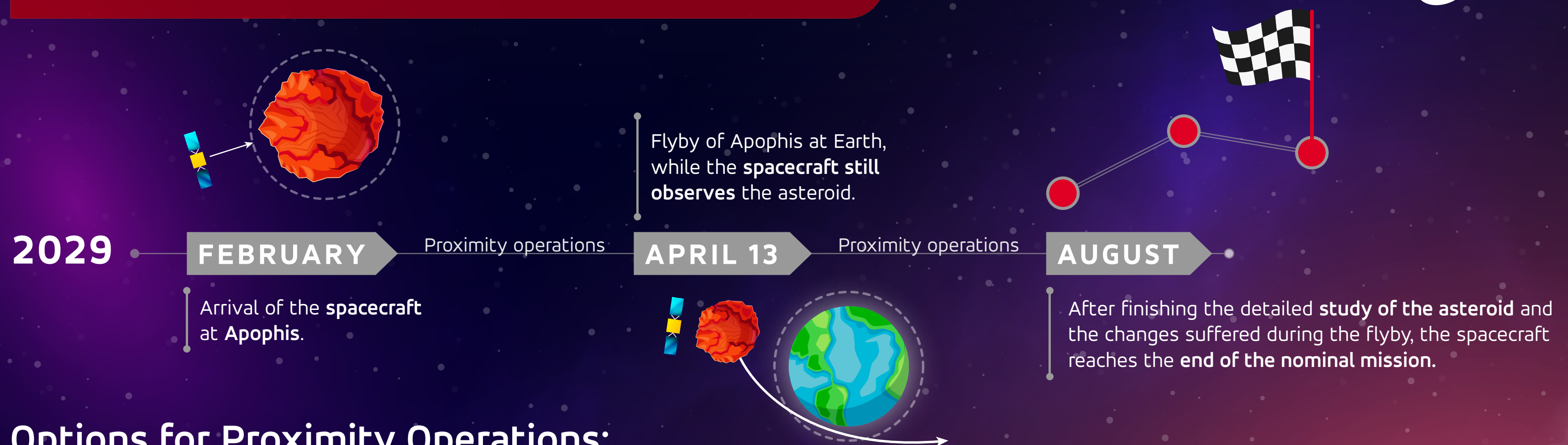


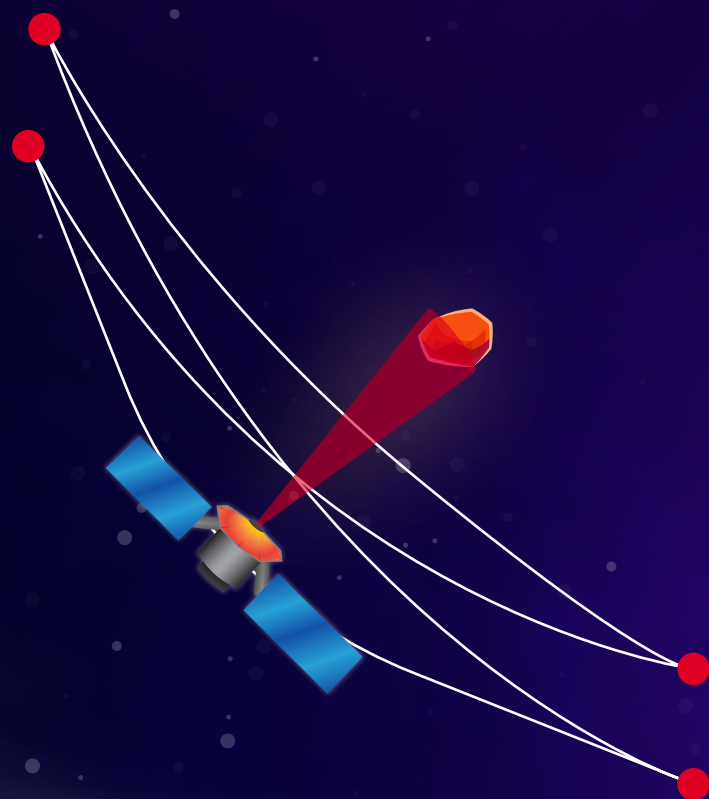
Proximity Operations at Apophis

A study by GMV on Trajectory and GNC design around Apophis

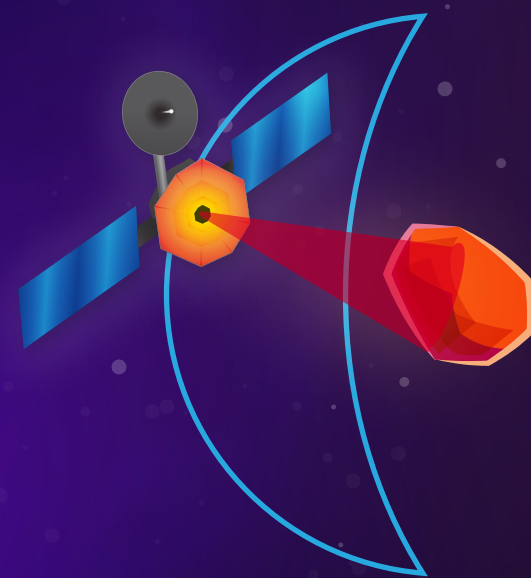


Options for Proximity Operations:

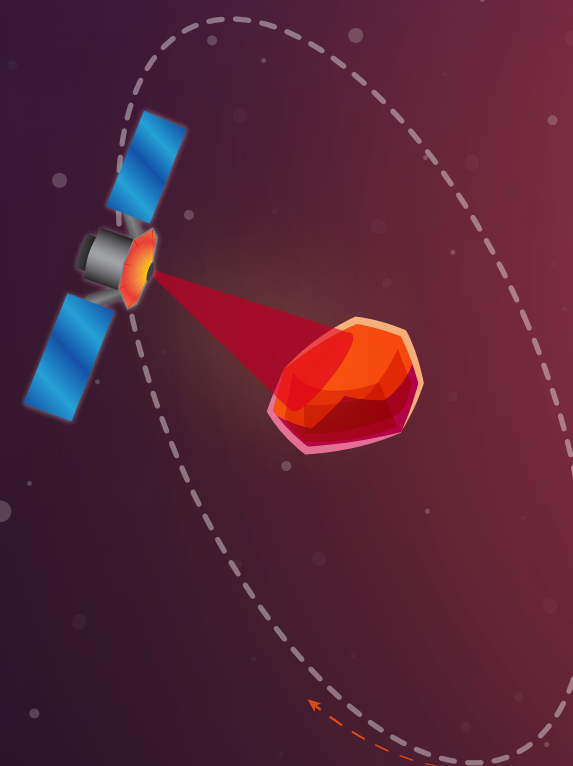
GMV is **studying proximity operations options** for a potential