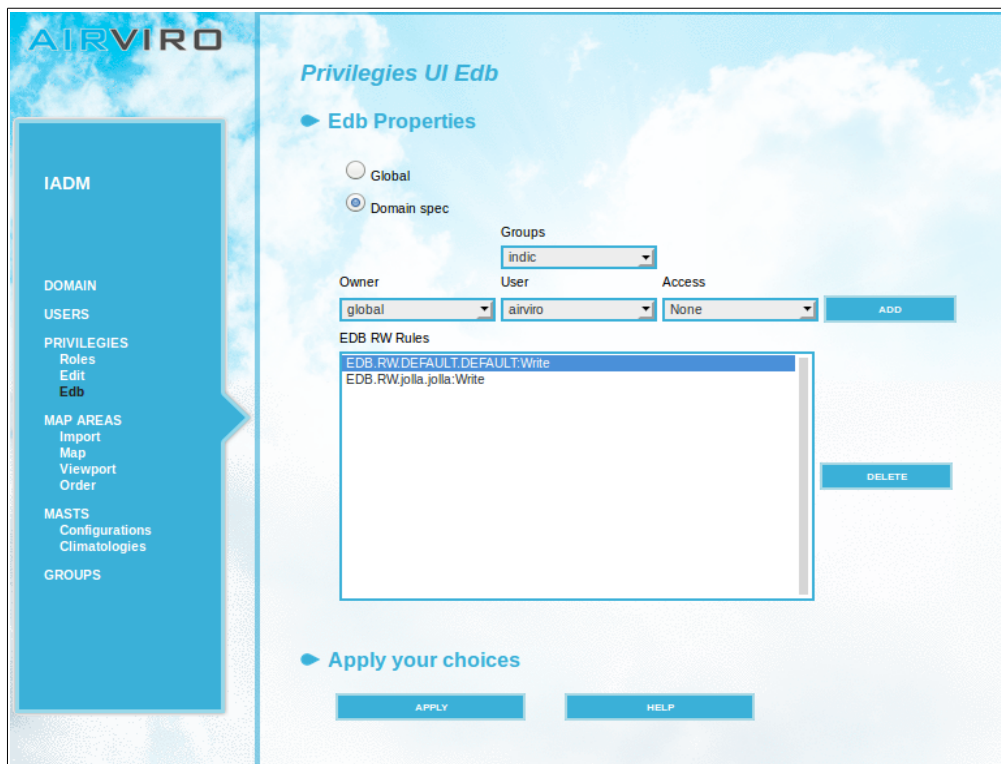Apertum

Airviro User's Reference

Working with IADM

How to perform administrative tasks in Airviro

Amendments

Version	Date changed	Cause of change	Signature
3.11	Nov 2006	Manual for new Airviro module	GS
3.11	Nov 2007	Upgrade	GS
3.12	Feb 2009	Upgrade	GS
3.13	Feb 2009	Upgrade	GS
3.20	Dec 2010	Upgrade	GS
3.21	Dec 2010	Upgrade	GS
3.21	June 2012	Review	GS
3.22	March 2013	Upgrade	GS
3.23	May 2013	Upgrade	GS
3.23	Nov 2014	Review	GS
4.00	June 2015	Upgrade	GS
4.00	Aug 2018	Review	GS
5.00	Dec 2020	Review	GS
5.00	March 2021	Review	DC

Contents

7.1 Introduction: What is it?

IADM is used to perform some administrative and configuration tasks in Airviro.

Only the user named **airviro** has access to this module since changes made here may affect an entire installation.

7.1.1 How does IADM work?

This Airviro module runs on any PC or other devices running Internet Explorer 6 or later, Firefox or any other mozilla based browsers

After logging in to Airviro with your user-ID and password, a domain must first be selected, and then IADM module should be chosen from the available modules.. All data processing is made on the Airviro server and afterwards the results are sent to the web browser.

 This Airviro module version v5.00 or higher don't need Java Runtime Environment to run.

7.2 Getting started

Once Airviro has been properly installed on the *server*, you can access it by typing the correct URL in your web browser over Intranet/Internet.

