



Overview of the functionalities of the RiumWeb platform  
v1.1.1

ichup

Connection

Go to app.icohup.com

## A solution in Radioactive Monitoring

RiumWeb allows you to manage your sensors, follow real-time measurements, map risks, calculate workers exposure and several other features.



Log in and access your data

Log in

[Forgotten password ?](#)

# A solution in Radioactive Monitoring

RiumWeb allows you to manage your sensors, follow real-time measurements, map risks, calculate workers exposure and several other features.



Log in and access your data

Type in your username

Login  
john-doe@icohup-test.com ✓

Password

Log in

[Forgotten password ?](#)



# A solution in Radioactive Monitoring

RiumWeb allows you to manage your sensors, follow real-time measurements, map risks, calculate workers exposure and several other features.



Log in and access your data



Your password

Login  
john-doe@icohup-test.com ✓

Password  
●●●●●●●●●●●●●●●●●●●●●● ✓

And log in!

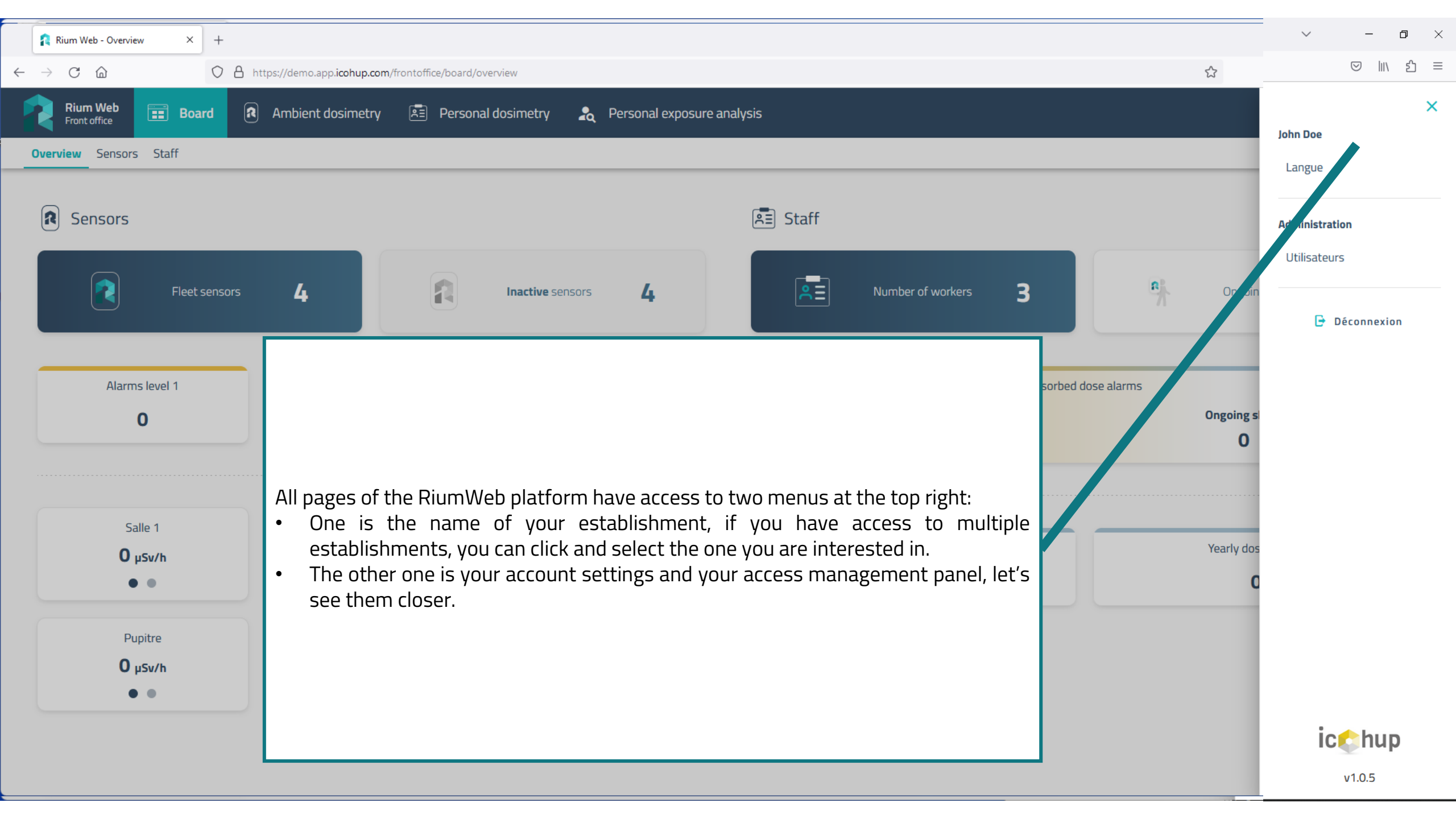
Log in

Forgotten password ?

If you lose your password, click here!



Account Settings



All pages of the RiumWeb platform have access to two menus at the top right:

- One is the name of your establishment, if you have access to multiple establishments, you can click and select the one you are interested in.
- The other one is your account settings and your access management panel, let's see them closer.

Sensors Staff

Fleet sensors 4

Inactive sensors

Choice of language (French/English)

Users management only for supervisors.

Alarms level 1 0

Alarms level 2 0

24-hour alarms 0 L1 0 L2

Last shifts 1

Ongoing shifts 0

Salle 1 0 µSv/h

Salle 2 0.41 µSv/h

Radiamètre 0 µSv/h

Monthly dose alarms 0

Yearly dose alarms 0

Pupitre 0 µSv/h

John Doe

Lingue

Administration

Utilisateurs

Déconnexion





## User list

[+ ADD A USER](#)

Create a new user



Rows per page: 15

Full name ▲	Email	Authorization
Pierre Durand	Pierre-Durand@icohup-test.com	<input checked="" type="checkbox"/>
John Doe	john-doe@icohup-test.com	<input type="checkbox"/>
Odile Doré	Odile-Dore@icohup-test.com	<input checked="" type="checkbox"/>
Jean Dupont	jean-dupont@icohup-test.com	<input checked="" type="checkbox"/>

4 of 4

&lt; 1 &gt;

This is the users list. It is possible to activate/deactivate them. Users can't be deleted to keep track of their actions.



## +👤 Create a user

[☰ BACK TO LIST](#)

### General information

Email



### Additional information

First and last name



Only the name is mandatory, but in order for the employee to have access to his data it is necessary to enter his email address.

There is a choice of different roles. Multiple roles can be selected at the same time. Only RPA and corporate medical advisors can have access to the operational dosimetry data because of the sensibility of individual information.

### Roles and permissions

 **Operational Dosimetry Worker**

Can access his shifts and the shift's data.

 **Ambient dosimetry user**

Can access the ambient dashboard, ambient sensor monitoring, ambient sensor data.

 **Operational Dosimetry User**

Can access individual worker data, operational dosimetry alarm tracking, operational alarm threshold management.

 **Ambient Dosimetry Supervisor**

Can access the ambient dashboard, ambient sensor tracking, ambient sensor data.

 **Operational Dosimetry Supervisor**

Can do everything the operational dosimetry user can do and in addition can create, edit, delete users for their company and manage groups of people.

[Cancel](#)[+ Create](#)



## + Create a user

[BACK TO LIST](#)

### General information



### Additional information



Category



Zone



When the worker's role is chosen, more fields can appear. They are all optional.

### Roles and permissions

**Operational Dosimetry Worker**

Can access his shifts and the shift's data.

**Operational Dosimetry User**

Can access individual worker data, operational dosimetry alarm tracking, operational alarm threshold management.

**Operational Dosimetry Supervisor**

Can do everything the operational dosimetry user can do and in addition can create, edit, delete users for their company and manage groups of people.

**Ambient dosimetry user**

Can access the ambient dashboard, ambient sensor monitoring, ambient sensor data.

**Ambient Dosimetry Supervisor**

Can access the ambient dashboard, ambient sensor tracking, ambient sensor data.

Once you finish, click on "Create".

[Cancel](#)[+ Create](#)

ichup

Dashboards

The main menu with the different modules you have access to

### Sensors

Fleet sensors <b>4</b>	Inactive sensors <b>3</b>
------------------------	---------------------------

Alarms level 1 <b>0</b>	Alarms level 2 <b>0</b>	24-hour alarms <b>1</b> L1 <b>0</b> L2
----------------------------	----------------------------	---

Room 1 <b>0</b> $\mu\text{Sv/h}$	Room 2 <b>0.41</b> $\mu\text{Sv/h}$	Survey meter <b>0</b> $\mu\text{Sv/h}$
-------------------------------------	--	---

Desk  
**0**  $\mu\text{Sv/h}$

### Staff

Number of workers <b>3</b>	Ongoing Shifts <b>0</b>
----------------------------	-------------------------

Absorbed dose alarms	
Last shifts <b>1</b>	Ongoing shifts <b>0</b>

Monthly dose alarms <b>0</b>	Yearly dose alarms <b>0</b>
---------------------------------	--------------------------------



### Sensors

**Fleet sensors** 4

**Inactive sensors** 3

**Your operational dosimeters** 0

**Automatic calculation of individual exposure analyses** 0

Alarms level 1  
0

Alarms level 2  
0

24-hour alarms  
1 L1 0 L2

Your ambient dosimeters, radiation survey meters and portal monitors  
Last shifts 1

Ongoing shifts 0

Room 1  
0  $\mu\text{Sv/h}$

Room 2  
0.41  $\mu\text{Sv/h}$

Survey meter  
0  $\mu\text{Sv/h}$

Monthly dose alarms  
0

Yearly dose alarms  
0

Desk  
0  $\mu\text{Sv/h}$

Automatic calculation of individual exposure analyses

Your operational dosimeters

Your ambient dosimeters, radiation survey meters and portal monitors

Information about your sensor fleet. This is the default selected tab.

Overview Sensors Staff

### Sensors

Fleet sensors **4** Inactive sensors **3**

Alarms level 1 **0** Alarms level 2 **0** 24-hour alarms **1** L1 **0** L2

Room 1 **0**  $\mu\text{Sv/h}$  Room 2 **0.41**  $\mu\text{Sv/h}$  Survey meter **0**  $\mu\text{Sv/h}$

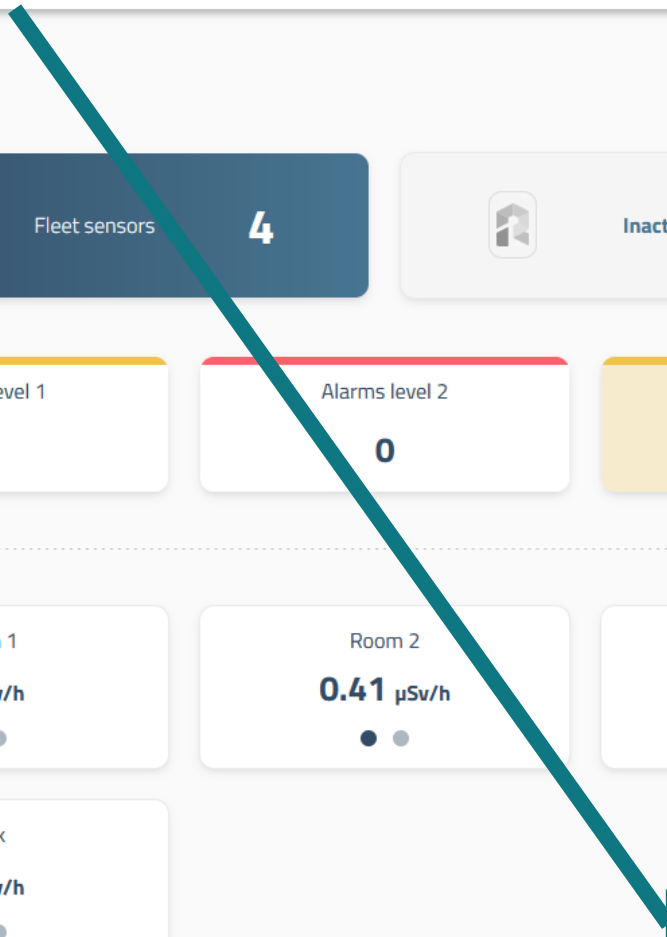
Desk **0**  $\mu\text{Sv/h}$

### Staff

Number of workers **3** Ongoing Shifts **0**

Absorbed dose alarms Last shifts **1** Ongoing shifts **0**

Monthly dose alarms **0** Yearly dose alarms **0**



Sub-menu for navigation between dashboards

### Sensors

Fleet sensors **4**

Inactive sensors **3**

Alarms level 1 **0**

Alarms level 2 **0**

24-hour alarms  
**1** L1 **0** L2

Room 1  
**0**  $\mu\text{Sv/h}$

Room 2  
**0.41**  $\mu\text{Sv/h}$

Survey meter  
**0**  $\mu\text{Sv/h}$

Desk  
**0**  $\mu\text{Sv/h}$

### Staff

Number of workers **3**

Ongoing Shifts **0**


Absorbed dose alarms  
**1** Last shifts **0** Ongoing shifts


Monthly dose alarms **0**

Yearly dose alarms **0**

The overview allows you to see the state of radiological activity of the environment on the left and of workers on the right.



 Fleet sensors **4**

 Inactive sensors **3**

Alarms level 1  
**0**

Alarms level 2  
**0**

24-hour alarms  
**1** L1 **0** L2


Room 1  
**0**  $\mu\text{Sv/h}$   
● ●


Room 2  
**0.21**  $\mu\text{Sv/h}$   
● ●

Survey meter  
**0**  $\mu\text{Sv/h}$   
● ●

Desk  
**0**  $\mu\text{Sv/h}$   
● ●

In this tab, there is only an overview of ambient dosimeters, radiation survey meters and portal monitors.

 **Fleet sensors** **4**

 **Inactive sensors** **3**

Alarms level 1  
**0**

Alarms level 2  
**0**

24-hour alarms  
**1** L1 **0** L2

Room 1  
**0**  $\mu\text{Sv/h}$   
● ●


Room 2  
**0.21**  $\mu\text{Sv/h}$   
● ●


Survey meter  
**0**  $\mu\text{Sv/h}$   
● ●

Desk  
**0**  $\mu\text{Sv/h}$   
● ●

The sensor groups, which can be set by the user, are listed here.

This is the instant average value per sensor group. The data is displayed either in dose rate or in counts per second. Switching from one to the other is possible by clicking on the ●○.

 Number of workers **3**

 Ongoing Shifts **0**

Absorbed dose alarms

Last shifts	Ongoing shifts
<b>1</b>	<b>0</b>

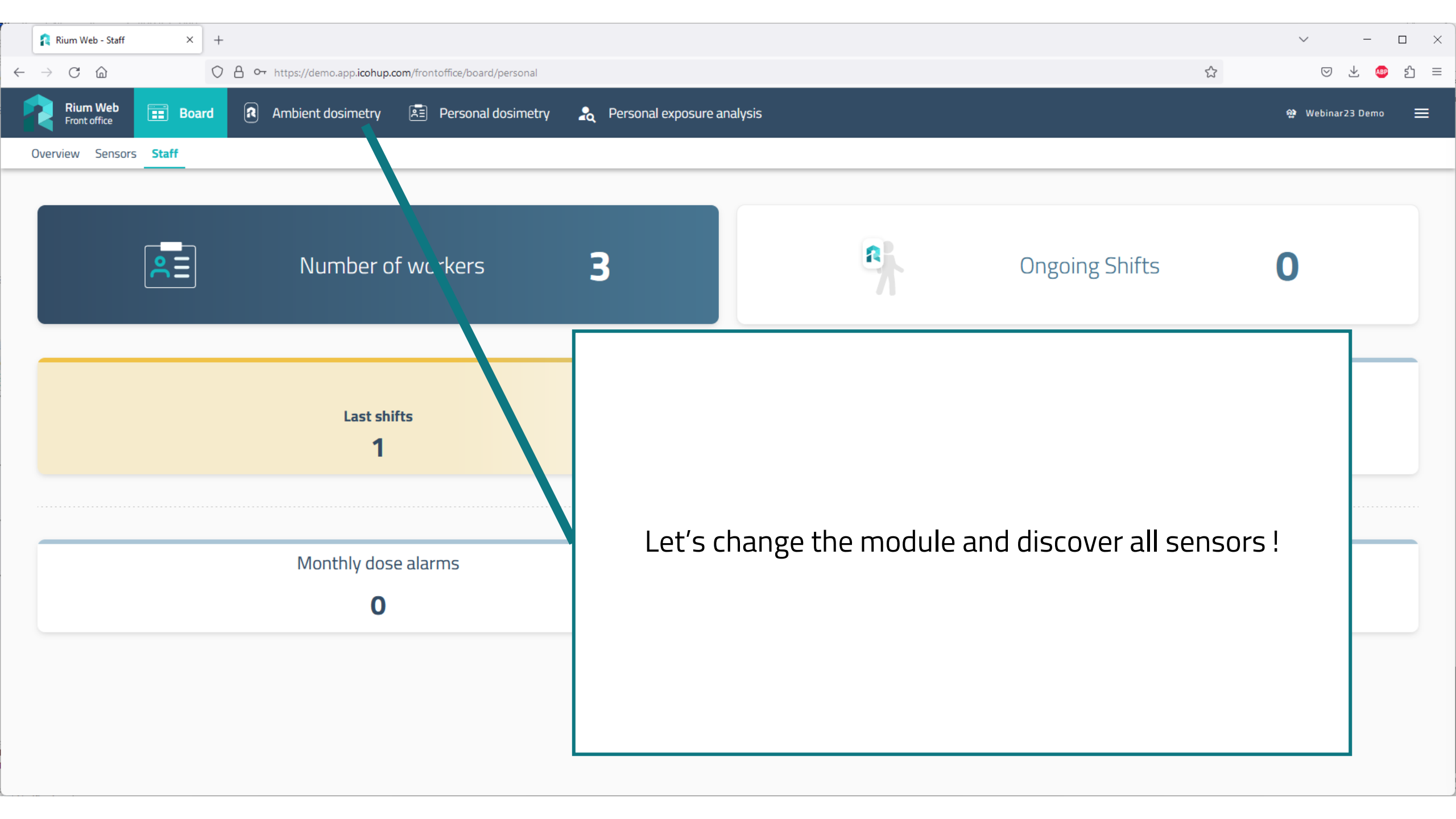
Monthly dose alarms **0**

Yearly dose alarms **0**

In this tab, there is only an overview on the activity of workers using an operational dosimeter.

