



# Improving Critical Infrastructure Resilience Using NISAR Remote Sensing Data

DHS/NPPD – NASA Meeting

1401 S. Clark St., Arlington, VA 22201

Conference Room 01-002

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## DAY 1

Tuesday, June 6, 2017

1. 7:30 - 8:00 AM – *Arrival & Sign-In*
2. 8:00 – 8:15 Welcome - Craig Dobson, NISAR Program Scientist (NASA/HQ/Earth Science Division)
3. 8:15 – 8:45 NASA Disasters Program Overview – David Green, Program Manager (NASA/HQ/Applied Science Division)
4. 8:45 – 9:15 DHS/NPPD/OIP Overview – Damion Higbe, Deputy Director, SP&B (NPPD/OIP)
5. 9:15 – 9:45 NISAR Mission Overview – Bradford Hager (Director, Earth Resources Laboratory, Massachusetts Institute of Technology)
6. 9:45 – 10:00 *Break*
7. 10:00 – 10:30 Office of Cyber and Infrastructure Analysis Overview – Robert Hanson (DHS/NPPD/OCIA)
8. 10:30 – 11:00 Use of SAR Remote Sensing for CI Applications – Cathleen Jones (NASA/JPL)
9. 11:00 – 12:00 Critical Infrastructure Sector Information Product Requirements – Critical Infrastructure Sector Representatives – Bruce Davis, facilitator
  - a) Dams Sector – Reis Thomas - (DHS/NPPD/OCIA)
  - b) Emergency Services Sector – Dan Schultz (DHS/NPPD/OIP)
  - c) Transportation Systems Sector - Andrew Pasternak (DHS/NPPD/OCIA)
10. 12:00 – 1:00 *Lunch / Email Break*
11. 1:00 – 2:30 PM Critical Infrastructure Sector Information Product Requirements (cont.)
  - d) Water and Wastewater - Marliee Orr (DHS/NPPD/OCIA) John Laws (DHS/NPPDSOPD)
  - e) Government Facilities - Christopher Coleman (DHS/NPPD/FPS)
  - f) Nuclear Reactors and Materials - Rachel Liang (DHS/NPPD/OIP)
  - g) Infrastructure Development and Recovery - Wynne Kwan (DHS/NPPD/OIP)



12. 2:30 – 2:45 *Break*
13. 2:45 – 3:45 Technical Response to Information Requirements Discussion – Cathleen Jones (JPL/NASA)
14. 3:45 – 4:15 R&D Needs to Address Identified Technical Gaps - Gerald Bawden (NASA/HQ)
15. 4:15 – 4:45 Next Steps and Day 1 Wrap Up – Cathleen Jones (JPL/NASA)

## **DAY 2**

Wednesday, June 7, 2017

1. 7:30 – 8:00 AM – *Arrival & Sign-In*
2. 8:00 – 8:10 Day 2 Action Plan - Cathleen Jones (NASA/JPL)
3. 8:10 – 8:30 New Orleans Levee monitoring via remote sensing and in situ instrumentation - Victoria Bennett (Rensselaer Polytechnic Institute)
4. 8:30 – 8:50 Radar mapping of post-disaster damage - Sue Owen (NASA/JPL)
5. 8:50 – 9:10 Radar remote sensing of displacement of bridges and similar structures - Daniele Perissin (Purdue Univ., via Webex)
6. 9:10 – 9:30 InSAR Remote Sensing for Performance Monitoring of Transportation Infrastructure - Edward Hoppe (Virginia DOT)
7. 9:30 – 9:45 Roundtable Discussion / Q&A with Speakers – Gerald Bawden, facilitator
8. 9:45 – 10:00 *Break*
9. 10:00 – 10:30 OCIA work flow for geospatial products - Christopher Marques (DHS/NPPD/OCIA/PMD/GAB)
10. 10:30 – 10:45 NASA/JPL ARIA satellite data processing - Sue Owen (NASA/JPL)
11. 10:45 – 11:30 Detailed Sector requirements - Bruce Davis, lead, group discussion
  - a. What do the final products look like?
  - b. Do any of the products serve multiple Sector requirements?
  - c. What is the technical specification for the NISAR radar product?
  - d. What is the best way to deliver the final product?
  - e. What is the best way to get from NISAR radar products to CI final products?
  - f. How do we put that in place?
12. 11:30 – 12:30 *Lunch / Email Break*
13. 12:30 – 1:30 PM Discussion on Detailed Sector requirements (cont.) - Bruce Davis, lead
14. 1:30 – 2:30 Work Plan group discussion - Cathleen Jones, lead
15. 2:30 – 3:00 Next Steps and Wrap Up - Craig Dobson (NASA/HQ/Earth Science)