Apophis smallsat mission that respect system, operational and cost constraints, while maximizing the scientific return. **Four distinct options** have been identified, based on **GMV's experience with Hera**.



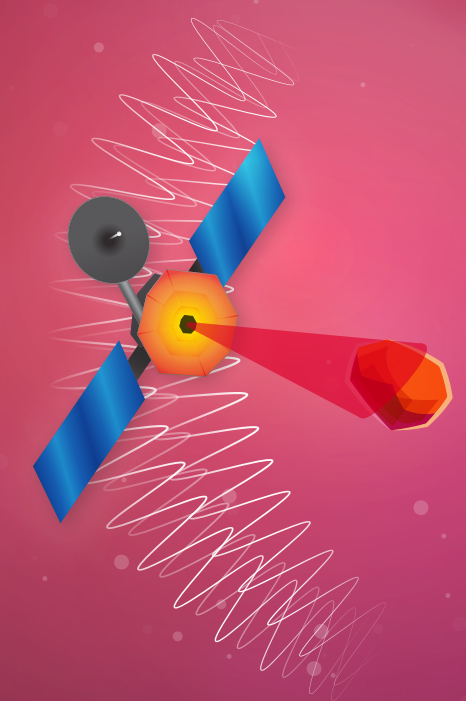
HYPERBOLIC
ARCS



TERMINATOR-TO-TERMINATOR
ORBITS



SUN-STABILISED
TERMINATOR ORBITS



PSEUDO HOVERING