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Scheel, M L M ; Rohrer, M ; Huggel, Christian ; Santos Villar, D ; Silvestre, E ; Huffman, G J

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DOI: https://doi.org/10.5194/hess-15-2649-2011

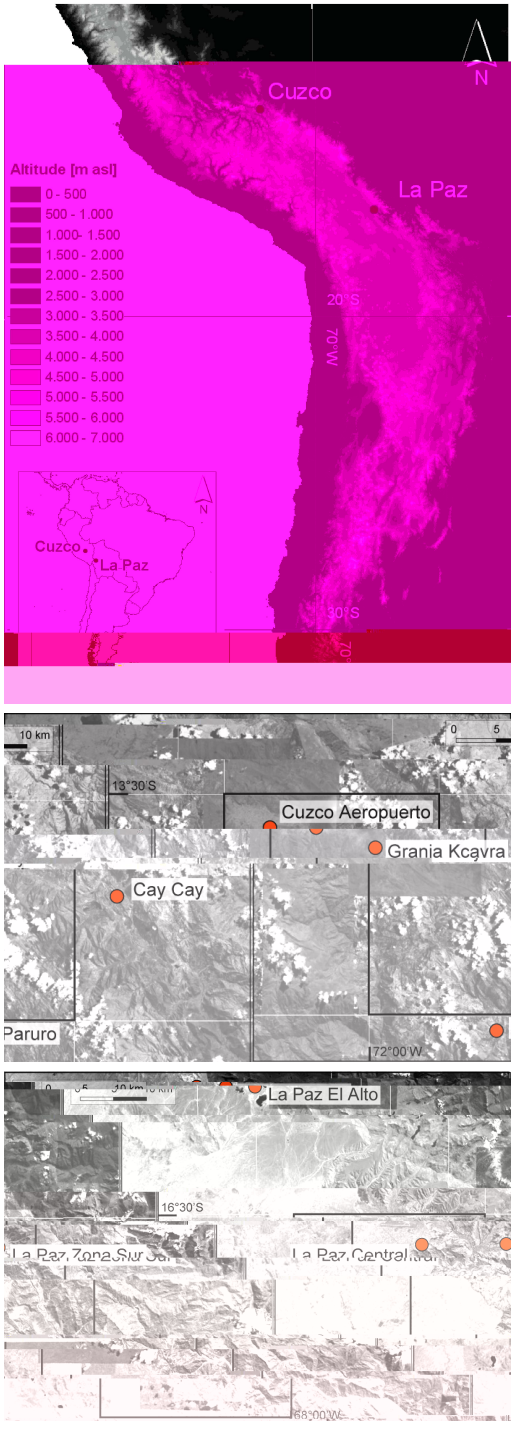


**Fig. 1.**

**(b)** **(c)**

**(b)** **(c)**

## 2 Investigation areas and data

### 2.1 Investigation areas

### 2.2 Data

#### 2.2.1 Ground Data

## 3 Uncertainties

#### 2.2.2 TMPA Data (TRMM 3B42 V6)

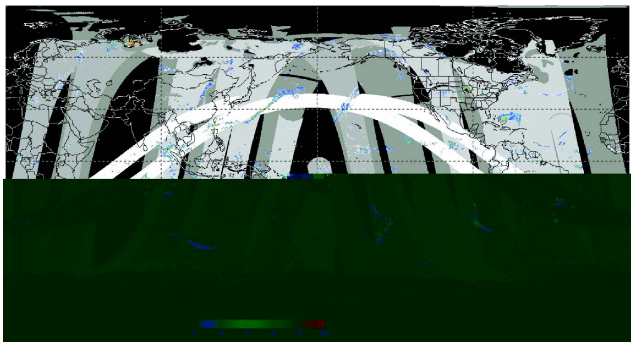

**Fig. 2.**

## 4 Verification methods

**Fig. 3.**

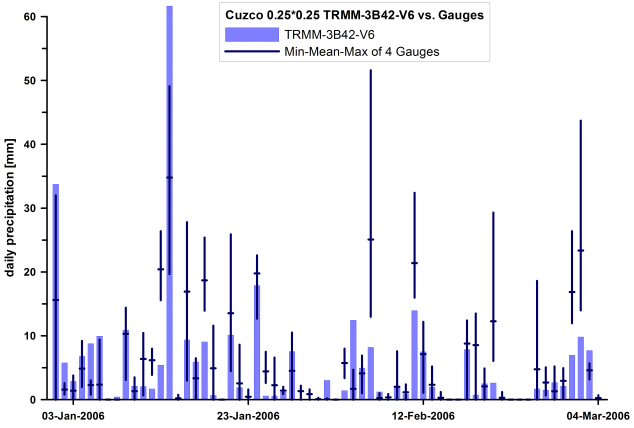


**Fig. 4.**

$$= \frac{}{n} \sum_{i=}^{n} (Z \qquad (x_i) - Z \qquad (x_i))$$

