

GRANGE OBS. OPERATIONS

- Photometers status

All photometers (the Johnson BVR-Vilnius VS at the 0.14-m astrograph (field 32x32 arcmin) and the Sloan-GAIA G at the 0.3-m (field 17x13 arcmin) are working nominally. Some flat field has been updated on 21st.

- Flat Fields status

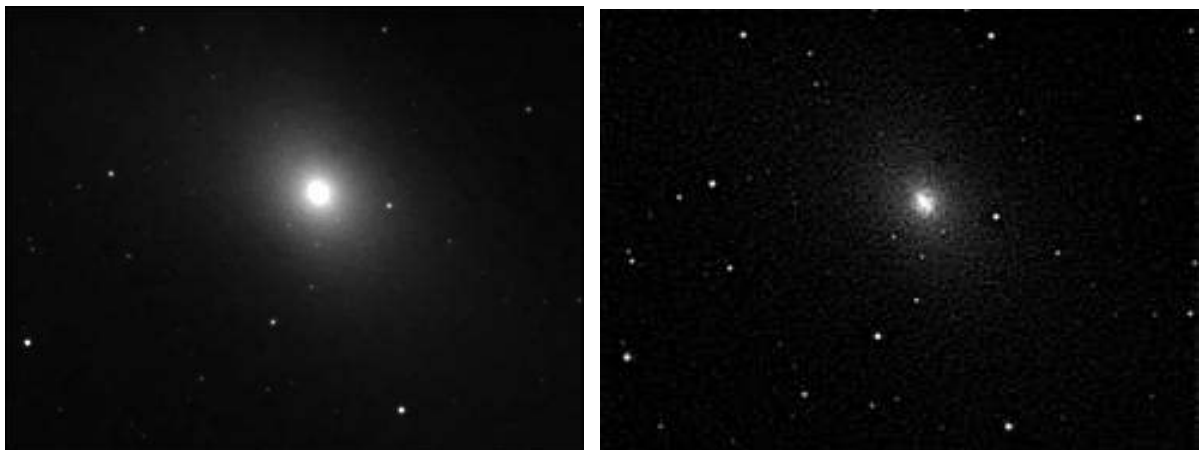
telescope-camera	filter	peak ADU	date
0.14-m SXL8	B	23000	08-APR-2017
0.14-m SXL8	V	32000	08-APR-2017
0.14-m SXL8	R	22000	08-APR-2017
0.14-m SXL8	VI	25000	21-SEP-2017
0.14-m SXL8	S	31000	21-APR-2017
0.3-m QHY6	g	17000	15-JUN-2017
0.3-m QHY6	r	22000	21-SEP-2017
0.3-m QHY6	i	18000	15-JUN-2017
0.3-m QHY6	BG 40	15000	15-JUN-2017
0.3-m QHY6	GAIA G	22000	15-JUN-2017

The flat fields are usually executed during twilights at room temperature.

A red color in the date cell (format DD-lett.M-YYYY) indicates the need of updated frames.

- Observations

On 20th M31 has been imaged with the Sloan r filter at the 0.3-m telescope in 6x5 s multiple poses, then summed to reach a 30 s exposure. At left, the aim was to demonstrate a SN search technique feasibility in the galaxy core at lowest magnitude with the use of deconvolution algorithm; at right, a multiple unsharp masking of the 30 s image shows the M31 core desired star pattern for reference.



The Milky Way in Cygnus around the star Deneb was also imaged at ~22 UT with the 0.3-m telescope photometer during the observing session with exposures of 30 s (then summed to reach 3 min in total), for checking the Sloan r filter limit magnitude at airmass = 1). It resulted a magnitude limit >17 for the 30 s exposures and >19 for 180 s.



The September 20th observation statistics were as follows:

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*** Sun set/rise and twilight times (UT):
    Sun Set: 2017-09-20 17:32    272.1 (azimuth, deg.)
    End civil: 2017-09-20 18:01
    End nautical: 2017-09-20 18:36
    End astronomical: 2017-09-20 19:11
    Begin astronomical: 2017-09-21 03:36
    Begin nautical: 2017-09-21 04:12
    Begin civil: 2017-09-21 04:46
    Sun Rise: 2017-09-21 05:16    88.1 (azimuth, deg.)

*** Moon rise/transit/set (UT) and phase:
    Transit: 2017-09-20 11:37 (phase: 0.00)
    Moon Set: 2017-09-20 17:57 (phase: 0.00)
    Moon Rise: 2017-09-21 06:19 (phase: 0.01)

*** Available dark time (hh:mm) = 08:24
    Begin dark: 2017-09-20 19:11
    Mid dark: 2017-09-20 23:24
    End dark: 2017-09-21 03:36
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