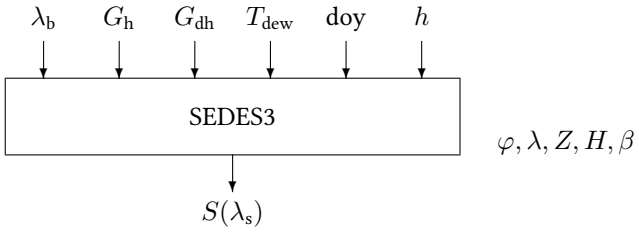
Block SEDES3

The SEDES3 block calculates solar irradiance spectra for the range between 0.3 and 1.4 micrometer.





Name	SEDES3
Function	em0033
Inputs	6
Outputs	1
Parameters	5
Strings	0
Group	S

Inputs

1	Wavelength λ_s/ μm
2	Global radiation horizontal G_h / W m^{-2}
3	Diffuse radiation horizontal G_{dh} / W m^{-2}
4	Dewpoint temperature T_{dew} / °C
5	Day of the year doy
6	Hour h

Outputs

1	Spectral density $S(\lambda_s)$/ W m^{-2} μm^{-1}

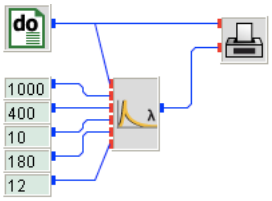
Parameters

1	Latitude φ / ° (north positive)
2	Longitiude λ / ° (east positive)
3	UTC Time zone Z
4	Height above sea level H / m
5	Tilt angle β / °

Strings

None

sedes3.vseit



A DO block varies wavelengths between zero and 2 micrometers in steps of 0.01. All other inputs to the SEDES3 block are set constant.

The PLOT block displays the spectrum on screen.

