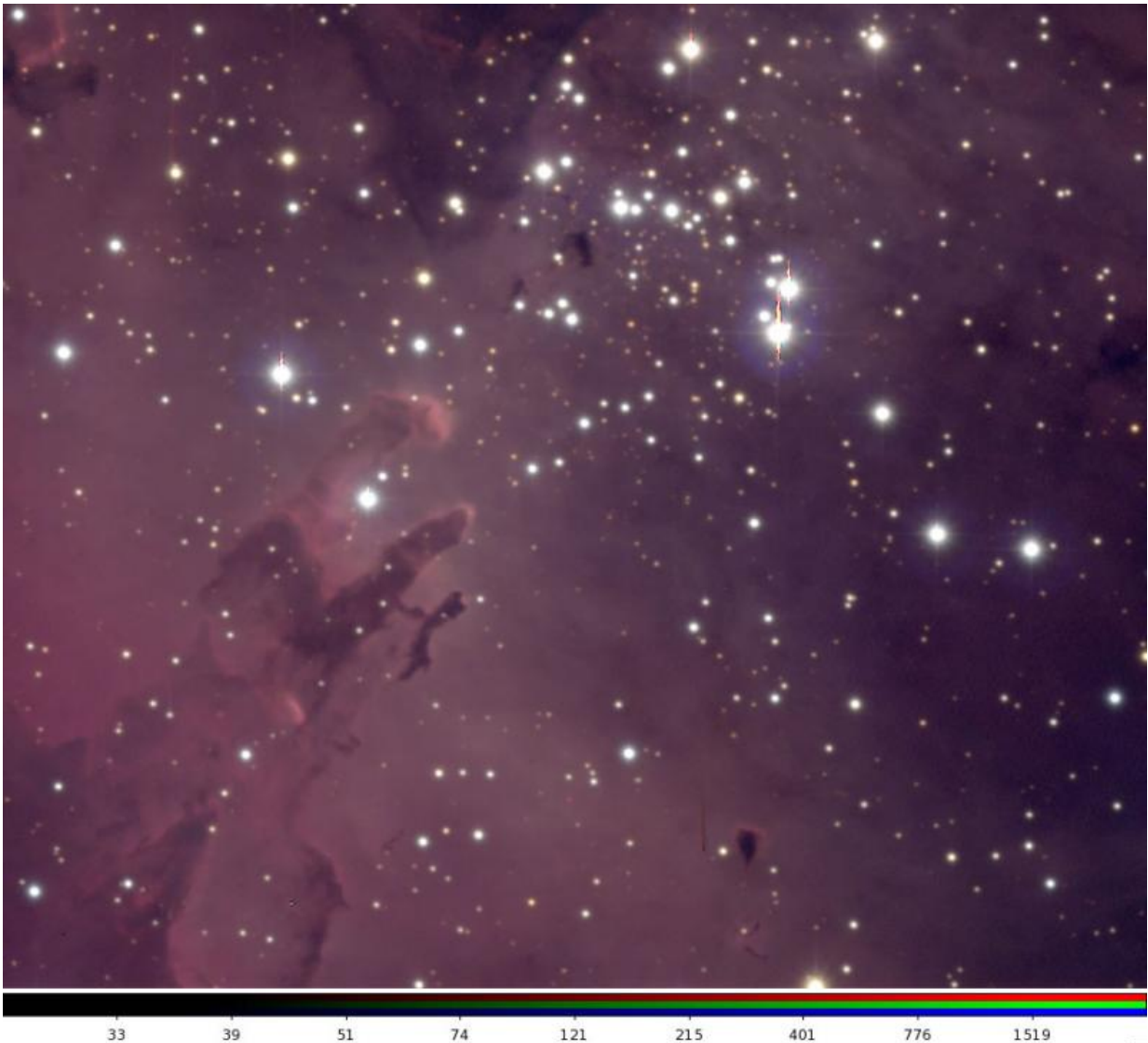


Astronomer explores universe through remote-controlled telescope

May 24 2016



Eagle Nebula M16. Taken by Dr. William Keel with the Jacobus Kapteyn Telescope.

Access by the astronomers at The University of Alabama to the Jacobus Kapteyn Telescope in the Canary Islands will benefit both research and students at UA.

Dr. William Keel, UA professor of astronomy and astrophysics, represents UA on the managing board of a 12-institution consortium called the Southeastern Association for Research in Astronomy. He recently obtained some of the first data with the recently reopened Jacobus Kapteyn Telescope through SARA, which operates the [telescope](#).

