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netcdf forcing {
dimensions:
    time = 19 ;
    lev = 40 ;
variables:
    double base_time ;
        base_time:string = "2004-10-01T00:00:00Z" ;
    double time(time) ;
        time:long_name = "Calendar day fraction of the year 2004" ;
        time:units = "days since 2004-10-01" ;
        time:axis = "T" ;
    double time_offset(time) ;
        time_offset:long_name = "Time offset from base_time" ;
        time_offset:units = "days since 2004-10-01T00:00:00Z" ;
    int year(time) ;
        year:long_name = "Year" ;
        year:units = "" ;
        year:missing_value = -9999 ;
    int month(time) ;
        month:long_name = "Month" ;
        month:units = "" ;
        month:missing_value = -9999 ;
    int day(time) ;
        day:long_name = "Day" ;
        day:units = "" ;
        day:missing_value = -9999 ;
    int hour(time) ;
        hour:long_name = "Hour" ;
        hour:units = "" ;
        hour:missing_value = -9999 ;
    int minute(time) ;
        minute:long_name = "Minute" ;
        minute:units = "" ;
        minute:missing_value = -9999 ;
    float lat ;
        lat:long_name = "latitude" ;
        lat:units = "degrees North" ;
        lat:missing_value = -9999.f ;
    float lon ;
        lon:long_name = "longitude" ;
        lon:units = "degrees East" ;
        lon:missing_value = -9999.f ;
    float phis ;
        phis:long_name = "surface geopotential height" ;
        phis:units = "m^2/s^2" ;
        phis:missing_value = -9999.f ;
    double lev(lev) ;
        lev:long_name = "pressure levels" ;
        lev:units = "hPa" ;
        lev:missing_value = -9999. ;
    float T(time, lev) ;
        T:long_name = "Temperature" ;
        T:units = "K" ;
        T:missing_value = -9999.f ;
    float q(time, lev) ;
        q:long_name = "Water vapour mixing ratio" ;
        q:units = "g/kg" ;
        q:missing_value = -9999.f ;
    float u(time, lev) ;
        u:long_name = "Horizontal wind U component" ;

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        u:units = "m/s" ;
        u:missing_value = -9999.f ;
float v(time, lev) ;
        v:long_name = "Horizontal wind V component" ;
        v:units = "m/s" ;
        v:missing_value = -9999.f ;
float omega(time, lev) ;
        omega:long_name = "vertical velocity" ;
        omega:units = "hPa/hour" ;
        omega:missing_value = -9999.f ;
float div(time, lev) ;
        div:long_name = "Horizontal wind divergence" ;
        div:units = "1/s" ;
        div:missing_value = -9999.f ;
float T_adv_h(time, lev) ;
        T_adv_h:long_name = "Horizontal temperature Advection" ;
        T_adv_h:units = "K/hour" ;
        T_adv_h:missing_value = -9999.f ;
float T_adv_v(time, lev) ;
        T_adv_v:long_name = "Vertical temperature Advection" ;
        T_adv_v:units = "K/hour" ;
        T_adv_v:missing_value = -9999.f ;
float q_adv_h(time, lev) ;
        q_adv_h:long_name = "Horizontal q advection" ;
        q_adv_h:units = "g/kg/hour" ;
        q_adv_h:missing_value = -9999.f ;
float q_adv_v(time, lev) ;
        q_adv_v:long_name = "Vertical q advection" ;
        q_adv_v:units = "g/kg/hour" ;
        q_adv_v:missing_value = -9999.f ;
float s(time, lev) ;
        s:long_name = "Dry static energy" ;
        s:units = "K" ;
        s:missing_value = -9999.f ;
float s_adv_h(time, lev) ;
        s_adv_h:long_name = "Horizontal dry static energy advection" ;
        s_adv_h:units = "K/hour" ;
        s_adv_h:missing_value = -9999.f ;
float s_adv_v(time, lev) ;
        s_adv_v:long_name = "Vertical dry static energy advection" ;
        s_adv_v:units = "K/hour" ;
        s_adv_v:missing_value = -9999.f ;
float dsdt(time, lev) ;
        dsdt:long_name = "d(dry static energy)/dt" ;
        dsdt:units = "K/hour" ;
        dsdt:missing_value = -9999.f ;
float dTdt(time, lev) ;
        dTdt:long_name = "d(temperature)/dt" ;
        dTdt:units = "K/hour" ;
        dTdt:missing_value = -9999.f ;
float dqdt(time, lev) ;
        dqdt:long_name = "d(water vapour mixing ratio)/dt" ;
        dqdt:units = "g/kg/hour" ;
        dqdt:missing_value = -9999.f ;
float q1(time, lev) ;
        q1:long_name = "Apparent heat sources Yanai (1973)" ;
        q1:units = "K/hour" ;
        q1:missing_value = -9999.f ;
float q2(time, lev) ;
        q2:long_name = "Apparent moisture sinks Yanai (1973)" ;

