The European Space Agency’s (ESA) Gaia satellite is capturing data on around 1 billion celestial objects to create a 3D map of the Milky Way - but exactly how much information is being collected and how is it being stored and analysed?

The Gaia satellite will look at around 1 BILLION celestial objects over a period of 5 years.

Gaia records the POSITION, MOVEMENT & BRIGHTNESS of observed celestial bodies...

Over 5 years it will perform 10 SWEEPS of the entire galaxy.

Gaia sees up to 40 MILLION observations every day. This results in over 285 GB of scientific data per day.

If stored on DVDs, it would take 217,872 DVDs...

That’s nearly 50 YEARS of entertainment.

It is expected to discover HUNDREDS of THOUSANDS of new celestial objects... including extra solar planets and brown dwarfs (failed stars).

...and look at each one on average 70 TIMES.

Over its entire lifetime, Gaia will handle around 1 MILLION GIGABYTES of data.

The Gaia Project is considered the BIGGEST data challenge in astronomy to date.

Got a big challenge? We’re built for big.

Find out more at www.intersystems.com/gaia