

About the voyage

Australia's research vessel (RV) *Investigator* is undertaking a 54-day research voyage to Tonga to study the aftermath of the 2022 eruption of Hunga Volcano. Led by Chief Scientist Associate Professor Rebecca Carey from the University of Tasmania, a collaborative international research team onboard will investigate the eruption, destruction and seafloor ecosystem recovery following the 2022 eruption, which was the most powerful volcanic eruption on Earth in the past 110 years.

Researchers will undertake more than 120 scientific operations in and around the volcano including high resolution seafloor mapping, surveys of the sub-seafloor structure, seafloor sediment coring with a giant piston corer (able to recover 24-metre cores), deep towed camera surveys and benthic sled sampling to study seafloor life, and CTD (conductivity, temperature and depth) instrument casts to study ocean properties. The voyage science team includes participants from Australia, Tonga, Fiji, New Zealand, the United Kingdom and the United States.

The research seeks to generate knowledge to help Pacific Island nations better manage the risk from natural disasters and safeguard island communities from volcano-generated tsunamis. It also aims to provide information to help protect fisheries and food security, and prevent damage to critical regional sub-sea infrastructure such as communication cables.

The voyage departed Hobart, Tasmania on Sunday 10 August and finishes in Brisbane, Queensland on Wednesday 1 October. Three port calls will be made in Tonga during the voyage.

About the vessel

RV *Investigator* is Australia's dedicated ocean research vessel and is operated by CSIRO (Commonwealth Scientific and Industrial Research Organisation), Australia's national science agency. This 94-metre vessel is packed with impressive scientific capabilities to enable a diverse range of research including atmospheric, biological, geophysical and oceanographic science. It can accommodate 60 scientists and crew, and deliver research from the ice edge to the equator.

RV *Investigator* is part of Australia's Marine National Facility, national research infrastructure funded by the Australian Government and operated by CSIRO on behalf of the nation.

Find out more about RV Investigator and the Marine National Facility at www.csiro.au/mnf