



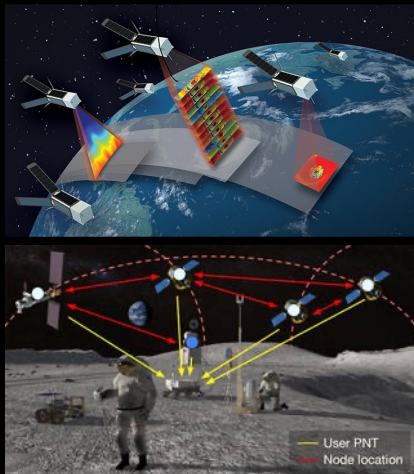
Distributed Systems Missions (DSM)

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DISTRIBUTED SYSTEMS MISSIONS

OBJECTIVE



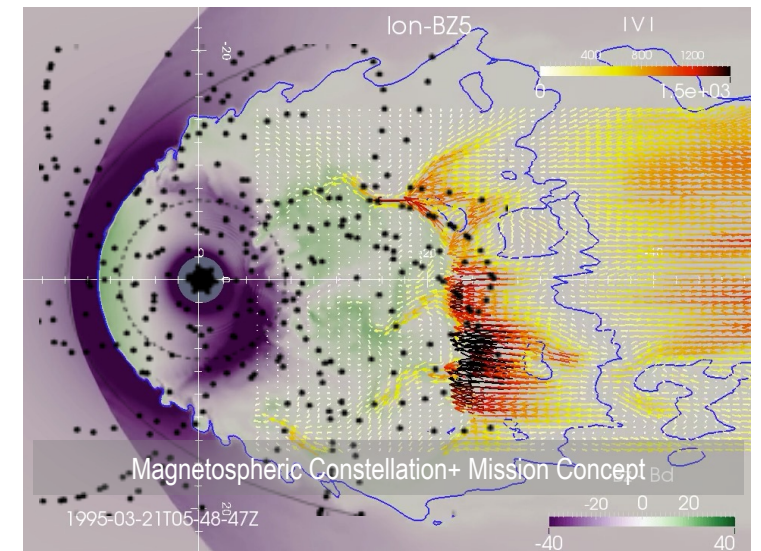
Moving missions towards a network-centric approach is transforming science benefit

Goal: Combine components, systems, instruments, data, models, and even other missions into a unified whole—and enable timely actions from fusion of the resultant knowledge

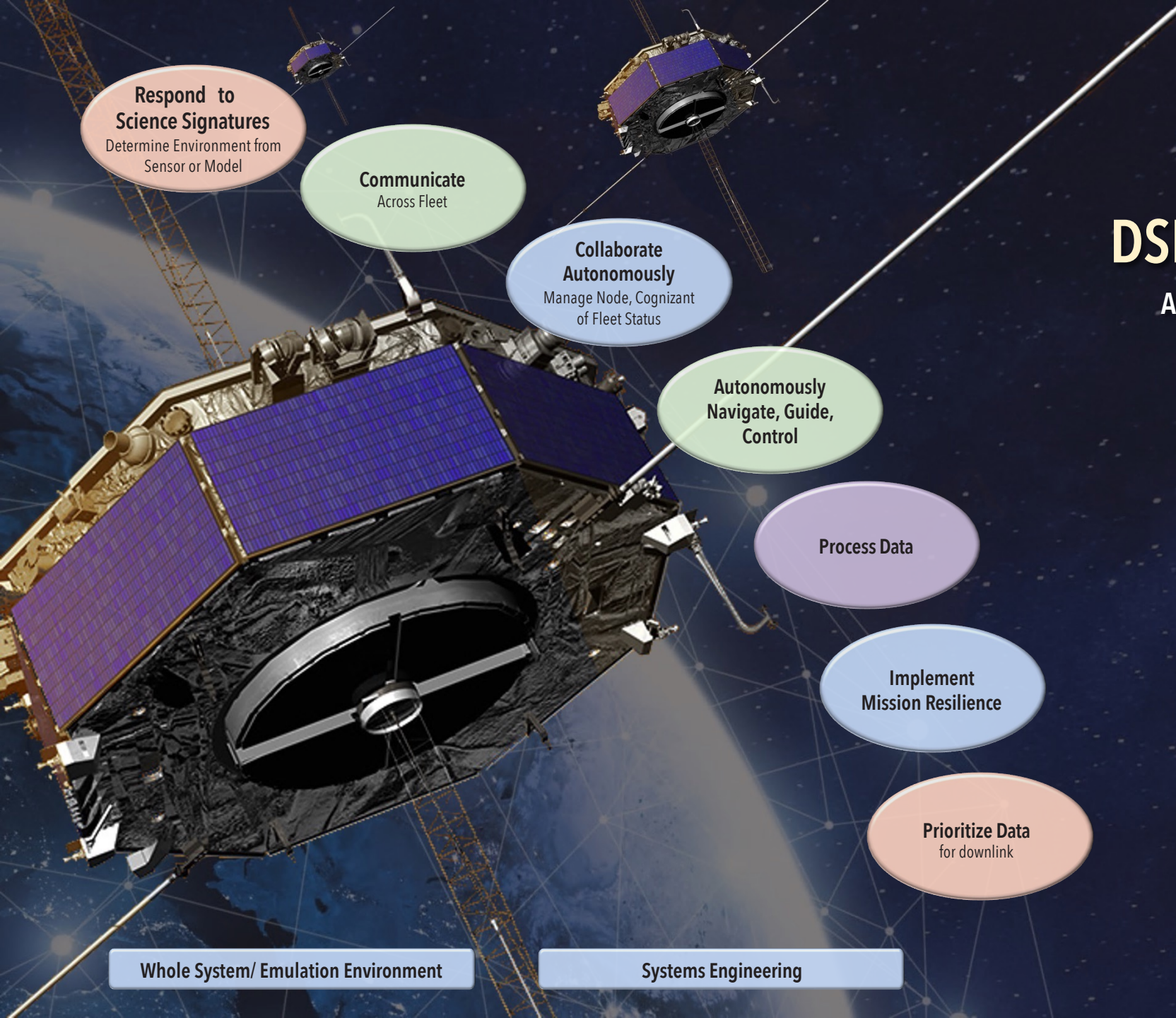


Collaboration. Cooperation. Communication. Agility. Resilience ...
Migrating effective human behaviors to space.

