

NSF 24-024

Dear Colleague Letter: National Discovery Cloud for Climate Opportunities

December 1, 2023

Dear Colleagues:

The National Discovery Cloud for Climate (NDC-C) is a National Science Foundation (NSF) initiative to pilot efforts to build an integrated national-scale cyberinfrastructure capable of supporting end-to-end climate research and education. NDC-C goals include the development, augmentation, and integration of the following in support of the climate research and education communities:

- Cyberinfrastructure middleware and front-end software systems to support access to and integration of distributed climate data, software, and computing resources.
- Data-centric cyberinfrastructure for publishing, discovering, accessing, and transferring climate research data.
- Cyberinfrastructure-based training and workforce development.
- Cyberinfrastructure professional networks to support climate research and education communities.
- Cybersecurity systems for the security and trustworthiness of climate research systems and workflows.

This Dear Colleague Letter expresses the interest of the Office of Advanced Cyberinfrastructure (OAC) in receiving proposals relevant to the NDC-C goals described above to the following existing programs:

- Cyberinfrastructure for Sustained Scientific Innovation (CSSI)
 - Program Page: https://new.nsf.gov/funding/opportunities/cyberinfrastructuresustained-scientific
 - Current Solicitation: https://www.nsf.gov/publications/pub_summ.jsp?
 WT.z pims id=505505&ods key=nsf22632
- Training-based Workforce Development for Advanced Cyberinfrastructure (CyberTraining)

- Program Page: https://new.nsf.gov/funding/opportunities/training-based-workforcedevelopment-advanced
- Current Solicitation: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23520
- Strengthening the Cyberinfrastructure Professional Ecosystem (SCIPE)
 - Program Page: https://new.nsf.gov/funding/opportunities/strengtheningcyberinfrastructure-professionals
 - Current Solicitation: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23521
- Cybersecurity Innovation for Cyberinfrastructure (CICI)
 - Program Page: https://new.nsf.gov/funding/opportunities/cybersecurity-innovationcyberinfrastructure-cici
 - Current Solicitation: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23517

To be considered, please include "National Discovery Cloud for Climate" as a keyword at the end of the Overview section of the Project Summary and a description of the relevance of the proposed work to NDC-C goals for climate research-centric Cl in the Project Description section of the proposal.

Prospective principal investigators interested in submitting to the above programs are strongly encouraged to contact the relevant cognizant program officers to discuss their proposals' relevance to NDC-C.

For general inquiries about the National Discovery Cloud for Climate, please email ndccqueries@nsf.gov.

Sincerely,

Margaret Martonosi Assistant Director, NSF CISE