

# SLOW SLIP EVENTS WITH DR AKE FAGERENG

## TALKING POINTS

1. Why do you think slow slip events have only recently been discovered?
2. How could studying slow slip events be important for human settlements?
3. What were some of the initial findings from the International Ocean Discovery Program Expedition 375?
4. What can microscopy tell researchers about sediment cores that other scientific techniques cannot?
5. What does Ake suspect is a key factor in slow-slip events?
6. Why do you think Expedition 375 chose the Hikurangi Margin as the research site?
7. What different areas of research were undertaken on Expedition 375?
8. What is a drawback of using drilling to extract sediment cores?

## ACTIVITIES FOR HOME OR IN THE CLASSROOM

The work done by scientific vessels can tell researchers many different things about the world. The JOIDES Resolution website has information on all its research expeditions since 2005. Use the website to find out more about the different areas it has worked on, and the sorts of researchers that have been onboard.

<https://joidesresolution.org/expeditions/>

For instance, Expedition 375 was investigating seismology and geology. Ake is a structural geologist, but other sorts of geologists and scientists were onboard. Other expeditions covered different areas. Consider the following as starting points:

- Climate change
- History of the Earth
- Ocean currents
- Natural disasters
- Weather
- Microbiology
- Outreach and education

What design features on the JOIDES Resolution made it able to explore so many different areas of science? Can you think of any topics that future expeditions might investigate?

## MORE RESOURCES

- The JOIDES Resolution has a huge array of resources suitable for schools, including blogs, videos, eBooks, and even downloadable games: <https://joidesresolution.org/public/>
- Ake's personal website talks about his research as well as his life outside his career, giving an interesting insight into a researcher's work-life balance: <https://akefagereng.wordpress.com/>
- The Geological Society offers a wide range of free resources for schools and students, including factsheets, posters and even card games. Find them here: <https://www.geolsoc.org.uk/SupportingMaterials>