

# Re: Grid (or matrix) transformations – newbie question

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- *From:* [spellucci@xx](mailto:spellucci@xx) (Peter Spellucci)
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In article <00445a36-2e8c-429b-96cb-a68252bca292@xx>, Hans Olav <hon@xxxxxx> writes:

Hi,

I have a grid or matrix of floating point values. Each cell represents an area of say 1x1km (or 1x1 mile – it doesn't matter here).

Now I need to "transform" somehow this to another matrix which only partially covers the same actual area as the first one. It has another origin, is rotated and has another size of cells.

Anyone who could point me in the right direction considering choice of algorithm for this – or somewhere to read more about this? I've made some solutions that work pretty good in the examples I have tested so far but

- 1) I have a nag that in other cases my algorithm will yield less good results and/or consume too much CPU time
  - 2) I am pretty sure I can't be the first one with a problem like this.
- It's a little like all those things you can do in a photo processing application on the PC except my domain is more general (not being constrained to RGB values) and my problem has a geographical extent so sometimes I have to go beyond strictly rectangular metric coordinate-systems.

Rgds, Hans Olav

your question is all but clear to me:  
did you want to know shift, rotation, cut off data (since only a part of the original is covered by the image)?  
what do you know about the size of the cells in the image?  
is this a image detection problem ?  
please be more precise in what you mean by "transform"  
sorry, no help

Re: Grid (or matrix) transformations – newbie question

peter

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