

AltiGlidEx : towards a synergy of AltiKa, gliders and XBTs for the monitoring of boundary currents in the South-West Pacific

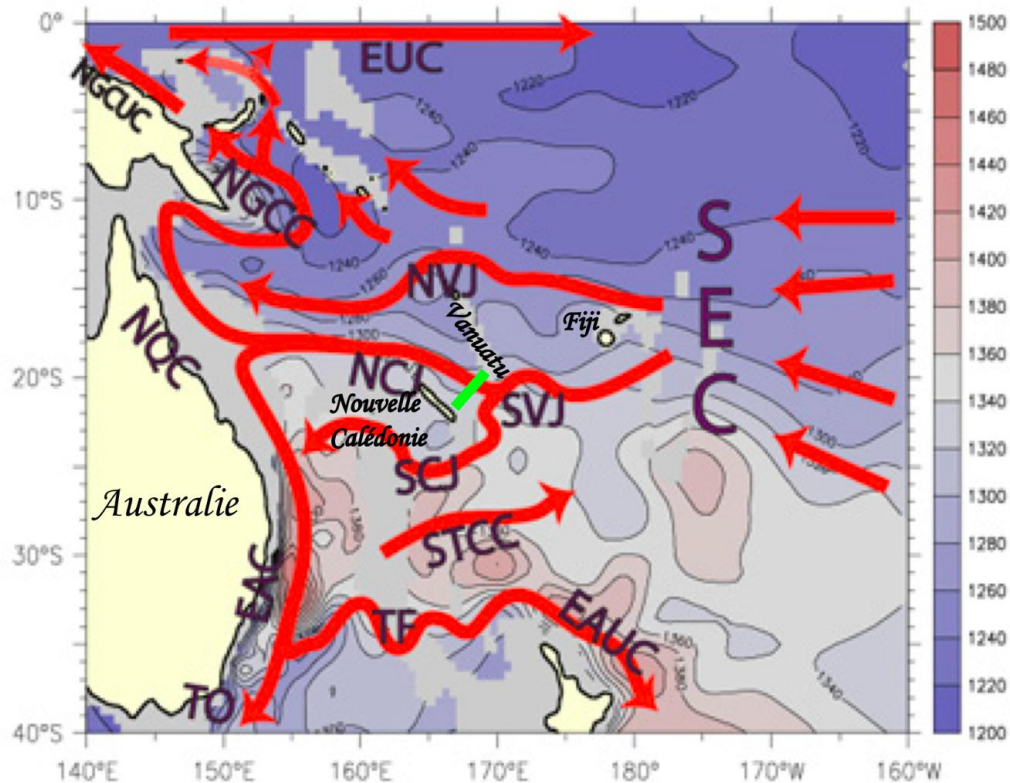
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South-Western Pacific ocean: A key region for the tropical general circulation



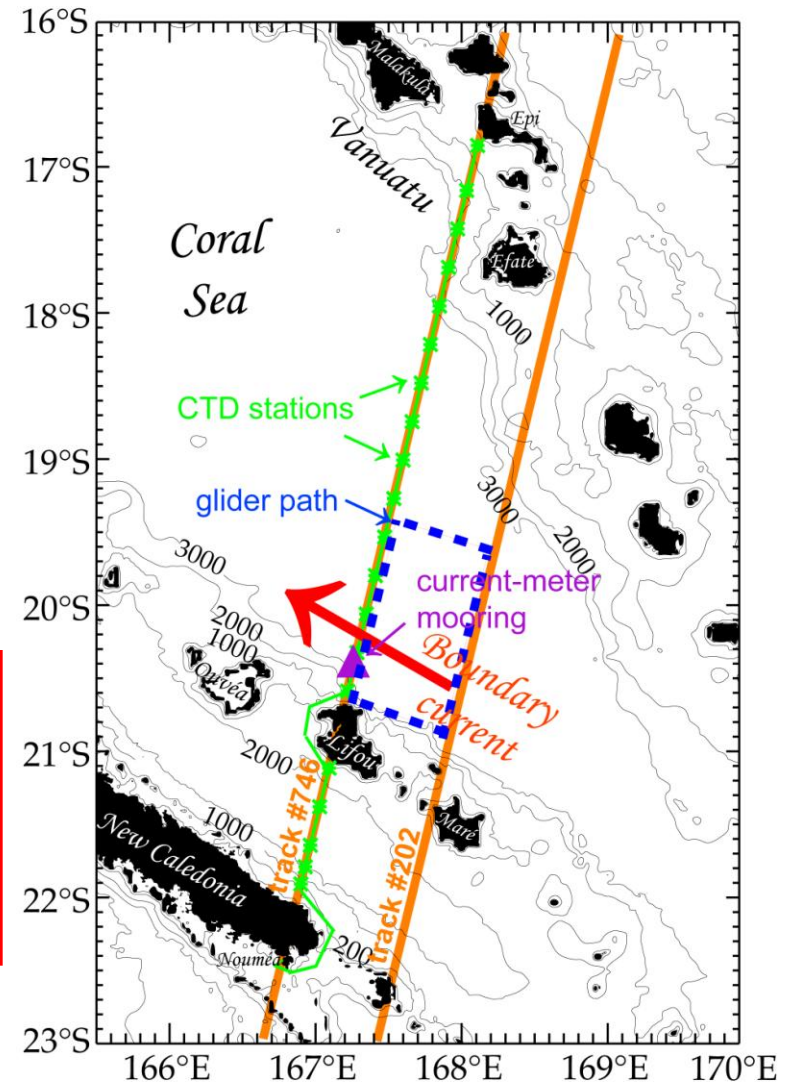
- complex bathymetry: powerful and variable jets and boundary currents.
- climatic relevance: low-frequency modulation of ENSO (SPICE/CLIVAR).

Objectives of AltiGlideX

4 questions raised :

- performance of SARAL in coastal waters ?
- relevance of the temporal sampling (35d) ?
- vertical extent of the surface current ?
- mean and ageostrophic components ?

Our target: implement a synergy between AltiKa et 4 in situ observing systems (gliders, moorings, shipborne ADCP and XBTs) to observe the entire spectrum of boundary current variability.



Implementation: current status

Completed:

- 1 year of current-meter mooring (second year currently ongoing...)
- 3 glider missions along SARAL tracks (1 since launch)

- 220 CTD + velocity profiles (0-1000m, every 5 km along the track)

- observation of geostrophic and absolute current

- for each SARAL cycle: 2 meeting points (on track #202 and #746)

example : latest glider mission (June-August 2013)

