

HW

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EET 3132

Prog. Viviana

Ch#6

1-5

- 1) The two ships seems to be landed at the port. They are about 100-200 meters apart from each other. The other ship on the right is longer than the one on the left.
- 2) A road or rail line was intended for missile transport can be determined from relative size methodology. Tone or color can also be used to determine the situation.
- 3) Variance = 5106.4 , mean = 0.61
 $s.d \sigma = \sqrt{5106.4} = 71.4591$
- 4) The ~~red~~ soil scale is $DN = 250-400$
for water the scale would be $DN = 50-200$
the old moss is between $DN = 350-420$
for the bright white sand the scale will be $600-1200 DN$.

5.) Calculate the Correlation between the pixels and the covariance using matlab

Pixel #	Red (DN)	Green(DN)	Blue(DN)
1	40	50	60
2	20	25	28
3	30	30	30
4	15	16	14

The screenshot shows the MATLAB environment. At the top, there is a script editor window titled "Untitled.m" containing the following code:

```
1 - P1=[40,50,60];
2 - P2=[20,25,28];
3 - P3=[30,30,30];
4 - P4=[15,16,14];
5 - P=[P1;P2;P3;P4];
6 - Correlation=corrcoef(P)
7 - Covariance=cov(P)
```

Below the script editor is the "Command Window" which displays the results of running the script:

```
>> Untitled

Correlation =

    1.0000    0.9693    0.9397
    0.9693    1.0000    0.9949
    0.9397    0.9949    1.0000

Covariance =

   122.9167   154.5833   201.6667
   154.5833   206.9167   277.0000
   201.6667   277.0000   374.6667

fx >>
```