IERS TECHNICAL NOTE 15

ITRF 92 and its associated velocity field

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ERRATUM

IERS Technical Note No 13 - IERS Standards (1992)

p. 9 : GPS Block II dz = **0.9519** m vice 1.0229 m

p. 18 : Table 3.1, first line, last value should be **-0.0070** vice 0.0070.

p. 83 : Hobart Q1 EW tangential phase should be **160.4** vice -160.4.

p. 89 : Malibu M2 EW tangential phase should be **-142.4** vice 142.4.

p. 98 : Pearblossom M2 radial phase should be **-24.14** vice 24.1.

p. 137 : paragraph 3, read ...of the International **Astronomical** Union.

p. 137 : the formula reads

$$ds^2 = -c^2 d\tau^2$$

$$= -\left(1 - \frac{2U}{c^2}\right)(dx^0)^2 + \left(1 + \frac{2U}{c^2}\right)[(dx^1)^2 + (dx^2)^2 + (dx^3)^2].$$

(the "minus" sign was omitted in the second line)

p. 140, note 2: the formulas giving TCB-TCG, read

$$TCB - TCG = c^{-2}\left[\int_{t_0}^{t} (v_e^2/2 + U_{ext}(x_e))dt + v_e.(x - x_e)\right].$$

$$TCB - TCG = L_C \times (JD - 2443144.5) \times 86400 + c^{-2} v_e.(x - x_e) + P.$$

(the "." in the vector product V_e . (x-x_e) was omitted)

1992 IERS ANNUAL REPORT

p. II-14, line 1 (title)

p. II-79, 80, 84, 86, Note 1

p. V-7, last table, lines 1, 3, 5

read ...SSC(IERS) 93 C **03**

IERS Technical Notes

This series of publications gives technical information related to the IERS activities, e.g. reference frames, excitation of the Earth rotation, computational or analysis aspects, models, etc. It also contains the description and results of the analyses performed by the IERS Analysis Centres for the Annual Report global analysis.

Back issues still available

No 3 : D.D. McCarthy (ed). IERS Standards (1989)

No 4 : C. Boucher and Z. Altamimi. Evaluation of the realizations of the Terrestrial Reference System done by the BIH and IERS (1984-1988).

No 5 : Earth orientation and reference frame determinations, atmospheric excitation functions, up to 1989 (Annex to the IERS Annual Report for 1989). *[Superseded by T.N. No 8].*

No 6 : C. Boucher and Z. Altamimi. ITRF89 and other realizations of the IERS Terrestrial Reference System for 1989.

No 7 : E.F. Arias, M. Feissel and J.-F. Lestrade. The IERS extragalactic Celestial Reference Frame and its tie with HIPPARCOS.

No 9 : C. Boucher and Z. Altamimi. ITRF90 and other realizations of the IERS Terrestrial Reference System for 1990.

No 10: C. Boucher and Z. Altamimi. The IERS GPS Terrestrial Reference Frame.

No 11: P. Charlot (ed.). Earth orientation, reference frames and atmospheric excitation functions submitted for the 1991 IERS Annual Report.

No 12: C. Boucher and Z. Altamimi. ITRF91 and other realizations of the IERS Terrestrial Reference System for 1991.

No 13: D.D. McCarthy (ed.). IERS Standards (1992).

No 14: P. Charlot (ed.) Earth orientation, reference frames and atmospheric excitation functions submitted for the 1992 IERS Annual Report.

No 15: C. Boucher and Z. Altamimi. ITRF92 and other realizations of the IERS Terrestrial Reference System for 1992.

Future issue

No 16: J.O. Dickey and M. Feissel (eds.). Results from the SEARCH'92 Campaign.

TABLE OF CONTENTS

This report contains a detailed description of the IERS products related to the Terrestrial Reference System for the period of the IERS Annual Report for 1992. It gives a detailed analysis about the ITRF92 and its associated combined velocity field.

This description intends to be the continuation of the previous reports: the IERS Technical Note 4 , 6, 9 and 12. In particular, methodological presentation will be followed here.

1) INPUT DATA

1.1) Sites included

The list of sites considered in the 1992 solution is included in Table T1 of the appendix.

A more detailed list of points and marks for these sites is also provided by the Table T2 of the appendix.

Table T3 also gives a summary of the occupancies of these sites by VLBI, LLR, GPS or SLR instruments. We have distinguished the IERS sites into the following data sets:

1) colocation (at least two techniques)

2) multiple SLR (simultaneous or successive)

3) single SLR

4) multiple VLBI (simultaneous or successive)

5) single VLBI

6) multiple GPS (simultaneous or successive)

7) single GPS

1.2) Input data sets

The data sets received for the 1992 solution and included in the global combination performed by the IERS Terrestrial Frame Section (ITFS), under the label ITRF92 are summarized in Table 1.

1.3) Description of individual data sets

For all solutions, no permanent tidal correction has been performed, and the adopted velocity of light is $c = 299792458\ m\ s^{-1}$.

As the formal errors σ_f provided by the analysis centers are in most cases too optimistic, the

input errors σ are adopted according to the following formula:

$$\sigma = \sqrt{A^2 + B^2 \cdot \sigma_f^2} \qquad (1)$$

where A is an additive variance and B is a factor. The values of A and B are determined by an empirical estimation. Figures 1 to 20 show for all the solutions, the histograms of the formal errors and those after applying the previous formula.

1.3.1) GIUB VLBI solution

Identifer : SSC(GIUB) 93 R 01

Model : CALC-7 software, with local earth relativistic scale (Hellings model).

Adjusted parameters : X,Y,Z at epoch 1988.0

Constraints for the CTS :

- Westford X,Y,Z fixed at ITRF91 values,
- the orientation is fixed on one IRIS-S measurement day (1989 Dec 21) to the IERS Rapid Service value.

- fixed NNR-NUVEL1 motion

Raw data :

Positions at 1988.0.

Input data (RF) :

The 1988 values, with formal errors unmodified.

1.3.2) GSFC VLBI solution

Identifer : SSC(GSFC) 93 R 04, also named GLB886a

Model : CALC-7 software, with local earth relativistic scale (Hellings model).

Adjusted parameters :

X,Y,Z and VX, VY, VZ of stations with sufficient data

Constraints for the CTS :

- Westford X,Y,Z fixed at a nominal value on Oct 17 1980,
- ERP fixed on Nov 6 1986 at BIH Circular D values,
- Westford velocities fixed at NNR-NUVEL1 values,
- Westford-Richmond azimut moving with NNR-NUVEL1 value.

Raw data :

Positions at 1988.0 and velocities (except for stations with short time span),

Input data (RG) :

The 1988 values, with formal errors modified using the formula (1) with A = 0.5 cm and B = 1.5.

1.3.3) JPL VLBI solution

Identifer : SSC(JPL) 93 R 01, also named 1993-1.

Model : Modest software.

Adjusted parameters : X, Y, Z at 1988.0 and velocities

Constraints for the CTS :

- six constraints (with 5 mm uncertainty) : 3 translations and 3 rotations between 1993-1 and ITRF91.

Raw data : X, Y, Z and velocities with formal errors.

Input data (RJ)

X, Y, Z, with formal errors modified with A = 0.5 cm and B = 2.0

1.3.4) NOAA VLBI solution

Identifer : SSC(NOAA) 93 R 02

Model : CALC software, with Hellings relativistic model

Adjusted parameters :

Positions at 1988.0 and velocities (except for stations with short time span),

Constraints for the CTS :

- the orientation is that of the ITRF91 through a constraint on the coordinates of 16 selected VLBI sites,

- the time evolution matches NNR-NUVEL1 through a constraint on the velocities of 9 selected VLBI sites

Raw data :

1988 positions and velocity for sites with sufficient data, with formal errors

Input data (RN) :

The 1988 values, with formal errors modified using the formula (1) with A = 0.0 cm and B = 1.5.

1.3.5) USNO VLBI solution

Identifer : SSC(USNO) 93 R 09, also named 1993-9

Model : CALC-7 software with LE relativistic scale. Motion with NNR-NUVEL1 model

Adjusted parameters: X, Y, Z at Oct 17 1980

Constraints for the CTS :

- NRAO85 3 position fixed at its value in ITRF90 at 1988.0
- fixed NNR-NUVEL1 motion

Raw data : X, Y, Z and formal errors

Input data (RO) :

X, Y, Z transformed at 1988.0 with NNR-NUVEL1 . Formal errors modified with A = 0.5 cm and B = 1.5.

1.3.6) JPL LLR solution

Identifer : SSC(JPL) 93 M 01

Model : Motion with NNR-NUVEL1 model

Adjusted parameters : X, Y, Z at 1991.0

Constraints for the CTS :

- DE210/LE210 planetary ephemeris
- fixed NNR-NUVEL1 motion model

Raw data : X, Y, Z without error estimate

Input data (MJ) :

X, Y, Z with 3 cm as error.

1.3.7) SHA LLR solution

Identifer : SSC(SHA) 93 M 01

Model : Motion with NNR-NUVEL1 model

Adjusted parameters : X, Y, Z at 1988.0

Constraints for the CTS :

- DE303/LE303 planetary ephemeris

Raw data : X, Y, Z without error estimate

Input data (MS) :

X, Y, Z with 3.5 cm as error.

1.3.8) UT/McD LLR solution

Identifer : SSC(UTXMO)93 M 01

Model : Motion with AM0-2 model, GM = 398600.444 km^3/s^2

Adjusted parameters : lambda, phi, h at 1984.0

Constraints for the CTS :

- fixed AM0-2
- ERP fixed at 1985 Jan. 11 to CSR LGN7692 series

Raw data : X, Y, Z

Input data (MX) :

X, Y, Z transformed at 1988.0 with AM0-2 with 3 cm as apriori error.

1.3.9) CODE GPS solution

Identifer : SSC(CODE) 92 P 01

Model : Bernese software

Adjusted parameters : X, Y, Z at 1992.62 for european stations

Constraints for the CTS :

Orientation and time evolution constrained to those of ITRF91.

Raw data : X, Y, Z without formal error.

Input data (PB) :

X, Y, Z transformed to 1988.0 with ITRF91 velocity field with 8 mm as error.

1.3.10) CSR GPS solution

Identifer : SSC(CSR) 92 P 03

Model : UTOPIA software,

Adjusted parameters : X, Y, Z at 1992.79

Constraints for the CTS :

The a priori EOP and the tie to the geocenter are taken from EOP/SSC(CSR) 92 L 01.

Raw data : X, Y, Z with formal error.

Input data (PC) :

X, Y, Z transformed to 1988.0 with ITRF91 velocity field with formal errors modified with A = 0.0 cm and B = 8.0.

1.3.11) EMR GPS solution

Identifer : SSC(EMR) 93 P 01

Model : GIPSY/OISIS II software, GM = 398600.4414 km^3/s^2

Adjusted parameters : X, Y, Z at 1992.79

Constraints for the CTS :

Origin and orientation constrained to those of ITRF91.

Raw data : X, Y, Z with formal error.

Input data (PE) :

X, Y, Z transformed to 1988.0 with ITRF91 velocity field with formal errors modified with A = 0.0 cm and B = 4.0.

1.3.12) ESOC GPS solution

Identifer : SSC(ESOC) 93 P 01

Model : GPSOBS/BAHN-V5 software, GM = 398600.4415 km^3/s^2

Adjusted parameters : X, Y, Z at 1992.5

Constraints for the CTS :

- EOP from IERS Bulletin A,
- 12 stations are constrained in longitude and latitude with a priori uncertainty of 5 cm to ITRF91 values.
- time evolution according to NNR-NUVEL1

Raw data : X, Y, Z with formal errors.

Input data (PA) :

X, Y, Z transformed to 1988.0 with ITRF91 velocity field with formal errors unmodified.

1.3.13) JPL GPS solution

Identifer : SSC(JPL) 93 P 01

Model : GIPSY software, free network

Adjusted parameters : X, Y, Z at 1992.5

Constraints for the CTS :

Orientation and time evolution constrained to those of ITRF91.

Raw data : X, Y, Z with error estimate

Input data (PJ) :

X, Y, Z transformed to 1988.0 with ITRF91 velocity field. Formal errors modified with a=0.0cm and B = 0.8.

1.3.14) SIO GPS solution

Identifer : SSC(SIO) 93 P 01

Model : GAMIT software.

Adjusted parameters : X, Y, Z at 1992.836

Constraints for the CTS :

- tied to ITRF91 through the average of coordinates of 18 fundamental sites,
- time evolution constrained to that of ITRF91.

Raw data : X, Y, Z without formal errors

Input data (PP) :

X, Y, Z transformed to 1988.0 with ITRF91 velocity field with 1.5 cm as a priori error.

1.3.15) CLG SLR solution

Identifer : SSC(CLG) 93 L 01

Model : Sites velocities fixed to AM0-2. GM = 398600.436 km^3/s^2

Adjusted parameters: X, Y, Z at 1988.0.

Constraints for the CTS :

- latitude of 7210 and 7907 and longitude of 7907 fixed to ITRF89 values,

Raw data : X, Y, Z

Input data (LL) :

X, Y, Z at 1988.0 with formal errors modified with A = 3 cm and B = 3.0.

1.3.16) CSR SLR solution

Identifer : SSC(CSR) 93 L 01

Model : Horizontal velocities adjusted for 47 sites. For all other sites velocities fixed to NNR-NUVEL1. GM = 398600.4415 km^3/s^2.

Adjusted parameters: X, Y, Z at 1988.0 and horizontal velocities for 42 sites

Constraints for the CTS :

- system oriented to agree with EOP(JPL) 93 C 01 in a mean sense over period 1981 - 1992,
- latitude and longitude of 7210 and latitude of 7105 fixed,
- rate of latitude and longitude of 7210 and latitude of 7105 fixed to NUVEL-1 NNR velocities.

Raw data : X, Y, Z, and 2D velocities for 47 sites and formal errors

Input data (LC) :

X, Y, Z at 1988.0 with formal errors modified with A = 1.0 cm and B = 1.0.

1.3.17) DUT SLR solution

Identifer : SSC(DUT) 93 L 02

Model : GEODYN-II/SOLVE-2 software, estimation of station motions, GM = 398600.4415 km^3/s^2

Adjusted parameters : X, Y, Z, and velocities

Constraints for the CTS :

- the orientation is defined by initial coordinates at reference epoch
- NNR-NUVEL1 values for 12 stations

Raw data : X, Y, Z at 1988.0 and VX, VY, VZ

Input data (LU) :

X, Y, Z at 1988.0 with formal errors modified with A = 1.0 cm and B = 1.0

1.3.18) GAOUA SLR solution

Identifer : SSC(GAOUA)93 L 01

Model : KIEV-GEODYNAMICS - 4 software. Adjusted velocities. GM = 398600.4418 $km3/s^2$

Adjusted parameters : X, Y, Z for 73 stations and velocities for 43 stations.

Constraints for the CTS :

- ERP values from IERS Bulletin B
- latitude and longitude of 7105 and latitude of 7210 fixed
- fixed NNR-NUVEL1 motion for selected stations, longitude rate of 7105 and latitude rate of 7210 fixed to NNR-NUVEL1.

Raw data : X, Y, Z and velocities with formal errors

Input data (LK) :

X, Y, Z and formal errors modified with A = 2.5 cm and B = 2.0

1.3.19) GFZ SLR solution

Identifer : SSC(GFZ) 93 L 01

Model : EPOS.P.V1 software. Adjusted velocities. GM = 398600.442 km^3/s^2

Adjusted parameters : r, lambda, phi at 1988.0 and 3-D velocities

Constraints for the CTS :

- latitude and velocity in latitude fixed for stations 7105,7840
- longitude and velocity in longitude fixed for station 7840

Raw data : X, Y, Z and velocity with formal errors

Input data (LZ) :

X, Y, Z with formal errors modified with A = 1.5 cm and B = 1.5.

1.3.20) GSFC SLR solution

Identifer : SSC(GSFC) 93 L 01 (SL8.2)

Model : GEODYN II software, GM = 398600.4415 km^3/s^2

Adjusted parameters : X, Y, Z and velocities

Constraints for the CTS :

- latitude and longitude of 7105, the latitude of 7210 were fixed

- apriori values of ERP from IERS 90 C 04

Raw data : X, Y, Z and velocities with formal errors

Input data (LG) :

X, Y, Z with formal errors modified with A = 1.0 cm and B = 3.0.

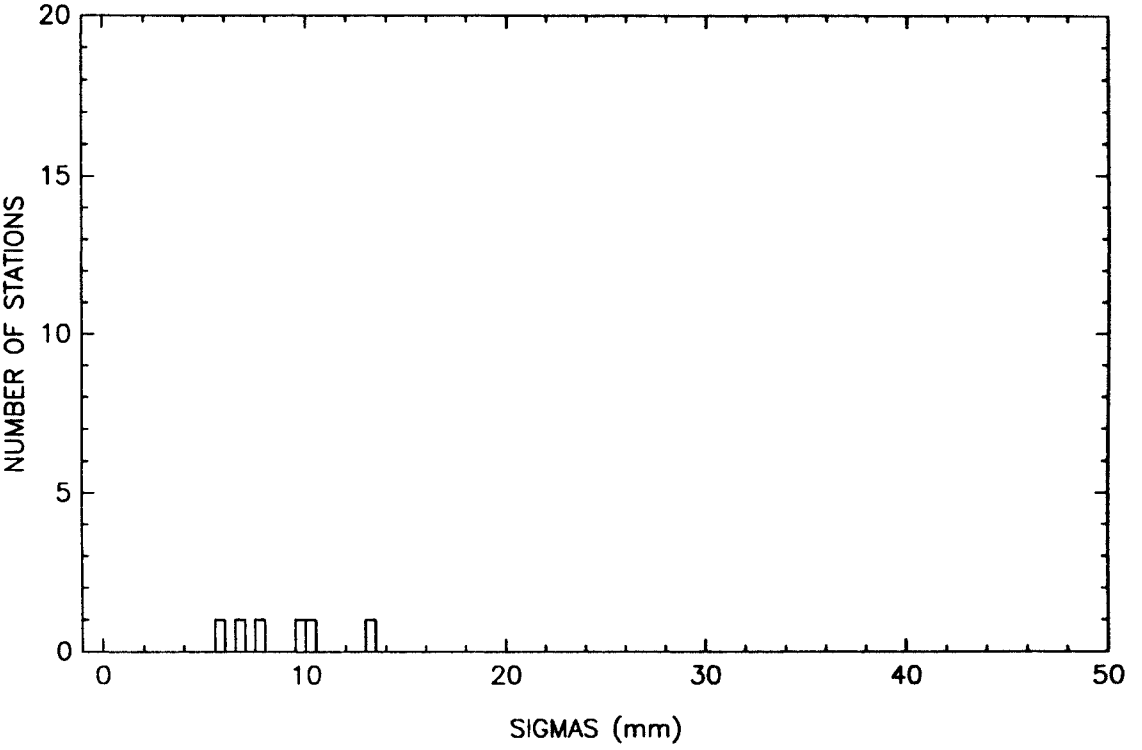
Table 1 : ITRF92 input data

Tech.	Label	Designation	Motion Model	Ref. Epoch	Num. of Station	Other name
	RF92	SSC(GIUB) 93 R 01	NNR-NUVEL1	1988.0	6	
	RG92	SSC(GSFC) 93 R 04	Etim./NNR-NUVEL1	1988.0	115	GLB886a
VLBI	RJ92	SSC(JPL) 93 R 01	Etim./ITRF91	1988.0	12	1993-1
	RN92	SSC(NOAA) 93 R 02	Estim./NNR-NUVEL1	1988.0	54	
	RO92	SSC(USNO) 93 R09	NNR-NUVEL1	1980.8	15	1993-9
	MJ92	SSC(JPL) 93 M 01	NNR-NUVEL1	1991.0	5	
LLR	MS92	SSC(SHA) 93 M 01	NNR-NUVEL1	1988.0	4	
	MX92	SSC(UTXMO)93 M01	AM0-2	1984.0	5	
	PB92	SSC(CODE) 92 P 01		1992.62	13	
	PC92	SSC(CSR) 92 P 03		1992.79	24	
GPS	PE92	SSC(EMR) 93 P 01		1992.5	20	
	PA92	SSC(ESOC) 93 P 01	NNR-NUVEL1	1992.5	33	
	PJ92	SSC(JPL) 93 P 01	ITRF91	1992.5	42	
	PP92	SSC(SIO) 93 P 01	ITRF91	1992.836	48	
	LL92	SSC(CLG) 93 L 01	AM0-2	1988.0	45	
	LC92	SSC(CSR) 93 L 01	Estim/NNR-NUVEL1	1988.0	111	
SLR	LU92	SSC(DUT) 93 L 01	Estim./NNR-NUVEL1	1988.0	68	
	LK92	SSC(GAOUA)93 L 01	Estim./NNR-NUVEL1	1988.0	73	
	LZ92	SSC(GFZ) 93 L 01	Estim/NNR-NUVEL1	1988.0	101	
	LG92	SSC(GSFC) 93 L 01	Estim./NNR-NUVEL1	1988.0	35	SL8.2

1.4) Excentricites

The excentricities used for ITRF92 are given in Table T4 of the appendix.

FIGURE 1 : SSC(GIUB) 93 R 01



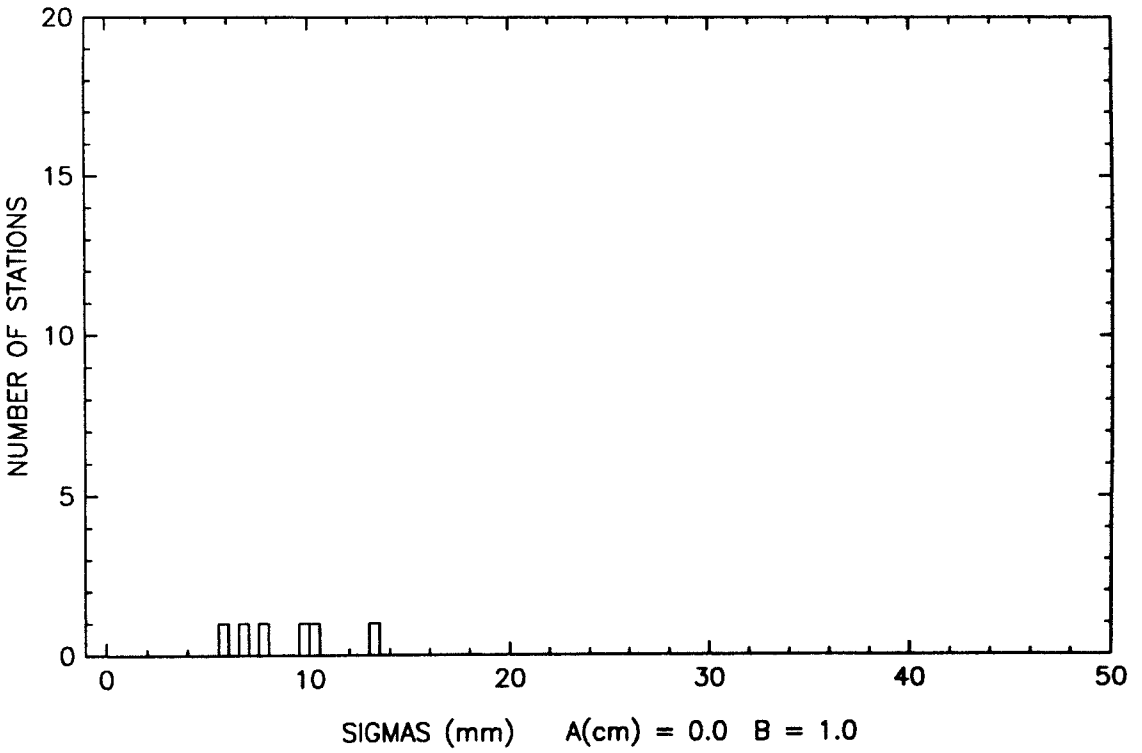
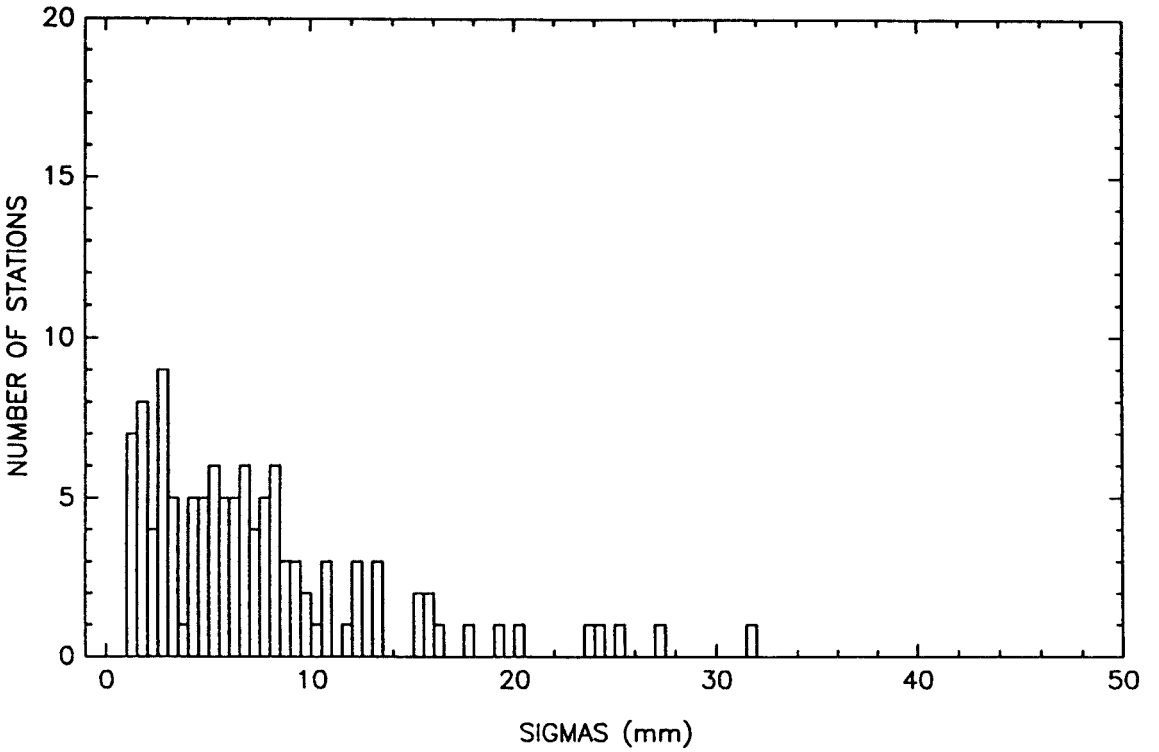


FIGURE 2 : SSC(GSFC) 93 R 04 / GLB886a



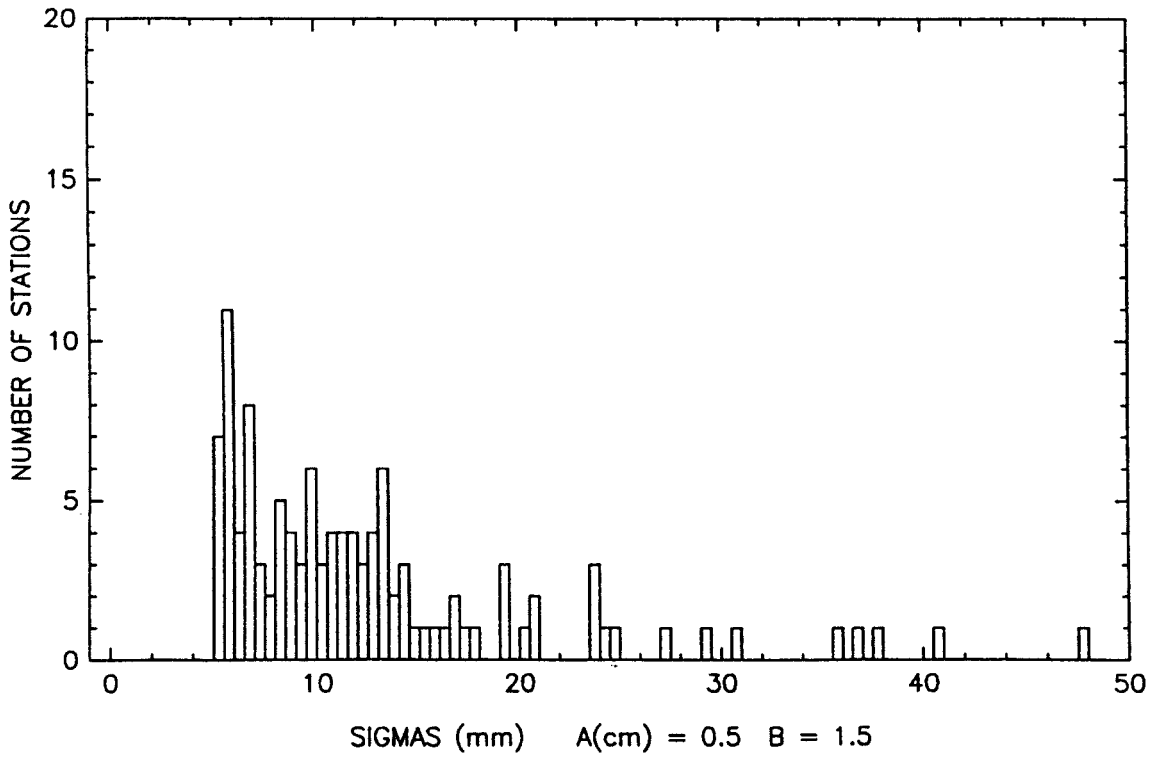
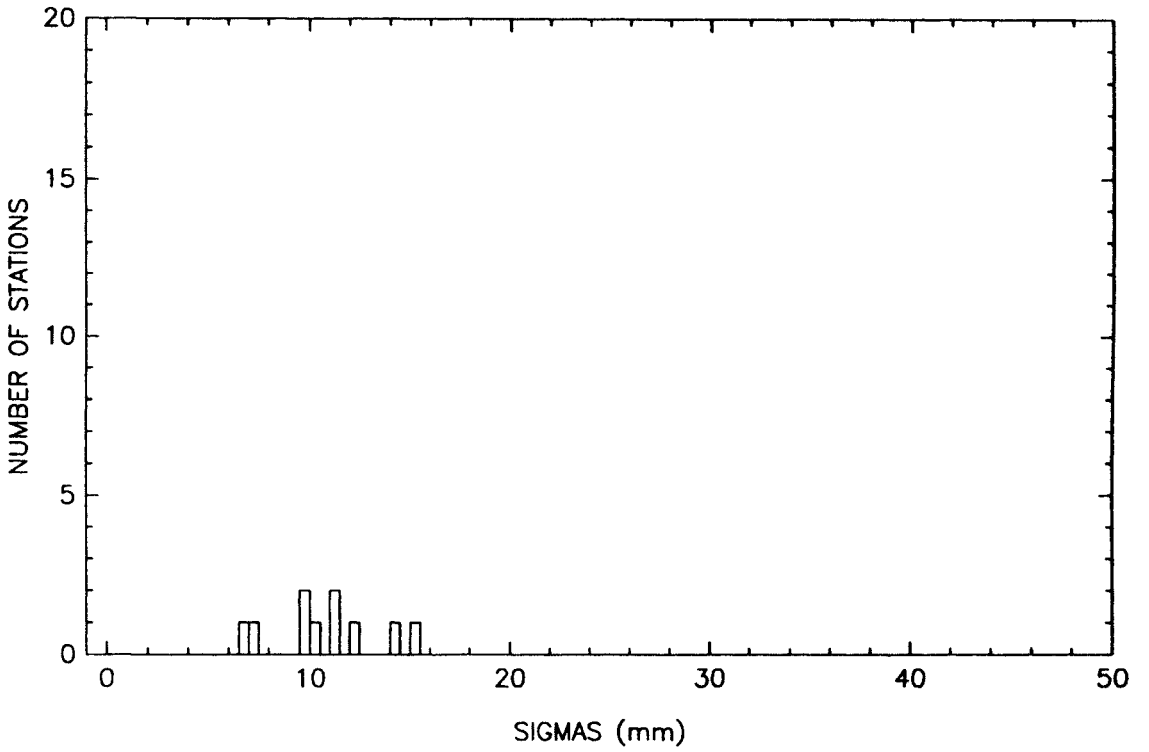


FIGURE 3 : SSC(JPL) 93 R 01



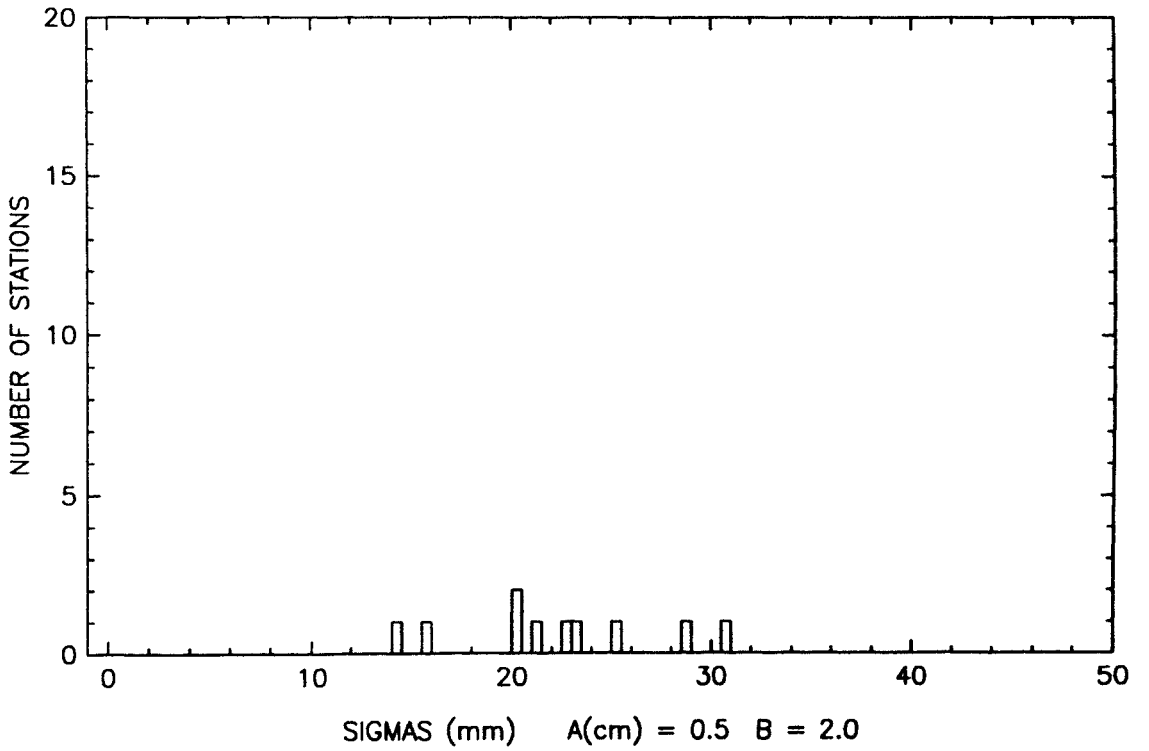
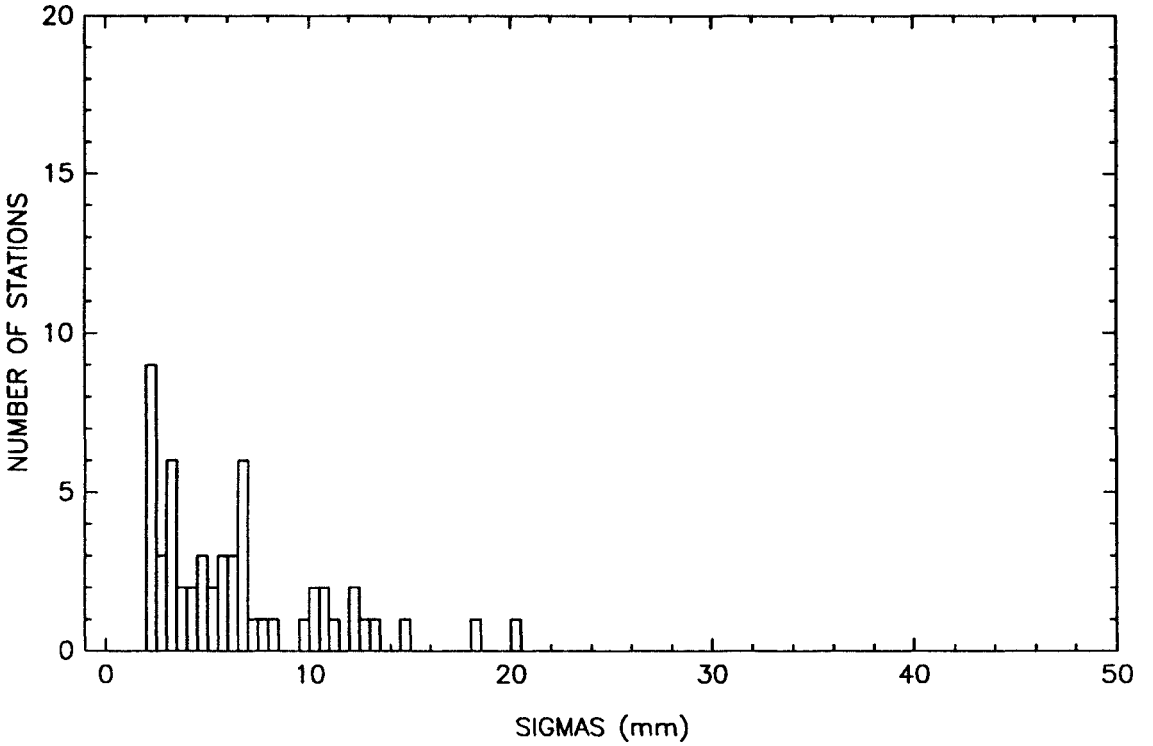


FIGURE 4 : SSC(NOAA) 93 R 02



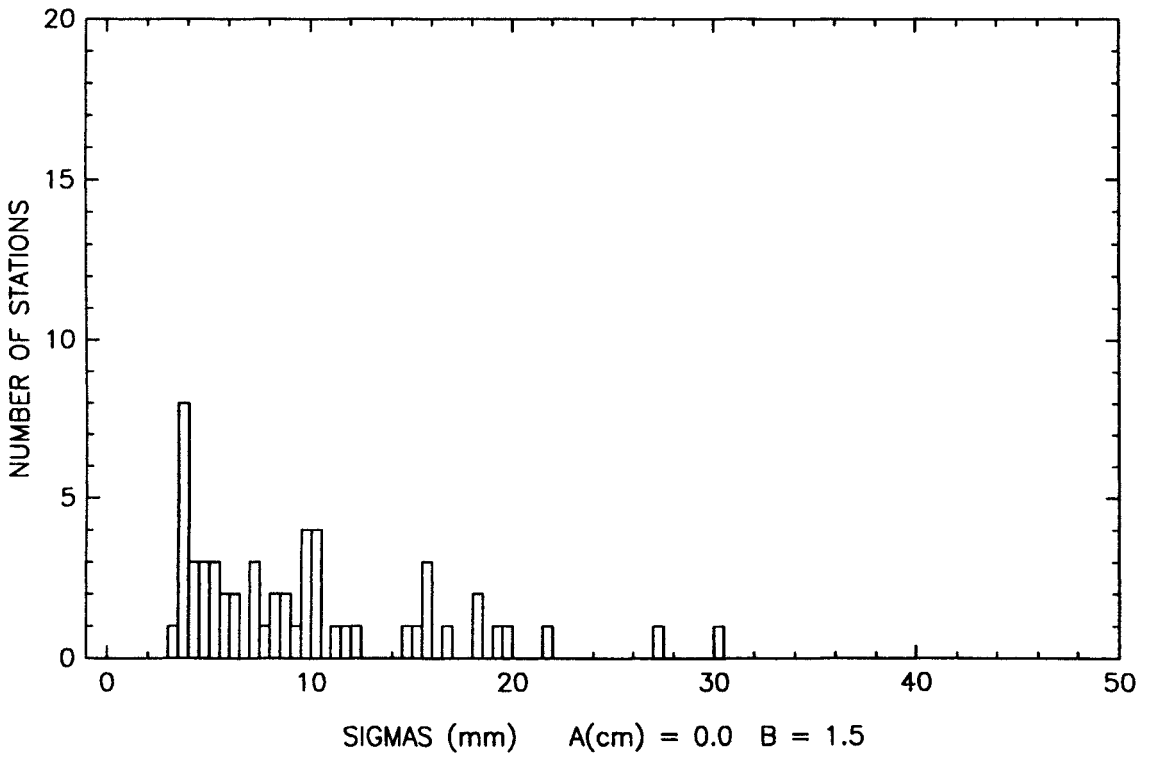
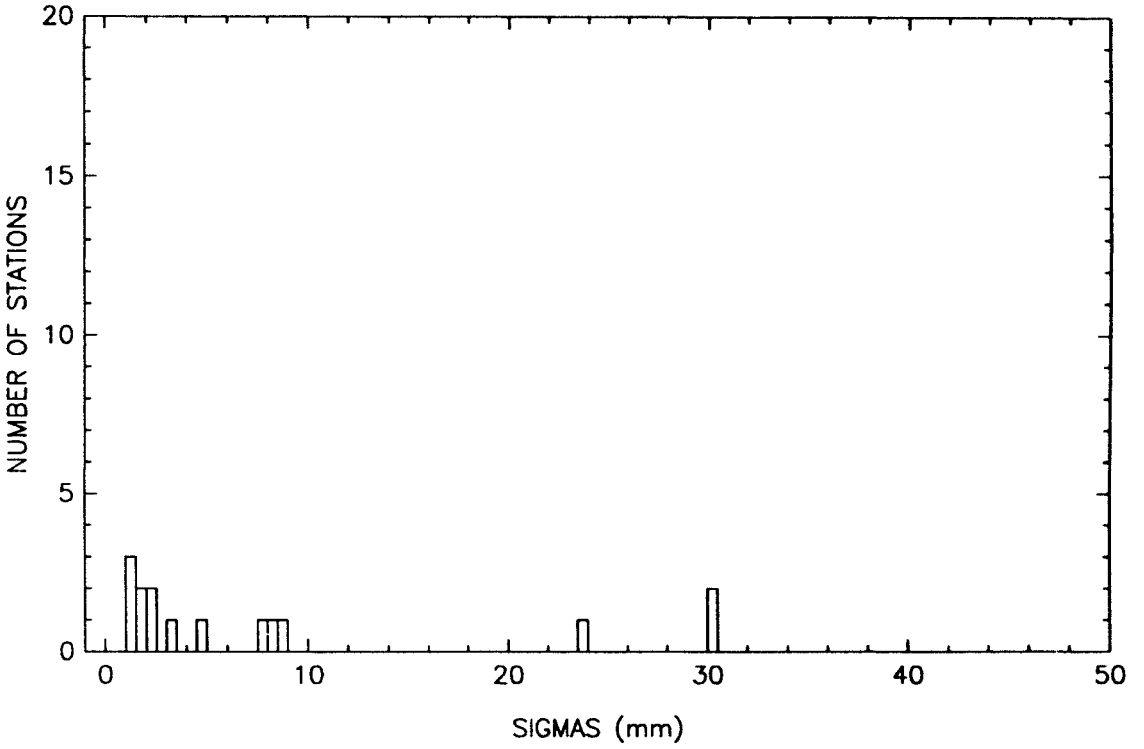


FIGURE 5 : SSC(USNO) 93 R 09 / 1993-9



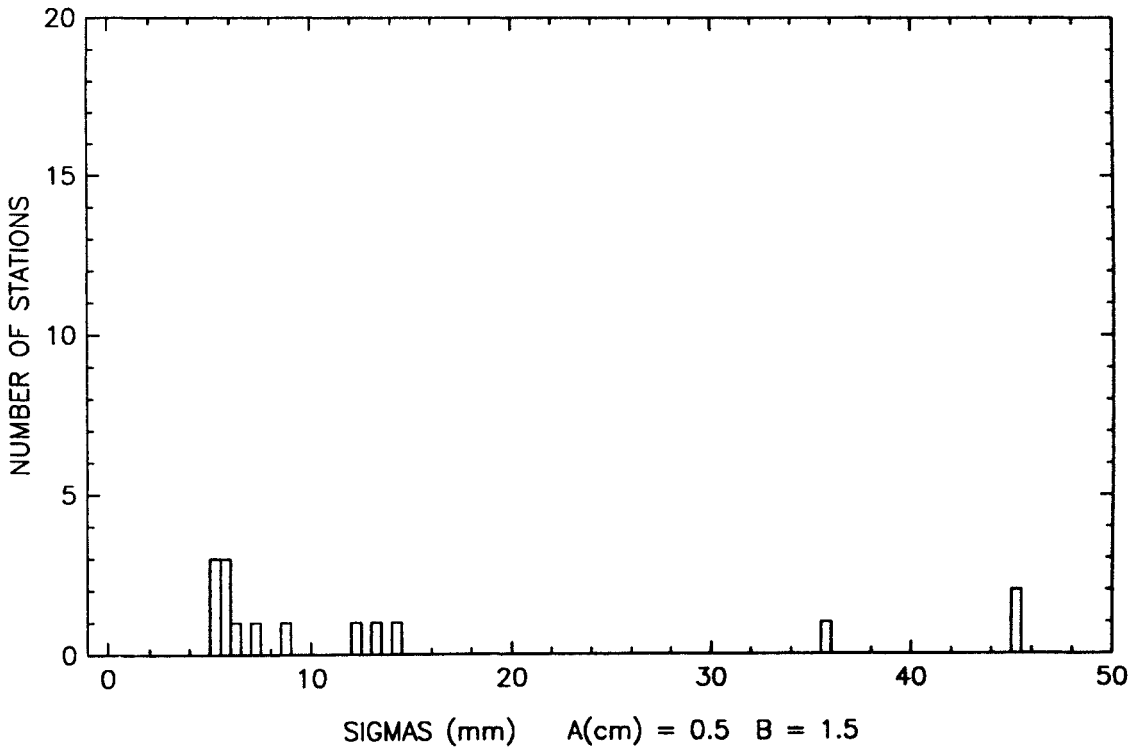
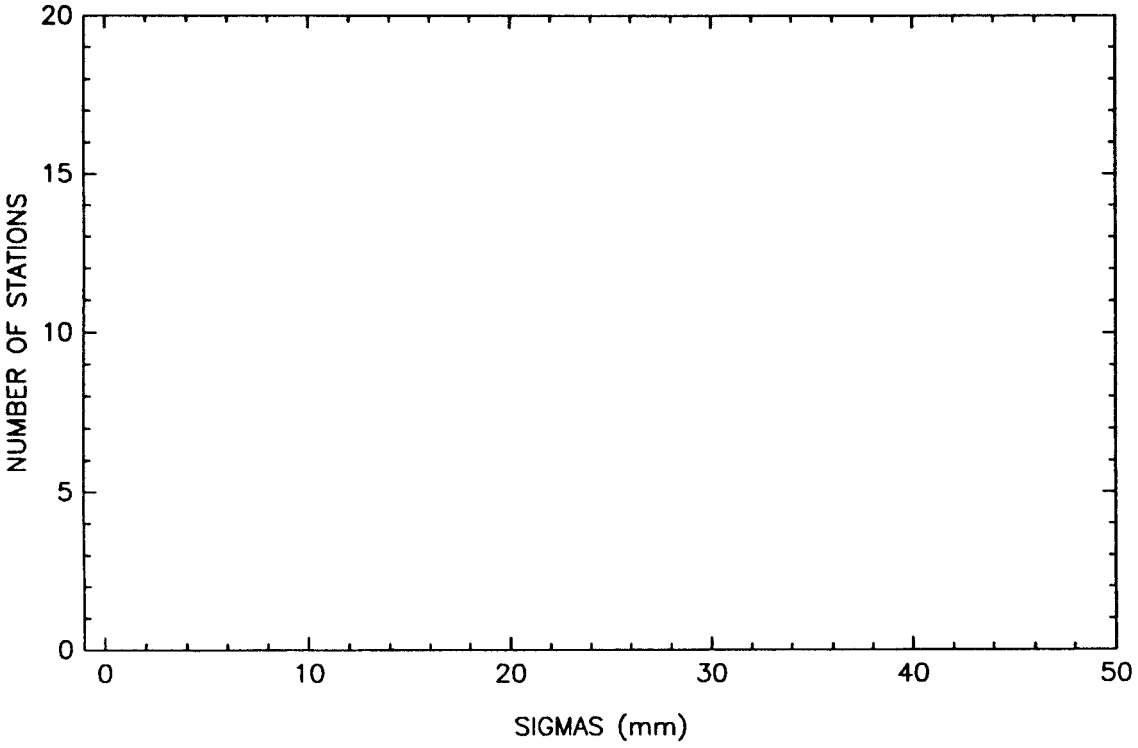


FIGURE 6 : SSC(JPL) 93 M 01



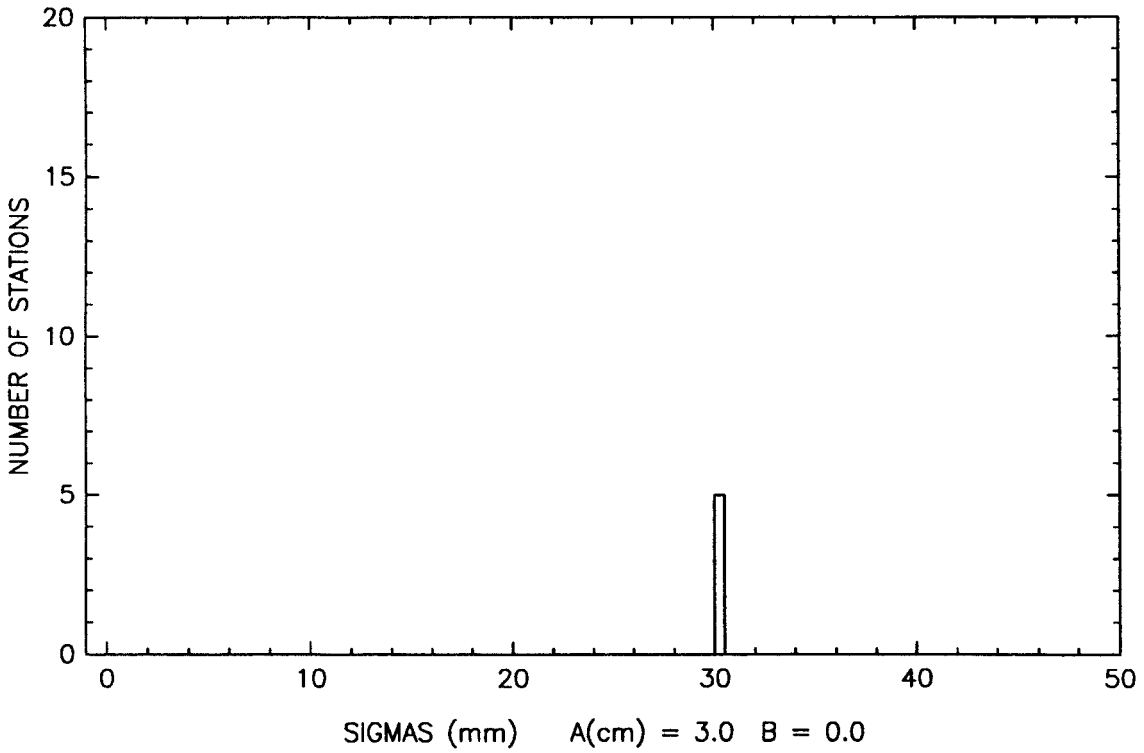
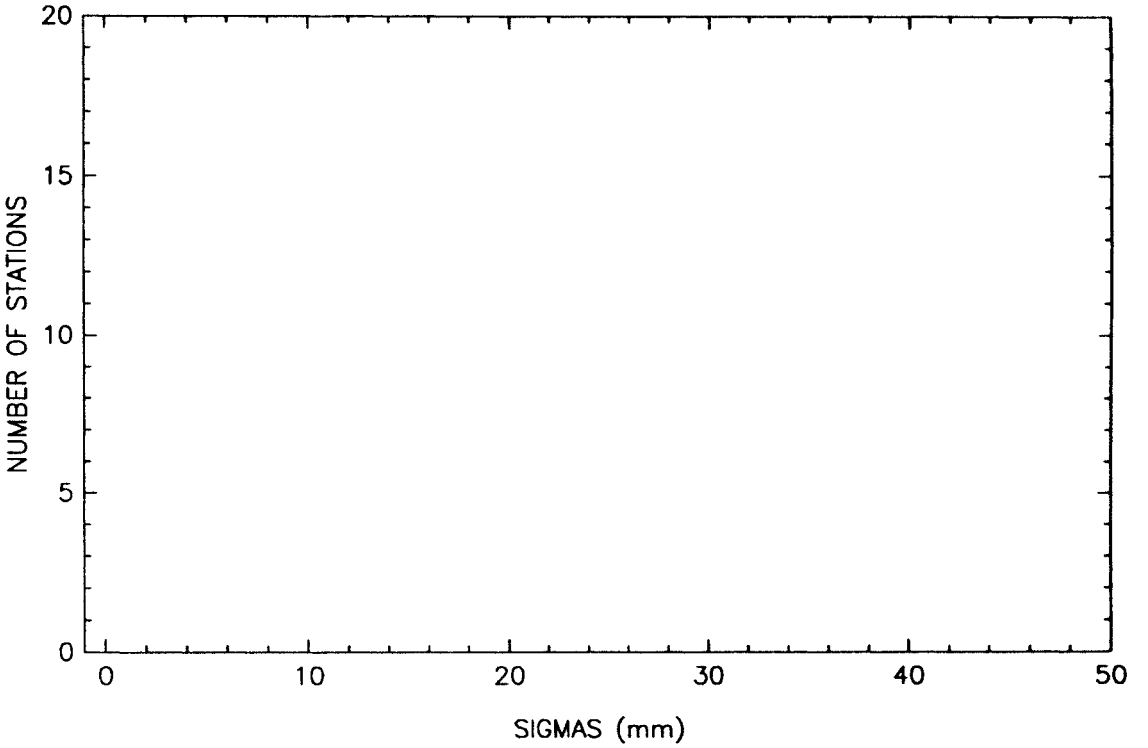


FIGURE 7 : SSC(SHA) 93 M 01



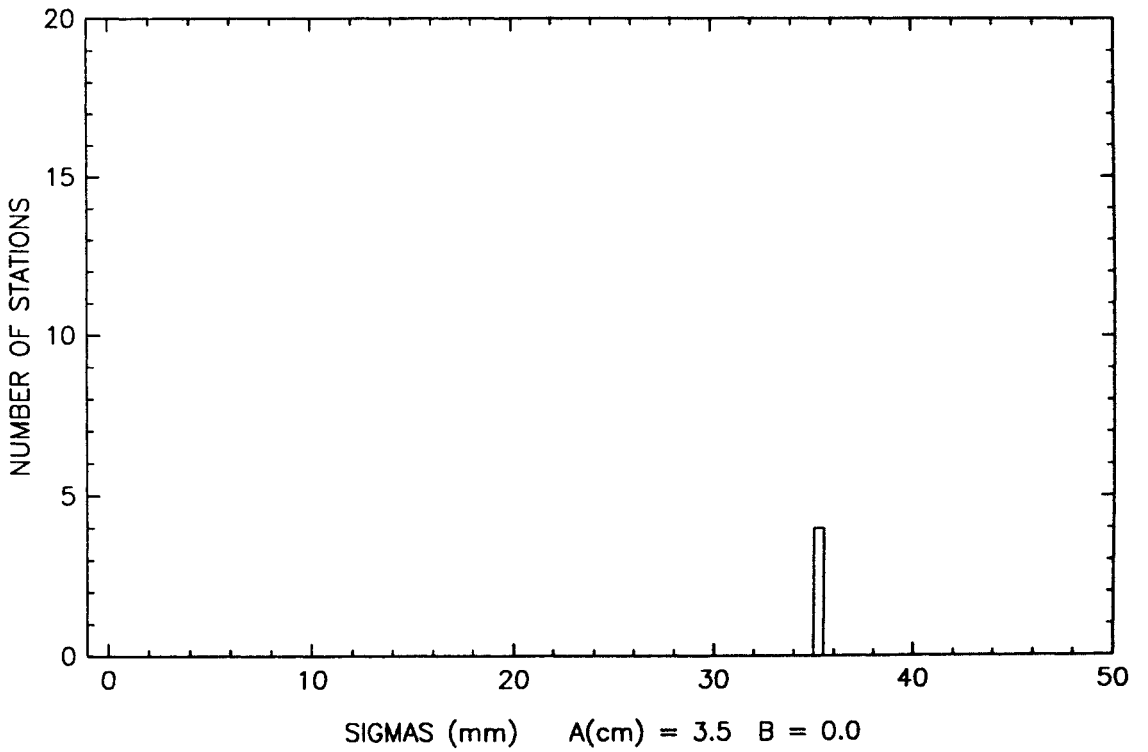
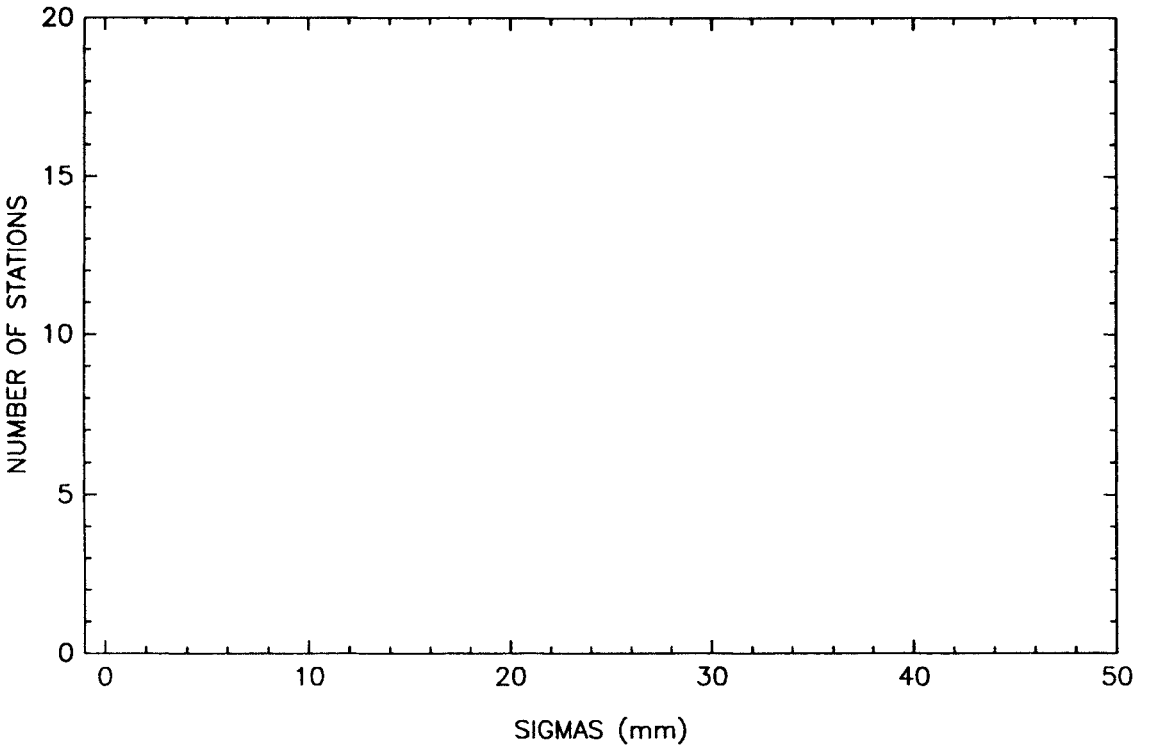


FIGURE 8 : SSC(UTXMO)93 M 01



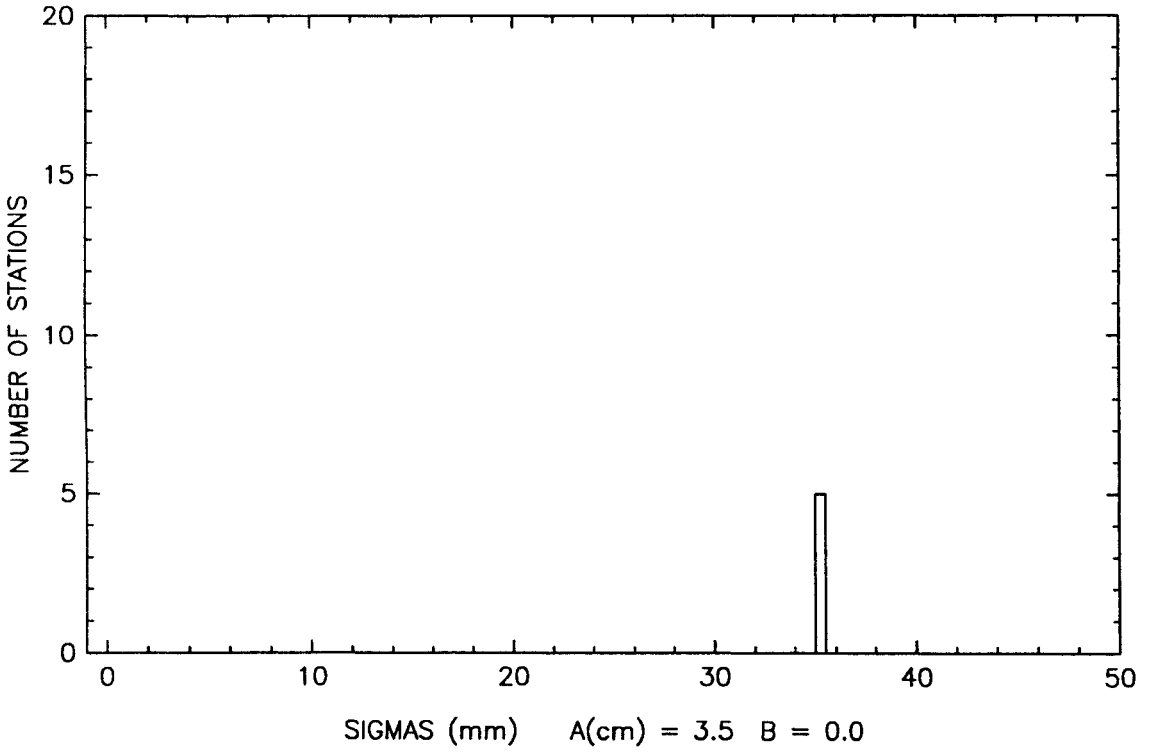
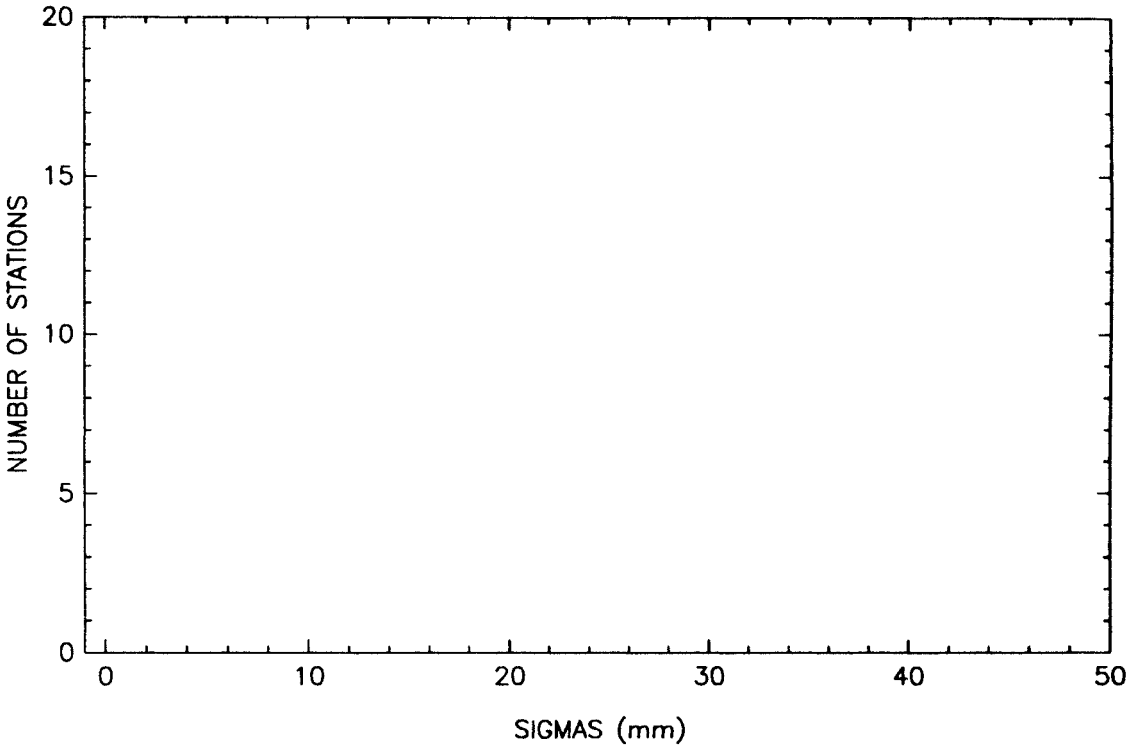


FIGURE 9 : SSC(CODE) 92 P 01



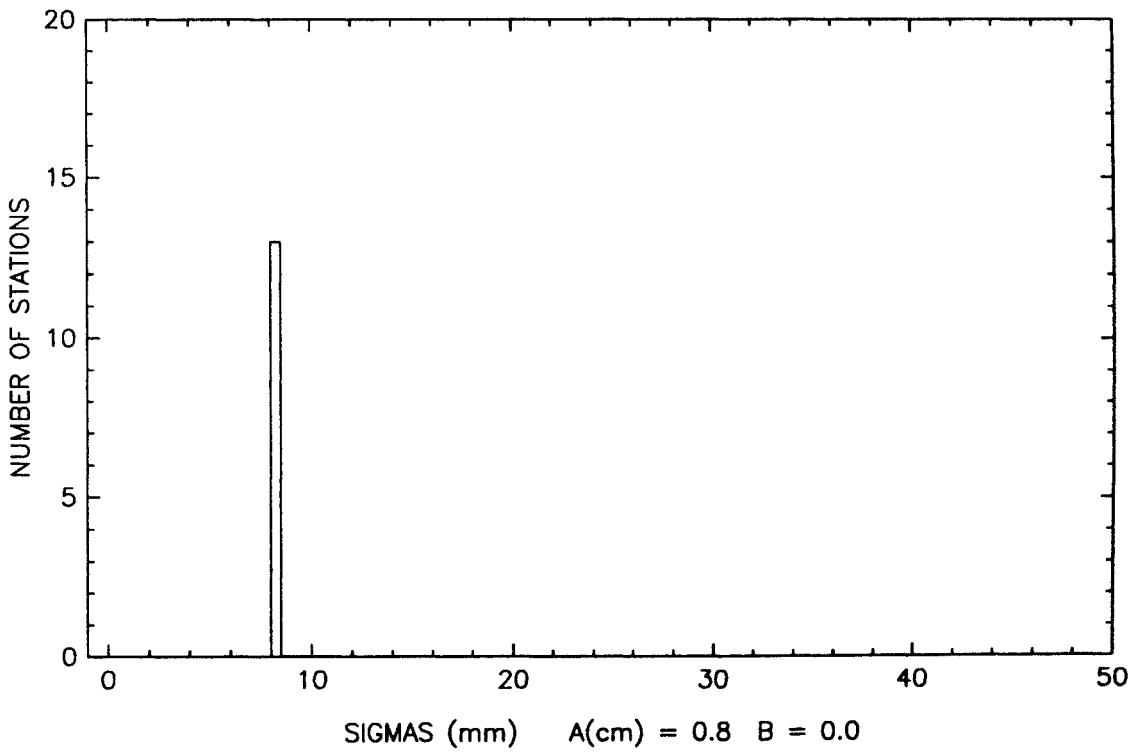
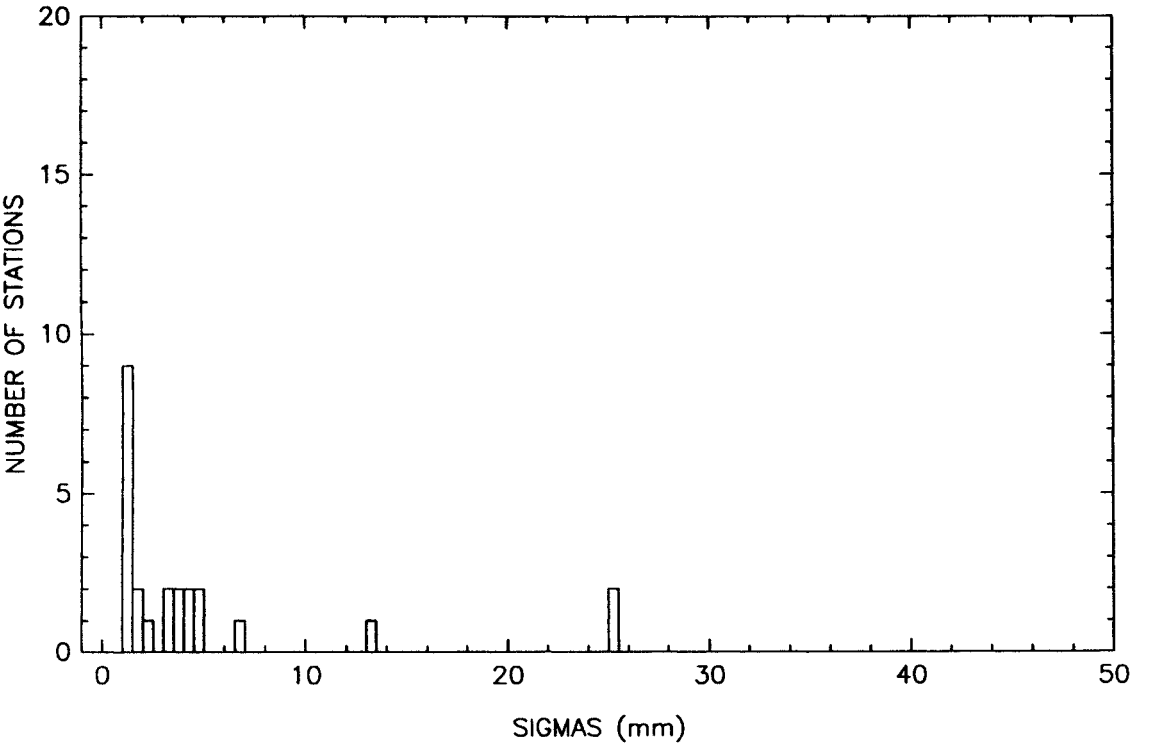


FIGURE 10 : SSC(CSR) 92 P 03



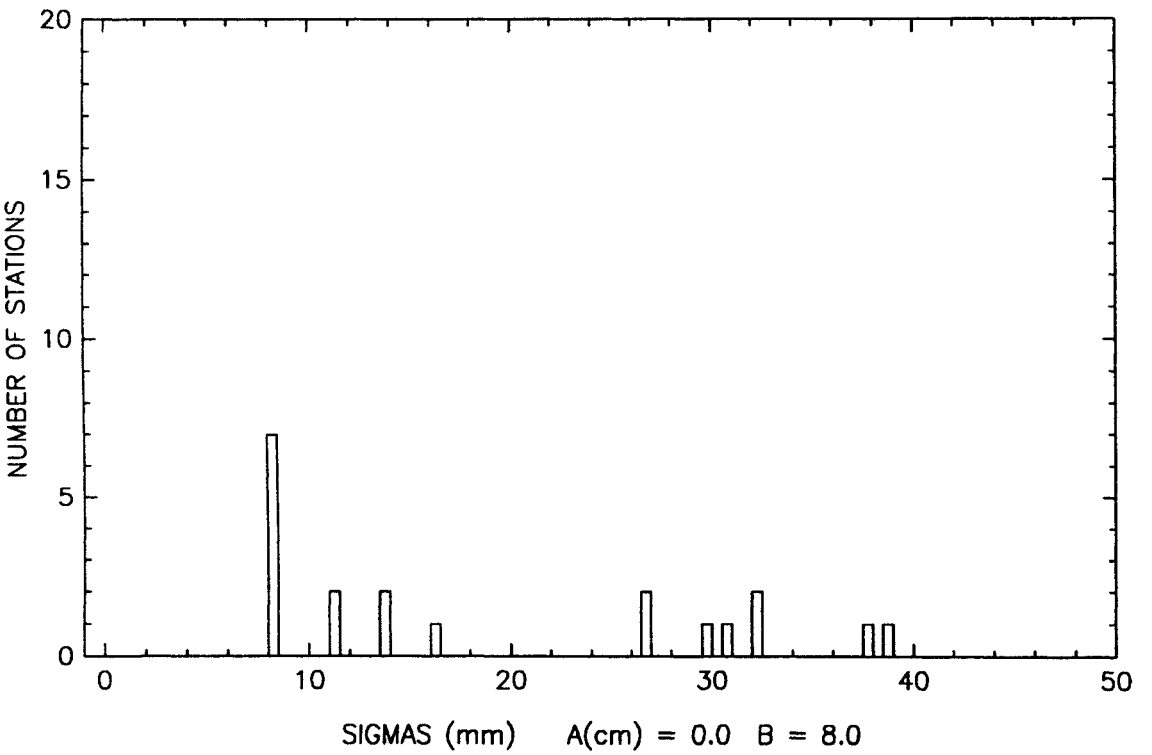
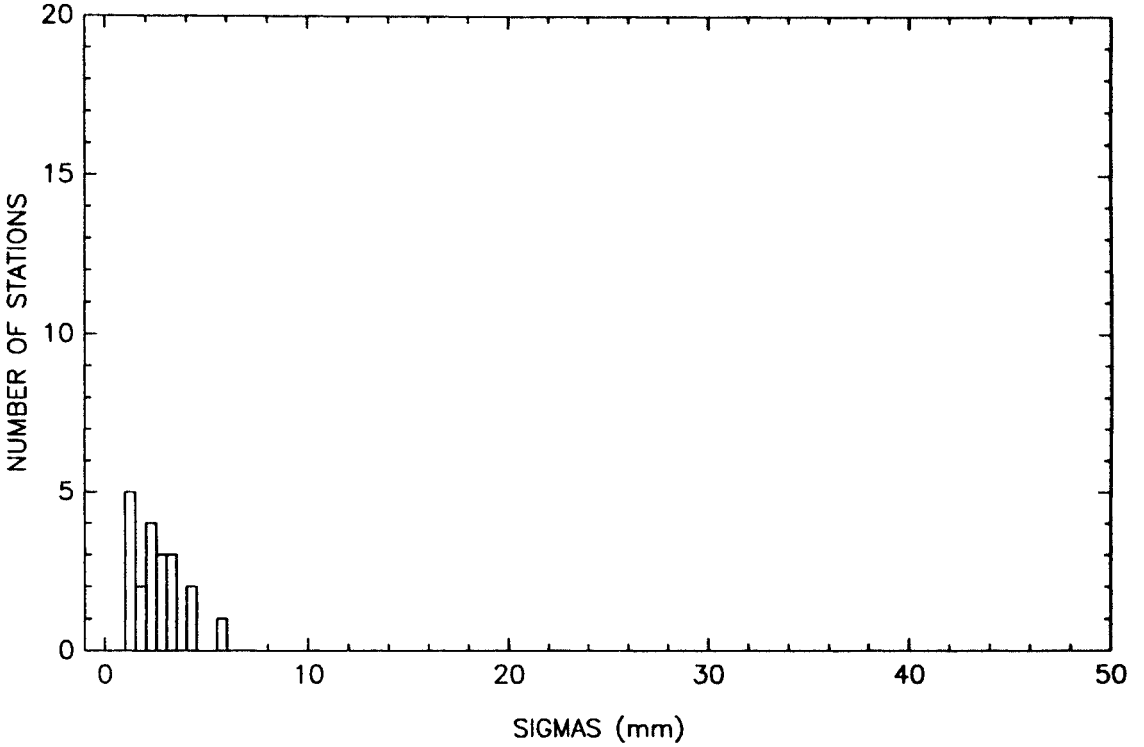


FIGURE 11 : SSC(EMR) 93 P 01



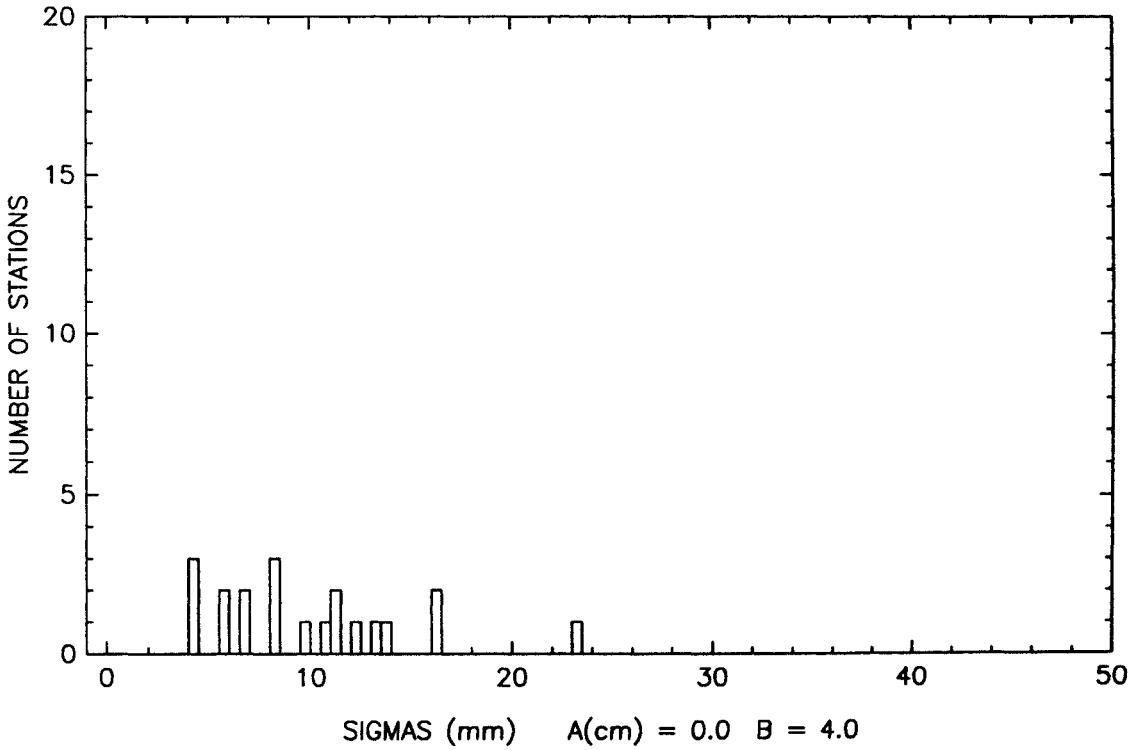
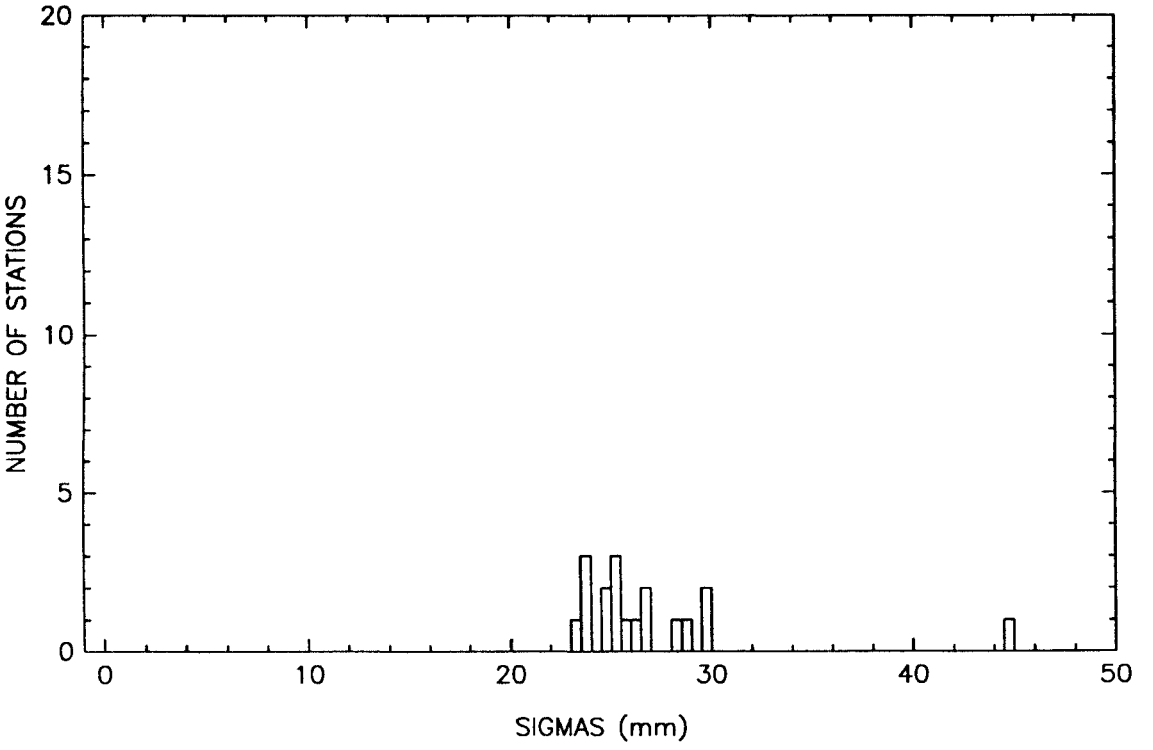


FIGURE 12 : SSC(ESOC) 93 P 01



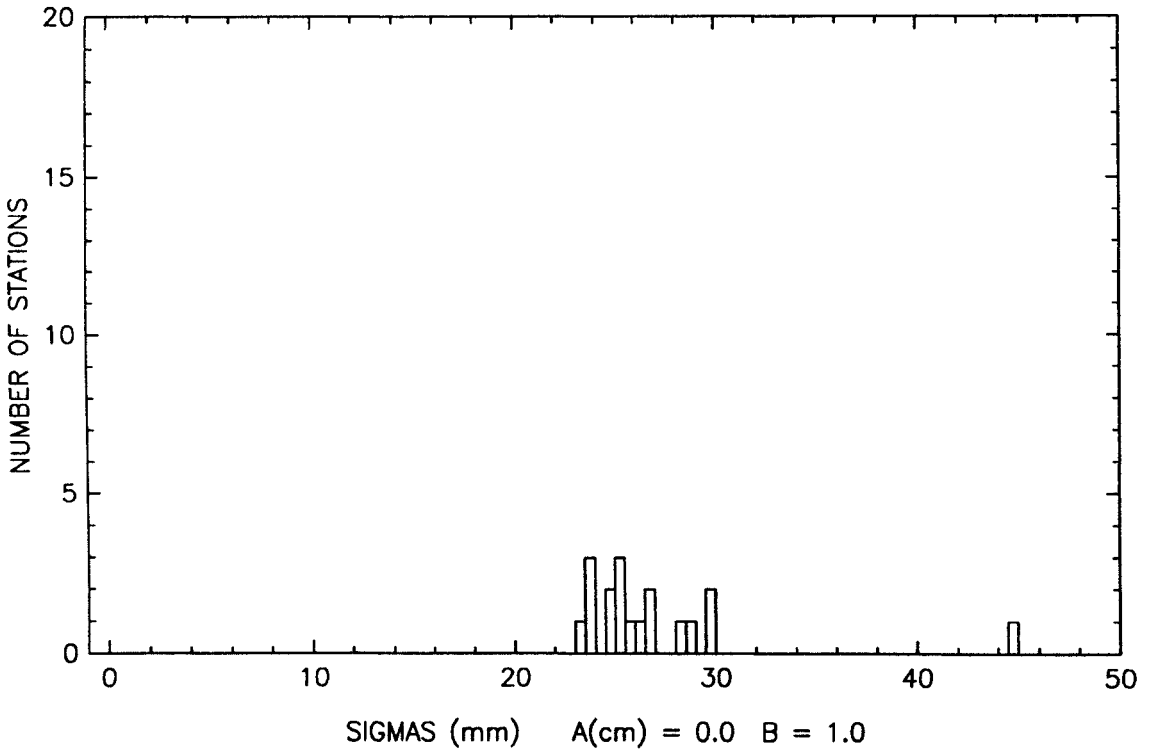
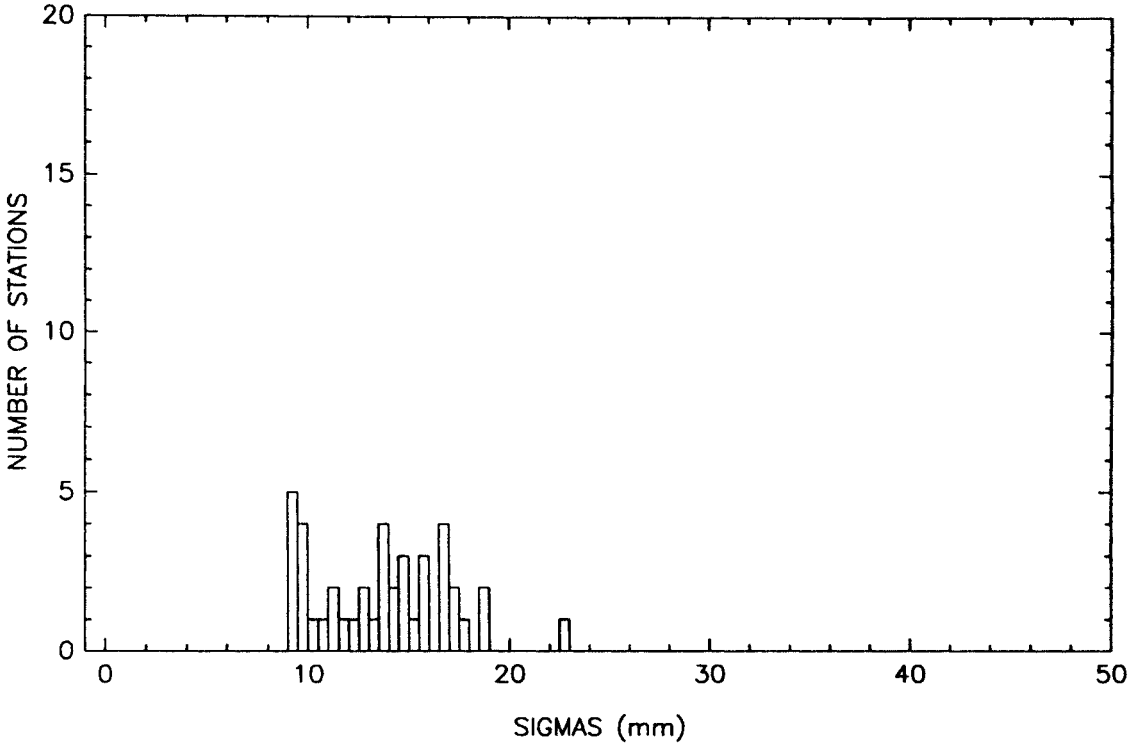


