Team Mahogany Weekly Status Report Week of 3/12/18(1)

Team

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This Week

- Met with Warren to discuss the hardware for accessing the memory card addition
- Analyzed the contingency plan should the hardware design fail
- Worked on updating a new transmission base that can verify receipt of packets
- Started to parse the image transmission in packets
- Front end (Kevin)
 - Finished stabilizing cross-platformability of codebase
 - Development is occurring on both Windows and Linux
 - Worked on refacing WebODM's UI to better match final needs (e.g., remove separate node processing)

Next Week

- Working to test the hardware limitations for remote SD card storage
- Reading and transmitting a full image to test limitations of transmission and data loss
- Kevin (front end)
 - Continue refacing the WebODM UI for better usability/targeted use.
 - Create code scaffolding for handling scattered radiation data in topographic map style

Team Mahogany Weekly Status Report Week of 3/12/18 (2)

Long Term

- Finalizing a recovery script to reproduce the image at the receiver from the individual data packets
- Kevin (software on receiving computer)
 - Finish UI updates and dive deeper into the image processing/stitching and possible improvements/shortcuts that can be made there to enable real time processing

Critical Obstacles

- The SD hardware for wiring between the camera and the Arduino may fail due to the data rate or communications protocol
- Kevin
 - Time+scoping

Risks/Contingencies

- If the hardware fails to work we will be pivoting the project to demo the image transmission and creating documentation for further work and areas that we have seen to be potentially helpful
- We will then demonstrate the conceptual goal of producing the hardware and discus what limitations must be
 overcome for that solution to work in the future