

Hubble snaps a pair of interacting galaxies

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Credit: ESA/Hubble & NASA, Dark Energy Survey/Department of Energy/Fermilab/Dark Energy Camera (DECam)/Cerro Tololo Inter-American Observatory/NOIRLab/AURA



The two interacting galaxies making up the pair known as Arp-Madore 608-333 seem to float side by side in this image from the NASA/ESA Hubble Space Telescope. Though they appear serene and unperturbed, the two are subtly warping one another through a mutual gravitational interaction that is disrupting and distorting both galaxies. Hubble's Advanced Camera for Surveys captured this drawn-out galactic interaction.

The <u>interacting galaxies</u> in Arp-Madore 608-333 are part of an effort to build up an archive of interesting targets for more detailed future study with Hubble, <u>ground-based telescopes</u>, and the NASA/ESA/CSA James Webb Space Telescope. To build up this archive, <u>astronomers</u> scoured existing astronomical catalogs for a list of targets spread throughout the night sky.

They hoped to include objects already identified as interesting and that would be easy for Hubble to observe no matter which direction it was pointing.

Deciding how to award Hubble observing time is a drawn-out, competitive, and difficult process, and the observations are allocated to use every last second of Hubble time available. However, there is a small but persistent fraction of time—around 2–3%—that goes unused as Hubble turns to point at new targets.

Snapshot programs, such as the one which captured Arp-Madore 608-333, exist to fill this gap and take advantage of the moments between longer observations. Snapshot programs not only produce beautiful images, they enable astronomers to gather as much data as possible with Hubble.

Provided by NASA's Goddard Space Flight Center



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