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# Spatial variation and temporal trends of solar radiation over Morocco based on ground observations and CMSAF data records.

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*EGU2020 ONLINE*

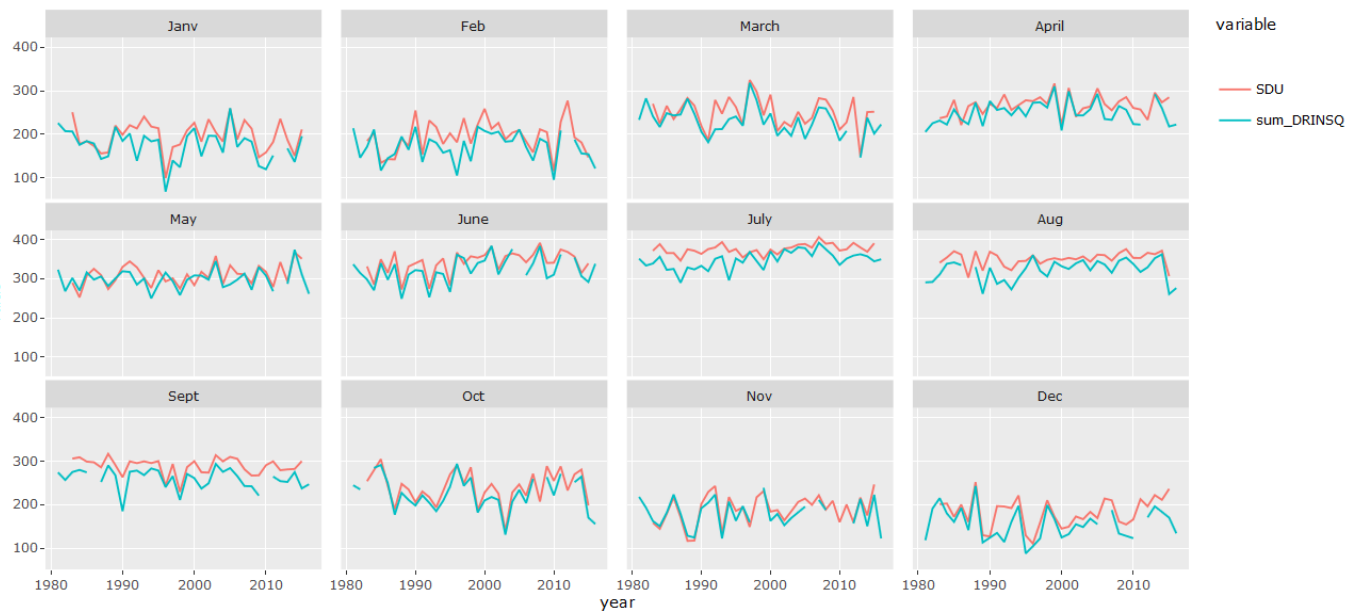
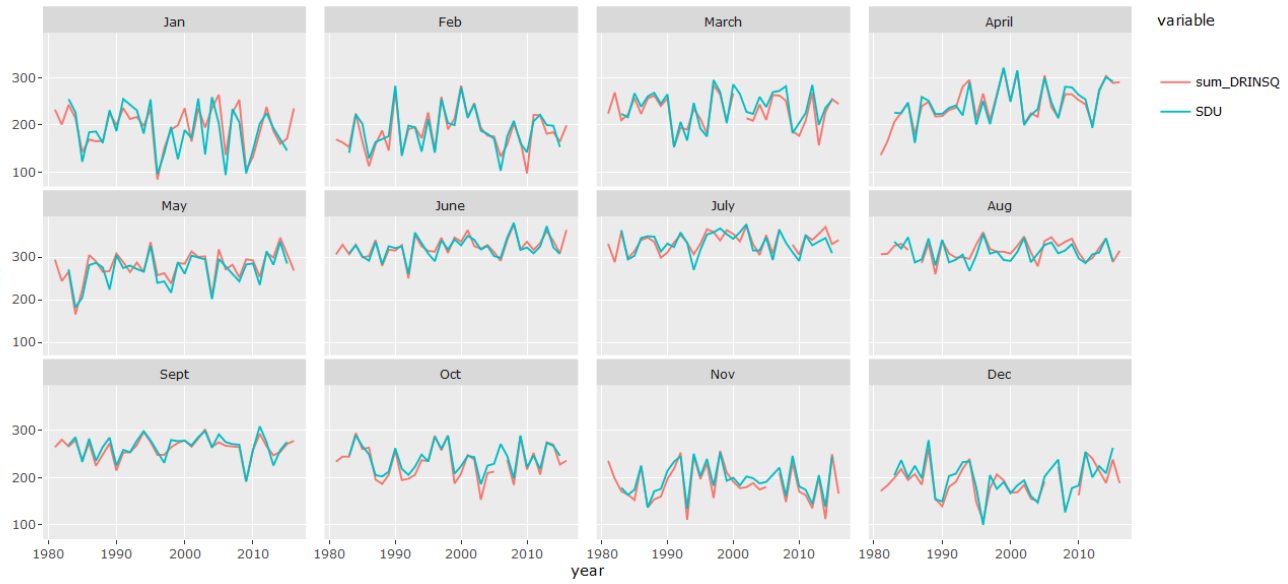
***MOUTIA Sara***

