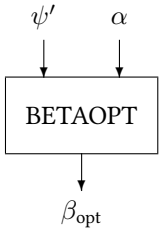
Block BETAOPT

The BETAOPT block calculates the optimum tilt angle for a one-axis tracked receiver with horizontal axis.





Name	BETAOPT
Function	em0032
Inputs	2
Outputs	1
Parameters	0
Strings	0
Group	S

Inputs

1	Difference between surface azimuth and azimuth of the Sun / °
2	Solar elevation / °

Outputs

1	Optimum tilt angle / °

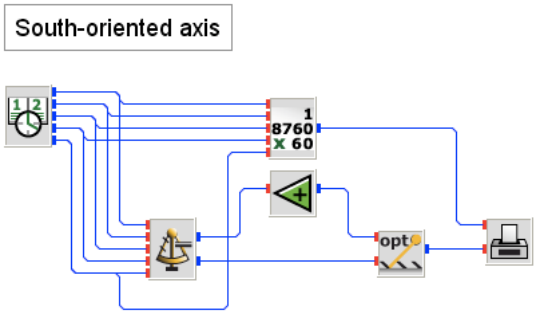
Parameters

None

Strings

None

betaopt.vseit



A CLOCK block drives this simulation between 05:00 o'clock in the morning until 09:00 p.m. in steps of five minutes on the first of July 2010. The SUNAE block is used to calculate the solar azimuth and elevation. An OFFSET block with parameter -180 is used to calculate the difference between surface azimuth and solar azimuth, as required by the BETAOPT block.

The Gregorian date of the CLOCK block is converted into the minute of the year by a MOY block, which is used as x-coordinate by the PLOT block.

