

SEMINAR

THE SNOWBEAR PROJECT

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Abstract: The SNOWBEAR project (Svalbard ground Station for Wide Band Earth observation data Reception) was a study project by the European Space Agency (ESA) aimed to de-risk the introduction of the new 26 GHz frequency band for payload data reception of the future Earth Observation Mission. It consisted in the deployment of a prototype ground station at Svalbard (completed in autumn 2018) and a two-years operational trial using the Earth Observation satellite NASA/NOAA JPSS-1 (completed in autumn 2020).

The analysis of the study results, performed in collaboration with the University of Pavia, was very helpful to characterize the impairments due to rain and snow accumulation on the antenna radome at high frequencies.

Bio: Filippo Concaro was born in Tortona, Italy, in 1979. He received the “Laurea” degree in Electronic Engineering from the University of Pavia, Italy, in 2003, with a Thesis on “Analysis and Synthesis of the Beam Waveguide System of ESA Deep Space Antenna 2” after a 6-months traineeship in the Ground Station Antenna (GSA) Section at the European Space Operation Centre (ESOC) in Darmstadt (Germany).

Since then has been always working in ESOC, despite a parenthesis of 14 months at the European Organization for the Exploitation of Meteorological Satellites (EUMETSAT), also located in Darmstadt.

During all these years he was involved in the design and testing of several Ground Station projects all over the European Space Agency Tracking Network (ESTRACK). In particular he was Technical Officer of various projects such the so-called XAA (X-Band Acquisition Aid) terminals deployed in Perth (Australia), Kourou (French Guyana) and Maspalomas (Canary Islands), the NNO-2 antenna in New Norcia (Australia) the MAL-X in Malindi (Kenia) and the SNOWBEAR at Svalbard (Norway), he is also responsible for the deployment of the Brand new cryo feed systems into the ESA Deep Space antennas (Spain and Argentina) and deputy TO of the new NNO-3 Deep Space Antenna project.

Organizers

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