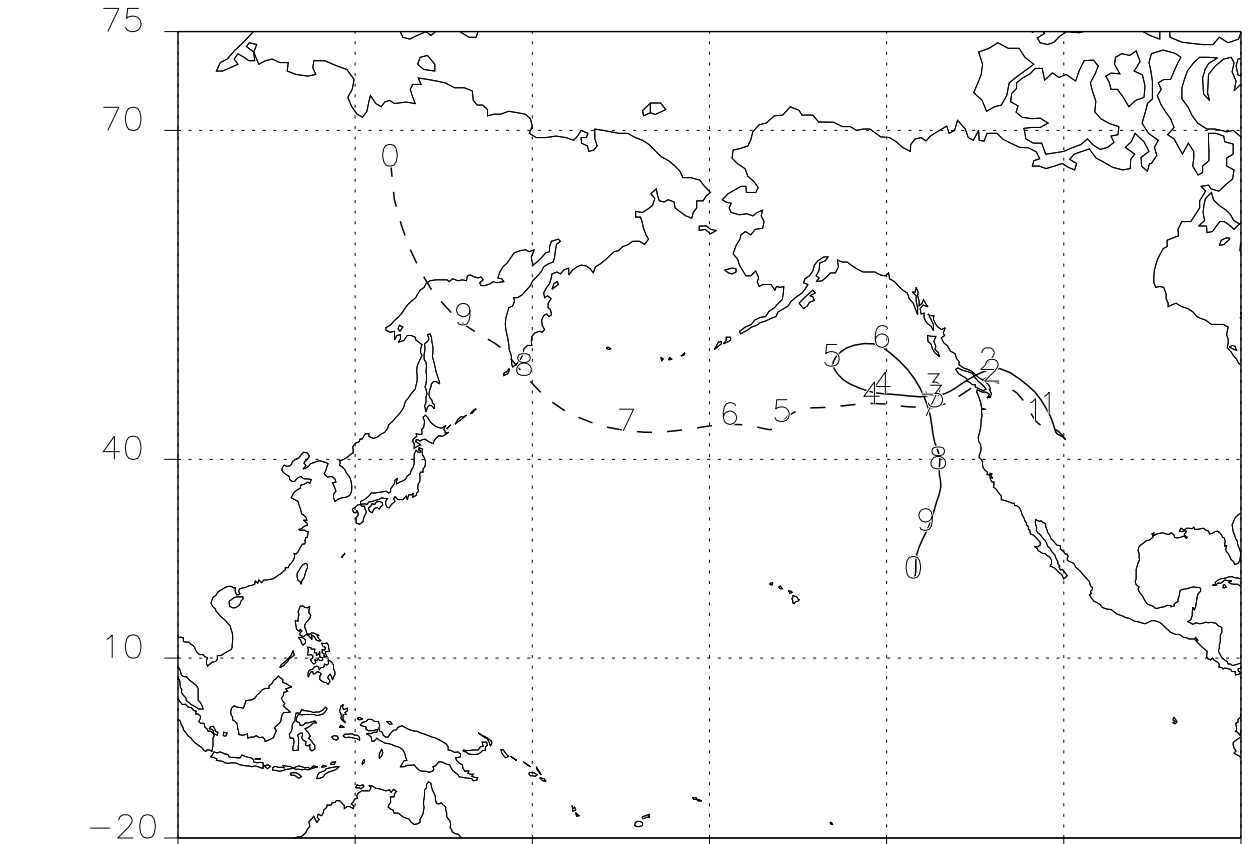
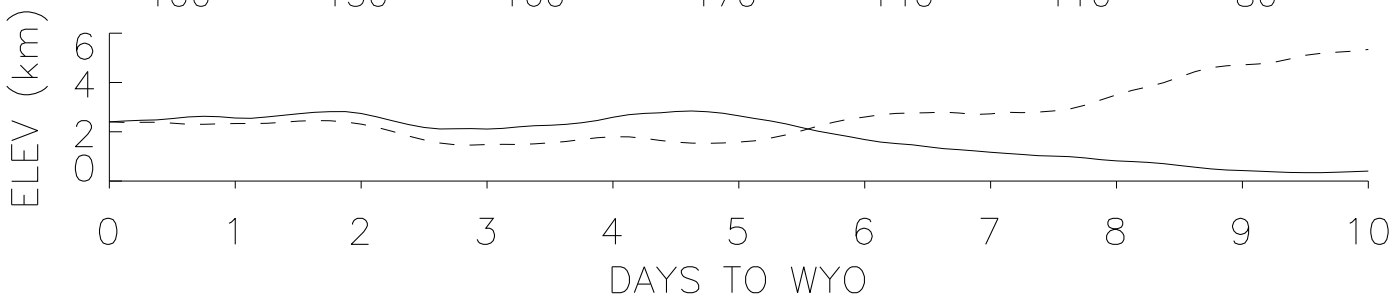
3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/1/2005 (Day of Year 32)
NCEP/NCAR Reanalysis 1 Data Set





00UT − solid
06UT − dashed

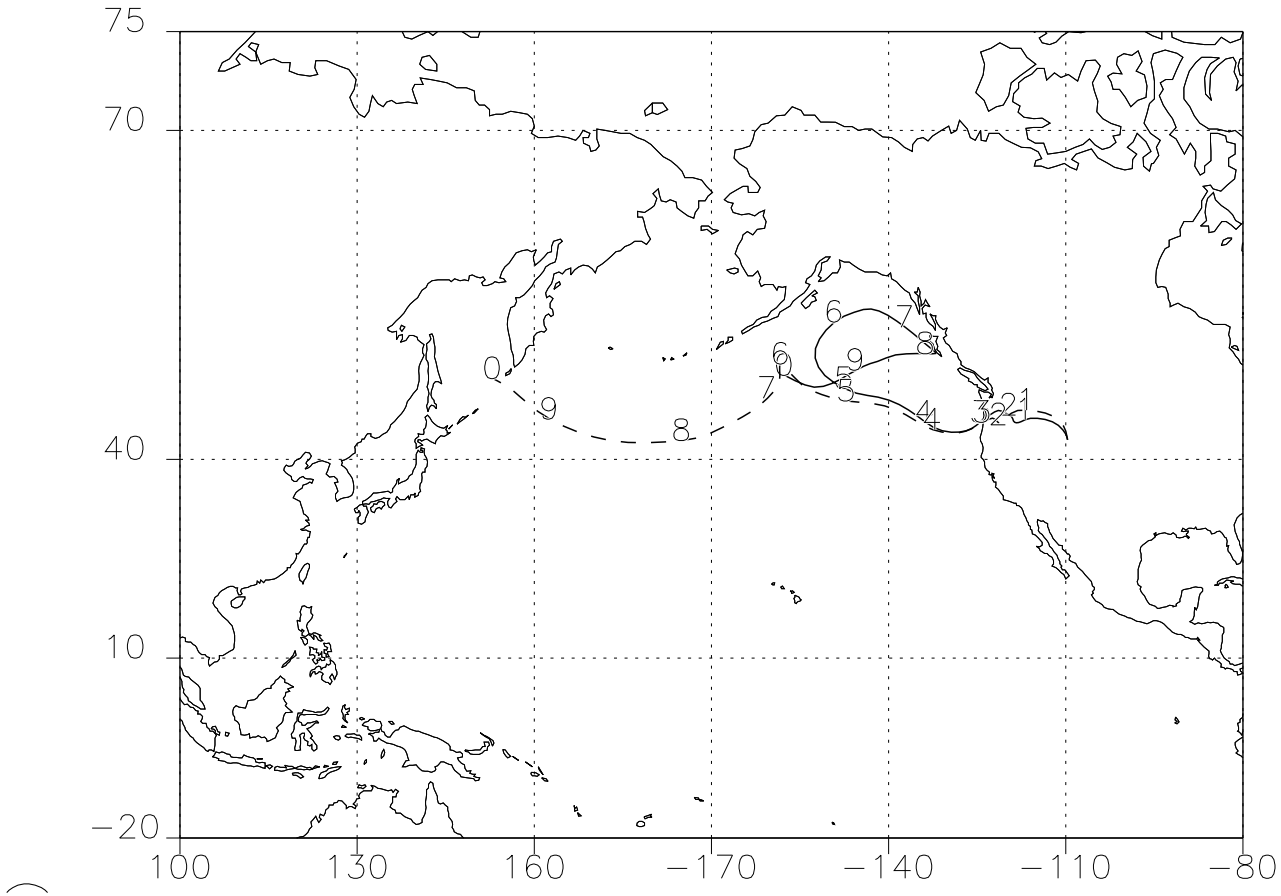
00UT

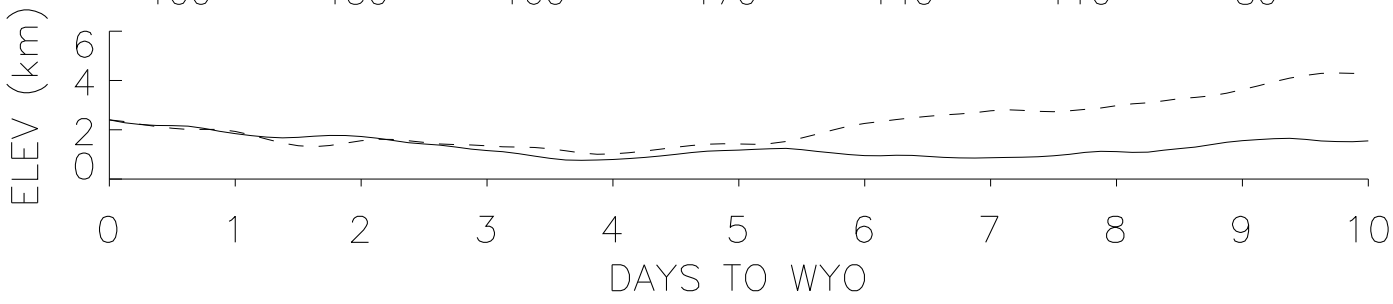
Day	km	hPa	C
0	2.4	763	−3
1	2.6	748	−6
2	2.7	726	−7
3	2.1	776	−4
4	2.6	721	−8
5	2.6	710	−8
6	1.7	812	0
7	1.2	874	5
8	0.8	914	12
9	0.4	961	17
10	0.4	970	16

06UT

Day	km	hPa	C
0	2.4	762	−7
1	2.3	771	−5
2	2.3	770	−4
3	1.5	846	2
4	1.8	803	−5
5	1.6	827	−4
6	2.6	719	−10
7	2.7	695	−15
8	3.5	622	−28
9	4.7	523	−40
10	5.3	484	−44

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/1/2005 (Day of Year 32)
NCEP/NCAR Reanalysis 1 Data Set





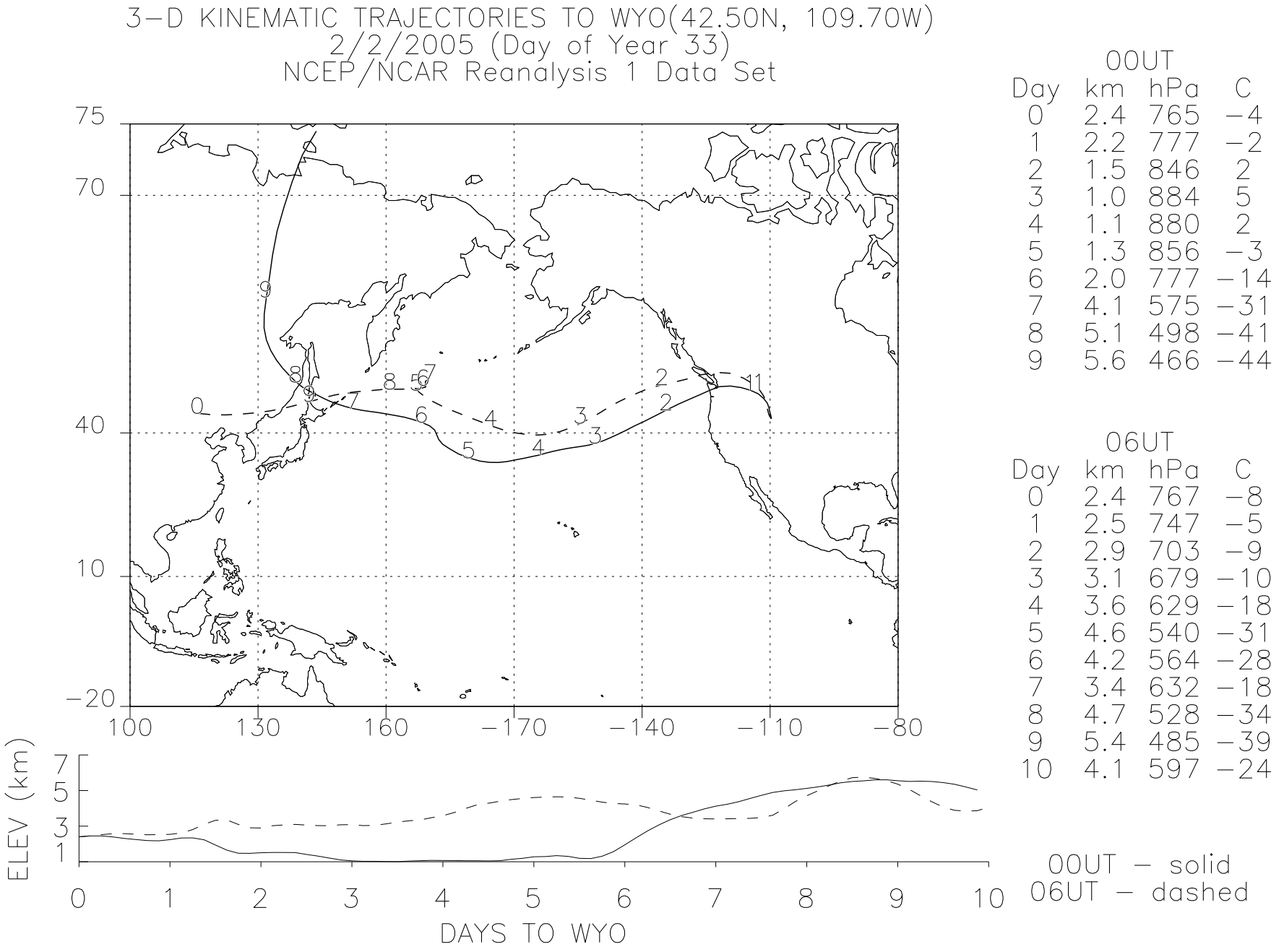
12UT

Day	km	hPa	C
0	2.4	761	−8
1	1.8	821	−3
2	1.7	832	−2
3	1.2	887	2
4	0.8	913	4
5	1.2	859	−2
6	0.9	890	1
7	0.9	908	2
8	1.1	880	−1
9	1.6	823	−4
10	1.5	815	−5

18UT

Day	km	hPa	C
0	2.4	764	−7
1	1.9	810	−3
2	1.6	852	1
3	1.4	870	0
4	1.0	891	3
5	1.4	838	−4
6	2.3	754	−9
7	2.8	701	−11
8	3.0	676	−16
9	3.6	614	−30
10	4.3	561	−37

12UT − solid
18UT − dashed



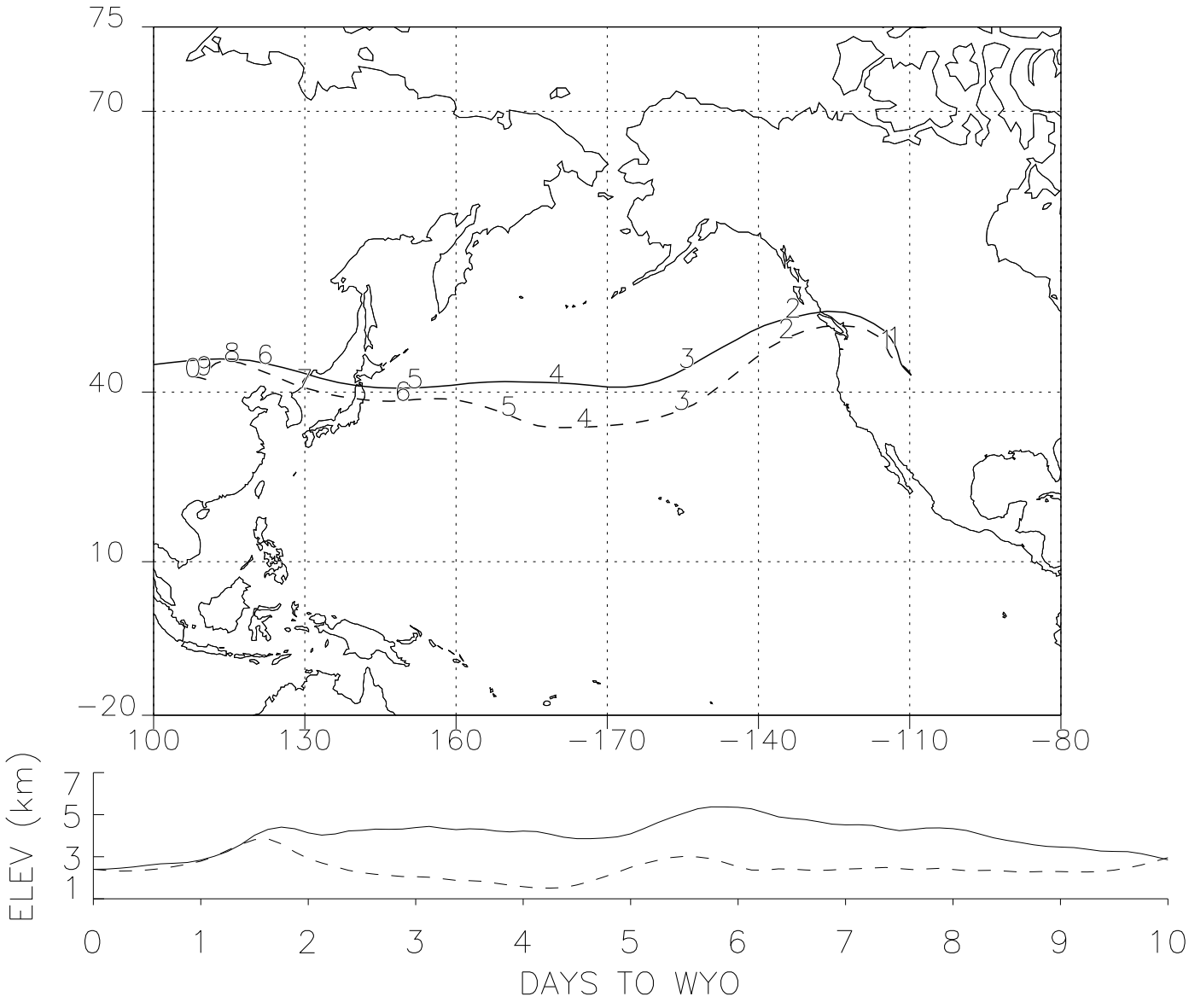
00UT

Day	km	hPa	C
0	2.4	765	-4
1	2.2	777	-2
2	1.5	846	2
3	1.0	884	5
4	1.1	880	2
5	1.3	856	-3
6	2.0	777	-14
7	4.1	575	-31
8	5.1	498	-41
9	5.6	466	-44

06UT

Day	km	hPa	C
0	2.4	767	-8
1	2.5	747	-5
2	2.9	703	-9
3	3.1	679	-10
4	3.6	629	-18
5	4.6	540	-31
6	4.2	564	-28
7	3.4	632	-18
8	4.7	528	-34
9	5.4	485	-39
10	4.1	597	-24

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/2/2005 (Day of Year 33)
NCEP/NCAR Reanalysis 1 Data Set



12UT

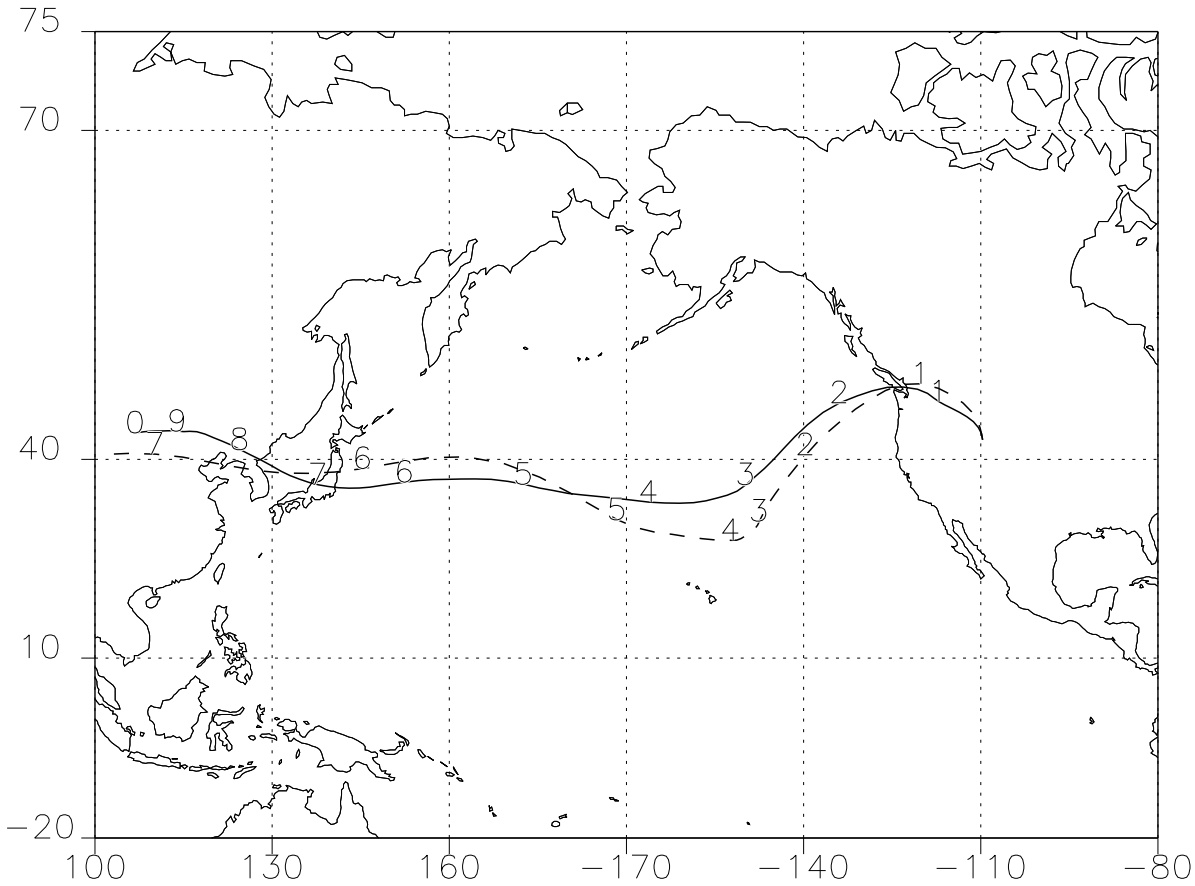
Day	km	hPa	C
0	2.4	766	−6
1	2.8	721	−7
2	4.1	598	−19
3	4.4	569	−21
4	4.2	581	−23
5	4.1	593	−21
6	5.3	497	−33
7	4.5	564	−25
8	4.3	581	−23
9	3.5	651	−13
10	2.9	702	−8

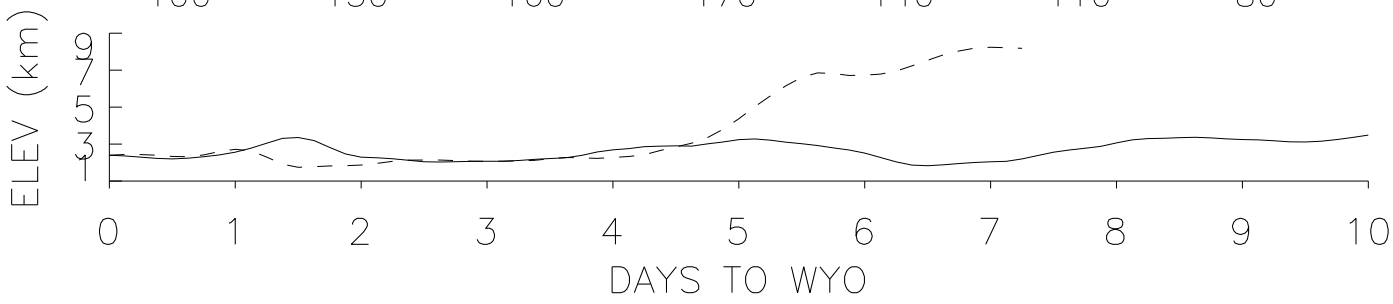
18UT

Day	km	hPa	C
0	2.4	767	−4
1	2.8	729	−5
2	2.9	711	−6
3	2.1	788	−1
4	1.6	834	−1
5	2.5	742	−8
6	2.5	732	−13
7	2.4	743	−16
8	2.4	749	−18
9	2.3	763	−14
10	3.0	702	−14

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/3/2005 (Day of Year 34)
NCEP/NCAR Reanalysis 1 Data Set





00UT

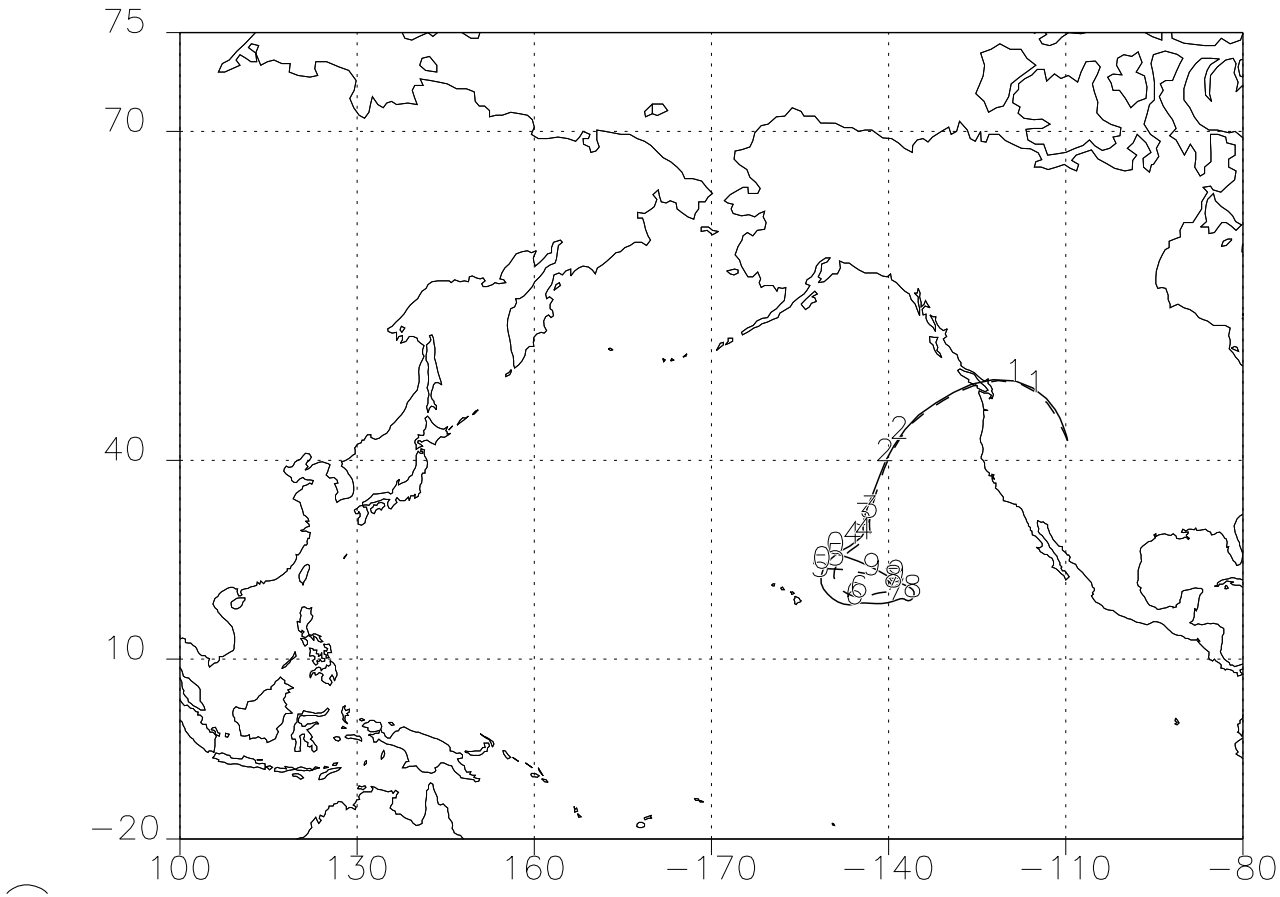
Day	km	hPa	C
0	2.4	767	1
1	2.6	751	−2
2	2.3	772	0
3	2.1	792	1
4	2.7	725	−6
5	3.2	675	−11
6	2.5	739	−9
7	2.0	785	−9
8	3.1	686	−19
9	3.2	671	−20
10	3.5	651	−19

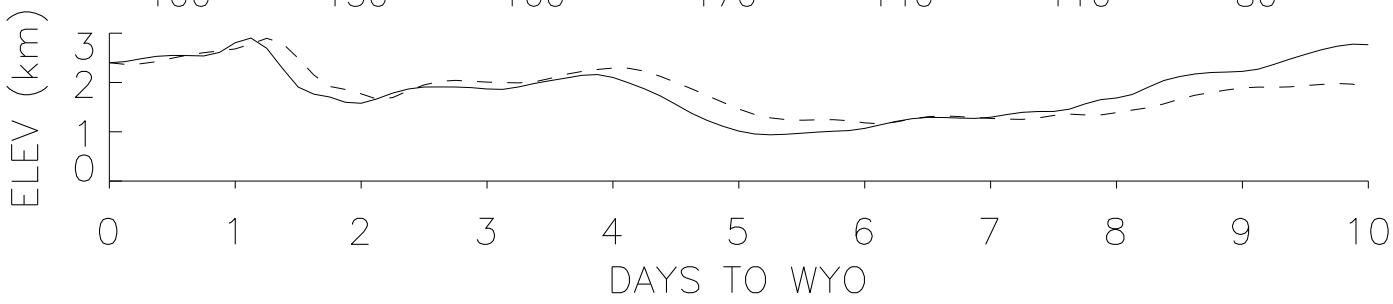
06UT

Day	km	hPa	C
0	2.4	768	−2
1	2.7	735	−1
2	1.9	818	7
3	2.1	798	8
4	2.3	775	6
5	4.4	585	−14
6	6.7	413	−36
7	8.2	333	−50

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/3/2005 (Day of Year 34)
NCEP/NCAR Reanalysis 1 Data Set





12UT

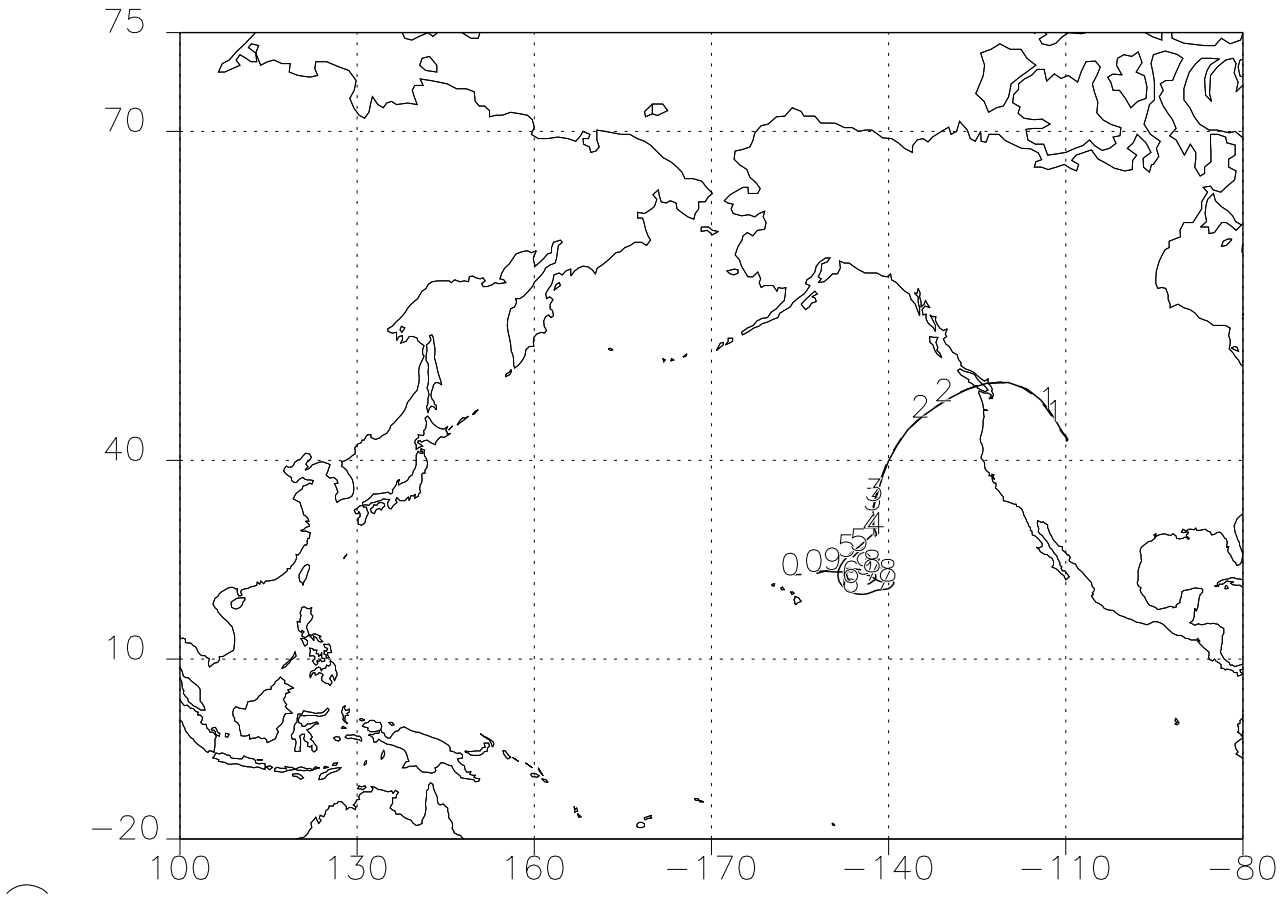
Day	km	hPa	C
0	2.4	770	−1
1	2.8	726	0
2	1.6	845	11
3	1.9	820	10
4	2.1	795	8
5	1.0	903	16
6	1.1	898	16
7	1.3	873	16
8	1.7	833	16
9	2.2	781	12
10	2.8	727	8

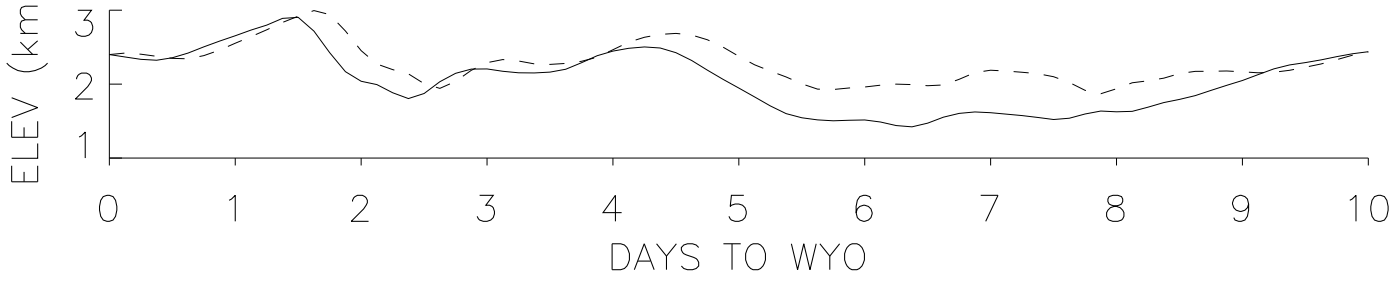
18UT

Day	km	hPa	C
0	2.4	769	0
1	2.7	739	2
2	1.8	825	9
3	2.0	807	9
4	2.3	778	6
5	1.5	857	13
6	1.2	887	15
7	1.3	878	15
8	1.4	865	16
9	1.9	814	11
10	1.9	812	12

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/4/2005 (Day of Year 35)
NCEP/NCAR Reanalysis 1 Data Set





00UT

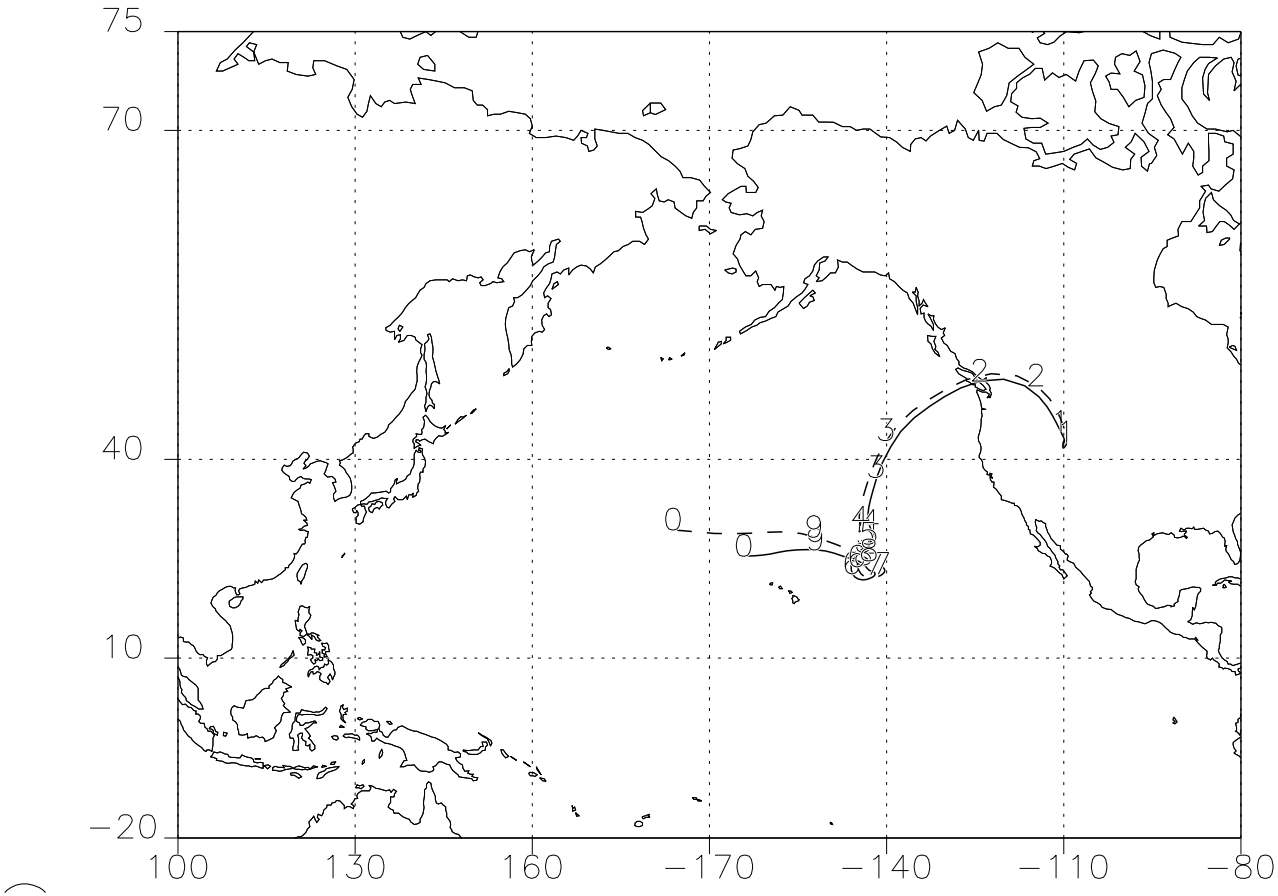
Day	km	hPa	C
0	2.4	768	4
1	2.7	743	3
2	2.0	798	7
3	2.2	787	7
4	2.4	764	5
5	1.9	808	10
6	1.5	852	14
7	1.6	843	13
8	1.6	840	13
9	2.0	797	11
10	2.4	759	9

