



IERS TECHNICAL NOTE 6

**ITRF 89 and other realizations of the
IERS Terrestrial Reference System for 1989**

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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

- No 1 : C. Boucher and Z. Altamimi. The initial IERS Terrestrial Reference Frame.
- No 2 : Earth orientation and reference frame determinations, atmospheric excitation functions, up to 1988, (Annex to the IERS Annual Report for 1988). *[No longer available, superseded by N.T. No 5].*
- 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).
- No 6 : C. Boucher and Z. Altamimi. ITRF89 and other realizations of the IERS Terrestrial Reference System for 1989.

Future issues

- No 7 : E.F. Arias, J.-F. Lestrade and M. Feissel. The IERS Celestial Reference Frame and its tie with HIPPARCOS.
- No 8 : Earth orientation and reference frame determinations, atmospheric excitation functions, up to 1990, (Annex to the IERS Annual Report for 1990).

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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 1989.

This description intends to continue the series of BIH/IERS results (84 to 88) as reported in the IERS Technical Note 4. In particular, methodological presentation as described in Table 1 of this publication will be followed here.

1) INPUT DATA

1.1) Sites included

The list of sites considered in the 1989 solution is given in Table T1 of the appendix.

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

Table T3 also gives a summary of the occupancies of these sites by SLR, LLR, or VLBI 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

1.2) Input data sets

The data sets received for the 1989 solution and included in the global combination performed by the ITFS, under the label ITRF89 are summarized in Table 1.

Distribution of corresponding coordinates for each solution are given in Table T4 of the appendix.

1.3) Description of individual data sets

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

1.3.1) GSFC VLBI solution

Identifier : SSC(GSFC) 90 R 02, also named GLB628

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

Adjusted parameters :

X,Y,Z and horizontal velocities, except for Kashima, Fairbanks and HRAS 85 where a vertical component has been also added.

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 AM0-2 values,
- Westford-Richmond azimuth moving with AM0-2 value

Raw data :

Yearly values of positions were available, with formal errors (from 1979 to 1992). Figure 7 shows the histogram of these errors.

Input data (RG) :

The 1988 values, with formal errors modified using a lower bound value of 2 cm (shown on Figure 7)

1.3.2) NGS VLBI solution

Identifier : SSC(NGS) 90 R 01

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 :

- Westford velocity at AM0-2 value
- ERP fixed at 1985 Mai 24 and 1989 Mai 12

Raw data :

Only 1988 positions were available, with formal errors (see Figure 8)

Input data (RN) :

The 1988 values, with formal errors modified using a lower bound value of 2 cm (shown on Figure 8)

1.3.3) USNO VLBI solution

Identifier : SSC(USNO) 90 R 01

Model : Motion with AM0-2 model

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

Constraints for the CTS :

- Richmond position fixed at ITRF88 value
- fixed AM0-2 motion

Raw data : X, Y, Z and formal errors

Input data (R0) :

X, Y, Z transformed at 1988.0 with AM0-2. Formal errors with 2 cm as lower bound.

1.3.4) Shanghai Observatory VLBI solution

Identifier : SSC(SO) 88 R 01

Model : No motion model

Adjusted parameters: X, Y, Z

Constraints for the CTS :

Raw data : X, Y, Z without error estimate

Input data (RS) :

X, Y, Z with 3 cm as error

1.3.5) NAO VLBI solution

Identifier : SSC(NAOMZ) 89 R 01

Model : Motion with AM0-2 model

Adjusted parameters: X, Y, Z at 1984.0

Constraints for the CTS :

- fixed AM0-2 motion

Raw data : X, Y, Z without error estimate

Input data (RM) :

X, Y, Z transformed at 1988.0 with AM0-2. Formal errors with 10 cm as error.

1.3.6) JPL VLBI solution

Identifier : SSC(JPL) 90 R 02, also named 1990-2

Model : Masterfit software. Motion with AM0-2 model

Adjusted parameters: X, Y, Z at 1988.0

Constraints for the CTS :

- six constraints (with 1 cm uncertainty) : 3 translations and 3 rotations between 1990-2 and ITRF88

- fixed AM0-2 motion

Raw data : X, Y, Z and formal errors

Input data (RJ) :

X, Y, Z, with formal errors modified using a lower bound value of 5 cm.

1.3.7) CSR SLR solution

Identifier : SSC(CSR) 89 L 02

Model : Motion with AM1-2 model, $GM = 398600.4404 \text{ km}^3/\text{s}^2$

Adjusted parameters: X, Y, Z at 1988.0

Constraints for the CTS :

- reference longitude is related, but not identical, to an earlier LLR solution of McDonald Observatory
- fixed AM1-2 motion

Raw data : X, Y, Z and formal errors (see Figure 9)

Input data (LC) :

X, Y, Z with formal errors modified using a lower bound value of 4 cm (shown on Figure 9)

1.3.8) GSFC SLR solution

Identifier : SSC(GSFC) 89 L 01

Model : Motion with AM0-2 model, $GM = 398600.4408 \text{ km}^3/\text{s}^2$

Adjusted parameters: X, Y, Z at January 15 1983

Constraints for the CTS :

- apriori values of ERP from SL7
- fixed AM0-2 motion

Raw data : X, Y, Z and formal errors (see Figure 10)

Input data (LG) :

X, Y, Z with formal errors modified using a lower bound value of 4 cm (shown on Figure 10).

1.3.9) DGFII SLR solution

Identifier : SSC(DGFII) 89 L03

Model : DOGS software, $GM = 398600.440 \text{ km}^3/\text{s}^2$

Adjusted parameters: X, Y, Z, and horizontal velocities

Constraints for the CTS :

- forcing of rotation angles between initial and adjusted coordinates of 15 stations to becomes zero in the average
- rotation drift rates around the three coordinate axes are forced to become zero with respect to a given set of AM0-2 horizontal station position drift rates

Raw data : X, Y, Z at a given epoch for each station without error estimate and $\lambda \cdot \cos(\phi)$, ϕ

Input data (LD) :

X, Y, Z transformed at 1988.0 with their velocities with 4 cm as errors

1.3.10) DUT SLR solution

Identifier : SSC(DUT) 90 L 01

Model : Estimation of station motions, $GM = 398600.4359 \text{ km}^3/\text{s}^2$

Adjusted parameters: X, Y, Z, and velocities

Constraints for the CTS :

- longitude of station 7105 fixed
- ERP a priori values from IERS Bulletin B

Raw data : X, Y, Z at 1986.0 and $\dot{X}$, $\dot{Y}$, $\dot{Z}$

Input data (LU) :

X, Y, Z transformed at 1988.0 with their velocities with 4 cm as lower bound error.

1.3.11) ZIPE SLR solution

Identifier : SSC(ZIPE) 90 L 01

Model : POTSDAM-5 software. Motion with AM0-2 model, $GM = 398600.440 \text{ km}^3/\text{s}^2$

Adjusted parameters: r, lambda, phi at 1988.0

Constraints for the CTS :

- lambda, phi fixed for station 7210
- phi fixed for station 7105
- fixed AM0-2 motion

Raw data : X, Y, Z and formal errors

Input data (LZ) :

X, Y, Z with formal errors modified using a lower bound value of 4 cm

1.3.12) Shanghai Observatory SLR solution

Identifier : SSC(SO) 90 L 01

Model : SHORDE I software. Motion with AM0-2 model, $GM = 398600.436 \text{ km}^3/\text{s}^2$

Adjusted parameters: X, Y, Z at 1989.0

Constraints for the CTS :

- fixed AM0-2 motion

Raw data : X, Y, Z and formal errors

Input data (LS) :

X, Y, Z transformed at 1988.0 with AM0-2. Formal errors modified using a lower bound value of 4 cm.

1.3.13) GAOUA SLR solution

Identifier : SSC(GAOUA)90 L 01

Model : KIEV-GEODYNAMICS -₃ software. Motion with AM0-2 model,
 $GM = 398600.440 \text{ km}^3/\text{s}^2$

Adjusted parameters: X, Y, Z at 1988.0

Constraints for the CTS :

- fixed AM0-2 motion
- ERP values from IERS Bulletin B

Raw data : X, Y, Z and formal errors

Input data (LK) :

X, Y, Z and formal errors modified using a lower bound value of 4 cm.

1.3.14) LPAC SLR solution

Identifier : SSC(LPAC) 90 L 01

Model : GEORAN-2 software. Motion with AM0-2 model,

Adjusted parameters: X, Y, Z at 1984.0

Constraints for the CTS :

- fixed AM0-2 motion
- longitude and latitude of station 7105 and latitude of 7210 fixed
- ERP values from IERS Bulletin B

Raw data : X, Y, Z and formal errors

Input data (LL) :

X, Y, Z transformed at 1988.0 with AM0-2. Formal errors modified using a lower bound value of 5 cm.

1.3.15) UT/McD LLR solution

Identifier : SSC(UTXMO)90 M 01

Model : Motion with AM0-2 model, $GM = 398600.4459 \text{ km}^3/\text{s}^2$

Adjusted parameters: lambda, phi, h at 1984.0

Constraints for the CTS :

- fixed AM0-2
- ERP fixed at 1985 Jan. 11

Raw data : X, Y, Z and formal errors

Input data (MX) :

X, Y, Z transformed at 1988.0 with AM0-2. Formal errors with 5 cm as lower bound.

1.3.16) JPL LLR solution

Identifier : SSC(JPL) 90 M 01

Model : Motion with AM0-2 model

Adjusted parameters: X, Y, Z at 1988.0

Constraints for the CTS : Fixed AM0-2

Raw data : X, Y, Z without error estimate

Input data (MJ) :

X, Y, Z with 5 cm as error.

1.3.17) CERGA LLR solution

Identifier : SSC(CERGA)89 M 01

Model : No motion model

Adjusted parameters: X, Y, Z

Constraints for the CTS :

Raw data : X, Y, Z without error estimate

Input data (ME) :

X, Y, Z with 5 cm as error

1.3.18) Shanghai Observatory LLR solution

Identifier : SSC(SO) 86 M 01

Model : No motion model

Adjusted parameters: X, Y, Z

Constraints for the CTS :

Raw data : X, Y, Z, without error estimate

Input data (MS) :

X, Y, Z with 10 cm as error

Table 1
Input data sets

label	designation	other name
RG89	SSC(GSFC) 90 R 02	GLB628
RN89	SSC(NGS) 90 R 01	
RO89	SSC(USNO) 90 R 01	
RS89	SSC(SO) 88 R 01	
RM89	SSC(NAOMZ)89 R 01	
RJ89	SSC(JPL) 90 R 02	1990-2
LC89	SSC(CSR) 89 L 02	
LG89	SSC(GSFC) 89 L 01	
LD89	SSC(DGFII)89 L 03	
LU89	SSC(DUT) 90 L 01	
LZ89	SSC(ZIPE) 90 L 01	
LS89	SSC(SO) 90 L 01	
LK89	SSC(GAOUA)90 L 01	
LL89	SSC(LPAC) 90 L 01	
MX89	SSC(UTXMO)90 M 01	
MJ89	SSC(JPL) 90 M 01	
ME89	SSC(CERGA)89 M 01	
MS89	SSC(SO) 86 M 01	

1.4) Excentricities

The excentricities used for ITRF89 are given in Table T5 of the appendix.

2) DATA ANALYSIS

The ITRF89 solution consists of :

a) a combined adjustment of station positions and transformation parameters for the epoch 1988.0

b) estimation of possible secular variations in orientation parameters.

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

- reduction of individual data sets at a common epoch,
- 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)

Test computations (ITRF89A and B) were performed with partial data and presented at the IERS Workshop held in Paris (23-27 April 1990).

It was decided that:

- origin should come from SLR
- scale should also come from SLR as there is still some possible questions about VLBI scale, and that when it is apparently consistent with SLR, the scale parameter is close to zero,
- orientation should be such that no global rotation should exist with respect to ITRF88.

To ensure that, a first global adjustment of all selected data was done, holding the LC transformation parameters fixed to their ITRF88 value. The solution was labelled ITRF89C.

Then ITRF89C was compared to ITRF88 in order to estimate corrections to rotation angles.

Several tests were done (all points, one point per site, 6 points covering the Earth, changes in weighting). Table 2 summarizes these tests. Solution (6) was finally used to repeat the global adjustment with LC translation and scale put to zero and rotation angles fixed to the values derived from the previous computation.

Table 2
Comparison ITRF89C - ITRF88

	T1 cm	T2 cm	T3 cm	D 10 ⁻⁸	R1 0.001"	R2 0.001"	R3 0.001"	F
(1) Sigmas 1m All points	0.6 0.8	1.0 0.8	1.4 0.7	-0.1 0.1	0.5 0.3	0.3 0.3	-0.5 0.3	0.049
(2) Sigmas 1m 1 point per site	-0.2 0.9	0.7 0.9	0.4 0.8	-0.1 0.1	0.1 0.4	0.5 0.3	-0.5 0.3	0.043
(3) Sigmas 1m 6 points	4.0 3.1	1.4 3.1	5.6 3.1	-1.0 0.5	0.3 1.2	0.4 1.3	-0.2 1.2	0.053
(4) Sigmas scaled All points	0.1 0.4	1.6 0.4	1.3 0.3	0.0 0.1	0.6 0.2	0.2 0.1	-0.1 0.1	0.261
(5) Sigmas unscaled All points	0.3 0.3	1.5 0.4	1.3 0.3	0.0 0.1	0.6 0.1	0.2 0.1	-0.2 0.1	1.069
(6) Sigmas unscaled 1 point per site	0.3 0.4	1.5 0.4	1.0 0.3	0.0 0.1	0.5 0.2	0.2 0.2	-0.2 0.1	0.778
(7) Sigmas unscaled 6 points	2.8 2.6	1.4 2.6	3.9 2.9	-0.6 0.4	0.5 1.0	-0.1 1.2	-0.5 1.0	2.406
(8) Sigmas unscaled 88 Sigmas scaled 89 All points	0.3 0.4	1.5 0.4	1.4 0.4	0.0 0.1	0.6 0.2	0.1 0.2	-0.2 0.1	0.979
(9) Sigmas unscaled 88 Sigmas scaled 89 1 point per site	0.3 0.4	1.4 0.4	1.1 0.4	0.0 0.1	0.4 0.1	0.2 0.1	-0.2 0.1	0.707

As some solutions have derived velocities or used an other model than AM0-2, we have repeated the adjustment at the epoch 1984.0 for these solutions. We fixed the LC rotation parameters for 1984 at their values of 1988 plus rotation correction from AM1-2/AM0-2 angular velocities. We then estimated annual rates of rotation for RG, LD and LU.

3) RESULTS

3.1) Values

We have adjusted combined coordinates in the ITRF89 solution for epoch 1988.0. They are given in Table T6 under the label SSC(IERS) 90 C 01.

As no global velocity field has been adjusted, the AM0-2 model is still valid to estimate positions at other epochs.

The adjusted transformation parameters and rates were published in Table T-2 of the IERS Annual Report for 1989. It is also available in Table T7 of the appendix.

We have also computed for a practical point of view positions for epochs 1984, 1986, 1988, 1990, for both the combined and some individual solutions. For the last solutions, the procedure used is:

a) to compute position at the epoch using values of the individual solution, namely positions at the reference epoch and corresponding velocity.

b) to compute transformation parameters at the epoch from table T7 values. For this case, only corrections exist for some rotation angles.

c) to convert positions to IERS values using this formula.

This is done for :

RG	SSC(IERS) 90 R 01 (84, 86, 88, 90)
RN	SSC(IERS) 90 R 02 (88)
LC	SSC(IERS) 90 L 01 (84, 86, 88, 90)
LG	SSC(IERS) 90 L 02 (84, 86, 88, 90)
LD	SSC(IERS) 90 L 03 (84, 86, 88, 90)
LU	SSC(IERS) 90 L 04 (84, 86, 88, 90)

For RN only 1988 values have been computed as velocities were not available at IFTS.

3.2) Analysis of results

The factor of unit variance is 1.3. Although it is close to 1, the proper weighting in the combined adjustment is a rather critical and delicate problem.

As presented in the IERS Technical Note 4 for past BIH/IERS solutions, a sample of 6 stations is given in Tables 3 and 4, where we have also repeated ITRF88 solutions. See also Figures 1 to 6.

Table 3
Solutions for a sample of stations

I : Raw data

Notes :

- for each station this table gives:
 - * the coordinates in the combined solution,
 - * the original coordinates in 3 individual solutions (RN : VLBI NGS, RG : VLBI GSFC and LC : SLR CSR)
 - * the transformed coordinates (T) in the corresponding combined solution using the transformation parameters between the combined solution and the individual one,
- USX : unscaled standard deviation on X,
- SSX : scaled standard deviation on X, in the case of combined solutions and a priori value adopted in the combination, in the case of individual solution.

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Solution point Date		X (m) USX(m)	SSX(m)	Y (m) USY(m)	SSY(m)	Z (m) USZ(m)	SSZ(m)
-----		-----	-----	-----	-----	-----	-----
ITRF88	7943	-4447548.848		2677134.080		-3694996.708	
1988.0		±0.030 (0.165)		±0.029 (0.159)		±0.033 (0.182)	
RG88	1545	-4460933.406		2682764.817		-3674381.113	
1988.0		±0.015 (0.015)		±0.011 (0.011)		±0.010 (0.010)	
	exc.	13386.172		-5631.623		-20614.965	
		-----		-----		-----	
	7943	-4447547.234		2677133.194		-3694996.078	
RG88(T)		-4447548.857		2677134.081		-3694996.747	
1988.0							
LC88	7943	-4447548.581		2677134.298		-3694996.587	
1988.0		±0.013 (0.013)		±0.015 (0.015)		±0.014 (0.014)	
LC88(T)	7943	-4447548.748		2677134.003		-3694996.691	
1988.0							

ITRF89 1988.0	7943	-4447548.620 ±0.018 (0.023)	2677133.986 ±0.017 (0.022)	-3694996.479 ±0.018 (0.023)
RN89 1988.0	1545	-4460935.217 ±0.026 (0.026)	2682765.664 ±0.019 (0.020)	-3674381.460 ±0.016 (0.020)
	exc.	13386.516	-5631.785	-20614.724
		-----	-----	-----
RN89(T) 1988.0	7943	-4447548.890 -4447548.721	2677133.879 2677134.001	-3694996.184 -3694996.421
RG89 1988.0	1545	-4460933.448 ±0.012 (0.020)	2682764.920 ±0.009 (0.020)	-3674381.099 ±0.008 (0.020)
	exc.	13386.516	-5631.785	-20614.724
		-----	-----	-----
RG89(T) 1988.0	7943	-4447546.932 -4447548.547	2677133.135 2677133.998	-3694995.823 -3694996.432
LC89 1988.0	7943	-4447548.581 ±0.013 (0.040)	2677134.298 ±0.015 (0.040)	-3694996.587 ±0.014 (0.040)
LC89(T) 1988.0	7943	-4447548.710	2677134.016	-3694996.636

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Solution point		X (m) USX(m)	SSX(m)	Y (m) USY(m)	SSY(m)	Z (m) USZ(m)	SSZ(m)
-----		-----	-----	-----	-----	-----	-----
ITRF88 1988.0	7838	-3822388.405 ±0.020	(0.110)	3699363.434 ±0.019	(0.105)	3507573.079 ±0.031	(0.171)
LC88 1988.0	7838	-3822388.009 ±0.013	(0.013)	3699363.804 ±0.013	(0.013)	3507573.109 ±0.013	(0.013)
LC88(T) 1988.0	7838	-3822388.407		3699363.445		3507573.071	
ITRF89 1988.0	7838	-3822388.355 ±0.017	(0.022)	3699363.504 ±0.017	(0.022)	3507573.098 ±0.019	(0.025)
LC89 1988.0	7838	-3822388.009 ±0.013	(0.040)	3699363.804 ±0.013	(0.040)	3507573.109 ±0.013	(0.040)
LC89(T) 1988.0	7838	-3822388.367		3699363.452		3507573.090	

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Solution point		X (m) USX(m)	SSX(m)	Y (m) USY(m)	SSY(m)	Z (m) USZ(m)	SSZ(m)
-----	-----	-----	-----	-----	-----	-----	-----
ITRF88	7232	5085442.883		2668263.355		-2768697.313	
1988.0		±0.032	(0.176)	±0.032	(0.176)	±0.028	(0.154)
RN88	7232	5085442.778		2668263.461		-2768697.652	
1984.0		±0.026	(0.026)	±0.013	(0.013)	±0.016	(0.016)
1988.0	7232	5085442.648		2668263.553		-2768697.623	
RN88(T)	7232	5085442.856		2668263.404		-2768697.263	
1988.0							
RG88	7232	5085444.366		2668262.522		-2768696.748	
1988.0		±0.018	(0.018)	±0.014	(0.014)	±0.010	(0.016)
RG88(T)	7232	5085442.878		2668263.352		-2768697.320	
1988.0							
ITRF89	7232	5085442.832		2668263.404		-2768697.266	
1988.0		±0.023	(0.030)	±0.024	(0.031)	±0.023	(0.030)
RN89	7232	5085442.677		2668263.264		-2768697.487	
1988.0		±0.015	(0.020)	±0.008	(0.020)	±0.009	(0.020)
RN89(T)	7232	5085442.827		2668263.387		-2768697.232	
1988.0							
RG89	7232	5085444.377		2668262.559		-2768696.777	
1988.0		±0.011	(0.020)	±0.007	(0.020)	±0.006	(0.020)
RG89(T)	7232	5085442.831		2668263.421		-2768697.300	
1988.0							

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Solution point		X (m) USX(m)	SSX(m)	Y (m) USY(m)	SSY(m)	Z (m) USZ(m)	SSZ(m)
-----		-----		-----		-----	
ITRF88	7834	4075530.090		931781.263		4801618.163	
1988.0		±0.017	(0.094)	±0.016	(0.088)	±0.019	(0.105)
RN88	7224	4075540.371		931735.319		4801629.057	
1984.0		±0.007	(0.007)	±0.004	(0.004)	±0.010	(0.010)
1988.0	7224	4075540.303		931735.387		4801629.101	
	exc.	-10.003		46.149		-11.072	
-----		-----		-----		-----	
	7834	4075530.300		931781.536		4801618.029	
RN88(T)	7834	4075530.102		931781.302		4801618.129	
1988.0							
RG88	7224	4075541.673		931734.246		4801629.685	
1988.0		±0.006	(0.006)	±0.004	(0.004)	±0.011	(0.011)
	exc.	-10.003		46.149		-11.072	
-----		-----		-----		-----	
	7834	4075531.670		931780.395		4801618.613	
RG88(T)	7834	4075530.089		931781.268		4801618.160	
1988.0							
LC88	7834	4075530.300		931781.077		4801618.122	
1988.0		±0.015	(0.015)	±0.018	(0.018)	±0.012	(0.012)
LC88(T)	7834	4075530.132		931781.307		4801618.213	
1988.0							
ITRF89	7834	4075530.091		931781.322		4801618.178	
1988.0		±0.013	(0.017)	±0.013	(0.017)	±0.013	(0.017)
RN89	7224	4075540.325		931735.227		4801629.044	
1988.0		±0.004	(0.020)	±0.002	(0.020)	±0.005	(0.020)
	exc.	-10.003		46.149		-11.072	
-----		-----		-----		-----	
	7834	4075530.322		931781.376		4801617.972	
RN89(T)	7834	4075530.084		931781.349		4801618.165	
1988.0							
RG89	7224	4075541.699		931734.277		4801629.695	
1988.0		±0.002	(0.020)	±0.001	(0.020)	±0.003	(0.020)
	exc.	-10.003		46.149		-11.072	
-----		-----		-----		-----	
	7834	4075531.696		931780.426		4801618.623	
RG89(T)	7834	4075530.078		931781.341		4801618.168	
1988.0							
LC89	7834	4075530.300		931781.077		4801618.122	
1988.0		±0.015	(0.040)	±0.018	(0.040)	±0.012	(0.040)
LC89(T)	7834	4075530.128		931781.312		4801618.222	
1988.0							

Arequipa SLR 7907

Solution point		X (m) USX(m)	SSX(m)	Y (m) USY(m)	SSY(m)	Z (m) USZ(m)	SSZ(m)
-----		-----		-----		-----	
ITRF88	7907	1942792.009		-5804077.744		-1796919.359	
1988.0		±0.021	(0.116)	±0.023	(0.127)	±0.022	(0.121)
LC88	7907	1942791.451		-5804077.903		-1796919.266	
1988.0		±0.015	(0.015)	±0.007	(0.007)	±0.017	(0.017)
LC88(T)	7907	1942791.950		-5804077.767		-1796919.364	
1988.0							
ITRF89	7907	1942792.013		-5804077.661		-1796919.307	
1988.0		±0.017	(0.022)	±0.017	(0.022)	±0.017	(0.022)
LC89	7907	1942791.451		-5804077.903		-1796919.266	
1988.0		±0.015	(0.040)	±0.007	(0.040)	±0.017	(0.040)
LC89(T)	7907	1942791.940		-5804077.724		-1796919.321	
1988.0							

Fort Davis SLR 7086

Solution point		X (m) USX(m)	SSX(m)	Y (m) USY(m)	SSY(m)	Z (m) USZ(m)	SSZ(m)
ITRF88 1988.0	7086	-1330125.273 ±0.011	(0.061)	-5328526.693 ±0.011	(0.061)	3236150.236 ±0.013	(0.072)
RN88 1984.0	7216	-1324210.748 ±0.005	(0.005)	-5332023.121 ±0.017	(0.017)	3232118.544 ±0.015	(0.015)
1988.0	7216	-1324210.804		-5332023.129		3232118.512	
	exc.	-5914.397		3496.510		4031.862	
	7086	-1330125.201		-5328526.619		3236150.374	
RN88(T) 1988.0	7086	-1330125.272		-5328526.679		3236150.200	
RG88 1988.0	7216	-1324209.184 ±0.001	(0.001)	-5332023.991 ±0.002	(0.002)	3232118.820 ±0.003	(0.003)
	exc.	-5914.397		3496.510		4031.862	
	7086	-1330123.581		-5328527.481		3236150.682	
RG88(T) 1988.0	7086	-1330125.272		-5328526.678		3236150.210	
LC88 1988.0	7086	-1330125.610 ±0.015	(0.015)	-5328526.465 ±0.009	(0.009)	3236150.379 ±0.013	(0.013)
LC88(T) 1988.0	7086	-1330125.277		-5328526.668		3236150.244	
ITRF89 1988.0	7086	-1330125.262 ±0.010	(0.013)	-5328526.629 ±0.010	(0.013)	3236150.242 ±0.010	(0.013)
RN89 1988.0	7216	-1324210.697 ±0.001	(0.020)	-5332023.106 ±0.003	(0.020)	3232118.569 ±0.003	(0.020)
	exc.	-5914.397		3496.510		4031.862	
	7086	-1330125.094		-5328526.596		3236150.431	
RN89(T) 1988.0	7086	-1330125.256		-5328526.623		3236150.224	
RG89 1988.0	7216	-1324209.205 ±0.001	(0.020)	-5332023.991 ±0.001	(0.020)	3232118.816 ±0.001	(0.020)
	exc.	-5914.397		3496.510		4031.862	
	7086	-1330123.599		-5328527.481		3236150.678	
RG89(T) 1988.0	7086	-1330125.253		-5328526.624		3236150.220	
LC89 1988.0	7086	-1330125.610 ±0.015	(0.040)	-5328526.465 ±0.009	(0.040)	3236150.379 ±0.013	(0.040)
LC89(T) 1988.0	7086	-1330125.267		-5328526.621		3236150.263	

Table 4

Solutions for a sample of stations

II : Comparisons / ITRF-0

Note : this table is schematized in figures 1 to 6 following it

CANBERRA SLR 7943

Solution	X - X0 cm	Y - Y0 cm	Z - Z0 cm
-----	-----	-----	-----
ITRF88	-4.6	-2.4	-4.7
RG88(T)	-5.5	-2.3	-8.6
LC88(T)	5.4	-10.1	-3.0
ITRF89	18.2	-11.8	18.2
RN89(T)	8.1	-10.3	24.0
RG89(T)	25.5	-10.6	22.9
LC89(T)	9.2	-8.8	2.5

SIMOSATO SLR 7838

Solution	X - X0 cm	Y - Y0 cm	Z - Z0 cm
-----	-----	-----	-----
ITRF88	-2.6	-0.8	-0.6
LC88(T)	-2.8	0.3	-1.4
ITRF89	2.4	6.2	1.3
LC89(T)	1.2	1.0	0.5

HARTEBEESTHOEK VLBI 7232

Solution	X - X0 cm	Y - Y0 cm	Z - Z0 cm
-----	-----	-----	-----
ITRF88	4.7	-11.0	-1.6
RN88(T)	2.0	-6.1	3.4
RG88(T)	4.2	-11.3	-2.3
ITRF89	-0.4	-6.1	3.1
RN89(T)	-0.9	-7.8	6.5
RG89(T)	-0.5	-4.4	-0.3

WETTZELL SLR 7834

Solution	X - X0 cm	Y - Y0 cm	Z - Z0 cm
-----	-----	-----	-----
ITRF88	-1.0	-1.2	-2.4
RN88(T)	0.2	2.7	-5.8
RG88(T)	-1.1	-0.7	-2.7
LC88(T)	3.2	3.2	2.6
ITRF89	-0.9	4.7	-0.9
RN89(T)	-1.6	7.4	-2.2
RG89(T)	-2.2	6.6	-1.9
LC89(T)	2.4	3.7	3.5

AREQUIPA SLR 7907

Solution	X - X0 cm	Y - Y0 cm	Z - Z0 cm
-----	-----	-----	-----
ITRF88	5.1	-0.3	-1.2
LC88(T)	-0.8	-2.6	-1.7
ITRF89	5.5	8.0	4.0
LC89(T)	-1.8	1.7	2.6

FORT DAVIS SLR 7086

Solution	X - X0 cm	Y - Y0 cm	Z - Z0 cm
-----	-----	-----	-----
ITRF88	2.3	-6.1	-0.4
RN88(T)	2.4	-4.7	-4.0
RG88(T)	2.4	-4.6	-3.0
LC88(T)	1.9	-3.6	0.4
ITRF89	3.4	0.3	0.2
RN89(T)	4.0	0.9	-1.6
RG89(T)	4.3	0.8	-2.0
LC89(T)	2.9	1.1	2.3

FIG. 1 CANBERRA SLR 7943

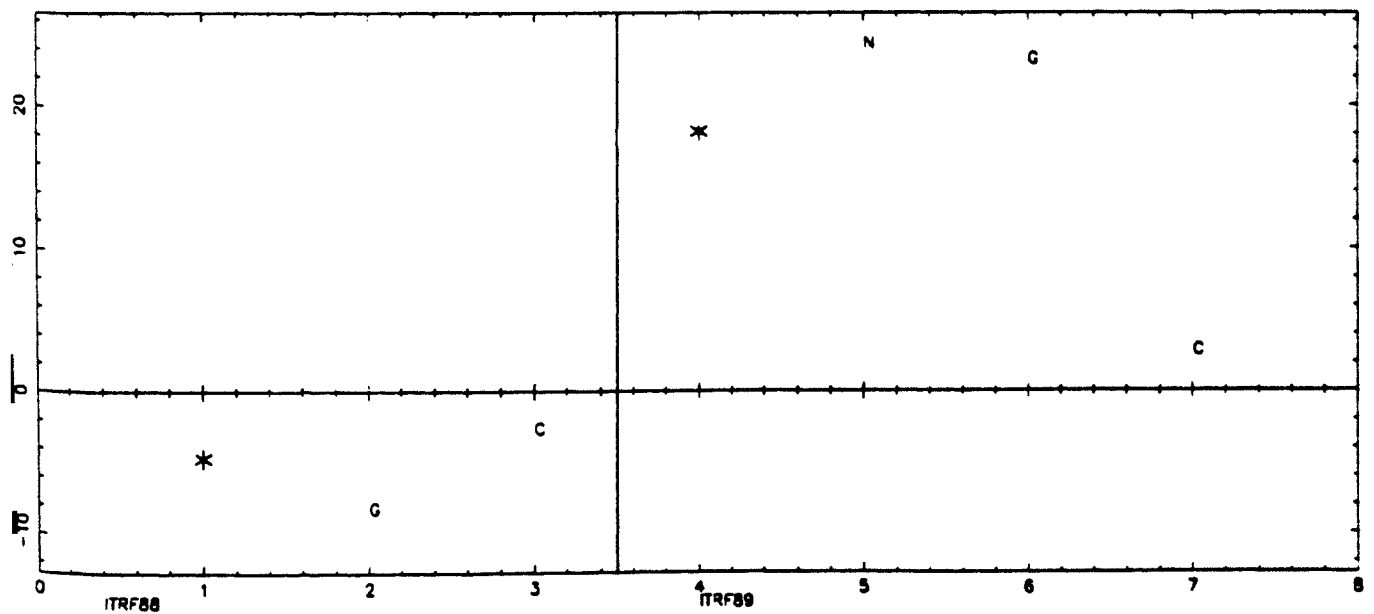
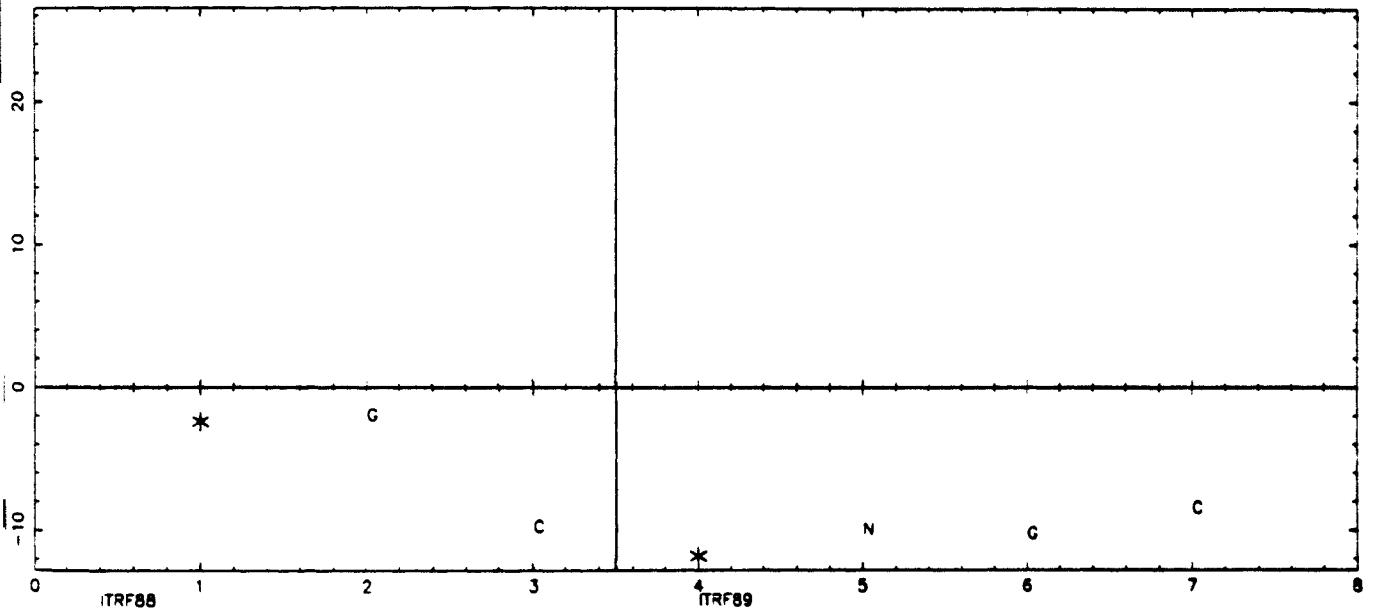
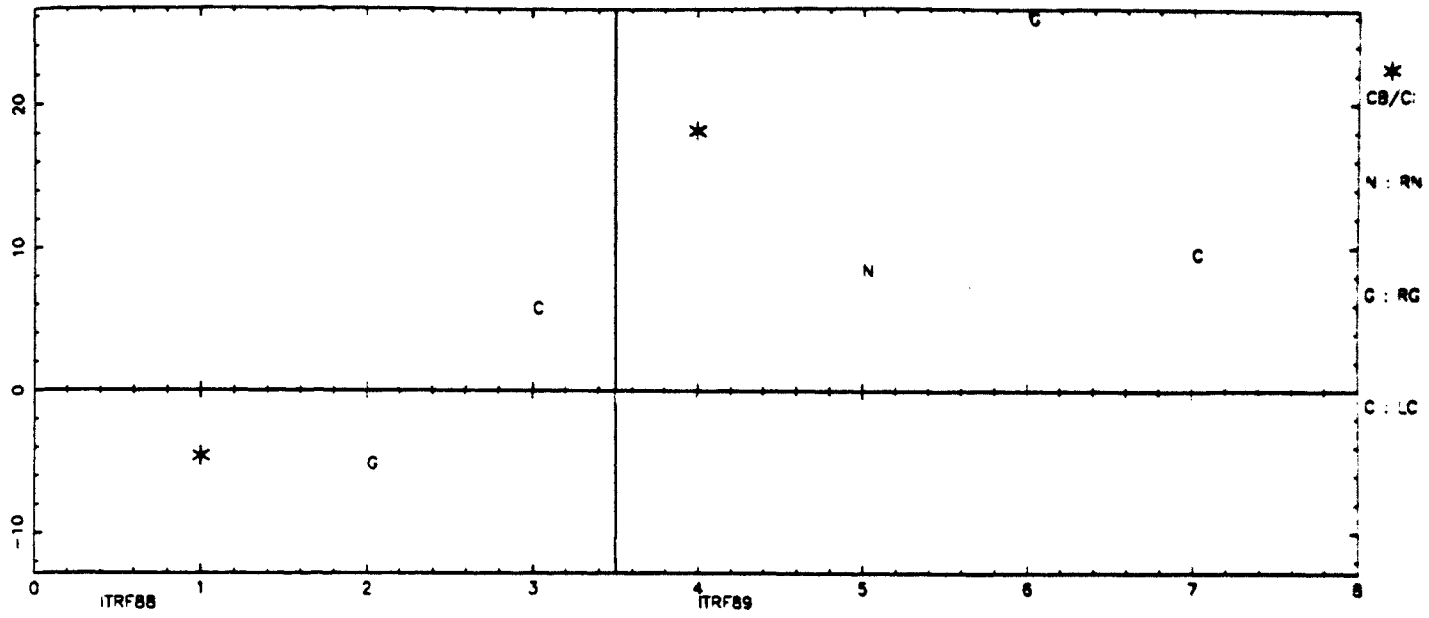


FIG. 2 SIMOSATO SLR 7838

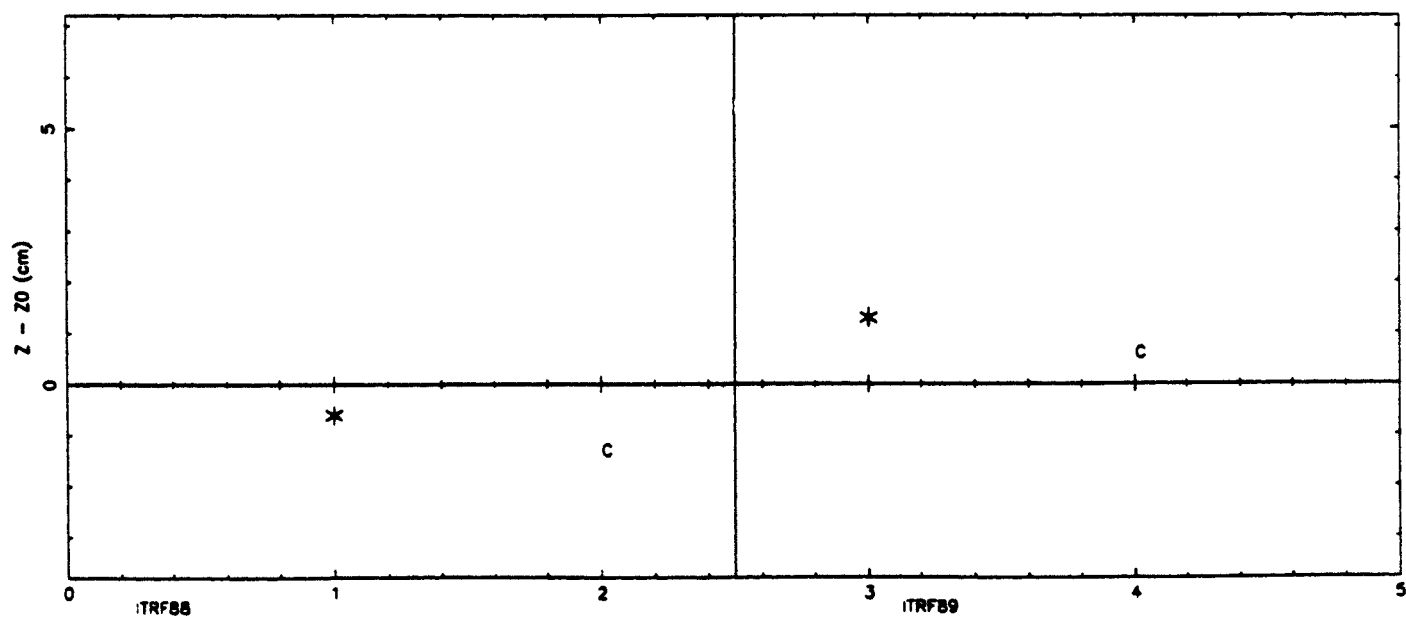
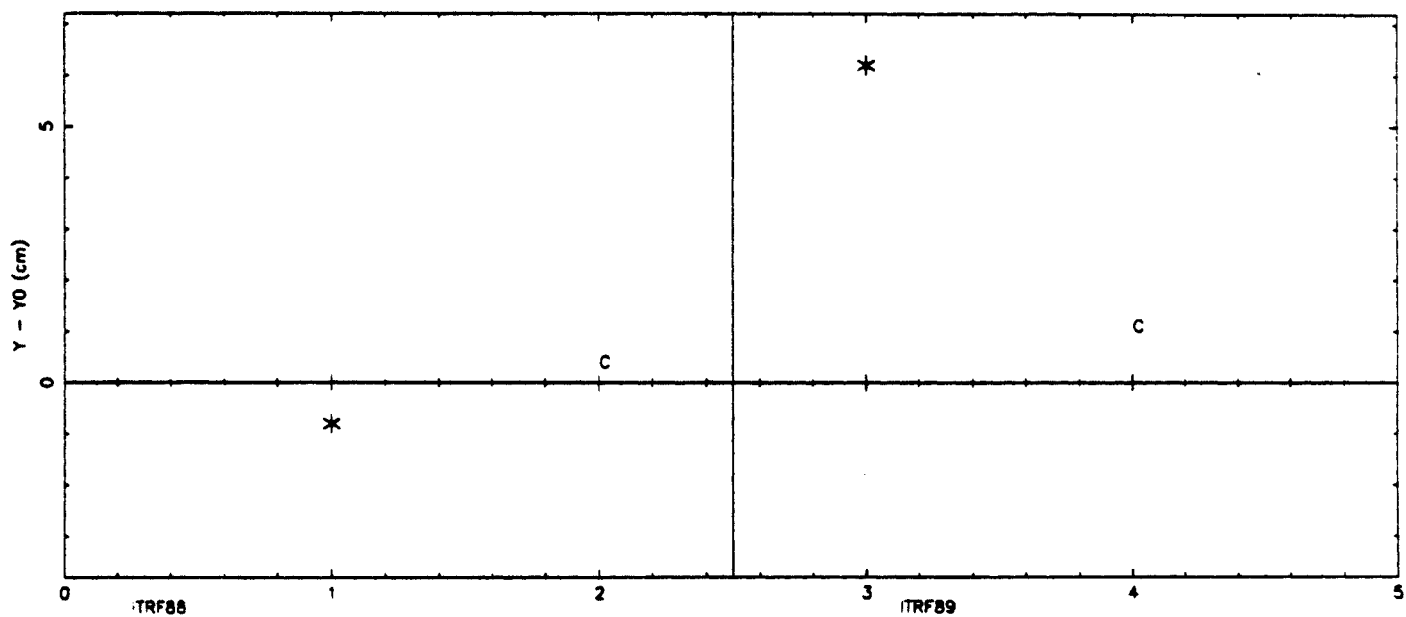
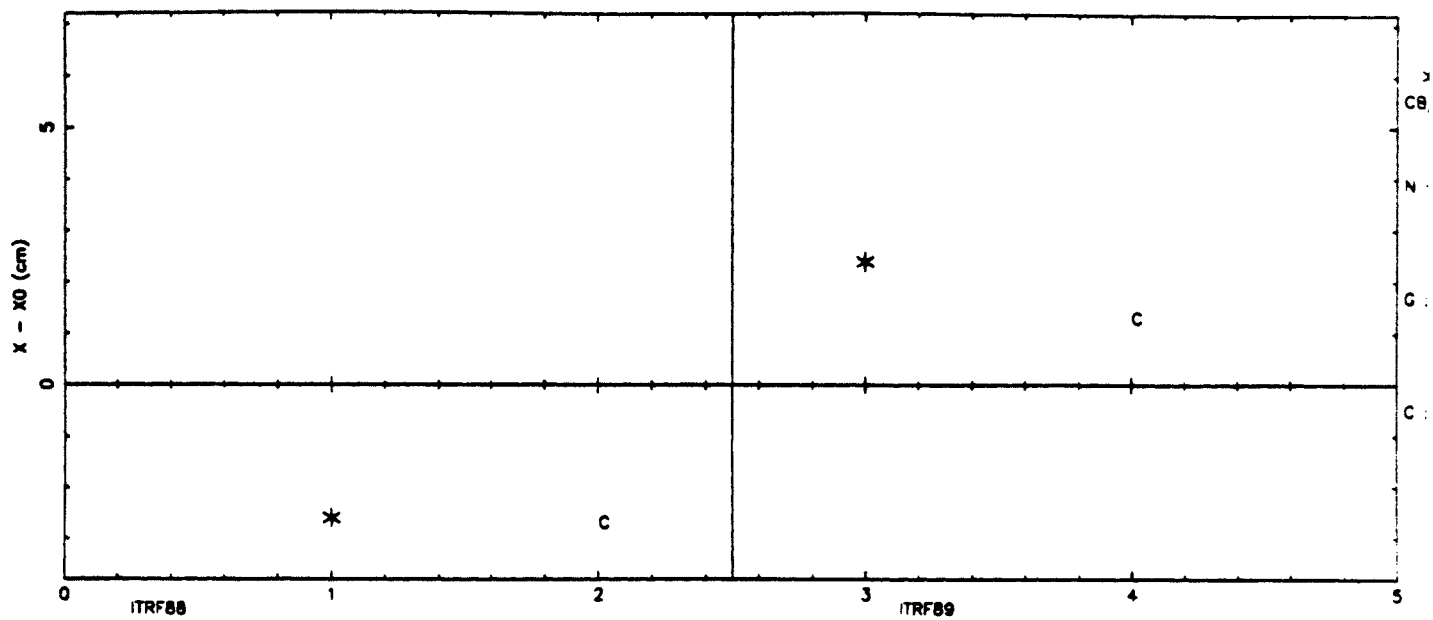


FIG. 3 HARTBEESTHOEK V_LBI 7232

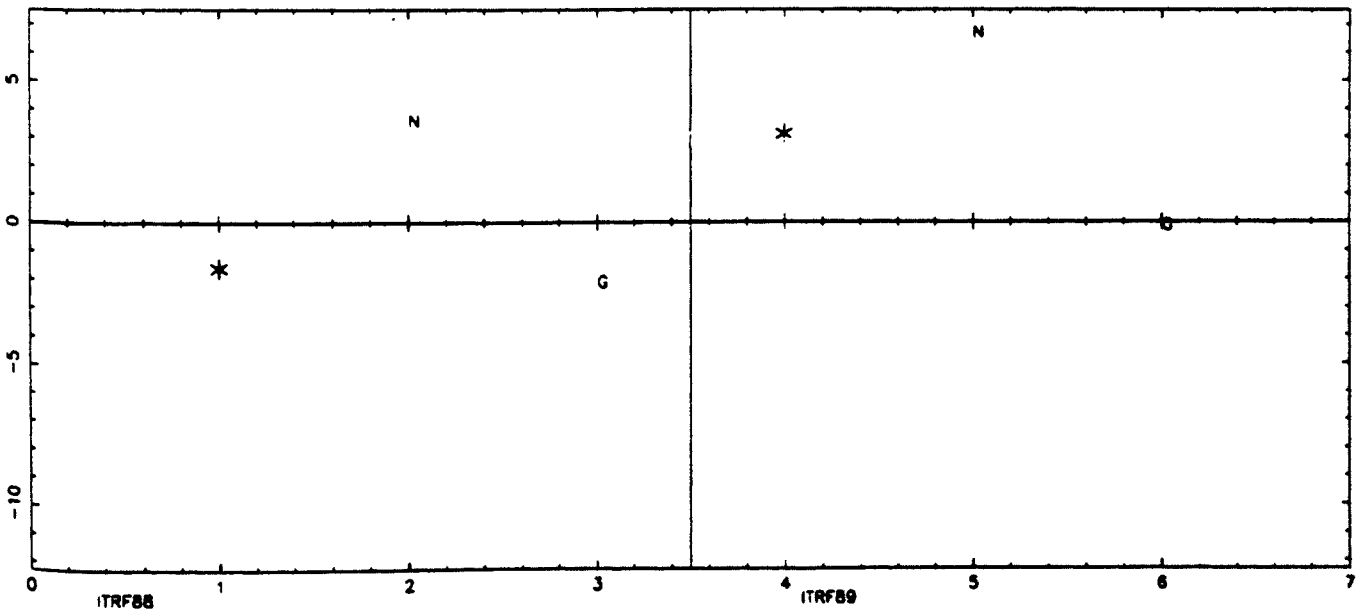
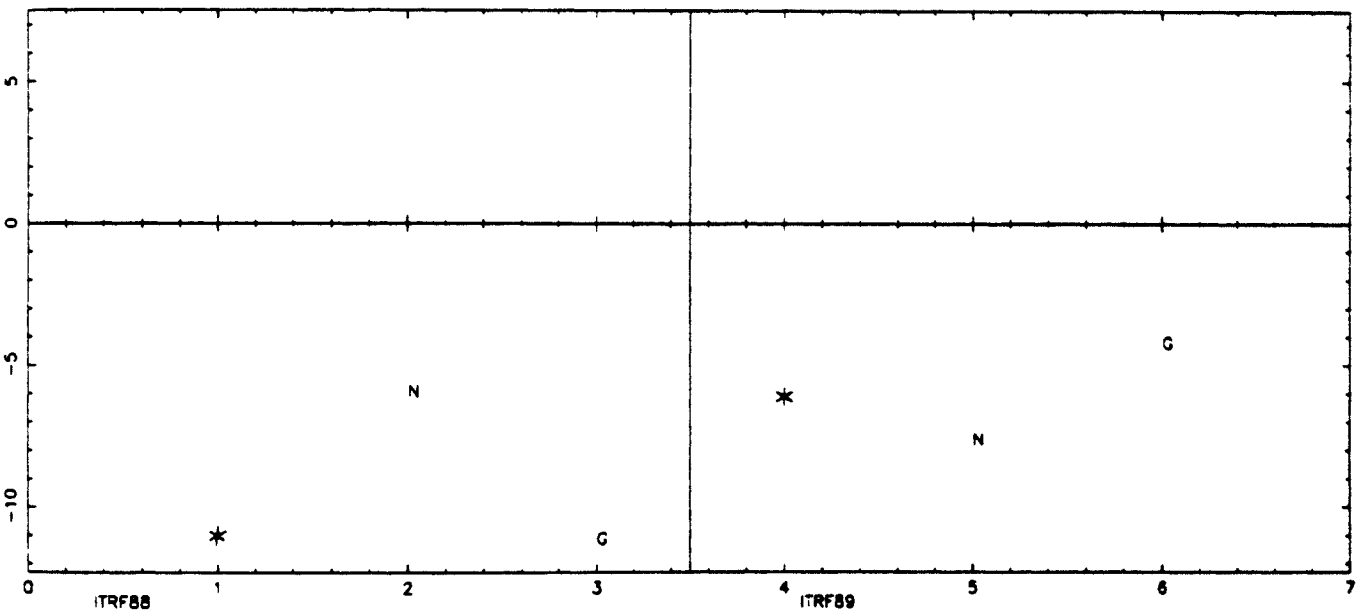
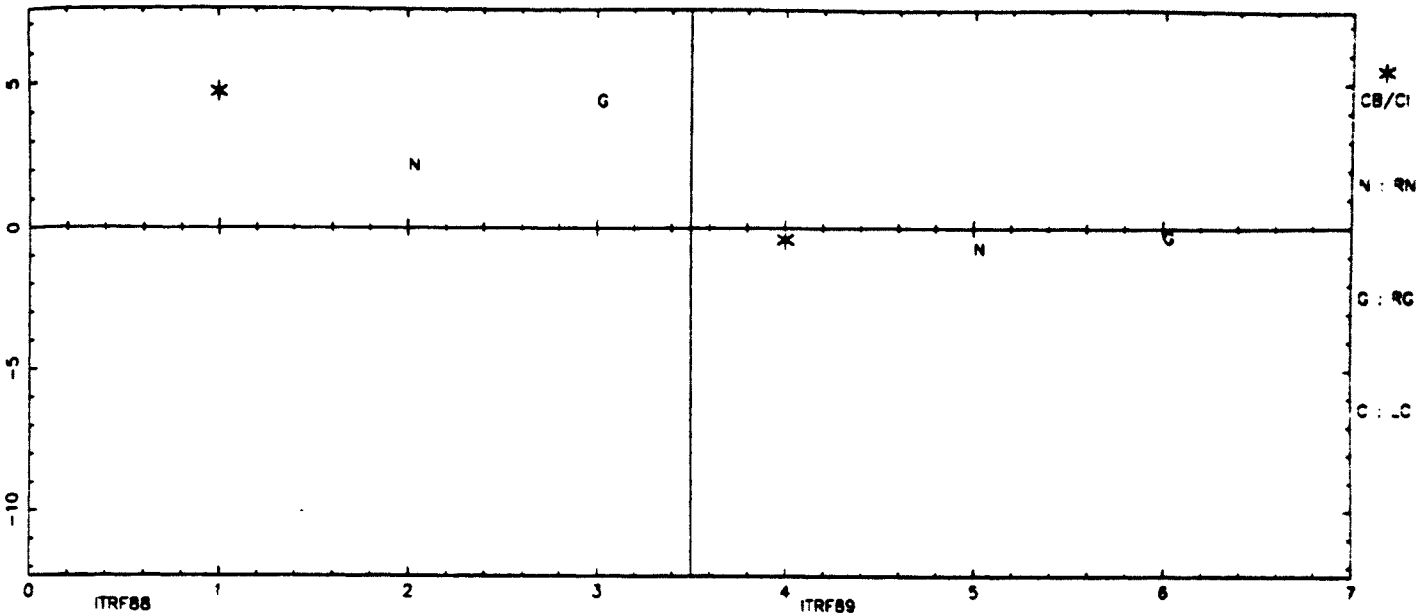


