

HORIZON EUROPE · TEAMING FOR EXCELLENCE · PHASE 2

SPACE ✦ Crete

CRETAN CENTRE OF EXCELLENCE IN EMERGING SPACE TECHNOLOGIES

SHAPING THE FUTURE FROM CRETE

Info Day Heraklion · 2/10/2026

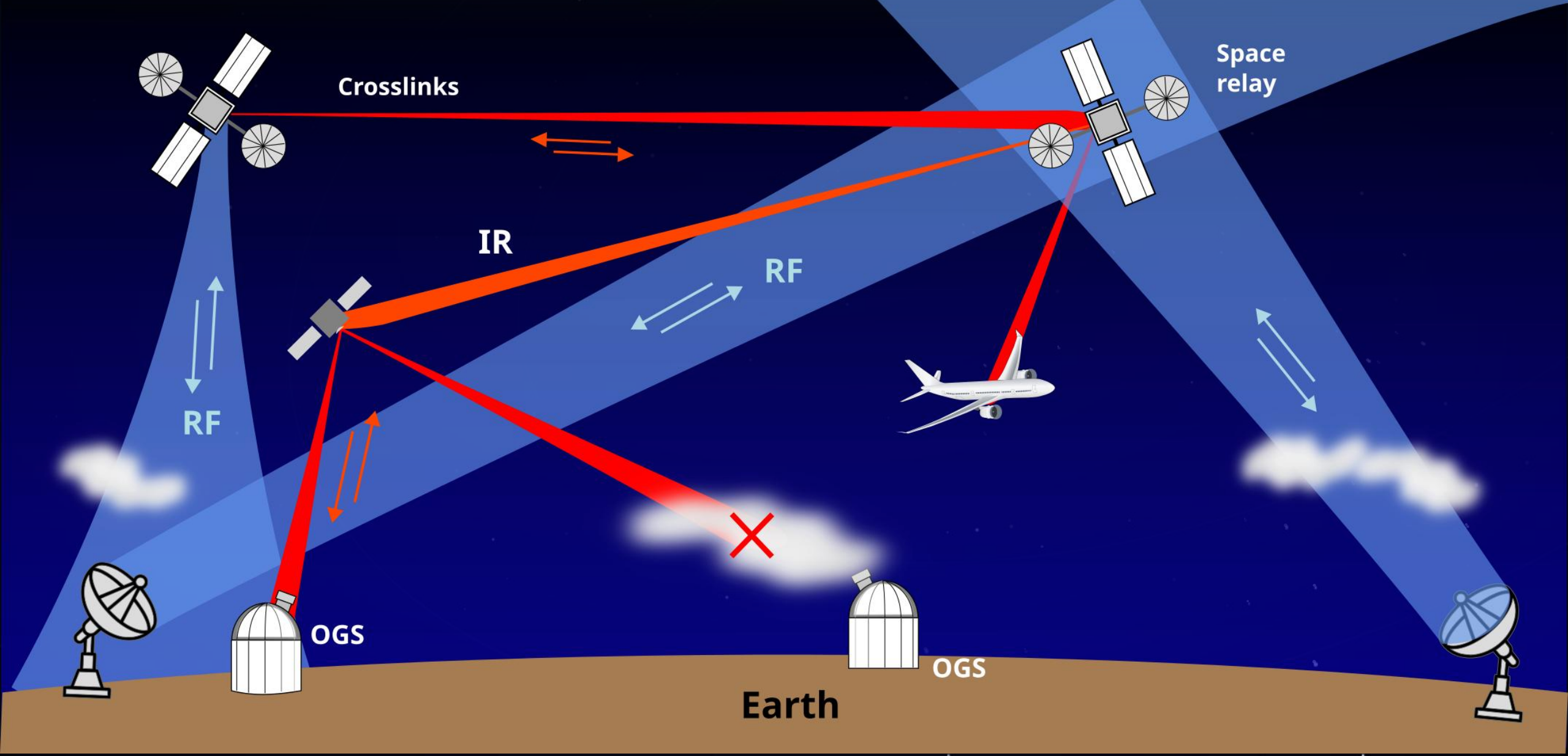
Optical/Quantum Sensing and Communications



