

Cheers! NASA's Webb Finds Ethanol, Other Icy Ingredients for Worlds



What do margaritas, vinegar, and ant stings have in common? They contain chemical ingredients that NASA's Webb has identified surrounding two young protostars known as IRAS 2A and IRAS 23385. Although planets are not yet forming around those stars, these and other molecules detected there by Webb represent key ingredients for making potentially habitable worlds.

An international team of astronomers used Webb's MIRI (Mid-Infrared Instrument) to identify a variety of icy compounds made up of complex organic molecules like ethanol (alcohol) and likely acetic acid (an ingredient in vinegar). This work builds on previous Webb detections of diverse ices in a cold, dark molecular cloud.

Feature: <https://science.nasa.gov/missions/webb/cheers-nasas-webb-finds-ethanol-other-icy-ingredients-for-worlds/>

Paper: <https://doi.org/10.1051/0004-6361/202348427>

Caption: NASA's Webb captured this image by of a region near the protostar IRAS 23385. Credit: NASA, ESA, CSA, W. Rocha (Leiden University)

