

**DICHIARAZIONI SOSTITUTIVE DI  
CERTIFICAZIONI**

(art. 46 D.P.R. n. 445/2000 e s.m.i)

**DICHIARAZIONI SOSTITUTIVE DELL'ATTO DI  
NOTORIETÀ**

(art. 47 D.P.R. n. 445/2000 e s.m.i)

...l. a sottoscritt. a.

COGNOME Roa NOME Yenni Lorena Belen

NAT. a. A: \_\_\_\_\_ PROV. \_\_\_\_\_

IL \_\_\_\_\_

ATTUALMENTE RESIDENTE A: \_\_\_\_\_

PROV. \_\_\_\_\_

INDIRIZZO \_\_\_\_\_ C.A.P. \_\_\_\_\_

TELEFONO \_\_\_\_\_

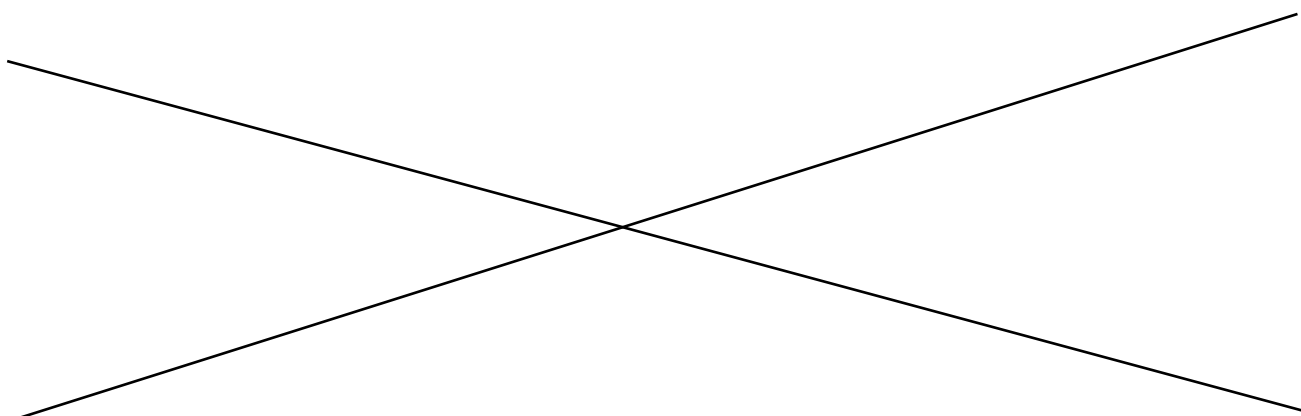
Visto il D.P.R. 28 dicembre 2000, n. 445 concernente “T.U. delle disposizioni legislative e regolamentari in materia di documentazione amministrativa” e successive modifiche ed integrazioni;  
Vista la Legge 12 novembre 2011, n. 183 ed in particolare l’art. 15 concernente le nuove disposizioni in materia di certificati e dichiarazioni sostitutive (\*);

Consapevole che, ai sensi dell’art.76 del DPR 445/2000, le dichiarazioni mendaci, la falsità negli atti e l’uso di atti falsi sono punite ai sensi del Codice penale e delle leggi speciali vigenti in materia, dichiara sotto la propria responsabilità:

**che quanto dichiarato nel seguente curriculum vitae et studiorum comprensivo delle informazioni sulla produzione scientifica corrisponde a verità**

**Curriculum vitae et studiorum**

studi compiuti, i titoli conseguiti, le pubblicazioni e/o i rapporti tecnici e/o i brevetti, i servizi prestati, le funzioni svolte, gli incarichi ricoperti ed ogni altra attività scientifica, professionale e didattica eventualmente esercitata (in ordine cronologico iniziando dal titolo più recente)



(\*) ai sensi dell'art. 15, comma 1 della Legge 12/11/2011, n. 183 le certificazioni rilasciate dalla P.A. in ordine a stati, qualità personali e fatti sono valide e utilizzabili solo nei rapporti tra privati; nei rapporti con gli Organi della Pubblica Amministrazione e i gestori di pubblici servizi, i certificati sono sempre sostituiti dalle dichiarazioni sostitutive di certificazione o dall'atto di notorietà di cui agli artt. 46 e 47 del DPR 445/2000

N.B:

- 1) Datare e sottoscrivere tutte le pagine che compongono la dichiarazione.
- 2) Allegare alla dichiarazione la fotocopia di un documento di identità personale con firma leggibile, in corso di validità.
- 3) Le informazioni fornite con la dichiarazione sostitutiva devono essere identificate correttamente con i singoli elementi di riferimento (esempio: data, protocollo, titolo pubblicazione ecc...).
- 4)

5)

6) I cittadini di Stati non appartenenti all'Unione, regolarmente soggiornanti in Italia, possono utilizzare le dichiarazioni sostitutive di cui agli artt. 46 e 47 del D.P.R. 445 del 28.12.2000 limitatamente agli stati, alla qualità personali e ai fatti certificabili o attestabili da parte di soggetti pubblici italiani, fatte salve le speciali disposizioni contenute nelle leggi e nei regolamenti concernenti la disciplina dell'immigrazione e la condizione dello straniero.

Al di fuori dei casi sopradetti, i cittadini di Stati non appartenenti all'Unione autorizzati a soggiornare nel territorio dello Stato possono utilizzare le dichiarazioni sostitutive nei casi in cui la produzione

Napoli, 30/06/2025

delle stesse avvenga in applicazione di convenzioni internazionali fra l'Italia e il Paese di provenienza del dichiarante.

Napoli, 30/06/2025

# Curriculum Vitae – Yenni Lorena Belen Roa

## PERSONAL INFORMATION

## EDUCATION

April 2018 –  
April 2025

### PhD in Science and Technology

**Institution** Instituto de Capacitación Especial y Desarrollo de Ingeniería Asistida por Computadora (CEDIAC - CONICET), Universidad Nacional de Cuyo, Mendoza, Argentina

**Activity** Data processing to obtain interferometric and polarimetric products from satellite and airborne Synthetic Aperture Radar (SAR) systems (e.g., SAOCOM-1A and SARAT).

**Tutors and affiliations** Eng. Pablo Euillades and Eng. Leonardo Euillades, Instituto de Capacitación Especial y Desarrollo de Ingeniería Asistida por Computadora (CEDIAC), Universidad Nacional de Cuyo, Mendoza, Argentina; Prof. Stefano Perna, Università degli Studi di Napoli "Parthenope", Dipartimento di Ingegneria & Istituto per il Rilevamento Elettromagnetico dell'Ambiente del Consiglio Nazionale delle Ricerche (IREA-CNR), Naples, Italy.

