	hPa	C
0	3.4	677	6
1	3.5	672	6
2	3.5	668	6
3	3.7	655	5
4	3.7	657	5
5	3.9	640	2
6	4.3	612	0
7	4.7	581	-3
8	5.2	546	-4
9	5.5	524	-5
10	6.8	440	-14

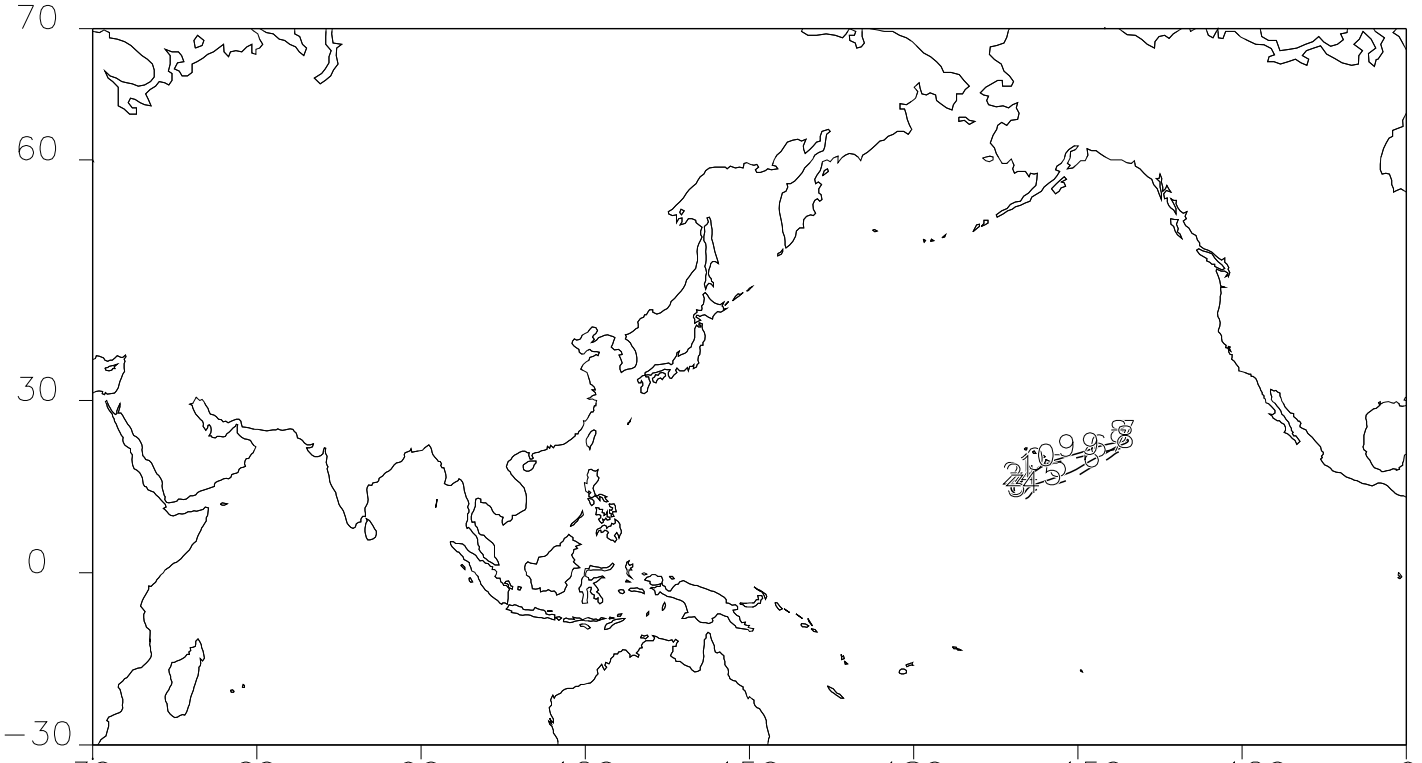
06UT

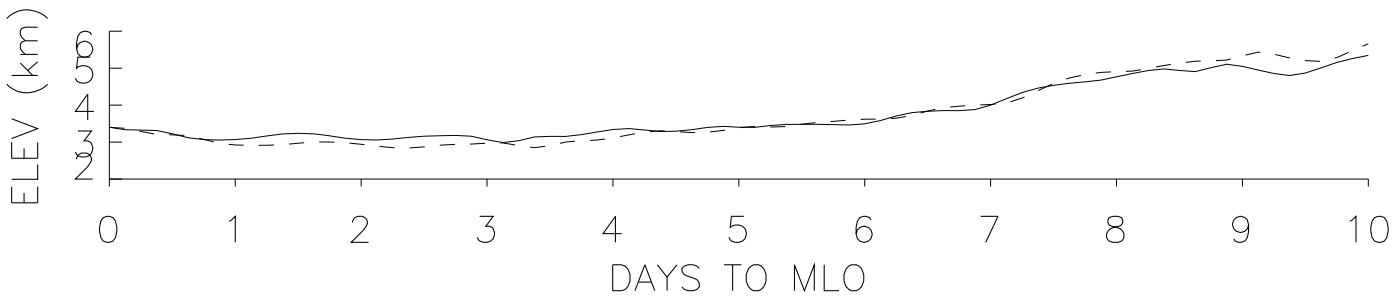
Day	km	hPa	C
0	3.4	677	7
1	3.3	687	7
2	3.2	691	7
3	3.3	684	8
4	3.5	672	7
5	3.6	664	5
6	3.8	646	2
7	4.4	607	0
8	4.8	569	-2
9	5.0	559	-1
10	5.8	503	-6



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

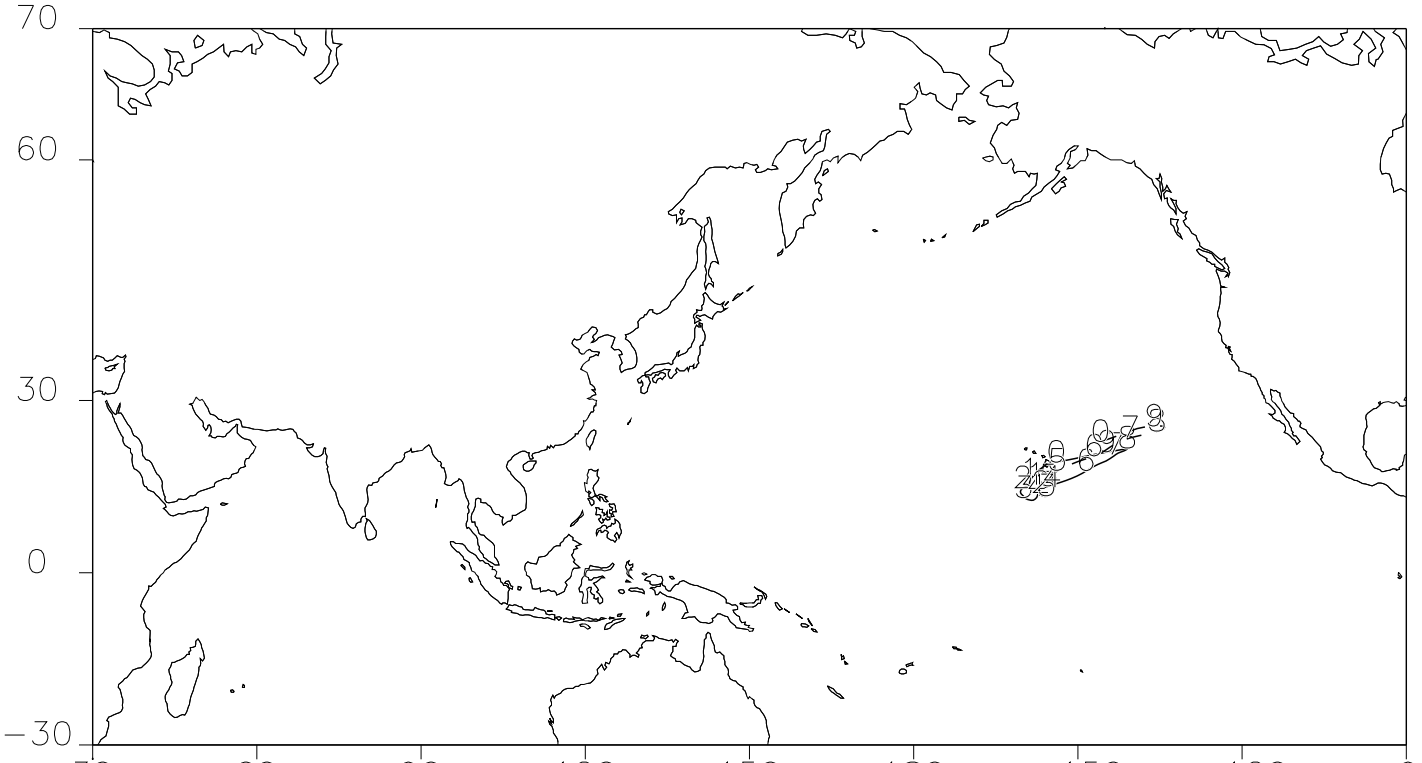
Day	km	hPa	C
0	3.4	677	7
1	3.1	704	8
2	3.1	705	8
3	3.1	705	9
4	3.3	684	7
5	3.4	679	6
6	3.5	672	4
7	4.0	633	2
8	4.8	575	−3
9	5.0	554	−3
10	5.3	533	−4

18UT

Day	km	hPa	C
0	3.4	677	6
1	2.9	718	10
2	2.9	716	9
3	3.0	713	10
4	3.1	702	9
5	3.4	681	8
6	3.6	663	5
7	4.0	632	2
8	4.9	567	−4
9	5.3	536	−5
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

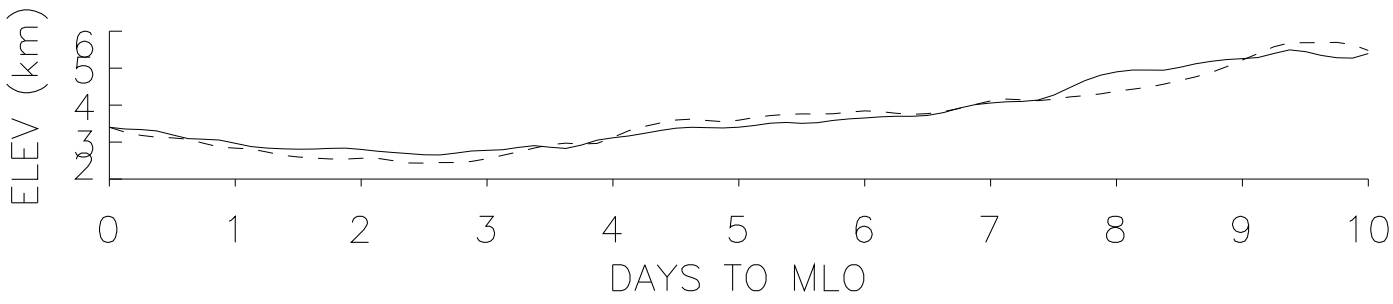


00UT

Day	km	hPa	C
0	3.4	677	7
1	3.0	714	10
2	2.8	728	11
3	2.8	730	11
4	3.1	700	10
5	3.4	679	8
6	3.7	659	5
7	4.1	627	1
8	4.9	566	−4
9	5.3	540	−4
10	5.4	530	−4

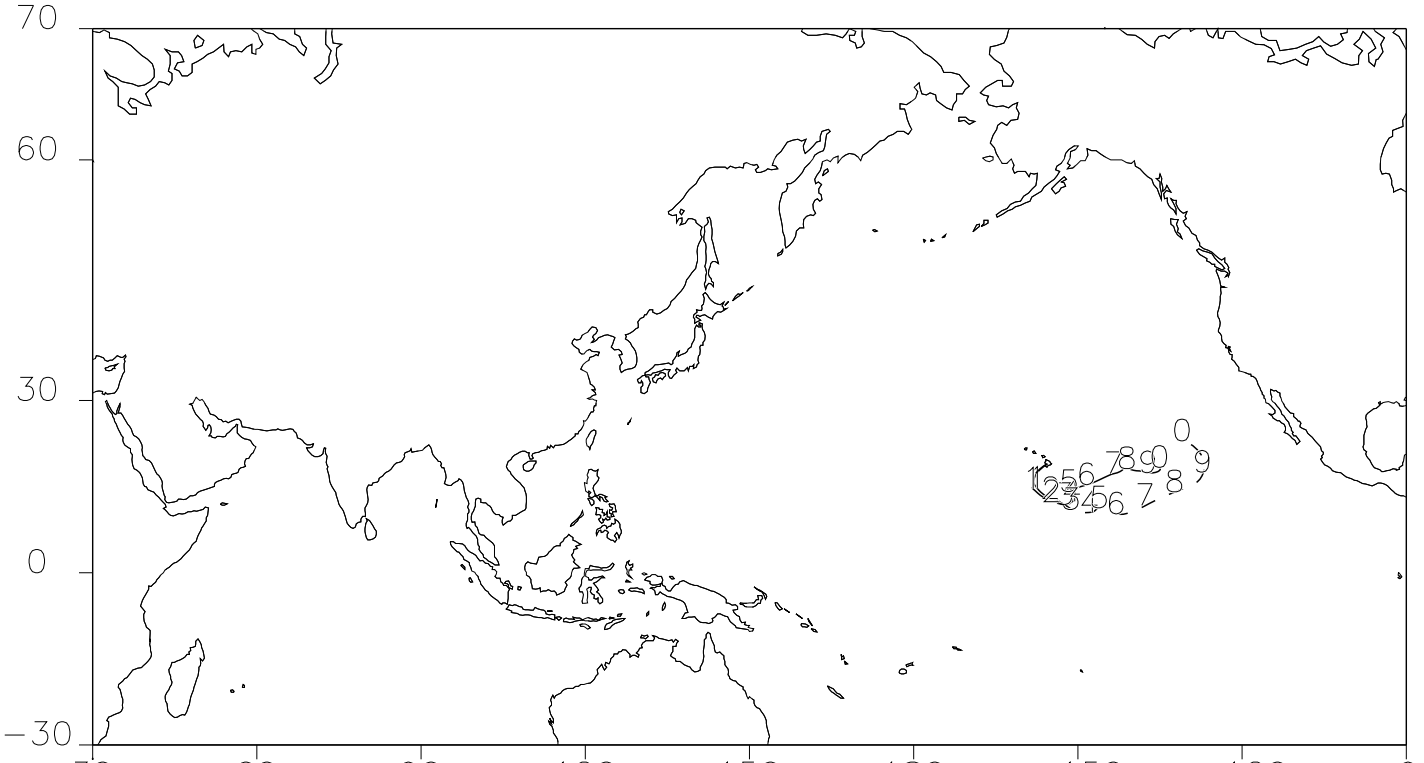
06UT

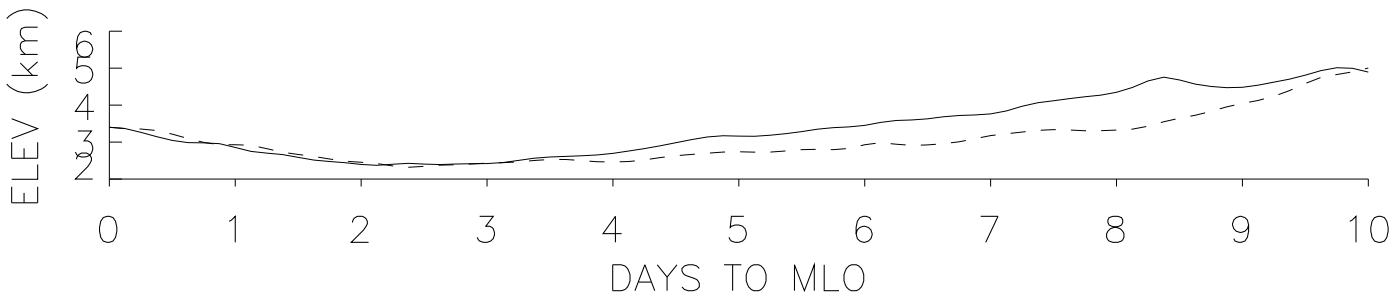
Day	km	hPa	C
0	3.4	677	6
1	2.8	725	11
2	2.6	749	12
3	2.5	750	12
4	3.1	700	10
5	3.6	664	6
6	3.8	646	4
7	4.1	624	2
8	4.4	606	1
9	5.2	544	−5
10	5.5	524	−7



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

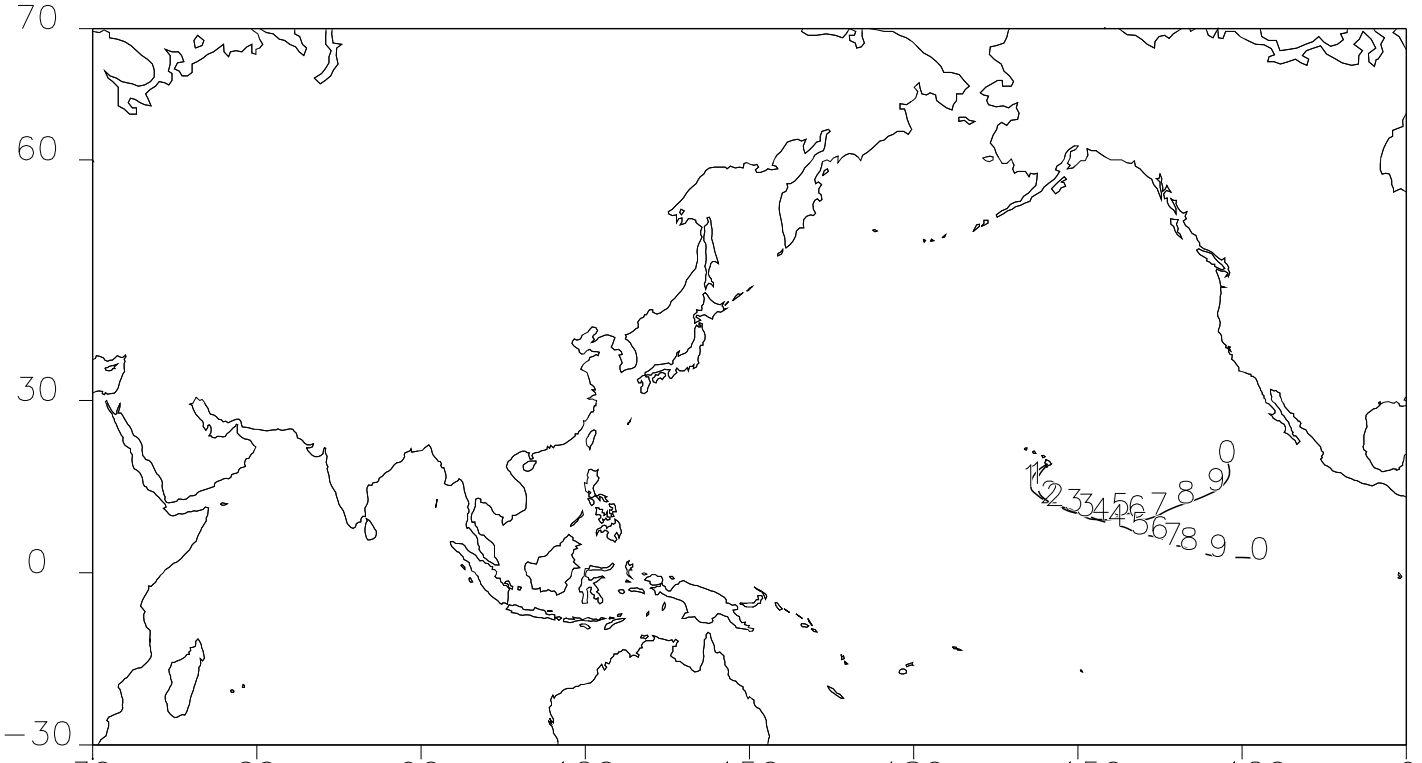
Day	km	hPa	C
0	3.4	677	5
1	2.9	723	11
2	2.4	764	12
3	2.4	762	13
4	2.7	736	12
5	3.2	697	10
6	3.5	673	7
7	3.8	650	5
8	4.3	606	0
9	4.5	596	1
10	4.9	566	-2

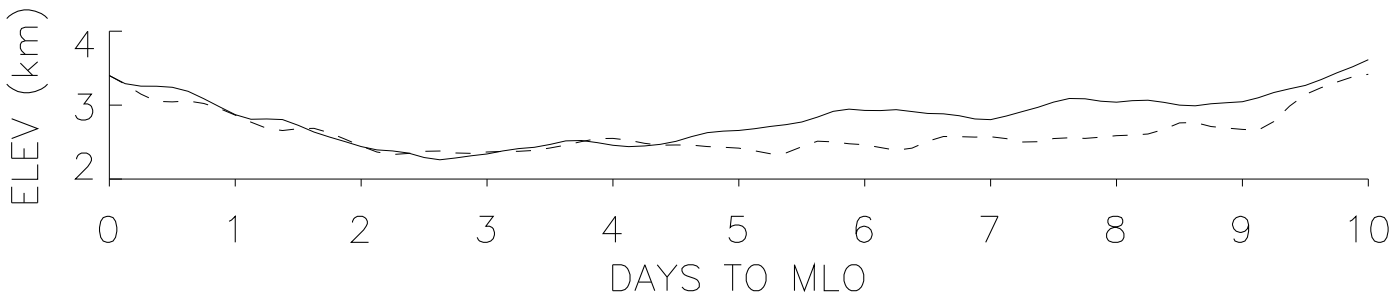
18UT

Day	km	hPa	C
0	3.4	679	6
1	2.9	717	10
2	2.5	760	13
3	2.4	763	14
4	2.5	758	13
5	2.7	733	13
6	2.9	719	13
7	3.2	698	11
8	3.3	686	10
9	4.0	629	5
10	5.0	560	-4

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

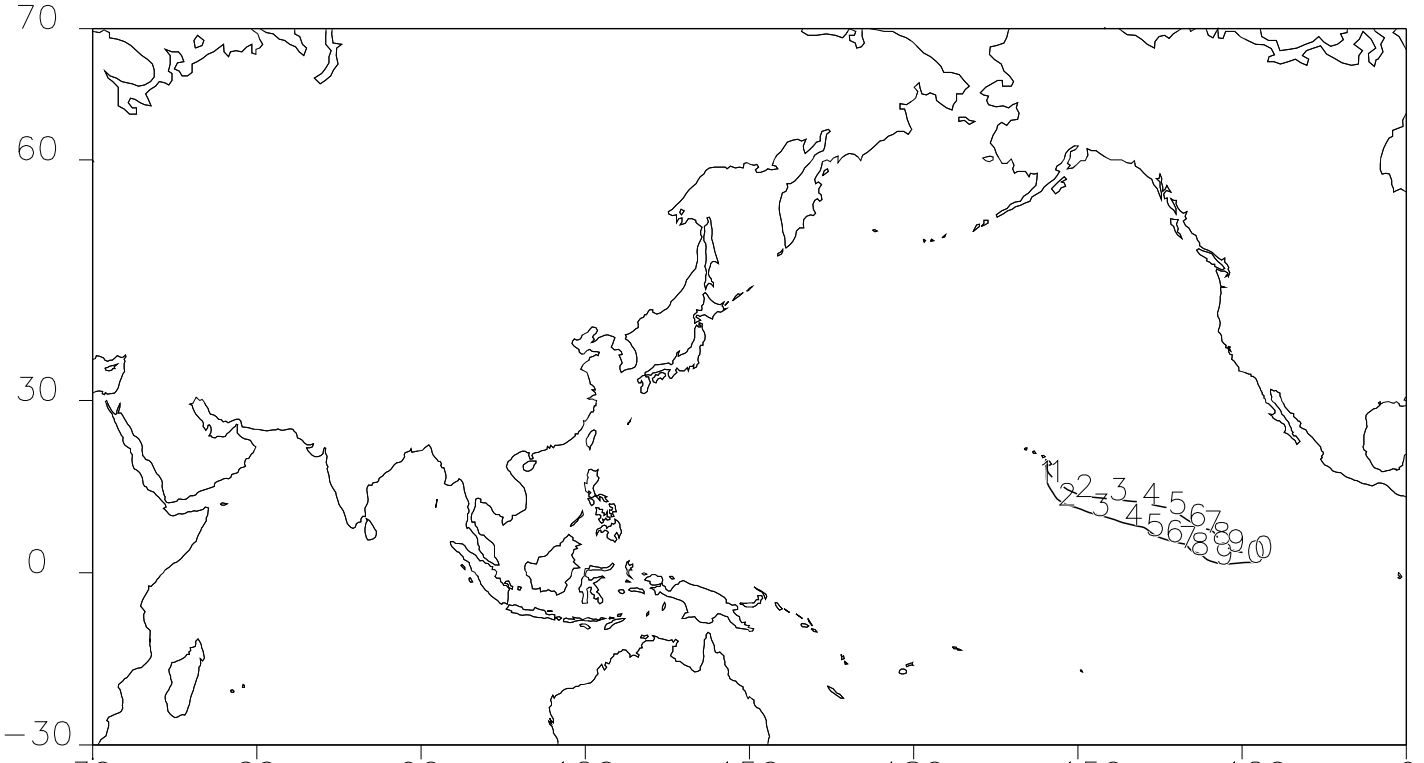
Day	km	hPa	C
0	3.4	677	5
1	2.9	721	10
2	2.4	761	14
3	2.3	770	14
4	2.5	758	14
5	2.7	738	13
6	2.9	716	13
7	2.8	725	12
8	3.0	706	11
9	3.0	707	12
10	3.6	663	7

06UT

Day	km	hPa	C
0	3.4	678	5
1	2.9	723	9
2	2.4	759	14
3	2.4	768	14
4	2.5	751	14
5	2.4	762	13
6	2.5	759	12
7	2.6	749	13
8	2.6	748	12
9	2.7	740	13
10	3.4	677	8

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

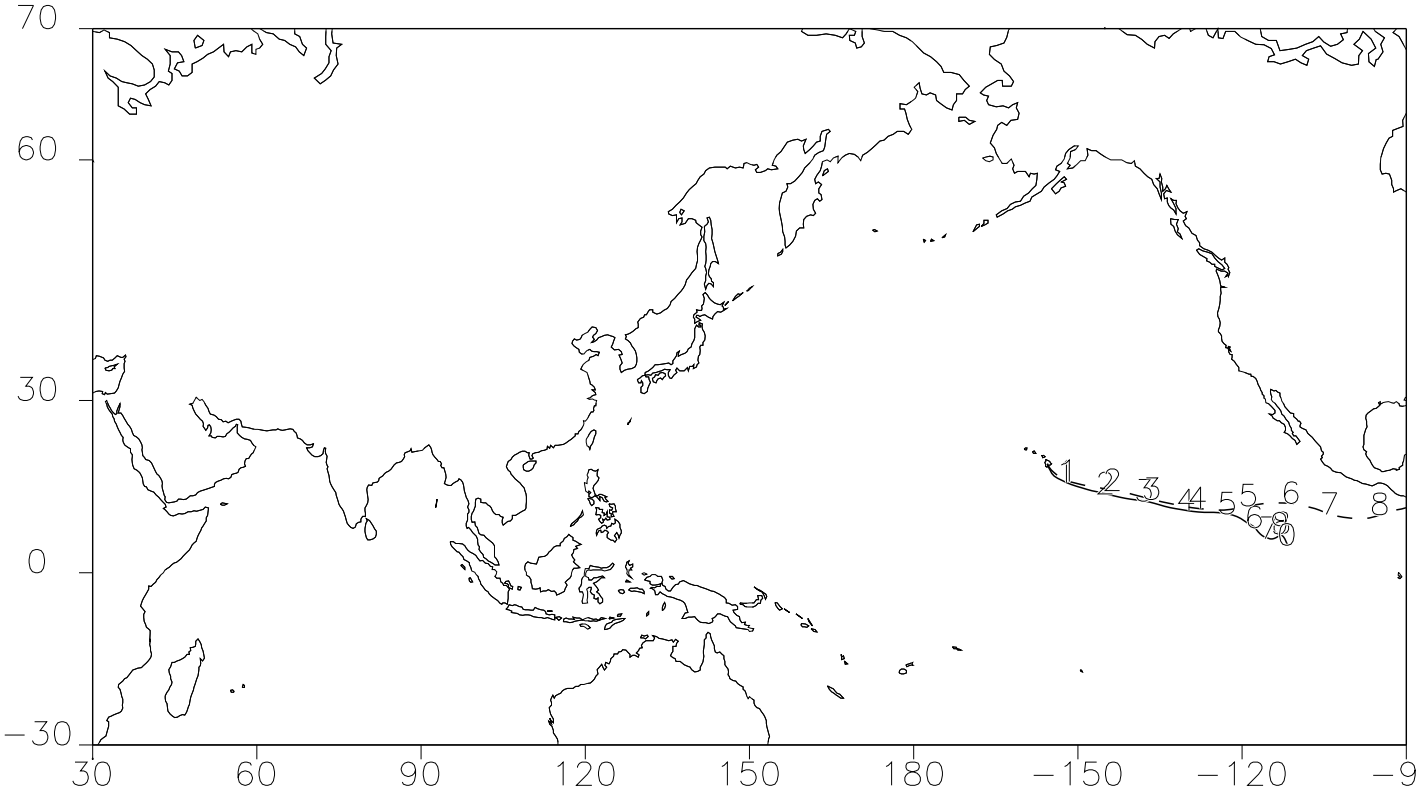
Day	km	hPa	C
0	3.4	678	5
1	2.9	720	9
2	2.6	745	12
3	2.6	746	12
4	2.7	738	13
5	2.4	759	12
6	2.5	750	11
7	2.7	734	11
8	3.1	702	10
9	3.7	647	7
10	4.9	564	1

18UT

Day	km	hPa	C
0	3.4	679	6
1	2.8	730	10
2	2.4	766	12
3	2.3	780	14
4	2.4	766	13
5	2.4	767	12
6	2.6	744	12
7	2.7	737	12
8	2.8	731	11
9	3.2	694	9
10	3.9	639	7

