

Interactive comment on "Cloud and DNI nowcasting with MSG/SEVIRI for the optimised operation of concentrating solar power plants" by Tobias Sirch et al.

Anonymous Referee #2

Received and published: 12 October 2016

This manuscript reports the algorithm for nowcasting direct normal irradiance based on satellite measurements of cloud properties and movements. This has great significance for solar/gas power plant in arranging power-generation mode change and has significant economical value for stability of the power supply and for saving gas from loss during transition period. The manuscript is well written, the algorithm is reasonable, results seem flawless, and conclusion is meaningful. This reviewer recommends this manuscript be published with only minor optional revisions.

1. The paper is too long. No people today have time to read so long scientific article. The authors should try their best to make it concise. Significant reduction of the pages is mandatory.

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2. In Section 2.1, the authors stated that COCS can detect 50% of the cirrus clouds with OT \sim 0.1. How this 50% number is obtained? During daytime, even CALIPSO lidar cannot claim this due to sunlight noise, let alone to say the narrow field of view of lidar, which covers negligible area of the earth.

3. Section 2.3 is not clearly presented. Find a better way to present for this section.

4. Organization is loose for the whole manuscript. Merge some sections and consider a better sequence for each section.

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2016-250, 2016.