



Precipitation climatology over the Mediterranean Basin – validation over Cyprus

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A study over a 15-year period (1998-2012) for both satellite and rain gauge data is performed over the Mediterranean basin. Tropical Rainfall Measuring Mission (TRMM) 3B43 monthly data (versions 7 and 7A) are compared with the corresponding E-OBS gridded rain gauge precipitation data over a common 0.25×0.25 degree grid. The results show a very good correlation over some areas, where TRMM data incorporate rain gauge measurements along with satellite data. However, the poor correlation over other areas is of great interest and needs to be studied further.

The study focuses over Cyprus, where a dense and reliable network of rain gauges is available. These in situ measurements are compared with both E-OBS and TRMM data for the above 15-year period. Monthly and seasonal comparisons are presented for each of the 0.25×0.25 degree cells overlaying the island of Cyprus. For each of these cells, at least one rain gauge is situated within its area.