CURRICULUM VITAE SUMMARY



Curriculum Vitae Summary **Dr Charalampos (Haris) KONTOES**

Research Director of NOA (kontoes@noa.gr)

Phd In Satellite Remote Sensing

Institute for Astronomy & Astrophysics, Space
Applications and Remote Sensing
National Observatory of Athens



RESEARCH POSITIONS

Dr. Charalampos (Haris) Kontoes holds the title as NOA Researcher during the last 20 years at various research levels such as:

2010 up to present: **Research Director of NOA** - Satellite Remote Sensing sector, Institute for Astronomy & Astrophysics, Space Applications and Remote Sensing of the National Observatory of Athens (IAASARS/NOA)

2003-2010: Senior Researcher IAASARS/NOA – Satellite Remote Sensing Sector

2000-2003: Associate Researcher IAASARS/NOA 1997-2003: Assistant Researcher IAASARS/NOA



OTHER KEY POSITIONS

Principal Researcher of the BEYOND Center for Earth Observation Research and Satellite Remote Sensing of the National Observatory of Athens (www.beyond-eocenter.eu)

Principal Contact for GRSS to GEO

Member of the National Committee of International Union of Geodesy and Geophysics (IUGG)

Lead the EuroGEO Disaster Resilience & Health and **Coordinator** of the EuroGEO Action Groups

Lead the GR-SST NOC operations in the EU SST and **National Delegate** in EUSST Steering Committee

Coordinator of the Regional Support Office (RSO) of UN-SPIDER for Disasters Risk Reduction (DRR)

Chair of the IGARSS 2024 Conference (Athens, 7-12 July 2024)



SUMMARY OF RESEARCH ACTIVITIES

Charalampos (Haris) KONTOES holds the position of Research Director at the IAASARS/NOA and leads the Operational Unit BEYOND Center (www.beyond-eocenter.eu) for Earth Observation Research and Satellite Remote Sensing. He received his PhD in Earth Observation holding a grant from EC (JRC/ISPRA). He leads a team of 55 researchers with active

participation in Space related projects funded by ESA, EC, and International Institutions (WB, EIB). He acts as National Delegate contributing to Space Policy and Program Committees of ESA, EC, COPERNICUS, SST/SSA. He is member of the Steering Committee of Geohazard Supersites and Natural Laboratories of Group of Earth Observations and the Committee of International Union of Geodesy and Geophysics, and is actively involved in the GEO Disaster Risk Reduction and Capacity Building Working Groups. He is the GRSS GEO principal and leader of the Disasters Resilience and Health Action Group of EuroGEO. He is responsible for Node 3 of Copernicus Data Access Service, the Hellenic Mirror Site, and the NOA's Ground Segment. He is author of more than 200 publications (h-index 35). He speaks English, French and Italian.

ESTABLISHMENT AND OPERATION OF THE EUROPEAN CENTRE BEYOND

He took the initiative to build a large-scale EO infrastructure within the competitive framework of the EU FP7-REGPOT-2012-2013-1 program, which led to the establishment of the European Center of Earth Observation Research and Satellite Remote Sensing Center BEYOND (http://www.beyond-eocenter.eu/). In BEYOND he leads a large multidisciplinary research team of 55 scientists, the operations of which are fully supported through EU, national, ESA and international competitive frameworks.



