

Appendix F – Dataset for Point-Rated Criterion R3

Bidders are to use the dataset below to prepare the mock-ups in response to R3.

Excel file “RISMA_test_Data.xlsx” containing a fictitious dataset of three sensors readings at three different depths (5 cm, 20 cm and 50 cm). The following provides the variable names and definitions used in the dataset:

- **Date:** Local (EST)
- **Time:** Local (EST)
- **UTC_Date**
- **UTC_Time**
- **Battery Voltage [V]**
- **SAGES_SM_PRECIP [mm]:** Total amount of rain in the past 15 minutes measured at 2.5 m height, in mm
- **SAGES_SM_WFV_5 [vol%]:** Calibrated soil moisture as calculated based on the recorded Real Dielectric Constant (RDC) at 5 cm in the past 15 minutes, in m³/m³
- **SAGES_SM_STC_5 [C]:** Soil temperature measured at 5 cm in the past 15 minutes, in °C
- **SAGES_SM_RDC_5 [EC]:** Real Dielectric Constant measured at 5 cm in the past 15 minutes
- **SAGES_SM_5_Flag:** “Flag1,Flag2,Flag3,Flag4,Flag5,Flag6” The probe data has gone through a basic, automated Quality Control (QC) procedure where data not meeting quality standards has either been removed or flagged. Missing data and data removed by QC process is reported as “NoData” in the data columns and as NA in the flag columns. The flags will be OK, NA or an error message
- **SAGES_SM_WFV_20 [vol%]:** Calibrated soil moisture as calculated based on the recorded RDC at 20 cm in the past 15 minutes, in m³/m³
- **SAGES_SM_STC_20 [C]:** Soil temperature measured at 20 cm in the past 15 minutes, in °C
- **SAGES_SM_RDC_20 [EC]:** Real Dielectric Constant measured at 20 cm in the past 15 minutes
- **SAGES_SM_20_Flag:** QC procedure flags
- **SAGES_SM_WFV_50 [vol%]:** Calibrated soil moisture as calculated based on the recorded RDC at 50 cm in the past 15 minutes, in m³/m³
- **SAGES_SM_STC_50 [C]:** Soil temperature measured at 50 cm in the past 15 minutes, in °C
- **SAGES_SM_RDC_50 [EC]:** Real Dielectric Constant measured at 50 cm in the past 15 minutes
- **SAGES_SM_50_Flag:** QC procedure

For the Current Data, Bidders should use all data dated 2017-06-22.

Displaying for each of the three sensors the current Soil Moisture (“SAGES_SM_WFV_5 [vol%]”, “SAGES_SM_WFV_20 [vol%]” and “SAGES_SM_WFV_50 [vol%]” variables), Temperature data (“SAGES_SM_STC_5 [C]”, “SAGES_SM_STC_20 [C]” and “SAGES_SM_STC_50 [C]” variables), and the

Meteorological Observation data (Last hour and last 24 hours precipitation using “SAGES_SM_PRECIP [mm]” variable)

For Historic Data, Bidders should use all data between 2015-07-18 and 2017-06-22

Displaying the 15 minutes and daily historical data in tabular format for Soil Moisture (“SAGES_SM_WFV_5 [vol%]”, “SAGES_SM_WFV_20 [vol%]” and “SAGES_SM_WFV_50 [vol%]” variables), Temperature data (“SAGES_SM_STC_5 [C]”, “SAGES_SM_STC_20 [C]” and “SAGES_SM_STC_50 [C]” variables), and the Meteorological Observation data (Last 15 minutes precipitation using “SAGES_SM_PRECIP [mm]” variable)

For Graphical Display, Bidders should use

Displaying historical data on a 15 minutes, hourly and daily basis for Soil Moisture (“SAGES_SM_WFV_5 [vol%]”, “SAGES_SM_WFV_20 [vol%]” and “SAGES_SM_WFV_50 [vol%]” variables), Temperature data (“SAGES_SM_STC_5 [C]”, “SAGES_SM_STC_20 [C]” and “SAGES_SM_STC_50 [C]” variables), and the Meteorological Observation data (precipitation using “SAGES_SM_PRECIP [mm]” variable)