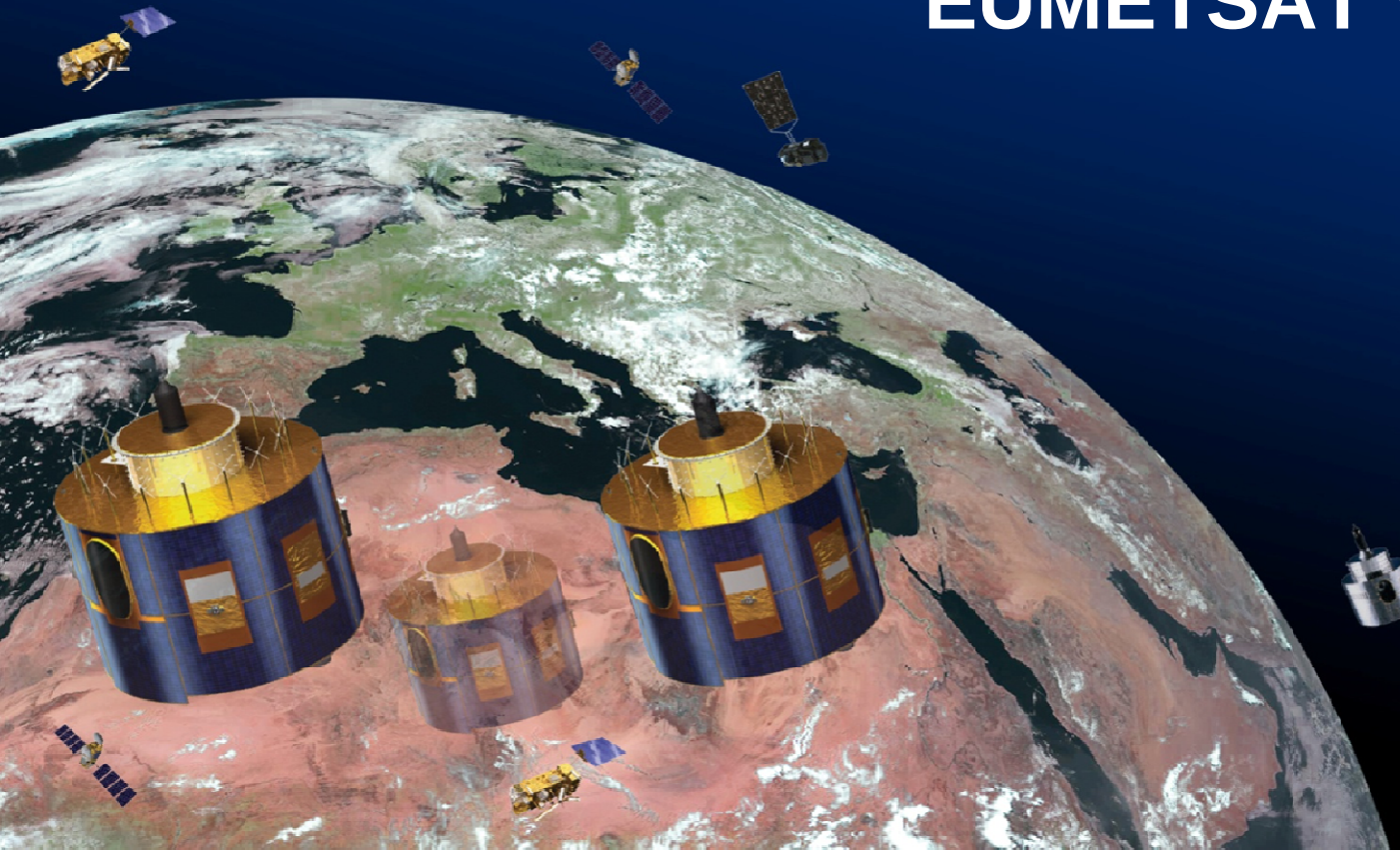


EUMETSAT Viewgraph Template

Subtitle and/or presenter information

Recent Evolutions@EUMETSAT

- The Secretariat signed agreement with ECMWF on C3S to provide climate data for the next global reanalysis;
- Network of Satellite Application Facilities is about to start third Continues Development and Operations Phase (2017-2022) with many continued and new climate data records, e.g., global precipitation climatology at CM SAF, surface wind vector over ocean from all scatterometers at OSI-SAF;
- The Secretariat implemented new compute cluster for climate data processing consisting of ~900 cores allowing to process one year of IASI L1c in three days.

