# Requesting and Using High-End Computing Time at NASA

## Overview

NASA operates two high-end computing facilities: the NASA Advanced Supercomputing Division (NAS) at Ames Research Center and the NASA Center for Climate Simulation (NCCS) at Goddard Space Flight Center. If your research is funded through NASA and you are affiliated with a U.S. organization, you may be eligible to use time on NASA's supercomputers.
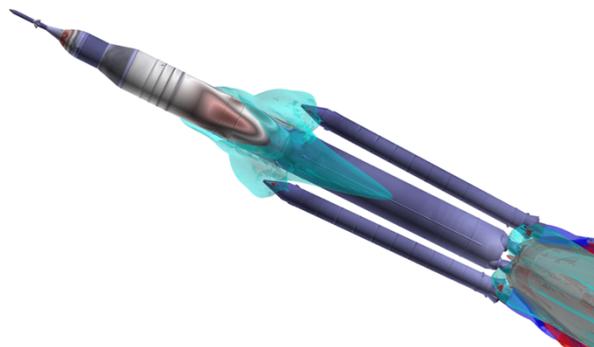
Researchers funded through the NASA Science Mission Directorate's (SMD's) Research Opportunities in Space and Earth Science (ROSES) are guaranteed a computing time allocation. Whether through ROSES or another mechanism, NASA funding is tightly coupled to your allocation. The allocation's size depends on system capacity, overall demand for resources, and other Agency priorities.

## Request Process

NASA High-End Computing uses the Request Management System (RMS) for computing time requests.

### Set Up an RMS Account

An RMS account is not the same as a NAS or NCCS account. Visit https://request.hec.nasa.gov to set up your RMS account and request a computing time allocation.

#### Who needs an account?

- Principal Investigator (PI): whoever holds the funding
- Computational PI (CPI): whoever is completing the request

> In RMS, click Management > Manage Team to assign these roles in your request

- NASA Program Managers: program officers who want visibility into their investigators' HEC requests

### Request Computing Time

NASA High-End Computing uses a single-step process for collecting multi-year requests.

#### Enter your request information:

- Investigator information.
- Computational project information—indicate whether this request continues an existing Group Identifier (GID).
- Funding information—your request will have the same duration as your funding.

> If your funding is from a competed solicitation like ROSES, the Funding Year is the same as the solicitation year.

- Requested allocation information in Standard Billing Units (SBUs)—RMS provides an SBU calculator.
- CPI assignment, if appropriate.

#### Wait for the allocation decision:

The SMD Allocation Authority meets quarterly; emergencies are dealt with on a case-by-case basis. Other Mission Directorates allocate at the beginning of the fiscal year; off-cycle requests are dealt with on a case-by-case basis. The PI will be notified when an allocation has been made and should share this information with their team(s) as appropriate.

**Manage your allocation:**
- Increase or decrease your allocation to fit your requirements.
- Request No-Cost Extensions and project closeouts.

## Set Up a NAS or NCCS Account

*A NAS or NCCS account is not the same as an RMS account.* Visit the NAS and NCCS websites for directions:
https://www.nas.nasa.gov/hecc/accounts/getaccounts.html
https://www.nccs.nasa.gov/nccs-users/instructional/account-set-up

Note: You must take IT Security training (specifically the current year's Cybersecurity and Privacy Awareness Training) in NASA's SATERN system for NAS or NCCS to approve your account and annually thereafter to maintain access.

## Submit Jobs

NAS and NCCS User Services can help you with technical details of submitting and processing jobs, as well as with analyzing and visualizing your results. Contact the appropriate team for more details.

## Manage Your Data

At the end of your computational project, please move your data to an appropriate archive or your home institution's storage resources in accordance with your project's data management plan.

## Get Help

### NASA High-End Computing Websites

NASA High-End Computing: https://www.hec.nasa.gov
NASA Advanced Supercomputing Division (NAS): https://www.nas.nasa.gov
NASA High-End Computing Capability (HECC): https://www.nas.nasa.gov/hecc
NASA Center for Climate Simulation (NCCS): https://www.nccs.nasa.gov

### User Services

For help requesting computing time, including questions about RMS: support@hec.nasa.gov
For help setting up and submitting jobs at NAS: support@nas.nasa.gov
For help setting up and submitting jobs at NCCS: support@nccs.nasa.gov



NASA/GMAO - GEOS Forecast Initialized on 00z 08/23/2022
Dust Aerosol Optical Thickness
072 hr forecast valid Fri 00z 2022-08-26