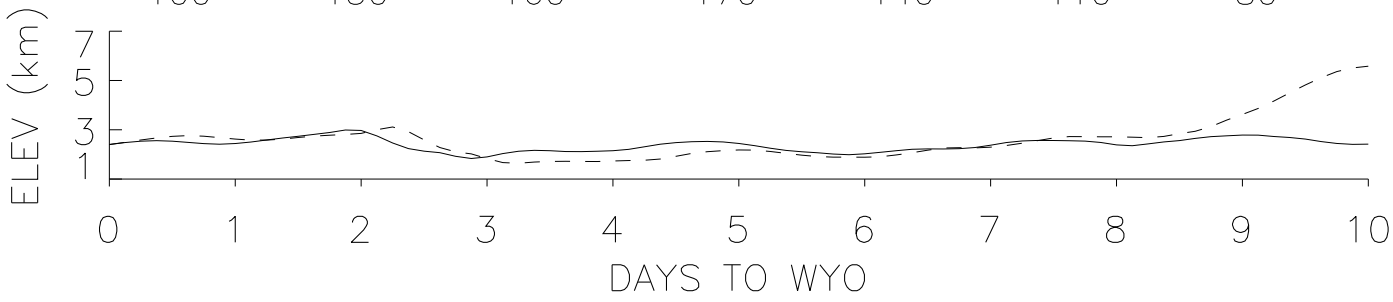
06UT

Day	km	hPa	C
0	2.4	767	0
1	2.6	753	1
2	2.5	760	5
3	2.3	778	7
4	2.5	763	6
5	2.4	769	7
6	2.0	809	12
7	2.2	788	9
8	1.9	810	11
9	2.2	786	9
10	2.4	760	8

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/4/2005 (Day of Year 35)
NCEP/NCAR Reanalysis 1 Data Set





12UT

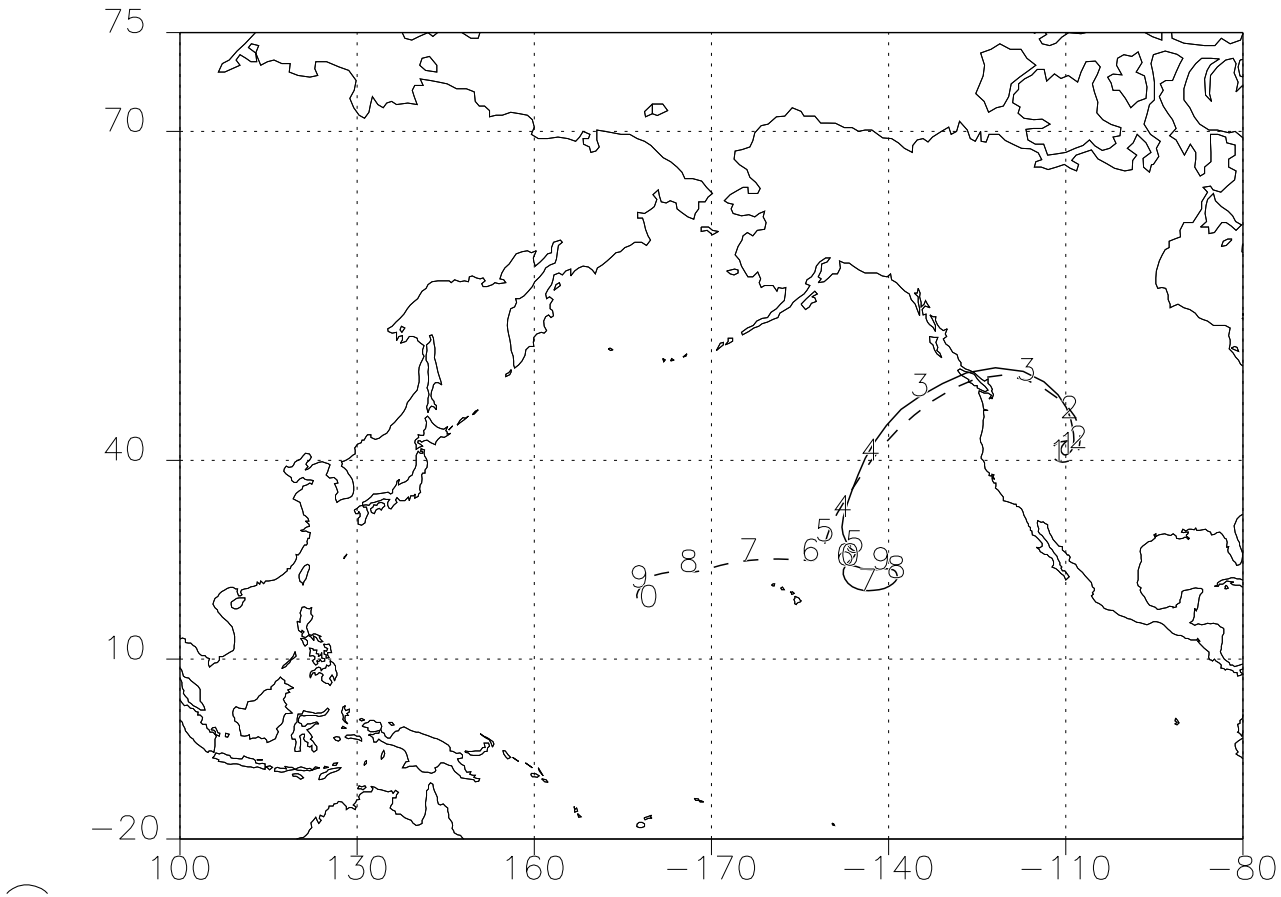
Day	km	hPa	C
0	2.4	766	−1
1	2.4	765	0
2	3.0	711	−1
3	1.9	814	10
4	2.2	793	9
5	2.4	763	6
6	2.0	803	11
7	2.4	770	8
8	2.4	766	7
9	2.8	726	3
10	2.4	759	6

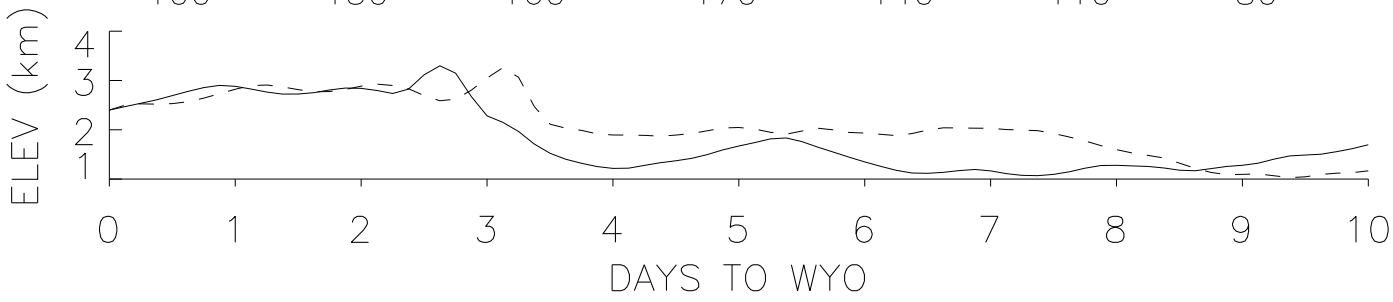
18UT

Day	km	hPa	C
0	2.4	764	−2
1	2.6	748	0
2	2.9	722	1
3	1.8	816	9
4	1.7	834	11
5	2.2	790	7
6	1.9	816	11
7	2.3	778	8
8	2.7	738	6
9	3.6	654	−3
10	5.6	499	−21

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/5/2005 (Day of Year 36)
NCEP/NCAR Reanalysis 1 Data Set





00UT

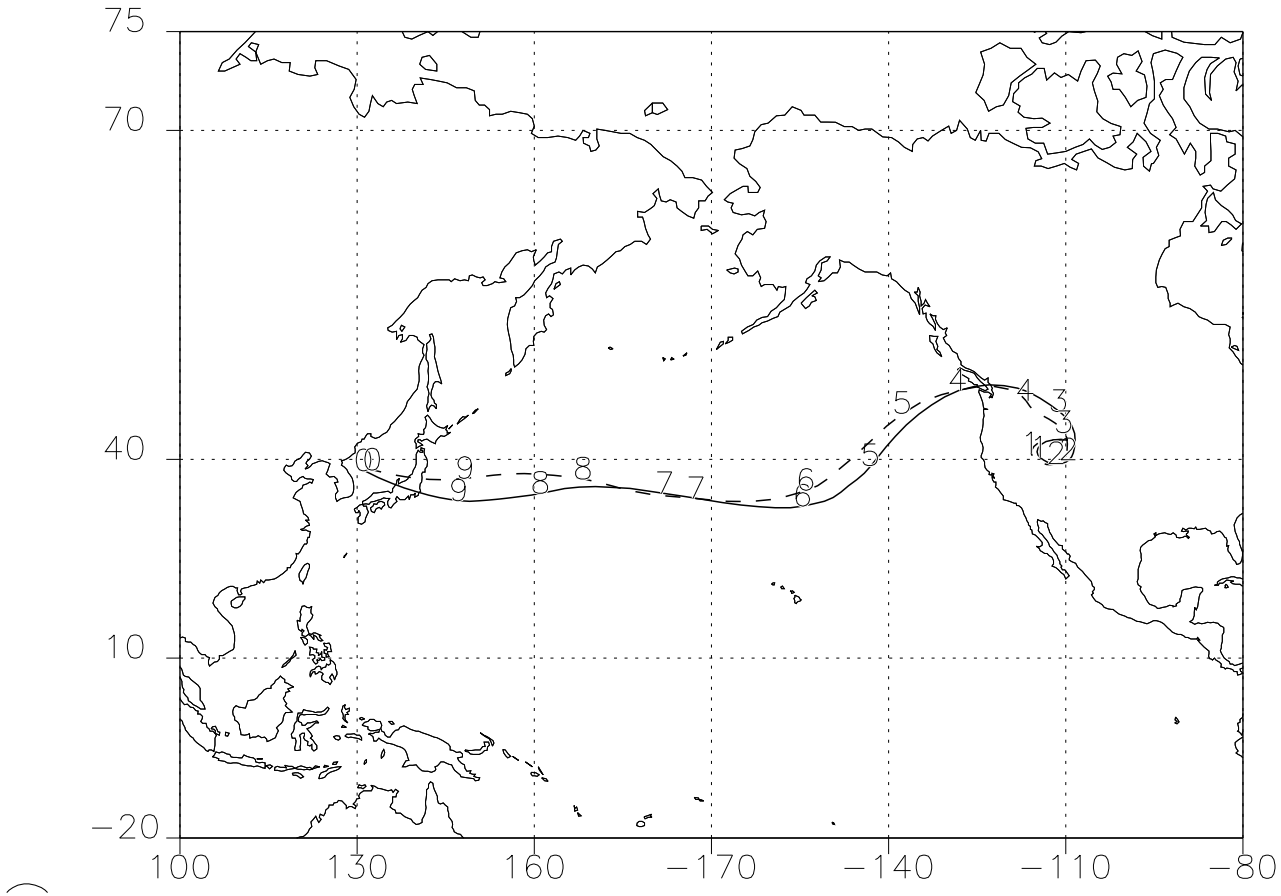
Day	km	hPa	C
0	2.4	761	3
1	2.9	723	1
2	2.8	725	1
3	2.3	769	5
4	1.2	882	13
5	1.7	839	12
6	1.3	868	13
7	1.2	889	14
8	1.3	877	13
9	1.3	874	14
10	1.7	831	12

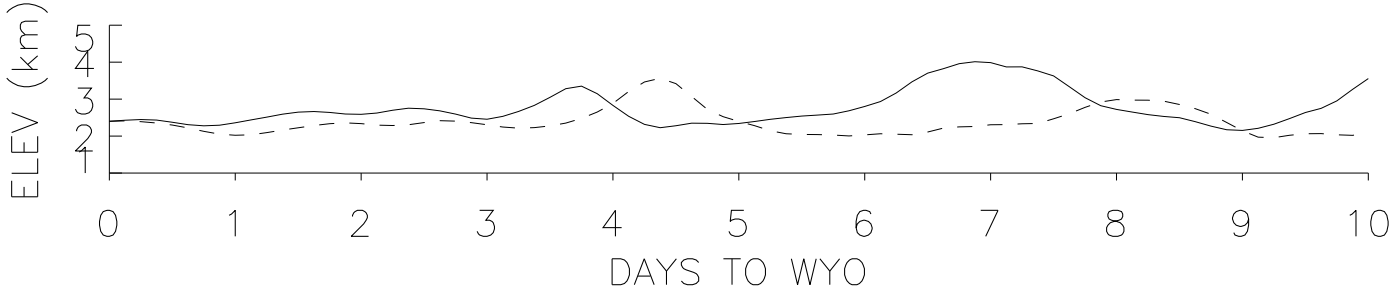
06UT

Day	km	hPa	C
0	2.4	757	−1
1	2.8	728	−2
2	2.9	722	−2
3	3.0	702	−1
4	1.9	811	7
5	2.0	800	9
6	1.9	809	10
7	2.0	796	8
8	1.6	840	12
9	1.1	892	16
10	1.2	883	17

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/5/2005 (Day of Year 36)
NCEP/NCAR Reanalysis 1 Data Set





12UT

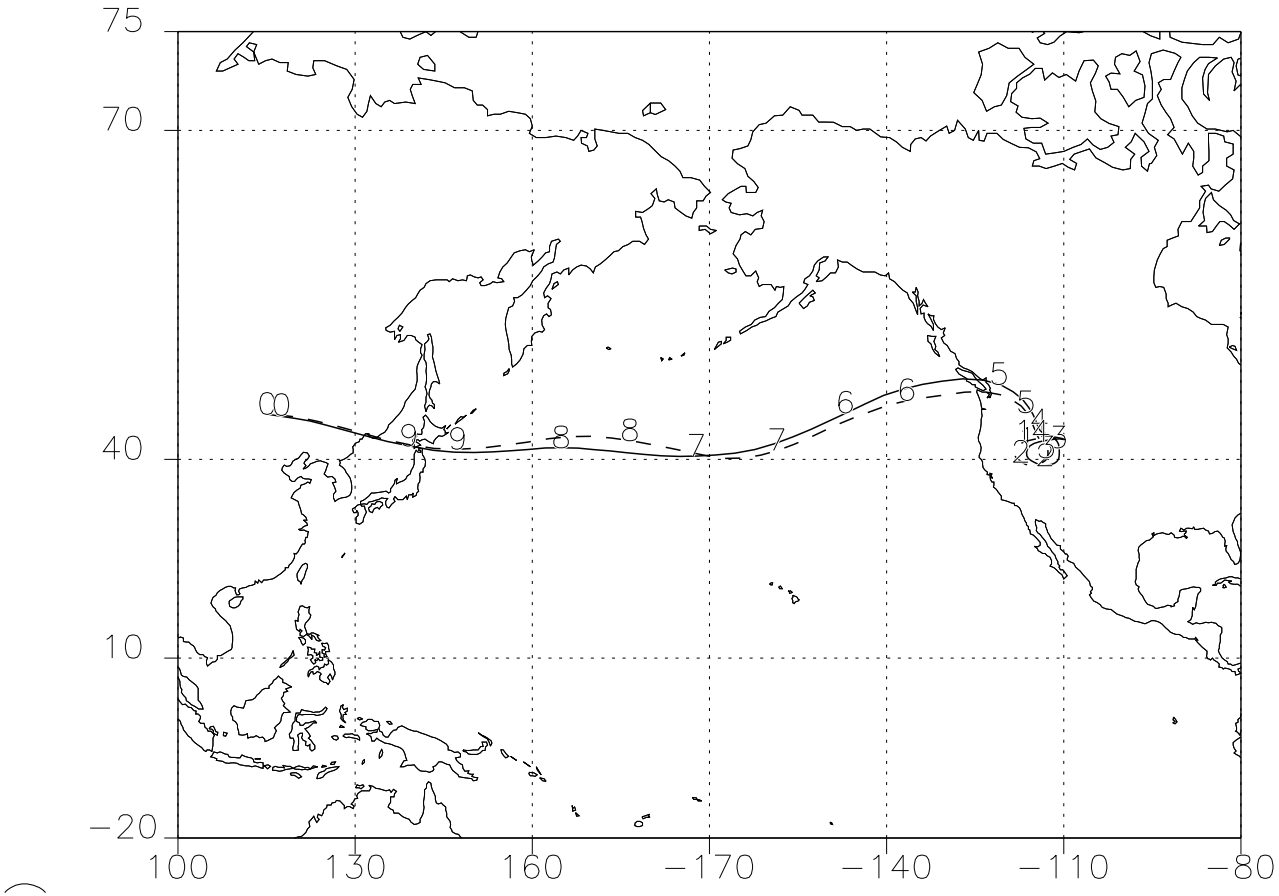
Day	km	hPa	C
0	2.4	756	−2
1	2.4	769	−3
2	2.6	751	−4
3	2.5	758	0
4	2.8	724	−4
5	2.3	770	2
6	2.8	721	−2
7	4.0	613	−13
8	2.7	724	−6
9	2.2	776	−6
10	3.6	641	−18

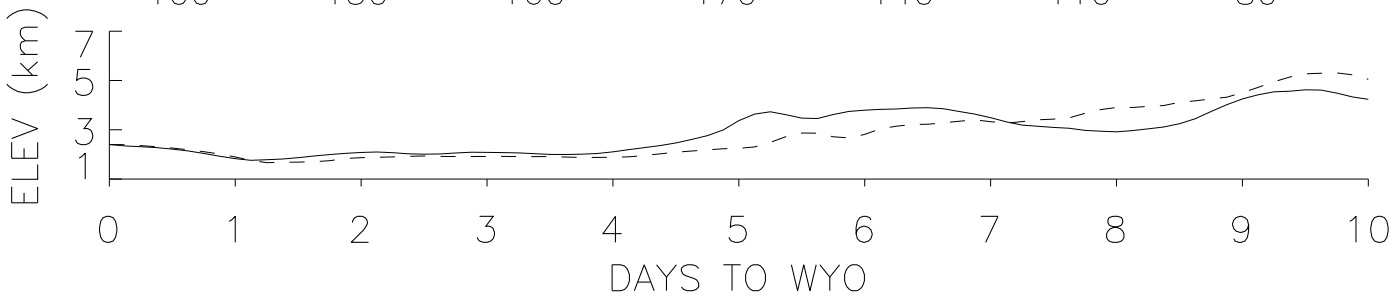
18UT

Day	km	hPa	C
0	2.4	755	−5
1	2.0	800	−2
2	2.3	775	−3
3	2.3	776	−3
4	2.9	721	−5
5	2.4	761	−2
6	2.0	794	0
7	2.3	760	−4
8	3.0	696	−10
9	2.1	772	−8
10	2.1	778	−13

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/6/2005 (Day of Year 37)
NCEP/NCAR Reanalysis 1 Data Set





00UT

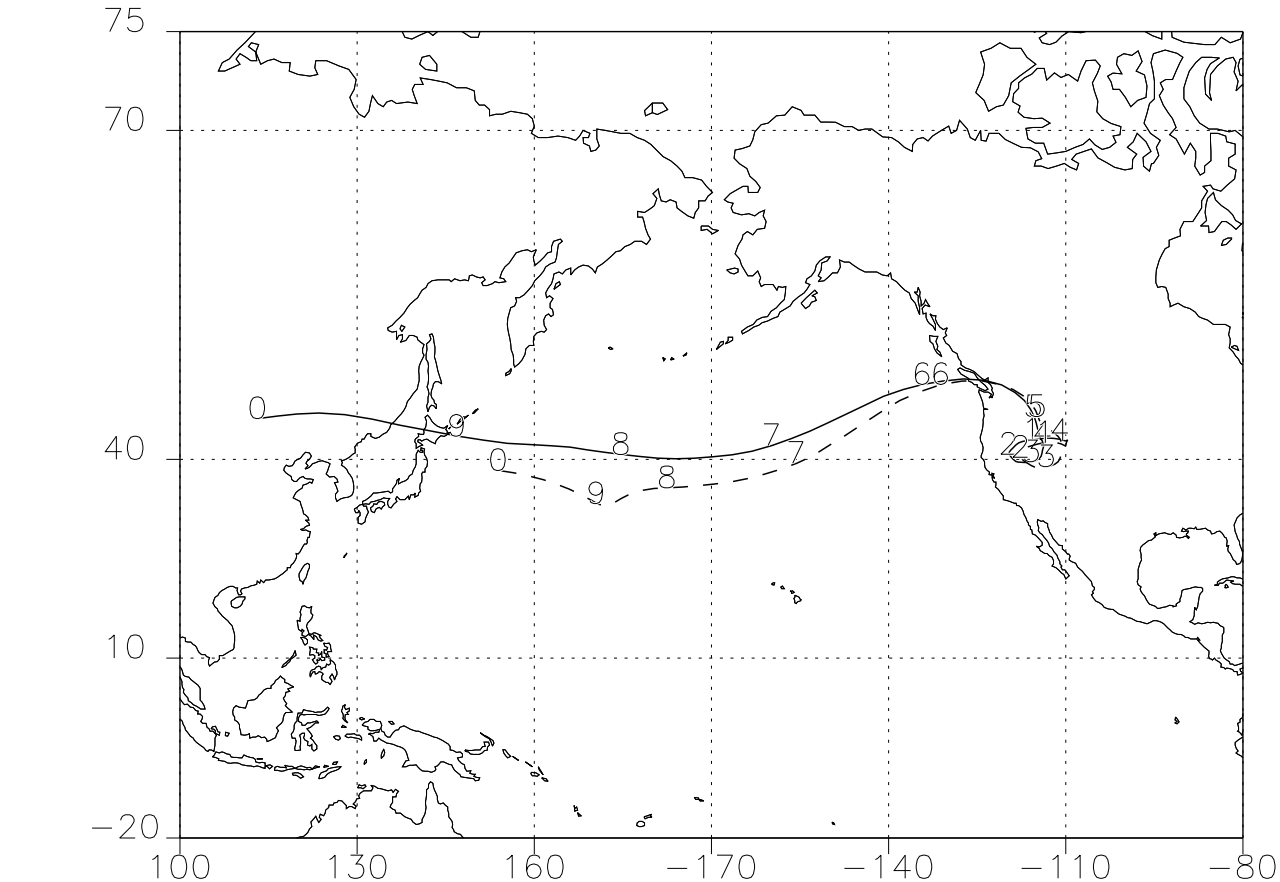
Day	km	hPa	C
0	2.4	755	−5
1	1.8	817	4
2	2.1	798	2
3	2.1	799	1
4	2.1	796	−3
5	3.4	673	−12
6	3.8	621	−16
7	3.5	641	−17
8	2.9	694	−16
9	4.3	577	−25
10	4.2	581	−25

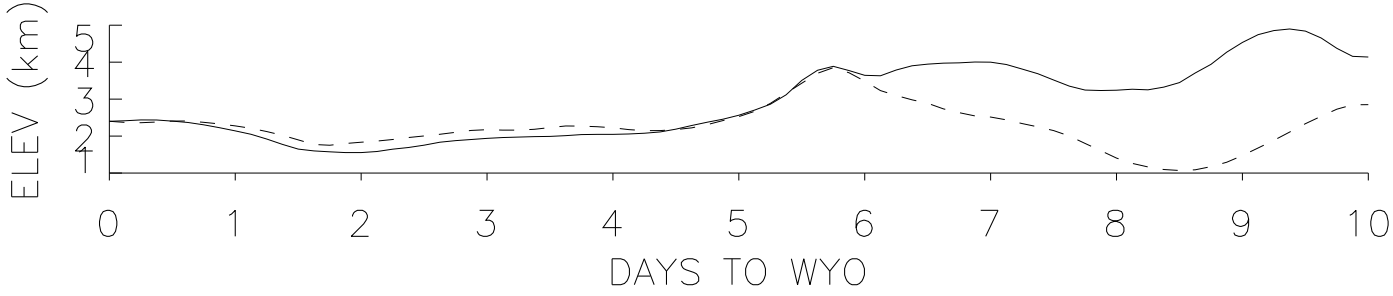
06UT

Day	km	hPa	C
0	2.4	755	−8
1	1.9	808	−2
2	1.9	818	0
3	1.9	817	−4
4	1.9	820	−7
5	2.2	780	−4
6	2.8	712	−8
7	3.3	655	−13
8	3.9	605	−22
9	4.5	557	−25
10	5.0	518	−31

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/6/2005 (Day of Year 37)
NCEP/NCAR Reanalysis 1 Data Set





12UT

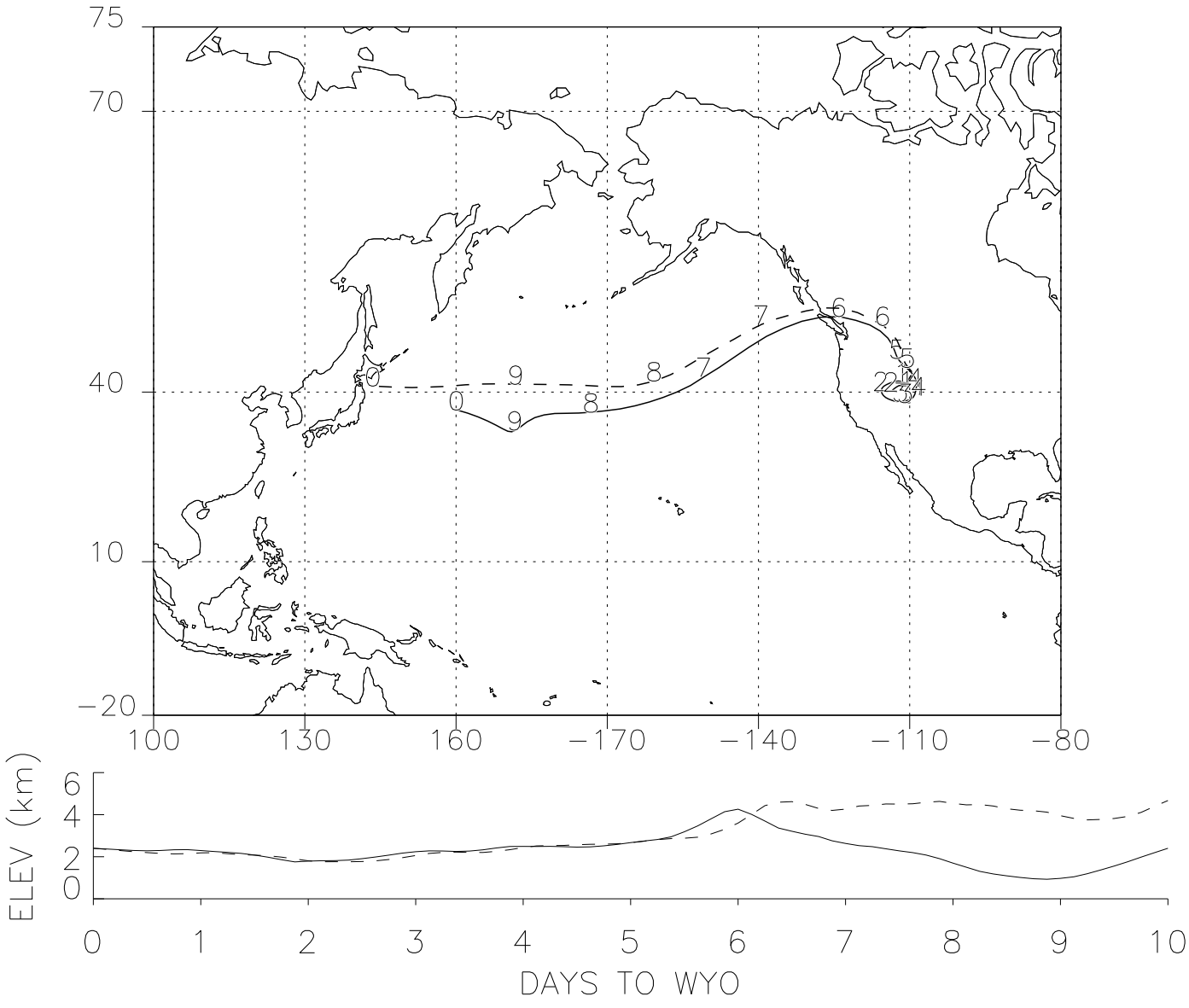
Day	km	hPa	C
0	2.4	754	−9
1	2.1	782	−4
2	1.6	849	2
3	1.9	814	−3
4	2.0	803	−6
5	2.6	749	−6
6	3.6	641	−15
7	4.0	599	−19
8	3.2	666	−16
9	4.5	552	−29
10	4.1	585	−26

18UT

Day	km	hPa	C
0	2.4	755	−9
1	2.3	768	−5
2	1.8	819	−1
3	2.2	790	−2
4	2.2	785	−5
5	2.5	754	−5
6	3.5	659	−12
7	2.5	739	−5
8	1.4	849	−1
9	1.5	848	−2
10	2.9	701	−17

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/7/2005 (Day of Year 38)
NCEP/NCAR Reanalysis 1 Data Set



00UT

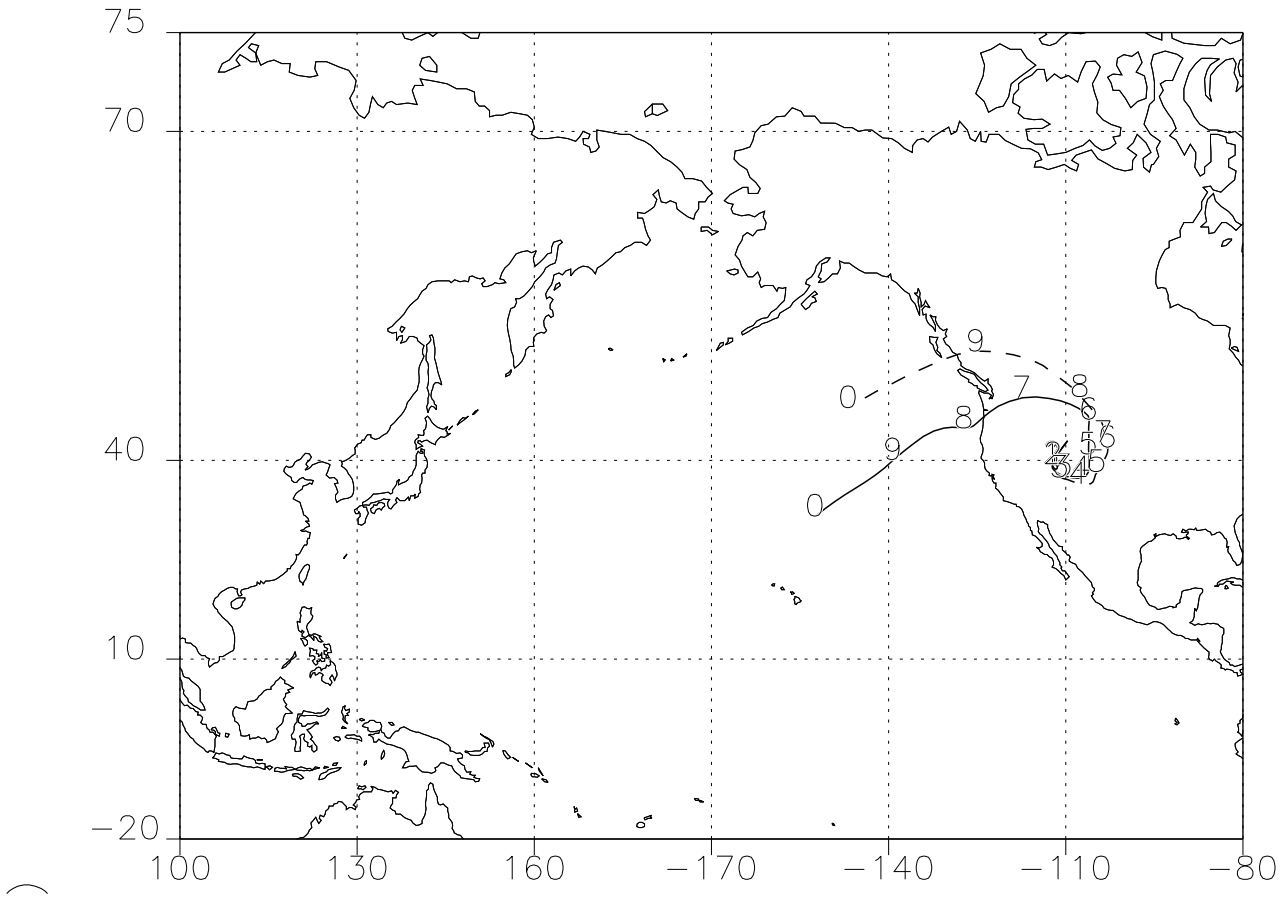
Day	km	hPa	C
0	2.4	754	−5
1	2.3	765	−3
2	1.8	821	4
3	2.2	782	2
4	2.5	758	0
5	2.7	740	−4
6	4.3	596	−17
7	2.6	726	−5
8	1.7	818	−2
9	1.0	905	3
10	2.4	749	−12

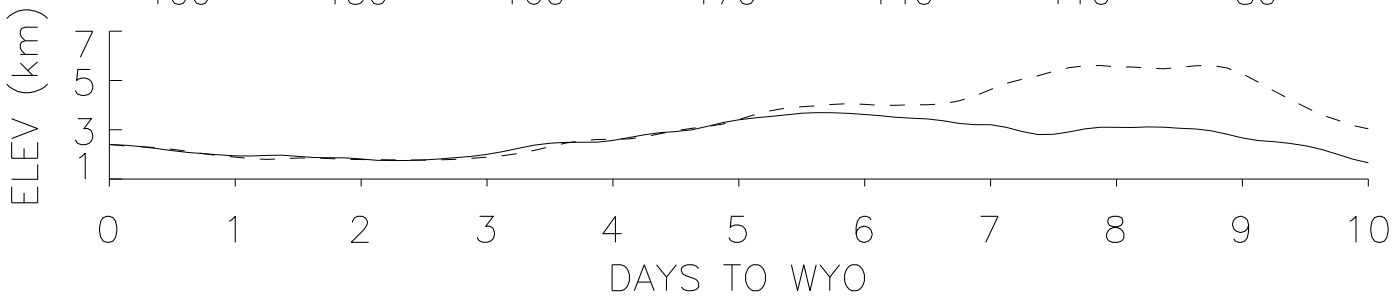
06UT

Day	km	hPa	C
0	2.4	753	−6
1	2.2	776	−3
2	1.8	817	−1
3	2.1	801	−1
4	2.4	764	−4
5	2.7	741	−7
6	3.6	652	−12
7	4.3	583	−20
8	4.5	556	−23
9	3.9	604	−21
10	4.7	546	−27

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/7/2005 (Day of Year 38)
NCEP/NCAR Reanalysis 1 Data Set





12UT

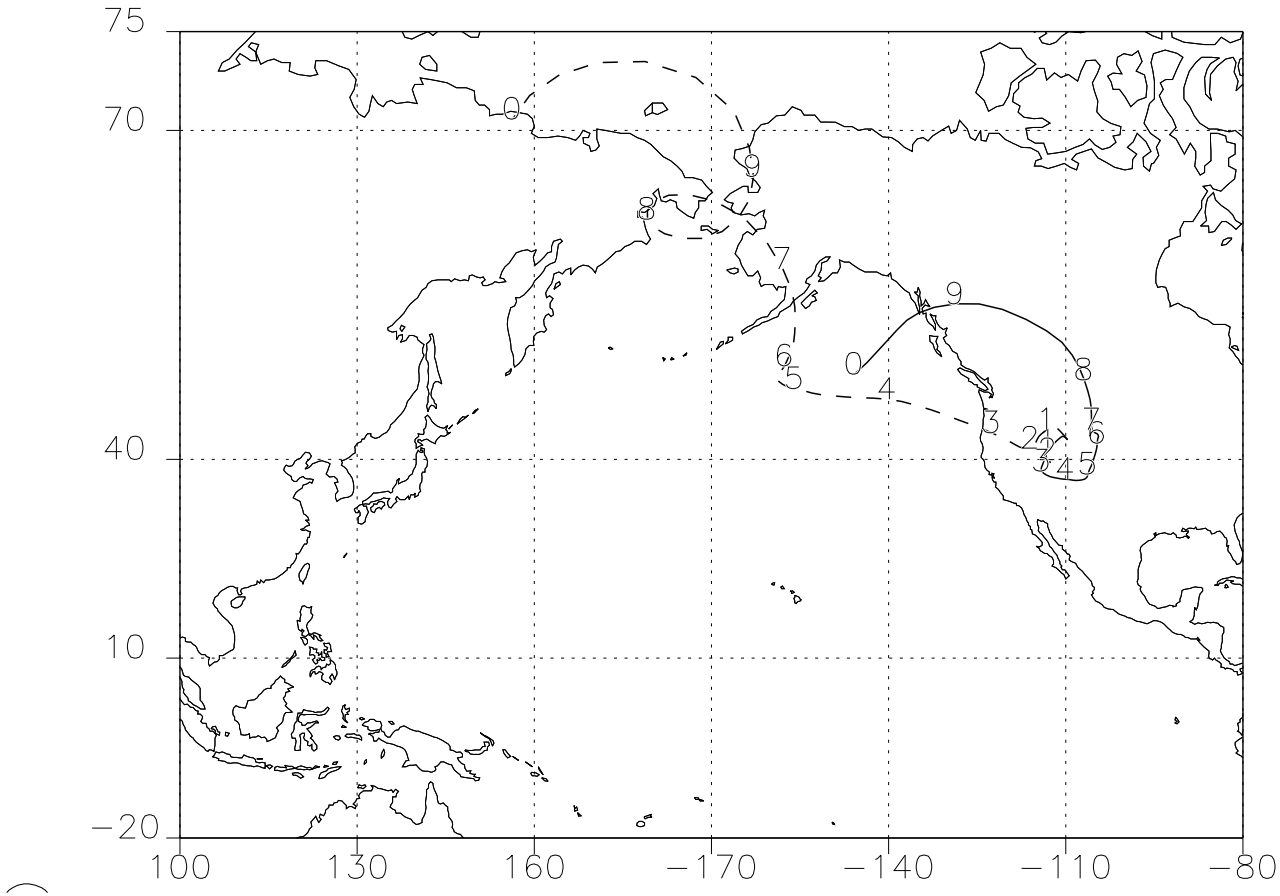
Day	km	hPa	C
0	2.4	753	−7
1	1.9	799	−3
2	1.8	816	−1
3	2.0	806	−3
4	2.6	752	−6
5	3.4	672	−9
6	3.6	649	−12
7	3.2	689	−3
8	3.1	702	−1
9	2.7	738	2
10	1.7	834	8