ic  hup

"Sensors" module



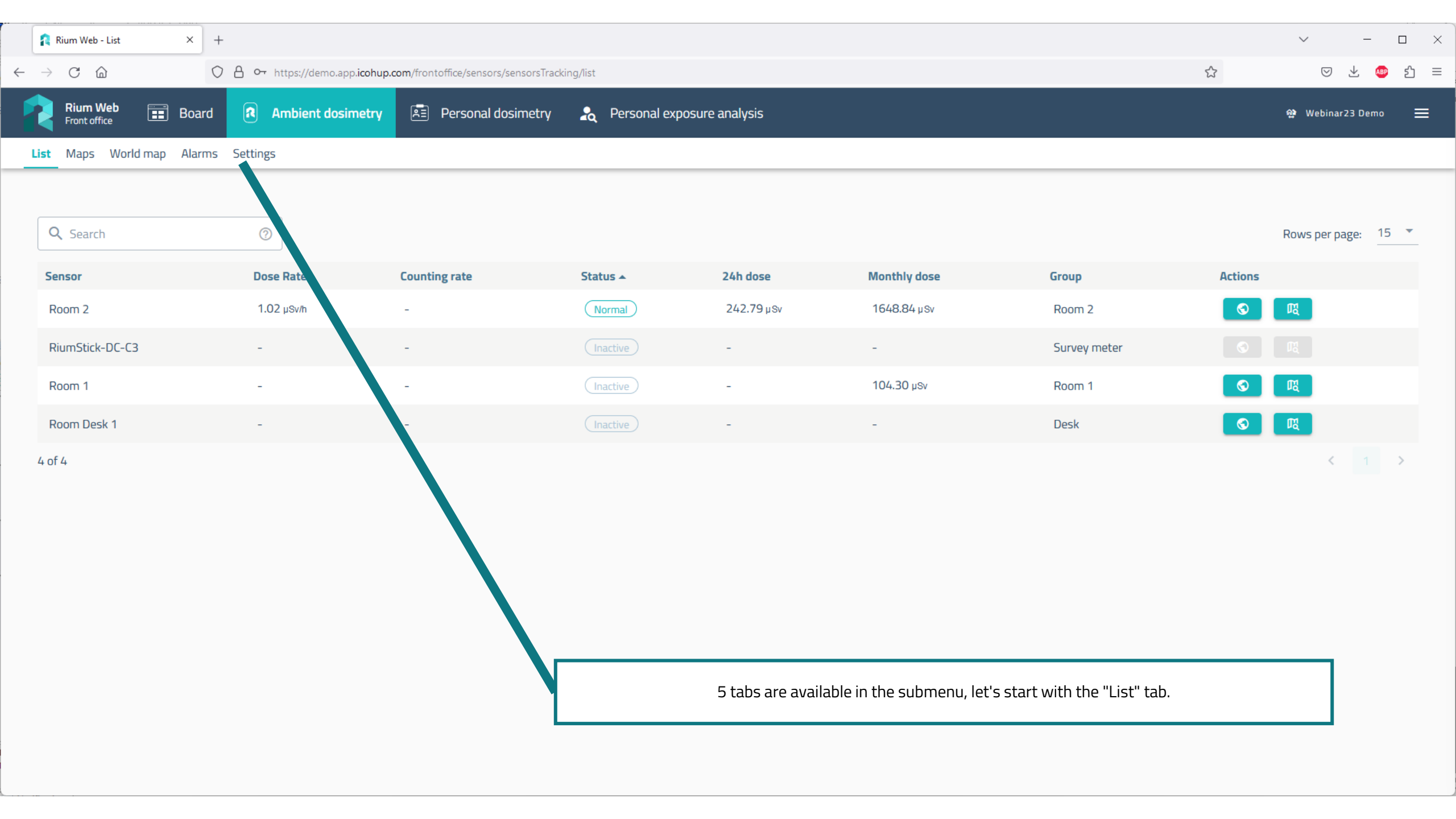
Number of workers **3**

Ongoing Shifts **0**

Last shifts **1**

Monthly dose alarms **0**

Let's change the module and discover all sensors !



Search

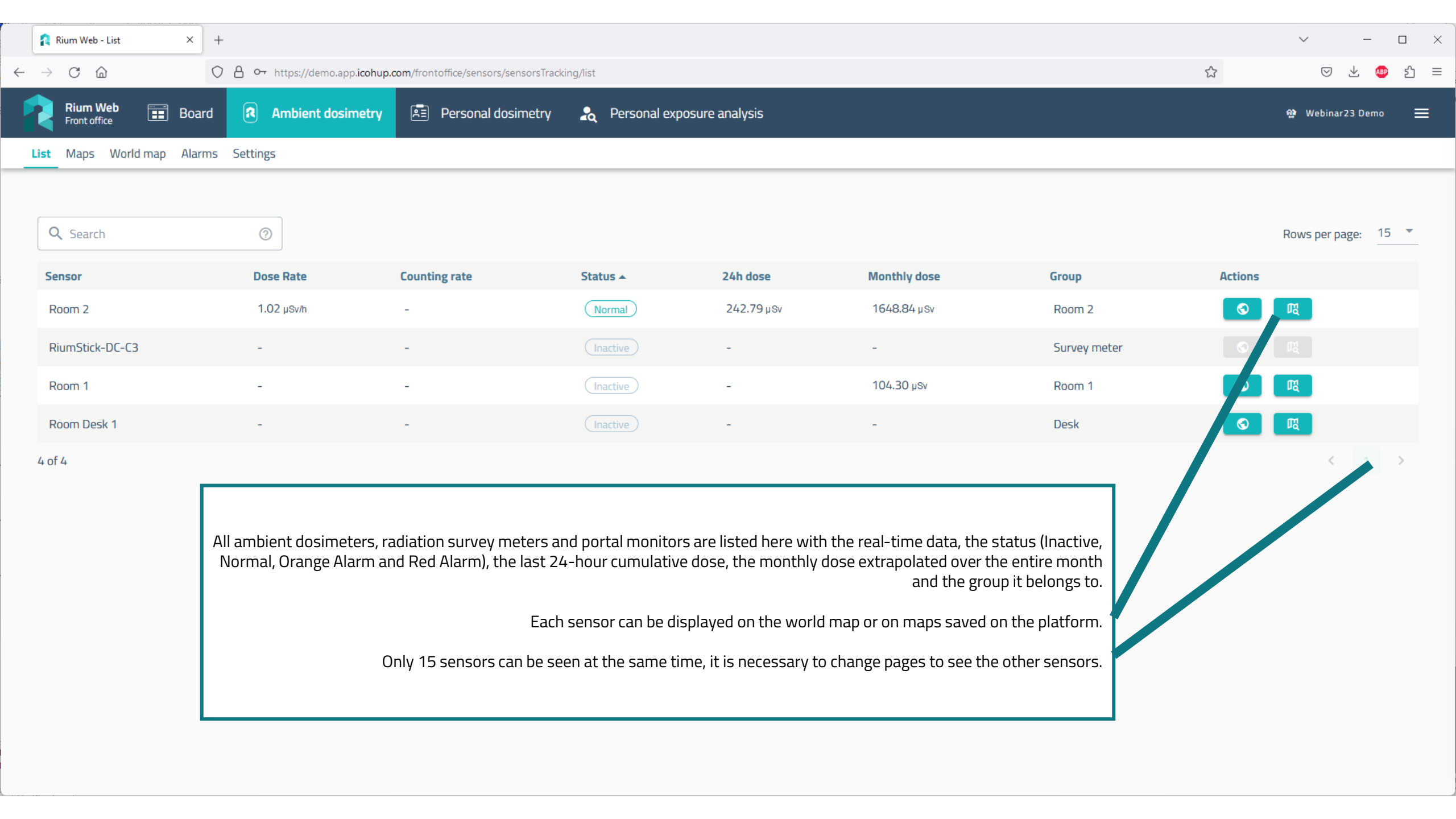
Rows per page: 15

Sensor	Dose Rate	Counting rate	Status	24h dose	Monthly dose	Group	Actions
Room 2	1.02 $\mu$ Sv/h	-	Normal	242.79 $\mu$ Sv	1648.84 $\mu$ Sv	Room 2	
RiumStick-DC-C3	-	-	Inactive	-	-	Survey meter	
Room 1	-	-	Inactive	-	104.30 $\mu$ Sv	Room 1	
Room Desk 1	-	-	Inactive	-	-	Desk	

4 of 4

< 1 >

5 tabs are available in the submenu, let's start with the "List" tab.



Search ?

Rows per page: 15

Sensor	Dose Rate	Counting rate	Status ▲	24h dose	Monthly dose	Group	Actions
Room 2	1.02 $\mu\text{Sv/h}$	-	Normal	242.79 $\mu\text{Sv}$	1648.84 $\mu\text{Sv}$	Room 2	
RiumStick-DC-C3	-	-	Inactive	-	-	Survey meter	
Room 1	-	-	Inactive	-	104.30 $\mu\text{Sv}$	Room 1	
Room Desk 1	-	-	Inactive	-	-	Desk	

4 of 4

All ambient dosimeters, radiation survey meters and portal monitors are listed here with the real-time data, the status (Inactive, Normal, Orange Alarm and Red Alarm), the last 24-hour cumulative dose, the monthly dose extrapolated over the entire month and the group it belongs to.

Each sensor can be displayed on the world map or on maps saved on the platform.

Only 15 sensors can be seen at the same time, it is necessary to change pages to see the other sensors.

Search ?

Rows per page: 15

Sensor	Dose Rate	Counting rate	Status ▲	24h dose	Monthly dose	Group	Actions
Room 2	1.02 $\mu\text{Sv/h}$	-	Normal	242.79 $\mu\text{Sv}$	1648.84 $\mu\text{Sv}$	Room 2	
RiumStick-DC-C3	-	-	Inactive	-	-	Survey meter	
Room 1	-	-	Inactive	-	104.30 $\mu\text{Sv}$	Room 1	
Room Desk 1	-	-	Inactive	-	-	Desk	

4 of 4

< 1 >

**Cumulative Dose Extrapolation:**

The advantage of connected dosimetry is to avoid incidents involving the people health and the environment by anticipating exposures.

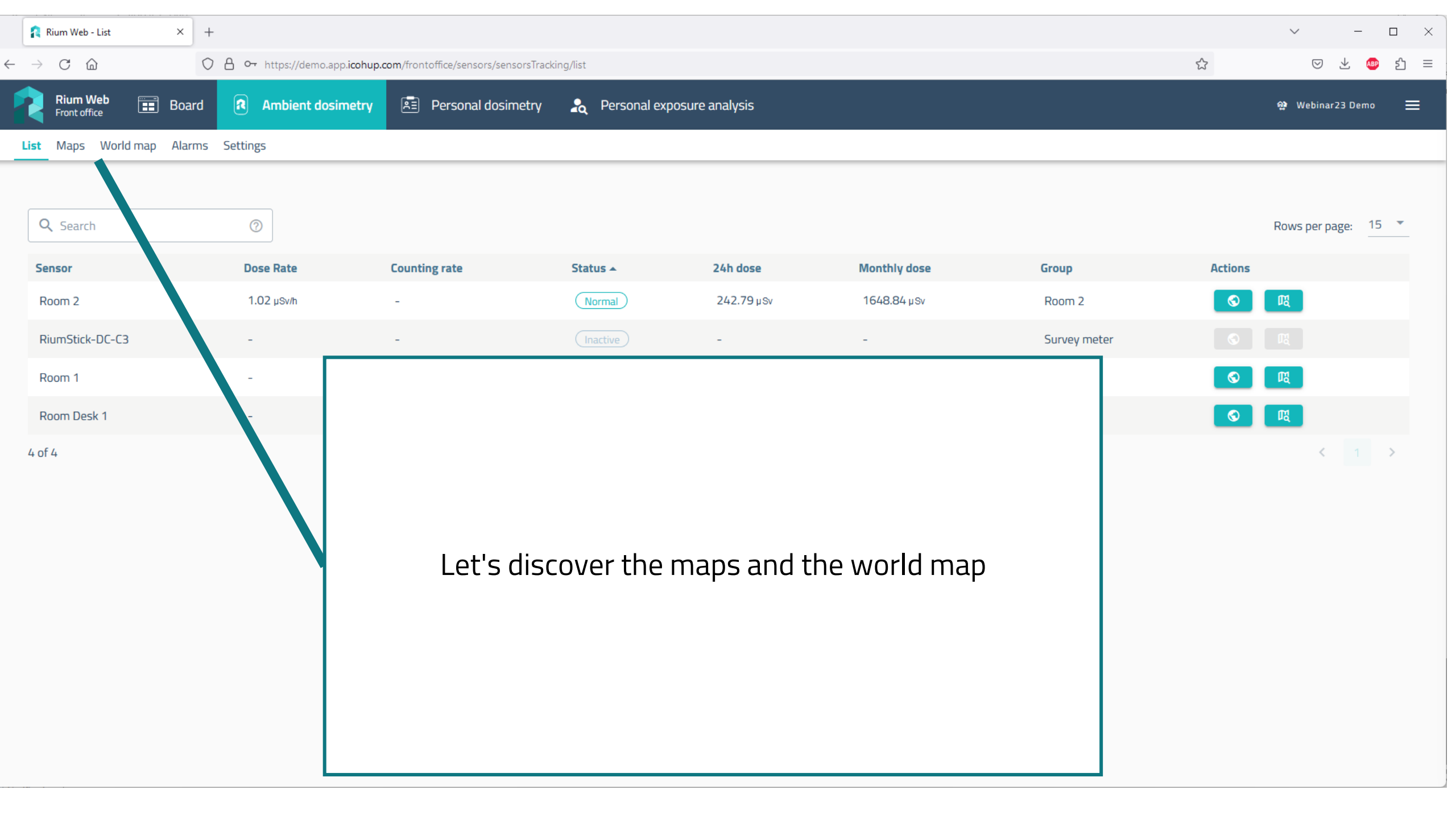
We have chosen to display the monthly dose recalculated over the entire month assuming an identical activity at the end of the month.

Two examples:

- On the 10th of the month, the sensor has been active 30% of the month, the dose measured from the 1st to the 10th is multiplied by 3 to give an extrapolation of the dose for the month.
- If the sensor has been active 80% of the time (and unplugged the remaining 20%), the measured dose is multiplied by (1/80%).

This allows us to anticipate a drift in radiological activity.





Rows per page: 15

Sensor	Dose Rate	Counting rate	Status	24h dose	Monthly dose	Group	Actions
Room 2	1.02 $\mu\text{Sv/h}$	-	Normal	242.79 $\mu\text{Sv}$	1648.84 $\mu\text{Sv}$	Room 2	
RiumStick-DC-C3	-	-	Inactive	-	-	Survey meter	
Room 1	-	-					
Room Desk 1	-	-					

4 of 4

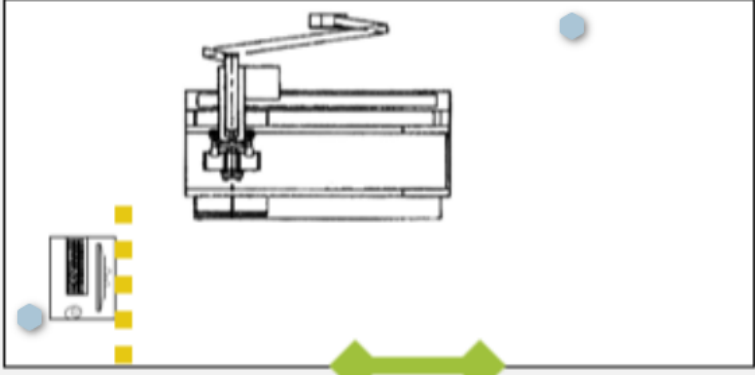
< 1 >

Let's discover the maps and the world map

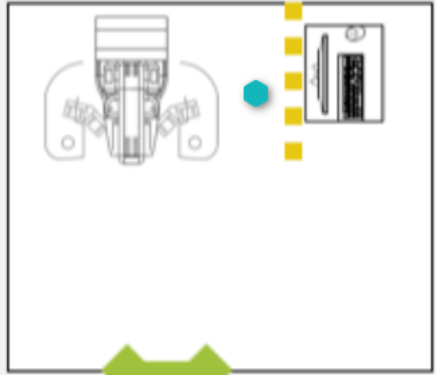
Map list  
Webinar23 Demo Map

Several maps may be available (rooms, buildings,...)

