

Solution Center Manual on STAR Information

I. STAR XL

A. Current Conditions:



1. Product Description

The Current Conditions Page is the first page that displays during the Local Forecast. It shows in every Local Forecast. The product is driven by the primary and alternate sites of the STAR XL. It displays the current weather conditions for that location. It is not forecast data, nor is it related to where the forecast comes from.

2. Data Information and Expiration Rules

Data for these pages is sent at least hourly (we call it HO for Hourly Observation data), usually within 10 minutes either before or after the top of the hour. The primary site will display until for whatever reason the data expires. Then, the alternate site will display until its data expires. If both the primary and alternate data has expired, the page will display the “No Data Available” label. The expiration time for HO data is approximately 1 ½ hours. HO data is considered tabular data

Most weather sites report 24 hours, however there are some out there that report fewer than 24 hours. We have a rule when assigning primary and alternate sites that the alternate site has to report 24 hours so a STAR will not go without data.

There are two types of observation sites, manned and automated. Manned observation reports are compiled and sent by a person. Automated observation reports are compiled and sent by a computer and they almost always report 24 hours. There are two types of automated observations, ASOS (Automated Surface Observation System) and AWOS (Automated Weather Observation System). ASOS observations are complete observations, meaning they report every weather parameter shown on the Current Conditions page seen above. AWOS observations do not report weather (rain, snow, sunny, etc), therefore no weather icon and text modifier (the icon with a sun with clouds and the “Partly Cloudy” text modifier seen above) will display.

3. Problem Information

If the “No Data Available” label is showing it is time to get suspicious about the HO data. It is possible to have data expired for the two stations and not have a widespread HO data problem. Check the Local Observations table in the next section.

B. Current Conditions Page 1 and 2 – a.k.a. Local Observations Pages 1 and 2:



1. *Product Description*

The Local Observations Pages are the second and third pages that display during the Local Forecast. It shows in every Local Forecast. It is driven by the eight closest weather observation sites to the STAR XL. It displays the current weather conditions for those locations. It is not forecast data.

2. *Data Information and Expiration Rules*

Data for these pages is sent at least hourly (we call it HO for Hourly Observation data), usually within 10 minutes either before or after the top of the hour. If the data has expired for a site or sites, the line next to the city name or names will display the “No Data Available” label. The expiration time for HO data is approximately 1 ½ hours. HO data is considered tabular data

As mentioned before, there are two types of observation sites, manned and automated. Manned observation reports are compiled and sent by a person. Automated observation reports are compiled and sent by a computer and they almost always report 24 hours. There are two types of automated observations, ASOS (Automated Surface Observation System) and AWOS (Automated Weather Observation System). ASOS observations are complete observations, meaning they report every weather parameter shown on the Current Conditions page seen above. AWOS observations do not report weather (rain, snow, sunny, etc), therefore no weather icon (the icon with a sun with clouds seen above) will display. Data should match the main Current Conditions Page.

3. *Problem Information*

If the “No Data Available” label is showing for every city on both pages, as well as the Current Conditions page, it is apparent that there is a problem with at least HO data transmission. Since this data is the first to expire, it is possible that there is a problem with all tabular and narrative data.

If the “No Data Available” label is showing, check the other STARs (4000 and STAR III). The legacy STARs have an expiration rule of 2 ½ hours for HO data, so a problem with the HO data feed will not show up on the STAR III or 4000 until after it shows up on the STAR XL. If all types of STARs show “No Data Available” for this product, the HO data transmission process has failed.

C. Current Conditions Map – a.k.a. Regional Observations Map:



1. *Product Description*

The Regional Observations Map only displays once an hour (usually the forecast :58 minutes after the hour) and is the fourth page that displays during the Local Forecast in that flavor. It is driven by the weather observation sites of the largest cities in the region around the STAR XL that will fit on the map. It displays the current weather conditions for those locations. It is not forecast data.

2. *Data Information and Expiration Rules*

Data for these pages is sent at least hourly (we call it HO for Hourly Observation data), usually within 10 minutes either before or after the top of the hour. If the data has expired for a particular site, the icon and temperature will not display for that site. A “No Data Available” label does not show for this product. The expiration time for HO data is approximately 1 ½ hours. HO data is considered tabular data

There are two types of observation sites, manned and automated. Manned observation reports are compiled and sent by a person. Automated observation reports are compiled and sent by a computer and they almost always report 24 hours. There are two types of automated observations, ASOS (Automated Surface Observation System) and AWOS (Automated Weather Observation System). ASOS observations are complete observations, meaning they report every weather parameter shown on the Current Conditions page seen above. AWOS observations do not report weather (rain, snow, sunny, etc), therefore no weather icon (the icon with a sun with clouds seen above) will display. We try not to assign AWOS sites to this product.

