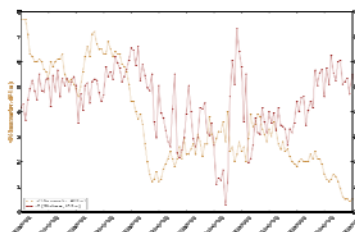
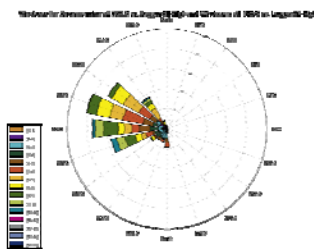


Welcome to AmmonitOR -Ammonit Online Report
our Online Platform to simplify your data communication



Ammonit – Company Profile

- 20 years of know-how in the international wind industry, since 1989
- Ammonit offers high quality measurement equipment for wind site assessment, wind park monitoring and climate research
- Growing product range: reliable data loggers, first class sensors and data communication systems, applied by wind consultants, wind farm operators and research institutes in over 100 countries
- Bespoke measurement systems as well as standard ready to use measurement systems, for all climates and very remote areas

AmmonitOR – Online Platform

AmmonitOR – what for?

AmmonitOR – Ammonit Online Report

is our user-friendly online platform to access, archive, monitor and visualise measurement data, around-the-clock, from wherever it suits you.

The software is available in request.

To register send us an email at: ammonitor@ammonit.com

AmmonitOR – Online Platform

AmmonitOR – what for?

- AmmonitOR simplifies time-consuming activities, such as:
 - retrieving and archiving measurement data
 - monitoring the functions of the measurement system
- It is the perfect assistant:
 - who takes care of the boring and with low added value work and
 - informs you, on system failures with warning emails
- Simplifies all data communication, management procedures:
 - It produces diagrams and schedules for your reports
 - It performs data plausibility checks

AmmonitOR –Online Platform

AmmonitOR – how to get started

- Global data access around-the-clock with our encrypted login section
- To register send us an email at: ammonitor@ammonit.com
Our services team will set up your personal account information
- Get started by logging into:
<https://or.ammonit.com/en/accounts/login/>

AmmonitOR – Online Platform

AmmonitOR - what it does

- Collect, access and archive your measurement data in well-structured projects files, enabling easy project navigation.
- Monitoring of your measurement system:
 - Verify that all sensors and the power supply are working well
 - Receive monitoring reports of the measurement system
 - Receive alarm messages per email /SMS, in case of problems
- Data quality checking with customised filters on sensor default, such as ice-effects, temperature, humidity, pressure performance or measuring system.

AmmonitOR – Online Platform

AmmonitOR - what it does

- Performance of simple data plausibility checks
- Automatic warning emails or SMS alerting you to technical problems, such as problems with sensors, power supply or communication issues.
- Visualisation of your measurement data in schedules or diagrams of your choice (e.g. histograms, wind rose, wind speed, xy-plot).
- Adaption of your wind reports in your own corporate design.

AmmonitOR – Online Platform

AmmonitOR - what it does

- Long-term data storage of up to three years:
 - on a dedicated Ammonit server, or
 - data storage on a server of your choice is available on request
- Access control: you specify the level of access rights to individuals using the system, (e. g. read-only or full access).
- Multi-language functionality: English, Spanish, German and French (Additional languages will be offered at a later stage).

AmmonitOR – Online Platform

AmmonitOR – what it does

- AmmonitOR is an open source program.
This allows for a continuous improvement of features in accordance with customer requirements.
- Technical requirements:
AmmonitOR requires a GSM/GPRS-modem and data logger firmware minimum 1.9.

AmmonitOR - Online Platform

AmmonitOR – how it works

- Data Collection:
Automated collection of your measurement data:
E-Mail function sets address in copy to aor@ammonit.com
- Archiving:
 - Data is archived on the AmmonitOR server
 - This server is located in a data-pool, which is maintained 24/7
- Sorting / Structuring:
 - All data is stored in a data base, selectable by logger
 - Identification through logger serial-number

AmmonitOR - Online Platform

AmmonitOR – how it works

Monitoring the system - AmmonitOR performs three checks:

- Communication:
 - Data has been transmitted
 - Data is complete
- Sensors:
 - All sensors are transmitting data
 - Data is plausible
- Power supply: the power supply is running well

AmmonitOR – Online Platform

AmmonitOR – how it works

AmmonitOR offers three alarms & feedback instruments:

- Wrong or suspicious data is isolated in a menu on the AmmonitOR web-page
- AmmonitOR produces a daily report
- AmmonitOR generates an alarm per E-Mail:
 - Several tools allow for a email transmission to a SMSNote: the emission of a SMS often causes small costs

