



Activity and Morphology of Comet 73P/Schwassmann-Wachmann 3 close to its closest approach to the Earth

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In May 2006, Comet 73P/Schwassmann-Wachmann 3 passed by Earth at a minimum distance of 0.067 AU which was only slightly larger than its closest encounter distance of 0.0616 AU in its original discovery apparition in 1930. Much attention was given to this close approach of Comet 73P/S-W3 because its nucleus was observed to split into 3-4 components after one outburst in its last apparition in 1995. We were not disappointed because the fragments created in 1995 were observed to break up into many sub-fragments. This process combined with the possibility of making high resolution imaging observations provided the unique opportunity of studying fresh material emitted from the deep interior of a cometary nucleus. We have carried out coordinated observations by using the Lulin One-meter Telescope (LOT) at Lulin Observatory and the 2.16-m spectrograph at Beijing Astronomical Observatory. Here we present the preliminary results on the coma activities and morphological structures of the sub-fragments.