



GOES-R/JPSS PG User-Readiness 2014



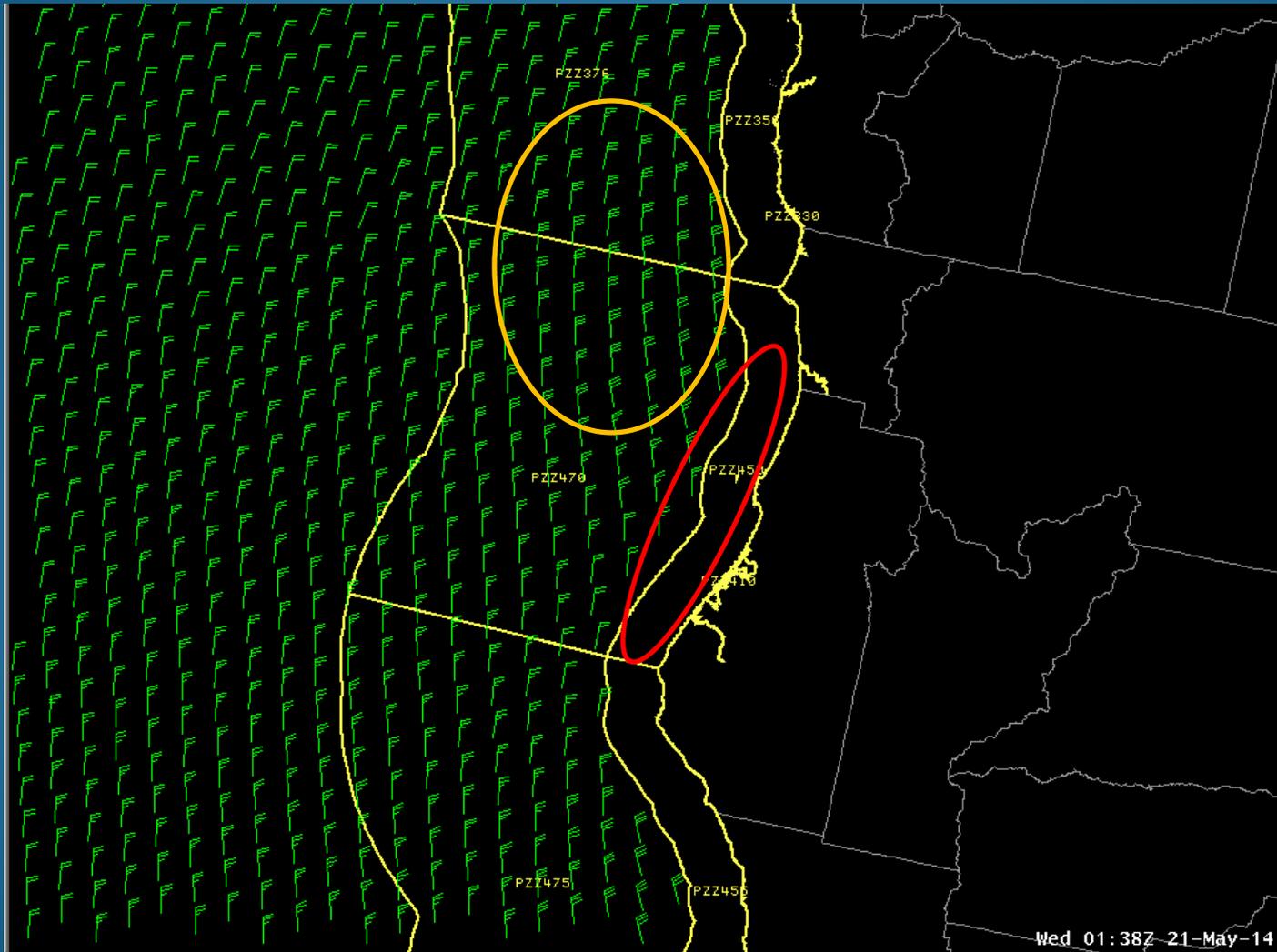
NWS Western Region and
Coastal WFO Eureka
Mel Nordquist,
SOO WFO EKA