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

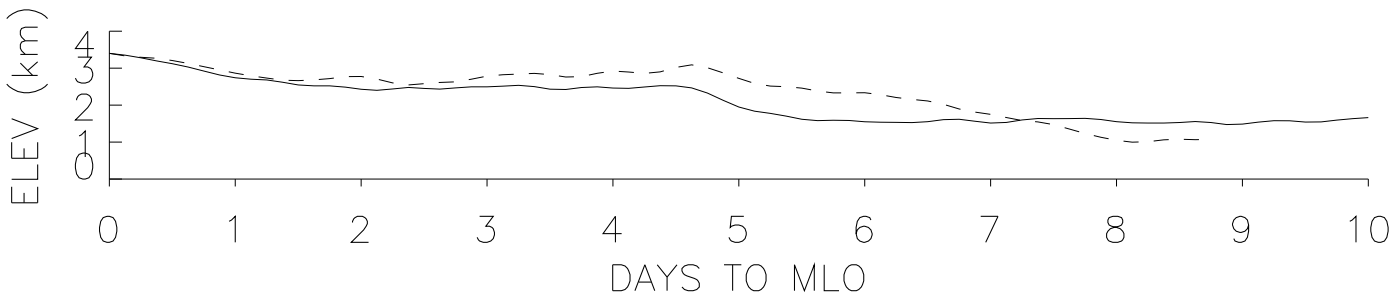


00UT

Day	km	hPa	C
0	3.4	679	5
1	2.7	734	11
2	2.4	762	12
3	2.5	756	12
4	2.5	759	13
5	1.9	806	14
6	1.6	844	15
7	1.5	848	14
8	1.6	844	15
9	1.5	849	17
10	1.7	833	16

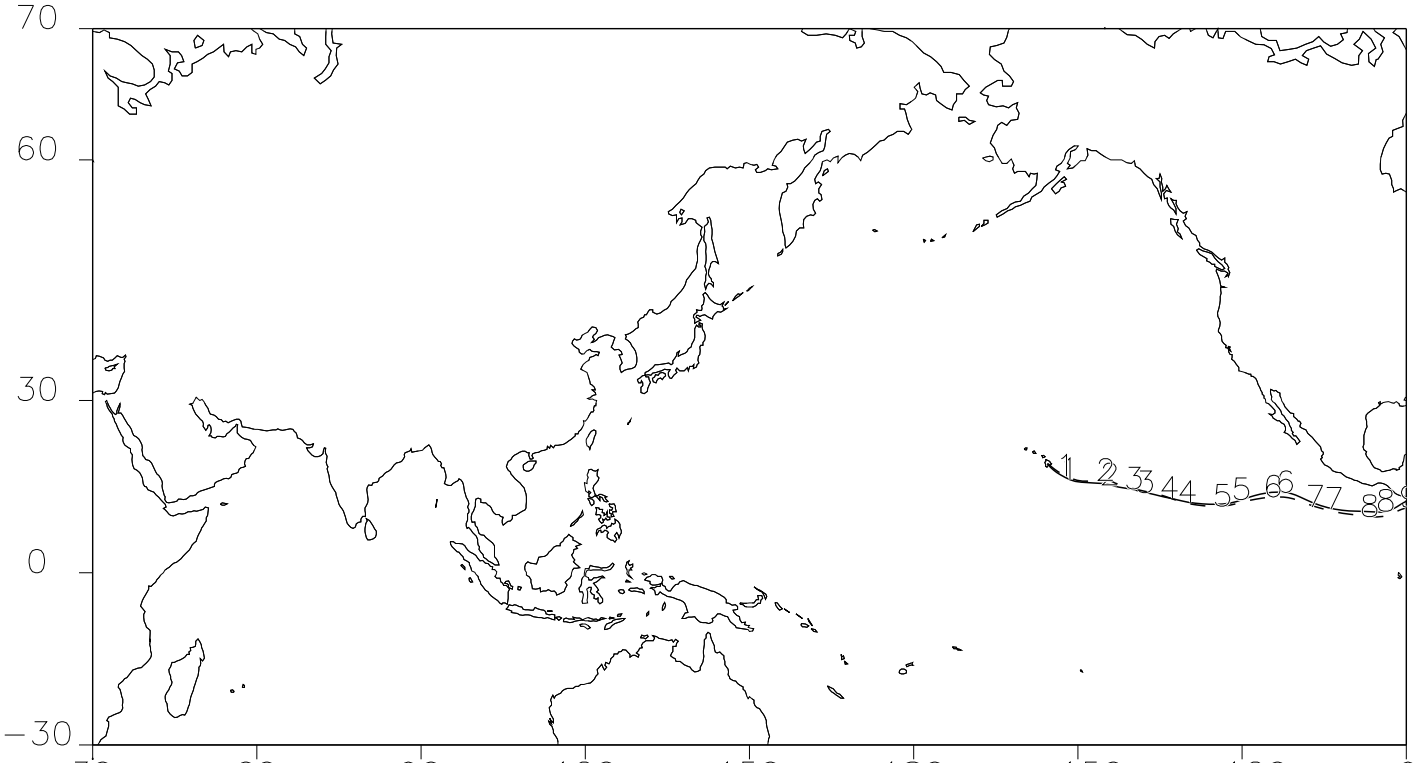
06UT

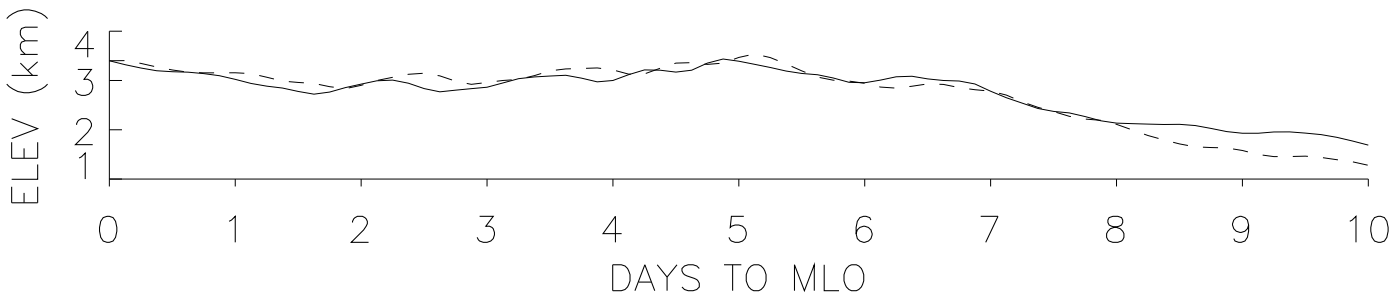
Day	km	hPa	C
0	3.4	679	5
1	2.9	724	11
2	2.8	733	9
3	2.8	732	11
4	2.9	721	12
5	2.7	739	10
6	2.3	774	12
7	1.8	829	15
8	1.0	899	21



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

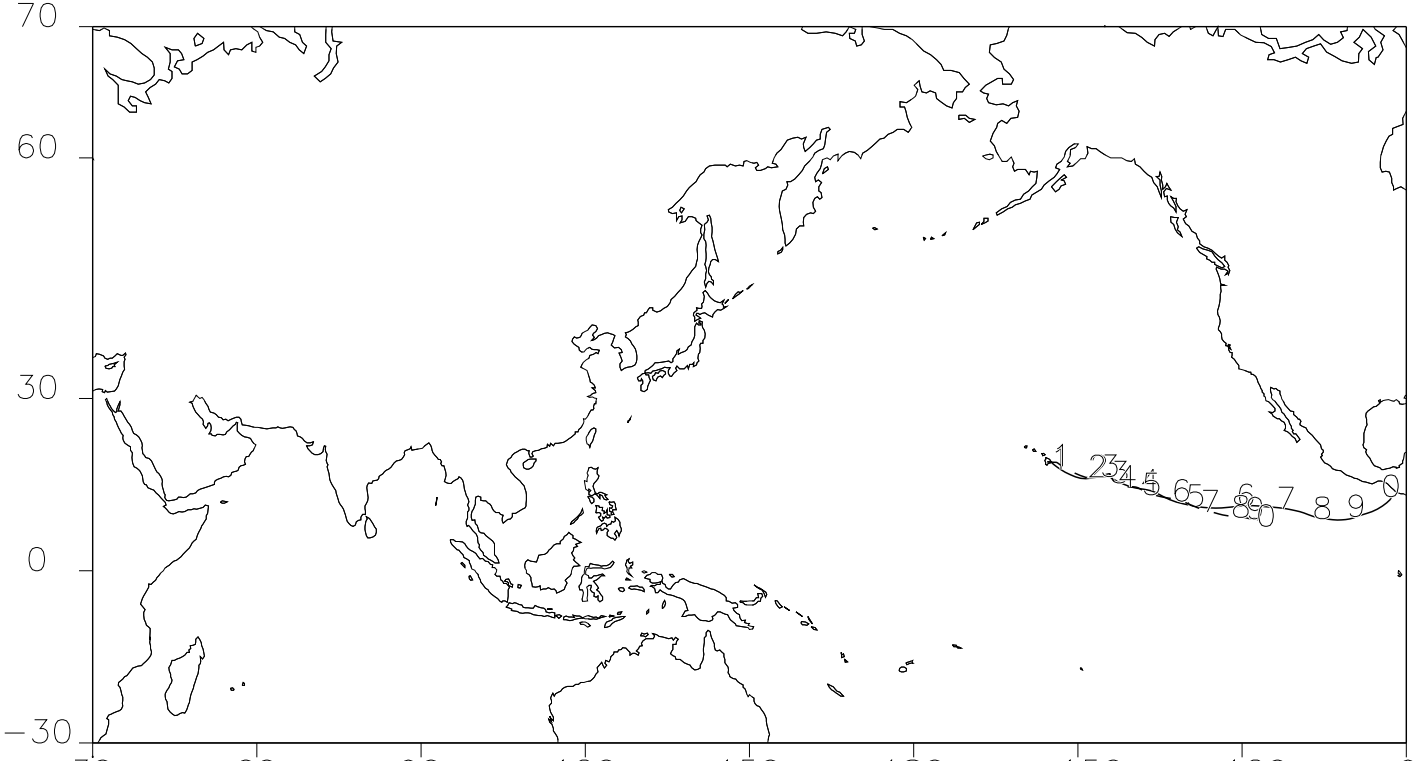
Day	km	hPa	C
0	3.4	679	6
1	3.0	709	9
2	2.9	718	9
3	2.9	723	10
4	3.0	712	11
5	3.4	680	7
6	3.0	717	10
7	2.8	730	10
8	2.1	790	14
9	1.9	810	15
10	1.7	832	17

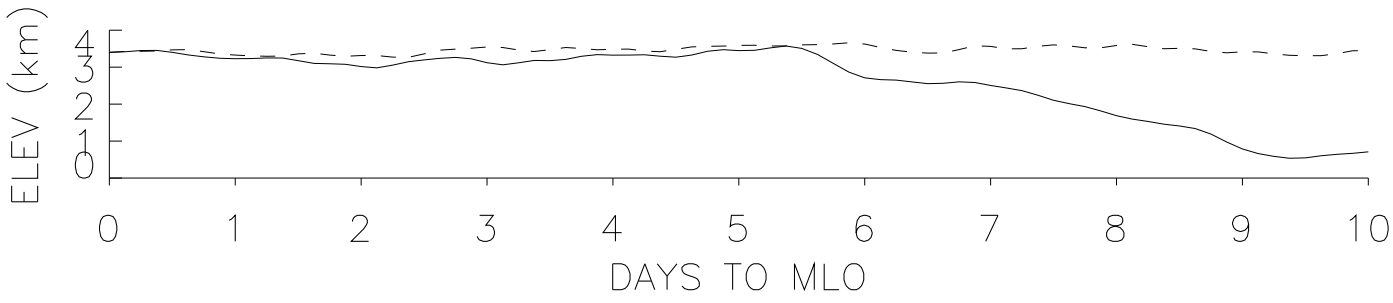
18UT

Day	km	hPa	C
0	3.4	680	6
1	3.2	699	8
2	2.9	722	11
3	3.0	717	10
4	3.2	695	9
5	3.5	676	9
6	2.9	720	11
7	2.8	732	10
8	2.1	793	14
9	1.6	845	17
10	1.3	873	19

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

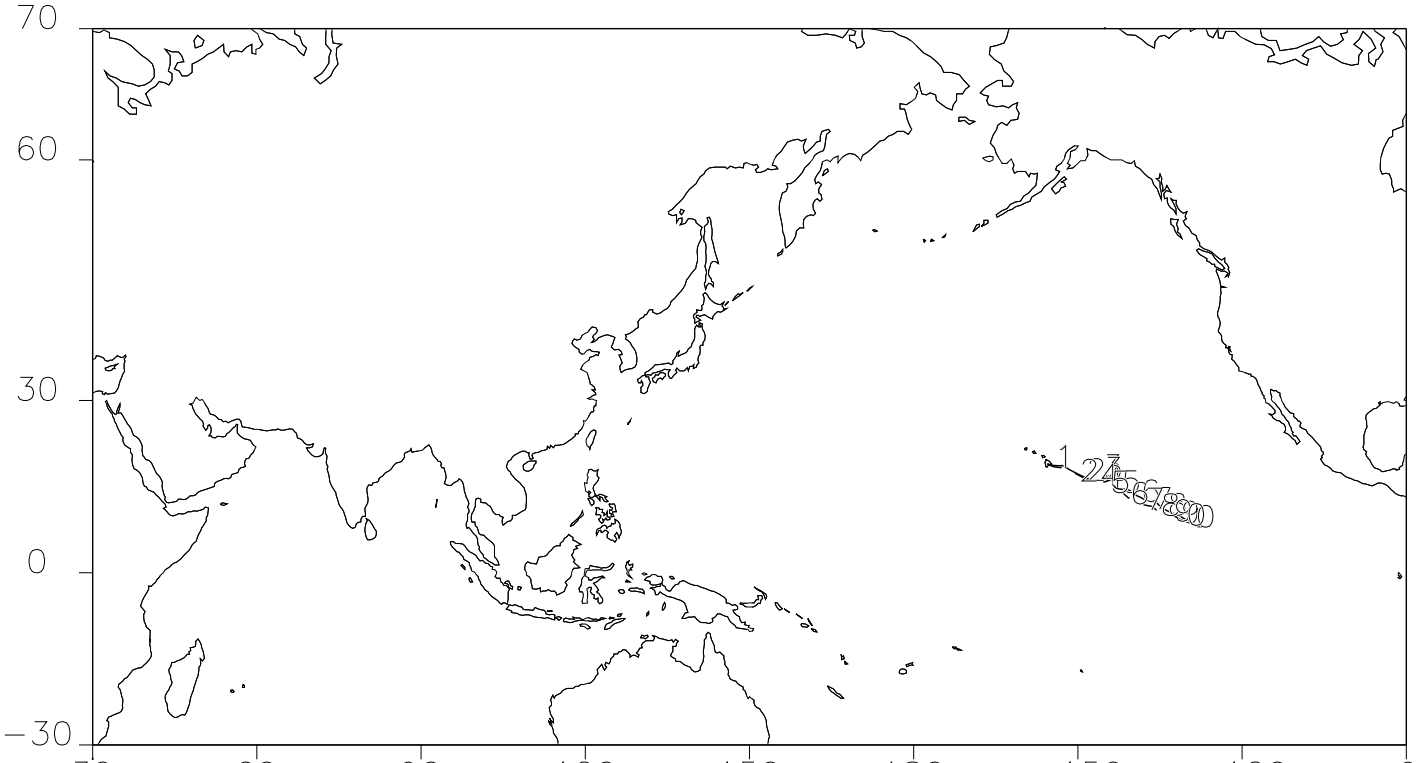
Day	km	hPa	C
0	3.4	679	6
1	3.2	693	7
2	3.0	712	11
3	3.1	702	9
4	3.3	685	8
5	3.4	675	9
6	2.7	736	10
7	2.5	754	11
8	1.7	831	15
9	0.8	923	22
10	0.7	931	24

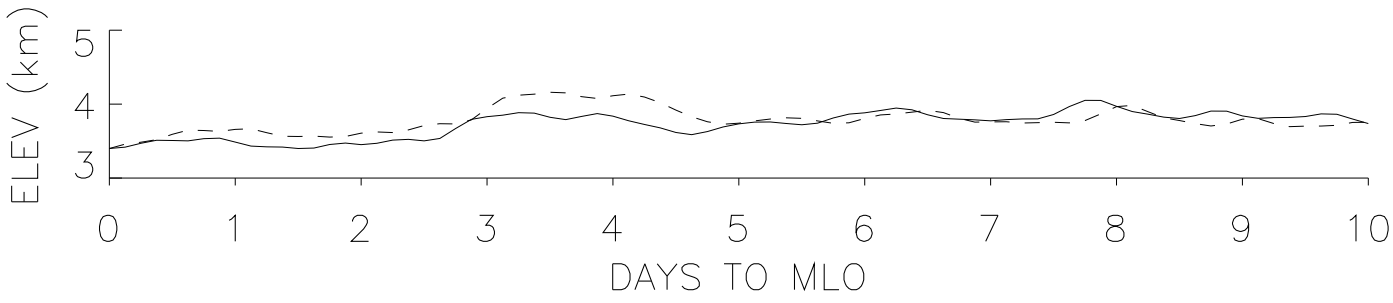
06UT

Day	km	hPa	C
0	3.4	680	7
1	3.3	686	6
2	3.3	687	9
3	3.5	668	6
4	3.5	673	8
5	3.6	665	9
6	3.6	662	7
7	3.6	666	10
8	3.6	664	8
9	3.4	678	9
10	3.4	674	7

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





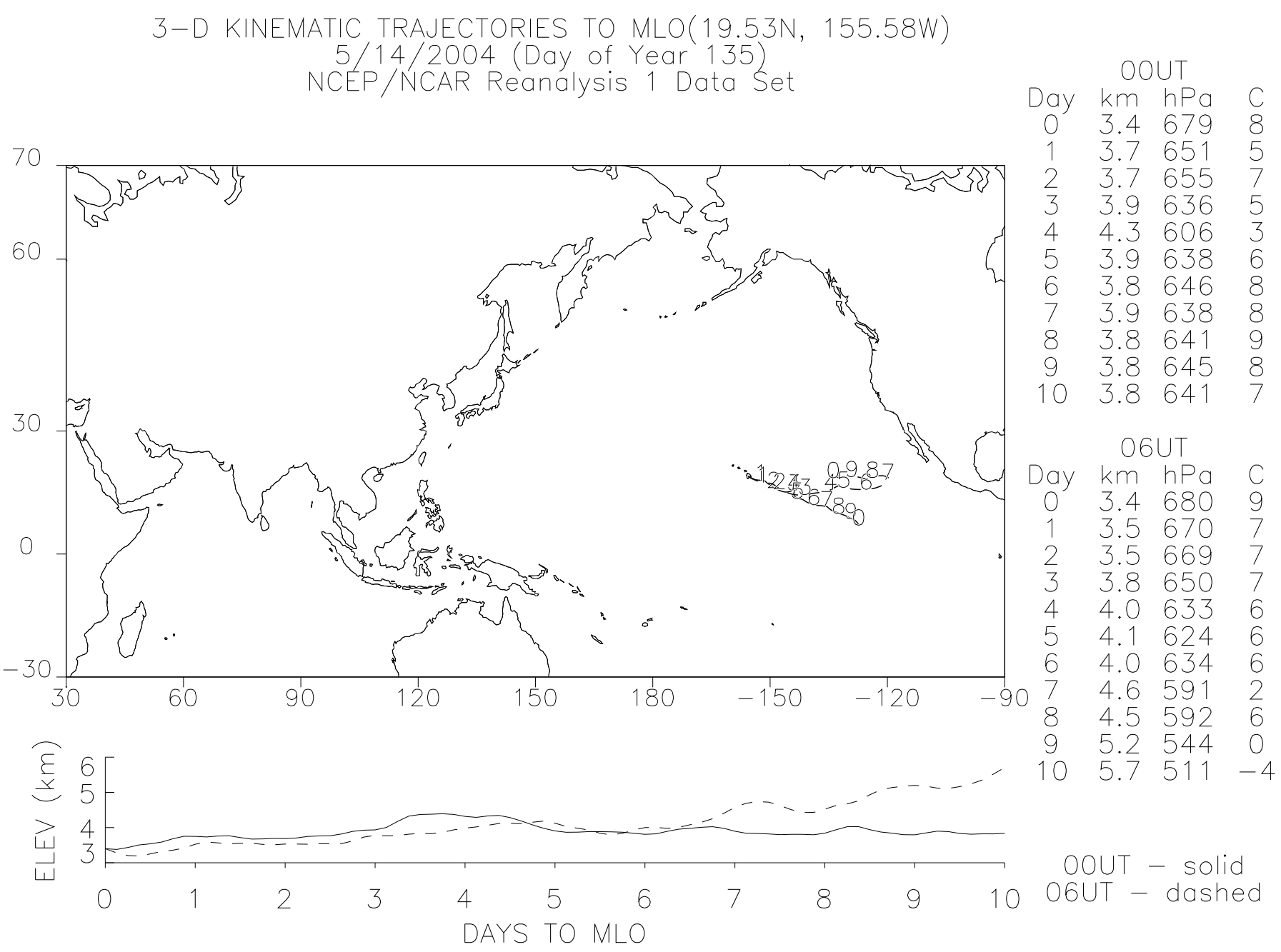
12UT

Day	km	hPa	C
0	3.4	679	6
1	3.5	672	6
2	3.5	674	8
3	3.8	644	4
4	3.8	643	6
5	3.7	651	7
6	3.9	640	7
7	3.8	646	8
8	4.0	630	6
9	3.8	641	7
10	3.7	649	7

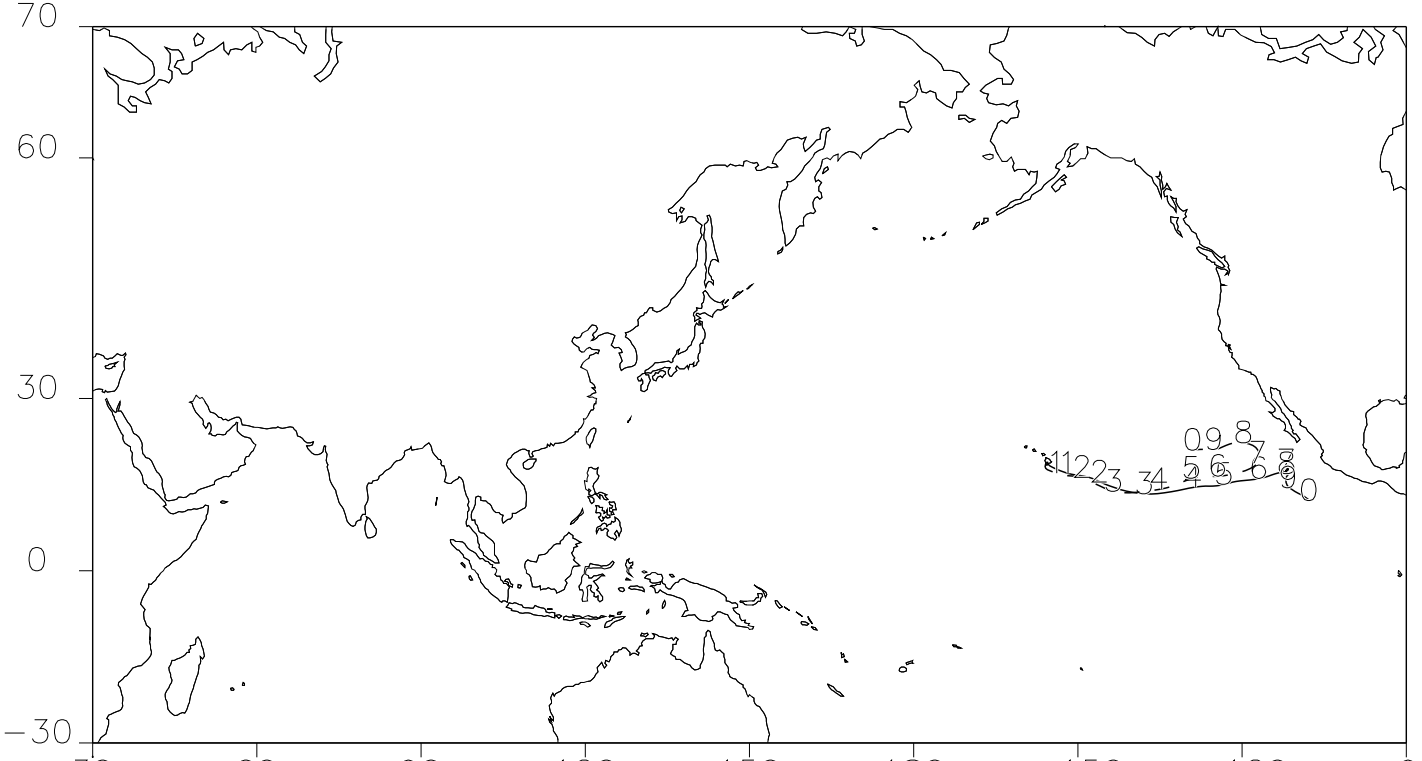
18UT

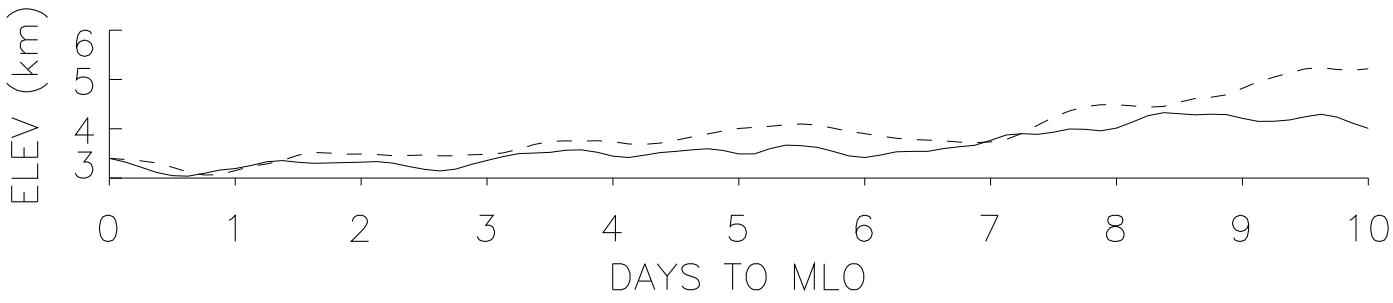
Day	km	hPa	C
0	3.4	679	7
1	3.7	659	5
2	3.6	662	7
3	3.9	637	4
4	4.1	623	5
5	3.7	652	7
6	3.8	648	8
7	3.8	650	8
8	4.0	633	7
9	3.8	647	8
10	3.8	650	8

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
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 3.4 679 8
1 3.7 651 5
2 3.7 655 7
3 3.9 636 5
4 4.3 606 3
5 3.9 638 6
6 3.8 646 8
7 3.9 638 8
8 3.8 641 9
9 3.8 645 8
10 3.8 641 7
06UT
Day km hPa C
0 3.4 680 9
1 3.5 670 7
2 3.5 669 7
3 3.8 650 7
4 4.0 633 6
5 4.1 624 6
6 4.0 634 6
7 4.6 591 2
8 4.5 592 6
9 5.2 544 0
10 5.7 511 −4
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

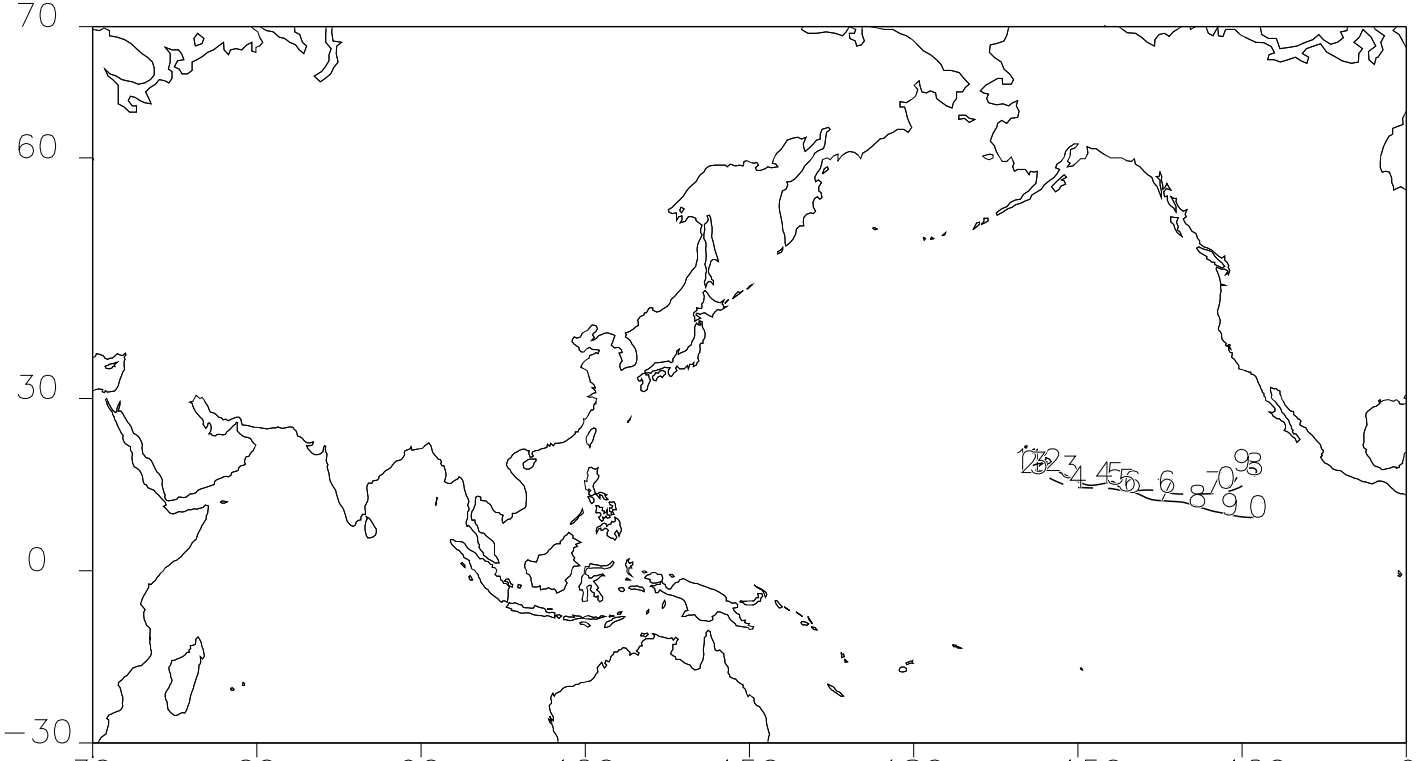
Day	km	hPa	C
0	3.4	679	8
1	3.2	696	9
2	3.3	685	9
3	3.4	681	9
4	3.4	674	9
5	3.5	671	9
6	3.4	678	9
7	3.8	650	5
8	4.0	631	3
9	4.2	613	3
10	4.0	629	4

