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Mobile VLBI Results for Crustal Dynamics Project Observations in the Conterminous Western United States, June 27, 1983 to May 21, 1986

Michael D. Abell
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Rockville, MD
February 1987

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MOBILE VLBI RESULTS FOR CRUSTAL DYNAMICS PROJECT OBSERVATIONS IN THE CONTERMINOUS WESTERN UNITED STATES JUNE 27, 1983 TO MAY 21, 1986

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ABSTRACT. Three years of Mobile Very Long Baseline Interferometry (MVLBI) data in the conterminous Western United States have been processed using the SOLVE3 program. The solutions allow separate estimates of the mobile station position for each occupation while using all the data to adjust the source positions. Independent estimates of Earth orientation allow the results to be presented as latitude, longitude, and height for each station as a function of time. Graphs are presented of the horizontal positions which clearly show the northwestward movement of stations west of the San Andreas fault at a rate of about 3 cm/yr. Furthermore, all the California stations appear to be moving northward at 2 cm/yr with respect to stations at Plattville, CO, Ely, NV, and Flagstaff, AZ. Summaries of all the baselines are also presented.

INTRODUCTION

Under the terms of an interagency agreement between the National Oceanic and Atmospheric Administration (NOAA), the National Aeronautics and Space Administration (NASA), the U.S. Geological Survey (USGS), the National Science Foundation (NSF), and the Defense Mapping Agency (DMA) for a Joint Program for the Application of Space Technology to Crustal Dynamics and Earthquake Research (1980) and as delineated in the Federal Implementation Plan for the Application of Space Technology to Crustal Dynamics and Earthquake Research (1982), the ownership and operational responsibility for the three MVLBI systems and the Mojave Base Station developed by NASA have been transferred from NASA to NOAA as implemented by the Agreement for Transfer of Mobile VLBI Operations from NASA to NOAA (1983). This transfer was completed in 1985.

The National Geodetic Survey (NGS) Division in the Office of Charting and Geodetic Services, National Ocean Service, NOAA, currently operates the MVLBI systems to meet both NASA and NOAA requirements. Under NASA funding, NGS currently carries out an extensive set of measurements each year in support of the NASA Crustal Dynamics Project (CDP) according to an observing schedule mutually agreed upon between the CDP and NGS.

The interagency agreement specifies that NOAA will process the MVLBI data which it gathers in support of the CDP. In response to that requirement, this report describes the MVLBI results in the conterminous United States for the period June 27, 1983 through May 21, 1986. This encompasses all MVLBI data taken since the introduction of the Mojave Base Station into the MVLBI observation schedule in 1983 (including data taken prior to assumption of operational responsibility by NGS) in order to provide uniform reductions of all MVLBI data in the Western United States. A subsequent report will provide compatible MVLBI results beginning with the introduction of dual frequency Mark III MVLBI observations, in October 1982. The single frequency MVLBI data taken

prior to October 1982 are not considered to be of sufficient quality to be included in these reports. The solutions for CDP MVLBI observations in Alaska and Canada will be provided in a separate report.

DATA PROCESSING

The solutions reported here have been obtained from the SOLVE3 VLBI least squares adjustment program, written at NGS (Robertson 1975, Dillinger and Robertson 1987). SOLVE3 is a three-stage operation designed to offer as much flexibility to the analyst as possible in the determination of geodetic and astrometric quantities from VLBI data. The three stages of the SOLVE3 operation are implemented in three separate programs: Data Preparation (GDAT), Computation (NRML), and Analysis (DISPL).

Stage 1. GDAT

Incoming VLBI data sets from the correlator facility are processed through a series of VLBI computer programs employing a "data base handler" processor. Because of the complexity of the "data base handler" software the interaction of VLBI data with this system is quite time-consuming. To obtain maximum efficiency in SOLVE3, a data preparation program called GDAT has been developed to read a finished VLBI data set, extract only the data from each observation record essential to the SOLVE3 adjustment, and form a reformatted observation data file for use as input to the SOLVE3 adjustment routine.

Each observation record in the SOLVE3 observation data file contains the observables and partial derivatives necessary to construct the observation equation for the SOLVE3 least squares adjustment, allowing the user to adjust selectively site positions, source coordinates, clock parameters, atmospheric scale heights, antenna axis offsets, polar motion, UT1, Earth tides, nutation, precession, relativity, and parallax. Table 1 lists the options selected and constraints applied for the MVLBI solutions given in this report.

Table 1.--SOLVE3 parameterization options used in adjustment of MVLBI data, June 27, 1983 through May 21, 1986.

SOLVE3 Option	Comments
Site coordinates	Mojave Base Station held fixed in the solution with the following a priori geocentric Cartesian coordinate values: X = -2356169.15 meters Y = -4646756.83 meters Z = 3668471.22 meters All other sites were locally adjusted and referred to ground monuments where applicable. (See appendix A for a list of antenna-monument offset vectors).

Table 1.--Continued

SOLVE3 Option	Comments
Source coordinates	The right ascension of source 3C273B was held fixed in the solution with the following a priori value, referred to epoch J2000.0: RA = 12h 29m 06.699699s All other source coordinates were globally adjusted in the solution.
Clock parameters	Coefficients of user-specified polynomial characterizations are locally adjusted. The clock at Mojave Base Station was generally the constrained clock in the adjustment.
Atmospheric scale heights	Locally adjusted, using the Marini model (Marini 1974) in the presence of real surface meteorological data, or the Chao model (Chao 1970) when such data are unavailable.
Antenna-axis offset	Set equal to fixed values for each antenna.
Polar motion (x,y), UT1, and nutation (dPSI, dEPS)	Constrained to interpolated values for individual observations from NGS IRIS solutions for Earth orientation and rotation rate. Prior to January 1984, these values were obtained from a combination of POLARIS VLBI and Laser Ranging solutions.
Earth tides	Constrained to Project MERIT standards (1983).
Precession	Constrained to Project MERIT standards.
Relativity	In accordance with Project MERIT standards, gamma was set equal to 1.0.
Parallax	Option to adjust for stellar parallax was not exercised in this solution.

Stage 2. NRML

The second stage of the SOLVE3 process is the least squares adjustment, where the optional parameterizations are exercised by the analyst to satisfy the particular requirements of the adjustment.

During this step, parameters may be identified as either local or global. Local parameters are adjusted using only the data for a particular observing session. Global parameters are adjusted using the data from all observing sessions submitted to NRML from the GDAT data files. For example, because we are looking for possible movements at individual MVLBI sites, the site coordinates, clock parameters and atmospheric scale heights are locally adjusted parameters, using only data taken on the day of a given observing session. However, the source coordinates are common to all 58 observing sessions included in this report and are adjusted globally, providing a much more powerful determination of source coordinates than could be obtained from separate solutions using each of the individual MVLBI networks.

Stage 3. DISPL

This stage of SOLVE3 produces a print output file designed to allow the display and analysis of results of the least squares adjustment. In this stage, if a local site adjustment option has been called for, the analyst specifies the necessary antenna-monument offset vectors to reduce the adjusted coordinates for each site to common reference points, either the antenna VLBI reference points or to a monument on the Earth's surface. Appendix A contains a table of the antenna-monument offset vectors used in our solution. The results from the exercise of this option are included in the print output file in two forms: in geocentric Cartesian coordinates and in geodetic positions referred to the NAD 83 ellipsoid (a = 6378137.0 m; f = 1/298.257221). The tables in section I show these results.

Along with adjusted site coordinates, the print output file provides adjusted baseline components and lengths for the baselines connecting the sites included in each data set. The tables in section II show these results.

In addition to adjusted site coordinates and baseline information, the print output file also contains the clock and atmospheric scale height adjustments for each observation data file, as well as globally adjusted source coordinates and other information of interest to the analyst.

DATA SUMMARY

The observing sessions used in this report are identified in table 2 along with the CDP Data Information System (DIS) occupation code, the reference monument identifier at each site and a summary of the calibrations applied to the data. The cable calibrations are used to correct for variations in the electrical length of the cable connecting the S/X receiver to the Mark III terminal. When available, they generally aid in the characterization of the clock parameters. If the calibrations are missing, the cable variations are absorbed into the clock parameters with negligible effects on the adjusted site positions.

When surface measurements of temperature, barometric pressure, and relative humidity are available, these data will be used in the Marini model to compute a tropospheric delay correction. When these data are missing or unusable, the tropospheric delay correction is estimated from a standard atmosphere using a modified cosecant law (Chao 1970).

The contribution to the path delay due to the ionosphere is estimated from simultaneous S- and X-band observations. These corrections are applied to the X-band data which are used exclusively for all subsequent processing. Individual X-band observations which do not have a corresponding acceptable S-band observation cannot be corrected for the effect of the ionosphere, and are not included in the SOLVE3 adjustment.

Table 2.--List of sites scheduled for participation in the observing sessions used to form the NGS MVLBI SOLVE3 data base.

	Site name	DIS code	Reference monument	Calibrations included: Cable	Calibrations included: Troposphere model
1.	83F 27 JUN 83				
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	N	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	HATCREEK	72189301	7218	N	MARINI
	QUINCY	72215202	7221	N	MARINI
	MON PEAK	72205303	7274	Y	MARINI
	GOLDVENU	15139101	Data deleted due to poor quality.		
2.	83G 29 JUN 83				
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	N	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	HATCREEK	72189301	7218	N	MARINI
	MAMMOTHL	72595201	7259	N	MARINI
	JPL MV3	72725301	7263	Y	MARINI
	GOLDVENU	15139101	Data deleted due to poor quality.		
3.	83H 22 AUG 83				
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	CHAO
	VNDNBERG	72235101	7223	N	MARINI
	JPL MV2	72645208	7263	N	MARINI
	PBLOSSOM	72545301	7254	N	CHAO
	GOLDVENU	15139101	Data deleted due to poor quality.		
4.	83I 25 AUG 83				
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	CHAO
	VNDNBERG	72235101	7223	N	MARINI
	PRESIDIO	72525203	7252	N	MARINI
	FORT ORD	72665302	7266	Y	CHAO
	GOLDVENU	15139101	Data deleted due to poor quality.		

Table 2.--Continued

	Site name	DIS code	Reference monument	Calibrations included cable	Troposphere model
5. 83J 27 AUG 83					
	MOJAVE12	72227101	7222	N	MARINI
	OVRO 130	72077001	7207	Y	CHAO
	VNDNBERG	72235101	7223	N	MARINI
	PRESIDIO	72525203	7252	N	MARINI
	PT REYES	72515302	7251	Y	CHAO
	GOLDVENU	15139101	Data deleted due to poor quality.		
6. 83K 31 AUG 83					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	CHAO
	VNDNBERG	72235101	7223	N	MARINI
	SANPAULA	72555202	7255	N	MARINI
	DEADMANL	72675301	Data deleted; no antenna-monument offset vector.		
7. 83M 31 OCT 83					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	N	MARINI
	VNDNBERG	72235101	7223	N	MARINI
	JPL MV2	72645209	7263	N	MARINI
	PINFLATS	72565303	7256	N	MARINI
8. 83N 3 NOV 83					
	MOJAVE12	72227101	7222	Y	MARINI
	VNDNBERG	72235101	7223	N	MARINI
	YUMA	78945201	7894	N	MARINI
	PINFLATS	72565303	7256	N	MARINI
9. 83O 5 NOV 83					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	N	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	YUMA	78945201	7894	N	MARINI
	MON PEAK	72205304	7274	Y	MARINI

Table 2.--Continued

		Site name	DIS code	Reference monument	Calibrations included cable	troposphere model
10.	83P	8 NOV 83				
		MOJAVE12	72227101	7222	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		VNDNBERG	72235101	7223	N	MARINI
		BLKBUTTE	72695201	7269	N	MARINI
		MON PEAK	72205304	7274	N	MARINI
11.	83Q	10 NOV 83				
		MOJAVE12	72227101	7222	Y	MARINI
		VNDNBERG	72235101	7223	N	MARINI
		BLKBUTTE	72695201	7269	N	CHAO
12.	83R	12 NOV 83				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	N	MARINI
		VNDNBERG	72235101	7223	N	MARINI
		PVERDES	72685206	7268	N	MARINI
13.	84A	20 FEB 84				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	N	MARINI
		VNDNBERG	72235101	7223	Y	MARINI
		JPL MV2	72645210	7263	N	CHAO
		PBLOSSOM	72545303	7254	N	MARINI
14.	84B	23 FEB 84				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	N	MARINI
		HATCREEK	72189301	7218	N	CHAO
		VNDNBERG	72235101	7223	N	MARINI
		PRESIDIO	72525204	Data deleted due to poor quality.		
		FORT ORD	72665303	7266	N	MARINI

Table 2.--Continued

		Sit ename	DIS code	REFERENCE monument	CALIBRATIONS INCLUDED Cable	Troposphere model
15.	84C	26 FEB 84				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	N	MARINI
		HATCREEK	72189301	7218	Y	CHAO
		VNDNBERG	72235101	7223	N	MARINI
		PRESIDIO	72525204	Data deleted due to poor quality.		
		PT REYES	72515303	7251	N	CHAO
16.	84D	29 FEB 84				
		MOJAVE12	72227101	7222	Y	MARINI
		VNDNBERG	72235101	7223	Y	MARINI
		SANPAULA	72555203	7255	N	MARINI
		DEADMANL	72675302	7267	N	MARINI
17.	84E	3 MAR 84				
		MOJAVE12	72227101	7222	Y	MARINI
		VNDNBERG	72235101	7223	Y	MARINI
		OCOTILLO	72705202	7270	N	MARINI
		BLKBUTTE	72695302	7269	N	MARINI
18.	84F	9 APR 84				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	Y	MARINI
		MAMMOTHL	72595202	7259	N	MARINI
		JPL MV1	72635308	7263	N	MARINI
19.	84G	12 APR 84				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		HATCREEK	72189301	7218	Y	CHAO
		VNDNBERG	72235102	7223	N	MARINI
		QUINCY	72215203	7221	N	MARINI
		MON PEAK	72745301	7274	N	CHAO
20.	84H	17 APR 84				
		MOJAVE12	72227101	7222	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		HATCREEK	72189301	7218	Y	MARINI
		PLATTVIL	72585202	7258	N	MARINI
		FLAGSTAF	72615301	7261	Y	MARINI

Table 2.--Continued

	Site name	DIS code	Reference monument	Calibrations included Cable	Troposphere model
21. 84I 22 APR 84					
	MOJAVE12	72227101	7222	Y	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	PLATTVIL	72585202	7258	N	MARINI
	ELY	72575302	7286	Y	MARINI
22. 84J 25 APR 84					
	MOJAVE12	72227101	7222	Y	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	HATCREEK	72189301	7218	Y	MARINI
	PLATTVIL	72585202	7258	N	CHAO
23. 84O 22 OCT 84					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	MARINI
	VNDNBERG	72235102	7223	Y	MARINI
	JPL MV1	72635209	7263	N	MARINI
		This site was erroneously named JPL MV2 in the data set.			
	MAMMOTHL	72595303	7259	Y	MARINI
24. 84P 25 OCT 84					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	MARINI
	VNDNBERG	72235102	7223	Y	MARINI
	JPL MV1	72635209	7263	N	MARINI
		This site was erroneously named JPL MV2 in the data set.			
	PBLOSSOM	72545304	7254	Y	MARINI
25. 84Q 28 OCT 84					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	MARINI
	VNDNBERG	72235102	7223	Y	MARINI
	JPL MV1	72635209	MV-2 was scheduled but did not participate.		
	PINFLATS	72565304	7256	Y	CHAO
26. 84R 31 OCT 84					
	MOJAVE12	72227101	7222	Y	MARINI
	VNDNBERG	72235102	7223	Y	MARINI
	YUMA	78945202	7894	N	MARINI
	PINFLATS	72565304	7256	Y	MARINI

Table 2.--Continued

		Site name	DIS code	Reference monument	Calibrations included Cable	Troposphere model
27.	85A	9 JAN 85				
		MOJAVE12	72227101	7222	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		DEADMANL	72675203	7267	N	MARINI
		SANPAULA	72555304	7255	Y	MARINI
28.	85B	12 JAN 85				
		MOJAVE12	72227101	7222	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		MON PEAK	72745202	7274	N	MARINI
		BLKBUTTE	72695303	7269	Y	MARINI
29.	85C	15 JAN 85				
		MOJAVE12	72227101	7222	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		OCOTILLO	72705203	7270	Y	MARINI
		BLKBUTTE	72695303	7269	N	MARINI
30.	85D	18 JAN 85				
		MOJAVE12	72227101	7222	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		JPL MV1	72635210	7263	Y	MARINI
		PINFLATS	72565305	7256	Y	MARINI
31.	85E	1 MAR 85				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		HATCREEK	72189301	7218	Y	CHAO
		VNDNBERG	72235102	7223	Y	MARINI
		MON PEAK	72745203	7274	Y	MARINI
		YUMA	78945303	7894	Y	MARINI
32.	85F	4 MAR 85				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		PVERDES	72685207	7268	N	MARINI
		OCOTILLO	72705304	7270	Y	MARINI

Table 2.--Continued

	Site name	DIS code	Reference monument	Calibrations included Cable	Troposphere model
33. 85G 7 MAR 85					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	MARINI
	VNDNBERG	72235102	7223	Y	MARINI
	JPL MV1	72635211	7263	Y	MARINI
	PBLOSSOM	72545305	7254	Y	MARINI
34. 85H 10 MAR 85					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	HATCREEK	72189301	7218	Y	CHAO
	VNDNBERG	72235102	7223	Y	MARINI
	PRESIDIO	72525205	7252	Y	MARINI
	FORT ORD	72665304	7266	Y	MARINI
35. 85I 13 MAR 85					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	VNDNBERG	72235102	7223	Y	MARINI
	PRESIDIO	72525205	7252	Y	MARINI
	PT REYES	72515304	7251	Y	MARINI
36. 85J 2 MAY 85					
	MOJAVE12	72227101	7222	Y	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	HATCREEK	72189301	7218	Y	MARINI
	PLATTVIL	72585203	7258	Y	MARINI
	FLAGSTAF	72615302	7261	Y	MARINI
37. 85K 6 MAY 85					
	MOJAVE12	72227101	7222	Y	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	HATCREEK	72189301	7218	Y	MARINI
	PLATTVIL	72585203	7258	Y	MARINI
	ELY	72865301	7286	Y	MARINI

Table 2.--Continued

		Site name	DIS code	Reference monument	Calibrations included Cable	Troposphere model
38.	85L	7 MAY 85 (session also designated NAPS-A)				
		MOJAVE12	72227101	7222	Y	MARINI
		GILCREEK	40477001	4047	Y	MARINI
		OVRO 130	72077001	7207	Y	MARINI
		WESTFORD	72097301	7209	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		HATCREEK	72189301	7218	Y	MARINI
		PLATTVIL	72585203	7258	Y	MARINI
39.	85M	12 MAY 85				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		HATCREEK	72189301	7218	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		MON PEAK	72745204	7274	Y	MARINI
		QUINCY	72215304	7221	Y	MARINI
40.	85N	14 MAY 85				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		MON PEAK	72745204	7274	Y	MARINI
		QUINCY	72215304	7221	Y	CHAO
41.	85T	19 OCT 85				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	N	CHAO
		HRAS 085	72167201	7216	Y	MARINI
		HATCREEK	72189301	7218	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		PT REYES	72515205	7251	Y	MARINI
		PRESIDIO	72525306	7252	Y	MARINI

Table 2.--Continued

		Site name	DIS code	Reference monument	Calibrations included Cable	Troposphere model
42.	85U	23 OCT 85				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		HATCREEK	72189301	7218	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		FORT ORD	72665205	7266	Y	MARINI
		PRESIDIO	72525306	7252	Y	MARINI
43.	85V	27 OCT 85				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		JPL MV1	72635212	7263	N	MARINI
		PBLOSSOM	72545306	7254	Y	MARINI
44.	85W	30 OCT 85				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		JPL MV1	72635212	7263	Y	MARINI
		PINFLATS	72565306	7256	Y	CHAO
45.	85X	2 NOV 85				
		MOJAVE12	72227101	7222	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		VNDNBERG	72235102	7223	N	MARINI
		YUMA	78945204	7894	Y	MARINI
		PINFLATS	72565306	7256	Y	MARINI
46.	85Y	5 NOV 85				
		MOJAVE12	72227101	7222	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		YUMA	78945204	7894	Y	MARINI
		MON PEAK	72745305	7274	Y	MARINI

Table 2.--Continued

		Site name	DIS code	Reference monument	Calibrations included Cable	Troposphere model
47.	85Z	12 DEC 85				
		MOJAVE12	72227101	7222	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		HATCREEK	72189301	7218	Y	MARINI
		VNDNBERG	72235102	7223	N	MARINI
		YUMA	78945205	MV-2 was scheduled but did not participate.		
		MON PEAK	72745306	7274	Y	MARINI
48.	86A	5 JAN 86				
		MOJAVE12	72227101	7222	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		VNDNBERG	72235102	MV-1 was scheduled but did not participate.		
		MON PEAK	72745307	7274	Y	MARINI
49.	86B	23 FEB 86				
		MOJAVE12	72227101	7222	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		MON PEAK	72745208	7274	Y	MARINI
		YUMA	78945306	MV-3 was scheduled but did not participate.		
50.	86C	26 FEB 86				
		MOJAVE12	72227101	7222	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		PINFLATS	72565207	7256	N	MARINI
		YUMA	78945306	MV-3 was scheduled but did not participate.		
51.	86D	26 MAR 86				
		MOJAVE12	72227101	7222	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		HATCREEK	72189301	7218	Y	MARINI
		FLAGSTAF	72615203	7261	Y	MARINI
		PLATTVIL	72585304	7258	Y	MARINI

Table 2.--Continued

	Site name	DIS code	Reference monument	Calibrations included Cable	Troposphere model
52. 86E 30 MAR 86					
	MOJAVE12	72227101	7222	Y	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	HATCREEK	72189301	7218	Y	MARINI
	VERNAL	72905201	7290	Y	MARINI
	PLATTVIL	72585304	7258	Y	MARINI
53. 86F 2 APR 86					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	HATCREEK	72189301	7218	Y	MARINI
	ELY	72865202	7286	Y	MARINI
	PLATTVIL	72585304	MV-3 was scheduled but did not participate.		
54. 86G 7 APR 86					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	HATCREEK	72189301	7218	Y	MARINI
	VNDNBERG	72235102	Data deleted due to poor quality.		
	MON PEAK	72745209	7274	Y	MARINI
	YUMA	78945307	MV-3 was scheduled but did not participate.		
55. 86H 10 APR 86					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	MARINI
	HRAS 085	72167201	7216	Y	MARINI
	VNDNBERG	72235102	7223	Y	MARINI
	PINFLATS	72565208	7256	Y	MARINI
	YUMA	78945307	7894	Y	MARINI
56. 86I 13 APR 86					
	MOJAVE12	72227101	7222	Y	MARINI
	OVRO 130	72077001	7207	Y	MARINI
	VNDNBERG	72235102	7223	Y	MARINI
	PINFLATS	72565208	7256	Y	MARINI
	JPL MV1	72635313	7263	Y	MARINI

Table 2.--Continued

		Site name	DIS code	Reference monument	Calibrations included Cable	Troposphere model
57.	86J	18 MAY 86				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		MON PEAK	72745210	7274	Y	MARINI
		BLKBUTTE	72695304	7269	Y	CHAO
58.	86K	21 MAY 86				
		MOJAVE12	72227101	7222	Y	MARINI
		OVRO 130	72077001	7207	Y	MARINI
		HRAS 085	72167201	7216	Y	MARINI
		HATCREEK	72189301	7218	Y	MARINI
		VNDNBERG	72235102	7223	Y	MARINI
		MON PEAK	72745210	7274	Y	MARINI
		YUMA	78945308	7894	Y	MARINI

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Section I. Site Coordinates

This section contains the locally adjusted site coordinates for each occupation of MVLBI sites shown in figure 1. These coordinates have been corrected for changes in Earth orientation and UT1, allowing a ready interpretation by direct comparison of site positions rather than by baselines between sites.

For each site the positions for each occupation are given in Cartesian coordinates and in geodetic coordinates (referred to the NAD 83 ellipsoid). The Cartesian coordinates and the formal error given for each component are in meters. The geodetic coordinates are given in degrees, minutes and seconds of arc, and the ellipsoid height in meters. The formal errors given for the latitude, longitude, and height are in meters.

Where a site has three or more occupations, figures showing the latitude and longitude as a function of time are also given. These figures present the latitude and longitude for each occupation with respect to the mean latitude and longitude for that site. Individual site occupations are shown as north-south or west-east displacements in centimeters with respect to the mean value. Each figure has the same horizontal and vertical scale. The sites are ordered sequentially by increasing monument reference number, with the fixed base stations preceding the MVLBI sites.

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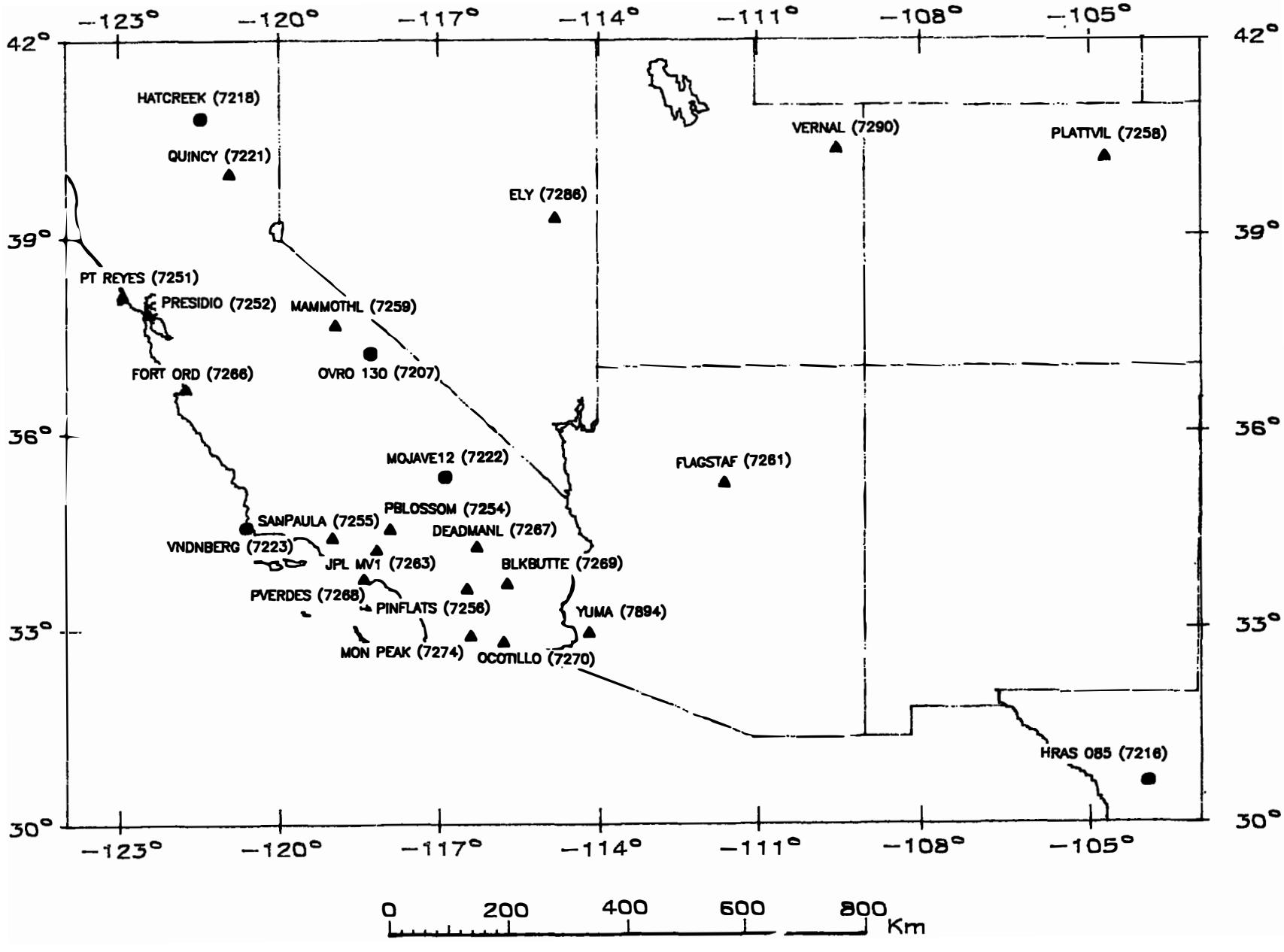

Figure 1.--Crustal Dynamics Project VLBI sites in conterminous Western United States.

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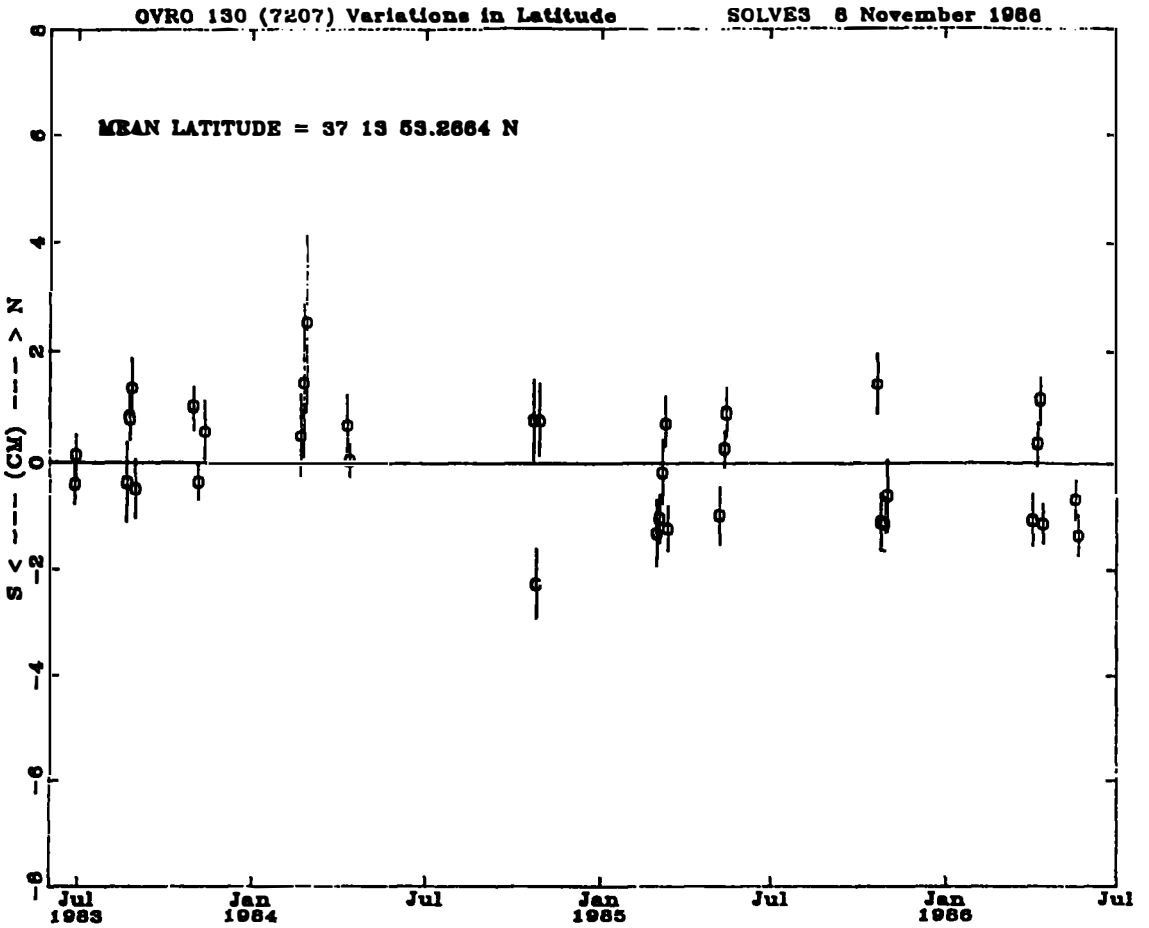
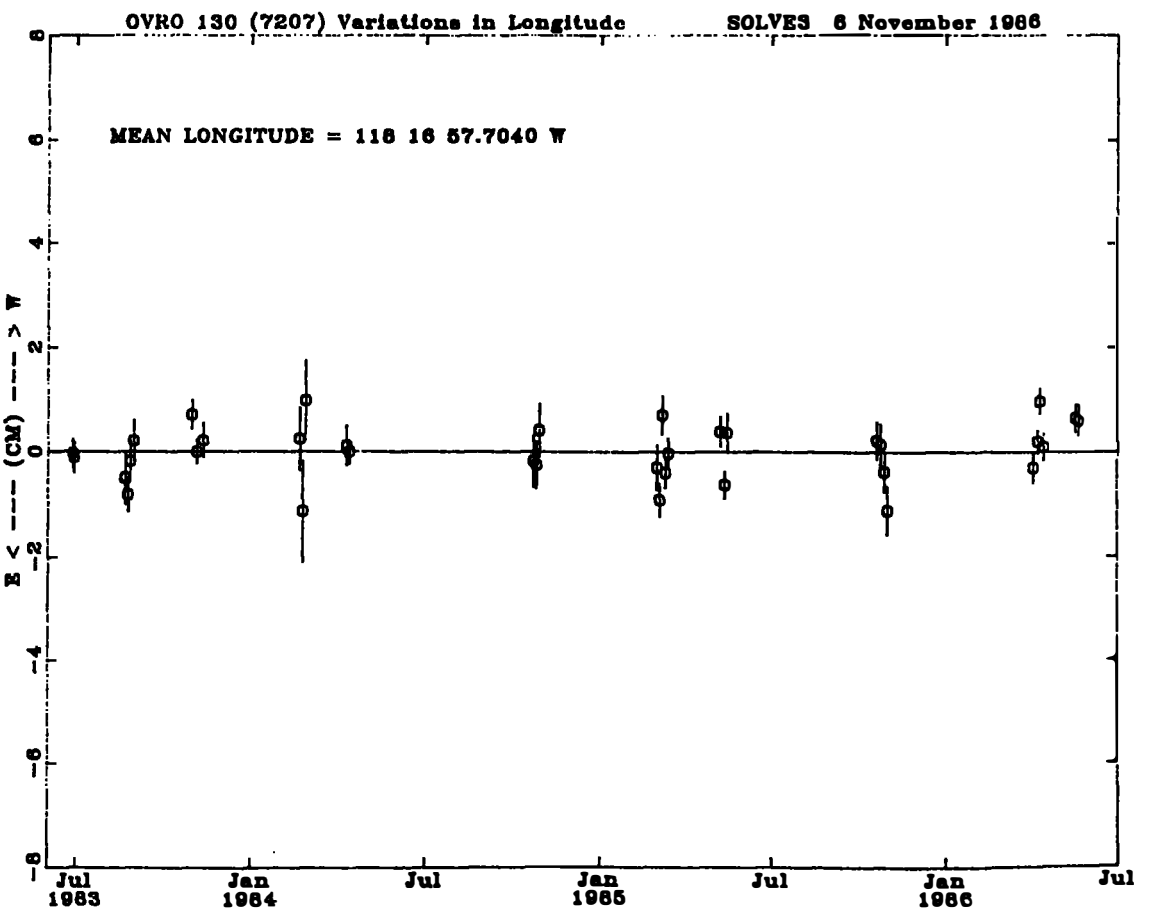
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR OVRO 130 (7207)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 6271452	-2409598.8924	.01030	-4478350.4826	.02015	3838603.8139	.01619
83 629 212	-2409598.9127	.01028	-4478350.5220	.01987	3838603.8541	.01630
83 8221519	-2409598.8936	.01373	-4478350.4951	.03055	3838603.8232	.01975
83 82518 5	-2409598.9098	.00869	-4478350.5315	.01781	3838603.8686	.01329
83 82723 9	-2409598.8483	.01182	-4478350.4042	.02450	3838603.7680	.01916
83 83119 7	-2409598.9161	.01185	-4478350.5217	.02514	3838603.8476	.01825
8310311825	-2409598.8821	.00852	-4478350.4481	.01720	3838603.8049	.01352
8311 51754	-2409598.9021	.00831	-4478350.5005	.01607	3838603.8299	.01303
8311121632	-2409598.8867	.00975	-4478350.4672	.02054	3838603.8141	.01511
84 2201649	-2409598.9477	.01733	-4478350.5797	.03255	3838603.9100	.02741
84 2231559	-2409598.9695	.02926	-4478350.6494	.05699	3838603.9768	.05366
84 2261646	-2409598.8680	.02132	-4478350.4160	.03993	3838603.7975	.04074
84 4 919 5	-2409598.8896	.00847	-4478350.4743	.01773	3838603.8211	.01354
84 41216 1	-2409598.9164	.00918	-4478350.5267	.01731	3838603.8574	.01432
8410251538	-2409598.8932	.01393	-4478350.4890	.02737	3838603.7950	.02211
8410281525	-2409598.8817	.01399	-4478350.4538	.02667	3838603.8058	.02221
85 3 11610	-2409598.9231	.01647	-4478350.5454	.02950	3838603.8552	.02502
85 3 41553	-2409598.9544	.01082	-4478350.6169	.01987	3838603.9181	.01677
85 3 71552	-2409598.8895	.01246	-4478350.4617	.02172	3838603.8017	.01769
85 3101952	-2409598.8757	.00946	-4478350.4596	.01616	3838603.8067	.01312
85 3131615	-2409598.8894	.00857	-4478350.4773	.01572	3838603.7988	.01289
85 5 71635	-2409598.9081	.00891	-4478350.5032	.01592	3838603.8261	.01378
85 5121545	-2409598.8604	.00943	-4478350.4356	.01672	3838603.7792	.01390
85 51419 7	-2409598.8876	.01133	-4478350.4659	.02122	3838603.8176	.01669
85101916 9	-2409598.8711	.01078	-4478350.4379	.01966	3838603.7995	.01630
8510231610	-2409598.8900	.01051	-4478350.4749	.01887	3838603.7990	.01635
8510271613	-2409598.9742	.01191	-4478350.6420	.02266	3838603.9407	.01923
8510301558	-2409598.8664	.01302	-4478350.4574	.02440	3838603.7850	.02165
86 4 218 0	-2409598.8963	.00766	-4478350.4955	.01369	3838603.8153	.01108
86 4 71735	-2409598.9063	.00751	-4478350.5040	.01289	3838603.8426	.01075
86 4101553	-2409598.8866	.00677	-4478350.4513	.01184	3838603.8103	.01068
86 4131921	-2409598.9038	.00684	-4478350.5014	.01298	3838603.8213	.01057
86 5181559	-2409598.9117	.00797	-4478350.5048	.01362	3838603.8323	.01133
86 5211559	-2409598.9118	.00802	-4478350.5057	.01408	3838603.8242	.01191

