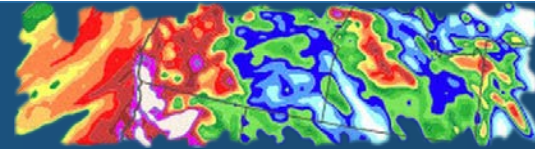
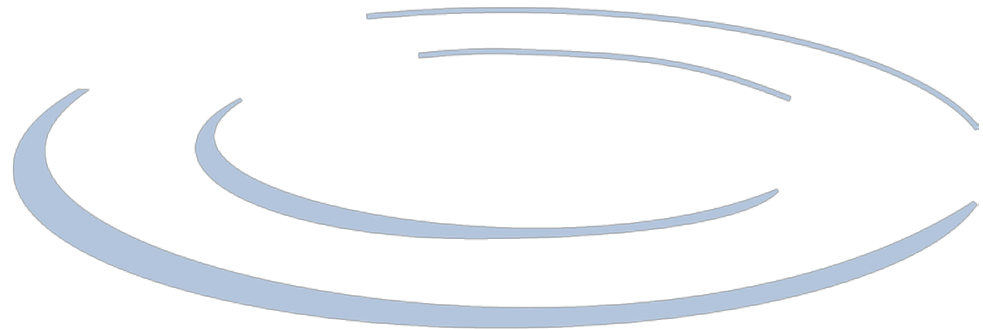


SCAN ALERT2 Network Design



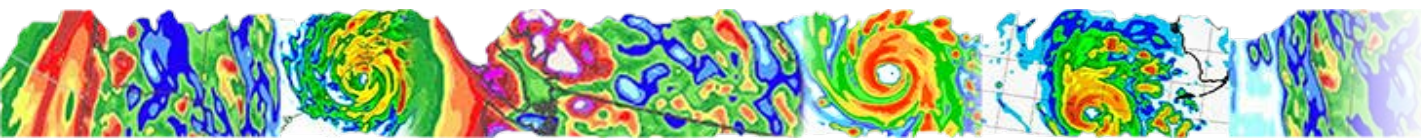
Project Status

16 October 2014



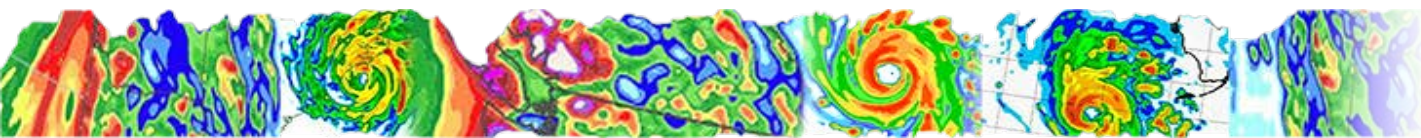
Project Scope

- Task 1: Interview agencies
 - Questionnaire
- Task 2: Inventory existing network configurations
 - Ventura Database
- Task 3: TDMA Management Tool
 - <http://tdma-scan.onerain.com>
- Task 4: Network Designs
 - Phased Upgrades
 - Concentration
 - Full ALERT2
 - TDMA design
 - Equipment Required for each phase



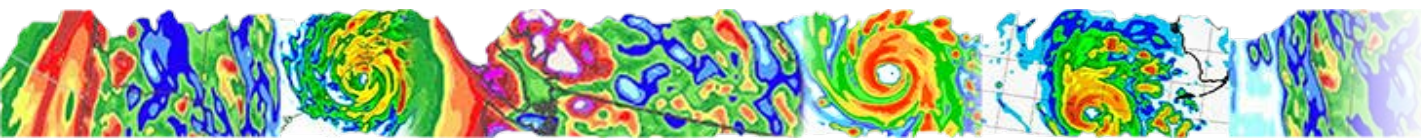
Task Status

- ✓ Task 1: Interview agencies
 - ✓ Questionnaire
- ✓ Task 2: Inventory existing network configurations
 - ✓ Ventura Database
- ✓ Task 3: TDMA Management Tool
 - ✓ <http://tdma-scan.onerain.com>
- Task 4: Network Designs
 - Phased Upgrades
 - Concentration
 - Full ALERT2
 - TDMA design
 - Equipment Required for each phase