$Z$

$Z$

$$= \sqrt{\frac{}{n} \sum_{i=}^{n} (Z \qquad (x_i) - Z \qquad (x_i))}$$

$r_{xy}$

$$r_{zy} = \frac{Cov(X,Y)}{\sqrt{Var(X)} \circ \sqrt{Var(Y)}}$$

–

° × °

° × ° ° × °

° ×

## 5 Results of TMPA data verification

### 5.1 Verification at daily, 0.25° × 0.25° grid resolution

° × °

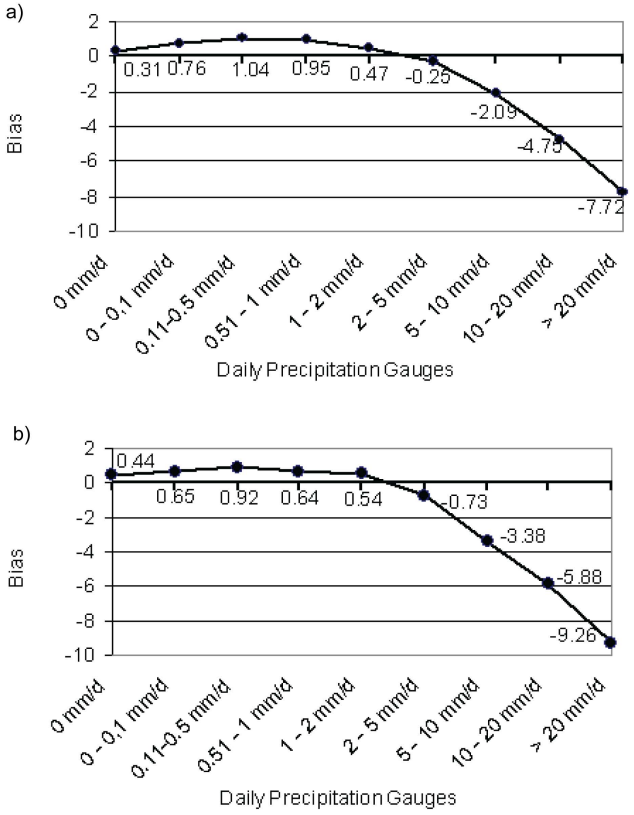


**Fig. 5.**

## 5.2 Verification on different temporal resolutions

## 5.3 Verification on different spatial resolutions

## 5.4 Verification of hourly values

**Table 1.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
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| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

