

Interactive comment on “Operational retrieval of Asian sand and dust storm from FY-2C geostationary meteorological satellite and its application to real time forecast in Asia” by X. Q. Hu et al.

Anonymous Referee #1

Received and published: 4 September 2007

This paper describes an operational method for retrieving the Sand and Dust Storm (SDS) with FY-2C/S-VISSR in Asian area. It is valuable for monitoring Asian SDS from space and also useful for SDS forecast. This method combines several techniques, such as BTM, RAT, and IDDI, to identify SDS based on the optical and radiative physical properties of SDS in mid-infrared and thermal infrared spectral regions. The authors applied these algorithms to some cases and obtained some good results. Although these approaches are only combining with some developed techniques from others, but it will be value added because it is can be used in operation. One important issue

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

still is how to obtain threshold values and cloud masks which are critical parts of this paper. The authors may need to run more case to get to get the better threshold values for future studies and SDS monitoring. Some suggested editing comments are not included in this summary. I suggest to following references:

Hsu, N. C., S.-C. Tsay, M. D. King, and J. R. Herman, 2004: Aerosol properties over bright-reflecting source regions, *IEEE Trans. Geosci. Rem. Sens.*, 42, 557-569.

Miller, S. D., 2003: A consolidated technique for enhancing desert dust storms with MODIS, *Geophys. Res. Lett.*, 30, 2071-2074.

Qu, J. J., X. Hao, M. Kafatos, and L. Wang, 2006, Asian Dust Storm Monitoring Combining Terra and Aqua MODIS SRB Measurements. *IEEE Geoscience and Remote Sensing Letters*, 3(4), 484-486.

Interactive comment on *Atmos. Chem. Phys. Discuss.*, 7, 8395, 2007.

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper