

# Visual Observation of Meteors in Nepal

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## 1 Introduction

This paper deals with the meteor works and the leading role of Nepal Astronomical Society (NASO) for meteor astronomy in Nepal. It provides basic insights on how NASO has been carrying out various activities in the field of meteor astronomy in Nepal since 2007. NASO is the first and only group in the country to introduce meteor astronomy with the greater involvement of the public through various programs. The first meteor outreach was on Perseids during August, 2007 with many activities: a press release, a talk program and media talks. By 2010, NASO has acquired a wide range of observers, including students and the public, from almost every corner of the nation. Frequently people ask when and where the next shower should be looked for with spectacular views of fireworks in the Nepalese sky. People mostly recognize the flashes in the sky as fireworks, and we became aware that people had many superstitious beliefs about meteors from those participating from the greater public during the observation campaign and group observations in the observers' hometowns.

## 2 Methods

For every major shower, a press release was sent to the media for better mass coverage of the shower and better outreach in the nation. Information was spread to all Nepalese through radio, FM radio, television, paper media, and electronic media. Shower details were frequently sent to the media and potential observers. Details like naked eye observation tips and information about the impact of light pollution to the observation were frequently disseminated among the Nepalese. Talks, interaction and press meets were often organized at the Nepal Academy of Science and Technology (NAST) and at schools in different parts of Nepal. Several observation campaigns were organized with many individual events during the time. Also, an astrophotography workshop was organized for the greater involvement of the media and the Nepalese people.

## 3 Conclusion

Meteor astronomy has now emerged as a new field of astronomy to work for both amateur and professional astronomers in Nepal. Amateur astronomers are continuously putting forth their hard efforts and trying to collaborate with M.Sc. Physics (major cosmology and astrophysics) graduates from Tribhuvan University (TU) and professional astronomers/astrophysicists in Nepal and abroad for the substantial development of meteor astronomy in Nepal. People of Nepal are now eager to know about the date and cause of the showers. People are now aware of the fact that they don't need telescopes for the observations during the peak time. Visual observation has been famous in Nepal but people acquire less knowledge from radio and other types of meteor observations. NASO has been successful in spreading the enjoyment of meteor observation and its scientific aspects to the students and public in Nepal. People are eager to know meteor science but they lack good skills for professional type observations. Superstitious meteor-related beliefs are still present in this society. Even though NASO stresses the scientific aspects, people tend to hold onto the superstitious beliefs they had as they participate in a meteor watch. Collaborative works should be carried out with highly qualified meteor astronomers and for the substantial development of meteor astronomy in Nepal.

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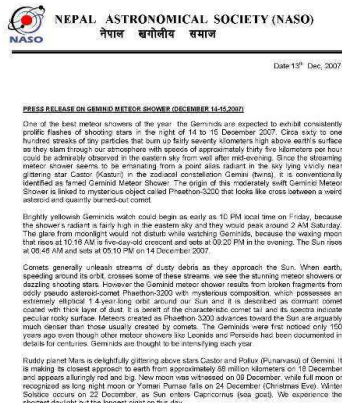


Figure 1 – Sample of press release and news published on the national English Dailies on Orionids, Lyrids and Eta Aquarids.



Figure 2 – Talk programs at NAST hall during the meteor shower. Left: talk on Perseids Meteor Shower 2007. Right: talk program organized during the Leonids 2009

References

English People’s Daily Online (2007). “Nepalese to witness spectacular meteor shower”. <http://english.people.com.cn/90001/90777/6321343.html> .

France Nepal (2007). “Nepalese to witness spectacular meteor shower”. [http://www.english.francenepal.info/article\\_view.php?id=4119&title=Nepalese\\_to\\_witness\\_spectacular\\_meteor\\_shower&by=Shyam\\_Krishna\\_KHAKUREL](http://www.english.francenepal.info/article_view.php?id=4119&title=Nepalese_to_witness_spectacular_meteor_shower&by=Shyam_Krishna_KHAKUREL) .

Kantipur Online (2010). “Year’s 2nd meteor shower late tonight”. <http://www.kantipuronline.com/kolnews.php?&nid=128585> .

La Republica (2010). “Meteor shower on Tuesday night”. [http://www.myrepublica.com/portal/index.php?action=news\\_details&news\\_id=26171](http://www.myrepublica.com/portal/index.php?action=news_details&news_id=26171) .

Nepal News (2008). “New Year’s maiden meteor shower on view”. <http://hamropalo.com/tag/quadrantid-meteor-shower> .

Nepalese in Singapore (2007). “Leonid meteor shower on Monday”. <http://nepalsingapore.com/?p=10017> .

Reporters Nepal (2007). “Meteor shows today midnight”. <http://www.reportersnepal.com/newsbase/nid/2420> .

Shah R. and Bhattarai S. (2009). “Geminid meteor shower 2009”. [http://www.gorkhapatra.org.np/detail.php?article\\_id=28263&cat\\_id=7](http://www.gorkhapatra.org.np/detail.php?article_id=28263&cat_id=7) . Editorial, The Rising Nepal, National English Daily.

Singapore Astronomy Forum (2009). “2009 Leonids observation in Nagarkot, Nepal”. <http://www.singastro.org/viewtopic.php?t=7497> .

The Himalayan Times (2010). “Meteor shower to grace sky tonight and Wednesday”. <http://www.thehimalayantimes.com/fullNews.php?headline=Meteor+shower+to+grace+sky+tonight+and+Wednesday+&NewsID=269363> .

Universe Today (2009). “Leonids light up the night 2009 Leonid meteor shower information”. <http://www.universetoday.com/45159/leonids-light-up-the-night-2009-leonid-meteor-shower-information/> .

Vaubailon J. (2005). “2005 Leonid Forecastings”. <http://www.imcce.fr/langues/en/ephemerides/phenomenes/meteor/DATABASE/Leonids/2005> . IMCCE webpage.

Vaubailon J. (2009). “2009 Leonids”. <http://www.imcce.fr/en/ephemerides/phenomenes/meteor/DATABASE/Leonids/2009/index.php> . IMCCE-Caltech.