# Potential of GPM IMERG precipitation estimates to monitor natural disaster triggers in urban areas: the case of Rio de Janeiro, Brazil

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**Introduction**

This document contains Figures S1 to S4, showing the spatial distribution of the probability of detection (POD) and false alarm rate (FAR) for normalized rainfall, rootzone soil moisture (RZSM) and total runoff (TR) over the city of Rio de Janeiro at percentile thresholds of ≥80%, ≥90%, ≥95% and ≥98%.
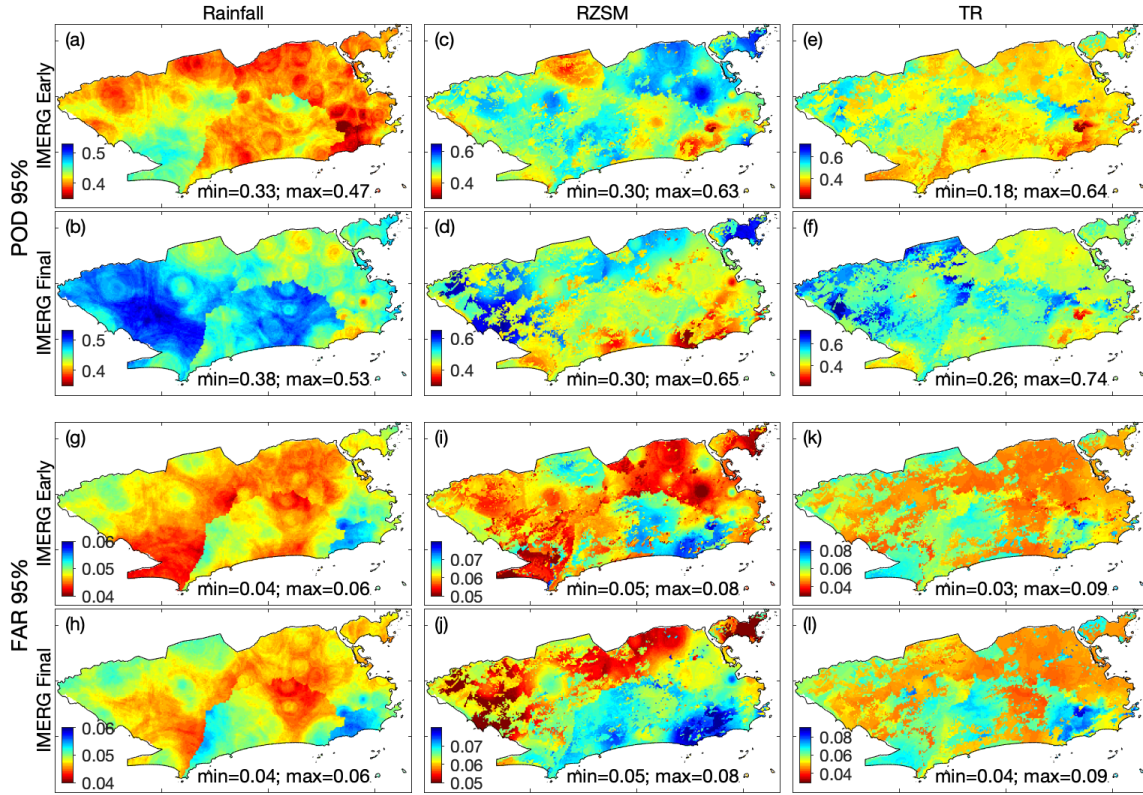
**Figure S1:** POD and FAR maps for rainfall, RZSM and TR events derived from experiments with IMERG Early and IMERG Final at the percentile threshold ≥80% chance of occurrence.
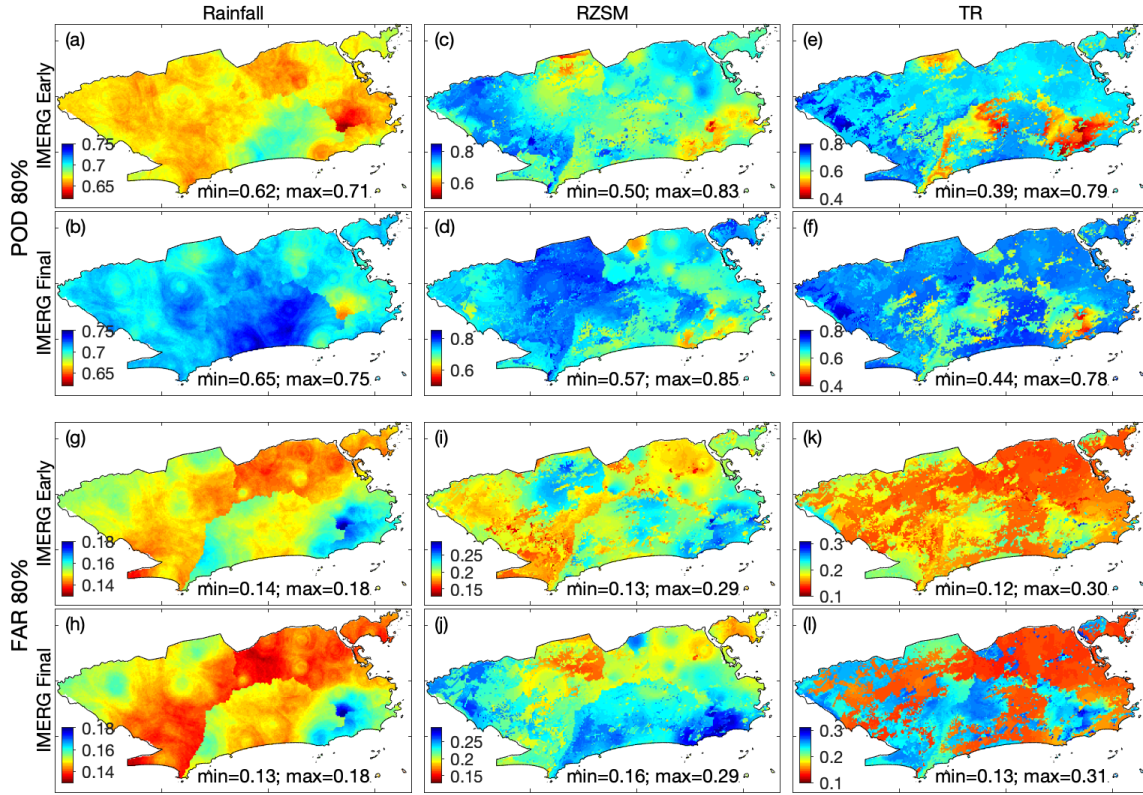
