

# WSI Trader API Documentation Last Updated: Sep 09, 2024

The Following document describes how to use the WSI Trader API to download data from the WSI Trader website. These services provide the means to automate the downloading of data that is available within the WSI Trader web application.

Note: The documentation below includes quotes around some of the options simply for clarity. In no case, should quotes be used in the API calls.

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# 1.) Homepage - Forecast Table

Returns a .csv file with WSI forecast data from the Forecast City Table on the Trader homepage for a given Region or Custom List

# **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetCityTableForecast

# **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

**SiteId** – the Id of the region or custom list you would like the forecast data for. For the complete list of available Region IDs run the following API URL:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetForecastTableIds?Account=username&Profile=name@wsi.com&Password=password

There are 2 types of region ids returned, one with simply the region name, for example **NEISO** or **GERMANY**, and the other with the region name followed by "-pool"

Entering just the region name, for example **NEISO** or **GERMANY**, will return the forecast data for all the individual cities in that region. Entering the region name followed by "-**pool**", for example NEISO-pool or GERMANY-pool, will return both the forecast data for all the individual cities in that region as well as the aggregate forecast for the region.

\* To return the forecast for all cities in which you are provisioned, use the value **allcities** for the **SiteId** parameter.

**IsCustom** – Indicates if the name of the region entered is a user-defined custom list. Accepted values are:

**True** – region name entered is a user-defined custom list

False – region name entered is not a user-defined custom list

**CurrentTabName** – Indicates the parameter you would like to get forecast information for. Accepted values are:

MinMax – 12am-12am Min and Max Temperature Peak – Off Peak/On Peak Min and Max Temperature AverageTemp – 12am-12am Average Temperature



**DegreeDays** – Cooling Degree Day (CDD) and Heating Degree Day (HDD) calculated from 12am-12am Average Temperature

**GasDay** – Min and Max Temperature based on the Gas Day Definition. In North America it is defined as 10am-10am and in all other regions defined as 6am-6am.

**POP** – Probability of Precipitation

TempUnits – The units you want the temperature data displayed in. Accepted values are:

F - Fahrenheit

**C** – Celsius

**Region** – The region in which the SiteId is located. Accepted values are:

NA – North America

**MEX** - Mexico

**EUR** – Europe

ASIA - Asia

AUS - Australia

# **Example URLs:**

Return the WSI Gas Day Min and Max Temperature forecast in degrees Celsius for all cities in Germany

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetCityTableForecast?Account=username&Profile=name@wsi.com&Password=password&IsCustom=false&CurrentTabName=GasDay&TempUnits=C&Id=GERMANY&Region=EUR

Return the WSI Average Temperature forecast in degrees Fahrenheit for all cities in the region NYISO as well as the aggregate forecast for NYISO

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetCityTableForecast?Account=username&Profile=name@wsi.com&Password=password&IsCustom=false&CurrentTabName=AverageTemp&TempUnits=F&Id=NYISO-pool&Region=NA

Return the WSI Average Temperature forecast in degrees Celsius for all available cities in North America that your account is provisioned for:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetCityTableForecast?Account=username&Profile=name@wsi.com&Password=password&IsCustom=false&CurrentTabName=AverageTemp&TempUnits=C&Id=allcities&Region=NA

<sup>\*</sup> For "Custom Lists", you must set the *IsCustom* parameter to "true" and use the exact name of your customer list for the *Id* parameter.



Return the WSI Average Temperature forecast in degrees Celsius for a user-defined custom list with the name "mycities" for cities located in Europe:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetCityTableForecast?Account=usernam

<u>e&Profile=name@wsi.com&Password=password&IsCustom=false&CurrentTabName=AverageTemp&TempUnits=C&Id=mycities&Region=EUR</u>

# 2.) Forecast Comparison

Returns a .csv file with the data provided in the tabular section of the Forecast Comparison product

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetForecastComparison

# **Required Parameters:**

**Account** – The username used to login to WSI Trader

**Profile** – The email address used to login to WSI Trader

**Password** – The password used to login to WSI Trader

**SiteId** – The ID for the station you would like to download data for.

For the complete list of available station IDs run the following API URL:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetCityIds?Account=username&Profile=name@wsi.com&Password=password

**Region** – Enter the Region in which the station is located. Accepted values are:

NA - North America

**MEX** - Mexico

**EUR** – Europe

AUS - Australia

ASIA - Asia

TempUnits – The units you want the temperature data displayed in: Accepted values are:

F - Fahrenheit

C - Celsius



# **Example URL:**

Return the data from the WSI Forecast Comparison product for the North American city Boston (KBOS) in degrees Fahrenheit

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetForecastComparison?Account=usern a me&Profile=name@wsi.com&Password=password&region=NA&SiteId=KBOS&TempUnits=F

# 3.) Hourly Forecast

Returns a .csv file with the data provided in the Hourly Forecast product

# **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHourlyForecast

# **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

**SiteId** – The ID for the station you would like to download data for. Use this parameter only when requesting one station

Or

**SiteIds[]** – The IDs for the stations you would like to download data for. You can retrieve data for up to 10 stations in one API call. Use this parameter only when requesting multiple stations

For the complete list of available station IDs run the following API URL:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetCityIds?Account=username&Profile=name@wsi.com&Password=password

**Region** – Enter the Region in which the station is located. Accepted values are:

NA - North America

MEX - Mexico

**EUR** – Europe

AUS - Australia

ASIA - Asia

TempUnits – The units you want the temperature data displayed in: Accepted values are:

**F** – Fahrenheit

**C** - Celsius



# **Optional Parameter:**

*timeutc* – The timezone to express the data in. By default, the Date and Time will be expressed in the local prevailing timezone of the station being retrieved

false – Date and Time are returned in local prevailing timezone (Default)

true – Date and Time are returned in UTC format

# **Example URL:**

Return the data from the WSI Hourly Forecast for the European city London Heathrow (EGLL) in degrees Celsius

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHourlyForecast?Account=username & Profile=name@wsi.com&Password=password&region=EUR&SiteId=EGLL&TempUnits=C

Return the data from the WSI Hourly Forecast for multiple cities in North America in degrees Fahrenheit

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHourlyForecast?Account=username &Profile=name@wsi.com&Password=password&region=NA&SiteIds[]=KBOS&SiteIds[]=KLAX&TempUnit s=F

# 4.) Weighted Forecast - ISO/Country

Returns a .csv file with the Weighted Temperature Forecasts for the ISOs or Countries you have configured to view on the Trader website,

https://www.wsitrader.com/WeightedForecast/PowerGas/RegionWeighted, for the selected Region

#### Base URL:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetModelForecast

#### **Required Parameters:**

**Account** – The username used to login to WSI Trader

Profile - The email address used to login to WSI Trader

**Password** – The password used to login to WSI Trader

Region – Enter the desired region for which your account has access to. Accepted values are:

NA - North America

**MEX** - Mexico

**EUR** – Europe



ForecastType – The data resolution desired. Accepted values are:

Period Daily

**Model** – The desired data source. Users can retrieve the latest WSI forecast or the latest forecasts from the GFS and ECMWF models. Accepted values are:

```
WSI – Latest WSI Forecast

GFS_OP – GFS Operational

GFS_ENS – GFS Ensemble

ECMWF_OP – ECMWF Operational

ECMWF_ENS – ECMWF Ensemble
```

TempUnits – The units you want the temperature data displayed in. Accepted values are:

F - Fahrenheit

C - Celsius

**showdecimals** – Controls the precision of the data. Accepted values are:

```
true – Data is provided with one decimal precision false – Data is provided as a whole number
```

**BiasCorrected** – The GFS and ECMWF Data can be returned either with the interpolation biases removed or in the raw interpolated format. This parameter is not relevant to WSI forecasts in which case any accepted value can be entered. Accepted values are:

**true** – Forecasts calculated using data in which the interpolation errors have been removed **false** – Forecasts calculated using raw interpolated model data

#### **Optional Parameters:**

**ShowDifferences** – Return the differences between the latest forecast and the previous forecast(s). By Default, if the parameter is not entered differences will be provided. Accepted values are:

```
true – Differences are provided (Default) false – Differences are not provided
```

**DataTypes**[] — Return the desire parameter. By Default, if the parameter is not entered all available parameters will be returned. Accepted values are:

```
Temp – Min/Max Temperature
```

HDD – Heating Degree Days (Only available for the NA region)

CDD – Cooling Degree Days (Only available for the NA region)

Heat - Heat Index (Only available for the NA region and for the WSI Forecast)



You can provide multiple values in one request. For example, DataTypes[]=Temp&DataTypes[]=Heat

# **Example URLs:**

Return the latest WSI Temperature Period Forecast for North America in degrees Fahrenheit: <a href="https://www.wsitrader.com/Services/CSVDownloadService.svc/GetModelForecast?Account=username@wsi.com&Password=password&Region=NA&forecasttype=Period&Model=WSI&TempUnits=F&BiasCorrected=true">https://www.wsitrader.com/Services/CSVDownloadService.svc/GetModelForecast?Account=username@wsi.com&Password=password&Region=NA&forecasttype=Period&Model=WSI&TempUnits=F&BiasCorrected=true</a>

Return the latest GFS Ensemble Daily Forecast for Europe in degrees Celsius with the data bias corrected:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetModelForecast?Account=username &Profile=name@wsi.com&Password=password&Region=EUR&forecasttype=Daily&Model=GFS\_ENS&TempUnits=C&BiasCorrected=true

# 5.) Weighted Forecast - Degree Days

Returns a .csv file with the Weighted Degree Day Forecasts for the available sub-regions based on the Region entered in the API call. For North America, both the original and new EIA regions are provided, while for Europe forecasts for individual countries and sub-regions is provided.

