# Preliminary comparisons between MERIS, MODIS and SeaWiFS Issue 1 revision 1 Gilbert Barrot, ACRI-ST 05/jul/2006

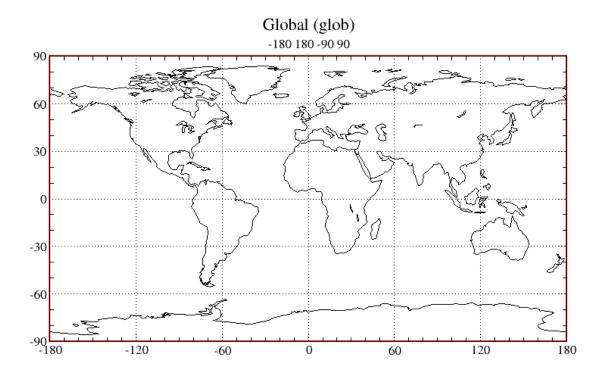
The first comparisons are performed using daily level 3 products with a discretisation close to 9 km. MODIS and SeaWiFS products are SMI products (Plate-Carré grid) while MERIS products are ISIN products (Integerized Sinusoidal grid). For the comparison between SeaWiFS or MODIS and MERIS, each valid bin of the SMI grid is reprojected onto the ISIN grid and compared to the MERIS data if it is also valid. For the comparisons between MODIS and SeaWiFS, we have just performed a bin to bin comparison as the two SMI grids are identical.

Four days have been selected: 14/03/2003, 15/06/2003, 15/09/2003 and 15/12/2003.

# MERIS / MODIS / SeaWiFS comparisons

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

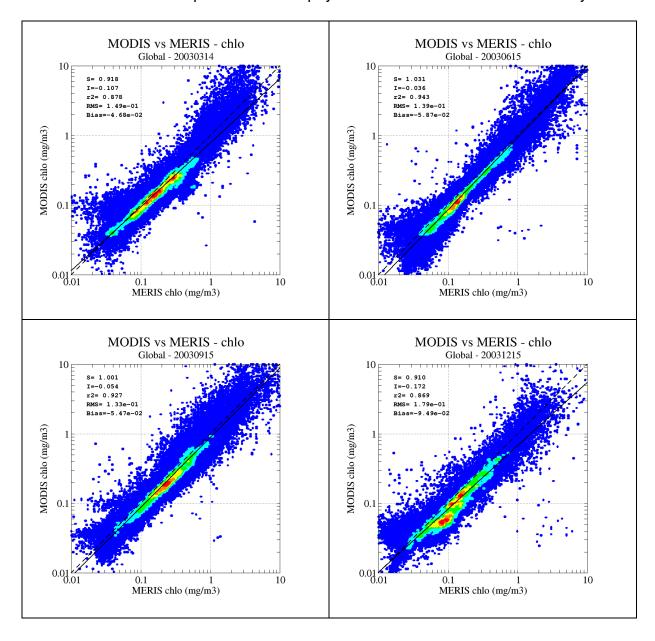
## **Global Earth analysis**



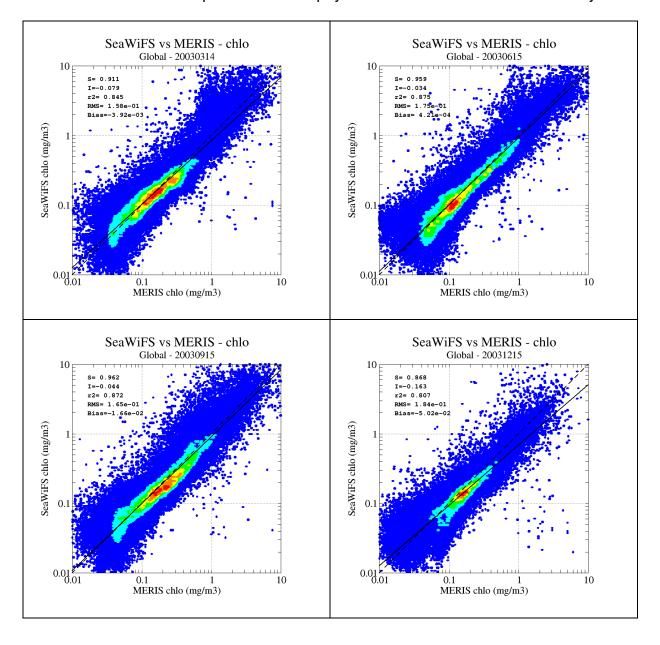
Longitude range: -180° to +180° Latitude range: -90° to +90°

