



FS  
**FLIGHT**  
CONTROL  
[www.fs-flightcontrol.com](http://www.fs-flightcontrol.com)

# FS-FlightControl

## Manual

### **Instructor Operator Station**

for Microsoft Flight Simulator, Prepar3D and X-Plane



**FS-FlightControl · AB-Tools GmbH**

E-mail: [info@fs-flightcontrol.com](mailto:info@fs-flightcontrol.com) · Internet: [www.fs-flightcontrol.com](http://www.fs-flightcontrol.com)

Marsstraße 78, 80335 München, Germany · Phone: +49 89 38898588 · Fax: +49 89 38898589

Bank Account: Grenke Bank AG · IBAN: DE 49 20130400 0060270139 · BIC: GREBDEH1XXX

Register: Amtsgericht München, HRB 202859 · Finance Office: München für Körperschaften · VAT ID DE273587389

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## CONDITIONS

Define and save detailed custom weather conditions, enable real-time weather, set ILS visibility for all categories and set season, time and simulation rate.

## Current Weather

Current Weather Provided by Flight Simulator

Current METAR: **EDDM 061404Z 24005KT 210V270 9999 CLR 05/M07 Q1029**

Translated to Text:

☒ Show as Table
 ☒ Show Only Official METAR

**Location** Weather station Munich, Munich, Germany (EDDM)  
**Report Date and Time** Thursday, February 6, 2020 at 14:04:00 UTC  
**Surface Wind** With 5 kt from 240° true. Wind is varying between 210° and 270° true.  
**Visibility** 100,000.0 m in all directions  
**Clouds** No clouds below 12,000 ft  
**Temperature** 5°C with a dew point of -7°C  
**QNH** 1,029 hPa (mean sea level pressure)


Load in Custom Weather

Name:


Save as Weather Preset

In this section the current weather is displayed as METAR code and translated text.

You can choose if the translated text is displayed as continuous text or structured table. Additionally you can decide if all or only official weather METAR data is displayed.

 **Note:** The flight simulator uses the official METAR format, but extends it with additional extensions. FS-FlightControl can decode both, the official METAR data as well as the flight simulator extensions.


You can load the current weather into the **custom weather** section or save it as **weather presets**.

 **Note:** The option to Load in Custom Weather is only available if you do not have the Simplified Weather Control option enabled in the **Settings** module.

## Weather Themes



Here all themes that are available in the flight simulator are listed and can be activated with just one click.

 Note: This section does not appear if Active Sky is enabled as weather engine in the **Settings** module.

## Real-Time Weather

Real-Time Weather

Send Real-Time Weather to Flight Simulator
Load Next Station Weather in Custom Weather

☒ Enabled Continious Real-Time Weather

Continious Real-Time Weather

Automated Weather Update (whatever is first):

Every Certain Time:  sec.
After Flown Distance:  NM

☒ No Weather Update Below Altitude Above Ground:  ft.


Next Automated Update:


Either in: **101 sec.**
Or After: **10 NM**

You have the option to enable real-time weather in this section.

Therefore you can either send the current real-time weather directly to flight simulator or load it into the **custom weather** section.

 Note: You can change the used real-time weather source in the **Settings** module.

 Note: This section does only appear if Prepar3D, FSX or FSW is selected as simulator type and Active Sky is not enabled as weather engine in the **Settings** module.

 Note: Real-time weather in Prepar3D, FSX or FSW is limited to existent ground weather stations with upper level winds being interpolated.

## Continuous Real-Time Weather

Continious Real-Time Weather

Automated Weather Update (whatever is first):

Every Certain Time:  sec.
After Flown Distance:  NM

☒ No Weather Update Below Altitude Above Ground:  ft.

Next Automated Update:

Either in: **101 sec.**
Or After: **10 NM**

To enable continues real-time weather just activate the corresponding check box. This will enable automated real-time weather updates for all weather stations around the current aircraft location.

You can choose how often this weather update should be performed by entering a certain time interval or a flown distance (or both).

Additionally you can define that automated weather updates should not be performed when the aircraft is below a certain altitude above ground. This makes sure that the pilot is not disturbed while doing a final approach.


Below that some information is displayed to show when the next automated weather update will be performed.

## Real-Time Weather for X-Plane



You have the option to enable real-time weather in this section.

Additionally you will see the current availability status of the real-time weather and you have the option to use the button Refresh Real-Time Weather Now to reload the weather at any time.


 Note: This section does only appear if X-Plane is selected as simulator type.

## Weather Mode for Active Sky Weather Engine

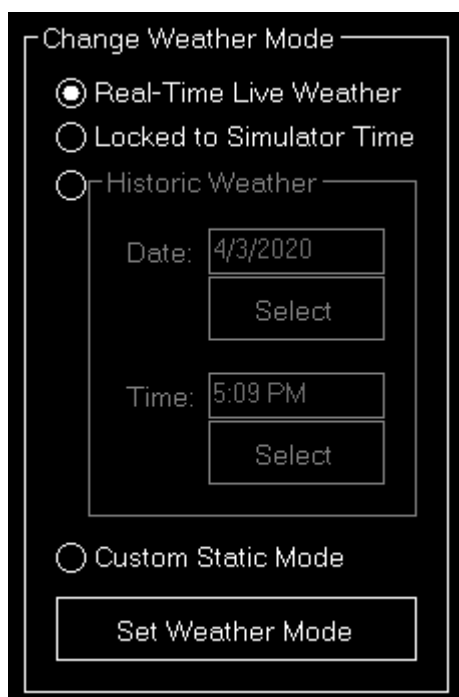


The screenshot shows a 'Weather Mode' settings panel. At the top, it displays 'Current Weather Mode: Real-Time Live Weather'. Below this is a 'Change Weather Mode' section containing three radio buttons: 'Real-Time Live Weather' (which is selected), 'Locked to Simulator Time', and 'Historic Weather'. The 'Historic Weather' option is expanded, showing a 'Date' field with '4/3/2020' and a 'Time' field with '5:09 PM', each with a 'Select' button below it. At the bottom of the panel is a 'Custom Static Mode' radio button and a 'Set Weather Mode' button.

In this area you can see the current Active Sky weather mode and change it, too.

 Note: This section only appears if Active Sky is enabled as weather engine in the **Settings** module.

## Change Weather Mode



This screenshot shows the 'Change Weather Mode' panel. It features three radio buttons: 'Real-Time Live Weather' (selected), 'Locked to Simulator Time', and 'Historic Weather'. The 'Historic Weather' option is expanded, showing a 'Date' field with '4/3/2020' and a 'Time' field with '5:09 PM', each with a 'Select' button below it. At the bottom of the panel is a 'Custom Static Mode' radio button and a 'Set Weather Mode' button.

Select the desired weather mode here and set it with the button Set Weather Mode.



