U.S. Geological Survey

Analog Camera Calibration Status

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Background

• Individual Analog Camera Calibration is done by USGS EROS contractors at USGS Optical Science Laboratory (OSL) in Reston via fully reimbursable agreements with camera owners.
• This has been done by the USGS for decades.
• Analog Camera Cal is done only as a service to industry, and is not a source of research.
• Last year specially manufactured glass plates, used for precision calibration, were noted as in short supply, with only one known manufacturer.
Situation Today

• With less than 2 years of glass plates remaining, the need for the OSL was investigated with the premise it may close after depletion of glass plates
• However, based on MAPPS, ASPRS, and RFI feedback, USGS has decided to buy glass plates to keep the OSL operating
• Demand is down
  • # of cameras calibrated decreased to 58 in FY10
  • Expected 50 cameras in FY11; Only calibrated 40 cameras
  • Reduced staff due to reduced demand but cannot sustain 2 people needed in the OSL at current rate and demand
• Increased Cost; Price Update completed
  • Supply, maintenance and space costs have increased
  • Fee update was approved by USGS last year and took effect in February this year
• Considering removing the requirement from USGS contracts that vendors cameras must be calibration every 3 years.
Situation Today

• Calibration is being continued because the vendors have want it not just because USGS is requiring it.
• With cost rising and demand going down, Calibration Fees to vendors may need to increase again
• Watching demand this year to determine future
Background

• USGS was in the process of developing a calibration laboratory and a “Digital Imagery Quality Assurance” (DIQA) plan.
  • To complement Analog Camera Calibration
  • Provide Digital Sensor system capability and performance assessment information
    • Provide Manufacturer Sensor Certification
    • Data Provider Evaluation
  • Develop Specifications and QA tools
  • Accomplish Range development and evaluation tools
• The plan was fully briefed in FY11 and USGS Management has decided not to move forward and has redirected all digital aerial assessment funding.
Ranges: Sioux Falls, SD; Rolla, MO; Pueblo, CO; Airy, North Carolina; Rochester, NY

Being maintained with external agreements to support research needs
Current Status

• Research Funding significantly reduced in FY12
• DIQA plan efforts stopped
• Continuing to Perform Sensor Research to Satisfy USGS Needs
  • Concentrate on New Sensors or New Technologies which can be used to support Climate and Land Use Change Science
  • Utilize USGS Science experts to guide areas of research
• USGS EROS Digital Camera Calibration efforts stopped
• Maintain Range Capabilities for Research only
  • Develop process for vendors use of ranges
• Continue to work with ASPRS to support in situ calibration process / standards work currently in process
• Inter-agency Digital Imagery Working Group (IADIWG) will not be supported and related technical staff and issues will be redirected to NDOP and NDEP as appropriate
Questions?