



Vasilis Kalogirou

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● WORK EXPERIENCE

1 JAN 2020 – CURRENT – Torrejon de Ardoz, Madrid, Spain

PROJECT MANAGER – European Union Satellite Centre

Managing the Service Evolution component of SatCen's Border and Maritime Surveillance services, delivered in the framework of the SLA signed with Frontex. I use best service management practices (ITIL) to define **Continuous Service Improvement** processes at Unit level, bridging Service Design and development with Operations, while continuously monitoring and improving service levels.

Having gained experience, as an Officer, in procuring geospatial services, I also focus on **supporting operational geospatial production** with: i) underpinning contracts and, ii) in-house development.

I worked on **positioning SatCen in project proposals** relevant to Border and Maritime Surveillance and delivered contributions for various **EU-funded projects**, including:

- CALLISTO (H2020), to build Copernicus Artificial Intelligence Services on DIAS infrastructure.
- MARINE-EO (H2020), a Pre-Commercial Procurement (PCP) project to build innovative EO downstream EO services for maritime security and surveillance.
- MEDEA (H2020), to create and operate four Pan-European Networks of practitioners & actors in the field of security.
- MARSUR (EDA), to connect existing naval and maritime information exchange systems.
- REACT (EDA), to support EU operations with improved geo-information and satellite imagery.

1 JUN 2013 – 31 DEC 2019 – Torrejon de Ardoz, Madrid, Spain

COPERNICUS PROJECT OFFICER – European Union Satellite Centre

Large part of my work involved the **institutional and technical development** of Earth Observation Imagery Intelligence services for Border Surveillance, in the framework of the Copernicus Programme. In this line, I supported the **preparation and implementation of SatCen's Service Level Agreement with Frontex** (succesfully signed in May 2015).

Having achieved this mission, I supported the **service transition** to Operations, designing its outsourcing elements. In addition, I worked on **user uptake activities**, to train Frontex and EU Member States on the efficient use of EO technology to support their mandates and actions (delivered more than 15 courses and lectures as invites speaker/trainer). On technical level, I developed validation protocols for geodatabases and supported the operational assessment of new satellite imagery data. Finally, I supported the **positioning of SatCen in project proposals** relevant to Border and Maritime Surveillance and delivered contributions for various **EU-funded projects**, including:

- SAGRES and LOBOS (FP7) for the development of Copernicus EUROSUR services.

- CLOSEYE (FP7), a Pre-Operational Validation project to test maritime border surveillance prototypes in real operational environments, following the Common Application of Surveillance Tools concept, established by EUROSUR.
- EUCISE2020 (FP7), to build a European test-bed for the maritime Common Information Sharing Environment (CISE).

1 MAY 2008 – 31 MAR 2013 – Frascati, Italy

REMOTE SENSING PROJECTS SCIENTIST – Remote Sensing Applications Consultants (RSAC) Ltd. c/o European Space Agency

I was consulting the Department Earth Observation Science, Applications & Future Technologies of the European Space Agency, in Frascati (Italy). I was acting as a **scientific and technical advisor** for numerous ESA R&D EO projects (i.e. TropForest, GlobCover, Culture-MERIS, GlobCarbon, Climate Change Initiative etc.), following their implementation from the definition up to the delivery phase. I have conducted **feasibility studies** for ESA projects and supported the **definition of the technical requirements**.

On the technical side, I managed satellite data ordering, cataloging (e.g. MERIS archive) and processing for verification and testing. In this line, I focused on reviewing Algorithm Theoretical Basis Documents, **prototyping** data processing algorithms (IDL) and improving processing chains. I supported ESA in communicating project achievements, either by publishing in scientific journals, or by preparing and coordinating the production of communication material (website articles, Newsletters etc).

On an *ad hoc* basis, I acted as an ESA-delegated Project Manager for the purposes of the **International Charter for Space & Major Disasters**, managing Charter activations in Europe and Africa for flooding and wildfire events.