The 1.0-meter telescope is at an altitude of 2,360 meters at the Observatorio del Roque de los Muchachos on the Spanish Canary Island of La Palma, which is off the coast of Morocco. Keel can operate the telescope remotely, take digital images and bring his students into his research. The telescope is in the Western Europe time zone, which is six hours head of U.S. Central Time.

"Because of the time difference, students can see in the afternoon what they'd have to wait until midnight to see here," Keel said. "This opens up new possibilities for classroom experiences in our daytime, as well as making it easier to use the telescope without changing a whole day's schedule."

In April and May, Keel took some photos using the reopened telescope, including shots of the [globular star cluster](#) M3 in Canes Venatici (the constellation of the Hunting Dogs just south of the Big Dipper) and the planetary nebula M27 (the Dumbbell Nebula) in Vulpecula (the Fox, in the summer Milky Way).



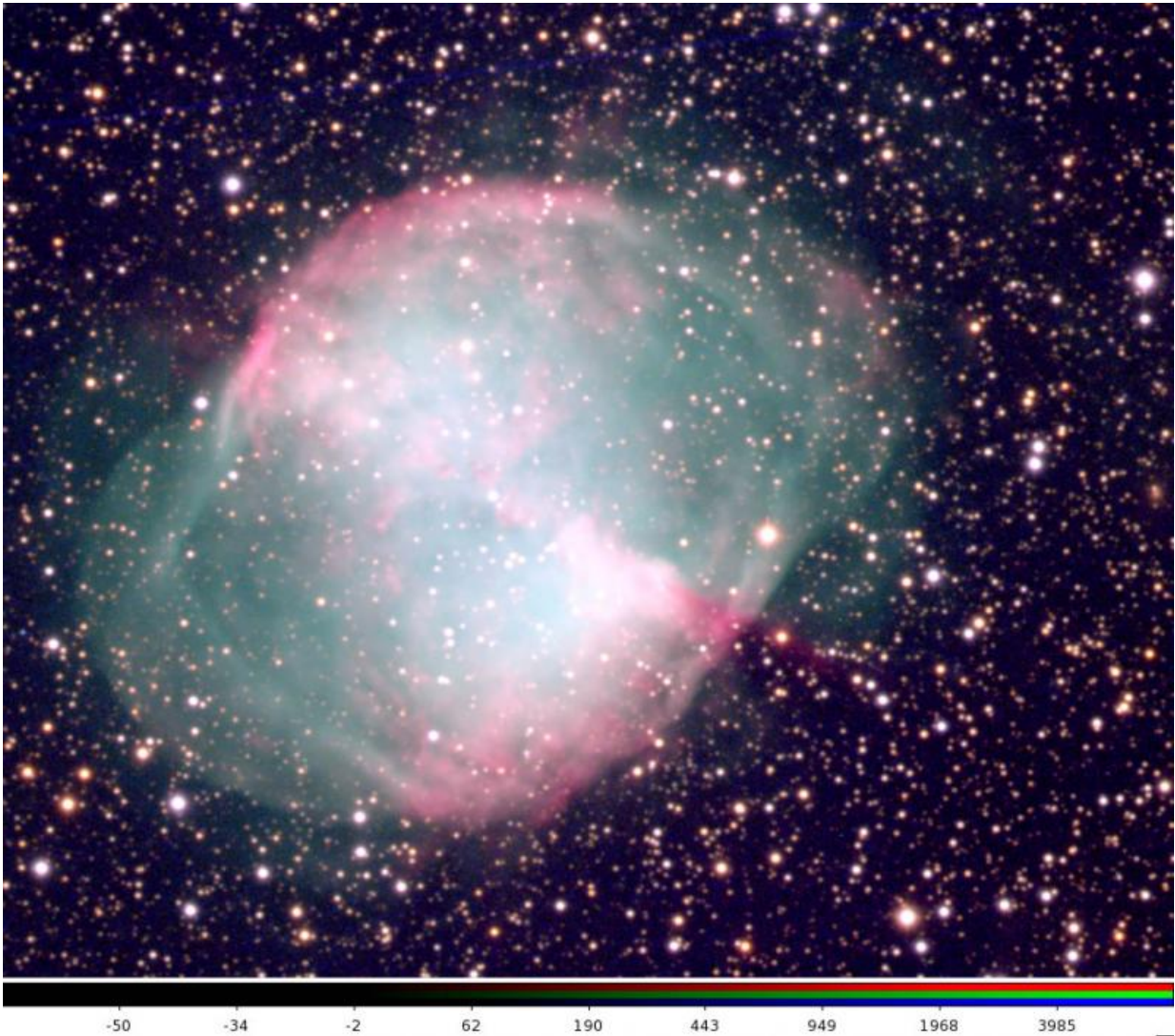
Spiral galaxy M83. Taken by Dr. William Keel with the Jacobus Kapteyn Telescope.