$r < \quad . \quad n =$ $\sim$

### 5.5 Daily TMPA estimates vs. interpolated precipitation data and blending

$r \quad = \quad .$

$r <\sim \quad . \qquad <\sim$

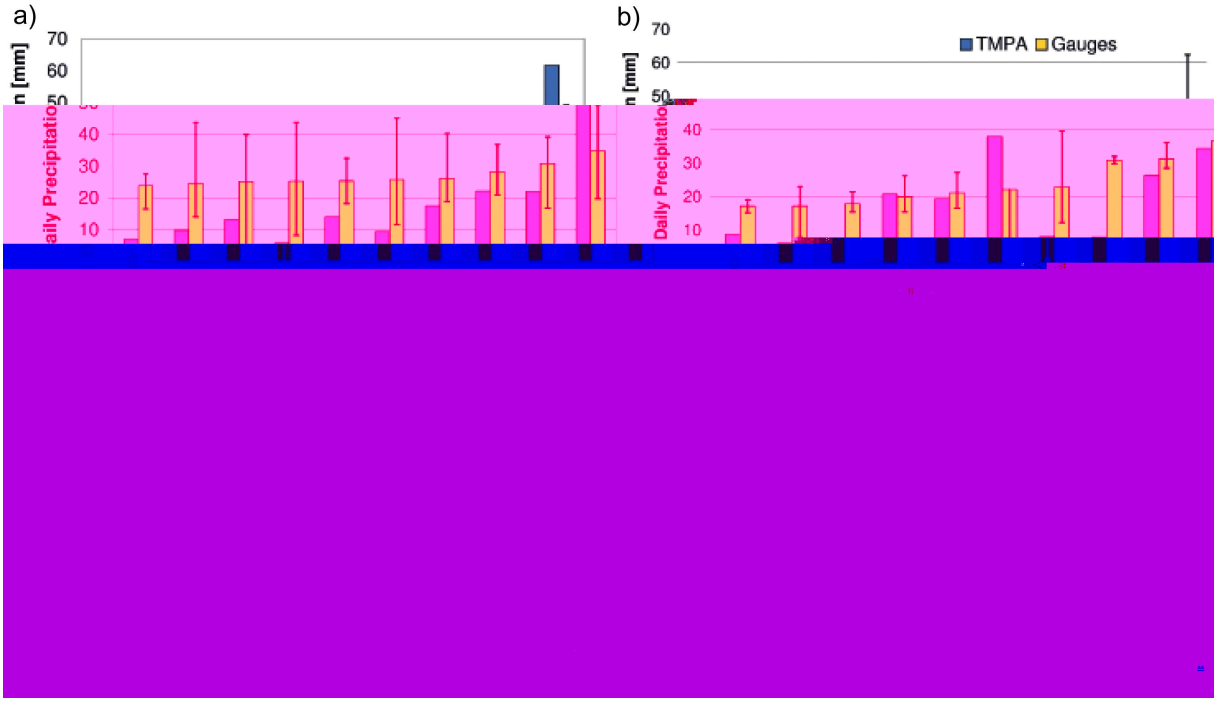


**Fig. 6.**

**(b)** **(c)** **(d)** **(a)**

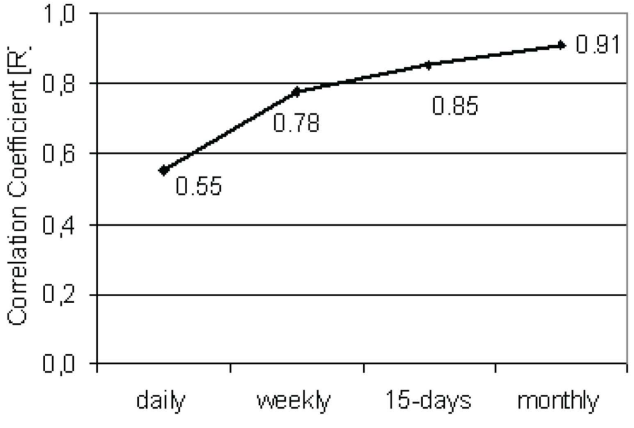


**Fig. 7.**

° × °

## 6 Discussion

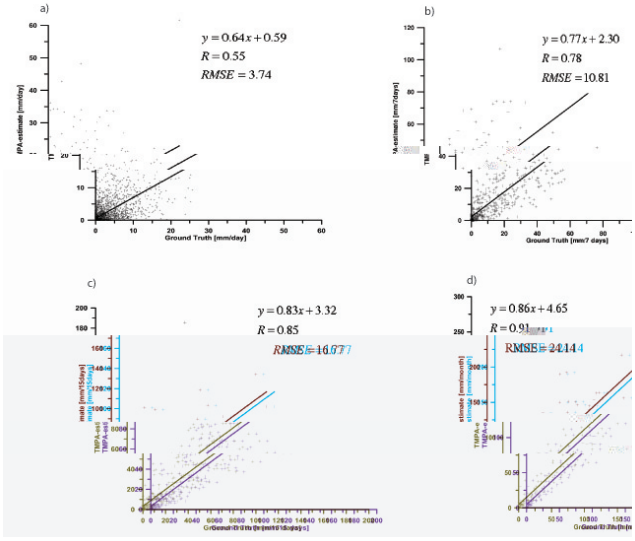


**Fig. 8.**

**(a)** **(b)** **(c)** **(d)**

° × °

**Table 2.**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | *r* | | *r* | | *r* | *r* |
| | | | | | | | |
| | | | | | | | |
| | | | | | | |