AmmonitOR - Online Platform

AmmonitOR – how it works

Report and visualise your measurement data:

- Generation of brief evaluation reports
- Visualisation of measurement data with diagrams & schedules
- Diagrams: Weibull curve, Windrose & XY-Diagram
- Shows serial number of data loggers & sensors

AmmonitOR - Online Platform

AmmonitOR – how it works

Plausibility check your measurement data:

- Data plausibility checks with customised filters.
- The following checks will be installed, at the product launch:
 - Sensor default: sensor is not transmitting signal
 - Icing effects: wind speed is 0 for at least 12 hours
 - Temperature / humidity / pressure performance
- AmmonitOR is an open source tool, (programming language Python)

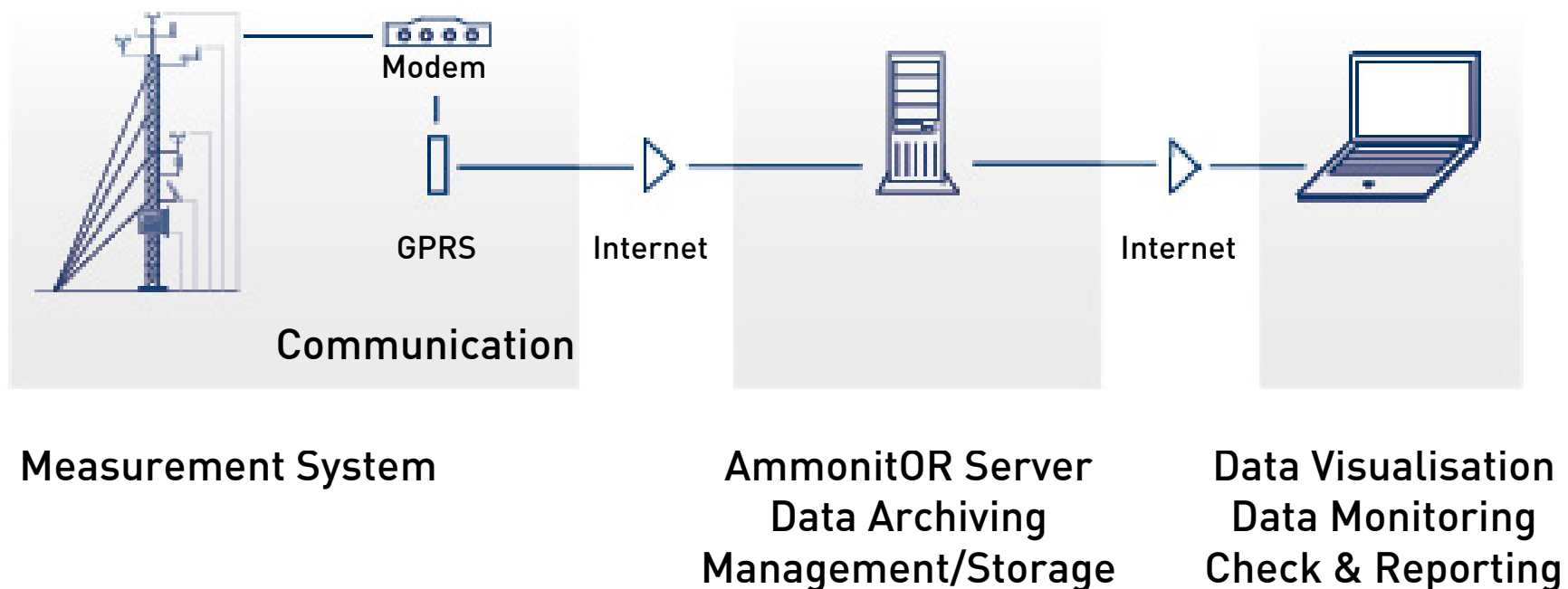
AmmonitOR - Online Platform

AmmonitOR – how it works

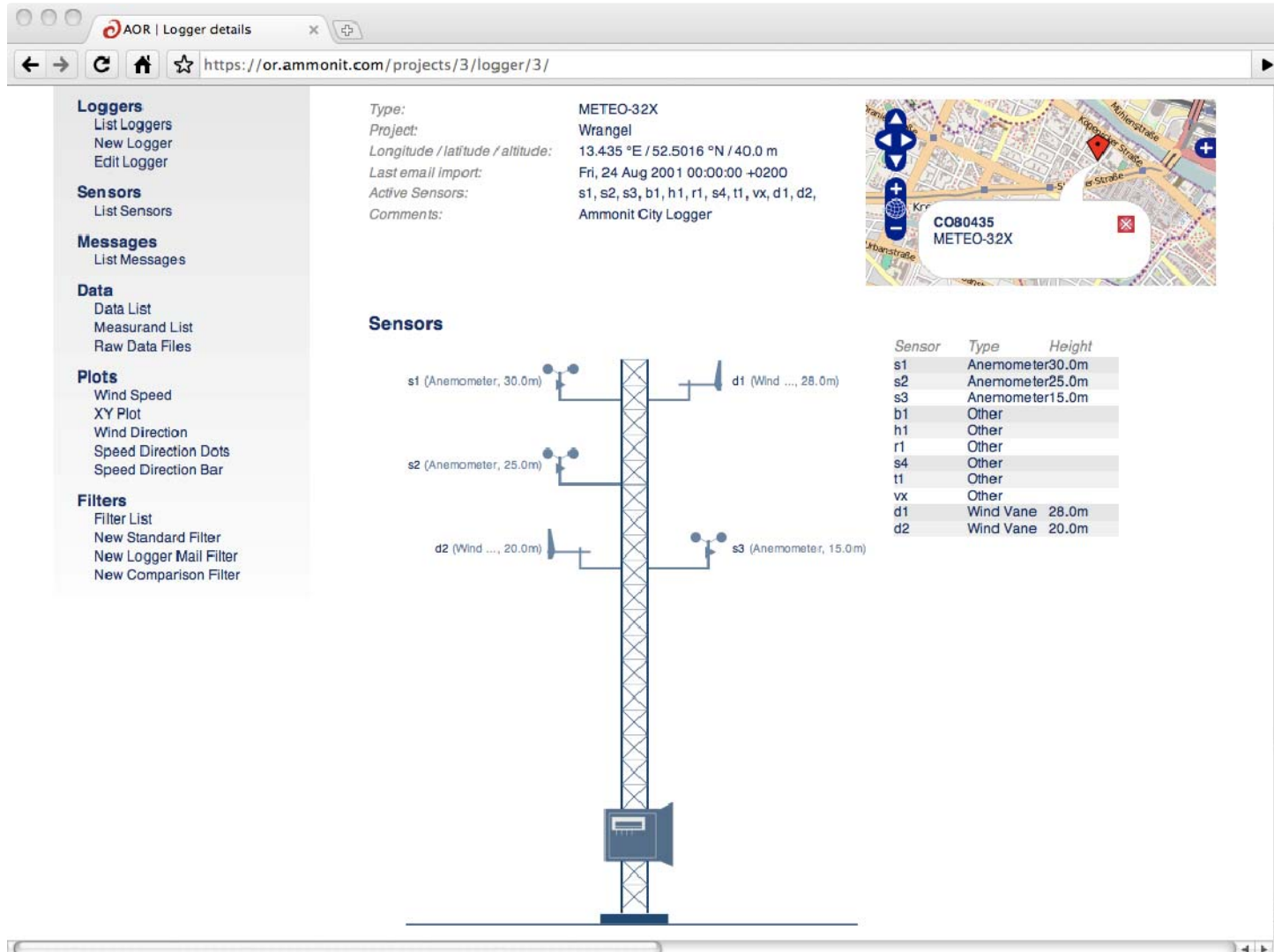
- To register send us an email at: ammonitor@ammonit.com
 - in the customer login section
 - the logger(s) is (are) registered by Ammonit
- Login in into your account with your personal password (encrypted)
- Create your new project within AmmonitOR
