

Detection of impacts on giant planets: Another way to determine meter-sized object flux in our Solar System

François Colas, Sylvain Bouley, David Baratoux, Salma MBaye, Marc Delcroix,
and Jean Luc Dauvergne

IMCCE-Observatoire de Paris, 77 avenue Denfert Rochereau, 75014 Paris, France
colas@imcce.fr

We know since the impact of Comet D/1993F2 Shoemaker-Levy 9 on Jupiter that it is possible to view these kind of events on giant planets. The continuous amateur monitoring of Jupiter has led to the discovery of fireballs in Jupiter's atmosphere, providing information not only on Jupiter's gravitational influence but also on the properties and populations of the impactors. We also got data from observations of impacts on the Moon. We explain how it is possible to connect these data with those of fireball networks in order to get a better picture on metric objects. We focus in particular on one of our key observational program at Pic du Midi Observatory.