National Meteorological Directorate (DMN), Morocco.  
Hassania School of Public Works (EHTP), Morocco.

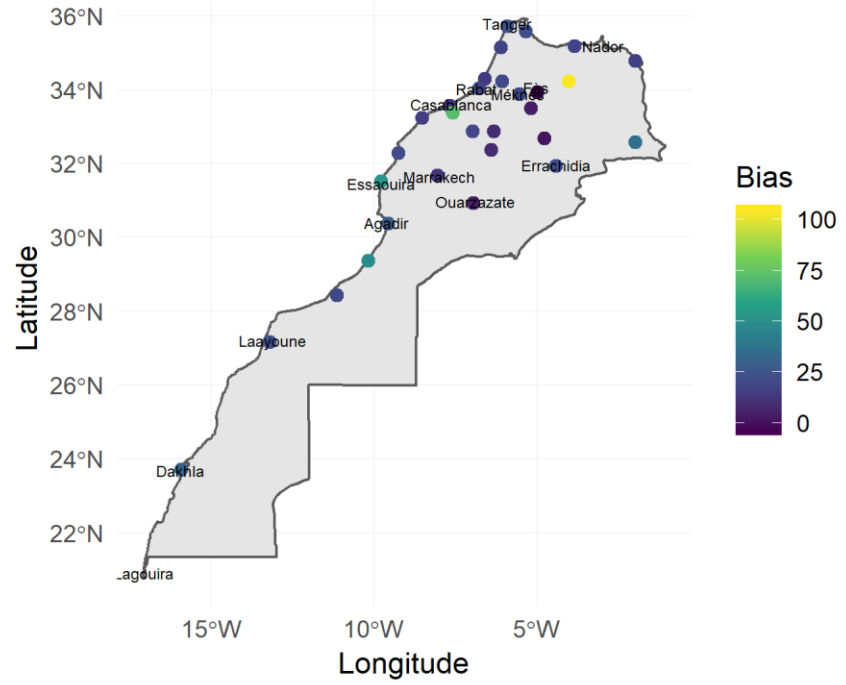
**moutia.sara@gmail.com**

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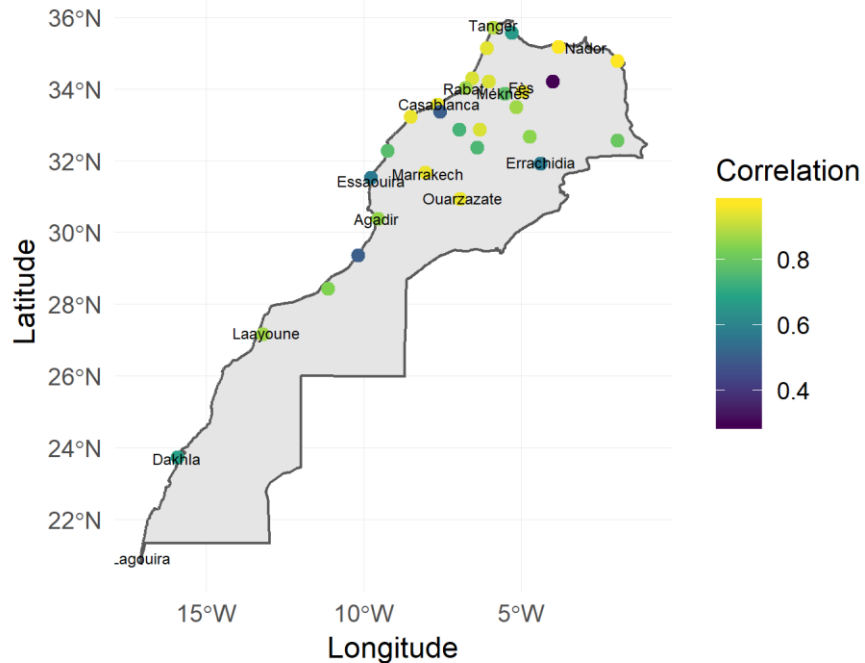
# Comparison of CMSAF Sunshine Duration data and Surface