



NOAA Weather Wire Service (NWWWS) Partners Brief

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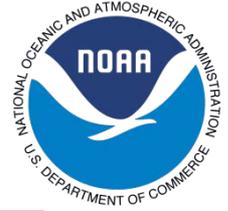
NWWS-2 Status



- Revisit NWWS-2 Basic Information
 - Roll-out Progress
 - Satellite (SBN/NOAAPORT)
 - Open Interface (OI)
 - End User Client (EUC)
 - Webpage Updates/Schedule
- Reported Issues
- FAQs
- Discussion



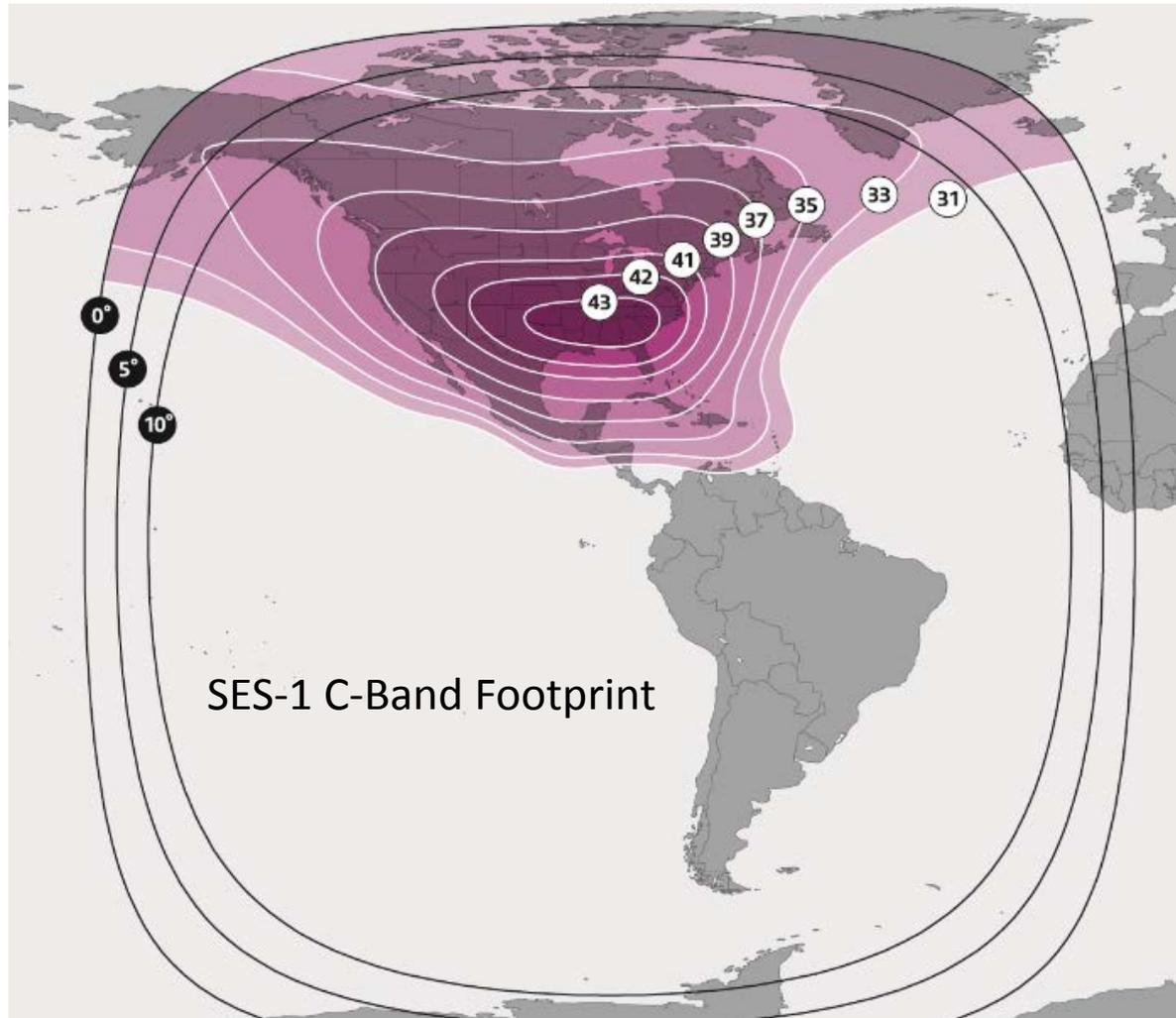
NWWS-2 Roll-out



- Began April 1, 2015
- 90-day transition/dual operation until 6/30/15
 - Satellite transition biggest concern
- Currently day 63 of 90
- Legacy NWWS ends in 27 days
 - Latest transition for satellite; 15 days prior.
 - Latest transition for OI with EUC; 5 days prior.
 - Latest transition for OI with client development; 15+ days prior.