After logging in to Airviro with your user-ID and password, a domain must first be selected, and then **IADM** should be chosen from the available modules.At the top of the

window, in Current application the name of the module actually selected is shown. Clicking on the [down arrow] button beside the name other modules can be selected.

Clicking on the Current language [down arrow] button it is possible to select the language to work with. This functionality is not yet implemented.

By clicking on the **Logout [**down arrow] button, the current module is closed and the Airviro login page is displayed instead.
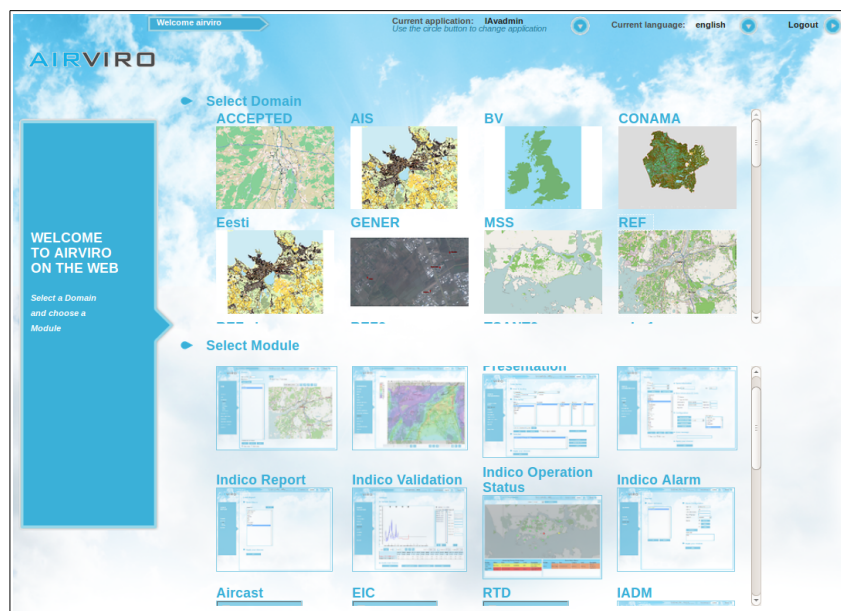

Figure 7.2.1 Logging in Airviro.

In this manual you will learn :

- How to add users to your system.

- How to add roles and privileges to the users.

- How to work with maps in Airviro.

- How to add scenarios for later use in dispersion calculations.

Some of the examples shown here are based on real sources from the Airviro (Göteborg) Reference System, included in all Airviro installations.

7.2.1. Selecting a Domain

Click on the **Domain** menu option to open this window (*Figure 7.7.2.),* Select a **Domain** from the list and press [**APPLY]**.
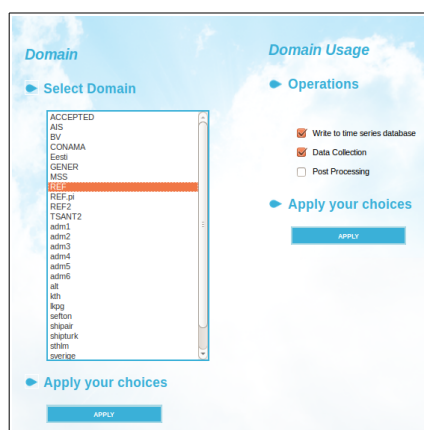

Figure 7.2.2 Select REF domain

Once a domain has been selected, the user can enable/disable the following operations:

- Write to time series database
- Data Collection
- Post-Processing

Note: As already said, only the **airviro** user can use this module since changes made here may affect an entire system. If you need to perform some administrative tasks like adding a new layer to a map or setting up a new user or role, contact you system administrator.

Note: Different users can have different privilege levels for different modules and menus. It is the task of the system administrator to ensure that the correct functionality is only available to those responsible and that other users cannot make changes in the Airviro configuration files. If you have problems to access modules that you think you should be able to access, ask your system administrator about your privilege levels.

7.3. Users

Click on the **USERS** menu option, to open this window. *Figure 7.3.1.*

Once a user has been selected from the list, you can specify a **Full Name** for this user or change his **Password**.