- My history involved with GOES R:
 - Became the WR Satellite FP early 2008.
 - **GOES-R Proving Ground Kick-Off Meeting 15-16 May 2008.**
 - **Created the WRSAC 2010, myself and five WR SOOs**
- Eureka WFO history with PG activities:
 - ORI evaluation 2011 CIRA.
 - WindSat operational evaluation with NASA SPoRT Summer 2012.
 - **CIMSS Fog Low Stratus (FLS) product evaluation**
Summer 2013.
 - QPE and LPW
Spring Summer 2013. *(EKA tried but WFO MFR participated)*

*How long has your WFO participated in the Satellite Proving Ground?
What GOES-R/JPSS product(s) have been evaluated and for how long?*

- Discuss two:
 - Summer 2013 eval of CIMSS FLS products.
 - Chad Gravelle - Facilitator
 - Mike Pavolonis – Developer and Training
 - MFR evaluation of the CIRA QPE and LPW products with NASA SPoRT.
- A plug for OSVW (non-GOES R/JPSS):
 - NASA SPoRT eval. of WindSat. (one slide)
 - Chris White - Facilitator.

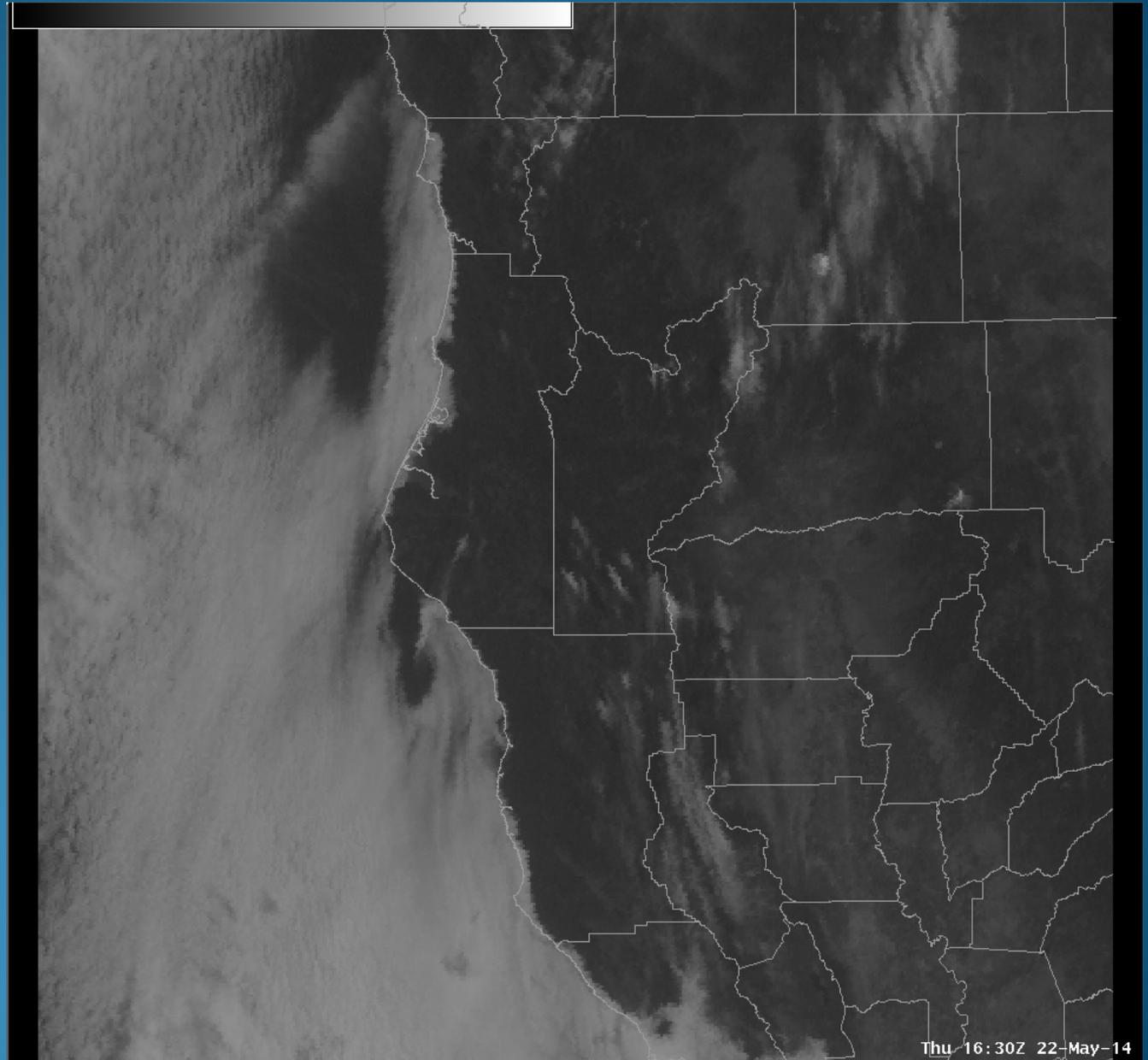
- Current example of use of WindSat during a Gale event offshore leading to hazardous seas near shore.