FIGURE 13 : SSC(JPL) 93 P 01



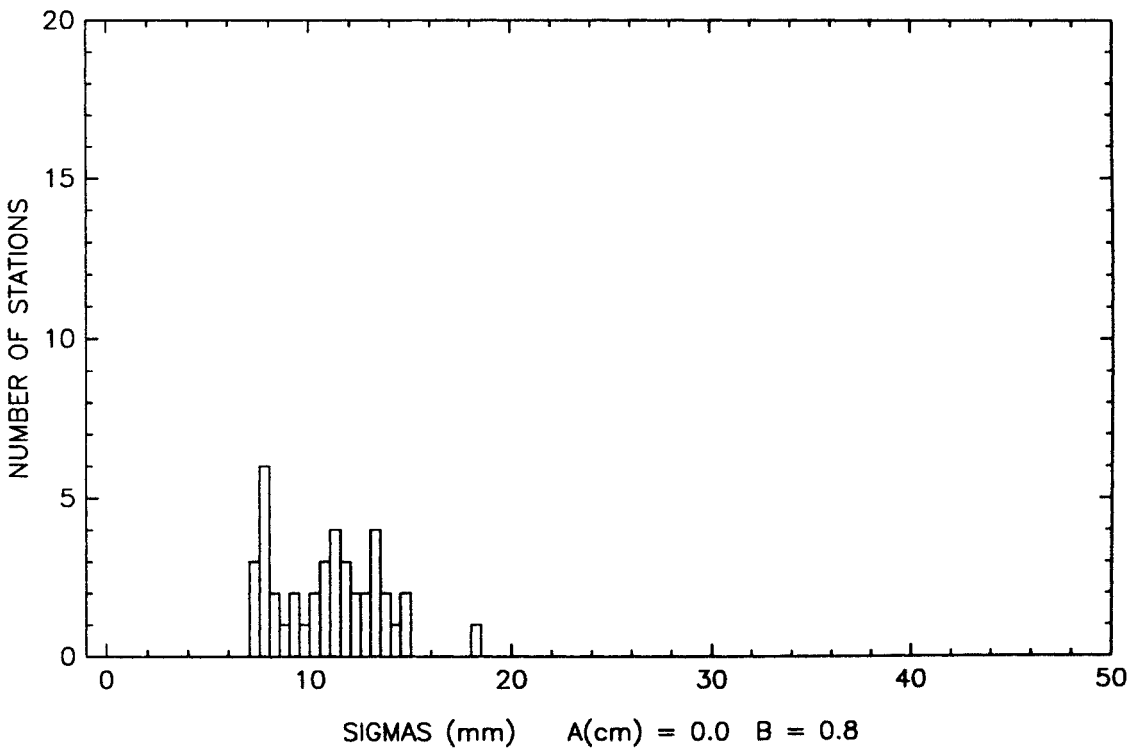
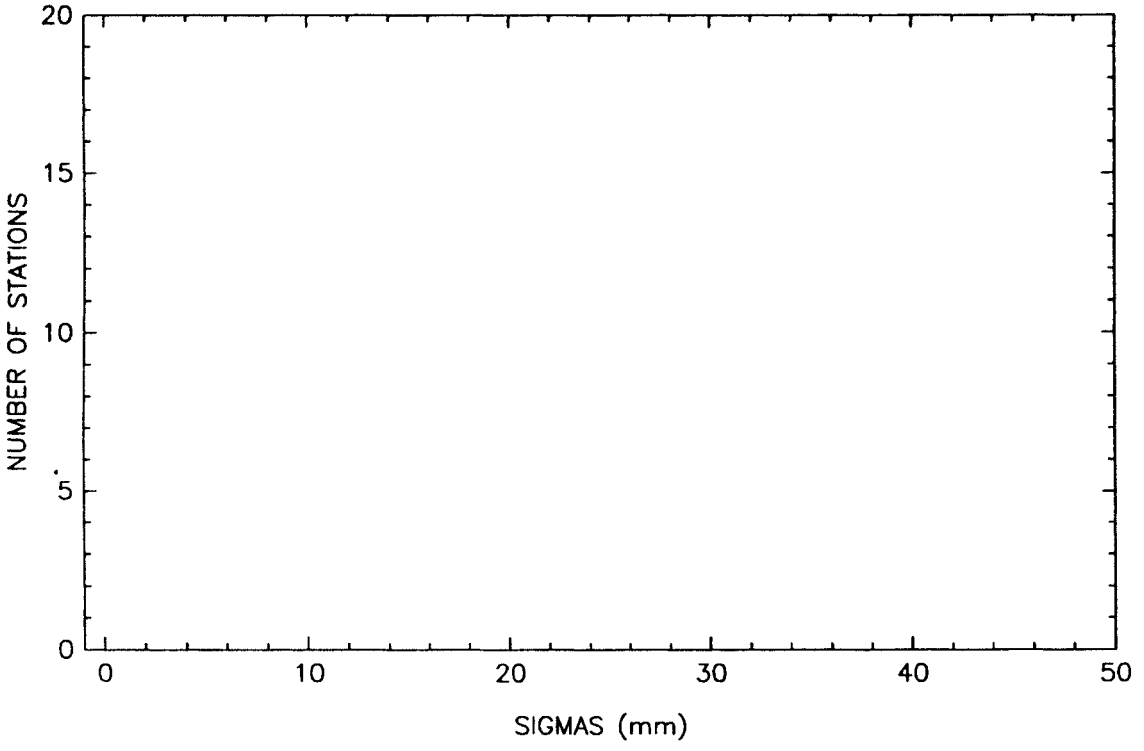


FIGURE 14 : SSC(SIO) 93 P 01



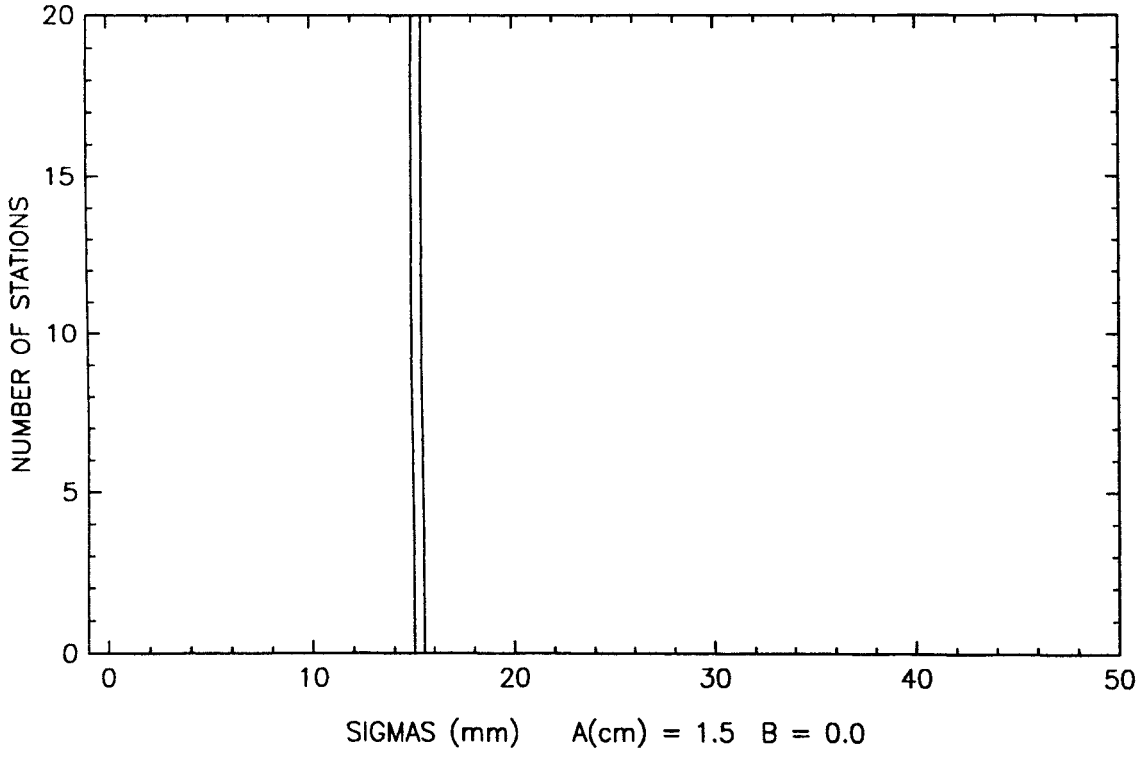
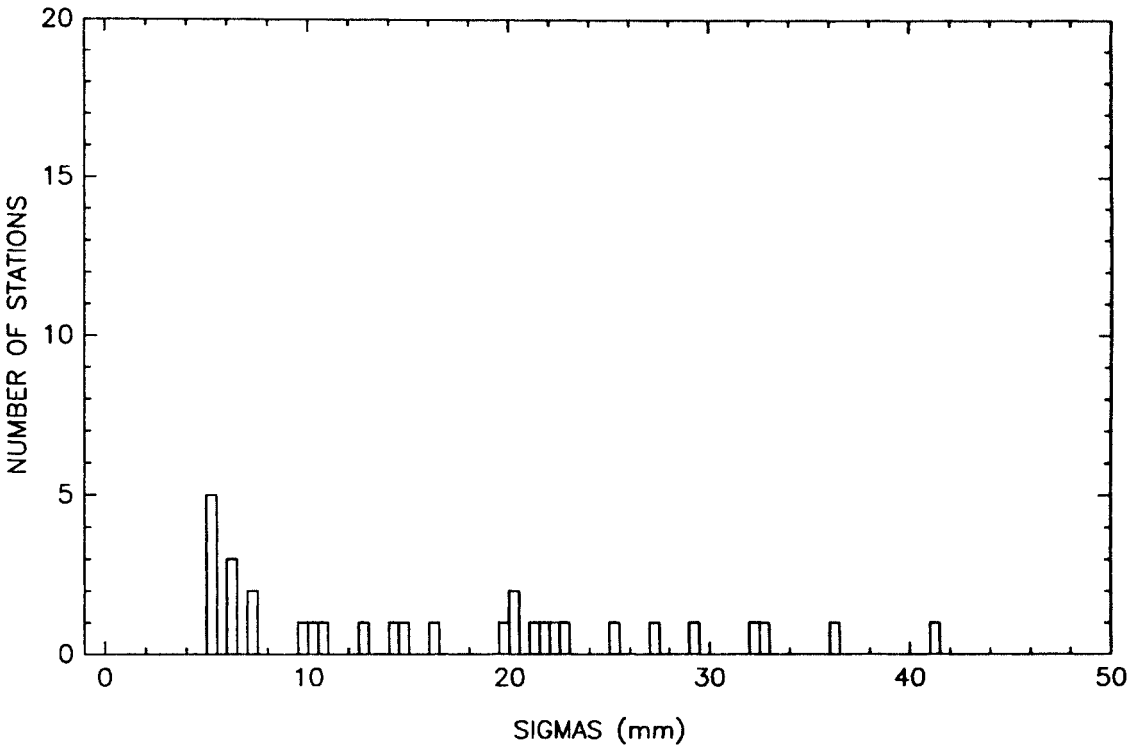


FIGURE 15 : SSC(CLG) 93 L 01



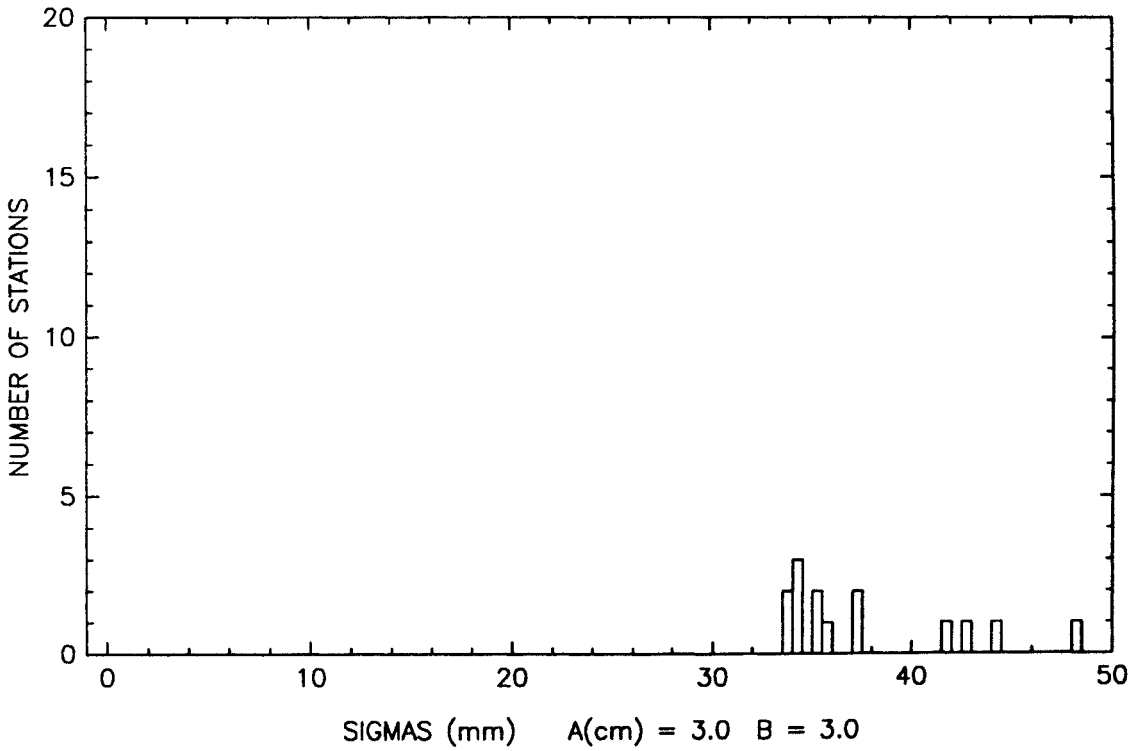
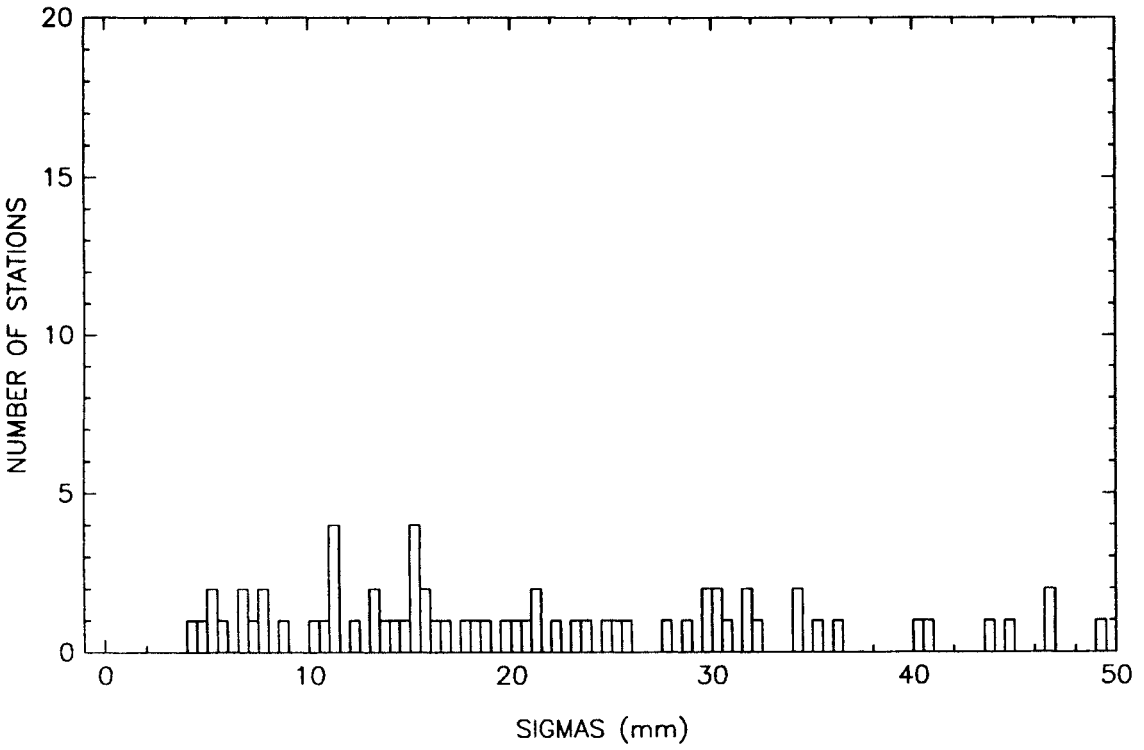


FIGURE 16 : SSC(CSR) 93 L 01



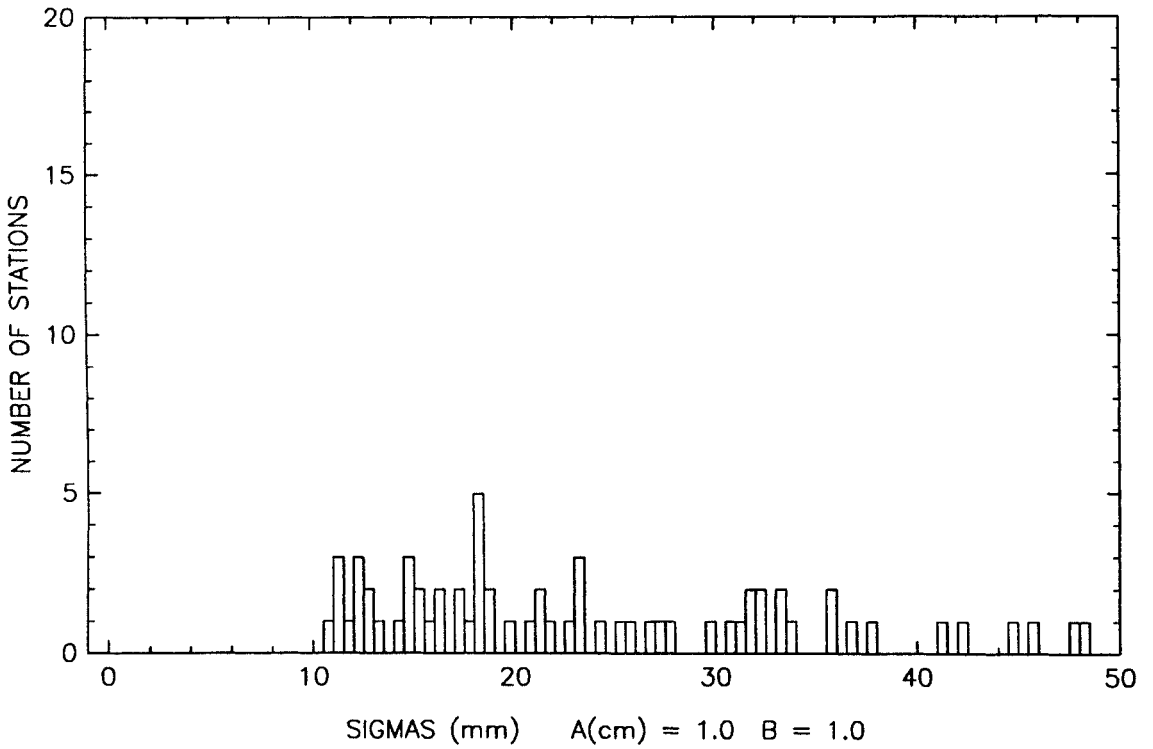
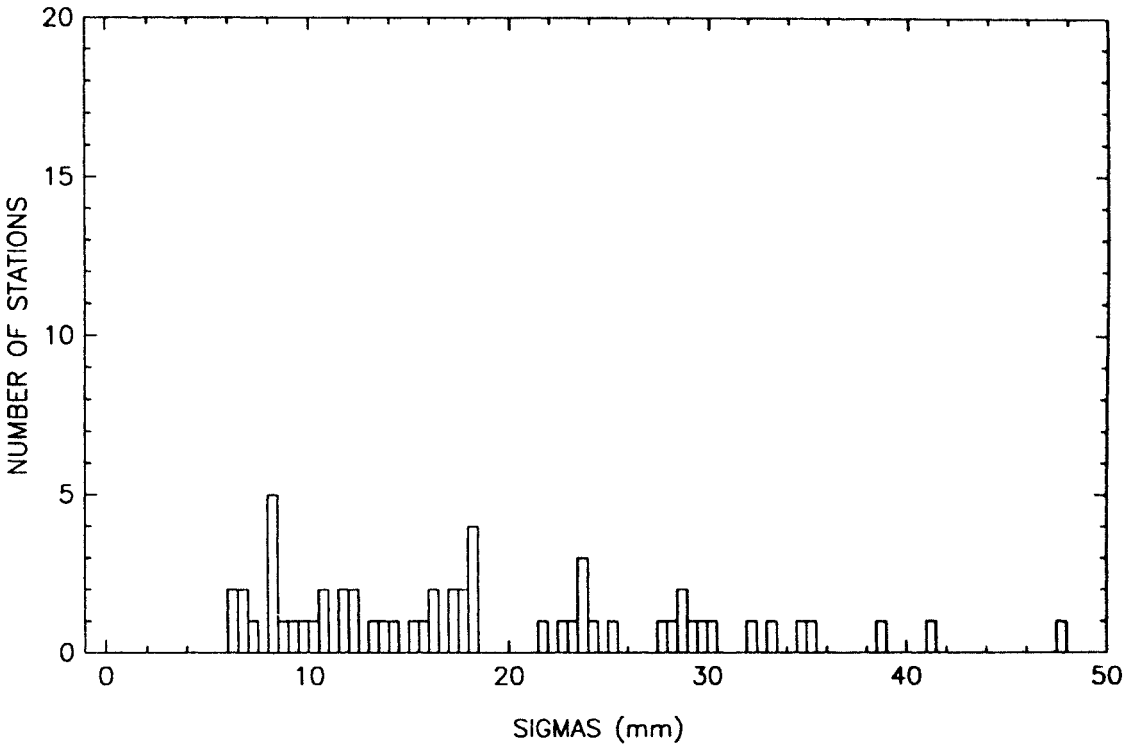


FIGURE 17 : SSC(DUT) 93 L 02



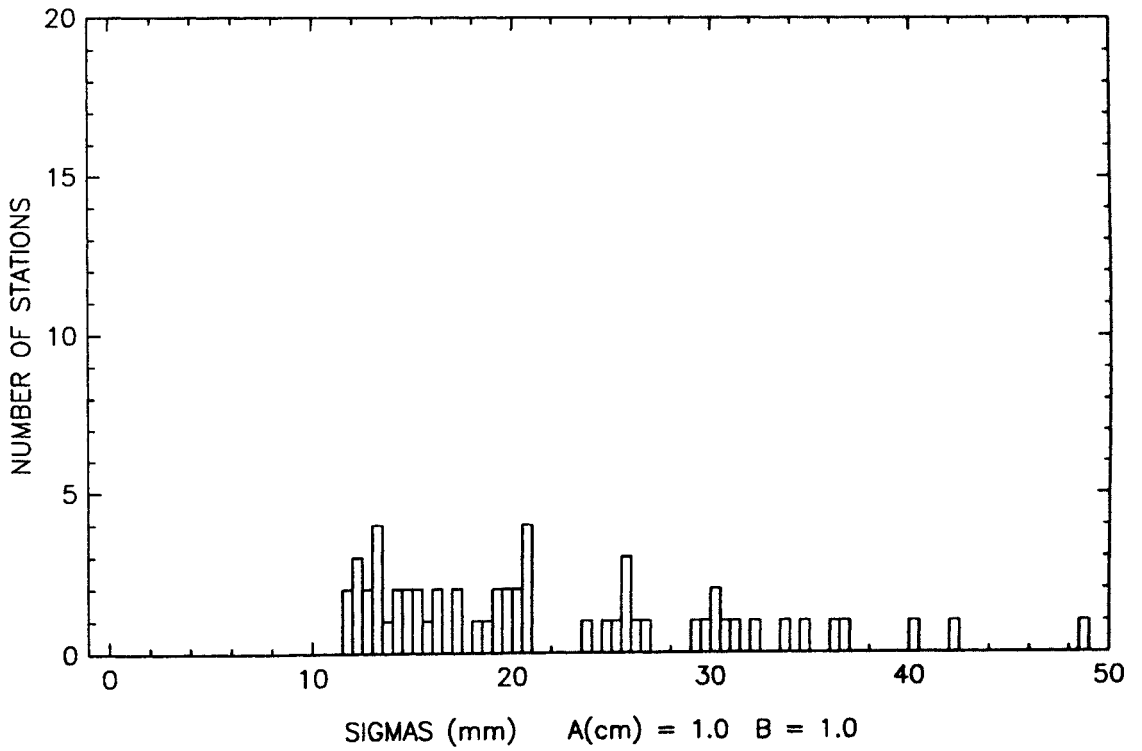
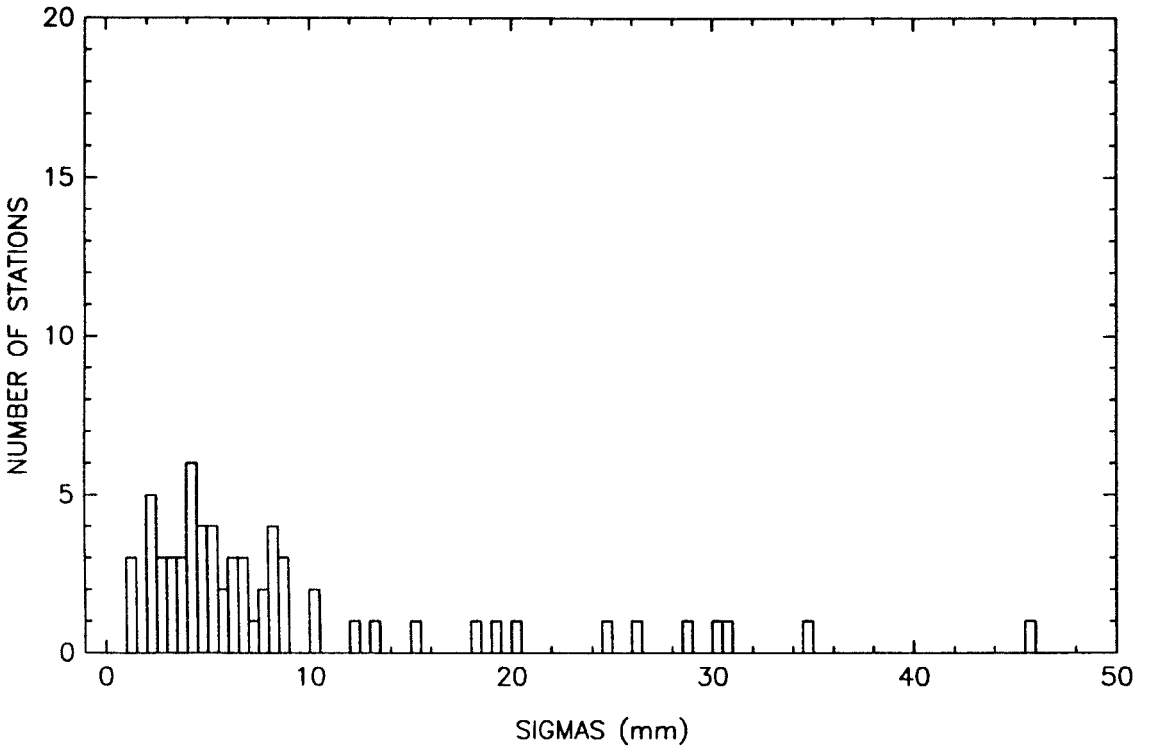


FIGURE 18 : SSC(GAOUA)93 L 01



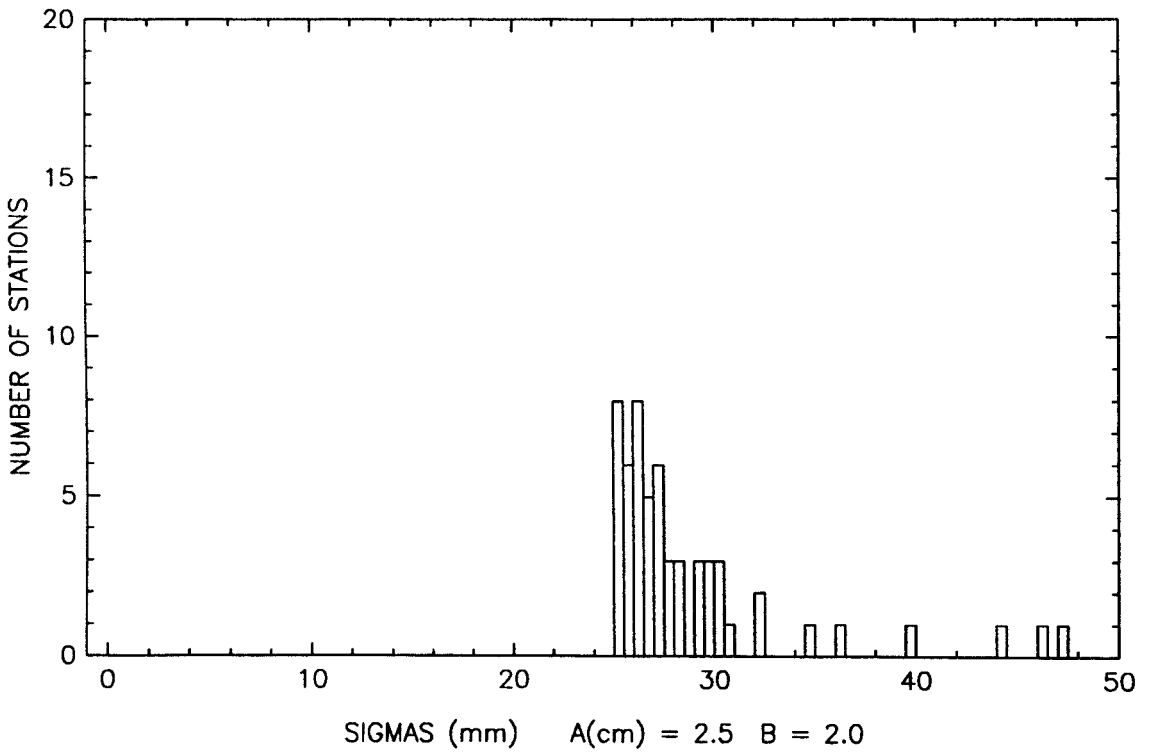
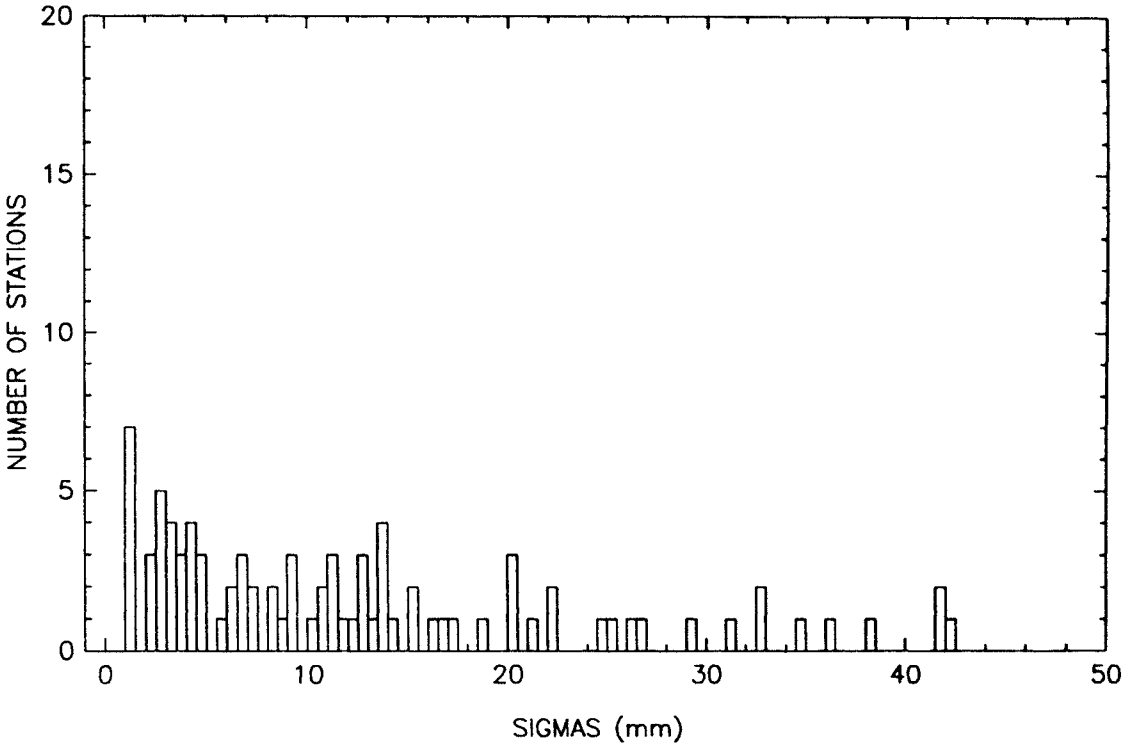


FIGURE 19 : SSC(GFZ) 93 L 01



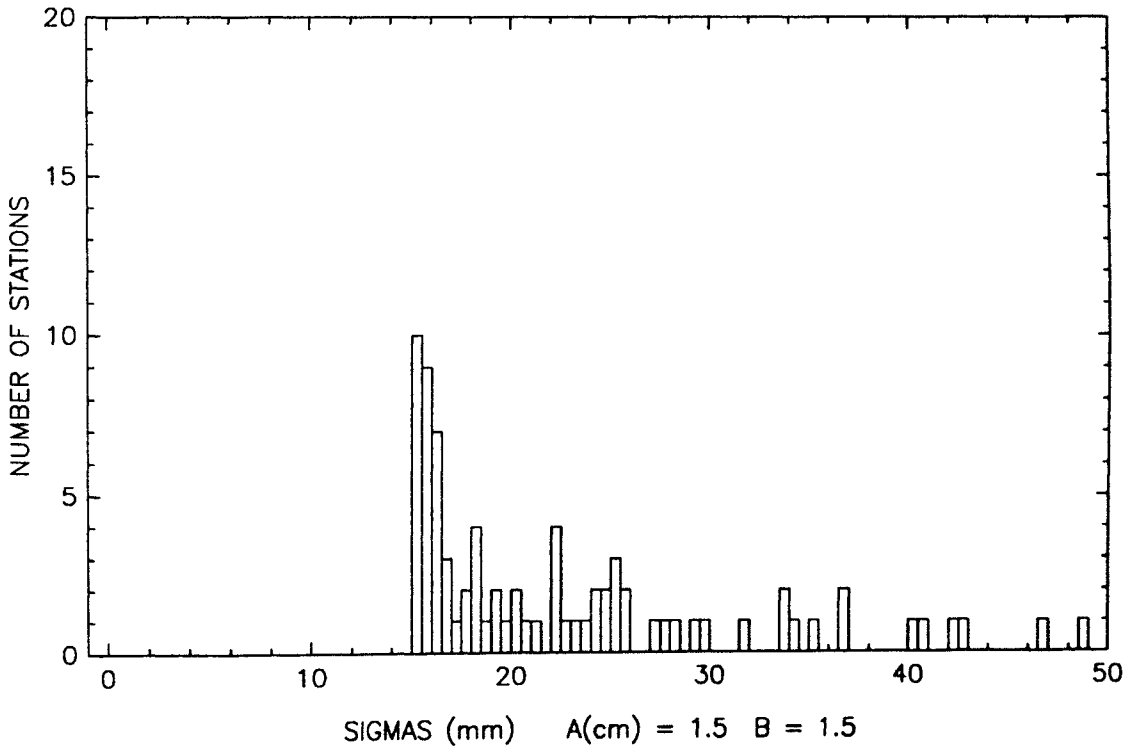
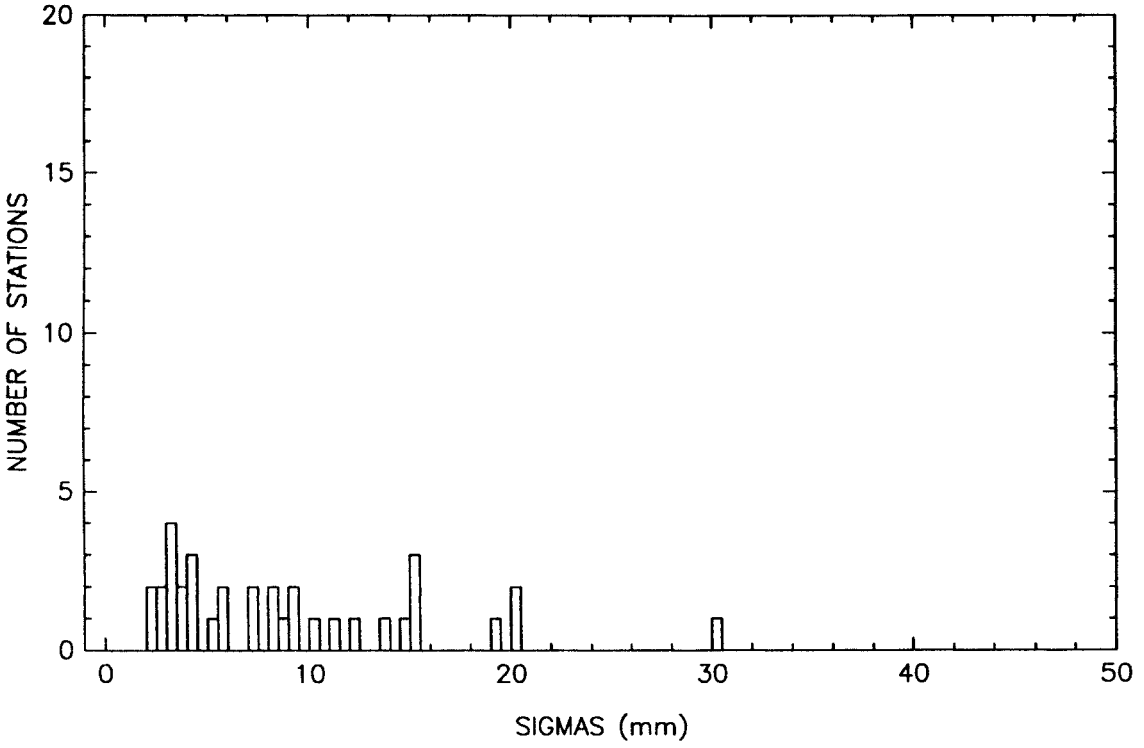
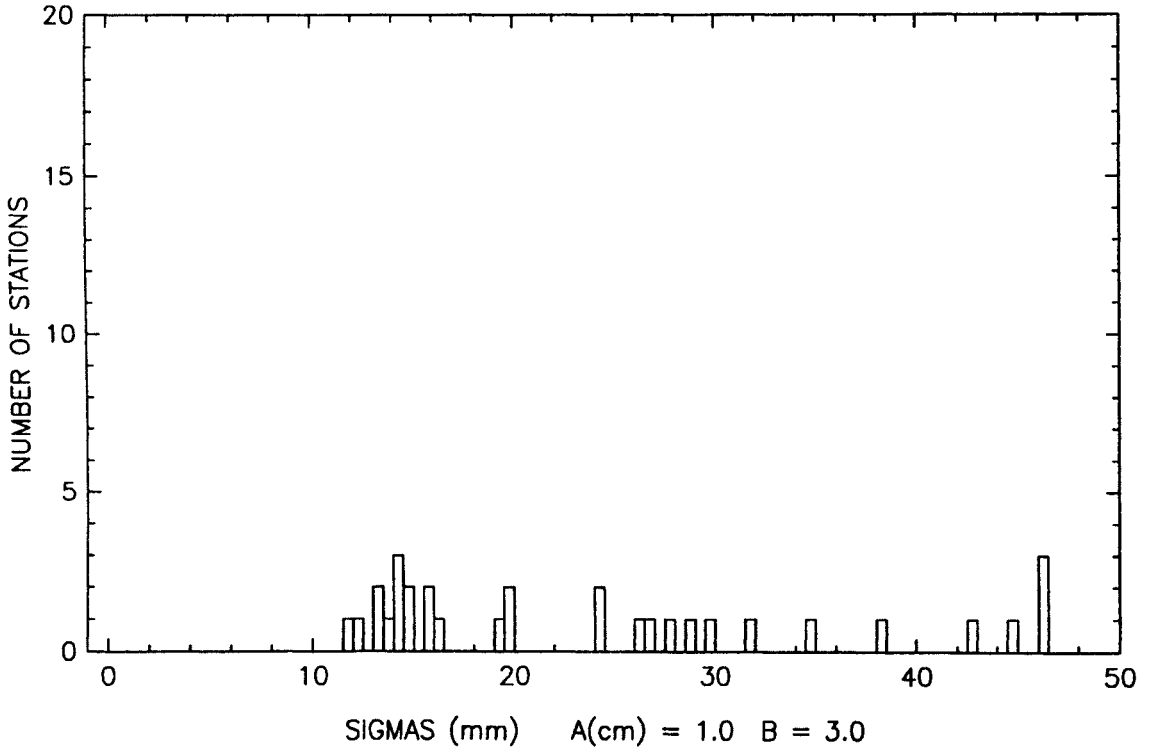


FIGURE 20 : SSC(GSFC) 93 L 01





2) DATA ANALYSIS

The ITRF92 global combined solution is divided into two parts: a set of station coordinates at epoch 1988.0 and its associated velocity field. Both of them are estimated, using least square adjustment, by combination of individual terrestrial reference frames provided by the analysis centers participating in the IERS activities. These individual terrestrial reference frames are derived fromVLBI, LLR, GPS and SLR observations.

2.1) ITRF92 station coordinates

The ITRF92 station coordinates solution consists of a combined adjustement of station positions and transformation parameters for the epoch 1988.0.

The adjustment were performed using the SSCMIX software developped by IGN. The options used were:

- reduction of individual data sets at a common epoch(1988.0) using their respective motion models,

- least square estimation of station coordinates and 7 transformation parameters for each solution,

- local surveys used with a priori variances (see 1.4)

- station coordinates used with a priori variances (see 1.3)

It was decided that:

- origin should come from SLR

- scale should also come from SLR noting that the scales of most VLBI solutions are consistent with most of SLR ones,

- orientation should be such that no global rotation should exist with respect to ITRF91.

To insure that, a first global adjustment of all selected data was done, holding the LC92 transformation parameters fixed to zero. This solution was labelled ITRF92A.

Then ITRF92A was compared to ITRF91 in order to estimate corrections to rotation angles. This comparison has been done incorporating only one point per site. Table 2 gives the transformation parameters between ITRF92A and ITRF91. The global adjustment was finally repeated with LC92 translation and scale put to zero and rotation angles fixed to the values derived from the previous comparison.

Table 2 : Transformation parameters from ITRF91 to ITRF92A
(one point per site)

T1 m	T2 m	T3 m	D 10^{-8}	R1 0.001"	R2 0.001"	R3 0.001"
-1.1 ±0.2	-1.4 ±0.2	0.6 ±0.2	-0.14 ±0.02	-0.47 ±0.07	0.74 ±0.07	-1.41 ±0.05

2.2) ITRF92 velocity field

The ITRF92 velocity field has been obtained by combination of eight site velocity fields estimated by SLR and VLBI analysis centers. These eight velocity fields have been estimated together with eight SSCs among those incorporated in the ITRF92 station coordinates combined solution. The method for combining velocities is equivalent to and consistent with the method for combining SSCs into the ITRF92 station coordinates. In order to insure the condition of no-net-Rotation of the ITRS with respect to the crust, NNR-NUVEL1 was selected as the reference motion model as recommended by the IERS Standards (McCarthy, 1992). A velocity field was so constructed using NNR-NUVEL1 for those sites which are available in the eight estimated velocity fields. The temporal variation (or rate of change) of the translation and rotation parameters of the constructed NNR-NUVEL1 velocity field were fixed to zero in the global adjustement. The scale factor is assumed to be invariant with time and so the corresponding parameters are fixed to zero for all velocity fields.

NNR-NUVEL1 is a horizontal motion model. For the consistency of the three-dimensional we used it as three-dimensional model with zero vertical velocity and assumed an error of 3mm/year for the horizontal components and 1 cm/year for the vertical one. NNR-NUVEL1 velocities were deweighted in the combination (with 10 cm/year as a priori standard deviation) for sites whose motion may differ from NNR-NUVEL1, such as sites in California, Japan and the Mediterranean area. Consequently, the condition of no-net-rotation is practically applied to those sites which are located on the rigid part of the tectonic plates and whose motion are consistent with that predicted by NNR-NUVEL1.

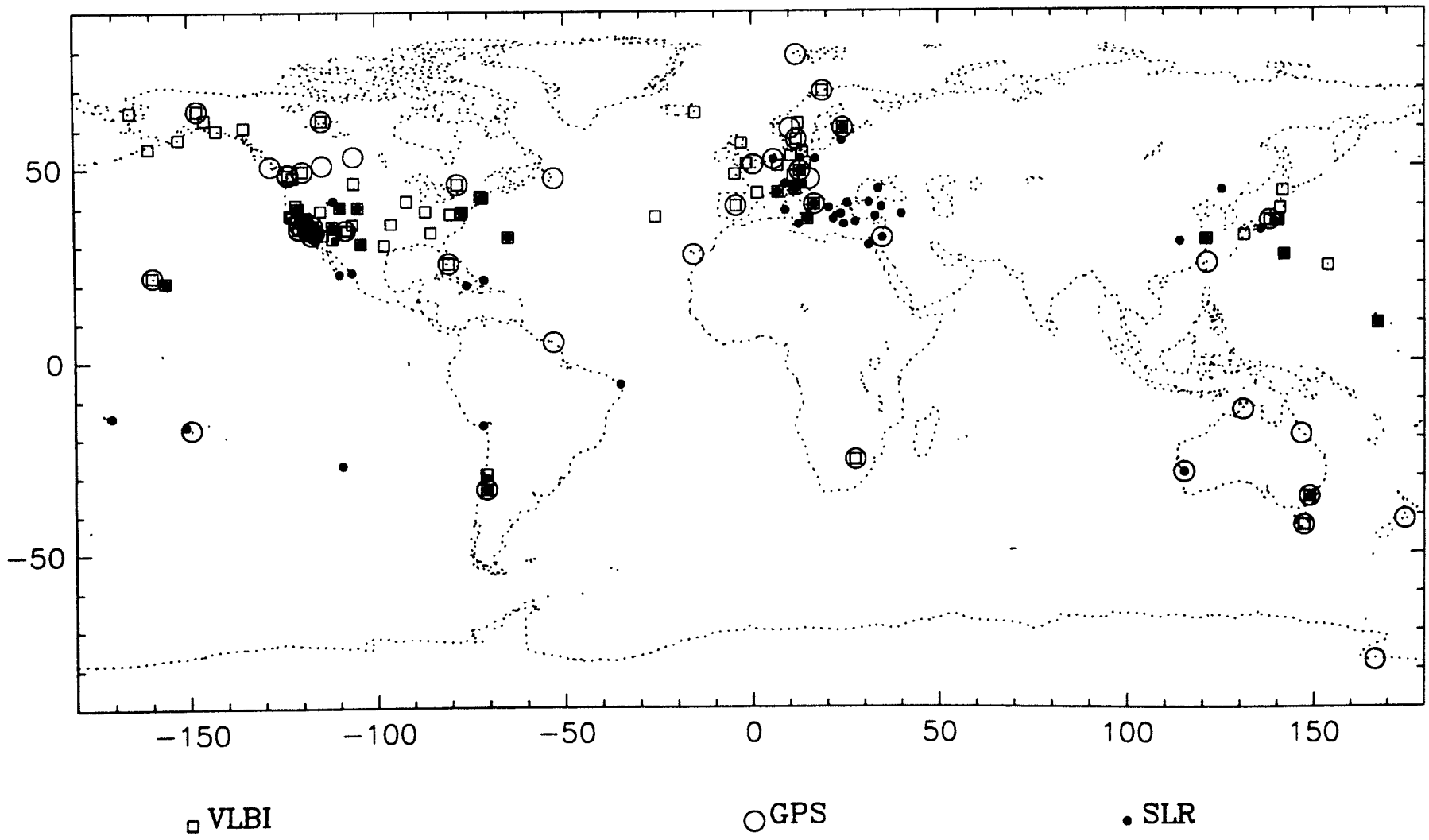
3) RESULTS

3.1) Values

We have adjusted combined coordinates in the ITRF92 solution for epoch 1988.0. In total, 287 stations located in 152 sites (see Figure 21) have been independently adjusted. These coordinates are given in Table T5 under the label SSC(IERS) 93 C 03. They are also published in Table T-3 of the 1992 IERS Annual Report.

Table T6 lists the ITRF92 combined velocity field. These velocities should be used to refer the

FIGURE 21 : DISTRIBUTION OF THE 152 SITES OF THE ITRF92



ITRF92 coordinates from the 1988.0 epoch to another desired epoch. This Table gives for each site its DOMES number, name, the individual solutions in which its velocities are available, the cartesian velocities and their standard deviations, the plate and a code : CN for Combined Velocities with NNR-NUVEL1, C for Combined velocities with NNR-NUVEL1 velocities deweighted, and N for NNR-NUVEL1 velocities.

The adjusted transformation parameters were published in Table T-2 of the 1992 IERS Annual Report. They are also available in Table T7 of the appendix.

Table T8 gives the rate of change of the translation and rotation parameters. The scale factor is assumed to be invariant with time. These values have to be considered as annual variations to the transformation parameters given in Table T7. So for a given transformation parameter T at an epoch t in years, we have:

$$T(t) = T(1988.0) + \dot{T} \cdot (t - 1988.0) \qquad (2)$$

T and $\dot{T}$ are given in Tables T7 and T8 respectively. When $\dot{T}$ is not given one can assume $\dot{T} = 0$.

3.2) Analysis of results

The factor of unit variance is 1.1 for both the ITRF92 station coordinates and velocity field combined solutions. Although it is close to 1, the proper weighting in the combined adjustment is a rather critical and delicate problem.

For a sample of 6 stations, Figures 22 to 27 show the evolution of their positions expressed in the local frame, from ITRF0 to ITRF92 for two epochs: 88.0 and 93.0. The Figures at epoch 88.0 represent the simple coordinate differences with respect to ITRF0, while the Figures at epoch 93.0 represent the simple coordinate differences with respect to ITRF0, but after mapping the coordinates in the different ITRF solutions from the reference epoch (88.0) to epoch 93.0 using their respective motion models (AM0-2 for ITRF-0 to ITRF90 and the respective velocity fields for ITRF91 and ITRF92).

The quality of the results is also given by examining residuals by groups. All residuals by site are given in the appendix; Table T9 for the sets of station coordinates and Table T10 for the velocity fields respectively . Table T9 gives residuals in meters, while T10 gives residuals in mm both in equatorial and local frame, as well as equatorial residuals divided by the a priori standard errors.

At the end of each site, the following RMS means are given:

SX: unweighted 3-D RMS
NSX: 3-D normalized RMS
SP: unweighted 2-D horizontal RMS
SU: unweighted vertical RMS

with,

$$SX = \sqrt{\frac{\sum_{i=1}^{N} (RX_i^2 + RY_i^2 + RZ_i^2)}{3N}} \tag{3}$$

$$NSX = f \cdot \sqrt{\frac{\sum_{i=1}^{N} (NX_i^2 + NY_i^2 + NZ_i^2)}{3N}} \tag{4}$$

$$SP = \sqrt{\frac{\sum_{i=1}^{N} (RE_i^2 + RN_i^2)}{2N}} \tag{5}$$

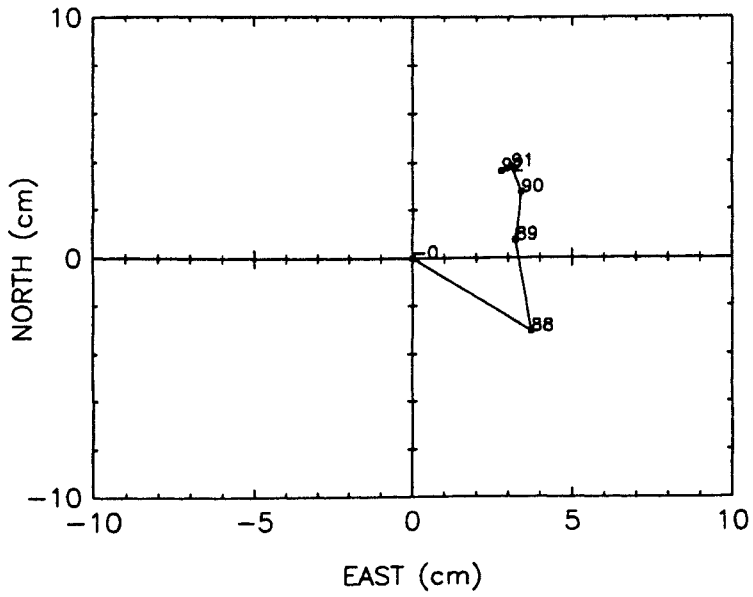
$$SU = \sqrt{\frac{\sum_{i=1}^{N} (RU_i^2)}{N}} \tag{6}$$

with N as the number of points in the site and f a scaling factor,

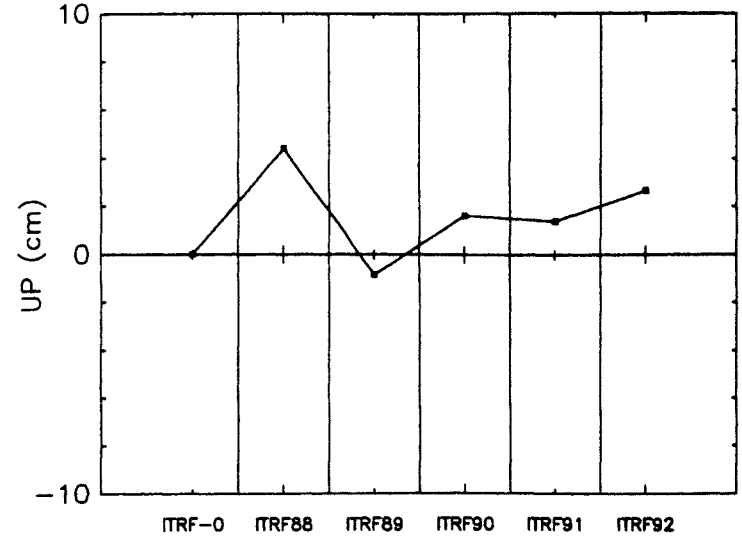
$$f = \frac{1}{\sigma_0} \sqrt{\frac{\text{Number of observations}}{\text{Number of degree of freedom}}} \tag{7}$$

A summary of the quality of the various sites is given in Table 3, where can be found N, NSX, SP and SU in cm, the maximum standard deviation of ITRF92 coordinates for this site, also in cm.

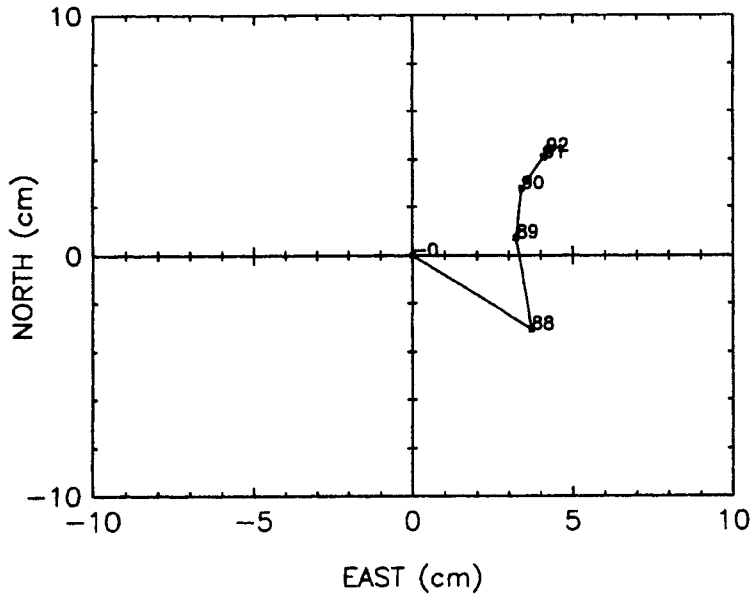
FIGURE 22 : FORT DAVIS 2-D POSITION IN THE ITRFs AT 88.0



FORT DAVIS VERTICAL COMPONENT IN THE ITRFs AT 88.0



FORT DAVIS 2-D POSITION IN THE ITRFs AT 93.0



FORT DAVIS VERTICAL COMPONENT IN THE ITRFs AT 93.0

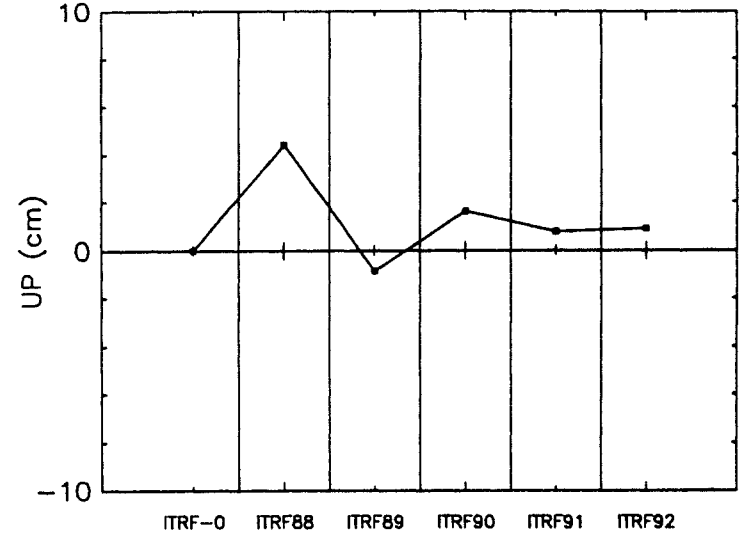
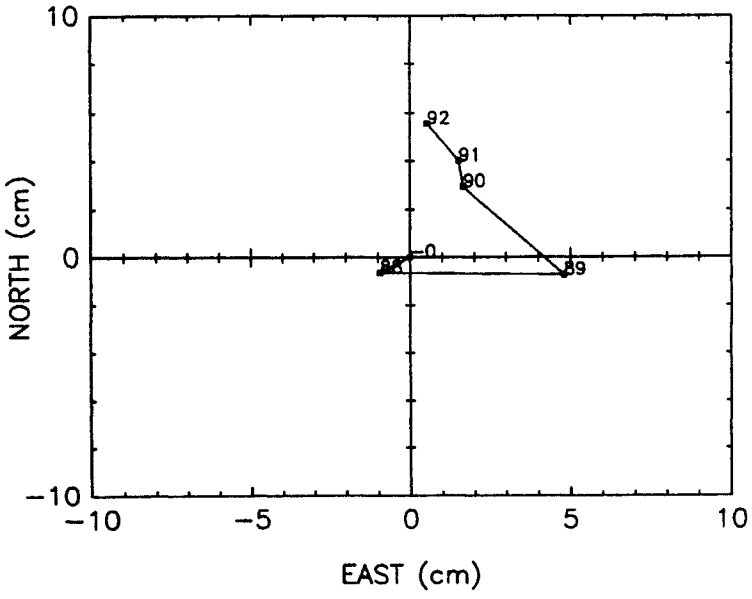
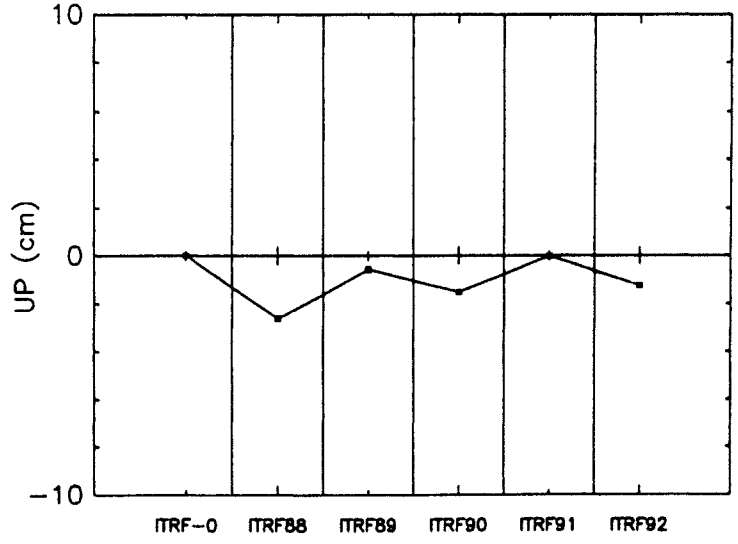


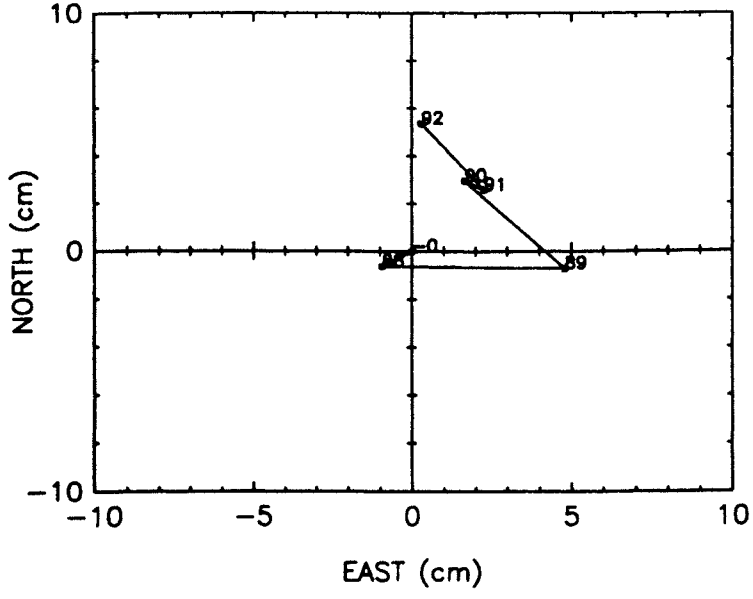
FIGURE 23 : WETTZELL 2-D POSITION IN THE ITRFs AT 88.0



WETTZELL VERTICAL COMPONENT IN THE ITRFs AT 88.0



WETTZELL 2-D POSITION IN THE ITRFs AT 93.0



WETTZELL VERTICAL COMPONENT IN THE ITRFs AT 93.0

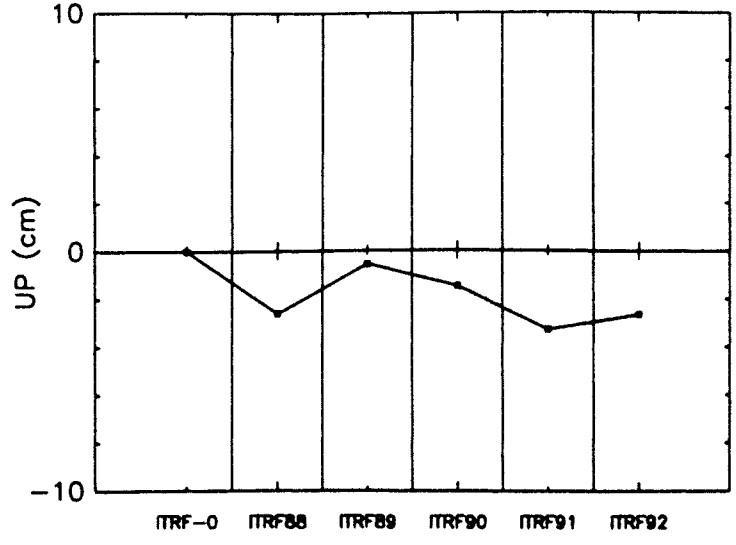
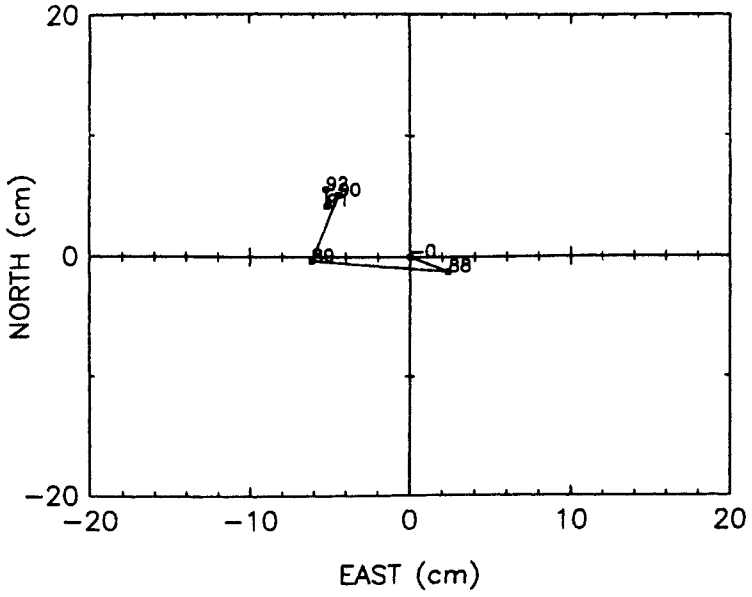
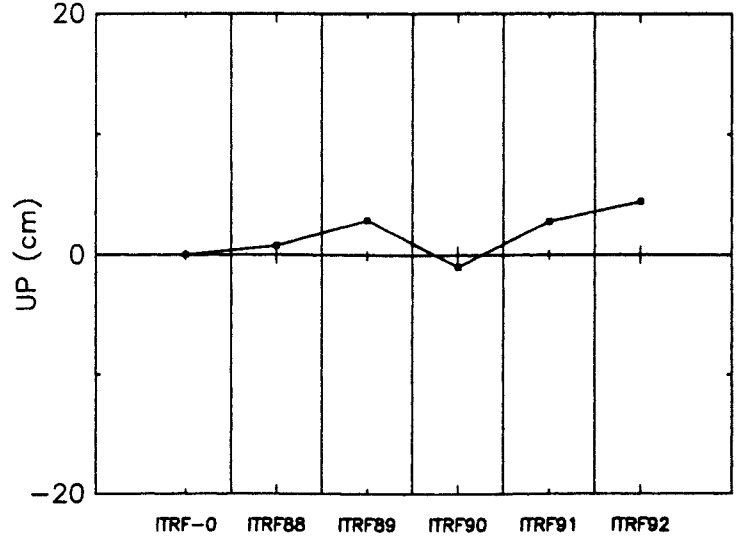


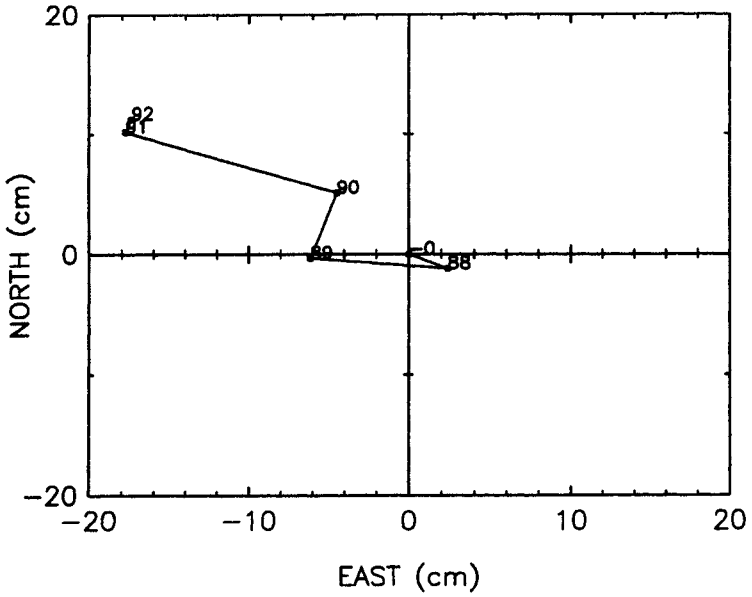
FIGURE 24 : SIMOSATO 2-D POSITION IN THE ITRFs AT 88.0



SIMOSATO VERTICAL COMPONENT IN THE ITRFs AT 88.0



SIMOSATO 2-D POSITION IN THE ITRFs AT 93.0



SIMOSATO VERTICAL COMPONENT IN THE ITRFs AT 93.0

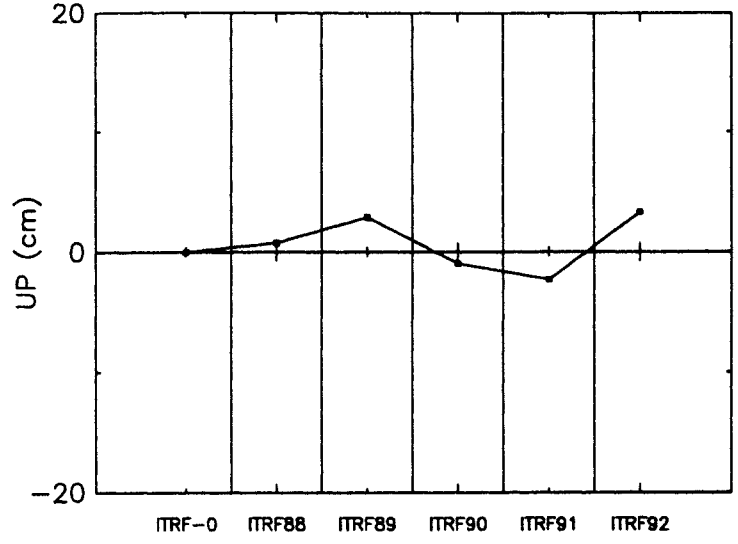
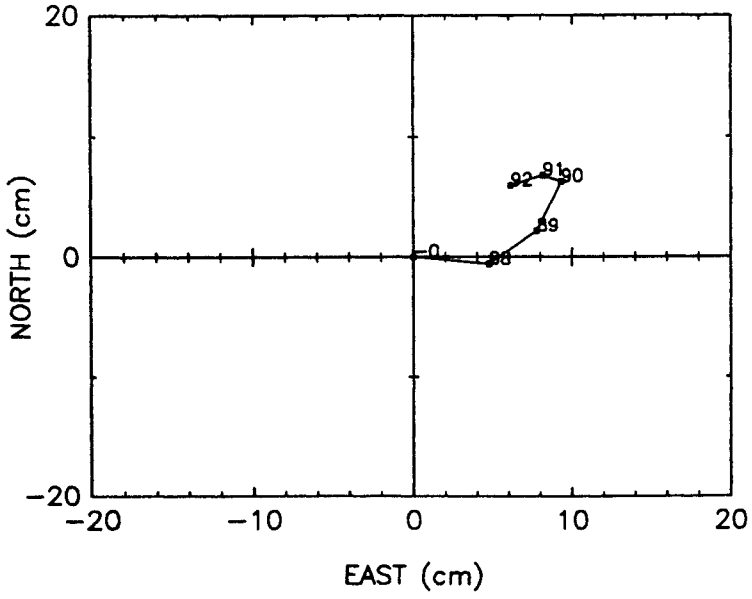
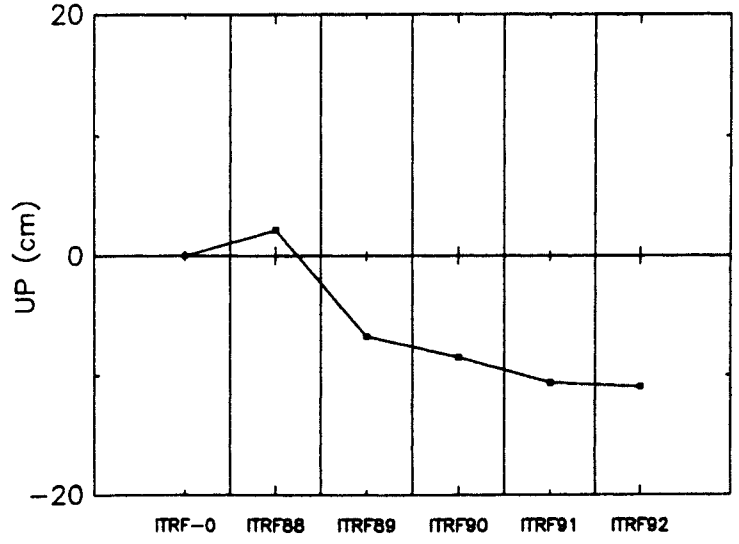


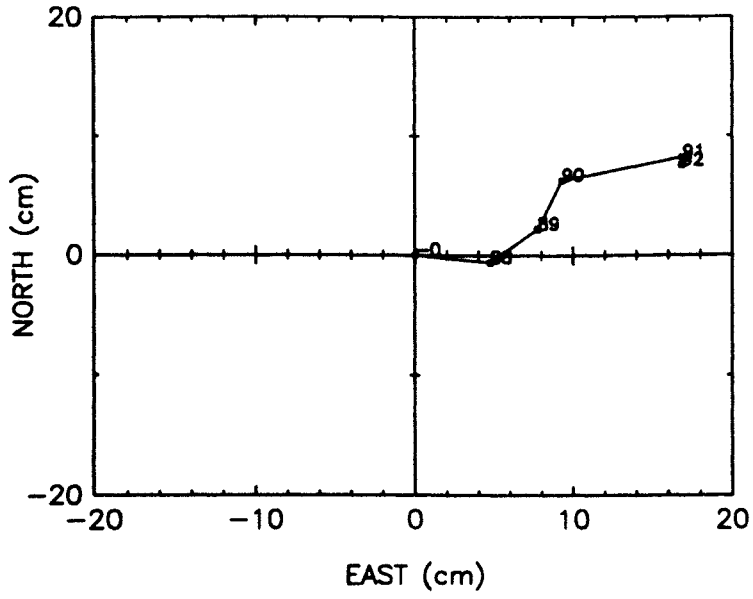
FIGURE 25 : AREQUIPA 2-D POSITION IN THE ITRFs AT 88.0



AREQUIPA VERTICAL COMPONENT IN THE ITRFs AT 88.0



AREQUIPA 2-D POSITION IN THE ITRFs AT 93.0



AREQUIPA VERTICAL COMPONENT IN THE ITRFs AT 93.0

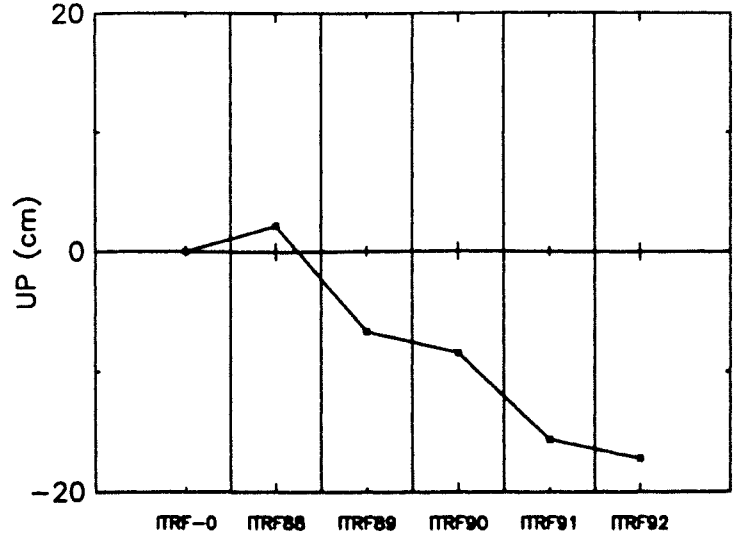
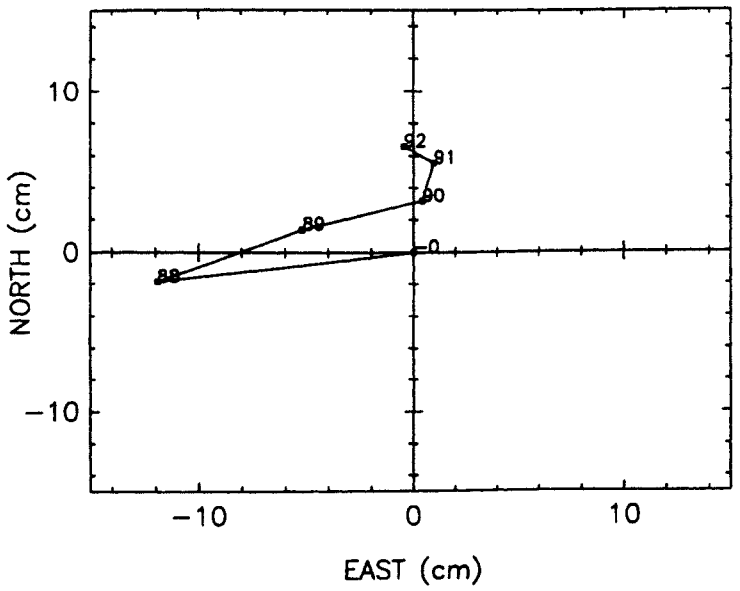
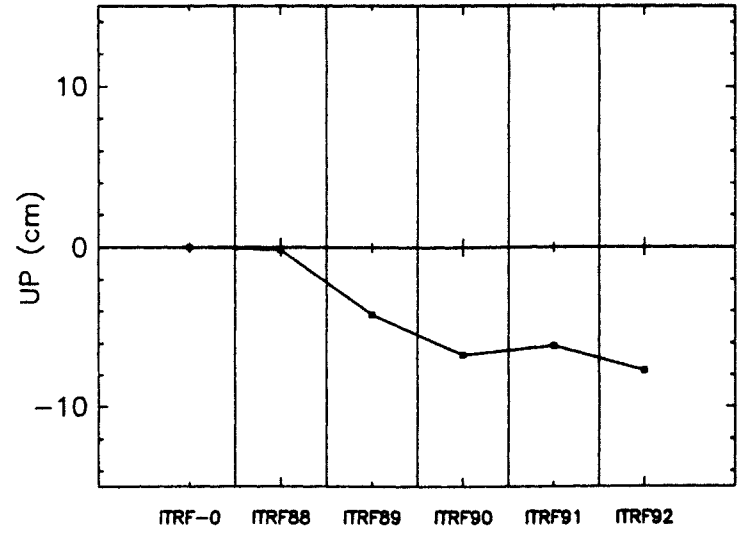


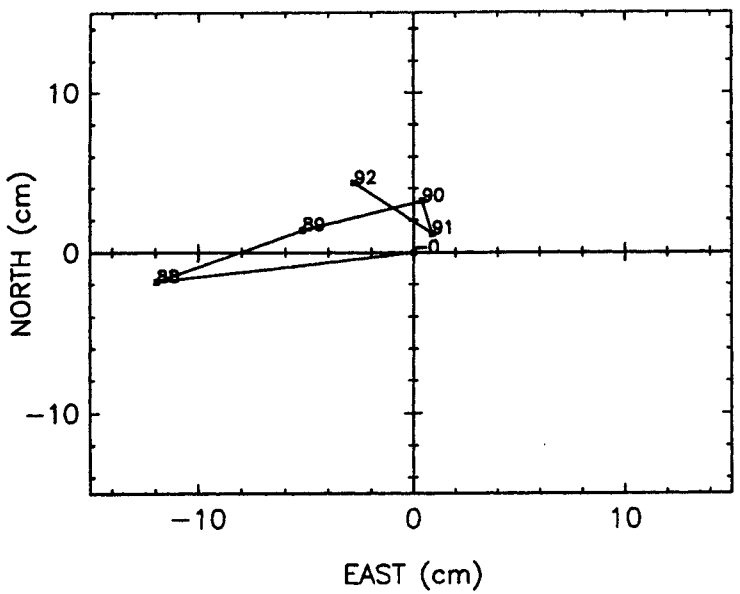
FIGURE 26 : HART 2-D POSITION IN THE ITRFs AT 88.0



HART VERTICAL COMPONENT IN THE ITRFs AT 88.0



HART 2-D POSITION IN THE ITRFs AT 93.0



HART VERTICAL COMPONENT IN THE ITRFs AT 93.0

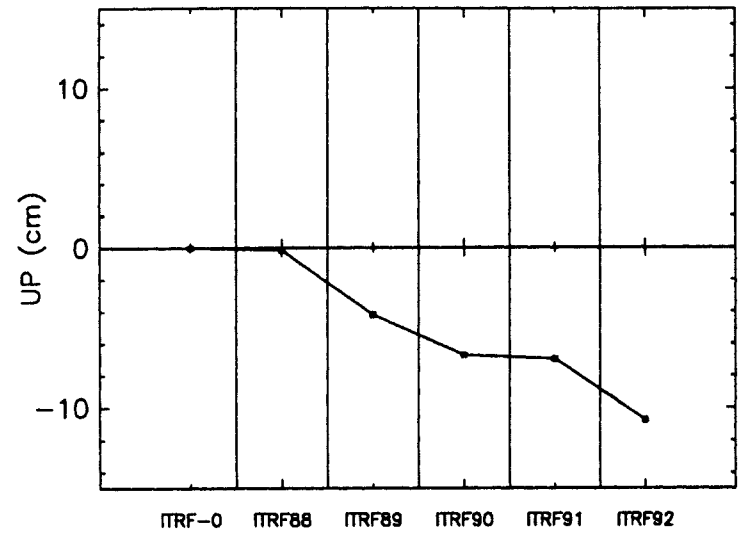
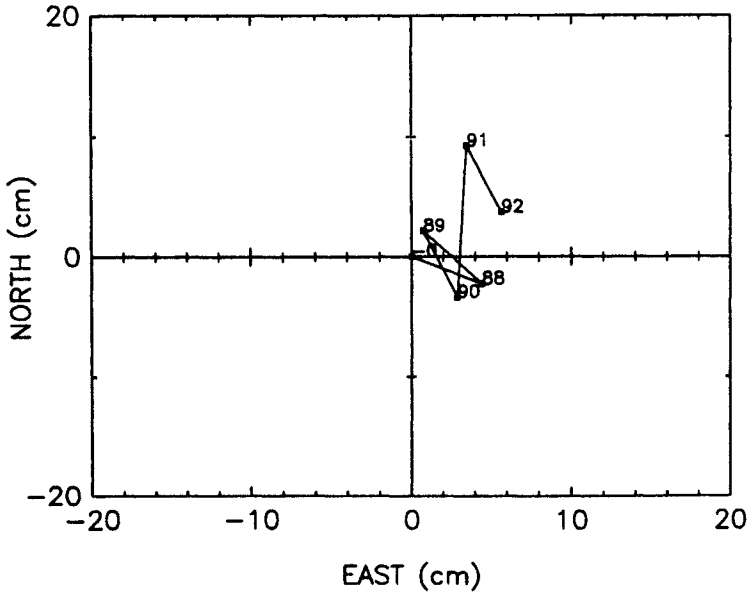
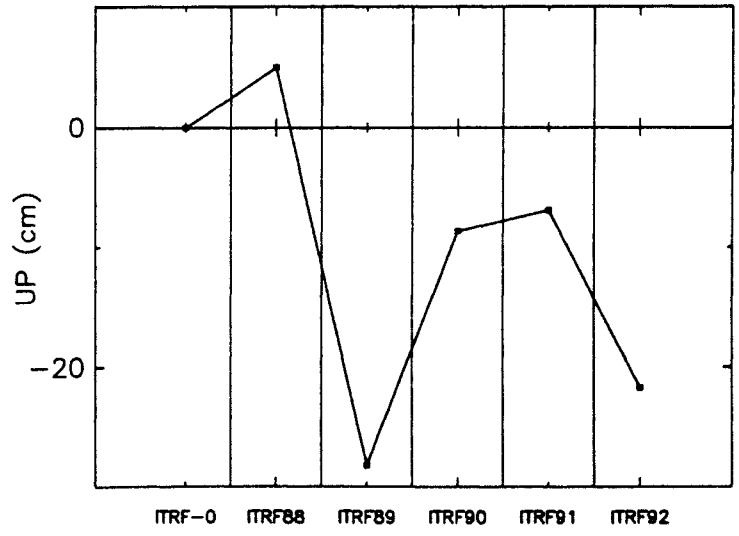


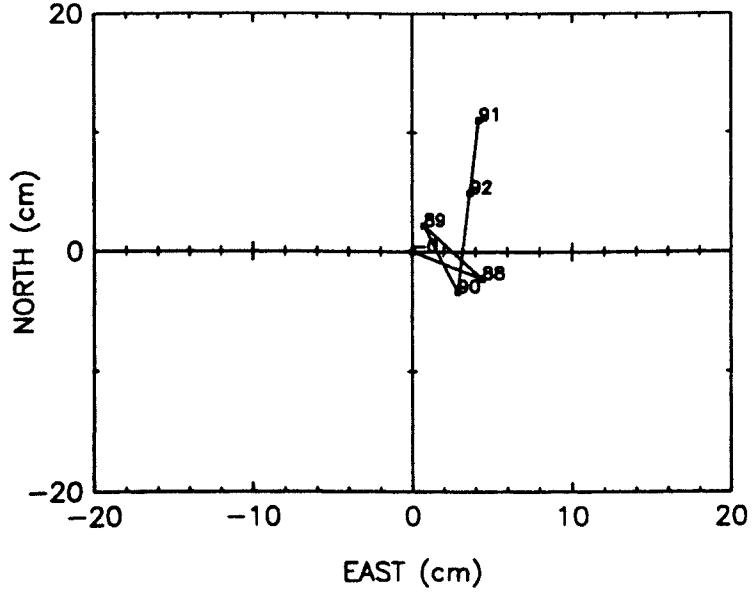
FIGURE 27 : CANBERRA 2-D POSITION IN THE ITRFs AT 88.0



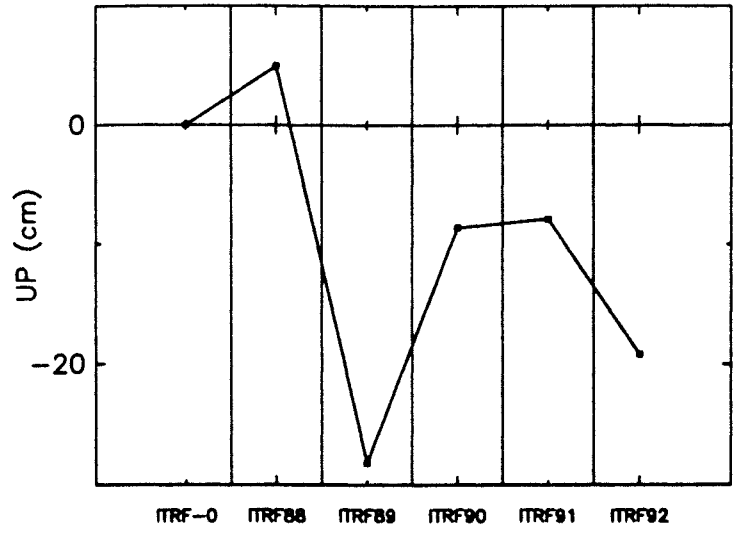
CANBERRA VERTICAL COMPONENT IN THE ITRFs AT 88.0



CANBERRA 2-D POSITION IN THE ITRFs AT 93.0



CANBERRA VERTICAL COMPONENT IN THE ITRFs AT 93.0



A similar analysis has been done by solution. Table 4 gives the results for the sets of station coordinates and Table 5 for the velocity fileds. Statistics presented in these two tables involve the following parameters:

N	: number of points common to other solutions
SP, SU and NSX	: as defined in page 37
WSX	: weighted 3-D RMS
A and B:	: the two weighting parameters of the formula (1), page 2

In addition, one can analyze transformation parameters as given in Table T7, and also compare ITRF92 to previous solutions, such as ITRF91. This global transformation is obtained taking into account one point per site only. The values are (from ITRF91 to ITRF92) :

T1(cm)	= -1.1	(±0.2)
T2(cm)	= -1.4	(±0.2)
T3(cm)	= 0.6	(±0.2)
D (10^{-8})	= -0.14	(±0.03)
R1(0.001")	= 0.00	(±0.07)
R2(0.001")	= 0.00	(±0.07)
R3(0.001")	= 0.00	(±0.05)

Finally, in order to analyse the ITRF92 combined velocity field, we illustrated in figures given in the appendix, site velocities in the local frame given by the combined solution, NNR-NUVEL1 as well as the individual solutions.

