

# **Present Status of the SCAR GPS Epoch Campaigns**

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# List of stations

4-ID	Station name	Station owner	95	96	97	98	99
ARCT	Arctovski	Poland					x
ART1	Base Artigas	Uruguay	x	x	x	x	
BEL1	Belgrano	Argentina	x				
BELG	Belgrano	Argentina				x	
CUR1	Curitiba	Brazil	x	x			
DAL1	Jubany/Dallmann	Argentina/Germany	x	x	x	x	
DALL	Jubany/Dallmann	Argentina/Germany				x	x
DUM1	Dumont d'Urville	France	x	x			
ELE1	Elephant Island/Gibbs Island		x			x	
ESP1	Esperanza	Argentina	x	x		x	
FAL1	Falkland	U.K.	x			x	
FOR1	Forster	(Germany)	x			x	
FOR2	Forster	(Germany)		x			
FOS1	Fossil Bluff	U.K.	x	x		x	
GOUG	Gough Island	South Africa				x	x
GRW1	Great Wall	China	x		x	x	x
GRY1	Grytviken	U.K.				x	
HAAG	Haag Nunatak	U.K.		x			
HAR1	Hartebeesthoek	South Africa	x	x		x	
KOH1	Kliment Ohridski	Bulgaria				x	
KOTA	Kottas Berge	Germany				x	
MAR1	Marambio	Argentina	x	x		x	
MON1	Montevideo	Uruguay	x	x	x	x	x
NOT1	Notter Point		x			x	
OHG1	O'Higgins	Chile/Germany	x	x	x	x	
PAL1	Palmer	U.S.A.	x	x		x	
PALM	Palmer	U.S.A.				x	x
PET1	Peter I					x	
PRA1	Arturo Prat	Chile	x	x		x	
PUN1	Punta Arenas	Chile	x	x		x	
RIG1	Rio Grande	Argentina	x				
ROT1	Rothera	U.K.	x	x		x	
SAN1	Santiago	Chile	x				
SAN2	Santiago	Chile				x	
SIG1	Signy	U.K.	x			x	
SMR1	San Martin	Argentina	x			x	
SPR1	Punta Spring	Chile	x			x	
SYO1	Syowa	Japan	x				
SYOG	Syowa	Japan		x			x
TNB1	Terra Nova Bay	Italy		x		x	x
TROL	Troll	Norway			x		
VER1	Vernadsky	Ukraine				x	
VESL	Sanae	South Africa				x	x
WASA	Wasa	Sweden			x		
ZSS4	Zhong Shang	China			x	x	x

except IGS stations

# **Analysis Groups and Software**

## **Packages**

### **TU Dresden:**

Bernese 4.0 (DRES)

### **Alfred Wegener Institut für Polar- und Meeresforschung:**

GAMIT/GLOBK (AWI)

### **Universität Hannover:**

GEONAP (HAN1) and  
GIPSY (HAN2) only SCAR98

### **TU Braunschweig:**

GEONAP (BRAUN)

### **Universität Karlsruhe:**

Bernese 4.0 (KARL)

### **Bundesamt für Kartographie und Geodäsie, Aussenstelle Leipzig:**

Bernese 4.0 (BKG) and  
GIPSY only SCAR95

# Coordinate solution

## GPS Campaign 1995

### ITRF94, Epoch 1995.1

Station	X [m]	Y [m]	Z [m]
ART1	1541244.888	-2555205.107	-5618169.091
BEL1	1105999.505	-763743.179	-6214256.054
CAS1	-901776.158	2409383.435	-5816748.400
CUR1	3763751.645	-4365113.755	-2724404.761
DAL1	1548376.241	-2544409.313	-5621096.404
DAV1	486854.554	2285099.323	-5914955.690
DUM1	-1940883.765	1628483.397	-5833718.005
ELE1	1723594.793	-2520204.027	-5581225.272
ESP1	1560034.354	-2401882.729	-5679860.022
FAL1	2108106.688	-3353898.454	-4982108.736
FOR1	2061522.345	431615.727	-6000314.514
FOS1	757185.446	-1904739.716	-6019724.318
GRW1	1536965.609	-2554125.238	-5619825.330
MAC1	-3464038.464	1334172.738	-5169224.370
MAR1	1527541.626	-2321657.478	-5721839.997
MAW1	1111287.169	2168911.289	-5874493.584
MCM4	-1311703.251	310815.130	-6213255.059
MON1	2909133.028	-4355451.274	-3627801.381
NOT1	1451912.100	-2436397.927	-5693758.656
OHG1	1525852.229	-2432401.839	-5676185.034
PAL1	1192924.638	-2450915.581	-5747042.584
PRA1	1493161.963	-2550156.726	-5633379.124
PUN1	1239165.387	-3582438.932	-5112279.292
RIG1	1429883.030	-3495363.303	-5122698.810
ROT1	909255.078	-2264721.336	-5873063.044
SIG1	2189251.369	-2235016.417	-5539523.685
SMR1	927077.483	-2195046.496	-5896519.285
SPR1	1342651.571	-2427390.456	-5724115.522
SYO1	1766182.606	1460336.746	-5932285.465

published:

*The Geodetic Antarctic Project GAP95 – German Contributions to the SCAR 95 Epoch Campaign.* Deutsche Geodätische Kommission München. Reihe B, Number 304.

