Chronological Records of Climate-Related Events and Societal Consequences

Gary D. Sharp

Abstract

A chronology of documented regional and global warm and cold event records is collated along with documented ecosystem response records and health threat/sequellae records for the historical period. Patterns of societal response to cold periods punctuated by warm periods have been associated with considerable human health impacts, stimulated by blooms in disease vectors such as rodents and insects. The recent ENSO/SOI records provide insights into these sequences, and historical detectivery such as that by Quinn and associates provides unique opportunities to explore the ENSO warm event as far back into history as the mid-seventeenth century.

Great interest is awakening in trying to understand societal and ecosystem responses to climate regime shifts. Longer time scales of cool and warm climatic periods also provide tantalizing clues about pre-human evolution, as well as regional climatic precursors for local civilizations to begin and thrive around the globe. While debates over the future have captured many persons' interest, it is important to maintain as open a perspective as possible on the merits of examining the relationships between regional, local, and global consequences of climate swings and events, as well as the frequent volcanic and seismic cataclysms that punctuate these warming and cooling scenarios. I have tried to post a firm set of climate observations upon which to begin a synthesis of regional responses for well-documented areas.