

PS Technique - Sar data processing
Final Report
Date: 04/06/2008

Ref: 07.0K7C



San Francisco

**SAR (Synthetic Aperture Radar)
image processing**

Processing Report

**ERS 1 - 2
Dataset DESCENDING**

To the attention of:

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Date: 04/06/2008
Ref: 07.0K7C



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1 Data-Set used TRACK: 70

#	Date	Satellite	Dc *	Bn ^	Bt [days]
1	06/05/1992	ERS1	0.1851	0.2097	-2614
2	10/06/1992	ERS1	0.1815	0.3838	-2578
3	19/08/1992	ERS1	0.169	0.0094	-2508
4	23/09/1992	ERS1	0.153	-0.0226	-2473
5	06/01/1993	ERS1	0.1361	-0.418	-2369
6	30/06/1993	ERS1	0.1719	-0.1741	-2193
7	01/09/1995	ERS1	0.155	-0.1034	-1400
8	10/11/1995	ERS1	0.1407	0.367	-1330
9	11/11/1995	ERS2	-0.0339	0.1634	-1329
10	29/03/1996	ERS1	0.1626	-0.2932	-1190
11	30/03/1996	ERS2	-0.0134	-0.3778	-1189
12	03/05/1996	ERS1	0.1789	0.7081	-1155
13	04/05/1996	ERS2	0.017	0.6392	-1154
14	17/08/1996	ERS2	-0.039	-0.1295	-1049
15	26/10/1996	ERS2	-0.0215	0.7555	-979
16	30/11/1996	ERS2	-0.0002	0.7617	-944
17	04/01/1997	ERS2	0.0087	0.0229	-909
18	02/08/1997	ERS2	-0.0166	0.0203	-699
19	06/09/1997	ERS2	-0.0072	0.396	-664
20	11/10/1997	ERS2	-0.0259	0.3871	-629
21	20/12/1997	ERS2	0.0441	0.1406	-559
22	04/04/1998	ERS2	-0.0221	-0.3031	-454
23	18/07/1998	ERS2	-0.0155	-0.5136	-350
24	22/08/1998	ERS2	-0.0155	-0.232	-314
25	26/09/1998	ERS2	-0.0094	0.5228	-279
26	31/10/1998	ERS2	-0.0231	0.6752	-244
27	05/12/1998	ERS2	-0.0057	-0.1709	-210
28	09/01/1999	ERS2	0.0389	-0.714	-175
29	13/02/1999	ERS2	0.0382	0.6963	-139
30	20/03/1999	ERS2	0.0509	0.1893	-104
31	24/04/1999	ERS2	0.0279	-0.053	-69
32	29/05/1999	ERS2	0.0065	0.6132	-34
33(M)	03/07/1999	ERS2	0	0	0
34	07/08/1999	ERS2	-0.0593	0.5496	34
35	11/09/1999	ERS2	-0.0192	-0.4519	69
36	16/10/1999	ERS2	-0.0139	-0.0951	104
37	20/11/1999	ERS2	-0.0213	-0.2019	139
38	25/12/1999	ERS2	0.0227	0.3423	174



39	29/01/2000	ERS2	0.0253	0.0532	209
40	08/04/2000	ERS2	-0.0509	0.0985	280
41	17/06/2000	ERS2	-0.3933	-0.0034	350
42	22/07/2000	ERS2	-0.3763	-0.2229	385
43	26/08/2000	ERS2	-0.3215	0.5962	420
44	30/09/2000	ERS2	-0.0304	-0.2007	455
45	04/11/2000	ERS2	-0.0644	0.1574	490
46	09/12/2000	ERS2	0.1246	-0.2918	525

^ Critical Baseline Fraction * PRF fraction (M) Master Image

1.1 Discarded Images

Date	Satellite	Bn ^	Dc *	Bt [days]	Comment
15/07/1992	ERS1	-0.0424	0.1861	-2543	Not enough data.
19/05/1995	ERS1	---	0.1709	---	The two images are not overlapped for append.
15/12/1995	ERS1	0.6121	0.151	-1295	Not enough data.

^ Critical Baseline Fraction * PRF fraction

2 PS report – Slovenia

Site name	SACRA_FRISCO_ERS_D_T70_2835_TRE
Customer	University of California, E. Orlando Lawrence Berkeley National Laboratory
Reference Documents	07.0K7C-REP1.0
Engineer entitled of this processing	Jacopo Allievi
Project Manager	Fabrizio Novali

Process Date (final result)	04/06/2008
Software used	PSproc
Version	3.0
Analysis Type	Standard PS Analysis
Interpolation factor	2
Satellite data used	ERS2 ERS1
Descending of ascending orbit	DESCENDING
Critical Baseline [m]	1286,8605
Pulse Repetition Frequency [Hz]	1679,902



Number of scenes used	35
Date range of analysis	06/05/1992 - 09/12/2000
UTC Time / Local Time	18:50:17

Reference data used for georeference	Landsat (30x30 m resolution)
Projection system used	NAD_1983_UTM_Zone_10N
Reference point location	NORTH: 4147400.0000000 EAST: 596080.0000000
Hypotesis on reference point motion	
Extension of the Area of interest	19007 Km ²
Number of PS identified	273948
False Alarm Rate	10 ⁻⁰⁵
Average PS density (PS/km ²)	14,41

2.1 Information on LOS velocity field target motion

Line Of Sight Versor Coordinates	H: 0.91808	E: 0.38858	N: -0.07826
Tilt of phase trends have been removed durino PS processing?			
Delivered Files	SACRA_FRISCO_ERS_D_T70_2835_June2008-REF.dbf SACRA_FRISCO_ERS_D_T70_2835_June2008-TSR.dbf		



2.2 Velocity Field