1st EUMETSAT Climate Data User Feedback Workshop 2016 (Every two years on specific topic)

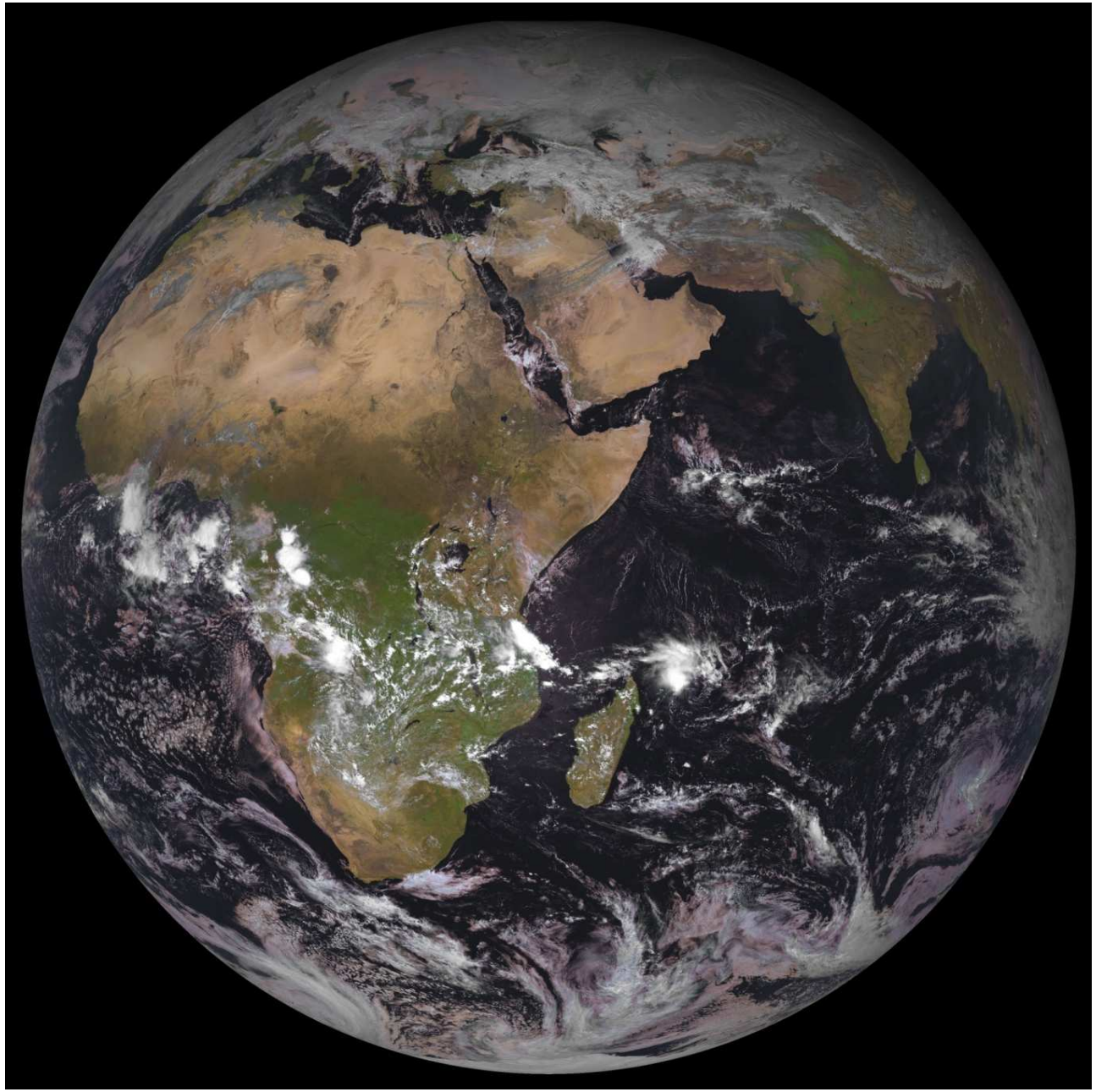
Applications of Satellite Climate Data Records in Numerical Modelling

Organised by CM SAF and EUMETSAT.

ECMWF | Reading | 15 – 17 November 2016, Workshop by invitation only (30 participants from the modelling world).

- Data Assimilation and model initialisation (decadal prediction);
- Process-oriented model evaluation and improvement using satellite data (parameterisations);
- Operational validation and model performance using satellite data
- Evolving user needs for future planning.

