PHOENIX LiDAR SYSTEMS

Ladybug5/5+ Checklist

GNSS Reference Station
- ☐ Batteries charged?
- ☐ Tri-pod leveled?
- ☐ Height from ground to ARP measured?
- ☐ Set to log at 1 Hz?
- ☐ Powered on?
- ☐ Receiving satellites?
- ☐ Logging observations?
- ☐ Pictures of the setup taken?

Roof Rack
- ☐ Roof rack secured to vehicle cross bars?
- ☐ Camera securely mounted to roof rack?
- ☐ GNSS antenna/s installed on roof rack?
- ☐ Rover payload securely mounted to roof rack?
- ☐ Ethernet cable routed to user?
- ☐ Ladybug5 USB 3.0 cable routed to user?
- ☐ All cables zipped tied?
- ☐ LiPo batteries secured to roof rack?

Serial Port Redirector
- ☐ Serial Port Redirector open and running in the background?
- ☐ Remote IP address configured to rover-wire or 192.168.200.10?
- ☐ TCP port configured to 8000?

Rover
- ☐ IMU to GNSS antenna/s offsets measured/verified?
- ☐ Vehicle body rotations verified?
- ☐ LiDAR transform (translation/rotation) verified?
- ☐ LiDAR acquisition settings set (PRR, LPS, return mode, FOV)?
- ☐ Camera acquisition settings set (trigger by interval/distance)?
- ☐ Connections to Nav box secure?
- ☐ GNSS antenna cable/s connected to Nav box?
- ☐ LiDAR cover removed?
- ☐ Ethernet cable connected from Nav box to laptop?
- ☐ Nav box powered on?
- ☐ LiDAR sensor powered on?

- ☐ Ladybug5 camera powered on with 4 cell LiPo battery?
- ☐ Able to connect to Nav box via SpatialExplorer?
- ☐ Nav box has enough free space?
- ☐ Static alignment complete
- ☐ Pictures of system/setup taken (must show LiDAR/IMU orientation)?

LadybugCapPro/SpatialExplorer
- ☐ Camera detected in LadybugCapPro?
- ☐ Camera interface detected as USB 3.0?
- ☐ Trigger control enabled in LadybugCapPro??
- ☐ Pin direction control set to "GPIO 0: In"?
- ☐ Pin direction control set to "GPIO 1: Out"?
- ☐ Strobe control enabled for GPIO 1?
- ☐ Strobe control polarity set to "Low" for GPIO 1?
- ☐ Strobe control delay set to 0.00?
- ☐ Strobe control duration set to 10.00?
- ☐ GPS port number matches Serial Port Redirector COM port?
- ☐ Start GPS when starting LadybugCapPro enabled?
- ☐ Start GPS Positioning enabled?
- ☐ Start GPS Time Sync enabled?
- ☐ Serial Port Redirector COM port status is Connected?
- ☐ GPS Time: 1, PPS: 1, Quality: 1?
- ☐ Appropriate shutter range selected?
- ☐ Data format set to JPEG (12-Bit) - GIS?
- ☐ Recording of new PGR stream initiated?
- ☐ PGR stream recording location has enough space?
- ☐ PGR stream recording location set?
- ☐ LiDAR sensor activates/deactivates?
- ☐ Camera triggers (activates/deactivates)?
- ☐ Camera ACTivated in SpatialExplorer?
- ☐ Camera deactivated in SpatialExplorer?
- ☐ Recording of PGR stream stopped?