

Out of This World!



What is a Comet?

Comets are believed to be remnants left over from when the solar system formed about 4.5 billions years ago. Like the planets, comets orbit the sun, though their orbits are more elongated (think of a very squashed oval). Depending on the type of comet, they can take from around 200 years or more to orbit the Sun. Sometimes their orbital path will bring them particularly close.

Comets are composed of ice, rock, and dust. They can range from a few miles to tens of miles wide. As they approach the Sun, the ice is heated, causing vapour to fizz from the surface. Dust and gas creates a long tail of debris, known as a coma. The coma stretches millions of miles and is lit by Sun.



COMET NEOWISE OVER ROARINGWATER BAY, WEST CORK: Comet Neowise was visible for a number of nights over Sherkin Island and Roaringwater Bay. The image above, taken on 15th July, is looking north over Kinish Harbour (aka Cúinne) with the lights of Heir Island and Cunnamore Piers in the distance. It was captured using a shutter exposure of 15 seconds and very high ISO—these are settings on a camera which reveal more colours and detail than is visible to the naked-eye.

Comet Neowise's long tail of debris, known as a coma.



Images courtesy of Robbie Murphy

What do we know about Comet Neowise?

Comet Neowise was discovered on 27th March 2020 by NASA's Near-Earth Object Wide-field Infrared Survey Explorer (NEOWISE) mission. It came from the most distant parts of our solar system. As it zipped through the inner solar system, Comet Neowise was visible in the Northern Hemisphere skies from 15th to 23rd July, being closest to Earth on the 23rd. It survived the intense heat from the sun and sped away into the depths of space. It will not be seen from Earth again for another 6,800 years.

