In 2020 the Heliophysics Technology Program was put in place

**Vision:**
- Enable New Realms of Heliophysics Knowledge and Capability

**Mission:**
- Advance science by disrupting the limits of what is measurable, observable and achievable in Heliophysics. With space-based advanced instrumentation capability, improved methodologies and novel mission concepts, set the tone for the future of the field, enabling science and missions that are not conceivable or achievable today.

**Heliophysics Technology Strategic Goals**
- Invest in novel and transformative technologies and mission concepts
- Improve the likelihood of technological and scientific success
- Optimize the return of our investment
Heliophysics Technology Solicitations

- **ROSES Heliophysics Technology and Instrument Development for Science (HTIDS)**
  - Released annually on Feb 14th
  - Solicits instrument technology development (ITD) and laboratory nuclear, atomic and plasma physics (LNAPP) proposals
  - Updated annually to incorporate new initiatives (non-Heliophysics technologists, high risk/high impact, space working environment...)

- **ROSES Heliophysics Flight Opportunities Studies (HFOS)**
  - Released annually on Feb 14th
  - Solicits pre-phase A studies of novel mission concepts
  - One year seed funding

- **Small Business Innovation and Research (SBIR)**
  - Heliophysics topic, two subtopics

- **Future Investigators in NASA Earth and Space Science Technology (FINESST)**
  - Graduate student projects that contribute to science, technology, and exploration goals
ROSES Heliophysics Low-Cost Access to Space (HLCAS)

- Released annually on Feb 14th
- Goal is Heliophysics Science investigations on sounding rockets and balloons
- Technology maturation on low-cost flight platforms a future goal of the Heliophysics Technology Program
In 2022 the Heliophysics Strategic Technology Office (HESTO) was put in place

HESTO was competitively selected and implemented at the Wallops Flight Facility (WFF)

- Active management of technology projects
  - Value-added management oversight of each technology investigation to nurture, advance, and infuse matured technologies into future science missions.
  - Conduct quarterly status review with our principal investigators
- Conduct periodic technology gap and trend analysis
  - Invest in the right technologies (the first gap and trend analysis was published in June 2023)
- Engage and Inform the community
  - Develop a virtual institute to inform the community (in works)
  - Conduct annual technology symposia (the first technology symposium was held on Oct 18-19, 2023)
  - Publish annual technology highlights report (in works)
  - Put in place the Heliophysics Technology Program Analysis Group (H-TPAG) (ToR has been signed)
56 Active Projects

94 Students

40 Universities

3 First-Time PIs

3 Federal Agencies & FFRDCs

4 NASA Centers

10 Mission Studies (H-FOSS)

3 Special Projects

9 Laboratory Studies (LNAPP)

43 Technology Development (H-TiDeS)

34 Instrument Technology Development (ITD)

33 PI Institutions

6 Non-Heliophysics PIs

51 Co-I Institutions

21 PI States

20 Co-I States

141 Co-Is

Co-I/Collaborator Countries

USA

BEL

JAP

SUI