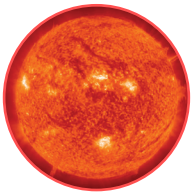
National Aeronautics and Space Administration

Sounding Rocket Mission Fact Sheet

Mission: Solar eruptioN Integral Field Spectrograph (SNIFS)
Mission Number(s): 36.372 US
Principal Investigator: Dr. Chamberlin/University of Colorado
Launch Date: July 17, 2025
Launch site: White Sands Missile Range, NM



Science Discipline:
Solar Physics

Description

The goal of the SNIFS sounding rocket is to study the high frequency dynamics associated with small - nanoflares, spicules, Rapid Blueshifted Excursions (RBEs) - and large solar flare energy releases in the lower solar atmosphere.

The SNIFS instrument will also try to answer the following questions:

- What does the heterogeneous structure of the chromosphere tell us about energy and mass flow upwards and downwards?
- Which magnetohydrodynamic (MHD) or non-magnetohydrodynamic processes generate high-frequency dynamics in the chromosphere and transition region?
- How does the non-equilibrium state of hydrogen affect the energy budget of the chromosphere?

SNIFS will also prove new technology:

- Mirrorlet Integral Field Spectrograph
- 4MP CMOS detector and software