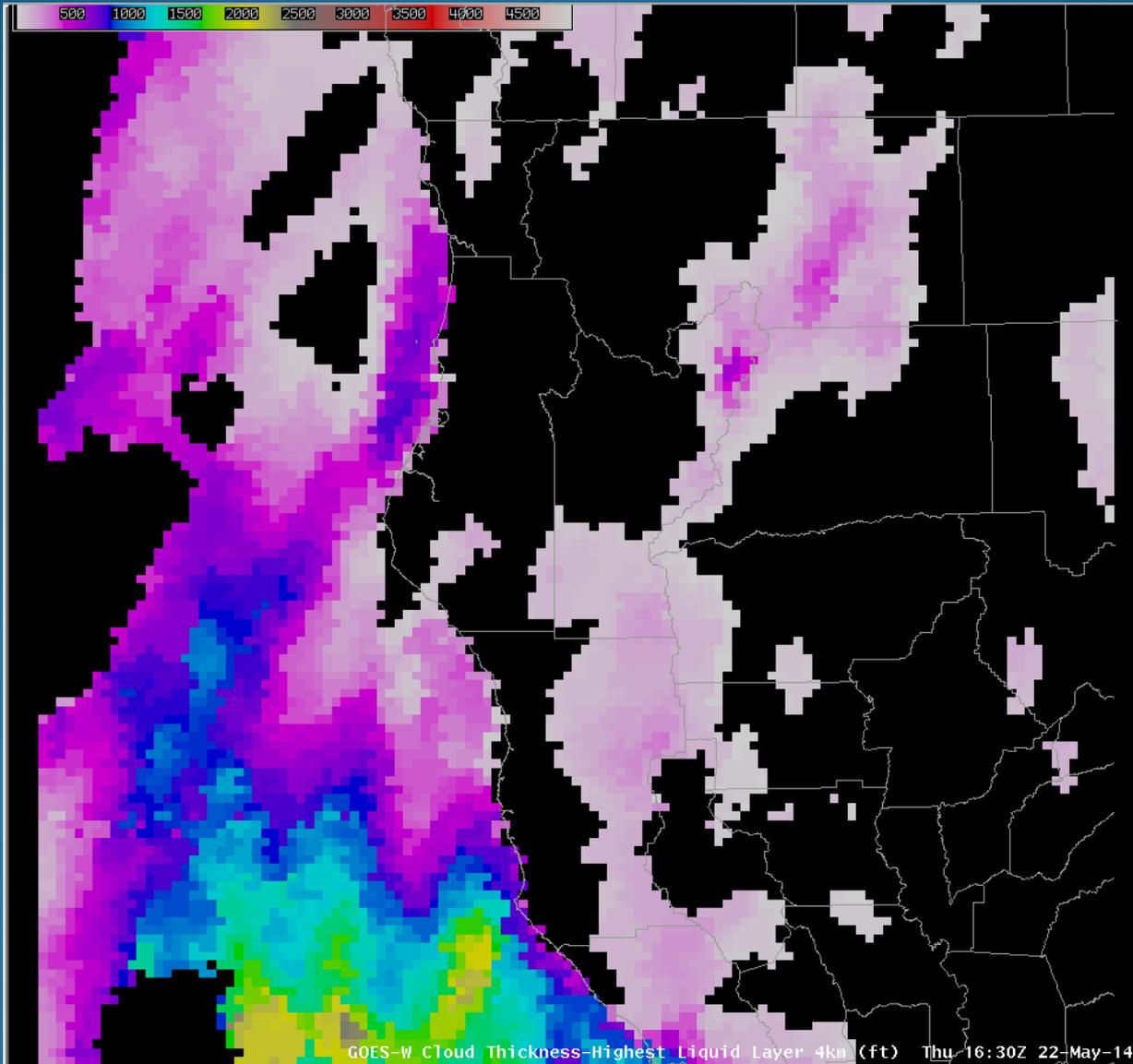
- Surveys: FLS
 - Collaborative preparation of survey...critical for success.
 - Forecasters doing the surveys:
 - Gives the developers an unfiltered (by SOO) response.
 - Also, helps forecaster internalize their understanding of the operational applications of the product.
- Preparation training for FLS:
 - Two GoTo sessions with Mike Pavolonis (recorded).
 - Introductions and discussions during morning map discussions.
 - One-on-one sessions with SOO.
 - SOO survey of forecasters helps identify deficiencies in forecaster understanding.

