



Correction to: NASA/POWER and DailyGridded weather datasets—how good they are for estimating maize yields in Brazil?

Yury C. N. Duarte¹ · Paulo C. Sentelhas¹

© ISB 2019

Correction to: International Journal of Biometeorology <https://doi.org/10.1007/s00484-019-01810-1>

The original article was published with errors found in the “Material and Methods” section, as well as the “Results and Discussion” section and Tables 5 and 6. The authors regret the oversight and stress the following information be noted:

1. In the “Material and Methods” section, T_{mean2} should be noted as T_{mean} . In the same section, c_{mo} should be noted as c_{wc} .
2. In the “Results and Discussion” section, mg should be noted as kg whereas in Figs. 3 and 4, mg should be noted instead of kg (see images below).

As above for Tables 5 and 6 where mg should be noted as kg, see below.

The intended information yields that units described as $mg\ ha^{-1}$ actually should be represented as $kg\ ha^{-1}$. In Table 6, there was also a correction needed on table legends (NP to DG). This correction note stands to correct the original article. The original article has been corrected.

Table 5 Comparison between maize potential (YP) and attainable (YA) yields when simulated by the AEZ-FAO model with observed INMET and NASAPOWER (NP) weather data, for different Brazilian locations

| Indices/errors | YP ($kg\ ha^{-1}$) | YA ($kg\ ha^{-1}$) |
|---------------------------|-------------------------|-----------------------|
| YA _{NP} -mean | 14,567.5 (± 2916) | 4450.7 (± 3587) |
| YA _{INMET} -mean | 14,139.5 (± 2907) | 4823.2 (± 3563) |
| ME | 40.4 | -24.5 |
| MAE | 68.4 | 36.0 |
| RMSE | 300.1 | 210.4 |
| d | 0.99 | 0.99 |
| r | 0.95 | 0.98 |
| R^2 | 0.91 | 0.96 |
| C | 0.95 | 0.98 |

ME mean error, MAE mean absolute error, RMSE root mean square error, d agreement index, r Pearson coefficient, R^2 coefficient of determination, C confidence index, YA_{NP-mean} yield attainable estimated with NP weather data, YA_{INMET-mean} yield attainable estimated with INMET weather data

Table 6 Comparison between maize potential (YP) and attainable (YA) yields when simulated by the AEZ-FAO model with observed (INMET) and DailyGridded (DG) weather data, for different Brazilian locations

| Indices/errors | YP ($kg\ ha^{-1}$) | YA ($kg\ ha^{-1}$) |
|---------------------------|-------------------------|-----------------------|
| YA _{DG} -mean | 14,246.5 (± 2917) | 4812.0 (± 3651) |
| YA _{INMET} -mean | 14,139.4 (± 2907) | 4823.2 (± 3563) |
| ME | 10.1 | -0.7 |
| MAE | 25.4 | 13.9 |
| RMSE | 123.4 | 104.9 |
| d | 0.99 | 0.99 |
| r | 0.99 | 0.99 |
| R^2 | 0.98 | 0.99 |
| C | 0.99 | 0.99 |

ME mean error, MAE mean absolute error, RMSE root mean square error, d agreement index, r Pearson coefficient, R^2 coefficient of determination, C confidence index, YA_{DG-mean} yield attainable estimated with DG weather data, YA_{INMET-mean} yield attainable estimated with INMET weather data

The online version of the original article can be found at <https://doi.org/10.1007/s00484-019-01810-1>

✉ Paulo C. Sentelhas
pcsentel.esalq@usp.br

¹ Department of Biosystems Engineering, Agricultural College Luiz de Queiroz (ESALQ), University of São Paulo, Avenida Pádua Dias, 11, Piracicaba, SP 13418-900, Brazil

Fig. 3 Relationship between maize potential yield (YP) simulated with weather data from INMET and from NASA/POWER system (a) and maize attainable yield (YA) simulated with weather data from INMET and from NASA/POWER system (b), for ten Brazilian locations, using the AEZ-FAO model

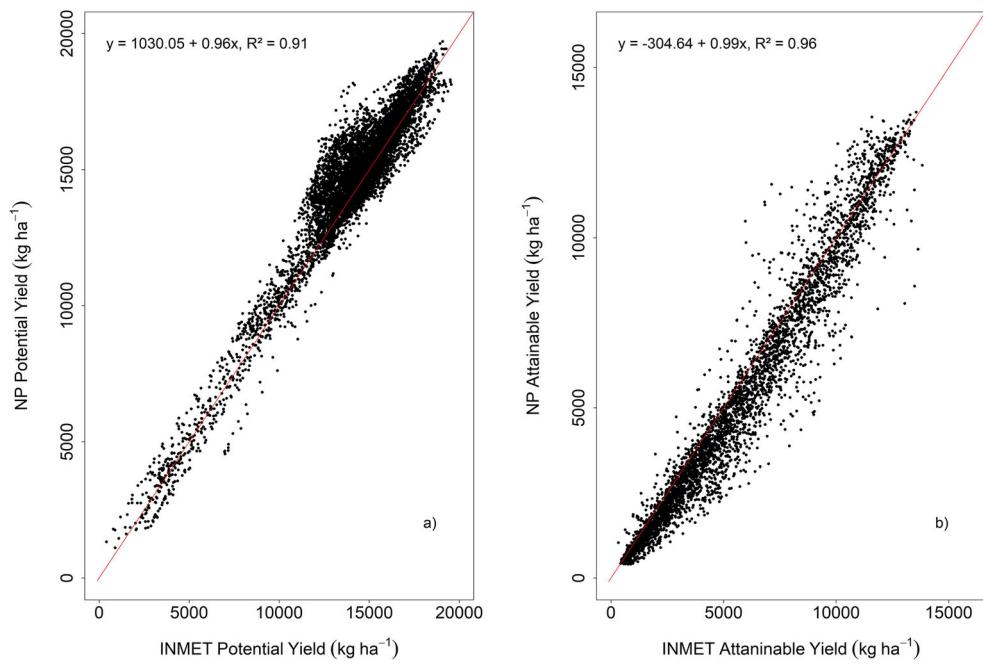


Fig. 4 Relationship between maize potential yield (YP) simulated with weather data from INMET and from DailyGridded system (a) and maize attainable yield (YA) simulated with weather data from INMET and from DailyGridded system (b), for ten Brazilian locations, using the AEZ-FAO model

