

# The Search for the Gamma Lyrid Progenitor

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## **Abstract:**

10 On 5 February 2015, a previously unknown meteor shower, the  $\gamma$  Lyrids were observed for the  
first time. Because of the Sun-Earth-Moon viewing geometry, however, stream members were  
observed almost exclusively by the Canadian Meteor Orbit Radar (CMOR). The  $\gamma$  Lyrids did not  
appear again until 2018, and that outburst was stronger than in 2015. This study analyzed the 2015  
and 2018 CMOR data in order to determine the orbital parameters of the stream in an attempt to  
15 determine the  $\gamma$  Lyrid parent body. Of primary importance is to determine if the  $\gamma$  Lyrids will recur  
in a predictable manner. Two bodies, with dramatically different orbital parameters and  
evolutionary behaviors, emerged as the leading candidates: 2003 EH1 and 1854 R1.