Subject: Implementation of G Statistic in IDL
Posted by crd319 on Fri, 20 Jun 2008 14:43:56 GMT
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I am working on a project which involves comparing two regions of an image by means of a "G statistic" The equation I am to use is as follows:

E_(variable) denotes a Sigma (Summation) with variable as its condition

ie:

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variable

s,m are two histograms (256x8 2D histograms)
i is a bin number
f_i is the frequency at bin i

The equation, as defined in the paper I'm using, is:

G = 2*([E_s,m E_i f_i log f_i] -[E_s,m (E_i f_i) log (E_i f_i)] -
[E_i (E_s,m f_i) log (E_s,m f_i)] +
[(E_s,m E_i f_i) log (E_s,m E_i f_i)]

I am trying to perform this comparison within a computer program but I am unsure of the logical flow of it, mostly since there are 3 variables (s,m,i) but only one is explicitly shown to be used. I am not familiar with this complex of a problem so if anyone could help my try and decipher this equation, I would be grateful

Chris