## Historic Dynamic Weather



Historic Weather

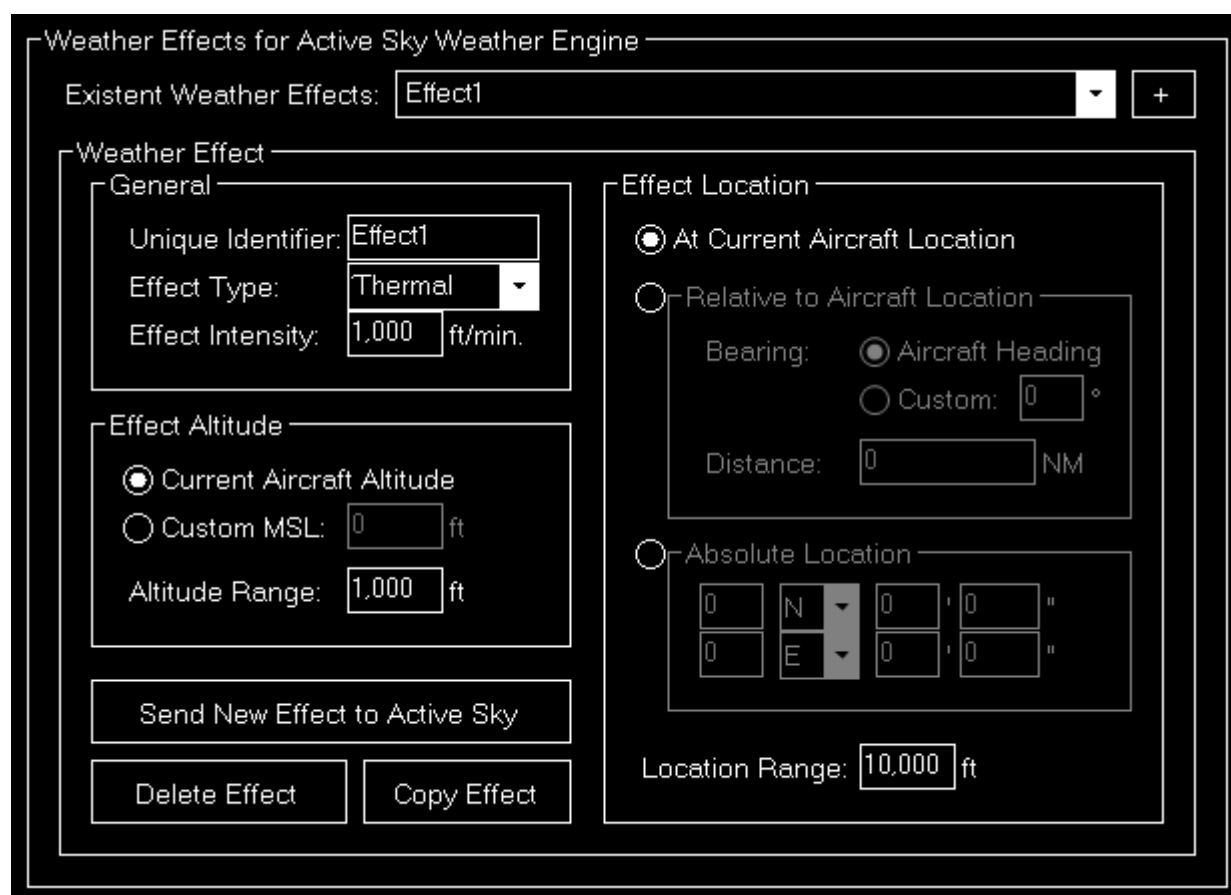
Date:

Time:

If you have chosen the hisotoric dynamic weather mode you can set the historic date and time here.

Use the corresponding Select button to open the **Select Date** or **Select Time** dialog.

## Weather Effects for Active Sky Weather Engine



Weather Effects for Active Sky Weather Engine

Existent Weather Effects:

Weather Effect

General

Unique Identifier:

Effect Type:

Effect Intensity:  ft/min.

Effect Location

☒ At Current Aircraft Location

☐ Relative to Aircraft Location

Bearing: ☒ Aircraft Heading  
☐ Custom:  °

Distance:  NM

☐ Absolute Location

"

"

Location Range:  ft


Effect Altitude

☒ Current Aircraft Altitude

☐ Custom MSL:  ft

Altitude Range:  ft


In this area you can create new and edit existent Active Sky weather effects.

 Note: This section only appears if Active Sky is enabled as weather engine in the **Settings** module.

## Weather Effect

Here different options of the weather effect can be changed.

Use the button **Send New Effect to Active Sky** to active a new weather effect, the button **Delete Effect** to remove an existent one again and **Copy Effect** to create a duplicate of the current selected effect.

 **Note:** An already sent weather effect cannot be changed anymore. Please just duplicate it and then remove the old one.

### General

First you can enter a name for the weather effect here and set the effect type as of

- Thermal
- Downdraft
- Updraft
- Turbulence
- Windshear

Then the effect intensity can be defined as vertical speed for thermal, downdraft and updraft effect

types and as an intensity between 1 and 5 for the turbulence and windshear effect types.

### Effect Altitude

Effect Altitude

☒ Current Aircraft Altitude

☐ Custom MSL:  ft

Altitude Range:  ft

You can choose here if the current aircraft altitude should be used for the effect or you want to define an altitude (MSL) manually.

Additionally an altitude range can be set: So if you define, for example, an custom altitude of 10,000 ft and an altitude range of 1,000 ft the effect will be active between 9,500 and 10,500 ft.

### Effect Location

Effect Location

☒ At Current Aircraft Location

☐ Relative to Aircraft Location

Bearing: ☒ Aircraft Heading

☐ Custom:  °

Distance:  NM

☐ Absolute Location

<input type="text" value="0"/>	N	<input type="text" value="0"/>	<input type="text" value="0"/>	"
<input type="text" value="0"/>	E	<input type="text" value="0"/>	<input type="text" value="0"/>	"

Location Range:  ft

Select here if the effect should be placed at the current aircraft location, relative to the aircraft location or at a custom absolute location.

Additionally a location range can be set defining the radius around the location where the effect should be active.

### Relative to Aircraft Location

Relative to Aircraft Location

Bearing: ☒ Aircraft Heading  
☐ Custom:  °

Distance:  NM

If the effect should be placed relative to the aircraft location, you first need to choose if it should be place in the direction of the current aircraft bearing or in a custom direction.

Then you need to define the distance the effect should be placed away from the aircraft.

### Absolute Location

Absolute Location

<input type="text" value="48"/>	<input type="text" value="N"/>	<input type="text" value="19"/>	<input type="text" value="7.52"/>	"
<input type="text" value="11"/>	<input type="text" value="E"/>	<input type="text" value="46"/>	<input type="text" value="56.70"/>	"

In case of an absolute position you can directly enter the latitude and longitude of the position where the weather effect should be located.

## ILS Visibility

ILS Visibility

CAT I	CAT I LTS	CAT II
CAT IIIa	CAT IIIb	CAT IIIc

Custom Visibility

Decision Height:  ft  
 Runway Visibility:  m

Set Custom Visibility

Reference Airport

Airport: **Munich (EDDM)**  
 Runway: **08R**

Use this section to set a pre-defined visibility condition for any of the ILS categories.

