

# MESSIR-SAT

## EUMETCast Workstation

**COROBOR**  
S y s t è m e s

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With the progression of science, and developments in the accuracy of numerical weather prediction, the need for more frequent and comprehensive data from space has arisen.

■ This has led to the current work on the MSG (Meteosat Second Generation) system. MSG is a significantly enhanced follow-on system to the current generation of Meteosat.

■ MESSIR-SAT is a comprehensive, flexible and modular turnkey Workstation allowing for the acquisition, processing and display of the 12 high resolution spectral channels, the derived products and the MDD text and binary data available through the Eumetsat Broadcast System (EUMETCast).

■ GEONETCast is a near real time, global network of satellite-based data dissemination systems designed to distribute space-based, air-borne and in situ data, metadata and products to diverse communities.

■ The features offered by MESSIR-SAT cover the full range from the basic satellite image display to elaborated multiple layers overlays essential to modern forecast and nowcasting



### Some GOOD REASONS to choose MESSIR-SAT

■ COROBOR is the only MSG supplier offering an all-in-one software package 100% produced in-house allowing for image and products overlay and annotation.

■ MESSIR-SAT allows for the processing, display and combination of the whole range of MSG data streams including METEOSAT images and MDD data.

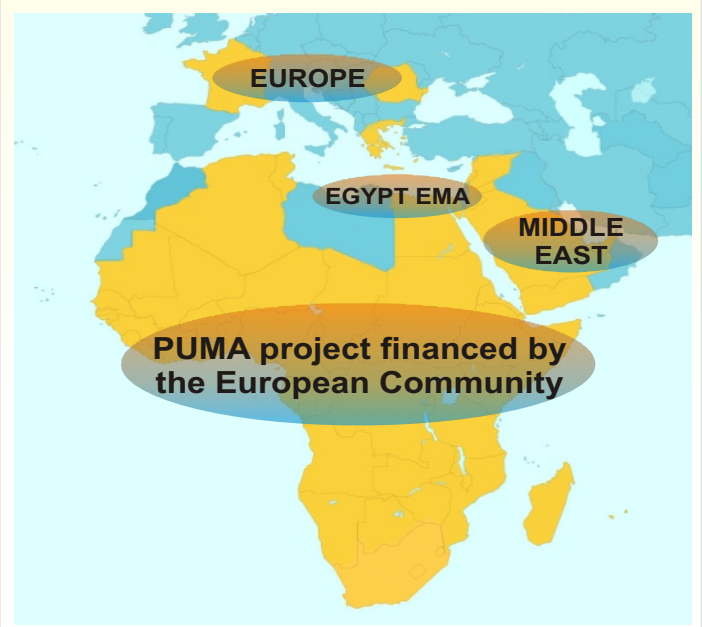
■ MESSIR-SAT inherits from MESSIR systems intuitive look-and-feel. The users will quickly become familiar and productive with MESSIR-SAT.

■ MESSIR-SAT is fully compliant with the EUMETSAT document entitled EUM TD 15 - EUMETCast Technical Description

■ MESSIR-SAT provides you with a wide range of options to display your data and make it visually striking.

### MESSIR-SAT

MESSIR-SAT workstations installed in more than 50 countries



# MESSIR-SAT Main Features

## Runs on PC-based standard platform:

- Runs on standard Intel-based PC or server equipped with a DVB acquisition card.
- Compatibility with the latest desktop and server editions of Windows Operating System

## Reception

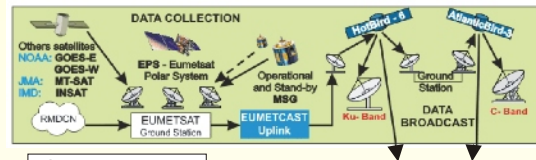
- C-band or Ku-based reception of XRIT (HRIT+LRIT) MSG data flow via the EUMETCast service (EUMETSAT EUM TD 15 compliant)

## Access to the full range of MSG data and products

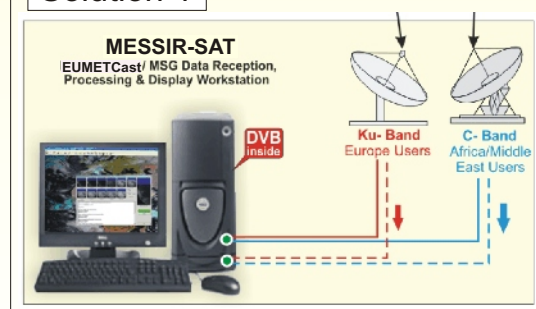
- 12 SEVIRI spectral channels from Meteosat MSG satellites
  - 3 visible channels : VIS06, VIS08,
  - HRV (up to 1km resolution)
  - 7 infrared channels : IR 1.6, IR 3.9, IR 8.7, IR 10.8, IR 12.0, IR 9.7, IR 13.4
  - 2 water vapor channels : WV 6.2, WV 7.3
- Foreign satellite images : Meteosat-7, GOES-E, GOES-W, INSAT, MT-SAT
- MSG MPEF, rapid scan and derived products :
  - Atmospheric Motion Vectors (AMV)
  - Multi-Sensor Sensor Précipitation estimate (MPE)
  - Cloud Analysis and classification
  - Sea Surface Temperature (SST)
  - Cloud Top Height (CTH)
  - Normalized Difference Vegetation Index (NDVI)
  - Albedo
  - Meteorological Products Extraction Facility (MPEF)
  - Rapid Scanning Service (RSS)
- ATOVS / EARS data processing
- GRIB-coded Numerical Weather Prediction Model:
  - ECMWF, EGRR models
- MDD text and graphical products in WMO format
  - SYNOP observations
  - TEMP soundings
  - T4-coded charts

