Science Mission Operations

OVERVIEW

The Huntsville Operations Support Center provides systems and a distributed architecture for remote-user access to vehicle and science payload commanding, telemetry monitoring, voice and video management, and data distribution and storage.
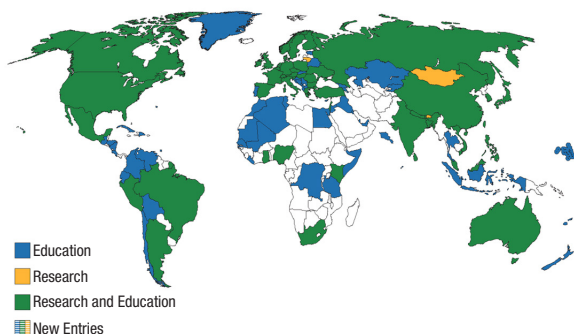
With major roles in the International Space Station, Space Launch System, and NEA Scout and Solar Cruiser Missions, we have broad experience, a deep heritage, and flight-proven hardware and software. We've hosted programs such as Commercial Crew in our quick-turnaround, configurable mission control areas and can host science mission systems hardware in our data center.

With 24/7/365 on-site support, physical security provided by Redstone Arsenal and Marshall Space Flight Center, and government standard IT security, we provide safe, secure, and reliable services. We have established partnerships with NASA's communications program. We support multiple missions simultaneously at high data rates, while still ensuring the data is sent safely to our users around the world.

Our operations software is user-friendly, reducing the amount of effort for training and maintenance. PMOD operations specialists translate science mission objectives and requirements into operations concepts, as well as execution and recovery procedures. Our planning experts map science mission needs to flight resources. In-house science operations specialists integrate operational controls into our ground and flight procedures to protect the crew, vehicle, and science.

We've helped more than **108 countries** perform science in space and ensure science objectives are met safely and efficiently.

SERVICES

- Turnkey operations areas
- Ready-to-use, configurable mission control rooms
- Global remote-user connectivity
- NASA spaceflight network connectivity
- Comprehensive data and voice communications solutions
- CCSDS standards development
- Delay/Disruption Tolerant Network technology development
- In-house, NASA imagery expertise
- 24/7/365 monitoring
- 24/7 help desk support
- Secure, safe, reliable facility
- Operations concepts and procedures development, logistics, and execution planning
- Science mission operations risk management
- Access to the Near Earth Network, Space Network, Deep Space Network, and other government or commercial ground stations

International Participation on ISS

- Education
- Research
- Research and Education
- New Entries

108 highlighted countries and areas have participated in ISS Research and Education Activities.

A facility of Marshall Space Flight Center's Payload and Mission Operations Division