Observations of oceanic currents structures off Southern Peru

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Thanks to Carmen GRADOS and the whole scientific party onboard R/V José Olaya





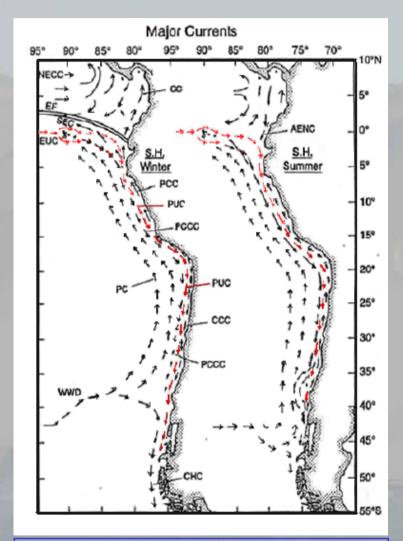




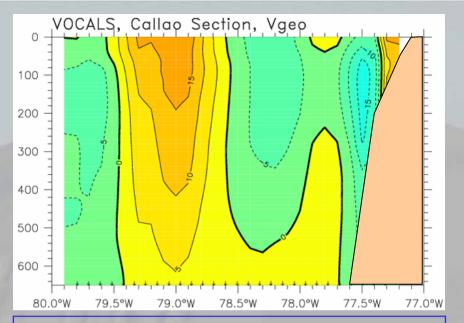




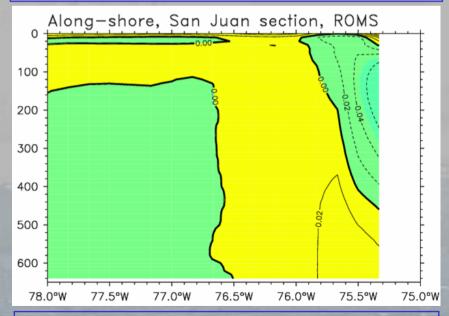
Climatology and modeling



Conceptual view of the Humboldt Current System, [Strub et al., 1998]



Geostrophic velocity section at Callao (12°S), from a regional climatology (courtesy Alexis Chaigneau)

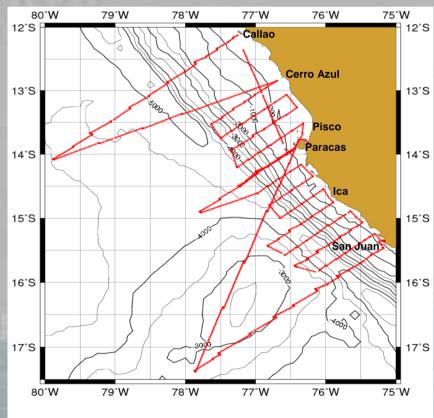


2002-2007 October average along-shore velocity, ROMS model run (courtesy Julien Boucharel).

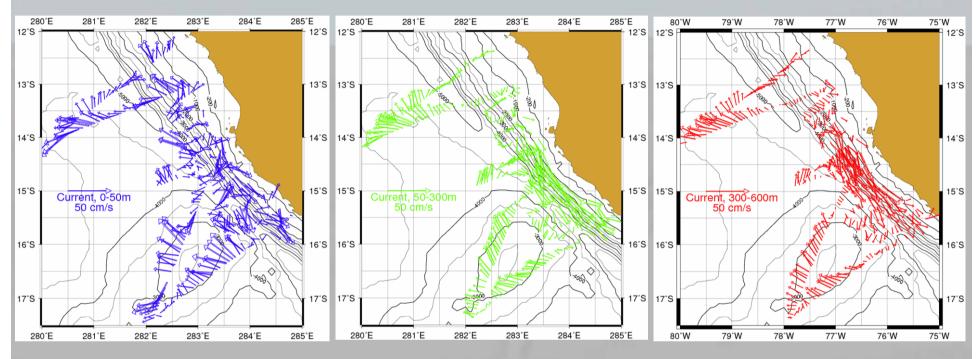
Data

- R/V José Olaya cruise 2008-10
- 03-17 October 2008
- RDI 0S-75 VM-ADCP
- 8 m bins, 10 mn averages, ~16-600 m
- CODAS3 processing software and data base