# Coordinate solution

## GPS Campaign 1996

### ITRF94, Epoch 1996.1

Station	X [m]	Y [m]	Z [m]
ART1	1541244.8961	-2555205.1265	-5618169.0662
CUR1	3763751.6459	-4365113.7733	-2724404.7605
DAL1	1548376.2543	-2544409.3337	-5621096.3999
DUM1	-1940883.7739	1628483.3884	-5833718.0912
ESP1	1560034.3819	-2401882.7559	-5679860.0569
FOR1	2061522.3675	431615.6997	-6000314.5371
FOR2	2061809.1568	432116.1018	-6000155.3854
FOS1	757185.4696	-1904739.7371	-6019724.3396
HAAG	291442.3589	-1405571.0472	-6194871.8855
HAR1	5085401.1354	2668330.0526	-2768688.8948
MAR1	1527541.6521	-2321657.5012	-5721840.0266
MON1	2909133.0165	-4355451.2657	-3627801.3451
OHG1	1525852.2555	-2432401.8589	-5676185.0570
PAL1	1192924.6678	-2450915.6097	-5747042.6130
PRA1	1493161.9834	-2550156.7499	-5633379.1254
PUN1	1239165.3983	-3582438.9522	-5112279.2946
ROT1	909255.1049	-2264721.3571	-5873063.0645
SYOG	1766207.8522	1460290.3467	-5932297.6961
TNB2	-1623858.4689	462478.2106	-6130048.9489