- Add your loggers to the new project
- Configure your logger to send Emails to AmmonitOR

AmmonitOR - Online Platform

How it works:



AmmonitOR – Projects & Loggers



The screenshot displays the AmmonitOR web interface for a specific logger. The browser address bar shows the URL: <https://or.ammonit.com/projects/3/logger/3/>.

Left Sidebar:

- Loggers**
 - List Loggers
 - New Logger
 - Edit Logger
- Sensors**
 - List Sensors
- Messages**
 - List Messages
- Data**
 - Data List
 - Measurand List
 - Raw Data Files
- Plots**
 - Wind Speed
 - XY Plot
 - Wind Direction
 - Speed Direction Dots
 - Speed Direction Bar
- Filters**
 - Filter List
 - New Standard Filter
 - New Logger Mail Filter
 - New Comparison Filter

Main Content Area:

Type: METEO-32X
Project: Wrangel
Longitude / latitude / altitude: 13.435 °E / 52.5016 °N / 40.0 m
Last email import: Fri, 24 Aug 2001 00:00:00 +0200
Active Sensors: s1, s2, s3, b1, h1, r1, s4, t1, vx, d1, d2,
Comments: Ammonit City Logger

Map: A map showing the location of the logger. A callout box identifies the logger as **CO80435 METEO-32X**.

