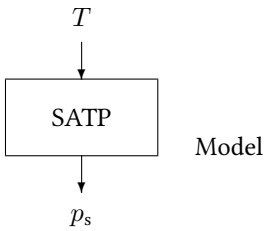


Block SATP

The SATP block returns water vapour saturation pressure as a function of temperature.

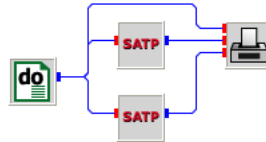
SATP



Name	SATP
Function	st0009
Inputs	1
Outputs	1
Parameters	0 . . . [1]
Strings	0
Group	S

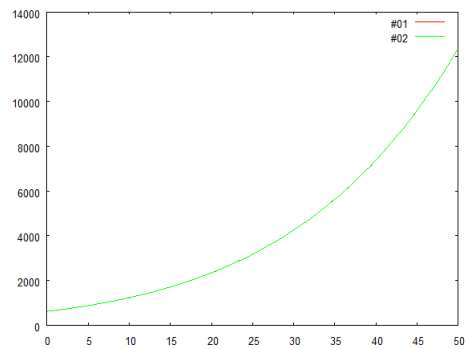
Inputs	1	Temperature T / °C
Outputs	1	Water vapour saturation pressure p_s / Pa
Parameters	1	Mode
	0	Y. O. Devres Psychrometric properties of humid air: Calculation procedures in: Applied Energy 48 1994 (accuracy: $\pm$ 5 %)
	1	W. Wagner and A. Pruss
Strings		None

satp.vseit



The saturation pressure of water vapor is calculated according to approximations of Devres (upper block) and Wagner Pruss (lower block) for dew point temperatures which are varied between 0 and 50 °C by a [DO](#) block in steps of 0.1 °C.

The [PLOT](#) block shows that the difference between the two approximations is very small.



See also [Block SATP](#).