3. *Problem Information*

If there is not any data showing on this product page, as well as the Current Conditions and Local Observation Pages, there is definitely a problem with the HO data.

If there is no data, check the other STARS (4000 and STAR III). The legacy STARS have a expiration rule of 2 ½ hours for HO data, so a problem with the HO data feed will not show up on the STAR III or 4000 until after it shows up on the STAR XL. If all types of STARS show no data for this product, the HO data transmission process has failed.

D. 36-Hour Forecast Pages 1, 2, and 3:



1. Product Description

The three 36-Hour Forecast pages display near the middle of The Local Forecast. It is driven by National Weather Service (NWS) zone, not primary or alternate site, and is considered narrative data. The forecast is generated by the NWS specifically for each county in the U.S. The forecast is not generated by The Weather Channel.

2. Data Information and Expiration Rules

Data for these pages is sent at the very least every 12 hours, however, most of the time every 6 hours. New data is issued usually around 4 am and 4 pm local time (give or take 30-45 minutes) of the issuing offices. Updated zone forecasts are usually issued between 10 and 11 am and pm local time of the issuing offices, although updates can be issued whenever necessary.

Zone forecasts in the West also have a table of cities at the end of the forecast called spot cities. Spot cities are a list of cities in that NWS zone with their forecast temperature and rain chance. The NWS adds the cities at the end of the zone forecast, therefore we have no control over what cities display or the order in which they display. If the NWS groups the forecast zones together differently, the cities will change. This can occur on a daily basis.

The first period of the time interval switches during the main update times. In the morning, after about 5 am local time, a 36-hour forecast should begin with the time period "This Morning" or "Today", not "Tonight". In the evening, after about 5 pm local time, the 36-hour forecast should begin with the period "This evening", "Overnight", or "Tonight", not "This Afternoon". If these time periods are still old, there may be a problem with the narrative data.

3. Problem Information

If the data has expired for a particular zone, the "No Data Available" label will display on all three 36-Hour Forecast pages. In this case, the data may not have gone out for that NWS zone. The 36-Hour Forecast does not expire on the legacy STARS. However, the data will be old on the legacy STARS if there is a widespread 36-hour narrative data failure, which can be determined by checking the first period of the time intervals as described above.

E. Regional Forecast Map:



1. *Product Description*

The Regional Forecast Map only displays once an hour (usually the forecast :58 minutes after the hour) and usually displays after the 36-Hour Forecast during the Local Forecast in that flavor. It displays the forecast weather condition (icon) and high temperature for those locations in the region around the STAR on a map. It is forecast data.

2. *Data Information and Expiration Rules*

The data (F5 data) is driven by short-term weather forecasts made by TWC meteorologists for sites across the country. The data for these pages is sent at least every other hour, sometimes every hour. The change of day will occur between 3-5 pm each day. In the morning, the forecast should be for the high that day. In the evening, the forecast will be for the high for the next day. If the data has expired for a particular site, the icon and temperature will not display for that site. A “No Data Available” label does not show for this product. This data is also considered tabular data.

3. *Problem Information*

If there is not any data showing on this product page, there is problem with the F5 data or data transmission.

F. 3 to 5 Day Extended Forecast:



1. *Product Description*

The Extended Forecast displays in every Local Forecast and usually displays after the 36-Hour Forecast or Regional Forecast Map during the Local Forecast. The data (FE data) is driven by extended weather forecasts made TWC meteorologists for areas across the country. It displays the forecast weather condition (icon), low and high temperature for those locations for a three day period. It is forecast data.

2. *Data Information and Expiration Rules*

FE data is valid for a TWC defined area called a Weather Display Area (WDA). The STAR gets assigned their WDA based on their viewers' location and county. Any STAR within this area receives the same forecast. FE data is also considered tabular data.

