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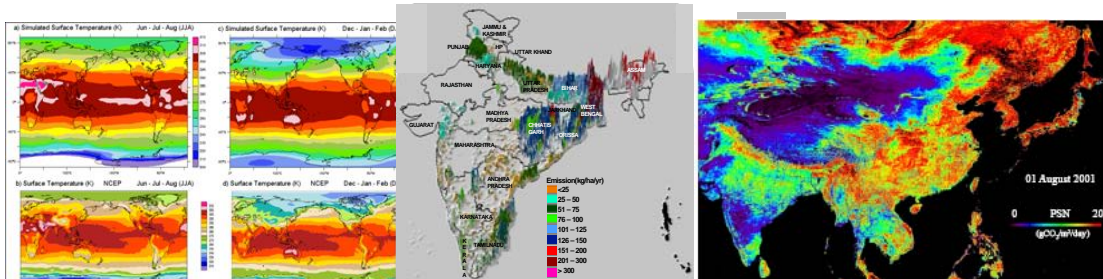
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Space Applications Centre (ISRO), Ahmedabad, India
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Sushma Panigrahy, Shibendu Shankar Ray, Jai Singh Parihar

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INTRODUCTION

Climate change is one of the most important global environmental challenges, with implications for food production, water supply, health, energy, etc. The weather indicators of global change include increased global mean surface temperature; increased continental precipitation (Northern hemisphere), increased heavy precipitation events and increased frequency and severity of drought. Agriculture is an activity that is highly dependent upon weather and climate in order to produce the food and fibre necessary to sustain human life. According to the IPCC, crop productivity is projected to increase slightly at mid- to high latitudes for local mean temperature increase of up to 1-3°C depending on the crop, and then decrease beyond that in some regions. However, there has been conflicting reports regarding the effects of climate change on agriculture and its complexities have not been completely understood. As farmers are subjected to an increased frequency of extreme weather events and a changing climate, they will inevitably need to adapt their farming practices to these new conditions. In addition, changes in global supply and demand for crops will provide new challenges to farmers worldwide. It is thus timely and pertinent to have a workshop to discuss the impact of climate change on agriculture, especially to understand the role of earth observation data for studying climate change.

ICCA 2009 (International Workshop on Impact of Climate Change on Agriculture) is jointly organized by the ISPRS WG VIII/6, GEO Task AG 07 03 and the Indian Society of Remote Sensing and hosted by Space Applications Centre (ISRO) and Indian Society of Remote Sensing – Ahmedabad Chapter. ICCA 2009 aims at providing a forum to research scientists for exchanging ideas related to various themes such as climate variability & agriculture, impact assessment, mitigation and adaptation measures and use of EO data as input to climate models.