Press the [**ADD**] button to add new *users.* Pressing the [**DEACTIVATE - ACTIVATE**] button you can activate/deactivate existing Airviro users. Users displayed in red are deactivated and those in green are activated. Pressing the [**RESET FAILED LOGINS**] button you can reset the login failed attempts count. *Figure 7.3.1.*
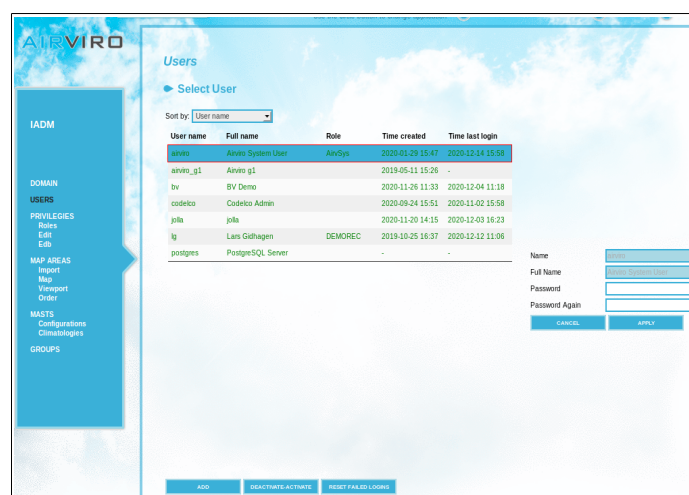

Figure 7.3.1. Select Users.

7.4. Privileges

This section manages user privileges in relation to access and operations that can be performed for a specific domain or module.

This menu has three sub-menus: **Roles**, **Edit** and **Edb**.

7.4.1 Roles

Roles are useful for configuring groups of users who need to have the same privileges to access certain modules or to perform certain operations.

 All users belonging to the same Role, will share the same privileges.

Before defining roles it is important to know how different users will use the system.
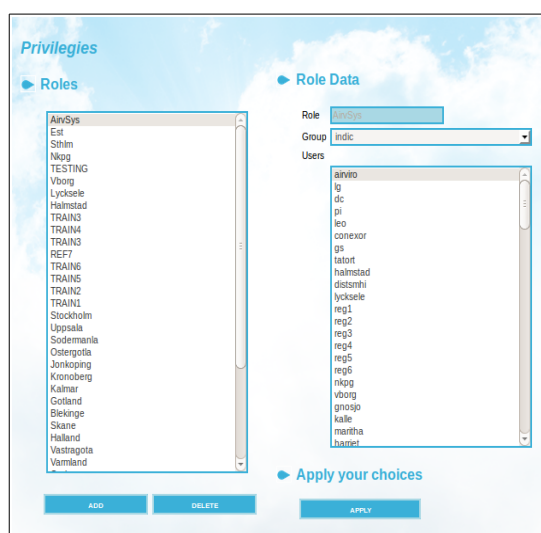
Figure 7.4.1. Privileges: Roles

Also it is important to know that:

- A role can contain one or multiple users.

- A user cannot belong to more than one role.

- Users can be added to an existing role.

To add a Role, press the [**ADD]** button and enter a name for the new Role in the **Role** text box, then select the users to be included in this new Role and finally press the [**APPLY]** button.

7.4.2 Edit

There are two levels of Privileges : A global level and a domain specific level. If a role doesn't have any privileges defined for a certain domain, the global definition for that role will be used instead. If the global definition for the role doesn't exist, the definition for the global role DEFAULT will be used instead. The global role DEFAULT always exists and should not give access to anything. In this way one must define privileges for a role, otherwise that role won't have access to anything.

That is, privileges are matched according to the following hierarchy (until privileges are found):

1. Domain specific privileges for the role

2. Global privileges for the role

After having defined different roles , the administrator can configure them:

- Setting access to a specific domain.

- Setting access to the different Airviro modules.

- Assigning READ/WRITE privileges to modules and time series keys.

- Defining which maps will be available for each specific Domain.

- Setting which dispersion models will be available for each Domain.

- Ticking off if Role/User are allowed to run Dispersion Calculations.