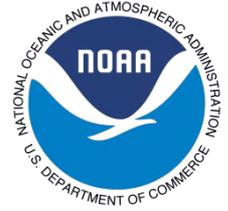


Satellite (SBN/NOAAPORT)





SBN/NOAAPORT



- NWS-2 Requirements
 - Same Satellite dish plus Internet Open Interface
 - New Low Noise Band (LNB) down converter
 - New ethernet cable
 - New DVB-S2 Satellite Receiver (Novra S300 or similar)
 - Product filtering software
- Recommendation
 - Larger dish size (> 1.8m) to increase product availability



SBN/NOAAPORT



- **Channel 101-105 - No Change in product dissemination (WMO format)**
- **Channel 201 - Added August 2014 (WMO format)**
 - NWS Products only
 - Phase I testing indicated 100% product availability.



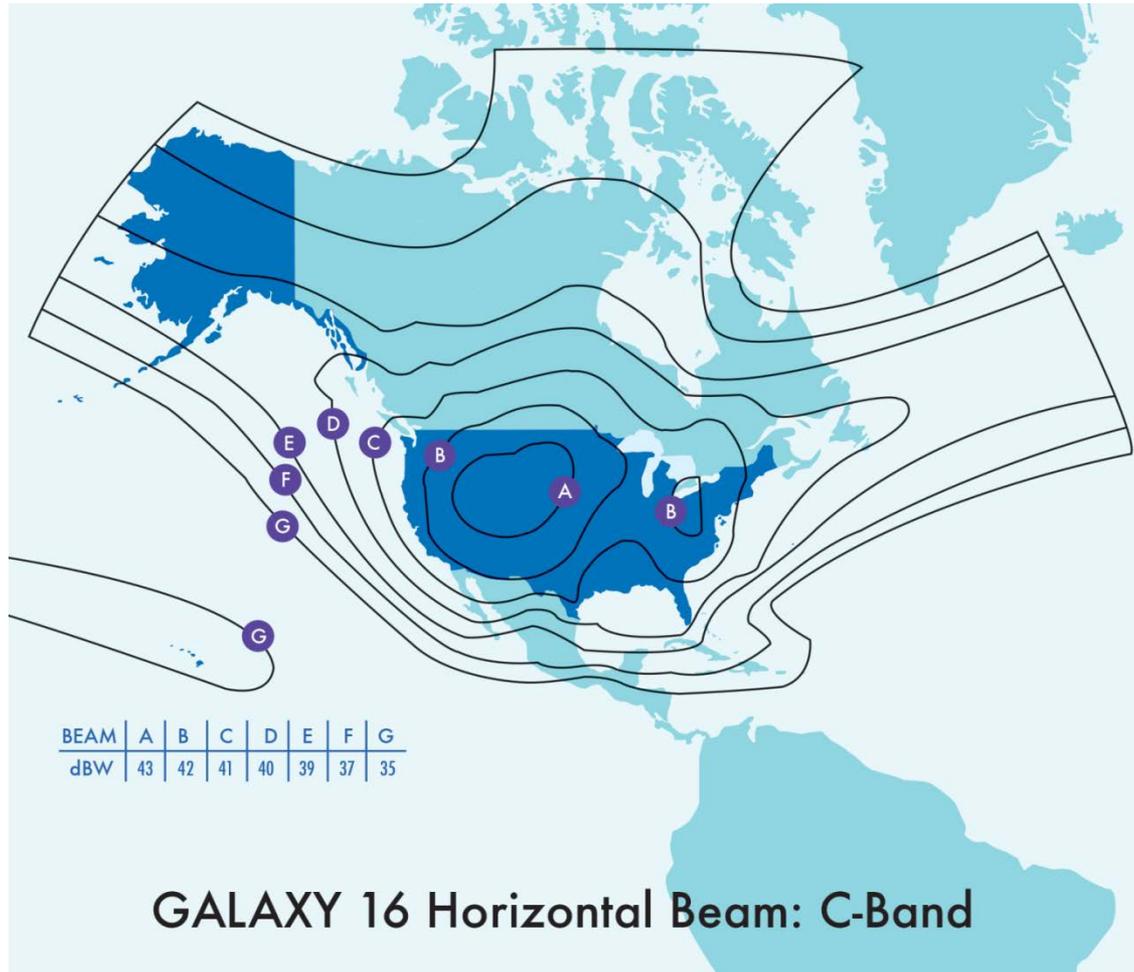
SBN/NOAAPORT



- **SBN/NOAAPORT transponder changed October 2014**
 - Loss of product availability noticed on 1.8m dish
 - Reported at October Partners Meeting.
 - Issue prevalent on all dish sizes.
 - Reported at AMS Partners Meeting January 2015
 - Solutions sought;
 - Filter testing – completed testing – minimal improvement
 - Software testing (NOVRA) – completed testing – no improvement
 - Software for high packet rate (NOVRA) – completed testing - 1% improvement on 3.7m+
 - L-Band Filter (50 ohm)- completed testing – 14% improvement on 1.8m dish only