What were your Proving Ground training experiences with GOES-R/JPSS products?

- Visible image
- 22 May 2014
- 1630Z
- Morning
Marine
Stratus



Cloud Thickness Product



- PIREP and cloud thickness products off shore are in good agreement and usually are with these events...

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NEWBY/SDM/NCO/NCEP  
UBCA90 KWBC 221805  
\x1eCA 221805  
ACV UA /OV ACV/TM 1758/FL003/TP M20P/SK OVC003 TOPS007/RM  
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and used to help evaluate afternoon development and evening onshore push.

Did the product(s) provide added value for the forecast process and/or operations?

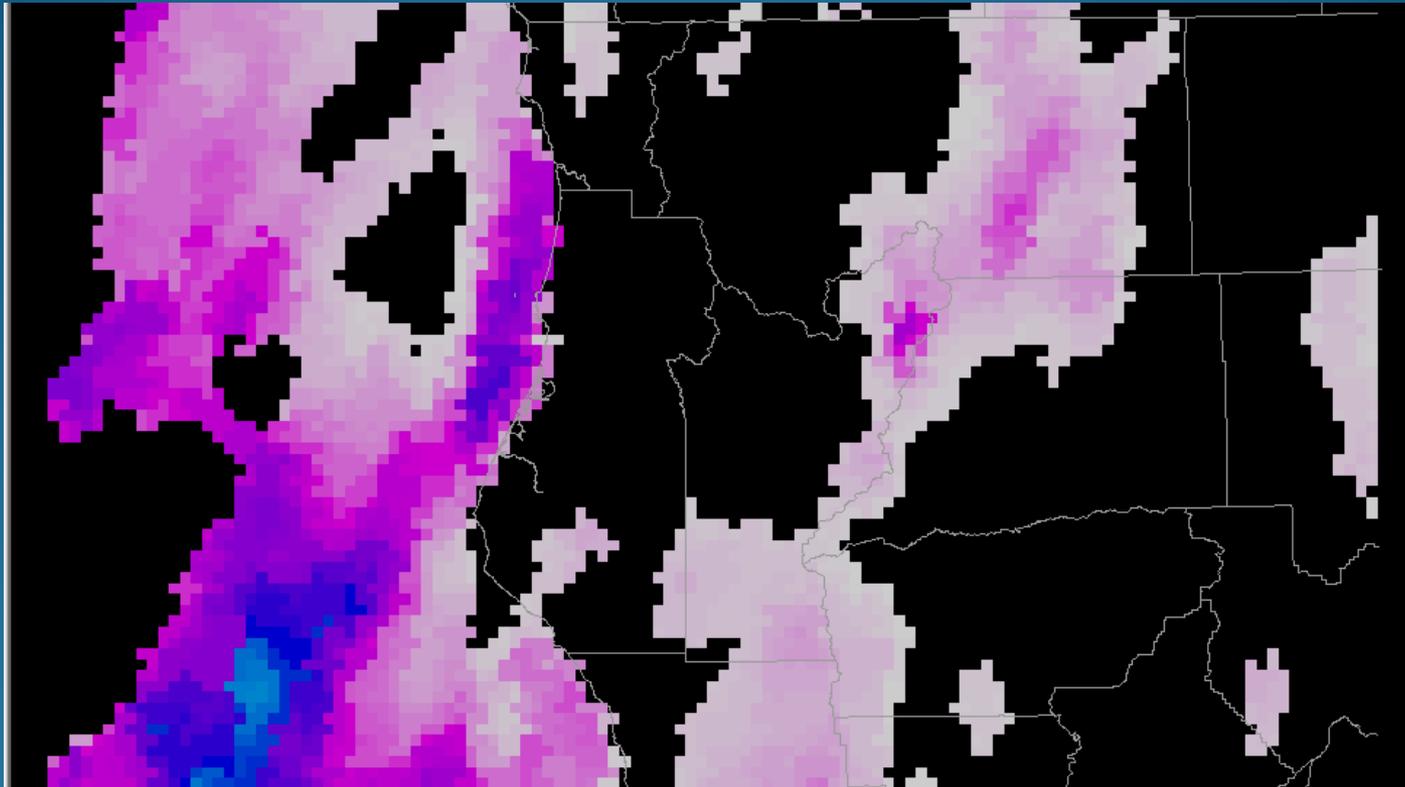
Let me set the stage... (remember , very limited surface based observations over the ocean)