Salle 1



Salle 2



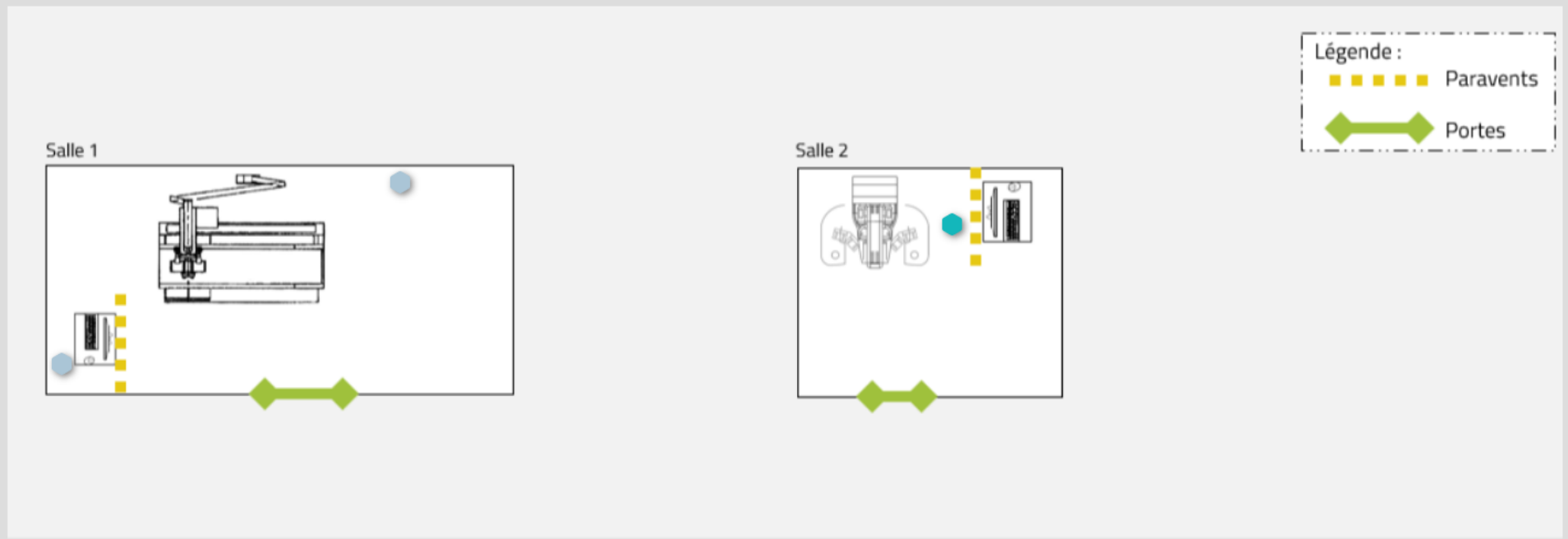
Légende :

- ■ ■ ■ ■ Paravents
- ↔ Portes



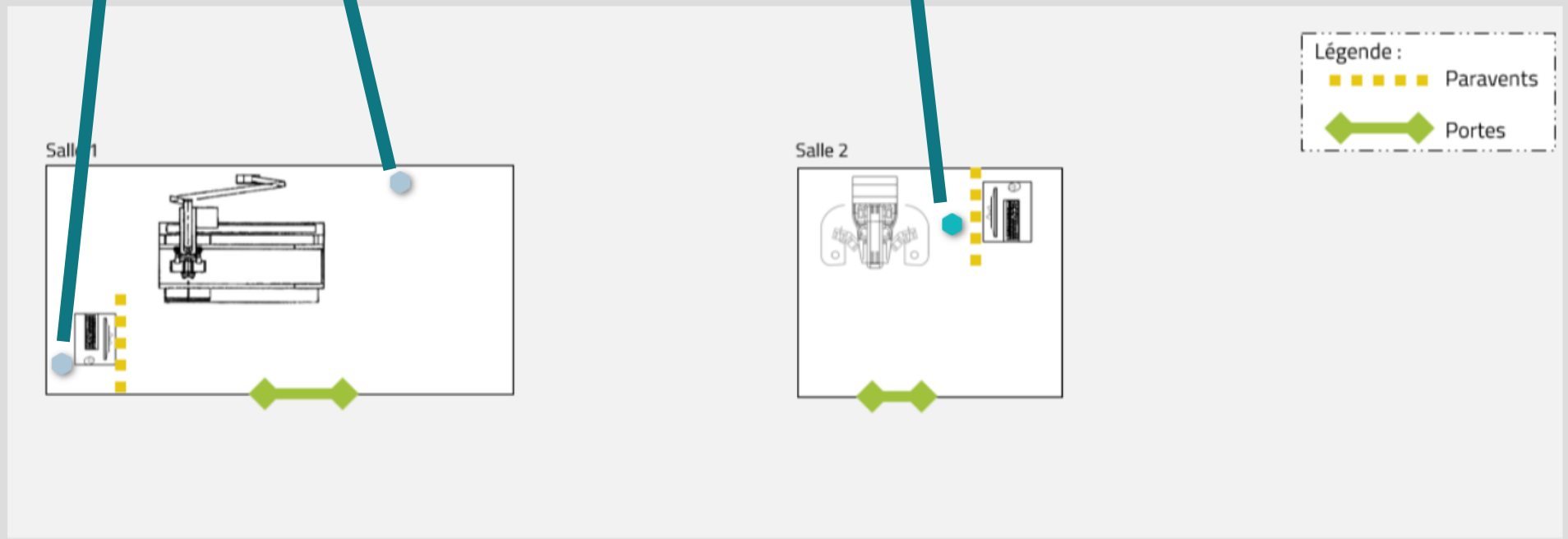
Map list  
Webinar23 Demo Map


Maps are images provided by the client or the installer. There are no limitation on the graphic charter or symbols.



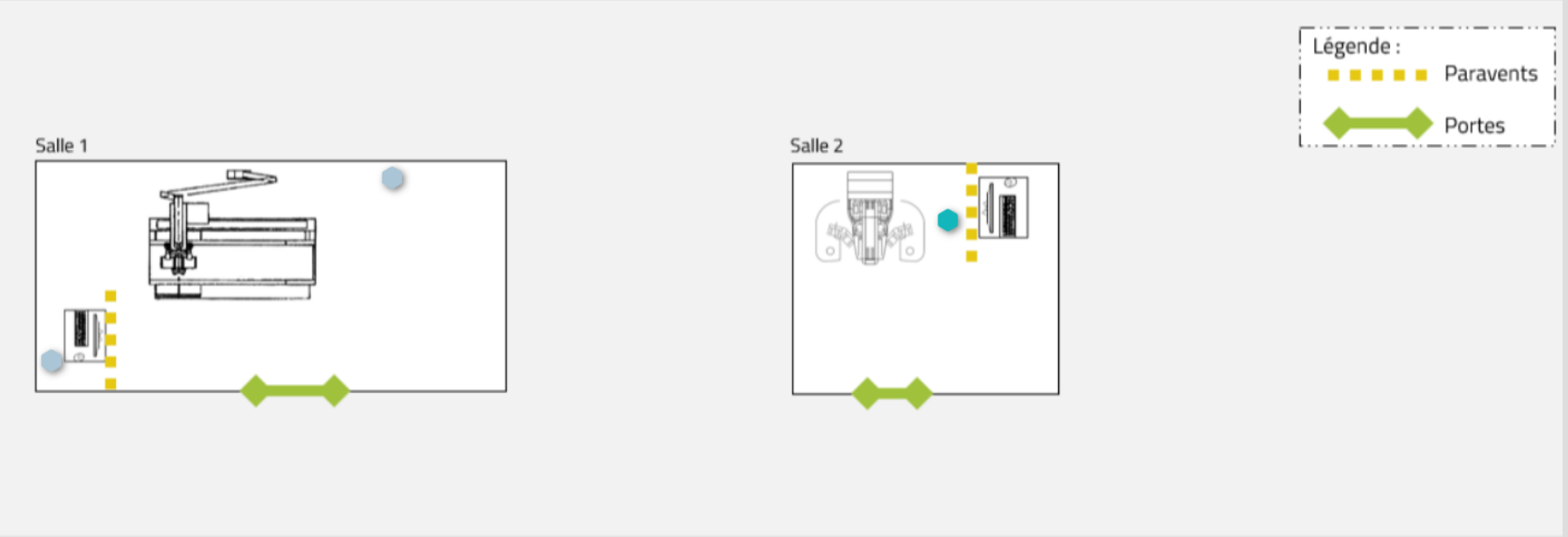
Map list  
Webinar23 Demo Map ▾ 🗺️

All sensors are represented by these hexagons, blue when the sensor is active, gray when it is inactive.



Map list  
Webinar23 Demo Map 

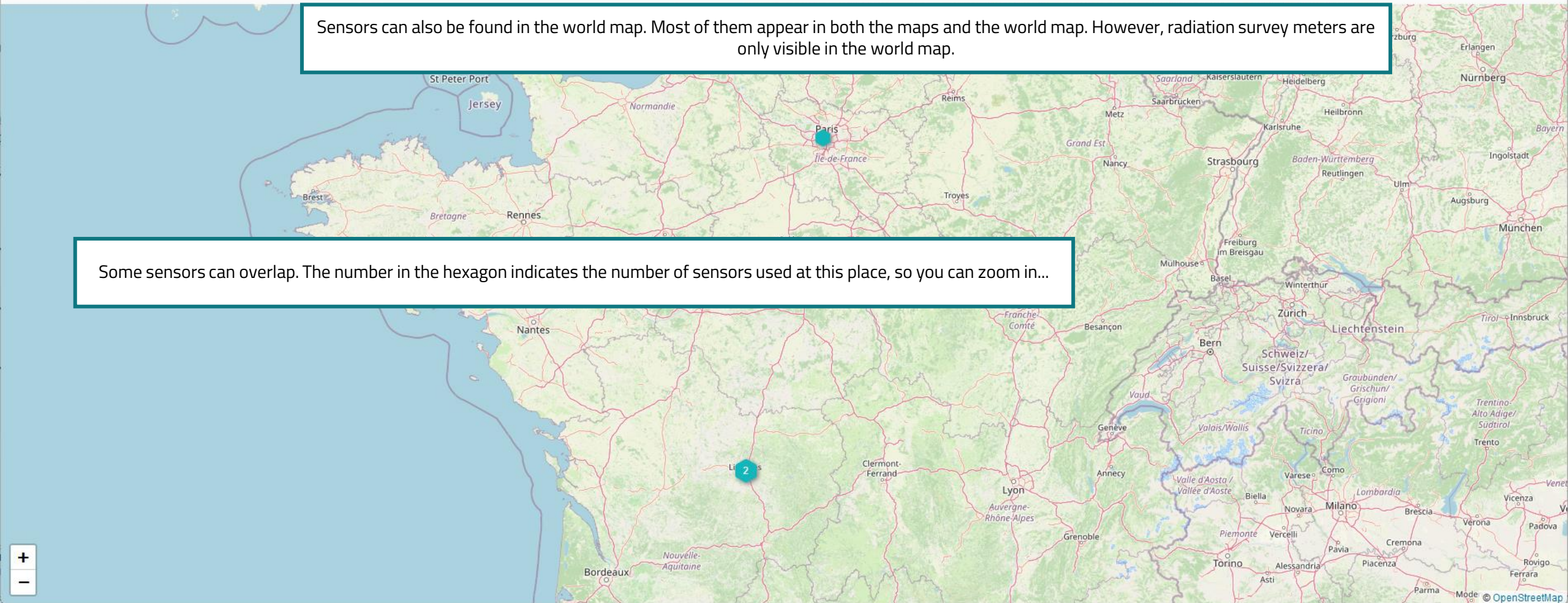
Let's move on to the world map



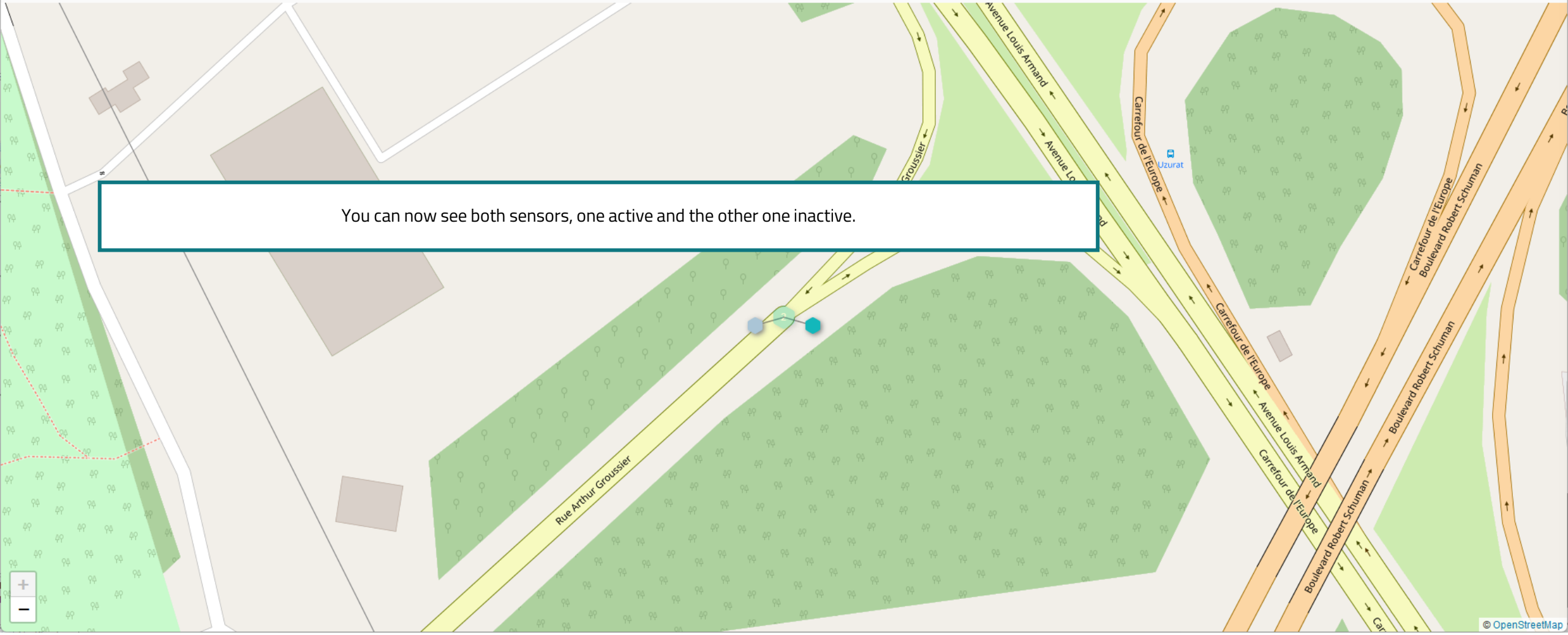


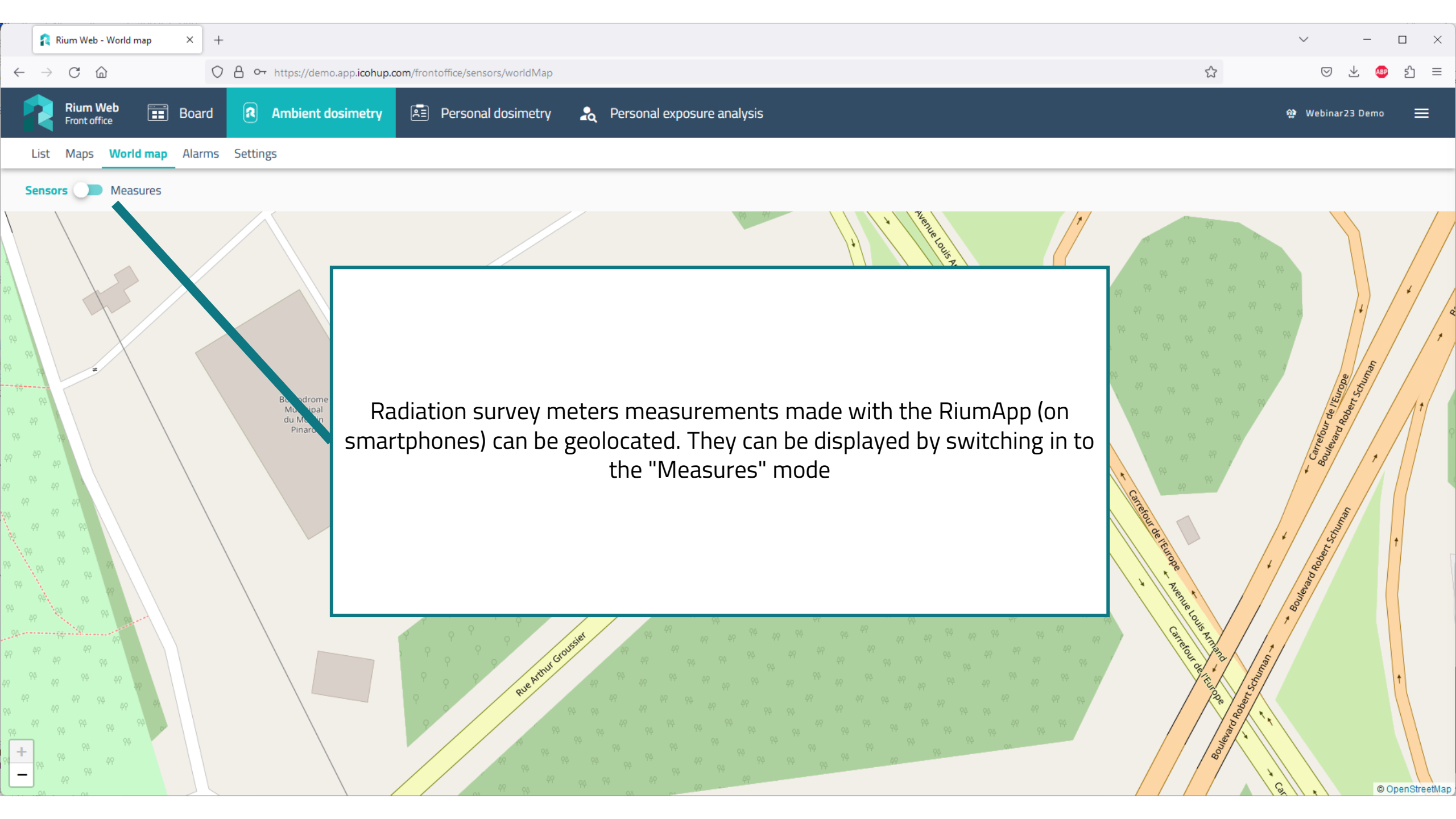
Sensors can also be found in the world map. Most of them appear in both the maps and the world map. However, radiation survey meters are only visible in the world map.