SBN/NOAAPORT Interference





SBN/NOAAPORT



- SBN Filtering Solution(s)
 - L-band (50 ohm) commercially available.
 - *Optional with Internet Open Interface*



NWWS-2 Open Interface (OI)



- **Establishing an OI Account**
 - User Information needed
 - Contact information (Company, e-mail, Address, Telephone)
 - *NWS Provided information*
 - *User_id* and *password*
 - URL: nwws-oi.weather.gov
 - Port: 5223
 - Chat “nwws”
- **End User Client (EUC) Disclaimer (optional)**



NWWS-2 End User Client (EUC)



- **End User Client v0.1.7**
- **End User Client v1.0.0 (as of June 1)**
 - Upgrade to Java 8
 - Filter Messages Based on Product Category
 - Select Archive Location
 - Set Audible Alarm Based on Product Category
 - Visual and audible notification for OI interface interruptions
 - Print Product Based on Category
 - Remove clear-text OI Password from Log



NWWS Webpage



- Used as primary media for information
- Changed initial page format
- Attempting to resolve historical data mis-information



ISSUES



Old Issue Summary

ISSUE	STATUS	MITIGATION
1. Satellite Product Availability	Closed	SBN + OI per NWWWS-2 design
2. OI Access Request Timeliness	OPEN	Weekly verification/validation (3-5 days)
3. Zip files won't unzip	Closed	Directory location name length or distance from root directory is the issue. Move location closer or use a shorter directory location/name.
4. Un-zipped file won't run	Closed	See Appendix C in EUC Manual for setup change.
5. EUC Message Format Variance	Closed	OI is in XML ; SBN is in WMO std
6. I'm not recognized as a user	Closed	<i>User_id</i> and <i>password</i> are case sensitive
7. EUC does not provide product alert capability.	Closed	Will be incorporated into EUC software upgrade.
8. We run on Linux not Windows.	Closed	This is a User developed interface.
9. Won't run on two systems using same user_id and password.	Closed	Don't do it. Request additional accounts as needed.



New Issue Summary



ISSUE	STATUS	MITIGATION
System stopped then surge of 12+ hour old products.	Closed	New alerts were set in place by NWS. This was not an NWWWS specific issue.
OI failed when issue above occurred.	OPEN	The /awips/fxa/bin/NWWSSchedule on the PX1 had stopped on AWIPS. A reset alarm is being considered.
WMO header wrapped CAP v1.2 products not on NWWWS-2 ingest	OPEN	Currently on SBN/NOAAPORT Channels 101-105; routing documentation to add to Channel 201 and OI.



NWWS-2 Issues



- **Program halts after a period of time when running on two systems.**
 - Using the same *User_id* and *password* on two systems will cause one or both to go down.
 - Request another account to resolve issue.



NWWS-2 Issues



- ***User_id* and *password* resources.**
 - Multiple requests. Limited access/resources.
 - Resolution in process.



Frequently Asked Questions (FAQs)



NWWS-2 FAQ



- **When will I get my *User_id* and *password*?**
 - Training additional personnel to support effort
 - Moving majority of effort to Program Manager control



NWWS-2 FAQ



- In the XMPP message stanza within the 'nwws-oi' name space there is an element entitled 'id'. How is the id element generated? Is it a sequence number only? what is the relationship of the number on the left of the decimal to the number on the right of the decimal? Please see example 'id="23666.8606"' below with the user ID redacted.

```
<message to="xxx-xxx.xxxxx@nwws-oi.weather.gov/1381b030" type="groupchat"
from="nwws@conference.nwws-oi.weather.gov/nwws-oi"><body>KCTP issues TAF
valid 2015-04-23T19:07:00Z</body><html
xmlns="http://jabber.org/protocol/xhtml-im"><body
xmlns="http://www.w3.org/1999/xhtml">KCTP issues TAF valid 2015-04-
23T19:07:00Z</body></html><x xmlns="nwws-oi" cccc="KCTP" ttaaii="FTUS41"
issue="2015-04-23T19:07:00Z" awipsid="TAFLNS" id="23666.8606">
```

- The id attribute on the <x> stanza is meant to help clients know if they are missing any products as they parse the stream. The id contains two values loaded up into one and they are separated by a period. The first number is the UNIX process ID on the system running the ingest process. The second number is a simple incremented sequence number for the product.