ADJUSTED GEODETIC POSITIONS (NAD83) FOR OVRO 130 (7207)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 6271452	37 13 53.26830	.00367	118 16 57.70403	.00269	1201.2080	.02793
83 629 212	37 13 53.26847	.00411	118 16 57.70400	.00299	1201.2676	.02770
83 8221519	37 13 53.26831	.00741	118 16 57.70384	.00501	1201.2228	.03853
83 82518 5	37 13 53.26870	.00422	118 16 57.70371	.00329	1201.2819	.02367
83 82723 9	37 13 53.26888	.00492	118 16 57.70397	.00411	1201.1086	.03323
83 83119 7	37 13 53.26827	.00553	118 16 57.70413	.00393	1201.2647	.03313
8310311825	37 13 53.26876	.00403	118 16 57.70433	.00277	1201.1745	.02337
8311 51754	37 13 53.26831	.00327	118 16 57.70404	.00231	1201.2338	.02232
8311121632	37 13 53.26862	.00529	118 16 57.70413	.00335	1201.1951	.02706
84 2201649	37 13 53.26859	.00751	118 16 57.70414	.00601	1201.3551	.04574
84 2231559	37 13 53.26891	.01382	118 16 57.70358	.00972	1201.4526	.08331
84 2261646	37 13 53.26925	.01603	118 16 57.70444	.00770	1201.1422	.05934
84 4 919 5	37 13 53.26866	.00525	118 16 57.70409	.00386	1201.2055	.02338
84 41216 1	37 13 53.26844	.00296	118 16 57.70404	.00232	1201.2743	.02440
84102216 1	37 13 53.26869	.00742	118 16 57.70397	.00491	1201.1065	.04137
8410251538	37 13 53.26769	.00666	118 16 57.70394	.00449	1201.2014	.03764
8410281525	37 13 53.26869	.00671	118 16 57.70421	.00509	1201.1789	.03712
85 3 11610	37 13 53.26800	.00621	118 16 57.70392	.00428	1201.2885	.04209
85 3 41553	37 13 53.26809	.00447	118 16 57.70367	.00317	1201.3886	.02812
85 3 71552	37 13 53.26837	.00588	118 16 57.70433	.00374	1201.1848	.03040
85 3101952	37 13 53.26867	.00462	118 16 57.70388	.00293	1201.1812	.02260
85 3131615	37 13 53.26803	.00420	118 16 57.70403	.00289	1201.1940	.02186
85 5 71635	37 13 53.26811	.00537	118 16 57.70420	.00287	1201.2357	.02244
85 5121545	37 13 53.26851	.00335	118 16 57.70379	.00261	1201.1420	.02373
85 51419 7	37 13 53.26873	.00460	118 16 57.70419	.00371	1201.1967	.02919
85101916 9	37 13 53.26890	.00520	118 16 57.70413	.00353	1201.1599	.02749
8510231610	37 13 53.26807	.00524	118 16 57.70410	.00395	1201.1926	.02677
8510271613	37 13 53.26806	.00510	118 16 57.70389	.00379	1201.4274	.03194
8510301558	37 13 53.26823	.00668	118 16 57.70359	.00456	1201.1631	.03480
86 4 218 0	37 13 53.26808	.00485	118 16 57.70392	.00292	1201.2194	.01870
86 4 71735	37 13 53.26854	.00414	118 16 57.70412	.00230	1201.2456	.01809
86 4101553	37 13 53.26880	.00442	118 16 57.70443	.00246	1201.1816	.01688
86 4131921	37 13 53.26806	.00368	118 16 57.70408	.00259	1201.2300	.01784
86 5181559	37 13 53.26821	.00376	118 16 57.70430	.00269	1201.2419	.01921
86 5211559	37 13 53.26799	.00388	118 16 57.70428	.00299	1201.2377	.01986


OVRO 130 (7207) Variations in Latitude
SOLVE3 6 November 1986
MEAN LATITUDE = 37 13 53.2664 N
S < --- (CM) --- > N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul


OVRO 130 (7207) Variations in Longitude
SOLVE3 6 November 1986
MEAN LONGITUDE = 118 16 57.7040 W
E < --- (CM) --- > W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

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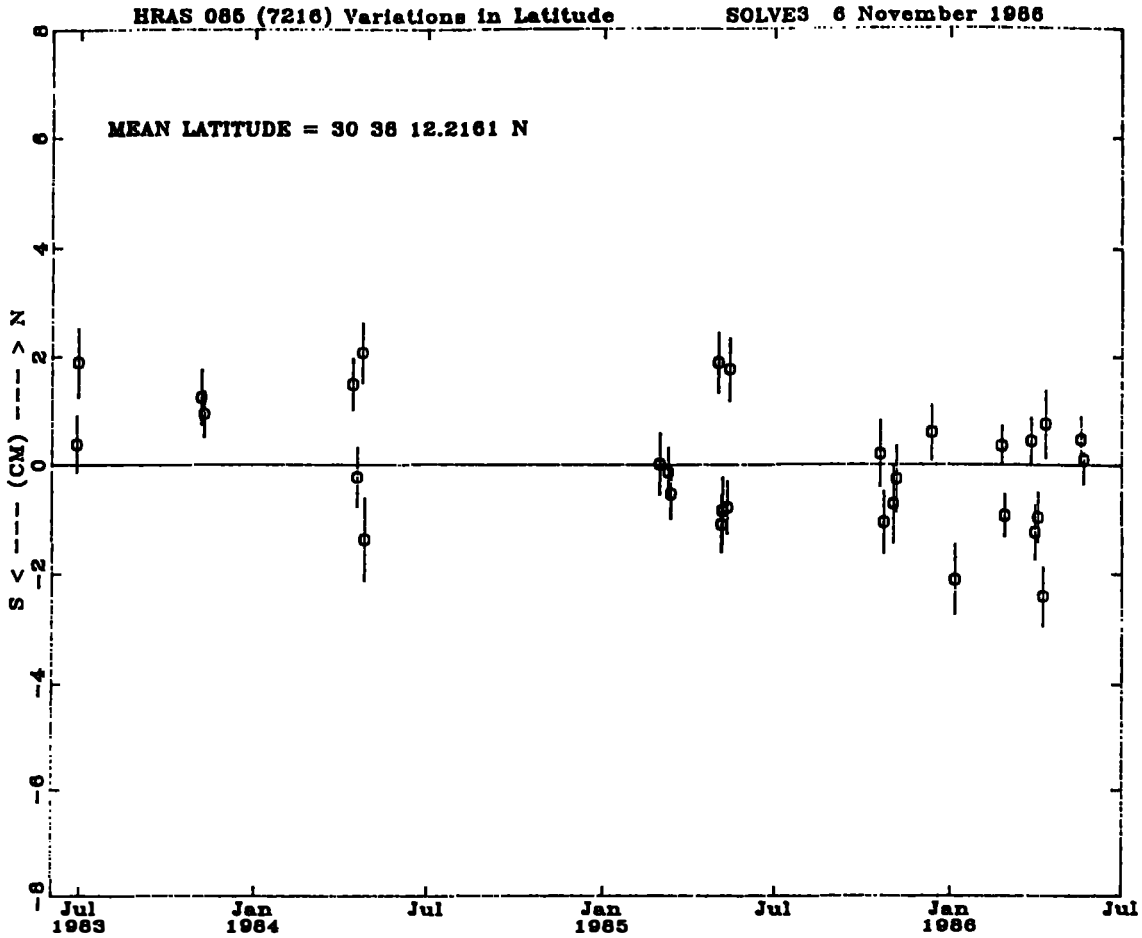
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR HRAS 085 (7216)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 6271451	-1324209.1286	.01110	-5332024.0507	.02290	3232118.9595	.01766
83 629 212	-1324209.1467	.01284	-5332024.0404	.02694	3232118.9736	.02050
8311 51754	-1324209.1639	.00973	-5332024.0632	.01958	3232118.9816	.01526
8311 81536	-1324209.1415	.00831	-5332024.0629	.01790	3232118.9748	.01341
84 41216 1	-1324209.1273	.01095	-5332024.0157	.02202	3232118.9521	.01714
84 41715 6	-1324209.1431	.01063	-5332024.0033	.03110	3232118.9270	.02024
84 4221652	-1324209.1513	.01077	-5332024.0841	.03576	3232119.0015	.02241
84 4251511	-1324209.1759	.01591	-5332024.1735	.04270	3232119.0163	.02889
85 3 11610	-1324209.1975	.01144	-5332024.1622	.02411	3232119.0291	.01839
85 3101952	-1324209.1690	.00875	-5332024.0979	.01913	3232118.9862	.01422
85 3131615	-1324209.1428	.00796	-5332024.0425	.01679	3232118.9460	.01271
85 5 216 1	-1324209.1411	.00932	-5332024.0462	.02257	3232118.9760	.01553
85 5 61545	-1324209.1797	.00890	-5332024.1341	.02086	3232118.9975	.01454
85 5 71635	-1324209.1752	.00895	-5332024.0846	.01800	3232118.9713	.01459
85 5121545	-1324209.1539	.00940	-5332024.0659	.02012	3232118.9580	.01489
85 51419 7	-1324209.1124	.01215	-5332023.9628	.02465	3232118.9229	.01817
85101916 9	-1324209.1409	.01054	-5332024.0556	.02408	3232118.9618	.01749
8510231610	-1324209.1510	.00965	-5332024.0818	.02149	3232118.9637	.01644
8511 21550	-1324209.1516	.01417	-5332024.1081	.02913	3232118.9827	.02192
8511 52018	-1324209.1239	.01112	-5332023.9818	.02447	3232118.9116	.01752
8512121519	-1324209.1251	.00947	-5332024.0050	.02939	3232118.9350	.01919
86 1 51618	-1324209.1683	.01343	-5332024.0781	.02612	3232118.9518	.02030
86 22320 0	-1324209.1338	.00551	-5332024.0374	.01286	3232118.9522	.00937
86 2262034	-1324209.1433	.00662	-5332024.0366	.01623	3232118.9380	.01127
86 3261624	-1324209.1259	.00542	-5332024.0189	.01275	3232118.9413	.00938
86 3301939	-1324209.1708	.00651	-5332024.1382	.01435	3232118.9968	.01053
86 4 218 0	-1324209.1369	.00639	-5332024.0421	.01258	3232118.9399	.00977
86 4 71735	-1324209.1257	.00777	-5332024.0514	.01580	3232118.9269	.01170
86 4101552	-1324209.0964	.00889	-5332023.9779	.02154	3232118.9172	.01492
86 5181559	-1324209.1202	.00693	-5332024.0091	.01649	3232118.9354	.01175
86 5211559	-1324209.1265	.00734	-5332024.0160	.01853	3232118.9359	.01288

ADJUSTED GEODETIC POSITIONS (NAD83) FOR HRAS 085 (7216)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 6271451	30 38 12.21618	.00526	103 56 50.07004	.00634	1595.7785	.03041
83 629 212	30 38 12.21667	.00636	103 56 50.07080	.00759	1595.7808	.03548
8311 51754	30 38 12.21646	.00508	103 56 50.07122	.00582	1595.8075	.02599
8311 81536	30 38 12.21636	.00429	103 56 50.07040	.00522	1595.7992	.02332
84 41216 1	30 38 12.21654	.00486	103 56 50.07031	.00632	1595.7452	.02943
84 41715 6	30 38 12.21598	.00551	103 56 50.07100	.00649	1595.7253	.03833
84 4221652	30 38 12.21673	.00561	103 56 50.07057	.00673	1595.8325	.04343
84 4251511	30 38 12.21561	.00757	103 56 50.07065	.00913	1595.9198	.05358
85 3 11610	30 38 12.21606	.00569	103 56 50.07155	.00681	1595.9213	.03176
85 3101952	30 38 12.21601	.00461	103 56 50.07109	.00494	1595.8399	.02493
85 3131615	30 38 12.21588	.00458	103 56 50.07064	.00473	1595.7677	.02193
85 5 216 1	30 38 12.21667	.00555	103 56 50.07054	.00580	1595.7857	.02832
85 5 61545	30 38 12.21570	.00515	103 56 50.07115	.00551	1595.8780	.02634
85 5 71635	30 38 12.21578	.00619	103 56 50.07143	.00537	1595.8224	.02390
85 5121545	30 38 12.21580	.00479	103 56 50.07083	.00574	1595.7957	.02615
85 51419 7	30 38 12.21663	.00585	103 56 50.07025	.00780	1595.6831	.03206
85101916 9	30 38 12.21612	.00612	103 56 50.07045	.00622	1595.7862	.03090
8510231610	30 38 12.21571	.00568	103 56 50.07058	.00565	1595.8112	.02810
8511 21550	30 38 12.21582	.00718	103 56 50.07036	.00860	1595.8430	.03817
8511 52018	30 38 12.21597	.00615	103 56 50.07050	.00684	1595.6956	.03132
8512121519	30 38 12.21625	.00517	103 56 50.07033	.00522	1595.7271	.03624
86 1 51618	30 38 12.21537	.00651	103 56 50.07124	.00820	1595.8057	.03478
86 22320 0	30 38 12.21617	.00356	103 56 50.07035	.00350	1595.7647	.01638
86 2262034	30 38 12.21575	.00395	103 56 50.07071	.00406	1595.7588	.02043
86 3261624	30 38 12.21620	.00419	103 56 50.07023	.00355	1595.7421	.01610
86 3301939	30 38 12.21565	.00504	103 56 50.07079	.00430	1595.8793	.01810
86 4 218 0	30 38 12.21574	.00468	103 56 50.07042	.00429	1595.7630	.01627
86 4 71735	30 38 12.21527	.00537	103 56 50.06993	.00486	1595.7619	.02025
86 4101552	30 38 12.21630	.00619	103 56 50.06953	.00559	1595.6895	.02688
86 5181559	30 38 12.21621	.00431	103 56 50.07011	.00441	1595.7297	.02087
86 5211559	30 38 12.21609	.00459	103 56 50.07028	.00473	1595.7370	.02323


HRAS 085 (7216) Variations in Latitude
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Jul 1983
Jan 1984
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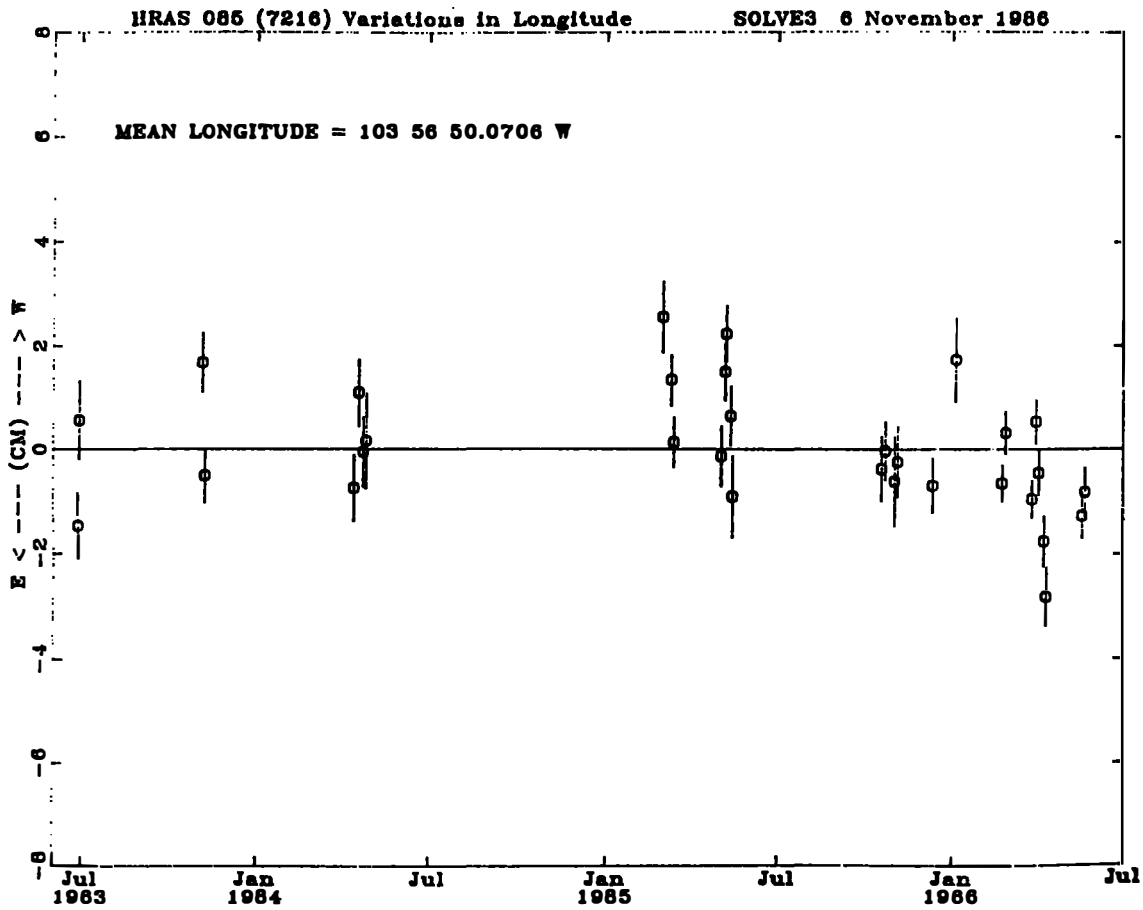
Jan 1985
Jul
Jan 1986
Jul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Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

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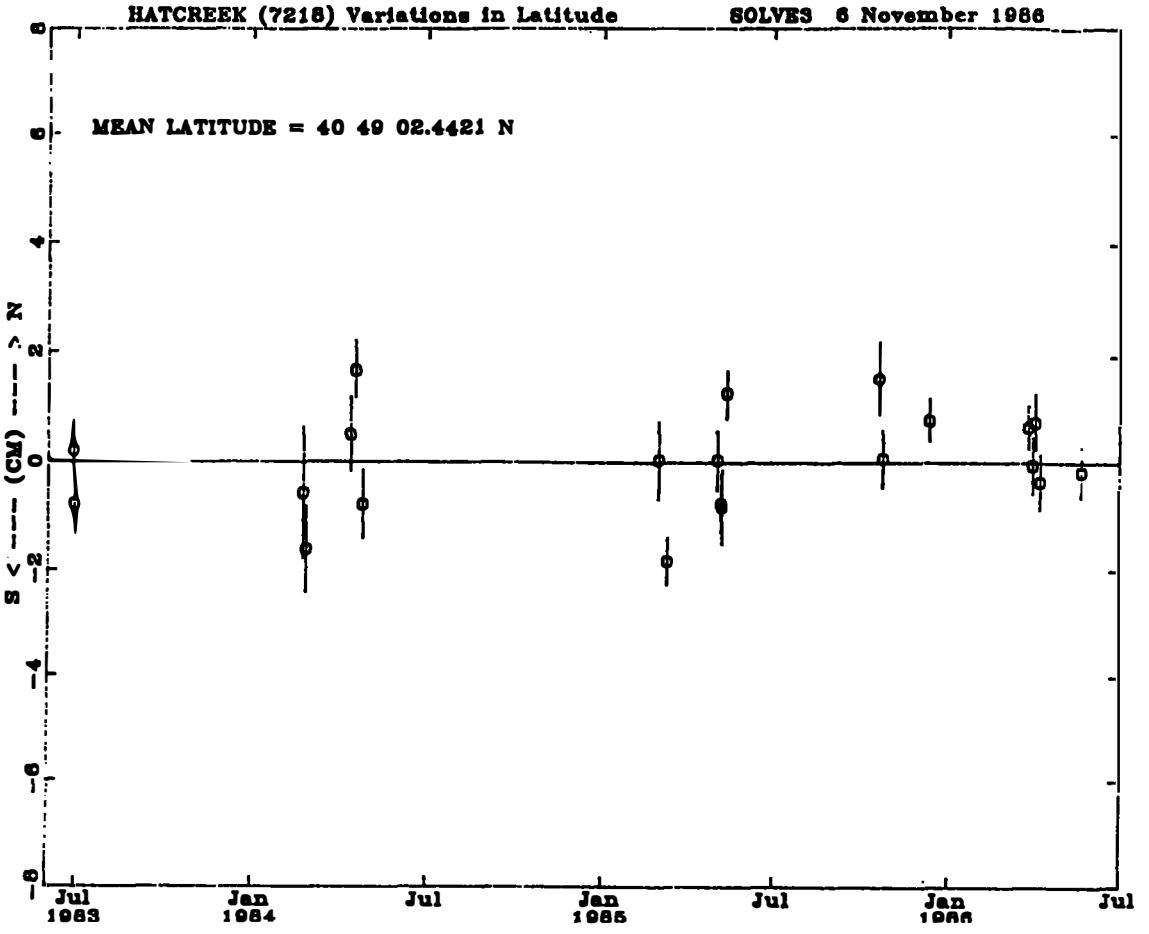
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR HATCREEK (7218)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 6271451	-2523968.0590	.01214	-4123507.2682	.02230	4147753.1872	.01865
83 629 212	-2523968.0926	.01156	-4123507.3332	.02173	4147753.2374	.01814
84 2231559	-2523968.0387	.01946	-4123507.2661	.03920	4147753.1663	.03173
84 2261646	-2523968.0524	.01106	-4123507.3065	.02412	4147753.1885	.01767
84 41216 1	-2523968.0274	.01573	-4123507.1977	.02837	4147753.1251	.02486
84 41715 6	-2523968.0019	.00897	-4123507.2072	.01769	4147753.1364	.01368
84 4251511	-2523968.0334	.01035	-4123507.2571	.02027	4147753.1545	.01555
85 3 11610	-2523968.0899	.01811	-4123507.3581	.03057	4147753.2653	.03106
85 3101952	-2523968.0794	.00777	-4123507.3242	.01418	4147753.2108	.01175
85 5 216 1	-2523968.0620	.00874	-4123507.2710	.01557	4147753.1885	.01263
85 5 61545	-2523968.0677	.00874	-4123507.3077	.01519	4147753.2077	.01258
85 5 71635	-2523968.0765	.01347	-4123507.3310	.02190	4147753.2278	.02091
85 5121545	-2523968.0505	.00972	-4123507.3058	.01703	4147753.2255	.01478
85101916 9	-2523968.0929	.01192	-4123507.3396	.02075	4147753.2732	.01802
8510231610	-2523968.0692	.00910	-4123507.3074	.01668	4147753.2191	.01441
8512121519	-2523968.0671	.00647	-4123507.2994	.01276	4147753.2216	.01077
86 3261624	-2523968.0686	.00607	-4123507.2753	.01023	4147753.2031	.00921
86 3301940	-2523968.0648	.00739	-4123507.3040	.01390	4147753.2131	.01213
86 4 218 0	-2523968.0742	.00748	-4123507.3122	.01240	4147753.2340	.01101
86 4 71735	-2523968.0371	.00772	-4123507.2331	.01288	4147753.1443	.01130
86 5211559	-2523968.0687	.00738	-4123507.2819	.01242	4147753.1969	.01083

ADJUSTED GEODETIC POSITIONS (NAD83) FOR HATCREEK (7218)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 6271451	40 49 2.44212	.00557	121 28 13.76296	.00385	1009.5213	.03132
83 629 212	40 49 2.44180	.00545	121 28 13.76273	.00390	1009.6093	.03037
84 2231559	40 49 2.44187	.01212	121 28 13.76227	.00890	1009.4982	.05289
84 2261646	40 49 2.44153	.00800	121 28 13.76187	.00563	1009.5443	.03091
84 41216 1	40 49 2.44222	.00676	121 28 13.76338	.00517	1009.4227	.04069
84 41715 6	40 49 2.44261	.00532	121 28 13.76224	.00401	1009.4261	.02358
84 4251511	40 49 2.44180	.00629	121 28 13.76227	.00464	1009.4826	.02692
85 3 11610	40 49 2.44207	.00716	121 28 13.76208	.00529	1009.6425	.04717
85 3101952	40 49 2.44146	.00452	121 28 13.76245	.00280	1009.5808	.01962
85 5 216 1	40 49 2.44207	.00557	121 28 13.76300	.00354	1009.5251	.02124
85 5 61545	40 49 2.44181	.00529	121 28 13.76239	.00343	1009.5636	.02102
85 5 71635	40 49 2.44179	.00689	121 28 13.76220	.00417	1009.5953	.03274
85 5121545	40 49 2.44247	.00463	121 28 13.76181	.00335	1009.5672	.02431
85101916 9	40 49 2.44256	.00659	121 28 13.76260	.00443	1009.6369	.02942
8510231610	40 49 2.44208	.00533	121 28 13.76246	.00367	1009.5714	.02337
8512121519	40 49 2.44231	.00390	121 28 13.76256	.00270	1009.5671	.01759
86 3261624	40 49 2.44227	.00402	121 28 13.76315	.00248	1009.5401	.01456
86 3301940	40 49 2.44204	.00519	121 28 13.76237	.00344	1009.5636	.01924
86 4 218 0	40 49 2.44230	.00512	121 28 13.76253	.00305	1009.5863	.01752
86 4 71735	40 49 2.44194	.00514	121 28 13.76294	.00277	1009.4619	.01820
86 5211559	40 49 2.44200	.00465	121 28 13.76301	.00325	1009.5403	.01747


HATCREEK (7218) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 40 49 02.4421 N
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Jul 1983
Jan 1984
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Jan 1985
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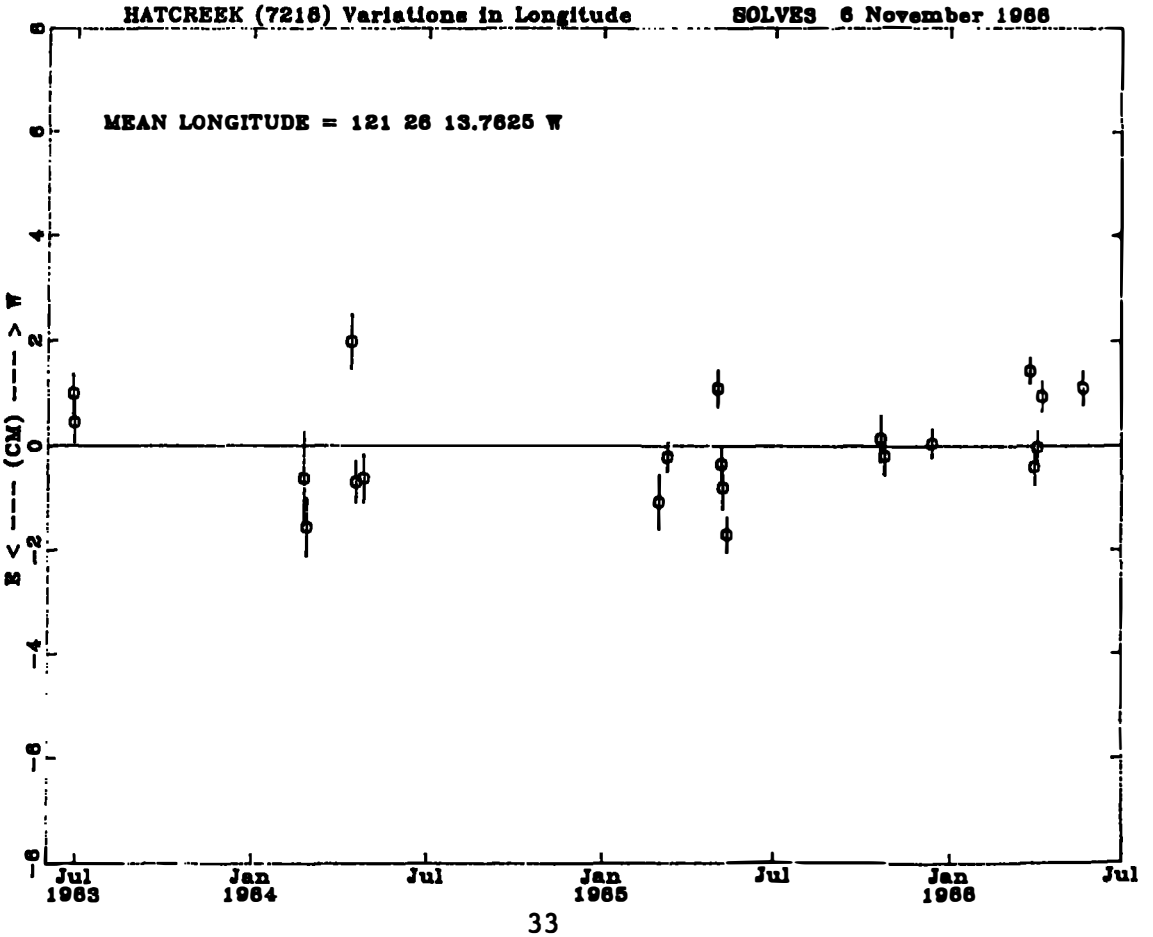
Jan 1986
Jul


HATCREEK (7218) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 121 26 13.7625 W
E <--- (CM) ---> W
8
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Jul 1983
Jan 1984
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Jan 1986
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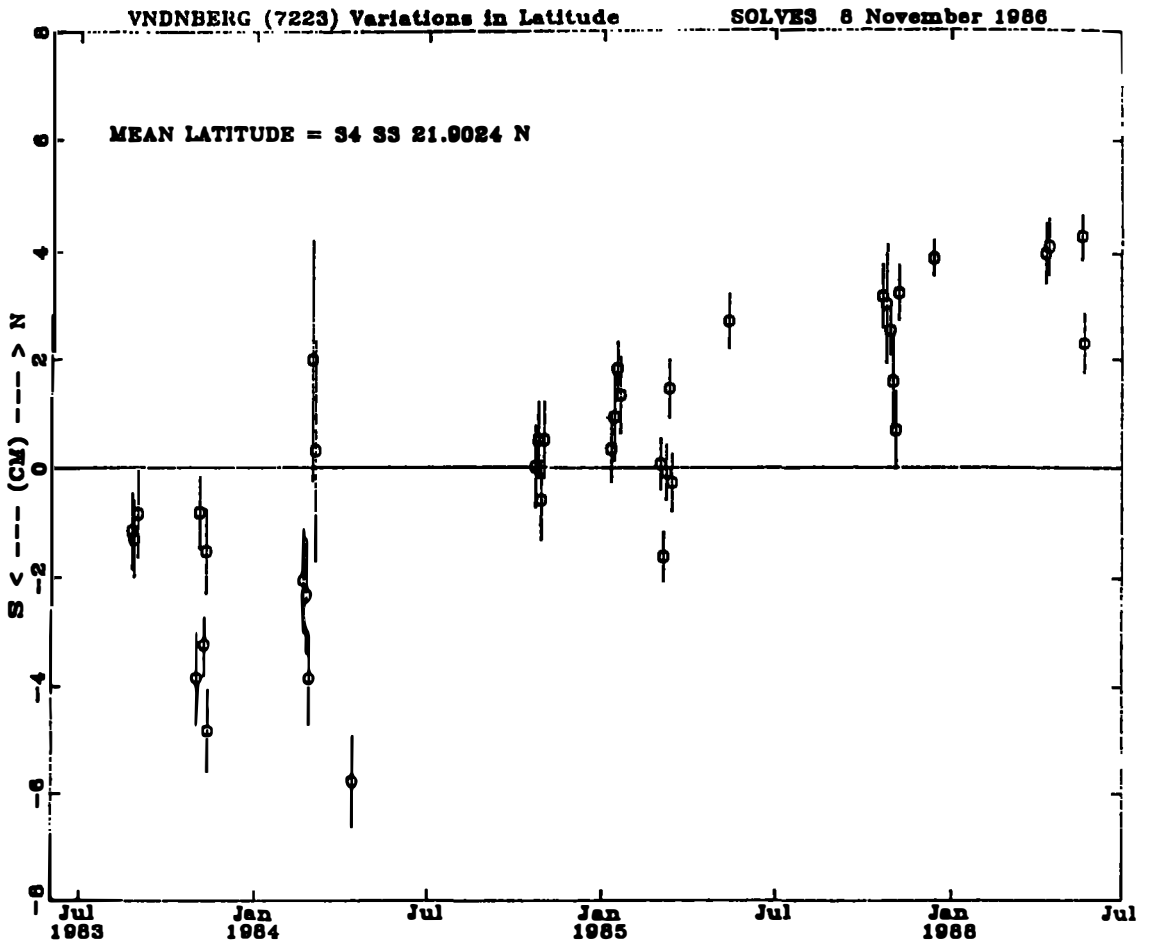
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR VNDNBERG (7223)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 8221519	-2678092.4229	.05249	-4525451.2234	.09077	3597410.0355	.06420
83 82518 5	-2678092.4162	.01980	-4525451.1412	.03338	3597410.1001	.02457
83 82723 9	-2678092.3272	.02177	-4525450.9901	.03739	3597409.9772	.02970
83 83119 7	-2678092.3536	.02157	-4525451.1031	.04002	3597410.0589	.03069
8310311825	-2678092.4129	.03273	-4525451.1123	.05445	3597410.0489	.04500
8311 320 6	-2678092.3396	.02067	-4525451.0239	.03557	3597410.0076	.02813
8311 81536	-2678092.3483	.01838	-4525451.0197	.03072	3597409.9788	.02457
8311101754	-2678092.3355	.02283	-4525451.0079	.03935	3597409.9882	.03168
8311121632	-2678092.2970	.03685	-4525450.9307	.06538	3597409.8887	.04891
84 2201649	-2678092.4573	.02525	-4525451.2371	.04240	3597410.1604	.03300
84 2231559	-2678092.3571	.03283	-4525451.0937	.05581	3597410.0369	.04528
84 2261646	-2678092.4437	.02172	-4525451.1552	.03580	3597410.0853	.02965
84 2291616	-2678092.4527	.05329	-4525451.1498	.07801	3597410.1559	.06103
84 3 32051	-2678092.4532	.04365	-4525451.0839	.08186	3597410.0968	.06388
84 41216 1	-2678092.3674	.02303	-4525451.0992	.04205	3597410.0019	.03192
84102216 1	-2678092.3778	.01915	-4525451.0538	.03458	3597410.0487	.02772
8410251538	-2678092.4068	.01612	-4525451.1261	.03013	3597410.1078	.02384
8410281526	-2678092.4053	.01602	-4525451.0877	.02932	3597410.0711	.02333
8410311559	-2678092.4441	.01829	-4525451.1695	.03238	3597410.1468	.02563
85 1 91542	-2678092.4151	.01497	-4525451.1007	.02494	3597410.0938	.01917
85 1121616	-2678092.3630	.01557	-4525450.9858	.02691	3597410.0147	.02067
85 11516 4	-2678092.3754	.01227	-4525451.0225	.02120	3597410.0516	.01702
85 1181636	-2678092.4392	.01514	-4525451.1511	.02768	3597410.1441	.02178
85 3 11610	-2678092.4695	.01188	-4525451.1912	.02084	3597410.1632	.01718
85 3 41553	-2678092.4420	.01142	-4525451.1483	.01993	3597410.1075	.01595
85 3 71553	-2678092.3882	.01239	-4525451.0432	.02187	3597410.0452	.01752
85 3101952	-2678092.3994	.01293	-4525451.0626	.02065	3597410.0793	.01647
85 3131615	-2678092.4079	.01202	-4525451.0539	.02010	3597410.0562	.01597
85 5121545	-2678092.4045	.01246	-4525451.0629	.02021	3597410.0966	.01647
85101916 9	-2678092.4021	.01243	-4525451.0307	.02098	3597410.0821	.01624
8510231610	-2678092.3865	.01985	-4525450.9975	.03131	3597410.0553	.02633
8510271613	-2678092.4674	.01175	-4525451.1626	.02146	3597410.1754	.01688
8510301558	-2678092.4869	.01903	-4525451.1882	.03285	3597410.1857	.02596
8511 21550	-2678092.4415	.02013	-4525451.0525	.03693	3597410.0785	.02799
8511 52018	-2678092.4379	.01260	-4525451.0835	.02214	3597410.1268	.01719
8512121519	-2678092.4085	.00756	-4525451.0320	.01342	3597410.0940	.01052
86 4101553	-2678092.3523	.00948	-4525450.9003	.01594	3597409.9970	.01293
86 4131921	-2678092.3739	.01216	-4525450.9494	.01999	3597410.0352	.01569
86 5181559	-2678092.4303	.00845	-4525451.0375	.01405	3597410.1097	.01120
86 5211559	-2678092.4420	.01003	-4525451.0633	.01659	3597410.1048	.01337

ADJUSTED GEODETIC POSITIONS (NAD83) FOR VNDNBERG (7223)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 8221519	34 33 21.89896	.02626	120 36 59.01802	.01966	-13.0441	.12068
83 82518 5	34 33 21.90205	.00693	120 36 59.01944	.00682	-13.0685	.04571
83 82723 9	34 33 21.90200	.00695	120 36 59.01945	.00759	-13.2826	.05237
83 83119 7	34 33 21.90215	.00799	120 36 59.01808	.00948	-13.1452	.05440
8310311825	34 33 21.90118	.00875	120 36 59.01990	.00809	-13.1194	.07829
8311 320 6	34 33 21.90216	.00661	120 36 59.01919	.00882	-13.2363	.04948
8311 81536	34 33 21.90138	.00569	120 36 59.01957	.00611	-13.2520	.04337
8311101754	34 33 21.90193	.00770	120 36 59.01938	.01030	-13.2604	.05490
8311121632	34 33 21.90086	.00772	120 36 59.01962	.00895	-13.3876	.09036
84 2201649	34 33 21.90176	.00931	120 36 59.01891	.01148	-12.9491	.05855
84 2231559	34 33 21.90167	.01041	120 36 59.01839	.01080	-13.1629	.07896
84 2261646	34 33 21.90118	.00861	120 36 59.02009	.00727	-13.0555	.05096
84 2291616	34 33 21.90307	.02226	120 36 59.02050	.02192	-13.0154	.11005
84 3 32051	34 33 21.90253	.02019	120 36 59.02183	.01838	-13.0955	.11128
84 41216 1	34 33 21.90055	.00852	120 36 59.01863	.00824	-13.1745	.05737
84102216 1	34 33 21.90243	.00749	120 36 59.01989	.00820	-13.1757	.04784
8410251538	34 33 21.90259	.00691	120 36 59.01942	.00796	-13.0788	.04104
8410281526	34 33 21.90223	.00727	120 36 59.02014	.00763	-13.1275	.04010
8410311559	34 33 21.90259	.00693	120 36 59.01981	.00794	-13.0103	.04472
85 1 91542	34 33 21.90254	.00605	120 36 59.02021	.00741	-13.1013	.03412
85 1121616	34 33 21.90273	.00800	120 36 59.02075	.00806	-13.2495	.03624
85 11516 4	34 33 21.90302	.00510	120 36 59.02043	.00531	-13.1973	.02943
85 1181636	34 33 21.90286	.00708	120 36 59.02002	.00745	-13.0269	.03761
85 3 11610	34 33 21.90245	.00467	120 36 59.02024	.00373	-12.9749	.02941
85 3 41553	34 33 21.90190	.00453	120 36 59.02017	.00481	-13.0485	.02767
85 3 71553	34 33 21.90240	.00504	120 36 59.02045	.00557	-13.1809	.03025
85 3101952	34 33 21.90290	.00546	120 36 59.02044	.00394	-13.1431	.02914
85 3131615	34 33 21.90234	.00537	120 36 59.02090	.00397	-13.1588	.02805
85 5121545	34 33 21.90331	.00514	120 36 59.02061	.00419	-13.1309	.02863
85101916 9	34 33 21.90346	.00593	120 36 59.02117	.00431	-13.1630	.02888
8510231610	34 33 21.90341	.01108	120 36 59.02130	.00673	-13.2082	.04440
8510271613	34 33 21.90325	.00459	120 36 59.02074	.00531	-12.9892	.02941
8510301558	34 33 21.90294	.00858	120 36 59.02088	.00790	-12.9570	.04531
8511 21550	34 33 21.90265	.00706	120 36 59.02206	.00685	-13.1330	.05044
8511 52018	34 33 21.90348	.00517	120 36 59.02132	.00420	-13.0852	.03054
8512121519	34 33 21.90369	.00323	120 36 59.02136	.00272	-13.1526	.01850
86 4101553	34 33 21.90372	.00562	120 36 59.02209	.00383	-13.3245	.02197
86 4131921	34 33 21.90376	.00530	120 36 59.02184	.00474	-13.2590	.02776
86 5181559	34 33 21.90382	.00425	120 36 59.02198	.00327	-13.1307	.01947
86 5211559	34 33 21.90317	.00559	120 36 59.02187	.00425	-13.1102	.02290


VNDNBERG (7223) Variations in Latitude
SOLVE3 6 November 1986
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Jul 1983
Jan 1984
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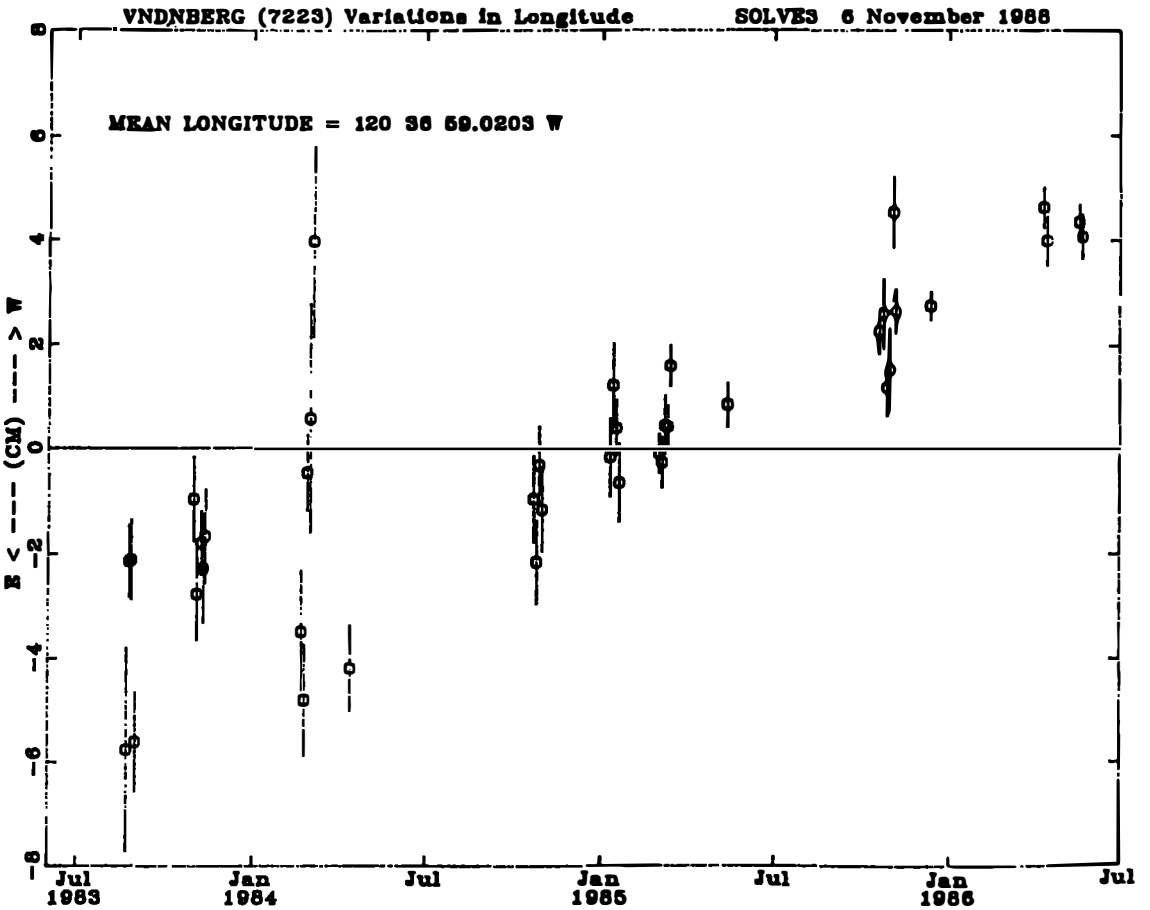
Jan 1985
Jul
Jan 1986
Jul


