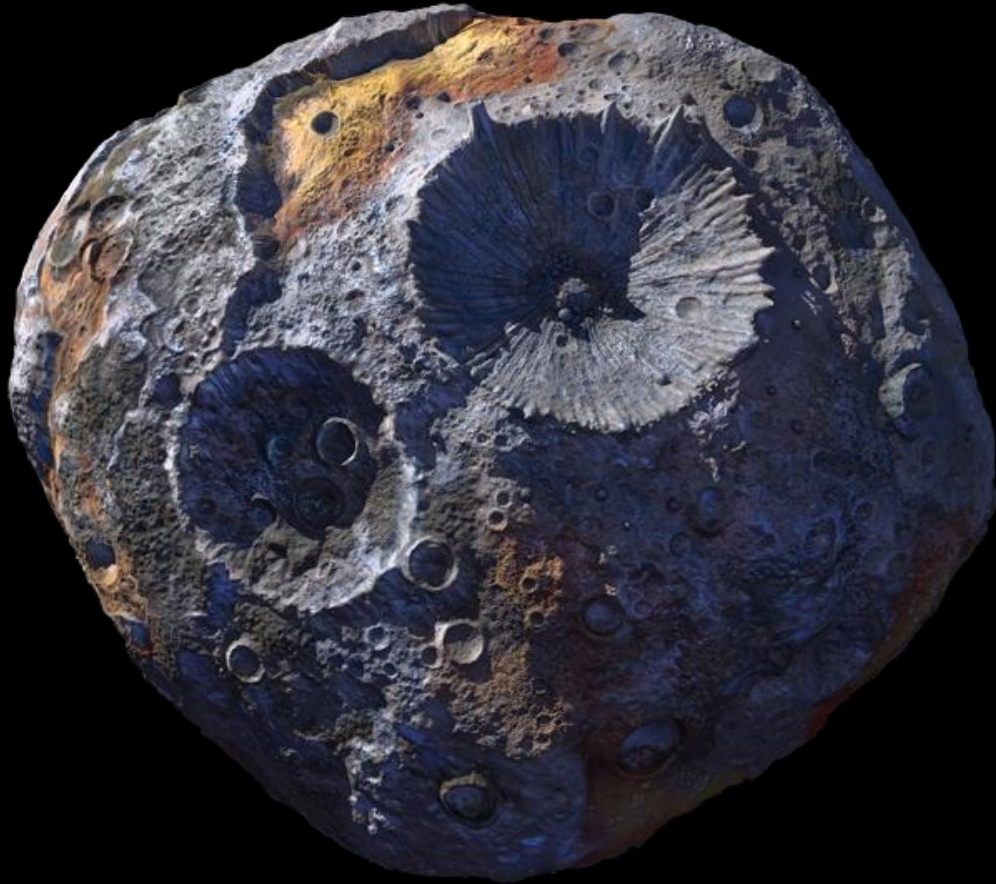


# Evidence of (16) Psyche's Metallic Nature Found with SOFIA



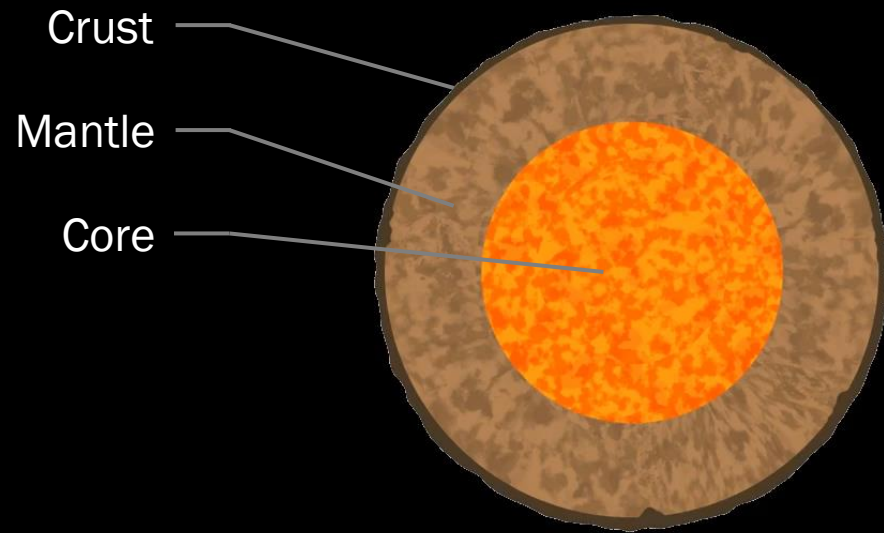
Anicia Arredondo<sup>1</sup>, Maggie McAdam<sup>2</sup>,  
and Tracy Becker<sup>1</sup>

