

IAF SYMPOSIUM ON ONGOING AND NEAR FUTURE SPACE ASTRONOMY AND  
SOLAR-SYSTEM SCIENCE MISSIONS (A7)  
Space Agency Strategies and Plans (1)

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THE U.S. NATIONAL ACADEMY OF SCIENCES DECADAL SURVEY FOR ASTRONOMY AND  
ASTROPHYSICS: PROCESS AND RESULTS

**Abstract**

One principal means by which NASA and related federal agencies engage the science community to identify and prioritize leading-edge scientific questions and the observations required to answer them lies in the task performed by the U.S. National Academy of Sciences (NAS) called a Decadal Survey. NASA and its partners ask the NAS to look out ten or more years into the future and prioritize research areas, observations, and notional missions with which to make those observations. The NAS convenes a committee of leading scientists to gather information from the general community and write a report. The Decadal Survey report provides the most important scientific goals and missions for the upcoming decade.

Nearly one hundred scientists typically are involved in the activity undertaken and guided by the NAS. The report general takes one and one-half years to produce and includes an extensive external report review process. All of these activities are taken independently of the sponsoring Agencies. The Decadal Survey report informs discussion about resource priorities at NASA, the White House, and Congress. It is used as both a "sword" and a "shield" in that it allows the scientific and engineering community to support new projects and research as well as defend ongoing efforts when budgets are constrained.

The Decadal Survey for astrophysics and astronomy will be completed in the second half of 2021. After reviewing the process for producing a decadal survey and how it applied specifically to the astrophysics and astronomy decadal survey, a summary of the report conclusions will be provided.