

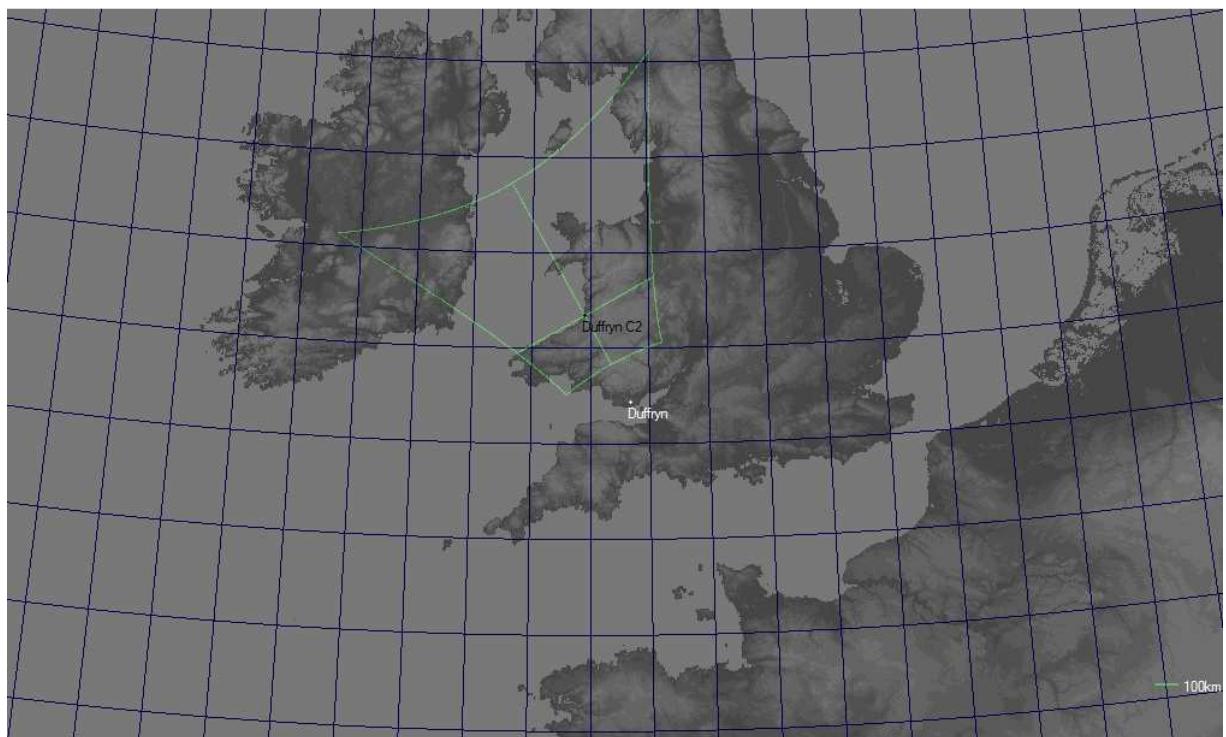
CAS UKMON Report to CAS Committee Meeting 10/03/2016

This report covers activities since 22 February 2016 for the CAS Meteor Observation Camera 2 located as part of the Society Observatory at NT Dyffryn Gardens.

An initial introduction to the system of acquisition and analysis was received from Martin Chick on the 22 February 2016, data downloaded for January and February 2016, software installed on my PC for processing / analysis. Data prior to 2016 has now been removed from the PC at the Observatory.

I have been in contact with Richard Kacerek (UKMON) who helped me through the processing of an initial recording, it was during this discussion that a flaw in the data collected to date became apparent. The location coordinates for the camera have been wrong for some time. Richard Kacerek showed me from our data the field of view for the Observatory camera; it showed that the camera was positioned in the Bristol Channel just north of the English coast. The error was that the system needs decimal degrees but has been given degrees, minutes and seconds (but with a single decimal point).

i.e. long was -3.1818 should have been -3.305016666 to represent $3^{\circ} 18' 18.06''$ lat was 51.2638 should have been 51.4441722 to represent $51^{\circ} 26' 39.02''$ N.



Corrected Location of Observatory Camera

The data for 2016 can be corrected, by editing the files holding the co-ordinates; this will be done as part of the data processing activity prior to lodging with UKMON. Data prior to 2016 is either of no value or will be corrected by UKMON.

The cause of the error has been corrected in the acquisition programme on the PC at Dyffryn so the source of the issue has been eliminated.

A UPS (Uninterruptable Power Supply) has been fitted to the acquisition PC which should protect the system from power spikes and short (< 10 minute) power outages. These events have been causing the PC to reboot but halting prior to restarting the acquisition programme.

The USB Video Capture Device has been damaged by being bent in the front USB socket of the PC, this has likely damaged the contacts resulting in intermittency. This may explain some of the interference on the data and occasional poor / incomplete records. In the short term a USB extension cable has been used to relocate the Video Capture Device from such a vulnerable position. A new USB Video Capture Device is on order and once delivered will be substituted for the existing damaged one.

Other than that data is being collected and prepared for analysis prior to deposition with UKMON.

Last week UKMON announced that the Natural History Museum is now part of UKMON network. NHM camera 1 is placed on the building in South Kensington, London and has matching field of view with many other cameras of the UKMON Network. A second camera in Tring is planned to be operational soon.



3 February 2016 NHM South Kensington

9 February 2016 NHM South Kensington

Edward Cooper
CAS UKMON Co-ordinator
7 March 2016