

**Opportunity Title:** Magnetosphere-Ionosphere-Thermosphere Coupling through Electrodynamic and Ionospheric Outflow

**Opportunity Reference Code:** 0216-NPP-NOV23-GSFC-HelioSci

**Organization** National Aeronautics and Space Administration (NASA)

**Reference Code** 0216-NPP-NOV23-GSFC-HelioSci

**Application Deadline** 11/1/2023 6:00:59 PM Eastern Time Zone

**Description** The Magnetosphere-Ionosphere-Thermosphere system is coupled through both electrodynamic effects (e.g. field-aligned currents, convection flows, and Joule heating) and escape processes (e.g. ion and neutral upwelling, wave heating, and ambipolar electric fields). Magnetospheric inputs such as particle precipitation play a major role in the resulting ionospheric conductances and ionospheric escape, which in turn affect magnetospheric processes. Ongoing research seeks to quantify, understand, and model feedback these effects throughout the system. The upcoming GDC mission will enable new understanding of the role of the thermosphere plays in these processes. The candidate will engage in research involving theory, data analysis, and/or modeling studies of electrodynamic or ionospheric escape within the magnetosphere-ionosphere-thermosphere coupled system.

**Location:**

Goddard Space Flight Center  
Greenbelt, Maryland

**Field of Science:**Heliophysics Science

**Advisors:**

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**Applications with citizens from Designated Countries will not be accepted at this time, unless they are Legal Permanent Residents of the United States.** A complete list of Designated Countries can be found at: <https://www.nasa.gov/oiir/export-control>.

Eligibility is currently open to:

- U.S. Citizens;
- U.S. Lawful Permanent Residents (LPR);
- Foreign Nationals eligible for an Exchange Visitor J-1 visa status; and,



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- Applicants for LPR, asylees, or refugees in the U.S. at the time of application with 1) a valid EAD card and 2) I-485 or I-589 forms in pending status

**Eligibility Requirements**

- **Degree:** Doctoral Degree.