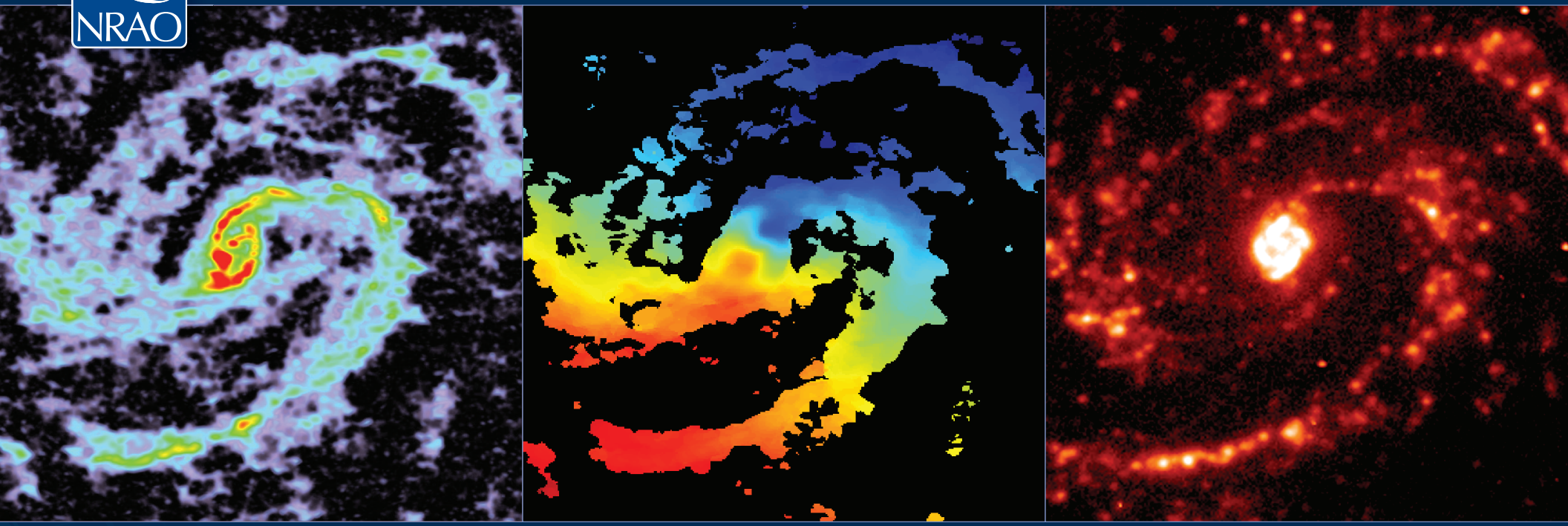
NATIONAL RADIO ASTRONOMY OBSERVATORY

Atacama Large Millimeter/submillimeter Array (ALMA)



The Atacama Large Millimeter/submillimeter Array (ALMA) is an international astronomy facility that is enabling transformational research into the physics of the cold Universe and cosmic origins from an outstanding observing site in northern Chile. The NRAO North American ALMA Science Center in Charlottesville, Virginia supports the scientific use of ALMA by the North American astronomy community.

Dramatic mosaic images of the face-on Sc spiral galaxy M100 acquired by ALMA Band 3 ($\lambda \sim 2.59$–3.57 mm) as part of the Science Verification process: (Left) the detailed CO emission distribution; and (Center) the molecular gas motions, as traced by their Doppler shift. This is the first public data release that includes all three parts of ALMA: the 12m-array, 7m-array, and Total Power antennas. About half of the full ALMA collecting area was used to make these images. *Credit: ALMA (NRAO/ESO/NAOJ).* [Right] An Hα image of M100 showing emission from ionized gas surrounding young, massive stars. *Credit: GoldMine (A. Boselli & G. Gavazzi).*

ALMA is a partnership of Europe, Japan, and North America in cooperation with the Republic of Chile that is funded in Europe by the European Southern Observatory, in North America by the U.S. National Science Foundation in cooperation with the National Research Council of Canada and the National Science Council of Taiwan, and in East Asia by the National Institutes of Natural Sciences of Japan in cooperation with the Academia Sinica in Taiwan.

ALMA Array Operations Site

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