

Introduction

A number of individuals based around the UK used the Forward Scatter technique (Using BRAMS and Graves) to detect and record Radio Meteor Events, monthly this data is then added to a central database. Given the receiving stations all different in setup and there is little or no standardisation across the stations there are limits to how the data can be used in a scientific context.

We can however plot trends and create matched events (Events with a duration that exceed 10 seconds recorded by three or more different contributors and are + / - within 2 seconds of each other)

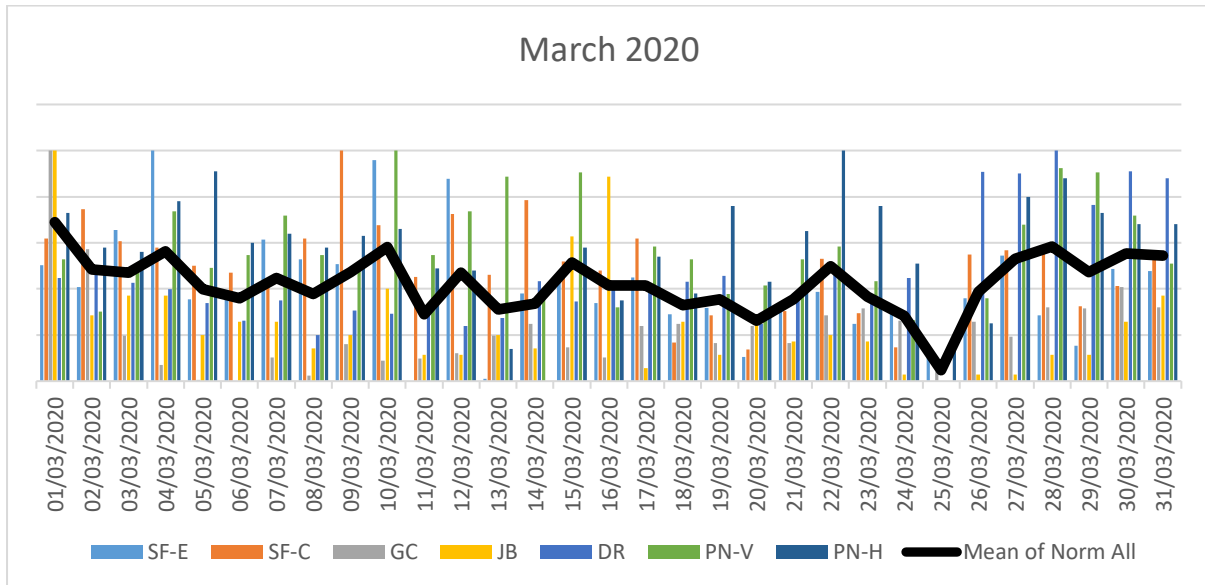
Contributor Locations



Trend of contributions for March 2020

The graph below shows the trend of contributions over time for the month of March – Counts are not displayed as its simply a trend for the month.

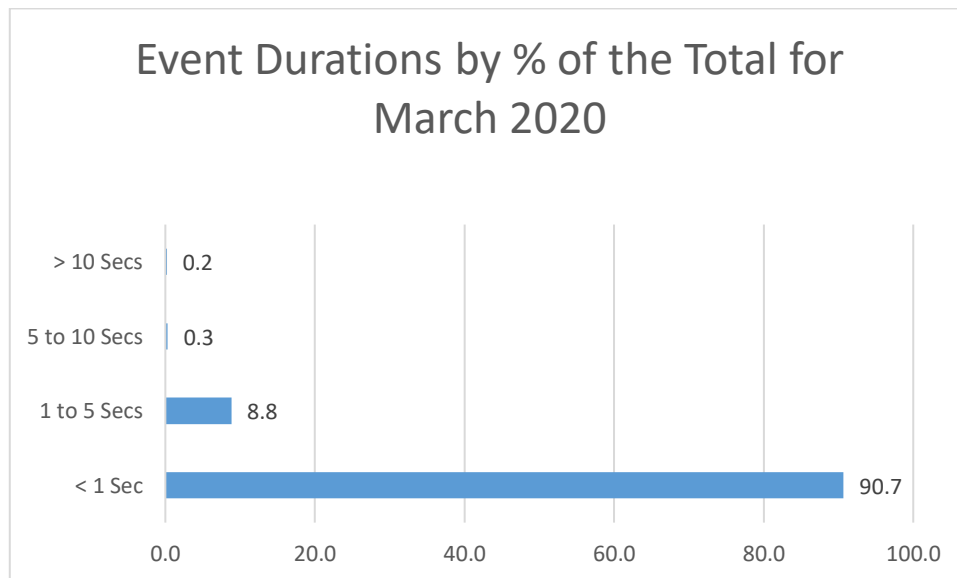
Assume Graves was down on the 25th March



