Remote Sensing Laboratory Lab Assignment # 4 Map Development

1. OBJECTIVE

To create a map using ENVI

2. DATA PROVIDED

Select the image of the data sources used are from following satellites/sensors; IKONOS, IRS and QUICKBIRD

3. METHODOLOGY

Map Layout:

- 1. Open Image with true color composite (i.e. RGB =321).
- 2. From Display menu bar (Image window menu bar), select File \rightarrow QuickMap \rightarrow New QuickMap.
- 3. When the QuickMap Default Layout dialog appears, enter the page size, select **Portrait** or **Landscape** page orientation, and enter your desired output map scale.
- 4. Click **OK**, The QuickMap Image selection window appears.
- 5. Select from the following options to select the image subset to be used in the QuickMap"
 - Resize and move the red box outline (drag from corners to resize, click and drag the middle of the box to move).
 - Enter x and y sizes, in inches, in the **Image Size** text boxes, or use the arrow increment buttons to select dimensions.
 - Click the **Spatial Subset** button and use standard ENVI spatial subset methods.
- 6. Click **OK**.

Setting QuickMap Parameters

- 1. When QuickMap Parameters dialog appears, select from the following options:
 - To add a title to the map, type the text in the **Main Title** text box.
 - To add text to the lower left or lower right corners of the map, type the text into the corresponding text boxes.
 - To automatically load the map projection from the ENVI header into either the Lower Left or Lower Right text boxes, right-click in the text box and select Load Projection Info.
 - To change the grid line parameters (thickness, style, color, etc.), click **Additional Properties** button.
 - To add scale bar and grid lines, leave the corresponding check boxes selected and edit the parameters as needed.
 - To add a North arrow, leave the corresponding check box selected and select an arrow type from the **North Arrow Type** button menu.

- To return to the QuickMap Image Selection window and edit the image subset or map scale, click **Change Mapping Parameters** button.
- 2. Click Apply to view the changes.
- 3. Save image in .jpeg format.

Follow these steps for IKONOS, IRS and QUICKBIRD images given below. Also try to plot the Map with different scale and different paper sizes.

Size	millimeters	inches
Letter (US)	215.9 x 279.4	8.5 x 11
Legal (US)	215.9 x 355.6	8.5 x 14
Ledger (US)	279.4 x 431.8	11 X 17
A0	841 x 1189	33.125 x 46.75
A1	594 x 841	23.375 x 33.125
A2	420 x 594	16.5 x 23.375
A3	297 x 420	11.75 x 16.5
A4	210 x 297	8.25 x11.75

Table: International Standard Paper Sizes

Submit the report with discussion and conclusion with your result obtained.

4. Result

5. Discussions and Conclusion: