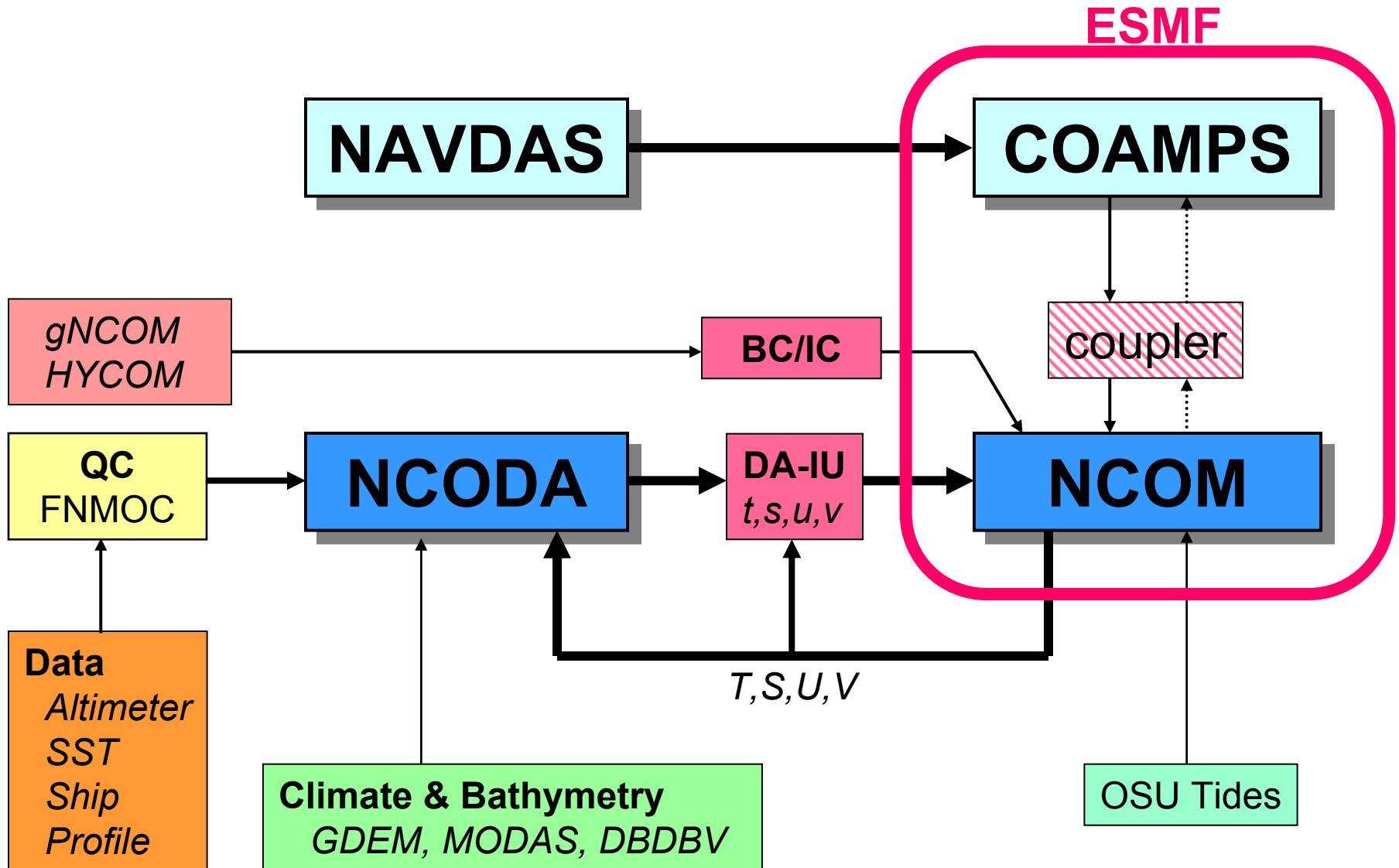


HYCOM Initial/Boundary Conditions for Coupled COAMPS/NCOM

6.2 HYCOM

PI: Julie Pullen
Paul May

COAMPS/NCOM-OnScene



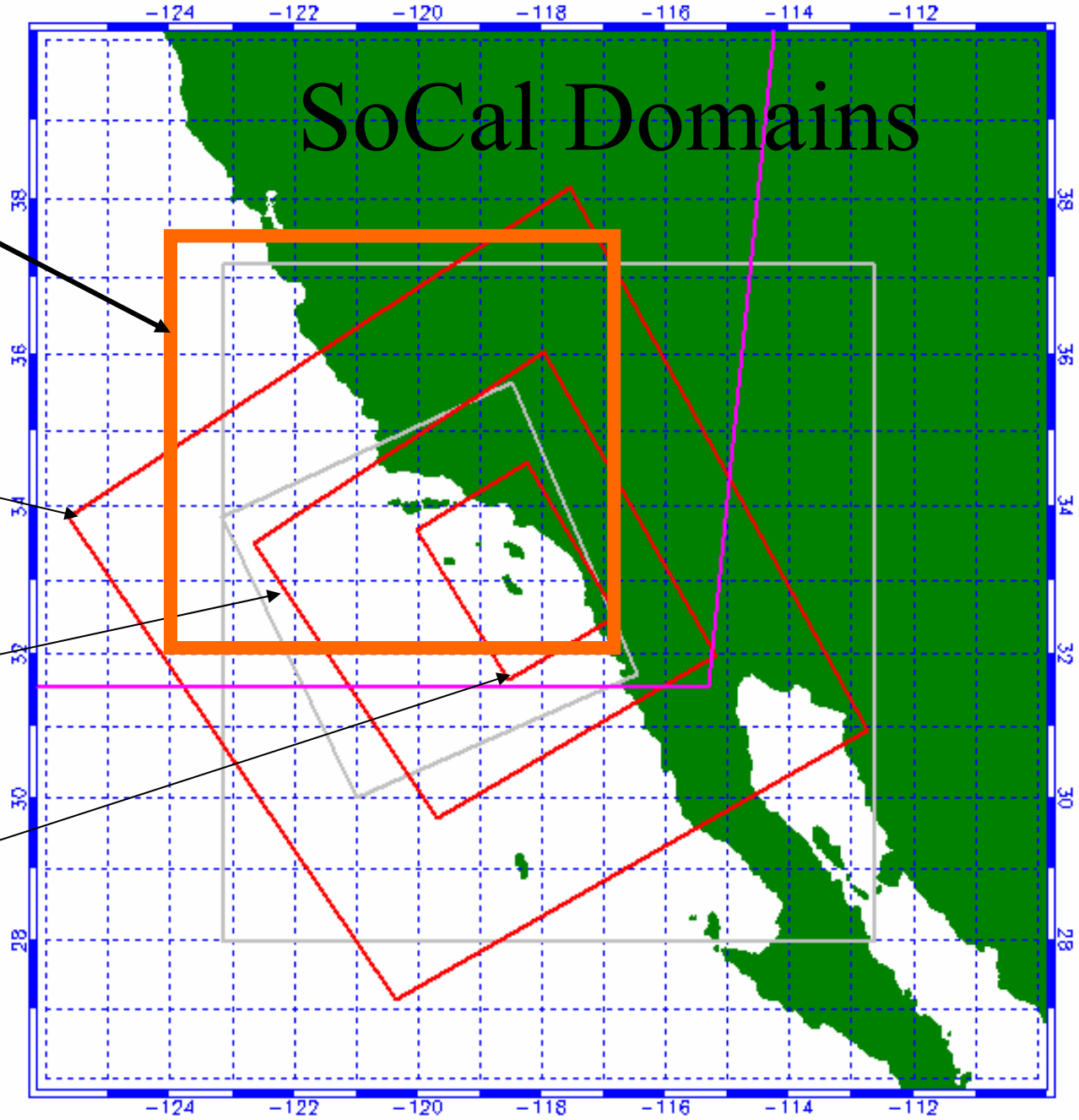
SoCal Domains

COAMPS 9-km
NCOM 3-km

COAMPS-OS
15-km

COAMPS-OS
NCOM
5-km

NCOM
2-km



COAMPS-OS[®] Map Projection Panel

COAMPS-OS[®] GUI USER - coamps PROJECT - Agrib Project Classification - UNCLASSIFIED (U) Data Classification - ...

NRL COAMPS-OS[®] COAMPS-OS[®] GUI USER - coamps PROJECT - Agrib Project Classification - UNCLASSIFIED (U) Data Classification - ...

