# **NEXRAD** View

### **NEXRAD View Summary**

The NEXRAD View display is broken into two separate areas. The upper field is a graphical representation of the NEXRAD sites and current system status. The default display represents the last Level II data received status of every given site. A legend box in the lower left corner indicates the data type being monitored and the various colors associated with the data condition. The '+' and '-' in the upper left corner zoom the map in and out respectively. Scrolling the mouse wheel will



allow the user to zoom in or out on the map. Hovering over an individual radar site will cause a pop-up with additional basic information about that site. The display is updated once a minute. Clicking on the site with the pop-up displayed will "Pin" that pop-up to the display. Clicking on the site again will clear the "Pinned" status to remove the pop-up. Clicking on another site will move the "Pinned" status to the next site. Clicking the 'X' in the upper right corner of the pop-up or anywhere on the map will clear the "Pinned" status to remove the pop-up. Only one site can be "Pinned" at a time. Basic details (ICAO, Name, Associated WFO, VCP & Build Status, LDM Version, Date/time, Latency, and Latency Time) are displayed in the pop-up on the Map display.

	and the state	v
Radar:	KYUX	~
Location:	Yuma	
Forecast Office:	PSR	
VCP:	R215	
RDA Build:	19	
RDA Status:	Operate	
LDM Version:	6	
Data Time:	Fri, 29 Jan 2021 21:06:00 GMT	
Current Latency:	0.079861 sec	
Average Latency:	0.09 sec	
Max Latency:	0 sec	
Max Latency Time:	Fri, 29 Jan 2021 21:01:01 GMT	
Site Data View	radar.weather.gov	

#### **Basic Detail Pop Up**

"Pinning" any individual site will also cause the lower half of the Map view screen to populate tabs with data for that NEXRAD site. This information is detailed NEXRAD information extracted from the Level II Metadata product allowing a technician insight into the quality of the radar and the radar products from the Level II data itself. (RDA Status Data, Performance/Maintenance Data, Adaptation Data, and NEXRAD System Alarms)

# **INDICATOR FIELDS (Top Half)**

# Pushbuttons:

- Sites (Conus, Alaska, Hawaii, Korea, Puerto Rico, Guam, Japan) Clicking on any of the buttons will re-center the map for that area to a pre-defined zoom appropriate for that region. The button's color represents the current data status for NEXRAD sites in that region. The button color is determined by the worst case "Data Last Received" scenario for any NEXRAD site within that area. (Any NEXRAD site turns red due to data last received and the button for that area goes red.)
- Server The operator selected source for populating the data. By default, the current source (white) follows the aggregate, should the aggregate shift to another NL2 server it will auto-update. If an alternate source is manually selected, server is turned (red) and no longer follows the aggregate. Refreshing the browser restores the default state.
- 3. **Radar Variable** (*default: Data Last Received*) Displays nine major NEXRAD statistics on a fleet wide basis. If anything other than the default is selected, the field turns red reminding the operator the default is not selected. Corresponding legends for each variable appear in the lower left hand corner of the upper display for each data type selected.
  - a. **Data Last Received** indicates the time since the last received Level II data transmission from any given site.
  - b. **Current Latency** The difference between the data generation timestamp and the time it is received by the NL2 server based on the data last received.
  - c. **Average Latency** The difference between the data generation timestamp and the time it is received by the NL2 server based on the latency average over the last hour.
  - d. **Max Latency** The difference between the data generation timestamp and the time it is received by the NL2 server based on the maximum latency over the last hour.
  - e. **Agency** Hosting NEXRAD partner association.
  - f. **VCP** Current Volume Coverage Pattern
  - g. RDA Status Current RDA Operational Mode
  - h. **LDM Version** The Level II Type in accordance with Message 31 in the Interface Control Document.
  - i. **RDA Build Number** indicated the current RDA Software load.

## 4. Overlays Tab

- a. Regions Turns on regional indication in the background map.
- b. NEXRAD Base Reflectivity Shows basic NEXRAD reflectivity overlay information and timestamp from Weather.gov web site.

### 5. Filter Tab

*(default is all cleared)* checking any of the boxes modifies the display to only display the sites meeting that criterion. More than one criterion can be selected. Selecting ANY filter turns the tab red until the boxes are cleared.

**Status Collection Time**: (*DDD:dd:mmm:yyyy:HH:MM:SS*) – Time of the Web server's most recent NL2 status update. If the data status has not updated in the last 5 update intervals, the text turns red.