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        q2:units = "K/hour" ;
        q2:missing_value = -9999.f ;
float cld(time, lev) ;
        cld:long_name = "Cloud fraction" ;
        cld:units = "%" ;
        cld:missing_value = -9999.f ;
float prec_srf(time) ;
        prec_srf:long_name = "Surface precipitation" ;
        prec_srf:units = "mm/hour" ;
        prec_srf:missing_value = -9999.f ;
float LH(time) ;
        LH:long_name = "Surface latent heat flux, upward positive" ;
        LH:units = "W/m^2" ;
        LH:missing_value = -9999.f ;
float SH(time) ;
        SH:long_name = "Surface sensible heat flux, upward positive" ;
        SH:units = "W/m^2" ;
        SH:missing_value = -9999.f ;
float p_srf_aver(time) ;
        p_srf_aver:long_name = "Surface pressure averaged over the
domain" ;
        p_srf_aver:units = "hPa" ;
        p_srf_aver:missing_value = -9999.f ;
float p_srf_center(time) ;
        p_srf_center:long_name = "Surface pressure at centre of the
domain" ;
        p_srf_center:units = "hPa" ;
        p_srf_center:missing_value = -9999.f ;
float T_srf(time) ;
        T_srf:long_name = "2m air temperature" ;
        T_srf:units = "Celsius" ;
        T_srf:missing_value = -9999.f ;
float T_skin(time) ;
        T_skin:long_name = "Surface skin temperature" ;
        T_skin:units = "Celsius" ;
        T_skin:missing_value = -9999.f ;
float RH_srf(time) ;
        RH_srf:long_name = "2m air relative humidity" ;
        RH_srf:units = "%" ;
        RH_srf:missing_value = -9999.f ;
float wspd_srf(time) ;
        wspd_srf:long_name = "10m wind speed" ;
        wspd_srf:units = "m/s" ;
        wspd_srf:missing_value = -9999.f ;
float u_srf(time) ;
        u_srf:long_name = "10m U component" ;
        u_srf:units = "m/s" ;
        u_srf:missing_value = -9999.f ;
float v_srf(time) ;
        v_srf:long_name = "10m V component" ;
        v_srf:units = "m/s" ;
        v_srf:missing_value = -9999.f ;
float rad_net_srf(time) ;
        rad_net_srf:long_name = "Surface net radiation, downward
positive" ;
        rad_net_srf:units = "W/m^2" ;
        rad_net_srf:missing_value = -9999.f ;
float lw_net_toa(time) ;
        lw_net_toa:long_name = "TOA LW flux, upward positive" ;
        lw_net_toa:units = "W/m^2" ;

