

## Some Current and Upcoming Ionosphere/Thermosphere SmallSat and Hosted Payloads

Mission	On-orbit Estimate	Mission Purpose
AERO	>=2022	Nature and source of auroral radio emissions
CIRCE	2022-TBD	2 s/c measure ionosphere and particle radiation
DALI	2022	Measure dayglow to determine composition
LAICE	TBD	Atmospheric gravity waves
petitSat	2022 - 2023	Link between MSTIDs and plasma density enhancements
LLITED	2022-2023	ETWA and EIA coupling
SPORT	2022-2023	Conditions leading to low-latitude scintillation
SWARM-EX	2023 – 2024	ETWA and EIA coupling
GPX-2	2022-2023	Upward TEC data
APEX	>=2022	Understand the influence of the magnetosphere on upper atmosphere through energetic particle precipitation
CANVAS	>=2022	VLF wave energy from lightning and ground-based transmitters
Dione	>=2022	Responses of IT to magnetosphere energy
3U <sup>3</sup>	>=2022	Measures precipitating electrons and UV emissions in auroral Cusp regions