Geophysical Research Abstracts
Vol. 16, EGU2014-5683-1, 2014
EGU General Assembly 2014

Common oscillations in Global Earth Temperature, Sea Level, and Earth rotation

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Singular Spectrum Analysis (SSA) of Global Mean Sea Level (GMSL) and Global Average Earth Temperature (HadCRUT4) data after global warming trends subtraction revealed presence of quasi-periodic components with periods of 60, 20 and 10 years in both time series. 60-year component of sea level is anticorrelated with long-periodic changes in temperature, while 10 and 20-year components are correlated.
Simultaneous presence of 60-year component in secular Earth rotation rate changes rises a question of interrelations between Earth rotation and Climate.
Quasi-20-year changes in GMSL and HadCRUT4 have maxima and minima well corresponding to the amplitude changes of recently reconstructed Chandler wobble excitation, which could be caused by the 18.6-year cycle of the Moon orbital nodes regression.
The cause of 10-year oscillations in climate characteristics is enigmatic. It could be related to El Nino variability, Volcanoes, or Solar activity, but correlation with each of those processes found to be small. Looks like it is correlated with 9.3 yr tidal wave.