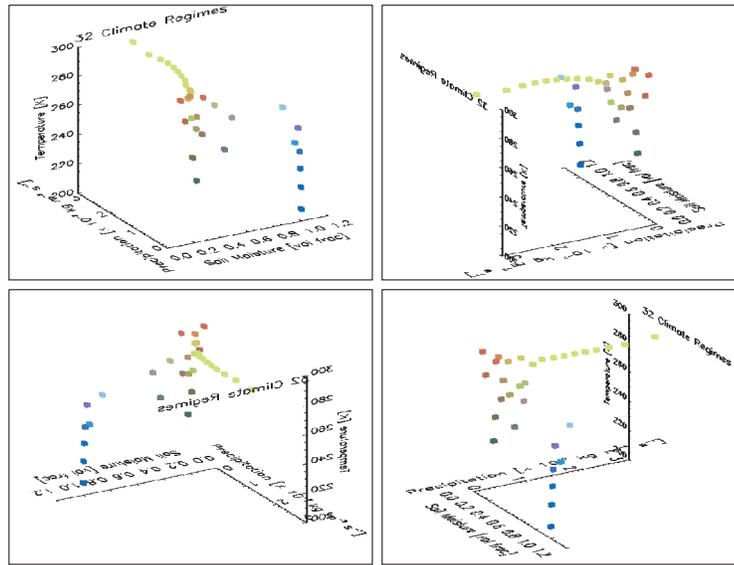


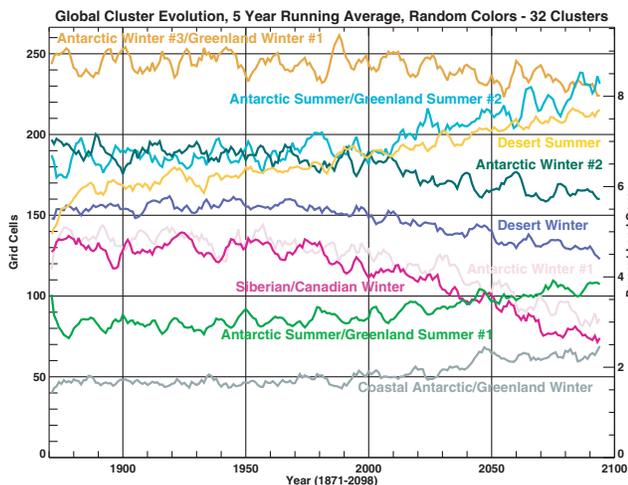
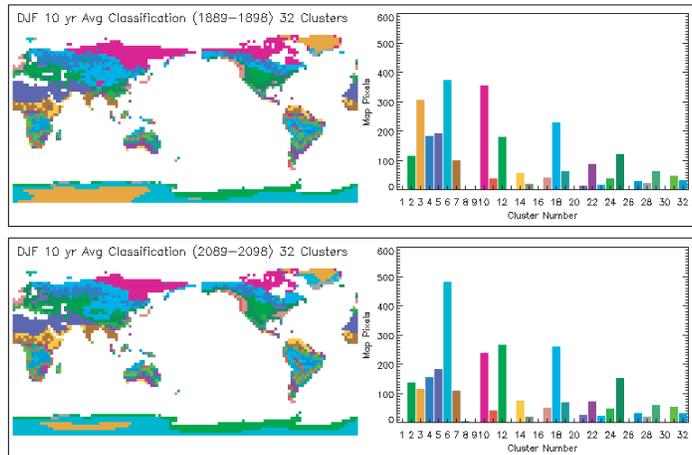
# Climate Regimes Statistically Determined from PCM Model Output

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Climate regimes statistically defined in terms of three variables from 200 years of monthly global output from the Parallel Climate Model (PCM). These 32 regimes or states exhaustively indicate the subset of the climate state space occupied by PCM predictions, and can serve as a basis for intercomparison with measurements or other model predictions.

Comparison of different periods is facilitated by coloring maps according to their state space assignments. For example, both gold colored region (Cluster 3) representing the coolest Antarctic summer and the magenta colored region (Cluster 10) representing the coldest Siberian/Canadian winter, shrink from the beginning of the 200 year period to the end.



Trajectories of global change can easily be identified as location changes among the states. For example, the climate regime represented by Cluster 14 (Desert) increases through time, while the regime represented by Cluster 10 (Siberian/Canadian winter) decreases over the same period. Lines are plotted in the same colors as the bars and map areas above.