VNDNBERG (7223) Variations in Longitude
SOLVE3 6 November 1986
MEAN LONGITUDE = 120 36 59.0203 W
E <---- (CM) ----> W
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4
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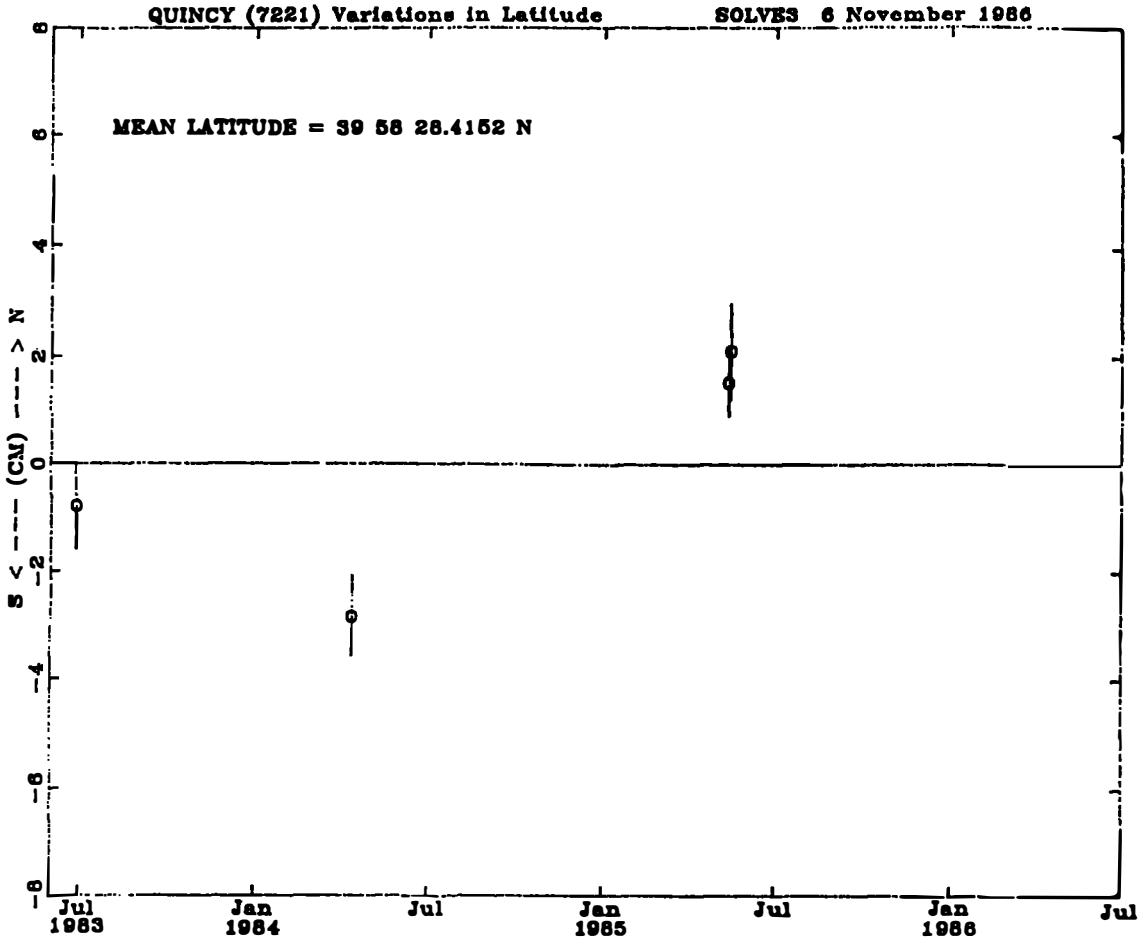
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

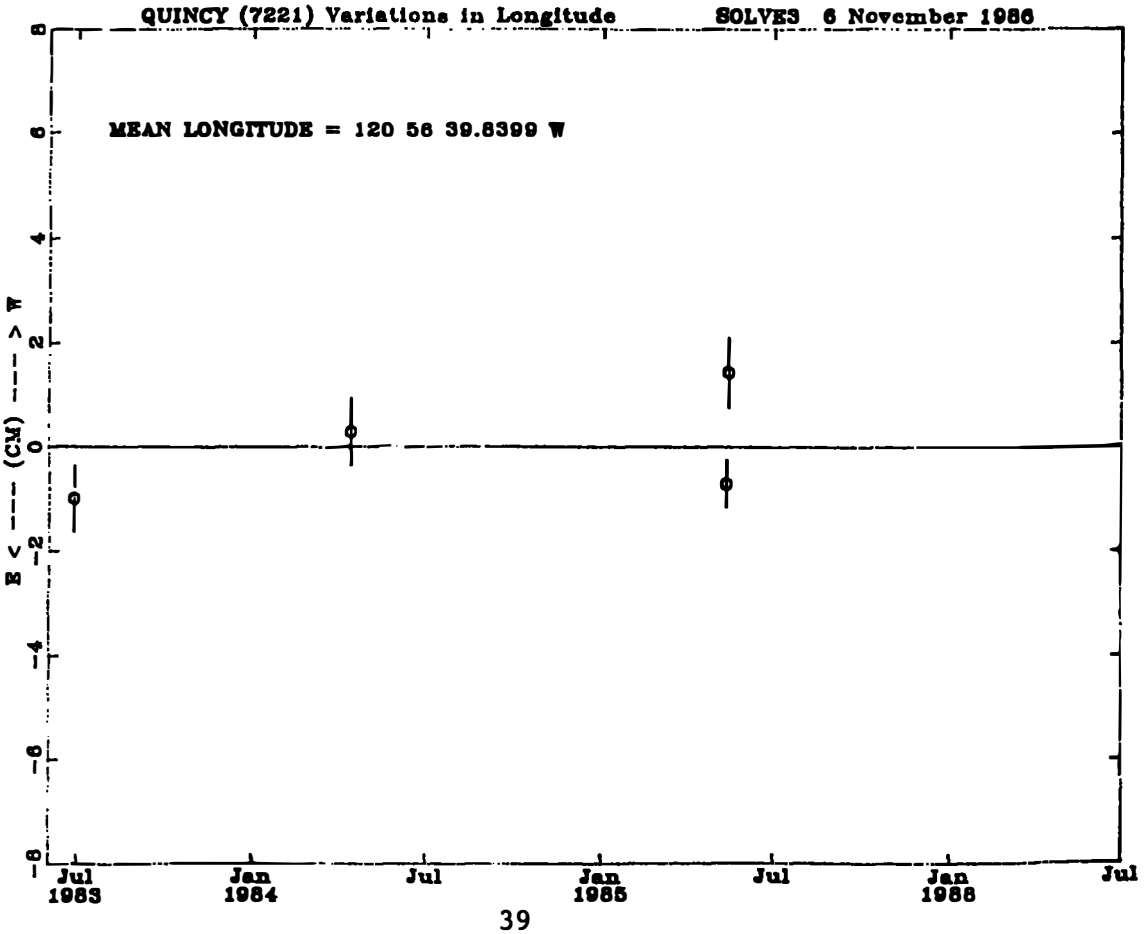
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR QUINCY (7221)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 6271451	-2517229.0596	.01743	-4198596.2550	.03161	4076531.9495	.02817
84 41216 1	-2517229.0599	.02946	-4198596.2303	.04763	4076531.9053	.04570
85 5121545	-2517229.0147	.01596	-4198596.1744	.02529	4076531.9026	.02320
85 51419 7	-2517228.9770	.02131	-4198596.0700	.03518	4076531.8189	.03158

ADJUSTED GEODETIC POSITIONS (NAD83) FOR QUINCY (7221)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 6271451	39 58 28.41496	.00807	120 56 39.83948	.00647	1106.1818	.04541
84 41216 1	39 58 28.41430	.00749	120 56 39.84002	.00643	1106.1373	.07286
85 5121545	39 58 28.41571	.00610	120 56 39.83960	.00455	1106.0810	.03774
85 51419 7	39 58 28.41590	.00889	120 56 39.84050	.00665	1105.9437	.05156


QUINCY (7221) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 39 58 28.4152 N
S < ---- (CM) ---- > N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

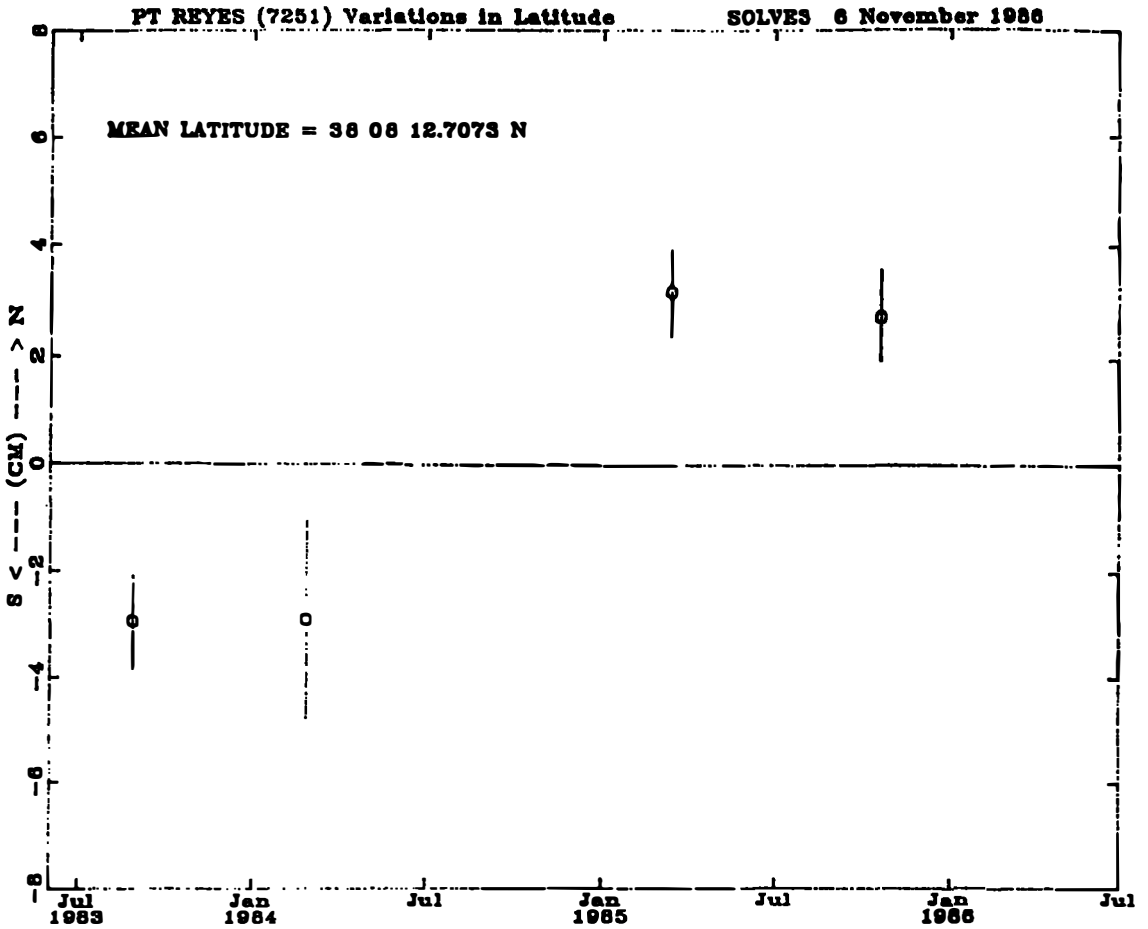

QUINCY (7221) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 120 56 39.8399 W
E < ---- (CM) ---- > W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

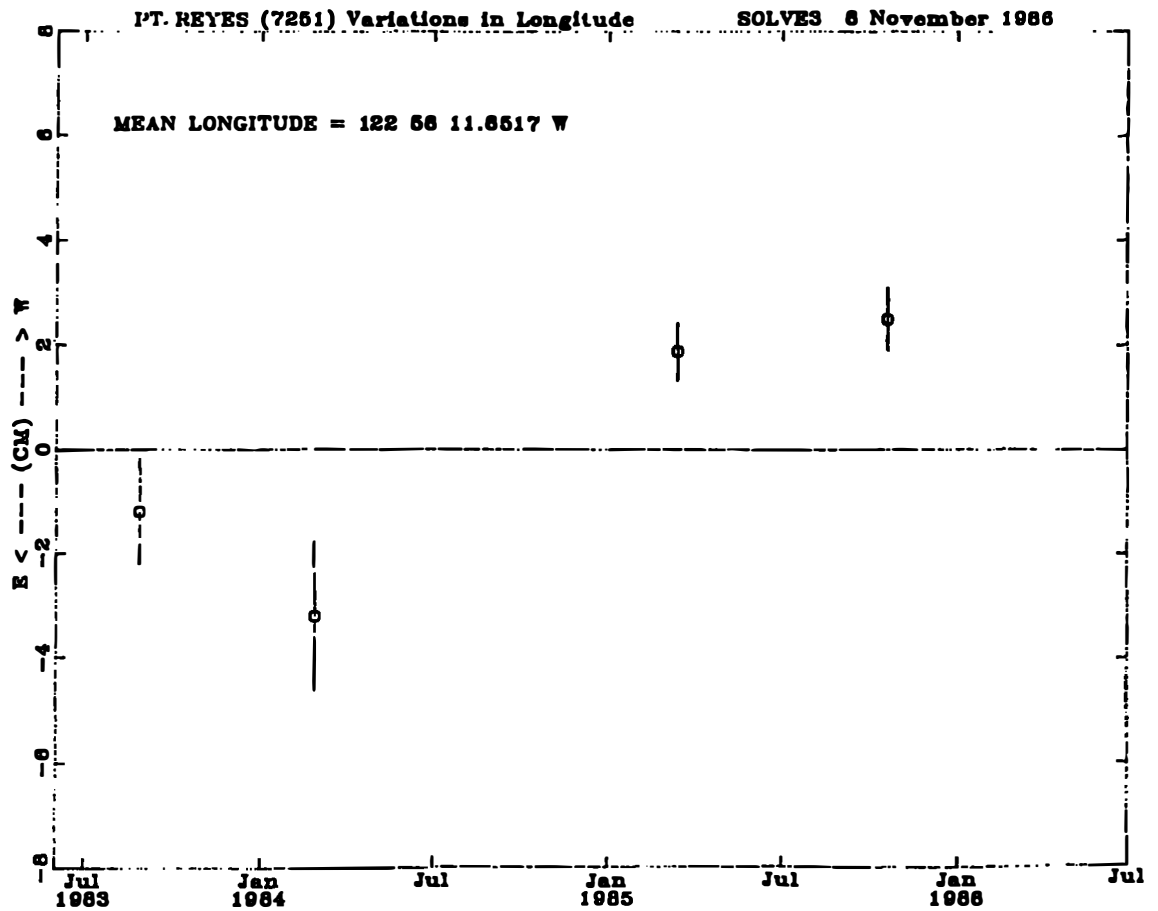
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR PT REYES (7251)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 82723 9	-2732331.1851	.02012	-4217635.8785	.03657	3914491.5307	.02984
84 2261646	-2732331.1922	.04170	-4217635.9264	.06211	3914491.5658	.05870
85 3131615	-2732331.2270	.01501	-4217635.8869	.02275	3914491.6317	.01954
85101916 9	-2732331.2591	.01852	-4217635.9251	.02880	3914491.6655	.02484

ADJUSTED GEODETIC POSITIONS (NAD83) FOR PT REYES (7251)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 82723 9	38 6 12.70635	.00875	122 56 11.65119	.01009	-2.3941	.05045
84 2261646	38 6 12.70636	.01867	122 56 11.65037	.01432	-2.3377	.09381
85 3131615	38 6 12.70833	.00773	122 56 11.65245	.00540	-2.3083	.03279
85101916 9	38 6 12.70820	.00784	122 56 11.65270	.00579	-2.2484	.04192


PT REYES (7251) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 38 08 12.7073 N
S <---- (CM) ----> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

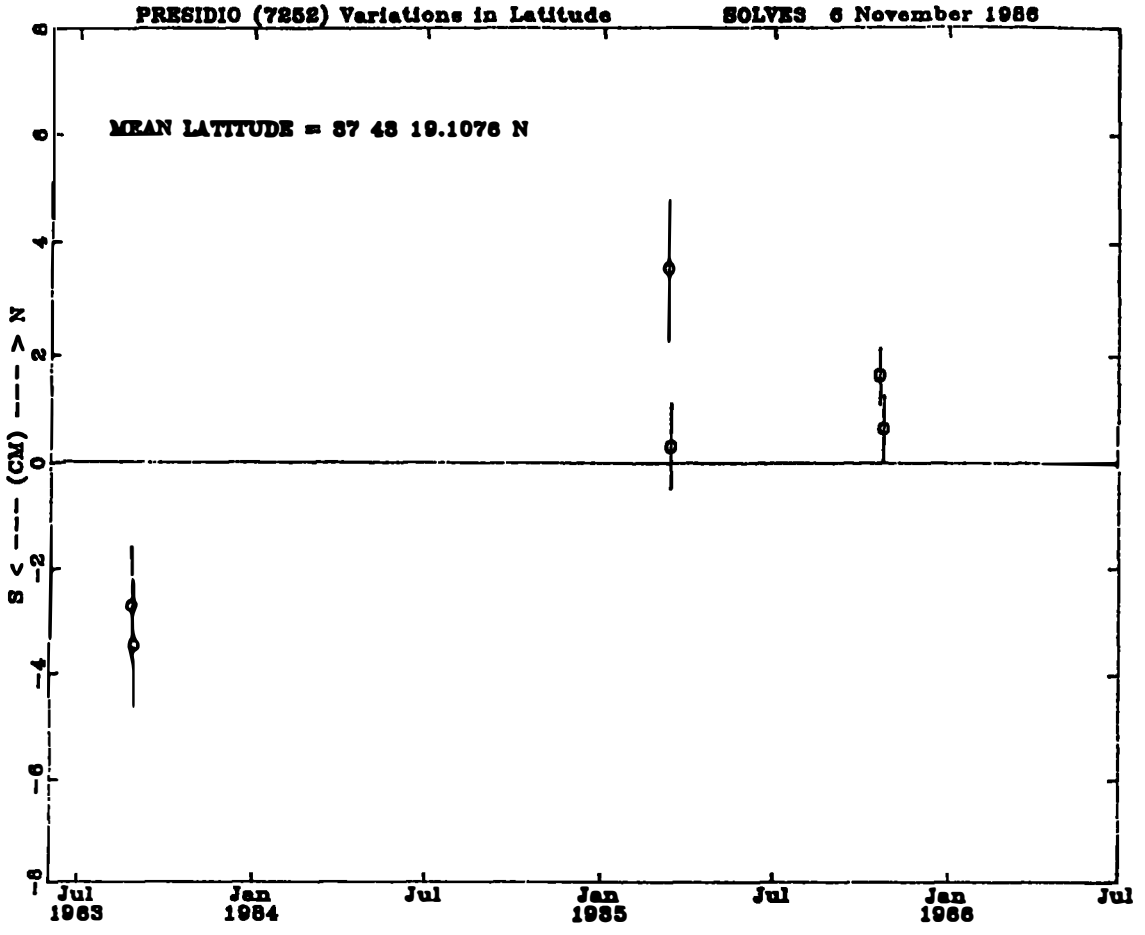

PT. REYES (7251) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 122 56 11.6517 W
E <---- (CM) ----> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

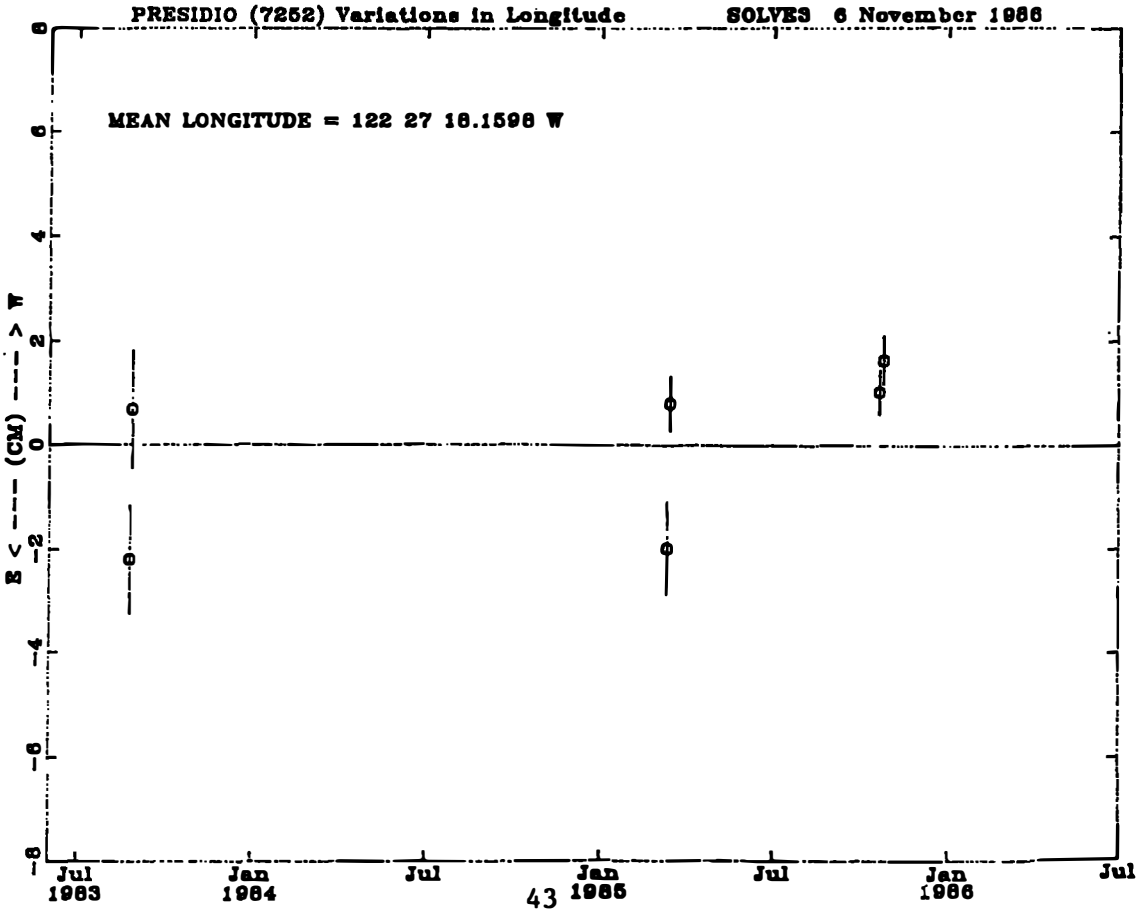
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR PRESIDIO (7252)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 82518 5	-2707702.9945	.02432	-4257610.6295	.04133	3888374.7644	.03338
83 82723 9	-2707703.0042	.02586	-4257610.5910	.04471	3888374.7339	.03859
85 3101952	-2707702.8389	.04028	-4257610.3809	.05269	3888374.6162	.04816
85 3131615	-2707702.9622	.02078	-4257610.5229	.03063	3888374.7198	.02714
85101916 9	-2707703.0008	.01111	-4257610.5795	.01878	3888374.7895	.01567
8510231610	-2707702.9789	.01295	-4257610.5337	.02176	3888374.7378	.01893

ADJUSTED GEODETIC POSITIONS (NAD83) FOR PRESIDIO (7252)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 82518 5	37 48 19.10672	.01134	122 27 18.15895	.01055	-29.1221	.05737
83 82723 9	37 48 19.10648	.01180	122 27 18.16013	.01135	-29.1623	.06351
85 3101952	37 48 19.10875	.01245	122 27 18.15904	.00889	-29.4446	.08196
85 3131615	37 48 19.10770	.00796	122 27 18.16018	.00537	-29.2341	.04569
85101916 9	37 48 19.10813	.00528	122 27 18.16027	.00425	-29.1373	.02647
8510231610	37 48 19.10781	.00605	122 27 18.16052	.00456	-29.2088	.03125


PRESIDIO (7252) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 37 48 19.1076 N
S <---- (CM) ----> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

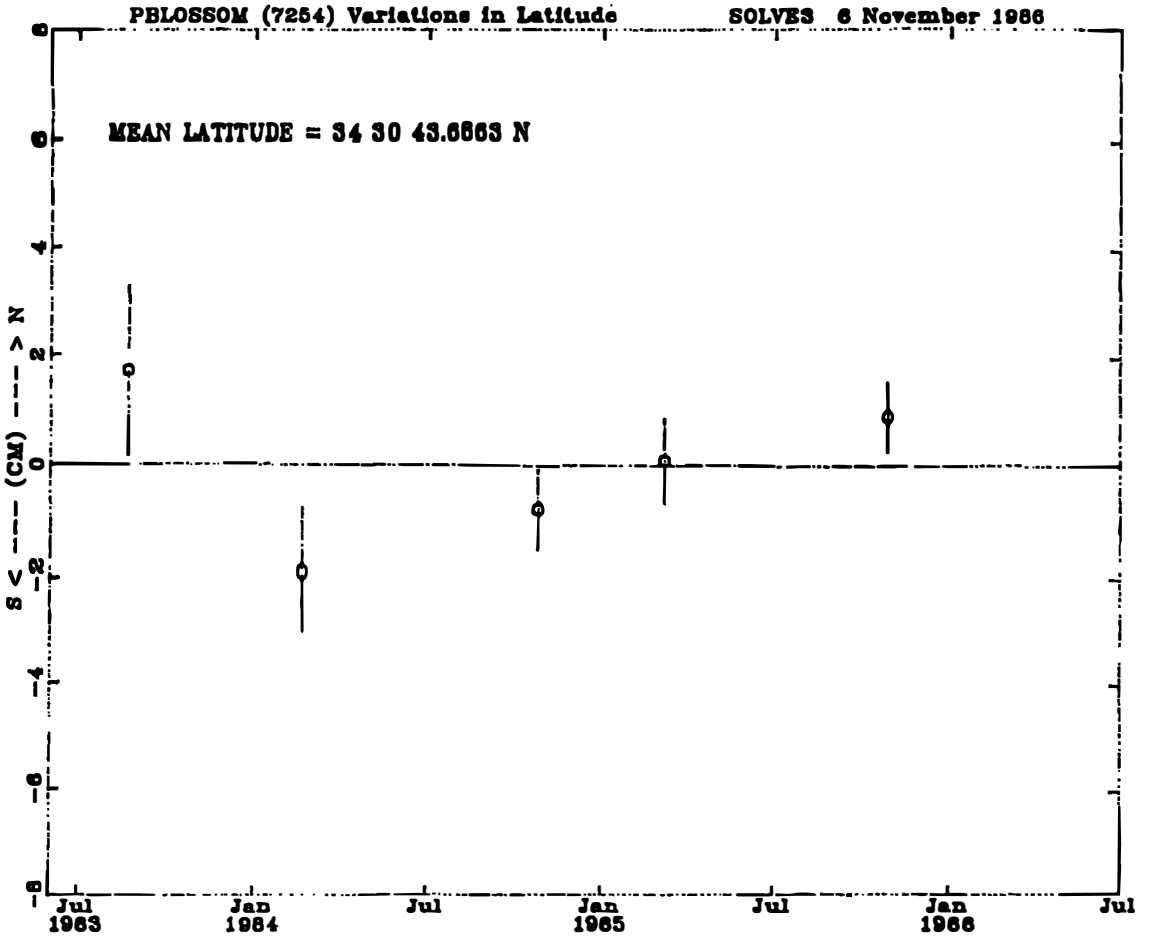

PRESIDIO (7252) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 122 27 18.1598 W
E <---- (CM) ----> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

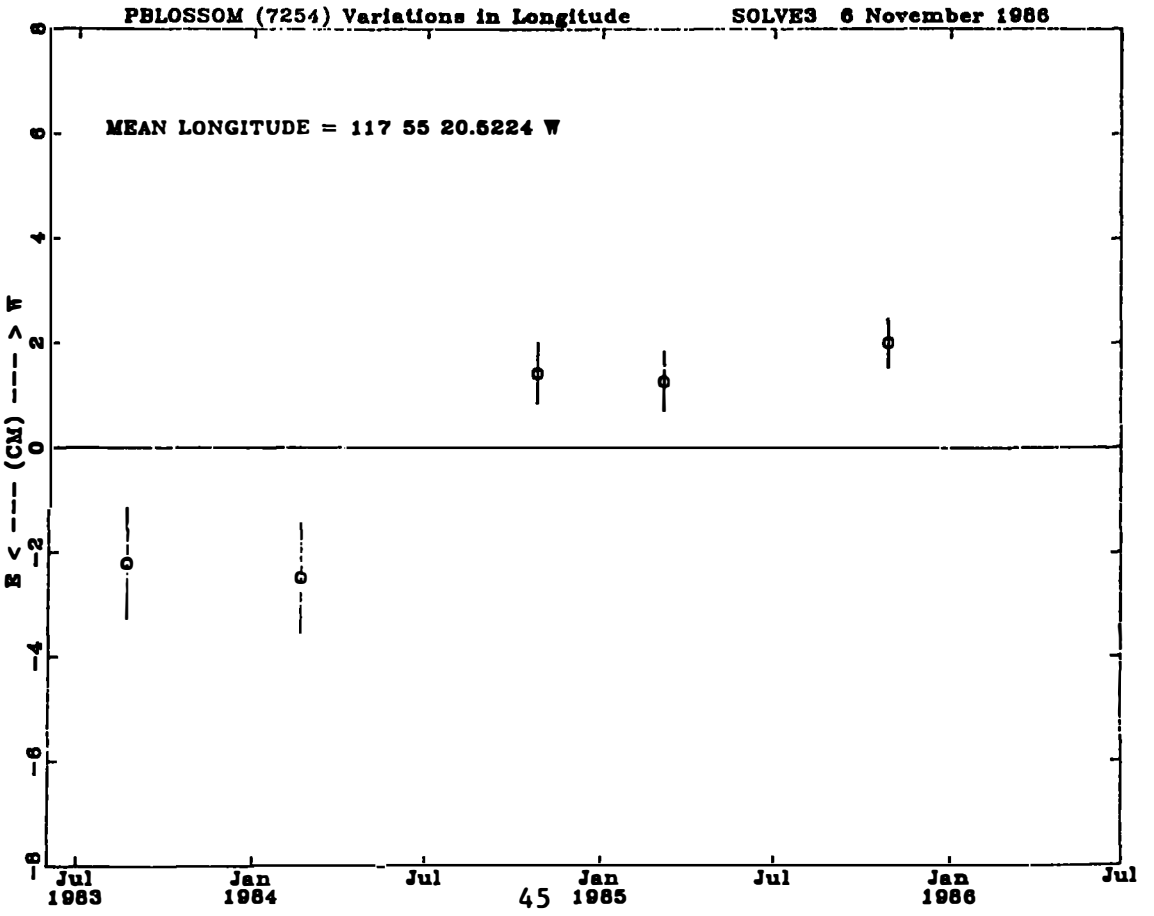
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR PBLOSSOM (7254)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 8221519	-2464069.0562	.03547	-4649426.6747	.06499	3593906.3518	.04664
84 2201649	-2464069.1077	.03199	-4649426.7778	.05973	3593906.3866	.04633
8410251538	-2464069.0985	.01903	-4649426.6763	.03587	3593906.3356	.02780
85 3 71553	-2464069.0515	.01726	-4649426.5913	.03089	3593906.2798	.02423
8510271613	-2464069.1112	.01526	-4649426.6880	.02840	3593906.3674	.02194

ADJUSTED GEODETIC POSITIONS (NAD83) FOR PBLOSSOM (7254)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 8221519	34 30 43.68685	.01552	117 55 20.52151	.01056	891.4359	.08700
84 2201649	34 30 43.68567	.01143	117 55 20.52140	.01050	891.5506	.08204
8410251538	34 30 43.68603	.00733	117 55 20.52294	.00579	891.4443	.04918
85 3 71553	34 30 43.68632	.00775	117 55 20.52288	.00562	891.3326	.04256
8510271613	34 30 43.68658	.00639	117 55 20.52317	.00464	891.4757	.03888


PBLOSSOM (7254) Variations in Latitude
SOLVE3 6 November 1986
MEAN LATITUDE = 34 30 43.6663 N
S <--- (CM) ---> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

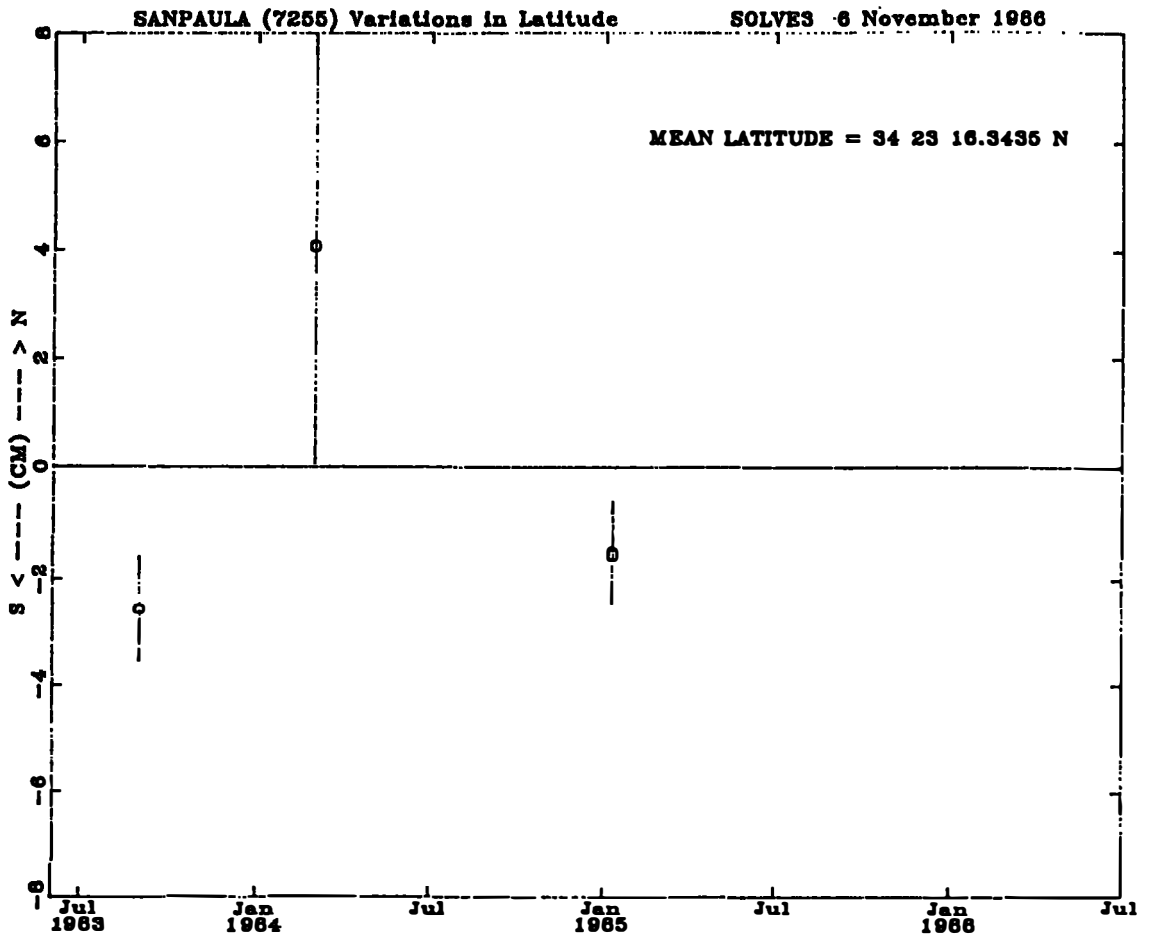

PBLOSSOM (7254) Variations in Longitude
SOLVE3 6 November 1986
MEAN LONGITUDE = 117 55 20.5224 W
E <--- (CM) ---> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

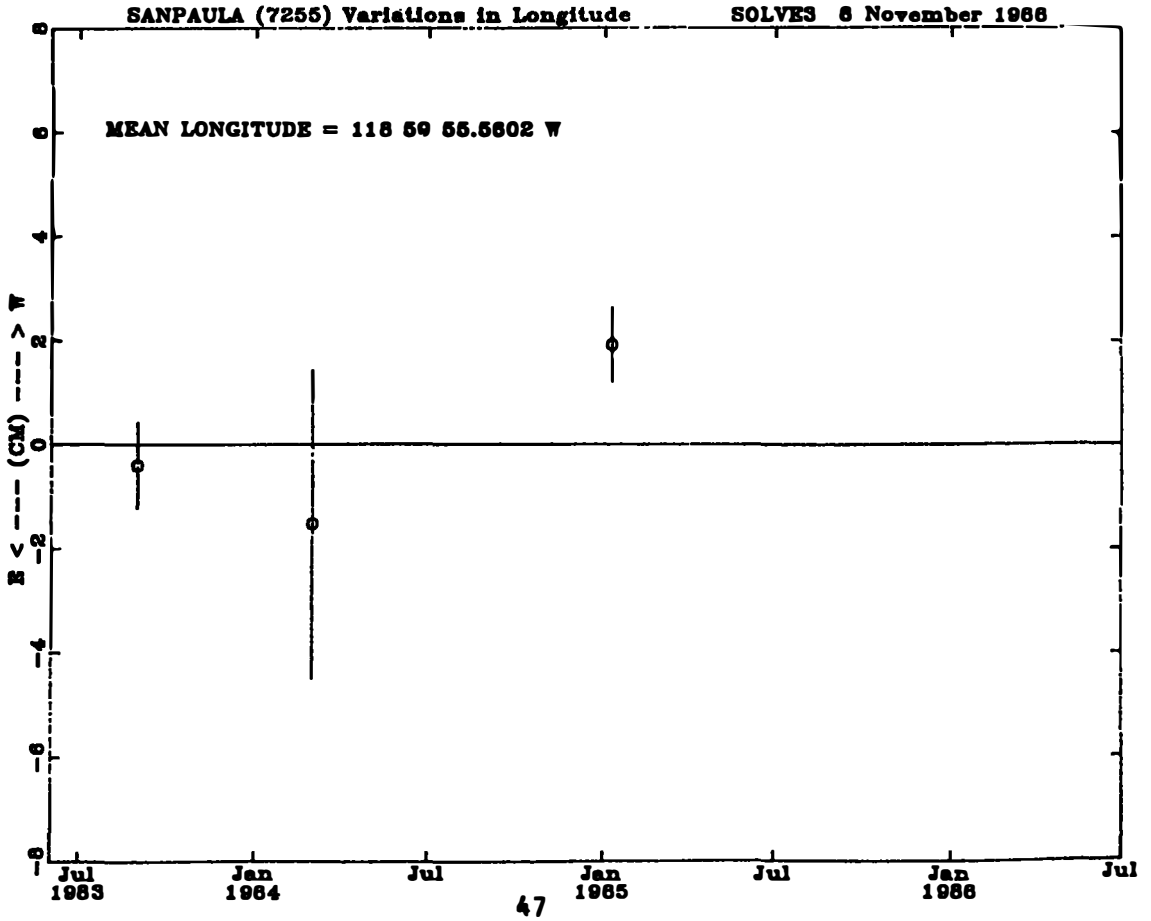
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR SANPAULA (7255)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 83119 7	-2554474.7456	.02720	-4608628.3816	.04771	3582138.8434	.03774
84 2291616	-2554474.7276	.06870	-4608628.3724	.09916	3582138.9119	.07333
85 1 91542	-2554474.7884	.01884	-4608628.4111	.03423	3582138.8875	.02564