## Advanced visualization functions

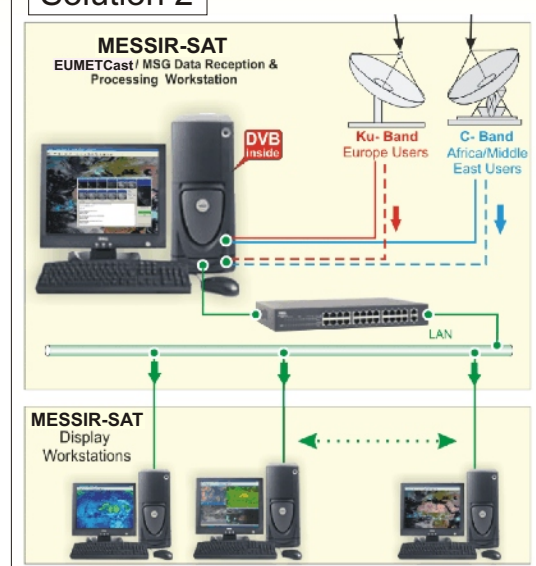
- Quick-view of the latest images received
- Channels calibration with Eumetsat calibration data.
  - Vis channels are calibrated in reflectance and IR/WV channels in temperature.
- Spectral channels combination: differences, RGB composites...
- Integrated map editor featuring :
  - Standard re-projections : space view, cylindrical, mercator, lambert, stereographic
  - User-defined geographical areas, selectable map components: boundaries, coasts, rivers, regions, flight information regions (FIR), airports, cities, ...
  - Topographic (DEM) and texture database
- Satellite images overlay with plotting maps from MSG/MDD observation data
- Calibration and customizable color palettes: RGB values, transparency...
- 3D product generation
- Multi-screen support (with compatible video card)
- Data redistribution and export
- Manual or scheduled-basis image export
- Various image formats:
  - JPEG, TIFF, GIF, PostScript, PDF...
- Various export/redistribution modes: local storage, FTP, WMO/GTS standard protocols, NFS, e-mail...
- Events and operations logging journal
- Web server feeding



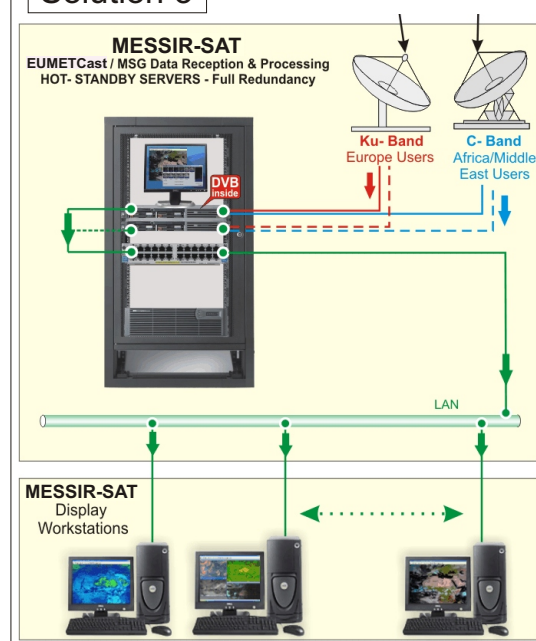
## Solution 1



## Solution 2



## Solution 3



## Who are we?

COROBOR is a French company located in Paris, with an experience of 14 years in its market. COROBOR team is made mainly of meteorological software engineers, fully dedicated to the development of IT solutions for Meteorology and Aviation. So far, COROBOR has provided more than

1000 MESSIR systems in more than 120

countries, including:

**MESSIR-COMM** - World #1 for GTS Message Switching;

**MESSIR-AERO** - World #1 for SADIS,

ISCS, WAFS

**MESSIR-VISION** - World #1 for Forecaster Workstations

**MESSIR-SAT** - World #1 for METEOSAT

MSG/MDD

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**COROBOR**  
S y s t è m e s

COROBOR Systèmes obtained in 2002 the ISO 9001-2000 certification for its Quality Management System, designed to ensure customer satisfaction.