Following values are the default for decision height and runway visibility:

	Decision Height	Runway Visibility
<b>CAT I</b>	200 ft (60 m)	1,800 ft (550 m)
<b>CAT II</b>	100 ft (30 m)	1,000 ft (300 m)
<b>CAT IIIa</b>	50 ft (15 m)	600 ft (180 m)
<b>CAT IIIb</b>	30 ft (10 m)	150 ft (46 m)
<b>CAT IIIc</b>	0 ft (0 m)	30 ft (10 m)

 Note: You can customize these presets in the **Settings** module to your needs.

## Custom Visibility

Custom Visibility

Decision Height:  ft

Runway Visibility:  m

Set Custom Visibility

Additionally you can also set directly a custom visibility here as well.

## Custom Weather

Custom Weather

☒ High Altitude Layer
 

MSL in ft:

Calculate Wind

Direction:  °  
 Speed:  kt  
 Gust:  kt

No Turbulence  
 Visibility:  m

ISA Deviation:  °F  
 Temperature:  °F

Clear  
 Change Clouds

☒ Low Altitude Layer
 

MSL in ft:

Calculate Wind

Direction:  °  
 Speed:  kt  
 Gust:  kt

No Turbulence  
 Visibility:  m

ISA Deviation:  °F  
 Temperature:  °F

Scattered, Cumulus,  
Rain, Icing  
 Change Clouds

Surface Layer

MSL in ft:

Calculate Wind


Direction:  °  
 Speed:  kt  
 Gust:  kt

No Turbulence  
 Visibility:  m

Calculate  
 Wind Change  
 ISA Deviation  
 for Higher Layers

Temperature:  °F  
 QNH:  hPa

In case you want to define a completely custom weather situation you can do so in this section.

 Note: This version of the custom weather section appears Enable Simplified Weather is selected in the **Settings** module.

## Activate

FS-FlightControl Manual: <https://www.fs-flightcontrol.com/en/manual/>



In case you have a different weather control option (like ILS visibility or real-time weather) enabled you will have to activate the customer weather control first before you can start using it.

## High Altitude Layer

 A black rectangular panel with a white border. At the top left is a checked checkbox labeled "High Altitude Layer". Below it, on the left, is a label "MSL in ft:" followed by a dropdown menu showing "30.000". To the right of this is a button labeled "Calculate Wind". Further right are three input fields: "Direction:" with "159" and a degree symbol, "Speed:" with "24" and "kt", and "Gust:" with "0" and "kt". To the right of these is a dropdown menu showing "No Turbulence". Further right are two input fields: "ISA Deviation:" with "8" and "°F", and "Temperature:" with "-72" and "°F". To the right of these is a button labeled "Clear". At the bottom center is a label "Visibility:" followed by an input field showing "100.000" and "m". At the bottom right is a button labeled "Change Clouds".

This section creates a high altitude layer.

If you have enabled this layer can first selected the altitude level where this layer will be applied to.

Next the wind for this layer can be defined either manually by entering the wind direction, speed and gust values or by using the **Calculate Wind dialog**.

There is also the option to set the intensity of turbulence in this layer as well as the visibility.


By default the temperature is automatically calculated based on the ISA atmosphere, but values can be adjusted here as needed either by specifying the deviation from the ISA atmosphere or a temperature directly.

Additionally you can see which clouds and precipitation is present in this layer. Both can be configured using the Change Clouds button.

## Low Altitude Layer

 A black rectangular panel with a white border. At the top left is a checked checkbox labeled "Low Altitude Layer". Below it, on the left, is a label "MSL in ft:" followed by a dropdown menu showing "9.000". To the right of this is a button labeled "Calculate Wind". Further right are three input fields: "Direction:" with "139" and a degree symbol, "Speed:" with "17" and "kt", and "Gust:" with "0" and "kt". To the right of these is a dropdown menu showing "No Turbulence". Further right are two input fields: "ISA Deviation:" with "4" and "°F", and "Temperature:" with "-1" and "°F". To the right of these is a button labeled "Change Clouds". Above this button is the text "Scattered, Cumulus, Rain, Icing". At the bottom center is a label "Visibility:" followed by an input field showing "100.000" and "m".

The options of the low altitude layer are exactly the same as for the high altitude layer.

 **Note:** Wind and temperature values between the layers are automatically interpolated to ensure a smooth transition between them.

## Surface Layer

Surface Layer									
MSL in ft:	Calculate Wind	Direction:	130 °	No Turbulence	Calculate	Wind Change		for Higher Layers	
1.516		Speed:	9 kt			ISA Deviation			
		Gust:	12 kt						
		Visibility:	100.000 m	Temperature:	59 °F	QNH:	1.014 hPa		

The options for the surface layer are also very similar to the layers above.

You can define a local QNH here and also calculate the winds for the higher layers: This will apply a standard model of geostrophic winds turning with increasing altitude to the right in the Northern and left in the Southern Hemisphere.

## Calculate Wind

FS-FlightControl: Calculate Wind

Change Wind

Wind Settings

Direction: 290 °  
Speed: 25 kt

Wind Relative to Current Aircraft Heading

Aircraft Heading: 293°  
Cross Wind Component: 1 kt

Wind Relative to Runway Heading

Flight Plan Departure

Flight Plan Arrival

Custom

Airport: Munich (EDDM)  
Runway: 26L  
Runway Heading: 263°  
Cross Wind Component: 11 kt

Cancel

This dialog allows you to visually change the wind direction and speed.

Just click in the compass rose from where the wind should come from. The length of the arrow defines the wind speed.

You can also see the current aircraft heading as well as the runway if an airport and runway is selected.

### Wind Settings

A dark-themed panel titled "Wind Settings" with a white border. It contains two input fields: "Direction:" with the value "290" and a degree symbol, and "Speed:" with the value "25" and the unit "kt".

Wind Settings

Direction: 290 °

Speed: 25 kt

Alternatively you can also set the wind direction and speed manually here.

### Wind Relative to Current Aircraft Heading

A dark-themed panel titled "Wind Relative to Current Aircraft Heading" with a white border. It displays "Aircraft Heading: 293°" and "Cross Wind Component: 1 kt".

Wind Relative to Current Aircraft Heading

Aircraft Heading: 293°

Cross Wind Component: 1 kt

This section shows your current aircraft heading and calculates the cross wind component relative to that.

### Wind Relative to Runway Heading

A dark-themed panel titled "Wind Relative to Runway Heading" with a white border. It has three tabs: "Flight Plan Departure", "Flight Plan Arrival", and "Custom". The "Flight Plan Departure" tab is selected. Below the tabs, it displays "Airport: Munich (EDDM)", "Runway: 26L", "Runway Heading: 263°", and "Cross Wind Component: 11 kt".