Some sensors can overlap. The number in the hexagon indicates the number of sensors used at this place, so you can zoom in...



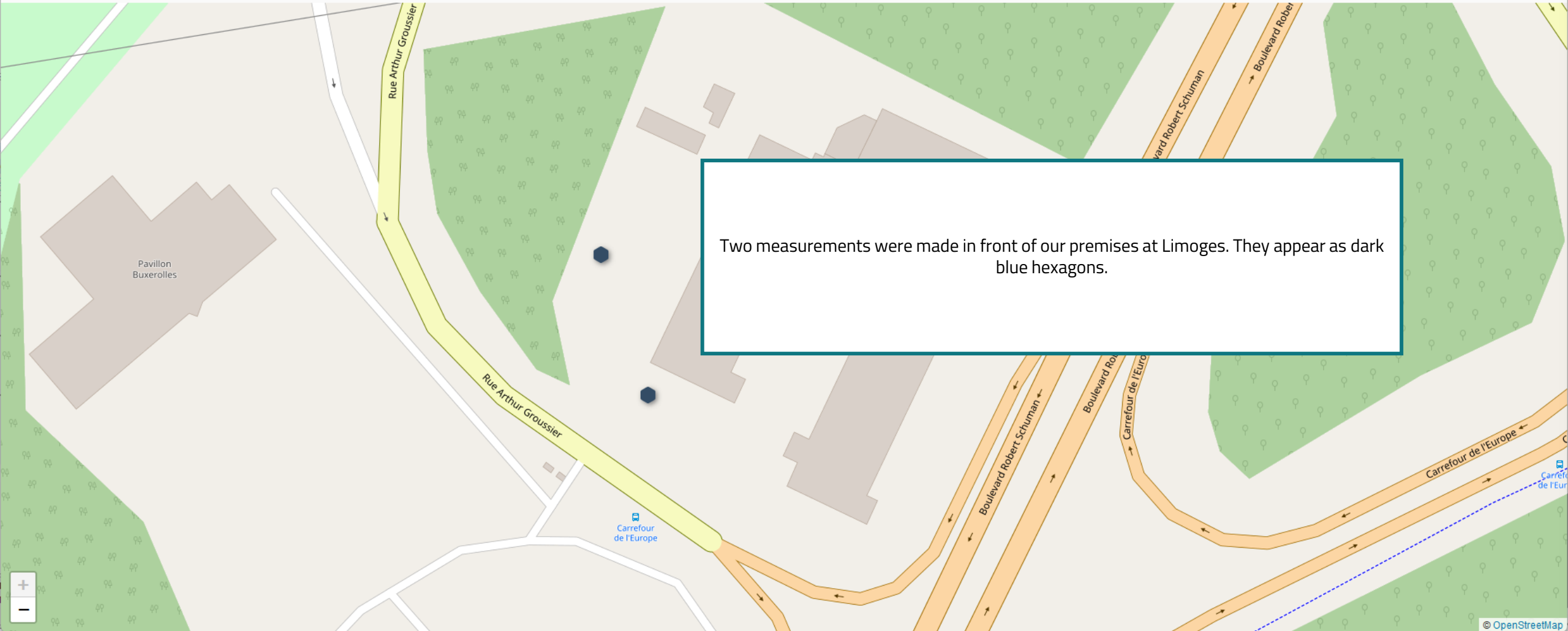
You can now see both sensors, one active and the other one inactive.



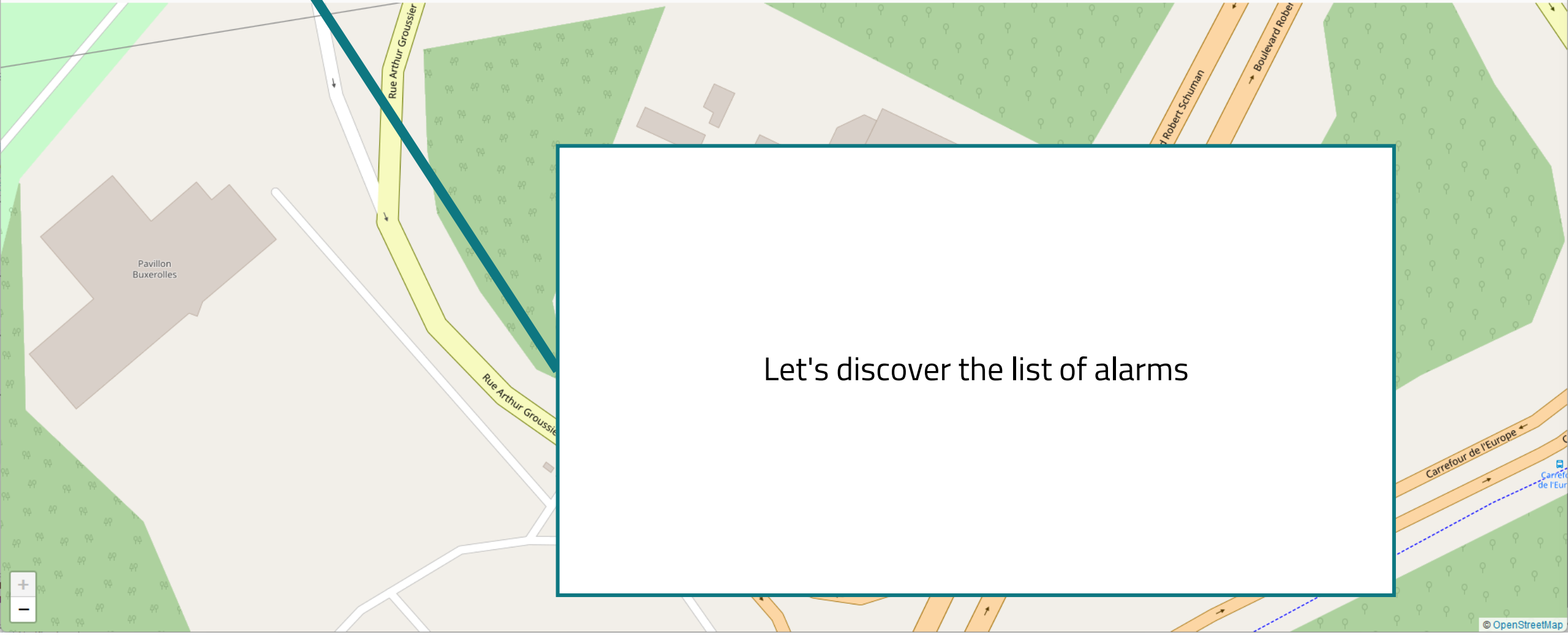


Radiation survey meters measurements made with the RiumApp (on smartphones) can be geolocated. They can be displayed by switching in to the "Measures" mode





Two measurements were made in front of our premises at Limoges. They appear as dark blue hexagons.



Let's discover the list of alarms

### Last 24 hours alarms

Each alarm is listed here with the timestamp, the sensor name, the type (dose rate or count rate), the trigger value, the threshold value when the alarm was activated, the alarm status (Warning in Orange or Alert in Red), and the group it belongs to.

Multiple pages may be required.

Refresh

Rows per page: 15

Date	Sensor	Type	Value	Threshold	Status	Group	Processed	Comment
Jan 15, 2024, 3:21 PM	Room 2	Dose rate	20.71 $\mu$ Sv/h	20 $\mu$ Sv/h	Warn	Room 2	<input type="checkbox"/>	<input type="text"/>

0 / 255

### Last 24 hours alarms

It is possible to sort the list by clicking on the column heading. Searching the sensors is also possible (e.g. on sensor names).

Refresh

Rows per page: 15

Date	Sensor	Type	Value	Threshold	Status	Group	Processed	Comment
Jan 15, 2024, 3:21 PM	Room 2	Dose rate	20.71 $\mu$ Sv/h	20 $\mu$ Sv/h	Warn	Room 2	<input type="checkbox"/>	<input type="text"/>

### Last 24 hours alarms

Refresh

Rows per page: 15

Date	Sensor	Type	Value	Threshold	Status	Group	Processed	Comment
Jan 15, 2024, 3:21 PM	Room 2	Dose rate	20.71 $\mu$ Sv/h	20 $\mu$ Sv/h	Warn	Room 2	<input type="checkbox"/>	<input type="text"/>

1 of 1

...  
and may be checked as "processed".

Each line can be commented to report the reasons for exceeding the threshold  
...

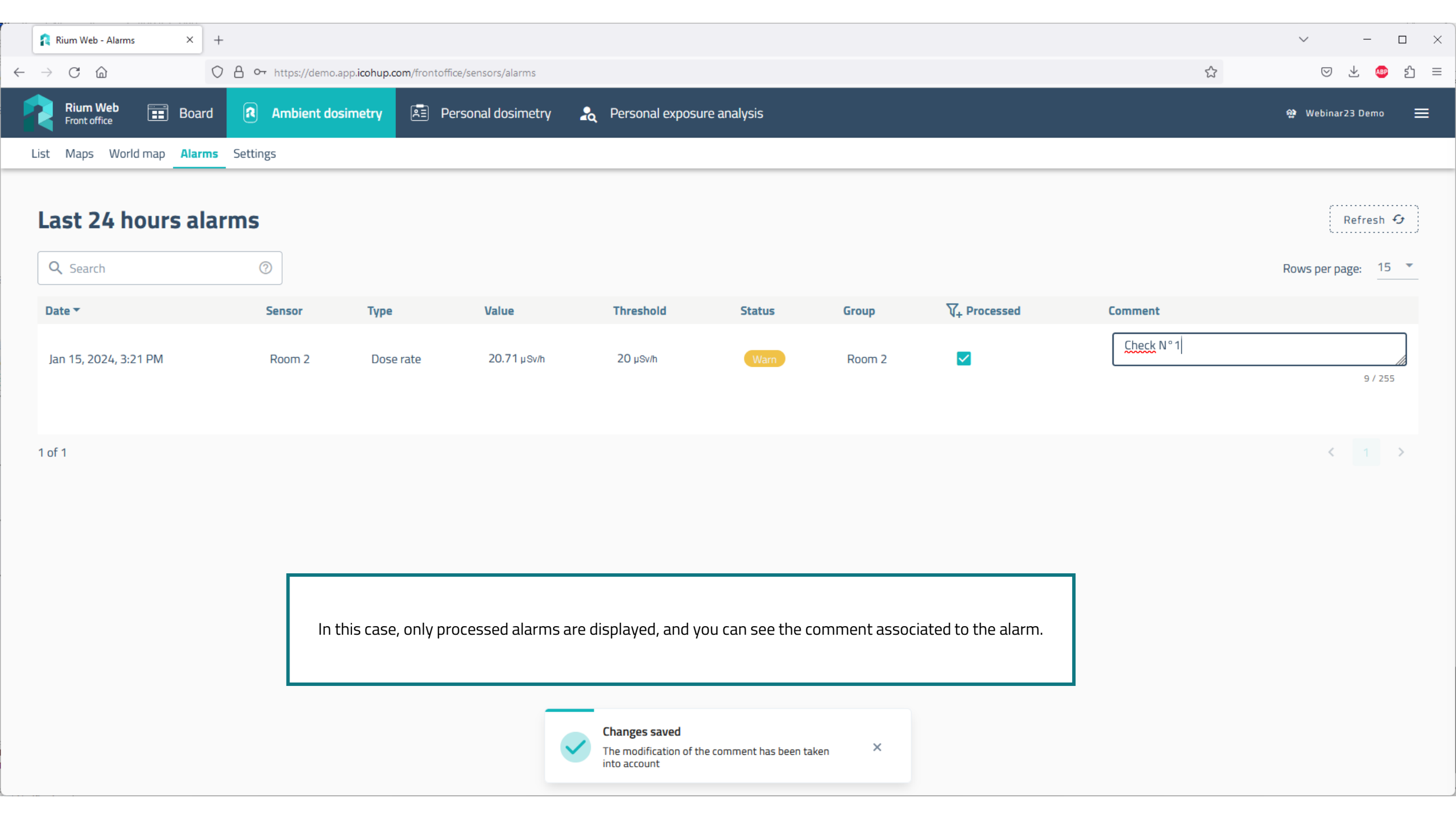
### Last 24 hours alarms

Refresh

Rows per page: 15

Date	Sensor	Type	Value	Threshold	Status	Group	Processed	Comment
						Room 2	All Processed Unprocessed	<input type="text"/>

The filter can then be used to display only one category.



## Last 24 hours alarms

Refresh

Search

Rows per page: 15

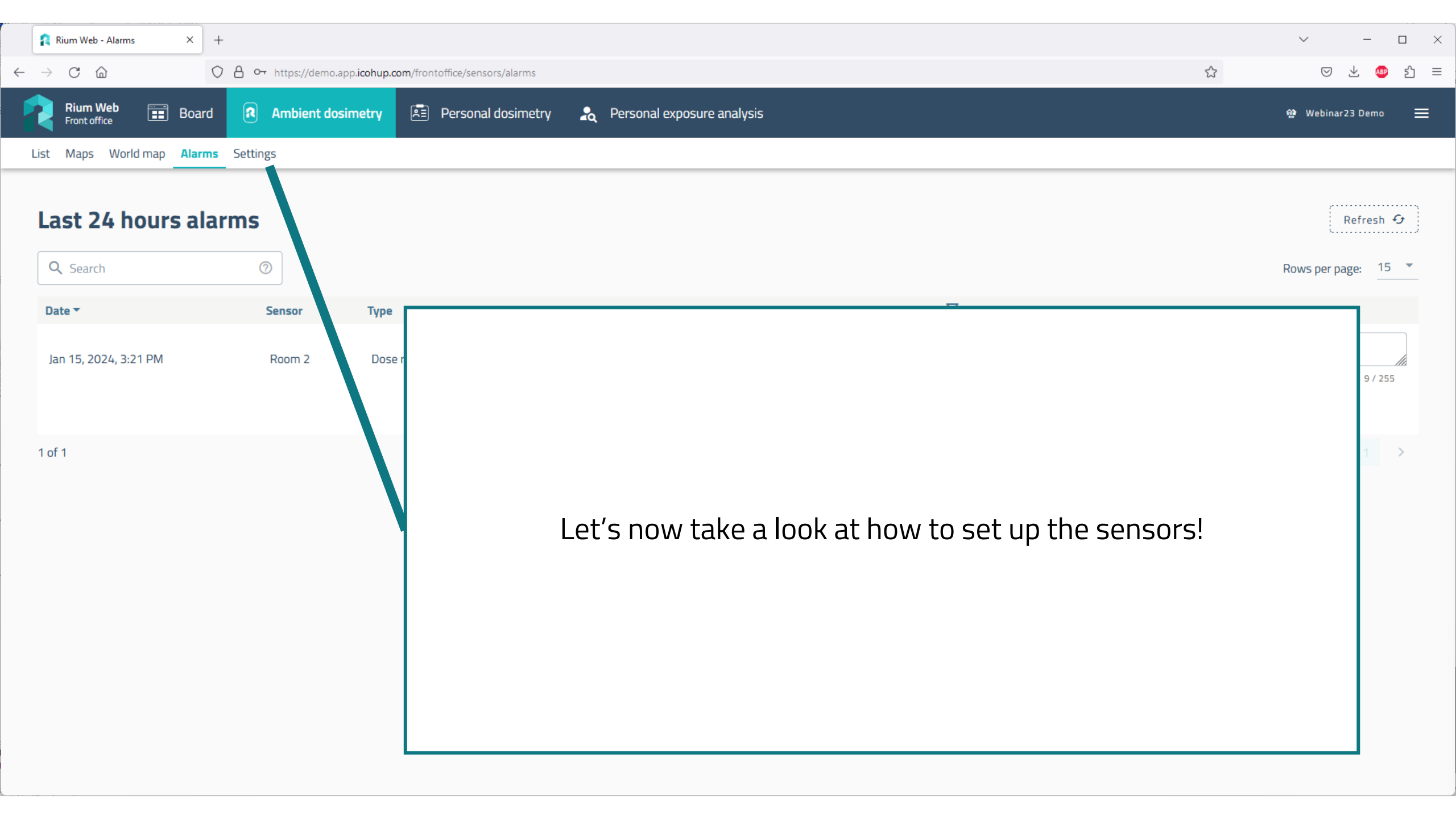
Date	Sensor	Type	Value	Threshold	Status	Group	Processed	Comment
Jan 15, 2024, 3:21 PM	Room 2	Dose rate	20.71 µSv/h	20 µSv/h	Warn	Room 2	<input checked="" type="checkbox"/>	<input type="text" value="Check N° 1"/>

1 of 1

< 1 >

In this case, only processed alarms are displayed, and you can see the comment associated to the alarm.