The FE data for these pages is sent at 5 am to adjust the days, and then updated 3 more times during the day. The 5 am update adjusts the day one day forward. For example, before 5 am on Tuesday, the 3 to 5 days will display as "Wed", "Thu", and "Fri". After 5 am on Tuesday, the days will display as "Thu", "Fri", and "Sat". Those days will display until 5 am Wednesday. The data expires after 15 hours and displays a "No Data Available" label for this product.

3. *Problem Information*

If there is not any data showing on this product page, there is problem with the FE data or data transmission.

G. Almanac:



1. *Product Description*

The Almanac page displays once an hour (usually the forecast :58 minutes after the hour). It displays the sunrise/sunset times for the next 2 days. It also displays the next 4 moon phases and the dates of each phase.

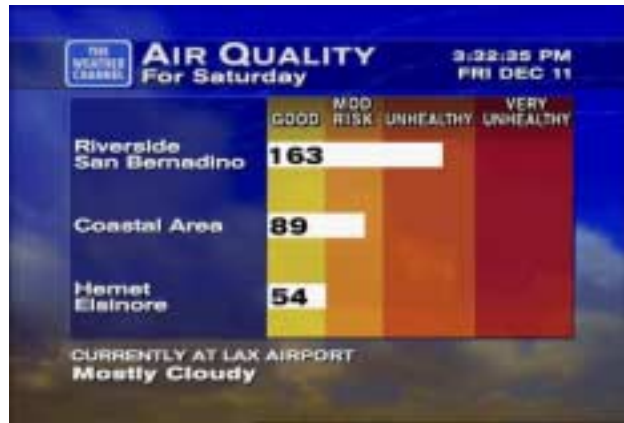
2. *Data Information and Expiration Rules*

The data is calculated on the STAR based on the latitude/longitude of the climate station it is assigned. The times are based on the local time of the headend and follow the daylight savings time (DST) rules of the time zone and local laws of the headend (the states of Arizona and Hawaii, Puerto Rico, the Virgin Islands, and some counties in Indiana do not observe DST). The sunrise/sunset data is updated at midnight, local time.

3. *Problem Information*

This data never expires because it is STAR generated data, therefore there will not be a "No Data Available" label. If by chance there is not any data for this product, there is a problem with the STAR.

H. Air Quality:



1. Product Description

The Air Quality page displays once an hour (usually the forecast :58 minutes after the hour) for ONLY those STARs in Southern California. It shows a location name and an air pollution measurement in pounds per square inch (psi). This is forecast data.

2. Data Information and Expiration Rules

The Air Quality data (FK data) is provided by an outside source located in Southern California. This data is valid for a TWC defined area called a Weather Display Area (WDA). The STAR gets assigned their WDA based on their viewers' location and county. Any STAR within this area receives the same forecast. The locations displayed on this page are fixed based on their WDA. FK data is considered tabular data.

The FK data is sent by TWC personnel once a day around 4 pm EST/EDT. It expires after 27 hours and displays a "No Data Available" label for this product.

3. Problem Information

If there is not any data showing on this product page, there is problem with the FK data or data transmission.

I. Marine Forecast:



1. *Product Description*

The Marine Forecast page displays once an hour (usually the forecast :58 minutes after the hour) for ONLY a few STARS along the coast where our Meteorologists edit the data. This forecast provides any marine craft advisories, wind direction and speed, sea conditions and wave height. This is forecast data.

2. *Data Information and Expiration Rules*

The Marine Forecast data (FZ data) is created and edited by TWC Meteorologists. This data is valid for a TWC defined area called a Weather Display Area (WDA). The STAR gets assigned their WDA based on their viewers' location and county. Any STAR within this area receives the same forecast. FZ data is also considered tabular data.

The FZ data is usually sent 4 times daily. It expires after 9 hours and displays a "No Data Available" label for this product.

1. *Problem Information*

If there is not any data showing on this product page, there is problem with the FZ data or data transmission.

J. Tides:



1. Product Description

The Tides Forecast page displays once an hour (usually the forecast :58 minutes after the hour) for ONLY those STARS along the coast. The tide stations are assigned per STAR XL. The times for next four events (two high and two low tidal events) are displayed for two tide stations. Tide data is forecast data. The Sunrise/Sunset data located near the bottom of the Tide page is calculated on the STAR based on the latitude/longitude of the climate station it is assigned.

