
Subject: Re: Majority Filter

Posted by [Jeremy Bailin](#) on Fri, 08 Mar 2013 15:08:06 GMT

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On 3/7/13 7:46 PM, Jeremy Bailin wrote:

> On 3/7/13 2:18 PM, Coyote wrote:

>> Folks,

>>

>> Has anyone ever written a majority image filter in IDL? I wish to
>> filter out small incorrectly classified pixels floating in a sea of
>> correctly classified pixels in an image, before processing the image
>> further. These pixels have classification numbers, not data values. I
>> can imagine doing it in a FOR loop (or two), but these images are
>> large and I have a lot of them. :-)

>>

>> Cheers,

>>

>> David

>>

>

> Here's a quick stab at it.

>

> It does have a for loop, but it's just a loop through the classification
> values rather than a loop through pixels. You could always try using the
> double-histogram-trick if that's a problem. Also, it doesn't worry about
> edge effects (although it almost always gets the right answer even on
> the edge because of how IDL deals with out-of-bounds indexing in these
> cases), and it only worries about the majority-of-pixel criterion and
> not the contiguity criterion.

>

Incidentally, it should be pretty easy to implement the contiguity
criterion by using the output of LABEL_REGION... if you want a fully
optimized correct version, let me know, but I suspect that this is a
good enough base for you to fiddle with the details yourself. ;-)

-Jeremy.