FIG. 4 WETZELL SLR 7834

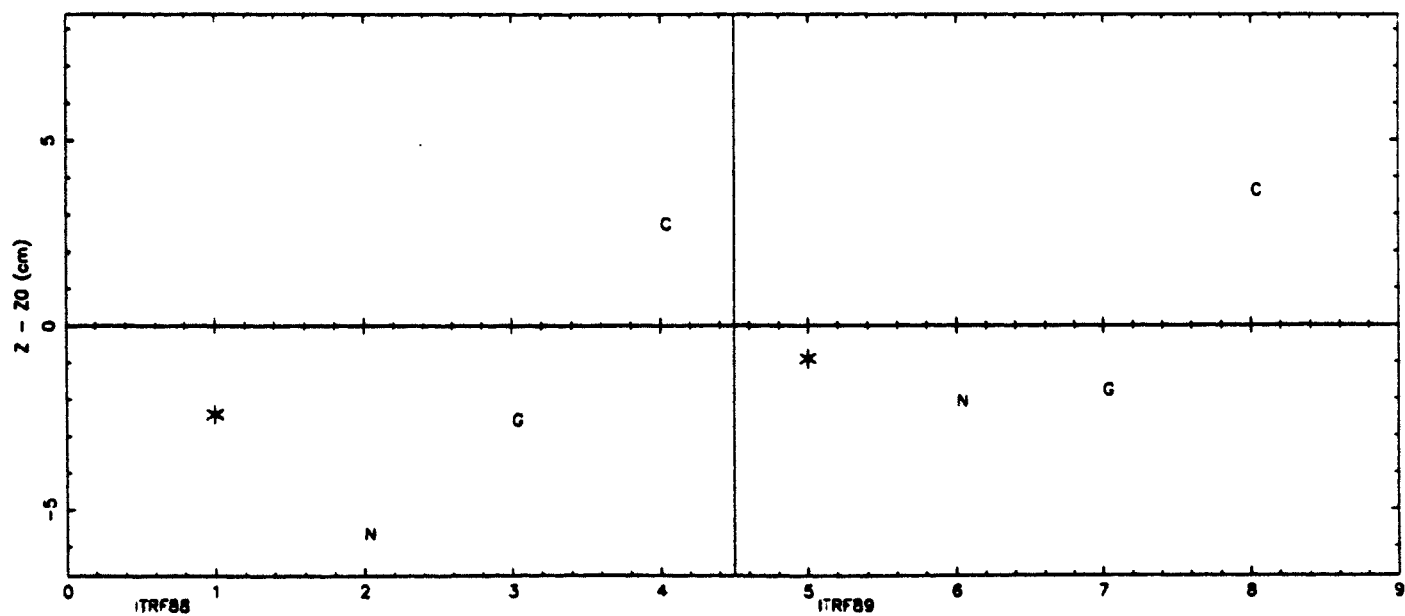
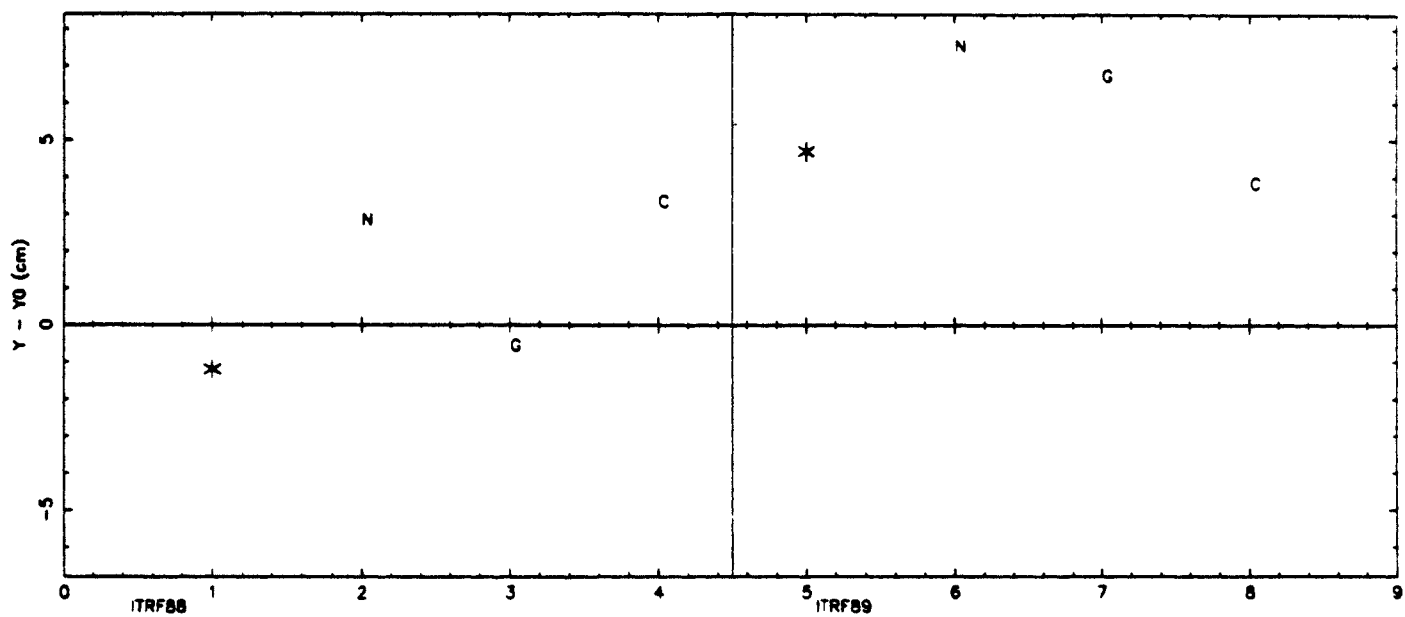
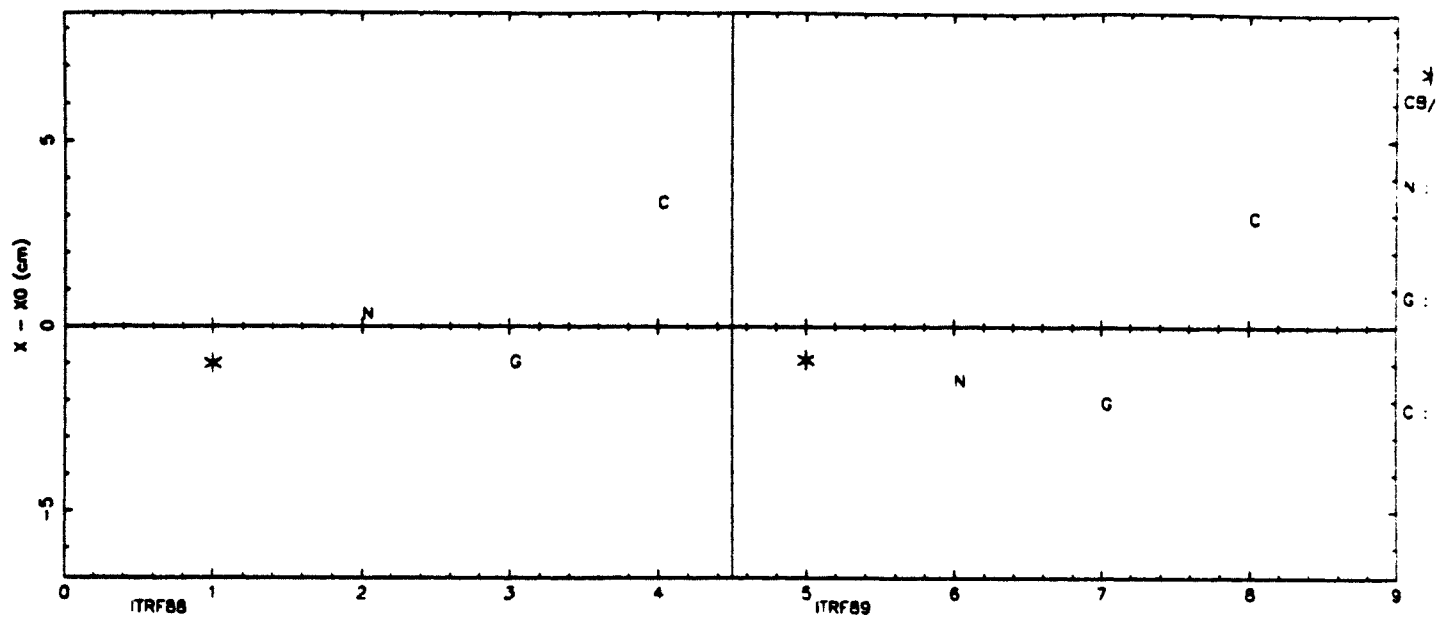


FIG. 5 AREQUIPA SLR 7907

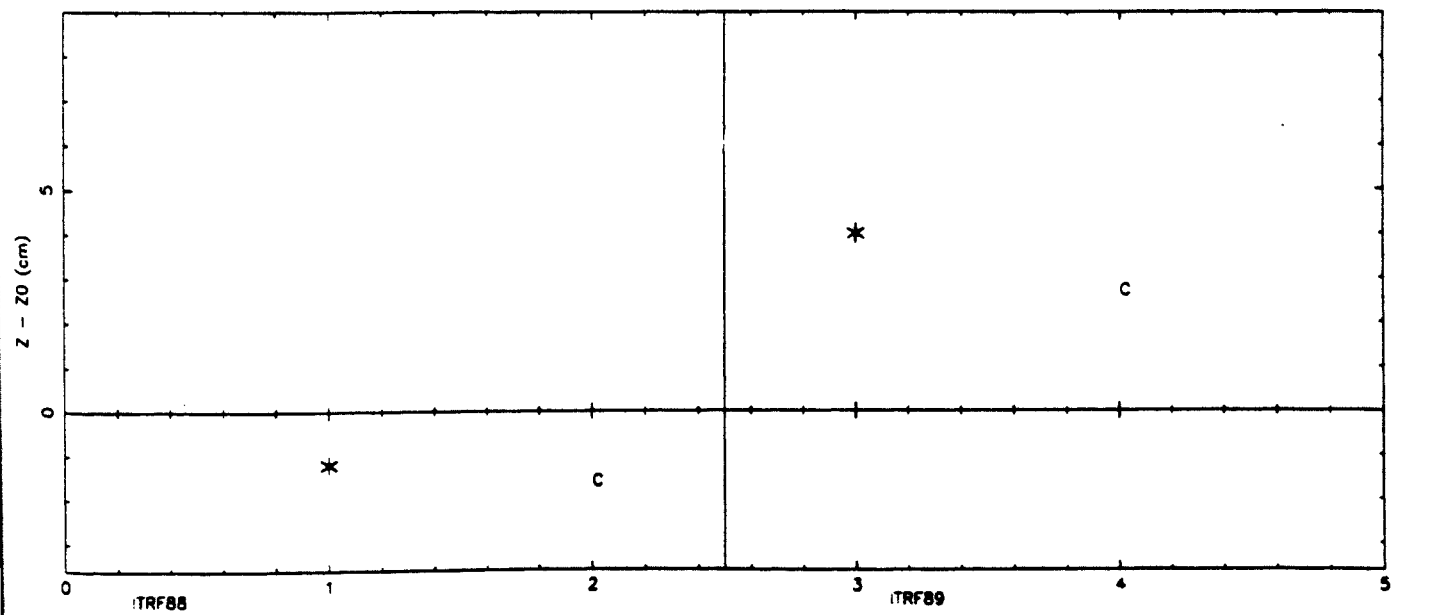
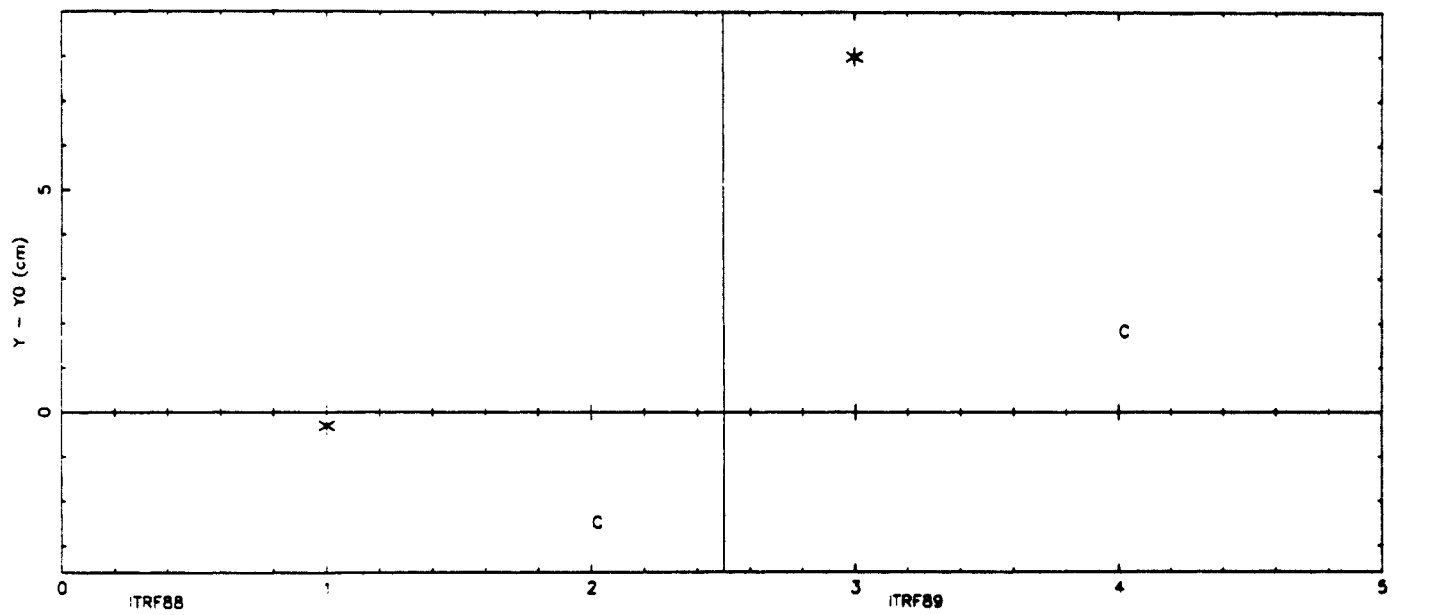
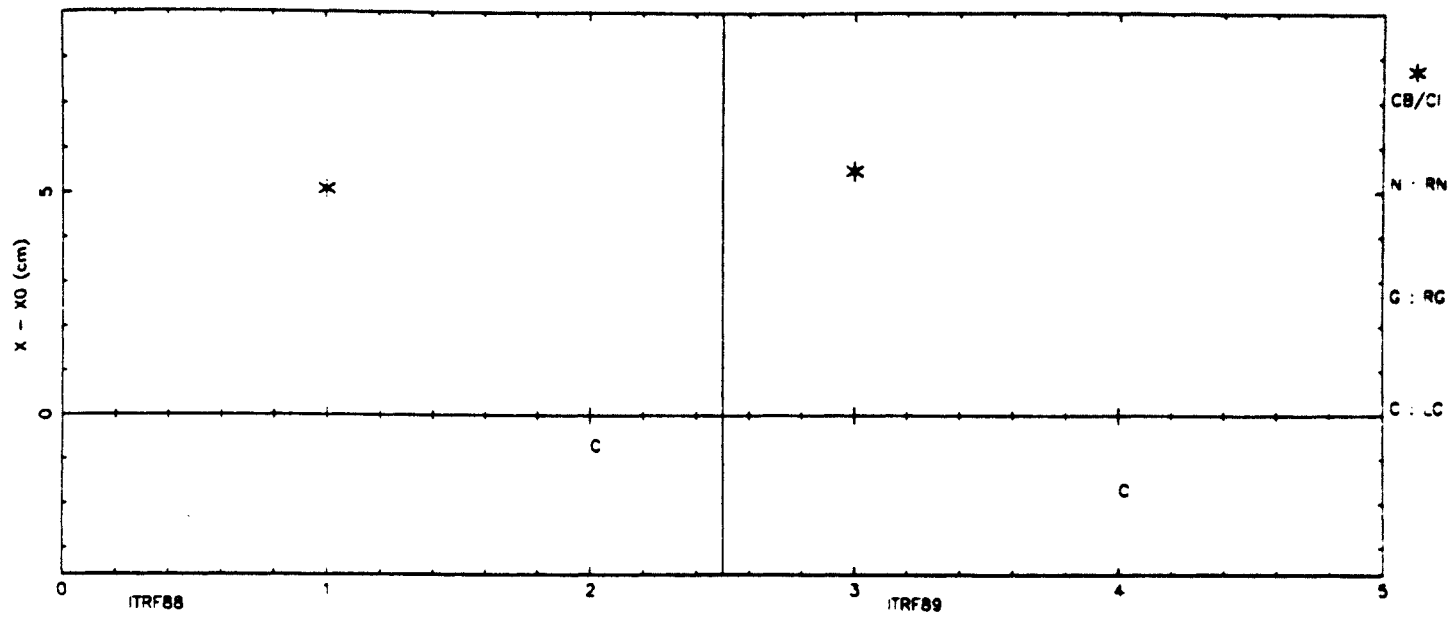


FIG. 6 FORT DAVIS SLR 7086

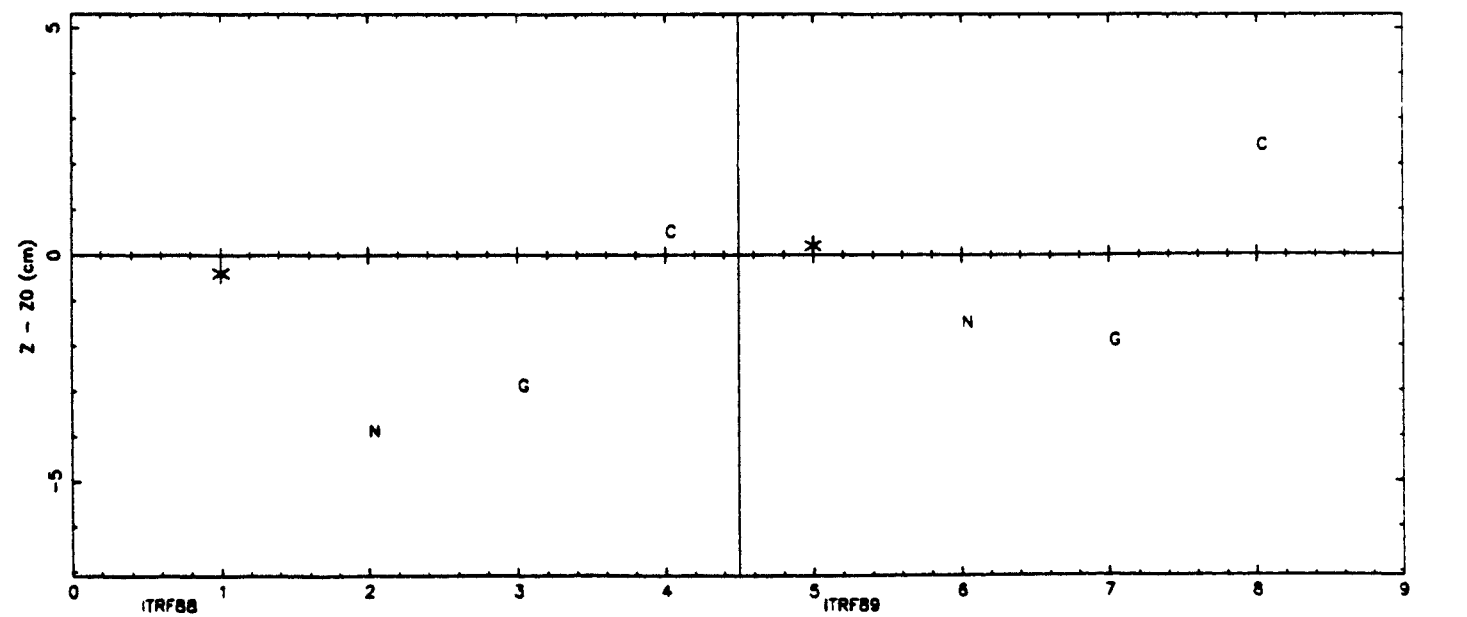
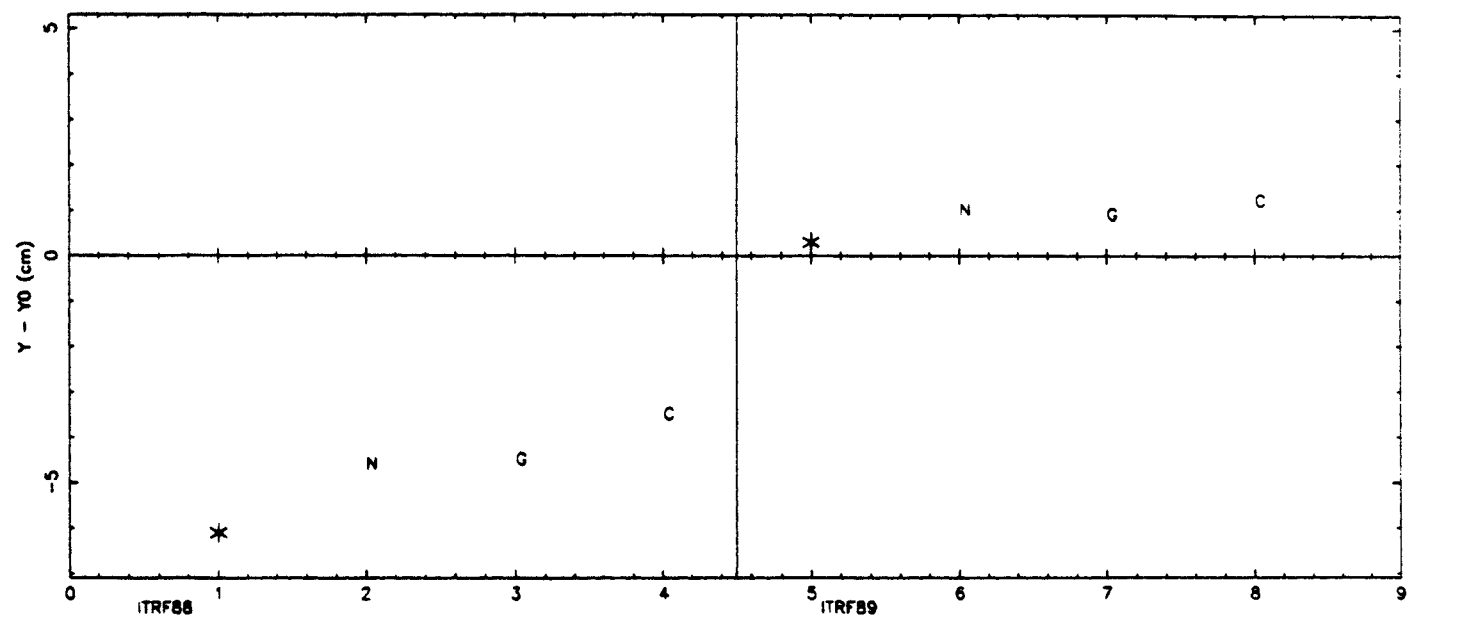
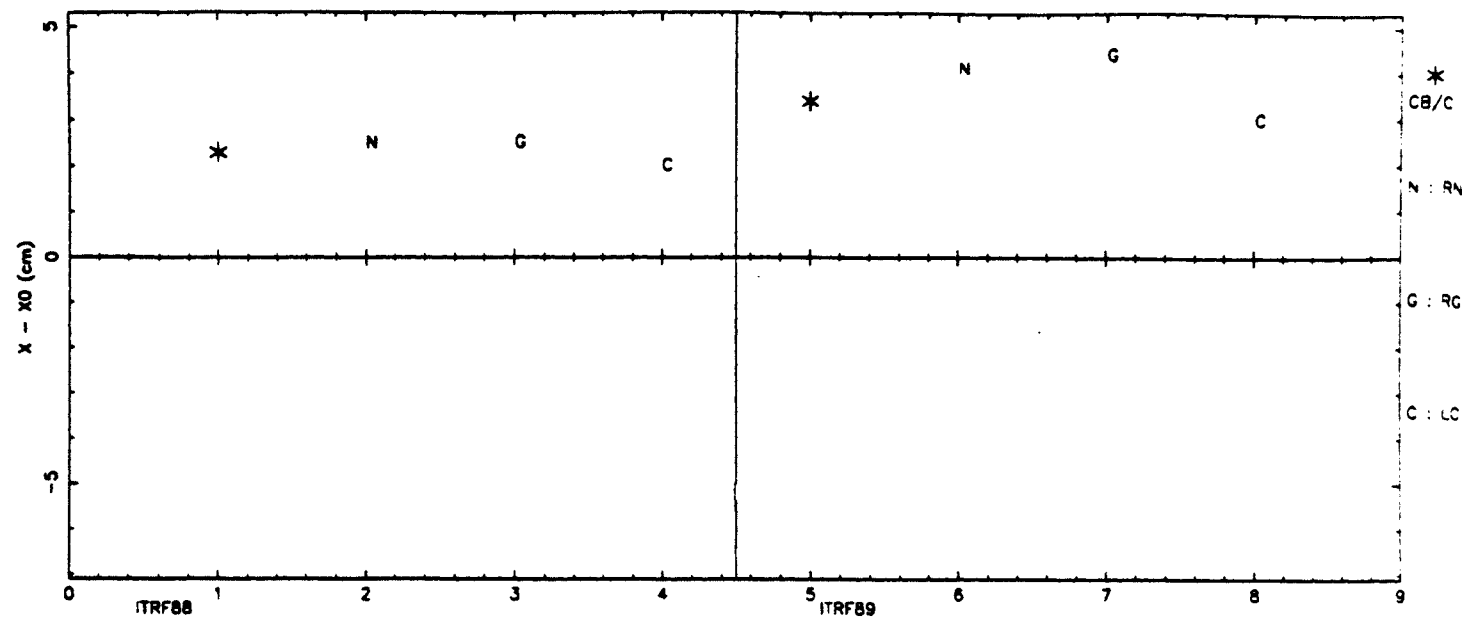


FIGURE 7
SSC(GSFC) 90 R 02/GLB628/CALC 7/

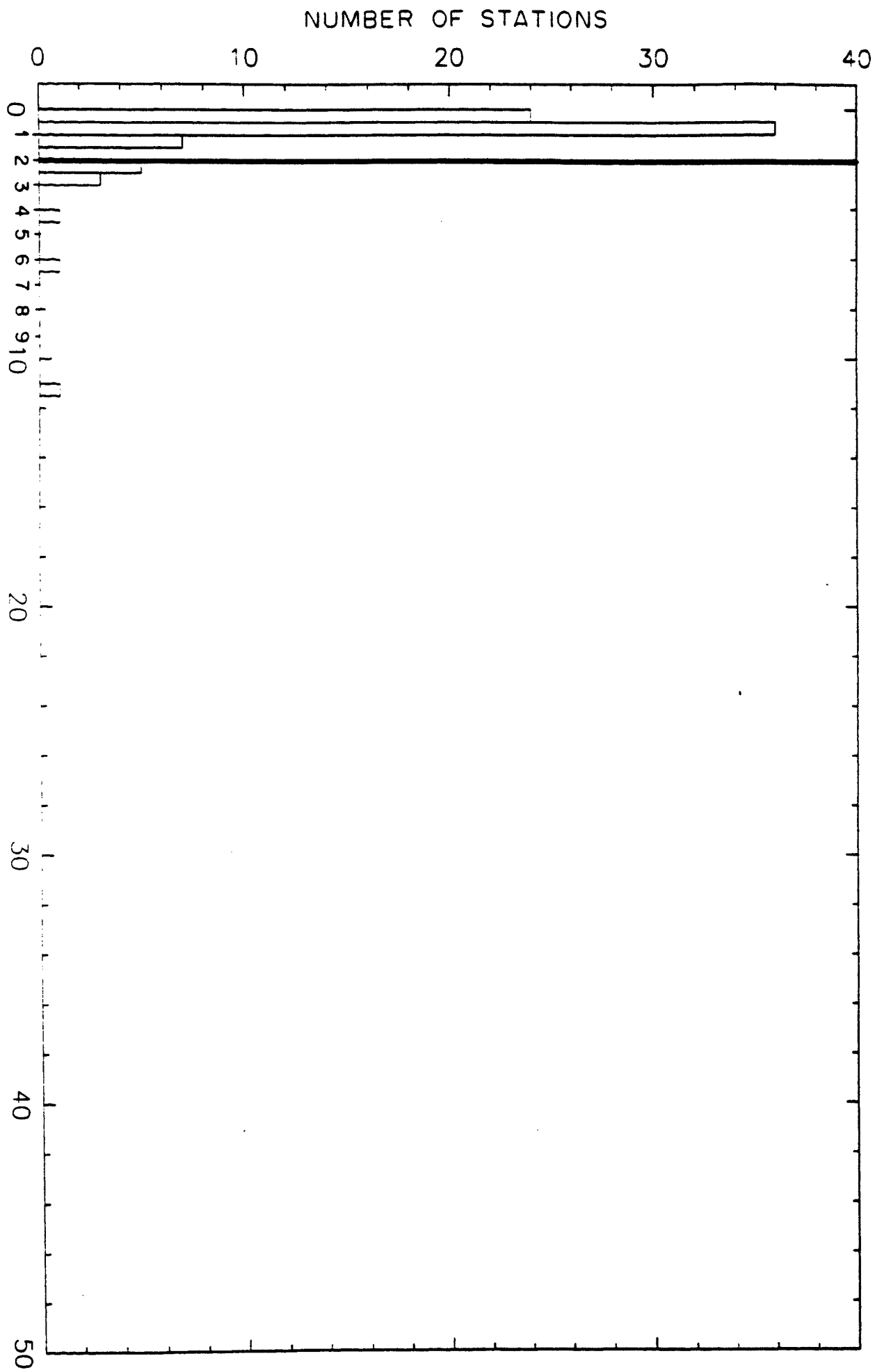


FIGURE 8
SSC(NGS) 90 R 01

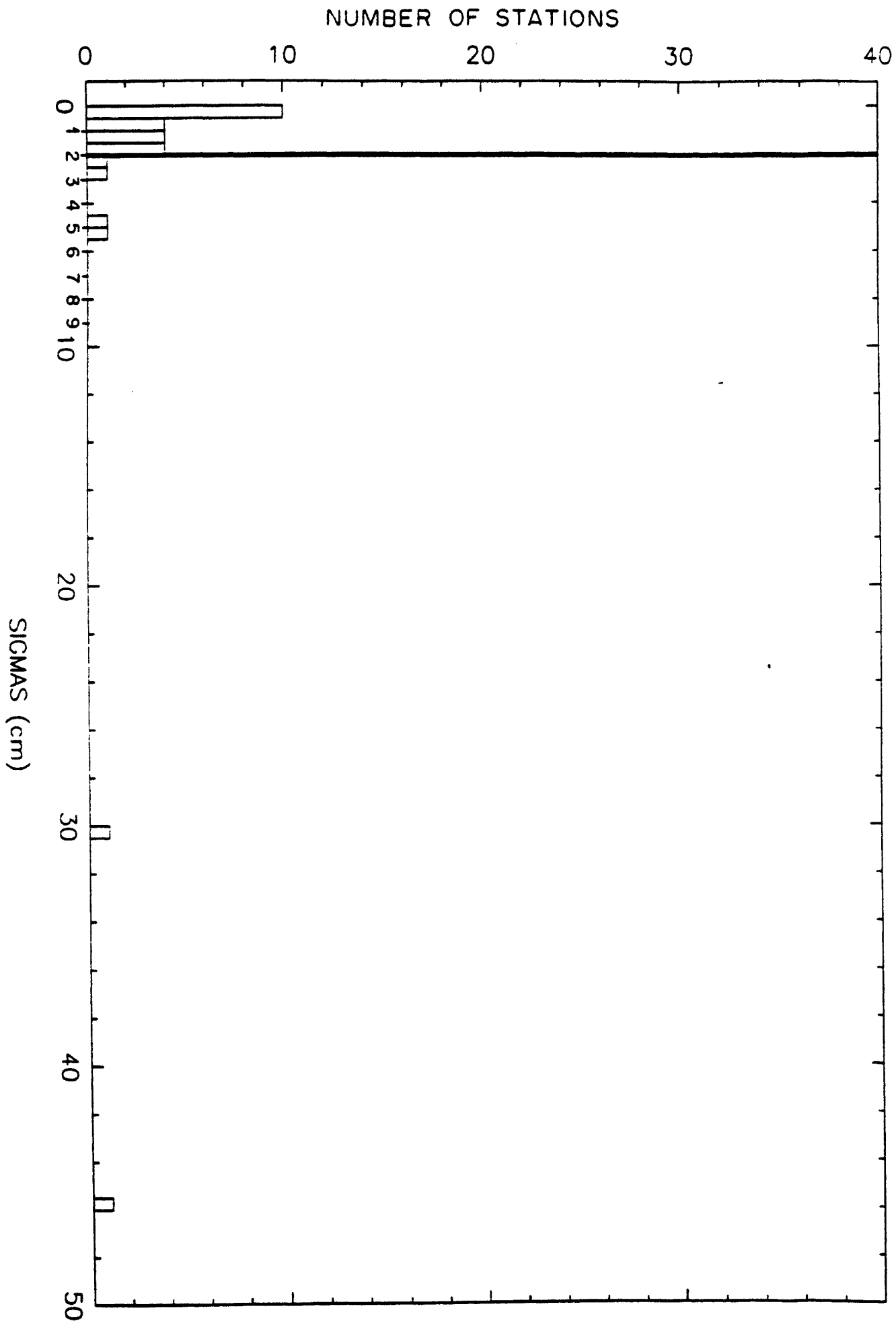


FIGURE 9
SSC(CSR) 89 L 02

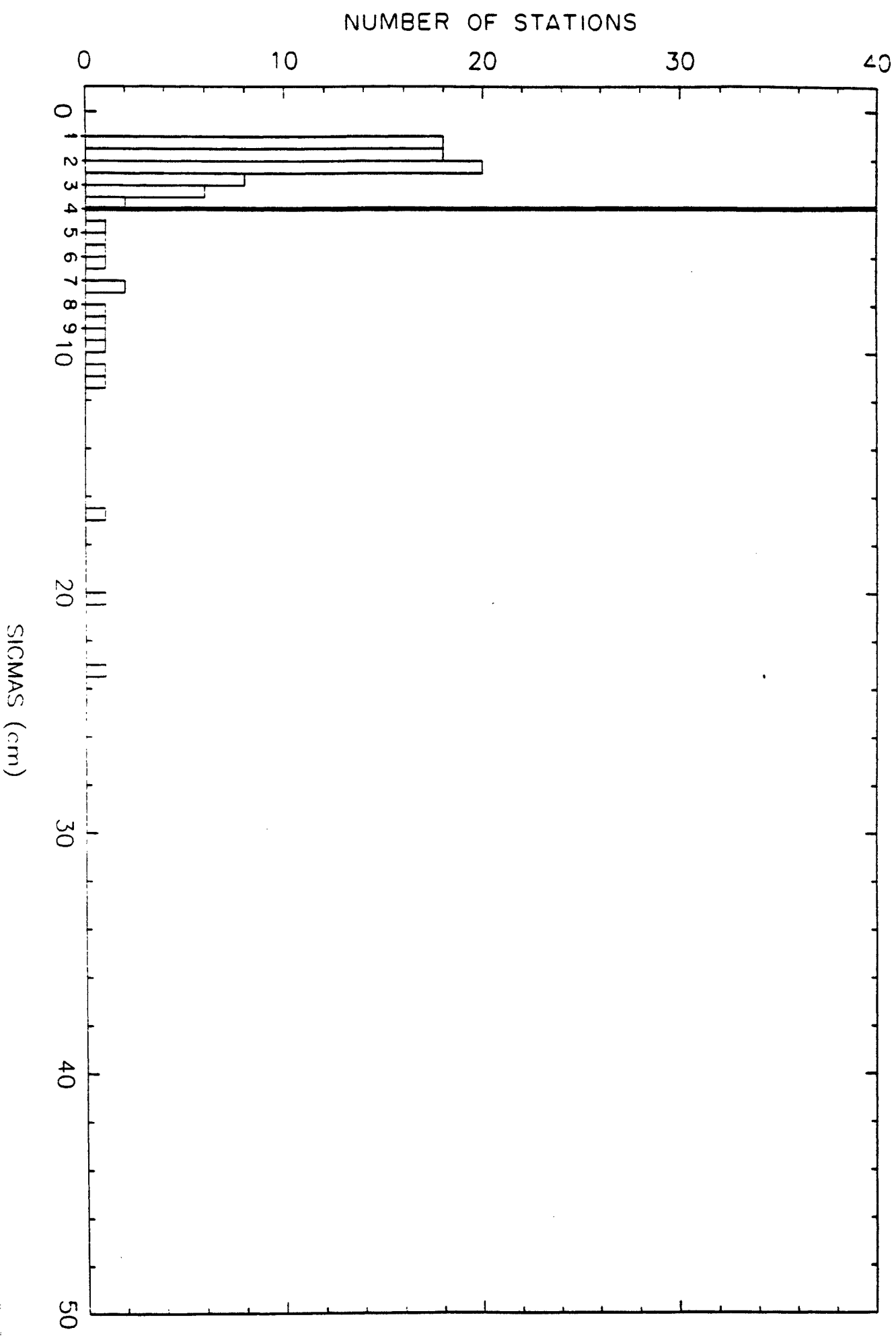
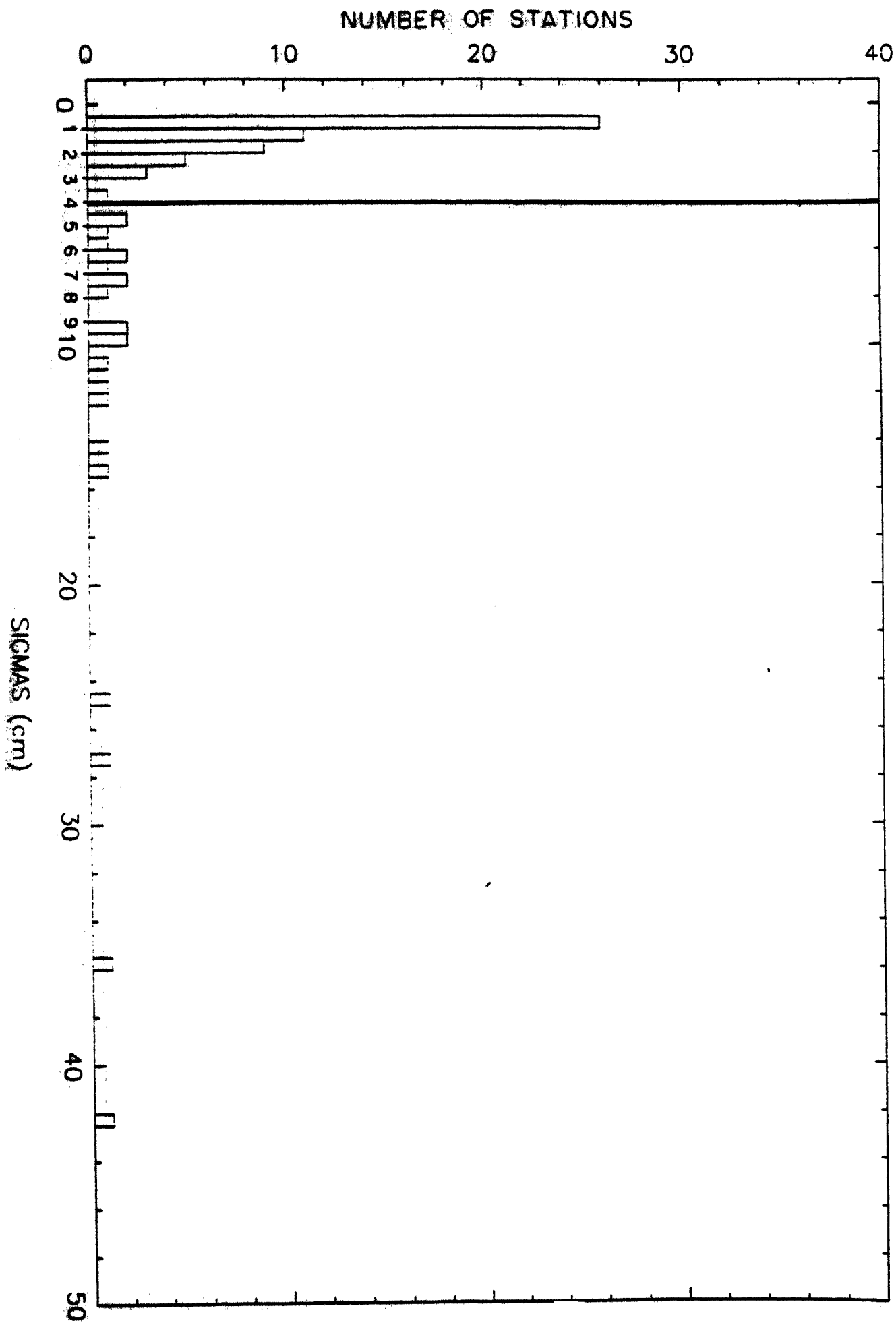


FIGURE 10
SSC(GSFC) 89 L 01 SL7.1(G4)



The quality of the results is also given by examining residuals by groups.

All residuals by site are given in Table T8 of the appendix. This Table gives residuals in meters 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, 3-D RMS mean
 NSX, 3-D RMS normalized mean
 SP, 2-D RMS mean
 SU, vertical RMS mean

with,

$$SX = \sqrt{\frac{\sum_i (RX_i^2 + RY_i^2 + RZ_i^2)}{3N}}$$

$$NSX = f \cdot \sqrt{\frac{\sum_i (NX_i^2 + NY_i^2 + NZ_i^2)}{3N}}$$

$$SP = \sqrt{\frac{\sum_i (RE_i^2 + RN_i^2)}{2N}}$$

$$SU = \sqrt{\frac{\sum_i RE_i^2}{N}}$$

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

$$f = \frac{1}{\sqrt{v_0}} \sqrt{\frac{\text{Number of degree of freedom}}{\text{Number of observations}}}$$

A summary of the quality of the various sites is given in Table 5, where can be found N, NSX, SP and SU in cm, the maximum standard deviation of ITRF89 coordinates for this site, also in cm.

A similar analysis has been done by solution. Table 6 gives the results.

In addition, one can analyze transformation parameters as given in Table T7, and also compare ITRF89 to previous solutions, such as ITRF88. This global transformation is obtained with hypotheses (6) of Table 2. The values are (from ITRF88 to ITRF89) :

T1(cm) = 0.5 (±0.4)
T2(cm) = 3.6 (±0.4)
T3(cm) = 2.4 (±0.3)
D (10-8) = -0.3 (±0.1)
R1(0.001") = -0.1 (±0.2)
R2(0.001") = 0.0 (±0.2)
R3(0.001") = 0.0 (±0.1)

Table 5

Site	N	NSX	SP cm	SU cm	Max(*) cm
-----	---	---	---	---	---
Grasse	16	0.7	2.8	3.5	1.5
Onsala	4	0.2	0.6	0.7	1.8
Metsahovi	5	1.7	28.6	34.2	2.4
Graz	8	1.4	7.6	4.3	1.6
Borowiec	2	4.3	22.8	9.1	3.4
Riga	4	2.1	30.3	28.9	3.2
Simeis	3	2.3	13.9	1.2	3.2
Dionysos	5	0.4	2.1	1.2	4.4
Askites	5	0.4	1.8	1.8	4.4
Roumelli	7	0.9	2.1	5.7	4.4
Karitza	4	0.5	2.2	1.2	2.2
Katavia	5	0.9	4.9	0.5	5.0
Xrisokalaria	5	0.5	2.2	2.0	4.5
Lampedusa	6	0.4	11.1	5.8	2.5

Bologna	9	0.6	4.4	2.7	1.7
Noto	3	0.8	2.5	2.9	2.2
Trieste	4	0.5	4.0	3.0	2.8
Cagliari	6	1.0	2.5	5.7	1.9
Matera	10	0.7	3.0	3.4	4.0
Chilbolton	2	1.0	1.7	2.6	1.9
Herstmonceux	8	0.8	3.0	4.5	1.6
Madrid	5	1.0	0.9	5.0	6.3
Kootwijk	7	1.5	7.7	6.9	3.7
Zimmerwald	8	1.4	8.0	2.5	1.6
Potsdam	7	1.3	4.9	7.3	1.9
Wettzell	16	0.8	3.1	3.9	6.4
Effelsberg	2	0.8	1.5	1.6	1.9
Bar Giyyora	2	0.4	1.2	2.1	2.9
Diyarbakir	4	0.7	6.0	2.8	2.7
Yozgat	5	0.7	3.8	2.7	2.4
Melengiclick	4	0.8	2.9	6.3	2.8
Yigilca	4	0.6	3.2	1.0	2.6
Shanghai	10	1.1	4.2	5.4	2.0
Kashima	3	0.4	1.8	1.1	2.2
Simosato	8	1.2	3.2	8.7	1.9
Helwan	5	1.7	15.2	9.9	3.2
Johannesburg	2	1.1	2.3	2.1	2.4
Algonquin	2	0.7	0.7	3.2	1.9
Pasadena	5	1.6	5.7	4.7	1.8
Goldstone	27	1.2	2.6	10.4	6.0
Fairbanks	4	0.3	1.7	3.6	1.5
Patrick AFB	2	0.5	4.6	11.7	10.7
Kauai	4	0.6	1.2	0.7	1.3
Quincy	18	1.0	4.5	2.9	3.0
Mount Hopkins	4	0.7	3.6	0.4	2.9
San Diego	8	0.6	2.2	2.8	1.4
Bear Lake	2	1.0	2.6	5.5	2.9
Owens Valley	12	0.9	3.5	3.2	1.2
Westford	14	0.7	1.7	3.8	1.2
Greenbank	4	1.9	1.3	17.5	2.1
Fort Davis	42	1.1	4.6	6.2	1.2
Maui	21	0.9	3.8	4.1	3.3
Washington	29	0.7	4.1	2.9	4.3
Hat Creek	2	0.2	0.3	0.4	1.6
Maryland Point	3	0.4	4.5	19.6	1.8
Flagstaff	5	1.7	4.4	8.0	1.8
Vernal	2	0.7	0.8	4.4	2.9
Yuma	3	0.8	3.3	0.6	1.8
Platteville	9	0.4	1.7	1.0	1.3
Monument Peak	16	0.8	2.9	2.8	4.3
Richmond	11	1.0	5.7	1.7	1.3
Mazatlan	8	0.6	1.2	3.6	1.6
Cabo San Lucas	5	1.6	3.0	10.0	1.9
Santiago de Cuba	5	2.2	13.6	9.1	2.6
Natal	2	1.8	4.8	12.5	3.4
Easter Island	6	0.5	2.5	1.9	2.0
Santiago	2	0.3	1.2	1.0	2.9
Cerro Tololo	2	0.3	1.3	0.2	2.9
Arequipa	8	1.4	4.7	6.7	1.7

Bermuda	2	0.6	5.3	6.2	6.3
Canberra	17	1.9	3.3	12.1	2.1
Yarragadee	8	1.0	5.1	3.9	4.9
American Samoa	2	0.2	0.8	0.3	2.9
Kwajalein atoll	6	0.8	3.3	1.6	1.9
Huahine	5	1.6	1.9	10.8	2.9

Max : Maximum standard deviation of ITRF89 coordinates

Table 6

Solution	N	SP	SU	WSX	NSX	(*)
RG	43	1.4	2.2	1.7	0.78	2
RN	26	2.2	9.9	2.1	0.92	2
RO	8	0.9	1.2	0.9	0.42	2
RS	5	0.9	2.2	1.4	0.43	3
RM	6	2.4	3.8	2.8	0.25	10
RJ	7	1.9	10.8	6.1	1.11	5
LC	85	9.3	12.2	4.9	1.07	4
LG	74	6.7	7.1	5.2	1.10	4
LD	23	3.5	1.9	3.0	0.68	4
LU	31	2.3	3.6	2.7	0.59	4
LZ	36	6.1	5.1	5.2	1.18	4
LS	41	6.0	6.9	4.2	0.90	4
LK	39	6.3	6.2	5.2	1.21	4
LL	24	11.6	9.6	10.8	2.02	5
MX	5	6.0	3.9	4.2	0.61	5
MJ	5	2.9	1.8	2.5	0.45	5
ME	4	12.8	19.3	14.4	2.58	5
MS	4	3.1	3.3	3.0	0.27	10

(*) : lower bound of the a priori standard deviation
for coordinates of the solution, in centimeters

References

Boucher, C., Z. Altamimi, 1990, Evolution of the realizations of the Terrestrial Reference System done by the BIH and IERS (1984-1988), IERS Technical Note n° 4, Observatoire de Paris, 1990.

IERS Annual Report for 1989, Observatoire de Paris 1990.

IERS, 1990, Earth orientation and reference frame determinations, atmospheric excitation functions, up to 1989, IERS Analysis Centers for VLBI, LLR, SLR, AAM, Technical Note N° 5, Observatoire de Paris, 1990.