-Home Page- -System Monitor- -Scheduler-

COAMPS[®] Control Panel

Main Security **Map Projection** Forecast Nowcast

Location Positioning Options

Grid Section


Mesh #	+	X-Axis	-	+	Y-Axis	-	Spacing	Parent
1	<input type="button" value="▲"/>	61	<input type="button" value="▼"/>	<input type="button" value="▲"/>	61	<input type="button" value="▼"/>	45.00	
2	<input type="button" value="▲"/>	61	<input type="button" value="▼"/>	<input type="button" value="▲"/>	61	<input type="button" value="▼"/>	15.00	1 ▼
3	<input type="button" value="▲"/>	61	<input type="button" value="▼"/>	<input type="button" value="▲"/>	61	<input type="button" value="▼"/>	5.00	2 ▼
4	<input type="button" value="▲"/>	61	<input type="button" value="▼"/>	<input type="button" value="▲"/>	61	<input type="button" value="▼"/>	1.67	3 ▼
5	<input type="button" value="▲"/>	61	<input type="button" value="▼"/>	<input type="button" value="▲"/>	61	<input type="button" value="▼"/>	.56	4 ▼

Mesh Positioning

Disable Auto Centering

	X-Axis		Y-Axis		
Mesh 1	<input type="button" value="◀"/>		<input type="button" value="▶"/>	<input type="button" value="▲"/>	<input type="button" value="▼"/>
<input type="checkbox"/> Mesh 2 - Parent 1	<input type="button" value="◀"/>	21	<input type="button" value="▶"/>	<input type="button" value="▲"/>	21 <input type="button" value="▼"/>
<input type="checkbox"/> Mesh 3	<input type="button" value="◀"/>	0	<input type="button" value="▶"/>	<input type="button" value="▲"/>	0 <input type="button" value="▼"/>
<input type="checkbox"/> Mesh 4	<input type="button" value="◀"/>	0	<input type="button" value="▶"/>	<input type="button" value="▲"/>	0 <input type="button" value="▼"/>
<input type="checkbox"/> Mesh 5	<input type="button" value="◀"/>	0	<input type="button" value="▶"/>	<input type="button" value="▲"/>	21 <input type="button" value="▼"/>

Map Options



Latitude: -36.186 Degrees: 36 11 09.60

Longitude: -137.853 Degrees: 137 51 10.80

Current Project

Runtime Estimate: 0.57 hours Output Size: 604 Mb Memory: NA

Status Log

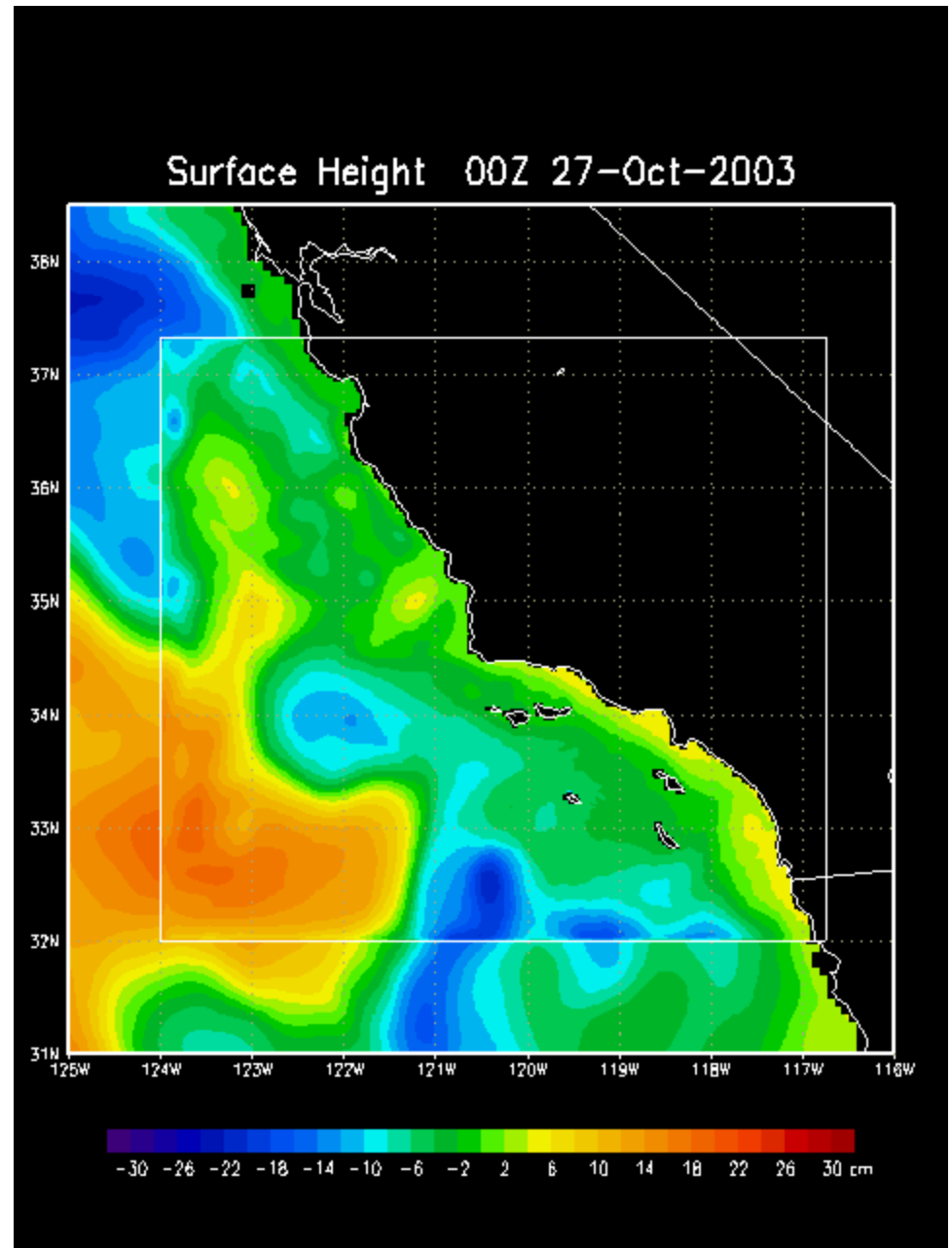
Map Projection Panel

* COAMPS and COAMPS-OS are registered trademarks of the Naval Research Laboratory.

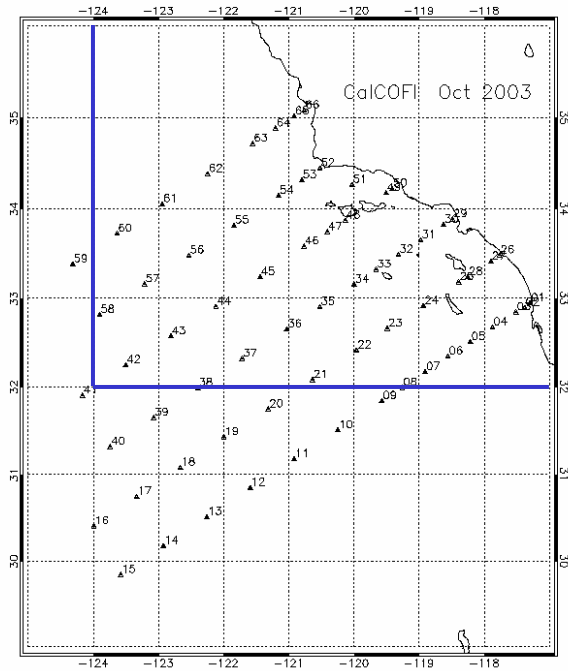
Nested NCOM with Data Assimilation and Global HYCOM BCs

NCOM (3-km)