BEYOND CENTER - INTERNATIONAL ACTIVITY - THEMATIC AREAS

He conceptualized and led the Center BEYOND for Earth Observation Research and Satellite Remote Sensing, to be well-accepted and receiving a validated recognition in the provision of research and operational services in the framework of the European Union's Flagship Program Copernicus, European Space Agency (ESA), ECMWF, WB, EIB, etc. The emphasis is on Emergency Response and Disasters Resilience, Agriculture, Renewable Energy, Health & Epidemics, Climate Adaptation, Capacity Building, Big Data Science. BEYOND operates systems and opens portals for operational support of stakeholders as FireHub, FloodHub, DustHub, SolarHub, HealtHub, and GeoHub for real-time delivery of space based services, for early awareness, continuous monitoring, and management of climatic and anthropogenic disasters, the monitoring of active forest fires, flood events and seismic/volcanic risks, dust and smoke dispersions. He manages and supports the routine use of the BEYOND research by many environmental and organizations at National, Regional, and EU level, as well as EC services and DGs. For the shake of example BEYOND has been activated numerous times as validated contractor through the Copernicus EMS program to address the needs of a big number Civil Protection Authorities around the world. Dr Haris Kontoes as Chief Researcher leads the development of BEYOND by coordinating the participation of a number of scientists, partners and stakeholders all around Europe participating in the co-design and continuous evaluation of the delivered research and research outcomes.



BEYOND CENTER - ENSURING RESEARCH FUNDS

His leading role in BEYOND ensures funding from competitive programs (EU, ESA, National Programs), as well as from International Funding Organizations amounting to **2.5 million Euros/year.** At the same time, it collaborates and supports with its infrastructure and research, the activity of other researcher institutions in EU, providing an additional equal inflow of research funds at IAASARS/NOA.

BEYOND CENTER - INTERNATIONAL DISTINCTIONS - RESEARCH &



SERVICE

- The <u>FireHUB</u> services have been internationally recognized (Copernicus Masters 2014 -<u>Best Service Challenge Award</u>) winning the 1st prize as the Best Challenge Service among over 70 competitive proposals.
- 2. Dr Haris Kontoes is the owner of the patent no. 20150100061 issued by the Industrial Property Organization to protect the copyright of the FireHUB information system, Mr. Themistocles Herekakis (see ANNEX I).
- 3. The <u>EYWA</u>, <u>Early Warning System for Mosquito Borne Diseases</u> received the 1st EIC HORIZON 2020 Prize of 5M Euros.

CREATION AND OPERATION OF NATIONAL INFRASTRUCTURES FOR SATELLITE REMOTE SENSING

Dr. Charalampos (Haris) Kontoes has also been responsible for the installation and uninterrupted operation of EO infrastructures for the systematic reception, management and redistribution of real-time Earth Observation data acquired by satellites and in-situ monitoring networks. The coverage and usage of the EO monitoring infrastructure is international. He also coordinates the operations of the National Operation Center (NOC) of the GR Satellite Surveillance and Tracking Program. This infrastructure includes:

- 1. The Hellenic Mirror Site (https://sentinels.space.noa.gr/) providing near real-time satellite data to the international research community and the private sector, from the Sentinels (S-1, S-2, S-3, S-5P) (Copernicus missions).
- 2. The 3rd International Node of Copernicus for delivering Sentinel Data worldwide (IntHub, DIASHub, CollHub, and the S-5PHubs) and the National Collaborative Data Hub (Hellenic Mirror Sites
- 3. An X-/L-band acquisition antenna for real-time satellite data reception from missions EOS (AQUA, TERRA)/NASA, SUOMI-NPP/NASA, NOAA/AVHRR, METOP, FY, and corresponding archiving facility. The range of reception is the whole of Southeast Europe, North Africa, Middle East and the Balkans.
- **4.** Satellite acquisition antenna (DVB-2) and archiving facility for the real time reception of data from EUMETSAT missions (MSG1, MSG2, MSG3).
- 5. The NOC of GR SST in contribution to the EU SST Program.
- **6.** Unmanned aerial platforms (UAVs, Drones), long-distance fixed-wing SendeFly e-Bee and ATLAS eight copter for lifting multiple load carriers (~5kgr).

MANAGEMENT OF A LARGE RESEARCH GROUP - RESEARCH PROJECTS

Dr. Haris Kontoes has been assuming the scientific responsibility to manage a significant number of research projects with an internationally recognized social and scientific impact while leading an interdisciplinary research team of 55 staff members with international presence, all of them holding Msc and/or PhD diplomas from well recognized Universities worldwide. The team has been collaborating with researchers and scientists from esteemed Research and University units from Europe, and US. In addition to his career he has approximately trained 150 young researchers / engineers who have been assuming significant careers in Greece and abroad. He has been coordinating as Scientific Responsible of about 25-40 ongoing research projects yearly and a number of engineering studies reaching an approximate total budget of > 15ME Euros in the last 7 years.

