



Potential Synergies between TROPICS and GOES-R

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TROPICS and GOES-R Rainfall

- Because of its strict latency requirement (< 5 min), the GOES-R Rainfall Rate algorithm is based on IR (ABI) data but uses PMW rain rates as a calibration data source
 - The goal is to capture as much of the information content of PMW data as possible using IR data
 - Calibration is updated as new PMW rain rates become available (even if longer latency)
- Additional MW rain rates from TROPICS should lead to better GOES-R rain rate estimates in tropical regions



TROPICS and GOES-R Cloud Properties



- Coincident MW cloud microphysical retrievals will be used to improve the ABI microphysical retrievals for:
 - Improved cloud water estimates (fundamental climate parameter) from GOES-16/17 and VIIRS
 - Improved estimates of warm-phase precipitation / drizzle (synergy with QPE also)
 - Improved aircraft icing threats