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Observation report
of a variable nebula near NGC1333

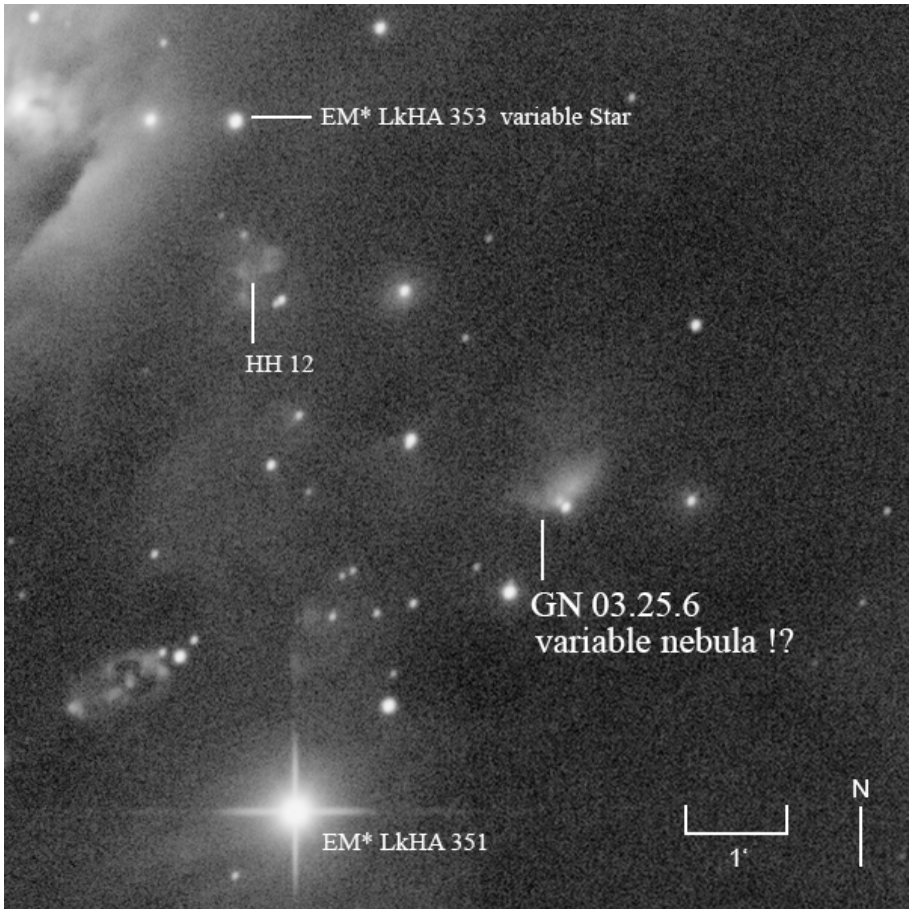
Rainer Späni[1] , Christian Rusch[1] , Egon Eisenring[2]

[1] AstroteamCeres (ATC) , observation with Newton 12.5“ and Newton 8”
[2] AstroteamCeres (ATC) , observation with Newton 8”

ABSTRACT

We report the discovery of a temporal development in a nebula near NGC1333.
Observations from October 2014 show that the reflection nebula GN 03.25.6 significantly dropped in brightness compared to images taken two years before. During follow-up observations in November and December 2014, the increase in brightness of GN 03.25.6 back to its original level could be observed.

OVERVIEW



GN 03.25.6 = RA(J2000) 03h 28m 44s DE(J2000) +31° 17.6'

