

### 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 5 seconds of each other)

### Contributor Locations

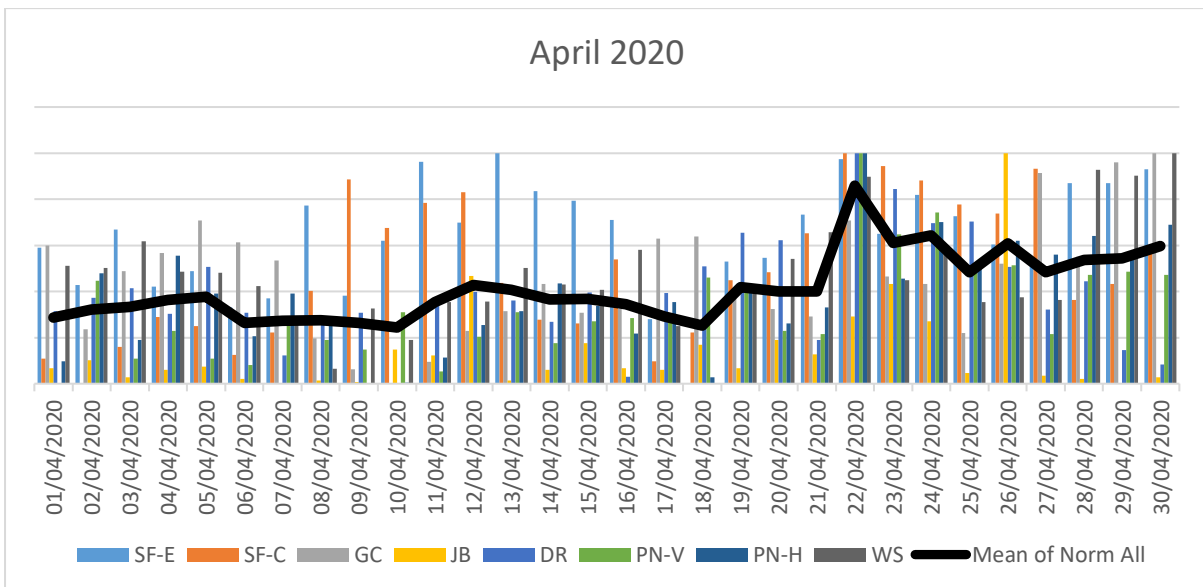


**Trend of contributions for April 2020**

The graph below shows the trend of contributions over time for the month of April – Counts are not displayed as its simply a trend for the month. You can however see the Lyrids Peak

**Key Meteor showers in April 2020**

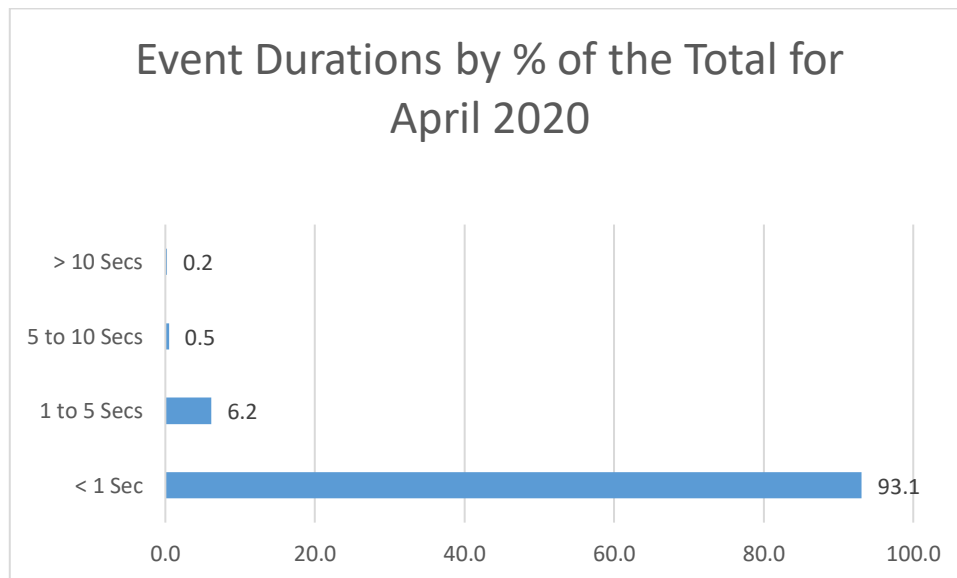
Shower	Dates	Peak
Lyrids	16 April – 25 April	21/22 April