Sensors: A diagram of the logger tower with sensors labeled s1, s2, d2, d1, and s3. s1, s2, and s3 are anemometers at different heights. d1 and d2 are wind vane sensors.

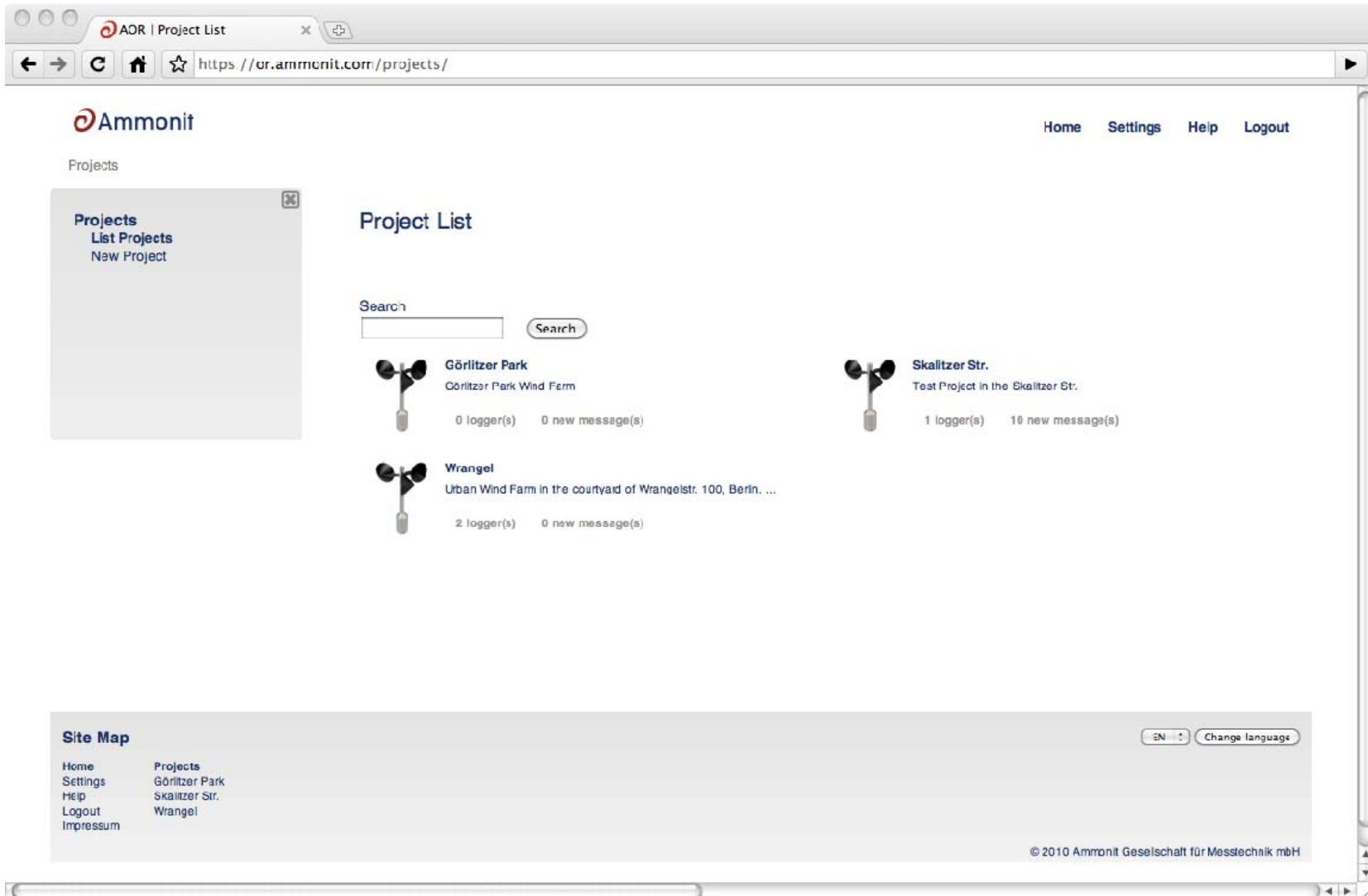
Sensor	Type	Height
s1	Anemometer	30.0m
s2	Anemometer	25.0m
s3	Anemometer	15.0m
b1	Other	
h1	Other	
r1	Other	
s4	Other	
t1	Other	
vx	Other	
d1	Wind Vane	28.0m
d2	Wind Vane	20.0m

