

Interactive comment on “Novel index to comprehensively evaluate air cleanness: the “Clean air Index”” by Tomohiro O. Sato et al.

Tomohiro O. Sato et al.

tosato@nict.go.jp

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Dear Anonymous Referee #1

General comments from Referee: In this manuscript, authors focused on their original index to evaluate air cleanness, named as CII. CII is defined as the difference from unity of the sum of relative cleanness of each pollutant (NO₂, SO₂, SPM and O₃) normalized by each standard. This study is positioned as a basic research of their novel index and a demonstration for indicating reasonability and utility of the index. Such an index may be useful for capturing and understanding simply the air cleanness. Thus, the reviewer believes that this work has an important implication and is significant enough to be published in this journal. However, the present manuscript leaves several points to be

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improved, clarified, modified, and/or reconstructed, in order for readers to understand descriptions and to recognize the significance of this study clearly. Especially, it is necessary to indicate more information and explanations with some arguments and/or references, and to clarify the story of discussion.

Author's response: We greatly appreciate your efforts to help us improve our manuscript. Yes, this manuscript is fundamental, and the aim is to propose our concept of “Clean air Index, CII.” We answered your valuable comments point by point as the attached files, especially for the abstract, introduction and conclusion to state the objective of CII more clearly. We hope that our manuscript is suitable for publication in GC.

Sincerely yours,

Tomohiro Sato National Institute of Information and Communications Technology

Please also note the supplement to this comment:

<https://www.geosci-commun-discuss.net/gc-2019-16/gc-2019-16-AC1-supplement.pdf>

Interactive comment on Geosci. Commun. Discuss., <https://doi.org/10.5194/gc-2019-16>, 2019.

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