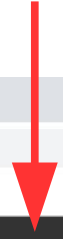


New SCC product calculation (HiRELPP, CloudMask, ELIC, ELQUICK)

- 1 – Connect to <https://scc.imaa.cnr.it>
- 2 – Log in with you username and password
- 3 – Click on “Station Admin”

A screenshot of the web browser showing the SCC v5.0.0 interface. The browser tab is 'Single Calculus Chain | Web'. The address bar shows 'https://scc.imaa.cnr.it'. The navigation bar includes 'Single Calculus Chain', 'Data processing', 'Handbook of Instruments', 'Station Admin', and 'Logout'. The main content area has a dark blue header with the text 'Welcome to Earlinet's SCC v5.0.0' and 'Process your lidar data in near-real time'. Below this is a 'HOME' button. The main text describes the interface's purpose. A blue box contains a 'Beta testing of SCC v5.0.0' notice. On the right, there is a 'Scc info' section with a list of version numbers for various components.

Single Calculus Chain | Web x +

← → ↻ https://scc.imaa.cnr.it

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Single Calculus Chain Data processing Handbook of Instruments Station Admin Logout

Welcome to Earlinet's SCC v5.0.0

Process your lidar data in near-real time

HOME

This interface was designed to improve the user-friendliness of EARLINET's Single Calculus Chain and to manage the set of parameters needed to perform lidar analysis.

Beta testing of SCC v5.0.0

This is a beta version of SCC v5.0.0. Please report any issues you face or suggestions for improving the SCC in the [forum](#) or in the [bug tracking system](#).

Thank you for your help and support!

Scc info

- Version: 5.0.0
- HiRELPP ver.: 1.0.0
- CloudMask ver.: 1.0.0
- ELPP ver.: 7.0.0
- ELDA ver.: 3.2.14
- ELDEC ver.: 2.0.0
- ELIC ver.: 1.0.0
- ELQUICK ver.: 1.0.0

New SCC product calculation (HiRELPP, CloudMask,ELIC, ELQUICK)

4 – In “Product settings” tabs click on the “+” at the right of “HiRELPP Products”

The screenshot shows the 'Site administration' page for SCC station management. The page is divided into several sections:

- Systems settings:** General settings about stations, systems and their various components. Includes links for Stations, Lidars, Lidar versions, Lidar configurations, Telescopes, Lasers, Channels, Laser emission lines, and System photos, each with a '+' icon.
- Product settings:** Settings about the optical products that will be calculated. Includes links for Products and HiRELPP Products, each with a '+' icon. A red arrow points to the '+' icon next to 'HiRELPP Products'.
- Generated Products:** Rapid Visualization of Products generated by SCC Modules. Includes links for HiRELPP Products (Files), CloudMask Products, ELPP Products, ELDA Products, ELDEC Products, ELIC Products, and ELQUICK Products.
- Quicklook settings:** Settings for generating quicklooks. Includes links for ELQUICK Color Palette, ELQUICK Excluded Types, ELQUICK Product Options, and ELQUICK Timelengths, each with a '+' icon.
- ModelList: Administration:** Includes links for Groups, Sites, and Users, each with a '+' icon.
- Support:** Includes links for SCC documentation and Forum.
- Recent Actions:** Lists recent actions, including '125: MUSA, daytime Lidar configuration' repeated five times.

New SCC product calculation (HiRELPP, CloudMask, ELIC, ELQUICK)

5 – Select “Min height” and “Max height”

Add HiRELPP Product | SCC x +

← → ↻ https://scc.imaa.cnr.it/admin/database/hirelppproductsettings/add/

Apps CIAO Infrastructu ICARE Varie

SCC station management

Home > Database > HiRELPP Products > Add HiRELPP Product

Add HiRELPP Product

Min height	<input type="text"/>	←
	Minimum height in meters, to calculate high-resolution product.	
Max height	<input type="text"/>	←
	Maximum height in meters, to calculate high-resolution product.	
Emission Wavelengths To Glue	<input type="text"/>	
	Provide a comma separated list of the emission wavelengths to glue. E.g. '355, 532, 1064' means that all the channels (elastic and inelastic) with emission wavelength 355nm, 532nm and 1064nm will be glued.	

