# Regression tests between MKL3 v4.0 and globCOLOUR processor v1.0 Issue 1 revision 0 Gilbert Barrot, ACRI-ST 06/jul/2006

Some regression tests consists into comparing scatter plots obtained by using:

- 1. MERIS L3 ISIN products at 9 km computed by MKL3 v4.0, MODIS and SeaWiFS SMI products at 9 km downloaded from the NASA Ocean Color web server.
- 2. MERIS, MODIS and SeaWiFS L3 ISIN products at 4 km computed by globCOLOUR v1.0. MERIS L2 products from the second reprocessing (MEGS 7.4.1). SeaWiFS & MODIS L2 products from NASA Ocean Color web server.

These tests show that the globCOLOUR v1.0 processor results are equivalent to the results obtained by the MERIS MKL3 v4.0 software and NOAA level 3 generation tools.

Two days have been selected: 14/03/2003 and 15/06/2003.

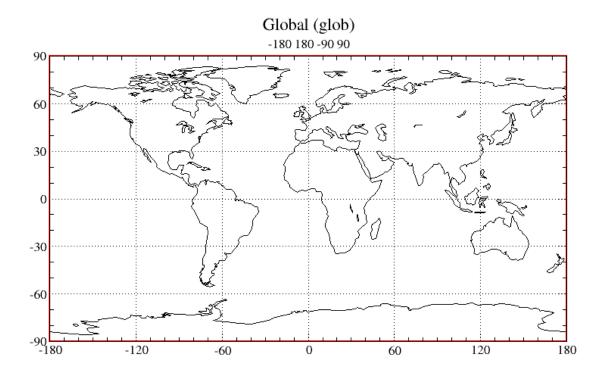
In the comparison tables, the left columns contain plots generated from MERIS MKL3 results and NASA L3 data. The right columns contain plots generated from globCOLOUR processor results (L3 ISIN 4 km products).

Note that in the MKL3 and NASA L3 products, N560 is truncated to 1.27.

