Welcome the Smithsonian Institution High Performance Computing Wiki.

This Wiki holds information for the use of HPC resources at the Smithsonian.

Central to the SI HPC resources is the Smithsonian Institution High Performance Cluster (SI/HPC), named Hydra.

- High performance computing is administered by the Office of Research Computing within OCIO.
- The OCIO Herndon Data Center in Herndon, VA houses the high performance computing cluster, Hydra.

- The documentation is organized as follows:
  - Overview;
  - Citing/Acknowledging Hydra;
  - What's New;
  - Policies;
  - Hydra Training;
  - Quick Start guide;
  - Reference pages;
  - FAQs;
  - Cluster Upgrades

- The complete documentation can be downloaded as a PDF document (200+ pages).

What's New

- May 7, 2024 - Hydra has been upgraded to Linux Rocky 8.9 and 15 new compute nodes have been added.
  - See the "2024 Cluster Upgrade to Hydra-7" page for details.
  - Please take the time needed to read these pages before contacting us for support.

- If you have any questions or encounter any problems, email:

<table>
<thead>
<tr>
<th>Email</th>
<th>For</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:SI-HPC-Admin@si.edu">SI-HPC-Admin@si.edu</a></td>
<td>for sys-admin related issues,</td>
</tr>
<tr>
<td><a href="mailto:SI-HPC@si.edu">SI-HPC@si.edu</a></td>
<td>for non-SA0 users who need help,</td>
</tr>
<tr>
<td><a href="mailto:hpc@cfa.harvard.edu">hpc@cfa.harvard.edu</a></td>
<td>for SA0 users who need help.</td>
</tr>
</tbody>
</table>

- Past news with more details can be found at the What's New page.

Quick Links

- Cluster Status Page at SAO
- Cluster Status Page at OCIO*
- QSub Generator *

*: these pages are only accessible from trusted machines: within SI or SAO networks, or using VPN.

Reminder

- References to Hydra (publications, proposals, etc.) should mention the cluster as:

  Smithsonian Institution High Performance Computing Cluster. Smithsonian Institution. [https://doi.org/10.25572/SIHPC](https://doi.org/10.25572/SIHPC).

- or as an acknowledgment:

  '(Some of) [T]he computations in this paper were conducted on the Smithsonian High Performance Cluster (SI/HPC), Smithsonian Institution. [https://doi.org/10.25572/SIHPC]'.