18UT

Day	km	hPa	C
0	3.4	680	9
1	3.2	700	10
2	3.5	672	8
3	3.5	672	10
4	3.7	653	7
5	4.0	632	7
6	3.9	641	7
7	3.7	655	8
8	4.5	595	4
9	4.8	569	1
10	5.2	542	−2

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

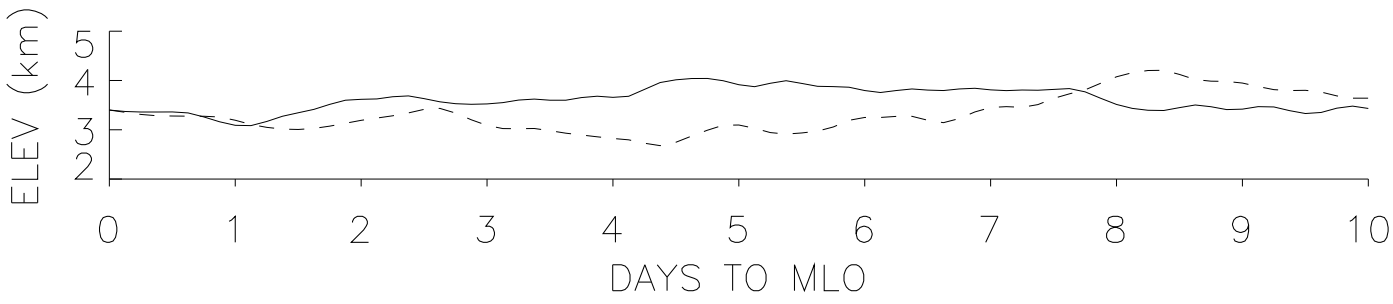


00UT

Day	km	hPa	C
0	3.4	680	9
1	3.1	704	10
2	3.6	661	6
3	3.5	668	7
4	3.7	658	7
5	3.9	637	5
6	3.8	647	7
7	3.8	645	7
8	3.5	668	8
9	3.4	674	10
10	3.4	674	9

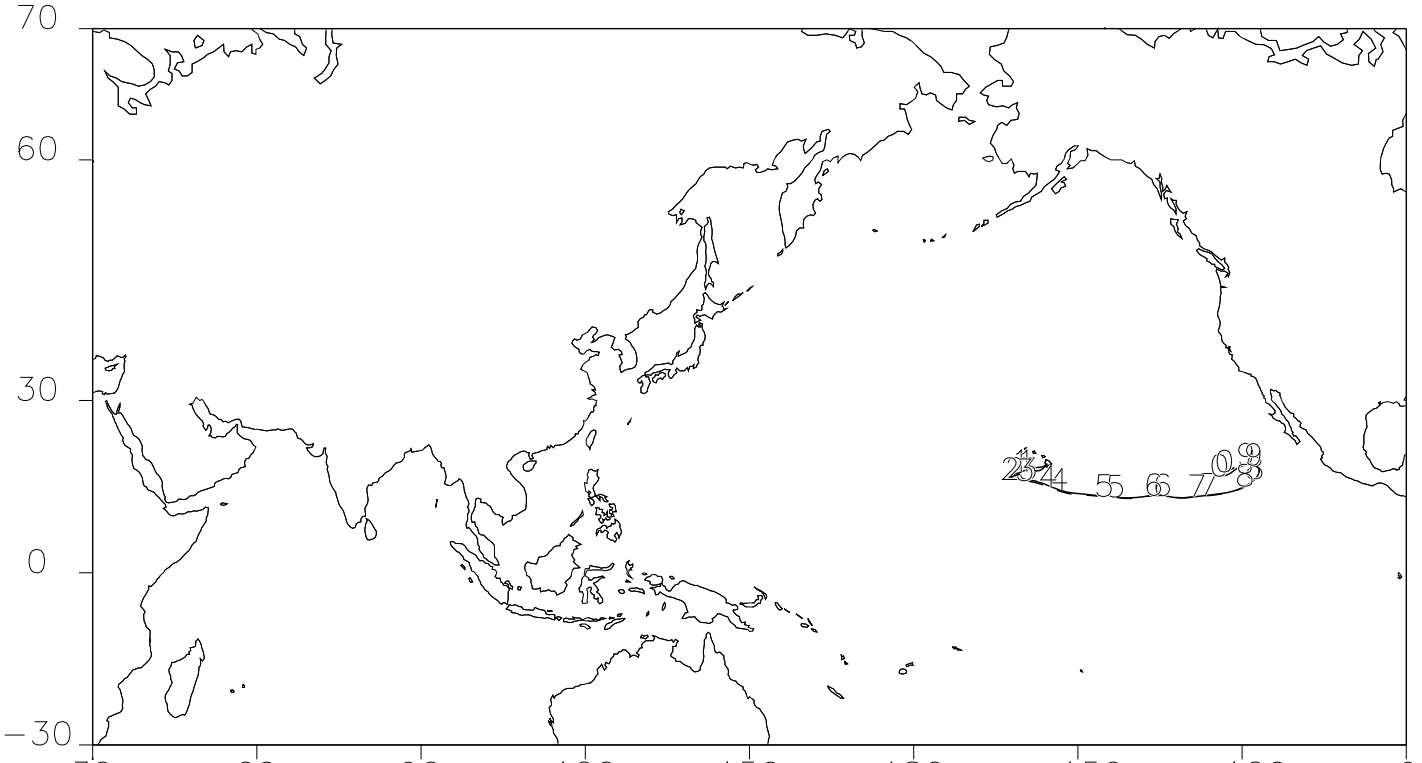
06UT

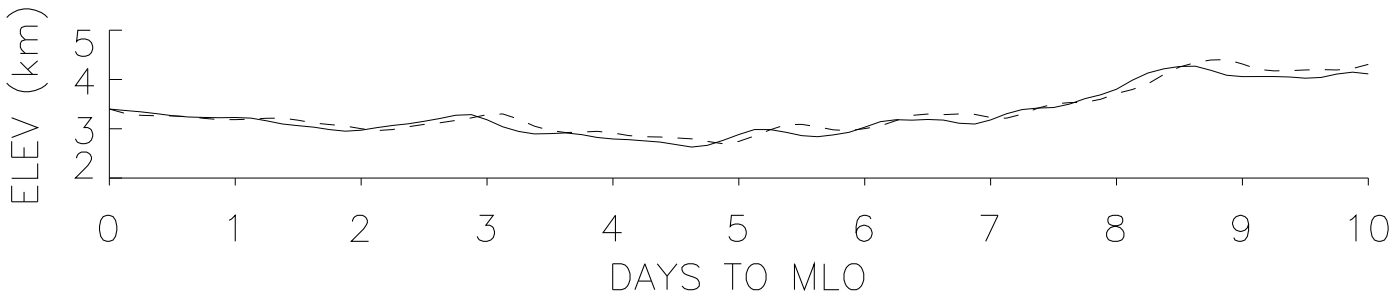
Day	km	hPa	C
0	3.4	681	9
1	3.2	696	9
2	3.2	697	8
3	3.1	705	8
4	2.8	727	12
5	3.1	704	7
6	3.2	693	8
7	3.5	678	9
8	4.1	628	4
9	3.9	636	6
10	3.6	659	9



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

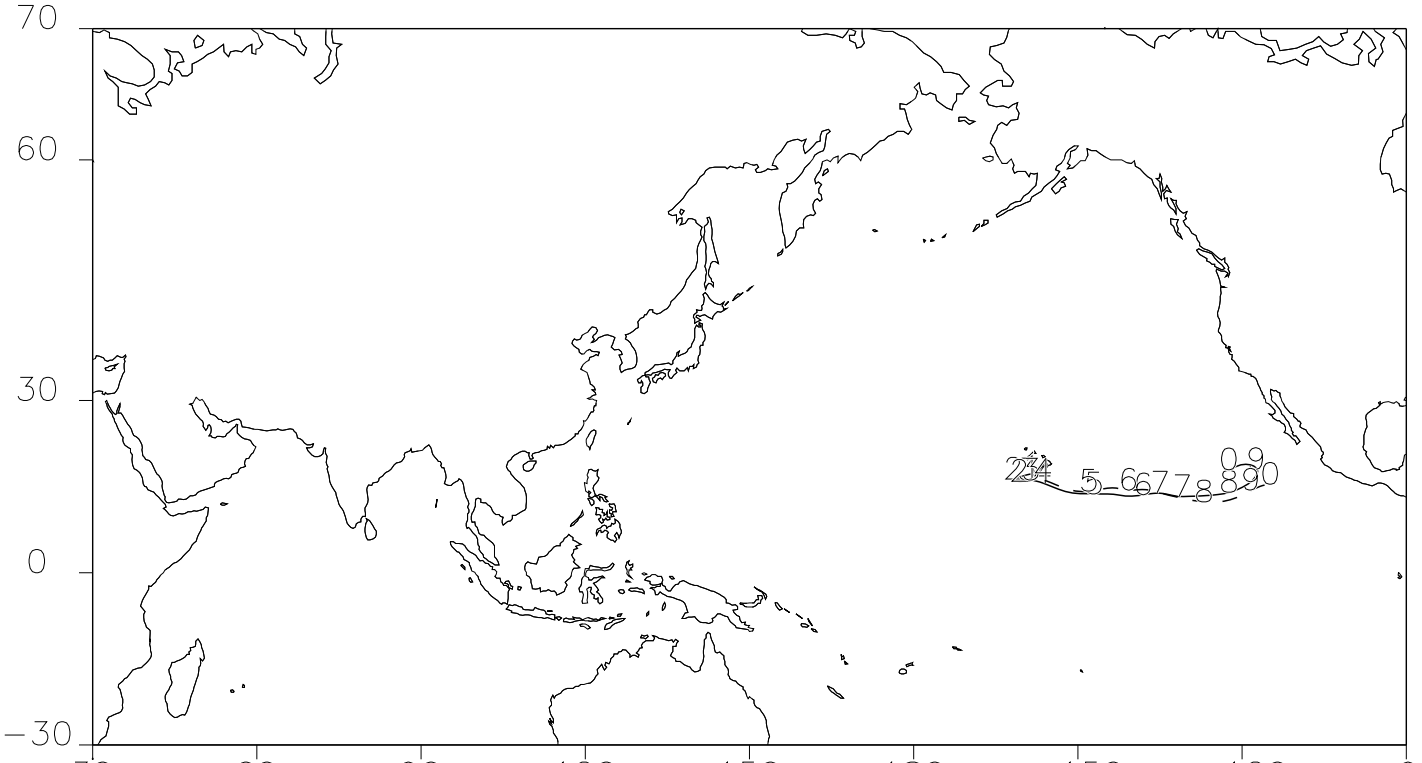
Day	km	hPa	C
0	3.4	680	9
1	3.2	693	8
2	3.0	714	10
3	3.2	697	8
4	2.8	729	11
5	2.9	721	9
6	3.0	709	8
7	3.2	698	9
8	3.8	647	6
9	4.1	625	5
10	4.1	619	7

18UT

Day	km	hPa	C
0	3.4	681	9
1	3.2	697	10
2	3.0	712	10
3	3.3	688	8
4	2.9	719	10
5	2.7	735	12
6	3.0	713	10
7	3.2	695	10
8	3.7	656	7
9	4.3	609	4
10	4.3	607	6

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

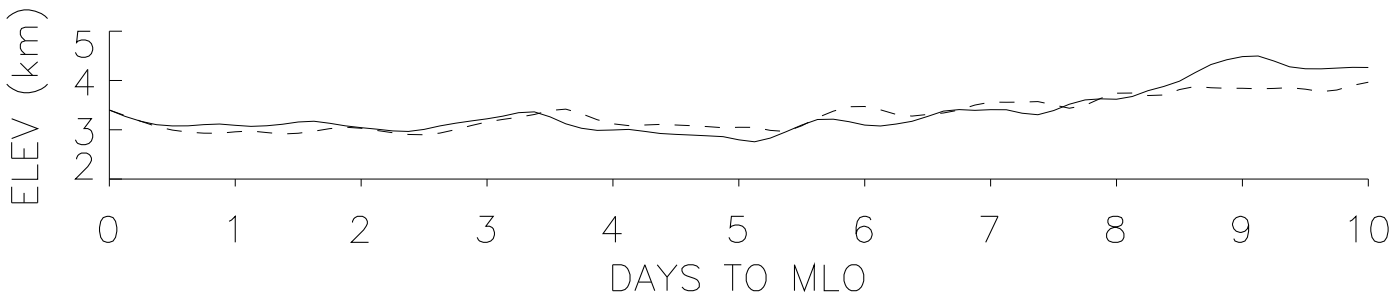


00UT

Day	km	hPa	C
0	3.4	680	9
1	3.1	705	10
2	3.0	708	10
3	3.2	694	8
4	3.0	712	10
5	2.8	729	12
6	3.1	704	9
7	3.4	678	7
8	3.6	662	8
9	4.5	595	3
10	4.3	608	6

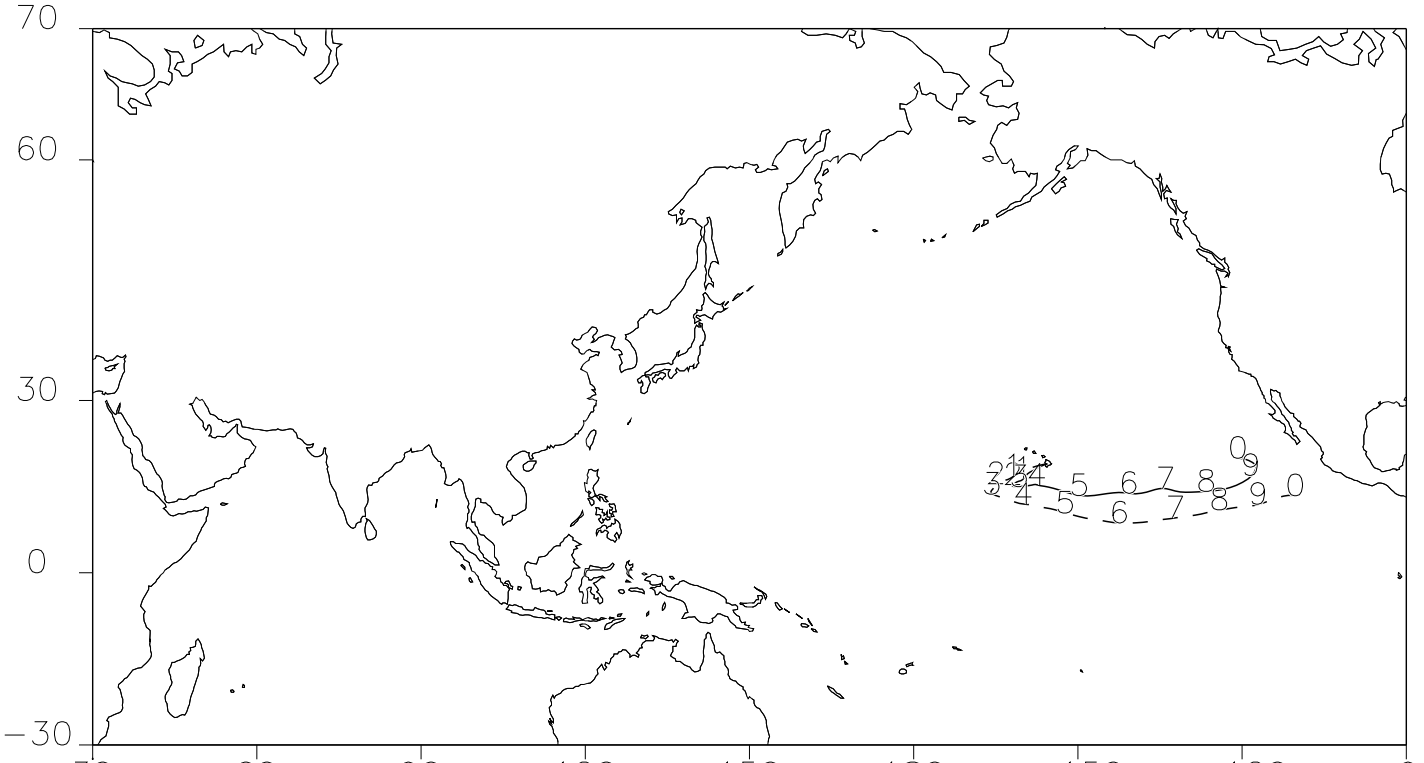
06UT

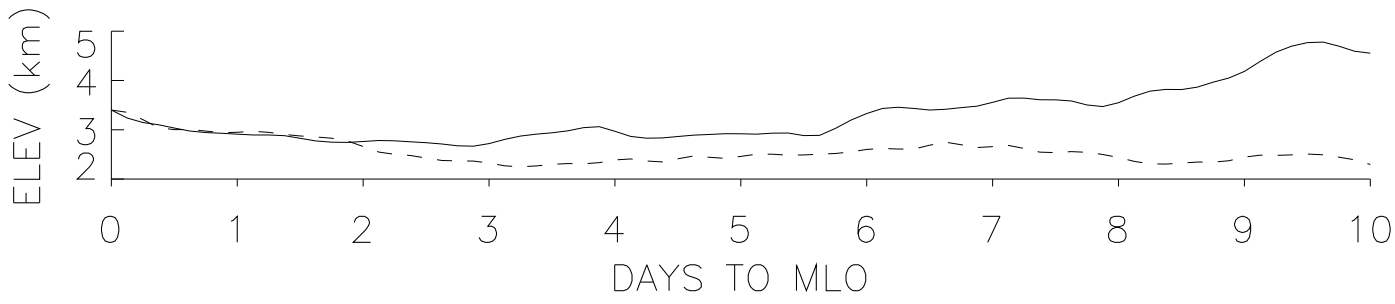
Day	km	hPa	C
0	3.4	681	8
1	3.0	717	11
2	3.0	710	11
3	3.2	700	9
4	3.1	702	8
5	3.1	708	11
6	3.5	673	6
7	3.6	667	8
8	3.7	654	8
9	3.8	646	5
10	4.0	635	5



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

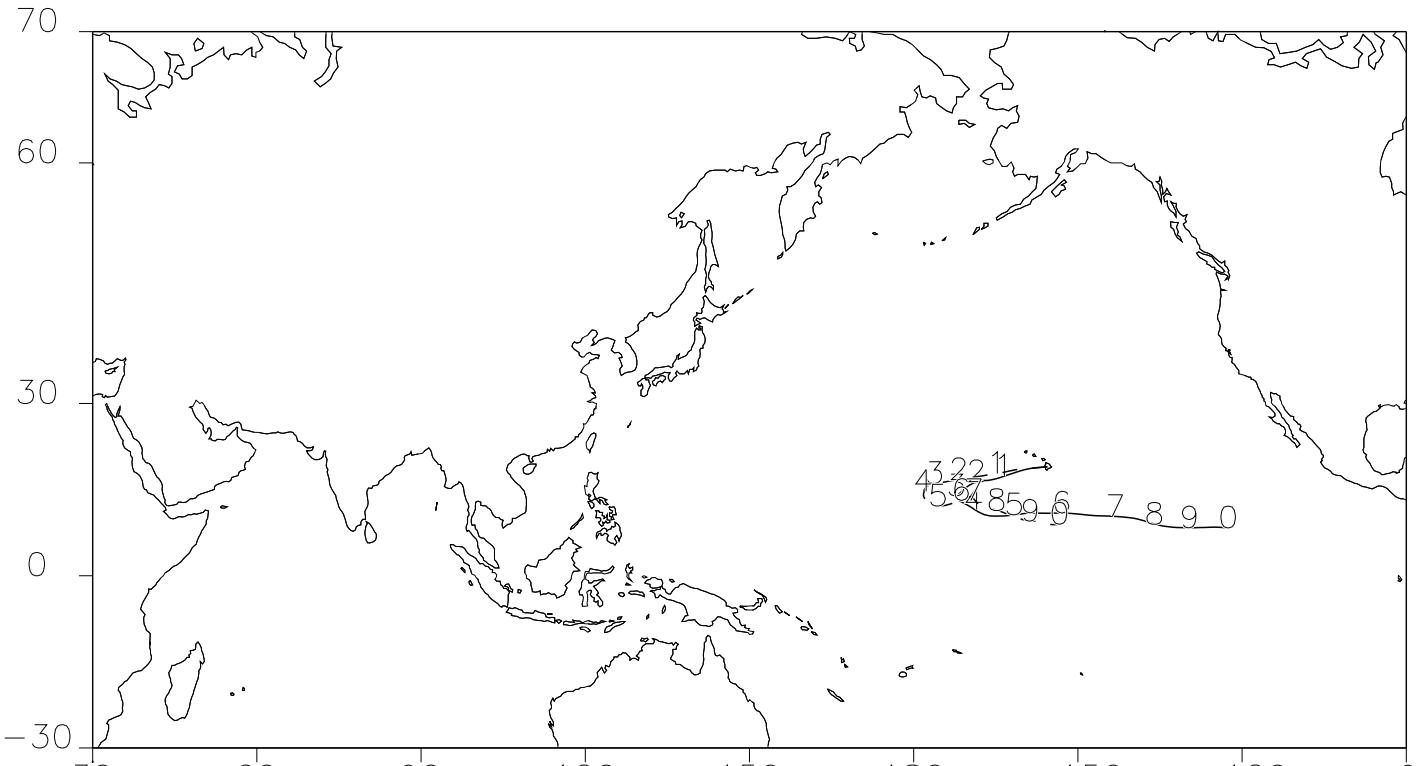
Day	km	hPa	C
0	3.4	680	8
1	2.9	721	11
2	2.8	733	12
3	2.7	736	11
4	3.0	714	10
5	2.9	718	11
6	3.3	684	7
7	3.6	666	7
8	3.5	667	8
9	4.2	618	5
10	4.6	588	4

18UT

Day	km	hPa	C
0	3.4	680	7
1	2.9	718	11
2	2.7	742	12
3	2.3	772	14
4	2.4	765	13
5	2.5	758	13
6	2.6	746	11
7	2.7	742	12
8	2.4	763	13
9	2.4	764	13
10	2.3	778	13

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

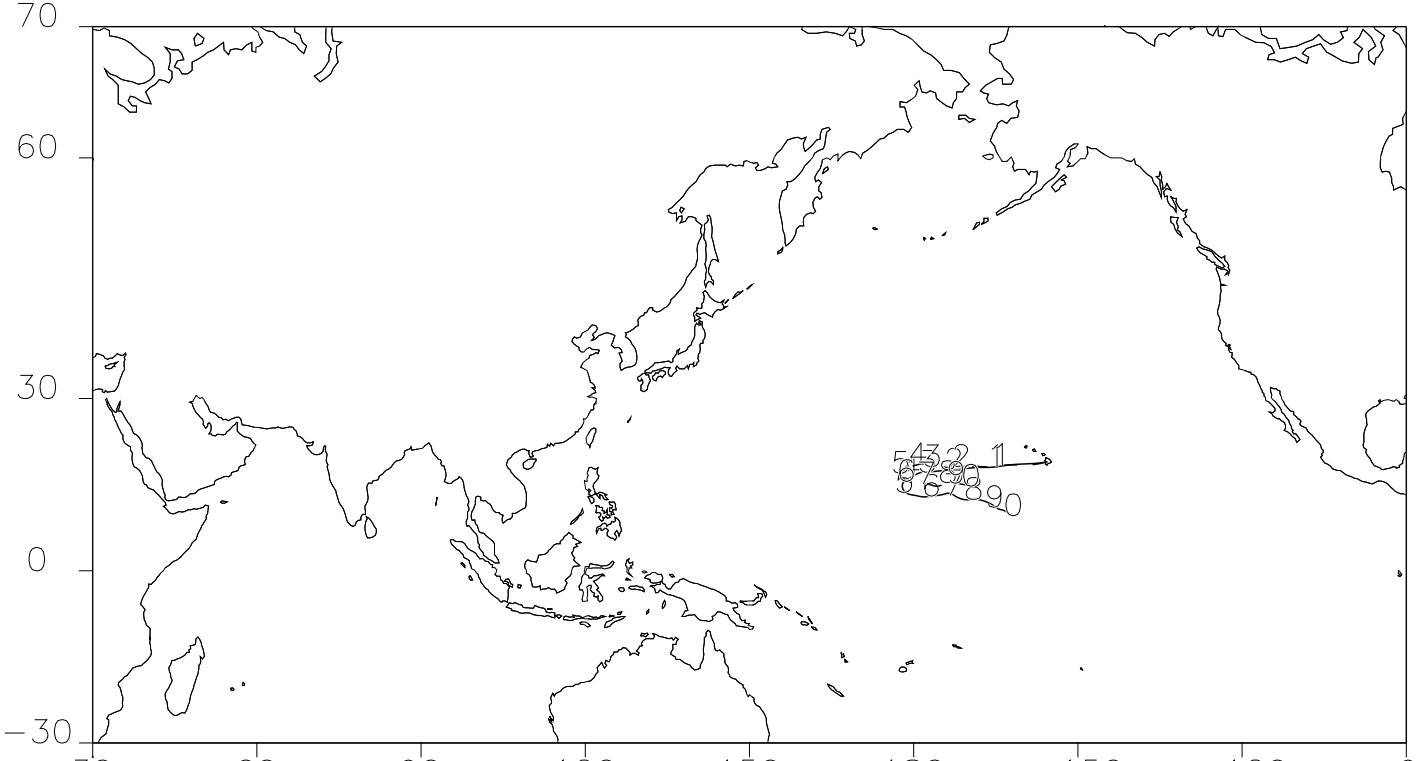
Day	km	hPa	C
0	3.4	679	8
1	3.1	702	10
2	3.3	691	8
3	2.7	740	12
4	2.5	754	14
5	2.7	736	13
6	3.0	706	11
7	2.8	731	11
8	3.1	706	10
9	3.1	706	11
10	2.5	755	11

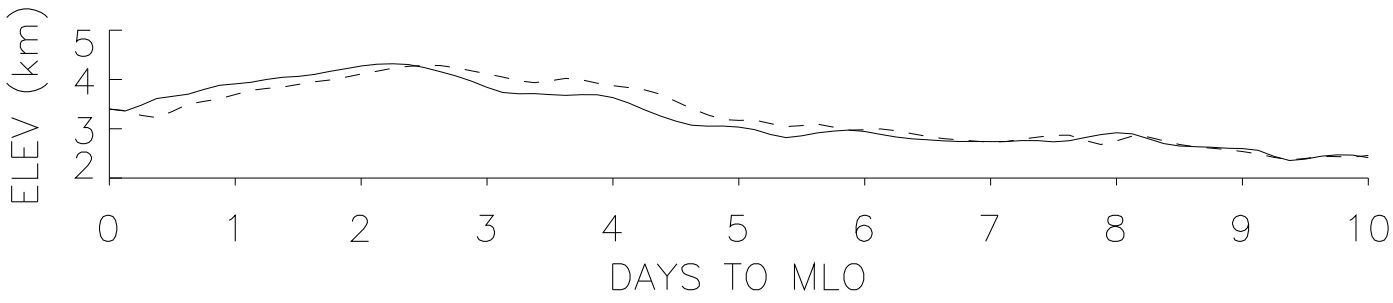
06UT

Day	km	hPa	C
0	3.4	680	9
1	3.6	661	6
2	3.9	635	5
3	3.4	679	8
4	3.2	690	9
5	3.0	708	12
6	2.9	722	13
7	2.5	755	13
8	2.4	766	12
9	2.2	787	14
10	2.2	780	14

