<u>RMetS Early Career and Student Conference 2023</u>
<u>Guidelines for Abstracts</u>

These guidelines are designed to help you produce a good abstract that describes the work you want to present, which will in turn help everyone to get as much out of the conference as possible.

We will be offering a hybrid event of both in-person and virtual attendance. We kindly invite you to provide us with your preference out of these two options when submitting your abstract. You can apply to present your work orally or as a poster, and to aid your decision you can read the '**Should I send in my abstract for an oral presentation or a poster?**' section for some guidelines on what to expect for each format.

What is an abstract?
'Abstracts' are used in science to provide a 'summary' of a piece of work, for a variety of different purposes. When submitting your abstract, it's important to keep in mind what it will be used for, who will be reading it and how you can maximise its positive impact on them. Remember that an abstract for a conference presentation has a different purpose and audience to an abstract for an academic paper, for instance, so it may need to have a different focus and structure.

Who can submit an abstract?
We welcome submissions from all early career scientists, including undergraduates, graduate students and other young scientists working inside or outside an academic context. We invite posters and presentations on as broad a range of topics as possible, so long as they are in some way related to meteorology and associated sciences such as atmospheric chemistry, atmospheric physics, science communication and engineering. We welcome abstracts from those who are just starting their projects or work, where an abstract can be just a summary, such as the motivation and aims. This is a great opportunity to practise presenting your work and also begin to meet people who are working in similar fields as you, even if you do not have many results yet.

What is my abstract for?
Firstly, your abstract will be used by the organising committee to decide who will be given the opportunity to present and how the presentations will be grouped together. Secondly, the abstract will provide an overview of your poster or oral presentation to the other delegates. This will enable them to know what to expect in your presentation and help them identify which presentations are of particular interest to them.

Who will see it?
Submitted abstracts will be read by all the conference's organising committee during the selection process. Accepted abstracts will be made available electronically (via email or link) to all the conference delegates.

How long should it be?
Typically, about 150-300 words. A good abstract will be long enough to include all the information that will be helpful to its readers, but short enough so as not to distract the

reader from its key points. We will almost certainly ask you to shorten your abstract if it exceeds 300 words.

Should I send in my abstract for an oral presentation or a poster?

In person
That is up to you, and you should be aware that the interaction with the audience, the length of talk and the format of the presentation are different. With an oral presentation, it is possible to reach every delegate at once, but apart from a few questions, there is limited possibility of interaction during the presentation. A poster on the other hand gives you the opportunity to delve into a subject with a few people for a longer period. In either case there will be enough time during (and after) the conference to discuss your research.

Online
Both oral and poster presentations will be allocated dedicated time slots where you will present your work. In either case, there will be time to answer a few questions during the session as well as to discuss your work further during the conference social breaks. Below gives a brief outline for what to expect, further guidance on preparing an oral or poster presentation will be issued once abstracts have been reviewed and accepted.

Oral presentations
The length of each oral presentation is 12 minutes, allowing for 3 minutes of Q&A. Your presentation should include visual aids throughout. The content and level of detail you choose to include is up to you, but keep in mind that your audience may have no prior knowledge of your subject area.

The level of audience interaction is more flexible, as how you engage with your audience and when you ask for questions is entirely up to you.

Posters
A traditional poster session will take place for the conference in 2023 for those who are attending the venue.

If you would like to present a poster presentation virtually, more guidelines will follow once we have determined the amount of poster presenters. However, please be aware that your poster will need to be submitted 2 weeks ahead and placed online for delegates to read and view in advance of the conference.

What could it contain?
Exactly what you want to include in your abstract, and how you write it, is entirely up to you. In most cases, it's helpful to the reader of the abstract to follow this overall structure:
1. **Motivations.** Begin with familiar ground: what the reader already knows or can easily understand. What's the wider context in which your work sits? Why is it important? Is there a problem you're trying to solve? Can you (briefly) refer to any previous work or theories in your field that the reader might already know about?
2. **Methods.** Explain what you or your colleagues have done. How did you approach the problem? How does this differ from previous work?
3. **Results.** Tell us what you found.

4. **Conclusion.** Where do we go from here? What will be the implications of your findings? Do they complement or challenge what has been found in the past? How will this affect the wider society in the future?

Don't worry if this structure doesn't fit your poster or presentation. For example, if you are just starting a project, you probably won't have any results to report, but you can still say what you expect to find. Remember that you don't need to include everything – the abstract is an appetiser for your poster or presentation, where you will be able to provide more details.

Should I include Keywords?

We ask that you provide at least **three key words** of your own choosing at the bottom of your abstract. This is simply a way of helping the organising committee categorise similar presentations and posters. Examples of keywords are listed below, but feel free to use other keywords (which may not be listed in the table) to best summarise your work in your presentation.

List of Keywords

Aerosol	Energy	Monsoon
Agriculture	Extremes	NWP
Air Quality	Extra-tropical	Observations
Biosphere	Flooding	Oceanography
Boundary Layer	Government	Paleoclimate
Chemistry	Health	Parameterisation
Climate Change	Heatwaves	Polar
Climate Science	Industry	Precipitation
Clouds	Land Surface	Regional
Coastal	Lightning	Teleconnections
Communication	Machine Learning	Transports
Convection	Mesoscale	Tropical
Cyclones	Microphysics	Urban
Drought	Modelling	Volcanic
Dynamics		

What should I avoid?

Please **do not** include references in your abstract (though you can, of course, refer to these in your poster or presentation) and **do not** use acronyms as readers may not know what this means. For example, rather than using 'RMetS', you would use 'Royal Meteorological Society' instead.

Could my abstract be rejected?

This is very unlikely. Usually, we only reject an abstract outright if it is not appropriate for a meteorological science conference. However, if your abstract is illegible or too long, we may ask you to revise or shorten it before we can accept it. Because of the limited time available for the conference, we may ask some applicants to present a poster on the same topic instead if there are too many abstracts submitted to us for oral presentations.

Can I see an Example?
We have prepared this example, which refers to an entirely fictional experiment!

Writing an abstract for a conference can present difficulties, especially for those presenting their work for the first time or confused by the different requirements of different conferences. Often, abstracts are difficult to read or too lengthy, which makes it difficult for people attending the conference to know what to expect in advance, and in turn makes it more difficult for the presenter to put their message across in a short space of time. In this study, we presented brief guidelines of what we expected from abstracts for the 2018 Royal Meteorological Society Conference to twenty applicants (Group A),and denied these guidelines to another twenty (Group B) randomly selected from amongst early career scientists. We then asked all participants to submit an abstract as though presenting at the conference. We found that the abstracts submitted by the Group A applicants were considerably clearer, more concise and more helpful to the organising committee than those of Group B, as measured by a rating given out of ten by independent assessors who did not know which abstract belonged to which group. The results suggest that abstract guidelines could improve the quality of abstracts at conferences, and should be provided as standard to all applicants.
Keywords: Abstracts, writing, conferences, assessment
Key theme: Academic writing