

Comparison of TRMM V7 3A25 with Singapore rain-gage network data

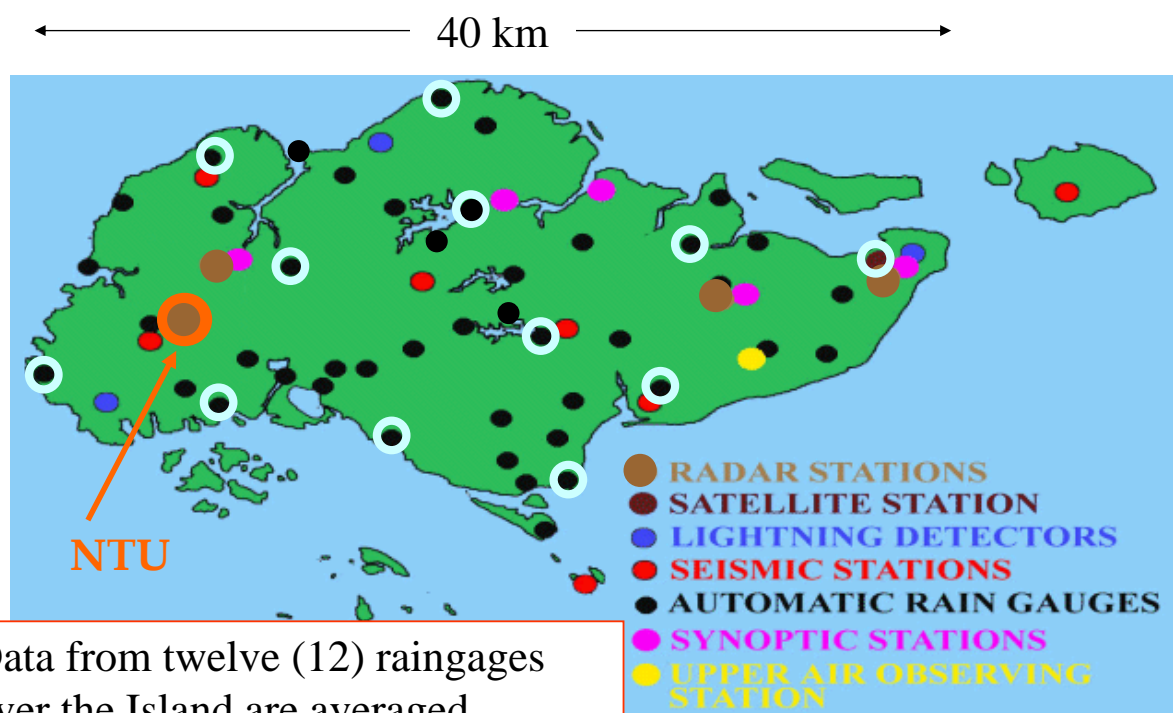
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- TRMM version 7 (OAT) 3A25 G1 monthly rainfall shows good correlation with **Singapore** MSS rain gage network derived one with some underestimation (~11~18%).

1

Singapore as a TRMM GV site



Data from twelve (12) raingages over the Island are averaged.