OBSERVATIONS

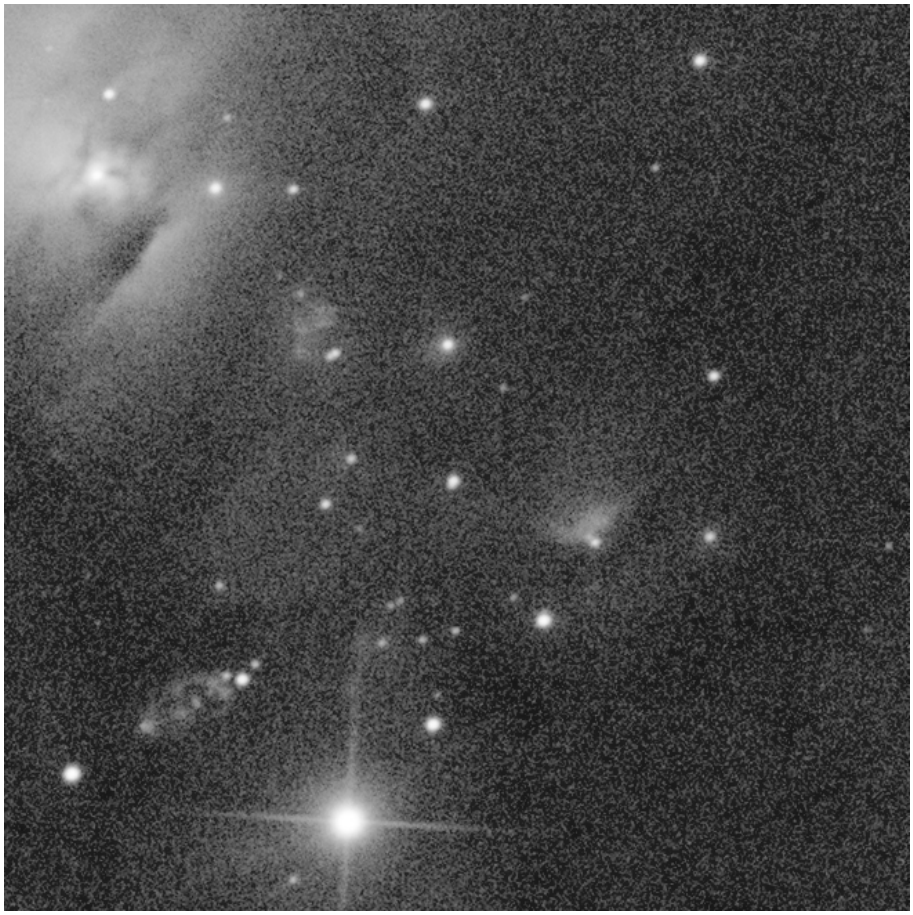


Figure 1.
First observation taken on 2012-10-20 by Rainer Späni[1] and Christian Rusch[1] .
Teleskope: Newton 8“ on the Fornax 51 , camera: Canon 450D mod.
Total exposure : 2h 36min , FWHM about 4.1” , field of view: 8.9’ x 8.9’