Observations



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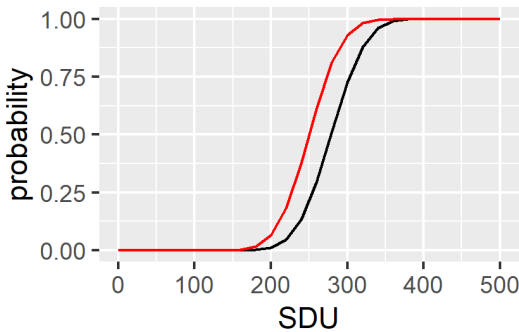


**Ifrane**  
**Cor=0.97**

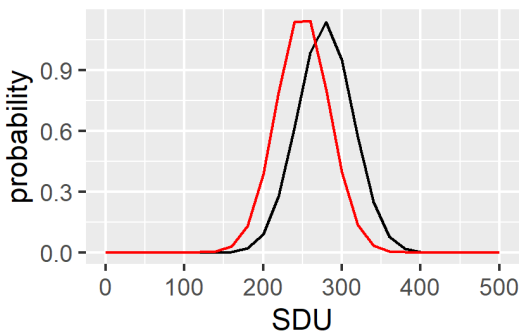


**Tanger**  
**Cor=0.96**

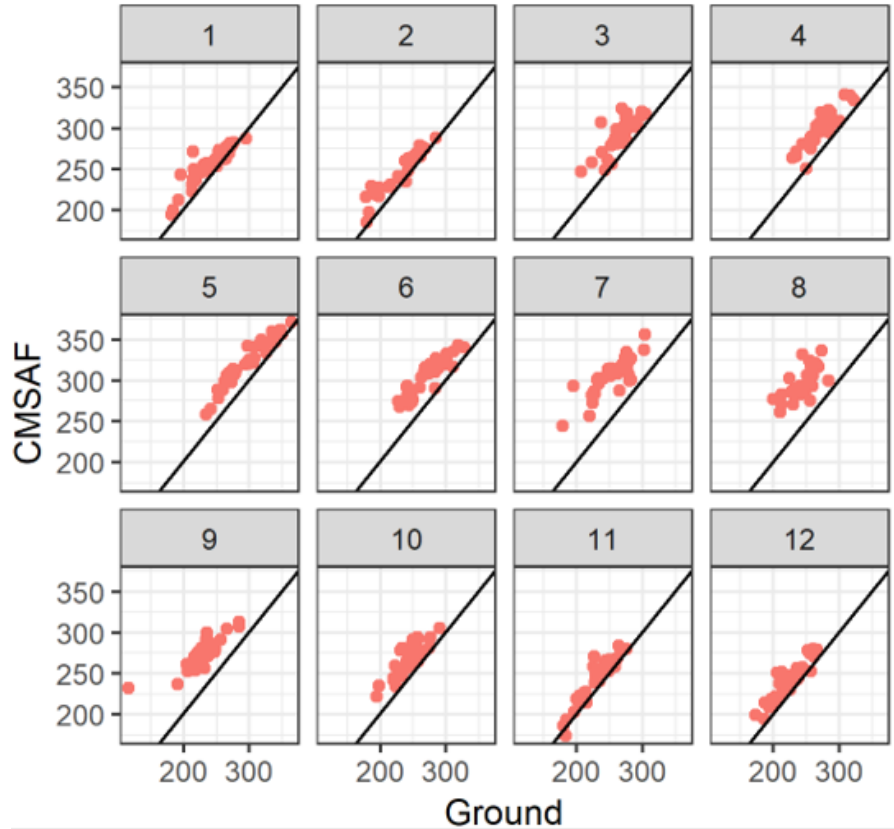
# Comparison of CMSAF Sunshine Duration data and Surface Observations