**Changes saved**  
The modification of the comment has been taken into account



## Last 24 hours alarms

Rows per page: 15

Date	Sensor	Type
Jan 15, 2024, 3:21 PM	Room 2	Dose r

1 of 1

Let's now take a look at how to set up the sensors!



### Global settings










Select groups  
Group

Counting rate  
Cps Level 1 Level 2

Dose rate  
 $\mu$ Sv/h Level 1 Level 2

Apply

Add a new group +

- > Room 1  
- > Room 2  
- > Survey meter  
- > Desk  
- > Unlinked sensors 

It is possible to: create, delete and modify groups of sensors,

### Global settings










Select groups  
Group

Counting rate  
Cps Level 1 Level 2

Dose rate  
µSv/h Level 1 Level 2

Apply

Add a new group +

- > Room 1  
- > Room 2  
- > Survey meter  
- > Desk  
- > Unlinked sensors 

and access sensors that are not, or not yet, linked to a group.

### Global settings

Select groups

Counting rate

Dose rate

Apply

Add a new group +

- > Room 1
- > Room 2
- > Survey meter
- > Desk
- > Unlinked sensors

Let's open a group by clicking on its name...

### Global settings

Select groups

Counting rate  
Cps | Level 1 | Level 2

Dose rate  
µSv/h | Level 1 | Level 2

Apply

Add a new group +

- > Room 1 ✎ 🗑
- > Room 2 ✎ 🗑
- > Survey meter ✎ 🗑
- > Desk ✎ 🗑
- > Unlinked sensors ✎

### Global settings


Select groups  
Group

Counting rate  
Cps | Level 1 | Level 2

Dose rate  
 $\mu\text{Sv/h}$  | Level 1 | Level 2


Apply

Add a new group +

Room 1		Counting rate		Dose rate		Comment	Actions
Name		Cps		$\mu\text{Sv/h}$			
 Room 1		Level 1	Level 2	Level 1 20	Level 2 2000		 

0 / 255

1 of 1 Rows per page: 15

> Room 2  

> Survey meter  

🔍 Search ?

This is the name of the sensor. In this case, there is only 1 sensor in the group named as the group.

**Global settings**

Select groups  
Group ▾

Counting rate  
Cps Level 1 Level 2  
µSv/h Level 1 Level 2

Apply

Setting the alarma thresholds. It must be left blank if no alarm is necessary.

**Add a new group**

Comment (examples: sensor specific position, reason for choice of alarm thresholds,...)

Name	Counting rate	Dose rate	Comment	Actions
Room 1	Cps Level 1 Level 2	µSv/h Level 1: 20 Level 2: 2000		✎ 🗑️
Room 2				✎ 🗑️
Survey meter				✎ 🗑️

Select groups

Group

Counting rate

Cps Level 1 Level 2




Dose rate

$\mu\text{Sv/h}$  Level 1 Level 2

Apply

Add a new group

Room 1

Name	Counting rate	Dose rate	Comment	Actions
 Room 1	Cps Level 1 Level 2	$\mu\text{Sv/h}$ Level 1: 20 Level 2: 2000		 

Click on this button to place the sensor in another group.

Click on this button to unpair the sensor from the group. It will then appear in the list of unlinked sensors.

Room 2

Survey meter

Desk

Unlinked sensors

Select groups:

Counting rate:

Dose rate:

Add a new group

Name	Counting rate	Dose rate	Comment	Actions
<input type="button" value="Room 1"/>	<input type="text" value="Cps"/> <input type="text" value="Level 1"/> <input type="text" value="Level 2"/>	<input type="text" value="µSv/h"/> <input type="text" value="40"/> <input checked="" type="checkbox"/> <input type="text" value="2000"/>	<input type="text"/>	<input type="button" value="edit"/> <input type="button" value="delete"/>

All changes are confirmed by a pop-up at the bottom of the page that disappears after a few seconds.

- > Room 2
- > Survey meter
- > Desk
- > Unlinked sensors

**Changes saved**  
The threshold has been edited



Select groups  
Group

Counting rate  
Cps | Level 1 | Level 2

Dose rate  
µSv/h | Level 1 | Level 2

Apply

Add a new group

Room 1

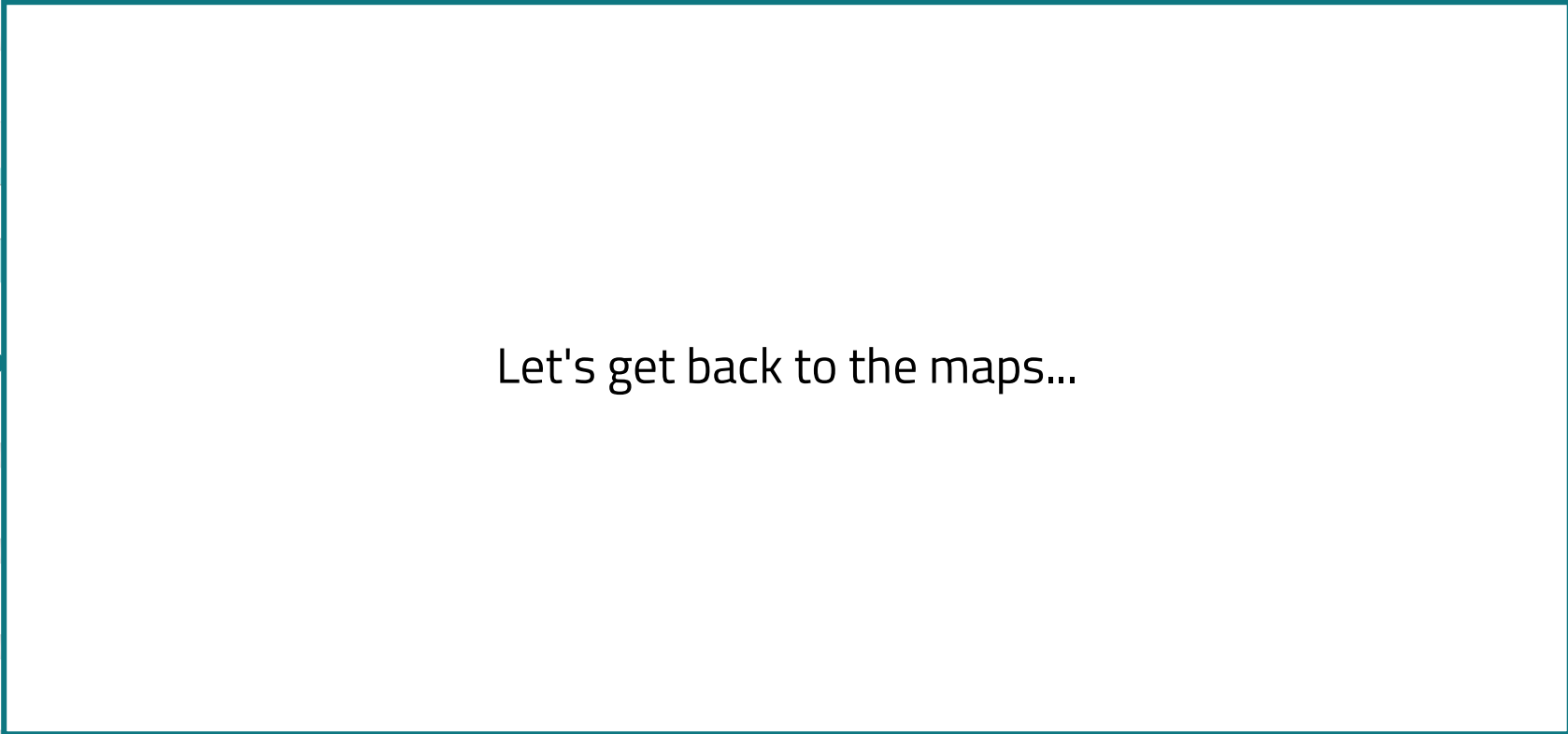
Name	Counting rate
Room 1	Cps   Level 1   Level 2

1 of 1 Rows per page: 15

Room 2

Survey meter

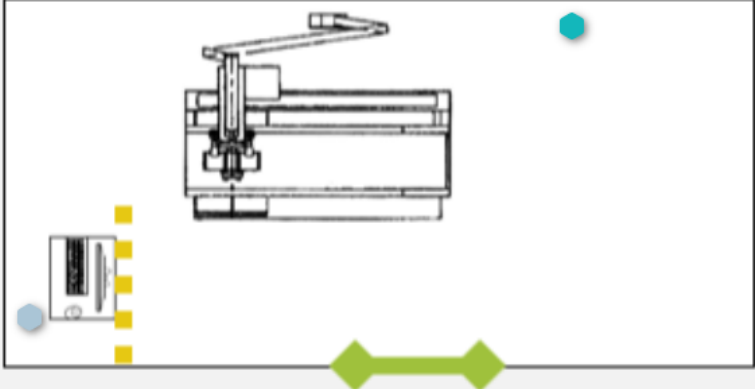
Desk



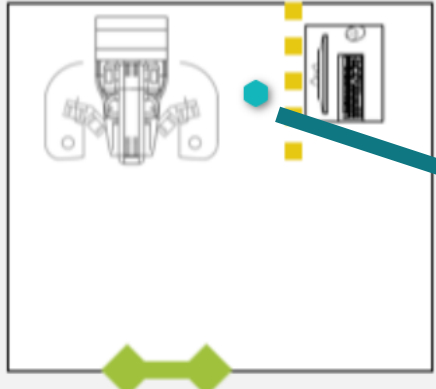
Let's get back to the maps...

Changes saved  
The threshold has been edited

Salle 1



Salle 2



And let's choose the dosimeter in Room 2.  
(You can also choose it from the sensors list or the world map)



Sensor

## Room 2

Past 24H dose

**~36.88  $\mu$ Sv**

Dose rate thresholds

Threshold L1 **20  $\mu$ Sv/h**

Threshold L2 **2000  $\mu$ Sv/h**

Dose rate

**0.41  $\mu$ Sv/h**

> Alarm History

> Measurements History

▼ Data and charts

In real time  Time range

From

15 / 01 / 2024

16:19:35

To

15 / 01 / 2024

16:29:35

Export

Export 1 Year

Create A Measurement

Dosimetry

Dose over the period : 63.78 nSv

Sensor

# Room 2

Past 24H dose  
**~36.88  $\mu$ Sv**

Dose rate thresholds

Threshold L1 **20  $\mu$ Sv/h**  
Threshold L2 **2000  $\mu$ Sv/h**

Dose rate  
**0.41  $\mu$ Sv/h**

You can access the sensor's details with all the data collected: Name, alarm thresholds, real time measurements, the last 24H cumulative dose, the list of all the sensor's alarms, the list of all measurements, a chart with all the sensor's data, the monthly dose.

> Alarm History

> Measurements History

▼ Data and charts

In real time  Time range

From

15 / 01 / 2024

16:19:35

To

15 / 01 / 2024

16:29:35

Export

Export 1 Year

Create A Measurement

Dosimetry

Dose over the period : 63.78 nSv



Sensor

Room 2

Past 24H dose  
~36.53  $\mu\text{Sv}$

Dose rate thresholds

Threshold L1 20  $\mu\text{Sv/h}$   
Threshold L2 2000  $\mu\text{Sv/h}$

Dose rate  
0.61  $\mu\text{Sv/h}$

When opening the alarm history, you can find each alarm detail.

Alarm History



Date	Value	Threshold	Alarm	Actions
Jan 15, 2024, 3:21 PM	20.71 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	🔍
Nov 4, 2023, 2:35 PM	21.73 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	🔍
Nov 4, 2023, 9:03 AM	20.09 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	🔍
Nov 3, 2023, 1:40 PM	22.75 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	🔍
Nov 3, 2023, 11:54 AM	22.55 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	🔍
Oct 30, 2023, 6:46 AM	27.88 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	🔍
Oct 27, 2023, 5:25 PM	20.29 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	🔍
Oct 27, 2023, 5:24 PM	20.09 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	🔍
Oct 27, 2023, 5:24 PM	23.57 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	🔍
Oct 27, 2023, 5:22 PM	22.55 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	🔍

Sensor  
**Room 2**  
Past 24H dose  
**~36.53  $\mu\text{Sv}$**

Dose rate thresholds  
Threshold L1 **20  $\mu\text{Sv/h}$**   
Threshold L2 **2000  $\mu\text{Sv/h}$**   
Dose rate  
**0.61  $\mu\text{Sv/h}$**

Click on this button to access data when the alarm was triggered.

Alarm History

Date	Value	Threshold	Alarm	Actions
Jan 15, 2024, 3:21 PM	20.71 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	
Nov 4, 2023, 2:35 PM	21.73 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	
Nov 4, 2023, 9:03 AM	20.09 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	
Nov 3, 2023, 1:40 PM	22.75 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	
Nov 3, 2023, 11:54 AM	22.55 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	
Oct 30, 2023, 6:46 AM	27.88 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	
Oct 27, 2023, 5:25 PM	20.29 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	
Oct 27, 2023, 5:24 PM	20.09 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	
Oct 27, 2023, 5:24 PM	23.57 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	
Oct 27, 2023, 5:22 PM	22.55 $\mu\text{Sv/h}$	20 $\mu\text{Sv/h}$	Warning	

Data and charts

In real time  Time range

From

15 / 01 / 2024



15:50:34

To

15 / 01 / 2024



15:55:39

Export

Export 1 Year

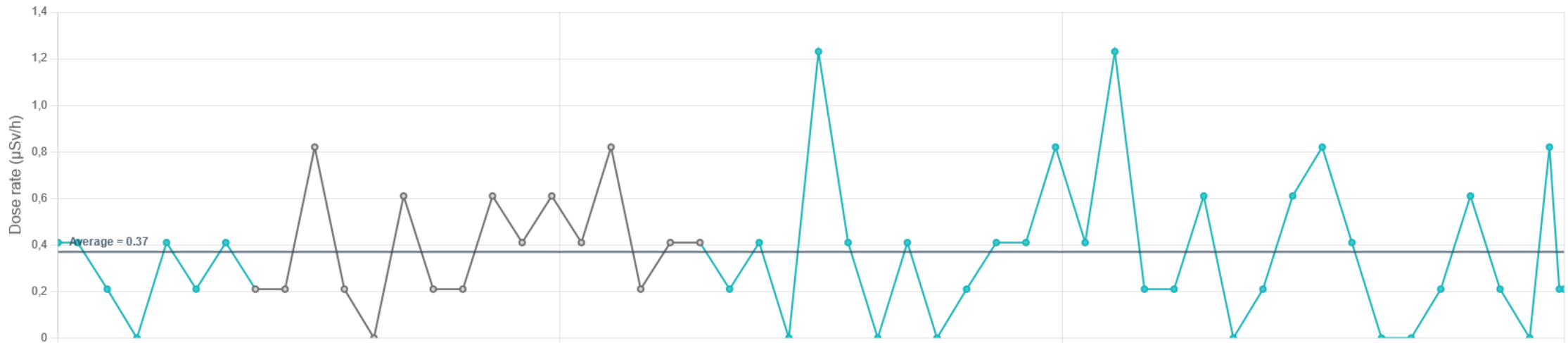
Create A Measurement

Dosimetry



Enable zoom

Dose over the period : 31.09 nSv



You can see all the data collected from the sensor in this chart. The data granularity depends on the zoom and the data disclosure.

All data collected in real time are in blue, all data collected afterwards are in grey (offline mode, for example, when there is no WIFI or there is a server update) and periods of inactivity are in black (unplugged dosimeters).

▼ Data and charts

In real time  Time range

From 15 / 01 / 2024 15:50:34 To 15 / 01 / 2024 15:55:39

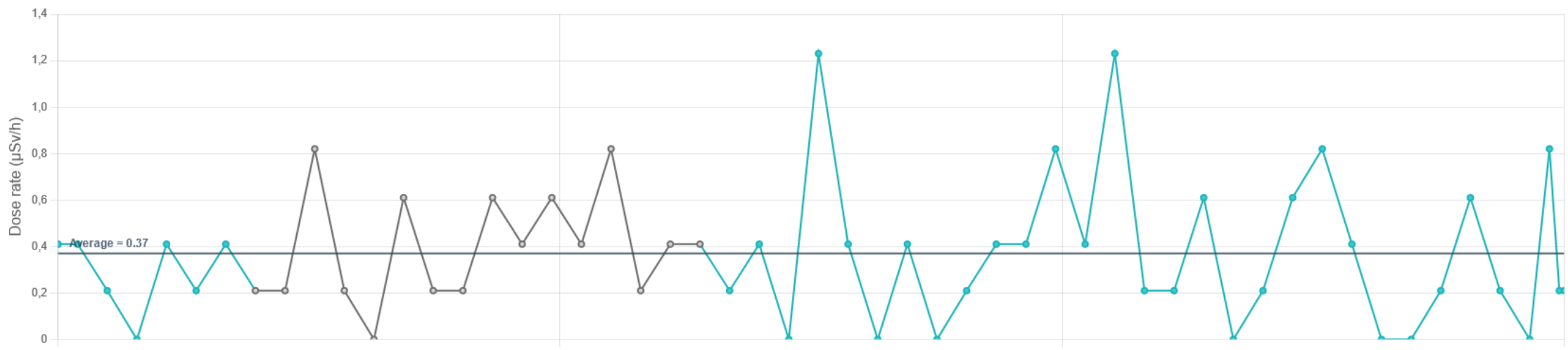
Export Export 1 Year Create A Measurement

You can select the real time display or access to a time range by switching the slot. When the time range is activated, you can zoom in the chart.

