Sentinel-3 Pilot Study

Mid-Project Report

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❏ Goal 1: Integrate the Sentinel 3 NRT Fire Products into LANCE FIRMS and Worldview. Evaluate it for continuity with the Terra MODIS active fire/thermal anomaly product

❏ Goal 2: Develop an NRT Sentinel 3 Corrected Reflectance (CR) Product and integrate into Worldview. Evaluate it for continuity with the Terra MODIS CR product

❏ Goal 3: Prototype a Standard Sentinel 3 Land Surface Reflectance (LSR) Product. Evaluate it for continuity with the Terra MODIS LSR product

NASA's Sentinel 3 Pilot Data Flow Diagram

Goal 1: Integrate Fire Product

FRP= Fire Radiative Power Product
SLSTR=Sea and Land Surface Temperature Instrument
OLCI=Ocean and Land Color Instrument
CR=Corrected Reflectance
LSR=Land Surface Reflectance

FIRMS=Fire Information for Resource Management System
GIBS= Global Imagery Browse Services
NTC= Non Time Critical
NRT= Near Real-time
CSV=Comma Separated Values/Plain text file

EUMETSAT Fire Product Analysis and QA (Giglio)

NRT FRP Product

QA and Analysis

EUMETSAT & Kings College (Chimot & Wooster)

NRT FRP Product & CSV file

Land SIPS

FRP Ingest & Distribution

S3 FRP (Fire Radiative Power CSV File)

FIRMS

S3 FRP (Fire Radiative Power) Imagery

Goal 2&3: Create CR and LSR Products

ESA Hub

S3 SLSTR & OLCI NRT and NTC Products

NASA Sentinel Gateway (NSG)

S3 SLSTR & OLCI NRT and NTC Products

S3 SLSTR & OLCI NRT and NTC Products

S3 SLSTR & OLCI Ingest CR & LSR Processing & Distribution

GIBS & Worldview

S3 CR & LSR (Corrected Reflectance & Land Surface Reflectance) Imagery

Corrected & Land Surface Reflectance Algorithms (Vermote)

S3 NRT CR & Std LSR Algorithms & QA