1 MAY 2007 – 30 APR 2008 – Greece

AIRMAN – Hellenic Air Force

I served my **compulsory military service** in various establishments of the Hellenic Air Force.

1 JUN 2004 – 31 MAY 2005 – Thessaloniki, Greece

RESEARCH ASSISTANT – Laboratory of Forest Management & Remote Sensing, Aristotle University

I worked on a project: “Land Cover/Use Mapping of the prefecture of Drama, using Landsat-5 TM data”.

I performed **image processing tasks** (using ERDAS IMAGINE), **map design and production** (using ArcGIS), in-situ **validation** with a GPS field survey and drafted the final report of the project.

1 NOV 2002 – 31 DEC 2002 – Thessaloniki, Greece

INTERN IN GEOGRAPHIC INFORMATION SYSTEMS (GIS) – GeoInfo, Applied Studies and Research

I focused on **obtaining map digitization skills** in MapInfo and ArcView. I produced Forest Maps tailored to support forest management applications.

● EDUCATION AND TRAINING

1 OCT 2009 – 1 MAY 2015 – Rome, Italy

Doctor of Philosophy in Geoinformation – University of Rome - Tor Vergata

Modules: Understanding Earth Observation, Electromagnetic Foundations of Remote Sensing, Neural Networks in Remote Sensing.

Thesis: Analysing burned forest canopies with SAR data and microwave scattering modeling.

15 SEP 2005 – 1 NOV 2006 – London, United Kingdom

Master of Science in Remote Sensing – University College of London

Modules: Data Handling & Analysis, Image Understanding, Principles & Practice of Remote Sensing, Mapping Science, Digital Mapping, Global Change Monitoring, Topographic Mapping etc.

Dissertation: Simulation of discrete-return LiDAR signal from conifer stands (Distinction)

28 SEP 1999 – 9 JUL 2004 – Thessaloniki, Greece

Bachelor Degree (Ptychio) in Forestry and Natural Environment – Aristotle University

Modules: Geographical Information Systems, Aerial Photography, Environmental Remote Sensing, Plant Physiology, Forest Informatics, Forest Management, Soil Science etc.

Dissertation: AutoCAD and forestry applications.

● DIGITAL SKILLS

Service Management

ITIL Foundation Certification AXELOS | ITIL Service Strategy | ITIL Service Operation

Programming skills and development frameworks

Python | IDL | Basic scrum knowledge

Office Applications

Microsoft Excel | Microsoft Office | Power Point | Microsoft Sharepoint | Outlook

● LANGUAGE SKILLS

Mother tongue(s): **GREEK**

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C2	C2	C2
ITALIAN	C1	B2	B2	B2	B1
SPANISH	B1	B1	B1	B1	A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● HONOURS AND AWARDS

2010

Satellite Imagery Grand – DigitalGlobe Foundation

2007

Best MSc Thesis Award – Remote Sensing and Photogrammetry Society (UK), sponsored by Leica Geosystems

2002

Annual Grand – Greek State Scholarships Foundation (IKY)

For my academic performance during my 3rd University year.

● NETWORKS AND MEMBERSHIPS

JAN 2020 – CURRENT

IEEE European Public Policy Committee

I'm member of the IEEE European Public Policy Committee (EPPC), which aims at expanding the dialogue between the European engineering community and European public authorities. I have worked in developing and reviewing Committee's position statements and white papers.

MAR 2010 – CURRENT

IEEE Geoscience and Remote Sensing Society

The professional society of the Institute of Electrical and Electronics Engineers (IEEE) active in the fields of geoscience and remote sensing.

● **SELECTED PUBLICATIONS**

Book contributions

Giri, C.P. (eds), 2012. Remote sensing of land use and land cover: Principles and applications. CRC Press. [Co-author in one Chapter].

