

Monthly mean AMIP

SPCAM: netcdf spcam30_4km_32c.cam2.h0.1986-01

CAM: netcdf eul64x128_d50amip.cam2.h0.1986-01

Variable

SP-CAM CAM

| | | |
|---|---|---|
| PO = reference pressure | X | X |
| lat = latitude | X | X |
| lon = longitude | X | X |
| crm_x = crm horiz. distance in x | X | |
| crm_y = crm horiz. distance in y | X | |
| crm_z = crm nominal pressure levels | X | |
| lev = hybrid level at midpoints (1000*(A+B)) | X | X |
| ilev = hybrid level at interfaces (1000*(A+B)) | X | X |
| isccp_prs = Mean ISCCP pressure | X | X |
| isccp_tau = Mean ISCCP optical depth | X | X |
| isccp_prstau = Mean pressure (mb).mean optical depth (unitless)/1000 | X | X |
| time = time | X | X |
| time_bnds = time interval endpoints | X | X |
| ntrm = spectral truncation parameter M | X | X |
| ntrn = spectral truncation parameter N | X | X |
| ntrk = spectral truncation parameter K | X | X |
| ndbase = base day | X | X |
| nsbase = seconds of base day | X | X |
| nbdate = base date (YYYYMMDD) | X | X |
| nbsec = seconds of base date | X | X |
| mdt = timestep | X | X |
| nlon = number of longitudes | X | X |
| wnummax = cutoff Fourier wavenumber | X | X |
| hyai = hybrid A coefficient at layer interfaces | X | X |
| hybi = hybrid B coefficient at layer interfaces | X | X |
| hyam = hybrid A coefficient at layer midpoints | X | X |
| hybm = hybrid B coefficient at layer midpoints | X | X |
| gw = gauss weights | X | X |
| ndcur = current day (from base day) | X | X |
| nscur = current seconds of current day | X | X |
| date = current date (YYYYMMDD) | X | X |
| datesec = current seconds of current date | X | X |
| nsteph = current timestep | X | X |
| CLDHGH = Vertically-integrated high cloud ptop < 400 mb | X | X |
| CLDICE = Grid box averaged ice condensate amount | | X |
| CLDLIQ = Grid box averaged liquid condensate amount | | X |
| CLDLOW = Vertically-integrated low cloud ptop > 700 mb | X | X |
| CLDMED = Vertically-integrated mid-level cloud 700 mb > ptop > 400 mb | X | X |
| CLDTOT = Vertically-integrated total cloud if lwp>0.02 kg/m2 | X | X |
| CLOUD = Cloud fraction | X | X |
| CLOUDR = Cloud fraction based on -30dBZ radar reflectivity | X | |
| CLOUDTOP = Cloud Top PDF | X | |
| CLOUDY = Binary flag for daytime cltot >=cldmin | X | X |
| CMFDQ = Q tendency - Hack convection | | X |
| CMFDQR = Q tendency - shallow convection rainout | | X |