First MSG now operational over Indian Ocean



"Central Eastern Europe, the Indian Ocean region, is now in the focus of a multi-spectral imager"

MSG, 1 February 2017, noon CET

Data Rescue – Meteosat-1

WV channel, Meteosat 1

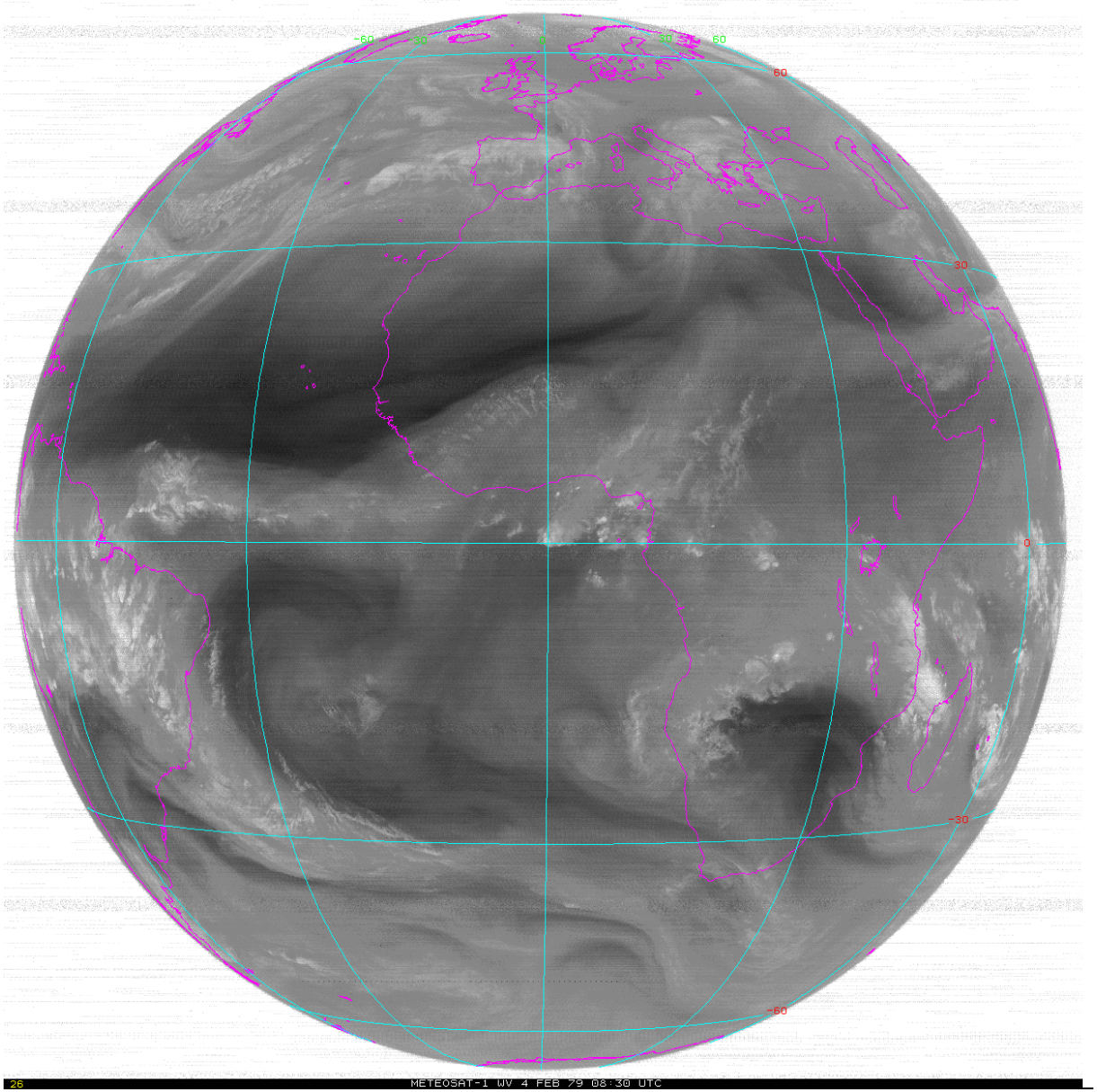
4th February 1979

15 images

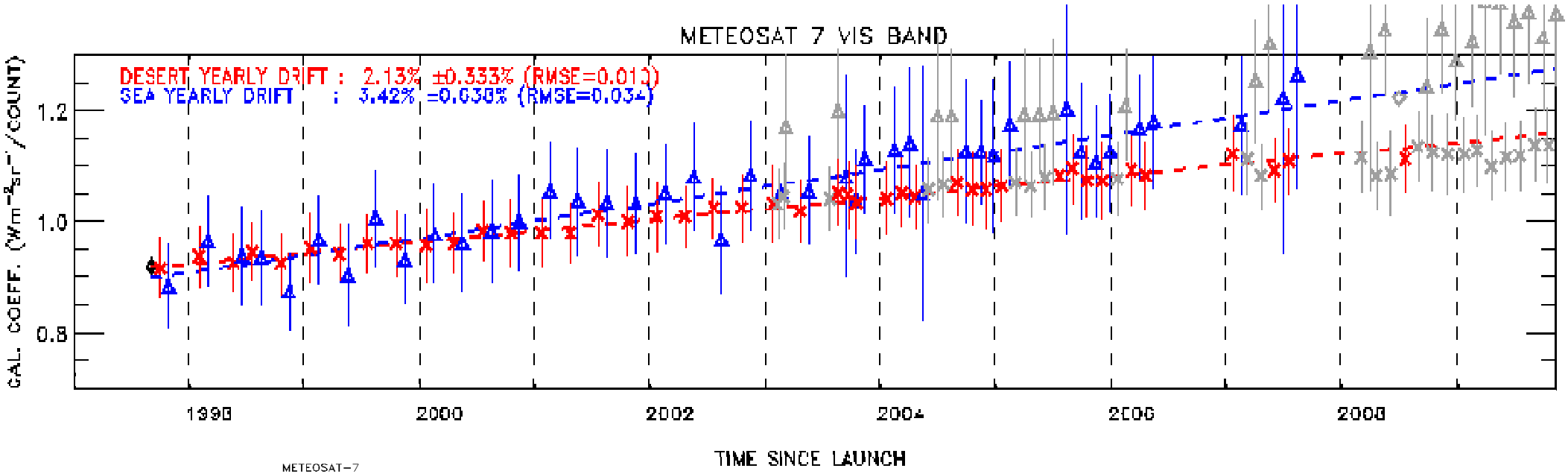
