

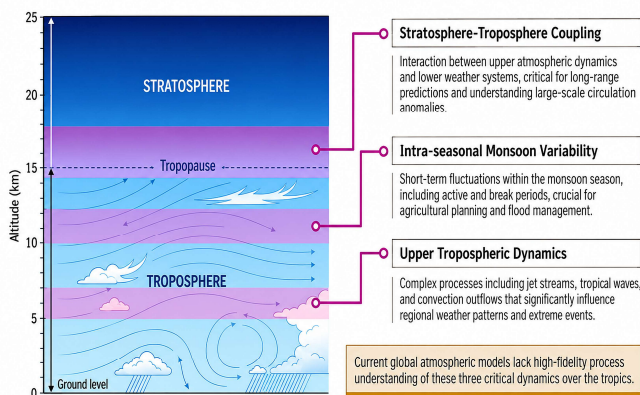
From Process Understanding to People: APARC Science for Global South Resilience

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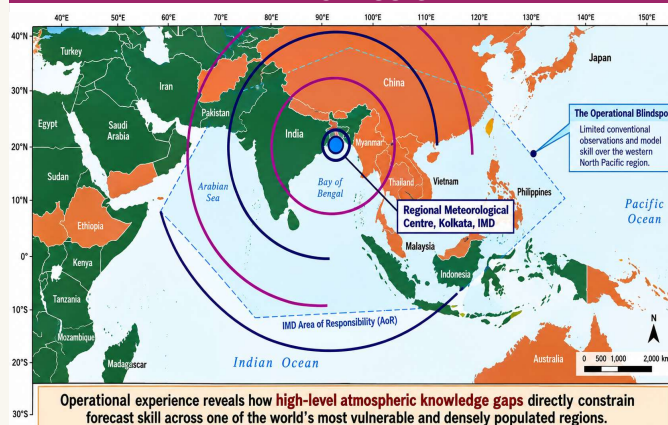
CORE MESSAGE | Process-level atmospheric science is a foundation for equitable, locally useful climate services.

THE RISK IS UNEQUAL



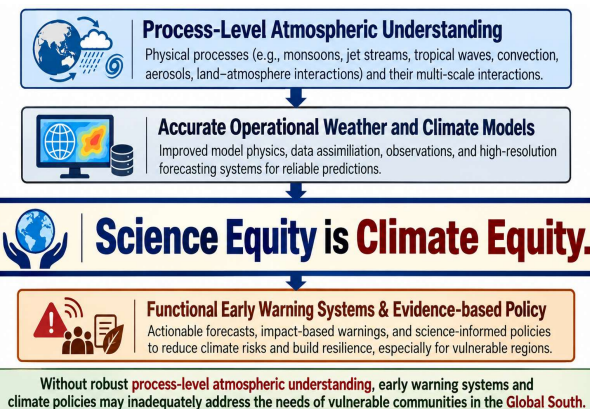
The Global South faces a disproportionate climate-disaster burden despite comparatively low cumulative emissions.

THE PROCESS GAP



Stratosphere-troposphere coupling, intra-seasonal monsoon variability and upper-tropospheric dynamics remain critical research priorities.

FROM GAP TO IMPACT



Scientific knowledge gaps can constrain extended-range and medium-range forecast skill, with consequences for drought and cyclone preparedness.

A SHIFT IN SCIENTIFIC PRACTICE

The Lighthouse Integration Gear System

From Process Understanding to Actionable Climate Information

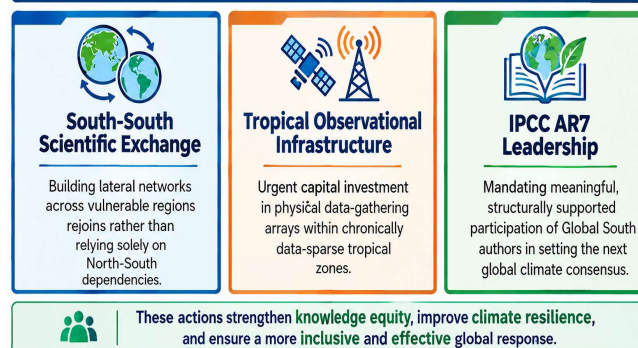


Move from extractive research towards co-production: shared agenda-setting, bidirectional data exchange and locally relevant climate information.

CONNECT RESEARCH TO APPLICATION

Action Framework for APARC & The Global Community

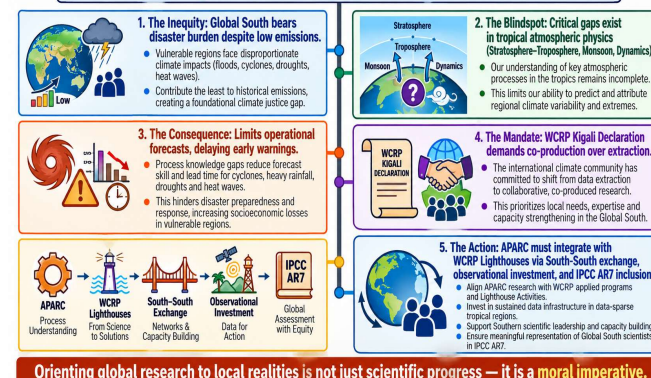
Science · Collaboration · Resilience · A Sustainable Future



APARC process understanding can help connect atmospheric science with WCRP Lighthouse activities and locally co-produced climate information.

THREE PRIORITIES FOR ACTION

Executive Synthesis: Bridging Global Science and Local Action



Strengthen South-South scientific exchange, invest in tropical observational infrastructure and support meaningful Global South participation in IPCC AR7.

SCIENCE EQUITY IS CLIMATE EQUITY • Co-produce knowledge • Improve observations • Strengthen regional leadership