

ESA/CONAE L/C/X band SAR Training Course
Buenos Aires, Argentina
12 -17 November 2018

	Introduction
	Vegetation
	Interferometry
	Cryosphere
	Polarimetry

Monday 12/11	
08:00-08:30	Registration
08:30 – 08:45	<p style="text-align: center;">Welcome by representatives of CONAE, ESA, UCA and the Ministry of Education, Culture, Science and Technology</p> <p style="text-align: center;">Speakers: Ada Susana López (Pontifical Catholic University of Argentina), Raúl Kulichevsky (CONAE), Ricardo Campero (Ministry of Education, Culture, Science and Technology), Francesco Sarti (ESA)</p>
08:45 – 09:45	<p style="text-align: center;">ESA Earth Observation Introduction</p> <p style="text-align: center;">Speaker: Francesco Sarti (ESA)</p>
09:45 - 10:00	<p style="text-align: center;">SAOCOM presentation</p> <p style="text-align: center;">Speaker: Laura Frulla (CONAE)</p>
10:00 – 12:30	<p style="text-align: center;">Theory: Introduction to Synthetic Aperture Radar (SAR). Intro to SAR-EDU initiative. Agricultural applications with SAR data</p> <p style="text-align: center;">Speaker: Christiane Schmullius</p>
12:30 – 13:30	Lunch Break
13:30 – 17:30	<p style="text-align: center;">Exercise: SAR for Crop Monitoring</p> <p style="text-align: center;">Trainers: Amalia Castro Gomez, Christiane Schmullius</p>
17:30 - 19:00	Ice Breaker

Tuesday 13/11	
08:30 – 10:30	<p style="text-align: center;">Theory: Biomass estimation using SAR data</p> <p style="text-align: center;">Speaker: Christiane Schmullius</p>
10:45 – 12:30	<p style="text-align: center;">Exercise: SAR for Forestry</p> <p style="text-align: center;">Trainers: Amalia Castro Gomez, Christiane Schmullius</p>
12:30 – 13:30	Lunch Break
13:30 – 15:00	<p style="text-align: center;">Theory: Introduction to SAR Interferometry and Permanent Scatterers. Applications and examples.</p> <p style="text-align: center;">Speaker: Daniele Perissin</p>
15:15 – 17:30	<p style="text-align: center;">Exercises: Interferometry & Multi-temporal Interferometry (small areas) with Sarproz software</p> <p style="text-align: center;">Trainer: Daniele Perissin</p>
	<p style="text-align: center;">Additional exercise on Interferogram generation from SNAP</p> <p style="text-align: center;">Trainer: Amalia Castro Gómez</p>

Wednesday 14/11	
08:30 – 12:30	Theory: Interferometric SAR Multi-temporal processing: techniques and applications Speaker: Daniele Perissin
12:30 – 13:30	Lunch Break
13:30 – 17:30	Exercises: Multi-temporal Interferometry (large areas) & Change Detection with Sarproz software Trainer: Daniele Perissin

Thursday 15/11	
08:30 – 12:30	Theory: SAR methods and Applications for Cryosphere Monitoring: Radar Signal Propagation in Snow and Ice, and SAR Application to Snow Cover Monitoring. Dynamics and Mass Balance of Glaciers and Ice Sheets. Speaker: Helmut Rott
12:30 – 13:30	Lunch Break
13:30 – 15:00	Exercise: Snowmelt Area Maps from Sentinel-1 SAR data Trainer: Helmut Rott
15:15 – 17:30	Exercise: Glacier Surface Elevation Change and Mass Balance by means of InSAR-DEM Differencing Trainer: Helmut Rott

Friday 16/11	
08:30 – 12:30	Exercise: Sentinel-1 Toolbox Offset Tracking Tutorial Trainer: Helmut Rott
12:30 – 13:30	Lunch Break
13:30 – 15:00	Theory: Introduction to Polarimetric SAR. Advanced Polarimetric SAR. Speaker: Armando Marino
15:15 – 17:30	Exercise: Polarimetry for Ship detection with PolSARpro Trainer: Armando Marino

Saturday 17/11	
08:30 – 11:45	Exercise: Polarimetry for Ship detection with python Trainer: Armando Marino
11:45 – 12:00	Extra: Brief introduction to the Graphic Processing Tool in SNAP Trainer: Mario Camuyrano
12:00 – 12:30	Feedback and Presentation of certificates