

# FLARE Mission Overview

**Launch 6/1/2028**

VSFB or KSC  
Falcon 9

**Flyby 1/21/2029**

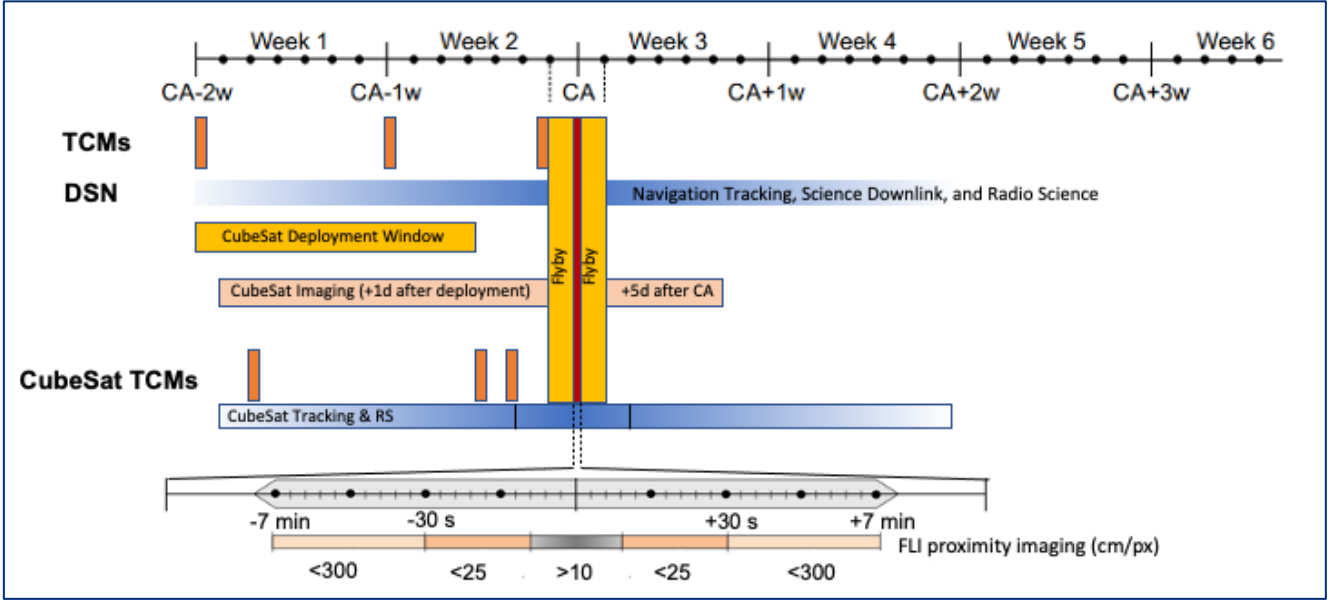
Speed 2 km/s  
Closest Approach Distance 40 km



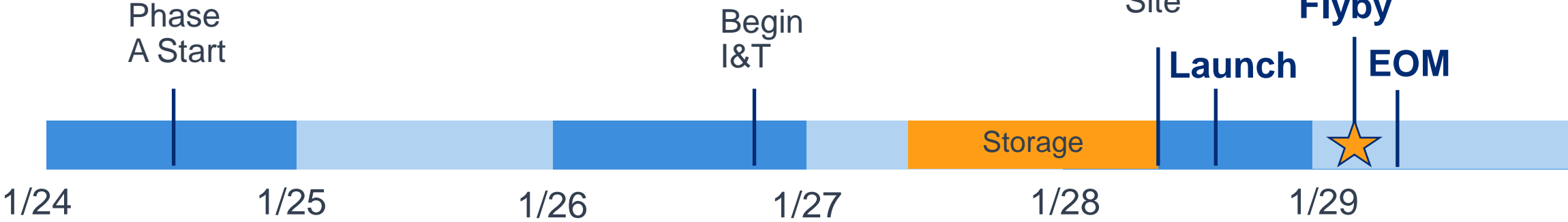
**FLARE** (Flyby Asteroid REconnnaissance) Mission uses a unique opportunity to establish the utility of flyby data by:

1. Characterizing the key physical properties of Apophis that are important for planetary defense, including shape and mass of the asteroid, using two instruments: a Narrow Angle Imager (FLI) and CubeSat Mass experiment (FLAME)
2. Testing rapid response capabilities in a compressed schedule.
3. Validating measurements with higher quality “truth data” from the OSIRIS - APEX rendezvous mission
4. Establishing the surface conditions of Apophis before its close approach

# Baseline Conops, Schedule, and Cost



~110M for Baseline  
in FY22 with 50% reserves



\*Schedule Challenges can be implemented to further reduce durations