ADJUSTED GEODETIC POSITIONS (NAD83) FOR SANPAULA (7255)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 83119 7	34 23 16.34268	.00995	118 59 55.56009	.00825	185.0589	.06654
84 2291616	34 23 16.34483	.04012	118 59 55.55965	.02959	185.0837	.13467
85 1 91542	34 23 16.34301	.00910	118 59 55.56100	.00709	185.1222	.04611


SANPAULA (7255) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 34 23 16.3435 N
S <--- (CM) ---> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

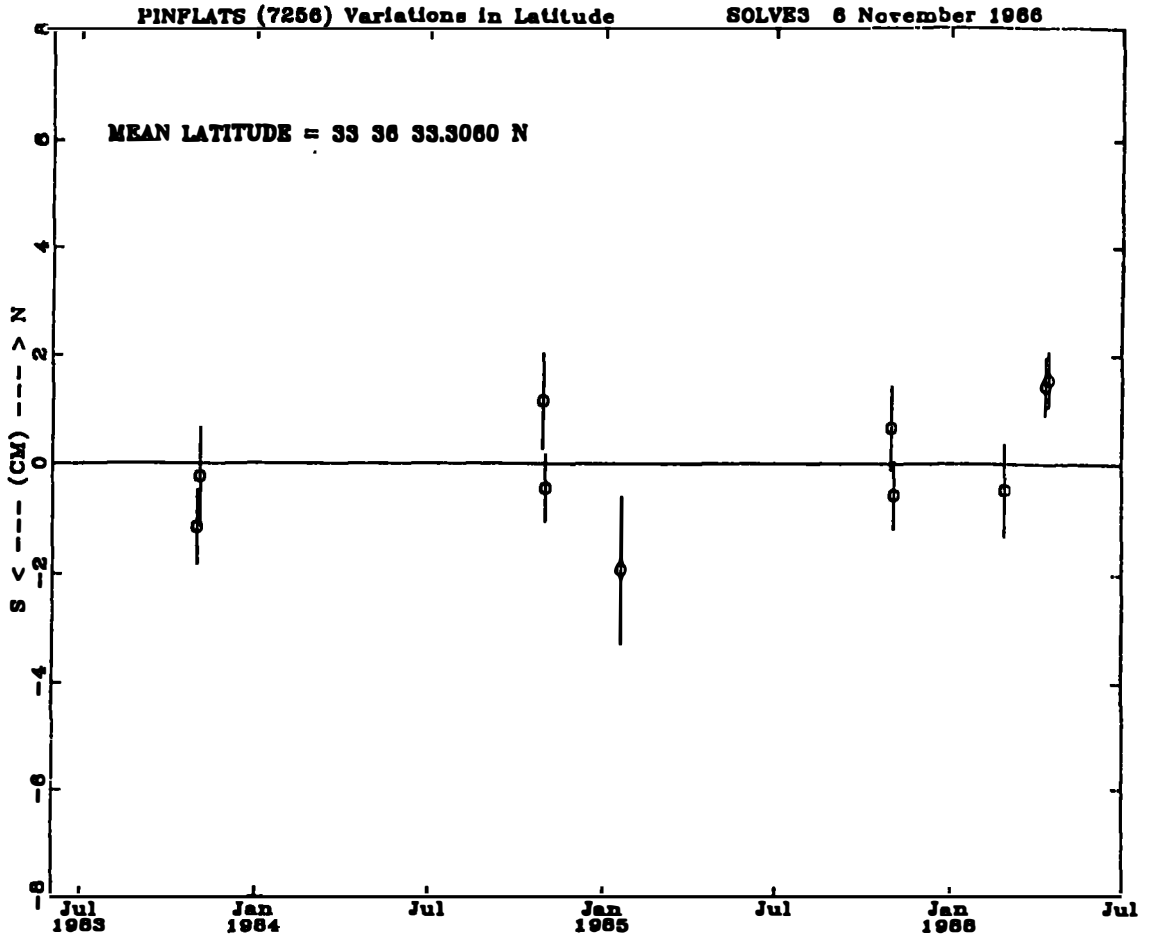

SANPAULA (7255) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 118 59 55.5602 W
E <--- (CM) ---> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

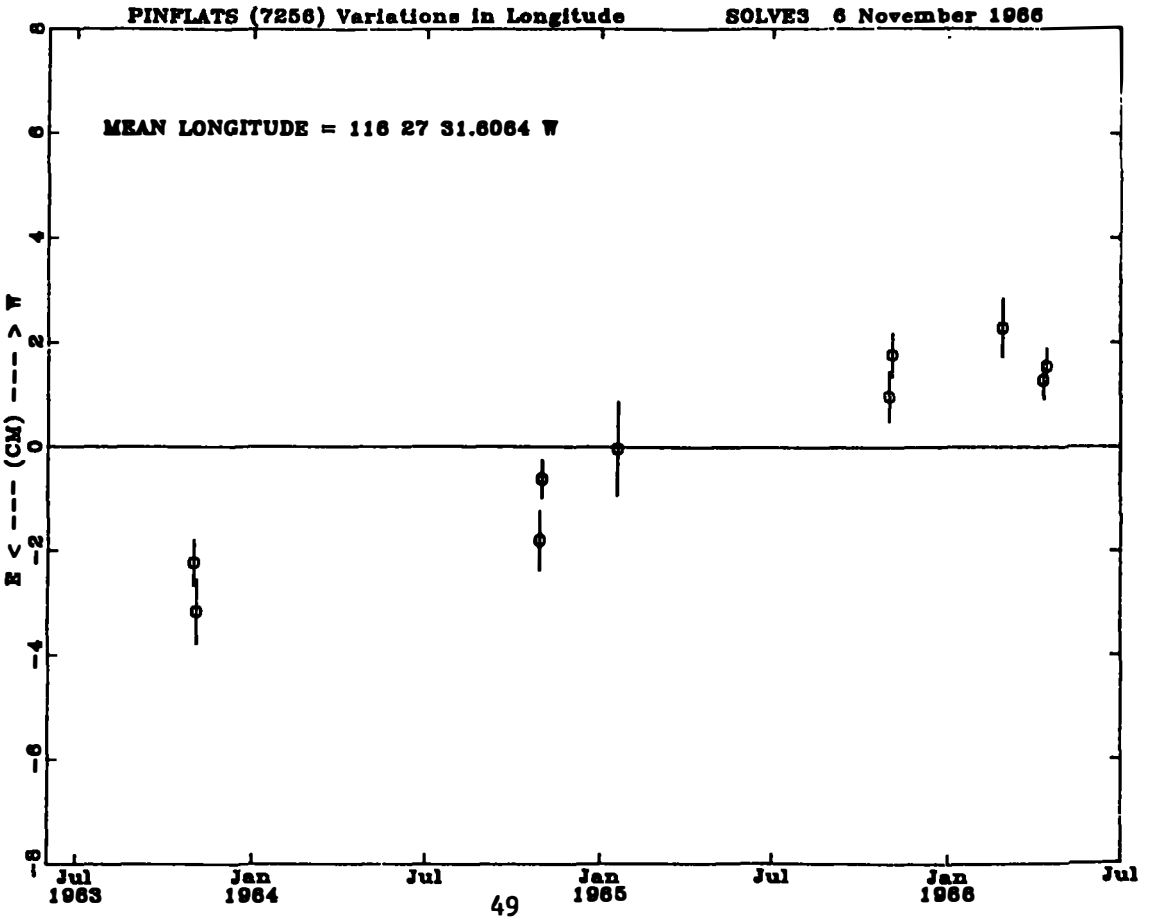
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR PINFLATS (7256)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
8310311825	-2369634.0262	.01580	-4761325.8142	.03249	3511116.6574	.02408
8311 320 6	-2369634.1184	.02290	-4761326.0205	.04515	3511116.8185	.03492
8410281525	-2369634.0101	.02018	-4761325.7727	.03957	3511116.6557	.02908
8410311559	-2369634.0905	.01440	-4761325.9080	.02929	3511116.7409	.02115
85 1181636	-2369634.0374	.02604	-4761325.7879	.05411	3511116.6361	.04096
8510301558	-2369634.0916	.01533	-4761325.8742	.02939	3511116.7344	.02249
8511 21550	-2369634.1071	.01358	-4761325.8871	.02730	3511116.7319	.02067
86 2262034	-2369634.1301	.01665	-4761325.9221	.03299	3511116.7607	.02431
86 4101553	-2369634.0582	.01137	-4761325.8002	.02132	3511116.6898	.01619
86 4131921	-2369634.0773	.00992	-4761325.8329	.01894	3511116.7165	.01415

ADJUSTED GEODETIC POSITIONS (NAD83) FOR PINFLATS (7256)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
8310311825	33 36 33.30759	.00674	116 27 31.60557	.00437	1235.7774	.04343
8311 320 6	33 36 33.30789	.00902	116 27 31.60521	.00624	1236.0546	.06159
8410281525	33 36 33.30834	.00877	116 27 31.60573	.00570	1235.7395	.05298
8410311559	33 36 33.30782	.00616	116 27 31.60619	.00377	1235.9174	.03890
85 1181636	33 36 33.30734	.01317	116 27 31.60642	.00901	1235.7502	.07220
8510301558	33 36 33.30818	.00771	116 27 31.60681	.00480	1235.8890	.03973
8511 21550	33 36 33.30778	.00614	116 27 31.60712	.00428	1235.9030	.03672
86 2262034	33 36 33.30781	.00839	116 27 31.60732	.00566	1235.9536	.04384
86 4101553	33 36 33.30843	.00539	116 27 31.60693	.00358	1235.7968	.02887
86 4131921	33 36 33.30847	.00510	116 27 31.60703	.00348	1235.8430	.02534


PINFLATS (7256) Variations in Latitude
SOLVE3 6 November 1986
MEAN LATITUDE = 33 36 33.3060 N
S <---- (CM) ----> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

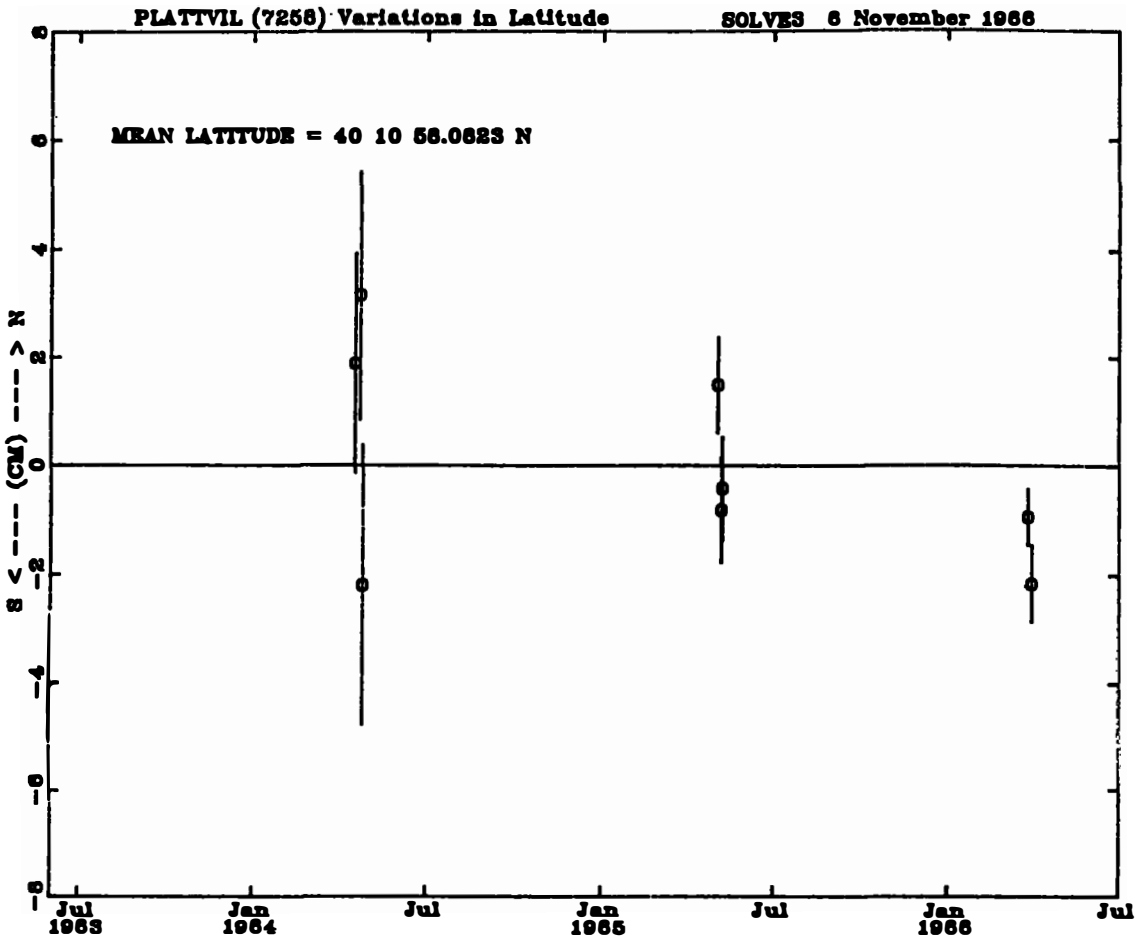

PINFLATS (7256) Variations in Longitude
SOLVE3 6 November 1986
MEAN LONGITUDE = 116 27 31.6064 W
E <---- (CM) ----> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

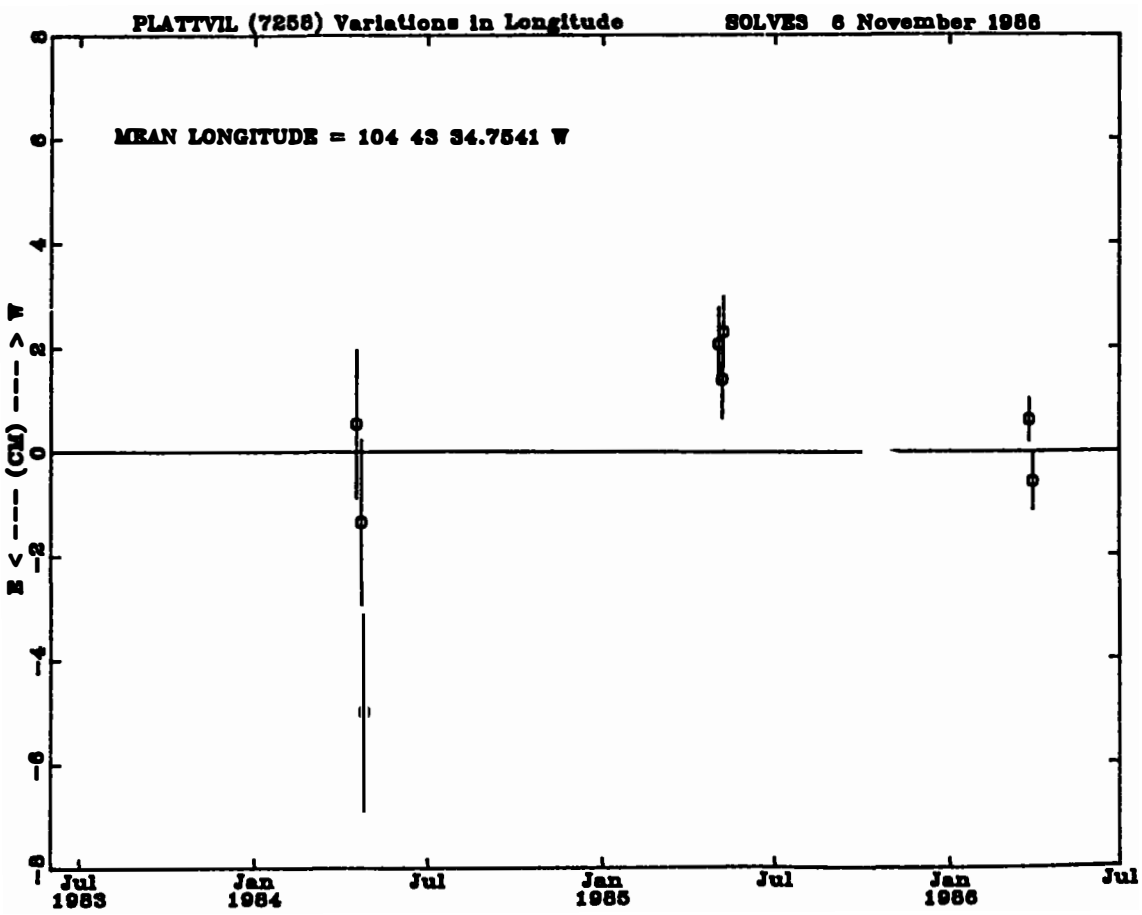
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR PLATTVIL (7258)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
84 41715 6	-1240706.2768	.02697	-4720455.2760	.07698	4094482.2404	.05962
84 4221652	-1240706.1750	.03995	-4720454.9631	.12753	4094481.9796	.11479
84 4251511	-1240706.2799	.03952	-4720455.5059	.14053	4094482.3750	.11281
85 5 216 1	-1240706.2767	.01151	-4720455.2151	.02985	4094482.1852	.02448
85 5 61545	-1240706.2982	.01227	-4720455.3242	.03296	4094482.2486	.02630
85 5 71635	-1240706.2891	.01296	-4720455.2530	.03742	4094482.1937	.03245
86 3261624	-1240706.2805	.00715	-4720455.2870	.02091	4094482.2128	.01775
86 3301940	-1240706.2818	.00963	-4720455.3386	.02927	4094482.2392	.02471

ADJUSTED GEODETIC POSITIONS (NAD83) FOR PLATTVIL (7258)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
84 41715 6	40 10 58.06287	.02032	104 43 34.75433	.01427	1502.0457	.09973
84 4221652	40 10 58.06328	.02311	104 43 34.75353	.01586	1501.6264	.17699
84 4251511	40 10 58.06154	.02578	104 43 34.75199	.01875	1502.3030	.18494
85 5 216 1	40 10 58.06274	.00890	104 43 34.75498	.00702	1501.9651	.03938
85 5 61545	40 10 58.06199	.00962	104 43 34.75469	.00735	1502.0908	.04300
85 5 71635	40 10 58.06212	.00944	104 43 34.75508	.00671	1502.0009	.05078
86 3261624	40 10 58.06195	.00517	104 43 34.75436	.00413	1502.0367	.02806
86 3301940	40 10 58.06155	.00720	104 43 34.75386	.00546	1502.0922	.03915


PLATTVIL (7258) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 40 10 58.0623 N
S <---- (CM) ----> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

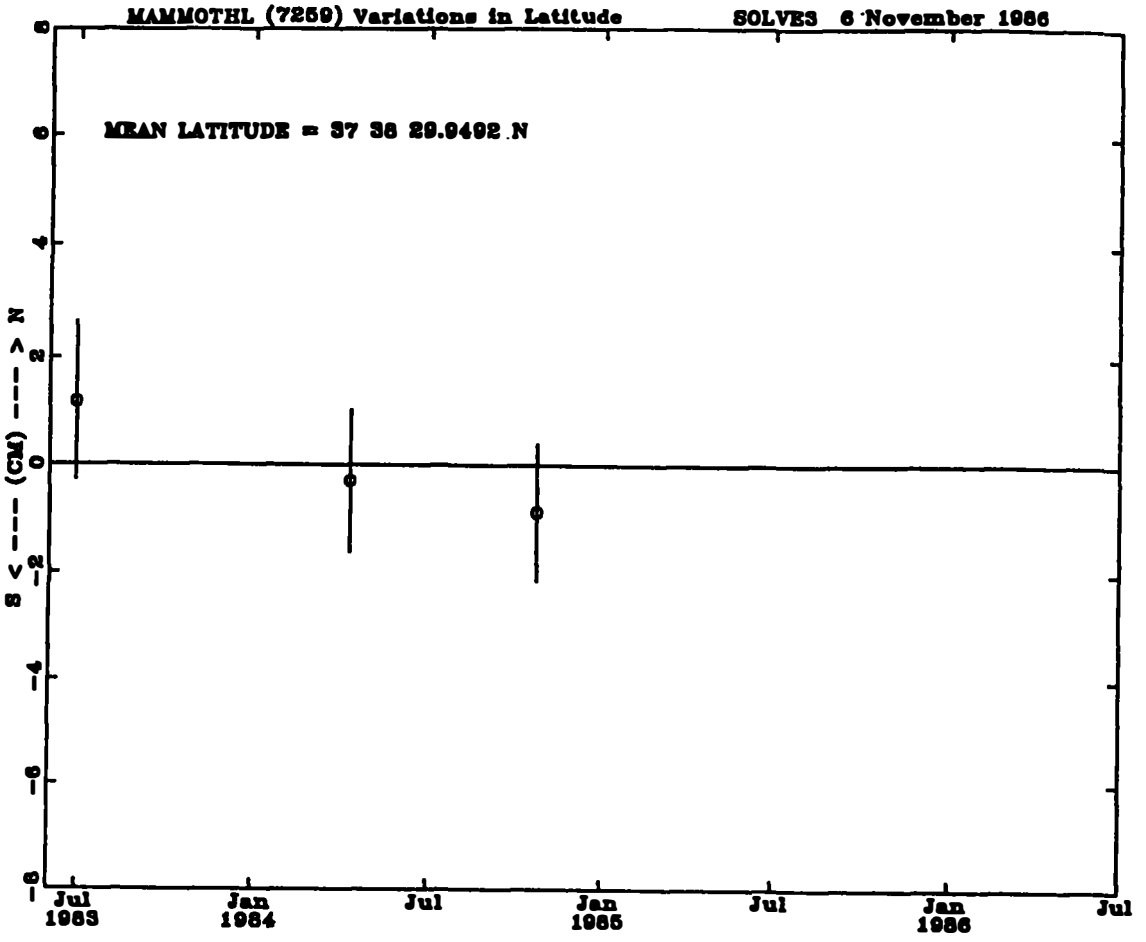

PLATTVIL (7258) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 104 43 34.7541 W
E <---- (CM) ----> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

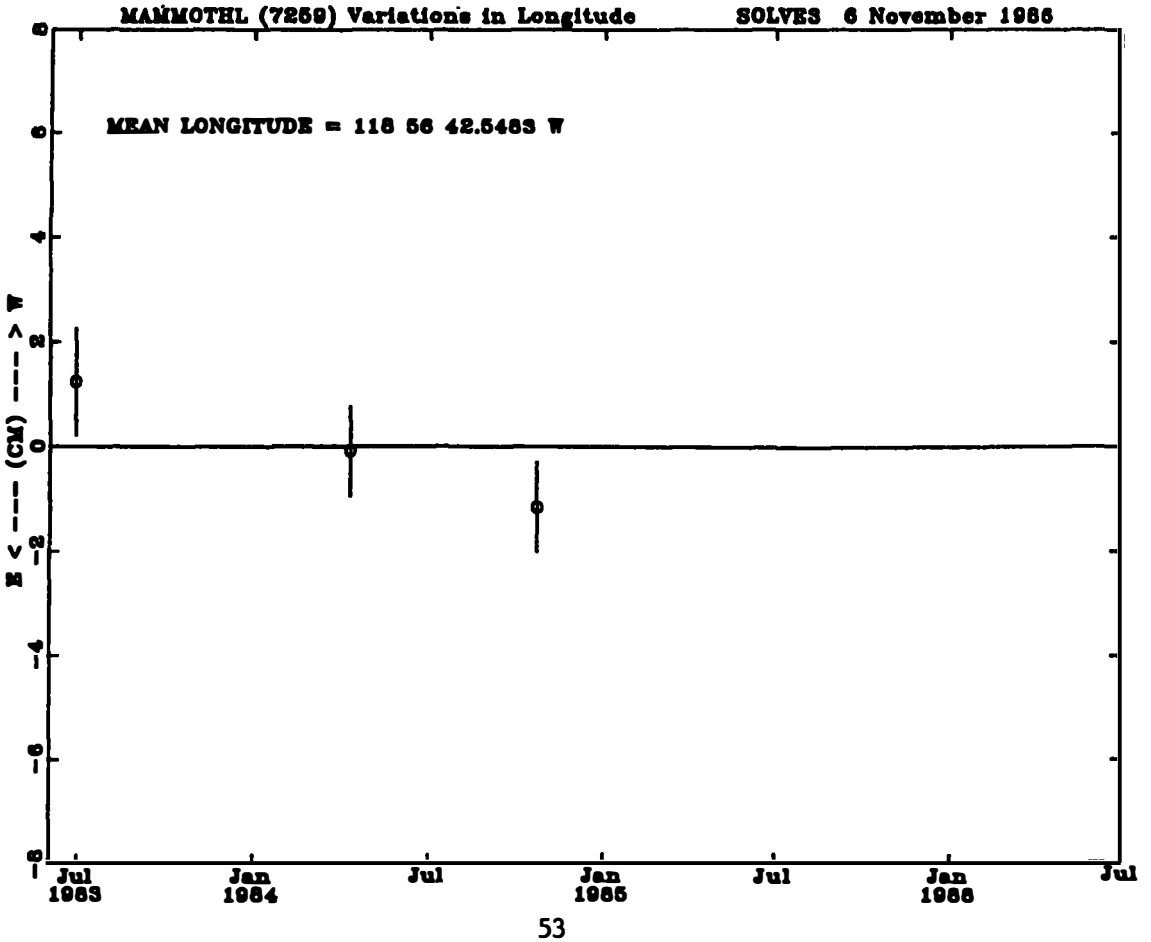
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR MAMMOTHL (7259)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 629 212	-2448244.9504	.02978	-4426739.3512	.05183	3875436.5870	.04049
84 4 919 5	-2448244.8844	.02886	-4426739.2592	.05087	3875436.4817	.04365
84102216 1	-2448244.8492	.03115	-4426739.2179	.05523	3875436.4333	.04598

ADJUSTED GEODETIC POSITIONS (NAD83) FOR MAMMOTHL (7259)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 629 212	37 38 29.94954	.01464	118 56 42.54683	.01026	2311.0282	.07123
84 4 919 5	37 38 29.94906	.01317	118 56 42.54629	.00858	2310.8750	.07255
84102216 1	37 38 29.94887	.01264	118 56 42.54585	.00856	2310.8033	.07819


MAMMOTHL (7259) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 37 38 29.9492 N
S <---- (CM) ----> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

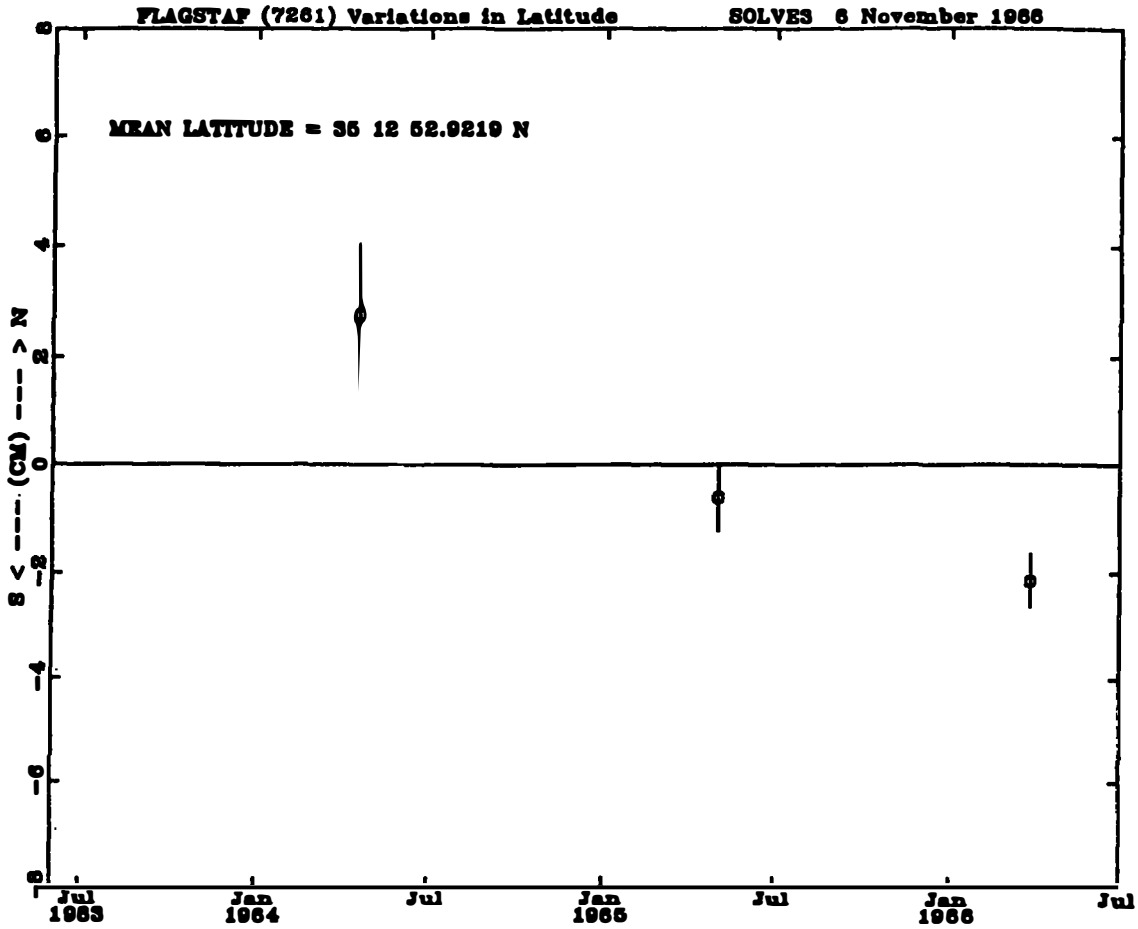

MAMMOTHL (7259) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 118 56 42.5483 W
E <---- (CM) ----> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

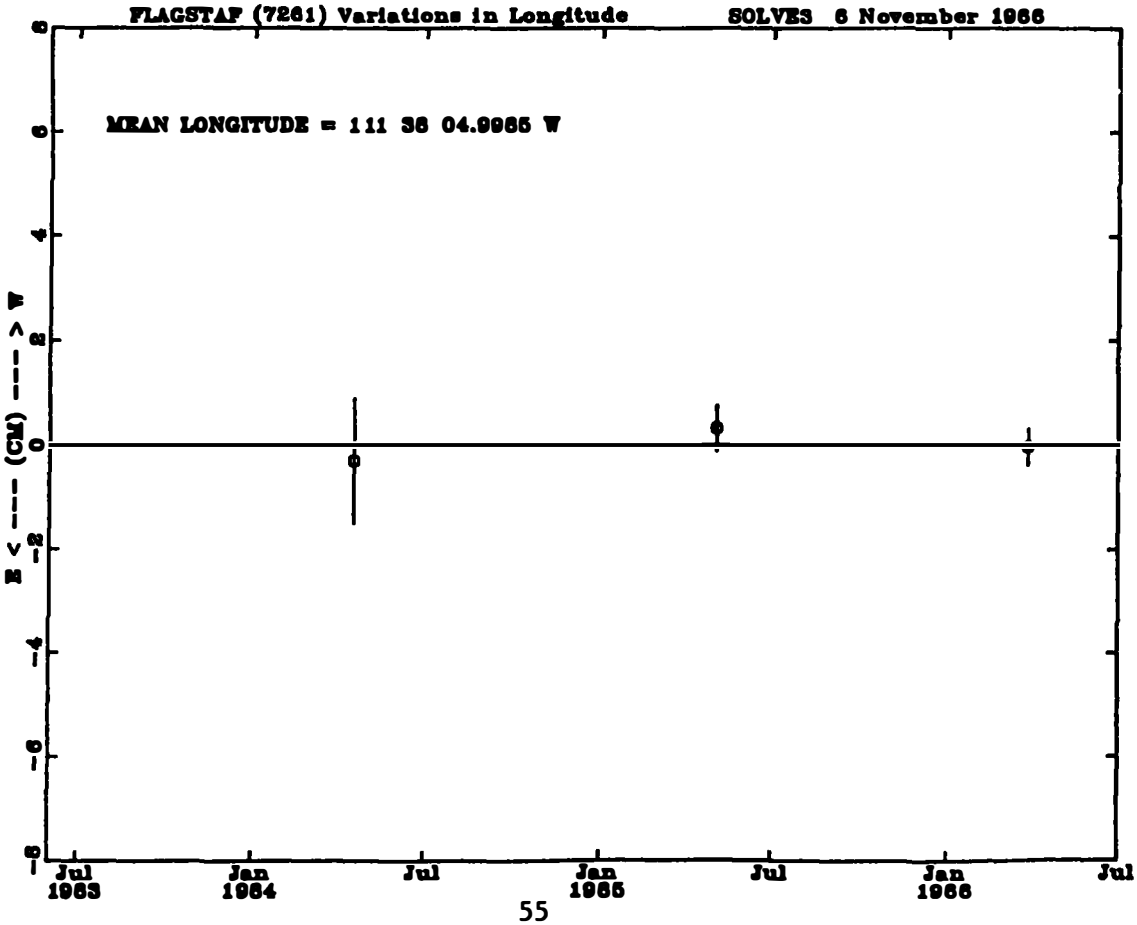
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR FLAGSTAF (7261)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
84 41715 6	-1923990.7287	.03836	-4850855.1732	.10040	3658589.7449	.07580
85 5 216 1	-1923990.8394	.01223	-4850855.4348	.02787	3658589.9036	.02096
86 3261624	-1923990.8401	.00863	-4850855.4462	.01984	3658589.8924	.01475

ADJUSTED GEODETIC POSITIONS (NAD83) FOR FLAGSTAF (7261)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
84 41715 6	35 12 52.92279	.01390	111 38 4.99841	.01198	2144.7098	.13252
85 5 216 1	35 12 52.92169	.00614	111 38 4.99866	.00436	2145.0333	.03683
86 3261624	35 12 52.92119	.00488	111 38 4.99852	.00350	2145.0357	.02595


FLAGSTAF (7261) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 35 12 52.9219 N
S <---- (CM) ----> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

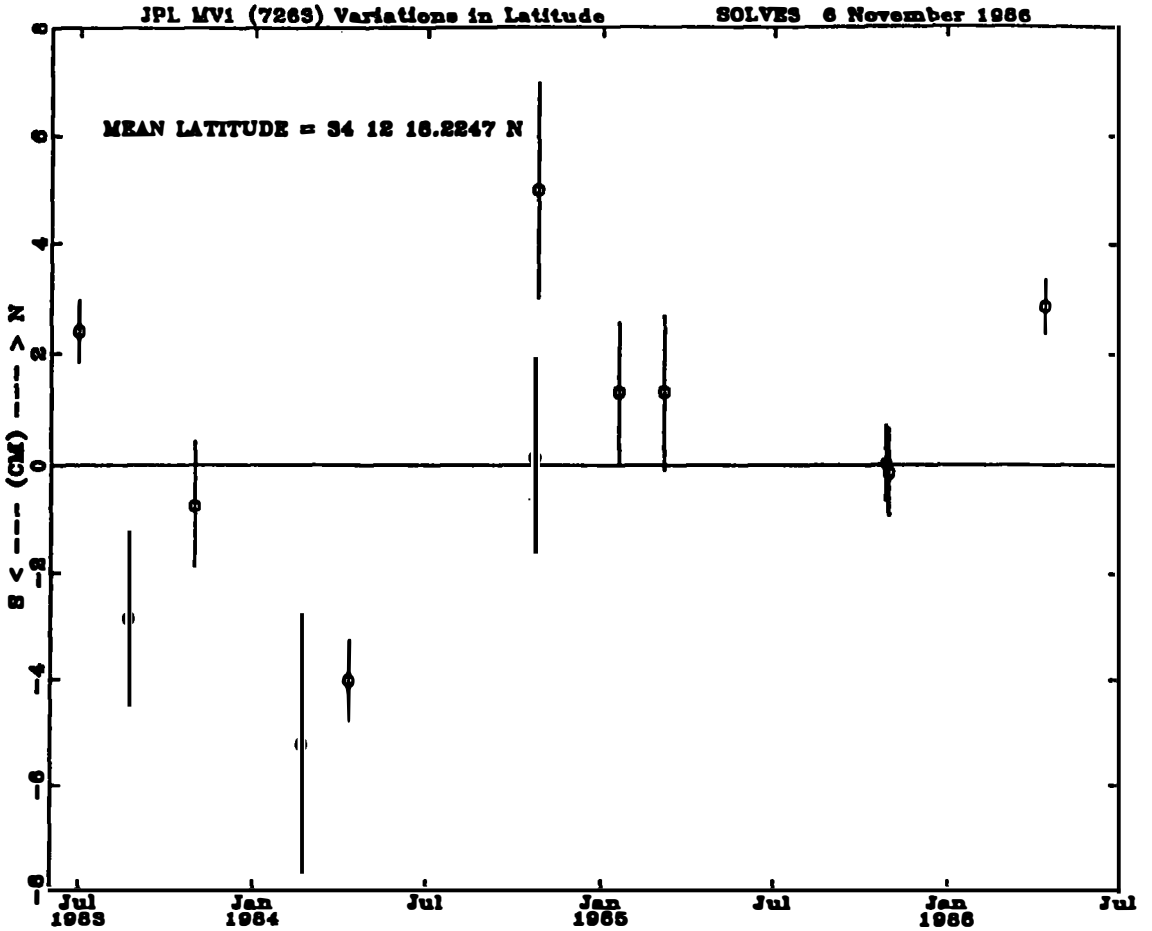

FLAGSTAF (7261) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 111 38 04.9965 W
E <---- (CM) ----> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

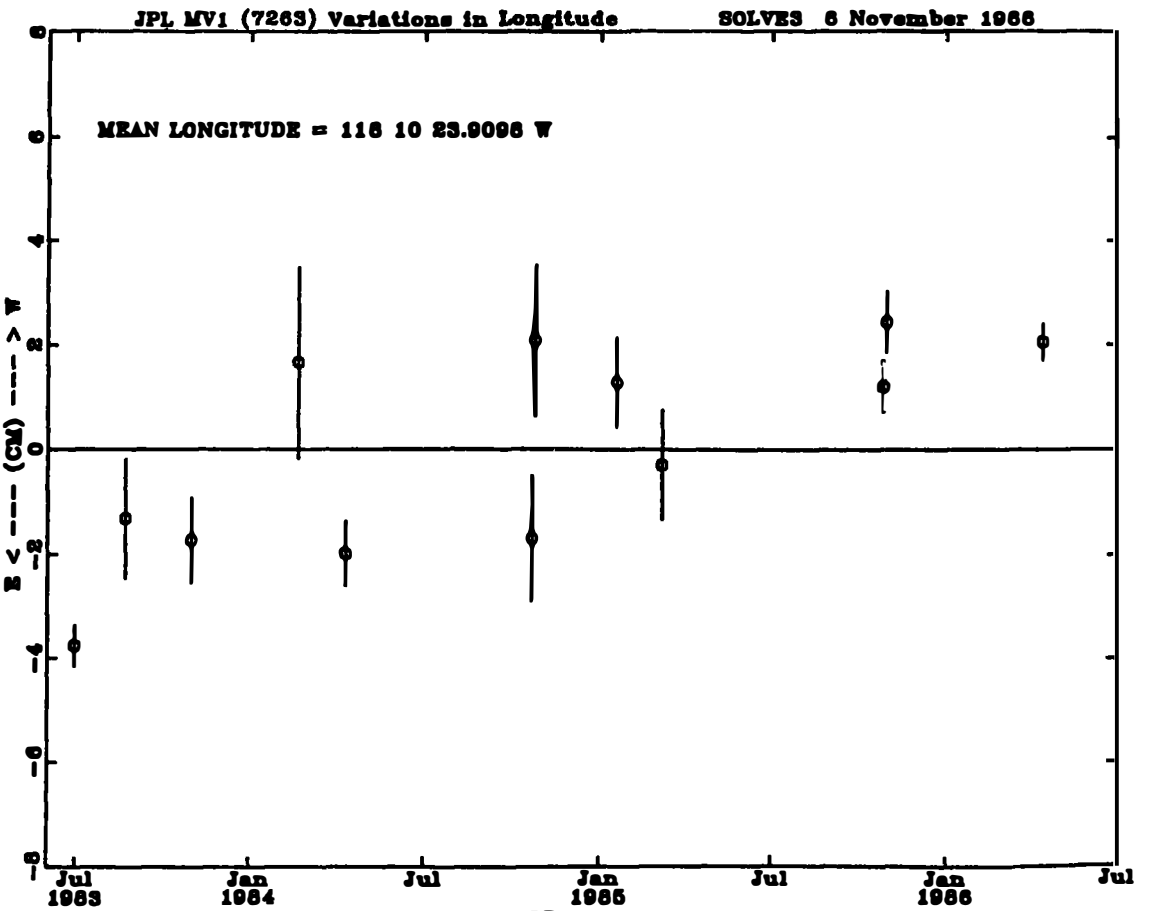
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR JPL MV1 (7263)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 629 212	-2493304.0774	.01578	-4655198.5995	.02951	3565519.9344	.02281
83 823 010	-2493304.1102	.03654	-4655198.6092	.06573	3565519.8872	.04830
8310311825	-2493304.0689	.02585	-4655198.5407	.05035	3565519.8587	.03770
84 2201649	-2493304.1336	.04495	-4655198.5898	.07548	3565519.8544	.06159
84 4 919 5	-2493304.1442	.02742	-4655198.6865	.05010	3565519.9304	.03749
84102216 1	-2493304.0768	.03322	-4655198.5547	.05752	3565519.8803	.04594
8410251538	-2493304.1409	.03927	-4655198.5945	.07372	3565519.9831	.05401
85 1181636	-2493304.1281	.02422	-4655198.5872	.04471	3565519.9302	.03486
85 3 71553	-2493304.1271	.02990	-4655198.6189	.05310	3565519.9485	.03760
8510271613	-2493304.1424	.01786	-4655198.6153	.03255	3565519.9361	.02490
8510301558	-2493304.1131	.01979	-4655198.5350	.03545	3565519.8765	.02739
86 4131921	-2493304.1174	.01113	-4655198.5509	.02026	3565519.9239	.01523