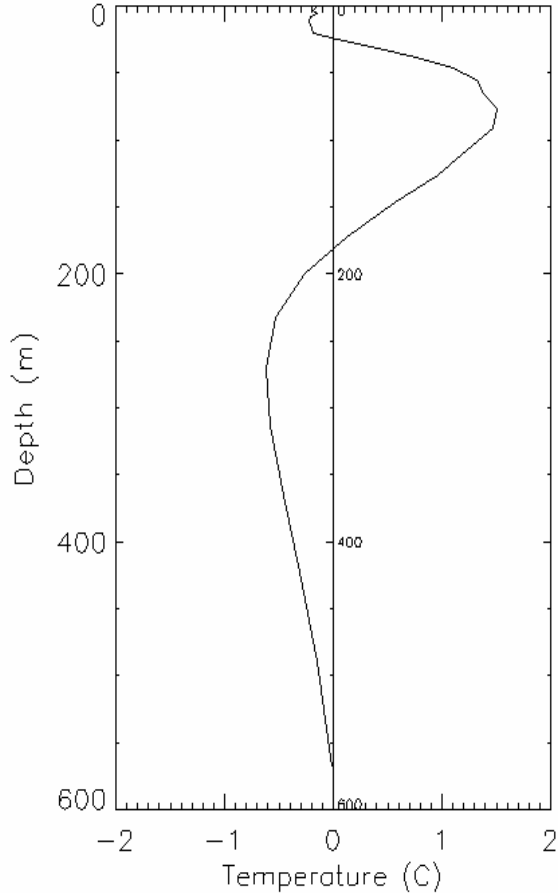
- COAMPS (9-km) forcing
- Incremental Update DA
- Global HYCOM (5.3) bcs
- Oct-Nov 2003



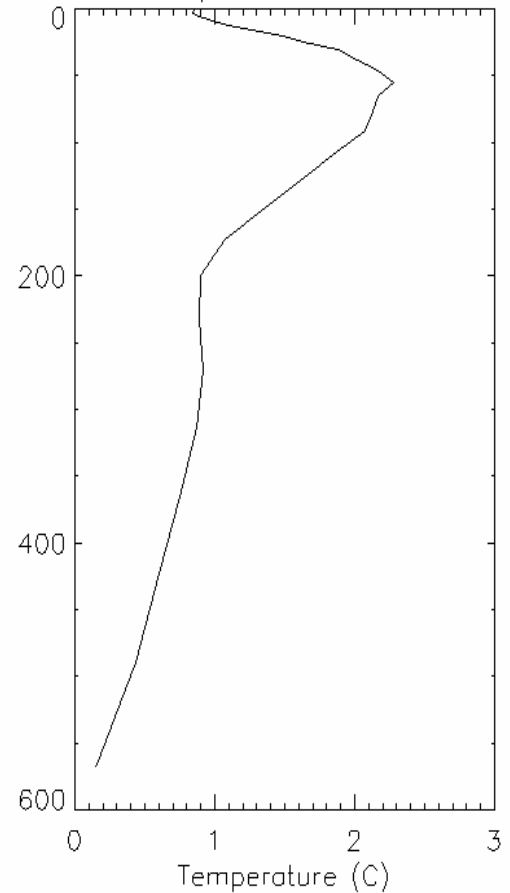
CalCOFI data comparison



Temperature Bias

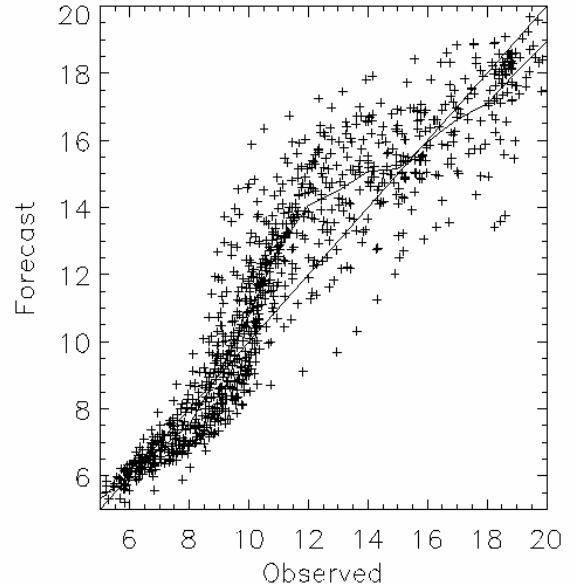


Temperature RMSE

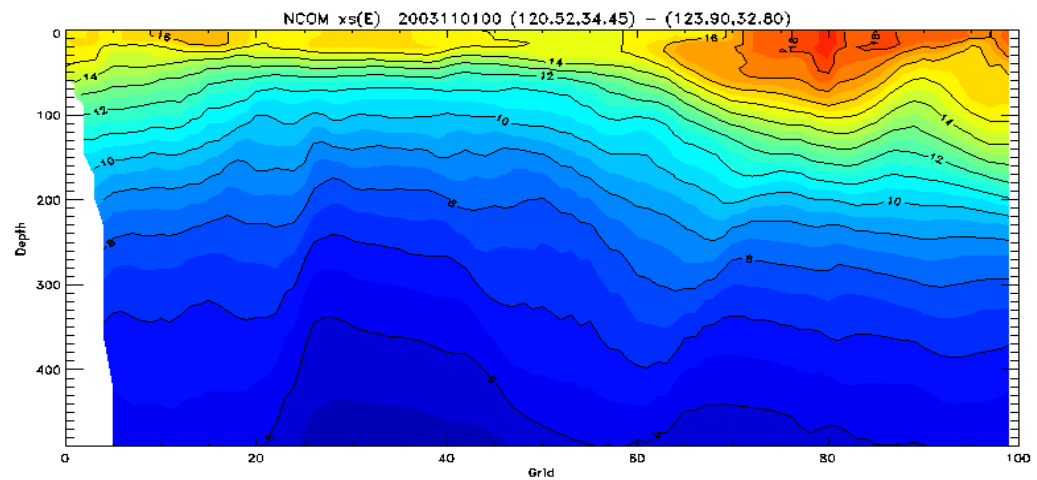
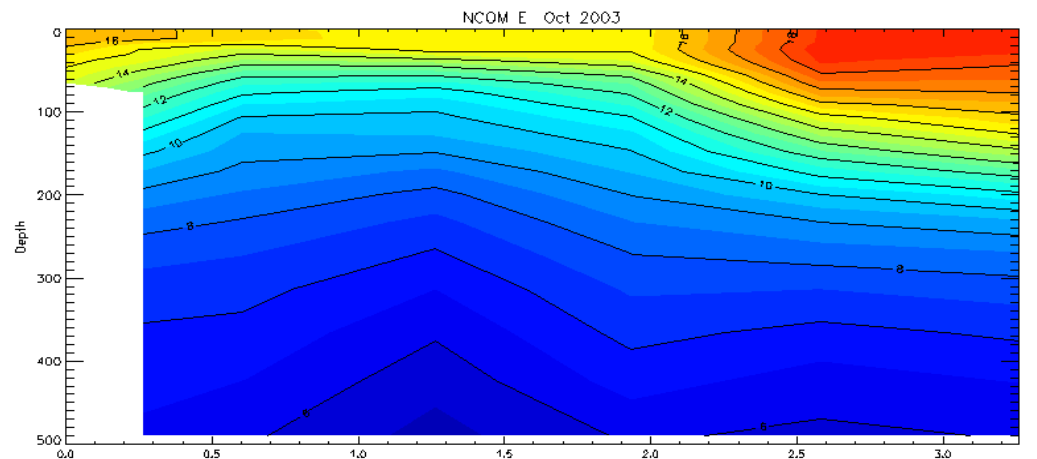
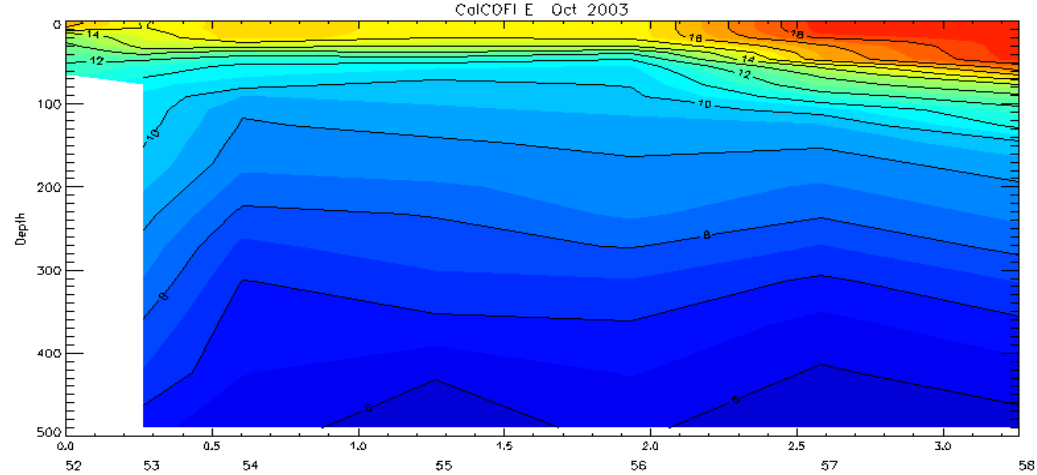
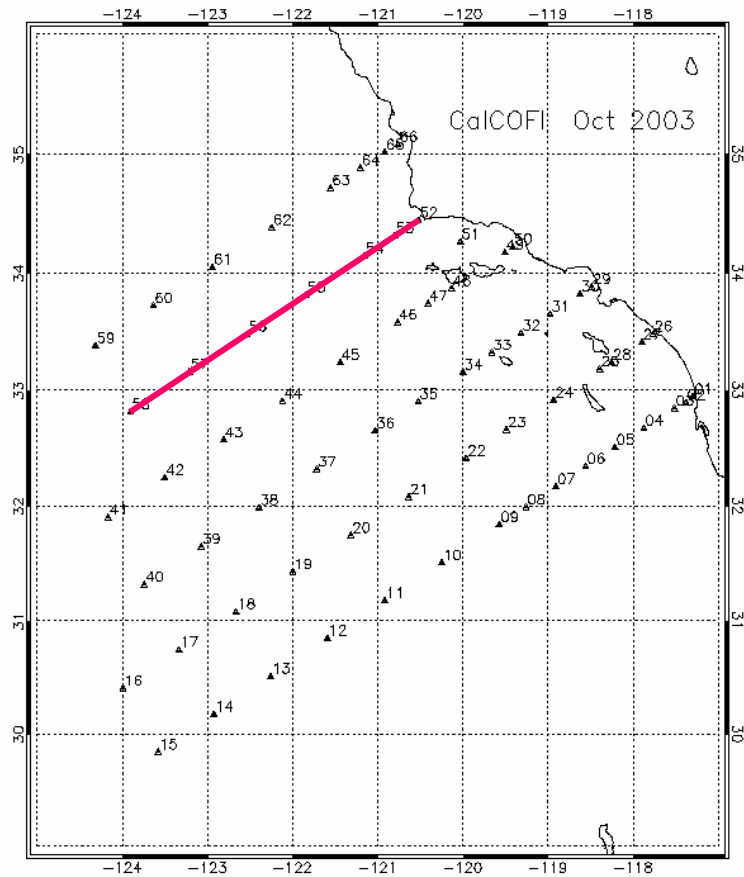