**April Event data broken down into durations**

	Raw Data				
Month	Total Count	< 1 Sec	1 to 5 Secs	5 to 10 Secs	> 10 Secs
April	102,159	95,095	6,301	510	253

Event Durations as a % of the Total				
Month	< 1 Sec	1 to 5 Secs	5 to 10 Secs	> 10 Secs
April	93.1	6.2	0.5	0.2



Matched Events - Events with a duration that exceed 10 seconds recorded by three or more different contributors and are + / - within 5 seconds of each other

There were 20 potential matches in April – A notable one is below

**Event 896 at 08:58:31 on 22 April 2020**

Contributor	RX Lat	RX Lng	TX Source	Time Sync	Time	Duration in Seconds	S\N Ratio	Doppler Estimate
Steve Futcher - Clan	50.90	-1.00	Graves	NetTime	08:58:31	30.38	22.20	1
William Stewart	53.10	-2.60	Graves	Dimension 4	08:58:31	34.12	25.40	6
Derek Robson	52.70	-1.20	Graves	Dimension 4	08:58:31	37.03	17.20	26
Graham Cluer	51.40	-1.00	Graves	Dimension 4	08:58:32	33.71	25.90	68
John Berman	51.40	-0.10	Graves	Dimension 4	08:58:32	30.50	43.00	-27
Steve Futcher - Ems	50.	-0.90	Graves	NetTime	08:58:35	24.41	19.60	-3
Philip Norton - H	53.10	-0.50	Graves	Dimension 4	08:58:37	14.67	40.90	-1

You can get more detail by going to: [http://meteor.m81.co.uk/duration\\_lookup10list.php](http://meteor.m81.co.uk/duration_lookup10list.php) and looking at event 896

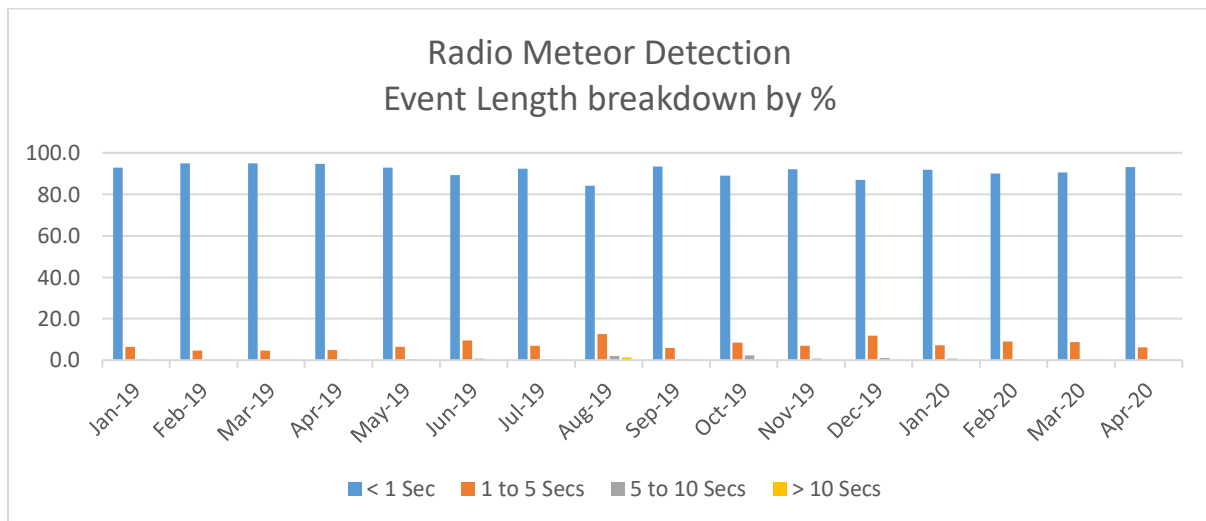
or go here to see the screen captures: [http://meteor.m81.co.uk/v\\_picturelist.php?x\\_groupm=896](http://meteor.m81.co.uk/v_picturelist.php?x_groupm=896)

To see all of the April Coincidences please go to:

[http://meteor.m81.co.uk/duration\\_lookup10list.php](http://meteor.m81.co.uk/duration_lookup10list.php)

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
Apr-20	93.1	6.2	0.5	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](mailto:Jberman44@googlemail.com)