



Weather Briefings

Obtaining weather through DUATS is simple, quick, and best of all you can get exactly what you want by selecting one of the three different types of briefing formats. Standard briefings, provide all available weather affecting a requested area, Outlook briefings provide forecast weather affecting a requested area based on a departure time of 6 hours or more into the future. Abbreviated briefings allow pilots to select the type of weather desired for selected locations or areas. Each type of briefing offers something unique to assist in flight planning, and to get the most out of each available option GTE will offer a series of weather articles.

Standard Weather Briefing

To get a Weather brief using Cirrus simply select either **Standard WX: Route** or **Standard WX: Area** brief from the DUATS Command List and fill in the form. When you are done, click OK, the selected command will appear in the Scripts Command window ready for dialing. For either of the Standard Weather briefings, you will automatically be provided all available weather in the requested area.

Select the dialog box for standard route weather by double clicking on Standard WX: Route located in the DUATS Command List window. Simply "TAB" through the dialog box, filling in the fields as you go, or use the mouse to go directly to a field of your choice. If you have used the flight planning chart Departure, Destination, a Route will already be filled in. F1 will provide help for any dialog box selected.

NOTE: Cirrus will not move a dialog box to the Scripts Command window if required fields are not filled in.

The first field in the dialog box is **Departure Time**. Departure time is used along with estimated time in route to determine the effective winds aloft (FDs) for display. Departure time must be filled in using Universal Coordinated Time (UTC) as (hhmm), or you can

enter a plus time in number of minutes (+mmmm)..If +mmmm is used DUATS will convert to the correct UTC

Example-1: (UTC) is to be entered as hhmm - 2200, 0330, etc.

Example-2: +mmmm, where mmmm is the number of minutes past the current time (e.g., +45). Valid numbers are from +0 to +1439 minutes.

NOTE: DUATS will not accept a departure time more than 23 hours and 59 minutes into the future.

An **Altitude** is required and must be entered as Flight Level.

Example 1: 120 for 12,000 feet.

Example 2: 80 for 8,000 feet. No "leading" zeros are required.

Altitude is used to provide an interpolation to the nearest 500 feet of requested altitude up to 29,000 feet. Above 29,000 feet interpolation is to the nearest 1,000 feet.

The **Estimated Time Enroute** is required to insure current wind information is provided for the duration of the flight. Estimated time enroute must be entered as (hhmm).

Example: 0230

(2 hours and 30 minutes)

The next entry is **Aircraft ID**. This entry must be the entire aircraft registration number. If you have created an aircraft database in Cirrus an optional pull down window is available for a point and click selection of an aircraft ID.

NOTE: To create an aircraft database select "Databases" from the "Edit" pull down menu.

Cirrus provides several optional features to make flight planning easier. Weather is available in FAA coded format or can be translated for easy reading.. Cirrus defaults to **FAA Weather**, however, you may select either of the other two options, **Plain Language** or **Both**. Plain

Language provides a plain English translation of FAA weather. If you select one of these options, the **PLAIN LANGUAGE TIME ZONE** button at the bottom of the dialog box now can be selected. Selecting a time zone here only applies to this briefing, the default time zone selected during Setup Dialog will not be changed.

NOTE: The following optional weather and traffic advisories can also be selected by simply checking the appropriate box.

If you check the box for **General FDC NOTAMs** you will also get all of the Flight Data Center (FDC) NOTAMs that are not associated with the requested route. These NOTAMs are often worldwide in scope and may go on for many pages.

The FAA provides **ATC Delay and Flow Control Advisories** designed to adjust the flow of traffic into a given airspace, along a given route, or bound for a given airdrome to ensure the most effective utilization of the airspace. To receive these advisories simply check the box.

By checking **Tropical Depression/Hurricane Advisories** box, Atlantic, Pacific, and Gulf advisories are provided. These advisories are often general and may not apply to the specific area of interest.

If you have used the flight planning chart in Cirrus to flight plan you will find that Departure, Destination, and Route are already filled in. You may use these

(Continued on Back)

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(Std Weather Brf Continued)

flight planning elements or you can simply replace them by typing in elements of your choice. Departure and destination may be filled in with either three or four character identifier, i.e., BOS or KBOS. The desired route of flight may be entered using any combination of standard route elements. The route may also be left blank which defaults to a direct route between departure and destination. **NOTE:** A list of Route Elements accepted by DUATS may be found in Cirrus Help under "Route Elements".

If you want to see weather for an Alternate Destination, type the Location ID in this field. You may enter as many as 5 LOCATION IDs. Either three or four character identifier may be used i.e., BOS or KBOS. If the location reports METARs and or TAFs they will be provided. DUATS also provide, the portion of an FA that affects the area around the selected alternate.

Two very important entries are **Weather** and **Wind Corridor**. The width selected will determine how much weather you will receive along your route of flight. The **Weather Corridor Width** can be selected between 10 and 100NM in 5 NM increments. The default is 50 NM. Example: An input of 40 will display weather within 20 NM each side of the route of flight.

