

Planning for disaster, saving lives

Natural disasters around the world have highlighted the vulnerability of modern society to the forces of nature.

NERC scientists can detect and analyse natural events as they happen, providing vital information for local and national authorities to plan for and respond to disasters, saving lives and avoiding disruption and economic losses.

Partners: UK and international governments, local authorities and communities

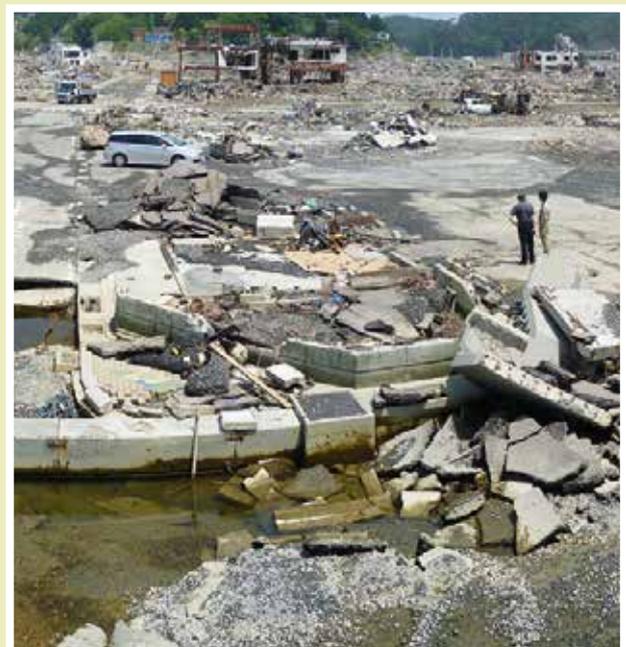
The collaboration

Vital data provided by BGS helped the response to the Haiti earthquake in January 2010. Scientists immediately detected the 7.0 magnitude quake and were able to quickly alert rescue agencies. NERC scientists also assisted the World Bank, by analysing high-resolution satellite and aerial images to assess the damage in and around Port-au-Prince. Working with NGOs, including the Red Cross and Unicef, NERC scientists continued to help identify areas safe from aftershocks, landslips and flooding.

When the Soufrière Hills volcano in Montserrat erupted in 2008 under a layer of thick cloud, researchers at the National Centre for Earth Observation used satellite data to assess future risk and advise the Montserrat government that evacuated people could return home, minimising disruption to their lives and to the recovering Montserrat economy.

Satellite data helped researchers pinpoint the cause of the earthquake that struck L'Aquila in Italy in 2009, killing 308 people and leaving tens of thousands homeless. Radar data revealed that a largely overlooked fault was responsible and that nearby faults had become more dangerous as a result. The work helped the Italian authorities improve their emergency planning procedures.

When the Eyjafjallajökull volcano erupted in Iceland in 2010, closing much of Europe's airspace, a NERC



research aircraft was able to fly into the ash cloud to take measurements which helped the Civil Aviation Authority decide when to re-open British airspace.

The UK Radiation Recovery Handbook, produced by scientists at NERC's Centre for Ecology & Hydrology, is designed to help policy-makers and the emergency services manage contaminated land in the aftermath of a release of radioactive materials. It is being used in Japan to help authorities tackle the radiation leaking from the Fukushima nuclear reactor.