



## Communicating meteorology through popular music

Sally Brown (1), Karen Aplin (2), Katie Jenkins (3), Sarah Mander (4), Claire Walsh (5), and Paul Williams (6)

(1) Engineering and the Environment, Southampton University, United Kingdom, (2) Physics Department, University of Oxford, United Kingdom (karen.aplin@physics.ox.ac.uk), (3) Oxford Centre for the Environment, University of Oxford, United Kingdom, (4) Mechanical, Aerospace and Civil Engineering, University of Manchester, United Kingdom, (5) School of Civil Engineering and Geosciences, Newcastle University, United Kingdom, (6) Department of Meteorology, University of Reading, United Kingdom

Previous studies of weather-inspired classical music showed that all forms of music (as well as visual arts and literature) reflect the significance of the environment in society. Here we quantify the extent to which weather has inspired popular musicians, and how weather is represented in English-language pop music. Our work is in press at *Weather*.

Over 750 songs have been identified which were found to refer to meteorological phenomena, mainly in their lyrics, but also in the title of the song, name of the band or songwriter and occasionally in the song's music or sound effects. Over one third of the songs analysed referred to either sun or rain, out of a possible 20 weather categories. It was found that artists use weather to describe emotion, for example, to mirror the changes in a relationship. In this context, rain was broadly seen negatively, and might be used to signify the end of a relationship. Rain could also be perceived in a positive way, such as in songs from more agricultural communities. Wind was the next most common weather phenomenon, but did not represent emotions as much as sun or rain. However, it was the most frequently represented weather type in the music itself, such as in instrumental effects, or non-verbally in choruses.

From the limited evidence available, we found that artists were often inspired by a single weather event in writing lyrics, whereas the outcomes were less clearly identifiable from longer periods of good or bad weather. Some artists were influenced more by their environment than others, but they were often inspired to write many songs about their surroundings as part of every-day life, rather than weather in particular. Popular singers and songwriters can therefore emotionally connect their listeners to the environment; this could be exploited to communicate environmental science to a broad audience.