AmmonitOR – Projects & Loggers

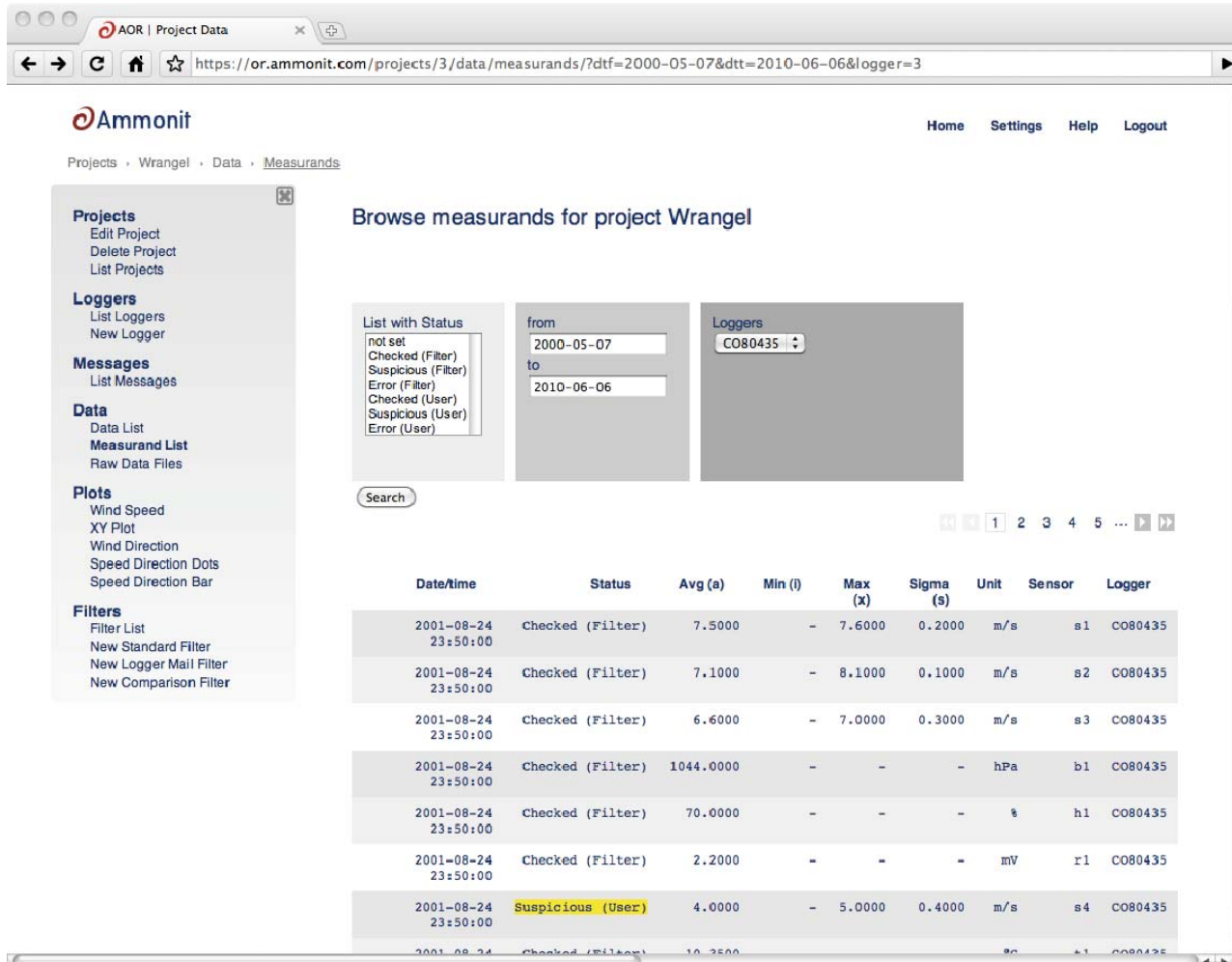
How it works:

- Multiple users can work together on different projects
- Users can create an unlimited number of projects
- Each logger is assigned to exactly one project

AmmonitOR – Project Lists & Project Details



AmmonitOR – Measurand List



Ammonit Home Settings Help Logout

Projects · Wrangel · Data · Measurands

Projects
 Edit Project
 Delete Project
 List Projects

Loggers
 List Loggers
 New Logger

Messages
 List Messages

Data
 Data List
Measurand List
 Raw Data Files

Plots
 Wind Speed
 XY Plot
 Wind Direction
 Speed Direction Dots
 Speed Direction Bar