Wind Relative to Runway Heading

Flight Plan Departure Flight Plan Arrival Custom

Airport: Munich (EDDM)

Runway: 26L

Runway Heading: 263°

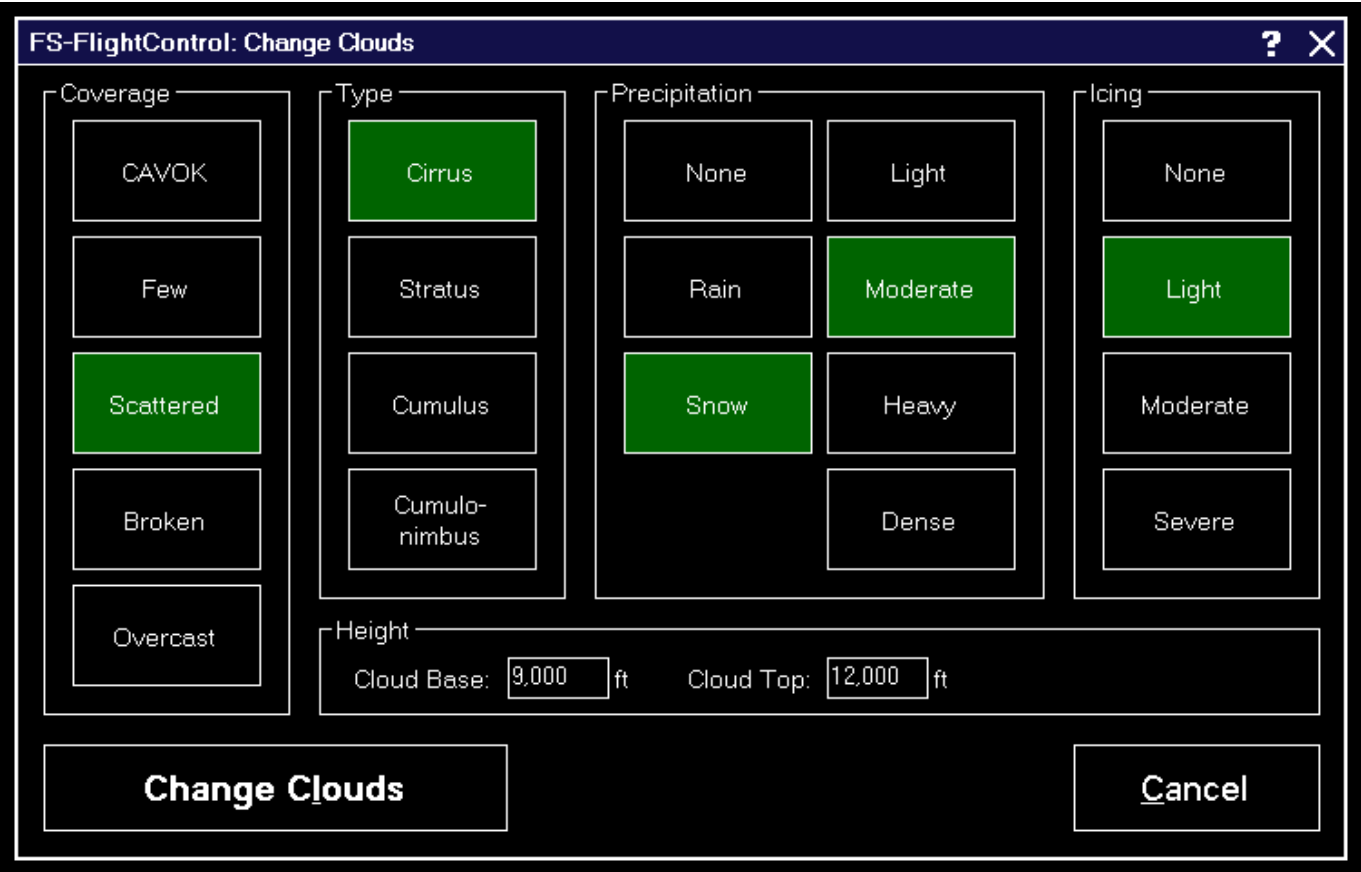
Cross Wind Component: 11 kt

First you can select here the airport and runway either by taking over your flight plan departure or arrival airport or defining any custom one.


Then it will calculate the cross wind component accordingly.

## Change Clouds

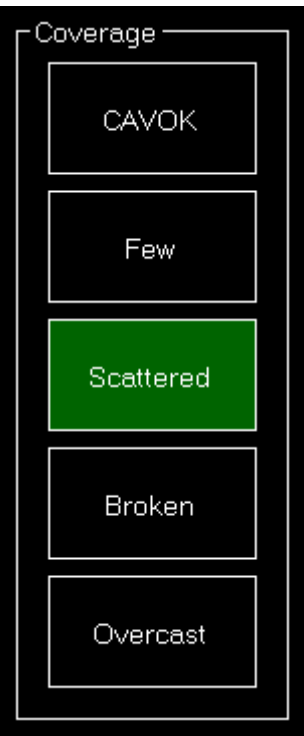




This dialog makes it simpler to change the cloud layer as well as set a certain precipitation.

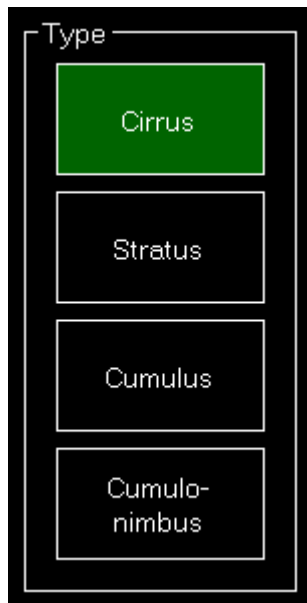
 Note: The available options will vary based on the simulator and weather engine type.

**Coverage**



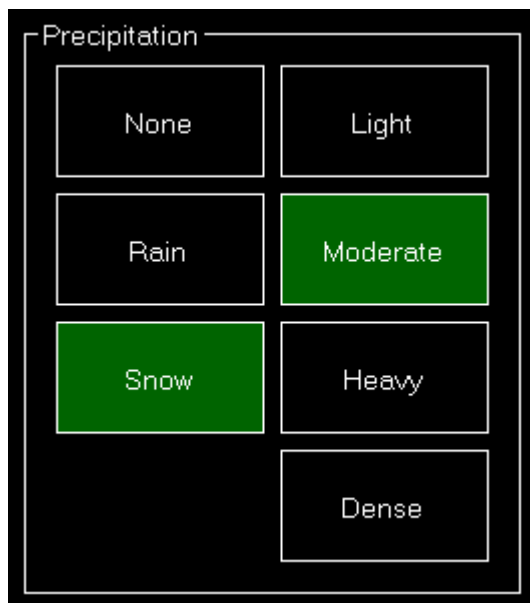
First you can select the coverage of the cloud layer.

## Type



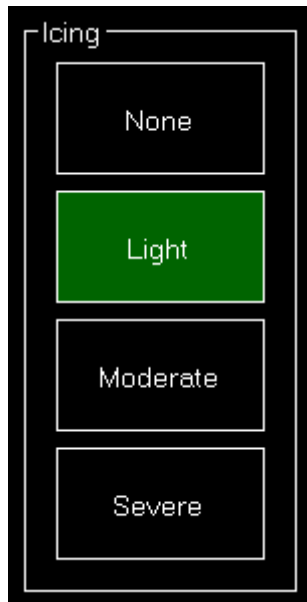
Next the cloud type can be selected.

## Precipitation



Now the precipitation type as well as its intensity can be defined.

## Icing




You also have the option to select the amount of icing in this cloud layer

### Height



Finally you can define the height of the cloud above the ground (independent of the current layer altitude) and set the upper limit of the cloud.

