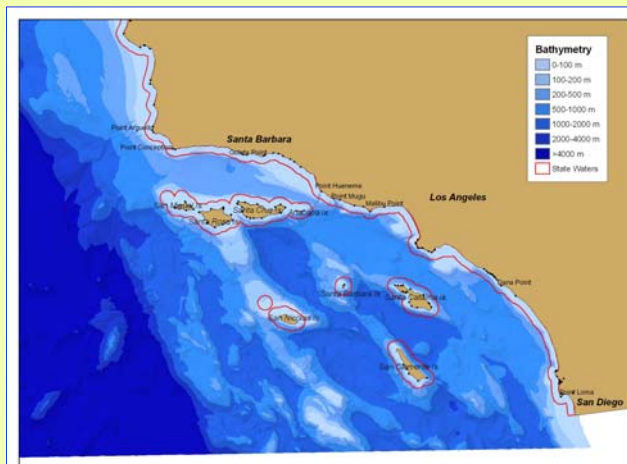


Southern California Oceanography MLPA South Coast Study Region



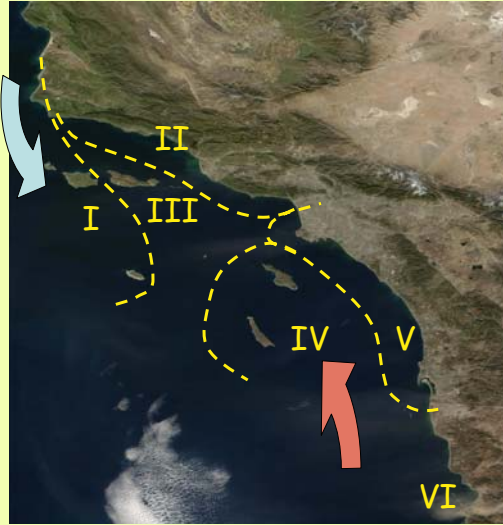
Developing an Oceanographic Perspective for MLPA in S California



What can we do with models & cartoons?

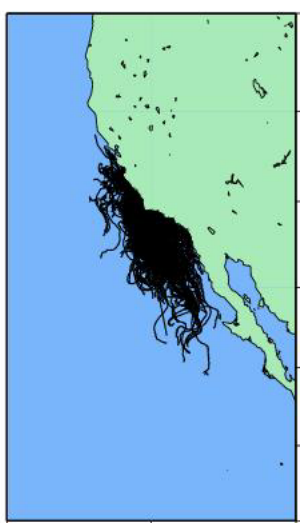
Developing an Oceanographic Perspective for MLPA in S California

