

Sentinel-2 Mission overview and quality performance

S. Clerc¹, C. Bouzinac, B. Lafrance, D. Touli-Lebreton, B. Allamoud, M. Neveu-Van Malle, J. Louis, B. Pflug, L. Pessiot, V. Boccia

1) sebastien.clerc@acri-st.fr, ACRI-ST/ARGANS

Abstract

In the Copernicus program, Sentinel-2 is the mission with the highest resolution. Thanks to frequent radiometric and geometric calibration, the mission is providing accurate and reliable reflectance measurements in 13 spectral bands in the VISNIR and the SWIR. Another key aspect is the guaranteed availability of long and consistent time series, with two Sentinel-2 units currently in operation and 2 more in preparation for the future. These aspects make Sentinel-2 a good source of reference data for inter-comparisons or vicarious calibration.

We will present a brief overview of the Sentinel-2 mission characteristics, describe the calibration methodologies and provide a status on the mission performances and image quality. Finally we will discuss potential use of Sentinel-2 data for geometric and radiometric validation of other sensors.

Keywords - Calibration methodology and techniques