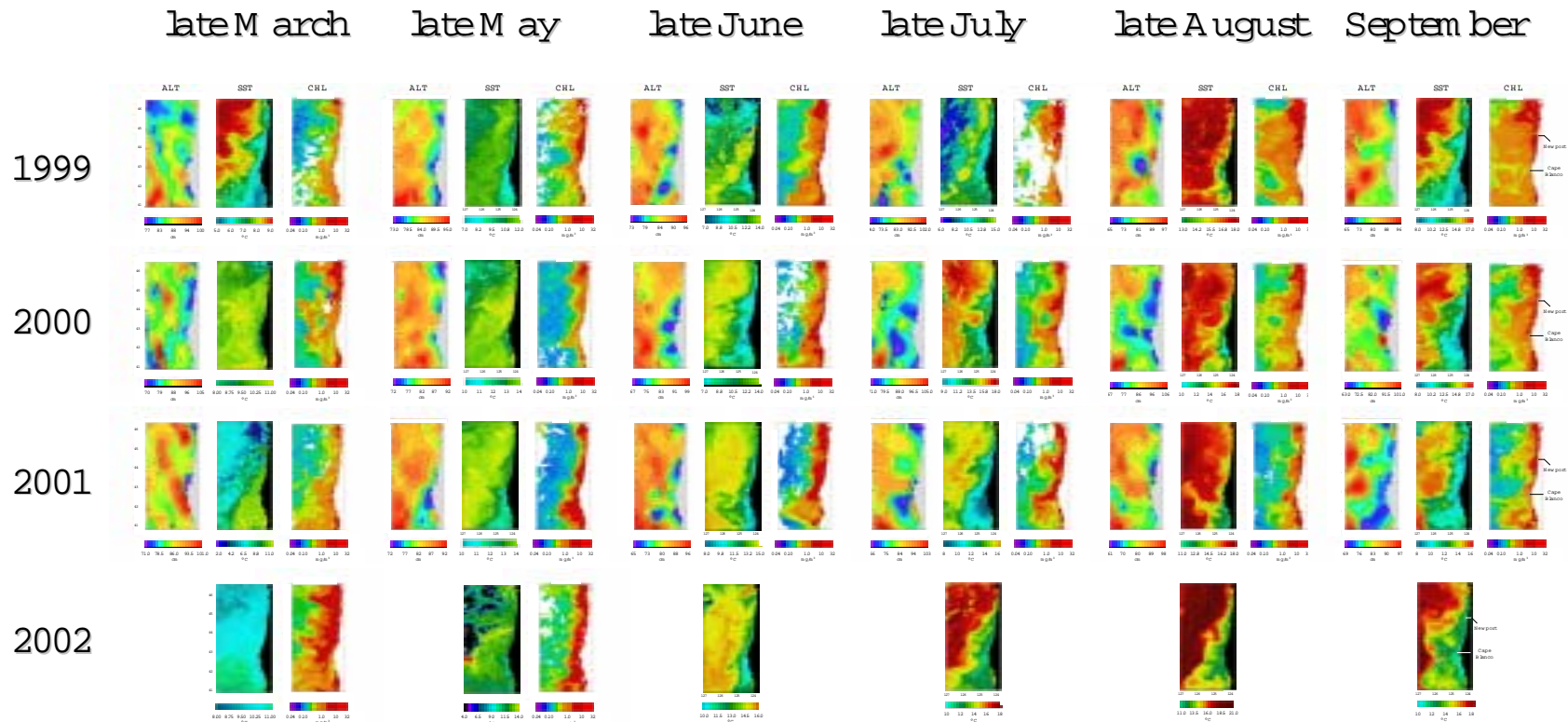


Seasonal Development of Mesoscale Satellite Fields Along the Pacific Northwest

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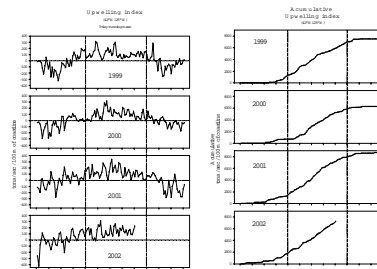


The Coastal Upwelling Index (CUI) and Accumulated CUI (ACUI) for 42N indicate strongest spring-summer upwelling off Oregon in 2002 (GLOBEC field year 2), weakest in 2000 (GLOBEC field year 1), with 2001 almost as strong as 2002.

The SST and chlorophyll (especially) fields from March-April and May also show the effects of strong early upwelling in 2002 and weak early upwelling in 2000.

From June on, the fields are qualitatively similar, although the August 2002 SST field does have a larger region of cold water off southern Oregon (we lack altimeter and color data from mid-summer 2002).

NOTE: All 4 of these years have stronger spring-summer upwelling and lower sea levels than the years 1993-1998. The above comparison is thus between 4 years with relatively strong upwelling.



CONCLUSIONS

- The June, 2000 GLOBEC cruise saw the system in the very early stages of upwelling.
- The August, 2002 GLOBEC cruise saw the system after the longest and strongest period of upwelling (August 1999 might have been similar).
- GLOBEC cruises in June 2002 and August 2000 saw the system in intermediate stages of seasonal development.