APPENDIX

Tables

- T1 : List of IERS sites
- T2 : Directory of IERS stations
- T3 : Occupancies of IERS sites
- T4 : Summary of available solutions for IERS sites
- T5 : Local eccentricities for IERS colocation sites
- T6 : SSC(IERS) 90 C 01 Station coordinates in ITRF89 for epoch 1988.0
- T7 : Transformation parameters from ITRF89 to individual systems
- T8 : Residuals and statistics
- T9 : Samples of 1989 realizations for ITRS

Table T1
List of IERS sites

DOMES Number	Name	Country	Long. d m		Lat. d m		Plate	Status
10002	GRASSE	France	6	55	43	45	EUR A	PC
10004	BREST	France	355	30	48	24	EUR A	S
10302	TROMSO	Norway	18	56	69	40	EUR A	S
10402	ONSALA	Sweden	11	55	57	24	EUR A	P
10405	MARTSBO	Sweden	17	16	60	36	EUR A	S
10503	METSAHOVI	Finland	24	23	60	13	EUR A	S
11001	GRAZ	Austria	15	30	47	04	EUR A	P
12205	BOROWIEC	Poland	17	04	52	17	EUR A	S
12302	RIGA	URSS	24	04	56	57	EUR A	S
12337	SIMEIS-KATZIVELY	URSS	33	58	44	24	EUR A	S
12602	DIONYSOS	Greece	23	56	38	05	EUR A	S
12612	ASKITES	Greece	25	34	40	56	EUR A	S
12613	ROUMELLI	Greece	24	42	35	24	EUR A	P
12614	KARITSA	Greece	20	40	39	44	EUR A	S
12615	KATAVIA	Greece	27	47	35	57	EUR A	S
12616	XRISOKALARIA	Greece	21	53	36	47	EUR A	S
12706	LAMPEDUSA	Italy	12	34	35	31	EUR A	S
12711	BOLOGNA	Italy	11	21	44	29	EUR A	PC
12717	NOTO	Italy	14	59	36	53	EUR A	S
12718	TRIESTE	Italy	13	53	45	39	EUR A	P
12725	CAGLIARI	Italy	9	00	39	08	EUR A	S
12734	MATERA	Italy	16	37	40	42	EUR A	P
13201	CHILBOLTON	UK	358	37	51	11	EUR A	S
13212	HERSTMONCEUX	UK		21	50	52	EUR A	P
13296	CARNUTSY	UK	357	13	56	29	EUR A	S
13407	MADRID	Spain	355	44	40	26	EUR A	P
13504	KOOTWIJK	Netherlands	5	49	52	11	EUR A	S
13506	WESTERBORK	Netherlands	6	36	52	55	EUR A	S
14001	ZIMMERWALD	Switzerland	7	28	46	53	EUR A	P
14005	MONTE GENEROSO	Switzerland	9	01	45	56	EUR A	S
14106	POTSDAM	GDR	13	04	52	23	EUR A	P
14201	WETTZELL	FRG	12	53	49	09	EUR A	PC
14202	HOHENBUNSTORF	FRG	10	29	53	03	EUR A	S
14209	EFFELSBERG	FRG	6	53	50	32	EUR A	S
20702	BAR GIYYORA	Israel	35	05	31	43	AFRC	P
20801	DIYARBAKIR	Turkey	40	12	37	55	EUR A	S
20802	YOZGAT	Turkey	34	49	39	48	EUR A	S
20803	MELENGICLICK	Turkey	33	11	37	23	EUR A	S
20804	YIGILCA	Turkey	31	26	40	56	EUR A	S
21602	WUHAN	China	114	20	30	32	EUR A	S
21605	SHANGHAI	China	121	26	31	01	EUR A	PC
21701	KASHIMA	Japan	140	40	35	57	NOAM	P
21709	OKINAWA	Japan	127	43	26	08	EUR A	S
21725	NOBEYAMA	Japan	138	28	35	56	EUR A	S
21726	SIMOSATO	Japan	135	56	33	34	EUR A	P
21732	CHICHIJIMA	Japan	142	13	27	06	EUR A	S
21733	MINAMI TORI SHIMA	Japan	153	59	24	17	PCFC	S

21735	TSUSHIMA	Japan	129	25	34	24	EUR	S
21736	ISHIGAKI SHIMA	Japan	124	10	24	21	EUR	S
30101	HELWAN	Egypt	31	21	29	52	AFRC	S
30302	JOHANNESBURG	S. Africa	27	42	-25	53	AFRC	P
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
40127	YELLOWKNIFE	Canada	245	32	62	29	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	NOAM	P
40407	PINYON FLATS	USA	243	33	33	26	PCFC	S
40408	FAIRBANKS	USA	212	29	64	58	NOAM	P
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	NOAM	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	P
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	SEATTLE	USA	237	45	47	41	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

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
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
42202	AREQUIPA	Peru	288	30	-16	28	SOAM	P
42501	BERMUDA	UK	295	21	32	21	NOAM	S
43602	GRAND TURK	Bahama Is.	288	42	21	28	SOAM	S
50103	CANBERRA	Australia	148	59	-35	35	INDI	PC
50107	YARRAGADEE	Australia	115	25	-29	05	INDI	P
50116	HOBART	Australia	147	26	-42	48	INDI	S
50503	AMERICAN SAMOA	USA	189	17	-14	20	PCFC	S
50505	KWAJALEIN ATOLL	USA	167	29	9	24	PCFC	SC
92202	HUAHINE	France	208	58	-16	44	PCFC	P

P: Primary

S: Secondary

C: Colocation

Table T2

DIRECTORY OF IERS STATIONS

DOMES Number	Site	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
10004	Brest		
M002		7604	Mobile VLBI mark 1989
10302	Tromso		
M001			Trig. point (N 5481)
M002		7602	Mobile VLBI mark 1989
10402	Onsala		
M003			NLS Mark 761331 (S7331)
S001		7212	VLBI ref. pt. ONSALA85
S002		7213	VLBI ref. pt. ONSALA60
10503	Metsahovi		
M001			Mark (SF 348)
M002		7601	Mobile VLBI mark 1989
S001		7805	SLR IAR
11001	Graz		
M001			Mark (A171)
S002		7839	SLR IAR
12205	Borowiec		
S001		7811	SLR IAR
12302	Riga		
S002		1884	SLR IAR
12337	Simeis - Katzively		
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	7520	Mark SLR 7520
M001			
12615	Katavia	7512	Mark SLR 7512
M001			
12616	Xrisokalaria	7525	Mark SLR 7525
M001			
12706	Lampedusa	7544	Mark SLR 7544
M001			
12711	Bologna		Pillar
M001			
M002		7546	Mark SLR 7546
S001		7230	Radiotelescope ref. pt.
12717	Noto		
S001		7547	Radiotelescope ref. pt.
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)
M004		7541	Mark SLR 7541 "C"
M005		7540	Mark SLR 7540 "B"
S001		7939	SLR IAR
13201	Chilbolton		
S002		7215	25m radiotelescope ref. pt.
13212	Herstmonceux		
M002			Primary pillar (GB 481)
S001		7840	SLR IAR
13296	Carnusty		
M001		7603	Mobile VLBI mark 1989
13407	Madrid		
S001		1563	64m antenna DSS63
S003		1561	26(34) antenna DSS61
S010		1565	34m antenna DSS65
13504	Kootwijk		
M001			Perm. mark 1980
M002		8833	Monument MTLRS 1984
S001		7833	SLR IAR (NL 233)

14001	Zimmerwald		
M001			Mark (CH 99)
S001		7810	SLR IAR
14005	Monte Generoso		
M001			Mark (CH 65)
M002		7590	Mark SLR
14106	Potsdam		
M001			Pillar tour Helmert
S001		1181	SLR IAR
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 mark
M007		7599	SLR mark
S004		7224	VLBI Ref. Point
S002		7834	SLR IAR
14202	Hohenbunstorf		
M002		7600	Mobile VLBI mark 1989
14209	Effelsberg		
M001			Control network mark
S001		7203	100m radiotelescope ref. pt.
20702	Bar Giyyora		
M001		7530	SLR mark 7530
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.

21701	Kashima		
M001			Metal station mark (Denken 1)
S001		1856	VLBI 26m antenna
21709	Okinawa		
S001		7301	SLR IAR HTLRS-1
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
21732	Chichijima		
S002		7844	SLR IAR HTLRS-1
21735	Tsushima		
S001		7302	SLR IAR HTLRS-1
21736	Ishigaki-shima		
S001		7307	SLR IAR HTLRS-1
30101	Helwan		
S001		7831	SLR IAR fixed
30302	Johannesburg		
S001		7232	26m VLBI antenna ref. pt.
40104	Algonquin		
S001		7282	46m VLBI antenna ref. pt.
40105	Penticton		
M001		7283	Mobile VLBI mark 7283
40118	Whitehorse		
M001		7284	Mobile VLBI mark 7284
40127	Yellowknife		
M001		7285	Mobile VLBI mark
40400	Pasadena		
M001		7896	Mark SLR (JPL aries 2 1975)
M003		7263	Mobile VLBI Mark
M005		7265	Mobile VLBI MARK
M006		7272	Mobile VLBI mark (JPL MV3 1983)
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
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)
40406	San Francisco (presidio)		
M001		7252	Mobile VLBI mark
40407	Pinyon Flats		
M001		7256	Mobile VLBI mark (NCMN 1981)
40408	Fairbanks		
S001			26m antenna ref. pt.
S002		7225	26m VLBI ref. point (GILMORE CREEK)
40410	Point Reyes		
M001		7251	Mobile VLBI mark
40412	Austin		
M001		7890	Mark SLR 7890
M002			Austin monument
M003		7271	Mobile VLBI mark
40416	Yakataga		
M001		7277	Mobile VLBI mark
40417	Patrick AFB		
M001		7081	Mark SLR
M002		7069	Mark SLR
40419	Kodiak		
M001		7278	Mobile VLBI mark
40420	Vandenberg		
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)
40421	Nome		
M001		7279	Mobile VLBI mark
40423	Sandpoint		
M001		7280	Mobile VLBI mark
40424	Kauai		
S001		1311	9m VLBI ref. point

40425	Sourdough		
M001		7281	Mobile VLBI mark
40427	Fort Ord		
M001		7266	Mobile VLBI mark (NCMN 1981)
M002		7241	Mobile VLBI mark
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
M002		7109	MOBLAS 7109 (1981) Standard NASA disk
M006		7260	Quincy ARIES 1979
M005		7886	TLRS 7886 (1982) standard NASA disk
M004		7221	TLRS and VLBI standard NASA disk
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)
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
S002		7205	37m VLBI ref. point of radio telescope
S003		7209	18m VLBI ref. point of radio telescope

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 (Harvard 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)
40445	Maui		
M001		7210	HOLLAS fixed carriage bolt
M002		7120	MOBLAS 7120 (1980)
S005			LLR Haleakala transmitter
S002			LLR Haleakala midpoint
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 standard 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	7292	Mobile VLBI mark
M001			
40455	Miles City	7038	Mobile VLBI mark
M001			
40456	Pietown	7234	VLBA antenna
S001			
40457	Seattle	7229	Mobile VLBI mark
M001			
40489	Hat Creek		Mark NCMN B
M001		7218	26m VLBI ref. point of radio telescope
S001			
40490	Maryland Point	7217	(26m) 85-foot radiotelescope
S001			
40491	Flagstaff	7891	Mark SLR (RMT N 4 1981)
M002		7261	Mobile VLBI mark
M003			
40492	Vernal	7892	Mobile SLR and VLBI mark (NCMN 1981)
M001		7290	Mobile SLR and VLBI mark (NCMN 1985)
M002			
40493	Yuma	7894	Mobile SLR and VLBI mark
M001			
40496	Platteville	7258	NCMN 1981 mobile VLBI NGS station disk
M002		7112	Moblas 7112-1980 standard NASA disk
M001			
40497	Monument Peak	7110	ORT station 7110-1981 standard NASA disk
M001		7220	ARIES ORION STA 7220-1981
M002		7274	NCMN 1983 mobile VLBI NGS disk
M003			
40499	Richmond		Timer 1962
M001		7295	Mark SLR
M002		7219	65 foot VLBI antenna
S001			
40504	Mazatlan	7122	MOBLAS 7122-1983 standard NASA disk
M001			
40505	Cabo San Lucas	7882	Mark SLR 7882 1983
M001			
40506	Ensenada	7883	SLR mark 7883
M001			
40701	Santiago de Cuba	1953	SLR IAR
S001			

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
41706	Cerro Tololo		
M001		7401	Mark SLR
42202	Arequipa		
M002			Satellite mark 1961
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-orroral		
M103			Stromlo PZT4
M106		7843	Orroral center ground mark 7843
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
50107	Yarragadee		
M001		7090	MOBLAS 7090 brass disk
50116	Hobart		
S002		7242	VLBI antenna ref. pt.
50503	American Samoa		
M001		7096	Mark SLR
50505	Kwajalein Atoll		
M001		7092	Mark SLR
S003		4968	Tardex 26m antenna ref. pt.
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

Table T3

Occupancies of IERS sitesColocation

DOMES Number	Site	1	2	CDP Number	Years of occupancy
40412	Austin				
M001		L	T	7890	80,81
M003		R	T	7271	87
42501	Bermuda				
M001		L	T	7067	75-76,78
M002		R	T	7294	87
12711	Bologna-Medicina				
S001		R	P	7230	87-
M002-S003		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-
S007		L	P	7843	85-
S003		L	P	7943	76-82
40491	Flagstaff				
M003		R	T	7261	84,85,86,87,88
M002		L	T	7891	81
40442	Fort Davis-McDonald				
S003		R	P	7216	80-
M008		R	T	7850	88
M009		R	T	7900	88
S014		M	P	7080	88-
S001		M	P	7086	82,85,86,87,88
S002		M	P	7206	69-85
M006-S014		L	P	7080	88-
M001-S001-S016		L	P	7086	79,80,82,85,86,87,88
M005		L	T	7885	82

1 : Type of technique (L,M,R)

2 : Permanent or Temporary occupancy

40405	Goldstone-Mojave			
S003		R	P	1512
S014		R	P	1513 79-
S001		R	P	1514 78-
S019		R	P	7231 88-
S009		R	P	7222 83-
M013		R	T	7288 88
M001		L	T	7085 78
M002		L	T	7115 79-81
M006		L	T	7265 84
M013-S023		L	T	7288 88,89,90
10002	Grasse			
M003		R	T	7605 89
S002		M	P	7845 79-
S001		L	P	7835 79-
40440	Haystack-Westford			
S002		R	P	7205 76-
S003		R	P	7209 81-
M001-S015		L	T	7091 78,79,80,88
50505	Kwajalein Attol			
S003		R	P	4968 84,85,86
M001		L	T	7092 79-80
40445/40424	Maui/Kokee Park			
/S001		R	P	1311 84-
M002		R	T	7120 88
S005-S002		M	P	7210 76-
M002		L	T	7120 80,81
M001		L	P	7210 79-
10503	Metsahovi			
M002		R	T	7601 89
S001		L	P	7805 78-
40497/40436	Monument Peak/San Diego-Otay Mountain			
M002		R	T	7220 81,82,83
M003		R	T	7274 84,85,86,87
M001-S001-S002-S003		L	P	7110 81-
M002		L	T	7220 83-85
M003		L	T	7274 85
/M003-S008		L	T	7035 88
/M002		L	T	7062 76,77,78,79,81,83,84
40439	Owens Valley			
S002		R	P	7207 76-
M004		R	T	7853 87
M003		L	T	7084 78
M001		L	T	7114 79,80,81,82
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
40496 Platteville			
M002	R T	7258	83,84,85,86,87,88,89
M001-S004	L T	7112	81-84,88,90
40433 Quincy			
M004	R T	7221	82,83,84,85,86,87,88,89
M006	R T	7260	79
M001	L T	7051	76,79,81
M002-S006-S014	L P	7109	81-
M005	L T	7886	83,84
40499 Richmond			
S001	R P	7219	83-
M002-S010	L T	7295	88
21605 Shanghai			
S008	R P	7226	86-
S009	R P	7227	88-
S001	L P	7837	83-
40420 Vandenberg			
M001	R T	7111	81,83
M002	R P	7223	83-
M001	L T	7111	82
M004	L T	7887	83
40492 Vernal			
M002	R T	7290	86,87,88,89
M001	L T	7892	81,82
40451/40490 Washington/Maryland Point			
/S001	R P	7217	82-
M102	R T	7102	89
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-S101-S135-S147-S148	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
M121	L T	7919	85-87
M117	L T	7920	85-89
M118	L T	7889	82-85

M111		L	T	7899	80
14201	Wettzell				
S004		R	P	7224	83-
S002		L	P	7834	78-
M003		L	T	7595	
M004-S010		L	T	7596	85
M005		L	T	7597	85
M006		L	T	7598	
M007		L	T	7599	84
40493	Yuma				
M002		R	T	7273	81
M001		R	T	7894	83,84,85,86,87,88
M001		L	T	7894	83

Multiple SLR

12602	Dionysos				
S001		L	P	7940	84-
M002-S008-S009-S010		L	T	7515	86
41703	Easter island				
M001		L	T	7061	83,84
M002		L	T	7097	87,88
92202	Huahine				
M002		L	T	7121	83-86
M003		L	T	7123	87-
13504	Kootwijk				
S001		L	P	7833	79-84
M002		L	T	8833	84
12734	Matera				
S001		L	P	7939	83-
M004		L	T	7541	86
M005		L	T	7540	86
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
12337	Simeis - Katzively				
S003		L	P	1873	76-
S006		L	P	1893	76-

Single SLR

50503	American Samoa				
M001		L	T	7096	79-80
42202	Arequipa				
S001		L	P	7907	76-
12612	Askites				
M001-S001-S002-S003-S004		L	T	7510	86,87,89
20702	Bar Giyyora				
M001		L	P	7530	85-
40438	Bear Lake				
M001		L	T	7082	76,79
12205	Borowiec				
S001		L	P	7811	76-83,88-
40505	Cabo San Lucas				
M001		L	T	7882	84,88
12725	Cagliari				
M002-S011		L	T	7545	85,88,90
41706	Cerro Tololo				
M001		L	T	7401	84,90
21732	Chichijima				
S002		L	T	7844	88
20801	Diyarbakir				
M001-S002		L	T	7575	87,89
40506	Ensenada				
M001		L	T	7883	89
11001	Graz				
S002		L	P	7839	83-
30101	Helwan				
S001		L	P	7831	84-
13212	Herstmonceux				
S001		L	T	7840	83-
21736	Ishigaki-shima				
S001		L	T	7307	88
12614	Karitsa				
M001		L	T	7520	86,89

12615	Katavia				
M001-S001-S002-S003		L	T	7512	86,87,89
12706	Lampedusa				
M001-S002		L	T	7544	87,89
40504	Mazatlan				
M001-S001		L	P	7122	83-
20803	Melengiclick				
M001-S002		L	T	7580	87,89
41604	Natal				
S001		L	P	7929	76-81
21709	Okinawa				
S001		L	T	7301	89
14106	Potsdam				
S001		L	P	1181	74-
12302	Riga				
S002		L	P	1884	76-
12613	Roumelli				
M001-S001-S002-S003-S004		L	T	7517	86,87,89
41705	Santiago				
M001		L	T	7400	84
40701	Santiago de Cuba				
S001		L	P	1953	76-
21726	Simosato				
S001		L	P	7838	82-
12718	Trieste				
M002-S002		L	T	7550	86,89
21735	Tsushima				
S001		L	T	7302	89
21602	Wuhan				
S003		L	P	7236	88-
12616	Xrisokalaria				
M001-S001-S002-S003-S004-S005		L	T	7525	86,87,89
50107	Yarragadee				
M001-S001-S004		L	P	7090	79-

20804	Yigilca				
M001		L	T	7587	87,89

20802	Yozgat				
M001-S002		L	T	7585	87,89

14001	Zimmerwald				
S001		L	P	7810	84-

Multiple VLBI

40432	Ely				
M001		R	T	7286	85,86,87,88,89
M002		R	T	7257	83,84

40427	Fort Ord				
M001		R	T	7266	81,83,84,85,87,88
M002		R	T	7241	88,89

40441	Greenbank				
S001		R	P	7204	76-82
S004		R	P	7214	89-

13407	Madrid				
S003		R	P	1561	83-
S005		R	P	1562	
S001		R	P	1563	79
S010		R	P	1565	88-

40404	Pearblossom				
M001		R	T	7254	83,84,85,87,88
M002		R	T	7253	76,77,81,83

Single VLBI

40104	Algonquin				
S001		R	P	7282	84-

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

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
40408	Fairbanks				
S002		R	P	7225	84-
40489	Hat Creek				
S001		R	P	7218	83-
50116	Hobart				
S002		R	P	7242	89-
14202	Hohenbunstorf				
M002		R	T	7600	89
30302	Johannesburg				
S001		R	P	7232	87-
21701	Kashima				
S001		R	P	1856	84-
40419	Kodiak				
M001		R	T	7278	84,85,86,87,88
40454	Leonard				
M001		R	T	7292	87
40437	Mammoth Lakes				
M001		R	T	7259	83,84,86
40455	Miles City				
M001		R	T	7038	88
21725	Nobeyama				
S001		R	P	7244	89-
40421	Nome				
M001		R	T	7279	84,85,86
12717	Noto				
S001		R	P	7547	89-
40449	Ocotillo				
M001		R	T	7270	83,84,85

10402	Onsala				
S002		R	P	7213	77-
40403	Palos Verdes				
M001		R	T	7268	80,81,83,85,87,88,89
40105	Penticton				
M001		R	T	7283	84,85
40456	Pietown				
S001		R	T	7234	89
40407	Pinyon Flats				
M001		R	T	7256	81,83,84,85,86,87,88
40410	Point Reyes				
M001		R	T	7251	81,83,84,85,87,88
40423	Sandpoint				
M001		R	T	7280	84,85,86,87,88
40406	San Francisco (Presidio)				
M001		R	T	7252	81,83,84,85,87,88
40428	Santa Paola				
M001		R	T	7255	81,83,84,85,87,88,89
40457	Seattle				
M001		R	T	7229	87,88
40425	Sourdough				
M001		R	T	7281	84,85,86,87,88
10302	Tromso				
M002		R	T	7602	89
40118	Whitehorse				
M001		R	T	7284	84,85,86,88
40416	Yakataga				
M001		R	T	7277	84,85,86,87,88
40127	Yellowknife				
M001		R	T	7285	84,85

Table T4

Summary of available solutions for IERS sites

R : 1 SSC(NGS) 90 R 01, AM0-2 1988
 2 SSC(GSFC) 90 R 02, estimation 1979-1992 GLB628/CALC-7
 3 SSC(USNO) 90 R 01, AM0-2, 17/10/1980
 4 SSC(JPL) 90 R 02, AM0-2, 1988
 5 SSC(SO) 88 R 01 -
 6 SSC(NAOMZ) 89 R 01, AM0-2 1984

 M : 1 SSC(JPL) 90 M 01, AM0-2 1988
 2 SSC(UTXMO) 90 M 01, AM0-2 1984
 3 SSC(CERGA) 89 M 01, - 10/87 - 03/89
 4 SSC(SO) 86 M 01, - 1984

 L : 1 SSC(CSR) 89 L 02, AM1-2 1988
 2 SSC(GSFC) 89 L 01, AM0-2 1983
 3 SSC(GAOUA) 90 L 01, AM0-2 1988
 4 SSC(ZIPE) 90 L 01, AM0-2 1988
 5 SSC(SO) 90 L 01, AM0-2 1989
 6 SSC(DGFII) 89 L 03, estimation 1983-1986
 7 SSC(DUT) 90 L 01, estimation 1986
 8 SSC(LPAC) 90 L 01, AM0-2 1984

SITE	DOMES NUMBER	CDP NUM.	R 123456	M 1234	L 12345678
Algonquin	40104 S001	7282	R12		
American Samoa	50503 M001	7096			L12
Arequipa	42202 S001	7907			L12345678
Askites	12612 M001	7510			L12 567
Austin	40412 M001 M003	7890 7271	R 2		L 2
Bar Giyyora	20702 M001	7530			L12
Bear Lake	40438 M001	7082			L12

Bermuda	42501 M001 7067 M002 7294 R 2	L12	
Black Butte	40430 M001 7269 R 2		
Bloomington	40452 M001 7291 R 2		
Bologna-Medicina	12711 S001 7230 R123 M002 7546	L1 345	A A
Brest	10004 M002 7604 R 2		
Browiec	12205 S001 7811	L 45	
Cabo San Lucas	40505 M001 7882	L12345 8	
Cagliari	12725 M002 7545	L12345 7	
Canberra-Orroral -Tidbinbilla	50103 S005 1542 R 4 S001 1543 R 4 S006 1544 R S010 1545 R12 4 S007 7843 S003 7943	 L12 5 7 L12	 B B A B A A
Carnusty	13296 M001 7603 R 2		
Carrollton	40453 M001 7228 R 2		
Cerro Tololo	41706 M001 7401	L12	
Chichijima	21732 S002 7844	L 4	
Chilbolton	13201 S002 7215 R12		
Deadman Lake	40431 M001 7267 R 2		
Dionysos	12602 M002 7515	L12 567	

	S001 7940		L1	
Diyarbakir	20802			
	M001 7575		L12 5 7	
Easter Island	41703			
	M001 7061		L12	
	M002 7097		L1234 78	
Effelsberg	14209			
	S001 7203 R12			
Ely	40432			
	M001 7286 R 2			
	M002 7257 R 2			
Ensenada	40506			
	M001 7883		L 3	
Fairbanks	40408			
	S002 7225 R123 6			
Flagstaff	40491			
	M003 7261 R 2			A
	M002 7891		L12	A
Fort Davis -McDonald	40442			
	S003 7216 R12 56			A B
	M006 7080	M1234	L12345 78	B
	M001 7086	M1234	L12345678	A
	S002 7206	M12		A
	M005 7885		L12	A
	M009 7900 R 2			B
	M008 7850 R 2			A
Fort Ord	40427			
	M001 7266 R 2			
	M002 7241 R 2			
Goldstone-Mojave	40405			
	S003 1512 R 4			
	S014 1513 R 2 4			C
	S001 1514 R 4			
	S019 7231 R 2 4			B
	S009 7222 R123			A B
	M013 7288 R 2		L12345	A
	M001 7085		L12	B
	M002 7115		L12	B C
	M006 7265		L12	A
Grasse	10002			
	S002 7845	M1234		A
	S001 7835		L12345678	A

	M003 7605 R 2		A
Graz	11001 S002 7839	L12345678	
Greenbank	40441 S001 7204 R12 S004 7214 R 23		
Hat Creek	40489 S001 7218 R12		
Haystack-Westford	40440 S002 7205 R12 S003 7209 R12 56 M001 7091	L12345	A A A
Helwan	30101 S001 7831	L123 56 8	
Herstmonceux	13212 S001 7840	L12345678	
Hobart	50116 S002 7242 R1		
Hohenbunstorf	14202 M002 7600 R 2		
Huahine	92202 M002 7121 M002 7123	L12 L12345	
Johannesburg	30302 S001 7232 R12		
Karitsa	12614 M001 7520	L123 7	
Kashima	21701 S001 1856 R12 6		
Katavia	12615 M001 7512	L12 567	
Kauai	40424 S001 1311 R123		
Kodiak	40419 M001 7278 R 2		
Kootwijk	13504 M002 8833 S001 7833	L1234 8 L12	

Kwajalein Atoll	50505			
	S003 4968 R12			A
	M001 7092		L12	A
Lampedusa	12706			
	M001 7544		L12345 7	
Leonard	40454			
	M001 7292 R 2			
Madrid	13407			
	S001 1563 R 4			
	S003 1561 R 2 4			
	S010 1565 R12 4			
Mammoth Lakes	40437			
	M001 7259 R 2			
Maryland Point	40490			
	S001 7217 R123			
Matera	12734			
	M004 7541		L12	
	M005 7540		L1	
	S001 7939		L12345678	
Maui/	40445/40424			
Kokee Park				
	/S001 1311 R123			B
	M002 7120 R 2		L12	A
	M001 7210		L12345678	A B
	S005 7210	M123		A C
	S002 7210	M 4		C
Mazatlan	40504			
	M001 7122		L12345678	
Melengiclick	20803			
	M001 7580		L12 5 7	
Metsahovi	10503			
	S001 7805		L12	A
	M002 7601 R 2			A
Miles City	40455			
	M001 7038 R 2			
Monument	40497/40436			
Peak/San Diego-	M002 7220 R		L123	A
Otay Mountain	M003 7274 R 2		L1	A B
	M001 7110		L12345678	A
	/M003 7035		L1 345	B
	/M002 7062		L12	B

Mount Hopkins	40434		
	M002 7888	L12	
	S001 7921	L12	
Natal	41604		
	S001 7929	L12	
Nobeyama	21725		
	S001 7244 R1		
Nome	40421		
	M001 7279 R 2		
Noto	12717		
	S001 7547 R123		
Ocotillo	40449		
	M001 7270 R 2		
Onsala	10402		
	S002 7213 R12 56		
Owens Valley	40439		
	S002 7207 R12		A
	M004 7853 R 2	L1 45	A
	M003 7084	L123	A
	M001 7114	L12	A
Palos Verdes	40403		
	M001 7268 R 2		
Pasadena	40400		
	M003 7263 R 2		A
	M005 7264 R		
	M006 7272 R		
	M001 7896	L12	A
Patrick AFB	40417		
	M002 7069	L12	
Pearblossom	40404		
	M001 7254 R 2		
	M002 7253 R 2		
Penticton	40105		
	M001 7283 R 2		
Pietown	40456		
	S001 7234 R 2		
Pinyon Flats	40407		
	M001 7256 R 2		
Platteville	40496		

	M002 7258 R12		A
	M001 7112	L12345 8	A
Point Reyes	40410		
	M001 7251 R 2		
Potsdam	14106		
	S001 1181	L123456 8	
Quincy	40433		
	M004 7221 R 2		A
	M006 7260 R		A
	M001 7051	L12	A
	M002 7109	L12345678	A
	M005 7886	L12	A
Richmond	40499		
	S001 7219 R123 56		
	M002 7295	L1 345 8	
Riga	12302		
	S002 1884	L1 345	
Roumelli	12613		
	M001 7517	L1234567	
Sandpoint	40423		
	M001 7280 R 2		
San Fransisco	40406		
	M001 7252 R 2		
Santa Paola	40428		
	M001 7255 R 2		
Santiago	41705		
	M001 7400	L12	
Santiago de Cuba	40701		
	S001 1953	L1 345 8	
Seattle	40457		
	M001 7229 R 2		
Shanghai	21605		
	S008 7226 R 2		
	S009 7227 R12		A
	S001 7837	L12345 8	A
Simeis-Katzively	12337		
	S006 1893	L 34 8	
Simosato	21726		
	M002 7838	L12345678	

Sourdough	40425		
	M001 7281 R 2		
Trieste	12718		
	M002 7550	L12 5 7	
Tromso	10302		
	M002 7602 R 2		
Vandenberg	40420		
	M001 7111 R		
	M002 7223 R12		A
	M004 7887	L 2	A
Vernal	40492		
	M002 7290 R 2		
	M001 7892	L12	
Washington 40451/40490			
/Maryland Point	/S001 7217 R123		
	M112 7063	L12	A
	M107 7064	L 2	A
	M108 7065	L	
	M106 7100	L12	A
	M101 7101	L12	A
	M102 7102 R 2	L12	A
	M103 7103	L12	A
	M104 7104	L12	A
	M105 7105	L12345678	A
	M114 7125	L12	
	M116 7130	L1	
	M119 7917	L	
	M120 7918	L	
	M121 7919	L	
	M117 7920	L	
	M118 7889	L	
	M111 7899	L1	A
Wettzell	14201		
	S004 7224 R12 56		A
	S002 7834	L12345678	A
	S010 7596	L12	A
	M005 7597	L	
	M007 7599	L1	
Whitehorse	40118		
	M001 7284 R 2		
Xrisokalaria	12616		
	M001 7525	L12 567	
Yakataga	40416		
	M001 7277 R 2		

Yaragadee	50107 M001 7090	L12345678
Yellowknife	40127 M001 7285 R 2	
Yigilca	20804 M001 7587	L123 7
Yozgat	20802 M001 7585	L123 5 7
Yuma	40493 M002 7273 R M001 7894 R 2	L12
Zimmerwald	14001 S001 7810	L12345678

Table T5

Local eccentricities for IERS
colocation sites

12711 Bologna

A	M002	S001	-29.5309 .0005	29.9040 .0011	48.5558 .0049	Ref: (1),(2)
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50103 Canberra-Orroral-Tidbinbilla

A	S007	S003	-1071.832 0.004	-993.102 0.004	1255.304 0.004	Ref: (7)
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	S010	-14458.347 0.027	4638.683 0.027	21870.028 0.027	Ref: (7)
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B	S001	S005	-86.629 0.003	52.090 0.003	166.302 0.003	Ref: (3)
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	S010	-40.677 0.003	404.160 0.003	367.155 0.003	Ref: (7)
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40491 Flagstaff

A	M002	M003	-15.9330 .0010	17.2130 .0030	14.3670 .0030	Ref: (2)
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40442 Fort Davis

A	M001	M005	0.000 0.003	0.000 0.003	0.000 0.003	Ref: (3)
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	S001	4.356 0.003	-5.631 0.003	-3.556 0.003	Ref: (3)
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	S002	-655.977 0.003	-228.944 0.003	-452.568 0.003	Ref: (3)
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	S003	5914.3973 .0035	-3496.5099 .0120	-4031.8616 .0069	Ref: (2)
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		M008	117.2017 0.003	135.0619 0.003	352.4838 0.003	Ref: (6)
B	S003	M006	-5810.0685 .0026	3621.2944 .0100	4362.4228 .0059	Ref: (2)
		M009	-16.9714 0.003	-39.9062 0.003	-95.3390 0.003	Ref: (6)

40405 Goldstone

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

10002 Grasse

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

40440 Haystack

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

50505 Kwajalein Atoll

A	M001	S003	-89.234 0.003	-702.977 0.003	544.240 0.003	Ref: (3), (4)
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40445/40424 Maui/Kokee Park

A	M001	S005	-.483 0.003	-.212 0.003	1.003 0.003	Ref: (3)
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	M002		8.014 0.003	19.409 0.003	40.927 0.003	Ref: (3)
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B	/S001	M001	77839.523 .014	-349863.790 .006	-145626.288 .006	Ref: (1)
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C	S005	S002	3.408	1.499	9.075	REF: (10)
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10503 Metsahovi

A	S001	M002	-1942.700 0.003	-1512.472 0.003	1347.868 0.003	Ref: (9)
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40497/40436 Monument Peak/ San Diego-Otay Mountain

A	M001	M002	-14.269 0.003	6.872 0.003	-.596 0.003	Ref: (3)
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	M003		-11.3947 .0040	7.8021 .0020	2.5225 .0010	Ref: (2)
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B	/M003	M003	42537.2846 .0061	-2592.2578 .0180	27616.9206 .0170	Ref: (2)
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	/M002		0.7557 0.003	3.8313 0.003	5.6376 0.003	Ref: (6)
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40439 Owens Valley

A	M004	M003	-169.108 0.003	55.235 0.003	-41.459 0.003	Ref: (3)
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M001	-1.223 0.003	-2.261 0.003	-3.617 0.003	Ref: (3)
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S002	820.4891 .0052	-549.1188 .0085	-87.1157 .0085	Ref: (2)
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40400 Pasadena

A	M001	M003	-94.0640 .0030	31.9450 .0020	-55.1210 .0020	Ref: (2)
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40496 Platteville

A	M001	M002	-29.8944 .0005	9.0355 .0007	1.0253 .0005	Ref: (2)
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40433 Quincy

A	M002	M001	341.574 0.003	-288.820 0.003	-158.155 0.003	Ref: (3)
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	M004		3.8898 .0019	-38.9866 .0012	-38.4094 .0013	Ref: (8)
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	M005		-7.611 0.003	5.308 0.003	0.615 0.003	Ref: (3)
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	M006		250.894 0.003	-256.753 0.003	-178.597 0.003	Ref: (3)
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40499 Richmond

A	M002	S001	-60.8770 .0030	0.9310 .0020	44.2120 .0020	Ref: (2), (4)
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21605 Shanghai

A	S001	S009	-598.875 .010	-469.603 .010	154.995 .010	Ref: (2)
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40420 Vandenberg

A	M004	M002	-9226.714 0.003	5291.788 0.003	-1274.701 0.003	Ref: (3)
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40451 Washington

A	M105	M112	-4.947 0.003	-17.162 0.003	-19.125 0.003	Ref: (3)
		M107	-30.463 0.003	8.595 0.003	16.961 0.003	Ref: (3)
		M106	635.813 0.003	182.229 0.003	25.164 0.003	Ref: (3)
		M101	520.577 0.003	170.825 0.003	41.961 0.003	Ref: (3)
		M102	-33.112 0.003	-2.452 0.003	4.398 0.003	Ref: (3)
		M103	-34.066 0.003	1.868 0.003	9.839 0.003	Ref: (3)
		M104	376.110 0.003	153.626 0.003	64.228 0.003	Ref: (3)
		M111	645.036 0.003	181.778 0.003	22.412 0.003	Ref: (3)

14201 Wettzell

A	S002	S004	10.003 0.003	-46.149 0.003	11.072 0.003	Ref: (3), (4)
		S010	55.215 0.003	56.493 0.003	-58.875 0.003	Ref: (5)

References

- (1) Message from D. Robertson, NGS, 7 April 1989.
- (2) Draft "Comparison of GSFC/VLBI and CSR/SLR geocentric coordinates. Epoch 1988 Jan 01", Presented at CDP Investigator Meeting, Pasadena, 1989.
- (3) Derived from Table 3 of IERS Technical Note "The Initial IERS Terrestrial Reference Frame".
- (4) Message from B. Carter, NGS,, 27 Feb. 1989.

- (5) IGN data base.
- (6) CDP Catalogue of Site Information, May, 1989.
- (7) Orroral - Tidbinbilla tracking station adjustment, Tom Morrison, 23 March 1990.
- (8) Comparaison of VLBI and SLR geocentric site coordinates, J.R. Ray, J.W. Ryan, C. Ma, T.A. Clark, B.E. Schutz, R.J. Eanes, M.M. Watkins, B.D. Tapley, 29 March 1990.
- (9) Message from J. Kakkuri, Finnish Geodetic Institut, 17 April 1990.
- (10) JPL LLR solutions: SSC(JPL) 85 M 02 , SSC(JPL) 86 M 02

Table T6

SSC(IERS) 90 C 01

STATION COORDINATES IN ITRF89 FOR EPOCH 1988.0

DOMES NUMBER	NAME	CDP NUM.	NETWORK (*)	X m	Y m	Z m	SX m	SY m	SZ m	PLATE
10002M003	GRASSE	VLBI 7605	1	4581697.839	556125.667	4389351.287	0.014	0.014	0.014	EURA
10002S001	GRASSE	SLR 7835	7 8 9 10 11 12 13 14	4581691.824	556159.402	4389359.388	0.014	0.014	0.014	EURA
10002S002	GRASSE	LLR 7845	15 16 17 18	4581692.402	556195.875	4389354.950	0.014	0.014	0.015	EURA
10004M002	BREST	VLBI 7604	1	4228877.244	-333104.261	4747180.845	0.023	0.023	0.024	EURA
10302M002	TROMSO	VLBI 7602	1	2102904.247	721602.486	5958201.247	0.023	0.023	0.023	EURA
10402S002	ONSALA	VLBI 7213	1 2 4 5	3370606.206	711917.439	5349830.613	0.017	0.017	0.018	EURA
10503M002	METSAHOVI	VLBI 7601	1	2890652.914	1310295.292	5513958.596	0.023	0.023	0.023	EURA
10503S001	METSAHOVI	SLR 7805	7 8	2892595.614	1311807.764	5512610.728	0.023	0.023	0.024	EURA
11001S002	GRAZ	SLR 7839	7 8 9 10 11 12 13 14	4194426.737	1162693.882	4647246.547	0.016	0.016	0.016	EURA
12205S001	BOROWIEC	SLR 7811	11 13	3738332.911	1148246.139	5021815.804	0.030	0.033	0.034	EURA
12302S002	RIGA	SLR 1884	7 11 12 13	3183896.022	1421496.637	5322803.161	0.030	0.030	0.032	EURA
12337S006	KATZIVELY	SLR 1893	11 13 14	3785945.097	2550780.427	4439461.268	0.031	0.032	0.032	EURA
12602M002	DIONYSOS	SLR 7515	7 8 9 10 12	4595216.461	2039435.353	3912629.489	0.020	0.020	0.020	EURA
12602S008	DIONYSOS	SLR 7515	9	4595218.871	2039436.386	3912628.295	0.044	0.043	0.044	EURA
12612M001	ASKITES	SLR 7510	7 8 9 10 12	4353444.930	2082666.290	4156506.648	0.020	0.020	0.020	EURA
12612S001	ASKITES	SLR 7510	9	4353447.330	2082667.443	4156505.610	0.044	0.043	0.043	EURA
12613M001	ROUMELLI	SLR 7517	7 8 9 10 11 12 13	4728694.708	2174373.380	3674572.931	0.017	0.017	0.017	EURA
12613S001	ROUMELLI	SLR 7517	9	4728697.078	2174374.492	3674571.617	0.043	0.043	0.044	EURA
12613S002	ROUMELLI	SLR 7517	9	4728697.994	2174374.831	3674573.595	0.043	0.043	0.044	EURA
12614M001	KARITSA	SLR 7520	7 8 10 13	4596042.646	1733476.814	4055720.832	0.022	0.021	0.021	EURA
12615M001	KATAVIA	SLR 7512	7 8 9 10 12	4573400.092	2409322.208	3723881.751	0.021	0.021	0.021	EURA
12615S001	KATAVIA	SLR 7512	9	4573402.424	2409323.368	3723880.443	0.050	0.045	0.047	EURA
12616M001	XRISOKALAR	SLR 7525	7 8 9 10 12	4745949.581	1905705.949	3799169.031	0.021	0.021	0.021	EURA
12616S001	XRISOKALAR	SLR 7525	9	4745952.057	1905706.824	3799167.811	0.045	0.044	0.044	EURA
12706M001	LAMPEDUSA	SLR 7544	7 8 10 11 12 13	5072832.032	1130886.253	3684836.962	0.024	0.025	0.025	EURA
12711M002	BOLOGNA	SLR 7546	7 11 12 13	4461399.730	919566.858	4449510.495	0.015	0.016	0.017	EURA
12711S001	BOLOGNA	VLBI 7230	1 2 3	4461370.199	919596.762	4449559.050	0.015	0.016	0.016	EURA
12717S001	NOTO	VLBI 7547	1 2 3	4934563.319	1321201.194	3806484.311	0.020	0.019	0.022	EURA
12718M002	TRIESTE	SLR 7550	7 8 10 12	4336738.594	1071271.509	4537911.033	0.026	0.028	0.026	EURA
12725M002	CAGLIARI	SLR 7545	7 8 10 11 12 13	4893398.123	772673.322	4004140.947	0.018	0.019	0.019	EURA
12734M004	MATERA	SLR 7541	7 8	4641990.340	1393042.306	4133231.833	0.029	0.029	0.029	EURA
12734M005	MATERA	SLR 7540	7	4641984.621	1393057.748	4133233.440	0.040	0.040	0.040	EURA
12734S001	MATERA	SLR 7939	7 8 9 10 11 12 13 14	4641965.109	1393069.957	4133262.222	0.016	0.016	0.016	EURA
13201S002	CHILBOLTON	VLBI 7215	1 2	4008310.258	-100650.843	4943794.658	0.018	0.018	0.019	EURA
13212S001	HERSTMANCE	SLR 7840	7 8 9 10 11 12 13 14	4033463.851	23662.362	4924305.020	0.016	0.016	0.016	EURA
13296M002	CARNUSTY	VLBI 7603	1	3526416.532	-171421.184	5294098.749	0.023	0.023	0.023	EURA
13407S001	MADRID	VLBI 1563	6	4849092.769	-360180.603	4115109.009	0.061	0.061	0.063	EURA
13407S003	MADRID	VLBI 1561	1 6	4849245.358	-360278.220	4114884.376	0.042	0.023	0.039	EURA
13407S010	MADRID	VLBI 1565	1 2 6	4849336.800	-360488.886	4114748.631	0.018	0.018	0.019	EURA
13504M002	KOOTWIJK	SLR 8833	7 8 11 13 14	3899237.870	396769.148	5015055.206	0.020	0.020	0.020	EURA
13504S001	KOOTWIJK	SLR 7833	7 8	3899224.134	396742.866	5015073.869	0.037	0.037	0.037	EURA
14001S001	ZIMMERWALD	SLR 7810	7 8 9 10 11 12 13 14	4331283.632	567549.546	4633139.944	0.016	0.016	0.016	EURA
14005M002	MONTE GENE	SLR 7590	8	4390309.915	696752.028	4560835.914	0.041	0.041	0.041	EURA

14106S001	POTSDAM	SLR	1181	7	8	9	11	12	13	14	3800621.336	882005.355	5028859.521	0.019	0.019	0.018	EURA	
14201S002	WETTZELL	SLR	7834	7	8	9	10	11	12	13	14	4075530.091	931781.322	4801618.178	0.013	0.013	0.013	EURA
14201S004	WETTZELL	VLBI	7224	1	2	4	5					4075540.094	931735.174	4801629.250	0.013	0.013	0.013	EURA
14201S007	WETTZELL	SLR	7599	7								4075517.452	931754.091	4801630.292	0.060	0.064	0.040	EURA
14201S010	WETTZELL	SLR	7596	7								4075585.306	931837.815	4801559.303	0.013	0.013	0.013	EURA
14202M002	HOHENBUNST	VLBI	7600	1								3778215.036	698644.703	5074053.486	0.023	0.023	0.024	EURA
14209S001	EFFELSBERG	VLBI	7203	1	2							4033947.677	486990.425	4900430.667	0.018	0.018	0.019	EURA
20702S001	BAR GIYYOR	SLR	7530	7	8							4443968.450	3121946.872	3334695.458	0.029	0.029	0.029	AFRC
20801M001	DIYARBAKIR	SLR	7575	7	8	10	12					3848636.001	3251760.924	3898909.231	0.027	0.025	0.026	EURA
20802M001	YOZGAT	SLR	7585	7	8	10	12	13				4029730.694	2802093.318	4062068.007	0.024	0.024	0.022	EURA
20803M001	MELENGICLI	SLR	7580	7	8	10	12					4247620.510	2778638.987	3851607.491	0.028	0.027	0.026	EURA
20804M001	YIGILCA	SLR	7587	7	8	10	13					4117362.036	2517076.880	4157679.031	0.026	0.024	0.025	EURA
21605S001	SHANGHAI	SLR	7837	7	8	11	12	13	14			-2831087.792	4676203.493	3275172.831	0.018	0.018	0.020	EURA
21605S008	SHANGHAI	VLBI	7226	1								-2847698.171	4659872.978	3283958.844	0.125	0.109	0.099	EURA
21605S009	SHANGHAI	VLBI	7227	1	2							-2831686.669	4675733.893	3275327.811	0.018	0.017	0.020	EURA
21701S001	KASHIMA	VLBI	1856	1	2	5						-3997892.278	3276581.318	3724118.291	0.019	0.019	0.022	NOAM
21725S001	NOBEYAMA	VLBI	7244	2								-3871168.279	3428274.050	3723697.613	0.025	0.024	0.029	EURA
21726S001	SIMOSATO	SLR	7838	7	8	9	10	11	12	13	14	-3822388.355	3699363.504	3507573.098	0.017	0.017	0.019	EURA
21732S002	CHICHIJIMA	SLR	7844	11								-4491072.503	3481527.838	2887391.654	0.043	0.043	0.045	EURA
30101S001	HELWAN	SLR	7831	7	8	12	13	14				4728283.610	2879670.580	3156894.276	0.031	0.032	0.031	AFRC
30302S001	JOHANNESBU	VLBI	7232	1	2							5085442.832	2668263.404	-2768697.266	0.023	0.024	0.023	AFRC
40104S001	ALGONQUIN	VLBI	7282	1	2							918034.931	-4346132.200	4561971.094	0.016	0.019	0.019	NOAM
40105M001	PENTICTON	VLBI	7283	1								-2058840.349	-3621286.300	4814420.706	0.022	0.028	0.030	NOAM
40118M001	WHITEHORSE	VLBI	7284	1								-2215213.530	-2209261.574	5540292.513	0.022	0.022	0.022	NOAM
40127M001	YELLOWKNIF	VLBI	7285	1								-1224124.412	-2689530.586	5633555.275	0.022	0.024	0.028	NOAM
40400M001	PASADENA	SLR	7896	7	8							-2493211.866	-4655229.531	3565574.500	0.018	0.018	0.018	PCFC
40400M003	PASADENA	VLBI	7263	1								-2493305.929	-4655197.586	3565519.378	0.017	0.017	0.018	PCFC
40403M001	PALOS VERD	VLBI	7268	1								-2525452.712	-4670035.680	3522886.743	0.022	0.022	0.022	PCFC
40404M001	PEARBLOSSO	VLBI	7254	1								-2464070.842	-4649425.649	3593905.693	0.022	0.022	0.022	PCFC
40405M001	GOLDSTONE	SLR	7085	7								-2353394.094	-4641529.610	3676899.206	0.012	0.013	0.013	NOAM
40405M002	GOLDSTONE	SLR	7115	7	8							-2350861.549	-4655546.276	3660997.826	0.015	0.015	0.015	NOAM
40405M006	GOLDSTONE	SLR	7265	7	8							-2356475.652	-4646618.292	3668424.711	0.011	0.011	0.011	NOAM
40405M013	GOLDSTONE	VLBI	7288	1	7	8	11	12	13			-2356494.019	-4646607.670	3668426.597	0.011	0.012	0.012	NOAM
40405S001	GOLDSTONE	VLBI	1514	6								-2353621.135	-4641341.569	3677052.298	0.058	0.059	0.060	NOAM
40405S003	GOLDSTONE	VLBI	1512	6								-2350443.694	-4651980.872	3665630.941	0.058	0.059	0.060	NOAM
40405S009	GOLDSTONE	VLBI	7222	1	2	3						-2356170.906	-4646755.882	3668470.582	0.010	0.011	0.011	NOAM
40405S014	GOLDSTONE	VLBI	1513	1	6							-2351129.052	-4655477.097	3660956.884	0.015	0.015	0.015	NOAM
40405S019	GOLDSTONE	VLBI	7231	1	6							-2353538.667	-4641649.585	3676670.056	0.013	0.013	0.013	NOAM
40406M001	SAN FRANCI	VLBI	7252	1								-2707704.790	-4257609.607	3888374.170	0.022	0.022	0.022	NOAM
40407M001	PINYON FLA	VLBI	7256	1								-2369635.863	-4761324.925	3511116.129	0.022	0.022	0.022	PCFC
40408S002	FAIRBANKS	VLBI	7225	1	2	3	5					-2281547.099	-1453645.009	5756993.211	0.015	0.015	0.015	NOAM
40410M001	POINT REYE	VLBI	7251	1								-2732333.019	-4217634.897	3914491.037	0.022	0.022	0.022	PCFC
40412M001	AUSTIN	SLR	7890	8								-754162.049	-5459061.230	3200744.016	0.271	0.240	0.300	NOAM
40412M003	AUSTIN	VLBI	7271	1								-737793.705	-5459892.271	3202990.456	0.022	0.022	0.022	NOAM
40416M001	YAKATAGA	VLBI	7277	1								-2529744.129	-1942091.269	5505027.934	0.022	0.022	0.022	NOAM
40417M002	PATRICK AF	SLR	7069	7	8							917958.975	-5548370.255	2998776.585	0.107	0.061	0.090	NOAM
40419M001	KODIAK	VLBI	7278	1								-3026940.108	-1575911.768	5370362.496	0.022	0.022	0.022	NOAM
40420M002	VANDENBERG	VLBI	7223	1	2							-2678094.662	-4525450.829	3597410.121	0.016	0.016	0.016	PCFC
40421M001	NOME	VLBI	7279	1								-2658150.350	-693821.852	5737236.603	0.022	0.022	0.022	NOAM
40423M001	SANDPOINT	VLBI	7280	1								-3425461.854	-1214669.110	5223858.281	0.022	0.022	0.022	NOAM
40424S001	KAUAI	VLBI	1311	1	2	3						-5543845.990	-2054564.161	2387813.763	0.013	0.012	0.013	PCFC
40425M001	SOURDOUGH	VLBI	7281	1								-2419993.407	-1664228.720	5643538.257	0.022	0.022	0.022	NOAM
40427M001	FORT ORD	VLBI	7266	1								-2697026.684	-4354393.315	3788077.589	0.022	0.022	0.022	PCFC
40427M002	FORT ORD	VLBI	7241	1								-2699840.181	-4359127.103	3781050.941	0.022	0.022	0.022	PCFC
40428M001	SANTA PAOL	VLBI	7255	1								-2554476.590	-4608627.393	3582138.284	0.022	0.022	0.022	PCFC

40430M001	BLACK BUTT	VLBI	7269	1							-2306306.869	-4787914.438	3515736.408	0.022	0.022	0.022	NOAM	
40431M001	DEADMAN LA	VLBI	7267	1							-2336819.570	-4732586.967	3570329.967	0.022	0.022	0.022	NOAM	
40432M001	ELY	VLBI	7286	1							-2077236.221	-4486712.712	4018753.736	0.021	0.022	0.022	NOAM	
40433M001	QUINCY	SLR	7051	7	8						-2516893.108	-4198845.072	4076411.494	0.012	0.012	0.012	NOAM	
40433M002	QUINCY	SLR	7109	7	8	9	10	11	12	14	-2517234.682	-4198556.251	4076569.651	0.012	0.012	0.012	NOAM	
40433M004	QUINCY	VLBI	7221	1							-2517230.792	-4198595.238	4076531.242	0.012	0.012	0.012	NOAM	
40433M005	QUINCY	SLR	7886	7	8						-2517242.293	-4198550.943	4076570.267	0.012	0.012	0.012	NOAM	
40433S006	QUINCY	SLR	7109	9	13						-2517235.959	-4198558.294	4076571.636	0.030	0.030	0.030	NOAM	
40434M002	MOUNT HOPK	SLR	7888	7	8						-1936744.267	-5077639.091	3331993.855	0.029	0.029	0.029	NOAM	
40434S001	MOUNT HOPK	SLR	7921	7	8						-1936760.105	-5077707.166	3331922.475	0.029	0.029	0.029	NOAM	
40436M002	SAN DIEGO	SLR	7062	7	8						-2428825.839	-4799750.485	3417272.689	0.011	0.014	0.014	PCFC	
40436M003	SAN DIEGO	SLR	7035	7	11	12	13				-2428826.595	-4799754.316	3417267.050	0.011	0.014	0.014	PCFC	
40437M001	MAMMOTH LA	VLBI	7259	1							-2448246.687	-4426738.319	3875435.881	0.022	0.022	0.022	NOAM	
40438M001	BEAR LAKE	SLR	7082	7	8						-1735997.103	-4425048.201	4241430.413	0.029	0.029	0.029	NOAM	
40439M001	OWENS VALL	SLR	7114	7	8						-2410422.364	-4477802.691	3838686.694	0.012	0.012	0.012	NOAM	
40439M004	OWENS VALL	VLBI	7853	1	7	11	12	13			-2410421.141	-4477800.429	3838690.311	0.012	0.012	0.012	NOAM	
40439S002	OWENS VALL	VLBI	7207	1	2						-2409600.654	-4478349.550	3838603.198	0.012	0.012	0.012	NOAM	
40440M001	WESTFORD	SLR	7091	7	8	11	12	13			1492453.790	-4457278.749	4296815.889	0.011	0.011	0.012	NOAM	
40440S002	WESTFORD	VLBI	7205	1	2						1492404.925	-4457266.485	4296881.695	0.011	0.011	0.012	NOAM	
40440S003	WESTFORD	VLBI	7209	1	2	4	5				1492206.788	-4458130.470	4296015.461	0.011	0.011	0.012	NOAM	
40441S001	GREENBANK	VLBI	7204	1	2						882880.050	-4924482.269	3944130.605	0.016	0.021	0.021	NOAM	
40441S004	GREENBANK	VLBI	7214	1	3						882325.748	-4925137.959	3943397.608	0.017	0.017	0.018	NOAM	
40442M001	FORT DAVIS	SLR	7086	7	8	9	10	11	12	13	14							
				15	16	17	18					-1330125.262	-5328526.629	3236150.242	0.010	0.010	0.010	NOAM
40442M005	FORT DAVIS	SLR	7885	7	8							-1330125.263	-5328526.628	3236150.242	0.010	0.011	0.011	NOAM
40442M006	FORT DAVIS	SLR	7080	7	10	11	12	13	14	15	16							

40489S001 HAT CREEK VLBI 7218 1 2	-2523969.856 -4123506.360 4147752.584 0.016 0.016 0.016 NOAM
40490S001 MARYLAND P VLBI 7217 1 2 3	1106629.484 -4882907.168 3938086.920 0.017 0.017 0.018 NOAM
40491M002 FLAGSTAFF SLR 7891 7 8	-1923976.630 -4850871.713 3658574.853 0.017 0.018 0.018 NOAM
40491M003 FLAGSTAFF VLBI 7261 1	-1923992.563 -4850854.501 3658589.222 0.017 0.017 0.018 NOAM
40492M001 VERNAL SLR 7892 7 8	-1631484.650 -4589133.879 4106749.536 0.029 0.029 0.029 NOAM
40492M002 VERNAL VLBI 7290 1	-1631473.206 -4589128.919 4106759.869 0.021 0.021 0.022 NOAM
40493M001 YUMA VLBI 7894 1 7 8	-2196777.814 -4887337.065 3448425.227 0.017 0.017 0.018 NOAM
40496M001 PLATTEVILL SLR 7112 7 8 11 12 13 14	-1240678.147 -4720463.384 4094480.610 0.013 0.013 0.013 NOAM
40496M002 PLATTEVILL VLBI 7258 1 2	-1240708.041 -4720454.348 4094481.635 0.013 0.013 0.013 NOAM
40497M001 MONUMENT P SLR 7110 7 8 9 10 11 12 13 14	-2386277.917 -4802354.358 3444881.442 0.011 0.011 0.011 PCFC
40497M002 MONUMENT P SLR 7220 7 8	-2386292.186 -4802347.486 3444880.847 0.011 0.011 0.011 PCFC
40497M003 MONUMENT P VLBI 7274 1 7	-2386289.312 -4802346.557 3444883.965 0.011 0.011 0.011 PCFC
40497S001 MONUMENT P SLR 7110 9	-2386279.246 -4802357.002 3444883.314 0.043 0.043 0.043 PCFC
40499M002 RICHMOND SLR 7295 7 11 12 13 14	961319.054 -5674090.961 2740489.520 0.012 0.012 0.013 NOAM
40499S001 RICHMOND VLBI 7219 1 2 3 4	961258.177 -5674090.030 2740533.732 0.012 0.012 0.013 NOAM
40504M001 MAZATLAN SLR 7122 7 8 9 10 11 12 13 14	-1660089.273 -5619100.401 2511637.839 0.016 0.016 0.016 NOAM
40505M001 CABO SAN L SLR 7882 7 8 11 12 13 14	-1997241.710 -5528041.214 2468355.232 0.019 0.019 0.019 PCFC
40506S001 ENSENADA SLR 7883 13	-2406127.848 -4898370.369 3290337.985 0.042 0.042 0.042 PCFC
40701S001 SANTIAGO D SLR 1953 7 11 12 13 14	1474548.429 -5811242.478 2168945.024 0.025 0.024 0.026 NOAM
41604S001 NATAL SLR 7929 7 8	5186467.934 -3653856.112 -654321.859 0.029 0.033 0.034 SOAM
41703M001 EASTER ISL SLR 7061 8	-1884983.824 -5357606.785 -2892852.664 0.109 0.084 0.101 NAZC
41703M002 EASTER ISL SLR 7097 7 8 10 11 13 14	-1884984.367 -5357608.159 -2892853.409 0.020 0.020 0.020 NAZC
41705M001 SANTIAGO SLR 7400 7 8	1769699.797 -5044612.924 -3468260.059 0.029 0.029 0.029 SOAM
41706M001 CERRO TOLO SLR 7401 7 8	1815517.158 -5213464.873 -3187999.416 0.029 0.029 0.029 SOAM
42202S001 AREQUIPA SLR 7907 7 8 9 10 11 12 13 14	1942792.013 -5804077.661 -1796919.307 0.017 0.017 0.017 SOAM
42501M001 BERMUDA SLR 7067 7 8	2308538.585 -4874079.947 3393628.546 0.063 0.042 0.059 NOAM
42501M002 BERMUDA VLBI 7294 1	2307209.606 -4874215.807 3394317.840 0.022 0.022 0.023 NOAM
43602M002 GRAND TURK SLR 7068 8	1920482.869 -5619478.249 2318914.323 0.472 0.260 0.300 NOAM
50103S001 CANBERRA VLBI 1543 6	-4460894.400 2682361.619 -3674748.867 0.021 0.020 0.021 INDI
50103S003 CANBERRA SLR 7943 7 8	-4447548.620 2677133.986 -3694996.479 0.018 0.017 0.018 INDI
50103S005 CANBERRA VLBI 1542 6	-4460981.029 2682413.708 -3674582.565 0.021 0.021 0.021 INDI
50103S007 CANBERRA SLR 7843 7 8 10 12	-4446476.785 2678127.086 -3696251.778 0.018 0.017 0.018 INDI
50103S010 CANBERRA VLBI 1545 1 2 6	-4460935.077 2682765.779 -3674381.712 0.021 0.020 0.021 INDI
50107M001 YARRAGADEE SLR 7090 7 8 9 10 11 12 13 14	-2389006.531 5043329.300 -3078525.380 0.019 0.018 0.020 INDI
50107S001 YARRAGADEE SLR 7090 9	-2389007.754 5043331.814 -3078526.884 0.048 0.047 0.049 INDI
50116S002 HOBART VLBI 7242 2	-3950237.448 2522348.094 -4311563.189 0.625 0.386 0.297 INDI
50503M001 AMERICAN S SLR 7096 7 8	-6100045.862 -996203.145 -1568976.334 0.029 0.029 0.029 PCFC
50505M001 KWAJALEIN SLR 7092 7 8	-6143447.273 1364700.188 1034163.111 0.017 0.017 0.019 PCFC
50505S003 KWAJALEIN VLBI 4968 1 2	-6143536.507 1363997.212 1034707.351 0.017 0.017 0.019 PCFC
92202M002 HUAHINE SLR 7121 7 8	-5345865.265 -2958246.631 -1824623.796 0.029 0.029 0.029 PCFC
92202M003 HUAHINE SLR 7123 7 8 11	-5345865.398 -2958246.716 -1824623.894 0.025 0.024 0.025 PCFC

(*) 1 SSC(GSFC) 90 R 02	2 SSC(NGS) 90 R 01	3 SSC(USNO) 90 R 01	4 SSC(SO) 88 R 01	5 SSC(NAOMZ)89 R 01
6 SSC(JPL) 90 R 02	7 SSC(CSR) 89 L 02	8 SSC(GSFC) 89 L 01	9 SSC(DGFII)89 L 03	10 SSC(DUT) 90 L 01
11 SSC(ZIPE) 90 L 01	12 SSC(SO) 90 L 01	13 SSC(GAUA)90 L 01	14 SSC(LPAC) 90 L 01	15 SSC(UTXMD)90 M 01
16 SSC(JPL) 90 M 01	17 SSC(CERGA)89 M 01	18 SSC(SO) 86 M 01		

Table T7

TRANSFORMATION PARAMETERS FROM ITRF89 TO INDIVIDUAL SYSTEMS AT
EPOCH 1988.0 AND THE ORIENTATION RATE OF CHANGE OF SOME OF THEM
(TO BE USED USING THE FORMULA BELOW)

NETWORK	T1 cm	T2 cm	T3 cm	D ⁻⁸ 10 ⁻⁸	R1 .001"	R2 .001"	R3 .001"
					$\dot{R1}$.001"/Y	$\dot{R2}$.001"/Y	$\dot{R3}$.001"/Y
SSC(GSFC) 90 R 02	161.2 1.1	-87.0 1.1	51.9 1.0	-0.8 0.2	1.8 0.4	1.7 0.4	0.2 0.3
					-0.03 0.35	0.05 0.35	-0.13 0.28
SSC(NGS) 90 R 01	-0.2 1.1	-5.3 1.2	4.8 1.1	-0.3 0.2	-3.9 0.5	10.6 0.4	-0.4 0.4
SSC(USNO) 90 R 01	-7.9 1.7	-17.0 1.9	5.3 1.8	-1.8 0.2	0.0 0.8	1.9 0.6	0.3 0.5
SSC(SO) 88 R 01	161.2 6.7	-106.8 3.7	37.1 5.1	-0.6 0.4	-7.2 1.8	7.5 2.8	-1.6 1.2
SSC(NAOMZ)89 R 01	-7.8 7.5	11.8 7.3	-5.4 6.2	1.2 0.9	-3.9 2.7	8.0 2.8	-1.5 2.0
SSC(JPL) 90 R 02	-1.7 2.4	-3.8 2.4	6.9 2.4	-3.6 0.4	2.2 1.1	1.8 1.0	-0.1 1.1
SSC(CSR) 89 L 02	0.0 -	0.0 -	0.0 -	0.0 -	-3.4 -	4.3 -	-15.9 -
					0.23 -	0.52 -	-0.70 -
							(*)
SSC(GSFC) 89 L 01	-1.0 0.9	-1.0 0.9	2.4 0.9	0.0 0.1	-1.0 0.4	5.3 0.4	-7.7 0.3
SSC(DGFII)89 L 03	0.0 1.4	-1.0 1.4	4.4 1.3	-0.2 0.2	-286.3 0.6	-46.0 0.6	3.4 0.4
					-0.25 0.46	0.15 0.46	-0.45 0.35

SSC(DUT) 90 L 01	-0.5 1.2	-2.3 1.2	-6.1 1.2	-1.1 0.2	0.0 0.5	1.7 0.5	-4.4 0.4
					0.08 0.35	0.68 0.35	-0.53 0.28
SSC(ZIPE) 90 L 01	-3.1 1.2	0.4 1.2	-8.6 1.1	0.1 0.2	0.3 0.5	1.0 0.5	0.7 0.4
SSC(SO) 90 L 01	-0.6 1.2	-0.7 1.1	1.7 1.1	-0.8 0.2	-3.5 0.5	5.0 0.5	-14.2 0.4
SSC(GAOUA) 90 L 01	-3.3 1.2	-1.8 1.2	-1.7 1.1	-1.2 0.2	0.8 0.5	3.2 0.5	-0.8 0.4
SSC(LPAC) 90 L 01	1.5 1.6	-0.9 1.5	8.9 1.4	-0.2 0.2	2.3 0.6	-0.7 0.6	-4.7 0.5
SSC(UTXMO) 90 M 01	-2.6 5.9	-2.0 7.6	34.2 5.4	-4.3 0.9	-0.9 2.4	0.3 1.7	-3.1 3.3
SSC(JPL) 90 M 01	-10.0 4.5	-2.8 5.0	0.2 4.7	-2.0 0.6	1.4 2.3	3.3 1.7	-1.4 1.3
SSC(CERGA) 89 M 01	-13.4 4.5	2.6 5.3	-4.8 4.8	-5.3 0.6	0.5 2.5	3.6 1.7	-11.5 1.3
SSC(SO) 86 M 01	-17.4 9.1	20.8 10.5	6.7 9.5	-1.9 1.2	15.9 5.0	7.0 3.5	-6.2 2.6

```

: XS :      : X :      : T1 :      : D  -R3  R2 : : X :
:      :      :      :      :      :      :      : :
: YS :  =  : Y :  +  : T2 :  +  : R3  D  -R1 : : Y :
:      :      :      :      :      :      :      : :
: ZS :      : Z :      : T3 :      : -R2  R1  D : : Z :

```

Where X,Y,Z are the coordinate in the ITRF89 system, and XS,YS,ZS are the coordinates in the individual system.

$$R_i(T) = R_i(1988.0) + \dot{R}_i(T - 1988.0)$$

where T is the epoch in year. When $\dot{R}_i$ is not given, one can assume $\dot{R}_i = 0$.

(*) $\dot{R}_i$ for SSC(CSR) 89 L 02 are fixed to the value given by Minster and Jordan as difference between AM1-2 and AM0-2.

Table T8

RESIDUALS AND STATISTICS

SITE NAME: GRASSE

DOMES NUMBER	CDP NUM.	*	RX m	RY m	RZ m	NX	NY	NZ	RE m	RN m	RU m
10002M003	7605	RG	0.011	-0.003	-0.027	0.5	-0.2	-1.4	-0.005	-0.027	-0.011
10002M003	7605	GA	0.000	0.000	0.001	-0.1	0.0	0.2	0.000	0.001	0.000
10002S001	7835	LU	0.008	-0.001	0.043	0.2	0.0	1.1	-0.002	0.026	0.035
10002S001	7835	LD	-0.005	-0.001	0.037	-0.1	0.0	0.9	0.000	0.030	0.022
10002S001	7835	LS	-0.030	0.008	0.014	-0.7	0.2	0.3	0.012	0.029	-0.011
10002S001	7835	LG	0.005	0.034	-0.004	0.1	0.9	-0.1	0.033	-0.009	0.004
10002S001	7835	LZ	0.006	0.027	0.016	0.1	0.7	0.4	0.026	0.006	0.017
10002S001	7835	LC	-0.020	-0.004	0.022	-0.5	-0.1	0.5	-0.001	0.029	0.000
10002S001	7835	GA	0.000	0.000	0.000	0.0	0.0	-0.1	0.000	0.000	0.000
10002S001	7835	LL	0.054	-0.104	0.099	1.1	-2.1	2.0	-0.110	0.043	0.098
10002S001	7835	LK	-0.031	-0.014	-0.079	-0.8	-0.3	-2.0	-0.010	-0.035	-0.078
10002S002	7845	MS	0.006	0.037	0.000	0.1	0.4	0.0	0.036	-0.007	0.007
10002S002	7845	MX	0.005	-0.002	0.001	0.1	0.0	0.0	-0.003	-0.002	0.004
10002S002	7845	GA	0.000	0.000	0.000	0.0	-0.1	0.0	0.000	0.000	0.000
10002S002	7845	ME	-0.047	0.033	-0.011	-0.9	0.7	-0.2	0.038	0.021	-0.039
10002S002	7845	MJ	0.023	0.004	0.005	0.5	0.1	0.1	0.001	-0.012	0.020
			0.031			0.7			0.028		0.035

ONSALA

10402S002	7213	RG	0.005	0.006	0.004	0.3	0.3	0.2	0.005	-0.003	0.007
10402S002	7213	RM	0.000	-0.010	-0.010	0.0	-0.1	-0.1	-0.010	-0.003	-0.009
10402S002	7213	RN	-0.009	-0.003	-0.002	-0.4	-0.1	-0.1	-0.001	0.006	-0.007
10402S002	7213	RS	0.008	-0.007	-0.003	0.3	-0.2	-0.1	-0.008	-0.007	0.001
			0.006			0.2			0.006		0.007

METSARHOVI

10503M002	7601	GA	0.000	-0.001	0.000	0.1	-0.1	0.0	0.001	0.000	0.000
10503M002	7601	RG	-0.009	0.013	-0.005	-0.5	0.7	-0.2	0.016	0.000	-0.005
10503S001	7805	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
10503S001	7805	LC	0.472	-0.575	0.762	2.4	-2.9	3.8	-0.719	0.214	0.756
10503S001	7805	LG	0.258	-0.416	-0.161	1.7	-2.8	-1.1	-0.485	-0.135	-0.108
			0.305			1.7			0.286		0.342

GRAZ

11001S002	7839	LC	-0.004	-0.030	0.026	-0.1	-0.8	0.6	-0.028	0.026	0.011
11001S002	7839	LG	0.006	0.014	0.023	0.1	0.3	0.6	0.012	0.009	0.024
11001S002	7839	LZ	0.005	0.002	0.017	0.1	0.0	0.4	0.000	0.008	0.016
11001S002	7839	LL	-0.031	0.250	-0.177	-0.6	5.0	-3.5	0.249	-0.148	-0.104
11001S002	7839	LU	0.003	-0.020	0.024	0.1	-0.5	0.6	-0.020	0.018	0.016

11001S002	7839	LK	0.019	-0.037	0.016	0.5	-0.9	0.4	-0.041	0.005	0.017
11001S002	7839	LD	0.024	-0.038	0.020	0.6	-1.0	0.5	-0.043	0.004	0.024
11001S002	7839	LS	-0.033	-0.050	-0.014	-0.8	-1.3	-0.3	-0.039	0.023	-0.041
			-----			-----			-----		
			0.067			1.4			0.076		
			-----			-----			-----		
									0.043		

BOROWIEC

12205S001	7811	LK	-0.149	0.188	0.109	-3.7	4.7	2.7	0.223	0.136	0.033
12205S001	7811	LZ	0.149	-0.306	-0.199	3.7	-6.0	-3.7	-0.336	-0.163	-0.125
			-----			-----			-----		
			0.194			4.3			0.228		
			-----			-----			-----		
									0.091		

RIGA

12302S002	1884	LC	0.271	0.280	-0.811	1.1	1.0	-4.4	0.145	-0.747	-0.480
12302S002	1884	LK	0.097	0.062	0.106	2.4	1.6	2.7	0.018	-0.037	0.151
12302S002	1884	LS	0.123	0.167	-0.409	0.3	0.5	-1.7	0.103	-0.375	-0.243
12302S002	1884	LZ	-0.106	-0.071	-0.090	-2.6	-1.8	-1.8	-0.022	0.056	-0.144
			-----			-----			-----		
			0.298			2.1			0.303		
			-----			-----			-----		
									0.289		

SIMEIS

12337S006	1893	LL	-0.149	0.246	0.009	-3.0	4.6	0.2	0.287	-0.003	0.017
12337S006	1893	LK	0.082	-0.126	-0.005	2.0	-3.2	-0.1	-0.151	-0.001	-0.005
12337S006	1893	LZ	0.054	-0.092	-0.010	0.7	-0.9	-0.1	-0.106	-0.003	-0.012
			-----			-----			-----		
			0.114			2.3			0.139		
			-----			-----			-----		
									0.012		

DIONYSOS

12602M002	7515	LC	-0.011	-0.004	-0.018	-0.3	-0.1	-0.4	0.001	-0.007	-0.020
12602M002	7515	LD	0.011	0.025	-0.011	0.3	0.6	-0.3	0.018	-0.020	0.009
12602M002	7515	LS	-0.001	-0.033	0.037	0.0	-0.8	0.9	-0.030	0.038	0.011
12602M002	7515	LU	-0.015	0.002	0.005	-0.4	0.1	0.1	0.008	0.012	-0.007
12602M002	7515	LG	0.021	0.019	-0.019	0.5	0.4	-0.4	0.009	-0.032	0.010
			-----			-----			-----		
			0.019			0.4			0.021		
			-----			-----			-----		
									0.012		

ASKITES

12612M001	7510	LS	0.024	0.023	0.007	0.6	0.6	0.2	0.011	-0.015	0.029
12612M001	7510	LU	0.003	-0.031	0.005	0.1	-0.8	0.1	-0.029	0.011	-0.005
12612M001	7510	LC	-0.026	-0.026	0.005	-0.7	-0.7	0.1	-0.012	0.026	-0.023
12612M001	7510	LG	0.006	0.025	-0.001	0.1	0.4	0.0	0.019	-0.012	0.011
12612M001	7510	LD	-0.005	0.023	-0.017	-0.1	0.6	-0.4	0.023	-0.016	-0.007
			-----			-----			-----		
			0.018			0.4			0.018		
			-----			-----			-----		
									0.018		

ROUMELLI

12613M001	7517	LG	0.018	0.022	-0.014	0.4	0.5	-0.3	0.013	-0.026	0.013
12613M001	7517	LD	-0.019	0.029	-0.005	-0.5	0.7	-0.1	0.035	-0.001	-0.007
12613M001	7517	LS	0.078	0.056	0.088	1.9	1.4	2.2	0.018	0.017	0.127

12613M001	7517	LK	-0.043	-0.060	-0.029	-1.1	-1.5	-0.7	-0.037	0.013	-0.069
12613M001	7517	LZ	-0.028	0.008	0.006	-0.7	0.2	0.2	0.019	0.018	-0.015
12613M001	7517	LU	0.002	-0.020	-0.019	0.0	-0.5	-0.5	-0.019	-0.012	-0.016
12613M001	7517	LC	-0.008	-0.028	-0.032	-0.2	-0.7	-0.8	-0.022	-0.015	-0.034
			-----			-----			-----		
			0.037			0.9			0.021		
			-----			-----			-----		

KARITSA

12614M001	7520	LU	-0.010	0.044	-0.013	-0.2	1.1	-0.3	0.044	-0.014	-0.003
12614M001	7520	LC	-0.003	-0.036	-0.002	-0.1	-0.9	-0.1	-0.033	0.008	-0.013
12614M001	7520	LK	0.013	0.016	0.008	0.3	0.4	0.2	0.010	-0.005	0.019
12614M001	7520	LG	-0.003	-0.021	0.005	-0.1	-0.5	0.1	-0.019	0.010	-0.004
			-----			-----			-----		
			0.019			0.5			0.022		
			-----			-----			-----		

KATAVIA

12615M001	7512	LG	0.007	0.010	-0.004	0.1	0.1	-0.1	0.006	-0.009	0.007
12615M001	7512	LD	-0.075	0.113	0.028	-1.6	2.6	0.6	0.135	0.030	0.005
12615M001	7512	LS	0.018	-0.027	-0.014	0.4	-0.7	-0.4	-0.032	-0.014	-0.006
12615M001	7512	LU	0.010	-0.042	0.014	0.2	-1.0	0.3	-0.042	0.018	0.000
12615M001	7512	LC	0.024	-0.032	-0.018	0.6	-0.8	-0.4	-0.040	-0.018	-0.005
			-----			-----			-----		
			0.040			0.9			0.049		
			-----			-----			-----		

XRISOKALARIA

12616M001	7525	LS	-0.041	0.006	0.023	-1.0	0.1	0.6	0.020	0.039	-0.015
12616M001	7525	LG	0.030	0.032	-0.001	0.5	0.5	0.0	0.019	-0.025	0.031
12616M001	7525	LC	0.009	-0.032	-0.017	0.2	-0.8	-0.4	-0.033	-0.011	-0.013
12616M001	7525	LD	0.028	0.019	-0.004	0.7	0.5	-0.1	0.007	-0.023	0.024
12616M001	7525	LU	-0.010	-0.006	-0.002	-0.2	-0.1	0.0	-0.001	0.005	-0.010
			-----			-----			-----		
			0.021			0.5			0.022		
			-----			-----			-----		

LAMPEDUSA

12706M001	7544	LU	0.011	0.000	0.004	0.2	0.0	0.1	-0.003	-0.003	0.011
12706M001	7544	LK	-0.302	0.196	0.119	-0.7	0.5	0.8	0.257	0.243	-0.137
12706M001	7544	LC	0.000	-0.023	0.007	0.0	-0.6	0.2	-0.022	0.008	0.000
12706M001	7544	LS	-0.002	0.006	-0.025	0.0	0.1	-0.6	0.006	-0.020	-0.015
12706M001	7544	LG	-0.003	0.059	0.028	0.0	0.7	0.4	0.058	0.018	0.024
12706M001	7544	LZ	-0.089	0.074	0.061	-0.1	0.1	0.1	0.092	0.091	-0.022
			-----			-----			-----		
			0.096			0.4			0.111		
			-----			-----			-----		

BOLOGNA

12711M002	7546	GA	0.000	0.000	0.000	0.0	0.1	0.0	0.000	0.000	0.000
12711M002	7546	LK	0.004	-0.021	-0.038	0.1	-0.5	-1.0	-0.022	-0.027	-0.027
12711M002	7546	LS	0.063	-0.155	0.067	0.5	-1.8	0.6	-0.164	0.027	0.069
12711M002	7546	LC	0.004	-0.040	-0.007	0.1	-0.4	-0.1	-0.040	-0.002	-0.007
12711M002	7546	LZ	-0.004	-0.056	-0.005	-0.1	-1.4	-0.1	-0.054	0.007	-0.014
12711S001	7230	RG	0.005	0.021	0.001	0.2	1.1	0.0	0.020	-0.006	0.007

12711S001	7230	GA	0.000	0.000	-0.001	0.0	-0.1	-0.1	0.000	0.000	0.000	
12711S001	7230	RN	-0.012	0.013	-0.007	-0.6	0.6	-0.4	0.015	0.001	-0.012	
12711S001	7230	RO	0.005	-0.005	0.030	0.3	-0.3	1.1	-0.006	0.018	0.024	
			-----			-----			-----			
			0.039			0.6			0.044			0.027

NOTO

12717S001	7547	RN	-0.055	-0.050	0.007	-0.8	-1.7	0.1	-0.034	0.045	-0.049	
12717S001	7547	RG	0.001	0.014	0.013	0.0	0.7	0.6	0.013	0.008	0.011	
12717S001	7547	RO	0.004	0.010	-0.014	0.2	0.5	-0.7	0.008	-0.015	-0.003	
			-----			-----			-----			
			0.026			0.8			0.025			0.029

TRIESTE

12718M002	7550	LS	-0.019	0.005	0.097	-0.2	0.0	1.0	0.010	0.080	0.057	
12718M002	7550	LC	-0.028	-0.004	0.015	-0.7	-0.1	0.4	0.003	0.031	-0.009	
12718M002	7550	LG	0.056	0.006	-0.042	1.0	0.1	-0.6	-0.007	-0.069	0.010	
12718M002	7550	LU	0.001	0.001	-0.020	0.0	0.0	-0.5	0.001	-0.015	-0.013	
			-----			-----			-----			
			0.037			0.5			0.040			0.030

CAGLIARI

12725M002	7545	LG	0.034	-0.005	-0.027	0.8	-0.1	-0.7	-0.011	-0.042	0.008	
12725M002	7545	LZ	-0.022	0.021	0.017	-0.6	0.5	0.4	0.024	0.025	-0.004	
12725M002	7545	LU	0.014	-0.027	-0.001	0.2	-0.3	0.0	-0.029	-0.007	0.007	
12725M002	7545	LK	-0.099	0.005	-0.045	-2.5	0.1	-1.1	0.020	0.026	-0.103	
12725M002	7545	LC	0.023	-0.028	-0.019	0.6	-0.7	-0.5	-0.031	-0.027	0.003	
12725M002	7545	LS	0.058	0.015	0.075	1.4	0.4	1.9	0.006	0.021	0.093	
			-----			-----			-----			
			0.039			1.0			0.025			0.057

MATERA

12734M004	7541	LG	-0.001	0.008	-0.002	0.0	0.2	0.0	0.008	-0.002	-0.001	
12734M004	7541	LC	0.001	-0.008	0.002	0.0	-0.2	0.0	-0.008	0.002	0.001	
12734S001	7939	LG	0.012	0.035	0.010	0.3	0.9	0.2	0.030	-0.007	0.023	
12734S001	7939	LU	-0.002	0.007	-0.001	0.0	0.2	0.0	0.007	-0.001	0.000	
12734S001	7939	LD	0.025	0.019	0.003	0.6	0.5	0.1	0.011	-0.016	0.024	
12734S001	7939	LK	0.051	0.010	0.014	1.3	0.3	0.4	-0.005	-0.023	0.049	
12734S001	7939	LZ	-0.017	0.024	-0.027	-0.4	0.6	-0.7	0.028	-0.015	-0.025	
12734S001	7939	LL	0.019	-0.105	0.070	0.4	-2.1	1.4	-0.106	0.061	0.037	
12734S001	7939	LS	-0.059	-0.023	-0.040	-1.5	-0.6	-1.0	-0.005	0.010	-0.074	
12734S001	7939	LC	-0.022	-0.005	-0.004	-0.6	-0.1	-0.1	0.002	0.012	-0.020	
			-----			-----			-----			
			0.031			0.7			0.030			0.034

CHILBOLTON

13201S002	7215	RG	0.025	-0.021	0.013	1.2	-1.1	0.6	-0.021	-0.011	0.026	
13201S002	7215	RN	-0.025	0.021	-0.013	-1.2	1.1	-0.6	0.021	0.011	-0.026	
			-----			-----			-----			
			0.020			1.0			0.017			0.026

HERSTMONCEUX

13212S001	7840	LG	-0.003	0.029	-0.006	-0.1	0.7	-0.1	0.029	-0.001	-0.007
13212S001	7840	LK	0.065	-0.003	0.032	1.6	-0.1	0.8	-0.003	-0.030	0.066
13212S001	7840	LS	-0.059	0.003	-0.041	-1.5	0.1	-1.0	0.004	0.020	-0.069
13212S001	7840	LD	0.014	-0.016	-0.017	0.4	-0.4	-0.4	-0.016	-0.022	-0.004
13212S001	7840	LL	0.034	-0.096	0.074	0.7	-1.9	1.5	-0.096	0.021	0.079
13212S001	7840	LC	-0.032	0.007	0.001	-0.8	0.2	0.0	0.008	0.025	-0.019
13212S001	7840	LU	-0.001	0.011	-0.010	0.0	0.3	-0.3	0.011	-0.006	-0.009
13212S001	7840	LZ	-0.006	0.030	-0.006	-0.1	0.8	-0.2	0.030	0.000	-0.008
			-----			-----			-----		
			0.035			0.8			0.030		
			-----			-----			-----		
									0.045		

MADRID

13407S003	1561	RG	-0.019	0.003	-0.023	-0.4	0.2	-0.5	0.002	-0.005	-0.029
13407S003	1561	RJ	0.017	-0.021	0.029	0.3	-0.4	0.6	-0.020	0.010	0.033
13407S010	1565	RN	0.032	-0.010	0.035	1.6	-0.5	1.8	-0.007	0.006	0.048
13407S010	1565	RG	-0.021	0.008	-0.027	-1.1	0.4	-1.4	0.007	-0.007	-0.035
13407S010	1565	RJ	-0.069	0.010	-0.049	-1.4	0.2	-1.0	0.005	0.007	-0.085
			-----			-----			-----		
			0.030			1.0			0.009		
			-----			-----			-----		
									0.050		

KOOTWIJK

13504M002	8833	LK	-0.002	-0.068	0.011	-0.1	-1.7	0.3	-0.067	0.014	0.003
13504M002	8833	LL	0.115	0.256	0.052	2.3	5.1	1.0	0.243	-0.078	0.127
13504M002	8833	LZ	-0.032	-0.025	0.048	-0.8	-0.6	1.2	-0.021	0.057	0.017
13504M002	8833	LG	0.003	-0.015	-0.086	0.1	-0.4	-2.2	-0.016	-0.054	-0.067
13504M002	8833	LC	-0.041	-0.055	-0.006	-1.0	-1.4	-0.2	-0.051	0.033	-0.034
13504S001	7833	LG	-0.084	0.044	-0.069	-0.8	0.5	-0.7	0.053	0.020	-0.103
13504S001	7833	LC	0.012	-0.009	0.011	0.3	-0.2	0.3	-0.010	-0.002	0.015
			-----			-----			-----		
			0.075			1.5			0.077		
			-----			-----			-----		
									0.069		

ZIMMERWALD

14001S001	7810	LU	-0.014	-0.038	0.034	-0.4	-0.9	0.9	-0.036	0.037	0.012
14001S001	7810	LS	-0.038	-0.023	-0.025	-1.0	-0.6	-0.6	-0.017	0.012	-0.046
14001S001	7810	LC	-0.011	-0.010	0.019	-0.3	-0.2	0.5	-0.008	0.021	0.005
14001S001	7810	LL	0.064	0.250	-0.146	1.3	5.0	-2.9	0.239	-0.170	-0.041
14001S001	7810	LZ	-0.006	-0.009	0.040	-0.1	-0.2	1.0	-0.008	0.033	0.025
14001S001	7810	LG	0.020	0.048	-0.015	0.5	1.2	-0.4	0.045	-0.029	0.006
14001S001	7810	LD	0.002	-0.079	0.012	0.0	-1.9	0.3	-0.078	0.014	0.003
14001S001	7810	LK	0.006	-0.054	0.030	0.1	-1.4	0.7	-0.054	0.021	0.021
			-----			-----			-----		
			0.067			1.4			0.080		
			-----			-----			-----		
									0.025		

POTSDAM

14106S001	1181	LK	0.045	0.032	0.039	1.1	0.8	1.0	0.021	-0.016	0.062
14106S001	1181	LZ	0.022	0.036	0.136	0.5	0.9	3.4	0.030	0.060	0.125
14106S001	1181	LC	0.022	0.018	-0.046	0.5	0.4	-1.2	0.012	-0.048	-0.021
14106S001	1181	LL	-0.109	-0.068	-0.048	-2.2	-1.4	-1.0	-0.042	0.066	-0.113

14106S001	1181	LG	-0.009	0.008	-0.038	-0.1	0.1	-0.5	0.009	-0.018	-0.034
14106S001	1181	LS	0.007	0.088	-0.071	0.1	1.6	-1.8	0.084	-0.065	-0.039
14106S001	1181	LD	-0.021	-0.093	-0.016	-0.5	-2.3	-0.4	-0.086	0.023	-0.038
			-----			-----			-----		
			0.058			1.3			0.049		0.073

WETTZELL

14201S002	7834	LK	0.006	-0.006	-0.018	0.2	-0.1	-0.5	-0.007	-0.016	-0.010
14201S002	7834	GA	0.000	0.000	0.000	0.0	-0.1	0.1	0.000	0.000	0.000
14201S002	7834	LZ	0.005	0.049	-0.010	0.1	1.2	-0.2	0.046	-0.018	0.003
14201S002	7834	LG	0.019	0.061	-0.006	0.5	1.5	-0.1	0.055	-0.028	0.017
14201S002	7834	LS	-0.062	-0.006	-0.089	-1.6	-0.1	-2.2	0.009	-0.011	-0.108
14201S002	7834	LC	-0.037	0.010	-0.044	-0.9	0.3	-1.1	0.018	-0.004	-0.055
14201S002	7834	LD	0.007	0.021	-0.018	0.2	0.5	-0.5	0.019	-0.021	-0.006
14201S002	7834	LU	0.011	0.027	-0.011	0.3	0.7	-0.3	0.024	-0.019	0.003
14201S002	7834	LL	0.030	-0.094	0.094	0.6	-1.9	1.9	-0.098	0.055	0.077
14201S004	7224	RN	0.003	-0.025	0.010	0.1	-1.3	0.5	-0.025	0.009	0.005
14201S004	7224	RG	0.012	-0.020	0.010	0.6	-1.0	0.5	-0.022	0.000	0.012
14201S004	7224	RS	-0.011	0.015	-0.006	-0.4	0.5	-0.2	0.017	0.002	-0.009
14201S004	7224	RM	0.012	-0.036	0.011	0.1	-0.4	0.1	-0.038	0.005	0.011
14201S004	7224	GA	0.000	0.001	0.000	-0.1	0.3	-0.1	0.000	0.000	-0.001
14201S010	7596	LC	-0.011	0.062	0.067	-0.3	1.6	1.7	0.063	0.042	0.053
14201S010	7596	GA	0.000	0.000	0.000	0.0	-0.1	-0.1	0.000	0.000	0.000
			-----			-----			-----		
			0.034			0.8			0.031		0.039

EFFELSBERG

14209S001	7203	RN	-0.022	0.014	-0.004	-1.1	0.7	-0.2	0.017	0.013	-0.016
14209S001	7203	RG	0.022	-0.014	0.004	1.1	-0.7	0.2	-0.017	-0.014	0.016
			-----			-----			-----		
			0.015			0.8			0.015		0.016

BAR GIYYORA

20702S001	7530	LG	0.010	0.025	0.004	0.2	0.6	0.1	0.015	-0.008	0.021
20702S001	7530	LC	-0.010	-0.025	-0.004	-0.2	-0.6	-0.1	-0.015	0.008	-0.021
			-----			-----			-----		
			0.016			0.4			0.012		0.021

DIYARBAKIR

20801M001	7575	LC	-0.037	-0.014	0.010	-0.9	-0.4	0.2	0.013	0.030	-0.024
20801M001	7575	LS	0.061	0.033	-0.024	1.5	0.8	-0.6	-0.014	-0.061	0.039
20801M001	7575	LU	-0.016	-0.023	0.007	-0.2	-0.4	0.1	-0.007	0.022	-0.017
20801M001	7575	LG	-0.111	-0.046	0.100	-0.9	-0.4	0.8	0.036	0.149	-0.029
			-----			-----			-----		
			0.052			0.7			0.060		0.028

YOZGAT

20802M001	7585	LU	-0.044	-0.015	0.017	-0.7	-0.3	0.3	0.013	0.041	-0.024
20802M001	7585	LK	0.007	-0.036	0.022	0.2	-0.9	0.5	-0.033	0.026	0.003
20802M001	7585	LC	-0.031	-0.011	0.009	-0.7	-0.2	0.2	0.008	0.027	-0.019

20802M001	7585	LS	0.071	0.052	-0.042	1.4	1.3	-1.0	0.002	-0.088	0.041
20802M001	7585	LG	-0.051	-0.015	0.012	-0.4	-0.1	0.1	0.016	0.042	-0.031
			-----			-----			-----		
			0.035			0.7			0.038		
			-----			-----			-----		
									0.027		

MELENGICLICK

20803M001	7580	LU	-0.016	-0.018	0.011	-0.3	-0.3	0.2	-0.006	0.023	-0.012
20803M001	7580	LS	0.110	0.061	0.015	2.1	1.0	0.3	-0.009	-0.064	0.109
20803M001	7580	LG	-0.053	0.016	-0.016	-0.6	0.2	-0.2	0.042	0.009	-0.038
20803M001	7580	LC	-0.045	-0.018	-0.015	-1.1	-0.5	-0.4	0.009	0.017	-0.047
			-----			-----			-----		
			0.043			0.8			0.029		
			-----			-----			-----		
									0.063		

YIGILCA

20804M001	7587	LC	-0.012	0.030	0.002	-0.3	0.8	0.0	0.032	-0.003	0.006
20804M001	7587	LU	-0.016	0.034	0.009	-0.3	0.7	0.2	0.037	0.004	0.009
20804M001	7587	LG	0.005	0.038	-0.016	0.0	0.5	-0.2	0.030	-0.028	0.007
20804M001	7587	LK	0.018	-0.062	-0.005	0.4	-1.5	-0.1	-0.062	0.008	-0.016
			-----			-----			-----		
			0.027			0.6			0.032		
			-----			-----			-----		
									0.010		

SHANGHAI

21605S001	7837	LK	-0.030	-0.021	-0.101	-0.7	-0.5	-2.5	0.036	-0.085	-0.054
21605S001	7837	LL	0.050	0.026	0.013	1.0	0.5	0.3	-0.056	0.013	0.003
21605S001	7837	LG	0.057	-0.116	-0.068	0.1	-0.5	-0.1	0.011	0.008	-0.146
21605S001	7837	LZ	-0.026	0.033	-0.131	-0.6	0.8	-3.3	0.005	-0.134	-0.031
21605S001	7837	LS	-0.008	0.006	-0.030	-0.1	0.1	-0.3	0.004	-0.030	-0.008
21605S001	7837	LC	-0.043	0.050	-0.022	-0.5	0.6	-0.3	0.010	-0.052	0.045
21605S001	7837	GA	0.000	0.000	0.000	0.0	0.0	0.1	0.000	0.000	0.000
21605S009	7227	GA	-0.002	0.002	-0.015	-0.2	0.2	-1.5	-0.003	-0.015	-0.003
21605S009	7227	RG	-0.014	0.017	0.032	-0.7	0.8	1.6	0.003	0.016	0.035
21605S009	7227	RN	0.022	-0.026	0.027	1.1	-1.3	1.4	-0.005	0.041	-0.015
			-----			-----			-----		
			0.046			1.1			0.042		
			-----			-----			-----		
									0.054		

KASHIMA

21701S001	1856	RM	-0.022	-0.018	-0.035	-0.2	-0.2	-0.4	0.028	-0.032	-0.016
21701S001	1856	RN	0.003	0.005	0.013	0.1	0.2	0.7	-0.005	0.010	0.008
21701S001	1856	RG	-0.002	-0.004	-0.012	-0.1	-0.2	-0.6	0.004	-0.009	-0.008
			-----			-----			-----		
			0.016			0.4			0.018		
			-----			-----			-----		
									0.011		

SIMOSATO

21726S001	7838	LC	0.012	0.052	0.008	0.3	1.3	0.2	-0.046	-0.009	0.027
21726S001	7838	LG	0.004	0.061	-0.004	0.1	1.5	-0.1	-0.047	-0.025	0.031
21726S001	7838	LK	-0.040	0.004	0.054	-1.0	0.1	1.3	0.025	0.028	0.056
21726S001	7838	LZ	-0.043	0.000	0.017	-1.1	0.0	0.4	0.030	-0.003	0.036
21726S001	7838	LD	0.000	0.019	-0.016	0.0	0.5	-0.4	-0.014	-0.021	0.002
21726S001	7838	LS	0.003	-0.004	0.021	0.1	-0.1	0.5	0.001	0.020	0.008
21726S001	7838	LU	0.017	-0.008	0.006	0.4	-0.2	0.2	-0.006	0.015	-0.012

21726S001	7838	LL	0.074	-0.196	-0.134	1.5	-3.9	-2.7	0.089	-0.008	-0.232
			-----			-----			-----		
			0.057			1.2			0.032		
									0.087		

HELWAN

30101S001	7831	LS	0.011	-0.182	-0.018	0.0	-1.1	-0.1	-0.162	0.027	-0.083
30101S001	7831	LL	0.009	-0.222	-0.065	0.2	-4.4	-1.3	-0.194	-0.003	-0.126
30101S001	7831	LC	0.054	-0.140	0.020	0.3	-0.9	0.2	-0.148	0.031	-0.013
30101S001	7831	LK	0.014	0.128	0.027	0.3	3.2	0.7	0.102	-0.016	0.081
30101S001	7831	LG	-0.092	0.368	0.087	-1.1	2.7	0.9	0.362	0.020	0.141
			-----			-----			-----		
			0.136			1.7			0.152		
									0.099		

JOHANNESBURG

30302S001	7232	RG	0.002	-0.018	0.035	0.1	-0.9	1.7	-0.017	0.028	-0.021
30302S001	7232	RN	-0.002	0.018	-0.035	-0.1	0.9	-1.7	0.017	-0.028	0.021
			-----			-----			-----		
			0.023			1.1			0.023		
									0.021		

ALGONQUIN

40104S001	7282	RN	0.010	-0.036	0.023	0.5	-1.1	0.8	0.002	-0.011	0.042
40104S001	7282	RG	-0.010	0.014	-0.010	-0.5	0.7	-0.5	-0.007	0.004	-0.018
			-----			-----			-----		
			0.020			0.7			0.007		
									0.032		

PASADENA

40400M001	7896	LC	0.060	-0.063	-0.135	1.5	-1.6	-3.4	0.082	-0.127	-0.053
40400M001	7896	GA	0.000	0.000	0.000	-0.1	0.0	0.2	0.000	0.000	0.000
40400M001	7896	LG	0.040	0.010	-0.111	1.0	0.2	-2.8	0.031	-0.076	-0.085
40400M003	7263	RG	-0.025	0.013	0.061	-1.3	0.7	3.1	-0.028	0.051	0.034
40400M003	7263	GA	0.001	0.000	-0.001	0.2	-0.1	-0.3	0.000	-0.001	0.000
			-----			-----			-----		
			0.054			1.6			0.057		
									0.047		

GOLDSTONE

40405M001	7085	GB	0.000	0.000	0.000	0.0	0.0	-0.1	0.000	0.000	0.000
40405M001	7085	LC	-0.272	-0.286	0.345	-3.1	-2.9	5.3	-0.113	0.064	0.508
40405M002	7115	LG	0.020	0.101	-0.013	0.5	2.5	-0.3	-0.028	0.047	-0.088
40405M002	7115	LC	0.040	0.082	-0.019	1.0	2.0	-0.5	-0.002	0.037	-0.085
40405M002	7115	GC	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40405M002	7115	GB	-0.009	-0.043	0.027	-0.4	-1.9	1.2	-0.017	0.048	0.007
40405M006	7265	GA	0.000	0.000	0.000	0.1	-0.1	0.0	0.000	0.000	0.000
40405M006	7265	LG	-0.029	-0.003	-0.005	-0.7	-0.1	-0.1	-0.024	-0.013	0.009
40405M006	7265	LC	-0.014	0.038	-0.020	-0.3	1.0	-0.5	-0.029	0.000	-0.034
40405M013	7288	LC	-0.012	0.012	-0.037	-0.3	0.3	-0.9	-0.016	-0.027	-0.026
40405M013	7288	LS	0.022	-0.081	0.043	0.6	-2.0	1.1	0.056	-0.001	0.075
40405M013	7288	GA	0.000	-0.001	0.008	0.0	-0.1	0.8	0.001	0.008	-0.001
40405M013	7288	LK	0.006	0.005	-0.030	0.2	0.1	-0.8	0.003	-0.020	-0.024
40405M013	7288	LZ	0.001	0.011	-0.012	0.0	0.3	-0.3	-0.005	-0.004	-0.016
40405M013	7288	LG	-0.012	-0.002	-0.052	-0.3	0.0	-1.3	-0.010	-0.046	-0.024

40405M013	7288	RG	0.001	0.016	-0.010	0.1	0.8	-0.5	-0.006	0.000	-0.018
40405S009	7222	RO	0.010	0.003	-0.014	0.5	0.2	-0.7	0.007	-0.007	-0.014
40405S009	7222	GA	0.000	0.000	0.000	0.0	0.0	-0.1	0.000	0.000	0.000
40405S009	7222	GB	0.001	-0.011	0.023	0.1	-1.0	2.1	0.007	0.021	-0.014
40405S009	7222	RN	-0.002	0.012	-0.013	-0.1	0.6	-0.6	-0.007	-0.005	-0.015
40405S009	7222	RG	-0.004	0.011	-0.012	-0.2	0.6	-0.6	-0.009	-0.005	-0.013
40405S014	1513	RJ	0.012	0.014	-0.008	0.2	0.3	-0.2	0.004	0.004	-0.019
40405S014	1513	RG	-0.009	-0.013	-0.013	-0.5	-0.6	-0.6	-0.002	-0.019	0.005
40405S014	1513	GC	0.000	0.000	0.000	0.0	0.1	0.1	0.000	0.000	0.000
40405S019	7231	RJ	0.030	-0.040	0.053	0.6	-0.8	1.1	0.045	0.031	0.048
40405S019	7231	RG	0.006	-0.055	0.058	0.3	-2.8	2.9	0.030	0.020	0.071
40405S019	7231	GB	0.000	0.001	-0.001	-0.1	0.5	-0.5	-0.001	-0.001	0.001
			-----			-----			-----		
			0.064			1.2			0.026		
									0.104		

FAIRBANKS

40408S002	7225	RM	-0.016	0.027	0.079	-0.2	0.3	0.8	-0.032	0.034	0.071
40408S002	7225	RG	-0.007	-0.001	-0.002	-0.4	-0.1	-0.1	-0.003	-0.007	0.001
40408S002	7225	RN	0.008	0.005	0.003	0.4	0.2	0.1	0.000	0.010	-0.001
40408S002	7225	RO	0.000	-0.005	-0.004	0.0	-0.2	-0.2	0.004	-0.004	-0.002
			-----			-----			-----		
			0.025			0.3			0.017		
									0.036		

PATRICK AFB

40417M002	7069	LC	0.009	-0.028	0.000	0.1	-0.4	0.0	0.004	-0.014	0.026
40417M002	7069	LG	-0.041	0.183	0.004	-0.2	1.1	0.0	-0.011	0.091	-0.164
			-----			-----			-----		
			0.078			0.5			0.046		
									0.117		

VANDENBERG AFB

40420M002	7223	RN	0.002	0.000	0.001	0.1	0.0	0.1	0.001	0.002	0.000
40420M002	7223	RG	-0.002	0.000	-0.001	-0.1	0.0	-0.1	-0.001	-0.002	0.000
			-----			-----			-----		
			0.001			0.1			0.002		
									0.000		

KAUAI

40424S001	1311	RO	-0.002	-0.006	0.006	-0.1	-0.3	0.3	0.005	0.004	0.006
40424S001	1311	GA	0.000	0.000	0.000	0.0	-0.1	0.1	0.000	0.000	0.000
40424S001	1311	RN	-0.003	0.025	-0.018	-0.1	1.3	-0.9	-0.025	-0.014	-0.012
40424S001	1311	RG	-0.005	0.011	-0.015	-0.3	0.6	-0.7	-0.012	-0.014	-0.004
			-----			-----			-----		
			0.011			0.6			0.012		
									0.007		

QUINCY

40433M001	7051	GA	0.000	-0.001	-0.001	0.0	-0.4	-0.5	-0.001	-0.001	0.001
40433M001	7051	LC	-0.005	0.102	0.131	-0.1	2.5	3.3	-0.056	0.155	0.019
40433M001	7051	LG	-0.019	0.088	0.112	-0.5	2.2	2.8	-0.061	0.128	0.021
40433M002	7109	LS	0.019	0.007	-0.006	0.5	0.2	-0.1	0.013	0.006	-0.016
40433M002	7109	LC	-0.005	-0.009	-0.009	-0.1	-0.2	-0.2	0.000	-0.014	0.002
40433M002	7109	LD	0.039	-0.041	0.009	1.0	-1.0	0.2	0.055	-0.002	0.017

40433M002	7109	LL	-0.070	-0.072	0.043	-1.4	-1.4	0.9	-0.023	-0.030	0.102
40433M002	7109	LZ	0.002	-0.036	-0.003	0.1	-0.9	-0.1	0.020	-0.021	0.021
40433M002	7109	LG	-0.012	-0.018	-0.015	-0.3	-0.4	-0.4	-0.001	-0.025	0.007
40433M002	7109	LU	0.028	-0.013	-0.010	0.7	-0.3	-0.2	0.031	-0.005	-0.009
40433M002	7109	GA	0.000	0.000	0.000	0.0	0.1	0.0	0.000	0.000	0.000
40433M004	7221	RG	0.018	-0.013	-0.027	0.9	-0.6	-1.4	0.022	-0.022	-0.016
40433M004	7221	GA	0.000	0.000	0.000	-0.1	0.0	0.1	0.000	0.000	0.000
40433M005	7886	GA	0.000	0.000	0.001	0.1	0.0	0.2	0.000	0.001	0.000
40433M005	7886	LC	-0.004	0.044	-0.028	-0.1	1.1	-0.7	-0.026	0.001	-0.045
40433M005	7886	LG	-0.071	-0.027	-0.099	-1.8	-0.7	-2.5	-0.047	-0.114	-0.018
40433S006	7109	LK	-0.026	-0.002	0.008	-0.6	-0.1	0.2	-0.021	-0.004	0.017
40433S006	7109	LD	0.026	0.002	-0.008	0.6	0.1	-0.2	0.021	0.004	-0.017
			-----			-----			-----		
			0.040			1.0			0.045		
			-----			-----			-----		
			0.029								

MOUNT HOPKINS

40434M002	7888	LG	0.002	0.003	0.006	0.0	0.1	0.1	0.000	0.007	0.000
40434M002	7888	LC	-0.002	-0.003	-0.006	0.0	-0.1	-0.1	0.000	-0.007	0.000
40434S001	7921	LC	0.046	0.011	0.054	1.1	0.3	1.4	0.039	0.060	0.006
40434S001	7921	LG	-0.046	-0.011	-0.054	-1.1	-0.3	-1.4	-0.039	-0.060	-0.006
			-----			-----			-----		
			0.029			0.7			0.036		
			-----			-----			-----		
									0.004		

SAN DIEGO

40436M002	7062	LG	-0.017	-0.023	-0.039	-0.4	-0.6	-1.0	-0.005	-0.048	0.003
40436M002	7062	LC	0.032	0.035	-0.058	0.8	0.9	-1.4	0.013	-0.024	-0.070
40436M002	7062	GA	0.000	0.000	0.001	0.0	0.0	0.2	0.000	0.000	0.000
40436M003	7035	GA	0.000	0.000	0.000	0.1	0.0	0.0	0.000	0.000	0.000
40436M003	7035	LZ	-0.029	0.004	0.032	-0.7	0.1	0.8	-0.028	0.022	0.025
40436M003	7035	LC	-0.024	0.019	0.007	-0.6	0.5	0.2	-0.030	0.009	-0.002
40436M003	7035	LK	0.002	0.032	-0.006	0.1	0.8	-0.1	-0.013	0.011	-0.028
40436M003	7035	LS	-0.029	0.018	0.030	-0.7	0.4	0.7	-0.034	0.027	0.013
			-----			-----			-----		
			0.024			0.6			0.022		
			-----			-----			-----		
									0.028		

BEAR LAKE

40438M001	7082	LC	0.021	-0.043	0.046	0.5	-1.1	1.1	0.035	0.013	0.055
40438M001	7082	LG	-0.021	0.043	-0.046	-0.5	1.1	-1.1	-0.035	-0.013	-0.055
			-----			-----			-----		
			0.038			1.0			0.026		
			-----			-----			-----		
									0.055		

OWENS VALLEY

40439M001	7114	LC	0.000	0.052	0.049	0.0	1.3	1.2	-0.025	0.066	-0.007
40439M001	7114	GA	0.000	-0.001	-0.001	0.0	-0.2	-0.2	0.000	0.000	0.001
40439M001	7114	LG	-0.019	0.077	0.047	-0.5	1.9	1.2	-0.054	0.073	-0.018
40439M004	7853	LC	-0.033	-0.060	-0.027	-0.8	-1.5	-0.7	-0.001	-0.063	0.039
40439M004	7853	LK	0.006	0.003	0.003	0.1	0.1	0.1	0.004	0.006	-0.003
40439M004	7853	RG	0.004	-0.008	-0.002	0.2	-0.4	-0.1	0.007	-0.005	0.004
40439M004	7853	LZ	-0.025	-0.005	0.002	-0.6	-0.1	0.1	-0.019	-0.008	0.014
40439M004	7853	GA	0.000	0.000	0.000	0.1	0.1	0.0	0.000	0.000	0.000
40439M004	7853	LS	-0.062	-0.082	-0.001	-1.6	-1.9	0.0	-0.016	-0.062	0.080

40439S002	7207	RG	0.010	-0.001	-0.004	0.5	-0.1	-0.2	0.009	-0.001	-0.005
40439S002	7207	RN	0.020	0.011	-0.012	1.0	0.6	-0.6	0.012	0.002	-0.023
40439S002	7207	GA	-0.002	-0.002	0.003	-0.4	-0.2	0.4	-0.003	0.003	-0.001
			-----			-----			-----		
			0.029			0.8			0.030		
									0.027		

