

Interactive comment on “Monthly-averaged maps of surface BRDF parameters in ten spectral bands for land and water masses” by Philippe Blanc et al.

Philippe Blanc et al.

philippe.blanc@mines-paristech.fr

Received and published: 21 May 2018

First point: indeed, compiling multiannual monthly averages from time series of BRDF parameters maps removes the intra-monthly and inter-annual variabilities. Nevertheless, authors believe that having a “static”gap-filled BRDF parameters for the 10 spectral bands of MODIS may be as handy for some Earth science application such as the Heliosat-4 and McClear method. On the occasion of the conference EGU 2018, a Monte-Carlo based comparison has been done between the MCD43C1 time series and the Here is the main conclusion: “[The database with gap-filled multiannual monthly averages of BRDF parameters] is in good agreement with MCD43C1 (Fig. 2), except some specific cases: most of deviations observed come from regions with high inter-annual and intra-monthly variabilities of snow cover: - Northern mid-latitudes dur-

Printer-friendly version

Discussion paper



ing winter - Arctic regions during spring and fall - Himalaya, Southern Andes, Alps For these regions at these specific periods, we also observe a significant negative bias”

In order to provide the users with information about the variability lost during the monthly averaging process, an additional field has been added with the corresponding multiannual monthly standard deviation of the BRDF parameters.

Second point: This work has been done with the database MCD43C1 v5 and the primary intention was to serve our own purpose, especially in assessing the solar radiation available at ground. We have been approached by other potential users in other communities and have decided to share our existing database for the common good. The NASA has released in between the version 6 of MCD43C1. The same approach we used for MCD43C1 v5 could be applied and, in that case, a new version of our monthly average database.

Third point: following the link https://www.umb.edu/spectralmass/terra_aqua_modis/v006/mcd43gf_cm_gap_filled_snow it is said that the gap free products MCD43GF will be produced from V006 MCD43D. The one compiled from V005 is indeed available at <ftp://rsftp.eeos.umb.edu/data02/Gapfilled/> at 30 arcsec, every 8 days, from 2003 to 2015. This product is very interesting, but authors believes that having smaller and easy to access database of multiannual monthly averages of BRDF parameters maybe useful for some users in the community of Earth Science, just like it is useful for our own purpose.

Last point: at the time of the reviewer’s check, our servers seemed to be down. Authors will double check the availability of the database along with the metadata. Comments about quality information have been addressed in the answer for the Anonymous Referee #1.

Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2017-141>, 2018.

[Printer-friendly version](#)[Discussion paper](#)