Research Priorities at NESDIS/STAR

Ingrid Guch

Third Annual CICS-MD Science Meeting

November 12, 2014

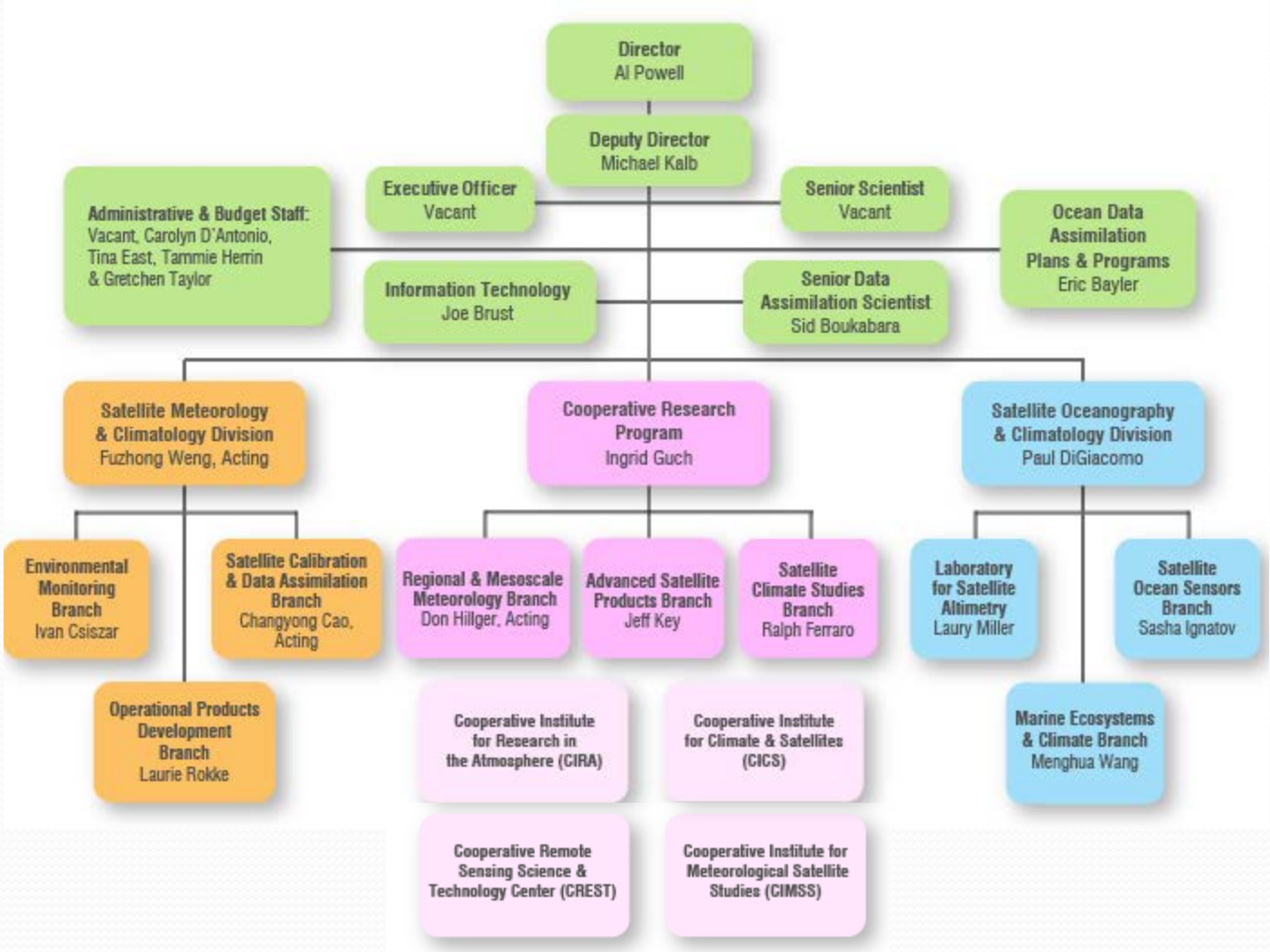
Why?

- STAR has a long-lasting partnership with CICS-MD
- Working together we can make more progress than alone
- STAR helps manage many of the funding opportunities that are proposed to by CICS-MD

This presentation…

- Serves as a quick reference about NESDIS/STAR
  - Org Chart
  - Priorities
  - Performance Measures
- Is only 10 slides! Should be time for discussions…

Center for SaTellite Applications And Research (STAR)



Where to find STAR Priorities?