Products

Product

Product type + Station +

Product/channel connections

Channel id

[Add another Product/Channel Connection](#)

System/product connections

system id

[Add another System/Product Connection](#)

polarization calibration product

Calibration product +

[Add another Polarization Calibration Product](#)

polarization option

Calibration handling +
select the way in which the gain ratio should be handled

Crosstalk handling +
select the way in which the cross-talk parameters should be handled

Correction factor handling +
select the way in which the correction factors should be handled

New SCC product calculation (HiRELPP, CloudMask, ELIC, ELQUICK)

6 – Select “Product types” and “Station”

Add HiRELPP Product | SCC x +

← → ↻ https://scc.imaa.cnr.it/admin/database/hirelppproductsettings/add/

Apps CIAO Infrastructu ICARE Varie

SCC station management

Home > Database > HiRELPP Products > Add HiRELPP Product

Add HiRELPP Product

Min height
Minimum height in meters, to calculate high-resolution product.

Max height
Maximum height in meters, to calculate high-resolution product.

Emission Wavelengths To Glue
Provide a comma separated list of the emission wavelengths to glue. E.g. '355, 532, 1064' means that all the channels (elastic and inelastic) with emission wavelength 355nm, 532nm and 1064nm will be glued.

Products

Product

Product type + Station +

Product/channel connections

Channel id

[Add another Product/Channel Connection](#)

System/product connections

system id

[Add another System/Product Connection](#)

polarization calibration product

Calibration product +

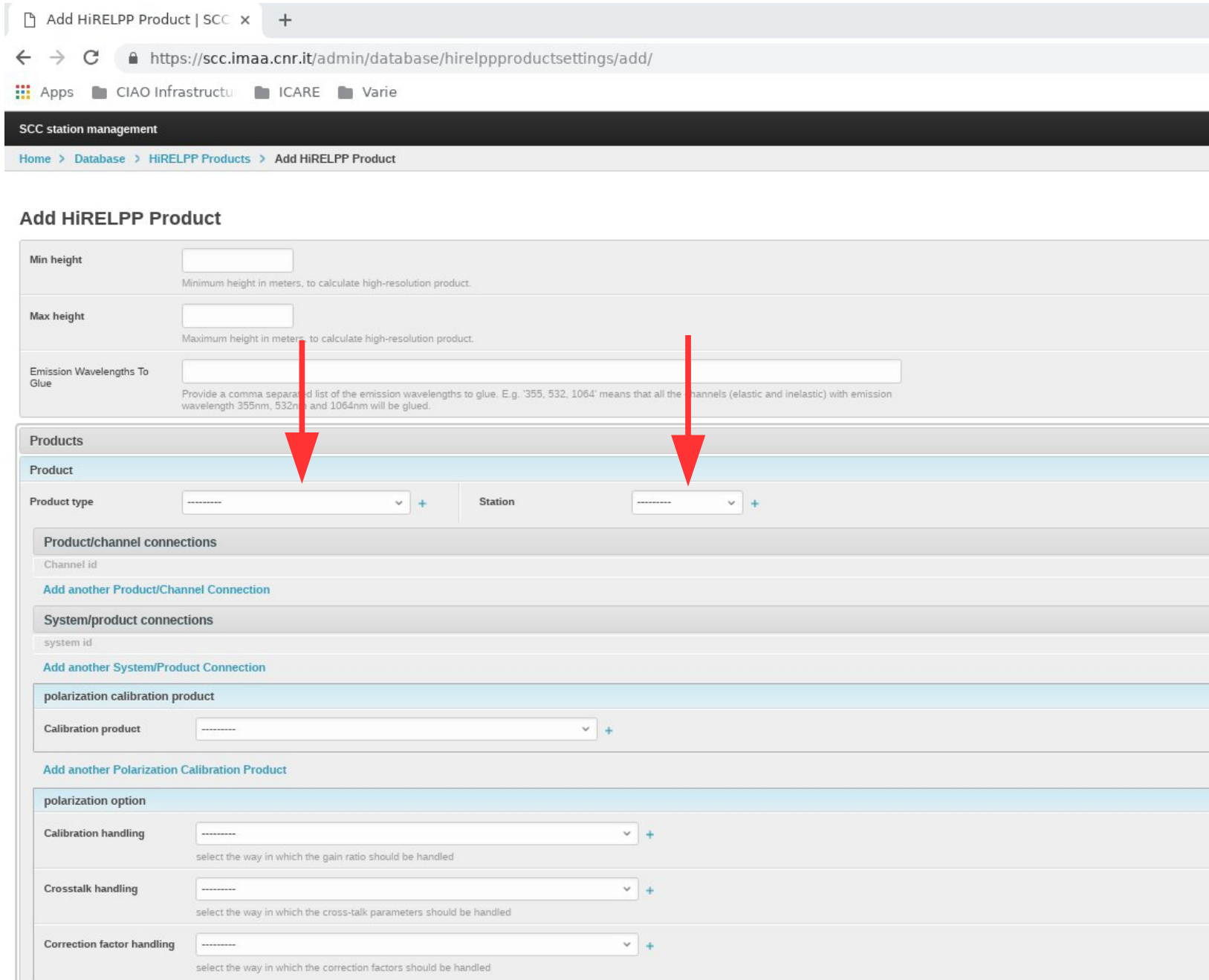
[Add another Polarization Calibration Product](#)