# Coordinate solution

## GPS Campaign 1998

### ITRF96, Epoch 1998.1

ID	X	Y	Z	Latitude	Longitude	Height
ART1	1541244.896	-2555205.117	-5618168.998	-62° 11' 4.22670"	-58° 54' 9.07794"	33.199
BEL1	1105999.550	-763743.192	-6214256.133	-77° 52' 29.34815"	-34° 37' 36.66144"	245.780
BELG	1106002.319	-763742.205	-6214255.841	-77° 52' 29.29203"	-34° 37' 36.29529"	245.855
CUR1	3763751.628	-4365113.766	-2724404.733	-25° 26' 54.12861"	-49° 13' 51.43709"	925.743 (*)
DAL1	1548376.266	-2544409.340	-5621096.389	-62° 14' 26.56946"	-58° 40' 40.05011"	41.204
DALL	1549109.860	-2544290.071	-5620947.204	-62° 14' 16.33434"	-58° 39' 52.36269"	39.400
DUM1	-1940883.795	1628483.375	-5833718.110	-66° 39' 54.30245"	140° 0' 6.95389"	-1.270 (*)
ELE1	1723594.819	-2520204.050	-5581225.251	-61° 28' 50.60016"	-55° 37' 52.87166"	124.094
ESP1	1560034.400	-2401882.736	-5679860.029	-63° 23' 42.31747"	-56° 59' 45.89582"	27.207
FAL1	2108106.693	-3353898.478	-4982108.712	-51° 41' 53.46884"	-57° 50' 54.29718"	63.230
FOR1	2061522.361	431615.725	-6000314.518	-70° 46' 40.58154"	11° 49' 30.23133"	152.925
FOR2	2061809.126	432116.131	-6000155.372	-70° 46' 27.21400"	11° 50' 12.43407"	128.849
FOS1	757185.484	-1904739.738	-6019724.320	-71° 18' 48.04863"	-68° 19' 15.03479"	158.838
GOUG	4795578.561	-835299.505	-4107634.065	-40° 20' 55.80310"	-9° 52' 50.58484"	81.276
GRW1	1536965.671	-2554125.265	-5619825.284	-62° 12' 58.70636"	-58° 57' 44.03432"	37.037
GRY1	3000185.672	-2219035.702	-5155263.134	-54° 17' 0.91785"	-36° 29' 16.23765"	35.492
HAAG	291442.336	-1405571.018	-6194871.875	-77° 2' 17.16996"	-78° 17' 8.98390"	1173.005 (6)
HAR1	5085401.141	2668330.117	-2768688.881	-25° 53' 22.95275"	27° 41' 10.22749"	1406.837
KOH1	1453260.382	-2554435.086	-5641770.093	-62° 38' 29.75432"	-60° 21' 49.44990"	43.613
KOTA	1706640.101	-293453.132	-6119455.228	-74° 18' 0.17576"	-9° 45' 23.32905"	1423.309
MAR1	1527541.667	-2321657.484	-5721840.003	-64° 14' 41.79116"	-56° 39' 25.05650"	230.305
MAW1	1111287.170	2168911.280	-5874493.617	-67° 36' 17.15922"	62° 52' 14.57703"	59.159
MON1	2909132.991	-4355451.249	-3627801.307	-34° 53' 17.95004"	-56° 15' 35.57635"	158.116
NOT1	1451912.141	-2436397.943	-5693758.668	-63° 40' 27.08258"	-59° 12' 29.51780"	64.653
OHG1	1525852.270	-2432401.847	-5676185.033	-63° 19' 17.42174"	-57° 53' 59.42388"	30.428
PAL1	1192924.682	-2450915.592	-5747042.575	-64° 46' 25.62303"	-64° 2' 47.76826"	40.556
PALM	1192671.794	-2450887.590	-5747096.064	-64° 46' 30.32720"	-64° 3' 4.04817"	31.050
PET1	-17156.097	-2306572.281	-5926530.158	-68° 51' 48.65086"	-90° 25' 34.15257"	32.408
PRA1	1493161.993	-2550156.759	-5633379.111	-62° 28' 39.28245"	-59° 39' 0.97384"	81.197
PUN1	1239165.405	-3582438.933	-5112279.261	-53° 37' 38.69692"	-70° 55' 10.20087"	23.990
RIG1	1429883.021	-3495363.286	-5122698.800	-53° 47' 7.74264"	-67° 45' 5.45214"	31.252 (5)
ROT1	909255.120	-2264721.346	-5873063.048	-67° 34' 18.16563"	-68° 7' 30.73446"	32.065
SAN1	1769699.647	-5044612.982	-3468259.922	-33° 8' 58.69358"	-70° 40' 7.06740"	722.057
SAN2	1769697.537	-5044611.423	-3468263.246	-33° 8' 58.82240"	-70° 40' 7.12433"	722.059
SIG1	2189251.401	-2235016.423	-5539523.676	-60° 42' 27.82172"	-45° 35' 33.54552"	48.593
SMR1	927077.525	-2195046.516	-5896519.282	-68° 7' 46.74474"	-67° 6' 11.67628"	26.198
SPR1	1342651.609	-2427390.469	-5724115.520	-64° 17' 43.19402"	-61° 3' 6.83674"	49.074
SYO1	1766182.595	1460336.748	-5932285.491	-69° 0' 24.60111"	39° 35' 6.14562"	42.238 (*)
SYOG	1766207.837	1460290.362	-5932297.705	-69° 0' 25.04677"	39° 35' 1.48042"	50.021 (*)
TNB1	-1623858.481	462478.179	-6130048.980	-74° 41' 55.69762"	164° 6' 10.58315"	72.270 (*)
TROL	1974137.150	87507.435	-6045350.408	-72° 0' 43.32124"	2° 32' 17.10393"	1313.527 (7)
VER1	1163330.339	-2412201.153	-5769273.189	-65° 14' 46.16095"	-64° 15' 12.30495"	19.879
VES1	2009329.722	-99741.466	-6033158.466	-71° 40' 25.66908"	-2° 50' 30.41721"	862.372
WASA	1815176.279	-432905.860	-6079084.411	-73° 2' 34.22900"	-13° 24' 50.52273"	466.396 (7)
ZSS4	531102.201	2190269.924	-5946719.112	-69° 22' 15.78604"	76° 22' 11.46260"	40.681

(5) coordinates in epoch 1995.1

(6) coordinates in epoch 1996.1

(7) coordinates in epoch 1997.1

(\*) there are no observations in epoch 1998.1.

the coordinates were extrapolated from data analysis of the campaigns in 1995 and 1996

# TU Dresden - SCAR-Data Center

	number of stations	number of observation days	amount of data
1995	32	556	1 635 Mb
1996	19	357	931 Mb
1997	8	140	317 Mb
1998	35	649	2 309 Mb
1999	7	173	400 Mb
total	55	1875	5 611 Mb

## Availability

- access via ftp or WWW (coming soon)
- username and password required,  
contact: Dietrich (TU Dresden)
- separately for every campaign

# **Next SCAR GPS Campaign**

## *The Millenium Campaign*

from January 20 to February 10, 2000



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