Daily Assessment Format

Name: Jyoti. S. Donur

Date: 03/07/2020

Usn: 4AL17EC037

Course: IJps

Topic: photogrammetric products from satellite stereo images

Github repository: jyoti-courses

Report

Photogrammetric products from satellite stereo images

→ DEM
* Triangular irregular network (TIN)
* Grid (regular spaced)
* contours
* Gray scale image
* shaded relief image
* persspective view
* 3d view

→ Uses of DEM
* Derivation of contour lines
* orthophoto generation
* production of visibility maps
* profile determination
* volume determination
* generation of slope models

→ DEM precision
o.1m precision

→ Automatic DTM point collection
* image matching techniques
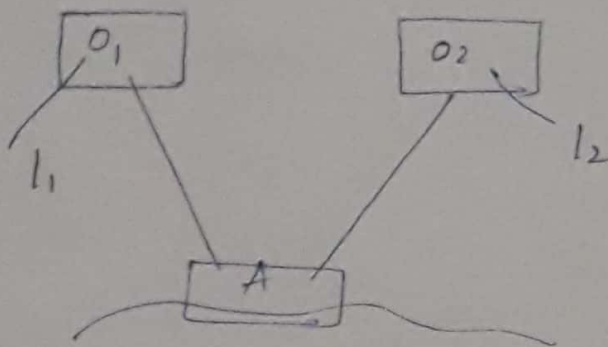o Area based matching
• feature based matching

° Relation based matching

→ Area based matching
This method determines the correspondence b/w
two image areas according to the similarity of
their gray level values.

The cross correlation & least mean square
techniques are well-known methods for area
based matching.

→ Automatic DIM point collection



→ Feature based matching
It determines the correspondence b/w two image
features.
most feature based techniques match extracted
point features (this is called feature point matching
as opposed to other features, such as lines of complex
objects.

→ Image pyramid

choice is yours! - which ever you choose!
everything is possible! . - ·
IAm possible ·· ·

Impossible ...

→ ortho-rectification

→ Algorithms for digital ortho-rectification
    polynomial rectification
    projective transformation
    Differential rectification

→ Advantages of digital orthophotos

* the geometric accuracy is higher since a very close mesh at points is used to approximate the ground surface

* image content can be modified quite simply by content manipulation of the densities & colors!

→ Dort