Consultancy Service for the Development of an Inundation, Flooding and Landslide National Risk Profile, Strategic Framework and Action Plans for Disaster Risk Management for the Republic of Mauritius

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Capacity and validation workshop

Swami Vivekananda International Convention Centre, Pailles, Mauritius, August 22-24, 2012

Climate risk analysis

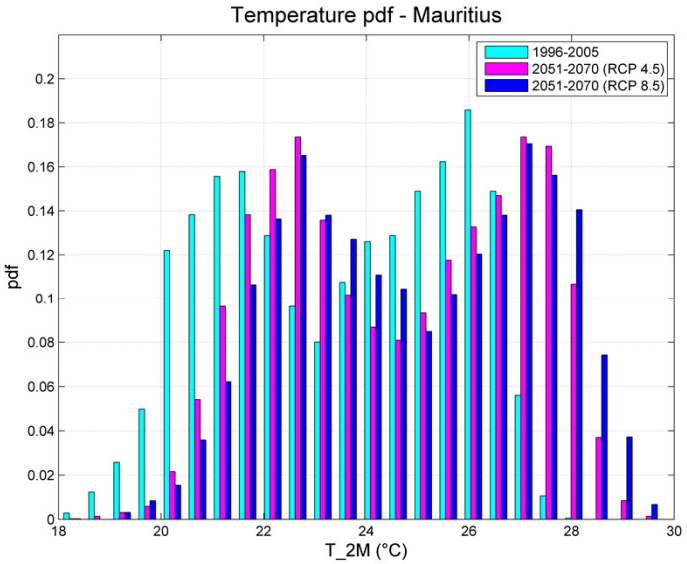
Temperature

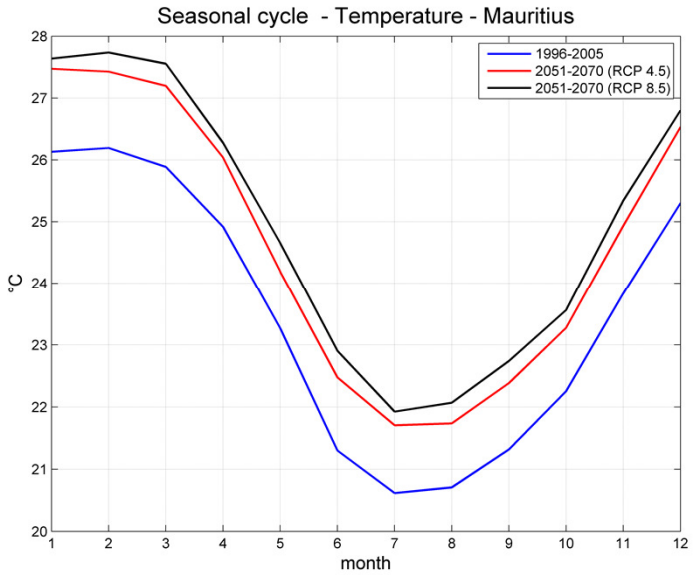
The IPCC 4th Assessment report (Solomon et al, 2007) projections for Indian Ocean and the medium emissions scenario SRES A1B scenario over the period 1980-1999 compared to 2080-2099 suggest about a 2.1˚ C increase in temperature (range between +1.4 and +3.8˚ C).