18UT

Day	km	hPa	C
0	2.4	753	−6
1	1.9	805	−1
2	1.8	817	1
3	1.9	816	−1
4	2.6	748	−4
5	3.4	672	−11
6	4.0	616	−16
7	4.6	570	−19
8	5.5	496	−30
9	5.3	517	−23
10	3.0	686	−3

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/8/2005 (Day of Year 39)
NCEP/NCAR Reanalysis 1 Data Set

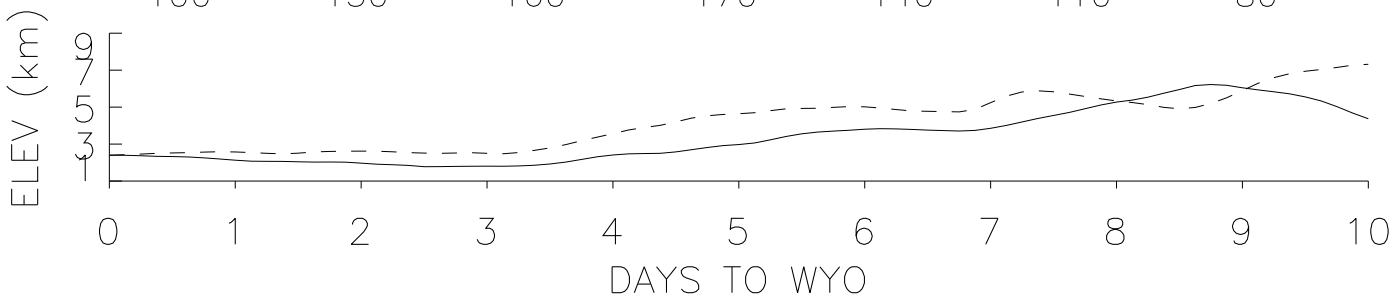


00UT

Day	km	hPa	C
0	2.4	754	−7
1	2.1	780	−2
2	2.0	797	1
3	1.8	820	6
4	2.4	766	1
5	3.0	711	−5
6	3.8	637	−14
7	3.9	631	−12
8	5.3	518	−25
9	6.0	456	−33
10	4.4	572	−16

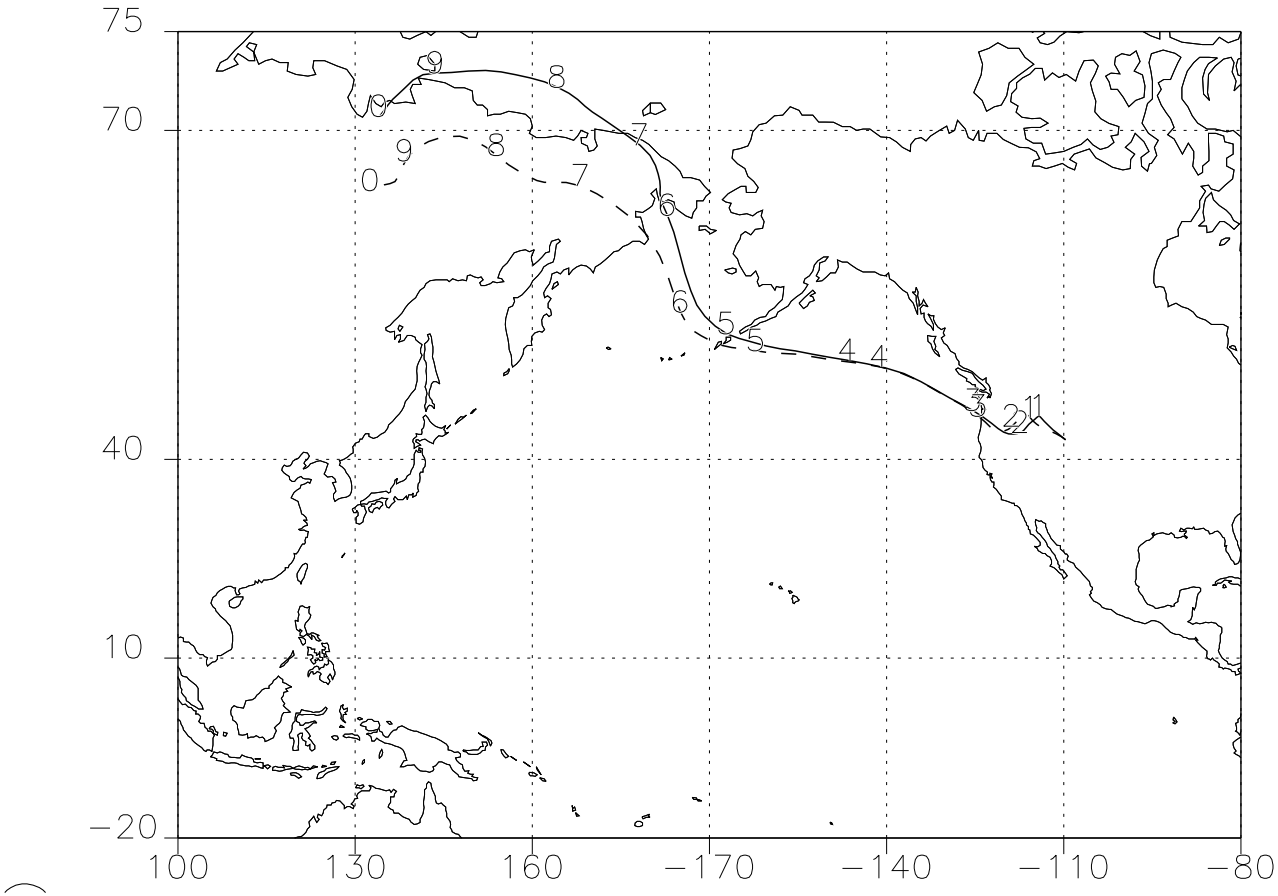
06UT

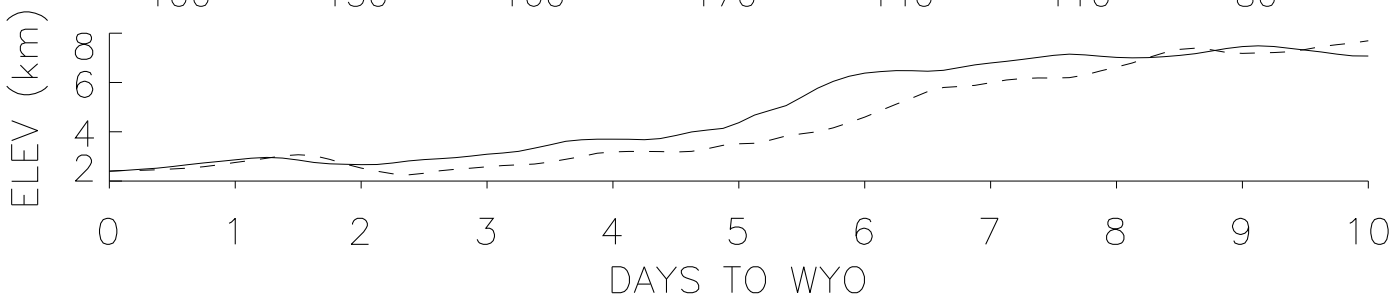
Day	km	hPa	C
0	2.4	756	−10
1	2.6	734	−9
2	2.6	733	−8
3	2.5	749	−6
4	3.6	650	−16
5	4.6	556	−26
6	5.0	524	−28
7	5.2	501	−30
8	5.3	501	−30
9	5.9	462	−34
10	7.3	377	−48



00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/8/2005 (Day of Year 39)
NCEP/NCAR Reanalysis 1 Data Set





12UT

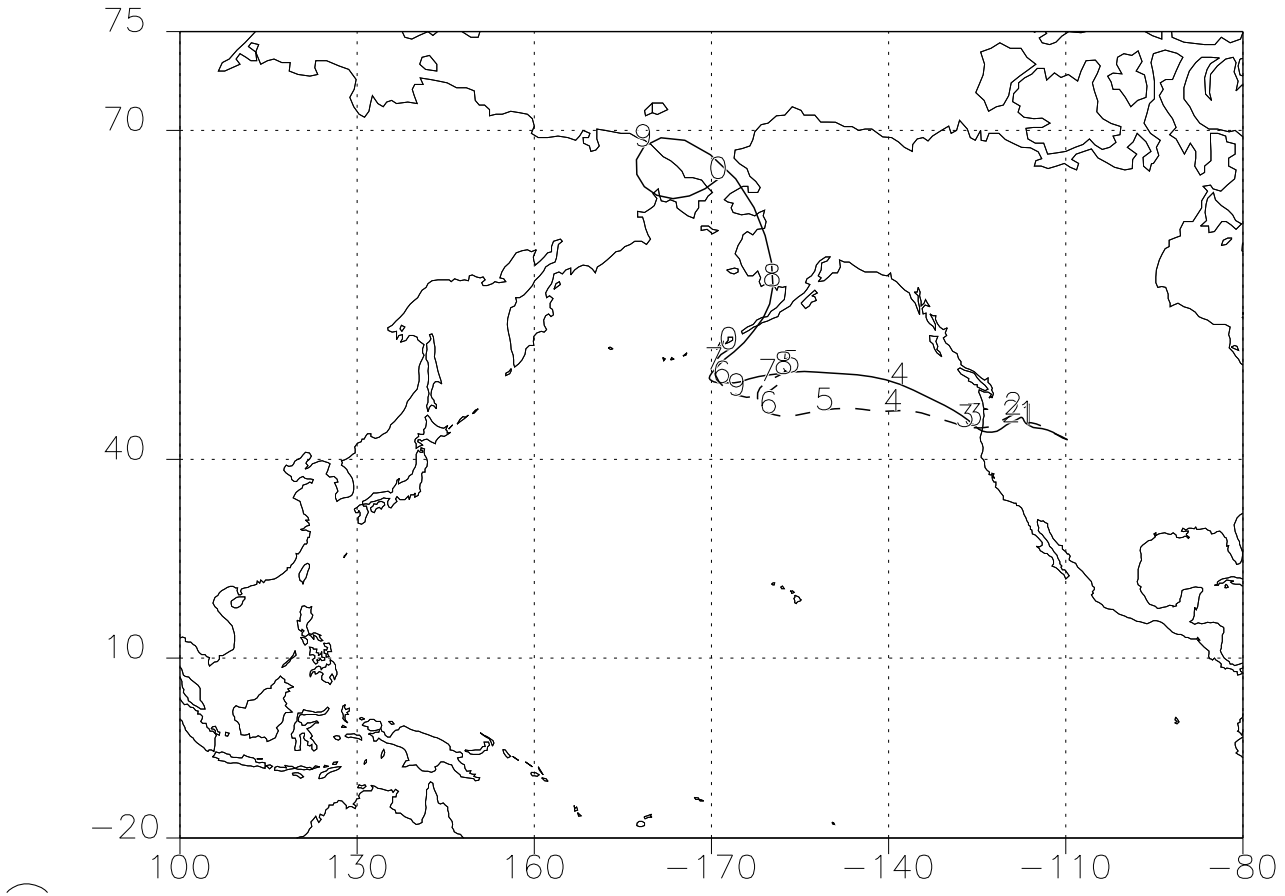
Day	km	hPa	C
0	2.4	756	−11
1	2.9	707	−13
2	2.7	727	−11
3	3.1	692	−12
4	3.7	634	−18
5	4.4	573	−24
6	6.4	428	−42
7	6.8	397	−48
8	7.0	383	−50
9	7.5	362	−51
10	7.1	385	−49

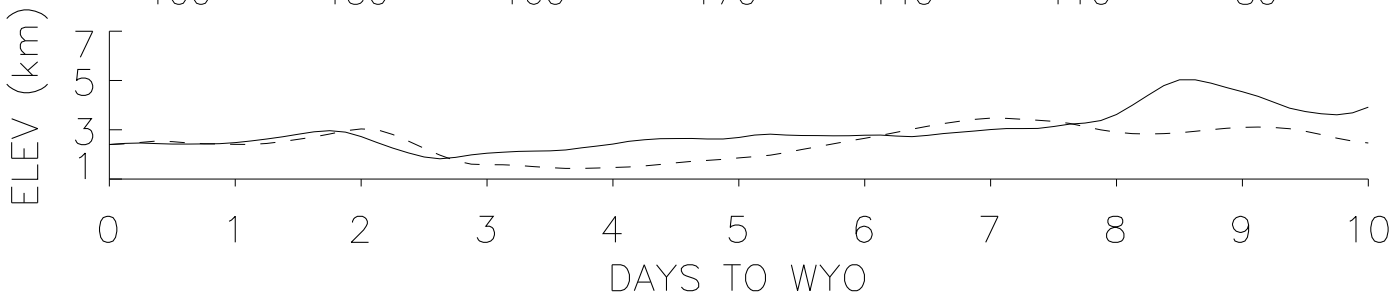
18UT

Day	km	hPa	C
0	2.4	757	−10
1	2.8	720	−13
2	2.5	738	−10
3	2.6	740	−10
4	3.2	681	−15
5	3.5	646	−18
6	4.6	556	−26
7	6.0	452	−42
8	6.6	411	−46
9	7.2	379	−49
10	7.7	350	−53

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/9/2005 (Day of Year 40)
NCEP/NCAR Reanalysis 1 Data Set





00UT

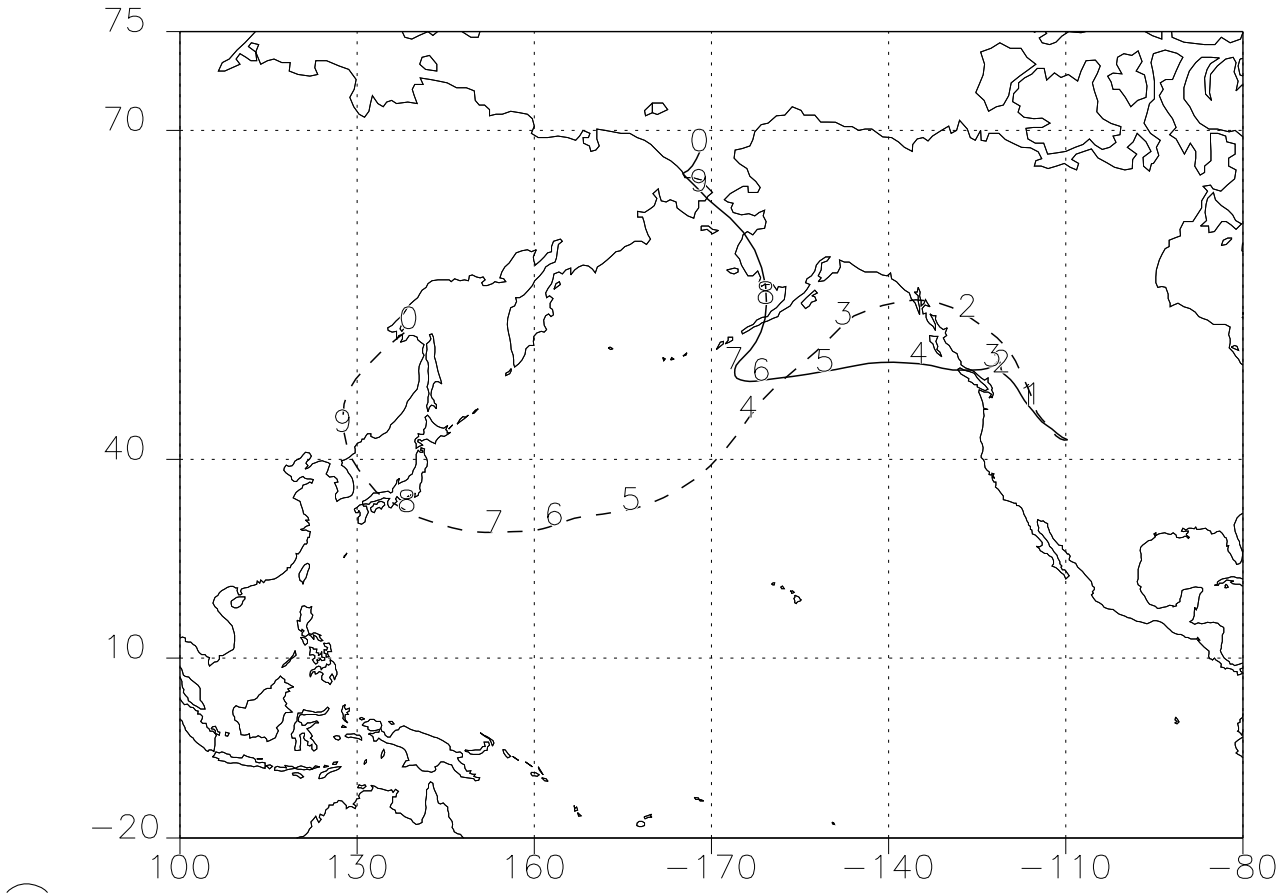
Day	km	hPa	C
0	2.4	758	−9
1	2.5	748	−9
2	2.7	719	−11
3	2.0	792	−6
4	2.4	756	−9
5	2.7	724	−13
6	2.8	714	−10
7	3.0	690	−12
8	3.6	627	−19
9	4.5	560	−25
10	3.9	610	−19

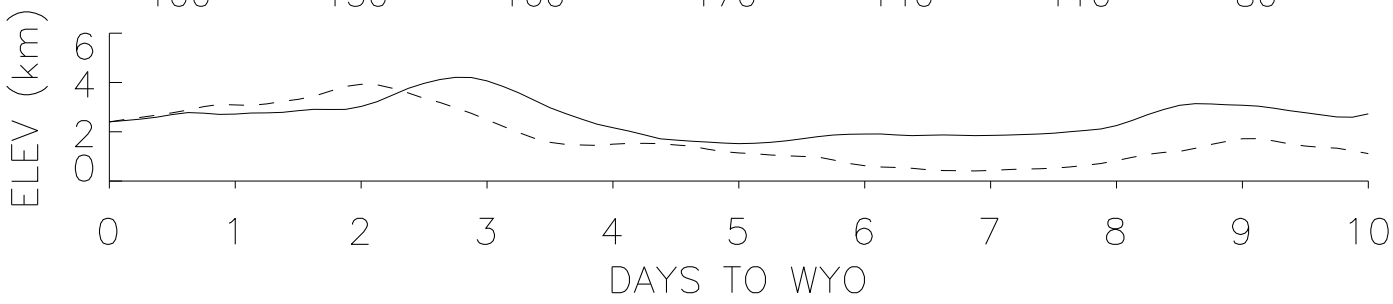
06UT

Day	km	hPa	C
0	2.4	760	−11
1	2.4	756	−10
2	3.0	691	−14
3	1.6	837	−2
4	1.5	859	−1
5	1.9	814	−3
6	2.7	728	−9
7	3.5	646	−17
8	2.9	687	−14
9	3.1	663	−14
10	2.5	714	−9

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/9/2005 (Day of Year 40)
NCEP/NCAR Reanalysis 1 Data Set





12UT

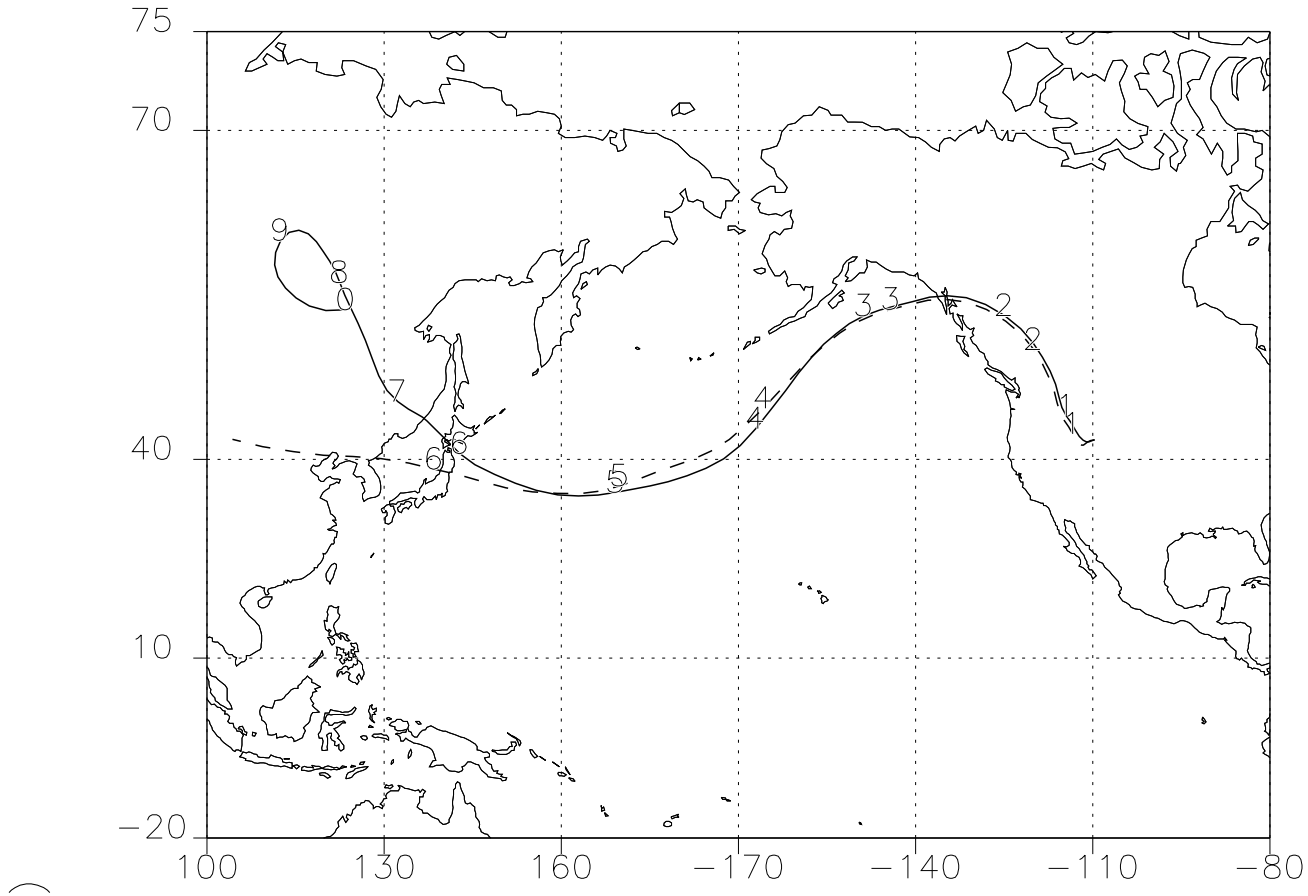
Day	km	hPa	C
0	2.4	762	−11
1	2.7	725	−10
2	3.0	694	−14
3	4.1	597	−26
4	2.2	776	−11
5	1.5	846	−6
6	1.9	800	−8
7	1.9	802	−6
8	2.3	755	−10
9	3.1	679	−17
10	2.7	717	−14

18UT

Day	km	hPa	C
0	2.4	763	−7
1	3.1	692	−11
2	3.9	613	−17
3	2.5	739	−5
4	1.5	840	2
5	1.1	866	7
6	0.6	928	10
7	0.4	956	10
8	0.8	903	−6
9	1.7	799	−25
10	1.1	878	−18

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/10/2005 (Day of Year 41)
NCEP/NCAR Reanalysis 1 Data Set

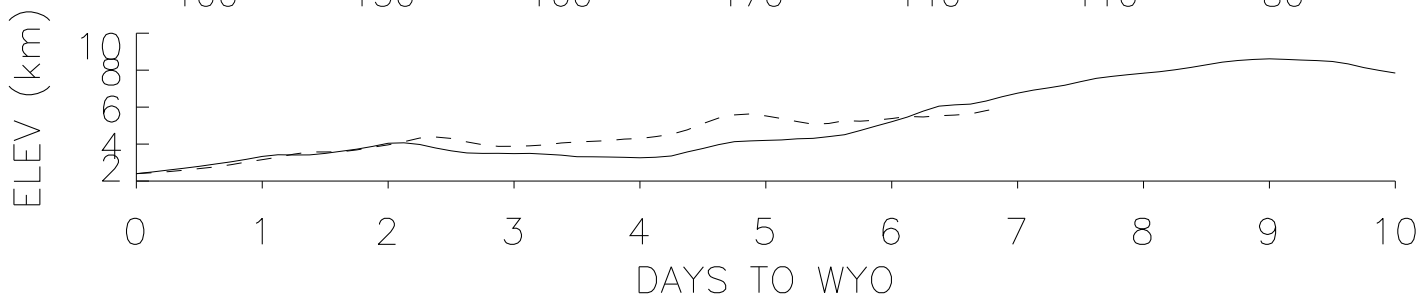


00UT

Day	km	hPa	C
0	2.4	763	−3
1	3.3	671	−13
2	4.0	604	−18
3	3.5	649	−11
4	3.3	668	−10
5	4.2	584	−20
6	5.2	502	−31
7	6.8	395	−47
8	7.8	338	−55
9	8.6	303	−62
10	7.8	339	−53

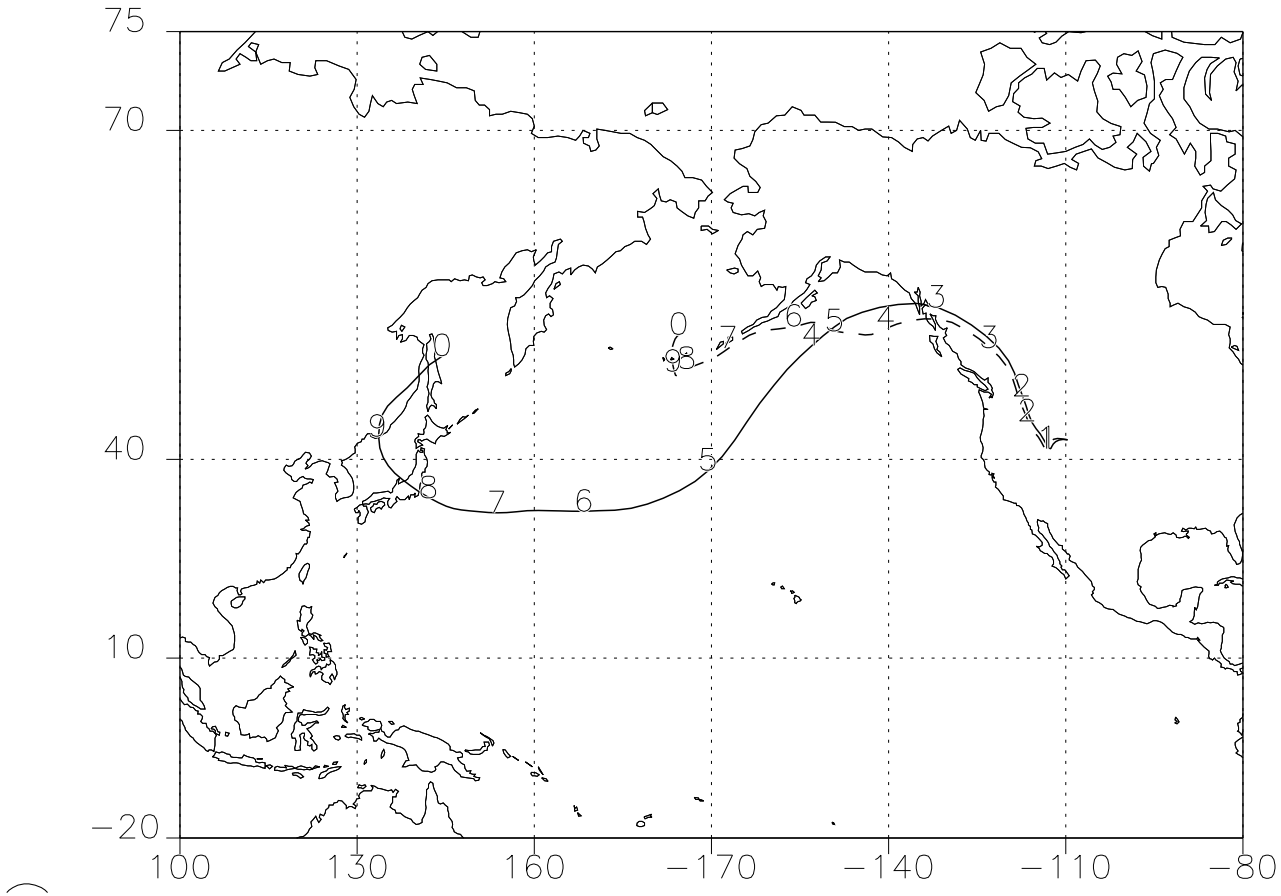
06UT

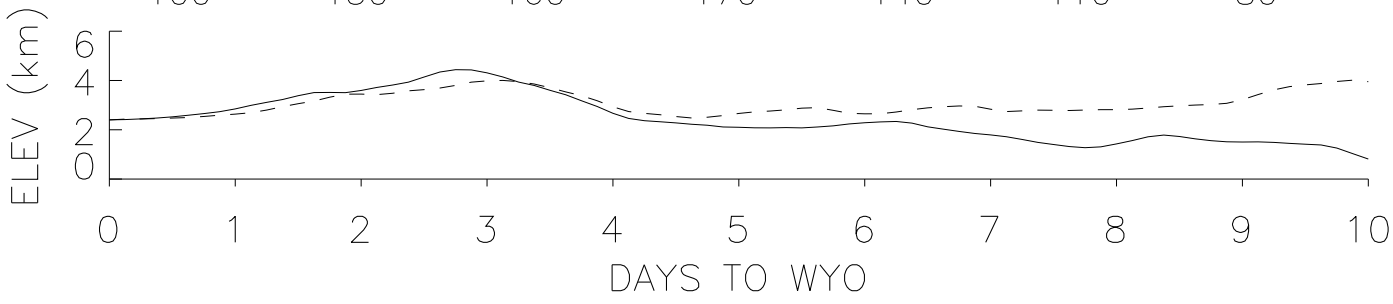
Day	km	hPa	C
0	2.4	764	−4
1	3.2	691	−10
2	4.0	613	−18
3	3.9	617	−13
4	4.3	580	−18
5	5.5	486	−31
6	5.4	496	−29



00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/10/2005 (Day of Year 41)
NCEP/NCAR Reanalysis 1 Data Set





12UT

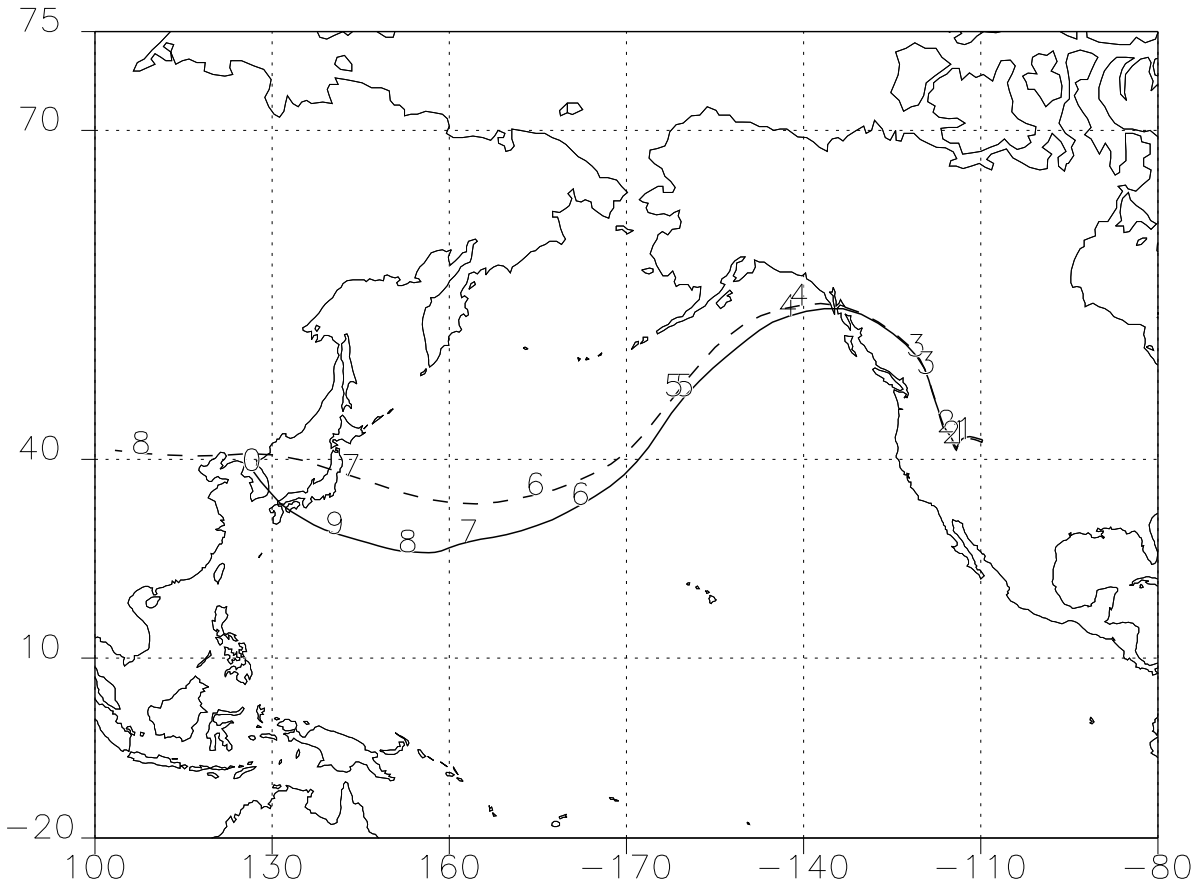
Day	km	hPa	C
0	2.4	764	−7
1	2.8	720	−9
2	3.6	647	−13
3	4.3	583	−18
4	2.7	723	−5
5	2.1	778	1
6	2.3	750	−3
7	1.8	803	−5
8	1.4	843	−7
9	1.5	821	−18
10	0.8	897	−9

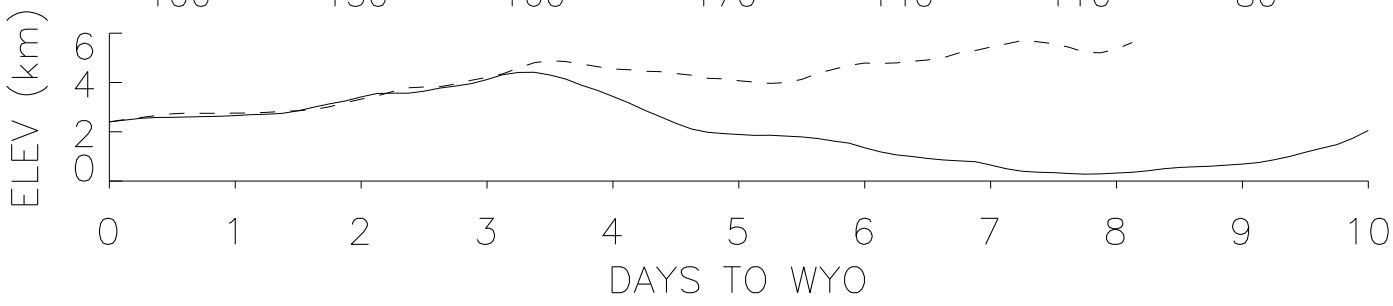
18UT

Day	km	hPa	C
0	2.4	766	−5
1	2.6	741	−5
2	3.4	662	−12
3	4.0	611	−17
4	2.9	703	−7
5	2.7	726	−6
6	2.6	725	−11
7	2.8	704	−12
8	2.8	709	−11
9	3.2	671	−13
10	4.0	602	−20

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/11/2005 (Day of Year 42)
NCEP/NCAR Reanalysis 1 Data Set