- Allowing to select custom mast configuration.
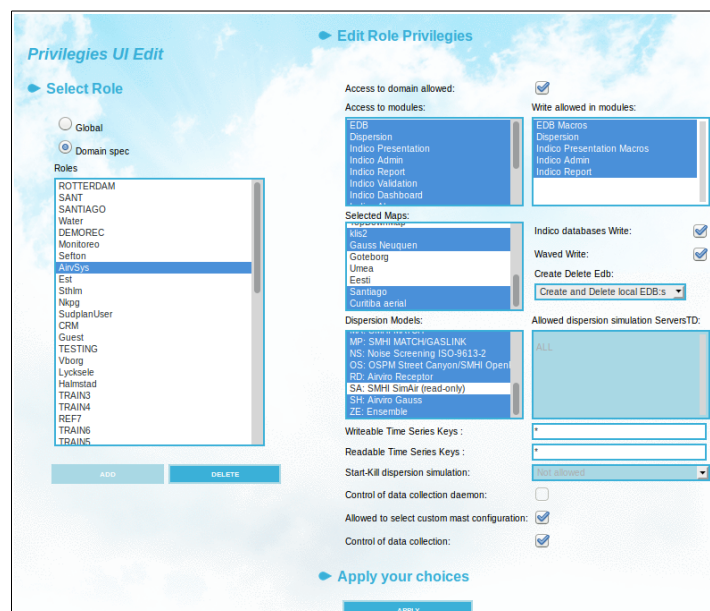
- And so on .

Figure 7.4.2. Privileges .Edit

In addition, the administrator can configure the following roles:

– Configure access to a specified Domain.

– Configure access to different Modules.

– Assign privileges to read-write Modules.

– Define maps available for each Domain.

– Dispersion models available for each Domain.

– Define which roles / users can run dispersion calculations.

7.4.2 EDB

Roles are not used for setting privileges for EDB. The privileges are set per user. There are two levels of Privileges: A global level and a domain specific level. You can specify which users can access EDB:s owned by another user. The user DEFAULT can be used if no privilege was set for a any combination Edb owner / user access . The table below shows the precedence of rules that will be followed to determine the level of access. In this example, the user karl wants to have access to an EDB owned by carolina:

Domain EDB.RW.carolina.karl

Global RW.carolina.karl.

Domain RW.carolina.DEFAULT.

Global RW.carolina.DEFAULT.

Domain RW.DEFAULT.karl

Global RW.DEFAULT.karl
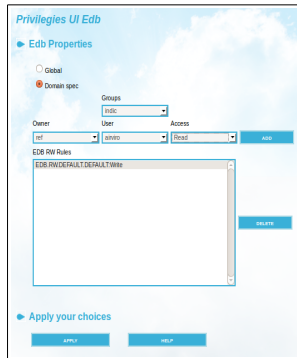
Domain RW.DEFAULT.DEFAULT

Global RW.DEFAULT.DEFAULT

Figure 7.4.3. Privileges: EDB.

Here, the administrator can specify:

Access level (read / write / write sources only) that each user will have to other users ´s Edbs

In the example shown here, only the user airviro is allowed to read his own edbs.

7.5 Map Areas

This section has four sub windows: **Map Import, Map, Viewport and Order.**

This section will help you to import maps and configure how they will be displayed . Maps has a high quality digital format and are usually created using GIS or CAD systems.

All Airviro modules obtain information related to map files from a resource file named **modell.par.**

There is only one **modell.par** file per domain, containing all map references for that domain .

7.5.1 Map Import

This menu allows the user to import map files into the Airviro server, specifying the folder where the file should be saved.
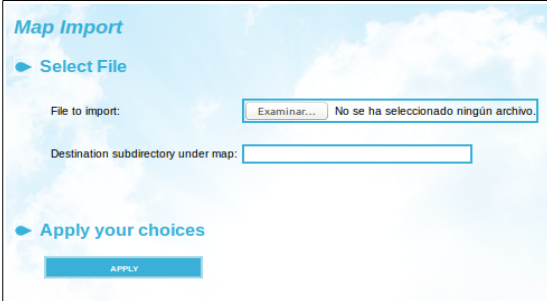
Figure 7.5.1. Map import.

