

Observations of Comet 73P/SW3 close to its closest approach to the Earth

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In May 2006 comet 73P/SW3 passed at less than 0.1 AU from Earth providing us an unique opportunity for high spatial resolution study of its coma. This event was expected to be particularly interesting because the comet had broken apart in 3-4 fragments in 1996. The 2006 apparition has been even more interesting because the fragments produced in 1996, when approaching the Sun, were continuously breaking apart. This process resulted in many small sub-fragments and in the injection in the coma of fresh material, coming from the interior of the nuclei, giving the possibility to study this uncontaminated material. The breaking fragments have been observed at ESO in the visible and near-IR with the aim of analyzing this fresh solid component of the coma in search of possible presence of organic solids. In the presentation we will report preliminary results of this campaign.