

CAS UKMON Report to CAS Committee Meeting 08/03/2018

This report covers activities between the 4th January 2018 and the 7th March 2018 of the CAS Meteor Observation Camera 2 located as part of the Society Observatory at National Trust Dyffryn Gardens.

Camera 2 captured 91 meteor trails in January 2018 and 66 meteor trails in February 2018; no fireball events were recorded.

The CAS website CAS_UKMON entry has been updated to the end of January 2018 for Camera 1, end January 2018 for Camera 2 and today for this report and general information.

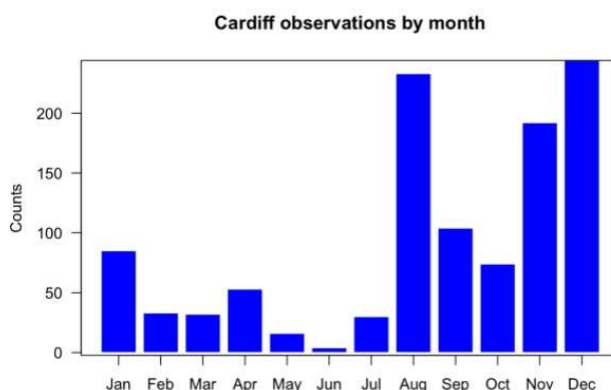
The UKMON central database has been updated to the end of January 2018 for Camera 1 and the end of January 2018 for Camera 2. Camera 2 data for February 2018 is still being processed.

A full summary of the Cardiff contribution to UKMON during 2017 can be accessed via the Society website at: https://s3-eu-west-1.amazonaws.com/cdn.webfactore.co.uk/sr_660025.pdf

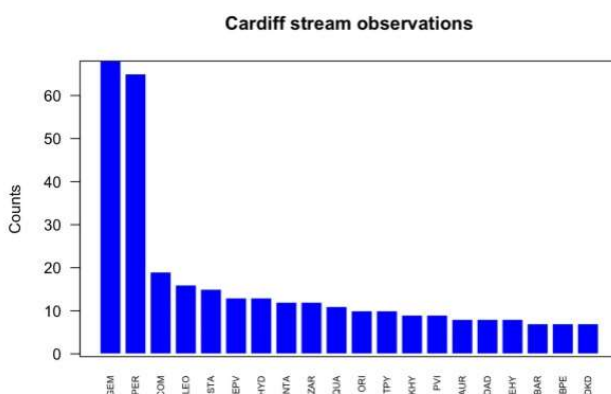
Some extracts from the report follow:

In 2017 twenty fireball events were captured (Based on IAU definition of apparent magnitude of -4.0 or brighter) between the two Cardiff based cameras.

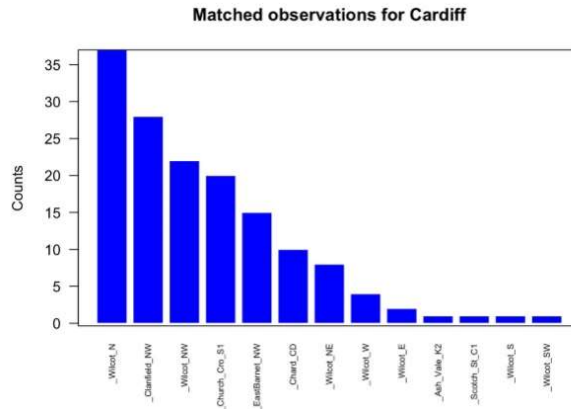
Cardiff recorded 1100 individual meteor observations. These observations comprised 216 sporadic meteors and 884 stream meteors. A breakdown by month is shown below.