polarization option

Calibration handling +
select the way in which the gain ratio should be handled

Crosstalk handling +
select the way in which the cross-talk parameters should be handled

Correction factor handling +
select the way in which the correction factors should be handled



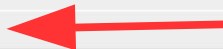
New SCC product calculation (HiRELPP, CloudMask,ELIC, ELQUICK)

7 – Select all the channels involved in the product calculation in the “Product/channel Connection”

IMPORTANT: HiRELPP products are designed to be multi-wavelength products. So do not define different HiRELPP products for different wavelengths but put all the wavelengths (channels) in the same HiRELPP product

Add HiRELPP Product

Min height	<input type="text"/>	Minimum height in meters, to calculate high-resolution product.
Max height	<input type="text"/>	Maximum height in meters, to calculate high-resolution product.
Emission Wavelengths To Glue	<input type="text"/>	Provide a comma separated list of the emission wavelengths to glue. E.g. '355, 532, 1064' means that all the channels (elastic and inelastic) with emission wavelength 355nm, 532nm and 1064nm will be glued.

Products	
Product	
Product type	<input type="text"/> +
Station	<input type="text"/> +
Product/channel connections	
Channel id	
Add another Product/Channel Connection	
System/product connections	
system id	
Add another System/Product Connection	
polarization calibration product	
Calibration product	<input type="text"/> +
Add another Polarization Calibration Product	
polarization option	
Calibration handling	<input type="text"/> + select the way in which the gain ratio should be handled
Crosstalk handling	<input type="text"/> + select the way in which the cross-talk parameters should be handled
Correction factor handling	<input type="text"/> + select the way in which the correction factors should be handled

New SCC product calculation (HiRELPP, CloudMask,ELIC, ELQUICK)

8 – Select the configuration at which the product should be connected in “System/Product Connection”

The screenshot shows a web browser window with the URL `https://scc.imaa.cnr.it/admin/database/hirelppproductsettings/add/`. The page title is "SCC station management" and the breadcrumb trail is "Home > Database > HiRELPP Products > Add HiRELPP Product".

The main form is titled "Add HiRELPP Product" and contains the following fields:

- Min height**: A text input field with a description: "Minimum height in meters, to calculate high-resolution product."
- Max height**: A text input field with a description: "Maximum height in meters, to calculate high-resolution product."
- Emission Wavelengths To Glue**: A text input field with a description: "Provide a comma separated list of the emission wavelengths to glue. E.g. '355, 532, 1064' means that all the channels (elastic and inelastic) with emission wavelength 355nm, 532nm and 1064nm will be glued."

Below the form is a section titled "Products" with a sub-section "Product" containing two dropdown menus: "Product type" and "Station".

Under "Product/channel connections", there is a "Channel id" field and a link "Add another Product/Channel Connection".

Under "System/product connections", there is a "system id" field and a link "Add another System/Product Connection" which is highlighted with a red arrow.

Under "polarization calibration product", there is a "Calibration product" dropdown menu and a link "Add another Polarization Calibration Product".

Under "polarization option", there are three dropdown menus: "Calibration handling" (description: "select the way in which the gain ratio should be handled"), "Crosstalk handling" (description: "select the way in which the cross-talk parameters should be handled"), and "Correction factor handling" (description: "select the way in which the correction factors should be handled").

