

## 1.9. stop line "C 2" 157.6m reaches 0.2 rel to "O 3" 5007

The calculation will stop when the emission line with the label given within the first pair of quotes and the wavelength given by the first number exceeds an intensity given by the second number, relative to an optional second emission line. In this example the calculation will stop when the intensity of [C II] 158  $\mu\text{m}$  reaches 0.2 relative to [O III]  $\lambda 5007$ . If a second optional line is not entered it will be  $\text{H}\beta$ . This can be a useful way to stop matter-bounded models. The results of this command are not exact; the final intensity ratio will be slightly larger than the ratio specified.

The line label and wavelength should be entered exactly as it appears in the emission line output – the normal units are Angstroms, but microns ('m'), centimeters ('c'), and others are also recognized.

The scaling of the line intensities on the final printout can be changed with the **normalize** command, as described on page **Error! Bookmark not defined. Error! Reference source not found.** That command can change both the normalization line (usually  $\text{H}\beta$ ) and its relative intensity (usually 1). The **normalize** command does not interact with the **stop line** command. If the third number is not entered with the **stop line** command then  $\text{H}\beta$  is always used as the line in the denominator in the ratio. The **stop line** command always uses the ratio of the two line intensities, even if the scale intensity of the second line has been reset with the **normalize** command.

Up to 10 different **stop line commands** may be entered. If more than one **stop line command** is entered then the code will stop as soon as any of the limits is reached.