# MERIS / MODIS / SeaWiFS comparisons

# Chlorophyll concentration (CHL1) and nLw (N560/L551/L555)

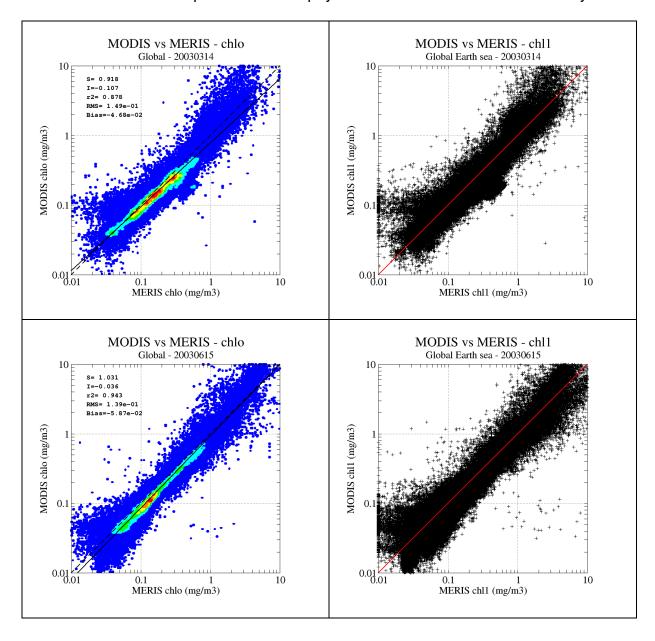
# **Global Earth analysis**



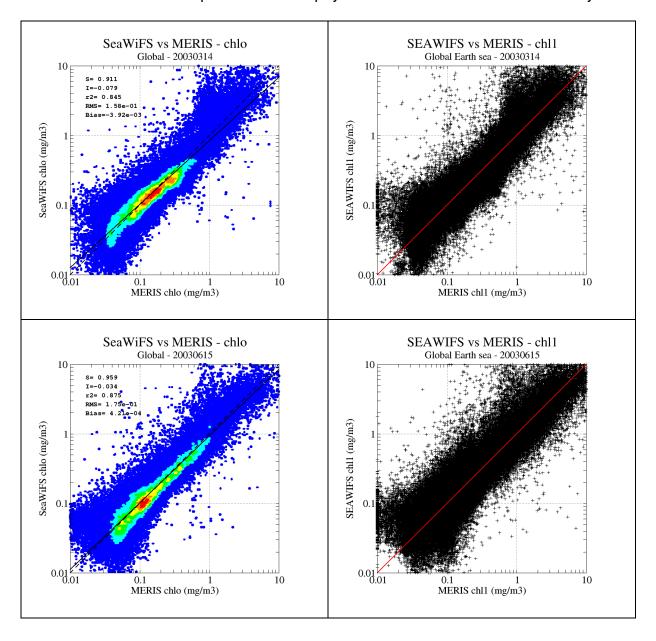
Longitude range: -180° to +180° Latitude range: -90° to +90°

Dates: 14/03/2003, 15/06/2003, 15/09/2003 and 15/12/2003

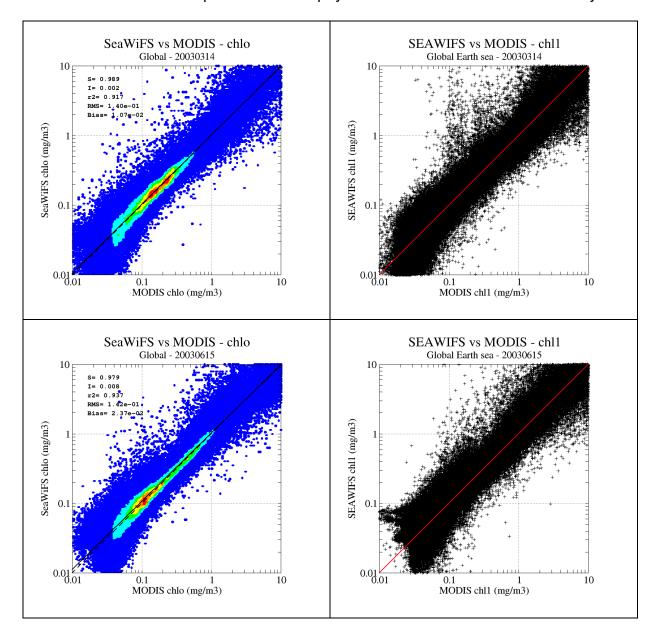
# MERIS/MODIS comparison - Chlorophyll concentration - Global Earth analysis



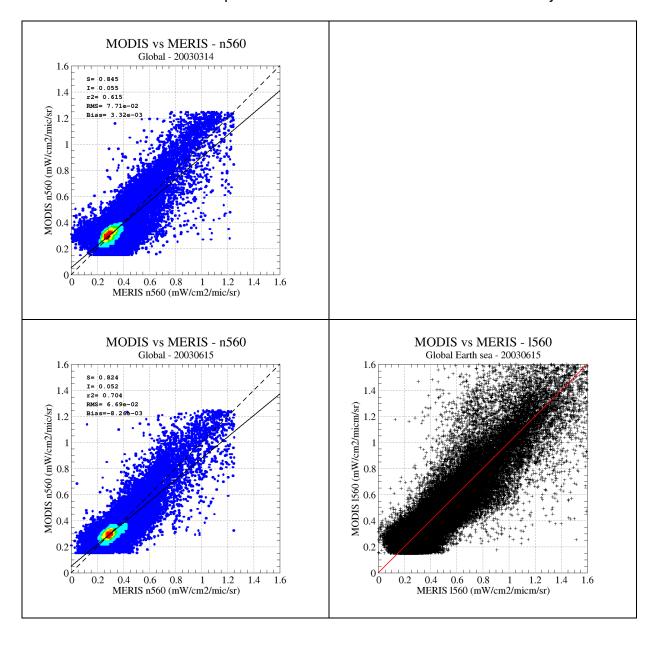
# MERIS/SeaWiFS comparison - Chlorophyll concentration - Global Earth analysis



