



SCIENCE DATA PROCESSING CENTERS
IN TURIN





ALTEC - Aerospace Logistics Technology Engineering Company is a public - private company owned by Thales Alenia Space in Italy and the Italian Space Agency - ASI.



ALTEC is the Italian center of excellence for engineering and logistics services to support the operations and utilization of the International Space Station and the development and implementation of planetary exploration missions.

Current main activities: a strong heritage, looking to the future



HUMAN SPACEFLIGHT & SPACEGATE



ISS/PMM
Sustaining
Engineering
(ASI)



ISS/Columbus
Training, Logistics
and Ops Support
(ESA)



CoI-CC
Flight Control
Team
(ESA)



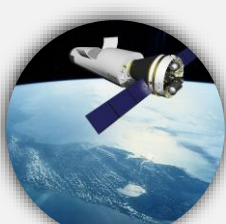
ISS Experiment
Development
and Operations
Support
(ASI)



ERFNET European
Radiation Facility
Data Hub
(ESA)



Moon Studies &
new Initiatives
(ASI)



Space Rider
Sub-aggregator
(R&D)

MISSION CONTROL



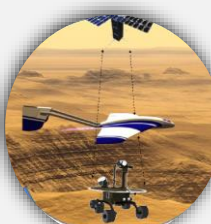
ExoMars
Rover Operations
Control Center (ESA)
and Lunar Simulation
and Operations
Center (ASI)



Space Rider
P/L GCC and
Landing Control
Center
(ESA)



HERMES Pathfinder
Constellation
MOC
(ASI)



SINAV
Innovative Solution
for High speed
Navigation
(ASI)



ROCC
Modernization
(ESA)



IN-Orbit Service
Ground Segment
(ASI)

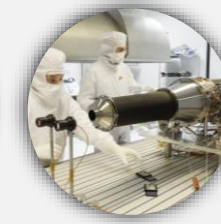
ADVANCED DATA PROCESSING



GAIA DPCT
Data Processing
Center Torino
(ASI)



EUCLID I-SDC
Italian Science Data
Center
(ASI)



METIS Operations
Facility
(ASI)



Space
Weather
Tools
(ESA)



AI/ML for SYS &
S/S Models From
AIT/AIV to OPS
(ESA)



GNSS Machine
Learning
Demonstrator
(ESA)

ISS, ARTEMIS, P/L Development & Support

Robotic Exploration, Moon & Advanced Mission Operations

Future Science Missions, Big Data & AI/ML Solution for Operations

MultiMission Science Data Center



High Performance Computing

Data Exploitation & Validation

Scalability & Maintainability

Data Persistence

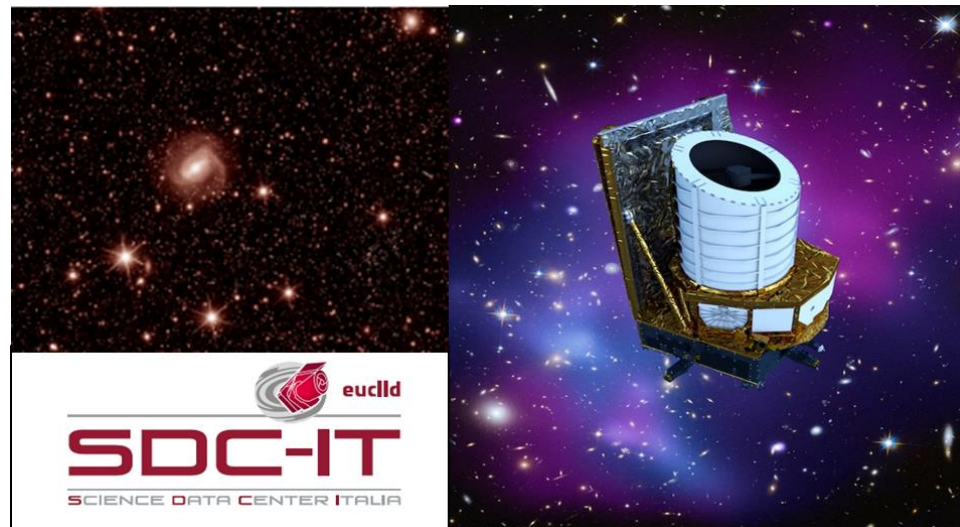
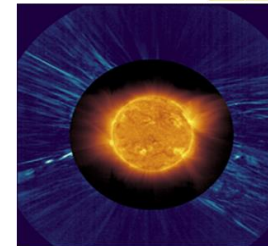
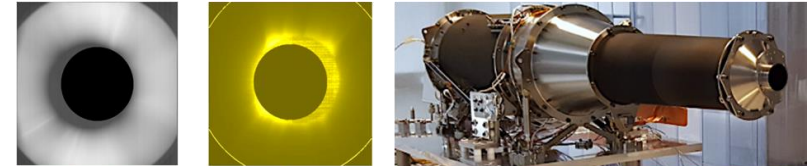
Fast Data Exchange