Science mission objectives are routinely achieved by cooperative dynamically-networked "anywhere-based" systems



Distributed assets collaboratively sense and respond to spatial and temporal dynamics of the magnetosphere.



DSM Enabling Capabilities

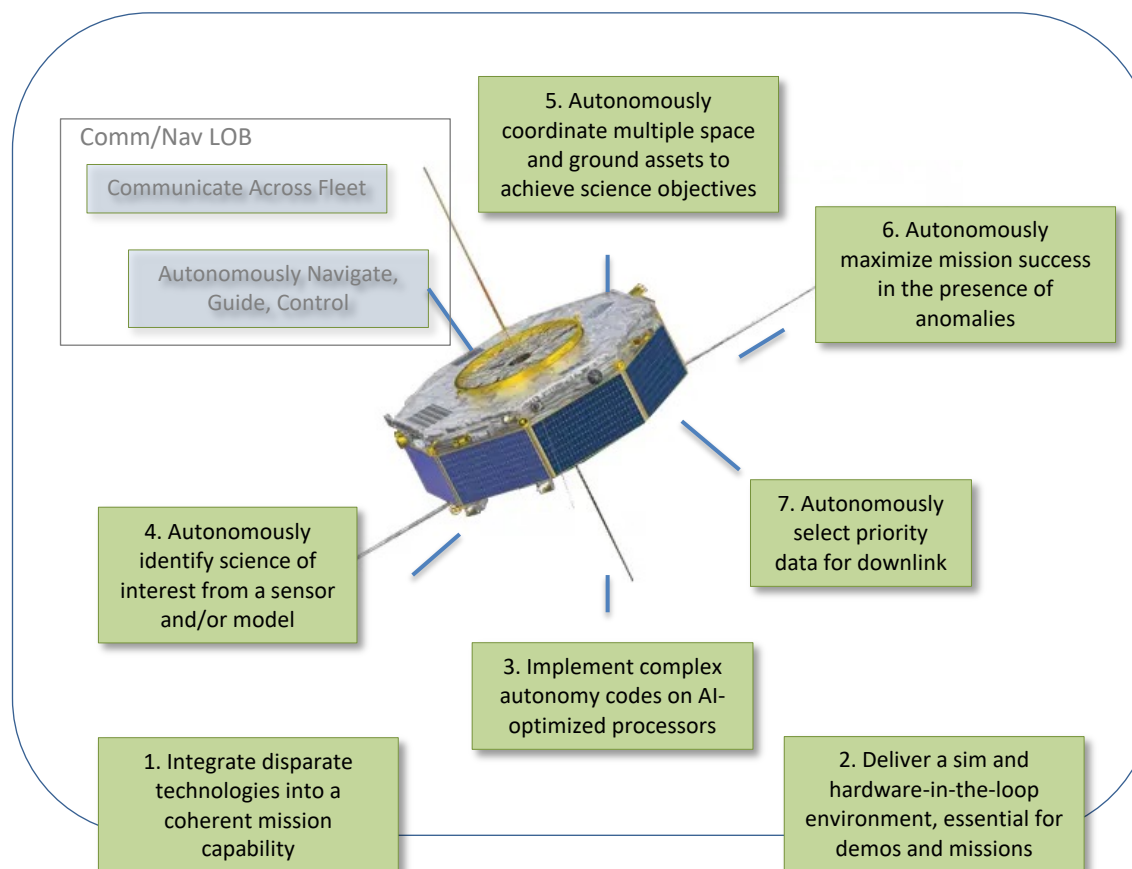
A project to integrate and field critical intelligent constellation-enabling capabilities.

A forest, not just trees ...

DSM Intelligent Constellation/ Coordinated Assets



A science enabling program comprised of coherently integrated projects



Goddard Distributed Systems Missions – Moving missions towards a network-centric approach

Combining components, systems, instruments, data, models, and other missions into a unified whole – enabling timely actions from fusion of the resultant knowledge

Implementation Plan- Concurrent Objective- and Capability Driven Approaches

Capability Development

Capability Integration
and Lab Demonstration

Integrated Field
Capability Demonstration

Mission Infusion



FY 2022

MMS Flight Demo

2023

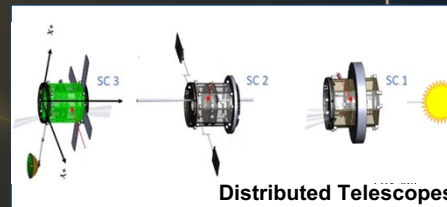
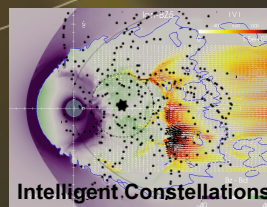
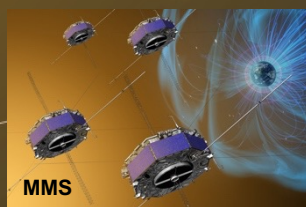
DSM Planetary Analogue

ISS Experiment

2024

Science mission objectives are routinely achieved by cooperative dynamically-networked "anywhere-based" systems

203x



Past

Present

Future