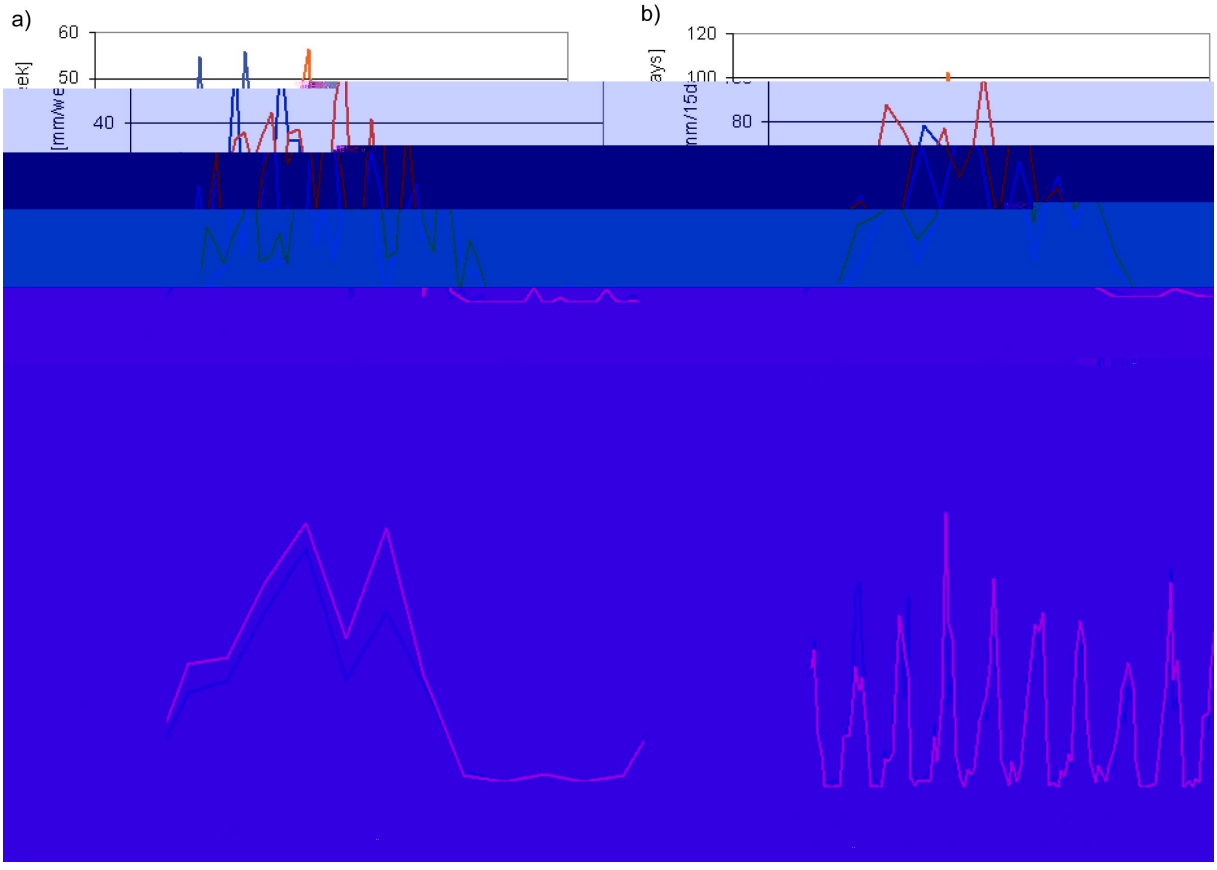


**Fig. 9.** **(a)** **(b)** **(c)** **(d)**

$r =$ .

$r =$ .