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

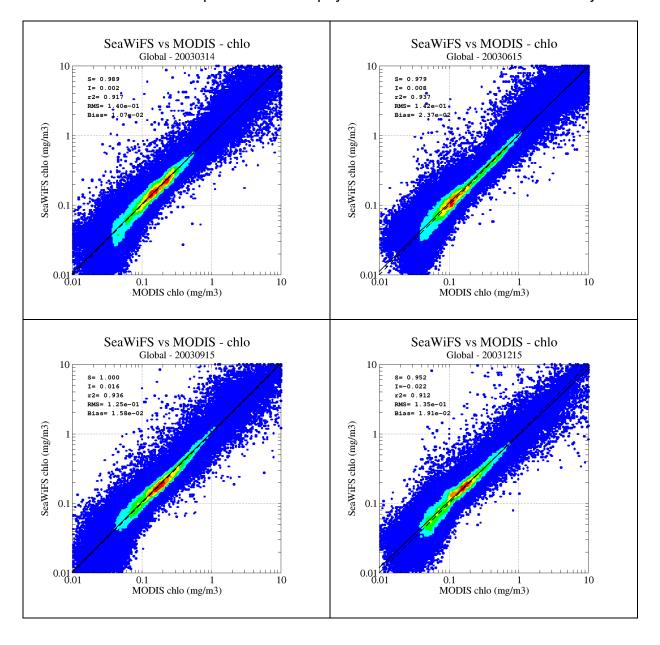
## MERIS/MODIS comparison - Chlorophyll concentration - Global Earth analysis



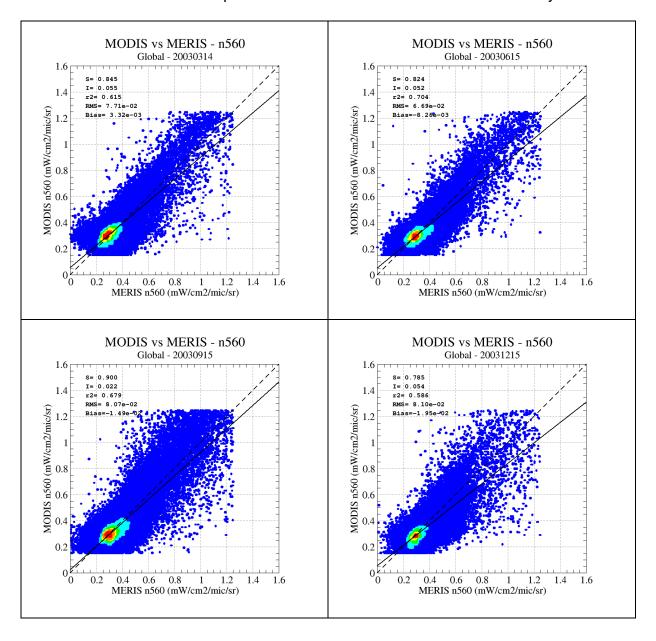
## MERIS/SeaWiFS comparison - Chlorophyll concentration - Global Earth analysis



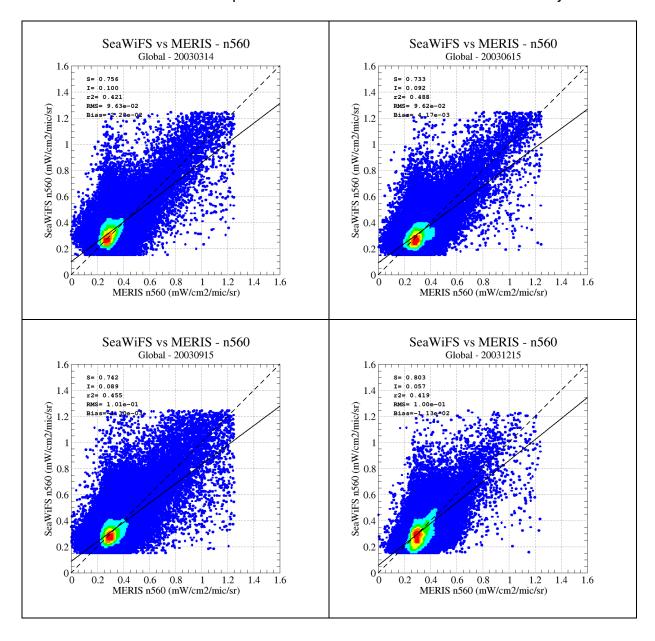
## MODIS/SeaWiFS comparison - Chlorophyll concentration - Global Earth analysis



