
Subject: Re: IDL5.2: map_proj_info
Posted by [davidf](#) on Wed, 09 Dec 1998 08:00:00 GMT
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Andy Loughe <afl@cdc.noaa.gov> used his secret decoder ring to write:

```
> <!doctype html public "-//w3c//dtd html 4.0 transitional//en">
> <html>
> &nbsp;
> <p>Hello,
> <p>I have tried to use "map_proj_info" within IDL5.2
> <br>(see page 67 of What's New in IDL 5.2), but have
> <br>had no luck with it.
> <p>Can someone give me a hint on how this potentially
> <br>useful routine works?&nbsp; There is no entry for this routine
> <br>in the online help, and I cannot find the source in
> <br>$IDL_DIR/lib (bad sign).
```

This is from my IDL 5.2 on-line help. Sure you are using the correct help file?

Cheers,

David

The MAP_PROJ_INFO routine returns information about the current map and/or the available projection. Mapping parameters should be setup via a call to MAP_SET before using MAP_PROJ_INFO.

Calling Sequence

Result = MAP_PROJ_INFO [, iproj]

Arguments

lproj

The projection index. If the CURRENT keyword is set, then the index of the current map projection is returned in lproj.

Keywords

AZIMUTHAL

Set this keyword if the projection is azimuthal. If the projection is not azimuthal, set this keyword to zero (the default).

CIRCULAR

Set this keyword for a circular or elliptical projection.

CURRENT

Set this keyword to use the current projection index and return that index in lproj.

CYLINDRICAL

Set this keyword for a cylindrical or pseudo-cylindrical projection.

LL_LIMITS

The geocoordinate rectangle of the current map in degrees (Lonmin, Latmin, Lonmax, Latmax). This range may not always be available, especially if the LIMIT keyword was not specified in the call to MAP_SET. If either or both the longitude and latitude range are not available, the minimum and maximum values will be set to zero.

NAME

Set this keyword to the name of the projection.

PROJ_NAMES

Set this keyword to a string array containing the names of the available projections, ordered by their indices. The first projection name is stored in element one.

UVRANGE

The UV coordinate limits of the selected map projection (umin, vmin, umax, vmax). UV coordinates are mapped to normalized coordinates using the system variables !X.S and !Y.S. These limits are dependent upon the selected projection, but independent of the current map.

UV_LIMITS

The UV bounding box of the current map (Umin, Vmin, Umax, Vmax).

--

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Toll-Free IDL Book Orders: 1-888-461-0155

[Note: This follow-up was e-mailed to the cited author.]

Subject: Re: IDL5.2: map_proj_info
Posted by [davidf](#) on Thu, 10 Dec 1998 08:00:00 GMT
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Andy Loughe (afl@cdc.noaa.gov) writes with regard to the new
MAP_PROJ_INFO function(?!):

```
>> Calling Sequence
>>
>> Result = MAP_PROJ_INFO [, iproj]
>>
> Does this calling sequence work for you?
```

No. But I often start my IDL courses with a Barry Lopez
story called "Directions". One of my favorite lines in
the story goes like this:

"Where it says go right, go left sometimes. Where it
says go North, read South...sometimes."

Here is one of those cases.

This routine is a procedure, not a function.

Map_Proj_Info, thisProjIndex, /Current

```
> If so, that would be great-- for an informational
> routine could simply pass into "Result" a structure
> variable from which "information" is gleaned.
> Unfortunately, I don't think map_proj_info works that way.
> Please educate me if I am wrong (is that fee-based?).
```

No. Only my correct answers are fee-based. What you get here
is exactly what you get here. :-)

```
>> LL_LIMITS
>>
>> The geocoordinate rectangle of the current map in degrees (Lonmin, Latmin,
>> Lonmax, Latmax). This range may not always be available, especially if the
>> LIMIT keyword was not specified in the call to MAP_SET. If either or both the
>> longitude and latitude range are not available, the minimum and maximum values
>> will be set to zero.
>
> This is unfortunate. In IDL, limits are normally given by
```

> [latmin,lonmin,latmax,lonmax].

Sheesh. The technical writer must have been having a bad day. Or, possibly, they take their own documentation more seriously than the rest of us. :-) This documentation is clearly wrong. You will be glad to hear, however, that the results are consistent with what you expect, rather than what you have been led to believe. :-)

On a related note, I have *finally* figured out how to do filled contours consistently in IDL! Those of you who have fooled around with this to any extent know that this is no small feat. My wife threatened to divorce me over the profusion of foul language coming out of my office over the past week or so. But it turns out it (the language) was useful in beating the problem into submission. (I guess.)

I haven't decided yet if I'm going to keep this knowledge to myself and try to get rich on another book deal, or share it with the larger community as a major public service. But I'll let you know. :-)

Cheers,

David

--

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Subject: Re: IDL5.2: map_proj_info
Posted by [Andy Loughe](#) on Thu, 10 Dec 1998 08:00:00 GMT
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David Fanning wrote:

>
>

> The MAP_PROJ_INFO routine returns information about the current map and/or the
> available projection. Mapping parameters should be setup via a call to MAP_SET
> before using MAP_PROJ_INFO.

It sounds like this is an informational routine, but for most of the keywords listed I am asked to give (or set) a value. I don't quite understand that.

I could not find help for map_proj_info by viewing the alphabetical listings. Apparently the routine is embedded within map_set.pro. I am running IDL 5.2 on a Sun Solaris system.

Thanks for sending the help file. :-)

```
>  
> Calling Sequence  
>  
> Result = MAP_PROJ_INFO [, iproj]  
>
```

Does this calling sequence work for you?
If so, that would be great-- for an informational routine could simply pass into "Result" a structure variable from which "information" is gleaned. Unfortunately, I don't think map_proj_info works that way. Please educate me if I am wrong (is that fee-based?).

```
> LL_LIMITS  
>  
> The geocoordinate rectangle of the current map in degrees (Lonmin, Latmin,  
> Lonmax, Latmax). This range may not always be available, especially if the  
> LIMIT keyword was not specified in the call to MAP_SET. If either or both the  
> longitude and latitude range are not available, the minimum and maximum values  
> will be set to zero.
```

This is unfortunate. In IDL, limits are normally given by [latmin,lonmin,latmax,lonmax].

It seems like this particular keyword is nearly useless if I must provide the necessary limits in a call to map_set anyway.

```
>  
> [Note: This follow-up was e-mailed to the cited author.]
```

Ditto.

--
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"I do not feel obliged to believe that the same God who has endowed us with
sense, reason, and intellect has intended us to forego their use." -Galileo
