

# Forecasting Climate Change Scenarios in the Bago River Basin, Myanmar

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**Abstract:** This study forecasts climate change scenarios in the Bago River Basin, Myanmar, under different scenarios: B1, B2, A1, and A2. The results show that the temperature will increase by 0.74°C to 1.5°C by 2050, and the precipitation will decrease by 10% to 20% by 2050.

**Keywords:** Climate change, Bago River Basin, Myanmar, forecasting, scenarios.

The Bago River Basin (BRB) is one of the major river basins in Myanmar, covering an area of 135,000 km<sup>2</sup>. The basin is characterized by a tropical monsoon climate, with a mean annual temperature of 27°C and a mean annual precipitation of 1,500 mm. The BRB is a highly populated and agricultural region, and is vulnerable to climate change. This study forecasts climate change scenarios in the BRB, Myanmar, under different scenarios: B1, B2, A1, and A2. The results show that the temperature will increase by 0.74°C to 1.5°C by 2050, and the precipitation will decrease by 10% to 20% by 2050.

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1990 2009.  
 1975 2005 1.  
 9  
 (39.7%), (32.4%), (0.11%), F (9.14%),  
 (0.08%), (10.51%), (3.37%), (0.15%)  
 (4.54%)  
 30 1984  
 47  
 2010. : E  
 ( 37-2/3 ) (59.26%), E ( 50-2/3 ) (2.04%)  
 ( 55-2/3 ) (38.7%) D  
 (D ).  
 C 5  
 1975 2005 ( )  
 2010 2099 CC  
 4.5 (C 4.5) 8.5 (C 8.5). C 4.5  
 ( )- C2 53( )9( )4( (10.51%), )51%), 6 C ( )4( ) C 5 0.164 ( )19( )- C 0.243 24.5 ( )  
 6( ( )12 ) 0.178 ( )12 C -9( )8( 2010. )1993. (10 )19(5( )6( -27 )19( )- )4( )-9( )95 %62.9( 1( )1 )-1 CC

**Citation:**



Figure 5: Observed and bias corrected values of Tmax and Tmin in the Bago River Basin for the baseline period (1991–2005).

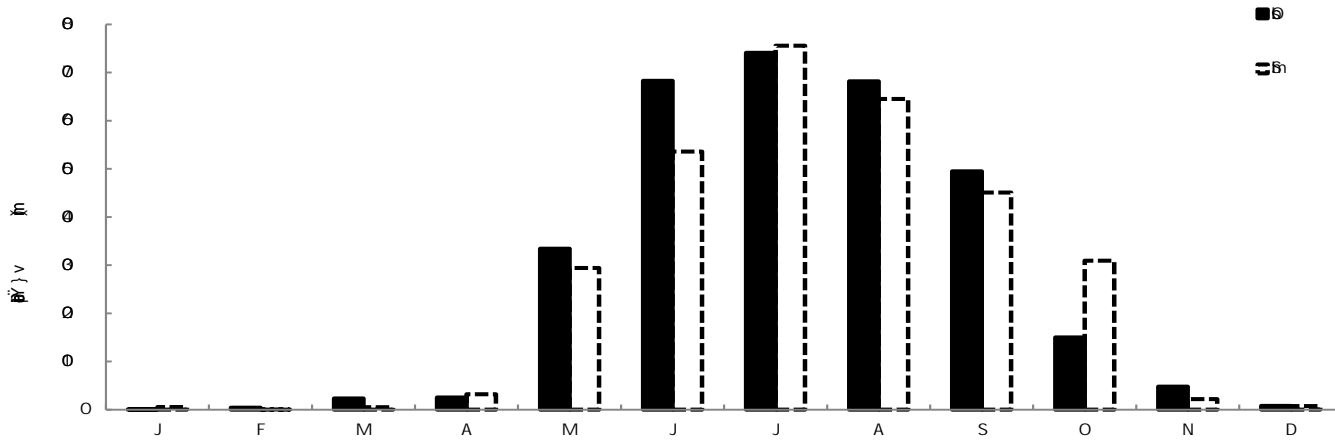
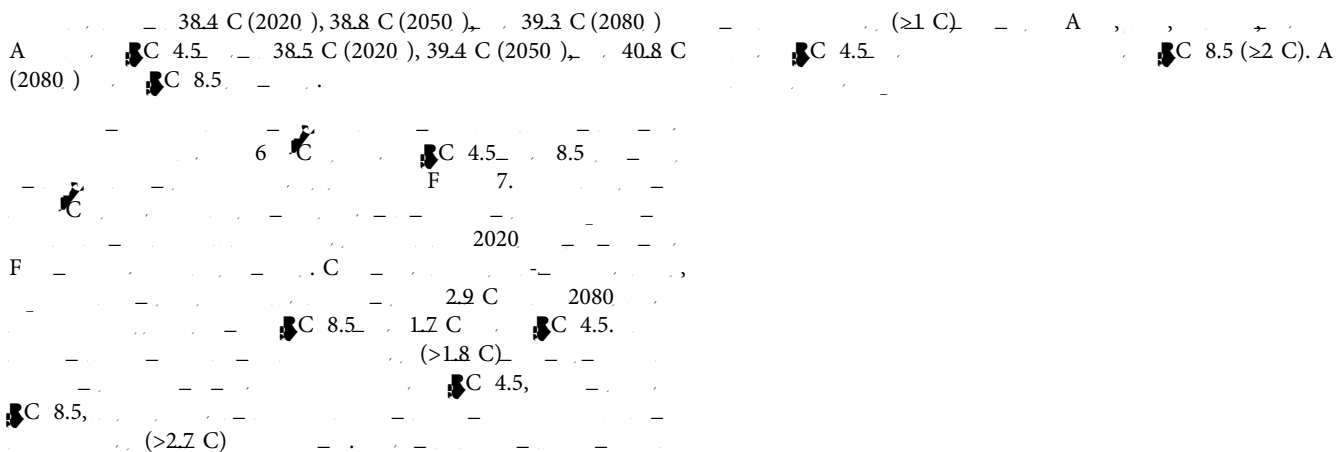