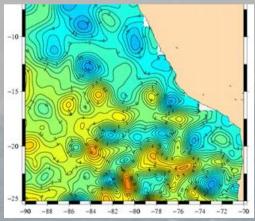


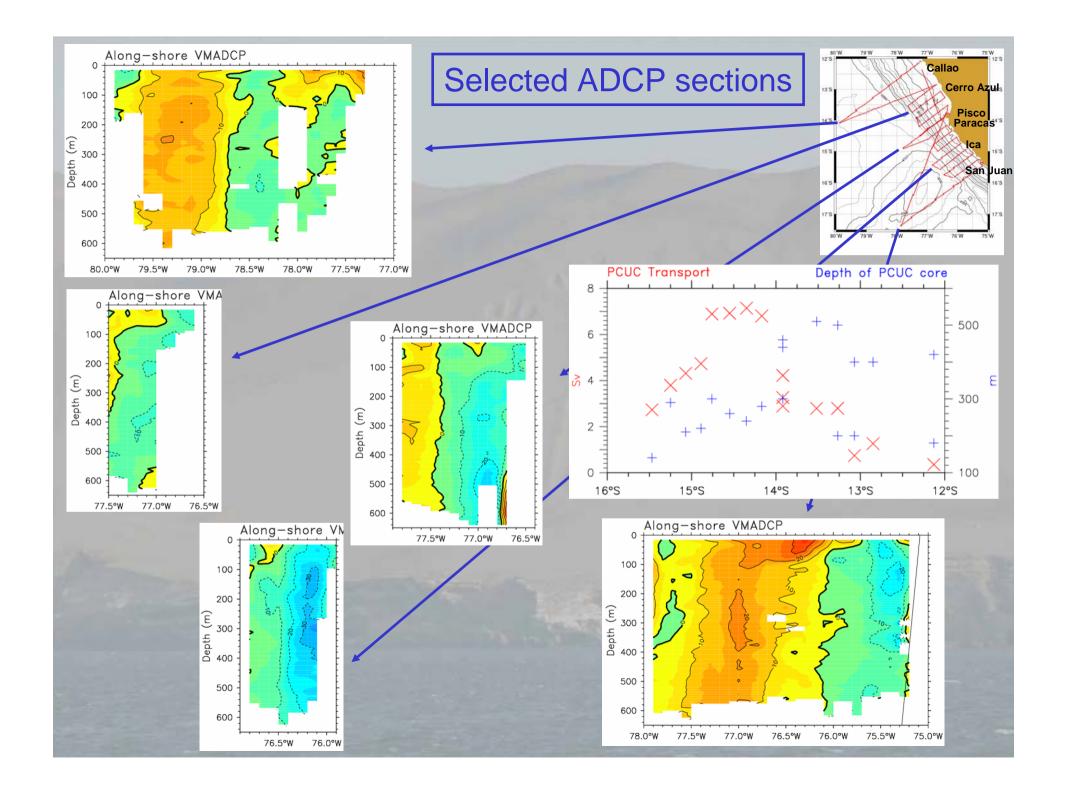


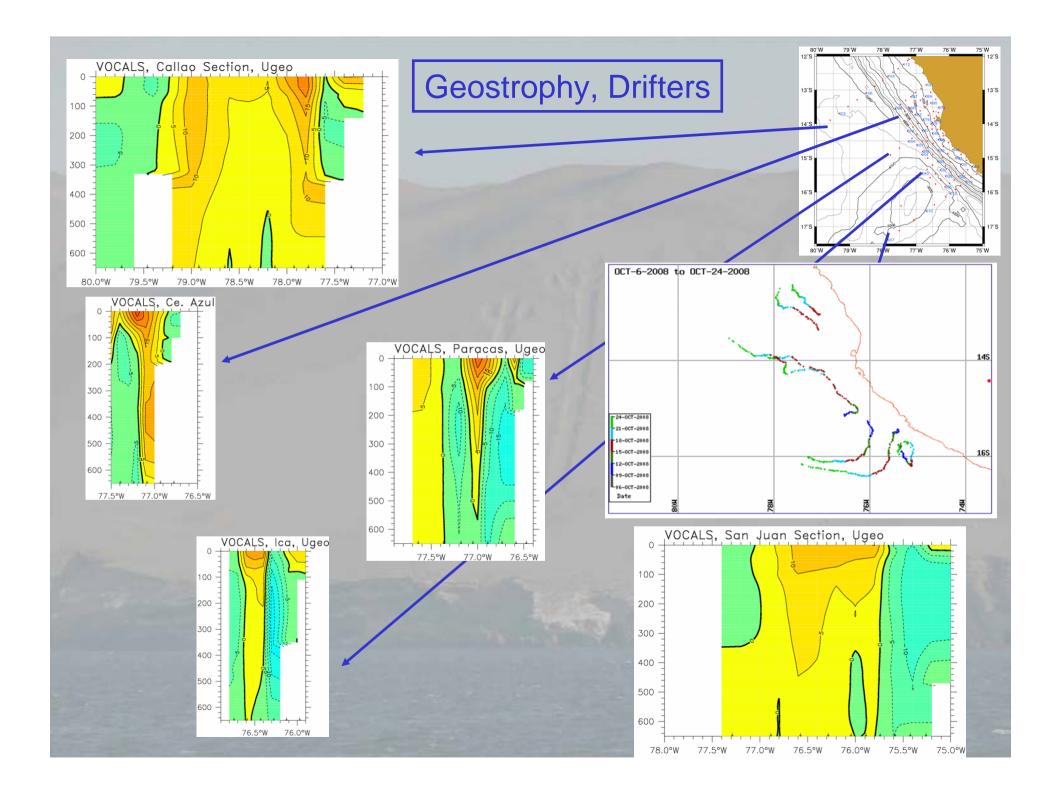
Overview of ADCP data



- In surface, northward flow offshore and around shelf break, lots of small scale variability in between.
- At depth still northward flow offshore, more organized southward flow along the slope
- On the shelf, variable flow







Summary

- PC and PCUC are the dominant features
- Strong small scale variability in the surface layer
- Southward flow in surface (PCCC), partly non-geostrophic
- Strong spatial/temporal variability in PCUC transport and core location

