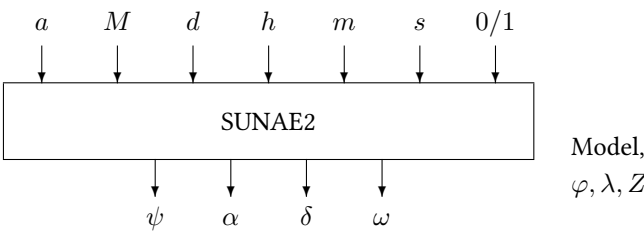


Block SUNAE2

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
Inputs	4 ... [7]
Outputs	4
Parameters	4
Strings	0
Group	S

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° ... west = 270°)
- 2 Elevation $\alpha / ^\circ$
- 3 Declination $\delta / ^\circ$
- 4 Hour angle ω (0° ... 360° west)

Parameters

- 1 Approximation
0 Spencer

- 1 Holland/Mayer
- 2 Michalsky
- 2 Latitude $\varphi \in [-90^\circ, +90^\circ]$, northern hemisphere positive
- 3 Longitude $\lambda \in [-180^\circ, 180^\circ]$, 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
