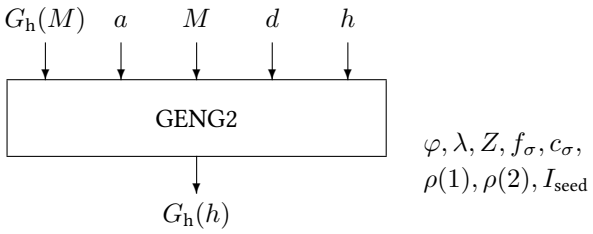
Block GENG2

The GENG2 block generates a series of hourly global radiation data from monthly mean values.

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





Name	GENG2
Function	em0115
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Inputs

1 Monthly mean value $G_\mathrm{h}(M)$ / W m^{-2} of global radiation on a horizontal plane
2 Year a
3 Month $M \in [1, 12]$
4 Day $d \in [1, 31]$
5 Hour $h \in [0, 23]$
6 Minute $m \in [0, 59]$

Outputs

1 Hourly mean value $G_\mathrm{h}(h)$ / W m^{-2} of global radiation on a horizontal plane. When input six is connected, GENG2 performs a linear interpolation between the two corresponding hours.

Parameters

1 Latitude $\varphi \in [-90°, +90°]$, northern hemisphere positive
2 Longitude $\lambda \in [-180°, 180°]$, **east of Greenwich**; values west of Greenwich may be used with a minus sign

3	UTC Time zone $Z \in [-12, 12]$, Greenwich Mean Time $Z = 0$, Central European Time $Z = +1$.
4	Variance factor f_σ to the Gordon / Reddy correlation, eq **??**; if unknown $f_\sigma = 1$ is recommended
5	Coefficient c_σ corresponding to the year-to-year variability due to different climatic conditions. When c_σ is set to zero the year-to-year variability is omitted. $c_\sigma = 0.185$ approximates North American variability, while $c_\sigma = 0.3$ approximates European variability
6	Autocorrelation coefficient $\rho(1)$ at a lag of one day; if unknown $\rho(1) = 0.3$ is recommended
7	Autocorrelation coefficient $\rho(2)$ at a lag of two days; if unknown $\rho(2) = 0.57\rho(1)$ is recommended
8	Initialization I_{seed} of random number generator 0 for a different random sequence at each run

Strings

None