

# ***Interactive comment on* “The International Satellite Cloud Climatology Project H-Series Climate Data Record Product” by Alisa H. Young et al.**

**Alisa H. Young et al.**

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RE: Interactive comment on “The International Satellite Cloud Climatology Project H-Series Climate Data Record Product” by Alisa H. Young et al. Anonymous Referee #2

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Review results for the manuscript entitled "The International Satellite Cloud Climatology Project H - Series Climate Data Record Product" by Young et al. I suggest rejecting the manuscript in its current form since a number of key elements are missing in the

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manuscript, e.g.:

RC1: 1) The introduction should have a broad scope, summarizing other international activities (e.g. Patmos-X, CMSAF CLARA-A1/2, MODIS Collection 6, ESA Cloud\_cci) and putting them in contrast to the characteristics of the dataset presented. This is completely missing.

Response\_1: None of the listed "activities" is international and none have a time resolution and record length comparable to ISCCP. In any case, most of these other products were compared to the D-version ISCCP product by the GEWEX Assessment, which is summarized by Stubenrauch et al 2013 and described in more detail in a larger report available at [http://www.wcrp-climate.org/documents/GEWEX\\_Cloud\\_Assessment\\_2012.pdf](http://www.wcrp-climate.org/documents/GEWEX_Cloud_Assessment_2012.pdf). So, to respond to the concerns addressed in 1) the text has been modified to mention the GEWEX Assessment without a detailed listing of all other projects, which seems unnecessary. However, the updated manuscript has been modified to address the Reviewer's concerns. The Introduction of the paper now contains more references to other cloud datasets and work that has been done to evaluate global cloud characteristics and ISCCP. The language now provides more context regarding a broader scope of other cloud datasets, and addresses where the ISCCP products fit within that general schema.

The following references have been added: Cao, C., De Luccia, F. J., Xiong, X., Wolfe, R., and Weng, F.: Early on-orbit performance of the visible infrared imaging radiometer suite onboard the Suomi National Polar-Orbiting Partnership (S-NPP) satellite,

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EC2: 2) The manuscript needs to describe also all other product variables (not only cloud amount) more comprehensively, how are they retrieved, how do they look like

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(Showing examples of most of them), which caveats exist for them...

Response\_2: The ISCCP Product has many variables. However, the cloud variables listed in the description of the text are the most widely used. A more comprehensive description of these variables are documented in other places including the C-ATBD. Thus the manuscript focuses on the updates to the ISCCP algorithm. A general description of the product's caveats are given.

Please also note the supplement to this comment:

<https://www.earth-syst-sci-data-discuss.net/essd-2017-73/essd-2017-73-AC3-supplement.pdf>

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Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2017-73>, 2017.

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