● RG used for TRMM comparison

2

3A25G1 and 3B43 grid areas for Singapore



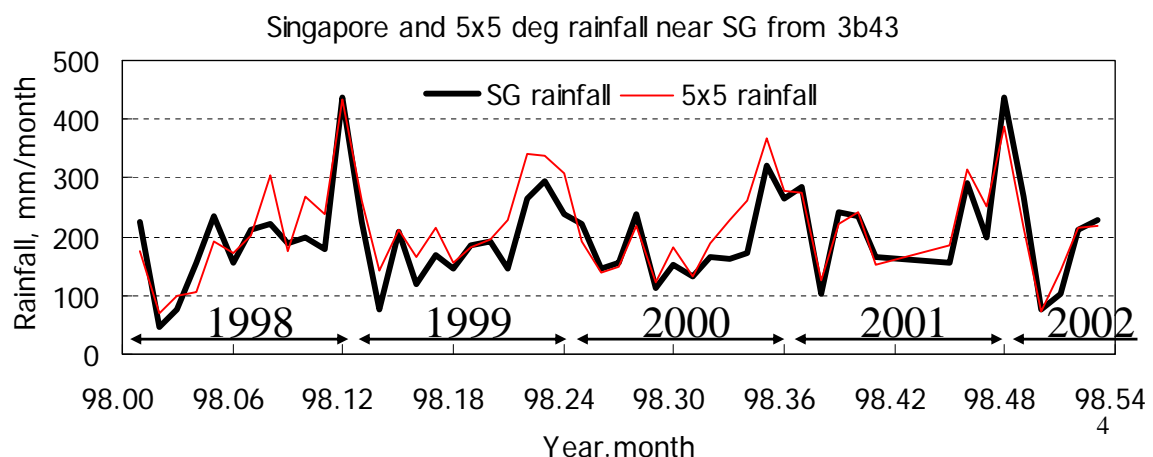
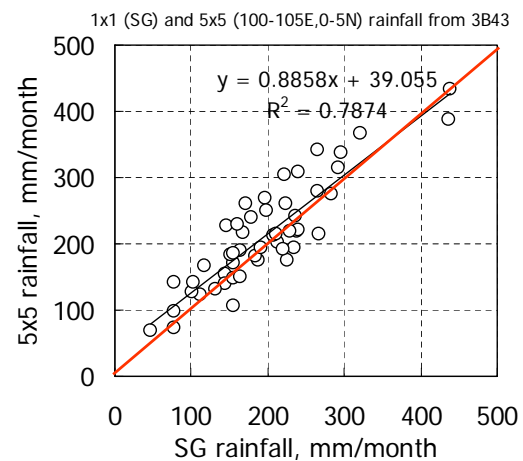
3

3B43(v5) derived rainfall near Singapore

SG (103-104°E, 1-2°N)

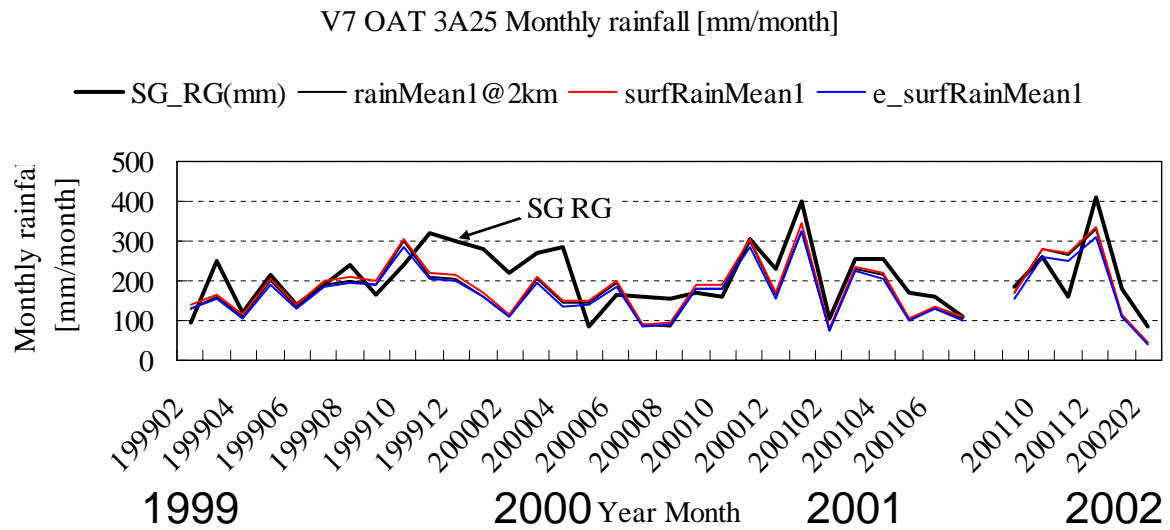
5°×5° (100-105°E, 0-5°N)

This suggests that 3A25G1 (5°×5°) can be compared with SG rain gauge data.



4

Comparison of SG RG and 3A25G1 monthly rainfalls (V7 OAT)