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWeightedDegreeDayForecast

# **Required Parameters:**

Account – The username used to login to WSI Trader
 Profile – The email address used to login to WSI Trader
 Password – The password used to login to WSI Trader
 ForecastType – The data resolution desired. Accepted values are:

Period Daily

**Model** – The desired data source. Users can retrieve the latest WSI forecast or the latest forecasts from the GFS and ECMWF models. Accepted values are:

WSI – Latest WSI Forecast
GFS\_OP – GFS Operational
GFS\_ENS – GFS Ensemble
ECMWF\_OP – ECMWF Operational
ECMWF\_ENS – ECMWF Ensemble



**BiasCorrected** – The GFS and ECMWF Data can be returned either with the interpolation biases removed or in the raw interpolated format. This parameter is not relevant to WSI forecasts in which case any accepted value can be entered. Accepted values are:

**true** – Forecasts calculated using data in which the interpolation errors have been removed **false** – Forecasts calculated using raw interpolated model data

**DataTypes**[] – Return the desired parameter.

```
gas_hdd – Gas Weighted HDD (North America Only)
gas_cdd – Gas Weighted CDD (North America Only)
oil_hdd – Oil Weighted HDD (North America Only)
oil_cdd – Oil Weighted CDD (North America Only)
electric_hdd – Electric Weighted HDD (North America Only)
electric_cdd – Electric Weighted CDD (North America Only)
population_hdd – Population Weighted HDD
population_cdd – Population Weighted CDD
```

You can provide multiple values in one request.

For example, DataTypes[]=gas\_hdd&DataTypes[]=population\_cdd

You can provide multiple values in one request.

For example, Stations[]=CONUS&Stations[]=EAST

**Region** – Enter the Region in which data is desired for. Accepted values are:

```
NA – North America (Default)
EUR – Europe
```

**Stations**[] – Return the desired sub-regions based on the **Region** value entered

#### **North America:**

**CONUS** 

**EAST** 

**MIDWEST** 

**SOUTHCENTRAL** 

**MOUNTAIN** 

**PACIFIC** 

**GASCONSEAST** 

**GASPRODUCING** 

**GASCONSWEST** 



# Europe:

**BELGIUM** 

CZECH\_REPUBLIC

**DENMARK** 

**FRANCE** 

**GERMANY** 

**GREECE** 

**ITALY** 

NORWAY

**SERBIA** 

**SPAIN** 

**SWITZERLAND** 

**TURKEY** 

UNITED\_KINGDOM

# **Example URLs:**

Return the latest WSI Gas Weighted HDD and Population Weighted CDD Daily Forecast for the 5 new EIA regions and CONUS:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWeightedDegreeDayForecast?Account=username&Profile=name@wsi.com&Password=password&forecasttype=Daily&Model=WSI&BiasCorrected=false&stations[]=EAST&stations[]=MIDWEST&stations[]=MOUNTAIN&stations[]=PACIFIC&stations[]=SOUTHCENTRAL&stations[]=CONUS&datatypes[]=gas hdd&datatypes[]=population cdd&Region=NA

Return the latest ECMWF Op Gas Weighted HDD and Population Weighted CDD Daily Forecast for the 5 new EIA regions and CONUS:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWeightedDegreeDayForecast?Account=username&Profile=name@wsi.com&Password=password&forecasttype=Daily&Model=ECMWF\_OP&BiasCorrected=true&stations[]=EAST&stations[]=MIDWEST&stations[]=MOUNTAIN&stations[]=PACIFIC&stations[]=SOUTHCENTRAL&stations[]=CONUS&datatypes[]=gas\_hdd&datatypes[]=population\_cdd&Region=NA

Return the latest ECMWF Op Population Weighted HDD Daily Forecast for the Germany:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWeightedDegreeDayForecast?Account=username&Profile=name@wsi.com&Password=password&forecasttype=Daily&Model=ECMWF\_OP&BiasCorrected=true&stations[]=GERMANY&datatypes[]=population\_hdd&Region=EUR



# 6.) 1-5, 6-10 & 11-15 Day Forecast Graphics

Returns the latest version of the WSI Period Forecast Graphic

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetForecastGraphics

# **Required Parameters:**

**Account** – The username used to login to WSI Trader

**Profile** – The email address used to login to WSI Trader

Password – The password used to login to WSI Trader

ForecastRange – The desired forecast period. Accepted values are:

1-5

6-10

11-15

**Region** – Enter the Region in which the station is located. Accepted values are:

NA - North America

MEX - Mexico

**EUR** – Europe

AUS - Australia

ASIA - Asia

# **Optional Parameter:**

**Stream** – The desired means for obtaining the graphic. Accepted values are:

false – Graphic will be downloaded to your system (Default)

**true** – Graphic will be streamed into the application making the call. For example, you can insert the graphic in a PowerPoint slide via the API call and the graphic will appear within the slide.

# **Example URLs:**

Download the latest WSI 6-10 Day forecast graphic for North America

 $\frac{https://www.wsitrader.com/Services/CSVDownloadService.svc/GetForecastGraphics?Account=usernam}{e\&profile=name@wsi.com\&password=password\&ForecastRange=6-10\&Region=NA\&Stream=false}$ 



Stream the latest WSI 11-15 Day forecast graphic for Europe

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetForecastGraphics?Account=username&profile=name@wsi.com&password=password&ForecastRange=11-15&Region=EUR&stream=true

# 7.) 1-5, 6-10 & 11-15 Day Forecast Headlines

Returns the latest version of the WSI Headlines located on the WSI Trader homepage covering the 1-15 Day Period

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetForecastDiscussions

# **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

**Region** – Enter the Region in which the station is located. Accepted values are:

NA – North America MEX - Mexico EUR – Europe

ForecastRange – The desire forecast period. Accepted values are:

1-56-10 (North America only)11-15 (North America only)Medium Range (Mexico & Europe only)Seasonal

# **Example URL:**

Return the latest WSI 1-5 Day Headline for North America

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetForecastDiscussions?Account=username&profile=name@wsi.com&password=password&ForecastRange=1-5&Region=NA



# 8.) Seasonal Forecast Graphics

Returns the latest version of the seasonal forecast graphic requested

# **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetSeasonalForecastGraphics

# **Required Parameters:**

Account – The username used to login to WSI Trader

**Profile** – The email address used to login to WSI Trader

Password – The password used to login to WSI Trader

*Model* – The desired forecast source. Accepted values are:

**WSI** – Graphics depicting the latest WSI seasonal forecast

**ECMWF** – Graphics depicting the latest ECMWF seasonal forecast

ForecastType – The desired forecast parameter. Accepted values are:

**Temp** – Graphics depicting the latest Temperature forecast

**Precip** – Graphics depicting the latest Precipitation forecast

ForecastMonth – The desired forecast period. Accepted values are:

If WSI is the desired forecast source

Month 1

Month 2

Month 3

Month 1-3

Month 2-4

If ECMWF is the desired forecast source

Month 1

Month 2

Month 3

Month 4

Month 5

Month 6

**Climatology (WSI Model Only)** – The desired climatological period for which to view the WSI forecast against. Accepted values are:

10 - Past 10yr Climatology

**30** – Std 30yr Climatology



**Region** – Enter the Region in which the station is located. Accepted values are:

NA - North America

**MEX** - Mexico

**EUR** – Europe

**AUS** – Australia (ECMWF only)

ASIA - Asia (ECMWF only)

# **Optional Parameter:**

**Stream** – The desired means for obtaining the graphic. Accepted values are:

false – Graphic will be downloaded to your system (Default)

**true** – Graphic will be streamed into the application making the call. For example, you can insert the graphic in a PowerPoint slide via the API call and the graphic will appear within the slide.

# **Example URLs:**

Download the Month 1 WSI Temperature Forecast for North America against the Std 30yr climatology

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetSeasonalForecastGraphics?Account=username&profile=name@wsi.com&password=password&model=wsi&forecasttype=Temp&ForecastMonth=Month 1&Climatology=30&region=NA&Stream=false

Stream the Month 5 ECMWF Precipitation forecast for Europe

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetSeasonalForecastGraphics?Account=username&profile=name@wsi.com&password=password&model=ecmwf&forecasttype=Precip&ForecastMonth=Month 5&Climatology=30&region=EUR&Stream=true

# 9.) Sub-Seasonal Forecast Graphics

Allows for retrieving the WSI and ECMWF Sub-Seasonal forecast graphics

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetSubSeasonalForecastGraphics

#### **Required Parameters:**

Account – The username used to login to WSI Trader

**Profile** – The email address used to login to WSI Trader

Password – The password used to login to WSI Trader



model – The desired forecast source. Accepted values are:

**WSI** – Graphics depicting the latest WSI seasonal forecast **ECMWF** – Graphics depicting the latest ECMWF seasonal forecast

forecasttype – The desired forecast parameter. Accepted values are:

**Temp** – Graphics depicting the Temperature forecast

**Precip** – Graphics depicting the Precipitation forecast (Only available for the ECMWF)

Wind - Graphics depicting the Wind forecast (Only available for the ECMWF)

**Solar -** Graphics depicting the Solar forecast (Only available for the ECMWF)

**issuedate**— The specific date the forecast graphics of interest were released. Graphics are available for issue dates up to a month in the past. Check the Trader site to get the list of current issue dates

Expressed in **YYMMDD** format

WSI: <a href="https://www.wsitrader.com/LongRange/Subseasonal/SubseasonalWSIGraphics">https://www.wsitrader.com/LongRange/Subseasonal/SubseasonalWSIGraphics</a>

ECMWF: https://www.wsitrader.com/LongRange/Subseasonal/SubseasonalECMWFGraphics

forecastweek – The specific forecast week for the graphics of interest

If WSI is the desired forecast source

Week3

Week4

Week5

If ECMWF is the desired forecast source

Week3

Week4

**Region** – Enter the Region of interest. Accepted values are:

NA - North America

**EUR** – Europe

**AUS** – Australia (ECMWF only)

ASIA - Asia (ECMWF only)



# **Optional Parameter:**

**Stream** – The desired means for obtaining the graphic. Accepted values are:

false – Graphic will be downloaded to your system (Default)

**true** – Graphic will be streamed into the application making the call. For example, you can insert the graphic in a PowerPoint slide via the API call and the graphic will appear within the slide.