IN CHARGE OF SPACE POLICY AND SPACE STRATEGY POSITIONS

- 1. In the period 2001-2003, the role of national representative of the GMES Steering Committee. The Committee was appointed by the EU and the ESA to develop the strategy and the priorities for the Global Monitoring for the Environment and Security Program (Copernicus/ former GMES).
- 2. In the period 2001-2003, he served as Deputy National Representative in the European Commission's JSSAG Joint-Space Strategy Advisory Group.
- **3.** In the period 2002-2004 he was nominated as National Representative of ESA's (European Space Agency) PBEO-Program Board for Earth Observation, whose main responsibilities was the formulation of space strategy and relevant work programs for the development of future satellite systems, research and application priorities in the field of Earth Observation.
- **4.** In the period 2014-2019, he acted as National Representative of the EC Space Committee of Space FP7 and Space H2020 programs of the European Commission. As a national representative, he supported a number of national meetings and information days organized by the GSRT in order to inform the Greek scientific community on the possibilities offered through Space FP7/Space H2020 in the development of Space Research in Greece.
- **5.** From 2016 to 2018 he has been the National Representative of the Copernicus Integrated GS (IGS) Task Force.
- **6.** Since 2016 and until now, he has been the National Focal Point for data exchange within the governments and members of GEO.
- **7.** Since 2017 and until now, he has been member of the National Committee of the International Union of Geodesy and Geophysics (IUGG).
- **8.** Since 2018 and until today, he has been assuming the role of coordinator of the EuroGEO Disaster Resilience & Health Action Group for Epidemics
- **9.** Since 2015 he is the coordinator of the Regional Support Office (RSO) of UN-SPIDER for Disasters Risk Reduction (DRR)
- 10. Since 2023 he is the National Delegate in the EU SST Committee

CONTRIBUTION TO THE COORDINATION OF SPACE PROGRAMS COPERNICUS/GEO

He has been entrusted by the EU and GEO (through the GEO-CRADLE project -www.geocradle.eu, since 2018 a GEO Initiative, and from 2025 onward a GEO enabling mechanism) to coordinate the implementation of the Copernicus and GEO/GEOSS Space programs in Africa, Middle East, Balkans, and the Black Sea, as well as Asia-Pacific Regions. He set up and coordinated numerous networks of research and professional entities which are active in more than 22 countries over these regions. He assisted the networking and transferring the know-how in Earth Observation matters, as well as the education of stakeholders in the exploitation of Sentinels/Copernicus EO data. Lastly, he coordinated the submission to the EU of the roadmap for the implementation of the Copernicus and GEO/GEOSS programs on the basis of the recognized priorities and needs of the regions.

ADMINISTRATIVE EXPERIENCE



BOARD OF DIRECTORS OF THE NATIONAL OBSERVATORY OF ATHENS

During the period **2013-2017**, he acted as member of the Advisory Board of NOA, representing the Research Community of NOA.

During the period **2011-2013 he was Deputy Director** of the Astronomy, Astrophysics, Space Applications and Remote Sensing Institute of the National Observatory of Athens.



SCIENTIFIC COUNCIL OF THE INSTITUTE (IAASARS) - NOA

He acted twice as **Chair of the Scientific Advisory Council** of the Institute of Astronomy, Astrophysics, Space Applications and Remote Sensing National Observatory of Athens. He acted twice member of the Board of Directors of National Observatory of Athens.

SCIENTIFIC PUBLICATIONS – CITATIONS (H INDEX)

https://scholar.google.com/citations?user=UVzxtmUAAAAJ&hl=enhttps://zenodo.org/records/15172105

TEACHING

Teaching staff and member of the Special Inter-Institutional Committee of the Master's Degree program "SPACE SCIENCE TECHNOLOGIES AND APPLICATIONS" co-organized by the National Observatory of Athens and the University of Peloponnese. Courses: "Fundamentals of remote sensing", "Space Applications", and "Advanced Space Applications".

