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Atmospheric Measurement Techniques Discussions

Interactive comment on "Cloud Products from the Earth Polychromatic Imaging Camera (EPIC): Algorithms and Initial Evaluaiton" *by* Yuekui Yang et al.

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I have three comments to this interesting paper:

- page 2, section 2.1: the threshold values used for the different cloud mask tests should be specified

- page 4, section 2.2: O2 A-Band cloud retrievals are also operational for GOME, GOME-2 and TROPOMI/Sentinel-5 Precursor, see Loyola et al. 2007 and Loyola et al., 2018.

- page 5: The statement "the EPIC measurements generally do not provide enough

information content to retrieve the actual cloud top, but they are sufficient for retrieving another important cloud location information – namely CEP/CEH" is not correct. The main reason for retrieving a CEH instead of the cloud top height is the usage of a Lambertian cloud model instead of a more realistic Mie scattering cloud model, see Schüssler et al., 2014 and Loyola et al., 2018.

References:

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Loyola, D., Thomas, W., Livschitz, Y., Ruppert, T., Albert, P., and Hollmann, R.: Cloud properties derived from GOME/ERS-2 backscatter data for trace gas retrieval, IEEE Transactions on Geoscience and Remote Sensing, 45, 2747–2758, 2007.

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