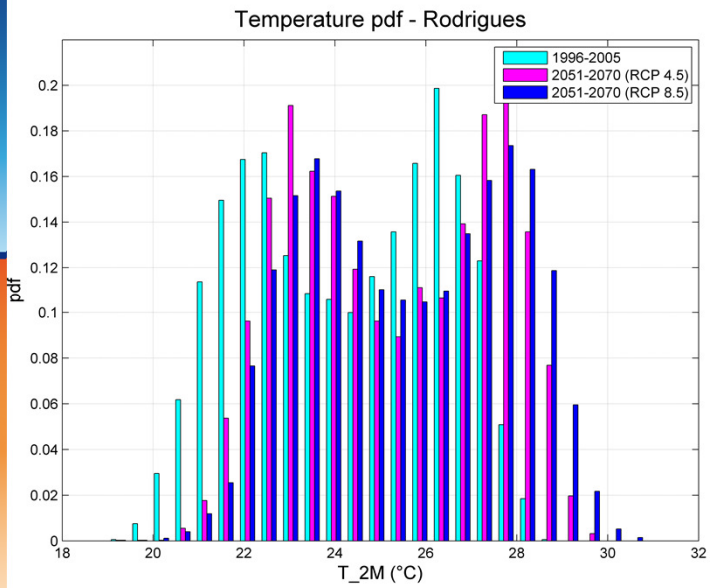
Precipitation

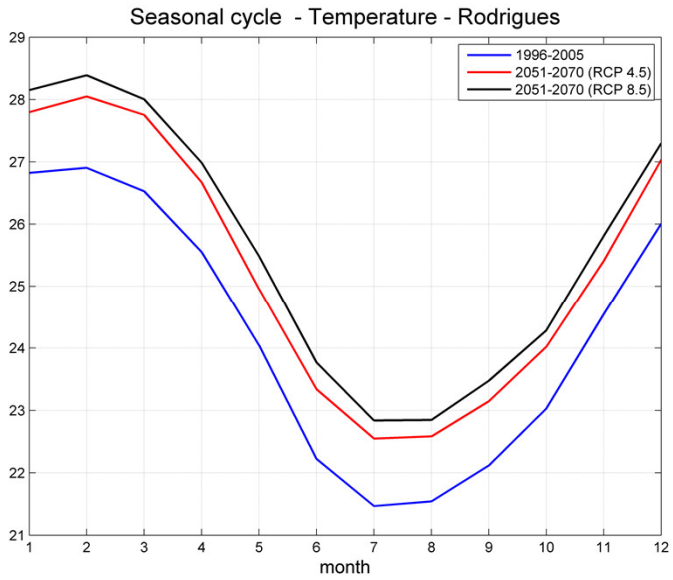
AR4 assumes a 4% increase in precipitation (range between -5% and +20%). Maunsell (2009) for the Australian territories the Cocos (Keeling) Islands and Christmas Island - rainfall changes are afflicted with uncertainty, open to different speculation except that the driest seasons may become drier Territories and that the wet season may become wetter on Christmas Island. Due to high uncertainty and contradictory evidence, the authors have not indicated any quantitative projections for precipitation