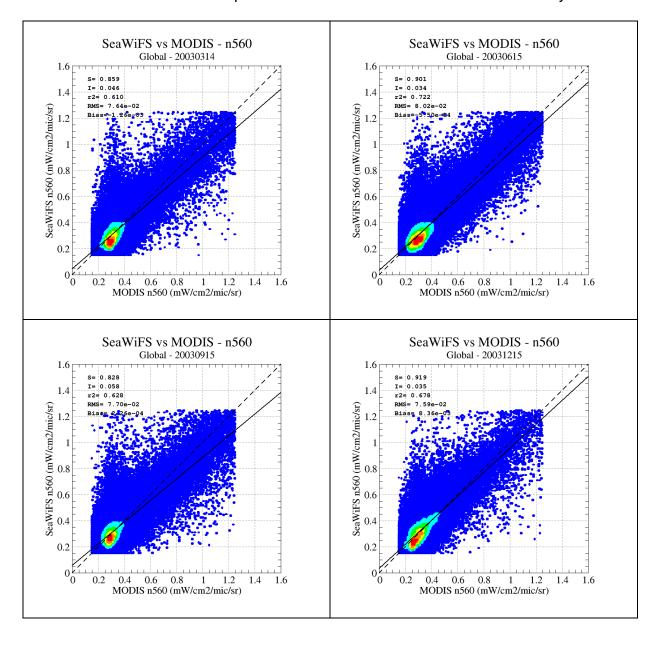
### MERIS/MODIS comparison - nLw 560/551 nm - Global Earth analysis



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



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

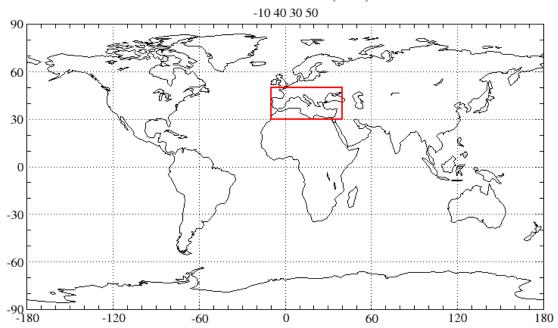


# MERIS / MODIS / SeaWiFS comparisons

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

### **Mediterranean sea**

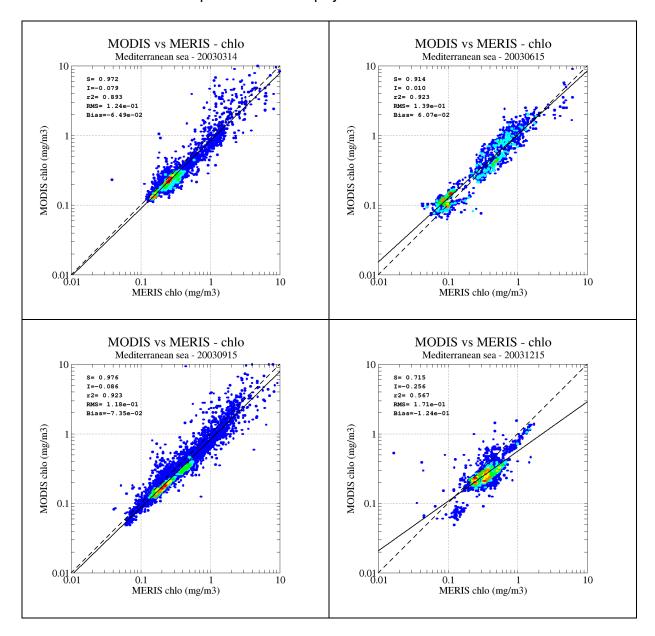
### Mediterranean sea (med)



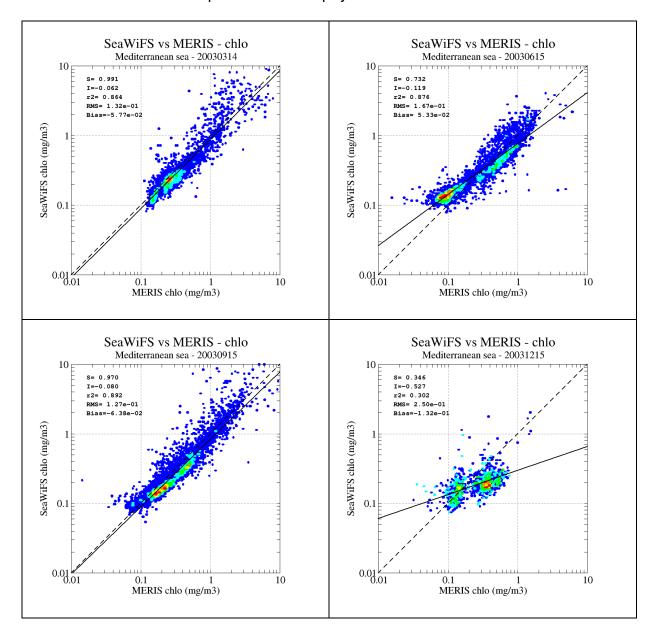
Longitude range: -10° to +40° Latitude range: +30° to +50°