Every hour from 08:30 UTC until 23:30 UTC *(missing images at 18:30 UTC)*

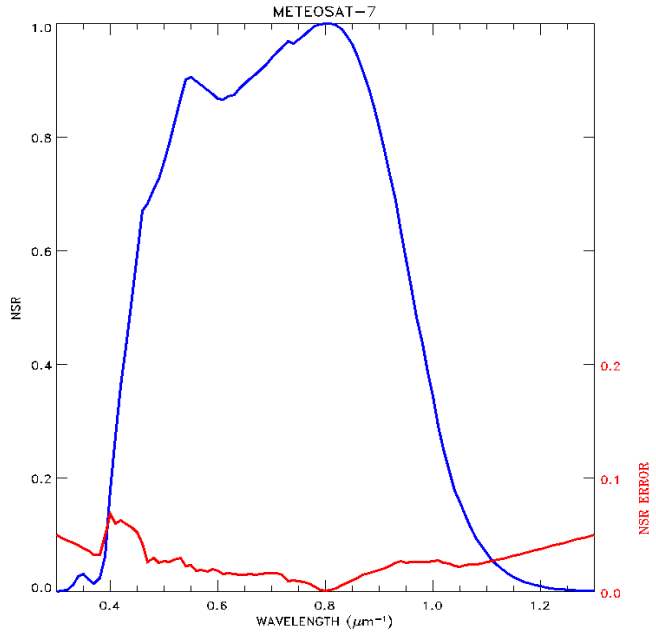
Data discovered by SSEC, Madison, USA.

The data were part of the Global Atmosphere Research Programme, First GARP Global Experiments (FGGE) activities and collected by SSEC to derive global Atmospheric Motion Vectors.



