



SUMMARY OF SESSIONS

A1 Learning from large NZ earthquakes	This session is calling for contributions on new knowledge ranging from active fault behaviour to earthquake source dynamics and shaking impact on the natural (tsunami, landslide and liquefaction) and the built environment. We are also after presentations drawing on geological, geodesic and seismological observations and building towards more robust hazard models.
A2 Hikurangi Margin	The Hikurangi subduction zone is an outstanding natural laboratory to investigate a wide range of fundamental subduction processes and it is the focus of many recent onshore and offshore geological and geophysical investigations. We welcome submissions that advance understanding of the Hikurangi subduction zone, including processes that underlie slow slip events and earthquake cycle behavior, volatile and fluid cycling, long-term subduction margin evolution, geohazards associated with the plate boundary and comparative studies with other subduction zones.
A3 From faults to the mantle: integrating near-surface seismotectonics with processes at depth	We welcome presentations that contribute to the understanding of seismotectonics at different levels within the crust. From the geomorphic expression of active faults and paleoseismology, borehole and geophysics studies at near surface to deep crustal levels, to seismotectonic modelling. We particularly encourage presentations that integrate different disciplines at singular and/or multiple crustal levels.
B1 TVZ-Kermadec Hydrothermal	This is a call for papers that broadly covers tectonic, volcanic and hydrothermal processes that occur in the Kermadec arc/backarc system, NE of New Zealand. This includes the active arc front volcanoes, the Kermadec Ridge, Havre Trough and Colville Ridge. This session hopes to bring together a collection of papers that will address fundamental processes that drive submarine hydrothermal activity associated with a plate boundary. The goal of this session is to bring together scientists from a broad range of disciplines (e.g. igneous petrology, economic geology, volcano and geothermal fluid geochemistry, crustal geophysics and numerical modeling) to elucidate processes of mass and energy transfer in hydrothermal systems with implications for resources. We are welcoming contribution exploring the future of New Zealand needs in terms of mineral exploration and energy security.
B2 Volcanism and magmatism in Zealandia	This session seeks to understand ancient and modern magmatic processes, the range of volcanic eruption styles and their controls, and the future impacts of eruptions in a modern world. We encourage the full gamut of specialists from modelling, laboratory, experimental, monitoring, and field-based analysis to understand fundamental processes and how this feeds into applied scenarios. We aim to focus on volcanism and magmatism in Zealandia, but are open to overseas analogues.
B3 New Zealand Geochemistry	We invite scientists studying geochemical processes to present their research at the inaugural Geochemistry Special Interest Group session at Geosciences New Zealand. We specifically seek to bring together researchers from low through to high temperature settings and provide a venue in which they can present their work to an informed and interested audience. There is no restriction to what can be presented as long as it is geochemistry-related. Confirmed topics include: what Martian meteorites tell about the composition of Mars's crust, rare earth element geochemistry of beach sands in Westland, the distribution of Au in Earth's upper mantle, and As and Au mobility in soils above Hyde-Macraes shear zone. We encourage posters as an option to develop discussion on new topics.
C1 Sedimentary Basins and processes	All aspects of sedimentary basin formation, integrated stratigraphy, evolution, and architecture.
C2 Zealandia: Our land and natural history	The mostly submerged continent of Zealandia has a history that spans more than half a billion years. We invite contributions on all aspects of Zealandia history, ranging from continental-scale processes, to microscale fossils, and to the reconstruction of past geological settings and ecosystems.
C3 Antarctica + NZ: climate + processes	Antarctica - climate and processes This session is focussed on Antarctic climate, cryosphere, atmosphere and lithosphere, particularly the geology and climatic variability of the Ross Sea region. Includes recent IODP drilling. Quaternary climate and biotic responses, including updates from SHAPE projects.
C4 Sea level	Presentations in this session will examine the causes, magnitude, and frequency of past sea level change across a range of temporal scales and will outline state of the art science that aims to update sea level projections and interrogate potential impacts.
D1 Geoparks and Geoheritage	UNESCO Geoparks and other aspects of Geoheritage.
D2 Resilience to hazards	This session will focus on how societal decisions and choices affect the social, culture and economic resilience of communities, at local, regional and national scales. We will also explore role of collaboration between physical and social scientists and how this multi-disciplinary endeavour has evolved over the past two decades within the earth science community. We will also look at opportunities and challenges for the future.
D3 Jurassic Crises - 7th Symposium of IGCP 632	Calling for contributions to consider: the evidence and impact of well-known continental crises preserved within Jurassic sequences in the south-polar regions of Gondwana.
D4 The role of sub-seafloor fluid flow in the geosphere and biosphere	Fluid flow and fluid-rock interactions in the sub-seafloor environment are of interest to a wide range of subsurface applications, including conventional hydrocarbon exploration, geothermal energy production, geological CO2 sequestration, gas hydrates and groundwater remediation. However, the evolution and the physical properties of fluid pathways in shallow sediments remains poorly understood. The interaction between fluid composition, fluxes and biota plays a role in hydrocarbon formation, sediment deformation and supplying gas to seafloor vent sites and associated ecosystems.
D5 Geoscience Data for Everyone	New Zealand has many rich and diverse geoscience databases and collections that are publicly accessible and many more that could be. We invite contributions to this session that describe some of these data, explain how they can be accessed, consider how access to important information can be improved and/or show exciting ways these data have been combined and applied.