Subject: Re: signal processing package for IDL Posted by dpkemp on Sat, 25 Jul 1992 14:23:50 GMT

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In article <ghsu.711219193@critical> ghsu@critical.nswc.navy.mil () writes:

- > I am interested in finding procedures for signal processing (design of
- > filters, filtering, etc), similar to the signal processing toolbox for
- > matlab), for IDL. Is there something like that in existence? Is
- > there such package available for pvwave? Any pointer will be
- > appreciated.

>

Don't get your hopes up. Filter design is probably best done by a specialized application (there are lots of them), but it would be nice to do the actual filtering in PV-wave.

Unfortunately, the technical support person I talked to at PVI didn't know anything about filters, not even the vocabulary. I asked if there was any primitive to support Infinite Impulse Response (variously known as Auto Regressive, or Recursive) filters, and this person didn't know what I was talking about.

FIR filtering is, of course, supported by PV-wave's convolution operation, but there doesn't seem to be any operation for doing recursive filters without doing it sample-by-sample with an explicit loop - horribly slow.

Question for the net: Am I missing something in the documentation? IIR is a term used by DSP people, AR is used by statistics people. Is there some other term used in Geology, or Fluid Dynamics, or whatever, that I should have been asking for?

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"The use of history as therapy means the corruption of history as history."
-- Arthur Schlesinger (quote stolen from Chet Ramey, CWRU)