

The planets descend on the UK (BBC NEWS)

So a project to bring the size of the Solar System down to Earth - or rather to the UK - has been launched.

Spaced Out, as it is called, aims to create the world's largest scale model of the Solar System.

The model will be constructed across the UK, and will also be supported by a dedicated website.

"It will incorporate a total of 18 models which will represent the Sun, the nine planets, Halley's Comet and numerous asteroids," said project director Nigel Marshall.

Planet Earth will be sited in Macclesfield.

School orbits

It is not just a science project though.

"It will unite art, science and technology," explained Dr Marshall

"The models will be sculptures or artistic representations. For example, we're not expecting the model of the Sun to be a yellow sphere with dots on it - it's going to be rather more interpretation.

"Someone has even suggested that Mars could be an old red sea mine - Mars was the god of war, the mine would be the same colour as the planet and the surface would be rusty iron, just like the surface of Mars."

Most of the objects will be located in school grounds. Others will be in visitor attractions, such as the National Space Centre in Leicester, the Spaceguard Centre in Knighton, Wales, and the Armagh Planetarium in Northern Ireland.

"The school sites will act as a focus for the school's activities. The sites will incorporate a planting area, a seating area and a circular orbital path.

"We hope that the schools will get heavily involved with designers and artists from their local communities," said Dr Marshall.

Outer reaches

The Sun will be located at Jodrell Bank Observatory in Cheshire.

Jodrell is home to the 76m (250ft) diameter Lovell radio telescope, which has been listening to the skies since 1957.

"One problem that everybody has is how to get some feel of the scale of the Universe and our Solar System," said Ian Morison, operations engineer at the observatory.

"The distances are so great it is very hard to imagine. I think this project is absolutely wonderful. We are very proud that Jodrell Bank has been chosen for the location of the Sun."

The scale of 1 to 15 million reduces the distance between the Earth and the Sun to about 16km (10 miles).

However, Pluto will still be as far away as Fort William, Scotland; Saturn will be in Lancaster and Halley's Comet in London.

Uranus will be placed in Bath - where, coincidentally, William Herschel lived when he discovered the planet in 1781.

Mission to engage

On the same scale, the nearest star, Proxima Centauri, would be about seven times further away than the Moon.

Space exploration and astronomy now form major themes in primary and secondary school curricula.

"Spaced Out will become a national teaching resource accessible to all students in all schools," said Dr Marshall.

"It will show the scale and content of our Solar System. It is, no doubt, going to inspire, captivate and stimulate. We hope to encourage young people to consider science-based careers."

Events such as the close proximity of Mars last summer and Beagle 2 have caught the attention of the public.

It is hoped that Spaced Out will promote further interest and awareness in astronomy.

"The dedicated website will be accessible to all and will link all the sites together. It will encourage dialogue and act as an information service for everyone.

"We really want to demystify science - to expel some of the myths. Many of the general public are not aware of the difference between astronomy and astrology. When I'm asked I reply that one's a bit of fun - the other is a lot of fun," said Dr Marshall.

Planet webcams

The project also aims to highlight the astronomical work already being carried out in the UK.

"We have involvement with the Esa space probes and with the Faulkes telescope project.

"There is wonderful work being done at Jodrell Bank and we have great exhibition centres in Leicester and at the Greenwich observatory. We want to link all these together," said Dr Marshall. The website will contain most of the science.

"There will be areas for learning and a quiz of multiple choice questions. You will be able to print out a special Spaced Out certificate with your name and score on it," said Andrew Greenwood, the team's website designer.

"There will be webcams at all of the objects, so you can take a virtual tour of the whole model. A discussion group, open to all, and a secure schools-only chatroom will be available. Everyone can chat in real time about any of the objects or astronomy in general."

The website will also contain an extensive image gallery, where professional and amateur astronomers can put their astronomical images.

There will also be an area for the art and designs produced by the schools themselves.

Stardate 2005

"It will be an eclectic mix of learning, science and art - it will be quite an impressive tool," said Mr Greenwood.

"The website will also contain news, FAQ's - Frequently Asked Questions - and information about the project. We hope that in the future the site may develop into a hub for astronomy learning in the UK and possibly worldwide as well."

The Spaced Out team of astronomers, schoolteachers and designers will oversee the planning, construction and realisation of the project.

"There is a lot more funding to gain and we also need to develop partner schools. The models also need to be designed and built. This stage will take one year and we hope to have coordinated openings during Science Week 2005," said Dr Marshall.

"The project will run for a further three years but there will be plenty of opportunity to develop things further."