# **Example URLs:**

Download the Week 3 WSI Temperature Forecast for North America from the forecast issued on Dec 14<sup>th</sup>, 2022

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetSubSeasonalForecastGraphics?Account=username&profile=name@wsi.com&password=password&model=wsi&forecasttype=Temp&ForecastWeek=Week3&IssueDate=221214&region=NA&Stream=false

Stream the Week 4 ECMWF Solar forecast for Europe from the forecast issued on Dec 5th, 2022

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetSubSeasonalForecastGraphics?Account=username&profile=name@wsi.com&password=password&model=ecmwf&forecasttype=Solar&ForecastWeek=Week4&IssueDate=221205&region=EUR&Stream=true

# 10.) European Solar/Wind Power Forecasts

Returns a csv file with the solar or wind power forecast for the desired country. The Models currently provide forecasts based on the ECMWF Op, GFS Op, GFS Ensemble, ECMWF Ensemble and 4km GRAF. Currently the ECM and GFS Solar and Wind Power forecasts are only available for subscribers of Trader Europe. The GRAF Solar and Wind Power Forecasts are only available for subscribers of the GRAF Renewable Forecast Add-on service

#### **Base URL:**

http://www.wsitrader.com/Services/CSVDownloadService.svc/GetWindSolarForecast

#### **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

# Atmospheric G2

# *regionId* – The country for which forecasts are desired. Accepted values are:

AT - Austria

BE - Belgium

CZ - Czech Republic

DE - Germany

DE50hertz - Germany 50 Hertz

DEAmprion - Germany Amprion

DETennet - Germany Tennet

DETransnetBW - Germany Transnet BW

DK - Denmark

ES - Spain

FI - Finland

FR - France

IT - Italy

ITCNOR - Italy CNOR

ITCSUD - Italy CSUD

ITNORD - Italy NORD

ITSUD - Italy SUD

NL - Netherlands

NO - Norway

PL - Poland

PT - Portugal

RO - Romania

SE - Sweden

TR - Turkey

UK - United Kingdom

# *renewableType* – Returns the desired forecast type. Accepted values are:

wind – Wind Power Forecasts

solar – Solar Power Forecasts

total – Sum of the Wind and Solar Power Forecasts

# *model* – The desired model to view forecasts for. Accepted values are:

**GFS\_OP** – Forecasts generated utilizing data from the GFS Operational Model

ECMWF\_OP - Forecasts generated utilizing data from the ECMW Operational Model

GFS\_ENS - Forecasts generated utilizing data from the GFS Operational Model

**ECMWF\_ENS** – Forecasts generated utilizing data from the ECMW Operational Model

4km\_GRAFLR - Forecasts generated utilizing data from the proprietary 4km IBM GRAF Model

• Available to subscribers of the GRAF Renewable Forecast Add-On



# **Optional Parameters:**

**modelDate** and **modelRun** — These 2 parameters **MUST** both be used together in the API call for them to be recognized. If only one of them is defined in the API call then the Latest run will be returned. Data is available for the past 5 days of model runs.

**modelDate** - The date in which the forecast was issued that you want to retrieve. Format of the date must be in YYYYMMDD format. If **modelDate** is not specified you will receive data from the most recent Model Date.

**modelRun** – The model run you want to retrieve the forecast data for. If **modelRun** is not specified you will receive data from the most recent modelRun. Accepted values, except for the 3km\_GRAF, are:

00 - 00Z

**06** – 06Z

**12** – 12Z

**18** – 18Z

As the 4km\_GRAF updates every hour, **modelRun** for this model can be any value between 00 and 23

forecastType – Specific format the data is returned

megawatts – Returns the forecast data expressed in absolute megawatts (Default) percentcapacity – Returns the forecast data expressed in percent capacity

Timezone – Data can either be returned in UTC or in localtime based on the time zone of each country

lwt – Return data in localtime (Default)

utc - Return all data expressed in UTC

# **Example URLs:**

Return the most recent GFS OP wind power forecast for Germany
<a href="http://www.wsitrader.com/Services/CSVDownloadService.svc/GetWindSolarForecast?Account=userna">http://www.wsitrader.com/Services/CSVDownloadService.svc/GetWindSolarForecast?Account=userna</a>
<a href="mailto:me&profile=name@wsi.com&password=password&regionId=DE&renewableType=wind&model=GFS\_O">me&profile=name@wsi.com&password=password&regionId=DE&renewableType=wind&model=GFS\_O</a>

<u>P</u>

Return the ECMWF OP solar power forecast for the UK from 2017-03-08 00Z

http://www.wsitrader.com/Services/CSVDownloadService.svc/GetWindSolarForecast?Account=userna me&profile=name@wsi.com&password=password&regionId=UK&renewableType=solar&model=ECMW F OP&modelDate=20170308&modelRun=00



# 11.) Historical Observations

Returns a csv file with the requested historical data. Currently Historical Observations are only available for subscribers of WSI Trader North America Complete, WSI Trader North America Standard, WSI Trader Europe and WSI Trader Asia

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHistoricalObservations

# **Required Parameters:**

**Account** – The username used to login to WSI Trader

**Profile** – The email address used to login to WSI Trader

**Password** – The password used to login to WSI Trader

**TempUnits** – The units you want the temperature data displayed in: Accepted values are:

F - Fahrenheit

**C** – Celsius

StartDate - The beginning date for which to retrieve data. Format as MM/DD/YYYY

EndDate - The final date for which to retrieve data. Format as MM/DD/YYYY

HistoricalProductId - The specific dataset you would like to retrieve. Accepted values are:

**HISTORICAL\_MONTHLY\_AVERAGE** – Returns the average monthly Min & Max Temperature for each of the 12 months calculated based on the **StartDate** and **EndDate** entered

**HISTORICAL\_DAILY\_OBSERVED** — Returns the observed Temperature and Precipitation data for each day between the **StartDate** and **EndDate** entered

**HISTORICAL\_DAILY\_AVERAGE** - Returns the average daily Min & Max Temperature for each day between the **StartDate** and **EndDate** entered

**HISTORICAL\_HOURLY\_OBSERVED** – Returns the observed data for each hour of each day between the **StartDate** and **EndDate** entered

**HISTORICAL\_NORMALS** – Returns the Std 30yr climatological Temperatures between the **StartDate** and **EndDate** entered. Use the *isDaily* Special Parameter to choose between downloading daily or hourly data

**HISTORICAL\_WEIGHTED\_TEMPERATURE** – Returns either the Daily or Weekly (M-F) observed Temperature for the entered North America Power Region for each day between the **StartDate** and **EndDate** entered.



**HISTORICAL\_WEIGHTED\_GAS** – Returns either the Daily or EIA Week observed CDD and HDD for the entered Gas Region for each day between the **StartDate** and **EndDate** entered. Provides access to the original and current EIA regions.

HISTORICAL\_WEIGHTED\_DEGREEDAYS – Returns either the Daily or EIA Week observed CDD and HDD for the entered North America Gas Region for each day between the **StartDate** and **EndDate** entered

CityIds[]— The ID for the station(s)/region(s) you would like to download data for.

For the complete list of available individual station IDs run the following API URL:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetCitylds?Account=username&Profile=name@wsi.com&Password=password

For the **HISTORICAL\_WEIGHTED\_DEGREEDAYS** product the following North America Gas regions are available as options:

**CONUS** 

**EAST** 

**MIDWEST** 

**SOUTHCENTRAL** 

**MOUNTAIN** 

**PACIFIC** 

**GASCONSEAST** 

**GASPRODUCING** 

**GASCONSWEST** 

You can provide multiple values in one request, for example:

CityIds[]=KBOS&CityIds []=NEISO
CityIds[]=CONUS&CityIds[]=MOUNTAIN

#### **Special Parameters:**

timeutc – This parameter is only applicable for the HISTORICAL HOURLY OBSERVED product

**false** – Date and Time are returned in local standard timezone of the respective station (Default) **true** – Date and Time are returned in UTC format of the respective station



IsDisplayDates – This parameter is only applicable for the HISTORICAL\_MONTHLY\_AVERAGE product.

- Setting this value to **true**, will return the Dates for when the Highest Max Temperature and Lowest Min Temperature occurred between the **StartDate** and **EndDate** entered.
- Setting this value to false will ensure only the Monthly Average Temperatures are returned.

For all other *HistoricalProductId* values, you can enter either **true** or **false**, as the same data will be returned in either case.

IsTemp – This parameter is only applicable for the HISTORICAL\_DAILY\_OBSERVED product.

- Setting this value to true, will return the following parameters: Min Temp, Max Temp, Avg Temp & Precip.
- Setting this value to false, will return the following parameters: HDD & CDD

For all other *HistoricalProductId* values, you can enter either **true** or **false**, as the same data will be returned in either case.

IsDaily – This parameter is only applicable for the HISTORICAL\_NORMALS,
HISTORICAL\_WEIGHTED\_TEMPERATURE, HISTORICAL\_WEIGHTED\_GAS &
HISTORICAL\_WEIGHTED\_DEGREEDAYS products.

#### For **HISTORICAL\_NORMALS** queries,

- Setting this value to true, will return the daily climatological Min & Max Temperature
- Setting this value to false, will return the hourly climatological Temperature

# For HISTORICAL\_WEIGHTED queries,

- Setting this value to true, will return the weighted forecasts only for individual days.
- Setting this value to **false**, will return the weighted forecasts as a weekly average. In the case of the Gas observations it would be returned as the value for the EIA week and in the case of the Temperature observations it would be returned as the average value for Monday-Friday.

For all other *HistoricalProductId* values, you can enter either **true** or **false**, as the same data will be returned in either case.

**DataTypes[]** – This parameter is only applicable for the **HISTORICAL\_HOURLY\_OBSERVED** and **HISTORICAL\_WEIGHTED\_DEGREEDAYS** products. Accepted values are for each product is outlined below:



# **HISTORICAL\_HOURLY\_OBSERVED:**

temperature – Temperature
dewpoint - Dewpoint
cloudCover - % Cloud Cover
windDirection – Wind Direction in Degrees
windSpeed – Wind Speed in mph
heatIndex – Heat Index
windChill – Wind Chill
relativeHumidity – Relative Humidity
precipitation – Precipitation

# **HISTORICAL\_WEIGHTED\_DEGREEDAYS:**

```
gas_hdd – Gas Weighted HDD
gas_cdd – Gas Weighted CDD
oil_hdd – Oil Weighted HDD
oil_cdd – Oil Weighted CDD
electric_hdd – Electric Weighted HDD
electric_cdd – Electric Weighted CDD
population_hdd – Population Weighted HDD
population_cdd – Population Weighted CDD
```

You can provide multiple values in one request, for example:

DataTypes[]=cloudCover&DataTypes[]=windDirection

 $DataTypes[]=gas\_hdd\&DataTypes[]=population\_cdd$ 

For all other *HistoricalProductId* values this parameter does not have to be entered.

