
Subject: Re: Creating a composite image, avoid fill data values

Posted by [Spon](#) on Fri, 13 Feb 2009 17:26:26 GMT

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On Feb 13, 4:30 pm, Matt <mmsmith1...@gmail.com> wrote:

> Hi - I need to create a composite image showing the mean of all images
> while avoiding the fill value of 0. I have 5 images that are 600 by
> 800. In these images there are fill values interspersed among valid
> values (3-255). I'd like to create a new image showing the mean pixel
> values across all images, but I need to ignore pixels with value of 0
> from the calculations. Any suggestions on how to get this done?
> Thanks.

Hi Matt,

here's how I would go about it:

1) Create a stack of the images (e.g. `Stack = [ [img1], [img2], ...]`), and set all your zeroes to 1 (with the `>` operator). Then multiply up stack contents in 3rd dimension with `PRODUCT`.

2) Now all you need to know is what denominator to divide each cell by to get your average, and divide your two arrays to get the average in each pixel.

`GoodInd = Where(Stack GT 1)`

`Mask = Intarr(Size(Stack,/Dim))`

`Mask[GoodInd] = 1`

`Denominator = Total(Mask, 3)`

`Avlmg = StackProduct / Denominator`

Good luck!

Chris
