November 15, 2024

Comments by Owen R. Cooper (TOAR Scientific Coordinator of the Community Special Issue) on:

Modelling the nutritional implications of ozone on wheat protein and amino acids

Jo Cook, Durgesh Singh Yadav, Felicity Hayes, Nathan Booth, Sam Bland, Pritha Pande, Samarthia Thankappan, Lisa Emberson

EGUsphere [preprint], https://doi.org/10.5194/egusphere-2024-2968
Discussion started Oct. 10, 2024
Discussion closes Nov. 29, 2024

This review is by Owen Cooper, TOAR Scientific Coordinator of the TOAR-II Community Special Issue. I, or a member of the TOAR-II Steering Committee, will post comments on all papers submitted to the TOAR-II Community Special Issue, which is an inter-journal special issue accommodating submissions to six Copernicus journals: ACP (lead journal), AMT, GMD, ESSD, ASCMO and BG. The primary purpose of these reviews is to identify any discrepancies across the TOAR-II submissions, and to allow the author teams time to address the discrepancies. Additional comments may be included with the reviews. While O. Cooper and members of the TOAR Steering Committee may post open comments on papers submitted to the TOAR-II Community Special Issue, they are not involved with the decision to accept or reject a paper for publication, which is entirely handled by the journal's editorial team.

Comments regarding TOAR-II guidelines:

TOAR-II has produced two guidance documents to help authors develop their manuscripts so that results can be consistently compared across the wide range of studies that will be written for the TOAR-II Community Special Issue. Both guidance documents can be found on the TOAR-II webpage: https://igacproject.org/activities/TOAR/TOAR-II

The TOAR-II Community Special Issue Guidelines: In the spirit of collaboration and to allow TOAR-II findings to be directly comparable across publications, the TOAR-II Steering Committee has issued this set of guidelines regarding style, units, plotting scales, regional and tropospheric column comparisons, and tropopause definitions.

The TOAR-II Recommendations for Statistical Analyses: The aim of this guidance note is to provide recommendations on best statistical practices and to ensure consistent communication of statistical analysis and associated uncertainty across TOAR publications. The scope includes approaches for reporting trends, a discussion of strengths and weaknesses of commonly used techniques, and calibrated language for the communication of uncertainty. Table 3 of the TOAR-II statistical guidelines provides calibrated language for describing trends and uncertainty, similar to the approach of IPCC, which allows trends to be discussed without having to use the problematic expression, "statistically significant".

General comments:

The authors have submitted an extremely well-written manuscript to the TOAR-II Community Special Issue, and the paper has already received two thorough reviews from the anonymous referees. I find the paper and its conclusions to be consistent with the findings of previous TOAR work and I only have a few minor comments, listed below.

Line 70-72
The first phase of TOAR was only able to find publicly available ozone data at 3 sites in India (Mills et al., 2018), and only two of these were in the wheat growing areas of northern India. Given that observations are so sparse, how confident are you that India has some of the highest ozone levels with regards to crops? Have additional ozone observations become available at more sites across India since the first phase of TOAR? Is your assessment based on models?

Line 69
Nitrous oxide should be nitrogen oxides

Line 244
29016 should be 2016

Line 410
Meteorology's doesn't seem to be the right work. Would "meteorological conditions" be more suitable?