# **Example URLs:**

Return the daily gas weighted HDDs and population weighted CDDs for the 5 new EIA regions and CONUS between Jan 1, 2010 and Dec 31, 2014

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHistoricalObservations?Account=username&profile=name@wsi.com&password=password&HistoricalProductID=HISTORICAL\_WEIGHTED\_DEGREEDAYS&DataTypes[]=gas\_hdd&DataTypes[]=population\_cdd&StartDate=01/01/2010&EndDate=12/31/2014&IsDaily=true&CityIds[]=CONUS&CityIds[]=EAST&CityIds[]=MOUNTAIN&CityIds[]=PACIFIC&CityIds[]=SOUTHCENTRAL&CityIds[]=MIDWEST



Return the Monthly Average temperature in degrees Fahrenheit for Boston (KBOS) calculated on the years between 1981 and 2010 and do not display the dates of the highest Max Temp and lowest Min Temp:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHistoricalObservations?Account=username&profile=name@wsi.com&password=password&TempUnits=F&HistoricalProductID=HISTORICALMONTHLY\_AVERAGE&StartDate=01/01/1981&EndDate=12/31/2010&IsDisplayDates=false&IsTemp=true&IsDaily=true&CityIds[]=KBOS

Return the Daily Observed Temperature and Precipitation in degrees Fahrenheit for Los Angeles Intl Airport (KLAX) for all days between Jan 1, 1990 and Jan 1, 2000:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHistoricalObservations?Account=username&profile=name@wsi.com&password=password&TempUnits=F&HistoricalProductID=HISTORICALDAILY\_OBSERVED&StartDate=01/01/1990&EndDate=01/01/2000&IsDisplayDates=false&IsTemp=true&IsDaily=true&CityIds[]=KLAX

Return the Daily Average Temperature for NEISO in degrees Fahrenheit for the days between Jan 1 and March 1 calculated based on the years between 1990 and 2000:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHistoricalObservations?Account=use rname&profile=name@wsi.com&password=password&TempUnits=F&HistoricalProductID=HISTORICAL DAILY\_AVERAGE&StartDate=01/01/1990&EndDate=03/01/2000&IsDisplayDates=false&IsTemp=true&Is Daily=true&CityIds[]=NEISO

Return the observed hourly data for both Miami (KMIA) and Orlando (KMCO) between Jan 1, 2010 and Mar 1, 2010 in degrees Fahrenheit specifically requesting the following parameters: temperature and dewpoint:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHistoricalObservations?Account=username&Profile=name@wsi.com&Password=password&HistoricalProductID=HISTORICAL\_HOURLY\_OBSERVED&DataTypes[]=precipitation&DataTypes[]=temperature&TempUnits=F&StartDate=01/01/2010&EndDate=03/01/2010&CityIds[]=KMIA&CityIds[]=KMCO

Return the Observed Daily Gas/Pop Weighted Degree Days for the 4 Gas regions between Sep 1, 2012 and Mar 31, 2013:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHistoricalObservations?Account=username&profile=name@wsi.com&password=password&TempUnits=F&HistoricalProductID=HISTORICALWEIGHTED\_GAS&DataTypes[]=temperature&StartDate=09/01/2012&EndDate=03/31/2013&IsDisplayDates=true&IsTemp=true&IsDaily=true&CityIds[]=CONUS&CityIds[]=GASCONSEAST&CityIds[]=GASCONSWEST&CityIds[]=GASPRODUCING



Return the Observed Gas/Pop Weighted Degree Days by EIA Week for the 4 Gas Regions between Sep 1, 2012 and Mar 31, 2013:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHistoricalObservations?Account=username&profile=name@wsi.com&password=password&TempUnits=F&HistoricalProductID=HISTORICALWEIGHTED\_GAS&DataTypes[]=temperature&StartDate=09/01/2012&EndDate=03/31/2013&IsDisplayDates=true&IsTemp=true&IsDaily=false&CityIds[]=CONUS&CityIds[]=GASCONSEAST&CityIds[]=GASCONSWEST&CityIds[]=GASPRODUCING

Return the daily Observed Weighted Temperature for NEISO and PJM between Apr 1, 2010 and Apr 1, 2011 in degrees Fahrenheit:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHistoricalObservations?Account=username&profile=name@wsi.com&password=password&TempUnits=F&HistoricalProductID=HISTORICALWEIGHTED\_TEMPERATURE&DataTypes[]=temperature&StartDate=04/01/2010&EndDate=04/01/2011&IsDisplayDates=true&IsTemp=true&IsDaily=true&CityIds[]=NEISO&CityIds[]=PJM

Return the Observed Weighted Temperature for NEISO and PJM between Apr 1, 2010 and Apr 1, 2011 in degrees Fahrenheit in weekly format:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHistoricalObservations?Account=username&profile=name@wsi.com&password=password&TempUnits=F&HistoricalProductID=HISTORICALWEIGHTED\_TEMPERATURE&DataTypes[]=temperature&StartDate=04/01/2010&EndDate=04/01/2011&IsDisplayDates=true&IsTemp=true&IsDaily=false&CityIds[]=NEISO&CityIds[]=PJM

# 12.) Premium Weather - Forecast Analysis

Returns a csv file with the requested forecast data. Data can be retrieved for forecasts issued as far back as 15 days in the past. Currently the Forecast Analysis data is only available for subscribers of the WSI Trader Premium Weather Package

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetForecastAnalysis

# **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader



SiteIds[]— The ID for the station(s) you would like to download data for.

For the complete list of available station IDs run the following API URL:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetCityIds?Account=username&Profile=name@wsi.com&Password=password

You can provided multiple values in one request, for example: SiteIds[]=KBOS&SiteIds[]=KORD

**Region** – Enter the desired region for which your account has access to. Accepted values are:

NA - North America

**MEX** - Mexico

**EUR** – Europe

TempUnits – The units you want the temperature data displayed in. Accepted values are:

**F** – Fahrenheit

C - Celsius

**ModelDate** – The date in which the forecast was issued that you want to retrieve. Format of the date must be in YYYYMMDD format

**ModelRun** – The model run you want to retrieve the forecast data for. Accepted values are:

00 - 00Z

**12** – 12Z

#### **Example URLs:**

Return the Forecast data for Chicago O'Hare in Fahrenheit for the 00Z model cycle that was issued on Oct 20<sup>th</sup>, 2014.

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetForecastAnalysis?Account=username &Profile=email@wsi.com&Password=password&Region=NA&SiteIds[]=KORD&ModelDate=20141020& ModelRun=00&TempUnits=F

Return the Forecast data for London Heathrow in Celsius for the 12Z model cycle that was issued on Oct 15<sup>th</sup>, 2014.

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetForecastAnalysis?Account=username &Profile=email@wsi.com&Password=password&Region=EUR&SiteIds[]=EGLL&ModelDate=20141015& ModelRun=12&TempUnits=C



Return the Forecast data for Chicago O'Hare and Boston Logan in Fahrenheit for the 00Z model cycle that was issued on Oct 20<sup>th</sup>, 2014.

 $\frac{\text{https://www.wsitrader.com/Services/CSVDownloadService.svc/GetForecastAnalysis?Account=username}{\text{\&Profile=email\&Password=password\&Region=NA\&SiteIds[]=KORD\&SiteIds[]=KBOS\&ModelDate=201410}{20\&ModelRun=00\&TempUnits=F}$ 

# 13.) Premium Weather - Teleconnections

Returns a csv file with either the observed or forecasted data for each of the teleconnections currently offered in the Premium Weather Package. Data can be retrieved for forecasts issued as far back as 15 days in the past as well as observations for up to 90 days in the past. Currently the Teleconnections data is only available for subscribers of the WSI Trader Premium Weather Package

#### **Base URLs:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionFcstDatahttps://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionObsDatahttps://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionObsDatahttps://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionObsDatahttps://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionFcstDatahttps://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionFcstDatahttps://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionObsDatahttps://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionObsDatahttps://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionObsDatahttps://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionObsDatahttps://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionObsDatahttps://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionObsDatahttps://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionObsDatahttps://www.wsitrader.com/Services/CSVDownloadServices/CS

#### **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

TeleconnID - Teleconnection for which you want to retrieve data for

AO

EPO

**EUDXSUM** – AG2 European Summer Demandex

**EUDXWTR** – AG2 European Winter Demandex

**NADXSUM** – AG2 North America Summer Demandex

NADXWTR - AG2 North America Winter Demandex

NAO

PNA

SOI

**WPO** 

# **Forecast Parameters:**

*InitDate* – The date in which the forecast was issued that you want to retrieve. Format of the date must be in YYYYMMDD format



*InitHour* – The model run you want to retrieve the forecast data for. Accepted values are:

00 - 00Z

**12** – 12Z

*Model* – Which model sources you want to retrieve data for. Accepted values are:

ECMWF, GFS, or GEM (pulls ensemble member, ensemble mean and deterministic runs for that model)

# **Observation Parameters:**

*InitDate* – The start date in which you want to retrieve observations. Format of the date must be in YYYYMMDD format

**EndDate** – The end date in which you want to retrieve observations. Format of the date must be in YYYYMMDD format

# **Example URLs:**

The **InitDate** value below is strictly for demonstration purposes and will not work in an actual query. You must enter a value within the past 15 days.

Return the AO forecast data for the GFS 00Z model cycle that was issued on Dec 31, 2021

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionFcstData?Account=username&Profile=name@wsi.com&Password=password&TeleconnID=AO&Model=GFS&InitDate=20211231&InitHour=00

The **InitDate** and **EndDate** values below are strictly for demonstration purposes and will not work in an actual query. You must enter values within the past 90 days.