Table 3 : Summary of the quality of the ITRF92 sites

SITE	N	NSX	SP cm	SU cm	Max(*) cm
GRASSE	14	1.4	1.9	2.0	0.8
TOULOUSE	2	0.2	0.3	0.2	1.6
BREST	2	0.1	0.2	0.1	1.3
HOFN	2	0.3	0.3	0.4	2.0
TROMSO	13	0.9	1.6	2.0	0.6
NY-ALESUND	5	1.0	1.8	3.7	0.7
TRYSIL	2	0.4	0.2	0.6	0.9
ONSALA	9	0.7	0.5	1.0	1.0
METSAHOVI	12	0.9	22.6	28.0	0.8
GRAZ	12	0.9	1.2	3.8	0.6
BOROWIEC	4	1.5	5.4	15.5	4.6
RIGA	8	0.7	3.3	9.3	6.5
KATZIVELY	12	1.1	7.2	14.3	5.2
DIONYSOS	7	0.4	4.7	2.7	46.7
ASKITES	5	0.4	0.9	0.4	1.1
ROUMELLI	5	0.8	1.8	0.7	1.1
KARITSA	5	0.8	1.3	5.1	1.3
KATAVIA	6	0.8	2.1	3.4	1.1
XRISOKALARIA	5	0.6	1.9	1.0	1.1
LAMPEDUSA	6	0.7	2.1	4.0	1.2
BOLOGNA	9	1.1	7.8	2.6	0.9
NOTO	10	0.9	1.9	1.0	0.8
TRIESTE	5	0.5	2.2	2.0	2.3
CAGLIARI	5	0.5	2.4	5.3	1.3
MATERA	24	1.0	1.3	2.5	1.5
MONTE VENDA	4	0.5	2.8	2.0	2.4
CHILBOLTON	2	0.7	0.4	1.0	1.2
HERSTMONCEUX	11	0.7	0.7	1.1	0.6
CARNUSTY	2	0.5	0.4	1.5	1.8
MADRID	13	1.1	1.0	2.5	3.9
KOOTWIJK	16	0.8	3.4	4.2	3.5
ZIMMERWALD	7	0.9	1.9	1.3	0.7
MONTE GENEROSO	3	0.6	1.5	1.8	2.1
POTSDAM	6	1.3	2.7	7.3	7.3
WETTZELL	28	0.8	1.8	2.7	2.0
HOHENBUNSTORF	2	0.9	0.2	1.2	0.9
EFFELSBERG	2	0.5	0.2	0.2	0.8
HOHENPEISSENBERG	2	0.1	0.2	0.1	1.8
KARLSBURG	2	0.5	0.4	1.0	2.4
KIRSCHBERG	2	0.3	0.2	0.0	1.2
BAR GIYYORA	5	1.4	6.0	10.3	3.0
DIYARBAKIR	5	0.7	2.7	4.6	1.5
YOZGAT	5	0.6	3.7	2.1	1.6
MELENGICLICK	5	0.8	2.5	10.0	1.3
YIGILCA	5	0.6	1.7	1.6	1.3
WUHAN	2	1.5	4.3	12.3	3.4
SHANGHAI	10	1.2	2.5	5.4	18.2
CHANGCHUN	2	0.2	7.0	8.6	8.4
KASHIMA	6	0.9	2.5	2.1	1.1

NOBEYAMA	2	0.6	0.9	0.3	1.5
SIMOSATO	6	1.3	5.6	4.5	1.1
USUDA	9	1.2	3.8	4.5	2.9
CHICHIJIMA	4	1.3	19.7	3.3	6.0
TAIPEI	3	1.1	4.4	0.2	1.4
HELWAN	5	1.4	16.8	5.5	2.0
HARTEBEESTHOEK	11	0.8	6.8	10.2	1.1
MASPALOMAS	5	1.9	1.9	3.6	0.9
SAO MIGUEL	2	0.9	0.8	0.1	1.1
ST. JOHNS	5	1.0	1.5	2.7	0.8
ALGONQUIN	10	1.0	1.0	1.5	0.5
PENTICTON	7	1.1	0.8	2.7	0.7
YELLOWKNIFE	10	1.5	1.1	5.0	0.9
ALBERT HEAD	3	0.9	1.3	2.2	3.3
PASADENA	12	1.0	9.1	3.9	1.2
GOLDSTONE	42	1.0	2.7	4.4	3.4
PINYON FLATS	9	0.6	3.5	1.7	0.9
FAIRBANKS	10	1.1	1.4	1.6	0.6
VANDENBERG	5	1.2	0.6	2.5	1.8
KAUAI	10	1.5	1.8	3.9	0.7
QUINCY	18	1.2	2.3	5.1	0.6
MOUNT HOPKINS	2	0.4	2.4	1.4	9.0
SAN DIEGO	9	0.8	3.3	2.0	1.1
BEAR LAKE	7	1.1	7.5	8.2	2.2
OWENS VALLEY	13	0.9	1.9	1.7	1.4
WESTFORD	14	1.1	3.4	2.9	0.5
GREENBANK	5	0.7	0.3	0.4	1.0
FORT DAVIS	34	1.3	2.5	2.8	0.7
MAUI	16	1.3	3.8	2.7	0.8
WASHINGTON	38	1.0	4.7	6.4	1.6
PIETOWN	5	1.4	0.4	1.1	0.6
SCRIPPS 1	2	0.3	0.4	0.2	3.2
LOS ALAMOS	2	2.4	0.6	2.7	1.8
HAT CREEK	2	0.3	0.0	0.2	0.6
MARYLAND POINT	3	0.7	0.3	1.1	0.7
FLAGSTAFF	5	1.4	1.9	17.2	1.6
VERNAL	2	0.4	2.8	1.3	2.8
YUMA	3	0.5	2.3	0.2	1.0
PLATTEVILLE	10	0.9	1.0	2.7	0.6
MONUMENT PEAK	14	1.0	2.5	1.7	0.7
RICHMOND	13	0.9	1.2	1.5	0.6
MAZATLAN	6	1.1	2.4	5.3	0.8
CABO SAN LUCAS	5	1.1	3.3	3.4	1.3
ENSENADA	4	0.7	1.4	3.3	1.7
SANTIAGO DE CUBA	4	1.0	7.6	4.2	3.9
NATAL	2	0.5	4.9	6.0	4.4
EASTER ISLAND	6	1.2	10.6	4.0	1.2
SANTIAGO	17	1.1	10.3	11.1	1.1
CERRO TOLOLO	5	1.3	5.2	2.7	1.1
SEST	2	0.4	0.8	1.1	2.2
AREQUIPA	11	1.4	4.8	2.7	1.1
BERMUDA	2	0.2	0.3	0.5	1.6
CANBERRA	24	1.2	3.8	6.8	3.8
YARRAGADEE	12	1.2	4.6	3.8	0.9
HOBART	7	1.3	2.5	7.7	1.3
TOWNSVILLE	2	0.8	5.2	10.5	2.1
WELLINGTON	2	1.5	1.6	5.1	1.9

5MERICAN SAMOA	2	0.7	2.9	2.8	3.3
KWAJALEIN ATOLL	6	0.9	5.4	5.5	1.3
MC MURDO	5	1.3	6.5	7.4	1.6
PAMATAI	5	1.2	7.7	5.5	1.6
HUAHINE	10	1.3	4.2	4.4	1.5
KOUROU	2	1.4	4.4	5.2	1.6

(*) Max: Maximum standard deviation of ITRF92 coordinates

Table 4 : Statistics of the ITRF92 combined solution

Tech.	Solution	N	WSP cm	WSU cm	WSX cm	NSX	A cm	B
VLBI	SSC(GIUB) 93 R 01	6	0.6	1.1	0.7	1.15		1.0
	SSC(GSFC) 93 R 04	70	0.4	1.0	0.6	0.97	0.5	1.5
	SSC(JPL) 93 R 01	7	1.1	2.6	1.5	0.84	0.5	2.0
	SSC(NOAA) 93 R 02	55	0.3	0.8	0.5	1.02	0.0	1.5
	SSC(USNO) 93 R01	15	0.7	0.8	0.7	1.11	0.5	1.5
LLR	SSC(JPL) 93 M 01	5	3.6	2.2	3.1	1.12	3.0	
	SSC(SHA) 93 M 01	4	3.6	3.5	3.4	1.05	3.5	
	SSC(UTXMO) 93 M 01	5	4.3	3.5	3.9	1.22	3.5	
GPS	SSC(CODE) 92 P 01	12	0.4	1.0	0.7	0.91	0.8	
	SSC(CSR) 92 P 03	24	1.2	1.7	1.3	1.22		8.0
	SSC(EMR) 93 P 01	17	0.4	0.8	0.6	1.07		4.0
	SSC(ESOC) 93 P 01	32	3.1	4.4	3.4	1.22		1.0
	SSC(JPL) 93 P 01	39	0.6	0.9	0.7	0.90		0.8
	SSC(SIO) 93 P 01	40	1.3	2.4	1.8	1.14	1.5	
SLR	SSC(CLG) 93 L 01	36	4.8	7.2	5.8	1.26	3.0	3.0
	SSC(CSR) 93 L 01	101	1.7	2.6	2.0	1.02	1.0	1.0
	SSC(DUT) 93 L 01	69	1.3	1.9	1.5	0.87	1.0	1.0
	SSC(GAOUA)93 L 01	73	3.0	3.5	3.1	1.13	2.5	2.0
	SSC(GFZ) 93 L 01	95	1.8	2.1	1.9	1.01	1.5	1.5
	SSC(GSFC) 93 L 01	35	1.8	2.3	2.0	1.12	1.0	3.0

(*) : A is the additive variance in cm and B is the factor of the formula (1).

Table 5 : Statistics of the ITRF92 combined velocity field

Tech.	Solution	N	WSP mm/Y	WSU mm/Y	WSX mm/Y	NSX	A mm/Y	B
	NNR-NUVEL1	95	2.5	6.1	3.5	0.78	3.0* 10.0	
VLBI	SSC(GSFC) 93 R 04	63	0.6	0.5	0.7	0.80	0.5	1.5
	SSC(JPL) 93 R 01	3	1.0	2.9	1.1	0.68	0.0	1.0
	SSC(NOAA) 93 R 02	35	0.7	2.0	1.5	1.08	0.5	1.5
SLR	SSC(CSR) 93 L 01	47	1.1		0.9	0.70	0.5	1.0
	SSC(DUT) 93 L 01	35	2.4	2.6	2.5	0.89		0.5
	SSC(GAOUA)93 L 01	36	5.0	4.6	4.8	1.25	1.5	3.0
	SSC(GFZ) 93 L 01	43	1.5	2.3	2.0	0.79	0.5	1.5
	SSC(GSFC) 93 L 01	34	1.8		1.5	0.87	1.0	2.0

* The adopted value of A for the construcetd NNR-NUVEL1 velocity field is 3mm for the horizontal components and 10mm for the vertical one.

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APPENDIX

Table of contents

Table T1

CATALOGUE OF IERS SITES

DOMES Number	Name	Country	Long. d	Long. m	Lat. d	Lat. m	Plate	(*)
10002	GRASSE	France	6	55	43	45	EURA	PC
10003	TOULOUSE	France	1	29	43	34	EURA	S
10004	BREST	France	355	30	48	24	EURA	S
10204	HOFN	Island	350	48	64	16	EURA	S
10302	TROMSO	Norway	18	56	69	40	EURA	SC
10317	NY-ALESUND	Norway	11	56	78	55	EURA	S
10325	HONEFOS	Norway	10	15	60	36	EURA	S
10329	TRYSIL	Norway	12	23	61	25	EURA	S
10402	ONSALA	Sweden	11	55	57	24	EURA	P
10405	MARTSBO	Sweden	17	16	60	36	EURA	S
10503	METSAHOVI	Finland	24	23	60	13	EURA	SC
11001	GRAZ	Austria	15	30	47	04	EURA	P
12205	BOROWIEC	Poland	17	04	52	17	EURA	S
12302	RIGA	Latvia	24	04	56	57	EURA	S
12337	SIMEIS-KATZIVELY	Ukraine	33	58	44	24	EURA	S
12602	DIONYSOS	Greece	23	56	38	05	EURA	S
12612	ASKITES	Greece	25	34	40	56	EURA	S
12613	ROUMELLI	Greece	24	42	35	24	EURA	P
12614	KARITSA	Greece	20	40	39	44	EURA	S
12615	KATAVIA	Greece	27	47	35	57	EURA	S
12616	XRISOKALARIA	Greece	21	53	36	47	EURA	S
12706	LAMPEDUSA	Italy	12	34	35	31	AFRC	S
12711	BOLOGNA	Italy	11	21	44	29	EURA	PC
12717	NOTO	Italy	14	59	36	53	AFRC	SC
12718	TRIESTE	Italy	13	53	45	39	EURA	P
12725	CAGLIARI	Italy	9	00	39	08	EURA	S
12734	MATERA	Italy	16	37	40	42	EURA	PC
12749	MONTE VENDA	Italy	11	42	45	19	EURA	S
13201	CHILBOLTON	UK	358	37	51	11	EURA	S
13212	HERSTMONCEUX	UK		21	50	52	EURA	P
13296	CARNUTSY	UK	357	13	56	29	EURA	S
13407	MADRID-ROBLEDO	Spain	355	44	40	26	EURA	P
13411	MADRID-FACULTAD	Spain	356	16	40	27	EURA	S
13504	KOOTWIJK	Netherlands	5	49	52	11	EURA	S
13506	WESTERBORK	Netherlands	6	36	52	55	EURA	S
14001	ZIMMERWALD	Switzerland	7	28	46	53	EURA	P
14005	MONTE GENEROSO	Switzerland	9	01	45	56	EURA	S
14106	POTSDAM	Germany	13	04	52	23	EURA	P
14201	WETTZELL	Germany	12	53	49	09	EURA	PC
14202	HOHENBUNSTORF	Germany	10	29	53	03	EURA	S
14209	EFFELSBERG	Germany	6	53	50	32	EURA	S
14213	HOHENPEISSENBERG	Germany	11	01	47	48	EURA	S
14260	KARLSBURG	Germany	13	37	53	59	EURA	S
14261	KIRSCHBERG	Germany	14	17	51	13	EURA	S
20702	BAR GIYYORA	Israel	35	05	31	43	AFRC	P
20801	DIYARBAKIR	Turkey	40	12	37	55	EURA	S
20802	YOZGAT	Turkey	34	49	39	48	EURA	S
20803	MELENGICLICK	Turkey	33	11	37	23	EURA	S

20804	YIGILCA	Turkey	31	26	40	56	EURA	S
21602	WUHAN	China	114	20	30	32	EURA	S
21605	SHANGHAI	China	121	26	31	01	EURA	PC
21611	CHANGCHUN	China	125	27	43	47	EURA	S
21701	KASHIMA	Japan	140	40	35	57	NOAM	P
21702	MIZUSAWA	Japan	141	12	39	07	NOAM	S
21704	TOKYO	Japan	139	29	35	43	NOAM	S
21709	OKINAWA	Japan	127	43	26	08	EURA	S
21718	MIYAZAKI	Japan	131	29	32	05	EURA	S
21725	NOBEYAMA	Japan	138	28	35	56	NOAM	S
21726	SIMOSATO	Japan	135	56	33	34	EURA	P
21729	USUDA	Japan	138	29	36	12	EURA	S
21730	TSUKUBA	Japan	140	05	36	06	NOAM	S
21731	SHINTOTSUGAWA	Japan	141	51	43	32	NOAM	S
21732	CHICHIJIMA	Japan	142	13	27	06	PHIL	SC
21733	MINAMI TORI SHIMA	Japan	153	59	24	17	PCFC	SC
21735	TSUSHIMA	Japan	129	25	34	24	EURA	S
21736	ISHIGAKI SHIMA	Japan	124	10	24	21	PCFC	S
23601	TAIPEI	Taiwan	121	32	25	01	EURA	S
23902	DAEJEON	Korea	127	23	36	24	EURA	S
24901	BAHREIN (JUFFAR)	Bahrein	50	36	26	13	ARAB	S
30101	HELWAN	Egypt	31	21	29	52	AFRC	S
30302	JOHANNESBURG	S. Africa	27	42	-25	53	AFRC	P
30601	ASCENSION	GB	345	40	-7	57	SOAM	S
30802	DIEGO GARCIA	GB	72	22	-7	15	INDI	S
31303	MASPALOMAS	Spain	344	22	27	46	AFRC	S
31906	SAO MIGUEL	Portugal	343	40	33	03	AFRC	S
32809	LIBREVILLE	Gabon	9	24	0	24	AFRC	S
40101	ST JOHNS	Canada	307	09	47	36	NOAM	S
40103	PRINCE ALBERT	Canada	254	04	53	13	NOAM	S
40104	ALGONQUIN	Canada	281	56	45	57	NOAM	S
40105	PENTICTON	Canada	240	23	49	19	NOAM	S
40118	WHITEHORSE	Canada	224	55	60	44	NOAM	S
40124	CALGARY	Canada	245	42	50	52	NOAM	S
40127	YELLOWKNIFE	Canada	245	32	62	29	NOAM	S
40129	VICTORIA	Canada	236	31	48	23	NOAM	S
40130	HOLBERG	Canada	237	52	50	38	NOAM	S
40400	PASADENA	USA	241	50	34	12	PCFC	PC
40403	PALOS VERDES	USA	241	36	33	45	PCFC	P
40404	PEARBLOSSOM	USA	242	05	34	31	PCFC	S
40405	GOLDSTONE	USA	243	06	35	20	NOAM	PC
40406	SAN FRANCISCO	USA	237	33	37	48	PCFC	P
40407	PINYON FLATS	USA	243	33	33	26	PCFC	S
40408	FAIRBANKS	USA	212	29	64	58	NOAM	P
40409	KAENA POINT	USA	201	44	21	35	PCFC	S
40410	POINT REYES	USA	237	04	38	06	PCFC	P
40412	AUSTIN	USA	262	20	30	25	NOAM	S
40416	YAKATAGA	USA	217	31	60	05	PCFC	P
40417	PATRICK AFB	USA	279	24	28	14	NOAM	S
40419	KODIAK	USA	207	30	57	44	NOAM	P
40420	VANDENBERG AFB	USA	239	26	34	35	PCFC	PC
40421	NOME	USA	194	38	64	34	NOAM	S
40423	SANDPOINT	USA	343	31	55	21	NOAM	P
40424	KAUAI	USA	200	20	22	08	PCFC	P
40425	SOURDOUGH	USA	214	31	62	40	NOAM	S
40427	FORT ORD	USA	238	14	36	29	PCFC	P
40428	SANTA PAOLA	USA	241	00	34	12	PCFC	P

40430	BLACK BUTTE	USA	244	17	33	40	NOAM	P
40431	DEADMAN LAKE	USA	243	43	34	15	NOAM	P
40432	ELY	USA	244	55	39	19	NOAM	S
40433	QUINCY	USA	239	04	39	58	NOAM	PC
40434	MOUNT HOPKINS	USA	249	07	31	41	NOAM	S
40436	SAN DIEGO	USA	243	10	32	36	PCFC	S
40437	MAMMOTH LAKES	USA	241	04	37	38	NOAM	S
40438	BEAR LAKE	USA	248	35	41	56	NOAM	S
40439	OWENS VALLEY	USA	241	22	37	14	NOAM	PC
40440	WESTFORD	USA	288	31	42	37	NOAM	PC
40441	GREENBANK	USA	280	10	38	26	NOAM	S
40442	FORT DAVIS	USA	255	59	30	40	NOAM	PC
40445	MAUI	USA	203	44	20	43	PCFC	PC
40449	OCOTILLO	USA	244	12	32	47	PCFC	S
40451	WASHINGTON	USA	282	56	38	55	NOAM	PC
40452	BLOOMINGTON	USA	273	30	39	11	NOAM	S
40453	CARROLLTON	USA	274	53	33	34	NOAM	S
40454	LEONARD	USA	264	12	35	55	NOAM	S
40455	MILES CITY	USA	254	08	46	24	NOAM	S
40456	PIETON	USA	251	53	34	18	NOAM	S
40457	SEATLE	USA	237	45	47	41	NOAM	S
40460	LA JOLLA	USA	242	45	32	52	NOAM	S
40463	LOS ALAMOS	USA	253	45	35	47	NOAM	S
40464	CARR HILL	USA	239	34	35	53	NOAM	S
40465	NORTH LIBERTY	USA	268	26	41	46	NOAM	S
40466	KITT PEAK	USA	248	23	31	57	NOAM	S
40471	HANCOCK	USA	288	01	42	56	NOAM	S
40472	COLORADO SPRINGS	USA	255	07	39	00	NOAM	S
40489	HAT CREEK	USA	238	32	40	49	NOAM	P
40490	MARYLAND POINT	USA	282	46	38	22	NOAM	P
40491	FLAGSTAFF	USA	258	22	35	13	NOAM	PC
40492	VERNAL	USA	250	26	40	20	NOAM	SC
40493	YUMA	USA	245	48	32	56	NOAM	PC
40496	PLATTEVILLE	USA	255	16	40	11	NOAM	PC
40497	MONUMENT PEAK	USA	243	35	32	54	PCFC	PC
40498	VLA	USA	252	23	34	05	NOAM	PC
40499	RICHMOND	USA	279	37	25	37	NOAM	PC
40504	MAZATLAN	Mexico	253	33	23	14	NOAM	P
40505	CABO SAN LUCAS	Mexico	250	08	22	55	PCFC	S
40506	ENSENADA	Mexico	243	50	31	15	PCFC	S
40701	SANTIAGO DE CUBA	Cuba	284	14	20	01	NOAM	S
41505	BUENOS AIRES	Argentina	301	29	-34	34	SOAM	S
41604	NATAL	Brazil	324	40	-5	56	SOAM	S
41703	EASTER ISLAND	Chile	250	34	-27	11	NAZC	P
41705	SANTIAGO	Chile	289	20	-33	09	SOAM	S
41706	CERRO TOLOLO	Chile	289	12	-30	10	SOAM	S
41709	SEST	Chile	289	16	-29	16	SOAM	S
42001	QUITO	Equador	281	25	-0	37	SOAM	S
42202	AREQUIPA	Peru	288	30	-16	28	SOAM	P
42501	BERMUDA	UK	295	21	32	21	NOAM	SC
43602	GRAND TURK	Bahama Is.	288	42	21	28	SOAM	S
50103	CANBERRA	Australia	148	59	-35	35	AUST	PC
50106	SMITHFIELD	Australia	138	39	-34	41	AUST	S
50107	YARRAGADEE	Australia	115	25	-29	05	AUST	P
50116	HOBART	Australia	147	26	-42	48	AUST	S
50126	TOWNSVILLE	Australia	146	46	-19	17	AUST	S
50134	DARWIN	Australia	131	08	-12	51	AUST	S

50208	WELLINGTON	N. Zealand	174	47	-41	17	AUST	S
50503	AMERICAN SAMOA	USA	189	17	-14	20	PCFC	S
50505	KWAJALEIN ATOLL	USA	167	29	9	24	PCFC	SC
66006	MC MURDO	Antarctica	166	40	-77	51	ANTA	S
92201	PAMATAI	France	210	26	-17	34	PCFC	S
92202	HUAHINE	France	208	58	-16	44	PCFC	P
97101	LE MOULE	France	298	40	16	20	CARB	S
97301	KOUROU	France	307	21	5	07	SOAM	S

(*) P: Primary S: Secondary C: Colocation

Table T2

DIRECTORY OF IERS STATIONS

DOMES Number	SITE	4 CHAR ID	CDP NUMBER	DESIGNATION
10002	Grasse			
M001				Mark Caussols 3 (F 2)
M003			7605	Mobile VLBI mark 1989
S001			7835	SLR IAR
S002			7845	LLR IAR
10003	Toulouse			
M003			7608	VLBI mark
10004	Brest			
M002			7604	Mobile VLBI mark 1989
10204	Hofn			
M001			7635	Mobile VLBI mark 1992
10302	Tromso			
M001				Trig. point (N 5481)
M002			7602	Mobile VLBI and SLR mark
M003		TROM		GPS marker TSS GPSM
M004				Mark TSS III
M005				Mark WMC2
S001				TI4100/L1 20-DEC-87 - 26-OCT-88
S002				TI4100/L1 28-OCT-88 - 07-NOV-88
S003				TI4100/L1 07-NOV-88 - 21-SEP-89
S004				TI4100/L1 21-SEP-89 - 17-JUL-90
S006				TI4100/L1 17-JUL-90 - 22-AUG-90
S007				ROGUE SNR-8/L1 28-MAY-90 - 30-JUN-90
S008				ROGUE SNR-8/L1 01-JUL-90 - 18-JUL-90
S009				ROGUE SNR-8/L1 18-JUL-90 -
10317	Ny-Alesund			
M001		NYAL		GPS Mark
S001				ROGUE / L1 17-JAN-91
10325	Honefoss			
M001		HONE		SK Tower GPS mark
S001				ROGUE / L1 14-JAN-91
10329	Trysil			
M001			7607	VLBI mark
10402	Onsala			
M003				NLS Mark 761331 (S7331)
M004		ONSA		Mark 301 GPSM
M005				Mark 401
M006			7211	Mobile VLBI mark 1992
S001			7212	VLBI ref. pt. ONSALA85
S002			7213	VLBI ref. pt. ONSALA60
S011				TI4100/L1 18-DEC-87 -23-JAN-91
S012				ASHTECH/L1 27-JAN-91 -20-MAY-91
S013				ROGUE SNR-8/L1 31-MAY-91
10405	Martsbo			
S005				ASHTECH/L1 22-JAN-91 - 13-FEB-91
10503	Metsahovi			
M001				Mark (SF 348)

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 M002                        7601   Mobile VLBI mark 1989
 M003                               24 m high bilby tower
 S001                        7805   SLR IAR
 S009                               ASHTECH L-XII/L1   ??-MAY-91
 S010                               ROGUE/L1           ??-???-??
 S011              METS             ROGUE SNR-8  bottom of the choke ring

11001  Graz
 M001                               Mark (A171)
 M002              GRAZ             GPS Mark
 S002                        7839   Fixed Laser / intersection of axes

12205  Borowiec
 S001                        7811   SLR IAR

12302  Riga
 M001                        7560   SLR mark
 S002                        1884   SLR IAR

12337  Simeis - Katzively
 M001                        7561   Simeis SLR mark
 S003                        1873   Simeis fixed SLR IAR
 S006                        1893   Katzively Crimea fixed SLR IAR

12602  Dionysos
 M001                               Central Pillar
 M002                        7515   Mark SLR Standard WEGENER disk
 S001                        7940   SLR IAR

12612  Askites
 M001                        7510   Mark SLR 7510

12613  Roumelli
 M001                        7517   Mark SLR 7517

12614  Karitsa
 M001                        7520   Mark SLR 7520

12615  Katavia
 M001                        7512   Mark SLR 7512

12616  Xrisokalaria
 M001                        7525   Mark SLR 7525

12706  Lampedusa
 M001                        7544   Mark SLR 7544

12711  Bologna
 M001                               Pillar
 M002                        7546   Mark SLR 7546
 S001                        7230   Radiotelescope ref. pt.

12717  Noto
 S001                        7547   Radiotelescope ref. pt.
 M001                        7543   Mark SLR

12718  Trieste
 M001                               Mark (I 400130)
 M002                        7550   Mark SLR 7550

12725  Cagliari

 M001                               ILS Mark (I 234165)
 M002                        7545   Mark SLR 7545

12734  Matera
 M001                               Mark (I 201130)
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M004		7541	Mark SLR 7541 "C"	
M005		7540	Mark SLR 7540 "B"	
M007			Roof GPS Mark	
M008	MATE		Pole (CIGNET GPS mark)	
S001		7939	SLR IAR	
S005		7243	Fixed VLBI antenna	
S006			ROGUE/L1	22-JAN-91
S007			ROGUE/L1	??-???-??
12749	Monte Venda			
M001		7542	SLR mark	
13201	Chilbolton			
S002		7215	25m radiotelescope ref. pt.	
S301			Hermitage / GPS DMA TI4100 / L1	
13212	Herstmonceux			
M002			Primary pillar (GB 481)	
M005			Solar pillar	
M007	HERS		GPS reference mark	
S001		7840	SLR IAR	
S012			ROGUE SNR-8A/L1 04-SEP-91-	
13296	Carnusty			
M001		7603	Mobile VLBI mark 1989	
13407	Madrid-Robledo			
S001		1563	64m antenna DSS63	
S003		1561	26(34) antenna DSS61	
S010		1565	34m antenna DSS65	
S011			ROGUE/L1	21-MAR-90
S012	MADR		ROGUE/Bottom of the choke ring	21-MAR-90
S013			ROGUE/Top of the choke ring	21-MAR-90
13411	Madrid-Facultad			
S001			TRIMBLE 4000SLD/L1 22-JAN-91 - 13-FEB-91	
13504	Kootwijk			
M001			Perm. mark 1980	
M002		8833	Monument MTLRS 1984	
M003	KOSG		GPS mark 339334-25	
S001		7833	SLR IAR (NL 233)	
S013			ROGUE/L1	20-JAN-91
14001	Zimmerwald			
M001			Mark (CH 99)	
M002	ZIMA		DOPPLER Mark	
M004	ZIMM		GPS Marker (MAST) (L+T 88)	
S001		7810	Fixed Laser / intersection of axes	
14005	Monte Generoso			
M001			Mark (CH 65)	
M002		7590	SLR Mark	
14106	Potsdam			
M001			Pillar tour Helmert	
S001		1181	SLR IAR	
S009		7836	POTLAS / intersection of axes	
14201	Wettzell			
M001			Astro. Pillar	
M002			Trig. Point (D6843)	
M003		7595	SLR and GPS mark	
M004		7596	SLR mark	
M005		7597	SLR mark	
M006		7598	SLR and GPS (ROGUE) mark	
M007		7599	SLR mark	

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M008                                  Mark 1000 (bottom of the TI4100 antenna
                                                 12-NOV-90 - 27-JUL-89)
M009              WETT                GPS mark 1200/top of tower
S004                        7224      VLBI Ref. Point
S002                        7834      SLR IAR
S013                                  TI4100/L1       12-NOV-87 - 27-JUL-89
S016                                  MINI MAC/L1     23-MAY-89 -
S017                                  ROGUE/L1        20-DEC-90
S018                        8834      SLR WLRS IAR
S019                                  ROGUE SNR-8/L1 22-JUL-91-
S020              WETT                ROGUE SNR-8/Bottom of the choke ring

14202  Hohenbunstorf
M002                        7600      Mobile VLBI mark 1989

14209  Effelsberg
M001                                  Control network mark
S001                        7203      100m radiotelescope ref. pt.

14213  Hohenpeissenberg
M001                        7630      Mobile VLBI mark 1992

14260  Karlsburg            7632      Mobile VLBI mark 1992

14261  Kirschberg           7631      Mobile VLBI mark 1992

20702  Bar Giyyora
M001                        7530      SLR mark 7530
M002              BARG                GPS Mark
S001                        7530      MOBLAS-2

20801  Diyarbakir
M001                        7575      Mark SLR

20802  Yozgat
M001                        7585      Mark SLR

20803  Melengiclick
M001                        7580      Mark SLR

20804  Yigilca
M001                        7587      Mark SLR

21602  Wuhan
S003                        7236      Wuhan fixed laser

21605  Shanghai
M001                                  Mark connect with bedrock
S001                        7837      SLR IAR
S008                        7226      VLBI 6m radiotelescope ref. pt.
S009                        7227      VLBI 25m antenna ref. pt.


21611  Changchun
S001                        7237       CHALAS / intersection of axes


21701  Kashima
M001                                  Metal station mark (Denken 1)
S001                        1856      26m VLBI antenna
S004                        1857      34m VLBI antenna

21702  Mizusawa
M001                        7314      Mobile VLBI marker
S009                        7314      Mobile VLBI

21704  Tokyo
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 S001                        7308   SLR CRLLAS IAR

21709  Okinawa
 S001                        7301   SLR IAR HTLRS-1

21718  Miyazaki
 S001                        7312   5m mobile VLBI

21725  Nobeyama
 S001                        7244   6m VLBI antenna ref. pt.

21726  Simosato
 M001                               Stone marker
 M002                        7838   SLR mark (center of the ring of the base pier)
 S001                        7838   SLR IAR fixed

21729  Usuda
 M001                               GPS mark Control RM roof
 S001                        7246   64M VLBI antenna IAR
 S002                               ROGUE/L1     29-JAN-91/09-AUG-92
 S003                USUD           ROGUE SNR-8/Bottom of the choke ring
                                                29-JAN-91/09-AUG-92
 S004                               ROGUE/Top of the choke ring
                                                29-JAN-91/09-AUG-92
 S005                USU2           ROGUE SNR-8/Bottom of the choke ring
                                                09-AUG-92/29-OCT-92
 S007                USU3           ROGUE SNR-8/Bottom of the choke ring
                                                29-OCT-92/

21730  Tsukuba
 M001                        7311   Mobile VLBI marker
 S001                        7311   5m mobile VLBI
 S002                               MINI MAC2816AT/L1 10-JUL-88 - 17-DEC-91
 S003                               MINI MAC2816AT/L1 18-DEC-91
 S004                TSUK           MINI MAC2816AT / Bottom of the antenna


21731  Shintotsugawa
 M001                        7315   Mobile VLBI marker
 S001                        7315   Mobile VLBI

21732  Chichijima
 S001                        7844   mobile VLBI
 S002                        7844   SLR IAR  HTLRS-1

21733  Minami Tori sima (Marcus)
 S001                        7300   SLR IAR  HTLRS-1
 S002                        7310   mobile VLBI

21735  Tsushima
 S001                        7302   SLR IAR HTLRS-1

21736  Ishigaki-shima
 S001                        7307   SLR IAR HTLRS-1

23601  Taipei
 M001                TAIW           GPS mark

23902  Daejeon
 S001                               TRIMBLE 4000SDT/L1

24901  Bahrein
 S001                               GPS DMA TI4100 / L1

30101  Helwan
 S001                        7831   SLR IAR fixed
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30302  Hartebeesthoek
 M002              HART           Engraved plate below ROGUE antenna
 S001                      7232   26m VLBI antenna ref. pt.
 S014                             ROGUE/L1        15-JAN-91

30602  Ascension
 S003                             GPS OCS monitor station

30802  Diego Garcia
 S002                             GPS OCS monitor station

31303  MASPALOMAS
 M001              MASP           PILLAR MPA1

31906  Sao Miguel
 M001                      7609   Ponta Delgada / Mobile VLBI mark 1992

32809  Libreville
 M001                             N'Koltang / Borne 1988
 S001                             TRIMBLE SLD/L1 22-JAN-91 - 13-FEB-91

40101  St. Johns
 M001              STJO           GPS Mark


40103  Prince Albert
 M001              PRAL           GPS Mark

40104  Algonquin
 M002              ALGO           883160 GPS ARO N. pier
 S001                      7282   46m VLBI antenna ref. pt.
 S003                             ROGUE/L1        16-JAN-91 -

40105  Penticton
 M001                      7283   Mobile VLBI mark 7283
 M002              DRAO           GPS MARK 887006
 S002                             TI4100/L1
 S003                             ROGUE SNR-8/L1  ??-???-??-

40118  Whitehorse
 M001                      7284   Mobile VLBI mark 7284
 M002                      7284   Mobile VLBI mark 7284 peq

40124  Calgary
 M001              PRDS           PRIDDIS/GPS Mark

40127  Yellowknife
 M001                      7285   Mobile VLBI mark
 M002                             Mark 869211

 M003              YELL           Mark 889201
 S001                      7296   VLBI antenna IAR
 S003                             TI4100/L1       01-JAN-87 - 02-JUL-89
 S004                             TI4100/L1       07-JUL-89 - 21-JAN-91
 S005                             ROGUE SNR-8/L1 21-JAN-91 - 19-MAR-91
 S006                             Mini ROGUE SNR-8C/L1 20-MAR-91-


40129  Victoria/Albert Head
 M001                      7289   Mobile VLBI mark
 M002              PGC1           PGC1 867001
 M003              ALBH           Albert Head GPS Mark
 S001                             ROGUE/L1        16-JAN-91 -

40130  Holberg
 M001              HOLB           GPS mark
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40400  Pasadena
 M001                      7896   Mark SLR (JPL aries 2 1975)
 M003                      7263   Mobile VLBI Mark
 M005                      7264   Mobile VLBI MARK
 M006              JPL1    7272   Mobile VLBI mark (JPL MV3 1983)
 M007              JP1Q    7272   Mobile VLBI mark (JPL MV3 1983) PEQ
 S004                             ROGUE/L1       6-NOV-90 -

40403  Palos Verdes
 M001                      7268   Mobile VLBI mark

40404  Pearblossom
 M001                      7254   Mobile VLBI mark (NCMN 1983)
 M002                      7253   Mobile VLBI mark

40405  Goldstone
 M001                      7085   MOBLAS 7085 Goldstone val
 M002                      7115   MOBLAS 7115-1979 standard NASA disk
 M006                      7265   Mojave NCMN 1983 NGS station disk
 M010                      7287   Mojave TLRS 1984 standard NASA disk
 M011                             Mojave NCMN 1 1983
 M013                      7288   Mojave mobile VLBI and TLRS mark
                                  (Punchmark on sheared surface of 7287
                                   mark)
 S009                      7222   Mojave fixed 12m VLBI ref. point
 S001                      1514   Mars 64m fixed VLBI ref. point (DSS14)
 S014                      1513   Venus 26m fixed VLBI ref. point (DSS13)
 S019                      7231   Mars 34m fixed VLBI ref. ponit (DSS15)
 S020                             TI4100/L1  11-NOV-86 - 18-JUL-88
 S024                             TI4100 FRPA-2/L1/L2            19-JUL-88
 S025                             MINI MAC 2816AT/L1             05-FEB-89
 S026                             ROGUE/L1                       14-DEC-89
 S028                             Goldstone/ ROGUE SNR-8/Bottom choke ring
                   GOLD           14-DEC-89
 S029              MOJ1           Mojave/MINI MAC 2816AT/Bottom of the antenna
                                  05-FEB-89
 S030                             Goldstone/ ROGUE/Top of the choke ring
                                  14-DEC-89
 S031              GOLQ           Goldstone/ ROGUE SNR-8 /Bottom choke ring PEQ
                                  28-JUN-92-
 S031                             Goldstone/ ROGUE SNR-8 /Top choke ring PEQ
                                  28-JUN-92-


40406  San Francisco (presidio)
 M001                      7252   Mobile VLBI mark
 M002                      7252   Mobile VLBI mark (PQ)

40407  Pinyon Flats
 M001                      7256   Mobile VLBI mark (NCMN 1981)
 M002              PIN1           Pinyon 1
 M003              PN1Q           Pinyon 1 PEQ
 S001                             ROGUE/L1       6-NOV-90 -

40408  Fairbanks
 M001              FAIR           GPS pillar
 S001                             26m antenna ref. pt.
 S002                      7225   26m VLBI ref. point (GILMORE CREEK)
 S003                             ROGUE/L1       17-JAN-91

40409  Kaena Point (HAWAII)
 S001                             GPS OCS monitor station

40410  Point Reyes

 M001                      7251   Mobile VLBI mark
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40412  Austin
 M001                        7890    Mark SLR 7890
 M002                                Austin monument
 M003                        7271    Mobile VLBI mark

40416  Yakataga
 M001                        7277    Mobile VLBI mark
 M002                        7277    Mobile VLBI mark (PQ)

40417  Patrick AFB
 M001                        7081    Mark SLR
 M002                        7069    Mark SLR

40419  Kodiak
 M001                        7278    Mobile VLBI mark

40420  Vandenberg/Harvest Plqatform

 M001                        7111    DMA disk MOBLAS 7111 (1981)
 M002                        7223    DMA disk VLBI 7223 (1983)
 M003                        7880    DMA disk TLRS 7880 (1983)
 M004                        7887    DMA disk TLRS 7887 (1983)
 M007              VANQ              PGGA 1991 PEQ (Ashtech Monument)
 M007              VANR              PGGA 1991 PEQ (Rogue Antenna Monument since
                                                    22-JAN-1993 ?)
 M101              HARV              HARVEST PLATFORM/GPS mark

40421  Nome
 M001                        7279    Mobile VLBI mark

40423  Sandpoint
 M001                        7280    Mobile VLBI mark

40424  Kauai (Kokee Park)
 M004              KOKB              VERLOT radar building JPL GPS mark 3028-S
 M005                                CIGNET-GPS survey marker

 S001                        1311    9m VLBI ref. point
 S002                                TI4100/L1              -   -86 -
 S003                                TI4100 FRPA-2/L1      -APR-88 - 02-JUL-90
 S004                                TRIMBLE 4000SST/L1 02-JUL-90 - 17-MAR-92
 S006                                ROGUE SNR-8/L1     21-NOV-90 -

40425  Sourdough
 M001                        7281    Mobile VLBI mark
 M002                        7281    Mobile VLBI mark (PQ)

40427  Fort Ord
 M001                        7266    Mobile VLBI mark (NCMN 1981)
 M002                        7241    Mobile VLBI mark
 M003                        7241    Mobile VLBI mark (PQ)

40428  Santa Paola
 M001                        7255   Mobile VLBI mark

40430  Black Butte
 M001                        7269   Mobile VLBI mark (NCMN 1982)

40431  Deadman Lake
 M001                        7267   Mobile VLBI mark

40432  Ely
 M001                        7286   Mobile VLBI mark R.M. 2 1954
 M002                        7257   Mobile VLBI mark

40433  Quincy
 M001                        7051    Steel plate MOBLAS 7051
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M002		7109	MOBLAS 7109 (1981) Standard NASA disk
M004	7221	7221	QUINCY NCMN Standard NASA disk (7221-1982)
M005		7886	TLRS 7886 (1982) standard NASA disk
M006		7260	Quincy ARIES 1979
40434	Mount Hopkins		
M002		7888	Mark SLR
S001		7921	SLR IAR (SAO)
40436	San Diego Otay Mountain		
M002		7062	Mark SLR Circular 5" steel plate
M003		7035	Mark SLR 7035 1988
40437	Mammoth Lakes		
M001		7259	Mobile VLBI mark
40438	Bear Lake		
M001		7082	Mark SLR (4" x 4" Steel plate)
M002		7046	SLR mark
40439	Owens Valley		
M001		7114	MOBLAS 7114 (1979) standard NASA disk
M003		7084	MOBLAS, TLRS 7084 standard NASA disk
M004		7853	Mobile VLBI Jul 87 standard NASA disk
S002		7207	40m VLBI ref. point
40440	Haystack/Westford		
M001		7091	MOBLAS Haystack Inter Comp 1977
M004			Monument MICRO
S002		7205	Haystack / 37m VLBI ref. point
S003		7209	Westford / 18m VLBI ref. point
S014			TI4100/L1 -OCT-86 - 04-AUG-88
S016			TI4100 FRPA-2/L1/L2 05-AUG-88 - 14-FEB-89
S017			MINI MAC 2816AT/L1 29-JAN-89 -
S019	WES1		MINI MAC 2816AT / Bottom of the antenna
40441	Greenbank		
S001		7204	43m radiotelescope ref. pt.
S004		7214	85-foot antenna ref. pt.
40442	Fort Davis		
M004			McDonald RM4 1977
M001		7086	MLRS, MOBLAS, TLRS-1 standard NASA disk
M005		7885	MLRS, MOBLAS, TLRS-1 standard NASA disk
M006		7080	MLRS mark 7080 1988
M008		7850	Mobile VLBI and SLR mark 7850 1988
M009		7900	Mobile VLBI mark (Havard RM 5 1977)
M010		7897	Mark SLR
S002		7206	LLR McDonald 2
S001		7086	LLR MLRS
S003		7216	85-foot VLBI ref. point (HRAS 085)
S017		7613	VLBA antenna IAR
40445	Maui		
M001		7210	HOLLAS fixed carriage bolt
M002		7120	MOBLAS 7120 (1980)
S005			LLR Haleakala transmitter
40449	Ocotillo		
M001		7270	Mobile VLBI mark (NCMN 1982)
40451	Washington		
M110			Greenbelt north GEOS(GSFC) GORF
M107		7064	Mobile SLR 7064 standard NASA disk
M108		7065	Mobile SLR 7065 standard NASA disk
M101		7101	MOBLAS 7101-1977 standard NASA disk

M102		7102	Mobile SLR 7102-1978 standard NASA disk
M103		7103	Mobile SLR 7103-1978 standard NASA disk
M104		7104	Mobile SLR 7104-1978 standard NASA disk
M105		7105	MOBLAS -7 7105-1981 standard NASA disk
M106		7100	Mobile SLR 7100-1977 standard NASA disk
M111		7899	TLRS 7899-1980 standars NASA disk
M112		7063	STALAS fixed Laser standard NASA disk
M113		7106	Mark SLR
M114		7125	Mark SLR 7125 1985 standard NASA disk
M115		8213	Mark SLR
M116		7130	Mark SLR 7130 1985 standard NASA disk
M117		7920	Mark SLR 7125-B standard NASA disk
M118		7889	Mark SLR 7889 1981 standard NASA disk
M119		7917	Mark SLR 7917 Steel plate SAO-3
M120		7918	Mark SLR standard NASA disk
M121		7919	Mark SLR standard NASA disk
M122		7083	Mark SLR standard NASA disk
40452	Bloomington		
M001		7291	Mobile VLBI mark
40453	Carrollton		
M001		7228	Mobile VLBI mark
40454	Leonard		
M001		7292	Mobile VLBI mark
40455	Miles City		
M001		7038	Mobile VLBI mark
40456	Pietown		
M001	PIE1		Concrete GPS pier JPL 4009 S
S001		7234	VLBA antenna
40457	Seattle		
M001		7229	Mobile VLBI mark
40460	La Jolla/SCRIPPS		
M001	SIO1		SCRIPPS 1 (Rogue mark)
M002	SIO2		SCRIPPS 2 (Ashtech mark)
M003	SO2Q		SCRIPPS 2 PEQ
S001			ROGUE/L1 5-NOV-90 -
40463	Los Alamos		
S001		7611	VLBA antenna IAR
40464	CARR HILL		
M001	CARR		GPS Mark
40465	NORTH LIBERTY		
M001	NLIB		Concrete GPS pier JPL 4007 S
S001		7612	VLBA reference point (intersection of axes)
40489	Hat Creek		
M001			Mark NCMN B
S001		7218	26m VLBI ref. point of radio telescope
40472	Colorado Springs		
S001			GPS OCS monitor station
40490	Maryland Point		
S001		7217	(26m) 85-foot radiotelescope

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40491  Flagstaff
 M002                        7891   Mark SLR (RMT N 4 1981)
 M003                        7261   Mobile VLBI mark

40492  Vernal
 M001                        7892   Mobile SLR and VLBI mark (NCMN 1981)
 M002                        7290   Mobile SLR and VLBI mark (NCMN 1985)

40493  Yuma
 M001                        7894   Mobile SLR and VLBI mark

40496  Platteville
 M002                        7258   NCMN 1981 mobile VLBI NGS station disk
 M001                        7112   Moblas 7112-1980 standard NASA disk


40497  Monument Peak
 M001                        7110   ORT station 7110-1981 standard NASA disk
 M002                        7220   ARIES ORION STA 7220-1981
 M003                        7274   NCMN 1983 mobile VLBI NGS disk

40499  Richmond
 M001                               Timer 1962
 M002                        7295   Mark SLR
 S001                        7219   65 foot VLBI antenna
 S009                               TI4100 FRPA-2/L1/L2 09-FEB-88 - 24-FEB-89
 S011                               MINI MAC 2816AT/L1  05-FEB-89 -
 S013              RCMA             MINI MAC 2816AT/Bottom of the  antenna

40504  Mazatlan
 M001                        7122   MOBLAS 7122-1983 standard NASA disk

40505  Cabo San Lucas
 M001                        7882   Mark SLR 7882 1983

40506  Ensenada
 M001                        7883   SLR mark 7883

40701  Santiago de Cuba
 S001                        1953   SLR IAR

41505  Buenos Aires
 S006                               GPS DMA TI4100 / L1

41602 Fortaleza


41604  Natal
 S001                        7929   SLR IAR


41703  Easter Island
 M001                        7061   TLRS-2 7061-1983 NASA-GSFC station disk
 M002                        7097   TLRS-2 7097-1986 NASA brass disk

41705  Santiago
 M001                        7400   Mark SLR
 M002                               GPS Mark (GIG'91)
 M003              SANT             GPS Mark
 S004                               ROGUE/L1       15-JAN-91 -
 S006                        1404   12m VLBI antenna IAR

41706  Cerro Tololo
 M001                        7401   Mark SLR

41709  Sest
 S001                        7239   VLBI antenna
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42003  Quito
 S001                                GPS DMA TI4100 / L1

42202  Arequipa
 M002                                Satellite mark 1961
 M003                        7403    Mark SLR
 S001                        7907    SAO-2 fixed laser

42501  Bermuda
 M001                        7067    Mark SLR
 M002                        7294    Mobile VLBI mark

43602  Grand Turk
 M001                                Mark SKI 1952
 M002                        7068    Mark SLR

50103  Canberra-Tidbinbilla-Orroral

 M103                                Stromlo PZT4

 M106                        7843    Orroral center ground mark 7843
 M107                ORRO            Orroral Mark AU005
 S003                        7943    SAO-3 fixed laser
 S007                        7843    NLRS (coude mirror 7)
 S001                        1543    DSS43 Antenna
 S005                        1542    DSS42 Antenna
 S006                        1544    DSS44 Antenna
 S010                        1545    DSS45 Antenna
 S012                                Canberra/ROGUE SNR-8/L1 20-MAR-90-03-FEB-92
 S013                                Orroral/TRIMBLE SST /L1
 S014                                Canberra/ROGUE SNR-8/L1 03-FEB-92-10-MAY-92
 S015                                Canberra/ROGUE SNR-8/L1 11-MAY-92-
 S016                                Orroral/ASHTECH/L1      15-MAY-92-
 S017                CANB            Canberra/ROGUE SNR-8/Bottom of the choke ring
                                                  11-MAY-92-
 S018                                Orroral/ASHTECH/Bottom antenna 15-MAY-92-
 S019                                Canberra/ROGUE SNR-8/Top of the choke ring
                                                  20-MAR-90-03-FEB-92

 S020                DS40            Canberra/ROGUE SNR-8/Bottom of the choke ring
                                             20-MAR-90-03-FEB-92
 S021                DS41            Canberra/ROGUE SNR-8/Bottom of the choke ring
                                             03-FEB-92-10-MAY-92

50106  Smithfield
 S005                                GPS DMA TI4100 / L1

50107  Yarragadee
 M001                        7090    MOBLAS 7090 brass disk
 M004                YAR1            Mark RM-4
 S005                                ROGUE/L1       15-DEC-90 -

50116  Hobart
 M001                                West pillar
 M002                                North pillar
 S002                        7242    VLBI antenna ref. pt.
 S003                                MINIMAC 2816AT/L1  21-JAN-90 -
 S004                HOBA            MINIMAC 2816AT/Bottom of the antenna

50126  Townsville
 M001                                Pillar on the office building roof
 S002                                TRIMBLE 4000SST/L1  25-JUL-90 -
 S004                TOWN            TRIMBLE 4000SST/Bottom of the antenna

50134  DARWIN
 M001                DARW            GPS Mark
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50208  Wellington
 M001                                  Pillar on the DOSLI building roof
 S001                                  TRIMBLE 4000SST/L1  15-FEB-90 -
 S002                WELL     WELL     TRIMBLE 4000SST/Bottom of the antenna

50503  American Samoa
 M001                          7096    Mark SLR

50505  Kwajalein Atoll
 M001                          7092    Mark SLR
 S003                          4968    Tardex 26m antenna ref. pt.
 S004                                  GPS OCS monitor station

66001 Mc Murdo
 M001                  MCMU            GPS mark
 S001                                  ROGUE SNR-8/L1

92201  Pamatai
 M003                                  IGN brass mark
 S003                                  ASHTECH/L1      22-JAN-91 - 13-FEB-91-
 S004                                  ROGUE SNR-8/L1 ??-DEC-92 -

92202  Huahine  (Motu Hiumoo)
 M001                                  Tube Huahine no. 5
 M002                          7121    MOBLAS-1 7121-1982 standard NASA disk
 M003                          7123    TLRS-2 7123  CSR reference
 M004                          7123    TLRS-2 7123  standard NASA disk
 M005                                  Mark RM-1
 S008                                  ASHTECH/L1      22-JAN-91 - 13-FEB-91

97101  Le Moule (Guadeloupe)
 M001                                  RBGM / Borne
 S001                                  ASHTECH/L1      22-JAN-91 - 13-FEB-91


97301  Kourou
 M201                                  Pillar Diane I (84)
 M210                KOUR              Mark at the center of a horizontal metal plate
                                       embedded on the concrete monument
 S001                                  ASHTECH/L1      22-JAN-91 - 13-FEB-91
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Table T3

Occupancies of IERS sites

Colocation

DOMES Number	Site	1	2	CDP[3] Number	Years of occupancy
40104	Algonquin				
S001		R	P	7282	84-
M002		P	P	ALGO	91-
40412	Austin				
M001		L	T	7890	80,81
M003		R	T	7271	87
20702	Bar Giyyora				
M001		L	P	7530	85-
M002		P	T	BARG	92
42501	Bermuda				
M001		L	T	7067	75-76,78
M002		R	T	7294	87
12711	Bologna/Medicina				
S001		R	P	7230	87-
M002		L	T	7546	88
50103	Canberra-Orroral-Tidbinbilla				
S005		R	P	1542	
S001		R	P	1543	78
S006		R	P	1544	
S010		R	P	1545	88-
M106/S007		L	P	7843	85-
S003		L	P	7943	76-82
S020		P	T	DS40	90-92
S021		P	T	DS41	92
3017		P	P	CANB	92-
M107		P	P	ORRO	92
21732	Chichijima				
S001		R	T	7316	87,89
S002		L	T	7844	88
40408	Fairbanks				
S002		R	P	7225	84-
M001		P	P	FAIR	91-
40491	Flagstaff				
M003		R	T	7261	84,85,86,87,88,89,90
M002		L	T	7891	81
M002		L	T	7261	91
40442	Fort Davis-McDonald				
S003		R	P	7216	80-
M008		R	T	7850	88
M009		R	T	7900	88
S017		R	P	7613	90-
S014		M	P	7080	88-
S001		M	P	7086	82,85,86,87,88

1 : Type of technique (R: VLBI, M: LLR, P: GPS, L: SLR)
2 : Permanent or Temporary occupancy
3 : CDP number or IGS 4-char abbreviation

S002		M	P	7206	76-85
M006/S014		L	P	7080	88-
M001/S001/S016		L	P	7086	79,80,82,85,86,87,88
M005		L	T	7885	82
M008		L	T	7850	93

40405 Goldstone-Mojave

S003		R	P	1512	
S014		R	P	1513	80-
S001		R	P	1514	78-
S019		R	P	7231	88-
S009		R	P	7222	83-92
M013		R	T	7288	88
M001		L	T	7085	78
M002		L	T	7115	79-81
M006		L	T	7265	84
M013		L	T	7288	88,89,90,91
S028		P	P	GOLD	91-92
S031	pq	P	P	GOLQ	92-
S033	pq	R	P	7222	92-
S029		P	P	MOJ1	89

10002 Grasse

M003		R	T	7605	89
S002		M	P	7845	79-
S001		L	P	7835	79-

11001 Graz

S002		L	P	7839	83-
M002		P	P	GRAZ	92-

30302 Hartebeesthoek

S001		R	P	7232	87-
M002		P	P	HART	91-

40440 Haystack-Westford

S002		R	P	7205	76-
S003		R	P	7209	81-83
M001		L	T	7091	78,79,80,88,90
S019		P	P	WES1	89-

13212 Herstmonceux

S001		L	T	7840	83-
M007		P	P	HERS	92-

50116 Hobart

S002		R	P	7242	89-
S004		P	T	HOBA	92

13504 Kootwijk

S001		L	P	7833	79-84
M002		L	T	8833	84,85,88,89,90
M003		P	P	KOSG	91-

50505 Kwajalein Attol

S003		R	P	4968	84,85,86,88
M001		L	T	7092	79-80

13407 Madrid

S003		R	P	1561	83-
S005		R	P	1562	
S001		R	P	1563	79
S010		R	P	1565	88-
S012		P	P	MADR	91-

12734 Matera

S001		L	P	7939	83-

M004		L	T	7541	86
M005		L	T	7540	86
S005		R	P	7243	90-
M007		P	T		91-
M008		P	P	MATE	92-
40445/40424	Maui/Kokee Park				
/S001		R	P	1311	84-
M002		R	T	7120	88
S005		M	P	7210	76-
M002		L	T	7120	80-82
M001		L	P	7210	79-
/M004		P	P	KOKB	91-93
/M006		P	T	KOK2	93
10503	Metsahovi				
M002		R	T	7601	89
S001		L	P	7805	78-
S011		P	P	METS	92-
21733	Minami Tori Sima (Marcus)				
S001		L	T	7300	89
S002		R	T	7310	90
40497/40436	Monument Peak/San Diego-Otay Mountain				
M002		R	T	7220	81,82,83
M003		R	T	7274	84,85,86,87,88,89,90
M001		L	P	7110	81-
M002		L	T	7220	83-85
M003		L	T	7274	85
/M003		L	T	7035	88
/M002		L	T	7062	76,77,78,79,81,83,84
40465	North Liberty				
S001		R	P	7609	90-
M001		P	P	NLIB	93-
12717	Noto				
S001		R	P	7547	89-
M001		L	T	7543	90
10402	Onsala				
S002		R	P	7213	77-
M004		P	P	ONSA	92-
M006		R	T	7211	92
40439	Owens Valley				
S002		R	P	7207	76-
M004		R	T	7853	87
S006		R	P	7616	90-
M003		L	T	7084	78
M001		L	T	7114	79,80,81,82
M004		L	T	7853	88,90
40400	Pasadena				
M003		R	T	7263	80,81,82,83,84,85,86,87,88
M005		R	T	7264	80,81,82,83,84
M006		R	T	7272	83
M001		L	T	7896	80-81
M006		P	P	JPL1	91-92
M007	pq	P	P	JP1Q	92-
40105	Penticton				
M001		R	T	7283	84,85,90
M002		P	P	DRAO	92-
40456	Pietown				
S001		R	P	7234	88-

M001		P	P	PIE1	92-
40407	Pinyon Flats				
M001		R	T	7256	81,83,84,85,86,87,88
M002		P	P	PIN1	91-92
M003	pq	P	P	PN1Q	92-
40496	Platteville				
M002		R	P	7258	83,84,85,86,87,88,89,90
M001		L	P	7112	81-84,88,90,91
40433	Quincy				
M004		R	T	7221	82,83,84,85,86,87,88,89
M004		P	P	7221	92-
M006		R	T	7260	79
M001		L	T	7051	76,79,81
M002		L	P	7109	81-
M005		L	T	7886	83,84
40499	Richmond				
S001		R	P	7219	85-
S013		P	P	RCMA	89-
M002		L	T	7295	88,91
M002		P	P	7295	92-
41705	Santiago				
S006		R	P	1404	91-
M001		L	T	7400	84
M002		P	T		91
M003		P	P	SANT	92-
21605	Shanghai				
S008		R	P	7226	86-
S009		R	P	7227	88-
S001		L	P	7837	83-
10302	Tromso				
M002		R	T	7602	89,92
M002		L	T	7602	90
M003		P	P	TROM	91-
21730	Tsukuba				
S001		R	T	7311	84,85,86,87,88,89
S004		P	P	TSUK	92-
21729	Usuda				
S001		R	P	7246	90-
S003		P	T	USUD	91
S005		P	T	USU2	92
S007		P	P	USU3	92-
40420	Vandenberg/Harvest Platform				
M001		R	T	7111	81,83
M002/S003		R	P	7223	83-
M001		L	T	7111	82
M004		L	T	7887	83
M006		P	T	VAND	92
M007	pq	P	P	VANQ	92-
M101		P	P	HARV	92-
40492	Vernal				
M002		R	T	7290	86,87,88,89,90
M001		L	T	7892	81,82
40129	Victoria/Albert Head				
M001		R	P	7289	90
M002		P	P	PGC1	91-
M003		P	P	ALBH	92-

40451/40490 Washington/Maryland Point

/S001	R	P	7217	82-
M102	R	P	7102	89,90,91-
M112	L	P	7063	76-81
M107	L	T	7064	77
M108	L	T	7065	77
M106	L	T	7100	77,78
M101	L	T	7101	78,79,82
M102	L	P	7102	78-89
M103	L	T	7103	79,82
M104	L	T	7104	79
M105	L	P	7105	81-
M114	L	T	7125	85,87
M116	L	T	7130	85-87
M119	L	T	7917	84-85
M120	L	T	7918	85,86,87,88,90,91,92
M121	L	T	7919	85-87
M117	L	P	7920	85,86,87,88,89,90,91,92
M118	L	T	7889	82-85
M111	L	T	7899	80

14201 Wettzell

S004	R	P	7224	83-91
S018	R	P	8834	90-
S002	L	P	7834	78-
M003	L	T	7595	
M004/S010	L	T	7596	85
M005	L	T	7597	85,92
M006	L	T	7598	
M007	L	T	7599	84
M006	P	T	7598	91
S020	P	P	WETT	92-

50107 Yarragadee

M001	L	P	7090	79-
M004	P	P	YAR1	91-

40127 Yellowknife

M001	R	T	7285	84,85
M004	R	P	7296	91-
M003	P	P	YELL	91-

40493 Yuma

M002	R	T	7273	81
M001	R	T	7894	83,84,85,86,87,88
M001	L	T	7894	83

14001 Zimmerwald

S001	L	P	7810	84-
M002	P	P	ZIMA	92-
M004	P	P	ZIMM	92-

<u>Multiple SLR</u>

42202 Arequipa

M003	L	P	7403	90,91,92
S001	L	P	7907	76-

40438 Bear Lake

M001	L	T	7082	76,79,81,83,84
M002	L	T	7046	90,91

12602 Dionysos

S001	L	P	7940	84-
M002	L	T	7515	86,87,89,90,92

41703 Easter island

M001		L	T	7061	83,84
M002		L	T	7097	87,88,89,90,91,92
92202	Huahine				
M002		L	T	7121	83-86
M003		L	P	7123	87-
40434	Mount Hopkins				
S001		L	P	7921	76-79,82
M001		L	T	7880	82
40417	Patrick AFB				
M001		L	T	7081	76
M002		L	P	7069	76-80
14106	Potsdam				
S001		L	P	1181	74-
S009		L	P	7836	91-
12302	Riga				
S002		L	P	1884	76-
M001		L	T	7560	91
12337	Simeis - Katzively				
S003		L	P	1873	76-
S006		L	P	1893	76-
M001		L	T	7561	91

Single SLR

50503	American Samoa				
M001		L	T	7096	79-80
12612	Askites				
M001		L	T	7510	86,87,89
12205	Borowiec				
S001		L	P	7811	76-83,88-
40505	Cabo San Lucas				
M001		L	T	7882	84,88,92
12725	Cagliari				
M002		L	T	7545	85,88,90
41706	Cerro Tololo				
M001		L	T	7401	84,90,91
21611	Changchun				
S001		L	P	7237	91-
20801	Diyarbakir				
M001		L	T	7575	87,89
40506	Ensenada				
M001		L	T	7883	89,91,92
43602	Grand Turk				
M002		L	T	7068	75,76,78
30101	Helwan				
S001		L	P	7831	83-
21736	Ishigaki-shima				
S001		L	T	7307	88
12614	Karitsa				

M001		L	T	7520	86,89
12615	Katavia				
M001		L	T	7512	86,87,89,92
12706	Lampedusa				
M001		L	T	7544	87,89,92
40504	Mazatlan				
M001		L	P	7122	83-
20803	Melengiclick				
M001		L	T	7580	87,89,92
14005	Monte Generoso				
M002		L	T	7590	85
12749	Monte Venda				
M001		L	T	7542	91
41604	Natal				
S001		L	P	7929	76-81
21709	Okinawa				
S001		L	T	7301	89
12613	Roumelli				
M001		L	T	7517	86,87,89,92
40701	Santiago de Cuba				
S001		L	P	1953	76-
21726	Simosato				
S001		L	P	7838	82-
21704	Tokyo				
S001		L	P	7308	90-
12718	Trieste				
M002		L	T	7550	86,89
21735	Tsushima				
S001		L	T	7302	89
21602	Wuhan				
S003		L	P	7236	88-
12616	Xrisokalaria				
M001		L	T	7525	86,87,89,90,92
20804	Yigilca				
M001		L	T	7587	87,89,92
20802	Yozgat				
M001		L	T	7585	87,89,92

Multiple VLBI

40432	Ely				
M001		R	T	7286	85,86,87,88,89,90
M002		R	T	7257	83,84
40427	Fort Ord				
M001		R	T	7266	81,83,84,85,87,88
M002		R	T	7241	88

M003	pq	R	T	7241	88,89,91
40441	Greenbank				
S001		R	P	7204	76-82
S004		R	P	7214	89-
S005		R	P	7248	92-
21701	Kashima				
S001		R	P	1856	84-
S004		R	P	1857	90-
40404	Pearblossom				
M001		R	T	7254	83,84,85,87,88
M002		R	T	7253	76,77,81,83

Single VLBI

40430	Black Butte				
M001		R	T	7269	83,84,85,86,87,88
40452	Bloomington				
M001		R	T	7291	87
10004	Brest				
M002		R	T	7604	89
14260	Carlsburg				
M001		R	T	7632	92
13296	Carnusty				
M001		R	T	7603	89
40453	Carrollton				
M001		R	T	7228	87
13201	Chilbolton				
S002		R	P	7215	80
40431	Deadman Lake				
M001		R	T	7267	83,84,85,87,88
14209	Effelsberg				
S001		R	P	7203	79-83
40471	Hancock				
S001		R	P	7618	92-
40489	Hat Creek				
S001		R	P	7218	83-
10204	Hofn				
M001		R	T	7635	92
14202	Hohenbunstorf				
M002		R	T	7600	89
14213	Hohenpeissenberg				
M002		R	T	7630	92
14261	Kirschberg				
M001		R	T	7631	92
40466	Kitt Peak				
S001		R	P	7610	90-
40419	Kodiak				

M001		R	T	7278	84,85,86,87,88,89,90
40454	Leonard				
M001		R	T	7292	87
40463	Los Alamos				
S001		R	P	7611	91
40437	Mammoth Lakes				
M001		R	T	7259	83,84,86
40455	Miles City				
M001		R	T	7038	88
21718	Miyazaki				
S001		R	T	7312	90
21702	Mizusawa				
S009		R	T	7314	91
21725	Nobeyama				
S001		R	P	7244	90-
40421	Nome				
M001		R	T	7279	84,85,86,90
40449	Ocotillo				
M001		R	T	7270	83,84,85
40403	Palos Verdes				
M001		R	T	7268	80,81,83,85,87,88,89
40410	Point Reyes				
M001		R	T	7251	81,83,84,85,87,88,89,91
40423	Sand Point				
M001		R	T	7280	84,85,86,87,88,89,90
40406	San Francisco (Presidio)				
M001		R	P	7252	81,83,84,85,87,88
M002	pq	R	P	7252	88,89,91
40428	Santa Paola				
M001		R	T	7255	81,83,84,85,87,88,89
31906	Sao Miguel				
M001		R	T	7609	92
40457	Seattle				
M001		R	T	7229	87,88
41709	Sest				
S001		R	P	7239	90-
21731	Shintotsugawa				
S001		R	T	7315	90
40425	Sourdough				
M001		R	T	7281	84,85,86,87,88,89
10003	Toulouse				
M003		R	T	7608	92
10329	Trysil				
M001		R	T	7607	91,92
40498	VLA				
S001		R	P	7619	83-

40118	Whitehorse					
M001			R	T	7284	84,85,86,88
M002		pq	R	T	7284	88,89
40416	Yakataga					
M001			R	T	7277	84,85,86,87,88
M002		pq	R	T	7277	88,89,90

Multiple GPS

40460	La Jolla/SCRIPPS					
M001			P	P	SIO1	91-
M002			P	P	SIO2	91-
M003		pq	P	P	SO2Q	92-

Single GPS

40124	Calgary				
M001		P	T	PRDS	92
40464	Carr Hill				
M001		P	P	CARR	92-
50134	Darwin				
M001		P	P	DARW	92-
40130	Holberg				
M001		P	T	HOLB	92
10325	Honefoss				
M001		P	T	HONE	91
97301	Kourou				
M210		P	P	KOUR	92-
66001	Mc Murdo				
M001		P	P	MCMU	92-
31303	MasPalomas				
M001		P	P	MASP	92-
10317	Ny-Alesund				
M001		P	P	NYAL	91-
92201	Pamatai				
M003		P	P	PAMA	91-
40103	Prince Albert				
M001		P	T	PRAL	92
40101	St. Johns				
M001		P	P	STJO	92-
23601	Taipei				
M001		P	P	TAIW	92-
50126	Townsville				
S004		P	P	TOWN	90-
50208	Wellington				
S002		P	P	WELL	90-

Table T4

Local eccentricities for IERS colocation sites

40104 Algonquin						
A	S001	M002	94.763	61.017	6.666	Ref: (14)
			0.003	0.003	0.003	
12711 Bologna						
A	M002	S001	-29.5309	29.9040	48.5558	Ref: (1),(2)
			.0005	.0011	.0049	
50103 Canberra-Orroral-Tidbinbilla						
A	S007	S003	-1071.832	-993.102	1255.304	Ref: (7)
			0.100	0.100	0.100	
		S010	-14458.347	4638.683	21870.028	Ref: (7)
			0.027	0.027	0.027	
-B	S005	S001	86.428	-51.970	-166.511	Ref: (11)
			0.010	0.005	0.010	
-B	S010	S001	40.658	-404.152	-367.185	Ref: (11)
			0.010	0.010	0.010	
-B	S017	S001	101.503	-195.609	-304.593	Ref: (27), (11)
			0.003	0.003	0.003	
21732 Chichijima						
A	S001	S002	-1716.283	-1462.147	-539.508	Ref: (12)
			0.040	0.040	0.040	
40408 Fairbanks						
A	S002	M001	-74.141	49.280	-31.231	Ref: (17)
			0.100	0.100	0.100	
40491 Flagstaff						
A	M002	M003	-15.9330	17.2130	14.3670	Ref: (2)
			.0010	.0030	.0030	
40442 Fort Davis						
A	M001	M005	0.000	0.000	0.000	Ref: (3)
			0.003	0.003	0.003	
		S002	-655.977	-228.944	-452.568	Ref: (3)
			0.003	0.003	0.003	
		S003	5914.3973	-3496.5099	-4031.8616	Ref: (2)
			.0035	.0120	.0069	

		M008	117.2017	135.0619	352.4838	Ref: (6)
			0.003	0.003	0.003	
B	S003	M006	-5810.0685	3621.2944	4362.4228	Ref: (2)
			.0026	.0100	.0059	
		M009	-16.9714	-39.9062	-95.3390	Ref: (6)
			0.003	0.003	0.003	

40405 Goldstone

A	S009	M013	-323.1130	148.2132	-43.9926	Ref: (2)
			.0070	.0129	.0097	
		M006	-304.746	137.590	-45.871	Ref: (3)
			0.003	0.003	0.003	
B	M001	S019	-144.572	-119.976	-229.148	Ref: (2)
			0.003	0.003	0.003	
		S009	-2776.813	-5226.260	-8428.647	Ref: (3)
			0.003	0.003	0.003	
		M002	2532.555	-14016.623	-15901.406	Ref: (3)
			0.003	0.003	0.003	
C	M002	S014	-267.5030	69.1790	-40.9430	Ref: (2)
			.0020	.0030	.0020	
D	M013	S028	2880.020	5222.261	8549.860	Ref: (17)
			0.011	0.011	0.011	

10002 Grasse

A	S001	S002	0.578	36.473	-4.438	Ref: (3)
			0.003	0.003	0.003	
		M003	6.015	-33.735	-8.102	Ref: (5)
			0.003	0.003	0.003	

11001 Graz

A	S002	M002	-2.559	8.516	-1.321	Ref: (21)
			0.003	0.003	0.003	

30302 Hartebeesthoek

	S001	M002	-817.332	2103.129	203.079	Ref: (5)
			0.004	0.004	0.004	

40440 Haystack

A	M001	S002	-48.8650	12.2640	65.8060	Ref: (2),(3)
			.0010	.0020	.0020	
		S003	-247.0020	-851.7200	-800.4280	Ref: (2),(3)
			.0030	.0040	.0040	

13212 Herstmonceux

A	S001	M007	6.505	10.278	-3.945	Ref: (24)

			0.003	0.003	0.003	
50116 Hobart						
A	S002	S004	52.490	16.986	-25.806	Ref: (15)
13504 Kootwijk						
A	M002	M003	-12.461	-37.503	23.024	Ref: (14)
			0.003	0.003	0.003	
50505 Kwajalein Atoll						
A	M001	S003	-89.234	-702.977	544.240	Ref: (3),(4)
			0.003	0.003	0.003	
13407 Madrid						
A	S010	S012	-134.246	159.664	164.275	Ref: (17)
			0.003	0.003	0.003	
12734 Matera						
A	S001	S005	-26.120	-67.073	63.166	Ref: (23)
			0.007	0.007	0.007	
		M008	-15.173	-24.827	24.965	Ref (23)
			0.003	0.003	0.003	
40445/40424 Maui/Kokee Park						
A	M001	S005	-.483	-.212	1.003	Ref: (3)
			0.003	0.003	0.003	
		M002	8.014	19.409	40.927	Ref: (3)
			0.003	0.003	0.003	
B	/S001	M001	77839.523	-349863.790	-145626.288	Ref: (1)
			.014	.006	.006	
		/M004	7.9413	-23.6167	-4.4070	Ref: (14),(15)
			0.003	0.003	0.003	
10503 Metsahovi						
-A	S001	M002	-1942.700	-1512.472	1347.868	Ref: (9)
			0.004	0.004	0.004	
	S011	M002	-1918.188	-1548.001	1324.627	Ref: (20)
			0.004	0.004	0.004	
40497/40436 Monument Peak/ San Diego-Otay Mountain						
A	M001	M002	-14.269	6.872	-.596	Ref: (3)
			0.003	0.003	0.003	
		M003	-11.3947	7.8021	2.5225	Ref: (2)
			.0040	.0020	.0010	
B	/M003	M003	42537.2846	-2592.2578	27616.9206	Ref: (2)

			.0061	.0180	.0170	
		/M002	0.7557	3.8313	5.6376	Ref: (6)
			0.003	0.003	0.003	
12717 Noto						
A	M001	S001	34.242	67.907	-38.223	Ref: (22)
			0.003	0.003	0.003	
10402 Onsala						
A	S002	M004	52.631	-40.464	-43.865	Ref: (15)
			0.003	0.003	0.003	
40439 Owens Valley						
A	M004	M003	-169.108	55.235	-41.459	Ref: (3)
			0.003	0.003	0.003	
		M001	-1.223	-2.261	-3.617	Ref: (3)
			0.003	0.003	0.003	
		S002	820.4891	-549.1188	-87.1157	Ref: (2)
			.0052	.0085	.0085	
40400 Pasadena						
A	M001	M003	-94.0640	31.9450	-55.1210	Ref: (2)
			.0030	.0020	.0020	
		M006	-92.077	13.882	-77.173	Ref: (14)
			0.003	0.003	0.003	
40105 Penticton						
A	M001	M002	-324.180	178.052	11.636	Ref: (25)
40456 Pietown						
A	S001	M001	36.916	34.827	35.255	Ref: (22)
			0.003	0.003	0.003	
40407 Pinyon						
	M001	M002	125.588	117.655	279.910	Ref: (14)
			0.003	0.003	0.003	
40496 Platteville						
A	M001	M002	-29.8944	9.0355	1.0253	Ref: (2)
			.0005	.0007	.0005	
40433 Quincy						
A	M002	M001	341.574	-288.820	-158.155	Ref: (3)
			0.003	0.003	0.003	

		M004	3.8898	-38.9866	-38.4094	Ref: (8)
			.0019	.0012	.0013	
		M005	-7.611	5.308	0.615	Ref: (3)
			0.003	0.003	0.003	
40499 Richmond						
A	M002	S001	-60.8770	0.9310	44.2120	Ref:(2),(4)
			.0030	.0020	.0020	
41705 Santiago						
A	M003	M001	6.309	-38.830	61.146	Ref: (26)
			0.003	0.003	0.003	
		S006	-0.231	69.610	-113.927	Ref: (26)
21605 Shanghai						
A	S001	S009	-598.875	-469.603	154.995	Ref: (2)
			.010	.010	.010	
10302 Tromso						
A	M002	M003	36.287	-33.115	-9.215	Ref: (15)
			0.003	0.003	0.003	
40420 Vandenberg						
A	M002	M006	5.037	12.908	21.229	Ref: (22)
			0.003	0.003	0.003	
40451 Washington						
A	M105	M112	-4.947	-17.162	-19.125	Ref: (3)
			0.003	0.003	0.003	
		M106	635.813	182.229	25.164	Ref: (3)
			0.003	0.003	0.003	
		M101	520.577	170.825	41.961	Ref: (3)
			0.003	0.003	0.003	
		M102	-33.112	-2.452	4.398	Ref: (3)
			0.003	0.003	0.003	
		M103	-34.066	1.868	9.839	Ref: (3)
			0.003	0.003	0.003	
		M104	376.110	153.626	64.228	Ref: (3)
			0.003	0.003	0.003	
		M111	645.036	181.778	22.412	Ref: (3)
			0.003	0.003	0.003	
14201 Wettzell						
A	S002	S004	10.003	-46.149	11.072	Ref: (3),(4)
			0.003	0.003	0.003	
		M004	52.559	55.916	-58.337	Ref: (13)

		0.003	0.003	0.003	
	M005	72.017	45.135	-70.501	Ref: (13)
		0.003	0.003	0.003	
	S020	48.700	71.268	-48.250	Ref: (19)
		0.003	0.003	0.003	

40127 Yellowknife

A	M001	M003	-327.848	314.599	82.882	Ref: (16)
			0.003	0.003	0.003	

50103 Yarragadee

A	M001	M004	-18.605	-12.471	-5.835	Ref (17)
			0.003	0.003	0.003	

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(18) GPS Bulletin Vlo. 5 No. 1, March-April, 1992, page 20.

(19) SGMS Newsletter April, 1991, page 60.
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(21) IGS Mail #118.
(22) CDP Catalogue of Site Information, March, 1993.
(23) Survey of the Matera site, Telespazio, March 1992
(24) Message from A. Sinclair, 16-jun-1992.
(25) Message from M. Caissy, 25-jun-1992
(26) IGS Mail #42.
(27) IGS Mail #35.

