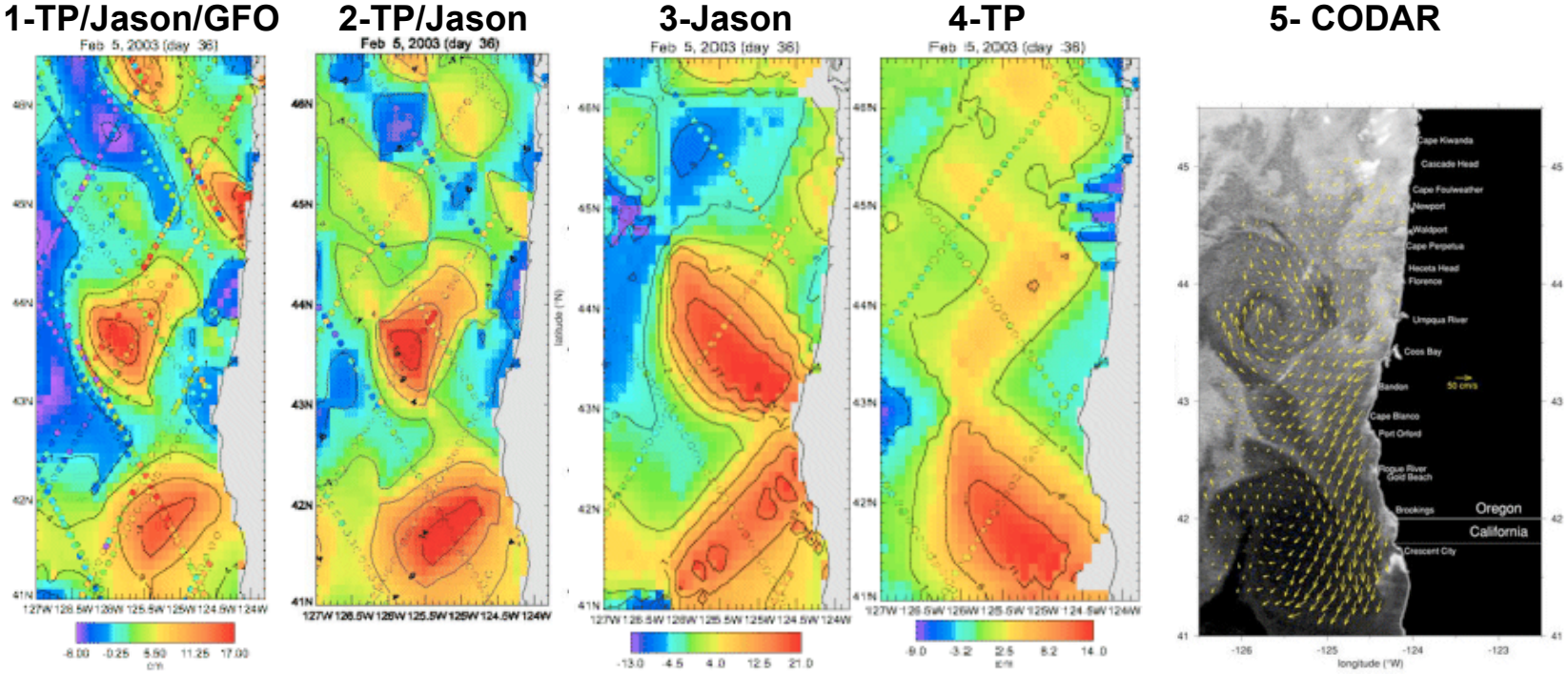
Tandem Mission Data; Mesoscale Circulation in the California Current



(Strub)

Altimeter data and coastal radar surface velocity fields collected at Oregon State University's College of Oceanic and Atmospheric Sciences (COAS) quantify and explain changes in mesoscale circulation in the California Current off Oregon. Increased resolution from the Tandem Mission (panels 1 & 2) provides the ability to monitor the development of eddies off Oregon. Coverage by the individual altimeters (panels 3 and 4) distorts the SSH fields. These panels resolve anticyclonic eddies – one off Oregon between 43N and 44N and another between 41N and 42N. Overlaying the CODAR velocity field on a surface temperature field from the AVHRR sensor (panel 5) confirms the location of these eddies. The anticyclonic eddy between 41N and 42N draws warmer water from the south into its clockwise circulation, forming a sharp boundary between the warm water in the eddy and the cooler water surrounding the eddy.