Return the AO observation data for the past 30 days

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetTeleconnectionObsData?Account=username&Profile=name@wsi.com&Password=password&TeleconnID=AO&InitDate=20220806&EndDate=20220906

# 14.) Load - Hourly Forecasts

Returns a csv file with the latest hourly load forecast. Currently the Load Forecast data is only available for subscribers of the WSI Trader Load Forecast service.



#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHourlyLoadData

# **Required Parameters:**

Account – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

ISO - The specific market you want to retrieve data for. You can only retrieve data for the specific markets you are subscribing to. Currently accepted values are:

PJM **ERCOT MISO CAISO NYISO ISONE** 

SPP

Regions[] - The specific regions in the selected ISO that you want to retrieve data for. Multiple regions can be entered within the API call. Accepted values are listed below for each ISO:

# PJM Regions:

RTO - PJM Aggregate MIDATL - MidAtlantic sub-region **WEST** – West sub-region **SOUTH** – South sub-region

# **ERCOT Regions:**

RTO - ERCOT Aggregate

Houston West

North

South

#### MISO Regions:

RTO - MISO Aggregate

Central

North

South

# **CAISO Regions:**



RTO - CAISO Aggregate

NP15

**SP15** 

# **NYISO Regions:**

RTO - NYISO Aggregate

Capital

Central

Dunwoodie

Genese

**HudsonVL** 

LongIsland

Millwood

Mohawk

North

NYC

West

# **ISONE Regions:**

**RTO** – ISONE Aggregate

**CT -** Connecticut

ME - Maine

**NEMA** – Northeast Massachusetts

**NH** – New Hampshire

RI - Rhode Island

**SEMA** – Southeast Massachusetts

**VT** - Vermont

**WCMA** – West-Central Massachusetts

# **SPP Regions:**

RTO - SPP Aggregate

**CSWS –** CSWS-AEPW

**EDE** – Empire District

**GRDA** – Grand River Dam

INDN - Independence P&L

**KACY** – Kansas City BPU

KCPL - Kansas City P&L

LES – Lincoln Electric

....

MPS – KCP&L Greater MO

NPPD - Nebraska PPD

**OKGE** – Oklahoma GE

**OPPD** – Omaha PPD

**SECI** – Sunflower Electric

**SPRM** – City of Springfield

**SPS** – Southwestern PSC



**WAUE** – WAP-UGPE **WEFC** – Western Farmers **WR** – Westar Energy

**Subzones**[] – The specific sub-zones in the selected **ISO** that you want to retrieve data for. Multiple subzones can be entered within the API call. Accepted values are listed below for each **ISO** 

# PJM sub-zones:

**AE** – Atlantic City Electric

AEP - AEP

AP - Allegheny Power

**ATSI** – American Transmission

**BC** – Baltimore Gas & Electric

CE - ComEd

**DAY –** Dayton Power & Light

**DEOK** – Duke Energy

**DOM** – Dominion

**DPL** – Delmarva Power & Light

**DUQ** – Duquesne Light

**EKPC** – East Kentucky Power

JC – Jersey Central Power

ME - Metropolitan Edison

PE - PECO Energy

PEP - Pepco

PL - PPL Electric

PN - Pennsylvania Electric

PS - PSEG

**RECO** – Rockland Electric

# **ERCOT sub-zones:**

Coast

East

**FarWest** 

North

South

**SouthCentral** 

West

**NorthCentral** 



# **CAISO sub-zones:**

PGE

**SDGE** 

**VEA** 

**FARWEST** 

SCE

**Sources[]** – Which model sources you want to retrieve data for. Accepted values are provided below. Each option will return the latest forecast for entered Source.

WSI
PJM
PJM\_DAY\_AHEAD
GFS\_OP
GFS\_ENS
ECMWF\_OP
ECMWF\_ENS
GFS\_OP
GFS\_ENS

# **Optional Parameter:**

*timeutc* – The timezone to express the data in. By default, the Date and Time will be expressed in the local prevailing timezone of the station being retrieved

```
false – Date and Time are returned in local prevailing timezone (Default) true – Date and Time are returned in UTC format
```

#### **Notes:**

Due to concerns with processing time there are some restrictions on the amount of data that can be requested. The restrictions are outlined below.

- 1.) You cannot specify more than 1 Source if you have either multiple Regions or multiple Subzones specified. You can specify multiple Sources if you specify only one Region and one Subzone
- 2.) You cannot specify more than 1 Subzone if you specified multiple Subregions



# **Example URLs:**

Return the latest WSI PJM Forecast for the PJM RTO

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHourlyLoadData?
Account=username&Profile=email&Password=password&ISO=PJM&Regions[]=RTO&Sources[]=WSI

Return the latest forecast for all sources for the PJM RTO

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHourlyLoadData?

Account=username&Profile=email&Password=password&ISO=PJM&Regions[]=RTO&Sources[]=WSI&Sources[]=GFS OP&Sources[]=GFS ENS&Sources[]=ECMWF OP&Sources[]=ECMWF ENS&Sources[]=PJM &Sources[]=PJM DAY AHEAD

Return the latest WSI PJM Forecast for the PJM sub-zone AEP

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHourlyLoadData?

Account=username&Profile=email&Password=password&regions=RTO&ISO=PJM&Subzones[]=AEP&Sources[]=WSI

# 15.) Load - Daily Forecasts

Returns a csv file with the requested forecast data. Data can be retrieved for forecasts issued as far back as 15 days in the past. Currently the Load Forecast data is only available for subscribers of the WSI Trader Load Forecast service.

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetDailyLoadData

# **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

**ISO** – The specific market you want to retrieve data for. You can only retrieve data for the specific markets you are subscribing to. Currently accepted values are:

PJM

**ERCOT** 

**MISO** 

**CAISO** 

NYISO



**Regions[]** – The specific regions in the selected **ISO** that you want to retrieve data for. Multiple regions can be entered within the API call. Accepted values are listed below for each **ISO**:

# PJM Regions:

RTO – PJM Aggregate
MIDATL – MidAtlantic sub-region
WEST – West sub-region
SOUTH – South sub-region

# **ERCOT Regions:**

RTO - ERCOT Aggregate

Houston

West

North

South

# MISO Regions:

RTO - MISO Aggregate

Central

North

South

# **CAISO Regions:**

**RTO** – CAISO Aggregate

**NP15** 

**SP15** 

# **NYISO Regions:**

RTO - NYISO Aggregate

Capital

Central

Dunwoodie

Genese

**HudsonValley** 

LongIsland

Millwood

Mohawk

North

NYC

West

# **ISONE Regions:**

RTO - ISONE Aggregate

CT - Connecticut



ME - Maine

**NEMA** – Northeast Massachusetts

**NH** – New Hampshire

RI - Rhode Island

**SEMA** – Southeast Massachusetts

**VT** - Vermont

WCMA - West-Central Massachusetts

# **SPP Regions:**

RTO - SPP Aggregate

**CSWS** – CSWS-AEPW

**EDE** – Empire District

**GRDA** – Grand River Dam

**INDN** – Independence P&L

**KACY** – Kansas City BPU

KCPL - Kansas City P&L

**LES** – Lincoln Electric

MPS - KCP&L Greater MO

NPPD - Nebraska PPD

**OKGE** – Oklahoma GE

**OPPD** - Omaha PPD

**SECI** – Sunflower Electric

**SPRM** – City of Springfield

**SPS** – Southwestern PSC

WAUE - WAP-UGPE

**WEFC** – Western Farmers

WR - Westar Energy

**Subzones**[] – The specific sub-zones in the selected **ISO** that you want to retrieve data for. Multiple subzones can be entered within the API call. Accepted values are listed below for each **ISO** 

#### PJM sub-zones:

AE - Atlantic City Electric

AEP - AEP

AP - Allegheny Power

**ATSI** – American Transmission

**BC** – Baltimore Gas & Electric

 $\mathbf{CE}$  – ComEd

**DAY** – Dayton Power & Light

**DEOK** – Duke Energy

**DOM** – Dominion

**DPL** – Delmarva Power & Light

**DUQ** – Duquesne Light

**EKPC** – East Kentucky Power



JC – Jersey Central Power

ME - Metropolitan Edison

PE - PECO Energy

PEP - Pepco

PL - PPL Electric

**PN** – Pennsylvania Electric

PS - PSEG

**RECO** – Rockland Electric

# **ERCOT sub-zones:**

Coast

East

**FarWest** 

North

South

SouthCentral

West

**NorthCentral** 

# CAISO sub-zones:

**PGE** 

**SDGE** 

**VEA** 

**FARWEST** 

SCE

**ModelDate** – The date in which the forecast was issued that you want to retrieve. Format of the date must be in YYYYMMDD format

*ModelRun* – The model run you want to retrieve the forecast data for. Accepted values are:

**00** – 00Z

**12** – 12Z

*CalcType* – The forecast type you want to retrieve. Accepted values are:

PEAK - Peak Daily Load

AVERAGE – Average Daily Load



# **Example URLs:**

The **ModelDate** value is strictly for demonstration purposes and will not work in an actual query. You must enter a value within the past 15 days.

Return for PJM, the RTO, West sub-region and AE sub-zone Peak load forecast for the 12Z model cycle that was issued on Dec 31<sup>st</sup>, 1999

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetDailyLoadData?

Account=username&Profile=email&Password=password&Regions[]=RTO&Regions[]=WEST&Subzones[]
=AE&ISO=PJM&ModelDate=19991231&ModelRun=00&CalcType=PEAK

Return for PJM, the RTO, West sub-region and all West sub-zones Average load forecast for the 12Z model cycle that was issued on Dec 31<sup>st</sup>, 1999

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHourlyLoadData?

Account=username&Profile=email&Password=password&Regions[]=WEST&Subzones=ALL&ISO=PJM&M odelDate=19991231&ModelRun=00&CalcType=AVERAGE

Return for PJM, the forecast for the RTO and all sub-regions and sub-zones Peak load forecast for the 12Z model cycle that was issued on Dec 31<sup>st</sup>, 1999

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetHourlyLoadData?