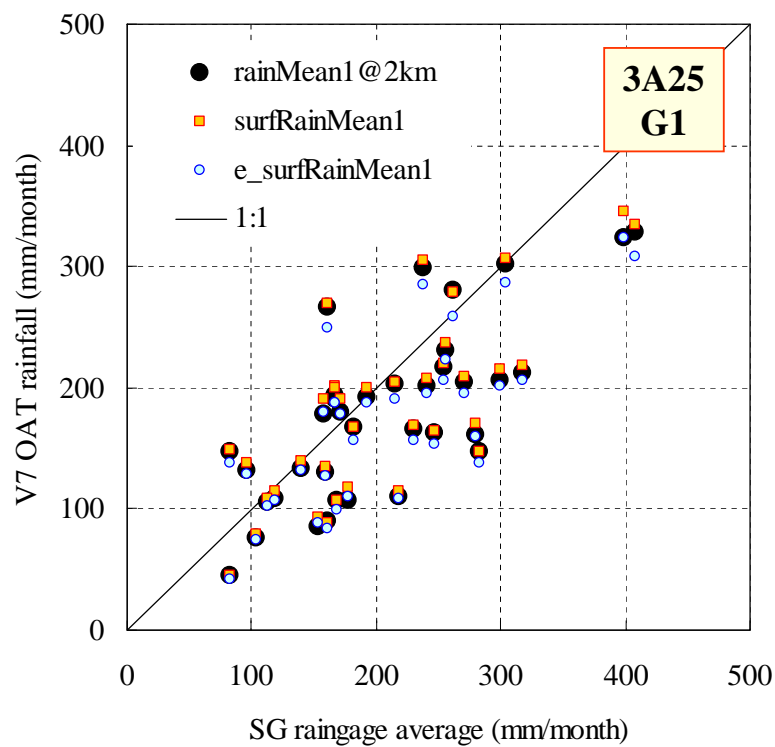
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Mean monthly rainfalls and ratio with SG RG Feb. 1999 – Feb. 2002

SG Rainage average	rainMean1 @ 2km	surfRainMean 1	E_surfRainMean1	V6rainMean1 @2km
208.0 mm	177.4 mm	182.7 mm	170.8 mm	169.2 mm
1	0.85	0.89	0.82	0.81

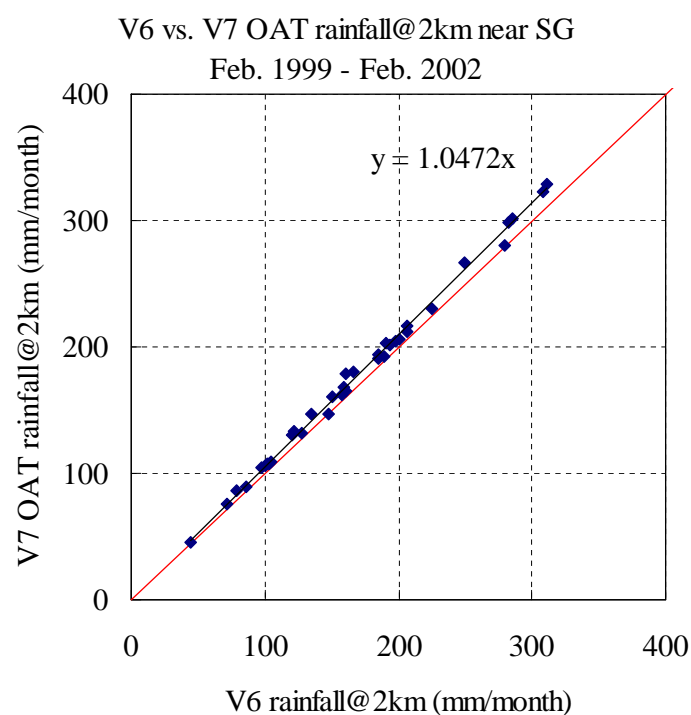
6

Correlations between SG gage with PR V7 OAT 3A25 between Feb. 1999 and Feb. 2002 (excluding Aug. 2001)