WESTFORD

40440M001	7091	LK	0.006	0.043	-0.071	0.1	1.1	-1.8	0.019	-0.026	-0.077
40440M001	7091	LS	-0.012	-0.025	-0.001	-0.2	-0.6	0.0	-0.019	-0.014	0.013
40440M001	7091	LG	0.082	-0.060	0.068	2.0	-1.5	1.7	0.058	-0.005	0.107
40440M001	7091	LZ	-0.027	0.003	0.025	-0.7	0.1	0.6	-0.024	0.026	0.008
40440M001	7091	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40440M001	7091	LC	-0.020	-0.003	0.017	-0.5	-0.1	0.4	-0.020	0.015	0.009
40440S002	7205	RN	-0.012	0.006	0.006	-0.6	0.3	0.3	-0.010	0.011	-0.003
40440S002	7205	RG	-0.002	-0.004	-0.005	-0.1	-0.2	-0.3	-0.003	-0.006	-0.001
40440S002	7205	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40440S003	7209	RS	-0.005	-0.035	0.022	-0.2	-1.2	0.7	-0.016	-0.005	0.038
40440S003	7209	RM	0.012	0.019	-0.020	0.1	0.2	-0.2	0.017	-0.005	-0.024
40440S003	7209	GA	0.000	0.000	0.000	0.0	-0.1	0.1	0.000	0.001	0.000
40440S003	7209	RN	0.004	0.013	-0.012	0.2	0.6	-0.6	0.008	-0.001	-0.016
40440S003	7209	RG	0.003	0.010	-0.008	0.2	0.5	-0.4	0.006	0.000	-0.011
			-----			-----			-----		
			0.026			0.7			0.017		
									0.038		

GREENBANK

40441S001	7204	RN	0.016	-0.277	0.210	0.8	-4.3	4.0	-0.033	-0.006	0.346
40441S001	7204	RG	-0.016	0.026	-0.031	-0.8	1.3	-1.6	-0.012	-0.007	-0.042
40441S004	7214	RG	0.002	-0.012	0.006	0.1	-0.6	0.3	0.000	-0.003	0.013
40441S004	7214	RO	-0.002	0.012	-0.006	-0.1	0.6	-0.3	0.000	0.003	-0.013
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			0.101			1.9			0.013		
									0.175		

FORT DAVIS

40442M001	7086	LG	0.004	0.004	-0.031	0.1	0.1	-0.8	0.003	-0.024	-0.019
40442M001	7086	LL	0.012	-0.001	0.057	0.2	0.0	1.1	0.012	0.050	0.027
40442M001	7086	MX	-0.026	-0.053	0.002	-0.1	-1.0	0.0	-0.012	-0.027	0.051
40442M001	7086	ME	-0.032	0.032	-0.303	-0.6	0.6	-6.1	-0.039	-0.249	-0.173
40442M001	7086	LS	0.022	0.054	-0.028	0.6	1.4	-0.7	0.008	0.005	-0.064
40442M001	7086	MS	-0.061	-0.018	0.005	-0.6	-0.2	0.0	-0.054	-0.012	0.030
40442M001	7086	GA	0.000	0.000	0.000	0.0	-0.1	0.2	0.000	0.000	0.000
40442M001	7086	LU	0.029	0.057	-0.019	0.7	1.4	-0.5	0.014	0.015	-0.064
40442M001	7086	LK	-0.047	0.031	-0.036	-1.2	0.8	-0.9	-0.053	-0.022	-0.034
40442M001	7086	LZ	0.019	0.023	0.019	0.5	0.6	0.5	0.013	0.031	-0.013
40442M001	7086	MJ	0.012	0.000	0.013	0.2	0.0	0.3	0.012	0.013	0.004
40442M001	7086	LD	-0.007	0.027	-0.021	-0.2	0.7	-0.5	-0.014	-0.006	-0.032
40442M001	7086	LC	0.005	-0.008	-0.021	0.1	-0.2	-0.5	0.007	-0.022	-0.005
40442M005	7885	LG	0.022	-0.146	0.012	0.6	-3.7	0.3	0.057	-0.059	0.124
40442M005	7885	LC	0.049	-0.054	0.021	1.2	-1.4	0.5	0.061	-0.003	0.046
40442M005	7885	GA	0.000	0.001	0.000	-0.1	0.4	-0.1	0.000	0.000	0.000
40442M006	7080	GB	0.000	0.000	-0.001	-0.1	0.0	-0.2	0.001	-0.001	-0.001
40442M006	7080	MJ	0.012	-0.013	-0.014	0.2	-0.3	-0.3	0.015	-0.017	0.001
40442M006	7080	MS	-0.004	-0.022	-0.018	0.0	-0.2	-0.2	0.001	-0.027	0.010

40442M006	7080	LK	0.011	0.076	-0.031	0.3	1.9	-0.8	-0.008	0.012	-0.082
40442M006	7080	MX	0.052	-0.030	-0.037	0.3	-0.6	-0.7	0.058	-0.040	-0.005
40442M006	7080	ME	0.042	-0.153	0.308	0.9	-3.1	6.2	0.078	0.195	0.275
40442M006	7080	LC	-0.006	0.044	-0.025	-0.2	1.1	-0.6	-0.016	-0.001	-0.048
40442M006	7080	LL	0.090	-0.003	0.020	1.8	-0.1	0.4	0.088	0.026	-0.006
40442M006	7080	LU	0.013	0.021	-0.092	0.3	0.5	-1.6	0.007	-0.067	-0.067
40442M006	7080	LS	-0.059	-0.055	0.008	-1.5	-1.4	0.2	-0.044	-0.028	0.062
40442M006	7080	LZ	-0.006	0.051	-0.016	-0.2	1.3	-0.4	-0.018	0.011	-0.049
40442M008	7850	GA	0.000	0.000	-0.001	0.1	0.1	-0.2	0.000	0.000	0.000
40442M008	7850	RG	-0.007	-0.010	0.023	-0.4	-0.5	1.1	-0.005	0.014	0.021
40442M009	7900	RG	0.008	-0.009	0.013	0.4	-0.5	0.7	0.010	0.008	0.013
40442M009	7900	GB	0.000	0.000	0.000	-0.1	0.1	-0.1	0.000	0.000	0.000
40442S001	7086	LD	-0.037	0.006	-0.060	-0.9	0.2	-1.5	-0.037	-0.053	-0.028
40442S001	7086	GA	0.000	0.000	0.000	0.1	0.0	0.1	0.000	0.000	0.000
40442S002	7206	GA	0.000	0.000	0.000	0.1	-0.2	0.0	0.001	0.000	0.000
40442S002	7206	MX	-0.094	0.097	0.033	-0.5	1.8	0.7	-0.115	0.065	-0.045
40442S002	7206	MJ	-0.060	0.045	-0.007	-1.2	0.9	-0.1	-0.069	0.008	-0.029
40442S003	7216	RM	0.015	0.019	-0.026	0.2	0.2	-0.3	0.010	-0.011	-0.032
40442S003	7216	RN	-0.009	-0.003	0.010	-0.4	-0.2	0.5	-0.007	0.006	0.010
40442S003	7216	RG	-0.007	-0.003	0.014	-0.3	-0.1	0.7	-0.006	0.010	0.010
40442S003	7216	GA	0.000	0.002	-0.006	-0.1	0.1	-0.9	0.001	-0.006	0.002
40442S003	7216	GB	0.000	0.000	0.000	0.0	0.0	0.1	0.000	0.000	0.000
40442S003	7216	RS	0.007	0.017	-0.003	0.2	0.6	-0.1	0.003	0.007	-0.017
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			0.052			1.1			0.046		
									0.062		

MAUI

40445M001	7210	LL	-0.144	-0.041	0.033	-2.9	-0.8	0.7	-0.021	-0.021	0.150
40445M001	7210	LD	0.011	-0.018	0.016	0.3	-0.5	0.4	0.021	0.016	0.003
40445M001	7210	GA	0.000	0.000	0.000	0.0	0.1	-0.1	0.000	0.000	0.000
40445M001	7210	LK	0.046	-0.081	0.050	1.2	-2.0	1.3	0.093	0.050	0.009
40445M001	7210	LU	0.037	0.004	0.051	0.9	0.1	1.3	0.011	0.060	-0.015
40445M001	7210	LZ	0.065	-0.053	0.087	1.6	-1.3	2.2	0.074	0.095	-0.006
40445M001	7210	GA	-0.005	0.003	-0.002	-0.4	0.5	-0.4	-0.004	-0.004	-0.003
40445M001	7210	LG	-0.018	-0.028	-0.015	-0.4	-0.7	-0.4	0.019	-0.024	0.020
40445M001	7210	LC	0.004	-0.032	-0.008	0.1	-0.8	-0.2	0.031	-0.010	0.006
40445M001	7210	LS	0.057	-0.015	0.010	1.4	-0.4	0.2	0.037	0.025	-0.040
40445M002	7120	LG	-0.057	0.013	-0.017	-1.4	0.3	-0.4	-0.035	-0.033	0.038
40445M002	7120	GA	0.001	-0.001	0.001	0.2	-0.2	0.2	-0.001	0.001	0.000
40445M002	7120	LC	-0.048	-0.007	-0.049	-1.2	-0.2	-1.2	-0.013	-0.062	0.026
40445M002	7120	RG	-0.001	0.023	-0.012	-0.1	1.2	-0.6	-0.022	-0.009	-0.012
40445S002	7210	GB	-0.005	0.000	-0.001	-0.2	0.0	0.0	0.002	0.004	-0.003
40445S002	7210	MS	0.059	0.003	0.013	0.6	0.0	0.1	0.021	0.032	-0.047
40445S005	7210	ME	0.037	0.088	0.006	0.7	1.8	0.1	-0.066	0.030	-0.063
40445S005	7210	MX	0.003	-0.104	0.000	0.0	-0.6	0.0	0.096	-0.013	0.037
40445S005	7210	GA	0.000	0.000	0.000	-0.1	-0.1	0.0	0.000	0.000	0.000
40445S005	7210	MJ	0.013	-0.036	0.004	0.3	-0.7	0.1	0.039	0.003	0.004
40445S005	7210	GB	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
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			0.039			0.9			0.038		
									0.041		

WASHINGTON

40451M101	7101	LG	-0.155	0.044	-0.017	-1.8	0.9	-0.3	-0.141	0.036	-0.072
40451M101	7101	GA	0.000	0.000	0.000	0.1	-0.2	0.0	-0.001	0.000	0.000
40451M101	7101	LC	-0.113	0.105	0.028	-1.4	2.0	0.4	-0.086	0.102	-0.082
40451M102	7102	LC	0.015	0.024	-0.002	0.4	0.6	-0.1	0.020	0.011	-0.017
40451M102	7102	RG	-0.013	-0.011	0.002	-0.6	-0.5	0.1	-0.015	-0.003	0.007
40451M102	7102	LG	0.018	0.045	0.001	0.5	1.1	0.0	0.028	0.026	-0.030
40451M102	7102	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40451M103	7103	GA	0.000	0.000	0.000	-0.1	-0.1	0.0	0.000	0.000	0.000
40451M103	7103	LG	0.004	0.011	0.023	0.1	0.3	0.6	0.006	0.024	0.007
40451M103	7103	LC	0.065	0.029	0.001	1.6	0.7	0.0	0.069	0.009	-0.010
40451M104	7104	GA	0.000	0.000	0.000	0.0	0.1	0.0	0.000	0.000	0.000
40451M104	7104	LC	0.026	-0.008	0.028	0.4	-0.2	0.6	0.023	0.013	0.029
40451M104	7104	LG	-0.065	-0.123	-0.091	-1.0	-2.2	-1.5	-0.091	-0.137	0.024
40451M105	7105	LU	-0.009	-0.006	0.010	-0.2	-0.1	0.2	-0.010	0.005	0.009
40451M105	7105	LL	-0.065	-0.099	0.032	-1.3	-2.0	0.6	-0.086	-0.026	0.084
40451M105	7105	LZ	-0.016	-0.004	-0.002	-0.4	-0.1	-0.1	-0.016	-0.002	-0.001
40451M105	7105	LD	-0.021	-0.002	0.020	-0.5	-0.1	0.5	-0.021	0.017	0.011
40451M105	7105	LG	-0.002	-0.019	0.007	0.0	-0.5	0.2	-0.006	-0.006	0.018
40451M105	7105	LC	0.000	-0.001	0.005	0.0	0.0	0.1	0.000	0.003	0.004
40451M105	7105	LS	0.004	0.014	-0.003	0.1	0.3	-0.1	0.007	0.006	-0.012
40451M105	7105	LK	-0.018	0.012	-0.017	-0.5	0.3	-0.4	-0.015	-0.003	-0.024
40451M105	7105	GA	0.000	0.000	0.000	0.1	0.0	0.0	0.000	0.000	0.000
40451M111	7899	LC	0.072	-0.017	-0.065	1.8	-0.4	-1.6	0.066	-0.071	-0.015
40451M111	7899	GA	0.000	0.000	0.000	-0.1	0.0	0.1	0.000	0.000	0.000
40451M112	7063	LC	0.058	0.022	0.009	1.4	0.6	0.2	0.061	0.012	-0.001
40451M112	7063	GA	0.000	0.000	0.000	-0.1	0.0	0.0	0.000	0.000	0.000
40451M112	7063	LG	-0.002	-0.018	0.005	0.0	-0.5	0.1	-0.006	-0.007	0.017
40451M114	7125	LG	0.000	0.000	-0.007	0.0	0.0	-0.2	0.000	-0.006	-0.005
40451M114	7125	LC	0.005	0.001	0.034	0.0	0.0	0.4	0.005	0.027	0.021
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			0.037			0.7			0.041		

HAT CREEK

40489S001	7218	RG	-0.003	-0.005	0.000	-0.2	-0.2	0.0	0.000	-0.004	0.004
40489S001	7218	RN	0.003	0.005	0.000	0.2	0.2	0.0	0.000	0.004	-0.004
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			0.003			0.2			0.003		

MARYLAND POINT

40490S001	7217	RN	0.001	-0.327	0.142	0.0	-0.8	0.5	-0.071	-0.085	0.339
40490S001	7217	RO	0.000	-0.007	0.000	0.0	-0.3	0.0	-0.002	-0.004	0.005
40490S001	7217	RG	0.000	0.007	-0.001	0.0	0.4	0.0	0.002	0.004	-0.006
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			0.119			0.4			0.045		

FLAGSTAFF

40491M002	7891	LC	-0.016	0.005	0.157	-0.4	0.1	3.9	-0.017	0.128	0.091
40491M002	7891	LG	-0.061	-0.085	0.102	-1.5	-2.1	2.6	-0.026	0.025	0.142
40491M002	7891	GA	0.000	0.000	0.000	0.0	0.1	-0.2	0.000	0.000	0.000
40491M003	7261	GA	0.000	0.000	0.001	0.0	-0.2	0.5	0.000	0.001	0.001

40491M003	7261	RG	0.019	0.020	-0.065	1.0	1.0	-3.2	0.011	-0.038	-0.058
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			0.058			1.7			0.044		
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VERNAL

40492M001	7892	LC	-0.002	-0.029	0.035	0.0	-0.7	0.9	0.008	0.008	0.044
40492M001	7892	LG	0.002	0.029	-0.035	0.0	0.7	-0.9	-0.008	-0.008	-0.044
			-----			-----			-----		
			0.026			0.7			0.008		
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YUMA

40493M001	7894	LC	-0.023	0.019	-0.005	-0.6	0.5	-0.1	-0.029	0.001	-0.009
40493M001	7894	RG	0.021	-0.007	0.010	1.1	-0.4	0.5	0.022	0.010	0.004
40493M001	7894	LG	-0.061	0.009	-0.036	-1.5	0.2	-0.9	-0.060	-0.039	-0.005
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			0.027			0.8			0.033		
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PLATTEVILLE

40496M001	7112	LK	0.002	0.013	-0.009	0.0	0.3	-0.2	-0.002	0.002	-0.016
40496M001	7112	LG	0.019	-0.006	0.021	0.5	-0.1	0.5	0.020	0.015	0.014
40496M001	7112	LS	0.015	-0.042	-0.024	0.4	-1.1	-0.6	0.025	-0.042	0.013
40496M001	7112	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
40496M001	7112	LC	0.014	0.024	0.014	0.3	0.6	0.3	0.007	0.027	-0.012
40496M001	7112	LZ	-0.033	0.016	0.019	-0.8	0.4	0.5	-0.036	0.019	0.007
40496M002	7258	RN	-0.001	-0.003	-0.002	0.0	-0.2	-0.1	0.000	-0.003	0.001
40496M002	7258	RG	-0.003	0.002	-0.004	-0.2	0.1	-0.2	-0.004	-0.002	-0.003
40496M002	7258	GA	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
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			0.015			0.4			0.017		
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MONUMENT PEAK

40497M001	7110	LL	-0.062	-0.023	-0.020	-1.2	-0.5	-0.4	-0.045	-0.043	0.030
40497M001	7110	LC	-0.012	-0.026	0.002	-0.3	-0.7	0.0	0.001	-0.014	0.025
40497M001	7110	LS	0.011	0.016	0.001	0.3	0.4	0.0	0.003	0.011	-0.015
40497M001	7110	LD	0.003	-0.009	0.046	0.1	-0.2	1.1	0.006	0.035	0.031
40497M001	7110	LG	-0.020	-0.042	0.002	-0.5	-1.0	0.1	0.000	-0.023	0.040
40497M001	7110	LU	0.005	-0.004	0.029	0.1	-0.1	0.7	0.006	0.024	0.017
40497M001	7110	LZ	-0.007	-0.010	0.049	-0.2	-0.2	1.2	-0.002	0.035	0.037
40497M001	7110	LK	0.005	0.014	0.045	0.1	0.3	1.1	-0.001	0.046	0.012
40497M001	7110	GA	0.000	0.000	0.000	0.0	0.0	-0.1	0.000	0.000	0.000
40497M002	7220	LG	0.025	-0.076	-0.058	0.6	-1.9	-1.4	0.057	-0.080	0.017
40497M002	7220	LC	0.052	0.014	-0.070	1.3	0.3	-1.8	0.041	-0.040	-0.068
40497M002	7220	GA	0.000	0.000	0.001	-0.1	0.1	0.2	0.000	0.001	0.001
40497M003	7274	LC	-0.008	-0.058	-0.025	-0.2	-1.5	-0.6	0.019	-0.051	0.033
40497M003	7274	GA	-0.001	0.017	-0.006	-0.2	1.0	-0.4	0.017	-0.004	-0.005
40497M003	7274	RG	0.013	0.028	0.006	0.6	1.4	0.3	-0.001	0.022	-0.022
40497M003	7274	GA	0.000	-0.001	0.000	0.0	-0.3	0.1	0.001	0.000	-0.001
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			0.028			0.8			0.029		
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RICHMOND

40499M002	7295	LK	-0.016	0.029	-0.017	-0.4	0.7	-0.4	-0.011	-0.002	-0.036
40499M002	7295	GA	0.000	0.000	0.000	-0.1	0.0	0.0	0.000	0.000	0.000
40499M002	7295	LS	-0.026	-0.036	0.023	-0.6	-0.9	0.6	-0.031	0.008	0.038
40499M002	7295	LZ	-0.003	0.001	-0.035	-0.1	0.0	-0.9	-0.003	-0.031	-0.016
40499M002	7295	LL	0.255	0.023	-0.046	5.1	0.5	-0.9	0.256	-0.051	-0.002
40499M002	7295	LC	0.002	0.000	-0.012	0.1	0.0	-0.3	0.002	-0.011	-0.005
40499S001	7219	GA	0.001	0.000	0.000	0.2	0.0	-0.1	0.000	0.000	-0.001
40499S001	7219	RO	-0.014	-0.002	0.015	-0.7	-0.1	0.7	-0.014	0.014	0.006
40499S001	7219	RG	-0.009	-0.006	0.011	-0.4	-0.3	0.6	-0.009	0.008	0.009
40499S001	7219	RN	-0.008	0.001	-0.004	-0.4	0.1	-0.2	-0.008	-0.002	-0.004
40499S001	7219	RS	0.002	0.010	-0.010	0.1	0.3	-0.3	0.003	-0.005	-0.013
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			0.047			1.0			0.057		

MAZATLAN

40504M001	7122	LG	-0.012	-0.008	-0.013	-0.3	-0.2	-0.3	-0.009	-0.017	0.005
40504M001	7122	LL	-0.036	-0.016	0.004	-0.7	-0.3	0.1	-0.030	-0.007	0.025
40504M001	7122	LK	-0.024	-0.068	0.033	-0.6	-1.7	0.8	-0.003	0.002	0.079
40504M001	7122	LU	0.016	0.027	-0.007	0.4	0.7	-0.2	0.008	0.006	-0.030
40504M001	7122	LS	0.017	0.042	-0.014	0.4	1.1	-0.4	0.004	0.005	-0.047
40504M001	7122	LC	0.002	-0.003	-0.012	0.1	-0.1	-0.3	0.003	-0.011	-0.003
40504M001	7122	LZ	0.026	0.012	0.011	0.7	0.3	0.3	0.022	0.017	-0.013
40504M001	7122	LD	-0.002	0.008	0.000	-0.1	0.2	0.0	-0.004	0.002	-0.006
			-----			-----			-----		
			0.023			0.6			0.012		

CABO SAN LUCAS

40505M001	7882	LS	-0.035	0.004	0.043	-0.8	0.1	1.1	-0.034	0.037	0.024
40505M001	7882	LZ	0.027	0.073	-0.006	0.7	1.8	-0.2	0.000	0.025	-0.074
40505M001	7882	LC	0.017	0.041	-0.008	0.4	1.0	-0.2	0.003	0.010	-0.044
40505M001	7882	LG	-0.017	-0.192	0.032	-0.4	-4.8	0.8	0.049	-0.043	0.184
40505M001	7882	LK	0.003	0.073	-0.061	0.1	1.8	-1.5	-0.022	-0.029	-0.088
			-----			-----			-----		
			0.062			1.6			0.030		

SANTIAGO DE CUBA

40701S001	1953	LS	-0.083	-0.065	0.034	-0.5	-0.5	0.2	-0.097	0.017	0.052
40701S001	1953	LC	-0.261	-0.080	0.022	-2.6	-1.1	0.2	-0.272	0.016	0.020
40701S001	1953	LK	0.075	0.055	0.066	1.9	1.4	1.6	0.086	0.074	-0.010
40701S001	1953	LZ	0.149	-0.063	0.018	3.7	-1.6	0.5	0.129	-0.016	0.098
40701S001	1953	LL	-0.276	0.061	-0.141	-5.5	1.2	-2.8	-0.253	-0.090	-0.168
			-----			-----			-----		
			0.123			2.2			0.136		

NATAL

41604S001	7929	LG	-0.088	0.057	0.049	-2.2	1.4	1.2	-0.004	0.038	-0.109
41604S001	7929	LC	0.088	-0.100	-0.095	2.2	-1.9	-1.7	-0.031	-0.082	0.139
			-----			-----			-----		
			0.082			1.8			0.048		

EASTER ISLAND

41703M002	7097	LL	0.010	0.041	0.005	0.2	0.8	0.1	-0.004	-0.015	-0.039
41703M002	7097	LK	0.000	0.030	-0.027	0.0	0.8	-0.7	-0.010	-0.036	-0.013
41703M002	7097	LZ	-0.024	0.009	-0.019	-0.6	0.2	-0.5	-0.026	-0.018	0.008
41703M002	7097	LG	0.019	-0.016	0.027	0.5	-0.4	0.7	0.023	0.028	-0.005
41703M002	7097	LU	0.043	-0.033	0.005	0.6	-0.7	0.1	0.051	0.012	0.013
41703M002	7097	LC	-0.013	-0.023	0.014	-0.3	-0.6	0.4	-0.005	0.024	0.017
			-----			-----			-----		
			0.023			0.5			0.025		
									0.019		

SANTIAGO

41705M001	7400	LG	-0.014	-0.012	-0.008	-0.3	-0.3	-0.2	-0.017	-0.003	0.010
41705M001	7400	LC	0.014	0.012	0.008	0.3	0.3	0.2	0.017	0.003	-0.010
			-----			-----			-----		
			0.012			0.3			0.012		
									0.010		

CERRO TOLOLO

41706M001	7401	LC	0.015	0.010	-0.005	0.4	0.3	-0.1	0.018	-0.006	-0.002
41706M001	7401	LG	-0.015	-0.010	0.005	-0.4	-0.3	0.1	-0.018	0.006	0.002
			-----			-----			-----		
			0.011			0.3			0.013		
									0.002		

AREQUIPA

42202S001	7907	LG	0.026	0.020	0.018	0.6	0.5	0.4	0.031	0.014	-0.016
42202S001	7907	LD	-0.036	0.012	0.021	-0.9	0.3	0.5	-0.031	0.014	-0.028
42202S001	7907	LZ	-0.052	-0.003	-0.077	-1.3	-0.1	-1.9	-0.050	-0.078	0.009
42202S001	7907	LU	-0.027	-0.008	0.016	-0.7	-0.2	0.4	-0.029	0.015	-0.005
42202S001	7907	LL	0.008	-0.055	0.034	0.2	-1.1	0.7	-0.010	0.048	0.043
42202S001	7907	LC	0.073	0.063	0.014	1.8	1.6	0.3	0.089	0.003	-0.039
42202S001	7907	LS	0.042	0.107	0.045	1.1	2.7	1.1	0.074	0.018	-0.097
42202S001	7907	LK	-0.031	-0.155	-0.058	-0.8	-3.9	-1.4	-0.079	-0.017	0.148
			-----			-----			-----		
			0.054			1.4			0.047		
									0.067		

BERMUDA

42501M001	7067	LG	-0.048	-0.124	0.012	-0.3	-1.3	0.1	-0.096	-0.039	0.084
42501M001	7067	LC	0.011	0.032	-0.006	0.2	0.7	-0.1	0.024	0.008	-0.024
			-----			-----			-----		
			0.056			0.6			0.053		
									0.062		

CANBERRA

50103S001	1543	GB	0.000	0.000	0.000	0.0	0.0	0.0	0.000	0.000	0.000
50103S001	1543	RJ	0.076	-0.031	0.071	1.5	-0.6	1.4	-0.013	0.011	-0.107
50103S003	7943	LG	0.174	-0.126	0.287	4.3	-3.2	7.2	0.018	0.109	-0.340
50103S003	7943	GA	-0.003	0.002	-0.004	-0.7	0.4	-1.1	-0.003	-0.004	-0.002
50103S003	7943	LC	0.090	-0.030	0.157	2.3	-0.8	3.9	-0.021	0.074	-0.166
50103S005	1542	GB	0.000	0.000	0.000	0.1	-0.1	0.2	0.000	0.001	0.000
50103S005	1542	RJ	-0.124	0.089	-0.137	-2.5	1.8	-2.7	-0.012	-0.024	0.204

50103S007	7843	LU	-0.083	0.056	-0.130	-2.1	1.4	-2.9	-0.006	-0.048	0.157
50103S007	7843	LS	-0.015	0.041	-0.058	-0.4	1.0	-1.4	-0.027	-0.027	0.061
50103S007	7843	LG	-0.007	0.007	-0.076	-0.2	0.2	-1.9	-0.003	-0.056	0.052
50103S007	7843	GA	0.000	0.000	0.000	0.1	-0.1	0.2	0.000	0.000	0.000
50103S007	7843	LC	-0.038	0.072	-0.124	-1.0	1.8	-3.1	-0.042	-0.060	0.129
50103S010	1545	RN	-0.032	-0.008	-0.013	-1.2	-0.4	-0.6	0.023	0.003	0.027
50103S010	1545	RG	-0.013	-0.003	-0.004	-0.6	-0.2	-0.2	0.009	0.002	0.010
50103S010	1545	RJ	0.057	-0.022	0.041	1.1	-0.4	0.8	-0.010	-0.001	-0.073
50103S010	1545	GB	0.000	0.000	0.000	-0.1	0.1	-0.1	0.000	0.000	0.000
50103S010	1545	GA	0.055	0.009	0.038	2.0	0.3	1.4	-0.026	0.063	0.003

0.075

1.9

0.033

0.121

YARRAGADEE

50107M001	7090	LC	-0.007	0.025	-0.023	-0.2	0.6	-0.6	-0.005	-0.008	0.033
50107M001	7090	LZ	-0.050	0.030	-0.040	-1.3	0.8	-1.0	0.032	-0.011	0.062
50107M001	7090	LL	0.116	0.069	0.142	2.3	1.4	2.8	-0.135	0.130	-0.057
50107M001	7090	LK	-0.032	-0.054	0.002	-0.8	-1.3	0.1	0.052	-0.015	-0.032
50107M001	7090	LS	0.001	-0.037	0.032	0.0	-0.9	0.8	0.015	0.011	-0.045
50107M001	7090	LG	-0.004	0.016	-0.038	-0.1	0.4	-0.9	-0.003	-0.025	0.033
50107M001	7090	LU	-0.001	-0.012	-0.008	0.0	-0.3	-0.2	0.006	-0.012	-0.006
50107M001	7090	LD	0.019	-0.012	-0.017	0.5	-0.3	-0.4	-0.012	-0.024	-0.009

0.047

1.0

0.051

0.039

AMERICAN SAMOA

50503M001	7096	LC	0.000	-0.004	-0.011	0.0	-0.1	-0.3	0.004	-0.010	0.003
50503M001	7096	LG	0.000	0.004	0.011	0.0	0.1	0.3	-0.004	0.010	-0.003

0.007

0.2

0.008

0.003

KWAJALEIN ATOLL

50505M001	7092	LG	-0.003	0.068	0.066	-0.1	1.7	1.7	-0.066	0.063	0.028
50505M001	7092	LC	-0.007	0.051	0.046	-0.2	1.3	1.2	-0.048	0.043	0.025
50505M001	7092	GA	0.000	0.000	0.000	0.0	-0.1	-0.1	0.000	0.000	0.000
50505S003	4968	GA	0.000	0.001	0.001	0.0	0.2	0.2	0.000	0.001	0.000
50505S003	4968	RG	-0.002	-0.024	-0.014	-0.1	-1.2	-0.7	0.024	-0.013	-0.005
50505S003	4968	RN	0.004	-0.006	-0.014	0.2	-0.3	-0.7	0.005	-0.013	-0.008

0.029

0.8

0.033

0.016

HUAHINE

92202M002	7121	LC	-0.001	0.014	-0.007	0.0	0.3	-0.2	-0.012	-0.009	-0.003
92202M002	7121	LG	0.001	-0.014	0.007	0.0	-0.3	0.2	0.012	0.009	0.003
92202M003	7123	LG	0.091	0.021	0.057	2.3	0.5	1.4	0.026	0.029	-0.103
92202M003	7123	LZ	0.073	0.072	-0.003	1.8	1.8	-0.1	-0.027	-0.031	-0.094
92202M003	7123	LC	-0.164	-0.093	-0.054	-4.1	-2.3	-1.4	0.002	0.002	0.196

0.064

1.6

0.019

0.108

(*)

RG: SSC(GSFC) 90 R 02	RN: SSC(NGS) 90 R 01	RO: SSC(USNO) 90 R 01
RS: SSC(SO) 88 R 01	RM: SSC(NAOMZ)89 R 01	RJ: SSC(JPL) 90 R 02
LC: SSC(CSR) 89 L 02	LG: SSC(GSFC) 89 L 01	LD: SSC(DGFII)89 L 03
LU: SSC(DUT) 90 L 01	LZ: SSC(ZIPE) 90 L 01	LS: SSC(SO) 90 L 01
LK: SSC(GAOUA)90 L 01	LL: SSC(LPAC) 90 L 01	MX: SSC(UTXMO)90 M 01
MJ: SSC(JPL) 90 M 01	ME: SSC(CERGA)89 M 01	MS: SSC(SO) 86 M 01
GA: LOCAL TIE SET A	GB: LOCAL TIE SET B	GC: LOCAL TIE SET C

Table T9

Sample of 1989 realizations for ITRS

SSC(IERS) 90 C 01
POSITIONS 1984.0

DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
10002M003	GRASSE	VLBI 7605	4581697.895	556125.595	4389351.237	EURA
10002S001	GRASSE	SLR 7835	4581691.880	556159.330	4389359.338	EURA
10002S002	GRASSE	LLR 7845	4581692.458	556195.803	4389354.900	EURA
10004M002	BREST	VLBI 7604	4228877.292	-333104.329	4747180.797	EURA
10302M002	TROMSO	VLBI 7602	2102904.323	721602.444	5958201.225	EURA
10402S002	ONSALA	VLBI 7213	3370606.275	711917.381	5349830.577	EURA
10503M002	METSAHOVI	VLBI 7601	2890652.993	1310295.241	5513958.567	EURA
10503S001	METSAHOVI	SLR 7805	2892595.693	1311807.713	5512610.699	EURA
11001S002	GRAZ	SLR 7839	4194426.804	1162693.815	4647246.503	EURA
12205S001	BOROWIEC	SLR 7811	3738332.982	1148246.077	5021815.765	EURA
12302S002	RIGA	SLR 1884	3183896.100	1421496.582	5322803.129	EURA
12337S006	SIMEIS	SLR 1893	3785945.181	2550780.366	4439461.232	EURA
12602M002	DIONYSOS	SLR 7515	4595216.532	2039435.282	3912629.442	EURA
12602S008	DIONYSOS	SLR 7515	4595218.942	2039436.315	3912628.248	EURA
12612M001	ASKITES	SLR 7510	4353445.005	2082666.222	4156506.604	EURA
12612S001	ASKITES	SLR 7510	4353447.405	2082667.375	4156505.566	EURA
12613M001	ROUMELLI	SLR 7517	4728694.778	2174373.307	3674572.883	EURA
12613S001	ROUMELLI	SLR 7517	4728697.148	2174374.419	3674571.569	EURA
12613S002	ROUMELLI	SLR 7517	4728698.064	2174374.758	3674573.547	EURA
12614M001	KARITSA	SLR 7520	4596042.715	1733476.742	4055720.785	EURA
12615M001	KATAVIA	SLR 7512	4573400.166	2409322.137	3723881.706	EURA
12615S001	KATAVIA	SLR 7512	4573402.498	2409323.297	3723880.398	EURA
12616M001	XRISOKALAR	SLR 7525	4745949.649	1905705.876	3799168.983	EURA
12616S001	XRISOKALAR	SLR 7525	4745952.125	1905706.751	3799167.763	EURA
12706M001	LAMPEDUSA	SLR 7544	5072832.088	1130886.176	3684836.908	EURA
12711M002	BOLOGNE	SLR 7546	4461399.792	919566.787	4449510.448	EURA
12711S001	BOLOGNE	VLBI 7230	4461370.261	919596.691	4449559.003	EURA
12717S001	NOTO	VLBI 7547	4934563.379	1321201.118	3806484.259	EURA
12718M002	TRIESTE	SLR 7550	4336738.659	1071271.440	4537910.987	EURA
12725M002	CAGLIARI	SLR 7545	4893398.178	772673.246	4004140.894	EURA
12734M004	MATERA	SLR 7541	4641990.405	1393042.234	4133231.785	EURA
12734M005	MATERA	SLR 7540	4641984.686	1393057.676	4133233.392	EURA
12734S001	MATERA	SLR 7939	4641965.174	1393069.885	4133262.174	EURA
13201S002	CHILBOLTON	VLBI 7215	4008310.311	-100650.908	4943794.613	EURA
13212S001	HERSTMONCE	SLR 7840	4033463.906	23662.296	4924304.975	EURA
13296M002	CARNUSTY	VLBI 7603	3526416.588	-171421.244	5294098.710	EURA
13407S001	MADRID	VLBI 1563	4849092.810	-360180.678	4115108.955	EURA
13407S003	MADRID	VLBI 1561	4849245.399	-360278.295	4114884.322	EURA
13407S010	MADRID	VLBI 1565	4849336.841	-360488.961	4114748.577	EURA
13504M002	KOOTWIJK	SLR 8833	3899237.931	396769.084	5015055.164	EURA
13504S001	KOOTWIJK	SLR 7833	3899224.195	396742.802	5015073.827	EURA
14001S001	ZIMMERWALD	SLR 7810	4331283.691	567549.477	4633139.897	EURA
14005M002	MONTE GENE	SLR 7590	4390309.975	696751.958	4560835.867	EURA
14106S001	POTSDAM	SLR 1181	3800621.404	882005.292	5028859.481	EURA

14201S002	WETTZELL	SLR	7834	4075530.157	931781.256	4801618.135	EURA
14201S004	WETTZELL	VLBI	7224	4075540.160	931735.108	4801629.207	EURA
14201S007	WETTZELL	SLR	7599	4075517.518	931754.025	4801630.249	EURA
14201S010	WETTZELL	SLR	7596	4075585.372	931837.749	4801559.260	EURA
14202M002	HOHENBUNST	VLBI	7600	3778215.102	698644.640	5074053.446	EURA
14209S001	EFFELSBERG	VLBI	7203	4033947.738	486990.359	4900430.623	EURA
20702S001	BAR GIYYOR	SLR	7530	4443968.547	3121946.811	3334695.386	AFRC
20801M001	DIYARBAKIR	SLR	7575	3848636.089	3251760.863	3898909.195	EURA
20802M001	YOZGAT	SLR	7585	4029730.777	2802093.254	4062067.968	EURA
20803M001	MELENGICLI	SLR	7580	4247620.591	2778638.921	3851607.450	EURA
20804M001	YIGILCA	SLR	7587	4117362.117	2517076.815	4157678.991	EURA
21605S001	SHANGHAI	SLR	7837	-2831087.692	4676203.525	3275172.872	EURA
21605S008	SHANGHAI	VLBI	7226	-2847698.071	4659873.010	3283958.886	EURA
21605S009	SHANGHAI	VLBI	7227	-2831686.569	4675733.925	3275327.852	EURA
21701S001	KASHIMA	VLBI	1856	-3997892.222	3276581.323	3724118.347	NOAM
21725S001	NOBEYAMA	VLBI	7244	-3871168.191	3428274.095	3723697.663	EURA
21726S001	SIMOSATO	SLR	7838	-3822388.266	3699363.549	3507573.148	EURA
21732S002	CHICHIJIMA	SLR	7844	-4491072.423	3481527.893	2887391.711	EURA
30101S001	HELWAN	SLR	7831	4728283.701	2879670.513	3156894.201	AFRC
30302S001	JOHANNESBU	VLBI	7232	5085442.840	2668263.308	-2768697.345	AFRC
40104S001	ALGONQUIN	VLBI	7282	918035.008	-4346132.189	4561971.089	NOAM
40105M001	PENTICTON	VLBI	7283	-2058840.269	-3621286.291	4814420.747	NOAM
40118M001	WHITEHORSE	VLBI	7284	-2215213.440	-2209261.563	5540292.553	NOAM
40127M001	YELLOWKNIF	VLBI	7285	-1224124.320	-2689530.574	5633555.301	NOAM
40400M001	PASADENA	SLR	7896	-2493211.731	-4655229.676	3565574.406	PCFC
40400M003	PASADENA	VLBI	7263	-2493305.794	-4655197.731	3565519.284	PCFC
40403M001	PALOS VERD	VLBI	7268	-2525452.575	-4670035.826	3522886.648	PCFC
40404M001	PEARBLOSSO	VLBI	7254	-2464070.707	-4649425.793	3593905.600	PCFC
40405M001	GOLDSTONE	SLR	7085	-2353394.031	-4641529.604	3676899.254	NOAM
40405M002	GOLDSTONE	SLR	7115	-2350861.486	-4655546.270	3660997.874	NOAM
40405M006	GOLDSTONE	SLR	7265	-2356475.589	-4646618.286	3668424.759	NOAM
40405M013	GOLDSTONE	VLBI	7288	-2356493.956	-4646607.664	3668426.645	NOAM
40405S001	GOLDSTONE	VLBI	1514	-2353621.072	-4641341.563	3677052.346	NOAM
40405S003	GOLDSTONE	VLBI	1512	-2350443.631	-4651980.866	3665630.989	NOAM
40405S009	GOLDSTONE	VLBI	7222	-2356170.843	-4646755.876	3668470.630	NOAM
40405S014	GOLDSTONE	VLBI	1513	-2351128.989	-4655477.091	3660956.932	NOAM
40405S019	GOLDSTONE	VLBI	7231	-2353538.604	-4641649.579	3676670.104	NOAM
40406M001	SAN FRANCI	VLBI	7252	-2707704.724	-4257609.601	3888374.223	NOAM
40407M001	PINYON FLA	VLBI	7256	-2369635.722	-4761325.064	3511116.037	PCFC
40408S002	FAIRBANKS	VLBI	7225	-2281547.006	-1453644.998	5756993.251	NOAM
40410M001	POINT REYE	VLBI	7251	-2732332.911	-4217635.056	3914490.941	PCFC
40412M001	AUSTIN	SLR	7890	-754161.993	-5459061.223	3200744.041	NOAM
40412M003	AUSTIN	VLBI	7271	-737793.649	-5459892.264	3202990.480	NOAM
40416M001	YAKATAGA	VLBI	7277	-2529744.039	-1942091.259	5505027.979	NOAM
40417M002	PATRICK AF	SLR	7069	917959.028	-5548370.247	2998776.583	NOAM
40419M001	KODIAK	VLBI	7278	-3026940.021	-1575911.759	5370362.548	NOAM
40420M002	VANDENBERG	VLBI	7223	-2678094.533	-4525450.982	3597410.024	PCFC
40421M001	NOME	VLBI	7279	-2658150.258	-693821.841	5737236.647	NOAM
40423M001	SANDPOINT	VLBI	7280	-3425461.770	-1214669.101	5223858.338	NOAM
40424S001	KAUAI	VLBI	1311	-5543845.948	-2054564.435	2387813.625	PCFC
40425M001	SOURDOUGH	VLBI	7281	-2419993.315	-1664228.709	5643538.299	NOAM
40427M001	FORT ORD	VLBI	7266	-2697026.567	-4354393.471	3788077.493	PCFC
40427M002	FORT ORD	VLBI	7241	-2699840.064	-4359127.259	3781050.845	PCFC
40428M001	SANTA PAOL	VLBI	7255	-2554476.457	-4608627.541	3582138.189	PCFC
40430M001	BLACK BUTT	VLBI	7269	-2306306.808	-4787914.432	3515736.456	NOAM

40431M001	DEADMAN LA	VLBI	7267	-2336819.508	-4732586.961	3570330.015	NOAM
40432M001	ELY	VLBI	7286	-2077236.152	-4486712.705	4018753.779	NOAM
40433M001	QUINCY	SLR	7051	-2516893.039	-4198845.065	4076411.544	NOAM
40433M002	QUINCY	SLR	7109	-2517234.613	-4198556.244	4076569.701	NOAM
40433M004	QUINCY	VLBI	7221	-2517230.723	-4198595.231	4076531.292	NOAM
40433M005	QUINCY	SLR	7886	-2517242.224	-4198550.936	4076570.317	NOAM
40433S006	QUINCY	SLR	7109	-2517235.890	-4198558.287	4076571.686	NOAM
40434M002	MOUNT HOPK	SLR	7888	-1936744.209	-5077639.085	3331993.898	NOAM
40434S001	MOUNT HOPK	SLR	7921	-1936760.047	-5077707.160	3331922.518	NOAM
40436M002	SAN DIEGO	SLR	7062	-2428825.694	-4799750.625	3417272.595	PCFC
40436M003	SAN DIEGO	SLR	7035	-2428826.450	-4799754.456	3417266.956	PCFC
40437M001	MAMMOTH LA	VLBI	7259	-2448246.621	-4426738.313	3875435.930	NOAM
40438M001	BEAR LAKE	SLR	7082	-1735997.031	-4425048.193	4241430.451	NOAM
40439M001	OWENS VALL	SLR	7114	-2410422.298	-4477802.685	3838686.743	NOAM
40439M004	OWENS VALL	VLBI	7853	-2410421.075	-4477800.423	3838690.360	NOAM
40439S002	OWENS VALL	VLBI	7207	-2409600.588	-4478349.544	3838603.247	NOAM
40440M001	WESTFORD	SLR	7091	1492453.863	-4457278.738	4296815.875	NOAM
40440S002	WESTFORD	VLBI	7205	1492404.998	-4457266.474	4296881.681	NOAM
40440S003	WESTFORD	VLBI	7209	1492206.861	-4458130.459	4296015.447	NOAM
40441S001	GREENBANK	VLBI	7204	882880.118	-4924482.259	3944130.602	NOAM
40441S004	GREENBANK	VLBI	7214	882325.816	-4925137.949	3943397.605	NOAM
40442M001	FORT DAVIS	SLR	7086	-1330125.205	-5328526.623	3236150.275	NOAM
40442M005	FORT DAVIS	SLR	7885	-1330125.206	-5328526.622	3236150.275	NOAM
40442M006	FORT DAVIS	SLR	7080	-1330020.878	-5328401.838	3236480.828	NOAM
40442M008	FORT DAVIS	VLBI	7850	-1330008.003	-5328391.561	3236502.759	NOAM
40442M009	FORT DAVIS	VLBI	7900	-1324227.780	-5332063.037	3232023.068	NOAM
40442S001	FORT DAVIS	SLR	7086	-1330120.849	-5328532.254	3236146.720	NOAM
40442S002	FORT DAVIS	LLR	7206	-1330781.182	-5328755.568	3235697.707	NOAM
40442S003	FORT DAVIS	VLBI	7216	-1324210.808	-5332023.131	3232118.407	NOAM
40445M001	MAUI	SLR	7210	-5466006.411	-2404428.218	2242187.333	PCFC
40445M002	MAUI	VLBI	7120	-5465998.396	-2404408.809	2242228.260	PCFC
40445S002	MAUI	LLR	7210	-5466003.492	-2404426.931	2242197.409	PCFC
40445S005	MAUI	LLR	7210	-5466006.894	-2404428.430	2242188.336	PCFC
40449M001	OCOTILLO	VLBI	7270	-2335600.937	-4832244.301	3434392.471	NOAM
40451M101	WASHINGTON	SLR	7101	1131240.439	-4831179.733	3994148.431	NOAM
40451M102	WASHINGTON	VLBI	7102	1130686.750	-4831353.010	3994110.868	NOAM
40451M103	WASHINGTON	SLR	7103	1130685.796	-4831348.690	3994116.309	NOAM
40451M104	WASHINGTON	SLR	7104	1131095.972	-4831196.931	3994170.698	NOAM
40451M105	WASHINGTON	SLR	7105	1130719.862	-4831350.557	3994106.470	NOAM
40451M111	WASHINGTON	SLR	7899	1131364.898	-4831168.779	3994128.882	NOAM
40451M112	WASHINGTON	SLR	7063	1130714.915	-4831367.719	3994087.345	NOAM
40451M114	WASHINGTON	SLR	7125	1130745.925	-4831368.041	3994077.072	NOAM
40451M116	WASHINGTON	SLR	7130	1130735.413	-4831324.622	3994132.296	NOAM
40451S101	WASHINGTON	SLR	7105	1130720.414	-4831352.926	3994108.464	NOAM
40451S135	WASHINGTON	SLR	7105	1130720.420	-4831352.930	3994108.476	NOAM
40451S147	WASHINGTON	SLR	7105	1130720.409	-4831352.920	3994108.468	NOAM
40452M001	BLOOMINGTO	VLBI	7291	302384.625	-4941699.015	4007908.457	NOAM
40453M001	CARROLLTON	VLBI	7228	453520.795	-5300506.749	3507207.405	NOAM
40454M001	LEONARD	VLBI	7292	-522231.417	-5145676.871	3720152.353	NOAM
40455M001	MILES CITY	VLBI	7038	-1204438.836	-4239211.083	4596266.087	NOAM
40456M001	PIETOWN	VLBI	7234	-1640953.490	-5014815.979	3575411.931	NOAM
40457M001	SEATTLE	VLBI	7229	-2295347.841	-3638029.475	4693408.766	NOAM
40489S001	HAT CREEK	VLBI	7218	-2523969.786	-4123506.353	4147752.634	NOAM
40490S001	MARYLAND P	VLBI	7217	1106629.552	-4882907.158	3938086.914	NOAM
40491M002	FLAGSTAFF	SLR	7891	-1923976.567	-4850871.706	3658574.895	NOAM

40491M003	FLAGSTAFF	VLBI	7261	-1923992.500	-4850854.494	3658589.264	NOAM
40492M001	VERNAL	SLR	7892	-1631484.580	-4589133.871	4106749.573	NOAM
40492M002	VERNAL	VLBI	7290	-1631473.136	-4589128.911	4106759.906	NOAM
40493M001	YUMA	VLBI	7894	-2196777.754	-4887337.059	3448425.273	NOAM
40496M001	PLATTEVILL	SLR	7112	-1240678.077	-4720463.376	4094480.641	NOAM
40496M002	PLATTEVILL	VLBI	7258	-1240707.971	-4720454.340	4094481.666	NOAM
40497M001	MONUMENT P	SLR	7110	-2386277.772	-4802354.497	3444881.349	PCFC
40497M002	MONUMENT P	SLR	7220	-2386292.041	-4802347.625	3444880.754	PCFC
40497M003	MONUMENT P	VLBI	7274	-2386289.167	-4802346.696	3444883.872	PCFC
40497S001	MONUMENT P	SLR	7110	-2386279.101	-4802357.141	3444883.221	PCFC
40499M002	RICHMOND	SLR	7295	961319.103	-5674090.954	2740489.518	NOAM
40499S001	RICHMOND	VLBI	7219	961258.226	-5674090.023	2740533.730	NOAM
40504M001	MAZATLAN	SLR	7122	-1660089.227	-5619100.397	2511637.878	NOAM
40505M001	CABO SAN L	SLR	7882	-1997241.511	-5528041.327	2468355.141	PCFC
40506S001	ENSENADA	SLR	7883	-2406127.695	-4898370.507	3290337.891	PCFC
40701S001	SANTIAGO D	SLR	1953	1474548.469	-5811242.472	2168945.014	NOAM
41604S001	NATAL	SLR	7929	5186467.951	-3653856.078	-654321.912	SOAM
41703M001	EASTER ISL	SLR	7061	-1884984.167	-5357606.684	-2892852.628	NAZC
41703M002	EASTER ISL	SLR	7097	-1884984.710	-5357608.058	-2892853.373	NAZC
41705M001	SANTIAGO	SLR	7400	1769699.802	-5044612.900	-3468260.092	SOAM
41706M001	CERRO TOLO	SLR	7401	1815517.166	-5213464.850	-3187999.450	SOAM
42202S001	AREQUIPA	SLR	7907	1942792.035	-5804077.642	-1796919.344	SOAM
42501M001	BERMUDA	SLR	7067	2308538.644	-4874079.937	3393628.520	NOAM
42501M002	BERMUDA	VLBI	7294	2307209.665	-4874215.797	3394317.814	NOAM
43602M002	GRAND TURK	SLR	7068	1920482.912	-5619478.242	2318914.305	NOAM
50103S001	CANBERRA	VLBI	1543	-4460894.255	2682361.629	-3674749.035	INDI
50103S003	CANBERRA	SLR	7943	-4447548.475	2677133.995	-3694996.647	INDI
50103S005	CANBERRA	VLBI	1542	-4460980.884	2682413.718	-3674582.733	INDI
50103S007	CANBERRA	SLR	7843	-4446476.640	2678127.095	-3696251.946	INDI
50103S010	CANBERRA	VLBI	1545	-4460934.932	2682765.789	-3674381.880	INDI
50107M001	YARRAGADEE	SLR	7090	-2389006.325	5043329.268	-3078525.592	INDI
50107S001	YARRAGADEE	SLR	7090	-2389007.548	5043331.782	-3078527.096	INDI
50116S002	HOBART	VLBI	7242	-3950237.297	2522348.067	-4311563.343	INDI
50503M001	AMERICAN S	SLR	7096	-6100045.782	-996203.411	-1568976.475	PCFC
50505M001	KWAJALEIN	SLR	7092	-6143447.358	1364699.898	1034162.989	PCFC
50505S003	KWAJALEIN	VLBI	4968	-6143536.592	1363996.922	1034707.229	PCFC
92202M002	HUAHINE	SLR	7121	-5345865.090	-2958246.860	-1824623.938	PCFC
92202M003	HUAHINE	SLR	7123	-5345865.223	-2958246.945	-1824624.036	PCFC

SSC(IERS) 90 C 01
POSITIONS 1986.0

DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE	
10002M003	GRASSE	VLBI	7605	4581697.867	556125.631	4389351.262	EURA
10002S001	GRASSE	SLR	7835	4581691.852	556159.366	4389359.363	EURA
10002S002	GRASSE	LLR	7845	4581692.430	556195.839	4389354.925	EURA
10004M002	BREST	VLBI	7604	4228877.268	-333104.295	4747180.821	EURA
10302M002	TROMSO	VLBI	7602	2102904.285	721602.465	5958201.236	EURA
10402S002	ONSALA	VLBI	7213	3370606.240	711917.410	5349830.595	EURA
10503M002	METSAHOVI	VLBI	7601	2890652.953	1310295.266	5513958.581	EURA
10503S001	METSAHOVI	SLR	7805	2892595.653	1311807.738	5512610.713	EURA

