

Requesting and Using High-End Computing Time at NASA



Overview

NASA operates two advanced computing facilities through its High-End Computing (HEC) Program: the NASA Center for Climate Simulation (NCCS) at Goddard Space Flight Center and the NASA Advanced Supercomputing Division (NAS) at Ames Research Center. If your research is funded through NASA's Science Mission Directorate (SMD) and you are affiliated with a U.S. organization, you may be eligible to use time on NASA's supercomputers.

Researchers funded through NASA'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's HEC Program uses the Request Management System (RMS) for computing time requests.

1. Set Up an RMS Account

An RMS account is not the same as an NCCS or NAS 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.

2. Request Computing Time

The HEC Program 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 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. Note: Only the PI can submit the request. The CPI can prepare the request, but the PI must submit it.

Change your requested allocation:

- Increase or decrease your allocation.
- Request no-cost extensions and project closeouts.

Wait for the allocation decision:

- The SMD Allocation Authority meets quarterly; emergencies will be 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.

3. Set up an NCCS or NAS Account

An NCCS or NAS account is not the same as an RMS account. Visit the NCCS and NAS websites for directions:

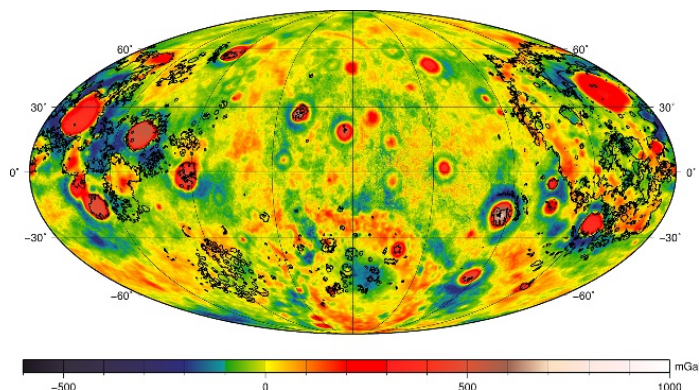
<https://www.nccs.nasa.gov/nccs-users/instructional/account-set-up>

<https://www.nas.nasa.gov/hecc/accounts/getaccounts.html>

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

Submit Jobs

NCCS and NAS 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

• HEC Websites

NASA High-End Computing (HEC) Program: <https://hec.nasa.gov>

NASA Center for Climate Simulation (NCCS): <https://www.nccs.nasa.gov>

NASA Advanced Supercomputing Division (NAS): <https://www.nas.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 NCCS: support@nccs.nasa.gov

For help setting up and submitting jobs at NAS: support@nas.nasa.gov