When the zoom is enabled, it is possible to zoom in and out on an area of the chart as to click and drag within the chart using the mouse.

Dosimetry  Enable zoom

Dose over the period : 31.09 nSv







## Data and charts

In real time  Time range

From

15 / 01 / 2024



15 : 50 : 34

To

15 / 01 / 2024

Export

Export 1 Year

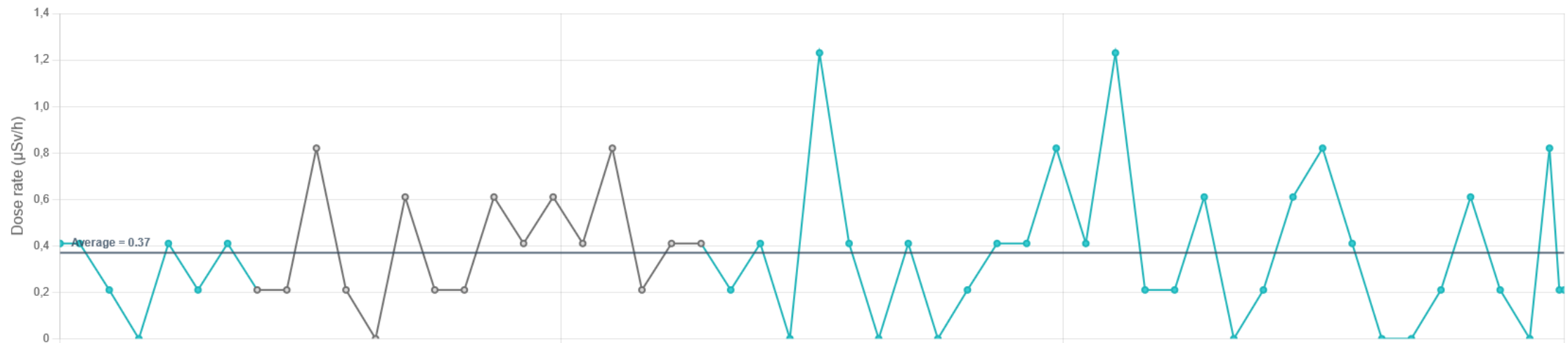
Create A M

Dosimetry



Enable zoom

Dose over the period : 31.09 nSv

**Periods for data holding:**

All data is not stored for the same period.

- Raw data (every two seconds in this example) is stored for a month.
- The cumulative data for the month is kept for an indefinite period (since August 2022).
- Alarms and measurements are kept for an indefinite period (since August 2022).
- Other aggregated data (per minute, per hour and per day) are kept for one year.

▼ Data and charts

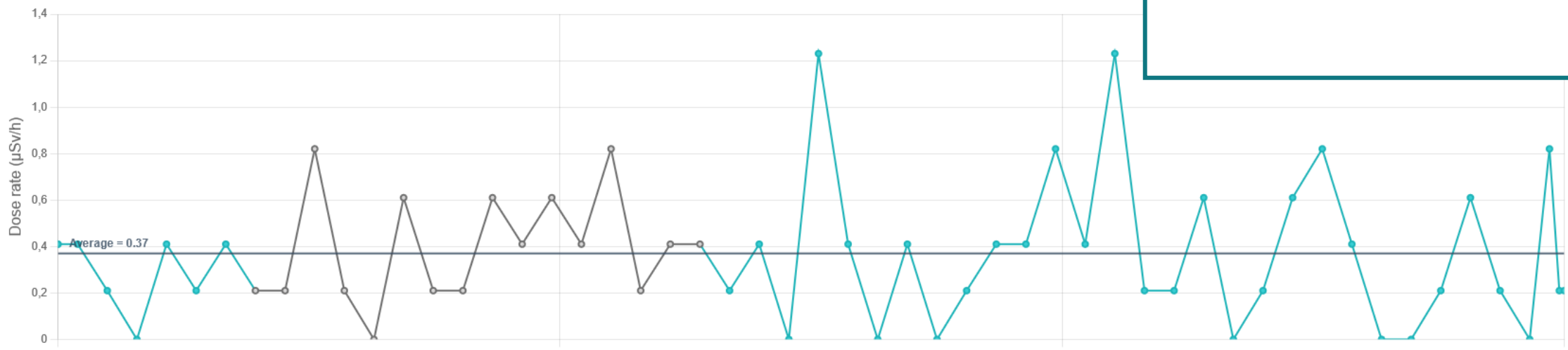
In real time  Time range

From 15/01/2024 15:50:34 To 15/01/2024 15:55:39

Export Export 1 Year Create A Measurement

Dosimetry  Enable zoom

Dose over the period : 31.09 nSv



If this period is important (incident, specific handling, quality control, etc.), it is possible to:

- save it as a "Measurement",
- export the data into Excel.

▼ Data and charts

In real time  Time range

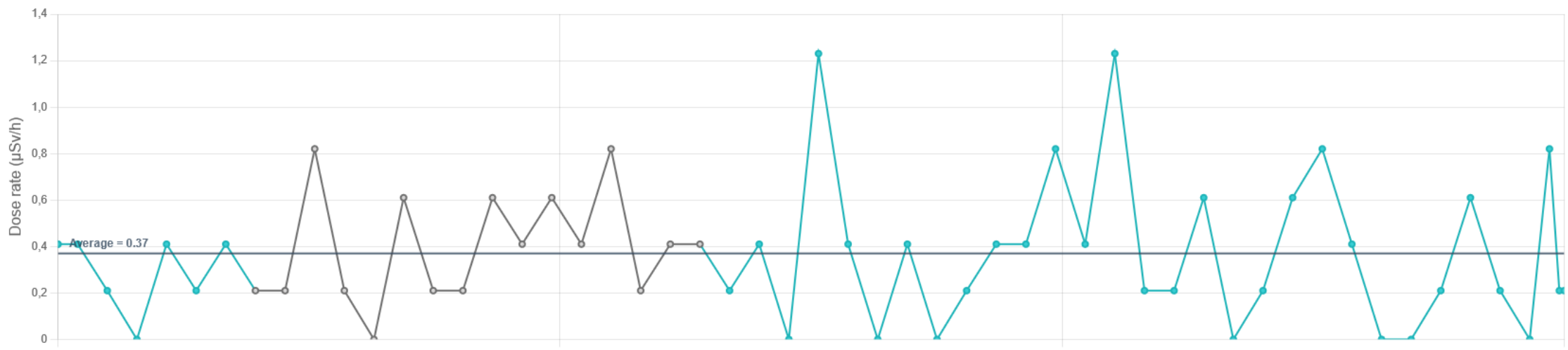
From   To

[Export](#) [Export 1 Year](#) [Create A Measurement](#)

**Dosimetry**  Enable zoom

Let's click on "Create a measurement"

Dose over the period : 31.09 nSv



Data and charts

In real time  Time range

From 15/01/2024 To 15/01/2024 15:55:48

Measurement informations

From 15/01/2024 15:50:48 To 15/01/2024 15:55:48

Measurement title  
Test

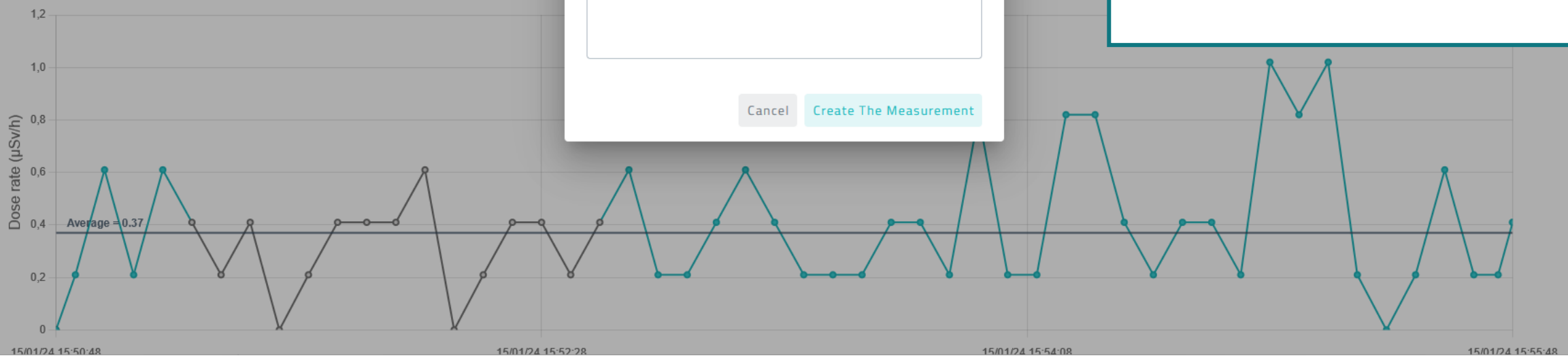
Comment

Cancel Create The Measurement

Fill in the following fields

- Title
- Comment

Dosimetry  Enable zoom





Sensor

Room 2

Past 24H dose

~33.09  $\mu\text{Sv}$

Dose rate thresholds

Threshold L1 20  $\mu\text{Sv/h}$

Threshold L2 2000  $\mu\text{Sv/h}$

Dose rate

0.41  $\mu\text{Sv/h}$

Measurement are registered in this tab. You can click in both buttons to display the comment (and other details if the measurement was made by the RiumApp with a radiation survey meter) and to overlook the chart data.

> Alarm History

▾ Measurements History

Date ▾	Dose rate	Duration	Alarm	Title	Actions
Jan 15, 2024, 3:50 PM	0.37 $\mu\text{Sv/h}$	5 min	None	Test	

1 of 1 Rows per page: 15 ▾

< 1 >

▾ Data and charts

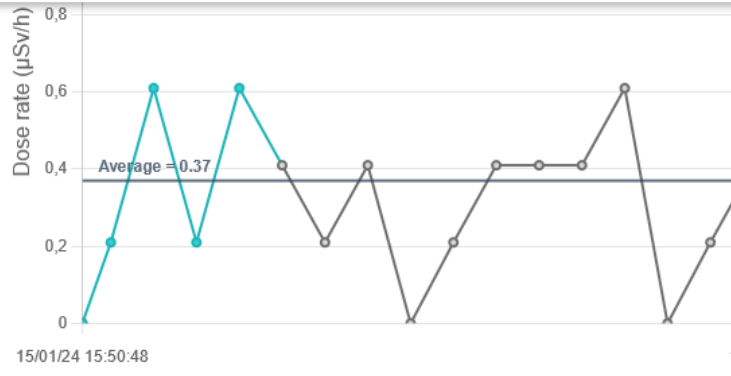
In real time  Time range

From 15 / 01 / 2024 📅

15 : 50 : 48

To 15 / 01 / 2024 📅

15 : 55 : 48

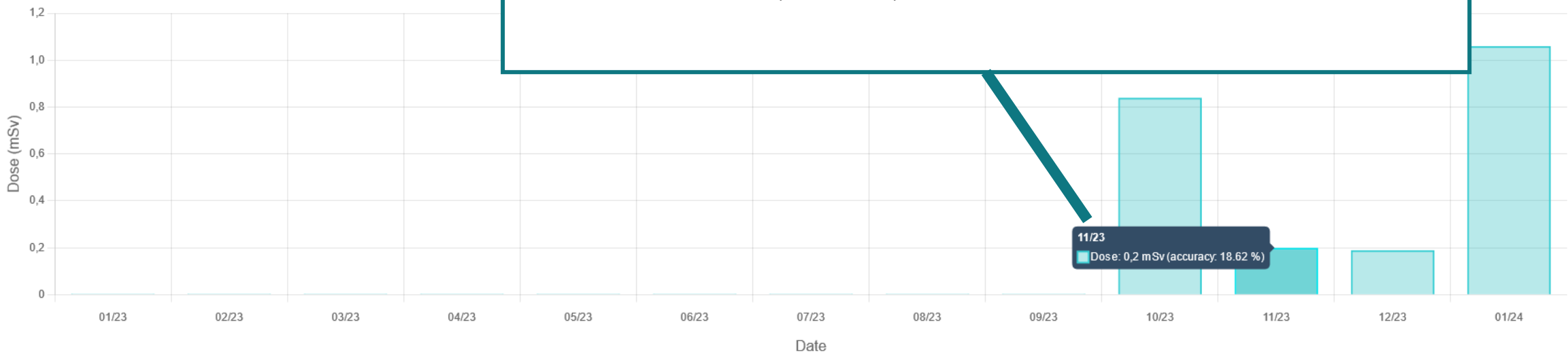


At the bottom of the page, there is a chart with the monthly cumulative doses over the last 12 months. This data is extrapolated in the month if the sensor has not been active a 100% of the time.

By hovering the mouse over the monthly bar, two different informations are given:  
The extrapolated cumulative dose value (including the background noise)  
The "reliability" which is the percentage of the sensor's activity over the month, used for the dose extrapolation calculation.

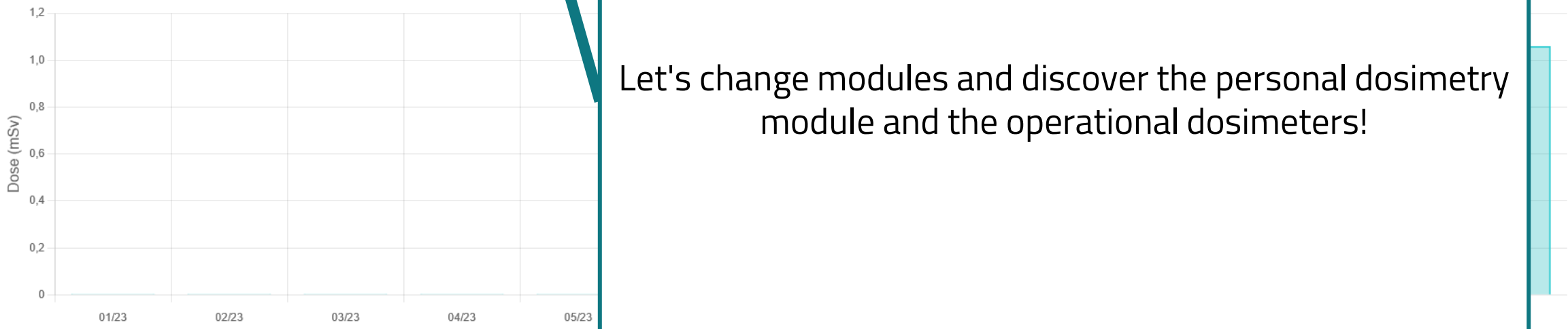
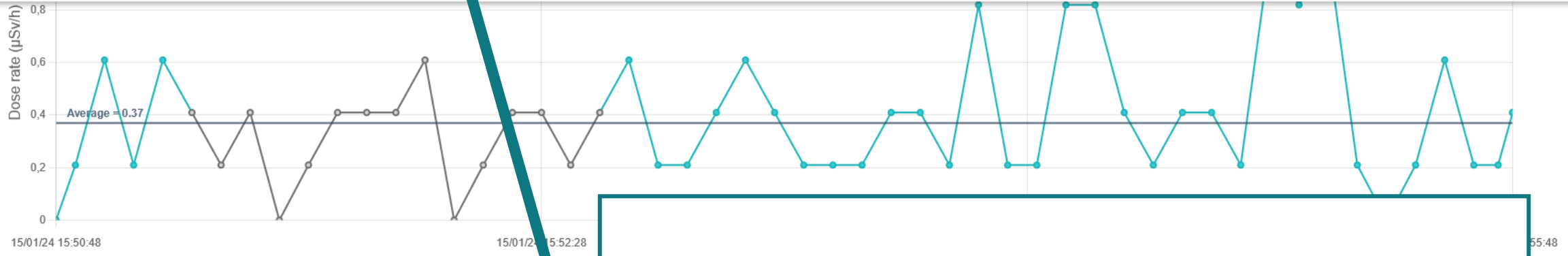
We usually consider the cumulative dose accurate when the reliability rate exceeds 90%. In any case, all values under 100% must be explained if the dosimeters are used for individual radioprotection.

In this case, the reliability of 18.62% represents a short time use of the dosimeter in October, 2023.





"Personal Dosimetry" module



Let's change modules and discover the personal dosimetry module and the operational dosimeters!



