



JPSS: SBN (AWIPS Products)

Brian Gockel

Acting NWS Ground Readiness Project Manager
NOAA/NWS Office of Observations

April 29, 2015

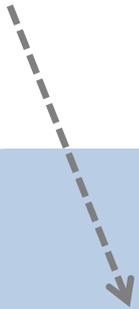


JPSS: SBN (AWIPS Products) - Topics

- S-NPP/JPSS Product Flow to AWIPS
- NOAAPort SBN
- S-NPP/JPSS Products Planned for AWIPS
- AWIPS Screen Shots of S-NPP/JPSS Products

Flow of S-NPP and JPSS Products to AWIPS

S-NPP and JPSS
Space Segment



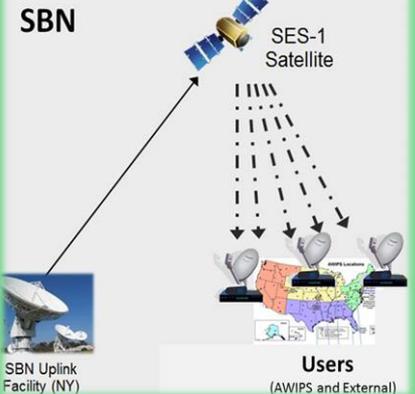
S-NPP/JPSS
Ground Stations
(Space/Ground Comms Node)

JPSS Ground Segment

JPSS IDPS → NDE/PDA
NSOF

JPSS IDPS → PDA
CBU

**AWIPS
NCF**

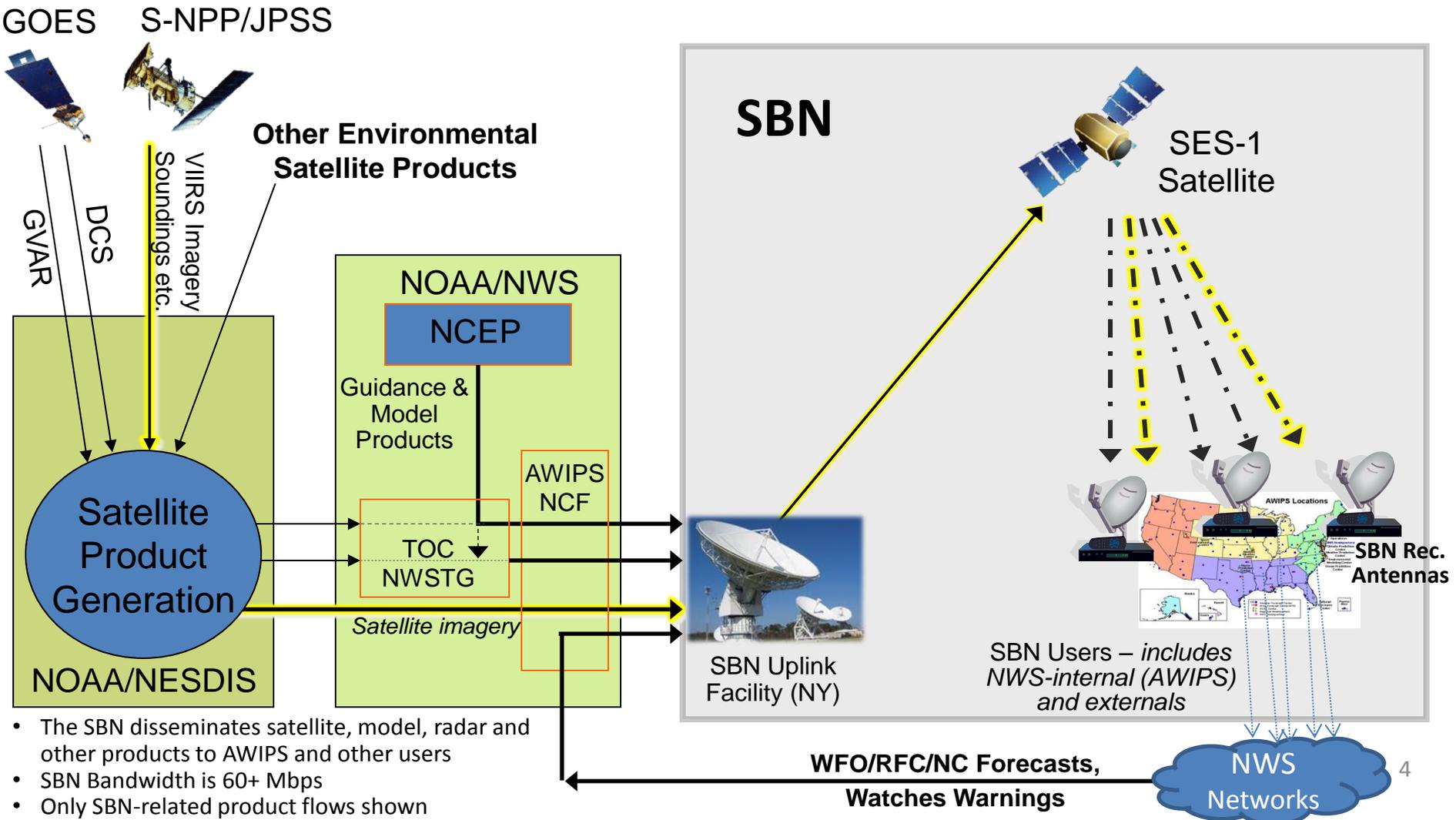


NOAA/NWS

Alternative, local or secondary data paths not shown.

Satellite Broadcast Network ~ "NOAAPort"

S-NPP/JPSS Product Distribution



- The SBN disseminates satellite, model, radar and other products to AWIPS and other users
- SBN Bandwidth is 60+ Mbps
- Only SBN-related product flows shown

SBN Channels Carrying S-NPP/JPSS Products

Channel Name	S-NPP/JPSS Products	Example Products
NMC/NWSTG	✓	S-NPP Point Data (e.g., NUCAPS soundings)
GOES/GINI		Legacy GOES Imagery (Mostly CONUS)
GOES-R West		GOES-R ABI Imagery (West)
GOES-R East		GOES-R ABI Imagery (East)
NMC2/NWSTG2		GRIB2 model/analysis/forecast grids
OCONUS		GRIB1 OCONUS Grids, Legacy OCONUS GOES Imagery, DCS
POLARSAT	✓	S-NPP/JPSS VIIRS Imagery
EXP	✓	Test or Experimental Products

S-NPP/JPSS Products Planned for AWIPS SBN Addition

1. VIIRS Imagery Channels for AK Region - added in 2012
 - a. Channel I1 (0.64 μm)
 - b. Channel I4 (3.74 μm)
 - c. Channel I5 (11.45 μm)
2. Western Hemisphere NUCAPS (NOAA-Unique CrIS/ATMS Processing System Soundings) – added April 2014
3. VIIRS Near-Constant Contrast Imagery – Regional, planned for addition in July 2015
4. Blended Products (e.g., Total Precip Water)

