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Earth System Dynamics
Discussions

Interactive comment on "ESD Ideas: Long-period tidal forcing in geophysics – application to ENSO, QBO, and Chandler wobble" *by* Paul R. Pukite

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Similar to the QBO, specific aliased harmonics should be observed in the power spectrum of the Chandler wobble if it is forced by impulse modulated tidal period. Because the ∼0.843/yr = 365.242/(27.2122/2) - integer(365.242/(27.2122/2)) main frequency is identified, the other sideband at 0.157 = 1-0.843 should also exist. It does appear as highlighted in Figure 1 below, both in the model and in the spectrum of the Chandler wobble time series data. A natural resonance would not produce these frequencies, only a forced behavior could plausibly match so closely.

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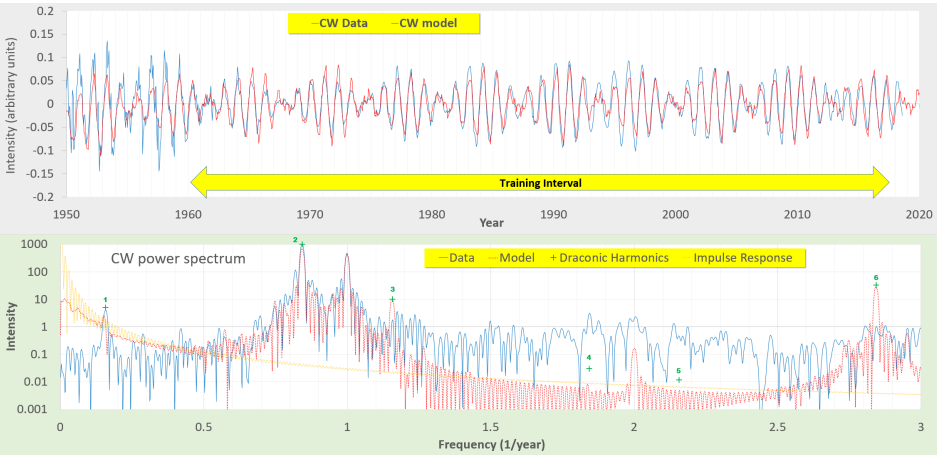

Fig. 1.