Curriculum and Participation

18 credits toward graduation, 6 credits toward Geo Major

21 student participants
Plus: me, NZ Geologists, one or two Carl alums as TAs/Camp Managers

Candidates: geology majors and those considering it. We anticipate some Seniors (especially as mentors), a good number of Juniors, and some Sophomores... (at least one 200-level geology course required)

Interviews and applications this Spring Term- so watch for announcements from OCS. Applications: April 17th.
Focus will be **Field Work**

- we will investigate all types of rock, structures, stratigraphy, geomorphology, using both ancient and modern examples

- problem-based inquiry, honing our skills of observation and spatial reasoning, and some event analysis

- we’ll use readings from the primary literature, and have evening seminars

- we’ll also visit to cool geological sites without guilt of doing so…

- we’ll explore cultural topics (Maori and European) and environmental issues: geothermal energy, geohazards, land-use, etc.
New Zealand: A Geologist's Paradise
Plate Tectonics on a very active convergent plate boundary
Diagram of plate tectonics showing the subduction of the Pacific Plate and the formation of the Kermadec volcanic arc. The Australian Plate is shown with magma and melting processes. Backarc and pelagic sediments are also indicated.
Local Experts in field with us:
Darren Gravley
Other random Kiwis
Exposure to new types of rock, and problems to solve...
Programme starts in Auckland

Programme ends in Christchurch
First four-weeks on North Island:

devolving skills
back arc tectonism
volcanism and geothermal energy
coastal sedimentology, geomorphology & marine habitats
Second four-weeks on South Island:

- honing skills
- structures mapping
- stratigraphy
  - igneous-
  - metamorphic mid-crustal & mantle rock
Working 6 days per week (rain or shine), maybe even 7 some weeks!

Some odd hours (low tide) and some odd down-time

Some rugged terrain

Bunk style dorms or rustic cabin quarters

Communal and small group cooking for ourselves
You might be hot and sunburnt, or cold and wet.... You might be hiking across a hillslope, or jumping in the surf....
Dates and Destinations:

Sunday January 3: students due in Auckland
-arrive at start separately, but we leave Auckland as a group the next morning, Monday January 4. You can use the Winter & Spring Breaks for personal travel.

January 4 - 30: Four weeks of intense field work and travel across the North Island

January 30 - February 5: Mid-Programme Break

Friday February 5: Group reconvenes on South Island (various rendezvous points to meet up with group)

Saturday March 6: Programme ends in Christchurch after breakfast. Three weeks to start of Carleton term...