Note Megha-Tropiques – June 4^{th,} 2019

Summarize of events

From November 8th 2018 until March 21th 2019 no data shall be used (Saphir and Scarab).

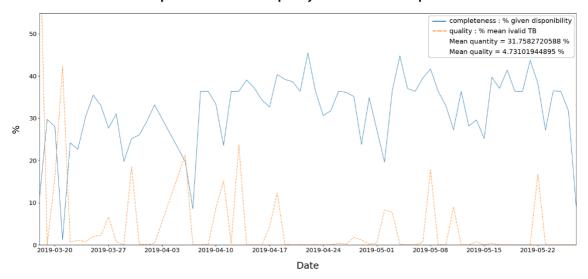
From march 22th 2019 Level 1 data are ok (Saphir and Scarab).

Megha-Tropiques on board issue, end 2018 - beginning 2019

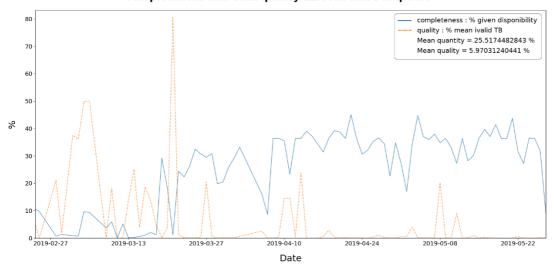
Following an interruption of data production at the end of 2018, investigations on this issue ran from mid December 2018 to end February 2019. The issue is located in the satellite data handling sub system. Actually, the memory is sensitive to temperature, which causes corruptions in data and, therefore, prevents any operational production in the ground system. The solution elaborated by the ISRO (in charge of the satellite), to decrease the memory temperature down to an operational point, is to switch off equipment for 2 orbits and switch on for more than one orbit (140mn). This pattern is repeated every 3 orbits. Currently, the situation is stable. As shown in the 2 graphs below, the data completeness (blue curve) is around 30% and the overall quality is comparable to the situation before the anomaly.

NB: the period is not the same for SCARAB and SAPHIR because SCARAB was OFF at the beginning of the year.

Completeness and data quality L1A SCARAB Dumpwise



Completeness and data quality L1A SAPHIR Dumpwise



NB: Quality is the mean percentage of bad pixels (or sample) versus to the total number of pixels. This is an average on all the channels.