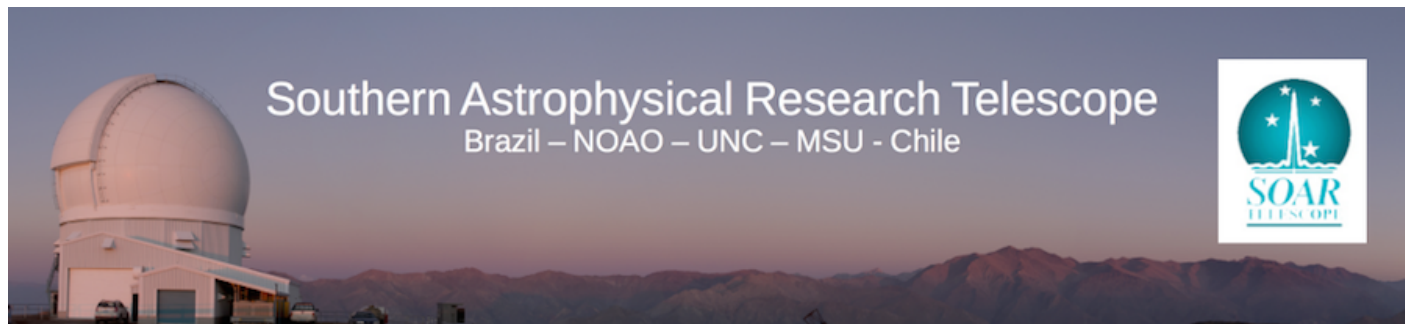




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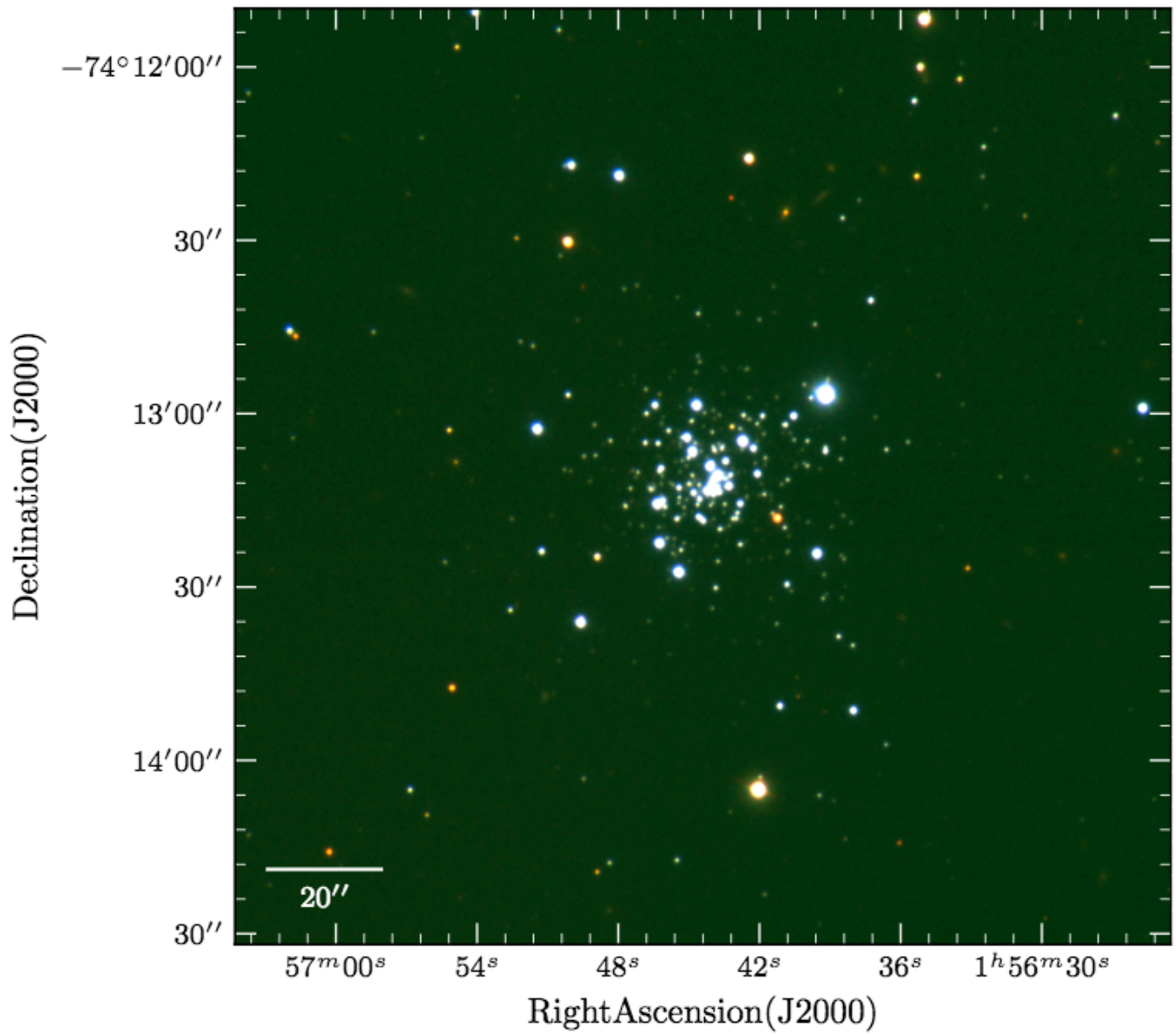
[Home](#) > Deep SAM AO Imaging of a distant young cluster

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## Deep SAM AO Imaging of a distant young cluster

Submitted by cbriceno on Fri, 2018-02-16 12:52

In a Jan 2018 paper, Kalari et al. 2018, ApJ, in press, report deep SAM AO images of the cluster NGC 796, located at 59 kpc in the diffuse intergalactic medium of the Magallanic Bridge. SAM optical imaging enabled the team to observe at scale down to  $\sim 0.14$  pc, and obtained resolved photometry of cluster stars to derive an age of 20 Myr by means of isochronal fitting on a color-magnitude diagram. With a total estimated mass of  $\sim 1000$  Msun and a core radius of  $\sim 1.4$  pc, this massive young open cluster is an important laboratory for studies of star formation at low metallicities environments.



SAM 3' x 3' three-color image of NGC 796. Blue = g-band, Green = r-band, Red= i-band, with exposure times of 50s in each filter. North is up, east is to the left. The scale is indicated by the horizontal bar at the bottom right. At the cluster distance, this bar corresponds to  $\sim 6$  pc.

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