

NEMO - a global near real-time fireball monitoring system

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The NEar real-time MOnitoring system, called NEMO, is a project for world-wide and near real-time monitoring of bright fireballs, currently under development. NEMO is based on an alert system collecting information on fireball events and will be a combined world-wide database for large fireball events with the goal to analyse and combine data of these events from various data sources to maximize the scientific output. Based on social media, the alert system can provide very fast notifications for fireball events. Furthermore, diverse data sources are investigated like witness reports, meteorological satellite data, or the IMS infrasound data. There is still a lack of knowledge on extra-terrestrial objects in the intermediate size range (decimetres to metres). These objects cause bright fireballs when they impact the Earth's Atmosphere, which they do frequently, but are too small to be detected by NEO (near-Earth object) surveys. To close this gap between large meteoroids and small asteroids is one of NEMO's aims. In this talk a brief introduction on NEMO and its working principle will be given, illustrated by an example of a NEMO event: the Russian daytime fireball from 21 June 2018.

Primary author: OTT, Theresa Lisel Maria (Carl von Ossietzky University of Oldenburg)

Presenter: OTT, Theresa Lisel Maria (Carl von Ossietzky University of Oldenburg)

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