**Scientific results achieved in the context of the PhD** the research activity developed in the context of the PhD led to the publication of 1 paper in an International Journal (P4) and 2 papers in international conferences (C2, C17)

Attachment: PhD Certificate from page 16 to 17

February 2018 -  
September 2020

### Master degree in "Applications of Space Information" (2 years course)

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich"/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Average grade of the Master** 9.54 (Scale 0-10, 10 best, 0 worst)

**Final project** Evaluation of the interferometric and polarimetric capabilities of the SARAT airborne L-band SAR system.

**Score of the final project** 10 (Scale 0-10, 10 best, 0 worst)

**Advisor** Eng. Pablo Euillades, Instituto de Capacitación Especial y Desarrollo de Ingeniería Asistida por Computadora (CEDIAC), Universidad Nacional de Cuyo, Mendoza, Argentina.

**Methodological advisor** Prof. Stefano Perna, Università degli Studi di Napoli "Parthenope", Dipartimento di Ingegneria & Istituto per il Rilevamento Elettromagnetico dell'Ambiente del Consiglio Nazionale delle Ricerche (IREA-CNR), Naples, Italy.

**Scientific results achieved in the context of the master** the research activity developed in the context of the master led to the publication of 1 paper in an international conference (C18) and 1 paper in national conference (C20).

Attachment: Master Certificates from page 18 to 20.

March 2008 - December  
2016

### Degree in Geophysics (5 years course)

**Institution** Facultad de Ciencias Astronómicas y Geofísicas - Universidad Nacional de La Plata, Buenos Aires, Argentina

**Average grade of career** 8.48 (Scale 0-10, 10 best, 0 worst)

**Final project** Estimation and sizing of a solar thermal power plant in Argentina: direct radiation mapping for a possible installation and comparison of two possible technologies for its construction.

**Score of the final project** 10 (Scale 0-10, 10 best, 0 worst)

**Advisor** Prof. María Fernanda Montero, Universidad Nacional de La Plata (UNLP), Buenos Aires, Argentina.

**Co-advisor** Jesús Fernandez-Reche, CIEMAT-Plataforma Solar de Almería, España.  
**Scientific results achieved in the context of the degree** the research activity developed in the context of the degree led to the publication of 3 papers in national conferences (C21, C22, C23, C24).  
Attachment: Degree Certificates from page 21 to 32.

## PROFESSIONAL EXPERIENCES

### Technologist – Level III

May 2024  
June 2025

**Institution** Istituto per il Rilevamento Elettromagnetico dell'Ambiente (IREA) di Napoli - Consiglio Nazionale delle Ricerche (CNR)  
**Activity** Processing of L-band SAR data, with applications in the fields of differential interferometry and polarimetry, through the development of dedicated algorithms and the analysis of results over various areas of interest in Italy  
The work contributed to the development of advanced computational tools in the field of Earth observation, in line with the strategic objectives of the National Recovery and Resilience Plan (PNRR)  
**References** Research project PNRR. Project CN00000013 – 'National Centre for HPC, Big Data and Quantum Computing' – Spoke 5  
**Scientific results achieved in the context of the degree** the research activity developed in the context of the research fellow led to the publication of 2 paper in an International Journal (P1, P2).

## RESEARCH EXPERIENCES

### Research fellow

December 2023  
May 2024

**Institution** Istituto per il Rilevamento Elettromagnetico dell'Ambiente (IREA) di Napoli - Consiglio Nazionale delle Ricerche (CNR)  
**Activity** research activity and development of techniques on the topic "Advanced Techniques for L-band SAR Interferometry". Continued the elaboration of SAOCOM-1 data within the P-SBAS (Parallel Small BAseline Subset) interferometric processing chain, with a particular focus on the analysis of the results obtained, including the generation of deformation time series and mean velocity maps. Additionally, polarimetric analysis of SAOCOM-1 data was performed to derive soil moisture maps, thus expanding the applications of L-band data for environmental and land monitoring studies  
**References** appointment act, protocol number IREA N 372230 of 29 November, 2023.  
**Scientific results achieved in the context of the degree** the research activity developed in the context of the research fellow led to the publication of 7 papers in international conferences (C1, C2, C3, C4, C5, C6, C7).

June 2021  
December 2023

**Institution** Istituto per il Rilevamento Elettromagnetico dell'Ambiente (IREA) di Napoli - Consiglio Nazionale delle Ricerche (CNR)  
**Activity** research activity and development of techniques on the topic "Sviluppo di tecniche e algoritmi avanzati di Interferometria SAR Differenziale finalizzati alla generazione di catene automatiche per il processing massivo e sistematico di grandi dataset di interferogrammi, a media ed alta risoluzione spaziale, anche mediante l'utilizzo di Cloud Computing e di risorse di calcolo HPC (multi-nodo, multi-core, GPU)" in the frame of the projects: "OT4CLIMA - Tecnologie OT innovative per lo studio degli impatti del Cambiamento climatico sull'ambiente", "H2020-EU.1.4.1.1. EPOS SP - INFRADEV-03-2018-2019 Individual support to ESFRI and other world-class research infrastructures", "DInSAR-3M DInSAR Multi-frequenza/Multi-piattaforma per analisi Multi-scala dei movimenti del suolo", "Servizi interoperabili per la Terra Digitale 2021 – 2023".  
**References** appointment act, protocol number IREA N 758 of April 7, 2021; renewal act, protocol number IREA N 1514 of June 1, 2022.  
**Scientific results achieved in the context of the degree** the research activity developed in the context of the research fellow led to the publication of 1 paper in an International Journal P3, 9 papers in international conferences (C8, C9, C10, C11, C12, C13, C14, C15, C16) and 10 reports (R1, R2, R3, R4, R5, R6, R7, R8, R9, R10).

## CURRENT COLLABORATIONS

Since September 2020

Data processing to obtain Differential Interferometric SAR products using Sentinel 1-A and B over the Sotará Volcano (Colombia), and modeling of the volcanic source using the MATLAB-based software package dModels, in collaboration with the Colombian Geological Survey and the US Geological Survey.

## AWARDS

February 2020

**Best paper in the Latin American GRSS & ISPRS Remote Sensing Conference (LAGIRS) 2020 Student Paper Competition**

Awarded paper "On the interferometric and polarimetric capabilities of the Argentinian L-band SARAT system", by Y. Roa; M. Azcueta; P. Berardino; C. Esposito; L. Euillades; P. Euillades; A. Natale; S. Perna.

December 2017

**Prize "Joaquín V. Gonzáles"**

Prize "Joaquín V. Gonzáles" to one of the best average grades of the Geophysics graduates of the year 2016. The award is conferred annually by the Municipality of La Plata to the best top ten average grades of the different careers of the National University of La Plata, Argentina.