11001S002	GRAZ	SLR	7839	4194426.771	1162693.848	4647246.525	EURA
12205S001	BOROWIEC	SLR	7811	3738332.947	1148246.108	5021815.785	EURA
12302S002	RIGA	SLR	1884	3183896.061	1421496.610	5322803.145	EURA
12337S006	SIMEIS	SLR	1893	3785945.139	2550780.396	4439461.250	EURA
12602M002	DIONYSOS	SLR	7515	4595216.497	2039435.317	3912629.466	EURA
12602S008	DIONYSOS	SLR	7515	4595218.907	2039436.350	3912628.272	EURA
12612M001	ASKITES	SLR	7510	4353444.967	2082666.256	4156506.626	EURA
12612S001	ASKITES	SLR	7510	4353447.367	2082667.409	4156505.588	EURA
12613M001	ROUMELLI	SLR	7517	4728694.743	2174373.344	3674572.907	EURA
12613S001	ROUMELLI	SLR	7517	4728697.113	2174374.456	3674571.593	EURA
12613S002	ROUMELLI	SLR	7517	4728698.029	2174374.795	3674573.571	EURA
12614M001	KARITSA	SLR	7520	4596042.680	1733476.778	4055720.808	EURA
12615M001	KATAVIA	SLR	7512	4573400.129	2409322.173	3723881.728	EURA
12615S001	KATAVIA	SLR	7512	4573402.461	2409323.333	3723880.420	EURA
12616M001	XRISOKALAR	SLR	7525	4745949.615	1905705.912	3799169.007	EURA
12616S001	XRISOKALAR	SLR	7525	4745952.091	1905706.787	3799167.787	EURA
12706M001	LAMPEDUSA	SLR	7544	5072832.060	1130886.214	3684836.935	EURA
12711M002	BOLOGNE	SLR	7546	4461399.761	919566.823	4449510.471	EURA
12711S001	BOLOGNE	VLBI	7230	4461370.230	919596.727	4449559.026	EURA
12717S001	NOTO	VLBI	7547	4934563.349	1321201.156	3806484.285	EURA
12718M002	TRIESTE	SLR	7550	4336738.626	1071271.474	4537911.010	EURA
12725M002	CAGLIARI	SLR	7545	4893398.150	772673.284	4004140.921	EURA
12734M004	MATERA	SLR	7541	4641990.372	1393042.270	4133231.809	EURA
12734M005	MATERA	SLR	7540	4641984.653	1393057.712	4133233.416	EURA
12734S001	MATERA	SLR	7939	4641965.141	1393069.921	4133262.198	EURA
13201S002	CHILBOLTON	VLBI	7215	4008310.285	-100650.876	4943794.636	EURA
13212S001	HERSTMONCE	SLR	7840	4033463.878	23662.329	4924304.998	EURA
13296M002	CARNUSTY	VLBI	7603	3526416.560	-171421.214	5294098.729	EURA
13407S001	MADRID	VLBI	1563	4849092.789	-360180.641	4115108.982	EURA
13407S003	MADRID	VLBI	1561	4849245.378	-360278.258	4114884.349	EURA
13407S010	MADRID	VLBI	1565	4849336.820	-360488.924	4114748.604	EURA
13504M002	KOOTWIJK	SLR	8833	3899237.900	396769.116	5015055.185	EURA
13504S001	KOOTWIJK	SLR	7833	3899224.164	396742.834	5015073.848	EURA
14001S001	ZIMMERWALD	SLR	7810	4331283.662	567549.511	4633139.921	EURA
14005M002	MONTE GENE	SLR	7590	4390309.945	696751.993	4560835.890	EURA
14106S001	POTSDAM	SLR	1181	3800621.370	882005.324	5028859.501	EURA
14201S002	WETTZELL	SLR	7834	4075530.124	931781.289	4801618.156	EURA
14201S004	WETTZELL	VLBI	7224	4075540.127	931735.141	4801629.228	EURA
14201S007	WETTZELL	SLR	7599	4075517.485	931754.058	4801630.270	EURA
14201S010	WETTZELL	SLR	7596	4075585.339	931837.782	4801559.281	EURA
14202M002	HOHENBUNST	VLBI	7600	3778215.069	698644.672	5074053.466	EURA
14209S001	EFFELSBERG	VLBI	7203	4033947.707	486990.392	4900430.645	EURA
20702S001	BAR GIYYOR	SLR	7530	4443968.499	3121946.841	3334695.422	AFRC
20801M001	DIYARBAKIR	SLR	7575	3848636.045	3251760.894	3898909.213	EURA
20802M001	YOZGAT	SLR	7585	4029730.736	2802093.286	4062067.988	EURA
20803M001	MELENGICLI	SLR	7580	4247620.550	2778638.954	3851607.470	EURA
20804M001	YIGILCA	SLR	7587	4117362.076	2517076.847	4157679.011	EURA
21605S001	SHANGHAI	SLR	7837	-2831087.742	4676203.509	3275172.852	EURA
21605S008	SHANGHAI	VLBI	7226	-2847698.121	4659872.994	3283958.865	EURA
21605S009	SHANGHAI	VLBI	7227	-2831686.619	4675733.909	3275327.832	EURA
21701S001	KASHIMA	VLBI	1856	-3997892.250	3276581.320	3724118.319	NOAM
21725S001	NOBEYAMA	VLBI	7244	-3871168.235	3428274.072	3723697.638	EURA
21726S001	SIMOSATO	SLR	7838	-3822388.310	3699363.526	3507573.123	EURA
21732S002	CHICHIJIMA	SLR	7844	-4491072.463	3481527.866	2887391.683	EURA
30101S001	HELWAN	SLR	7831	4728283.655	2879670.547	3156894.239	AFRC

30302S001	JOHANNESBU	VLBI	7232	5085442.836	2668263.356	-2768697.305	AFRC
40104S001	ALGONQUIN	VLBI	7282	918034.969	-4346132.194	4561971.092	NOAM
40105M001	PENTICTON	VLBI	7283	-2058840.309	-3621286.295	4814420.727	NOAM
40118M001	WHITEHORSE	VLBI	7284	-2215213.485	-2209261.569	5540292.533	NOAM
40127M001	YELLOWKNIF	VLBI	7285	-1224124.366	-2689530.580	5633555.288	NOAM
40400M001	PASADENA	SLR	7896	-2493211.798	-4655229.603	3565574.453	PCFC
40400M003	PASADENA	VLBI	7263	-2493305.861	-4655197.658	3565519.331	PCFC
40403M001	PALOS VERD	VLBI	7268	-2525452.644	-4670035.753	3522886.696	PCFC
40404M001	PEARBLOSSO	VLBI	7254	-2464070.775	-4649425.721	3593905.646	PCFC
40405M001	GOLDSTONE	SLR	7085	-2353394.062	-4641529.607	3676899.230	NOAM
40405M002	GOLDSTONE	SLR	7115	-2350861.518	-4655546.273	3660997.850	NOAM
40405M006	GOLDSTONE	SLR	7265	-2356475.620	-4646618.289	3668424.735	NOAM
40405M013	GOLDSTONE	VLBI	7288	-2356493.987	-4646607.667	3668426.621	NOAM
40405S001	GOLDSTONE	VLBI	1514	-2353621.103	-4641341.566	3677052.322	NOAM
40405S003	GOLDSTONE	VLBI	1512	-2350443.662	-4651980.869	3665630.965	NOAM
40405S009	GOLDSTONE	VLBI	7222	-2356170.874	-4646755.879	3668470.606	NOAM
40405S014	GOLDSTONE	VLBI	1513	-2351129.021	-4655477.094	3660956.908	NOAM
40405S019	GOLDSTONE	VLBI	7231	-2353538.635	-4641649.582	3676670.080	NOAM
40406M001	SAN FRANCI	VLBI	7252	-2707704.757	-4257609.604	3888374.196	NOAM
40407M001	PINYON FLA	VLBI	7256	-2369635.792	-4761324.994	3511116.083	PCFC
40408S002	FAIRBANKS	VLBI	7225	-2281547.052	-1453645.004	5756993.231	NOAM
40410M001	POINT REYE	VLBI	7251	-2732332.965	-4217634.976	3914490.989	PCFC
40412M001	AUSTIN	SLR	7890	-754162.021	-5459061.227	3200744.028	NOAM
40412M003	AUSTIN	VLBI	7271	-737793.677	-5459892.268	3202990.468	NOAM
40416M001	YAKATAGA	VLBI	7277	-2529744.084	-1942091.264	5505027.956	NOAM
40417M002	PATRICK AF	SLR	7069	917959.002	-5548370.251	2998776.584	NOAM
40419M001	KODIAK	VLBI	7278	-3026940.064	-1575911.763	5370362.522	NOAM
40420M002	VANDENBERG	VLBI	7223	-2678094.598	-4525450.906	3597410.073	PCFC
40421M001	NOME	VLBI	7279	-2658150.304	-693821.847	5737236.625	NOAM
40423M001	SANDPOINT	VLBI	7280	-3425461.812	-1214669.106	5223858.310	NOAM
40424S001	KAUAI	VLBI	1311	-5543845.969	-2054564.298	2387813.694	PCFC
40425M001	SOURDOUGH	VLBI	7281	-2419993.361	-1664228.715	5643538.278	NOAM
40427M001	FORT ORD	VLBI	7266	-2697026.626	-4354393.393	3788077.541	PCFC
40427M002	FORT ORD	VLBI	7241	-2699840.122	-4359127.181	3781050.893	PCFC
40428M001	SANTA PAOL	VLBI	7255	-2554476.524	-4608627.467	3582138.236	PCFC
40430M001	BLACK BUTT	VLBI	7269	-2306306.839	-4787914.435	3515736.432	NOAM
40431M001	DEADMAN LA	VLBI	7267	-2336819.539	-4732586.964	3570329.991	NOAM
40432M001	ELY	VLBI	7286	-2077236.187	-4486712.708	4018753.758	NOAM
40433M001	QUINCY	SLR	7051	-2516893.073	-4198845.069	4076411.519	NOAM
40433M002	QUINCY	SLR	7109	-2517234.647	-4198556.248	4076569.676	NOAM
40433M004	QUINCY	VLBI	7221	-2517230.757	-4198595.235	4076531.267	NOAM
40433M005	QUINCY	SLR	7886	-2517242.258	-4198550.940	4076570.292	NOAM
40433S006	QUINCY	SLR	7109	-2517235.924	-4198558.291	4076571.661	NOAM
40434M002	MOUNT HOPK	SLR	7888	-1936744.238	-5077639.088	3331993.876	NOAM
40434S001	MOUNT HOPK	SLR	7921	-1936760.076	-5077707.163	3331922.496	NOAM
40436M002	SAN DIEGO	SLR	7062	-2428825.766	-4799750.555	3417272.642	PCFC
40436M003	SAN DIEGO	SLR	7035	-2428826.522	-4799754.386	3417267.003	PCFC
40437M001	MAMMOTH LA	VLBI	7259	-2448246.654	-4426738.316	3875435.906	NOAM
40438M001	BEAR LAKE	SLR	7082	-1735997.067	-4425048.197	4241430.432	NOAM
40439M001	OWENS VALL	SLR	7114	-2410422.331	-4477802.688	3838686.718	NOAM
40439M004	OWENS VALL	VLBI	7853	-2410421.108	-4477800.426	3838690.335	NOAM
40439S002	OWENS VALL	VLBI	7207	-2409600.621	-4478349.547	3838603.222	NOAM
40440M001	WESTFORD	SLR	7091	1492453.826	-4457278.743	4296815.882	NOAM
40440S002	WESTFORD	VLBI	7205	1492404.961	-4457266.479	4296881.688	NOAM
40440S003	WESTFORD	VLBI	7209	1492206.824	-4458130.464	4296015.454	NOAM

40441S001	GREENBANK	VLBI	7204	882880.084	-4924482.264	3944130.604	NOAM
40441S004	GREENBANK	VLBI	7214	882325.782	-4925137.954	3943397.607	NOAM
40442M001	FORT DAVIS	SLR	7086	-1330125.234	-5328526.626	3236150.259	NOAM
40442M005	FORT DAVIS	SLR	7885	-1330125.235	-5328526.625	3236150.259	NOAM
40442M006	FORT DAVIS	SLR	7080	-1330020.907	-5328401.841	3236480.812	NOAM
40442M008	FORT DAVIS	VLBI	7850	-1330008.032	-5328391.564	3236502.743	NOAM
40442M009	FORT DAVIS	VLBI	7900	-1324227.809	-5332063.040	3232023.052	NOAM
40442S001	FORT DAVIS	SLR	7086	-1330120.878	-5328532.257	3236146.704	NOAM
40442S002	FORT DAVIS	LLR	7206	-1330781.211	-5328755.571	3235697.691	NOAM
40442S003	FORT DAVIS	VLBI	7216	-1324210.837	-5332023.134	3232118.391	NOAM
40445M001	MAUI	SLR	7210	-5466006.441	-2404428.084	2242187.403	PCFC
40445M002	MAUI	VLBI	7120	-5465998.426	-2404408.675	2242228.330	PCFC
40445S002	MAUI	LLR	7210	-5466003.522	-2404426.797	2242197.479	PCFC
40445S005	MAUI	LLR	7210	-5466006.924	-2404428.296	2242188.406	PCFC
40449M001	OCOTILLO	VLBI	7270	-2335600.967	-4832244.304	3434392.447	NOAM
40451M101	WASHINGTON	SLR	7101	1131240.405	-4831179.738	3994148.435	NOAM
40451M102	WASHINGTON	VLBI	7102	1130686.716	-4831353.015	3994110.872	NOAM
40451M103	WASHINGTON	SLR	7103	1130685.762	-4831348.695	3994116.313	NOAM
40451M104	WASHINGTON	SLR	7104	1131095.938	-4831196.936	3994170.702	NOAM
40451M105	WASHINGTON	SLR	7105	1130719.828	-4831350.562	3994106.474	NOAM
40451M111	WASHINGTON	SLR	7899	1131364.864	-4831168.784	3994128.886	NOAM
40451M112	WASHINGTON	SLR	7063	1130714.881	-4831367.724	3994087.349	NOAM
40451M114	WASHINGTON	SLR	7125	1130745.891	-4831368.046	3994077.076	NOAM
40451M116	WASHINGTON	SLR	7130	1130735.379	-4831324.627	3994132.300	NOAM
40451S101	WASHINGTON	SLR	7105	1130720.380	-4831352.931	3994108.468	NOAM
40451S135	WASHINGTON	SLR	7105	1130720.386	-4831352.935	3994108.480	NOAM
40451S147	WASHINGTON	SLR	7105	1130720.375	-4831352.925	3994108.472	NOAM
40452M001	BLOOMINGTO	VLBI	7291	302384.590	-4941699.020	4007908.453	NOAM
40453M001	CARROLLTON	VLBI	7228	453520.765	-5300506.754	3507207.402	NOAM
40454M001	LEONARD	VLBI	7292	-522231.449	-5145676.875	3720152.343	NOAM
40455M001	MILES CITY	VLBI	7038	-1204438.874	-4239211.087	4596266.072	NOAM
40456M001	PIETOWN	VLBI	7234	-1640953.521	-5014815.983	3575411.912	NOAM
40457M001	SEATTLE	VLBI	7229	-2295347.880	-3638029.480	4693408.743	NOAM
40489S001	HAT CREEK	VLBI	7218	-2523969.821	-4123506.356	4147752.609	NOAM
40490S001	MARYLAND P	VLBI	7217	1106629.518	-4882907.163	3938086.917	NOAM
40491M002	FLAGSTAFF	SLR	7891	-1923976.598	-4850871.710	3658574.874	NOAM
40491M003	FLAGSTAFF	VLBI	7261	-1923992.531	-4850854.498	3658589.243	NOAM
40492M001	VERNAL	SLR	7892	-1631484.615	-4589133.875	4106749.554	NOAM
40492M002	VERNAL	VLBI	7290	-1631473.171	-4589128.915	4106759.887	NOAM
40493M001	YUMA	VLBI	7894	-2196777.784	-4887337.062	3448425.250	NOAM
40496M001	PLATTEVILL	SLR	7112	-1240678.112	-4720463.380	4094480.625	NOAM
40496M002	PLATTEVILL	VLBI	7258	-1240708.006	-4720454.344	4094481.650	NOAM
40497M001	MONUMENT P	SLR	7110	-2386277.845	-4802354.427	3444881.395	PCFC
40497M002	MONUMENT P	SLR	7220	-2386292.114	-4802347.555	3444880.800	PCFC
40497M003	MONUMENT P	VLBI	7274	-2386289.240	-4802346.626	3444883.918	PCFC
40497S001	MONUMENT P	SLR	7110	-2386279.174	-4802357.071	3444883.267	PCFC
40499M002	RICHMOND	SLR	7295	961319.079	-5674090.957	2740489.519	NOAM
40499S001	RICHMOND	VLBI	7219	961258.202	-5674090.026	2740533.731	NOAM
40504M001	MAZATLAN	SLR	7122	-1660089.250	-5619100.399	2511637.859	NOAM
40505M001	CABO SAN L	SLR	7882	-1997241.610	-5528041.270	2468355.187	PCFC
40506S001	ENSENADA	SLR	7883	-2406127.772	-4898370.438	3290337.938	PCFC
40701S001	SANTIAGO D	SLR	1953	1474548.449	-5811242.475	2168945.019	NOAM
41604S001	NATAL	SLR	7929	5186467.943	-3653856.095	-654321.885	SOAM
41703M001	EASTER ISL	SLR	7061	-1884983.996	-5357606.734	-2892852.646	NAZC
41703M002	EASTER ISL	SLR	7097	-1884984.539	-5357608.108	-2892853.391	NAZC

41705M001	SANTIAGO	SLR	7400	1769699.799	-5044612.912	-3468260.075	SOAM
41706M001	CERRO TOLO	SLR	7401	1815517.162	-5213464.861	-3187999.433	SOAM
42202S001	AREQUIPA	SLR	7907	1942792.024	-5804077.652	-1796919.326	SOAM
42501M001	BERMUDA	SLR	7067	2308538.614	-4874079.942	3393628.533	NOAM
42501M002	BERMUDA	VLBI	7294	2307209.635	-4874215.802	3394317.827	NOAM
43602M002	GRAND TURK	SLR	7068	1920482.890	-5619478.245	2318914.314	NOAM
50103S001	CANBERRA	VLBI	1543	-4460894.328	2682361.624	-3674748.951	INDI
50103S003	CANBERRA	SLR	7943	-4447548.547	2677133.991	-3694996.563	INDI
50103S005	CANBERRA	VLBI	1542	-4460980.957	2682413.713	-3674582.649	INDI
50103S007	CANBERRA	SLR	7843	-4446476.712	2678127.091	-3696251.862	INDI
50103S010	CANBERRA	VLBI	1545	-4460935.005	2682765.784	-3674381.796	INDI
50107M001	YARRAGADEE	SLR	7090	-2389006.428	5043329.284	-3078525.486	INDI
50107S001	YARRAGADEE	SLR	7090	-2389007.651	5043331.798	-3078526.990	INDI
50116S002	HOBART	VLBI	7242	-3950237.372	2522348.081	-4311563.266	INDI
50503M001	AMERICAN S	SLR	7096	-6100045.822	-996203.278	-1568976.405	PCFC
50505M001	KWAJALEIN	SLR	7092	-6143447.315	1364700.043	1034163.050	PCFC
50505S003	KWAJALEIN	VLBI	4968	-6143536.549	1363997.067	1034707.290	PCFC
92202M002	HUAHINE	SLR	7121	-5345865.178	-2958246.745	-1824623.867	PCFC
92202M003	HUAHINE	SLR	7123	-5345865.311	-2958246.830	-1824623.965	PCFC

SSC(IERS) 90 C 01
POSITIONS 1988.0
(see table T6 of this appendix)

SSC(IERS) 90 C 01
POSITIONS 1990.0

DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
10002M003	GRASSE	VLBI 7605	4581697.811	556125.703	4389351.312	EURA
10002S001	GRASSE	SLR 7835	4581691.796	556159.438	4389359.413	EURA
10002S002	GRASSE	LLR 7845	4581692.374	556195.911	4389354.975	EURA
10004M002	BREST	VLBI 7604	4228877.220	-333104.227	4747180.869	EURA
10302M002	TROMSO	VLBI 7602	2102904.209	721602.507	5958201.258	EURA
10402S002	ONSALA	VLBI 7213	3370606.171	711917.468	5349830.631	EURA
10503M002	METSAHOVI	VLBI 7601	2890652.874	1310295.318	5513958.611	EURA
10503S001	METSAHOVI	SLR 7805	2892595.574	1311807.790	5512610.743	EURA
11001S002	GRAZ	SLR 7839	4194426.703	1162693.916	4647246.569	EURA
12205S001	BOROWIEC	SLR 7811	3738332.875	1148246.170	5021815.823	EURA
12302S002	RIGA	SLR 1884	3183895.983	1421496.665	5322803.177	EURA
12337S006	SIMEIS	SLR 1893	3785945.055	2550780.458	4439461.286	EURA
12602M002	DIONYSOS	SLR 7515	4595216.425	2039435.389	3912629.512	EURA
12602S008	DIONYSOS	SLR 7515	4595218.835	2039436.422	3912628.318	EURA
12612M001	ASKITES	SLR 7510	4353444.893	2082666.324	4156506.670	EURA
12612S001	ASKITES	SLR 7510	4353447.293	2082667.477	4156505.632	EURA
12613M001	ROUMELLI	SLR 7517	4728694.673	2174373.416	3674572.955	EURA
12613S001	ROUMELLI	SLR 7517	4728697.043	2174374.528	3674571.641	EURA
12613S002	ROUMELLI	SLR 7517	4728697.959	2174374.867	3674573.619	EURA
12614M001	KARITSA	SLR 7520	4596042.612	1733476.850	4055720.856	EURA
12615M001	KATAVIA	SLR 7512	4573400.055	2409322.243	3723881.774	EURA

12615S001	KATAVIA	SLR	7512	4573402.387	2409323.403	3723880.466	EURA
12616M001	XRISOKALAR	SLR	7525	4745949.547	1905705.986	3799169.055	EURA
12616S001	XRISOKALAR	SLR	7525	4745952.023	1905706.861	3799167.835	EURA
12706M001	LAMPEDUSA	SLR	7544	5072832.004	1130886.292	3684836.989	EURA
12711M002	BOLOGNE	SLR	7546	4461399.699	919566.893	4449510.519	EURA
12711S001	BOLOGNE	VLBI	7230	4461370.168	919596.797	4449559.074	EURA
12717S001	NOTO	VLBI	7547	4934563.289	1321201.232	3806484.337	EURA
12718M002	TRIESTE	SLR	7550	4336738.562	1071271.544	4537911.056	EURA
12725M002	CAGLIARI	SLR	7545	4893398.096	772673.360	4004140.973	EURA
12734M004	MATERA	SLR	7541	4641990.308	1393042.342	4133231.857	EURA
12734M005	MATERA	SLR	7540	4641984.589	1393057.784	4133233.464	EURA
12734S001	MATERA	SLR	7939	4641965.077	1393069.993	4133262.246	EURA
13201S002	CHILBOLTON	VLBI	7215	4008310.231	-100650.810	4943794.680	EURA
13212S001	HERSTMONCE	SLR	7840	4033463.824	23662.395	4924305.042	EURA
13296M002	CARNUSTY	VLBI	7603	3526416.504	-171421.154	5294098.769	EURA
13407S001	MADRID	VLBI	1563	4849092.749	-360180.565	4115109.036	EURA
13407S003	MADRID	VLBI	1561	4849245.338	-360278.182	4114884.403	EURA
13407S010	MADRID	VLBI	1565	4849336.780	-360488.848	4114748.658	EURA
13504M002	KOOTWIJK	SLR	8833	3899237.839	396769.180	5015055.227	EURA
13504S001	KOOTWIJK	SLR	7833	3899224.103	396742.898	5015073.890	EURA
14001S001	ZIMMERWALD	SLR	7810	4331283.602	567549.581	4633139.967	EURA
14005M002	MONTE GENE	SLR	7590	4390309.885	696752.063	4560835.938	EURA
14106S001	POTSDAM	SLR	1181	3800621.302	882005.386	5028859.541	EURA
14201S002	WETTZELL	SLR	7834	4075530.058	931781.355	4801618.200	EURA
14201S004	WETTZELL	VLBI	7224	4075540.061	931735.207	4801629.272	EURA
14201S007	WETTZELL	SLR	7599	4075517.419	931754.124	4801630.314	EURA
14201S010	WETTZELL	SLR	7596	4075585.273	931837.848	4801559.325	EURA
14202M002	HOHENBUNST	VLBI	7600	3778215.003	698644.734	5074053.506	EURA
14209S001	EFFELSBERG	VLBI	7203	4033947.647	486990.458	4900430.689	EURA
20702S001	BAR GIYYOR	SLR	7530	4443968.401	3121946.903	3334695.494	AFRC
20801M001	DIYARBAKIR	SLR	7575	3848635.957	3251760.955	3898909.249	EURA
20802M001	YOZGAT	SLR	7585	4029730.652	2802093.350	4062068.026	EURA
20803M001	MELENGICLI	SLR	7580	4247620.470	2778639.020	3851607.512	EURA
20804M001	YIGILCA	SLR	7587	4117361.996	2517076.913	4157679.051	EURA
21605S001	SHANGHAI	SLR	7837	-2831087.842	4676203.477	3275172.810	EURA
21605S008	SHANGHAI	VLBI	7226	-2847698.221	4659872.962	3283958.823	EURA
21605S009	SHANGHAI	VLBI	7227	-2831686.719	4675733.877	3275327.790	EURA
21701S001	KASHIMA	VLBI	1856	-3997892.306	3276581.316	3724118.263	NOAM
21725S001	NOBEYAMA	VLBI	7244	-3871168.323	3428274.027	3723697.588	EURA
21726S001	SIMOSATO	SLR	7838	-3822388.400	3699363.482	3507573.073	EURA
21732S002	CHICHIJIMA	SLR	7844	-4491072.543	3481527.810	2887391.625	EURA
30101S001	HELWAN	SLR	7831	4728283.565	2879670.613	3156894.313	AFRC
30302S001	JOHANNESBU	VLBI	7232	5085442.828	2668263.452	-2768697.227	AFRC
40104S001	ALGONQUIN	VLBI	7282	918034.892	-4346132.206	4561971.096	NOAM
40105M001	PENTICTON	VLBI	7283	-2058840.389	-3621286.305	4814420.685	NOAM
40118M001	WHITEHORSE	VLBI	7284	-2215213.575	-2209261.579	5540292.493	NOAM
40127M001	YELLOWKNIF	VLBI	7285	-1224124.458	-2689530.592	5633555.262	NOAM
40400M001	PASADENA	SLR	7896	-2493211.934	-4655229.459	3565574.547	PCFC
40400M003	PASADENA	VLBI	7263	-2493305.997	-4655197.514	3565519.425	PCFC
40403M001	PALOS VERD	VLBI	7268	-2525452.781	-4670035.607	3522886.791	PCFC
40404M001	PEARBLOSSO	VLBI	7254	-2464070.909	-4649425.577	3593905.740	PCFC
40405M001	GOLDSTONE	SLR	7085	-2353394.126	-4641529.613	3676899.182	NOAM
40405M002	GOLDSTONE	SLR	7115	-2350861.581	-4655546.279	3660997.802	NOAM
40405M006	GOLDSTONE	SLR	7265	-2356475.684	-4646618.295	3668424.687	NOAM
40405M013	GOLDSTONE	VLBI	7288	-2356494.051	-4646607.673	3668426.573	NOAM

40405S001	GOLDSTONE	VLBI	1514	-2353621.167	-4641341.572	3677052.274	NOAM
40405S003	GOLDSTONE	VLBI	1512	-2350443.726	-4651980.875	3665630.917	NOAM
40405S009	GOLDSTONE	VLBI	7222	-2356170.938	-4646755.885	3668470.558	NOAM
40405S014	GOLDSTONE	VLBI	1513	-2351129.084	-4655477.100	3660956.860	NOAM
40405S019	GOLDSTONE	VLBI	7231	-2353538.699	-4641649.588	3676670.032	NOAM
40406M001	SAN FRANCI	VLBI	7252	-2707704.823	-4257609.610	3888374.144	NOAM
40407M001	PINYON FLA	VLBI	7256	-2369635.934	-4761324.856	3511116.175	PCFC
40408S002	FAIRBANKS	VLBI	7225	-2281547.146	-1453645.014	5756993.191	NOAM
40410M001	POINT REYE	VLBI	7251	-2732333.073	-4217634.818	3914491.085	PCFC
40412M001	AUSTIN	SLR	7890	-754162.077	-5459061.233	3200744.004	NOAM
40412M003	AUSTIN	VLBI	7271	-737793.733	-5459892.274	3202990.444	NOAM
40416M001	YAKATAGA	VLBI	7277	-2529744.174	-1942091.274	5505027.912	NOAM
40417M002	PATRICK AF	SLR	7069	917958.948	-5548370.259	2998776.586	NOAM
40419M001	KODIAK	VLBI	7278	-3026940.152	-1575911.773	5370362.470	NOAM
40420M002	VANDENBERG	VLBI	7223	-2678094.726	-4525450.752	3597410.170	PCFC
40421M001	NOME	VLBI	7279	-2658150.396	-693821.857	5737236.581	NOAM
40423M001	SANDPOINT	VLBI	7280	-3425461.896	-1214669.114	5223858.252	NOAM
40424S001	KAUAI	VLBI	1311	-5543846.011	-2054564.024	2387813.832	PCFC
40425M001	SOURDOUGH	VLBI	7281	-2419993.453	-1664228.725	5643538.236	NOAM
40427M001	FORT ORD	VLBI	7266	-2697026.742	-4354393.237	3788077.637	PCFC
40427M002	FORT ORD	VLBI	7241	-2699840.240	-4359127.025	3781050.989	PCFC
40428M001	SANTA PAOL	VLBI	7255	-2554476.657	-4608627.319	3582138.332	PCFC
40430M001	BLACK BUTT	VLBI	7269	-2306306.899	-4787914.441	3515736.384	NOAM
40431M001	DEADMAN LA	VLBI	7267	-2336819.601	-4732586.970	3570329.943	NOAM
40432M001	ELY	VLBI	7286	-2077236.255	-4486712.716	4018753.714	NOAM
40433M001	QUINCY	SLR	7051	-2516893.143	-4198845.075	4076411.469	NOAM
40433M002	QUINCY	SLR	7109	-2517234.717	-4198556.254	4076569.626	NOAM
40433M004	QUINCY	VLBI	7221	-2517230.827	-4198595.241	4076531.217	NOAM
40433M005	QUINCY	SLR	7886	-2517242.328	-4198550.946	4076570.242	NOAM
40433S006	QUINCY	SLR	7109	-2517235.994	-4198558.297	4076571.611	NOAM
40434M002	MOUNT HOPK	SLR	7888	-1936744.296	-5077639.094	3331993.834	NOAM
40434S001	MOUNT HOPK	SLR	7921	-1936760.134	-5077707.169	3331922.454	NOAM
40436M002	SAN DIEGO	SLR	7062	-2428825.912	-4799750.415	3417272.736	PCFC
40436M003	SAN DIEGO	SLR	7035	-2428826.668	-4799754.246	3417267.097	PCFC
40437M001	MAMMOTH LA	VLBI	7259	-2448246.720	-4426738.322	3875435.856	NOAM
40438M001	BEAR LAKE	SLR	7082	-1735997.139	-4425048.205	4241430.394	NOAM
40439M001	OWENS VALL	SLR	7114	-2410422.397	-4477802.694	3838686.670	NOAM
40439M004	OWENS VALL	VLBI	7853	-2410421.174	-4477800.432	3838690.287	NOAM
40439S002	OWENS VALL	VLBI	7207	-2409600.687	-4478349.553	3838603.174	NOAM
40440M001	WESTFORD	SLR	7091	1492453.754	-4457278.755	4296815.896	NOAM
40440S002	WESTFORD	VLBI	7205	1492404.889	-4457266.491	4296881.702	NOAM
40440S003	WESTFORD	VLBI	7209	1492206.752	-4458130.476	4296015.468	NOAM
40441S001	GREENBANK	VLBI	7204	882880.016	-4924482.274	3944130.606	NOAM
40441S004	GREENBANK	VLBI	7214	882325.714	-4925137.964	3943397.609	NOAM
40442M001	FORT DAVIS	SLR	7086	-1330125.290	-5328526.632	3236150.225	NOAM
40442M005	FORT DAVIS	SLR	7885	-1330125.291	-5328526.631	3236150.225	NOAM
40442M006	FORT DAVIS	SLR	7080	-1330020.963	-5328401.847	3236480.778	NOAM
40442M008	FORT DAVIS	VLBI	7850	-1330008.088	-5328391.570	3236502.709	NOAM
40442M009	FORT DAVIS	VLBI	7900	-1324227.865	-5332063.046	3232023.018	NOAM
40442S001	FORT DAVIS	SLR	7086	-1330120.934	-5328532.263	3236146.670	NOAM
40442S002	FORT DAVIS	LLR	7206	-1330781.267	-5328755.577	3235697.657	NOAM
40442S003	FORT DAVIS	VLBI	7216	-1324210.893	-5332023.140	3232118.357	NOAM
40445M001	MAUI	SLR	7210	-5466006.503	-2404427.814	2242187.543	PCFC
40445M002	MAUI	VLBI	7120	-5465998.488	-2404408.405	2242228.470	PCFC
40445S002	MAUI	LLR	7210	-5466003.584	-2404426.527	2242197.619	PCFC

40445S005	MAUI	LLR	7210	-5466006.986	-2404428.026	2242188.546	PCFC
40449M001	OCOTILLO	VLBI	7270	-2335601.027	-4832244.310	3434392.399	NOAM
40451M101	WASHINGTON	SLR	7101	1131240.337	-4831179.748	3994148.441	NOAM
40451M102	WASHINGTON	VLBI	7102	1130686.648	-4831353.025	3994110.878	NOAM
40451M103	WASHINGTON	SLR	7103	1130685.694	-4831348.705	3994116.319	NOAM
40451M104	WASHINGTON	SLR	7104	1131095.870	-4831196.946	3994170.708	NOAM
40451M105	WASHINGTON	SLR	7105	1130719.760	-4831350.572	3994106.480	NOAM
40451M111	WASHINGTON	SLR	7899	1131364.796	-4831168.794	3994128.892	NOAM
40451M112	WASHINGTON	SLR	7063	1130714.813	-4831367.734	3994087.355	NOAM
40451M114	WASHINGTON	SLR	7125	1130745.823	-4831368.056	3994077.082	NOAM
40451M116	WASHINGTON	SLR	7130	1130735.311	-4831324.637	3994132.306	NOAM
40451S101	WASHINGTON	SLR	7105	1130720.312	-4831352.941	3994108.474	NOAM
40451S135	WASHINGTON	SLR	7105	1130720.318	-4831352.945	3994108.486	NOAM
40451S147	WASHINGTON	SLR	7105	1130720.307	-4831352.935	3994108.478	NOAM
40452M001	BLOOMINGTO	VLBI	7291	302384.522	-4941699.030	4007908.447	NOAM
40453M001	CARROLLTON	VLBI	7228	453520.703	-5300506.762	3507207.398	NOAM
40454M001	LEONARD	VLBI	7292	-522231.513	-5145676.883	3720152.323	NOAM
40455M001	MILES CITY	VLBI	7038	-1204438.952	-4239211.097	4596266.044	NOAM
40456M001	PIETOWN	VLBI	7234	-1640953.583	-5014815.989	3575411.874	NOAM
40457M001	SEATTLE	VLBI	7229	-2295347.958	-3638029.488	4693408.699	NOAM
40489S001	HAT CREEK	VLBI	7218	-2523969.891	-4123506.364	4147752.559	NOAM
40490S001	MARYLAND P	VLBI	7217	1106629.450	-4882907.173	3938086.923	NOAM
40491M002	FLAGSTAFF	SLR	7891	-1923976.662	-4850871.716	3658574.832	NOAM
40491M003	FLAGSTAFF	VLBI	7261	-1923992.595	-4850854.504	3658589.201	NOAM
40492M001	VERNAL	SLR	7892	-1631484.685	-4589133.883	4106749.518	NOAM
40492M002	VERNAL	VLBI	7290	-1631473.241	-4589128.923	4106759.851	NOAM
40493M001	YUMA	VLBI	7894	-2196777.844	-4887337.068	3448425.204	NOAM
40496M001	PLATTEVILL	SLR	7112	-1240678.182	-4720463.388	4094480.595	NOAM
40496M002	PLATTEVILL	VLBI	7258	-1240708.076	-4720454.352	4094481.620	NOAM
40497M001	MONUMENT P	SLR	7110	-2386277.989	-4802354.289	3444881.489	PCFC
40497M002	MONUMENT P	SLR	7220	-2386292.258	-4802347.417	3444880.894	PCFC
40497M003	MONUMENT P	VLBI	7274	-2386289.384	-4802346.488	3444884.012	PCFC
40497S001	MONUMENT P	SLR	7110	-2386279.318	-4802356.933	3444883.361	PCFC
40499M002	RICHMOND	SLR	7295	961319.029	-5674090.965	2740489.521	NOAM
40499S001	RICHMOND	VLBI	7219	961258.152	-5674090.034	2740533.733	NOAM
40504M001	MAZATLAN	SLR	7122	-1660089.296	-5619100.403	2511637.819	NOAM
40505M001	CABO SAN L	SLR	7882	-1997241.810	-5528041.158	2468355.277	PCFC
40506S001	ENSENADA	SLR	7883	-2406127.924	-4898370.300	3290338.032	PCFC
40701S001	SANTIAGO D	SLR	1953	1474548.409	-5811242.481	2168945.029	NOAM
41604S001	NATAL	SLR	7929	5186467.925	-3653856.129	-654321.833	SOAM
41703M001	EASTER ISL	SLR	7061	-1884983.652	-5357606.836	-2892852.682	NAZC
41703M002	EASTER ISL	SLR	7097	-1884984.195	-5357608.210	-2892853.427	NAZC
41705M001	SANTIAGO	SLR	7400	1769699.795	-5044612.936	-3468260.043	SOAM
41706M001	CERRO TOLO	SLR	7401	1815517.154	-5213464.885	-3187999.399	SOAM
42202S001	AREQUIPA	SLR	7907	1942792.002	-5804077.670	-1796919.288	SOAM
42501M001	BERMUDA	SLR	7067	2308538.556	-4874079.952	3393628.559	NOAM
42501M002	BERMUDA	VLBI	7294	2307209.577	-4874215.812	3394317.853	NOAM
43602M002	GRAND TURK	SLR	7068	1920482.848	-5619478.253	2318914.332	NOAM
50103S001	CANBERRA	VLBI	1543	-4460894.473	2682361.614	-3674748.783	INDI
50103S003	CANBERRA	SLR	7943	-4447548.693	2677133.981	-3694996.395	INDI
50103S005	CANBERRA	VLBI	1542	-4460981.102	2682413.703	-3674582.481	INDI
50103S007	CANBERRA	SLR	7843	-4446476.858	2678127.081	-3696251.694	INDI
50103S010	CANBERRA	VLBI	1545	-4460935.150	2682765.774	-3674381.628	INDI
50107M001	YARRAGADEE	SLR	7090	-2389006.634	5043329.316	-3078525.274	INDI
50107S001	YARRAGADEE	SLR	7090	-2389007.857	5043331.830	-3078526.778	INDI

50116S002	HOBART	VLBI	7242	-3950237.524	2522348.107	-4311563.112	INDI
50503M001	AMERICAN S	SLR	7096	-6100045.902	-996203.012	-1568976.263	PCFC
50505M001	KWAJALEIN	SLR	7092	-6143447.231	1364700.333	1034163.172	PCFC
50505S003	KWAJALEIN	VLBI	4968	-6143536.465	1363997.357	1034707.412	PCFC
92202M002	HUAHINE	SLR	7121	-5345865.353	-2958246.516	-1824623.725	PCFC
92202M003	HUAHINE	SLR	7123	-5345865.486	-2958246.601	-1824623.823	PCFC

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40104S001	ALGONQUIN	7282	918035.003	-4346132.201	4561971.103	NOAM
40412M003	AUSTIN	7271	-737793.659	-5459892.260	3202990.483	NOAM
42501M002	BERMUDA	7294	2307209.654	-4874215.800	3394317.814	NOAM
40430M001	BLACK BUTTE	7269	-2306306.797	-4787914.445	3515736.444	NOAM
40452M001	BLOOMINGTON	7291	302384.615	-4941699.014	4007908.458	NOAM
10004M002	BREST	7604	4228877.295	-333104.338	4747180.794	EURA
13296M002	CARNUSTY	7603	3526416.592	-171421.251	5294098.706	EURA
40453M001	CARROLLTON	7228	453520.784	-5300506.747	3507207.406	NOAM
13201S002	CHILBOLTON	7215	4008310.290	-100650.897	4943794.596	EURA
40431M001	DEADMAN LAKE	7267	-2336819.501	-4732586.982	3570329.991	NOAM
40405S019	GOLDSTONE	7231	-2353538.618	-4641649.515	3676670.050	NOAM
50103S010	CANBERRA	1545	-4460934.915	2682765.803	-3674381.874	INDI
13407S010	MADRID	1565	4849336.865	-360488.981	4114748.599	EURA
14209S001	EFFELSBERG	7203	4033947.720	486990.373	4900430.615	EURA
40432M001	ELY	7286	-2077236.148	-4486712.706	4018753.780	NOAM
40491M003	FLAGSTAFF	7261	-1923992.527	-4850854.515	3658589.321	NOAM
40427M001	FORT ORD	7266	-2697026.575	-4354393.439	3788077.521	PCFC
40427M002	FORT ORD	7241	-2699840.072	-4359127.249	3781050.848	PCFC
40442M009	FORT DAVIS	7900	-1324227.799	-5332063.022	3232023.057	NOAM
40408S002	FAIRBANKS	7225	-2281546.985	-1453644.977	5756993.229	NOAM
40405S014	GOLDSTONE	1513	-2351128.980	-4655477.094	3660956.922	NOAM
40451M102	WASHINGTON	7102	1130686.753	-4831352.999	3994110.866	NOAM
10002M003	GRASSE	7605	4581697.889	556125.588	4389351.259	EURA
40445M002	MAUI	7120	-5465998.398	-2404408.816	2242228.279	PCFC
30302S001	JOHANNESBURG	7232	5085442.856	2668263.302	-2768697.369	AFRC
40489S001	HAT CREEK	7218	-2523969.775	-4123506.370	4147752.615	NOAM
40440S002	WESTFORD	7205	1492404.989	-4457266.472	4296881.687	NOAM
14202M002	HOHENBUNSTORF	7600	3778215.108	698644.632	5074053.441	EURA
40442S003	FORT DAVIS	7216	-1324210.814	-5332023.144	3232118.402	NOAM
40400M003	PASADENA	7263	-2493305.779	-4655197.679	3565519.297	PCFC
21701S001	KASHIMA	1856	-3997892.258	3276581.325	3724118.324	NOAM
40424S001	KAUAI	1311	-5543845.948	-2054564.413	2387813.651	PCFC
40419M001	KODIAK	7278	-3026940.036	-1575911.790	5370362.530	NOAM
50505S003	KWAJALEIN ATOLL	4968	-6143536.581	1363996.974	1034707.249	PCFC
40454M001	LEONARD	7292	-522231.427	-5145676.867	3720152.355	NOAM
40437M001	MAMMOTH LAKES	7259	-2448246.598	-4426738.350	3875435.900	NOAM
40490S001	MARYLAND POINT	7217	1106629.546	-4882907.162	3938086.917	NOAM
40442M008	FORT DAVIS	7850	-1330008.007	-5328391.545	3236502.740	NOAM
12711S001	BOLOGNA	7230	4461370.274	919596.698	4449558.978	EURA
10503M002	METSAHOVI	7601	2890653.011	1310295.222	5513958.568	EURA

40455M001	MILES CITY	7038	-1204438.842	-4239211.076	4596266.088	NOAM
40405M013	GOLDSTONE	7288	-2356493.967	-4646607.671	3668426.658	NOAM
40405S009	GOLDSTONE	7222	-2356170.841	-4646755.906	3668470.615	NOAM
40497M003	MONUMENT PEAK	7274	-2386289.185	-4802346.680	3444883.921	PCFC
40421M001	NOME	7279	-2658150.267	-693821.832	5737236.643	NOAM
12717S001	NOTO	7547	4934563.384	1321201.094	3806484.241	EURA
40441S001	GREENBANK	7204	882880.127	-4924482.287	3944130.630	NOAM
40441S004	GREENBANK	7214	882325.804	-4925137.937	3943397.600	NOAM
40449M001	OCOTILLO	7270	-2335600.989	-4832244.194	3434392.584	PCFC
10402S002	ONSALA	7213	3370606.279	711917.384	5349830.566	EURA
40439M004	OWENS VALLEY	7853	-2410421.087	-4477800.405	3838690.365	NOAM
40439S002	OWENS VALLEY	7207	-2409600.592	-4478349.565	3838603.226	NOAM
40404M001	PEARBLOSSOM	7254	-2464070.748	-4649425.704	3593905.684	PCFC
40105M001	PENTICTON	7283	-2058840.214	-3621286.353	4814420.722	NOAM
40456S001	PIETOWN	7234	-1640953.500	-5014815.973	3575411.933	NOAM
40407M001	PINYON FLATS	7256	-2369635.763	-4761324.983	3511116.116	PCFC
40496M002	PLATTEVILLE	7258	-1240707.971	-4720454.338	4094481.671	NOAM
40406M001	SAN FRANCISCO	7252	-2707704.699	-4257609.690	3888374.139	NOAM
40410M001	POINT REYES	7251	-2732332.929	-4217635.008	3914490.978	PCFC
40403M001	PALOS VERDES	7268	-2525452.591	-4670035.775	3522886.700	PCFC
40433M004	QUINCY	7221	-2517230.727	-4198595.243	4076531.300	NOAM
40499S001	RICHMOND	7219	961258.223	-5674090.016	2740533.722	NOAM
13407S003	MADRID	1561	4849245.420	-360278.311	4114884.340	EURA
40428M001	SANTA PAOLA	7255	-2554476.465	-4608627.485	3582138.251	PCFC
40457M001	SEATTLE	7229	-2295347.845	-3638029.467	4693408.769	NOAM
21605S009	SHANGHAI	7227	-2831686.539	4675733.917	3275327.820	EURA
21605S008	SHANGHAI	7226	-2847698.055	4659873.019	3283958.886	EURA
40423M001	SANDPOINT	7280	-3425461.767	-1214669.113	5223858.336	NOAM
40425M001	SOURDOUGH	7281	-2419993.303	-1664228.691	5643538.309	NOAM
10302M002	TROMSO	7602	2102904.330	721602.442	5958201.222	EURA
40492M002	VERNAL	7290	-1631473.155	-4589128.907	4106759.902	NOAM
40420M002	VANDENBERG AFB	7223	-2678094.543	-4525450.951	3597410.051	PCFC
40440S003	WESTFORD	7209	1492206.849	-4458130.469	4296015.456	NOAM
14201S004	WETTZELL	7224	4075540.158	931735.135	4801629.185	EURA
40118M001	WHITEHORSE	7284	-2215213.419	-2209261.569	5540292.558	NOAM
40416M001	YAKATAGA	7277	-2529744.088	-1942091.377	5505027.914	NOAM
40127M001	YELLOWKNIFE	7285	-1224124.338	-2689530.569	5633555.298	NOAM
40493M001	YUMA	7894	-2196777.782	-4887337.050	3448425.259	NOAM

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40104S001	ALGONQUIN	7282	918034.971	-4346132.207	4561971.103	NOAM
40412M003	AUSTIN	7271	-737793.682	-5459892.265	3202990.468	NOAM
42501M002	BERMUDA	7294	2307209.629	-4874215.804	3394317.826	NOAM
40430M001	BLACK BUTTE	7269	-2306306.833	-4787914.440	3515736.425	NOAM
40452M001	BLOOMINGTON	7291	302384.585	-4941699.020	4007908.454	NOAM
10004M002	BREST	7604	4228877.269	-333104.300	4747180.820	EURA
13296M002	CARNUSTY	7603	3526416.562	-171421.218	5294098.727	EURA
40453M001	CARROLLTON	7228	453520.758	-5300506.752	3507207.402	NOAM

13201S002	CHILBOLTON	7215	4008310.261	-100650.860	4943794.620	EURA
40431M001	DEADMAN LAKE	7267	-2336819.536	-4732586.974	3570329.978	NOAM
40405S019	GOLDSTONE	7231	-2353538.646	-4641649.522	3676670.023	NOAM
50103S010	CANBERRA	1545	-4460934.989	2682765.793	-3674381.790	INDI
13407S010	MADRID	1565	4849336.842	-360488.939	4114748.628	EURA
14209S001	EFFELSBERG	7203	4033947.686	486990.405	4900430.639	EURA
40432M001	ELY	7286	-2077236.185	-4486712.709	4018753.757	NOAM
40491M003	FLAGSTAFF	7261	-1923992.555	-4850854.518	3658589.303	NOAM
40427M001	FORT ORD	7266	-2697026.631	-4354393.377	3788077.554	PCFC
40427M002	FORT ORD	7241	-2699840.127	-4359127.176	3781050.894	PCFC
40442M009	FORT DAVIS	7900	-1324227.822	-5332063.028	3232023.039	NOAM
40408S002	FAIRBANKS	7225	-2281547.038	-1453644.993	5756993.220	NOAM
40405S014	GOLDSTONE	1513	-2351129.012	-4655477.088	3660956.908	NOAM
40451M102	WASHINGTON	7102	1130686.723	-4831353.004	3994110.869	NOAM
10002M003	GRASSE	7605	4581697.858	556125.629	4389351.287	EURA
40445M002	MAUI	7120	-5465998.427	-2404408.689	2242228.345	PCFC
30302S001	JOHANNESBURG	7232	5085442.843	2668263.361	-2768697.335	AFRC
40489S001	HAT CREEK	7218	-2523969.815	-4123506.362	4147752.599	NOAM
40440S002	WESTFORD	7205	1492404.957	-4457266.476	4296881.692	NOAM
14202M002	HOHENBUNSTORF	7600	3778215.071	698644.666	5074053.464	EURA
40442S003	FORT DAVIS	7216	-1324210.837	-5332023.139	3232118.380	NOAM
40400M003	PASADENA	7263	-2493305.842	-4655197.639	3565519.305	PCFC
21701S001	KASHIMA	1856	-3997892.267	3276581.324	3724118.313	NOAM
40424S001	KAUAI	1311	-5543845.966	-2054564.292	2387813.714	PCFC
40419M001	KODIAK	7278	-3026940.071	-1575911.779	5370362.513	NOAM
50505S003	KWAJALEIN ATOLL	4968	-6143536.542	1363997.106	1034707.306	PCFC
40454M001	LEONARD	7292	-522231.455	-5145676.872	3720152.343	NOAM
40437M001	MAMMOTH LAKES	7259	-2448246.644	-4426738.334	3875435.890	NOAM
40490S001	MARYLAND POINT	7217	1106629.514	-4882907.169	3938086.918	NOAM
40442M008	FORT DAVIS	7850	-1330008.030	-5328391.550	3236502.721	NOAM
12711S001	BOLOGNA	7230	4461370.233	919596.719	4449559.014	EURA
10503M002	METSAHOVI	7601	2890652.967	1310295.249	5513958.585	EURA
40455M001	MILES CITY	7038	-1204438.878	-4239211.084	4596266.073	NOAM
40405M013	GOLDSTONE	7288	-2356493.994	-4646607.678	3668426.632	NOAM
40405S009	GOLDSTONE	7222	-2356170.872	-4646755.899	3668470.604	NOAM
40497M003	MONUMENT PEAK	7274	-2386289.255	-4802346.632	3444883.939	PCFC
40421M001	NOME	7279	-2658150.309	-693821.842	5737236.623	NOAM
12717S001	NOTO	7547	4934563.351	1321201.137	3806484.270	EURA
40441S001	GREENBANK	7204	882880.096	-4924482.291	3944130.632	NOAM
40441S004	GREENBANK	7214	882325.774	-4925137.942	3943397.600	NOAM
40449M001	OCOTILLO	7270	-2335600.993	-4832244.250	3434392.503	PCFC
10402S002	ONSALA	7213	3370606.239	711917.407	5349830.588	EURA
40439M004	OWENS VALLEY	7853	-2410421.116	-4477800.412	3838690.337	NOAM
40439S002	OWENS VALLEY	7207	-2409600.628	-4478349.557	3838603.213	NOAM
40404M001	PEARBLOSSOM	7254	-2464070.796	-4649425.676	3593905.688	PCFC
40105M001	PENTICTON	7283	-2058840.282	-3621286.326	4814420.713	NOAM
40456S001	PIETOWN	7234	-1640953.526	-5014815.979	3575411.912	NOAM
40407M001	PINYON FLATS	7256	-2369635.813	-4761324.953	3511116.122	PCFC
40496M002	PLATTEVILLE	7258	-1240708.004	-4720454.344	4094481.654	NOAM
40406M001	SAN FRANCISCO	7252	-2707704.744	-4257609.649	3888374.153	NOAM
40410M001	POINT REYES	7251	-2732332.975	-4217634.952	3914491.006	PCFC
40403M001	PALOS VERDES	7268	-2525452.652	-4670035.727	3522886.721	PCFC
40433M004	QUINCY	7221	-2517230.769	-4198595.233	4076531.284	NOAM
40499S001	RICHMOND	7219	961258.204	-5674090.020	2740533.721	NOAM
13407S003	MADRID	1561	4849245.398	-360278.268	4114884.369	EURA

40428M001	SANTA PAOLA	7255	-2554476.528	-4608627.438	3582138.266	PCFC
40457M001	SEATTLE	7229	-2295347.882	-3638029.476	4693408.745	NOAM
21605S009	SHANGHAI	7227	-2831686.597	4675733.896	3275327.800	EURA
21605S008	SHANGHAI	7226	-2847698.113	4659872.998	3283958.865	EURA
40423M001	SANDPOINT	7280	-3425461.811	-1214669.111	5223858.308	NOAM
40425M001	SOURDOUGH	7281	-2419993.356	-1664228.705	5643538.282	NOAM
10302M002	TROMSO	7602	2102904.288	721602.464	5958201.234	EURA
40492M002	VERNAL	7290	-1631473.181	-4589128.913	4106759.885	NOAM
40420M002	VANDENBERG AFB	7223	-2678094.602	-4525450.890	3597410.086	PCFC
40440S003	WESTFORD	7209	1492206.816	-4458130.474	4296015.462	NOAM
14201S004	WETTZELL	7224	4075540.119	931735.164	4801629.213	EURA
40118M001	WHITEHORSE	7284	-2215213.475	-2209261.572	5540292.534	NOAM
40416M001	YAKATAGA	7277	-2529744.109	-1942091.323	5505027.923	NOAM
40127M001	YELLOWKNIFE	7285	-1224124.375	-2689530.578	5633555.286	NOAM
40493M001	YUMA	7894	-2196777.808	-4887337.054	3448425.238	NOAM