Main results - temperature





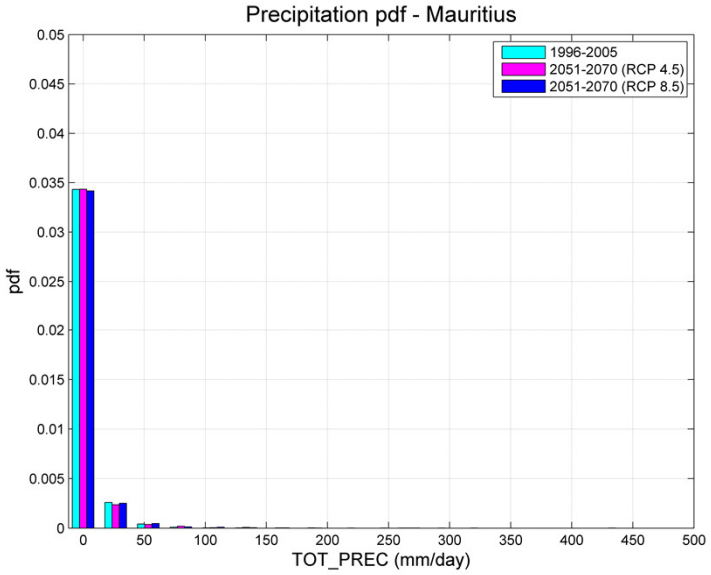


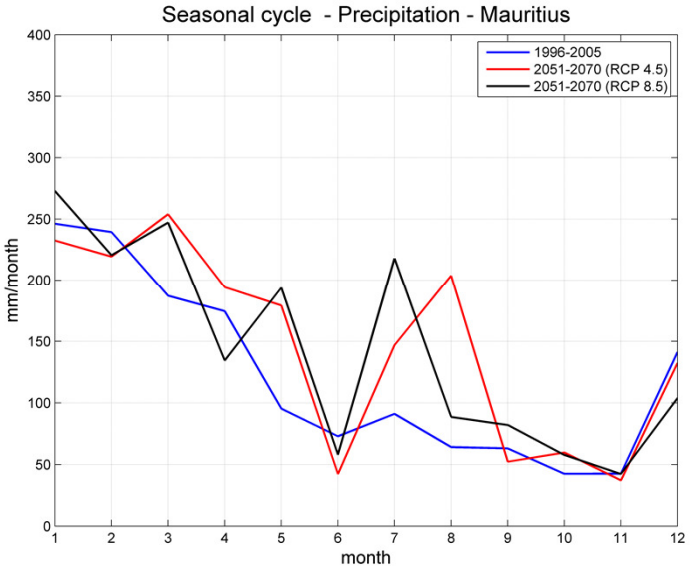


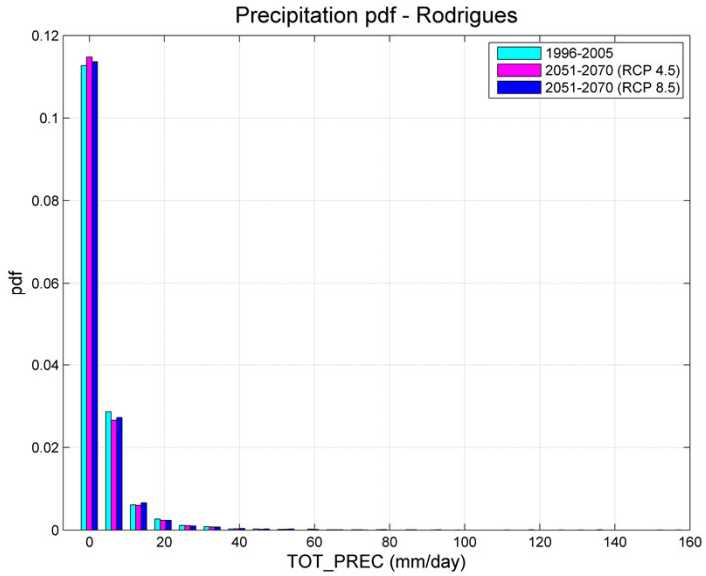
Increase of temperature in 2061-2070, compared to 1996-2005 for two RCP scenarios

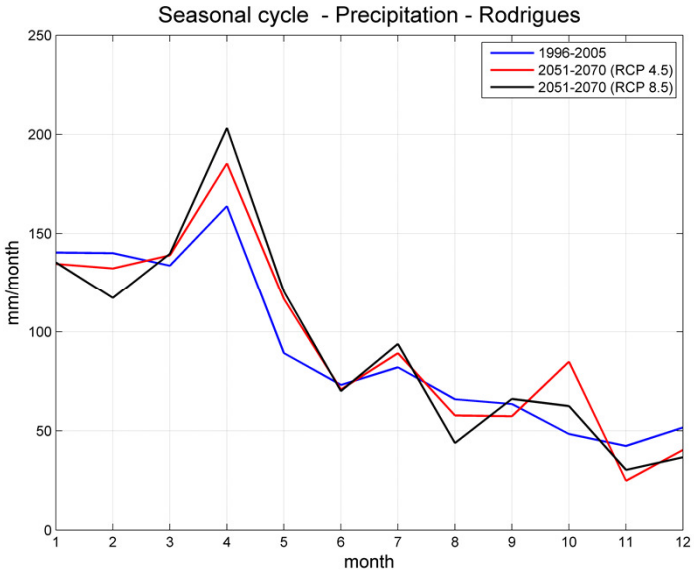
Temperature increase between 1 / 2 ° C on each month.

Main results - precipitation









2PDF don't show a significant variation compared to present. The seasonal cycles of the precipitation show a different distribution, especially over Mauritius island and the period from June to October, for the monthly precipitation.