Table T5

SSC(IERS) 93 C 03

STATION COORDINATES IN THE ITRF92 FOR EPOCH 1988.0

DOMES NUMBER	NAME	CDP IGS	NUM. CODE	NETWORK (*)	X m	Y m	Z m	SX m	SY m	SZ m	PLATE
10002M003	GRASSE	VLBI	7605	2 4	4581697.792	556125.612	4389351.315	0.006	0.005	0.007	EURA
10002S001	GRASSE	SLR	7835	15 16 17 18 19 20	4581691.777	556159.353	4389359.412	0.006	0.005	0.007	EURA
10002S002	GRASSE	LLR	7845	6 7 8	4581692.355	556195.826	4389354.975	0.007	0.006	0.008	EURA
10003M003	TOULOUSE	VLBI	7608	2 4	4627950.109	119843.521	4372862.910	0.016	0.007	0.016	EURA
10004M002	BREST	VLBI	7604	2 4	4228877.212	-333104.326	4747180.895	0.011	0.006	0.013	EURA
10204M001	HOFN	VLBI	7635	2 4	2679650.361	-727916.552	5722807.152	0.011	0.006	0.020	EURA
10302M002	TROMSO	VLBI	7602	2 4 9 16 17 18 19	2102904.226	721602.401	5958201.264	0.006	0.006	0.006	EURA
10302M003	TROMSO	GPS	TROM	11 12 13 14	2102940.512	721569.285	5958192.050	0.006	0.006	0.006	EURA
10317M001	NY-ALESUND	GPS	NYAL	9 10 12 13 14	1202430.805	252626.577	6237767.482	0.007	0.007	0.007	EURA
10325M001	HONEFOSS	GPS	HONE	14	3132539.069	566401.646	5508609.833	0.018	0.018	0.018	EURA
10329M001	TRYSIL	VLBI	7607	2 4	2988029.290	655956.980	5578669.017	0.007	0.006	0.009	EURA
10402M004	ONSALA	GPS	ONSA	10 12 13 14	3370658.810	711876.901	5349786.787	0.006	0.006	0.006	EURA
10402M006	ONSALA	VLBI	7211	2	3370642.097	711865.999	5349796.058	0.008	0.007	0.010	EURA
10402S002	ONSALA	VLBI	7213	2 4 9	3370606.178	711917.365	5349830.649	0.005	0.005	0.006	EURA
10503M002	METSAHOVI	VLBI	7601	2 4 9	2890652.901	1310295.212	5513958.602	0.007	0.006	0.007	EURA
10503S001	METSAHOVI	SLR	7805	16 18 19	2892595.601	1311807.684	5512610.733	0.008	0.007	0.008	EURA
10503S011	METSAHOVI	GPS	METS	12 13 14	2892571.089	1311843.212	5512633.973	0.007	0.006	0.007	EURA
11001M002	GRAZ	GPS	GRAZ	12 13 14	4194424.122	1162702.404	4647245.219	0.006	0.006	0.006	EURA
11001S002	GRAZ	SLR	7839	9 15 16 17 18 19 20	4194426.682	1162693.887	4647246.541	0.006	0.006	0.006	EURA
12205S001	BOROWIEC	SLR	7811	16 17 18 19	3738332.837	1148246.354	5021815.661	0.046	0.040	0.021	EURA
12302M001	RIGA	SLR	7560	16 17 18 19	3183914.363	1421473.397	5322796.726	0.065	0.038	0.031	EURA
12302S002	RIGA	SLR	1884	16 17 18 19	3183896.072	1421496.889	5322803.589	0.032	0.025	0.030	EURA
12337M001	SIMEIS	SLR	7561	16 17 18 19	3783746.658	2551362.528	4441445.027	0.018	0.016	0.016	EURA
12337S003	SIMEIS	SLR	1873	16 17 18 19	3783902.746	2551404.925	4441257.589	0.046	0.040	0.028	EURA
12337S006	KATZIVELY	SLR	1893	16 17 18 19	3785944.913	2550780.525	4439461.512	0.052	0.040	0.029	EURA
12602M002	DIONYSOS	SLR	7515	16 17 18 19 20	4595216.419	2039435.320	3912629.520	0.010	0.010	0.011	EURA
12602S001	DIONYSOS	SLR	7940	16 18	4595217.164	2039464.467	3912613.178	0.467	0.194	0.143	EURA
12612M001	ASKITES	SLR	7510	16 17 18 19 20	4353444.885	2082666.283	4156506.670	0.010	0.010	0.011	EURA
12613M001	ROUMELLI	SLR	7517	16 17 18 19 20	4728694.664	2174373.368	3674572.973	0.010	0.009	0.011	EURA
12614M001	KARITSA	SLR	7520	15 16 17 18 19	4596042.613	1733476.756	4055720.861	0.013	0.013	0.013	EURA
12615M001	KATAVIA	SLR	7512	15 16 17 18 19 20	4573400.020	2409322.211	3723881.780	0.010	0.010	0.011	EURA

12616M001	XRISOKALARIA	SLR	7525	16	17	18	19	20		4745949.535	1905705.936	3799169.064	0.011	0.010	0.011	EURA
12706M001	LAMPEDUSA	SLR	7544	15	16	17	18	19	20	5072831.987	1130886.238	3684836.975	0.012	0.012	0.012	AFRC
12711M002	BOLOGNA	SLR	7546	16	17	18	19			4461399.704	919566.761	4449510.545	0.006	0.006	0.009	EURA
12711S001	BOLOGNA	VLBI	7230	2	4	5				4461370.173	919596.665	4449559.103	0.006	0.006	0.007	EURA
12717M001	NOTO	SLR	7543	16	17	18	19			4934529.050	1321133.208	3806522.583	0.008	0.006	0.008	AFRC
12717S001	NOTO	VLBI	7547	1	2	4	5			4934563.293	1321201.116	3806484.358	0.007	0.006	0.007	AFRC
12718M002	TRIESTE	SLR	7550	15	16	17	18	19		4336738.580	1071271.474	4537911.044	0.023	0.022	0.017	EURA
12725M002	CAGLIARI	SLR	7545	15	16	17	18	19		4893398.079	772673.297	4004140.982	0.013	0.013	0.013	EURA
12734M004	MATERA	SLR	7541	16	17	18	19			4641990.303	1393042.292	4133231.869	0.013	0.012	0.013	EURA
12734M005	MATERA	SLR	7540	16	17	18	19			4641984.573	1393057.715	4133233.480	0.015	0.014	0.014	EURA
12734M008	MATERA	GPS	MATE	12	13	14				4641949.890	1393045.111	4133287.191	0.006	0.006	0.006	EURA
12734S001	MATERA	SLR	7939	9	15	16	17	18	19 20	4641965.063	1393069.936	4133262.230	0.006	0.006	0.006	EURA
12734S005	MATERA	VLBI	7243	2	4	5				4641938.944	1393002.864	4133325.408	0.007	0.006	0.007	EURA
12749M001	MONTE VENDA	SLR	7542	16	17	18	19			4399363.602	910506.446	4512940.879	0.024	0.023	0.018	EURA
13201S002	CHILBOLTON	VLBI	7215	2	4					4008310.204	-100650.913	4943794.691	0.010	0.007	0.012	EURA
13212M007	HERSTMONCEUX	GPS	HERS	13	14					4033470.343	23672.610	4924301.111	0.006	0.006	0.006	EURA
13212S001	HERSTMONCEUX	SLR	7840	9	15	16	17	18	19 20	4033463.837	23662.331	4924305.055	0.006	0.006	0.006	EURA
13296M002	CARNUSTY	VLBI	7603	2	4					3526416.476	-171421.234	5294098.742	0.013	0.008	0.018	EURA
13407S001	MADRID	VLBI	1563	3						4849092.680	-360180.692	4115109.057	0.028	0.028	0.039	EURA
13407S003	MADRID	VLBI	1561	2	3					4849245.258	-360278.299	4114884.408	0.032	0.015	0.035	EURA
13407S010	MADRID	VLBI	1565	2	3	4	9			4849336.787	-360488.958	4114748.700	0.005	0.005	0.006	EURA
13407S012	MADRID	GPS	MADR	10	11	12	13	14		4849202.545	-360329.294	4114912.974	0.006	0.005	0.006	EURA
13504M002	KOOTWIJK	SLR	8833	9	15	16	17	18	19	3899237.850	396769.173	5015055.228	0.007	0.006	0.006	EURA
13504M003	KOOTWIJK	GPS	KOSG	10	12	13	14			3899225.389	396731.669	5015078.252	0.007	0.006	0.006	EURA
13504S001	KOOTWIJK	SLR	7833	15	16	18	19			3899224.204	396742.871	5015073.966	0.035	0.028	0.016	EURA
14001S001	ZIMMERWALD	SLR	7810	9	15	16	17	18	19 20	4331283.625	567549.559	4633139.956	0.007	0.007	0.007	EURA
14005M002	MONTE GENEROSO	SLR	7590	15	18	19				4390309.894	696752.037	4560835.907	0.020	0.021	0.015	EURA
14106S001	POTSDAM	SLR	1181	15	16	17	18	19	20	3800621.302	882005.313	5028859.533	0.018	0.016	0.013	EURA
14106S009	POTSDAM	SLR	7836	16						3800639.853	881981.881	5028831.610	0.061	0.038	0.073	EURA
14201M004	WETTZELL	SLR	7596	15	16	19				4075582.606	931837.182	4801559.874	0.006	0.006	0.006	EURA
14201M005	WETTZELL	SLR	7597	16						4075602.063	931826.402	4801547.709	0.006	0.006	0.006	EURA
14201M007	WETTZELL	SLR	7599	16						4075514.963	931753.440	4801630.976	0.170	0.072	0.226	EURA
14201S002	WETTZELL	SLR	7834	15	16	17	18	19	20	4075530.046	931781.267	4801618.210	0.005	0.005	0.006	EURA
14201S004	WETTZELL	VLBI	7224	2	4	5	9			4075540.048	931735.120	4801629.280	0.005	0.005	0.006	EURA
14201S018	WETTZELL	SLR	8834	16	17	18	19			4075577.031	931785.302	4801583.482	0.020	0.020	0.015	EURA
14201S020	WETTZELL	GPS	WETT	10	11	12	13	14		4075578.745	931852.533	4801569.960	0.005	0.005	0.006	EURA
14202M002	HOHENBUNSTORF	VLBI	7600	2	4					3778215.011	698644.642	5074053.525	0.008	0.006	0.009	EURA
14209S001	EFFELSBERG	VLBI	7203	2	4					4033947.600	486990.364	4900430.687	0.007	0.006	0.008	EURA
14213M002	HOHENPEISSENBERG	VLBI	7630	2	4					4213687.373	820422.814	4702784.170	0.016	0.008	0.018	EURA
14260M001	KARLSBURG	VLBI	7632	2	4					3653204.388	884427.448	5135732.061	0.017	0.008	0.024	EURA
14261M001	KIRSCHBERG	VLBI	7631	2	4					3879830.876	987963.195	4948713.305	0.010	0.007	0.012	EURA
20702M001	BAR GIYYORA	SLR	7530	15	16	17	18	19		4443967.253	3121945.386	3334694.432	0.030	0.028	0.027	AFRC
20702M002	BAR GIYYORA	GPS	BARG	9						4443959.437	3121952.994	3334710.225	0.014	0.012	0.015	AFRC
20801M001	DIYARBAKIR	SLR	7575	15	16	17	18	19		3848635.953	3251760.908	3898909.263	0.015	0.015	0.015	EURA
20802M001	YOZGAT	SLR	7585	15	16	17	18	19		4029730.653	2802093.294	4062068.019	0.015	0.016	0.015	EURA

20803M001	MELENGICLICK	SLR	7580	15	16	17	18	19		4247620.482	2778638.975	3851607.532	0.012	0.012	0.013	EURA
20804M001	YIGILCA	SLR	7587	16	17	18	19	20		4117361.982	2517076.836	4157679.069	0.013	0.012	0.012	EURA
21602S003	WUHAN	SLR	7236	16	18					-2266555.555	5009079.321	3222266.106	0.033	0.033	0.034	EURA
21605S001	SHANGHAI	SLR	7837	15	16	17	18	19	20	-2831087.772	4676203.416	3275172.849	0.011	0.011	0.012	EURA
21605S008	SHANGHAI	VLBI	7226	2						-2847697.994	4659872.716	3283958.777	0.182	0.162	0.145	EURA
21605S009	SHANGHAI	VLBI	7227	2	4					-2831686.637	4675733.799	3275327.829	0.009	0.008	0.011	EURA
21611S001	CHANGCHUN	SLR	7237	17	18					-2674386.760	3757189.529	4391508.708	0.084	0.068	0.053	EURA
21701S001	KASHIMA	VLBI	1856	2	4	5				-3997892.252	3276581.252	3724118.349	0.007	0.006	0.010	NOAM
21701S004	KASHIMA	VLBI	1857	2	4	5				-3997649.233	3276690.751	3724278.957	0.008	0.007	0.011	NOAM
21702S009	MIZUSAWA	VLBI	7314	2						-3862411.852	3105015.039	4001944.975	0.034	0.034	0.036	NOAM
21704S002	TOKYO	SLR	7308	16						-3942020.077	3368097.548	3702191.136	0.116	0.112	0.138	NOAM
21718S001	MIYAZAKI	VLBI	7312	2						-3582767.830	4052034.021	3369020.655	0.029	0.033	0.030	EURA
21725S001	NOBEYAMA	VLBI	7244	2	4					-3871168.223	3428273.995	3723697.720	0.013	0.012	0.015	NOAM
21726S001	SIMOSATO	SLR	7838	15	16	17	18	19	20	-3822388.351	3699363.465	3507573.140	0.010	0.010	0.011	EURA
21729S001	USUDA	VLBI	7246	2						-3855355.321	3427427.626	3740971.371	0.026	0.026	0.029	EURA
21729S003	USUDA ORIGINAL	GPS	USUD	10	12	13	14			-3855262.540	3427432.213	3741021.028	0.012	0.012	0.013	EURA
21729S005	USUDA DISPLACED	GPS	USU2	13	14					-3855262.970	3427432.602	3741020.540	0.013	0.014	0.013	EURA
21729S007	USUDA CURRENT	GPS	USU3	12	13	14				-3855262.943	3427432.566	3741020.511	0.013	0.013	0.013	EURA
21730S001	TSUKUBA	VLBI	7311	2						-3957172.891	3310237.922	3737709.034	0.017	0.016	0.020	NOAM
21731M001	SHINTOTSUGAWA	VLBI	7315	2						-3642141.815	2861496.592	4370361.775	0.016	0.014	0.020	NOAM
21732S001	CHICHIJIMA	VLBI	7316	2						-4489356.681	3482989.525	2887931.223	0.044	0.036	0.038	PCFC
21732S002	CHICHIJIMA	SLR	7844	19						-4491072.936	3481527.406	2887391.722	0.060	0.055	0.052	PCFC
21733S001	MINAMI TORI SIMA	VLBI	7310	2						-5227446.868	2551379.178	2607604.801	0.019	0.019	0.023	PCFC
23601M001	TAIPEI	GPS	TAIW	10	13	14				-3024781.775	4928936.927	2681234.588	0.014	0.013	0.014	EURA
30101S001	HELWAN	SLR	7831	15	16	17	18	19		4728283.588	2879670.295	3156894.540	0.016	0.017	0.020	AFRC
30302M002	HARTEBEESTHOEK	GPS	HART	10	11	12	13	14		5084625.453	2670366.458	-2768494.105	0.011	0.010	0.008	AFRC
30302S001	HARTEBEESTHOEK	VLBI	7232	1	2	4	5			5085442.785	2668263.330	-2768697.188	0.010	0.010	0.008	AFRC
31303M001	MASPALOMAS	GPS	MASP	9	10	12	13	14		5439189.208	-1522054.957	2953464.119	0.008	0.009	0.007	AFRC
31906M001	SAO MIGUEL	VLBI	7609	2	4					4552174.650	-2186664.819	3882779.666	0.011	0.008	0.011	AFRC
40101M001	ST. JOHNS	GPS	STJO	10	11	12	13	14		2612631.412	-3426807.001	4686757.698	0.008	0.006	0.006	NOAM
40103M001	PRINCE ALBERT	GPS	PRAL	11						-1050707.979	-3680985.833	5085127.862	0.010	0.010	0.014	NOAM
40104M002	ALGONQUIN	GPS	ALGO	10	11	12	13	14		918129.667	-4346071.208	4561977.801	0.005	0.005	0.005	NOAM
40104S001	ALGONQUIN	VLBI	7282	2	4	5				918034.909	-4346132.228	4561971.136	0.004	0.005	0.005	NOAM
40105M001	PENTICTON	VLBI	7283	2						-2058840.306	-3621286.372	4814420.734	0.007	0.007	0.007	NOAM
40105M002	PENTICTON	GPS	DRAO	11	12	13	14			-2059164.485	-3621108.319	4814432.369	0.006	0.007	0.006	NOAM
40118M001	WHITEHORSE	VLBI	7284	2						-2215213.518	-2209261.587	5540292.545	0.023	0.018	0.039	NOAM
40118M002	WHITEHORSEpq	VLBI	7284	2						-2215213.543	-2209261.605	5540292.524	0.012	0.011	0.019	NOAM
40124M001	CALGARY	GPS	PRDS	11						-1659602.660	-3676725.736	4925493.651	0.018	0.019	0.010	NOAM
40127M001	YELLOWKNIFE	VLBI	7285	2						-1224124.437	-2689530.677	5633555.419	0.006	0.007	0.007	NOAM
40127M003	YELLOWKNIFE	GPS	YELL	10	11	12	13	14		-1224452.285	-2689216.080	5633638.302	0.006	0.006	0.006	NOAM
40127M004	YELLOWKNIFE	VLBI	7296	2	4					-1224399.357	-2689273.208	5633620.282	0.006	0.008	0.009	NOAM
40129M001	VICTORIA	VLBI	7289	2						-2341310.012	-3539083.869	4745768.389	0.018	0.028	0.033	NOAM
40129M002	VICTORIA	GPS	PGC1	13						-2327187.977	-3522529.001	4764832.426	0.012	0.015	0.010	NOAM
40129M003	ALBERT HEAD	GPS	ALBH	11	12	13				-2341332.738	-3539049.502	4745791.437	0.008	0.011	0.008	NOAM
40130M001	HOLBERG	GPS	HOLB	11						-2503040.234	-3188233.330	4908701.634	0.010	0.010	0.010	NOAM

40400M001	PASADENA	SLR	7896	16	19				-2493211.848	-4655229.543	3565574.484	0.008	0.009	0.008	PCFC
40400M003	PASADENA	VLBI	7263	2					-2493305.911	-4655197.598	3565519.363	0.008	0.009	0.008	PCFC
40400M006	PASADENA	GPS	JPL1	12	13	14			-2493303.924	-4655215.660	3565497.311	0.008	0.009	0.008	PCFC
40400M007	PASADENA PEQ	GPS	JP1Q	12	13	14			-2493303.931	-4655215.648	3565497.326	0.012	0.012	0.009	PCFC
40403M001	PALOS VERDES	VLBI	7268	2					-2525452.712	-4670035.684	3522886.784	0.011	0.016	0.014	PCFC
40404M001	PEARBLOSSOM	VLBI	7254	2					-2464070.848	-4649425.664	3593905.739	0.011	0.016	0.014	PCFC
40405M001	GOLDSTONE	SLR	7085	16					-2353394.101	-4641529.566	3676899.199	0.007	0.009	0.009	NOAM
40405M002	GOLDSTONE	SLR	7115	16	19				-2350861.542	-4655546.262	3660997.875	0.006	0.007	0.007	NOAM
40405M006	GOLDSTONE	SLR	7265	16	17	18	19	20	-2356475.652	-4646618.308	3668424.765	0.006	0.006	0.006	NOAM
40405M013	GOLDSTONE	VLBI	7288	2	16	17	18	19	-2356494.024	-4646607.695	3668426.653	0.006	0.008	0.007	NOAM
40405S001	GOLDSTONE	VLBI	1514	3					-2353621.115	-4641341.540	3677052.355	0.018	0.024	0.023	NOAM
40405S003	GOLDSTONE	VLBI	1512	3					-2350443.676	-4651980.838	3665630.978	0.026	0.034	0.032	NOAM
40405S009	GOLDSTONE	VLBI	7222	1	2	4			-2356170.906	-4646755.897	3668470.636	0.005	0.005	0.005	NOAM
40405S014	GOLDSTONE	VLBI	1513	2	3	4			-2351129.045	-4655477.084	3660956.933	0.006	0.007	0.007	NOAM
40405S019	GOLDSTONE	VLBI	7231	2	3	4			-2353538.673	-4641649.540	3676670.049	0.007	0.009	0.008	NOAM
40405S028	GOLDSTONE	GPS	GOLD	10	13	14			-2353614.011	-4641385.437	3676976.511	0.009	0.010	0.009	NOAM
40405S031	GOLDSTONE PEQ	GPS	GOLQ	11	12	13	14		-2353614.020	-4641385.452	3676976.509	0.008	0.008	0.008	NOAM
40405S033	GOLDSTONE PEQ	VLBI	7222	2	4				-2356170.925	-4646755.902	3668470.631	0.005	0.007	0.007	NOAM
40406M001	PRESIDIO	VLBI	7252	2					-2707704.789	-4257609.620	3888374.212	0.009	0.011	0.011	PCFC
40406M002	PRESIDIOpq	VLBI	7252	2					-2707704.767	-4257609.590	3888374.170	0.012	0.016	0.015	PCFC
40407M001	PINYON FLATS	VLBI	7256	2					-2369635.865	-4761324.934	3511116.170	0.008	0.009	0.008	PCFC
40407M002	PINYON FLATS	GPS	PIN1	13	14				-2369510.277	-4761207.279	3511396.080	0.008	0.009	0.008	PCFC
40407M003	PINYON FLATS PEQ	GPS	PN1Q	10	12	13	14		-2369510.263	-4761207.271	3511396.129	0.009	0.009	0.009	PCFC
40408M001	FAIRBANKS	GPS	FAIR	10	11	12	13	14	-2281621.222	-1453595.760	5756961.999	0.005	0.006	0.006	NOAM
40408S002	FAIRBANKS	VLBI	7225	2	4	5			-2281547.086	-1453645.042	5756993.234	0.005	0.005	0.005	NOAM
40410M001	POINT REYES	VLBI	7251	2					-2732333.023	-4217634.915	3914491.082	0.009	0.011	0.011	PCFC
40412M003	AUSTIN	VLBI	7271	2					-737793.721	-5459892.277	3202990.504	0.010	0.028	0.016	NOAM
40416M001	YAKATAGA	VLBI	7277	2					-2529744.128	-1942091.300	5505027.966	0.012	0.011	0.022	PCFC
40416M002	YAKATAGApq	VLBI	7277	2					-2529744.189	-1942091.280	5505027.904	0.011	0.010	0.018	PCFC
40419M001	KODIAK	VLBI	7278	2					-3026940.095	-1575911.796	5370362.521	0.011	0.009	0.015	NOAM
40420M002	VANDENBERG AFB	VLBI	7223	2	4				-2678094.663	-4525450.837	3597410.165	0.005	0.005	0.006	PCFC
40420M006	VANDENBERG	GPS	VAND	14					-2678089.628	-4525437.931	3597431.395	0.006	0.006	0.007	PCFC
40420M007	VANDENBERG PEQ	GPS	VANQ	14					-2678089.659	-4525437.943	3597431.415	0.018	0.018	0.018	PCFC
40420M101	HARVEST PLATFORM	GPS	HARV	13					-2686069.014	-4527084.602	3589502.146	0.014	0.016	0.011	PCFC
40421M001	NOME	VLBI	7279	2					-2658150.365	-693821.909	5737236.653	0.012	0.009	0.022	NOAM
40423M001	SANDPOINT	VLBI	7280	2					-3425461.827	-1214669.140	5223858.292	0.012	0.009	0.016	NOAM
40424M004	KAUAI	GPS	KOKB	10	11	12	13	14	-5543838.027	-2054587.817	2387809.429	0.006	0.006	0.007	PCFC
40424M006	KAUAI TEMPORARY	GPS	KOK2	13					-5543802.112	-2054603.839	2387872.629	0.023	0.024	0.015	PCFC
40424S001	KAUAI	VLBI	1311	2	4	5			-5543845.962	-2054564.195	2387813.834	0.006	0.006	0.007	PCFC
40425M001	SOURDOUGH	VLBI	7281	2					-2419993.413	-1664228.740	5643538.282	0.011	0.010	0.018	NOAM
40425M002	SOURDOUGHpq	VLBI	7281	2					-2419993.395	-1664228.757	5643538.308	0.011	0.010	0.018	NOAM
40427M001	FORT ORD	VLBI	7266	2					-2697026.680	-4354393.320	3788077.627	0.011	0.014	0.012	PCFC
40427M002	FORT ORD	VLBI	7241	2					-2699840.180	-4359127.107	3781050.988	0.012	0.018	0.015	PCFC
40427M003	FORT ORDpq	VLBI	7241	2					-2699840.163	-4359127.095	3781051.035	0.010	0.012	0.011	PCFC
40428M001	SANTA PAOLA	VLBI	7255	2					-2554476.589	-4608627.399	3582138.326	0.012	0.018	0.015	PCFC

40430M001	BLACK BUTTE	VLBI	7269	2								-2306306.873	-4787914.446	3515736.452	0.010	0.015	0.012	NOAM
40431M001	DEADMAN LAKE	VLBI	7267	2								-2336819.574	-4732586.974	3570330.011	0.014	0.022	0.016	NOAM
40432M001	ELY	VLBI	7286	2								-2077236.227	-4486712.726	4018753.780	0.009	0.012	0.011	NOAM
40433M001	QUINCY	SLR	7051	16	19							-2516893.125	-4198845.069	4076411.559	0.006	0.006	0.006	NOAM
40433M002	QUINCY	SLR	7109	15	16	17	18	19	20			-2517234.700	-4198556.249	4076569.715	0.005	0.006	0.006	NOAM
40433M004	QUINCY	VLBI	7221	2	13	14						-2517230.809	-4198595.236	4076531.306	0.005	0.006	0.006	NOAM
40433M005	QUINCY	SLR	7886	16	17	19						-2517242.310	-4198550.941	4076570.330	0.006	0.006	0.006	NOAM
40434M002	MOUNT HOPKINS	SLR	7888	16	19							-1936744.237	-5077639.087	3331993.914	0.030	0.029	0.041	NOAM
40434S001	MOUNT HOPKINS	SLR	7921	16								-1936760.105	-5077707.085	3331922.573	0.068	0.090	0.076	NOAM
40436M002	SAN DIEGO	SLR	7062	16	19							-2428825.846	-4799750.514	3417272.710	0.008	0.010	0.011	PCFC
40436M003	SAN DIEGO	SLR	7035	16	17	18	19	20				-2428826.602	-4799754.345	3417267.072	0.007	0.010	0.010	PCFC
40437M001	MAMMOTH LAKES	VLBI	7259	2								-2448246.687	-4426738.325	3875435.920	0.015	0.026	0.023	NOAM
40438M001	BEAR LAKE	SLR	7082	16	19							-1735997.152	-4425048.360	4241430.521	0.021	0.020	0.022	NOAM
40438M002	BEAR LAKE	SLR	7046	16	17	18	19	20				-1736002.972	-4425049.628	4241427.149	0.013	0.014	0.013	NOAM
40439M001	OWENS VALLEY	SLR	7114	16	19							-2410422.370	-4477802.693	3838686.739	0.006	0.008	0.007	NOAM
40439M003	OWENS VALLEY	SLR	7084	16								-2410589.989	-4477745.310	3838648.799	0.240	0.302	0.321	NOAM
40439M004	OWENS VALLEY	VLBI	7853	2	16	17	18	19	20			-2410421.147	-4477800.432	3838690.357	0.006	0.007	0.007	NOAM
40439S002	OWENS VALLEY	VLBI	7207	2	4							-2409600.664	-4478349.557	3838603.242	0.005	0.006	0.006	NOAM
40439S006	OWENS VALLEY	VLBI	7616	2								-2409149.962	-4478573.331	3838617.476	0.010	0.014	0.012	NOAM
40440M001	WESTFORD	SLR	7091	16	17	18	19	20				1492453.760	-4457278.775	4296815.931	0.004	0.005	0.005	NOAM
40440S002	WESTFORD	VLBI	7205	2	4							1492404.895	-4457266.510	4296881.737	0.004	0.005	0.005	NOAM
40440S003	WESTFORD	VLBI	7209	1	2	4	5					1492206.755	-4458130.499	4296015.503	0.004	0.004	0.005	NOAM
40441S001	GREENBANK	VLBI	7204	2	4							882880.037	-4924482.305	3944130.664	0.005	0.005	0.006	NOAM
40441S004	GREENBANK	VLBI	7214	2	4	5						882325.722	-4925137.980	3943397.658	0.005	0.006	0.006	NOAM
40441S005	GREENBANK	VLBI	7248	2								883555.705	-4924490.892	3943961.948	0.007	0.010	0.009	NOAM
40442M001	FORT DAVIS	LLR	7086	6	7	8	15	16	17	18	19	-1330125.270	-5328526.639	3236150.281	0.005	0.006	0.006	NOAM
40442M005	FORT DAVIS	SLR	7885	16	19							-1330125.269	-5328526.640	3236150.281	0.006	0.007	0.007	NOAM
40442M006	FORT DAVIS	LLR	7080	6	7	8	16	17	18	19	20	-1330020.939	-5328401.845	3236480.832	0.005	0.006	0.006	NOAM
40442M008	FORT DAVIS	VLBI	7850	2								-1330008.067	-5328391.577	3236502.764	0.005	0.007	0.007	NOAM
40442M009	FORT DAVIS	VLBI	7900	2								-1324227.843	-5332063.041	3232023.068	0.005	0.006	0.006	NOAM
40442S002	FORT DAVIS	LLR	7206	6	8							-1330781.245	-5328755.584	3235697.713	0.006	0.007	0.007	NOAM
40442S003	FORT DAVIS	VLBI	7216	2	4							-1324210.870	-5332023.134	3232118.407	0.004	0.005	0.005	NOAM
40442S017	FORT DAVIS	VLBI	7613	2	4							-1324008.995	-5332181.953	3231962.513	0.005	0.006	0.006	NOAM
40445M001	MAUI	SLR	7210	15	16	17	18	19	20			-5466006.471	-2404427.980	2242187.534	0.007	0.006	0.007	PCFC
40445M002	MAUI	VLBI	7120	2	16	19						-5465998.456	-2404408.572	2242228.462	0.008	0.007	0.007	PCFC
40445S005	MAUI	LLR	7210	6	7	8						-5466006.954	-2404428.192	2242188.537	0.008	0.007	0.008	PCFC
40449M001	OCOTILLO	VLBI	7270	2								-2335601.081	-4832244.155	3434392.635	0.021	0.042	0.030	PCFC
40451M101	WASHINGTON	SLR	7101	16								1131240.360	-4831179.745	3994148.475	0.006	0.007	0.007	NOAM
40451M102	WASHINGTON	VLBI	7102	2	4	16	19					1130686.670	-4831353.026	3994110.915	0.005	0.006	0.006	NOAM
40451M103	WASHINGTON	SLR	7103	16	19							1130685.717	-4831348.701	3994116.353	0.006	0.006	0.007	NOAM
40451M104	WASHINGTON	SLR	7104	16								1131095.893	-4831196.944	3994170.742	0.006	0.007	0.007	NOAM
40451M105	WASHINGTON	SLR	7105	15	16	17	18	19	20			1130719.783	-4831350.570	3994106.514	0.005	0.006	0.006	NOAM
40451M106	WASHINGTON	SLR	7100	16								1131355.596	-4831168.341	3994131.678	0.006	0.007	0.007	NOAM
40451M108	WASHINGTON	SLR	7065	16								1130691.615	-4831350.668	3994111.586	1.107	1.107	1.107	NOAM
40451M111	WASHINGTON	SLR	7899	16	19							1131364.819	-4831168.791	3994128.926	0.006	0.006	0.007	NOAM

40451M112	WASHINGTON	SLR	7063	16	19							1130714.836	-4831367.731	3994087.389	0.006	0.006	0.007	NOAM
40451M114	WASHINGTON	SLR	7125	15	16	19						1130745.837	-4831368.024	3994077.121	0.015	0.016	0.016	NOAM
40451M116	WASHINGTON	SLR	7130	16								1130735.356	-4831324.665	3994132.367	0.111	0.211	0.183	NOAM
40451M117	WASHINGTON	SLR	7920	16	17	18	19					1130741.979	-4831369.740	3994076.123	0.013	0.013	0.014	NOAM
40451M120	WASHINGTON	SLR	7918	16	17	18	19					1130705.376	-4831345.406	3994115.974	0.012	0.012	0.013	NOAM
40451S145	WASHINGTON	SLR	7919	16								1130705.793	-4831347.372	3994117.500	1.107	1.107	1.107	NOAM
40452M001	BLOOMINGTON	VLBI	7291	2								302384.535	-4941699.043	4007908.496	0.019	0.059	0.049	NOAM
40453M001	CARROLLTON	VLBI	7228	2								453520.710	-5300506.771	3507207.443	0.016	0.057	0.036	NOAM
40454M001	LEONARD	VLBI	7292	2								-522231.499	-5145676.889	3720152.378	0.010	0.032	0.023	NOAM
40455M001	MILES CITY	VLBI	7038	2								-1204438.920	-4239211.101	4596266.090	0.016	0.050	0.050	NOAM
40456M001	PIETOWN	GPS	PIET	13								-1640916.658	-5014781.220	3575447.221	0.006	0.006	0.006	NOAM
40456S001	PIETOWN	VLBI	7234	2	4							-1640953.574	-5014816.047	3575411.968	0.005	0.005	0.006	NOAM
40457M001	SEATTLE	VLBI	7229	2								-2295347.895	-3638029.465	4693408.714	0.018	0.028	0.032	NOAM
40460M001	SCRIPPS 1	GPS	SIO1	13	14							-2455521.613	-4767213.435	3441654.953	0.012	0.013	0.011	NOAM
40460M002	SCRIPPS 2	GPS	SIO2	14								-2455539.170	-4767224.126	3441628.918	0.018	0.018	0.018	NOAM
40460M003	SCRIPPS 2 PEQ	GPS	SO2Q	14								-2455539.158	-4767224.111	3441628.936	0.018	0.018	0.018	NOAM
40463S001	LOS ALAMOS	VLBI	7611	2	4							-1449752.228	-4975298.593	3709123.985	0.006	0.006	0.006	NOAM
40464M001	CARR HIL	GPS	CARR	14								-2620446.960	-4460941.701	3718442.710	0.018	0.018	0.018	NOAM
40465S001	NORTH LIBERTY	VLBI	7612	2								-130872.096	-4762317.111	4226851.053	0.008	0.012	0.011	NOAM
40466S001	KITT PEAK	VLBI	7610	2								-1995678.500	-5037317.699	3357328.193	0.008	0.012	0.010	NOAM
40471S001	HANCOCK	VLBI	7618	2								1446375.282	-4447939.649	4322306.083	0.009	0.014	0.012	NOAM
40489S001	HAT CREEK	VLBI	7218	2	4							-2523969.852	-4123506.367	4147752.621	0.005	0.006	0.006	NOAM
40490S001	MARYLAND POINT	VLBI	7217	2	4	5						1106629.456	-4882907.184	3938086.963	0.005	0.007	0.007	NOAM
40491M002	FLAGSTAFF	SLR	7891	16	19							-1923976.656	-4850871.736	3658574.954	0.010	0.016	0.014	NOAM
40491M003	FLAGSTAFF	VLBI	7261	2								-1923992.589	-4850854.524	3658589.321	0.010	0.016	0.014	NOAM
40492M001	VERNAL	SLR	7892	16	19							-1631484.649	-4589133.898	4106749.624	0.025	0.026	0.028	NOAM
40492M002	VERNAL	VLBI	7290	2								-1631473.216	-4589128.928	4106759.908	0.009	0.014	0.012	NOAM
40493M001	YUMA	VLBI	7894	2	16	19						-2196777.838	-4887337.065	3448425.260	0.008	0.010	0.010	NOAM
40496M001	PLATTEVILLE	SLR	7112	15	16	17	18	19	20			-1240678.152	-4720463.385	4094480.641	0.005	0.006	0.006	NOAM
40496M002	PLATTEVILLE	VLBI	7258	2	4							-1240708.046	-4720454.349	4094481.666	0.005	0.006	0.006	NOAM
40497M001	MONUMENT PEAK	SLR	7110	15	16	17	18	19	20			-2386277.925	-4802354.374	3444881.470	0.005	0.006	0.006	PCFC
40497M002	MONUMENT PEAK	SLR	7220	16	19							-2386292.194	-4802347.501	3444880.874	0.006	0.007	0.007	PCFC
40497M003	MONUMENT PEAK	VLBI	7274	2	16							-2386289.320	-4802346.575	3444883.994	0.005	0.006	0.006	PCFC
40498S001	VLA	VLBI	7619	2								-1601185.174	-5041977.539	3554876.017	0.070	0.188	0.143	NOAM
40499M002	RICHMOND	GPS	7295	12	13	14	16	17	18	19		961319.033	-5674090.965	2740489.563	0.005	0.005	0.006	NOAM
40499S001	RICHMOND	VLBI	7219	1	2	4	5					961258.157	-5674090.035	2740533.774	0.005	0.005	0.006	NOAM
40504M001	MAZATLAN	SLR	7122	15	16	17	18	19	20			-1660089.293	-5619100.427	2511637.896	0.008	0.008	0.008	NOAM
40505M001	CABO SAN LUCAS	SLR	7882	16	17	18	19	20				-1997241.736	-5528041.274	2468355.286	0.012	0.013	0.013	PCFC
40506M001	ENSENADA	SLR	7883	16	17	18	19					-2406126.747	-4898368.399	3290336.591	0.017	0.015	0.017	PCFC
40701S001	SANTIAGO DE CUBA	SLR	1953	16	17	18	19					1474548.312	-5811242.290	2168944.979	0.036	0.023	0.039	NOAM
41604S001	NATAL	SLR	7929	16	19							5186467.927	-3653856.237	-654322.032	0.037	0.044	0.035	SOAM
41703M001	EASTER ISLAND	SLR	7061	19								-1884985.805	-5357607.607	-2892850.242	0.055	0.043	0.083	NAZC
41703M002	EASTER ISLAND	SLR	7097	15	16	17	18	19	20			-1884984.382	-5357608.162	-2892853.356	0.012	0.012	0.012	NAZC
41705M001	SANTIAGO	SLR	7400	15	16	17	18	19				1769699.542	-5044612.883	-3468260.029	0.010	0.011	0.009	SOAM
41705M003	SANTIAGO	GPS	SANT	10	11	12	13	14				1769693.233	-5044574.052	-3468321.175	0.009	0.010	0.008	SOAM

41705S006	SANTIAGO	VLBI	1404	1	2	4	5			1769693.000	-5044504.441	-3468435.101	0.009	0.010	0.008	SOAM
41706M001	CERRO TOLOLO	SLR	7401	15	16	17	18	19		1815517.221	-5213464.832	-3187999.325	0.011	0.011	0.011	SOAM
41709S001	SEST	VLBI	7239	2	4					1838237.884	-5258699.196	-3100588.865	0.013	0.022	0.013	SOAM
42202M003	AREQUIPA	SLR	7403	16	17	18	19	20		1942808.005	-5804069.713	-1796915.610	0.011	0.010	0.011	SOAM
42202S001	AREQUIPA	SLR	7907	15	16	17	18	19	20	1942791.984	-5804077.631	-1796919.254	0.009	0.009	0.008	SOAM
42501M001	BERMUDA	SLR	7067	16						2308538.663	-4874079.999	3393628.499	0.201	0.302	0.190	NOAM
42501M002	BERMUDA	VLBI	7294	2	4					2307209.568	-4874215.823	3394317.885	0.009	0.016	0.012	NOAM
43602M002	GRAND TURK	SLR	7068	16						1920483.036	-5619478.388	2318914.322	1.107	1.107	1.107	NOAM
50103S001	CANBERRA	VLBI	1543	3						-4460894.394	2682361.548	-3674748.775	0.010	0.011	0.011	INDI
50103S003	CANBERRA	SLR	7943	16	19					-4447548.696	2677133.974	-3694996.508	0.038	0.035	0.035	INDI
50103S005	CANBERRA	VLBI	1542	3						-4460980.822	2682413.518	-3674582.264	0.011	0.011	0.011	INDI
50103S007	CANBERRA	SLR	7843	16	17	18	19	20		-4446476.747	2678127.006	-3696251.638	0.010	0.010	0.010	INDI
50103S010	CANBERRA	VLBI	1545	2	3	4				-4460935.051	2682765.700	-3674381.594	0.010	0.010	0.010	INDI
50103S017	CANBERRA CURRENT	GPS	CANB	10	11	12	13	14		-4460995.897	2682557.157	-3674444.179	0.010	0.011	0.011	INDI
50103S020	CANBERRA 1	GPS	DS40	14						-4460987.788	2682362.761	-3674626.807	0.020	0.020	0.021	INDI
50103S021	CANBERRA 2	GPS	DS41	14						-4460979.314	2682381.166	-3674624.404	0.020	0.020	0.021	INDI
50107M001	YARRAGADEE	SLR	7090	16	17	18	19	20		-2389006.519	5043329.274	-3078525.342	0.008	0.008	0.009	INDI
50107M004	YARRAGADEE	GPS	YAR1	10	11	12	13	14		-2389025.123	5043316.805	-3078531.178	0.009	0.008	0.009	INDI
50116S002	HOBART	VLBI	7242	2	4					-3950236.334	2522347.473	-4311562.919	0.013	0.012	0.012	INDI
50116S004	HOBART	GPS	HOBA	10	12	14				-3950183.841	2522364.459	-4311588.725	0.013	0.012	0.012	INDI
50126S004	TOWNSVILLE	GPS	TOWN	10	14					-5041024.612	3296980.232	-2090553.610	0.020	0.020	0.021	INDI
50134M001	DARWIN	GPS	DARW	14						-4091358.484	4684606.882	-1408581.131	0.020	0.020	0.021	INDI
50208S002	WELLINGTON	GPS	WELL	10	14					-4780648.623	436507.100	-4185440.503	0.019	0.019	0.016	INDI
50503M001	AMERICAN SAMOA	SLR	7096	16	19					-6100045.880	-996203.210	-1568976.284	0.027	0.033	0.019	PCFC
50505M001	KWAJALEIN ATOLL	SLR	7092	16	19					-6143447.244	1364700.162	1034163.195	0.013	0.009	0.011	PCFC
50505S003	KWAJALEIN ATOLL	VLBI	4968	2	4					-6143536.478	1363997.185	1034707.435	0.012	0.008	0.011	PCFC
66001M001	MC MURDO	GPS	MCMU	10	11	12	13	14		-1310695.287	310468.933	-6213363.455	0.013	0.016	0.011	ANTA
92201M003	PAMATAI	GPS	PAMA	10	11	12	13	14		-5245194.951	-3080472.632	-1912825.660	0.013	0.016	0.010	PCFC
92202M002	HUAHINE	SLR	7121	15	16	17	18	19		-5345865.280	-2958246.681	-1824623.795	0.015	0.015	0.013	PCFC
92202M004	HUAHINE	SLR	7123	16	17	18	19	20		-5345866.754	-2958247.478	-1824624.316	0.011	0.011	0.010	PCFC
97301M210	KOUROU	GPS	KOUR	12	13					3839591.474	-5059567.510	579956.772	0.016	0.016	0.011	SOAM

(*) 1 : SSC(GIUB) 93 R 01 2 : SSC(GSFC) 93 R 04 3 : SSC(JPL) 93 R 01 4 : SSC(NOAA) 93 R 02
5 : SSC(USNO) 93 R 09 6 : SSC(JPL) 93 M 01 7 : SSC(SHA) 93 M 01 8 : SSC(UTXMO)93 M 01
9 : SSC(CODE) 92 P 01 10 : SSC(CSR) 92 P 03 11 : SSC(EMR) 93 P 01 12 : SSC(ESOC) 93 P 01
13 : SSC(JPL) 93 P 01 14 : SSC(SIO) 93 P 01 15 : SSC(CLG) 93 L 01 16 : SSC(CSR) 93 L 01
17 : SSC(DUT) 93 L 02 18 : SSC(GAOUA)93 L 01 19 : SSC(GFZ) 93 L 01 20 : SSC(GSFC) 93 L 01

Table T6

ITRF92 VELOCITY FIELD

DOMES Number	NAME		NETWORK (*) 1 2 3 4 5 6 7 8	Vx m/y	Vy m/y	Vz m/y	sVx m/y	sVy m/y	sVz m/y	Plate	(**)
10002	GRASSE	L	1 1 1 1 1	-.0179	.0185	.0018	.0012	.0012	.0014	EURA	CN
10003	TOULOUSE			-.0113	.0197	.0115				EURA	N
10004	BREST			-.0108	.0188	.0109				EURA	N
10204	HOFN			-.0119	.0147	.0075				EURA	N
10302	TROMSO	R	1 1	-.0188	.0203	.0054	.0015	.0014	.0012	EURA	CN
10317	NY-ALESUND			-.0164	.0104	.0027				EURA	N
10325	HONEFOSS			-.0157	.0160	.0073				EURA	N
10329	TRYSIL			-.0161	.0156	.0068				EURA	N
10402	ONSALA	R	1 1	-.0136	.0136	.0118	.0009	.0009	.0011	EURA	CN
10503	METSAHOVI			-.0181	.0152	.0059				EURA	N
11001	GRAZ	L	1 1 1 1	-.0190	.0176	.0094	.0015	.0014	.0016	EURA	CN
12205	BOROWIEC	L	1	-.0167	.0174	.0076	.0070	.0038	.0089	EURA	CN
12302	RIGA	L	1	-.0223	.0152	.0015	.0050	.0037	.0068	EURA	CN
12337	SIMEIS	L	1	-.0204	.0162	.0059	.0070	.0053	.0079	EURA	CN
12602	DIONYSOS	L	1 1 1 1 1	.0036	.0069	-.0114	.0029	.0030	.0030	EURA	C
12612	ASKITES	L	1 1 1 1 1	-.0181	.0230	.0069	.0030	.0030	.0031	EURA	C
12613	ROUMELLI	L	1 1 1 1 1	.0254	-.0004	-.0059	.0024	.0025	.0029	EURA	C
12614	KARITSA	L	1 1 1 1	-.0062	-.0168	.0102	.0044	.0047	.0047	EURA	C
12615	KATAVIA	L	1 1 1 1 1	.0021	.0186	-.0080	.0024	.0024	.0027	EURA	C
12616	XRISOKALARIA	L	1 1 1 1 1	.0057	-.0097	-.0118	.0025	.0025	.0029	EURA	C
12706	LAMPEDUSA	L	1 1 1 1	-.0153	.0186	.0186	.0030	.0023	.0029	AFRC	CN
12711	BOLOGNA	R	1 1	-.0184	.0189	.0102	.0012	.0010	.0015	EURA	CN
12717	NOTO	R	1 1	-.0211	.0160	.0152	.0021	.0013	.0020	AFRC	CN
12718	TRIESTE	L	1 1 1	-.0139	.0190	.0111	.0056	.0034	.0057	EURA	CN
12725	CAGLIARI	L	1 1 1 1	-.0104	.0200	.0119	.0038	.0028	.0035	EURA	CN
12734	MATERA	R L	1 1 1 1 1 1 1	-.0217	.0171	.0119	.0013	.0011	.0014	EURA	CN
12749	MONTE VENDA			-.0143	.0191	.0101				EURA	N
13201	CHILBOLTON			-.0120	.0183	.0101				EURA	N
13212	HERSTMONCEUX	L	1 1 1 1	-.0140	.0175	.0102	.0011	.0010	.0014	EURA	CN
13296	CARNUSTY			-.0127	.0171	.0090				EURA	N
13407	MADRID	R	2 1 1	-.0072	.0203	.0147	.0009	.0010	.0012	EURA	CN
13504	KOOTWIJK	L	1 1 1	-.0143	.0170	.0074	.0041	.0030	.0042	EURA	CN
14001	ZIMMERWALD	L	1 1 1 1 1	-.0164	.0197	.0101	.0018	.0017	.0019	EURA	CN
14005	MONTE GENEROSO			-.0137	.0192	.0103				EURA	N
14106	POTSDAM	L	1 1 1 1 1	-.0280	.0127	-.0113	.0033	.0027	.0034	EURA	CN

14201	WETTZELL	R	L	1		1	2		1	1	1	-.0169	.0161	.0092	.0009	.0009	.0012	EURA	CN
14202	HOHENBUNSTORF											-.0150	.0177	.0087				EURA	N
14209	EFFELSBERG	R		1		1						-.0162	.0166	.0084	.0011	.0010	.0015	EURA	CN
14213	HOHENPEISS											-.0145	.0187	.0097				EURA	N
14260	KARLSBURG											-.0158	.0173	.0082				EURA	N
14261	KIRSCHBERG											-.0156	.0179	.0087				EURA	N
20702	BAR GIYYORA		L					1		1		-.0217	.0168	.0185	.0077	.0059	.0062	AFRC	CN
20801	DIYARBAKIR		L				1	1	1	1		-.0367	.0016	.0026	.0062	.0064	.0066	EURA	C
20802	YOZGAT		L				1	1	1	1		-.0150	-.0139	.0061	.0041	.0046	.0043	EURA	C
20803	MELENGICLICK		L				1	1	1	1		-.0191	-.0120	.0016	.0033	.0033	.0038	EURA	C
20804	YIGILCA		L				1	1	1	1	1	-.0203	-.0049	.0079	.0031	.0029	.0034	EURA	C
21602	WUHAN											-.0246	-.0041	-.0108				EURA	N
21605	SHANGHAI	R	L	1		1	1	1	1	1	1	-.0276	-.0126	-.0126	.0016	.0013	.0018	EURA	CN
21611	CHANGCHUN											-.0234	-.0043	-.0106				EURA	N
21701	KASHIMA	R		1		2						-.0005	.0021	-.0120	.0014	.0011	.0017	NOAM	C
21702	MIZUSAWA											-.0145	-.0004	-.0137				NOAM	N
21704	TOKYO											-.0134	-.0003	-.0139				NOAM	N
21718	MIYAZAKI											-.0218	-.0083	-.0131				EURA	N
21725	NOBEYAMA											-.0134	-.0004	-.0137				NOAM	N
21726	SIMOSATO		L				1	1	1	1	1	.0011	.0044	-.0012	.0018	.0017	.0021	EURA	C
21729	USUDA											-.0207	-.0088	-.0132				EURA	N
21730	TSUKUBA	R		1								-.0037	.0021	-.0111	.0034	.0035	.0035	NOAM	C
21731	SHINTOTSUGAWA											-.0160	-.0006	-.0129				NOAM	N
21732	CHICHIJIMA											.0141	.0170	.0014				PHIL	N
21733	MINAMI TORI SIMA	R		1								.0432	.0580	.0212	.0019	.0027	.0027	PCFC	CN
21736	ISHIGAKI SHIMA											.0634	.0382	.0089				PCFC	N
23601	TAIPEI											-.0229	-.0072	-.0126				EURA	N
30101	HELWAN		L				1	1				-.0399	.0083	.0076	.0044	.0033	.0036	AFRC	CN
30302	JOHANNESBURG	R		1		1						-.0027	.0187	.0151	.0025	.0020	.0017	AFRC	CN
31303	MASPALOMAS											-.0033	.0195	.0162				AFRC	N
31906	AZORES											-.0036	.0150	.0127				AFRC	N
40101	ST. JOHNS											-.0182	-.0017	.0089				NOAM	N
40103	PRINCE ALB											-.0197	-.0012	-.0049				NOAM	N
40104	ALGONQUIN	R		1		1						-.0148	-.0063	.0045	.0008	.0011	.0012	NOAM	CN
40105	PENTICTON	R		1								-.0154	-.0028	-.0077	.0013	.0013	.0013	NOAM	CN
40118	WHITEHORSE	R		1								-.0120	.0043	-.0030	.0046	.0040	.0025	NOAM	C
40124	CALGARY											-.0191	-.0010	-.0072				NOAM	N
40127	YELLOWKNIFE	R				1						-.0273	-.0106	.0109	.0026	.0036	.0064	NOAM	CN
40129	VICTORIA											-.0184	-.0009	-.0097				NOAM	N
40130	HOLBERG											-.0190	-.0009	-.0103				NOAM	N
40400	PASADENA	R		1								-.0305	.0203	.0068	.0012	.0011	.0014	PCFC	C
40403	PALOS VERDES	R		1								-.0296	.0241	.0125	.0016	.0013	.0018	PCFC	C
40404	PEARBLOSSOM	R		1								-.0228	.0134	.0032	.0015	.0015	.0018	PCFC	C
40405	GOLDSTONE	R	L	3	1	2	1		1	1	1	-.0139	.0038	-.0055	.0007	.0008	.0009	NOAM	CN
40406	PRESIDIO	R		1								-.0218	.0204	.0082	.0012	.0012	.0014	PCFC	C

40407	PINYON FLATS	R		1							-.0238	.0136	.0042	.0012	.0011	.0014	PCFC	C
40408	FAIRBANKS	R		1	1						-.0206	-.0039	-.0098	.0008	.0009	.0010	NOAM	CN
40410	POINT REYES	R		1							-.0221	.0266	.0144	.0012	.0011	.0013	PCFC	C
40412	AUSTIN										-.0129	-.0007	-.0043				NOAM	N
40416	YAKATAGA	R		1							-.0087	.0277	.0055	.0020	.0021	.0014	PCFC	C
40417	PATRICK AFB										-.0122	-.0009	.0020				NOAM	N
40419	KODIAK	R		1							-.0177	.0045	-.0093	.0013	.0015	.0012	NOAM	CN
40420	VANDENBERG AFB	R		1	1						-.0281	.0302	.0177	.0010	.0013	.0013	PCFC	C
40421	NOME	R		1							-.0206	-.0057	-.0110	.0012	.0014	.0011	NOAM	CN
40423	SANDPOINT	R		1							-.0202	.0037	-.0135	.0014	.0018	.0013	NOAM	CN
40424	KAUAI	R		1	1						-.0083	.0625	.0305	.0009	.0012	.0012	PCFC	CN
40425	SOURDOUGH	R		1							-.0254	-.0009	-.0113	.0017	.0017	.0012	NOAM	CN
40427	FORT ORD	R		1							-.0264	.0315	.0186	.0013	.0013	.0015	PCFC	C
40428	SANTA PAOLA	R		1							-.0301	.0230	.0098	.0015	.0015	.0018	PCFC	C
40430	BLACK BUTTE	R		1							-.0178	.0012	-.0082	.0016	.0015	.0020	NOAM	C
40431	DEADMAN LAKE	R		1							-.0180	.0030	-.0061	.0046	.0038	.0053	NOAM	C
40432	ELY	R		1							-.0173	-.0017	-.0091	.0012	.0012	.0014	NOAM	CN
40433	QUINCY	R	L	1		1	1		2	1	-.0193	.0045	-.0052	.0008	.0009	.0010	NOAM	CN
40434	MOUNT HOPKINS										-.0134	-.0006	-.0086				NOAM	N
40436	SAN DIEGO		L			1	1			1	-.0342	.0276	.0212	.0030	.0033	.0032	PCFC	C
40437	MAMMOTH LAKES	R		1							-.0219	.0078	-.0036	.0023	.0027	.0030	NOAM	C
40438	BEAR LAKE		L				1		1	1	-.0154	.0013	-.0121	.0025	.0029	.0028	NOAM	CN
40439	OWENS VALLEY	R	L	1	1	1	1		1	1	-.0168	.0044	-.0058	.0008	.0012	.0012	NOAM	CN
40440	WESTFORD	R	L	1	2	1		1	1	1	-.0139	-.0040	.0055	.0007	.0008	.0010	NOAM	CN
40441	GREENBANK	R		2	2						-.0144	-.0034	.0027	.0007	.0009	.0010	NOAM	CN
40442	FORT DAVIS	R	L	3	1	2	1		2	1	-.0106	.0005	-.0081	.0007	.0008	.0009	NOAM	CN
40445	MAUI	R	L	1		1		1	1	1	-.0123	.0604	.0304	.0009	.0011	.0011	PCFC	CN
40449	OCOTILLO										-.0330	.0298	.0195				PCFC	N
40451	WASHINGTON	R	L	1	1	1		1	1	1	-.0131	-.0036	.0035	.0009	.0008	.0010	NOAM	CN
40452	BLOOMINGTON										-.0159	-.0011	-.0002				NOAM	N
40453	CARROLLTON										-.0141	-.0010	.0003				NOAM	N
40454	LEONARD										-.0148	-.0009	-.0033				NOAM	N
40455	MILES CITY										-.0180	-.0010	-.0057				NOAM	N
40456	PIETOWN	R		1	1						-.0112	.0077	-.0155	.0010	.0015	.0014	NOAM	CN
40457	SEATTLE	R		1							-.0165	-.0022	-.0089	.0020	.0019	.0018	NOAM	CN
40460	LA JOLLA										-.0137	-.0005	-.0105				NOAM	N
40463	LOS ALAMOS	R			1						-.0094	.0087	-.0128	.0015	.0025	.0024	NOAM	CN
40464	CARR HIL										-.0147	-.0006	-.0110				NOAM	N
40465	NORTH LIBE										-.0167	-.0011	-.0018				NOAM	N
40466	KITT PEAK										-.0135	-.0006	-.0088				NOAM	N
40471	HANCOCK										-.0170	-.0014	.0043				NOAM	N
40489	HAT CREEK	R		1	1						-.0168	.0060	-.0093	.0009	.0012	.0013	NOAM	CN
40490	MARYLAND POINT	R		1	1						-.0139	-.0016	.0016	.0010	.0024	.0021	NOAM	CN
40491	FLAGSTAFF	R		1							-.0137	-.0024	-.0082	.0013	.0012	.0015	NOAM	CN
40492	VERNAL	R		1							-.0134	-.0035	-.0071	.0014	.0014	.0015	NOAM	CN

40493	YUMA	R		1							-.0129	-.0021	-.0092	.0011	.0012	.0014	NOAM	CN
40496	PLATTEVILLE	R	L	1		1	1		1	1	-.0143	-.0034	-.0061	.0009	.0009	.0010	NOAM	CN
40497	MONUMENT PEAK	R	L	1			1	1	1	1	-.0332	.0241	.0117	.0009	.0008	.0010	PCFC	C
40498	VLA										-.0142	-.0007	-.0074				NOAM	N
40499	RICHMOND	R	L	1		1	1	1	1		-.0079	-.0036	.0029	.0008	.0009	.0011	NOAM	CN
40504	MAZATLAN		L				1		1	1	-.0122	-.0096	-.0048	.0014	.0016	.0014	NOAM	CN
40505	CABO SAN LUCAS		L				1		1	1	-.0456	.0305	.0153	.0036	.0073	.0039	PCFC	CN
40506	ENSENADA		L				1	1	1		-.0342	.0252	.0211	.0031	.0038	.0036	PCFC	CN
40701	SANTIAGO DE CUBA		L					1			-.0092	.0009	.0031	.0041	.0098	.0048	NOAM	CN
41604	NATAL										-.0023	-.0054	.0122				SOAM	N
41703	EASTER ISLAND		L				1		1	1	.0736	-.0170	-.0051	.0025	.0037	.0026	NAZC	CN
41705	SANTIAGO										.0009	-.0054	.0083				SOAM	N
41706	CERRO TOLOLO		L				1	1	1	1	.0209	.0075	.0195	.0027	.0025	.0024	SOAM	C
41709	SEST										.0001	-.0051	.0086				SOAM	N
42202	AREQUIPA		L				2	1	1	1	.0121	.0113	.0147	.0017	.0017	.0015	SOAM	C
42501	BERMUDA										-.0136	-.0013	.0074				NOAM	N
43602	GRAND TURK										-.0096	-.0009	.0057				NOAM	N
50103	CANBERRA	R	L	1	1	1	1			1	-.0393	.0043	.0418	.0022	.0018	.0017	AUST	CN
50107	YARRAGADEE		L				1		1	1	-.0451	.0078	.0528	.0018	.0016	.0016	AUST	CN
50116	HOBART	R		1		1					-.0426	.0140	.0400	.0027	.0024	.0023	AUST	CN
50126	TOWNSVILLE										-.0329	-.0160	.0540				AUST	N
50134	DARWIN										-.0383	-.0153	.0603				AUST	N
50208	WELLINGTON										-.0253	.0029	.0292				AUST	N
50503	AMERICAN SAMOA										-.0183	.0611	.0325				PCFC	N
50505	KWAJALEIN ATOLL	R		1		1					.0228	.0657	.0263	.0012	.0017	.0021	PCFC	CN
66001	MC MURDO										.0098	-.0104	-.0026				ANTA	N
92201	PAMATAI										-.0418	.0517	.0314				PCFC	N
92202	HUAHINE		L				1		1	1	-.0378	.0523	.0295	.0049	.0033	.0026	PCFC	CN
97301	KOUROU										-.0055	-.0029	.0116				SOAM	N

(*) 1 : GSFC 93 R 04 2 : JPL 93 R 01 3 : NOAA 93 R 02 4 : CSR 93 L 01
5 : DUT 93 L 02 6 : GAOUA 93 L 01 7 : GFZ 93 L 01 8 : GSFC 93 L 01
The number indicates how many station velocities were estimated in each site

(**) N NNR-NUVEL1 Velocities
CN ITRF92 velocity field (combined solution from SLR and VLBI estimates with NNR-NUVEL1)
C ITRF92 velocity field (combined solution from SLR and VLBI estimates with NNR-NUVEL1 deweigted)

Table T7

TRANSFORMATION PARAMETERS FROM ITRF92 TO INDIVIDUAL FRAMES
AT EPOCH 1988.0 (To be used with the formula below)

SOLUTION		T1 cm	T2 cm	T3 cm	D (10**-8)	R1 .001"	R2 .001"	R3 .001"
VERY LONG BASELINE INTERFEROMETRY								
SSC(GIUB)	93 R 01	3.0	3.2	1.8	0.00	-0.68	-0.08	-1.75
		0.8	0.7	0.8	0.09	0.29	0.33	0.25
SSC(GSFC)	93 R 04	1.2	1.9	-0.4	0.02	1.38	-0.45	-3.52
		0.5	0.5	0.5	0.07	0.21	0.20	0.15
SSC(JPL)	93 R 01	0.1	1.5	-1.3	0.15	-0.18	0.56	0.24
		1.2	1.0	1.3	0.17	0.48	0.57	0.51
SSC(NOAA)	93 R 02	0.3	2.3	-1.0	0.32	0.18	-0.07	1.06
		0.5	0.5	0.5	0.07	0.21	0.20	0.15
SSC(USNO)	93 R 09	7.6	2.5	-2.2	0.06	-0.17	-0.34	-2.12
		0.6	0.6	0.6	0.08	0.25	0.23	0.18
LUNAR LASER RANGING								
SSC(JPL)	93 M 01	-4.6	0.5	-2.6	-1.66	-0.16	0.57	-41.34
		2.9	3.3	3.1	0.38	1.53	1.12	0.83
SSC(SHA)	93 M 01	-15.4	2.0	3.8	-2.49	3.08	2.82	2.01
		3.5	4.0	3.6	0.45	1.94	1.32	0.99
SSC(UTXMO)	93 M 01	-2.6	0.8	11.8	-3.06	-4.55	1.53	55.23
		3.4	3.8	3.6	0.44	1.78	1.30	0.96
GLOBAL POSITIONING SYSTEM								
SSC(CODE)	92 P 01	-3.7	6.2	2.6	0.19	0.65	1.72	-1.96
		1.4	2.5	1.4	0.20	0.73	0.51	0.60
SSC(CSR)	92 P 03	0.7	2.4	-1.5	0.53	0.23	0.08	0.48
		0.6	0.8	0.6	0.09	0.32	0.24	0.21
SSC(EMR)	93 P 01	1.5	0.8	0.9	-0.04	0.18	0.35	0.16
		0.5	0.6	0.5	0.08	0.23	0.21	0.18
SSC(ESOC)	93 P 01	5.4	0.4	-6.5	0.48	-1.10	-2.00	-0.69
		1.2	1.2	1.0	0.15	0.47	0.43	0.36
SSC(JPL)	93 P 01	2.1	1.0	-0.9	-0.10	-0.21	-0.01	0.13
		0.5	0.5	0.5	0.07	0.22	0.20	0.18
SSC(SIO)	93 P 01	0.0	3.8	0.1	0.29	0.78	0.33	0.41
		0.7	0.7	0.6	0.09	0.28	0.26	0.21

SATELLITE LASER RANGING

SSC(CLG)	93 L 01	11.5	8.9	1.0	0.17	4.06	-4.79	-0.96
		1.6	1.4	1.5	0.20	0.66	0.66	0.48
SSC(CSR)	93 L 01	0.0	0.0	0.0	0.00	-0.47	0.74	-1.41
SSC(DUT)	93 L 02	2.4	1.7	0.4	0.03	0.24	0.35	-0.32
		0.5	0.5	0.5	0.07	0.20	0.20	0.15
SSC(GAOUA)	93 L 01	-0.9	0.4	9.7	1.10	2.54	1.88	0.23
		0.7	0.7	0.7	0.09	0.29	0.29	0.22
SSC(GFZ)	93 L 01	1.8	0.9	2.7	0.17	0.19	-0.05	-0.38
		0.5	0.5	0.5	0.07	0.20	0.20	0.16
SSC(GSFC)	93 L 01	2.4	-2.1	-0.5	-0.43	-0.78	2.75	-2.81
		0.6	0.6	0.6	0.08	0.23	0.22	0.20

$$\begin{pmatrix} XS \\ YS \\ ZS \end{pmatrix} = \begin{pmatrix} X \\ Y \\ Z \end{pmatrix} + \begin{pmatrix} T1 \\ T2 \\ T3 \end{pmatrix} + \begin{pmatrix} D & -R3 & R2 \\ R3 & D & -R1 \\ -R2 & R1 & D \end{pmatrix} \begin{pmatrix} X \\ Y \\ Z \end{pmatrix}$$

WHERE X,Y,Z ARE THE COORDINATES IN THE GLOBAL SYSTEM, AND XS,YS,ZS ARE THE COORDINATES IN THE INDIVIDUAL SYSTEM.

Table T8

RATE OF CHANGE OF THE TRANSFORMATION PARAMETERS

SOLUTION	Tx	Ty	Tz	Rx	Ry	Rz
	-------	mm/y	-------	------	0.001"/y	------
NNR-NUVEL1	0.0	0.0	0.0	.000	.000	.000
VERY LONG BASELINE INTERFEROMETRY						
SSC(GSFC) 93 R 04	-3.2	2.7	-0.4	.005	.046	-.024
	1.0	1.0	0.8	.035	.033	.026
SSC(JPL) 93 R 01	-2.1	-1.8	-2.2	-.088	.099	.019
	2.0	1.6	1.9	.068	.082	.071
SSC(NOAA) 93 R 02	-2.8	2.7	-1.2	-.025	.065	.006
	1.1	1.0	0.8	.038	.036	.028
SATELLITE LASER RANGING						
SSC(GAOUA) 93 L 01	-1.9	-1.6	-2.9	-.121	.431	-.040
	1.4	1.3	1.2	.053	.051	.044
SSC(DUT) 93 L 02	2.4	4.1	0.7	.094	.016	-.008
	1.5	1.3	1.2	.055	.056	.039
SSC(GFZ) 93 L 01	-1.3	1.5	-1.1	-.054	.048	-.108
	1.2	1.1	1.0	.043	.041	.035
SSC(CSR) 93 L 01	-0.8	-1.0	0.2	-.072	.012	-.035
	1.1	1.1	0.9	.038	.035	.030
SSC(GSFC) 93 L 01	-0.8	-0.4	0.1	-.036	-.018	-.071
	1.2	1.2	1.0	.041	.039	.034

Table T9

RESIDUALS AND STATISTICS OF THE ITRF92 STATION COORDINATES COMBINATION

SITE NAME: GRASSE

DOMES NUMBER	CDP NUM.	*	RX m	RY m	RZ m	NX	NY	NZ	RE m	RN m	RU m
10002M003	7605	RN	-0.002	0.006	-0.039	-0.2	1.5	-3.3	0.006	-0.028	-0.028
10002M003	7605	RG	0.008	0.006	-0.034	0.8	1.0	-2.8	0.005	-0.030	-0.017
10002M003	7605	GA	-0.001	-0.005	0.005	-0.2	-1.6	1.5	-0.001	0.006	0.004
10002S001	7835	GA	0.000	0.001	-0.001	0.1	0.5	-0.5	0.000	0.000	0.000
10002S001	7835	LL	-0.019	-0.045	-0.044	-0.5	-1.2	-1.3	-0.042	-0.015	-0.048
10002S001	7835	LU	-0.005	-0.028	0.036	-0.4	-2.5	2.8	-0.027	0.032	0.019
10002S001	7835	LZ	0.006	-0.018	0.034	0.4	-1.2	2.2	-0.019	0.022	0.026
10002S001	7835	LC	0.001	-0.020	0.024	0.1	-1.5	1.7	-0.019	0.018	0.015
10002S001	7835	LK	-0.001	-0.023	0.025	-0.1	-0.9	1.0	-0.023	0.021	0.014
10002S001	7835	LG	-0.008	-0.003	0.004	-0.6	-0.2	0.3	-0.002	0.009	-0.003
10002S002	7845	MS	-0.016	-0.043	-0.002	-0.5	-1.2	-0.1	-0.041	0.013	-0.017
10002S002	7845	MJ	0.019	0.002	0.004	0.6	0.1	0.1	0.000	-0.010	0.017
10002S002	7845	MX	0.009	-0.005	0.002	0.3	-0.1	0.1	-0.006	-0.004	0.007
10002S002	7845	GA	0.000	0.000	0.000	0.0	0.1	0.0	0.000	0.000	0.000
				0.019			1.4			0.019	0.020

TOULOUSE

10003M003	7608	RG	0.004	0.002	-0.001	0.2	0.3	-0.1	0.002	-0.004	0.002
10003M003	7608	RN	-0.004	-0.002	0.001	-0.2	-0.3	0.1	-0.001	0.003	-0.002
				0.003			0.2			0.003	0.002

BREST

10004M002	7604	RN	-0.002	0.001	0.001	-0.1	0.1	0.0	0.001	0.002	-0.001
10004M002	7604	RG	0.002	-0.001	-0.001	0.1	-0.1	-0.1	-0.001	-0.002	0.001
				0.001			0.1			0.002	0.001

HOFN

10204M001	7635	RG	0.005	0.003	0.002	0.3	0.4	0.1	0.004	-0.002	0.004
10204M001	7635	RN	-0.004	-0.002	-0.002	-0.3	-0.3	-0.1	-0.003	0.002	-0.003
				0.003			0.3			0.003	0.004

(*)

RF: SSC(GIUB) 93 R 01 RG: SSC(GSFC) 93 R 04 RJ: SSC(JPL) 93 R 01

RN: SSC(NOAA) 93 R 02 RO: SSC(USNO) 93 R 09 MJ: SSC(JPL) 93 M 01

MS: SSC(SHA) 93 M 01 MX: SSC(UTXMO) 93 M 01 PB: SSC(CODE) 92 P 01

PC: SSC(CSR) 92 P 03 PE: SSC(EMR) 93 P 01 PA: SSC(ESOC) 93 P 01

PJ: SSC(JPL) 93 P 01 PP: SSC(SIO) 93 P 01 LL: SSC(CLG) 93 L 01

LC: SSC(CSR) 93 L 01 LU: SSC(DUT) 93 L 02 LK: SSC(GAOUA) 93 L 01

LZ: SSC(GFZ) 93 L 01 LG: SSC(GSFC) 93 L 01 GA: LOCAL TIE SET A

GB: LOCAL TIE SET B GC: LOCAL TIE SET C GD: LOCAL TIE SET D

TROMSO

10302M002	7602	LZ	0.031	0.000	0.006	0.5	0.0	0.3	-0.010	-0.025	0.016
10302M002	7602	LK	-0.016	0.051	-0.058	-0.5	1.7	-2.1	0.053	-0.021	-0.054
10302M002	7602	GA	0.000	0.000	0.000	0.1	0.1	-0.1	0.000	0.000	0.000
10302M002	7602	RG	-0.005	-0.006	0.001	-0.5	-0.8	0.0	-0.004	0.006	-0.002
10302M002	7602	LC	0.002	0.001	-0.018	0.1	0.0	-0.5	0.000	-0.008	-0.016
10302M002	7602	LU	0.003	-0.006	0.003	0.1	-0.2	0.1	-0.006	0.000	0.003
10302M002	7602	PB	-0.001	-0.001	0.010	-0.1	-0.1	1.3	0.000	0.005	0.009
10302M002	7602	RN	-0.003	-0.004	0.004	-0.2	-0.5	0.2	-0.003	0.005	0.003
10302M003	TROM	GA	-0.001	-0.001	0.001	-0.3	-0.3	0.3	-0.001	0.001	0.000
10302M003	TROM	PE	0.000	0.001	0.000	0.1	0.1	0.0	0.000	-0.001	0.000
10302M003	TROM	PA	0.028	0.004	-0.037	1.4	0.2	-1.0	-0.005	-0.039	-0.025
10302M003	TROM	PJ	0.002	0.001	0.002	0.2	0.1	0.5	0.000	-0.002	0.003
10302M003	TROM	PP	-0.005	0.017	-0.039	-0.4	1.1	-2.6	0.018	-0.014	-0.036
				0.017			0.9			0.016	0.020

NY-ALESUND

10317M001	NYAL	PB	-0.008	0.000	-0.010	-1.0	0.0	-1.3	0.002	0.005	-0.011
10317M001	NYAL	PJ	0.003	0.008	0.007	0.3	1.1	1.2	0.007	-0.003	0.008
10317M001	NYAL	PA	0.056	0.013	0.037	1.1	0.3	0.4	0.001	-0.049	0.047
10317M001	NYAL	PC	0.004	-0.011	-0.006	0.6	-1.4	-0.3	-0.012	-0.003	-0.005
10317M001	NYAL	PP	-0.006	0.020	-0.068	-0.1	0.4	-1.4	0.021	-0.012	-0.067
				0.026			1.0			0.018	0.037

TRYSIL

10329M001	7607	RN	0.000	-0.001	0.005	0.0	-0.1	0.5	-0.001	0.002	0.004
10329M001	7607	RG	0.000	0.001	-0.008	0.0	0.1	-0.7	0.001	-0.004	-0.007
				0.004			0.4			0.002	0.006

ONSALA

10402M004	ONSA	PJ	0.000	-0.001	0.000	0.0	-0.1	-0.1	-0.001	0.000	0.000
10402M004	ONSA	PC	-0.012	-0.002	-0.014	-1.5	-0.2	-1.7	0.001	0.002	-0.018
10402M004	ONSA	PA	0.025	0.010	0.010	1.1	0.6	0.3	0.005	-0.017	0.023
10402M004	ONSA	PP	0.000	0.008	-0.011	0.0	0.5	-0.7	0.007	-0.007	-0.008
10402M004	ONSA	GA	0.001	0.000	0.003	0.4	-0.1	0.8	0.000	0.003	0.000
10402S002	7213	RN	0.000	0.001	0.004	0.0	0.3	0.9	0.001	0.002	0.003
10402S002	7213	RG	0.002	-0.002	0.003	0.4	-0.4	0.4	-0.002	0.000	0.003
10402S002	7213	GA	0.000	0.000	0.000	-0.1	0.0	-0.3	0.000	0.000	0.000
10402S002	7213	PB	0.003	-0.002	-0.001	0.3	-0.3	-0.1	-0.003	-0.002	0.001
				0.007			0.7			0.005	0.010

METSAHOVI

10503M002	7601	RG	0.002	-0.005	-0.031	0.2	-0.6	-1.6	-0.005	-0.015	-0.027
10503M002	7601	RN	0.000	-0.002	-0.023	0.0	-0.3	-1.8	-0.001	-0.011	-0.021
10503M002	7601	GA	0.000	0.000	0.000	0.0	0.0	0.1	0.000	0.000	0.000
10503M002	7601	PB	-0.001	0.005	0.008	-0.1	0.6	0.9	0.005	0.003	0.007
10503S001	7805	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
10503S001	7805	LZ	0.357	-0.559	0.685	0.5	-0.7	0.9	-0.656	0.260	0.641
10503S001	7805	LC	0.373	-0.595	0.626	0.7	-1.2	1.3	-0.696	0.231	0.589
10503S001	7805	LK	0.401	-0.292	0.348	1.0	-0.7	0.9	-0.431	-0.038	0.424
10503S011	METS	PJ	0.002	0.002	0.005	0.2	0.3	1.0	0.001	0.000	0.006
10503S011	METS	PP	0.000	0.014	-0.013	0.0	0.9	-0.9	0.013	-0.011	-0.009
10503S011	METS	GA	0.000	-0.001	-0.002	0.0	-0.2	-0.4	-0.001	-0.002	0.000
10503S011	METS	PA	-0.008	-0.016	-0.054	-0.4	-0.9	-1.6	-0.011	-0.015	-0.053
				0.245			0.9			0.226	0.280

GRAZ

11001M002	GRAZ	GA	-0.001	0.001	-0.002	-0.3	0.3	-0.5	0.001	-0.001	0.001
11001M002	GRAZ	PP	0.007	-0.010	0.012	0.5	-0.6	0.8	-0.011	0.005	0.011
11001M002	GRAZ	PJ	0.002	-0.003	0.003	0.2	-0.3	0.6	-0.004	0.001	0.003
11001M002	GRAZ	PA	0.050	-0.013	-0.006	1.7	-0.7	-0.2	-0.026	-0.037	0.026
11001S002	7839	GA	0.000	0.000	0.000	0.1	-0.1	0.2	0.000	0.000	0.000
11001S002	7839	LZ	-0.003	0.016	-0.007	-0.2	1.0	-0.4	0.016	-0.006	-0.004
11001S002	7839	LC	0.002	0.017	0.010	0.1	1.3	0.6	0.016	0.002	0.011
11001S002	7839	LL	-0.082	-0.049	-0.088	-2.2	-1.3	-2.4	-0.025	0.007	-0.127
11001S002	7839	LU	-0.004	0.003	-0.004	-0.3	0.2	-0.3	0.004	-0.001	-0.005
11001S002	7839	PB	0.002	-0.004	-0.005	0.2	-0.5	-0.6	-0.004	-0.004	-0.003
11001S002	7839	LG	-0.015	0.008	-0.004	-1.0	0.5	-0.2	0.012	0.007	-0.011
11001S002	7839	LK	-0.001	0.001	-0.006	-0.1	0.0	-0.2	0.001	-0.003	-0.005
				0.024			0.9			0.012	0.038

BOROWIEC

12205S001	7811	LC	-0.079	-0.008	-0.241	-0.9	-0.1	-2.2	0.016	-0.087	-0.238
12205S001	7811	LZ	0.064	0.005	0.029	1.1	0.1	1.5	-0.014	-0.032	0.062
12205S001	7811	LU	-0.011	0.085	0.005	0.0	0.2	0.0	0.085	-0.008	0.012
12205S001	7811	LK	-0.053	0.001	-0.199	-0.7	0.0	-3.3	0.017	-0.083	-0.188
				0.100			1.5			0.054	0.155

RIGA

12302M001	7560	LZ	-0.020	0.006	0.003	-0.1	0.1	0.1	0.013	0.015	-0.006
12302M001	7560	LK	-0.006	-0.020	-0.023	0.0	-0.1	-0.1	-0.016	-0.001	-0.027
12302M001	7560	LC	0.039	-0.007	0.011	0.5	-0.2	0.1	-0.022	-0.022	0.027
12302M001	7560	LU	-0.090	0.023	-0.025	-0.7	0.2	-0.3	0.057	0.048	-0.061
12302S002	1884	LC	-0.028	0.001	-0.054	-0.5	0.0	-0.7	0.013	-0.009	-0.059
12302S002	1884	LK	0.051	0.028	0.239	0.5	0.3	2.3	0.005	0.082	0.232
12302S002	1884	LZ	0.020	-0.008	0.001	0.5	-0.2	0.0	-0.016	-0.012	0.010
12302S002	1884	LU	-0.071	0.031	-0.062	-0.8	0.4	-1.0	0.057	0.009	-0.081
				0.060			0.7			0.033	0.093

KATZIVELY

12337M001	7561	LU	-0.092	-0.154	0.017	-0.3	-0.5	0.1	-0.076	0.125	-0.105
12337M001	7561	LC	-0.005	-0.002	-0.039	-0.1	-0.1	-1.0	0.001	-0.024	-0.031
12337M001	7561	LZ	-0.004	0.014	-0.009	-0.2	0.6	-0.5	0.014	-0.010	-0.003
12337M001	7561	LK	0.010	-0.017	0.039	0.3	-0.6	1.4	-0.020	0.029	0.026
12337S003	1873	LU	-0.107	-0.176	0.043	-0.4	-0.7	0.2	-0.086	0.161	-0.104
12337S003	1873	LC	0.057	0.022	-0.009	0.6	0.3	-0.1	-0.013	-0.048	0.037
12337S003	1873	LZ	-0.022	-0.003	-0.002	-0.4	-0.1	-0.1	0.010	0.013	-0.015
12337S003	1873	LK	0.104	0.021	0.030	0.6	0.1	0.2	-0.040	-0.047	0.091
12337S006	1893	LZ	-0.065	-0.054	-0.046	-1.0	-1.0	-1.6	-0.008	0.026	-0.092
12337S006	1893	LK	0.010	-0.039	0.291	0.1	-0.5	2.8	-0.038	0.218	0.193
12337S006	1893	LU	0.170	0.192	0.207	0.8	0.9	1.5	0.064	-0.025	0.322
12337S006	1893	LC	0.097	0.087	0.224	1.0	1.4	2.1	0.017	0.070	0.249
				0.101			1.1			0.072	0.143

DIONYSOS

12602M002	7515	LU	0.008	0.000	-0.004	0.6	0.0	-0.2	-0.003	-0.008	0.004
12602M002	7515	LK	-0.005	0.011	0.003	-0.2	0.4	0.1	0.012	0.002	0.002
12602M002	7515	LC	-0.008	-0.006	0.001	-0.5	-0.4	0.0	-0.002	0.007	-0.007
12602M002	7515	LZ	-0.011	0.011	0.007	-0.6	0.6	0.4	0.015	0.009	0.000
12602M002	7515	LG	0.020	-0.016	-0.013	0.7	-0.5	-0.5	-0.023	-0.017	0.002
12602S001	7940	LK	-0.025	-0.004	0.001	-0.1	0.0	0.0	0.007	0.016	-0.019
12602S001	7940	LC	0.117	0.115	-0.087	0.1	0.1	-0.1	0.057	-0.163	0.068
				0.042			0.4			0.047	0.027

ASKITES

12612M001	7510	LG	-0.013	0.014	0.006	-0.4	0.4	0.2	0.018	0.008	0.000
12612M001	7510	LU	0.008	0.002	-0.008	0.5	0.1	-0.4	-0.002	-0.011	0.001
12612M001	7510	LK	-0.005	-0.012	0.012	-0.2	-0.5	0.5	-0.009	0.015	0.000
12612M001	7510	LC	-0.008	-0.003	-0.003	-0.4	-0.2	-0.1	0.001	0.003	-0.008
12612M001	7510	LZ	0.005	0.002	0.001	0.2	0.1	0.0	0.000	-0.003	0.004
				0.008			0.4			0.009	0.004

ROUMELLI

12613M001	7517	LG	0.037	-0.030	-0.012	1.4	-1.0	-0.5	-0.043	-0.022	0.011
12613M001	7517	LC	0.001	-0.002	0.011	0.1	-0.1	0.5	-0.002	0.009	0.007
12613M001	7517	LZ	-0.018	0.018	0.001	-1.0	0.9	0.1	0.024	0.006	-0.007
12613M001	7517	LU	0.003	-0.002	-0.008	0.2	-0.2	-0.5	-0.003	-0.007	-0.004
12613M001	7517	LK	-0.012	0.007	0.009	-0.5	0.3	0.3	0.011	0.012	-0.002
				0.015			0.8			0.018	0.007

KARITSA

12614M001	7520	LL	0.085	0.036	0.048	0.9	0.3	0.5	0.004	-0.022	0.101
12614M001	7520	LK	0.043	0.014	-0.005	1.6	0.5	-0.2	-0.002	-0.033	0.032
12614M001	7520	LU	-0.017	0.001	0.003	-0.9	0.1	0.1	0.007	0.012	-0.010
12614M001	7520	LC	-0.027	-0.009	-0.023	-1.0	-0.5	-0.8	0.001	0.000	-0.037
12614M001	7520	LZ	0.010	0.002	0.005	0.4	0.1	0.3	-0.002	-0.003	0.011
				0.031			0.8			0.013	0.051

KATAVIA

12615M001	7512	LG	0.010	-0.003	0.002	0.3	-0.1	0.1	-0.007	-0.002	0.007
12615M001	7512	LK	0.006	-0.006	0.010	0.2	-0.2	0.4	-0.008	0.006	0.008
12615M001	7512	LL	0.086	-0.030	0.050	1.8	-0.6	1.0	-0.067	0.004	0.080
12615M001	7512	LU	0.010	0.005	-0.007	0.6	0.3	-0.3	0.000	-0.012	0.005
12615M001	7512	LZ	-0.024	0.000	-0.007	-1.3	0.0	-0.4	0.011	0.007	-0.021
12615M001	7512	LC	-0.009	0.001	0.002	-0.5	0.0	0.1	0.005	0.007	-0.005
				0.026			0.8			0.021	0.034

XRISOKALARIA

12616M001	7525	LU	0.009	-0.001	-0.007	0.6	-0.1	-0.3	-0.004	-0.010	0.002
12616M001	7525	LG	0.018	-0.043	-0.025	0.5	-1.2	-0.8	-0.047	-0.021	-0.015
12616M001	7525	LC	-0.013	-0.001	-0.004	-0.7	0.0	-0.2	0.004	0.004	-0.012
12616M001	7525	LK	-0.008	0.007	0.022	-0.3	0.3	0.8	0.010	0.020	0.009
12616M001	7525	LZ	-0.004	0.014	0.005	-0.2	0.6	0.3	0.014	0.003	0.004
				0.016			0.6			0.019	0.010

LAMPEDUSA

12706M001	7544	LC	-0.019	-0.004	-0.009	-0.9	-0.3	-0.4	0.000	0.004	-0.021
12706M001	7544	LZ	0.005	0.015	0.003	0.2	0.5	0.2	0.013	-0.002	0.008
12706M001	7544	LK	0.035	0.004	-0.017	1.2	0.1	-0.6	-0.004	-0.034	0.018
12706M001	7544	LU	-0.007	-0.001	-0.005	-0.4	0.0	-0.2	0.001	0.001	-0.009
12706M001	7544	LL	0.072	-0.036	0.071	1.1	-0.5	0.9	-0.051	0.022	0.092
12706M001	7544	LG	-0.002	0.011	0.035	-0.1	0.2	0.9	0.012	0.028	0.020
				0.029			0.7			0.021	0.040

BOLOGNA

12711M002	7546	LU	0.029	-0.101	0.026	0.6	-1.0	0.4	-0.105	0.013	0.024
12711M002	7546	LC	0.046	-0.115	-0.003	0.4	-2.0	0.0	-0.122	-0.017	0.013
12711M002	7546	LZ	0.006	-0.136	0.033	0.1	-1.3	1.5	-0.135	0.039	0.007
12711M002	7546	GA	0.000	0.000	0.000	0.0	0.1	-0.1	0.000	0.000	0.000
12711M002	7546	LK	0.034	-0.247	-0.006	0.9	-2.4	-0.2	-0.249	0.008	-0.016

12711S001	7230	GA	0.000	0.000	0.002	0.0	-0.1	0.3	0.000	0.001	0.001
12711S001	7230	RO	0.049	-0.029	0.057	1.5	-1.1	1.2	-0.038	0.011	0.070
12711S001	7230	RN	-0.003	0.001	-0.004	-0.8	0.3	-0.7	0.002	-0.001	-0.005
12711S001	7230	RG	0.006	0.002	0.002	0.8	0.3	0.2	0.000	-0.003	0.005
				0.065			1.1			0.078	0.026

NOTO

12717M001	7543	GA	0.000	0.000	0.000	-0.1	-0.1	0.2	0.000	0.000	0.000
12717M001	7543	LC	0.008	0.013	-0.019	0.3	0.7	-0.6	0.010	-0.022	-0.002
12717M001	7543	LU	0.017	0.009	-0.024	0.6	0.3	-0.7	0.005	-0.031	0.001
12717M001	7543	LK	0.026	0.026	-0.018	0.9	0.8	-0.6	0.018	-0.034	0.014
12717M001	7543	LZ	0.041	0.045	-0.025	1.5	1.5	-1.6	0.033	-0.051	0.026
12717S001	7547	GA	0.001	0.001	-0.001	0.3	0.4	-0.5	0.000	-0.001	0.002
12717S001	7547	RO	0.013	-0.002	-0.004	1.0	-0.3	-0.3	-0.005	-0.010	0.007
12717S001	7547	RF	0.005	-0.001	-0.003	0.7	-0.2	-0.5	-0.002	-0.005	0.002
12717S001	7547	RG	-0.010	-0.002	0.015	-1.1	-0.3	1.5	0.001	0.018	0.001
12717S001	7547	RN	-0.013	0.001	0.010	-1.5	0.2	1.1	0.004	0.015	-0.005
				0.017			0.9			0.019	0.010