Filters
 Filter List
 New Standard Filter
 New Logger Mail Filter
 New Comparison Filter

Browse measurands for project Wrangel

List with Status
 not set
 Checked (Filter)
 Suspicious (Filter)
 Error (Filter)
 Checked (User)
 Suspicious (User)
 Error (User)

from
 2000-05-07
 to
 2010-06-06

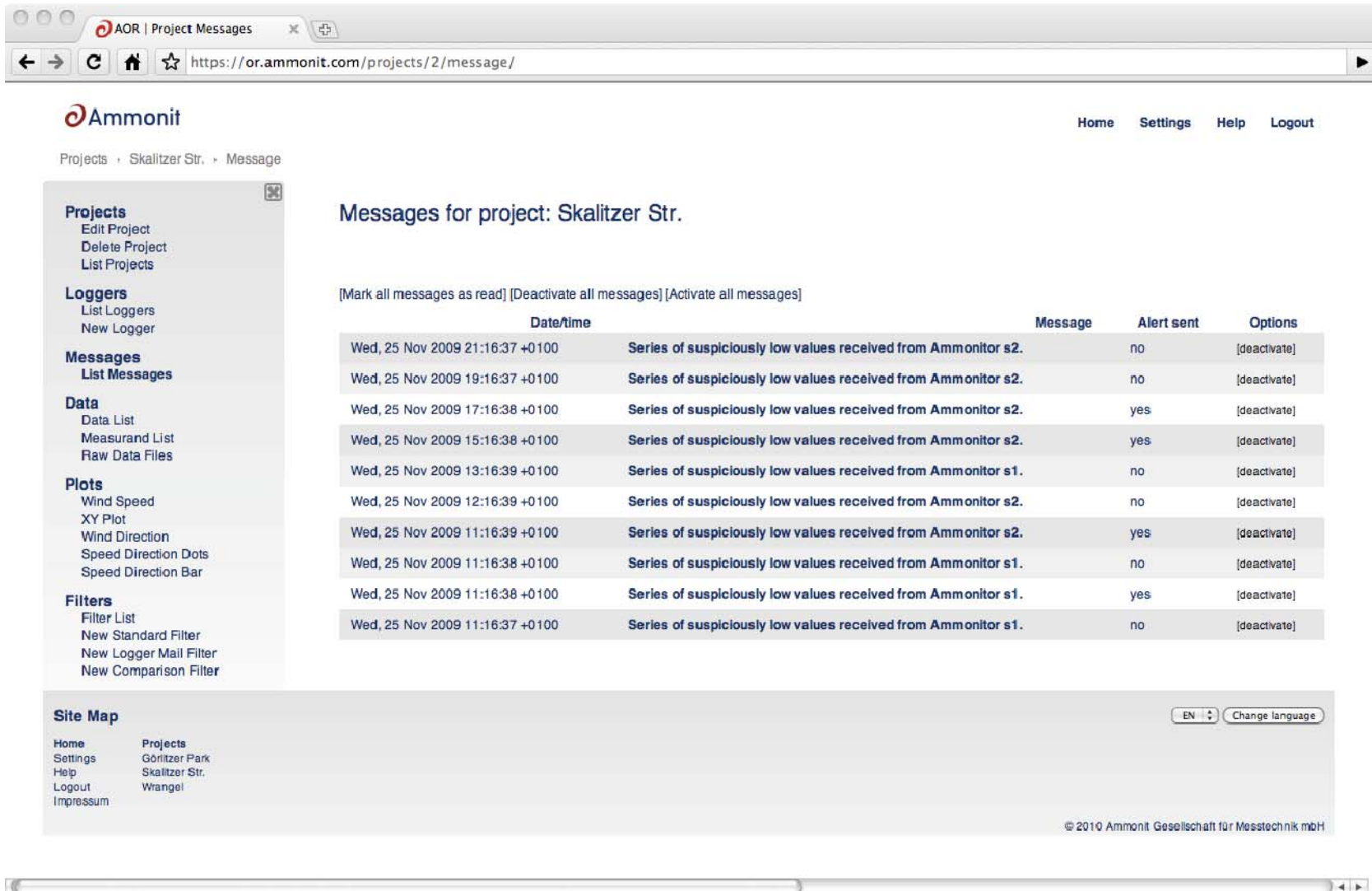
Loggers
 CO80435

Search

1 2 3 4 5 ...