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

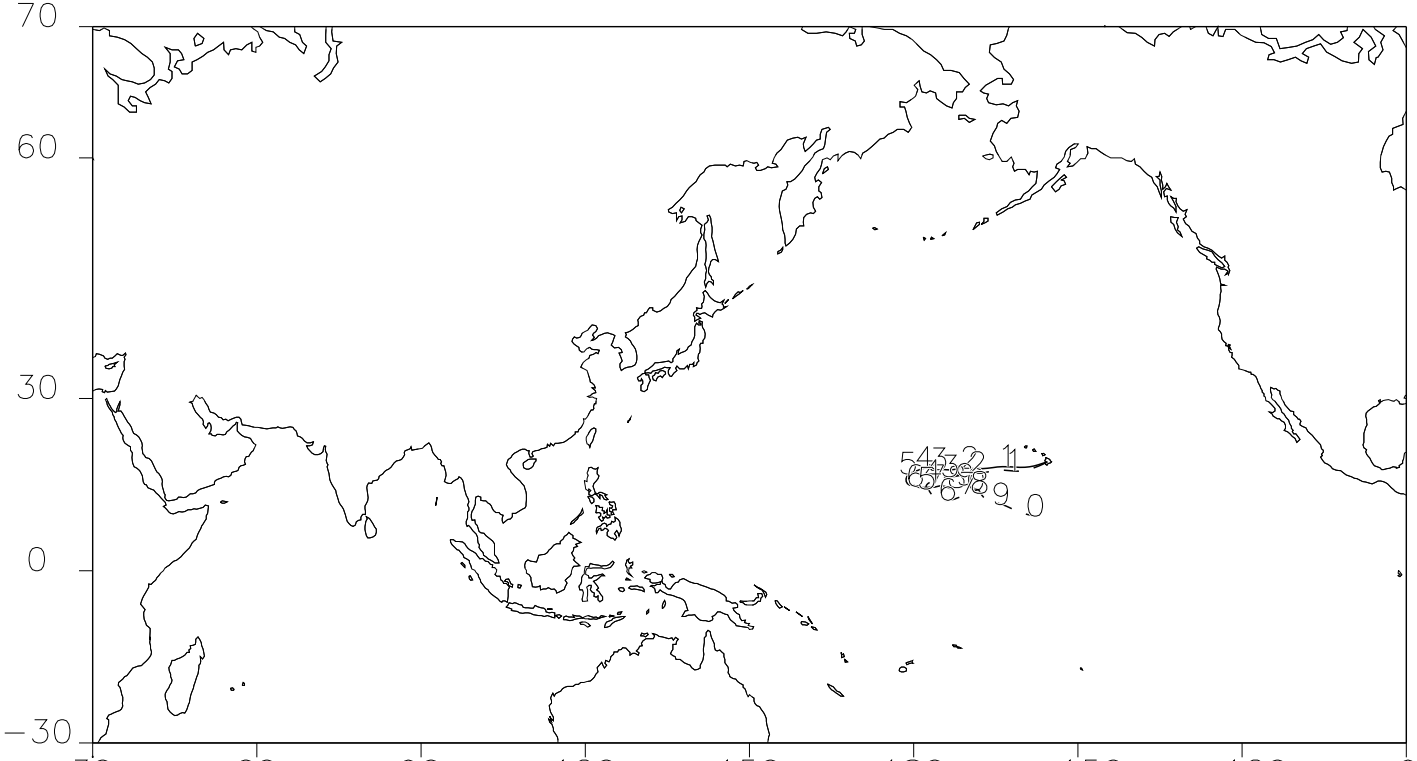
Day	km	hPa	C
0	3.4	679	8
1	3.9	638	5
2	4.3	610	3
3	3.8	643	6
4	3.6	659	5
5	3.0	709	11
6	2.9	716	12
7	2.7	734	13
8	2.9	718	11
9	2.6	746	12
10	2.4	763	13

18UT

Day	km	hPa	C
0	3.4	679	8
1	3.7	655	5
2	4.1	622	3
3	4.1	621	2
4	3.9	639	4
5	3.2	696	9
6	3.0	713	11
7	2.7	735	13
8	2.8	732	12
9	2.5	752	11
10	2.5	758	11

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

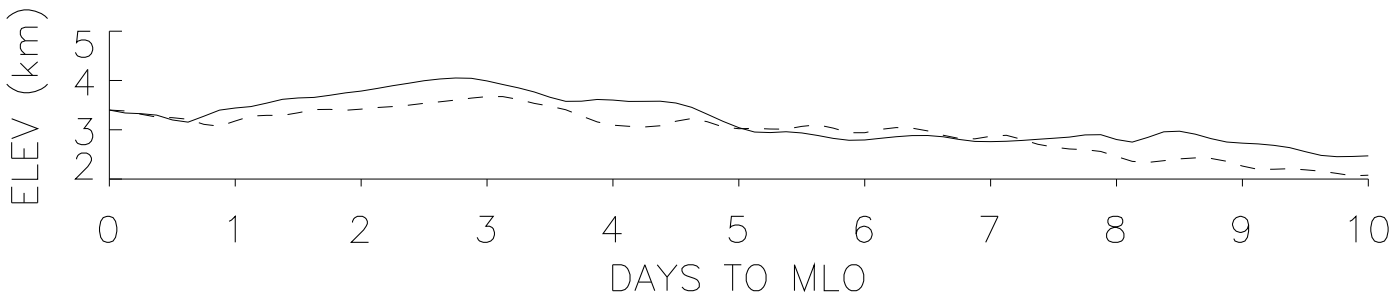


00UT

Day	km	hPa	C
0	3.4	678	7
1	3.4	676	8
2	3.8	649	5
3	4.0	632	4
4	3.6	662	6
5	3.0	708	10
6	2.8	730	12
7	2.8	733	13
8	2.8	728	13
9	2.7	735	11
10	2.5	757	13

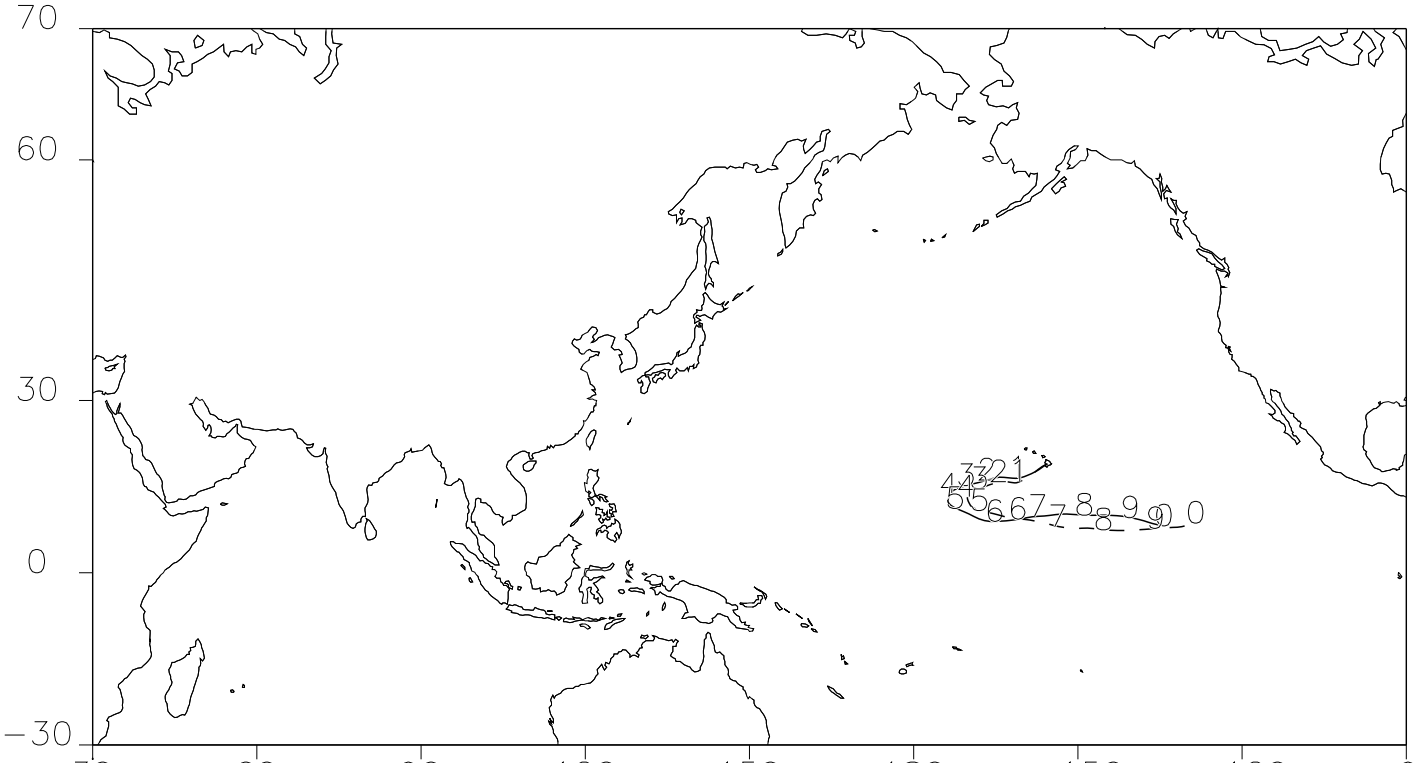
06UT

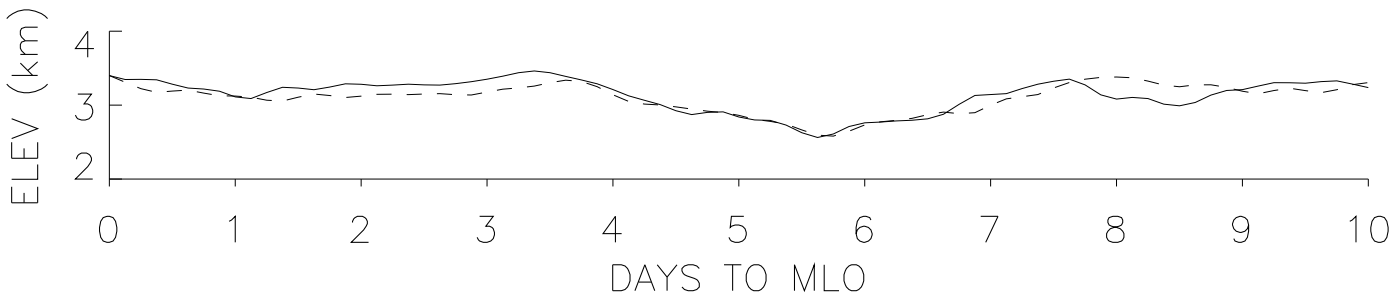
Day	km	hPa	C
0	3.4	679	8
1	3.2	698	10
2	3.4	679	8
3	3.7	657	6
4	3.1	703	10
5	3.0	709	11
6	2.9	716	12
7	2.9	723	12
8	2.5	759	13
9	2.3	776	13
10	2.1	794	14



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

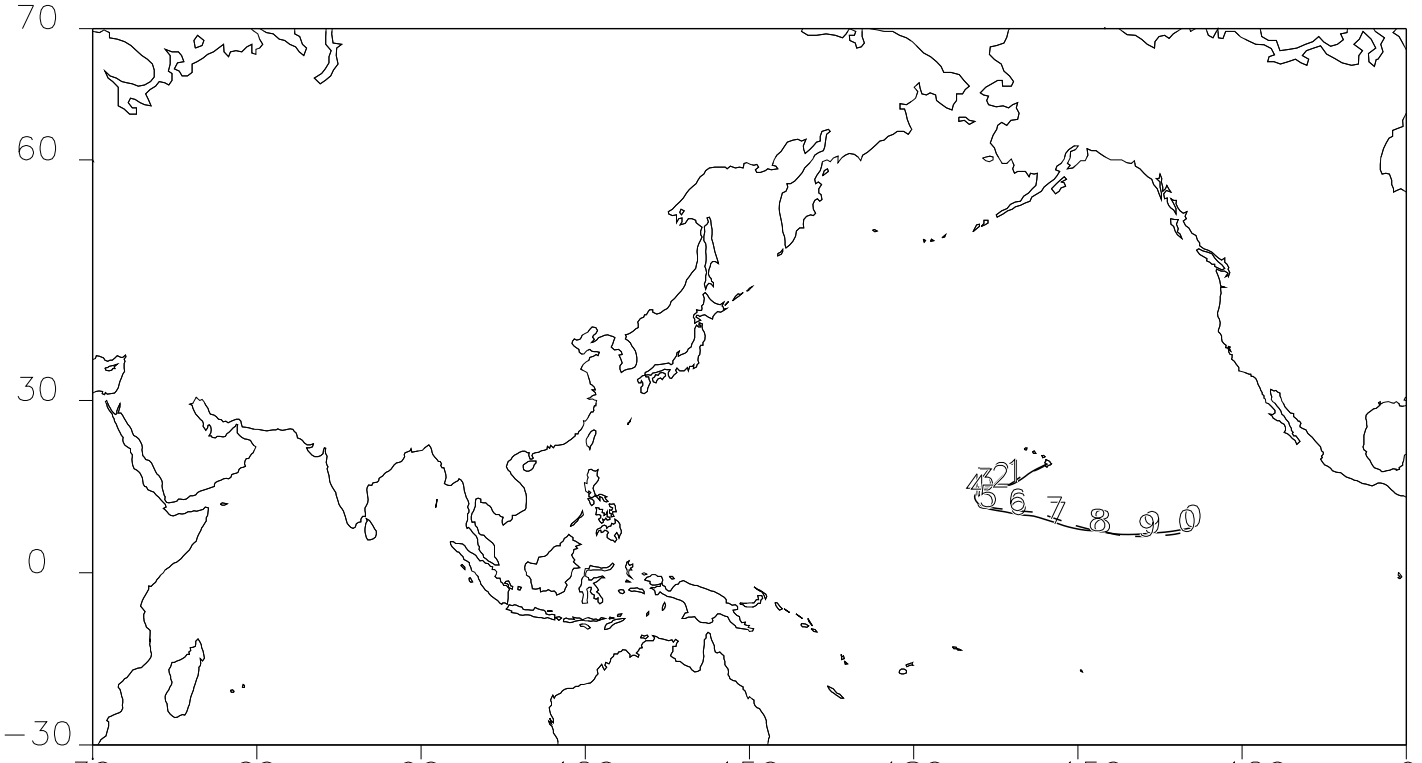
Day	km	hPa	C
0	3.4	679	8
1	3.1	703	11
2	3.3	690	9
3	3.4	684	9
4	3.2	695	9
5	2.8	725	12
6	2.8	731	13
7	3.1	698	11
8	3.1	703	10
9	3.2	693	10
10	3.2	691	9

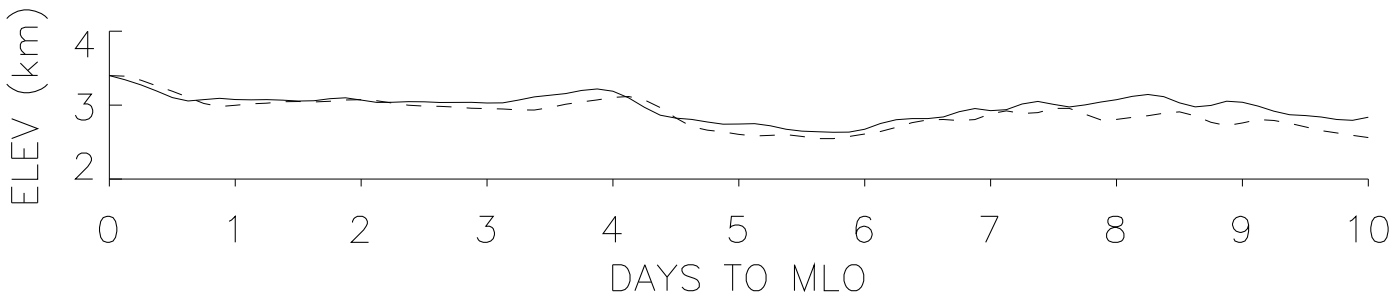
18UT

Day	km	hPa	C
0	3.4	680	9
1	3.1	702	10
2	3.1	703	10
3	3.2	698	10
4	3.1	701	10
5	2.9	724	12
6	2.7	734	13
7	3.0	711	12
8	3.4	679	9
9	3.2	696	10
10	3.3	687	9

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

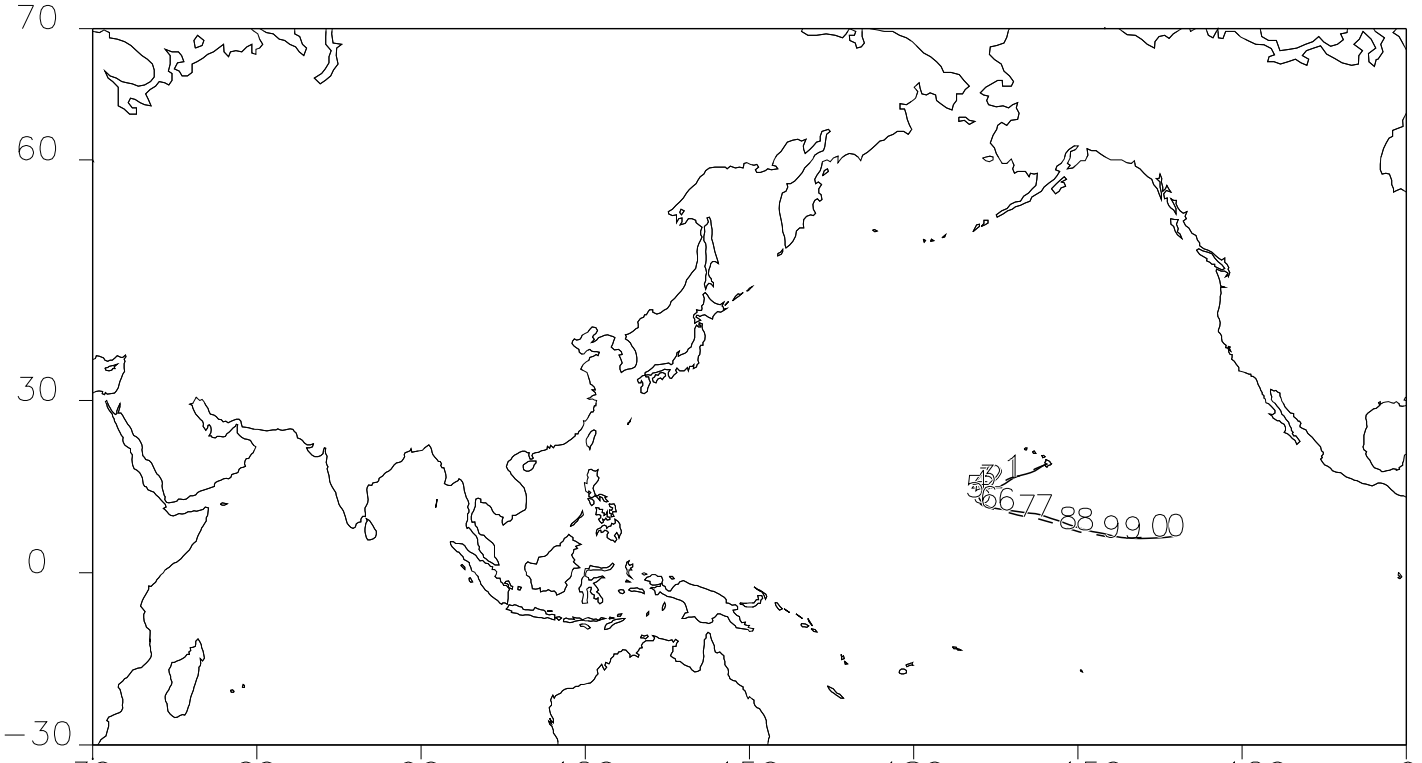
Day	km	hPa	C
0	3.4	680	7
1	3.1	706	10
2	3.1	708	11
3	3.0	711	11
4	3.2	698	10
5	2.7	734	12
6	2.7	739	14
7	2.9	716	13
8	3.1	703	10
9	3.0	706	11
10	2.8	725	11

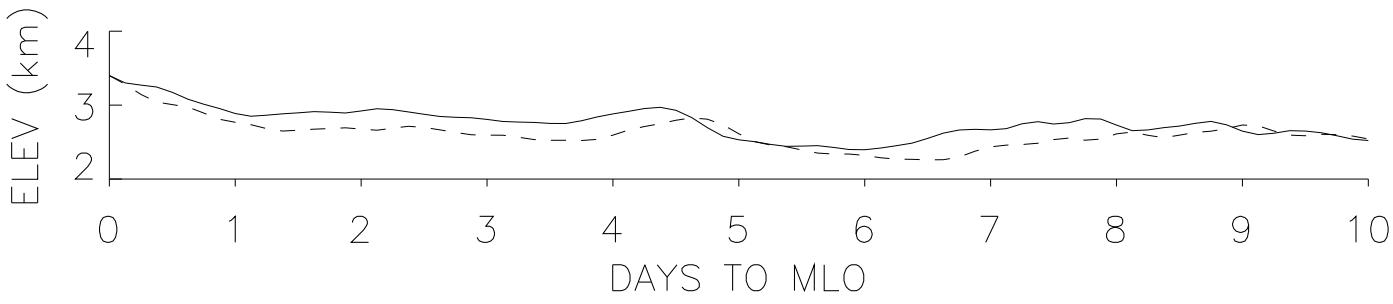
06UT

Day	km	hPa	C
0	3.4	681	8
1	3.0	713	10
2	3.1	707	12
3	3.0	718	11
4	3.1	704	11
5	2.6	747	13
6	2.6	746	14
7	2.9	721	13
8	2.8	728	12
9	2.8	731	12
10	2.6	750	13

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

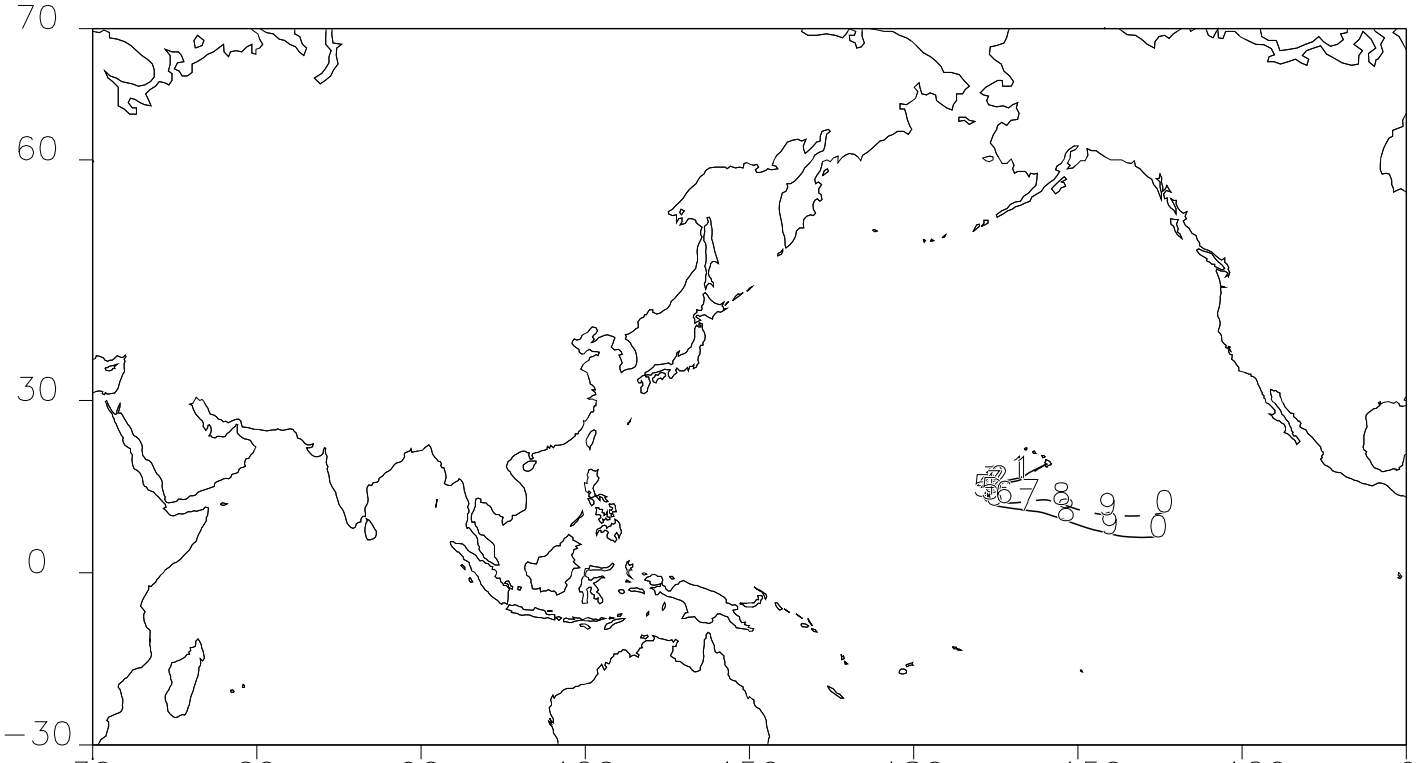
Day	km	hPa	C
0	3.4	680	8
1	2.9	722	11
2	2.9	720	11
3	2.8	731	12
4	2.9	724	12
5	2.5	754	14
6	2.4	764	14
7	2.7	740	12
8	2.7	732	12
9	2.6	739	11
10	2.5	752	11

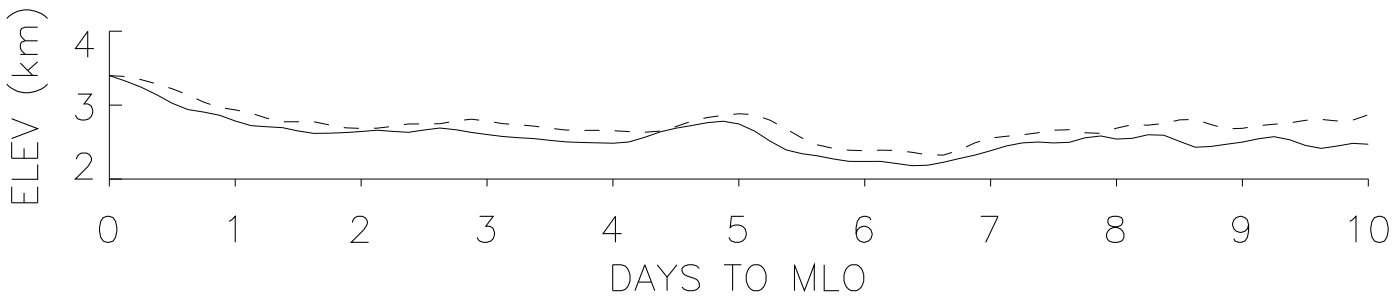
18UT

Day	km	hPa	C
0	3.4	680	7
1	2.8	734	11
2	2.7	741	12
3	2.6	749	12
4	2.6	749	13
5	2.6	746	12
6	2.3	773	14
7	2.4	761	14
8	2.6	744	13
9	2.7	733	11
10	2.5	752	12

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

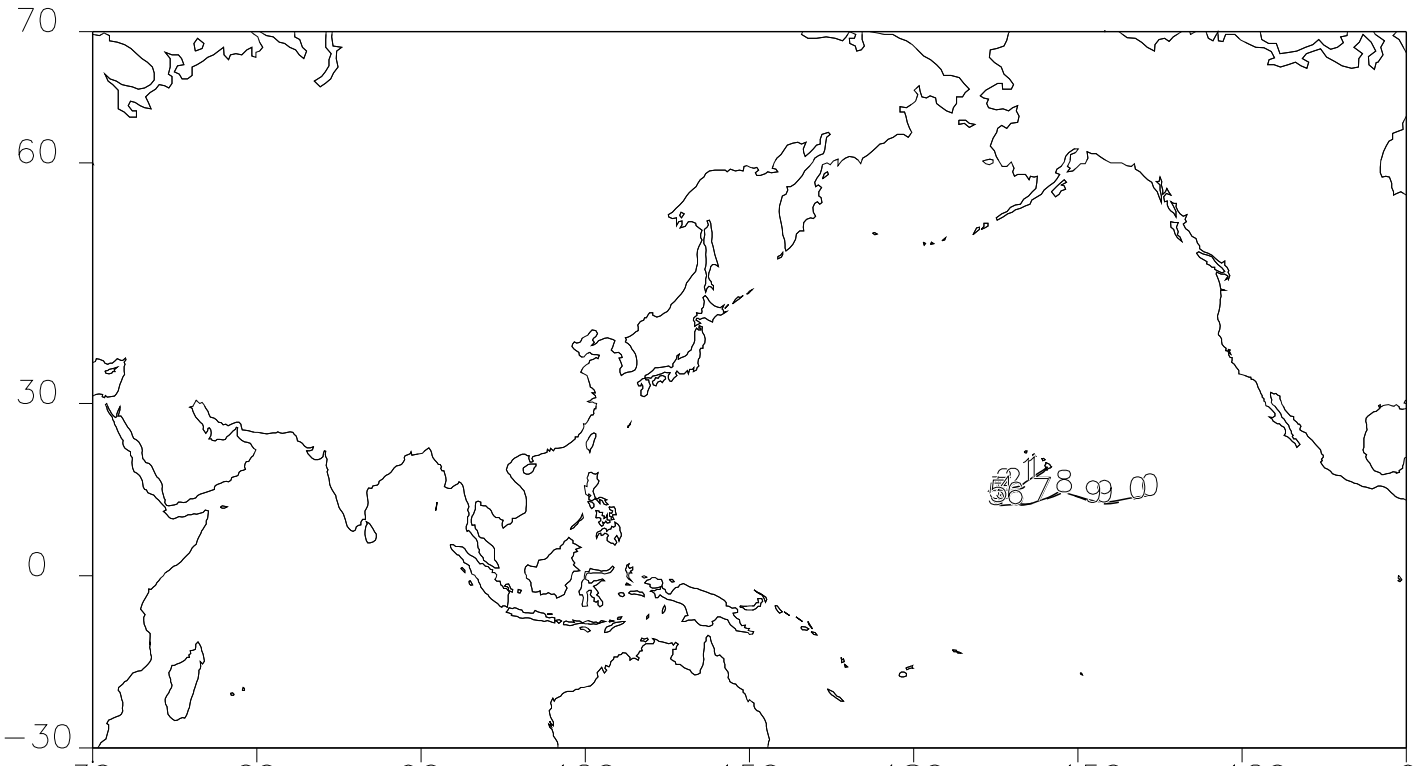
Day	km	hPa	C
0	3.4	680	7
1	2.8	732	11
2	2.6	743	12
3	2.6	749	13
4	2.5	759	14
5	2.7	735	12
6	2.2	780	14
7	2.4	765	14
8	2.5	749	14
9	2.5	753	12
10	2.5	756	12

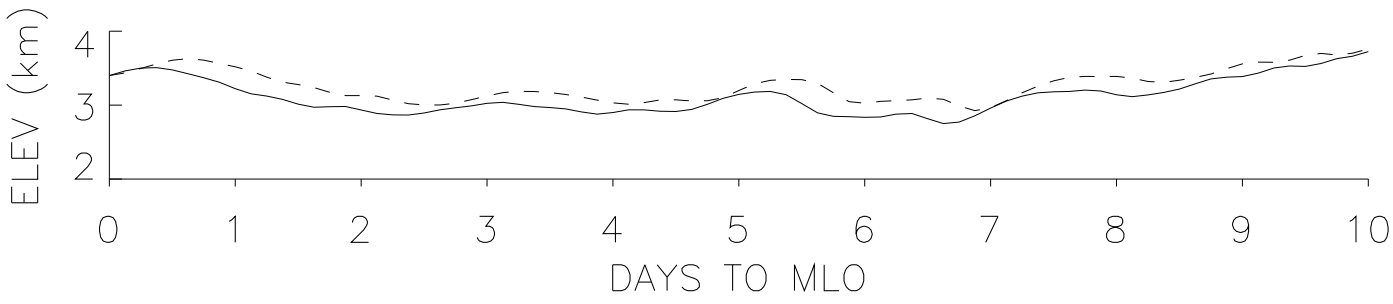
06UT

Day	km	hPa	C
0	3.4	682	8
1	2.9	719	11
2	2.7	740	12
3	2.8	732	13
4	2.7	745	13
5	2.9	723	12
6	2.4	767	14
7	2.6	751	13
8	2.7	739	13
9	2.7	739	13
10	2.9	723	11

