Subject: volumes of contiguous areas that have range of values
Posted by astroboy.20000 on Tue, 16 Aug 2016 16:12:21 GMT
View Forum Message <> Reply to Message

Hello, sorry for a dumb question but I can't find anything in the documentation and I'm at my wit's end.

Some years ago I had a 3D dataset in which certain volume elements had values between, say, 100 and 150. The IDL routine was about to identify all the elements with values in that range (of course) and also to compute how many continuous regions created by such elements, and the volume of each contiguous region.

Can anyone tell me the name of the routine?

Thanks,

Mark

Subject: Re: volumes of contiguous areas that have range of values
Posted by Dick Jackson on Tue, 16 Aug 2016 16:33:06 GMT
View Forum Message <> Reply to Message

On Tuesday, 16 August 2016 09:13:49 UTC-7, M Q wrote:
> Hello, sorry for a dumb question but I can't find anything in the documentation and I'm at my wit's end.
>
> Some years ago I had a 3D dataset in which certain volume elements had values between, say, 100 and 150. The IDL routine was about to identify all the elements with values in that range (of course) and also to compute how many continuous regions created by such elements, and the volume of each contiguous region.
>
> Can anyone tell me the name of the routine?
>
> Thanks,
>
> Mark

Hi Mark,

I think LABEL_REGION will do the trick:
http://www.harrisgeospatial.com/docs/LABEL_REGION.html

Start with something like this:
inRange = data GT 100 AND data LT 150
regions = LABEL_REGION(inRange) ; /ALL_NEIGHBORS may be desired

Then, HISTOGRAM (possibly with REVERSE_INDICES) is helpful, to get at the number (and the

locations) of elements in each region:
http://www.harrisgeospatial.com/docs/histogram.html

I hope that helps to point you in the right direction!

Cheers,
-Dick

Dick Jackson Software Consulting Inc.
Victoria, BC, Canada --- http://www.d-jackson.com