- Currents & Connectivity
- Water type & Habitat

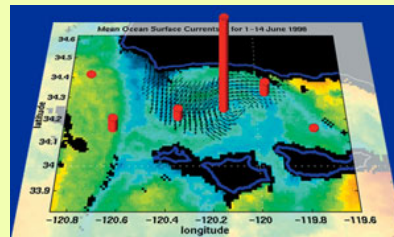


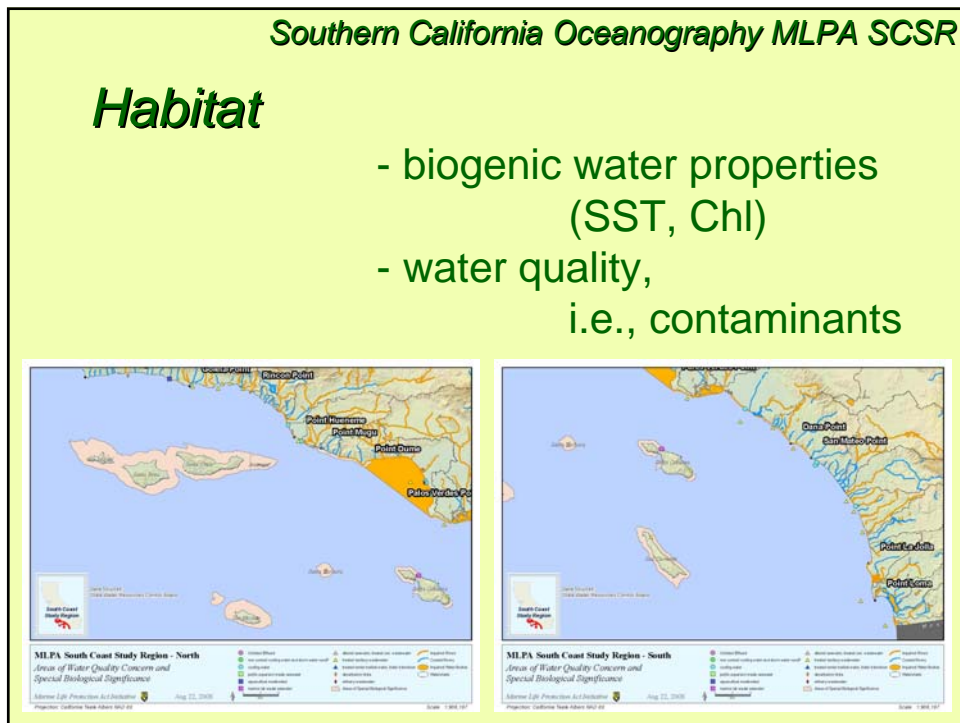
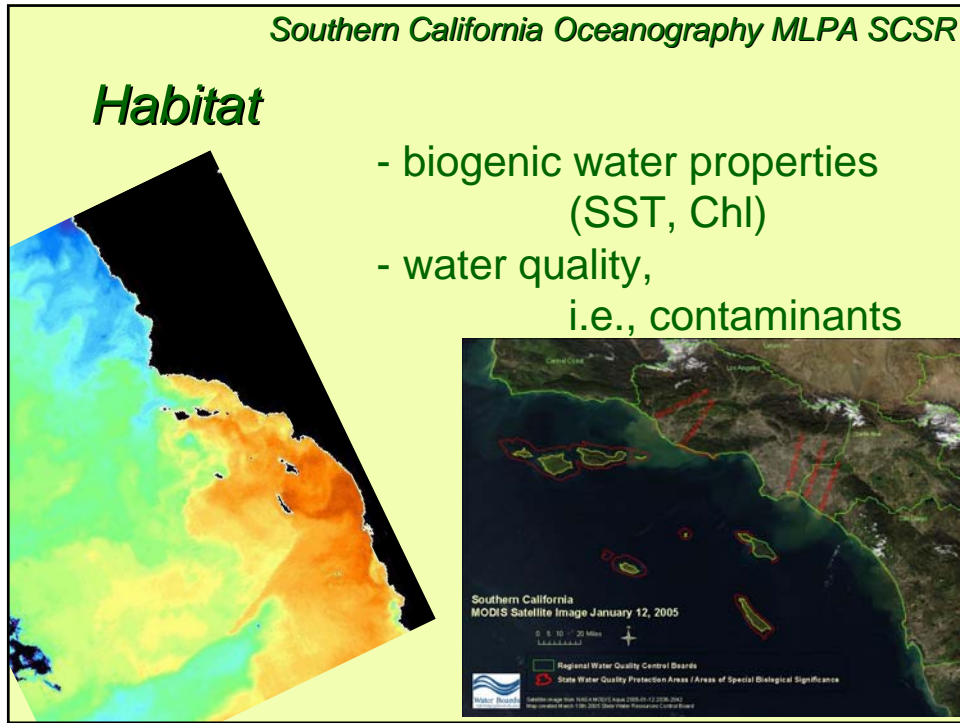
Southern California Oceanography MLPA SCSR

