RMetS Conference 2021 for Students and Early Career Scientists
Guidelines for Abstracts

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

When you submit your abstract you can apply to orally present your work or present a poster. As the conference will be virtual in 2021 it is worth bearing in mind how best to present your work. To aid your decision, see 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 remember what it will be used for, who will be reading it and how you can maximise its positive impact on them. Bear in mind that an abstract for a conference presentation has a different purpose and audience to one for an academic paper, for instance, so it may need to have a difference focus and structure.

Who can submit an abstract?

We welcome submissions from all early career scientists, including undergraduate students, postgraduate 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 just begun their project or work, where the abstract can be just a summary, such as the motivation and aims. This is a great opportunity to practice presenting your work and also begin to meet people who may be working in similar fields 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 is given the opportunity to present and how to group thepresentations together. Secondly the abstract will give an overview of your poster or oral presentation to the other delegates. This allows delegates to know what to expect in your presentation or identify presentationsthat they are particularly interested in.

Who will see it?

Submitted abstracts will be read by all the conference's organising committee in the selection process. Accepted abstracts will be made available electronically (via email or a 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 to not distract the reader from the 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?
That is up to you, you should realise the interaction with the audience, length of talk and presentation format is different. 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 discuss your work further during the conference. To try and replicate the conference environment, outside of the presentation time slots we are planning to create rooms/threads where talks and posters can be discussed further. 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

Oral presentations are are 12 minutes in length and allow for 3 minutes Q&A time. Your talk should include visual aids throughout. The content and level of detail you choose to include is up to you, bear in mind you may have an audience with no prior knowledge of your subject area.

The level of audience interactions is more flexible as it is up to you how to engage with the audience and when to questions.

Posters

Posters presentations are shorter and give an opportunity to briefly summarise your work.

As the conference will be virtual in 2021, presenting a poster will be different to what you may be used to when presenting a poster face to face. Feedback from 2020 showed 'in person' poster styles were difficult to put together and difficult for the audience to gain insight from virtually.

This year when presenting a 'poster' you should use a format that suits both you and the audience. This could be a short video, infographic, single slide explainer, top five messages or something else. Whatever format you choose, it should be easy to read on a single screen. Additionally, you may wish to create a traditional 'in person style' poster that delegates can then refer to later if they are interested to find out more.

To try and simulate an in person conference, we'll be creating a repository of posters that delegates can access on demand throughout the conference. The repository would try to replicate what you may expect at a face to face conference where posters are left up on the wall throughout the day. With the idea that delegates can read them in their own time, then virtually mingle and discuss during networking poster presentation sessions . What goes in the repository is up to you, in addition to your talk it might be useful to create a more detailed summary of your work such as a traditional 'in person style' poster.

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 abstract's audience for you to follow this overall structure:

1. **Motivation.** 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 what's been done before?
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 wider society in the future?

Don't worry if this structure doesn't fit your poster or presentation. For example, if you've only just begun on 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 Key Words?

We ask that you provide between three and five additional key words of your own choosing at the bottom of your abstract. This is simply a way of helping the organising committee to group together similar presentations and posters. Examples of keywords are given at the call for abstracts, but feel free to use the keywords that that best summarise your work in your presentation.

What should I avoid?

Please don't include references in your abstract (though you can refer to these in your poster or presentation, of course) and don't use acronyms as readers may not know what these mean, unless these are very widely known (e.g. BBC). For example, rather than 'RMetS' you would write 'Royal Meteorological Society'.

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 the conference is limited in duration, if we have very many abstracts submitted for oral presentations we may ask some applicants to present a poster on the same topic instead.

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.
Key words: Abstracts, writing, conferences, assessment