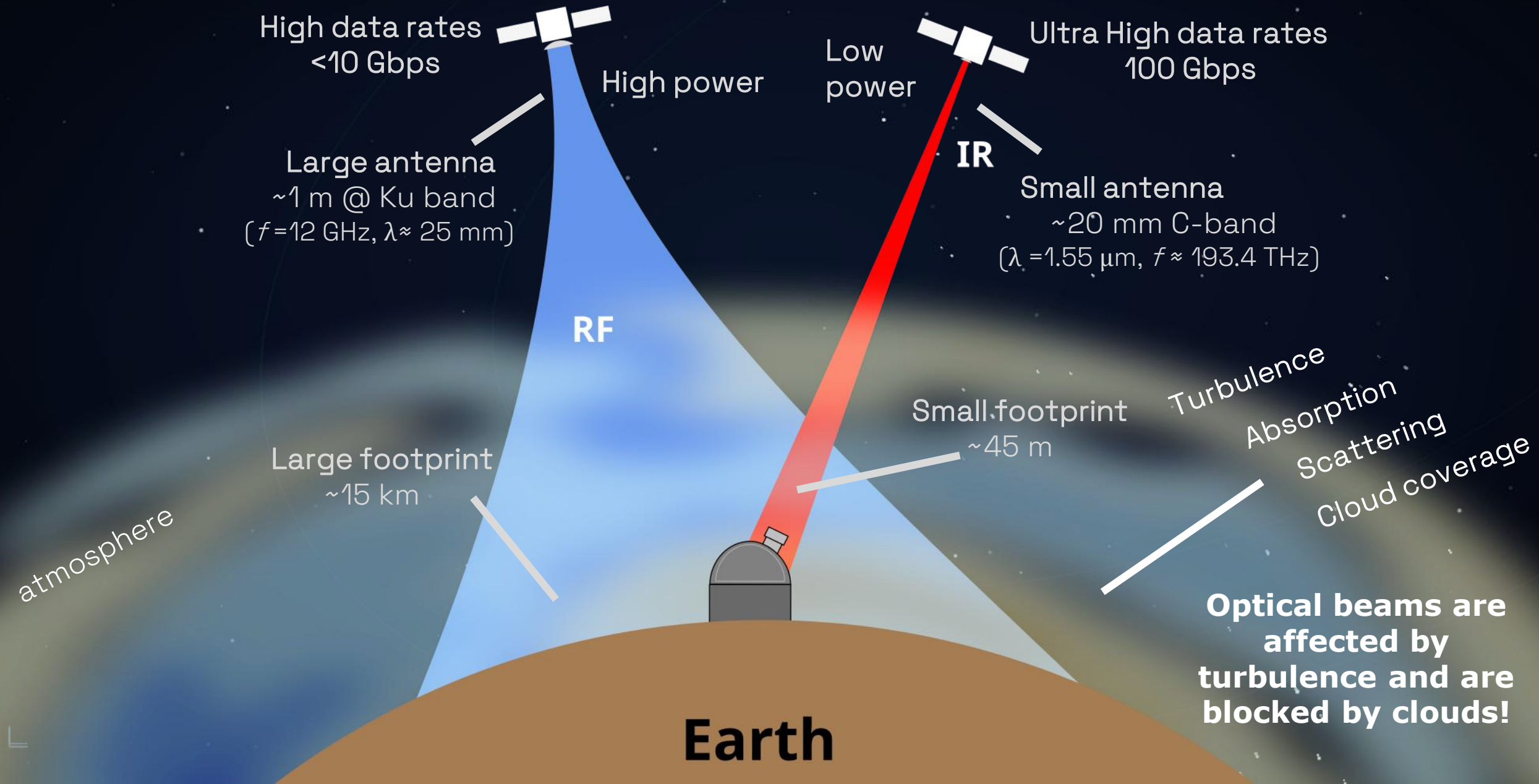
HERAKLION · CRETE
35.30° N 25.07° E