- Morning marine stratus over the coastal plain and ocean.
- CIGS @ 3 hundred feet.
- By midday skies cleared to the beach but stratus is expected to move back over the coastal plain by late afternoon.
- The question is “is a persistence forecast best?”. Did the deck lift or become thicker?

What forecast problems has your WFO/NCEP Center addressed with GOES-R/JPS products?

What were the strengths and weaknesses of the product(s) when they were used in the forecast process?

Cloud Thickness Product

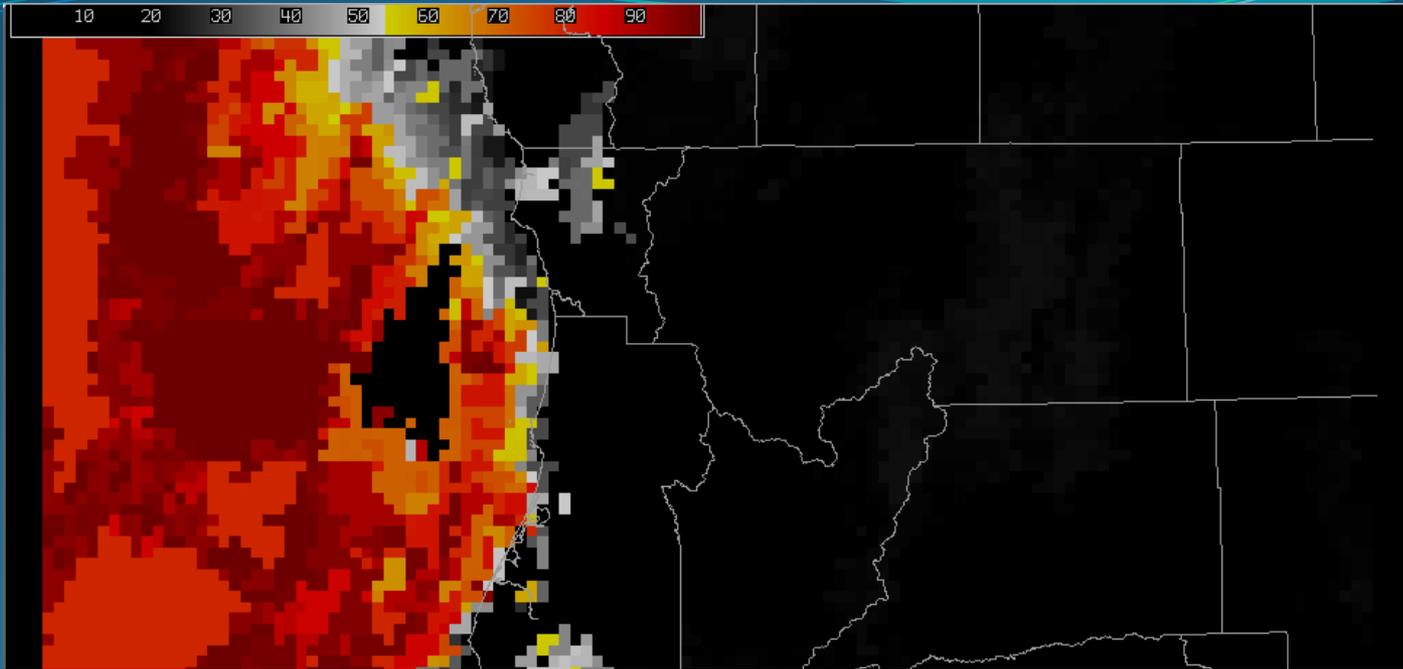


- PIREP

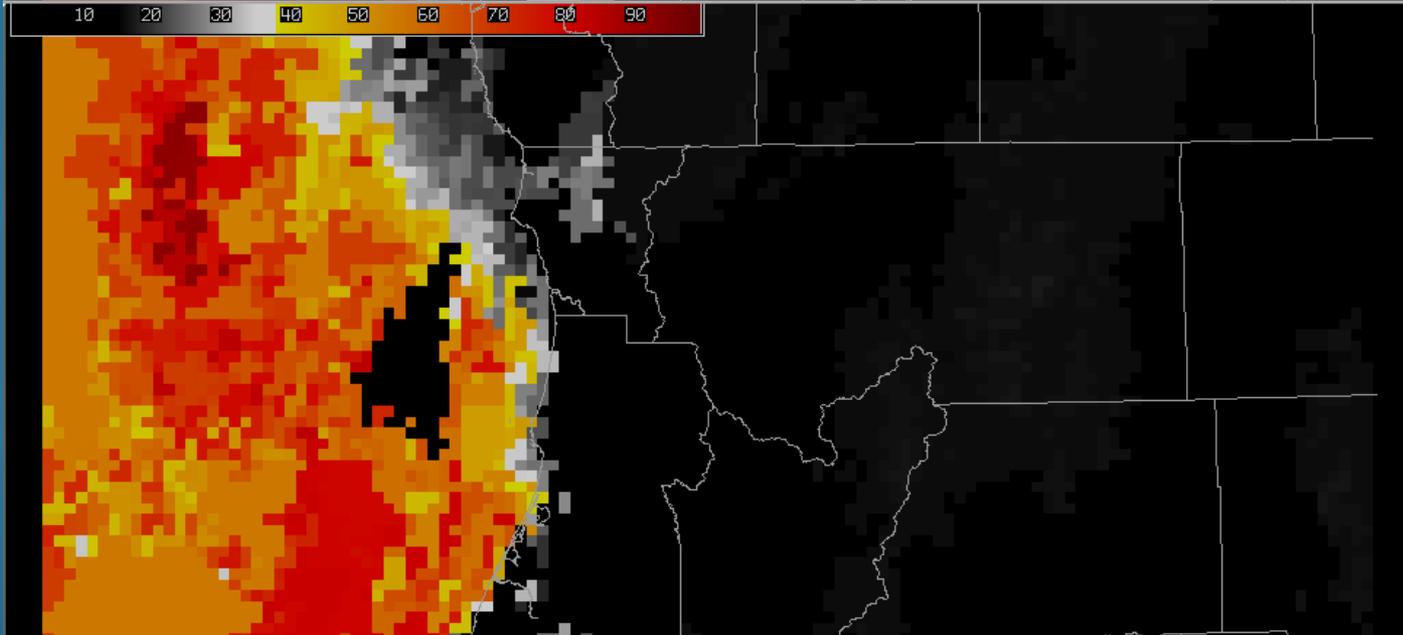
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FLS products