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





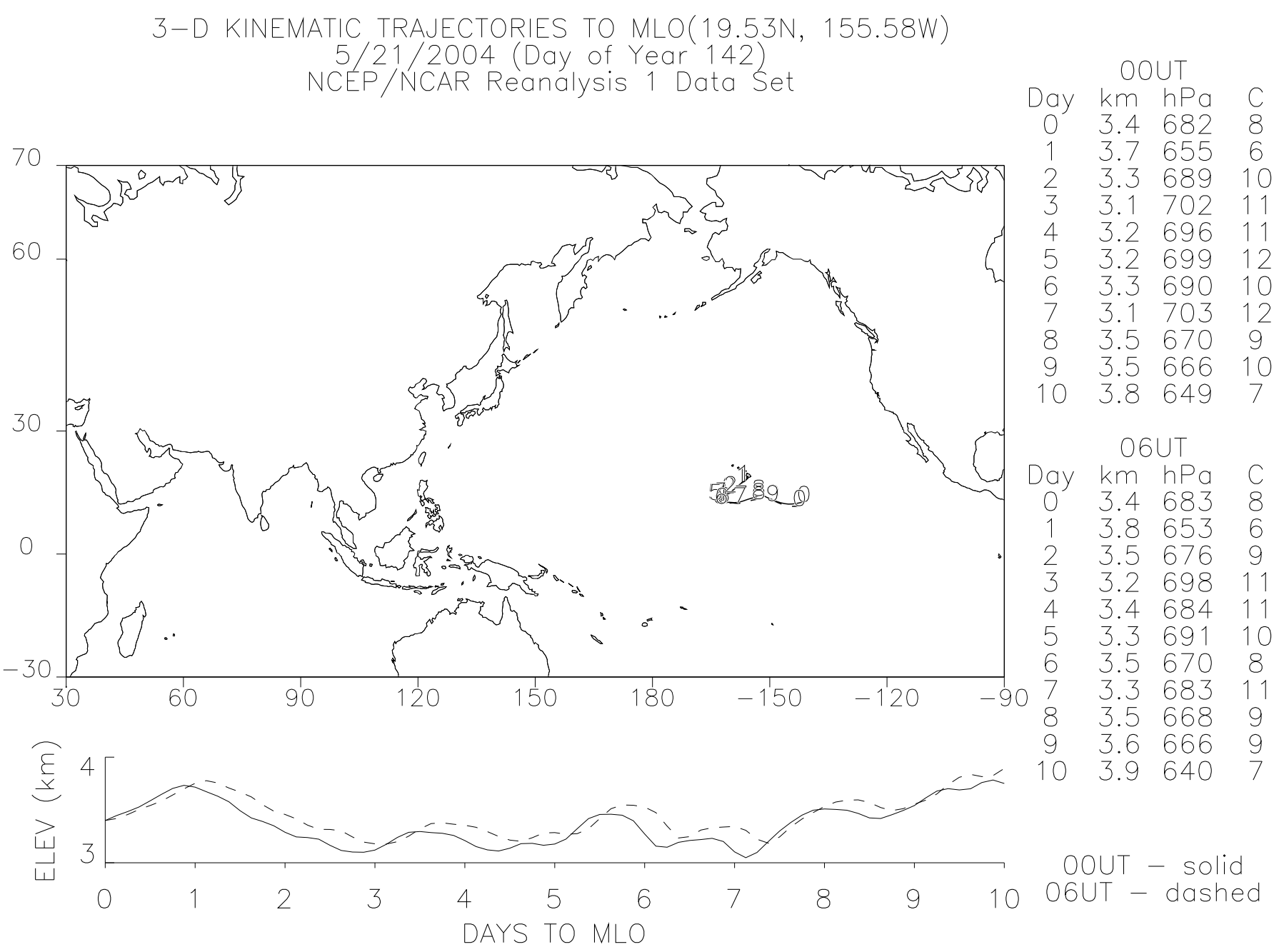
12UT

Day	km	hPa	C
0	3.4	681	7
1	3.2	695	9
2	2.9	718	11
3	3.0	711	11
4	2.9	723	12
5	3.1	702	11
6	2.8	727	13
7	3.0	715	12
8	3.1	699	11
9	3.4	679	9
10	3.7	652	6

18UT

Day	km	hPa	C
0	3.4	682	8
1	3.5	671	7
2	3.1	703	10
3	3.1	703	11
4	3.0	711	11
5	3.2	697	11
6	3.0	711	13
7	3.0	715	13
8	3.4	680	9
9	3.6	666	9
10	3.8	650	7

12UT – solid
18UT – dashed



00UT

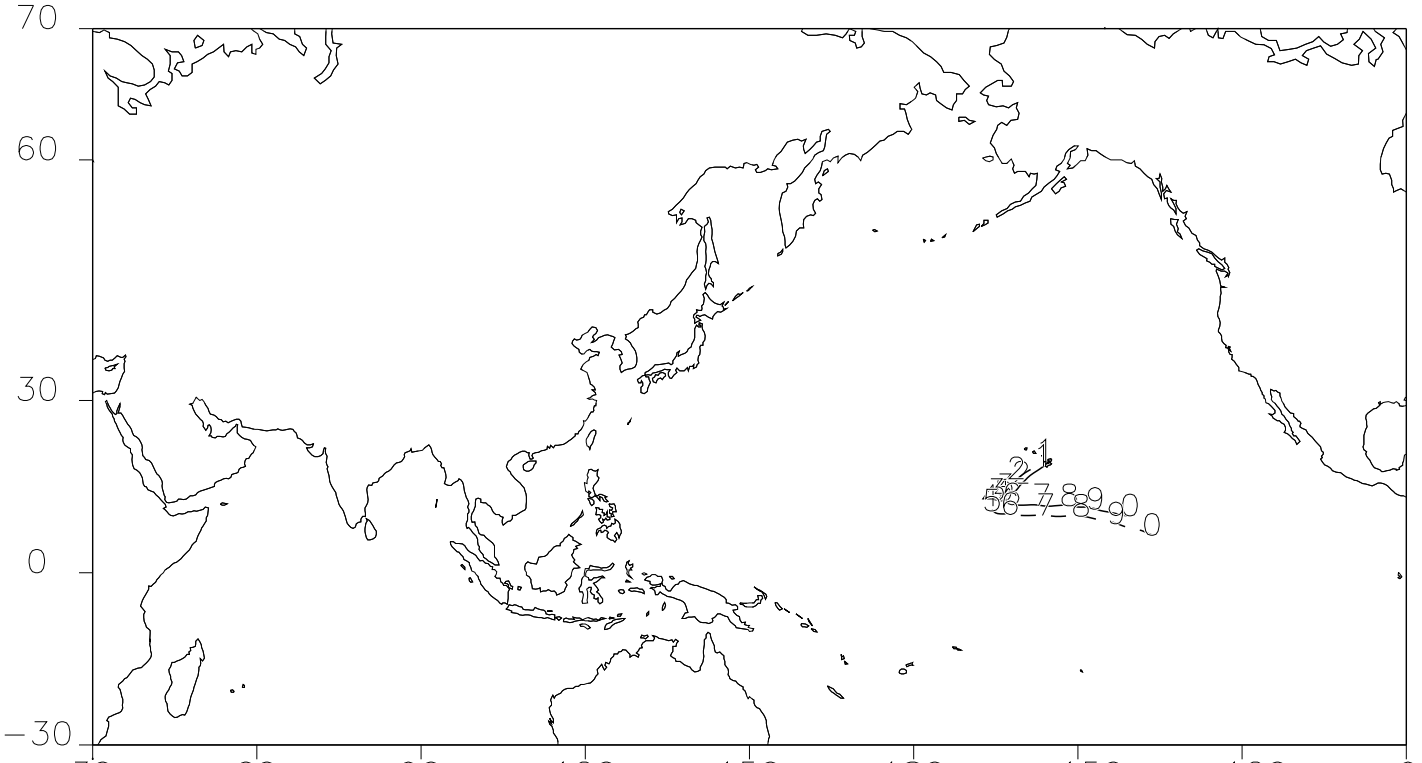
Day	km	hPa	C
0	3.4	682	8
1	3.7	655	6
2	3.3	689	10
3	3.1	702	11
4	3.2	696	11
5	3.2	699	12
6	3.3	690	10
7	3.1	703	12
8	3.5	670	9
9	3.5	666	10
10	3.8	649	7

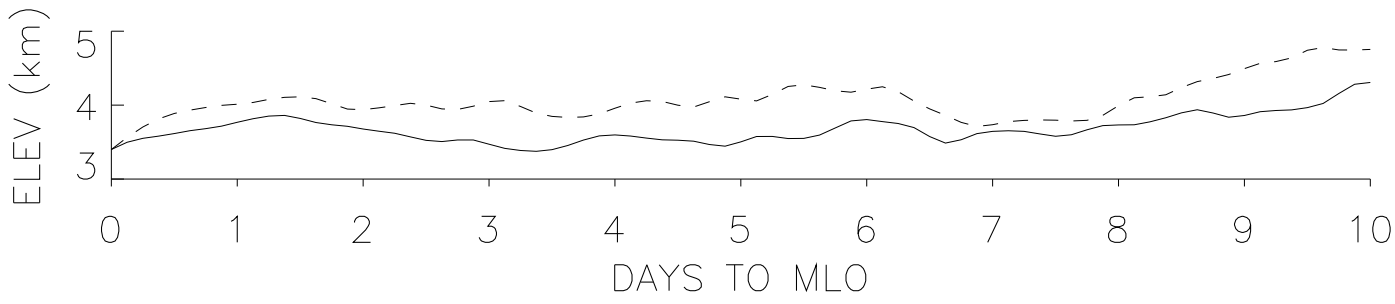
06UT

Day	km	hPa	C
0	3.4	683	8
1	3.8	653	6
2	3.5	676	9
3	3.2	698	11
4	3.4	684	11
5	3.3	691	10
6	3.5	670	8
7	3.3	683	11
8	3.5	668	9
9	3.6	666	9
10	3.9	640	7

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

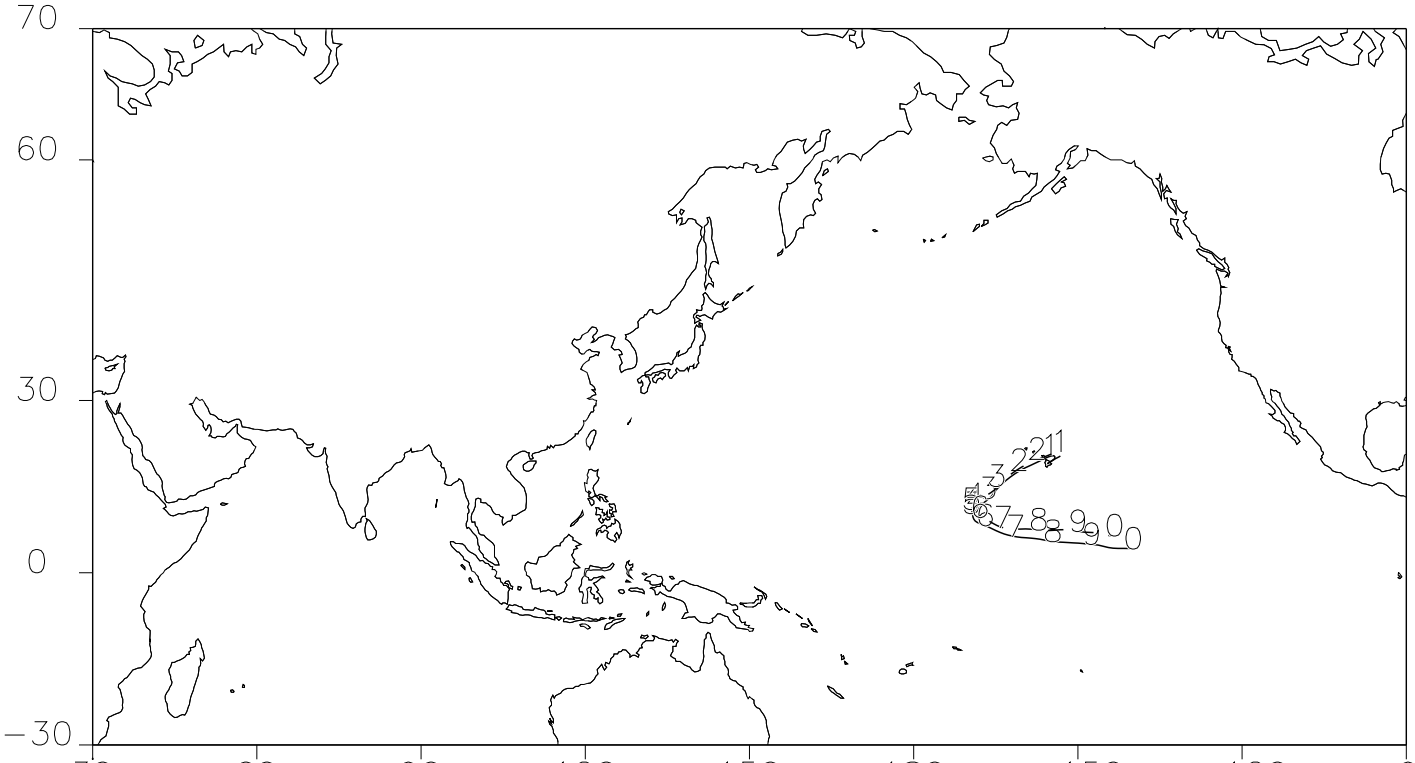
Day	km	hPa	C
0	3.4	683	7
1	3.8	651	5
2	3.7	658	6
3	3.5	673	9
4	3.6	664	8
5	3.5	672	9
6	3.8	648	7
7	3.6	659	9
8	3.7	651	9
9	3.9	641	9
10	4.3	606	5

18UT

Day	km	hPa	C
0	3.4	683	7
1	4.0	633	4
2	3.9	636	4
3	4.0	629	6
4	4.0	636	7
5	4.1	626	6
6	4.2	616	5
7	3.7	652	8
8	4.0	631	8
9	4.5	595	6
10	4.8	575	4

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

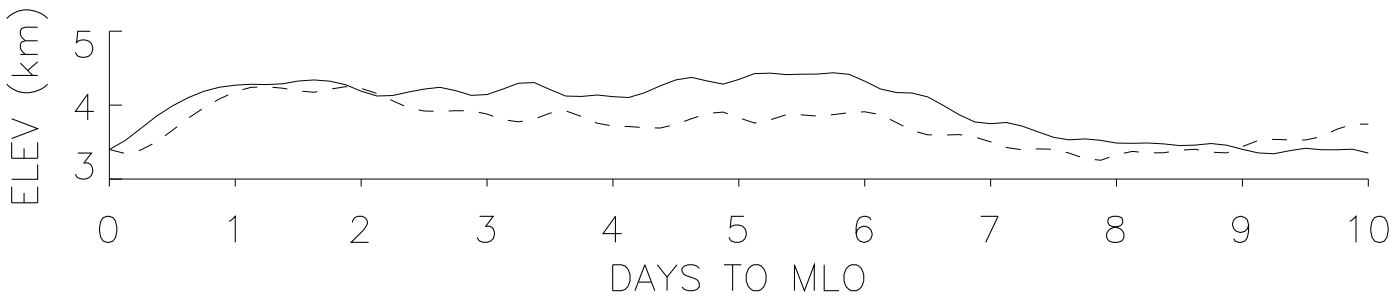


00UT

Day	km	hPa	C
0	3.4	684	7
1	4.3	613	2
2	4.2	617	3
3	4.1	621	5
4	4.1	623	6
5	4.3	606	5
6	4.3	608	5
7	3.7	650	8
8	3.5	669	11
9	3.4	676	11
10	3.4	679	10

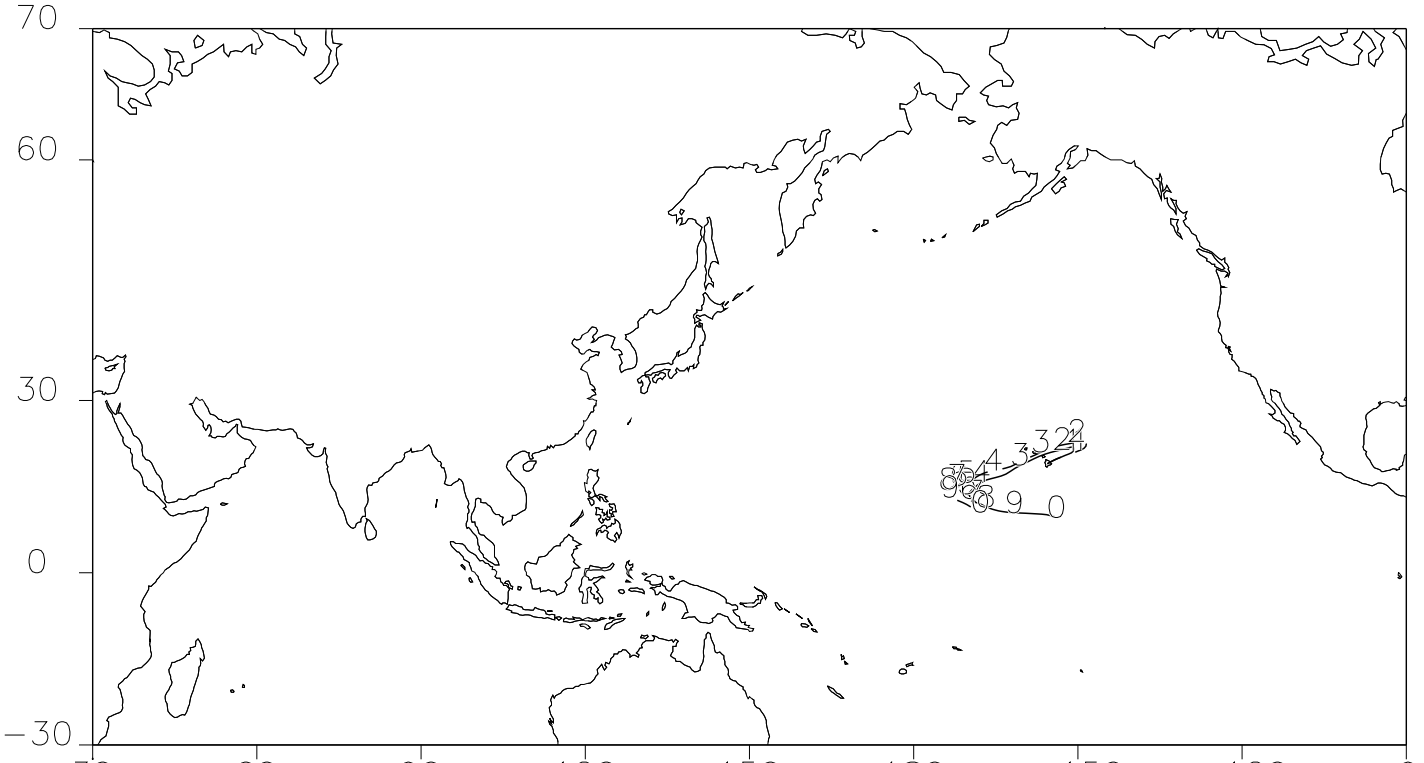
06UT

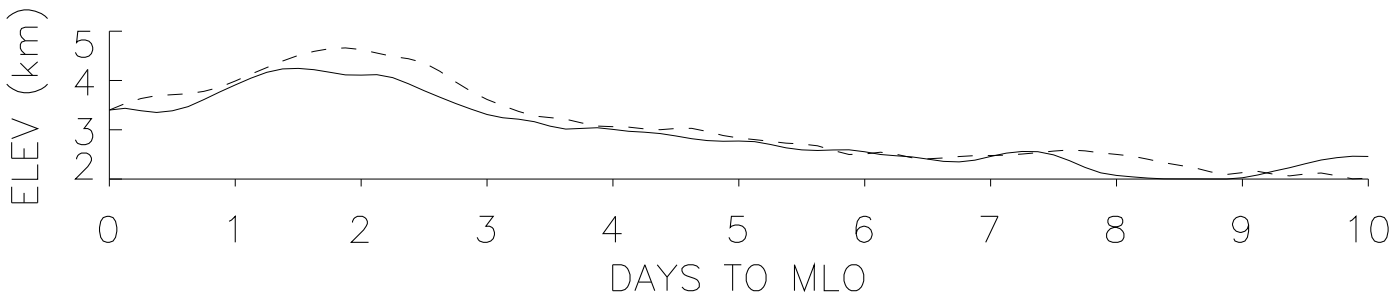
Day	km	hPa	C
0	3.4	684	8
1	4.2	620	2
2	4.2	615	2
3	3.9	641	6
4	3.7	654	9
5	3.8	646	8
6	3.9	640	7
7	3.5	671	8
8	3.3	684	11
9	3.4	675	12
10	3.7	650	9



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

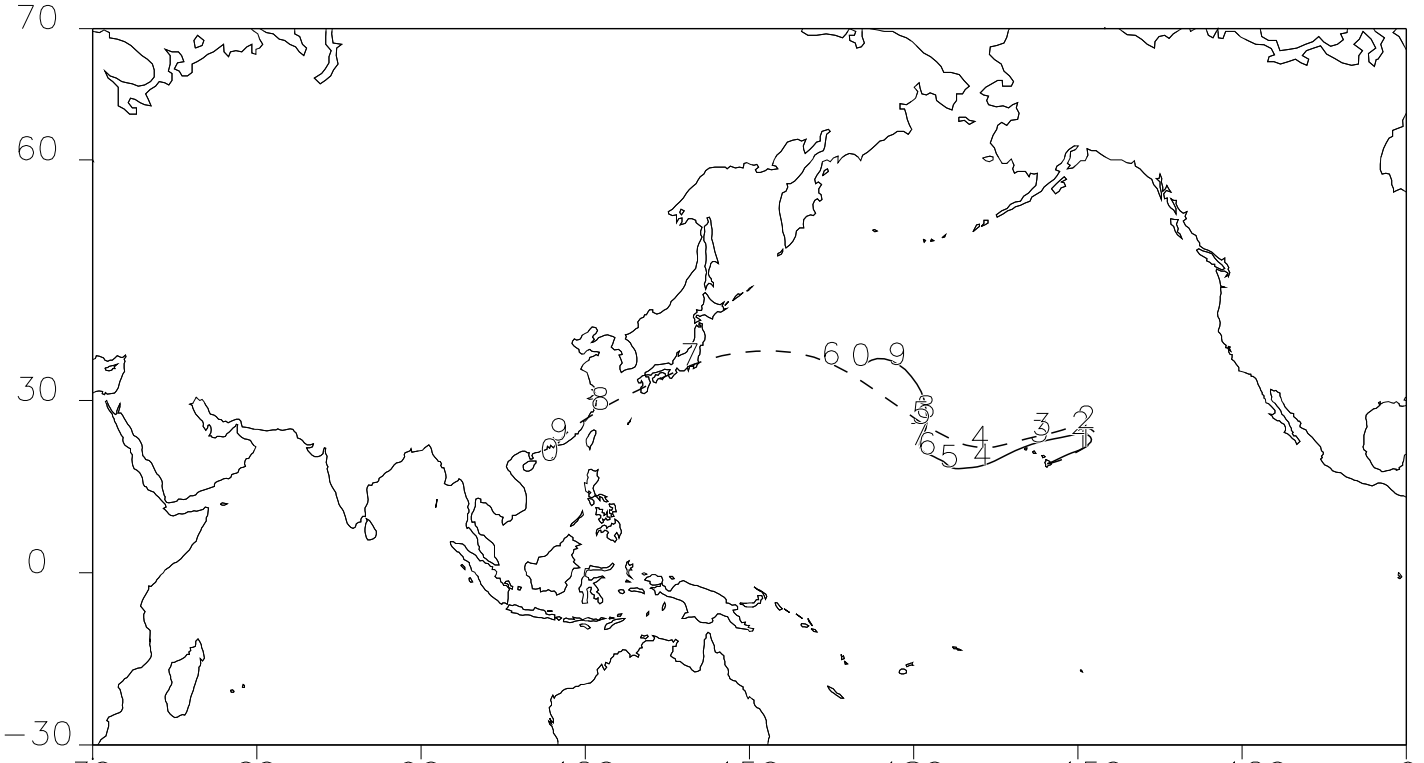
Day	km	hPa	C
0	3.4	682	8
1	3.9	642	4
2	4.1	624	1
3	3.3	687	8
4	3.0	711	10
5	2.8	734	12
6	2.6	754	13
7	2.5	762	13
8	2.1	796	15
9	2.0	799	15
10	2.5	758	13

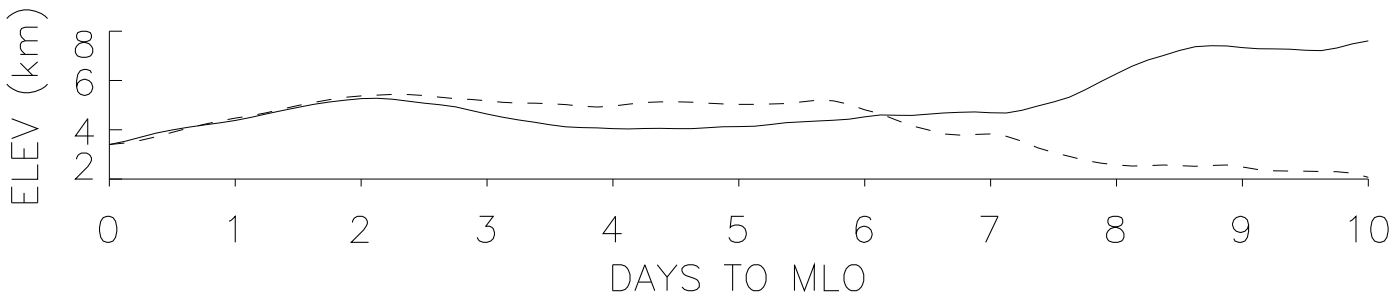
18UT

Day	km	hPa	C
0	3.4	683	9
1	4.0	636	3
2	4.6	586	−2
3	3.6	662	5
4	3.1	707	9
5	2.8	727	10
6	2.5	756	12
7	2.5	759	12
8	2.5	756	11
9	2.1	791	14
10	2.0	799	16

12UT – solid
18UT – dashed

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





00UT

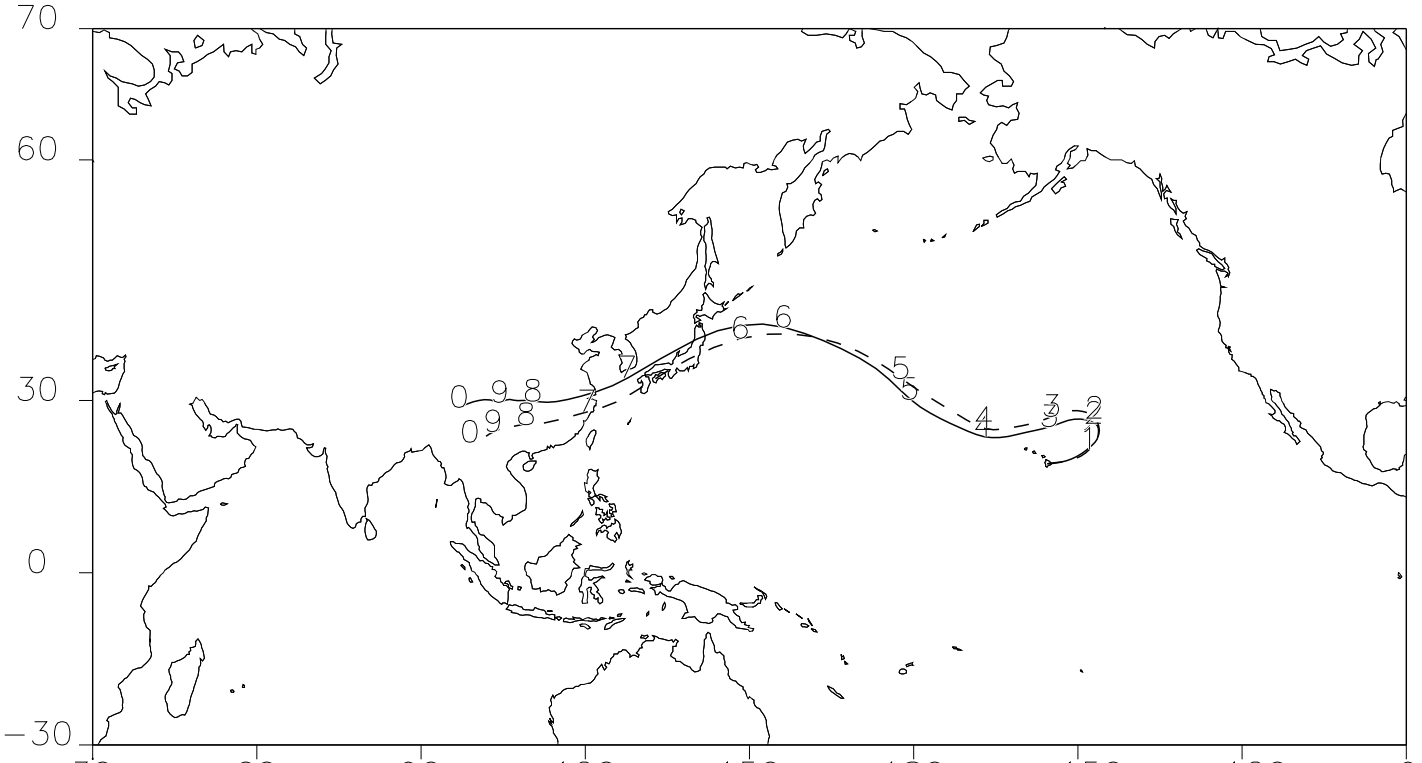
Day	km	hPa	C
0	3.4	682	10
1	4.4	606	2
2	5.3	541	−5
3	4.6	582	−2
4	4.0	626	4
5	4.1	621	4
6	4.5	593	2
7	4.7	580	−1
8	6.3	473	−14
9	7.3	410	−24
10	7.6	394	−26