SoCal Nested NCOM errors

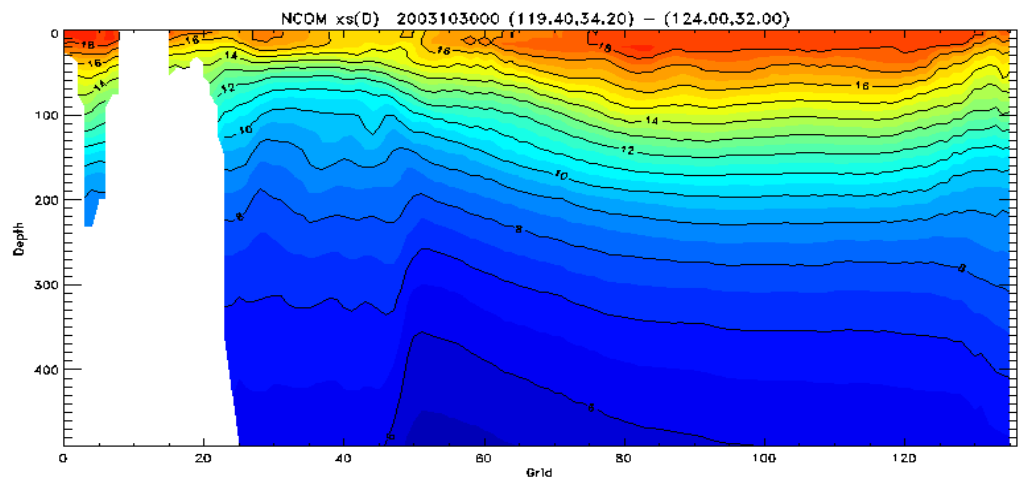
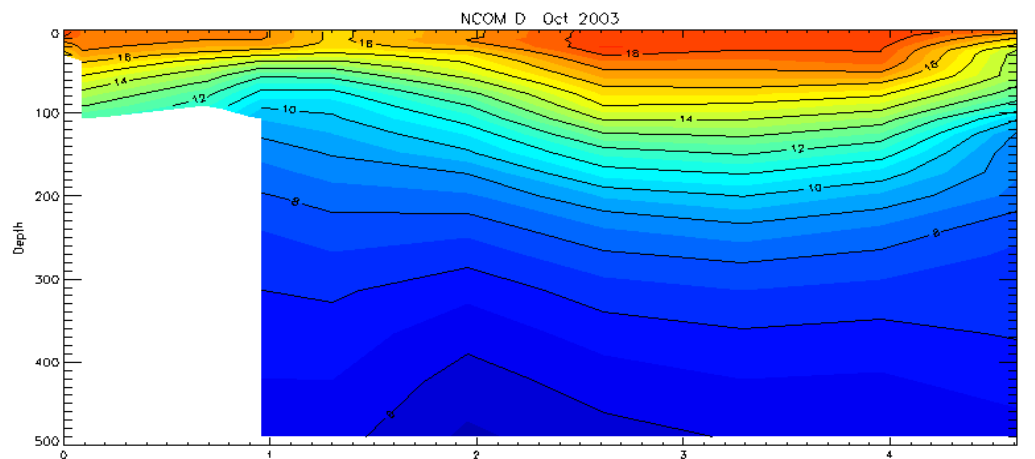
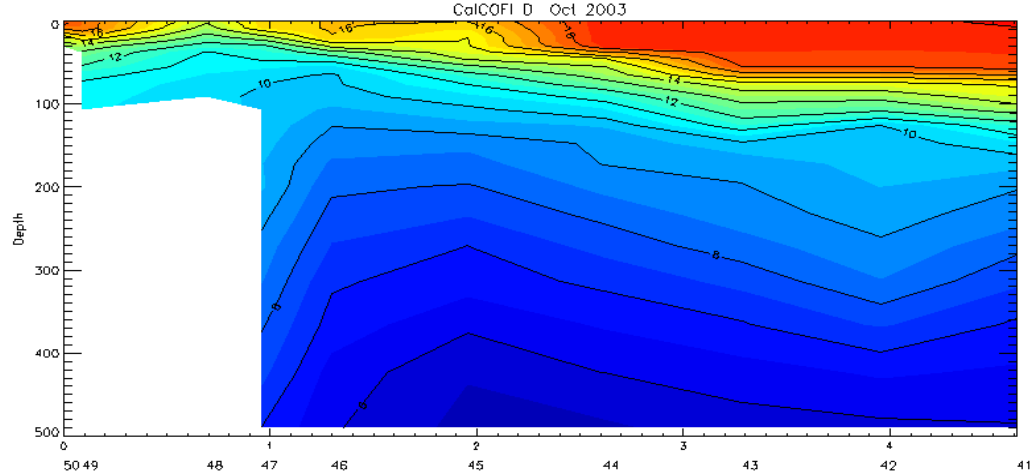
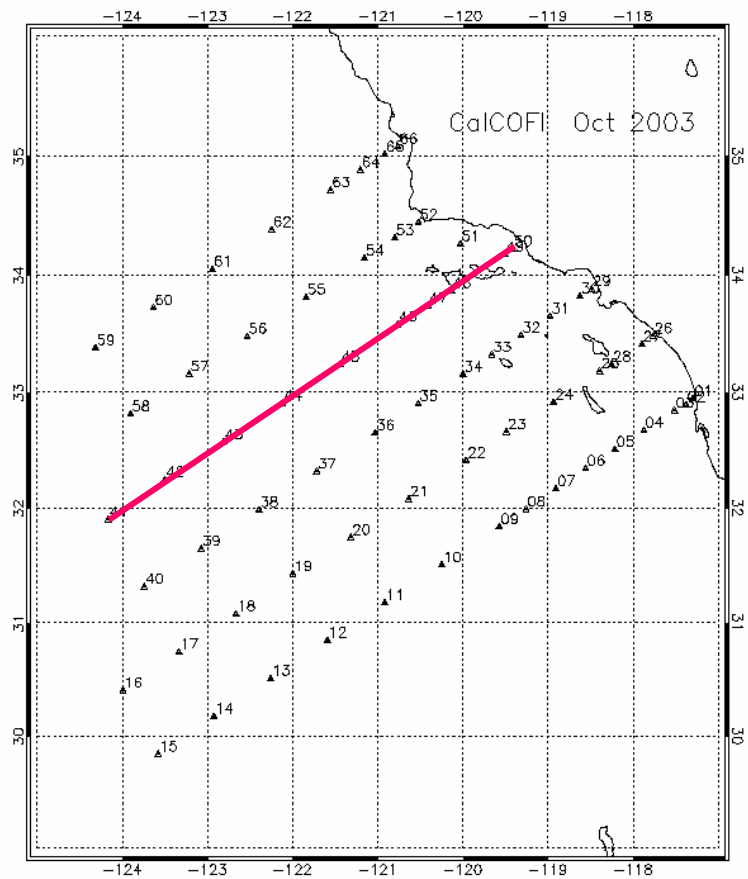
CalCOFI (Oct 2003) vs Forecast