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DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
40104S001	ALGONQUIN	7282	918034.940	-4346132.214	4561971.103	NOAM
40412M003	AUSTIN	7271	-737793.706	-5459892.270	3202990.454	NOAM
42501M002	BERMUDA	7294	2307209.605	-4874215.807	3394317.839	NOAM
40430M001	BLACK BUTTE	7269	-2306306.870	-4787914.437	3515736.406	NOAM
40452M001	BLOOMINGTON	7291	302384.555	-4941699.025	4007908.449	NOAM
10004M002	BREST	7604	4228877.243	-333104.262	4747180.845	EURA
13296M002	CARNUSTY	7603	3526416.531	-171421.186	5294098.749	EURA
40453M001	CARROLLTON	7228	453520.733	-5300506.757	3507207.398	NOAM
13201S002	CHILBOLTON	7215	4008310.232	-100650.824	4943794.644	EURA
40431M001	DEADMAN LAKE	7267	-2336819.571	-4732586.966	3570329.966	NOAM
40405S019	GOLDSTONE	7231	-2353538.674	-4641649.529	3676669.997	NOAM
50103S010	CANBERRA	1545	-4460935.063	2682765.784	-3674381.708	INDI
13407S010	MADRID	1565	4849336.821	-360488.896	4114748.658	EURA
14209S001	EFFELSBURG	7203	4033947.653	486990.438	4900430.663	EURA
40432M001	ELY	7286	-2077236.222	-4486712.712	4018753.734	NOAM
40491M003	FLAGSTAFF	7261	-1923992.583	-4850854.520	3658589.285	NOAM
40427M001	FORT ORD	7266	-2697026.685	-4354393.314	3788077.587	PCFC
40427M002	FORT ORD	7241	-2699840.182	-4359127.102	3781050.939	PCFC
40442M009	FORT DAVIS	7900	-1324227.845	-5332063.033	3232023.019	NOAM
40408S002	FAIRBANKS	7225	-2281547.092	-1453645.008	5756993.212	NOAM
40405S014	GOLDSTONE	1513	-2351129.043	-4655477.083	3660956.895	NOAM
40451M102	WASHINGTON	7102	1130686.693	-4831353.009	3994110.871	NOAM
10002M003	GRASSE	7605	4581697.827	556125.669	4389351.314	EURA
40445M002	MAUI	7120	-5465998.456	-2404408.562	2242228.411	PCFC
30302S001	JOHANNESBURG	7232	5085442.831	2668263.421	-2768697.300	AFRC
40489S001	HAT CREEK	7218	-2523969.853	-4123506.354	4147752.582	NOAM
40440S002	WESTFORD	7205	1492404.925	-4457266.482	4296881.699	NOAM
14202M002	HOHENBUNSTORF	7600	3778215.035	698644.701	5074053.486	EURA
40442S003	FORT DAVIS	7216	-1324210.859	-5332023.134	3232118.358	NOAM
40400M003	PASADENA	7263	-2493305.905	-4655197.599	3565519.315	PCFC
21701S001	KASHIMA	1856	-3997892.275	3276581.322	3724118.302	NOAM

40424S001	KAUAI	1311	-5543845.984	-2054564.171	2387813.776	PCFC
40419M001	KODIAK	7278	-3026940.108	-1575911.768	5370362.495	NOAM
50505S003	KWAJALEIN ATOLL	4968	-6143536.503	1363997.237	1034707.365	PCFC
40454M001	LEONARD	7292	-522231.482	-5145676.878	3720152.331	NOAM
40437M001	MAMMOTH LAKES	7259	-2448246.688	-4426738.318	3875435.879	NOAM
40490S001	MARYLAND POINT	7217	1106629.483	-4882907.176	3938086.919	NOAM
40442M008	FORT DAVIS	7850	-1330008.053	-5328391.556	3236502.701	NOAM
12711S001	BOLOGNA	7230	4461370.194	919596.739	4449559.049	EURA
10503M002	METSAHOVI	7601	2890652.923	1310295.277	5513958.601	EURA
40455M001	MILES CITY	7038	-1204438.914	-4239211.092	4596266.056	NOAM
40405M013	GOLDSTONE	7288	-2356494.022	-4646607.685	3668426.605	NOAM
40405S009	GOLDSTONE	7222	-2356170.903	-4646755.892	3668470.592	NOAM
40497M003	MONUMENT PEAK	7274	-2386289.325	-4802346.584	3444883.957	PCFC
40421M001	NOME	7279	-2658150.350	-693821.852	5737236.602	NOAM
12717S001	NOTO	7547	4934563.317	1321201.179	3806484.299	EURA
40441S001	GREENBANK	7204	882880.065	-4924482.295	3944130.635	NOAM
40441S004	GREENBANK	7214	882325.745	-4925137.947	3943397.601	NOAM
40449M001	OCOTILLO	7270	-2335600.998	-4832244.306	3434392.421	PCFC
10402S002	ONSALA	7213	3370606.201	711917.431	5349830.608	EURA
40439M004	OWENS VALLEY	7853	-2410421.145	-4477800.420	3838690.311	NOAM
40439S002	OWENS VALLEY	7207	-2409600.664	-4478349.548	3838603.200	NOAM
40404M001	PEARBLOSSOM	7254	-2464070.843	-4649425.648	3593905.691	PCFC
40105M001	PENTICTON	7283	-2058840.350	-3621286.300	4814420.704	NOAM
40456S001	PIETOWN	7234	-1640953.552	-5014815.985	3575411.891	NOAM
40407M001	PINYON FLATS	7256	-2369635.864	-4761324.924	3511116.127	PCFC
40496M002	PLATTEVILLE	7258	-1240708.038	-4720454.350	4094481.637	NOAM
40406M001	SAN FRANCISCO	7252	-2707704.791	-4257609.607	3888374.168	NOAM
40410M001	POINT REYES	7251	-2732333.019	-4217634.896	3914491.036	PCFC
40403M001	PALOS VERDES	7268	-2525452.713	-4670035.679	3522886.741	PCFC
40433M004	QUINCY	7221	-2517230.811	-4198595.225	4076531.268	NOAM
40499S001	RICHMOND	7219	961258.185	-5674090.023	2740533.719	NOAM
13407S003	MADRID	1561	4849245.377	-360278.225	4114884.399	EURA
40428M001	SANTA PAOLA	7255	-2554476.590	-4608627.392	3582138.282	PCFC
40457M001	SEATTLE	7229	-2295347.920	-3638029.484	4693408.719	NOAM
21605S009	SHANGHAI	7227	-2831686.654	4675733.876	3275327.779	EURA
21605S008	SHANGHAI	7226	-2847698.170	4659872.978	3283958.844	EURA
40423M001	SANDPOINT	7280	-3425461.854	-1214669.110	5223858.279	NOAM
40425M001	SOURDOUGH	7281	-2419993.407	-1664228.720	5643538.256	NOAM
10302M002	TROMSO	7602	2102904.246	721602.485	5958201.247	EURA
40492M002	VERNAL	7290	-1631473.207	-4589128.918	4106759.867	NOAM
40420M002	VANDENBERG AFB	7223	-2678094.660	-4525450.828	3597410.120	PCFC
40440S003	WESTFORD	7209	1492206.783	-4458130.480	4296015.468	NOAM
14201S004	WETTZELL	7224	4075540.081	931735.192	4801629.240	EURA
40118M001	WHITEHORSE	7284	-2215213.531	-2209261.574	5540292.511	NOAM
40416M001	YAKATAGA	7277	-2529744.129	-1942091.269	5505027.932	NOAM
40127M001	YELLOWKNIFE	7285	-1224124.413	-2689530.586	5633555.273	NOAM
40493M001	YUMA	7894	-2196777.836	-4887337.057	3448425.215	NOAM

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DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
40104S001	ALGONQUIN	7282	918034.907	-4346132.220	4561971.103	NOAM
40412M003	AUSTIN	7271	-737793.728	-5459892.276	3202990.440	NOAM
42501M002	BERMUDA	7294	2307209.579	-4874215.810	3394317.851	NOAM
40430M001	BLACK BUTTE	7269	-2306306.907	-4787914.433	3515736.387	NOAM
40452M001	BLOOMINGTON	7291	302384.525	-4941699.031	4007908.444	NOAM
10004M002	BREST	7604	4228877.218	-333104.224	4747180.871	EURA
13296M002	CARNUSTY	7603	3526416.501	-171421.153	5294098.771	EURA
40453M001	CARROLLTON	7228	453520.707	-5300506.762	3507207.395	NOAM
13201S002	CHILBOLTON	7215	4008310.203	-100650.787	4943794.668	EURA
40431M001	DEADMAN LAKE	7267	-2336819.606	-4732586.957	3570329.953	NOAM
40405S019	GOLDSTONE	7231	-2353538.701	-4641649.536	3676669.970	NOAM
50103S010	CANBERRA	1545	-4460935.137	2682765.774	-3674381.625	INDI
13407S010	MADRID	1565	4849336.799	-360488.853	4114748.687	EURA
14209S001	EFFELSBERG	7203	4033947.619	486990.469	4900430.688	EURA
40432M001	ELY	7286	-2077236.259	-4486712.715	4018753.712	NOAM
40491M003	FLAGSTAFF	7261	-1923992.612	-4850854.524	3658589.266	NOAM
40427M001	FORT ORD	7266	-2697026.740	-4354393.252	3788077.621	PCFC
40427M002	FORT ORD	7241	-2699840.237	-4359127.029	3781050.984	PCFC
40442M009	FORT DAVIS	7900	-1324227.868	-5332063.039	3232023.000	NOAM
40408S002	FAIRBANKS	7225	-2281547.145	-1453645.023	5756993.203	NOAM
40405S014	GOLDSTONE	1513	-2351129.075	-4655477.077	3660956.881	NOAM
40451M102	WASHINGTON	7102	1130686.664	-4831353.015	3994110.875	NOAM
10002M003	GRASSE	7605	4581697.795	556125.710	4389351.341	EURA
40445M002	MAUI	7120	-5465998.485	-2404408.435	2242228.478	PCFC
30302S001	JOHANNESBURG	7232	5085442.819	2668263.480	-2768697.264	AFRC
40489S001	HAT CREEK	7218	-2523969.892	-4123506.348	4147752.566	NOAM
40440S002	WESTFORD	7205	1492404.893	-4457266.486	4296881.705	NOAM
14202M002	HOHENBUNSTORF	7600	3778214.999	698644.735	5074053.508	EURA
40442S003	FORT DAVIS	7216	-1324210.882	-5332023.130	3232118.337	NOAM
40400M003	PASADENA	7263	-2493305.968	-4655197.558	3565519.324	PCFC
21701S001	KASHIMA	1856	-3997892.283	3276581.319	3724118.291	NOAM
40424S001	KAUAI	1311	-5543846.002	-2054564.050	2387813.839	PCFC
40419M001	KODIAK	7278	-3026940.145	-1575911.757	5370362.478	NOAM
50505S003	KWAJALEIN ATOLL	4968	-6143536.464	1363997.368	1034707.423	PCFC
40454M001	LEONARD	7292	-522231.509	-5145676.884	3720152.320	NOAM
40437M001	MAMMOTH LAKES	7259	-2448246.733	-4426738.302	3875435.869	NOAM
40490S001	MARYLAND POINT	7217	1106629.450	-4882907.183	3938086.919	NOAM
40442M008	FORT DAVIS	7850	-1330008.076	-5328391.562	3236502.682	NOAM
12711S001	BOLOGNA	7230	4461370.155	919596.759	4449559.085	EURA
10503M002	METSAHOVI	7601	2890652.880	1310295.305	5513958.617	EURA
40455M001	MILES CITY	7038	-1204438.949	-4239211.098	4596266.040	NOAM
40405M013	GOLDSTONE	7288	-2356494.049	-4646607.692	3668426.579	NOAM
40405S009	GOLDSTONE	7222	-2356170.934	-4646755.885	3668470.581	NOAM
40497M003	MONUMENT PEAK	7274	-2386289.396	-4802346.536	3444883.975	PCFC
40421M001	NOME	7279	-2658150.391	-693821.862	5737236.582	NOAM
12717S001	NOTO	7547	4934563.284	1321201.222	3806484.327	EURA
40441S001	GREENBANK	7204	882880.034	-4924482.298	3944130.637	NOAM
40441S004	GREENBANK	7214	882325.715	-4925137.952	3943397.601	NOAM
40449M001	OCOTILLO	7270	-2335601.001	-4832244.362	3434392.341	PCFC

10402S002	ONSALA	7213	3370606.162	711917.455	5349830.630	EURA
40439M004	OWENS VALLEY	7853	-2410421.174	-4477800.427	3838690.283	NOAM
40439S002	OWENS VALLEY	7207	-2409600.699	-4478349.540	3838603.187	NOAM
40404M001	PEARBLOSSOM	7254	-2464070.891	-4649425.621	3593905.695	PCFC
40105M001	PENTICTON	7283	-2058840.417	-3621286.273	4814420.695	NOAM
40456S001	PIETOWN	7234	-1640953.579	-5014815.992	3575411.870	NOAM
40407M001	PINYON FLATS	7256	-2369635.913	-4761324.895	3511116.133	PCFC
40496M002	PLATTEVILLE	7258	-1240708.071	-4720454.357	4094481.620	NOAM
40406M001	SAN FRANCISCO	7252	-2707704.836	-4257609.564	3888374.181	NOAM
40410M001	POINT REYES	7251	-2732333.065	-4217634.840	3914491.064	PCFC
40403M001	PALOS VERDES	7268	-2525452.774	-4670035.630	3522886.761	PCFC
40433M004	QUINCY	7221	-2517230.852	-4198595.215	4076531.251	NOAM
40499S001	RICHMOND	7219	961258.165	-5674090.028	2740533.718	NOAM
13407S003	MADRID	1561	4849245.354	-360278.183	4114884.428	EURA
40428M001	SANTA PAOLA	7255	-2554476.652	-4608627.345	3582138.297	PCFC
40457M001	SEATTLE	7229	-2295347.956	-3638029.493	4693408.695	NOAM
21605S009	SHANGHAI	7227	-2831686.712	4675733.855	3275327.758	EURA
21605S008	SHANGHAI	7226	-2847698.228	4659872.957	3283958.824	EURA
40423M001	SANDPOINT	7280	-3425461.898	-1214669.108	5223858.251	NOAM
40425M001	SOURDOUGH	7281	-2419993.459	-1664228.733	5643538.229	NOAM
10302M002	TROMSO	7602	2102904.205	721602.507	5958201.259	EURA
40492M002	VERNAL	7290	-1631473.234	-4589128.924	4106759.851	NOAM
40420M002	VANDENBERG AFB	7223	-2678094.720	-4525450.767	3597410.154	PCFC
40440S003	WESTFORD	7209	1492206.750	-4458130.484	4296015.474	NOAM
14201S004	WETTZELL	7224	4075540.042	931735.221	4801629.267	EURA
40118M001	WHITEHORSE	7284	-2215213.586	-2209261.577	5540292.488	NOAM
40416M001	YAKATAGA	7277	-2529744.150	-1942091.215	5505027.941	NOAM
40127M001	YELLOWKNIFE	7285	-1224124.451	-2689530.594	5633555.262	NOAM
40493M001	YUMA	7894	-2196777.862	-4887337.060	3448425.194	NOAM

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DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
50505S003	KWAJALEIN ATOLL	4968	-6143536.514	1363997.217	1034707.366	PCFC
40424S001	KAUAI	1311	-5543845.989	-2054564.187	2387813.780	PCFC
50103S010	CANBERRA	1545	-4460935.049	2682765.786	-3674381.698	INDI
21701S001	KASHIMA	1856	-3997892.284	3276581.311	3724118.278	NOAM
50116S002	HOBART	7242	-3950237.452	2522348.094	-4311563.187	INDI
21725S001	NOBEYAMA	7244	-3871168.282	3428274.049	3723697.613	EURA
21605S009	SHANGHAI	7227	-2831686.695	4675733.917	3275327.784	EURA
40420M002	VANDENBERG AFB	7223	-2678094.665	-4525450.829	3597410.117	PCFC
40489S001	HAT CREEK	7218	-2523969.861	-4123506.364	4147752.583	NOAM
40439S002	OWENS VALLEY	7207	-2409600.676	-4478349.561	3838603.208	NOAM
40405S009	GOLDSTONE	7222	-2356170.906	-4646755.893	3668470.593	NOAM
40408S002	FAIRBANKS	7225	-2281547.109	-1453645.015	5756993.207	NOAM
40442S003	FORT DAVIS	7216	-1324210.859	-5332023.133	3232118.362	NOAM
40496M002	PLATTEVILLE	7258	-1240708.042	-4720454.344	4094481.634	NOAM
40441S001	GREENBANK	7204	882880.030	-4924481.990	3944130.394	NOAM
40104S001	ALGONQUIN	7282	918034.919	-4346132.163	4561971.069	NOAM
40499S001	RICHMOND	7219	961258.183	-5674090.029	2740533.734	NOAM

40490S001	MARYLAND POINT	7217	1106629.480	-4882906.840	3938086.775	NOAM
40440S003	WESTFORD	7209	1492206.781	-4458130.481	4296015.470	NOAM
40440S002	WESTFORD	7205	1492404.935	-4457266.490	4296881.687	NOAM
10402S002	ONSALA	7213	3370606.211	711917.441	5349830.612	EURA
13201S002	CHILBOLTON	7215	4008310.278	-100650.864	4943794.668	EURA
14209S001	EFFELSBERG	7203	4033947.694	486990.412	4900430.668	EURA
14201S004	WETTZELL	7224	4075540.086	931735.200	4801629.237	EURA
12711S001	BOLOGNA	7230	4461370.207	919596.750	4449559.055	EURA
13407S010	MADRID	1565	4849336.763	-360488.875	4114748.593	EURA
12717S001	NOTO	7547	4934563.368	1321201.244	3806484.302	EURA
30302S001	JOHANNESBURG	7232	5085442.827	2668263.387	-2768697.231	AFRC

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POSITIONS 1984.0

DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
14106S001	POTSDAM	1181	3800621.382	882005.275	5028859.527	EURA
12302S002	RIGA	1884	3183895.829	1421496.303	5322803.939	EURA
40701S001	SANTIAGO DE CUBA	1953	1474548.731	-5811242.391	2168944.992	NOAM
40436M003	SAN DIEGO	7035	-2428826.425	-4799754.476	3417266.950	PCFC
40433M001	QUINCY	7051	-2516893.033	-4198845.167	4076411.414	NOAM
40436M002	SAN DIEGO	7062	-2428825.725	-4799750.661	3417272.653	PCFC
40451M112	WASHINGTON	7063	1130714.858	-4831367.741	3994087.337	NOAM
42501M001	BERMUDA	7067	2308538.634	-4874079.968	3393628.528	NOAM
40417M002	PATRICK AFB	7069	917959.020	-5548370.219	2998776.585	NOAM
40442M006	FORT DAVIS	7080	-1330020.871	-5328401.881	3236480.854	NOAM
40438M001	BEAR LAKE	7082	-1735997.051	-4425048.150	4241430.406	NOAM
40405M001	GOLDSTONE	7085	-2353393.759	-4641529.317	3676898.909	NOAM
40442M001	FORT DAVIS	7086	-1330125.209	-5328526.614	3236150.297	NOAM
50107M001	YARRAGADEE	7090	-2389006.319	5043329.242	-3078525.570	INDI
40440M001	WESTFORD	7091	1492453.884	-4457278.734	4296815.859	NOAM
50505M001	KWAJALEIN ATOLL	7092	-6143447.351	1364699.847	1034162.942	PCFC
50503M001	AMERICAN SAMOA	7096	-6100045.783	-996203.408	-1568976.465	PCFC
41703M002	EASTER ISLAND	7097	-1884984.697	-5357608.035	-2892853.386	NAZC
40451M101	WASHINGTON	7101	1131240.553	-4831179.837	3994148.404	NOAM
40451M102	WASHINGTON	7102	1130686.736	-4831353.033	3994110.871	NOAM
40451M103	WASHINGTON	7103	1130685.732	-4831348.718	3994116.309	NOAM
40451M104	WASHINGTON	7104	1131095.947	-4831196.922	3994170.671	NOAM
40451M105	WASHINGTON	7105	1130719.863	-4831350.556	3994106.466	NOAM
40433M002	QUINCY	7109	-2517234.607	-4198556.235	4076569.711	NOAM
40497M001	MONUMENT PEAK	7110	-2386277.759	-4802354.471	3444881.348	PCFC
40496M001	PLATTEVILLE	7112	-1240678.090	-4720463.400	4094480.628	NOAM
40439M001	OWENS VALLEY	7114	-2410422.298	-4477802.736	3838686.694	NOAM
40405M002	GOLDSTONE	7115	-2350861.525	-4655546.351	3660997.894	NOAM
40445M002	MAUI	7120	-5465998.347	-2404408.803	2242228.311	PCFC
92202M002	HUAHINE	7121	-5345865.088	-2958246.874	-1824623.929	PCFC
40504M001	MAZATLAN	7122	-1660089.229	-5619100.394	2511637.890	NOAM
92202M003	HUAHINE	7123	-5345865.058	-2958246.852	-1824623.981	PCFC
40451M114	WASHINGTON	7125	1130745.921	-4831368.042	3994077.039	NOAM
40451M116	WASHINGTON	7130	1130735.414	-4831324.621	3994132.297	NOAM
40445M001	MAUI	7210	-5466006.414	-2404428.186	2242187.342	PCFC

40497M002	MONUMENT PEAK	7220	-2386292.093	-4802347.639	3444880.825	PCFC
40405M006	GOLDSTONE	7265	-2356475.574	-4646618.323	3668424.780	NOAM
40497M003	MONUMENT PEAK	7274	-2386289.158	-4802346.638	3444883.898	PCFC
40405M013	GOLDSTONE	7288	-2356493.943	-4646607.675	3668426.683	NOAM
40499M002	RICHMOND	7295	961319.101	-5674090.953	2740489.531	NOAM
41705M001	SANTIAGO	7400	1769699.788	-5044612.912	-3468260.099	SOAM
41706M001	CERRO TOLOLO	7401	1815517.150	-5213464.860	-3187999.445	SOAM
12612M001	ASKITES	7510	4353445.030	2082666.248	4156506.598	EURA
12615M001	KATAVIA	7512	4573400.142	2409322.170	3723881.723	EURA
12602M002	DIONYSOS	7515	4595216.543	2039435.286	3912629.459	EURA
12613M001	ROUMELLI	7517	4728694.786	2174373.336	3674572.914	EURA
12614M001	KARITSA	7520	4596042.717	1733476.780	4055720.787	EURA
12616M001	XRISOKALARIA	7525	4745949.640	1905705.909	3799168.999	EURA
20702S001	BAR GIYYORA	7530	4443968.557	3121946.836	3334695.389	AFRC
12734M005	MATERA	7540	4641984.686	1393057.676	4133233.391	EURA
12734M004	MATERA	7541	4641990.403	1393042.242	4133231.782	EURA
12706M001	LAMPEDUSA	7544	5072832.089	1130886.199	3684836.901	EURA
12725M002	CAGLIARI	7545	4893398.155	772673.276	4004140.913	EURA
12711M002	BOLOGNA	7546	4461399.789	919566.828	4449510.453	EURA
12718M002	TRIESTE	7550	4336738.688	1071271.444	4537910.972	EURA
20801M001	DIYARBAKIR	7575	3848636.126	3251760.878	3898909.186	EURA
20803M001	MELENGICLICK	7580	4247620.635	2778638.939	3851607.465	EURA
20802M001	YOZGAT	7585	4029730.808	2802093.267	4062067.959	EURA
20804M001	YIGILCA	7587	4117362.127	2517076.785	4157678.989	EURA
14201S010	WETTZELL	7596	4075585.383	931837.688	4801559.191	EURA
14201S007	WETTZELL	7599	4075517.518	931754.026	4801630.248	EURA
10503S001	METSAHOVI	7805	2892595.221	1311808.288	5512609.937	EURA
14001S001	ZIMMERWALD	7810	4331283.702	567549.487	4633139.879	EURA
30101S001	HELWAN	7831	4728283.647	2879670.654	3156894.180	AFRC
13504S001	KOOTWIJK	7833	3899224.183	396742.812	5015073.815	EURA
13504M002	KOOTWIJK	8833	3899237.973	396769.140	5015055.169	EURA
14201S002	WETTZELL	7834	4075530.194	931781.247	4801618.178	EURA
10002S001	GRASSE	7835	4581691.900	556159.335	4389359.317	EURA
21605S001	SHANGHAI	7837	-2831087.649	4676203.475	3275172.894	EURA
21726S001	SIMOSATO	7838	-3822388.278	3699363.497	3507573.140	EURA
11001S002	GRAZ	7839	4194426.808	1162693.846	4647246.477	EURA
13212S001	HERSTMONCEUX	7840	4033463.937	23662.290	4924304.974	EURA
50103S007	CANBERRA	7843	-4446476.602	2678127.022	-3696251.823	INDI
40439M004	OWENS VALLEY	7853	-2410421.042	-4477800.362	3838690.387	NOAM
40505M001	CABO SAN LUCAS	7882	-1997241.527	-5528041.368	2468355.149	PCFC
40442M005	FORT DAVIS	7885	-1330125.254	-5328526.567	3236150.255	NOAM
40433M005	QUINCY	7886	-2517242.218	-4198550.980	4076570.345	NOAM
40434M002	MOUNT HOPKINS	7888	-1936744.206	-5077639.082	3331993.904	NOAM
40491M002	FLAGSTAFF	7891	-1923976.549	-4850871.712	3658574.739	NOAM
40492M001	VERNAL	7892	-1631484.577	-4589133.842	4106749.538	NOAM
40493M001	YUMA	7894	-2196777.731	-4887337.079	3448425.279	NOAM
40400M001	PASADENA	7896	-2493211.790	-4655229.612	3565574.541	PCFC
40451M111	WASHINGTON	7899	1131364.827	-4831168.762	3994128.948	NOAM
42202S001	AREQUIPA	7907	1942791.962	-5804077.705	-1796919.358	SOAM
40434S001	MOUNT HOPKINS	7921	-1936760.092	-5077707.171	3331922.464	NOAM
41604S001	NATAL	7929	5186467.864	-3653855.977	-654321.817	SOAM
12734S001	MATERA	7939	4641965.196	1393069.890	4133262.177	EURA
50103S003	CANBERRA	7943	-4447548.565	2677134.024	-3694996.804	INDI

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DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
14106S001	POTSDAM	1181	3800621.349	882005.306	5028859.548	EURA
12302S002	RIGA	1884	3183895.790	1421496.329	5322803.956	EURA
40701S001	SANTIAGO DE CUBA	1953	1474548.710	-5811242.395	2168944.998	NOAM
40436M003	SAN DIEGO	7035	-2428826.499	-4799754.406	3417266.997	PCFC
40433M001	QUINCY	7051	-2516893.068	-4198845.170	4076411.389	NOAM
40436M002	SAN DIEGO	7062	-2428825.799	-4799750.591	3417272.700	PCFC
40451M112	WASHINGTON	7063	1130714.824	-4831367.746	3994087.339	NOAM
42501M001	BERMUDA	7067	2308538.604	-4874079.973	3393628.540	NOAM
40417M002	PATRICK AFB	7069	917958.994	-5548370.223	2998776.585	NOAM
40442M006	FORT DAVIS	7080	-1330020.900	-5328401.885	3236480.837	NOAM
40438M001	BEAR LAKE	7082	-1735997.087	-4425048.154	4241430.386	NOAM
40405M001	GOLDSTONE	7085	-2353393.791	-4641529.321	3676898.885	NOAM
40442M001	FORT DAVIS	7086	-1330125.238	-5328526.618	3236150.280	NOAM
50107M001	YARRAGADEE	7090	-2389006.422	5043329.259	-3078525.463	INDI
40440M001	WESTFORD	7091	1492453.846	-4457278.739	4296815.865	NOAM
50505M001	KWAJALEIN ATOLL	7092	-6143447.308	1364699.993	1034163.003	PCFC
50503M001	AMERICAN SAMOA	7096	-6100045.822	-996203.274	-1568976.394	PCFC
41703M002	EASTER ISLAND	7097	-1884984.526	-5357608.085	-2892853.405	NAZC
40451M101	WASHINGTON	7101	1131240.518	-4831179.842	3994148.406	NOAM
40451M102	WASHINGTON	7102	1130686.702	-4831353.038	3994110.873	NOAM
40451M103	WASHINGTON	7103	1130685.698	-4831348.723	3994116.311	NOAM
40451M104	WASHINGTON	7104	1131095.912	-4831196.927	3994170.673	NOAM
40451M105	WASHINGTON	7105	1130719.829	-4831350.561	3994106.468	NOAM
40433M002	QUINCY	7109	-2517234.642	-4198556.238	4076569.686	NOAM
40497M001	MONUMENT PEAK	7110	-2386277.832	-4802354.401	3444881.393	PCFC
40496M001	PLATTEVILLE	7112	-1240678.125	-4720463.404	4094480.612	NOAM
40439M001	OWENS VALLEY	7114	-2410422.331	-4477802.739	3838686.669	NOAM
40405M002	GOLDSTONE	7115	-2350861.557	-4655546.355	3660997.870	NOAM
40445M002	MAUI	7120	-5465998.378	-2404408.668	2242228.380	PCFC
92202M002	HUAHINE	7121	-5345865.176	-2958246.760	-1824623.859	PCFC
40504M001	MAZATLAN	7122	-1660089.252	-5619100.397	2511637.871	NOAM
92202M003	HUAHINE	7123	-5345865.146	-2958246.738	-1824623.911	PCFC
40451M114	WASHINGTON	7125	1130745.887	-4831368.047	3994077.041	NOAM
40451M116	WASHINGTON	7130	1130735.380	-4831324.626	3994132.299	NOAM
40445M001	MAUI	7210	-5466006.445	-2404428.051	2242187.411	PCFC
40497M002	MONUMENT PEAK	7220	-2386292.166	-4802347.569	3444880.870	PCFC
40405M006	GOLDSTONE	7265	-2356475.606	-4646618.327	3668424.756	NOAM
40497M003	MONUMENT PEAK	7274	-2386289.231	-4802346.568	3444883.943	PCFC
40405M013	GOLDSTONE	7288	-2356493.975	-4646607.679	3668426.659	NOAM
40499M002	RICHMOND	7295	961319.077	-5674090.958	2740489.532	NOAM
41705M001	SANTIAGO	7400	1769699.785	-5044612.925	-3468260.082	SOAM
41706M001	CERRO TOLOLO	7401	1815517.146	-5213464.872	-3187999.428	SOAM
12612M001	ASKITES	7510	4353444.993	2082666.282	4156506.621	EURA
12615M001	KATAVIA	7512	4573400.105	2409322.205	3723881.746	EURA
12602M002	DIONYSOS	7515	4595216.508	2039435.322	3912629.483	EURA
12613M001	ROUMELLI	7517	4728694.751	2174373.372	3674572.938	EURA
12614M001	KARITSA	7520	4596042.683	1733476.815	4055720.810	EURA
12616M001	XRISOKALARIA	7525	4745949.606	1905705.946	3799169.024	EURA
20702S001	BAR GIYYORA	7530	4443968.509	3121946.866	3334695.426	AFRC

12734M005	MATERA	7540	4641984.654	1393057.712	4133233.415	EURA
12734M004	MATERA	7541	4641990.371	1393042.278	4133231.806	EURA
12706M001	LAMPEDUSA	7544	5072832.060	1130886.237	3684836.928	EURA
12725M002	CAGLIARI	7545	4893398.127	772673.313	4004140.940	EURA
12711M002	BOLOGNA	7546	4461399.757	919566.862	4449510.478	EURA
12718M002	TRIESTE	7550	4336738.655	1071271.478	4537910.995	EURA
20801M001	DIYARBAKIR	7575	3848636.082	3251760.909	3898909.204	EURA
20803M001	MELENGICLICK	7580	4247620.595	2778638.973	3851607.485	EURA
20802M001	YOZGAT	7585	4029730.767	2802093.298	4062067.978	EURA
20804M001	YIGILCA	7587	4117362.087	2517076.818	4157679.009	EURA
14201S010	WETTZELL	7596	4075585.351	931837.721	4801559.214	EURA
14201S007	WETTZELL	7599	4075517.486	931754.059	4801630.271	EURA
10503S001	METSAHOVI	7805	2892595.182	1311808.314	5512609.951	EURA
14001S001	ZIMMERWALD	7810	4331283.672	567549.522	4633139.902	EURA
30101S001	HELWAN	7831	4728283.602	2879670.687	3156894.219	AFRC
13504S001	KOOTWIJK	7833	3899224.153	396742.843	5015073.836	EURA
13504M002	KOOTWIJK	8833	3899237.943	396769.171	5015055.190	EURA
14201S002	WETTZELL	7834	4075530.162	931781.280	4801618.201	EURA
10002S001	GRASSE	7835	4581691.872	556159.370	4389359.342	EURA
21605S001	SHANGHAI	7837	-2831087.699	4676203.459	3275172.874	EURA
21726S001	SIMOSATO	7838	-3822388.322	3699363.474	3507573.115	EURA
11001S002	GRAZ	7839	4194426.774	1162693.880	4647246.499	EURA
13212S001	HERSTMONCEUX	7840	4033463.911	23662.322	4924304.996	EURA
50103S007	CANBERRA	7843	-4446476.675	2678127.019	-3696251.738	INDI
40439M004	OWENS VALLEY	7853	-2410421.075	-4477800.365	3838690.362	NOAM
40505M001	CABO SAN LUCAS	7882	-1997241.627	-5528041.311	2468355.194	PCFC
40442M005	FORT DAVIS	7885	-1330125.283	-5328526.571	3236150.238	NOAM
40433M005	QUINCY	7886	-2517242.253	-4198550.983	4076570.320	NOAM
40434M002	MOUNT HOPKINS	7888	-1936744.236	-5077639.085	3331993.882	NOAM
40491M002	FLAGSTAFF	7891	-1923976.582	-4850871.716	3658574.717	NOAM
40492M001	VERNAL	7892	-1631484.612	-4589133.846	4106749.520	NOAM
40493M001	YUMA	7894	-2196777.761	-4887337.081	3448425.255	NOAM
40400M001	PASADENA	7896	-2493211.857	-4655229.540	3565574.587	PCFC
40451M111	WASHINGTON	7899	1131364.792	-4831168.767	3994128.950	NOAM
42202S001	AREQUIPA	7907	1942791.951	-5804077.714	-1796919.340	SOAM
40434S001	MOUNT HOPKINS	7921	-1936760.122	-5077707.174	3331922.442	NOAM
41604S001	NATAL	7929	5186467.855	-3653855.994	-654321.790	SOAM
12734S001	MATERA	7939	4641965.164	1393069.926	4133262.201	EURA
50103S003	CANBERRA	7943	-4447548.638	2677134.020	-3694996.719	INDI

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DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
14106S001	POTSDAM	1181	3800621.314	882005.337	5028859.568	EURA
12302S002	RIGA	1884	3183895.750	1421496.357	5322803.972	EURA
40701S001	SANTIAGO DE CUBA	1953	1474548.690	-5811242.398	2168945.002	NOAM
40436M003	SAN DIEGO	7035	-2428826.571	-4799754.336	3417267.043	PCFC
40433M001	QUINCY	7051	-2516893.103	-4198845.174	4076411.363	NOAM
40436M002	SAN DIEGO	7062	-2428825.871	-4799750.521	3417272.746	PCFC
40451M112	WASHINGTON	7063	1130714.789	-4831367.752	3994087.343	NOAM

42501M001	BERMUDA	7067	2308538.574	-4874079.979	3393628.553	NOAM
40417M002	PATRICK AFB	7069	917958.966	-5548370.227	2998776.586	NOAM
40442M006	FORT DAVIS	7080	-1330020.929	-5328401.888	3236480.820	NOAM
40438M001	BEAR LAKE	7082	-1735997.123	-4425048.159	4241430.367	NOAM
40405M001	GOLDSTONE	7085	-2353393.823	-4641529.324	3676898.860	NOAM
40442M001	FORT DAVIS	7086	-1330125.267	-5328526.621	3236150.263	NOAM
50107M001	YARRAGADEE	7090	-2389006.525	5043329.275	-3078525.358	INDI
40440M001	WESTFORD	7091	1492453.810	-4457278.746	4296815.872	NOAM
50505M001	KWAJALEIN ATOLL	7092	-6143447.266	1364700.137	1034163.064	PCFC
50503M001	AMERICAN SAMOA	7096	-6100045.862	-996203.141	-1568976.324	PCFC
41703M002	EASTER ISLAND	7097	-1884984.354	-5357608.136	-2892853.424	NAZC
40451M101	WASHINGTON	7101	1131240.484	-4831179.848	3994148.410	NOAM
40451M102	WASHINGTON	7102	1130686.667	-4831353.044	3994110.877	NOAM
40451M103	WASHINGTON	7103	1130685.663	-4831348.729	3994116.315	NOAM
40451M104	WASHINGTON	7104	1131095.878	-4831196.933	3994170.677	NOAM
40451M105	WASHINGTON	7105	1130719.794	-4831350.567	3994106.472	NOAM
40433M002	QUINCY	7109	-2517234.677	-4198556.242	4076569.660	NOAM
40497M001	MONUMENT PEAK	7110	-2386277.905	-4802354.332	3444881.440	PCFC
40496M001	PLATTEVILLE	7112	-1240678.160	-4720463.408	4094480.596	NOAM
40439M001	OWENS VALLEY	7114	-2410422.364	-4477802.743	3838686.645	NOAM
40405M002	GOLDSTONE	7115	-2350861.588	-4655546.358	3660997.845	NOAM
40445M002	MAUI	7120	-5465998.409	-2404408.533	2242228.449	PCFC
92202M002	HUAHINE	7121	-5345865.264	-2958246.645	-1824623.788	PCFC
40504M001	MAZATLAN	7122	-1660089.275	-5619100.398	2511637.851	NOAM
92202M003	HUAHINE	7123	-5345865.234	-2958246.623	-1824623.840	PCFC
40451M114	WASHINGTON	7125	1130745.852	-4831368.053	3994077.045	NOAM
40451M116	WASHINGTON	7130	1130735.345	-4831324.632	3994132.303	NOAM
40445M001	MAUI	7210	-5466006.476	-2404427.916	2242187.480	PCFC
40497M002	MONUMENT PEAK	7220	-2386292.239	-4802347.500	3444880.917	PCFC
40405M006	GOLDSTONE	7265	-2356475.638	-4646618.330	3668424.731	NOAM
40497M003	MONUMENT PEAK	7274	-2386289.304	-4802346.499	3444883.990	PCFC
40405M013	GOLDSTONE	7288	-2356494.007	-4646607.682	3668426.634	NOAM
40499M002	RICHMOND	7295	961319.051	-5674090.961	2740489.533	NOAM
41705M001	SANTIAGO	7400	1769699.783	-5044612.936	-3468260.066	SOAM
41706M001	CERRO TOLOLO	7401	1815517.142	-5213464.884	-3187999.411	SOAM
12612M001	ASKITES	7510	4353444.956	2082666.316	4156506.643	EURA
12615M001	KATAVIA	7512	4573400.068	2409322.240	3723881.769	EURA
12602M002	DIONYSOS	7515	4595216.472	2039435.357	3912629.506	EURA
12613M001	ROUMELLI	7517	4728694.716	2174373.408	3674572.962	EURA
12614M001	KARITSA	7520	4596042.649	1733476.850	4055720.834	EURA
12616M001	XRISOKALARIA	7525	4745949.572	1905705.981	3799169.048	EURA
20702S001	BAR GIYYORA	7530	4443968.460	3121946.897	3334695.462	AFRC
12734M005	MATERA	7540	4641984.621	1393057.748	4133233.440	EURA
12734M004	MATERA	7541	4641990.338	1393042.314	4133231.831	EURA
12706M001	LAMPEDUSA	7544	5072832.032	1130886.275	3684836.955	EURA
12725M002	CAGLIARI	7545	4893398.100	772673.350	4004140.966	EURA
12711M002	BOLOGNA	7546	4461399.726	919566.898	4449510.501	EURA
12718M002	TRIESTE	7550	4336738.623	1071271.512	4537911.018	EURA
20801M001	DIYARBAKIR	7575	3848636.038	3251760.938	3898909.222	EURA
20803M001	MELENGICLICK	7580	4247620.555	2778639.005	3851607.506	EURA
20802M001	YOZGAT	7585	4029730.725	2802093.330	4062067.998	EURA
20804M001	YIGILCA	7587	4117362.047	2517076.850	4157679.029	EURA
14201S010	WETTZELL	7596	4075585.317	931837.753	4801559.235	EURA
14201S007	WETTZELL	7599	4075517.452	931754.091	4801630.292	EURA
10503S001	METSAHOVI	7805	2892595.142	1311808.339	5512609.966	EURA

14001S001	ZIMMERWALD	7810	4331283.643	567549.556	4633139.926	EURA
30101S001	HELWAN	7831	4728283.556	2879670.720	3156894.256	AFRC
13504S001	KOOTWIJK	7833	3899224.122	396742.875	5015073.858	EURA
13504M002	KOOTWIJK	8833	3899237.912	396769.203	5015055.212	EURA
14201S002	WETTZELL	7834	4075530.128	931781.312	4801618.222	EURA
10002S001	GRASSE	7835	4581691.844	556159.406	4389359.367	EURA
21605S001	SHANGHAI	7837	-2831087.750	4676203.443	3275172.853	EURA
21726S001	SIMOSATO	7838	-3822388.367	3699363.452	3507573.090	EURA
11001S002	GRAZ	7839	4194426.740	1162693.913	4647246.522	EURA
13212S001	HERSTMONCEUX	7840	4033463.883	23662.355	4924305.018	EURA
50103S007	CANBERRA	7843	-4446476.747	2678127.014	-3696251.655	INDI
40439M004	OWENS VALLEY	7853	-2410421.108	-4477800.369	3838690.338	NOAM
40505M001	CABO SAN LUCAS	7882	-1997241.727	-5528041.255	2468355.239	PCFC
40442M005	FORT DAVIS	7885	-1330125.312	-5328526.574	3236150.221	NOAM
40433M005	QUINCY	7886	-2517242.288	-4198550.987	4076570.294	NOAM
40434M002	MOUNT HOPKINS	7888	-1936744.265	-5077639.087	3331993.861	NOAM
40491M002	FLAGSTAFF	7891	-1923976.613	-4850871.719	3658574.696	NOAM
40492M001	VERNAL	7892	-1631484.648	-4589133.849	4106749.501	NOAM
40493M001	YUMA	7894	-2196777.791	-4887337.084	3448425.232	NOAM
40400M001	PASADENA	7896	-2493211.925	-4655229.468	3565574.634	PCFC
40451M111	WASHINGTON	7899	1131364.758	-4831168.773	3994128.954	NOAM
42202S001	AREQUIPA	7907	1942791.940	-5804077.724	-1796919.321	SOAM
40434S001	MOUNT HOPKINS	7921	-1936760.151	-5077707.176	3331922.421	NOAM
41604S001	NATAL	7929	5186467.846	-3653856.011	-654321.764	SOAM
12734S001	MATERA	7939	4641965.131	1393069.962	4133262.226	EURA
50103S003	CANBERRA	7943	-4447548.710	2677134.016	-3694996.636	INDI

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DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
14106S001	POTSDAM	1181	3800621.280	882005.368	5028859.588	EURA
12302S002	RIGA	1884	3183895.711	1421496.384	5322803.988	EURA
40701S001	SANTIAGO DE CUBA	1953	1474548.669	-5811242.401	2168945.006	NOAM
40436M003	SAN DIEGO	7035	-2428826.644	-4799754.265	3417267.090	PCFC
40433M001	QUINCY	7051	-2516893.138	-4198845.178	4076411.338	NOAM
40436M002	SAN DIEGO	7062	-2428825.944	-4799750.450	3417272.793	PCFC
40451M112	WASHINGTON	7063	1130714.755	-4831367.757	3994087.346	NOAM
42501M001	BERMUDA	7067	2308538.544	-4874079.985	3393628.565	NOAM
40417M002	PATRICK AFB	7069	917958.939	-5548370.231	2998776.587	NOAM
40442M006	FORT DAVIS	7080	-1330020.958	-5328401.891	3236480.804	NOAM
40438M001	BEAR LAKE	7082	-1735997.160	-4425048.163	4241430.348	NOAM
40405M001	GOLDSTONE	7085	-2353393.855	-4641529.327	3676898.836	NOAM
40442M001	FORT DAVIS	7086	-1330125.296	-5328526.624	3236150.247	NOAM
50107M001	YARRAGADEE	7090	-2389006.627	5043329.291	-3078525.251	INDI
40440M001	WESTFORD	7091	1492453.774	-4457278.752	4296815.878	NOAM
50505M001	KWAJALEIN ATOLL	7092	-6143447.223	1364700.283	1034163.125	PCFC
50503M001	AMERICAN SAMOA	7096	-6100045.903	-996203.008	-1568976.253	PCFC
41703M002	EASTER ISLAND	7097	-1884984.182	-5357608.186	-2892853.442	NAZC
40451M101	WASHINGTON	7101	1131240.450	-4831179.853	3994148.413	NOAM
40451M102	WASHINGTON	7102	1130686.633	-4831353.049	3994110.880	NOAM

40451M103	WASHINGTON	7103	1130685.629	-4831348.734	3994116.318	NOAM
40451M104	WASHINGTON	7104	1131095.844	-4831196.938	3994170.680	NOAM
40451M105	WASHINGTON	7105	1130719.760	-4831350.572	3994106.475	NOAM
40433M002	QUINCY	7109	-2517234.712	-4198556.246	4076569.635	NOAM
40497M001	MONUMENT PEAK	7110	-2386277.977	-4802354.262	3444881.487	PCFC
40496M001	PLATTEVILLE	7112	-1240678.196	-4720463.412	4094480.581	NOAM
40439M001	OWENS VALLEY	7114	-2410422.397	-4477802.747	3838686.620	NOAM
40405M002	GOLDSTONE	7115	-2350861.620	-4655546.360	3660997.821	NOAM
40445M002	MAUI	7120	-5465998.440	-2404408.398	2242228.519	PCFC
92202M002	HUAHINE	7121	-5345865.352	-2958246.530	-1824623.718	PCFC
40504M001	MAZATLAN	7122	-1660089.299	-5619100.400	2511637.831	NOAM
92202M003	HUAHINE	7123	-5345865.322	-2958246.508	-1824623.770	PCFC
40451M114	WASHINGTON	7125	1130745.818	-4831368.058	3994077.048	NOAM
40451M116	WASHINGTON	7130	1130735.311	-4831324.637	3994132.306	NOAM
40445M001	MAUI	7210	-5466006.507	-2404427.781	2242187.550	PCFC
40497M002	MONUMENT PEAK	7220	-2386292.311	-4802347.430	3444880.964	PCFC
40405M006	GOLDSTONE	7265	-2356475.670	-4646618.333	3668424.707	NOAM
40497M003	MONUMENT PEAK	7274	-2386289.376	-4802346.429	3444884.037	PCFC
40405M013	GOLDSTONE	7288	-2356494.039	-4646607.685	3668426.610	NOAM
40499M002	RICHMOND	7295	961319.026	-5674090.964	2740489.533	NOAM
41705M001	SANTIAGO	7400	1769699.781	-5044612.948	-3468260.050	SOAM
41706M001	CERRO TOLOLO	7401	1815517.138	-5213464.895	-3187999.394	SOAM
12612M001	ASKITES	7510	4353444.919	2082666.350	4156506.665	EURA
12615M001	KATAVIA	7512	4573400.031	2409322.276	3723881.792	EURA
12602M002	DIONYSOS	7515	4595216.437	2039435.392	3912629.530	EURA
12613M001	ROUMELLI	7517	4728694.680	2174373.444	3674572.986	EURA
12614M001	KARITSA	7520	4596042.615	1733476.886	4055720.859	EURA
12616M001	XRISOKALARIA	7525	4745949.538	1905706.017	3799169.073	EURA
20702S001	BAR GIYYORA	7530	4443968.411	3121946.927	3334695.499	AFRC
12734M005	MATERA	7540	4641984.589	1393057.783	4133233.464	EURA
12734M004	MATERA	7541	4641990.306	1393042.349	4133231.855	EURA
12706M001	LAMPEDUSA	7544	5072832.004	1130886.314	3684836.982	EURA
12725M002	CAGLIARI	7545	4893398.073	772673.387	4004140.992	EURA
12711M002	BOLOGNA	7546	4461399.696	919566.933	4449510.525	EURA
12718M002	TRIESTE	7550	4336738.591	1071271.547	4537911.042	EURA
20801M001	DIYARBAKIR	7575	3848635.994	3251760.968	3898909.240	EURA
20803M001	MELENGICLICK	7580	4247620.514	2778639.037	3851607.528	EURA
20802M001	YOZGAT	7585	4029730.684	2802093.361	4062068.018	EURA
20804M001	YIGILCA	7587	4117362.007	2517076.882	4157679.049	EURA
14201S010	WETTZELL	7596	4075585.284	931837.785	4801559.257	EURA
14201S007	WETTZELL	7599	4075517.419	931754.123	4801630.314	EURA
10503S001	METSAHOVI	7805	2892595.102	1311808.364	5512609.981	EURA
14001S001	ZIMMERWALD	7810	4331283.613	567549.589	4633139.949	EURA
30101S001	HELWAN	7831	4728283.511	2879670.754	3156894.293	AFRC
13504S001	KOOTWIJK	7833	3899224.091	396742.907	5015073.880	EURA
13504M002	KOOTWIJK	8833	3899237.881	396769.235	5015055.234	EURA
14201S002	WETTZELL	7834	4075530.095	931781.344	4801618.244	EURA
10002S001	GRASSE	7835	4581691.816	556159.442	4389359.392	EURA
21605S001	SHANGHAI	7837	-2831087.800	4676203.427	3275172.832	EURA
21726S001	SIMOSATO	7838	-3822388.412	3699363.429	3507573.066	EURA
11001S002	GRAZ	7839	4194426.707	1162693.946	4647246.544	EURA
13212S001	HERSTMONCEUX	7840	4033463.855	23662.387	4924305.041	EURA
50103S007	CANBERRA	7843	-4446476.820	2678127.010	-3696251.570	INDI
40439M004	OWENS VALLEY	7853	-2410421.141	-4477800.373	3838690.313	NOAM
40505M001	CABO SAN LUCAS	7882	-1997241.827	-5528041.199	2468355.284	PCFC

40442M005	FORT DAVIS	7885	-1330125.341	-5328526.577	3236150.205	NOAM
40433M005	QUINCY	7886	-2517242.323	-4198550.991	4076570.269	NOAM
40434M002	MOUNT HOPKINS	7888	-1936744.294	-5077639.090	3331993.839	NOAM
40491M002	FLAGSTAFF	7891	-1923976.645	-4850871.722	3658574.675	NOAM
40492M001	VERNAL	7892	-1631484.683	-4589133.853	4106749.482	NOAM
40493M001	YUMA	7894	-2196777.821	-4887337.087	3448425.208	NOAM
40400M001	PASADENA	7896	-2493211.994	-4655229.396	3565574.681	PCFC
40451M111	WASHINGTON	7899	1131364.724	-4831168.778	3994128.957	NOAM
42202S001	AREQUIPA	7907	1942791.928	-5804077.733	-1796919.302	SOAM
40434S001	MOUNT HOPKINS	7921	-1936760.180	-5077707.179	3331922.399	NOAM
41604S001	NATAL	7929	5186467.837	-3653856.029	-654321.738	SOAM
12734S001	MATERA	7939	4641965.099	1393069.997	4133262.250	EURA
50103S003	CANBERRA	7943	-4447548.783	2677134.012	-3694996.551	INDI