**Workers status** Alarms Settings

Refresh ↻ Export 📄

🔍 Search ⓘ

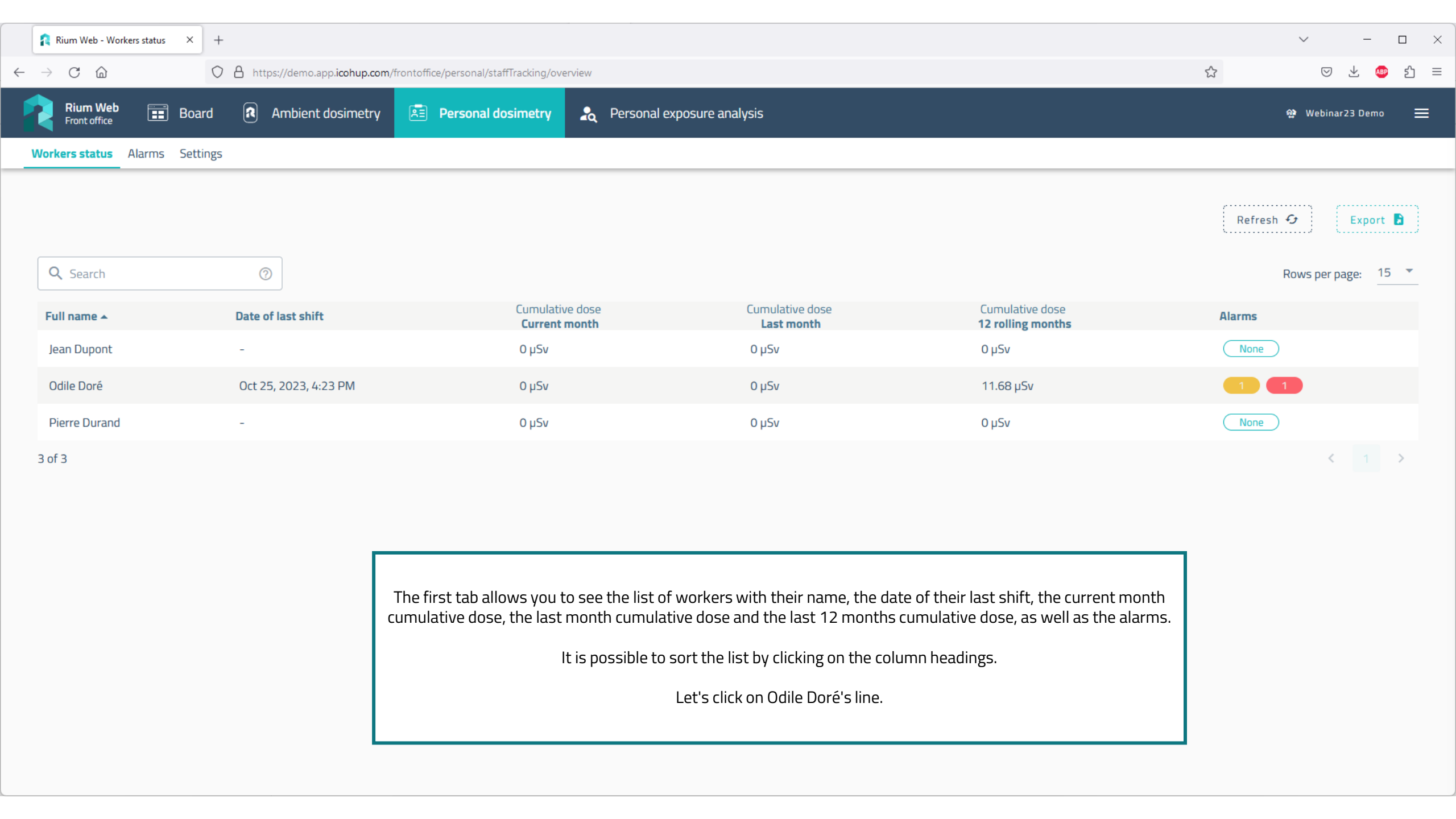
Rows per page: 15 ▾

Full name ▲	Date of last shift	Cumulative dose Current month	Cumulative dose Last month	Cumulative dose 12 rolling months	Alarms
Jean Dupont	-	0 µSv	0 µSv	0 µSv	None
Odile Doré	Oct 25, 2023, 4:23 PM	0 µSv	0 µSv	11.68 µSv	1 1
Pierre Durand	-	0 µSv	0 µSv	0 µSv	None

3 of 3

< 1 >

The sub-menu provides access to three tabs



Search ?

Rows per page: 15

Full name ▲	Date of last shift	Cumulative dose Current month	Cumulative dose Last month	Cumulative dose 12 rolling months	Alarms
Jean Dupont	-	0 µSv	0 µSv	0 µSv	None
Odile Doré	Oct 25, 2023, 4:23 PM	0 µSv	0 µSv	11.68 µSv	1 1
Pierre Durand	-	0 µSv	0 µSv	0 µSv	None

3 of 3

< 1 >

The first tab allows you to see the list of workers with their name, the date of their last shift, the current month cumulative dose, the last month cumulative dose and the last 12 months cumulative dose, as well as the alarms.

It is possible to sort the list by clicking on the column headings.

Let's click on Odile Doré's line.

### Odile Doré

Export 📄

Last shift dose

**8.69**  $\mu\text{Sv}$

Ongoing month dose

**0**  $\mu\text{Sv}$   
~ 0% ⓘ

Ongoing year dose

**0**  $\mu\text{Sv}$   
~ 0% ⓘ

Shifts

**4**

Shifts with a L1 alarm

**1**

~ 25% ⓘ

Shifts with a L2 alarm

**1**

~ 25% ⓘ

> Alarm History

> Shift list

### Monthly dose

15														
14														
12														

This page can be seen by the supervisor and the worker (who only has access to the page concerning him).  
  
The ⓘ provide access to contextual help.

The % of the regulatory dose limit reached by the worker is shown.



## Odile Doré

Export

Last shift dose

8.69  $\mu\text{Sv}$ 

Ongoing month dose

0  $\mu\text{Sv}$   
~ 0% ?

Ongoing year dose

0  $\mu\text{Sv}$   
~ 0% ?

Shifts

4

Shifts with a L1 alarm

1  
~ 25% ?

Shifts with a L2 alarm

1  
~ 25% ?

By scrolling down the "Alarm History" area, you can see the worker's exceeding thresholds.

## Alarm History



Sensor	Date ^	Value	Threshold	Comment	Alarm
RiumOp-010101	Oct 25, 2023, 4:20 PM	2.98 $\mu\text{Sv}$	1 $\mu\text{Sv}$	Manipulation d'une source ...	Shift Dose - Warning
RiumOp-010101	Oct 25, 2023, 4:41 PM	8.69 $\mu\text{Sv}$	8 $\mu\text{Sv}$		Shift Dose - Alert



## Shift list

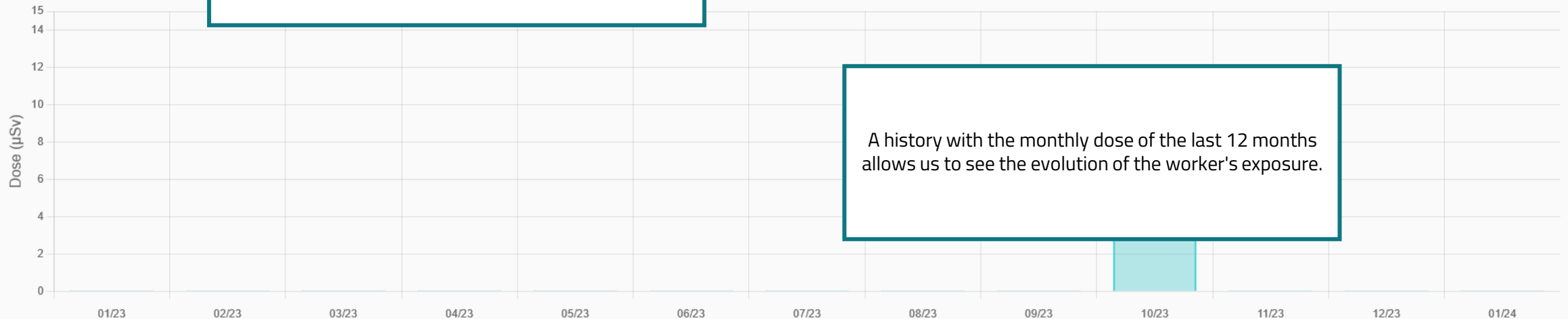
Start	End	Duration	Dose	Dose rate	Alarm
Oct 25, 2023, 4:23 PM	Oct 25, 2023, 4:41 PM	17 min 28 s	8.69 $\mu$ Sv	30.69 $\mu$ Sv/h	Alert
Oct 25, 2023, 4:12 PM	Oct 25, 2023, 4:20 PM	8 min 33 s	2.98 $\mu$ Sv	19.87 $\mu$ Sv/h	Warning
Oct 25, 2023, 3:49 PM	Oct 25, 2023, 3:57 PM	8 min 20 s	0.01 $\mu$ Sv	0.08 $\mu$ Sv/h	None
Oct 25, 2023, 3:46 PM	Oct 25, 2023, 3:48 PM	2 min 3 s	0 $\mu$ Sv	0.07 $\mu$ Sv/h	None

4 of 4 Rows per page: 15

&lt; 1 &gt;

Each shift is listed with the date, duration, the cumulative dose, the average dose rate and the alarms.

## Monthly dose



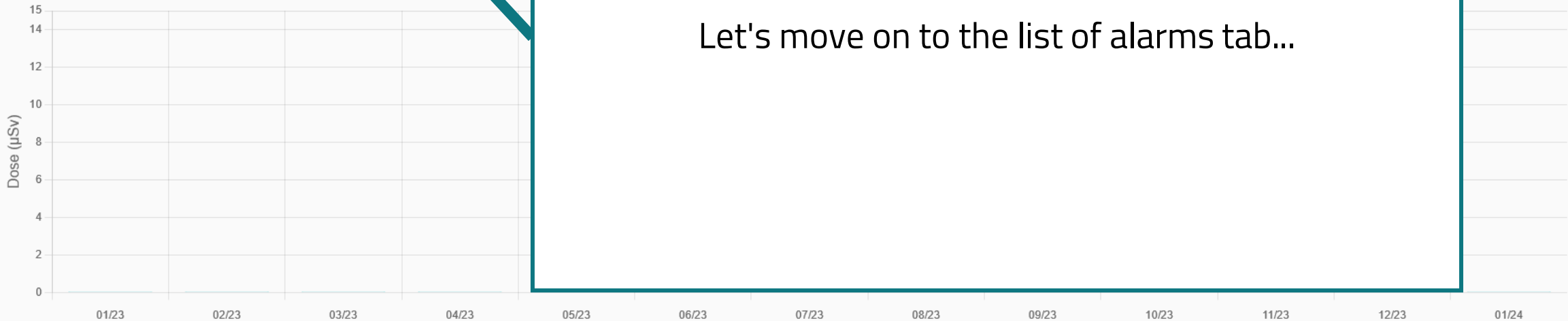
A history with the monthly dose of the last 12 months allows us to see the evolution of the worker's exposure.

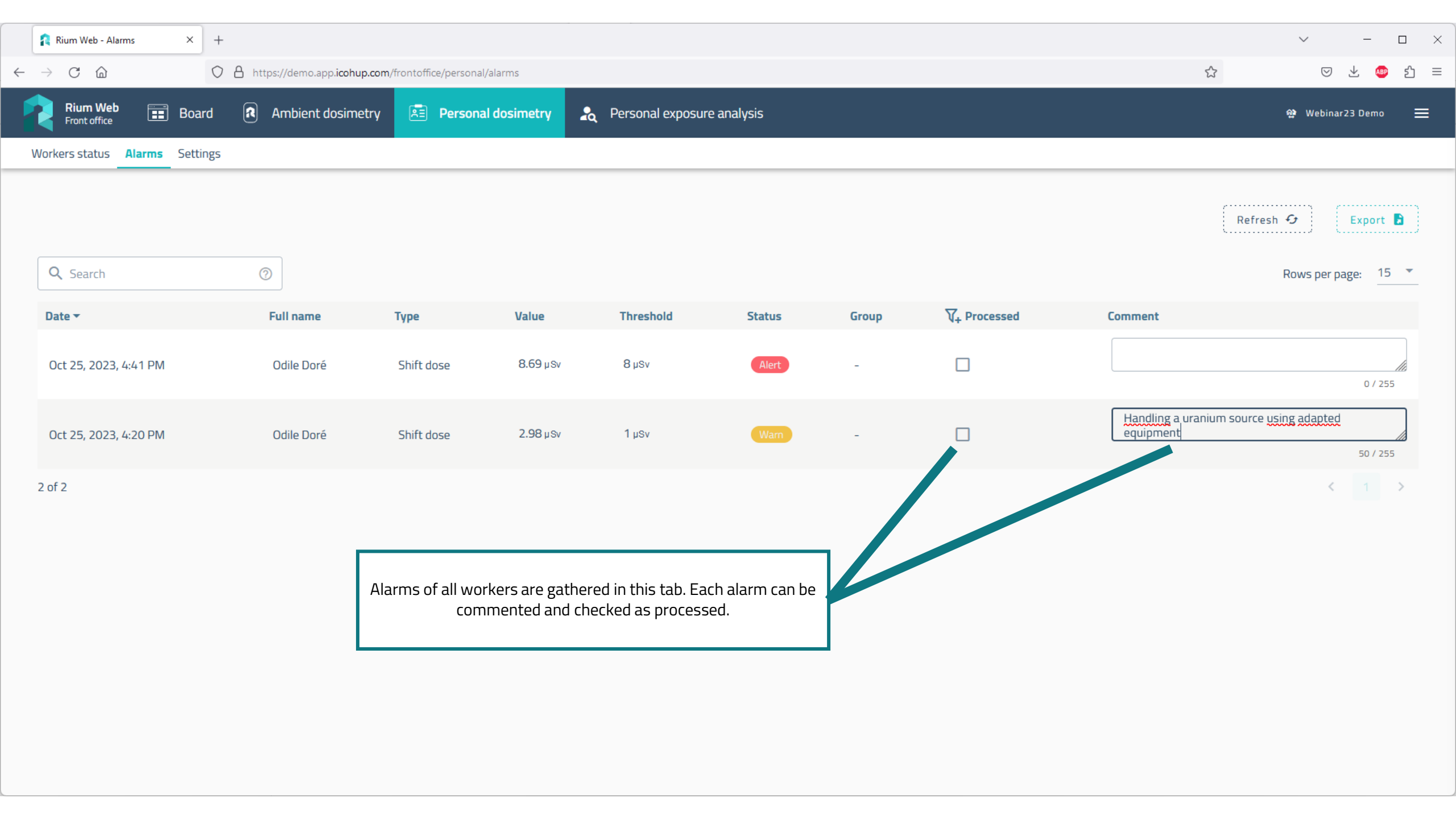
**Workers status** Alarms Settings

Shift list

Start	End	Duration	Dose	Dose rate	Alarm
Oct 25, 2023, 4:23 PM	Oct 25, 2023, 4:41 PM	17 min 28 s	8.69 $\mu$ Sv	30.69 $\mu$ Sv/h	Alert
Oct 25, 2023, 4:12 PM	Oct 25, 2023, 4:20 PM	8 min 33 s	2.98 $\mu$ Sv	19.87 $\mu$ Sv/h	Warning
Oct 25, 2023, 3:49 PM	Oct 25, 2023, 3:57 PM				
Oct 25, 2023, 3:46 PM	Oct 25, 2023, 3:48 PM				

4 of 4 Rows per page: 15





Refresh ↻

Export 📄

🔍 Search ⓘ

Rows per page: 15 ▾

Date ▾	Full name	Type	Value	Threshold	Status	Group	🔍 Processed	Comment
Oct 25, 2023, 4:41 PM	Odile Doré	Shift dose	8.69 µSv	8 µSv	Alert	-	<input type="checkbox"/>	<input type="text"/>
Oct 25, 2023, 4:20 PM	Odile Doré	Shift dose	2.98 µSv	1 µSv	Warn	-	<input type="checkbox"/>	Handling a uranium source using adapted equipment

2 of 2

< 1 >

Alarms of all workers are gathered in this tab. Each alarm can be commented and checked as processed.

Handling a uranium source using adapted equipment

Refresh ↻ Export 📄

🔍 Search ⓘ

Rows per page: 15 ▾

Date ▾	Full name	Type	Value	Threshold	Status	Group	🔍+ Processed	Comment
Oct 25, 2023, 4:41 PM	Odile Doré	Shift dose						
Oct 25, 2023, 4:20 PM	Odile Doré	Shift dose						

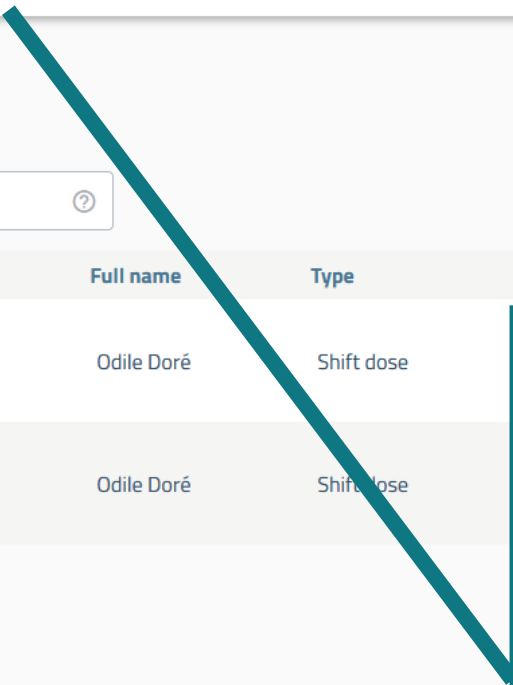
2 of 2

0 / 255

g adapted

50 / 255

< 1 >



Let's move on to the "Settings" tab...