data  
— CMSAF SDU  
— Ground Observations



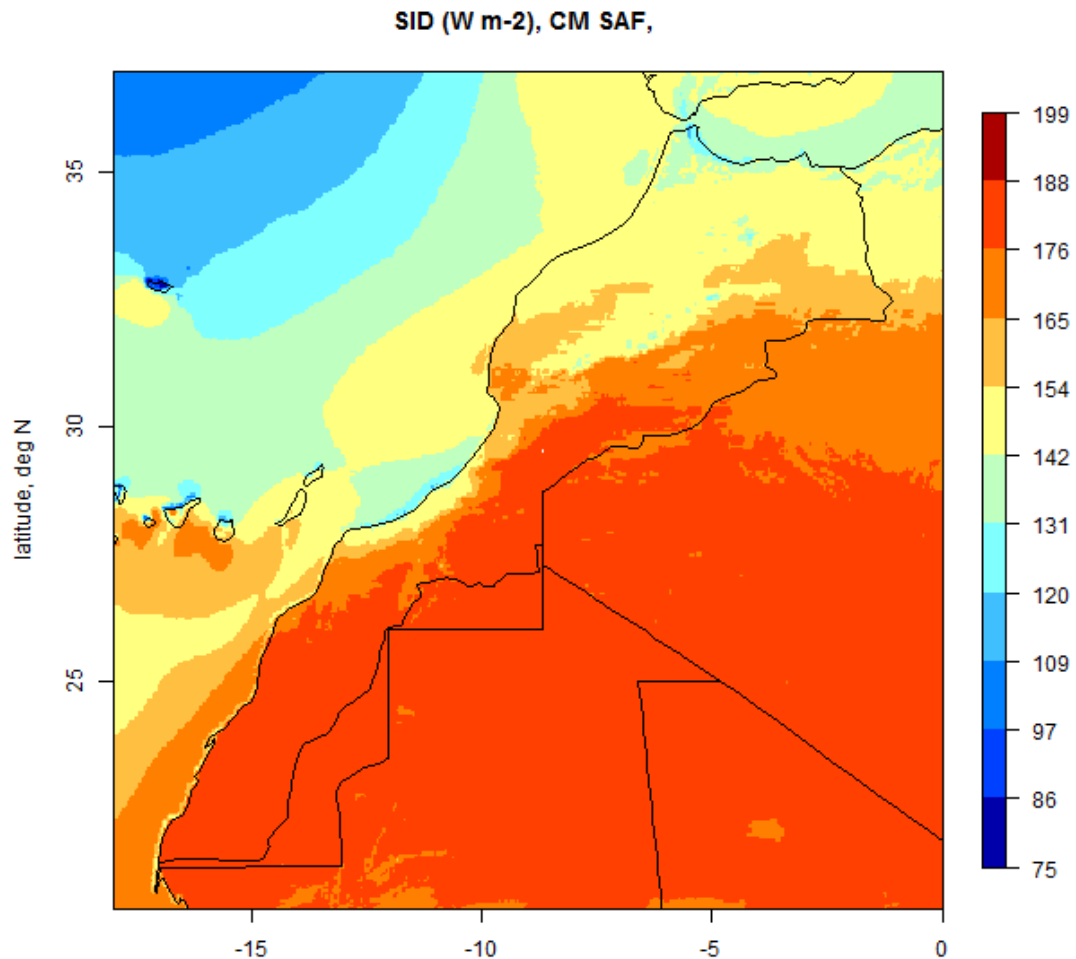
data  
— Cmsaf SDU  
— Ground Observations