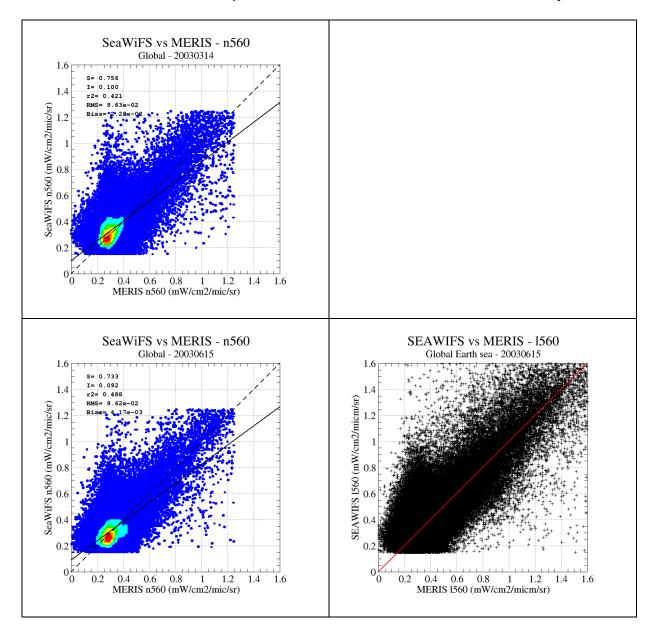
# MODIS/SeaWiFS comparison - Chlorophyll concentration - Global Earth analysis



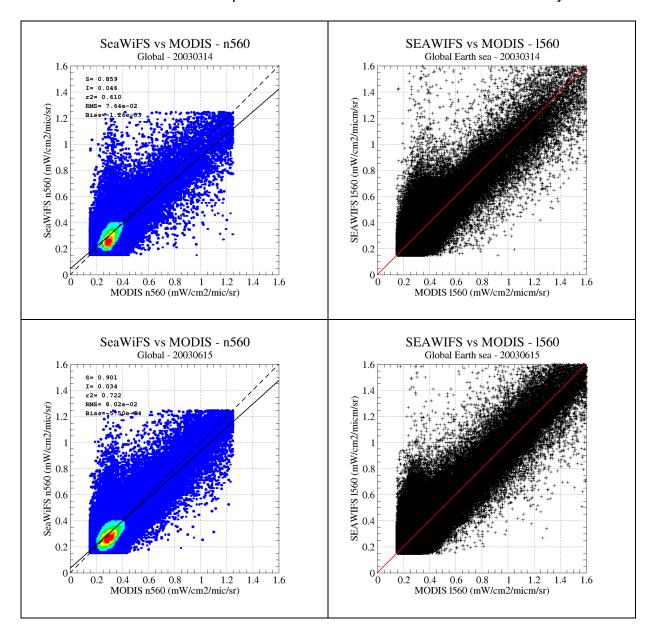
#### MERIS/MODIS comparison - nLw 560/551 nm - Global Earth analysis



