Day sequence

Julian day

Day

Month

Year

Hour

Minute

Cloudless model

Raw par

Latitude (radians)

Longitude (degrees E)

PcorrA.pro

Cloudless sky model (function of zenith angle z)

Day

Month

Year

Hour

Minute

Raw par

DaviesA\_15062021

\_29062023.txt

DaviesB\_15062021

\_29062023.txt

Day sequence

Julian day

Month

Year

ratiop

Clear\_stats\_15062021\_29062023.txt

PcorrB.pro

DaviesB\_15062021

\_29062023.txt

Day sequence

Julian day

Day

Month

Year

Hour

Minute

Cloudless model

Raw par

Cloudless\_in\_15062021\_29062023.txt

NOTES

* Clear\_stats\_15062021\_29062023.txt contains normalised stdev as a function of ratios for all days of record. The day is deemed cloudless if the values are less than 0.1.
* Cloudless\_in\_15062021\_29062023.txt contains all days that passed the cloudless days. The series must be examined further.
* I have deleted all colons in the input file “daviesA\_15062021\_29062023.txt”. I have also removed some peripheral data.
* I have deleted all times before 05:00 EST and after 18:50 EST in the input file “daviesA\_15062021\_29062023.txt”
* In extracting cloudless days, I have only examined ratios from 1.5 to 0.5 for Davies Reef. These ratios might have to be expanded in stations with a lot of degradation.
* As discussed, the technique cannot handle strong tilting. This is something we can address in the future (detection and substitution…)