 Note: The upper cloud limit can only be set when Active Sky weather engine is used.

## Custom Weather for Prepar3D, FSX and FSW

Custom Weather for Prepar3D, FSX and FSW

Load from Current Weather

Load from METAR String

Save as Preset

Send Custom Weather

Surface Wind

+

39,300 - 40,940 ft

+

0 - 1,013 ft

+

Wind Layer

Calculate Direction and Speed

Direction: 260 °

☐ Entirely Variable Direction

Variation from 250 ° to 270 °

Speed: 10 kt

Gust Speed: 15 kt

☒ Surface Wind

Depth/Height: 3,000 ft

Max. Altitude: 0 ft

Turbulence: None

Wind Shear: Gradual (none)

Delete Layer

Cloud Layer

Base Altitude: 39,300 ft

Cloud Coverage: Broken Clouds

Cloud Type: Cirrus

Top of Cloud: Flat

Turbulence: None

Type of Precipitation: Rain

Precipitation Strength: Moderate

Precipitat. Base Height: 0 ft

Icing Rate: None

Delete Layer

Atmospheric Pressure

Pressure: 1,013 hPa

Visibility Layer

Base Altitude: 0 ft

Max. Altitude: 1,000 ft

Visibility: 50,000 m

Direction: All

Delete Layer

0 ft

+

Temperature Layer


Max. Altitude: 0 ft

Temperature: 32 °F

Dew Point: 10 °F

Delete Layer

In case you want to define a completely custom weather situation you can do so in this section.

 **Note:** This version of the custom weather section appears if Prepar3D, FSX or FSW is selected as simulator type.

Load and Send Weather

Load from Current Weather

Load from METAR String

Save as Preset

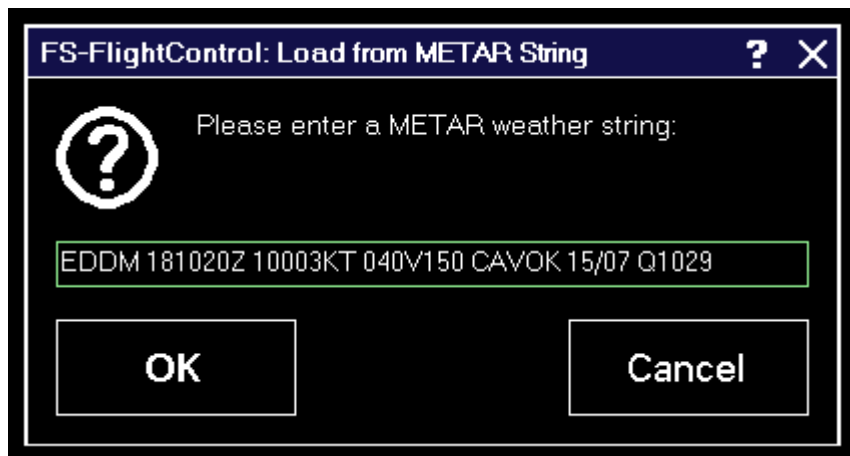
Send Custom Weather

You can load into the custom weather from the current weather or from a METAR string here.

Also saving the custom weather as a new *weather presets* is possible using the Save as Preset button.

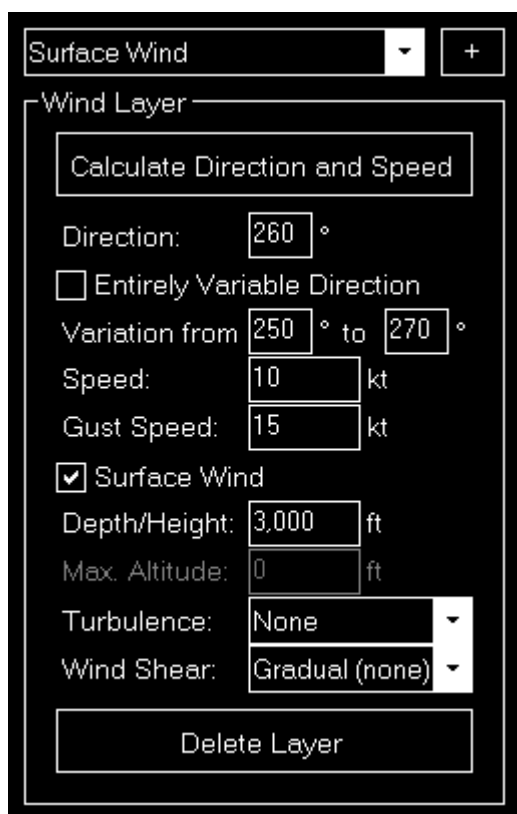
To send the weather defined in these custom weather sections to the flight simulator, just click on the Send Custom Weather button.

Load METAR String



If you have a METAR string as starting point for your custom weather enter it here. This will decode the weather situation defined in the METAR string into the custom weather sections.

## Wind Layers



You can define all wind layers - including the surface wind - in this section.


First you can define the direction where the wind is coming from. You have two additional options regarding the wind direction:

You can define it as **Entirely Variable** or even enter the from and to direction where the wind is coming from. If the wind should come only from a fixed direction, just keep the **Entirely Variable Direction** check box unchecked and the variation input fields as .

Next enter the speed and optional gust speed (keep it if not needed) of the wind layer.

There is also a ***Calculate Wind dialog*** that allows you to set the wind direction and speed visually.

Next you can define if the current wind layer is a surface wind or an wind aloft. In case of a surface wind you have the additional option to define a depth/height of the wind and if it is a wind aloft you can define a maximum altitude (MSL) for it instead.

 **Note:** You may add as many wind layers as you want, but there can be only one of them defined as surface wind.

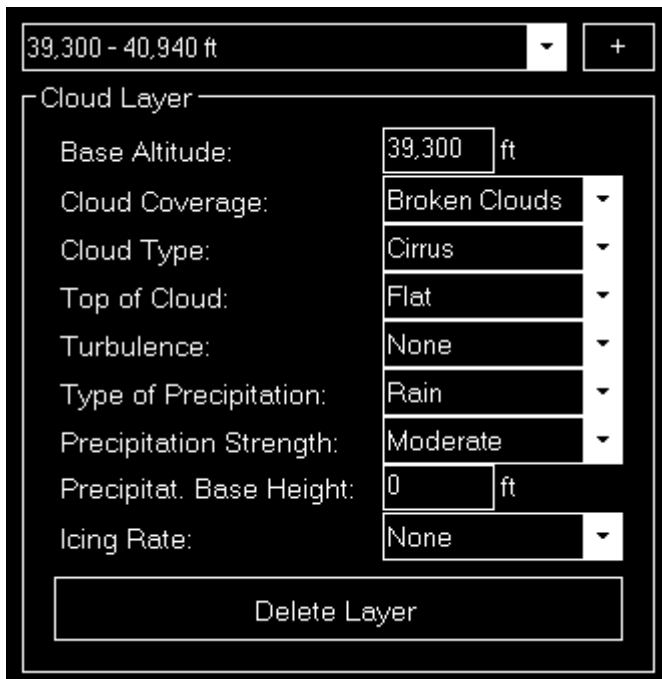
Finally you can define turbulences in this wind layer as

- None
- Light
- Moderate
- Heavy
- Severe

and wind shears as:

- Gradual (none)
- Moderate
- Steep
- Instantaneous

## Cloud Layers



39,300 - 40,940 ft

Cloud Layer

Base Altitude: 39,300 ft

Cloud Coverage: Broken Clouds

Cloud Type: Cirrus

Top of Cloud: Flat

Turbulence: None

Type of Precipitation: Rain

Precipitation Strength: Moderate

Precipitation Base Height: 0 ft

Icing Rate: None

Delete Layer

Here you can define all cloud layers of the custom weather situation.

