Anisotropic Hardware Injection

The existing code for the anisotropic signal is written for a software injection which gives strain. The following process takes the strain time series and transforms it into ETMX counts for the hardware injection. The time series, $d1$, is
In order to convert this to a hardware injection, the signal was fast Fourier transformed
\[ s_1 = \text{fft}(d_1) \]

multiplied by the pendulum transfer function
\[ t_H = \text{Freq}^2/\text{constants} \]

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[Graph showing Fourier Transform of \(s_1\) versus frequency]

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[Graph showing Pendulum Transfer Function \(t_H\) versus frequency]
giving \( d_{1\_mod} = f_{s1} \cdot \text{tfH} \)
This was inverse fast fourier transformed back to a time series giving counts versus time
d2 = ifft(d1_mod)
In order to check that the transfer worked correctly, the inverse process was applied to d2 giving d3. The ratio of d1 (original time series) to d3 is