TRIESTE

12718M002	7550	LZ	0.016	0.046	0.001	0.2	0.6	0.1	0.041	-0.018	0.019
12718M002	7550	LK	0.020	-0.024	0.001	0.6	-0.7	0.0	-0.028	-0.009	0.011
12718M002	7550	LC	-0.016	0.006	-0.011	-0.2	0.2	-0.2	0.009	0.002	-0.017
12718M002	7550	LU	-0.024	0.011	-0.008	-0.7	0.3	-0.2	0.017	0.009	-0.020
12718M002	7550	LL	0.001	0.038	0.032	0.0	0.4	0.4	0.037	0.015	0.030
				0.022			0.5			0.022	0.020

CAGLIARI

12725M002	7545	LZ	-0.005	0.006	0.001	-0.2	0.2	0.0	0.006	0.003	-0.003
12725M002	7545	LC	0.000	-0.015	-0.007	0.0	-0.9	-0.3	-0.014	-0.004	-0.006
12725M002	7545	LU	0.000	0.007	0.007	0.0	0.3	0.3	0.007	0.005	0.005
12725M002	7545	LK	0.004	0.023	-0.004	0.2	0.9	-0.1	0.022	-0.008	0.004
12725M002	7545	LL	0.078	0.083	0.076	0.6	0.4	0.6	0.070	0.003	0.118
				0.036			0.5			0.024	0.053

MATERA

12734M004	7541	LU	-0.003	0.014	0.017	-0.1	0.7	0.6	0.015	0.012	0.012
12734M004	7541	LC	-0.018	-0.003	0.010	-0.5	-0.1	0.2	0.002	0.019	-0.008
12734M004	7541	LZ	-0.005	-0.001	-0.009	-0.3	-0.1	-0.6	0.000	-0.003	-0.010
12734M004	7541	LK	0.032	-0.015	0.011	1.1	-0.5	0.4	-0.023	-0.008	0.027
12734M005	7540	LU	-0.006	0.003	0.012	-0.2	0.1	0.4	0.004	0.012	0.004
12734M005	7540	LC	-0.014	-0.018	0.030	-0.2	-0.5	0.5	-0.013	0.035	0.006
12734M005	7540	LK	0.019	0.014	-0.021	0.6	0.5	-0.7	0.007	-0.030	0.003
12734M005	7540	LZ	-0.003	-0.001	0.002	-0.2	-0.1	0.1	0.000	0.003	-0.001
12734M008	MATE	PP	0.006	-0.020	0.028	0.4	-1.3	1.8	-0.021	0.021	0.018
12734M008	MATE	PJ	-0.005	-0.012	0.005	-0.5	-1.2	1.2	-0.010	0.009	-0.003
12734M008	MATE	PA	0.036	-0.005	0.003	1.1	-0.2	0.1	-0.015	-0.019	0.027
12734M008	MATE	GA	0.000	0.002	-0.004	0.0	0.7	-1.3	-0.001	-0.002	-0.004
12734S001	7939	LZ	0.012	0.018	-0.014	0.7	1.1	-0.9	0.014	-0.021	0.004
12734S001	7939	LK	0.005	0.006	-0.016	0.2	0.2	-0.6	0.004	-0.016	-0.006
12734S001	7939	LU	0.002	0.005	-0.014	0.2	0.4	-1.0	0.004	-0.012	-0.006
12734S001	7939	LC	0.024	0.020	0.014	1.7	1.5	0.8	0.012	-0.008	0.031
12734S001	7939	PB	-0.011	-0.005	-0.006	-1.4	-0.7	-0.8	-0.002	0.003	-0.013
12734S001	7939	GA	0.000	0.000	0.000	0.0	-0.2	0.2	0.000	0.000	0.000
12734S001	7939	LL	0.067	0.016	0.053	1.9	0.5	1.5	-0.004	-0.004	0.087
12734S001	7939	LG	-0.012	0.012	0.000	-0.9	1.0	0.0	0.015	0.005	-0.006
12734S005	7243	RO	0.007	-0.005	-0.007	1.0	-0.8	-1.2	-0.006	-0.009	0.000
12734S005	7243	RG	-0.018	0.007	-0.004	-1.3	0.9	-0.3	0.012	0.006	-0.014
12734S005	7243	RN	-0.058	-0.006	-0.033	-1.9	-0.2	-1.1	0.011	0.012	-0.065

12734S005	7243	GA	0.000	0.001	0.013	0.1	0.1	1.8	0.000	0.010	0.008
				0.018			1.0			0.013	0.025

MONTE VENDA

12749M001	7542	LK	0.011	-0.066	0.029	0.3	-0.9	0.5	-0.067	0.022	0.019
12749M001	7542	LU	-0.018	0.004	-0.023	-0.5	0.1	-0.5	0.007	-0.004	-0.028
12749M001	7542	LC	0.019	0.009	-0.013	0.5	0.4	-0.3	0.005	-0.024	0.005
12749M001	7542	LZ	-0.033	-0.010	0.003	-0.5	-0.2	0.2	-0.003	0.026	-0.022
				0.026			0.5			0.028	0.020

CHILBOLTON

13201S002	7215	RG	0.004	-0.006	0.010	0.3	-0.8	0.7	-0.006	0.003	0.010
13201S002	7215	RN	-0.004	0.004	-0.008	-0.3	0.7	-0.6	0.004	-0.002	-0.009
				0.006			0.7			0.004	0.010

HERSTMONCEUX

13212M007	HERS	PJ	-0.008	-0.009	-0.002	-0.9	-1.0	-0.4	-0.009	0.005	-0.007
13212M007	HERS	GA	0.001	0.001	0.001	0.4	0.4	0.2	0.000	0.001	0.001
13212M007	HERS	PP	-0.005	-0.002	0.001	-0.4	-0.1	0.1	-0.002	0.005	-0.002
13212S001	7840	LZ	0.024	0.013	0.010	1.6	0.9	0.7	0.013	-0.012	0.023
13212S001	7840	LK	0.003	-0.001	-0.007	0.1	-0.1	-0.3	-0.001	-0.007	-0.004
13212S001	7840	LG	0.002	0.012	0.008	0.1	0.9	0.6	0.012	0.004	0.007
13212S001	7840	GA	0.000	0.000	0.000	-0.1	-0.1	-0.1	0.000	0.000	0.000
13212S001	7840	LU	0.007	0.002	0.008	0.6	0.1	0.6	0.002	0.000	0.011
13212S001	7840	LL	-0.001	-0.002	0.024	0.0	0.0	0.7	-0.002	0.016	0.018
13212S001	7840	PB	0.002	-0.003	-0.001	0.3	-0.4	-0.1	-0.003	-0.002	0.001
13212S001	7840	LC	-0.009	0.006	-0.010	-0.8	0.4	-0.7	0.006	0.001	-0.013
				0.008			0.7			0.007	0.011

CARNUSTY

13296M002	7603	RG	-0.004	0.003	-0.015	-0.2	0.3	-0.7	0.003	-0.005	-0.014
13296M002	7603	RN	0.004	-0.003	0.016	0.2	-0.3	0.7	-0.003	0.006	0.015
				0.009			0.5			0.004	0.015

MADRID

13407S003	1561	RJ	0.012	-0.011	0.018	0.4	-0.5	0.5	-0.010	0.005	0.021
13407S003	1561	RG	-0.061	0.004	-0.040	-1.0	0.3	-0.8	-0.001	0.008	-0.072
13407S010	1565	RG	0.006	-0.004	0.001	1.1	-0.6	0.1	-0.003	-0.004	0.005
13407S010	1565	PB	-0.017	0.004	-0.012	-2.2	0.5	-1.5	0.003	0.002	-0.021
13407S010	1565	RN	0.015	-0.001	0.010	2.6	-0.4	1.3	0.000	-0.002	0.018
13407S010	1565	RJ	0.010	0.026	-0.029	0.5	1.3	-1.0	0.026	-0.027	-0.013
13407S010	1565	GA	0.000	0.000	0.000	-0.4	0.1	0.1	0.000	0.000	0.000
13407S012	MADR	GA	0.003	-0.001	0.000	1.1	-0.2	-0.2	-0.002	0.001	-0.002
13407S012	MADR	PC	-0.013	0.007	0.000	-1.7	0.8	-0.1	0.006	0.008	-0.011
13407S012	MADR	PJ	-0.002	-0.005	0.001	-0.3	-0.5	0.2	-0.005	0.002	-0.001
13407S012	MADR	PE	-0.005	-0.001	-0.002	-0.6	-0.1	-0.4	-0.001	0.002	-0.005
13407S012	MADR	PA	0.021	0.006	0.036	0.7	0.3	1.4	0.007	0.014	0.039
13407S012	MADR	PP	-0.015	0.004	0.013	-1.0	0.3	0.8	0.003	0.019	-0.003
				0.017			1.1			0.010	0.025

KOOTWIJK

13504M002	8833	PB	0.007	0.001	0.005	0.9	0.1	0.6	0.000	-0.003	0.008
13504M002	8833	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
13504M002	8833	LZ	0.010	-0.021	-0.009	0.3	-0.6	-0.6	-0.022	-0.012	-0.002
13504M002	8833	LK	-0.027	-0.024	-0.020	-1.0	-0.9	-0.8	-0.021	0.011	-0.034

13504M002	8833	LU	-0.011	-0.005	-0.001	-0.6	-0.2	-0.1	-0.004	0.008	-0.008
13504M002	8833	LC	-0.010	-0.004	-0.005	-0.2	-0.1	-0.1	-0.003	0.006	-0.010
13504M002	8833	LL	-0.149	-0.008	-0.047	-1.5	-0.1	-0.5	0.007	0.089	-0.129
13504M003	KOSG	PC	-0.003	0.005	0.004	-0.4	0.6	0.6	0.005	0.005	0.002
13504M003	KOSG	GA	0.000	0.000	0.000	0.1	-0.1	0.0	0.000	0.000	0.000
13504M003	KOSG	PA	0.045	-0.005	-0.013	1.7	-0.3	-0.4	-0.010	-0.043	0.017
13504M003	KOSG	PJ	-0.001	-0.003	0.000	-0.2	-0.3	-0.1	-0.003	0.001	-0.001
13504M003	KOSG	PP	-0.005	0.006	-0.008	-0.4	0.4	-0.6	0.006	-0.001	-0.010
13504S001	7833	LC	0.009	0.036	0.103	0.1	0.8	1.3	0.035	0.054	0.089
13504S001	7833	LZ	-0.034	-0.076	0.009	-0.3	-0.8	0.5	-0.072	0.038	-0.018
13504S001	7833	LL	-0.070	0.065	0.057	-0.9	0.9	0.8	0.072	0.085	0.006
13504S001	7833	LK	0.021	-0.026	-0.053	0.5	-0.7	-1.8	-0.027	-0.047	-0.031
				0.037			0.8			0.034	0.042

ZIMMERWALD

14001S001	7810	LZ	0.005	0.010	0.000	0.3	0.6	0.0	0.009	-0.004	0.004
14001S001	7810	LU	-0.019	-0.005	-0.014	-1.2	-0.3	-0.9	-0.002	0.004	-0.023
14001S001	7810	LG	-0.006	0.002	0.005	-0.3	0.1	0.3	0.003	0.008	0.000
14001S001	7810	PB	0.009	-0.003	0.008	1.1	-0.3	1.0	-0.004	-0.001	0.011
14001S001	7810	LL	0.043	0.006	-0.048	1.1	0.1	-1.2	0.001	-0.065	-0.005
14001S001	7810	LK	0.021	0.012	-0.009	0.8	0.5	-0.4	0.009	-0.023	0.009
14001S001	7810	LC	-0.020	0.001	-0.011	-1.6	0.0	-0.7	0.003	0.007	-0.022
				0.017			0.9			0.019	0.013

MONTE GENEROSO

14005M002	7590	LZ	-0.015	-0.003	0.009	-0.6	-0.1	0.6	0.000	0.017	-0.004
14005M002	7590	LK	0.009	-0.001	-0.032	0.3	0.0	-1.2	-0.002	-0.029	-0.017
14005M002	7590	LL	0.023	0.015	0.012	0.4	0.3	0.2	0.012	-0.010	0.026
				0.016			0.6			0.015	0.018

POTSDAM

14106S001	1181	LZ	0.032	0.013	0.013	0.9	0.5	0.8	0.006	-0.019	0.032
14106S001	1181	LG	0.007	-0.037	0.094	0.2	-0.8	2.1	-0.038	0.059	0.074
14106S001	1181	LK	-0.002	0.004	-0.013	-0.1	0.1	-0.5	0.004	-0.007	-0.011
14106S001	1181	LU	0.017	-0.005	0.005	0.4	-0.2	0.2	-0.009	-0.009	0.013
14106S001	1181	LC	0.031	0.016	-0.045	0.6	0.5	-0.8	0.008	-0.054	-0.015
14106S001	1181	LL	-0.104	-0.037	-0.116	-2.3	-0.8	-2.9	-0.012	0.015	-0.159
				0.048			1.3			0.027	0.073

WETTZELL

14201M004	7596	LC	-0.043	0.065	-0.012	-0.6	1.7	-0.1	0.073	0.012	-0.027
14201M004	7596	LL	-0.111	-0.032	-0.023	-1.7	-0.4	-0.4	-0.007	0.072	-0.093
14201M004	7596	GA	0.001	0.000	0.001	0.2	-0.2	0.2	-0.001	0.001	0.000
14201M004	7596	LZ	-0.007	0.004	-0.015	-0.4	0.3	-1.0	0.006	-0.006	-0.015
14201M005	7597	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
14201M005	7597	LC	-0.012	-0.023	0.042	-0.2	-0.6	0.5	-0.020	0.041	0.021
14201S002	7834	LL	-0.017	-0.014	-0.034	-0.5	-0.4	-0.9	-0.010	-0.007	-0.038
14201S002	7834	LK	-0.005	-0.004	-0.025	-0.2	-0.2	-1.0	-0.003	-0.012	-0.023
14201S002	7834	GA	0.000	0.000	0.000	0.1	0.0	0.2	0.000	0.000	0.000
14201S002	7834	LZ	-0.007	0.005	-0.015	-0.4	0.3	-1.0	0.006	-0.006	-0.015
14201S002	7834	LU	-0.016	-0.002	-0.012	-1.2	-0.2	-0.9	0.001	0.004	-0.020
14201S002	7834	LC	0.004	0.005	0.013	0.3	0.4	0.7	0.004	0.004	0.013
14201S002	7834	LG	-0.007	0.001	-0.003	-0.5	0.0	-0.2	0.002	0.003	-0.007
14201S004	7224	GA	-0.001	0.002	-0.002	-0.3	0.6	-0.7	-0.001	-0.002	-0.002
14201S004	7224	RO	0.009	-0.003	0.006	1.4	-0.5	1.0	-0.005	-0.002	0.010
14201S004	7224	RG	-0.001	-0.003	0.001	-0.3	-0.5	0.2	-0.002	0.002	0.000
14201S004	7224	RN	-0.002	-0.001	0.002	-0.7	-0.2	0.4	0.000	0.003	0.000
14201S004	7224	PB	0.011	0.004	-0.003	1.4	0.5	-0.4	0.001	-0.011	0.005
14201S018	8834	LZ	-0.022	-0.006	-0.035	-0.3	-0.1	-1.9	-0.001	-0.006	-0.041

14201S018	8834	LC	-0.001	0.050	0.059	0.0	0.7	1.1	0.049	0.030	0.051
14201S018	8834	LK	-0.022	-0.011	0.035	-0.9	-0.4	1.3	-0.006	0.041	0.011
14201S018	8834	LU	0.035	0.008	0.036	1.2	0.3	1.1	0.001	-0.003	0.051
14201S020	WETT	PJ	0.004	-0.002	0.000	0.4	-0.3	-0.1	-0.003	-0.003	0.002
14201S020	WETT	PP	0.006	-0.003	0.008	0.4	-0.2	0.5	-0.004	0.001	0.009
14201S020	WETT	PC	-0.002	0.008	-0.005	-0.2	1.1	-0.6	0.009	-0.004	-0.004
14201S020	WETT	PE	0.000	0.003	0.004	0.1	0.4	0.5	0.003	0.002	0.004
14201S020	WETT	PA	0.015	0.002	0.001	0.6	0.1	0.0	-0.002	-0.011	0.010
14201S020	WETT	GA	-0.001	-0.001	0.000	-0.3	-0.4	0.0	0.000	-0.001	-0.001
				0.022			0.8			0.018	0.027

HOHENBUNSTORF

14202M002	7600	RN	-0.007	-0.001	-0.006	-0.9	-0.3	-0.6	0.000	0.003	-0.009
14202M002	7600	RG	0.009	0.003	0.010	1.0	0.4	0.8	0.001	-0.002	0.014
				0.007			0.9			0.002	0.012

EFFELSBERG

14209S001	7203	RG	0.001	-0.003	-0.003	0.1	-0.6	-0.3	-0.003	-0.002	-0.002
14209S001	7203	RN	-0.001	0.002	0.003	-0.1	0.5	0.3	0.002	0.002	0.002
				0.002			0.5			0.002	0.002

HOHENPEISSENBERG

14213M002	7630	RG	0.003	0.000	-0.002	0.1	0.0	-0.1	-0.001	-0.003	0.001
14213M002	7630	RN	-0.002	0.000	0.001	-0.1	0.0	0.1	0.000	0.002	-0.001
				0.002			0.1			0.002	0.001

KARLSBURG

14260M001	7632	RN	-0.009	-0.005	-0.005	-0.4	-0.6	-0.2	-0.003	0.005	-0.010
14260M001	7632	RG	0.008	0.004	0.005	0.4	0.5	0.2	0.002	-0.004	0.009
				0.006			0.5			0.004	0.010

KIRSCHBERG

14261M001	7631	RG	0.002	0.002	-0.002	0.1	0.4	-0.1	0.002	-0.003	0.000
14261M001	7631	RN	-0.001	-0.002	0.001	-0.1	-0.3	0.1	-0.001	0.002	0.000
				0.002			0.3			0.002	0.000

BAR GIYYORA

20702M001	7530	LZ	-0.130	-0.049	-0.062	-1.8	-0.7	-1.3	0.034	0.018	-0.147
20702M001	7530	LK	0.038	0.075	-0.020	0.9	1.9	-0.5	0.040	-0.056	0.053
20702M001	7530	LC	-0.111	-0.045	-0.025	-1.3	-0.7	-0.4	0.027	0.040	-0.113
20702M001	7530	LU	-0.022	-0.069	0.044	-0.3	-1.1	0.7	-0.043	0.068	-0.026
20702M001	7530	LL	0.103	-0.055	0.148	1.5	-0.8	2.2	-0.105	0.099	0.122
				0.077			1.4			0.060	0.103

DIYARBAKIR

20801M001	7575	LL	0.110	0.050	0.011	1.0	0.5	0.1	-0.033	-0.062	0.099
20801M001	7575	LK	0.025	0.015	0.001	0.9	0.5	0.0	-0.004	-0.017	0.024
20801M001	7575	LC	-0.007	-0.012	0.000	-0.3	-0.5	0.0	-0.004	0.008	-0.010
20801M001	7575	LU	0.010	-0.011	-0.004	0.4	-0.4	-0.1	-0.015	-0.003	-0.002
20801M001	7575	LZ	-0.038	0.020	0.001	-1.3	0.6	0.0	0.040	0.011	-0.012
				0.034			0.7			0.027	0.046

YOZGAT

20802M001	7585	LL	-0.067	-0.067	0.057	0.0	0.0	0.0	-0.017	0.103	-0.035
20802M001	7585	LU	0.021	0.004	-0.003	0.8	0.1	-0.1	-0.009	-0.014	0.013
20802M001	7585	LK	-0.015	0.008	0.029	-0.5	0.3	1.0	0.015	0.028	0.012
20802M001	7585	LC	0.004	-0.008	-0.031	0.2	-0.4	-1.0	-0.009	-0.023	-0.021
20802M001	7585	LZ	-0.031	0.010	0.001	-0.9	0.2	0.0	0.026	0.013	-0.015
				0.033			0.6			0.037	0.021

MELENGICLICK

20803M001	7580	LU	0.003	-0.009	0.000	0.2	-0.5	0.0	-0.009	0.001	-0.002
20803M001	7580	LL	0.195	0.044	0.119	1.5	0.4	0.8	-0.070	-0.019	0.221
20803M001	7580	LK	0.007	0.006	0.015	0.3	0.2	0.6	0.002	0.007	0.017
20803M001	7580	LZ	-0.030	0.019	-0.013	-1.2	0.7	-0.8	0.032	-0.001	-0.019
20803M001	7580	LC	0.007	-0.001	0.010	0.3	-0.1	0.4	-0.005	0.005	0.010
				0.061			0.8			0.025	0.100

YIGILCA

20804M001	7587	LC	0.004	-0.005	0.002	0.2	-0.3	0.1	-0.007	0.001	0.002
20804M001	7587	LU	-0.004	-0.009	0.002	-0.2	-0.6	0.1	-0.006	0.008	-0.005
20804M001	7587	LZ	0.005	0.008	-0.004	0.2	0.3	-0.2	0.004	-0.008	0.004
20804M001	7587	LK	0.005	0.046	0.001	0.2	1.6	0.1	0.037	-0.017	0.022
20804M001	7587	LG	-0.024	-0.033	0.001	-0.5	-0.7	0.0	-0.015	0.025	-0.028
				0.016			0.6			0.017	0.016

WUHAN

21602S003	7236	LC	-0.011	-0.144	-0.118	-0.2	-1.9	-2.0	0.069	-0.038	-0.169
21602S003	7236	LK	0.008	0.026	0.043	0.2	0.8	1.2	-0.018	0.027	0.040
				0.079			1.5			0.043	0.123

SHANGHAI

21605S001	7837	LU	0.012	-0.035	-0.001	0.6	-1.7	-0.1	0.008	0.018	-0.031
21605S001	7837	LL	0.005	0.080	-0.031	0.1	1.2	-0.4	-0.046	-0.060	0.041
21605S001	7837	LC	0.024	-0.055	-0.063	0.6	-1.1	-1.4	0.008	-0.023	-0.083
21605S001	7837	LG	0.027	-0.097	-0.036	0.4	-1.8	-0.7	0.028	0.019	-0.102
21605S001	7837	LZ	0.064	-0.040	-0.070	2.0	-1.2	-1.8	-0.034	-0.025	-0.093
21605S001	7837	GA	0.000	0.000	0.000	-0.1	0.1	0.2	0.000	0.000	0.000
21605S001	7837	LK	-0.007	0.024	-0.042	-0.2	0.8	-1.5	-0.006	-0.049	-0.001
21605S009	7227	RG	-0.004	0.003	0.007	-0.5	0.5	0.8	0.002	0.004	0.008
21605S009	7227	RN	-0.003	0.008	0.007	-0.4	0.8	0.7	-0.002	0.002	0.011
21605S009	7227	GA	0.010	-0.014	-0.015	1.0	-1.4	-1.5	0.017	-0.015	-0.003
				0.037			1.2			0.025	0.054

CHANGCHUN

21611S001	7237	LK	0.001	0.001	-0.001	0.0	0.0	0.0	-0.001	-0.001	-0.001
21611S001	7237	LU	-0.107	-0.040	0.146	-0.1	-0.1	0.3	0.110	0.086	0.122
				0.076			0.2			0.070	0.086

KASHIMA

21701S001	1856	RG	0.002	-0.004	-0.001	0.3	-0.7	-0.1	0.002	0.002	-0.004
21701S001	1856	RO	-0.064	-0.029	0.000	-1.4	-0.6	0.0	0.062	-0.018	0.026
21701S001	1856	RN	0.000	0.001	0.001	0.0	0.4	0.1	-0.001	0.000	0.001
21701S004	1857	RG	-0.005	0.005	0.004	-0.8	0.8	0.5	0.000	-0.001	0.008
21701S004	1857	RO	-0.071	-0.008	0.001	-1.6	-0.2	0.0	0.051	-0.028	0.041
21701S004	1857	RN	0.012	-0.005	-0.008	1.3	-0.8	-0.7	-0.004	0.000	-0.015

			0.024			0.9			0.025	0.021
NOBEYAMA										
21725S001	7244	RG	0.004	0.009	-0.009	0.3	0.7	-0.6	-0.009	-0.009	-0.003
21725S001	7244	RN	-0.005	-0.009	0.008	-0.3	-0.7	0.5	0.010	0.008	0.003
			0.008			0.6			0.009	0.003
SIMOSATO										
21726S001	7838	LZ	0.004	0.010	-0.010	0.3	0.6	-0.6	-0.010	-0.011	-0.002
21726S001	7838	LG	0.036	-0.006	-0.006	2.2	-0.4	-0.4	-0.021	0.012	-0.028
21726S001	7838	LL	0.105	0.161	0.014	0.3	0.5	0.0	-0.189	-0.008	0.038
21726S001	7838	LU	-0.018	0.005	0.017	-1.5	0.5	1.1	0.009	0.005	0.023
21726S001	7838	LK	-0.041	0.009	0.030	-1.6	0.4	1.1	0.022	0.005	0.047
21726S001	7838	LC	0.030	-0.069	-0.047	0.9	-2.2	-1.5	0.029	-0.001	-0.084
			0.053			1.3			0.056	0.045
USUDA										
21729S003	USUD	PP	0.018	-0.029	-0.008	1.2	-1.9	-0.5	0.009	0.013	-0.031
21729S003	USUD	PA	0.013	-0.031	-0.061	0.1	-0.3	-0.9	0.015	-0.031	-0.061
21729S003	USUD	PC	-0.003	0.065	-0.059	-0.1	2.7	-1.8	-0.047	-0.074	0.002
21729S003	USUD	PJ	-0.015	0.004	0.013	-1.1	0.3	1.2	0.007	0.002	0.019
21729S005	USU2	PP	-0.004	0.003	0.002	-0.2	0.2	0.1	0.000	-0.001	0.005
21729S005	USU2	PJ	0.003	-0.004	-0.001	0.2	-0.2	-0.1	0.001	0.002	-0.004
21729S007	USU3	PP	0.020	0.015	0.001	1.3	1.0	0.1	-0.024	0.004	-0.004
21729S007	USU3	PA	0.085	0.040	-0.143	0.9	0.4	-1.4	-0.086	-0.094	-0.114
21729S007	USU3	PJ	-0.019	-0.015	0.001	-1.4	-1.0	0.1	0.024	-0.002	0.004
			0.041			1.2			0.038	0.045
CHICHIJIMA										
21732S001	7316	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
21732S001	7316	RG	0.029	0.019	0.005	0.7	0.6	0.1	-0.033	0.010	-0.008
21732S002	7844	GA	0.028	0.027	0.007	0.7	0.7	0.2	-0.003	-0.003	-0.039
21732S002	7844	LZ	-0.399	-0.388	-0.036	-2.6	-2.6	-0.4	0.551	-0.067	0.052
			0.162			1.3			0.197	0.033
TAIPEI										
23601M001	TAIW	PP	-0.006	-0.010	0.013	-0.4	-0.7	0.9	0.010	0.014	0.000
23601M001	TAIW	PJ	0.000	0.001	-0.001	0.0	0.1	-0.1	0.000	-0.001	0.000
23601M001	TAIW	PC	0.027	0.064	-0.080	0.9	1.6	-2.0	-0.057	-0.089	0.003
			0.036			1.1			0.044	0.002
HELWAN										
30101S001	7831	LU	-0.065	0.005	-0.037	-1.6	0.1	-0.8	0.038	-0.005	-0.064
30101S001	7831	LK	0.032	-0.171	0.172	0.3	-1.7	1.7	-0.163	0.180	0.032
30101S001	7831	LC	0.002	0.014	-0.014	0.1	0.8	-0.7	0.011	-0.017	0.001
30101S001	7831	LL	-0.059	-0.353	0.218	-0.2	-1.2	0.7	-0.271	0.306	-0.095
30101S001	7831	LZ	0.024	-0.163	0.170	0.9	-2.1	2.2	-0.151	0.179	0.028
			0.141			1.4			0.168	0.055
HARTEBEESTHOEK										
30302M002	HART	GA	0.000	-0.001	0.003	0.1	-0.3	0.9	0.000	0.004	-0.001
30302M002	HART	PJ	-0.007	-0.002	-0.008	-0.5	-0.1	-1.3	0.001	-0.010	-0.003
30302M002	HART	PA	-0.222	-0.104	0.079	-1.1	-0.5	0.4	0.011	-0.035	-0.255

30302M002	HART	PP	0.302	0.038	0.144	1.5	0.2	0.7	-0.107	0.254	0.194
30302M002	HART	PE	0.005	0.017	-0.001	0.2	1.1	-0.1	0.013	0.005	0.011
30302M002	HART	PC	-0.166	0.078	0.026	-0.8	0.4	0.1	0.147	-0.024	-0.111
30302S001	7232	RF	-0.004	0.001	0.006	-0.3	0.1	0.9	0.003	0.004	-0.006
30302S001	7232	RG	-0.007	-0.001	0.005	-0.6	-0.1	0.6	0.003	0.002	-0.008
30302S001	7232	GA	0.000	0.000	0.000	0.0	0.1	-0.2	0.000	0.000	0.000
30302S001	7232	RN	0.004	-0.009	-0.006	0.3	-1.1	-0.7	-0.010	-0.005	0.002
30302S001	7232	RO	0.016	0.011	0.016	1.0	0.9	1.3	0.002	0.023	0.011
				0.081			0.8			0.068	0.102

MASPALOMAS

31303M001	MASP	PA	0.028	0.016	0.054	0.8	0.6	2.2	0.023	0.038	0.045
31303M001	MASP	PC	0.010	-0.008	0.015	0.6	-0.5	1.0	-0.005	0.008	0.018
31303M001	MASP	PB	0.005	0.004	0.007	0.7	0.5	0.9	0.005	0.005	0.007
31303M001	MASP	PP	0.032	-0.013	0.060	2.1	-0.9	4.0	-0.004	0.038	0.059
31303M001	MASP	PJ	-0.023	0.001	-0.009	-2.6	0.1	-2.1	-0.005	0.003	-0.024
				0.026			1.9			0.019	0.036

SAO MIGUEL

31906M001	7609	RG	0.004	0.012	0.000	0.3	1.4	0.0	0.013	0.001	-0.001
31906M001	7609	RN	-0.003	-0.010	0.000	-0.3	-1.2	0.0	-0.010	-0.001	0.001
				0.007			0.9			0.008	0.001

ST. JOHNS

40101M001	STJO	PA	-0.004	0.054	-0.008	-0.2	2.4	-0.3	0.029	0.028	-0.037
40101M001	STJO	PJ	0.002	0.002	0.003	0.2	0.3	0.4	0.003	0.002	0.001
40101M001	STJO	PE	0.000	0.002	-0.001	0.0	0.3	-0.3	0.001	0.001	-0.002
40101M001	STJO	PP	-0.041	0.018	-0.027	-0.8	0.4	-0.6	-0.021	0.011	-0.047
40101M001	STJO	PC	0.003	-0.012	0.006	0.2	-1.6	0.4	-0.005	-0.005	0.012
				0.020			1.0			0.015	0.027

ALGONQUIN

40104M002	ALGO	PC	0.024	-0.014	0.011	1.5	-1.8	0.7	0.020	-0.006	0.021
40104M002	ALGO	PJ	0.009	-0.004	0.009	0.7	-0.6	1.3	0.008	0.002	0.010
40104M002	ALGO	GA	-0.004	0.003	0.000	-1.2	0.9	-0.2	0.004	0.000	-0.002
40104M002	ALGO	PA	-0.030	0.016	0.005	-1.4	0.7	0.2	-0.026	0.019	-0.012
40104M002	ALGO	PE	0.005	-0.001	-0.003	1.3	-0.1	-0.7	0.005	-0.003	-0.001
40104M002	ALGO	PP	-0.025	0.019	-0.030	-0.5	0.4	-0.6	-0.021	-0.004	-0.038
40104S001	7282	GA	0.000	0.000	0.000	0.4	-0.3	0.1	0.000	0.000	0.000
40104S001	7282	RN	0.000	0.000	0.000	0.0	0.1	-0.1	0.000	0.000	0.000
40104S001	7282	RO	-0.008	0.010	-0.001	-1.6	1.7	-0.2	-0.006	0.007	-0.009
40104S001	7282	RG	-0.002	0.000	0.000	-0.5	0.1	0.0	-0.002	0.001	0.000
				0.012			1.0			0.010	0.015

PENTICTON

40105M001	7283	RG	0.024	0.038	-0.052	1.9	2.0	-2.1	0.002	0.000	-0.068
40105M001	7283	GA	0.000	0.000	0.000	-0.1	-0.1	0.1	0.000	0.000	0.000
40105M002	DRAO	PP	0.006	-0.001	-0.017	0.4	-0.1	-1.2	0.006	-0.010	-0.014
40105M002	DRAO	GA	0.001	0.001	-0.001	0.4	0.3	-0.2	-0.001	-0.001	-0.001
40105M002	DRAO	PE	-0.004	-0.002	0.001	-0.9	-0.4	0.3	-0.002	-0.002	0.003
40105M002	DRAO	PA	-0.014	-0.004	-0.024	-0.7	-0.2	-0.8	-0.010	-0.024	-0.012
40105M002	DRAO	PJ	0.008	0.001	0.005	0.8	0.1	0.8	0.006	0.007	0.001
				0.017			1.1			0.008	0.027

YELLOWKNIFE

40127M001	7285	RG	-0.006	-0.056	0.105	-0.7	-3.3	2.9	0.017	0.002	0.118
40127M001	7285	GA	0.000	0.000	0.000	0.1	0.2	-0.1	0.000	0.000	0.000
40127M003	YELL	PC	0.013	-0.002	0.006	1.6	-0.3	0.7	0.013	0.006	0.004
40127M003	YELL	PA	-0.013	-0.015	-0.038	-0.7	-0.7	-1.2	-0.005	-0.035	-0.025
40127M003	YELL	GA	-0.001	-0.002	0.001	-0.2	-0.6	0.2	0.002	0.001	-0.001
40127M003	YELL	PE	-0.002	0.002	0.002	-0.5	0.6	0.4	-0.003	0.002	0.001
40127M003	YELL	PJ	0.007	0.007	-0.002	0.7	0.7	-0.4	0.003	0.007	-0.006
40127M003	YELL	PP	-0.007	0.012	-0.038	-0.5	0.8	-2.6	-0.011	-0.011	-0.038
40127M001	7285	RG	0.005	0.003	-0.003	1.1	0.5	-0.4	0.004	0.003	-0.005
40127M001	7285	RN	-0.036	-0.044	0.080	-2.8	-1.9	2.1	-0.015	-0.011	0.097
				0.030			1.5			0.011	0.050

ALBERT HEAD

40129M003	ALBH	PE	-0.006	-0.010	0.005	-0.7	-0.7	0.7	0.001	-0.005	0.012
40129M003	ALBH	PA	-0.009	0.011	-0.044	-0.4	0.4	-1.5	-0.013	-0.027	-0.036
40129M003	ALBH	PJ	0.010	0.003	-0.001	1.0	0.3	-0.2	0.007	0.006	-0.007
				0.016			0.9			0.013	0.022

PASADENA

40400M001	7896	LZ	0.063	0.023	-0.149	2.5	1.0	-1.0	0.045	-0.096	-0.125
40400M001	7896	GA	0.000	0.000	0.000	-0.1	0.0	0.0	0.000	0.000	0.000
40400M001	7896	LC	0.013	-0.064	-0.111	0.2	-0.8	-1.5	0.042	-0.120	-0.021
40400M003	7263	GA	0.001	0.000	0.000	0.2	-0.1	0.0	0.000	0.000	-0.001
40400M003	7263	RG	-0.005	0.010	0.002	-0.6	0.9	0.2	-0.009	0.005	-0.005
40400M006	JPL1	PA	0.012	-0.017	-0.007	0.4	-0.5	-0.2	0.019	-0.011	0.004
40400M006	JPL1	GA	0.000	0.001	0.000	0.1	0.3	0.0	-0.001	0.000	0.000
40400M006	JPL1	PP	-0.005	-0.012	0.001	-0.3	-0.8	0.1	0.001	-0.006	0.011
40400M006	JPL1	PJ	-0.004	-0.007	0.001	-0.3	-0.6	0.1	0.000	-0.004	0.008
40400M007	JP1Q	PA	0.358	-0.208	0.043	2.4	-1.4	0.3	0.414	0.028	0.036
40400M007	JP1Q	PP	-0.010	-0.021	0.017	-0.6	-1.4	1.1	0.001	0.002	0.029
40400M007	JP1Q	PJ	0.004	0.015	-0.005	0.3	1.2	-0.6	-0.003	0.004	-0.015
				0.078			1.0			0.091	0.039

GOLDSTONE

40405M001	7085	GB	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40405M001	7085	LC	-0.224	-0.186	0.035	-1.2	-0.7	0.1	-0.115	-0.126	0.239
40405M002	7115	LC	-0.048	-0.024	0.090	-1.7	-0.7	2.6	-0.032	0.049	0.087
40405M002	7115	LZ	0.000	0.020	-0.021	0.0	0.9	-0.8	-0.009	-0.006	-0.027
40405M002	7115	GD	0.000	0.000	0.000	0.1	0.1	-0.2	0.000	0.000	0.000
40405M002	7115	GB	0.004	-0.073	0.082	0.2	-3.3	3.7	-0.009	0.108	-0.012
40405M006	7265	LK	0.012	-0.001	0.018	0.4	0.0	0.6	0.011	0.017	0.006
40405M006	7265	GA	0.000	-0.001	0.001	0.0	-0.4	0.2	0.001	0.001	-0.001
40405M006	7265	LC	-0.004	0.052	-0.002	-0.1	1.1	0.0	-0.027	0.024	-0.037
40405M006	7265	LU	0.026	0.061	-0.009	0.8	1.7	-0.2	-0.004	0.030	-0.059
40405M006	7265	LG	-0.010	0.004	-0.021	-0.4	0.2	-1.0	-0.011	-0.018	-0.012
40405M006	7265	LZ	-0.008	0.013	-0.012	-0.5	0.8	-0.7	-0.013	-0.005	-0.014
40405M013	7288	RG	-0.001	-0.004	0.005	-0.1	-0.2	0.4	0.000	0.002	0.006
40405M013	7288	LZ	0.004	0.008	-0.021	0.2	0.5	-1.2	0.000	-0.012	-0.019
40405M013	7288	LK	0.013	-0.004	-0.017	0.4	-0.1	-0.6	0.013	-0.013	-0.012
40405M013	7288	LC	0.013	0.010	-0.004	0.9	0.6	-0.2	0.007	0.006	-0.014
40405M013	7288	LU	-0.004	0.002	-0.020	-0.2	0.1	-1.0	-0.004	-0.017	-0.011
40405M013	7288	GC	0.000	0.000	0.000	0.1	0.0	0.0	0.000	0.000	0.000
40405M013	7288	GA	-0.006	-0.011	0.011	-0.8	-0.9	1.1	0.012	0.011	-0.001
40405S009	7222	GA	0.000	0.000	0.000	0.1	0.2	-0.2	0.000	0.000	0.000
40405S009	7222	RF	0.002	-0.020	0.001	0.4	-2.2	0.1	0.011	-0.009	0.014
40405S009	7222	RN	-0.001	0.000	0.002	-0.3	-0.1	0.6	-0.001	0.002	0.002
40405S009	7222	GB	0.008	-0.071	0.083	0.2	-1.4	1.7	0.041	0.096	-0.034
40405S009	7222	RG	-0.002	0.003	0.000	-0.3	0.5	0.0	-0.003	0.001	-0.001
40405S014	1513	RN	0.006	0.006	-0.011	0.9	0.7	-1.4	0.002	-0.005	-0.013
40405S014	1513	RG	-0.003	0.000	0.001	-0.7	-0.1	0.2	-0.003	0.000	0.002
40405S014	1513	RJ	0.008	0.027	-0.028	0.5	1.2	-1.3	-0.005	-0.007	-0.039

40405S014	1513	GD	0.000	-0.001	0.001	-0.1	-0.4	0.4	0.001	0.001	0.000
40405S019	7231	GB	0.000	0.002	-0.002	-0.1	0.5	-0.6	-0.001	-0.002	0.001
40405S019	7231	RN	0.011	0.008	-0.004	1.0	0.5	-0.2	0.006	0.004	-0.013
40405S019	7231	RG	0.001	-0.008	0.011	0.1	-1.0	1.3	0.004	0.005	0.012
40405S019	7231	RJ	-0.012	-0.023	0.011	-1.1	-1.4	0.7	0.000	-0.006	0.028
40405S028	GOLD	PC	0.007	-0.042	0.044	0.2	-1.3	1.4	0.025	0.016	0.054
40405S028	GOLD	GC	-0.006	-0.003	-0.002	-0.6	-0.2	-0.2	0.004	0.003	-0.005
40405S028	GOLD	PP	0.004	0.003	-0.001	0.3	0.2	-0.1	0.002	0.002	-0.005
40405S028	GOLD	PJ	0.005	0.008	-0.002	0.4	0.6	-0.2	0.001	0.004	-0.009
40405S031	GOLQ	PA	-0.025	-0.025	0.020	-1.0	-0.7	0.7	-0.011	-0.003	0.038
40405S031	GOLQ	PJ	0.008	0.005	-0.001	0.7	0.4	-0.1	0.005	0.004	-0.007
40405S031	GOLQ	PP	0.003	-0.009	0.008	0.2	-0.6	0.5	0.007	0.002	0.010
40405S031	GOLQ	PE	-0.002	0.002	-0.003	-0.3	0.2	-0.4	-0.003	-0.002	-0.002
40405S033	9222	RG	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40405S033	9222	RN	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
			0.034			1.0			0.027		0.044

PINYON FLATS

40407M001	7256	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40407M001	7256	RG	-0.002	-0.004	0.000	-0.3	-0.4	0.0	0.000	-0.002	0.004
40407M002	PIN1	PP	0.007	0.005	0.004	0.4	0.3	0.2	0.004	0.007	-0.004
40407M002	PIN1	GA	0.000	0.000	0.000	-0.1	-0.1	0.0	0.000	0.000	0.000
40407M002	PIN1	PJ	0.003	0.003	-0.002	0.2	0.2	-0.2	0.001	0.001	-0.004
40407M003	PN1Q	PC	0.004	-0.003	0.013	0.5	-0.4	0.8	0.005	0.010	0.008
40407M003	PN1Q	PJ	-0.006	0.012	-0.006	-0.5	1.0	-0.7	-0.010	0.000	-0.010
40407M003	PN1Q	PP	-0.009	-0.005	0.004	-0.6	-0.3	0.3	-0.005	-0.001	0.010
40407M003	PN1Q	PA	0.115	-0.096	0.036	1.2	-1.0	0.4	0.146	0.011	0.049
			0.030			0.6			0.035		0.017

FAIRBANKS

40408M001	FAIR	PC	-0.008	0.000	0.006	-1.0	0.0	0.8	-0.004	-0.003	0.009
40408M001	FAIR	PA	-0.029	-0.040	-0.032	-1.2	-1.9	-0.9	0.018	-0.055	-0.010
40408M001	FAIR	PJ	-0.001	-0.002	0.007	-0.1	-0.2	1.1	0.001	0.001	0.007
40408M001	FAIR	PP	-0.004	0.005	-0.047	-0.1	0.1	-1.0	-0.006	-0.021	-0.043
40408M001	FAIR	PE	-0.018	-0.009	0.013	-2.2	-1.1	1.6	-0.002	-0.013	0.020
40408M001	FAIR	GA	0.004	0.002	-0.004	1.4	0.7	-1.3	-0.004	-0.004	-0.001
40408S002	7225	GA	0.000	0.000	0.000	-0.5	-0.2	0.4	0.000	0.000	0.000
40408S002	7225	RN	0.003	0.002	-0.003	1.1	0.8	-1.1	0.000	0.002	-0.005
40408S002	7225	RO	0.002	0.001	-0.001	0.3	0.2	-0.3	0.000	0.001	-0.002
40408S002	7225	RG	0.001	-0.001	0.000	0.2	-0.2	-0.1	0.002	0.000	0.000
			0.015			1.1			0.014		0.016

VANDENBERG

40420M002	7223	RN	-0.001	-0.002	0.003	-0.2	-0.6	0.6	0.000	0.002	0.004
40420M002	7223	GA	0.000	0.000	0.000	0.2	0.2	-0.1	0.000	0.000	0.000
40420M002	7223	RG	-0.003	0.001	0.000	-0.6	0.2	0.1	-0.003	0.000	0.000
40420M006	VAND	PP	0.040	0.036	-0.024	2.6	2.4	-1.6	0.016	0.009	-0.056
40420M006	VAND	GA	-0.002	-0.001	0.001	-0.5	-0.5	0.3	0.001	0.002	0.000
			0.015			1.2			0.006		0.025

KAUAI

40424M004	KOKB	PC	0.003	0.009	-0.009	0.4	1.1	-1.1	-0.007	-0.006	-0.009
40424M004	KOKB	PP	-0.001	0.007	0.019	-0.1	0.5	1.3	-0.007	0.019	0.006
40424M004	KOKB	PE	0.028	0.021	0.007	3.5	2.6	0.4	-0.010	0.019	-0.028
40424M004	KOKB	PJ	0.007	0.011	-0.017	0.8	0.6	-1.8	-0.007	-0.011	-0.016
40424M004	KOKB	PA	0.071	0.050	-0.105	0.7	0.5	-1.0	-0.022	-0.066	-0.117
40424M004	KOKB	GA	-0.005	-0.005	0.002	-1.7	-1.6	0.7	-0.006	0.003	0.002
40424S001	1311	RG	-0.002	-0.001	0.000	-0.3	-0.1	0.0	0.000	-0.001	0.002
40424S001	1311	RN	-0.004	0.001	-0.001	-1.2	0.3	-0.1	-0.002	-0.002	0.003

40424S001	1311	RO	-0.007	-0.016	-0.002	-1.5	-2.7	-0.3	0.013	-0.007	0.011
40424S001	1311	GA	0.001	0.000	0.000	0.7	0.4	0.1	0.000	0.000	0.000
				0.027			1.5			0.018	0.039

QUINCY

40433M001	7051	LC	-0.049	0.015	0.126	-1.2	0.3	2.3	-0.050	0.089	0.090
40433M001	7051	LZ	-0.003	0.014	0.034	-0.1	0.6	1.3	-0.009	0.033	0.014
40433M001	7051	GA	0.000	0.000	-0.001	0.1	-0.1	-0.3	0.000	-0.001	0.001
40433M002	7109	LL	-0.014	0.045	0.032	-0.4	1.3	1.0	-0.035	0.045	-0.003
40433M002	7109	LC	0.002	-0.007	0.009	0.2	-0.6	0.8	0.006	0.004	0.010
40433M002	7109	LU	0.004	-0.010	0.016	0.4	-0.9	1.2	0.009	0.008	0.015
40433M002	7109	LG	0.005	-0.002	-0.005	0.4	-0.2	-0.5	0.005	-0.004	-0.004
40433M002	7109	LZ	-0.007	-0.018	0.010	-0.5	-1.2	0.6	0.003	-0.004	0.021
40433M002	7109	GA	0.000	0.000	0.000	-0.1	0.1	-0.1	0.000	0.000	0.000
40433M002	7109	LK	0.038	0.057	-0.091	1.5	2.3	-3.6	0.003	-0.026	-0.111
40433M004	7221	RG	-0.002	-0.001	-0.001	-0.3	-0.1	-0.2	-0.001	-0.002	0.001
40433M004	7221	GA	0.000	0.000	0.000	0.0	0.0	0.1	0.000	0.000	0.000
40433M004	7221	PJ	0.076	0.102	-0.079	0.5	0.7	-0.5	0.013	0.020	-0.148
40433M004	7221	PP	0.011	0.004	-0.014	0.7	0.3	-0.9	0.007	-0.005	-0.016
40433M005	7886	LZ	-0.007	-0.021	0.006	-0.4	-1.3	0.4	0.005	-0.010	0.021
40433M005	7886	LU	-0.002	0.034	-0.044	-0.1	1.9	-2.1	-0.019	-0.015	-0.050
40433M005	7886	LC	-0.022	0.034	0.018	-0.9	1.2	0.6	-0.036	0.025	-0.003
40433M005	7886	GA	0.001	-0.001	0.001	0.2	-0.2	0.2	0.000	0.001	-0.001
				0.035			1.2			0.023	0.051

MOUNT HOPKINS

40434M002	7888	LZ	-0.012	0.002	-0.004	-0.4	0.1	-0.1	-0.012	-0.005	0.000
40434M002	7888	LC	0.039	-0.030	0.014	0.7	-0.3	0.2	0.047	0.004	0.020
				0.022			0.4			0.024	0.014

SAN DIEGO

40436M002	7062	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40436M002	7062	LC	-0.038	-0.103	-0.062	-0.5	-1.4	-0.9	0.012	-0.110	0.059
40436M002	7062	LZ	0.001	0.018	0.023	0.0	0.6	0.6	-0.007	0.028	-0.002
40436M003	7035	LC	-0.009	0.001	-0.003	-0.5	0.0	-0.1	-0.009	-0.004	0.001
40436M003	7035	LU	-0.002	0.001	0.009	-0.1	0.1	0.4	-0.002	0.007	0.005
40436M003	7035	LZ	0.001	0.018	0.022	0.1	0.9	1.0	-0.007	0.027	-0.002
40436M003	7035	LK	-0.026	-0.009	-0.055	-0.9	-0.3	-2.1	-0.019	-0.057	-0.013
40436M003	7035	LG	-0.022	0.028	0.014	-0.8	1.1	0.6	-0.032	0.020	-0.005
40436M003	7035	GA	0.000	0.000	0.000	0.1	-0.1	0.0	0.000	0.000	0.000
				0.029			0.8			0.033	0.020

BEAR LAKE

40438M001	7082	LC	-0.080	-0.047	0.118	-1.3	-0.6	1.4	-0.057	0.040	0.133
40438M001	7082	LZ	0.008	0.002	-0.007	0.4	0.1	-0.3	0.006	-0.002	-0.008
40438M002	7046	LG	-0.001	0.004	-0.036	0.0	0.1	-1.7	-0.003	-0.025	-0.026
40438M002	7046	LK	-0.268	-0.164	-0.033	-2.6	-1.6	-0.3	-0.190	-0.192	0.165
40438M002	7046	LU	-0.012	-0.025	0.011	-0.2	-0.4	0.1	-0.002	-0.011	0.028
40438M002	7046	LC	0.001	0.002	0.021	0.1	0.1	1.1	0.000	0.017	0.013
40438M002	7046	LZ	0.012	0.004	0.013	0.6	0.2	0.6	0.010	0.015	0.002
				0.077			1.1			0.075	0.082

OWENS VALLEY

40439M001	7114	LC	-0.026	0.058	0.028	-1.0	1.8	0.8	-0.051	0.045	-0.014
40439M001	7114	LZ	-0.015	-0.006	0.028	-0.8	-0.3	1.5	-0.011	0.015	0.026
40439M001	7114	GA	0.001	0.000	-0.001	0.3	-0.1	-0.3	0.001	-0.001	0.001
40439M004	7853	LZ	-0.016	-0.006	0.027	-0.9	-0.4	1.5	-0.011	0.013	0.027

40439M004	7853	LC	-0.004	-0.035	-0.018	-0.3	-1.8	-1.0	0.013	-0.034	0.015
40439M004	7853	LG	0.003	0.008	-0.017	0.2	0.4	-0.9	-0.001	-0.008	-0.017
40439M004	7853	RG	-0.003	-0.002	0.001	-0.3	-0.2	0.1	-0.001	-0.001	0.003
40439M004	7853	LU	-0.001	0.020	-0.041	0.0	0.8	-1.1	-0.011	-0.022	-0.038
40439M004	7853	LK	-0.027	-0.016	-0.031	-1.0	-0.6	-1.2	-0.017	-0.041	0.003
40439M004	7853	GA	0.000	0.000	0.000	0.1	0.1	0.1	0.000	0.000	0.000
40439S002	7207	GA	-0.006	-0.006	0.002	-1.1	-0.6	0.2	-0.008	0.002	-0.002
40439S002	7207	RN	0.004	0.001	-0.001	0.9	0.3	-0.1	0.003	0.001	-0.003
40439S002	7207	RG	0.000	0.000	0.000	-0.1	0.0	0.0	0.000	0.000	0.000
				0.018			0.9			0.019	0.017

WESTFORD

40440M001	7091	LZ	0.165	0.001	0.064	1.1	0.0	0.4	0.157	0.013	0.081
40440M001	7091	LK	-0.075	-0.028	0.002	-2.4	-0.9	0.1	-0.080	0.000	0.004
40440M001	7091	LG	0.019	-0.018	0.030	0.9	-0.8	1.9	0.012	0.007	0.037
40440M001	7091	LC	-0.025	0.042	-0.033	-1.7	2.1	-1.6	-0.011	0.008	-0.058
40440M001	7091	GA	0.000	0.000	0.000	0.2	-0.1	-0.1	0.000	0.000	0.000
40440M001	7091	LU	-0.017	0.024	0.014	-0.7	0.9	0.5	-0.009	0.029	-0.011
40440S002	7205	RN	-0.002	0.000	-0.003	-0.7	0.1	-0.7	-0.002	-0.001	-0.003
40440S002	7205	RG	0.002	-0.008	0.003	0.3	-1.7	0.6	-0.001	-0.003	0.008
40440S002	7205	GA	0.000	0.001	0.000	0.2	0.6	0.1	-0.001	0.000	0.000
40440S003	7209	RN	0.003	0.000	0.000	0.8	-0.1	0.1	0.002	0.000	0.001
40440S003	7209	GA	-0.003	-0.004	0.000	-1.0	-0.9	0.1	-0.002	0.003	0.003
40440S003	7209	RG	0.002	-0.001	-0.002	0.5	-0.2	-0.4	0.002	-0.002	0.000
40440S003	7209	RO	0.000	0.010	-0.005	0.0	1.2	-0.6	0.003	0.003	-0.010
40440S003	7209	RF	-0.001	0.003	0.006	-0.2	0.6	0.8	0.000	0.007	0.002
				0.032			1.1			0.034	0.029

GREENBANK

40441S001	7204	RG	-0.002	0.004	-0.004	-0.3	0.7	-0.7	-0.001	0.000	-0.006
40441S001	7204	RN	0.001	-0.002	0.002	0.2	-0.5	0.5	0.000	0.000	0.003
40441S004	7214	RG	-0.006	0.001	0.005	-1.1	0.1	0.8	-0.005	0.005	0.001
40441S004	7214	RN	0.001	-0.006	-0.002	0.3	-0.9	-0.4	0.000	-0.005	0.003
40441S004	7214	RO	0.004	0.003	-0.002	0.7	0.7	-0.3	0.004	0.000	-0.003
				0.003			0.7			0.003	0.004

FORT DAVIS

40442M001	7086	LC	0.004	-0.031	0.011	0.3	-2.6	0.9	0.011	-0.005	0.031
40442M001	7086	MJ	0.017	-0.033	-0.006	0.6	-1.1	-0.2	0.024	-0.019	0.021
40442M001	7086	MS	0.046	0.016	0.024	1.3	0.4	0.7	0.041	0.034	-0.011
40442M001	7086	LU	0.016	0.024	-0.034	1.4	2.0	-2.3	0.010	-0.016	-0.041
40442M001	7086	LZ	0.000	-0.023	-0.025	0.0	-1.4	-1.4	0.006	-0.033	0.007
40442M001	7086	LK	0.016	0.012	-0.049	0.6	0.5	-2.0	0.012	-0.035	-0.038
40442M001	7086	MX	0.017	-0.043	-0.059	0.5	-1.2	-1.7	0.027	-0.070	0.003
40442M001	7086	LL	0.019	0.043	0.014	0.5	1.3	0.4	0.008	0.035	-0.033
40442M001	7086	GA	0.000	0.000	0.000	-0.2	0.1	0.3	0.000	0.000	0.000
40442M005	7885	LZ	-0.004	0.021	-0.012	-0.2	1.4	-0.7	-0.009	0.000	-0.023
40442M005	7885	GA	0.000	-0.001	0.000	0.0	-0.3	0.1	0.000	0.000	0.000
40442M005	7885	LC	0.045	-0.080	0.035	0.8	-0.8	0.4	0.063	-0.004	0.075
40442M006	7080	LZ	-0.004	0.031	-0.023	-0.2	2.1	-1.3	-0.011	-0.005	-0.037
40442M006	7080	MX	0.032	-0.002	0.082	0.9	-0.1	2.3	0.031	0.074	0.037
40442M006	7080	LK	0.012	0.062	-0.026	0.5	2.5	-1.1	-0.004	0.009	-0.068
40442M006	7080	LC	0.000	0.010	0.003	0.0	0.9	0.3	-0.003	0.007	-0.007
40442M006	7080	LU	-0.006	-0.015	0.016	-0.5	-1.2	1.1	-0.003	0.006	0.022
40442M006	7080	GB	0.000	-0.005	0.002	0.0	-0.5	0.3	0.004	0.003	-0.001
40442M006	7080	LG	-0.005	-0.022	-0.009	-0.4	-1.9	-0.8	0.000	-0.019	0.015
40442M006	7080	MJ	0.015	-0.012	-0.028	0.5	-0.4	-0.9	0.017	-0.028	-0.007
40442M006	7080	MS	0.043	0.015	-0.005	1.2	0.4	-0.1	0.038	0.009	-0.024
40442M008	7850	RG	0.000	0.006	0.004	0.0	0.4	0.4	-0.001	0.007	-0.003
40442M008	7850	GA	0.000	0.000	0.000	0.0	-0.1	-0.1	0.000	0.000	0.000
40442M009	7900	RG	0.015	0.020	-0.009	1.9	1.0	-0.7	0.010	0.004	-0.024

40442M009	7900	GB	-0.002	0.000	0.000	-0.7	-0.2	0.2	-0.002	0.001	0.000
40442S002	7206	MX	-0.052	0.067	-0.025	-1.5	1.9	-0.7	-0.067	0.005	-0.058
40442S002	7206	GA	0.001	-0.001	0.000	0.3	-0.4	0.0	0.001	0.000	0.000
40442S002	7206	MJ	-0.059	0.073	0.027	-2.0	2.4	0.9	-0.075	0.052	-0.035
40442S003	7216	GA	0.002	0.014	-0.012	0.6	1.2	-1.7	0.014	-0.013	0.001
40442S003	7216	RG	0.000	0.006	0.000	-0.1	1.3	-0.1	-0.002	0.003	-0.006
40442S003	7216	RN	-0.003	-0.004	0.006	-1.1	-1.4	1.5	-0.002	0.003	0.007
40442S003	7216	GB	0.000	0.000	0.000	0.2	0.1	-0.1	0.000	0.000	0.000
40442S017	7613	RG	0.006	0.010	-0.007	1.1	1.7	-1.2	0.003	0.000	-0.013
40442S017	7613	RN	-0.002	-0.010	0.003	-0.7	-1.7	0.8	0.000	-0.003	0.011
				0.026			1.3			0.025	0.028

MAUI

40445M001	7210	GA	0.000	0.000	0.000	-0.2	0.0	-0.2	0.000	0.000	0.000
40445M001	7210	LC	0.026	-0.004	0.037	1.9	-0.3	2.6	0.015	0.042	-0.008
40445M001	7210	LK	-0.001	-0.052	0.052	0.0	-1.6	1.6	0.047	0.041	0.039
40445M001	7210	LU	0.017	-0.008	0.030	1.4	-0.6	1.9	0.014	0.032	-0.001
40445M001	7210	LL	-0.070	-0.095	-0.086	-1.2	-2.3	-0.6	0.059	-0.116	0.066
40445M001	7210	LG	0.039	0.080	0.065	0.6	1.3	1.1	-0.058	0.085	-0.040
40445M001	7210	GA	-0.032	0.005	-0.012	-2.3	0.9	-2.0	-0.030	-0.015	-0.007
40445M001	7210	LZ	0.018	-0.010	0.027	1.2	-0.6	1.8	0.016	0.030	-0.002
40445M002	7120	GA	0.001	-0.001	0.001	0.3	-0.2	0.5	-0.001	0.001	0.001
40445M002	7120	LC	-0.053	0.003	-0.040	-1.6	0.1	-1.5	-0.024	-0.054	0.030
40445M002	7120	LZ	-0.003	0.007	-0.014	-0.2	0.3	-0.8	-0.007	-0.013	-0.005
40445M002	7120	RG	-0.023	0.008	-0.006	-1.0	0.7	-0.5	-0.017	-0.012	0.014
40445S005	7210	MX	-0.005	-0.016	-0.001	-0.2	-0.5	0.0	0.013	-0.005	0.011
40445S005	7210	MS	-0.073	0.013	-0.016	-2.1	0.4	-0.5	-0.041	-0.037	0.052
40445S005	7210	MJ	0.009	-0.030	0.003	0.3	-1.0	0.1	0.031	0.001	0.004
40445S005	7210	GA	0.000	0.000	0.000	0.2	0.1	0.0	0.000	0.001	0.000
				0.034			1.3			0.038	0.027

WASHINGTON

40451M101	7101	LC	-0.083	0.001	0.063	-0.5	0.0	0.3	-0.080	0.062	0.024
40451M101	7101	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40451M102	7102	LZ	0.017	0.001	-0.007	1.0	0.0	-0.5	0.016	-0.008	-0.002
40451M102	7102	RG	-0.003	0.036	-0.022	-0.4	4.0	-2.5	0.005	0.005	-0.041
40451M102	7102	LC	0.002	0.012	0.009	0.1	0.3	0.2	0.005	0.014	-0.003
40451M102	7102	RN	0.010	0.006	0.003	1.1	0.3	0.1	0.011	0.005	-0.001
40451M102	7102	GA	-0.001	-0.004	0.003	-0.4	-1.4	0.9	0.004	0.002	0.002
40451M103	7103	LZ	-0.010	-0.022	0.007	-0.7	-1.5	0.4	-0.015	-0.007	0.019
40451M103	7103	LC	0.038	-0.014	0.019	1.1	-0.2	0.3	0.034	0.001	0.029
40451M103	7103	GA	0.000	0.001	0.000	0.0	0.3	-0.1	-0.001	0.000	0.000
40451M104	7104	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40451M104	7104	LC	-0.099	0.064	-0.054	-0.8	0.2	-0.3	-0.081	0.012	-0.100
40451M105	7105	LL	0.028	0.028	0.033	0.8	0.8	1.0	0.034	0.039	0.005
40451M105	7105	LC	0.000	-0.005	0.004	0.0	-0.4	0.4	-0.001	0.000	0.006
40451M105	7105	LK	0.008	-0.006	-0.009	0.2	-0.2	-0.3	0.006	-0.012	0.000
40451M105	7105	GA	0.000	0.000	0.000	0.0	0.2	-0.1	0.000	0.000	0.000
40451M105	7105	LZ	-0.010	-0.023	0.007	-0.7	-1.5	0.5	-0.015	-0.007	0.020
40451M105	7105	LU	-0.001	-0.005	0.008	-0.1	-0.4	0.6	-0.002	0.004	0.009
40451M105	7105	LG	-0.008	-0.007	-0.005	-0.1	-0.1	-0.1	-0.010	-0.007	0.001
40451M106	7100	LC	-0.112	0.020	-0.460	-0.1	0.0	-0.5	-0.104	-0.330	-0.323
40451M106	7100	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40451M111	7899	LC	0.026	-0.054	0.047	0.3	-0.4	0.4	0.013	0.000	0.075
40451M111	7899	LZ	-0.010	-0.022	0.007	-0.7	-1.5	0.5	-0.015	-0.007	0.019
40451M111	7899	GA	0.000	0.001	0.000	0.1	0.3	-0.1	0.001	0.000	0.001
40451M112	7063	GA	0.000	0.001	-0.001	0.1	0.3	-0.3	0.000	-0.001	0.000
40451M112	7063	LZ	-0.010	-0.023	0.006	-0.7	-1.5	0.4	-0.015	-0.008	0.020
40451M112	7063	LC	0.000	-0.002	0.068	0.0	-0.1	2.0	-0.001	0.052	0.044
40451M114	7125	LZ	0.008	-0.017	0.000	0.6	-1.1	0.0	0.004	-0.011	0.014
40451M114	7125	LL	-0.102	0.155	-0.048	-1.3	2.3	-0.7	-0.064	0.072	-0.166
40451M114	7125	LC	-0.014	0.070	0.015	-0.5	1.7	0.4	0.002	0.056	-0.046
40451M117	7920	LU	-0.004	0.046	0.032	-0.2	1.9	1.2	0.007	0.053	-0.016

40451M117	7920	LZ	0.012	-0.018	-0.026	0.8	-1.2	-1.6	0.008	-0.033	0.000
40451M117	7920	LC	0.012	0.042	0.018	0.3	0.5	0.2	0.021	0.038	-0.018
40451M117	7920	LK	-0.052	-0.004	0.046	-1.7	-0.1	1.6	-0.051	0.041	0.023
40451M120	7918	LC	0.015	0.011	0.008	0.7	0.3	0.2	0.017	0.010	-0.001
40451M120	7918	LK	-0.036	-0.010	0.003	-1.3	-0.4	0.1	-0.038	0.002	0.003
40451M120	7918	LU	0.000	0.022	0.013	0.0	1.0	0.5	0.005	0.023	-0.009
40451M120	7918	LZ	0.005	-0.009	-0.007	0.3	-0.6	-0.4	0.003	-0.011	0.003
			0.054			1.0			0.047		0.064

PIETOWN

40456M001	PIET	GA	0.000	0.000	-0.002	0.0	0.0	-0.5	0.000	-0.001	-0.001
40456M001	PIET	PJ	-0.001	-0.001	0.014	-0.1	-0.1	1.6	0.000	0.011	0.009
40456S001	7234	RN	0.003	0.004	-0.007	1.0	1.4	-1.9	0.001	-0.003	-0.008
40456S001	7234	GA	0.000	0.000	0.000	0.0	0.0	0.2	0.000	0.000	0.000
40456S001	7234	RG	-0.008	-0.017	0.011	-1.6	-2.8	1.8	-0.002	-0.002	0.021
			0.007			1.4			0.004		0.011

SCRIPPS

40460M001	SIO1	PJ	0.003	-0.003	-0.003	0.2	-0.2	-0.3	0.004	-0.003	-0.001
40460M001	SIO1	PP	-0.003	0.002	0.006	-0.2	0.2	0.4	-0.004	0.005	0.003
			0.004			0.3			0.004		0.002

LOS ALAMOS

40463S001	7611	RN	0.007	0.035	-0.012	1.2	3.9	-1.4	-0.003	0.011	-0.036
40463S001	7611	RG	-0.005	-0.011	0.004	-1.0	-2.2	0.8	-0.002	-0.004	0.012
			0.016			2.4			0.006		0.027

HAT CREEK

40489S001	7218	RG	-0.002	-0.002	0.001	-0.3	-0.3	0.2	0.000	-0.001	0.002
40489S001	7218	RN	0.001	0.001	-0.001	0.2	0.2	-0.2	0.000	0.000	-0.002
			0.001			0.3			0.000		0.002

MARYLAND POINT

40490S001	7217	RN	-0.001	0.018	-0.007	-0.2	1.5	-0.6	0.003	0.005	-0.018
40490S001	7217	RG	-0.001	-0.003	0.002	-0.2	-0.4	0.2	-0.001	-0.001	0.003
40490S001	7217	RO	0.003	-0.007	0.002	0.5	-0.7	0.2	0.002	-0.003	0.007
			0.007			0.7			0.003		0.011

FLAGSTAFF

40491M002	7891	LZ	-0.056	-0.106	0.117	-0.7	-1.4	1.5	-0.013	0.027	0.165
40491M002	7891	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40491M002	7891	LC	-0.134	-0.232	0.227	-1.8	-2.4	2.5	-0.039	0.034	0.347
40491M003	7261	GA	0.000	0.000	0.000	0.0	-0.1	0.1	0.000	0.001	0.000
40491M003	7261	RG	0.002	0.009	-0.007	0.3	0.6	-0.6	-0.001	-0.001	-0.011
			0.101			1.4			0.019		0.172

VERNAL

40492M001	7892	LZ	-0.003	-0.006	-0.003	-0.1	-0.3	-0.1	-0.001	-0.007	0.003
40492M001	7892	LC	0.010	0.049	0.030	0.2	0.7	0.4	-0.007	0.055	-0.018
			0.024			0.4			0.028		0.013

YUMA

40493M001	7894	LC	-0.022	0.021	0.011	-0.4	0.2	0.1	-0.028	0.014	-0.003
40493M001	7894	RG	0.001	-0.003	-0.001	0.1	-0.3	-0.1	0.002	-0.002	0.002
40493M001	7894	LZ	-0.032	0.029	0.016	-0.6	1.0	0.3	-0.041	0.021	-0.002
				0.019			0.5			0.023	0.002

PLATTEVILLE

40496M001	7112	LK	-0.013	-0.002	-0.013	-0.5	-0.1	-0.5	-0.012	-0.014	-0.004
40496M001	7112	LZ	-0.005	-0.014	0.014	-0.3	-0.8	0.8	-0.001	0.001	0.021
40496M001	7112	LU	0.003	0.000	0.027	0.2	0.0	1.7	0.003	0.021	0.017
40496M001	7112	LL	0.007	-0.043	0.065	0.1	-0.9	1.3	0.017	0.025	0.072
40496M001	7112	LC	0.004	-0.004	0.007	0.3	-0.3	0.4	0.005	0.004	0.007
40496M001	7112	LG	0.022	0.016	-0.024	1.4	1.0	-1.9	0.017	-0.005	-0.032
40496M001	7112	GA	0.000	0.000	0.000	-0.1	0.0	0.0	0.000	0.000	0.000
40496M002	7258	RN	-0.002	-0.010	0.005	-0.6	-0.9	0.5	0.000	-0.003	0.011
40496M002	7258	GA	0.000	0.000	0.000	0.1	0.0	0.0	0.000	0.000	0.000
40496M002	7258	RG	0.001	0.007	-0.007	0.3	0.9	-0.8	0.000	-0.001	-0.010
				0.018			0.9			0.010	0.027

MONUMENT PEAK

40497M001	7110	LC	0.001	0.005	0.005	0.1	0.5	0.5	-0.002	0.007	-0.001
40497M001	7110	LL	0.020	-0.075	-0.040	0.6	-2.2	-1.2	0.051	-0.065	0.027
40497M001	7110	LK	-0.011	-0.030	0.009	-0.4	-1.2	0.4	0.003	-0.009	0.031
40497M001	7110	GA	0.000	0.000	0.000	0.1	0.1	-0.2	0.000	0.000	0.000
40497M001	7110	LG	-0.016	0.045	0.012	-0.5	1.4	0.4	-0.034	0.028	-0.021
40497M001	7110	LU	-0.005	-0.006	0.016	-0.5	-0.5	1.2	-0.002	0.009	0.015
40497M001	7110	LZ	-0.014	-0.015	0.009	-0.9	-1.0	0.5	-0.006	-0.003	0.021
40497M002	7220	LZ	0.012	-0.039	0.001	0.5	-1.9	0.0	0.028	-0.015	0.025
40497M002	7220	LC	0.028	-0.044	-0.020	1.1	-1.2	-0.6	0.045	-0.032	0.012
40497M002	7220	GA	-0.001	0.001	0.000	-0.2	0.4	0.1	-0.001	0.000	0.001
40497M003	7274	GA	-0.004	0.029	0.002	-0.6	1.6	0.1	0.028	0.004	-0.004
40497M003	7274	LC	0.015	-0.048	-0.031	0.5	-1.2	-0.9	0.035	-0.046	0.014
40497M003	7274	RG	0.005	0.013	-0.006	0.8	1.6	-0.9	-0.002	0.002	-0.015
40497M003	7274	GA	0.000	-0.002	0.001	-0.1	-0.8	0.5	0.002	0.002	-0.001
				0.023			1.0			0.025	0.017

RICHMOND

40499M002	7295	LC	0.018	0.019	-0.028	0.8	0.7	-1.3	0.021	-0.019	-0.027
40499M002	7295	PJ	0.016	-0.004	-0.017	1.1	-0.4	-1.9	0.015	-0.018	-0.002
40499M002	7295	PP	-0.014	-0.018	0.008	-0.9	-1.2	0.5	-0.017	0.000	0.017
40499M002	7295	LK	0.027	-0.009	-0.022	0.9	-0.3	-0.7	0.025	-0.025	0.003
40499M002	7295	LU	-0.007	0.020	-0.022	-0.2	1.0	-0.6	-0.003	-0.011	-0.028
40499M002	7295	PA	-0.003	0.034	0.003	-0.1	0.6	0.1	0.003	0.017	-0.030
40499M002	7295	GA	-0.001	0.000	0.001	-0.2	0.1	0.6	0.000	0.001	-0.001
40499M002	7295	LZ	-0.009	0.004	-0.017	-0.3	0.2	-0.5	-0.008	-0.013	-0.012
40499S001	7219	RO	-0.003	0.003	0.001	-0.6	0.7	0.2	-0.003	0.003	-0.003
40499S001	7219	RN	0.002	-0.003	0.004	0.6	-1.1	1.0	0.001	0.002	0.005
40499S001	7219	RF	-0.007	0.009	0.004	-1.0	1.5	0.4	-0.005	0.008	-0.008
40499S001	7219	GA	0.000	0.000	0.000	0.1	0.0	-0.3	0.000	0.000	0.000
40499S001	7219	RG	0.000	0.000	-0.001	0.0	0.1	-0.2	0.000	-0.001	-0.001
				0.013			0.9			0.012	0.015

MAZATLAN

40504M001	7122	LG	0.036	0.086	-0.081	0.8	1.9	-1.8	0.011	-0.038	-0.117
40504M001	7122	LU	-0.001	-0.005	0.001	-0.1	-0.4	0.1	0.001	-0.001	0.005
40504M001	7122	LK	0.002	-0.030	0.010	0.1	-1.2	0.4	0.011	-0.002	0.030
40504M001	7122	LC	0.002	0.012	-0.006	0.2	1.0	-0.5	-0.002	-0.001	-0.013
40504M001	7122	LL	-0.024	-0.009	0.083	-0.7	-0.3	2.4	-0.021	0.070	0.047
40504M001	7122	LZ	-0.003	-0.006	-0.003	-0.2	-0.4	-0.2	-0.001	-0.005	0.005

				0.037			1.1			0.024	0.053
CABO SAN LUCAS											
40505M001	7882	LU	-0.010	-0.031	0.006	-0.3	-0.9	0.1	0.001	-0.007	0.032
40505M001	7882	LC	0.014	0.019	-0.011	0.8	0.7	-0.6	0.007	-0.001	-0.025
40505M001	7882	LG	-0.092	-0.007	0.072	-2.3	-0.2	1.9	-0.084	0.051	0.063
40505M001	7882	LK	0.028	-0.015	0.001	1.0	-0.5	0.1	0.031	0.000	0.005
40505M001	7882	LZ	-0.005	0.008	-0.012	-0.2	0.4	-0.5	-0.007	-0.009	-0.010
				0.033			1.1			0.033	0.034
ENSENADA											
40506M001	7883	LC	0.018	0.008	-0.005	0.4	0.3	-0.1	0.012	0.004	-0.015
40506M001	7883	LK	0.004	-0.049	0.042	0.1	-1.2	1.0	0.025	0.014	0.058
40506M001	7883	LU	0.023	0.012	-0.016	0.8	0.5	-0.4	0.015	-0.003	-0.027
40506M001	7883	LZ	-0.016	0.001	-0.004	-0.8	0.1	-0.2	-0.015	-0.006	0.003
				0.022			0.7			0.014	0.033
SANTIAGO DE CUBA											
40701S001	1953	LC	-0.174	-0.079	0.058	-2.3	-0.6	0.7	-0.188	0.043	0.051
40701S001	1953	LZ	0.053	-0.009	0.008	1.1	-0.4	0.1	0.049	0.000	0.023
40701S001	1953	LK	0.015	0.041	-0.025	0.3	0.9	-0.4	0.025	-0.012	-0.043
40701S001	1953	LU	0.038	0.033	-0.075	0.3	0.3	-0.5	0.045	-0.063	-0.047
				0.067			1.0			0.076	0.042
NATAL											
41604S001	7929	LC	0.122	0.022	0.031	1.1	0.2	0.2	0.088	0.040	0.084
41604S001	7929	LZ	-0.010	-0.004	-0.001	-0.3	-0.1	0.0	-0.009	-0.002	-0.006
				0.052			0.5			0.049	0.060
EASTER ISLAND											
41703M002	7097	LK	0.003	0.014	0.038	0.1	0.5	1.5	-0.002	0.028	-0.030
41703M002	7097	LL	-0.352	0.028	-0.011	-1.9	0.2	-0.1	-0.341	0.031	0.085
41703M002	7097	LZ	0.042	0.003	0.032	2.0	0.1	1.0	0.039	0.021	-0.029
41703M002	7097	LC	-0.033	0.002	-0.010	-2.1	0.1	-0.6	-0.032	-0.005	0.013
41703M002	7097	LG	0.120	-0.016	-0.010	1.3	-0.2	-0.1	0.119	-0.020	-0.018
41703M002	7097	LU	0.011	-0.014	-0.019	0.5	-0.7	-0.9	0.015	-0.012	0.017
				0.090			1.2			0.106	0.040
SANTIAGO											
41705M001	7400	LU	-0.227	0.071	-0.013	-1.5	1.9	-0.3	-0.191	-0.088	-0.112
41705M001	7400	GA	0.000	-0.001	0.000	0.1	-0.2	0.0	0.000	0.000	0.000
41705M001	7400	LK	-0.279	0.068	0.047	-0.7	0.2	0.1	-0.241	-0.046	-0.157
41705M001	7400	LL	-0.120	0.079	-0.029	-1.4	1.0	-0.4	-0.087	-0.087	-0.080
41705M001	7400	LC	-0.246	0.015	-0.001	-1.2	0.1	0.0	-0.227	-0.053	-0.080
41705M001	7400	LZ	-0.302	0.052	-0.007	-1.0	0.2	0.0	-0.268	-0.087	-0.121
41705M003	SANT	GA	0.000	0.000	0.000	0.2	-0.1	-0.1	0.000	0.000	0.000
41705M003	SANT	PP	0.224	-0.238	0.130	1.1	-1.2	0.6	0.132	0.272	0.180
41705M003	SANT	PC	-0.024	0.199	0.032	-0.1	1.0	0.2	0.043	-0.080	-0.181
41705M003	SANT	PA	-0.150	0.190	0.158	-1.0	1.3	1.1	-0.079	0.008	-0.278
41705M003	SANT	PE	-0.004	-0.004	-0.014	-0.3	-0.3	-1.2	-0.005	-0.010	0.010
41705M003	SANT	PJ	-0.026	0.032	0.017	-1.9	1.9	1.9	-0.014	-0.007	-0.042
41705S006	1404	RF	0.003	-0.021	-0.031	0.3	-1.4	-2.4	-0.004	-0.015	0.035
41705S006	1404	RN	0.008	-0.006	-0.003	1.0	-0.5	-0.4	0.006	0.002	0.009
41705S006	1404	RO	-0.005	0.004	0.022	-0.6	0.2	1.7	-0.004	0.015	-0.017
41705S006	1404	GA	-0.002	0.001	0.001	-0.6	0.5	0.3	0.002	0.002	0.000
41705S006	1404	RG	0.009	-0.006	0.000	1.0	-0.4	0.0	0.006	0.004	0.007

				0.106			1.1			0.103	0.111

CERRO TOLOLO

41706M001	7401	LC	-0.010	-0.017	-0.025	-0.6	-0.9	-1.6	-0.015	-0.015	0.024
41706M001	7401	LK	0.013	0.015	0.061	0.5	0.6	2.3	0.017	0.048	-0.039
41706M001	7401	LL	0.138	0.079	0.020	2.3	1.5	0.3	0.156	0.002	-0.035
41706M001	7401	LZ	-0.006	0.006	0.013	-0.3	0.3	0.5	-0.003	0.008	-0.013
41706M001	7401	LU	-0.001	-0.004	-0.004	0.0	-0.2	-0.3	-0.002	-0.002	0.005
				0.046			1.3			0.052	0.027

SEST

41709S001	7239	RG	0.000	-0.016	0.004	0.0	-0.6	0.3	-0.005	0.011	0.011
41709S001	7239	RN	0.000	0.013	-0.003	0.0	0.5	-0.2	0.004	-0.009	-0.010
				0.009			0.4			0.008	0.011

AREQUIPA

42202M003	7403	LU	0.001	0.000	-0.007	0.1	0.0	-0.3	0.001	-0.006	0.002
42202M003	7403	LG	0.023	-0.012	0.000	1.5	-1.0	0.0	0.018	0.005	0.018
42202M003	7403	LC	-0.001	-0.007	-0.029	-0.1	-0.4	-1.2	-0.003	-0.026	0.014
42202M003	7403	LZ	-0.023	0.028	0.000	-1.2	1.7	0.0	-0.013	-0.009	-0.033
42202M003	7403	LK	-0.082	-0.011	0.140	-1.7	-0.3	3.0	-0.081	0.130	-0.055
42202S001	7907	LC	0.006	-0.019	-0.025	0.4	-1.1	-1.9	0.000	-0.018	0.026
42202S001	7907	LK	-0.008	-0.002	0.053	-0.3	-0.1	2.0	-0.008	0.051	-0.016
42202S001	7907	LG	0.024	-0.017	0.012	1.5	-1.4	1.0	0.017	0.018	0.019
42202S001	7907	LL	0.122	0.080	-0.026	1.4	1.8	-0.4	0.141	-0.036	-0.029
42202S001	7907	LZ	-0.022	0.025	0.016	-1.4	1.7	0.9	-0.013	0.006	-0.034
42202S001	7907	LU	-0.012	0.006	-0.014	-0.7	0.5	-1.0	-0.009	-0.016	-0.005
				0.042			1.4			0.048	0.027

BERMUDA

42501M002	7294	RN	-0.003	0.008	0.000	-0.3	0.3	0.0	0.001	0.005	-0.007
42501M002	7294	RG	0.002	-0.004	0.000	0.2	-0.2	0.0	0.000	-0.002	0.003
				0.004			0.2			0.003	0.005

CANBERRA

50103S001	1543	RJ	0.005	0.002	0.001	0.2	0.1	0.0	-0.004	-0.002	-0.003
50103S001	1543	GB	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
50103S003	7943	LC	0.012	0.009	-0.060	0.3	0.3	-1.4	-0.014	-0.052	0.030
50103S003	7943	LZ	0.023	-0.076	0.134	0.3	-1.0	2.6	0.053	0.075	-0.126
50103S003	7943	GA	-0.117	0.069	-0.174	-1.2	0.7	-1.7	-0.130	-0.157	-0.084
50103S005	1542	GB	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
50103S005	1542	RJ	0.006	0.002	0.002	0.2	0.1	0.1	-0.005	-0.001	-0.005
50103S007	7843	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
50103S007	7843	LZ	0.044	-0.004	-0.025	1.0	-0.1	-0.8	-0.019	-0.043	-0.018
50103S007	7843	LC	0.029	-0.003	0.012	2.4	-0.2	0.9	-0.013	-0.005	-0.028
50103S007	7843	LG	-0.036	0.013	-0.004	-2.8	0.8	-0.3	0.008	0.018	0.033
50103S007	7843	LU	0.021	-0.004	-0.014	0.8	-0.1	-0.6	-0.007	-0.023	-0.008
50103S007	7843	LK	0.162	-0.051	0.161	0.8	-0.3	0.8	-0.040	0.035	-0.228
50103S010	1545	RN	-0.019	0.013	0.013	-1.6	1.2	1.6	-0.001	0.024	0.011
50103S010	1545	GA	0.043	0.010	0.016	1.6	0.4	0.6	-0.023	0.040	-0.008
50103S010	1545	RG	0.002	-0.012	0.013	0.2	-1.0	1.3	0.009	0.006	-0.014
50103S010	1545	RJ	0.018	-0.005	0.009	0.6	-0.4	0.5	-0.005	-0.003	-0.020
50103S010	1545	GB	0.000	0.000	-0.004	0.1	0.0	-1.2	0.000	-0.003	-0.002
50103S017	CANB	PE	0.003	-0.012	-0.009	0.4	-1.0	-0.5	0.009	-0.012	-0.002
50103S017	CANB	GB	0.000	0.000	0.004	-0.1	0.1	1.2	0.000	0.002	0.003
50103S017	CANB	PC	-0.019	0.038	-0.049	-0.6	1.2	-2.0	-0.022	-0.019	0.057
50103S017	CANB	PA	-0.117	0.042	-0.057	-2.2	0.7	-1.3	0.024	0.023	0.132

50103S017	CANB	PP	0.053	-0.029	0.111	0.5	-0.3	1.1	-0.002	0.056	-0.113
50103S017	CANB	PJ	0.006	0.006	-0.026	0.5	0.4	-2.6	-0.008	-0.022	0.013
				0.050			1.2			0.038	0.068

YARRAGADEE

50107M001	7090	LU	0.001	0.018	-0.025	0.1	1.4	-1.7	-0.008	-0.014	0.026
50107M001	7090	GA	0.000	0.000	0.000	-0.1	-0.3	0.1	0.000	0.000	0.000
50107M001	7090	LC	-0.011	0.013	-0.005	-0.9	1.2	-0.3	0.004	0.004	0.017
50107M001	7090	LZ	0.034	0.008	-0.009	2.1	0.6	-0.6	-0.034	-0.011	-0.002
50107M001	7090	LK	0.001	0.023	0.077	0.0	0.5	1.6	-0.011	0.077	-0.019
50107M001	7090	LG	-0.015	-0.023	0.066	-0.3	-0.5	1.4	0.023	0.051	-0.044
50107M004	YAR1	PJ	0.005	-0.016	-0.001	0.3	-1.0	-0.1	0.003	-0.008	-0.014
50107M004	YAR1	PA	-0.095	-0.140	0.028	-1.5	-2.7	0.7	0.146	-0.017	-0.089
50107M004	YAR1	GA	0.001	0.002	-0.001	0.2	0.8	-0.3	-0.002	-0.001	-0.001
50107M004	YAR1	PP	0.084	0.033	0.121	0.8	0.3	1.2	-0.090	0.103	-0.064
50107M004	YAR1	PE	-0.001	-0.023	0.013	-0.2	-1.9	1.1	0.011	0.002	-0.023
50107M004	YAR1	PC	-0.033	0.026	-0.005	-1.0	0.8	-0.1	0.019	0.014	0.035
				0.044			1.2			0.046	0.038

HOBART

50116S002	7242	RN	0.023	0.001	0.008	1.8	0.1	0.9	-0.013	-0.007	-0.019
50116S002	7242	RG	0.030	-0.016	-0.008	1.9	-1.2	-0.6	-0.003	-0.029	-0.019
50116S002	7242	GA	0.000	0.000	0.000	-0.3	0.1	0.0	0.000	0.000	0.000
50116S004	HOBA	GA	0.002	-0.001	0.000	0.8	-0.3	0.1	-0.001	0.001	0.002
50116S004	HOBA	PA	-0.129	0.028	-0.125	-0.9	0.2	-0.8	0.046	-0.009	0.176
50116S004	HOBA	PP	-0.054	0.013	-0.006	-3.6	0.9	-0.4	0.018	0.031	0.042
50116S004	HOBA	PC	-0.007	0.040	-0.106	-0.2	1.0	-1.3	-0.030	-0.060	0.092
				0.049			1.3			0.025	0.077

TOWNSVILLE

50126S004	TOWN	PP	-0.003	0.002	0.001	-0.2	0.1	0.1	0.000	0.002	0.003
50126S004	TOWN	PC	0.145	-0.095	-0.049	1.4	-0.9	-0.5	0.000	-0.103	-0.148
				0.074			0.8			0.052	0.105

WELLINGTON

50208S002	WELL	PP	-0.016	-0.001	-0.020	-1.0	0.0	-1.4	0.002	-0.005	0.025
50208S002	WELL	PC	0.071	0.005	0.023	2.2	0.1	1.4	-0.011	-0.029	-0.068
				0.032			1.5			0.016	0.051

AMERICAN SAMOA

50503M001	7096	LZ	0.003	0.040	0.004	0.1	1.0	0.2	-0.039	0.001	-0.010
50503M001	7096	LC	-0.025	-0.042	-0.030	-0.3	-1.0	-0.6	0.037	-0.021	0.038
				0.029			0.7			0.029	0.028

KWAJALEIN ATOLL

50505M001	7092	LZ	0.145	0.109	0.067	1.9	1.4	0.9	-0.138	0.086	-0.106
50505M001	7092	LC	0.104	0.041	0.054	1.1	0.7	1.0	-0.063	0.068	-0.083
50505M001	7092	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
50505S003	4968	GA	0.000	0.000	0.000	0.1	0.1	0.1	0.000	0.000	0.000
50505S003	4968	RG	-0.001	-0.006	-0.004	-0.1	-0.9	-0.5	0.006	-0.004	-0.001
50505S003	4968	RN	-0.007	0.003	0.001	-0.4	0.6	0.2	-0.002	0.000	0.008
				0.054			0.9			0.054	0.055

MC MURDO

66001M001	MCMU	PP	0.129	-0.076	0.119	1.3	-0.8	1.2	0.045	-0.114	-0.146
66001M001	MCMU	PC	-0.026	0.068	-0.006	-0.6	1.4	-0.3	-0.060	0.039	0.015
66001M001	MCMU	PE	0.002	-0.001	-0.012	0.1	-0.1	-0.8	0.000	-0.005	0.012
66001M001	MCMU	PA	-0.125	0.038	0.103	-2.1	0.6	2.4	-0.008	0.149	-0.073
66001M001	MCMU	PJ	0.003	-0.009	-0.001	0.3	-0.5	-0.1	0.008	-0.005	0.000
				0.068			1.3			0.065	0.074

PAMATAI

92201M003	PAMA	PJ	0.002	-0.013	-0.004	0.2	-0.8	-0.4	0.012	-0.002	0.005
92201M003	PAMA	PP	-0.012	-0.179	0.085	-0.1	-0.9	0.4	0.148	0.112	0.071
92201M003	PAMA	PA	-0.140	0.092	-0.013	-2.0	1.3	-0.3	-0.150	0.010	0.074
92201M003	PAMA	PC	0.030	0.070	0.008	0.9	2.2	1.0	-0.045	-0.011	-0.061
92201M003	PAMA	PE	-0.015	-0.021	-0.018	-0.5	-0.9	-1.1	0.011	-0.010	0.028
				0.071			1.2			0.077	0.055

HUAHINE

92202M002	7121	LL	-0.053	-0.007	-0.069	-1.3	-0.2	-1.6	-0.020	-0.052	0.067
92202M002	7121	LC	0.025	0.019	0.000	1.1	1.1	0.0	-0.004	-0.009	-0.030
92202M002	7121	LU	-0.008	0.005	-0.028	-0.3	0.1	-0.8	-0.008	-0.025	0.012
92202M002	7121	LZ	0.017	-0.044	0.025	0.7	-1.5	1.1	0.047	0.026	-0.001
92202M002	7121	LK	-0.035	-0.172	0.014	-1.1	-1.7	0.4	0.133	0.046	0.105
92202M004	7123	LK	-0.013	-0.073	0.012	-0.5	-2.6	0.4	0.058	0.025	0.041
92202M004	7123	LC	0.019	0.002	-0.007	1.2	0.1	-0.5	0.007	-0.011	-0.015
92202M004	7123	LZ	-0.016	0.004	-0.047	-0.5	0.1	-1.7	-0.012	-0.041	0.025
92202M004	7123	LU	0.000	-0.023	-0.014	0.0	-1.1	-0.6	0.020	-0.010	0.015
92202M004	7123	LG	-0.010	0.044	0.030	-0.6	2.4	1.9	-0.043	0.025	-0.021
				0.043			1.3			0.042	0.044

KOUROU

97301M210	KOUR	PA	-0.007	0.094	0.065	-0.1	1.9	2.1	0.051	0.072	-0.073
97301M210	KOUR	PJ	0.001	-0.008	-0.004	0.0	-0.5	-0.5	-0.004	-0.005	0.006
				0.047			1.4			0.044	0.052

Table T10

RESIDUALS AND STATISTICS OF THE ITRF92 VELOCITY FIELDS COMBINATION

DOMES NUMBER	CDP NUM.	*	RX m	RY m	RZ m		NX	NY	NZ		RE m	RN m	RU m
GRASSE													
10002		N1	-5.1	-1.1	-9.1		-.160	-1.002	-1.000	<	-.5	-3.0	-10.0
10002	7835	LK	-1.1	1.8	-2.5	>	-.423	.683	-.986		1.9	-1.2	-2.4
10002S001	7835	LU	1.2	1.1	1.3	>	.693	.607	.680		.9	.0	1.8
10002S001	7835	LZ	.9	.1	-1.2		.021	-.942	-.123	<	.0	-1.5	-.1
10002S001	7835	LC	-1.3	.0	1.3		.103	1.012	------	<	.2	1.9	------
10002S001	7835	LG	-1.4	-3.1	1.9		-1.322	1.254	------	<	-3.0	2.6	------
				2.9				.825			1.8		6.0
TROMSO													
10302		N1	-1.6	7.2	.8		2.452	-.175	.110	<	7.4	-.5	1.1
10302M002	7602	RG	.4	-1.3	.0	>	.238	-.810	.003		-1.3	.1	.0
10302M002	7602	RN	1.2	-1.0	3.4	>	.372	-.530	.413		-1.3	.4	3.4
				3.0				.959			3.4		2.5
ONSALA													
10402		N1	2.1	-3.0	4.1		-1.113	.334	.426	<	-3.3	1.0	4.3
10402M006	7211	RG	.0	.2	.4	>	-.015	.239	.329		.2	.2	.3
10402S002	7213	RN	.0	-.1	-.2	>	.000	-.182	-.308		-.1	-.1	-.2
				2.0				.478			1.5		3.1
GRAZ													
11001		N1	-3.6	-1.0	.1		-.011	.924	-.245	<	.0	2.8	-2.4
11001	7839	LK	-.4	.4	-4.6	>	-.081	.093	-1.265		.5	-2.9	-3.5
11001S002	7839	LZ	.5	.4	.0		.130	-.225	.341	<	.2	-.4	.4
11001S002	7839	LC	-.3	-.6	.4		-.300	.350	------	<	-.5	.6	------
11001S002	7839	LG	.5	.7	-.6		.244	-.359	------	<	.6	-.9	------
				1.6				.509			1.4		3.0
BOROWIEC													
12205		N1	-.4	-.1	-.5		.018	-.008	-.068	<	.1	.0	-.7
12205S001	7811	LU	18.9	-30.5	13.4	>	.269	-.396	.305		-34.7	1.1	16.2
				17.1				.256			20.0		16.2
RIGA													
12302		N1	-4.3	-.8	-5.0		.350	.274	-.651	<	1.1	.8	-6.5
12302M001	7560	LU	22.5	-9.5	.4	>	1.838	-.761	.041		-17.9	-13.7	9.5
				11.3				.957			13.0		11.5
SIMEIS													
12337		N1	-.9	-.8	-.9		-.038	.065	-.151	<	-.1	.2	-1.5
12337M001	7561	LU	26.8	43.0	-5.7	>	.624	1.039	-.170		20.7	-36.4	29.2
				22.8				.552			24.2		29.2

(*)

N1: NNR-NUVEL1 RG: SSC(GSFC) 93 R 04 RJ: SSC(JPL) 93 R 01

RN: SSC(NOAA) 93 R 02 LC: SSC(CSR) 93 L 01 LU: SSC(DUT) 93 L 02

LK: SSC(GAOUA)93 L 01 LZ: SSC(GFZ) 93 L 01 LG: SSC(GSFC) 93 L 01

">" indicates that the normalized residuals are derived from those of the left side (the 3-D residuals) and "<" indicates that they are derived from the those of the right side (the residuals expressed in the local frame).