First enter a base altitude (MSL) for the cloud layer.

Then you can define several additional parameters for like cloud coverage as of

- Few Clouds

- Scattered Clouds
- Broken Clouds
- Overcast
- 1/8 Coverage
- 2/8 Coverage
- 3/8 Coverage
- 4/8 Coverage
- 5/8 Coverage
- 6/8 Coverage
- 7/8 Coverage
- 8/8 Coverage

cloud type as of

- Cirrus
- Stratus
- Cumulus
- Cumulo-nimbus

top of the cloud as of

- Flat
- Round
- Anvil

turbulences in the cloud layer as of

- None
- Light
- Moderate
- Heavy
- Severe

type of precipitation as of

- None
- Rain
- Freezing Rain
- Hail
- Snow

precipitation strength as of

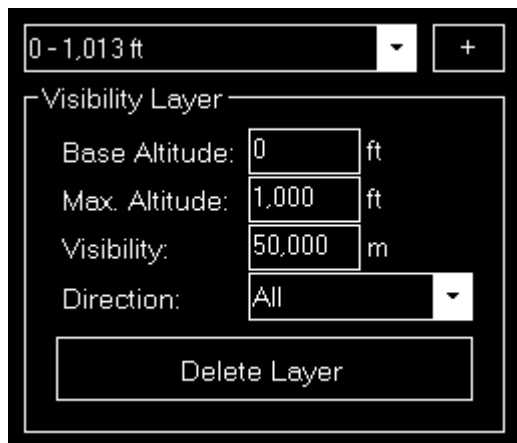
- Very Light
- Light
- Moderate
- Heavy
- Dense

the base altitude of the precipitation as well as the icing rate as of

- None
- Trace

- Light
- Moderate
- Severe

## Visibility Layers




The visibility layers of the custom weather situation can be defined in this section.

First enter the base and maximum (top) altitude (MSL) of the visibility layer.

Then you can define the visibility in this layer itself.

Finally you can decide in which direction this visibility should be effective as of

- All
- North-West
- North
- North-East
- East
- South-East
- South
- South-West
- West

 **Note:** To set the same visibility for more than one direction, but not for all, just create another visibility layer with the same base and maximum altitude.

## Temperature Layers



0 ft [v] +

Temperature Layer

Max. Altitude: 0 ft

Temperature: 32 °F

Dew Point: 10 °F

Delete Layer

Also individual temperature layers can be defined for your custom weather situation.

First enter the maximum altitude (MSL) up to which this layer should be valid.

Then you can enter the temperature and dew point of this temperature layer.

## Atmospheric Pressure

Atmospheric Pressure

Pressure: 1,013 hPa

Here you can define the atmospheric pressure for your custom weather situation.

## Custom Weather for X-Plane

Custom Weather for X-Plane

Load from Current Weather Load from METAR String Save as Preset Send Custom Weather

Atmospheric Conditions

Visibility: 35,000 m

Precipitation: 0 %

Storminess: 0 %

Temperature: 59 °F

Dew Point: 45 °F

Pressure: 1,013 hPa

Thermals

Altitude: 32,800 ft

Coverage: 10 %

Climb Rate: 300 ft

2,000 ft [v] +

Wind Layer

Calculate Direction and Speed

Direction: 120 °

Speed: 10 kt

Altitude: 2,000 ft

Turbulence: 0 (0-10)

Gust Direct. Change: 20 °

Gust Speed Increase: 5 kt

Delete Layer

4,500 - 6,500 ft [v] +

Cloud Layer

Cloud Type: Cirrus [v]

Base Altitude: 4,500 ft

Top Altitude: 6,500 ft

Delete Layer

Runway Conditions

Runway Wetness: Dry [v]

☐ Patchy


Bodies of Water

Wave Height: 5 ft

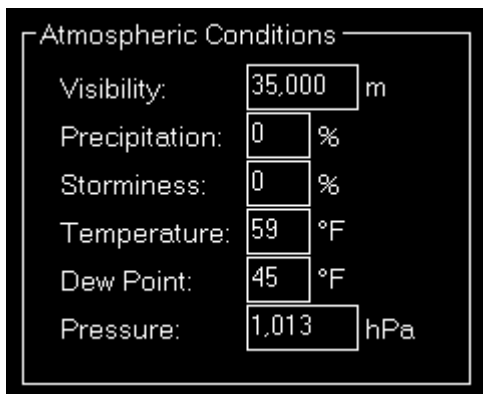
Wave Direction: 140 °

In case you want to define a completely custom weather situation you can do so in this section.

You can also **load and send weather** from here.

 Note: This version of the custom weather section appears if X-Plane is selected as simulator type.

## Atmospheric Conditions

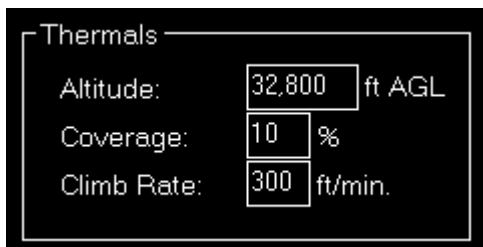


Atmospheric Conditions	
Visibility:	35,000 m
Precipitation:	0 %
Storminess:	0 %
Temperature:	59 °F
Dew Point:	45 °F
Pressure:	1,013 hPa

Here you can first define the visibility followed by the precipitation and storminess as percentage.

Additionally the temperature, dew point and atmospheric pressure can be set.

## Thermals



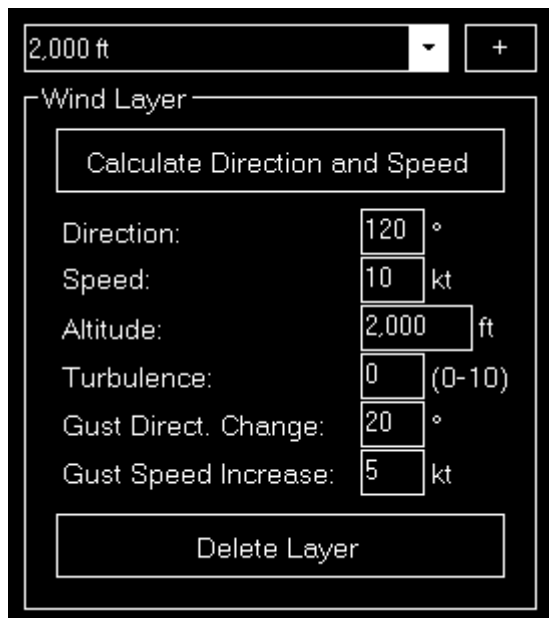
Thermals	
Altitude:	32,800 ft AGL
Coverage:	10 %
Climb Rate:	300 ft/min.

