
Subject: Re: Relative strengths: IDL vs. PV-Wave ?
Posted by [Martin Szummer](#) on Tue, 03 Dec 1996 08:00:00 GMT
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Dear All,

I did some searches using DejaNews and found previous comments regarding the merits of IDL and PV-Wave. I have taken the liberty to abbreviate the replies; the context may be missing, my apologies. Use DejaNews to retrieve the original posts. The query string was: IDL & PV-Wave & (compar* | differen* | better | best | review*)

Also I do not know how up to date the information is with respect to the latest versions, but I have included post dates.

If you think these facts and opinions are mistaken, please add yours!

--- Martin

grunes@news.nrl.navy.mil (Mitchell R Grunes)
sci.image.processing, comp.lang.apl posted 1996/09/24, 1996/08/15

IDL vs PV-Wave

- IDL handles more image file formats
- IDL handles 24 bit display, PV-Wave could not, at least in the past
- PV-Wave has smooth animation on SGI's, but IDL flickers
- IDL has better memory use
- IDL has better world maps
- IDL has possibly better documentation

Comparison IDL and Matlab
Source: http://www.amara.com/ftpstuff/IDL_Matlab.txt

IDL vs Matlab

Matlab

- + more compact syntax
- no explicit types

- + more beautiful graphics
- non-intuitive to customize graphics
- + more built-in functions than IDL
- + more toolkits
- difficult to batch-process a directory of files
- + better technical support than IDL

IDL

- + more of a true programming language: procedures, functions, explicit

types

- + more file formats supported (HDF, CDF, easier to write new ones)
- + file I/O easier

William Clodius <wclodius@lanl.gov>

Date: 1996/09/23

Newsgroups: sci.image.processing

...

Both packages provide access to extensive numerical libraries, PV-Wave to those of IMSL (this may be an optional add-on), IDL to an extensive subset of Numerical Recipes Routines. No knowledgeable person would argue that the Numerical Recipes routines are better than those of IMSL, but the wide availability of the Numerical Recipes text may make customization of those routines easier in IDL.

Newsgroups: sci.image.processing

From: medimtintl@aol.com (MedImTIntl)

Date: 1996/09/21

(...) Any "additional library" from the VNI is many times outweighed by the contributions in the User Library developed by hundreds of users around the world that continuously contribute and enrich the RSI offerings.

comp.lang.idl-pvwave

Subject: Re: Can I do this without using loops?

From: David Ritscher <david.ritscher@zibmt.uni-ulm.de>

Date: 1996/06/14

Message-Id: <31C17DE4.50C@zibmt.uni-ulm.de>

IDL. Version 3.1.0 and PV-WAVE v6.01. Sometimes one was faster, sometimes the other (often by a factor of two or more!).

	Insert columns		Insert rows	
	IDL	PV-Wave	IDL	PV-Wave
1.	22.84	17.58	30.48	21.31
2.	22.77	30.81	4.45	1.48
3.	3.88	9.73	3.87	9.70
4.	12.05	11.93	5.67	7.17
5.	89.24	164.56	87.51	163.15
6.	141.93	385.72	140.45	389.53
7.	92.75	166.44	92.82	169.71
8.	1.30	4.96	9.78	10.29
9.	30.75	28.71	18.40	21.60

Tested using the following number of rows and columns: 1000, 30000

	Insert columns		Insert rows	
	IDL	PV-Wave	IDL	PV-Wave
1.	84.95	71.09	Inf	Inf
2.	Inf	Inf	28.52	22.69
3.	27.65	42.95	30.88	50.10
4.	129.53	138.84	124.39	126.26
5.	300.62	547.51	296.74	556.55
6.	-	1284.83	-	1300.17
7.	Inf	Inf	Inf	Inf
8.	20.07	28.76	Inf	Inf
9.	-	3100.02	158.07	161.23

Newsgroups: comp.lang.idl-Pvwave
Date: 1996/06/15
Subject: Re: Can I do this without using loops?
From: David Ritscher <david.ritscher@zibmt.uni-ulm.de>

...
Ratios of execution times of rebin(/sample) / rebin():

problem with 3000, 3000 rows and columns:

	IDL	PV-Wave
test8	1.22997	0.676364
test8_rows	0.999363	0.956496

problem with 1000, 30000 rows and columns:

	IDL	PV-Wave
test8	1.06719	0.936516