M33 @ Observatorio Astrofísico de Javalambre

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Abstract

M33, the Triangulum Galaxy, is a spiral galaxy in the Local Group. Given its brightness and its vicinity with Andromeda Galaxy (M31), it is one of the best studied objects of the Northern hemisphere. In this poster, we present observations carried out with the JAST/T80 at the Observatorio Astrofísico de Javalambre. The extraordinary field of view of this telescope allows us to study the stellar populations of the galaxy with a single observation. Moreover, repeated observations have provided us the possibility to follow a variety of variable stars, among them the nova ASASSN-15th.

The RGB image of M33 was obtained combining r, i and J0660 images for a total time of 440s, 400s, 410s and 3640s, respectively. The average psf is 2'".3.

Our differential imaging pipeline detected a transient on an image obtained on Dec 6, 2015. After a closer inspection the transient was identified with the asteroid (45497) 2000 AR237 which, due to its slow motion, was picked by the software.

$r$-band light curve of the nova ASASSN-17th (Kojota et al. 2015) as observed with JAST/T80. Triangles are upper limits.

SEDs of globular clusters #14 and 15 (following the identification provided in San Roman et al. 2009) obtained with the J-CUBE program.

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