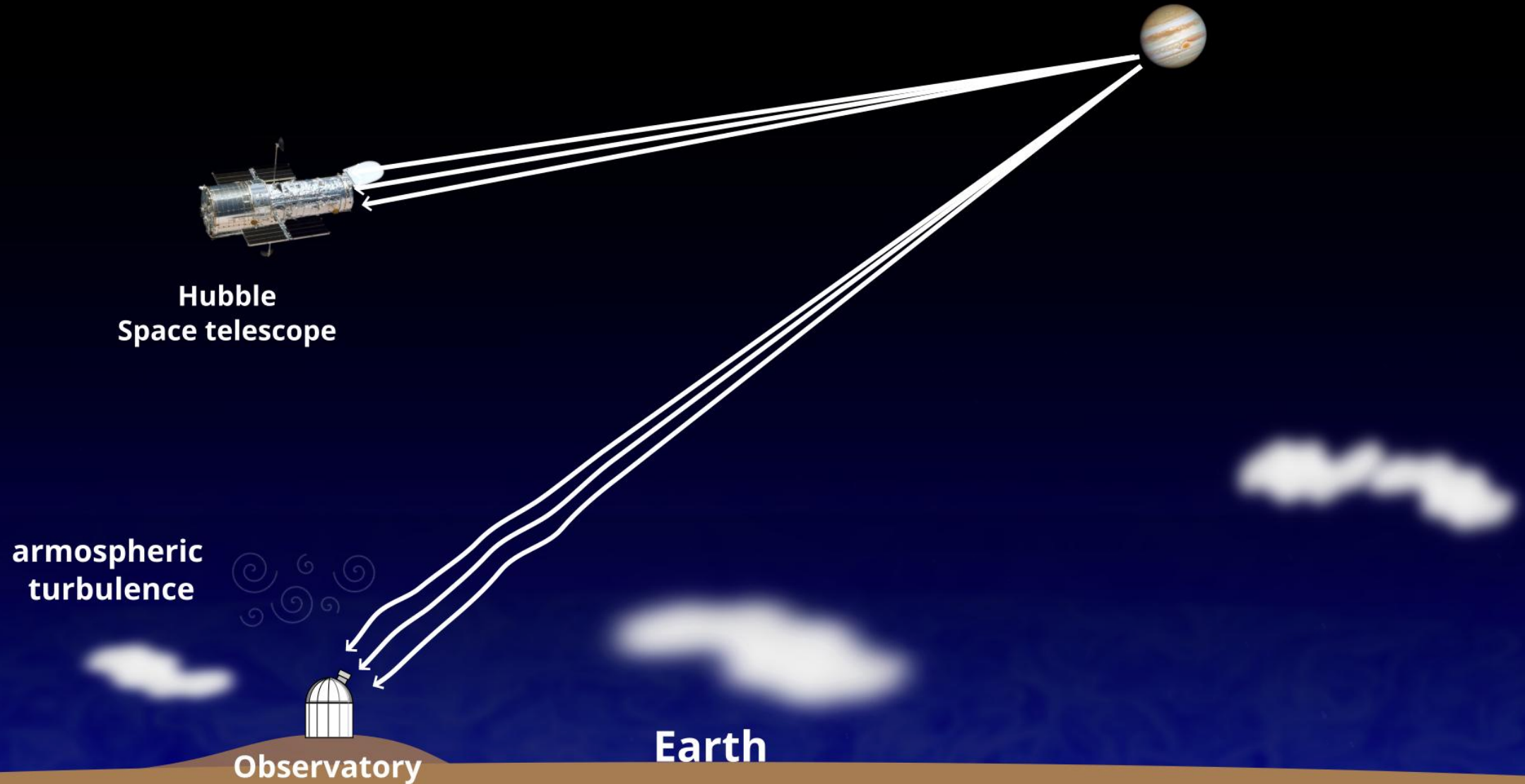
Using E/M waves to communicate in free space