November 2014

**Best poster in the scholarship program of the IX Hydrocarbons Exploration and Development Conference, Mendoza, Argentina**

Awarded work "Seismic stratigraphy interpretation of the marine platform of the Malvinas basin from 2D seismic", by A. Acosta, G. Gelpi, Y. Roa, G. Vergani, Y. Quinteros. Reference: [TRABAJOSPREMIADOS.pdf](#)

## GRANTS

From April 2019 to September 2019

**MAECI/ASI/CONAE-UNC scholarship in the framework of an internship in the Istituto per il Rilevamento Elettromagnetico dell'Ambiente (IREA), Consiglio Nazionale delle Ricerche (CNR)**

Winner of the scholarship funded by the Ministry of Foreign Affairs and International Cooperation (MAECI) of Italy, the Italian Space Agency (ASI) and the Instituto Gulich (CONAE-UNC) to spend a period of 6 months in IREA-CNR, Naples, Italy.

**Motivation** financial support to carry out the activities related to the master thesis.

From February 2018 to April 2018

**Scholarship in the framework of the Master in Applications of Space Information**

Winner of the scholarship funded by the National Commission of Space Activities of Argentina (CONAE), Córdoba, Argentina, for a period of 2 years.

**Motivation** financial support to carry out the activities related to the master degree.

From April 2018 to April 2023

**Ph.D. Scholarship**

Winner of the internal doctoral scholarship for a period of sixty (60) months from April 1, 2018 funded by The National Council of Scientific and Technical Investigations (CONICET), Argentina.

**Motivation** financial support to carry out the activities related to the PhD.

From September 2015 to August 2016

### Research Scholarship

Scholarship funded by the National Interuniversity Council (CIN) within the framework of the call for the scholarship program to encourage scientific vocations, La Plata, Argentina.

**Motivation** financial support to carry out the activities related to the geophysics degree thesis.

**Reference** <https://www.cin.edu.ar/becas-evc-convocatoria-2015-resultados/>

## PARTECIPATION IN PROJECTS

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2021-2024

### European Plate Observing System Sustainability Phase (EPOS-SP)

funded by the European Union, H2020 (total funding of 4.998.093,75 euro)

**Aim of the project** EPOS aims at developing a European research infrastructure to provide to the scientific community a better insight on our planet and, in particular, on the tectonic processes occurring on the Earth surface, as well as new tools for managing the geo-hazards and geo-resources. This goal is obtained by connecting the already existing infrastructures of 24 European countries and by sharing the different data, models and scientific knowledge of each country.

**Activity** participation in the research and development activity defined within the project.

**Operational unit** IREA – CNR

**Funding for the Operating Unit** 110.625,00 euro

**Reference** the research activity developed in the context of the project led to the publication of 2 papers in national and international conferences (C1, C3)

2022-2024

### Generation of pre-operative products aimed at the evaluation of surface deformations, through the use of advanced methodologies for the processing of synthetic aperture radar remote sensing data

funded by the Italian Civil Protection Department (DPC)

**Aim of the project** Processing and analysis of Synthetic Aperture Radar (SAR) data for volcanic and seismic applications, in the frame of the Agreement between the Department of Civil Protection (DPC) and the Institute for the Remote Sensing of the Environment (IREA) of the National Research Council (CNR) of Italy. In particular, the activities are aimed at 1) the monitoring of the surface deformations occurring on the main active volcanoes of Italy (Campi Flegrei, Ischia, Vesuvio, Stromboli, Etna) through Interferometric SAR (InSAR) techniques and Sentinel-1 data; 2) the nearly real-time generation of co-seismic deformation maps induced by the main seismic events in Italy based on Sentinel-1, SAOCOM-1 and COSMO-SkyMed data; 3) the analysis for DPC purposes of InSAR data acquired over Italy by IREA-CNR in the frame of other projects.

**Activity** participation in the research and development activity defined within the project.

**Operational unit** IREA – CNR

**Funding for the Operating Unit** N/A

**Reference** contributions in Proceedings of National and International Conferences (C1, C3)

2022 - 2024

### Research Projects of the Secretariat of Research, International and Postgraduate (SIIP) of the Universidad Nacional de Cuyo, Mendoza, Argentina

funded by Secretary of Research, International and Postgraduate, National University of Cuyo, N° Res. R\_RE\_3713\_2022, 06/B031-T1

**Aim of the project** Preliminary analysis of SAOCOM interferometric capabilities using data acquired in TOPSAR mode

**Activity** Analysis of different SAOCOM data sets acquired in TOPSAR Narrow mode to be used in the characterization of deformation fields through the application of interferometric techniques.

**Operational Unit** CEDIAC-UnCuyo.

**Reference** [R\\_RE\\_3713\\_2022](#)

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2021-2023   | <p><b>DInSAR-3M - DInSAR Multi-frequency/Multi-platform for Multiscale analysis of ground movements</b></p> <p>funded by the Italian Space Agency (total funding of 199.747,14 euro)</p> <p><b>Aim of the project</b> generation of 3D surface deformation maps, characterized by wide space-time coverage and high accuracy along the horizontal and vertical directions, by means of space-time integration of differential SAR interferometry products (DInSAR) obtained from aerial (L band) and multi-frequency/multi-mission (X-C-L bands) satellite SAR data for the study of seismic-volcanic phenomena, slow landslides, fast/intense landslides, even on vegetated and/or snowy areas.</p> <p><b>Activity</b> processing of the data acquired by the SAOCOM-1 SAR system in the context of the WP1102 "Processing of L-band satellite SAR data" and the WP 7101 "Procurement/support of/on satellite SAOCOM data".</p> <p><b>Operational unit</b> IREA – CNR</p> <p><b>Funding for the Operating Unit</b> 144.773,94 euro</p> <p><b>Reference</b> contributions in Proceedings of National and International Conferences (C2, C4)</p> |
| 2021-2023   | <p><b>Generation of interferometric and polarimetric products from L-Band Synthetic Aperture Radar (SAR) data acquired by the Argentine SARAT (airborne) and SAOCOM (satellite) sensors.</b></p> <p>funded by the Argentinian Republic through the Ministry of Science, Technology and Innovation (MINCyT) and the Italian Republic through the Ministry of Foreign Affairs and International Cooperation (MAECI).</p> <p><b>Aim of the project</b> investigation of the potentialities of satellite and airborne L-band SAR data for the generation of interferometric and polarimetric products, such as soil deformation and soil moisture maps.</p> <p><b>Role performed</b> focusing and polarimetric calibration of SARAT data. Soil moisture estimation through polarimetric SAOCOM data.</p> <p><b>Reference</b> 2019 - call for the VIII Executive Program for Scientific and Technological Cooperation between the Argentine Republic through the Ministry of Science, Technology and Innovation (MINCyT) and the Italian Republic through the Ministry of Foreign Affairs and International Cooperation (MAECI). 2021-2023.</p>      |
| 2021-2022   | <p><b>OT4CLIMA Tecnologie OT innovative per lo studio degli impatti del Cambiamento climatico sull'ambiente</b></p> <p>funded by the Ministry of University Education and Research (MIUR) of Italy (total funding of 4.494.621,38 Euro)</p> <p><b>Aim of the project</b> the project was finalized at developing new measurement tools and Earth Observation (EO) methodologies to provide products/applications/services aimed at improving the capacity to mitigate the effects of climate change at a regional and sub-regional scales.</p> <p><b>Activity</b> participation in the research and development activity defined within the project.</p> <p><b>Operational unit</b> IREA – CNR</p> <p><b>Funding for the Operating Unit</b> 289.000,00 euro</p> <p><b>Reference</b> Decreto Direttoriale del MIUR del 6 settembre 2018 prot. n. 2261, registrato dalla Corte dei Conti in data 3/10/2018 n. 1</p>                                                                                                                                                                                                                               |
| 2019 - 2021 | <p><b>Research Projects of the Secretariat of Research, International and Postgraduate (SIIP) of the Universidad Nacional de Cuyo, Mendoza, Argentina</b></p> <p>funded by Secretary of Research, International and Postgraduate, National University of Cuyo, N° Res. 4142/19.</p> <p><b>Aim of the project</b> Interferometric analysis of SAR images acquired from an airborne platform.</p> <p><b>Activity</b> focusing and interferometric product generation using SARAT data.</p> <p><b>Operational Unit</b> CEDIAC-UnCuyo.</p> <p><b>Reference</b> <a href="#">re414220191.pdf</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

