Subject: Map pixel areas
Posted by khyde on Fri, 09 May 2014 16:12:21 GMT
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Hello,

I was hoping someone could help me figure out how to calculate the size of a pixel from a given map projection. For example, I use the following MAP_SET command to create a global 4096x2048 equidistant map. In theory (if I understand it correctly), the pixel sizes should all be the same since it is an equidistant map.
MAP_SET, /CYLINDRICAL, 0, 0, ISOTROPIC = 1, POSITION=[0.0, 0.0, 1.0, 1.0],/NOBORDER

Conversely, this map should have pixel areas of varying sizes.
MAP_SET, /MOLLWEIDE, 0, 0, ISOTROPIC = 1, POSITION=[0.0, 0.0, 1.0, 1.0],/NOBORDER

So, what I would like to do is determine the area of each pixel based on the given map projection. I have tried MAP_2POINTS, but I think this gives me the actual distance from point A to point B based on the coordinates on a globe and not the projected pixel, which has been distorted because of the map projection.

I apologize if I am not explaining my question very well, but hopefully someone understands mapping well enough to help me figure this out.

Thank you,
Kim