His initial research projects with the instrument include a search for fading quasar activity in galaxies, as accretion of matter into their enormous central black holes drops rapidly, and a study of the most deeply disturbed galaxies in colliding systems. Keel notes that SARA's constellation of three telescopes allows projects to be divided among them for greatest efficiency according to position in the sky,

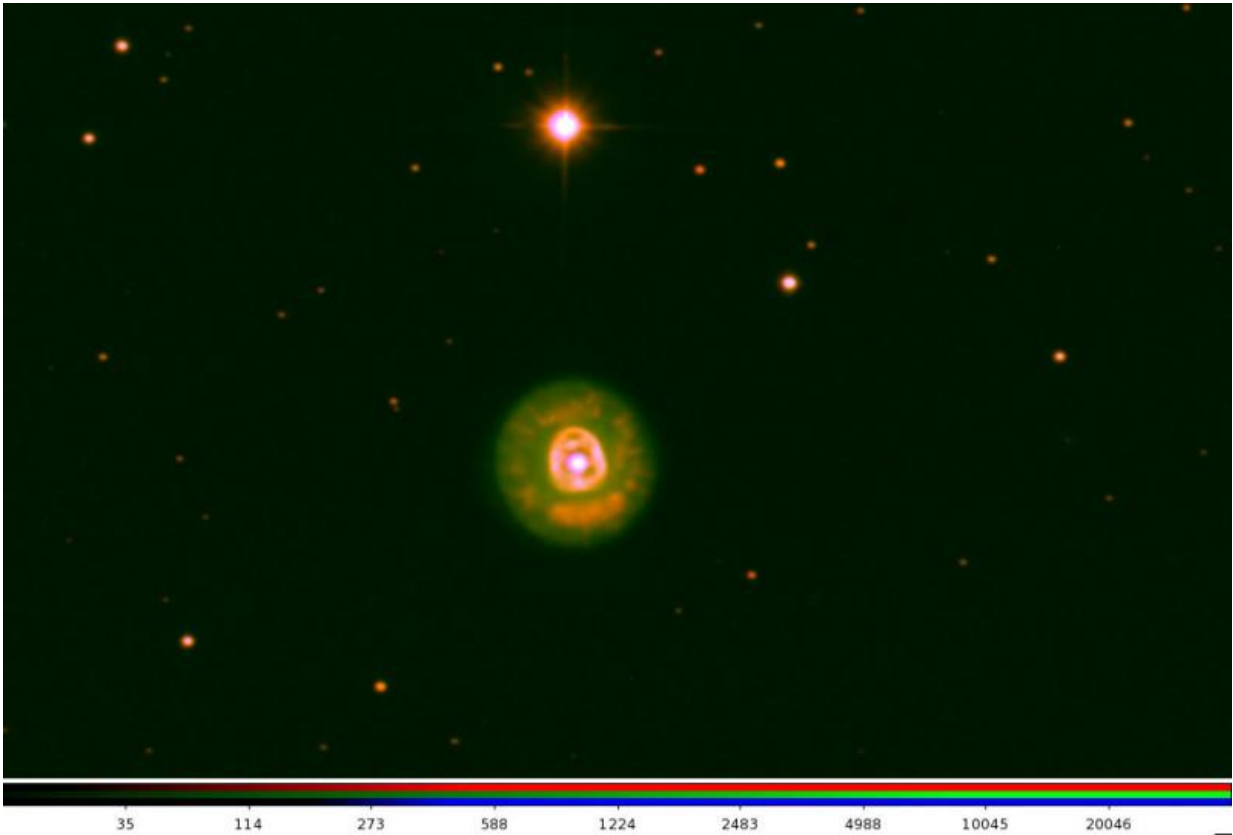
atmospheric conditions, and instruments installed on each one.

SARA began scheduled operation of the retrofitted the telescope in April 2016. According to its website, "the telescope provides additional advantages. On the one hand, SARA will have an instrument in an excellent location for astronomical observation. On the other, its position (longitude) allow observations for 16 hours straight."

SARA also operates telescopes in Arizona and Chile, providing unusually flexible access to the entire visible skies for research, classes and public outreach.



M27 (Dumbbell nebula) Taken by Dr. William Keel with the Jacobus Kapteyn Telescope



NGC 2392 planetary nebula. Taken by Dr. William Keel with the Jacobus Kapteyn Telescope.



Globular cluster M3 in Canes Venatici. Taken by Dr. William Keel with the Jacobus Kapteyn Telescope.

Provided by University of Alabama in Tuscaloosa

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