2018 – 2019

### Integration project within the framework of the Master in Applications of Space Information

**Aim of the project** Development and automatization of a traffic light for the trophic state of water, evaluation of the water quality using MODIS images.

**Activity** development of an automate a process to determine the trophic state of the San Roque Dam, located in the province of Cordoba, Argentina using the product MOD09GQ-MODIS to calculate the concentration value of chlorophyll-a in the San Roque Dam.

**Operational Unit** Instituto de Altos Estudios Espaciales “Mario Gulich” - CONAE .

**Reference** <http://aplicaciones.ig.conae.gov.ar:8080/visor2/#map=305.748113140705/-7187407.06/-3667271.76/0>

## TEACHING ASSIGNMENTS

22 August – 08  
September 2023

### Professor

Instituto de Altos Estudios Espaciales “Mario Gulich”/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Activity** Professor of a postgraduate course in the frame of the master degree “Applications in Space Information”

**Subject** Synthetic Aperture Radar imaging applications (60 hours)

22 August – 09  
September 2022

### Professor

Instituto de Altos Estudios Espaciales “Mario Gulich”/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Activity** Professor of a postgraduate course “Applications in Space Information”

**Subject** Synthetic Aperture Radar imaging applications (60 hours)

21 September – 17  
October 2020

### Professor

Instituto de Altos Estudios Espaciales “Mario Gulich”/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Activity** Professor of a postgraduate course in the frame of the master degree “Applications in Space Information”

**Subject** Synthetic Aperture Radar imaging applications (60 hours)

**Reference** <https://ig.conae.unc.edu.ar/sar/>

From March 2016 to  
March 2018

### Student Assistant designated via public selection

Facultad de Ciencias Astronómicas y Geofísicas, Universidad Nacional de La Plata, Buenos Aires, Argentina.

**Activity** Student assistant for the first year of the Geophysics career

**Subject** General Geophysics

From March 2016 to  
March 2018

### Student Assistant designated via public selection

Facultad de Ciencias Astronómicas y Geofísicas, Universidad Nacional de La Plata, Buenos Aires, Argentina.

**Activity** Student assistant for the second year of the Geophysics career

**Subject** Georeferencing.

From May to June 2017,

### Student Assistant

Facultad de Ciencias Astronómicas y Geofísicas, Universidad Nacional de La Plata, Buenos Aires Argentina.

**Activity** Student assistant for a course of the Meteorology career

**Subject** Introduction to Octave.

From September to  
December 2016

### Student Assistant designated via public selection

Facultad de Ciencias Astronómicas y Geofísicas, Universidad Nacional de La Plata, Buenos Aires, Argentina.

**Activity** Student assistant in the entrance exam course of Geophysics, Astronomy and Meteorology careers

**Subject** Mathematic

## RADAR ACQUISITION CAMPAIGNS

19 - 21 June 2019

Participation to the data acquisition campaign of the Italian Airborne X-band Interferometric SAR (AXIS) system, Salerno, Italy, under the supervision of Prof. Stefano Perna.

## REFEREEING ACTIVITY

IEEE International Geoscience and Remote Sensing Symposium (IGARSS 2023)

**Activity** Reviewer for scientific abstract papers

IV Biennial Congress of Argentina, IEEE ARGENCON 2022

**Activity** Reviewer for scientific papers.

Journal of Applied Remote Sensing (JARS 2021)

**Activity** Reviewer for scientific papers.

2020 Biennial Congress of Argentina, IEEE ARGENCON 2020

**Activity** Reviewer for scientific papers.

Member of the technical committee for the XXVIII Scientific Meeting of the Argentine Association of Geophysicists and Geodesists (AAGG 2017): Third Symposium on Investment and Signal Processing in Seismic Exploration (IPSES '17)

**Activity** General coordination of the abstract book and the extended abstract book.

**Place** Facultad de Ciencias Astronómicas y Geofísicas, La Plata, Argentina.

**Available in**

<http://sedici.unlp.edu.ar/handle/10915/60718> and <http://sedici.unlp.edu.ar/handle/10915/60712>

## HUMAN RESOURCES TRAINING

Co-supervisor for the master degree thesis in Applications of Space Information

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich" /FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Year** in progress since 2020

**Thesis title** Preliminary analysis of SAOCOM interferometric capabilities using data acquired in TOPSAR mode.

**Thesis Supervisor** Eng. Leonardo Euillades

**Student** Eng. Jorge Alejandro Euillades

**Co-supervisor for the bachelor degree thesis in Computer, Biomedical, and Telecommunications Engineering**

**Institution** Università degli Studi di Napoli "Parthenope", Centro Direzionale Isola C4, Naples, Italy

**Year** 2019

**Thesis title** SARAT-CONAE: un sistema SAR in banda L aviotrasportato.

**Thesis Supervisor** Prof. Stefano Perna

**Student** Francesco Romano

## LANGUAGE SKILLS

**Native language** Spanish

**Other languages**

| UNDERSTANDING |           | SPOKEN       |                 | WRITTEN PRODUCTION |
|---------------|-----------|--------------|-----------------|--------------------|
| Listening     | Reading   | Interaction  | Oral Production |                    |
| Good          | Very Good | Intermediate | Intermediate    | Good               |
| Good          | Good      | Good         | Good            | Good               |

## INFORMATIC SKILLS

**Programming languages**

Octave, Python, Matlab, R, IDL, Bash

**Image processing packages**

QGIS, SNAP, ENVI

**Office packages**

Microsoft Word, Microsoft Excel, Microsoft Power Point, Latex

## PARTICIPATION IN HIGHER COURSES OF TRAINING

**Images and Machine Learning in Python**

**Date** 8 to 16 October 2020

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich", Córdoba, Argentina (Online)

