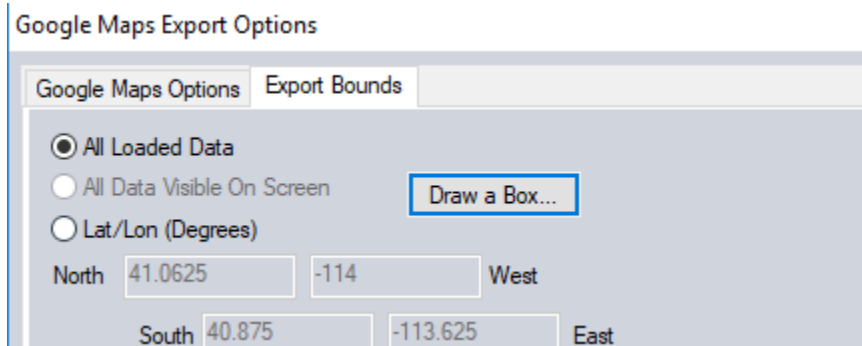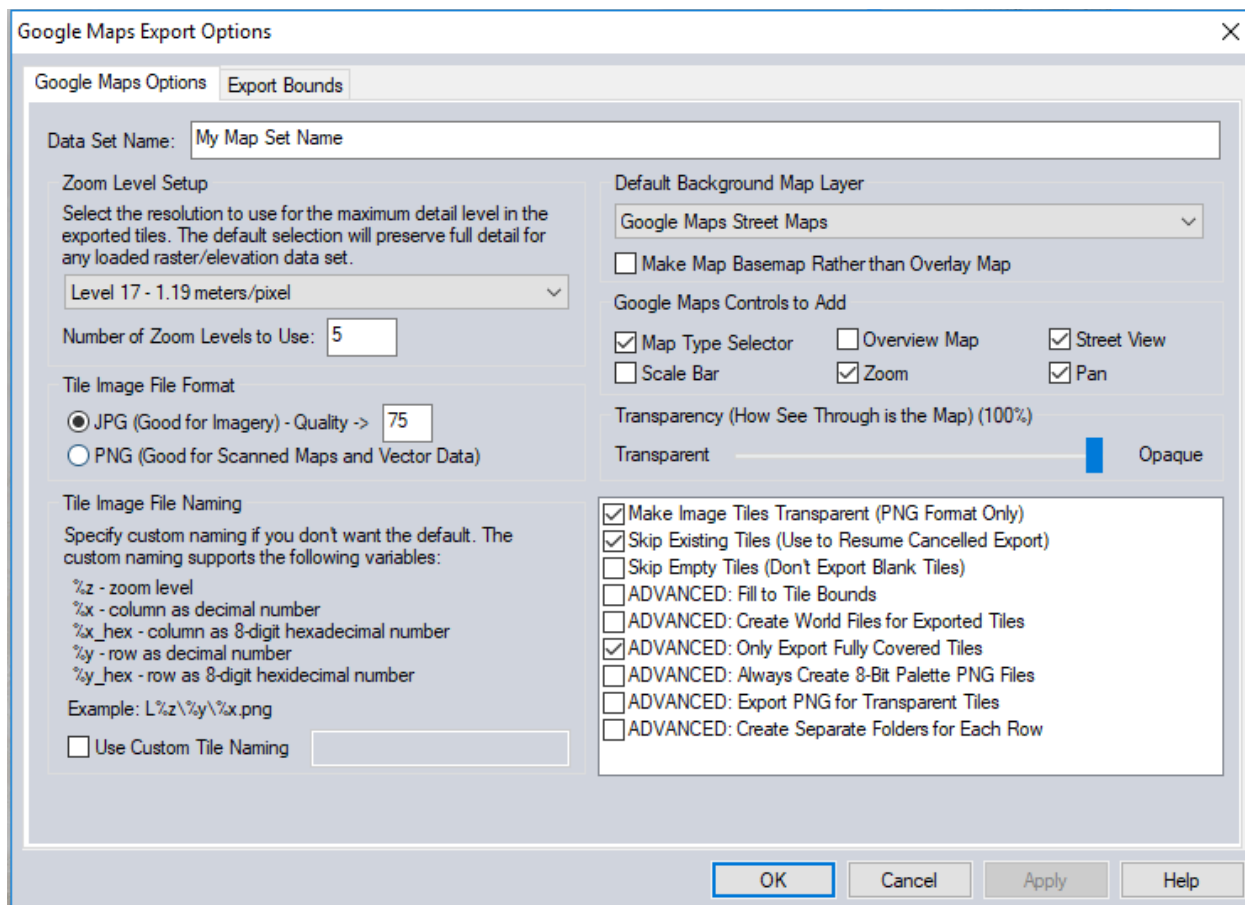ArgenTECH Alti T. Data Considerations