#### MERIS/SeaWiFS comparison - nLw 560/551 nm - Global Earth analysis



#### MODIS/SeaWiFS comparison - nLw 560/551 nm - Global Earth analysis

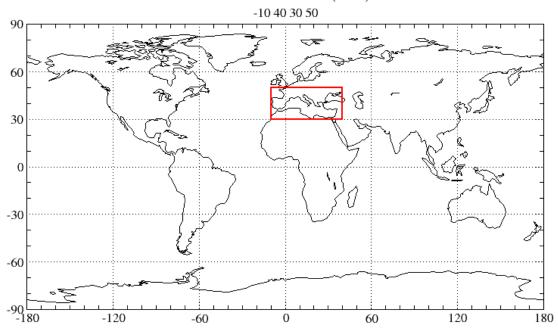


# MERIS / MODIS / SeaWiFS comparisons

# Chlorophyll concentration (CHL1) and nLw (N560/L551/L555)

#### **Mediterranean sea**

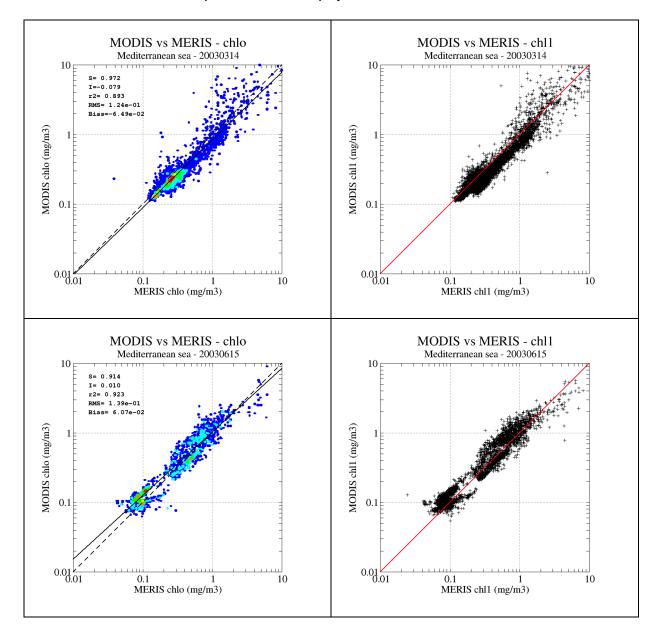
#### Mediterranean sea (med)



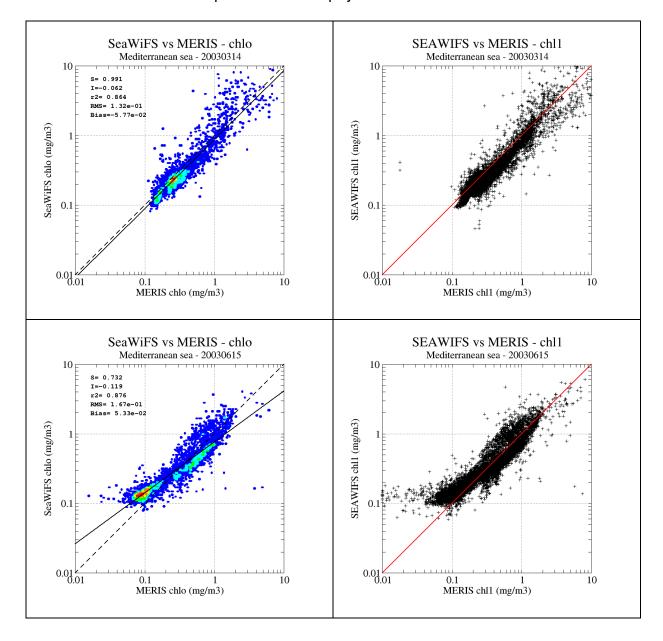
Longitude range: -10° to +40° Latitude range: +30° to +50°

Dates: 14/03/2003, 15/06/2003, 15/09/2003 and 15/12/2003

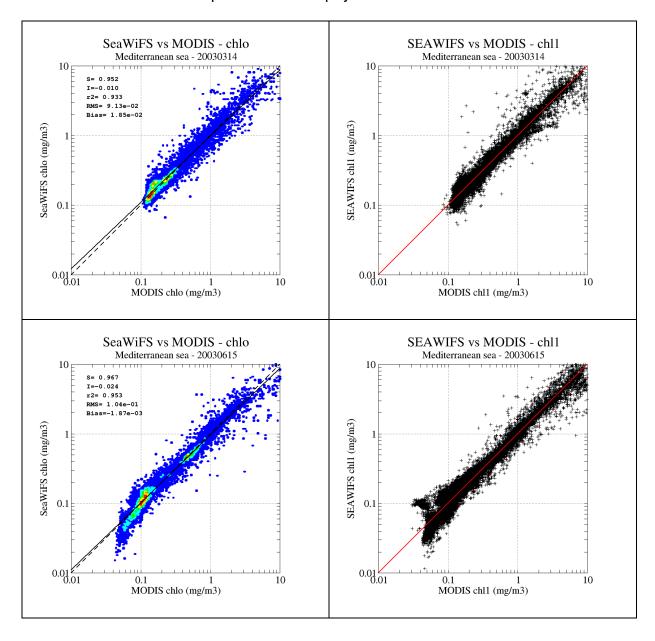
# MERIS/MODIS comparison - Chlorophyll concentration - Mediterranean sea



