Name: Angelica Giarolla
angelica.giarolla@inpe.br
Instituto Nacional de Pesquisas Espaciais - INPE
Instituto Nacional de Pesquisas Espaciais (INPE-CCST), Av. dos Astronautas, 1758, São José dos Campos-SP, Brazil, 12227-010, phone 55 (12) 3186 6825.
Country: Brazil

Title: Assessment of the corn yield from seasonal forecasts generated by the Eta- AmOc applied to CPT/IRI

Additional authors: Chou S. Chan (2), Josiane F. B. Fonseca (2), Jorge L. Gomes (2),  Priscila S. Tavares (1), Gracielle Siqueira (2), Diana C. Giraldo (3,4)
Additional Affiliations: (1) Instituto Nacional de Pesquisas Espaciais (INPE-CCST), Av. dos Astronautas, 1758, São José dos Campos-SP, Brazil, 12227-010, phone 55 (12) 3186 6825, (2) Instituto Nacional de Pesquisas Espaciais (INPE-CPTEC), Rod. Presidente Dutra, km 39, Cachoeira Paulista-SP, 12630-000, Brazil, 55 (12) 3186 8400, (3) Centro Internacional de Agricultura Tropical (CIAT), Km 17 Recta Cali <96> Palmira, Colombia, (4) Centro Internacional de la Papa (CIP), Av. La Molina 1895, La Molina, Lima 12, Peru

Abstract:

 Seasonal forecasts in recent years are increasingly the target of interest of farmers, planners and decision makers, since information in advance generated with a good level of confidence can promote improvements in the techniques employed in agricultural planning. When applied to agriculture, the climate seasonal forecast allows farmers to select crops according to the water needs during the crops growth cycle. This research, within the context of the project CCAFS/CIAT/CGIAR, intended to propose a methodology that allows the use of seasonal forecasts in the agricultural sector. Seasonal forecasts (up to 4 months in advance) were associated with corn yield for 21 localities in Colombia, and a regional model named as &quot;Eta-AmOc&quot;, with its three ensembles - 13, 15 and 17, respectively, was considered in the analyses.  The Climate Predictability Tool (CPT) developed by IRI/Columbia University was used to perform statistical analyzes between seasonal forecasts and maize yield. The results showed a strong correlation of the seasonal variables - temperature at 2 meters, surface temperature , solar radiation , relative humidity and rainfall extracted from the Eta-AmOc  and for the periods MAMJ (March-June) and SOND (September- December), both during the maize cycle in this country. The maize crop was considered as a preliminary study, however, we recommend applying the methodology for a different crop in order to test the method in other environmental conditions.
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