**Readme**

***Land surface parameter data record*** from **doy 170, 2012 to doy 184 2014** has been generated based on original RSS V7 Aqua/AMSR-E, and calibrated FengYun3B/MWRI and GCOM-W/AMSR2 Brightness Temperature (Tb) datasets using updated Precipitable Water Vapor (PWV) and Land Surface Air Temperature (Ta) retrieval algorithms of NTSG, UMT [1-3].  Similar retrieval accuracy (for PWV and Ta) has been found for the AMSR-E and post AMSR-E periods except for a slightly lower accuracy for MWRI PWV retrieval. The land surface parameters included in this folder are PWV, Ta and Tc10, which is vegetation opacity (dimensionless) for 10.7GHz. Fraction of water (fw), data flags (flag) and volumetric soil moisture (vsm) are also included in the folder.

For specifications of the data file format and parameter definitions, Please refer to ../ **AMSR2\_PARAMS\_V1.pdf**. Detailed document will be available in Nov., 2014. All the data are stored in DOUBLE except for flag data files whose data type is BYTE. The offset of all the data is ZERO and scale factor is ONE.

Please also find a sample matlab code for reading vegetation optical thickness originally written by Lucas A Jones at folder “./sample\_reading\_code”.

**Contact Information**

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**References**:

[1] Du, J.; Kimball, J.S.; Shi, J.; Jones, L.A.; Wu, S.; Sun, R.; Yang, H. Inter-Calibration of Satellite Passive Microwave Land Observations from AMSR-E and AMSR2 Using Overlapping FY3B-MWRI Sensor Measurements. Remote Sens. 2014, *6*, 8594-8616.

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