

# EARTH OBSERVATION MISSION CFI SOFTWARE

## Release Notes – Version 4.30

### 1 INTRODUCTION

This note describes the changes introduced in the new release of the Earth Observation CFI software libraries.

### 2 NEW RELEASE DESCRIPTION

#### 2.1 CFI Software and Documentation Delivery

The new versions of the CFI software libraries are the following:

- EO\_FILE\_HANDLING -- Version 4.30
- EO\_DATA\_HANDLING -- Version 4.30
- EO\_LIB -- Version 4.30
- EO\_ORBIT -- Version 4.30
- EO\_POINTING -- Version 4.30
- EO\_VISIBILITY -- Version 4.30

The following Software User Manuals have been updated accordingly:

- EO\_FILE\_HANDLING issue 4.30
- EO\_DATA\_HANDLING issue 4.30
- EO\_LIB issue 4.30
- EO\_ORBIT issue 4.30
- EO\_POINTING issue 4.30
- EO\_VISIBILITY issue 4.30
- GENERAL issue 4.30

#### 2.2 Compilation software and platform

This release of the CFI libraries are provided for LINUX, MACOS and WINDOWS platforms.

- LINUX 64-bits:

- Linux 4.10 (Ubuntu 17.04) Operating System
- gcc compiler version 6.3.0 (for linking the software to a C application)
- glibc 2.24
- LINUX 64-bits (Legacy):
  - Linux 2.6.35 (Ubuntu 10.10) Operating System
  - gcc compiler version 4.5.4 (for linking the software to a C application)
  - glibc 2.12
- PC WINDOWS 64-bits:
  - Microsoft Windows 10 Professional Operating System
  - Microsoft Visual Studio 2022 (for linking the software to a C application)
- MACOSX on Intel (64-bits):
  - Mac OS X version 10.12 (the libraries and executables have been compiled with compatibility with version 10.9 onwards).
  - gcc provided with Xcode 9.2 (for linking the software to a C application)
- MACOSX Apple M2 Max on Arm (64-bits):
  - MACOS 13.5.2 (the libraries and executables have been compiled with compatibility with version 13.5.2 onwards).
  - gcc provided with Xcode 14.3 (for linking the software to a C application)

Note that the distributed binaries have been generated with no debug.

## 2.3 Installation packages

The following installation packages are provided:

- EOCFI-4.30-CLIB-LINUX64\_LEGACY.zip
- EOCFI-4.30-CLIB-LINUX64.zip
- EOCFI-4.30-CLIB-MACIN64.zip
- EOCFI-4.30-CLIB-MACARM64.zip
- EOCFI-4.30-CLIB-WINDOWS64-V10.zip

## 3 CLOSED SPRS

Anomaly number	Description ANR
1047	REVERT sign in xl_geod_distance

1062	Memory leak in xp_sat_att_get_file
1063	Various documentation issues
1081	xl_quaternions_interp produces NaN values without warning

## 4 NEW REQUIREMENTS

The following new features/requirements have been implemented.

Anomaly number	Description ANR
1073	Update orbital parameters and SATCAT/NORAD ID for BIOMASS
1082	Add support for SENTINEL1D, SENTINEL2D, SENTINEL6C, HARMONY-A/B, and ALTIUS

## 5 KNOWN PROBLEMS

There are no known problems.