



## DESCRIPTION OF DIRECTORY

**Content of directory:** products created from Meteosat satellite located at 0° longitude.

**Files in directory:**

**24hCloudRGB:** The 24 Hour Microphysics image is used to monitor the clouds day and night, it is very helpful in distinguishing ice and water clouds.

**AirmassRGB:** The Airmass RGB helps to analyze dynamic processes in the atmosphere.

**CloudType:** The NWCSAF Cloud Type product automatically analyzes different cloud types.

**FogRGB:** The High Resolution Fog RGB is created using the high resolution visible channel; it helps to distinguish between low clouds/fog from snow covered surface.

**HRVCloudRGB:** The High Resolution Fog RGB is created using the high resolution visible channel; it helps to observe cloud formation.

**InfraCloud:** During the calibration procedure of the infrared images we calculate temperature values from the measured radiance then we put the temperature values of the cloudy pixels onto a topographic map. (Separation of cloudy and cloud-free areas is done by a dedicated program.)

**NaturalRGB:** The main aims of the Natural Colour RGB are to display surface characteristics (e.g. snow/vegetation/bare soil) and to distinguish ice from water phase (water clouds from ice clouds or from cloud-free snow) at daytime.

**NightRGB:** The Night Microphysics RGB is created for cloud analyzes at night time; it is also used for fog and low cloud detection

### CHARACTERISTICS OF THE DATA

**Filenames:** satellite\_MSG-<type>-<YYYYMMDD>\_<HHMM>.png, where

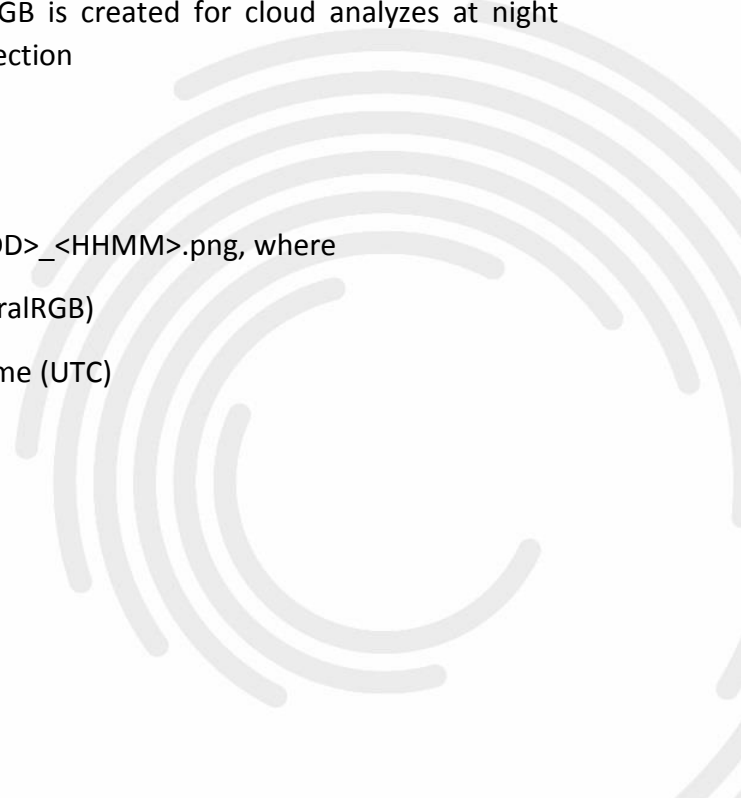
<type>: types listed above (e.g.: NaturalRGB)

<YYYYMMDD>\_<HHMM>: date and time (UTC)

**Update frequency:**

15 minutes

**Format:** png.





### **Uncertainty of measurement/methodology:**

The spatial and temporal resolution of the satellite measurements limits the observation. (Spatial resolution of the SEVIRI instrument is 3 km at nadir; 1 km at nadir for the High Resolution channel.)

### **METHODOLOGY**

Creating RGB images we use brightness temperatures or reflectivity values from different channels and/or channel differences in the red, green and blue colour beams. The channel selection for each RGB is depending on the feature we would like to highlight.

The Cloud Type product is generated with the EUMETSAT NWCSAF program package by using threshold methods. More information about algorithm and the program package can be found on the [https://www.nwcsaf.org/Downloads/GEO/2018/Documents/Scientific\\_Docs/NWC-CDOP3-GEO-MF-CMS-SCI-UM-Cloud\\_v1.0.pdf](https://www.nwcsaf.org/Downloads/GEO/2018/Documents/Scientific_Docs/NWC-CDOP3-GEO-MF-CMS-SCI-UM-Cloud_v1.0.pdf) webpage.

### **ADDITIONAL INFORMATION**

[https://www.met.hu/idojaras/aktualis\\_idojaras/muhold/](https://www.met.hu/idojaras/aktualis_idojaras/muhold/)

[https://eumetrain.org/RGBguide/recipes/RGB\\_recipes.pdf](https://eumetrain.org/RGBguide/recipes/RGB_recipes.pdf)

### **REVISION HISTORY**

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### **CONTACT POINT**

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