

## Metrics for General Circulation Model Evaluations

### Tropical El Niño Southern Oscillation (ENSO) Anomaly Database

	TMI	PR (CSH)	AMSR-E	ISCCP	NCEP	AIRS
Precipitation (prec, mm/day)	x	x	x			
Stratiform Rainfall Fraction (srf, %)	x	x				
Altitude of peak latent heating (aplh, km)	x	x				
Column water vapor (cwv, mm)	x		x			x (kg/m2)
Surface wind speed (lwspd, mwspd, m/s)	x		x			
Total cloud cover (tcl, %)				x		
Outgoing longwave radiation (olr, w/m <sup>2</sup> )				x		
Reflected solar at TOA (rswtoa, w/m <sup>2</sup> )				x		
Absorbed solar at TOA (aswtoa, w/m <sup>2</sup> )				x		
400mb temperature (t400, °C)					x	x
500mb omega (omega, mPa/s)					x	
500mb specific humidity (Q500, g/kg)					x	x
850mb specific humidity (Q850, g/kg)					x	x
Surface air temperature (sat, °C)						x
cloud liquid water path (clw, mm)	x		x			x (kg/m2)
SST (sst, °C)	x		x			
Skin Temperature (tskin, °C)						x
surface pressure (spres, mb)						x

Note:

- 1) Surface wind speed from AMSR-E has two retrievals: lwspd from 10.7GHz and mwspd from 18.7GHz channels. There are also two retrievals from TMI: 11 GHz and 37 GHz channels.
- 2) NCEP/NCAR analysis 1 data are obtained from the NOAA/OAR/ESRL PSD, Boulder, Colorado through the following website  
<http://www.esrl.noaa.gov/psd/data/gridded/data.ncep.reanalysis.pressure.html>.

