NASA AIST-05 Sensor Web PI Meeting

Agenda
   Background
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   Work Session Overview
   Desired Products
   Wrap up Topics
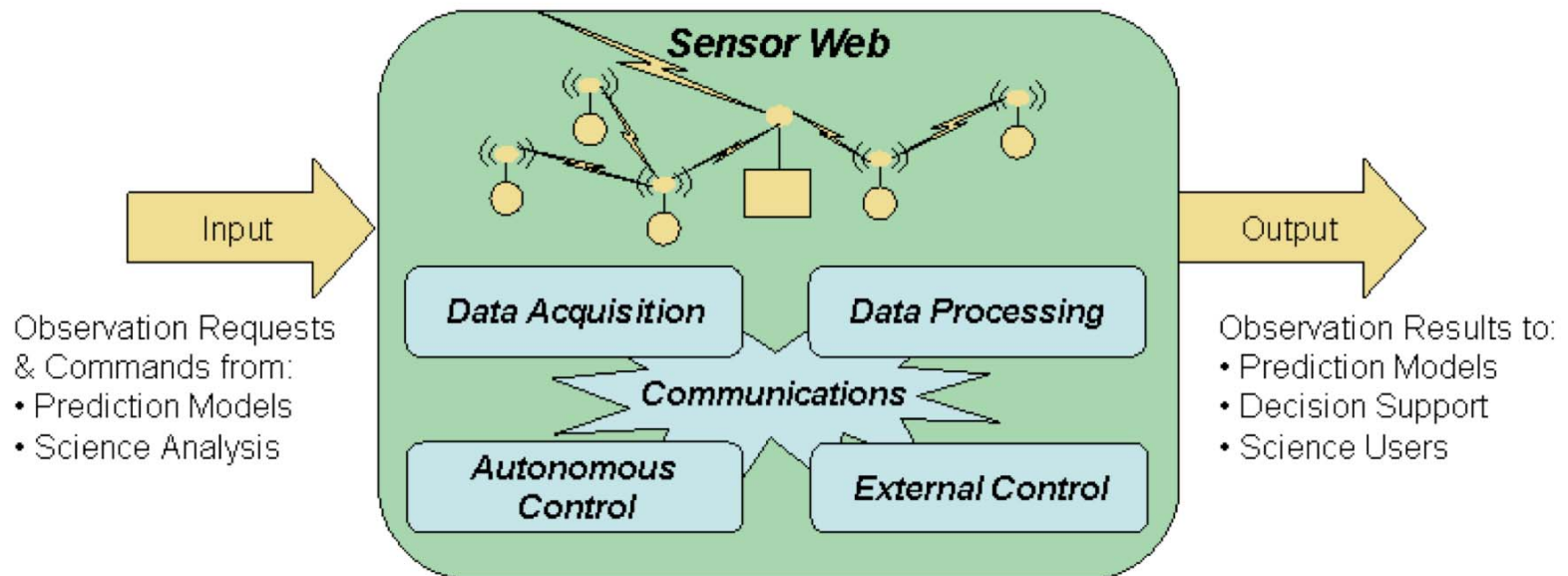
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AIST-05 NRA Motivation

- ## New NASA AA testimony to Congress in May 05:

  "In the future, NASA plans to develop a 'sensor web' to provide timely, on-demand data and analysis to users who can enable practical benefits for scientific research, national policymaking, economic growth, natural hazard mitigation, and the exploration of other planets in this solar system and beyond."

- ## AIST-05 Goals and Objectives

  – Evolve concepts demonstrating the benefit of sensor webs to Earth science applications

  – Developing selected component technologies to enable sensor webs

  – Enhance PI collaboration

  – Promote sensor web technology infusion

Sensor Web Design Concept

PI Meeting Objectives

- Increase awareness and understanding of "Sensor Webs"
    - Amongst ourselves
    - For the Earth science community
- Capture sensor web concepts for meeting report
    - An architecture "picture"
    - Useful definitions
    - Understandable scope
- Provide a forum for PI collaboration
- Develop an action plan to achieve technology infusion goals

Work Session Overview

- **Each Break-out Group includes**
  - ESTO facilitators and staffers
  - Aerospace reporters
  - A "Challenge" application advisor PI
  - A mix of PI's from each NRA topic area to maximize collaboration
    1. Smart Sensing
    2. Sensor Web Communications
    3. Enabling Model

- **Resources**
  - Internet wireless access to research concepts & terminology
  - CD of the Sensor Web Meeting web site files on each project
  - Computer projector, shared printers, overhead, flip charts
  - Worksheets & output templates

Break out Work Session Agenda

- 5-Minute Project Overviews (~1 hour)
  - Use the Project Quad charts and position papers
  - Get to know your fellow PIs
- Discuss and capture Sensor Web Concepts (~5 hours total)
  - Document architecture and terms as you go
  - Determine who will present your findings
- Lunch and Poster Session in the Del Mar Room
- Time permitting, address the Use Case Challenge
  - A. Ecosystems
  - B. Solid Earth Hazards
  - C. Weather Forecasts
- Prepare feedback briefings

Questions?

Desired Meeting Products

- Earth Science Sensor Web Architecture Concept (see worksheet)
  - Diagram
  - Components, terms, definitions, features, benefits
  - Use case challenge (stretch goal)
  - Map of PI projects to the Architecture Diagram
- Meeting Report (within 6 to 8 weeks, Aerospace lead)
  - Capture discussion highlights within each group
  - Minority viewpoints are welcome, contributions due by 2/19
  - Draft of session available by 3/ 5; all comments due by 3/12
  - Draft of full meeting summary report available by mid March
  - Target completion by early April
- Goal - Achieve consensus during feedback session

Wrap up Session Topics

- Action Plans

- Target Outreach Opportunities

- Collaboration Forums

- Schedule

Ready to Start?

The End

Charts for Wrap up Discussion

Action Plans

- Produce outreach materials, eg, poster, brochure, animated presentation, etc.
- Discuss coordination / opportunities with NSF (NOSS)
- Set up Sensor Web concept outlets
  – Public web site
  – Contribution to Wikipedia
- Establish a monthly Sensor Web technology infusion teleconference forum
  – TIWG 4th Tuesdays at 2:00 pm eastern

Action Plans

- Identify future forums for promoting Sensor Webs to the science community
  - Geoinformatics 2007, May 17-88, abstracts due 4/3
  - NASA SSTC 2007, June 19-21
  - AIAA Space 2007, September 18-20, abstracts due 2/28
- Suggestions for follow on Annual PI meeting
  - Place
  - Forum

Thank You!