



Corrigendum to “Evolution of the ESA CCI Soil Moisture climate data records and their underlying merging methodology” published in Earth Syst. Sci. Data, 11, 717–739, 2019

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The article gives the wrong impression that the Level 2 (L2) surface soil moisture products that are used as input to the ESA CCI Soil Moisture processor are produced within the ESA CCI project itself (Sects. 3.1, 10 Table 1 Figs. 1, 2, 3, 5). This is only true for the products retrieved from passive microwave radiometers, which are generated using the LPRM model (Sect. 3.2).

Metop ASCAT surface soil moisture data sets stem from the EUMETSAT Satellite Application Facility on Support to Operational Hydrology and Water Management (H SAF, <http://h-saf.eumetsat.int/>, last access: 4 December 2019). ERS-2 AMI surface soil moisture data sets stem from reprocessing activities which have been carried out within ESA’s SCIRoCCo project (Crapolicchio et al., 2016). ERS-1 AMI surface soil moisture products have been generated at TU Wien.

More specifically, ESA CCI SM v02.2 uses the H SAF H25 Metop ASCAT SSM CDR2014 (H SAF, 2017a), ESA CCI SM v03.2 uses the H SAF H109 Metop ASCAT SSM CDR2015 (H SAF, 2017b), ESA CCI SM v03.3 and v04.2 use the H SAF H111 Metop ASCAT SSM CDR 2016 (H SAF 2017c), and ESA CCI SM v04.4 and v04.5 use both the H SAF H113 Metop ASCAT SSM CDR2017 (H SAF, 2018a) and the H SAF H114 Metop ASCAT SSM CDR2017-EXT (H SAF, 2018b). The ERS-2 data set used in all ESA CCI SM versions is the ERS.SSM.H.TS 25 km soil moisture time series product (ESA, 2017). The ESA CCI Soil Moisture processor starts at the point of mapping these L2 products to a regular 0.25° latitude–longitude grid and to a daily time step centred at 00:00 UTC.

In addition, the soil Water Retrieval Package (WARP) represents the software implementation of the EUMETSAT H SAF TU Wien soil moisture retrieval algorithm. Details about the different algorithm versions can be found in H SAF ATBD v0.4 (for H25 H SAF, 2016), H SAF ATBD v0.5 (for H109 and H111 H SAF, 2017d), and H SAF ATBD v0.7 (for H113 and H114 H SAF, 2018c). The description in Sect. 3.1 of the paper merely serves as an overview of the methodology behind the EUMETSAT H SAF and ESA surface soil moisture products.

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