RDA Status Data Performan	ice/Maintenance Data	Adaptation Data Alarms	Free Text Message	USE
Status Time: Tue, 04 Jun 2 VCP	.019 15:27:43 GMT 8 R212	Control Status	RPG Only	Set. DEVENSE MANUED
RDA Build Number	18.1	RDA Alarm Summary	Tower/Util Transmitter	la l
Operational Mode	Operational	Aux Pwr Gen State	Util Pwr Avail Maiet Maed	WSR-88D
RDA Status	Operate	Avg XMTR Pwr (W)	1228	

## **NEXRAD View (Lower Half)**

Status Time (*DDD:dd:mmm:yyyy:HH:MM:SS*) – The message timestamp of the data displayed in tab. For the Alarm tab this is the time the request for alarms was made. Site – (Site ICAO & NEXRAD site location)

tatus Time: Tue, 04 Jun 2019 15:31:47 GMT

Pulse Width XMTR Output LP (ns) Horz RECV Noise LP (dBm)

### **TAB Information**

• RDA Status – Basic RDA Parameters extracted from the Level II stream metadata.

tatus Time: Tue, 04 Jun 2	019 15:27:43 GMT	Site: KFDR, AltusAFB		OFFENSE TRAVE
CP	R212	Control Status	RPG Only	18 🔺 🤜
DA Build Number	18.1	RDA Alarm Summary	Tower/Util/Transmitter	
Operational Mode	Operational	Aux Pwr Gen State	Util Pwr Avail	8
Super Resolution Status	Enabled	Operability Status	Maint Mand	WSR-88D
RDA Status	Operate	Avg XMTR Pwr (W)	1228	18

- Performance/Maintenance Data RDA Performance data extracted from the Level II stream metadata.
- Adaptation Data Basic RDA Adaptation data extracted from the Level II stream metadata.

	-			175
Receiver Bias	-0.328696	SP Horiz dBZ0 (dBZ)	-43.7374	The sund and
Transmitter Imbalance	0.251345	LP Horiz dBZ0 (dBZ)	-53.2	
Performance Check Time	Tue, 04 Jun 2019 15:31:49 GMT	XMTR Leaving Air Temp (C)	27.52	
Equip Shelt Temp (C)	15.45	Pwr Source	Utility Pwr	
DA Status Data Performa Status Time: Tue, 04 Jun	nce/Maintenance Data Ada 2019 15:31:49 GMT Site	plation Data Alarms Free Text a: KFDR, AltusAFB	Message	· CATENSE · TRANS
XMTR Freq (MHz)	2710	PL-WG04 Circulator (dB)	-0.2	/e <sup>c</sup> 🔺 🦄
Antenna gain Including Radome	(db) 44.6	PL-A6 Arc Detector (dB)	-0.05	lä 🛌 🍂
Coho Pwr A1J4 (dBm)	28.57	PL-1DC1 XMTR Cplr Strt Thru (dB)	0	WSR-88D
ME Horz Test Signal Power	10.95	Stalo Pwr A1J2 (dBm)	15.56	
AME Noise Src Horiz Excess No Ratio (dB)				
	ise 23.28	PL-Vert IF Heliax to 4AT16 (dB)	-1.72	and a second sec
PL-AT4 3dB Atten (dB)	ise 23.28 -5.84	PL-Vert IF Heliax to 4AT16 (dB) PL-Horz IF Heliax to 4AT17 (dB)	-1.72	The same owned and the
PL-AT4 3dB Atten (dB) PL-IFDIF Anti-alias Filter (dB)	-5.84 -1.94	PL-Vert IF Heliax to 4AT16 (dB) PL-Horz IF Heliax to 4AT17 (dB) PL-2A1A5 Elev Rot Jnt (dB)	-1.72 0 0	The stand with the
PL-AT4 3dB Atten (dB) PL-IFDIF Anti-alias Filter (dB) PL-IFD Burst Anti-Alias Filter (dB	-5.84 -1.94 3) -2.07	PL-Vert IF Heliax to 4AT18 (dB) PL-Horz IF Heliax to 4AT17 (dB) PL-2A1A5 Elev Rot Jnt (dB) PL-4DC3J1 to 4AT14 (dB)	-1.72 0 0 0	The same set

(w) Pulse Width XMTR Output SP (ns) PL-WG08 Spectrum Filter (dB) Horz RECV Noise SP (dBm)

0 -82.6

4650

- Alarm Data RDA Alarm data extracted from the Level II stream metadata.
  - **Green** = Alarm cleared
  - Anything Else = Alarm set



 Free Text Message – Status Messages for the associated site according to weather.gov