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        lw_net_toa:missing_value = -9999.f ;
float sw_net_toa(time) ;
        sw_net_toa:long_name = "TOA net SW flux, downward positive" ;
        sw_net_toa:units = "W/m^2" ;
        sw_net_toa:missing_value = -9999.f ;
float sw_dn_toa(time) ;
        sw_dn_toa:long_name = "TOA solar insolation" ;
        sw_dn_toa:units = "W/m^2" ;
        sw_dn_toa:missing_value = -9999.f ;
float cld_low(time) ;
        cld_low:long_name = "Satellite-measured low cloud" ;
        cld_low:units = "%" ;
        cld_low:missing_value = -9999.f ;
float cld_mid(time) ;
        cld_mid:long_name = "Satellite-measured middle cloud" ;
        cld_mid:units = "%" ;
        cld_mid:missing_value = -9999.f ;
float cld_high(time) ;
        cld_high:long_name = "Satellite-measured high cloud" ;
        cld_high:units = "%" ;
        cld_high:missing_value = -9999.f ;
float cld_tot(time) ;
        cld_tot:long_name = "Satellite-measured total cloud" ;
        cld_tot:units = "%" ;
        cld_tot:missing_value = -9999.f ;
float cld_thick(time) ;
        cld_thick:long_name = "Satellite-measured cloud thickness" ;
        cld_thick:units = "km" ;
        cld_thick:missing_value = -9999.f ;
float cld_top(time) ;
        cld_top:long_name = "Satellite-measured cloud top" ;
        cld_top:units = "km" ;
        cld_top:missing_value = -9999.f ;
float LWP(time) ;
        LWP:long_name = "MWR-measured cloud liquid water path" ;
        LWP:units = "cm" ;
        LWP:missing_value = -9999.f ;
float dh2odt_col(time) ;
        dh2odt_col:long_name = "Column-integrated dH2O/dt" ;
        dh2odt_col:units = "mm/hour" ;
        dh2odt_col:missing_value = -9999.f ;
float h2o_adv_col(time) ;
        h2o_adv_col:long_name = "Column-integrated H2O advection" ;
        h2o_adv_col:units = "mm/hour" ;
        h2o_adv_col:missing_value = -9999.f ;
float evap_srf(time) ;
        evap_srf:long_name = "Surface evaporation" ;
        evap_srf:units = "mm/hour" ;
        evap_srf:missing_value = -9999.f ;
float dsdt_col(time) ;
        dsdt_col:long_name = "Column d(dry static energy)/dt" ;
        dsdt_col:units = "W/m^2" ;
        dsdt_col:missing_value = -9999.f ;
float s_adv_col(time) ;
        s_adv_col:long_name = "Column dry static energy advection" ;
        s_adv_col:units = "W/m^2" ;
        s_adv_col:missing_value = -9999.f ;
float rad_heat_col(time) ;
        rad_heat_col:long_name = "Column radiative heating" ;
        rad_heat_col:units = "W/m^2" ;

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        rad_heat_col:missing_value = -9999.f ;
float LH_col(time) ;
    LH_col:long_name = "Column latent heating" ;
    LH_col:units = "W/m^2" ;
    LH_col:missing_value = -9999.f ;
float omega_srf(time) ;
    omega_srf:long_name = "Surface omega" ;
    omega_srf:units = "hPa/hour" ;
    omega_srf:missing_value = -9999.f ;
float q_srf(time) ;
    q_srf:long_name = "2m water vapour mixing ratio" ;
    q_srf:units = "kg/kg" ;
    q_srf:missing_value = -9999.f ;
float s_srf(time) ;
    s_srf:long_name = "2m dry static energy" ;
    s_srf:units = "K" ;
    s_srf:missing_value = -9999.f ;
float PW(time) ;
    PW:long_name = "MWR-measured column precipitable water" ;
    PW:units = "cm" ;
    PW:missing_value = -9999.f ;
float lw_up_srf(time) ;
    lw_up_srf:long_name = "Surface upwelling LW" ;
    lw_up_srf:units = "W/m^2" ;
    lw_up_srf:missing_value = -9999.f ;
float lw_dn_srf(time) ;
    lw_dn_srf:long_name = "Surface downwelling LW" ;
    lw_dn_srf:units = "W/m^2" ;
    lw_dn_srf:missing_value = -9999.f ;
float sw_up_srf(time) ;
    sw_up_srf:long_name = "Surface downwelling SW" ;
    sw_up_srf:units = "W/m^2" ;
    sw_up_srf:missing_value = -9999.f ;
float sw_dn_srf(time) ;
    sw_dn_srf:long_name = "Surface downwelling SW" ;
    sw_dn_srf:units = "W/m^2" ;
    sw_dn_srf:missing_value = -9999.f ;

// global attributes:
    :Conventions = "CF-1.0" ;
    :title = "VarAnalysis 3hr SndgBased Products V1.1: TWP-ICE" ;
    :date_created = "2010-01-20T01:10:24.546 +0
" ;
    :software = "Fortran 95 variational analysis software" ;

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