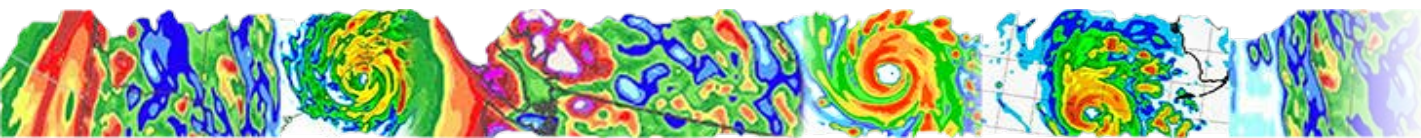
Remaining Tasks

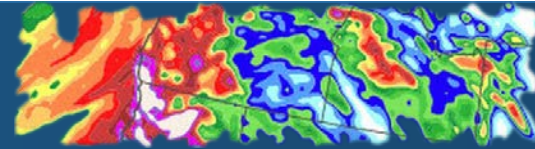
- Task 4: Network Designs
 - Phased Upgrades
 - Drafts have been distributed
 - Finalize
 - TDMA design
 - Each agency configured at <http://scan-tdma.onerain.com>
 - Equipment Required for each phase
 - Example draft
 - Each agency to review and verify



Discussion

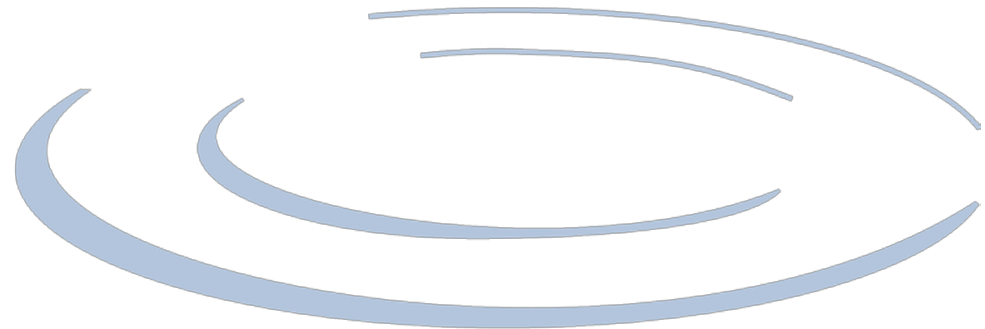
- Communication for cross agency dependencies
 - How does an agency learn about the designs and dependencies of their neighbors
 - How do the agencies coordinate the scheduling upgrades





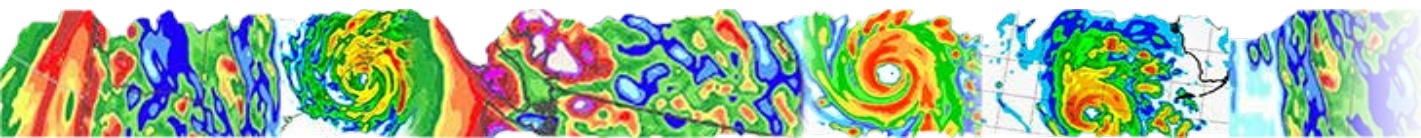
Thanks!

Comments and Discussion



Network Design Rules

- Network Design Rules
 - Two phase upgrade
 - Concentration
 - Full ALERT2
 - Separate dependencies across county agencies
 - NWS to receive data via SHEF
 - ALERT and ALERT2 not on same frequency throughout transition
 - Network/TDMA capacity to accommodate 5 years future growth



Equipment Requirements

- Equipment Requirements
 - Divided into two two phases
 - Concentration
 - Full ALERT2
- Things we don't know but recommend
 - Repeaters/Base Station require cavity filters in heavy RF environments
 - Reuse ALERT receivers for concentration if possible
 - Single antenna vs. dual antenna repeaters
 - May lose ability to receive during transmission times