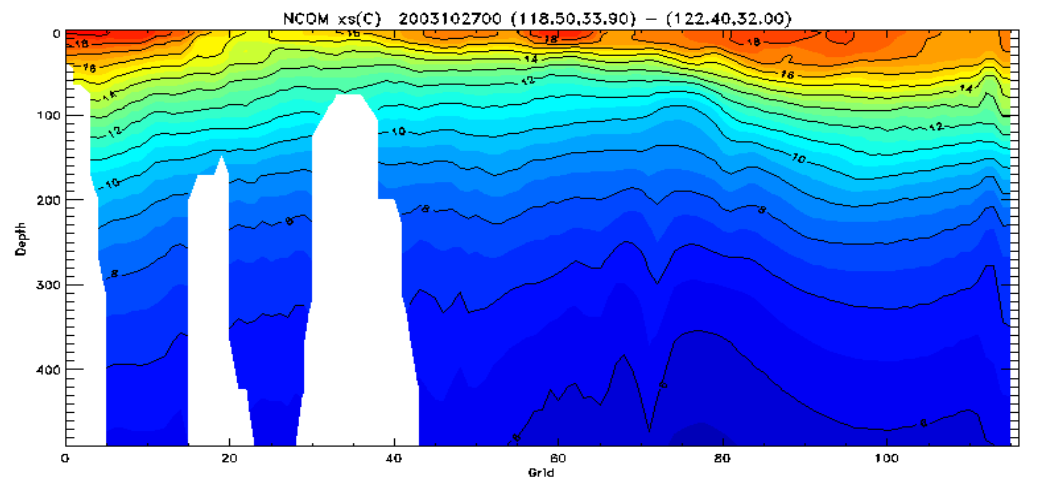
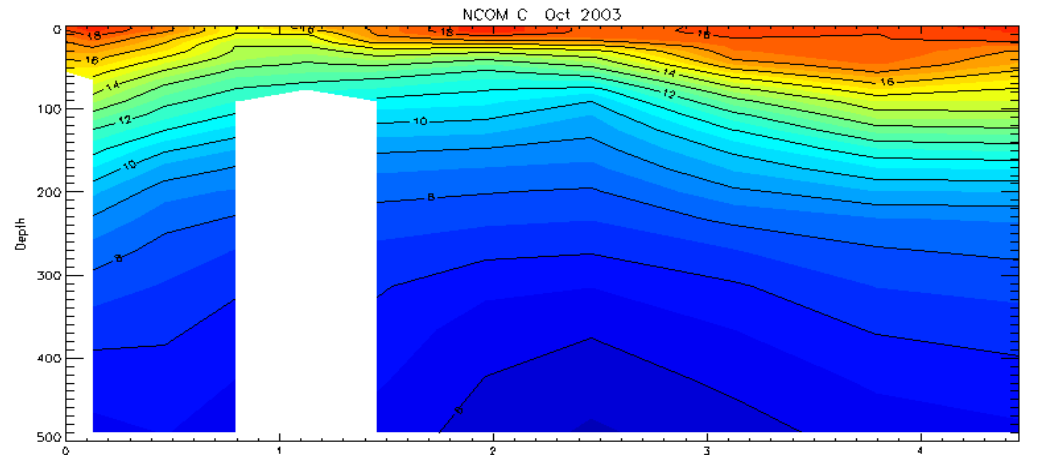
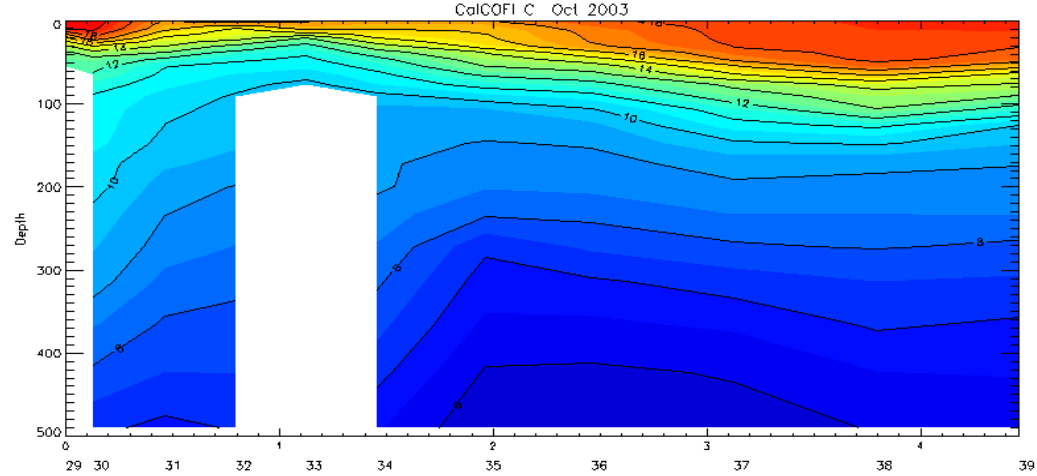
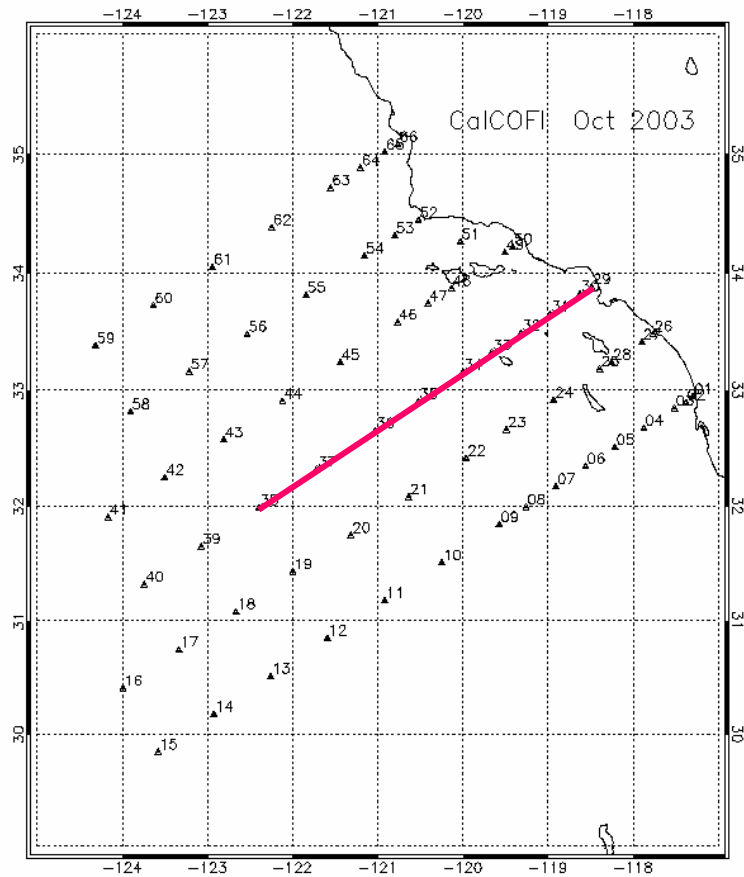
CalCOFI & NCOM Leg E XS



