

INCREMENTAL REGRESSION SST ALGORITHM FOR NPP VIIRS WITHIN THE ACSPO

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- The S-NPP satellite with VIIRS instrument onboard was launched on 28 October 2011.
- At NESDIS/STAR, VIIRS SDRs are processed into L2 SST with the Advanced Clear-Sky Processor for Oceans (ACSPO)
- Currently ACSPO uses Conventional Regression SST algorithms (CR), but the plan is to add RTM-based Incremental Regression algorithm
- The IncR was:
 - Developed and tested for MSG SEVIRI as proxy of GOES-R ABI;
 - Internally tested for AVHRR and MODIS
 - Tested for AVHRR within the ESA Climate Change Initiative (CCI) project.
- According to all tests, the IncR produces more uniform SST accuracy and precision, compared with conventional regression algorithms

Daytime composite maps of SST - Reynolds produced from VIIRS data with Conventional Regression and incremental Regression algorithms

