

## 1. Task 1 Assignment Documentation

### a. Principles followed to deciding chunks

1. There should be 5 GCPs in each of the chunk
2. The overlapping chunks will have atleast 3 GCPs common to each of them (chunks 1 to 5 follows this principle, rest of the chunk has 2 GCPs common as it was done before coming across the specific reference)
3. The GCPs considered are well spread across the corridor
4. The chunks are grouped from higher to lower ground elevation
5. There is good continuity between the end of flight images and beginning of the flight images
6. For some reason I thought the images of the same altitude are to be grouped together, but as the number of images are too high in number and the altitude details are not readily displayed in GE or QGIS, this will take lot of manual time to check altitude, this principle has not been adopted
7. For lack of time only 27 chunks are grouped for now

### b. Notes about specific chunks

1. The chunk1 has 5 GCPs well spread across the chunk, containing approximately 120 images.
2. The chunk2 in middle of chunk1 and chunk3 almost overlaps all the area covered by both of them
3. Chunk4 covers the end of flight images
4. Chunk5 overlaps the end of flight and beginning of new flight images and is also one of the long chunks as the GCPs are spread far away.

### c. References

1. Corridor mapping  
<https://support.pix4d.com/hc/en-us/articles/202557459#label6>
2. Distribution of GCPs  
<https://support.pix4d.com/hc/en-us/articles/202559299-Number-and-distribution-of-ground-control-points-GCPs-in-corridor-mapping>
3. About GCPs  
<https://support.pix4d.com/hc/en-us/articles/202557489>
4. Corridor sub-projects  
<https://support.pix4d.com/hc/en-us/articles/204909679-Corridor-Project-has-Big-Errors-on-the-Edges>
- 5.

Recommendations to GCP planning team: 1. The chunk5 has GCPs are widely spaced, hence shorter spaced GCPs are recommended.

General recommendation: A PyQGIS script would be great to decide the chunks instead of doing it manually. Attempted a work in progress script, first to strip away html tags of the KML file.