

Precision Stalker Data Considerations

GCS Requirements:

(File type, size, DEM included, etc.)

- TIFF exported from Data View to incorporate World File.
- DPI: 1200 works fine. Could take higher, processing through ArcMap was slow/problematic.
- WGS 1984 (this will stretch the image) but tests showed lat long to still be accurate. Vendor software would not read other projections.
- Must be loaded from external thumbdrive!!!
- DTED: Vendor is able to acquire this. Good to provide, but requires software (Global Mapper)
- Vendor software can read KML (not KMZ) however, still working on getting exported ArcMap KMLs to work with vendor software.
- Process used in ArcMap:
 - Dataframe Properties: Coordinate System set to WGS1984
 - Export TIFF 1200 DPI

NOTE: Vendor may only need .tfw and .tif files. This hasn't been tested yet.

Site Selection Requirements:

(Antenna height, preferred flight altitude, takeoff/landing area, etc.)

- Antenna height : 30'
- Min. alt: 1000' AGL
- Footprint launch/recovery: 300' long x100' wide, ideally obstacles within a quarter mile are less than 100' tall (for both approach and departure)

Data Processing:

(Format, conversion needed, FMV ready?)

Sensor Considerations

- Lat/Long display? Sensor center?
 - Lat/Long and Sensor center displayed on screen if using Vendor software (SkyLink)
- Gimbal angle for tilt and pan displayed?
 - Both angles displayed on video screen
- HFOV displayed?

- HFOV on screen
 - Basemap displayed?
 - Same or different from GCS basemap?
 - Different systems between sensor display and groundcontrol
 - Displays footprint of sensor FOV?
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 - Elevation model required?
 - Format?
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> EO/IR sensor:

> Mapping sensor:

Gimbal Control

- Zoom specs?
- Cursor control? Saved to GCS waypoints?
- Tracking?

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?
- For multiple optics
 - Boresighted?

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?
 - For mapping - intervalometer or camera triggers?

Storage

- Files archived on display device and/or onboard? File type?
- Files backed up on server?

- Files chunked based on size or time?
- Transfer method? USB flash drive

Video files. .ts has imbedded metatdata if used in Skylink. Unknown if metadata can be pulled from FMV. Skylink can export KML points.