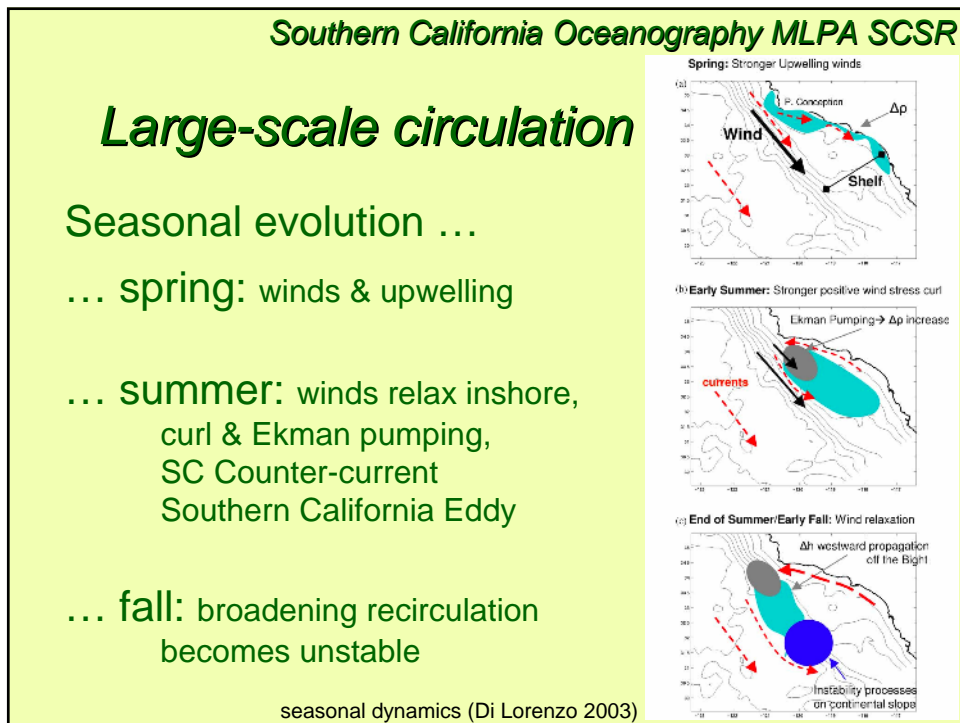
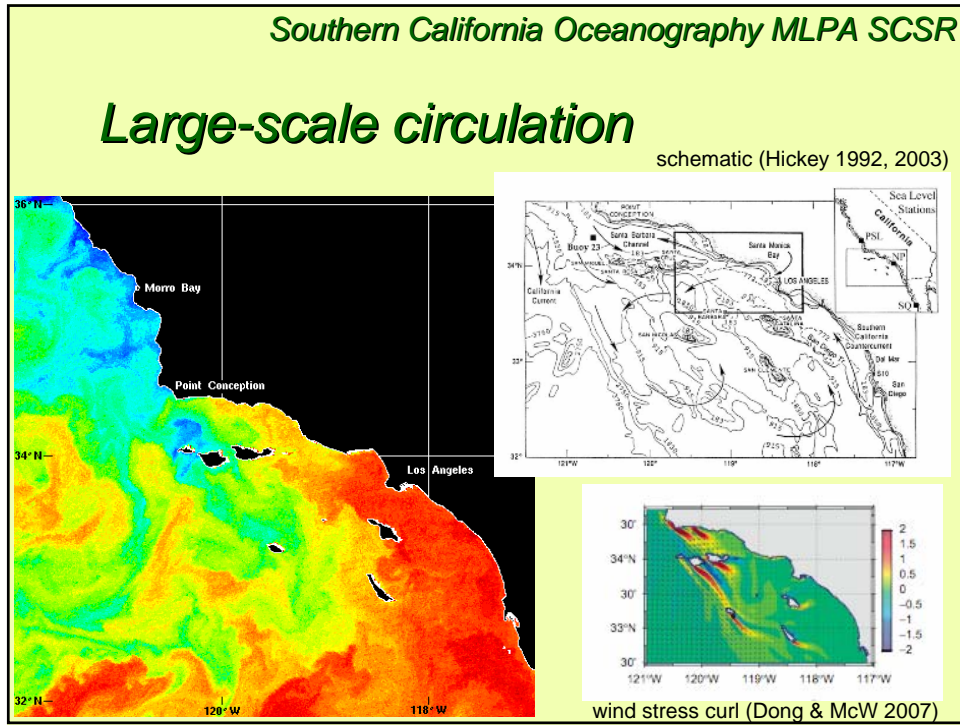
Connectivity



- typical circulation pattern
- variability ...
 - ... predictable currents?
 - ... stochastic dispersion?
- features