**Duration** 60 hours

**Scientific Writing**

**Date** 17 to 21 February 2020

**Institution** Facultad de Ciencias Exactas y Naturales (UNCUYO), Mendoza, Argentina

**Duration** 40 hours

**Research methodologies and tools for the thesis development**

**Date** 20 November to 5 December 2018

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich"/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Duration** 60 hours

**Radar Imaging Interferometry and Applications**

**Date** 5 to 16 November 2018

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich"/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Duration** 60 hours

**Spatial analysis and risk situations**

**Date** 22 October to 2 November 2018

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich"/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Duration** 60 hours

#### Early warning numerical models, risk maps and simulation

**Date** 1 to 19 October 2018

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich"/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Duration** 60 hours

#### Synthetic Aperture Radar Imaging Applications

**Date** 3 to 27 September 2018

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich"/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Duration** 60 hours

#### Digital processing of satellite images and Geographic Information Systems

**Date** 13 to 31 August 2018

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich"/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Duration** 60 hours

#### Applications of digital photogrammetry

**Date** 18 to 29 June 2018

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich"/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Duration** 60 hours

#### Programming and numerical methods oriented to the treatment of satellite information.

**Date** 21 May to 8 June 2018

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich"/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Duration** 60 hours

#### Statistics

**Date** 9 to 18 April 2018

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich"/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Duration** 60 hours

#### Introduction to remote sensing

**Date** 12 March to 4 April 2018

**Institution** Instituto de Altos Estudios Espaciales "Mario Gulich"/FAMAF/CONAE, Falda del Cañete, Córdoba, Argentina

**Duration** 60 hours

#### Characterization of sliding glaciers using SAR images

**Date** 17 to 18 August 2017

**Institution** Comisión Nacional de Actividades Espaciales (CONAE) y Capítulo Argentino de la IEEE de la Geoscience and Remote Sensing Society, Córdoba, Argentina.

**Duration** 16 hours

#### Solar thermal energy of high concentration

**Date** 22 to 26 February 2016

**Institution** V Escuela de Verano de la Universidad Nacional de La Plata (UNLP), La Plata, Argentina

**Duration** 60 hours

- P1. **SAOCOM-1 L-Band DInSAR Time Series Generation Through the P-SBAS Approach: Algorithm Extension and Products Analysis**  
**Authors** De Luca, C , Roa, Y. L. B., Bonano, M., Casu, F. , Euillades, P., Euillades, L. , Franzese, M., Manunta, M., Yasir, M., Onorato, G., Striano, P., Dini, L., Tapete, D. , and Lanari, R.  
**Journal** Selected Topics in Applied Earth Observations and Remote Sensing  
**Year** 2024  
**Contribution** methodology, software application, validation and original draft writing  
**Impact Factor** 3.5  
**DOI** <https://doi.org/10.1109/JSTARS.2024.3507554>  
**Available in**  
<https://ieeexplore.ieee.org/document/10769037>
- P2. **New Advances of the P-SBAS Approach for an Efficient Parallel Processing of Large Volumes of Full-Resolution Multi-Temporal DInSAR Interferograms**  
**Authors** Bonano, M., Striano, P., Yasir, M., Buonanno, S., Casu, F., De Luca, C., Fusco, A, Roa, Y. L. B., ... & Lanari, R.  
**Journal** of Selected Topics in Applied Earth Observations and Remote Sensing  
**Year** 2024  
**Contribution**  
**Citations** 3  
**Impact Factor** 5.3  
**DOI** <https://doi.org/10.1109/JSTARS.2024.3507542>  
**Available in**  
<https://ieeexplore.ieee.org/abstract/document/10769035>
- P3. **Interferometric assessment of SAOCOM-1 TOPSAR data**  
**Authors** Euillades, J. A., Roa, Y. L. B., Euillades, L. D., Euillades, P. A., Rosell, P. A., Solarte, E. A., & Perna, S  
**Journal** IEEE Geoscience and Remote Sensing Letters  
**Year** 2023  
**Contribution** SAOCOM-1 TOPSAR data selection and processing  
**Citations** 7  
**Impact Factor** 4.4  
**DOI** [10.1109/LGRS.2023.3347030](https://doi.org/10.1109/LGRS.2023.3347030)  
**Available in**  
<https://ieeexplore.ieee.org/abstract/document/10373865>
- P4. **First assessment of the interferometric capabilities of SAOCOM-1A: New results over the Domuyo Volcano, Neuquén Argentina**  
**Authors** Roa, Y. L. B., Rosell, P. A, Solarte E. A, Euillades, L. D., Carballo, F., García, S., Euillades , P. A.  
**Journal** of South American Earth Sciences. Elsevier  
**Year** 2020  
**Contribution** methodology, software application, validation and original draft writing  
**Citations** 32  
**Impact Factor** 1.5  
**DOI** <https://doi.org/10.1016/j.jsames.2020.102882>  
**Available in**  
<https://www.sciencedirect.com/science/article/abs/pii/S0895981120304259>

