Galileo NIMS Observations of the Impact of Comet Shoemaker-Levy 9 on Jupiter

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The Galileo Near Infrared Mapping Spectrometer (NIMS) observed the impacts of the C, F, G, and R fragments of Comet Shoemaker-Levy 9 on Jupiter in July 1994. Spectra of Jupiter at 17 wavelengths between 0.7 and 5.0 μm were obtained every 5 1/3 seconds during and following the impact events. The data are currently on the Galileo tape recorder and will be played back from September 1994 to January 1995. Preliminary “peeks” at the G and R impact data have confirmed that the NIMS instrument and Galileo scan platform performed nominally during the observations. Data covering the first 2.8 minutes of the G impact (and possibly up to 7.8 minutes) are expected to be available in time for this meeting and will be presented, along with a preliminary analysis. This work was supported by NASA through the Galileo Project at JPL.