<sup>1</sup> Southwest Research Institute, San Antonio, TX

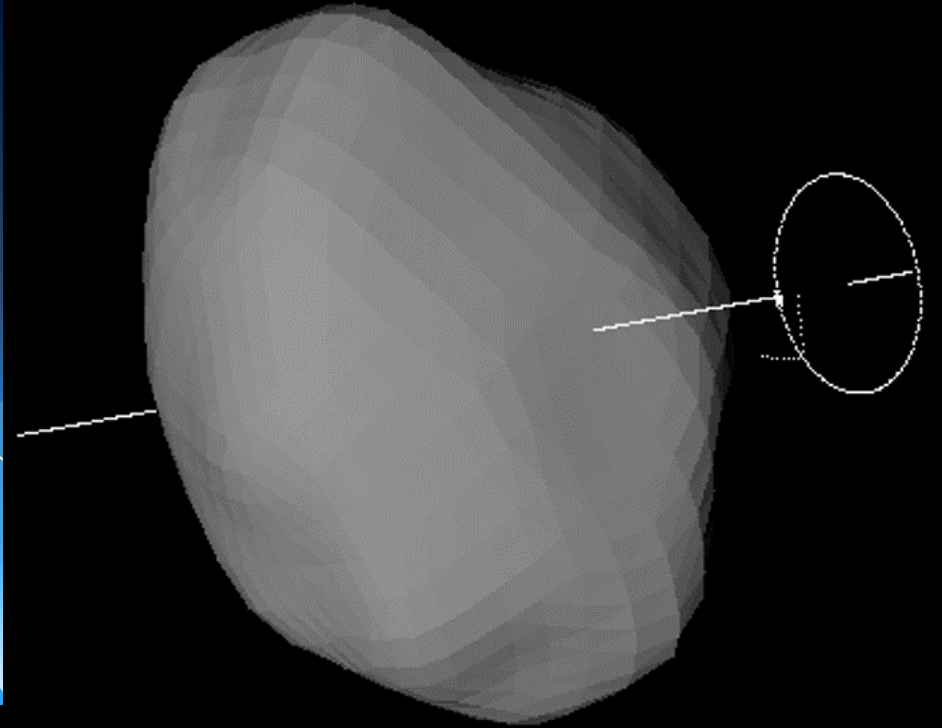
<sup>2</sup> NASA Ames Research Center, Moffat Field, CA

✉ [aarredondo@swri.org](mailto:aarredondo@swri.org)

