Subject: Re: FFT phase?
Posted by Yngvar Larsen on Fri, 25 Jan 2013 13:18:28 GMT
View Forum Message <> Reply to Message

On Friday, 25 January 2013 07:49:00 UTC+1, xqin...@gmail.com wrote:
> Thanks. I have known the reason. What I use is like x= 2*!dpi*2*dindgen(25)/16, so the amplitude and phase are not so accurate.

As a rule of thumb for harmonic analysis, you need at least 10 cycles in your data to get a reliable phase/magnitude estimate. Your example using around 1.5 cycles is probably the worst case scenario.

OR, if you know the frequency of your signal exactly a priori, you have to truncate your data to a periodic signal, i.e. an integer number of cycles, in order to extract A and B reliably. This is what Craig did in his reply, using only a single cycle.

--
Yngvar