You can define thermal effects in this section.

First enter the altitude where the thermal effect should occur.

Then you can set its coverage as percentage as well as the climb rate.

## Wind Layers



The screenshot shows a 'Wind Layer' configuration window. At the top, there is a text field containing '2,000 ft' and a '+' button. Below this is a 'Wind Layer' section with a 'Calculate Direction and Speed' button. The section contains several input fields: 'Direction:' with a value of '120' and a degree symbol, 'Speed:' with a value of '10' and 'kt', 'Altitude:' with a value of '2,000' and 'ft', 'Turbulence:' with a value of '0' and a range '(0-10)', 'Gust Direct. Change:' with a value of '20' and a degree symbol, and 'Gust Speed Increase:' with a value of '5' and 'kt'. At the bottom of the section is a 'Delete Layer' button.

You can define all wind layers in this section.

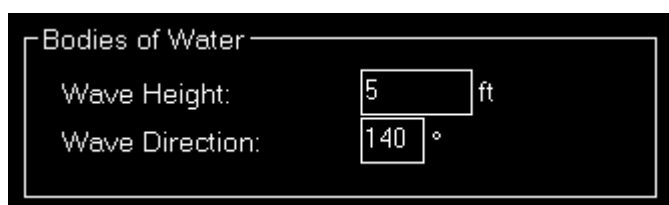
First enter the direction, altitude and speed of the wind layer.

There is also a ***Calculate Wind dialog*** that allows you to set the wind direction and speed visually.

Next you can define the turbulence intensity between 0 and 10.

Finally the gust direction change and speed increase can be set.

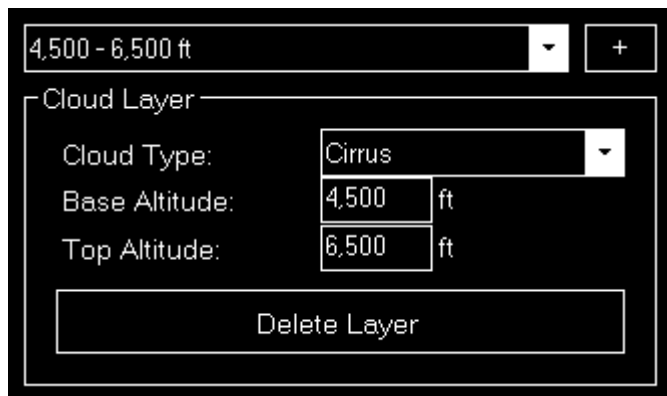
## Bodies of Water



The screenshot shows a 'Bodies of Water' configuration window. It contains two input fields: 'Wave Height:' with a value of '5' and 'ft', and 'Wave Direction:' with a value of '140' and a degree symbol.

In this section the water wave height and direction can be defined.

## Cloud Layers



Here you can define all cloud layers of the custom weather situation.

First choose the cloud type as of

- Cirrus
- Few Cumulus
- Scattered Cumulus
- Broken Cumulus
- Overcast Cumulus
- Stratus

Then you can enter a base and top altitude (MSL) for the cloud layer.

## Runway Conditions



Here you can choose the runway conditions as of

- Dry
- Damp
- Wet

If you have chosen Damp or Wet you can additionally decide if the runway surface should be patchy or not.

## Custom Weather for Active Sky Weather Engine

Custom Weather for Active Sky Weather Engine

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Surface Wind

Direction:  °

Variance:  °

Wind Speed:  kt

Gust Speed:  kt

Temperature:  °F

Dew Point:  °F

Turbulence:

3,000 ft

Wind Aloft Layer

Direction:  °

Speed:  kt

Temperature:  °F

Turbulence:

Atmospheric Pressure

Pressure:  hPa

39,300 ft

Cloud Layer

Base Altitude:  ft

Top Altitude:  ft

Cloud Coverage:

Cloud Type:

Turbulence:

Type of Precipitation:

Precipitation Strength:

Icing Rate:

Surface Visibility


Base Altitude:  ft

Max. Altitude:  ft

Visibility:  m

In case you want to define a completely custom weather situation you can do so in this section.

You can also **load and send weather** from here.

 Note: This version of the custom weather section only appears if Active Sky is enabled as weather engine in the **Settings** module.

## Surface Wind

Surface Wind

Direction:  °

Variance:  °

Wind Speed:  kt

Gust Speed:  kt

Temperature:  °F

Dew Point:  °F

Turbulence:

You can define the surface wind in this section.

First you can define the direction where the wind is coming from including a variance.

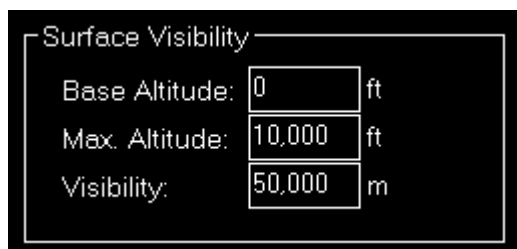
Next enter the speed and optional gust speed (keep it if not needed) of the wind.

Also the temperature and the dew point on the surface can be defined here.

Finally you can define turbulences in the surface wind as:

- None
- Light
- Moderate
- Heavy
- Severe

## Surface Visibility



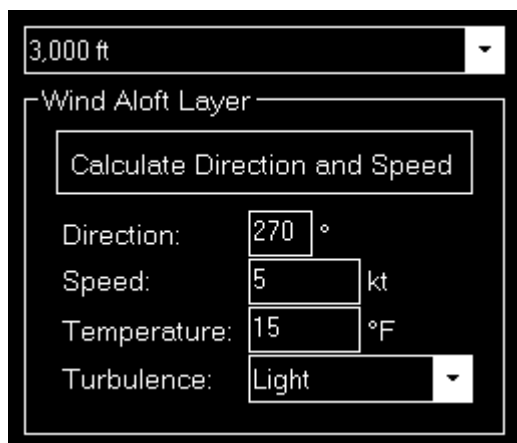
The screenshot shows a window titled "Surface Visibility". It contains three input fields: "Base Altitude:" with a value of "0" and unit "ft", "Max. Altitude:" with a value of "10,000" and unit "ft", and "Visibility:" with a value of "50,000" and unit "m".

The surface visibility of the custom weather situation can be defined in this section.

First enter the base and maximum (top) altitude (MSL) of the visibility layer.

Then you can define the visibility itself.

## Wind Aloft Layers



The screenshot shows a window titled "Wind Aloft Layer". At the top, there is a dropdown menu showing "3,000 ft". Below it is a button labeled "Calculate Direction and Speed". Underneath the button are four input fields: "Direction:" with a value of "270" and unit "°", "Speed:" with a value of "5" and unit "kt", "Temperature:" with a value of "15" and unit "°F", and "Turbulence:" with a dropdown menu showing "Light".

You can define all wind aloft layers in this section.


First enter the direction and speed of the wind layer.

There is also a **Calculate Wind dialog** that allows you to set the wind direction and speed visually.

