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Title: Skill score of seasonal precipitation forecasts over South America from Eta Model
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Abstract:
This work shows the skill score of seasonal precipitation forecasts from the Eta Model. The model was configured with 40-km horizontal resolution and 38 layers, and covers a domain which includes South America, most of Central America and part of Atlantic and Pacific Oceans. The forecast length was 4.5 months. The initial and lateral conditions were provided by CPTEC atmospheric general circulation model (AGCM) CPTEC and coupled ocean-atmosphere general circulation model (CGCM) updated every 6 hours. Anomaly persisted sea surface temperature was daily updated for Eta Model nested in AGCM and for integrations using CGCM conditions the sea surface temperature was updated daily using forecasted sea surface temperature provided by CGCM. The seasonal hindcasts were run in the period 2001-2010. The skill scores are investigared for Northeast of Brazil, that shows great yearly precipitation variability and with long drought periods. Several regional and global models have shown seasonal forecast skill near 0.7 over the extreme north and east of the NorhHteast Region of Brazil. Similar analyses are carried out with the Eta Model wich shows a skill score similar to other regional and global models during the rainy season.
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