00UT

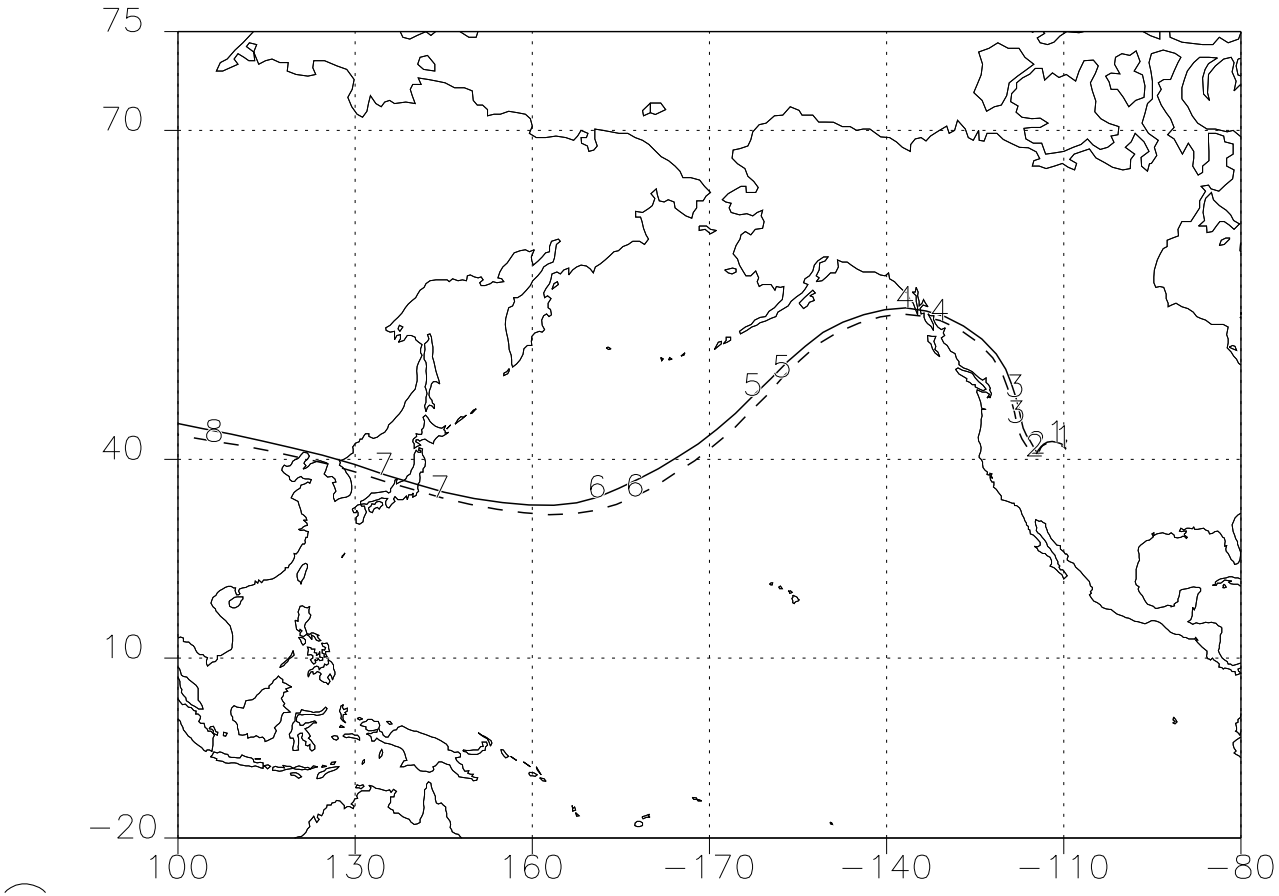
Day	km	hPa	C
0	2.4	764	1
1	2.7	738	−3
2	3.4	666	−11
3	4.1	601	−18
4	3.4	655	−10
5	1.9	801	0
6	1.3	851	7
7	0.7	927	13
8	0.3	974	15
9	0.7	927	3
10	2.1	769	−25

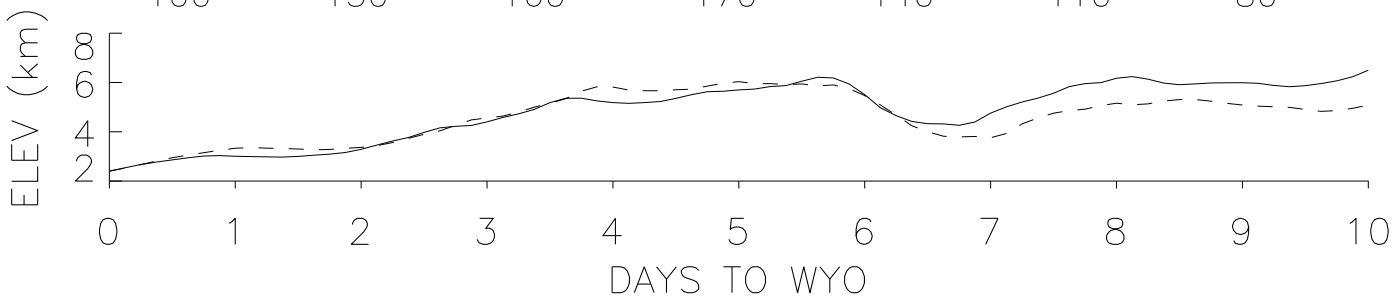
06UT

Day	km	hPa	C
0	2.4	766	−5
1	2.8	730	−5
2	3.3	677	−9
3	4.2	595	−18
4	4.5	565	−18
5	4.1	602	−16
6	4.8	543	−23
7	5.4	492	−28
8	5.4	502	−29

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/11/2005 (Day of Year 42)
NCEP/NCAR Reanalysis 1 Data Set





12UT

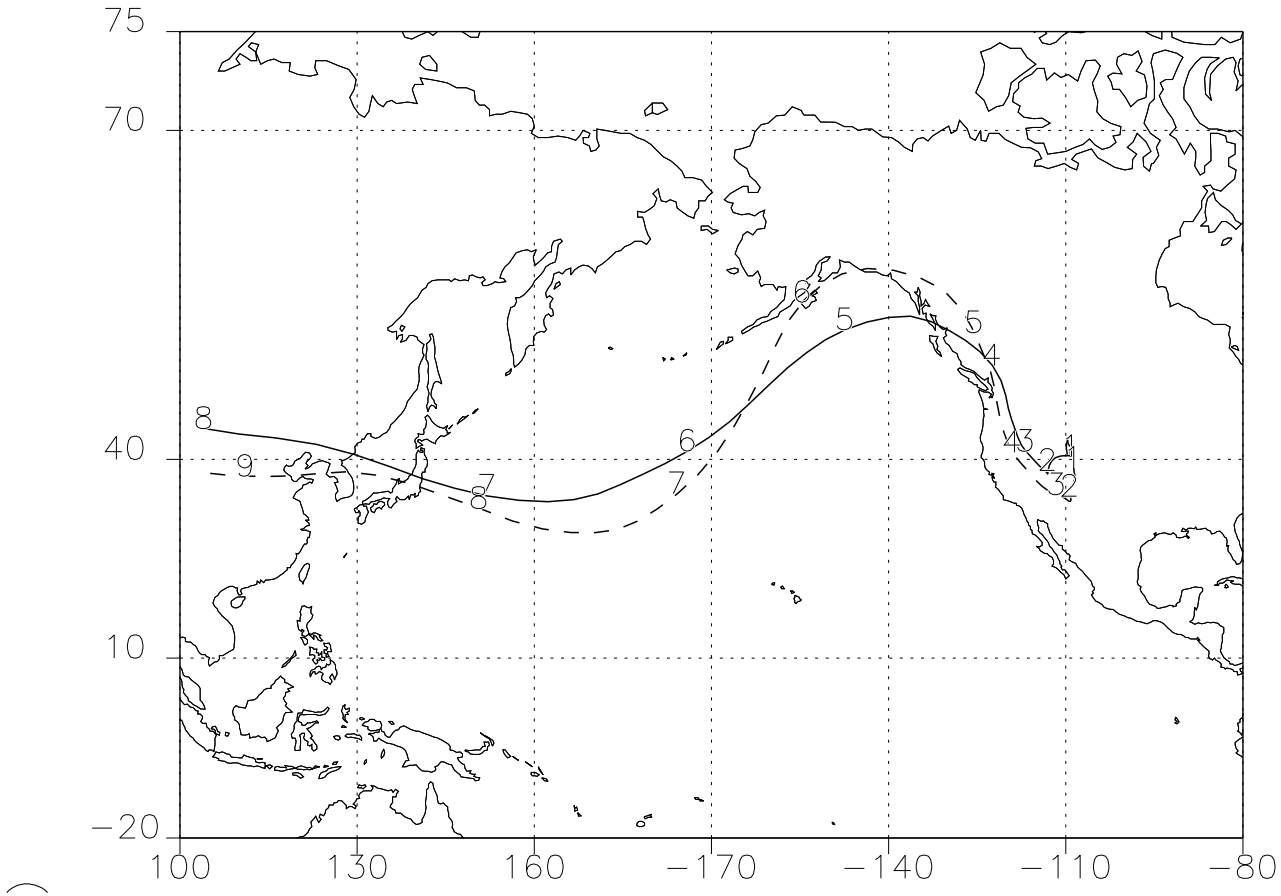
Day	km	hPa	C
0	2.4	764	−4
1	3.0	707	−6
2	3.3	681	−7
3	4.4	582	−17
4	5.2	520	−23
5	5.7	481	−28
6	5.5	491	−27
7	4.8	542	−25
8	6.2	443	−38
9	6.0	460	−34
10	6.5	430	−37

18UT

Day	km	hPa	C
0	2.4	763	−3
1	3.3	681	−5
2	3.4	675	−5
3	4.6	573	−16
4	5.8	477	−27
5	6.0	462	−29
6	5.5	497	−24
7	3.8	623	−16
8	5.2	516	−28
9	5.1	522	−27
10	5.1	525	−28

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/12/2005 (Day of Year 43)
NCEP/NCAR Reanalysis 1 Data Set

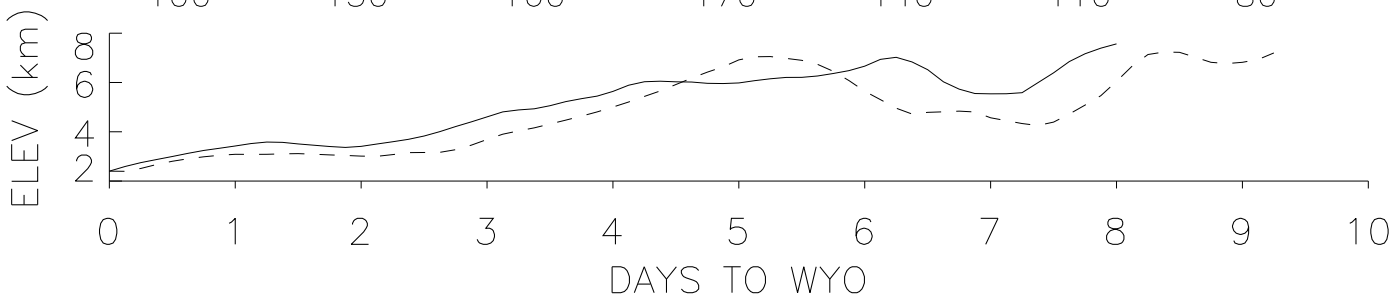


00UT

Day	km	hPa	C
0	2.4	759	3
1	3.4	673	−3
2	3.4	672	−3
3	4.6	572	−14
4	5.6	491	−25
5	6.0	466	−28
6	6.7	417	−38
7	5.5	484	−29
8	7.6	362	−47

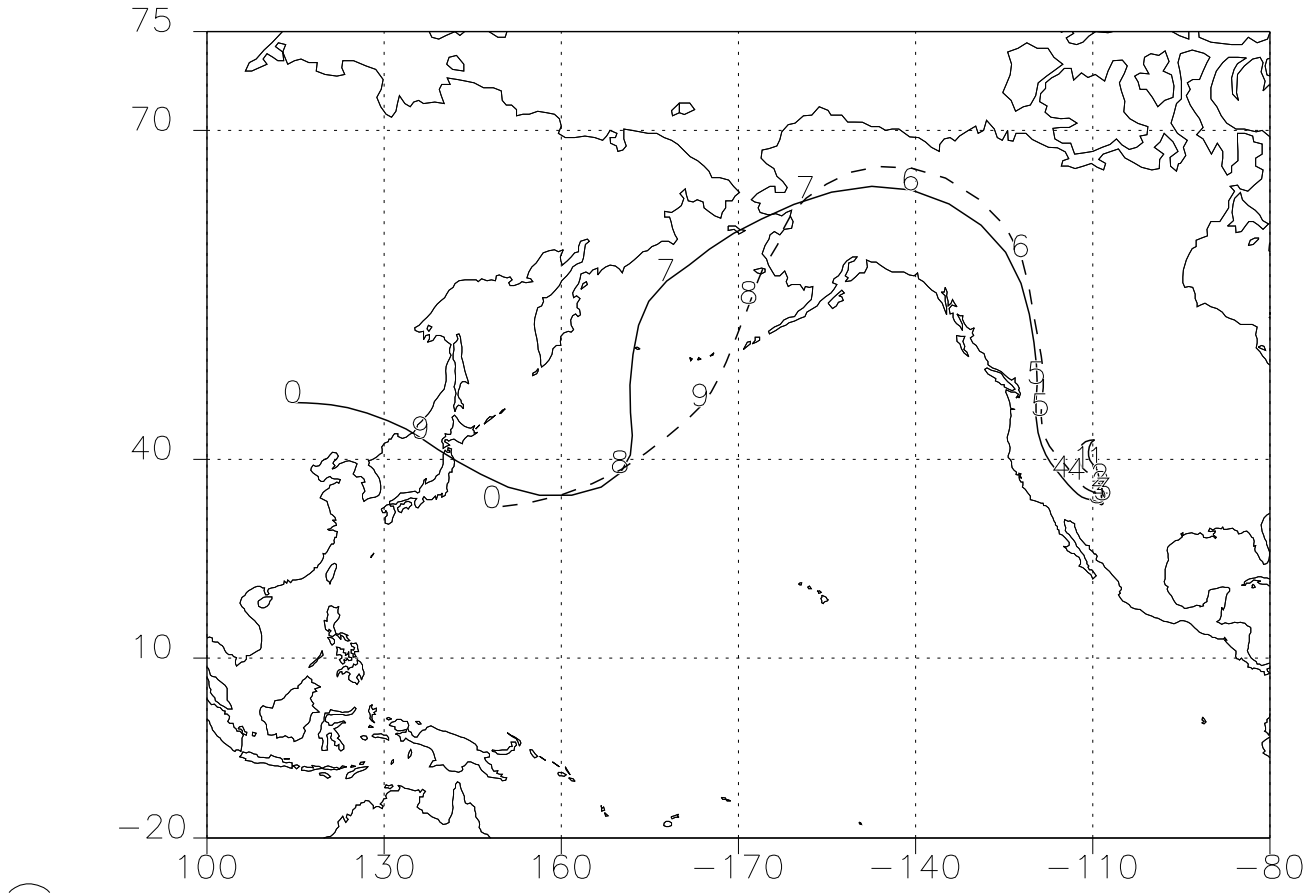
06UT

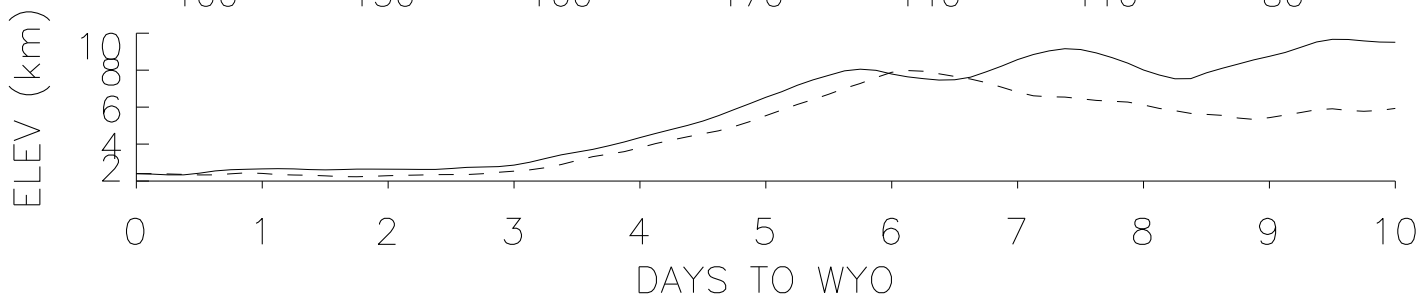
Day	km	hPa	C
0	2.4	757	−1
1	3.1	703	−1
2	3.0	710	3
3	3.7	648	−4
4	5.0	541	−16
5	6.9	408	−32
6	5.6	488	−21
7	4.6	567	−15
8	6.0	456	−28
9	6.8	416	−36



00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/12/2005 (Day of Year 43)
NCEP/NCAR Reanalysis 1 Data Set





12UT

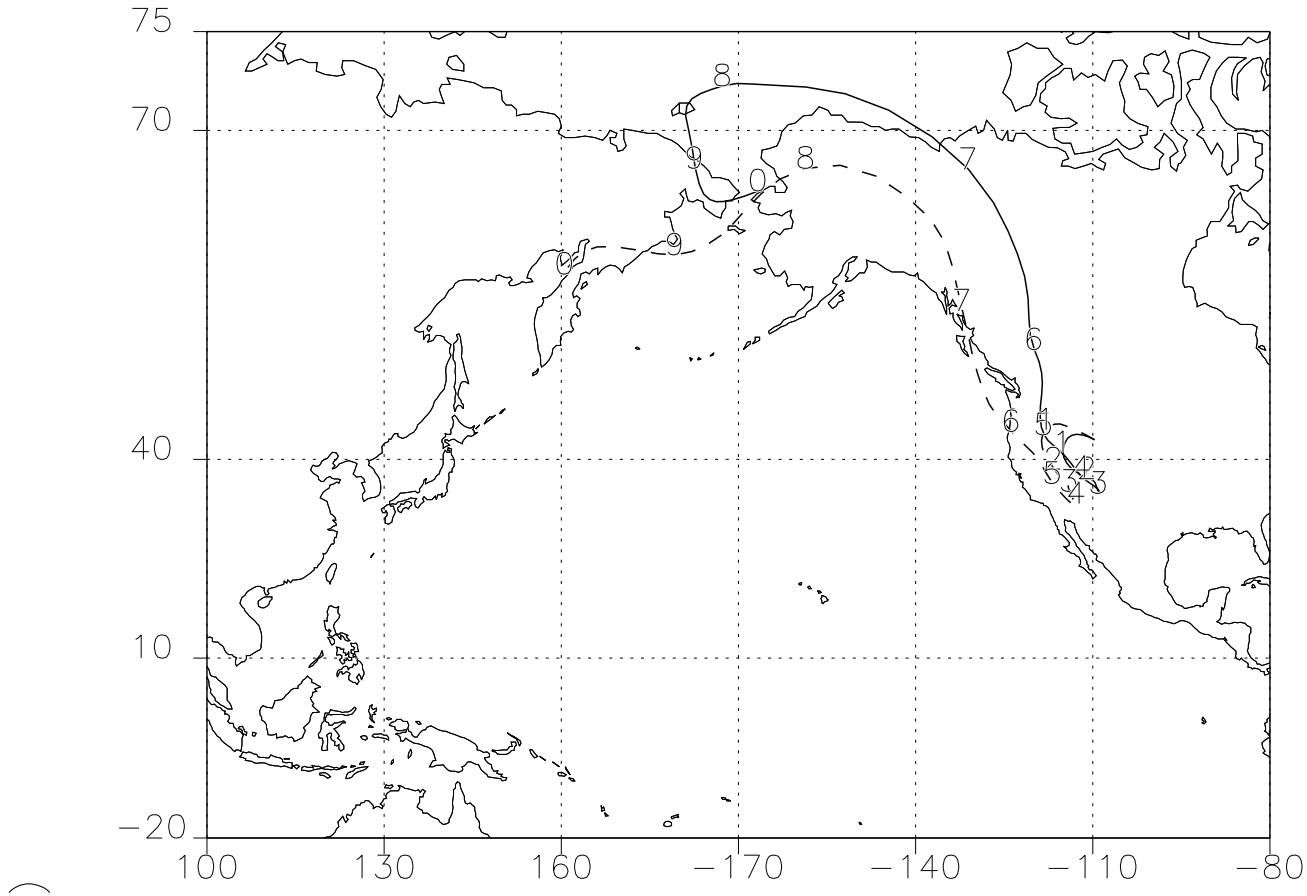
Day	km	hPa	C
0	2.4	754	−1
1	2.7	740	0
2	2.6	742	2
3	2.9	720	1
4	4.4	590	−12
5	6.5	430	−33
6	7.8	347	−48
7	8.6	308	−49
8	8.0	336	−44
9	8.7	295	−52
10	9.5	261	−58

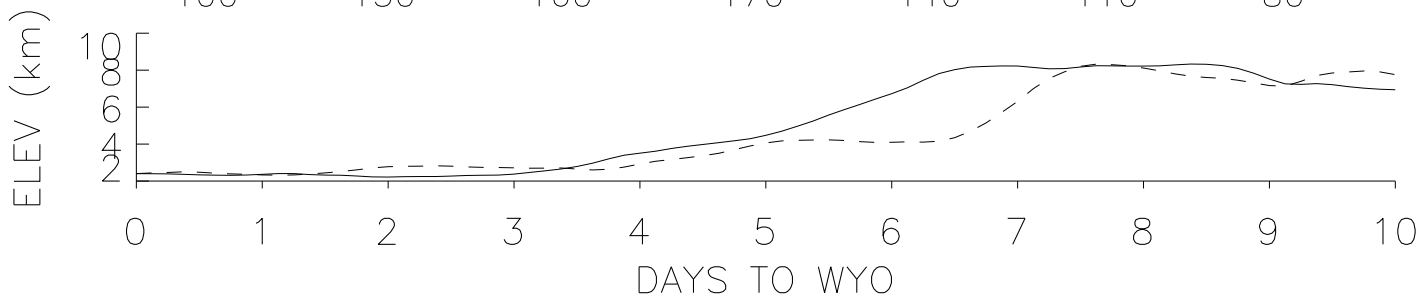
18UT

Day	km	hPa	C
0	2.4	753	−1
1	2.4	761	0
2	2.3	777	2
3	2.5	751	1
4	3.8	635	−11
5	5.5	497	−25
6	7.9	342	−51
7	6.8	402	−42
8	6.1	449	−34
9	5.4	496	−25
10	5.9	462	−27

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/13/2005 (Day of Year 44)
NCEP/NCAR Reanalysis 1 Data Set





00UT

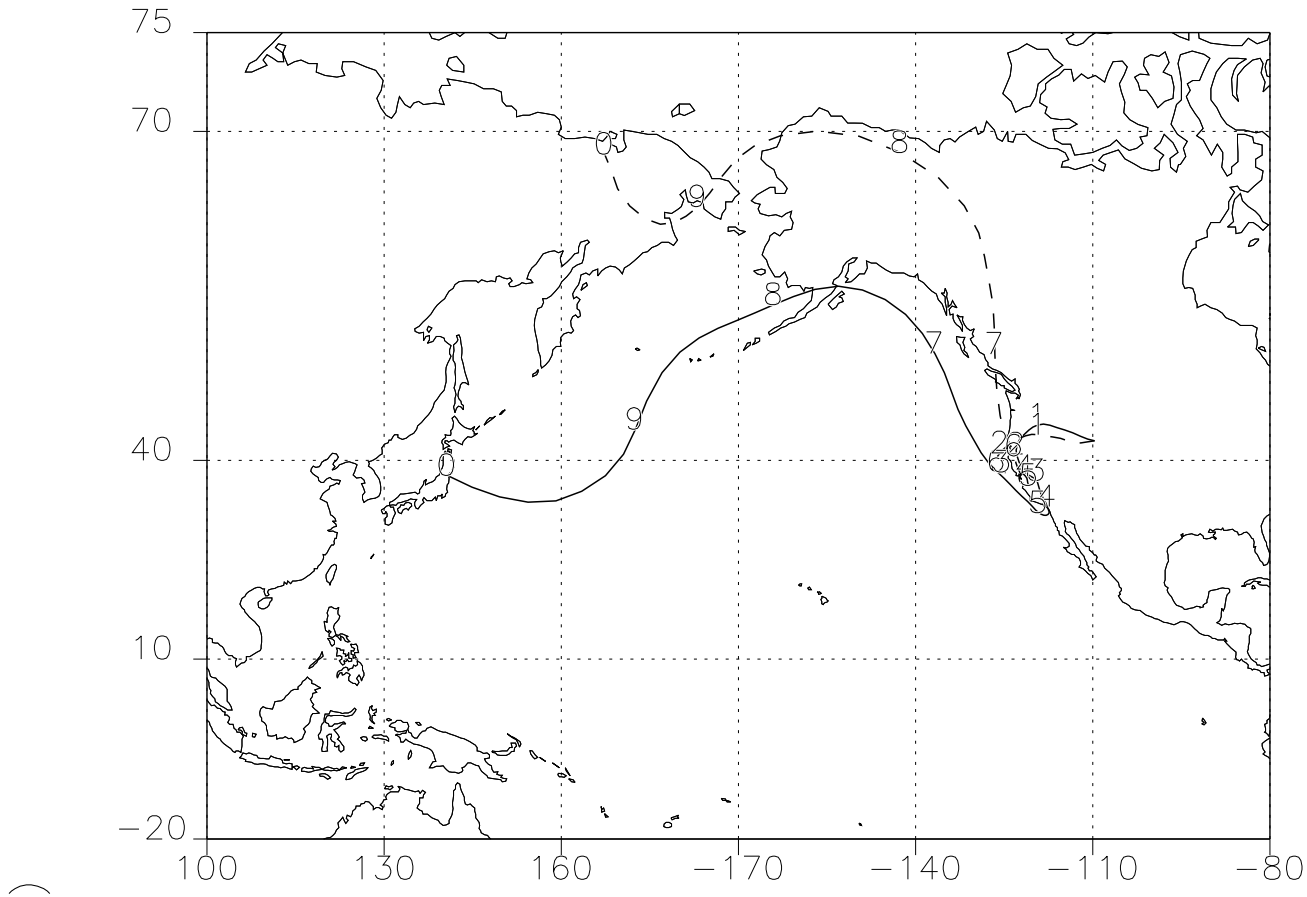
Day	km	hPa	C
0	2.4	751	−1
1	2.4	759	0
2	2.2	781	4
3	2.4	767	5
4	3.5	660	−9
5	4.5	576	−19
6	6.7	410	−43
7	8.2	317	−58
8	8.2	320	−54
9	7.5	358	−49
10	6.9	392	−44

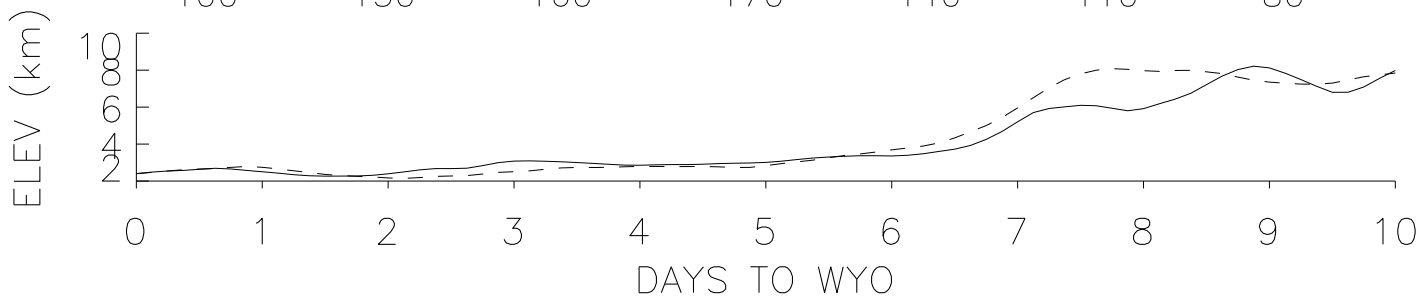
06UT

Day	km	hPa	C
0	2.4	755	−3
1	2.3	760	−2
2	2.8	726	0
3	2.7	735	3
4	2.9	715	2
5	4.1	613	−10
6	4.1	602	−15
7	6.3	436	−38
8	8.1	330	−53
9	7.2	382	−42
10	7.8	353	−48

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/13/2005 (Day of Year 44)
NCEP/NCAR Reanalysis 1 Data Set





12UT

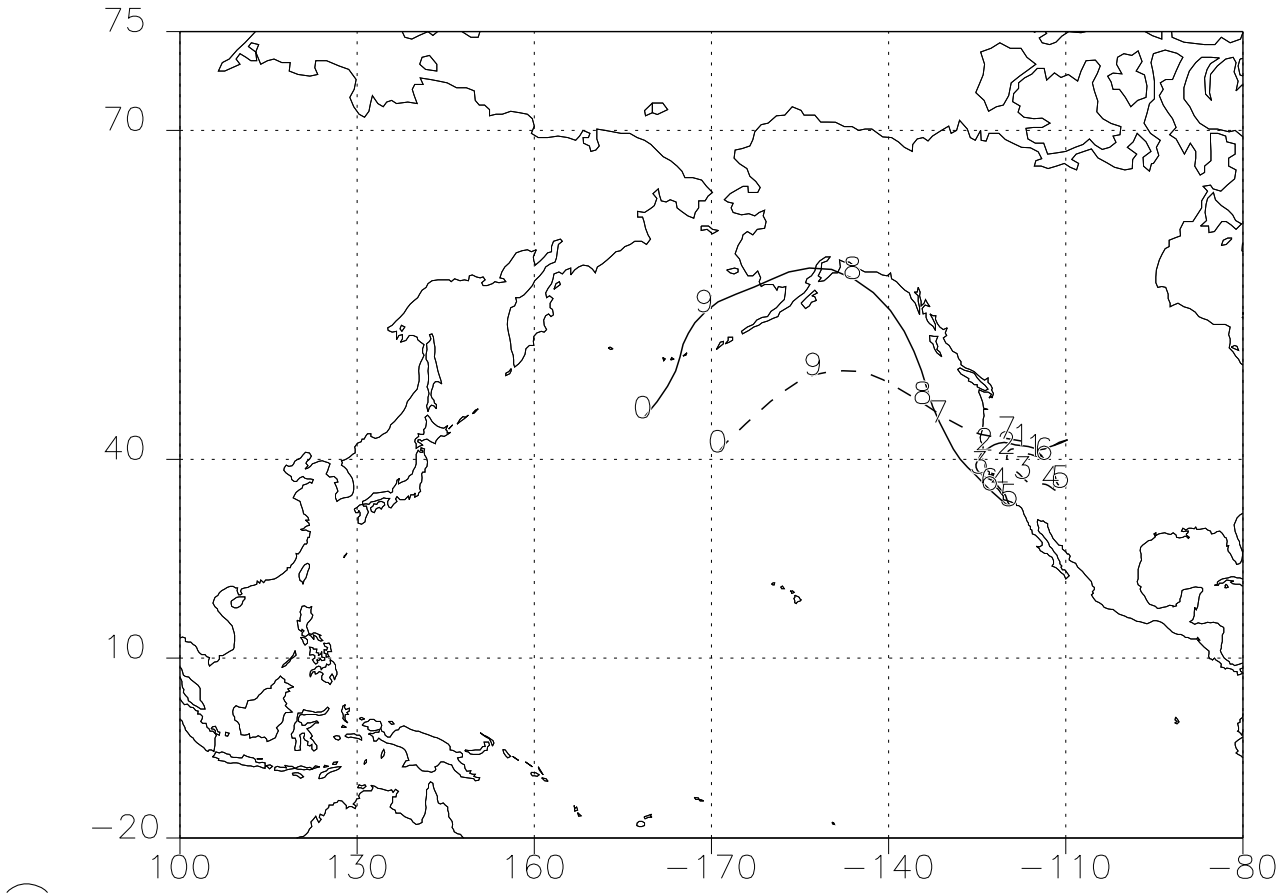
Day	km	hPa	C
0	2.4	757	−4
1	2.5	743	−4
2	2.4	756	2
3	3.1	699	0
4	2.9	719	3
5	3.0	704	2
6	3.4	671	−4
7	5.2	521	−19
8	5.9	466	−27
9	8.1	328	−49
10	8.0	335	−48

18UT

Day	km	hPa	C
0	2.4	759	−2
1	2.7	723	−4
2	2.2	775	1
3	2.5	749	3
4	2.8	725	0
5	2.8	720	1
6	3.7	642	−7
7	6.0	461	−31
8	8.0	333	−56
9	7.4	367	−46
10	7.8	342	−50

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/14/2005 (Day of Year 45)
NCEP/NCAR Reanalysis 1 Data Set

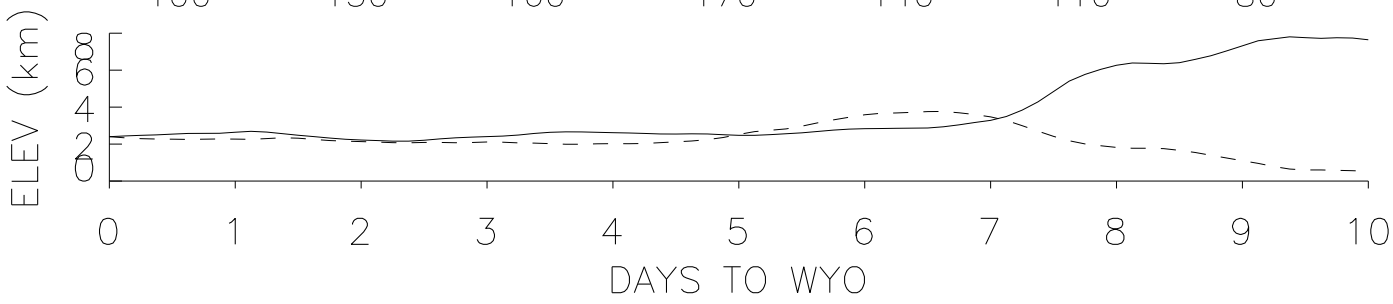


00UT

Day	km	hPa	C
0	2.4	757	−1
1	2.6	733	−3
2	2.2	770	1
3	2.4	756	3
4	2.6	739	2
5	2.5	752	3
6	2.8	717	0
7	3.3	675	−6
8	6.3	445	−31
9	7.3	376	−42
10	7.6	358	−45

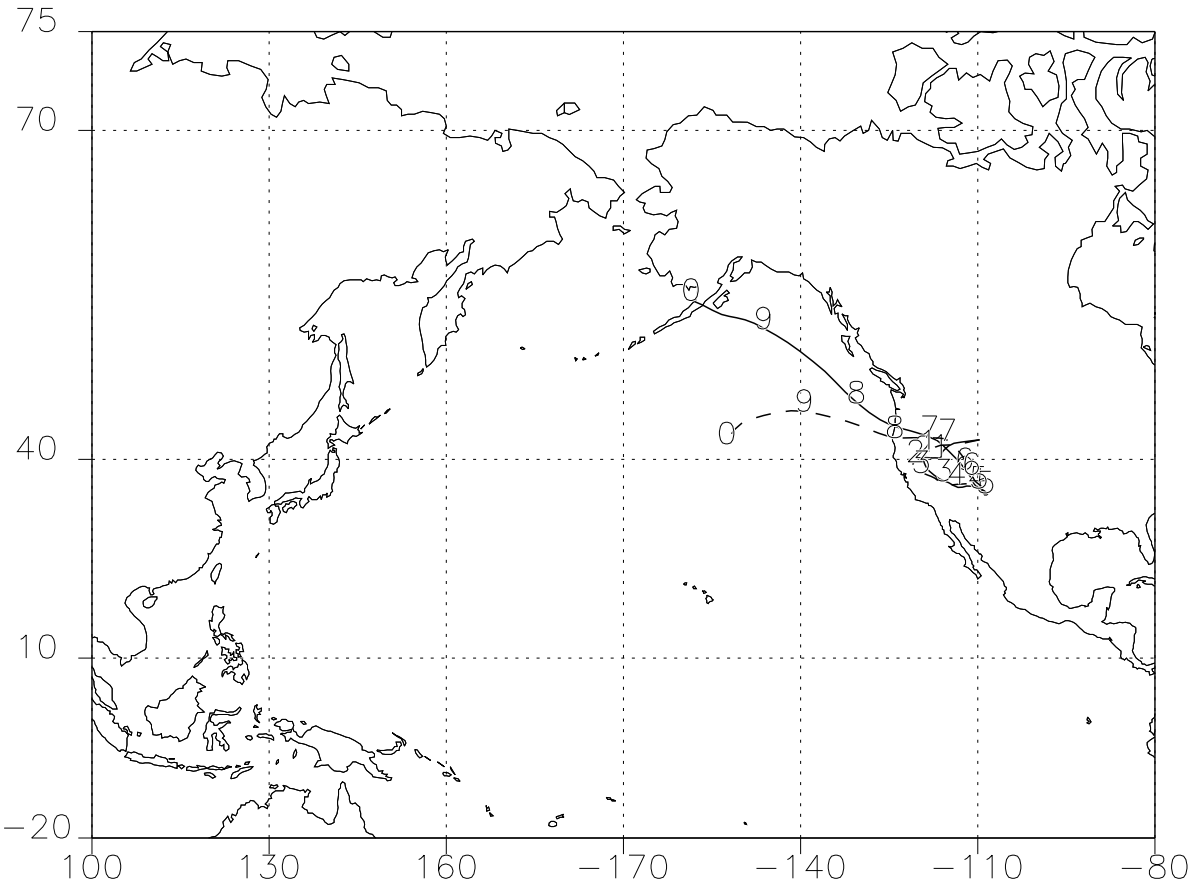
06UT

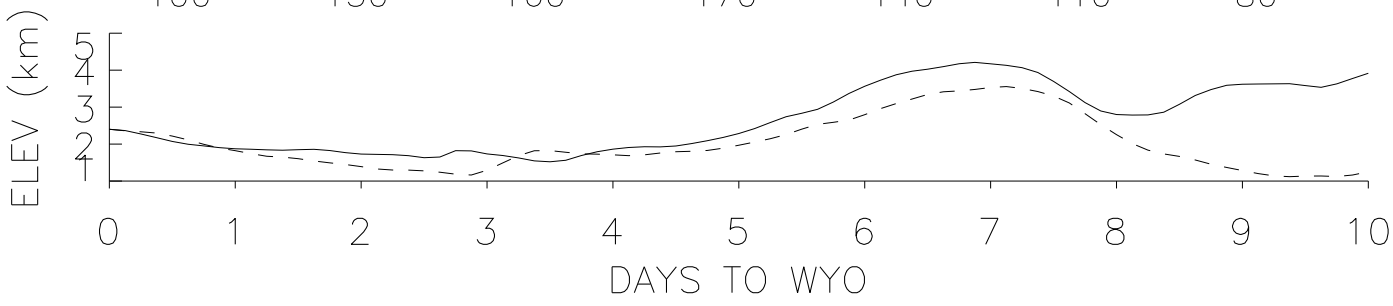
Day	km	hPa	C
0	2.4	755	−2
1	2.3	772	−2
2	2.1	780	0
3	2.1	788	3
4	2.0	801	3
5	2.5	751	−2
6	3.6	651	−15
7	3.5	654	−15
8	1.8	811	0
9	1.1	885	6
10	0.5	944	11



00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/14/2005 (Day of Year 45)
NCEP/NCAR Reanalysis 1 Data Set