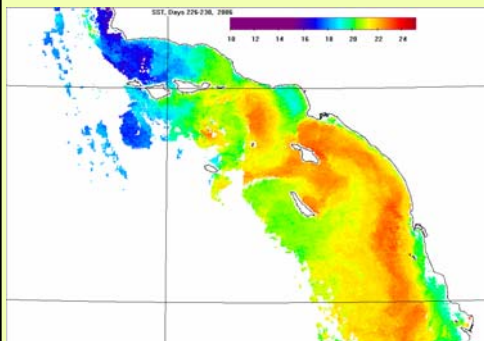




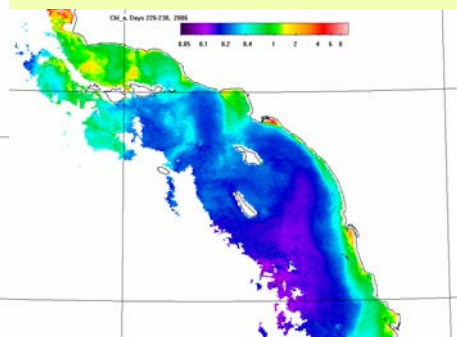


Southern California Oceanography MLPA SCSR

Multiple scales of patterns ...



SBC, SMB, islands, upwelling, ...

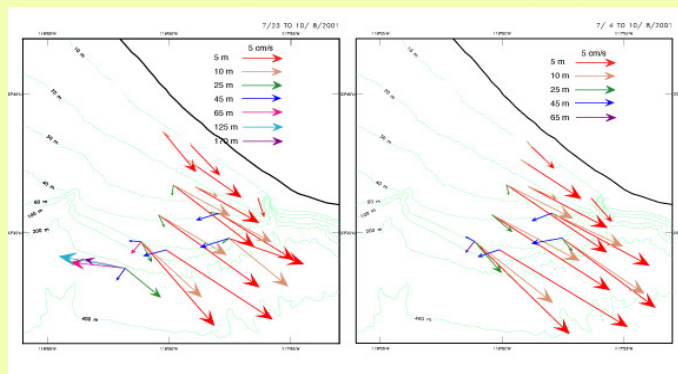


Merged MODIS Aqua and Terra products. (Aug 13 - 17, 2006). Courtesy of M. Kahru and B.G. Mitchell, OPG Group, SIO

Southern California Oceanography MLPA SCSR

Shelf currents

Southward currents over the shelf ...
reversing at times (Oct-Nov?)

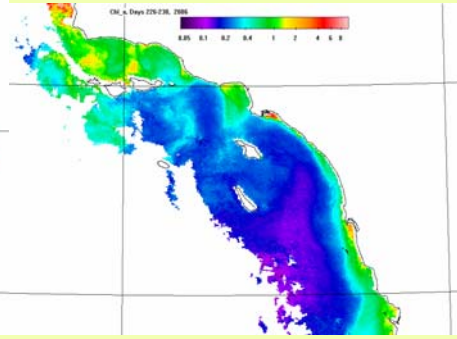
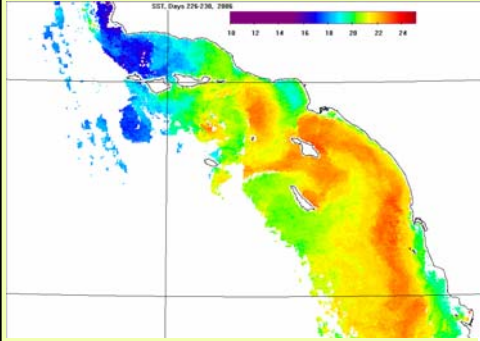


Huntington Beach (Noble et al 2004)

