



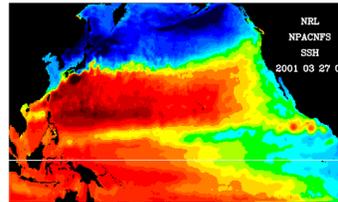
NPACNFS

A Experimental Real-Time North Pacific Ocean Nowcast/Forecast System

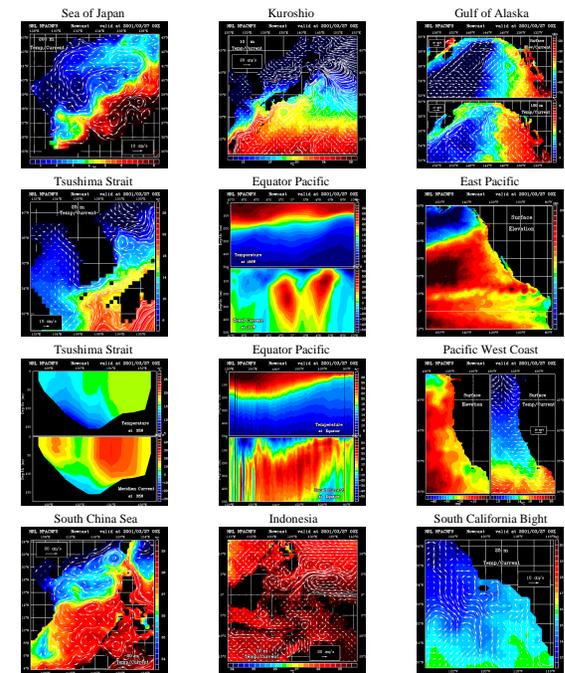
www7320.nrlssc.navy.mil/npacnfs_www/
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INTRODUCTION

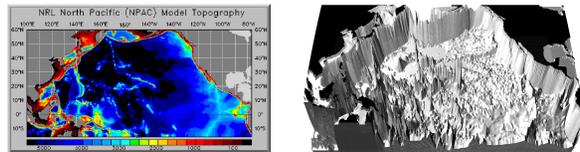
NPACNFS is a basin scale Air-Sea coupled system for real-time ocean prediction. The ocean model is based on POM (Princeton Ocean Model) which covers entire North Pacific Ocean from 16S to 60N with 1/4 degree resolution. Surface forcing, including wind stresses, heat flux, solar radiation and sea level air pressure comes from FNMOC NOGAPS (Navy Operational Global Atmospheric Prediction System). NPACNFS utilizes NRL MODAS (Modular Ocean Data Assimilation System) for data analysis. The real-time data for data assimilation come from satellites, GFO, TOPEX/Poseidon and EAS-2 for sea surface elevation and AVHRR for sea surface temperature.



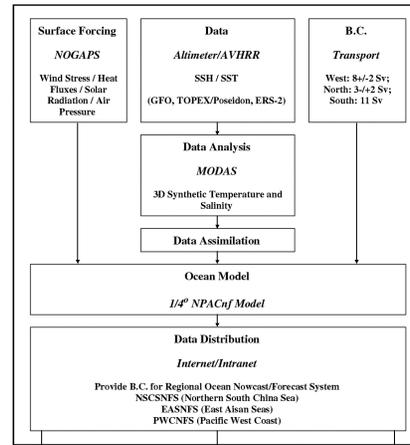
NOWCAST/FORECAST



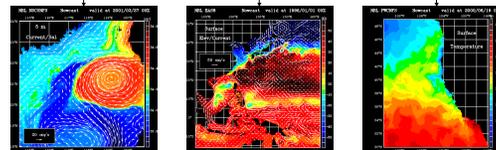
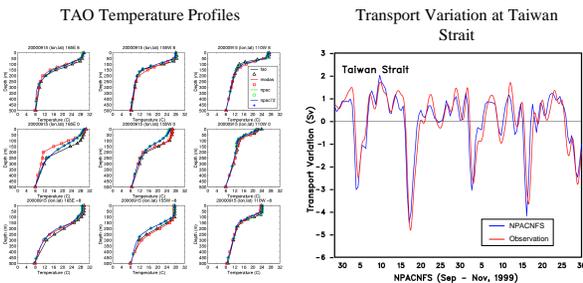
MODEL DOMAIN AND TOPOGRAPHY



SYSTEM COMPONENTS



COMPARISON TO OBSERVATIONS



SUMMARY

NPACNFS has been running at NRL since July, 1999. The system is automated. Every 24 hours, it produces the nowcast and up to 72 hrs. forecast sea level variation, 3D current, temperature and salinity fields. These fields provide the boundary conditions for the regional ocean nowcast/forecast systems. The daily nowcast/ forecast are also available to the public on the Internet.