DIONYSOS													
12602		N1	20.1	-12.2	-20.8		-.193	-.246	-.022	<	-19.3	-24.6	-2.2
12602	7515	LK	-1.7	4.0	.4	>	-.228	.467	.054		4.4	.3	.2
12602M002	7515	LU	.0	-1.5	.6	>	-.014	-.418	.199		-1.3	.9	-.1
12602M002	7515	LZ	-5.6	2.5	5.4		.311	.540	.011	<	4.6	6.7	.1
12602M002	7515	LC	1.0	.7	-1.5		.062	-.446	------	<	.3	-1.9	------
12602M002	7515	LG	.4	.9	-1.0		.083	-.189	------	<	.7	-1.2	------
				8.0				.285				9.9	1.3
ASKITES													
12612		N1	-.9	4.4	-1.8		.043	-.021	-.003	<	4.3	-2.1	-.3
12612	7510	LK	13.5	-4.9	8.1	>	1.699	-.551	1.140		-10.2	-.5	12.9
12612M001	7510	LU	-3.8	.1	-2.6	>	-1.188	.019	-.758		1.7	.2	-4.3
12612M001	7510	LZ	1.3	2.6	11.6		.144	.649	1.235	<	1.8	7.3	9.3
12612M001	7510	LC	.7	1.2	-1.4		.166	-.399	------	<	.8	-1.8	------
12612M001	7510	LG	2.3	-2.6	-1.0		-.460	-.219	------	<	-3.3	-1.4	------
				5.3				.770				4.3	9.5
ROUMELLI													
12613		N1	41.7	-19.7	-15.4		-.353	-.297	.153	<	-35.3	-29.7	15.3
12613	7517	LK	9.0	-20.8	10.6	>	.925	-1.861	1.126		-22.7	9.0	5.7
12613M001	7517	LU	-2.0	1.9	1.3	>	-.910	.662	.397		2.5	1.7	-.1
12613M001	7517	LZ	1.5	6.0	-2.3		.634	-.549	.338	<	4.8	-4.1	1.8
12613M001	7517	LC	3.6	-3.8	-2.5		-1.223	-.780	------	<	-5.0	-3.0	------
12613M001	7517	LG	.7	1.7	-1.9		.190	-.390	------	<	1.3	-2.4	------
				13.5				.831				16.0	9.5
KARITSA													
12614		N1	9.6	-36.2	.5		-.372	.028	-.026	<	-37.2	2.8	-2.6
12614	7520	LK	14.3	.6	-6.0	>	1.468	.061	-.707		-4.4	-13.3	6.6
12614M001	7520	LU	-2.5	-2.5	.5	>	-.526	-.453	.094		-1.4	2.4	-2.1
12614M001	7520	LZ	-2.2	17.8	.9		.989	-.129	.367	<	17.4	-2.0	3.8
12614M001	7520	LC	-3.3	1.4	3.2		.289	.519	------	<	2.5	4.1	------
				12.0				.606				14.6	4.8
KATAVIA													
12615		N1	19.4	-.3	-16.9		-.093	-.236	.039	<	-9.3	-23.6	3.9
12615	7512	LK	2.2	1.0	-1.9	>	.487	.208	-.420		-.1	-2.9	.8
12615M001	7512	LU	-1.7	-.3	1.3	>	-.667	-.103	.407		.5	2.0	-.5
12615M001	7512	LZ	5.2	-1.0	-2.5		-.424	-.623	.416	<	-3.3	-4.4	1.9
12615M001	7512	LC	-1.1	.0	1.3		.129	.407	------	<	.5	1.6	------
12615M001	7512	LG	2.7	-.9	-2.8		-.338	-.624	------	<	-2.1	-3.4	------
				6.5				.414				8.0	2.6
XRISOKALARIA													
12616		N1	21.5	-29.2	-21.7		-.351	-.229	-.057	<	-35.1	-22.9	-5.7
12616	7525	LK	-.6	1.8	-1.0	>	-.088	.252	-.164		1.9	-.9	-.5
12616M001	7525	LU	.2	.4	.6	>	.073	.160	.172		.3	.3	.6
12616M001	7525	LZ	2.3	.2	-5.8		-.074	-.693	-.300	<	-.7	-5.9	-1.7
12616M001	7525	LC	-.6	-1.2	1.4		-.211	.440	------	<	-.8	1.7	------
12616M001	7525	LG	.6	-.5	-.5		-.109	-.104	------	<	-.7	-.6	------
				10.4				.280				12.8	3.5
LAMPEDUSA													
12706		N1	1.3	1.2	1.1		.290	.008	.186	<	.9	.0	1.9
12706M001	7544	LU	-.2	.9	.0	>	-.058	.245	.009		.9	.0	.0
12706M001	7544	LZ	.7	2.5	-11.5		.070	-.333	-.302	<	2.3	-10.1	-5.6
12706M001	7544	LC	-.1	-3.0	1.1		-.651	.284	------	<	-2.9	1.3	------
12706M001	7544	LG	1.8	-1.3	-2.1		-.193	-.385	------	<	-1.6	-2.6	------
				3.4				.300				3.8	4.2
BOLOGNA													
12711		N1	-4.2	-.3	-.1		.189	.958	-.304	<	.6	2.9	-3.0
12711S001	7230	RG	-.3	-.1	-.5	>	-.193	-.109	-.326		.0	-.2	-.6
12711S001	7230	RN	.4	.1	.0	>	.324	.115	.001		.0	-.3	.3

				1.5				.406			1.3		2.2
NOTO													
12717		N1	-3.3	-.7	-2.1		.056	.126	-.398	<	.2	.4	-4.0
12717S001	7547	RG	.1	.2	-.3	>	.032	.117	-.119		.1	-.3	-.1
12717S001	7547	RN	-.4	-.3	1.0	>	-.153	-.194	.411		-.1	1.1	.2
				1.5				.234			.6		2.8
TRIESTE													
12718		N1	1.0	.0	1.4		-.089	.088	.170	<	-.3	.3	1.7
12718M002	7550	LU	.8	.7	-5.0	>	.086	.056	-.531		.5	-4.2	-2.9
12718M002	7550	LZ	15.6	19.4	-7.4		.262	-.354	.372	<	15.1	-19.3	8.6
12718M002	7550	LC	-7.8	7.4	5.7		.454	.435	------	<	9.1	8.1	------
				8.8				.326			10.5		6.5
CAGLIARI													
12725		N1	2.2	-.3	.4		-.217	-.324	.191	<	-.7	-1.0	1.9
12725	7545	LK	6.0	-8.7	8.7	>	.854	-1.050	1.399		-9.5	3.8	9.0
12725M002	7545	LU	-7.0	-3.2	-5.3	>	-1.096	-.420	-.657		-2.0	.5	-9.1
12725M002	7545	LZ	-3.3	.7	-1.8		.085	.045	-.414	<	1.2	.5	-3.6
12725M002	7545	LC	-.2	10.8	-1.8		1.599	-.369	------	<	10.7	-2.4	------
				5.4				.816			5.1		7.8
MATERA													
12734		N1	-6.8	-2.4	1.7		-.113	1.989	-.432	<	-.3	6.0	-4.3
12734S005	7243	RG	-2.1	-2.6	-.8	>	-.633	-1.814	-.249		-1.9	1.2	-2.6
12734S005	7235	RN	5.8	.8	5.4	>	2.360	.665	2.186		-.9	.3	7.9
12734	7939	LK	-2.4	3.5	1.9	>	-.613	.979	.558		4.1	2.2	.2
12734S001	7939	LU	.7	.1	-1.6	>	.350	.027	-.837		-.1	-1.7	-.6
12734S001	7939	LZ	-1.1	1.5	-3.6		.845	-1.183	-1.718	<	1.8	-2.3	-2.8
12734S001	7939	LC	1.0	.4	-1.3		.055	-.674	------	<	.1	-1.7	------
12734S001	7939	LG	.5	1.8	-1.2		.748	-.694	------	<	1.5	-1.6	------
				2.8				1.149			2.3		4.4
HERSTMONCEUX													
13212		N1	-1.6	-.8	.2		-.269	.438	-.087	<	-.8	1.3	-.9
13212	7840	LK	1.0	.8	-2.0	>	.361	.339	-.834		.8	-2.0	-.9
13212S001	7840	LZ	.0	-.1	.2		-.120	.322	.196	<	-.1	.2	.2
13212S001	7840	LC	.3	.2	-.2		.157	-.257	------	<	.2	-.4	------
13212S001	7840	LG	.8	.3	-.7		.136	-.552	------	<	.3	-1.0	------
				.9				.385			1.0		.9
MADRID													
13407		N1	1.9	.0	2.1		.064	.134	.285	<	.2	.4	2.8
13407S010	1665	RG	.1	.0	-.1	>	.098	-.005	-.093		.0	-.1	.0
13407S003	1561	RG	.1	.0	-.1	>	.098	-.005	-.093		.0	-.1	.0
13407S010	1665	RN	-3.3	.2	-1.9	>	-.979	.203	-.535		.0	.7	-3.7
13407S001	1563	RJ	1.4	-1.2	2.7	>	.485	-.553	.840		-1.1	1.1	2.8
				1.5				.437			.6		2.7
KOOTWIJK													
13504		N1	-.5	-.9	-1.9		-.299	-.256	-.187	<	-.9	-.8	-1.9
13504	8833	LK	-4.8	4.7	.6	>	-.579	.571	.110		5.2	3.7	-2.2
13504M002	8833	LZ	-3.4	1.7	6.4		.143	.459	.356	<	2.0	6.4	3.1
13504M002	8833	LC	1.3	2.5	-1.2		.180	-.139	------	<	2.4	-2.0	------
				3.2				.357			3.7		3.0
ZIMMERWALD													
14001		N1	-2.9	.7	-.2		.351	.629	-.209	<	1.1	1.9	-2.1
14001	7810	LK	-8.8	-11.9	3.1	>	-1.427	-1.831	.703		-10.6	9.6	-4.8
14001S001	7810	LU	2.3	.0	2.3	>	.938	-.009	1.020		-.3	.0	3.2
14001S001	7810	LZ	.3	-.3	-4.4		-.081	-.788	-1.226	<	-.3	-3.2	-3.0
14001S001	7810	LC	1.3	1.5	-1.4		.441	-.693	------	<	1.4	-2.0	------
14001S001	7810	LG	.6	.8	-.6		.214	-.306	------	<	.7	-.9	------
				4.0				.868			4.5		3.9
POTSDAM													
14106		N1	-12.5	-5.0	-19.9		-.664	-.553	-2.390	<	-2.0	-1.7	-23.9

14106	1181	LK	-9.4	6.9	4.7	>	-.864	.688	.691		8.8	8.9	-1.0
14106S001	1181	LU	-1.9	5.1	9.1	>	-.231	.694	1.742		5.4	6.1	6.8
14106S001	1181	LZ	-9.3	-2.4	4.6		-.017	.856	-.370	<	-.2	10.4	-2.2
14106S001	1181	LC	-8.9	.1	6.7		.178	.859	------	<	2.1	10.9	------
14106S001	1181	LG	5.3	2.1	-4.4		.143	-1.395	------	<	.8	-7.1	------
				8.2				1.011				6.8	14.4
WETTZELL													
14201		N1	-1.7	-2.3	-.1		-.618	.540	-.150	<	-1.9	1.6	-1.5
14201S004	7224	RG	.2	-.1	.4	>	.248	-.126	.339		-.1	.1	.4
14201S004	7224	RN	-.5	-.2	-.7	>	-.813	-.280	-.972		-.1	.0	-.9
14201	7834	LK	8.4	2.3	7.6	>	2.492	.743	2.679		.4	-1.6	11.4
14201S002	7834	LZ	8.7	2.5	10.1		.190	-.083	2.203	<	.5	-.2	13.6
14201S002	7834	LC	-.2	-.2	.2		-.054	.122	------	<	-.1	.3	------
14201S018	8834	LC	6.3	-11.4	-3.2		-.690	-.279	------	<	-12.5	-4.8	------
14201S002	7834	LG	.8	1.4	-1.0		.434	-.559	------	<	1.2	-1.5	------
				4.7				1.060				3.6	8.9
EFFELSBERG													
14209		N1	-2.3	-1.7	-1.2		-.481	.391	-.250	<	-1.4	1.2	-2.5
14209S001	7203	RG	.1	.3	.5	>	.087	.342	.362		.3	.2	.5
14209S001	7203	RN	.2	-.3	-.9	>	.166	-.336	-.611		-.3	-.7	-.6
				1.2				.390				.9	1.9
BAR GIYYORA													
20702		N1	1.9	1.7	1.2		.119	-.114	.276	<	.4	-.3	2.8
20702M001	7530	LU	-2.7	-54.2	37.7	>	-.078	-1.608	1.074		-42.8	49.6	-8.7
20702M001	7530	LZ	-16.3	-26.1	-43.3		-.147	-.273	-.936	<	-12.0	-22.0	-46.8
				30.0				.776				31.4	33.7
DIYARBAKIR													
20801		N1	-16.2	-15.1	-3.7		-.011	.106	-.198	<	-1.1	10.6	-19.8
20801	7575	LK	12.8	-31.8	7.9	>	.884	-2.194	.666		-32.5	12.8	-3.7
20801M001	7575	LU	-4.7	7.8	-4.0	>	-.674	1.042	-.494		8.9	-4.1	-1.3
20801M001	7575	LZ	14.9	-.8	-2.5		-.367	-.351	.482	<	-10.2	-8.6	7.1
20801M001	7575	LC	.4	.1	-.5		-.016	-.054	------	<	-.2	-.6	------
				12.2				.802				13.4	12.4
YOZGAT													
20802		N1	4.3	-31.3	-1.0		-.282	.083	-.117	<	-28.2	8.3	-11.7
20802	7585	LK	12.7	-3.5	14.4	>	.658	-.161	1.039		-10.1	5.7	15.7
20802M001	7585	LU	-1.4	1.8	-2.1	>	-.354	.352	-.506		2.3	-1.6	-1.5
20802M001	7585	LZ	12.0	10.2	20.4		.044	.160	.948	<	1.5	5.7	25.1
20802M001	7585	LC	1.2	-2.6	.6		-.474	.138	------	<	-2.8	.8	------
				12.1				.505				10.8	18.4
MELENGICLICK													
20803		N1	-.3	-30.0	-6.2		-.249	.051	-.170	<	-24.9	5.1	-17.0
20803	7580	LK	15.3	-36.7	-23.0	>	.994	-2.258	-1.696		-39.1	-13.9	-19.8
20803M001	7580	LU	.1	.4	1.9	>	.031	.123	.494		.3	1.3	1.4
20803M001	7580	LZ	-1.1	-8.5	5.3		-.348	.454	-.086	<	-6.5	7.6	-1.2
20803M001	7580	LC	-1.8	3.6	-.6		.763	-.137	------	<	4.0	-.7	------
				15.0				.888				16.6	15.1
YIGILCA													
20804		N1	-1.6	-22.8	.2		-.186	.088	-.099	<	-18.6	8.8	-9.9
20804	7587	LK	-8.3	-5.9	14.2	>	-.541	-.418	1.300		-.7	17.4	1.5
20804M001	7587	LU	2.7	1.0	-3.9	>	.889	.323	-1.151		-.6	-4.8	-.4
20804M001	7587	LZ	-12.0	-4.6	2.5		.146	.643	-.645	<	2.4	10.1	-7.9
20804M001	7587	LC	-4.3	-.6	4.6		.381	1.285	------	<	1.7	6.1	------
20804M001	7587	LG	.1	-1.8	.9		-.200	.171	------	<	-1.6	1.2	------
				7.9				.690				9.1	7.4
SHANGHAI													
21605		N1	-4.0	-6.7	-.6		2.288	.441	-.345	<	6.9	1.3	-3.4
21605S008	7226	RG	1.3	.0	.9	>	.792	-.031	.517		-1.1	1.1	-.1
21605S009	7233	RN	1.4	-2.1	4.0	>	.399	-.456	1.061		-.1	4.8	-.1

21605	7837	LK	-2.6	13.1	-5.3	>	-.312	1.715	-.753		-4.6	-11.0	8.0
21605S001	7837	LU	2.0	22.8	-7.8	>	.157	2.043	-.626		-13.5	-16.1	11.8
21605S001	7837	LZ	-11.3	22.9	-4.5		-.168	-1.396	2.267	<	-2.2	-16.9	19.5
21605S001	7837	LC	6.7	9.0	-7.1		-.929	-.841	------	<	-10.4	-8.3	------
21605S001	7837	LG	1.6	7.4	-9.3		-.614	-1.449	------	<	-5.2	-10.8	------
				9.0				1.140				9.2	10.9
KASHIMA													
21701		N1	13.0	2.4	2.2		-.101	.068	-.057	<	-10.1	6.8	-5.7
21701S001	1856	RG	-.4	.2	-.3	>	-.313	.217	-.157		.1	-.5	.2
21701S004	1857	RN	-4.5	3.2	3.4	>	-1.472	1.377	1.116		.4	-.4	6.4
21701S001	1856	RN	1.7	-1.6	-.3	>	1.196	-1.251	-.234		.2	1.1	-2.1
				4.5				.881				4.6	5.1
SIMOSATO													
21726		N1	22.0	13.3	12.2		-.249	.138	.012	<	-24.9	13.8	1.2
21726	7838	LK	4.9	-2.8	-2.7	>	.929	-.585	-.537		-1.4	.8	-6.1
21726S001	7838	LU	.9	1.1	.4	>	.441	.533	.205		-1.4	.3	.3
21726S001	7838	LZ	.0	1.5	.4		-.261	-.059	.422	<	-1.1	-.2	1.1
21726S001	7838	LC	-.4	-1.2	.8		.664	.583	------	<	1.1	1.0	------
21726S001	7838	LG	-1.2	.7	-2.0		.136	-1.007	------	<	.4	-2.4	------
				7.1				.527				8.7	3.6
TSUKUBA													
21730		N1	9.8	2.4	2.9		-.081	.058	-.031	<	-8.1	5.8	-3.1
21730S001	7311	RG	.0	.0	.0	>	-.004	-.002	-.002		.0	.0	.0
				4.7				.047				5.8	3.1
MINAMI TORI SIMA													
21733		N1	3.3	-.7	-1.3		-.289	.055	-.353	<	-.9	.2	-3.5
21733S001	7310	RG	-1.5	-2.1	-.9	>	-.464	-.475	-.184		2.6	-1.0	.0
				2.0				.370				1.7	3.5
HELWAN													
30101		N1	-17.9	-8.1	-10.4		.784	.217	-2.210	<	2.4	.6	-22.1
30101S001	7831	LU	10.9	-3.2	.3	>	1.988	-.595	.047		-8.4	-3.5	6.8
30101S001	7831	LC	-.4	.1	.6		.086	.172	------	<	.3	.7	------
				8.8				1.189				4.2	23.1
HARTEBEESTHOEK													
30302		N1	-.7	-4.6	-3.8		-1.250	-1.538	-.089	<	-3.7	-4.6	-.9
30302S001	7232	RG	.2	-1.1	-1.1	>	.059	-.524	-.594		-1.1	-1.2	.2
30302S001	7232	RN	-.3	3.8	1.8	>	-.105	1.570	1.126		3.6	2.3	.6
				2.7				1.019				3.3	.8
ALGONQUIN													
40104		N1	3.1	-4.9	2.2		.660	-.789	.534	<	2.0	-2.4	5.3
40104S001	7282	RG	.1	-.2	.2	>	.122	-.158	.177		.0	.0	.3
40104S001	7282	RN	-.1	.3	.1	>	-.253	.254	.046		-.1	.3	-.2
				2.2				.439				1.4	3.8
PENTICTON													
40105		N1	3.3	-1.8	1.0		1.251	.218	.072	<	3.8	.7	.7
40105M001	7283	RG	-.6	.3	-.1	>	-.495	.221	-.059		-.6	-.1	.0
				1.8				.619				2.3	.7
WHITEHORSE													
40118		N1	9.2	5.4	5.9		.027	.119	.001	<	2.7	11.9	.1
40118M001	7284	RG	.0	.0	.0	>	-.005	-.002	-.005		.0	.0	.0
				5.5				.055				7.0	.1
YELLOWKNIFE													
40127		N1	-5.6	-9.4	16.2		-.420	-.693	1.941	<	-1.3	-2.1	19.4
40127S001	7296	RN	2.8	5.5	-5.4	>	.833	1.078	-.591		.2	3.0	-7.7
				9.5				1.151				2.2	20.9
PASADENA													

40400	N1	.0	-11.4	-13.2		.054	-.165	.009	<	5.4	-16.5	.9
40400M003 7263	RG	.0	.0	.0	>	.000	.002	.002		.0	.0	.0
			7.8				.078				10.0	.9
PALOS VERDES												
40403	N1	1.2	-7.7	-7.7		.047	-.098	.010	<	4.7	-9.8	1.0
40403M001 7268	RG	.0	.0	.0	>	.000	.002	.002		.0	.0	.0
			4.9				.049				6.3	1.0
PEARBLOSSOM												
40404	N1	7.6	-18.0	-16.6		.151	-.207	.009	<	15.1	-20.7	.9
40404M001 7254	RG	.0	.0	.0	>	.000	.004	.004		.0	.0	.0
			11.5				.115				14.8	.9
GOLDSTONE												
40405	N1	.7	4.4	4.5		-.466	2.047	-.083	<	-1.4	6.1	-.8
40405S019 7231	RG	.9	1.7	-.3	>	.632	1.499	-.268		.0	.9	-1.8
40405S014 1513	RG	-.2	-2.1	1.9	>	-.244	-1.582	1.592		.8	.4	2.6
40405M013 7288	RG	-.4	-1.8	.8	>	-.749	-2.248	1.118		.4	-.4	1.9
40405S014 1513	RN	-2.1	-1.5	3.8	>	-1.358	-.561	1.476		-1.2	1.8	4.1
40405S009 7222	RN	-.6	-2.0	1.2	>	-1.111	-1.756	.950		.3	-.2	2.4
40405S001 1514	RJ	.3	.3	.0	>	.217	.155	-.007		.1	.2	-.3
40405 7288	LK	-7.7	.5	9.8	>	-.843	.070	1.333		-7.1	6.3	8.1
40405M006 7265	LZ	-5.3	-3.6	6.2		-.468	.275	2.145	<	-3.1	1.8	8.1
40405M013 7288	LC	-2.0	-.4	-1.8		-.386	-.576	------	<	-1.6	-2.2	------
40405M006 7265	LG	2.0	3.3	5.5		.065	1.550	------	<	.3	6.7	------
			3.4				1.140				3.1	4.6
PRESIDIO												
40406	N1	2.9	-14.0	-12.3		.100	-.159	.006	<	10.0	-15.9	.6
40406M001 7252	RG	.0	.0	.0	>	.000	.002	.002		.0	.0	.0
			8.4				.084				10.8	.6
PINYON FLATS												
40407	N1	8.0	-16.7	-15.3		.146	-.190	.011	<	14.6	-19.0	1.1
40407M001 7256	RG	.0	.0	.0	>	-.001	.002	.002		.0	.0	.0
			10.7				.107				13.8	1.1
FAIRBANKS												
40408	N1	1.3	-2.7	-.8		.994	-.234	-.055	<	3.0	-.7	-.5
40408S002 7225	RG	-.1	.2	.1	>	-.227	.284	.114		-.2	.0	.1
40408S002 7225	RN	.1	-.3	-.2	>	.230	-.312	-.255		.3	-.1	-.2
			1.1				.419				1.4	.4
POINT REYES												
40410	N1	2.0	-8.1	-6.1		.061	-.083	.007	<	6.1	-8.3	.7
40410M001 7251	RG	.0	.0	.0	>	.000	.001	.001		.0	.0	.0
			4.6				.046				5.9	.7
YAKATAGA												
40416	N1	-16.3	-7.4	-10.4		-.041	-.203	-.003	<	-4.1	-20.3	-.3
40416M001 7277	RG	.0	.0	.0	>	.003	.002	.004		.0	.0	.0
			9.3				.093				12.0	.3
KODIAK												
40419	N1	2.7	5.5	2.5		-1.205	1.828	-.056	<	-3.6	5.5	-.6
40419M001 7278	RG	-.5	-1.1	-.7	>	-.453	-.855	-.766		.7	-1.2	-.1
			3.0				1.124				3.9	.6
VANDENBERG AFB												
40420	N1	.9	-3.5	-3.0		.026	-.039	.004	<	2.6	-3.9	.4
40420M002 7223	RG	.3	.5	-.5	>	.350	.453	-.465		.0	-.1	-.8
40420M002 7223	RN	-.2	-.9	1.2	>	-.144	-.423	.567		.3	.5	1.4
			1.8				.365				2.1	1.2
NOME												
40421	N1	1.1	-4.6	-.8		1.577	-.137	-.069	<	4.7	-.4	-.7

40421M001 7279	RG	-.1	.7	.0	>	-.083	.605	.065		-.7	.1	.0	
		2.2				.760				2.8		.7	
SANDPOINT													
40423	N1	-.3	4.5	-.3		-1.452	.266	-.094	<	-4.4	.8	-.9	
40423M001 7280	RG	.2	-1.5	-.2	>	.189	-.858	-.182		1.5	-.3	.0	
		2.1				.774				2.7		.9	
KAUAI													
40424	N1	1.0	.9	-.8		-.160	-.092	-.147	<	-.5	-.3	-1.5	
40424S001 1311	RG	-.4	.1	.0	>	-.717	.065	.050		-.2	-.1	.4	
40424S001 1311	RN	1.1	.3	-.4	>	1.250	.195	-.374		.1	.0	-1.2	
		.7				.538				.3		1.4	
SOURDOUGH													
40425	N1	-3.9	.2	-1.8		-.780	-1.181	-.017	<	-2.3	-3.5	-.2	
40425M001 7281	RG	1.5	-.3	.6	>	.860	-.181	.624		1.1	1.2	.0	
		2.1				.796				2.6		.2	
FORT ORD													
40427	N1	-.2	-2.6	-2.0		.012	-.030	.007	<	1.2	-3.0	.7	
40427M001 7266	RG	.0	.0	.0	>	.000	.000	.000		.0	.0	.0	
		2.3				.023				3.2		-----	
SANTA PAOLA													
40428	N1	-.2	-9.3	-10.5		.043	-.133	.009	<	4.3	-13.3	.9	
40428M001 7255	RG	.0	.0	.0	>	.000	.002	.002		.0	.0	.0	
		6.3				.063				8.1		.9	
BLACK BUTTE													
40430	N1	-3.8	1.7	1.8		-.042	.014	.011	<	-4.2	1.4	1.1	
40430M001 7269	RG	.0	.0	.0	>	.000	-.001	.000		.0	.0	.0	
		2.0				.020				2.6		1.1	
DEADMAN LAKE													
40431	N1	-3.8	3.5	4.0		-.050	.041	.010	<	-5.0	4.1	1.0	
40431M001 7267	RG	.0	.0	.0	>	.001	-.003	-.002		.0	.0	.0	
		2.9				.029				3.7		1.0	
ELY													
40432	N1	-1.5	-1.0	-.1		-.300	-.350	.111	<	-.9	-1.1	1.1	
40432M001 7286	RG	.2	.1	.2	>	.149	.088	.152		.1	.2	.0	
		.8				.236				.8		1.1	
QUINCY													
40433	N1	-3.3	5.2	5.4		-1.819	1.970	.133	<	-5.5	5.9	1.3	
40433M004 7221	RG	.5	-.5	.9	>	.679	-.670	1.119		.7	.6	.6	
40433M002 7109	LU	-1.5	-.6	-.3	>	-.863	-.357	-.154		-1.0	-1.0	.8	
40433M002 7109	LZ	-1.8	2.4	-1.3		-1.316	-.189	-1.859	<	-2.8	-.3	-1.7	
40433M005 7886	LZ	.9	1.9	.4		-.037	.376	-1.052	<	-.2	1.6	-1.4	
40433M002 7109	LC	.1	-.3	-.3		.201	-.316	------	<	.2	-.3	------	
40433M002 7109	LG	-.1	-1.0	-1.1		.271	-.887	------	<	.4	-1.4	------	
		2.1				.993				2.5		1.4	
SAN DIEGO													
40436	N1	-1.5	-3.1	1.3		.001	-.007	.036	<	.1	-.7	3.6	
40436M003 7035	LU	.9	-.5	.0	>	.309	-.156	-.001		1.0	.0	.0	
40436M002 7062	LC	-4.0	-5.4	-10.4		-.086	-.992	------	<	-1.1	-12.3	------	
40436M003 7035	LG	-1.9	2.0	1.4		-.532	.363	------	<	-2.6	1.6	------	
		4.0				.412				4.8		3.6	
MAMMOTH LAKES													
40437	N1	-6.5	8.5	6.8		-.098	.080	.008	<	-9.8	8.0	.8	
40437M001 7259	RG	.0	.0	.0	>	.001	-.004	-.003		.0	.0	.0	
		5.7				.057				7.3		.8	
BEAR LAKE													

40438		N1	1.2	2.1	-4.4		.128	-.548	-.472	<	.4	-1.6	-4.7
40438M002	7046	LU	9.2	15.3	2.4	>	.850	1.430	.178		3.0	13.5	-11.5
40438M002	7046	LZ	-4.2	-2.4	-1.9		-.561	-.669	.487	<	-3.1	-3.9	1.6
40438M002	7046	LG	1.0	1.0	1.4		.141	.588	------	<	.6	1.9	------
				5.9				.686				5.6	8.9
OWENS VALLEY													
40439		N1	-1.6	5.0	4.4		-1.245	1.902	-.024	<	-3.7	5.7	-.2
40439S002	7207	RG	-1.0	-1.8	.8	>	-1.510	-1.520	.736		-.1	-.6	2.1
40439S002	7207	RN	1.4	2.6	-1.3	>	1.816	1.481	-.736		.0	.7	-3.1
40439M004	7853	LU	-6.0	-27.2	34.2	>	-.411	-1.849	2.011		7.6	11.2	42.0
40439M004	7853	LZ	-5.4	-6.3	3.2		-.332	-.404	2.005	<	-1.8	-2.3	8.4
40439M004	7853	LC	1.9	.7	2.0		.290	.545	------	<	1.3	2.5	------
40439M004	7853	LG	-8.1	8.3	4.6		-2.095	1.264	------	<	-11.1	5.7	------
				10.6				1.387				5.6	21.5
WESTFORD													
40440		N1	3.0	-2.6	1.0		.669	-.524	.325	<	2.0	-1.6	3.3
40440S002	7205	RG	-.1	-.7	.9	>	-.161	-1.096	1.284		-.3	.2	1.1
40440S002	7205	RN	-.2	.2	-.3	>	-.362	.195	-.315		-.1	-.1	-.4
40440S003	7209	RN	.1	.8	-.8	>	.171	.889	-.800		.3	-.1	-1.1
40440	7091	LK	28.6	12.8	-2.3	>	2.423	1.110	-.299		31.2	.4	-3.8
40440M001	7091	LZ	10.4	2.5	-1.7		2.721	-.512	-.161	<	10.6	-1.9	-.5
40440M001	7091	LC	.6	.1	-.1		.232	-.050	------	<	.6	-.1	------
40440M001	7091	LG	-2.6	-1.7	-.8		-1.073	-.503	------	<	-3.0	-1.1	------
				7.0				1.018				8.6	2.4
GREENBANK													
40441		N1	1.2	-2.2	.7		.270	-.310	.232	<	.8	-.9	2.3
40441S001	7204	RG	-1.1	-.6	1.0	>	-2.121	-.682	1.269		-1.2	.5	.9
40441S004	7214	RG	1.7	.9	-2.0	>	2.903	.761	-1.951		1.8	-1.2	-1.7
40441S001	7204	RN	-.8	.1	.6	>	-1.369	.086	.520		-.8	.6	.2
40441S004	7214	RN	.6	1.3	.7	>	.895	.903	.490		.8	1.3	-.5
				1.2				1.299				1.1	1.5
FORT DAVIS													
40442		N1	2.5	1.1	-1.7		.712	-.212	-.232	<	2.1	-.6	-2.3
40442M009	7900	RG	-.2	.4	-.2	>	-.479	.506	-.227		-.3	.0	-.4
40442S003	7216	RG	-.2	.4	-.2	>	-.479	.506	-.227		-.3	.0	-.4
40442M008	7850	RG	-.2	.4	-.1	>	-.479	.506	-.078		-.3	.1	-.3
40442S003	7216	RN	.7	4.2	-2.1	>	.837	1.720	-.763		-.4	.4	-4.7
40442M001	7086	LU	.6	-.7	.8	>	.286	-.373	.360		.7	.5	.8
40442M001	7086	LZ	2.9	-6.0	.8		2.193	-1.137	2.312	<	4.3	-2.0	4.8
40442M005	7885	LZ	-5.1	-7.1	.4		-.678	-.825	2.286	<	-3.2	-3.8	7.2
40442M006	7080	LC	.8	-1.0	-1.3		.601	-.896	------	<	1.0	-1.5	------
40442M001	7086	LC	1.0	-.4	-.3		.416	-.145	------	<	1.0	-.3	------
40442M006	7080	LG	1.9	.1	.9		.994	.665	------	<	1.9	1.0	------
				2.3				.971				1.7	3.8
MAUI													
40445		N1	1.4	-.2	-1.0		.250	-.180	-.152	<	.8	-.5	-1.5
40445M002	7120	RG	-.1	-.9	-.3	>	-.156	-1.038	-.371		.8	-.4	.3
40445	7210	LK	8.9	2.9	-4.5	>	.243	.185	-1.335		.9	-.9	-10.3
40445M001	7210	LZ	6.9	3.5	-2.8		-.192	.045	-2.752	<	-.4	.1	-8.2
40445M001	7210	LC	-.1	.4	.3		-.828	.720	------	<	-.4	.4	------
40445M001	7210	LG	.6	-2.1	-.8		1.280	-.856	------	<	2.2	-.9	------
				3.3				.980				.9	7.7
WASHINGTON													
40451		N1	2.8	-2.4	.6		.715	-.467	.267	<	2.1	-1.4	2.7
40451M102	7102	RG	-.5	-1.9	-2.4	>	-.410	-1.639	-1.822		-1.0	-2.9	-.1
40451M102	7102	RN	-.7	-7.8	1.5	>	-.364	-1.135	.264		-2.5	-3.5	6.8
40451	7105	LK	8.5	-3.1	-.7	>	2.766	-.754	-.201		7.6	-3.7	3.4
40451M105	7105	LZ	-.9	-.4	.4		-.483	.411	.444	<	-.9	.2	.4
40451M105	7105	LC	.1	.2	.2		.135	.503	------	<	.2	.3	------
40451M105	7105	LG	-.1	-.2	-.2		-.186	-.290	------	<	-.2	-.3	------

				2.9				.992				2.9	4.0
PIETOWN													
40456		N1	3.1	8.4	-8.0		.120	-.535	-1.189	<	.4	-1.6	-11.9
40456S001	7234	RG	1.2	2.5	-1.8	>	1.563	1.702	-1.567		.4	.0	-3.3
40456S001	7234	RN	-2.1	-5.8	5.8	>	-1.609	-1.920	1.918		-.2	1.3	8.4
				5.3				1.560				1.0	10.6
SEATTLE													
40457		N1	1.8	-1.3	.7		.742	.112	.065	<	2.2	.3	.6
40457M001	7229	RG	-1.3	.5	-.3	>	-.549	.211	-.133		-1.3	-.4	.0
				1.2				.431				1.5	.6
LOS ALAMOS													
40463		N1	5.4	9.4	-6.0		.852	.414	-1.205	<	2.6	1.2	-12.0
40463S001	7611	RN	-.5	-.6	-.3	>	-.419	-.225	-.103		-.4	-.6	.4
				5.6				.719				1.7	12.0
HAT CREEK													
40489		N1	-.6	6.7	1.3		-1.331	1.482	-.326	<	-4.0	4.4	-3.3
40489S001	7218	RG	1.2	1.6	-1.8	>	1.549	1.514	-1.761		.2	-.1	-2.7
40489S001	7218	RN	-1.7	-4.1	3.9	>	-1.167	-1.902	1.708		.7	.1	5.9
				3.3				1.572				2.7	5.1
MARYLAND POINT													
40490		N1	1.7	-.3	-1.2		.534	-.458	-.018	<	1.6	-1.4	-.2
40490S001	7217	RG	-.3	-.5	.6	>	-.302	-.211	.293		-.4	.2	.8
40490S001	7217	RN	1.3	2.8	-3.4	>	.924	.516	-.771		1.9	-1.1	-4.0
				1.8				.551				1.4	2.9
FLAGSTAFF													
40491		N1	.9	-1.8	.4		.499	-.153	.128	<	1.5	-.5	1.3
40491M003	7261	RG	-.2	.2	.1	>	-.171	.161	.086		-.2	.1	.0
				.9				.265				.9	1.3
VERNAL													
40492		N1	2.8	-2.7	.2		1.169	-.295	.137	<	3.5	-.9	1.4
40492M002	7290	RG	-.6	.5	.3	>	-.428	.352	.183		-.7	.4	.0
				1.8				.602				2.1	1.4
YUMA													
40493		N1	.8	-1.5	.4		.462	-.077	.111	<	1.4	-.2	1.1
40493M001	7894	RG	-.1	.1	.0	>	-.124	.103	.042		-.1	.1	.0
				.8				.228				.8	1.1
PLATTEVILLE													
40496		N1	1.8	-2.5	-.2		.797	-.485	.138	<	2.4	-1.5	1.4
40496M002	7258	RG	.4	.4	.3	>	.541	.607	.369		.3	.5	-.2
40496M002	7258	RN	2.0	3.2	1.2	>	1.001	.549	.252		1.1	3.2	-2.0
40496	7112	LK	-6.3	1.1	4.6	>	-1.740	.330	1.626		-6.4	3.2	3.4
40496M001	7112	LZ	-6.0	-8.7	4.1		-.874	-.912	2.430	<	-3.6	-3.2	10.2
40496M001	7112	LC	-.5	-1.1	-1.4		-.086	-.897	------	<	-.2	-1.8	------
40496M001	7112	LG	-2.7	-.4	-1.3		-1.022	-.819	------	<	-2.5	-1.7	------
				3.4				1.024				2.9	5.5
MONUMENT PEAK													
40497		N1	-.6	-6.2	-7.9		.022	-.098	.006	<	2.2	-9.8	.6
40497M003	7274	RG	1.1	.8	.9	>	1.658	1.297	1.360		.7	1.4	-.5
40497	7110	LK	-2.5	-.4	-2.6	>	-1.320	-.220	-1.103		-2.1	-3.0	-.1
40497M001	7110	LU	-.7	-.9	-1.4	>	-.439	-.528	-.740		-.3	-1.8	.2
40497M001	7110	LZ	-2.8	.5	.9		-1.289	.193	1.389	<	-2.7	.3	1.2
40497M001	7110	LC	-.2	-.7	-1.1		.159	-1.269	------	<	.2	-1.3	------
40497M001	7110	LG	-.5	-.1	-.5		-.238	-.451	------	<	-.4	-.6	------
				2.6				.938				3.2	.7
RICHMOND													
40499		N1	3.3	-2.7	.8		.931	-.221	.323	<	2.8	-.7	3.2
40499S001	7219	RG	.0	-.2	.1	>	.077	-.287	.213		.0	.0	.2

40499S001	7219	RN	-.2	1.3	-.9	>	-.262	1.083	-.782		.1	-.3	-1.5
40499	7295	LK	-10.0	-7.7	10.2	>	-.917	-1.089	1.087		-11.1	6.7	9.7
40499M002	7295	LU	3.8	-2.8	5.0	>	.718	-.735	.718		3.3	3.0	5.2
40499M002	7295	LC	-4.2	.4	2.3		-.522	.379	------	<	-4.0	2.6	------
				4.6				.716			4.5		5.8
MAZATLAN													
40504		N1	-1.9	-9.2	3.0		.272	-.326	.978	<	.8	-1.0	9.8
40504	7122	LK	-.8	1.2	-2.2	>	-.322	.650	-.867		-1.1	-1.7	-1.8
40504M001	7122	LZ	-.2	-1.5	-1.0		.075	-.571	.555	<	.2	-1.5	1.0
40504M001	7122	LC	.5	-.1	.1		.370	.095	------	<	.5	.1	------
40504M001	7122	LG	-.6	1.0	1.8		-.361	.933	------	<	-.9	1.9	------
				2.8				.592			1.2		7.1
CABO SAN LUCAS													
40505		N1	-.4	5.7	-3.6		-.787	-.439	-.625	<	-2.4	-1.3	-6.3
40505	7882	LK	16.4	-21.7	-8.7	>	1.179	-1.886	-1.089		22.8	-13.7	10.3
40505M001	7882	LC	.4	2.7	6.4		-.117	1.525	------	<	-.6	6.9	------
40505M001	7882	LG	5.9	-2.3	-.4		.983	-.081	------	<	6.4	-.5	------
				9.3				1.088			10.7		12.1
ENSENADA													
40506		N1	.3	-5.2	1.2		.837	-.447	.448	<	2.5	-1.3	4.5
40506	7883	LK	-.5	16.9	-13.2	>	-.027	1.274	-1.018		-7.9	-3.6	-19.7
40506M001	7883	LU	-3.7	2.0	6.7	>	-.787	.480	1.093		-4.2	5.9	3.3
40506M001	7883	LC	-4.1	2.4	.5		-.400	.062	------	<	-4.8	.6	------
				7.2				.773			4.8		14.5
SANTIAGO DE CUBA													
40701		N1	-.1	1.7	-.9		.103	-.109	-.188	<	.3	-.3	-1.9
40701S001	1953	LU	-59.3	-13.2	69.3	>	-1.374	-.423	1.678		-60.7	65.8	21.9
				41.2				.994			51.7		22.0
EASTER ISLAND													
41703		N1	-6.2	6.6	3.2		-2.673	.323	-.513	<	-8.0	1.0	-5.1
41703	7097	LK	-.4	-2.9	3.6	>	-.062	-.516	.634		.6	4.5	.9
41703M002	7097	LZ	5.0	1.5	-7.5		.587	-1.190	.119	<	4.2	-8.1	.6
41703M002	7097	LC	9.2	-1.5	-3.2		2.027	-.890	------	<	9.1	-3.6	------
41703M002	7097	LG	4.7	-2.3	1.3		1.328	.454	------	<	5.2	1.4	------
				4.8				1.184			5.7		3.7
CERRO TOLOLO													
41706		N1	20.6	12.6	10.9		.236	.069	-.099	<	23.6	6.9	-9.9
41706	7401	LK	1.7	-.4	-.6	>	.385	-.126	-.170		1.5	-.1	1.1
41706M001	7401	LU	-2.9	-.2	-1.8	>	-.988	-.079	-.611		-2.8	-1.9	.2
41706M001	7401	LZ	4.5	1.2	5.3		.790	.873	-.522	<	4.6	4.7	-2.4
41706M001	7401	LC	1.9	.2	.8		.483	.236	------	<	1.8	.9	------
				7.4				.524			8.6		5.9
AREQUIPA													
42202		N1	14.5	15.1	5.3		.186	.024	-.108	<	18.6	2.4	-10.8
42202	7403	LK	36.1	-4.4	-32.2	>	1.818	-.277	-1.646		32.8	-26.5	24.1
42202S001	7907	LU	2.8	-.9	-2.8	>	.999	-.408	-1.014		2.4	-2.2	2.4
42202S001	7907	LZ	.0	.5	.0		.099	-.108	-.461	<	.2	-.2	-.5
42202M003	7403	LC	3.1	.3	2.5		.471	.408	------	<	3.0	2.6	------
42202S001	7907	LC	-3.1	-.6	-1.3		-1.334	-.612	------	<	-3.1	-1.3	------
42202S001	7907	LG	.5	-.4	1.8		.162	1.078	------	<	.3	1.9	------
				12.0				.850			12.9		15.3
CANBERRA													
50103		N1	-2.0	3.4	-4.2		-.645	-.470	.521	<	-1.9	-1.4	5.2
50103S010	1642	RG	-1.4	-1.4	-1.9	>	-.346	-.463	-.687		1.9	-1.3	1.4
50103S010	1642	RN	7.9	-6.9	.1	>	2.097	-1.984	.032		1.8	-5.9	-8.5
50103S001	1543	RJ	-4.0	.2	-1.6	>	-1.148	.170	-.748		1.9	.7	3.8
50103S007	7843	LZ	-12.6	7.7	13.0		-.008	1.166	.408	<	-.1	19.1	4.6
50103S007	7843	LC	-.1	-.2	.1		.135	.057	------	<	.2	.1	------
50103S007	7843	LG	-.5	3.1	2.9		-.926	1.584	------	<	-2.4	3.5	------

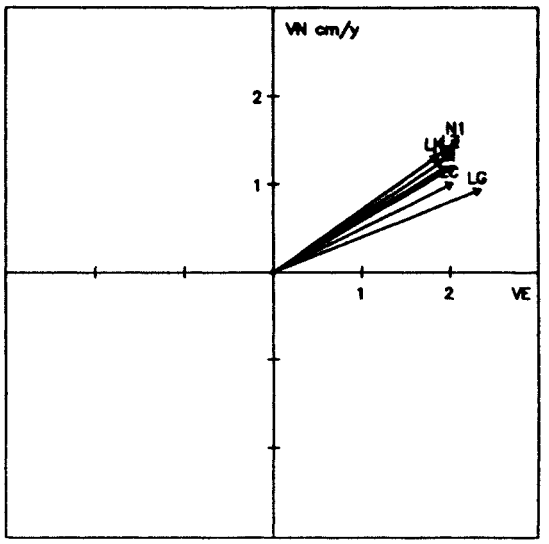
				5.4			.968			5.8		5.8
YARRAGADEE													
50107		N1	4.5	-1.7	-1.3	-1.114	-.930	-.243	<	-3.3	-2.8	-2.4
50107	7090	LK	-2.4	-1.7	.7 >	-1.257	-.868	.243		2.9	.4	-.8
50107M001	7090	LZ	.9	1.3	1.3	-.723	.773	.127	<	-1.4	1.5	.1
50107M001	7090	LC	.1	-.5	-1.0	.114	-.826	------	<	.1	-1.1	------
50107M001	7090	LG	-.1	.8	1.4	-.192	.929	------	<	-.3	1.6	------
				1.7			.779			2.0		1.8
HOBART													
50116		N1	-2.9	4.6	-1.9	-.764	.642	.492	<	-2.3	1.9	4.9
50116S002	7242	RG	-.9	-.5	1.4 >	-.226	-.170	.443		.9	1.3	-.6
50116S002	7242	RN	2.4	-2.8	-2.2 >	.635	-.781	-.829		1.1	-4.0	-1.2
				2.6			.634			2.4		3.6
KWAJALEIN ATOLL													
50505		N1	3.3	-.1	-2.6	-.214	-.670	-.360	<	-.6	-2.0	-3.6
50505S003	4968	RG	.1	-.5	1.0 >	.070	-.301	.409		.5	1.0	.0
50505S003	4968	RN	-1.0	.9	.7 >	-.118	.305	.195		-.6	.5	1.3
				1.6			.359			1.1		2.7
HUAHINE													
92202		N1	2.3	-.6	-2.2	.552	-.867	-.101	<	1.7	-2.6	-1.0
92202	7123	LK	-15.4	14.3	4.2 >	-2.094	1.739	.475		-20.0	5.9	5.1
92202M002	7121	LZ	12.4	-7.5	10.3	.938	.611	-1.065	<	12.6	7.8	-9.8
92202M004	7123	LC	.4	-.9	.4	.259	.116	------	<	.9	.4	------
92202M004	7123	LG	-.3	-.1	1.1	-.011	.360	------	<	.0	1.1	------
				7.5			.970			8.6		7.8

Site velocities, as given by the ITRF92 combined velocity field, NNR-NUVEL1 and the individual velocity fields

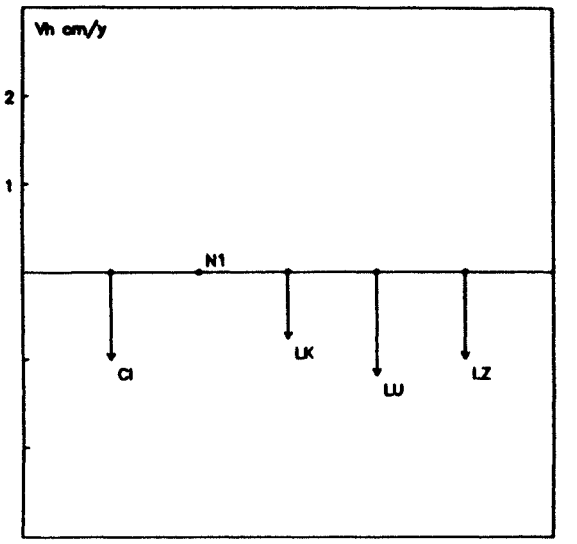
The following figures are ordered according to their DOMES number.
The labels of the vectors presented in these figures are as the following:

CI : refer to the ITRF92 velocity field
N1 : refer to velocity estimated by NNR-NUVEL1
RG: SSC(GSFC) 93 R 04
RJ: SSC(JPL) 93 R 01
RN: SSC(NOAA) 93 R 02
LC: SSC(CSR) 93 L 01
LU: SSC(DUT) 93 L 02
LK: SSC(GAOUA)93 L 01
LZ: SSC(GFZ) 93 L 01
LG: SSC(GSFC) 93 L 01

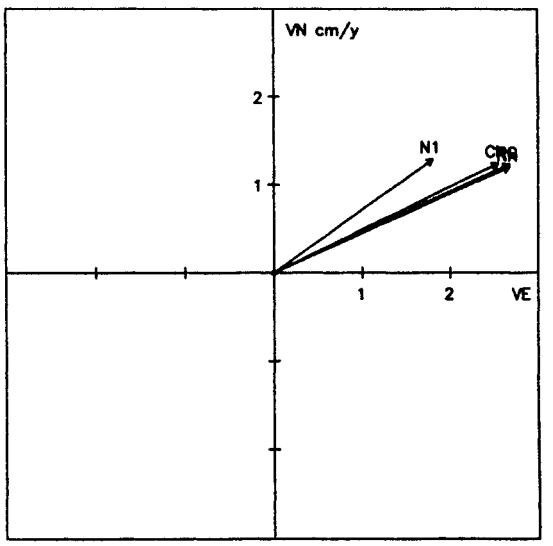
10002 GRASSE 2-D Velocities EURA



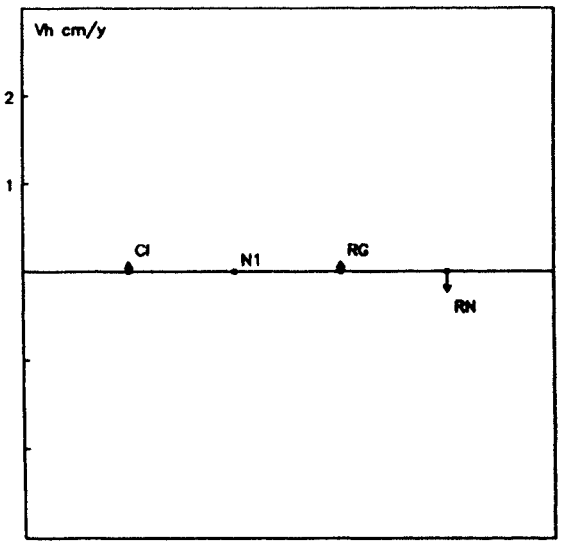
10002 GRASSE Vertical Velocities



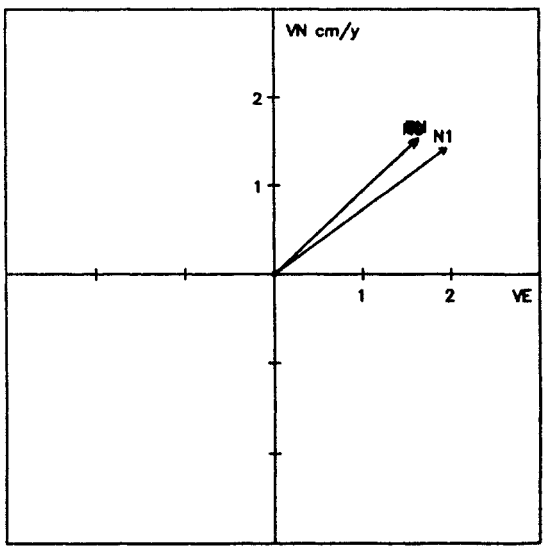
10302 TROMSO 2-D Velocities EURA



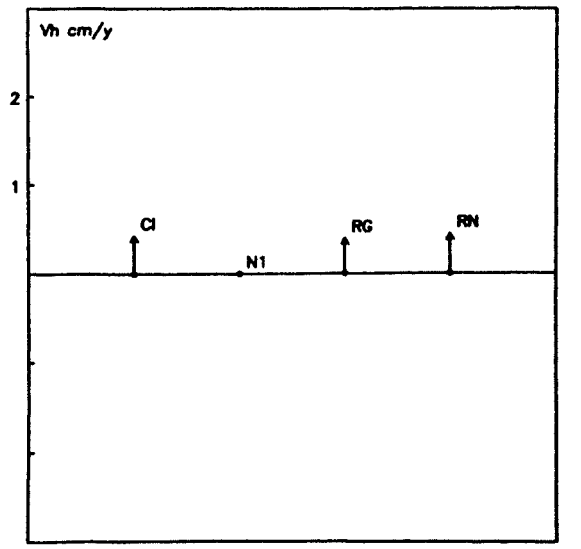
10302 TROMSO Vertical Velocities



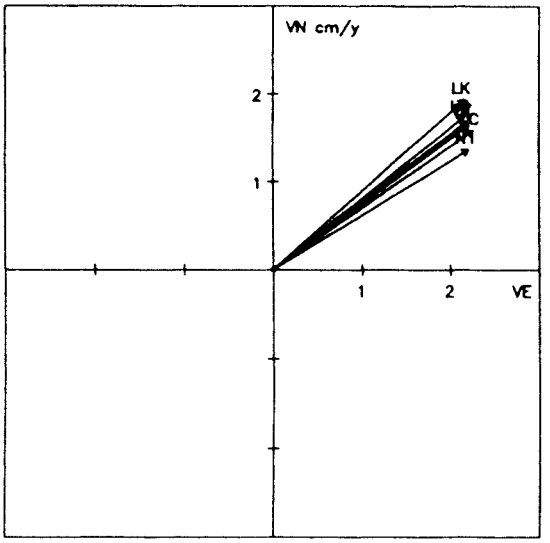
10402 ONSALA 2-D Velocities EURA



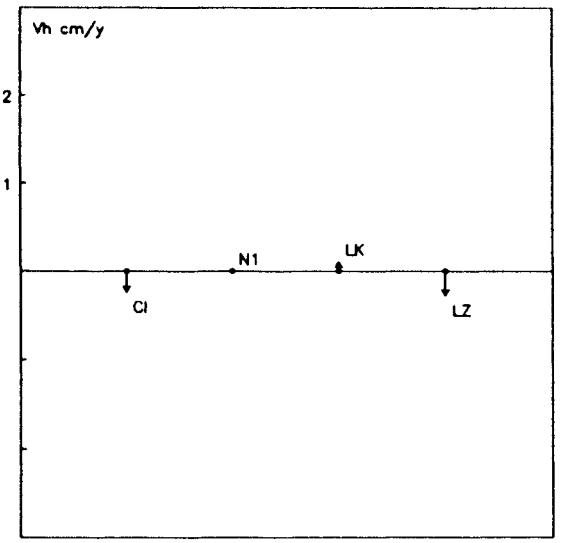
10402 ONSALA Vertical Velocities



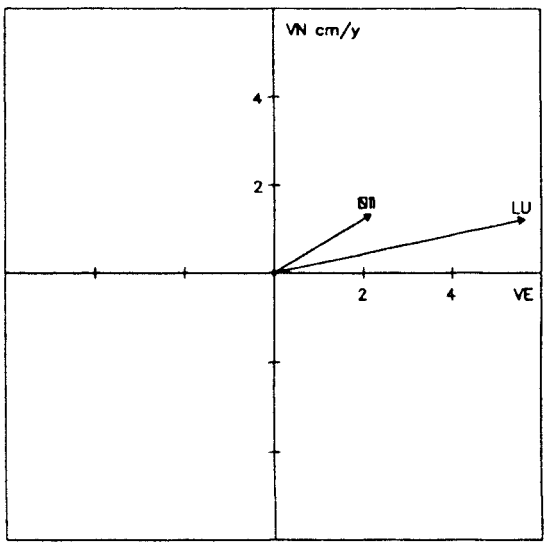
11001 GRAZ 2-D Velocities EURA



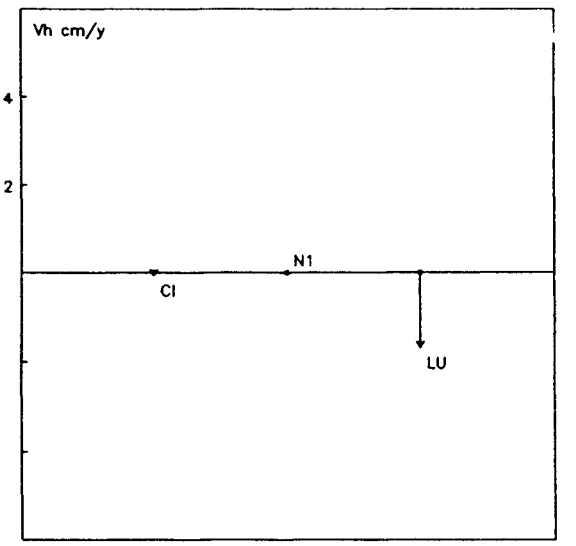
11001 GRAZ Vertical Velocities



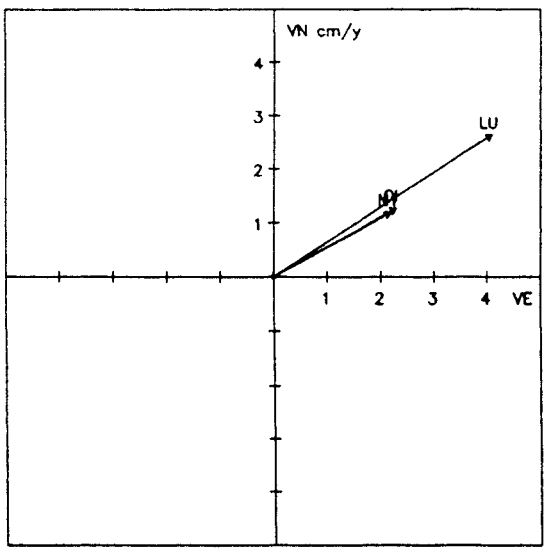
12205 BOROWIEC 2-D Velocities EURA



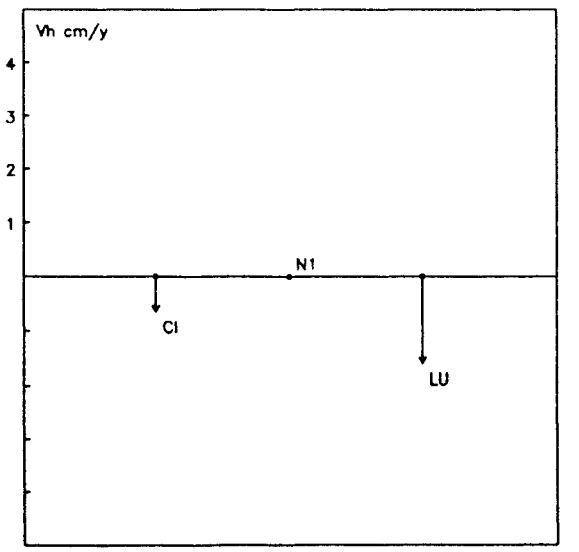
12205 BOROWIEC Vertical Velocities



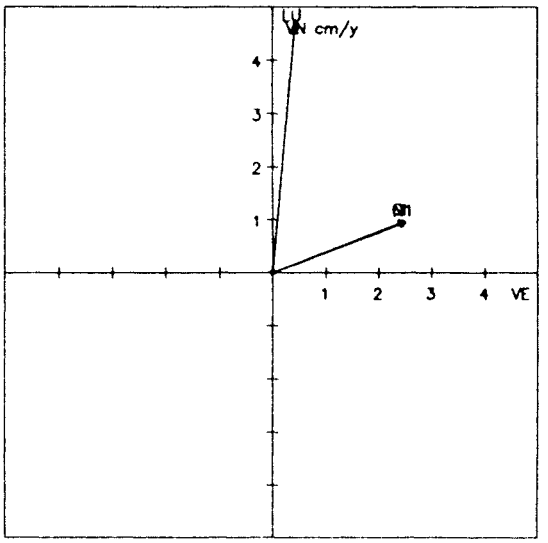
12302 RIGA 2-D Velocities EURA



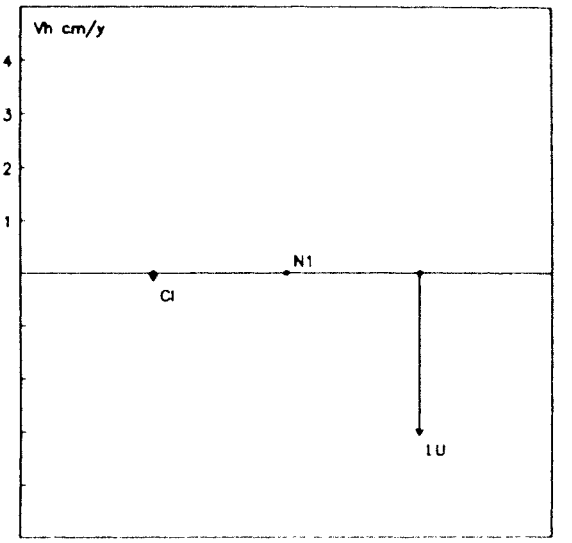
12302 RIGA Vertical Velocities



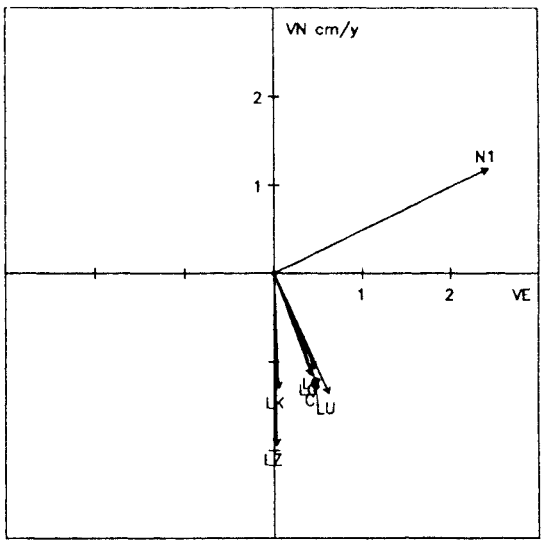
12337 SIMEIS 2-D Velocities EURA



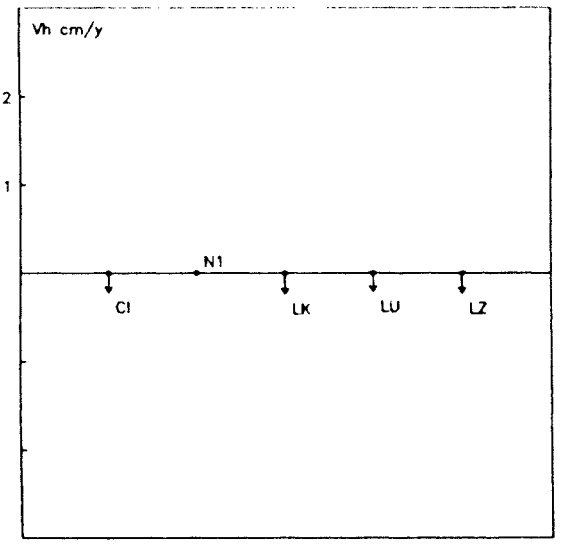
12337 SIMEIS Vertical Velocities



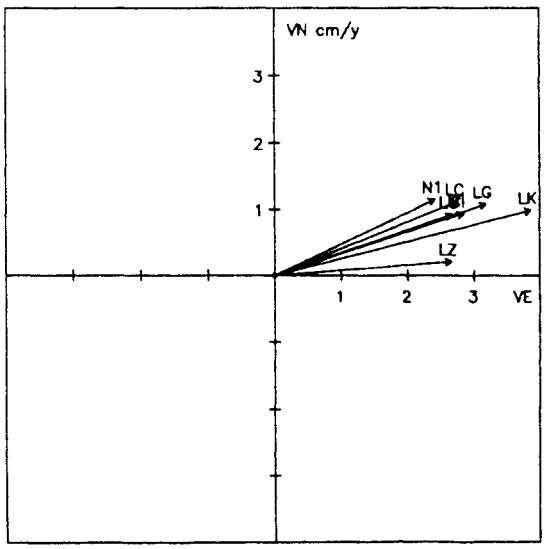
12602 DIONYSOS 2-D Velocities EURA N1 Deweighted



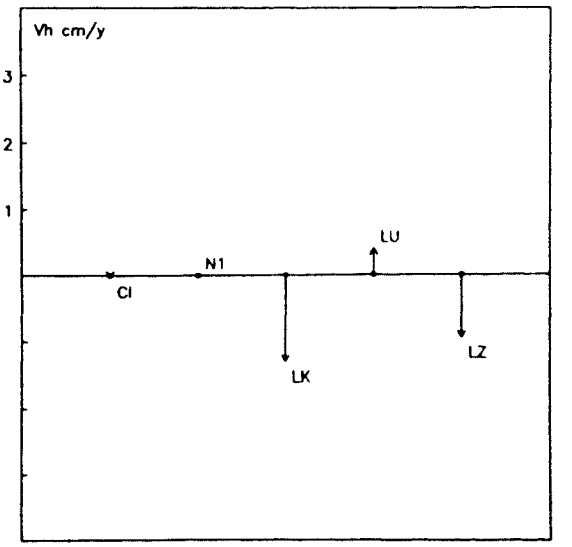
12602 DIONYSOS Vertical Velocities



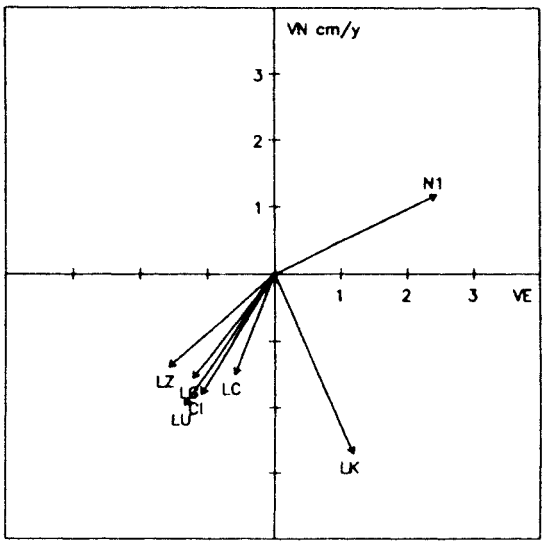
12612 ASKITES 2-D Velocities EURA N1 Deweighted



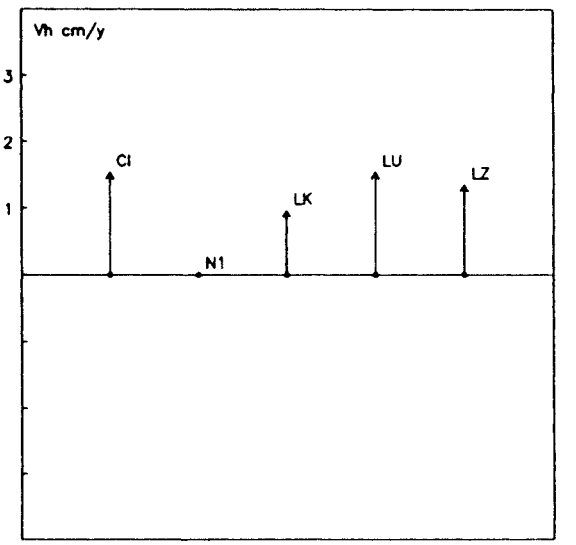
12612 ASKITES Vertical Velocities



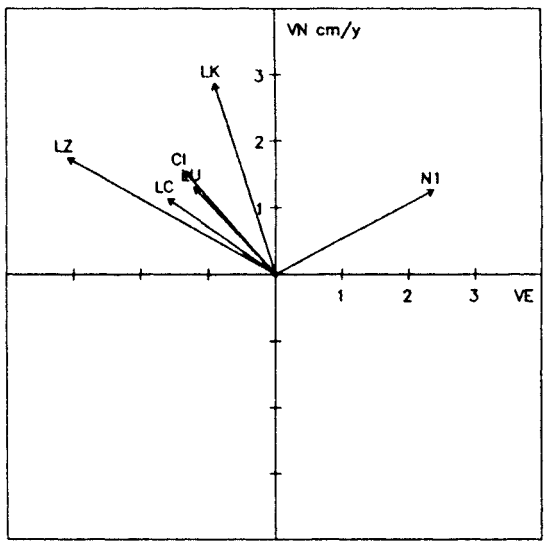
12613 ROUMELLI 2-D Velocities EURA N1 Deweighted



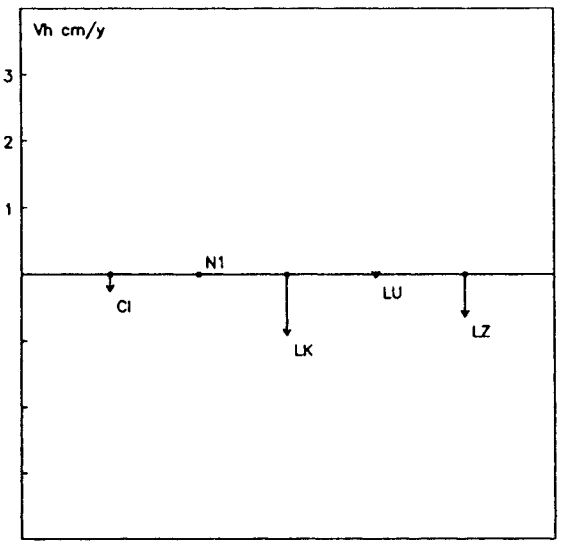
12613 ROUMELLI Vertical Velocities



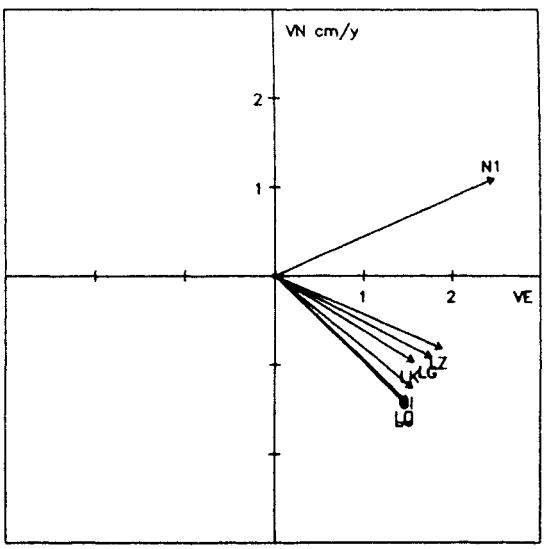
12614 KARITSA 2-D Velocities EURA N1 Deweighted



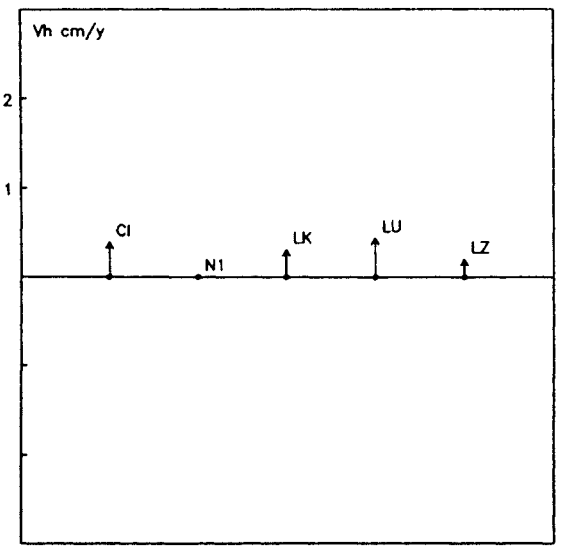
12614 KARITSA Vertical Velocities



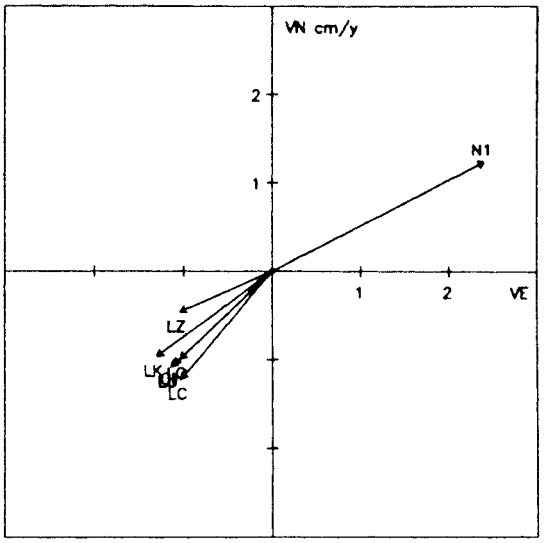
12615 KATAVIA 2-D Velocities EURA N1 Deweighted



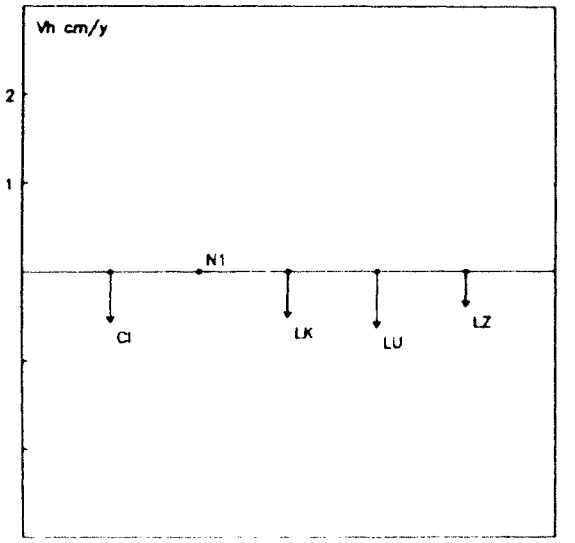
12615 KATAVIA Vertical Velocities



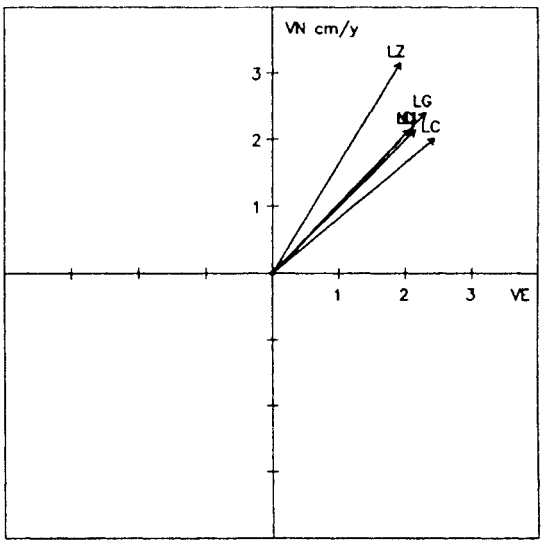
12616 XRISOKALARIA 2-D Velocities EURA N1 Deweighted