Account=username&Profile=email&Password=password&Regions=ALL&subzones=ALL&ISO=PJM&Mode

IDate=1991231&ModelRun=12&CalcType=PEAK

# 16.) Load - Observations

Returns a csv file with hourly load observations. Currently the Load Forecast data is only available for subscribers of the WSI Trader Load Forecast service.

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetLoadObsData

# **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader



**ISO** – The specific market you want to retrieve data for. You can only retrieve data for the specific markets you are subscribing to. Currently accepted values are:

PJM

**ERCOT** 

**MISO** 

**CAISO** 

**NYISO** 

**ISONE** 

**SPP** 

**Regions[]** – The specific regions in the selected **ISO** that you want to retrieve data for. Multiple regions can be entered within the API call. Accepted values are listed below for each **ISO**:

#### PJM Regions:

RTO - PJM Aggregate

MIDATL - MidAtlantic sub-region

WEST - West sub-region

**SOUTH** – South sub-region

# **ERCOT Regions:**

RTO - ERCOT Aggregate

Houston

West

North

South

## MISO Regions:

RTO - MISO Aggregate

Central

North

South

## **CAISO Regions:**

RTO - CAISO Aggregate

NP15

**SP15** 

#### **NYISO Regions:**

RTO - NYISO Aggregate

Capital

Central

Dunwoodie

Genese



**HudsonValley** 

LongIsland

Millwood

Mohawk

North

NYC

West

#### **ISONE Regions:**

**RTO** – ISONE Aggregate

CT - Connecticut

ME - Maine

**NEMA** – Northeast Massachusetts

**NH** – New Hampshire

RI - Rhode Island

**SEMA** – Southeast Massachusetts

**VT** - Vermont

WCMA - West-Central Massachusetts

## **SPP Regions:**

RTO - SPP Aggregate

**CSWS – CSWS-AEPW** 

**EDE** – Empire District

**GRDA** – Grand River Dam

**INDN** – Independence P&L

**KACY** – Kansas City BPU

KCPL - Kansas City P&L

**LES** – Lincoln Electric

MPS - KCP&L Greater MO

NPPD - Nebraska PPD

**OKGE** – Oklahoma GE

**OPPD** – Omaha PPD

**SECI** – Sunflower Electric

**SPRM** – City of Springfield

**SPS** – Southwestern PSC

WAUE - WAP-UGPE

**WEFC** – Western Farmers

WR - Westar Energy

**Subzones[]** – The specific sub-zones in the selected **ISO** that you want to retrieve data for. Multiple subzones can be entered within the API call. Accepted values are listed below for each **ISO** 

# Atmospheric G2

#### PJM sub-zones:

**AE** – Atlantic City Electric

AEP - AEP

AP – Allegheny Power

**ATSI** – American Transmission

**BC** – Baltimore Gas & Electric

CE - ComEd

**DAY –** Dayton Power & Light

**DEOK** – Duke Energy

**DOM** – Dominion

**DPL** – Delmarva Power & Light

**DUQ** - Duquesne Light

**EKPC** – East Kentucky Power

JC - Jersey Central Power

ME – Metropolitan Edison

PE - PECO Energy

**PEP** – Pepco

PL - PPL Electric

PN - Pennsylvania Electric

PS - PSEG

**RECO** – Rockland Electric

ALL – Returns data for all sub-zones for the entered ISO

## **ERCOT sub-zones:**

Coast

East

**FarWest** 

North

South

**SouthCentral** 

West

**NorthCentral** 

ALL – Returns data for all sub-zones for the entered ISO

#### **CAISO sub-zones:**

**PGE** 

**SDGE** 

**VEA** 

**FARWEST** 

**SCE** 

ALL - Returns data for all sub-zones for the entered ISO



Obstype – Period of time to retrieve data. Accepted values are:

**latest** – Retrieve the latest hourly observation **previous** – Retrieve all observations between now and midnight the previous day

## **Optional Parameter:**

*timeutc* – The timezone to express the data in. By default, the Date and Time will be expressed in the local prevailing timezone of the station being retrieved

false – Date and Time are returned in local prevailing timezone (Default)

true – Date and Time are returned in UTC format

#### **Example URLs:**

Return the latest hourly observation for the PJM RTO

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetLoadObsData?
Account=username&Profile=email&Password=password&ISO=PJM&Regions[]=RTO&Obstype=latest

Return the latest hourly observation for all Sub-zones

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetLoadObsData? Account=username&Profile=email&Password=password&ISO=PJM&Subzones[]=ALL&Obstype=latest

Return the previous observations for all Sub-zones and the RTO

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetLoadObsData?

Account=username&Profile=email&Password=password&ISO=PJM&Regions[]=RTO&Subzones[]=ALL&O bstype=previous

# 17.) Natural Gas Demand Forecasts

Returns a csv file with the Natural Gas Demand forecast expressed in BCF for the requested forecast source. Currently the BCF forecast is only available for subscribers of the WSI Trader Natural Gas Demand Forecast service.

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetModelBCFForecast



## **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

**ForecastType** – The data resolution desired. Accepted values are:

Period Daily

**Model** – The desired data source. Users can retrieve the latest WSI forecast or the latest forecasts from the GFS and ECMWF models. Accepted values are:

WSI – Latest WSI Forecast
GFS\_OP – GFS Operational
GFS\_ENS – GFS Ensemble
ECMWF\_OP – ECMWF Operational
ECMWF\_ENS – ECMWF Ensemble

#### **Example URLs:**

Return the BCF forecast based on the latest WSI forecast in Daily format.

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetModelBCFForecast?Account=username&Profile=name@wsi.com&Password=password&forecasttype=Daily&Model=WSI

Return the BCF forecast based on the GFS Operational forecast in Period format.

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetModelBCFForecast?Account=userna me&Profile=name@wsi.com&Password=password&forecasttype=Period&Model=GFS OP

# 18.) WindCast IQ - Hourly Wind Power Forecasts

Returns a csv file with the requested hourly WSI wind power forecast. Currently the Wind Power Forecast data is only available for subscribers of the WindCast IQ service.

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWindcastIQHourlyForecast



## **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader

**Password** – The password used to login to WSI Trader

**ForecastDate** – The date in which the forecast was issued that you want to retrieve. Format of the date must be in YYYY-MM-DD format

Forecasts are available for the current day and back to 5 days in the past.

ForecastType – The specific forecast to be retrieved. Available options are:

Latest – Returns the most recent WSI forecast for the entered Forecast Date

Primary – Returns the WSI forecast issued at 7:45am ET for the entered Forecast Date

Update – Returns the WSI forecast issued at 10:30am ET for the entered Forecast Date

All - Returns all the forecasts issued for the entered Forecast Date

*SiteIds* – The ID for the wind farm or regional aggregate that you would like to download data for.

For the complete list of available station IDs run the following API URL passing in the region the wind farm or aggregate is located in. You can only enter regions for which you currently have an active subscription for. Available regions are:

caiso

bpa

pjm

ercot

spp

miso

nyiso

neiso

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWindcastIQMetaData?Account=username&Profile=name@wsi.com&Password=password&Region=region

Up to 10 Sitelds can be passed into the HourlyForecast API with the ids being separated by commas.

## **Optional Parameter:**

*timeutc* – The timezone to express the data in. By default, the Date and Time will be expressed in the local prevailing timezone of the station being retrieved

false – Date and Time are returned in local prevailing timezone (Default)

true – Date and Time are returned in UTC format



#### **Example URLs:**

Retrieve the Primary WSI forecast made on Aug 8, 2017 for the ERCOT Aggregate.

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWindcastIQHourlyForecast?Account =username&Profile=name@wsi.com&Password=password&ForecastDate=2017-08-08&ForecastType=Primary&SiteIds=89b6bb6e-fdc5-11e5-8259-0019b9b47402

Retrieve the Latest WSI forecast made on Aug 8, 2017 for the CAISO Aggregate and the CAISO sub-region NP-15

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWindcastIQHourlyForecast?Account =username&Profile=name@wsi.com&Password=password&ForecastDate=2017-08-08&ForecastType=Latest&SiteIds=8a3c2e87-fdc5-11e5-8259-0019b9b47402,8a3ae57e-fdc5-11e5-8259-0019b9b47402

# 19.) WindCast IQ - Hourly Wind Power Observations

Returns a csv file with the requested hourly Wind Power observations. Observations are only available for the aggregate ISO. Data is available back to Jan 24, 2017.

Currently the Wind Power observation data is only available for subscribers of the WindCast IQ service.

Base URL: https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWindcastlQHourlyObs

#### **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

**ObsDate** – The date for which you want to retrieve data. Format of the date must be in YYYY-MM-DD format

#### Hourly observations are available back to Jan 24, 2017

**SiteIds** – The ID for the regional aggregate that you would like to download data for. The ids for each of the supported ISOs is listed below. Data can only be retrieved for regions for which you have an active provision.

**ERCOT:** 89b6bb6e-fdc5-11e5-8259-0019b9b47402 **BPA:** 8a4d1ae3-fdc5-11e5-8259-0019b9b47402 **PJM:** 8a5c2ff7-fdc5-11e5-8259-0019b9b47402 **CAISO:** 8a3ae57e-fdc5-11e5-8259-0019b9b47402



SPP: 8a6df093-fdc5-11e5-8259-0019b9b47402
MISO: 13050b40-0000-11e6-8259-0019b9b47402
NYISO: 50fe542e-f7cc-11e7-a01e-0eb97403cff2
NEISO: 63c52b27-fae8-11e7-a01e-0eb97403cff2

# **Optional Parameter:**

**timeutc** – The timezone to express the data in. By default, the Date and Time will be expressed in the local prevailing timezone of the station being retrieved

false – Date and Time are returned in local prevailing timezone (Default)

true - Date and Time are returned in UTC format

## **Example URLs:**

Retrieve the hourly observations for the ERCOT Aggregate valid on 2017-08-04

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWindcastIQHourlyObs?Account=username&Profile=name@wsi.com&Password=password&ObsDate=2017-08-04&SiteIds=89b6bb6e-fdc5-11e5-8259-0019b9b47402

Retrieve the hourly observations for both the MISO and PJM Aggregate valid on 2017-08-04

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWindcastIQHourlyObs?Account=username&Profile=name@wsi.com&Password=password&ObsDate=2017-08-04&SiteIds=13050b40-0000-11e6-8259-0019b9b47402,8a5c2ff7-fdc5-11e5-8259-0019b9b47402

# 20.) North America Solar Power Forecasts

Returns a csv file with the requested hourly AG2 Solar Power forecast. Currently the Solar Power Forecast data is only available for subscribers of the AG2 Solar Power Forecast Service

Base URL: https://www.wsitrader.com/Services/CSVDownloadService.svc/GetSolarHourlyForecast

#### **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader



**ForecastDate** – The date in which the forecast was issued that you want to retrieve. Format of the date must be in YYYY-MM-DD format

Forecasts are available for the current day and back to 5 days in the past.