2. Data Information and Expiration Rules

The Tide data is purchased from the National Oceanographic and Atmospheric Administration (NOAA). It is purchased for the entire year, resides on the STAR XL Host. The STAR XL Host sends the STAR XL 72 hours worth of data even though 24 hours is displayed. The data is considered tabular data and is sent once a day.

Expired tidal events are removed one hour after the event (high or low tide) occurs and replaced with the next event. If all tide data is expired for this page, a “No Data Available” label displays for this product.

All times are based on the local time of the headend and follow the daylight savings time (DST) rules of the time zone and local laws of the headend (the states of Arizona and Hawaii, Puerto Rico, the Virgin Islands, and some counties in Indiana do not observe DST). The sunrise/sunset data is updated at midnight, local time.

3. Problem Information

If there is not any data showing for Tides on this product page, there is problem with the Tide data or data transmission.

The Sunrise/Sunset data never expires because it is STAR generated data, therefore there will not be a “No Data Available” label. If by chance there is not any data for this product, there is a problem with the STAR.

K. Radar:



1. *Product Description*

The Radar page is the last product to display and displays during every Local Forecast. The product is centered on the headend and the headend city is usually on the radar map. The city names are assigned per STAR XL. This is not forecast data.

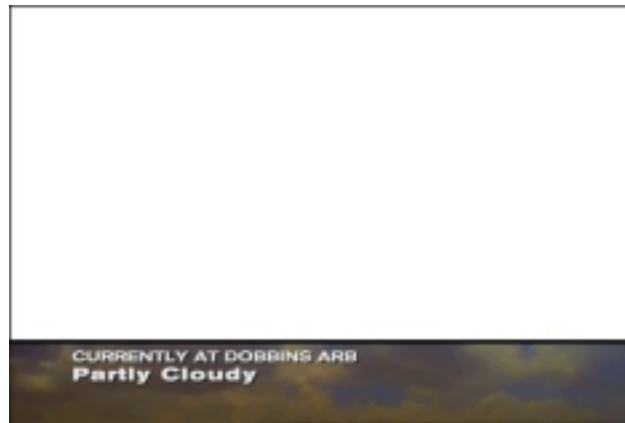
2. *Data Information and Expiration Rules*

The Radar data is delivered every 15 minutes. Currently the radar covers the period of the last 3 hours. If the STAR XL has not received an image within the last 30 minutes, the radar loop expires and a "No Data Available" label displays for this product.

3. *Problem Information*

The "No Data Available" label can display briefly during an active weather event because of slow downs in the data transmission. If the label displays for more than 2 locals in a row, it is time to check on the transmission of radar data. Check the radar data on the STAR 4000 to determine if the problem is just on the STAR XL or not. If there is not any data showing on this product page, there is problem with the Radar data or data transmission.

L. Current Conditions Over Local – a.k.a. Local Sensors Over Local



1. Product Description

The Local Sensors display at the bottom portion of the screen during the Local Forecast. It is driven by the primary and alternate sites of the STAR XL. It displays the current weather conditions for that location. The sites chosen should be the same as the primary and alternate on the Current Conditions page. It is not forecast data.

2. Data Information and Expiration Rules

Data for these pages is sent at least hourly (we call it HO for Hourly Observation data), usually within 10 minutes either before or after the top of the hour. The primary site will display until for whatever reason, the data expires. Then, the alternate site will display until its data expires. If both the primary and alternate data has expired, the page will not display any data. The expiration time for HO data is approximately 1 ½ hours. HO data is considered tabular data.

Most weather sites report 24 hours, however there are some out there that report fewer than 24 hours. We have a rule when assigning primary and alternate sites that the alternate site has to report 24 hours so a STAR will not go without data.

There are two types of observation sites, manned and automated. Manned observation reports are compiled and sent by a person. Automated observation reports are compiled and sent by a computer and they almost always report 24 hours. There are two types of automated observations, ASOS (Automated Surface Observation System) and AWOS (Automated Weather Observation System). ASOS observations are complete observations, meaning they report every weather parameter shown on the Current Conditions page seen above. AWOS observations do not report weather (rain, snow, sunny, etc), therefore no weather icon and text modifier (the icon with a sun with clouds and the “Partly Cloudy” text modifier seen above) will display.

Some sites purchased a sensor package from TWC to display weather conditions at the headend. The data from these packages is displayed here. For the STAR XL, the headend city shows as the weather site. These sensor packages do not report weather, therefore there is not a weather condition icon or text modifier.