Southern California Oceanography MLPA SCSR

Upwelling

Shallow thermocline throughout SCB, breaks surface at specific times & places

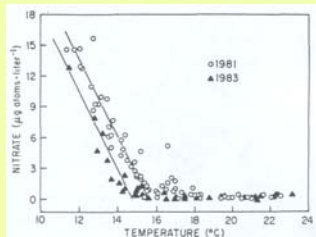


Pt Conception, Pt Dume, Palos Verdes, Pt Loma, S of border

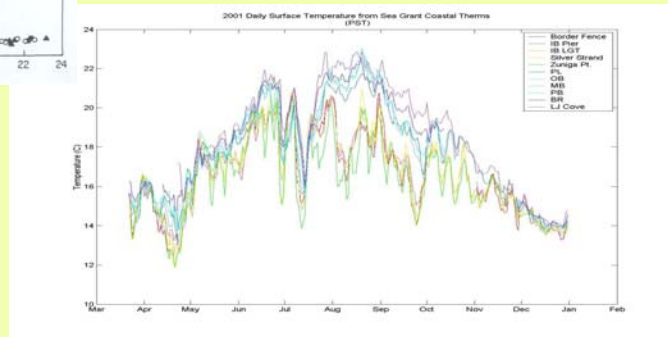
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Upwelling

Thermistors N and S of Pt Loma

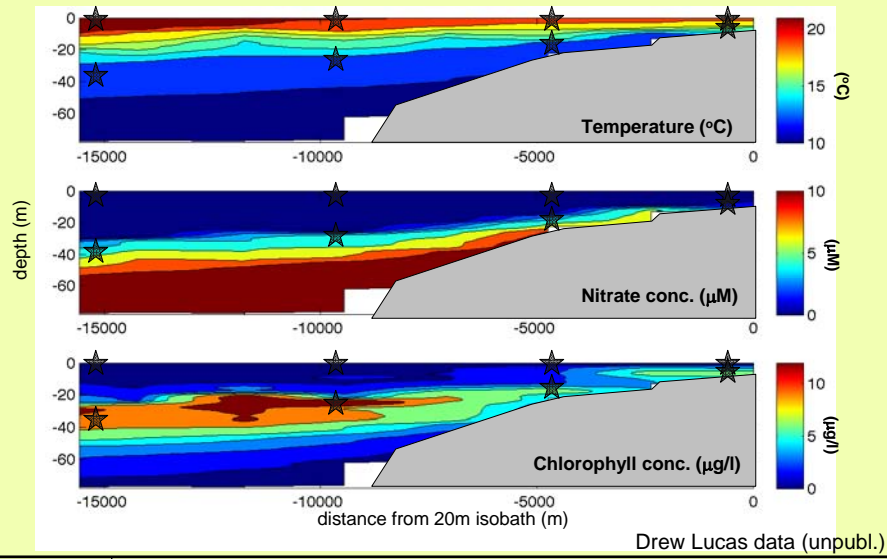


Zimmerman



Upwelling ... Shallow thermocline with Chl max

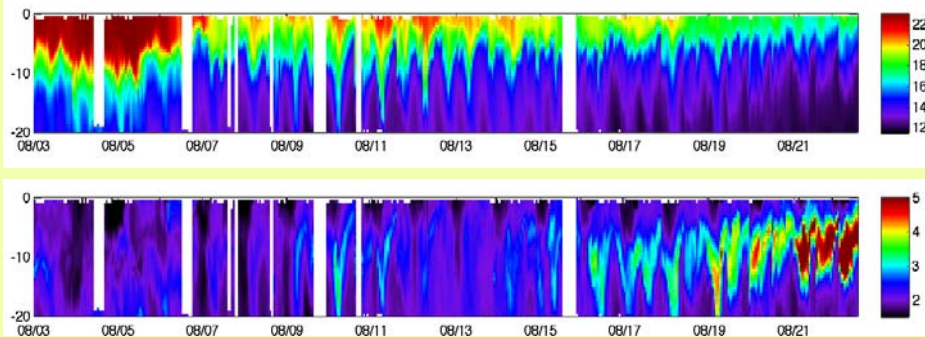
Cross-shore transects, shelf break to the inner shelf :



Southern California Oceanography MLPA SCSR

Internal Waves ... and other HF motions

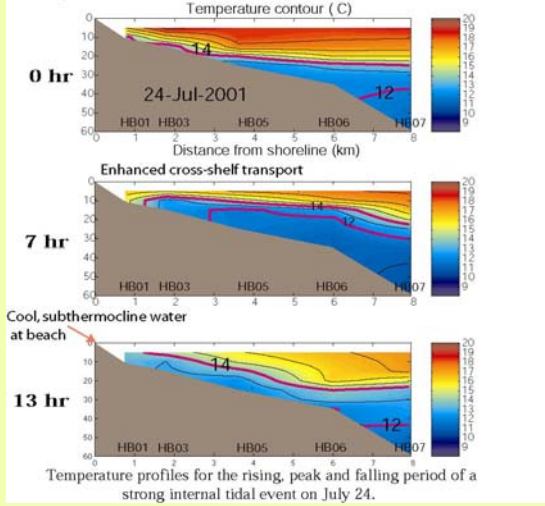
Temperature, fluorescence, (08/03 - 08/23/2006; 25 m WW):