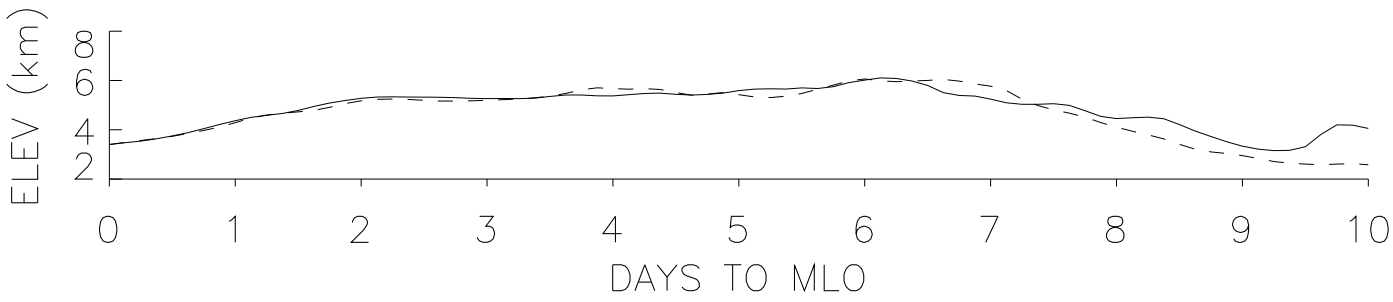
06UT

Day	km	hPa	C
0	3.4	682	10
1	4.5	600	1
2	5.4	534	−6
3	5.2	544	−4
4	5.0	557	−2
5	5.0	551	−3
6	4.8	567	−2
7	3.8	640	4
8	2.6	749	13
9	2.5	757	13
10	2.1	794	16

00UT – solid
06UT – dashed

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





12UT

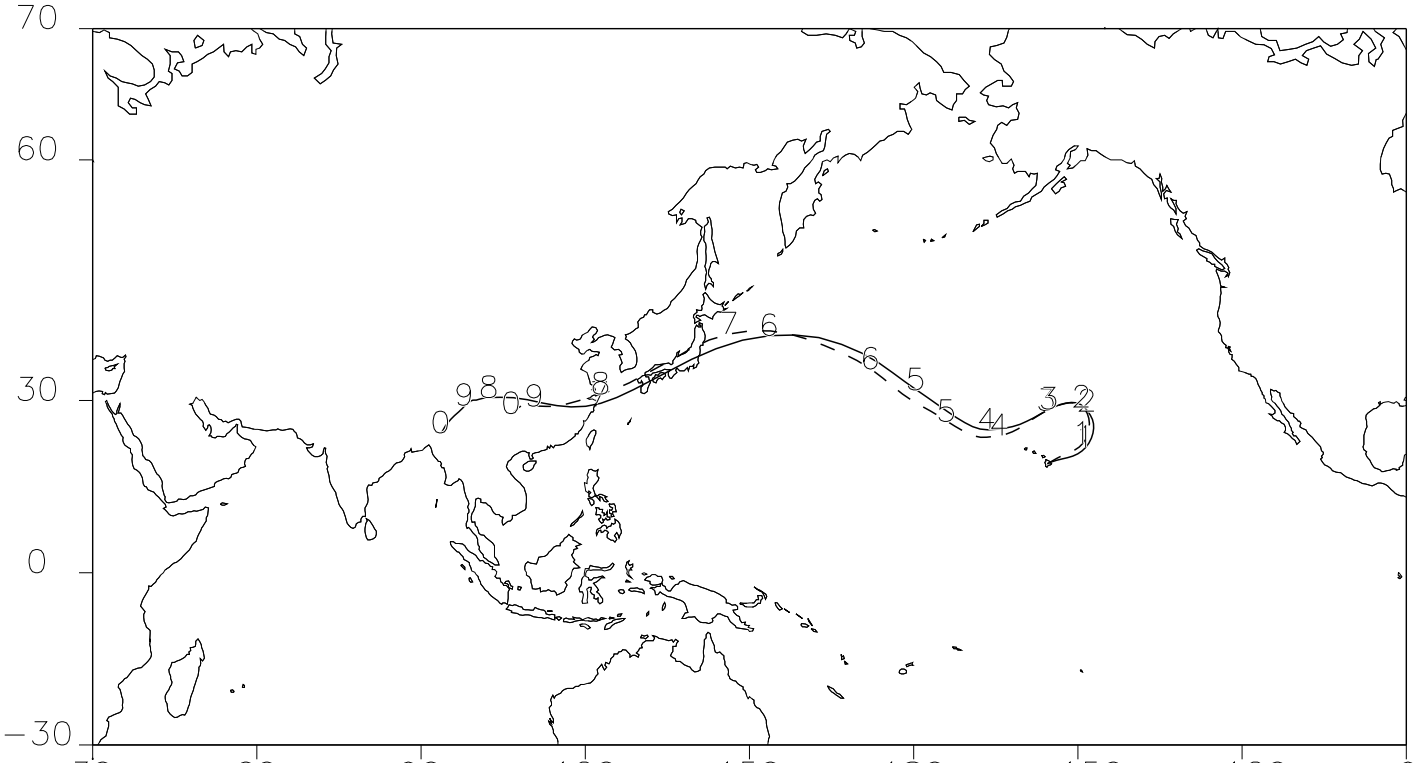
Day	km	hPa	C
0	3.4	681	9
1	4.4	606	1
2	5.3	540	−6
3	5.3	538	−6
4	5.4	528	−5
5	5.6	512	−6
6	6.0	481	−10
7	5.2	535	−5
8	4.5	593	−1
9	3.3	679	7
10	4.1	619	4

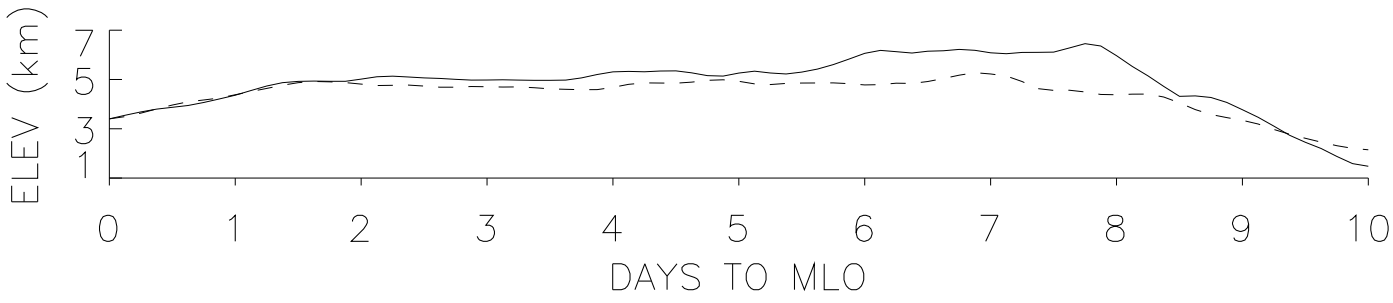
18UT

Day	km	hPa	C
0	3.4	682	9
1	4.3	613	2
2	5.2	548	−5
3	5.2	543	−6
4	5.7	507	−8
5	5.4	520	−8
6	6.1	478	−12
7	5.8	503	−8
8	4.1	622	3
9	2.9	714	11
10	2.6	746	13

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





00UT

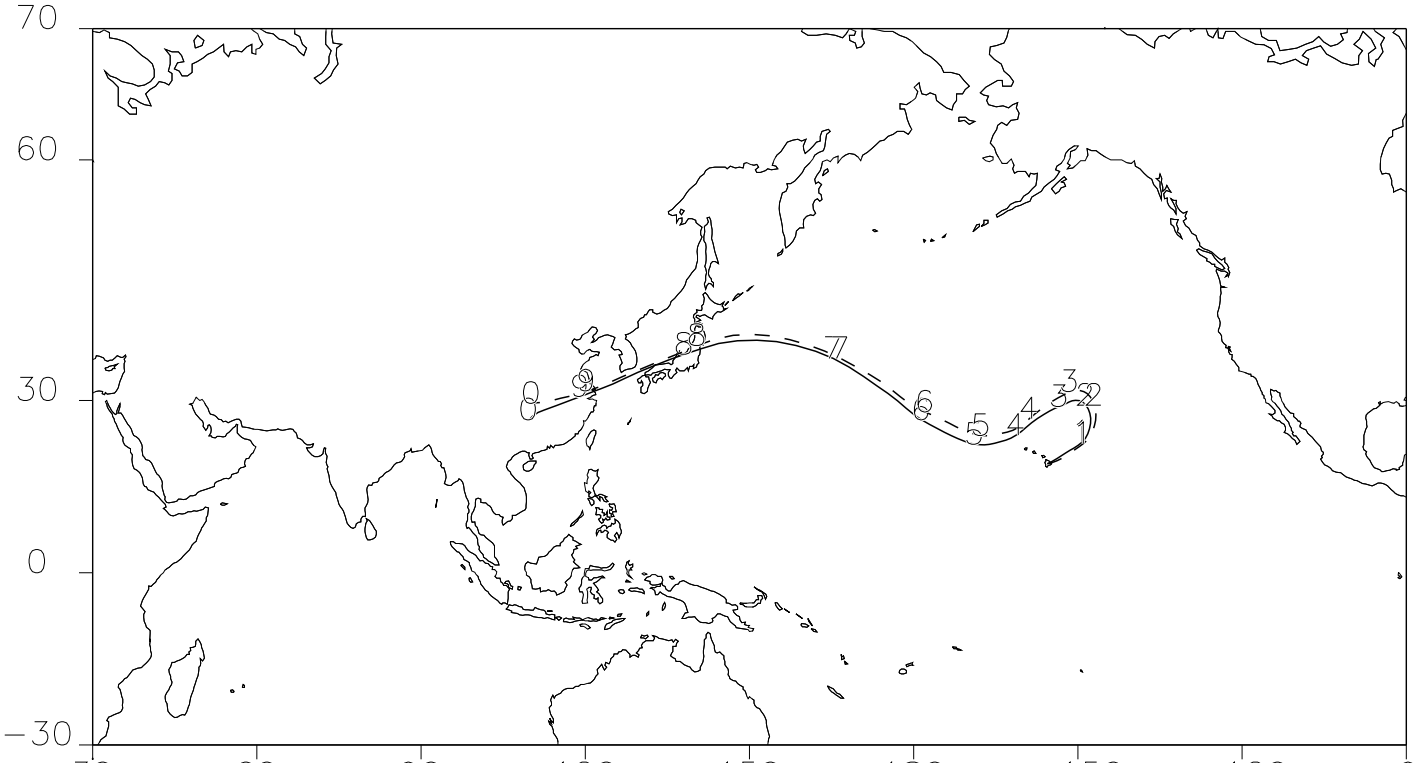
Day	km	hPa	C
0	3.4	681	8
1	4.4	606	2
2	5.0	560	−4
3	5.0	559	−4
4	5.3	532	−4
5	5.3	533	−6
6	6.1	478	−13
7	6.1	482	−11
8	6.0	490	−10
9	3.8	645	5
10	1.5	847	20

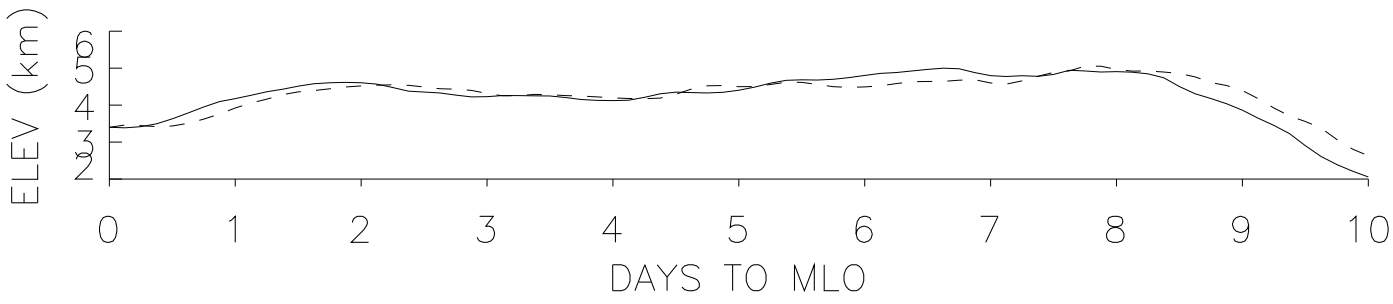
06UT

Day	km	hPa	C
0	3.4	681	8
1	4.4	605	2
2	4.8	575	−2
3	4.7	579	−3
4	4.7	577	−1
5	4.9	557	−2
6	4.8	565	−2
7	5.2	534	−5
8	4.4	598	2
9	3.3	681	6
10	2.1	783	15

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

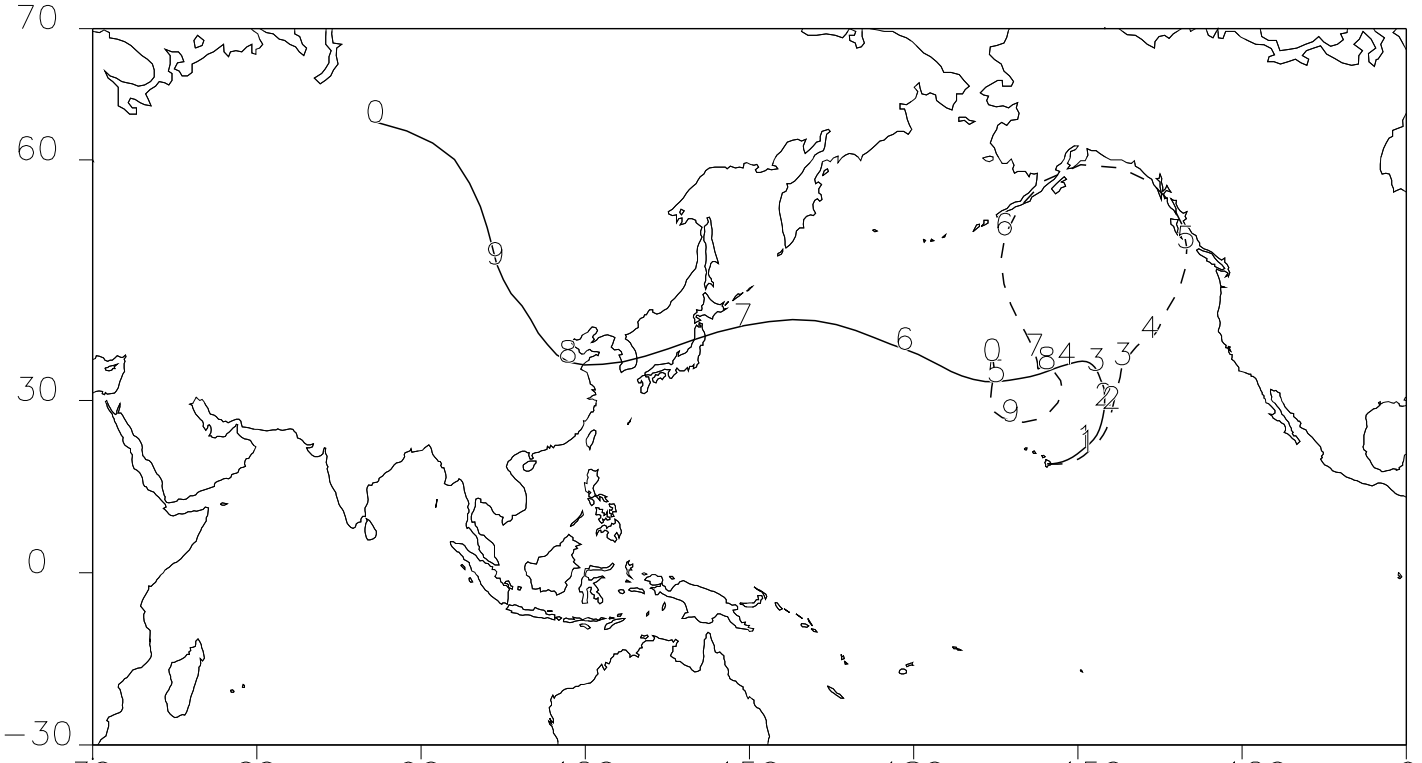
Day	km	hPa	C
0	3.4	680	7
1	4.2	620	3
2	4.6	589	-1
3	4.2	616	1
4	4.1	620	2
5	4.4	598	0
6	4.8	568	-2
7	4.8	565	-2
8	4.9	557	-3
9	3.9	638	3
10	2.1	793	15

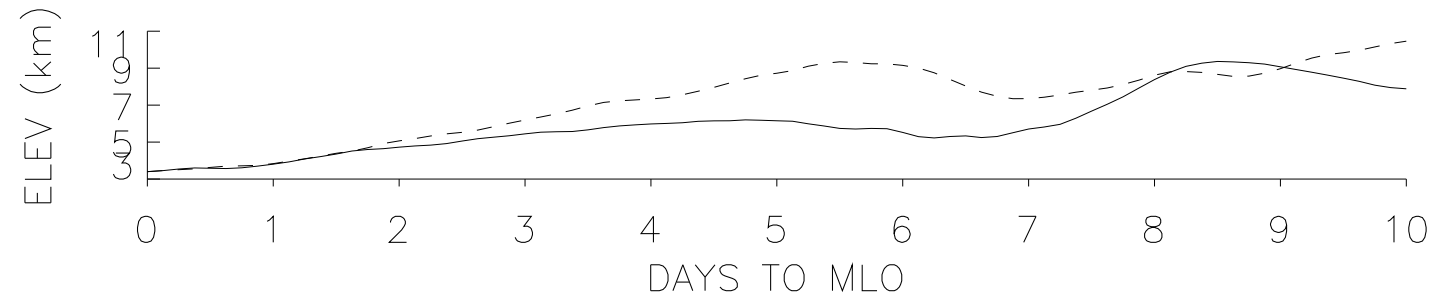
18UT

Day	km	hPa	C
0	3.4	681	7
1	3.9	640	3
2	4.5	595	-1
3	4.3	609	0
4	4.2	614	0
5	4.5	590	-1
6	4.5	589	-1
7	4.6	578	-1
8	5.0	551	-4
9	4.4	596	-1
10	2.6	741	10

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

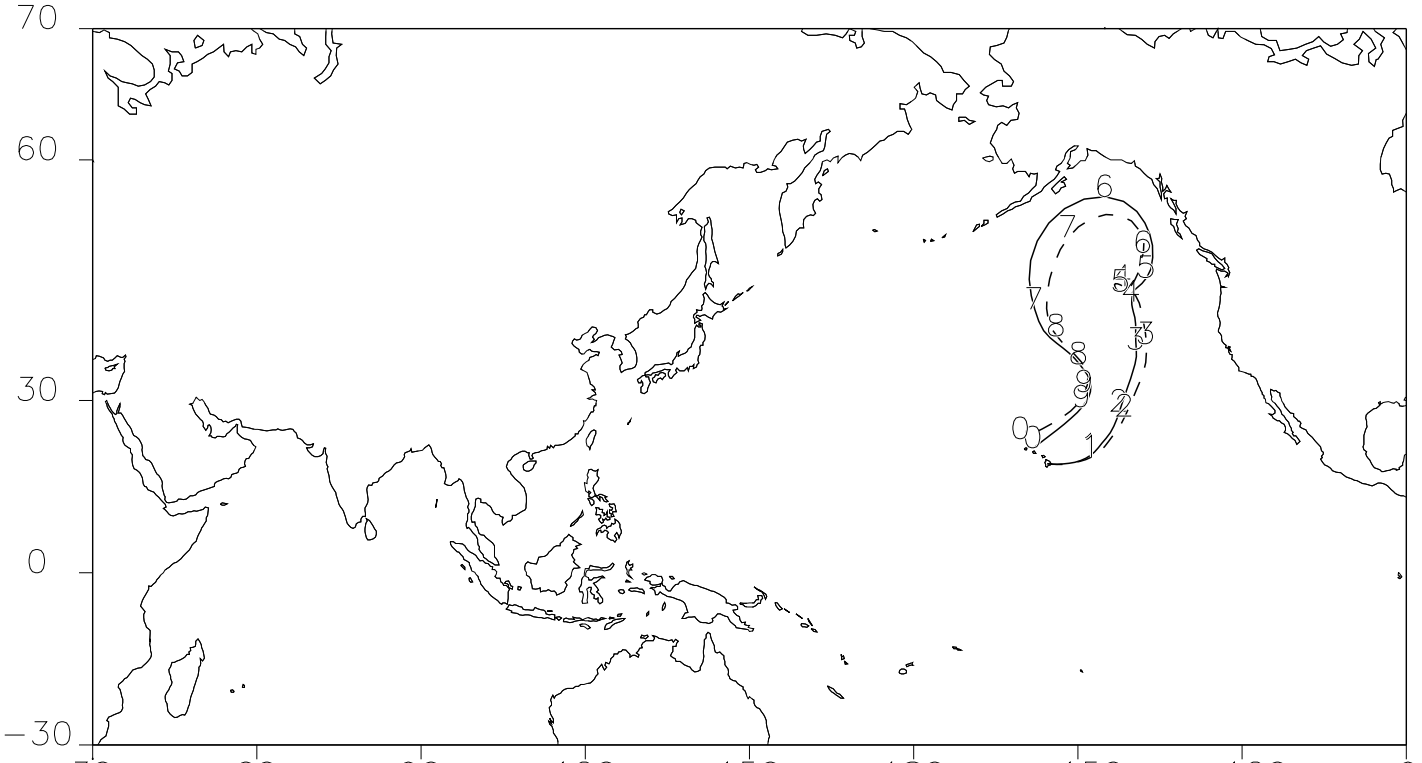
Day	km	hPa	C
0	3.4	680	7
1	3.8	648	3
2	4.7	580	−2
3	5.4	528	−9
4	6.0	488	−16
5	6.2	469	−19
6	5.5	508	−14
7	5.7	495	−14
8	8.4	342	−40
9	9.1	308	−47
10	7.9	367	−35

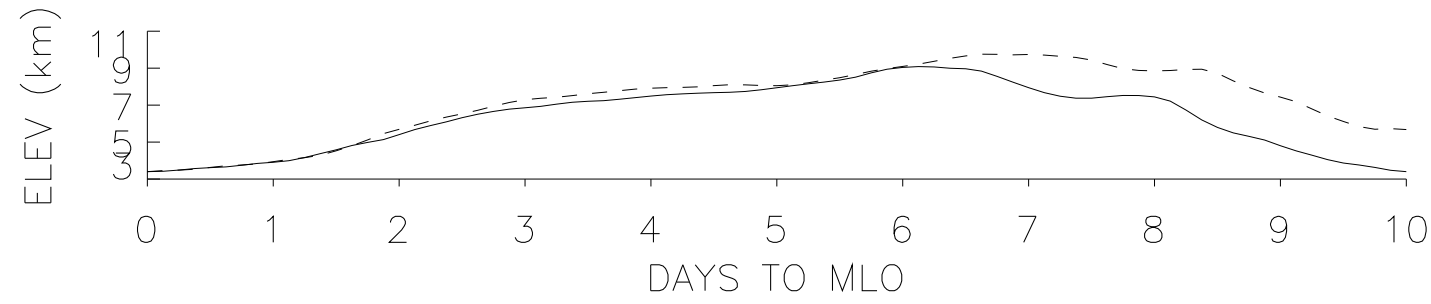
06UT

Day	km	hPa	C
0	3.4	680	8
1	3.8	645	5
2	5.1	554	−6
3	6.2	478	−15
4	7.3	407	−25
5	8.7	330	−38
6	9.1	306	−41
7	7.4	400	−26
8	8.6	336	−36
9	9.0	322	−37
10	10.5	256	−51

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

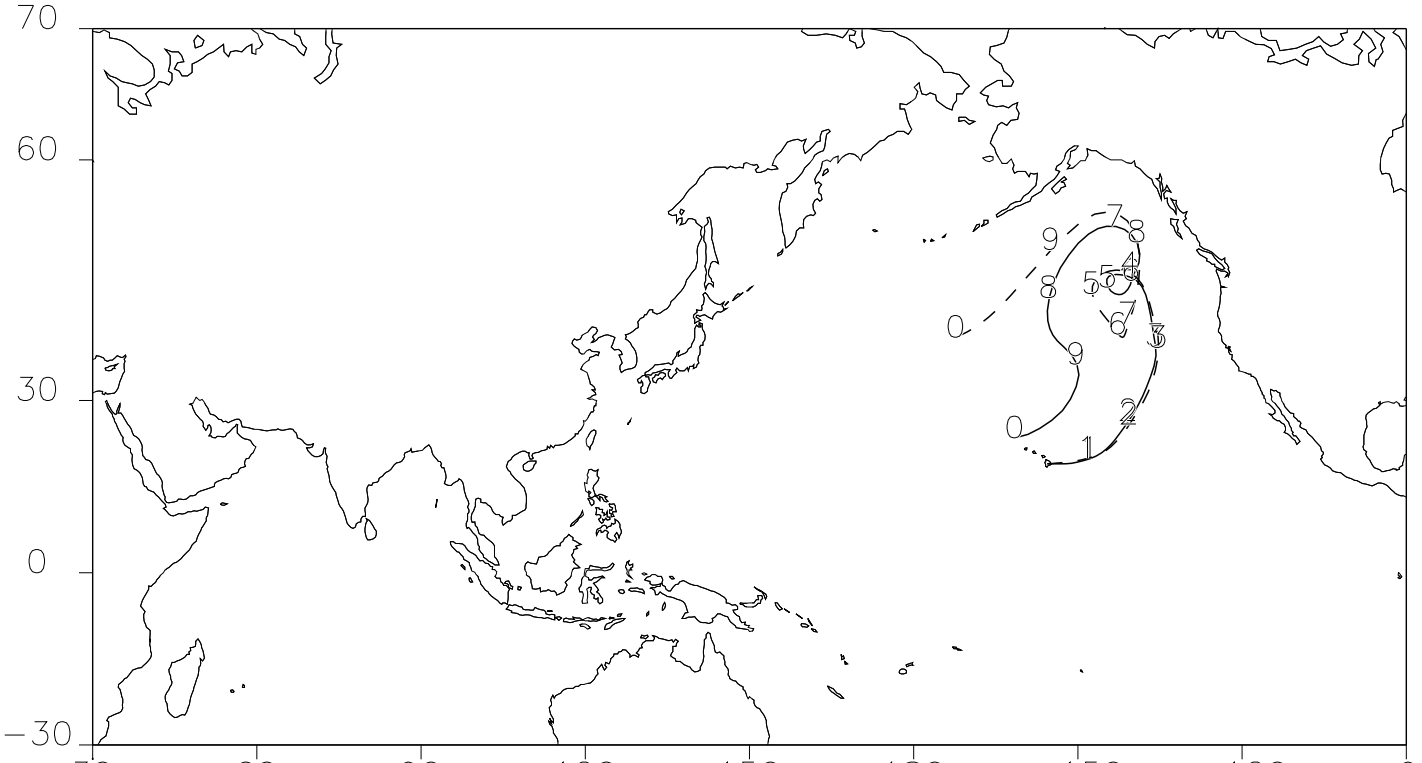
Day	km	hPa	C
0	3.4	680	6
1	3.9	639	3
2	5.4	528	-10
3	6.9	437	-21
4	7.5	400	-28
5	7.9	374	-32
6	9.0	317	-40
7	7.9	368	-31
8	7.4	398	-27
9	4.8	569	-4
10	3.4	679	7

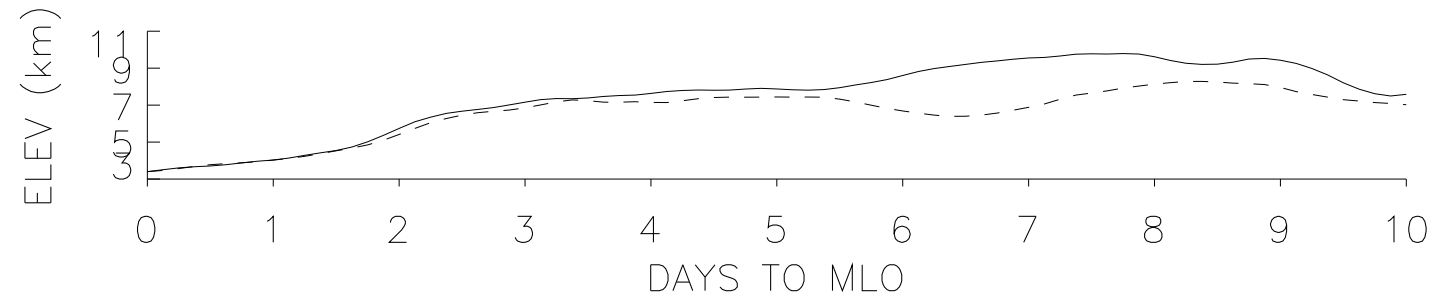
18UT

Day	km	hPa	C
0	3.4	681	7
1	3.9	637	3
2	5.7	509	-12
3	7.3	410	-24
4	7.9	377	-31
5	8.1	369	-31
6	9.1	317	-39
7	9.7	286	-45
8	8.9	326	-37
9	7.4	402	-23
10	5.7	508	-9