ForecastType - The specific forecast to be retrieved. Available options are:

Latest – Returns the most recent AG2 forecast for the entered Forecast Date

Primary – Returns the AG2 forecast issued at 7:00am Local Time for the entered Forecast Date

All - Returns all the forecasts issued for the entered Forecast Date

SiteIds[] - The ID(s) that you would like to download data for.

You can only enter SiteIds for regions for which you currently have an active subscription for. Available regions currently are:

#### **ERCOT**

The list of available SiteIds for reach region is listed below

#### **ERCOT Regions**:

- ERCOT\_TOTAL
- ERCOT\_SZ\_FARWEST
- ERCOT SZ NORTHWEST
- ERCOT\_SZ\_SOUTHEAST
- ERCOT SZ FAREAST
- ERCOT SZ CENTEREAST
- ERCOT\_SZ\_CENTERWEST

You can provided multiple values in one request, for example: SiteIds[]=ERCOT\_TOTAL&SiteIds[]=ERCOT\_SZ\_FAREAST

#### **Optional Parameter:**

*timeutc* – The timezone to express the data in. By default, the Date and Time will be expressed in the local prevailing timezone of the station being retrieved

false – Date and Time are returned in local prevailing timezone (Default)

true – Date and Time are returned in UTC format



## **Example URLs:**

Retrieve the Primary WSI forecast made on May 8, 2024 for the ERCOT Aggregate.

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetSolarHourlyForecast?Account=usern ame&Profile=name@wsi.com&Password=password&ForecastDate=2024-05-08&ForecastType=Primary&SiteIds[]=ERCOT\_TOTAL

Retrieve the Primary WSI forecast made on May 8, 2024 for 2 regions

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetSolarHourlyForecast?Account=usern ame&Profile=name@wsi.com&Password=password&ForecastDate=2024-05-08&ForecastType=Primary&SiteIds[]=ERCOT\_TOTAL&SiteIds[]=ERCOT\_SZ\_FAREST\_

# 21.) Probabilistic Forecasts - Discrete Probability

Returns a .csv file with the discrete probability data provided as part of the Probabilistic Forecast product

#### **Base URL:**

 $\frac{https://www.wsitrader.com/Services/CSVDownloadService.svc/GetProbabilityForecastDiscre}{te}$ 

#### **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

**siteId** – The ID for the station you would like to download data for. For the complete list of available station IDs run the following API URL:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetCitylds?Account=username&Profile=name@wsi.com&Password=password

*region* – Enter the Region in which the station is located. Accepted values are:

NA – North America

MEX - Mexico

**EUR** – Europe

AUS - Australia

ASIA - Asia



*parameter* – Enter the desired parameter for which you want to download data. Accepted values are:

```
max_temp - Max Temperature
min_temp - Min Temperature
precip - Precipitation
```

units – The units you want the data returned in: Accepted values are:

If you are requesting either Min or Max Temperature the accepted Units values are:

**F** – Fahrenheit

C - Celsius

If you are requesting Precipitation the accepted Units values are:

```
in – Inchesmm - Millimeters
```

## **Example URL:**

Return the Discrete Probability Max Temperature data for the European city London Heathrow (EGLL) in degrees Celsius

https://www.wsitrader.com/services/CSVDownloadService.svc/GetProbabilityForecastDiscrete?Account =username&password=password&profile=name@wsi.com&Region=EUR&SiteId=EGLL&parameter=max \_temp&unit=C

# 22.) Probabilistic Forecasts - Threshold Exceedance

Returns a .csv file with the threshold exceedance data provided as part of the Probabilistic Forecast product

## **Base URL:**

 $\underline{https://www.wsitrader.com/Services/CSVDownloadService.svc/GetProbabilityForecastExcee} \ dence$ 

#### **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader



**SiteId** – The ID for the station you would like to download data for. For the complete list of available station IDs run the following API URL:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetCityIds?Account=username&Profile=name@wsi.com&Password=password

**Region** – Enter the Region in which the station is located. Accepted values are:

NA – North America MEX - Mexico EUR – Europe AUS - Australia ASIA – Asia

**Parameter** – Enter the desired parameter for which you want to download data. Accepted values are:

```
max_temp – Max Temperature
min_temp – Min Temperature
precip – Precipitation
```

**Units** – The units you want the data returned in: Accepted values are:

If you are requesting either Min or Max Temperature the accepted Units values are:

**F** – Fahrenheit

C - Celsius

If you are requesting Precipitation the accepted Units values are:

```
in – Inchesmm - Millimeters
```

## **Example URL:**

Return the Threshold Exceedance Min Temperature data for the North American city Boston (KBOS) in degrees Fahrenheit



# 23.) Probabilistic Forecasts - FRisk

Returns a .csv file with the FRisk data provided as part of the Probabilistic Forecast service

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetFRiskData

## **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

**Stations[]** – The ID for the station(s) you would like to download data for. Multiple stations can be entered within the API call

For the complete list of available station IDs run the following API URL:

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetCityIds?Account=username&Profile=name@wsi.com&Password=password

**Region** – Enter the Region in which the station is located. Accepted values are:

NA – North America EUR – Europe AUS - Australia ASIA – Asia

**Parameter** – Enter the desired parameter for which you want to download data. The only currently accepted value is listed below:

avgtempfrisk – FRisk values derived from Average Temperature

#### **Example URLs:**

Return the Average Temperature FRisk data for the North American city Boston (KBOS)

https://www.wsitrader.com/services/CSVDownloadService.svc/GetFRiskData?Account=username&Profile=name@wsi.com&Password=password&region=NA&Stations[]=KBOS&parameter=avgtempfrisk



Return the Average Temperature FRisk data for multiple European cities

https://www.wsitrader.com/services/CSVDownloadService.svc/GetFRiskData?Account=username&Profile=name@wsi.com&Password=password&region=EUR&Stations[]=EGLL&Stations[]=EDDI&parameter=avgtempfrisk

# 24.) 1-15 Day WSI Temperature Forecast Graphics

Returns the latest version of 1-15 Day WSI Temperature Forecast Graphics. The requested graphics will be returned in a zip file.

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetDailyTempFcstGraphics

## **Required Parameters:**

Account – The username used to login to WSI Trader

**Profile** – The email address used to login to WSI Trader

Password – The password used to login to WSI Trader

Region – The Region for which graphics are desired and which you have a valid subscription for

Accepted values are:

NA - North America

**MEX** - Mexico

**EUR** – Europe

AUS - Australia

ASIA - Asia

Subregion - The desired Sub-Region for which graphics are desired

Accepted values for each of the respective **Regions** are:

North America Region:

NA - North America

**SE** - Southest

**NE - Northeast** 

**SW** - Southwest

**NW** - Northwest

MW - Midwest

**SC** – South Central

Europe Region:

**EUR** – Europe



Asia Region:

ASIA - Asia

Australia Region:

AUS - Australia

Mexico Region:

MEX - Mexico

NA - North America

**Parameter** – The specific parameter of interest. Accepted values are:

**MAX** – Max Temperature

MIN - Min Temperature

AVG - Avg Temperature

#### **Optional Parameters:**

**ForecastDiff** – This parameter will dictate if the Difference graphics are returned instead of the Forecast graphics. Accepted values are:

NO – Do not return the Difference graphics (Default)

**YES** – Return the Difference graphics

**Stream** – The desired means for obtaining the graphic. Accepted values are listed below. A value of "true" is only accepted when downloading a single graphic. If multiple graphics are being downloaded and the **Stream** parameter is set to a value of **true**, the graphics will still be downloaded to your system.

false – Graphic will be downloaded to your system (Default)

**true** – Graphic will be streamed into the application making the call. For example, you can insert the graphic in a PowerPoint slide via the API call and the graphic will appear within the slide.

**Range** – The graphic(s) for the time period of interest. If this parameter is not used in the API call, all graphics will be returned

day1 - Graphic for Day 1

day2 - Graphic for Day 2

day3 – Graphic for Day 3

day4 - Graphic for Day 4

day5 - Graphic for Day 5

day6 - Graphic for Day 6

day7 - Graphic for Day 7

day8 - Graphic for Day 8

day9 - Graphic for Day 9

day10 - Graphic for Day 10



day11 – Graphic for Day 11 day12 – Graphic for Day 12 day13 – Graphic for Day 13 day14 – Graphic for Day 14 day15 – Graphic for Day 15

#### **Example URLs:**

Download the North America, Southwest sub-region Max Temperature Graphics

https://www.wsitrader.com/Services/GraphicDownloadService.svc/GetDailyTempFcstGraphics?Account=username&Profile=name@wsi.com&Password=password&Region=NA&SubRegion=SW&Parameter=MAX

Stream into your application the Day 1 European Min Temperature Graphic

https://www.wsitrader.com/Services/GraphicDownloadService.svc/GetDailyTempFcstGraphics?Account=username&Profile=name@wsi.com&Password=password&Region=EUR&SubRegion=EUR&Parameter=MIN&Range=day1&Stream=true

Download the North America, Northeaset sub-region Day 1 Max Temperature Forecast Difference Graphic

 $\frac{\text{https://www.wsitrader.com/Services/GraphicDownloadService.svc/GetDailyTempFcstGraphics?Account=usernam}{\text{e\&Profile=name@wsi.com\&Password=password\&Region=NA\&SubRegion=NE\&Range=day1\&Parameter=MAX\&Formula recastDiff=yes}{\text{recastDiff=yes}}$ 

# 25.) 1-15 Day WSI Precipitation Forecast Graphics

Returns the latest version of 1-15 Day WSI Temperature Forecast Graphics. The requested graphics will be returned in a zip file.