ADJUSTED GEODETIC POSITIONS (NAD83) FOR JPL MV1 (7263)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 629 212	34 12 18.22546	.00564	118 10 23.90835	.00404	424.3318	.04061
83 823 010	34 12 18.22375	.01616	118 10 23.90930	.01133	424.3252	.08875
8310311825	34 12 18.22444	.01131	118 10 23.90914	.00808	424.2430	.06776
84 2201649	34 12 18.22298	.02441	118 10 23.91046	.01823	424.3017	.10480
84 4 919 5	34 12 18.22337	.00745	118 10 23.90904	.00615	424.4191	.06882
84102216 1	34 12 18.22473	.01750	118 10 23.90915	.01192	424.2685	.07938
8410251538	34 12 18.22630	.01973	118 10 23.91063	.01445	424.3803	.09818
85 1181636	34 12 18.22510	.01277	118 10 23.91032	.00871	424.3403	.06078
85 3 71553	34 12 18.22510	.01399	118 10 23.90970	.01047	424.3732	.07072
8510271613	34 12 18.22469	.00654	118 10 23.91029	.00489	424.3696	.04474
8510301558	34 12 18.22463	.00780	118 10 23.91077	.00575	424.2661	.04887
86 4131921	34 12 18.22561	.00490	118 10 23.91062	.00359	424.3061	.02750


JPL MV1 (7263) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 34 12 16.2247 N
S <---- (CM) ----> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

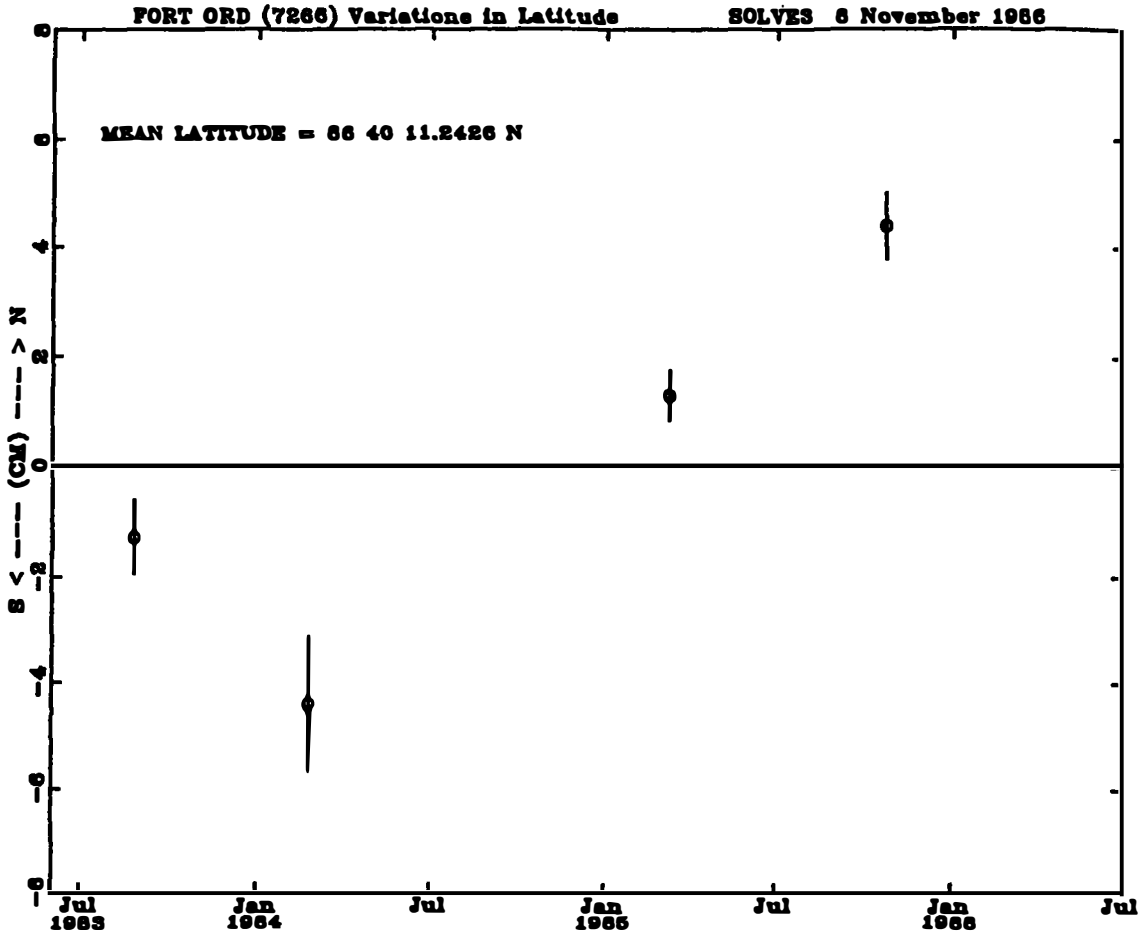

JPL MV1 (7263) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 116 10 23.9096 W
E <---- (CM) ----> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

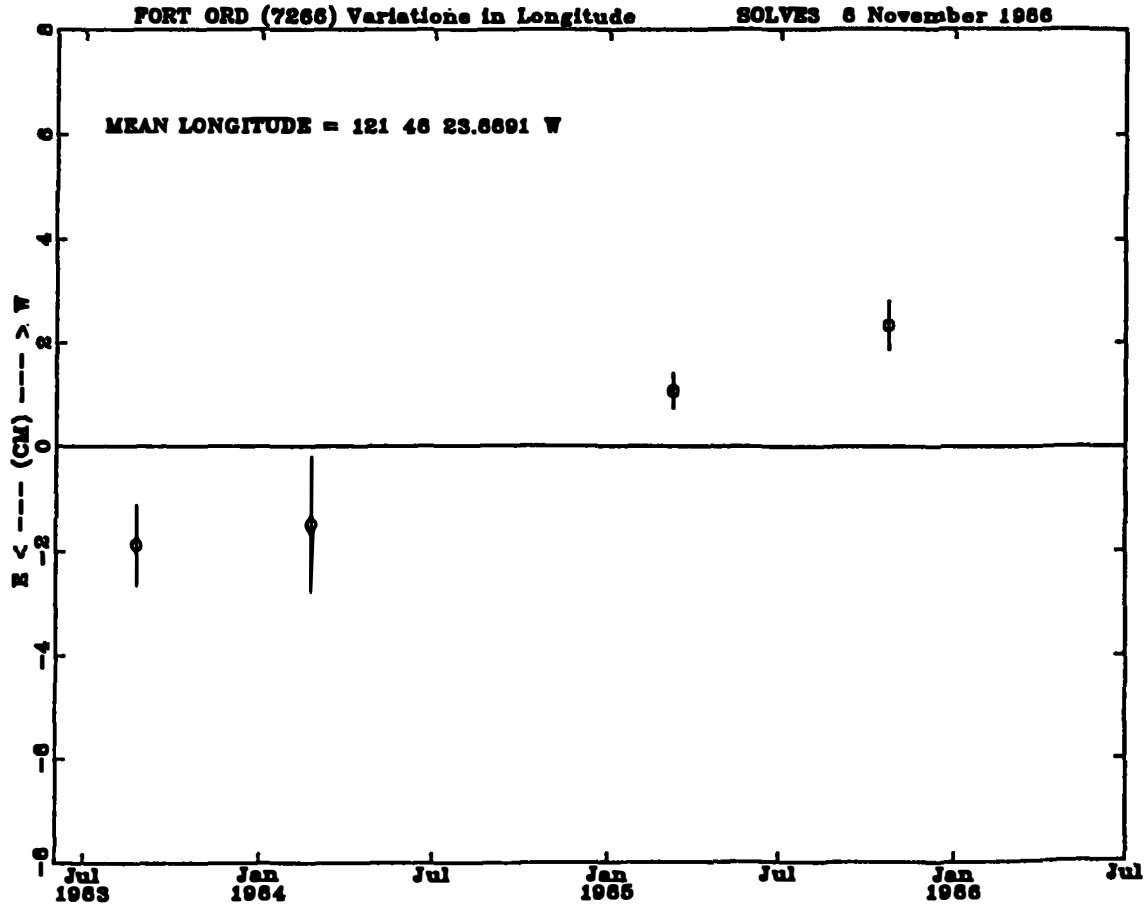
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR FORT ORD (7266)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 82518 5	-2697024.8967	.01706	-4354394.4083	.03020	3788078.1685	.02387
84 2231559	-2697024.8424	.03824	-4354394.3129	.06578	3788078.0480	.05476
85 3101952	-2697024.8797	.01212	-4354394.3247	.02012	3788078.1413	.01715
8510231610	-2697024.8912	.01504	-4354394.3190	.02439	3788078.1811	.02086

ADJUSTED GEODETIC POSITIONS (NAD83) FOR FORT ORD (7266)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 82518 5	36 40 11.24214	.00656	121 46 23.68837	.00766	24.0563	.04163
84 2231559	36 40 11.24113	.01268	121 46 23.68853	.01293	23.8963	.09362
85 3101952	36 40 11.24298	.00456	121 46 23.68956	.00333	23.9758	.02904
8510231610	36 40 11.24399	.00617	121 46 23.69007	.00470	24.0006	.03521


FORT ORD (7266) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 66 40 11.2426 N
S <---|---|--- (CM) ---|---> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul


FORT ORD (7266) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 121 46 23.6691 W
E <---|---|--- (CM) ---|---> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR DEADMANL (7267)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
84 2291616	-2336817.7376	.05007	-4732587.7085	.09528	3570330.4460	.07083
85 1 91542	-2336817.7887	.04742	-4732587.7994	.08696	3570330.5427	.06241

ADJUSTED GEODETIC POSITIONS (NAD83) FOR DEADMANL (7267)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
84 2291616	34 15 18.00530	.02499	116 16 43.87777	.01811	833.2836	.12737
85 1 91542	34 15 18.00599	.01921	116 16 43.87799	.01300	833.4241	.11680

ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR PVERDES (7268)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
8311121632	-2525450.9166	.02827	-4670036.7529	.05123	3522887.2956	.04014
85 3 41553	-2525451.0628	.01679	-4670036.8185	.02978	3522887.3871	.02333

ADJUSTED GEODETIC POSITIONS (NAD83) FOR PVERDES (7268)

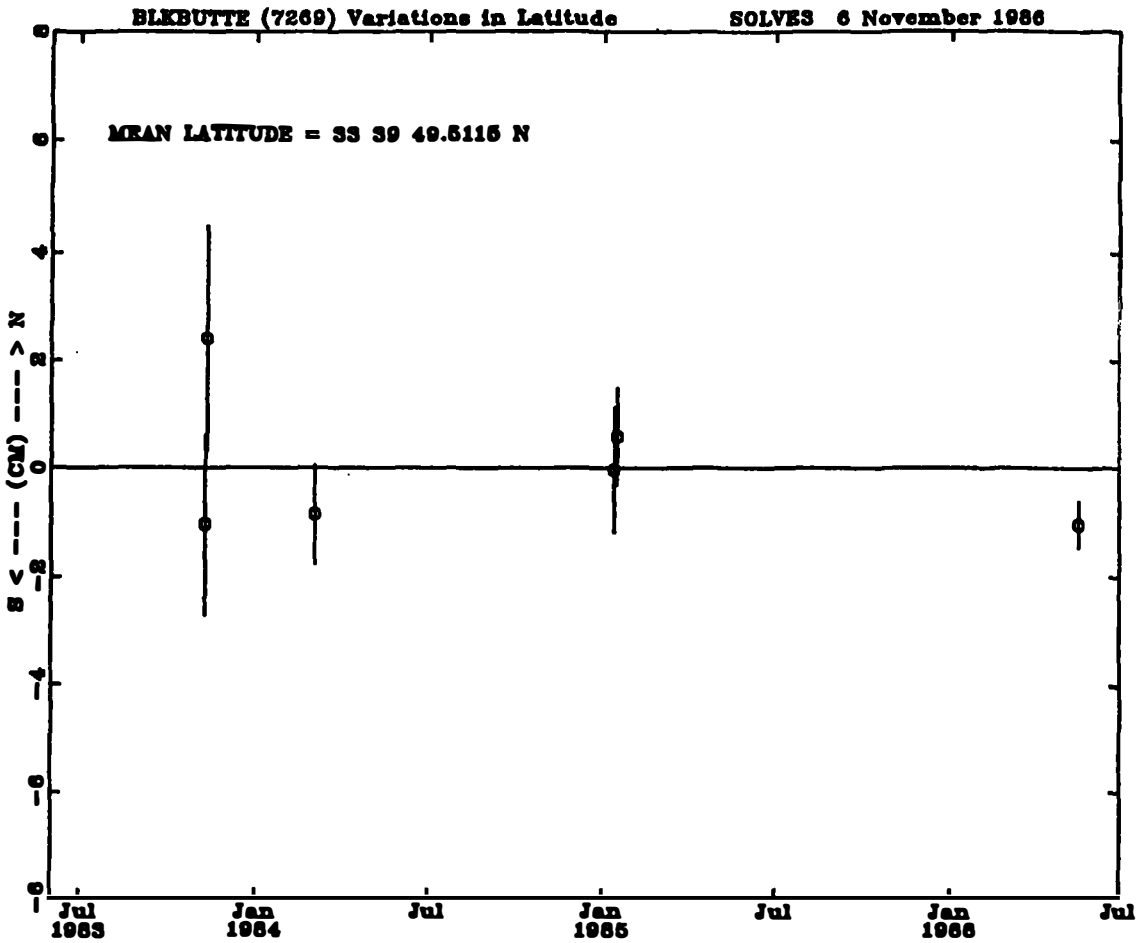
YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
8311121632	33 44 37.55444	.01274	118 24 12.69479	.00885	69.7774	.07049
85 3 41553	33 44 37.55462	.00768	118 24 12.69857	.00561	69.9341	.04102

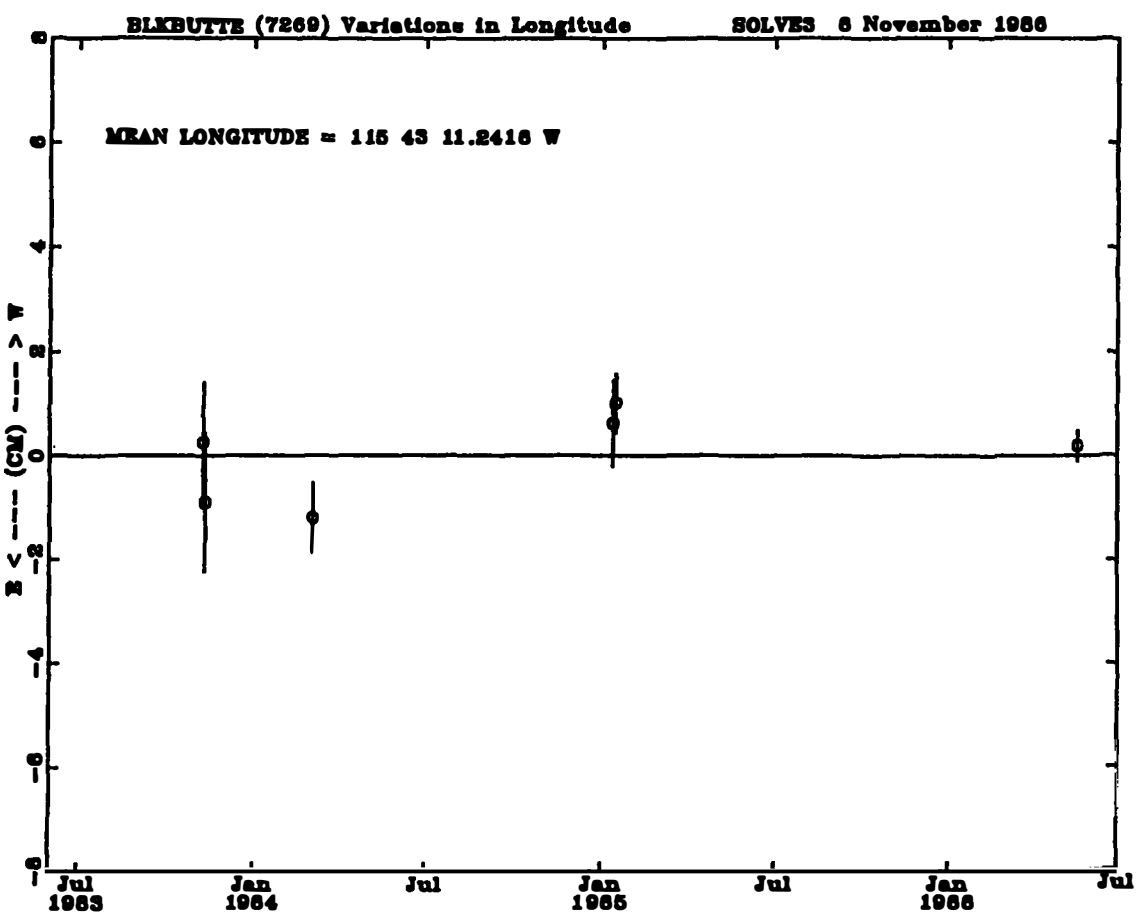
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR BLKBUTTE (7269)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
8311 81536	-2306305.0332	.03415	-4787915.1965	.07288	3515736.9168	.05151
8311101754	-2306305.0627	.03303	-4787915.2845	.06973	3515737.0196	.05152
84 3 32051	-2306305.0897	.01653	-4787915.3475	.03188	3515737.0260	.02547
85 1121616	-2306305.1192	.02297	-4787915.3668	.04462	3515737.0559	.03336
85 11516 4	-2306305.1120	.01781	-4787915.3429	.03459	3515737.0470	.02582
86 5181559	-2306305.1362	.00946	-4787915.4120	.01729	3515737.0756	.01289

ADJUSTED GEODETIC POSITIONS (NAD83) FOR BLKBUTTE (7269)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
8311 81536	33 39 49.51118	.01656	115 43 11.24169	.01152	489.6070	.09508
8311101754	33 39 49.51230	.02076	115 43 11.24124	.01333	489.7407	.09109
84 3 32051	33 39 49.51124	.00914	115 43 11.24112	.00675	489.8012	.04332
85 1121616	33 39 49.51151	.01151	115 43 11.24183	.00840	489.8429	.05962
85 11516 4	33 39 49.51171	.00893	115 43 11.24198	.00576	489.8175	.04630
86 5181559	33 39 49.51118	.00420	115 43 11.24166	.00308	489.8938	.02338


BLKBUTTE (7269) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 33 39 49.5115 N
S <---- (CM) ----> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

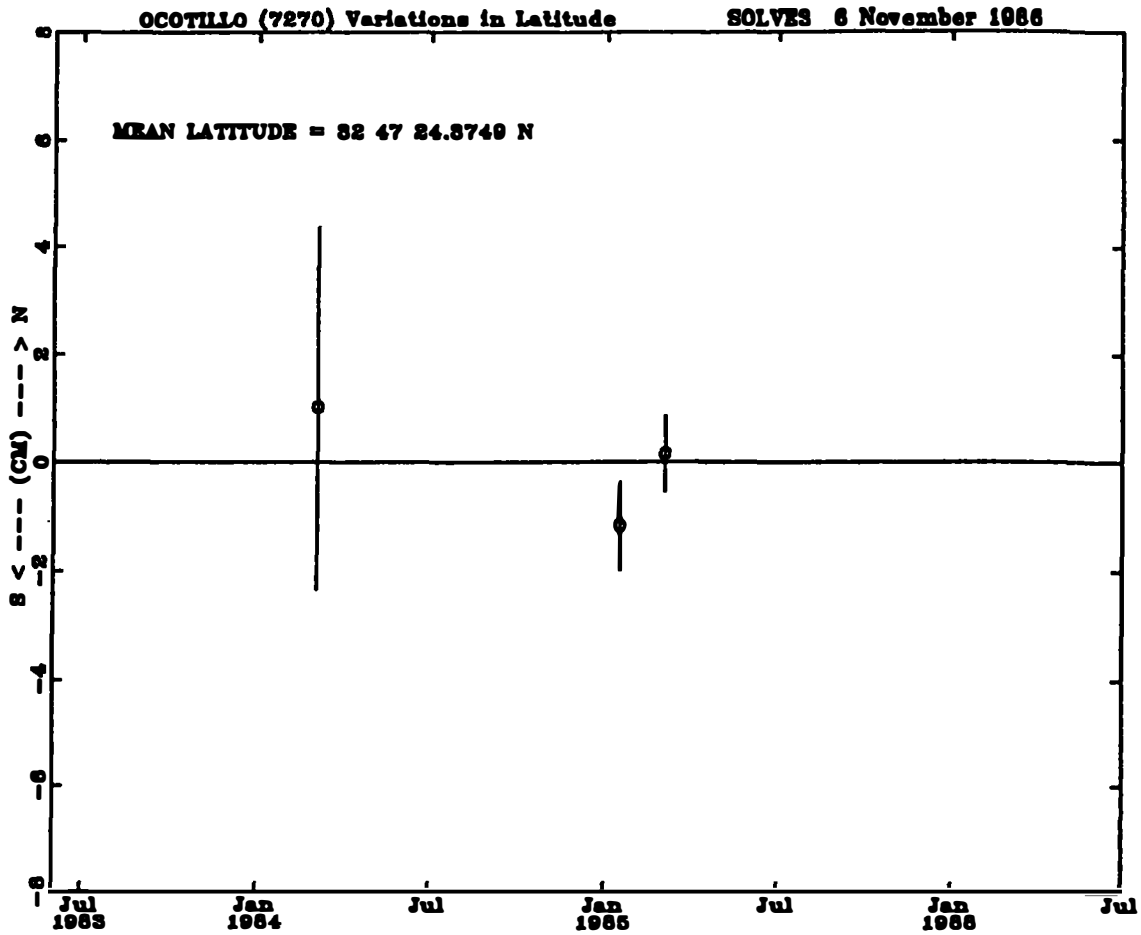

BLKBUTTE (7269) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 115 43 11.2416 W
E <---- (CM) ----> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

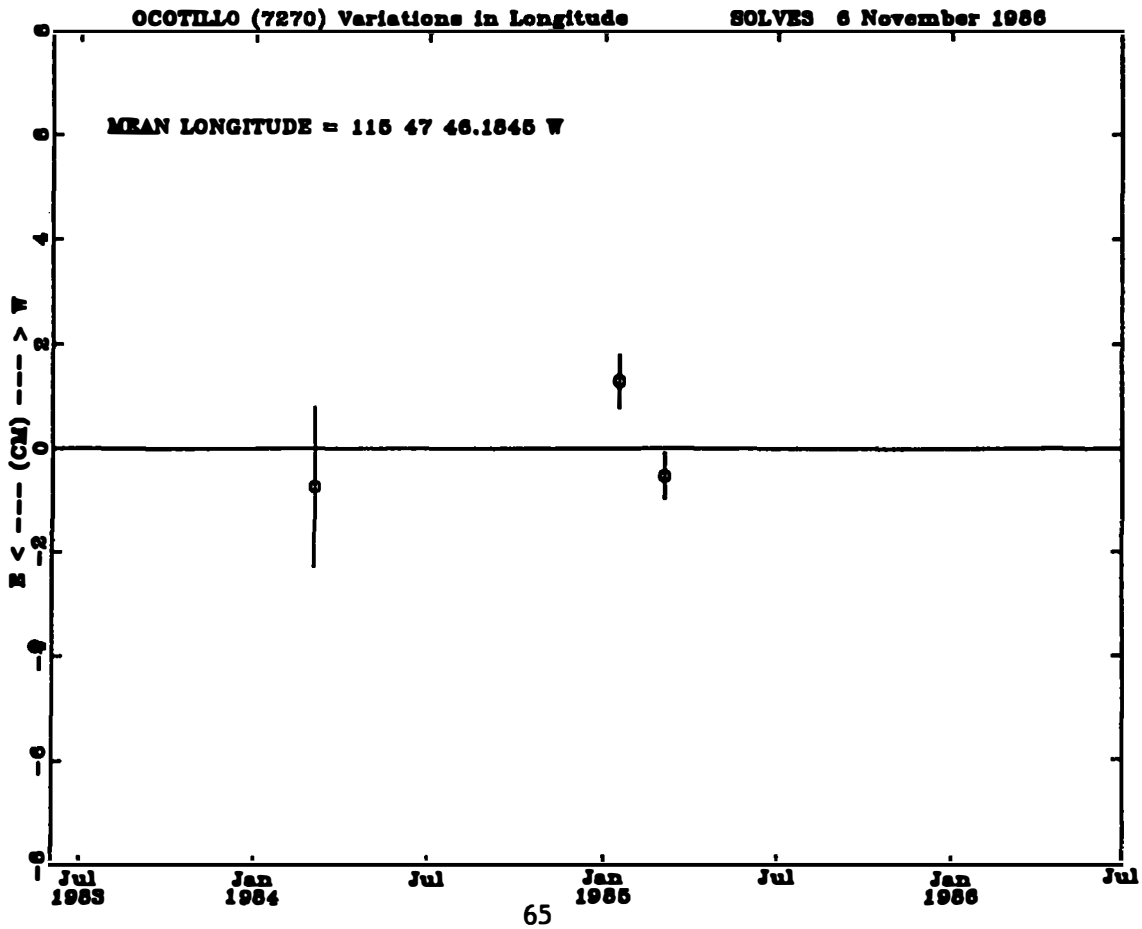
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR OCOTILLO (7270)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
84 3 32051	-2335599.2889	.03407	-4832245.1603	.07410	3434393.1796	.07667
85 11516 4	-2335599.2746	.01612	-4832245.0839	.03221	3434393.1055	.02395
85 3 41553	-2335599.3293	.01542	-4832245.2387	.03053	3434393.2262	.02308

ADJUSTED GEODETIC POSITIONS (NAD83) FOR OCOTILLO (7270)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
84 3 32051	32 47 24.37528	.03344	115 47 46.18424	.01539	-36.4170	.10776
85 11516 4	32 47 24.37457	.00809	115 47 46.18502	.00507	-36.5202	.04295
85 3 41553	32 47 24.37500	.00694	115 47 46.18432	.00447	-36.3176	.04115


OCOTILLO (7270) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 32 47 24.3749 N
S <---- (CM) ----> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

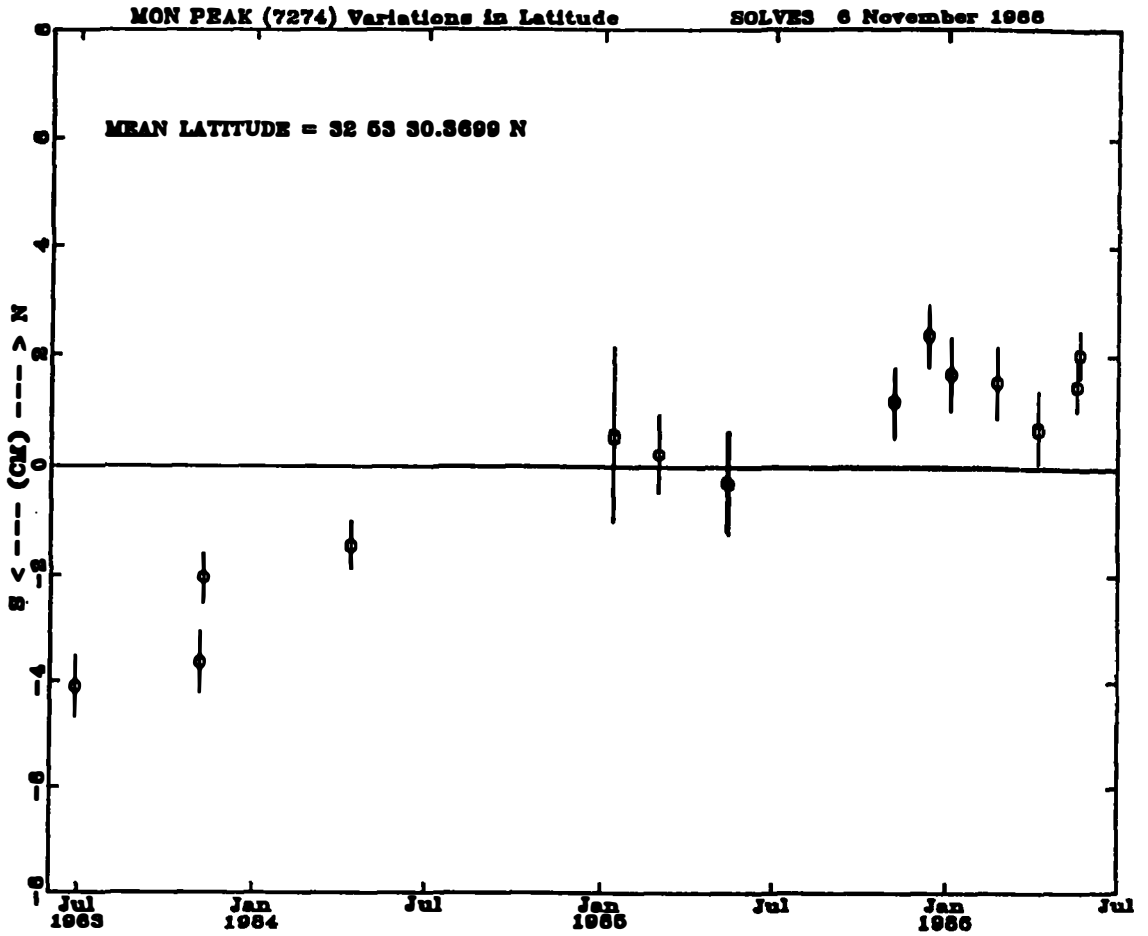

OCOTILLO (7270) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 115 47 46.1845 W
E <---- (CM) ----> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

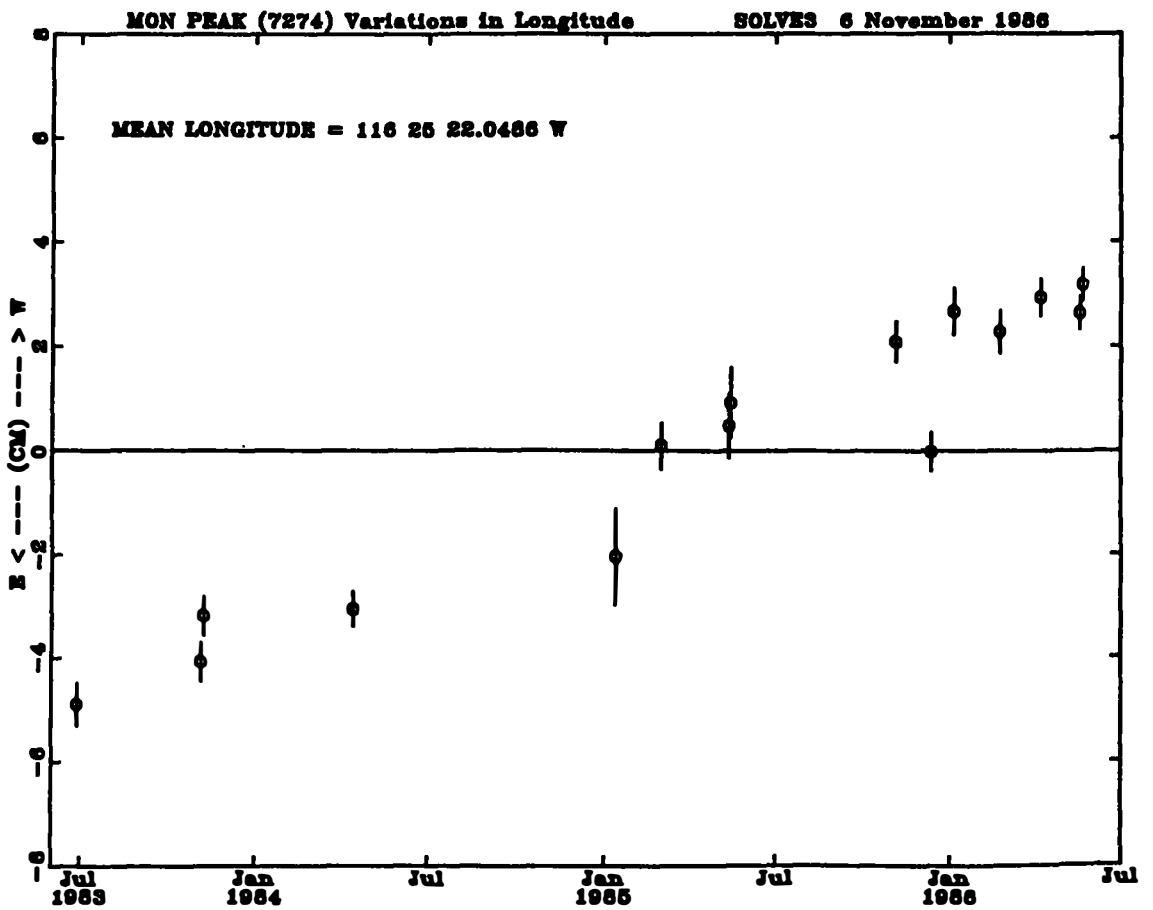
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR MON PEAK (7274)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
83 6271451	-2386287.4807	.01774	-4802347.5868	.03450	3444884.4952	.02521
8311 51754	-2386287.4819	.01315	-4802347.5708	.02700	3444884.4919	.02015
8311 81536	-2386287.5011	.01197	-4802347.5895	.02474	3444884.5274	.01758
84 41216 1	-2386287.5138	.01571	-4802347.6120	.03159	3444884.5515	.02302
85 1121616	-2386287.4718	.02396	-4802347.5048	.04455	3444884.5013	.03303
85 3 11610	-2386287.5853	.01487	-4802347.6851	.02803	3444884.6346	.02167
85 5121545	-2386287.5589	.01802	-4802347.6235	.03470	3444884.5854	.02588
85 51419 7	-2386287.5281	.02313	-4802347.5516	.04533	3444884.5344	.03103
8511 52018	-2386287.5253	.01179	-4802347.5196	.02331	3444884.5322	.01718
8512121519	-2386287.5141	.01148	-4802347.5443	.02248	3444884.5578	.01615
86 1 51618	-2386287.5513	.01519	-4802347.5590	.03019	3444884.5686	.02244
86 22320 0	-2386287.5552	.01054	-4802347.5757	.02047	3444884.5777	.01500
86 4 71735	-2386287.5448	.01225	-4802347.5402	.02196	3444884.5446	.01683
86 5181559	-2386287.5436	.00838	-4802347.5439	.01510	3444884.5551	.01151
86 5211559	-2386287.5580	.00839	-4802347.5604	.01565	3444884.5756	.01164

ADJUSTED GEODETIC POSITIONS (NAD83) FOR MON PEAK (7274)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
83 6271451	32 53 30.36857	.00580	116 25 22.04671	.00416	1839.1308	.04652
8311 51754	32 53 30.36872	.00581	116 25 22.04703	.00386	1839.1174	.03612
8311 81536	32 53 30.36924	.00466	116 25 22.04737	.00376	1839.1579	.03264
84 41216 1	32 53 30.36944	.00435	116 25 22.04742	.00328	1839.1927	.04251
85 1121616	32 53 30.37010	.01565	116 25 22.04781	.00930	1839.0691	.05869
85 3 11610	32 53 30.36999	.00683	116 25 22.04863	.00442	1839.3194	.03823
85 5121545	32 53 30.36983	.00902	116 25 22.04878	.00608	1839.2365	.04644
85 51419 7	32 53 30.36982	.00932	116 25 22.04895	.00664	1839.1433	.05954
8511 52018	32 53 30.37029	.00602	116 25 22.04940	.00387	1839.1170	.03099
8512121519	32 53 30.37068	.00561	116 25 22.04859	.00363	1839.1453	.02974
86 1 51618	32 53 30.37045	.00662	116 25 22.04962	.00445	1839.1761	.04048
86 22320 0	32 53 30.37040	.00638	116 25 22.04947	.00418	1839.1951	.02689
86 4 71735	32 53 30.37014	.00640	116 25 22.04972	.00354	1839.1465	.02990
86 5181559	32 53 30.37038	.00445	116 25 22.04961	.00314	1839.1546	.02039
86 5211559	32 53 30.37057	.00419	116 25 22.04982	.00313	1839.1835	.02096


MON PEAK (7274) Variations in Latitude
SOLVE3 6 November 1986
MEAN LATITUDE = 32 53 30.3699 N
S <--- (CM) ---> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

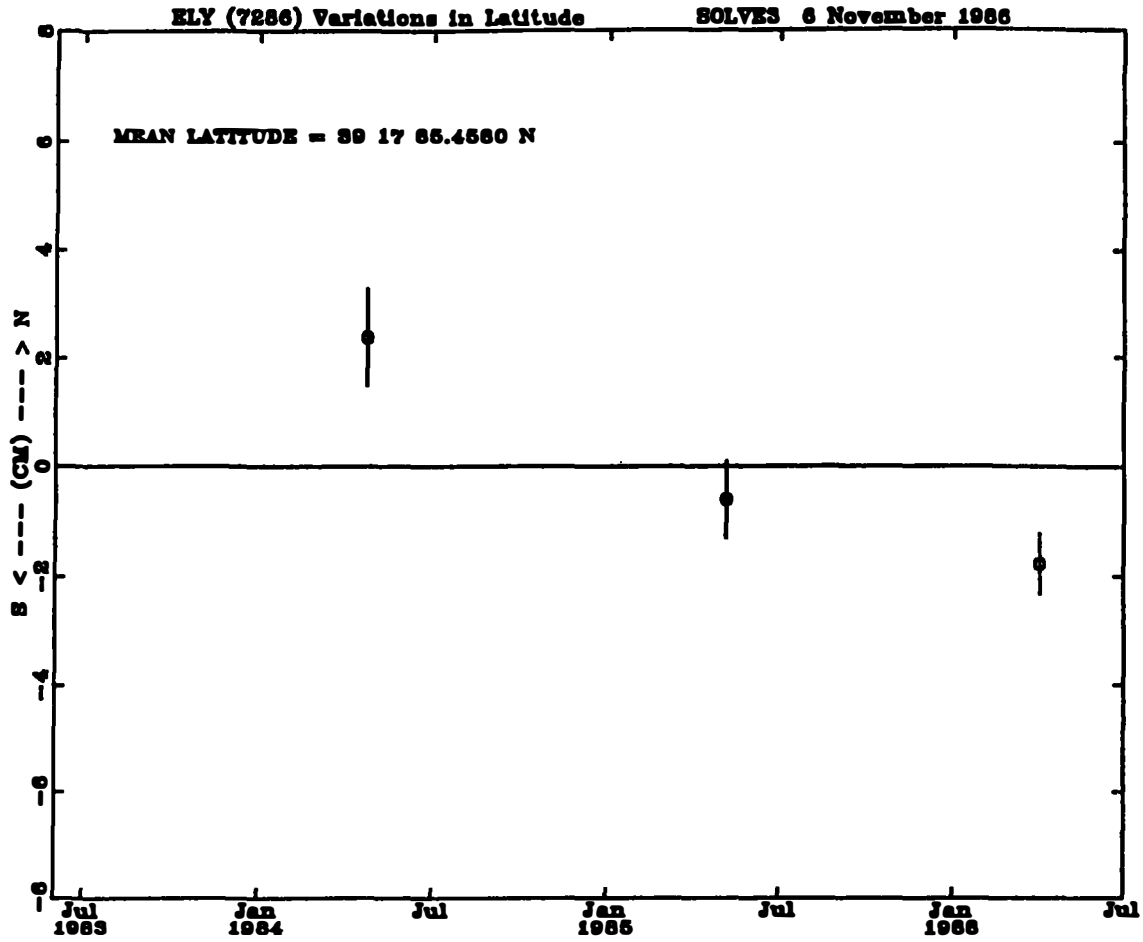

MON PEAK (7274) Variations in Longitude
SOLVE3 6 November 1986
MEAN LONGITUDE = 116 25 22.0486 W
E <--- (CM) ---> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