Date/Time	Status	Avg (a)	Min (l)	Max (x)	Sigma (s)	Unit	Sensor	Logger
2001-08-24 23:50:00	Checked (Filter)	7.5000	-	7.6000	0.2000	m/s	s1	CO80435
2001-08-24 23:50:00	Checked (Filter)	7.1000	-	8.1000	0.1000	m/s	s2	CO80435
2001-08-24 23:50:00	Checked (Filter)	6.6000	-	7.0000	0.3000	m/s	s3	CO80435
2001-08-24 23:50:00	Checked (Filter)	1044.0000	-	-	-	hPa	b1	CO80435
2001-08-24 23:50:00	Checked (Filter)	70.0000	-	-	-	%	h1	CO80435
2001-08-24 23:50:00	Checked (Filter)	2.2000	-	-	-	mV	r1	CO80435
2001-08-24 23:50:00	Suspicious (User)	4.0000	-	5.0000	0.4000	m/s	s4	CO80435
2001-08-24 23:50:00	Checked (Filter)	10.3500	-	-	-	m/s	s1	CO80435

AmmonitOR – Message List



The screenshot shows the AmmonitOR web interface. The browser address bar displays the URL <https://or.ammonit.com/projects/2/message/>. The page title is "AOR | Project Messages". The Ammonit logo is in the top left, and navigation links (Home, Settings, Help, Logout) are in the top right. The breadcrumb trail is "Projects > Skaltzer Str. > Message".

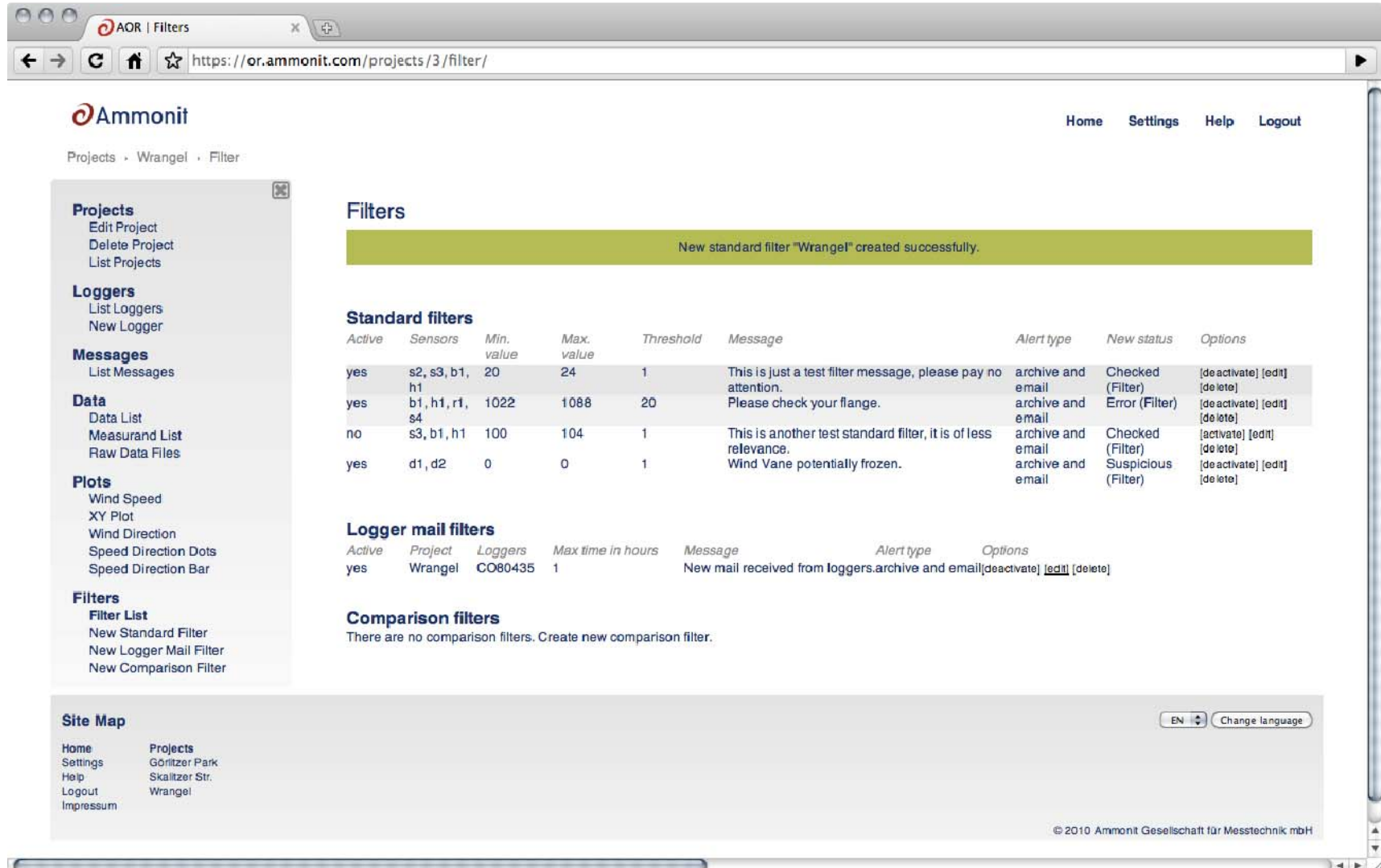
On the left sidebar, there are sections for "Projects" (Edit Project, Delete Project, List Projects), "Loggers" (List Loggers, New Logger), "Messages" (List Messages), "Data" (Data List, Measurand List, Raw Data Files), "Plots" (Wind Speed, XY Plot, Wind Direction, Speed Direction Dots, Speed Direction Bar), and "Filters" (Filter List, New Standard Filter, New Logger Mail Filter, New Comparison Filter). A "Site Map" section at the bottom left lists links for Home, Settings, Help, Logout, Impressum, Projects, Gönitz Park, Skaltzer Str., and Wangen.