3. Problem Information

If there is no data showing on this page as well as the Current Conditions, Local Observations, and/or Regional Observations, there is a problem with HO data.

M. Current Conditions Over National – a.k.a. Local Sensors Over National



1. Product Description

The Local Sensors display at the bottom portion of the screen during the national feed. It is driven by the primary and alternate sites of the STAR XL. It displays the current weather conditions for that location. The sites chosen should be the same as the primary and alternate on the Current Conditions page. It is not forecast data.

2. Data Information and Expiration Rules

Data for these pages is sent at least hourly (we call it HO for Hourly Observation data), usually within 10 minutes either before or after the top of the hour. The primary site will display until for whatever reason, the data expires. Then, the alternate site will display until its data expires. If both the primary and alternate data has expired, the page will not display any data. The expiration time for HO data is approximately 1 ½ hours. HO data is considered tabular data.

Most weather sites report 24 hours, however there are some out there that report fewer than 24 hours. We have a rule when assigning primary and alternate sites that the alternate site has to report 24 hours so a STAR will not go without data.

There are two types of observation sites, manned and automated. Manned observation reports are compiled and sent by a person. Automated observation reports are compiled and sent by a computer and they almost always report 24 hours. There are two types of automated observations, ASOS (Automated Surface Observation System) and AWOS (Automated Weather Observation System). ASOS observations are complete observations, meaning they report every weather parameter shown on the Current Conditions page seen above. AWOS observations do not report weather (rain, snow, sunny, etc), therefore no weather icon and text modifier (the icon with a sun with clouds and the “Partly Cloudy” text modifier seen above) will display.

Some sites purchased a sensor package from TWC to display weather conditions at the headend. The data from these packages is displayed here. For the STAR XL, the headend city shows as the weather site. These sensor packages do not report weather, therefore there is not a weather condition icon or text modifier.

3. Problem Information

If there is no data showing on this page as well as the Current Conditions, Local Observations, and/or Regional Observations, there is a problem with HO data.

N. Local and Regional Forecast Over National



1. Product Description

The Local Forecast Over National displays at the bottom portion of the screen during the national feed. The Local Forecast Over National displays one forecast city if that headend is located within 50 miles of a forecast point. The Regional Forecast Over National is intended for remote areas and displays the three closest forecast points to the headend city. It displays the forecast weather condition (icon) and forecast temperature for those locations around the STAR. It is forecast data.

2. Data Information and Expiration Rules

The data (F5 data) is driven by short-term weather forecasts made TWC meteorologists for sites across the country. The data for these pages is sent at least every other hour, sometimes every hour. The change of day will occur between 3-5 pm each day. In the morning, the forecast should be for the high that day. In the evening, the forecast will be for the low and high for the next day. This data should match the data on the Regional Forecast Map. If the data has expired for this product, data does not show for this product. F5 data is also tabular data.

3. Problem Information

If there is not any data showing on this product page, there is problem with the F5 data or data transmission.

O. Ski:



The image shows a graphic titled "Ski Conditions MONDAY" from "THE WEATHER CHANNEL". It displays a table of ski location data. The table has three columns: "NEW", "BASE", and "OPEN". The first two rows show "Mohawk Mt" and "Powder Ridge" with their respective snow conditions. The third row shows "Ski Sundown" with the status "Call Ahead".

	NEW	BASE	OPEN
Mohawk Mt PACKED POWDER	24"	64" - 80"	22
Powder Ridge PACKED POWDER	4"	38" - 66"	35
Ski Sundown	Call Ahead		

1. *Product Description*

The Ski product is part of the National Ski Segment. There are usually two local pages appearing back-to-back at the end of the feature. Usually there are 3 ski locations per page.

2. *Data Description and Expiration Rules*

The Ski product is driven by data purchased from a data vendor, Morrie Trumble, and displays the day for which the data is valid under the "Ski Conditions" banner, three ski location names, the amount of new snow, snow base, and number of trails open at those locations. There may also just be a message for that location like "Call Ahead", "Closed", etc.

3. *Problem Information*

Ski data is sent about four times a day. It expires after 24 hours and displays a "No Data Available" label if the data has expired. If "No Data Available" displays or the page is blank, check the STAR 4000 for data to determine whether the problem is STAR XL related.