



The Age of Exploration



In the 1500s, Europe was going through an Age of Exploration. Europeans were sailing across the oceans and mapping brand new lands. During this time they discovered the Americas, Africa, Asia and Oceania for the first time. Some of these explorers were also discovering new places in the night sky!

On one clear, starry night a Portuguese explorer called Ferdinand Magellan sailed over the equator to the Southern Hemisphere. Not only had he entered new lands and seas, but from there he saw an entirely new sky! Since the southern half of the planet is facing a different direction in space than the north, southerners see different stars and galaxies than the northerners do. Looking at this new set of stars, Magellan noticed what looked like a blurry cloud. But as his voyage continued, the "cloud" didn't move...

Magellan met his unfortunate end in a fight with a native Filipino tribal chief. But, although he never made it back to Europe, this "blurry cloud" has been named in his honour. Today, it is known as the Large Magellanic Cloud (or the "LMC").

We now know that the LMC is a dwarf galaxy, about 10 times smaller than the Milky Way (our home galaxy). And in the same way our planet orbits the Sun, this galaxy orbits the Milky Way. This picture is a close-up of the LMC, showing two clouds of gas and dust that have stars forming inside them.

These two clouds could be classed as "twins", since they both belong to the same parent galaxy. Plus they're both being lit up by extremely hot young stars inside them. But they look very different: one bright red and one bright blue. This is because of their chemical make-up. The blue glow tells us that the left cloud is made of oxygen, while the red glow shows us that the other cloud is made of hydrogen.

COOL FACT

There is another dwarf galaxy also named after Ferdinand Magellan. It's called the Small Magellanic Cloud. Many astronomers believe that both of these galaxies will eventually be consumed by the Milky Way!

