photobiologySun Version 0.2.0
Catalogue of Solar Spectra

Pedro J. Aphalo

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1 Introduction

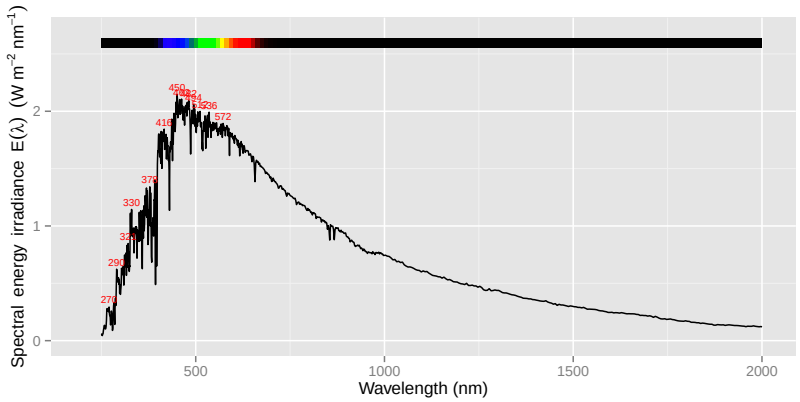
The plots show the solar spectral irradiance data included in the package.

```
library(ggplot2)
library(photobiology)
library(photobiologySun)
library(photobiologygg)
```

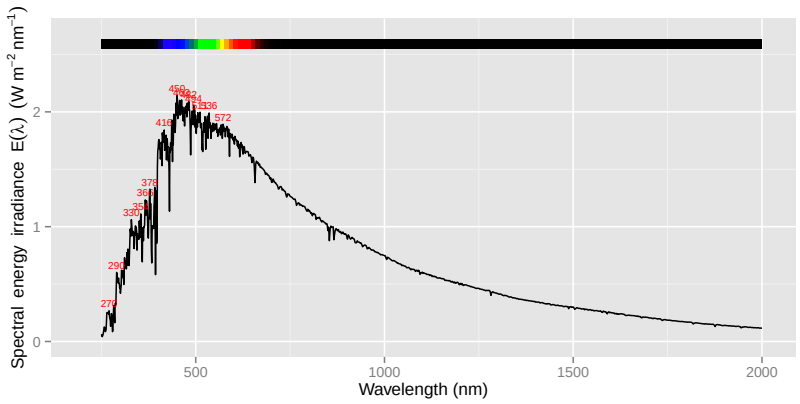
We define a function to do the actual plotting so as to not repeat code, and to make changes easier in the future.

2 Extraterrestrial solar spectra

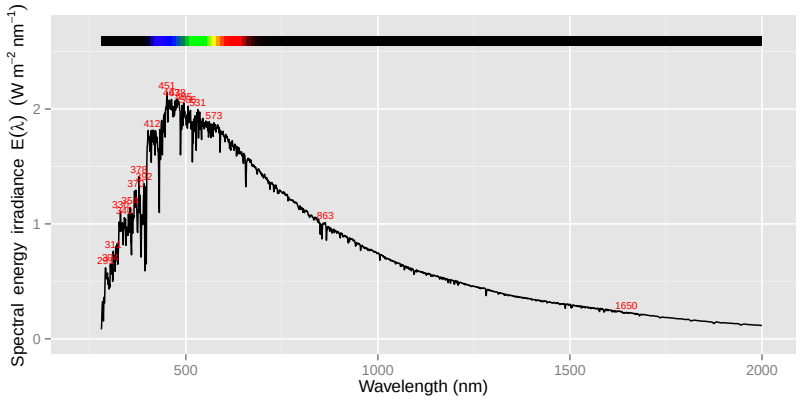
```
plot(WMO_Wehrli_AM0.spct, range=c(250, 2000), w.band = NULL)
```




```
plot(ASTM_E490_AM0.spct, range=c(250, 2000), w.band = NULL)
```

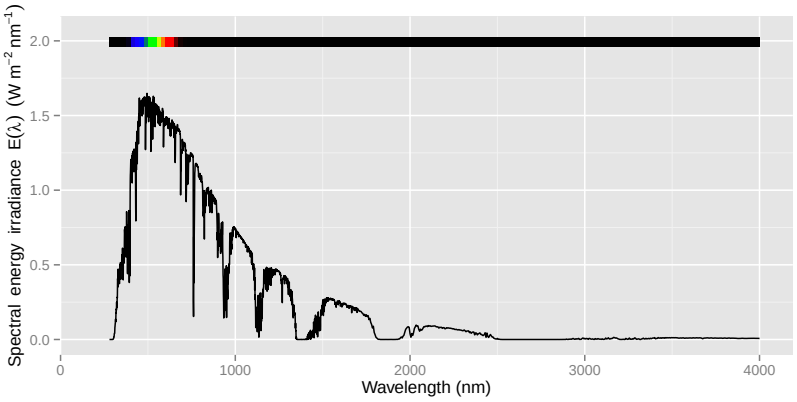



```
plot(Gueymard_AM0.spct, range=c(250, 2000), w.band = NULL)
```

