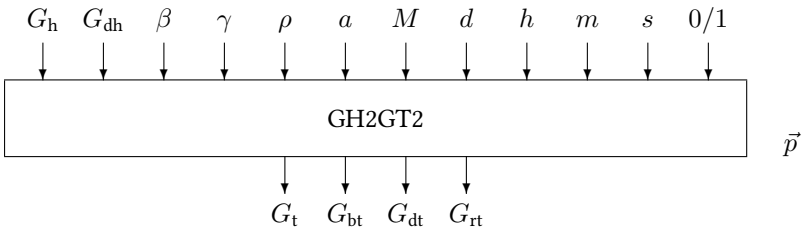
Block GH2GT2

The GH2GT2 block calculates the radiation on a tilted surface from horizontal data.

Internally, it simply calls GH2GT which uses an old convention for timezone and longitude.





Name	GH2GT2
Function	em0108
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Inputs

1	Global radiation horizontal G_h / W m^{-2}
2	Diffuse radiation horizontal G_{dh} / W m^{-2}
3	Slope β / °
4	Azimuth orientation of surface γ / °
5	Ground reflectance $\rho \in [0, 1]$
6	Year a (for example 2010)
7	Month $M \in [1, 12]$
8	Day $d \in [1, 31]$
9	Hour $h \in [0, 23]$
10	Minute $m \in [0, 59]$
11	Second $s \in [0, 60)$
12	Daylight saving time (0 no, 1 yes)

Outputs

1	Global radiation on tilted surface G_t / W m^{-2}
2	Beam radiation on tilted surface G_{bt} / W m^{-2}

3 Diffuse radiation on tilted surface G_{dt} / $\mathrm{W\,m^{-2}}$
4 Reflected radiation on tilted surface G_{rt} / $\mathrm{W\,m^{-2}}$

Parameters

1 Model
- 0 Liu, Jordan
- 1 Temps, Coulson
- 2 Bugler, Hay, Kambezidis
- 3 Klucher
- 4 Hay
- 5 Willmott
- 6 Skartveit, Olseth
- 7 Gueymard
- 8 Perez et al.
- 9 Reindl et al.

2 Latitude $\varphi \in [-90°, +90°]$, northern hemisphere positive
3 Longitude $\lambda \in [-180°, 180°]$, Greenwich $= 0$, **east positive**
4 UTC Time zone $Z \in [-12, 12]$, e. g., Central European Time: $Z = +1$

Strings

None