Teaching staff of the Master's Degree program "NATURAL DISASTERS AND MITIGATION OF DISASTERS" co-organized by the National Observatory of Athens and the University of Aegean. Courses: "Optical Sensors", "Natural Disasters and Copernicus Emergency Management Response".

Supervisor of numerous diploma thesis, and participation in Msc&doctoral dissertations committees.

He has given series of lectures in several academic classes (NTUA, University of Western Attica, and Fire Brigade Academy).

Continuing educational programs (Mobility Program, TCG, etc.) and popularization of knowledge (Hellenic World, French Institute, Space Expo, etc.).

UNIVERSITY DIPLOMAS - BASIC AND POSTGRADEDUCATION

- 1. (1992) **Ph.D. in** Satellite Remote Sensing of the Environment (European Commission Grant Joint Research Center of the European Union (JRC) National Technical University of Athens)
- 2. (1987) Diplôme d' Etudes Approfondies (DEA) in Rural and Urban Geography (Paris VI)
- **3.** (1985) **Diploma of Rural and Surveying Engineer** in National Technical University of Athens



ADDITIONAL TITLES OF POSTGRADUATE SPECIALIZATION

- **1. University PARIS VI-JUSSIEU**, Institut de Programmation, Diploma "Maitrise Informatique" (1986-1987).
- 2. University ECOLE DES HAUTES ETUDES EN SCIENCES SOCIALES, Faculty Centre d' Analyse et de Mathematiques Sociales, "Teledetection, Espaces et Sosietes" (1986-1987), Specialization Diploma in Thematic Cartography.



SEMINARS - CONTINUING TRAINING

- 1. (1999) CENTRE NATIONAL D' ETUDES SPATIALES: Toulouse Space Centre, Series of lectures on Differential Interferometry of SAR data: Principles and use of specialized software (DIAPASON) (1999).
- 2. (1987-1991) Joint Research Center (JRC): Series of lectures on "Satellite Remote Sensing for Ecosystem Monitoring", "Visual Spectrometry: Principles and Applications", "Applied Satellite Remote Sensing in Agricultural Production and Agricultural Statistics Assessment on an Extended Geographic Scale" (1987-1991).
- **3.** (1990) **EGIS FOUNDATION UTRECHT, University Faculty of Geographical Sciences**: Lecture series on Geographic Information Systems "GIS for environmental assessment".

OTHER PROFESSIONAL EMPLOYMENT

- (1993-1997) Surveying Engineer (Teaching Registry No. 44270). Responsible for the implementation and technical management of satellite Remote Sensing, Digital Cartography and Geographic Information Systems projects, through assignment of competitions to Public and International Organizations. Collaboration with consulting companies.
- 2. (1993-1995) Application engineer of the multinational company Intergraph Hellas S.A. Responsible for technical support of applications and promotion of business plans and products of the company in the sector of Geographic Information Systems, Remote Sensing and Digital Photogrammetry.
- **3.** (1991-1992) Assistant Researcher under project contract of the Maritime Applications Laboratory of the Joint Research Center of the European Communities (Marine Environment Group/JRC-ISPRA).
- **4.** (1987-1988) Assistant Researcher under project contract of the Image Processing and Environmental Mapping Unit of the Joint Research Center of the European Communities (LIP-Environmental Mapping and Modeling Development Group/JRC-ISPRA).
- **5.** (1984-1985) Assistant of the Geodesy Laboratory of the Department of Rural and Surveying Engineering Class of Large Geodetic Exercises.

FOREIGN LANGUAGES

He is a native **Greek** speaker and he is fluent in **English**, **French and Italian**.

MEMBER OF CHAMBERS - ASSOCIATIONS

- 1. Member of the Technical Chamber of Greece
- 2. Member of the American Society for Photogrammetry and Remote Sensing
- 3. Member of the Greek Society for Photogrammetry and Remote Sensing
- 4. Member of the Hellenic Society for the Promotion of Space Science Research & Support