Transitioning from Radio Frequency (RF) to Optical telecoms



Astronomical Observatories in the era of space telescopes

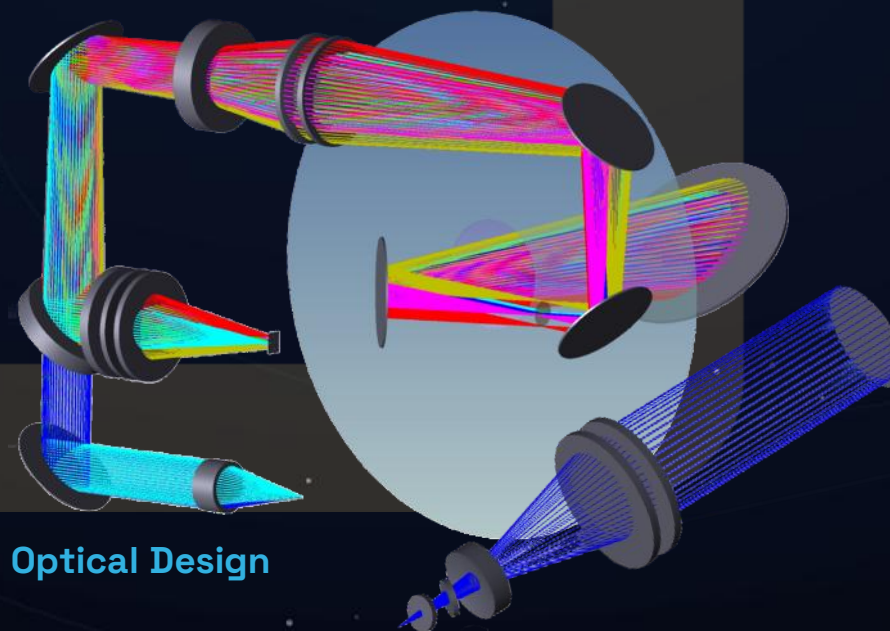
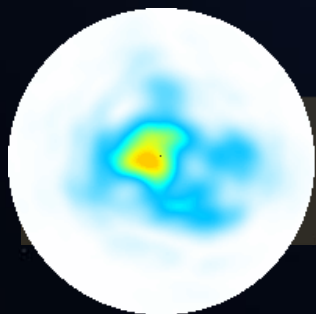


TRACK RECORD · FRONTIERS 1 & 2

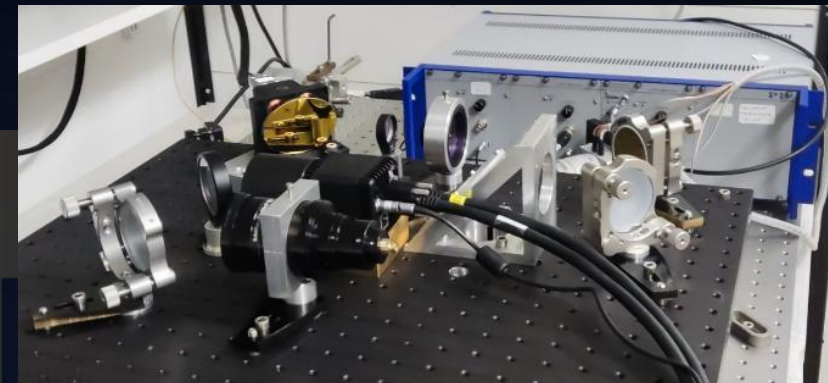
Skinakas Observatory upgrade for optical & quantum communication



