Subroutine DTRN31

[OPPARM2]

In:parameter table
Out: absorption coefficient,
optical parameters, mode
radius

[BCVR]

In:cloud cover Out: cloud cover matrix

[RMDIDX]

In:calculated mode radius
Out:fitted mode radius

[PLANKS] ← [PLANKF]

In:temperature, function fitting parameter Out:Plank function

[PTFIT2]

In:gas concentration, absorption coefficient Out:optical thickness due to gas

→ [CNTCFC2]

In:CFC concentration, absorption coefficient Out:optical thickness due to CFC

[SCATAE]

In:aerosi concentration, optical parameters, fitted mode radius Out:optical thickness due to aerosol

[SCATRY]

In:Rayleigh scattering coefficient, phase function moment, pressure Out:optical thickness due to Rayleigh scattering

[SCATCL]

add each optical thickness

In:cloud concentration, optical parameters, fitted mode radius Out:optical thickness due to cloud

*[PLKEXP]

In:total optical thickness, Plank function Out:expansion coefficient

[TWST]

In:optical thickness, scattering moments, expansion coefficients solar incidence angle factor Out: transmission and reflection coefficient, radiation source function

[RTSMR]

In:transmission and reflection coefficient, radiation source function, cloud cover matrix Out: transmission and reflection and source matrixes

[ADDMR]

In:transmission and reflection and source matrixes
Out:radiation flux

[ADDING]

In:transmission and reflection coefficient, radiation source function
Out:radiation flux