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

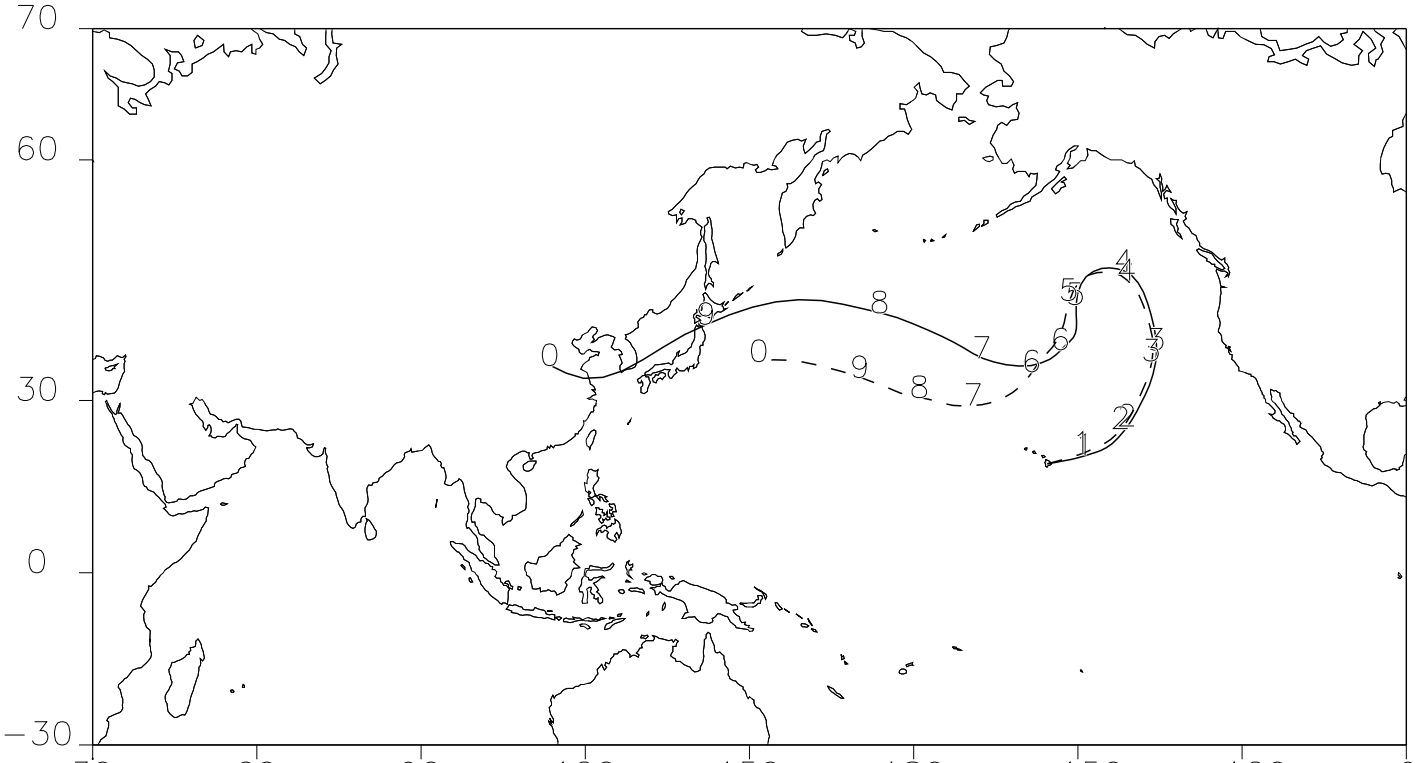
Day	km	hPa	C
0	3.4	681	7
1	4.0	629	4
2	5.7	504	−13
3	7.2	418	−23
4	7.6	393	−28
5	7.9	379	−29
6	8.6	342	−36
7	9.6	297	−43
8	9.6	291	−44
9	9.4	301	−42
10	7.6	394	−24

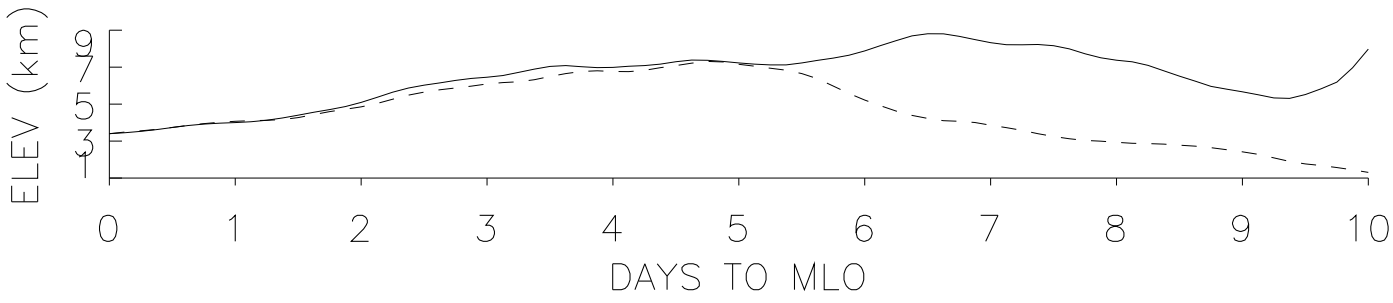
06UT

Day	km	hPa	C
0	3.4	681	8
1	4.0	630	4
2	5.4	527	−9
3	6.9	435	−22
4	7.1	419	−24
5	7.4	402	−26
6	6.7	445	−20
7	6.9	433	−22
8	8.1	361	−32
9	8.0	364	−32
10	7.0	420	−23

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

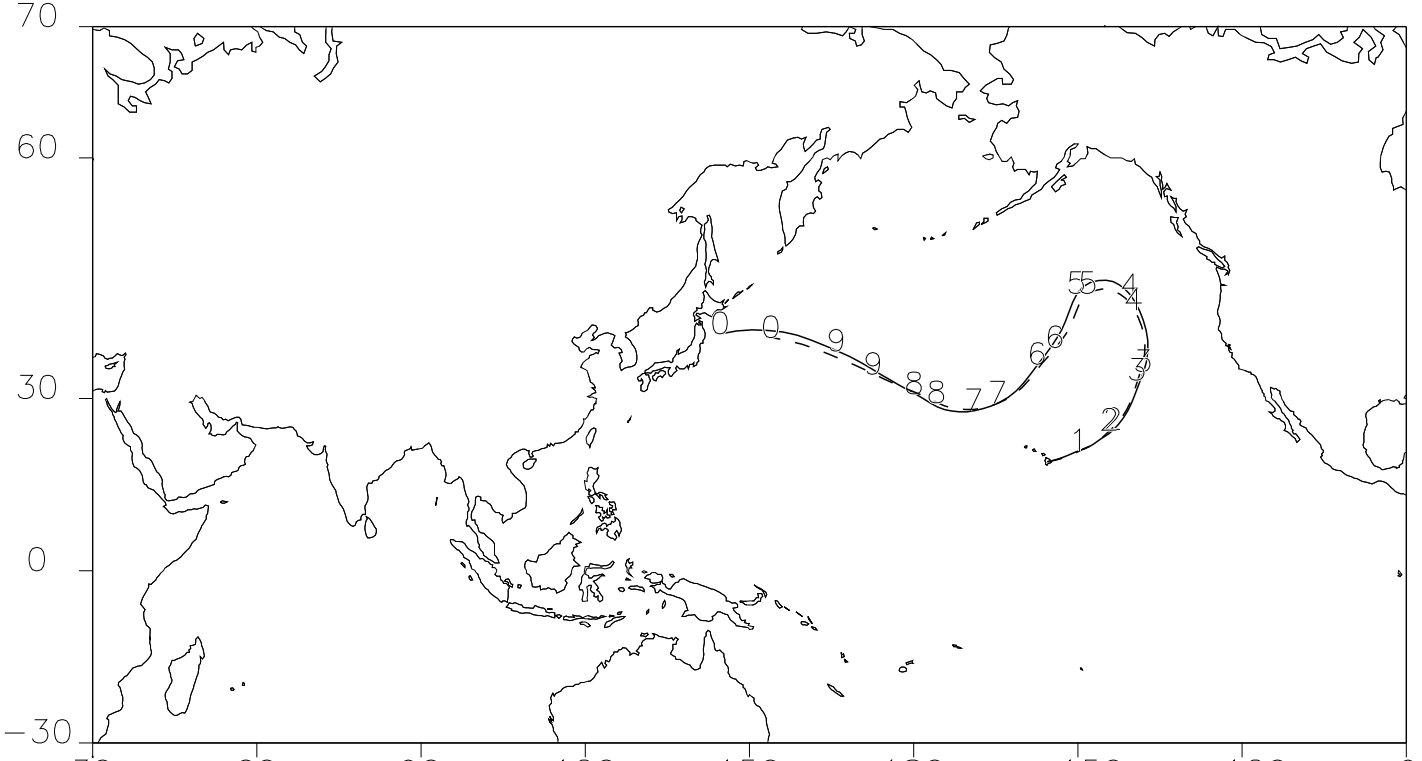
Day	km	hPa	C
0	3.4	680	7
1	4.0	631	4
2	5.1	550	−7
3	6.5	458	−18
4	7.0	427	−23
5	7.2	413	−24
6	7.9	371	−33
7	8.3	341	−39
8	7.4	390	−27
9	5.7	497	−14
10	8.0	362	−35

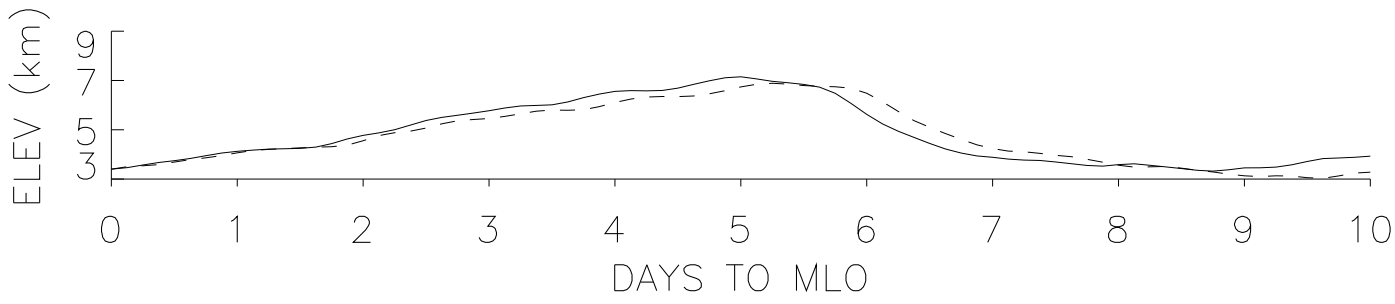
18UT

Day	km	hPa	C
0	3.4	682	8
1	4.1	628	4
2	4.9	568	−3
3	6.1	482	−16
4	6.8	441	−20
5	7.2	417	−24
6	5.2	536	−11
7	3.9	634	−1
8	2.9	712	5
9	2.4	757	8
10	1.3	869	16

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

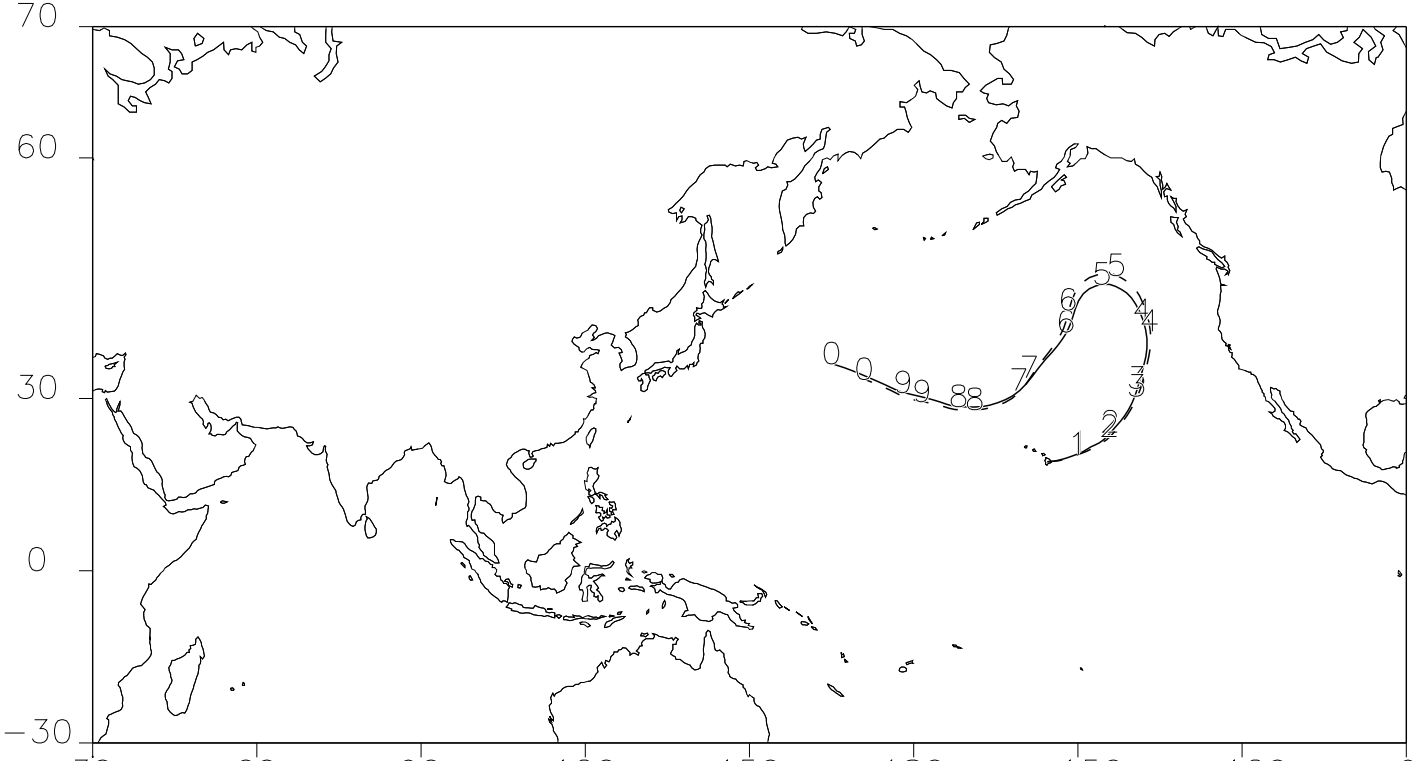
Day	km	hPa	C
0	3.4	681	8
1	4.1	623	4
2	4.8	574	−1
3	5.8	503	−12
4	6.6	455	−17
5	7.1	420	−22
6	5.6	509	−13
7	3.9	635	1
8	3.6	658	4
9	3.5	666	5
10	3.9	628	1

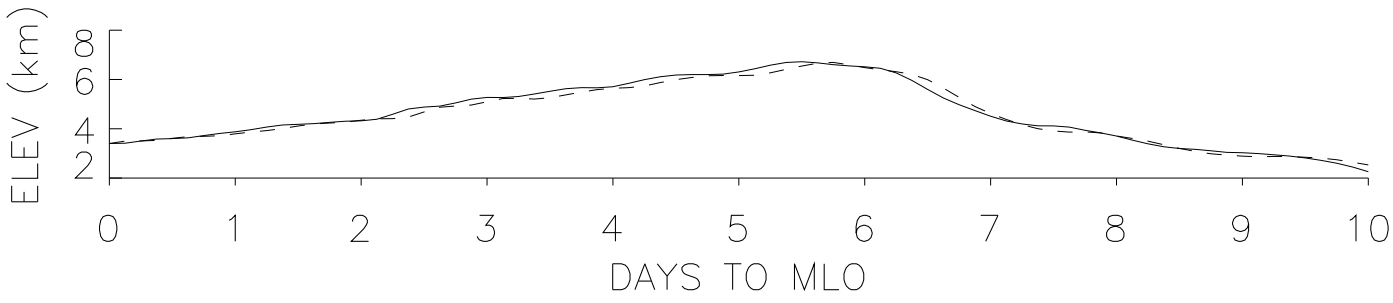
06UT

Day	km	hPa	C
0	3.4	681	9
1	4.1	628	4
2	4.6	590	0
3	5.5	524	−9
4	6.1	483	−14
5	6.7	445	−18
6	6.5	456	−18
7	4.2	606	−2
8	3.6	659	3
9	3.1	695	6
10	3.3	682	5

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

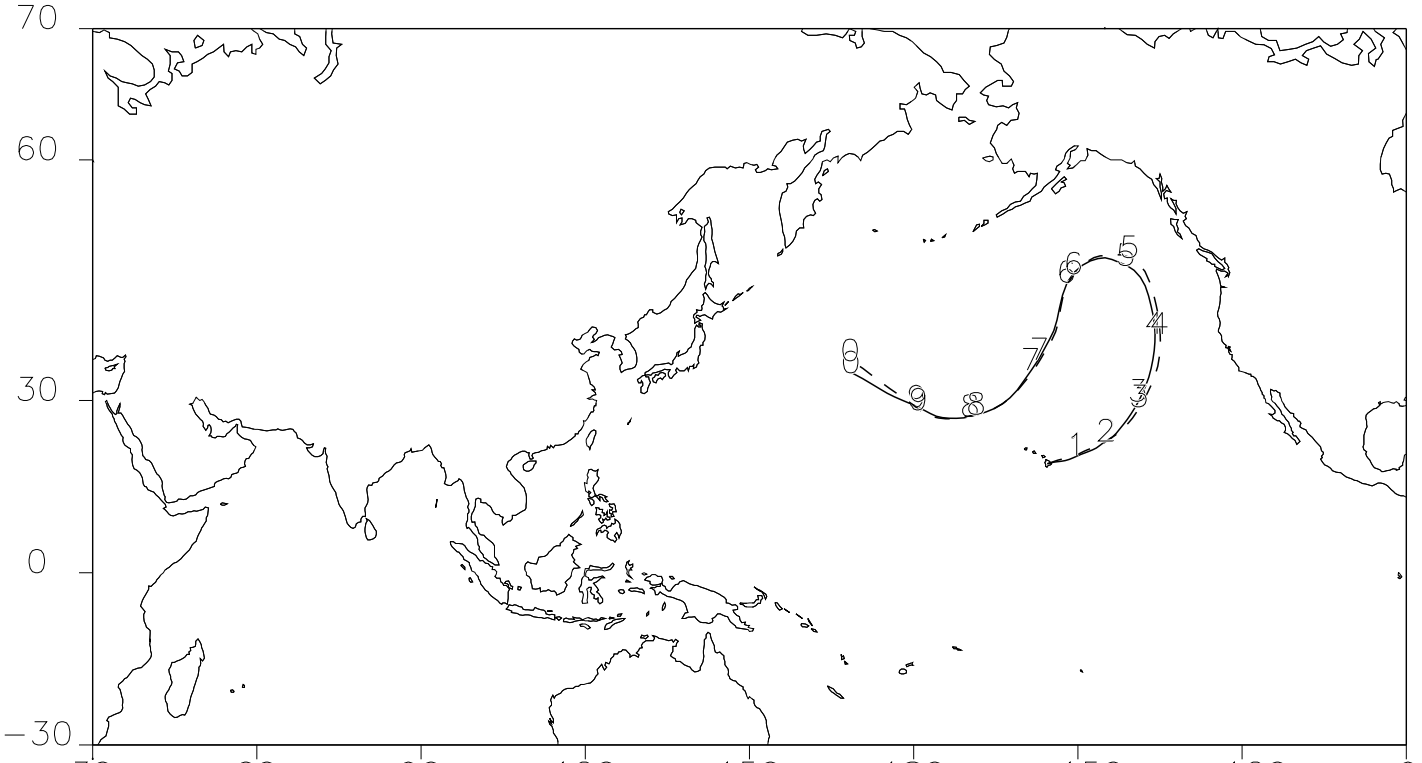
Day	km	hPa	C
0	3.4	679	8
1	3.9	642	5
2	4.3	607	1
3	5.3	537	−8
4	5.7	507	−12
5	6.3	470	−17
6	6.5	454	−19
7	4.5	586	−5
8	3.7	647	1
9	3.0	704	5
10	2.3	773	11

18UT

Day	km	hPa	C
0	3.4	680	9
1	3.8	650	6
2	4.3	606	2
3	5.1	550	−6
4	5.6	512	−12
5	6.2	479	−16
6	6.5	457	−19
7	4.6	579	−6
8	3.7	648	1
9	2.9	716	5
10	2.5	748	7

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

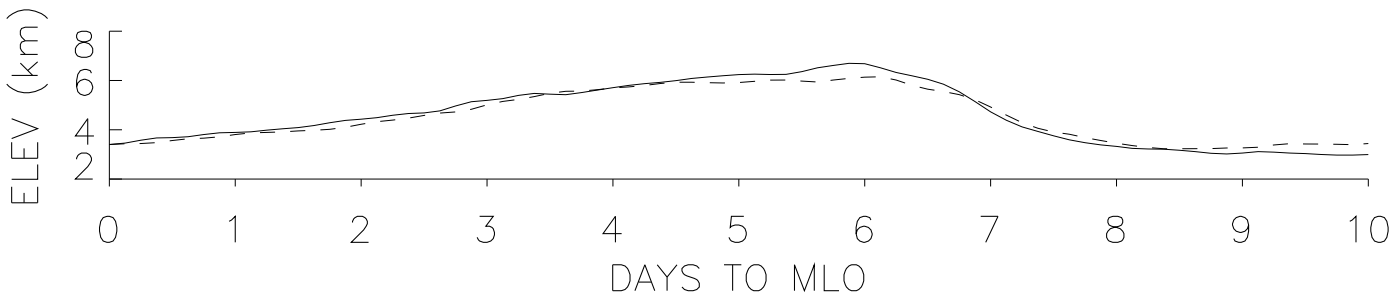


00UT

Day	km	hPa	C
0	3.4	679	8
1	3.9	641	6
2	4.4	599	1
3	5.2	543	−6
4	5.7	507	−12
5	6.2	473	−16
6	6.7	446	−19
7	4.7	571	−7
8	3.3	680	5
9	3.1	703	7
10	3.0	708	7

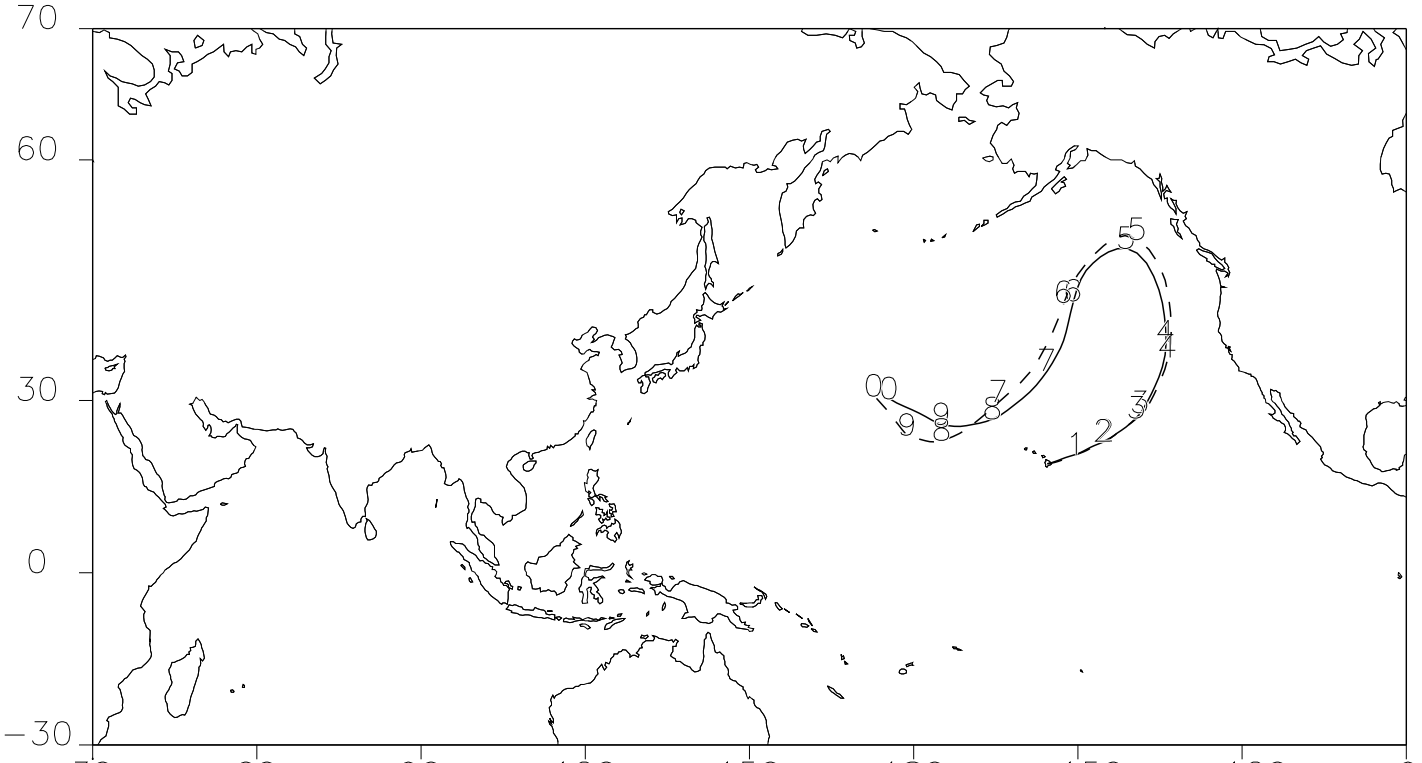
06UT

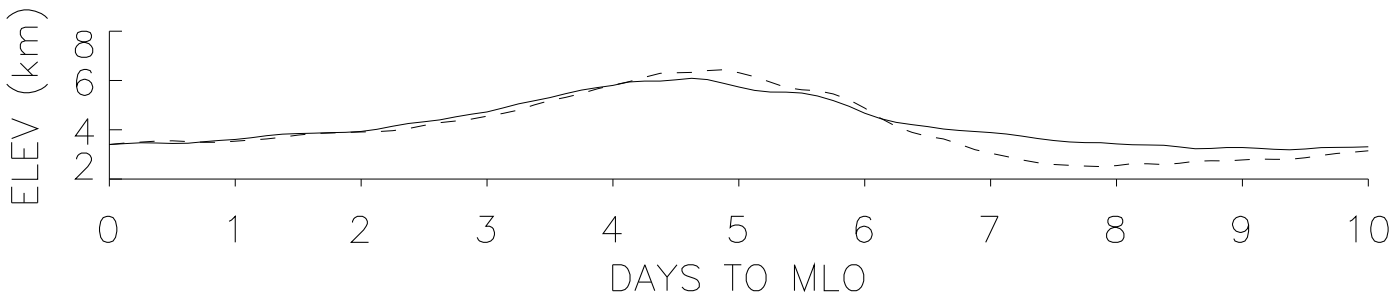
Day	km	hPa	C
0	3.4	680	9
1	3.8	648	6
2	4.2	616	1
3	5.0	556	−5
4	5.7	507	−11
5	5.9	493	−14
6	6.1	479	−15
7	4.9	557	−8
8	3.5	668	5
9	3.3	685	7
10	3.4	668	6



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

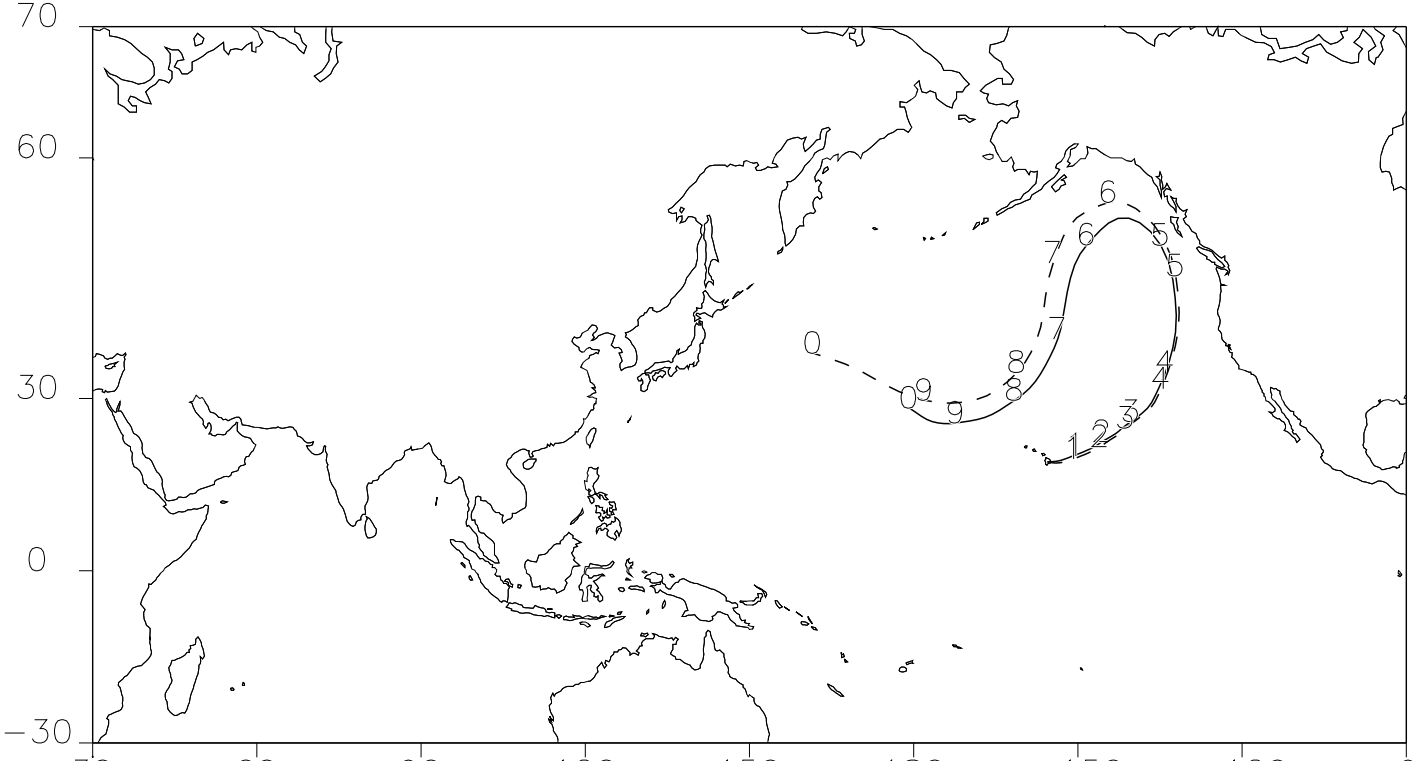
Day	km	hPa	C
0	3.4	678	8
1	3.6	663	6
2	3.9	638	3
3	4.7	576	−4
4	5.8	500	−13
5	5.7	503	−13
6	4.7	579	−6
7	3.9	638	0
8	3.4	673	4
9	3.3	685	6
10	3.3	683	6