Use the [**Browse]** button to find and select the shape files to be imported.

Write the path to the destination folder, that is. where the imported file will be saved, and press the [**APPLY]** button to import the map file.

7.5.2 Map

Here you can configure different options for the maps used in each specific domain.

Use the [**ADD]** or [**DELETE]** buttons to add maps, or delete them.

Under Map Definitions, give the new map a name in **Map Name** text box .

The **layers** list box show all the available map files (layers) that are included in a map.

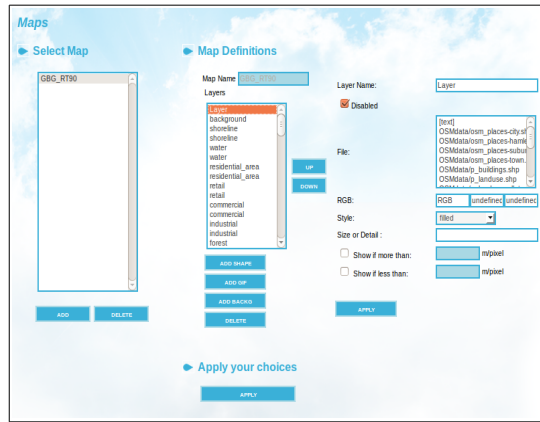It is possible to disable a layer using the Disabled check box.

Figure 7.5.2. Maps

The [**UP**] and [**DOWN**] buttons allows you to change the order in which the layers will be displayed in the map.

In the *Layers* section the following options are available:

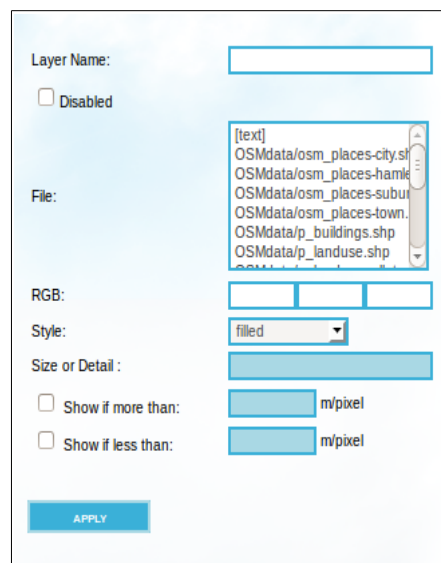**ADD SHAPE:** Allows you to add new layers to the map.

Figure 7.5.3. Add shape.

The user must enter the name of the Layer in the **Layer Name** text box. Then a **File** must be selected from the list showing all the available shape files that can be used to create the layer.

In the **RGB** text boxes, you can enter the RGB colour code for the active layer.

The **Style** drop down list allows you to select a style (linear or filled) to be applied to the layer that is added to the map

Additional features can be added to the layer by assigning a **Size or Detail ,** and a display restriction (**Show if more than & Show if less than)** to specify when to show a layer (after or before a zoom in/out) according to its definition in m/pixel,
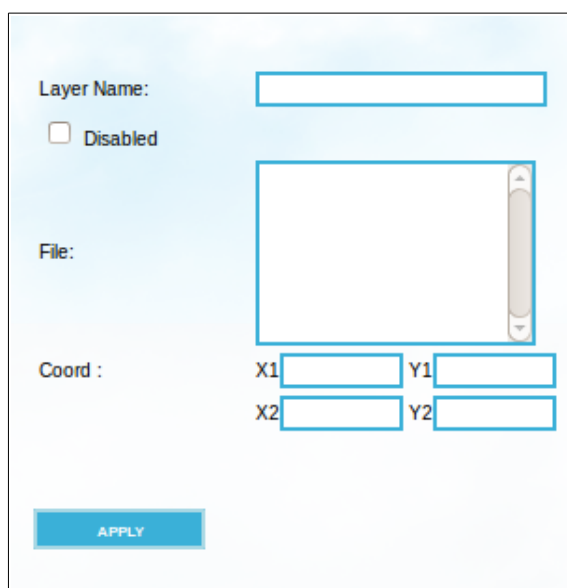

Figure 7.5.4. Add Gif.