GCS Requirements:

- Basemap - **Sensor Computer**
  - TIFF - geoTIFF with LZW compression
  - World File - Include
  - Geotags - Include
  - Projection or Geographic Coordinates - Projects on the fly
  - Multiple maps - Yes, but not in the same location. ie, multiple fires.
  - We were able to get the IMT PDF into SkyLink by converting it using GlobalMapper to a GeoTiff. No world file was needed.
- Basemap - **GCS computer**
  - Uses a custom version of Mission Planner. It can consume KMLs and .shp files,
  - Basemaps can be loaded by exporting from Global Mapper as a Google Maps Tiles.
    - In Global Mapper
      1. Load exported GeoTiff from ArcGIS Pro or ArcMap into Global Mapper
      2. File → Export Web Format → select Google Maps Tiles
      3. Select the Export Bounds tab → select Draw a Box

Google Maps Export Options

Google Maps Options	Export Bounds

Data Set Name: My Map Set Name

Zoom Level Setup

Select the resolution to use for the maximum detail level in the exported tiles. The default selection will preserve full detail for any loaded raster/elevation data set.

Level 17 - 1.19 meters/pixel

Number of Zoom Levels to Use: 5

Tile Image File Format

- ⦿ JPG (Good for Imagery) - Quality -> 75
- ◯ PNG (Good for Scanned Maps and Vector Data)

Tile Image File Naming

Specify custom naming if you don't want the default. The custom naming supports the following variables:

%z - zoom level
%x - column as decimal number
%x_hex - column as 8-digit hexadecimal number
%y - row as decimal number
%y_hex - row as 8-digit hexidecimal number

Example: L%z\%y\%x.png

☐ Use Custom Tile Naming

Default Background Map Layer

Google Maps Street Maps

☐ Make Map Basemap Rather than Overlay Map

Google Maps Controls to Add

- ☑ Map Type Selector
- ☐ Scale Bar
- ☐ Overview Map
- ☑ Zoom
- ☑ Street View
- ☑ Pan

Transparency (How See Through is the Map) (100%)

Transparent ———————————— Opaque

- ☑ Make Image Tiles Transparent (PNG Format Only)
- ☑ Skip Existing Tiles (Use to Resume Cancelled Export)
- ☐ Skip Empty Tiles (Don't Export Blank Tiles)
- ☐ ADVANCED: Fill to Tile Bounds
- ☐ ADVANCED: Create World Files for Exported Tiles
- ☑ ADVANCED: Only Export Fully Covered Tiles
- ☐ ADVANCED: Always Create 8-Bit Palette PNG Files
- ☐ ADVANCED: Export PNG for Transparent Tiles
- ☐ ADVANCED: Create Separate Folders for Each Row

OK Cancel Apply Help

Google Maps Export Options

Google Maps Options	Export Bounds

- ⦿ All Loaded Data
- ◯ All Data Visible On Screen   Draw a Box...
- ◯ Lat/Lon (Degrees)

North 41.0625   -114   West

South 40.875   -113.625   East

4. Click OK
5. Click OK again
6. Select a location to save.
7. Zoom level 17 and 18 seem to be the best levels for time sake. Higher levels of zoom took considerable time to export
8. After Export transfer the files to the GCS computer
9. If the file path of the export and location on the GCS computer are different you will need to modify the .htm file on the GCS computer to match the file saved path. You can do this by changing the .htm to .txt and editing the file paths embedded in the file.

10.
- ○ Waypoint entry

Site Selection Requirements:

(Antenna height, preferred flight altitude, takeoff/landing area, etc.)
Antenna height - 35 foot
Preferred flight levels - 3,500 agl
Launch and Recovery size - 200x200

Data Processing:

(Format, conversion needed, FMV ready?)
Sensor Display
- Displays where/how for which sensors?
  - Lat/Long: DDM
  - Gimbal angle for tilt and pan displayed: yes
- Basemap displayed?
  - Displays footprint of sensor FOV: yes
- Elevation model required?
  - Format: Will take Dted. .dt2 format

Sensor Specs
- For each sensor:
  - Megapixels?
  - Resolution height and width (pix)
  - Sensor height and width (mm)
  - Focal length (mm)
  - IR
    - Pixel pitch (microns, if applicable)
    - Radiometric? no
- For multiple optics
  - Boresighted: yes

Data Collection
- Video
  - Dual streams? Freqs?
  - Stream multiple sensors?
  - Streamed packet size?
  - Closed circuit or IP? (Multicast)
- Stills

- - Ability to collect stills while collecting video?
  - Stills watermarked?

Other:

Storage
- Files archived on display device and/or onborad: GCS Computer
- Files backed up on server?
- Files chunked based on size or time?
- Transfer method?