

Pandora provides unique, continuous dual-band data to determine stellar photosphere properties and disentangle star and planetary signals in transmission spectroscopy.

Mission Overview	
Launch Date	Mid-2020s
Payload	Telescope (0.45m)
Channels	Visible photometry
	IR spectroscopy
Orbit	Sun-sync LEO
Science Operations	1+ years

## Visible channel ← simultaneous → Wavelength IR channel Time-varying star brightness Time varying spectrum What do we (in IR band where water is (in visible band where stellar measure? strong molecular absorber) variability has high contrast) What do Star spot and faculae brightness contrasts (from visible) and covering measurements fractions (from Vis+IR) as a function of time & stellar rotation provide? Stellar atmosphere contribution Star-corrected planet spectrum What do we to planetary spectrum + deeper revealing composition of intrinsic understanding of stellar planetary atmospheres (water, learn? hydrogen, clouds) heterogeneity Why are the Pandora will produce the first long-duration dataset with simultaneous visible photometry and IR spectroscopy of exoplanets and their host stars. data unique?

Pandora will inform JWST exoplanet transmission spectroscopy

analyses, and operate concurrently with JWST.

Why Now?