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

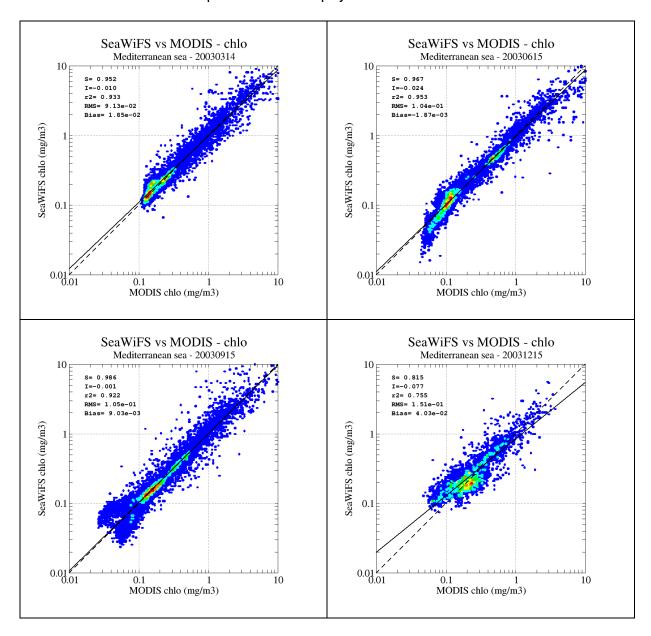
# MERIS/MODIS comparison - Chlorophyll concentration - Mediterranean sea.



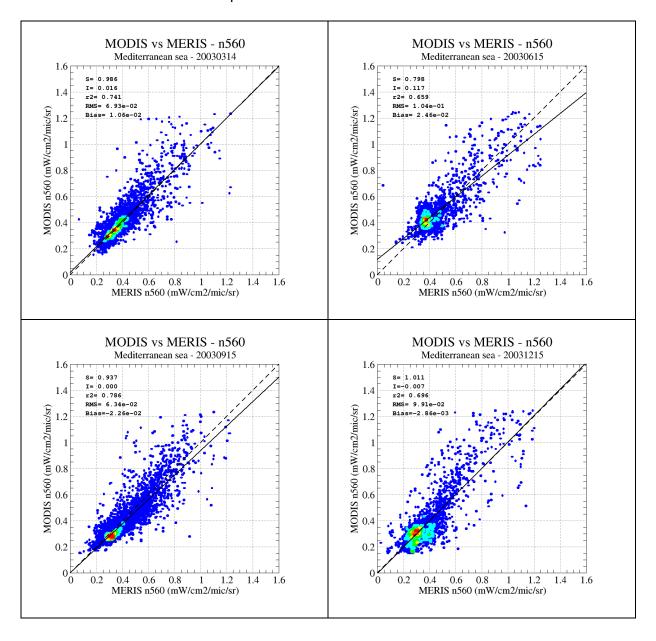
# MERIS/SeaWiFS comparison - Chlorophyll concentration - Mediterranean sea.



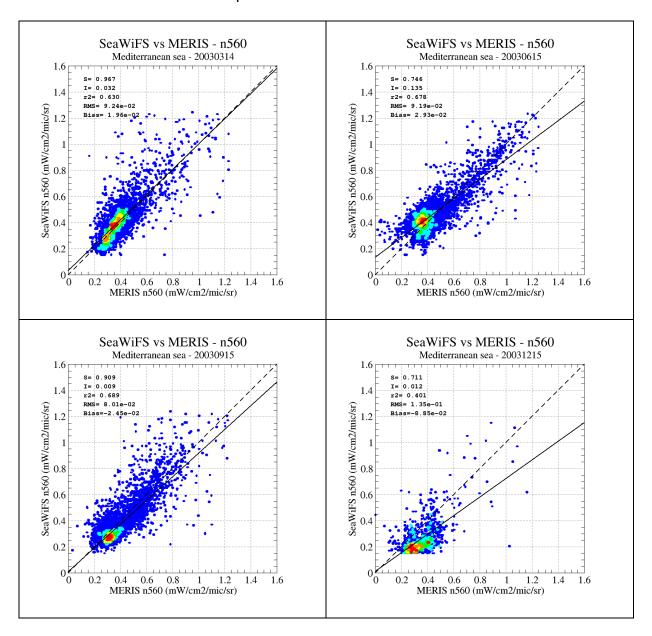
# MODIS/SeaWiFS comparison - Chlorophyll concentration - Mediterranean sea.



### 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.

