

# Locating of Meteorite from Fireball in Thailand on 7th September 2015 by Contrail Calibration with Coordinates of Background Star

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## ABSTRACT

Fireball is the extremely bright meteor, which could be asteroid, comet or near Earth objects (NEOs). Those objects fall through the Earth's atmosphere, while they are heated and glow due to the collisions with particles in the atmosphere. Its contrail appears like a long tail of smoke in the sky. Their remains from the burning in atmosphere impact onto the ground. The residue of burning meteor is called "Meteorite". Astronomers can search fragments of the meteorite by compare contrail's images with background star's images that were taken from the same place to determine the location of the meteorite impact. These contrail images were used along with observing data from eyewitnesses of fireball. From this information we can confirm the direction of fireball and burning tail of the meteorites. From fireball which appeared in Thailand since September 7th 2015, we can estimate the contact point by comparing photo of contrails to background star. The contact point could locate in Sai Yok national park, Kanchanaburi province, Thailand, which is the target of finding parts of meteorite. This research will report the proceeding of meteorite explore which might remain in that area.

Keyword : fireball, asteroid, comet, Near Earth Objects (NEOs), meteorite, contrail

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