



The Lucy Mission is a NASA Discovery-class mission to send a highly capable and robust spacecraft to investigate seven primitive bodies near both the L4 and L5 Lagrange points with Jupiter; the Jupiter Trojan asteroids. These planetesimals from the outer planetary system have been preserved since early in Solar System history. The Lucy mission will fly by and extensively study a diverse selection of Trojan asteroids including all the recognized taxonomic classes, a collisional family member and a near equal-mass binary. It will visit objects with diameters ranging from roughly 1 to 100 km. The payload suite consists of a color camera and infrared imaging spectrometer, a high-resolution panchromatic imager, and a thermal infrared spectrometer. Two spacecraft subsystems will also contribute to the science investigations: the terminal tracking cameras will supplement imaging during closest approach and the telecommunication subsystem will be used to measure the mass of the Trojans.

October 16, 2022