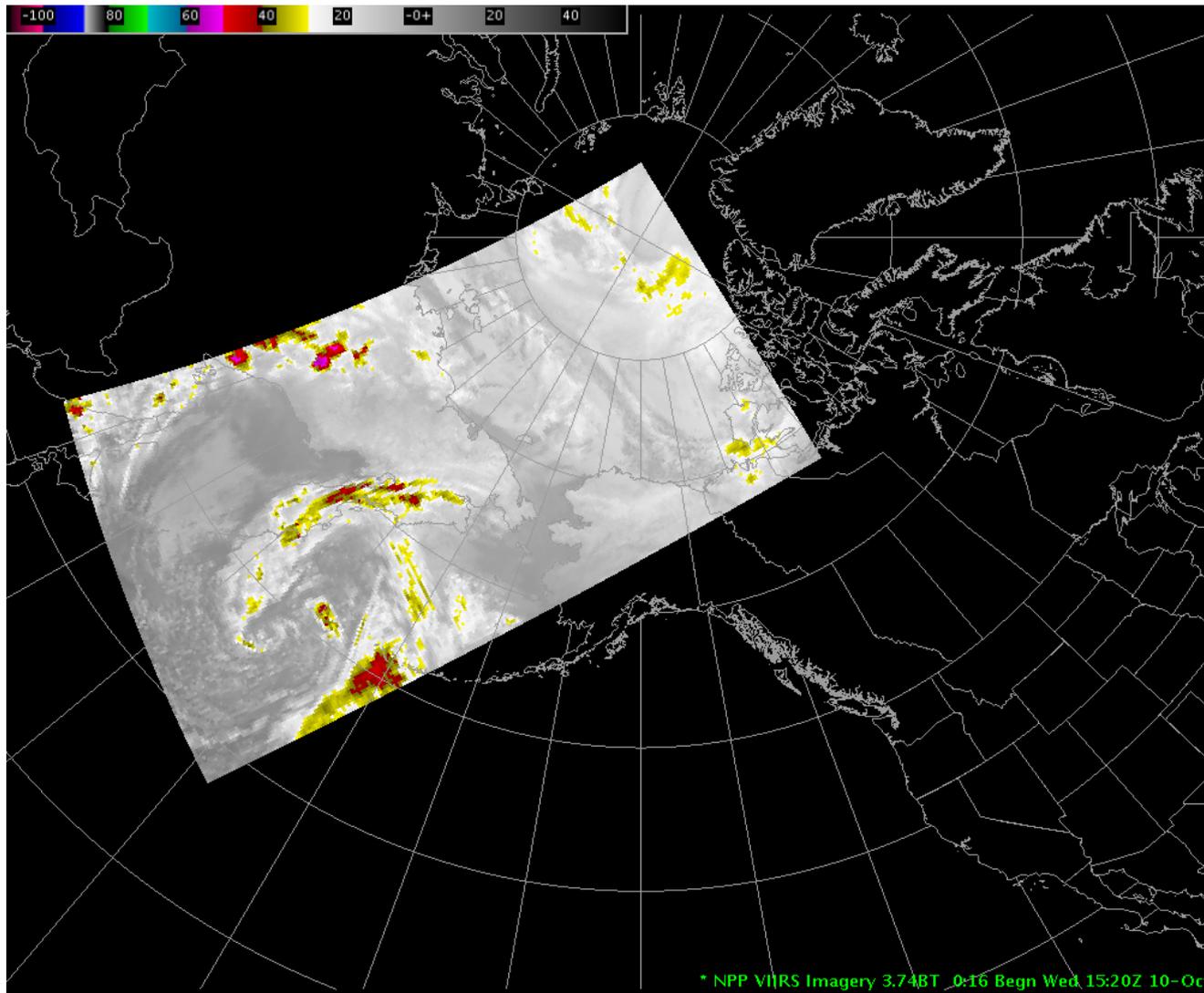
S-NPP/JPSS Products Planned for AWIPS SBN Addition

Other candidate products, in addition to products on preceding slide, include: VIIRS Channel I3 (1.61um) imagery, S-NPP/JPSS Active Fires Product, Cloud Liquid Water (ATMS – NUP), Snow Products, Sea Ice Characterization and/or Concentration.

Notes:

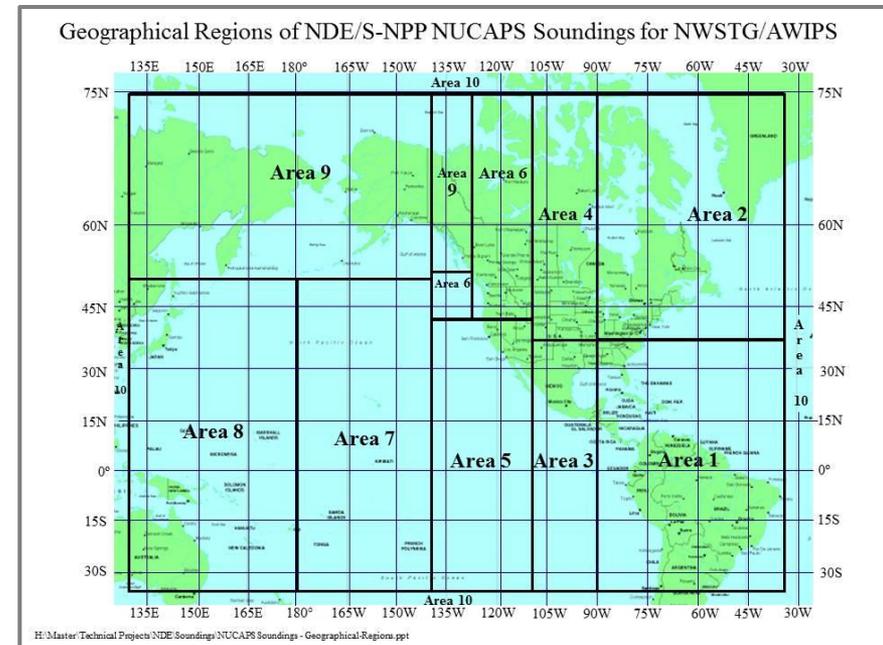
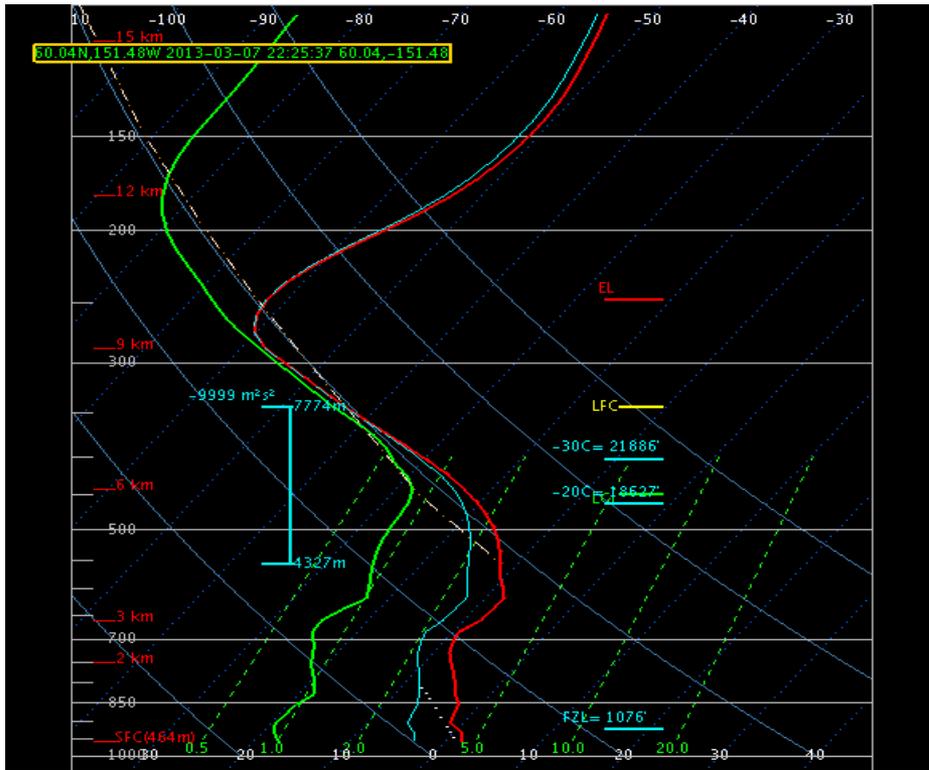
- 1. NWS field sites with a polar-satellite direct readout feed and ingest/processing systems receive more expansive product set than that which is available via the SBN.*
- 2. All NWS field sites have secondary/local methods for acquiring products that are not on the SBN/NOAAPort.*

