



UIFCW26 Virtual Poster Slam

Speaker Profile

UIFCW26 Virtual Poster Slam | UFS Applications – Global Workflow (S2S)

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Presentation

Evaluation of Subseasonal Forecast Skill in a Tropical Island Environment: Implications for Forecasting Capability over East Nusa Tenggara, Indonesia

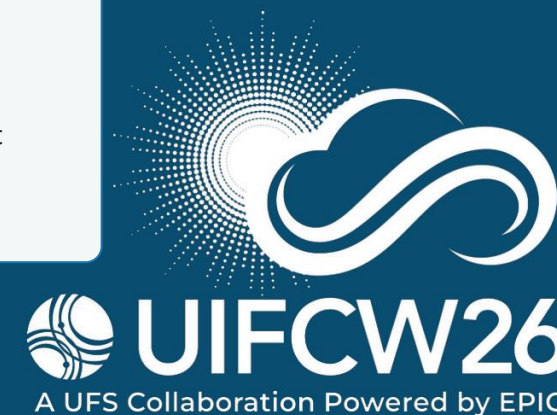
Virtual Poster Slam

Monday, July 20, 2026
11:00 AM EDT | 23:00 WITA

Format: one-slide virtual poster, 4-minute elevator speech

Core message

Anomaly-based verification reveals the strongest and most spatially coherent rainfall skill over East Nusa Tenggara at Weeks 2–3 during January–February.



1. Why East Nusa Tenggara?

Drought-prone tropical island region with strong strong rainfall gradients. Operational need: actionable actionable rainfall guidance beyond the weather weather range. Anomalies isolate subseasonal variability from the dominant seasonal cycle.



Study area: East Nusa Tenggara (NTT), Indonesia

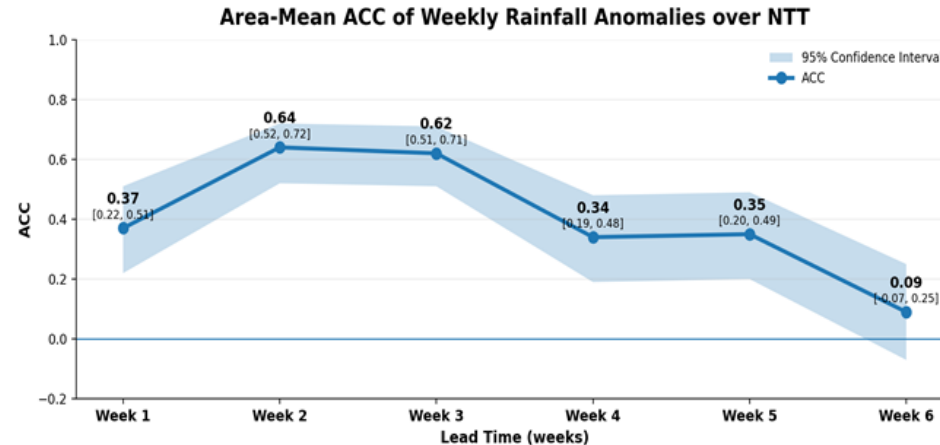
2. Data & verification framework

ECMWF S2S precipitation reforecasts, 2003–2020. Ensemble mean; January–February initializations. ERA5 reanalysis as the reference dataset. Weekly rainfall anomalies for lead weeks 1–6. Skill evaluated using ACC with 95% confidence intervals.

ERA5 is used as a reference dataset, not as a forecast model.

3. Main result: predictability horizon

Area-mean ACC peaks at Weeks 2–3 and declines rapidly afterward.



Peak practical skill window: Weeks 2–3

Skill remains statistically significant but substantially weaker at Weeks 4–5; Week 6 is not statistically significant.

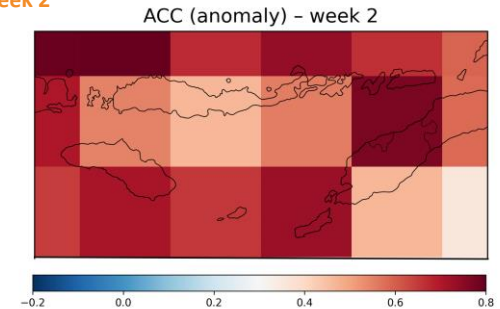
4. Forecasting capability implications

Anomaly-based verification isolates practical subseasonal skill from the seasonal seasonal cycle. Regional evaluation helps identify when global forecasts may may become operationally useful. The framework could also be applied to UFS/SFS to UFS/SFS regional verification in tropical island environments.

5. Spatial skill pattern

Strongest and most coherent positive skill occurs during Weeks 2–3.

Week 2



Week 3