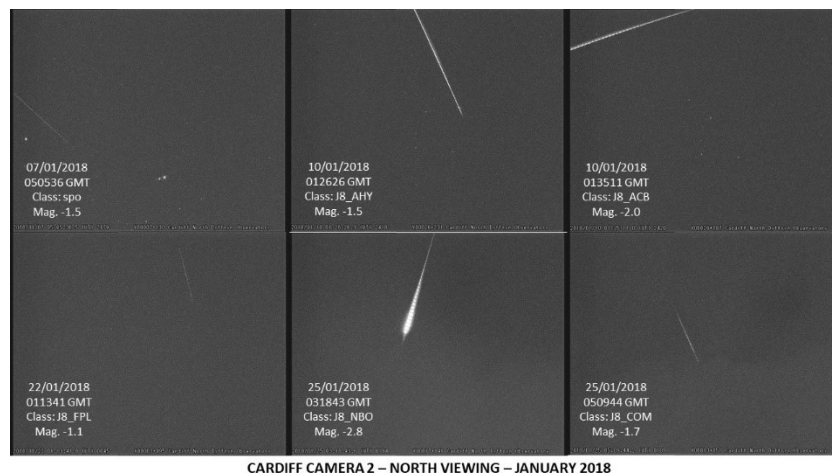
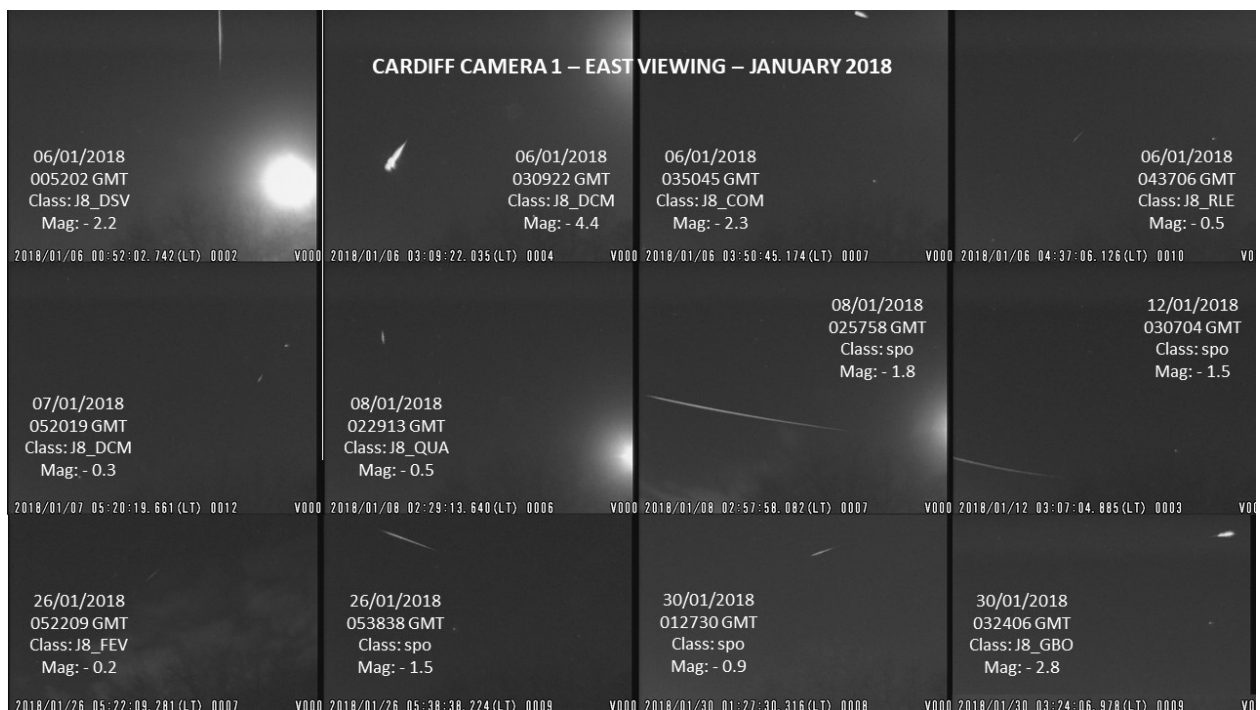
The following shows observation counts by stream for the 20 most frequent showers based on preliminary UFO ANALYSIS classifications:



The following graph shows which stations are generating matched observations with Cardiff and the number of matches:



Some images from January 2018:



A gap in data for Camera 2 has been experienced with a power outage which commenced at some point after 07:30 18th February until reset on the 23rd February. The cause has not been established but the UPS had to be powered up to correct the power break.

The UTC Clock (Arduino based) has been received but returned due to a failure with the microcontroller. Prior to the failure an attempt to interface it with the UKMON failed due to a Windows 10 networking issue on the UKMON PC. The Windows 10 issue has potentially been rectified by installing a newer version of Windows 10 but awaiting the return of the clock. The use of the UTC clock will be a good step as it will mean that the timestamp on our data is in sync with other UKMON stations (which use UTC time from the Internet).

Edward Cooper
CAS UKMON Co-ordinator
7th March 2018