

CE CORE

Dome Fuji - ^{10}Be Data 700-1900 CE

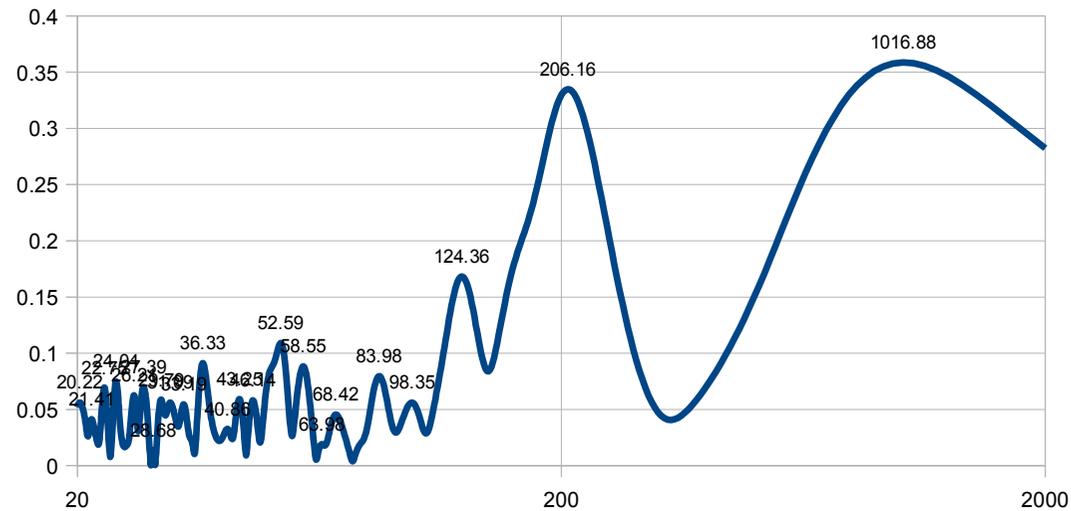
Horiuchi, K., T. Uchida, Y. Sakamoto, A. Ohta, H. Matsuzaki, Y. Shibata, and H. Motoyama. 2008. Ice core record of ^{10}Be over the past millennium from Dome Fuji, Antarctica: A new proxy record of past solar activity and a powerful tool for stratigraphic dating. *Quaternary Geochronology*, Vol. 3, Issue 3, pp. 253-261, August 2008. Data Coverage North: -77.32° * South: -77.32°