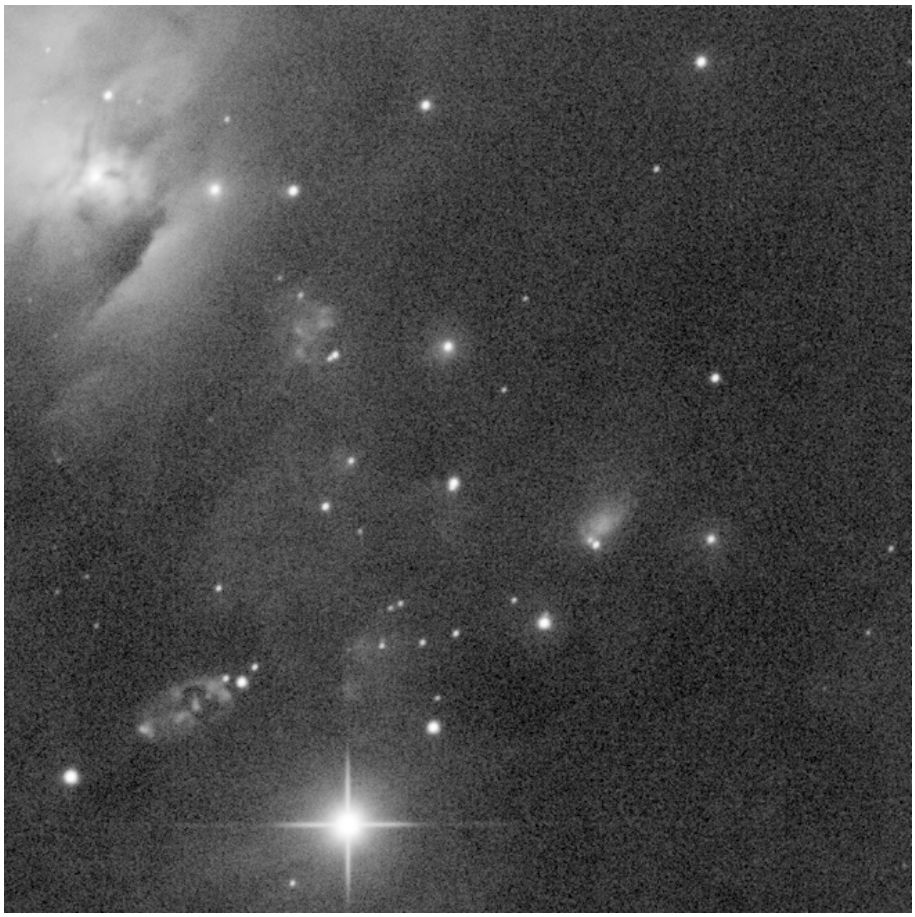


Figure 2.
Second observation taken on 2014-10-26 / 27 by Rainer Späni[1] and Christian Rusch[1] .
Teleskope: Newton 12.5“ on the Fornax 51 , camera: Canon 5DMKII mod.
Total exposure : 3h 45min , FWHM about 2.4” , field of view: 8.9’ x 8.9’

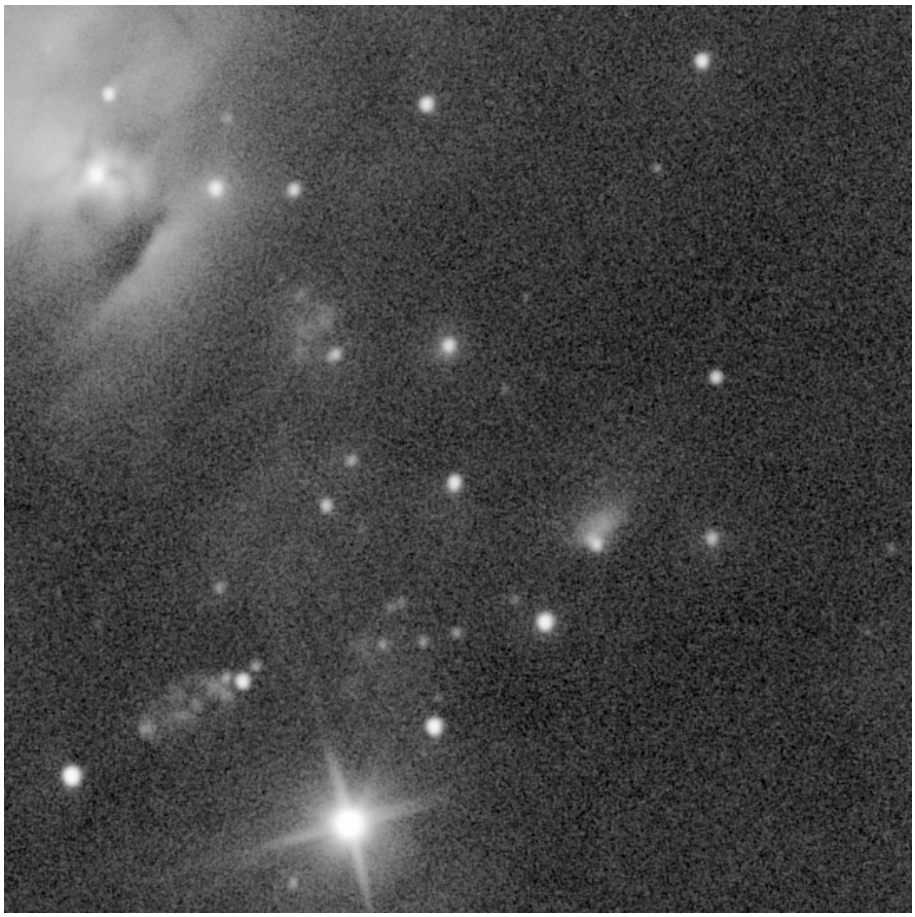


Figure 3.
Third observation taken on 2014-11-22 / 23 by Egon Eisenring[2] .
Teleskope: Newton 8“ on Losmandy G11, camera: Canon 650D mod.
Total exposure : 2h 42min , FWHM about 4.8 , field of view: 8.9’ x 8.9’

