EPSC Abstracts,
Vol. 2, EPSC2007-A-00044, 2007
European Planetary Science Congress 2007


# Monitoring of the comet 73P/Schwassmann-Wachmann 3 from January 3 to May 20, 2006

I. Bertini (1), H. Boehnhardt (2), P.J. Gutiérrez (1), M. Kueppers (2), L.M. Lara (1) and R. Rodrigo (1)

(1) Instituto de Astrofísica de Andalucía-CSIC, P.O.Box 3004, 18080 Granada, Spain, (2) Max-Planck Institute fuer Sonnensystemforschung, Max-Planck strasse 2, D-37189 Katlenburg-Lindau, Germany

Comet 73P/Schwassmann-Wachmann 3 has been monitored since January 3 to May 20, 2006. The goal of this campaign has been to characterize the different comet fragments (C, B and E as initially planned). However, our efforts focused on the study of the C and B fragments, the latter showing a highly variable activity and several splitting events. Thus, it has been possible to study the evolution in time of several fragments possibly giving hints about the material ejected from the nucleus during these disruption events.

Optical broadband images (and long-slit spectroscopic measurements) were acquired with the instrument CAFOS mounted at the 2.2 m telescope at the Calar Alto Observatory (CSIC-MPG) in Almería (Spain).

For the brightest fragments, we present our results on the evolution of the dust production rate (by means of the customary Af$\varrho$ parameter), dust reddening, coma morphology, gas production rates (CN, C2, C3, NH2), radial profiles of the dust brightness, etc. Differences and similarities among the evolution and behavior of the different fragments will be outlined.