




SPACEBORNE SAR SYSTEMS AND CALIBRATION GROUP





The Spaceborne SAR Systems and Calibration Group focuses on the development, project management, and implementation of spaceborne missions, with an emphasis on SAR and optical mission development, operation and calibration.

The group is responsible for PAZ CALVAL Centre and possesses expertise in SAR system engineering, comprehensive SAR system performance analysis, SAR calibration, algorithm development, mission planning, and SAR instrument operations. Additionally, it is tasked with defining, designing, and maintaining the INTA SAR Calibration field, as well as managing the scientific exploitation of the PAZ mission.

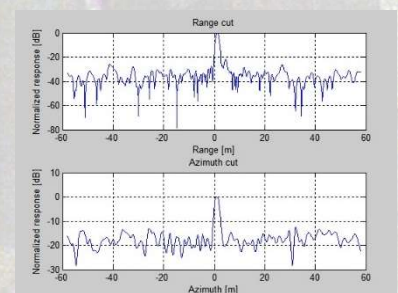
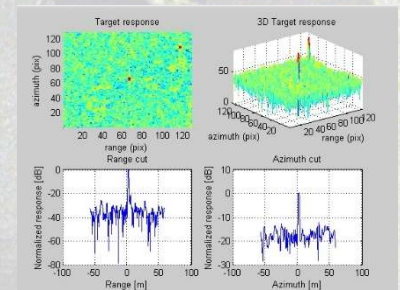
The team's experience in SAR systems has primarily been acquired through its involvement with the PAZ Mission. During the commissioning phase, the team took on responsibilities for system engineering at ground segment levels, external calibration, and SAR product characterization, as well as overall system performance monitoring.

PAZ CALVAL CENTRE

The PAZ CALVAL Centre is a SAR calibration facility developed for the PAZ Mission Calibration. It comprises over 30 corner reflectors, a calibration field, and a suite of software tools used for analyzing and evaluating the various measurements conducted for calibration and mission verification.

Competencies on calibration and validation encompass:

- Campaign design and reflector deployment
- Instrument monitoring
- Antenna pointing and model validation
- Absolute and relative radiometric calibration
- Geometric calibration
- IRF analysis
- NESZ analysis



INTA SAR Calibration Field



Target ID	Latitude (°)	Longitude (°)	height (m)	Azimuth (°)	Tilt (°)
CR:01/1.0	40,2171	-3,4883	744,7	13	29
CR:02/1.0	40,2181	-3,3698	796,2	12	30
CR:04/1.5	40,1867	-3,1941	816,8	11	32
CR:30C/1.5	40,5025	-3,4771	690,6	168	31
CR:03/1.0	40,5039	-3,4322	661,9	11	29
CR:24/1.5	38,9104	-2,0427	756,6	9	11
CR:29C/1.5	38,9492	-1,9021	741,2	10	27
CR:22B/1.0	38,8673	-2,7090	1010,9	169	12
CR:12/1.5	38,9096	-2,6609	1018,5	170	11
CR:31/1.0	40,2445	-3,0516	791,6	9	33
CR:13C/1.5	40,3718	-3,7758	735,0	170	17
CR:05B/1.5	40,5541	-3,6959	784,1	170	16
CR:14B/1.5	40,6777	-3,7831	960,2	168	16
CR:06B/1.5	40,4686	-3,4800	643,0	169	31
CR:11B/1.5	40,4844	-3,4225	648,6	11	29
CR:15B/1.5	39,0608	-2,0886	748,3	169	22
CR:16B/1.5	39,0541	-2,0920	750,5	169	22
CR:07B/1.5	39,0498	-2,0777	744,8	169	22
CR:37/1.0	-62,9768	-60,6721	23,4	23	9
CR:38/1.0	-62,9770	-60,6669	25,3	152	10
CR:33/1.0	-62,9752	-60,6906	26,5	24	9
CR:27B/1.5	39,0567	-2,0857	748,4	169	22
CR:26/1.5	40,4965	-3,4652	660,5	168	31
CR:25B/1.5	40,4982	-3,4550	658,6	168	30
CR:09C/1.5	38,9102	-2,6622	1017,3	170	11
CR:39/1.5	40,6097	-3,1154	987,2	11	31
CR:40B/1.5	40,5241	-3,0919	961,1	11	32
CR:23C/1.0	-62,9796	-60,6827	68,3	154	10
CR:21D/1.0	43,3184	-5,7899	424,6	168	26
CR:34/1.0	43,3177	-5,7899	423,5	168	26



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