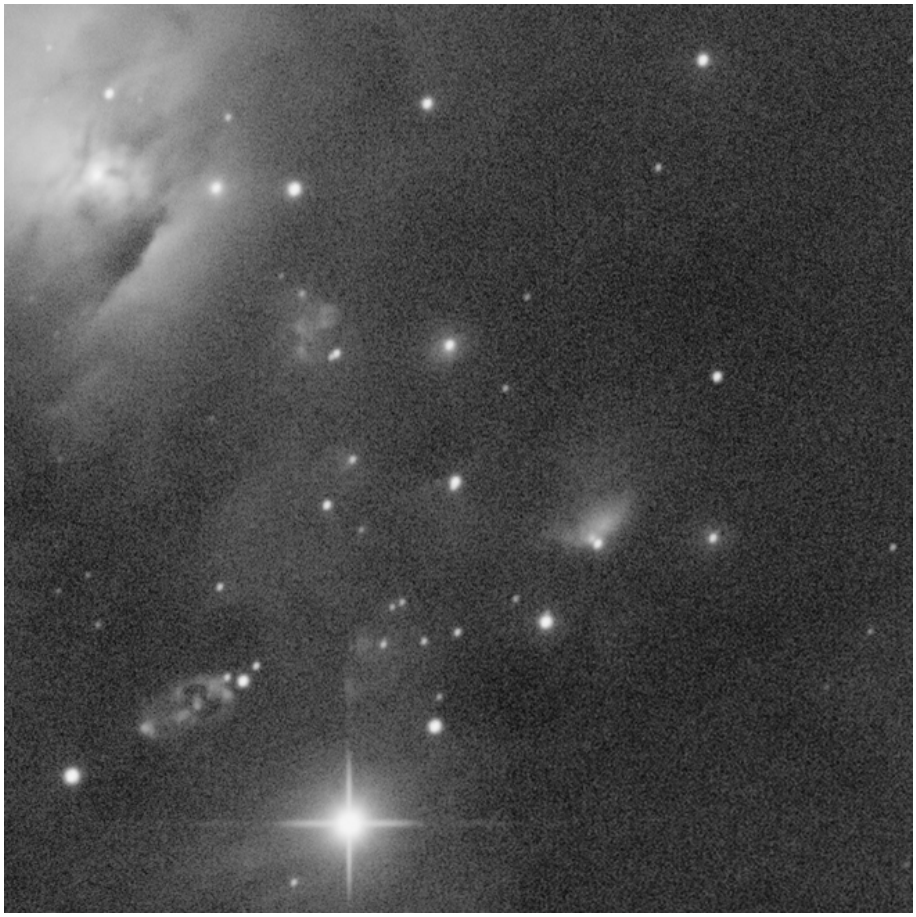
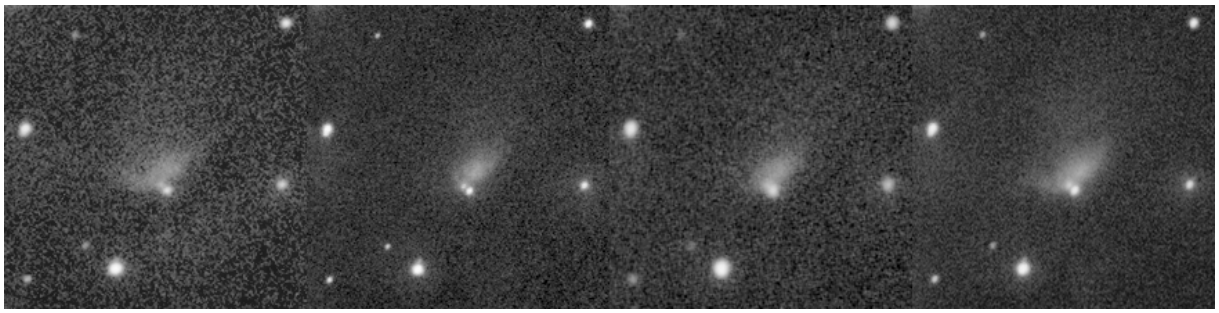