Peer-reviewed journal publications

- Ophoff, T., Puttemans, S., Kalogirou, V., Robin, J.-P., Goedemé, T., 2020. Vehicle and Vessel Detection on Satellite Imagery: A Comparative Study on Single-Shot Detectors. *Remote Sensing*, 12(7), 1217.
- Kalogirou, V., Ferrazzoli, P., Della Vecchia, A., Foumelis, M., 2014. On the SAR Backscatter of Burned Forests: A Model-Based Study in C-Band, Over Burned Pine Canopies. *IEEE Transactions on Geoscience & Remote Sensing*, 52 (10), 6205 - 6215.
- Kalogirou, V., Ramos Perez, J., Arino, O., 2012. A first analysis on Culture-MERIS products. *Remote Sensing Letters*, 4, 211-218.
- Arino, O., Kalogirou, V., Ramos Perez, J., Pinnock, S., 2012. Culture-MERIS: An ESA weekly service for agriculture. *Remote Sensing Letters*, 3, 461-469.
- Disney, M.I., Kalogirou, V., Lewis, P., Prieto-Blanco, A., Hancock, S., Pfeifer, M., 2010. Simulating the impact of discrete-return lidar system and survey characteristics over young conifer and broadleaf forests. *Remote Sensing of Environment*, 114, 1546-1560.

Conferences

- Lazzarini, M., Saameno, P, Luna, A., Kalogirou, V., Moura, D., Poletti, J.-P., Albani, S., 2020. The use of small EO satellites for security applications. 4S Symposium, 14-18 Sep. 2020, Vilamoura, Portugal.
- Kalogirou, V., 2019. Imagery Intelligence-derived analytics for security applications: Challenges and opportunities. ESA Living Planet Symposium 2019, Milan, Italy.
- Albani, S., Saameno, P., Kalogirou, V., Moura, D., Poletti, J-C., 2019. HAPS-based Security Services for Persistent EO Monitoring. HAPS4ESA Workshop, 12-14 Feb. 2019, Leiden, Netherlands.
- Popescu, A., Luna, A., Albani, S., Kalogirou, V., Robin, J-P., 2019. Cloud computing case studies and applications for the space and security domain. Big Data from Space (BiDS'19), Alte Kongresshalle, Munich, Germany.
- Kalogirou et al. 2017. HAPS for security applications: preliminary considerations for evolving EO-based services. HAPS4ESA Workshop, 9-10 Oct. 2017, Noordwijk, Netherlands.
- Kalogirou, V., Foumelis, M., Ferrazzoli, P., 2013. Hyper-temporal SAR backscattering trajectories of land cover over Athens (Greece). ESA Living Planet Symposium 2013, Edinburgh, United Kingdom, ESA SP-722.
- Kalogirou, V., Solimini, C., Paganini, M., Arino, O., 2013. Deforestation Mapping using the Google Earth Engine: First Experiments in Boqueron, Paraguay.ESA Living Planet Symposium 2013, Edinburgh,United Kingdom, ESA SP-722.
- Kalogirou, V., Ferrazzoli, P., Guerriero, L., Della Vecchia, A., 2011. Coupling the Tor Vergata microwave scattering model with a plant architectural model. Geophysical Research Abstracts, Vol. 13, EGU General Assembly 2011.
- Arino, O., Ramos, J., Kalogirou, V., Defourny, P., Achard, F., 2010. GlobCover 2009. ESA Living Planet Symposium 2010, 28th June - 2nd July, Bergen, Norway. SP-686.

Reports

- Bontemps, S., Defourny, P., Van Bogaert, E., Arino, O., Kalogirou, V., Ramos Perez, J., 2011. GlobCover 2009 - Product Description and Validation Report. Available through ESA Ionia Website.
- Arino, O., Kalogirou, V., Perez, J.R., 2009. The GlobCover Project. Terrestrial Observations of Our Planet, GTOS Biennal Report 2008/09, edited by Salvatori, V., FAO.