| Variable | SP-CAM | CAM |
|---|---------------|------------|
| CMFDT = T tendency - Hack convection | | X |
| CMFMC = Moist convection mass flux | | X |
| CONCLD = Convective cloud cover | | X |
| DCQ = Q tendency due to moist processes | X | X |
| DPRES = Pressure thickness of layer | X | |
| DTCOND = T tendency - moist processes | X | X |
| DTH = T horizontal diffusive heating | X | X |
| DTV = T vertical diffusion | X | X |
| FICE = Fractional ice content within cloud | X | X |
| FISCCP1 = grid box fraction covered by each ISCCP D level cloud types | X | X |
| FLNS = Net longwave flux at surface | X | X |
| FLNSC = Clearsky net longwave flux at surface | X | X |
| FLNSOI = FLNS over open ocn and ice | X | X |
| FLNT = Net longwave flux at top of model | X | X |
| FLNTC = Clearsky net longwave flux at top of model | X | X |
| FLUT = Upwelling longwave flux at top of model | X | X |
| FLUTC = Clearsky upwelling longwave flux at top of model | X | X |
| FLWDS = Downwelling longwave flux at the surface | X | |
| FLWDSC = Clearsky downwelling longwave flux at the surface | X | |
| FSDS = Downwelling solar flux at surface | X | X |
| FSDSC = Clearsky downwelling solar flux at surface | X | X |
| FSNS = Net solar flux at surface | X | X |
| FSNSC = Clearsky net solar flux at surface | X | X |
| FSNSOI = FSNS over open ocn and ice | X | X |
| FSNT = Net solar flux at top of model | X | X |
| FSNTC = Clearsky net solar flux at top of model | X | X |
| FSNTOA = Net solar flux at top of atmosphere | X | X |
| FSNTOAC = Clearsky net solar flux at top of atmosphere | X | X |
| FSUTOA = Upwelling shortwave flux at the TOA | X | |
| FSUTOAC = Clearsky upwelling shortwave flux at the TOA | X | |
| GCLDLWP = Grid-box cloud water path | X | X |
| HCLDAREA = High cloud area (ISCCP) | X | |
| HEIGHT = Height above surface | X | |
| ICEFRAC = Fraction of sfc area covered by sea-ice | X | X |
| ICLDLWP = In-cloud cloud water path | X | X |
| LANDFRAC = Fraction of sfc area covered by land | X | X |
| LCLDAREA = Low cloud area | X | |
| LHFLX = Surface latent heat flux | X | X |
| LHFLXOI = LHFLX over open ocn and ice | X | X |
| LWCF = Longwave cloud forcing | X | X |
| MCLDAREA = Middle cloud area (ISCCP) | X | |
| MEANPTOP = Mean cloud top pressure | X | X |
| MEANTAU = Mean optical thickness | X | X |
| MEANTTOP = Mean cloud top temperature | X | X |
| OCNFRAC = Fraction of sfc area covered by ocean | X | X |
| OMEGA = Vertical velocity (pressure) | X | X |
| OMEGAT = Vertical heat flux | X | X |
| PBLH = PBL height | X | X |

| Variable | SP-CAM | CAM |
|--|---------------|------------|
| PHIS = Surface geopotential | X | X |
| PRECC = Convective precipitation rate | X | X |
| PRECL = Large-scale (stable) precipitation rate | X | X |
| PRECSC = Convective snow rate (water equivalent) | X | X |
| PRECSH = Shallow Convection precipitation rate | X | X |
| PRECSL = Large-scale (stable) snow rate (water equivalent) | X | X |
| PRES = Pressure | X | |
| PS = Surface pressure | X | X |
| PSL = Sea level pressure | X | X |
| Q = Specific humidity | X | X |
| QC = Q tendency - shallow convection LW export | | X |
| QFLX = Surface water flux | X | X |
| QRL = Longwave heating rate | X | X |
| QRS = Solar heating rate | X | X |
| RELHUM = Relative humidity | X | X |
| SHFLX = Surface sensible heat flux | X | X |
| SHFLXOI = SHFLX over open ocn and ice | X | X |
| SNOWHICE = Water equivalent snow depth | X | X |
| SNOWHLND = Water equivalent snow depth | X | X |
| SOLIN = Solar insolation | X | X |
| SPDQ = Q tendency due to CRM | X | |
| SPDOC = QC tendency due to CRM | X | |
| SPDOI = QI tendency due to CRM | X | |
| SPDT = T tendency due to CRM | X | |
| SPMC = Total mass flux from CRM | X | |
| SPMCDN = Downdraft mass flux from CRM | X | |
| SPMCUDN = Unsaturated downdraft mass flux from CRM | X | |
| SPMCUP = Updraft mass flux from CRM | X | |
| SPMCUUP = Unsaturated updraft mass flux from CRM | X | |
| SPPFLX = Precipitation flux from CRM | X | |
| SPQC = Cloud water from CRM | X | |
| SPQG = Graupel from CRM | X | |
| SPQI = Cloud ice from CRM | X | |
| SPQPEVP = Prec. water evaporation from CRM | X | |
| SPQPFALL = Prec. water fall-out from CRM | X | |
| SPQPFLX = Precip. water flux from CRM | X | |
| SPQPSRC = Prec. water source from CRM | X | |
| SPQPTR = Prec. water transport from CRM | X | |
| SPQR = Rain from CRM | X | |
| SPQS = Snow from CRM | X | |
| SPQTFMX = Nonprecip. water flux from CRM | X | |
| SPQTLS = L.S. Vapor Tendency from CRM | X | |
| SPQTTR = Nonprec. water transport from CRM | X | |
| SPTLS = L.S. LIWSE Tendency from CRM | X | |
| SRFRAD = Net radiative flux at surface | X | X |
| SWCF = Shortwave cloud forcing | X | X |
| T = Temperature | X | X |
| TAUX = Zonal surface stress | X | X |