March Event data broken down into durations

Month	Raw Data				
	Total Count	< 1 Sec	1 to 5 Secs	5 to 10 Secs	> 10 Secs
Feb	50,715	45,974	4,479	164	98

Event Durations as a % of the Total				
Month	< 1 Sec	1 to 5 Secs	5 to 10 Secs	> 10 Secs
Feb	90.7	8.8	0.3	0.2



Radio Meteor Collaboration

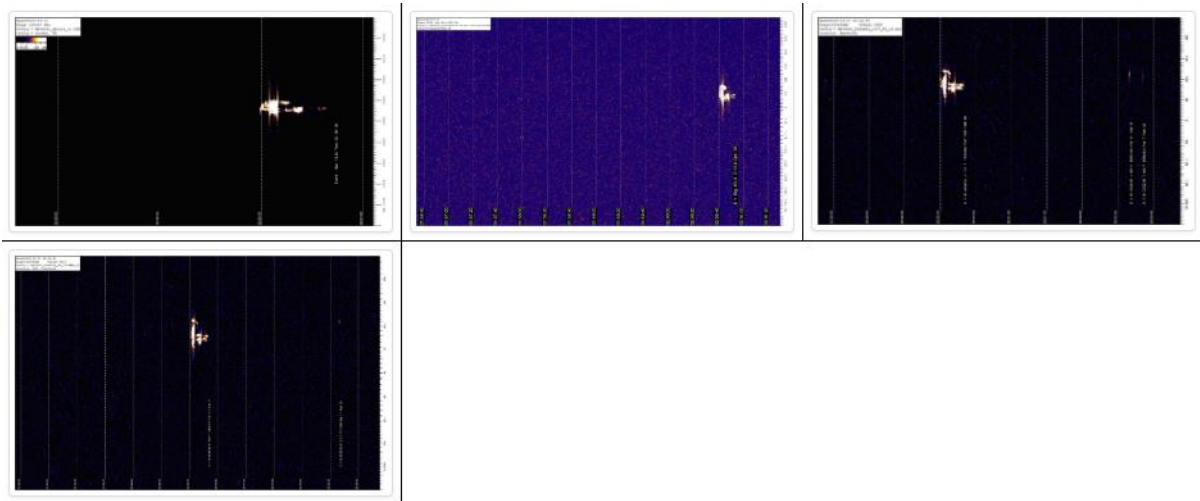
March 2020

Matched Events - Events with a duration that exceed 10 seconds recorded by three or more different contributors and are + / - within 2 seconds of each other