The **Winds Corridor Width** can be selected between 100 and 600NM in 50 NM increments. This corridor determines the winds that will be provided along the requested route of flight. The default is 200 NM. Example An input of 150 will display winds within 75 NM each side of the route of flight. Winds Aloft Forecast data is interpolated for requested flight level and displayed as an additional column to the right of the FD. The **Plain Language Time Zone** will not be available unless you chose either **Plain Language or Both**. Remember a time zone selection here only applies to this briefing, the default time zone selected in Setup Dialog will not be changed. Now that you have filled out the **Standard WX: Route** dialog box and submitted it to DUATS, what weather can you expect to see. DUATS uses Departure, Destination, Route, Weather Corridor Width, and Winds Corridor Width to calculate the area for which DUATS is to provide weather. If Route of Flight dialog box is left blank, DUATS calculates a great circle between departure and destination and builds a corridor based on the selected corridor width. If you have provided route elements, i.e., V123, TERRY, V1, etc., DUATS will build a series of corridors around each segment and provide the weather within each corridor. Exactly how and what weather DUATS provides for each briefing is described in the following article.

How DUATS Retrieves and Displays Weather

Aviation weather is reported by weather facilities throughout the U.S. It is important to know that each facility does not report all weather types. If you want to know what weather is reported by a specified facility you can use the Extended Decode feature of Cirrus by selecting the Encode/Decode dialog box. DUATS will display, the weather types that are available. An Extended Decode on Dulles (IAD) shows METARs, TAFs, NOTAMs and UAs are available.

DUATS provides the weather based on Weather Facilities, Route, or and Area. Weather briefings based on weather facility provide only the weather available at that specific location. Using Dulles, for the Location IAD, you can only get METARs, TAFs, NOTAMs, and UAs, and only if available. Pilots can provide the ID, or DUATS can determine IDs based on State, Route Corridor Width, and Area Radius. Since Winds Aloft reports (FDs) are reported by fewer facilities, DUATS allows for a wider search corridor to insure adequate wind information is provided. The following weather types are only provided based on location ID:

Surface Observations	METAR
Surface Observation Weather Trends (3 hours)	TW
Terminal Forecasts	TAF
Winds Aloft Forecasts	FD
Pilot Reports	UA
Radar Summaries	SD
NOTAMs-D	NO

The adverse weather types, listed below, are treated differently depending on the type of weather briefing selected.

Area Forecasts	FA
SIGMETs	WS
AIRMETs	WA
Amended Severe Weather Forecasts	WW-A
Center Weather Advisories	WA
Convective SIGMETs	WW-A
Flow Control Advisories	ATC
Severe Weather Forecast Alerts	AWW
Severe Weather Outlooks	AC
Severe Weather Warnings	WW
Hurricane Advisories	WH

Adverse Weather is provided by only a few reporting facilities. (See Table 1.) If you have selected a Standard or Outlook weather brief, DUATS automatically provides all adverse weather for the area or route even if the reporting location is not in area or route corridor. If you select any of the Abbreviated weather briefings you will only get adverse weather if you use a Location ID for the requested weather type unless you have checked the Adverse Weather option box. (See Table 1)

Example-1: Use BOS as a location and request FA as weather type and you will get the entire FA provided by Boston.

Example-2. Request WW as a weather type and do not use MKC as location ID and you will not get a WW.

By checking the Adverse Weather box in Abbreviated WX: Location, Route, or Area you will get all adverse weather for the area or route just as you do in a Standard brief.

Example: If the {BOSTON} FA affects the area or route corridor, you will get the portion of that FA that affects the requested area or route corridor.

Table 1

Standard outlook and the Adverse weather options in Abbreviated Briefings display only reports that affect the selected area or route. By Selecting one of the following weather types, Abbreviated weather provides the entire report regardless of area or route.

To request FA data the location identifiers are: BOS MIA CHI DFW SLC SFO
FA data is delineated along state boundaries. Standard briefings and adverse Weather displays only the state portions affected by the route or area selected. Below is the list of states for each report.
 BOS states: ME NH VT MA RI CT NY LO NJ PA OH LE WV MD DC DE VA & CSTL WTRS
 MIA states: NC SC GA FL and CSTL WTRS
 CHI states: ND SD NE KS MN IA MO WILM LS MI LH IL IN KY
 DFW states: OK TX AR TN LA MS AL and CSTL WTRS
 SLC states ID MT WY NV UT CO AZ NM
 SFO states WA OR CA and CSTL WTRS
 To request WW data the only location identifier is MKC
 To request WS data use the FA data identifiers: BOS MIA CHI DFW SLC SFO
 To request WS and WST data use MKC or MKCE MKCC MKCW.
 MCK and MKCE cover the East portion of the US. MKCC the Central and MKCW the West.
 To request CWA data use the ARTCC identifiers.
 To request WA data use the FA data identifiers BOS MIA CHI DFW SLC SFO
 To request WA data use the FA data identifiers. BOS MIA CHI DFW SLC SFO

EXCEPTION

To request WH data the location identifier are NHC.
 When WH is selected all current data is displayed regardless of route or area.