

EXCELSIOR

ERATOSTHENES:

Excellence Research Centre for Earth Surveillance
& Space-Based Monitoring of the Environment



**Cyprus enters the space arena with "Excelsior"
H2020 Teaming project and the Eratosthenes
Centre of Excellence: Why Cyprus? Why Excelsior?
What are the needs and opportunities?**

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**Kyriakos Themistocleous^{1,2}, Diofantos Hadjimitsis^{1,2}, Gunter Schreier³, Haris Kontoes⁴, Albert Ansmann⁵, Giorgos Komodromos⁶, Silas Michaelides^{1,2},
Kyriacos Neocleous^{1,2}, Christiana Papoutsas^{1,2}, Rodanthi Mamouri^{1,2}, Egbert Schwarz³, Ioannis Papoutsis⁴, Johannes Bühl⁵, Argyro Nisantzi^{1,2}, Christodoulos
Mettas^{1,2}, Christos Danezis^{1,2}, and Marios Tzouvaras^{1,2}**

¹Department of Civil Engineering and Geomatics, Faculty of Engineering and Technology, Cyprus University of Technology, Limassol, Cyprus

²ERATOSTHENES Centre of Excellence, Limassol, Cyprus

³German Aerospace Center, DLR, Germany

⁴National Observatory of Athens, BEYOND Centre of Excellence, Greece

⁵Leibniz Institute for Tropospheric Research, Germany

⁶Department of Electronic Communications, Deputy Ministry for Research, Innovation and Digital Policy, Nicosia Cyprus

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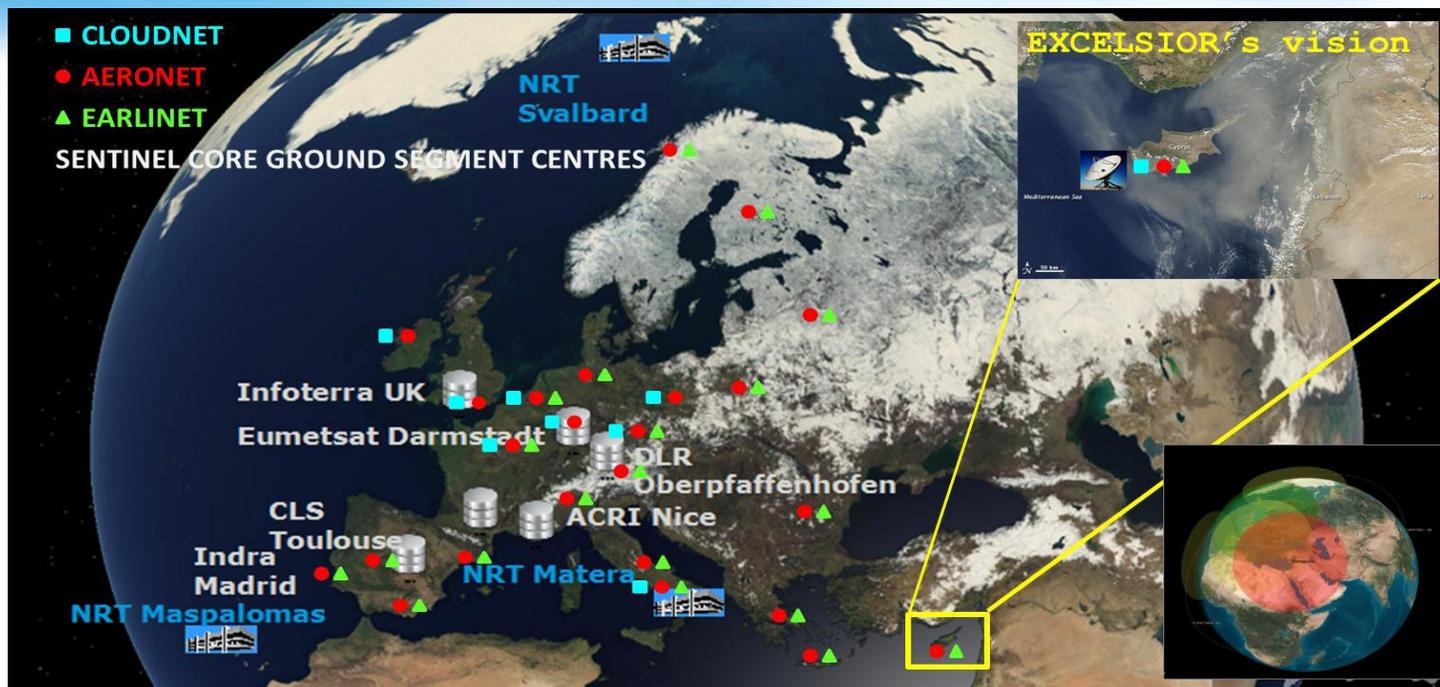
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Why Cyprus?

Cyprus's unique **geostrategic position** can support Earth Observation from satellites programmes in three continents and provide valuable services in the satellite **calibration and validation** processes.

The ERATOSTHENES CoE – with its expertise and infrastructure could further **complete the existing network of international ground stations**.



The *EXCELSIOR's* vision and the geostrategic position of Cyprus

Cyprus is ideally located to host the ECoE, due to its **climate**, which is characterised by **300 days of sunshine a year**, providing **excellent weather conditions** for cloud free satellite images!

Why Earth Observation in Cyprus?

Excellent weather conditions

Availability of cloud free images optical (passive) remote sensing

ocean

land

Ideal place

Calibration\Validation of satellite observations

**More than 78 % are cloud free images
(>18 out 24 cloud free Landsat images per year)**

Landsat 5/7/8 from 2000 to 2017 [database of USGS]

Why ECoE? Needs

There are some distinct needs and opportunities that motivate the establishment of **an Earth Observation Centre of Excellence in Cyprus.**

Needs:

- **Supersite for aerosol and cloud monitoring in the EMMENA:** strong demand for EO monitoring to provide data to evaluate the extent of pollution and climate change, especially in the EMMENA region
- **Droughts and water shortages in the EMMENA region**
- **Rehabilitation programmes in EMMENA**
- **Disaster Risk Reduction**
- **Regional Digital Innovation Hub for Earth Observation in Cyprus**



Why ECoE? Opportunities

- **The ECoE has the potential to become a catalyst for facilitating and enabling Regional, European and International cooperation.**
- **Capitalise on the favourable environmental, weather and climatic conditions of Cyprus to conduct cutting-edge research with impact in various sectors, including climate change, marine, solar energy, etc.**
- **The development of the Government of the Cyprus space strategy can be exploited for further EO research and applications**
- **Create a unique European capacity in Cyprus by mobilizing internal national assets and consolidating European EO capabilities in Cyprus to serve EMMENA. Such, currently missing, assets and infrastructures are: European Satellite Ground Stations covering EMMENA.**
- **Availability of funding instruments for EO t national and European Level**
- **Big Data management and analytics**



CONTACT US

ERATOSTHENES CENTRE OF EXCELLENCE
Professor Diofantos G. Hadjimitsis

PHONE

+357 25 002548 (direct line)
or 25002542 (through secretary)
Fax. +357 25 002661

EMAIL

d.hadjimitsis@cut.ac.cy

Address 2-8 Saripolou, Achilleos I
Building, 1st Floor, 3036 Lemesos,
Cyprus



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www.excelsior2020.eu

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@excelsior2020eu



E-MAIL:
info@excelsior2020.eu

WEBSITE:
www.excelsior2020.eu