
Subject: Re: cgmap_gshhs.pro minarea issue
Posted by [Takis.Velissariou](#) on Fri, 22 Nov 2013 15:57:59 GMT
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On Thursday, November 21, 2013 7:09:28 PM UTC-5, pvelis...@fsu.edu wrote:

> Apparently, in the recent versions (≥ 2.2) of gshhs database
>
> the units of the header.area changed from $1/10 \text{ km}^2$ to $1/10 \text{ m}^2$.
>
> For cgmap_gshhs to work properly the line:
>
> `polygonArea = header.area * 0.1` (ok for gshhs < 2.2)
>
> should be changed to:
>
> `polygonArea = header.area * 1.0e-7` (for gshhs ≥ 2.2)

David,

I saw the modified code in gmap_gshhs.pro and I think that:

`magnitude = ISHFT(f, -26) AND 1B`
should change to:
`magnitude = ISHFT(f, -26) AND 255B`

also

`polygonArea = header.area * 0.1 * 10^magnitude`
should change to:
`polygonArea = header.area * 0.1` (for version `lt 9`)
and
`polygonArea = header.area * 10^(-magnitude)` (for version `gt 9`)