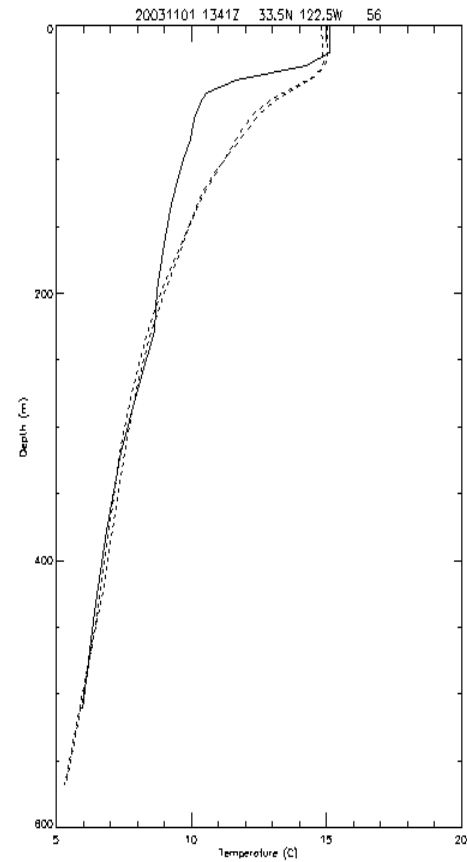
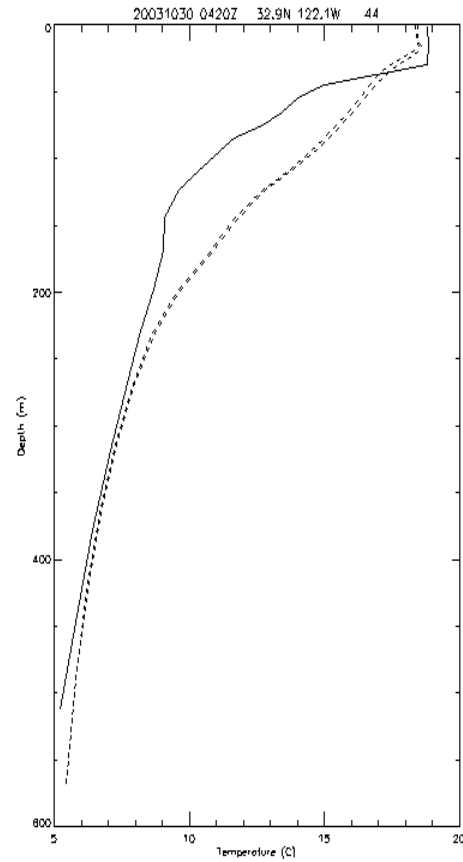
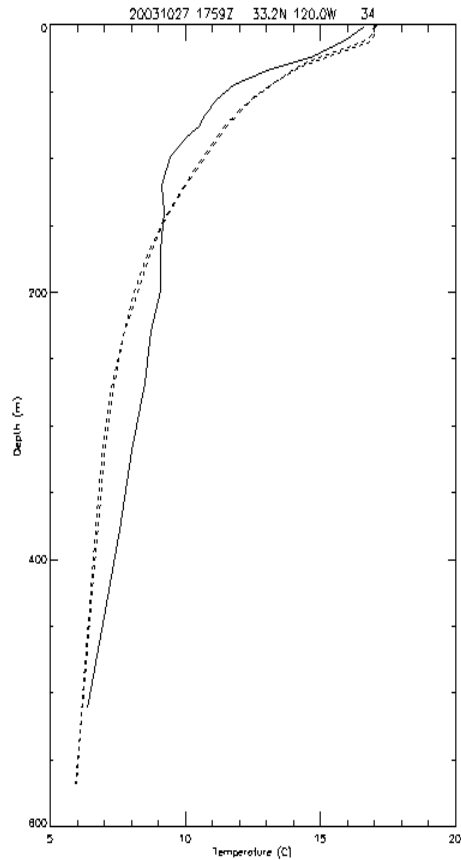
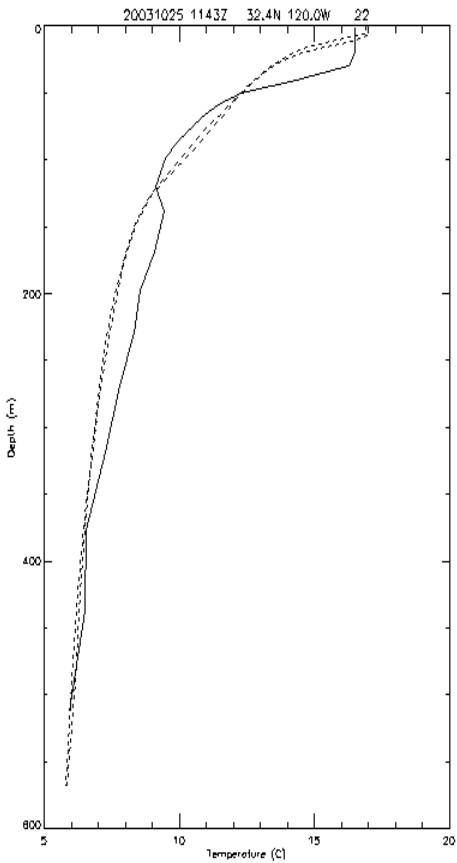
CalCOFI & NCOM Leg D XS



CalCOFI & NCOM Leg C XS

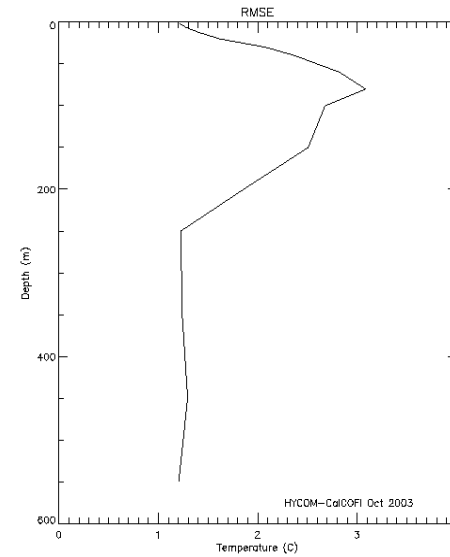
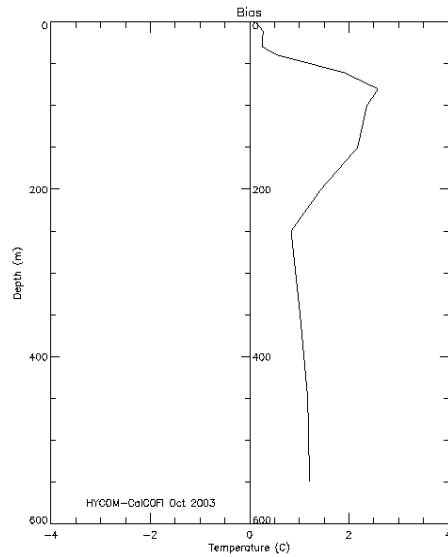


Selected Temperature Profiles

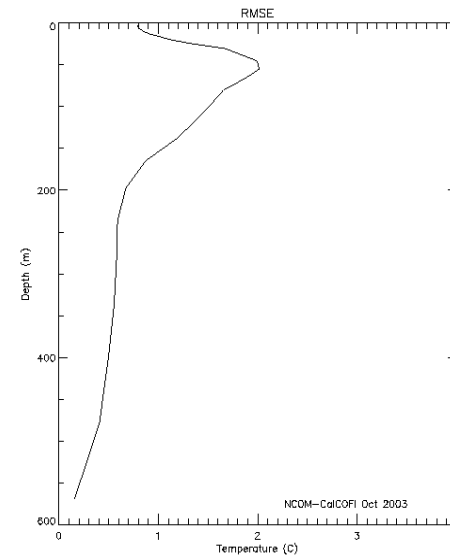
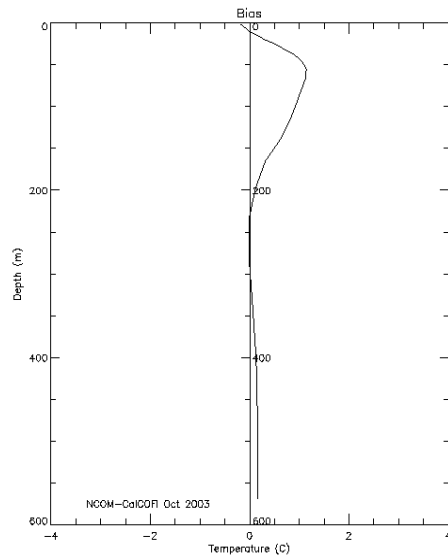


Initial/BC Temperature Errors (Oct 03)