New SCC product calculation (HiRELPP, CloudMask,ELIC, ELQUICK)

9 – On the base of the emission wavelengths of the channels included in the products, specify the emission wavelengths of the channels that have to be glued (separated by comma). If you leave this field empty the glueing will be NOT performed on any channel.

The screenshot shows a web browser window with the URL `https://scc.imaa.cnr.it/admin/database/nirelppproductsettings/add/`. The page title is "SCC station management" and the breadcrumb trail is "Home > Database > HiRELPP Products > Add HiRELPP Product".

Add HiRELPP Product

Min height	<input type="text"/>	Minimum height in meters, to calculate high-resolution product.
Max height	<input type="text"/>	Maximum height in meters, to calculate high-resolution product.
Emission Wavelengths To Glue	<input type="text"/>	Provide a comma separated list of the emission wavelengths to glue. E.g. '355, 532, 1064' means that all the channels (elastic and inelastic) with emission wavelength 355nm, 532nm and 1064nm will be glued.

A red arrow points to the "Emission Wavelengths To Glue" input field.

Products

Product

Product type: + Station: +

Product/channel connections

Channel id

[Add another Product/Channel Connection](#)

System/product connections

system id

[Add another System/Product Connection](#)

polarization calibration product

Calibration product: +

[Add another Polarization Calibration Product](#)

polarization option

Calibration handling: +
select the way in which the gain ratio should be handled

Crosstalk handling: +
select the way in which the cross-talk parameters should be handled

Correction factor handling: +
select the way in which the correction factors should be handled

New SCC product calculation (HiRELPP, CloudMask,ELIC, ELQUICK)

10 – (Optional) If among the channels included in the product, there are cross and parallel channels, select the depolarization calibration product(s) to use for their calibration under “polarization calibration product” and the “polarization option”.

https://scc.imaa.cnr.it/admin/database/nirelppproductsettings/add/

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SCC station management

Home > Database > HiRELPP Products > Add HiRELPP Product

Add HiRELPP Product

Min height
Minimum height in meters, to calculate high-resolution product.

Max height
Maximum height in meters, to calculate high-resolution product.

Emission Wavelengths To Glue
Provide a comma separated list of the emission wavelengths to glue. E.g. '355, 532, 1064' means that all the channels (elastic and inelastic) with emission wavelength 355nm, 532nm and 1064nm will be glued.

Products

Product

Product type + Station +

Product/channel connections

Channel id

[Add another Product/Channel Connection](#)

System/product connections

system id


[Add another System/Product Connection](#)


polarization calibration product


Calibration product +

[Add another Polarization Calibration Product](#)

polarization option

Calibration handling + 
select the way in which the gain ratio should be handled

Crosstalk handling + 
select the way in which the cross-talk parameters should be handled

Correction factor handling + 
select the way in which the correction factors should be handled

New SCC product calculation (HiRELPP, CloudMask, ELIC, ELQUICK)

11 – Finally press “Save”

Apps CIAO Infrastructu ICARE Varie

SCC station management damico View site

Home > Database > HiRELPP Products > Add HiRELPP Product

Add HiRELPP Product

Min height
Minimum height in meters, to calculate high-resolution product.

Max height
Maximum height in meters, to calculate high-resolution product.

Emission Wavelengths To Glue
Provide a comma separated list of the emission wavelengths to glue. E.g. '355, 532, 1064' means that all the channels (elastic and inelastic) with emission wavelength 355nm, 532nm and 1064nm will be glued.

Products

Product

Product type + Station +

Product/channel connections +
Channel id
[Add another Product/Channel Connection](#) +

System/product connections +
system id
[Add another System/Product Connection](#) +

polarization calibration product -
Calibration product +
[Add another Polarization Calibration Product](#) +


polarization option -

Calibration handling +
select the way in which the gain ratio should be handled

Crosstalk handling +
select the way in which the cross-talk parameters should be handled

Correction factor handling +
select the way in which the correction factors should be handled

Save and continue editing Save and add another **Save**



New SCC product calculation (HiRELPP, CloudMask, ELIC, ELQUICK)

This is how the HiRELPP product should look like

Home > Database > HiRELPP Products > ID: 895 | High Resolution pre-processed data (usecase: 7) at 355.0000, 532.0000, 1064.0000 nm

Change HiRELPP Product

Min height	<input type="text" value="0.0"/>	Minimum height in meters, to calculate high-resolution product.
Max height	<input type="text" value="20000.0"/>	Maximum height in meters, to calculate high-resolution product.
Emission Wavelengths To Glue	<input type="text" value="355, 532, 1064"/>	Provide a comma separated list of the emission wavelengths to glue. E.g. '355, 532, 1064' means that all the channels (elastic and inelastic) with emission wavelength 355nm, 532nm and 1064nm will be glued.