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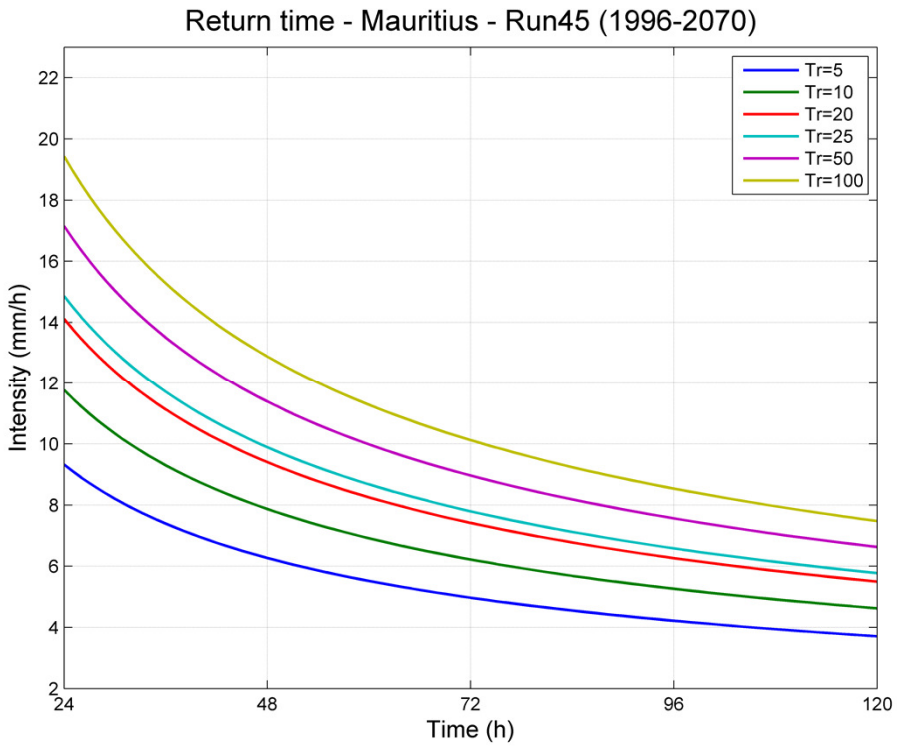
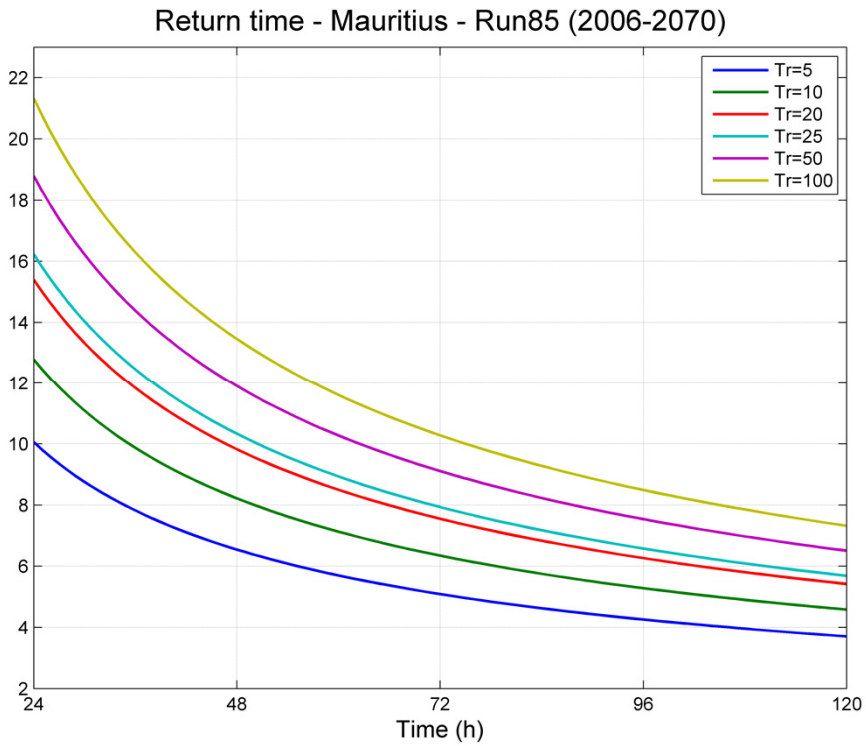
Rainfall Intensity-duration curves





Thank you for your attention