

**PLANETARY WAVES AS A TRANSPORT MEDIUM
OF EUROPEAN NOCTILUCENT CLOUDS AFTER
THE TUNGUSKA EVENT OF 1908.**

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Following the Tunguska explosion of 30 June 1908, the source of which was likely a massive stony meteorite, noctilucent clouds (NLC) were reported in Europe, and it has been suggested that these NLC were a direct result of increased meteoric nuclei introduced by the impacting body[1]. It has been pointed out the significance of planetary waves as a transport mechanism for atmospheric conditions favourable for NLC formation. Since these waves are known to move from east to west[2]the formation of NLC in Europe could have very well been due to planetary wave transport of attendant atmospheric physical conditions, if not the meteoric nuclei as well, from the site of the Tunguska impact much farther east in Asia. This might be the mechanism for the transport of NLC phenomena around the world in progressive times. NLC's in the Americas might even have the same time delay.

Conclusion: An in-depth analysis of dates when NLC were seen in Europe, or anywhere else for that matter, may shed light on the type of planetary wave responsible, be it a 2-day, 4-day, or 5-day wave.

References: [1] Turco, R.P., Toon, O.B., Whitten, R.C., Keesee, R.G., Hollenback, D. (1982) "Noctilucent clouds: simulation studies of their genesis, properties, and global influences." *Planetary and Space Science* 30: 1147-1181.
[2] Dalin, P. (2007) Personal Communication.