Add Gif: With this option a Gif file can be added to the map, for example a satellite image.

Add Backg: Adds a background colour.

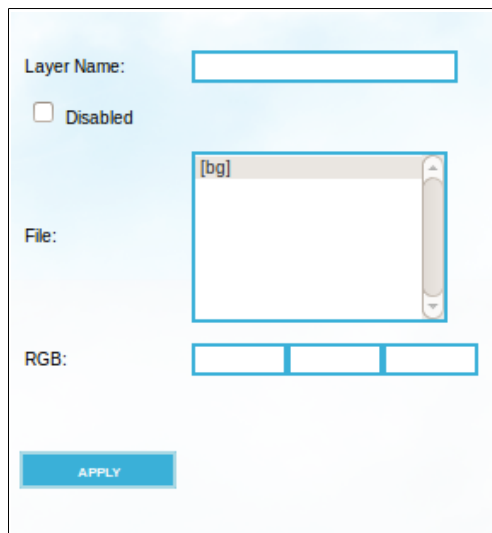All these features help to create maps tailored to your needs.

Figure 7.5.5 Add background.

 Delete: Using the [**DELETE**] button you can eliminate layers from the map. See *Figure 7.5.2. Maps*

7.5.3 Viewport

This interface allows you to define different viewing areas within the same map and to configure a map for dispersion calculations. This information is saved in the **modell.par** file.

Figure 7.5.6 Viewport

 Id is a unique identifier. **Active** is a check box that indicates if the selected map will be available or not. **Name** is a text shown for the specified view port . **X1, X2, Y1, Y2** are the coordinates that specifies the lower left and upper right corners of the viewport. **DX** and **DY** shows the width and height of the view port. Pressing [**Show Coord]** shows the bounding box of the map.

The **Map Source** list shows all available maps, with the currently selected map highlighted.

Tick off the **Simulation Grid** check box to use the viewport for dispersion calculations. Specify the **Lat**itude and **Long**itude as well as the default **Grid** size for the map used for dispersion calculations.

Under the **Physiography** and **Topography** section, files containing this information are listed in the corresponding list boxes. The selected topography and physiography are used in dispersion calculations.

Swampzone specify the number of grid squares outside the simulation area that should be included in a dispersion calculation. A normal number is 3.

7.5.4 Order

This window is used to change the order in which the maps are displayed in the map list for the different Airviro modules. To do this, select an item from the list and click on the [**Up] & [down]** buttons.
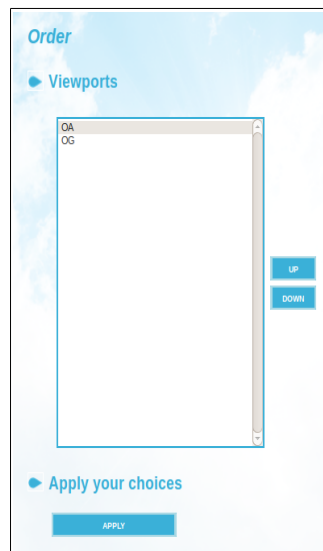

Figure 7.5.7 Order.

7.6 Masts

This interface provides access to configuration files used in the Dispersion Module. The Dispersion module installation process creates two configuration files: realwind.rf and climSH.rf. These contains the default configurations for the meteorological mats(s) and the default setup for climatologies. Additional mast configurations and climatologies can be created using realwind.rf, or one of the additional mast configurations, as a template.

7.6.1 Configuration

Additional mast configuration files can be created using this interface. Select a realwind(XX).rf file as a template and then press [ADD] to create a new additional mast configuration file. When starting a dispersion calculation, the mast configuration used for the calculation can be selected if the user has privileges to do so.

The new config file has a unique two letter identifier and is named mastcfg_XX.rf where XX is the two letter identifier.

The meteorological parameters used can be changed, including, temperature, differential temperature, wind direction, wind speed, precipitation, global radiation, humidity, standard deviation wind direction, standard deviation for vertical wind and pressure.

The roughness length and influence zones can be changed as well.

Figure 7.6.1 Mast. Configuration.

