https://doi.org/10.5194/amt-10-2337-2017-supplement
© Author(s) 2017. This work is distributed under the Creative Commons Attribution 3.0 License.

**Supplement of**

**Comparison of hourly surface downwelling solar radiation estimated from MSG–SEVIRI and forecast by the RAMS model with pyranometers over Italy**

Stefano Federico et al.

*Correspondence to:* Stefano Federico (s.federico@isac.cnr.it)

The copyright of individual parts of the supplement might differ from the CC BY 3.0 License.
We show the scatterplots of the pyranometers and MSG-GHI hourly estimate (Figures 1-12 a) and the scatterplots of the pyranometers and RAMS-GHI one-day hourly forecast (Figures 1-12 b) for all stations considered in this paper.

Figure 1 – Trapani (tra): a) scatter plot of the hourly GHI for the pyranometer (x-axis) and MSG (y-axis). The black dots are for clear sky conditions while the red dots are for both contaminated and overcast skies; b) as in a) for the RAMS one-day ahead hourly forecast. Regression lines are shown in their respective colours (blue is for all data, i.e. both clear and cloudy conditions).
Figure 2 – Cozzo Spadaro (csp): a) scatter plot of the hourly GHI for the pyranometer (x-axis) and MSG (y-axis). The black dots are for clear sky conditions while the red dots are for both contaminated and overcast skies; b) as in a) for the RAMS one-day ahead hourly forecast. Regression lines are shown in their respective colours (blue is for all data, i.e. both clear and cloudy conditions).
Figure 3 – Santa Maria di Leuca (sml): a) scatter plot of the hourly GHI for the pyranometer (x-axis) and MSG (y-axis). The black dots are for clear sky conditions while the red dots are for both contaminated and overcast skies; b) as in a) for the RAMS one-day ahead hourly forecast. Regression lines are shown in their respective colours (blue is for all data, i.e. both clear and cloudy conditions).
Figure 4 – Palinuro (pal): a) scatter plot of the hourly GHI for the pyranometer (x-axis) and MSG (y-axis). The black dots are for clear sky conditions while the red dots are for both contaminated and overcast skies; b) as in a) for the RAMS one-day ahead hourly forecast. Regression lines are shown in their respective colours (blue is for all data, i.e. both clear and cloudy conditions).
Figure 5 – Pratica di Mare (pdm): a) scatter plot of the hourly GHI for the pyranometer (x-axis) and MSG (y-axis). The black dots are for clear sky conditions while the red dots are for both contaminated and overcast skies; b) as in a) for the RAMS one-day ahead hourly forecast. Regression lines are shown in their respective colours (blue is for all data, i.e. both clear and cloudy conditions).
Figure 6 – Vigna di Valle (vdv): a) scatter plot of the hourly GHI for the pyranometer (x-axis) and MSG (y-axis). The black dots are for clear sky conditions while the red dots are for both contaminated and overcast skies; b) as in a) for the RAMS one-day ahead hourly forecast. Regression lines are shown in their respective colours (blue is for all data, i.e. both clear and cloudy conditions).
Figure 7 – Pisa (pis): a) scatter plot of the hourly GHI for the pyranometer (x-axis) and MSG (y-axis). The black dots are for clear sky conditions while the red dots are for both contaminated and overcast skies; b) as in a) for the RAMS one-day ahead hourly forecast. Regression lines are shown in their respective colours (blue is for all data, i.e. both clear and cloudy conditions).
Figure 8 – Cervia (cer): a) scatter plot of the hourly GHI for the pyranometer (x-axis) and MSG (y-axis). The black dots are for clear sky conditions while the red dots are for both contaminated and overcast skies; b) as in a) for the RAMS one-day ahead hourly forecast. Regression lines are shown in their respective colours (blue is for all data, i.e. both clear and cloudy conditions).
Figure 9 – Trieste (tri): a) scatter plot of the hourly GHI for the pyranometer (x-axis) and MSG (y-axis). The black dots are for clear sky conditions while the red dots are for both contaminated and overcast skies; b) as in a) for the RAMS one-day ahead hourly forecast. Regression lines are shown in their respective colours (blue is for all data, i.e. both clear and cloudy conditions).
Figure 10 – Monte Cimone (cim): a) scatter plot of the hourly GHI for the pyranometer (x-axis) and MSG (y-axis). The black dots are for clear sky conditions while the red dots are for both contaminated and overcast skies; b) as in a) for the RAMS one-day ahead hourly forecast. Regression lines are shown in their respective colours (blue is for all data, i.e. both clear and cloudy conditions).
Figure 11 – Paganella (pag): a) scatter plot of the hourly GHI for the pyranometer (x-axis) and MSG (y-axis). The black dots are for clear sky conditions while the red dots are for both contaminated and overcast skies; b) as in a) for the RAMS one-day ahead hourly forecast. Regression lines are shown in their respective colours (blue is for all data, i.e. both clear and cloudy conditions).
Figure 12 – Aosta (aos): a) scatter plot of the hourly GHI for the pyranometer (x-axis) and MSG (y-axis). The black dots are for clear sky conditions while the red dots are for both contaminated and overcast skies; b) as in a) for the RAMS one-day ahead hourly forecast. Regression lines are shown in their respective colours (blue is for all data, i.e. both clear and cloudy conditions).