

COLLABORATIVE TRAINING EFFORTS AT THE NESDIS COOPERATIVE INSTITUTES

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Satellite Forecaster Training***

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Challenges for operational environmental satellite services

- Growing ***number and complexity*** of sensors -- > community must be constantly learning
- Growing ***expense*** of sensors --> understanding how to obtain benefits is more critical now than ever before

Our objective is a community of learners across NESDIS and its academic partners (professors, researchers and students) improving operational environmental satellite services

Opportunities for learning

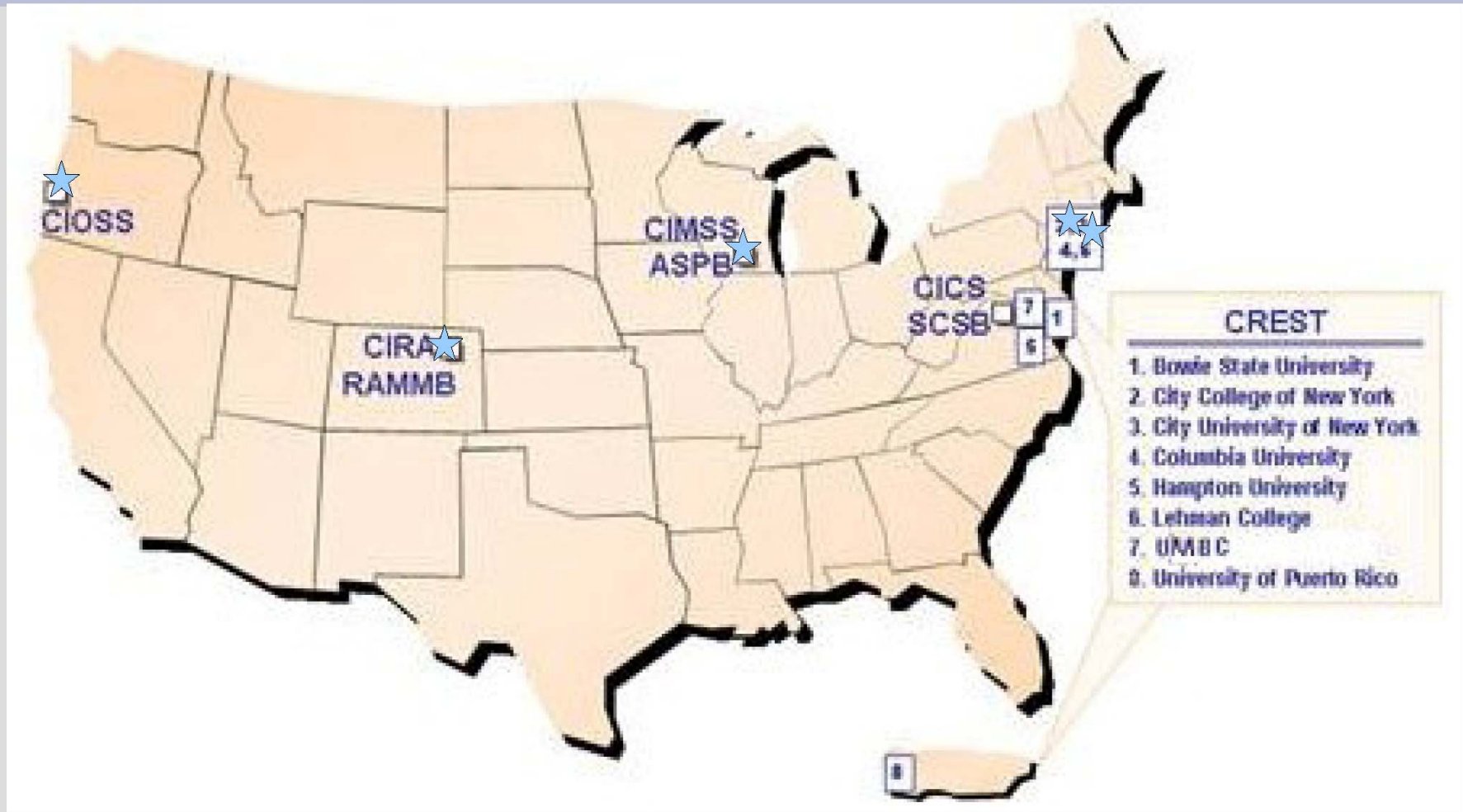
- Many future oceanographers, climatologists and meteorologists take satellite remote sensing courses at NESDIS Cooperative Institutes (Cis) and Science Center (CSC).
- Satellite remote sensing courses at NESDIS CIs and CSC cover sensors unevenly.

	CI for Meteorological Satellite Studies (CIMSS-WI)	CI for Oceanographic Satellite Studies (CIOSS-OR)	CI for Climate Studies (CICS-MD)	CI for Research in the Atmosphere (CIRA-CO)	Cooperative Remote Sensing Science and Technology Center (CREST-NY)
Satellite studies related to weather analysis*	P	s	s	S	s
Satellite oceanography	s	P	s	s	s
Satellite climatology	s	s	P	s	s
Satellite studies related to weather forecasting*	s	s	s	P	s
Succession planning, outreach and education	s	s	s	s	P

Broadening satellite courses

- Professors from NESDIS CIs and CSC teamed together by offering guest lectures to each other in their areas of expertise.
 - VISITview software with speakerphones

5 courses so far at 4 locations



Lessons learned

- VISITview worked well
- Speakerphones surprisingly troublesome
 - Skype worked better
- Lecturers new to distance learning had difficulty
 - Very limited interaction with classroom
 - Skype allows for video of each other which may help
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- More cohesive community desired
 - Satellite remote sensing community focusing on civilian operational benefits is small enough that students and faculty and researchers should be able to know each other and work together.