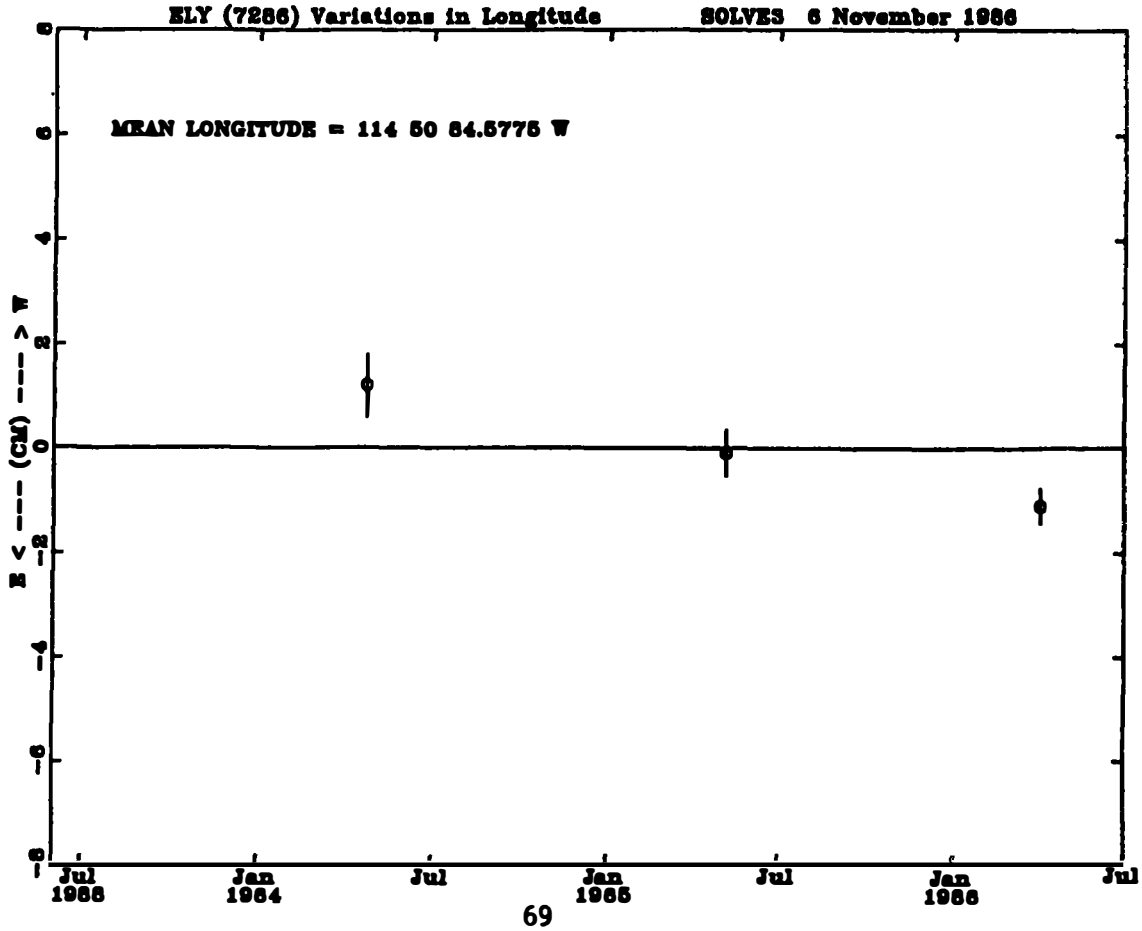
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR ELY (7286)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
84 4221652	-2077234.4327	.01611	-4486713.5640	.03182	4018754.3250	.02753
85 5 61545	-2077234.4741	.01369	-4486713.6841	.02616	4018754.3897	.02224
86 4 218 0	-2077234.4366	.00867	-4486713.6268	.01690	4018754.3191	.01469

ADJUSTED GEODETIC POSITIONS (NAD83) FOR ELY (7286)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
84 4221652	39 17 35.45881	.00896	114 50 34.57799	.00607	1886.5832	.04453
85 5 61545	39 17 35.45784	.00699	114 50 34.57745	.00436	1886.7220	.03668
86 4 218 0	39 17 35.45746	.00548	114 50 34.57703	.00335	1886.6248	.02357


ELY (7286) Variations in Latitude
SOLVES 6 November 1986
MEAN LATITUDE = 39 17 55.4560 N
S <---- (CM) ----> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

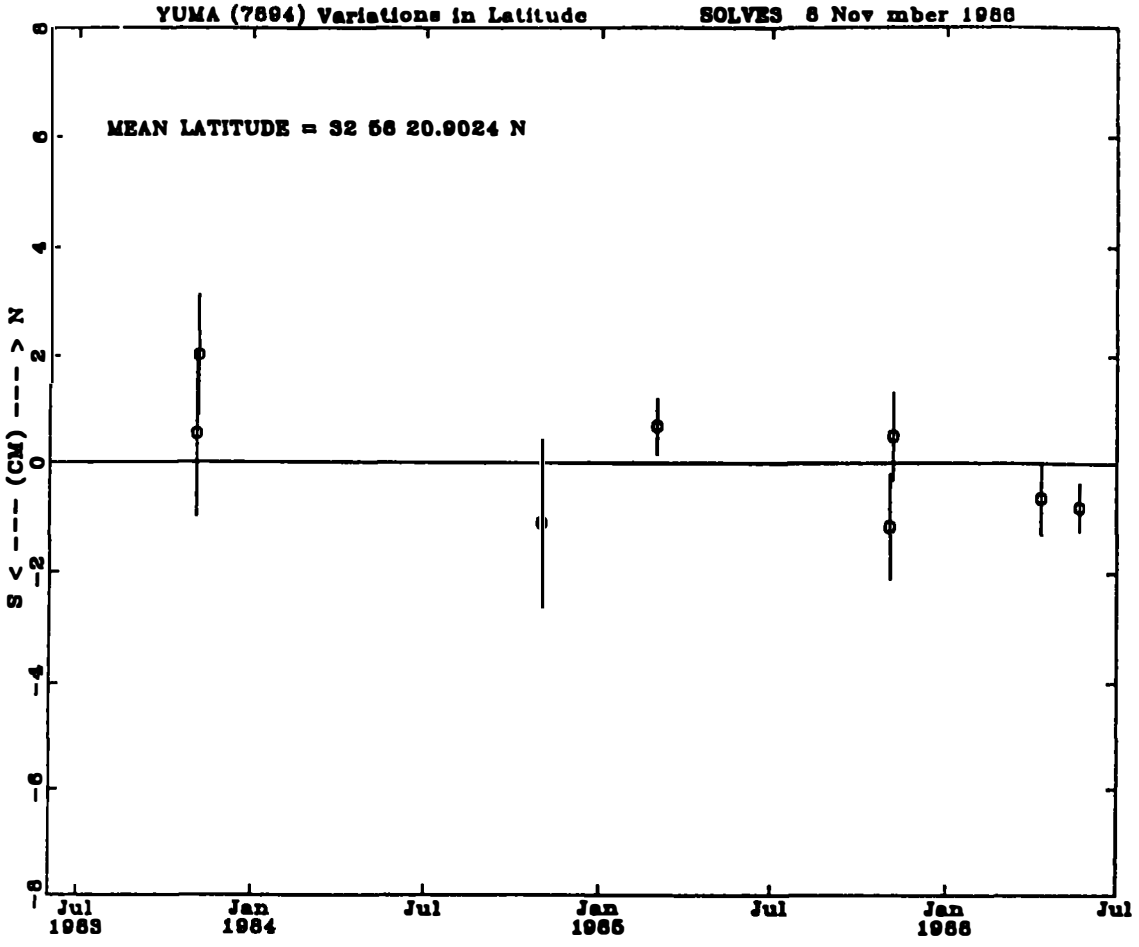

ELY (7286) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 114 50 54.5775 W
E <---- (CM) ----> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

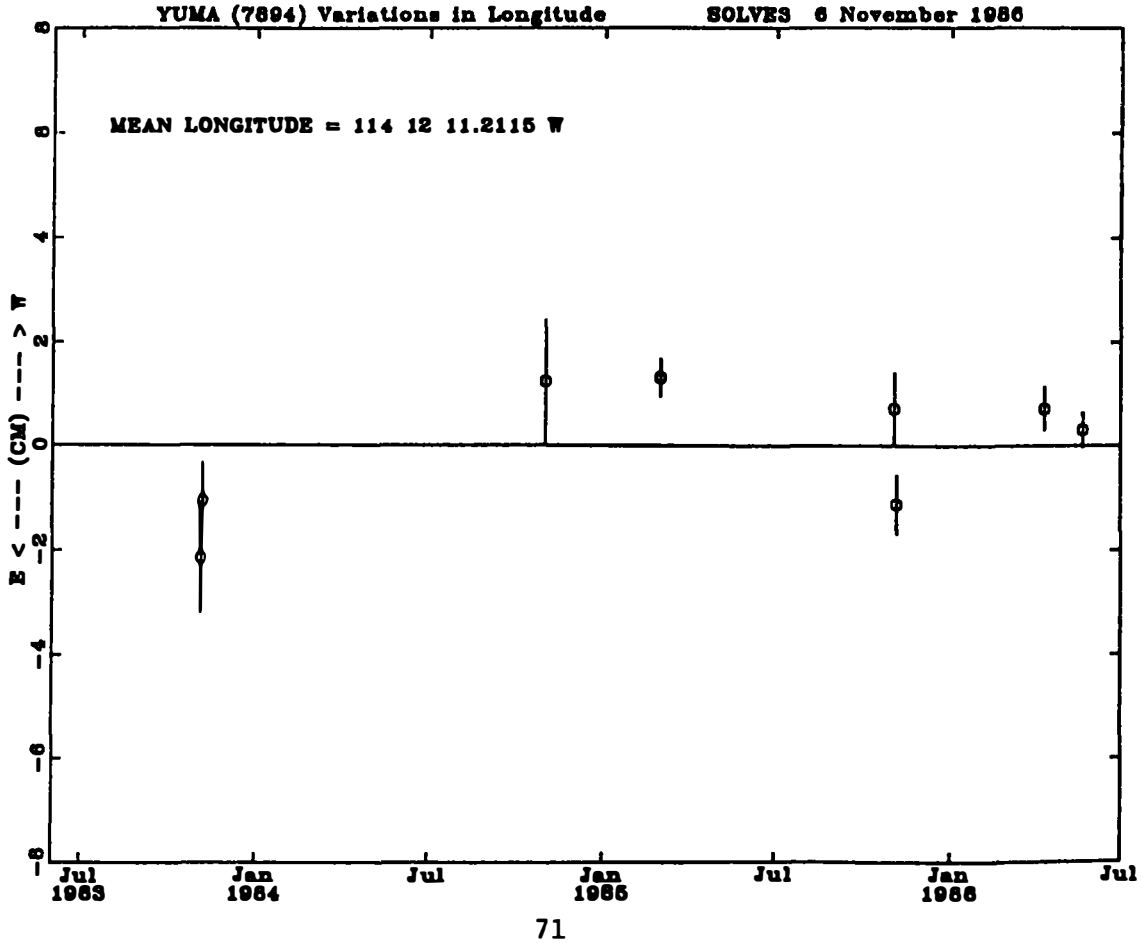
ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR YUMA (7894)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
8311 320 6	-2196776.0508	.02075	-4887337.9400	.04226	3448425.8247	.03396
8311 51754	-2196776.0816	.01845	-4887337.9819	.03994	3448425.8754	.02933
8410311559	-2196776.1210	.02908	-4887338.0137	.05909	3448425.8675	.04307
85 3 11610	-2196776.1419	.01233	-4887338.0586	.02521	3448425.9209	.01904
8511 21550	-2196776.1171	.01993	-4887338.0179	.04547	3448425.8684	.03158
8511 52018	-2196776.0753	.01737	-4887337.9696	.03776	3448425.8485	.02652
86 4101553	-2196776.0721	.01229	-4887337.9174	.02471	3448425.8032	.01807
86 5211559	-2196776.1141	.00934	-4887338.0214	.01845	3448425.8740	.01344

ADJUSTED GEODETIC POSITIONS (NAD83) FOR YUMA (7894)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
8311 320 6	32 56 20.90258	.01513	114 12 11.21067	.01042	238.8501	.05612
8311 51754	32 56 20.90306	.01123	114 12 11.21109	.00716	238.9203	.05212
8410311559	32 56 20.90205	.01539	114 12 11.21197	.01190	238.9540	.07764
85 3 11610	32 56 20.90263	.00515	114 12 11.21200	.00363	239.0245	.03392
8511 21550	32 56 20.90203	.00951	114 12 11.21177	.00692	238.9563	.05869
8511 52018	32 56 20.90257	.00817	114 12 11.21106	.00564	238.8941	.04916
86 4101553	32 56 20.90220	.00661	114 12 11.21177	.00417	238.8285	.03263
86 5211559	32 56 20.90215	.00438	114 12 11.21161	.00333	238.9610	.02448


YUMA (7894) Variations in Latitude
SOLVES 6 Nov mber 1986
MEAN LATITUDE = 32 56 20.9024 N
S <---- (CM) ----> N
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul


YUMA (7894) Variations in Longitude
SOLVES 6 November 1986
MEAN LONGITUDE = 114 12 11.2115 W
E <---- (CM) ----> W
8
6
4
2
0
-2
-4
-6
-8
Jul 1983
Jan 1984
Jul
Jan 1985
Jul
Jan 1986
Jul

ADJUSTED GEOCENTRIC CARTESIAN COORDINATES FOR VERNAL (7290)

YYMMDDHHMM	X	SIGMA	Y	SIGMA	Z	SIGMA
86 3301940	-1631471.4509	.01227	-4589129.8788	.03006	4106760.4693	.02614

ADJUSTED GEODETIC POSITIONS (NAD83) FOR VERNAL (7290)

YYMMDDHHMM	LATITUDE (N)	SIGMA	LONGITUDE (W)	SIGMA	ELLIPSOID HEIGHT	SIGMA
86 3301940	40 19 37.09048	.00815	109 34 14.50743	.00545	1591.0538	.04125

Section II. Baseline Components and Lengths

This section will present the locally adjusted baseline components and lengths connecting the MVLBI sites shown in figure 1.

The tables are ordered sequentially, beginning with all baselines referred to the Mojave Base Station, and continuing in increasing order of monument reference number. Fixed base stations precede MVLBI sites in the arrangement.

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MOJAVE12 (7222) - OVRO 130 (7207)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	46	53429.74240	.01048	-168406.34738	.02049	-170132.59388	.01647	245276.44549	.00358
83 629 212	84	53429.76271	.01046	-168406.30803	.02022	-170132.63408	.01658	245276.45078	.00410
83 8221519	55	53429.74358	.01396	-168406.33494	.03108	-170132.60320	.02009	245276.44366	.00778
83 82518 5	39	53429.75975	.00884	-168406.29846	.01812	-170132.64857	.01352	245276.45362	.00446
83 82723 9	34	53429.69834	.01203	-168406.42585	.02492	-170132.54798	.01949	245276.45793	.00535
83 83119 7	38	53429.76605	.01206	-168406.30826	.02557	-170132.62761	.01856	245276.44718	.00574
8310311825	63	53429.73213	.00866	-168406.38187	.01750	-170132.58486	.01375	245276.46068	.00419
8311 51754	65	53429.75206	.00845	-168406.32953	.01634	-170132.60988	.01326	245276.44643	.00306
8311121632	74	53429.73668	.00992	-168406.36283	.02089	-170132.59409	.01537	245276.45500	.00546
84 2201649	60	53429.79769	.01763	-168406.25032	.03311	-170132.69001	.02788	245276.45756	.00767
84 2231559	34	53429.81951	.02977	-168406.18061	.05798	-170132.75679	.05459	245276.46078	.01249
84 2261646	21	53429.71804	.02169	-168406.41399	.04062	-170132.57746	.04144	245276.47453	.01260
84 4 919 5	55	53429.73960	.00862	-168406.35569	.01803	-170132.60115	.01377	245276.45562	.00572
84 41216 1	72	53429.76642	.00934	-168406.30326	.01761	-170132.63737	.01456	245276.45059	.00288
84102216 1	43	53429.69923	.01596	-168406.42419	.02971	-170132.54214	.02556	245276.45293	.00749
8410251538	40	53429.74317	.01417	-168406.34096	.02784	-170132.57503	.02249	245276.42817	.00656
8410281525	42	53429.73171	.01423	-168406.37618	.02713	-170132.58578	.02259	245276.45731	.00653
85 3 11610	39	53429.77308	.01676	-168406.28462	.03000	-170132.63517	.02545	245276.43772	.00565
85 3 41553	47	53429.80436	.01101	-168406.21312	.02021	-170132.69813	.01706	245276.43911	.00422
85 3 71553	30	53429.73948	.01267	-168406.36832	.02209	-170132.58165	.01800	245276.45075	.00506
85 3101952	30	53429.72568	.00962	-168406.37035	.01644	-170132.58669	.01334	245276.45263	.00385
85 3131615	32	53429.73942	.00871	-168406.35275	.01599	-170132.57880	.01311	245276.43807	.00391
85 5 71635	79	53429.75813	.00906	-168406.32683	.01619	-170132.60608	.01402	245276.44326	.00474
85 5121545	46	53429.71038	.00959	-168406.39437	.01701	-170132.55916	.01414	245276.44670	.00306
85 51419 7	45	53429.73759	.01152	-168406.36414	.02159	-170132.59761	.01698	245276.45854	.00426
85101916 9	48	53429.72112	.01096	-168406.39212	.02000	-170132.57949	.01658	245276.46159	.00460
8510231610	49	53429.74005	.01069	-168406.35514	.01920	-170132.57897	.01663	245276.43997	.00472
8510271613	50	53429.82419	.01211	-168406.18799	.02305	-170132.72074	.01956	245276.44186	.00501
8510301558	51	53429.71640	.01324	-168406.37255	.02482	-170132.56500	.02203	245276.43708	.00645
86 4 218 0	16	53429.74627	.00779	-168406.33446	.01392	-170132.59534	.01127	245276.43847	.00426
86 4 71735	40	53429.75630	.00764	-168406.32597	.01311	-170132.62258	.01093	245276.45372	.00364
86 4101553	44	53429.73656	.00689	-168406.37869	.01204	-170132.59025	.01087	245276.46320	.00418
86 4131921	49	53429.75376	.00695	-168406.32856	.01321	-170132.60132	.01076	245276.44020	.00356
86 5181559	46	53429.76167	.00811	-168406.32520	.01385	-170132.61225	.01153	245276.44720	.00323
86 5211559	31	53429.76175	.00816	-168406.32429	.01432	-170132.60422	.01211	245276.44102	.00365

MOJAVE12 (7222) - HRAS 085 (7216)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	75	-1031960.02140	.01129	685267.22073	.02329	436352.26048	.01796	1313368.16804	.00520
83 629 212	84	-1031960.00329	.01306	685267.21036	.02741	436352.24638	.02085	1313368.14371	.00668
8311 51754	53	-1031959.98608	.00990	685267.23316	.01991	436352.23837	.01552	1313368.13942	.00488
8311 81536	76	-1031960.00849	.00846	685267.23292	.01821	436352.24518	.01364	1313368.15917	.00495
84 41216 1	74	-1031960.02272	.01114	685267.18571	.02239	436352.26793	.01743	1313368.15327	.00506
84 41715 6	101	-1031960.00689	.01081	685267.17330	.03163	436352.29304	.02059	1313368.14270	.00732
84 4221652	96	-1031959.99871	.01096	685267.25406	.03637	436352.21848	.02280	1313368.15364	.00838
84 4251511	78	-1031959.97413	.01618	685267.34352	.04343	436352.20367	.02989	1313368.17609	.00930
85 3 11610	54	-1031959.95247	.01164	685267.33219	.02453	436352.19094	.01871	1313368.14892	.00588
85 3101952	50	-1031959.98103	.00890	685267.26793	.01946	436352.23385	.01446	1313368.15209	.00408
85 3131615	47	-1031960.00721	.00809	685267.21254	.01708	436352.27400	.01293	1313368.15710	.00429
85 5 216 1	84	-1031960.00892	.00948	685267.21620	.02295	436352.24398	.01579	1313368.15038	.00577
85 5 61545	92	-1031959.97028	.00906	685267.30405	.02121	436352.22255	.01479	1313368.15874	.00536
85 5 71635	85	-1031959.97482	.00910	685267.25457	.01831	436352.24873	.01484	1313368.14519	.00454
85 5121545	67	-1031959.99607	.00956	685267.23590	.02047	436352.26197	.01514	1313368.15654	.00510
85 51419 7	56	-1031960.03758	.01236	685267.13284	.02507	436352.29714	.01848	1313368.14707	.00686
85101916 9	66	-1031960.00908	.01073	685267.22556	.02449	436352.25822	.01779	1313368.16012	.00547
8510231610	63	-1031959.99895	.00981	685267.25179	.02186	436352.25627	.01672	1313368.16520	.00485
8511 21550	45	-1031959.99843	.01441	685267.27807	.02963	436352.23728	.02229	1313368.17219	.00756
8511 52018	66	-1031960.02612	.01131	685267.15184	.02489	436352.30836	.01783	1313368.15171	.00631
8512121519	49	-1031960.02493	.00963	685267.17495	.02989	436352.28499	.01952	1313368.15506	.00586
86 1 51618	58	-1031959.98169	.01366	685267.24813	.02657	436352.26817	.02065	1313368.15369	.00697
86 22320 0	79	-1031960.01619	.00560	685267.20738	.01308	436352.26782	.00953	1313368.15941	.00354
86 2262034	71	-1031960.00670	.00673	685267.20662	.01651	436352.28199	.01147	1313368.15627	.00410
86 3261624	45	-1031960.02412	.00551	685267.18894	.01297	436352.27858	.00954	1313368.15963	.00368
86 3301940	64	-1031959.97918	.00662	685267.30824	.01459	436352.22322	.01071	1313368.16814	.00427
86 4 218 0	58	-1031960.01314	.00650	685267.21208	.01280	436352.28014	.00994	1313368.16356	.00381
86 4 71735	54	-1031960.02433	.00791	685267.22144	.01608	436352.29312	.01190	1313368.18155	.00431
86 4101553	57	-1031960.05360	.00905	685267.14794	.02191	436352.30279	.01517	1313368.16941	.00561
86 5181559	82	-1031960.02980	.00705	685267.17907	.01677	436352.28456	.01195	1313368.16090	.00442
86 5211559	66	-1031960.02346	.00747	685267.18599	.01885	436352.28409	.01311	1313368.15937	.00497

MOJAVE12 (7222) - VNDNBERG (7223)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 8221519	28	321923.27289	.05339	-121305.60657	.09233	71061.18447	.06531	351282.41595	.01815
83 82518 5	30	321923.26622	.02014	-121305.68876	.03396	71061.11995	.02499	351282.42516	.00657
83 82723 9	36	321923.17722	.02214	-121305.83990	.03803	71061.24276	.03021	351282.42063	.00745
83 83119 7	43	321923.20356	.02194	-121305.72695	.04071	71061.16109	.03122	351282.38924	.00930
8310311825	42	321923.26287	.03329	-121305.71766	.05538	71061.17109	.04577	351282.44242	.00820
8311 320 6	64	321923.18960	.02102	-121305.80608	.03618	71061.21245	.02862	351282.41417	.00863
8311 81536	54	321923.19827	.01869	-121305.81034	.03125	71061.24124	.02499	351282.42941	.00543
8311101754	54	321923.18547	.02322	-121305.82212	.04003	71061.23181	.03222	351282.41984	.01004
8311121632	18	321923.14701	.03748	-121305.89926	.06651	71061.33125	.04976	351282.43135	.00822
84 2201649	59	321923.30728	.02568	-121305.59291	.04313	71061.05958	.03357	351282.41748	.01139
84 2231559	37	321923.20706	.03340	-121305.73634	.05677	71061.18311	.04606	351282.40015	.01123
84 2261646	43	321923.29370	.02209	-121305.67476	.03642	71061.13474	.03016	351282.44850	.00768
84 2291616	65	321923.30273	.05421	-121305.68016	.07935	71061.06406	.06208	351282.44434	.02313
84 3 32051	39	321923.30316	.04441	-121305.74611	.08327	71061.12316	.06498	351282.47947	.01689
84 41216 1	35	321923.21738	.02342	-121305.73077	.04277	71061.21810	.03247	351282.41476	.00754
84102216 1	66	321923.22775	.01948	-121305.77619	.03518	71061.17126	.02819	351282.43048	.00798
8410251538	82	321923.25675	.01640	-121305.70393	.03064	71061.11220	.02425	351282.42016	.00789
8410281525	84	321923.25533	.01630	-121305.74235	.02982	71061.14886	.02374	351282.43954	.00767
8410311559	77	321923.29410	.01850	-121305.66049	.03294	71061.07324	.02607	351282.43150	.00797
85 1 91542	77	321923.26505	.01922	-121305.72926	.02537	71061.12622	.01950	351282.43935	.00745
85 1121616	57	321923.21301	.01584	-121305.84423	.02737	71061.20533	.02103	351282.44736	.00808
85 11516 4	83	321923.22536	.01248	-121305.80749	.02156	71061.16836	.01731	351282.43851	.00541
85 1181636	51	321923.28922	.01540	-121305.67891	.02815	71061.07592	.02215	351282.43393	.00725
85 3 11610	70	321923.31954	.01208	-121305.63882	.02120	71061.05679	.01748	351282.44400	.00367
85 3 41553	81	321923.29201	.01161	-121305.68171	.02027	71061.11251	.01623	351282.44486	.00481
85 3 71553	75	321923.23816	.01261	-121305.78680	.02224	71061.17482	.01782	351282.44440	.00560
85 3101952	70	321923.24937	.01315	-121305.76738	.02100	71061.14068	.01675	351282.44106	.00422
85 3131615	61	321923.25787	.01223	-121305.77614	.02045	71061.16384	.01625	351282.45656	.00395
85 5121545	86	321923.25454	.01267	-121305.76715	.02055	71061.12337	.01676	351282.44222	.00435
85101916 9	92	321923.25209	.01264	-121305.79932	.02134	71061.13795	.01652	351282.45404	.00444
8510231610	57	321923.23646	.02019	-121305.83246	.03185	71061.16466	.02678	351282.45655	.00722
8510271613	68	321923.31741	.01196	-121305.66740	.02182	71061.04459	.01717	351282.44945	.00519
8510301558	52	321923.33685	.01936	-121305.64181	.03342	71061.03433	.02641	351282.45636	.00779
8511 21550	32	321923.29152	.02048	-121305.77745	.03757	71061.14150	.02847	351282.48333	.00620
8511 52018	100	321923.28794	.01281	-121305.74655	.02252	71061.09322	.01749	351282.45961	.00411
8512121519	84	321923.25850	.00769	-121305.79798	.01365	71061.12603	.01070	351282.45704	.00270
86 4101553	70	321923.20231	.00964	-121305.92966	.01621	71061.22296	.01316	351282.47063	.00391
86 4131921	81	321923.22393	.01237	-121305.88056	.02034	71061.18478	.01596	351282.46576	.00480
86 5181559	88	321923.28027	.00859	-121305.79252	.01429	71061.11026	.01140	351282.47191	.00330
86 5211559	70	321923.29203	.01020	-121305.76667	.01688	71061.11519	.01360	351282.47476	.00423

MOJAVE12 (7222) - HATCREEK (7218)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	31	167798.90898	.01235	-523249.56175	.02268	-479281.96716	.01897	729148.66919	.00522
83 629 212	62	167798.94260	.01175	-523249.49684	.02210	-479282.01742	.01845	729148.66337	.00518
84 2231559	68	167798.88875	.01979	-523249.56391	.03988	-479281.94625	.03228	729148.65233	.01226
84 2261646	42	167798.90242	.01125	-523249.52349	.02453	-479281.96854	.01797	729148.64113	.00764
84 41216 1	0	167798.87739	.01600	-523249.63226	.02886	-479281.90514	.02529	729148.67175	.00645
84 41715 6	73	167798.85191	.00912	-523249.62282	.01800	-479281.91644	.01392	729148.66653	.00492
84 4251511	68	167798.88338	.01053	-523249.57289	.02062	-479281.93451	.01582	729148.64983	.00577
85 3 11610	17	167798.93991	.01842	-523249.47194	.03110	-479282.04532	.03160	729148.66322	.00758
85 3101952	49	167798.92937	.00790	-523249.50585	.01443	-479281.99076	.01195	729148.64927	.00390
85 5 216 1	96	167798.91197	.00889	-523249.55897	.01584	-479281.96851	.01285	729148.66876	.00506
85 5 61545	80	167798.91765	.00889	-523249.52231	.01545	-479281.98769	.01280	729148.65637	.00490
85 5 71635	45	167798.92653	.01370	-523249.49902	.02228	-479282.00781	.02127	729148.65493	.00603
85 5121545	53	167798.90050	.00988	-523249.52422	.01733	-479282.00547	.01503	729148.66548	.00439
85101916 9	61	167798.94288	.01212	-523249.49045	.02110	-479282.05318	.01833	729148.68236	.00583
8510231610	62	167798.91916	.00926	-523249.52262	.01696	-479281.99914	.01466	729148.66446	.00472
8512121519	51	167798.91710	.00658	-523249.53060	.01298	-479282.00165	.01095	729148.67136	.00368
86 3261624	40	167798.91860	.00618	-523249.55466	.01040	-479281.98314	.00937	729148.67681	.00366
86 3301940	42	167798.91482	.00752	-523249.52604	.01414	-479281.99313	.01234	729148.66197	.00476
86 4 218 0	46	167798.92417	.00761	-523249.51779	.01261	-479282.01402	.01120	729148.67194	.00441
86 4 71735	53	167798.88707	.00785	-523249.59689	.01310	-479281.92427	.01149	729148.66116	.00454
86 5211559	37	167798.91874	.00751	-523249.54813	.01264	-479281.97688	.01102	729148.66805	.00418

MOJAVE12 (7222) - QUINCY (7221)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	38	161059.90961	.01773	-448160.57503	.03215	-408060.72947	.02865	627137.74758	.00828
84 41216 1	53	161059.90992	.02996	-448160.59975	.04845	-408060.68533	.04649	627137.73659	.00860
85 5121545	84	161059.86466	.01624	-448160.65559	.02572	-408060.68262	.02360	627137.76312	.00580
85 51419 7	76	161059.82698	.02168	-448160.76002	.03578	-408060.59887	.03212	627137.77357	.00880

MOJAVE12 (7222) - PT REYES (7251)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 82723 9	34	376162.03511	.02046	-429120.95154	.03720	-246020.31071	.03035	621424.70259	.01060
84 2261646	56	376162.04219	.04241	-429120.90361	.06318	-246020.34575	.05971	621424.68765	.01463
85 3131615	68	376162.07699	.01527	-429120.94315	.02314	-246020.41171	.01988	621424.76213	.00622
85101916 9	90	376162.10911	.01884	-429120.90491	.02930	-246020.44552	.02527	621424.76856	.00656

MOJAVE12 (7222) - PRESIDIO (7252)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 82518 5	42	351533.84445	.02473	-389146.20053	.04204	-219903.54441	.03395	568654.88482	.01164
83 82723 9	26	351533.85418	.02631	-389146.23901	.04548	-219903.51392	.03925	568654.90537	.01230
85 3101952	18	351533.68891	.04097	-389146.44915	.05359	-219903.39619	.04899	568654.90148	.00984
85 3131615	25	351533.81224	.02114	-389146.30710	.03115	-219903.49978	.02761	568654.92058	.00591
85101916 9	89	351533.85077	.01130	-389146.25053	.01911	-219903.56953	.01594	568654.93266	.00446
8510231610	84	351533.82888	.01317	-389146.29626	.02213	-219903.51782	.01926	568654.93042	.00487

MOJAVE12 (7222) - PBLOSSOM (7254)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 8221519	62	107899.90619	.03608	2669.84468	.06610	74564.86819	.04745	131184.74528	.01312
84 2201649	72	107899.95765	.03254	2669.94781	.06076	74564.83337	.04713	131184.76992	.01113
8410251538	70	107899.94848	.01936	2669.84632	.03649	74564.88439	.02828	131184.78931	.00687
85 3 71553	71	107899.90150	.01756	2669.76128	.03143	74564.94015	.02464	131184.78063	.00698
8510271613	87	107899.96120	.01553	2669.85805	.02889	74564.89863	.02232	131184.78196	.00551

MOJAVE12 (7222) - SANPAULA (7255)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 83119 7	64	198305.59560	.02766	-38128.44837	.04853	86332.37661	.03839	219618.23028	.00858
84 2291616	32	198305.57757	.06988	-38128.45764	.10086	86332.30808	.07459	219618.18867	.03434
85 1 91542	87	198305.63837	.01917	-38128.41893	.03482	86332.33255	.02608	219618.24647	.00752

MOJAVE12 (7222) - PINFLATS (7256)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8310311825	74	13464.87618	.01608	114568.98421	.03305	157354.56262	.02450	195109.74709	.00667
8311 320 6	62	13464.96840	.02330	114569.19052	.04592	157354.40146	.03552	195109.74463	.00913
8410281525	82	13464.86006	.02053	114568.94273	.04025	157354.56433	.02958	195109.72300	.00869
8410311559	80	13464.94046	.01465	114569.07797	.02980	157354.47908	.02152	195109.73921	.00619
85 1181636	50	13464.88745	.02649	114568.95792	.05504	157354.58386	.04166	195109.74956	.01323
8510301558	90	13464.94164	.01559	114569.04418	.02990	157354.48562	.02288	195109.72473	.00754
8511 21550	67	13464.95709	.01382	114569.05711	.02777	157354.48807	.02103	195109.73536	.00616
86 2262034	64	13464.98013	.01694	114569.09212	.03355	157354.45927	.02473	195109.73428	.00825
86 4101553	58	13464.90821	.01157	114568.97022	.02169	157354.53018	.01646	195109.71492	.00537
86 4131921	91	13464.92731	.01009	114569.00292	.01927	157354.50352	.01440	195109.71395	.00496

MOJAVE12 (7222) - FLATTVIL (7258)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 41715 6	51	-1115462.87317	.02743	73698.44601	.07830	-426011.02040	.06065	1196316.96129	.01525
84 4221652	22	-1115462.97505	.04064	73698.13308	.12972	-426010.75959	.11676	1196316.94413	.01900
84 4251511	24	-1115462.87010	.04020	73698.67592	.14295	-426011.15501	.11475	1196317.02053	.02448
85 5 216 1	87	-1115462.87331	.01171	73698.38513	.03036	-426010.96518	.02490	1196316.93801	.00764
85 5 61545	83	-1115462.85178	.01248	73698.49423	.03353	-426011.02864	.02675	1196316.94725	.00781
85 5 71635	59	-1115462.86089	.01318	73698.42297	.03806	-426010.97366	.03301	1196316.93177	.00819
86 3261624	53	-1115462.86948	.00727	73698.45699	.02127	-426010.99283	.01806	1196316.94871	.00478
86 3301940	71	-1115462.86823	.00980	73698.50862	.02977	-426011.01923	.02514	1196316.96012	.00651

MOJAVE12 (7222) - MAMOTHL (7259)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 629 212	22	92075.80038	.03029	-220017.47883	.05272	-206965.36697	.04119	315785.22311	.01318
84 4 919 5	47	92075.73439	.02935	-220017.57081	.05174	-206965.26174	.04440	315785.19898	.01188
84102216 1	61	92075.69918	.03168	-220017.61207	.05618	-206965.21330	.04677	315785.18572	.01245

MOJAVE12 (7222) - FLAGSTAF (7261)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 41715 6	23	-432178.42129	.03902	204098.34324	.10213	9881.47508	.07711	478050.17006	.01404
85 5 216 1	79	-432178.31065	.01244	204098.60479	.02835	9881.31638	.02133	478050.17842	.00437
86 3261624	45	-432178.30991	.00878	204098.61618	.02018	9881.32757	.01500	478050.18284	.00355

MOJAVE12 (7222) - JPL M/1 (7263)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 629 212	79	137134.92739	.01605	8441.76947	.03002	102951.28558	.02320	171686.39720	.00456
83 8221519	31	137134.96016	.03716	8441.77922	.06687	102951.33276	.04913	171686.45215	.01337
8310311825	61	137134.91889	.02629	8441.71070	.05121	102951.36134	.03835	171686.43295	.00919
84 2201649	28	137134.98359	.04573	8441.75980	.07678	102951.36551	.06265	171686.48961	.02297
84 4 919 5	25	137134.99419	.02789	8441.85653	.05096	102951.28960	.03814	171686.45725	.00690
84102216 1	67	137134.92682	.03379	8441.72469	.05861	102951.33974	.04673	171686.42702	.01496
8410251538	27	137134.99087	.03994	8441.76451	.07499	102951.23693	.05494	171686.41849	.01654
85 1181636	43	137134.97805	.02463	8441.75723	.04548	102951.28980	.03546	171686.43959	.01020
85 3 71553	33	137134.97706	.03042	8441.78889	.05402	102951.27149	.03825	171686.42938	.01124
8510271613	89	137134.99238	.01817	8441.78532	.03311	102951.28393	.02533	171686.44890	.00580
8510301558	95	137134.96312	.02013	8441.70499	.03606	102951.34352	.02786	171686.45731	.00726
86 4131921	88	137134.96740	.01132	8441.72093	.02061	102951.29613	.01549	171686.43310	.00441

MOJAVE12 (7222) - FORT ORD (7266)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 82518 5	46	340855.74668	.01735	-292362.42168	.03072	-119506.94853	.02428	464719.53670	.00773
84 2231559	46	340855.69238	.03890	-292362.51715	.06691	-119506.82803	.05570	464719.52592	.01297
85 3101952	58	340855.72965	.01233	-292362.50532	.02046	-119506.92133	.01744	464719.56983	.00353
8510231610	88	340855.74121	.01530	-292362.51095	.02481	-119506.96112	.02122	464719.59209	.00489

MOJAVE12 (7222) - DEADMANL (7267)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 2291616	69	-19351.41241	.05093	85830.87850	.09692	98140.77404	.07205	131806.78433	.02285
85 1 91542	41	-19351.36127	.04824	85830.96937	.08845	98140.67725	.06349	131806.76393	.01776

MOJAVE12 (7222) - PVERDES (7268)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311121632	45	169281.76665	.02875	23279.92290	.05211	145583.92443	.04083	224483.74191	.01179
85 3 41553	63	169281.91275	.01708	23279.98852	.03029	145583.83289	.02373	224483.79953	.00705

MOJAVE12 (7222) - ELKBUTTE (7269)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311 81536	45	-49864.11681	.03474	141158.36652	.07413	152734.30317	.05239	213868.84286	.01816
8311101754	54	-49864.08734	.03360	141158.45451	.07093	152734.20036	.05241	213868.82065	.02111
84 3 32051	90	-49864.06029	.01682	141158.51755	.03243	152734.19396	.02591	213868.85138	.01013
85 1121616	77	-49864.03079	.02336	141158.53684	.04539	152734.16406	.03393	213868.83588	.01072
85 11516 4	76	-49864.03797	.01812	141158.51293	.03519	152734.17296	.02626	213868.82813	.00822
86 5181559	79	-49864.01382	.00963	141158.58197	.01759	152734.14438	.01311	213868.84766	.00379

MOJAVE12 (7222) - OCOTILLO (7270)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 3 32051	29	-20569.86107	.03466	185488.33029	.07538	234078.04044	.07799	299368.61705	.02945
85 11516 4	82	-20569.87543	.01640	185488.25390	.03276	234078.11447	.02436	299368.62859	.00783
85 3 41553	80	-20569.82068	.01569	185488.40871	.03106	234077.99379	.02348	299368.62638	.00669

