

## Full list of publications - Prof Giles Harrison

- | Number | Year | Title and citation  |
|--------|------|---|
| 339    | 2024 | <b>Giles Harrison</b> , <a href="#">Sparks from the past</a> <i>The Conversation</i>  |
| 338    |      | Rycroft, M.J., Odzimek, A. and <b>Harrison, R.G.</b> , Determining the time constant of the global atmospheric electric circuit through modelling and observations. <i>J Atmos Solar-Terr Physics</i> 260, 106276, <a href="https://doi.org/10.1016/j.jastp.2024.106267">https://doi.org/10.1016/j.jastp.2024.106267</a> (2024) |
| 337    |      | <b>R.G. Harrison</b> , and J.C. Riddick, Atmospheric electricity observations at Eskdalemuir Geophysical Observatory, <i>Hist. Geo Space. Sci</i> 15, 5–16, <a href="https://doi.org/10.5194/hgss-15-5-2024">https://doi.org/10.5194/hgss-15-5-2024</a> (2024)  |
| 336    |      | C. Miller, and <b>R.G. Harrison</b> , Atmospheric electricity ‘CTR Wilson’ meeting 2023 <i>Weather</i> <a href="http://doi.org/10.1002/wea.4544">http://doi.org/10.1002/wea.4544</a>  |
| 335    |      | <b>Giles Harrison</b> , <i>Weather and the Solar Eclipse - Nature's Meteorological Experiment</i> . In: Henrike Lange and Tom McLeish (eds), <a href="#">Eclipse and Revelation: Total Solar Eclipses in Science, History, Literature and the Arts</a> , Oxford University Press, 384pp   |
| 334    |      | C. Miller, K. Nicoll, C. Westbrook, and <b>R.G. Harrison</b> Evaluating atmospheric electricity changes as an indicator of fog formation <i>Quart Jour Roy Meteorol Soc</i> <b>150</b> , 761(B), 1892-1906, (2024) <a href="https://doi.org/10.1002/qj.4680">https://doi.org/10.1002/qj.4680</a>                                |
| 333    |      | M.W. Airey, <b>R.G. Harrison</b> , K.L. Aplin, C. Pfrang, B. McGinness, <a href="#">Electrical effects on droplet behaviour</a> , <i>J. Phys.: Conf. Ser.</i> 2702 012015 (2024) doi:10.1088/1742-6596/2702/1/012015  |
| 332    |      | Nicoll, K.A., V. Escobar-Ruiz, <b>R.G. Harrison</b> , M.H.P. Ambaum, A.A. Alkamali, <a href="#">A charge emitter for use in evaluating aircraft rainfall enhancement</a> , <i>J. Phys.: Conf. Ser.</i> 2702 012005 (2024) doi: 10.1088/1742-6596/2702/1/012005  |
| 331    |      | C. Miller, K. Nicoll, C. Westbrook, and <b>R.G. Harrison</b> , <a href="#">The effect of fog on atmospheric electric fields</a> , <i>J. Phys.: Conf. Ser.</i> 2702 012002 (2024) doi:10.1088/1742-6596/2702/1/012002  |
| 330    |      | B. McGinness, <b>R.G. Harrison</b> , K.L. Aplin and M.W. Airey, <a href="#">Evaluation of a point discharge sensor as an atmospheric electricity instrument</a> , <i>J. Phys.: Conf. Ser.</i> 2702 012004 (2024) doi:10.1088/1742-6596/2702/1/012004  |
| 329    |      | <b>R.G. Harrison</b> , Keri A. Nicoll, Maarten H.P. Ambaum, <a href="#">Charge in non-thunderstorm clouds and fogs</a> , <i>J. Phys.: Conf. Ser.</i> 2702 012001 (2024) doi:10.1088/1742-6596/2702/1/012001   |
| 328    | 2023 | <b>Giles Harrison</b> , <a href="#">“...since records began” – Christopher Wren’s first automatic weather station</a> (Department of Meteorology and Reading Physics blog, September 2023)  |
| 327    |      | <b>R. Giles Harrison</b> , Veronica Escobar-Ruiz, Keri A. Nicoll, Maarten H.P. Ambaum, Isolated corona current monitoring using a compensated light-emitting diode as an unpowered sensor, <i>Rev Sci Instrum</i> 94, 094504 (2023) <a href="https://doi.org/10.1063/5.0170176">https://doi.org/10.1063/5.0170176</a>           |
| 326    |      | M.C. Prosser, P.D. Williams, G.J. Marlton, <b>R.G. Harrison</b> , Evidence for Large Increases in Clear-Air Turbulence over the Past Four Decades, <i>Geophys Res Lett</i> 50, e2023GL103814 (2023). <a href="https://doi.org/10.1029/2023GL103814">https://doi.org/10.1029/2023GL103814</a>                                    |
| 325    |      | <b>R. Giles Harrison</b> and Kristian Schlegel, Atmospheric electricity observations by Reinhold Reiter around Garmisch-Partenkirchen <i>Hist. Geo Space. Sci.</i> 14, 71-75 <a href="https://doi.org/10.5194/hgss-14-71-2023">https://doi.org/10.5194/hgss-14-71-2023</a> (2023).  |
| 324    |      | Denisenko, V.V., Rycroft, M.J., <b>Harrison, R.G.</b> , <a href="#">Mathematical model of the global ionospheric electric field generated by thunderstorms</a> <i>Bulletin of the Russian Academy of Sciences:Physics</i> 87, 1, 118-123 (2023) DOI: 10.31857/S0367676522700260   |
| 323    | 2022 | <b>R.G. Harrison</b> , K.A. Nicoll, M. Joshi, E. Hawkins, <a href="#">Empirical evidence for multidecadal scale Global Atmospheric Electric Circuit modulation by the El Niño-Southern Oscillation</a> <i>Environ Res Lett</i> 17, 124048 (2022)  |

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*Geophys Res Lett* 49, <https://doi.org/10.1029/2022GL099827> (2022).
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- 313 **R.G. Harrison**, Measuring electrical properties of the lower troposphere using enhanced meteorological radiosondes, *Geosci. Instrum. Method. Data Syst.* 11, 37–57, 2022 <https://doi.org/10.5194/gi-11-37-2022>
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- 305 Maarten Ambaum and **Giles Harrison**, [Consider a spherical bird](#) Reading physics blog
- 304 **R. Giles Harrison**, Keri A. Nicoll, Douglas J. Tilley, Graeme J. Marlton, Stefan Chindea, Gavin P. Dingley, Pejman Iravani, David J. Cleaver, Jonathan L. du Bois, David Brus [Demonstration of a remotely piloted atmospheric measurement and charge release platform for geoengineering](#) *J. Atmos Oceanic Tech*, 38, 1, 63-75 (2021)
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