7.6.2 Climatologies

This interface allows you to configure climatologies. These are used by the Dispersion module when selecting Scenario in **Model Settings**

Climatologies can be reconfigured and recalculated for existing mast configuration files.

The available mast configuration files are listed on the right side listbox. By selecting one, it is possible to change the scenario and recalculate it. A scenario consists of a number of Season Specifications. New ones can be added and old ones deleted. A Season Specification consists of a name and a time period less than one year, that shows which meteorological data will be used for that scenario.
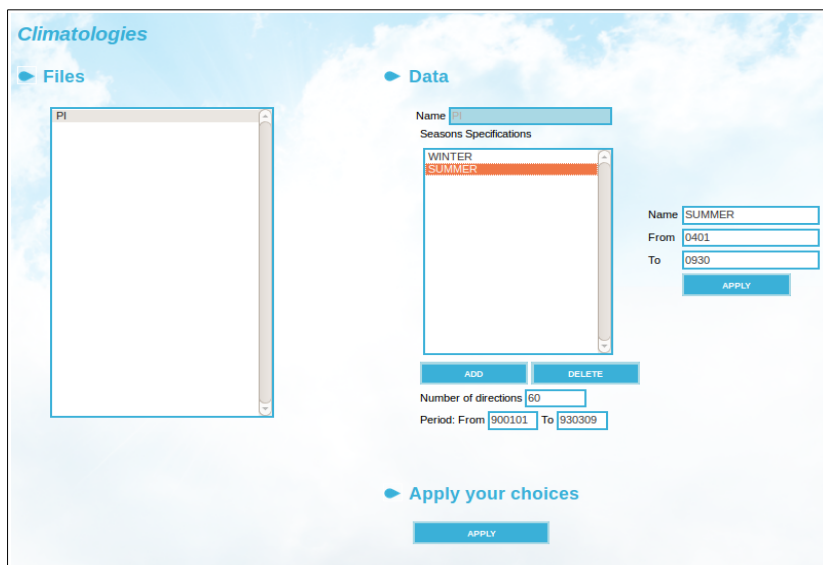

Figure 7.6.2. Climatologies

Below the Season Specification list is the number of wind directions used for the scenario and the time period for the meteorological data that will be used for the scenario calculation. Press the [**APPLY]** button to save and recalculate the climatology.

Appendix 7A: Privileges

7A.1 User Privileges

A privilege database is used to control access to functions within Airviro. This access is controlled based on the user's login identity. Global privilege settings can be made, as well as settings per domain.

Access to domains can be granted per user.

7A.1.1 EDB

Access to EDB can be granted per user.

The possibility to save macros can also be granted per user.

For the use of the global EDB or personal EDBs owned by specific users, four levels of privileges are available:

1 - No access is allowed to any EDBs.

2 - EDBs can be viewed but no changes can be made.

3 - EDBs can be viewed and modified.

4 - EDBs can be viewed and sources modified.

 Additionally, there is another set of privileges available related to the creation and deletion of EDBs that also has three levels:

1- No EDBs can be created

2- Personal EDBs can be created and deleted

3- Personal EDBs can be created, all EDBs may be deleted including those belonging to other users.

7A.1.2. Indico Presentation

Access to the module can be granted per user.

The possibility to save macros can also be granted per user.

7A.2 Indico Administration

Access to the module can be granted per user.

The possibility to save macros can also be granted per user.

For editing functions in Indico Administration (excluding editing of time series data), there are two levels of privilege**s**:

1- Other users can view the station content and parameter databases, but can not edit them.

2- A user can edit the station and parameter databases.

7A.3 Indico Report

Access to the module can be granted per user. The possibility to save reports can also be granted per user.

7A.4 Indico Validation

Access to the module can be granted per user. The possibility to edit or delete data can be granted per user.

7A.5 Dispersion

Access to the module can be granted per user. The possibility to save macros can also be granted per user.

7A.6 Time series data

The possibility to add or modify time series data can be granted per user and station.

7A.7 Map areas

The possibility to see and use a particular map area can be granted per user.

7A.8 Waved

The possibility to write data to the airviro time series database using waved.