There were 6 potential matches in March - the notable ones are below

Event at 2020-03-10 at 02:00:39 UTC

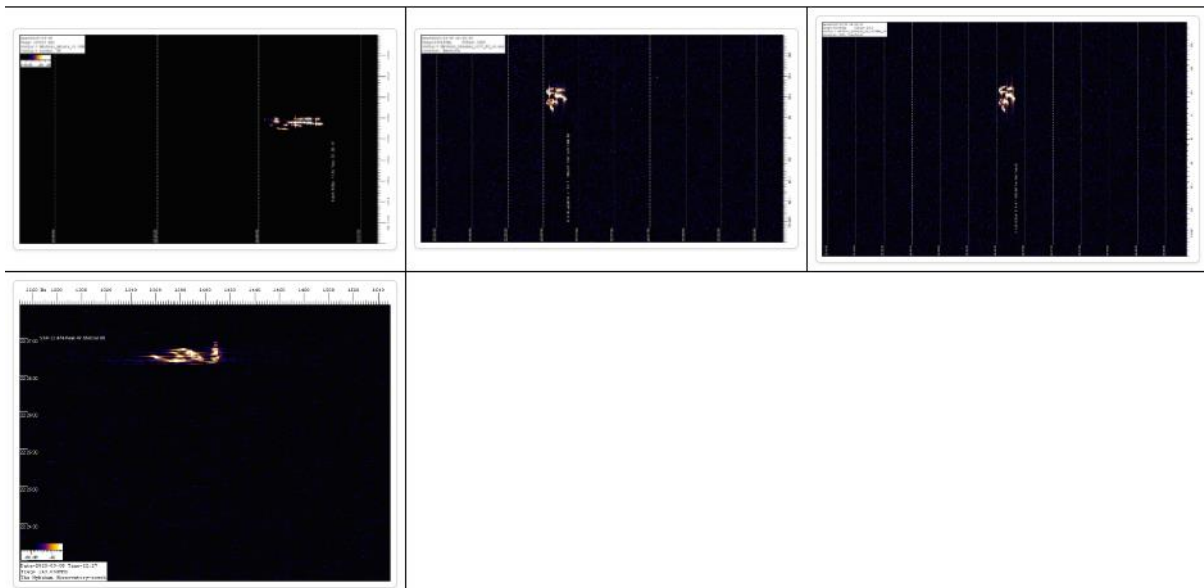
Contributor	RX Lat	RX Lng	TX Source	Time Sync	Time - UTC	Duration in Seconds	SN Ratio Calculated	Doppler Estimate Calculated
John Berman	51.4	-0.1	Graves	Dimension 4	02:00:39	13.20	52.80	-2515
Derek Robson	52.7	-1.2	Graves	Dimension 4	02:00:39	10.75	23.90	-30
Steve Futcher - Emsworth	50.9	-0.9	Graves	NetTime	02:00:40	13.15 Calculated	24.00	-5
Steve Futcher - Clanfield	50.9	-1.0	Graves	NetTime	02:00:40	10.58 Calculated	19.70	-16



Please go to <http://meteor.m81.co.uk/picview10.php?id=878> to see the full size plots

Event at 2020-03-08 at 22:26:41 UTC

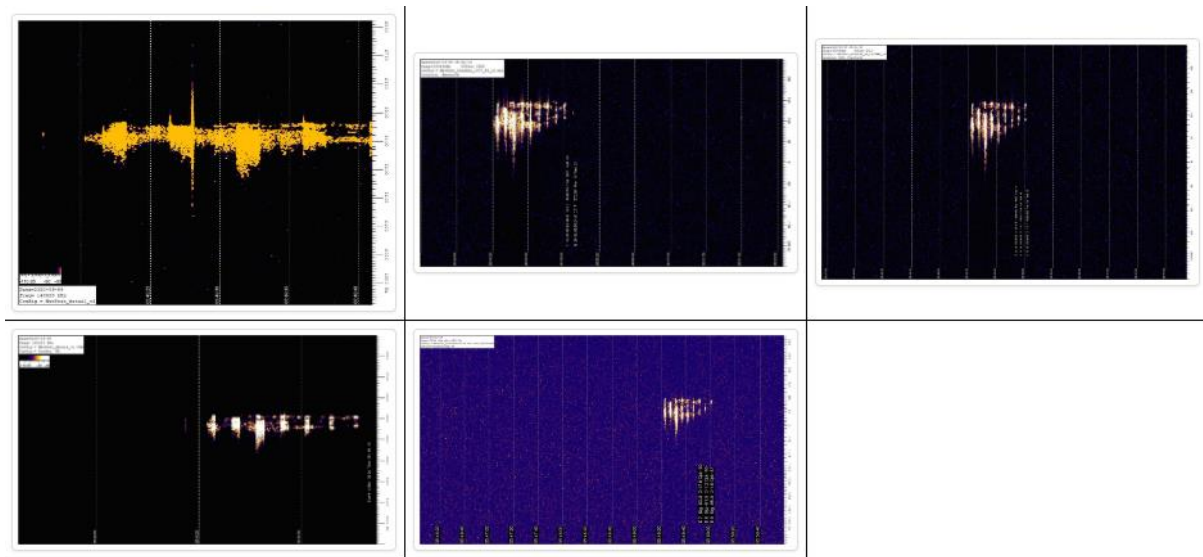
Contributor	RX Lat	RX Lng	TX Source	Time Sync	Time - UTC	Duration in Seconds	SN Ratio Calculated	Doppler Estimate Calculated
John Berman	51.4	-0.1	Graves	Dimension 4	22:26:41	11.70	40.80	-2517
Steve Futcher - Emsworth	50.9	-0.9	Graves	NetTime	22:26:41	11.43 Calculated	18.20	9
Steve Futcher - Clanfield	50.9	-1.0	Graves	NetTime	22:26:41	11.43 Calculated	25.50	14
Philip Norton - H	53.1	-0.5	Graves	Dimension 4	22:26:42	11.00 Calculated	47.90	1