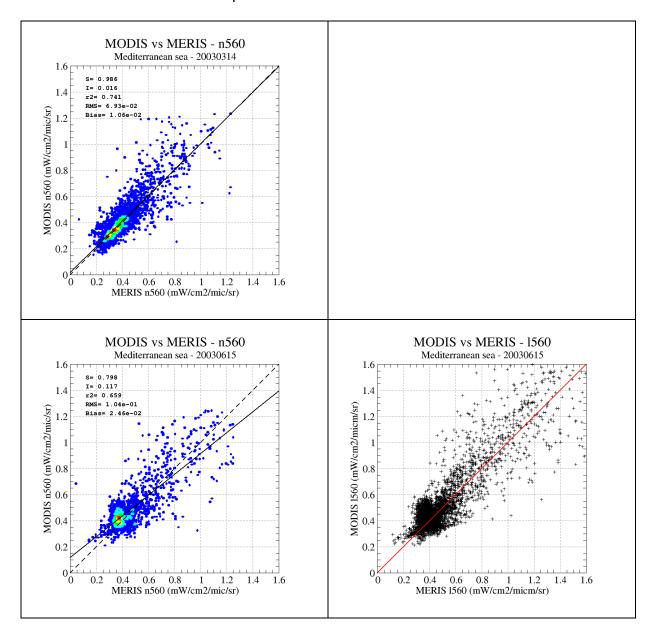
# MERIS/SeaWiFS comparison - Chlorophyll concentration - Mediterranean sea



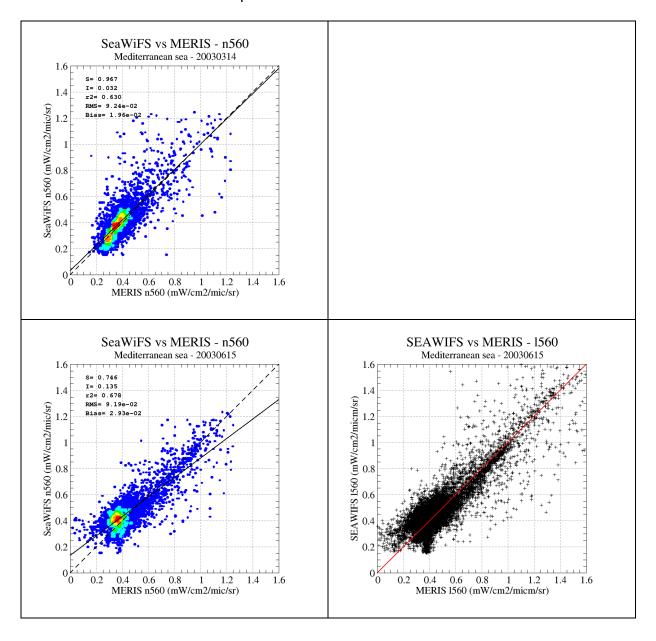
# MODIS/SeaWiFS comparison - Chlorophyll concentration - Mediterranean sea



#### MERIS/MODIS comparison - nLw 560/551 nm - Mediterranean sea



#### MERIS/SeaWiFS comparison - nLw 560/551 nm - Mediterranean sea



#### MODIS/SeaWiFS comparison - nLw 560/551 nm - Mediterranean sea