Global
HYCOM



Global
NCOM

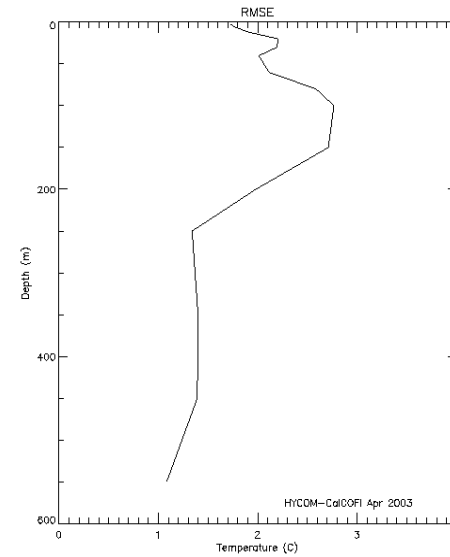
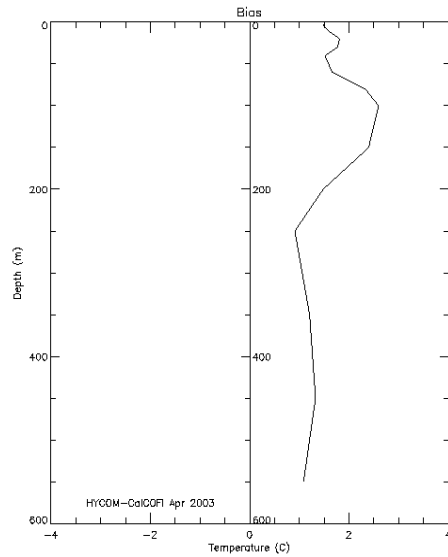


Bias

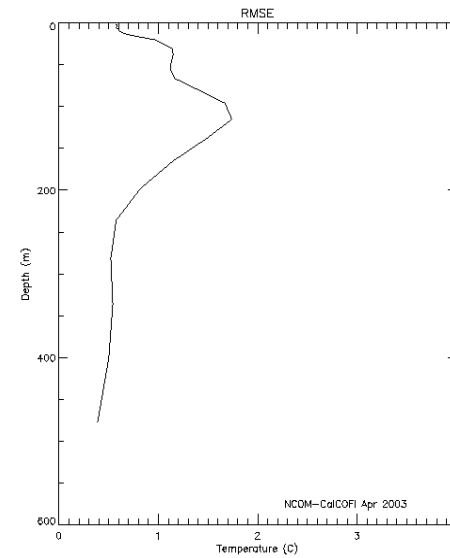
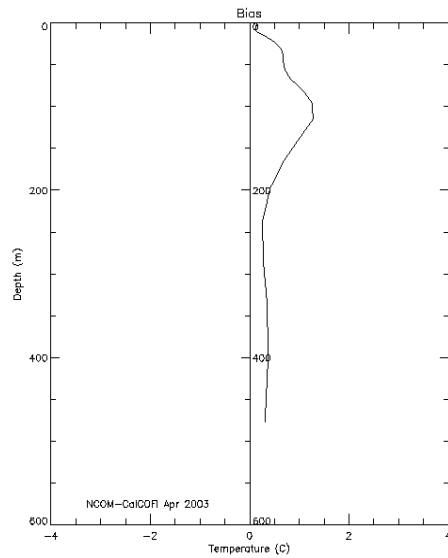
RMSE

Initial/BC Temperature Errors (Apr 03)

Global
HYCOM



Global
NCOM

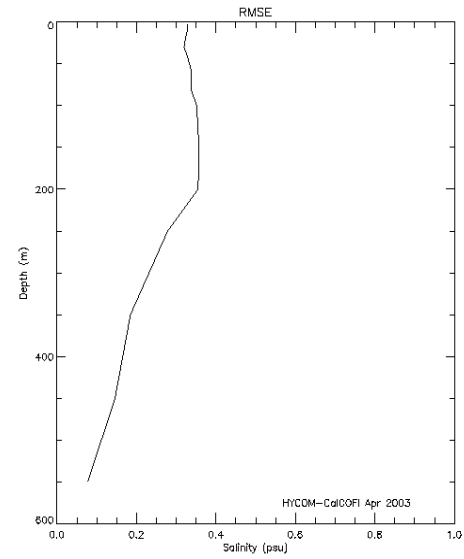
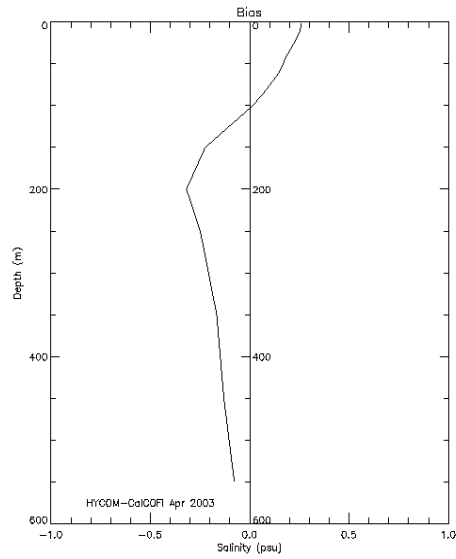


Bias

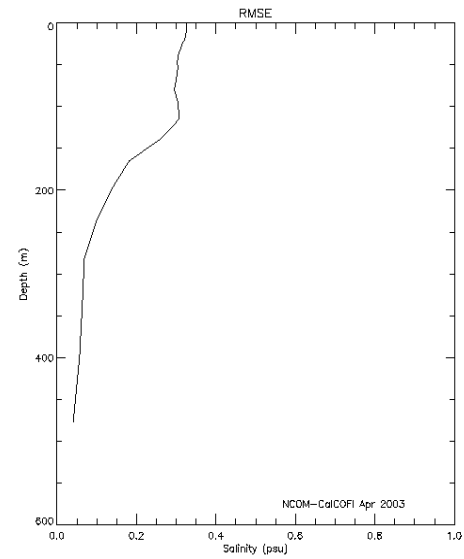
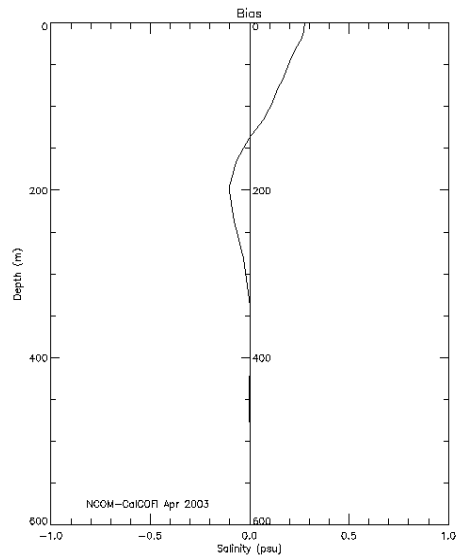
RMSE

Initial/BC Salinity Errors (Apr 03)