- C1. Franzese, M., De Maio, A., Lanari, R., Aubry, A., Noli, P., Onorato, G., **Roa, Y. L. B.**... & De Luca, C. (2024, November). Addressing ionospheric impairments in the azimuth ground displacements retrieved by using SAOCOM-1 L-band SAR data. In 2024 IEEE International Workshop on Technologies for Defense and Security (TechDefense) (pp. 92-97). IEEE. <https://doi.org/10.1109/TechDefense63521.2024.10863204>
- C2. Natale, A., Barber, M., Berardino, P., Esposito, C., Euillades L. D., Euillades, P.A., Lanari, R., **Roa, Y. L. B.**, Rosell, P., Perna, S. (2024, July). Estimation of Soil Permittivity through Polarimetric Saocom-1 Data. In IGARSS 2024-2024 IEEE International Geoscience and Remote Sensing Symposium (pp. 5162-5165). IEEE. [10.1109/IGARSS53475.2024.10640697](https://doi.org/10.1109/IGARSS53475.2024.10640697)
- C3. Euillades, J. A., Euillades, L. D., Euillades, P. A., **Roa, Y. L. B.**, Perna, S. (2024, July). Non-Synchronized TOPSAR Interferometry: The SAOCOM-1 Case Study. In IGARSS 2024-2024 IEEE International Geoscience and Remote Sensing Symposium (pp. 11326-11329). IEEE [http://dx.doi.org/10.1109/IGARSS53475.2024.10641030](https://dx.doi.org/10.1109/IGARSS53475.2024.10641030)
- C4. Striano, P., Buonanno, S., Casu, F., De Luca, C., Cotugno, F., Franzese, M., Fusco, A., Manunta, M., Onorato, G., **Roa, Y. L. B.**, Virelli, M., Yasir, M., Zeni, G., Zinno, I., Lanari, R., and Bonano, M.: National scale full-resolution P-SBAS processing for the investigation of critical infrastructure deformations related to the built-up environment, EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-21611, <https://doi.org/10.5194/egusphere-egu24-21611>
- C5. **Roa, Y. L. B.**, De Luca, C., Bonano, M., Casu, F., Franzese, M., Manunta, M., Onorato, G., Striano, P., Yasir, M., and Lanari, R.: A quantitative assessment of the SAOCOM-1 L-band DInSAR time-series retrieved through the P-SBAS approach in natural and anthropogenic hazard scenarios of the Italian territory, EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-16229, <https://doi.org/10.5194/egusphere-egu24-16229>
- C6. Franzese, M., De Luca, C., Aubry, A., Bonano, M., Casu, F., Manunta, M., Onorato, G., **Roa, Y. L. B.**, Striano, P., De Maio, A., and Lanari, R.: Detection and mitigation of ionospheric artifacts in the azimuth ground displacements through the SAOCOM-1 L-band SAR data exploitation, EGU General Assembly 2024, Vienna, Austria, 14–19 Apr 2024, EGU24-16496, <https://doi.org/10.5194/egusphere-egu24-16496>
- C7. De Luca, C., **Roa, Y. L. B.**, Bonano, M., Casu, F., Euillades, L. D., Euillades, P. A., ... & Lanari, R. (2024, April). A First Quantitative Assessment of the P-SBAS Approach Capability to Retrieve SAOCOM-1 DInSAR Deformation Time Series over the Italian Territory. In EUSAR 2024; 15th European Conference on Synthetic Aperture Radar (pp. 879-883). VDE
- C8. De Luca, C., **Roa, Y. L. B.**, Bonano, M., Casu, F., Euillades, P.A., Euillades, L.A., ... & Lanari, R. (2023, July). New advances of the P-SBAS approach for the generation of SAOCOM-1 L-band DInSAR time-series. In IGARSS 2023-2023 IEEE International Geoscience and Remote Sensing Symposium (pp. 1416-1419). IEEE. <https://dx.doi.org/10.1109/IGARSS52108.2023.10281896>
- C9. Svikas, N., Striano, P., Atzori, S., Bonano, M., Tolomei, C., Casu, F., De Luca, C., Franzese, M., Manunta, M., **Roa, Y. L. B.**, ... & Lanari, R. (2023, December). Source Modelling of the Turkey-Syria 2023 Seismic Event Based on SAOCOM, Sentinel-1 and ALOS-2 Satellite Data. In AGU Fall Meeting Abstracts (Vol. 2023, No. 359, pp. T33D-0359). <https://ui.adsabs.harvard.edu/abs/2023AGUFM.T33D0359S>
- C10. De Luca, C., Roa, Y. L. B.; Bonano, M., Casu, F., Euillades, L. D., Euillades, P. A., Franzese, M., Manunta, M., Yasir, M., Onorato, G., Striano, P., Zinno, I., Lanari, R. On the P-SBAS Processing Chain New Developments for The Generation of SAOCOM-1 Advanced DInSAR Products, FRINGE 11-15 September 2023 UNIVERSITY OF LEEDS.
- C11. Bonano, M., Monterroso, F., **Roa, Y. L. B.**, Striano, P., Franzese, M., De Luca, C., Casu, F., Manunta, M., Atzori, S., Onorato, G., Yasir, M., Zinno, I., Lanari, R. Joint Exploitation of Sentinel-1 And SAOCOM-1 SAR Data for Accurate Surface Deformation Retrieval of the February 2023 South-East Turkey Mw 7.8 And Mw 7.5 Seismic Events, FRINGE 11-15 September 2023 UNIVERSITY OF LEEDS.
- C12. Casu, F., Berardino, P., Bonano, M., Buonanno, S., Casamento, F., Cotugno, F., De Luca, C., Di Vincenzo, A., Esposito, C., Franzese, M., Fusco, A., Manunta, M., Monterroso, F., Natale, A., Onorato, G., Perna, S., **Roa, Y. L. B.**, Striano, P., Yasir, M., Zeni, G., Zinno, I., Lanari, R. Supporting Civil Protection Activities with Spaceborne and Airborne InSAR Products In Volcanic And Seismic Regions, FRINGE 11-15 September 2023 UNIVERSITY OF LEEDS.
- C13. Casu, F., Monterroso, F., **Roa, Y. L. B.**, Striano, P., Atzori, S., Bonano, M., De Luca, C., Franzese, M., Manunta, M., Onorato, G., Yasir, M., Zinno, I., and Lanari, R.: Surface deformation retrieval of the February 2023 South-East Turkey and Northern Syria Mw 7.8 and Mw 7.5 seismic events through Sentinel-1 and SAOCOM-1 co-seismic SAR image analysis, EGU General Assembly 2023, Vienna, Austria, 23–28 Apr 2023, EGU23-17628, <https://doi.org/10.5194/egusphere-egu23-17628>

