## Subject: How to test for a vector/matrix of constants? Posted by Mirko on Wed, 06 Dec 2006 18:21:45 GMT

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How can I quickly check if a vector/matrix is full of constants (all elements equal)?

For example if a vector contained:

[2.38,2.38,2.38,...,2.38]

I want it flagged as a "constant" vector.

I can think of finding differences between successive elements, and check for non-zero elements.

Any faster options?

Thanks,

Mirko

Subject: Re: How to test for a vector/matrix of constants? Posted by mmeron on Thu, 07 Dec 2006 04:58:14 GMT

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In article <1165429305.471782.64190@n67g2000cwd.googlegroups.com>, "Mirko" <mvukovic@nycap.rr.com> writes:

- > How can I quickly check if a vector/matrix is full of constants (all
- > elements equal)?
- > For example if a vector contained:
- > [2.38,2.38,2.38,...,2.38]
- > I want it flagged as a "constant" vector.

>

- > I can think of finding differences between successive elements, and
- > check for non-zero elements.

> Any faster options?

Differences are quite fast enough since you can do it as vector operation. Only, I wouldn't check for non-zero but for larger than specified, user defined, "delta". So, you would do something along the lines of

... if max(abs(vec[1:\*] - vec)) gt delta then...

Mati Meron | "When you argue with a fool, meron@cars.uchicago.edu | chances are he is doing just the same"