

State Estimate of the California Current System Using 4DVAR Ocean Data Assimilation

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4DVAR data assimilation (DA) over the California Current System is performed using all available observations during key time intervals in April 2002 and 2003. The resultant model fits can help to interpret biological observations that exhibited extreme conditions during these periods. They also provide initial conditions that improve model forecast skill of the physical state.

Passive tracers are used with the ROMS adjoint model to identify how source waters of upwelling are depending on the structure of the wind stress and wind stress curl forcing.