NWWS-2 FAQ



- **What version of the Novra S300N firmware should be used with the NWWS-2 satellite feed? V2R11?**
 - The example is a minimum standard; something similar in capability to the Novra S300 DVBS2 satellite receiver. Any related model meeting or exceeding those criteria would be adequate.
 - If using the Novra S300; firmware v2.15



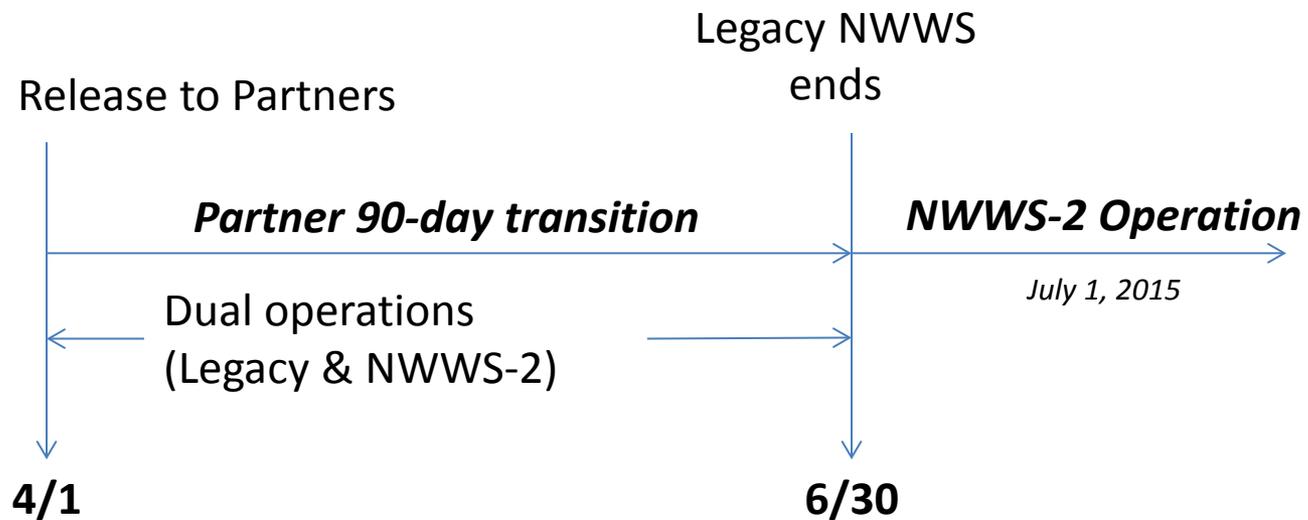
NWWS-2 FAQ



- **Regarding use of 1.8m antennas with NWWS-2, previous NWS communication has referenced a filter that was tested to help reduce adjacent satellite interference. Would you please provide additional details about the filter (manufacturer and model) and whether or not it was effective?**
 - Initially a huge, C-Band transponder bandwidth filter was set up on a tripod as a proof of concept. Though significant improvement was noted, it was too heavy/bulky to use as a recommended solution; and the reason NWS went to Novra for alternative solutions.
 - Novra provided 3 software solutions that emulated digital filters, but none proved to be effective.
 - The last was a commercial coaxial L-band filter (50 ohm) that did improve product availability 14%. However, it does not allow LNB voltage to be passed through from the receiver and a 75 ohm version is needed to eliminate RF reflections which are causing additional loss of data.
 - NWS is investigating if a version meeting these additional requirements is commercially available.



NWWS-2 Schedule





Discussion



How to direct your query

- First, check NWWS Webpage – <http://www.nws.noaa.gov/nwws>
- EUC Disclaimer request – <http://www.nws.noaa.gov/nwws/configuration.html>
- EUC Manual comments – Gregory.Zwicker@noaa.gov
- EUC Set-up Issue – NWWS.help@noaa.gov
- EUC Performance Issue(s) – NWWS.issue@noaa.gov
- EUC Updates – see NWWS webpage
- OI Access Request(s) – send POC information (p.6) to Gregory.Zwicker@noaa.gov
- OI Performance Issue(s) – NWWS.issue@noaa.gov
- Satellite receive configuration – see NWWS webpage (AWIPS NWWS-2) Interface Information Document (IDD)
- SBN Performance Issue(s) – NWWS.issue@noaa.gov
- Message format Issue(s) – NWWS.issue@noaa.gov
- Schedule – see NWWS webpage
- All other inquiries – Gregory.Zwicker@noaa.gov



Next Meeting

June 24, 2015



THANK YOU.



The Webinar has ended.

If you have a question or need to sign up for a user_id and password, please contact Gregory.Zwicker@noaa.gov

For OI or SBN help inquiries, use NWWS.Help@noaa.gov

To report an issue, use NWWS.Issues@noaa.gov

The next meeting is planned for June 24th.