**Figure S2:** POD and FAR maps for rainfall, RZSM and TR events derived from experiments with IMERG Early and IMERG Final at the percentile threshold ≥90% chance of occurrence.
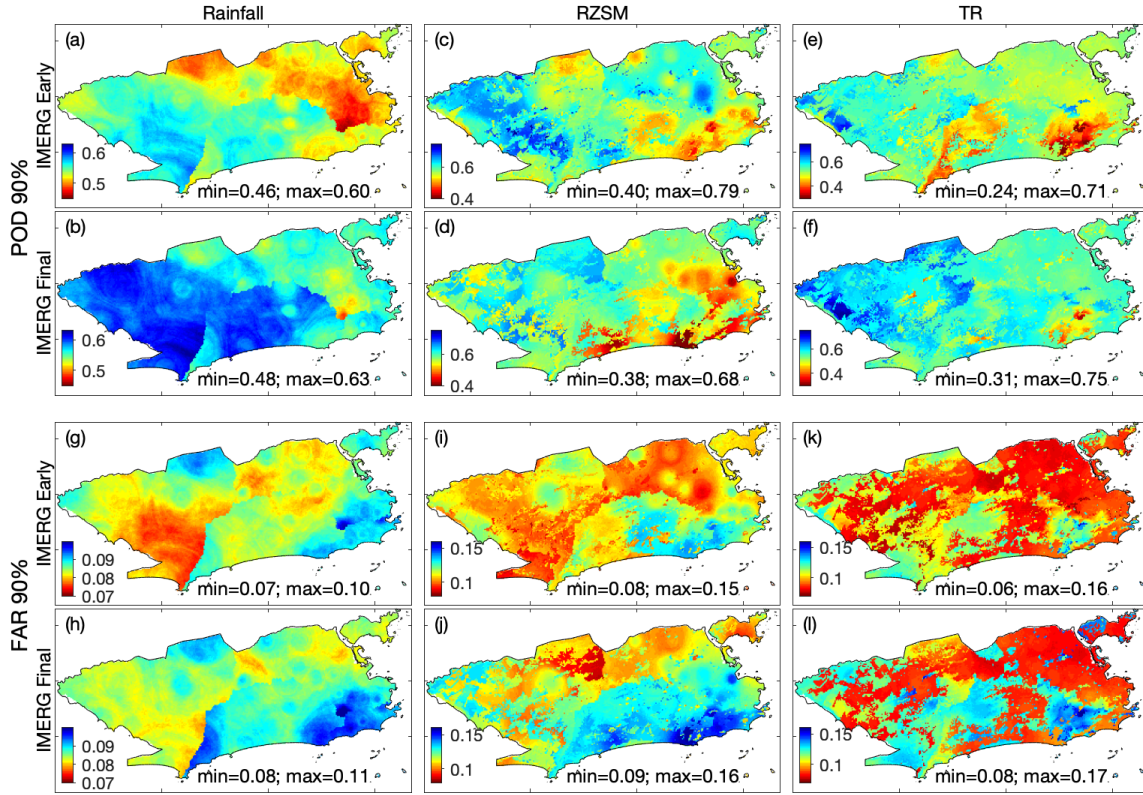
**Figure S3:** POD and FAR maps for rainfall, RZSM and TR events derived from experiments with IMERG Early and IMERG Final at the percentile threshold ≥95% chance of occurrence.

**Figure S4:** POD and FAR maps for rainfall, RZSM and TR events derived from experiments with IMERG Early and IMERG Final at the percentile threshold ≥98% chance of occurrence.