Products

Product ID: 895 | High Resolution pre-processed data (usecase: 7) at 355.0000, 532.0000, 1064.0000 nm

Product type Station

Product/channel connections

Channel id	
<input type="text" value="193"/>	Channel po012 (id: 193): 355 nr - Emission Wavelength: 355.0000 nm
<input type="text" value="194"/>	Channel po013 (id: 194): 355 far - Emission Wavelength: 355.0000 nm
<input type="text" value="195"/>	Channel po014 (id: 195): 387 nr - Emission Wavelength: 355.0000 nm
<input type="text" value="196"/>	Channel po015 (id: 196): 387 far - Emission Wavelength: 355.0000 nm
<input type="text" value="197"/>	Channel po016 (id: 197): 532p nr - Emission Wavelength: 532.0000 nm
<input type="text" value="198"/>	Channel po017 (id: 198): 532p far - Emission Wavelength: 532.0000 nm
<input type="text" value="199"/>	Channel po018 (id: 199): 532s nr - Emission Wavelength: 532.0000 nm
<input type="text" value="200"/>	Channel po019 (id: 200): 532s far - Emission Wavelength: 532.0000 nm
<input type="text" value="201"/>	Channel po020 (id: 201): 607 nr - Emission Wavelength: 532.0000 nm
<input type="text" value="202"/>	Channel po021 (id: 202): 607 far - Emission Wavelength: 532.0000 nm
<input type="text" value="203"/>	Channel po022 (id: 203): 1064an - Emission Wavelength: 1064.0000 nm

[Add another Product/Channel Connection](#)

System/product connections

system id 124: MUSA, nighttime

[Add another System/Product Connection](#)

polarization calibration product PolarizationCalibrationProduct object

Calibration product

polarization calibration product

Calibration product

[Add another Polarization Calibration Product](#)

polarization option

Calibration handling select the way in which the gain ratio should be handled

Crosstalk handling

New SCC product calculation (HiRELPP, CloudMask, ELIC, ELQUICK)

Restart the analysis the measurement IDs linked to the lidar configuration for which you have added the HiRELPP product by clicking on “Rerun all”

The screenshot shows a web browser window with the URL https://scc.ima.cnr.it/data_processing/measurements/20110414at01/. The page title is "Data processing". The breadcrumb navigation is "HOME / DATA PROCESSING / MEASUREMENTS / 20110414AT01".

The main content area is titled "Measurement 20110414at01 (Finished)". Below the title, it states: "The measurement parameters, processing status, and possible outputs are shown below. You can edit the system used in the processing and the categories in the 'Admin' section."

On the left side, there is a sidebar with the following sections:

- Explore
 - Search
 - Measurements
 - Ancillary files
- Actions
 - Quick Upload
 - Upload Ancillary

The main content area contains a table with the following data:

System	13: EOLE 2006-2015, nighttime
Start	2011-04-14 18:40
Stop	2011-04-14 20:42
Sounding file	rs_20110414at00.nc (ok)
Overlap file	-
Lidar ratio file	-
Categories	-
Created on	2018-10-08 18:48
Last update	2018-10-11 10:53
Comments	
Status	

Below the table, there are two tabs: "Processing status" and "Output". The "Processing status" tab is selected.

On the right side, there is a "File actions" menu with the following options:

- Edit in admin
- Rerun all
- Rerun HiRELPP
- Rerun ELPP
- Rerun ELDA
- Download ELPP files
- Download ELDA products
- Download plots

A red arrow points to the "Rerun all" option, which is also circled in red. Below the menu, there is a note: "N.B. = If products have not been obtained with the latest version of SCC, rerunning an intermediate module will automatically restart all the processing chain."