Meteosat VIS Band Aging





$$K = \gamma \int_{\lambda} \xi(\lambda) R(\lambda)\, d\lambda + K_0$$

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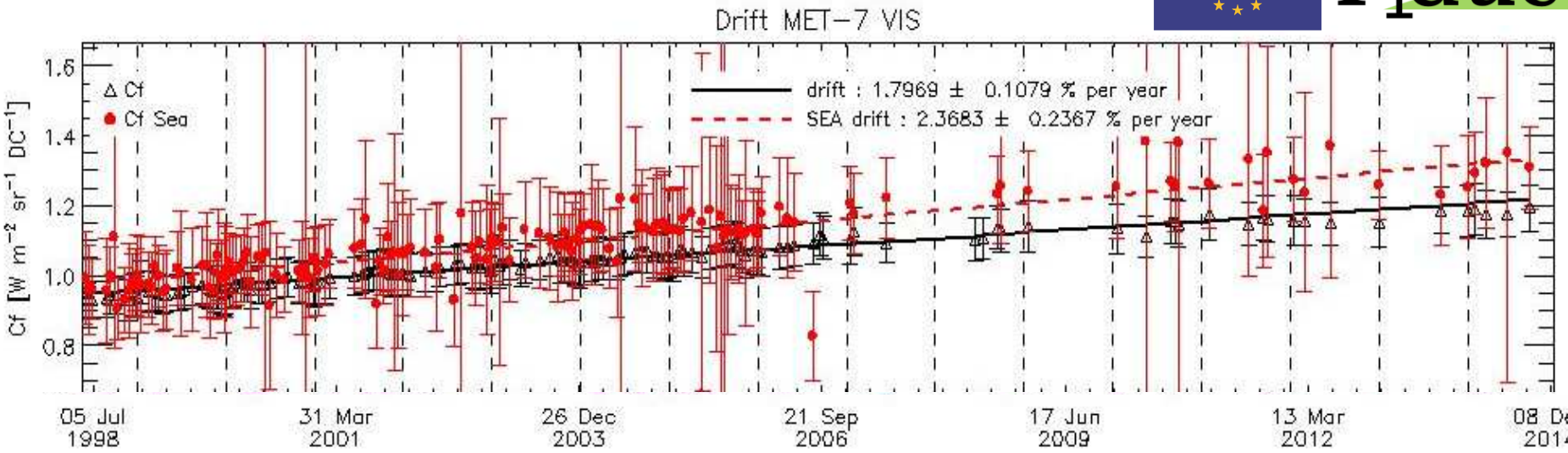
Meteosat VIS Band Aging Correction



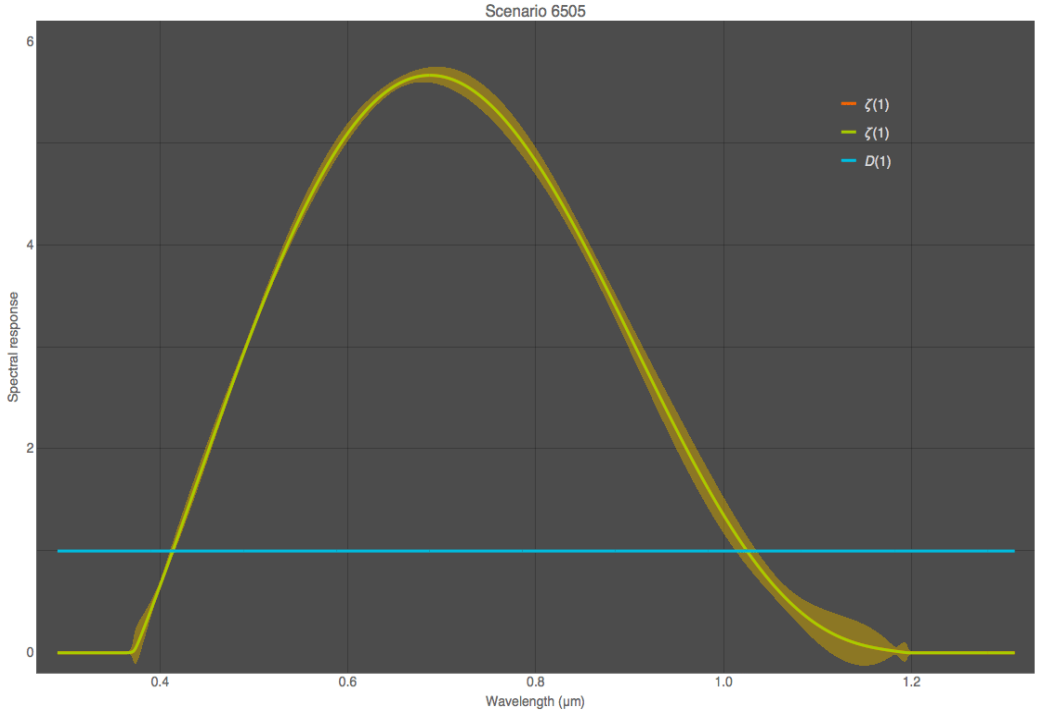


Fig. *Simulation of spectral degradation of the MVIRI visible channel over a period of about 10 years.*
These simulations:

- *Take into account spectral covariance matrix, calibration coefficient and uncertainty.*
- *Yield optimal (least variance) and unbiased digital count predictions for all target types.*