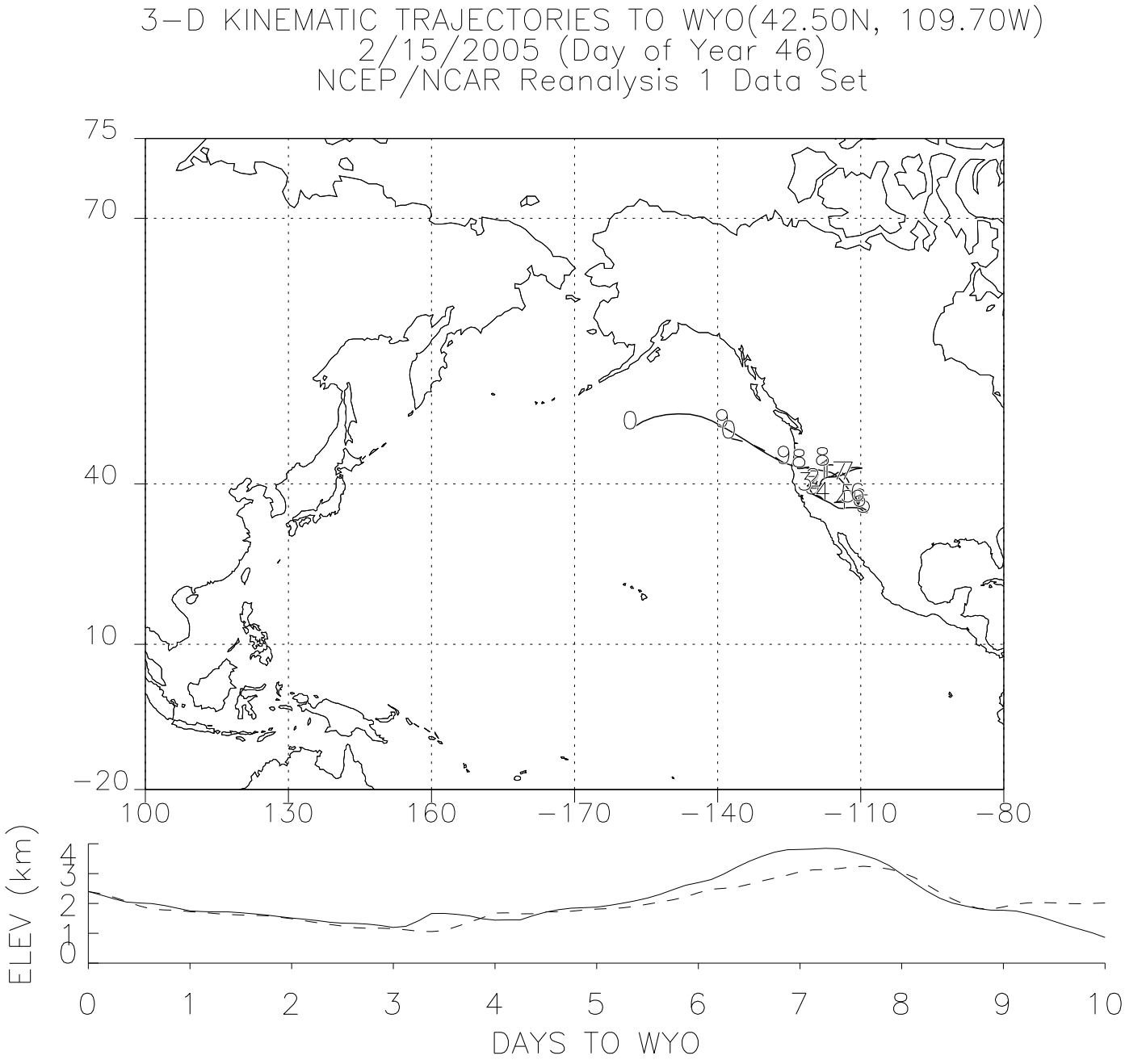
12UT

Day	km	hPa	C
0	2.4	756	−4
1	1.9	811	1
2	1.7	821	1
3	1.7	824	4
4	1.9	817	1
5	2.3	774	−2
6	3.6	651	−14
7	4.2	595	−21
8	2.8	711	−6
9	3.6	637	−15
10	3.9	609	−21

18UT

Day	km	hPa	C
0	2.4	755	−4
1	1.8	817	1
2	1.4	859	4
3	1.3	867	6
4	1.7	832	4
5	2.0	806	1
6	2.8	722	−9
7	3.5	651	−16
8	2.3	766	−4
9	1.3	876	3
10	1.3	883	5

12UT − solid
18UT − dashed



00UT

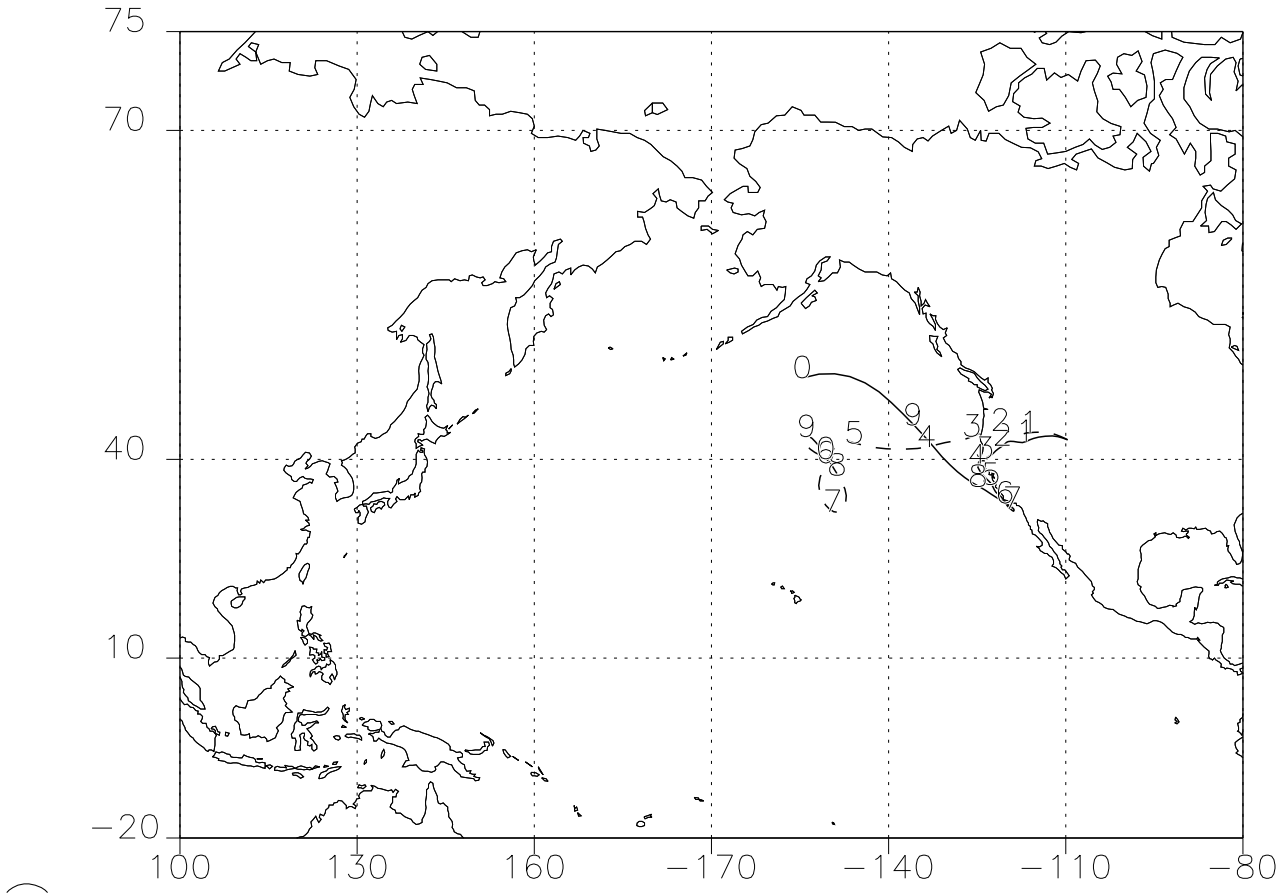
Day	km	hPa	C
0	2.4	754	−5
1	1.8	822	3
2	1.5	847	6
3	1.2	874	8
4	1.4	856	10
5	1.9	815	7
6	2.7	732	−4
7	3.8	629	−17
8	3.0	697	−9
9	1.8	817	1
10	0.9	909	7

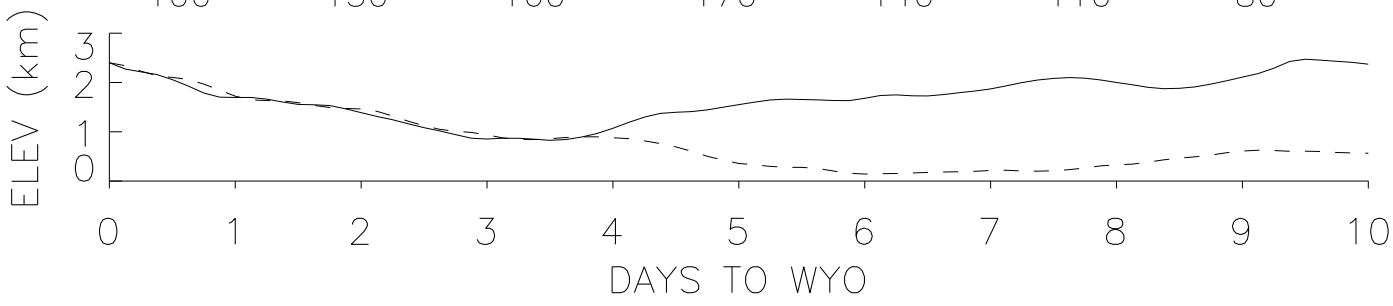
06UT

Day	km	hPa	C
0	2.4	756	−8
1	1.7	826	1
2	1.5	852	2
3	1.2	880	6
4	1.7	831	4
5	1.8	823	2
6	2.4	767	−3
7	3.1	696	−13
8	3.0	691	−12
9	1.9	807	−4
10	2.0	800	−4

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/15/2005 (Day of Year 46)
NCEP/NCAR Reanalysis 1 Data Set





12UT

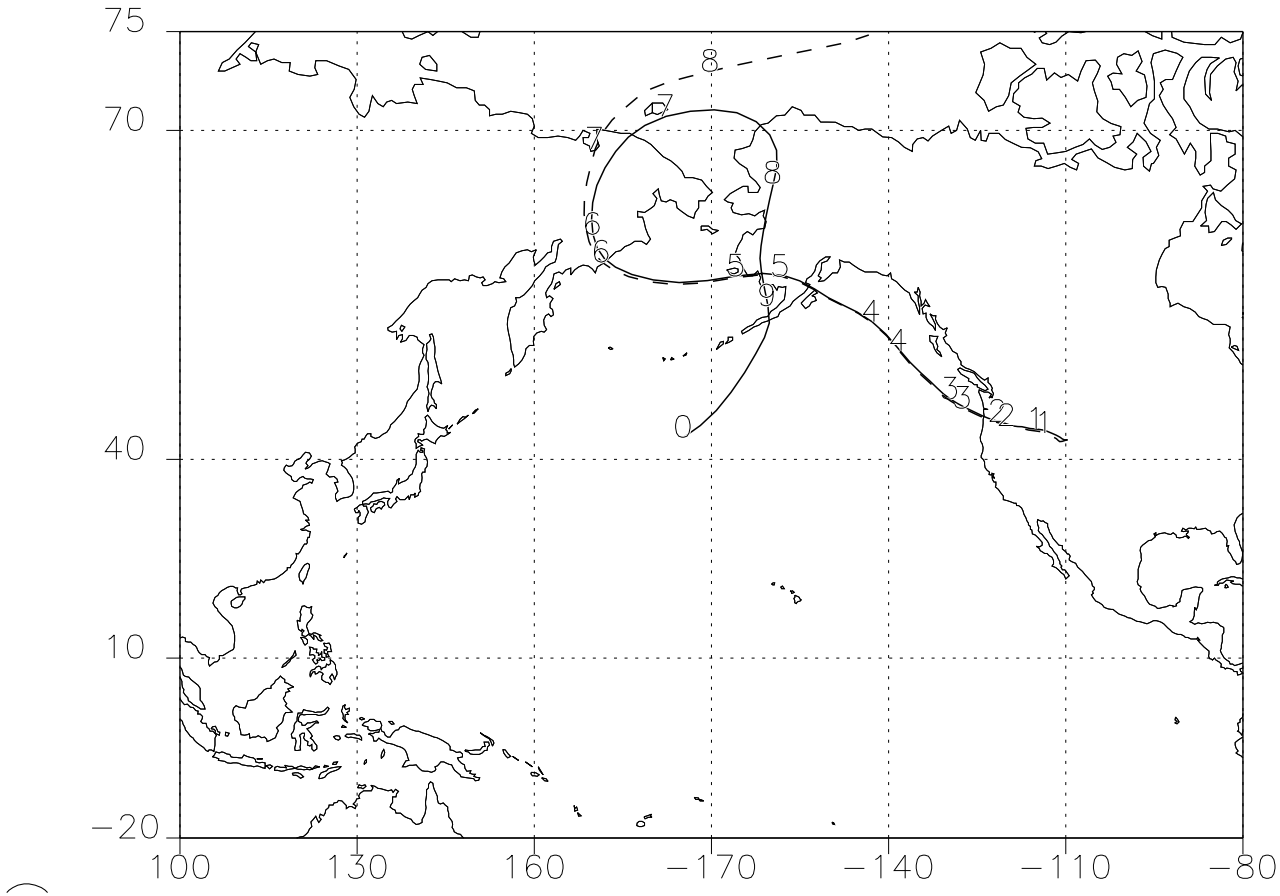
Day	km	hPa	C
0	2.4	757	−10
1	1.7	827	0
2	1.4	860	3
3	0.9	914	7
4	1.1	889	6
5	1.6	844	3
6	1.7	830	3
7	1.9	810	2
8	2.0	797	1
9	2.1	788	0
10	2.4	757	0

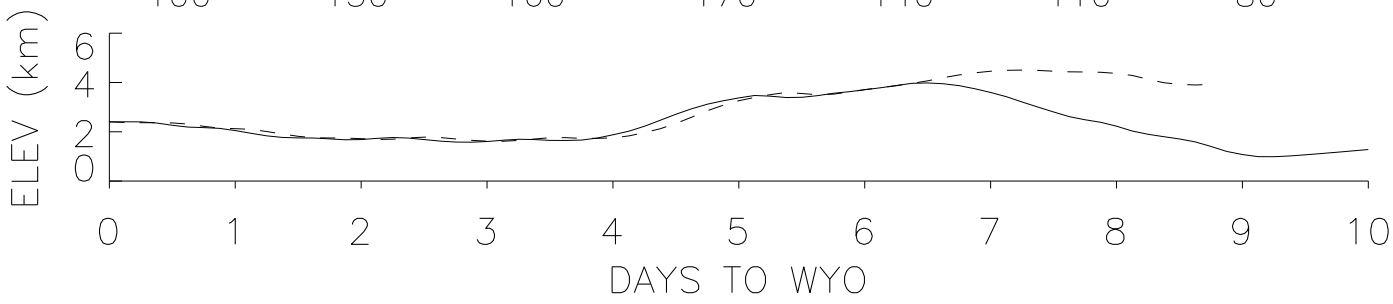
18UT

Day	km	hPa	C
0	2.4	759	−11
1	1.7	823	−4
2	1.5	853	−1
3	0.9	906	3
4	0.9	904	5
5	0.4	958	10
6	0.1	1000	12
7	0.2	999	15
8	0.3	982	11
9	0.6	946	9
10	0.6	957	13

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/16/2005 (Day of Year 47)
NCEP/NCAR Reanalysis 1 Data Set





00UT

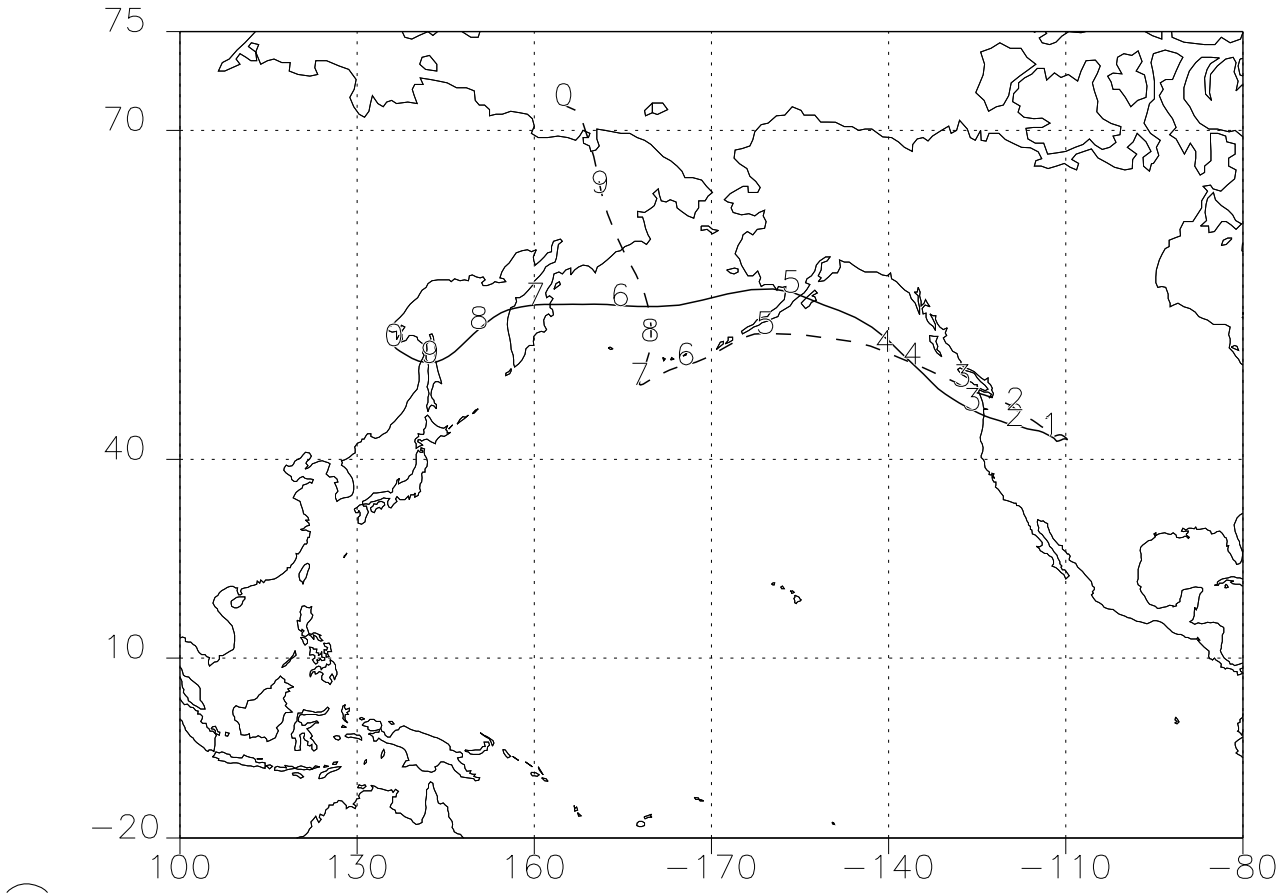
Day	km	hPa	C
0	2.4	759	−9
1	2.0	789	−7
2	1.7	828	−4
3	1.6	831	−9
4	1.9	789	−15
5	3.4	635	−31
6	3.7	607	−32
7	3.6	615	−30
8	2.2	741	−17
9	1.1	872	−2
10	1.3	850	−3

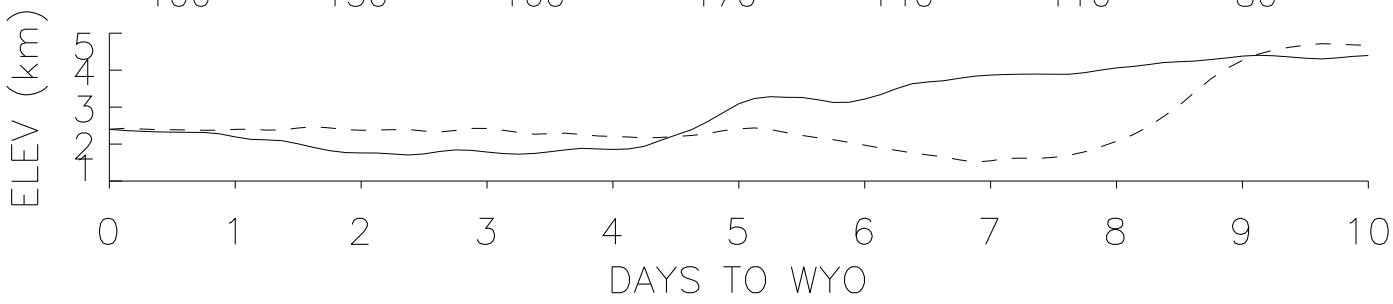
06UT

Day	km	hPa	C
0	2.4	761	−11
1	2.1	783	−9
2	1.7	825	−5
3	1.6	832	−6
4	1.8	801	−11
5	3.3	649	−26
6	3.7	608	−31
7	4.5	545	−39
8	4.4	553	−39

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/16/2005 (Day of Year 47)
NCEP/NCAR Reanalysis 1 Data Set





12UT

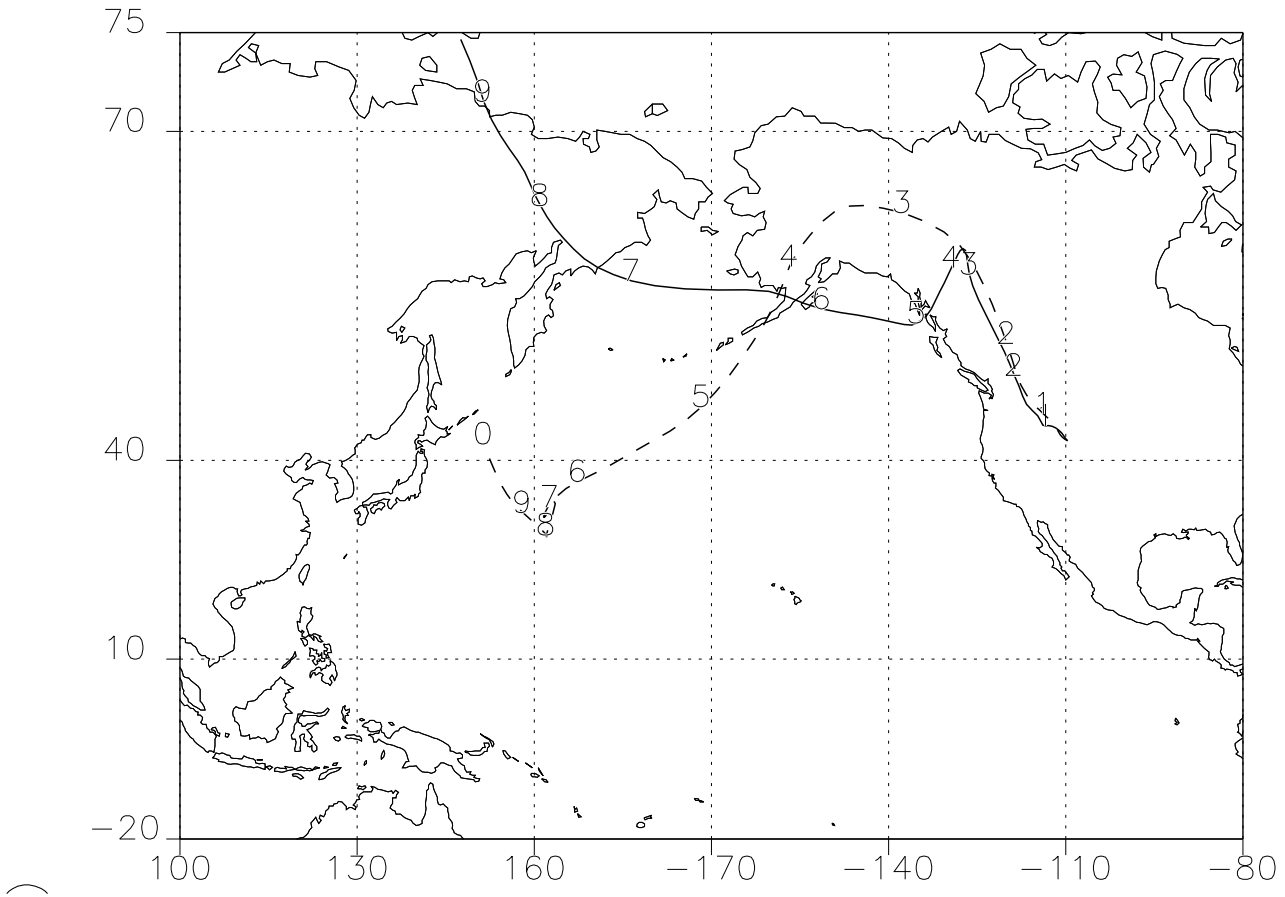
Day	km	hPa	C
0	2.4	760	−12
1	2.2	778	−11
2	1.8	819	−5
3	1.8	815	−7
4	1.9	795	−11
5	3.1	669	−24
6	3.2	655	−27
7	3.9	603	−31
8	4.1	591	−29
9	4.4	567	−29
10	4.4	568	−28

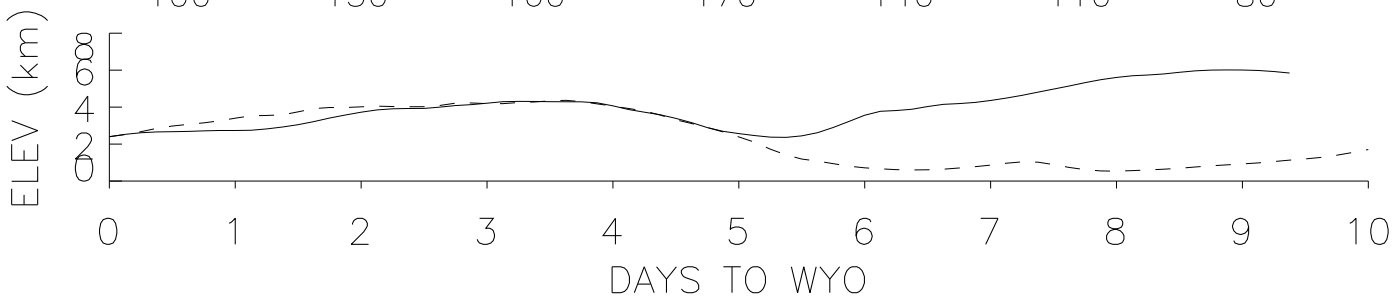
18UT

Day	km	hPa	C
0	2.4	760	−10
1	2.4	759	−12
2	2.4	756	−14
3	2.4	749	−14
4	2.2	764	−13
5	2.4	740	−18
6	2.0	786	−13
7	1.5	832	−13
8	2.1	767	−16
9	4.3	565	−37
10	4.7	535	−38

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/17/2005 (Day of Year 48)
NCEP/NCAR Reanalysis 1 Data Set





00UT

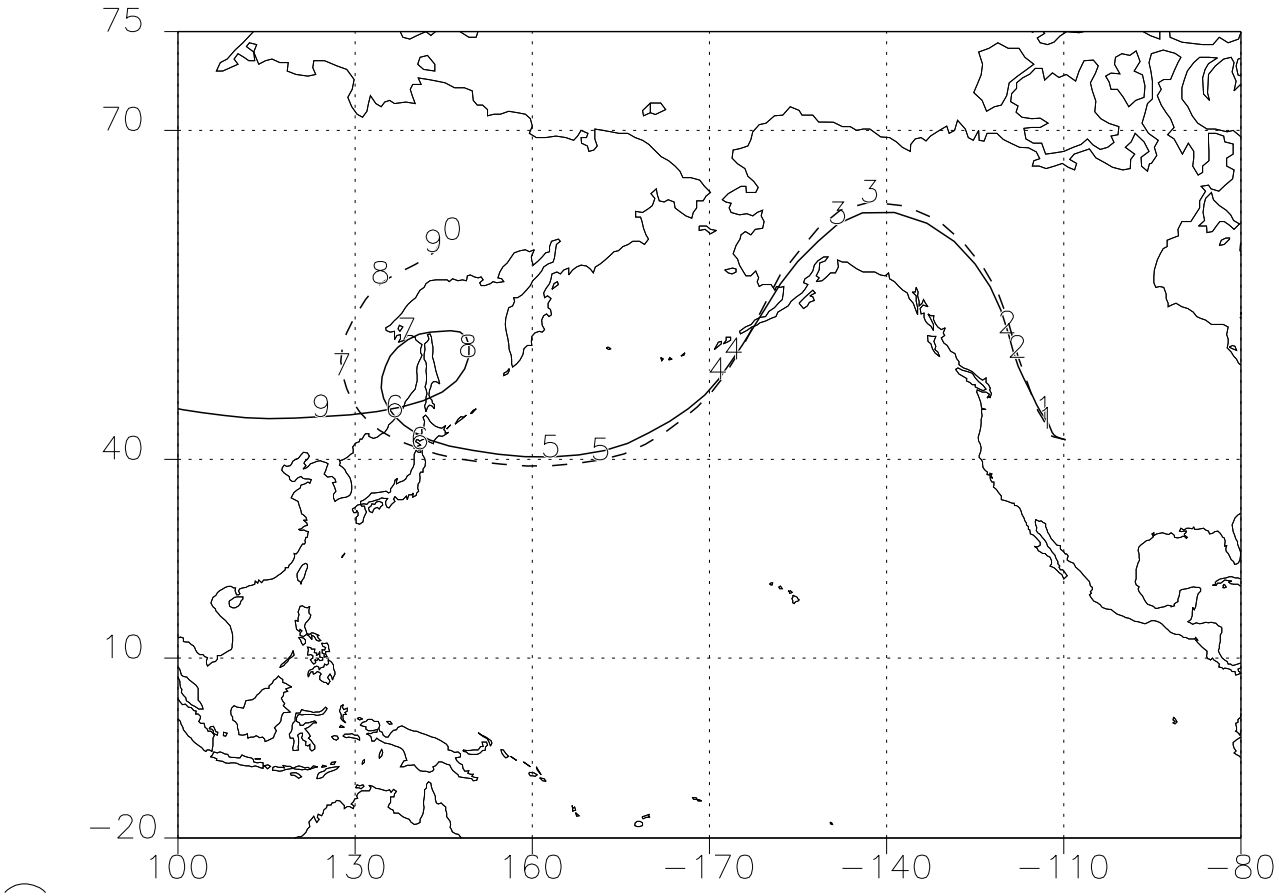
Day	km	hPa	C
0	2.4	762	−7
1	2.7	727	−12
2	3.7	629	−23
3	4.2	578	−29
4	4.1	585	−26
5	2.6	716	−13
6	3.6	623	−25
7	4.4	553	−35
8	5.6	465	−45
9	6.0	440	−47

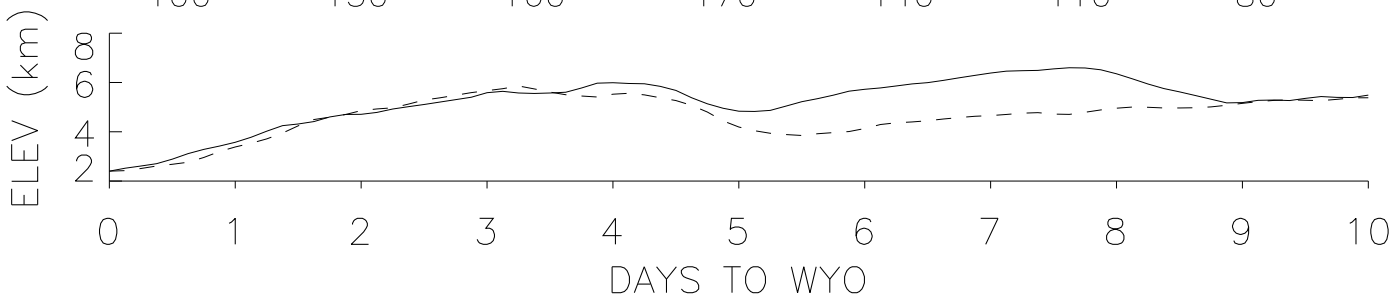
06UT

Day	km	hPa	C
0	2.4	763	−8
1	3.4	666	−16
2	4.0	607	−20
3	4.2	585	−25
4	4.1	593	−21
5	2.4	742	−5
6	0.7	925	10
7	0.9	917	10
8	0.5	958	9
9	0.9	912	1
10	1.7	817	−11

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/17/2005 (Day of Year 48)
NCEP/NCAR Reanalysis 1 Data Set





12UT

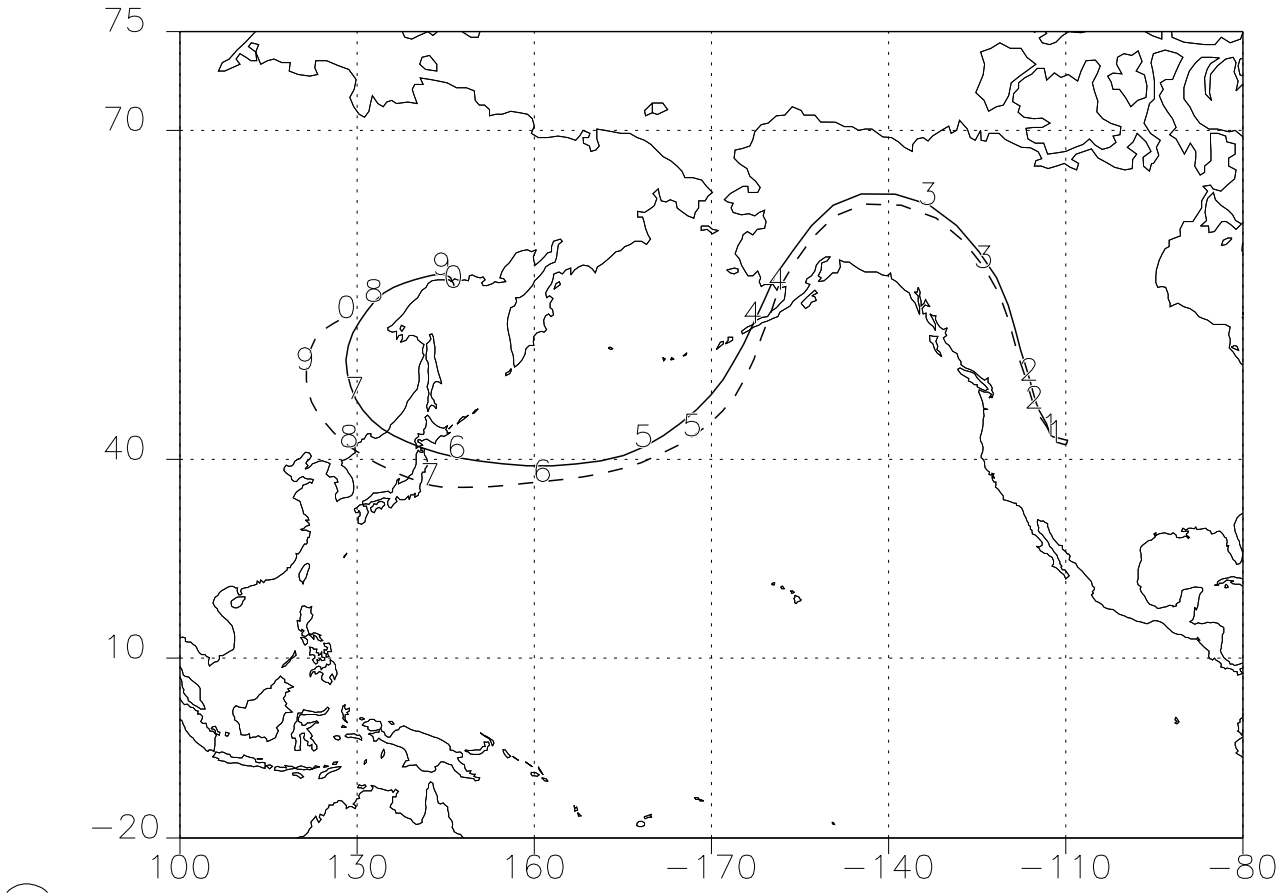
Day	km	hPa	C
0	2.4	763	−8
1	3.6	651	−16
2	4.7	553	−25
3	5.6	482	−34
4	6.0	442	−41
5	4.8	526	−33
6	5.7	459	−42
7	6.4	411	−50
8	6.4	416	−50
9	5.2	504	−37
10	5.5	486	−39

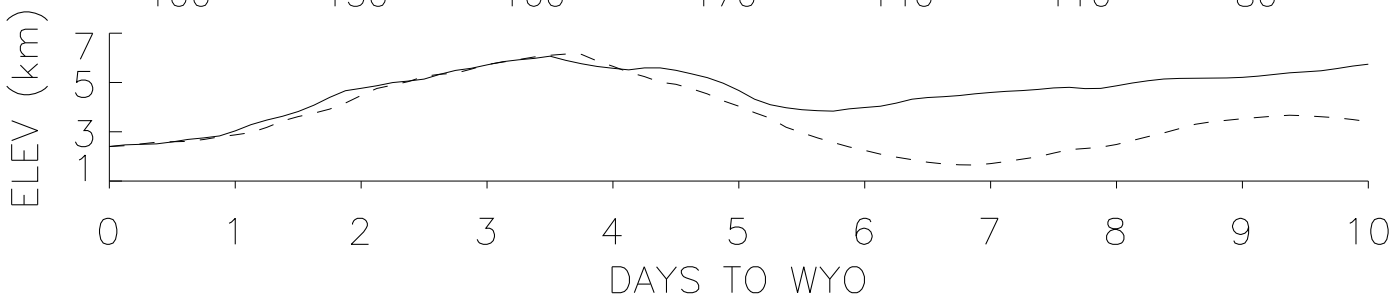
18UT

Day	km	hPa	C
0	2.4	764	−5
1	3.4	670	−12
2	4.9	542	−27
3	5.7	477	−35
4	5.5	475	−38
5	4.2	579	−28
6	4.1	582	−32
7	4.7	538	−37
8	5.0	514	−37
9	5.2	503	−36
10	5.4	490	−36

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/18/2005 (Day of Year 49)
NCEP/NCAR Reanalysis 1 Data Set





