Subject: IDL or MATLAB?
Posted by kropveld on Tue, 12 Apr 1994 12:24:45 GMT
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Hello,
I am a scientist working in the field of neurophysiology
in an Academic Hospital.
My job is to analyse the signal which we derive from the brain, nerves and
muscles. The signal comes from many channels, are mostly very noisy, and
long (big).
Now I am looking for the best program to use for analysing those signals.
I want to be able to filter, average, compare signals, frequencies.
(In short I want to be able to conveniently do anything I ever would
want to do with any signal :)

I want to be able to find specific wave-forms in the signal.
Where more channels are used I want to be able to make surface potential maps.
Later I will have to make a routine to find the dipole inside the brain,
where only the potentials on the surface of the skull are given.
Perhaps later I would want to combine EEG potential maps with CT/NMR-scans.

I have obtained the demo versions of MATLAB and IDL, and I have been working
with them for weeks now. Both the programs seem just too different for
me to be able to decide which one is best for me.
I have heard of the existence of PV~WAVE.

Can anybody (preferrably working in my field) answer or advice me
which of the programs is the better choice for doing these things.
I know of the Signal Toolbox of MATLAB, does IDL have anything comparable?
Does MATLAB or IDL have tools to work with 3D matrices?
I will be running the program on one of our UNIX workstations.

Greetings Daniel Kropveld, neurophysiology, AMC, Amsterdam