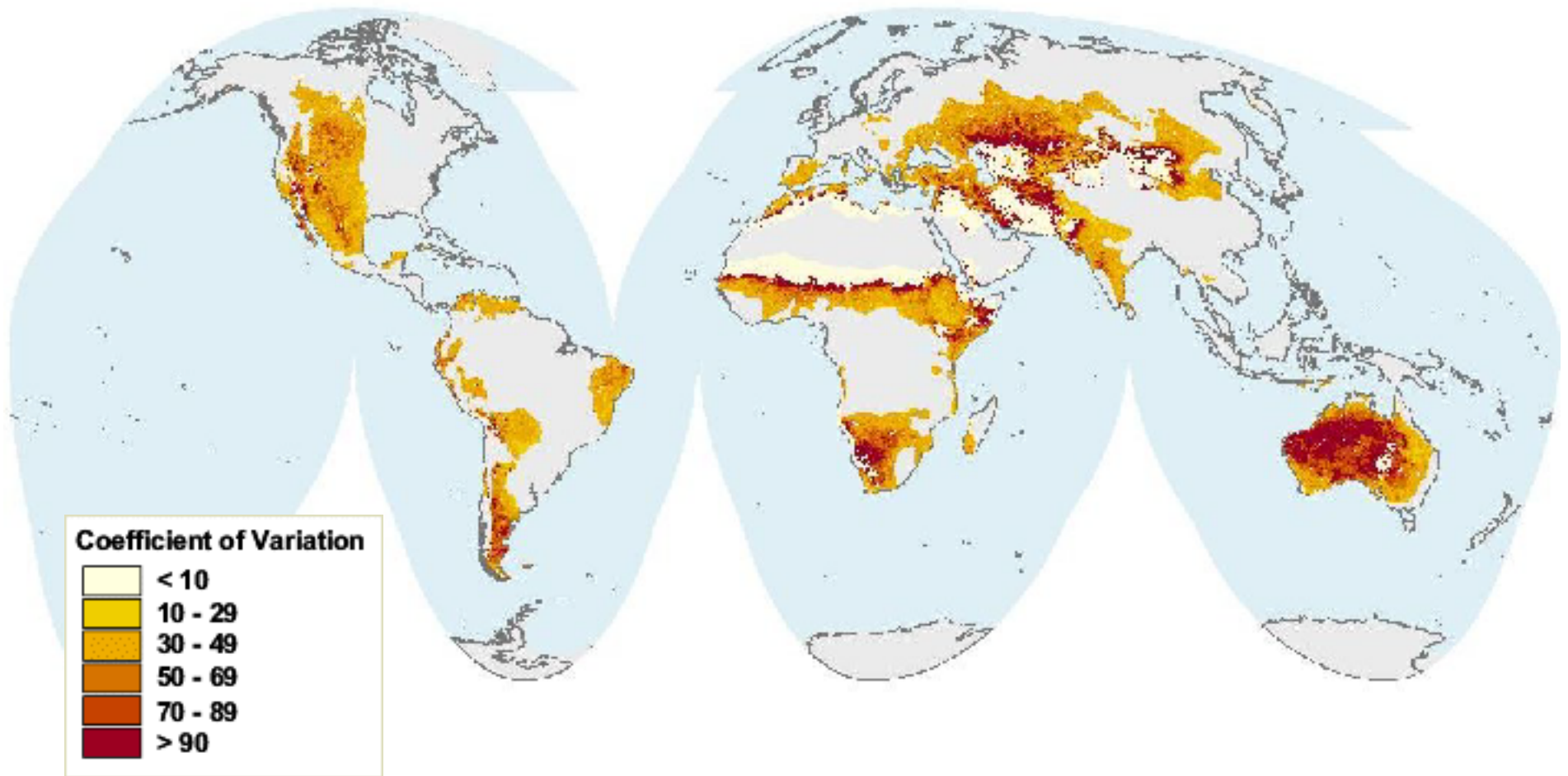


Drylands: Variation in NPP in Drylands



Map Projection: Geographic

Citation: WRI. 2002. World Resources Institute. Drylands, People, and Ecosystem Goods and Services: A Web-based Geospatial Analysis. Available online at: <http://www.wri.org>.

Analytical Overview:

No analysis was completed for this map.

Description:

Researchers have used eight years of NDVI data (1982-1989) to analyze interannual variation of NPP and to determine the coefficient of variation (ratio of the standard deviation of annual totals to the long-term mean) from the Global Production Efficiency Model (GLO-PEM) developed by the University of Maryland, Department of Geography. Interannual variation in mean NPP can reveal the complexity of spatial variation in species composition and biomass that is caused by climate, topography, soil types, and human-induced change.

This map of variation in NPP illustrates that some regions have stable NPP values from year to year, whereas other regions have highly variable values. Generally, the regions of lower NPP correspond to areas with the largest percentage variation in productivity from one year to the next. Many of the areas with high variability in NPP are found in drylands--on all continents--the Great Plains of North America, southern Patagonia, the Sahel, Southern Africa, and much of central Asia and Australia. This variation may affect human behavior and household decisions. It may influence whether people migrate on a seasonal or permanent basis or whether they abandon livestock herding for a more sedentary, agrarian existence.