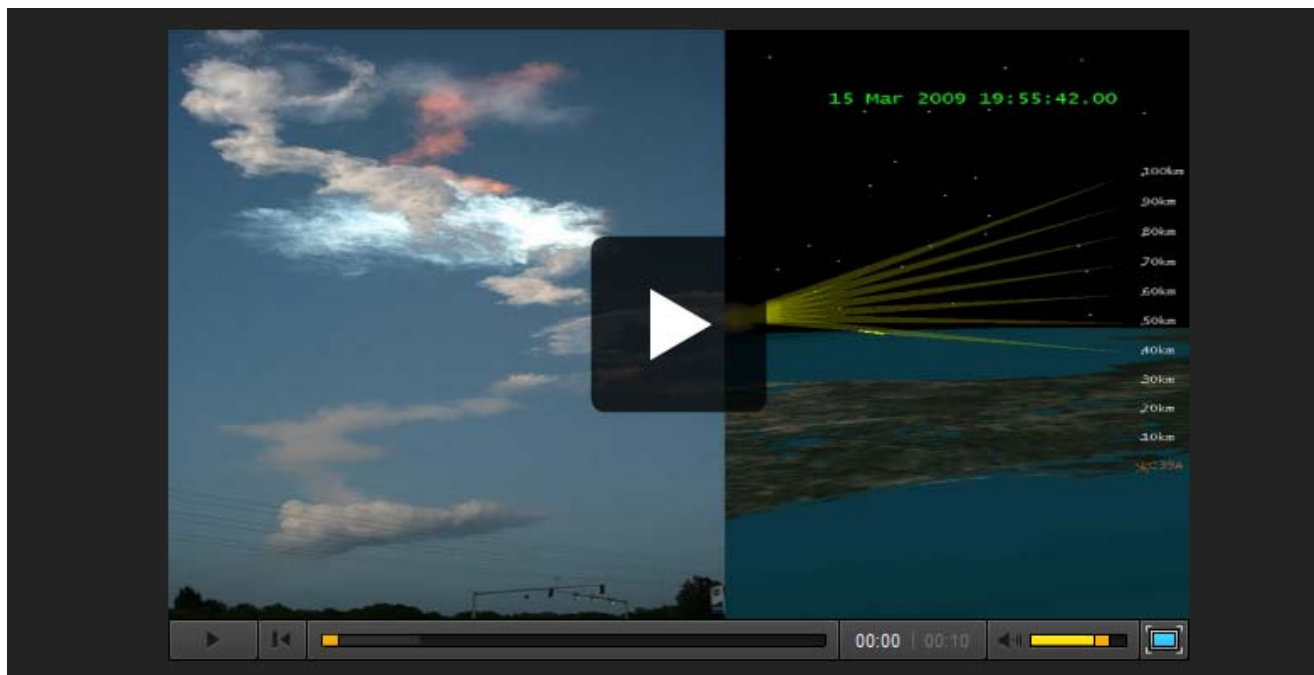


[Home](#) | [Contacts](#) | [Questions?](#)

- [Mission](#)
- [Instruments](#)
- [Data](#)
- [Orbit](#)
- [Education](#)
- [Library](#)
- [Team](#)
- [Press Room](#)



STS-119 NOCTILUCENT CLOUD AT LAUNCH



It is fairly clear that what is being seen is a man-made noctilucent cloud (NLC). The space shuttle is known to put out a lot of water vapor on the ascent. The timing of this launch was just right (after or around sunset) and the altitude of the cloud is above 60km – 70 km. This is not such a new phenomenon. Such clouds have been seen before after the shuttle launch, although they have not been nearly as large and homogenous as this one. In any case the cloud characteristics are very different than a natural NLC. The photographs make the cloud look very homogenous in structure which is not the case for naturally occurring NLCs. This is surely caused by the injection of a rather large amount of water vapor in one location.

Photo credit: Emily Hill Designs

More on the Web

Study Finds Space Shuttle Exhaust Creates Night-shining Clouds

AIM co-investigator Michael Stevens (NRL) has completed research on space shuttle exhaust creating NLCs in the thermosphere. [Read more >](#)



The AIM mission is a part of [NASA's Sun-Earth Connection Education Forum.](#)

Responsible Official: James M. Russell III

Web Curator: Emily M. W. Hill

