# NIDIS Knowledge Assessment Workshop "Contributions of Satellite Remote Sensing to Drought Monitoring" David Skaggs Research Center, NOAA, Room GB124 February 6-7, 2008

### Wednesday, February 6, 2008

#### 9:00-9:30 am: Workshop Overview

*9:00-9:15 am:* **Opening Remarks**: Roger Pulwarty, NOAA/NIDIS *9:15-9:25 am:* **Workshop Objectives**: Jim Verdin, USGS/NIDIS *9:25-9:30 am:* **Participant Introduction**: Workshop planning team

### 9:30 am-12:30 pm: Remote Sensing of Vegetation: Crops, Rangeland, and Forests

#### **Panel Presentations:**

9: 30-9:50 am: Jeff Eidenshink, USGS/EROS,
"A 16-year time series of 1-km AVHRR satellite data of the conterminous United
States and Alaska"
9:50-10:10 am: Jesslyn Brown, SAIC/USGS,
"Using eMODIS Vegetation Indices for Operational Drought Monitoring"
10:10-10:30 am: Brian Wardlow, NDMC, University of Nebraska, Lincoln
"The Vegetation Drought Response Index (VegDRI): A New Drought Monitoring
Approach for Vegetation"
10:30-10:50 am: Felix Kogan, NOAA/NESDIS
"Monitoring Drought and its Impacts on Vegetation from Space"
10:50-11:10 am: Wim VanLeeuwen, University of Arizona
"AVHRR and MODIS Vegetation Index Data for Rangeland Decision Support"

11:10-11:30 am Break

11:30 am-12:30 pm: Panel Discussion, Q & A led by Panel Chair Panel Chair: David Stooksbury, GA State Climatologist

12:30-1:30 pm: Lunch

### 1:30-4:30 pm: Remote Sensing of Precipitation and Snow Cover

#### **Panel Presentations**

Precipitation: 1:30-1:50 pm: Pingping Xie, Climate Predication Center, NCEP, NOAA "Precipitation Analyses and Their Applications in Drought Monitoring at NOAA's Climate Prediction Center" 1:50 pm-2:10 pm: Chris Funk, TRMM "Tropical Rainfall Measuring Mission" 2:10-2:30 pm: Victor Murphy, NOAA/NWS "NWS Precipitation Analysis Product"

Snow

2:30-2:50 pm: Donald Cline, NOAA

"NOAA's National Snow Analyses"

2:50-3:10 pm: Richard Armstrong, NSIDC, University of Colorado, "Northern Hemisphere Snow Extent Derived from Microwave and Optical Satellite Data"

3:10-3:30 pm: Break

3:30-4:30 pm: Panel Discussion, Q & A led by Panel Chair Panel Chair: Nolan Doesken, State Climatologist, Colorado State University

4:30 pm: End of Workshop Day 1

Thursday, February 7, 2008

**8:30-8:45 am: Opening remarks, recap of first day:** Jim Verdin, USGS/NIDIS, Jesslyn Brown, SAIC, USGS

9:00-12:00 pm: Remote Sensing of Evapotranspiration and Soil Moisture/Groundwater

## **Panel Presentations**

Soil Moisture/Groundwater
9:00-9:20 am: Son Nghiem, NASA JPL
"Satellite Remote Sensing of Soil Moisture for Drought Applications"

9:20-9:40 am: Eric Wood, Land Surface Hydrology Research Group, Princeton
University
"Remote Sensing and Land Surface Models"

9:40-10:00 am: Matt Rodell, NASA/GSFC
Remote Sensing of Terrestrial Water Storage and Application to Drought

Monitoring

10:00-10:20 am: Break

**Evapotranspiration** 

10:20-10:40 am: Graeme Aggett, Riverside Technology Enhancing Water Management Decision Support Systems with High Spatiotemporal Resolution Mapping of Actual Evapotranspiration
10:40-11:00 am: Martha Anderson, USDA/ARS Mapping Evapotranspiration and Drought at Local to Continental Scales with a Thermal-based Surface Energy Balance Model"
11:00-11:20 am: Gabriel Senay SAIC, USGS/EROS Landscape Evapotranspiration Estimates Using Remotely Sensed Data for Operational Applications in Agriculture and Hydrology"

11:20 am-12:20 pm: Lunch

*12:20-1:20 pm*: Panel Discussion, Q & A led by Panel Chair *Panel Chair:* Dennis Todey, State Climatologist, South Dakota State University

## 1:20-2:30 pm: Workshop Wrap-up

*1:20-2:20 pm:* **Identify crosscutting themes, user gaps, and recommendations**: Led by workshop planning team

2:20-2:30 pm: Closing Remarks: Roger Pulwarty