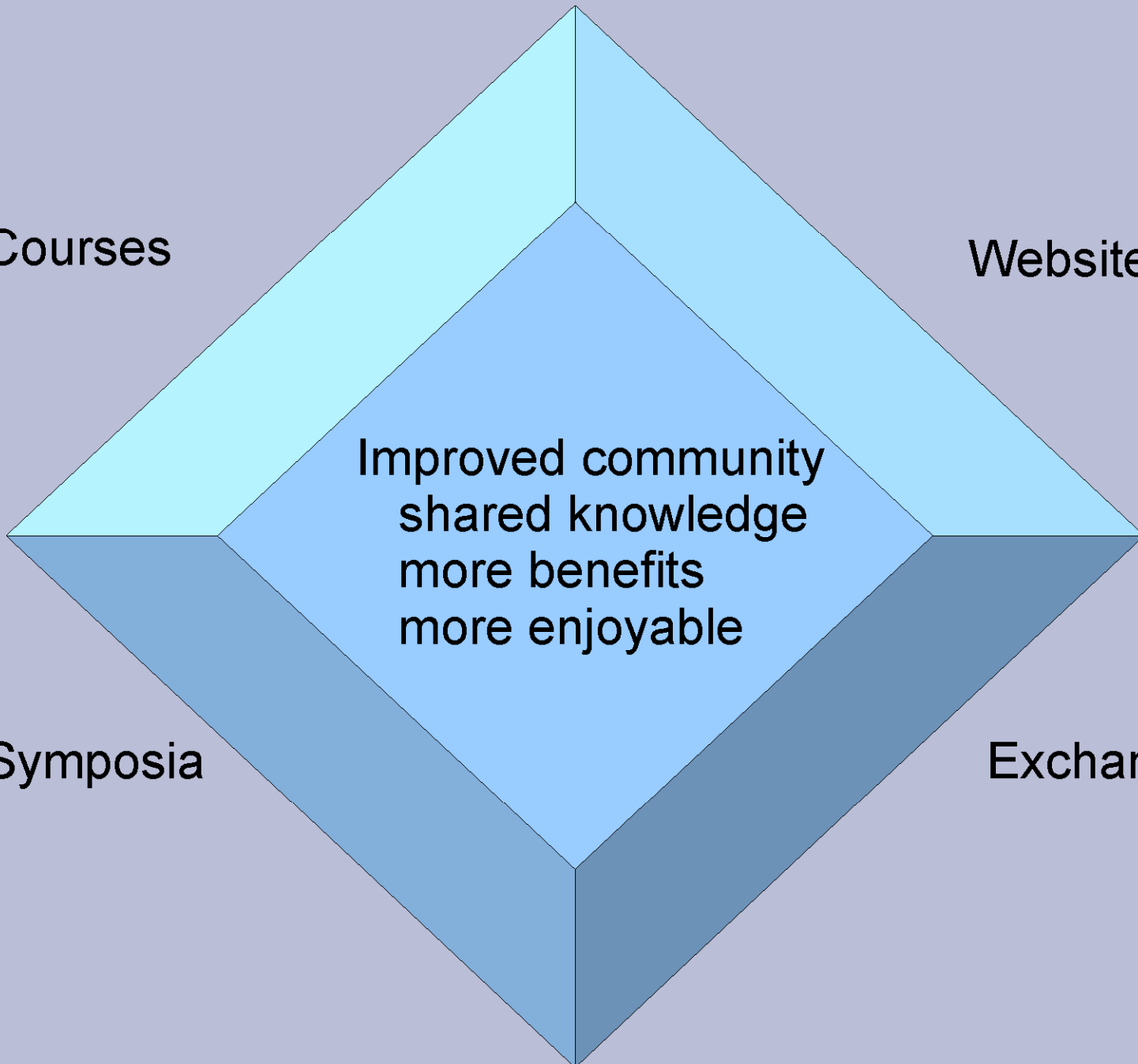
Courses

Website/blog

Improved community
shared knowledge
more benefits
more enjoyable

Symposia

Exchanges



Community building - NESDIS Cooperative Research Program Symposium

- 2008 – *Satellite Data and Model Infusion* hosted by CLOSS at Oregon State University
- 2007 – *The Role of Satellite Measurements in Observing and Predicting Climate Variability and Change* hosted by CICS at University of Maryland College Park
- 2006 – *NPOESS, GOES-R and Beyond: New Observations to Benefit Society* hosted by CIRA at Colorado State University

Community building - Student/Early career scientist exchanges

- Funds for student and early career scientist travel to and from NESDIS, the Cis and Center provided for 10-20 students each year.
 - One-on-one discussions
 - Seminars
 - Short courses
 - Proposal planning
 - Conference attendance

Community building - Directors Meeting

- Attendees from Cis, Center and NESDIS
- Strategic planning and adjustments
- Location alternates through Cis, Center and NESDIS

Building a community online

- NESDIS Center for Satellite Applications and Research (StAR) webpage
<http://www.star.nesdis.noaa.gov>
- **Cooperative Research Programs Blog**
<http://www.corpblogspot.com>

Benefits anticipated

- More communication between satellite sensor application experts and next generation of meteorologists, oceanographers and climatologists
- Improved use of current satellite constellation for benefits
- Improved design of future satellite constellation for benefits