Southern California Oceanography MLPA SCSR

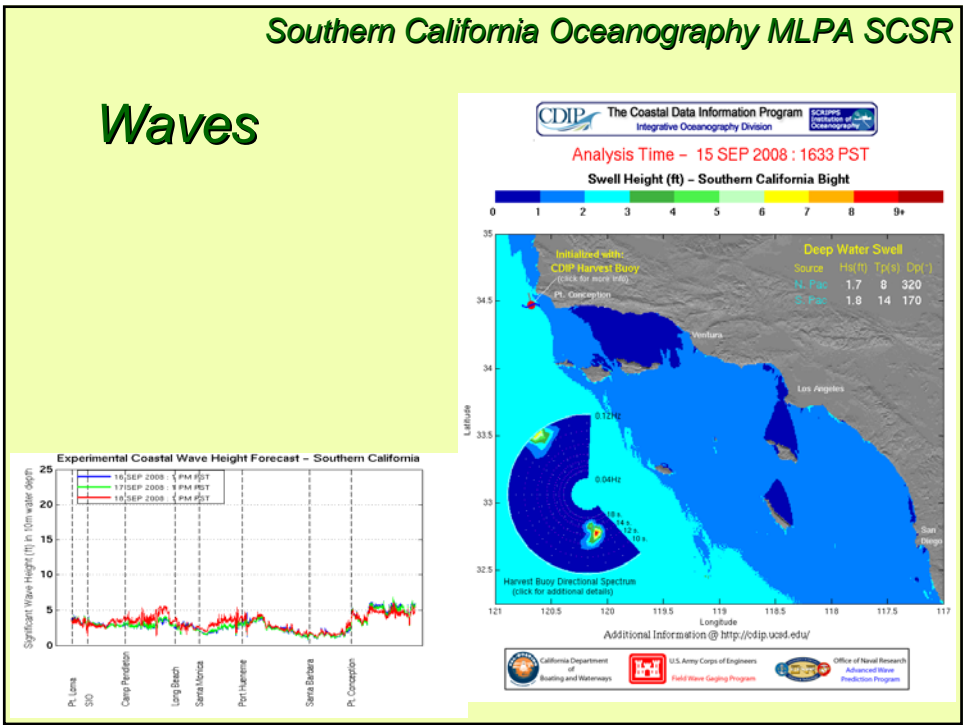
Internal Waves ... and other HF motions

Strong internal tides caused cool water to reach the nearshore.



Southern California Oceanography MLPA SCSR

Waves



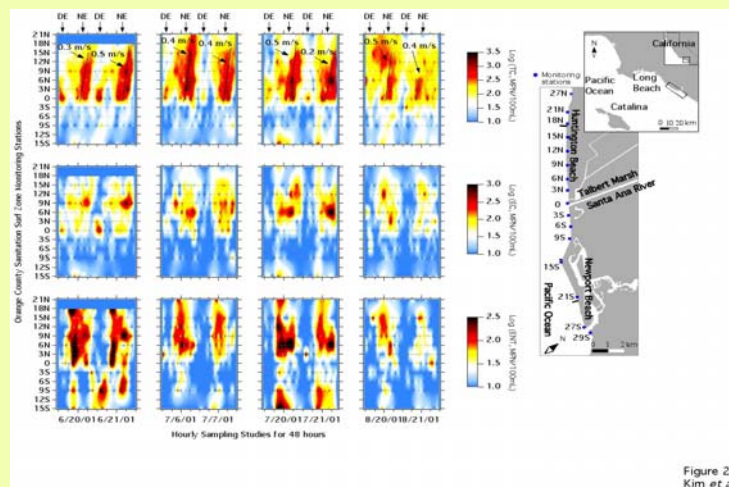
Southern California Oceanography MLPA SCSR

