

Free Satellite Imaging Initiative

Satellite imaging provider DMCii has announced that it will provide free DMC constellation satellite imagery for scientists to support global environmental monitoring projects. Scientists are invited to compete for the opportunity to use the DMC multi-spectral data in their research projects. Applications will be judged on their contribution to international environmental research by an international panel of scientists chaired by Professor Alan O'Neil from the National Centre for Earth Observation.

DMC constellation data will be awarded to 5 UK and 5 Spanish science projects. The provision of data will be coordinated by DMCii in the UK and Spanish company Deimos Imaging in Spain which will soon join the DMC with its new satellite DEIMOS-1.

Dave Hodgson, Managing Director DMCii commented, "We feel that this is a unique and valuable contribution to the science community, and look forward to supporting some deserving scientific research that will contribute to our knowledge of the Earth and our impact on its resources."

Satellite imaging is a powerful tool for monitoring land use. It offers a valuable "eye in space" for monitoring and recording environmental change on a global basis. DMCii has previously provided free data to the science community, from which scientists have produced excellent results which include monitoring the burning of peatlands in Indonesia.

Nowhere is the need to improve knowledge of resource more pressing than in improving our knowledge and monitoring of climate change. The Intergovernmental Panel on Climate Change (IPCC) reported that 17.3% CO2 emissions in 2004 were the result of changing land cover change, predominantly deforestation. By improving knowledge of the rainforests, satellite imaging is helping to measure the rate and location of deforestation and contributing to scientific models that will improve understanding of climate change mechanisms.

The DMC constellation of 5 satellites work together to image large areas of the Earth. Because several satellites and their respective owners (Algeria, China, Nigeria, Turkey, UK) cooperate together, the constellation can image a given geographical location frequently to identify changes or make the most of cloud-free periods. This unique combination makes the constellation highly effective for monitoring land use.

The multi-spectral sensors on-board the 5 spacecraft capture accurate images of the Earth, in visible spectral bands as well as infra-red, which is invisible to the naked eye. This additional information is used by scientists to identify specific detail, such as Normalized Difference Vegetation Index (NDVI) data which assesses whether the target being observed contains live green vegetation or not.

For more than 4 years, DMCii has acquired images enabling Brazil to monitor deforestation in the Amazon Basin. The DMC constellation has also contributed to the EC's landmark Global Monitoring for Environmental Security (GMES) project.

Both DMCii and Deimos are launching their own commercially funded satellites in 2009, UK-DMC2 and DEIMOS-1. The winning scientific projects will be able to request data from the 2 new satellites, which will offer higher resolution (22m) imaging capability and increased data capacity to the DMC constellation.