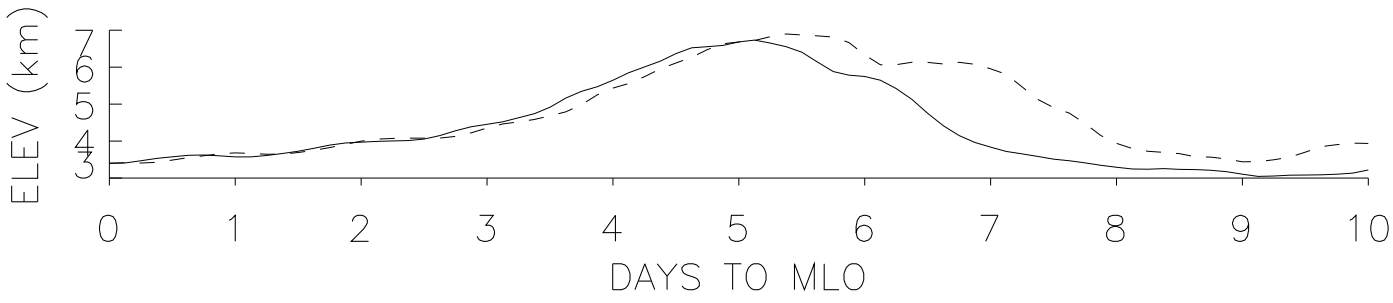
18UT

Day	km	hPa	C
0	3.4	679	8
1	3.5	669	8
2	3.9	641	4
3	4.6	590	−1
4	5.8	499	−13
5	6.3	465	−17
6	4.9	562	−7
7	3.0	704	5
8	2.5	749	10
9	2.8	729	10
10	3.1	697	10

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

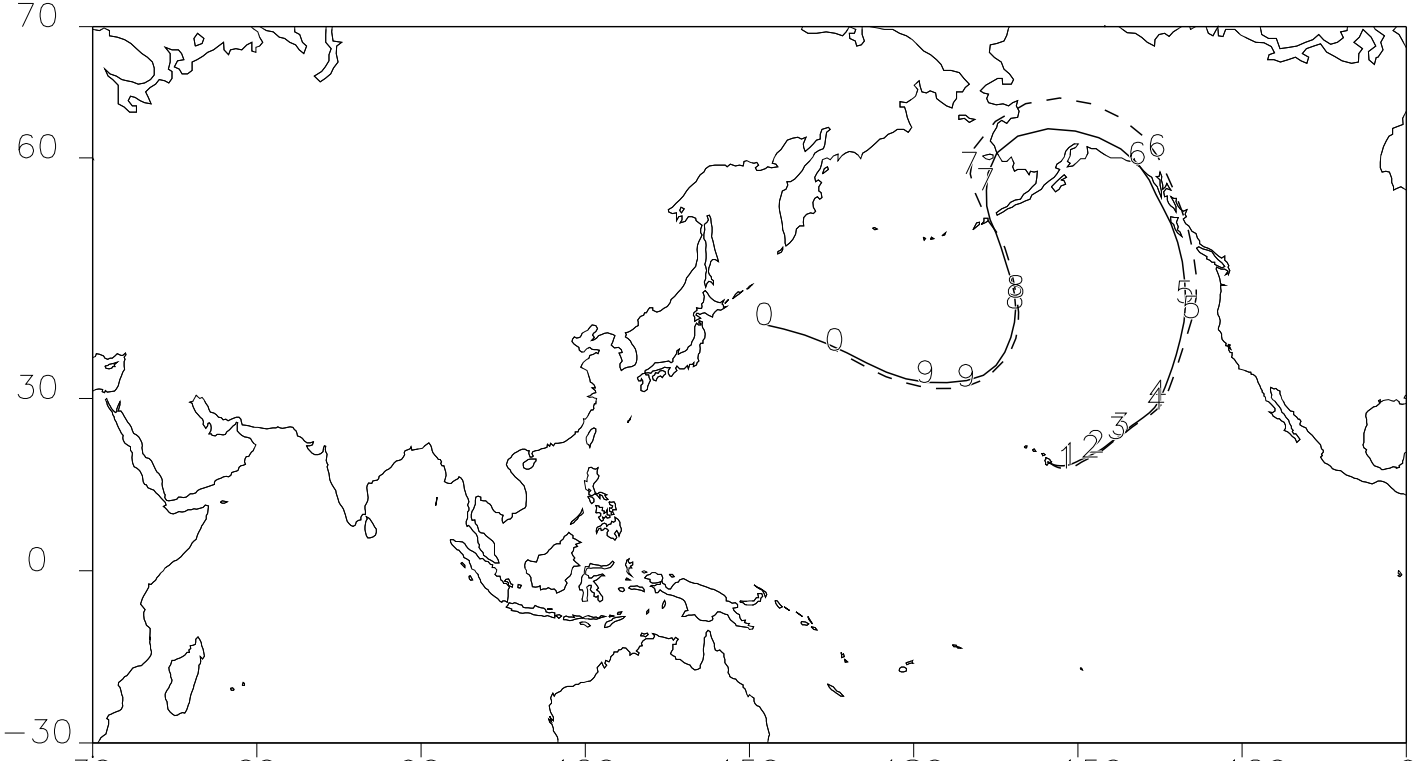
Day	km	hPa	C
0	3.4	678	7
1	3.6	665	7
2	4.0	635	4
3	4.5	597	−1
4	5.6	510	−11
5	6.7	442	−20
6	5.7	502	−13
7	3.8	644	0
8	3.3	686	4
9	3.1	700	6
10	3.2	691	7

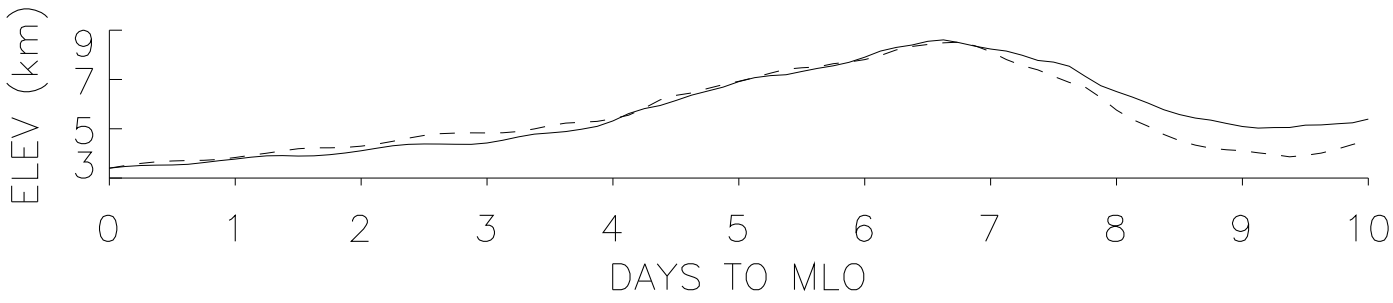
06UT

Day	km	hPa	C
0	3.4	678	7
1	3.7	657	7
2	4.0	633	4
3	4.4	605	1
4	5.4	526	−8
5	6.7	441	−19
6	6.3	462	−17
7	6.0	488	−16
8	3.9	629	−3
9	3.4	667	4
10	3.9	629	−1

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

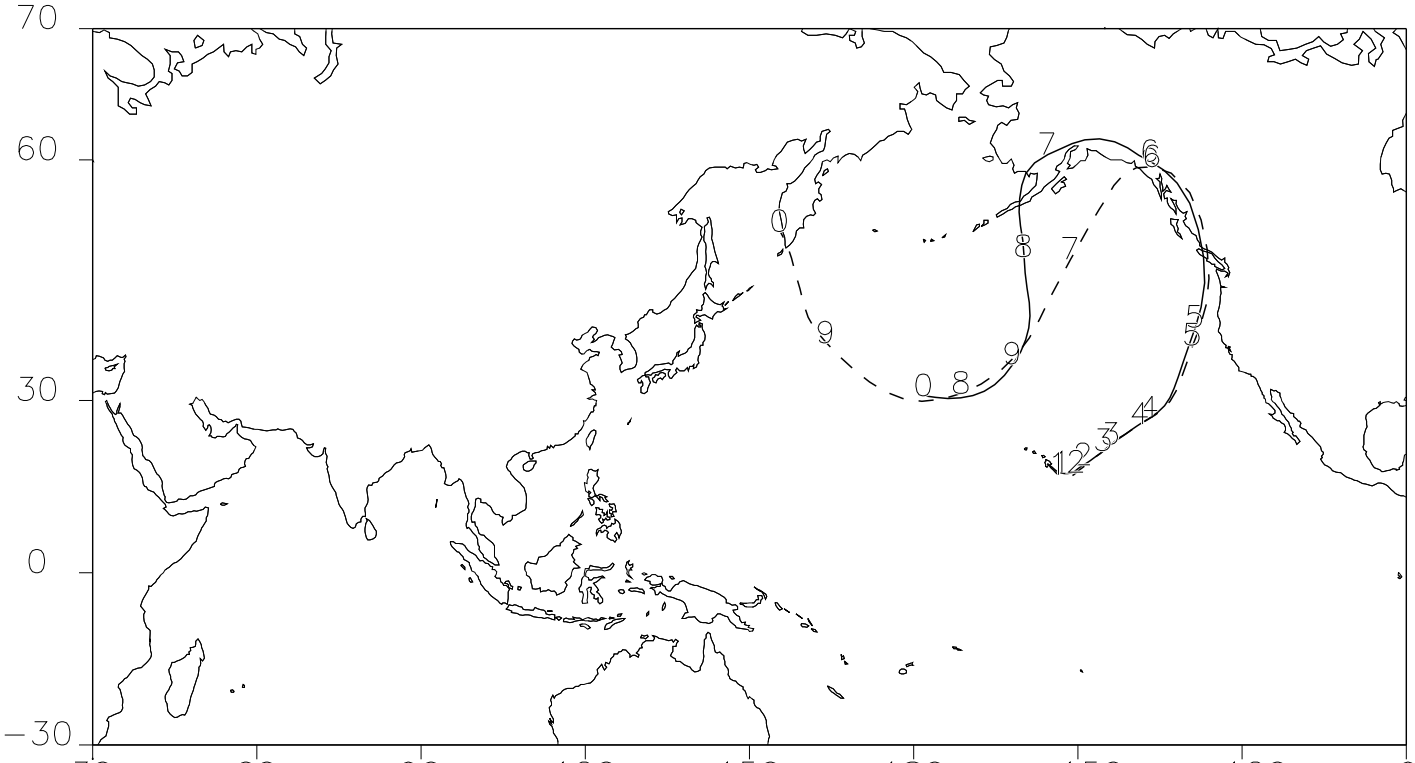
Day	km	hPa	C
0	3.4	679	8
1	3.8	648	6
2	4.1	623	3
3	4.4	599	−1
4	5.3	533	−8
5	6.9	427	−21
6	7.9	369	−32
7	8.2	349	−37
8	6.5	445	−23
9	5.1	535	−11
10	5.4	519	−12

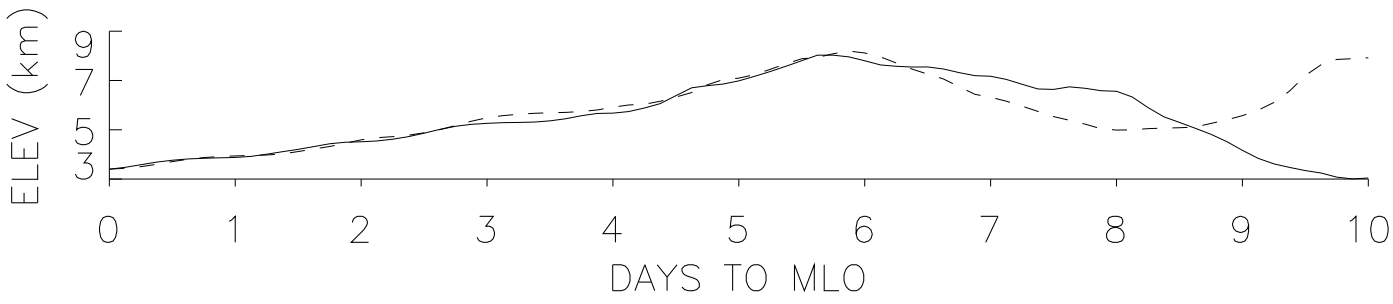
18UT

Day	km	hPa	C
0	3.4	679	8
1	3.8	643	6
2	4.3	609	3
3	4.8	571	−3
4	5.4	529	−8
5	6.9	427	−21
6	7.8	373	−32
7	8.1	352	−34
8	5.8	492	−17
9	4.1	609	−6
10	4.5	580	−6

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

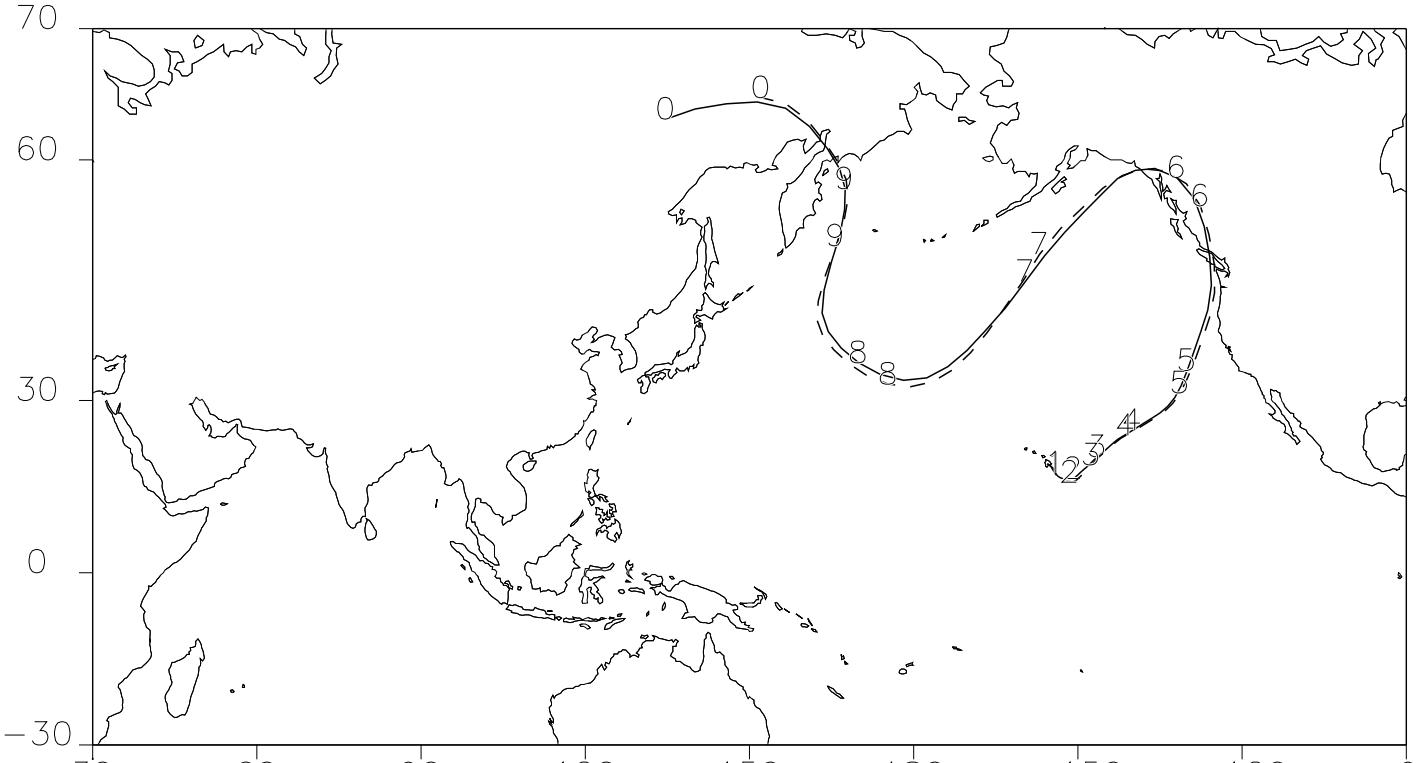
Day	km	hPa	C
0	3.4	680	8
1	3.9	639	5
2	4.5	592	2
3	5.3	540	−6
4	5.7	510	−10
5	7.0	424	−21
6	7.8	375	−29
7	7.2	409	−24
8	6.6	445	−22
9	4.2	609	−5
10	3.0	700	6

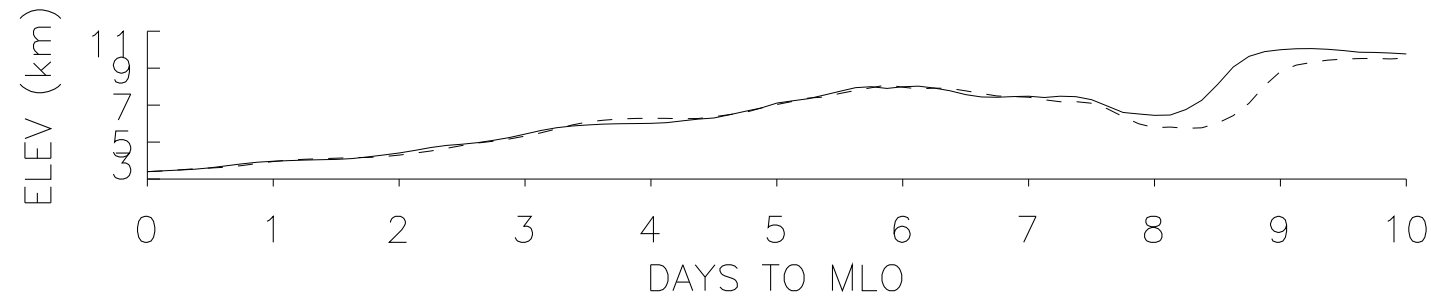
06UT

Day	km	hPa	C
0	3.4	680	7
1	3.9	635	5
2	4.6	587	2
3	5.5	525	−6
4	5.9	496	−10
5	7.1	419	−22
6	8.1	358	−31
7	6.3	461	−19
8	5.0	546	−8
9	5.6	504	−15
10	7.9	360	−40

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

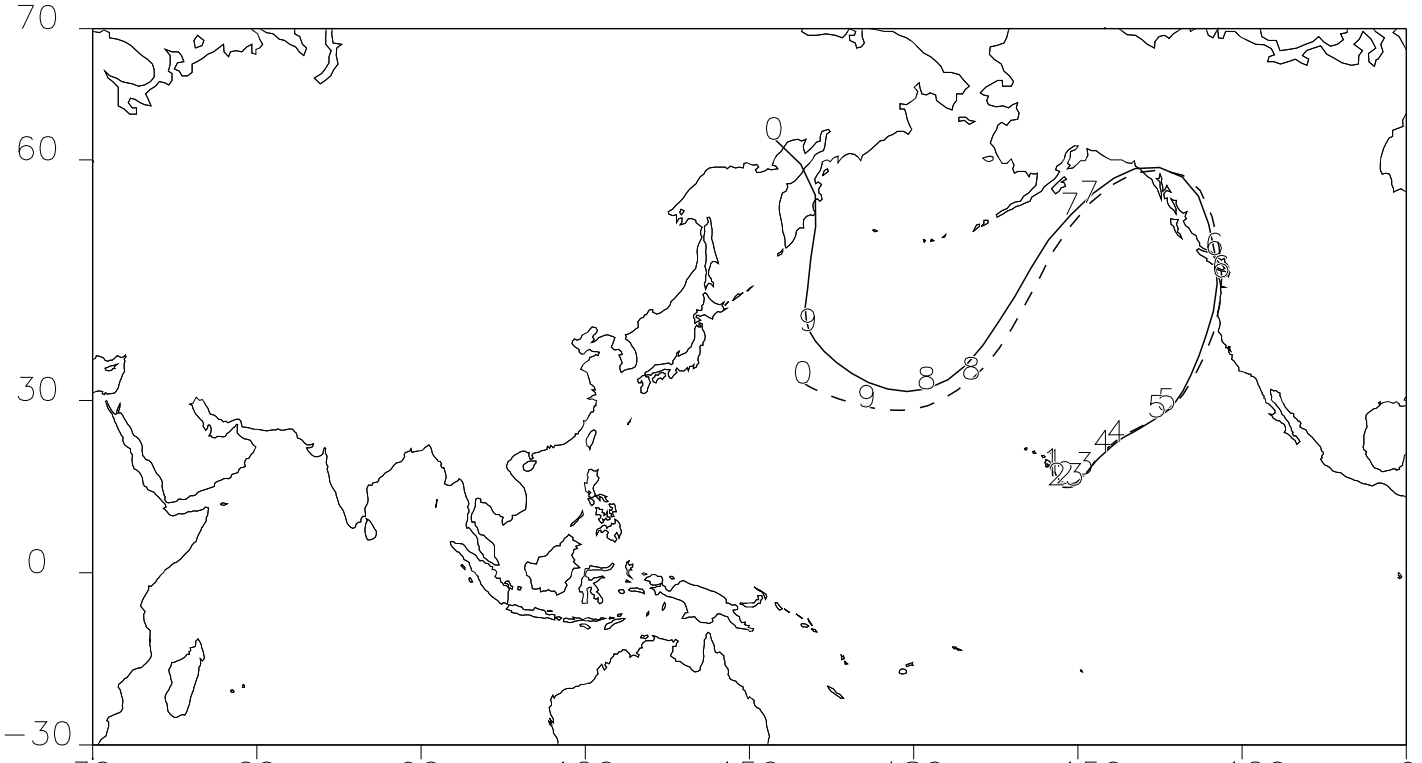
Day	km	hPa	C
0	3.4	681	7
1	4.0	633	5
2	4.4	599	3
3	5.4	527	−7
4	6.0	489	−12
5	7.1	418	−21
6	8.0	364	−30
7	7.5	385	−29
8	6.4	444	−20
9	10.0	265	−53
10	9.8	267	−50

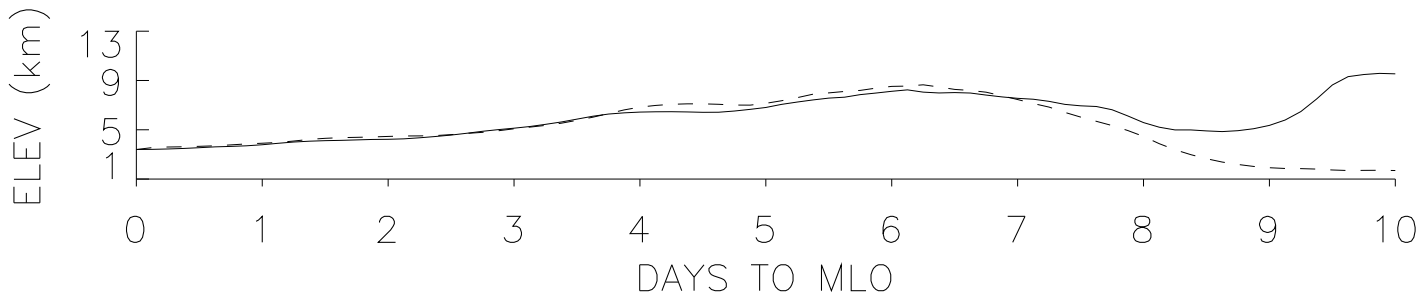
18UT

Day	km	hPa	C
0	3.4	682	7
1	3.9	636	6
2	4.3	608	4
3	5.3	535	−4
4	6.3	473	−13
5	7.0	426	−19
6	8.0	367	−29
7	7.4	388	−29
8	5.8	486	−17
9	8.8	316	−46
10	9.5	275	−50

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

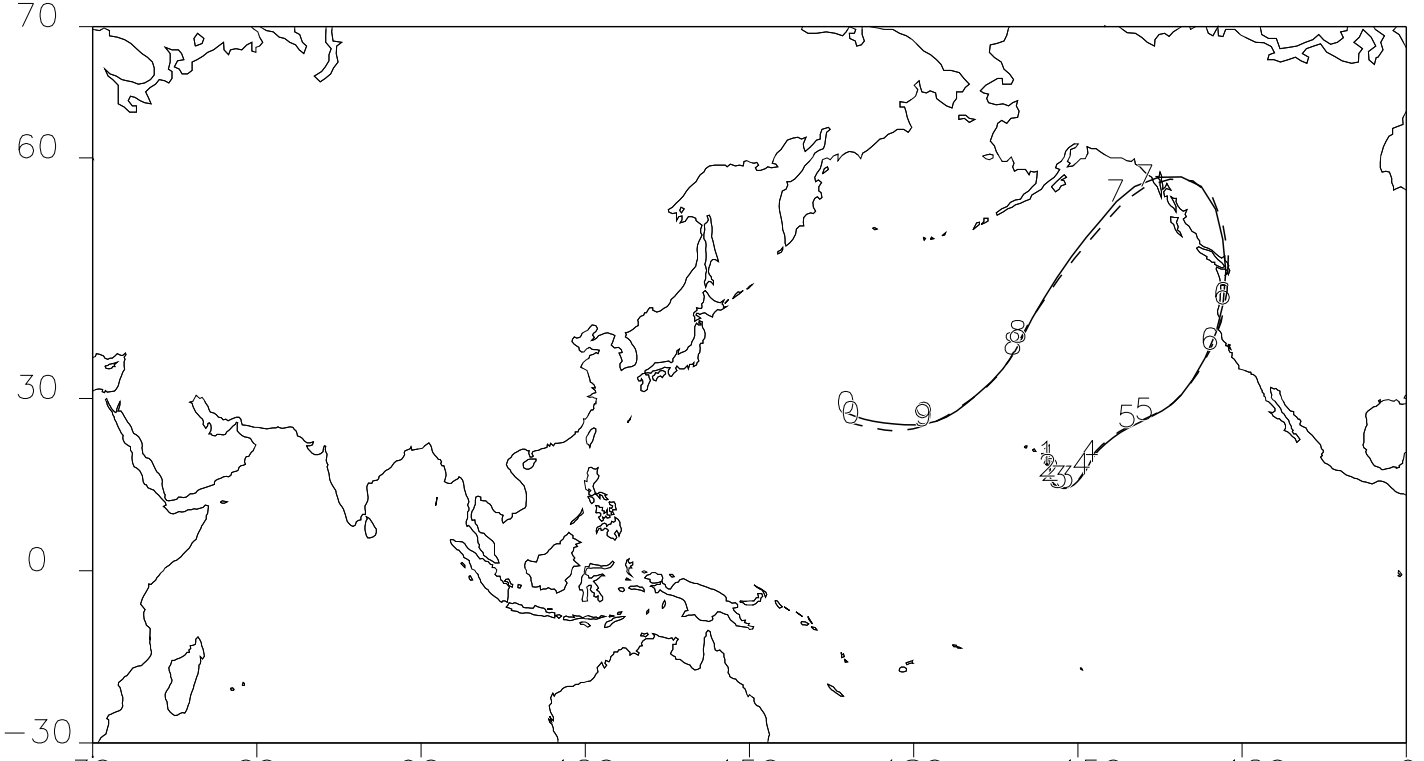
Day	km	hPa	C
0	3.4	682	7
1	3.8	649	7
2	4.2	613	4
3	5.1	548	−3
4	6.4	463	−15
5	6.8	439	−18
6	8.1	359	−31
7	7.6	384	−29
8	5.6	501	−15
9	5.4	520	−12
10	9.5	283	−51

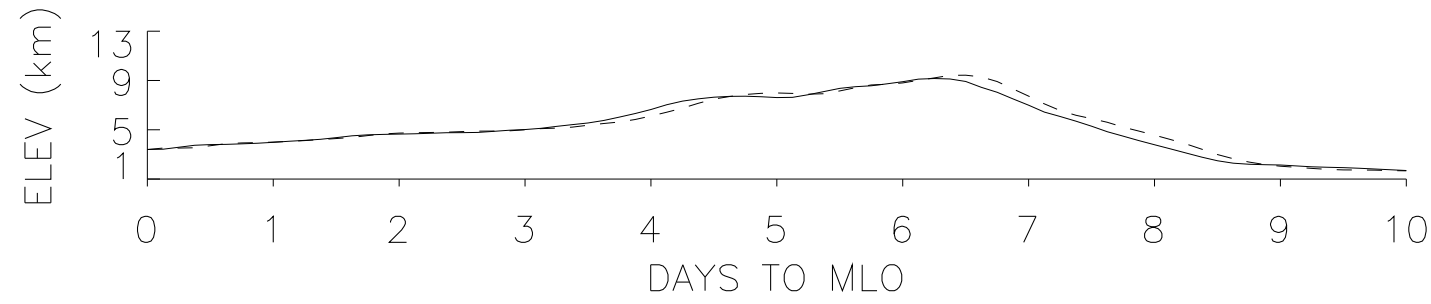
06UT

Day	km	hPa	C
0	3.4	682	7
1	3.9	640	5
2	4.5	596	3
3	5.1	552	−1
4	6.8	440	−17
5	7.1	421	−18
6	8.5	340	−33
7	7.5	392	−25
8	4.5	584	−4
9	1.9	803	10
10	1.7	828	14

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	3.4	681	7
1	4.0	634	5
2	4.6	583	2
3	5.0	555	0
4	6.6	450	−15
5	7.6	395	−22
6	8.9	322	−34
7	7.0	420	−19
8	3.8	641	1
9	2.1	787	11
10	1.7	831	15

18UT

Day	km	hPa	C
0	3.4	681	8
1	4.0	633	4
2	4.7	577	1
3	5.0	557	−1
4	6.1	484	−8
5	8.0	377	−25
6	8.8	329	−33
7	7.7	380	−24
8	4.6	580	−4
9	2.0	795	13
10	1.7	833	16

12UT − solid
18UT − dashed