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DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
14106S001	POTSDAM	1181	3800621.413	882005.284	5028859.521	EURA
40433M001	QUINCY	7051	-2516893.020	-4198845.155	4076411.433	NOAM
41703M001	EASTER ISLAND	7061	-1884984.167	-5357606.683	-2892852.629	NAZC
40436M002	SAN DIEGO	7062	-2428825.677	-4799750.604	3417272.633	PCFC
40451M112	WASHINGTON	7063	1130714.919	-4831367.701	3994087.340	NOAM
42501M001	BERMUDA	7067	2308538.693	-4874079.812	3393628.509	NOAM
43602M002	GRAND TURK	7068	1920482.913	-5619478.243	2318914.305	NOAM
40417M002	PATRICK AFB	7069	917959.070	-5548370.431	2998776.580	NOAM
40438M001	BEAR LAKE	7082	-1735997.010	-4425048.237	4241430.497	NOAM
40442M001	FORT DAVIS	7086	-1330125.208	-5328526.627	3236150.307	NOAM
50107M001	YARRAGADEE	7090	-2389006.322	5043329.253	-3078525.554	INDI
40440M001	WESTFORD	7091	1492453.781	-4457278.679	4296815.807	NOAM
50505M001	KWAJALEIN ATOLL	7092	-6143447.357	1364699.830	1034162.923	PCFC
50503M001	AMERICAN SAMOA	7096	-6100045.782	-996203.414	-1568976.487	PCFC
41703M002	EASTER ISLAND	7097	-1884984.729	-5357608.041	-2892853.401	NAZC
40451M101	WASHINGTON	7101	1131240.597	-4831179.777	3994148.449	NOAM
40451M102	WASHINGTON	7102	1130686.734	-4831353.054	3994110.867	NOAM
40451M103	WASHINGTON	7103	1130685.794	-4831348.700	3994116.286	NOAM
40451M104	WASHINGTON	7104	1131096.039	-4831196.808	3994170.790	NOAM
40451M105	WASHINGTON	7105	1130719.866	-4831350.538	3994106.464	NOAM
40433M002	QUINCY	7109	-2517234.601	-4198556.228	4076569.716	NOAM
40497M001	MONUMENT PEAK	7110	-2386277.751	-4802354.457	3444881.346	PCFC
40496M001	PLATTEVILLE	7112	-1240678.095	-4720463.372	4094480.620	NOAM
40439M001	OWENS VALLEY	7114	-2410422.279	-4477802.764	3838686.694	NOAM
40405M002	GOLDSTONE	7115	-2350861.505	-4655546.372	3660997.887	NOAM
40445M002	MAUI	7120	-5465998.340	-2404408.824	2242228.279	PCFC
92202M002	HUAHINE	7121	-5345865.092	-2958246.848	-1824623.946	PCFC
40504M001	MAZATLAN	7122	-1660089.215	-5619100.390	2511637.892	NOAM
92202M004	HUAHINE	7123	-5345866.532	-2958247.641	-1824624.513	PCFC
40451M114	WASHINGTON	7125	1130745.928	-4831368.041	3994077.080	NOAM
40445M001	MAUI	7210	-5466006.394	-2404428.191	2242187.349	PCFC
40497M002	MONUMENT PEAK	7220	-2386292.066	-4802347.550	3444880.811	PCFC
40405M006	GOLDSTONE	7265	-2356475.560	-4646618.284	3668424.765	NOAM

40405M013	GOLDSTONE	7288	-2356493.944	-4646607.663	3668426.697	NOAM
41705S003	SANTIAGO	7400	1769700.451	-5044614.721	-3468263.224	SOAM
41706S001	CERRO TOLOLO	7401	1815517.975	-5213466.752	-3188002.485	SOAM
12612M001	ASKITES	7510	4353444.997	2082666.197	4156506.608	EURA
12615M001	KATAVIA	7512	4573400.159	2409322.128	3723881.711	EURA
12602M002	DIONYSOS	7515	4595216.511	2039435.264	3912629.462	EURA
12613M001	ROUMELLI	7517	4728694.760	2174373.286	3674572.898	EURA
12614M001	KARITSA	7520	4596042.718	1733476.764	4055720.781	EURA
12616M001	XRISOKALARIA	7525	4745949.620	1905705.845	3799168.986	EURA
20702M001	BAR GIYYORA	7530	4443967.463	3121945.324	3334694.319	AFRC
12734M004	MATERA	7541	4641990.406	1393042.225	4133231.788	EURA
12706M001	LAMPEDUSA	7544	5072832.092	1130886.118	3684836.881	EURA
12725M002	CAGLIARI	7545	4893398.145	772673.252	4004140.923	EURA
12718M002	TRIESTE	7550	4336738.603	1071271.434	4537911.031	EURA
20801M001	DIYARBAKIR	7575	3848636.199	3251760.911	3898909.098	EURA
20803M001	MELENGICLICK	7580	4247620.643	2778638.906	3851607.468	EURA
20802M001	YOZGAT	7585	4029730.828	2802093.271	4062067.957	EURA
20804M001	YIGILCA	7587	4117362.112	2517076.779	4157679.009	EURA
14005M002	MONTE GENEROSO	7590	4390309.976	696751.959	4560835.868	EURA
10503S001	METSAHOVI	7805	2892595.435	1311808.128	5512610.862	EURA
14001S001	ZIMMERWALD	7810	4331283.672	567549.429	4633139.914	EURA
30101S001	HELWAN	7831	4728283.792	2879670.146	3156894.115	AFRC
13504S001	KOOTWIJK	7833	3899224.279	396742.757	5015073.896	EURA
14201S002	WETTZELL	7834	4075530.139	931781.196	4801618.141	EURA
10002S001	GRASSE	7835	4581691.875	556159.297	4389359.344	EURA
21605S001	SHANGHAI	7837	-2831087.751	4676203.640	3275172.942	EURA
21726M002	SIMOSATO	7838	-3822387.013	3699362.270	3507571.993	EURA
11001S002	GRAZ	7839	4194426.799	1162693.801	4647246.481	EURA
13212S001	HERSTMONCEUX	7840	4033463.910	23662.268	4924304.983	EURA
50103S007	CANBERRA	7843	-4446476.635	2678127.089	-3696251.870	INDI
40505M001	CABO SAN LUCAS	7882	-1997241.493	-5528041.137	2468355.109	PCFC
40442M005	FORT DAVIS	7885	-1330125.227	-5328526.476	3236150.264	NOAM
40433S010	QUINCY	7886	-2517242.329	-4198554.134	4076572.209	NOAM
40434M002	MOUNT HOPKINS	7888	-1936744.210	-5077639.089	3331993.893	NOAM
40412M001	AUSTIN	7890	-754161.992	-5459061.226	3200744.041	NOAM
40491M002	FLAGSTAFF	7891	-1923976.505	-4850871.624	3658574.793	NOAM
40492M001	VERNAL	7892	-1631484.581	-4589133.902	4106749.607	NOAM
40493S001	YUMA	7894	-2196777.773	-4887339.280	3448428.226	NOAM
40400M001	PASADENA	7896	-2493211.771	-4655229.686	3565574.516	PCFC
42202S001	AREQUIPA	7907	1942792.011	-5804077.663	-1796919.363	SOAM
40434S001	MOUNT HOPKINS	7921	-1936760.001	-5077707.150	3331922.573	NOAM
41604S001	NATAL	7929	5186468.041	-3653856.134	-654321.961	SOAM
12734S001	MATERA	7939	4641965.162	1393069.849	4133262.166	EURA
50103S003	CANBERRA	7943	-4447548.650	2677134.122	-3694996.933	INDI
13504S007	KOOTWIJK	8833	3899237.917	396769.089	5015055.214	EURA

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DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
14106S001	POTSDAM	1181	3800621.379	882005.316	5028859.541	EURA

40433M001	QUINCY	7051	-2516893.054	-4198845.158	4076411.408	NOAM
41703M001	EASTER ISLAND	7061	-1884983.996	-5357606.734	-2892852.647	NAZC
40436M002	SAN DIEGO	7062	-2428825.750	-4799750.534	3417272.680	PCFC
40451M112	WASHINGTON	7063	1130714.884	-4831367.707	3994087.343	NOAM
42501M001	BERMUDA	7067	2308538.663	-4874079.817	3393628.522	NOAM
43602M002	GRAND TURK	7068	1920482.891	-5619478.246	2318914.314	NOAM
40417M002	PATRICK AFB	7069	917959.044	-5548370.435	2998776.581	NOAM
40438M001	BEAR LAKE	7082	-1735997.046	-4425048.241	4241430.478	NOAM
40442M001	FORT DAVIS	7086	-1330125.236	-5328526.631	3236150.290	NOAM
50107M001	YARRAGADEE	7090	-2389006.425	5043329.269	-3078525.448	INDI
40440M001	WESTFORD	7091	1492453.745	-4457278.684	4296815.814	NOAM
50505M001	KWAJALEIN ATOLL	7092	-6143447.314	1364699.975	1034162.984	PCFC
50503M001	AMERICAN SAMOA	7096	-6100045.822	-996203.281	-1568976.416	PCFC
41703M002	EASTER ISLAND	7097	-1884984.558	-5357608.092	-2892853.419	NAZC
40451M101	WASHINGTON	7101	1131240.562	-4831179.783	3994148.452	NOAM
40451M102	WASHINGTON	7102	1130686.699	-4831353.060	3994110.870	NOAM
40451M103	WASHINGTON	7103	1130685.759	-4831348.706	3994116.289	NOAM
40451M104	WASHINGTON	7104	1131096.004	-4831196.814	3994170.793	NOAM
40451M105	WASHINGTON	7105	1130719.831	-4831350.544	3994106.467	NOAM
40433M002	QUINCY	7109	-2517234.635	-4198556.231	4076569.691	NOAM
40497M001	MONUMENT PEAK	7110	-2386277.823	-4802354.387	3444881.393	PCFC
40496M001	PLATTEVILLE	7112	-1240678.130	-4720463.376	4094480.604	NOAM
40439M001	OWENS VALLEY	7114	-2410422.312	-4477802.767	3838686.670	NOAM
40405M002	GOLDSTONE	7115	-2350861.537	-4655546.376	3660997.863	NOAM
40445M002	MAUI	7120	-5465998.370	-2404408.690	2242228.348	PCFC
92202M002	HUAHINE	7121	-5345865.180	-2958246.733	-1824623.875	PCFC
40504M001	MAZATLAN	7122	-1660089.238	-5619100.392	2511637.872	NOAM
92202M004	HUAHINE	7123	-5345866.620	-2958247.526	-1824624.442	PCFC
40451M114	WASHINGTON	7125	1130745.893	-4831368.047	3994077.083	NOAM
40445M001	MAUI	7210	-5466006.424	-2404428.057	2242187.418	PCFC
40497M002	MONUMENT PEAK	7220	-2386292.138	-4802347.480	3444880.858	PCFC
40405M006	GOLDSTONE	7265	-2356475.592	-4646618.288	3668424.741	NOAM
40405M013	GOLDSTONE	7288	-2356493.976	-4646607.667	3668426.673	NOAM
41705S003	SANTIAGO	7400	1769700.449	-5044614.733	-3468263.208	SOAM
41706S001	CERRO TOLOLO	7401	1815517.971	-5213466.763	-3188002.468	SOAM
12612M001	ASKITES	7510	4353444.960	2082666.232	4156506.629	EURA
12615M001	KATAVIA	7512	4573400.122	2409322.163	3723881.734	EURA
12602M002	DIONYSOS	7515	4595216.475	2039435.300	3912629.485	EURA
12613M001	ROUMELLI	7517	4728694.725	2174373.323	3674572.922	EURA
12614M001	KARITSA	7520	4596042.683	1733476.800	4055720.805	EURA
12616M001	KRISOKALARIA	7525	4745949.586	1905705.881	3799169.010	EURA
20702M001	BAR GIYYORA	7530	4443967.414	3121945.354	3334694.355	AFRC
12734M004	MATERA	7541	4641990.374	1393042.262	4133231.812	EURA
12706M001	LAMPEDUSA	7544	5072832.064	1130886.156	3684836.908	EURA
12725M002	CAGLIARI	7545	4893398.117	772673.290	4004140.949	EURA
12718M002	TRIESTE	7550	4336738.571	1071271.468	4537911.054	EURA
20801M001	DIYARBAKIR	7575	3848636.155	3251760.941	3898909.115	EURA
20803M001	MELENGICLICK	7580	4247620.602	2778638.939	3851607.488	EURA
20802M001	YOZGAT	7585	4029730.786	2802093.303	4062067.977	EURA
20804M001	YIGILCA	7587	4117362.071	2517076.811	4157679.029	EURA
14005M002	MONTE GENEROSO	7590	4390309.946	696751.994	4560835.892	EURA
10503S001	METSAHOVI	7805	2892595.395	1311808.154	5512610.877	EURA
14001S001	ZIMMERWALD	7810	4331283.642	567549.463	4633139.938	EURA
30101S001	HELWAN	7831	4728283.747	2879670.179	3156894.152	AFRC
13504S001	KOOTWIJK	7833	3899224.249	396742.789	5015073.917	EURA

14201S002	WETTZELL	7834	4075530.106	931781.229	4801618.163	EURA
10002S001	GRASSE	7835	4581691.847	556159.333	4389359.369	EURA
21605S001	SHANGHAI	7837	-2831087.801	4676203.625	3275172.921	EURA
21726M002	SIMOSATO	7838	-3822387.058	3699362.248	3507571.968	EURA
11001S002	GRAZ	7839	4194426.765	1162693.835	4647246.503	EURA
13212S001	HERSTMONCEUX	7840	4033463.882	23662.301	4924305.005	EURA
50103S007	CANBERRA	7843	-4446476.708	2678127.084	-3696251.786	INDI
40505M001	CABO SAN LUCAS	7882	-1997241.593	-5528041.081	2468355.154	PCFC
40442M005	FORT DAVIS	7885	-1330125.255	-5328526.480	3236150.247	NOAM
40433S010	QUINCY	7886	-2517242.363	-4198554.137	4076572.184	NOAM
40434M002	MOUNT HOPKINS	7888	-1936744.239	-5077639.092	3331993.871	NOAM
40412M001	AUSTIN	7890	-754162.020	-5459061.229	3200744.029	NOAM
40491M002	FLAGSTAFF	7891	-1923976.537	-4850871.627	3658574.772	NOAM
40492M001	VERNAL	7892	-1631484.616	-4589133.906	4106749.589	NOAM
40493S001	YUMA	7894	-2196777.803	-4887339.283	3448428.203	NOAM
40400M001	PASADENA	7896	-2493211.838	-4655229.614	3565574.563	PCFC
42202S001	AREQUIPA	7907	1942792.000	-5804077.672	-1796919.344	SOAM
40434S001	MOUNT HOPKINS	7921	-1936760.030	-5077707.153	3331922.551	NOAM
41604S001	NATAL	7929	5186468.032	-3653856.151	-654321.935	SOAM
12734S001	MATERA	7939	4641965.130	1393069.886	4133262.190	EURA
50103S003	CANBERRA	7943	-4447548.722	2677134.117	-3694996.849	INDI
13504S007	KOOTWIJK	8833	3899237.887	396769.121	5015055.235	EURA

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DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
14106S001	POTSDAM	1181	3800621.345	882005.347	5028859.561	EURA
40433M001	QUINCY	7051	-2516893.089	-4198845.162	4076411.383	NOAM
41703M001	EASTER ISLAND	7061	-1884983.824	-5357606.785	-2892852.665	NAZC
40436M002	SAN DIEGO	7062	-2428825.822	-4799750.464	3417272.727	PCFC
40451M112	WASHINGTON	7063	1130714.850	-4831367.712	3994087.347	NOAM
42501M001	BERMUDA	7067	2308538.634	-4874079.823	3393628.535	NOAM
43602M002	GRAND TURK	7068	1920482.870	-5619478.250	2318914.323	NOAM
40417M002	PATRICK AFB	7069	917959.017	-5548370.439	2998776.582	NOAM
40438M001	BEAR LAKE	7082	-1735997.082	-4425048.245	4241430.459	NOAM
40442M001	FORT DAVIS	7086	-1330125.265	-5328526.634	3236150.273	NOAM
50107M001	YARRAGADEE	7090	-2389006.528	5043329.285	-3078525.342	INDI
40440M001	WESTFORD	7091	1492453.709	-4457278.690	4296815.821	NOAM
50505M001	KWAJALEIN ATOLL	7092	-6143447.272	1364700.120	1034163.045	PCFC
50503M001	AMERICAN SAMOA	7096	-6100045.862	-996203.149	-1568976.346	PCFC
41703M002	EASTER ISLAND	7097	-1884984.386	-5357608.143	-2892853.437	NAZC
40451M101	WASHINGTON	7101	1131240.528	-4831179.788	3994148.456	NOAM
40451M102	WASHINGTON	7102	1130686.665	-4831353.065	3994110.874	NOAM
40451M103	WASHINGTON	7103	1130685.725	-4831348.711	3994116.293	NOAM
40451M104	WASHINGTON	7104	1131095.970	-4831196.819	3994170.797	NOAM
40451M105	WASHINGTON	7105	1130719.797	-4831350.549	3994106.471	NOAM
40433M002	QUINCY	7109	-2517234.670	-4198556.235	4076569.666	NOAM
40497M001	MONUMENT PEAK	7110	-2386277.896	-4802354.318	3444881.439	PCFC
40496M001	PLATTEVILLE	7112	-1240678.165	-4720463.380	4094480.589	NOAM
40439M001	OWENS VALLEY	7114	-2410422.344	-4477802.770	3838686.646	NOAM

40405M002	GOLDSTONE	7115	-2350861.568	-4655546.379	3660997.839	NOAM
40445M002	MAUI	7120	-5465998.401	-2404408.555	2242228.418	PCFC
92202M002	HUAHINE	7121	-5345865.267	-2958246.619	-1824623.804	PCFC
40504M001	MAZATLAN	7122	-1660089.261	-5619100.394	2511637.852	NOAM
92202M004	HUAHINE	7123	-5345866.707	-2958247.412	-1824624.371	PCFC
40451M114	WASHINGTON	7125	1130745.859	-4831368.052	3994077.087	NOAM
40445M001	MAUI	7210	-5466006.455	-2404427.922	2242187.488	PCFC
40497M002	MONUMENT PEAK	7220	-2386292.211	-4802347.411	3444880.904	PCFC
40405M006	GOLDSTONE	7265	-2356475.623	-4646618.291	3668424.717	NOAM
40405M013	GOLDSTONE	7288	-2356494.007	-4646607.670	3668426.649	NOAM
41705S003	SANTIAGO	7400	1769700.446	-5044614.745	-3468263.191	SOAM
41706S001	CERRO TOLOLO	7401	1815517.967	-5213466.775	-3188002.451	SOAM
12612M001	ASKITES	7510	4353444.923	2082666.266	4156506.651	EURA
12615M001	KATAVIA	7512	4573400.085	2409322.199	3723881.756	EURA
12602M002	DIONYSOS	7515	4595216.440	2039435.335	3912629.509	EURA
12613M001	ROUMELLI	7517	4728694.690	2174373.359	3674572.946	EURA
12614M001	KARITSA	7520	4596042.649	1733476.836	4055720.829	EURA
12616M001	XRISOKALARIA	7525	4745949.551	1905705.918	3799169.034	EURA
20702M001	BAR GIYYORA	7530	4443967.365	3121945.385	3334694.391	AFRC
12734M004	MATERA	7541	4641990.342	1393042.298	4133231.836	EURA
12706M001	LAMPEDUSA	7544	5072832.036	1130886.195	3684836.935	EURA
12725M002	CAGLIARI	7545	4893398.090	772673.328	4004140.975	EURA
12718M002	TRIESTE	7550	4336738.538	1071271.503	4537911.077	EURA
20801M001	DIYARBAKIR	7575	3848636.111	3251760.972	3898909.133	EURA
20803M001	MELENGICLICK	7580	4247620.562	2778638.972	3851607.509	EURA
20802M001	YOZGAT	7585	4029730.745	2802093.335	4062067.996	EURA
20804M001	YIGILCA	7587	4117362.031	2517076.844	4157679.049	EURA
14005M002	MONTE GENEROSO	7590	4390309.916	696752.029	4560835.915	EURA
10503S001	METSAHOVI	7805	2892595.356	1311808.180	5512610.891	EURA
14001S001	ZIMMERWALD	7810	4331283.613	567549.498	4633139.961	EURA
30101S001	HELWAN	7831	4728283.702	2879670.213	3156894.190	AFRC
13504S001	KOOTWIJK	7833	3899224.218	396742.822	5015073.939	EURA
14201S002	WETTZELL	7834	4075530.073	931781.262	4801618.185	EURA
10002S001	GRASSE	7835	4581691.819	556159.369	4389359.393	EURA
21605S001	SHANGHAI	7837	-2831087.851	4676203.609	3275172.901	EURA
21726M002	SIMOSATO	7838	-3822387.103	3699362.225	3507571.943	EURA
11001S002	GRAZ	7839	4194426.731	1162693.869	4647246.525	EURA
13212S001	HERSTMONCEUX	7840	4033463.855	23662.334	4924305.027	EURA
50103S007	CANBERRA	7843	-4446476.780	2678127.080	-3696251.702	INDI
40505M001	CABO SAN LUCAS	7882	-1997241.692	-5528041.024	2468355.200	PCFC
40442M005	FORT DAVIS	7885	-1330125.284	-5328526.483	3236150.230	NOAM
40433S010	QUINCY	7886	-2517242.398	-4198554.141	4076572.159	NOAM
40434M002	MOUNT HOPKINS	7888	-1936744.268	-5077639.095	3331993.850	NOAM
40412M001	AUSTIN	7890	-754162.048	-5459061.232	3200744.016	NOAM
40491M002	FLAGSTAFF	7891	-1923976.568	-4850871.630	3658574.751	NOAM
40492M001	VERNAL	7892	-1631484.651	-4589133.910	4106749.571	NOAM
40493S001	YUMA	7894	-2196777.833	-4887339.286	3448428.180	NOAM
40400M001	PASADENA	7896	-2493211.906	-4655229.542	3565574.610	PCFC
42202S001	AREQUIPA	7907	1942791.989	-5804077.681	-1796919.326	SOAM
40434S001	MOUNT HOPKINS	7921	-1936760.059	-5077707.156	3331922.530	NOAM
41604S001	NATAL	7929	5186468.024	-3653856.168	-654321.908	SOAM
12734S001	MATERA	7939	4641965.098	1393069.922	4133262.214	EURA
50103S003	CANBERRA	7943	-4447548.795	2677134.113	-3694996.765	INDI
13504S007	KOOTWIJK	8833	3899237.856	396769.154	5015055.257	EURA

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DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
14106S001	POTSDAM	1181	3800621.311	882005.378	5028859.581	EURA
40433M001	QUINCY	7051	-2516893.123	-4198845.165	4076411.358	NOAM
41703M001	EASTER ISLAND	7061	-1884983.652	-5357606.835	-2892852.683	NAZC
40436M002	SAN DIEGO	7062	-2428825.895	-4799750.394	3417272.774	PCFC
40451M112	WASHINGTON	7063	1130714.816	-4831367.717	3994087.350	NOAM
42501M001	BERMUDA	7067	2308538.604	-4874079.828	3393628.547	NOAM
43602M002	GRAND TURK	7068	1920482.849	-5619478.254	2318914.332	NOAM
40417M002	PATRICK AFB	7069	917958.990	-5548370.443	2998776.583	NOAM
40438M001	BEAR LAKE	7082	-1735997.118	-4425048.249	4241430.440	NOAM
40442M001	FORT DAVIS	7086	-1330125.293	-5328526.637	3236150.257	NOAM
50107M001	YARRAGADEE	7090	-2389006.631	5043329.301	-3078525.236	INDI
40440M001	WESTFORD	7091	1492453.672	-4457278.696	4296815.828	NOAM
50505M001	KWAJALEIN ATOLL	7092	-6143447.229	1364700.265	1034163.106	PCFC
50503M001	AMERICAN SAMOA	7096	-6100045.902	-996203.016	-1568976.275	PCFC
41703M002	EASTER ISLAND	7097	-1884984.214	-5357608.193	-2892853.455	NAZC
40451M101	WASHINGTON	7101	1131240.494	-4831179.793	3994148.459	NOAM
40451M102	WASHINGTON	7102	1130686.631	-4831353.070	3994110.877	NOAM
40451M103	WASHINGTON	7103	1130685.691	-4831348.716	3994116.296	NOAM
40451M104	WASHINGTON	7104	1131095.936	-4831196.824	3994170.800	NOAM
40451M105	WASHINGTON	7105	1130719.763	-4831350.554	3994106.474	NOAM
40433M002	QUINCY	7109	-2517234.704	-4198556.238	4076569.641	NOAM
40497M001	MONUMENT PEAK	7110	-2386277.968	-4802354.249	3444881.486	PCFC
40496M001	PLATTEVILLE	7112	-1240678.200	-4720463.384	4094480.574	NOAM
40439M001	OWENS VALLEY	7114	-2410422.377	-4477802.773	3838686.621	NOAM
40405M002	GOLDSTONE	7115	-2350861.600	-4655546.382	3660997.815	NOAM
40445M002	MAUI	7120	-5465998.432	-2404408.420	2242228.488	PCFC
92202M002	HUAHINE	7121	-5345865.355	-2958246.504	-1824623.733	PCFC
40504M001	MAZATLAN	7122	-1660089.283	-5619100.396	2511637.832	NOAM
92202M004	HUAHINE	7123	-5345866.795	-2958247.297	-1824624.300	PCFC
40451M114	WASHINGTON	7125	1130745.825	-4831368.057	3994077.090	NOAM
40445M001	MAUI	7210	-5466006.486	-2404427.787	2242187.558	PCFC
40497M002	MONUMENT PEAK	7220	-2386292.283	-4802347.342	3444880.951	PCFC
40405M006	GOLDSTONE	7265	-2356475.655	-4646618.294	3668424.693	NOAM
40405M013	GOLDSTONE	7288	-2356494.039	-4646607.673	3668426.625	NOAM
41705S003	SANTIAGO	7400	1769700.444	-5044614.757	-3468263.175	SOAM
41706S001	CERRO TOLOLO	7401	1815517.964	-5213466.787	-3188002.434	SOAM
12612M001	ASKITES	7510	4353444.885	2082666.300	4156506.673	EURA
12615M001	KATAVIA	7512	4573400.048	2409322.234	3723881.779	EURA
12602M002	DIONYSOS	7515	4595216.404	2039435.371	3912629.532	EURA
12613M001	ROUMELLI	7517	4728694.654	2174373.395	3674572.970	EURA
12614M001	KARITSA	7520	4596042.615	1733476.872	4055720.852	EURA
12616M001	KRISOKALARIA	7525	4745949.517	1905705.954	3799169.058	EURA
20702M001	BAR GIYYORA	7530	4443967.317	3121945.416	3334694.427	AFRC
12734M004	MATERA	7541	4641990.309	1393042.334	4133231.860	EURA
12706M001	LAMPEDUSA	7544	5072832.008	1130886.234	3684836.962	EURA
12725M002	CAGLIARI	7545	4893398.062	772673.366	4004141.001	EURA
12718M002	TRIESTE	7550	4336738.506	1071271.537	4537911.100	EURA
20801M001	DIYARBAKIR	7575	3848636.067	3251761.002	3898909.151	EURA
20803M001	MELENGICLICK	7580	4247620.522	2778639.006	3851607.530	EURA

20802M001	YOZGAT	7585	4029730.703	2802093.367	4062068.015	EURA
20804M001	YIGILCA	7587	4117361.991	2517076.877	4157679.069	EURA
14005M002	MONTE GENEROSO	7590	4390309.885	696752.064	4560835.939	EURA
10503S001	METSAHOVI	7805	2892595.316	1311808.205	5512610.906	EURA
14001S001	ZIMMERWALD	7810	4331283.583	567549.532	4633139.984	EURA
30101S001	HELWAN	7831	4728283.656	2879670.246	3156894.227	AFRC
13504S001	KOOTWIJK	7833	3899224.188	396742.854	5015073.960	EURA
14201S002	WETTZELL	7834	4075530.040	931781.295	4801618.206	EURA
10002S001	GRASSE	7835	4581691.791	556159.406	4389359.418	EURA
21605S001	SHANGHAI	7837	-2831087.902	4676203.593	3275172.880	EURA
21726M002	SIMOSATO	7838	-3822387.148	3699362.203	3507571.918	EURA
11001S002	GRAZ	7839	4194426.698	1162693.902	4647246.547	EURA
13212S001	HERSTMONCEUX	7840	4033463.828	23662.366	4924305.050	EURA
50103S007	CANBERRA	7843	-4446476.853	2678127.075	-3696251.617	INDI
40505M001	CABO SAN LUCAS	7882	-1997241.792	-5528040.968	2468355.245	PCFC
40442M005	FORT DAVIS	7885	-1330125.312	-5328526.486	3236150.214	NOAM
40433S010	QUINCY	7886	-2517242.432	-4198554.144	4076572.134	NOAM
40434M002	MOUNT HOPKINS	7888	-1936744.297	-5077639.098	3331993.829	NOAM
40412M001	AUSTIN	7890	-754162.076	-5459061.236	3200744.004	NOAM
40491M002	FLAGSTAFF	7891	-1923976.600	-4850871.633	3658574.730	NOAM
40492M001	VERNAL	7892	-1631484.686	-4589133.914	4106749.552	NOAM
40493S001	YUMA	7894	-2196777.863	-4887339.289	3448428.156	NOAM
40400M001	PASADENA	7896	-2493211.974	-4655229.469	3565574.657	PCFC
42202S001	AREQUIPA	7907	1942791.978	-5804077.691	-1796919.307	SOAM
40434S001	MOUNT HOPKINS	7921	-1936760.088	-5077707.159	3331922.509	NOAM
41604S001	NATAL	7929	5186468.015	-3653856.185	-654321.882	SOAM
12734S001	MATERA	7939	4641965.065	1393069.958	4133262.238	EURA
50103S003	CANBERRA	7943	-4447548.868	2677134.108	-3694996.680	INDI
13504S007	KOOTWIJK	8833	3899237.826	396769.186	5015055.278	EURA

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DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
14106S001	POTSDAM	1181	3800621.510	882005.295	5028859.451	EURA
40442S001	FORT DAVIS	7086	-1330120.884	-5328532.242	3236146.785	NOAM
40442S016	FORT DAVIS	7086	-1330120.914	-5328532.263	3236146.746	NOAM
50107S001	YARRAGADEE	7090	-2389007.538	5043331.770	-3078527.124	INDI
50107S004	YARRAGADEE	7090	-2389007.533	5043331.775	-3078527.144	INDI
40451S147	WASHINGTON	7105	1130720.363	-4831352.925	3994108.478	NOAM
40451S101	WASHINGTON	7105	1130720.368	-4831352.931	3994108.474	NOAM
40451S135	WASHINGTON	7105	1130720.374	-4831352.935	3994108.486	NOAM
40451S148	WASHINGTON	7105	1130720.365	-4831352.953	3994108.468	NOAM
40433S006	QUINCY	7109	-2517235.845	-4198558.314	4076571.716	NOAM
40433S014	QUINCY	7109	-2517235.817	-4198558.311	4076571.709	NOAM
40497S001	MONUMENT PEAK	7110	-2386279.116	-4802357.073	3444883.309	PCFC
40497S002	MONUMENT PEAK	7110	-2386279.009	-4802356.842	3444883.106	PCFC
40504S001	MAZATLAN	7122	-1660090.086	-5619103.187	2511639.164	NOAM
40445S001	MAUI	7210	-5466006.899	-2404428.379	2242188.375	PCFC
12612S001	ASKITES	7510	4353447.427	2082667.443	4156505.511	EURA
12612S002	ASKITES	7510	4353447.536	2082667.385	4156505.477	EURA

12615S001	KATAVIA	7512	4573402.131	2409323.648	3723880.625	EURA
12615S002	KATAVIA	7512	4573402.149	2409323.652	3723880.615	EURA
12602S008	DIONYSOS	7515	4595218.787	2039436.286	3912628.447	EURA
12602S009	DIONYSOS	7515	4595218.800	2039436.311	3912628.407	EURA
12613S002	ROUMELLI	7517	4728697.942	2174374.780	3674573.694	EURA
12613S003	ROUMELLI	7517	4728697.028	2174374.366	3674571.711	EURA
12613S001	ROUMELLI	7517	4728697.026	2174374.441	3674571.716	EURA
12616S004	XRISOKALARIA	7525	4745952.813	1905707.308	3799169.753	EURA
12616S001	XRISOKALARIA	7525	4745952.049	1905706.806	3799167.832	EURA
14001S001	ZIMMERWALD	7810	4331283.704	567549.458	4633139.887	EURA
14201S002	WETTZELL	7834	4075530.162	931781.221	4801618.149	EURA
10002S001	GRASSE	7835	4581691.865	556159.303	4389359.329	EURA
21726S001	SIMOSATO	7838	-3822388.326	3699363.495	3507573.137	EURA
11001S002	GRAZ	7839	4194426.809	1162693.811	4647246.471	EURA
13212S001	HERSTMONCEUX	7840	4033463.914	23662.254	4924304.977	EURA
42202S001	AREQUIPA	7907	1942791.952	-5804077.701	-1796919.347	SOAM
12734S001	MATERA	7939	4641965.177	1393069.862	4133262.143	EURA

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POSITIONS 1986.0

DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
14106S001	POTSDAM	1181	3800621.441	882005.340	5028859.495	EURA
40442S001	FORT DAVIS	7086	-1330120.875	-5328532.256	3236146.767	NOAM
40442S016	FORT DAVIS	7086	-1330120.905	-5328532.277	3236146.728	NOAM
50107S001	YARRAGADEE	7090	-2389007.638	5043331.796	-3078527.004	INDI
50107S004	YARRAGADEE	7090	-2389007.633	5043331.801	-3078527.024	INDI
40451S147	WASHINGTON	7105	1130720.357	-4831352.926	3994108.477	NOAM
40451S101	WASHINGTON	7105	1130720.362	-4831352.932	3994108.473	NOAM
40451S135	WASHINGTON	7105	1130720.368	-4831352.936	3994108.485	NOAM
40451S148	WASHINGTON	7105	1130720.359	-4831352.954	3994108.467	NOAM
40433S006	QUINCY	7109	-2517235.898	-4198558.316	4076571.681	NOAM
40433S014	QUINCY	7109	-2517235.870	-4198558.313	4076571.674	NOAM
40497S001	MONUMENT PEAK	7110	-2386279.168	-4802357.045	3444883.311	PCFC
40497S002	MONUMENT PEAK	7110	-2386279.061	-4802356.814	3444883.108	PCFC
40504S001	MAZATLAN	7122	-1660090.094	-5619103.199	2511639.133	NOAM
40445S001	MAUI	7210	-5466006.930	-2404428.270	2242188.417	PCFC
12612S001	ASKITES	7510	4353447.378	2082667.442	4156505.562	EURA
12612S002	ASKITES	7510	4353447.487	2082667.384	4156505.528	EURA
12615S001	KATAVIA	7512	4573402.270	2409323.523	3723880.535	EURA
12615S002	KATAVIA	7512	4573402.288	2409323.527	3723880.525	EURA
12602S008	DIONYSOS	7515	4595218.829	2039436.335	3912628.371	EURA
12602S009	DIONYSOS	7515	4595218.842	2039436.360	3912628.331	EURA
12613S002	ROUMELLI	7517	4728697.969	2174374.805	3674573.645	EURA
12613S003	ROUMELLI	7517	4728697.055	2174374.391	3674571.662	EURA
12613S001	ROUMELLI	7517	4728697.053	2174374.466	3674571.667	EURA
12616S004	XRISOKALARIA	7525	4745952.817	1905707.318	3799169.744	EURA
12616S001	XRISOKALARIA	7525	4745952.053	1905706.816	3799167.823	EURA
14001S001	ZIMMERWALD	7810	4331283.670	567549.516	4633139.910	EURA
14201S002	WETTZELL	7834	4075530.126	931781.248	4801618.174	EURA
10002S001	GRASSE	7835	4581691.848	556159.342	4389359.341	EURA

21726S001	SIMOSATO	7838	-3822388.343	3699363.488	3507573.126	EURA
11001S002	GRAZ	7839	4194426.766	1162693.849	4647246.500	EURA
13212S001	HERSTMONCEUX	7840	4033463.876	23662.296	4924305.008	EURA
42202S001	AREQUIPA	7907	1942792.001	-5804077.688	-1796919.337	SOAM
12734S001	MATERA	7939	4641965.133	1393069.892	4133262.183	EURA

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POSITIONS 1988.0

DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
14106S001	POTSDAM	1181	3800621.372	882005.384	5028859.540	EURA
40442S001	FORT DAVIS	7086	-1330120.867	-5328532.269	3236146.748	NOAM
40442S016	FORT DAVIS	7086	-1330120.897	-5328532.290	3236146.709	NOAM
50107S001	YARRAGADEE	7090	-2389007.737	5043331.822	-3078526.885	INDI
50107S004	YARRAGADEE	7090	-2389007.732	5043331.827	-3078526.905	INDI
40451S147	WASHINGTON	7105	1130720.351	-4831352.928	3994108.477	NOAM
40451S101	WASHINGTON	7105	1130720.356	-4831352.934	3994108.473	NOAM
40451S135	WASHINGTON	7105	1130720.362	-4831352.938	3994108.485	NOAM
40451S148	WASHINGTON	7105	1130720.353	-4831352.956	3994108.467	NOAM
40433S006	QUINCY	7109	-2517235.951	-4198558.318	4076571.645	NOAM
40433S014	QUINCY	7109	-2517235.923	-4198558.315	4076571.638	NOAM
40497S001	MONUMENT PEAK	7110	-2386279.220	-4802357.017	3444883.315	PCFC
40497S002	MONUMENT PEAK	7110	-2386279.113	-4802356.786	3444883.112	PCFC
40504S001	MAZATLAN	7122	-1660090.101	-5619103.210	2511639.103	NOAM
40445S001	MAUI	7210	-5466006.960	-2404428.161	2242188.459	PCFC
12612S001	ASKITES	7510	4353447.330	2082667.442	4156505.612	EURA
12612S002	ASKITES	7510	4353447.439	2082667.384	4156505.578	EURA
12615S001	KATAVIA	7512	4573402.408	2409323.399	3723880.446	EURA
12615S002	KATAVIA	7512	4573402.426	2409323.403	3723880.436	EURA
12602S008	DIONYSOS	7515	4595218.872	2039436.385	3912628.297	EURA
12602S009	DIONYSOS	7515	4595218.885	2039436.410	3912628.257	EURA
12613S002	ROUMELLI	7517	4728697.994	2174374.832	3674573.597	EURA
12613S003	ROUMELLI	7517	4728697.080	2174374.418	3674571.614	EURA
12613S001	ROUMELLI	7517	4728697.078	2174374.493	3674571.619	EURA
12616S004	XRISOKALARIA	7525	4745952.820	1905707.328	3799169.734	EURA
12616S001	XRISOKALARIA	7525	4745952.056	1905706.826	3799167.813	EURA
14001S001	ZIMMERWALD	7810	4331283.636	567549.575	4633139.935	EURA
14201S002	WETTZELL	7834	4075530.090	931781.275	4801618.199	EURA
10002S001	GRASSE	7835	4581691.832	556159.380	4389359.354	EURA
21726S001	SIMOSATO	7838	-3822388.360	3699363.482	3507573.114	EURA
11001S002	GRAZ	7839	4194426.723	1162693.886	4647246.530	EURA
13212S001	HERSTMONCEUX	7840	4033463.838	23662.337	4924305.039	EURA
42202S001	AREQUIPA	7907	1942792.049	-5804077.674	-1796919.327	SOAM
12734S001	MATERA	7939	4641965.090	1393069.921	4133262.222	EURA

SSC(IERS) 90 L 03
POSITIONS 1990.0

DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
14106S001	POTSDAM	1181	3800621.302	882005.428	5028859.584	EURA
40442S001	FORT DAVIS	7086	-1330120.859	-5328532.282	3236146.730	NOAM
40442S016	FORT DAVIS	7086	-1330120.889	-5328532.303	3236146.691	NOAM
50107S001	YARRAGADEE	7090	-2389007.837	5043331.848	-3078526.766	INDI
50107S004	YARRAGADEE	7090	-2389007.832	5043331.853	-3078526.786	INDI
40451S147	WASHINGTON	7105	1130720.346	-4831352.931	3994108.476	NOAM
40451S101	WASHINGTON	7105	1130720.351	-4831352.937	3994108.472	NOAM
40451S135	WASHINGTON	7105	1130720.357	-4831352.941	3994108.484	NOAM
40451S148	WASHINGTON	7105	1130720.348	-4831352.959	3994108.466	NOAM
40433S006	QUINCY	7109	-2517236.005	-4198558.321	4076571.610	NOAM
40433S014	QUINCY	7109	-2517235.977	-4198558.318	4076571.603	NOAM
40497S001	MONUMENT PEAK	7110	-2386279.272	-4802356.989	3444883.318	PCFC
40497S002	MONUMENT PEAK	7110	-2386279.165	-4802356.758	3444883.115	PCFC
40504S001	MAZATLAN	7122	-1660090.109	-5619103.221	2511639.072	NOAM
40445S001	MAUI	7210	-5466006.990	-2404428.051	2242188.501	PCFC
12612S001	ASKITES	7510	4353447.282	2082667.442	4156505.664	EURA
12612S002	ASKITES	7510	4353447.391	2082667.384	4156505.630	EURA
12615S001	KATAVIA	7512	4573402.547	2409323.275	3723880.356	EURA
12615S002	KATAVIA	7512	4573402.565	2409323.279	3723880.346	EURA
12602S008	DIONYSOS	7515	4595218.915	2039436.433	3912628.221	EURA
12602S009	DIONYSOS	7515	4595218.928	2039436.458	3912628.181	EURA
12613S002	ROUMELLI	7517	4728698.020	2174374.858	3674573.549	EURA
12613S003	ROUMELLI	7517	4728697.106	2174374.444	3674571.566	EURA
12613S001	ROUMELLI	7517	4728697.104	2174374.519	3674571.571	EURA
12616S004	XRISOKALARIA	7525	4745952.823	1905707.338	3799169.726	EURA
12616S001	XRISOKALARIA	7525	4745952.059	1905706.836	3799167.805	EURA
14001S001	ZIMMERWALD	7810	4331283.603	567549.635	4633139.959	EURA
14201S002	WETTZELL	7834	4075530.054	931781.302	4801618.224	EURA
10002S001	GRASSE	7835	4581691.815	556159.419	4389359.366	EURA
21726S001	SIMOSATO	7838	-3822388.378	3699363.475	3507573.103	EURA
11001S002	GRAZ	7839	4194426.679	1162693.924	4647246.559	EURA
13212S001	HERSTMONCEUX	7840	4033463.798	23662.378	4924305.071	EURA
42202S001	AREQUIPA	7907	1942792.098	-5804077.662	-1796919.317	SOAM
12734S001	MATERA	7939	4641965.046	1393069.951	4133262.260	EURA

SSC(IERS) 90 L 04
POSITIONS 1984.0

DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
40442M006	FORT DAVIS	7080	-1330020.946	-5328401.841	3236481.073	NOAM
40442M001	FORT DAVIS	7086	-1330125.184	-5328526.625	3236150.294	NOAM
50107M001	YARRAGADEE	7090	-2389006.315	5043329.254	-3078525.534	INDI
41703M002	EASTER ISLAND	7097	-1884984.725	-5357607.921	-2892853.367	NAZC
40451M105	WASHINGTON	7105	1130719.887	-4831350.597	3994106.441	NOAM
40433M002	QUINCY	7109	-2517234.645	-4198556.273	4076569.661	NOAM

40497M001	MONUMENT PEAK	7110	-2386277.794	-4802354.504	3444881.339	PCFC
40504M001	MAZATLAN	7122	-1660089.228	-5619100.401	2511637.846	NOAM
40445M001	MAUI	7210	-5466006.386	-2404428.132	2242187.353	PCFC
12612M001	ASKITES	7510	4353445.072	2082666.222	4156506.651	EURA
12615M001	KATAVIA	7512	4573400.147	2409322.153	3723881.757	EURA
12602M002	DIONYSOS	7515	4595216.503	2039435.269	3912629.562	EURA
12613M001	ROUMELLI	7517	4728694.754	2174373.276	3674572.983	EURA
12614M001	KARITSA	7520	4596042.676	1733476.784	4055720.820	EURA
12616M001	XRISOKALARIA	7525	4745949.543	1905705.962	3799169.062	EURA
12706M001	LAMPEDUSA	7544	5072832.067	1130886.108	3684836.852	EURA
12725M002	CAGLIARI	7545	4893398.118	772673.228	4004140.905	EURA
12718M002	TRIESTE	7550	4336738.688	1071271.379	4537910.976	EURA
20801M001	DIYARBAKIR	7575	3848636.203	3251760.989	3898909.147	EURA
20803M001	MELENGICLICK	7580	4247620.736	2778639.096	3851607.522	EURA
20802M001	YOZGAT	7585	4029730.908	2802093.499	4062067.936	EURA
20804M001	YIGILCA	7587	4117362.107	2517076.865	4157679.039	EURA
14001S001	ZIMMERWALD	7810	4331283.699	567549.475	4633139.840	EURA
14201S002	WETTZELL	7834	4075530.167	931781.187	4801618.147	EURA
10002S001	GRASSE	7835	4581691.958	556159.323	4389359.302	EURA
21726M002	SIMOSATO	7838	-3822387.129	3699362.274	3507572.006	EURA
11001S002	GRAZ	7839	4194426.821	1162693.807	4647246.485	EURA
13212S001	HERSTMONCEUX	7840	4033463.933	23662.269	4924305.039	EURA
50103S007	CANBERRA	7843	-4446476.409	2678126.839	-3696251.719	INDI
42202S001	AREQUIPA	7907	1942791.987	-5804077.741	-1796919.385	SOAM
12734S001	MATERA	7939	4641965.158	1393069.844	4133262.138	EURA

SSC(IERS) 90 L 04
POSITIONS 1986.0

DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
40442M006	FORT DAVIS	7080	-1330020.947	-5328401.853	3236480.980	NOAM
40442M001	FORT DAVIS	7086	-1330125.238	-5328526.655	3236150.278	NOAM
50107M001	YARRAGADEE	7090	-2389006.422	5043329.282	-3078525.453	INDI
41703M002	EASTER ISLAND	7097	-1884984.567	-5357608.022	-2892853.390	NAZC
40451M105	WASHINGTON	7105	1130719.844	-4831350.579	3994106.454	NOAM
40433M002	QUINCY	7109	-2517234.677	-4198556.255	4076569.660	NOAM
40497M001	MONUMENT PEAK	7110	-2386277.857	-4802354.428	3444881.375	PCFC
40504M001	MAZATLAN	7122	-1660089.258	-5619100.414	2511637.846	NOAM
40445M001	MAUI	7210	-5466006.447	-2404428.042	2242187.388	PCFC
12612M001	ASKITES	7510	4353445.000	2082666.271	4156506.647	EURA
12615M001	KATAVIA	7512	4573400.114	2409322.201	3723881.746	EURA
12602M002	DIONYSOS	7515	4595216.490	2039435.310	3912629.522	EURA
12613M001	ROUMELLI	7517	4728694.730	2174373.338	3674572.966	EURA
12614M001	KARITSA	7520	4596042.667	1733476.776	4055720.832	EURA
12616M001	XRISOKALARIA	7525	4745949.567	1905705.957	3799169.047	EURA
12706M001	LAMPEDUSA	7544	5072832.043	1130886.180	3684836.904	EURA
12725M002	CAGLIARI	7545	4893398.114	772673.289	4004140.926	EURA
12718M002	TRIESTE	7550	4336738.641	1071271.442	4537911.014	EURA
20801M001	DIYARBAKIR	7575	3848636.110	3251760.967	3898909.185	EURA
20803M001	MELENGICLICK	7580	4247620.631	2778639.049	3851607.501	EURA
20802M001	YOZGAT	7585	4029730.823	2802093.415	4062067.962	EURA

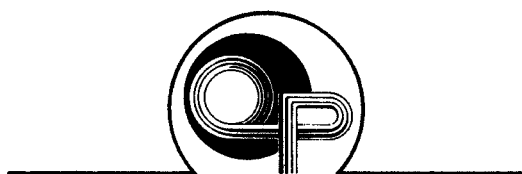
20804M001	YIGILCA	7587	4117362.080	2517076.855	4157679.029	EURA
14001S001	ZIMMERWALD	7810	4331283.673	567549.529	4633139.875	EURA
14201S002	WETTZELL	7834	4075530.125	931781.241	4801618.167	EURA
10002S001	GRASSE	7835	4581691.887	556159.362	4389359.323	EURA
21726M002	SIMOSATO	7838	-3822387.121	3699362.285	3507571.968	EURA
11001S002	GRAZ	7839	4194426.778	1162693.854	4647246.503	EURA
13212S001	HERSTMONCEUX	7840	4033463.893	23662.310	4924305.034	EURA
50103S007	CANBERRA	7843	-4446476.555	2678126.935	-3696251.683	INDI
42202S001	AREQUIPA	7907	1942792.012	-5804077.696	-1796919.354	SOAM
12734S001	MATERA	7939	4641965.135	1393069.896	4133262.180	EURA

SSC(IERS) 90 L 04
POSITIONS 1988.0

DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
40442M006	FORT DAVIS	7080	-1330020.948	-5328401.864	3236480.887	NOAM
40442M001	FORT DAVIS	7086	-1330125.291	-5328526.685	3236150.262	NOAM
50107M001	YARRAGADEE	7090	-2389006.528	5043329.312	-3078525.372	INDI
41703M002	EASTER ISLAND	7097	-1884984.411	-5357608.124	-2892853.413	NAZC
40451M105	WASHINGTON	7105	1130719.803	-4831350.561	3994106.466	NOAM
40433M002	QUINCY	7109	-2517234.710	-4198556.237	4076569.660	NOAM
40497M001	MONUMENT PEAK	7110	-2386277.921	-4802354.353	3444881.412	PCFC
40504M001	MAZATLAN	7122	-1660089.289	-5619100.426	2511637.846	NOAM
40445M001	MAUI	7210	-5466006.507	-2404427.951	2242187.423	PCFC
12612M001	ASKITES	7510	4353444.927	2082666.320	4156506.642	EURA
12615M001	KATAVIA	7512	4573400.082	2409322.248	3723881.736	EURA
12602M002	DIONYSOS	7515	4595216.477	2039435.349	3912629.483	EURA
12613M001	ROUMELLI	7517	4728694.706	2174373.399	3674572.948	EURA
12614M001	KARITSA	7520	4596042.656	1733476.769	4055720.843	EURA
12616M001	XRISOKALARIA	7525	4745949.591	1905705.953	3799169.032	EURA
12706M001	LAMPEDUSA	7544	5072832.021	1130886.252	3684836.956	EURA
12725M002	CAGLIARI	7545	4893398.109	772673.348	4004140.946	EURA
12718M002	TRIESTE	7550	4336738.593	1071271.506	4537911.052	EURA
20801M001	DIYARBAKIR	7575	3848636.018	3251760.946	3898909.224	EURA
20803M001	MELENGICLICK	7580	4247620.527	2778639.003	3851607.479	EURA
20802M001	YOZGAT	7585	4029730.739	2802093.332	4062067.989	EURA
20804M001	YIGILCA	7587	4117362.052	2517076.846	4157679.021	EURA
14001S001	ZIMMERWALD	7810	4331283.646	567549.583	4633139.909	EURA
14201S002	WETTZELL	7834	4075530.081	931781.294	4801618.187	EURA
10002S001	GRASSE	7835	4581691.816	556159.402	4389359.344	EURA
21726M002	SIMOSATO	7838	-3822387.113	3699362.295	3507571.931	EURA
11001S002	GRAZ	7839	4194426.734	1162693.901	4647246.522	EURA
13212S001	HERSTMONCEUX	7840	4033463.852	23662.350	4924305.028	EURA
50103S007	CANBERRA	7843	-4446476.702	2678127.031	-3696251.646	INDI
42202S001	AREQUIPA	7907	1942792.039	-5804077.651	-1796919.323	SOAM
12734S001	MATERA	7939	4641965.111	1393069.948	4133262.222	EURA

SSC(IERS) 90 L 04
POSITIONS 1990.0

DOMES NUMBER	SITE	CDP NUM.	X m	Y m	Z m	PLATE
40442M006	FORT DAVIS	7080	-1330020.949	-5328401.875	3236480.794	NOAM
40442M001	FORT DAVIS	7086	-1330125.345	-5328526.714	3236150.246	NOAM
50107M001	YARRAGADEE	7090	-2389006.636	5043329.341	-3078525.290	INDI
41703M002	EASTER ISLAND	7097	-1884984.254	-5357608.225	-2892853.437	NAZC
40451M105	WASHINGTON	7105	1130719.760	-4831350.543	3994106.479	NOAM
40433M002	QUINCY	7109	-2517234.742	-4198556.219	4076569.660	NOAM
40497M001	MONUMENT PEAK	7110	-2386277.984	-4802354.277	3444881.449	PCFC
40504M001	MAZATLAN	7122	-1660089.319	-5619100.439	2511637.845	NOAM
40445M001	MAUI	7210	-5466006.569	-2404427.860	2242187.456	PCFC
12612M001	ASKITES	7510	4353444.855	2082666.369	4156506.636	EURA
12615M001	KATAVIA	7512	4573400.050	2409322.295	3723881.725	EURA
12602M002	DIONYSOS	7515	4595216.464	2039435.390	3912629.443	EURA
12613M001	ROUMELLI	7517	4728694.683	2174373.460	3674572.931	EURA
12614M001	KARITSA	7520	4596042.647	1733476.762	4055720.854	EURA
12616M001	XRISOKALARIA	7525	4745949.615	1905705.949	3799169.017	EURA
12706M001	LAMPEDUSA	7544	5072831.998	1130886.324	3684837.008	EURA
12725M002	CAGLIARI	7545	4893398.104	772673.407	4004140.967	EURA
12718M002	TRIESTE	7550	4336738.546	1071271.570	4537911.090	EURA
20801M001	DIYARBAKIR	7575	3848635.926	3251760.924	3898909.261	EURA
20803M001	MELENGICLICK	7580	4247620.422	2778638.957	3851607.458	EURA
20802M001	YOZGAT	7585	4029730.654	2802093.248	4062068.014	EURA
20804M001	YIGILCA	7587	4117362.025	2517076.837	4157679.012	EURA
14001S001	ZIMMERWALD	7810	4331283.619	567549.636	4633139.942	EURA
14201S002	WETTZELL	7834	4075530.039	931781.348	4801618.207	EURA
10002S001	GRASSE	7835	4581691.746	556159.441	4389359.365	EURA
21726M002	SIMOSATO	7838	-3822387.105	3699362.306	3507571.895	EURA
11001S002	GRAZ	7839	4194426.689	1162693.947	4647246.539	EURA
13212S001	HERSTMONCEUX	7840	4033463.811	23662.391	4924305.024	EURA
50103S007	CANBERRA	7843	-4446476.848	2678127.126	-3696251.611	INDI
42202S001	AREQUIPA	7907	1942792.065	-5804077.607	-1796919.290	SOAM
12734S001	MATERA	7939	4641965.088	1393070.000	4133262.264	EURA



IMPRIMERIE DE L'OBSERVATOIRE DE PARIS