| Variable | SP-CAM | CAM |
|--|---------------|------------|
| TAUX_CRM = zonal CRM stress perturbation | X | |
| TAUY = Meridional surface stress | X | X |
| TAUY_CRM = merid CRM stress perturbation | X | |
| TCLDAREA = Total cloud area (ISCCP) | X | X |
| TGCLDIWP = Total grid-box cloud ice water path | X | X |
| TGCLDLWP = Total grid-box cloud liquid water path | X | X |
| TIMINGF = CRM CPU usage efficiency factor | X | |
| TMQ = Total (vertically integrated) precipitable water | X | X |
| TPHYSTND = T physics tendency | X | |
| TREFHT = Reference height temperature | X | X |
| TS = Surface temperature (radiative) | X | X |
| TSMN = Minimum surface temperature over output period | X | X |
| TSMX = Maximum surface temperature over output period | X | X |
| TTEND = T tendency | X | |
| U = Zonal wind | X | X |
| UU = Zonal velocity squared | X | X |
| V = Meridional wind | X | X |
| VD01 = Vertical diffusion of Q | X | X |
| VQ = Meridional water transport | X | X |
| VT = Meridional heat transport | X | X |
| VU = Meridional flux of zonal momentum | X | X |
| VV = Meridional velocity squared | X | X |
| ZOM = Momentum roughness length for CRM | X | |
| Z3 = Geopotential Height (above sea level) | X | X |
| _CLDHGH = Vertically-integrated high cloud conventional cloud param | X | |
| _CLDLOW = Vertically-integrated low cloud conventional cloud param | X | |
| | | |
| _CLDMED = Vertically-integrated mid-level cloud conventional cloud param | X | |
| _CLDTOT = Vertically-integrated total cloud conventional cloud param | X | |
| _CLOUD = Cloud fraction from conventional cloud param | X | |
| _CLOUDY = Binary flag for cltot >=cldmin conventional cloud param | X | |
| _CONCLD = Convective cloud cover conventional cloud param | X | |
| _FISCCP1 = grid box fraction covered by each ISCCP D level cloud types conventional cloud param | X | |
| _FLNS = Net longwave flux at surface | X | |
| _FLUT = Upward LW flux at TOM | X | |
| _FSDS = Flux Shortwave Downwelling Surface | X | |
| _FSNS = Net solar flux at surface | X | |
| _FSNTOA = Net solar flx at top of Atmos | X | |
| _LWCF = LW cloud forcing | X | |
| _MNPTOP = Mean cloud top pressure conventional cloud param | X | |
| _MNTAU = Mean optical thickness conventional cloud param | X | |
| _MNTTOP = Mean cloud top temperature conventional cloud param | X | |
| _QRL = Longwave heating rate | X | |
| _QRS = Solar heating rate | X | |
| _SWCF = SW cloud forcing | X | |
| _TCLDAR = Total cloud area conventional cloud param | X | |