MOJAVE12 (7222) - MON PEAK (7274)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	53	30118.33069	.01805	155590.75677	.03509	223586.72478	.02565	274055.87192	.00585
8311 51754	69	30118.33190	.01338	155590.74075	.02746	223586.72806	.02050	274055.86563	.00573
8311 81536	68	30118.35112	.01217	155590.75947	.02517	223586.69264	.01788	274055.84948	.00492
84 41216 1	72	30118.36381	.01598	155590.78200	.03213	223586.66854	.02342	274055.84400	.00441
85 1121616	50	30118.32181	.02437	155590.67481	.04531	223586.71867	.03360	274055.81943	.01538
85 3 11610	70	30118.43529	.01512	155590.85505	.02852	223586.58543	.02204	274055.82552	.00668
85 5121545	92	30118.40885	.01833	155590.79346	.03530	223586.63465	.02633	274055.82780	.00885
85 51419 7	78	30118.37815	.02352	155590.72159	.04611	223586.68560	.03156	274055.82520	.00961
8511 52018	92	30118.37535	.01199	155590.68960	.02371	223586.68777	.01748	274055.80850	.00600
8512121519	80	30118.36406	.01168	155590.71427	.02287	223586.66217	.01643	274055.80037	.00558
86 1 51618	79	30118.40127	.01545	155590.72904	.03070	223586.65139	.02283	274055.80406	.00654
86 22320 0	65	30118.40517	.01072	155590.74574	.02082	223586.64235	.01526	274055.80659	.00630
86 4 71735	44	30118.39478	.01246	155590.71018	.02234	223586.67545	.01712	274055.81226	.00619
86 5181559	87	30118.39363	.00853	155590.71394	.01536	223586.66491	.01171	274055.80568	.00434
86 5211559	68	30118.40795	.00854	155590.73042	.01592	223586.64440	.01184	274055.79987	.00419

MOJAVE12 (7222) - ELY (7286)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 4221652	62	-278934.71727	.01638	-160043.26596	.03237	-350283.10495	.02800	475517.27318	.00779
85 5 61545	62	-278934.67589	.01393	-160043.14586	.02661	-350283.16968	.02262	475517.25617	.00635
86 4 218 0	46	-278934.71343	.00882	-160043.20316	.01719	-350283.09911	.01495	475517.24549	.00526

MOJAVE12 (7222) - VERNAL (7290)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
86 3301940	57	-724697.69905	.01248	-57626.95117	.03058	-438289.24927	.02659	848884.61321	.00692

MOJAVE12 (7222) - YUMA (7894)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311 320 6	74	-159393.09917	.02110	240581.10998	.04299	220045.39532	.03454	362912.39514	.01491
8311 51754	50	-159393.06843	.01877	240581.15190	.04063	220045.34461	.02983	362912.37868	.00999
8410311559	60	-159393.02899	.02958	240581.18374	.06010	220045.35246	.04381	362912.38722	.01454
85 3 11610	81	-159393.00813	.01255	240581.22857	.02565	220045.29914	.01936	362912.37545	.00471
8511 21550	73	-159393.03285	.02027	240581.18795	.04626	220045.35164	.03212	362912.39121	.00975
8511 52018	97	-159393.07474	.01767	240581.13956	.03841	220045.37150	.02698	362912.38957	.00754
86 4101553	68	-159393.07792	.01250	240581.08744	.02513	220045.41681	.01839	362912.38389	.00566
86 5211559	63	-159393.03587	.00950	240581.19141	.01877	220045.34602	.01367	362912.39143	.00395

OVRO 130 (7207) - HRAS 085 (7216)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	50	-1085389.76381	.00874	853673.56811	.01810	606484.85437	.01448	1508195.40473	.00505
83 629 212	47	-1085389.76601	.01132	853673.51839	.02360	606484.88045	.01820	1508195.38866	.00697
8311 51754	42	-1085389.73814	.00983	853673.56269	.01857	606484.84825	.01532	1508195.38073	.00543
84 41216 1	68	-1085389.78914	.01084	853673.48896	.02100	606484.90530	.01759	1508195.39864	.00562
85 3 11610	26	-1085389.72554	.01729	853673.61680	.03245	606484.82611	.02691	1508195.39339	.00809
85 3101952	28	-1085389.70672	.00981	853673.63828	.01956	606484.82053	.01518	1508195.38976	.00485
85 3131615	27	-1085389.74663	.00869	853673.56529	.01754	606484.85280	.01415	1508195.39015	.00509
85 5 71635	77	-1085389.73295	.00801	853673.58139	.01606	606484.85482	.01370	1508195.39022	.00464
85 5121545	40	-1085389.70645	.00985	853673.63027	.02022	606484.82114	.01580	1508195.38527	.00564
85 51419 7	34	-1085389.77517	.00963	853673.49698	.02009	606484.89475	.01539	1508195.38889	.00686
85101916 9	33	-1085389.73020	.01151	853673.61767	.02462	606484.83771	.01937	1508195.40190	.00622
8510231610	32	-1085389.73900	.00987	853673.60693	.02095	606484.83524	.01733	1508195.40116	.00528
86 4 218 0	52	-1085389.75942	.00664	853673.54653	.01311	606484.87547	.01046	1508195.39784	.00406
86 4 71735	29	-1085389.78063	.00783	853673.54741	.01531	606484.91569	.01254	1508195.42978	.00493
86 4101553	0	-1085389.79016	.01121	853673.52663	.02403	606484.89304	.01886	1508195.41577	.00734
86 5181559	38	-1085389.79147	.00832	853673.50427	.01835	606484.89682	.01377	1508195.40557	.00513
86 5211559	37	-1085389.78521	.00848	853673.51028	.01996	606484.88830	.01484	1508195.40104	.00571

OVRO 130 (7207) - HATCREEK (7218)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	36	114369.16658	.01007	-354843.21437	.01687	-309149.37328	.01517	484321.53374	.00406
83 629 212	61	114369.17989	.01009	-354843.18880	.01741	-309149.38334	.01533	484321.52458	.00420
84 2231559	41	114369.06923	.02976	-354843.38330	.05668	-309149.18946	.05467	484321.51719	.01239
84 2261646	21	114369.18438	.02072	-354843.10951	.03790	-309149.39108	.03930	484321.47248	.01152
84 41216 1	0	114369.11098	.01577	-354843.32900	.02746	-309149.26777	.02517	484321.53725	.00615
85 3 11610	0	114369.16683	.02295	-354843.18732	.03859	-309149.41015	.03766	484321.53752	.00808
85 3101952	28	114369.20369	.00860	-354843.13550	.01364	-309149.40407	.01154	484321.50437	.00372
85 5 71635	0	114369.16841	.01509	-354843.17220	.02400	-309149.40173	.02357	484321.52143	.00677
85 5121545	37	114369.19012	.01030	-354843.12985	.01675	-309149.44631	.01539	484321.52400	.00389
85101916 9	38	114369.22176	.01261	-354843.09833	.02124	-309149.47369	.01934	484321.52585	.00532
8510231610	32	114369.17911	.00919	-354843.16748	.01576	-309149.42016	.01472	484321.53227	.00438
86 4 218 0	39	114369.17790	.00767	-354843.18334	.01266	-309149.41868	.01127	484321.54266	.00428
86 4 71735	31	114369.13077	.00759	-354843.27091	.01225	-309149.30169	.01123	484321.52102	.00395
86 5211559	20	114369.15699	.00871	-354843.22384	.01387	-309149.37267	.01285	484321.53803	.00422

OVRO 130 (7207) - VANDENBERG (7223)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 8221519	18	268493.52932	.05366	47100.72837	.08845	241193.78767	.06353	363980.35264	.02245
83 82518 5	41	268493.50647	.01969	47100.60970	.03199	241193.76852	.02316	363980.30774	.00683
83 82723 9	76	268493.47888	.02025	47100.58595	.03315	241193.79074	.02606	363980.29904	.00750
83 83119 7	13	268493.43751	.02283	47100.58131	.03848	241193.78870	.03038	363980.26657	.00997
8310311825	33	268493.53074	.03344	47100.66421	.05490	241193.75596	.04595	363980.32438	.00911
8311121632	16	268493.41033	.03694	47100.46357	.06312	241193.92534	.04820	363980.32184	.00852
84 2201649	43	268493.50959	.02473	47100.65740	.04172	241193.74958	.03388	363980.30367	.01202
84 2231559	13	268493.38755	.03757	47100.44427	.06570	241193.93991	.06205	363980.31218	.01612
84 2261646	0	268493.57556	.02983	47100.73923	.05062	241193.71220	.04856	363980.33822	.01800
84 41216 1	41	268493.45096	.02284	47100.57249	.04144	241193.85547	.03173	363980.31960	.00772
84102216 1	30	268493.52852	.02051	47100.64799	.03675	241193.71340	.03250	363980.29244	.00972
8410251538	49	268493.51359	.01539	47100.63703	.02699	241193.68723	.02377	363980.26266	.00868
8410281525	43	268493.52362	.01558	47100.63383	.02801	241193.73464	.02474	363980.30107	.00936
85 3 11610	34	268493.54646	.01736	47100.64580	.03000	241193.69196	.02591	363980.29118	.00586
85 3 41553	45	268493.48765	.01221	47100.53141	.02021	241193.81064	.01743	363980.31164	.00512
85 3 71553	31	268493.49868	.01462	47100.58152	.02384	241193.75648	.02050	363980.29037	.00722
85 3101952	39	268493.52369	.01389	47100.60297	.02158	241193.72737	.01750	363980.29230	.00578
85 3131615	39	268493.51845	.01270	47100.57661	.02096	241193.74265	.01706	363980.29515	.00526
85 5121545	48	268493.54416	.01338	47100.62722	.02116	241193.68254	.01770	363980.28083	.00527
85101916 9	49	268493.53097	.01366	47100.59279	.02259	241193.71744	.01846	363980.28978	.00604
8510231610	26	268493.49641	.02151	47100.52268	.03380	241193.74363	.02894	363980.27257	.01048
8510271613	37	268493.49322	.01291	47100.52059	.02239	241193.76533	.01989	363980.28432	.00588
8510301558	33	268493.62045	.01969	47100.73075	.03329	241193.59983	.02878	363980.29537	.00926
86 4101553	39	268493.46575	.01068	47100.44903	.01760	241193.81322	.01577	363980.28653	.00561
86 4131921	45	268493.47017	.01276	47100.44800	.02047	241193.78610	.01651	363980.27169	.00577
86 5181559	44	268493.51860	.00944	47100.53268	.01518	241193.72251	.01254	363980.27624	.00446
86 5211559	43	268493.53028	.01111	47100.55762	.01805	241193.71941	.01503	363980.28602	.00540

OVRO 130 (7207) - QUINCY (7221)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	41	107630.16721	.01637	-279754.22765	.02883	-237928.13559	.02660	382696.32672	.00771
84 41216 1	31	107630.14351	.02920	-279754.29649	.04647	-237928.04796	.04525	382696.31589	.00755
85 5121545	41	107630.15428	.01652	-279754.26122	.02534	-237928.12346	.02380	382696.34009	.00529
85 51419 7	36	107630.08938	.02141	-279754.39588	.03452	-237928.00126	.03197	382696.34430	.00806

OVRO 130 (7207) - PT REYES (7251)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 82723 9	65	322732.33677	.01805	-260714.52569	.02989	-75887.76273	.02597	421766.73367	.00789
84 2261646	0	322732.32415	.04663	-260714.48962	.07117	-75887.76829	.07059	421766.70273	.01438
85 3131615	31	322732.33756	.01590	-260714.59040	.02383	-75887.83290	.02095	421766.78690	.00568
85101916 9	0	322732.38799	.01998	-260714.51280	.03086	-75887.86603	.02728	421766.78348	.00595

OVRO 130 (7207) - PRESIDIO (7252)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 82518 5	52	298104.08470	.02415	-220739.90207	.03890	-49770.89584	.03271	374258.32222	.00945
83 82723 9	65	298104.15584	.02458	-220739.81316	.04009	-49770.96593	.03612	374258.33577	.00976
85 3101952	0	298103.96322	.04146	-220740.07880	.05399	-49770.80950	.04959	374258.31822	.00965
85 3131615	27	298104.07282	.02081	-220739.95435	.03047	-49770.92098	.02714	374258.34694	.00536
85101916 9	47	298104.12965	.01165	-220739.85842	.01883	-49770.99004	.01666	374258.34481	.00374
8510231610	39	298104.08883	.01382	-220739.94111	.02261	-49770.93885	.02035	374258.35426	.00454

OVRO 130 (7207) - PALOMSOM (7254)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 8221519	48	54470.16261	.03763	171076.17962	.06934	244697.47139	.04781	303497.79299	.01792
84 2201649	57	54470.15996	.03321	171076.19812	.06172	244697.52338	.04883	303497.84487	.01292
8410251538	32	54470.20531	.01930	171076.18728	.03609	244697.45942	.02882	303497.79533	.00853
85 3 71553	29	54470.16202	.01874	171076.12960	.03298	244697.52181	.02639	303497.80534	.00835
8510271613	45	54470.13701	.01594	171076.04604	.02936	244697.57337	.02367	303497.79533	.00705

OVRO 130 (7207) - SANPAULA (7255)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 83119 7	44	144875.82955	.02887	130277.85989	.05002	256465.00422	.03897	322080.15331	.01125

OVRO 130 (7207) - PINFLATS (7256)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8310311825	62	-39964.85595	.01562	282975.36608	.03206	327487.14748	.02397	434649.37511	.00837
8410281525	40	-39964.87164	.02152	282975.31891	.04178	327487.15010	.03179	434649.34782	.01090
8510301558	52	-39964.77476	.01689	282975.41673	.03204	327487.05063	.02661	434649.32765	.00965
86 4101553	34	-39964.82834	.01203	282975.34891	.02230	327487.12043	.01780	434649.34101	.00632
86 4131921	46	-39964.82645	.00967	282975.33148	.01847	327487.10484	.01389	434649.31774	.00564

OVRO 130 (7207) - FLATTVIL (7258)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
85 5 71635	72	-1168892.61902	.01252	242104.74979	.03717	-255878.36758	.03263	1220818.74316	.00752

OVRO 130 (7207) - MAMMOTHL (7259)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 629 212	33	38646.03767	.02956	-51611.17080	.05059	-36832.73289	.03977	74255.50075	.01202
84 4 919 5	50	38645.99480	.02904	-51611.21512	.05030	-36832.66059	.04385	74255.47337	.00863
84102216 1	22	38645.99996	.03207	-51611.18788	.05668	-36832.67116	.04737	74255.46237	.01031

OVRO 130 (7207) - JPL MV1 (7263)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 629 212	82	83705.16467	.01521	176848.07750	.02796	273083.91966	.02146	335941.40008	.00561
83 8221519	30	83705.21658	.03922	176848.11416	.07200	273083.93596	.05020	335941.44556	.01851
8310311825	46	83705.18676	.02636	176848.09257	.05119	273083.94620	.03849	335941.43509	.01209
84 2201649	18	83705.18590	.04673	176848.01012	.07873	273084.05562	.06470	335941.48041	.02524
84 4 919 5	23	83705.25460	.02818	176848.21223	.05337	273083.89075	.03843	335941.46990	.01004
84102216 1	32	83705.22759	.03463	176848.14888	.06015	273083.88188	.04941	335941.42262	.01861
8410251538	18	83705.24770	.03974	176848.10547	.07414	273083.81195	.05480	335941.34793	.02064
85 3 71553	14	83705.23758	.03180	176848.15721	.05602	273083.85314	.04006	335941.40613	.01531
8510271613	49	83705.16818	.01893	176847.97331	.03416	273084.00467	.02729	335941.41521	.00746
8510301558	49	83705.24672	.02104	176848.07754	.03780	273083.90852	.03110	335941.41149	.00956
86 4131921	47	83705.21364	.01178	176848.04949	.02129	273083.89744	.01621	335941.37947	.00585

OVRO 130 (7207) - FORT ORD (7266)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 82518 5	53	287425.98692	.01660	-123956.12322	.02705	50525.70004	.02244	317067.28751	.00564
84 2231559	0	287425.87287	.04692	-123956.33654	.08216	50525.92877	.07424	317067.30396	.01489
85 3101952	36	287426.00397	.01301	-123956.13497	.02055	50525.66536	.01777	317067.30202	.00348
8510231610	0	287426.00116	.01666	-123956.15581	.02658	50525.61786	.02359	317067.30006	.00535

OVRO 130 (7207) - PVERDES (7268)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311121632	61	115852.02997	.02937	191686.28573	.05272	315716.51853	.04070	387094.62029	.01456
85 3 41553	35	115852.10840	.01816	191686.20164	.03190	315716.53102	.02539	387094.61231	.00823

OVRO 130 (7207) - BLKBUTTE (7269)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
86 5181559	35	-103293.77549	.01054	309564.90717	.01885	322866.75663	.01443	459067.50957	.00426

OVRO 130 (7207) - OCOTILLO (7270)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
85 3 41553	43	-73999.62503	.01635	353894.62183	.03195	404210.69191	.02474	542313.22252	.00783

OVRO 130 (7207) - MDN PEAK (7274)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	51	-23311.41172	.01732	323997.10416	.03340	393719.31866	.02434	510423.79187	.00595
8311 51754	58	-23311.42016	.01374	323997.07027	.02784	393719.33794	.02083	510423.78562	.00621
84 41216 1	66	-23311.40260	.01600	323997.08526	.03204	393719.30591	.02355	510423.76962	.00515
85 3 11610	40	-23311.33779	.01953	323997.13967	.03559	393719.22060	.02898	510423.73539	.00786
85 5121545	49	-23311.30153	.01914	323997.18783	.03648	393719.19381	.02748	510423.74364	.00909
85 51419 7	40	-23311.35945	.02363	323997.08573	.04649	393719.28321	.03197	510423.75044	.01003
86 4 71735	22	-23311.36153	.01235	323997.03615	.02195	393719.29802	.01726	510423.73049	.00623
86 5181559	41	-23311.36804	.00959	323997.03914	.01664	393719.27716	.01312	510423.71659	.00479
86 5211559	0	-23311.35380	.01066	323997.05470	.01924	393719.24861	.01518	510423.70380	.00527

OVRO 130 (7207) - ELY (7286)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
86 4 218 0	44	-332364.45970	.00832	8363.13129	.01622	-180150.50377	.01430	378140.55594	.00384

OVRO 130 (7207) - YUMA (7894)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311 51754	43	-212822.82049	.01888	408987.48143	.04061	390177.95449	.02989	603989.36171	.01070
85 3 11610	38	-212822.78121	.01794	408987.51318	.03384	390177.93431	.02748	603989.35633	.00661
86 4101553	0	-212822.81448	.01401	408987.46613	.02707	390178.00706	.02117	603989.38319	.00726
86 5211559	36	-212822.79762	.01023	408987.51570	.01951	390177.95024	.01475	603989.37411	.00443

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FRAS 085 (7216) - HATCREEK (7218)

YYMMDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	41	1199758.93038	.01019	-1208516.78249	.01904	-915634.22764	.01672	1983473.64694	.00658
83 629 212	56	1199758.94589	.01144	-1208516.70719	.02295	-915634.26380	.01861	1983473.62663	.00778
84 41216 1	67	1199758.90012	.01287	-1208516.81797	.02363	-915634.17307	.02177	1983473.62449	.00730
84 41715 6	90	1199758.85880	.00951	-1208516.79612	.03198	-915634.20948	.02064	1983473.60244	.00874
84 4251511	64	1199758.85751	.01371	-1208516.91641	.04116	-915634.13818	.02771	1983473.64307	.01091
85 3 11610	13	1199758.89237	.01807	-1208516.80412	.03191	-915634.23626	.03203	1983473.64096	.01048
85 3101952	40	1199758.91041	.00679	-1208516.77378	.01547	-915634.22460	.01254	1983473.62767	.00482
85 5 216 1	98	1199758.92089	.00824	-1208516.77516	.02131	-915634.21249	.01524	1983473.62930	.00683
85 5 61545	79	1199758.88793	.00745	-1208516.82637	.01891	-915634.21024	.01386	1983473.63979	.00629
85 5 71635	18	1199758.90135	.01453	-1208516.75359	.02401	-915634.25654	.02346	1983473.62455	.00782
85 5121545	55	1199758.89656	.00890	-1208516.76013	.01823	-915634.26745	.01532	1983473.63083	.00649
85101916 9	49	1199758.95196	.01162	-1208516.71601	.02342	-915634.31141	.01967	1983473.65844	.00726
8510231610	47	1199758.91812	.00793	-1208516.77441	.01816	-915634.25540	.01509	1983473.64742	.00543
8512121519	29	1199758.94203	.00889	-1208516.70555	.02887	-915634.28664	.01938	1983473.63402	.00768
86 3261624	50	1199758.94272	.00590	-1208516.74360	.01249	-915634.26182	.01067	1983473.64647	.00472
86 3301940	44	1199758.89400	.00700	-1208516.83427	.01442	-915634.21635	.01239	1983473.65139	.00544
86 4 218 0	52	1199758.93731	.00665	-1208516.72987	.01223	-915634.29415	.01139	1983473.64985	.00472
86 4 71735	43	1199758.91140	.00719	-1208516.81833	.01408	-915634.21738	.01221	1983473.65271	.00548
86 5211559	38	1199758.94220	.00757	-1208516.73412	.01869	-915634.26097	.01393	1983473.63982	.00639

FRAS 085 (7216) - VNDNBERG (7223)

YYMMDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311 81536	56	1353883.20676	.01931	-806573.04326	.03268	-365291.00394	.02573	1617713.61162	.00945
84 41216 1	34	1353883.24010	.02326	-806572.91648	.04245	-365291.04982	.03189	1617713.58667	.00983
85 3 11610	47	1353883.27201	.01242	-806572.97100	.02383	-365291.13415	.01827	1617713.65960	.00645
85 3101952	0	1353883.23040	.01469	-806573.03531	.02540	-365291.09316	.01953	1617713.64759	.00653
85 3131615	53	1353883.26508	.01265	-806572.98868	.02209	-365291.11016	.01699	1617713.65720	.00618
85 5121545	0	1353883.25061	.01454	-806573.00305	.02537	-365291.13860	.01950	1617713.65867	.00728
85101916 9	0	1353883.26118	.01497	-806573.02488	.02808	-365291.12027	.02073	1617713.67427	.00724
8510231610	0	1353883.23541	.02168	-806573.08425	.03613	-365291.09161	.02972	1617713.67583	.00998
8511 21550	26	1353883.28994	.02193	-806573.05553	.03946	-365291.09578	.02864	1617713.70809	.01040
8511 52018	68	1353883.31406	.01428	-806572.89839	.02696	-365291.21514	.01933	1617713.67688	.00773
8512121519	41	1353883.28344	.01080	-806572.97292	.03032	-365291.15897	.01977	1617713.67573	.00700
86 4101553	52	1353883.25592	.01105	-806573.07760	.02331	-365291.07983	.01672	1617713.68702	.00681
86 5181559	75	1353883.31007	.00870	-806572.97159	.01828	-365291.17430	.01299	1617713.70082	.00531
86 5211559	0	1353883.31549	.01132	-806572.95266	.02302	-365291.16890	.01677	1617713.69470	.00677

HRAS 085 (7216) - QUINCY (7221)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	34	1198019.93102	.01639	-1133427.79576	.03010	-844412.98996	.02749	1849591.42018	.00951
84 41216 1	33	1198019.93265	.03001	-1133427.78545	.04848	-844412.95325	.04696	1849591.39816	.01372
85 5121545	67	1198019.86073	.01610	-1133427.89150	.02719	-844412.94459	.02444	1849591.41280	.00856
85 51419 7	54	1198019.86455	.02128	-1133427.89286	.03647	-844412.89601	.03245	1849591.39393	.01205

HRAS 085 (7216) - PT REYES (7251)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
85 3131615	14	1408122.08419	.01577	-1114388.15569	.02457	-682372.68571	.02108	1921015.68128	.00846
85101916 9	62	1408122.11819	.01883	-1114388.13047	.03150	-682372.70375	.02619	1921015.69798	.00941

HRAS 085 (7216) - PRESIDIO (7252)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
85 3101952	9	1383493.66994	.04094	-1074413.71708	.05423	-656255.63004	.04942	1870585.74307	.01744
85 3131615	25	1383493.81945	.02124	-1074413.51964	.03174	-656255.77379	.02806	1870585.79068	.00955
85101916 9	64	1383493.85985	.01232	-1074413.47609	.02365	-656255.82775	.01879	1870585.81448	.00698
8510231610	51	1383493.82783	.01331	-1074413.54804	.02449	-656255.77409	.02062	1870585.81329	.00664

HRAS 085 (7216) - PINFLATS (7256)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8511 21550	47	1045424.95552	.01540	-570698.22096	.03239	-278997.74921	.02252	1223294.54389	.00737
86 2262034	44	1045424.98683	.01758	-570698.11450	.03614	-278997.82272	.02610	1223294.53775	.00743
86 4101553	0	1045424.96182	.01433	-570698.17772	.03017	-278997.77261	.02160	1223294.53443	.00706

HRAS 085 (7216) - FLATTVIL (7258)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 41715 6	28	-83502.86628	.02693	-611568.72729	.08181	-862363.31344	.06182	1060499.65541	.01923
84 4221652	15	-83502.97634	.04132	-611569.12098	.13309	-862362.97807	.11839	1060499.61940	.02879
84 4251511	20	-83502.89597	.03903	-611568.66760	.14494	-862363.35868	.11508	1060499.66111	.02568
85 5 216 1	84	-83502.86439	.00917	-611568.83107	.03082	-862363.20916	.02392	1060499.63131	.00907
85 5 61545	81	-83502.88150	.01007	-611568.80983	.03303	-862363.25119	.02541	1060499.65459	.00942
85 5 71635	69	-83502.88607	.01128	-611568.83160	.03706	-862363.22239	.03207	1060499.64408	.01009
86 3261624	64	-83502.84536	.00649	-611568.73195	.02165	-862363.27151	.01804	1060499.62335	.00594
86 3301940	68	-83502.88905	.00878	-611568.79962	.02985	-862363.24245	.02504	1060499.64219	.00781

HRAS 085 (7216) - MAMMOTHL (7259)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 629 212	22	1124035.80368	.03005	-905284.68919	.05318	-643317.61335	.04112	1580143.79348	.01408

HRAS 085 (7216) - FLAGSTAF (7261)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 41715 6	12	599781.58560	.03932	-481168.83006	.10520	-426470.81796	.07842	879283.08980	.01633
85 5 216 1	79	599781.69827	.01203	-481168.61141	.03081	-426470.92761	.02221	879283.10019	.00598
86 3261624	60	599781.71421	.00838	-481168.57276	.02062	-426470.95111	.01510	879283.10131	.00436

HRAS 085 (7216) - JPL MV1 (7263)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 629 212	54	1169094.93068	.01773	-676825.44089	.03399	-333400.96080	.02518	1391413.61034	.00787

HRAS 085 (7216) - FORT ORD (7266)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
85 3101952	52	1372815.71068	.01257	-977629.77325	.02261	-555959.15518	.01861	1774675.61297	.00588
8510231610	57	1372815.74016	.01576	-977629.76274	.02756	-555959.21738	.02289	1774675.64947	.00739

HRAS 085 (7216) - BLUEBUTTE (7269)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311 81536	44	982095.89169	.03508	-544108.86640	.07517	-283617.94202	.05294	1158018.10694	.01512
86 5181559	68	982096.01598	.00976	-544108.59710	.02094	-283618.14018	.01452	1158018.13435	.00482

HRAS 085 (7216) - MON PEAK (7274)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	56	1062078.35209	.01778	-529676.46396	.03505	-212765.53571	.02496	1205751.53146	.00668
8311 51754	42	1062078.31798	.01452	-529676.49241	.02955	-212765.51031	.02140	1205751.50944	.00588
8311 81536	74	1062078.35961	.01346	-529676.47344	.02822	-212765.55254	.01962	1205751.54523	.00593
84 41216 1	65	1062078.38654	.01754	-529676.40371	.03559	-212765.59938	.02539	1205751.54658	.00614
85 3 11610	57	1062078.38775	.01605	-529676.47714	.03236	-212765.60551	.02367	1205751.58099	.00705
85 5121545	0	1062078.40492	.01971	-529676.44245	.03935	-212765.62732	.02852	1205751.58471	.00842
85 51419 7	57	1062078.41573	.02393	-529676.41125	.04798	-212765.61154	.03222	1205751.57775	.00952
8511 52018	63	1062078.40147	.01314	-529676.46225	.02855	-212765.62059	.01936	1205751.58919	.00643
8512121519	50	1062078.38899	.01399	-529676.46068	.03602	-212765.62282	.02360	1205751.57790	.00674
86 1 51618	64	1062078.38296	.01631	-529676.51910	.03248	-212765.61678	.02290	1205751.59719	.00715
86 22320 0	59	1062078.42136	.01071	-529676.46164	.02217	-212765.62548	.01572	1205751.60731	.00525
86 4 71735	43	1062078.41910	.01249	-529676.51126	.02379	-212765.61767	.01746	1205751.62574	.00536
86 5181559	75	1062078.42343	.00891	-529676.46513	.01955	-212765.61966	.01344	1205751.60964	.00479
86 5211559	67	1062078.43141	.00924	-529676.45557	.02157	-212765.63969	.01449	1205751.61600	.00508

HRAS 085 (7216) - ELY (7286)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 4221652	48	753025.28145	.01802	-845310.52003	.04654	-786635.32343	.03430	1378547.09090	.01230
85 5 61545	59	753025.29439	.01339	-845310.44991	.02922	-786635.39223	.02361	1378547.09424	.00759
86 4 218 0	54	753025.29971	.00798	-845310.41524	.01693	-786635.37924	.01485	1378547.06848	.00496

HRAS 085 (7216) - VERNAL (7290)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
86 3301940	60	307262.28013	.01210	-742894.25941	.03108	-874641.47249	.02694	1187981.35291	.00851

HRAS 085 (7216) - YUMA (7894)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311 51754	37	872566.91765	.01903	-444686.08126	.04177	-216306.89376	.03014	1002949.35512	.00846
85 3 11610	58	872566.94433	.01292	-444686.10362	.02853	-216306.89181	.02016	1002949.38783	.00532
8511 21550	51	872566.96558	.02016	-444686.09013	.04776	-216306.88565	.03146	1002949.39900	.00810
8511 52018	66	872566.95138	.01768	-444686.01228	.04056	-216306.93686	.02754	1002949.36318	.00731
86 4101553	53	872566.97568	.01253	-444686.06050	.02805	-216306.88598	.01955	1002949.39472	.00588
86 5211559	73	872566.98759	.00987	-444685.99458	.02336	-216306.93806	.01574	1002949.38709	.00488

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HATCREEK (7218) - VNDNBERG (7223)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 2231559	29	154124.31831	.03335	401943.82758	.05615	550343.12936	.04471	698706.45199	.01514
84 2261646	35	154124.39128	.02300	401943.84874	.03706	550343.10328	.02972	698706.45972	.01095
84 41216 1	51	154124.33998	.02409	401943.90149	.04280	550343.12325	.03408	698706.49448	.01016
85 3 11610	16	154124.37963	.01862	401943.83312	.02957	550343.10211	.03074	698706.44724	.00765
85 3101952	0	154124.31999	.01385	401943.73847	.02147	550343.13144	.01762	698706.40274	.00630
85 5121545	0	154124.35404	.01486	401943.75708	.02292	550343.12885	.01982	698706.41891	.00649
85101916 9	0	154124.30922	.01574	401943.69113	.02519	550343.19113	.02136	698706.42015	.00783
8510231610	0	154124.31729	.02139	401943.69016	.03348	550343.16379	.02869	698706.39984	.01176
8512121519	50	154124.34140	.00802	401943.73262	.01315	550343.12767	.01146	698706.40113	.00422
86 5211559	0	154124.37330	.01150	401943.78146	.01789	550343.09207	.01525	698706.40822	.00677

HATCREEK (7218) - QUINCY (7221)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	26	-6738.99937	.01725	75088.98673	.02944	71221.23768	.02756	103712.26898	.00824
84 41216 1	0	-6738.96747	.03220	75089.03251	.05156	71221.21982	.05028	103712.28779	.00912
85 5121545	55	-6739.03583	.01628	75088.86863	.02447	71221.32285	.02368	103712.24433	.00543

HATCREEK (7218) - PT REYES (7251)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 2261646	38	208363.13977	.04228	94128.61988	.06081	233261.62279	.05902	326628.81037	.01902
85101916 9	58	208363.16623	.01863	94128.58554	.02757	233261.60766	.02516	326628.80655	.00734

HATCREEK (7218) - PRESIDIO (7252)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
85 3101952	16	183734.75953	.04085	134103.05670	.05257	259878.59456	.04874	344991.80714	.01331
85101916 9	59	183734.90789	.01288	134103.23991	.01971	259878.48366	.01838	344991.87399	.00571
8510231610	59	183734.90972	.01273	134103.22637	.02006	259878.48132	.01848	344991.86793	.00566

HATCREEK (7218) - PLATIVIL (7258)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 41715 6	63	-1283261.72508	.02654	596948.06883	.07729	53270.89603	.05994	1416314.03308	.01623
84 4251511	33	-1283261.75348	.03919	596948.24881	.14194	53270.77950	.11424	1416314.13029	.02944
85 5 216 1	97	-1283261.78528	.01033	596947.94409	.02852	53271.00333	.02407	1416314.03909	.00726
85 5 61545	82	-1283261.76943	.01118	596948.01654	.03193	53270.95905	.02600	1416314.05360	.00793
85 5 71635	48	-1283261.78742	.01694	596947.92199	.04003	53271.03415	.03623	1416314.03287	.00896
86 3261624	51	-1283261.78808	.00757	596948.01165	.02104	53270.99031	.01833	1416314.06961	.00509
86 3301940	42	-1283261.78305	.01031	596948.03466	.03011	53270.97390	.02591	1416314.07413	.00692

HATCREEK (7218) - MAMMOTHL (7259)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 629 212	32	-75723.14222	.02981	303232.01801	.05074	272316.65045	.04015	414535.89606	.01455

HATCREEK (7218) - FLAGSTAF (7261)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 41715 6	30	-599977.27321	.03887	727347.96606	.10203	489163.39151	.07695	1062209.30880	.01956
85 5 216 1	89	-599977.22262	.01225	727348.16376	.02838	489163.28489	.02149	1062209.36650	.00648
86 3261624	51	-599977.22851	.00903	727348.17084	.02001	489163.31070	.01544	1062209.38656	.00503

HATCREEK (7218) - JHL M/1 (7263)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 629 212	73	-30664.01521	.01613	531691.26631	.02985	582233.30300	.02286	789070.02454	.00678

HATCREEK (7218) - FORT ORD (7266)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 2231559	36	173056.80363	.03873	230887.04676	.06394	359675.11822	.05500	461111.34915	.01359
85 3101952	42	173056.80028	.01122	230887.00053	.01760	359675.06943	.01581	461111.28668	.00412
8510231610	55	173056.82205	.01490	230887.01167	.02306	359675.03802	.02068	461111.27593	.00609

HATCREEK (7218) - MON PEAK (7274)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	31	-137680.57829	.01817	678840.31853	.03433	702868.69193	.02557	986815.34129	.00758
84 41216 1	0	-137680.51358	.02110	678840.41426	.04045	702868.57369	.03176	986815.31389	.00830
85 3 11610	18	-137680.50462	.02155	678840.32699	.03755	702868.63075	.03504	986815.29325	.00994
85 5121545	0	-137680.49165	.02002	678840.31768	.03780	702868.64012	.02884	986815.29171	.01017
8512121519	49	-137680.55304	.01222	678840.24486	.02389	702868.66382	.01762	986815.26706	.00688
86 4 71735	33	-137680.49230	.01200	678840.30706	.02137	702868.59971	.01679	986815.25372	.00657
86 5211559	38	-137680.51079	.00933	678840.27855	.01654	702868.62128	.01302	986815.25404	.00553

HATCREEK (7218) - ELY (7286)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
85 5 61545	56	-446733.59354	.01315	363206.37646	.02517	128998.81801	.02190	590025.82193	.00485
86 4 218 0	45	-446733.63760	.00849	363206.31463	.01592	128998.91491	.01441	590025.83842	.00346

HATCREEK (7218) - VERNAL (7290)

YYMMDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
86 3301940	38	-892496.61387	.01284	465622.57487	.03093	40992.74386	.02734	1007489.45059	.00629

HATCREEK (7218) - YUMA (7894)

YYMMDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
85 3 11610	18	-327191.94804	.01970	763830.70050	.03547	699327.34446	.03358	1086071.19683	.00918
86 5211559	39	-327191.95461	.01017	763830.73954	.01941	699327.32291	.01466	1086071.21239	.00559

VANDENBERG (7223) - QUINCY (7221)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 41216 1	0	-160863.30746	.03669	-326854.86898	.06125	-479121.90343	.05451	601887.78639	.01173
85 5121545	0	-160863.38987	.01969	-326854.88845	.02993	-479121.80599	.02703	601887.74143	.00760

VANDENBERG (7223) - PT REYES (7251)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 82723 9	34	54238.85789	.02488	-307815.11164	.04213	-317081.55347	.03412	445233.31885	.01062
84 2261646	17	54238.74849	.04585	-307815.22886	.06733	-317081.48049	.06300	445233.33458	.01769
85 3131615	49	54238.81912	.01718	-307815.16701	.02572	-317081.57555	.02182	445233.36813	.00795
85101916 9	0	54238.85701	.02177	-307815.10559	.03307	-317081.58347	.02805	445233.33592	.00872

VANDENBERG (7223) - PRESIDIO (7252)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 82518 5	0	29610.57823	.03130	-267840.51177	.05140	-290964.66436	.04017	396580.08270	.01345
83 82723 9	22	29610.67695	.02910	-267840.39910	.04830	-290964.75667	.04106	396580.08171	.01284
85 3101952	0	29610.43954	.04273	-267840.68177	.05626	-290964.53688	.05101	396580.09363	.01154
85 3131615	20	29610.55437	.02266	-267840.53096	.03333	-290964.66363	.02906	396580.09334	.00807
85101916 9	88	29610.59868	.01345	-267840.45121	.02133	-290964.70748	.01744	396580.07496	.00601
8510231610	26	29610.59242	.02251	-267840.46380	.03524	-290964.68248	.03040	396580.06465	.01116

VNDNBERG (7223) - FBLOSSOM (7254)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 8221519	0	-214023.36671	.06402	123975.45125	.11212	3503.68372	.07890	247362.46645	.01989
84 2201649	35	-214023.34963	.03745	123975.54072	.06731	3503.77380	.05222	247362.49779	.01330
8410251538	71	-214023.30827	.02074	123975.55025	.03758	3503.77219	.02887	247362.46676	.00721
85 3 71553	76	-214023.33666	.01870	123975.54808	.03289	3503.76533	.02566	247362.49014	.00630
8510271613	55	-214023.35621	.01592	123975.52544	.02889	3503.80805	.02216	247362.49631	.00534

VNDNBERG (7223) - SANPAULA (7255)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 83119 7	11	-123617.60796	.03300	83177.27858	.05763	15271.21552	.04441	149776.44238	.00876
84 2291616	0	-123617.72515	.08380	83177.22252	.12778	15271.24402	.09599	149776.51088	.03285
85 1 91542	45	-123617.62668	.02038	83177.31033	.03637	15271.20633	.02746	149776.47453	.00688

VNDNBERG (7223) - PINFLATS (7256)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8310311825	20	-308458.38669	.03574	235874.70187	.06145	86293.39152	.04948	397781.34789	.00980
8311 320 6	27	-308458.22121	.02853	235874.99660	.05266	86293.18901	.04086	397781.35039	.01109
8410281525	72	-308458.39527	.02281	235874.68508	.04332	86293.41546	.03122	397781.34977	.00908
8410311559	60	-308458.35364	.02148	235874.73846	.03948	86293.40584	.02883	397781.34705	.00888
85 1181636	80	-308458.40178	.02723	235874.63683	.05423	86293.50794	.04076	397781.34627	.01187
8510301558	53	-308458.39521	.02129	235874.68598	.03778	86293.45129	.02844	397781.35804	.00909
8511 21550	38	-308458.33443	.02116	235874.83456	.03933	86293.34657	.02878	397781.37628	.00737
86 4101553	62	-308458.29410	.01369	235874.89989	.02486	86293.30721	.01922	397781.37521	.00513
86 4131921	69	-308458.29562	.01428	235874.88348	.02448	86293.31874	.01846	397781.36994	.00553

