

Variables	Descriptions	Units
lat_cam/lon_cam	Latitude/longitude of CAM (atmosphere model) grid	degrees
lat_pop/lon_pop	Latitude/longitude of POP (ocean model) grid	degrees
SST	Sea surface temperature (on POP grid)	K/year
TS	Surface temperature (on CAM grid), same as SST for ice-free ocean	K/year
US	Zonal velocity at lowest atmospheric level	m/s/year
VS	Meridional velocity at lowest atmospheric level	m/s/year
U10	Surface wind speed	m/s/year
ICEFRAC	Sea ice fraction	%/year
SIE	Antarctic sea ice extent	m ² /year
SH	Sensible heat flux	W/m ² /year
LH	Latent heat flux	W/m ² /year
FSNS	Net shortwave radiative flux at surface (positive	W/m ² /year
FLNS	Net longwave radiative flux at surface (positive upward)	W/m ² /year
LWP	Liquid water path (TGCLDLWP)	kg/m ² /year
RHS	Relative humidity near surface	%/year
DELT	Temperature difference (surface temperature	K/year

	minus temperature at reference height)	
QEKMAN	Ekman advection	W/m2/year

Notes:

- The pickle files were created with Python 3.7.3
- Ekman advection (QEKMAN) is calculated following in Alexander and Scott (2008, DOI: 10.1175/2008JCLI2382.1),

- $$Q_{Ekman} = c/f(-\tau_y \frac{\partial SST}{\partial x} + \tau_x \frac{\partial SST}{\partial y}),$$

where c is the heat capacity of water, f is the Coriolis parameter, τ_x and τ_y are zonal and meridional wind stress.