Instrument Planning

Security & Reliability

Monitoring & Control

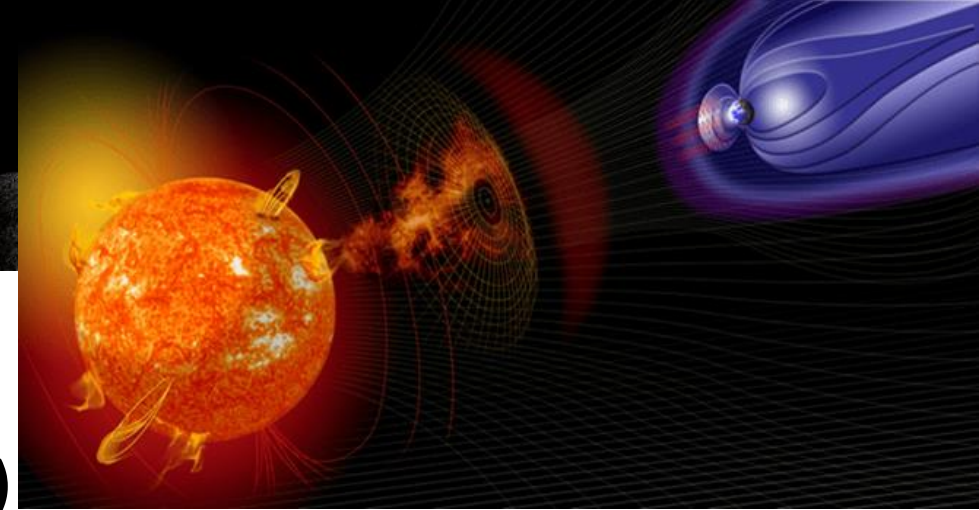
Quick Data Access



The Heliospheric Space Weather Center



Space Weather Service Network (SWESNET) Heliospheric Weather Expert Service Centre (H-ESC)



<https://swe.ssa.esa.int/inaf-mageff-federated>

INAF
ISTITUTO NAZIONALE
DI ASTRONOMIA

CME Propagation Prediction

HOME PRODUCTS HELP ACKNOWLEDGEMENTS

Last Solar Wind and Proton Density maps

This web page forms part of the European Space Agency's network of space weather services and service development activities, and is supported under ESA contract number 4000134036/21/D/MRP. For further product-related information or enquiries contact helpdesk. E-mail: helpdesk.swe@esa.int All publications and presentations using data obtained from this site should acknowledge INAF, ALTEC and The ESA Space Safety Programme. For further information about space weather in the ESA Space Safety Programme see www.esa.int/spaceweather Access the ESA SWE Portal here: <https://swe.ssa.esa.int>.

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Geo Magnetic Effectiveness

HOME PRODUCTS HELP ACKNOWLEDGEMENTS

Last Geo Magnetic Effectiveness

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POSTER SESSION 2 - TOPICS 5

Contribution ID: 311

MOF: the Ground Support to Metis Data and Operations

Author: **Vincenzo Chiaramida**

POSTER SESSION 2 - TOPICS 6

Contribution ID: 309

Heliospheric Space Weather Centre tools for space weather monitoring

Author: **Federico Pinna**