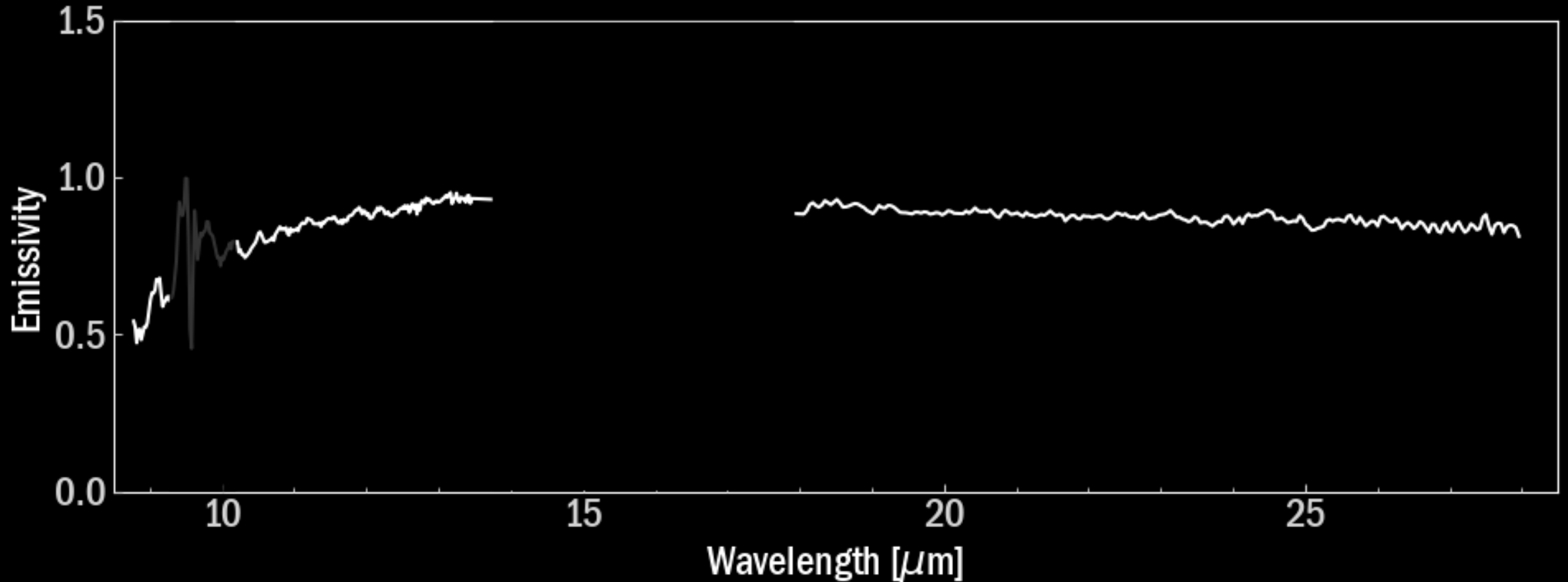
# Psyche is thought to be a metal core of a protoplanet



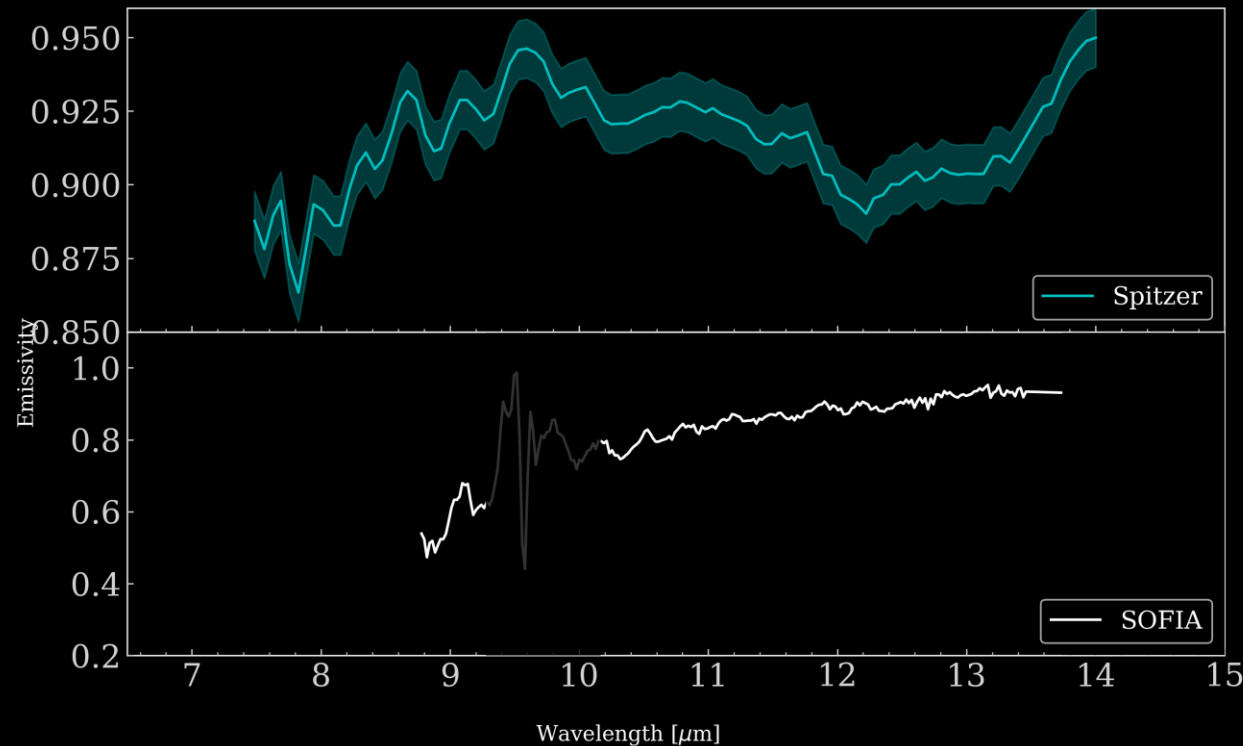
# SOFIA obtained data over an entire rotation period



