

## PROYEKSI PERUBAHAN CURAH HUJAN DIURNAL DAN NON-MUSIMAN DI PROVINSI JAMBI BERBASIS SKENARIO PERUBAHAN IKLIM *REPRESENTATIVE CONCENTRATION PATHWAYS (RCP)*

(Projections of Diurnal and Non-Seasonal Rainfall Changes in the Jambi Province  
based on Representative Concentration Pathways (RCP) Scenarios)

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### ABSTRAK

Studi perubahan karakteristik curah hujan diurnal dan curah hujan non-musiman di masa depan diperlukan untuk proyeksi perubahan iklim di Provinsi Jambi. Dalam studi ini, proyeksi perubahan iklim dilakukan dengan menggunakan data hasil keluaran model iklim regional untuk analisis perubahan curah hujan diurnal dan keluaran model iklim global untuk analisis perubahan curah hujan non-musiman. Proyeksi dilakukan berdasarkan skenario perubahan iklim terbaru yang dikenal dengan *Representative Concentration Pathways* (RCP). Skenario RCP terdiri dari empat skenario mulai dari skenario rendah hingga tinggi, yaitu RCP2.6, RCP4.5, RCP6.0, dan RCP8.5. Hasil proyeksi menggunakan skenario RCP4.5 menunjukkan bahwa curah hujan diurnal akan mengalami perubahan baik di bagian barat maupun di bagian timur Provinsi Jambi. Curah hujan diurnal umumnya diproyeksikan cenderung meningkat di wilayah bagian barat, sementara penurunan cenderung terjadi di bagian timur. Penurunan intensitas curah hujan diurnal di bagian timur kemungkinan terjadi pada hujan di waktu pagi dini hari hingga siang hari, khususnya di sepanjang wilayah pantai timur. Hujan malam hari pada pukul 21:00 hingga 00:00 diproyeksikan akan mengalami penurunan. Hasil proyeksi curah hujan non-musiman menunjukkan kecenderungan berkurangnya anomali curah hujan di barat dan timur Jambi pada hampir semua periode dan skenario RCP.

Kata kunci: Perubahan iklim, hujan diurnal, hujan non-musiman, skenario RCP.

### ABSTRACT

The study on the future changes of diurnal and non-seasonal rainfall characteristics is needed for projecting climate change in the Jambi Province. In this study, the output of regional climate models is used for projecting diurnal rainfall change, while the output of global climate model is used for projecting non-seasonal rainfall change. The future projections are based on the new climate change scenarios called as the Representative Concentration Pathways (RCP). The RCP consists of four scenarios ranging from low into high-range scenarios, i.e. RCP2.6, RCP4.5, RCP6.0 and RCP8.5. The result of projections under RCP4.5 scenario shows that the diurnal rainfall in the western and eastern parts of Jambi is expected to change. In general, the diurnal rainfall tend to increase in the west and decrease in the east. The decrease found in the east will dominantly occur between early morning and the daytime, especially along the east coast. Meanwhile, the night time rainfall especially during 21:00 to 00:00 o'clock is projected to decrease. For the projection of non-seasonal rainfall, it is shown that the rainfall anomalies in both parts of Jambi tend to decrease in the future as shown in almost all periods and almost all RCP scenarios.

Keywords: Climate change, diurnal rainfall, non-seasonal rainfall, RCP scenario.