

# Dr. Andrea Minchella Earth Observation Analyst

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## **Background**

Andrea has more than 10 years of experience working in the field of Earth Observation data exploitation. He got a MSc in Electronic Engineering and a PhD in Geo-Information - EO Remote Sensing both from the University of Rome Tor Vergata in Italy. His main line of PhD research was focused on the joint use of microwave scattering models and SAR data for bio-physical parameters estimation, but he gained as well skills in InSAR-DInSAR techniques, optical-Xs medium and high resolution data processing, GIS and 3D GIS Virtual Reality. From December 2006 to May 2014, he had been working for the Remote Sensing Applications Consultants Ltd. at the European Space Agency-ESRIN, providing technical and scientific expertise for the development of ESA open source SAR toolboxes (BEST, NEST/Sentinel-1 and PolSARpro), SAR R&D projects and ESA's Advanced Training Courses and Workshops. From June 2014 to November 2016, he had been working for the Satellite Applications Catapult, in UK, as a Principal SAR Specialist, with the main tasks to lead the exploitation of SAR data for a variety of projects within the CEMS high performance cloud computing infrastructure at the Catapult. From December 2016, Andrea has been working as Earth Observation Analyst in Airbus Defence and Space -Intelligence, contributing to the Copernicus data - Quality Control (CQC) service and to the exploitation of Copernicus Sentinel-1 and Sentinel-2 data for drought and farming applications.

#### **Activities in education**

Lecturer to the following Remote Sensing Courses:

1st ESA Advanced Training on RS of the Cryosphere 2016

8th ESA EO Summer School 2016

4th ESA Advanced Training on Land Remote Sensing 2013

2<sup>nd</sup> ESA Advanced Course on Radar Polarimetry 2013

Tor Vergata Master Geo-GST 2012, 2013

3rd ESA Advanced Training on Land Remote Sensing 2011

1st ESA Advanced Course on Radar Polarimetry 2011

### **Recent projects**

UK International Partnership Programme Project "<u>Earth Observation enabled decision support for Flood and Drought Resilience in Ethiopia and Kenya Flood & Drought resilience"</u>

Copernicus Coordinated data Quality Control

## **Selected publications**

A. Minchella, F. Del Frate, F. Manes, F. Capogna, S. Anselmi "USE OF MULTITEMPORAL SAR DATA FOR THE MONITORING OF THE REFORESTATION PROCESS OF BURNED AREAS. Journal Remote Sensing of Environment (2009), Volume: 113, Issue: 3, Publisher: Elsevier Inc., Pages: 588-597

S.Casadio, O.Arino, A. Minchella "Use of ATSR and SAR measurements for the monitoring and characterisation of night-time gas flaring from off-shore platforms: the North Sea test case", Journal Remote Sensing of Environment 123 (2012) 175-186 pages

Engdahl, M.; Minchella, A.; Marinkovic, P.; Veci, L.; Lu, J., "NEST: An esa open source Toolbox for scientific exploitation of SAR data", Geoscience and Remote Sensing Symposium (IGARSS), 2012, Page(s): 5322-5324