00UT

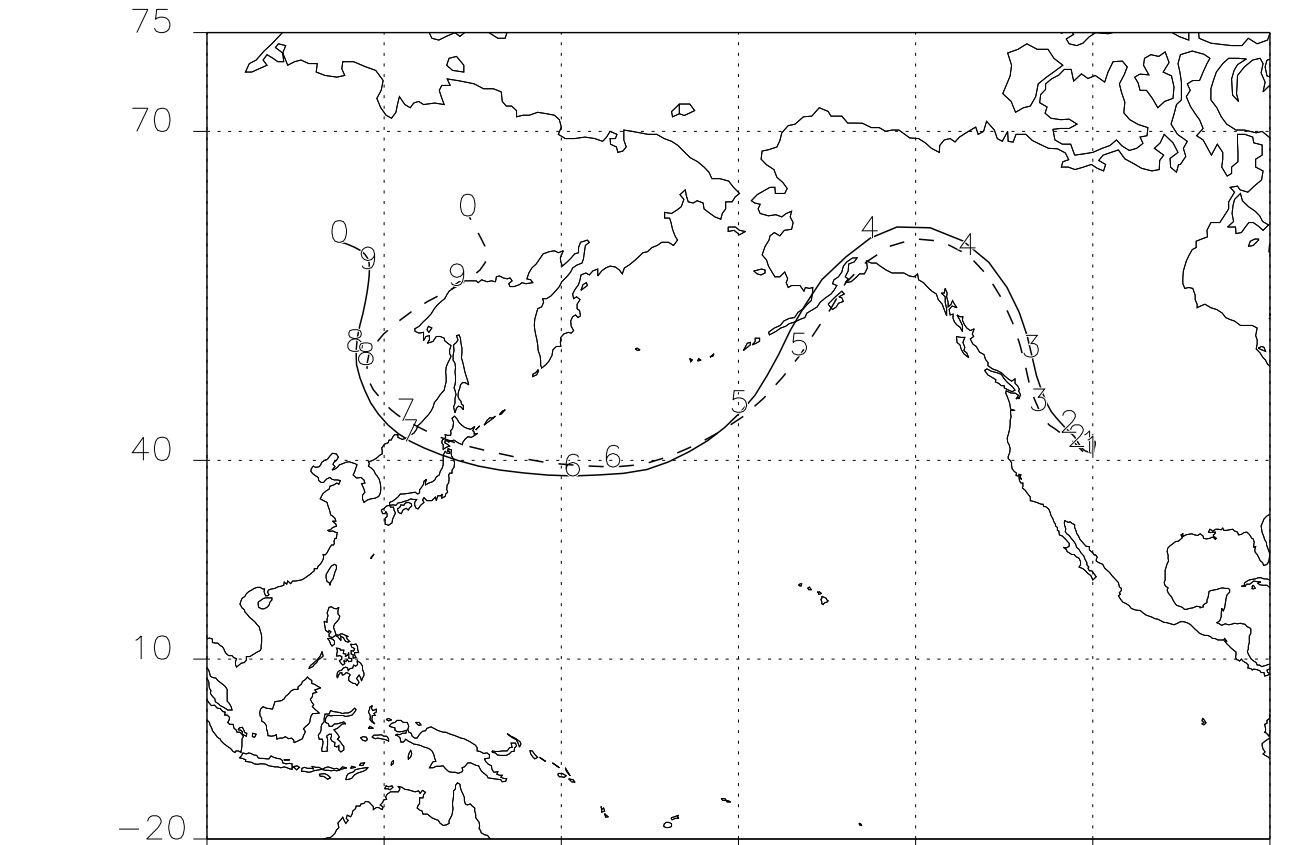
Day	km	hPa	C
0	2.4	762	−3
1	3.0	702	−8
2	4.8	553	−26
3	5.7	474	−33
4	5.6	474	−36
5	4.7	541	−30
6	4.0	595	−29
7	4.6	543	−36
8	4.9	520	−37
9	5.2	497	−37
10	5.7	463	−41

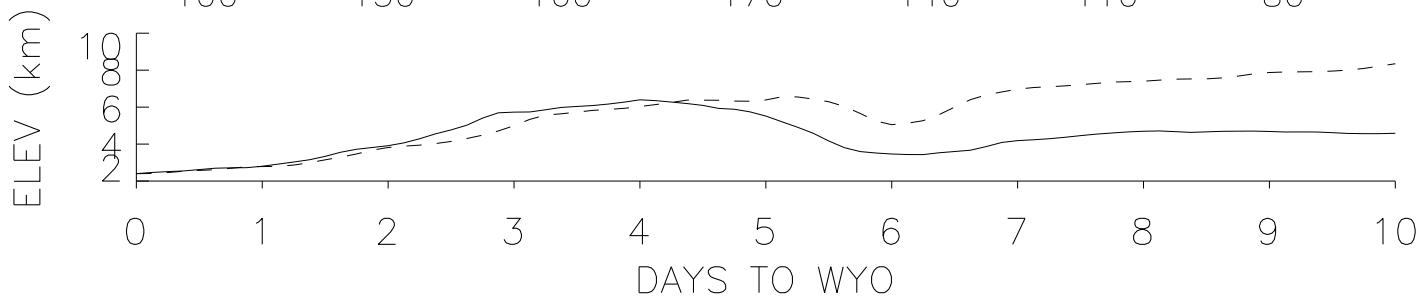
06UT

Day	km	hPa	C
0	2.4	762	−6
1	2.9	718	−6
2	4.5	577	−21
3	5.7	477	−32
4	5.7	473	−34
5	4.0	593	−22
6	2.2	761	−10
7	1.7	821	−11
8	2.5	736	−26
9	3.5	633	−33
10	3.4	642	−31

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/18/2005 (Day of Year 49)
NCEP/NCAR Reanalysis 1 Data Set





12UT

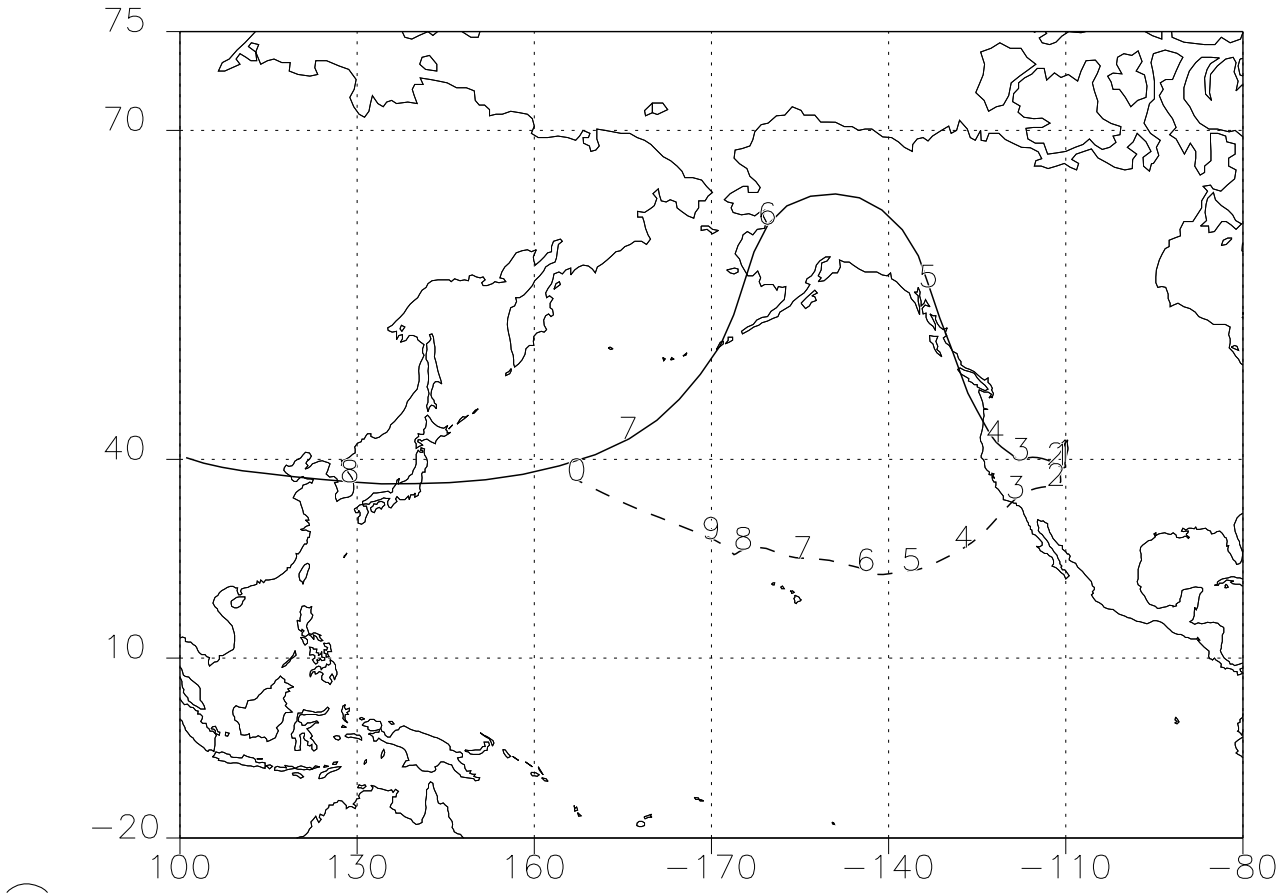
Day	km	hPa	C
0	2.4	759	−6
1	2.8	725	−5
2	3.9	624	−15
3	5.7	482	−31
4	6.4	431	−39
5	5.5	478	−35
6	3.5	645	−20
7	4.2	579	−33
8	4.7	538	−37
9	4.7	539	−34
10	4.6	549	−34

18UT

Day	km	hPa	C
0	2.4	759	−4
1	2.8	728	−3
2	3.8	634	−12
3	5.0	539	−24
4	6.0	457	−35
5	6.4	424	−40
6	5.1	515	−30
7	7.0	384	−48
8	7.4	358	−51
9	7.9	331	−53
10	8.3	311	−56

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/19/2005 (Day of Year 50)
NCEP/NCAR Reanalysis 1 Data Set

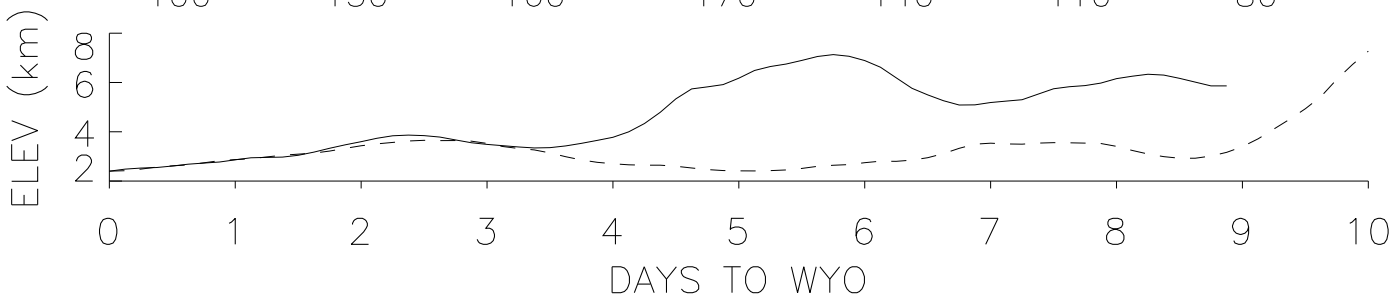


00UT

Day	km	hPa	C
0	2.4	755	0
1	2.9	719	−1
2	3.6	654	−8
3	3.5	660	−8
4	3.8	633	−13
5	6.2	443	−38
6	6.9	391	−46
7	5.2	508	−29
8	6.2	453	−34

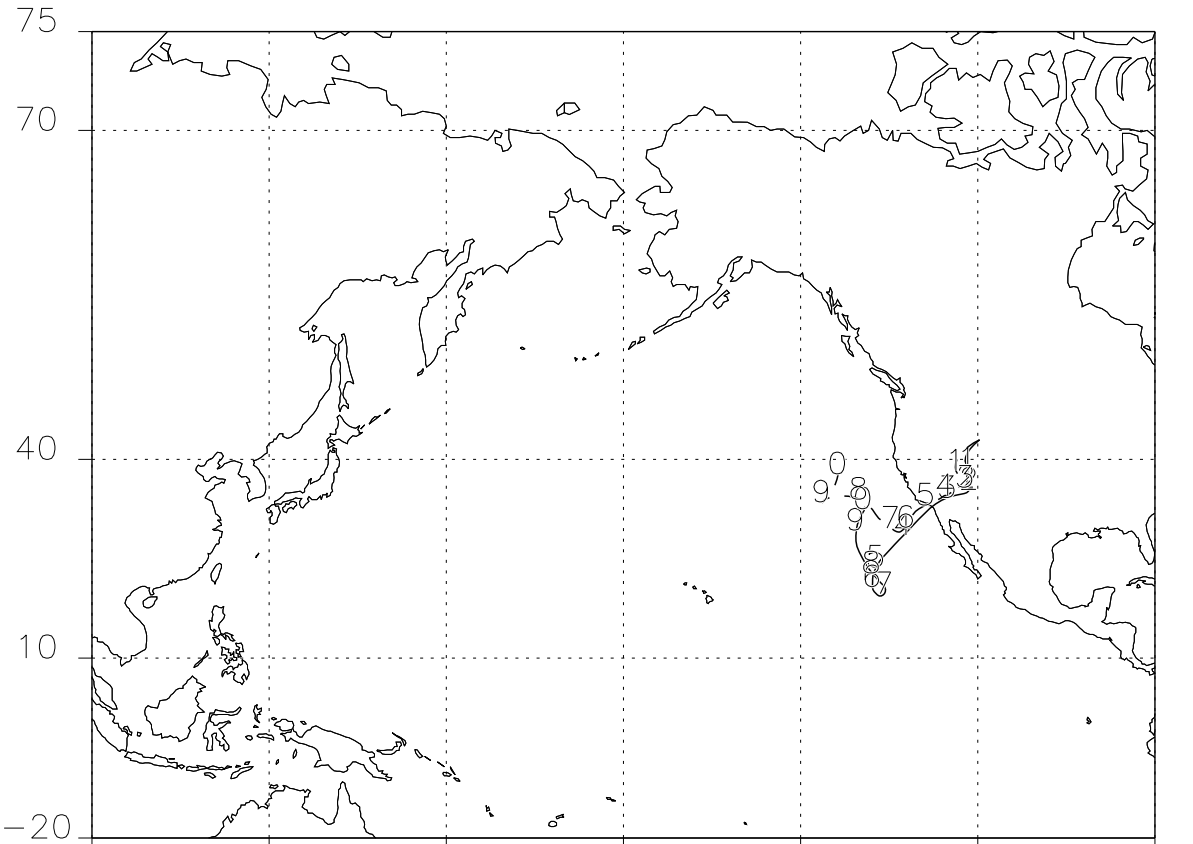
06UT

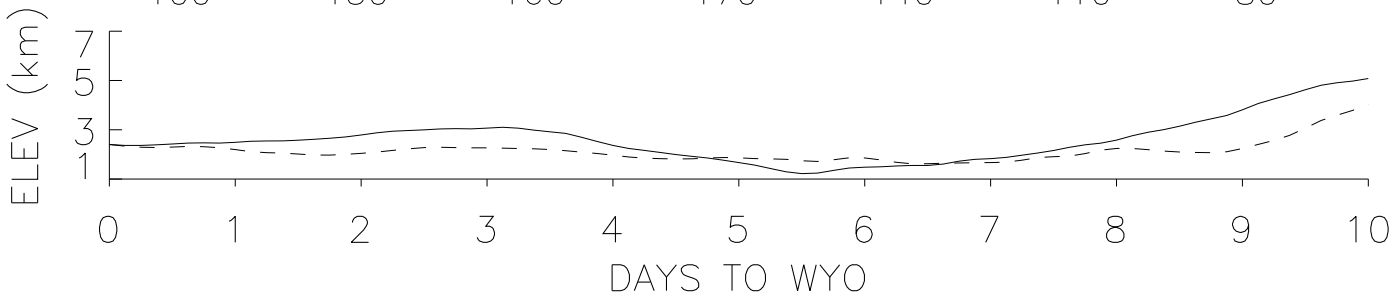
Day	km	hPa	C
0	2.4	753	−1
1	2.9	718	−2
2	3.4	671	−4
3	3.5	661	−5
4	2.7	733	1
5	2.4	761	5
6	2.7	731	4
7	3.5	663	−2
8	3.4	676	0
9	3.4	677	0
10	7.3	389	−38



00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/19/2005 (Day of Year 50)
NCEP/NCAR Reanalysis 1 Data Set





12UT

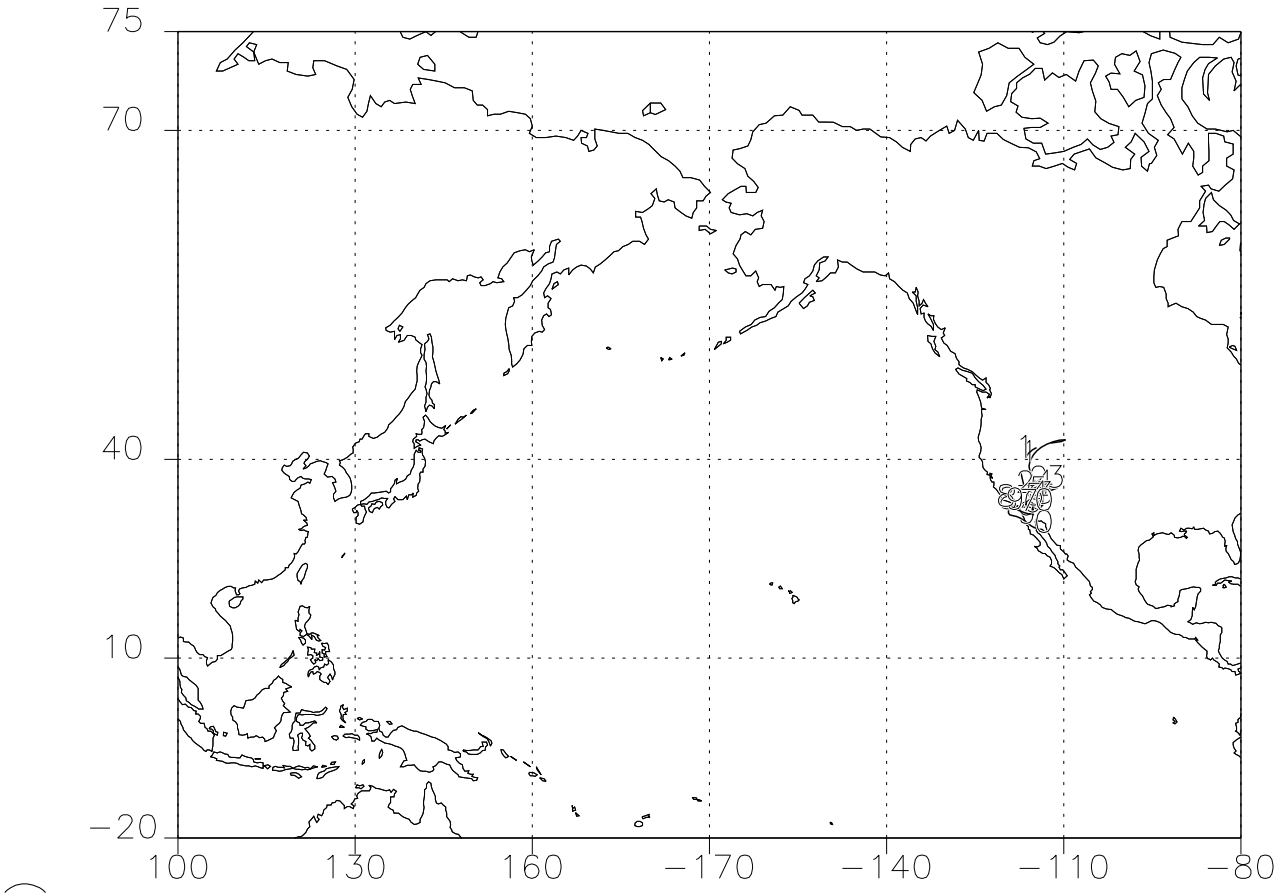
Day	km	hPa	C
0	2.4	751	−2
1	2.5	750	0
2	2.8	727	0
3	3.1	701	−1
4	2.4	764	3
5	1.7	834	8
6	1.5	854	9
7	1.8	816	9
8	2.6	741	4
9	3.8	637	−4
10	5.1	540	−15

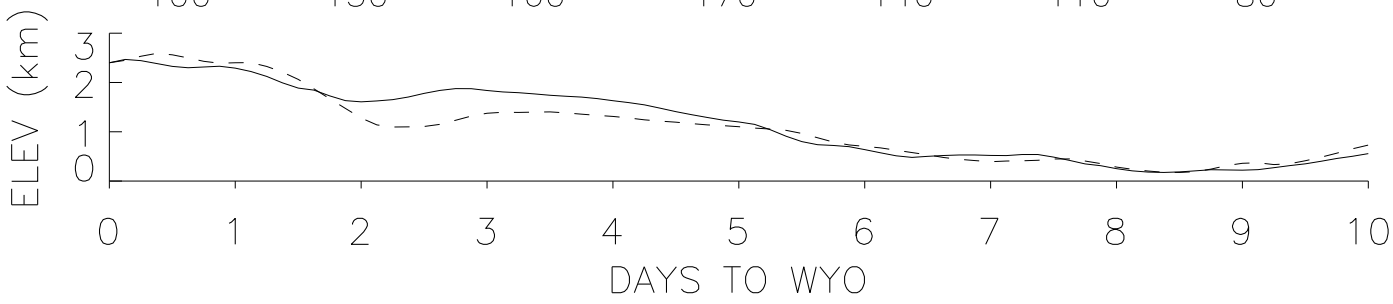
18UT

Day	km	hPa	C
0	2.4	751	−2
1	2.2	777	2
2	2.0	797	5
3	2.3	775	3
4	2.0	803	5
5	1.9	814	4
6	1.9	818	7
7	1.7	835	9
8	2.2	771	3
9	2.2	777	4
10	4.0	622	−8

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/20/2005 (Day of Year 51)
NCEP/NCAR Reanalysis 1 Data Set





00UT

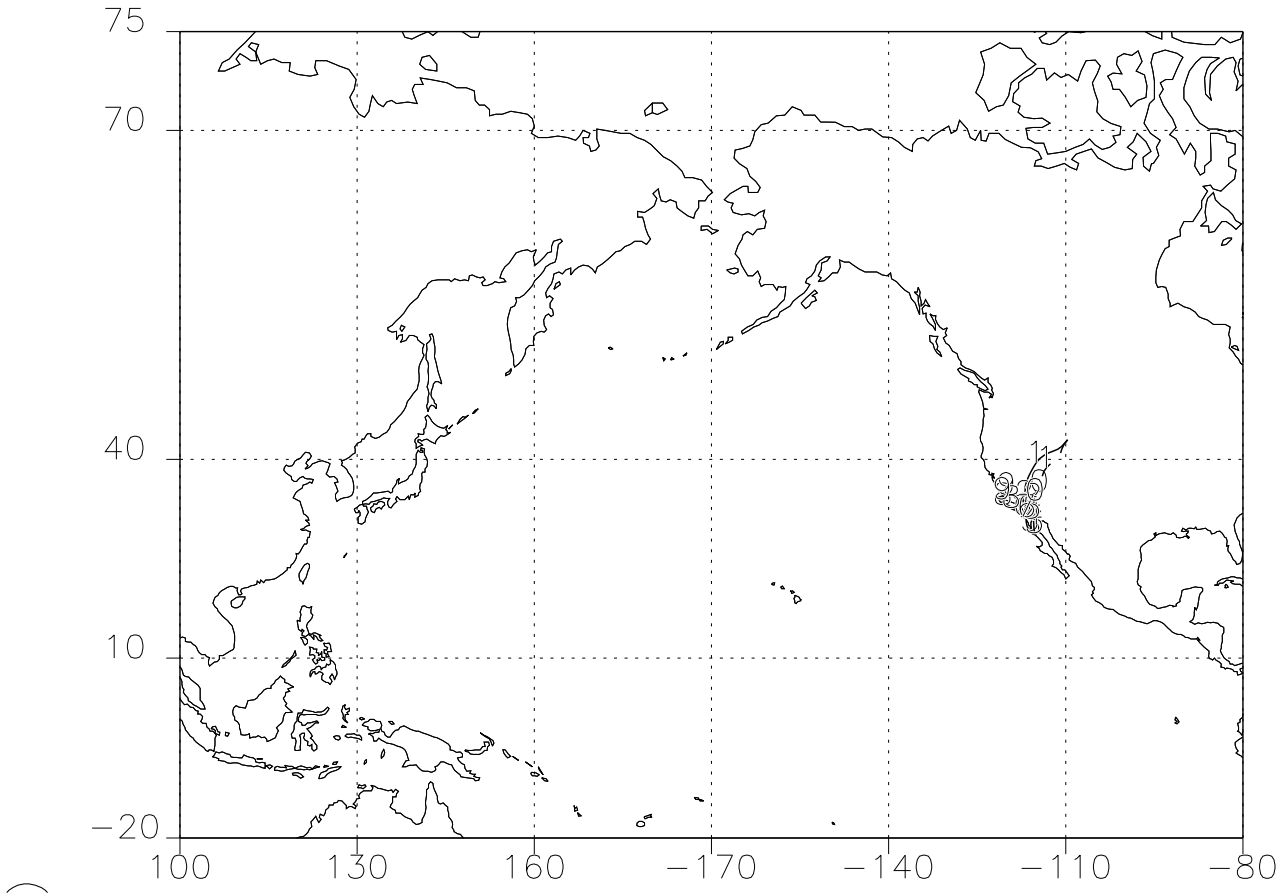
Day	km	hPa	C
0	2.4	751	−1
1	2.3	763	0
2	1.6	838	9
3	1.8	816	8
4	1.6	835	7
5	1.2	880	11
6	0.6	945	15
7	0.5	955	13
8	0.3	978	14
9	0.2	984	17
10	0.6	951	17

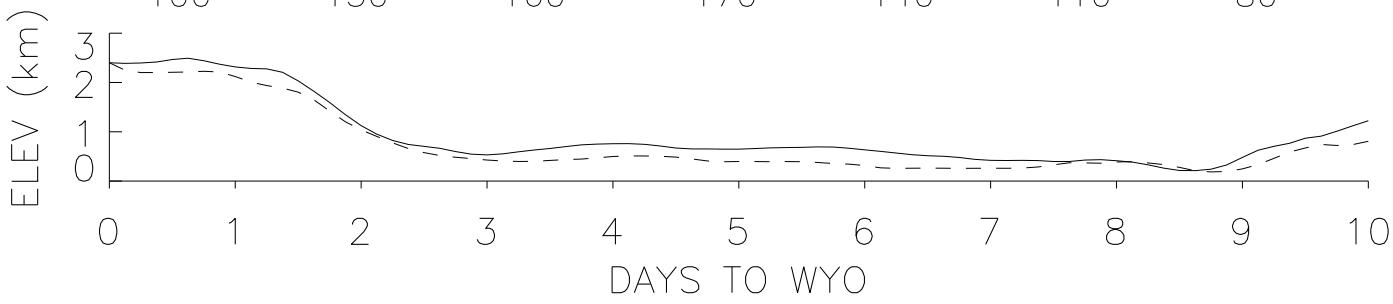
06UT

Day	km	hPa	C
0	2.4	753	−2
1	2.4	753	−2
2	1.3	870	9
3	1.4	863	12
4	1.3	869	10
5	1.1	892	10
6	0.7	938	13
7	0.4	973	12
8	0.3	978	13
9	0.4	969	15
10	0.7	934	16

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/20/2005 (Day of Year 51)
NCEP/NCAR Reanalysis 1 Data Set





12UT

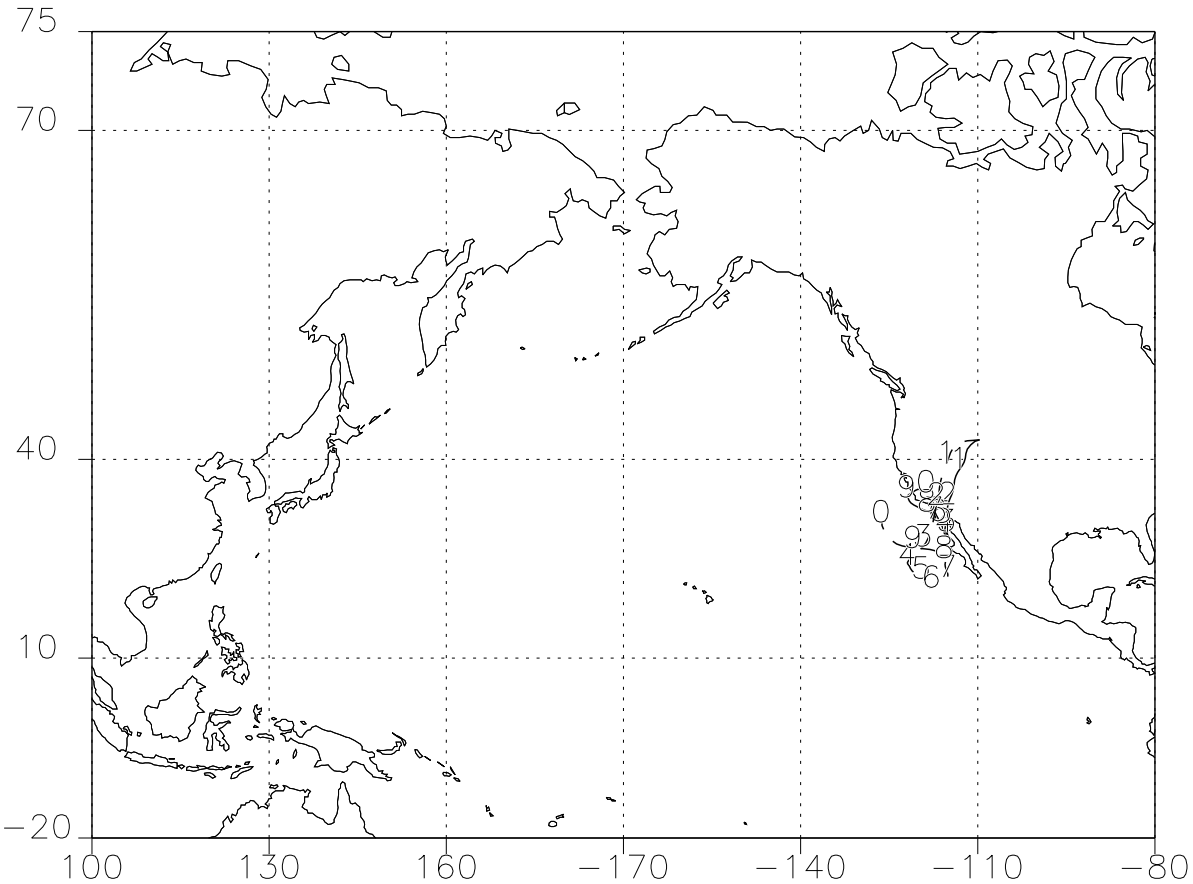
Day	km	hPa	C
0	2.4	754	−2
1	2.3	761	−2
2	1.1	885	9
3	0.5	950	16
4	0.8	930	13
5	0.6	941	12
6	0.6	945	10
7	0.4	970	11
8	0.4	964	11
9	0.5	954	11
10	1.2	881	7

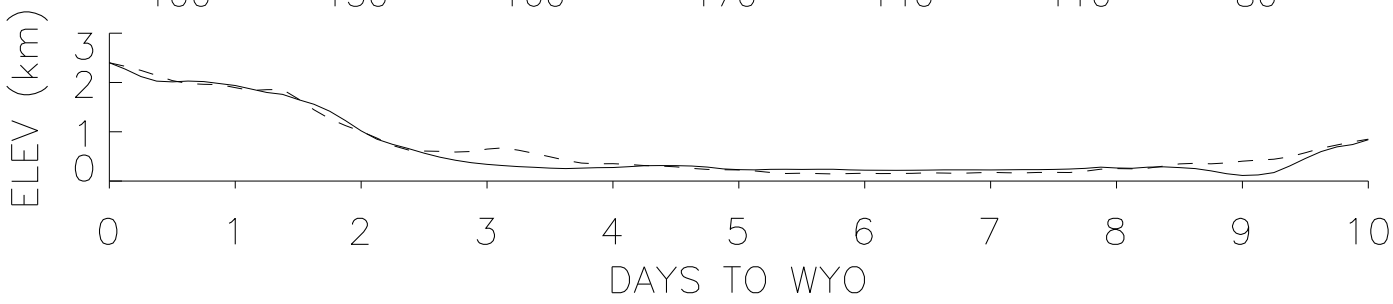
18UT

Day	km	hPa	C
0	2.4	754	−1
1	2.1	781	0
2	1.0	895	11
3	0.4	962	17
4	0.5	959	15
5	0.4	971	14
6	0.3	982	14
7	0.3	991	14
8	0.4	971	12
9	0.2	979	15
10	0.8	924	14

12UT – solid
18UT – dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/21/2005 (Day of Year 52)
NCEP/NCAR Reanalysis 1 Data Set





00UT

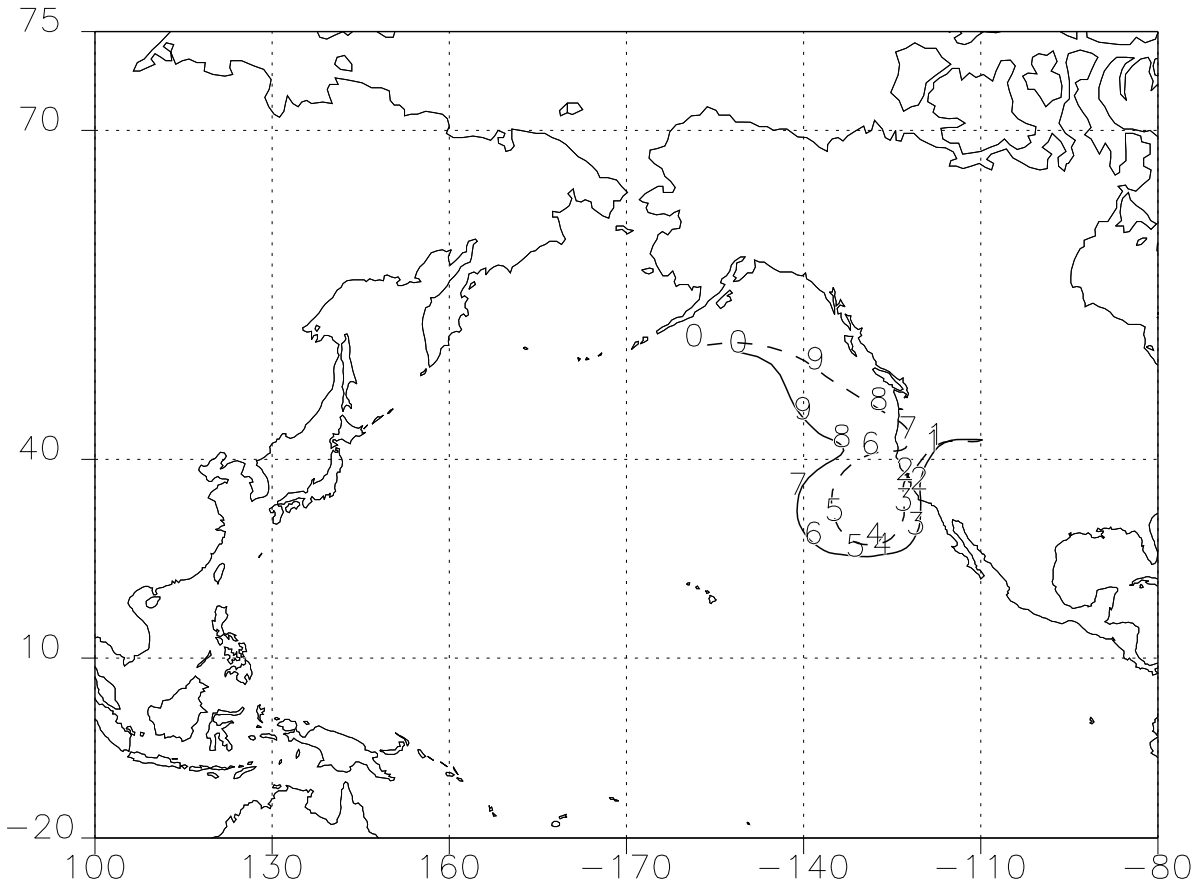
Day	km	hPa	C
0	2.4	755	−1
1	1.9	799	2
2	1.0	896	10
3	0.3	972	17
4	0.3	982	19
5	0.2	988	16
6	0.2	990	16
7	0.2	993	15
8	0.3	985	14
9	0.1	994	14
10	0.8	918	14

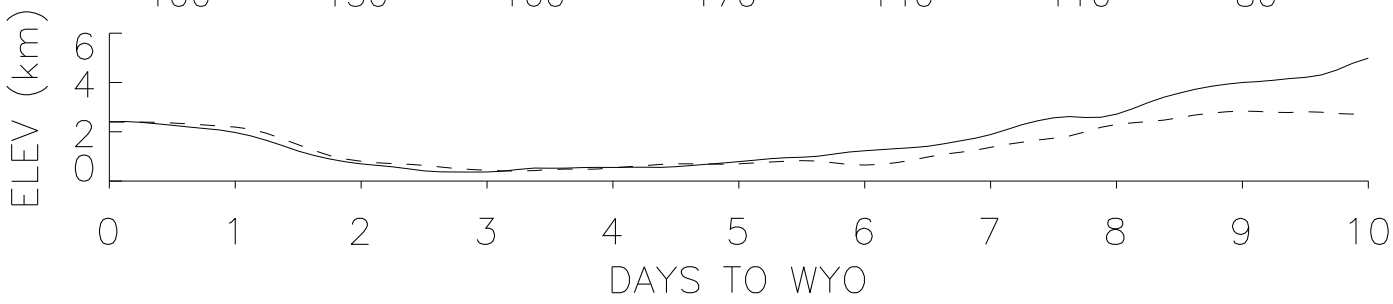
06UT

Day	km	hPa	C
0	2.4	757	−2
1	1.9	802	0
2	1.0	898	9
3	0.6	938	14
4	0.4	973	15
5	0.2	991	17
6	0.2	1000	18
7	0.2	1000	16
8	0.3	991	14
9	0.4	968	12
10	0.8	915	7

