A recommendation of the NRC’s decadal survey in solar and space physics, published in 2002, was the Small Instrument Distributed Ground-Based Network, which would provide global-scale ionospheric and upper atmospheric measurements crucial to understanding the atmosphere-ionosphere-magnetosphere system. To explore the scientific rationale for this distributed array of small instruments (known as DASI), the infrastructure needed to support and make use of such arrays, and proposals for a deployment implementation plan, the NRC held a workshop of interested parties at the request of the National Science Foundation. This report presents a summary of that workshop focusing on the science and instruments, and on infrastructure issues. It describes the themes emerging from the workshop: the need to address the magnetosphere-ionosphere-magnetosphere ensemble as a system; the need for real-time observations; and the insufficiency of current observations.

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effort to develop nuclear power and propulsion systems for solar system exploration. This activity, renamed Project Prometheus in 2004, was initiated.

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