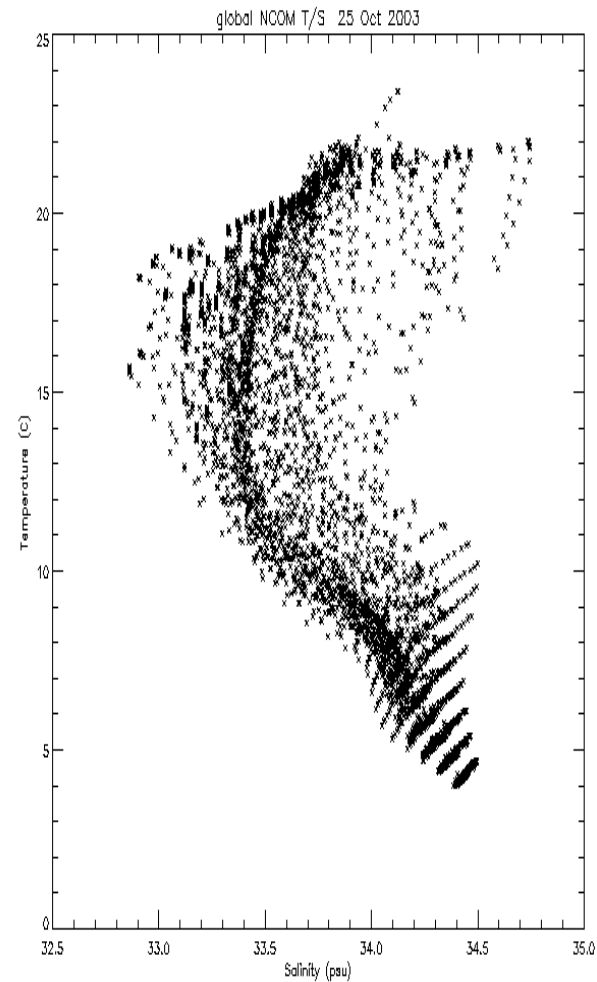
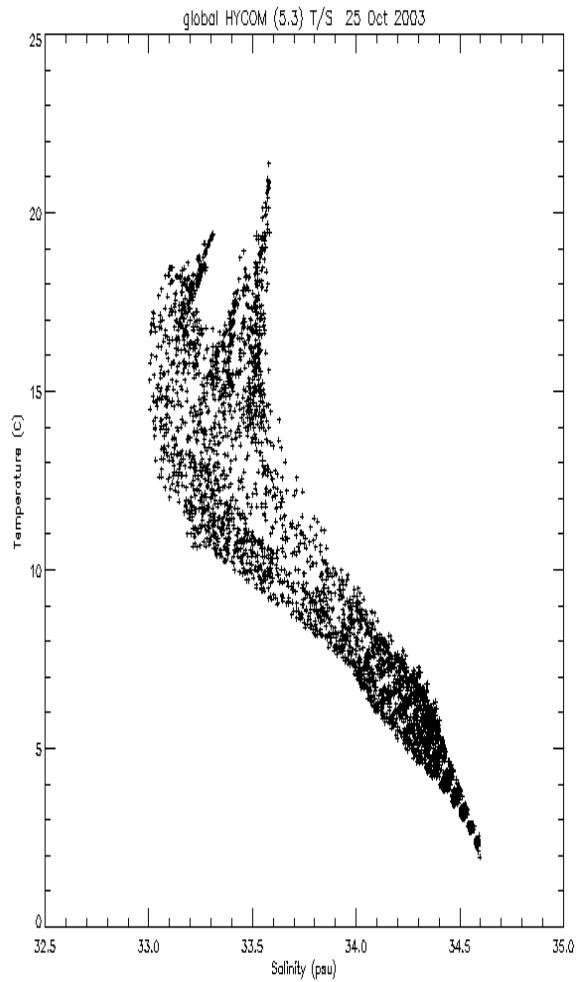
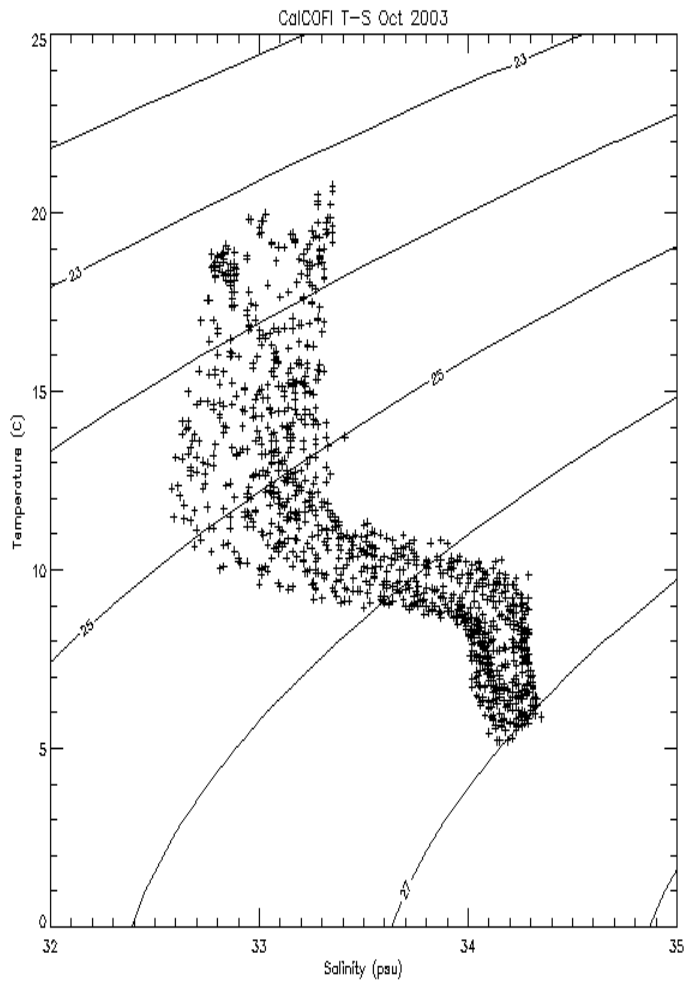
Global
HYCOM



Global
NCOM

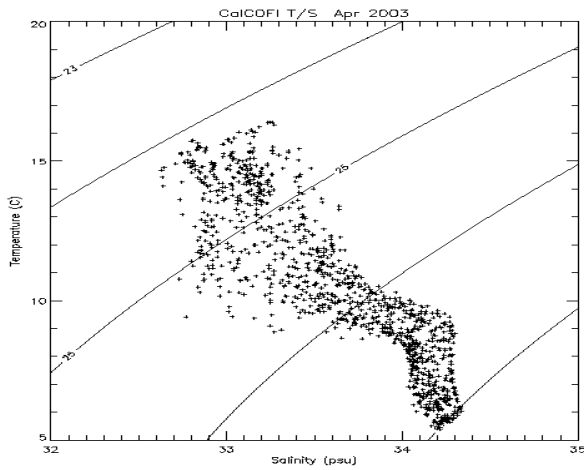


T/S October 2003

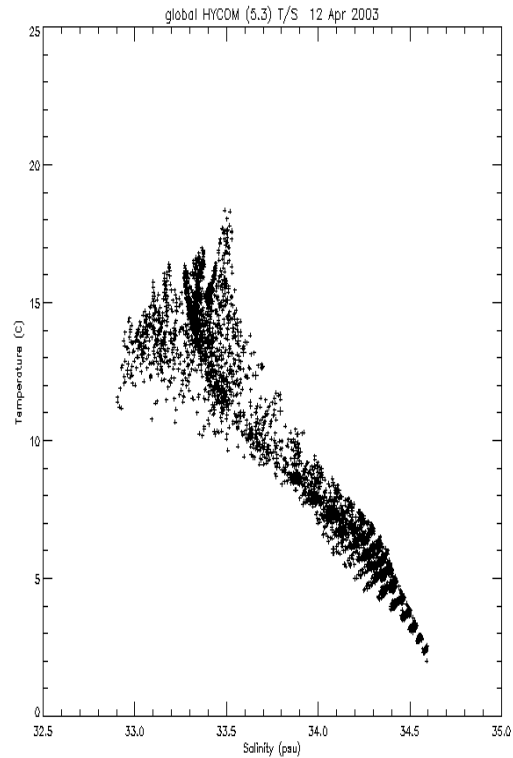


Temperature/Salinity Diagrams

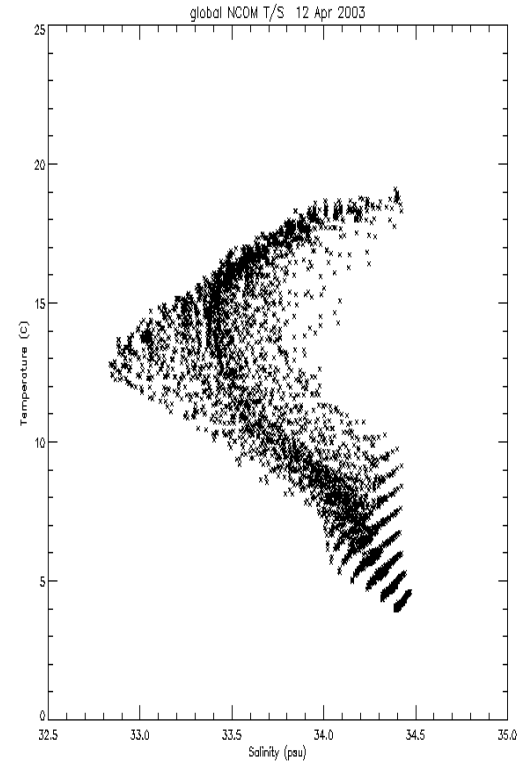
April 2003



CalCOFI



Global
HYCOM



Global
NCOM

Plans

- Initial/Boundary Conditions
 - Global HYCOM with DA
 - Global NCOM
 - CCS (John Kindle)
- Data comparisons
- Fully Coupled COAMPS/NCOM