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetDaily1to15FcstPrecipGraphics

#### **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

**Region** – The Region for which graphics are desired and which you have a valid subscription for.

Accepted values are:

NA - North America



MEX - Mexico

**EUR** – Europe

AUS - Australia

ASIA - Asia

Subregion - The desired Sub-Region for which graphics are desired

Accepted values for each of the respective **Regions** are:

North America Region:

NA - North America

**PN** – Pacific Northwest

**QO** – Quebec/Ontario

Europe Region:

**EUR** – Europe

SCN - Scandinavia

ALP - Alps

**SE** – SE Europe

Asia Region:

ASIA - Asia

SE - SE Asia

Australia Region:

AUS - Australia

Mexico Region:

**MEX** – Mexico

NA - North America

**DataType** – The specific graphic type of interest. Accepted values are:

**DepFromNormal** – Graphics depicting data as Departure from Normal **TotalPrecip** – Graphics depicting the actual forecast precipitation amounts

**Range** – The graphic(s) for the time period of interest. Accepted values are based on the value you entered for the "**DataType**" parameter described above:



Accepted values based on entering the "DepFromNormal" DataType are:

```
1-5 – Graphic for the 1-5 day period
1-10 – Graphic for the 1-10 day period
1-15 – Graphic for the 1-15 day period
6-10 – Graphic for the 6-10 day period
11-15 – Graphic for the 11-15 day period
week1 – Graphic for the Week 1 period
week2 – Graphic for the Week 2 period
all – A zip file is provided containing all the graphics for the above periods
```

Accepted values based on entering the "TotalPrecip" DataType are:

```
day1 - Graphic for Day 1
day2 – Graphic for Day 2
day3 - Graphic for Day 3
day4 - Graphic for Day 4
day5 - Graphic for Day 5
day6 - Graphic for Day 6
day7 - Graphic for Day 7
day8 - Graphic for Day 8
day9 - Graphic for Day 9
day10 - Graphic for Day 10
day11 - Graphic for Day 11
day12 - Graphic for Day 12
day13 – Graphic for Day 13
day14 - Graphic for Day 14
day15 – Graphic for Day 15
1-5 - Graphic for the 1-5 day period
1-10 - Graphic for the 1-10 day period
1-15 - Graphic for the 1-15 day period
6-10 – Graphic for the 6-10 day period
11-15 – Graphic for the 11-15 day period
week1 – Graphic for the Week 1 period
week2 - Graphic for the Week 2 period
all – A zip file is provided containing all the graphics for the above
```

#### **Optional Parameters:**

**Stream** – The desired means for obtaining the graphic. Accepted values are listed below. A value of "true" is only accepted when downloading a single graphic. If multiple graphics are being downloaded and the **Stream** parameter is set to a value of **True**, the graphics will still be downloaded to your system.



false – Graphic will be downloaded to your system (Default)

**true** – Graphic will be streamed into the application making the call. For example, you can insert the graphic in a PowerPoint slide via the API call and the graphic will appear within the slide.

#### **Example URLs:**

Download the North America, Pacific Northwest sub-region 1-5 Day Departure From Normal Precip Graphic

https://www.wsitrader.com/Services/GraphicDownloadService.svc/GetDaily1to15FcstPrecipGraphics?Account=username&Profile=name@wsi.com&Password=password&Region=NA&SubRegion=PN&DataType=DepFromNormal&Range=1-5

Stream the North America, Pacific Northwest sub-region Day 10 Total Precip Graphic

 $\frac{https://www.wsitrader.com/Services/GraphicDownloadService.svc/GetDaily1to15FcstPrecipGraphics?Account=usename&Profile=name@wsi.com&Password=password&Region=NA&SubRegion=PN&DataType=TotalPrecip&Range=day10\&Stream=true$ 

Download all the Europe Departure From Normal Precip Graphics

 $\frac{\text{https://www.wsitrader.com/Services/GraphicDownloadService.svc/GetDaily1to15FcstPrecipGraphics?Account=username&Profile=name@wsi.com&Password=password&Region=EUR&SubRegion=EUR&DataType=DepFromNormal&Range=all}$ 

# 26.) Weather Model Graphics

Returns the requested graphics for the weather model, parameter, view and run selected. If only one graphic is requested, it will be returned directly. If multiple graphics are requested, the graphics will be returned in a zip file.

#### **Base URL:**

https://www.wsitrader.com/Services/GraphicDownloadService.svc/GetModelGraphics

## **Metadata API:**

https://www.wsitrader.com/Services/GraphicDownloadService.svc/GetModelGraphicsMetaData?Account=username&profile=name@wsi.com&password=password&ModelName=model

Use the Metadata API to retrieve the complete list of available Views and Parameters for the **ModelName** entered in the API call. The list is returned in JSON format.



#### **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

ModelName - The Weather Model for which graphics are desired

Accepted values are:

```
gfs_op – GFS Operational – 0.25 Degree Resolution
gfs_op_priority – 1.0 Degree Resolution
gfs_ens – GFS Ensemble
gfs_ens_extended – GFS Ensemble Weekly
ecmwf_op – ECMWF Operational – 1.5 Degree Resolution
ecmwf_op_hires – ECMWF Operational – 1/8 Degree Resolution
ecmwf_ens – ECMWF Ensemble
ecmwf_weekly – ECMWF Weekly
gem_op – Canadian Operational
gem_ens – Canadian Ensemble
nam – NAM
graf_4km – 4km GRAF
```

Run - The Model Run of interest

Format of the date must be in YYYYMMDDHH format. For example, if you were interested in graphics from the May 21, 2021 00Z run you would use a value of 2021052100

**View** – The geographic view of interest.

Use the Metadata API call outlined above to retrieve the complete list of available "View" options for the *ModelName* of interest

**PeriodType** – The timescale of graphics that are of interest

Accepted values are:

```
    hour – Use this value when desiring to retrieve individual forecast hours
    period – Use this value when desiring to retrieve period mean graphics, i.e. 6-10
    week – Use this value when desiring to retrieve the graphics from the ECMWF Weekly or GFS Extended
```

## **Optional Parameters:**



StartPeriod – The first time period for which to retrieve graphics

**EndPeriod** – The last time period for which to retrieve graphics

- If neither of these options are used in the API call, all available forecast time periods will be returned
- If only the **StartPeriod** is used in the API call, all forecast time periods (inclusive) after the provided value will be returned
- If both **StartPeriod** and **EndPeriod** are used in the API call, all forecast time periods (inclusive) will be returned
- An error will be returned if only *EndPeriod* is used in the API call
- If only 1 graphic is requested or found, the graphic will be returned in PNG format.
- If 2 or more graphics are requested or found, the graphics are returned in a single zip file containing all the images

**Stream** – The desired means for obtaining the graphic. Accepted values are listed below. A value of "true" is only accepted when downloading a single graphic. If multiple graphics are being downloaded and the **Stream** parameter is set to a value of **true**, the graphics will still be downloaded to your system.

false – Graphic will be downloaded to your system (Default)

**true** – Graphic will be streamed into the application making the call. For example, you can insert the graphic in a PowerPoint slide via the API call and the graphic will appear within the slide.

#### **Example URLs:**

Download the entire run of individual forecast hours from the GFS Operational from 2021-01-19 12z, North America view, 850mb temp anomaly

https://www.wsitrader.com/Services/GraphicDownloadService.svc/GetModelGraphics?Account=username&profile=name@wsi.com&password=password&ModelName=gfs\_op&View=AF&Parameter=850t\_dif&Run=2021011912\_&PeriodType=hour\_

Download only forecast hour 12 from the GFS Ensemble run from 2021-01-25 00z, Europe view, mean surface temp

https://www.wsitrader.com/Services/GraphicDownloadService.svc/GetModelGraphics?Account=username&profile=name@wsi.com&password=password&ModelName=gfs\_ens&View=NA&PeriodType=hour&Parameter=m850ta&Run=2021052412&StartPeriod=12&EndPeriod=12

Download between hour 120 and the end of the run from the ECMWF Op run from 2021-01-25 00z, Europe view, mean surface temp

https://www.wsitrader.com/Services/GraphicDownloadService.svc/GetModelGraphics?Account=username&profile=name@wsi.com&password=password&ModelName=ecmwf\_op&View=NA&PeriodType=hour&Parameter=850ta&Run=2021052412&StartPeriod=120

Download the 1-5 Mean graphic from the ECMWF Ensemble from 2021-01-19 12z, North America view, 850mb Temp anomaly



https://www.wsitrader.com/Services/GraphicDownloadService.svc/GetModelGraphics?Account=username&profile=name@wsi.com&password=password&ModelName=ecmwfens&View=NA&PeriodType=period&Parameter=m850ta&Run=2021052412&StartPeriod=1-5&EndPeriod=1-5

# 27.) Weighted Forecast - Individual City Forecasts

Returns a .csv file with the 1-15 Day Min/Max/Avg Temp & CDD/HDD forecast for each of the 198 cities that are used within the Weighted Degree model. This product is only available for North America and for those clients who subscribe to the Trader North America Complete National package.

#### **Base URL:**

https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWsiForecastForDDModelCities

#### **Required Parameters:**

**Account** – The username used to login to WSI Trader **Profile** – The email address used to login to WSI Trader **Password** – The password used to login to WSI Trader

**ForecastType** – The specific forecast to be retrieved. Available options are:

Primary Latest

TempUnits – The units you want the temperature data displayed in. Accepted values are:

F - Fahrenheit

**C** – Celsius

**Region** – The region for which to receive forecast data for. Accepted values are:

NA - North America

#### **Example URL:**

Download the forecast data from the Primary forecast issued at 6:30am ET in degrees Fahrenheit

 $\frac{\text{https://www.wsitrader.com/Services/CSVDownloadService.svc/GetWsiForecastForDDModelCities?Account=usern}{ame\&Profile=name@wsi.com\&Password=password\&Region=NA\&ForecastType=Primary\&TempUnits=F\&ForecastType=Primary}{\text{ype=Primary}}$