

i-meteo station based weather forecast

1 Top quality i-METOS® station based forecast

i-meteo weather forecast achieves top rankings amongst all technologies (Figure 1):

Temperature:

- On day 1, <2.5°C **hourly** deviation, >80% of forecast with <2°C difference;
- Improvement of 0.5°C compared to top-class meteoblue local point forecasts;
- Improvement of 1.0°C compared to available forecast.

Wind:

- On day 1, <2.0 m/s **hourly** deviation, and <3 m/s on day 6;
- Improvement of 1.5-1.0 m/s compared to top-class meteoblue local point forecasts;
- Improvement of 1.8-1.5 m/s compared to available forecasts.

Precipitation:

- More than 80%-75% of occurrences predicted correctly for days 1 to 6;
- More than 60%-50% of events with >2mm predicted for days 1 to 6;
- Less than 40%-50% of events with >2mm not predicted correctly for days 1 to 6.

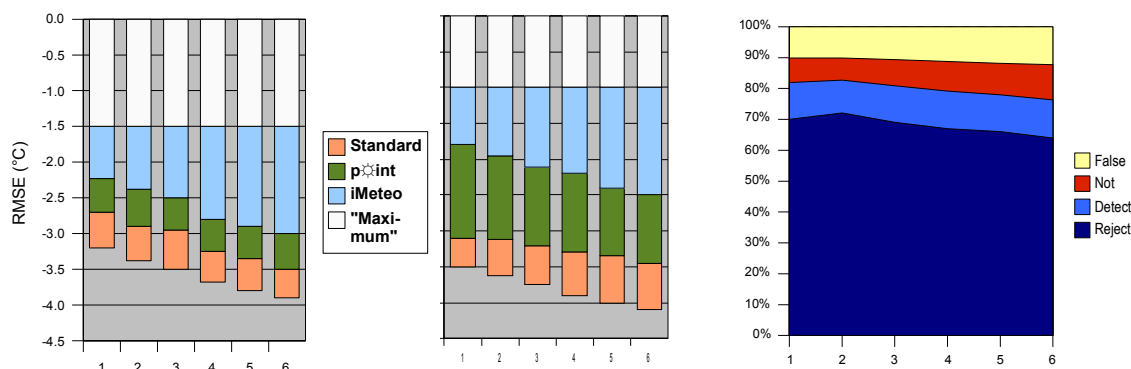


Figure 1. i-meteo forecast accuracy for temperature, wind, precipitation for for 1-6 days ahead.

Temperature: RMSE = absolute mean error in °C. Wind: RMSE = absolute mean error in m/s. Frequency of Precipitation events with >2mm: Reject = no event, no forecast; Detect = event, forecast; Not detected = event, no forecast; False = no event, forecast.

i-meteo weather forecast are available:

- for on any place on earth, where an i-METOS® station is installed;
- with uniform high quality – regardless of station placement;
- ready and running within 2 weeks of ordering;
- through the www.fieldclimate.com web interface;
- simply by ordering a forecast subscription through www.fieldclimate.com

i-meteo weather forecast offers you :

- your special station based forecast;
- unique forecast quality;
- a superior planning tool for the next 5 days;
- easy handling and access.

With i-meteo you have a modern service reliably available for any i-METOS® station

2 Forecast parameter validation

Temperature: *i-meteo* station forecasts reduce absolute error of temperature (RMSE) by approximately 0.7°C within the 0-23 hour forecast: Thereby, $\geq 80\%$ of the bias (Mean error) is below 0.5°C (see Figure 2). If constant hourly measurement data are available, the forecast quality is thereby comparable to the one achieved on airports and weather centres.

Wind: *i-meteo* station forecasts reduce wind forecast absolute error (RMSE) by approximately 1.8 m/s within the 0-23 hour forecast, and $\geq 85\%$ of the bias (Mean error) is below 1.0 m/s (see Figure 3).

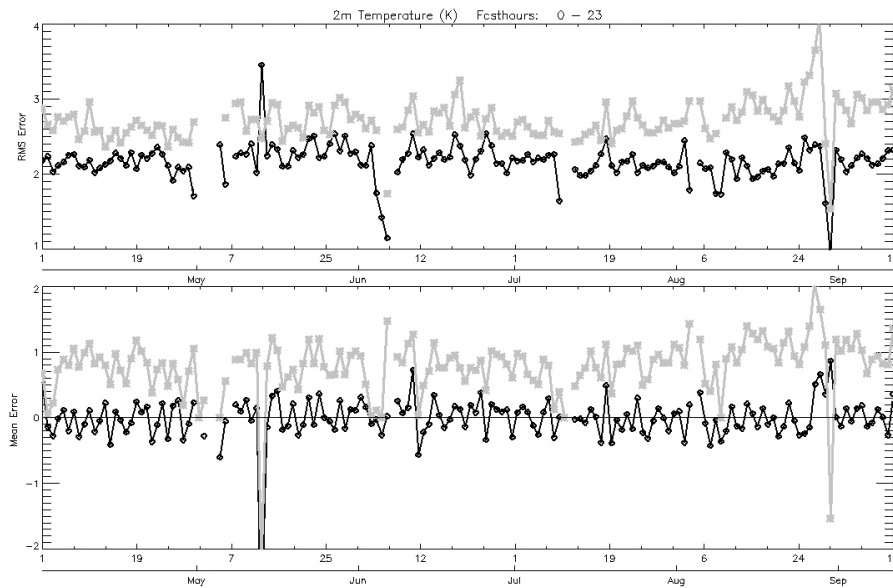


Figure 2. i-meteo temperature forecast accuracy for hours 0-23 (black line) compared with uncorrected local forecast (grey line), based on hourly measurements on 150 i-metos stations over 5 months. RMSE (root mean square error) and Mean error daily average from hourly comparisons (°C), >2000 direct comparisons per day.

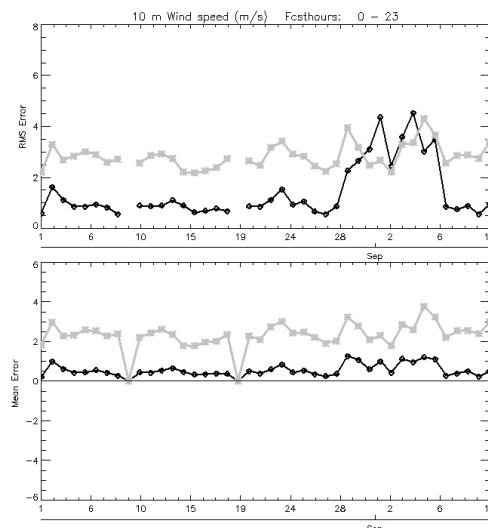


Figure 3. i-meteo wind forecast accuracy for hours 0-23 (black line) compared with uncorrected local forecast (grey line), based on hourly measurements from 150 i-metos stations over 1.5 months. RMSE (root mean square error) and Mean error daily average from hourly comparisons (m/s), >2000 direct comparisons per day.