- C14. Monterroso F., Berardino, P., Bonano, M., Buonanno, S., Casamento, F., Cotugno, F., De Luca, C., Di Vincenzo, A., Esposito C., Franzese, F., Fusco, A., Lanari, R., Manunta, M., Natale, A., Onorato, G., Perna, S., **Roa, Y. L. B.**, Striano, P., Yasir, M., Zeni, G., Zinno, I., Casu, F. Spaceborne and airborne DInSAR products generation and analysis to support Civil Protection activities in volcanic and seismic regions, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-14140, <https://doi.org/10.5194/egusphere-egu23-14140>
- C15. De Luca, C., **Roa, Y. L. B.**, Bonano, M., Casu, F., Franzese, M., Manunta, M., Muhammad, Y., Onorato, G., Striano, P., Zinno, I., and Lanari, R.: On the exploitation of L-band DInSAR products retrieved through the SAOCOM-1 constellation for the investigation of natural and anthropogenic hazards., EGU General Assembly 2023, Vienna, Austria, 23–28 Apr 2023, EGU23-7005, <https://doi.org/10.5194/egusphere-egu23-7005>
- C16. Casu, F., Berardino, P., Bonano, M., Buonanno, S., Casamento, F., De Luca, C., Esposito, C., Fusco, A., Lanari, R., Manunta, M., Manzo, M., Monterroso, F., Natale, A., Onorato, G., Perna, S., **Roa, Y. L. B.**, Striano, P., Yasir, M., Zeni, G., and Zinno, I. DInSAR-based monitoring services for ground deformation retrieval on active volcanoes and seismic regions through spaceborne and airborne radar sensors, 17th Plinius Conference on Mediterranean Risks, Frascati, Rome, Italy, 18–21 Oct 2022, Plinius17-78. <https://doi.org/10.5194/egusphere-plinius17-78>
- C17. De Luca, C., **Roa, Y. L. B.**, Bonano, M., Casu, F., Manunta, M., Manzo, M., Striano, P., Lanari, R. On the First Results of the DInSAR-3M Project: A Focus on the Interferometric Exploitation of Saocom SAR Images, IGARSS 2022 - 2022 IEEE International Geoscience and Remote Sensing Symposium. <https://doi.org/10.1109/IGARSS46834.2022.9884715>
- C18. **Roa, Y. L. B.**, Azcueta, M., Berardino, P., Esposito, C., Euillades, L. E., Euillades, P. A., Natale, A., Perna, S. On the Interferometric and Polarimetric Capabilities of the Argentinian L-Band SARAT System, 2020 IEEE Latin American GRSS & ISPRS Remote Sensing Conference. <https://doi.org/10.1109/LAGIRS48042.2020.9165681>
- C19. Euillades, P. A., Euillades, L. E., Rosell, P., **Roa, Y. L. B.** Subsidence in Maceio, Brazil, Characterized by Dinsar and Inverse Modeling, 2020 IEEE Latin American GRSS & ISPRS Remote Sensing Conference (LAGIRS). <https://doi.org/10.1109/LAGIRS48042.2020.9165567>
- C20. **Roa, Y. L. B.**, Lopez Gregori, M., Testa A. I., Germán, A. Desarrollo de un algoritmo de automatización para la determinación del estado trófico del embalse San Roque (Córdoba-Argentina), II Congreso Internacional sobre Gestión y Tratamiento Integral del Agua, Córdoba, Argentina, 2018
- C21. **Roa, Y. L. B.**, Montero, M. F., Fernández Reche, J. Diseño, análisis de costo y comparación de centrales termosolares de 30Mwe para la Provincia de Buenos Aires, XXVIII Reunión Científica de la Asociación Argentina de Geofísicos y Geodestas, La Plata Argentina, 2017. [https://sedici.unlp.edu.ar/bitstream/handle/10915/60718/Documento\\_completo.pdf-PDFA.pdf?sequence=3&isAllowed=y](https://sedici.unlp.edu.ar/bitstream/handle/10915/60718/Documento_completo.pdf-PDFA.pdf?sequence=3&isAllowed=y) (see pag. 68-72)
- C22. **Roa, Y. L. B.**, Montero, M. F., Dugaro, A., Fernández Reche, J. Estudio de mapas de radiación, heliofania efectiva e intensidad de vientos para el posible emplazamiento de una central termosolar en las provincias de San Juan, La Rioja y Catamarca. XXVIII Reunión Científica de la Asociación Argentina de Geofísicos y Geodestas, La Plata Argentina, 2017 [https://sedici.unlp.edu.ar/bitstream/handle/10915/60712/Documento\\_completo\\_PDF-FFA.pdf?sequence=3](https://sedici.unlp.edu.ar/bitstream/handle/10915/60712/Documento_completo_PDF-FFA.pdf?sequence=3) (see pag. 135)
- C23. **Roa, Y. L. B.**, Montero, M. F., Fernández Reche, J. Diseño y comparación de tecnologías para una central termosolar de 30 MWe, 2º Congreso de Energías Sustentables, Bahía Blanca, Argentina, 2016. [ces.frbb.utn.edu.ar/2016/archivos/Compilado\\_final\\_18-10-16.pdf](https://ces.frbb.utn.edu.ar/2016/archivos/Compilado_final_18-10-16.pdf) (see pag. 22)
- C24. Acosta, A., Gelpi, G., ] **Roa, Y. L. B.**, Vergani, G., Quinteros, Y. Interpretación sísmo estratigráfica de la plataforma marina de la cuenca de malvinas a partir de sísmica 2D. IX Congreso di Esplorazione e Sviluppo degli Idrocarburi, Mendoza, Argentina. 2014.

## TECHNICAL- SCIENTIFIC REPORTS

- R1. **DInSAR analysis of Stromboli using Sentinel-1 and SAOCOM data. Updated February 5, 2023**  
**Authors** Manuela Bonano, Francesco Casu, Claudio De Luca, Michele Manunta, Fernando Monterroso, Giovanni Onorato, Yenni Roa, Ivana Zinno  
**References or protocol number** WP1\_EOLI\_SNT\_23\_02\_S  
**Description** provides a description of the ground displacements measured on the island of Stromboli, in the period 24 April 2015 - 5 February 2023, using Synthetic Aperture Radar Differential Interferometry (DInSAR) techniques applied to the data acquired by the Sentinel-1 sensors of the program European Copernicus.

- R2. **DInSAR analysis of Stromboli using Sentinel-1 and SAOCOM data. Updated January 6, 2023**  
**Authors** Manuela Bonano, Francesco Casu, Claudio De Luca, Michele Manunta, Fernando Monterroso, Giovanni Onorato, Yenni Roa, Ivana Zinno  
**References or protocol number** WP1\_EOLI\_SNT\_23\_01\_S  
**Description** provides a description of the ground displacements measured on the island of Stromboli, in the period 24 April 2015 - 6 January 2023, using Synthetic Aperture Radar Differential Interferometry (DInSAR) techniques applied to the data acquired by the Sentinel-1 sensors of the program European Union Copernicus and SAOCOM of the Argentine Space Agency (CONAE).
- R3. **DInSAR analysis of Stromboli using Sentinel-1 and SAOCOM data. Update December 7, 2022**  
**Authors** Manuela Bonano, Francesco Casu, Claudio De Luca, Michele Manunta, Mariarosaria Manzo, Fernando Monterroso, Giovanni Onorato, Yenni Roa, Ivana Zinno  
**References or protocol number** WP1WP1\_EOLI\_SNT\_22\_12\_S  
**Description** provides a description of the ground displacements measured on the island of Stromboli, in the period 24 April 2015 - 7 December 2022, using Synthetic Aperture Radar Differential Interferometry (DInSAR) techniques applied to the data acquired by the Sentinel-1 sensors of the program European Copernicus.
- R4. **DInSAR analysis of Stromboli using Sentinel-1 and SAOCOM data. Update November 1, 2022**  
**Authors** Manuela Bonano, Francesco Casu, Claudio De Luca, Michele Manunta, Mariarosaria Manzo, Fernando Monterroso, Giovanni Onorato, Yenni Roa, Ivana Zinno  
**References or protocol number** WP1WP1\_EOLI\_SNT\_22\_11\_S  
**Description** provides a description of the ground displacements measured on the island of Stromboli, in the period 24 April 2015 - 1 November 2022, using Synthetic Aperture Radar Differential Interferometry (DInSAR) techniques applied to the acquired data by the Sentinel-1 sensors of the European Copernicus program and SAOCOM of the Argentine space agency (CONAE).
- R5. **DInSAR Multi-frequenza/Multi- piattaforma per analisi Multi- scala dei movimenti del suolo (DInSAR-3M). Progress report of October 2021**  
**Authors** Riccardo Lanari, Paolo Berardino, Manuela Bonano, Sabatino Buonanno, Nicola Casagli, Francesco Casu, Claudio De Luca, Francesca Di Matteo, Carmen Esposito, Pablo Euillades, Michele Manunta, Mariarosaria Manzo, Alessandro Mondini, Antonio Natale, Federico Raspini, Yenni Roa, Stefano Perna, Pasquale Striano, Pietro Tizzani  
**References or protocol number** ASI CONTRACT N° 2021-8-U.0  
**Description** the DInSAR-3M project aims to generate, through the development of an innovative methodology, displacement time series and corresponding mean deformation velocity maps relevant to the ground surface, spatially and temporally dense, even three-dimensional, for the multi-scale analysis of both the natural and anthropogenic deformation phenomena. The project objective was pursued through the use of Advanced Differential SAR Interferometry (DInSAR) techniques and the development of algorithms for the integration of multi-frequency (X-, C- and L- band) and multi-platform SAR data, i.e., acquired from different satellite and aerial platforms. In particular, within the DInSAR-3M project, the team aims at developing a methodology which takes advantage from the very large ground coverage of the L-band SAR systems, from the high accuracy characterizing the X- and C- band SAR products and from the versatility of the aerial platforms.
- R6. **DInSAR Multi-frequenza/Multi- piattaforma per analisi Multi- scala dei movimenti del suolo (DInSAR-3M). Progress report of January 2022**  
**Authors** Riccardo Lanari, Paolo Berardino, Manuela Bonano, Sabatino Buonanno, Nicola Casagli, Francesco Casu, Claudio De Luca, Francesca Di Matteo, Carmen Esposito, Pablo Euillades, Michele Manunta, Mariarosaria Manzo, Alessandro Mondini, Antonio Natale, Federico Raspini, Yenni Roa, Stefano Perna, Pasquale Striano, Pietro Tizzani  
**References or protocol number** ASI CONTRACT N° 2021-8-U.0  
**Description** as for R5