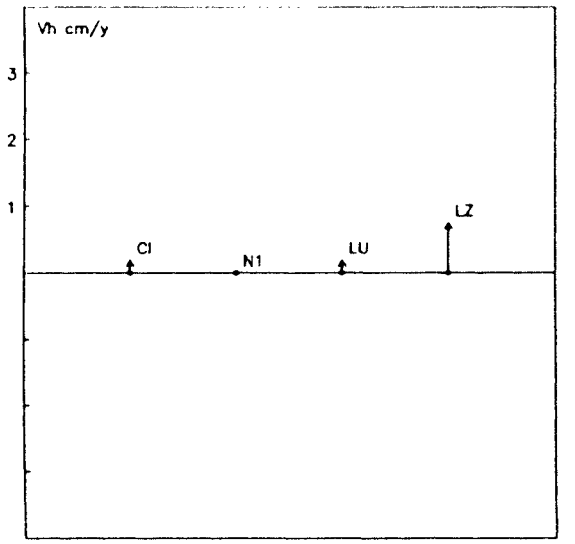
12616 XRISOKALARIA Vertical Velocities



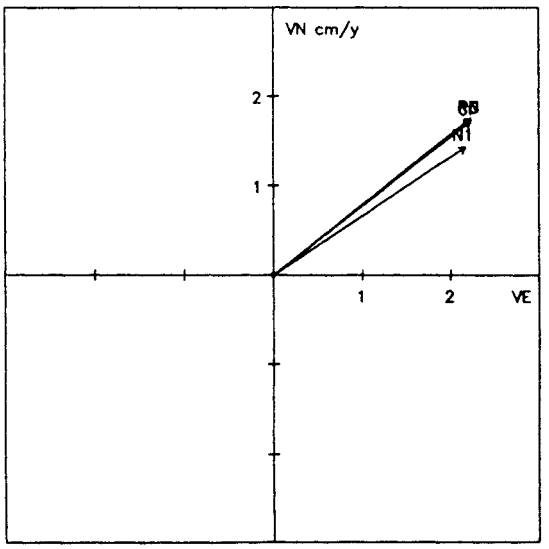
12706 LAMPEDUSA 2-D Velocities AFRC



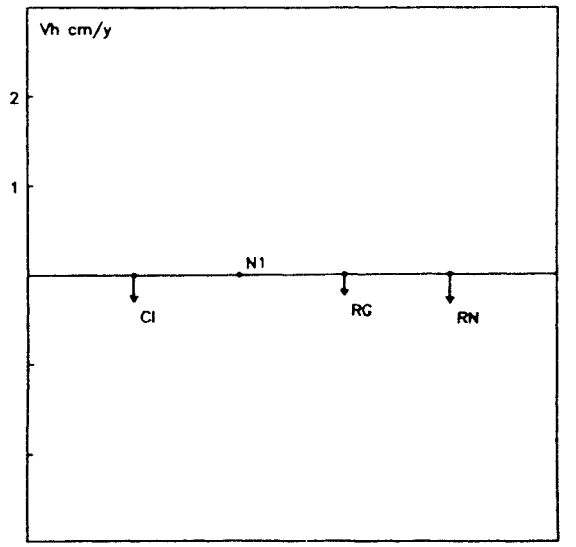
12706 LAMPEDUSA Vertical Velocities



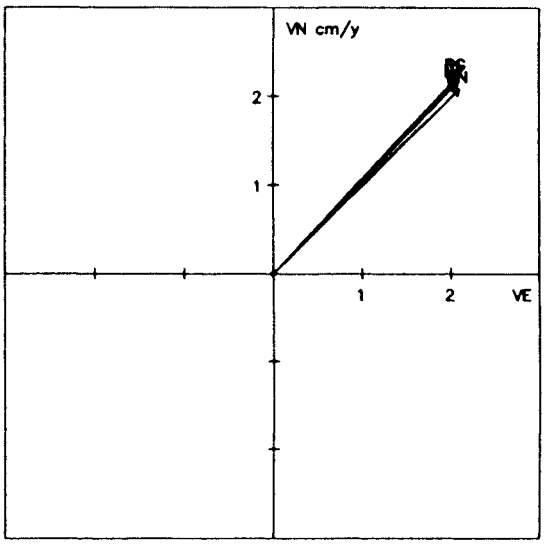
12711 BOLOGNA 2-D Velocities EURA



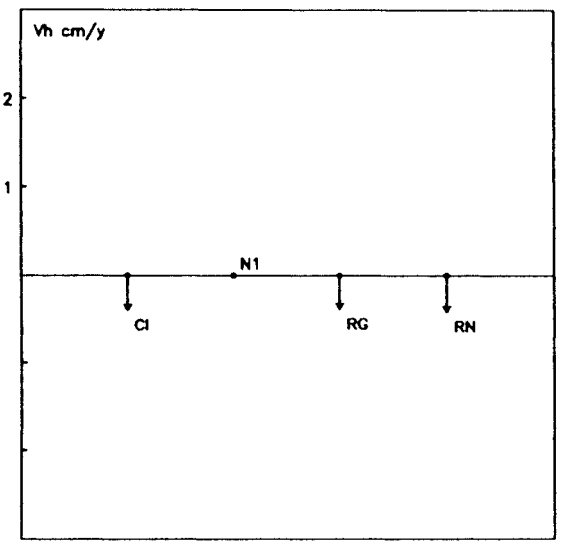
12711 BOLOGNA Vertical Velocities



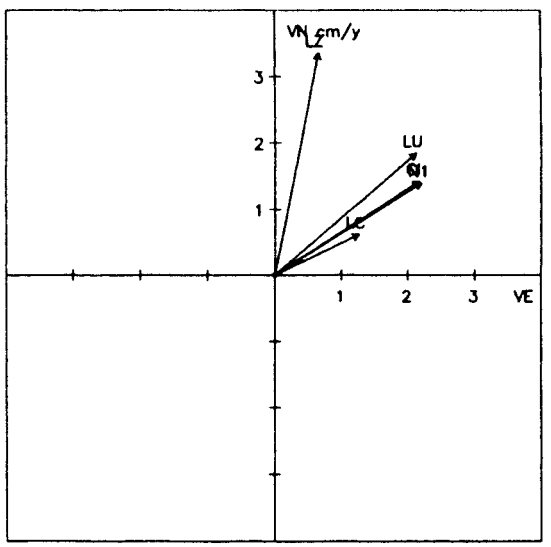
12717 NOTO 2-D Velocities AFRC



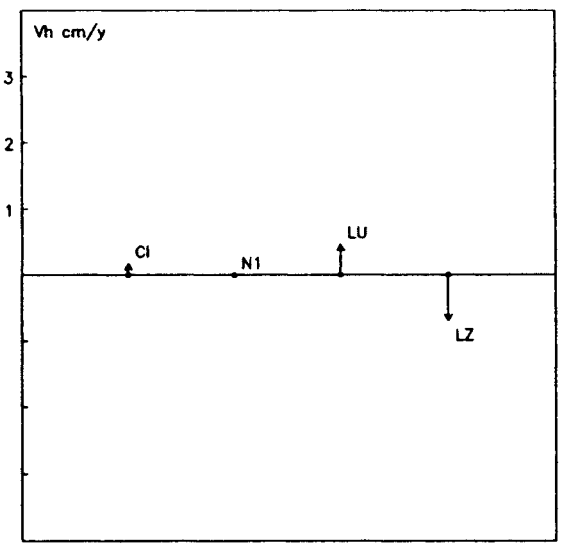
12717 NOTO Vertical Velocities



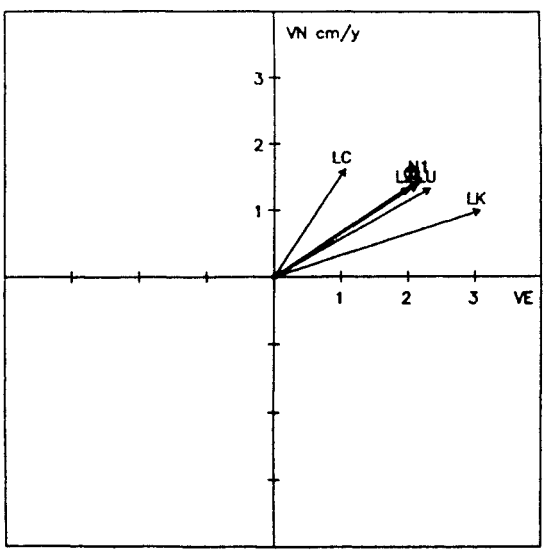
12718 TRIESTE 2-D Velocities EURA



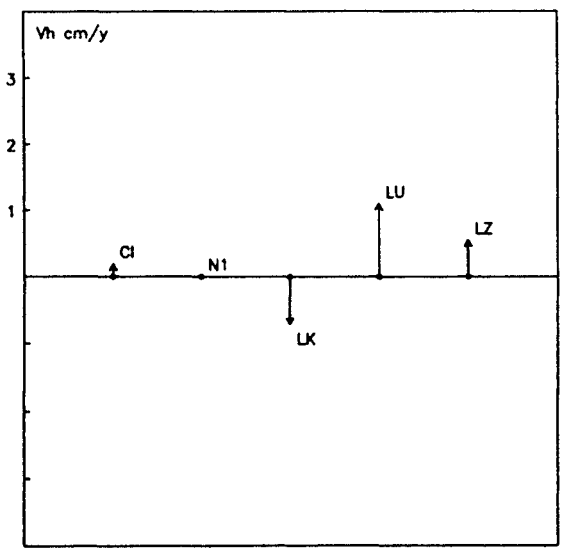
12718 TRIESTE Vertical Velocities



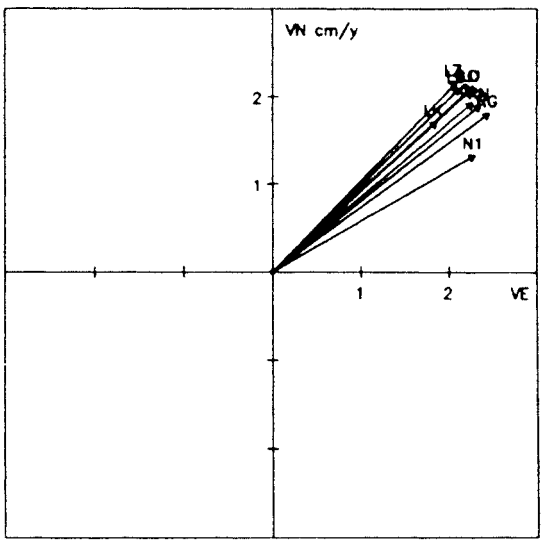
12725 CAGLIARI 2-D Velocities EURA



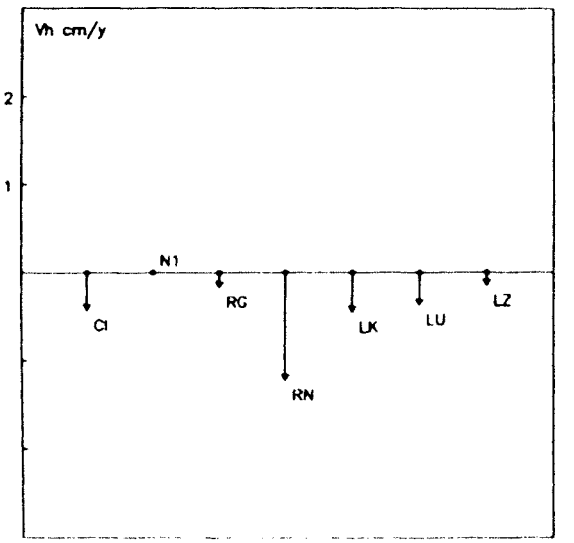
12725 CAGLIARI Vertical Velocities



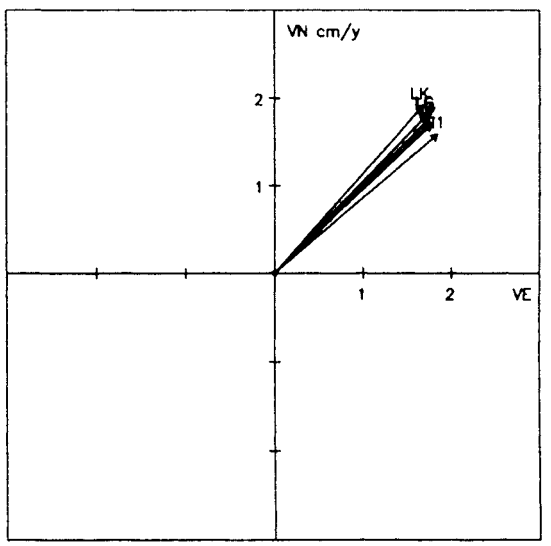
12734 MATERA 2-D Velocities EURA



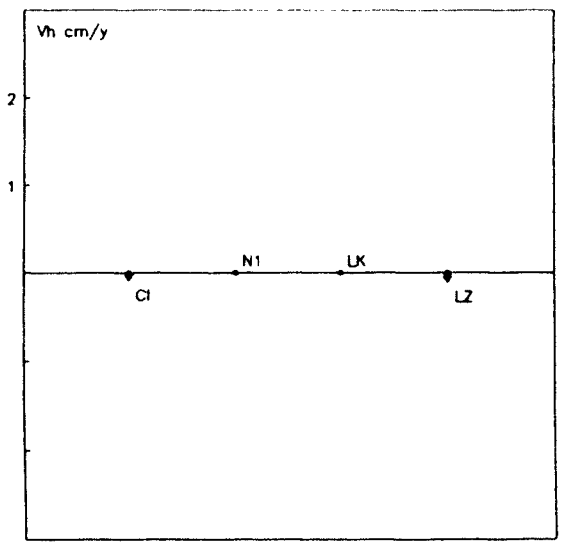
12734 MATERA Vertical Velocities



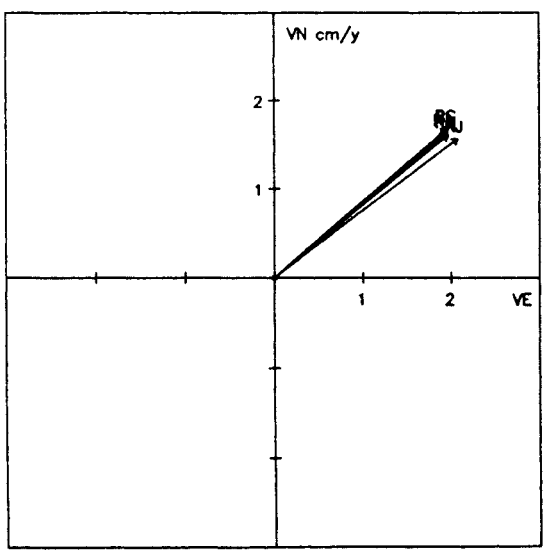
13212 HERSTMONCEUX 2-D Velocities EURA



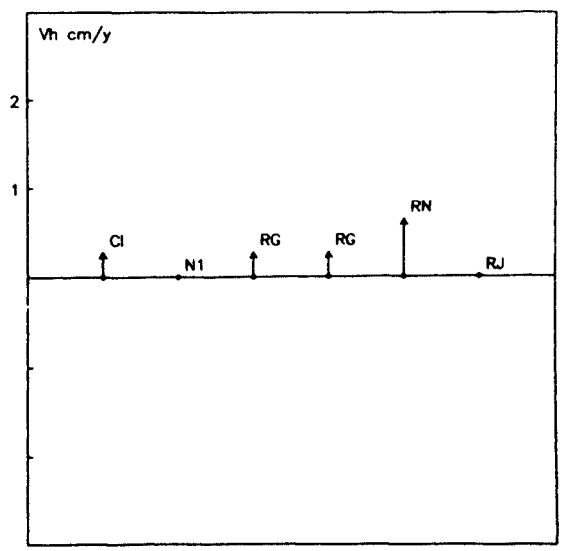
13212 HERSTMONCEUX Vertical Velocities



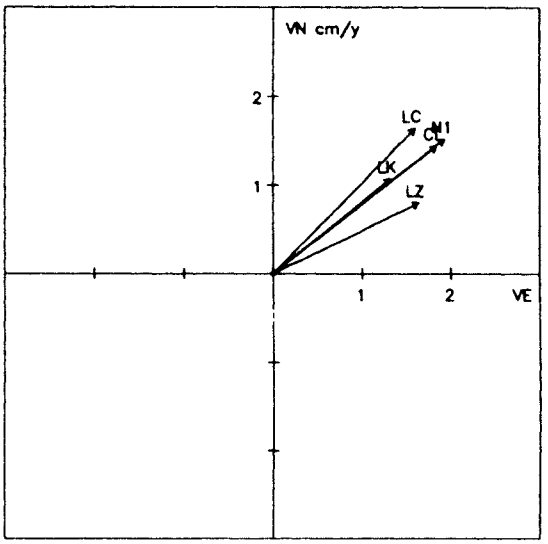
13407 MADRID 2-D Velocities EURA



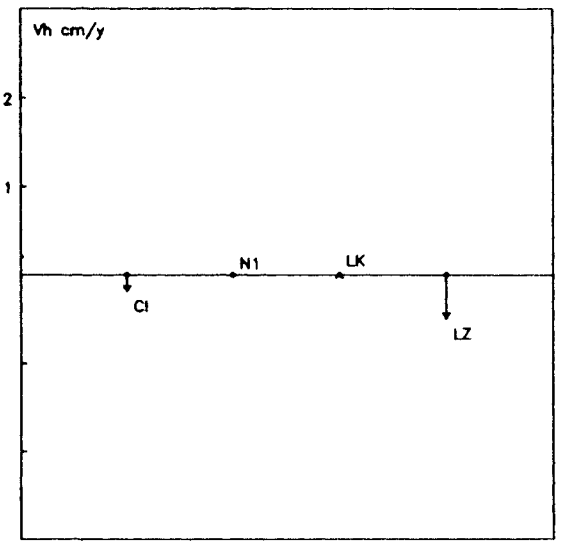
13407 MADRID Vertical Velocities



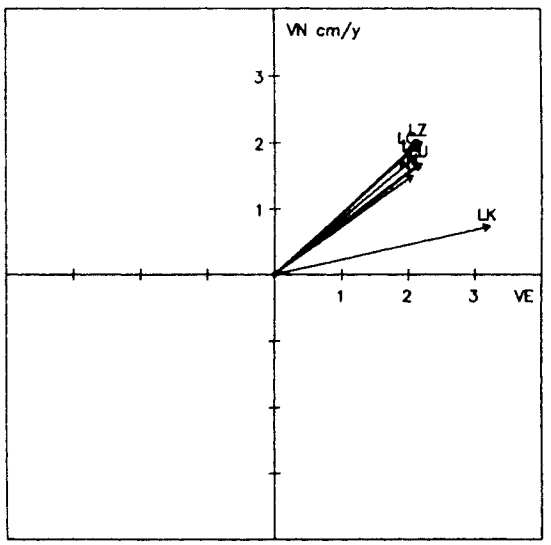
13504 KOOTWIJK 2-D Velocities EURA



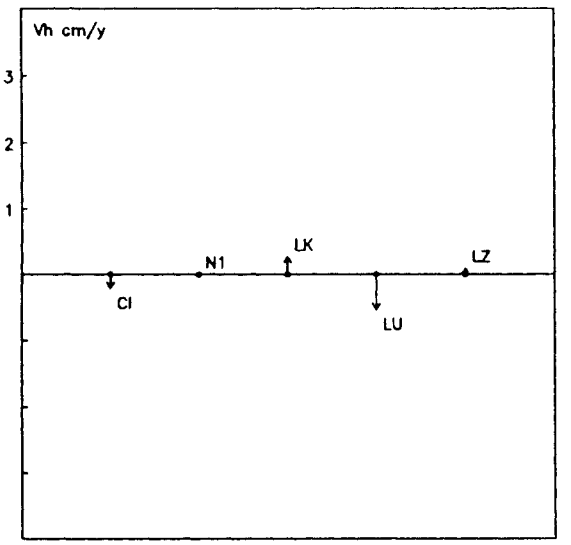
13504 KOOTWIJK Vertical Velocities



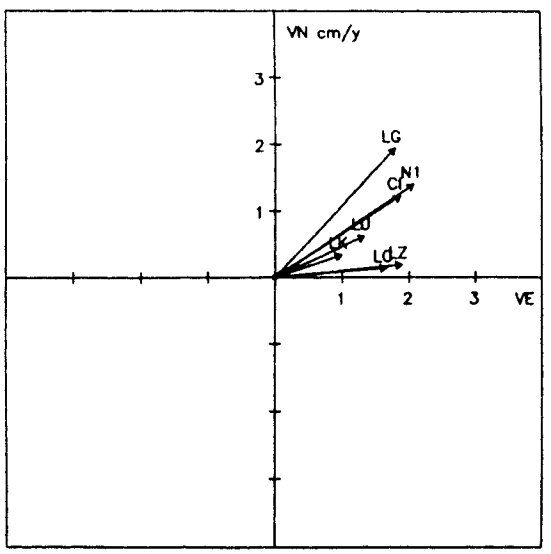
14001 ZIMMERWALD 2-D Velocities EURA



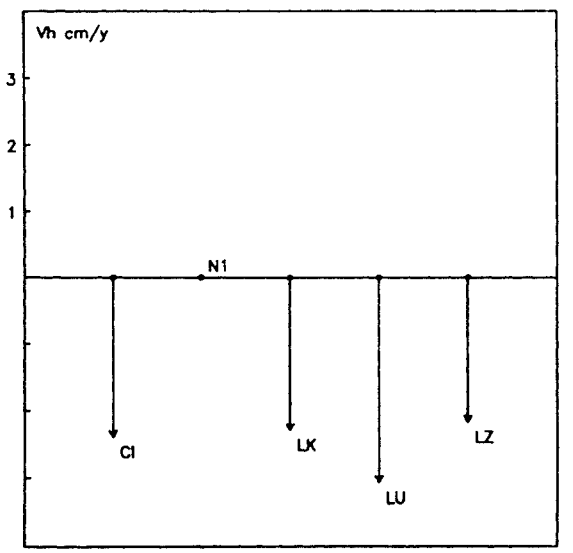
14001 ZIMMERWALD Vertical Velocities



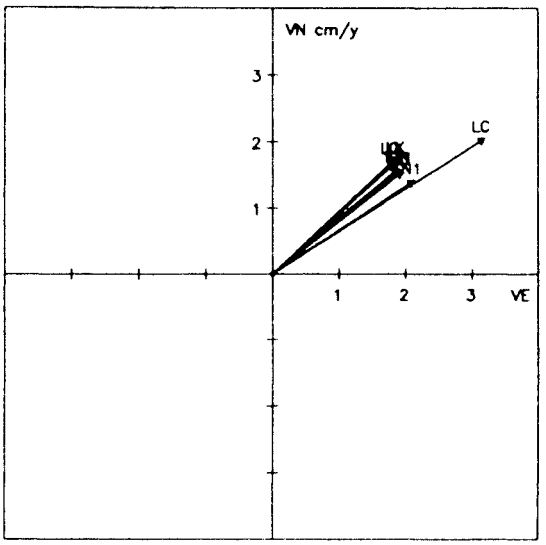
14106 POTSDAM 2-D Velocities EURA



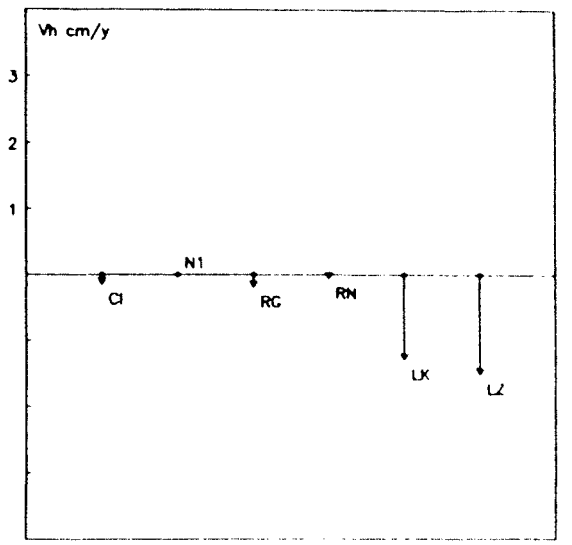
14106 POTSDAM Vertical Velocities



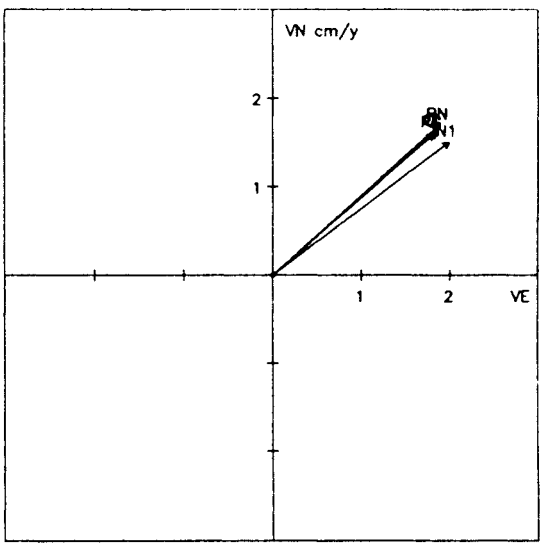
14201 WETTZELL 2-D Velocities EURA



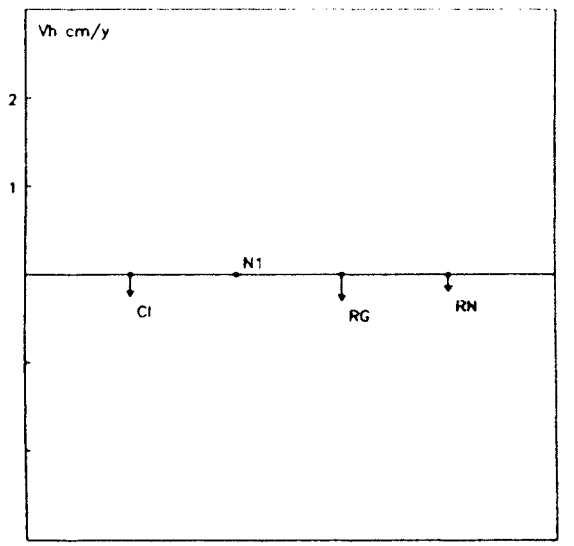
14201 WETTZELL Vertical Velocities



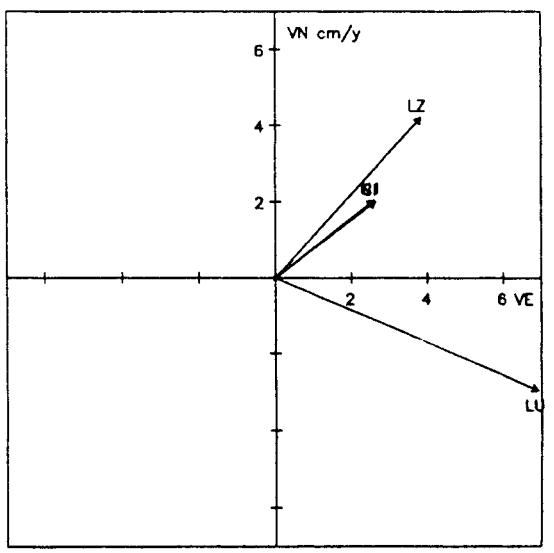
14209 EFFELSBERG 2-D Velocities EURA



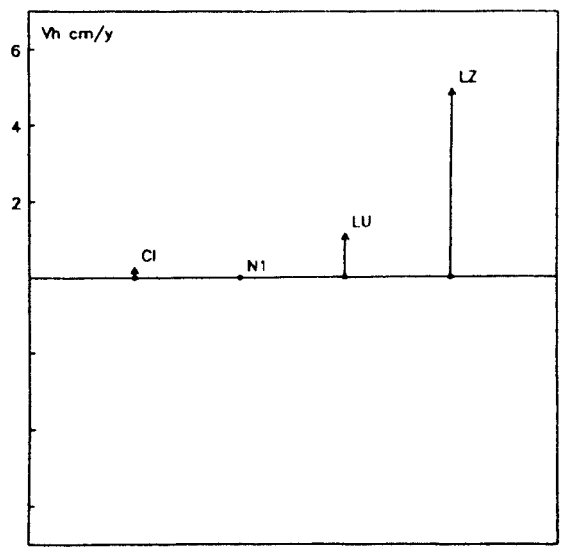
14209 EFFELSBERG Vertical Velocities



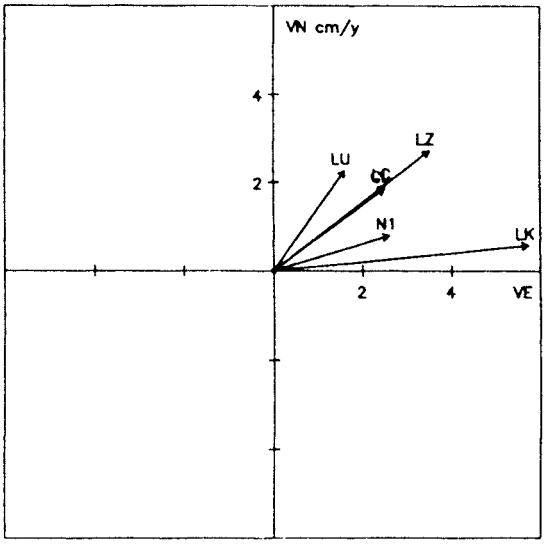
20702 BAR GIYYORA 2-D Velocities AFRC



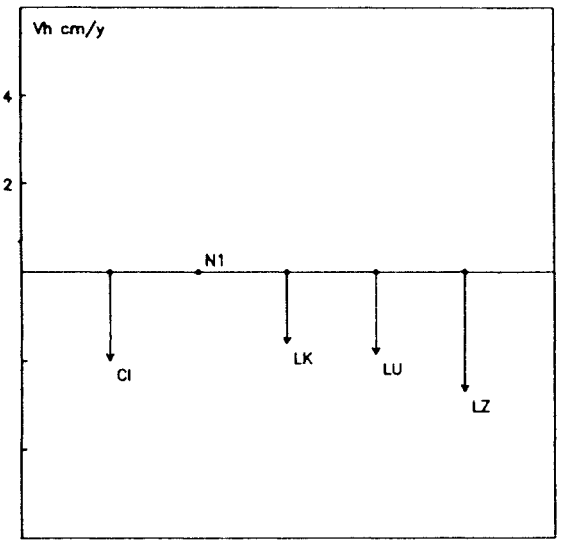
20702 BAR GIYYORA Vertical Velocities



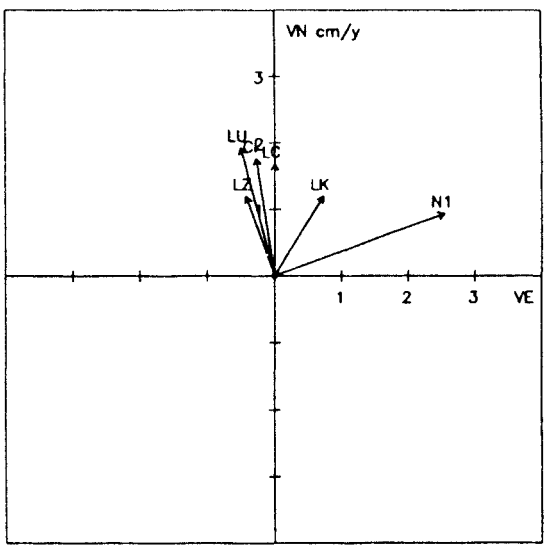
20801 DIYARBAKIR 2-D Velocities EURA N1 Deweighted



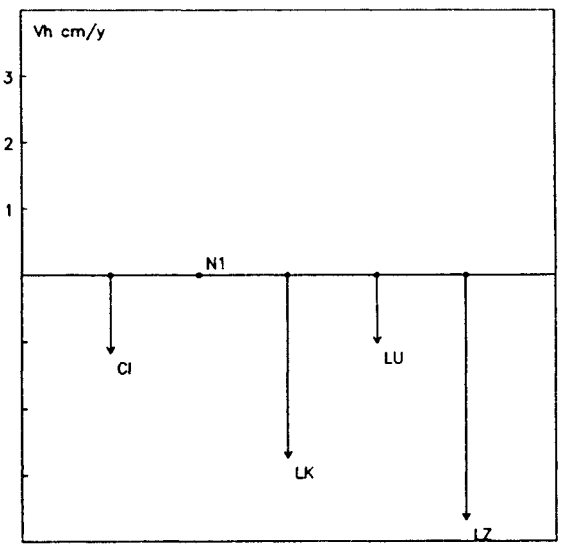
20801 DIYARBAKIR Vertical Velocities



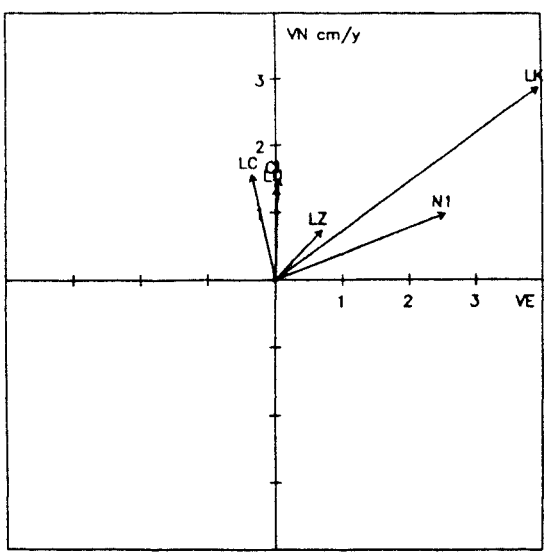
20802 YOZGAT 2-D Velocities EURA N1 Deweighted



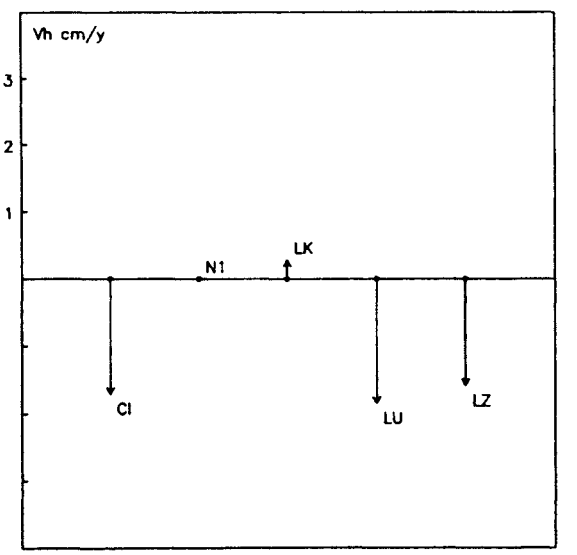
20802 YOZGAT Vertical Velocities



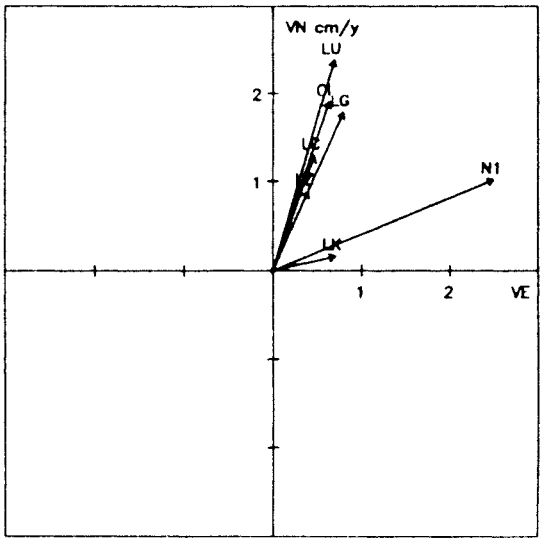
20803 MELENGICLICK 2-D Velocities EURA N1 Deweighted



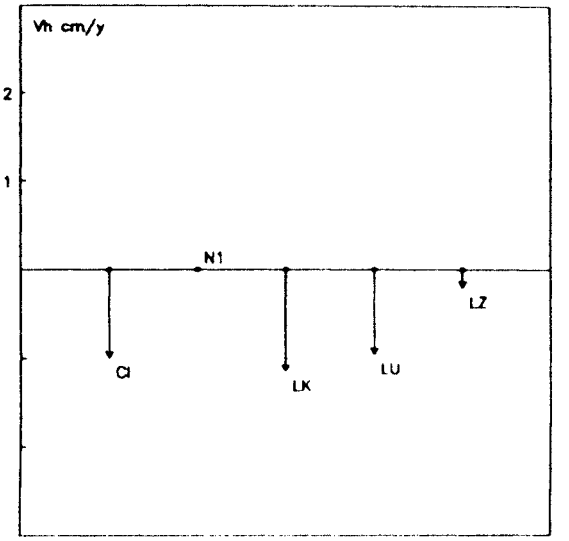
20803 MELENGICLICK Vertical Velocities



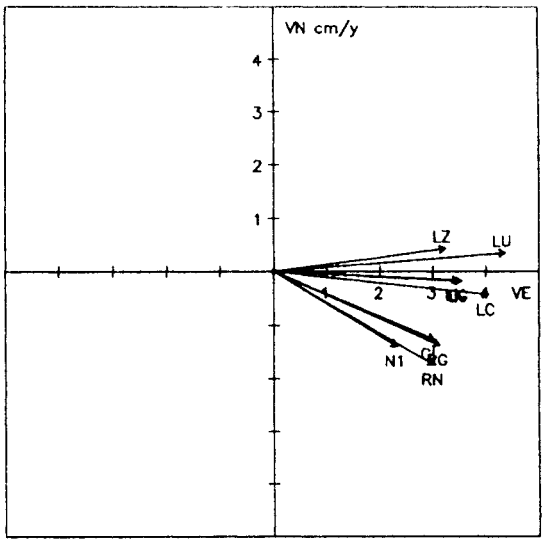
20804 YIGILCA 2-D Velocities EURA N1 Deweighted



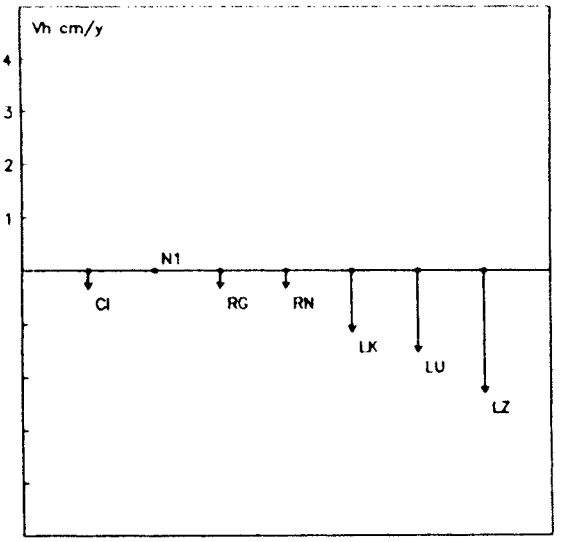
20804 YIGILCA Vertical Velocities



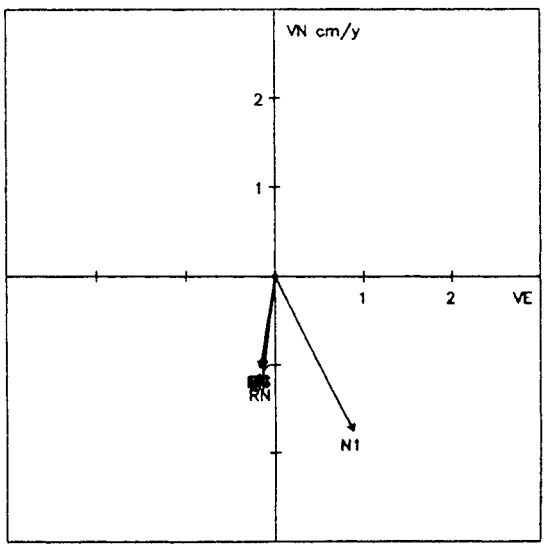
21605 SHANGHAI 2-D Velocities EURA



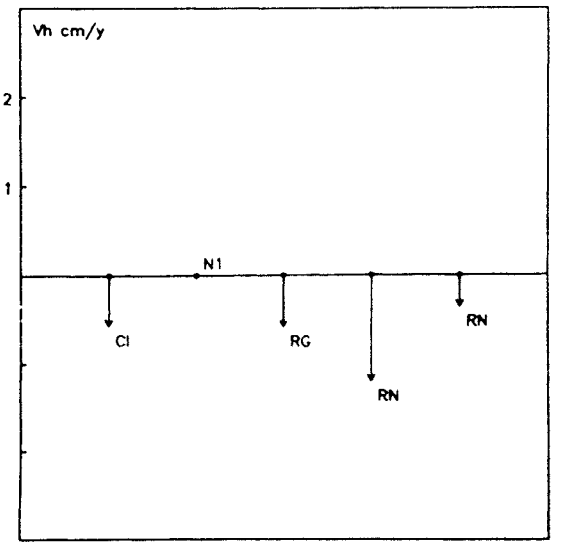
21605 SHANGHAI Vertical Velocities



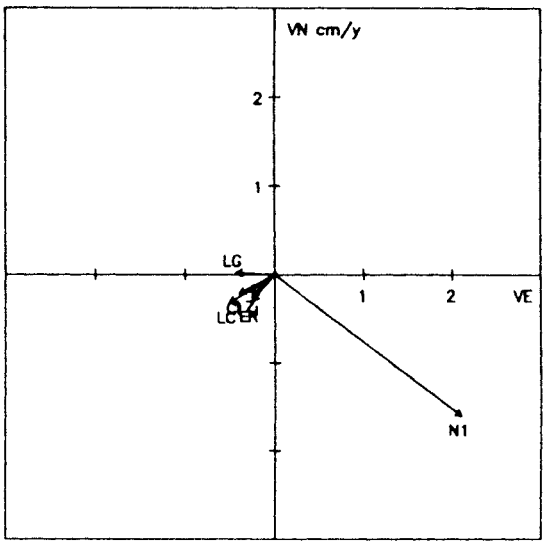
21701 KASHIMA 2-D Velocities NOAM N1 Deweighted



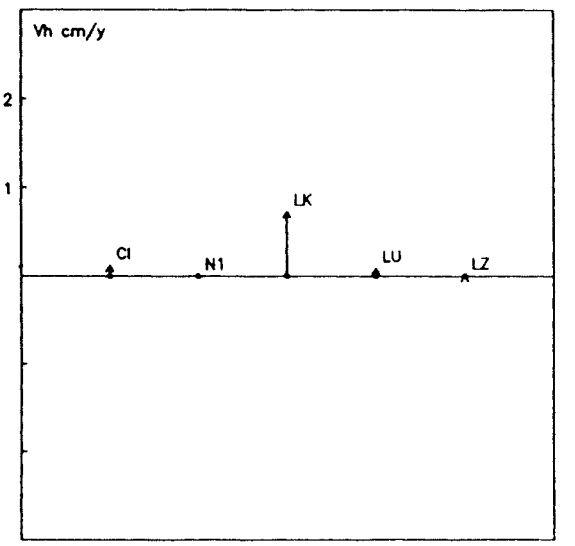
21701 KASHIMA Vertical Velocities



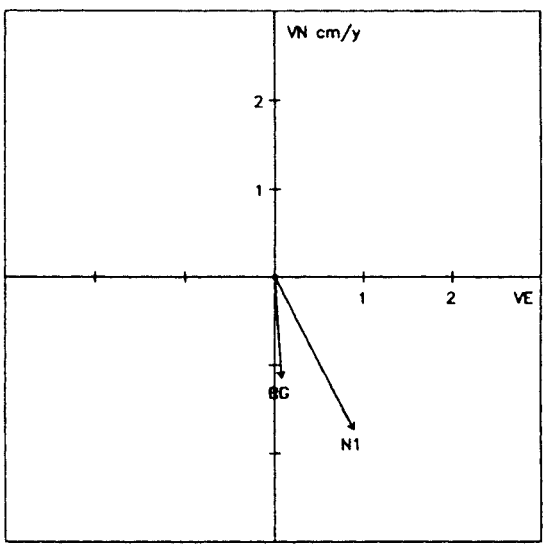
21726 SIMOSATO 2-D Velocities EURA N1 Deweighted



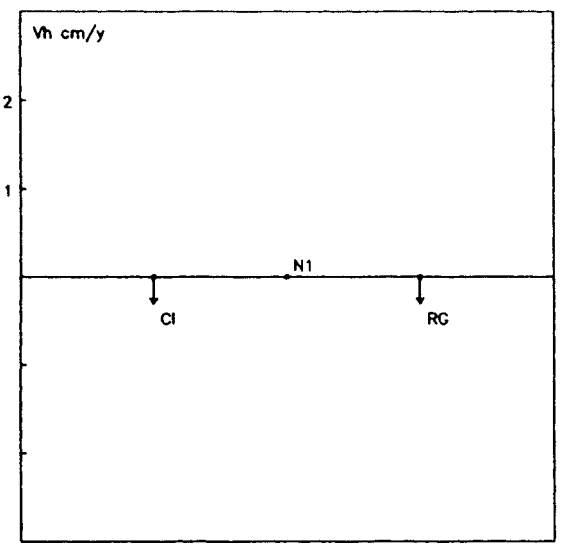
21726 SIMOSATO Vertical Velocities



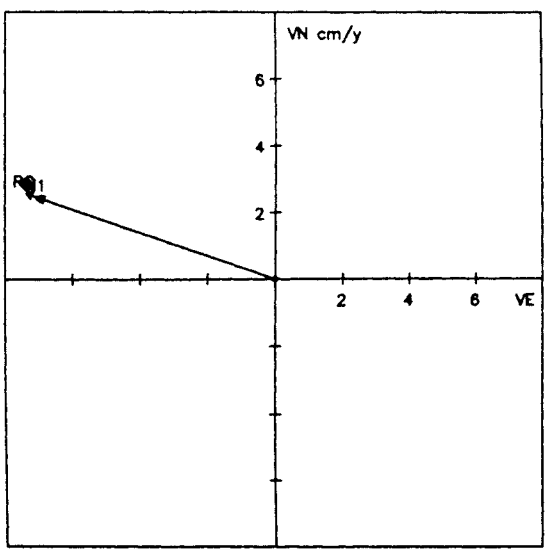
21730 TSUKUBA 2-D Velocities NOAM N1 Deweighted



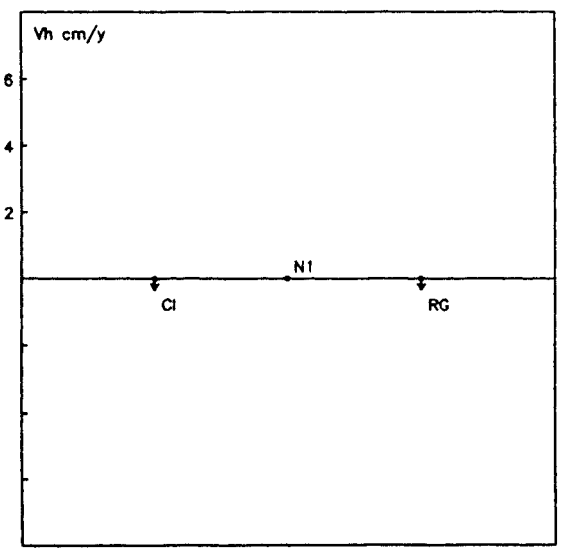
21730 TSUKUBA Vertical Velocities



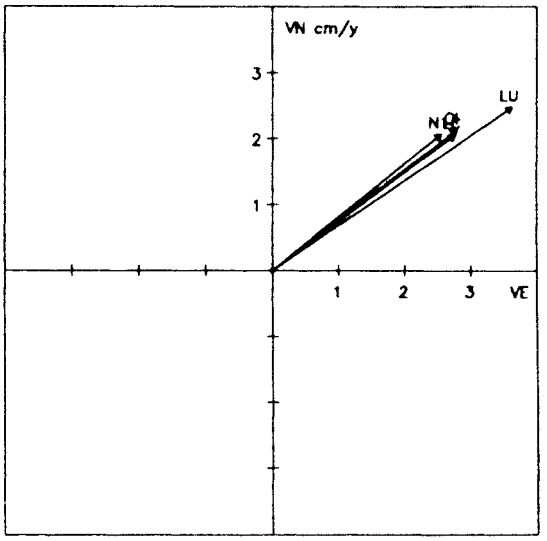
21733 MINAMI TORI SIMA 2-D Velocities PCFC



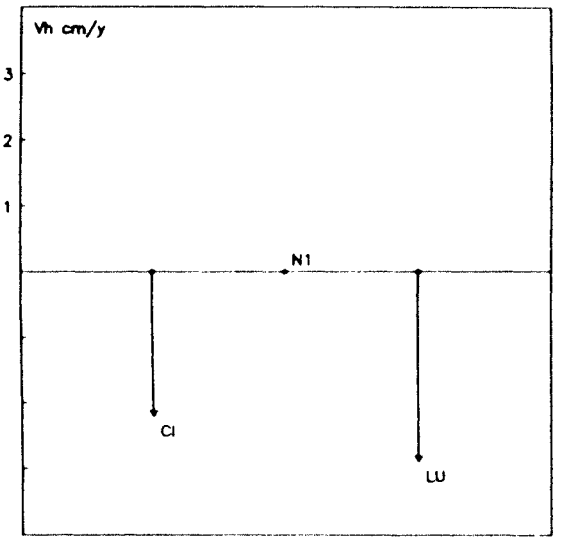
21733 MINAMI TORI SIMA Vertical Velocities



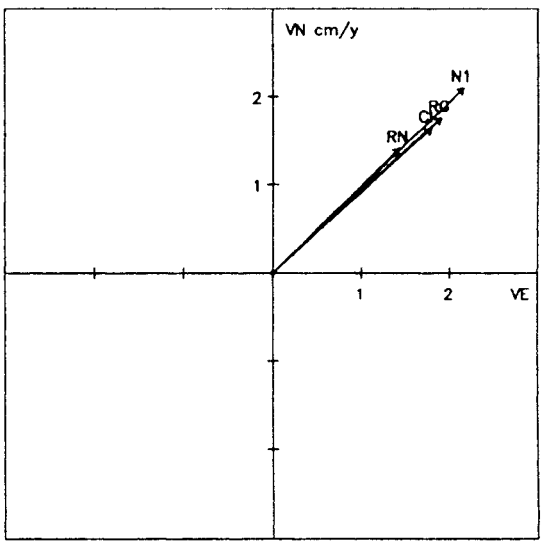
30101 HELWAN 2-D Velocities AFRC



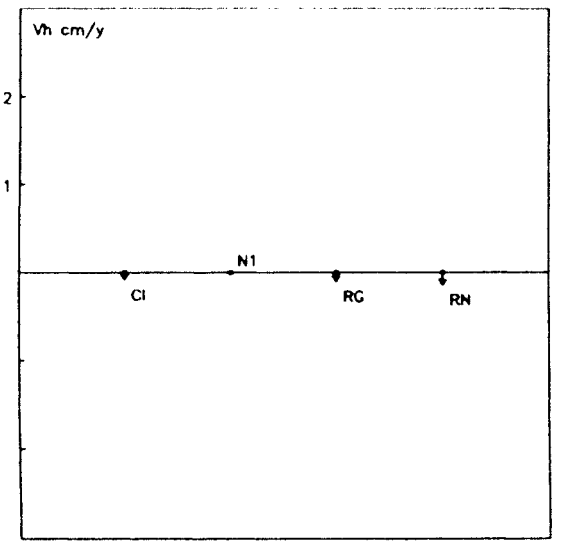
30101 HELWAN Vertical Velocities



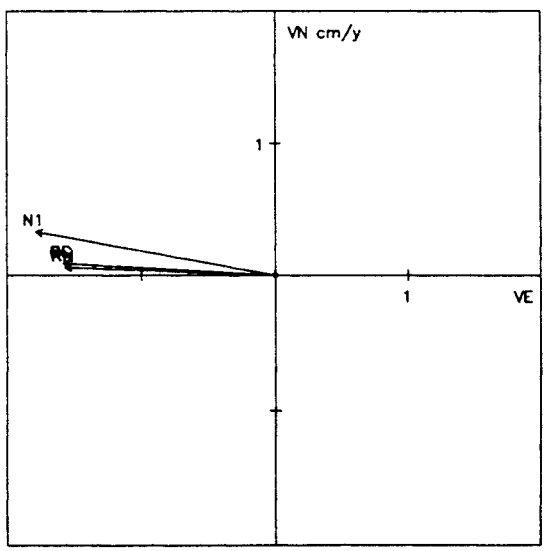
30302 JOHANNESBURG 2-D Velocities AFRC



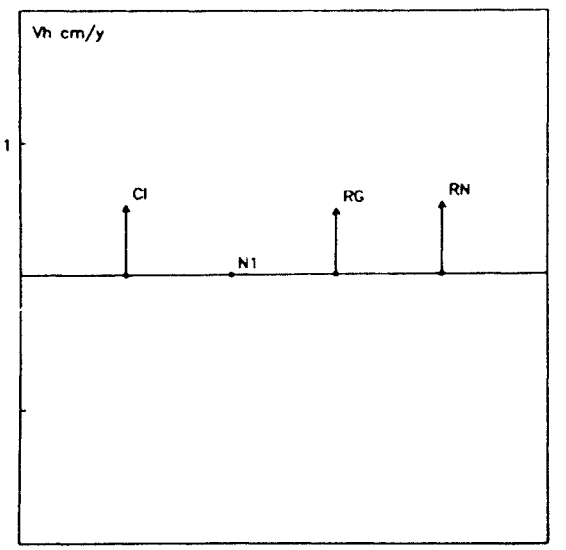
30302 JOHANNESBURG Vertical Velocities



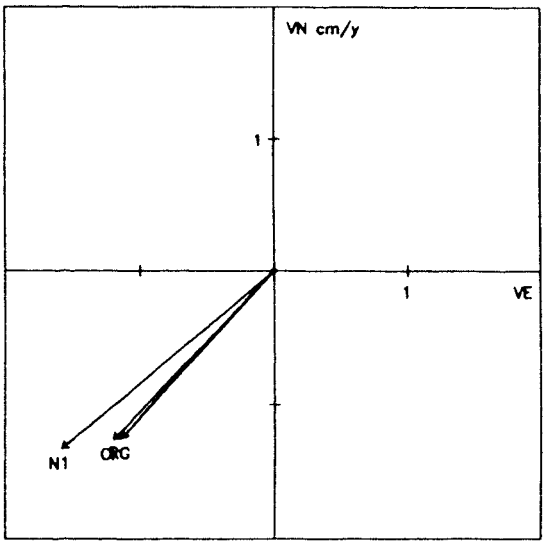
40104 ALGONQUIN 2-D Velocities NOAM



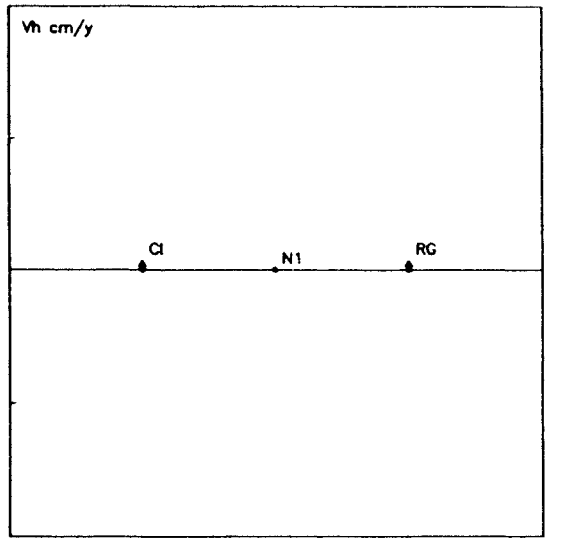
40104 ALGONQUIN Vertical Velocities



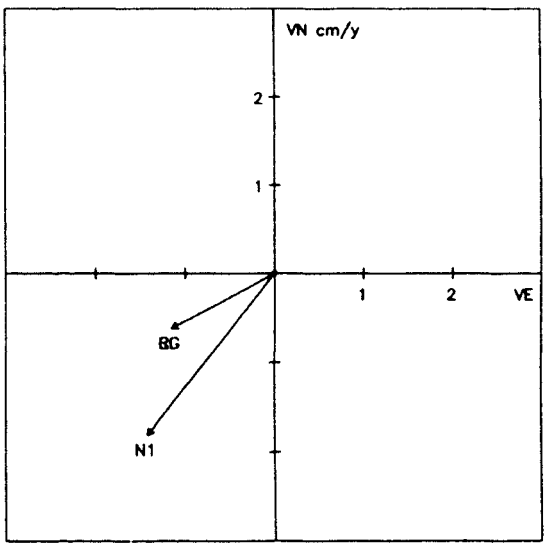
40105 PENTICTON 2-D Velocities NOAM



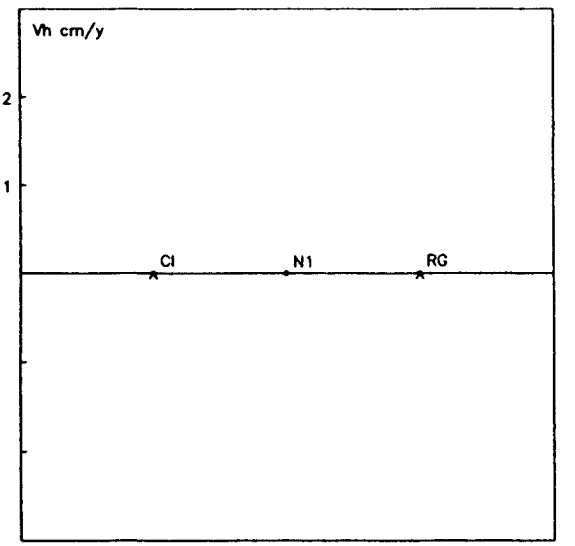
40105 PENTICTON Vertical Velocities



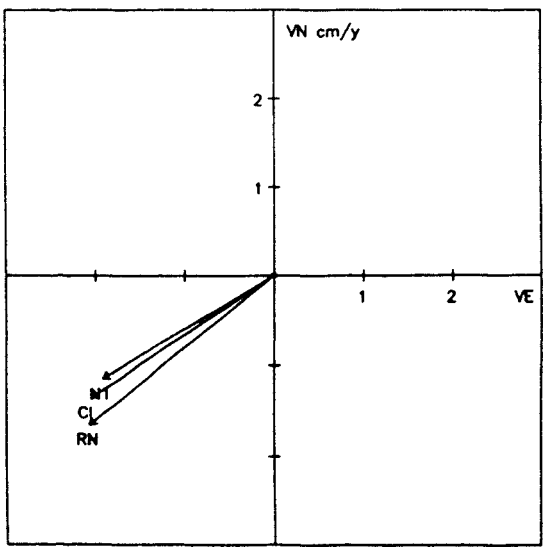
40118 WHITEHORSE 2-D Velocities NOAM N1 Deweighted



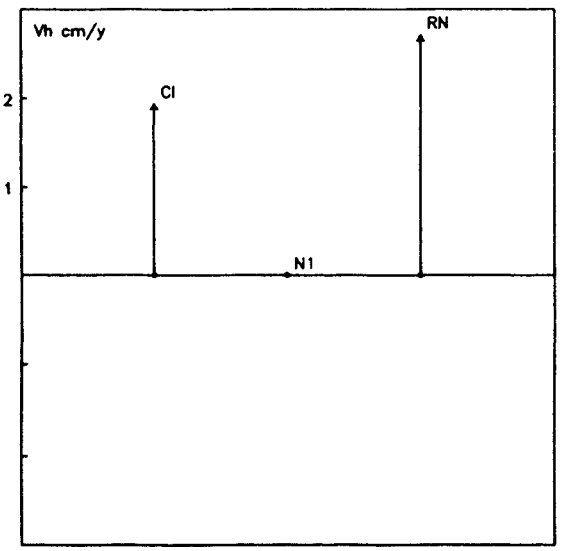
40118 WHITEHORSE Vertical Velocities



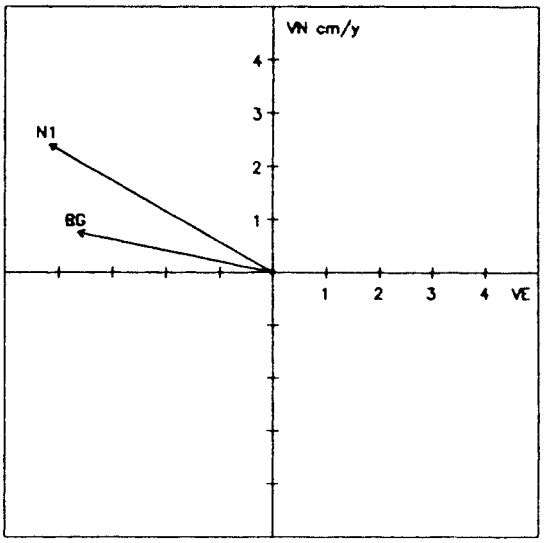
40127 YELLOWKNIFE 2-D Velocities NOAM



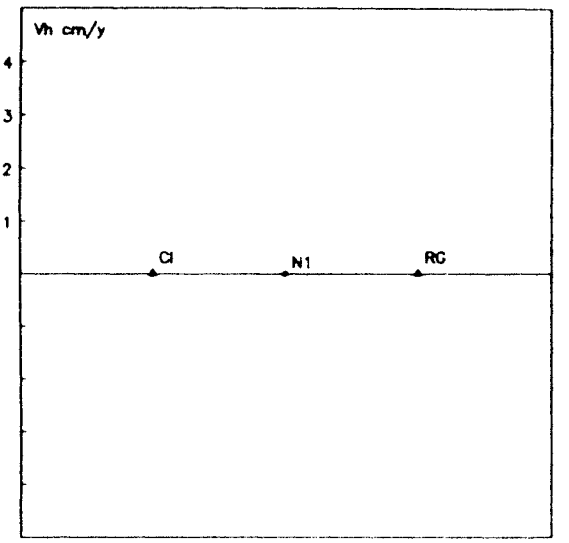
40127 YELLOWKNIFE Vertical Velocities



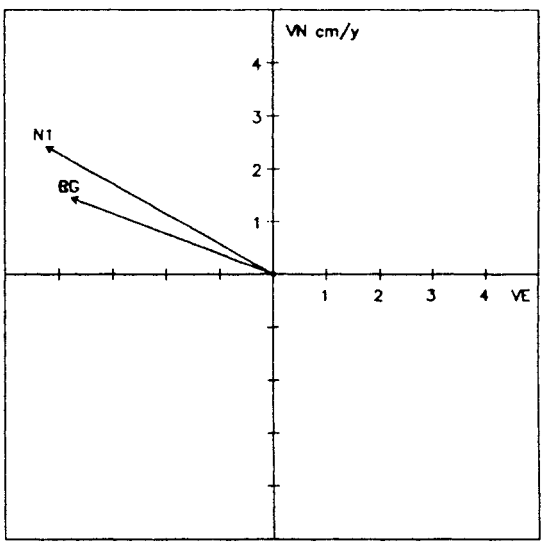
40400 PASADENA 2-D Velocities PCFC N1 Deweighted



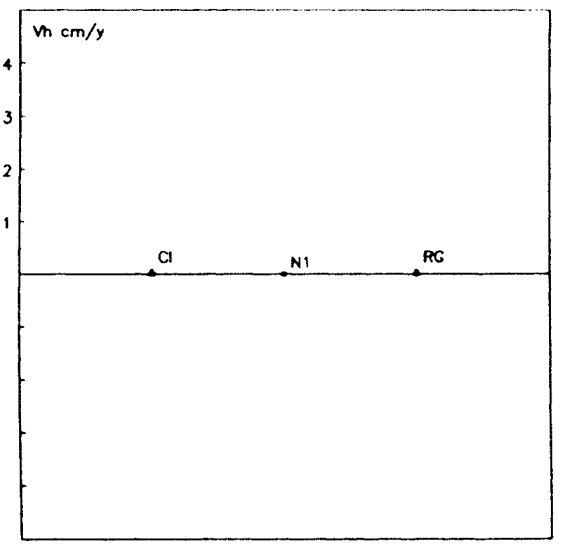
40400 PASADENA Vertical Velocities



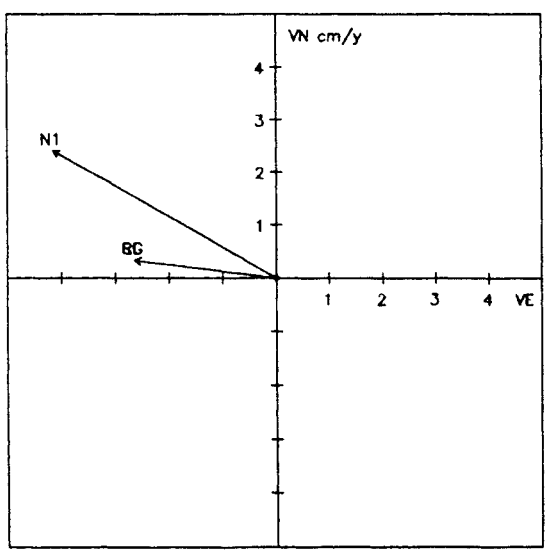
40403 PALOS VERDES 2-D Velocities PCFC N1 Deweighted



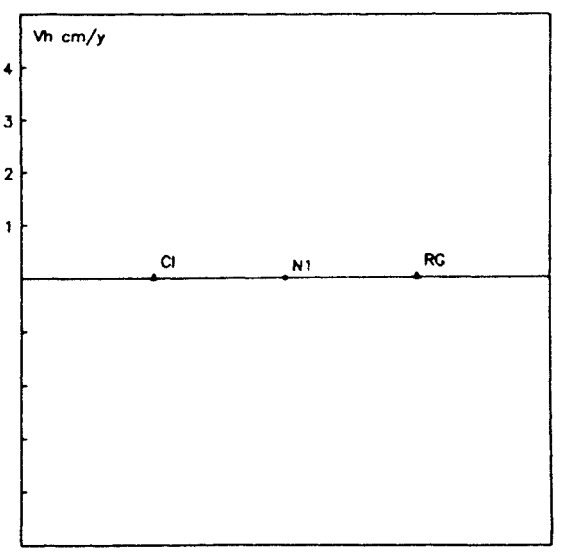
40403 PALOS VERDES Vertical Velocities



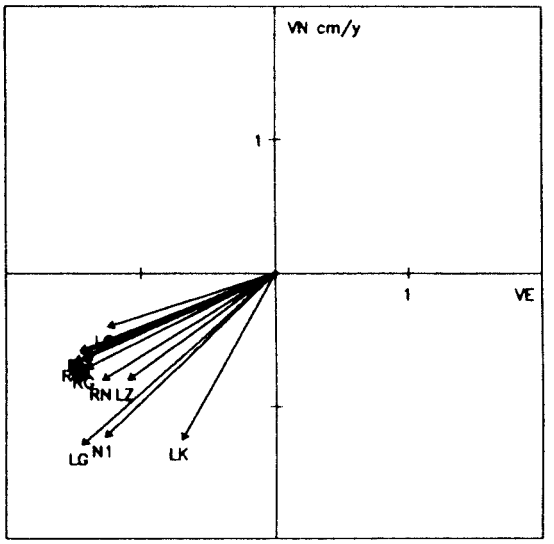
40404 PEARBLOSSOM 2-D Velocities PCFC N1 Deweighted



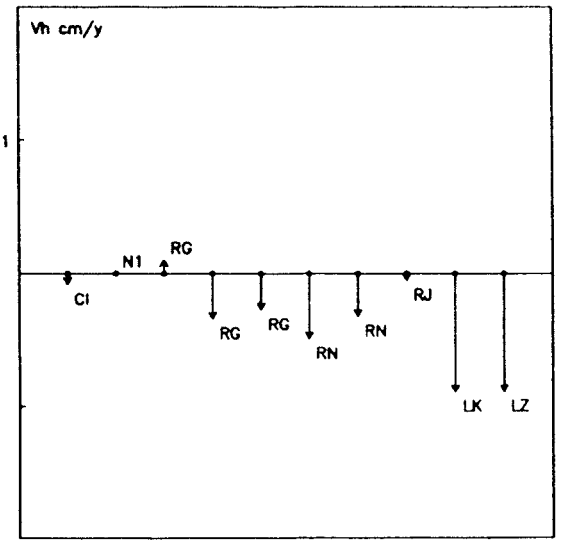
40404 PEARBLOSSOM Vertical Velocities



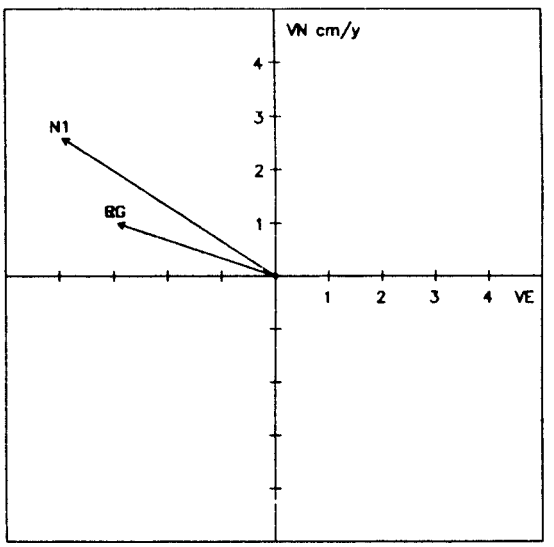
40405 GOLDSTONE 2-D Velocities NOAM



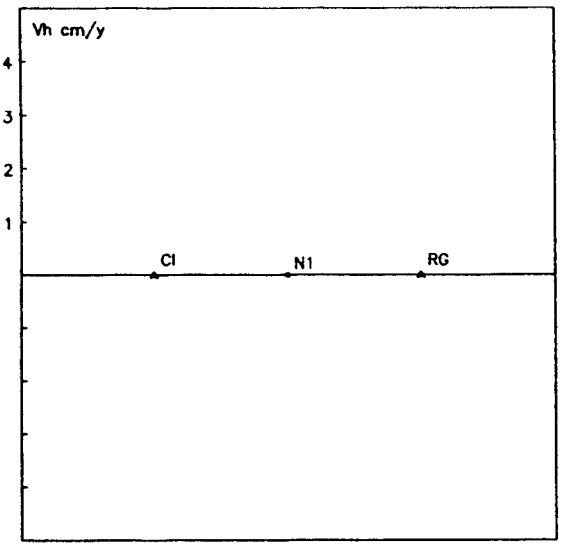
40405 GOLDSTONE Vertical Velocities



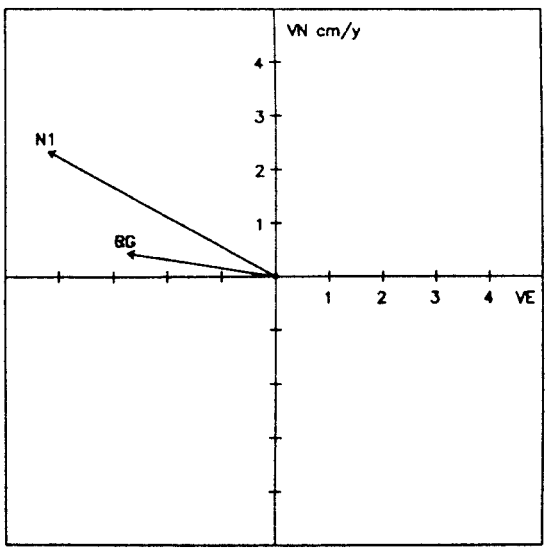
40406 PRESIDIO 2-D Velocities PCFC N1 Deweighted



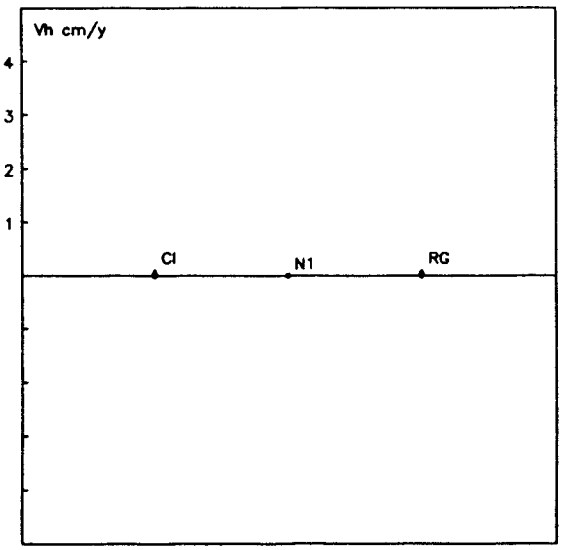
40406 PRESIDIO Vertical Velocities



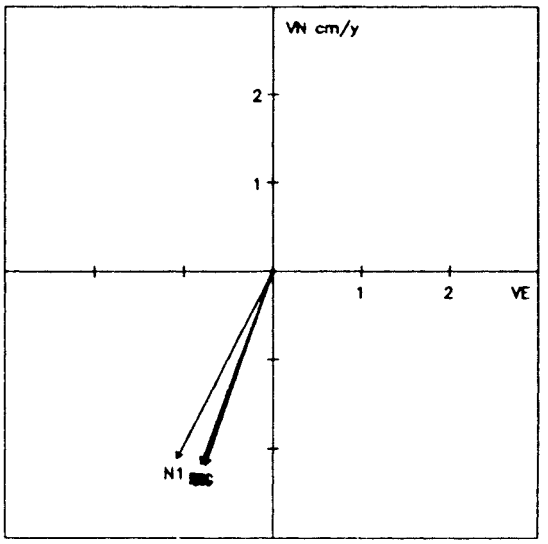
40407 PINYON FLATS 2-D Velocities PCFC N1 Deweighted



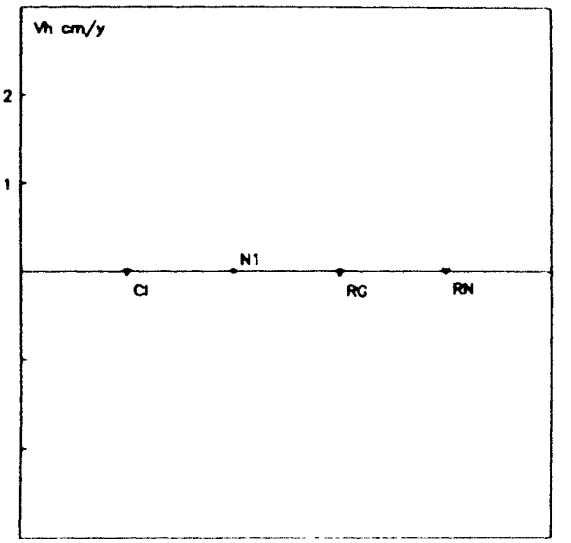
40407 PINYON FLATS Vertical Velocities



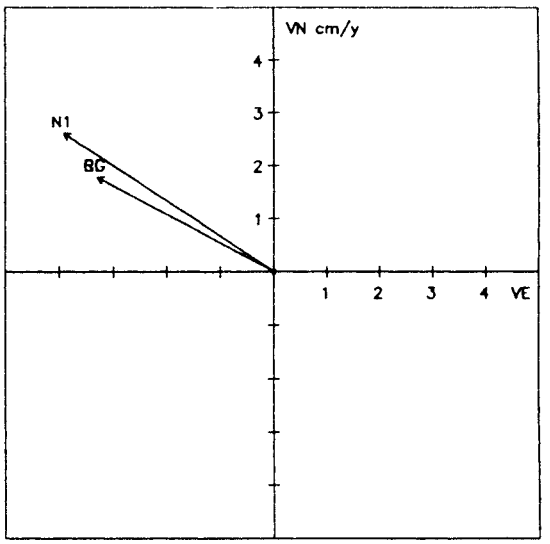
40408 FAIRBANKS 2-D Velocities NOAM



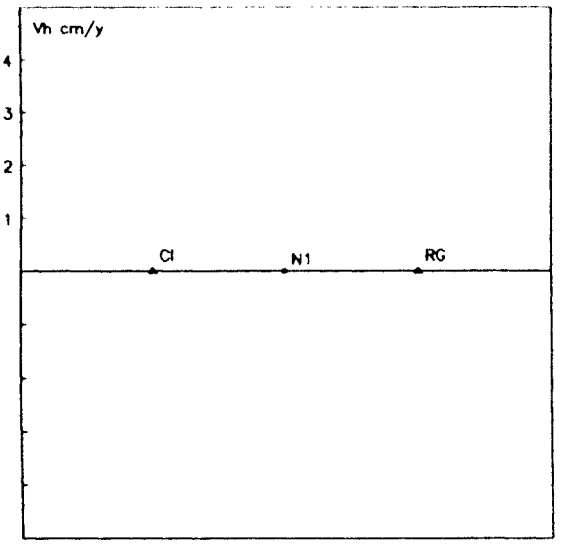
40408 FAIRBANKS Vertical Velocities



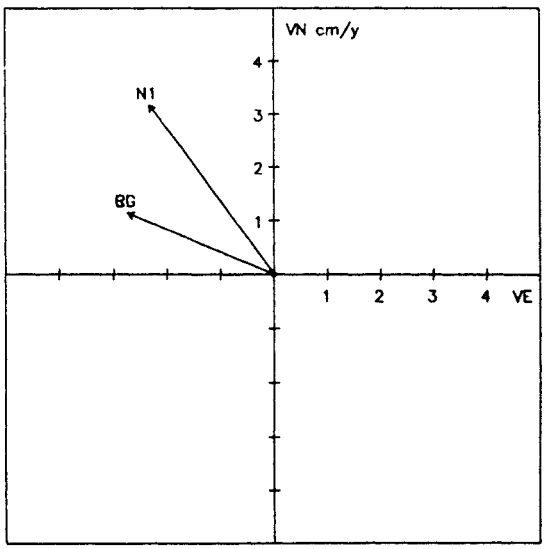
40410 POINT REYES 2-D Velocities PCFC N1 Deweighted



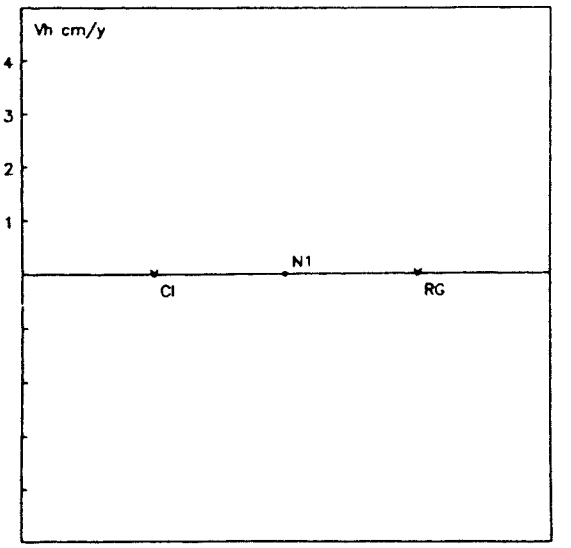
40410 POINT REYES Vertical Velocities



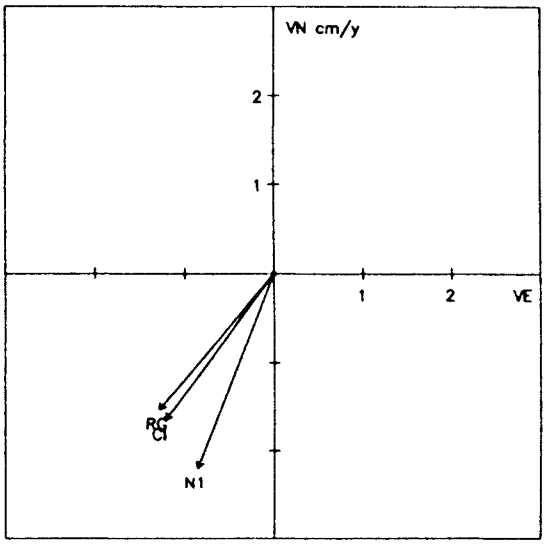
40416 YAKATAGA 2-D Velocities PCFC N1 Deweighted



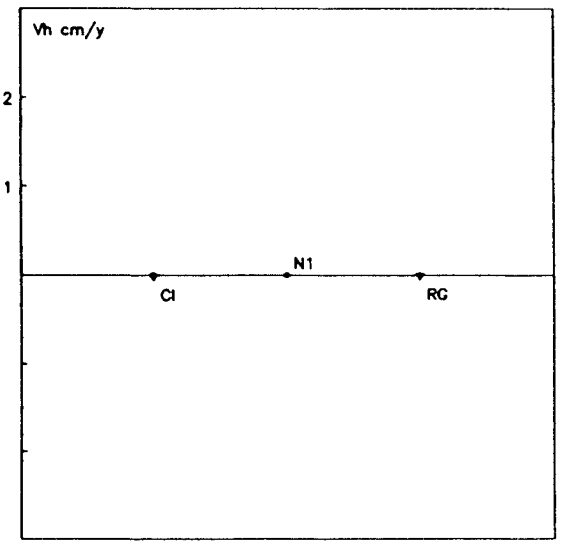
40416 YAKATAGA Vertical Velocities



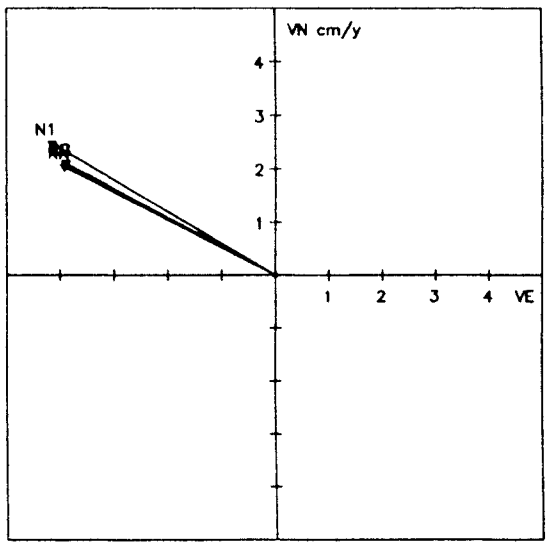
40419 KODIAK 2-D Velocities NOAM



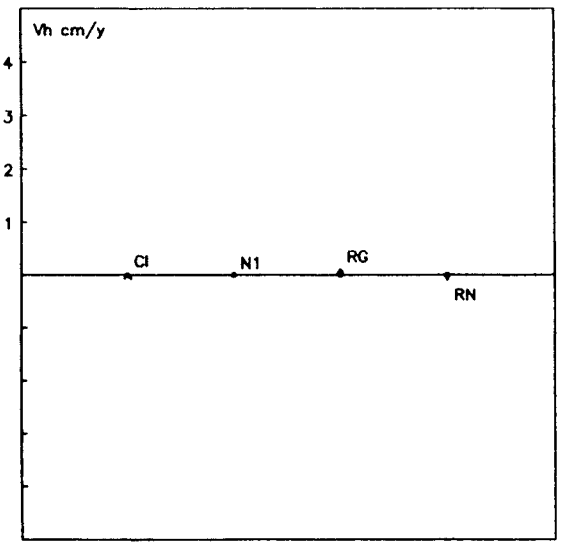
40419 KODIAK Vertical Velocities



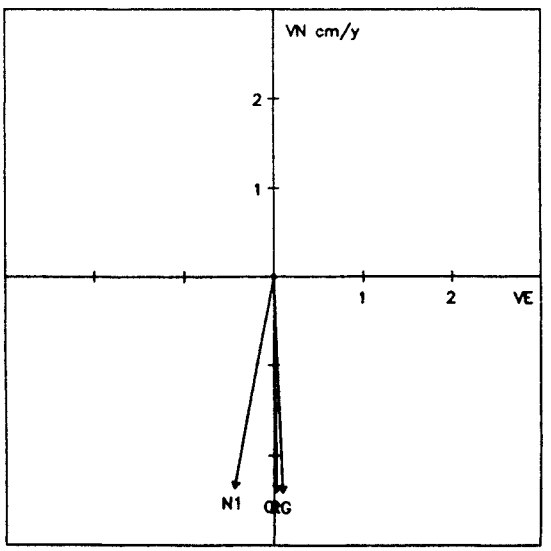
40420 VANDENBERG AFB 2-D Velocities PCFC N1 Deweighted



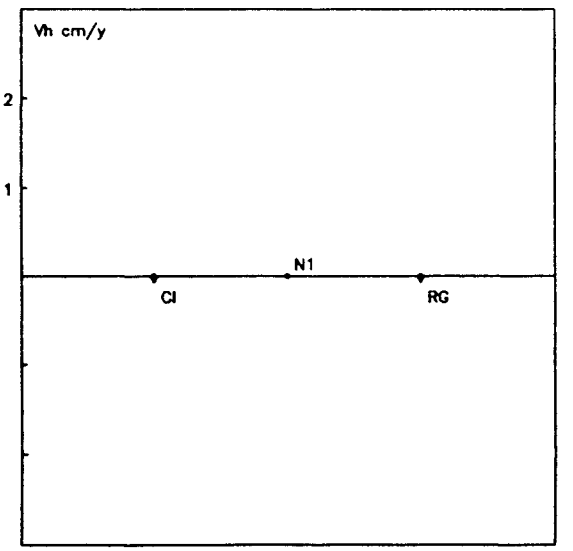
40420 VANDENBERG AFB Vertical Velocities