- FY-15 Guidance letter from STAR to NESDIS Cis and CREST (see Hugo)
- STAR Strategic Plan (see www.star.nesdis.noaa.gov)

FY-15 Guidance

- Data fusion techniques
- Current satellites of high interest
  - S-NPP, MeTOP, GCOM-W1 AMSR2, GPM
- OSSEs
- GOES-R/JPSS
- GEOSS
- JCSDA related work using “O2R” environments
- Regional ecosystem activities using/enhancing IOOS data
- Environmental literacy
- Improving information about climate-related risks and associated mitigation opportunities

STAR Strategic Plan

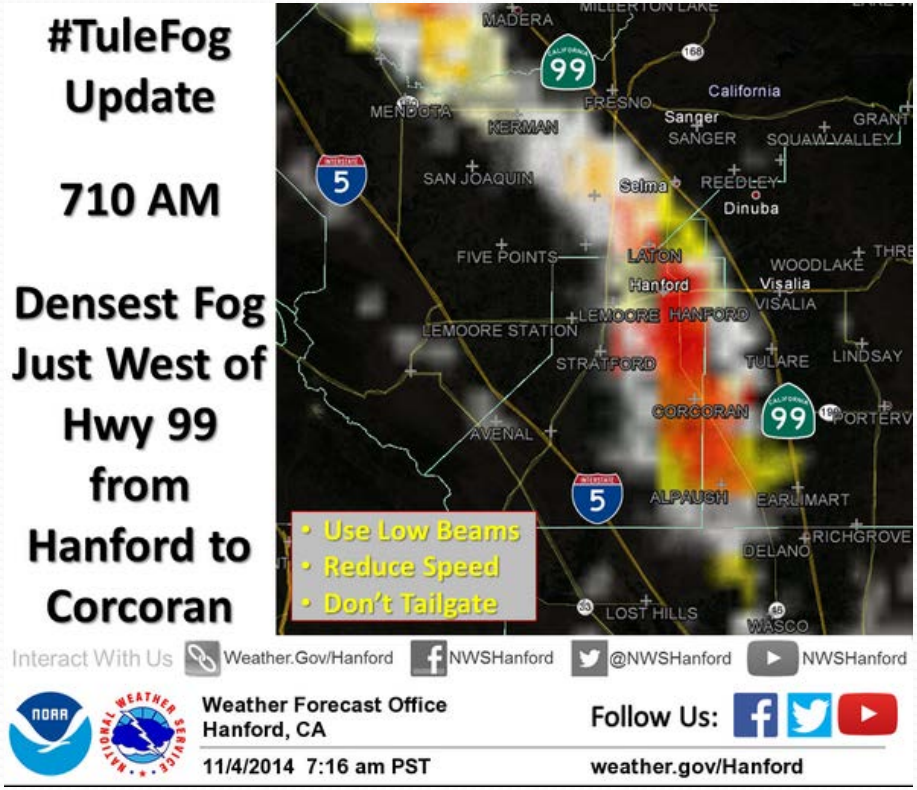
STAR Contributions/Goals to maximize the impact of NOAA's satellite program for the benefit of society, our communities and Nation's economy

- Promote new sensor and application research
- Ensure high-quality satellite data
- Advance algorithm refinement and technology infusion
- Transition research products into operational use
- Build and sustain partnerships

STAR Performance Measures

- Number of peer-reviewed papers published
- Number of calibration / validation corrections or analyses applied to satellite data sets to improve their utility
- Number of data products developed / product reviews completed for NOAA satellite missions
- Number of research products prepared for transition to operational use
- Number of live / recorded training sessions delivered / updated

Data fusion techniques



•The GOES-R Fog/Low Stratus (FLS) probability product is a merged product blending satellite, numerical weather prediction model (GFS and RAP), static ancillary (e.g., DEM, surface emissivity) and daily SST data using a Naïve Bayesian model.

http://fusedfog.ssec.wisc.edu/

GEOSS: PROVIDING SOLUTIONS

- Forecasting meningitis outbreaks
- Protecting biodiversity
- Improving climate observations in Africa
- Supporting disaster management in Central and South America
- Managing water resources in Asia
- Promoting solar energy
- Improving agriculture and fisheries management.
- Mapping and classifying ecosystems
- Forecasting weather for major events

Time for discussion

- Questions/comments ??