Figure 1. Annual precipitation for Illinois versus annual precipitation for central U.S. Units: mm d$^{-1}$. Each point represents a different AMIP model.
Figure 2. Annual mean precipitation (mm d\(^{-1}\)) for the central U.S. for AMIP models and observations (“OBS”). Values are plotted in order of increasing precipitation. The period covered is 1979-1995.
Figure 3. Seasonal (winter, spring, summer, fall) mean central U.S. precipitation (mm d$^{-1}$) for AMIP models and observations for the period 1979-1995.
Figure 4. Maps of winter precipitation (mm d$^{-1}$) from observations (top left), the GLA (driest annual) model (top right), the NCAR (an intermediate) model (bottom left), and the ECMWF (wettest annual) model (bottom right).
Figure 5. Maps of spring precipitation (mm d$^{-1}$) from observations (top left), the GLA (driest annual) model (top right), the NCAR (an intermediate) model (bottom left), and the ECMWF (wettest annual) model (bottom right).
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Figure 8. Map of observed (1979-1995) wind flow at a level of 850 hPa for winter (top left), spring (top right), summer (bottom left), and fall (bottom right). Barbed lines indicated wind flow directions and colored shading indicates speed (m s$^{-1}$).
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Figure 10. Maps of correlation coefficient for 1979-1995 between observed southerly component of the wind speed at 850 hPa and observed precipitation in the central U.S. for winter (top left), spring (top right), summer (bottom left), and fall (bottom right).
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Figure 21. Southerly wind component (m s\(^{-1}\)) at 850 hPa in the LLJ region for the 4 seasons for CMIP models (last 30 years of control run) and observations for the period 1979-1995.
Fig. 22. Specific humidity at 850hPa of LLJ region for the four seasons for CMIP models (last 30 years of control run) and observations for the period 1979-1995.
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Figure 25. Correlation coefficient for 4 seasons for CMIP models between model precipitation in the central U.S. and model westerly component of the wind speed at 200 hPa in the California region (Fig. 13).
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Figure 27  Annual surface air temperature (°C) for the central U.S. for AMIP models and observations. AMIP model values are plotted in order of increasing temperature. The period covered is 1979-1995.
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Figure 35. Maps of winter precipitation (mm d$^{-1}$) for 1991-1995 from observations (top left), RCM driven by the reanalysis data (R-2) (top right), the Parallel Climate Model (PCM) (bottom left), and the RCM driven by the PCM (bottom right).
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Figure 37. Maps of summer precipitation (mm d\(^{-1}\)) for 1991-1995 from observations (top left), RCM driven by the reanalysis data (R-2) (top right), the Parallel Climate Model (PCM) (bottom left), and the RCM driven by the PCM (bottom right).
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Figure 40. Maps of spring surface air temperature (°C) for 1991-1995 from observations (top left), RCM driven by the reanalysis data (R-2) (top right), the Parallel Climate Model (PCM) (bottom left), and the RCM driven by the PCM (bottom right).
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Figure 47. Maps of winter precipitation differences (2046-2050 minus 1991-1995) from (top and bottom left panels) the Parallel Climate Model and (top and bottom right panels) RCM driven by the PCM. Top panels show absolute differences (mm d⁻¹) and bottom panels show these same differences expressed in percent of the PCM value.
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Fig. 51. Maps of temperature differences (2046-2050 minus 1991-1995) from (top and bottom left panels) the Parallel Climate Model and (top and bottom right panels) RCM driven by the PCM. Top panels show winter differences (°C) and bottom panels show spring differences (°C).
Fig. 52. Maps of temperature differences (2046-2050 minus 1991-1995) from (top and bottom left panels) the Parallel Climate Model and (top and bottom right panels) RCM driven by the PCM. Top panels show summer differences (°C) and bottom panels show fall differences (°C).
Figure 53. AMIP model composite maps of wind flow at a level of 850 hPa for (top left) winter, (top right) spring, (bottom left) summer, and (bottom right) fall. Barbed lines indicate wind flow directions and colored shading indicates speed (m s$^{-1}$).
Figure 54. AMIP model composite maps of wind flow at a level of 200 hPa for (top left) winter, (top right) spring, (bottom left) summer, and (bottom right) fall. Barbed lines indicated wind flow directions and colored shading indicates speed (m s⁻¹).
Figure 55. CMIP model composite maps of wind flow at a level of 850 hPa for (top left) winter, (top right) spring, (bottom left) summer, and (bottom right) fall. Barbed lines indicated wind flow directions and colored shading indicates speed (m s\(^{-1}\)).
Figure 56. CMIP model composite maps of wind flow at a level of 200 hPa for (top left) winter, (top right) spring, (bottom left) summer, and (bottom right) fall. Barbed lines indicated wind flow directions and colored shading indicates speed (m s⁻¹).
Figure 57. AMIP model composite maps of correlation coefficient between southerly component difference (model-observed) of the wind speed at 850 hPa and precipitation difference (model-observed) in the central U.S. for 4 seasons.
Figure 58. AMIP model composite maps of correlation coefficient between southerly component difference (model-observed) of the wind speed at 200 hPa and precipitation difference (model-observed) in the central U.S. for 4 seasons.