- MVFR
CIGS
1000-3000
feet
VSBY
3-5
miles

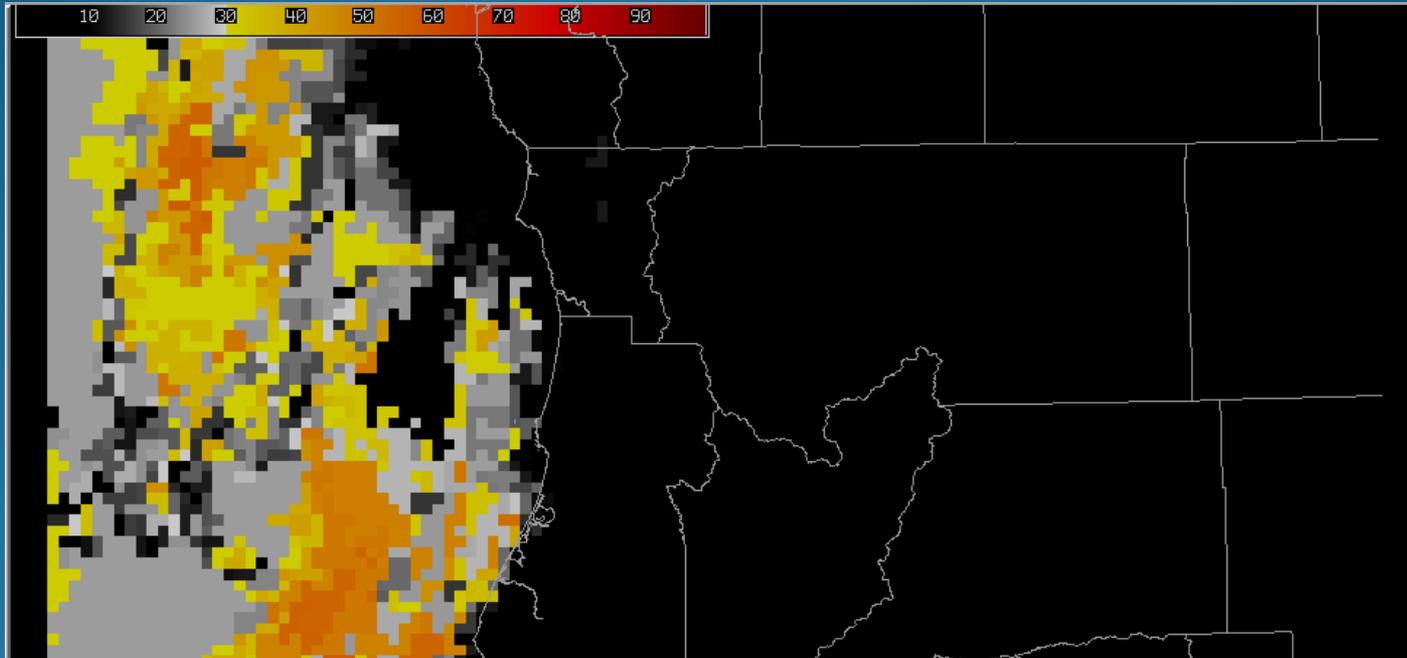


- IFR
CIGS
500-1000
feet
1-3
VSBY
miles



FLS products

- LIFR
CIGS
< 500 feet
VSBY
< 1 mile



The question is “is a persistence forecast best?”. Did the deck lift or become thicker?

Color table -- FLS

- The one thing that would be helpful would be making the color tables consistent.
- Timeliness

What deficiencies do you feel need to be tested or evaluated in the product(s) to ensure NWS implementation and “user readiness”?

In what way might these products be improved to be operationally useful?

Training/Survey experience summary

FLS

- Survey interviews of forecasters provided the SOO with valuable insight as to where additional training was needed.
- The tele-training sessions are invaluable and need to always be recorded to provide for shiftworkers.
- Provided additional insights into ways to use products that had not been thought of.
- Reinforced the need for multiple simultaneous training “channels”, to effectively train forecasters to achieve operational proficiency.

**THERE IS NO ONE SIZE FITS
ALL TRAINING THAT WILL
WORK**

- Training experience summary WFO Medford (MFR)
QPE / LPW – Summer 2013
 - Assessment-specific training material were provided by NASA SPoRT.
 - Some new, some review
 - SOO provided a one stop location on the local sharepoint page for the assessment.
 - GOES-R has been at the forefront of our local training efforts for the past year. Forecasters have taken several modules to prepare.
 - Setup notification crons in ops that would send a banner to AWIPS to remind the forecasters to participate in survey.
 - The folks at NASA SPoRT were very good about providing feedback which was a great way to keep forecasters motivated.

NASA SPoRT

SPoRT is a NASA project to transition unique observations and research capabilities to the operational weather community to improve short-term forecasts on a regional scale. WFO Medford is currently helping to assess CIRA Layered PW & NESDIS GOES-R QPE products. Training links are below to find out more about this imagery.

In AWIPS, at the bottom of the satellite menu, you'll find the NASA/SPoRT menu. At the bottom of that menu are the CIRA and NESDIS QPE products

RGB Imagery Evaluation - Click Here!

Training:

- [10-min training presentation for RGB Imagery Evaluation](#)
- [SPoRT Training Page](#)
- [CIRA Blended TPW and Anomaly Products](#)
- [Layered Precipitable Water Quick Guide by NASA / SPoRT and CIRA](#)

Real Time Products on the Web:

- [CIRA TPW](#)
- [NESDIS QPE](#)
- [KML/KMZ files for Google Earth](#)

