

**Purpose :**

This is the read me file for the SEVIRI/MSG NDVI extracted over West Africa area of the AMMA project.

**Date:**

This file was created on May, 16<sup>th</sup> 2006.

**Background:**

This NDVI product is generated by POSTEL, using the spectral directional albedo at 0.6 $\mu$ m and 0.8 $\mu$ m derived from the SEVIRI/MSG data processed by the LSASAF operational node and provided by the Institute of Meteorology of Portugal. The NDVI is in the physical range [-0.2, 1].

**File name convention:**

\*NDVI: name of the parameter

\*POSTEL : provider of the product

\*MSG name of the satellite

\*YYY: year of acquisition

\*MM month of acquisition

\*DD day of the acquisition

\*HHMM hour and minute of acquisition.

\*WEST\_AFR: spatial coverage of the products, region of the AMMA project

**Data encoding:**

The binary files are arrays of 1000 columns and 500 rows for the "WEST\_AFR" area. Values are coded in single-precision signed integer or 2 bytes. For reading these files, for example, use the following IDL code:

```
openr, unit, filename, /get_lun
img=intarr(1000,500)
readu, unit, img
free_lun, unit
```

**BE CAREFUL** : These files have been created on a LINUX platform so the byte ordering is "little endian". If you use these products on a "big endian" platform, you have to change the byte order.

The encoding of missing values is -10000.

To obtain the physical values of the parameters:

- NDVI: DN/1000

**Projection:**

The original LSASAF products are represented in the satellite MSG projection. They have been put in the geographical lat/lon projection ("plate-carrée") with a grid step equal to  $0.05^\circ$ . The "West\_Africa" area, which covers the zone from  $24.98^\circ$  West to  $24.98^\circ$  East, and from  $4.98^\circ$  South to  $19.98^\circ$  North, have been extracted from the  $0.05^\circ$  resolution grid. The pixels of the grids are located by the coordinates of their center.

**Product Quality:**

The NDVI over West Africa displays a line of no data pixel for  $0^\circ$  of latitude. This is an impact of a problem concerning the cloud mask in the original LSASAF algorithm. This effect has been corrected from November 1<sup>st</sup>, 2005.

**Contact information:**

For any questions about the NDVI product generated by Postel, please contact Roselyne Lacaze at [Roselyne.Lacaze@medias.cnes.fr](mailto:Roselyne.Lacaze@medias.cnes.fr).