🔍 Search

### Global settings

Select groups:  ▾

Shift dose thresholds:

Monthly dose thresholds:

Yearly dose thresholds:

Add a new group

- > Test group
- > Unlinked workers

Let's see the list of workers unlinked,

**Changes saved**

The modification has been taken into account

🔍 Search ?

### Global settings

Select groups:  ▾

Shift dose thresholds:

Monthly dose thresholds:

Yearly dose thresholds:

Add a new group +

### Unlinked workers

Worker	Shift dose thresholds	Monthly dose thresholds	Yearly dose thresholds	Actions
Pierre Durand	<input type="text" value="μSv"/> <input type="text" value="2"/> <input type="text" value="Level 1"/> <input type="text" value="10"/> <input type="text" value="Level 2"/>	<input type="text" value="μSv"/> <input type="text" value="80"/> <input type="text" value="Level 1"/> <input type="text" value="200"/> <input type="text" value="Level 2"/>	<input type="text" value="mSv"/> <input type="text" value="6"/> <input type="text" value="Level 1"/> <input type="text" value="20"/> <input type="text" value="Level 2"/>	<input type="button" value="🔗"/>
Odile Doré	<input type="text" value="μSv"/> <input type="text" value="1"/> <input type="text" value="Level 1"/> <input type="text" value="8"/> <input type="text" value="Level 2"/>	<input type="text" value="μSv"/> <input type="text" value="80"/> <input type="text" value="Level 1"/> <input type="text" value="500"/> <input type="text" value="Level 2"/>	<input type="text" value="mSv"/> <input type="text" value="1"/> <input type="text" value="Level 1"/> <input type="text" value="6"/> <input type="text" value="Level 2"/>	<input type="button" value="🔗"/>
Jean Dupont	<input type="text" value="μSv"/> <input type="text" value="2"/> <input type="text" value="Level 1"/> <input type="text" value="10"/> <input type="text" value="Level 2"/>	<input type="text" value="μSv"/> <input type="text" value="80"/> <input type="text" value="Level 1"/> <input type="text" value="200"/> <input type="text" value="Level 2"/>		

Let's create a new group,

🔍 Search ?

### Global settings

Select groups  Shift dose thresholds    Monthly dose thresholds Yearly dose thresholds

**Add a new group**

### Unlinked workers

Worker	Shift dose thresholds		Monthly dose thresholds		Yearly dose thresholds		Actions
Pierre Durand	<input type="text" value="μSv"/>	<input type="text" value="2"/> <input type="text" value="Level 1"/> <input type="text" value="Level 2"/> <input type="text" value="10"/>			<input type="text" value="mSv"/>	<input type="text" value="6"/> <input type="text" value="Level 1"/> <input type="text" value="Level 2"/> <input type="text" value="20"/>	<input type="button" value="🔗"/>
Odile Doré	<input type="text" value="μSv"/>	<input type="text" value="1"/> <input type="text" value="Level 1"/> <input type="text" value="Level 2"/> <input type="text" value="8"/>	<input type="text" value="μSv"/>	<input type="text" value="80"/> <input type="text" value="Level 1"/> <input type="text" value="Level 2"/> <input type="text" value="500"/>	<input type="text" value="mSv"/>	<input type="text" value="1"/> <input type="text" value="Level 1"/> <input type="text" value="Level 2"/> <input type="text" value="6"/>	<input type="button" value="🔗"/>
Jean Dupont	<input type="text" value="μSv"/>	<input type="text" value="2"/> <input type="text" value="Level 1"/> <input type="text" value="Level 2"/> <input type="text" value="10"/>	<input type="text" value="μSv"/>	<input type="text" value="80"/> <input type="text" value="Level 1"/> <input type="text" value="Level 2"/> <input type="text" value="200"/>			

### Creating a group

**Name of the group**

**Authorized users**

Let's name the group,

🔍 Search ?

### Global settings

Select groups: Group ▾

Shift dose thresholds: μSv Level 1 Level 2

Monthly dose thresholds: μSv Level 1 Level 2

Yearly dose thresholds: mSv Level 1 Level 2 Apply

### Add a new group



### Unlinked workers

Worker	Shift dose thresholds				Monthly dose thresholds				Yearly dose thresholds		Actions
Pierre Durand	μSv	Level 1: 2	Level 2: 10								
Odile Doré	μSv	Level 1: 1	Level 2: 8	μSv	Level 1: 80	Level 2: 500		mSv	Level 1: 1	Level 2: 6	
Jean Dupont	μSv	Level 1: 2	Level 2: 10	μSv	Level 1: 80	Level 2: 200					

### Creating a group

**Name of the group**

**Authorized users**

Cancel Add

Let's add the group to the list,

🔍 Search ?

### Global settings

Select groups:  ▾

Shift dose thresholds:

Monthly dose thresholds:

Yearly dose thresholds:

### Add a new group +

> Test group ✎ 🗑️

### Unlinked workers ✎

Worker	Shift dose thresholds	Monthly dose thresholds	Yearly dose thresholds	Actions
Pierre Durand	<input type="text" value="μSv"/> <input type="text" value="2"/> <input type="text" value="Level 1"/> <input type="text" value="10"/> <input type="text" value="Level 2"/>	<input type="text" value="μSv"/> <input type="text" value="80"/> <input type="text" value="Level 1"/> <input type="text" value="200"/> <input type="text" value="Level 2"/>	<input type="text" value="mSv"/> <input type="text" value="6"/> <input type="text" value="Level 1"/> <input type="text" value="20"/> <input type="text" value="Level 2"/>	<input type="button" value="🔗"/>
Odile Doré	<input type="text" value="μSv"/> <input type="text" value="1"/> <input type="text" value="Level 1"/> <input type="text" value="8"/> <input type="text" value="Level 2"/>	<input type="text" value="μSv"/> <input type="text" value="80"/> <input type="text" value="Level 1"/> <input type="text" value="500"/> <input type="text" value="Level 2"/>		
Jean Dupont	<input type="text" value="μSv"/> <input type="text" value="2"/> <input type="text" value="Level 1"/> <input type="text" value="10"/> <input type="text" value="Level 2"/>	<input type="text" value="μSv"/> <input type="text" value="80"/> <input type="text" value="Level 1"/> <input type="text" value="200"/> <input type="text" value="Level 2"/>	<input type="text" value="mSv"/> <input type="text" value="6"/> <input type="text" value="Level 1"/> <input type="text" value="20"/> <input type="text" value="Level 2"/>	<input type="button" value="🔗"/>

The "Test Group" is now available and can be opened,

🔍 Search ?

### Global settings

Select groups:  ▾

Shift dose thresholds:

Monthly dose thresholds:

Yearly dose thresholds:

### Add a new group +

#### Test group ▾

Worker ▾	Shift dose thresholds	Monthly dose thresholds	Yearly dose thresholds	Actions
No available data				

0 of 0 Rows per page: 15 ▾

It is possible to delete or modify it,

#### Unlinked workers ▾

Worker ▾	Shift dose thresholds	Monthly dose thresholds	Yearly dose thresholds	Actions
	<input type="text" value="µSv"/> <input type="text" value="2"/> <input type="text" value="Level 1"/> <input type="text" value="Level 2"/> <input type="text" value="10"/>	<input type="text" value="µSv"/> <input type="text" value="80"/> <input type="text" value="Level 1"/> <input type="text" value="Level 2"/> <input type="text" value="200"/>	<input type="text" value="mSv"/> <input type="text" value="6"/> <input type="text" value="Level 1"/> <input type="text" value="Level 2"/> <input type="text" value="20"/>	

Test group

Worker	Shift dose thresholds	Monthly dose thresholds	Yearly dose thresholds	Actions
No available data				

0 of 0 Rows per page: 15

Let's link Jean Dupont to a group,

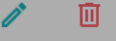
Unlinked workers

Worker	Shift dose thresholds	Monthly dose thresholds	Yearly dose thresholds	Actions
Pierre Durand	$\mu\text{Sv}$ <input type="text" value="2"/> <small>Level 1</small> <input type="text" value="10"/> <small>Level 2</small>	$\mu\text{Sv}$ <input type="text" value="80"/> <small>Level 1</small> <input type="text" value="200"/> <small>Level 2</small>	$\text{mSv}$ <input type="text" value="6"/> <small>Level 1</small> <input type="text" value="20"/> <small>Level 2</small>	
Odile Doré	$\mu\text{Sv}$ <input type="text" value="1"/> <small>Level 1</small> <input type="text" value="8"/> <small>Level 2</small>	$\mu\text{Sv}$ <input type="text" value="80"/> <small>Level 1</small> <input type="text" value="500"/> <small>Level 2</small>	$\text{mSv}$ <input type="text" value="1"/> <small>Level 1</small> <input type="text" value="6"/> <small>Level 2</small>	
Jean Dupont	$\mu\text{Sv}$ <input type="text" value="2"/> <small>Level 1</small> <input type="text" value="10"/> <small>Level 2</small>	$\mu\text{Sv}$ <input type="text" value="80"/> <small>Level 1</small> <input type="text" value="200"/> <small>Level 2</small>	$\text{mSv}$ <input type="text" value="6"/> <small>Level 1</small> <input type="text" value="20"/> <small>Level 2</small>	

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Associate the worker with a group

Test group



Worker	Shift dose thresholds	Monthly dose thresholds	Yearly dose thresholds	Actions
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No available data

0 of 0 Rows per page: 15

Associate with a group

List of groups

Test group

Cancel Associate

Unlinked workers



Worker	Shift dose thresholds	Monthly dose thresholds	Yearly dose thresholds	Actions
--------	-----------------------	-------------------------	------------------------	---------

Pierre Durand	$\mu\text{Sv}$ Level 1: 2 Level 2: 10		$\text{mSv}$ Level 1: 6 Level 2: 20	
Odile Doré	$\mu\text{Sv}$ Level 1: 1 Level 2: 8	$\mu\text{Sv}$ Level 1: 80 Level 2: 500	$\text{mSv}$ Level 1: 1 Level 2: 6	
Jean Dupont	$\mu\text{Sv}$ Level 1: 2 Level 2: 10	$\mu\text{Sv}$ Level 1: 80 Level 2: 200		

3 of 3 Rows per page: 15

Let's select the group,





Add a new group +

Test group ✎ 🗑️

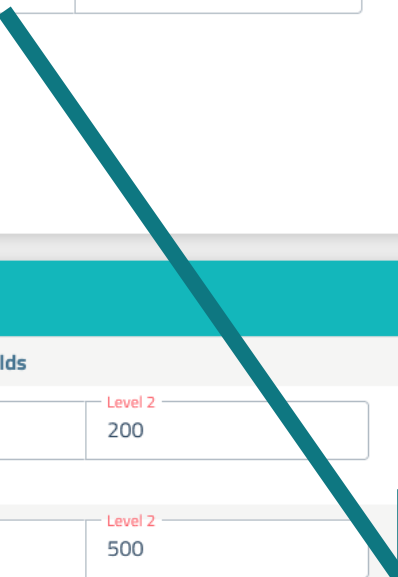
Worker	Shift dose thresholds	Monthly dose thresholds	Yearly dose thresholds	Actions
Jean Dupont	$\mu\text{Sv}$ Level 1: 2 Level 2: 10	$\mu\text{Sv}$ Level 1: 80 Level 2: 200	mSv Level 1: 6 Level 2: 20	<span>👤</span> <span>🔗</span>

1 of 1 Rows per page: 15 < 1 >

Unlinked workers ✎

Worker	Shift dose thresholds	Monthly dose thresholds	Yearly dose thresholds	Actions
Pierre Durand	$\mu\text{Sv}$ Level 1: 2 Level 2: 10	$\mu\text{Sv}$ Level 1: 80 Level 2: 200	mSv Level 1: 6 Level 2: 20	<span>🔗</span>
Odile Doré	$\mu\text{Sv}$ Level 1: 1 Level 2: 8	$\mu\text{Sv}$ Level 1: 80 Level 2: 500		

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Jean Dupont is now part of the new group.

✓ **Addition saved**  
The modification has been taken into account ✕

🔍 Search ?

### Global settings

Select groups

Group

Test group ▲

- Test group
- Unlinked workers

Shift dose thresholds

Level 1  Level 2

μSv

Monthly dose thresholds

Level 1  Level 2

μSv

Yearly dose thresholds

Level 1  Level 2

mSv

Apply

### Test group

Worker	Shift dose thresholds	Monthly dose thresholds	Yearly dose thresholds	Actions
Jean Dupont	μSv Level 1 <input type="text" value="2"/> Level 2 <input type="text" value="10"/>	μSv Level 1 <input type="text" value="80"/> Level 2 <input type="text" value="200"/>	mSv Level 1 <input type="text" value="6"/> Level 2 <input type="text" value="20"/>	

1 of 1 Rows per page: 15

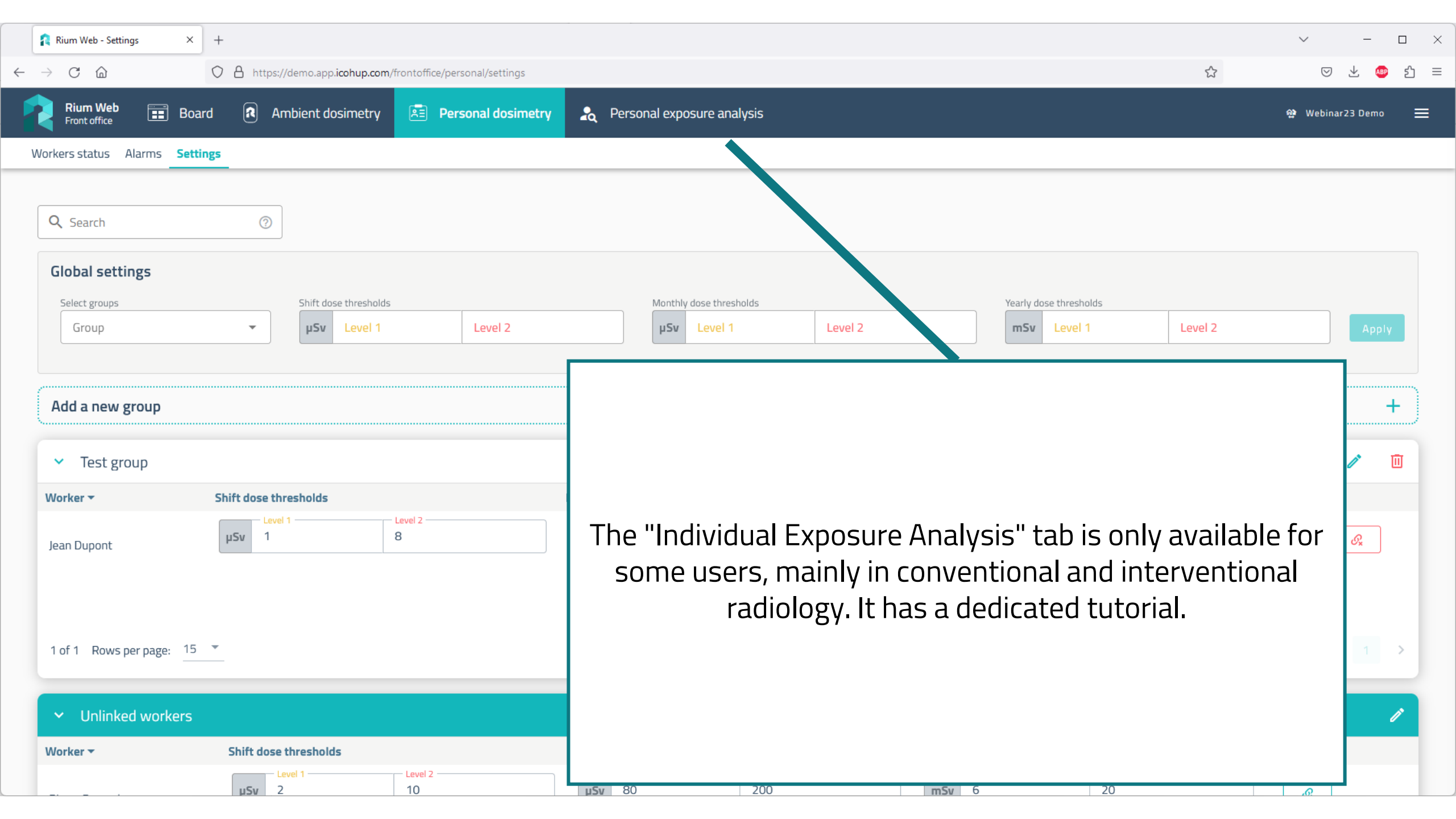
### Unlinked workers

Worker	Shift dose thresholds	Monthly dose thresholds	Yearly dose thresholds	Actions
	μSv Level 1 <input type="text" value="2"/> Level 2 <input type="text" value="10"/>	μSv Level 1 <input type="text" value="80"/> Level 2 <input type="text" value="200"/>	mSv Level 1 <input type="text" value="6"/> Level 2 <input type="text" value="20"/>	

It is possible to change the alarm thresholds settings of a group.



Module "Individual Exposure Analysis"



The "Individual Exposure Analysis" tab is only available for some users, mainly in conventional and interventional radiology. It has a dedicated tutorial.



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