Studying Light Propagation
Through Turbulence



Optical Design



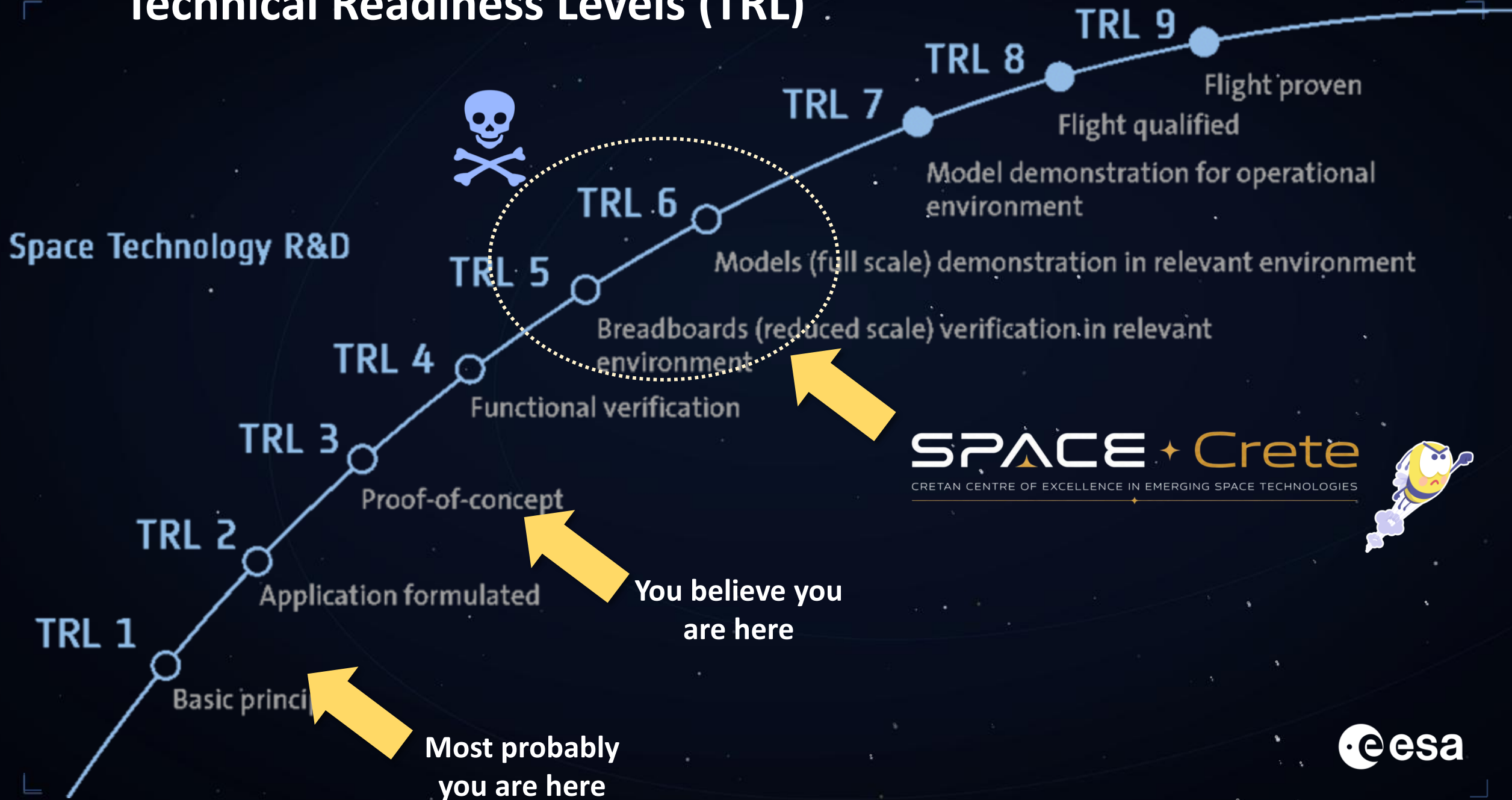
Lab Prototype



Telescope Upgrade



Technical Readiness Levels (TRL)



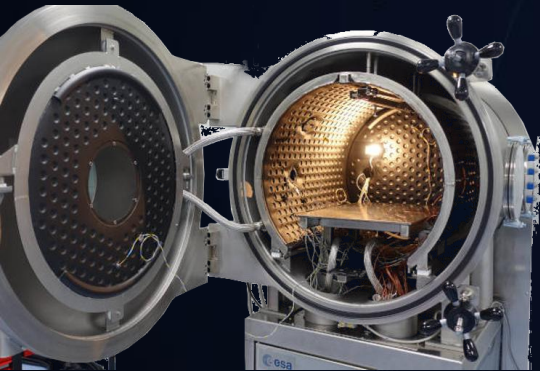
Environmental Testing Facility

TRL 5

Verification in a relevant environment

TRL 6

Demonstration in a relevant environment



Thermal vacuum chamber
for testing under cryogenic/high-vacuum condition

Vibration shaker
to simulate launch environments

EMI/EMC test chamber
for small payload testing

Vacuum oven
for bake-out, curing glue and other processes

