**UMT AMSR 6.25 KM Fractional Open Water Products**

**(2015-06)**

**Introduction**

The land-surface fractional open water (*fw*) products were produced based on 89 GHz brightness temperature retrievals from the Advanced Microwave Scanning Radiometer for EOS (AMSR-E) and AMSR2 with ***6.25*** km spatial resolution and ***10-day*** temporal fidelity.

**Naming Convention**

**AMSRU\_06km\_yyyy\_dds\_dde\_ave\_A.fw**

yyyy is the year

dds is the start DOY of the 10-day composite

dde is the end DOY of the 10-day composite

**Format**

The *fw* values are stored in a 2-D grids with dimensions 2880\*2880 in float type under Polar EASE-Grid 2.0 projection; Valid Range of *fw* is[0.0, 1.0] and invalid value is -999.0

**Spatial Coverage**

Northern Hemisphere

**Temporal Coverage**

AMSR-E Period: Jun. 2002 – Oct. 2011

AMSR2 Period: Jul. 2012 – Dec. 2014

**Note:**

1. The column and row numbers of the data grids start from 0. Accordingly, the grid coordinate of the centre of the first grid is (0.5, 0.5).
2. Only 6-day average from DOY 361 to 365 was made for the end of each year and the 366th day of the leap year has not been calculated.
3. *fw* retrievals for static water bodies larger than 25km\*25km are only for mapping purpose and not for evaluations.
4. **A negative bias of *fw* retrieval from AMSR2 compared against *fw* from AMSR-E was found for high-latitudes wetlands. Cautions are needed when analysing *fw* time series covering both AMSR-E and AMSR2 observation period.**

**Reference:**

Jinyang Du, J. S. Kimball, L. A. Jones, J. D. Watts, “High Temporal Resolution Retrieval of Fractional Cover of Water Inundation on Land from Satellite Passive Microwave Observations at 89 GHz”, 2015, **In Preparation.**