# The SOFIA data is featureless, consistent with a metal surface



# Our data differs from previously published data, suggesting a North-South dichotomy



Small grains of rock

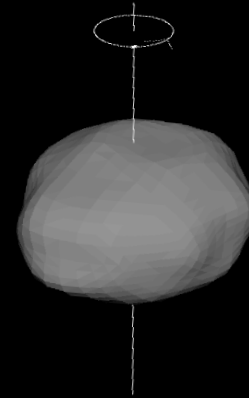
Metal

Spitzer  
SOFIA

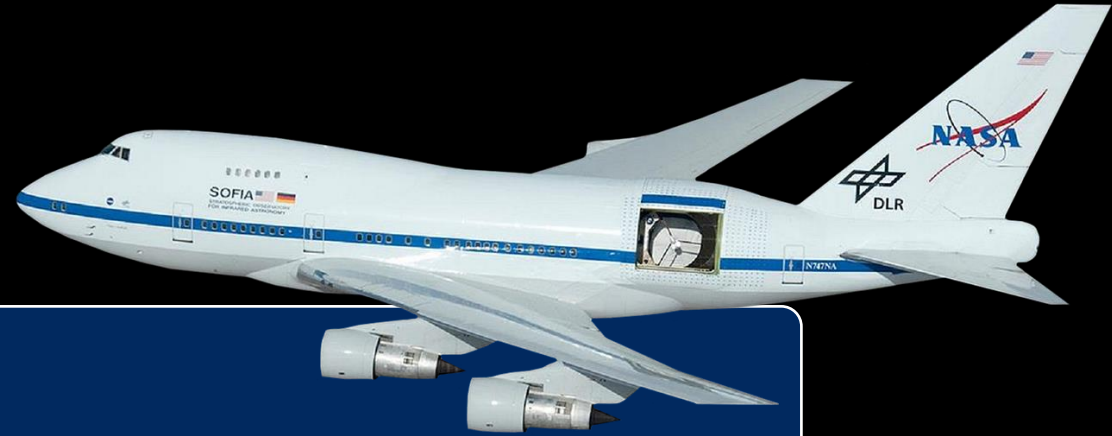
South pole

North pole

NASA's  
Psyche  
mission will  
be able to  
test our  
hypotheses



# Summary



SOFIA obtained Psyche data in 2022

The SOFIA data is featureless, consistent with a metal surface

Differences between our data and previous observations suggest a North/South compositional dichotomy

NASA's Psyche mission will test our hypotheses