R7. **DInSAR Multi-frequenza/Multi- piattaforma per analisi Multi- scala dei movimenti del suolo (DInSAR-3M). Progress report of March 2022**

**Authors** Riccardo Lanari, Paolo Berardino, Manuela Bonano, Sabatino Buonanno, Nicola Casagli, Francesco Casu, Claudio De Luca, Francesca Di Matteo, Carmen Esposito, Pablo Euillades, Michele Manunta, Mariarosaria Manzo, Alessandro Mondini, Antonio Natale, Federico Raspini, Yenni Roa, Stefano Perna, Pasquale Striano, Pietro Tizzani

**References or protocol number** ASI CONTRACT N° 2021-8-U.0

**Description** as for R5

R8. **DInSAR Multi-frequenza/Multi- piattaforma per analisi Multi- scala dei movimenti del suolo (DInSAR-3M). Progress report of June 2022**

**Authors** Riccardo Lanari, Paolo Berardino, Manuela Bonano, Sabatino Buonanno, Nicola Casagli, Francesco Casu, Claudio De Luca, Francesca Di Matteo, Carmen Esposito, Pablo Euillades, Michele Manunta, Mariarosaria Manzo, Alessandro Mondini, Antonio Natale, Federico Raspini, Yenni Roa, Stefano Perna, Pasquale Striano, Pietro Tizzani

**References or protocol number** ASI CONTRACT N° 2021-8-U.0

**Description** as for R5

R9. **DInSAR Multi-frequenza/Multi- piattaforma per analisi Multi- scala dei movimenti del suolo (DInSAR-3M). Progress report of November 2022**

**Authors** Riccardo Lanari, Paolo Berardino, Manuela Bonano, Sabatino Buonanno, Nicola Casagli, Francesco Casu, Claudio De Luca, Francesca Di Matteo, Carmen Esposito, Pablo Euillades, Michele Manunta, Mariarosaria Manzo, Alessandro Mondini, Antonio Natale, Federico Raspini, Yenni Roa, Stefano Perna, Pasquale Striano, Pietro Tizzani

**References or protocol number** ASI CONTRACT N° 2021-8-U.0

**Description** as for R5

R10. **DInSAR Multi-frequenza/Multi- piattaforma per analisi Multi- scala dei movimenti del suolo (DInSAR-3M). Progress report of January 2023**

**Authors** Riccardo Lanari, Paolo Berardino, Manuela Bonano, Sabatino Buonanno, Nicola Casagli, Francesco Casu, Claudio De Luca, Francesca Di Matteo, Carmen Esposito, Pablo Euillades, Michele Manunta, Mariarosaria Manzo, Alessandro Mondini, Antonio Natale, Federico Raspini, Yenni Roa, Stefano Perna, Pasquale Striano, Pietro Tizzani

**References or protocol number** ASI CONTRACT N° 2021-8-U.0

**Description** as for R5

## **PARTICIPATION TO CONFERENCES**

Attendance to international conferences

2020 IEEE International Geoscience and Remote Sensing Symposium

**Date** 26 September - 2 October 2020

**Place** Virtual Event

IEEE GRSS school "Advanced methods for remote sensing information extraction"(AMERSIE)

**Date** 3 to 5 November 2020

**Place** Tromsø, Norway. Virtual Event

1st IEEE Geoscience and Remote Sensing Society (GRSS) Instrumentation and Future Technologies (IFT) Remote Sensing Summer School (IFT-R3S)

**Date** 1 to 5 July 2018

**Place** Barcelona, Spain

Solar PACES 2017. Solar Power&Chemical Energy Systems

Date 26 to 29 September 2017

Place Santiago de Chile, Chile

Poster presentation Comparison of Satellite DNI Models and On-site Measurements in Argentina

Attendance to national conferences

Spring Remote Sensing School: "The SAR radar as a tool to monitoring the environment and production". CELFI - Sustentabilidad y Desarrollo, Córdoba, Argentina

Date 10 to 21 September 2018 (80 hours)

Place Córdoba, Argentina

Second Spring Remote Sensing School. Comisión Nacional de Actividades Espaciales (CONAE) y Capítulo Argentino de la IEEE Geoscience and Remote Sensing Society

Date 14 to 18 August 2017 (40 hours)

Place Córdoba, Argentina

XXVIII Reunión Científica de la Asociación Argentina de Geofísicos y Geodestas, La Plata, Argentina

Date 17 to 21 April 2017

Place La Plata, Argentina

Oral presentation Design, cost analysis and comparison of 30MWe Solar Thermal Power Plants for the Province of Buenos Aires

Poster presentation Study of radiation maps, effective heliophany and wind intensity for the possible location of a thermosolar plant in the provinces of San Juan, La Rioja and Catamarca

2° Congreso de Energías Sustentables, Bahía Blanca, Argentina

Date 26 to 28 October 2016

Place Bahía Blanca, Argentina

Oral presentation Design and comparison of two possible technologies for a 30 MWe Thermosolar plant

IX Congreso de Exploración y Desarrollo de Hidrocarburos, Mendoza, Argentina

Date 4 to 7 November 2014

Place Mendoza, Argentina

Poster presentation Seismic Stratigraphic Interpretation of the Marine Platform of the Malvinas Basin from 2D seismic

*Signature*