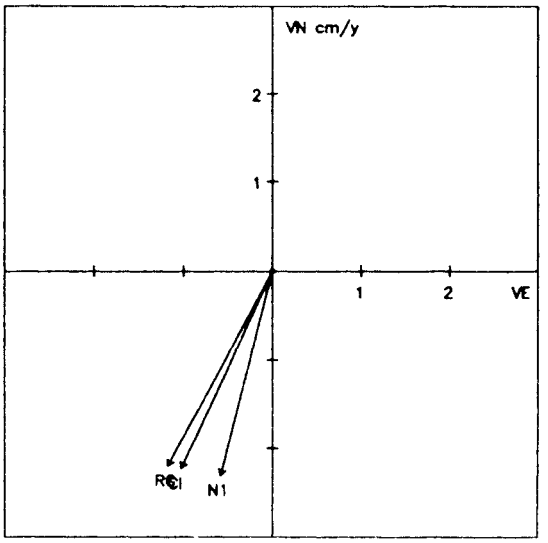
40421 NOME 2-D Velocities NOAM



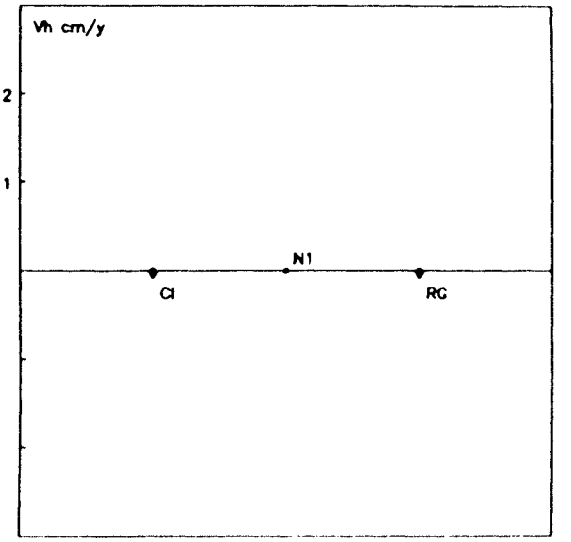
40421 NOME Vertical Velocities



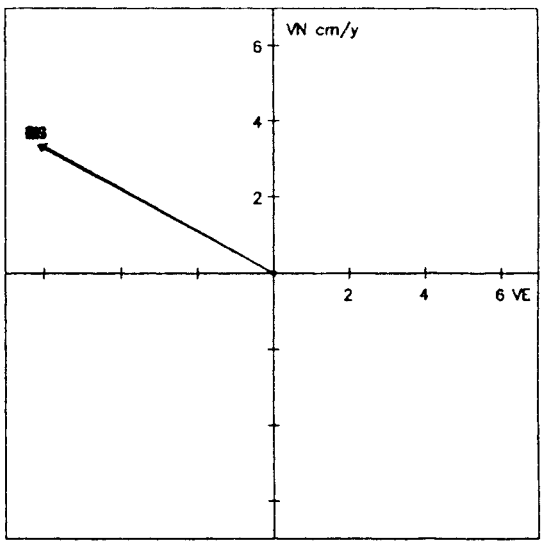
40423 SANDPOINT 2-D Velocities NOAM



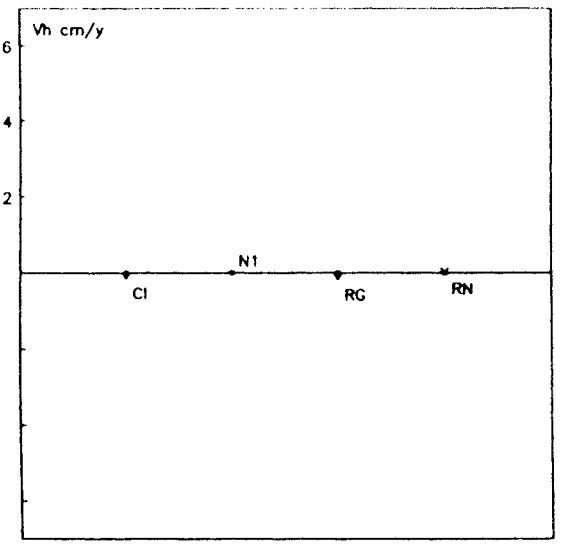
40423 SANDPOINT Vertical Velocities



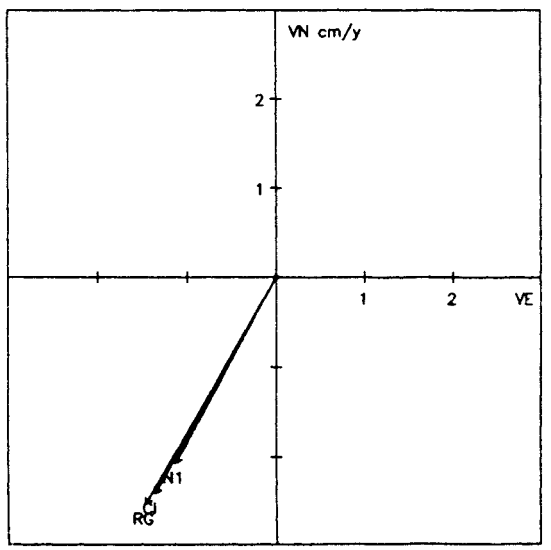
40424 KAUAI 2-D Velocities PCFC



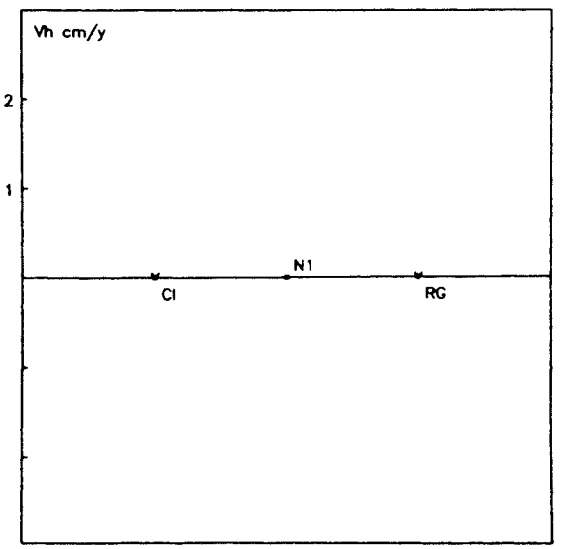
40424 KAUAI Vertical Velocities



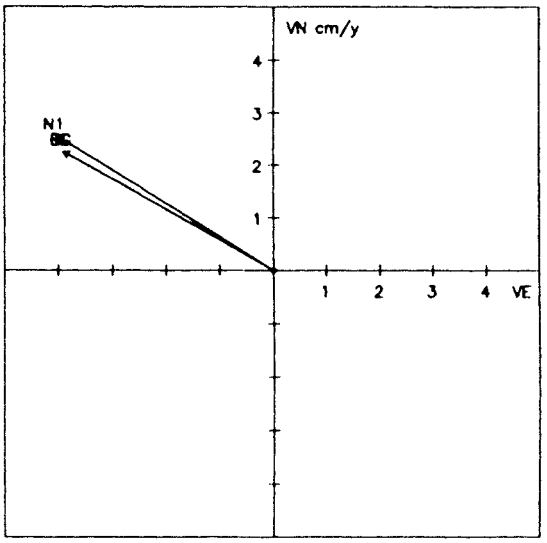
40425 SOURDOUGH 2-D Velocities NOAM



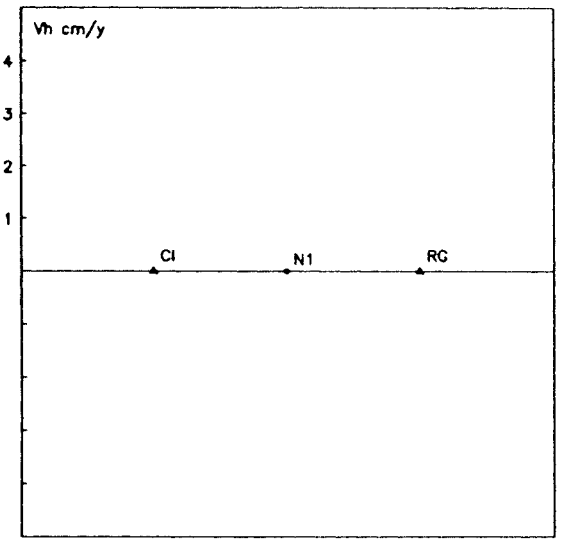
40425 SOURDOUGH Vertical Velocities



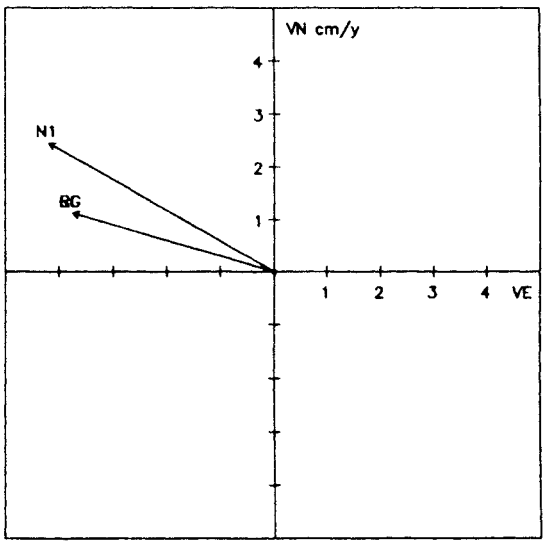
40427 FORT ORD 2-D Velocities PCFC N1 Deweighted



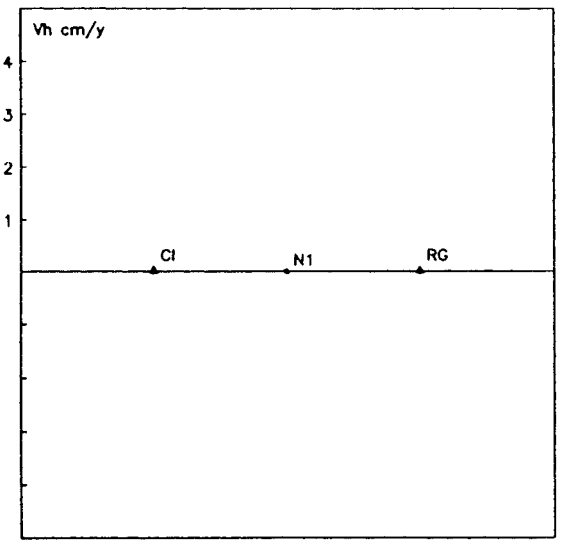
40427 FORT ORD Vertical Velocities



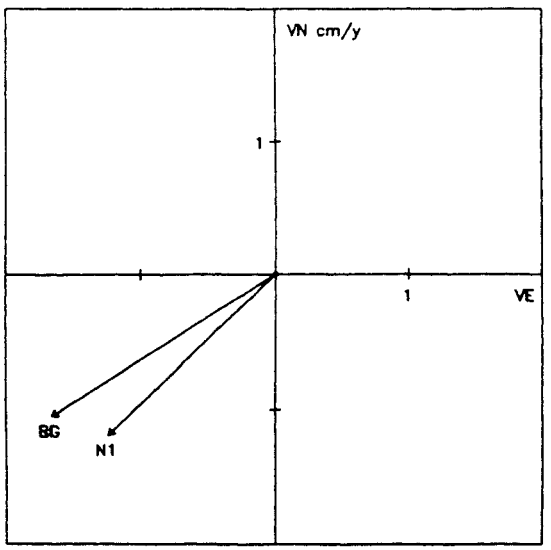
40428 SANTA PAOLA 2-D Velocities PCFC N1 Deweighted



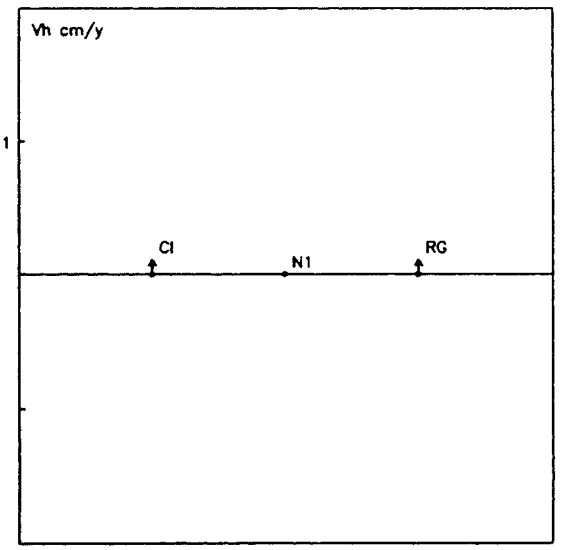
40428 SANTA PAOLA Vertical Velocities



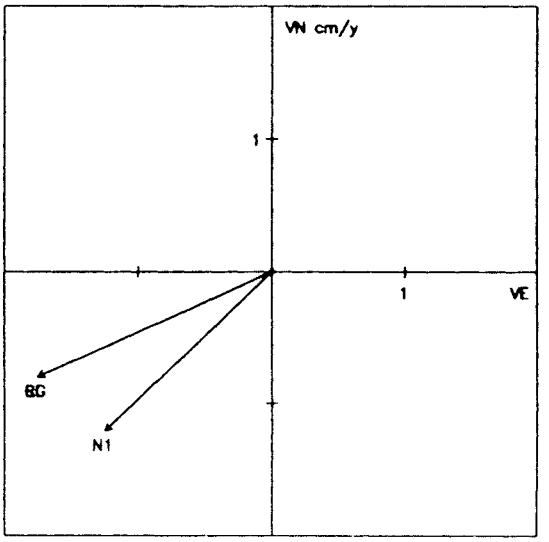
40430 BLACK BUTTE 2-D Velocities NOAM N1 Deweighted



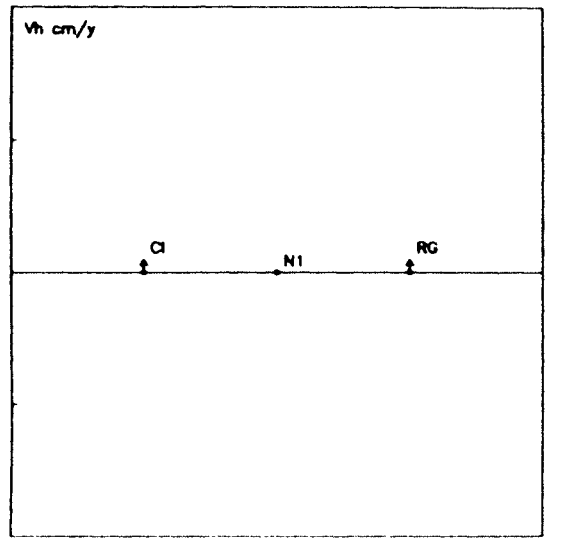
40430 BLACK BUTTE Vertical Velocities



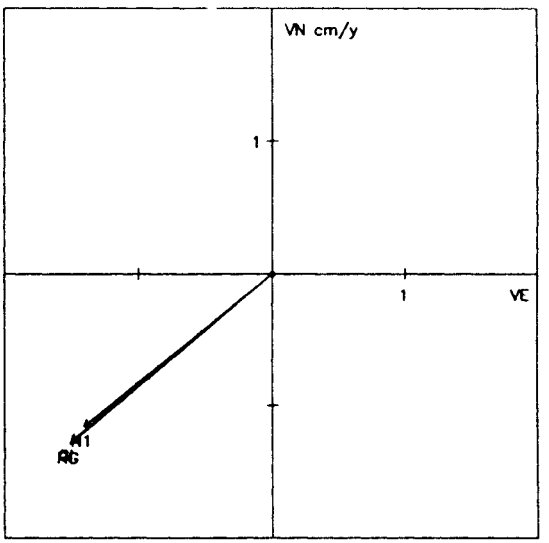
40431 DEADMAN LAKE 2-D Velocities NOAM N1 Deweighted



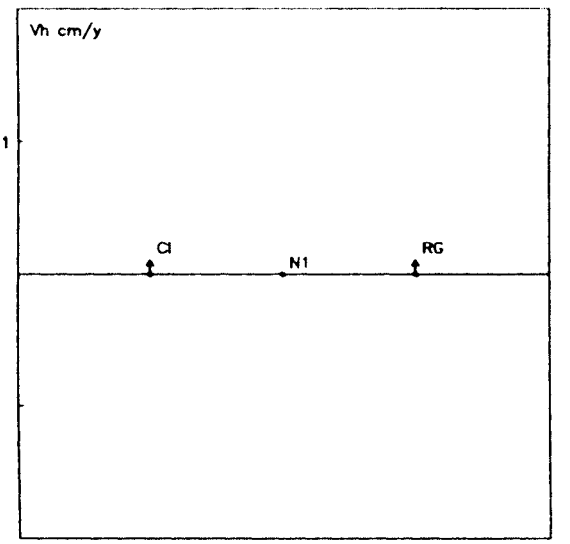
40431 DEADMAN LAKE Vertical Velocities



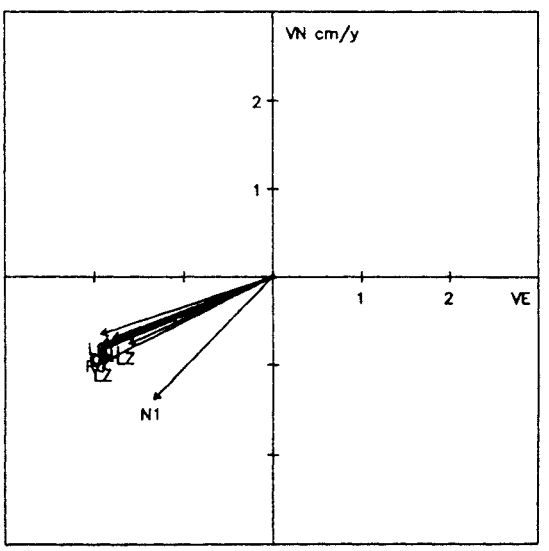
40432 ELY 2-D Velocities NOAM



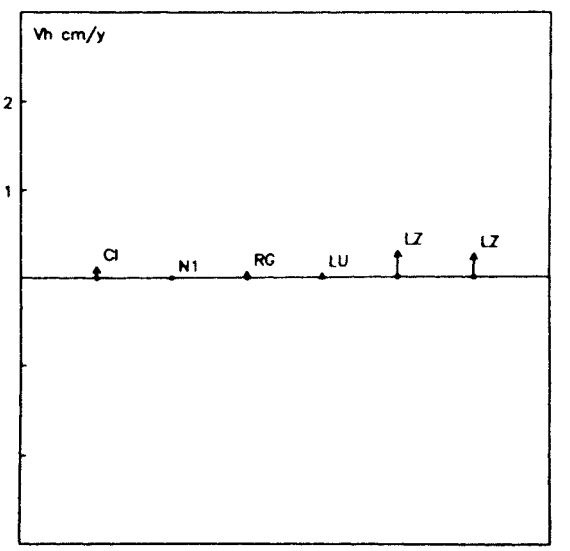
40432 ELY Vertical Velocities



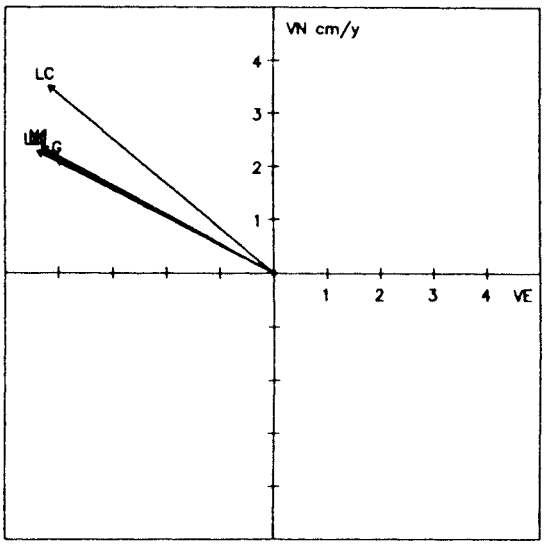
40433 QUINCY 2-D Velocities NOAM



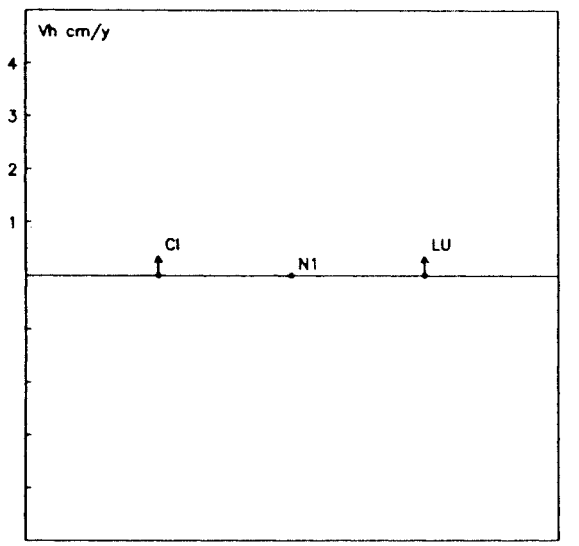
40433 QUINCY Vertical Velocities



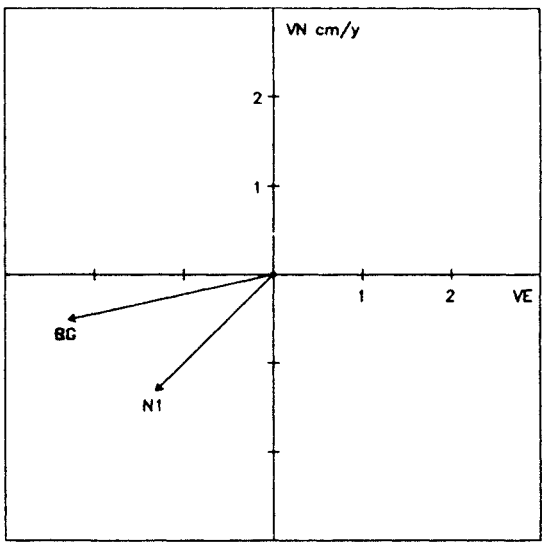
40436 SAN DIEGO 2-D Velocities PCFC N1 Deweighted



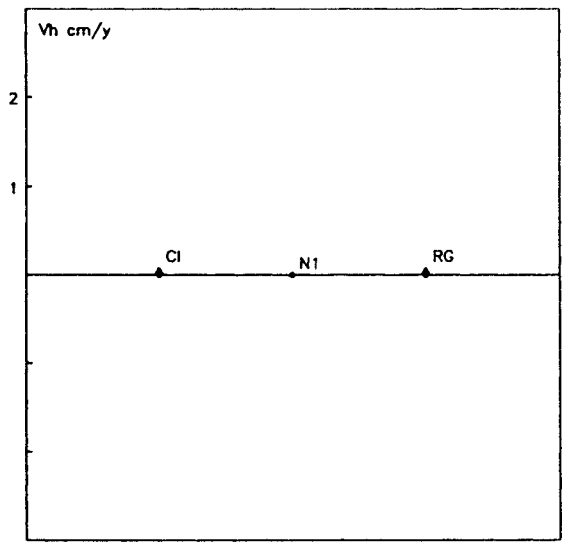
40436 SAN DIEGO Vertical Velocities



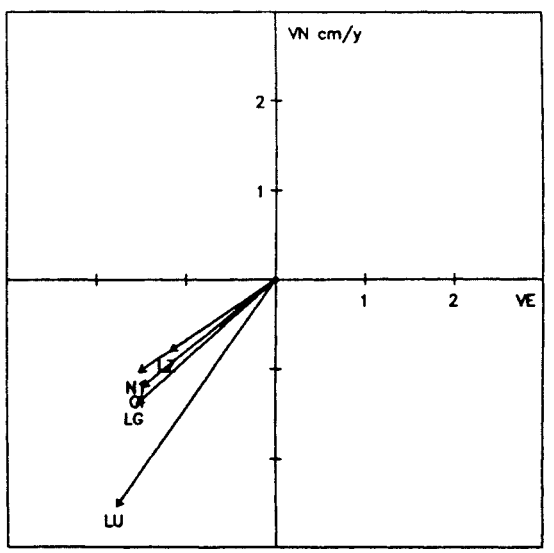
40437 MAMMOTH LAKES 2-D Velocities NOAM N1 Deweighted



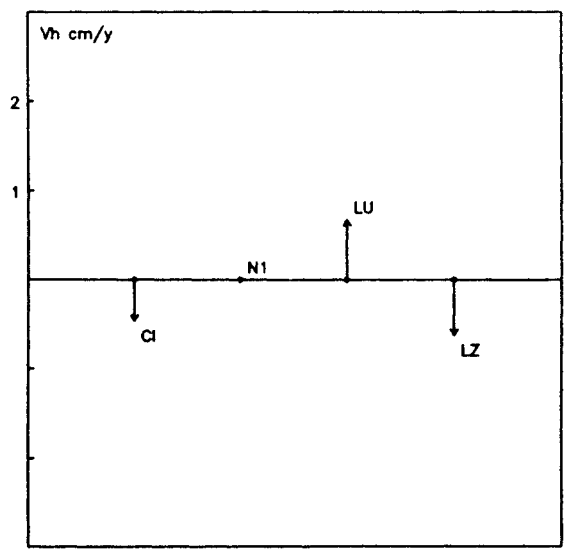
40437 MAMMOTH LAKES Vertical Velocities



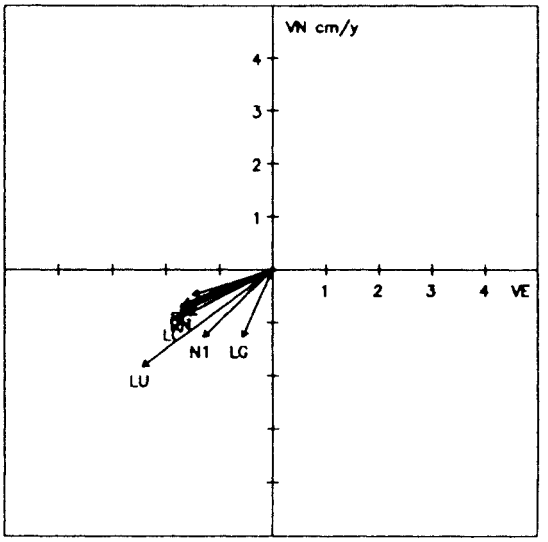
40438 BEAR LAKE 2-D Velocities NOAM



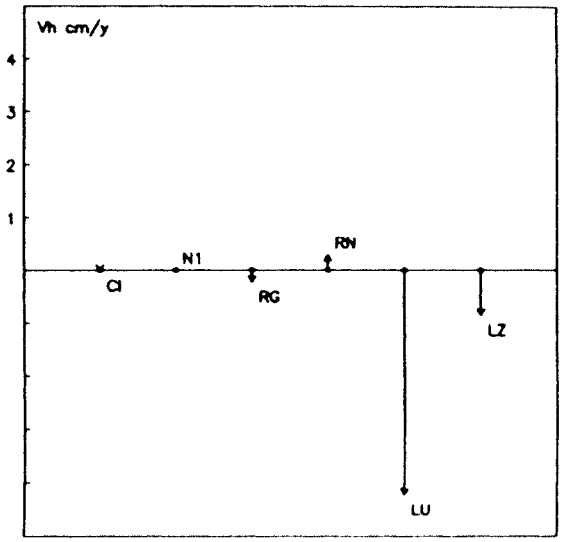
40438 BEAR LAKE Vertical Velocities



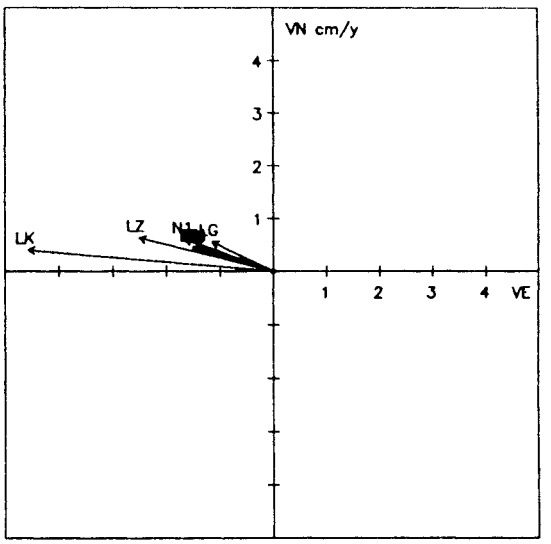
40439 OWENS VALLEY 2-D Velocities NOAM



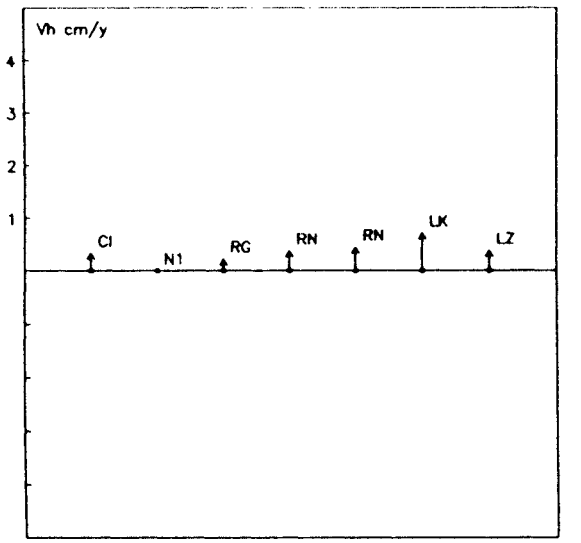
40439 OWENS VALLEY Vertical Velocities



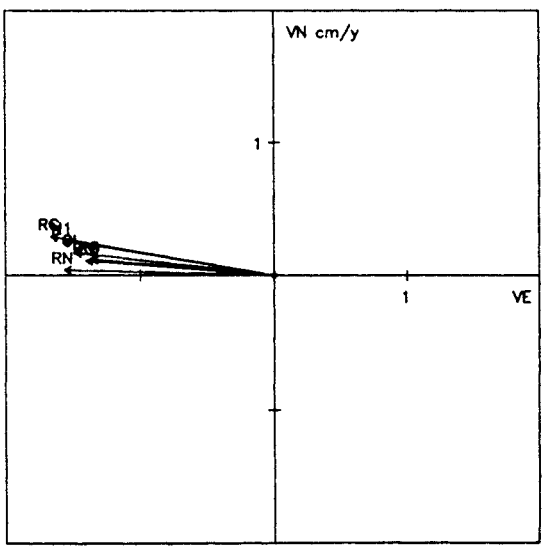
40440 WESTFORD 2-D Velocities NOAM



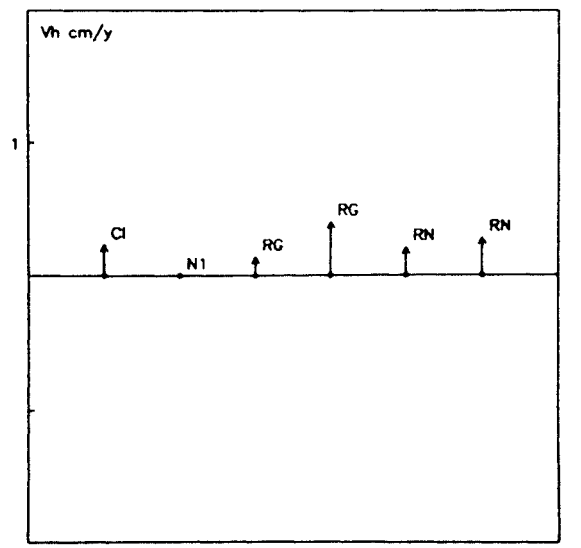
40440 WESTFORD Vertical Velocities



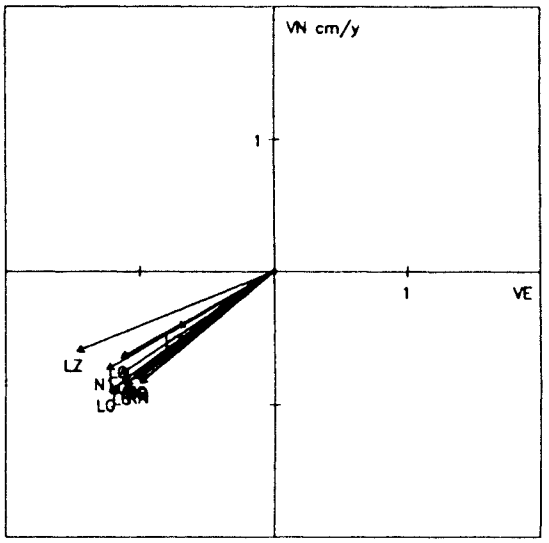
40441 GREENBANK 2-D Velocities NOAM



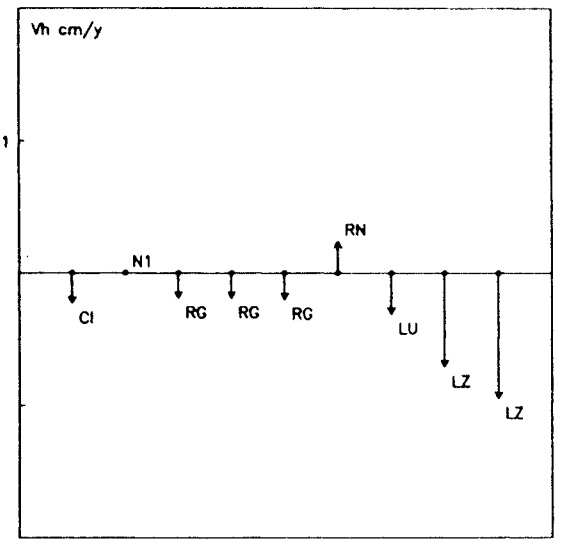
40441 GREENBANK Vertical Velocities



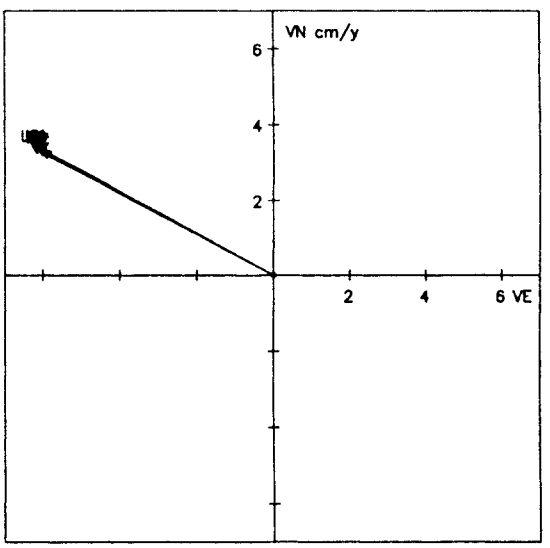
40442 FORT DAVIS 2-D Velocities NOAM



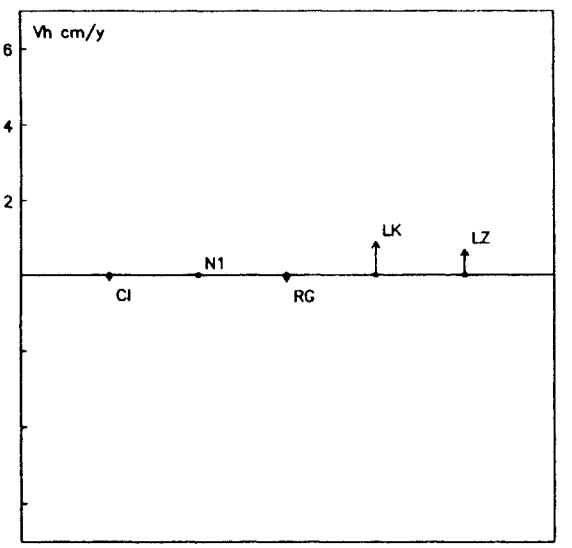
40442 FORT DAVIS Vertical Velocities



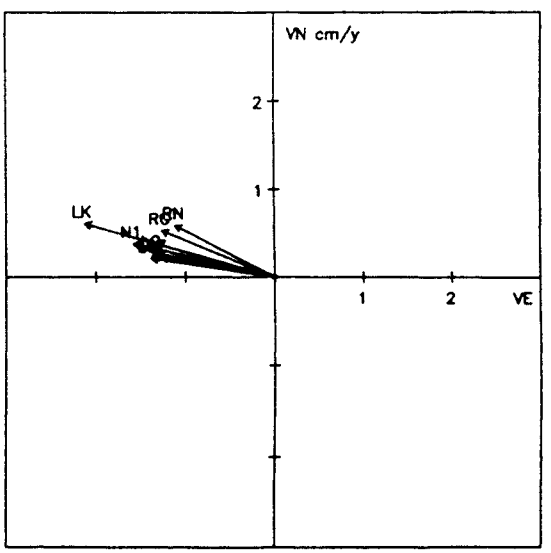
40445 MAUI 2-D Velocities PCFC



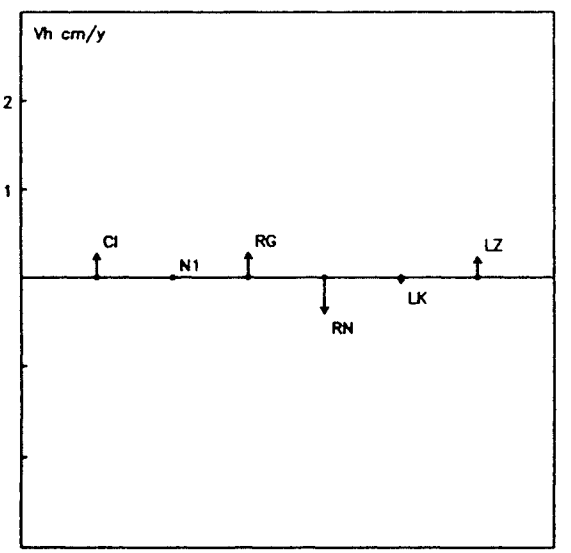
40445 MAUI Vertical Velocities



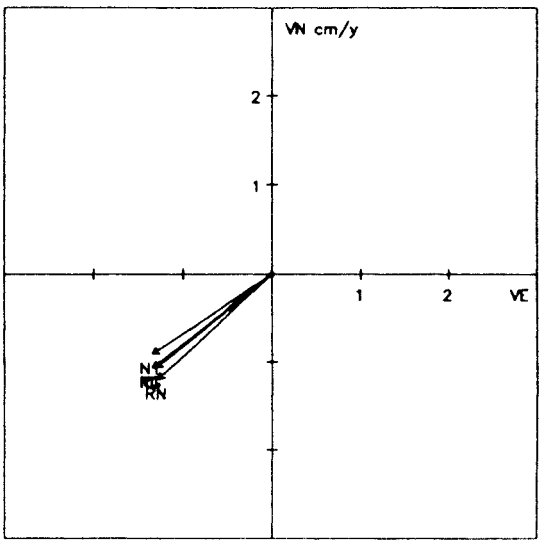
40451 WASHINGTON 2-D Velocities NOAM



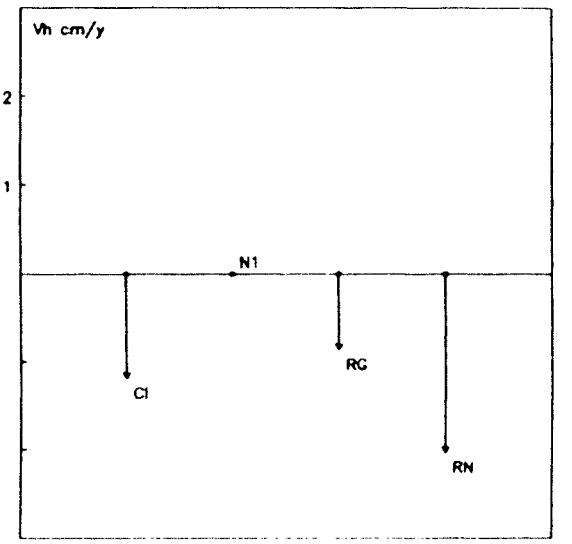
40451 WASHINGTON Vertical Velocities



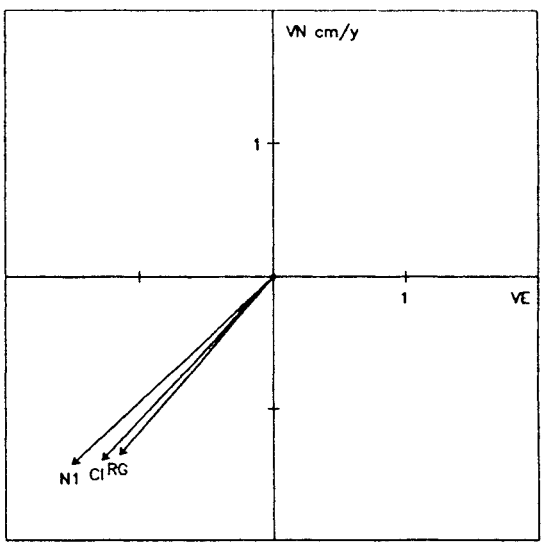
40456 PIETOWN 2-D Velocities NOAM



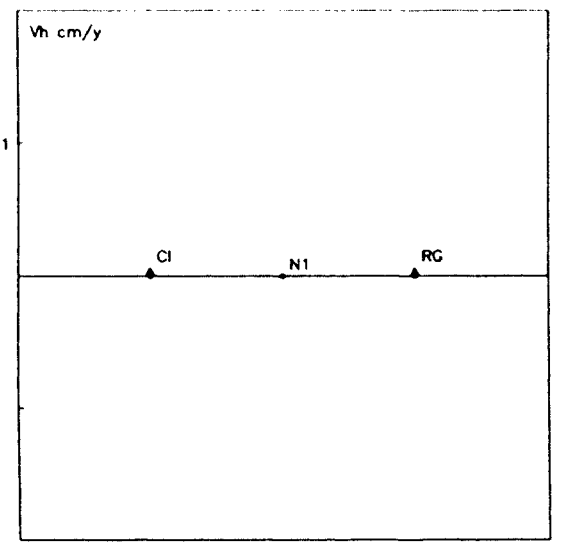
40456 PIETOWN Vertical Velocities



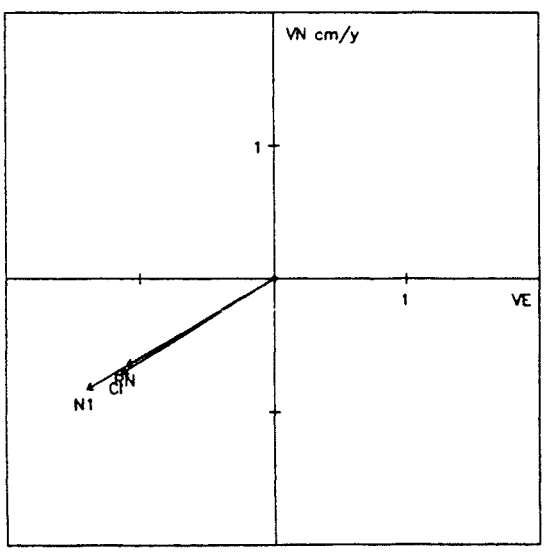
40457 SEATTLE 2-D Velocities NOAM



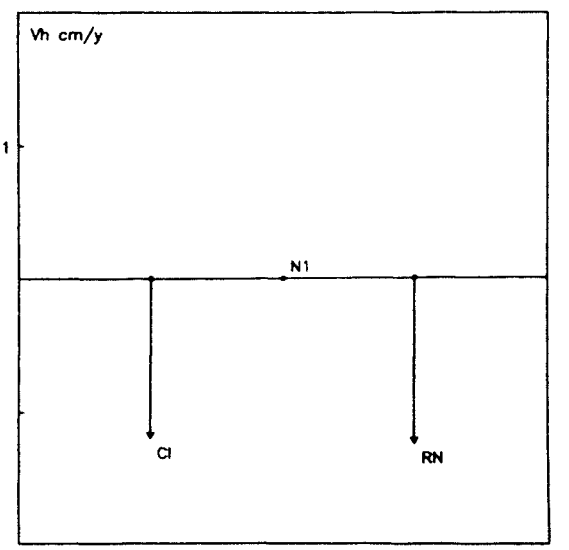
40457 SEATTLE Vertical Velocities



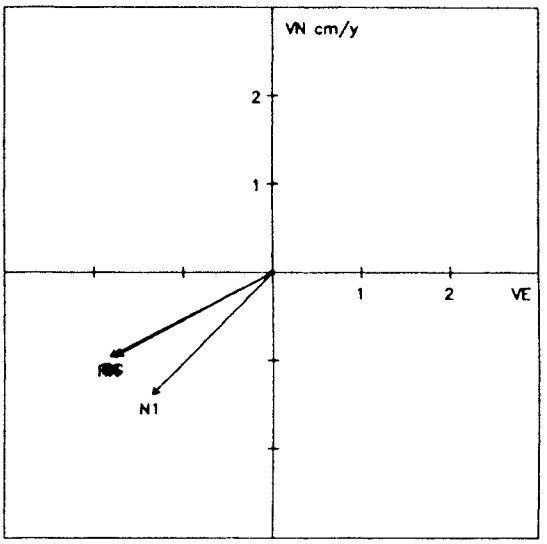
40463 LOS ALAMOS 2-D Velocities NOAM



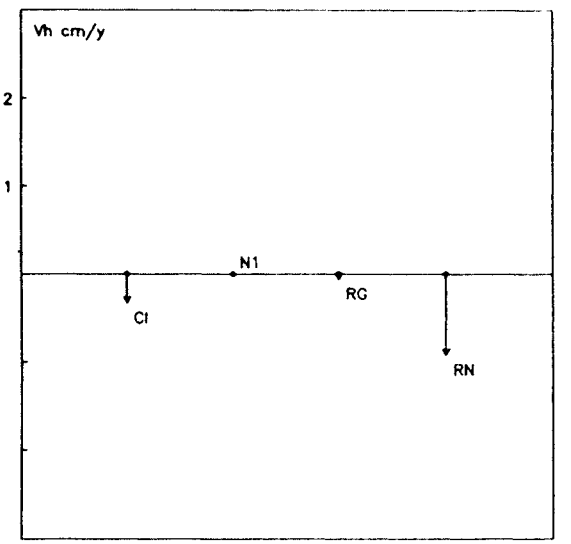
40463 LOS ALAMOS Vertical Velocities



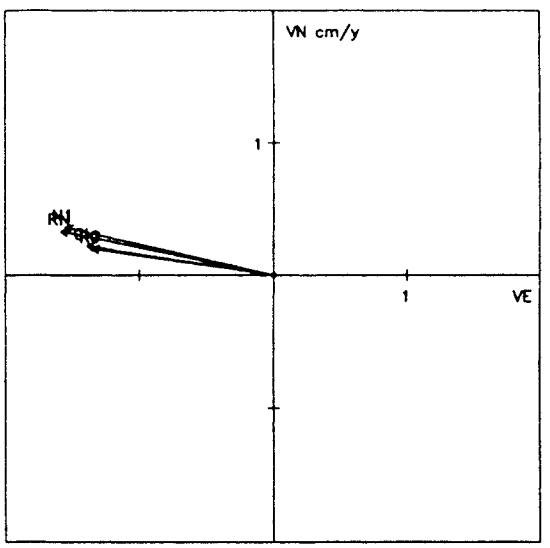
40489 HAT CREEK 2-D Velocities NOAM



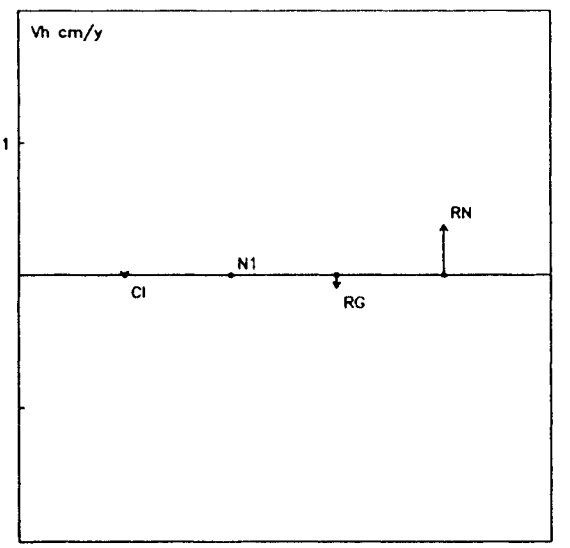
40489 HAT CREEK Vertical Velocities



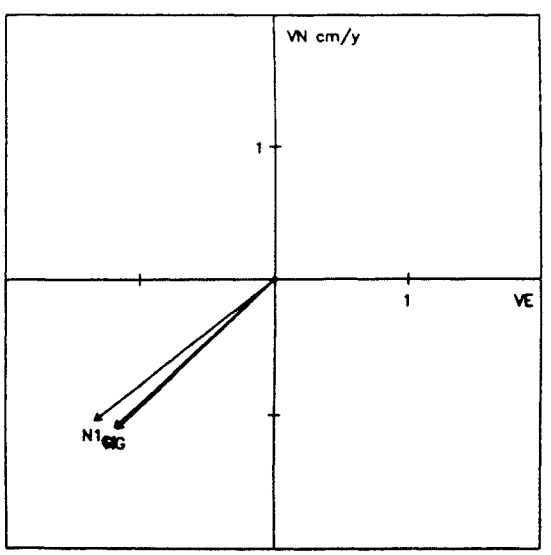
40490 MARYLAND POINT 2-D Velocities NOAM



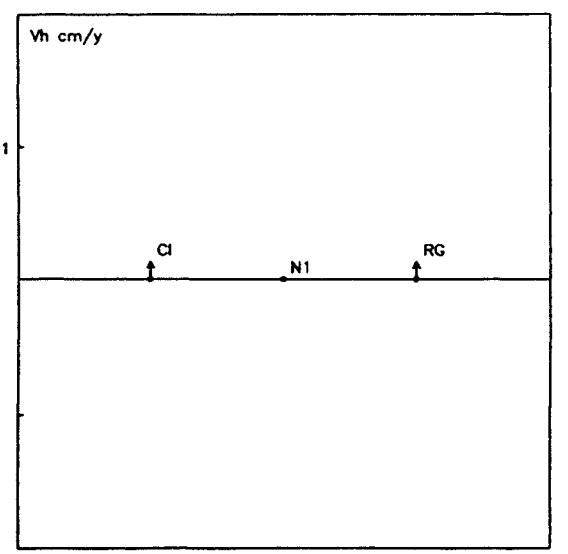
40490 MARYLAND POINT Vertical Velocities



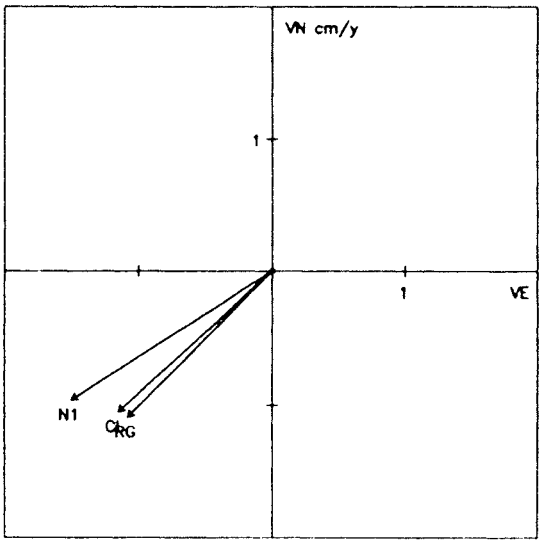
40491 FLAGSTAFF 2-D Velocities NOAM



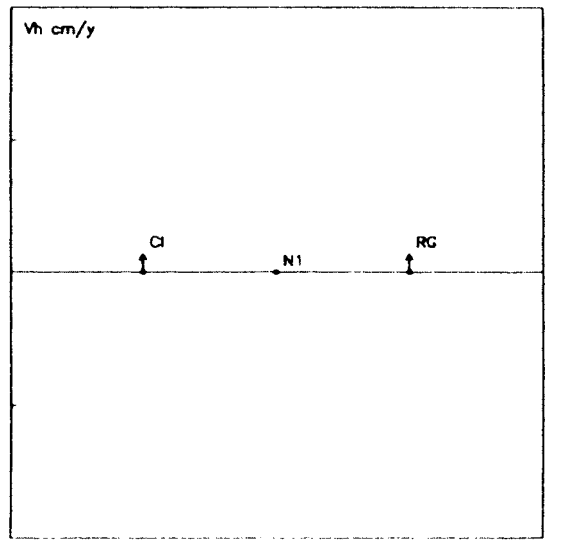
40491 FLAGSTAFF Vertical Velocities



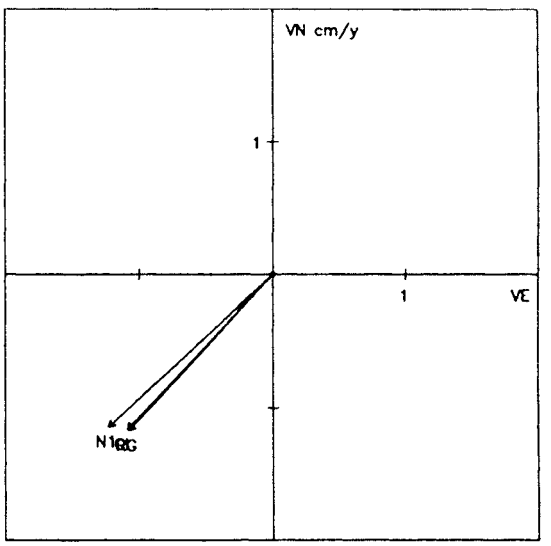
40492 VERNAL 2-D Velocities NOAM



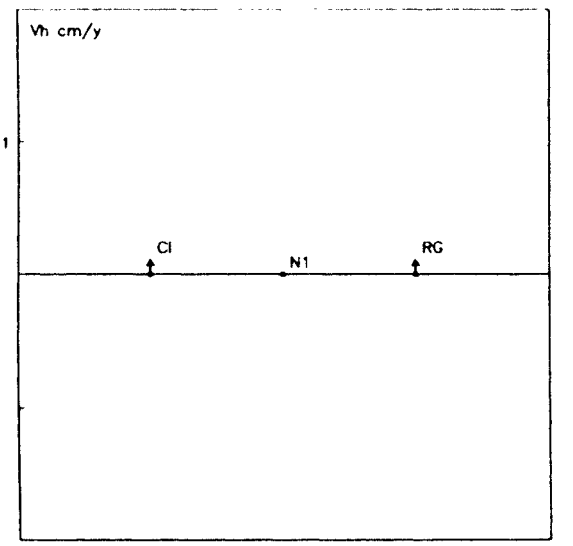
40492 VERNAL Vertical Velocities



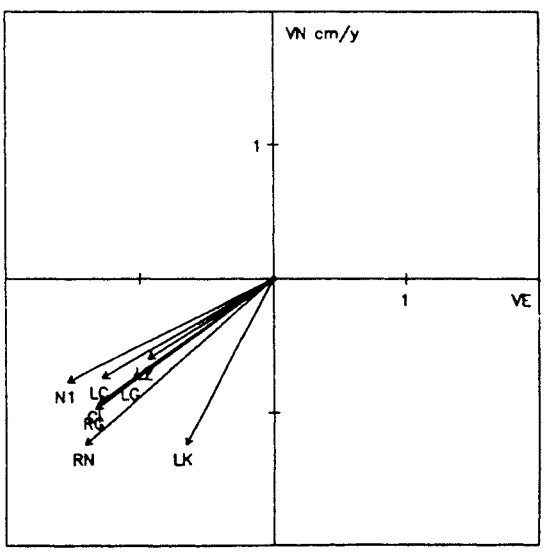
40493 YUMA 2-D Velocities NOAM



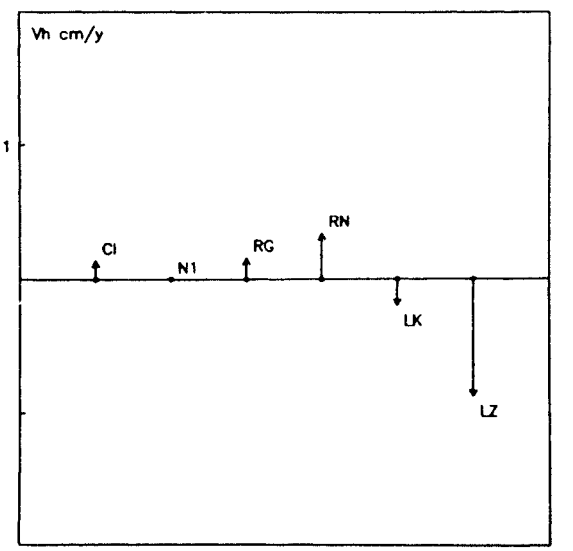
40493 YUMA Vertical Velocities



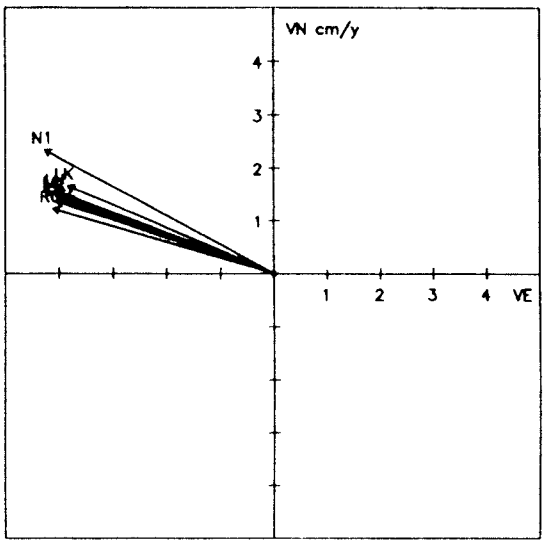
40496 PLATTEVILLE 2-D Velocities NOAM



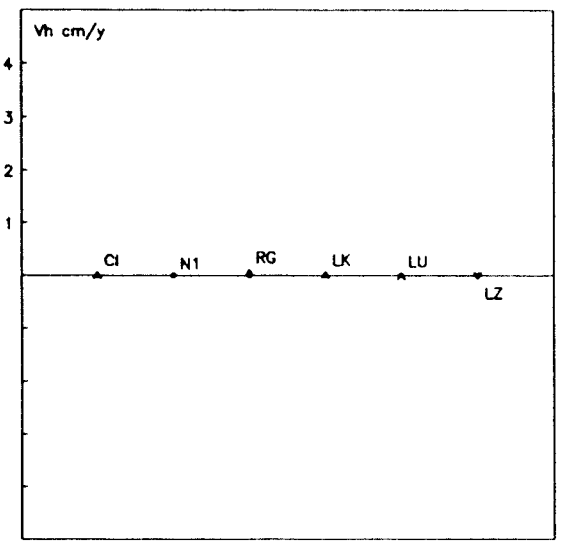
40496 PLATTEVILLE Vertical Velocities



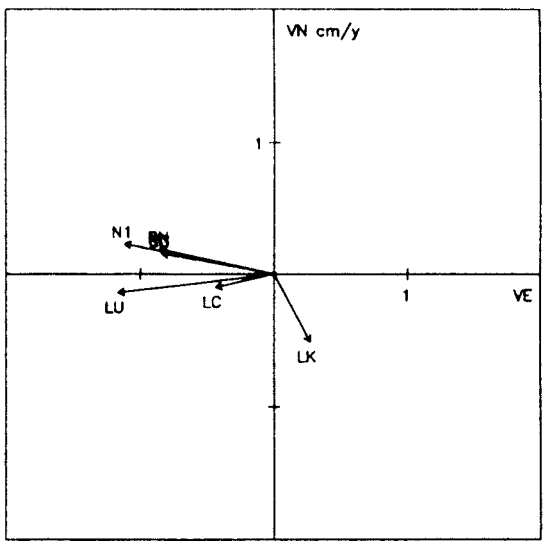
40497 MONUMENT PEAK 2-D Velocities PCFC N1 Deweighted



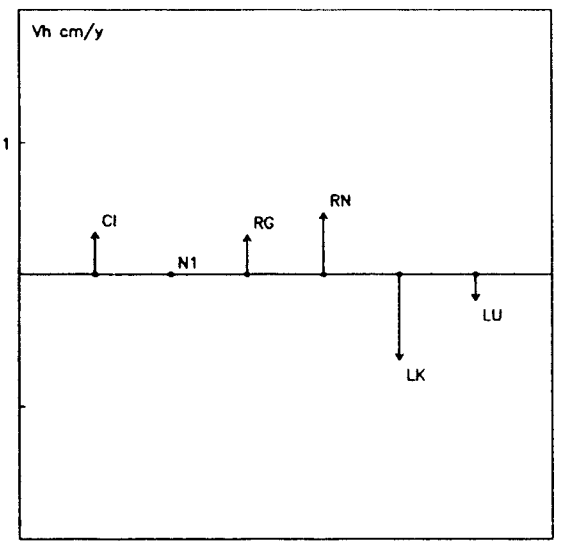
40497 MONUMENT PEAK Vertical Velocities



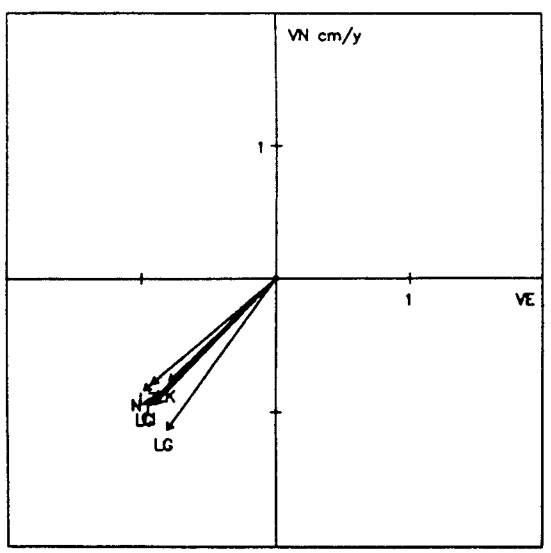
40499 RICHMOND 2-D Velocities NOAM



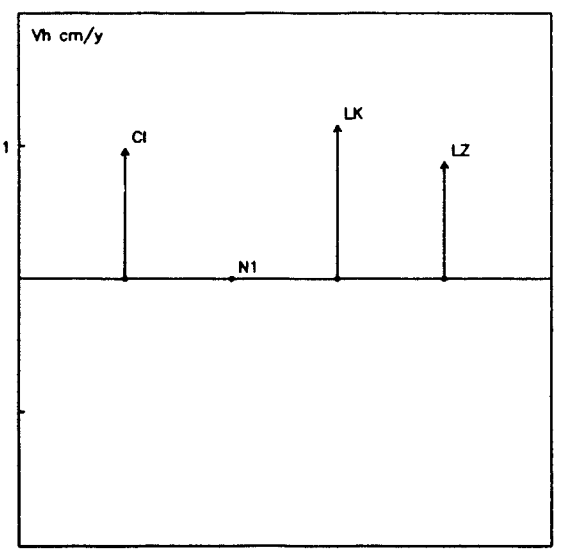
40499 RICHMOND Vertical Velocities



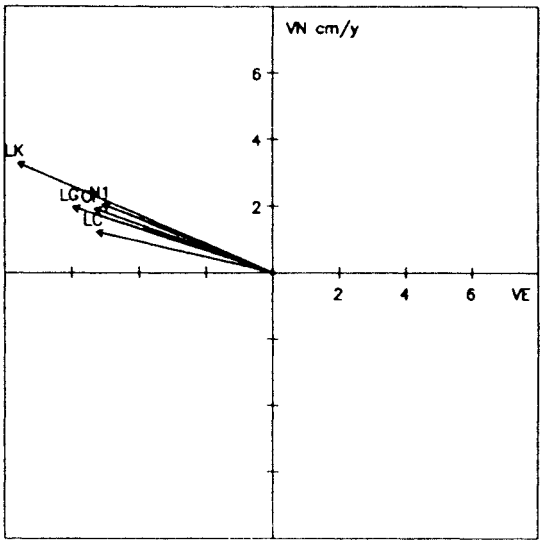
40504 MAZATLAN 2-D Velocities NOAM



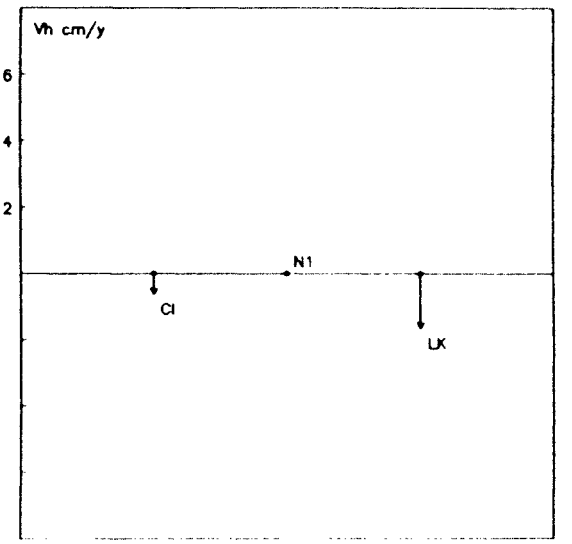
40504 MAZATLAN Vertical Velocities



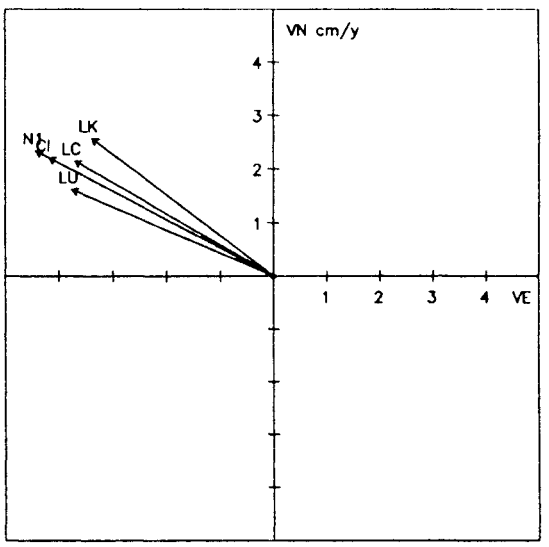
40505 CABO SAN LUCAS 2-D Velocities PCFC



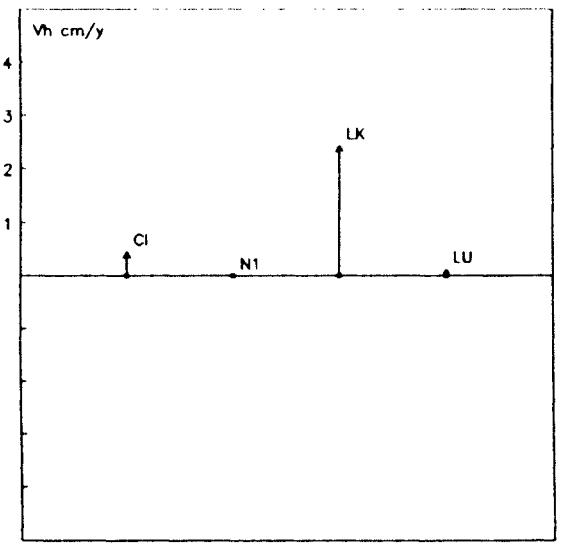
40505 CABO SAN LUCAS Vertical Velocities



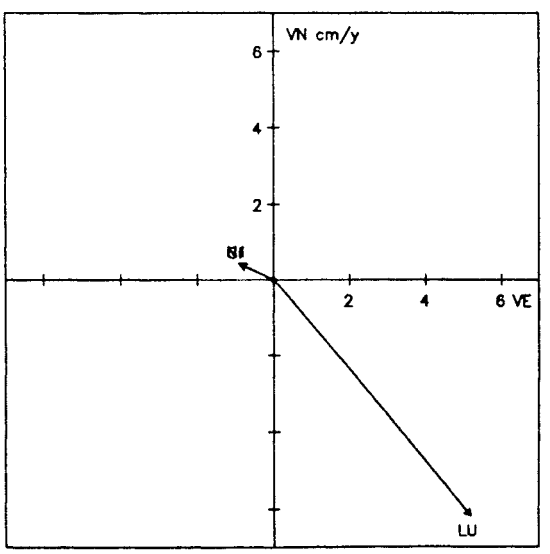
40506 ENSENADA 2-D Velocities PCFC



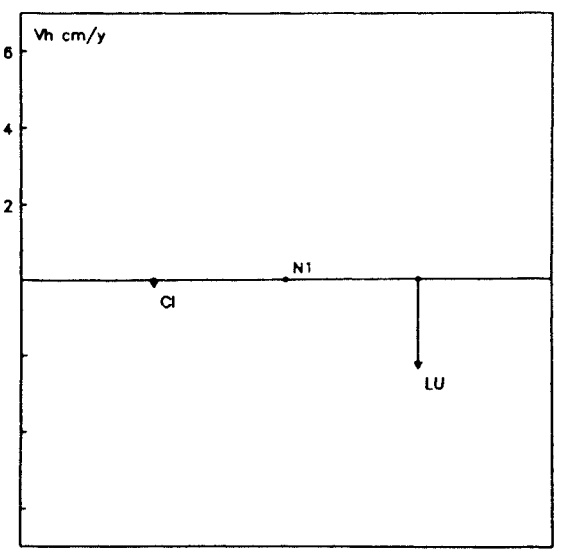
40506 ENSENADA Vertical Velocities



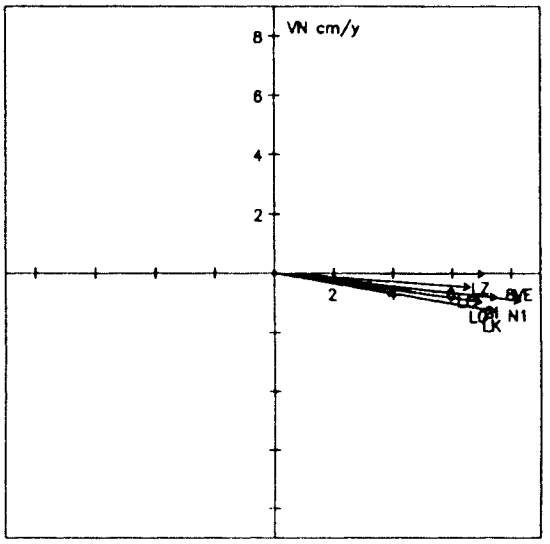
40701 SANTIAGO DE CUBA 2-D Velocities NOAM



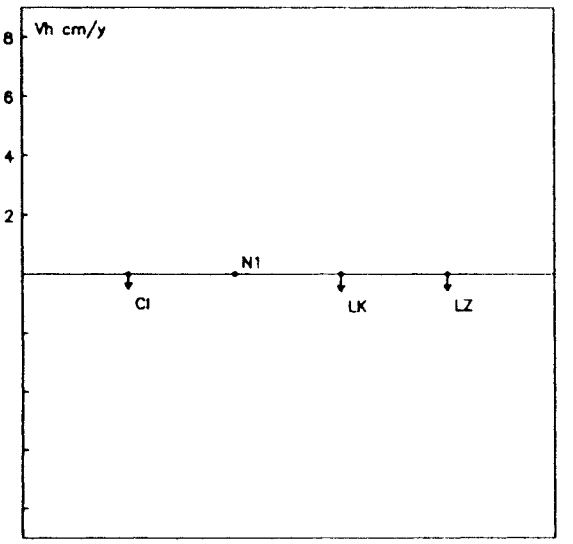
40701 SANTIAGO DE CUBA Vertical Velocities



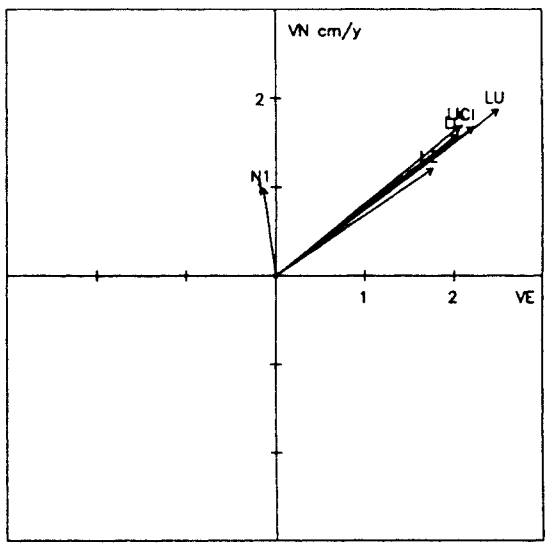
41703 EASTER ISLAND 2-D Velocities NAZC



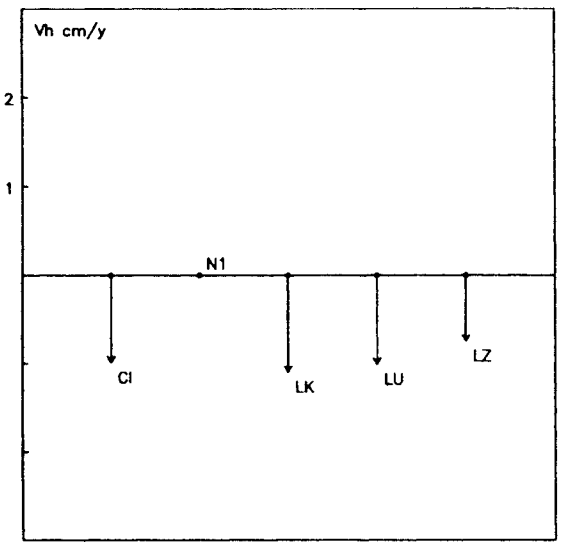
41703 EASTER ISLAND Vertical Velocities



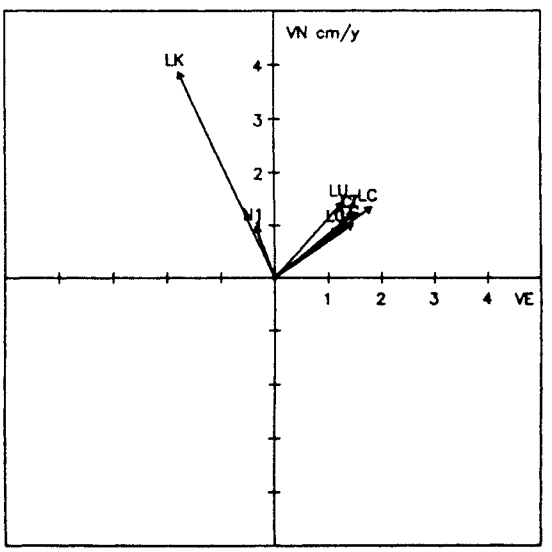
41706 CERRO TOLOLO 2-D Velocities SOAM N1 Deweighted



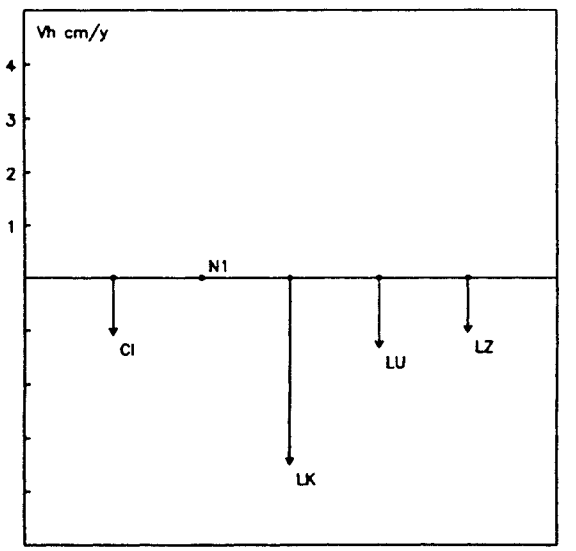
41706 CERRO TOLOLO Vertical Velocities



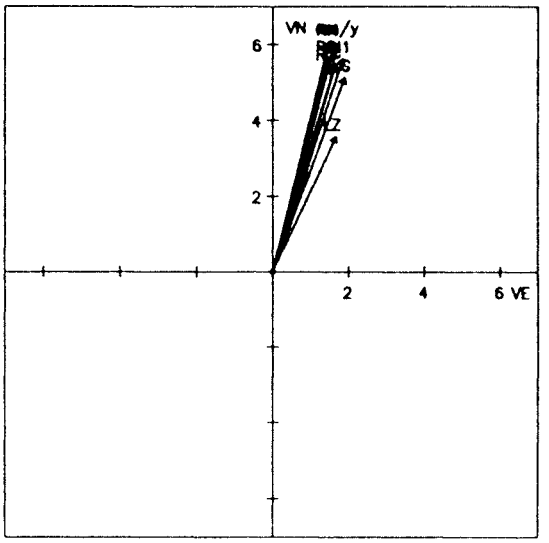
42202 AREQUIPA 2-D Velocities SOAM N1 Deweighted



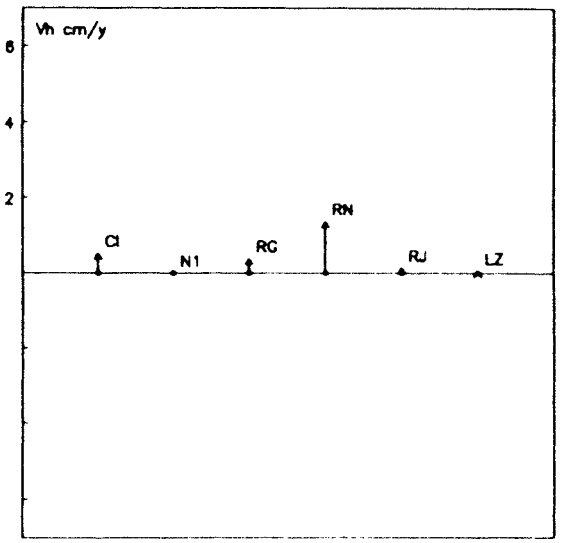
42202 AREQUIPA Vertical Velocities



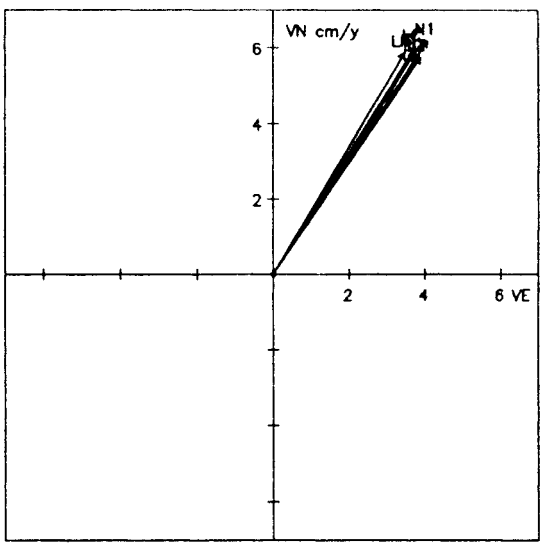
50103 CANBERRA 2-D Velocities AUST



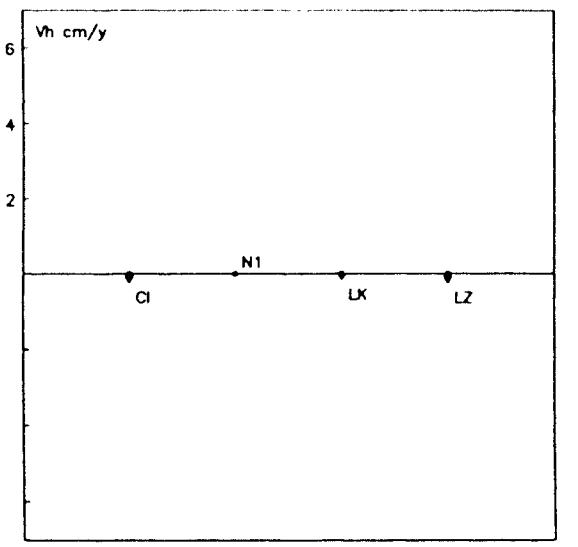
50103 CANBERRA Vertical Velocities



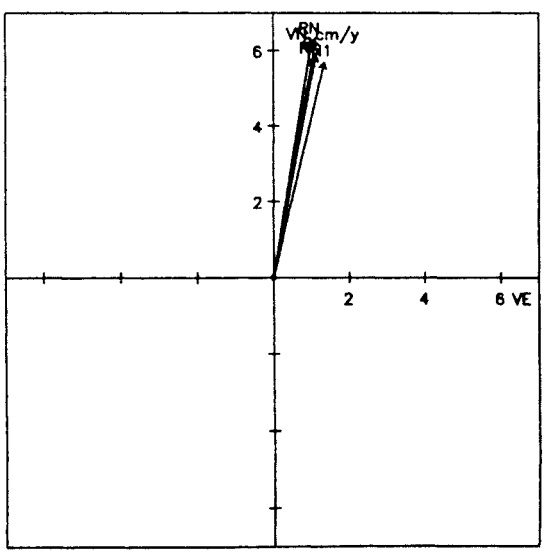
50107 YARRAGADEE 2-D Velocities AUST



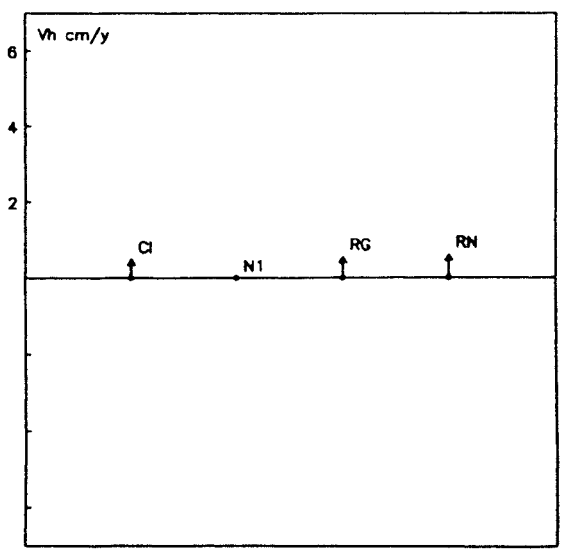
50107 YARRAGADEE Vertical Velocities



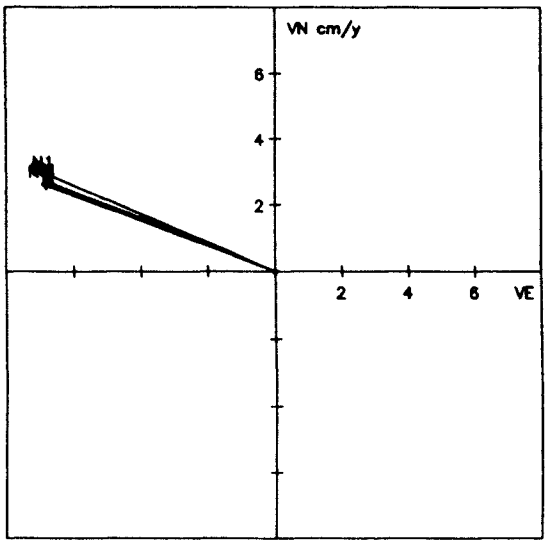
50116 HOBART 2-D Velocities AUST



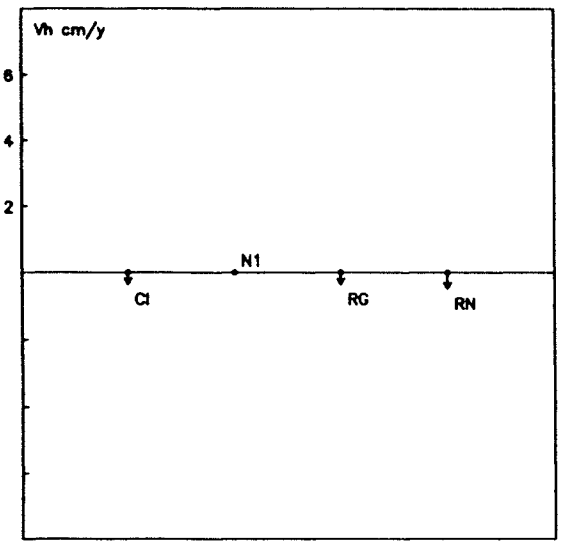
50116 HOBART Vertical Velocities



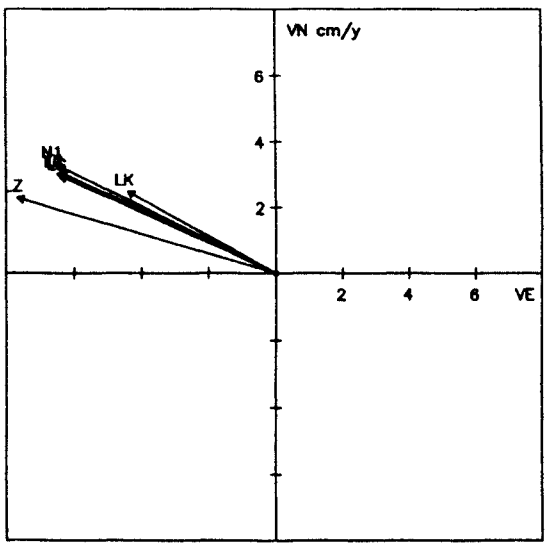
50505 KWAJALEIN ATOLL 2-D Velocities PCFC



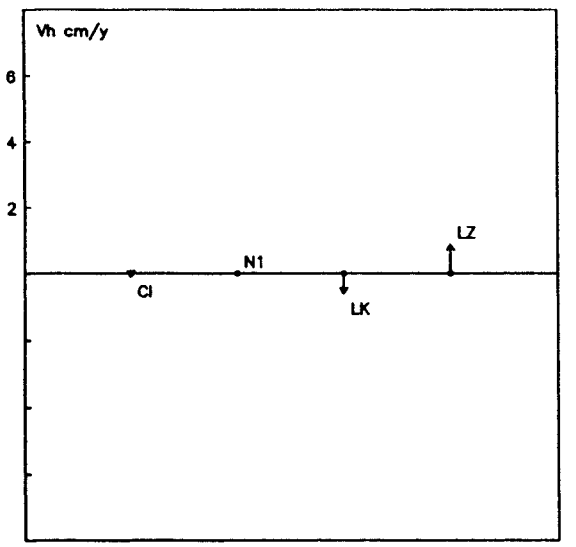
50505 KWAJALEIN ATOLL Vertical Velocities



92202 HUAHINE 2-D Velocities PCFC



92202 HUAHINE Vertical Velocities



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