VANDENBERG (7223) - MAMMOTHL (7259)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84102216 1	44	-229847.52857	.03347	-98711.83588	.05792	-278026.38456	.05000	373995.43238	.01279

VANDENBERG (7223) - JPL MV1 (7263)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 8221519	0	-184788.31273	.06474	129747.38579	.11397	31890.14829	.08075	228030.88870	.02205
8310311825	0	-184788.34398	.04190	129747.42836	.07397	31890.19024	.05846	228030.94411	.01101
84 2201649	10	-184788.32369	.04969	129747.35271	.08394	31890.30604	.06797	228030.90082	.01927
84102216 1	14	-184788.30093	.03758	129747.50089	.06431	31890.16848	.05103	228030.94745	.01293
8410251538	0	-184788.26589	.04170	129747.46844	.07707	31890.12473	.05664	228030.89447	.01591
85 1181636	67	-184788.31117	.02458	129747.43614	.04452	31890.21388	.03419	228030.92526	.00912
85 3 71553	23	-184788.26110	.03189	129747.57569	.05613	31890.09566	.03989	228030.94769	.01149
8510271613	57	-184788.32503	.01902	129747.45272	.03422	31890.23935	.02606	228030.94948	.00556
8510301558	51	-184788.37374	.02463	129747.34679	.04283	31890.30919	.03284	228030.93844	.00765
86 4131921	76	-184788.25653	.01463	129747.60149	.02502	31890.11135	.01901	228030.96072	.00477

VANDENBERG (7223) - FORT ORD (7266)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 82518 5	26	18932.48046	.02382	-171056.73292	.03980	-190668.06848	.03024	256852.40320	.00896
84 2231559	0	18932.48532	.04913	-171056.78081	.08191	-190668.01114	.06775	256852.39289	.01533
85 3101952	62	18932.48028	.01578	-171056.73794	.02467	-190668.06201	.02072	256852.40173	.00572
8510231610	0	18932.50475	.02488	-171056.67849	.03876	-190668.12577	.03307	256852.41128	.01158

VNDNBERG (7223) - DEADMANL (7267)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 2291616	12	-341274.71514	.07376	207136.55856	.11717	27079.70998	.09088	400134.09730	.02942
85 1 91542	15	-341274.62632	.05005	207136.69863	.09065	27079.55103	.06524	400134.08325	.01438

VNDNBERG (7223) - PVERDES (7268)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311121632	0	-152641.38036	.04689	144585.82216	.08223	74522.59318	.06131	223065.16506	.01210
85 3 41553	49	-152641.37926	.01851	144585.67022	.03210	74522.72038	.02477	223065.10832	.00623

VNDNBERG (7223) - BLKBUTTE (7269)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311 81536	18	-371787.31508	.03821	262464.17686	.07788	81673.06192	.05606	462367.53868	.01543
8311101754	24	-371787.27281	.03987	262464.27663	.07873	81672.96855	.05862	462367.54484	.01957
84 3 32051	0	-371787.36345	.04630	262464.26366	.08797	81673.07080	.06568	462367.62842	.02144
85 1121616	47	-371787.24379	.02595	262464.38107	.04887	81672.95873	.03556	462367.57906	.01213
85 11516 4	70	-371787.26333	.01989	262464.32042	.03646	81673.00460	.02724	462367.56844	.00795
86 5181559	74	-371787.29409	.01075	262464.37449	.01888	81673.03412	.01403	462367.62909	.00377

VNDNBERG (7223) - COOTILLO (7270)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 3 32051	0	-342493.16423	.05536	306794.07640	.11059	163016.91728	.09724	487851.09222	.02690
85 11516 4	72	-342493.10079	.01837	306794.06139	.03437	163016.94612	.02508	487851.04788	.00786
85 3 41553	79	-342493.11269	.01671	306794.09041	.03152	163016.88128	.02326	487851.05281	.00681

VANDENBERG (7223) - MON PEAK (7274)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311 81536	42	-291804.84715	.02106	276896.56982	.03723	152525.45140	.02856	430215.98357	.00795
84 41216 1	0	-291804.85356	.02716	276896.51277	.05125	152525.45044	.03781	430215.95086	.00907
85 1121616	23	-291804.89119	.02587	276896.51904	.04836	152525.51334	.03407	430216.00273	.01308
85 3 11610	52	-291804.88425	.01668	276896.49387	.03031	152525.52864	.02337	430215.98724	.00555
85 5121545	74	-291804.84569	.02000	276896.56060	.03700	152525.51128	.02794	430215.99788	.00754
8511 52018	92	-291804.91259	.01437	276896.43614	.02608	152525.59455	.01918	430215.99267	.00551
8512121519	77	-291804.89445	.01228	276896.51224	.02330	152525.53614	.01662	430216.00864	.00469
86 5181559	79	-291804.88664	.00992	276896.50646	.01700	152525.55465	.01283	430216.00618	.00404
86 5211559	0	-291804.88408	.01270	276896.49708	.02181	152525.52921	.01670	430215.98939	.00556

VANDENBERG (7223) - YUMA (7894)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311 320 6	27	-481316.28877	.02920	361886.91606	.05179	148984.18287	.04099	620341.67731	.01645
8410311559	19	-481316.32308	.03396	361886.84423	.06452	148984.27922	.04669	620341.68516	.01599
85 3 11610	76	-481316.32767	.01386	361886.86738	.02683	148984.24234	.02029	620341.69337	.00484
8511 21550	34	-481316.32437	.02619	361886.96540	.05439	148984.21013	.03795	620341.74025	.01074
8511 52018	90	-481316.36268	.01943	361886.88610	.03991	148984.27828	.02812	620341.74008	.00751
86 4101553	64	-481316.28023	.01374	361887.01710	.02630	148984.19385	.01960	620341.73226	.00556
86 5211559	92	-481316.32790	.01174	361886.95808	.02113	148984.23083	.01588	620341.74369	.00491

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QUINCY (7221) - MON PEAK (7274)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 6271451	0	-130941.57893	.02287	603751.33180	.04246	631647.45425	.03447	883538.26980	.01005
84 41216 1	0	-130941.54611	.03289	603751.38174	.05586	631647.35387	.05033	883538.22730	.01050
85 5121545	0	-130941.45582	.02383	603751.44905	.04233	631647.31727	.03418	883538.23375	.01082
85 51419 7	0	-130941.44883	.03064	603751.48162	.05572	631647.28447	.04297	883538.23152	.01364

PT REYES (7251) - PRESIDIO (7252)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 82723 9	18	-24628.18092	.02880	39974.71254	.04660	26116.79680	.04225	53727.19994	.01183
85 3131615	0	-24628.26474	.02510	39974.63605	.03590	26116.91192	.03221	53727.23741	.00797
85101916 9	0	-24628.25834	.02019	39974.65438	.02964	26116.87599	.02654	53727.23065	.00654

PRESIDIO (7252) - FORT ORD (7266)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 82518 5	0	-10678.09777	.02906	96783.77886	.04558	100296.59588	.03844	139787.44137	.01261
85 3101952	0	-10677.95926	.04217	96783.94383	.05520	100296.47486	.05079	139787.45819	.01062
8510231610	0	-10678.08767	.01863	96783.78530	.02906	100296.55670	.02580	139787.41696	.00714

FELOSSOM (7254) - JHL MV1 (7263)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 8221519	0	29235.05397	.05081	5771.93454	.09304	28386.46457	.06729	41155.74055	.01777
84 2201649	0	29235.02594	.05507	5771.81199	.09589	28386.53224	.07677	41155.75012	.02540
8410251538	0	29235.04239	.04313	5771.91819	.08047	28386.35253	.05925	41155.65275	.01806
85 3 71553	0	29235.07556	.03453	5772.02761	.06128	28386.33134	.04410	41155.67704	.01303
8510271613	0	29235.03117	.02226	5771.92728	.04052	28386.43130	.03095	41155.70038	.00726

SANPAULA (7255) - DEADMANL (7267)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 2291616	0	-217656.98999	.08824	123959.33614	.14105	11808.46597	.10569	250758.69312	.03528
85 1 91542	0	-217656.99964	.05168	123959.38831	.09438	11808.34471	.06803	250758.72157	.01422

FINFLATS (7256) - JPL MV1 (7263)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8310311825	20	123670.04271	.02892	-106127.27351	.05695	-54403.20128	.04226	171805.08129	.00991
85 1181636	0	123670.09060	.03472	-106127.20069	.06785	-54403.29406	.05149	171805.10016	.01379
8510301558	0	123670.02148	.02403	-106127.33919	.04378	-54403.14210	.03309	171805.08784	.00745
86 4131921	0	123670.04009	.01426	-106127.28199	.02629	-54403.20740	.01937	171805.08658	.00489

FINFLATS (7256) - YUMA (7894)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311 320 6	19	-172858.06757	.02964	126011.91946	.05920	62690.99386	.04600	222910.46651	.01294
8410311559	13	-172857.96945	.03142	126012.10577	.06459	62690.87338	.04589	222910.46186	.01251
8511 21550	0	-172857.98994	.02241	126012.13084	.05082	62690.86357	.03468	222910.48916	.00869
86 4101553	0	-172857.98613	.01663	126012.11722	.03245	62690.88663	.02402	222910.48500	.00589

FLATTVIL (7258) - FLAGSTAF (7261)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 41715 6	0	683284.45188	.04681	130399.89723	.12754	435892.49548	.09715	820904.40551	.01986
85 5 216 1	0	683284.56266	.01441	130400.21966	.03859	435892.28156	.03039	820904.43536	.00861
86 3261624	0	683284.55957	.01015	130400.15919	.02771	435892.32039	.02217	820904.44379	.00602

FLATTVIL (7258) - ELY (7286)

YYMMDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 4221652	0	836528.25778	.04351	-233741.39904	.13366	75727.65464	.11997	871865.38260	.01744
85 5 61545	0	836528.17589	.01604	-233741.64008	.03955	75727.85896	.03268	871865.38639	.00798

FLATTVIL (7258) - VERNAL (7290)

YYMMDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
86 3301940	32	390765.16917	.01384	-131325.45979	.03983	-12278.23004	.03384	412425.20384	.00640

MAMMOTHL (7259) - JHL M/1 (7263)

YYMMDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
83 629 212	0	45059.12700	.03262	228459.24830	.05672	309916.65255	.04397	387649.69314	.01448
84 4 919 5	0	45059.25980	.03982	228459.42734	.07285	309916.55134	.05752	387649.73317	.01580
84102216 1	0	45059.22764	.04529	228459.33676	.07863	309916.55304	.06449	387649.67741	.02143

PVERDES (7268) - OCOTILLO (7270)

YYMMDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
85 3 41553	0	-189851.73343	.02217	162208.42019	.04122	88494.16089	.03093	264927.28961	.00744

BLEBUTIE (7269) - OCOTILLO (7270)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
84 3 32051	11	29294.19921	.03660	44329.81274	.08043	81343.84648	.07870	97160.19641	.03195
85 11516 4	18	29294.16254	.02285	44329.74097	.04545	81343.94151	.03296	97160.23216	.01076

BLEBUTIE (7269) - MON PEAK (7274)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311 81536	17	79982.46793	.03602	14432.39296	.07670	70852.38948	.05415	107821.84490	.01103
85 1121616	0	79982.35260	.03309	14432.13797	.06298	70852.55461	.04596	107821.83373	.01656
86 5181559	0	79982.40746	.01159	14432.13197	.02123	70852.92053	.01548	107821.85122	.00514

MON PEAK (7274) - YUMA (7894)

YYMMDDHHMM	OBS	X	SIGMA	Y	SIGMA	Z	SIGMA	LENGTH	SIGMA
8311 51754	19	-189511.40033	.02156	84990.41115	.04618	-3541.38345	.03372	207726.94153	.00762
85 3 11610	16	-189511.44342	.01734	84990.37351	.03437	-3541.28629	.02549	207726.96379	.00501
8511 52018	0	-189511.45009	.01984	84990.44996	.04266	-3541.31627	.02957	207727.00166	.00634
86 5211559	0	-189511.44382	.01178	84990.46099	.02305	-3541.29837	.01641	207727.00015	.00402

APPENDIX A.--ANTENNA-MONUMENT OFFSET VECTORS

```
*************************************************************************
*                                                                       *
* STATION  MONUMENT    YY MM DD HH MM:  COMP 1 :  COMP 2 :  COMP 3:TYPE *
*                                     :  NORTH  :  EAST   :   UP  :NEU  *
*                                     :    X    :    Y    :   Z   :XYZ  *
*************************************************************************
*                                                                       *
* JUNE 1983 CAMPAIGN                                                    *
*                                                                       *
*   The MV-3 site vectors at MON PEAK (7220) and JPL MV3 (7272)         *
* were determined by reconstruction of the encoder readings on the      *
* locator arm after the calibrations were performed.                    *
*                                                                       *
*   The MON PEAK (7220) site vector has been reduced to MON PEAK (7274). *
* The values for N,E,U for MON PEAK (7220) given in the JPL DIS report of *
* November 30, 1984 are: N= -1.7153, E= 1.9858, U= 4.2895.              *
*   The reduction from MON PEAK (7274) to MON PEAK (7220) is: N= -3.767, *
* E= -2.179, U= 0.082 [Source: HAVAGO Adjustment of 84-08-17].          *
*                                                                       *
*   The JPL MV3 site vector was reduced to JPL MV1 (7263). The reduction *
* to the MV-3 mark (7272) is given in the old ECCDAT file as: N= 1.145, *
* E= -2.300, U= 4.352.                                                  *
*   The reduction from JPL MV1 (7263) to JPL MV3 (7272) is: N= -26.661, *
* E= 10.281, U= -0.002 [Source: HAVAGO Adjustment of 84-08-17].         *
*                                                                       *
* 83F          MOJAVE12  OVRO 130  HRAS 085  HATCREEK                   *
*                                                                       *
* QUINCY   7221        83 06 28 00 00    -.084     .054    2.857   NEU *
* MON PEAK 7274        83 06 28 00 00   -5.482   -0.193    4.372   NEU *
*                                                                       *
* 83G          MOJAVE12  OVRO 130  HRAS 085  HATCREEK                   *
*                                                                       *
* MAMMOTHL 7259        83 06 30 00 00     .059     .040    2.902   NEU *
* JPL MV3  7263        83 06 30 00 00  -25.516    7.981    4.350   NEU *
*                                                                       *
*************************************************************************
```

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*************************************************************************
*                                                                       *
* STATION  MONUMENT    YY MM DD HH MM:  COMP 1 :  COMP 2 :  COMP 3:TYPE *
*                                    :  NORTH  :  EAST   :   UP   :NEU  *
*                                    :    X    :    Y    :   Z    :XYZ  *
*************************************************************************
*                                                                       *
* AUGUST 1983 CAMPAIGN                                                  *
*                                                                       *
*   The MV-3 site vectors at PBLOSSOM (7254), FORT ORD (7266) and       *
* PT REYES (7251) were determined by reconstruction of the encoder      *
* readings on the locator arm after the calibrations were performed.    *
*                                                                       *
*   In 83H, unit MV-2 occupied JPL MV2 (7264); the site vector given has *
* been reduced to JPL MV1 (7263).                                       *
*   The values of N,E,U computed from the templates for 5-B-1 (7264)    *
* were: N= .004, E= .086, U= 2.851.                                     *
*   The reduction from JPL MV1 (7263) to JPL MV2 (7264) is: N= 12.729,  *
* E= -27.898, U= 0.642 [Source: HAVAGO Adjustment of 84-08-17].         *
*                                                                       *
*   In 83K, no site vector data exists for MV-3 at DEADMANL (7267).     *
* For this reason, the data from this site has been deleted from the    *
* observation data set.                                                 *
*                                                                       *
* 83H          MOJAVE12  OVRO 130                                       *
*                                                                       *
* VNDNBERG 7223        83 08 23 00 00     .000     .067    7.633   NEU *
* JPL MV2  7263        83 08 23 00 00   12.733  -27.812    3.493   NEU *
* PBLOSSOM 7254        83 08 23 00 00    2.5889   -.0281   4.3265  NEU *
*                                                                       *
* 83I          MOJAVE12  OVRO 130                                       *
*                                                                       *
* VNDNBERG 7223        83 08 26 00 00     .000     .067    7.633   NEU *
* PRESIDIO 7252        83 08 26 00 00    -.047     .030    2.833   NEU *
* FORT ORD 7266        83 08 26 00 00    2.4544   -.5970   4.4911  NEU *
*                                                                       *
* 83J          MOJAVE12  OVRO 130                                       *
*                                                                       *
* VNDNBERG 7223        83 08 28 00 00     .000     .067    7.633   NEU *
* PRESIDIO 7252        83 08 28 00 00    -.048     .029    2.833   NEU *
* PT REYES 7251        83 08 28 00 00     .3298   2.4913   4.4005  NEU *
*                                                                       *
* 83K          MOJAVE12  OVRO 130                                       *
*                                                                       *
* VNDNBERG 7223        83 09 01 00 00     .000     .067    7.633   NEU *
* SANPAULA 7255        83 09 01 00 00    -.028     .073    2.825   NEU *
*                                                                       *
*************************************************************************
```

STATION	MONUMENT	YY MM DD HH MM:	COMP 1 : NORTH : X	COMP 2 : EAST : Y	COMP 3: UP : Z	TYPE NEU :XYZ

NOVEMBER 1983 CAMPAIGN

The MV-3 site vectors at PINFLATS (7256) and MON PEAK (7220) were determined by reconstruction of the encoder readings on the locator arm after the calibrations were performed.

The MON PEAK (7220) site vector has been reduced to MON PEAK (7274). The values for N,E,U given in the JPL DIS report of November 30,1984 are: N= -1.998, E= 1.533, U= 4.297.
The reduction from MON PEAK (7274) to MON PEAK (7220) is: N= -3.767, E= -2.179, U= 0.082 [Source: HAVAGO Adjustment of 84-08-17].

In 83M, unit MV-2 occupied site JPL MV2 (7264), but the site vector was reduced to JPL MV1 (7263).
The values of N,E,U computed from the templates for 5-B-1 (7264) were: N= .040, E= .030, U= 2.841.
The reduction from JPL MV1 (7263) to JPL MV2 (7264) is: N= 12.729, E= -27.898, U= 0.642 [Source: HAVAGO Adjustment of 84-08-17].

83M	MOJAVE12 OVRO 130					
VNDNBERG	7223	83 11 01 00 00	.000	.067	7.633	NEU
JPL MV2	7263	83 11 01 00 00	12.769	-27.868	3.483	NEU
PINFLATS	7256	83 11 01 00 00	2.475	-.350	4.330	NEU
83N	MOJAVE12					
VNDNBERG	7223	83 11 04 00 00	.000	.067	7.633	NEU
YUMA	7894	83 11 04 00 00	-.043	-.019	2.833	NEU
PINFLATS	7256	83 11 04 00 00	2.475	-.350	4.330	NEU
83O	MOJAVE12 OVRO 130 HRAS 085					
YUMA	7894	83 11 06 00 00	-.044	-.011	2.833	NEU
MON PEAK	7274	83 11 06 00 00	-5.765	-0.646	4.379	NEU
83P	MOJAVE12 HRAS 085					
VNDNBERG	7223	83 11 09 00 00	.000	.067	7.633	NEU
BLKBUTTE	7269	83 11 09 00 00	.026	.048	2.921	NEU
MON PEAK	7274	83 11 09 00 00	-5.765	-0.646	4.379	NEU
83Q	MOJAVE12					
VNDNBERG	7223	83 11 11 00 00	.000	.067	7.633	NEU
BLKBUTTE	7269	83 11 11 00 00	.027	.048	2.921	NEU
83R	MOJAVE12 OVRO 130					
VNDNBERG	7223	83 11 13 00 00	.000	.067	7.633	NEU
PVERDES	7268	83 11 13 00 00	-.025	.007	2.882	NEU

```
*****************************************************************************
*                                                                           *
* STATION  MONUMENT    YY MM DD HH MM:  COMP 1 :  COMP 2 :  COMP 3:TYPE     *
*                                    :  NORTH  :  EAST   :   UP   :NEU      *
*                                    :    X    :    Y    :   Z    :XYZ      *
*****************************************************************************
*                                                                           *
* FEBRUARY 1984 CAMPAIGN                                                    *
*                                                                           *
*   In 84A, unit MV-2 occupied JPL MV2 (7264), but the site vector was      *
* reduced to JPL MV1 (7263).                                                *
*   The values for N,E,U computed from the templates for 5-B-1 (7264)       *
* were: N= -.010, E= .044, U= 2.913.                                        *
*   The reduction from JPL MV1 (7263) to JPL MV2 (7264) is: N= 12.729,      *
* E= -27.898, U= 0.642 [Source: HAVAGO Adjustment of 84-08-17].             *
*                                                                           *
*    In 84B and 84C, the data from PRESIDIO (7252) were deleted from the    *
* observation data set due to poor quality.                                 *
*                                                                           *
* 84A          MOJAVE12  OVRO 130                                           *
*                                                                           *
* VNDNBERG 7223        84 02 21 00 00     .000     .067    7.633   NEU     *
* JPL MV2  7263        84 02 21 00 00   12.719  -27.854    3.555   NEU     *
* PBLOSSOM 7254        84 02 21 00 00    -.022    -.015    4.322   NEU     *
*                                                                           *
* 84B          MOJAVE12  OVRO 130  HATCREEK                                 *
*                                                                           *
* VNDNBERG 7223        84 02 24 00 00     .000     .067    7.633   NEU     *
* FORT ORD 7266        84 02 24 00 00     .036    -.071    4.420   NEU     *
*                                                                           *
* 84C          MOJAVE12  OVRO 130  HATCREEK                                 *
*                                                                           *
* VNDNBERG 7223        84 02 27 00 00     .000     .067    7.633   NEU     *
* PT REYES 7251        84 02 27 00 00     .021    -.060    4.325   NEU     *
*                                                                           *
* 84D          MOJAVE12                                                     *
*                                                                           *
* VNDNBERG 7223        84 03 01 00 00     .000     .067    7.633   NEU     *
* SANPAULA 7255        84 03 01 00 00     .038    -.010    2.753   NEU     *
* DEADMANL 7267        84 03 01 00 00    -.053    -.030    4.276   NEU     *
*                                                                           *
* 84E          MOJAVE12                                                     *
*                                                                           *
* VNDNBERG 7223        84 03 04 00 00     .000     .067    7.633   NEU     *
* OCOTILLO 7270        84 03 04 00 00     .041    -.013    2.824   NEU     *
* BLKBUTTE 7269        84 03 04 00 00     .088    -.017    4.378   NEU     *
*                                                                           *
*****************************************************************************
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*****************************************************************************
*                                                                           *
* STATION  MONUMENT    YY MM DD HH MM:  COMP 1 :  COMP 2 :  COMP 3:TYPE     *
*                                    :  NORTH  :  EAST   :   UP   :NEU      *
*                                    :    X    :    Y    :   Z    :XYZ      *
*****************************************************************************
*                                                                           *
* APRIL 1984 CAMPAIGN                                                       *
*                                                                           *
*   The ELY (7257) site vector has been reduced to ELY (7286).  The         *
* values for N,E,U for ELY (7257) are: N= -0.051, E= 0.037, U= 4.426.       *
*   The reduction from ELY (7257) to ELY (7286) is: N= 2.656, E= -18.783,   *
* U= 0.079 [Source: D.Hoyle & B.Smith, NGS, 85-08-19].                      *
*                                                                           *
* 84F          MOJAVE12  OVRO 130                                           *
*                                                                           *
* MAMMOTHL 7259        84 04 10 00 00     .088    -.044    2.829   NEU     *
* JPL MV1  7263        84 04 10 00 00    -.021    -.024    4.321   NEU     *
*                                                                           *
* 84G          MOJAVE12  OVRO 130  HRAS 085  HATCREEK                       *
*                                                                           *
* VNDNBERG 7223        84 04 13 00 00     .006     .066    7.622   NEU     *
* QUINCY   7221        84 04 13 00 00    -.011     .065    2.845   NEU     *
* MON PEAK 7274        84 04 13 00 00    -.010     .080    4.340   NEU     *
*                                                                           *
* 84H          MOJAVE12  HRAS 085  HATCREEK                                 *
*                                                                           *
* PLATTVIL 7258        84 04 18 00 00   -0.006   -0.051    2.755   NEU     *
* FLAGSTAF 7261        84 04 18 00 00     .000    -.002    4.308   NEU     *
*                                                                           *
* 84I          MOJAVE12  HRAS 085                                           *
*                                                                           *
* PLATTVIL 7258        84 04 23 00 00   -0.005   -0.048    2.754   NEU     *
* ELY      7286        84 04 23 00 00   -2.707   18.820    4.347   NEU     *
*                                                                           *
* 84J          MOJAVE12  HRAS 085  HATCREEK                                 *
*                                                                           *
* PLATTVIL 7258        84 04 26 00 00   -0.005   -0.051    2.753   NEU     *
*                                                                           *
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*****************************************************************************
*                                                                           *
* STATION  MONUMENT    YY MM DD HH MM:  COMP 1 :  COMP 2 :  COMP 3:TYPE     *
*                                    :  NORTH  :  EAST   :   UP   :NEU      *
*                                    :    X    :    Y    :   Z    :XYZ      *
*****************************************************************************
*                                                                           *
* OCTOBER 1984 CAMPAIGN                                                     *
*                                                                           *
*   During 840 and 84P, unit MV-2 actually occupied JPL MV1 (7263).  The    *
* sitename was erroneously called JPL MV2 in the observation database.      *
*                                                                           *
* 840          MOJAVE12  OVRO 130                                           *
*                                                                           *
* VNDNBERG 7223        84 10 23 00 00     .006     .066    7.622   NEU     *
* JPL MV2  7263        84 10 23 00 00     .085    -.010    2.855   NEU     *
* MAMMOTHL 7259        84 10 23 00 00     .051    -.076    4.322   NEU     *
*                                                                           *
* 84P          MOJAVE12  OVRO 130                                           *
*                                                                           *
* VNDNBERG 7223        84 10 26 00 00     .006     .066    7.622   NEU     *
* JPL MV2  7263        84 10 26 00 00     .085    -.008    2.855   NEU     *
* PBLOSSOM 7254        84 10 26 00 00     .086    -.017    4.332   NEU     *
*                                                                           *
* 84Q          MOJAVE12  OVRO 130                                           *
*                                                                           *
* VNDNBERG 7223        84 10 29 00 00     .006     .066    7.622   NEU     *
* PINFLATS 7256        84 10 29 00 00     .062    -.066    4.329   NEU     *
*                                                                           *
* 84R          MOJAVE12                                                     *
*                                                                           *
* VNDNBERG 7223        84 11 01 00 00     .006     .066    7.622   NEU     *
* YUMA     7894        84 11 01 00 00     .076    -.022    2.835   NEU     *
* PINFLATS 7256        84 11 01 00 00     .060    -.066    4.330   NEU     *
*                                                                           *
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*****************************************************************************
*                                                                           *
* STATION  MONUMENT    YY MM DD HH MM:  COMP 1 :  COMP 2 :  COMP 3:TYPE     *
*                                    :  NORTH  :  EAST   :   UP   :NEU      *
*                                    :    X    :    Y    :   Z    :XYZ      *
*****************************************************************************
*                                                                           *
* JANUARY 1985 CAMPAIGN                                                     *
*                                                                           *
* 85A          MOJAVE12                                                     *
*                                                                           *
* VNDNBERG 7223        85 01 10 00 00     .006     .066    7.622   NEU     *
* DEADMANL 7267        85 01 10 00 00    -.031     .018    2.755   NEU     *
* SANPAULA 7255        85 01 10 00 00     .042    -.100    4.315   NEU     *
*                                                                           *
* 85B          MOJAVE12                                                     *
*                                                                           *
* VNDNBERG 7223        85 01 13 00 00     .006     .066    7.622   NEU     *
* MON PEAK 7274        85 01 13 00 00     .075    -.030    2.807   NEU     *
* BLKBUTTE 7269        85 01 13 00 00     .018     .058    4.328   NEU     *
*                                                                           *
* 85C          MOJAVE12                                                     *
*                                                                           *
* VNDNBERG 7223        85 01 16 00 00     .006     .066    7.622   NEU     *
* OCOTILLO 7270        85 01 16 00 00     .022     .020    2.823   NEU     *
* BLKBUTTE 7269        85 01 16 00 00     .018     .058    4.320   NEU     *
*                                                                           *
* 85D          MOJAVE12                                                     *
*                                                                           *
* VNDNBERG 7223        85 01 19 00 00     .006     .066    7.622   NEU     *
* JPL MV1  7263        85 01 19 00 00    -.035     .066    2.843   NEU     *
* PINFLATS 7256        85 01 19 00 00     .002     .034    4.310   NEU     *
*                                                                           *
*****************************************************************************
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*****************************************************************************
*                                                                           *
* STATION  MONUMENT    YY MM DD HH MM:  COMP 1 :  COMP 2 :  COMP 3:TYPE     *
*                                    :  NORTH  :  EAST   :   UP   :NEU      *
*                                    :    X    :    Y    :   Z    :XYZ      *
*****************************************************************************
*                                                                           *
* MARCH 1985 CAMPAIGN                                                       *
*                                                                           *
* 85E          MOJAVE12  OVRO 130  HRAS 085  HATCREEK                       *
*                                                                           *
* VNDNBERG 7223        85 03 02 00 00     .006     .066    7.622   NEU    *
* MON PEAK 7274        85 03 02 00 00     .086    -.040    2.811   NEU    *
* YUMA     7894        85 03 02 00 00     .024     .052    4.314   NEU    *
*                                                                           *
* 85F          MOJAVE12  OVRO 130                                           *
*                                                                           *
* VNDNBERG 7223        85 03 05 00 00     .006     .066    7.622   NEU    *
* PVERDES  7268        85 03 05 00 00    -.009     .073    2.838   NEU    *
* OCOTILLO 7270        85 03 05 00 00     .053    -.092    4.299   NEU    *
*                                                                           *
* 85G          MOJAVE12  OVRO 130                                           *
*                                                                           *
* VNDNBERG 7223        85 03 08 00 00     .006     .066    7.622   NEU    *
* JPL MV1  7263        85 03 08 00 00    -.012     .060    2.845   NEU    *
* PBLOSSOM 7254        85 03 08 00 00     .017     .052    4.292   NEU    *
*                                                                           *
* 85H          MOJAVE12  OVRO 130  HRAS 085  HATCREEK                       *
*                                                                           *
* VNDNBERG 7223        85 03 11 00 00     .006     .066    7.622   NEU    *
* PRESIDIO 7252        85 03 11 00 00     .078     .078    2.942   NEU    *
* FORT ORD 7266        85 03 11 00 00    -.002     .048    4.385   NEU    *
*                                                                           *
* 85I          MOJAVE12  OVRO 130  HRAS 085                                 *
*                                                                           *
* VNDNBERG 7223        85 03 14 00 00     .006     .066    7.622   NEU    *
* PRESIDIO 7252        85 03 14 00 00     .078     .076    2.942   NEU    *
* PT REYES 7251        85 03 14 00 00     .055     .032    4.310   NEU    *
*                                                                           *
*****************************************************************************
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*************************************************************************
*                                                                       *
* STATION  MONUMENT    YY MM DD HH MM:  COMP 1 :  COMP 2 :  COMP 3:TYPE *
*                                    :  NORTH  :  EAST   :   UP   :NEU  *
*                                    :    X    :    Y    :   Z    :XYZ  *
*************************************************************************
*                                                                       *
* MAY 1985 CAMPAIGN                                                     *
*                                                                       *
* 85J          MOJAVE12  HRAS 085  HATCREEK                             *
*                                                                       *
* PLATTVIL 7258        85 05 03 00 00    0.050   -0.035    2.855   NEU *
* FLAGSTAF 7261        85 05 03 00 00     .004     .049    4.296   NEU *
*                                                                       *
* 85K          MOJAVE12  HRAS 085  HATCREEK                             *
*                                                                       *
* PLATTVIL 7258        85 05 07 00 00    0.050   -0.034    2.855   NEU *
* ELY      7286        85 05 07 00 00    -.006    -.030    4.330   NEU *
*                                                                       *
* 85L (NAPS-A) MOJAVE12  GILCREEK  OVRO 130  WESTFORD  HRAS 085  HATCREEK *
*                                                                       *
* PLATTVIL 7258        85 05 08 00 00    0.050   -0.034    2.854   NEU *
*                                                                       *
* 85M          MOJAVE12  OVRO 130  HRAS 085  HATCREEK                   *
*                                                                       *
* VNDNBERG 7223        85 05 13 00 00     .006     .066    7.622   NEU *
* MON PEAK 7274        85 05 13 00 00     .092    -.112    2.827   NEU *
* QUINCY   7221        85 05 13 00 00    -.072    -.023    4.329   NEU *
*                                                                       *
* 85N          MOJAVE12  OVRO 130  HRAS 085                             *
*                                                                       *
* MON PEAK 7274        85 05 15 00 00     .092    -.113    2.827   NEU *
* QUINCY   7221        85 05 15 00 00    -.072    -.023    4.328   NEU *
*                                                                       *
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*****************************************************************************
*                                                                           *
* STATION  MONUMENT    YY MM DD HH MM:  COMP 1 :  COMP 2 :  COMP 3:TYPE     *
*                                     :  NORTH  :  EAST   :   UP   :NEU     *
*                                     :    X    :    Y    :   Z    :XYZ     *
*****************************************************************************
*                                                                           *
* OCTOBER 1985 CAMPAIGN                                                     *
*                                                                           *
* 85T          MOJAVE12  OVRO 130  HRAS 085  HATCREEK                       *
*                                                                           *
* VNDNBERG 7223        85 10 20 00 00     .006     .066    7.622   NEU     *
* PT REYES 7251        85 10 20 00 00     .014    -.083    2.834   NEU     *
* PRESIDIO 7252        85 10 20 00 00     .062    -.006    4.334   NEU     *
*                                                                           *
* 85U          MOJAVE12  OVRO 130  HRAS 085  HATCREEK                       *
*                                                                           *
* VNDNBERG 7223        85 10 24 00 00     .006     .066    7.622   NEU     *
* FORT ORD 7266        85 10 24 00 00     .056    -.025    2.894   NEU     *
* PRESIDIO 7252        85 10 24 00 00     .061    -.006    4.335   NEU     *
*                                                                           *
* 85V          MOJAVE12  OVRO 130                                           *
*                                                                           *
* VNDNBERG 7223        85 10 28 00 00     .006     .066    7.622   NEU     *
* JPL MV1  7263        85 10 28 00 00    -.014     .066    2.858   NEU     *
* PBLOSSOM 7254        85 10 28 00 00    -.030     .042    4.316   NEU     *
*                                                                           *
* 85W          MOJAVE12  OVRO 130                                           *
*                                                                           *
* VNDNBERG 7223        85 10 31 00 00     .006     .066    7.622   NEU     *
* JPL MV1  7263        85 10 31 00 00    -.010     .066    2.858   NEU     *
* PINFLATS 7256        85 10 31 00 00    -.038    -.028    4.319   NEU     *
*                                                                           *
* 85X          MOJAVE12  HRAS 085                                           *
*                                                                           *
* VNDNBERG 7223        85 11 03 00 00     .006     .066    7.622   NEU     *
* YUMA     7894        85 11 03 00 00     .060     .031    2.835   NEU     *
* PINFLATS 7256        85 11 03 00 00    -.040    -.028    4.320   NEU     *
*                                                                           *
* 85Y (YUMP-1) MOJAVE12  HRAS 085                                           *
*                                                                           *
* VNDNBERG 7223        85 11 06 00 00     .006     .066    7.622   NEU     *
* YUMA     7894        85 11 06 00 00     .062     .031    2.835   NEU     *
* MON PEAK 7274        85 11 06 00 00    -.018     .028    4.294   NEU     *
*                                                                           *
*****************************************************************************
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STATION	MONUMENT	YY MM DD HH MM	COMP 1 NORTH X	COMP 2 EAST Y	COMP 3 UP Z	TYPE NEU XYZ
DECEMBER 1985 CAMPAIGN						
85Z (YUMP-2) MOJAVE12 HRAS 085 HATCREEK						
VNDNBERG 7223		85 12 13 00 00	.006	.066	7.622	NEU
MON PEAK 7274		85 12 13 00 00	.030	-.022	4.353	NEU
JANUARY 1986 CAMPAIGN						
86A (YUMP-1) MOJAVE12 HRAS 085						
VNDNBERG 7223		86 01 06 00 00	.006	.066	7.622	NEU
MON PEAK 7274		86 01 06 00 00	-.017	-.043	4.296	NEU
FEBRUARY 1986 CAMPAIGN						
86B (MV-2 FIELD TEST) MOJAVE12 HRAS 085						
MON PEAK 7274		86 02 24 00 00	.030	-.045	2.862	NEU
86C (MV-2 FIELD TEST) MOJAVE12 HRAS 085						
PINFLATS 7256		86 02 27 00 00	.064	.031	2.855	NEU

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*****************************************************************************
*                                                                           *
* STATION  MONUMENT    YY MM DD HH MM:  COMP 1 :  COMP 2 :  COMP 3:TYPE     *
*                                    :  NORTH  :  EAST   :   UP   :NEU      *
*                                    :    X    :    Y    :   Z    :XYZ      *
*****************************************************************************
*                                                                           *
* MARCH-APRIL 1986 CAMPAIGN                                                 *
*                                                                           *
*   The MV-2 site vectors at VERNAL (7290) are based on an astronomic       *
* azimuth determination from the site to VERNAL RM 1 of 19-33-34,           *
* provided by V. Nelson (BFEC) via telephone, 860501.                       *
*                                                                           *
* 86D          MOJAVE12  HRAS 085  HATCREEK                                 *
*                                                                           *
* FLAGSTAF 7261        86 03 27 00 00     .020    -.060    2.862   NEU    *
* PLATTVIL 7258        86 03 27 00 00    -.011    -.004    4.251   NEU    *
*                                                                           *
* 86E          MOJAVE12  HRAS 085  HATCREEK                                 *
*                                                                           *
* VERNAL   7290        86 03 31 00 00    -.013     .046    2.859   NEU    *
* PLATTVIL 7258        86 03 31 00 00    -.010    -.004    4.250   NEU    *
*                                                                           *
* 86F          MOJAVE12  OVRO 130  HRAS 085  HATCREEK                       *
*                                                                           *
* ELY      7286        86 04 03 00 00    -.056     .054    2.854   NEU    *
*                                                                           *
* 86G          MOJAVE12  OVRO 130  HRAS 085  HATCREEK                       *
*                                                                           *
* MON PEAK 7274        86 04 08 00 00     .072    -.050    2.828   NEU    *
*                                                                           *
* 86H          MOJAVE12  OVRO 130  HRAS 085                                 *
*                                                                           *
* VNDNBERG 7223        86 04 11 00 00     .006     .066    7.622   NEU    *
* PINFLATS 7256        86 04 11 00 00     .055    -.023    2.824   NEU    *
* YUMA     7894        86 04 11 00 00     .016    -.011    4.301   NEU    *
*                                                                           *
* 86I          MOJAVE12  OVRO 130                                           *
*                                                                           *
* VNDNBERG 7223        86 04 14 00 00     .006     .066    7.622   NEU    *
* PINFLATS 7256        86 04 14 00 00     .055    -.023    2.824   NEU    *
* JPL MV1  7263        86 04 14 00 00     .026     .014    4.306   NEU    *
*                                                                           *
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*************************************************************************
*                                                                       *
* STATION  MONUMENT    YY MM DD HH MM:  COMP 1 :  COMP 2 :  COMP 3:TYPE *
*                                     :  NORTH  :  EAST   :   UP   :NEU *
*                                     :    X    :    Y    :   Z    :XYZ *
*************************************************************************
*                                                                       *
* MAY 1986 CAMPAIGN                                                     *
*                                                                       *
* 86J          MOJAVE12  OVRO 130  HRAS 085                             *
*                                                                       *
* VNDNBERG 7223        86 05 19 00 00     .006     .066    7.622   NEU *
* MON PEAK 7274        86 05 19 00 00     .071    -.051    2.813   NEU *
* BLKBUTTE 7269        86 05 19 00 00     .016     .024    4.331   NEU *
*                                                                       *
* 86K          MOJAVE12  OVRO 130  HRAS 085  HATCREEK                   *
*                                                                       *
* VNDNBERG 7223        86 05 22 00 00     .006     .066    7.622   NEU *
* MON PEAK 7274        86 05 22 00 00     .070    -.051    2.813   NEU *
* YUMA     7894        86 05 22 00 00    -.039    -.026    4.292   NEU *
*                                                                       *
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