**DAILY ASSESSMENT FORMAT**

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| **Course:** | IIRS Outreach Program on Satellite Photogrammetry | **USN:** | 4AL16EC057 |
| **Topic:** | Introducing Photogrammetric Concepts | **Semester & Section:** | 8th B |
| **Github Repository:** | Rasika B Patil |  |  |

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| Report:  C:\Users\User\Downloads\WhatsApp Image 2020-06-29 at 8.47.37 PM.jpegC:\Users\User\Downloads\WhatsApp Image 2020-06-29 at 8.47.37 PM (1).jpeg  C:\Users\User\Downloads\WhatsApp Image 2020-06-29 at 8.47.38 PM.jpegC:\Users\User\Downloads\WhatsApp Image 2020-06-29 at 8.47.38 PM (1).jpeg  C:\Users\User\Downloads\WhatsApp Image 2020-06-29 at 8.47.38 PM (2).jpegC:\Users\User\Downloads\WhatsApp Image 2020-06-29 at 8.47.38 PM (3).jpeg  Map: It shows an area as seen vertically form above. Different symbols and colours are used to represent various objects on a map.  Aerial Photo: They are taken from an aircraft to show objects on the ground. They can be divided into vertical aerial photos and oblique aerial photos.  WHAT IS PHOTOGRAMMETRY  • The science of quantitative analysis of measurements from photographs  • Photos - light  • Gramma - to draw  • Metron - to measure  Distinct Areas in Photogrammetry  Metric Photogrammetry  • Making precise measurements from photos determine the relative locations of points.  • Finding distances, angles, areas, olumes, elevations, and sizes and shapes of objects.  Interpretative Photogrammetry  • Deals in recognizing and identifying objects and judging their significance through careful and systematic analysis.  Most common applications:  • preparation of planimetric and Interpretation Sensing topographic maps  • production of digital orthophotos  • Military intelligence such as targeting  BRANCHES OF PHOTOGRAMMETRY  Based on platform:  • Ground Based  • UAV/drone based  • Aerial Photogrammetry  • Satellite Photogrammetry  Based on processing techniques:  Analogue System  • Optical or mechanical instruments were used to reconstruct three-dimensional geometry from two overlapping photographs  • The main product during this phase was topographic maps  Digital System  • Digital photogrammetry is applied to digital images that are stored and processed on a computer  • Digital photogrammetry is sometimes called softcopy photogrammetry.  • The output products are in digital form, such as digital maps, DEMs, and digital orthophotos saved on computer storage media.  Analytic system  • The computer replaces some expensive optical and mechanical components  • Devices were analog/digital hybrids  • Main developments- Analytical aerotriangulation, analytical plotters, and orthophoto projectors  • Outputs - can be topographic maps, but can also be digital products such as digital maps and DEMs  BASIC CONCEPT  • The primary objective of the technique is to derive precise coordinates of a point  • This is done by viewing the area from two different angles, thereby recreating the same conditions as it existed at the time of photography.  TYPES OF AERIAL PHOTOGRAPHY  • Vertical  • Low oblique  • High oblique  Scale of Aerial Photography  Before a photograph can be used as a map supplement or substitute, it is necessary to know its scale. On a map, the scale is printed as a representative fraction that expresses the ratio of map distance to ground distance, For example:  RF=MD/ GD  On a photograph, the scale is also expressed as a ratio, but is the ratio of the photo distance (PD) to ground distance. For example:  RF PD/GD  scale = f / H  scale = photo distance + ground distance |