AWIPS II Screenshots of S-NPP Products



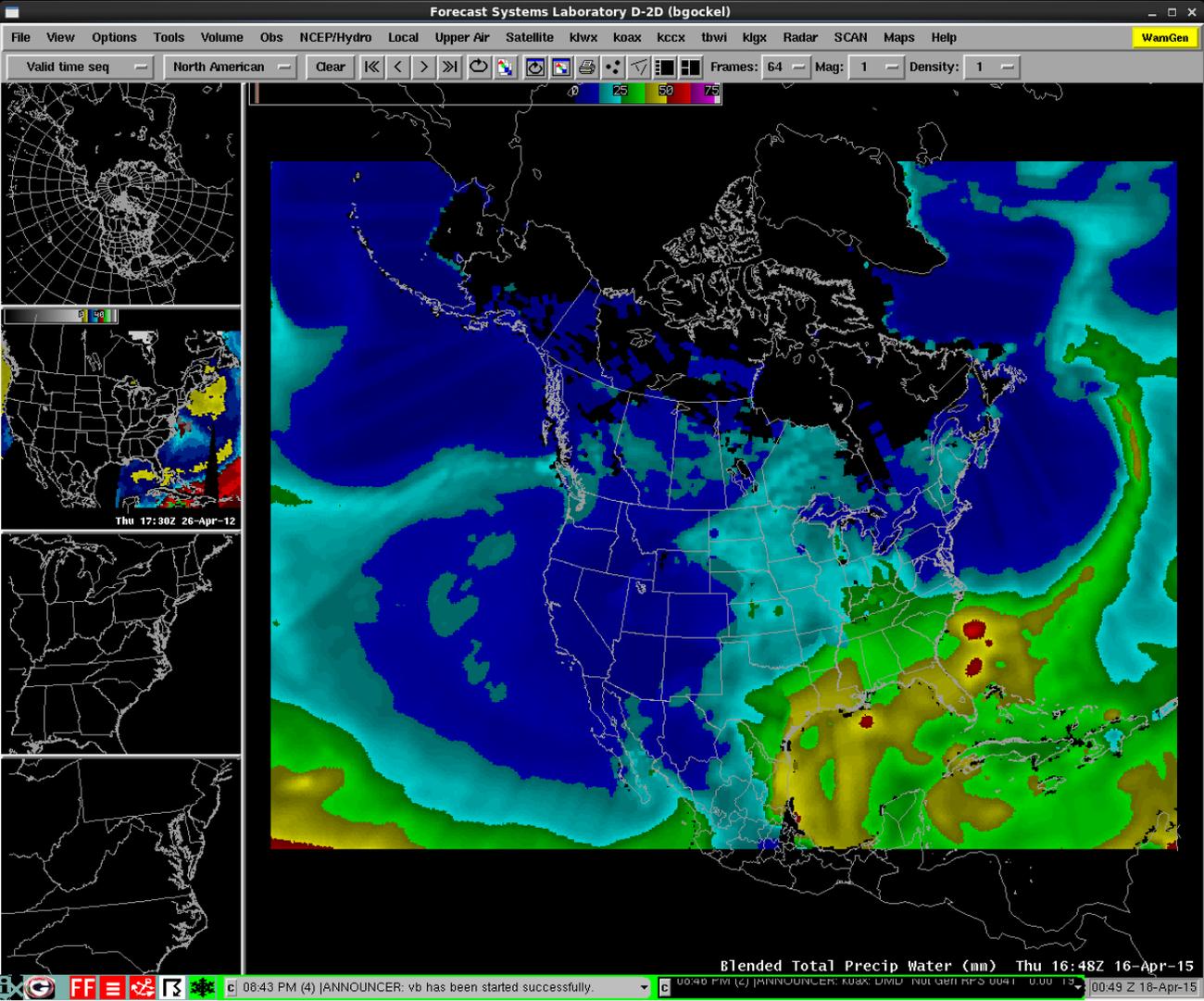
VIIRS Imagery (Channel I4 – 3.74 μm)

AWIPS II Screenshot NUCAPS Soundings



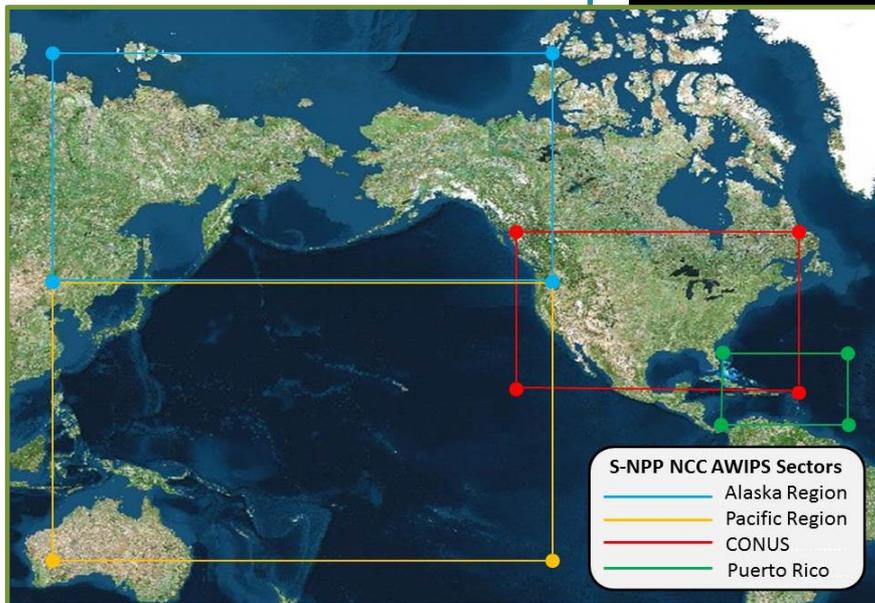
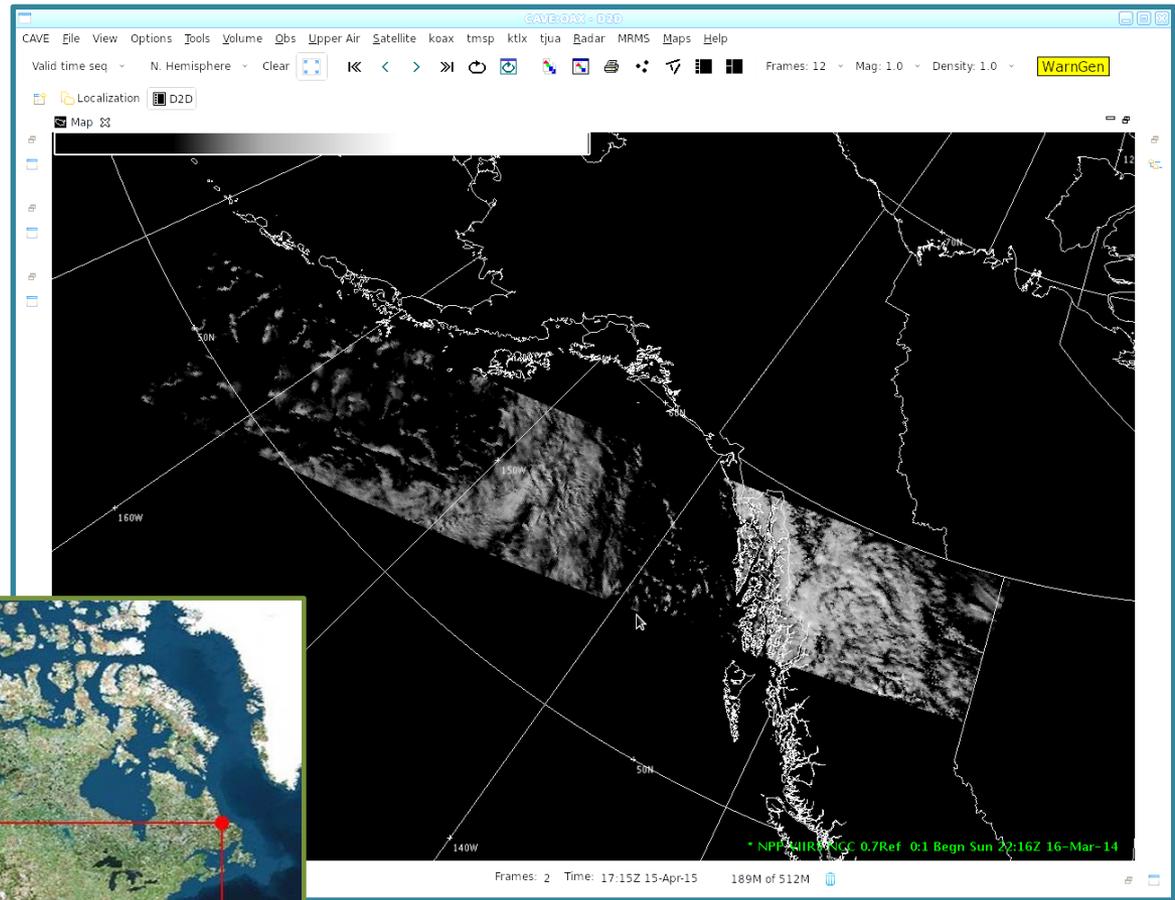
Geographical Sectors for NUCAPS Soundings on SBN

AWIPS Screenshot of Blended Total Precipitable Water



Blending of TPW Product from Multiple Satellites done by NESDIS

AWIPS II Screenshot of VIIRS NCC Granule



Geographical Sectors for VIIRS NCC Products on SBN (to be added July 2015)