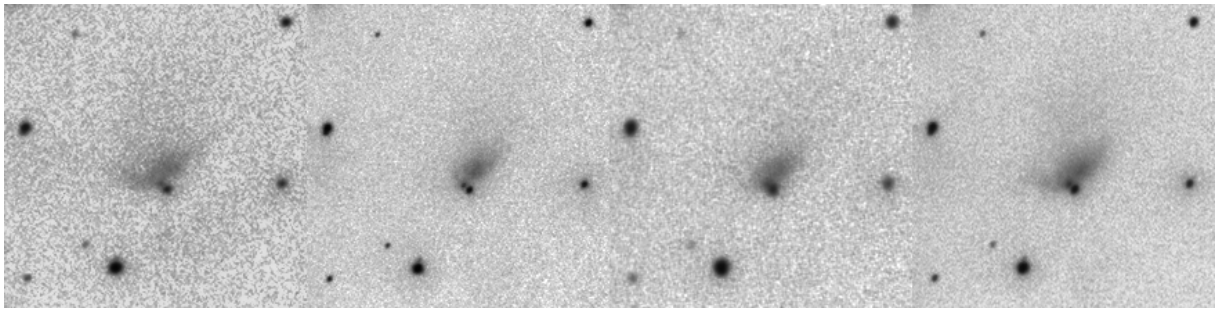
Figure 4.
Fourth observation taken on 2014-12-23 / 24 by Rainer Späni[1] and Christian Rusch[1] .
Teleskope: Newton 12.5“ on the Fornax 51 , camera: Canon 5DMKII mod.
Total exposure : 5h 19min , FWHM about 2.9 , field of view: 8.9’ x 8.9’