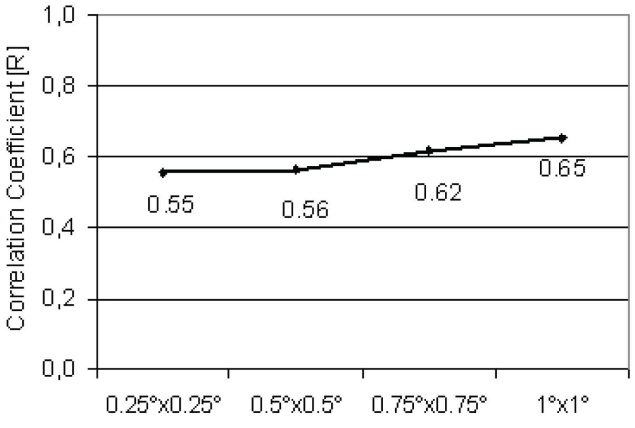


**Fig. 10.**

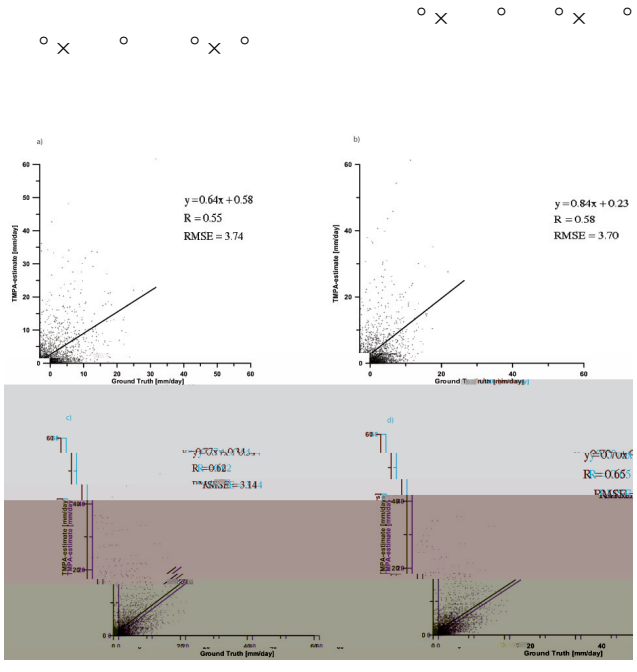


**Fig. 11.**

**Fig. 12.**

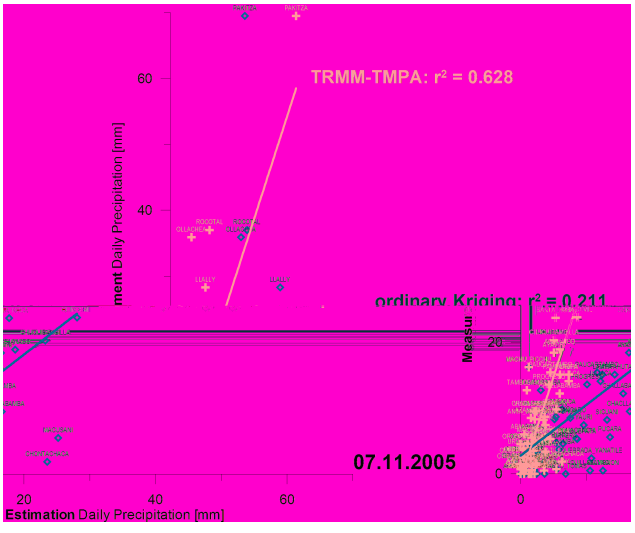


**Fig. 13.**

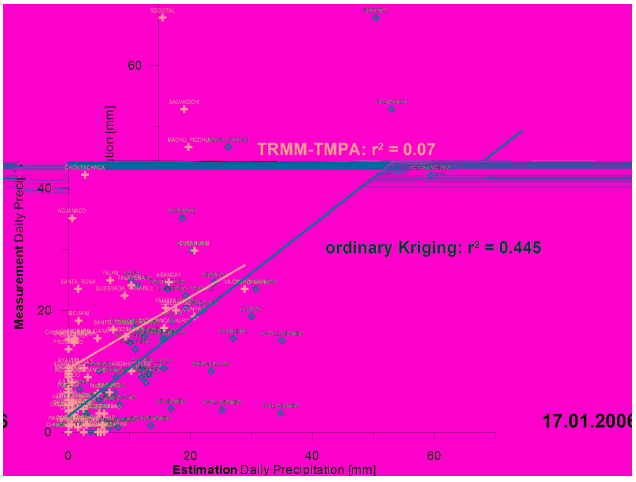


**Fig. 14.**

## 7 Conclusions and outlook

*Acknowledgements.*

**Fig. 15.**

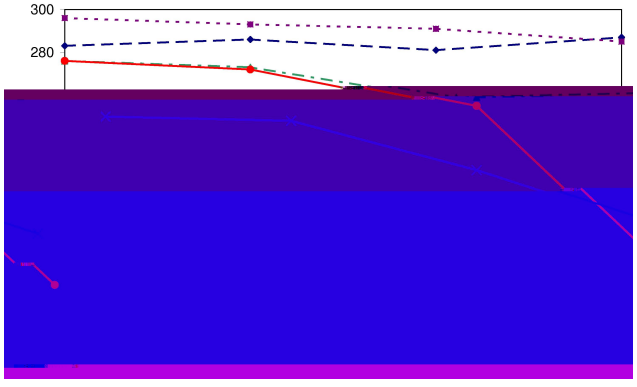


**Fig. 16.**

## References