Figure 6: Observed and bias corrected values of precipitation in the Bago River Basin for the baseline period (1991–2005).





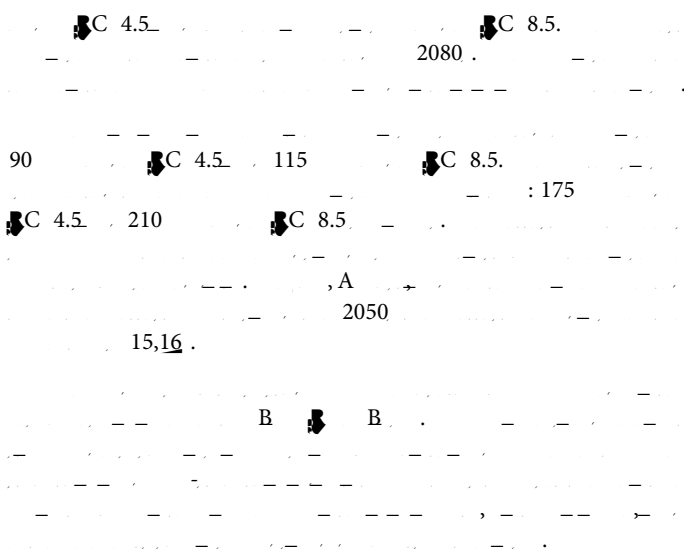
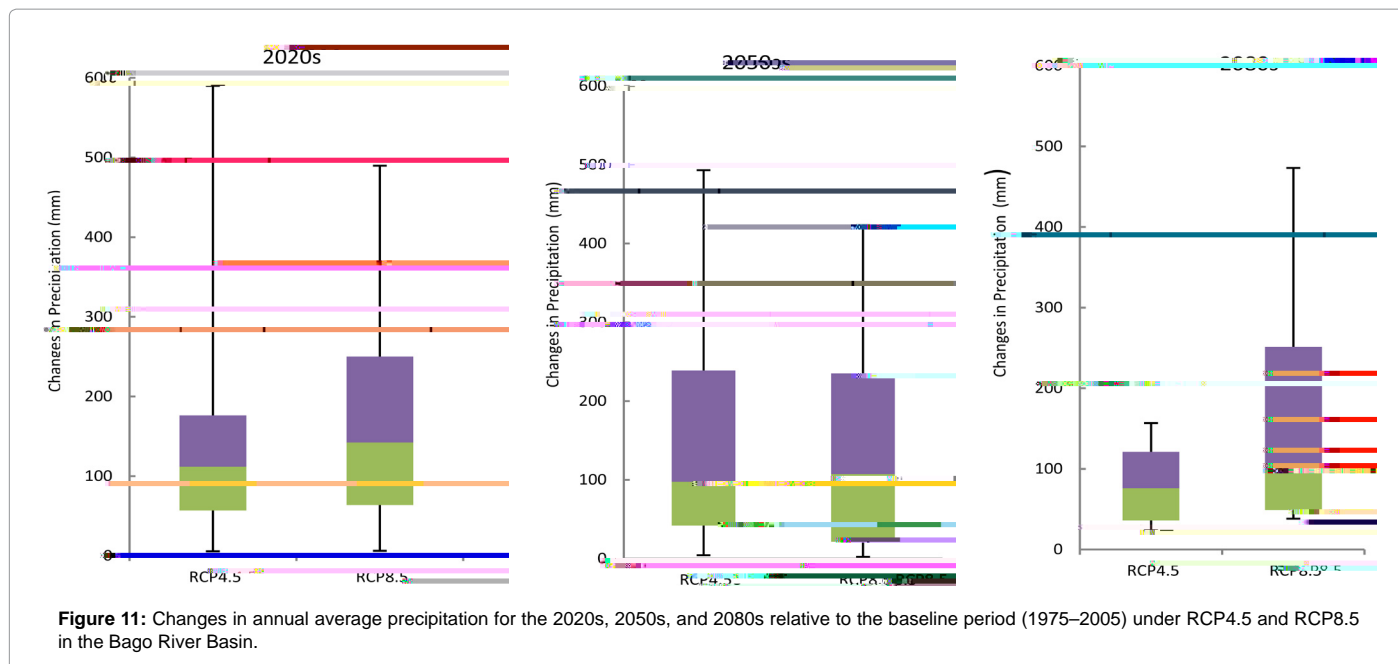
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