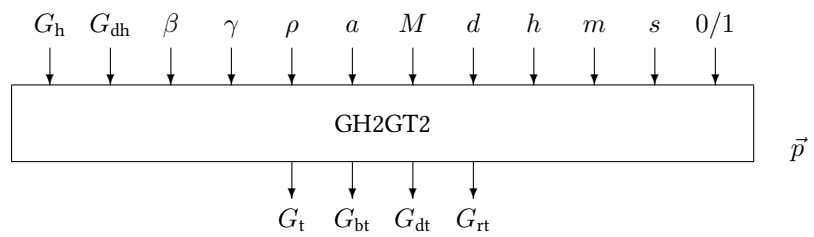


Block GH2GT2

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
Inputs	9 ... [12]
Outputs	4
Parameters	4
Strings	0
Group	S

Inputs

- 1 Global radiation horizontal G_h / W m^{-2}
- 2 Diffuse radiation horizontal G_{dh} / W m^{-2}
- 3 Slope β / $^\circ$
- 4 Azimuth orientation of surface γ / $^\circ$
- 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 $G_{dt} / \text{W m}^{-2}$
- 4 Reflected radiation on tilted surface $G_{rt} / \text{W m}^{-2}$

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

Strings

None
