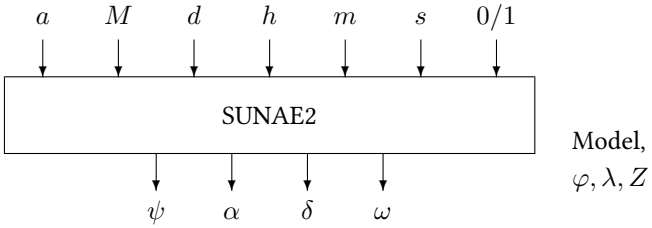
Block SUNAE2

The SUNAE2 block calculates the position of the Sun in horizon and equator coordinates.

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





Name	SUNAE2
Function	em0106
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Outputs	4
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Inputs

1 Year a
2 Month $M \in [1, 12]$
3 Day $d \in [1, 31]$
4 Hour $h \in [0, 23]$
5 Minute $m \in [0, 59]$
6 Second $s \in [0, 59]$
7 Daylight saving time (0 no, 1 yes)

Outputs

1 Azimuth ψ (north $= 0°$, east $= 90° \ldots$ west $= 270°$)
2 Elevation α / °
3 Declination δ / °
4 Hour angle ω ($0° \ldots 360°$west)

Parameters

1 Approximation
0 Spencer

	1	Holland/Mayer
	2	Michalsky
2	Latitude $\varphi \in [-90°, +90°]$, northern hemisphere positive	
3	Longitude $\lambda \in [-180°, 180°]$, east of Greenwich; values west of Greenwich may be used with a minus sign	
4	UTC Time zone $Z \in [-12, 12]$, e. g. Central European Time: $Z = +1$	

Strings

None