

IAF EARTH OBSERVATION SYMPOSIUM (B1)
International Cooperation in Earth Observation Missions (1)

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COSMO-SKYMED AND THE ASI-CONAE COOPERATION: THE SIASGE PROGRAMME

Abstract

Cooperation is a powerful tool to pursue common interest goals of the involved parties through the sharing of knowledges, skills and resources. The Italian Space Agency (ASI) has several ongoing international cooperations in the Earth Observation (EO) field, which include ASI-CONAE (Comisión Nacional de Actividades Espaciales of Argentina) cooperative effort in the development of a joint space-based EO system. The critical issue of prevention and emergency management originated from extreme environmental phenomena is a priority in both Countries, which have signed, in July 2005, a Memorandum of Understanding (MoU) for the development of the Italian-Argentine Satellite System for Emergency Management (SIASGE) and related applications. This MoU has been subsequently extended in 2008 and 2010. The main purpose of the overall cooperation between ASI and CONAE is to operationally integrate the two national Systems to generate information on Risk Management by performing environmental monitoring and surveillance applications of exogenous, endogenous and anthropogenic risks. The SIASGE system is composed of: 1) the Italian operational COSMO-SkyMed EO System consisting of a constellation of four satellites equipped with X-Band SAR; 2) the Argentinian SAOCOM EO System consisting of a constellation of two satellites (SAOCOM 1A and SAOCOM 1B) under development, equipped with L-Band SAR. SAOCOM 1A is scheduled to be launched in 2018, with SAOCOM 1B following one year later. The cooperation also includes the inter-operability between the respective Ground Segments and Users Ground Segments. SIASGE is an integrated and interoperable system allowing to monitor the territory using X, L and X+L bands in all weather conditions, by day and by night, with high revisit times. These characteristics make it an effective tool to investigate events as inundations, landslides, floods, fires, agricultural development, urbanization, migrations, etc. In application of the ASI-CONAE MoU, in May 2017, the SIASGE Data Policy Guidelines were signed to establish the rights to share the COSMO-SkyMed and SAOCOM products between the parties, and among them and third parties through trilateral agreements. Commercial exploitation of SIASGE satellite data is also contemplated. The focus of this paper is to give an overview of the SIASGE programme and its status, underlining the positive impacts of this cooperation, both in the European and international context, in terms of strategy and opportunities at national level.