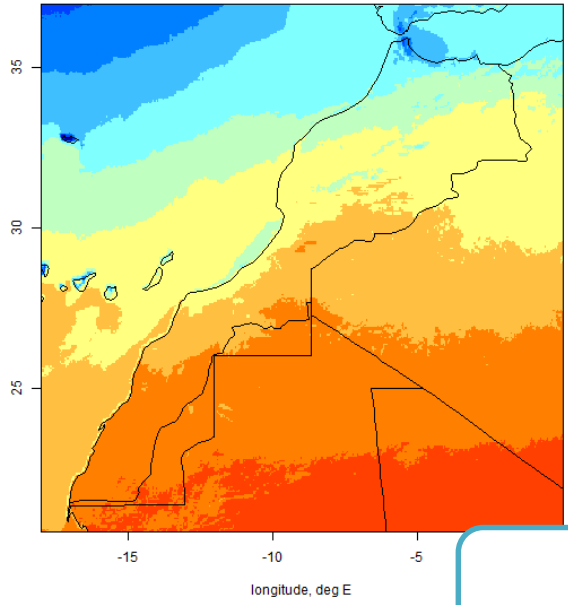
# Solar Radiation climatology for MOROCCO based on CMSAF data



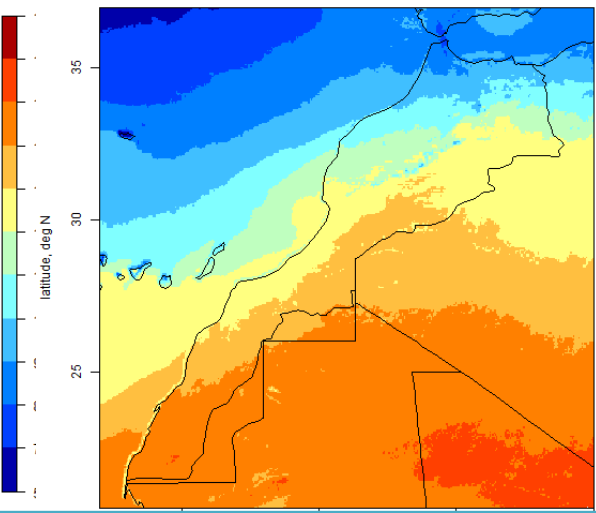
A long-term average of Solar Incoming Direct Radiation(1983-2015)



