

# Hyperspectral Remote Sensing Workshop 2021: PRISMA Mission and beyond

The present and the future of Hyperspectral Earth Observation  
from Space

13th - 14th April 2021

Day 1: 13th April 2021

All times are CEST

## Introductory session

- 14:00 Welcome, Workshop objectives, Agenda, Institutional/Industrial talks  
F. Longo, ASI, Head of ASI Earth Observation Department
- 14:05 Dr. G. Saccoccia, President of the Italian Space Agency
- 14:15 Dr. S. La Rosa, Ministry of University and Research
- 14:25 Gen. L. Capasso, Head of General Office for Space -SMD
- 14:35 Dr. T. Tolker-Nielsen – Acting Director of Earth Observation Programmes - ESA
- 14:45 Dr. A. Profumo, CEO Leonardo S.p.A.
- 14:55 Hon. B. Tabacci, Undersecretary of State with responsibility for Space  
activities
- 15: 05 End of the introductory session
- Session 1: PRISMA Mission and beyond (Characteristics, status, and results)  
E. Lopinto, ASI, PRISMA Mission Director
- 15:05 PRISMA Main performances, data policy & licensing, mission  
management aspects. P. Sacco/ASI
- 15:20 The PRISMA Advisory Working Group (PAGE). M. F. Buongiorno/INGV
- 15:30 PRISMA Payload characteristics. Fossati/Leonardo S.p.A.
- 15:45 PRISMA L1 Product. Chiarantini/Leonardo S.p.A.

- 15:52 PRISMA L2 Products. Santoro/Planetek Italia s.r.l.  
16:00 PRISMA Cal/Val1: The PRISCAV independent validation project.  
Miglietta/CNR  
16:15 PRISMA Cal/Val2: Calibration and Validation of L1 and L2 products.  
Meygret/CNES, Sarti/Leonardo S.p.A., Agrimano/Planetek Italia s.r.l.  
16:45 The SHALOM Mission. Varacalli/ASI  
17:00 The PRISMA Follow-On mission: PRISMA Second Generation.  
Ansalone/ASI  
17:15 Q & A

**Session 2: Other Hyperspectral missions (Characteristics, status, and results)**

- F. Buongiorno, INGV  
17:20 Hyperspectral Remote Sensing Activities in ISRO. Bhattacharya/ISRO  
17:35 DESIS Mission. Heiden/DLR  
17:50 1 CHIME Mission. Rast/ESA  
18:05 ENMAP German spaceborne imaging spectroscopy mission.  
Schickling/DLR  
18:20 SBG and EMIT Missions. Miller-Thompson-Green/JPL  
18:35 Q & A

**Session 3: User needs and requirements**

- G. Rum, ASI  
18:40 Continuous Copernicus evolution based on evolving EU policy and users  
needs. Facchini/Earth Observation DEFIS - EC  
18:55 Methods for hyperspectral user community requirements definition.  
Taramelli/ISPRA  
19:10 Q & A  
  
19:15 Wrap-up of the DAY. Lopinto/ASI

## Day 2: 14th April 2021

14:00 Welcome, Agenda of the Day  
F. Longo, ASI, Head of ASI Earth Observation Department

Session 1: Thematic exploitation  
Colombo/UNIMB, Tapete/ASI

14:05 Retrieval of vegetation traits in agriculture from PRISMA hyperspectral data using hybrid methods. Panigada/UNIMIB

14:20 PRISMA imagery exploitation for agricultural topsoil. Pignatti/CNR-IMAA

14:35 Assessment of PRISMA products across diverse aquatic ecosystems. Bresciani/CNR-IREA

14:50 ASI-PRISMA data exploitation for natural and manmade surfaces classification. Musacchio/INGV

15:05 Exploitation of PRISMA data for applications in the Cryosphere. Di Mauro/CNR-ISP

15:20 Mapping methane emissions around the world with PRISMA SWIR measurements. Guanter/Research Institute of Water and Environmental Engineering (IIAMA) Departamento de Física Aplicada ETS Ingeniería de Telecomunicación Universitat Politècnica de València

15:35 Modeling Hyperspectral features variability and fractional cover composition. Valentini/CNR-ISP

15:50 PRISMA hyperspectral data: Beta testing and valorization perspectives in urban remote sensing. Dell'Acqua-Gamba-Silino/UNIPavia

16:05 The Space-based Imaging Spectroscopy and Thermal (SISTER) pathfinder. Townsend/University of Wisconsin

16:20 Q & A

Session 2: Prototype applications and End Users Experience  
Zotti/Planetek Italia s.r.l., Daraio/ASI

16:25 Analytics for geology and Earth science. Mantovani/MEEEO s.r.l.

16:29 Innovative applications for agriculture and Wise Towns. Cruciani/Agricolous s.r.l.

16:33 Turning satellite imagery into geospatial information as-a-service. Volpe/Latitudo40 s.r.l.

16:37 PRISMA data exploitation in ERDAS Imagine software. Maldera/Planetek Italia s.r.l.

16:41 An application of Hyperspectral PRISMA data in the geoarchaeological studies: validation, encountered problems, benefits to end-users. Sara Zollini (DICEAA, Univ. Aquila)

- 16:45 Possible applications of hyperspectral satellite technology in civilian and military dual-use. De Ceglie/Ministero della Difesa
- 16:49 Applications for Urban and Regional Planning. Ianniello/Regione Toscana-Direzione Urbanistica
- 16:53 Usability and opportunities in agribusiness. Pagliuca/Abaco s.r.l.
- 16:57 Biodiversity and temporal variations in the Po Valley. Masini/FlySight s.r.l.
- 17:01 Q & A
- 17:05 Round Table “The future of Hyperspectral from Space”  
Moderator: A. Coletta/ASI
- Participants: Cluster Nazionale Aereospazio, Dipartimento di Protezione Civile, Earth Observation DEFIS – EC, e-Geos S.p.A., Leonardo S.p.A., Ministero della Difesa, Regione Toscana, Q & A
- 17:55 Wrap-up of DAY and conclusions. Longo/ASI