Please go to <http://meteor.m81.co.uk/picview10.php?id=875> to see the full size plots

Event at 2020-03-09 at 05:49:20 UTC

Contributor	RX Lat	RX Lng	TX Source	Time Sync	Time - UTC	Duration in Seconds	SN Ratio Calculated	Doppler Estimate Calculated
Graham Cluer	51.4	-1.0	Graves	Dimension 4	05:49:20	20.67 Calculated	20.10	82
Steve Futcher - Emsworth	50.9	-0.9	Graves	NetTime	05:49:20	35.32 Calculated	18.60	-4
Steve Futcher - Clanfield	50.9	-1.0	Graves	NetTime	05:49:20	26.79 Calculated	17.30	-19
John Berman	51.4	-0.1	Graves	Dimension 4	05:49:21	30.20	45.50	-2498
Derek Robson	52.7	-1.2	Graves	Dimension 4	05:49:21	17.92	22.20	-8



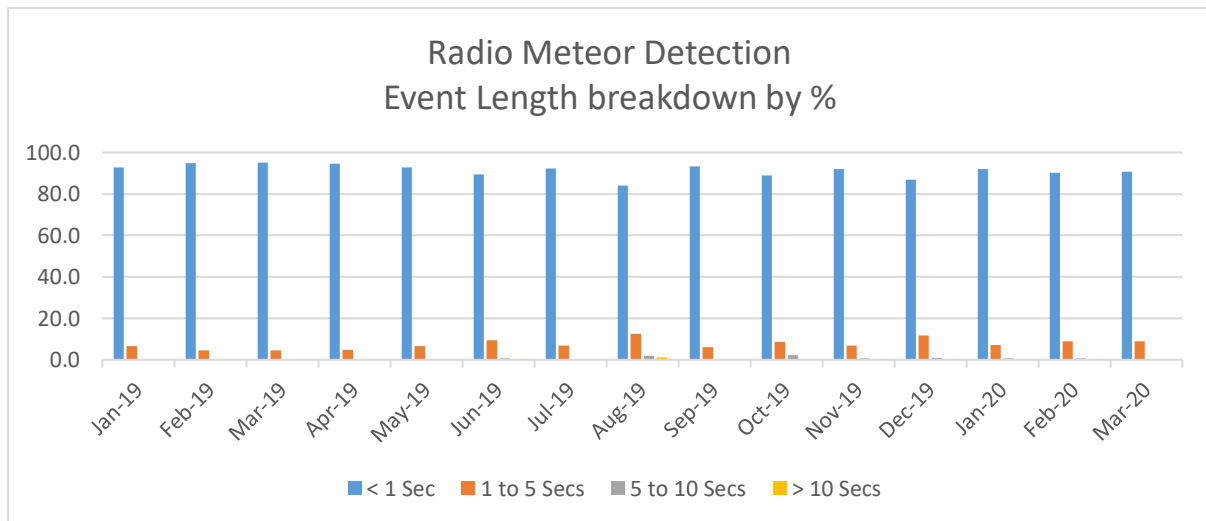
Please go to <http://meteor.m81.co.uk/picview10.php?id=876> to see the full size plots

To see all of the March Matches please go to:

http://meteor.m81.co.uk/duration_lookup10list.php?order=date&ordertype=DESC

Event data broken down into durations for 2019/20

Event Durations as a % of the Total				
Month	< 1 Sec	1 to 5 Secs	5 to 10 Secs	> 10 Secs
Jan-19	92.9	6.5	0.4	0.1
Feb-19	94.9	4.6	0.3	0.2
Mar-19	95.0	4.6	0.2	0.1
Apr-19	94.5	4.9	0.4	0.2
May-19	92.8	6.5	0.5	0.3
Jun-19	89.3	9.5	0.8	0.3
Jul-19	92.2	6.9	0.5	0.3
Aug-19	84.1	12.6	2.0	1.3
Sep-19	93.3	6.0	0.4	0.2
Oct-19	88.9	8.6	2.3	0.2
Nov-19	92.1	7.0	0.7	0.3
Dec-19	86.9	11.8	0.9	0.4
Jan-20	91.9	7.1	0.7	0.3
Feb-20	90.2	8.9	0.6	0.3
Mar-20	90.7	8.8	0.3	0.2



It can be clearly seen that the categorised event durations each month tend to be very aligned.

Please do feedback with any comments and or suggestion as to how we may make more us of this data – Jberman44@googlemail.com