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Atmospheric Chemistry and Physics Discussions

Interactive comment on "CLARA-A1: the CM SAF cloud, albedo and radiation dataset from 28 yr of global AVHRR data" *by* K.-G. Karlsson et al.

Anonymous Referee #2

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General Comments

This paper is very well written. Even though it is a technical overview of a data set, the figures and text were interesting and compelling. Satellite climatology for clouds and radiation is still a developing field but this paper sets a bar for how to convey these kinds of results to the public. The ratio of algorithm detail and analysis is just right.

Specific Comments

In Figure 5, I see no change during the NOAA-16 period when the 1.6 micron channel (3a as you refer to it) was used in CPP? Was there a correction applied here? Also, I see no impact of the inclusion of METOP which has the 1.6 micron and occurs at a different time of day.

Where the MODIS results in Figure 5 from the 2.1, 1.6 or 3.75 micron channels?

I was curious if there was any attempt to link the cloud properties used in MAGIC to those derived from the CPP algorithm in CLARA-A1? Would a user see a inconsistencies in the two products?

The CCI project is not mentioned directly but there is reference to paper about CCI? Will CM-SAF cease to exist in favor of CCI or are they in fact the same project?

The trend in cloud amounts is very interesting. This PATMOS-x data is referred to as coming from NOAA and therefore most likely uses NOAA reanalysis data where the CM-SAF uses ERA data. Can trends in the reanalysis impact the derived AVHRR cloud amounts?

Interactive comment on Atmos. Chem. Phys. Discuss., 13, 935, 2013.