East: 38.7° * West: 38.7°

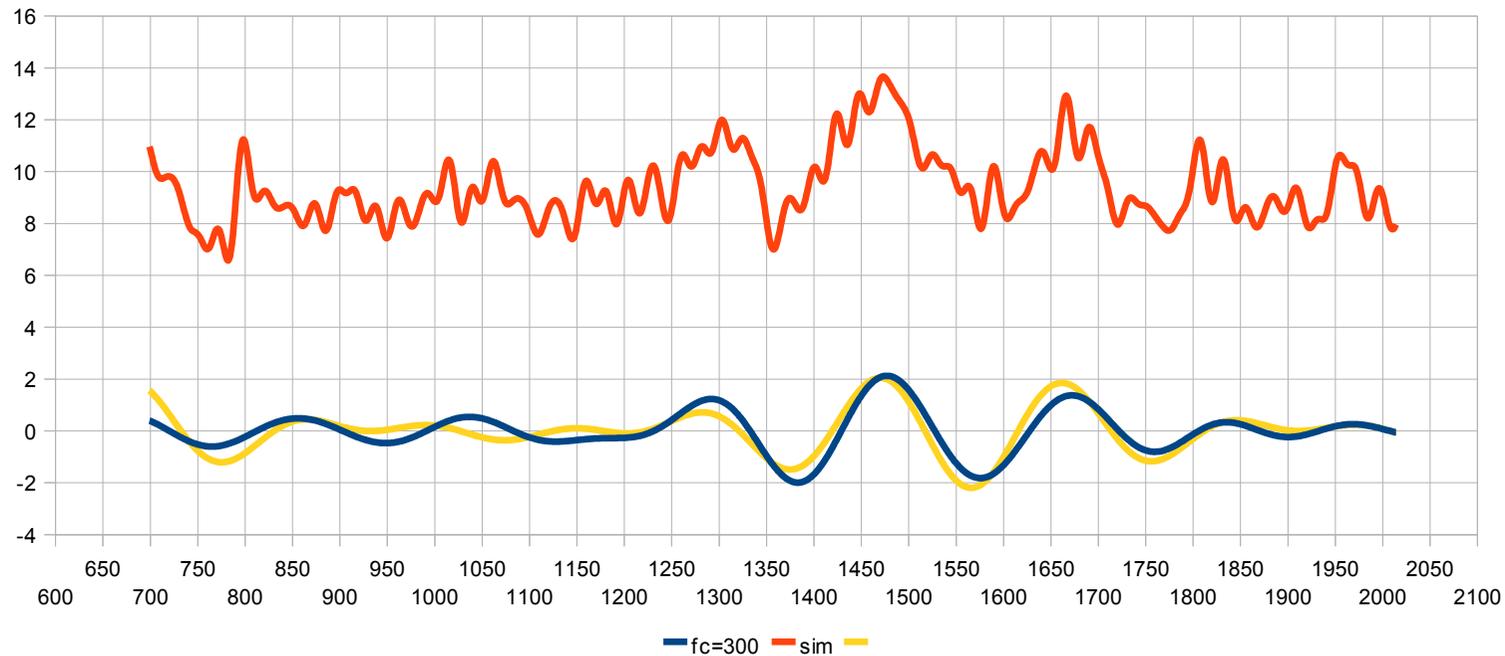
Altitude: 3810 m

Start Year: 699 AD End Year: 1876 AD

<http://www.ncdc.noaa.gov/paleo/metadata/noaa-icecore-8612.html>



Spectra for ^{10}Be , dominated by 1000 and 200 year, but has the look of modulation components.



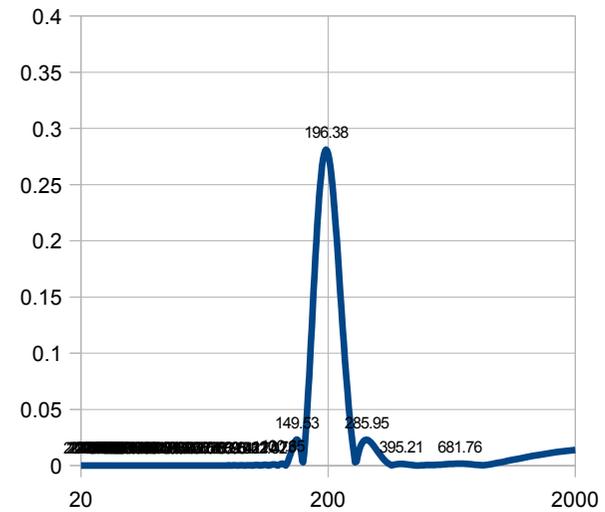
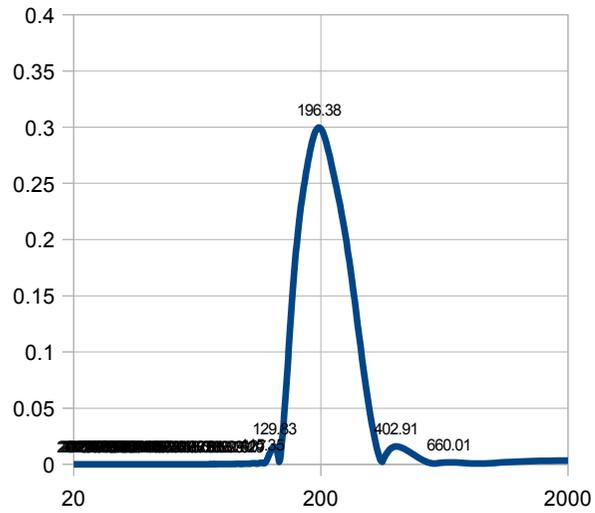
This is a simulation of the dataset, unimportant, notice instead the blue and yellow.

One is a severely bandpass filtered version of the dataset, about as far as filtering can be pushed. Roughly 130 y to 300 y.

The other is a single simulation term and this pleasingly mimics the filtered. This is 200 year, amplitude modulated by 1000 year and with a degree of allowed fundamental.

A wild suggestion is the 200 year, whatever the origin of that, was higher during the little ice age. Keep in mind though it might simply be a higher ^{10}Be content during LIA, without any actual change in whatever it is external to earth. (eg. Colder or wetter or whatever might lead to more of a signature, so beware)

Since I can do it, the spectra for the generator is



Page layout is bad here. Left is modulated, probably not what you expected, and right is with modulation removed. Small humps are artefacts of processing, is very hard at this level of work.

So the effect is broadening of a line. It has finite width because of the processing, is a compromise.

Following is what happens if chirp window is disabled. Is bad. So whilst the line width is minimised there is severe leakage. Then log scale to see better and finally, windowed chirp with log scale