TEMPORAL DEVELOPMENT

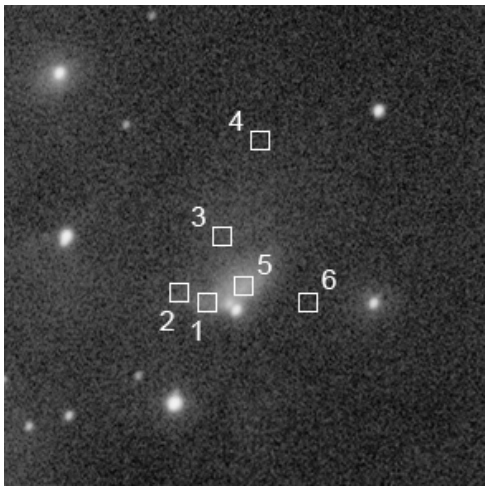
Comparison of GN 03.25.6 in detail

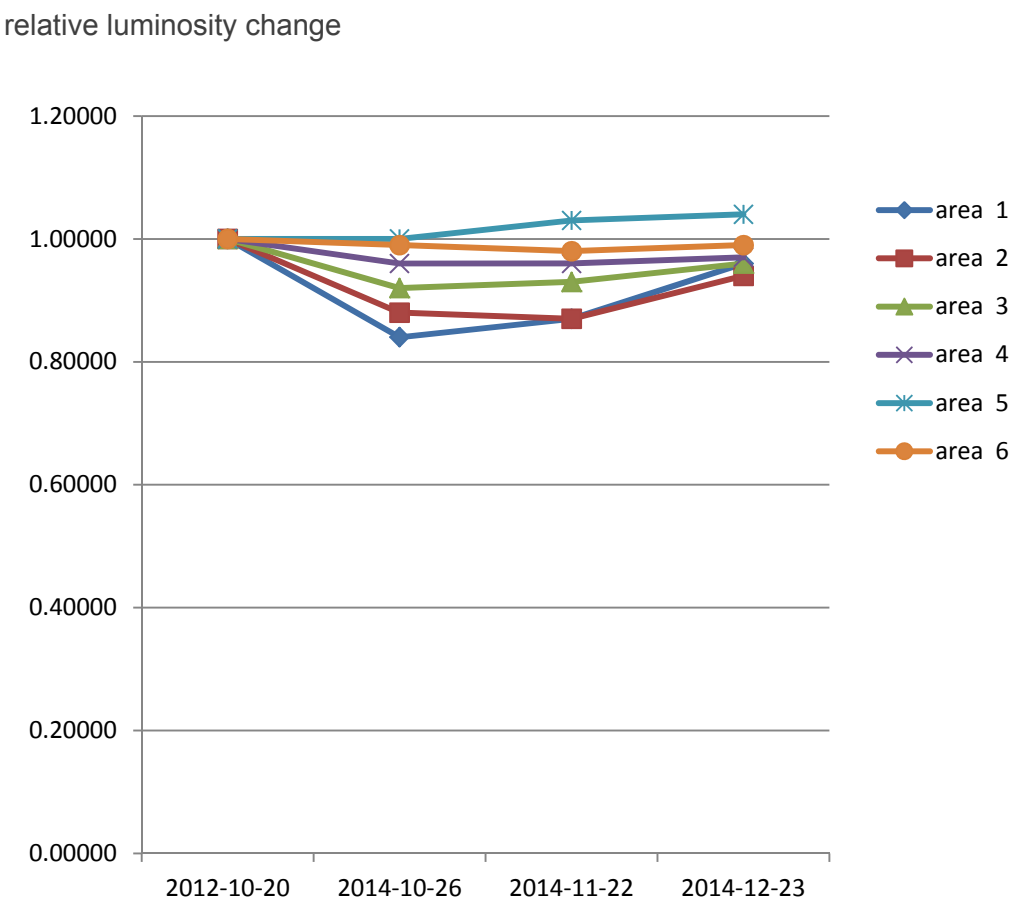


2012-10-20 2014-10-26 / 27 2014-11-22 / 23 2014-12-23 / 24



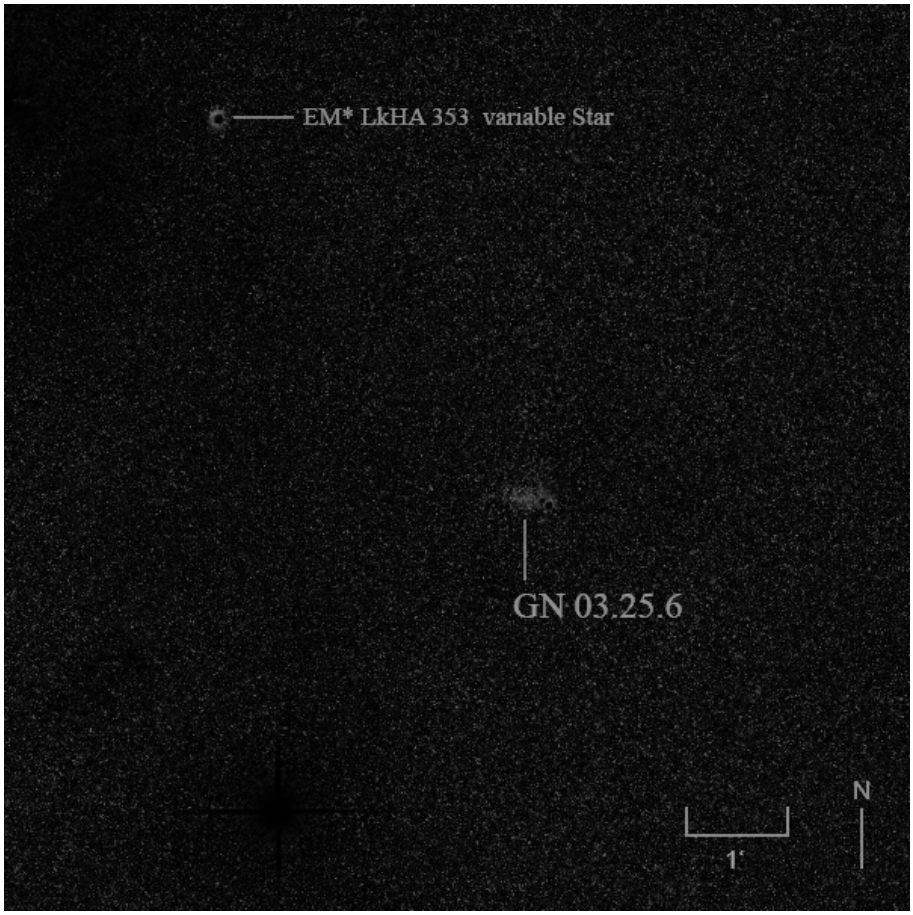
Relative Variations of brightness in a graphic display





Difference image

Between observation from 2014-10-26 / 27 and 2014-12-23 / 24



External Link to animation :

https://www.youtube.com/watch?v=qA95m0lqHvE&feature=youtu.be

NOTES

All files were acquired in Raw-Format, calibrated (Bias, Darks, Flats corrected), and integrated in PixInsight (www.pixinsight.com). For visualization, the integrated master lights were normalized and stretched with a single non-linear transformation applied to the whole image. No further processing was applied.

ACKNOWLEDGEMENT

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