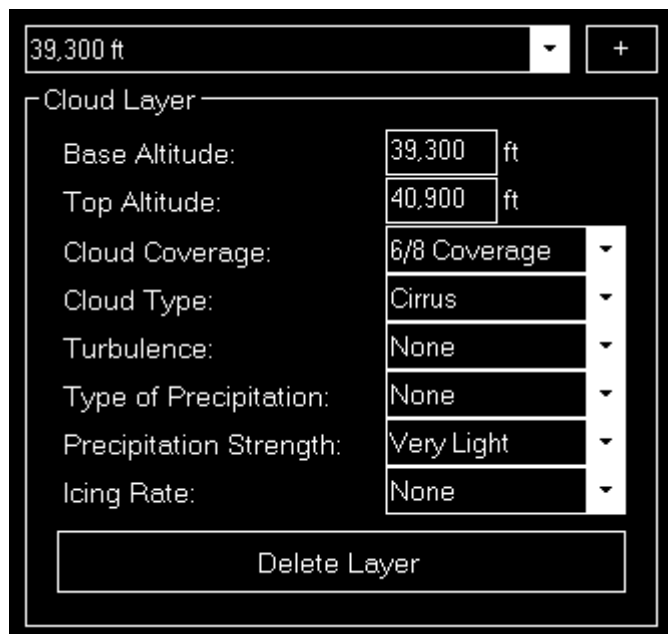
Next you can define the temperature and finally the turbulences in this wind layer as:

- None
- Light
- Moderate

- Heavy
- Severe

 Note: The altitudes of the individual wind layers cannot be changed for Active Sky.

## Cloud Layers



39,300 ft

Cloud Layer

Base Altitude: 39,300 ft

Top Altitude: 40,900 ft

Cloud Coverage: 6/8 Coverage

Cloud Type: Cirrus

Turbulence: None

Type of Precipitation: None

Precipitation Strength: Very Light

Icing Rate: None

Delete Layer

Here you can define all cloud layers of the custom weather situation.

First enter a base and top altitude (MSL) for the cloud layer.

Then you can define several additional parameters for like cloud coverage as of

- 1/8 Coverage
- 2/8 Coverage
- 3/8 Coverage
- 4/8 Coverage
- 5/8 Coverage
- 6/8 Coverage
- 7/8 Coverage
- 8/8 Coverage

cloud type as of

- Cirrus
- Stratus
- Cumulus
- Cumulo-nimbus

turbulences in the cloud layer as of

- None
- Light

- Moderate
- Heavy
- Severe

type of precipitation as of

- None
- Rain
- Freezing Rain
- Hail
- Snow

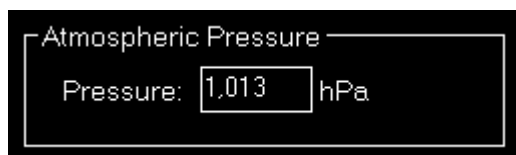
precipitation strength as of

- Very Light
- Light
- Moderate
- Heavy
- Dense

as well as the icing rate as of

- None
- Trace
- Light
- Moderate
- Severe

## Atmospheric Pressure



Here you can define the atmospheric pressure for your custom weather situation.

## Weather Presets





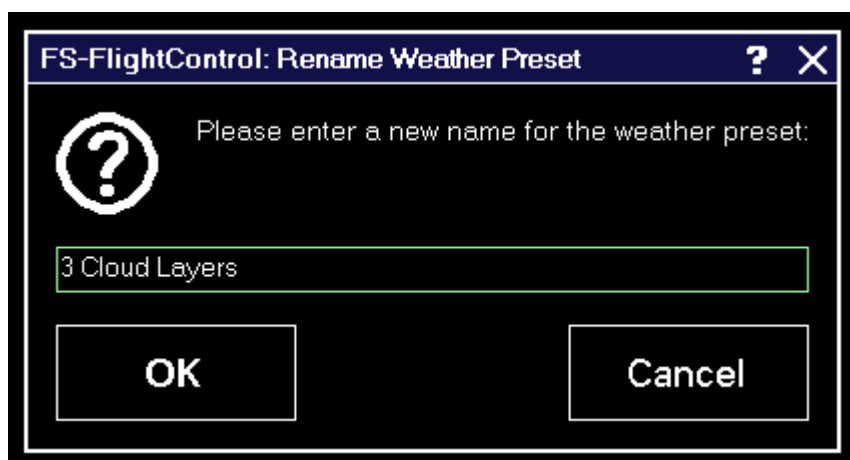
All your saved weather presets are listed here. There is no limit in the number of weather presets you can define.

## Pop-Up Menu



If you right click (long “touch”) on a weather preset this pop-up menu will be shown enabling you to rename, delete or edit an existent weather preset again.


### Rename Weather Preset





Here you can set a new name for an existent weather preset.

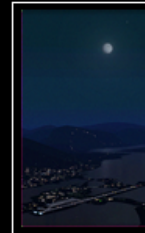
## Season and Time


Season and Time of Day


  
Spring Dawn

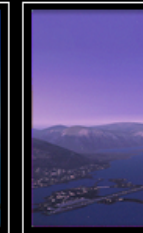
  
Spring Day


  
Spring Dusk


  
Spring Night


  
Summer Dawn


  
Summer Day


  
Summer Dusk


  
Summer Night


  
Fall Dawn


  
Fall Day


  
Fall Dusk

  
Fall Night

  
Winter Dawn

  
Winter Day

  
Winter Dusk

  
Winter Night

Synchronize Date and Time

PC Time Offset:  h ☐ Keep Synchronized

Set Simulator Date and Time to PC Time

Custom Date and Time

Date:   Time:

Send Custom Date and Time

In this section you have a quick and easy control of the current season.

Just click on one of the pre-defined season buttons.

## Synchronize Date and Time

Synchronize Date and Time

PC Time Offset:  h ☐ Keep Synchronized

Set Simulator Date and Time to PC Time

There is also the option to synchronize the simulator date and time with the one of the computer, optionally with a certain time offset.

You can either do a one-time synchronization manually or keep it synchronized automatically.

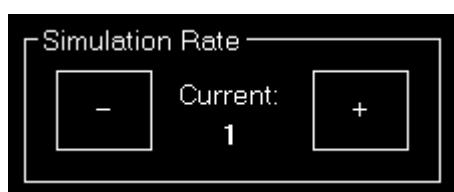
## Custom Date and Time



Additionally you can define a completely custom date and time in this section.

Use the corresponding Select button to open the **Select Date** or **Select Time** dialog.

## Simulation Rate



Beside a very detailed weather configuration system this module offers here also an easy way to change the current simulation rate of the simulator.

Only for X-Plane additionally the actual simulation rate is shown next to the currently requested one. For Prepar3D, FSX and FSW these two are always identical.

## Sound



It is possible to mute and un-mute the simulator sound from here.

## General Info



Additionally in the bottom right of the screen you always have an eye on the current frame rate and simulator time.

**FS-FlightControl Manual:**

[\*https://www.fs-flightcontrol.com/en/manual/\*](https://www.fs-flightcontrol.com/en/manual/)

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