



A simple technique to correct ECMWF SYS3 bias on West African Monsoon rainfall

Laura Feudale, Adrian Tompkins, and Fred Kucharski

The Abdus Salam International Centre for Theoretical Physics, Earth System Physics Section, Trieste, Italy (feudale@ictp.it)

Despite the recent advances in seasonal forecast systems, the prediction of African monsoon rainfall is still a challenging problem. The ECMWF System 3 operational seasonal forecast system (SYS3) is examined at a lead time of 2-3 months in a 49-yr hindcast dataset for the West Africa region. During the main monsoon season, the months from July to September, SYS3 reproduce the progression of the West Africa monsoon with the most evident difference of a southerly shift of the tropical rain band during each monsoon season. A simple technique based on EOF analysis is applied to correct this systematic bias.