00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/21/2005 (Day of Year 52)
NCEP/NCAR Reanalysis 1 Data Set





12UT

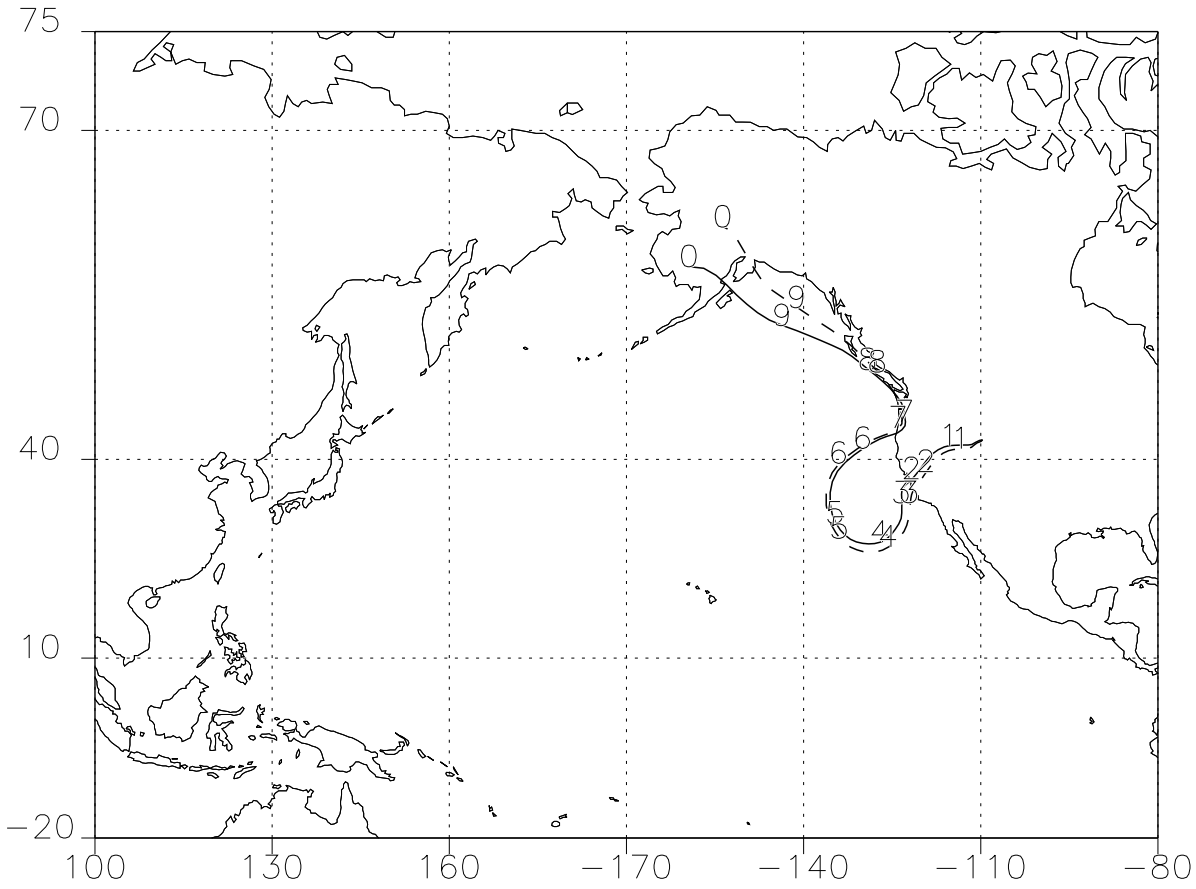
Day	km	hPa	C
0	2.4	757	−3
1	2.0	793	0
2	0.7	926	8
3	0.4	967	14
4	0.6	947	12
5	0.8	923	10
6	1.2	877	6
7	1.9	808	1
8	2.7	728	−7
9	4.0	608	−19
10	5.0	524	−29

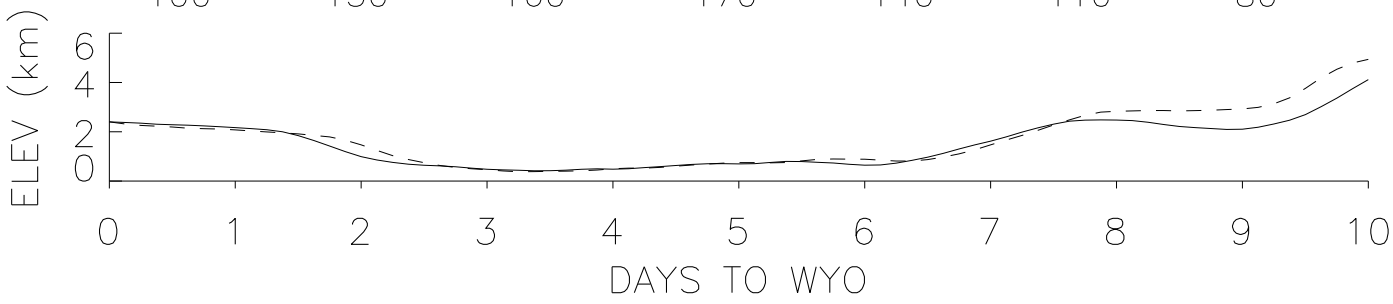
18UT

Day	km	hPa	C
0	2.4	759	−2
1	2.2	774	0
2	0.8	914	8
3	0.4	957	13
4	0.5	948	11
5	0.7	931	8
6	0.6	939	6
7	1.4	863	−1
8	2.3	765	−12
9	2.8	706	−15
10	2.7	714	−18

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/22/2005 (Day of Year 53)
NCEP/NCAR Reanalysis 1 Data Set





00UT

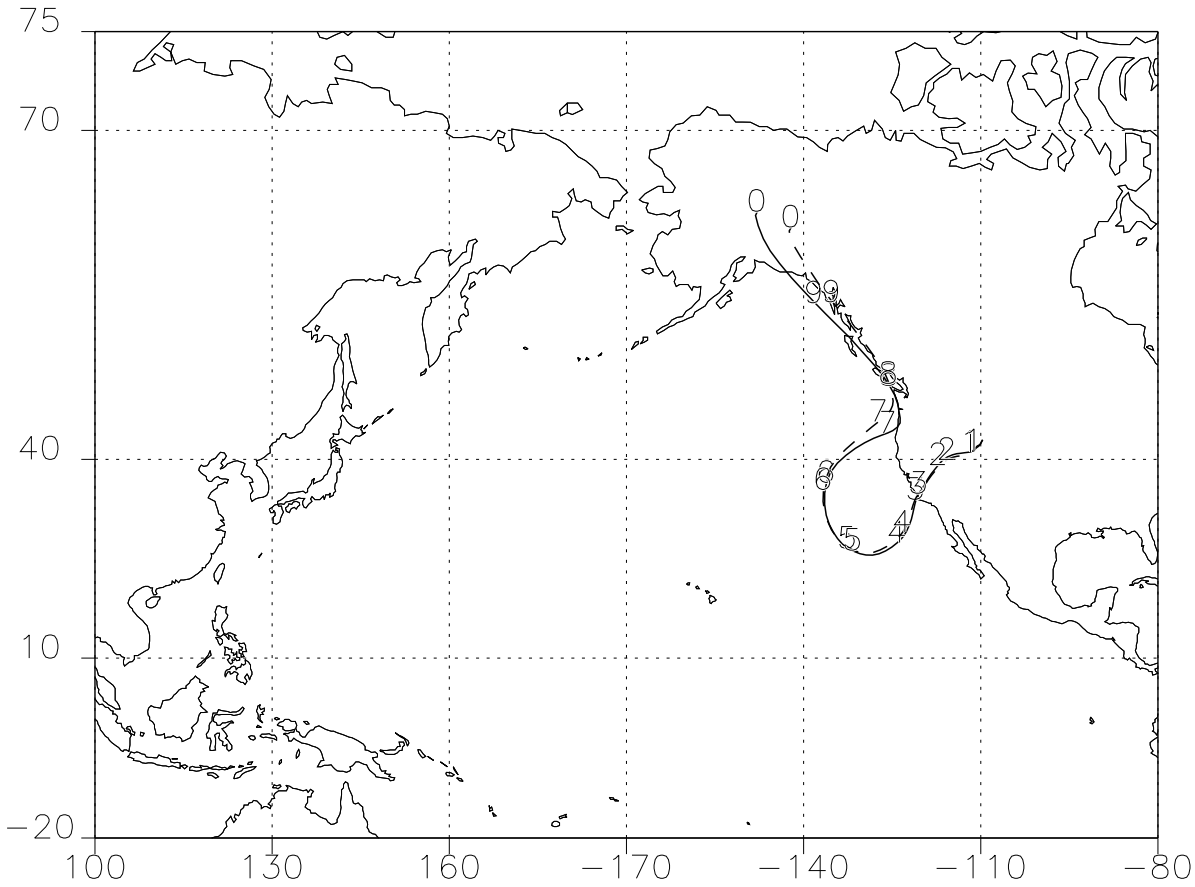
Day	km	hPa	C
0	2.4	758	−1
1	2.2	778	1
2	1.0	893	7
3	0.5	950	12
4	0.5	951	12
5	0.7	931	7
6	0.6	940	5
7	1.6	836	−5
8	2.5	744	−14
9	2.1	772	−13
10	4.1	579	−32

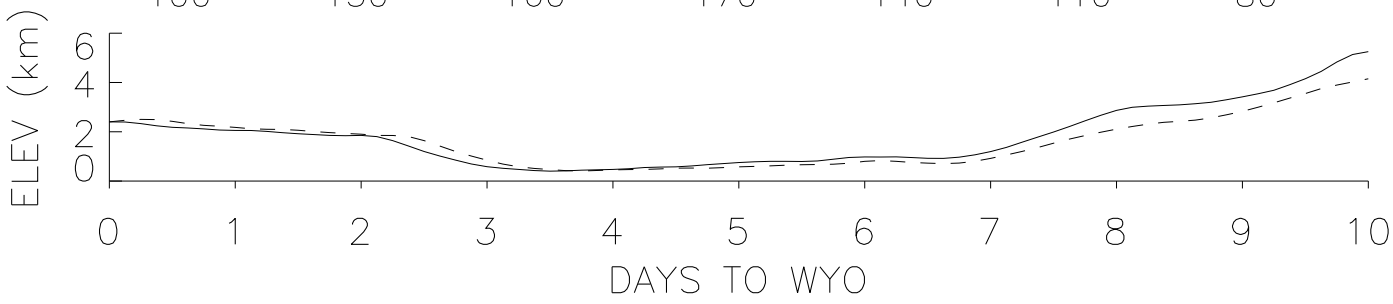
06UT

Day	km	hPa	C
0	2.4	759	−3
1	2.1	790	0
2	1.5	844	2
3	0.5	954	13
4	0.5	952	13
5	0.7	926	8
6	0.9	914	3
7	1.5	853	−1
8	2.8	710	−16
9	2.9	692	−16
10	4.9	513	−38

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/22/2005 (Day of Year 53)
NCEP/NCAR Reanalysis 1 Data Set





12UT

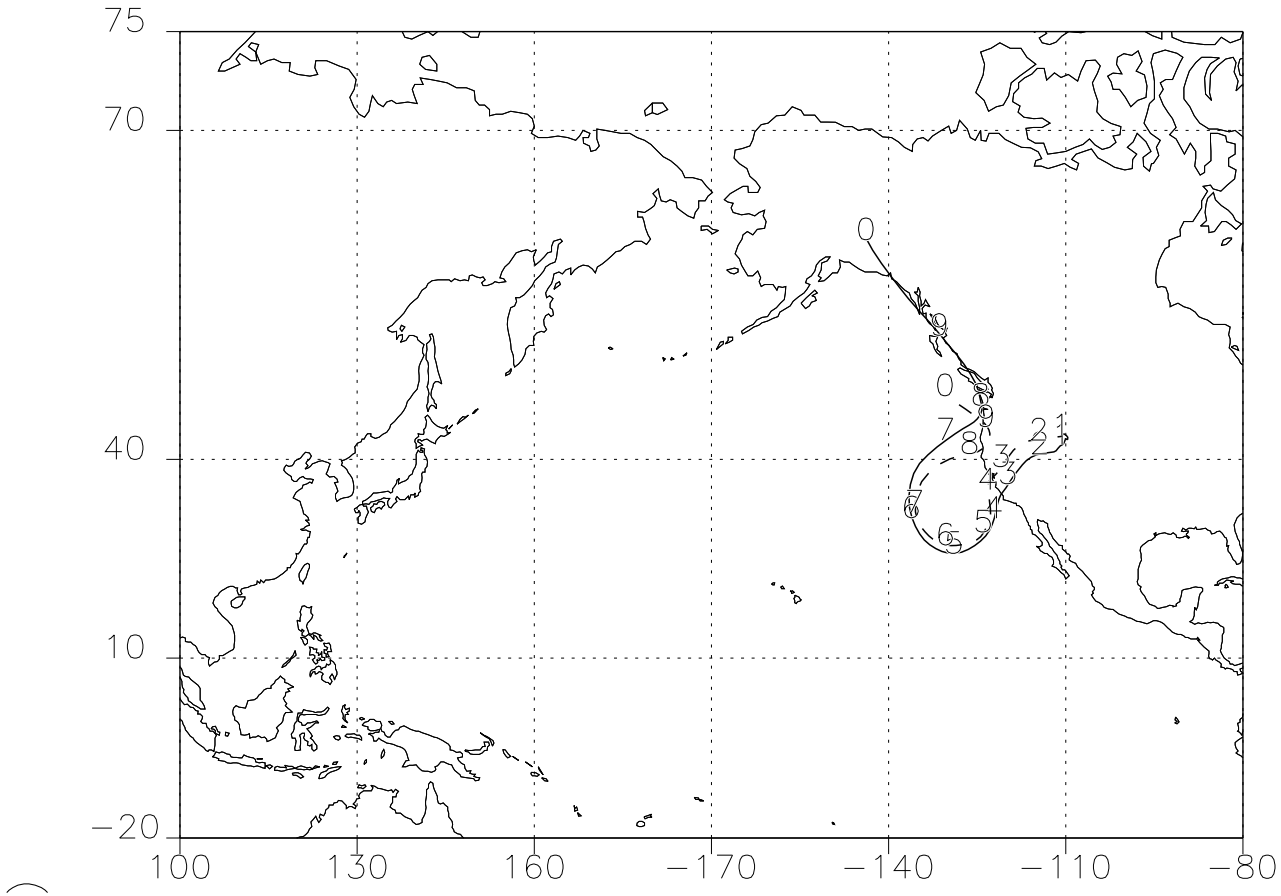
Day	km	hPa	C
0	2.4	760	−5
1	2.1	792	−1
2	1.9	806	0
3	0.6	939	10
4	0.5	954	13
5	0.8	925	8
6	1.0	902	4
7	1.2	882	2
8	2.9	708	−16
9	3.4	649	−21
10	5.3	491	−39

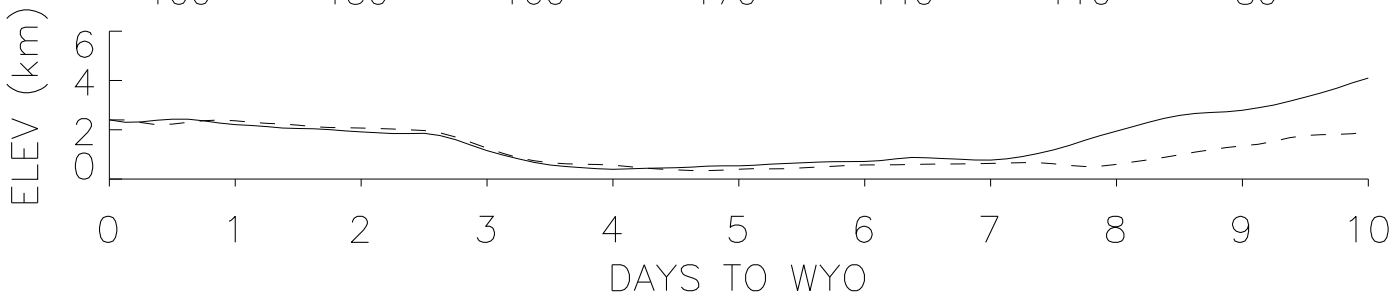
18UT

Day	km	hPa	C
0	2.4	759	−4
1	2.2	781	0
2	1.9	805	2
3	0.8	911	8
4	0.5	956	15
5	0.6	944	11
6	0.8	923	6
7	0.9	914	3
8	2.1	785	−10
9	2.8	704	−17
10	4.2	576	−32

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/23/2005 (Day of Year 54)
NCEP/NCAR Reanalysis 1 Data Set





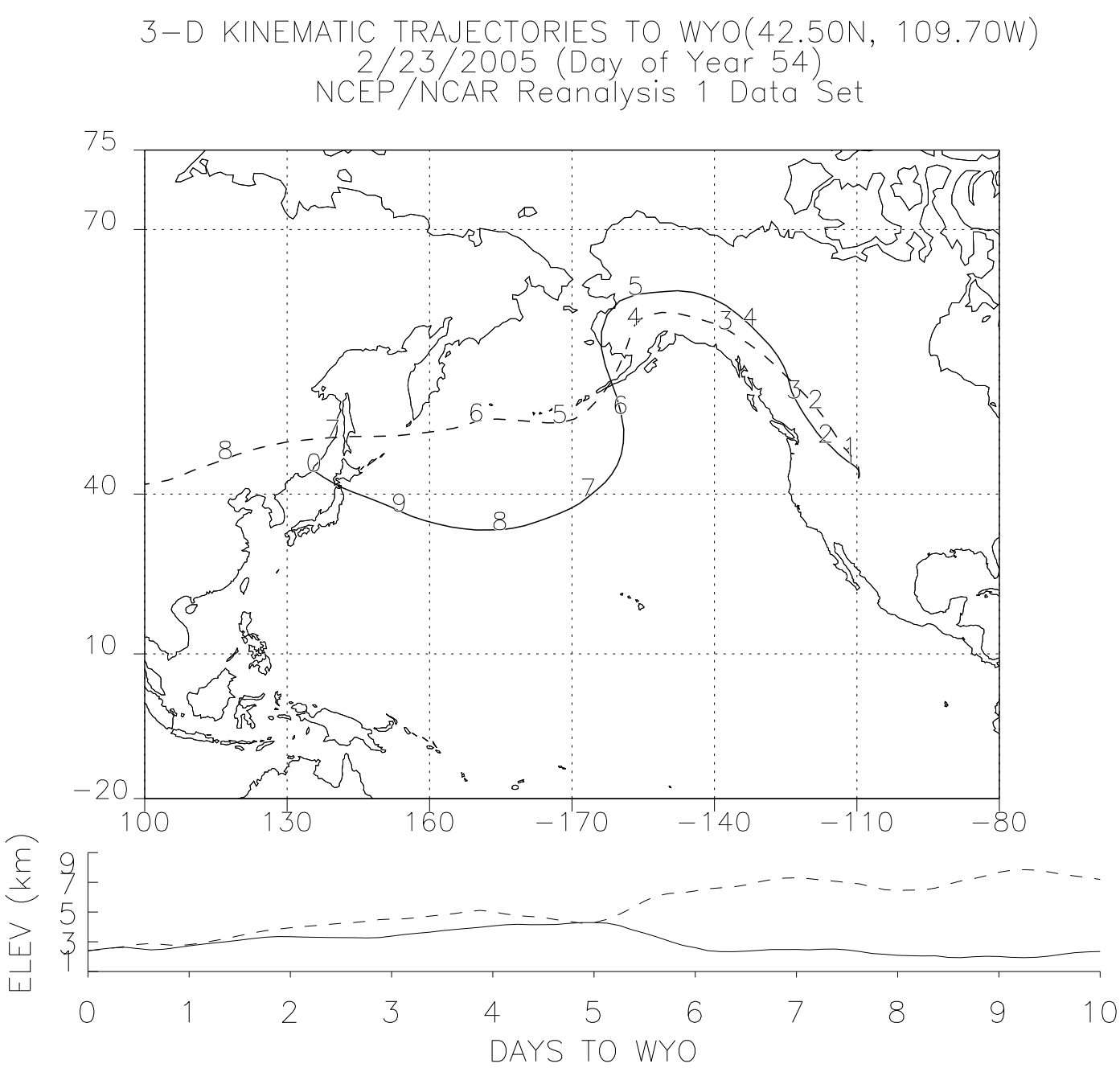
00UT

Day	km	hPa	C
0	2.4	760	−1
1	2.2	776	1
2	1.9	804	3
3	1.2	876	6
4	0.4	960	13
5	0.5	946	12
6	0.7	930	6
7	0.8	928	3
8	1.9	802	−7
9	2.8	711	−17
10	4.1	582	−29

06UT

Day	km	hPa	C
0	2.4	762	−4
1	2.4	762	−4
2	2.1	790	−1
3	1.3	865	4
4	0.6	941	11
5	0.4	961	14
6	0.6	945	10
7	0.6	938	8
8	0.6	947	6
9	1.3	866	−3
10	1.9	802	−10

00UT − solid
06UT − dashed



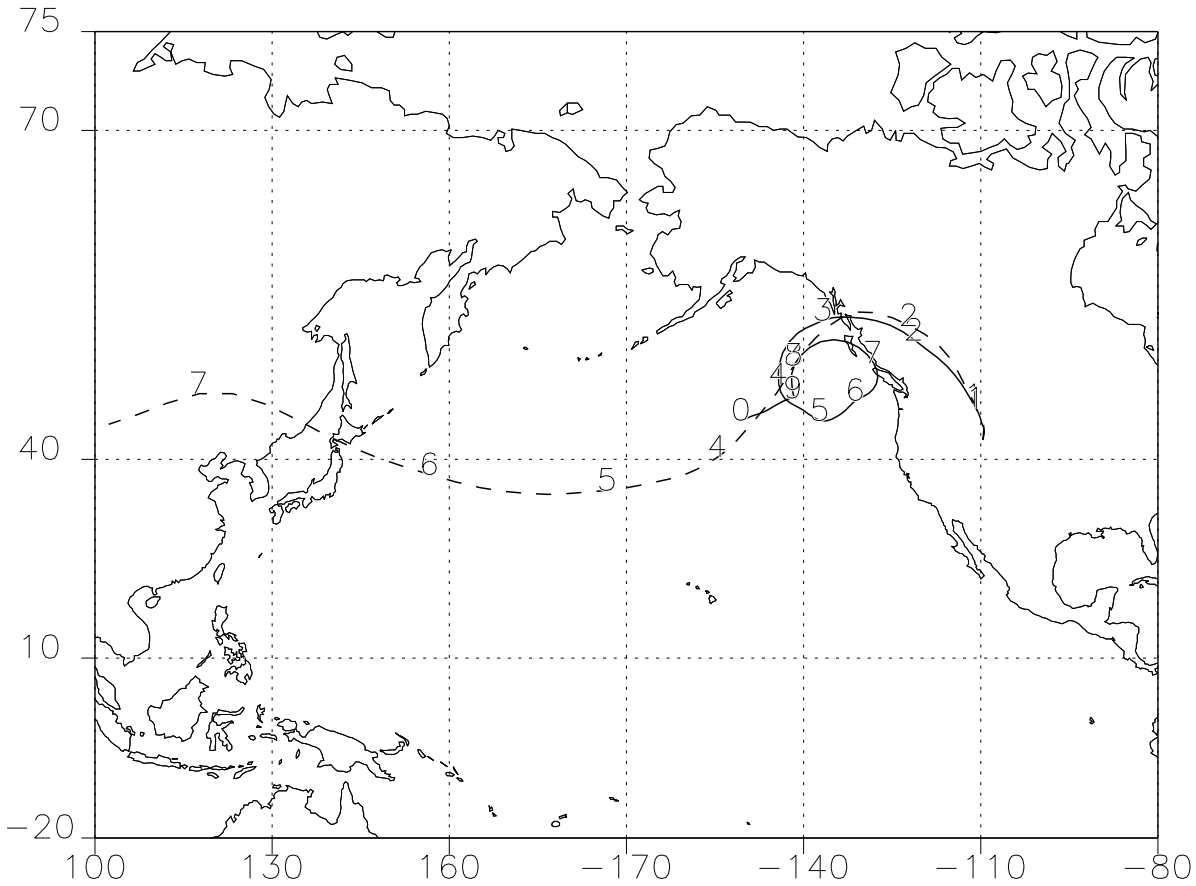
12UT

Day	km	hPa	C
0	2.4	761	−6
1	2.7	728	−8
2	3.3	669	−12
3	3.4	661	−12
4	4.1	603	−19
5	4.3	584	−22
6	2.6	726	−8
7	2.5	746	−6
8	2.1	780	−4
9	2.0	785	−14
10	2.3	749	−24

18UT

Day	km	hPa	C
0	2.4	761	−3
1	2.8	721	−8
2	3.9	615	−18
3	4.5	564	−23
4	5.0	524	−28
5	4.3	567	−21
6	6.4	419	−42
7	7.3	366	−48
8	6.5	428	−39
9	7.7	362	−47
10	7.2	391	−44

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/24/2005 (Day of Year 55)
NCEP/NCAR Reanalysis 1 Data Set

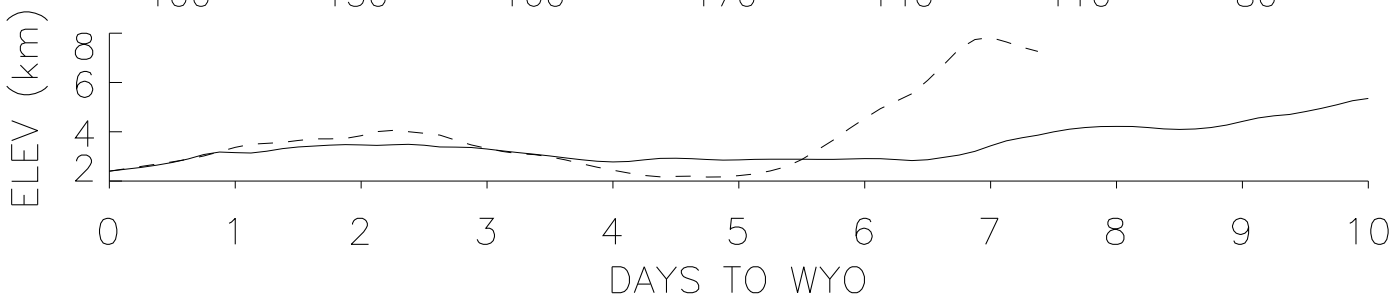


00UT

Day	km	hPa	C
0	2.4	761	−1
1	3.2	690	−9
2	3.5	658	−12
3	3.3	671	−11
4	2.8	719	−4
5	2.9	711	−2
6	2.9	714	−1
7	3.4	671	−7
8	4.2	605	−14
9	4.4	588	−18
10	5.4	515	−24

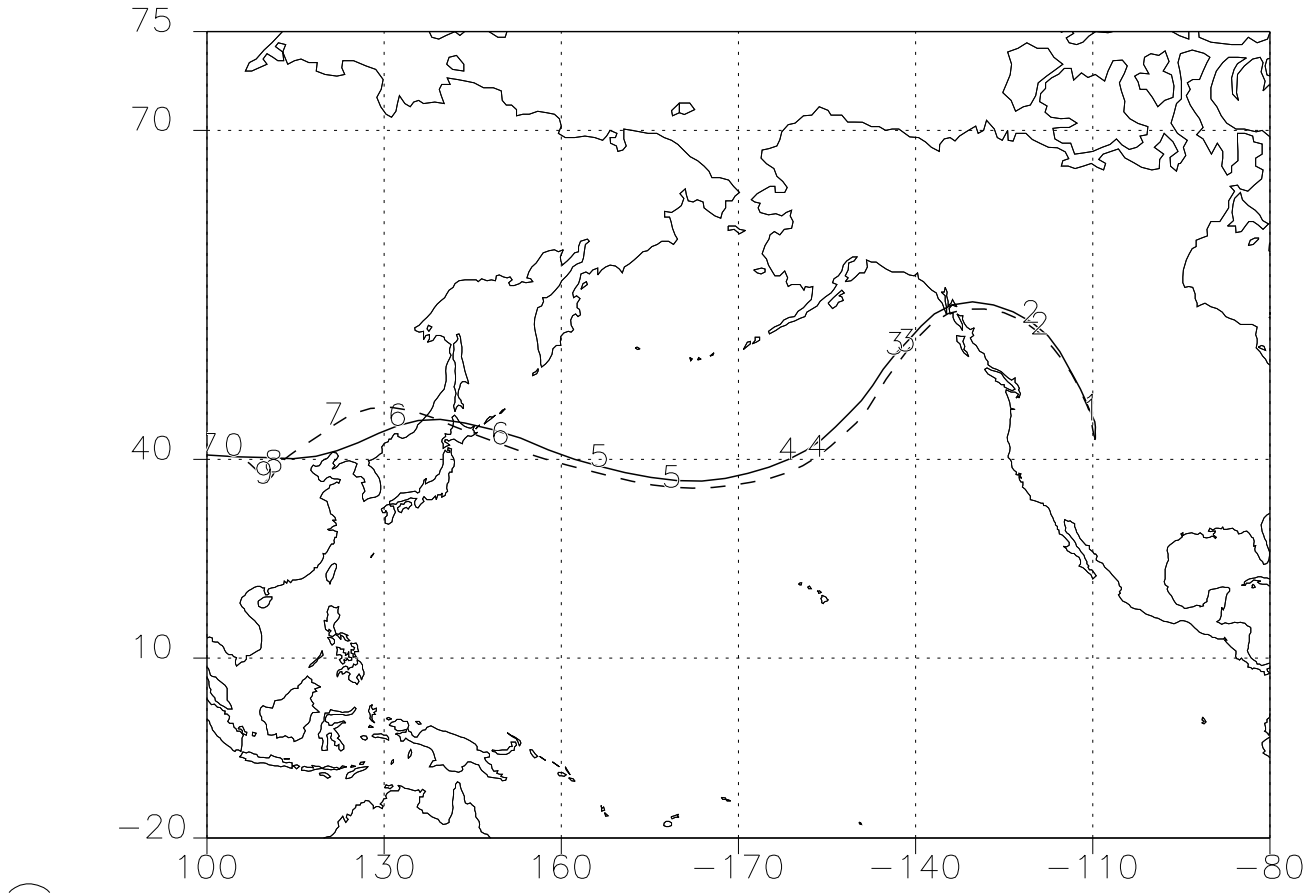
06UT

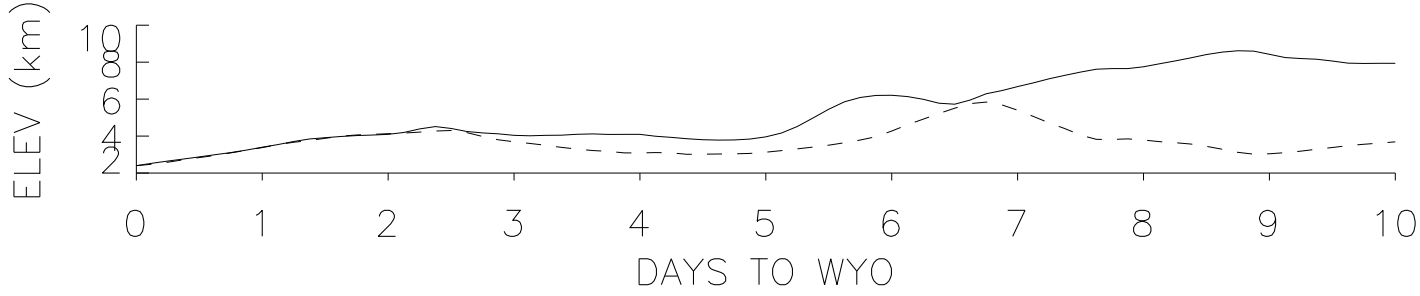
Day	km	hPa	C
0	2.4	762	−3
1	3.4	673	−10
2	3.8	626	−15
3	3.3	668	−9
4	2.4	749	−4
5	2.2	770	−1
6	4.5	565	−22
7	7.8	344	−51



00UT – solid
06UT – dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/24/2005 (Day of Year 55)
NCEP/NCAR Reanalysis 1 Data Set





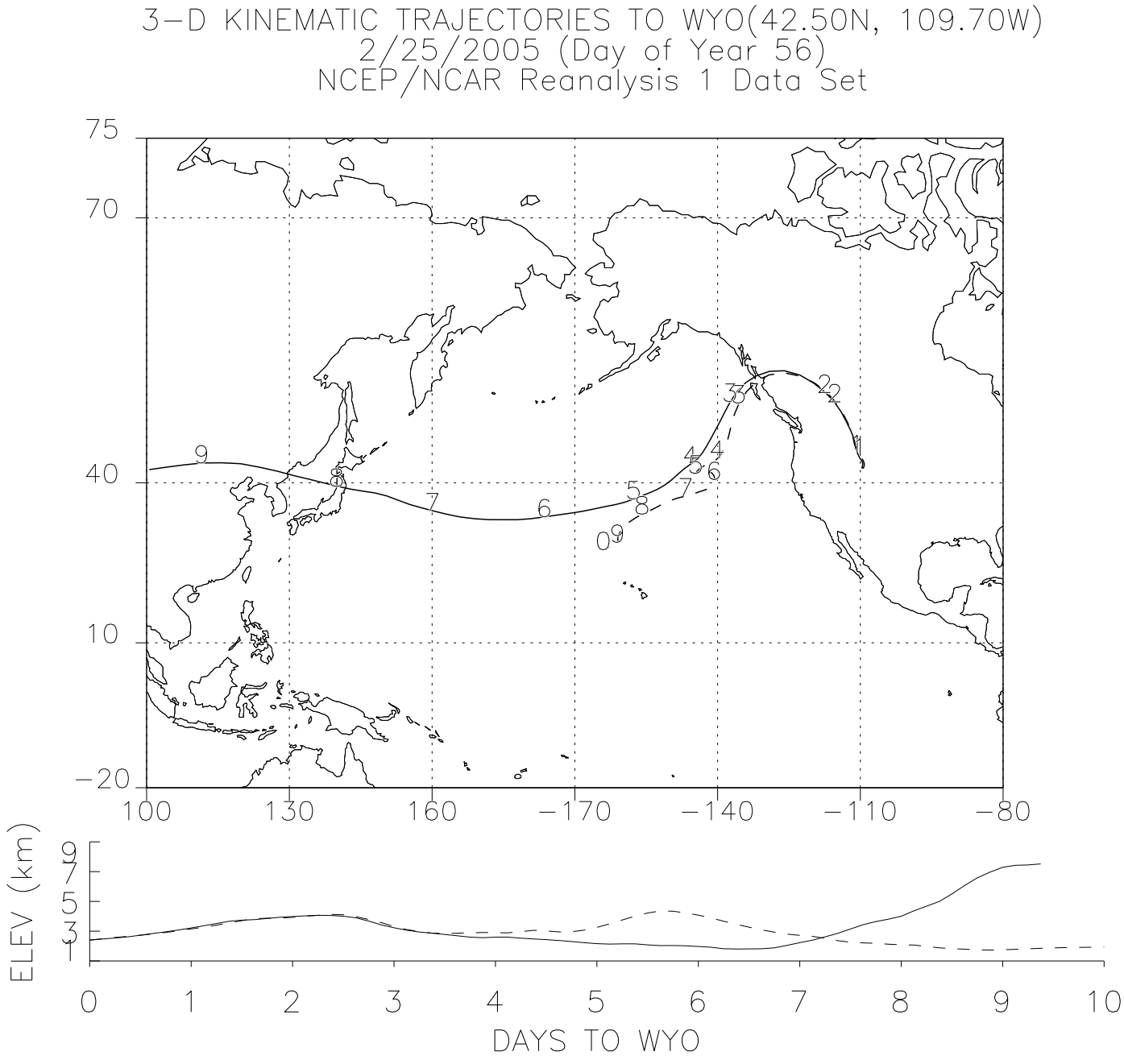
12UT

Day	km	hPa	C
0	2.4	762	−5
1	3.4	670	−9
2	4.1	605	−16
3	4.0	605	−18
4	4.1	599	−19
5	4.0	612	−19
6	6.2	444	−38
7	6.7	419	−39
8	7.8	358	−49
9	8.4	322	−55
10	7.9	349	−50

18UT

Day	km	hPa	C
0	2.4	762	−3
1	3.4	673	−8
2	4.1	605	−15
3	3.7	635	−15
4	3.1	687	−10
5	3.1	686	−12
6	4.3	583	−23
7	5.4	499	−34
8	3.8	632	−16
9	3.0	697	−11
10	3.7	637	−17

