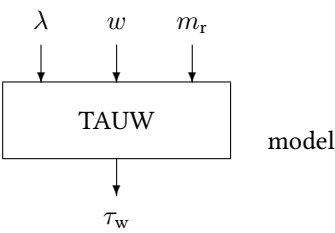


Block TAUW

The TAUW block calculates the spectral transmittance due to water vapor in the atmosphere.



Name	TAUW
Function	em0036
Inputs	3
Outputs	1
Parameters	1
Strings	0
Group	S

Inputs

- 1 Wave length λ / μm
- 2 Water vapor content in the atmosphere w / unit?
- 3 Relative air mass m_r

Outputs

- 1 Spectral transmittance

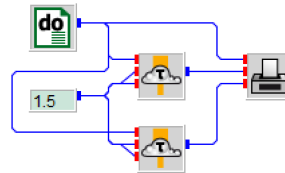
Parameters

- 1 Model
 - 0 LOWTRAN
 - 1 Lacis and Hanon

Strings

None

tauw.vseit



A **DO** block varies wavelengths between zero and five micrometers in steps of $0.01 \mu\text{m}$. Water vapor content and relative air mass are both set constant to 1.5.

The upper **TAUW** block uses the wavelength dependent LOWTRAN approximation, while the lower **TAUW** block uses the Lacis Hanon correlation which depends on the product of water vapor and relative air mass only, and is therefore constant in this example.

As usual, the **PLOT** block is used to display the two curves.

