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Subject: Re: Erosion/Dilation Operators

Posted by [Christian Soeller](#) on Wed, 19 Feb 1997 08:00:00 GMT

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First of all, let me point out that I am surprised by the aggressive style of your response to my followup (please point out to me what offended you in my posting). If you think that's the way to keep up the netiquette, but there you go...

> ???

> In your opinion, you do not lose information if you erase values from  
> an array?

You do lose information by applying any non-invertible operation to an array. I don't think that was the point of the original problem. Furthermore, it is typical to 'deliberately' give up information when you do data reduction (in this case e.g. the exact outline if you are mainly interested in features on a larger scale (but this depends on what David really wants)).

>

>> You normally do an erosion (or several erosions) followed  
>> by the same number of dilations with the same structuring elements.

>

> Normally means the way you use it?

I still keep up my point that this is a typical way of using dilations/ erosions when you want to remove small areas and smooth boundaries. Isn't an erosion followed by a dilation related to the morphological "opening" operation ?

> And what is smoothing with respect to the frequency domain?

> And where is the high frequency information after low-pass-filtering?

>

Well, this very much depends on the application, I am not sure if David wants to keep the high frequency content (which is often related to the presence of noise).

>

> Sorry for the lesson like Mail but what about 'Not necessarily true'

>

Well, means in German "nicht unbedingt richtig" when the opening is e.g. applied to objects with sufficiently smooth boundaries.

Hopefully we did not confuse David more than anything else. Anyway, to be able to point out the best way to deal with the icflow data some more detail about

what kind of data you are working on would be helpful, David.

Cheers,

Christian

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