

## See how CUIT Research Computing Services can help you with your research needs.

CUIT's Research Computing Services (RCS) team provides information technology infrastructure to empower Columbia University's research community, and acts as a liaison between researchers and resources like the Office of Research Initiatives and the Libraries/Information Services, to support our continued reputation as a driver of innovation.



### HPC Open Lab

The RCS Staff holds HPC Open Lab the first Monday of every month from 3pm to 5pm.

Science & Engineering Library  
Northwest Corner Building  
550 W. 120 Street

### Appointments

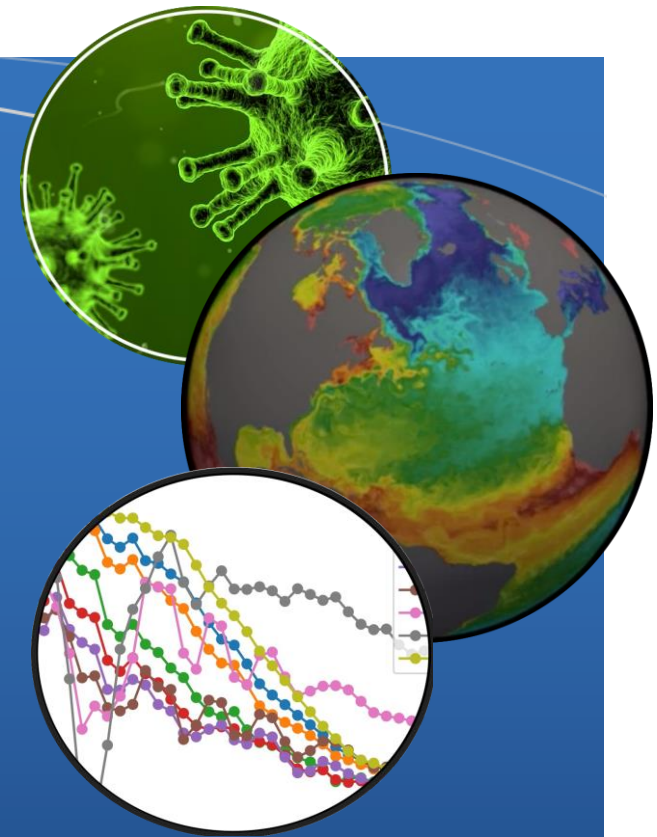
The RCS Staff are available for consulting and small-group training on request.

### Email

[rcs@columbia.edu](mailto:rcs@columbia.edu)

### Web

[rcs.columbia.edu](http://rcs.columbia.edu)



# Research Computing Services



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The Research Computing Services (RCS) division of CUIT provides access to resources designed to assist you with your research computing needs. With a dedicated staff, we can assist faculty to help decide what solution is best for your research.

Our goal is to facilitate enhanced research productivity by providing centralized support, thus allowing researchers to concentrate on their research.

## Shared High Performance Computing (HPC)

- RCS centrally manages HPC resources on the Morningside campus. Options for access include annual purchase cycles, rental, or free shares. It is also available for classes.

**Amazon Web Services (AWS)** - RCS can provide consulting to help you get started with AWS services. (no fee)

**Extreme Science and Engineering Discovery Experiment (XSEDE) and Blue Waters** - We can provide assistance to Columbia faculty members and postdoctoral researchers who are eligible PIs to obtain access to an allocation. (no fee)

**Contact us at [rcs@columbia.edu](mailto:rcs@columbia.edu)  
or visit [rcs.columbia.edu](http://rcs.columbia.edu)**

**Secure Data Enclave (SDE)** - The SDE is a platform available to work on highly secure data sets. The SDE is certified for PHI and HIPAA data. (fee)

**Globus** - CUIT has a standard site license for Globus endpoints for secure research data transfer. (no fee)

**Electronic Lab Notebooks** - for your lab, classroom, or any type of document storage and collaboration. (no fee)

[labnotebooks.columbia.edu](http://labnotebooks.columbia.edu)

**Embedded Research Computing Support** - on-site support tailored to the needs of the group. (fee)

$$\begin{aligned} & \sum_{i=1}^r \langle \mathcal{A}_i(X^* - X_i) + \mathcal{A}_i^T(X^* - X_i), R_i^0 \rangle \\ & - \beta_0 \sum_{i=1}^r \|R_i^0\|^2 + \beta_0 \frac{\sum_{i=1}^r \|R_i^0\|^2}{\|P_0\|^2} \|P_0\|^2 \\ & = \sum_{i=1}^r \langle \mathcal{A}_i(X^* - X_i), R_i^0 \rangle = \sum_{i=1}^r \langle E_i - \mathcal{A}_i(X_i), R_i^0 \rangle \end{aligned}$$

**Storage** - storage needs and costs vary widely. Please visit our website for up-to-date options.

**Code Ocean** - for collaborating, encapsulating, and publishing your research code and data. Pilot starting in January 2019.

**Foundations for Research Computing** - informal training for students to develop fundamental skills for harnessing computation.

[rcfoundations.research.columbia.edu](http://rcfoundations.research.columbia.edu)