DOC Activity Counter Network: Visitor Asset Utilisation Report



Technical Report

For equipment number 100093541 at Godley Head, Summit Track December 12, 2023

This uncalibrated counter data set ranges between 06/09/2012 and 26/05/2022 with a total count of 70864 in 85167 hourly observations. This document is set up to view the number of counts at an hourly scale, then to view the patterns there are over time (year, month, and day). At the daily level we fit a model that shows the relationship of the counts with time, month, and the Christmas holidays which seem to be the peak time at many sites. These reports are automated, so this trend needs to be evaluated by how well the model in red on Figure 1b matches with the the data.

We estimate that there was an increase in the number of visitors over time. The busiest 10 days are shown in Table 1 and the longest 10 occasions without any visitors are shown in Table 2. This should give a rough idea of the strength and validity of the data.

Date	Count
2021-03-11	240
2021-09-04	160
2020-05-09	153
2019-07-13	151
2019-08-25	142
2020-05-02	136
2018-04-25	135
2019-04-25	135
2019-09-29	128
2020-08-05	125

Table 1: Busiest 10 days in the dataset

Date	Days no visits
2018-06-04	4.79
2018 - 05 - 27	4.17
2017-06-03	3.96
2020-06-30	3.92
2015-07-07	3.71
2013-06-19	3.08
2020-07-07	2.96
2017-03-12	2.92
2016-05-29	2.88
2018-04-09	2.88

Table 2: The 10 Longest times without any visitors for a period.

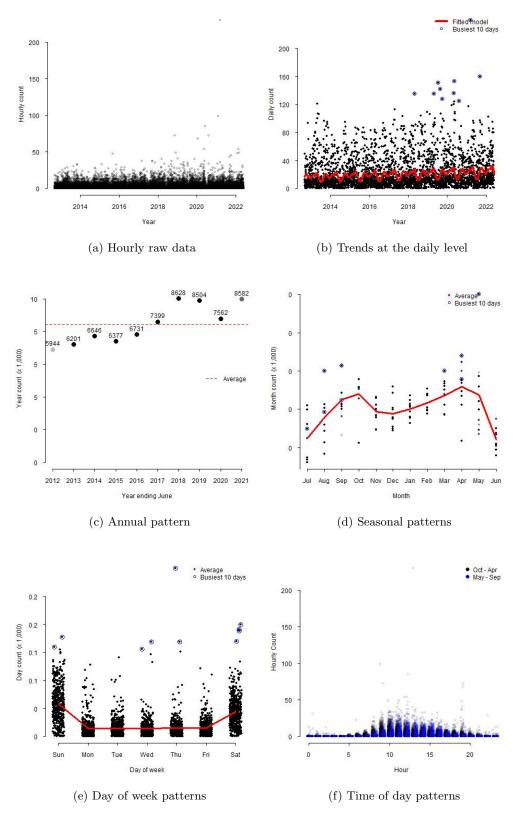


Figure 1: Basic trends in visitor counter data shown by (a) the raw hourly data, (b) model of the trend in count by time, season, and, Christmas holiday, (c) sum of counts annually with incomplete years in grey, (d) monthly patterns, (e) weekday patterns, and (f) hourly patterns. If a point was incomplete we filled that month/year with what was predicted to occur and faded the point as a function of the amount of uncertainty.