## Subject: coherence test implementation Posted by Mark Rehbein on Thu, 13 May 1999 07:00:00 GMT View Forum Message <> Reply to Message

Hi,

I'm doing some cloud detection on some rather large images using what some people call a coherence test. To do a coherence test on a pixel you take a 3x3 matrix around that pixel and assign that pixel the standard deviation of the 3x3 matrix. I have implemented this the following way:

```
for y=1, lines-1 do begin
for x=1, pixels-1 do begin
matrix=ch4(x-1:x+1, y-1:y+1)
stats=moment(matrix, sdev=sdev)
sddevimage(x,y)=sdev
endfor
```

You might agree that the code above can be more efficient if I use array and matrix operations. I'm fairly new to IDL and haven't been able to successfully use array and matrix operations in this application.

I'd appreciate any help any of you could provide.

Please email mrehbein@aims.gov.au

**Thanks** 

Mark