12UT − solid
18UT − dashed



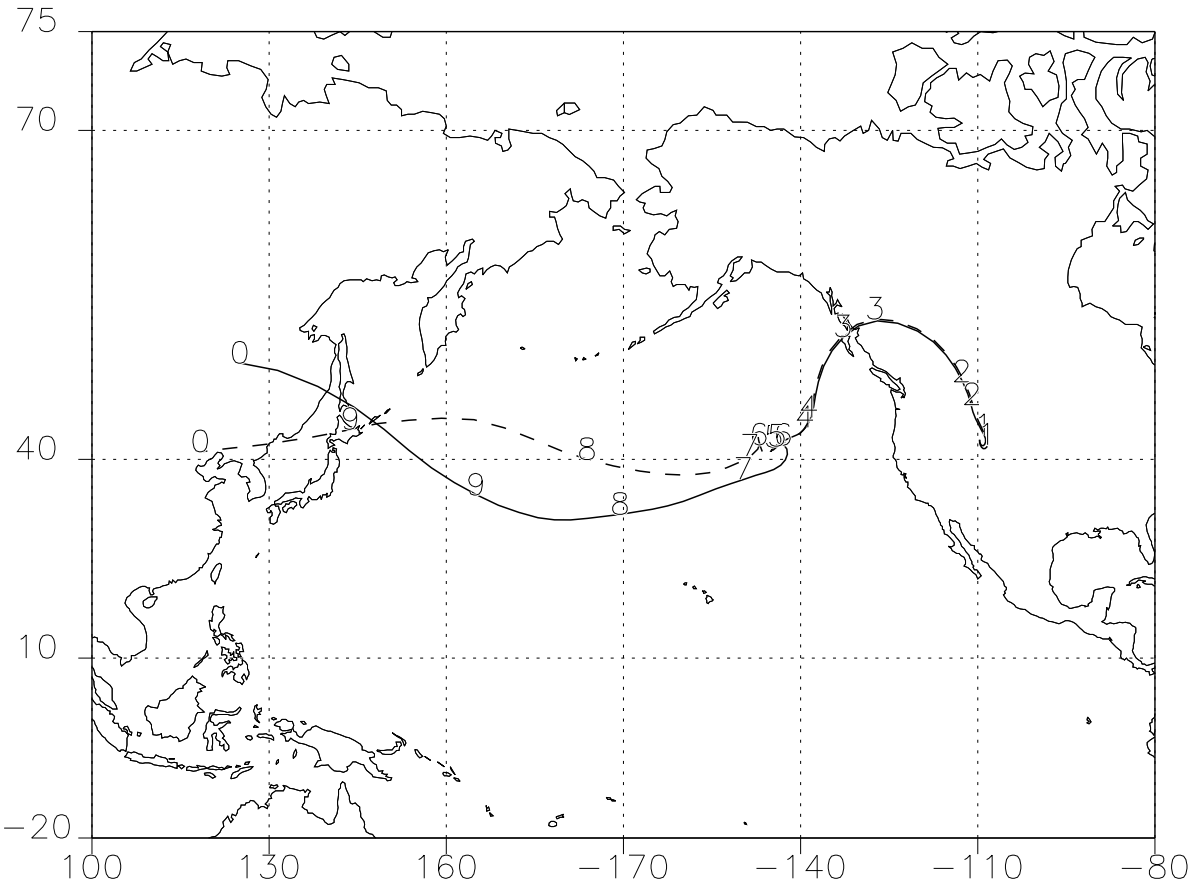
00UT

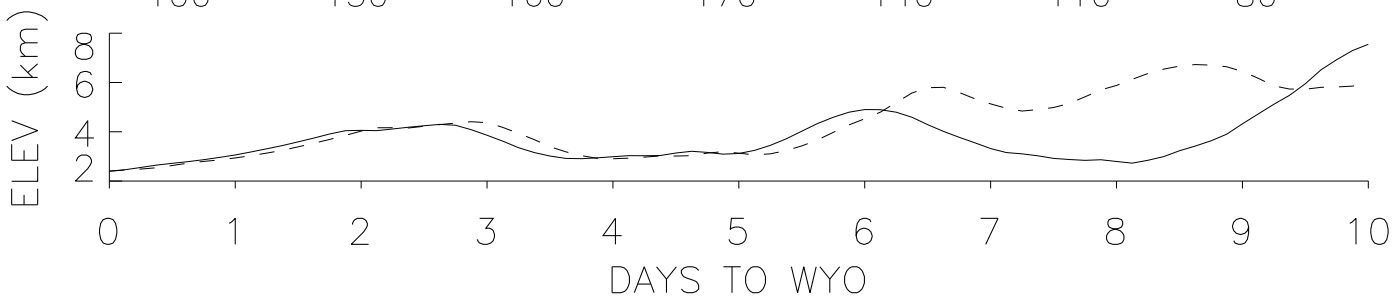
Day	km	hPa	C
0	2.4	762	1
1	3.2	687	-6
2	4.0	619	-14
3	3.2	681	-7
4	2.6	738	-3
5	2.2	779	1
6	2.0	798	3
7	2.2	766	0
8	4.0	606	-18
9	7.3	380	-47

06UT

Day	km	hPa	C
0	2.4	762	-2
1	3.2	693	-5
2	3.9	623	-13
3	3.3	674	-7
4	2.9	713	-2
5	3.3	679	-5
6	4.1	605	-14
7	2.7	730	-1
8	2.1	793	4
9	1.7	832	8
10	1.9	811	8

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/25/2005 (Day of Year 56)
NCEP/NCAR Reanalysis 1 Data Set





12UT

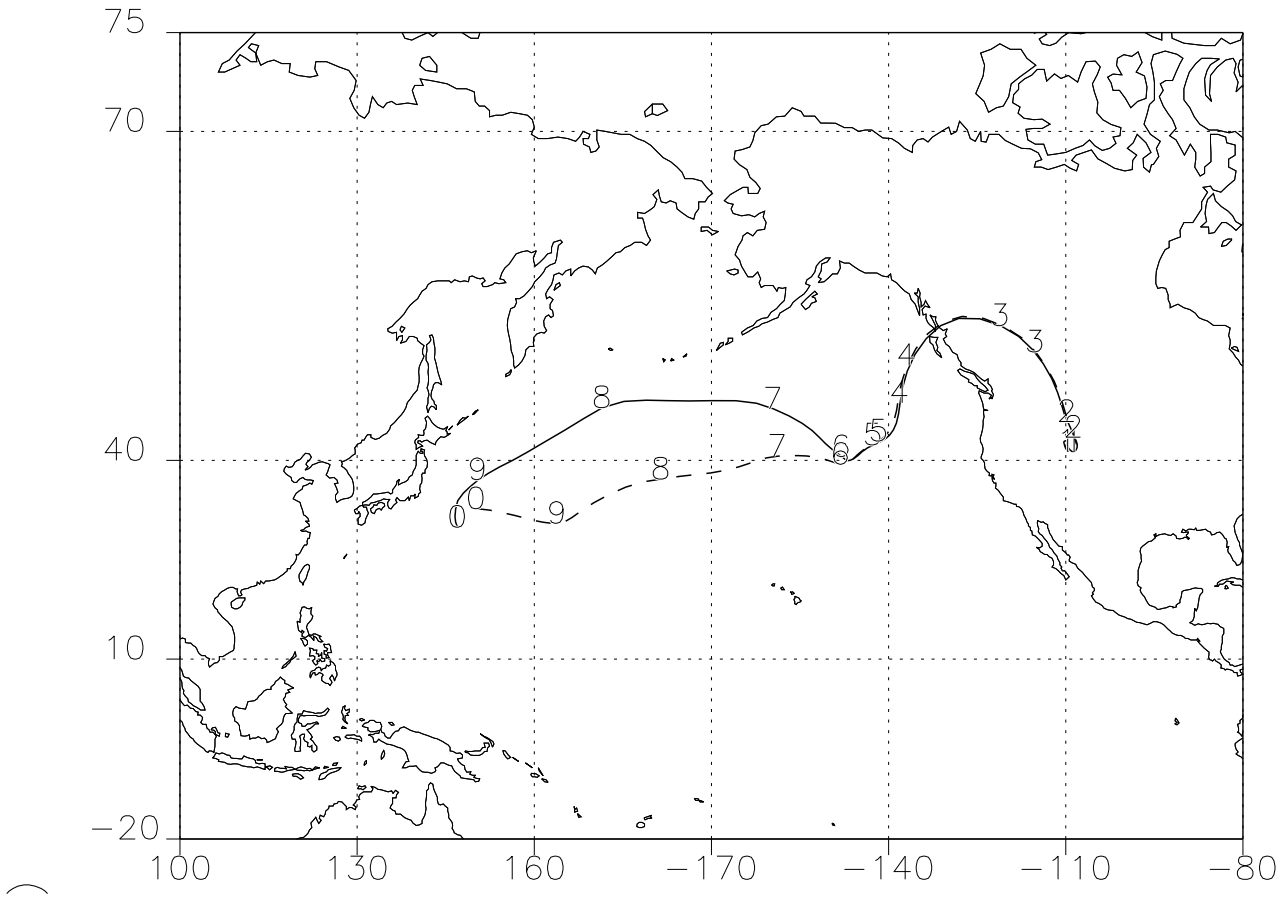
Day	km	hPa	C
0	2.4	760	−4
1	3.1	700	−6
2	4.1	614	−13
3	3.9	627	−11
4	3.0	705	−3
5	3.1	692	−2
6	4.9	540	−22
7	3.3	674	−8
8	2.8	723	−3
9	4.3	583	−16
10	7.5	359	−49

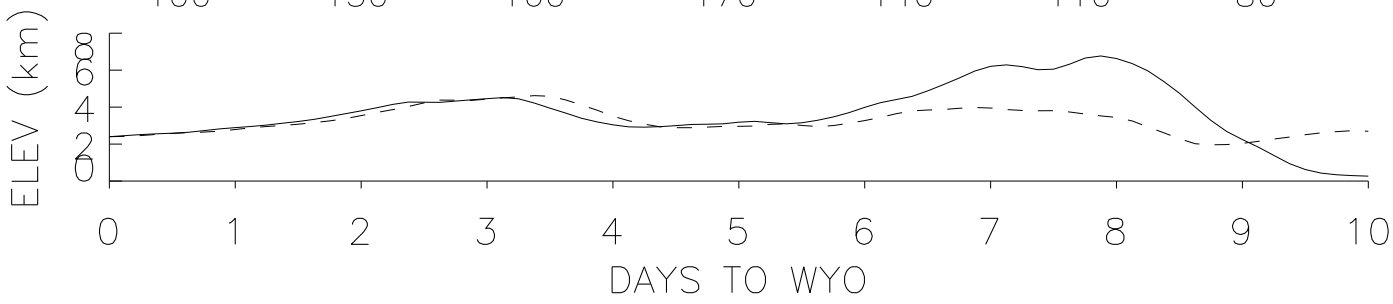
18UT

Day	km	hPa	C
0	2.4	759	−2
1	2.9	712	−5
2	4.0	618	−12
3	4.4	587	−15
4	2.9	712	−3
5	3.1	692	−3
6	4.5	572	−17
7	5.1	524	−24
8	5.9	466	−32
9	6.4	427	−36
10	6.0	464	−28

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/26/2005 (Day of Year 57)
NCEP/NCAR Reanalysis 1 Data Set





00UT

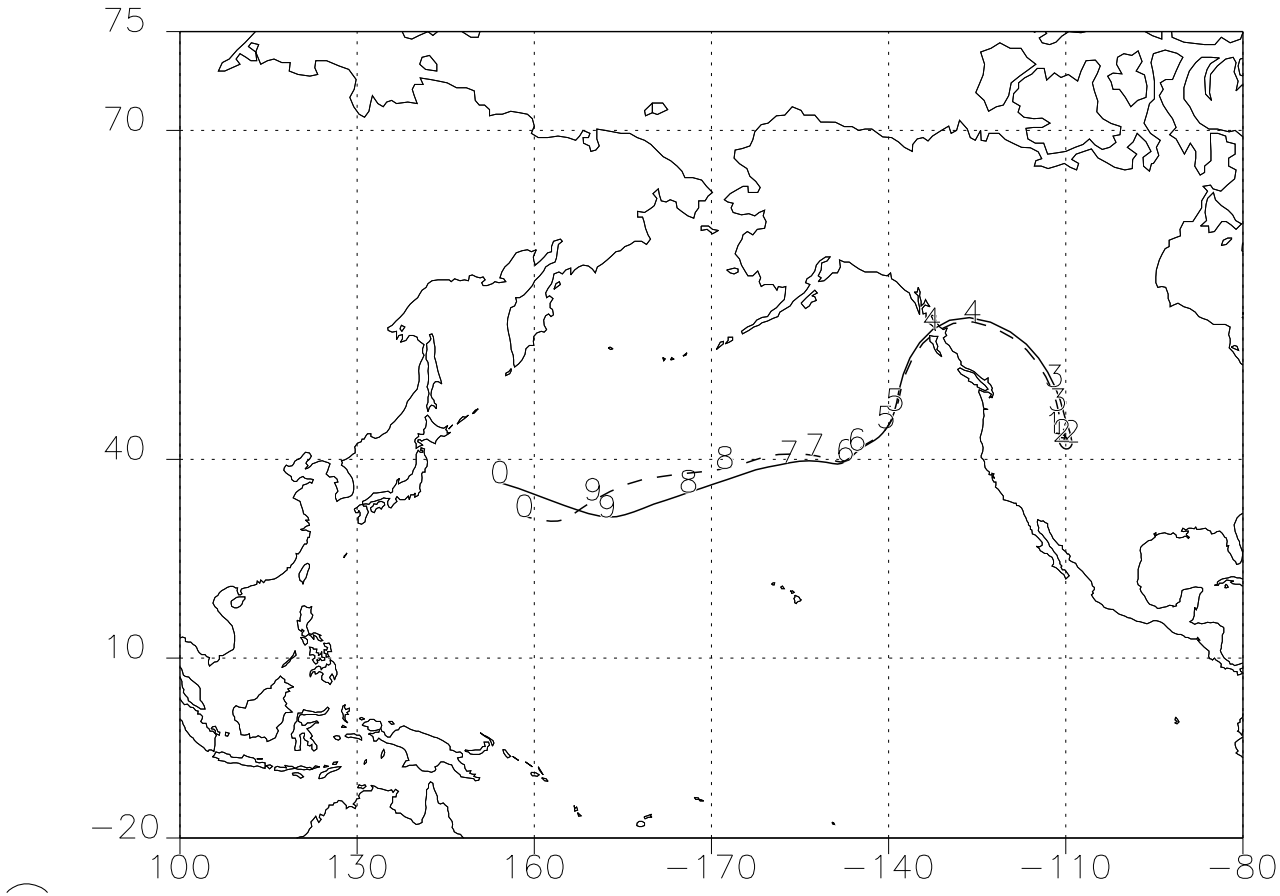
Day	km	hPa	C
0	2.4	757	2
1	2.9	716	−3
2	3.8	637	−10
3	4.5	580	−17
4	3.0	700	−3
5	3.2	688	−3
6	4.0	617	−11
7	6.2	447	−31
8	6.6	413	−39
9	2.2	763	−1
10	0.3	991	13

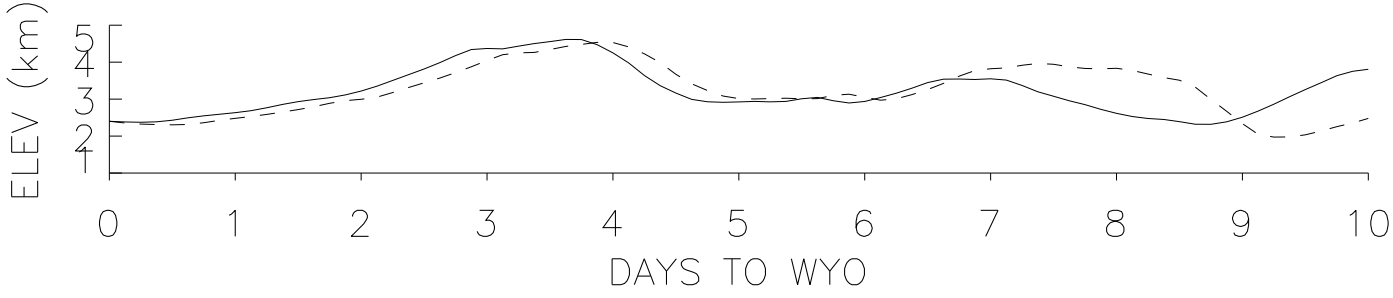
06UT

Day	km	hPa	C
0	2.4	757	−1
1	2.8	725	−3
2	3.5	659	−8
3	4.4	582	−16
4	3.5	656	−8
5	3.0	708	−2
6	3.3	678	−4
7	3.9	618	−9
8	3.4	658	−7
9	2.0	795	1
10	2.7	732	−2

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/26/2005 (Day of Year 57)
NCEP/NCAR Reanalysis 1 Data Set





12UT

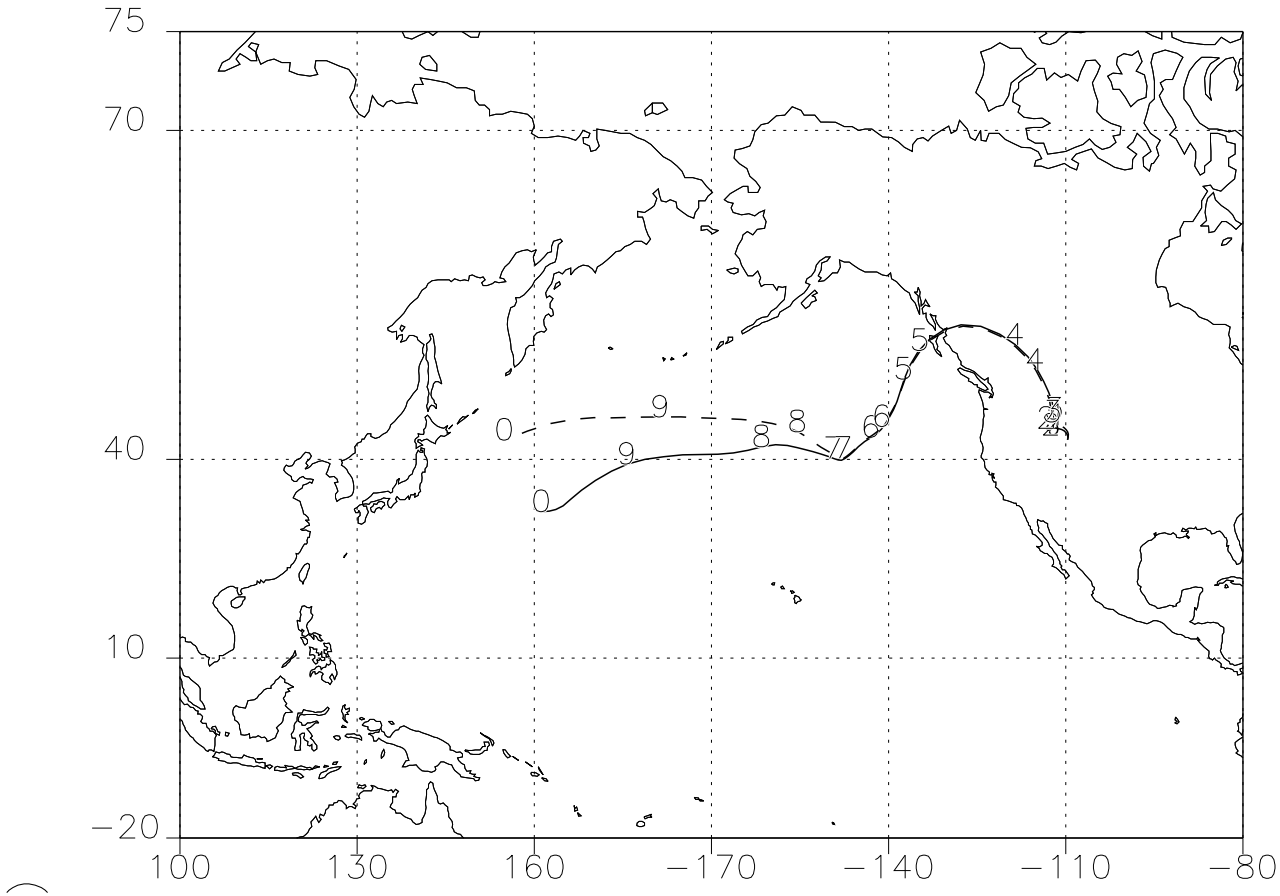
Day	km	hPa	C
0	2.4	757	−3
1	2.6	738	−4
2	3.2	687	−7
3	4.4	589	−15
4	4.3	595	−14
5	2.9	710	−3
6	2.9	708	−1
7	3.5	653	−6
8	2.6	737	−2
9	2.5	750	0
10	3.8	629	−10

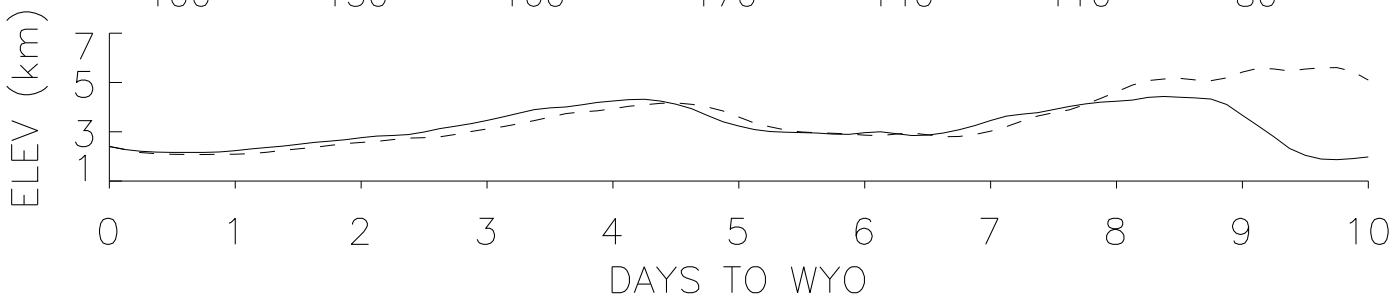
18UT

Day	km	hPa	C
0	2.4	757	−3
1	2.5	751	−3
2	3.0	707	−4
3	4.0	617	−11
4	4.5	575	−17
5	3.0	701	−4
6	3.1	699	−2
7	3.8	630	−10
8	3.8	627	−9
9	2.3	761	0
10	2.5	752	−1

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/27/2005 (Day of Year 58)
NCEP/NCAR Reanalysis 1 Data Set





00UT

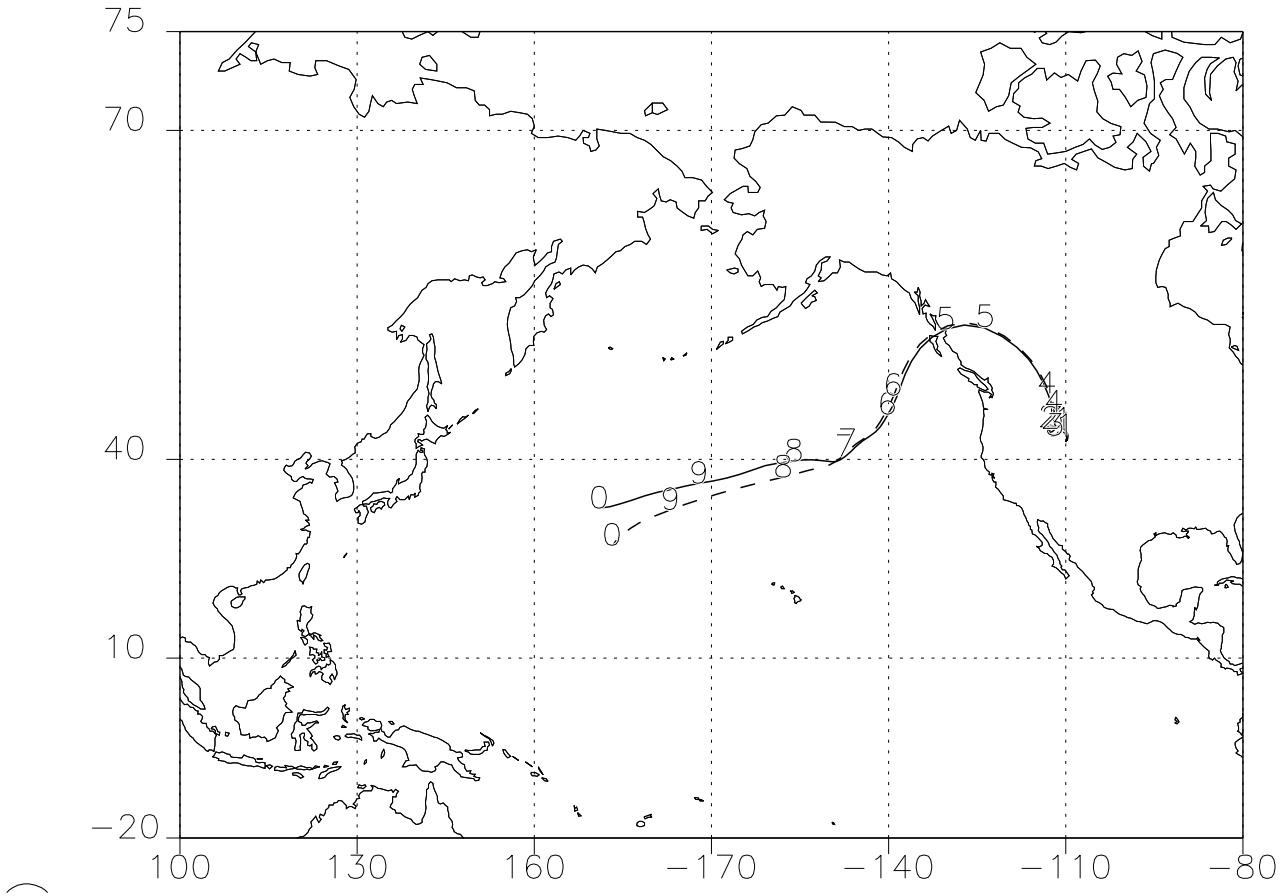
Day	km	hPa	C
0	2.4	758	−1
1	2.2	773	2
2	2.8	728	−1
3	3.5	667	−7
4	4.2	598	−15
5	3.2	682	−5
6	3.0	706	−3
7	3.5	661	−7
8	4.2	593	−13
9	3.7	636	−11
10	2.0	800	−2

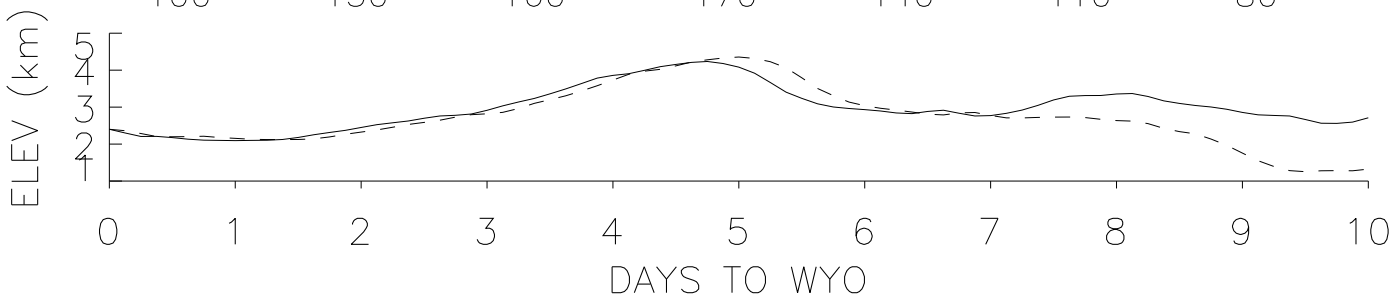
06UT

Day	km	hPa	C
0	2.4	760	−3
1	2.1	786	−1
2	2.6	745	−2
3	3.1	697	−4
4	3.9	624	−12
5	3.6	649	−10
6	2.9	716	−2
7	3.0	699	−3
8	4.6	563	−18
9	5.4	493	−29
10	5.1	516	−27

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/27/2005 (Day of Year 58)
NCEP/NCAR Reanalysis 1 Data Set





12UT

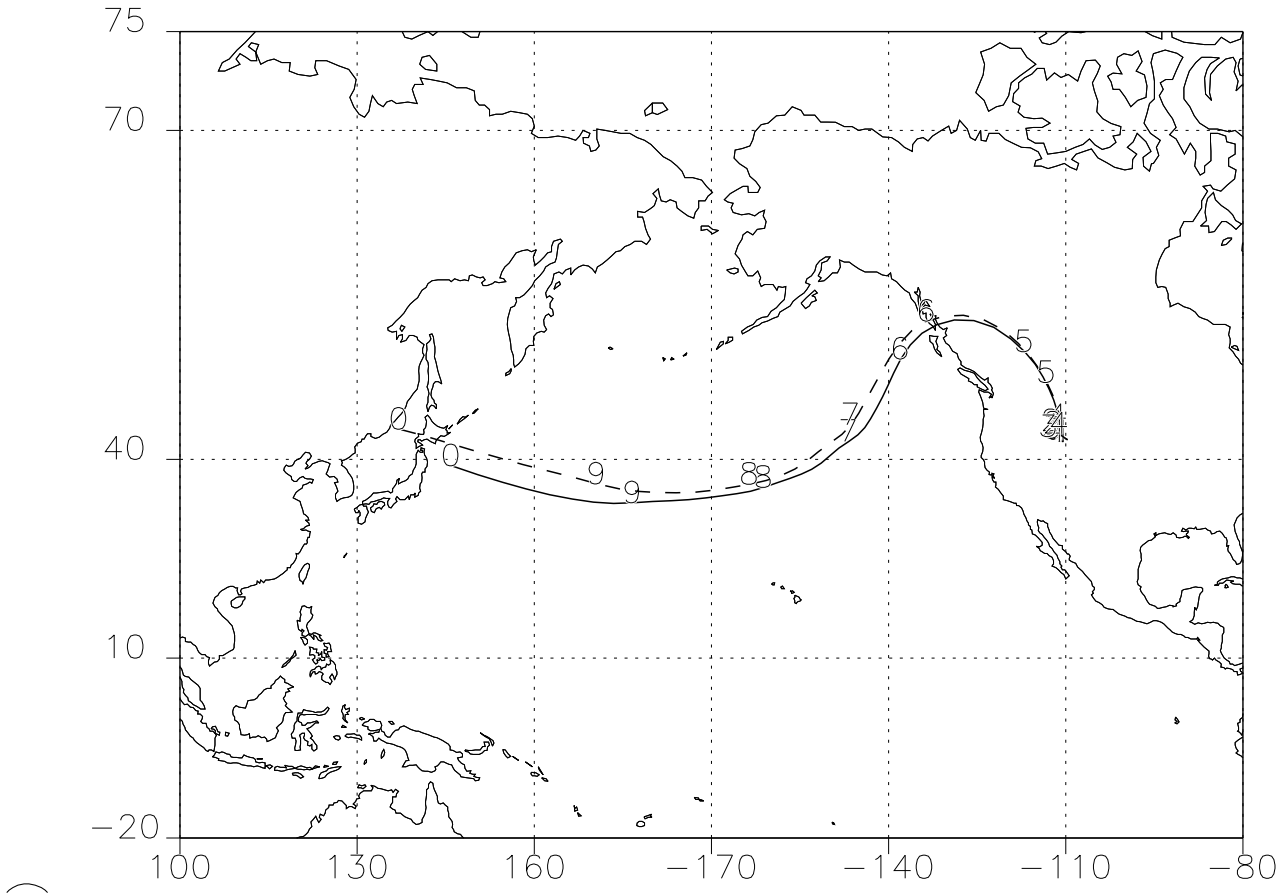
Day	km	hPa	C
0	2.4	760	−6
1	2.1	786	−2
2	2.5	754	−4
3	2.9	713	−4
4	3.9	632	−11
5	4.1	610	−14
6	2.9	709	−4
7	2.8	722	−1
8	3.4	669	−5
9	2.9	714	−3
10	2.7	730	−1

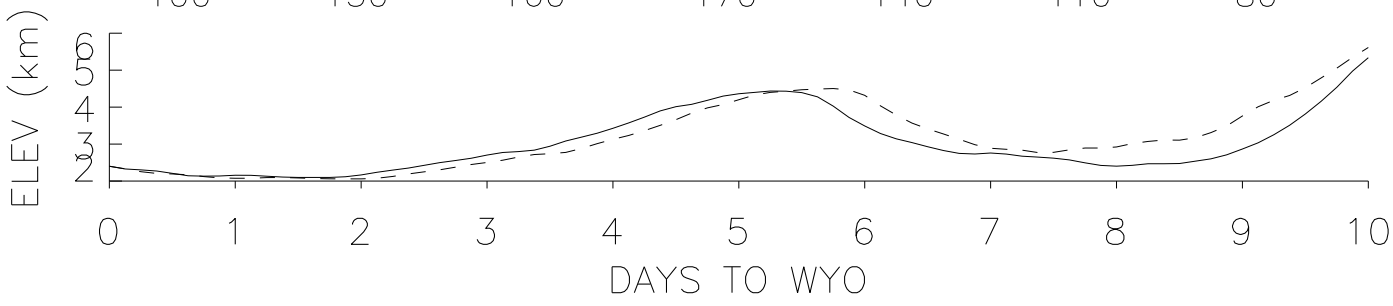
18UT

Day	km	hPa	C
0	2.4	761	−4
1	2.2	781	−3
2	2.3	766	−3
3	2.8	723	−4
4	3.7	643	−9
5	4.4	589	−15
6	3.0	698	−5
7	2.8	722	−3
8	2.6	734	−2
9	1.8	820	4
10	1.3	871	7

12UT − solid
18UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/28/2005 (Day of Year 59)
NCEP/NCAR Reanalysis 1 Data Set





00UT

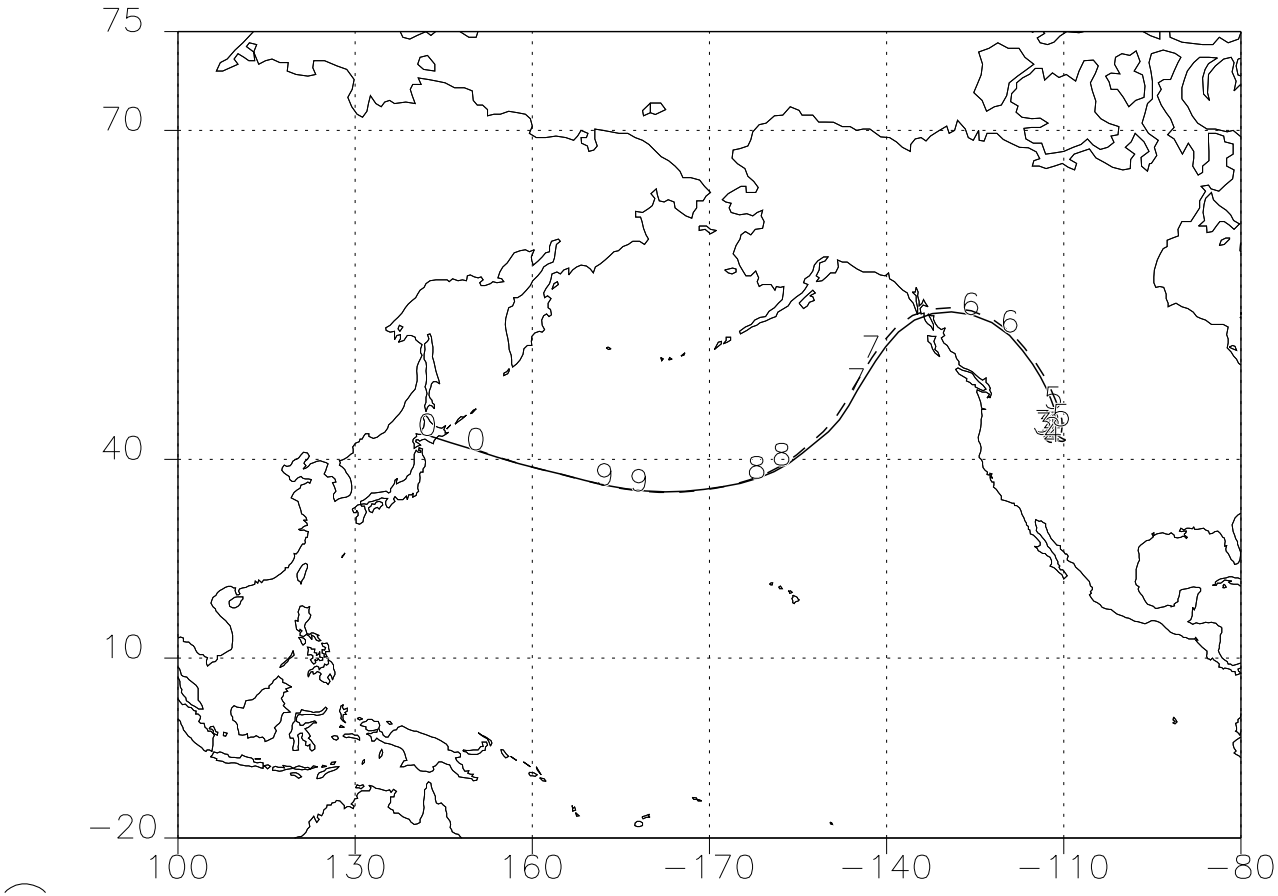
Day	km	hPa	C
0	2.4	759	−1
1	2.2	781	1
2	2.2	780	2
3	2.7	733	−1
4	3.4	669	−7
5	4.4	589	−16
6	3.5	658	−9
7	2.8	723	−4
8	2.4	755	0
9	2.9	712	−4
10	5.3	507	−24

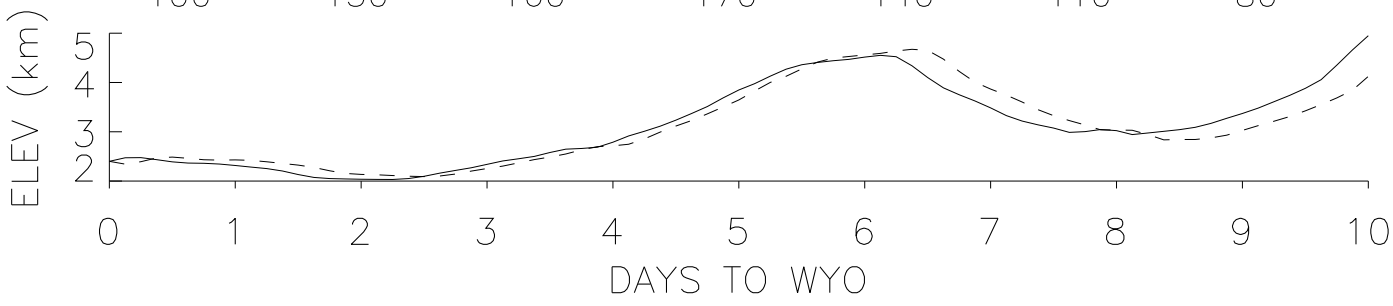
06UT

Day	km	hPa	C
0	2.4	760	−3
1	2.1	791	−1
2	2.1	790	−1
3	2.5	751	−2
4	3.1	695	−4
5	4.2	603	−14
6	4.3	588	−18
7	2.9	710	−6
8	2.9	705	−6
9	3.8	630	−14
10	5.6	484	−34

00UT − solid
06UT − dashed

3-D KINEMATIC TRAJECTORIES TO WYO(42.50N, 109.70W)
2/28/2005 (Day of Year 59)
NCEP/NCAR Reanalysis 1 Data Set





12UT

Day	km	hPa	C
0	2.4	759	−4
1	2.3	768	−5
2	2.0	793	−3
3	2.3	765	−4
4	2.8	725	−4
5	3.8	633	−11
6	4.5	573	−18
7	3.5	654	−12
8	3.0	695	−8
9	3.4	666	−12
10	4.9	532	−28

18UT

Day	km	hPa	C
0	2.4	759	−4
1	2.4	758	−3
2	2.1	784	−3
3	2.3	773	−4
4	2.7	732	−4
5	3.6	650	−9
6	4.6	572	−18
7	3.9	620	−16
8	3.0	692	−9
9	3.0	696	−10
10	4.1	597	−21

12UT − solid
18UT − dashed