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Supplementary Information

Evaluation of Six High-Resolution Satellite and Ground-Based Precipitation Products over Malaysia. *Remote Sens.* 2015, *7*, 1504–1528.

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The equations of coefficient of determination (R^2, Equation (1)), root mean square error (RMSE, Equation (2)), mean error (ME, Equation (3)), mean absolute error (MAE, Equation (4)), and relative bias (RB, Equation (5)) are shown below:

$$R^2 = \frac{\sum_{i=1}^{n}(G_i - \overline{G})(S_i - \overline{S})}{\sqrt{\sum_{i=1}^{n}(G_i - \overline{G})^2}.\sqrt{\sum_{i=1}^{n}(S_i - \overline{S})^2}} \quad (1)$$

$$RMSE = \sqrt{\frac{\sum_{i=1}^{n}(S_i - G_i)^2}{n}} \quad (2)$$

$$ME = \frac{\sum_{i=1}^{n}(S_i - G_i)}{n} \quad (3)$$

$$MAE = \frac{\sum_{i=1}^{n}\left|S_i - G_i\right|}{n} \quad (4)$$

$$RB = \frac{\sum_{i=1}^{n}(S_i - G_i)}{\sum_{i=1}^{n} G_i}(100), \quad (5)$$

where S and G are satellite/gridded and gauge precipitation, respectively, and n is the number of measurements.

The accuracy (ACC, Equation (6**)**), probability of detection (POD, Equation (7)), false alarm ratio (FAR, Equation (8)), critical success index (CSI, Equation (9)) and Heidke skill score (HSS, Equation (10)) are based on a contingency table (Table S1), according to the expressions shown below:

$$ACC = \frac{A + D}{n} \quad (6)$$

$$POD = \frac{A}{A + C} \quad (7)$$

$$FAR = \frac{B}{A + B} \quad (8)$$

$$CSI = \frac{A}{A + B + C} \quad (9)$$

$$HSS = \frac{2.(A.D - B.C)}{(A + C).(C + D) + (A + B).(B + D)}. \quad (10)$$

The 1 mm/day rainfall threshold was used to discriminate whether it is a rainy or no-rain day.

Table S1. Contingency table for comparing gauge and satellite precipitation estimate. The rainfall threshold is 1 mm. A = hits (event forecast to occur, and did occur); B = false alarm (event forecast to occur, but did not occur); C = misses (event forecast not to occur, but did occur); and D = correct negative (event forecast not to occur, and did not occur).

	Gauge ≥ Threshold	**Gauge < Threshold**
Satellite ≥ threshold	A	B
Satellite < threshold	C	D