

Reports during the 1859 Carrington Event.

German*, B.R., *Independent Researcher, 79111
Freiburg, Germany, borisgerman@hotmail.com.

After the disintegration of Comet Biela in the 1840s, Andromedids as well as secondary comets remained a compact group in its orbit. During the Carrington Event, there were reports on γ -Andromeda, i.e., Andromedids meteors [1, 2]. Such, over Norway, a beam shot into γ -Andromeda, and over England, an auroral dome formed near γ -Andromeda [1, 2]. Over the USA, fire flew arrows, like a terrible bombing, and the observer counted several meteors [1, 2]. In Rome, 'rockets' and auroral pillars could be seen even through the clouds [3]. It is known that long meteors resemble tails of rockets [2]. Additionally, a meteor exploded over the town of Mount Gambier, Australia, prompting an immediate aurora. This explosion, along with the aurora, was also observed in Adelaide [2]. Thus, meteor explosions could have caused the Carrington Event's aurorae. Finally, over the Civitavecchia Bay, near Rome, sailors directly associated the fiery column with a comet [3], which is consistent with the abnormal geomagnetic disturbance recorded at the Rome Observatory [3].

[1] Shea, M. & Smart, D. (2006) ASR 38 313–385.
<https://doi.org/10.1016/j.asr.2006.07.005> [2] German, B.
<https://doi.org/10.5194/epsc-dps2025-12> [3] Blake, S. et
al. (2020) JGR: Space Physics 125 e2019JA027336
(Appendix B.1.). <https://doi.org/10.1029/2019JA027336>