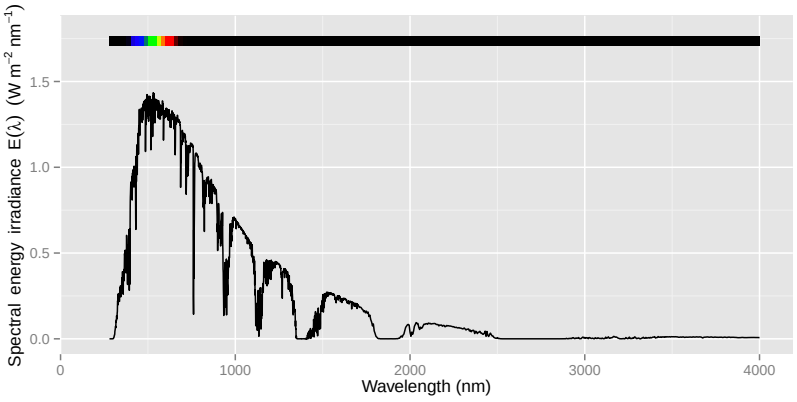


3 Standard terrestrial solar spectra

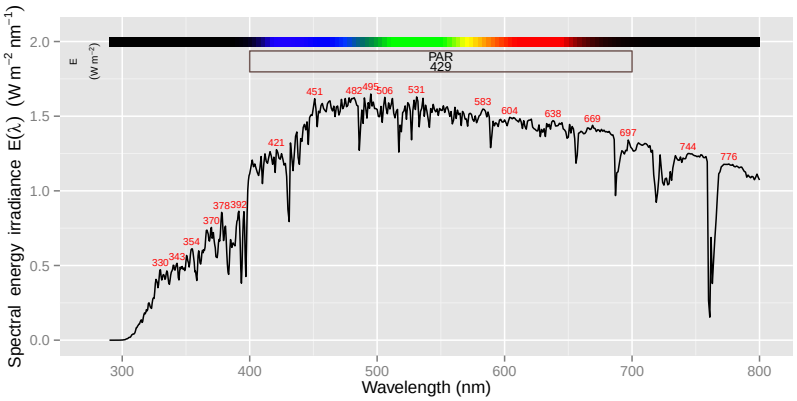
```
plot(ASTM_G173_direct.spct, annotations="colour.guide")
```



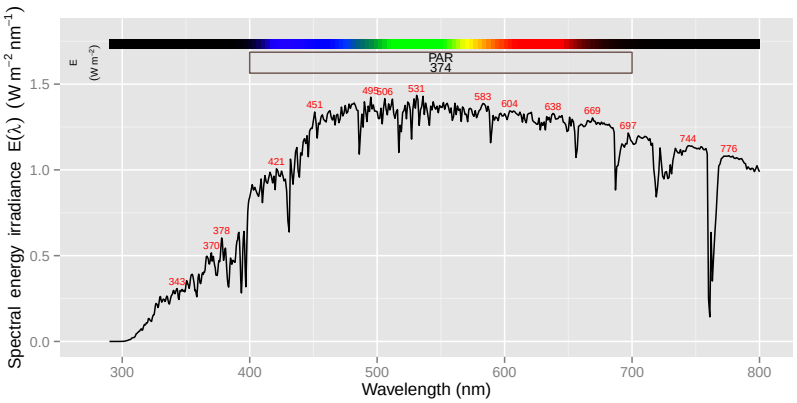

```
plot(ASTM_G173_global.spct, annotations="colour.guide")
```




```
plot(ASTM_G173_direct.spct, range=c(290, 800), w.band=PAR())
```

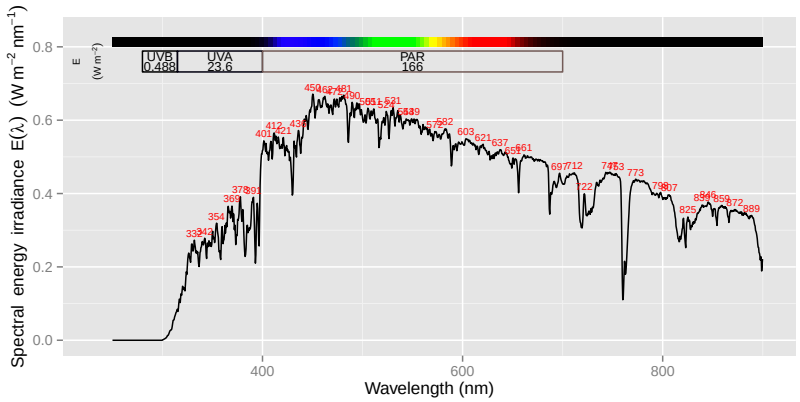


```
plot(ASTM_G173_global.spct, range=c(290, 800), w.band=PAR())
```



4 Measured daylight spectra

```
plot(sun_May_morning.spct)
```




```
plot(sun_May_morning.spct, unit.out = "photon")
```