



GCM-CFS

Statistic-deterministic model based on global atmospheric (GFS 2.5°) coluped with ocean model (MOM3)

Atmosferic model (GFS COARSE RESOLUTION)

Orizzontal resolution	Triangular truncation (spectral) about 200 km (T62)
Vertical resolution	64 sigma level, system (top at 0.2 hpa)
Domain	GLOBAL
Parametrizzazione	Radiative ballance and radiative flux (Hou ,1996-2002), vertical diffusion in ABL(Hong – Pan ,1998), Cumulus convection (Hong-Pan ,1998), Gravity wave drag (Kim – Arakawa ,1995) Schema diagnostico Cloud condensation diagnostic scheme (Zhao-Carr 1997-Sundquist,1989-Moorthi ,2001)

Oceanic Model (MOM3)

Orizzontal resolution	Spherical coordinate with 1° zonal resolution, 0.3° southern in the 30°NS area , 1° elsewhere
Vertical resolution	Z-coordinate , B Arakawa B grid, 40 vertical level
Domain	74° S – 64° N
Parametrizzazione	Vertical mixing (Profilo K non-locale, Large 1994), orizzontal mixing (isoneutral method - McWilliams 1990),orizzontal momentum mixing
Domain atmospher-ocean	Cut at 65S – 50N
Time step	1 day
SST in the atmospheric model	Interpolated with a mean on GFS and climatological data; the polar area SST is calculated on climatological data
Ice cover	Climatological data on last 24 year
Assimilation data	GODAS (3D variational tec. – Derber, Rosati 1989),
Forcing GODAS	Heat flux (Q), buoyancy flux(E-P), wind stress vector (tau)



GCM-CFS	
OUTPUT PARAMETER	
CLASS	OUTPUT PARAMETER
PRECIPITATION	
	Precipitation monthly anomaly
TEMPERATURE	
	Temperature monthly anomaly - 2m level - 850 hpa level
PRESSURE	
	Mean sea level pressure monthly anomaly