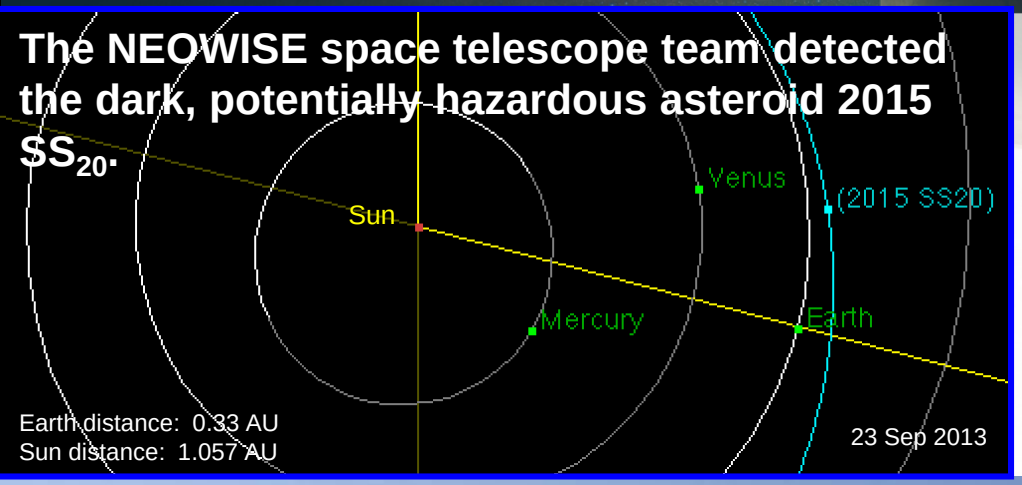
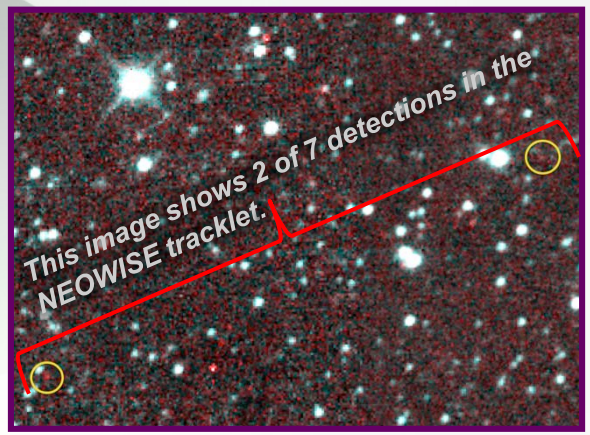
NEOWISE Finds an Elusive Asteroid as Dark as a Lump of Coal

The NEOWISE space telescope team detected the dark, potentially hazardous asteroid 2015 SS_{20}.



The asteroid was first detected in 7 images by NEOWISE on Sep 23, 2015, but it was not tracked by ground-based observers who were unable to find it, since it was very dark.



- **Additional NEOWISE detections were later found of 2015 SS_{20} that were fainter than the threshold used by the automated science data processing pipeline. With these detections, images collected in October and December 2015 by the Canada-France-Hawaii Telescope (CFHT) on Mauna Kea were reviewed and more data for this dark near-Earth asteroid was detected, thus allowing for the orbit of 2015 SS_{20} to be determined well into the future. The minimum orbit intersection distance (MOID) between the asteroid and the Earth is 0.03 AU.**
- **Additional thermal modeling has revealed that 2015 SS_{20} is extremely dark (3-4% albedo) and approximately ~180-300 m (600-1000 ft) across.**

Located atop Mauna Kea and optimized in the optical/infrared, the CFHT has a 3.6-m aperture.