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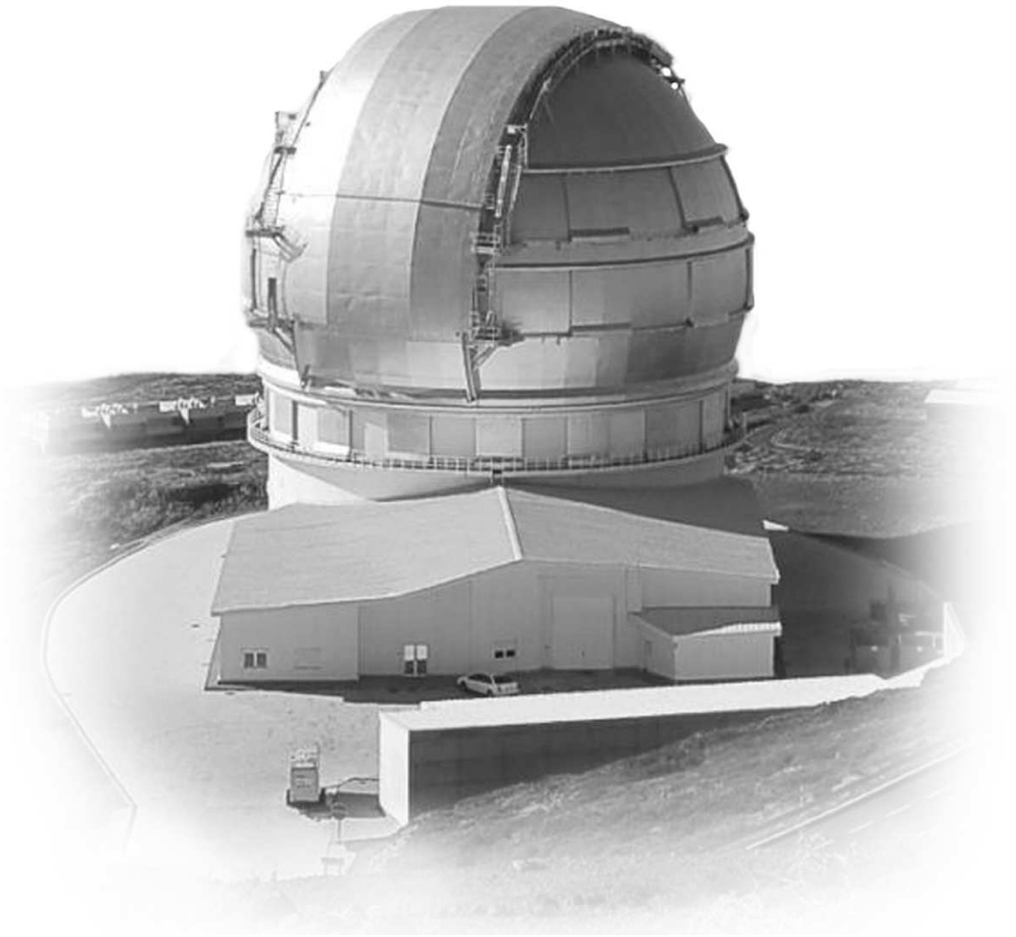

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Spectroscopic observations of the 2011 Draconids meteor shower

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In this presentation, we report on spectroscopic observations of the 2011 Draconids with cameras provided by the IMCCE, the ESA, the SETI Institute, and Ondřejov Observatory.

Summary

Spectroscopic observations of meteors reveal the chemical composition of the parent bodies and interplanetary dust. Draconids are an example of most fragile meteoroids, bringing us information about physical properties of Comet 21P/Giacobini-Zinner.

During the 2011 Draconids meteor shower, airborne and ground-based spectroscopic meteor observations were carried out. Here, we report on the results for spectra captured by cameras provided by the IMCCE, the ESA, the SETI Institute, and Ondřejov Observatory. The spectra we collected show two dominant emissions of the sodium line at 5890 Å and the magnesium line at 5180 Å. Other emision lines belong to iron and the N_2 molecule. An example is shown in Figure 1.

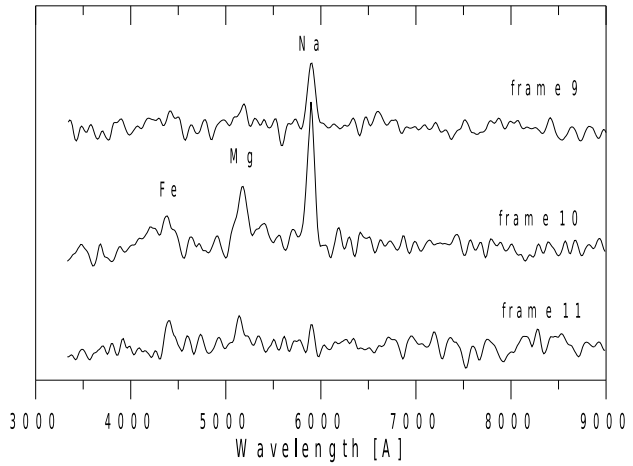

Figure 1 – Time variation of the spectra of a Draconid meteor observed at 20^h52^m UT on October 8, 2011.