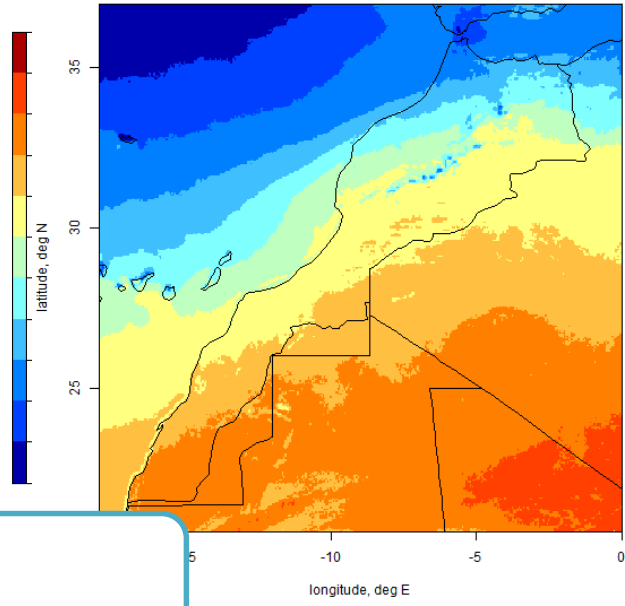
SID (W m-2), CM SAF, 10 octobre



SID (W m-2), CM SAF, 11 novembre

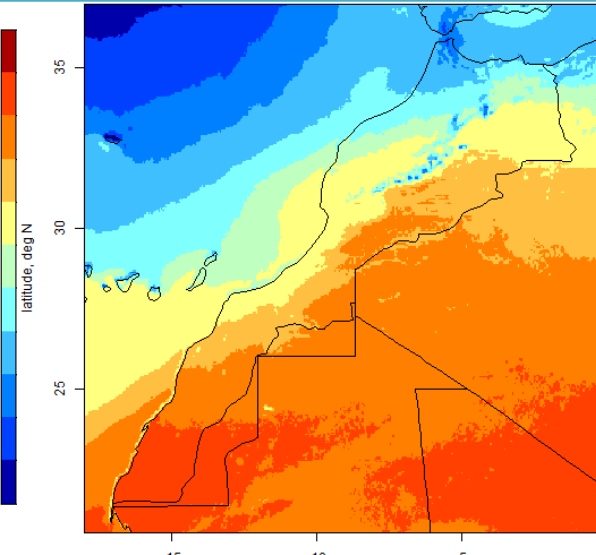
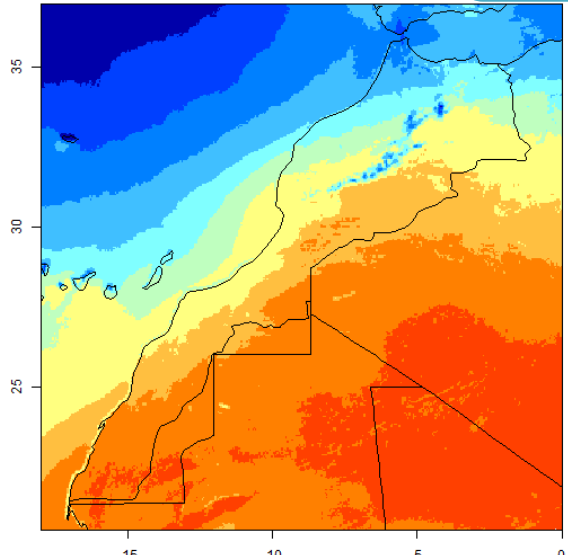