7

Comparison of PR V6 vs. V7 OAT near SG



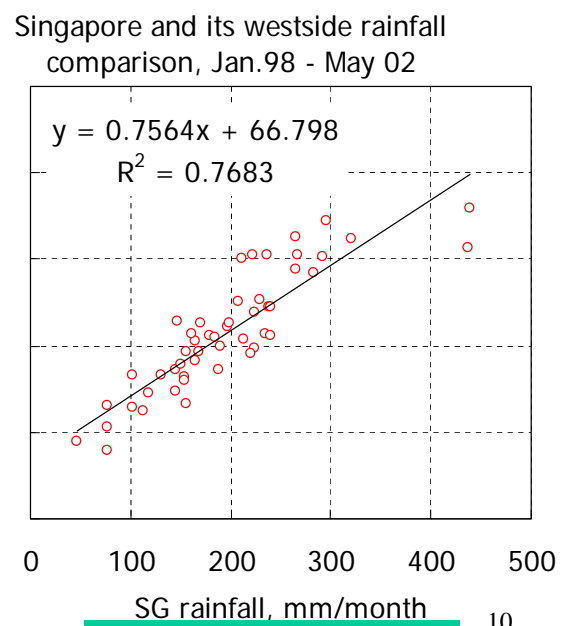
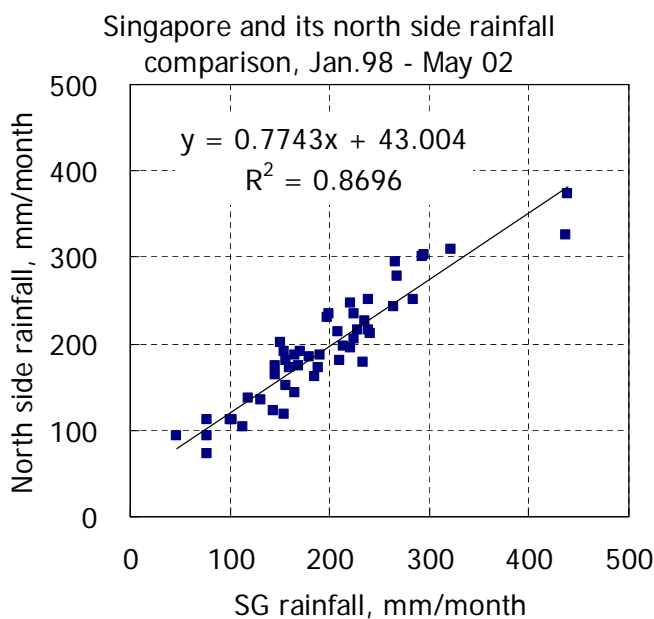
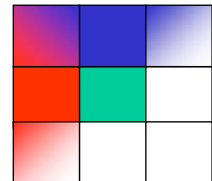
8

Thank You

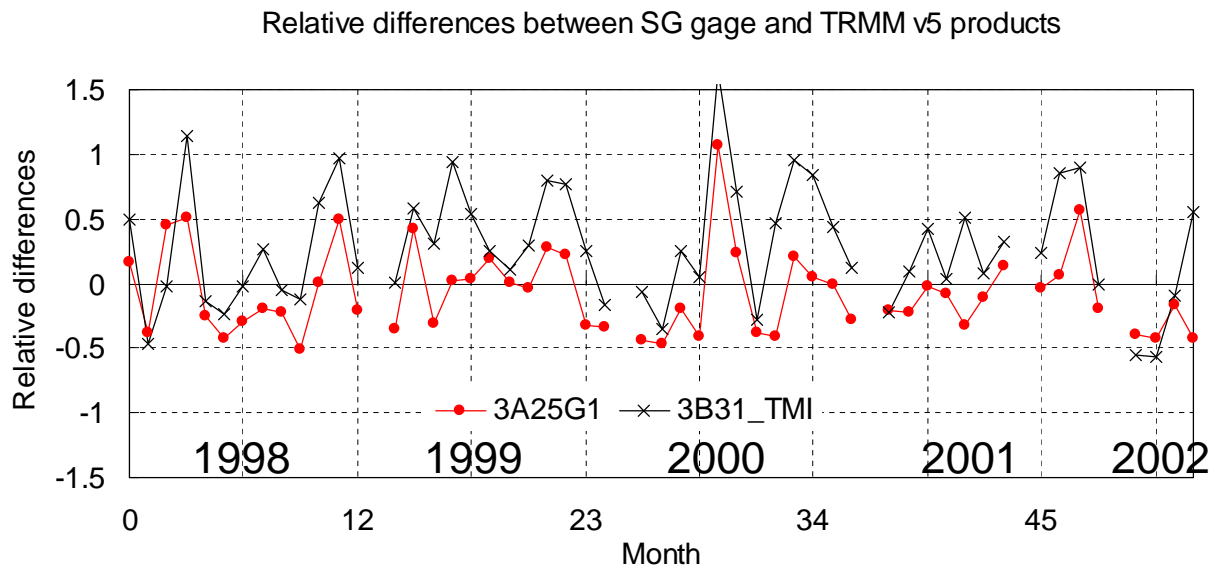
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3B43 rainfall at Singapore and North, West regions

3B43 estimates slightly smaller rainfall in rainy, and larger rainfall in dry seasons in north-west regions.



Relative differences between SG RG and 3A25G1 and 3B31 monthly rainfalls (Ver.5)



Good correlation is found between “errors” of PR and
TMI rainfall estimates. --> Sampling error dominant? ₁₁