



Finanziato
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NextGenerationEU



Ministero
dell'Università
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Italiadomani
PIANO NAZIONALE
DI RIPRESA E RESILIENZA



Consiglio Nazionale
delle Ricerche

PNRR Project - Task 1500-1 | Progetto: EMM - Earth Moon Mars

High Performance Computing (HPC) platform and software for atmospheric applications

Hardware (c/o AdR CNR-FI, INO)

- Cluster for parallel computing (448 cores @ 2.85 GHz, 2048 Gb RAM)
- Server optimized for sequential processing (96 cores @ 3.6 GHz, 768 Gb RAM)
- Storage system 450 Tb, redundant
- Rack internal network @200 Gb/s, UPS

Software

- Various, characterized radiative transfer models
- Tools for spectral fluxes computation (angular integration of spectral radiance)
- Tools for instrument spectral response function convolutions

Applications and know-how

- Climate model runs and optimization of setup parameters
- Impact studies for satellite atmospheric remote sensing missions
- Optimization and study of the requirements for new remote sensing missions

Facility Images



Entrance of the HPC INO lab at AdR CNR-FI



Rack mount of the HPC system