SID (W m-2), CM SAF, 12 décembre

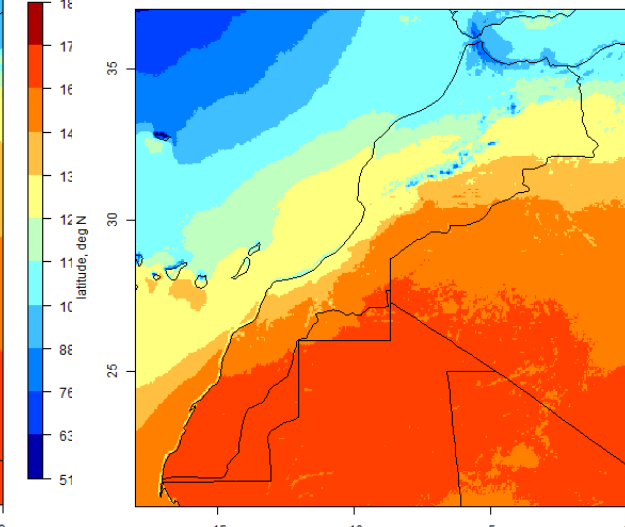


Cold season

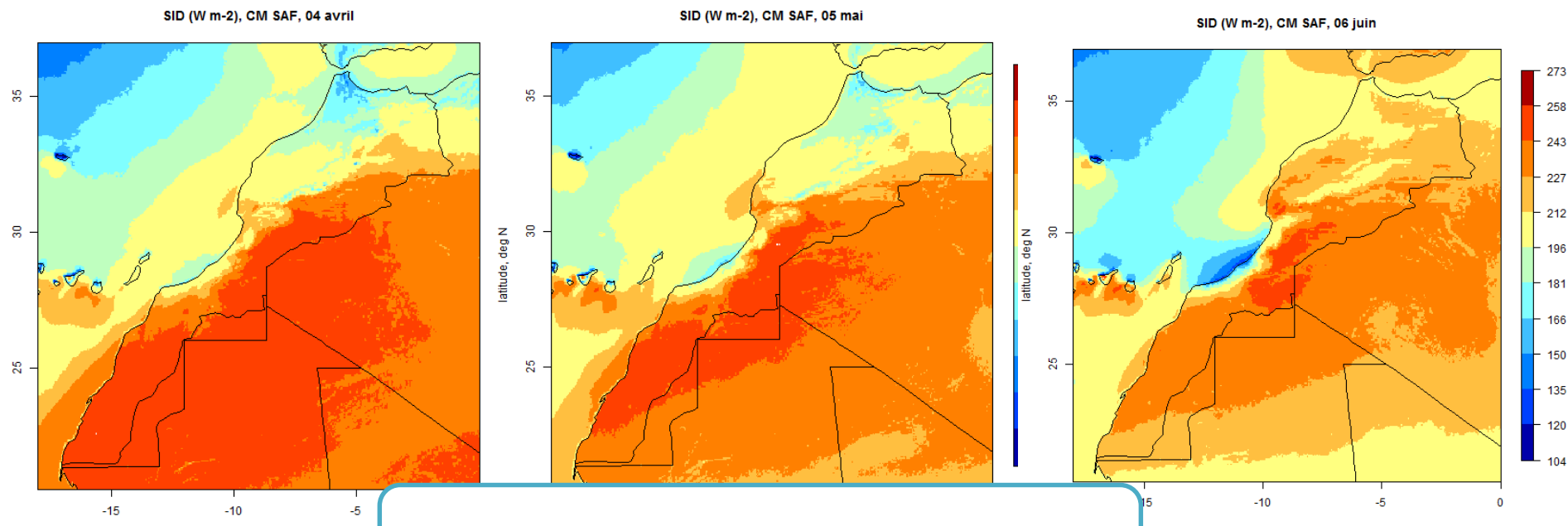
SID (W m-2), CM SAF, 01 janvier



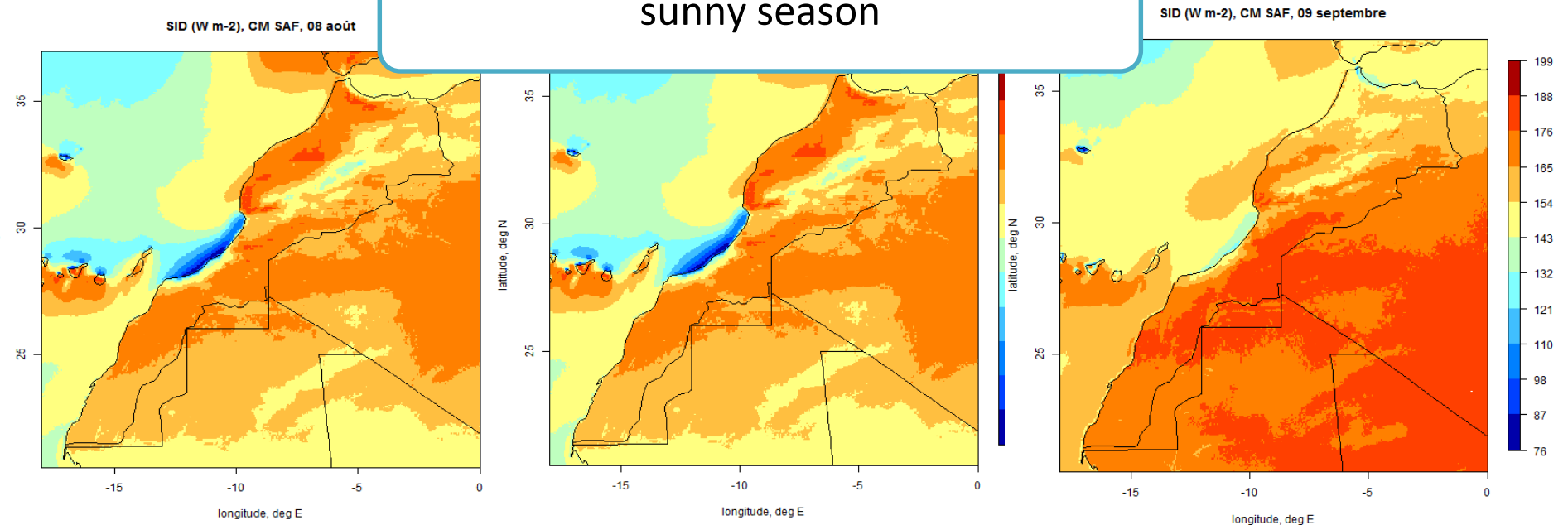
SID (W m-2), CM SAF, 03 mars



# Solar Radiation climatology for MOROCCO based on CMSAF data



sunny season



# Annual trend of Sunshine Duration (1983-2015) based on CMSAF data