River and tidal plumes



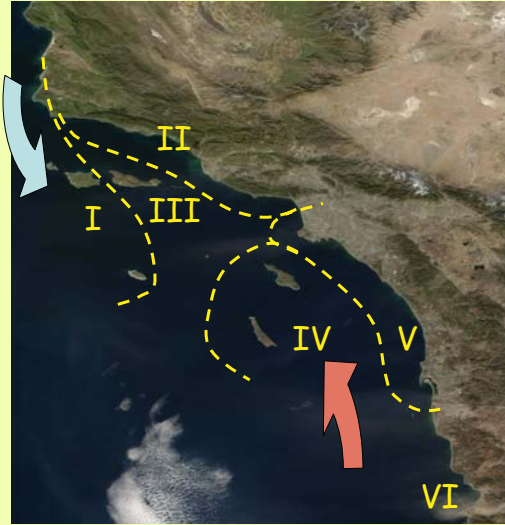
Southern California Oceanography MLPA SCSR

River and tidal plumes



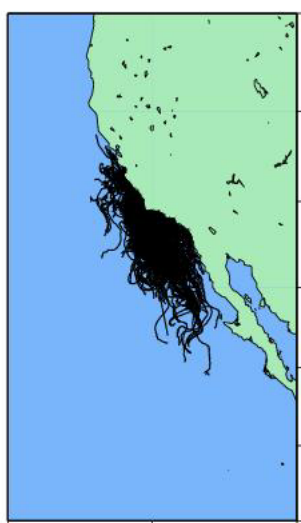
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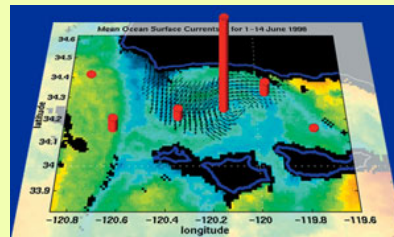


Southern California Oceanography MLPA SCSR

Connectivity



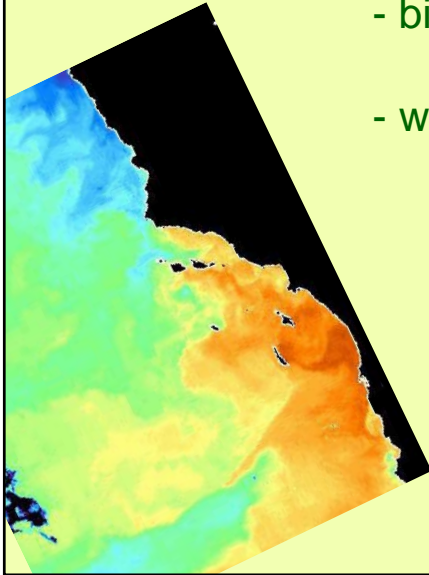
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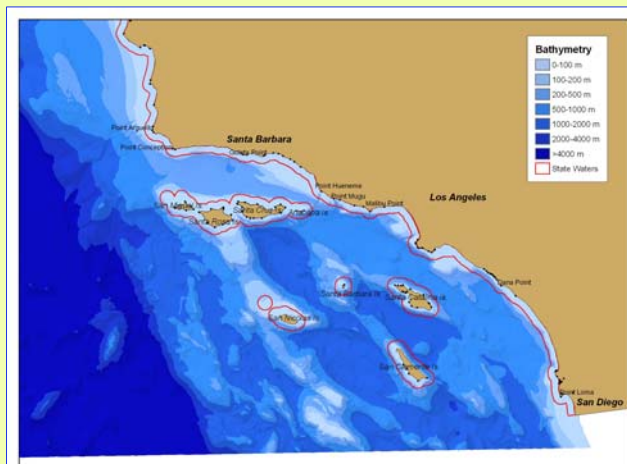
Southern California Oceanography MLPA SCSR

Habitat

- biogenic water properties (SST, Chl)
- water quality, i.e., contaminants



Developing an Oceanographic Perspective for MLPA in S California



What can we do with models & cartoons?