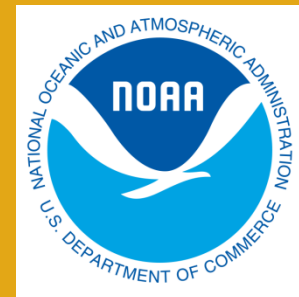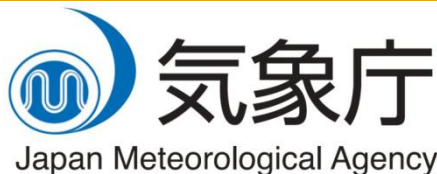**SCOPE•CM**

Sustained Coordinated Processing
of Environmental Satellite Data
for Climate Monitoring

SCM-03: Land Surface Albedo from geostationary satellites

WebEx Meeting: 10 of May 2017

EUMETSAT

EUMETSAT CM SAF

気象庁
Japan Meteorological Agency

NOAA NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION U.S. DEPARTMENT OF COMMERCE

SCM-03: the project team

EUMETSAT
(Darmstadt, Germany)

- A. Lattanzio (Leader)
- R. Roebeling

Project Leading, algorithm development and METEOSAT Processing
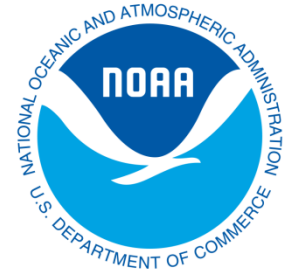
NOAA's NCEI
(Asheville, NC, US)

- J. Matthews
- K. Knapp

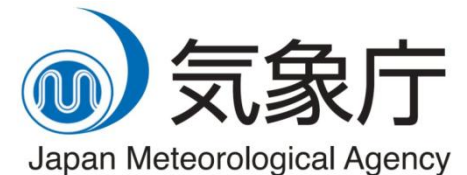Development of daily/NetCDF products and GOES processing

JMA
(Tokyo, Japan)

- M. Takahashi
- Tasuku Tabata

GMS/MTSAT Processing

MeteoSwiss (CMSAF)
(Zurich, Switzerland)

- R. Stöckli
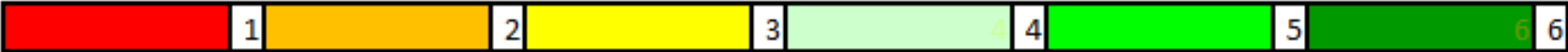- Anke Duguay-Tetzlaff

GEO Cloud mask

Project Plan: 2014-2018

Task	Year	Actors
– Updates to retrieval scheme including inclusion of common cloud mask approach, **utilization of common method of inter-calibration, e.g., DCC method**, implementation of common NWP data;	2014	EUM
– Adaptation of retrieval scheme to the SEVIRI and other instruments;		EUM
– Set up of validation procedures for Level-2 product.		EUM, JMA, NOAA
– **Technical assessment of the improved retrieval scheme;**	2015	EUM
– Implementation of updated retrieval scheme at all three agencies;		EUM, JMA, NOAA
– Validation of test products.		EUM, JMA, NOAA
– **Adaptation and re-implementation of algorithm following validation exercise;**	2016	EUM
– Processing of Level-2 data product for GEO tapestry;		EUM, JMA, NOAA
– Establish user documentation and prepare for public distribution;		EUM, JMA, NOAA
– Development of Level-3 product inclusive of user consultation.		EUM, NOAA
– Produce and validate Level-3 product and redistribute to partners;	2017	EUM
– Perform user driven studies on usage of the product to increase utilization;		EUM , JMA, NOAA
– Arrange distribution of L2 and L3 products from European, Japanese and US sites.		EUM, JMA, NOAA
– Update common calibration with results from SCOPE-CM inter-calibration project and rerun full data record;	2018	EUM, JMA, NOAA
– Study product improvements with respect to utilization aspects.		EUM, JMA, NOAA

Maturity Matrix (MFG)

No change to report in the MM since September 2016.

Software readiness	Metadata	User documentation	Uncertainties Characterisation	Public access, feedback and update	Usage
Coding Standards	Coding Standards	Formal description of scientific methodology	Standards	Public access/Archive	Research
Software Documentation	Collection level	Formal validation report	Validation	Version	Decision support system
Numerical reproductibility and portability	File level	Formal product user guide	Uncertainity quantification	User feedback mechanism	
Security		Formal description of operations concept	Automated quality monitoring	Update to record	

Legend

	1		2		3		4		5		6	6

Project Status

Item	Planned	Status
Level 2 Processing	Processing of Level-2 data product for GEO RING	• MET2-10 • GOES 1995-2015 • GMS5 1995-2003 No Cloud Mask, No common VIS calibration, No Common NPW
Cloud Mask	Implementation and usage for GEO RING	• Meteosat integrated and running in the new CDR Env • Integrated at NCEI and JMA. In Q3 at NOAA and JMA will cooperate directly with CMSAF-MeteoSwiss to implement the interface to Himawari and GOES imagery.
Daily product in NetCDF4	Change the code to generated daily products in NetCDF4	• NCEI proposed a new NetCDF4 format used in their recent processing (1995-2015) • EUM planned for next Release + Cloud Mask • JMA will integrate for the Himawari imagery next processing
Validation	Set up of validation procedures for Level-2 product.	Stand By. ALBEDOVAL guidelines and/or CEOS LPV Validation Protocol (when ready) can be used
Calibration	Utilization of common method of inter-calibration, e.g., DCC method	• JMA working on new calibration for Himawari IR. VIS still to come. Waiting for update from GSICS and IOGEO (SCM6)
Data Availability	Arrange distribution of L2/L3 products from European, Japanese and US sites.	• METEOSAT: DOI • GMS5: contact JMA helpdesk • GOES: DOI as of Oct 2017

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THANK YOU!

http://www.scope-cm.org/projects/scm-03/