The main content area is titled "Messages for project: Skaltzer Str.". It includes action links: "[Mark all messages as read] [Deactivate all messages] [Activate all messages]". Below is a table of messages:

Date/time	Message	Alert sent	Options
Wed, 25 Nov 2009 21:16:37 +0100	Series of suspiciously low values received from Ammonitor s2.	no	[deactivate]
Wed, 25 Nov 2009 19:16:37 +0100	Series of suspiciously low values received from Ammonitor s2.	no	[deactivate]
Wed, 25 Nov 2009 17:16:38 +0100	Series of suspiciously low values received from Ammonitor s2.	yes	[deactivate]
Wed, 25 Nov 2009 15:16:38 +0100	Series of suspiciously low values received from Ammonitor s2.	yes	[deactivate]
Wed, 25 Nov 2009 13:16:39 +0100	Series of suspiciously low values received from Ammonitor s1.	no	[deactivate]
Wed, 25 Nov 2009 12:16:39 +0100	Series of suspiciously low values received from Ammonitor s2.	no	[deactivate]
Wed, 25 Nov 2009 11:16:39 +0100	Series of suspiciously low values received from Ammonitor s2.	yes	[deactivate]
Wed, 25 Nov 2009 11:16:38 +0100	Series of suspiciously low values received from Ammonitor s1.	no	[deactivate]
Wed, 25 Nov 2009 11:16:38 +0100	Series of suspiciously low values received from Ammonitor s1.	yes	[deactivate]
Wed, 25 Nov 2009 11:16:37 +0100	Series of suspiciously low values received from Ammonitor s1.	no	[deactivate]

At the bottom right, there is a language selector showing "EN" and a "Change language" button. The footer contains the copyright notice: "© 2010 Ammonit Gesellschaft für Messtechnik mbH".

AmmonitOR – Filter List



The screenshot shows the AmmonitOR web interface. The browser address bar displays <https://or.ammonit.com/projects/3/filter/>. The page title is "AOR | Filters". The Ammonit logo is in the top left, and navigation links (Home, Settings, Help, Logout) are in the top right. The breadcrumb trail is "Projects > Wrangel > Filter".

Filters

New standard filter "Wrangel" created successfully.

Standard filters

Active	Sensors	Min. value	Max. value	Threshold	Message	Alert type	New status	Options
yes	s2, s3, b1, h1	20	24	1	This is just a test filter message, please pay no attention.	archive and email	Checked (Filter)	[deactivate] [edit] [delete]
yes	b1, h1, r1, s4	1022	1088	20	Please check your flange.	archive and email	Error (Filter)	[deactivate] [edit] [delete]
no	s3, b1, h1	100	104	1	This is another test standard filter, it is of less relevance.	archive and email	Checked (Filter)	[activate] [edit] [delete]
yes	d1, d2	0	0	1	Wind Vane potentially frozen.	archive and email	Suspicious (Filter)	[deactivate] [edit] [delete]

Logger mail filters

Active	Project	Loggers	Max time in hours	Message	Alert type	Options
yes	Wrangel	CO80435	1	New mail received from loggers.archive and email		[deactivate] [edit] [delete]

Comparison filters

There are no comparison filters. Create new comparison filter.

Site Map

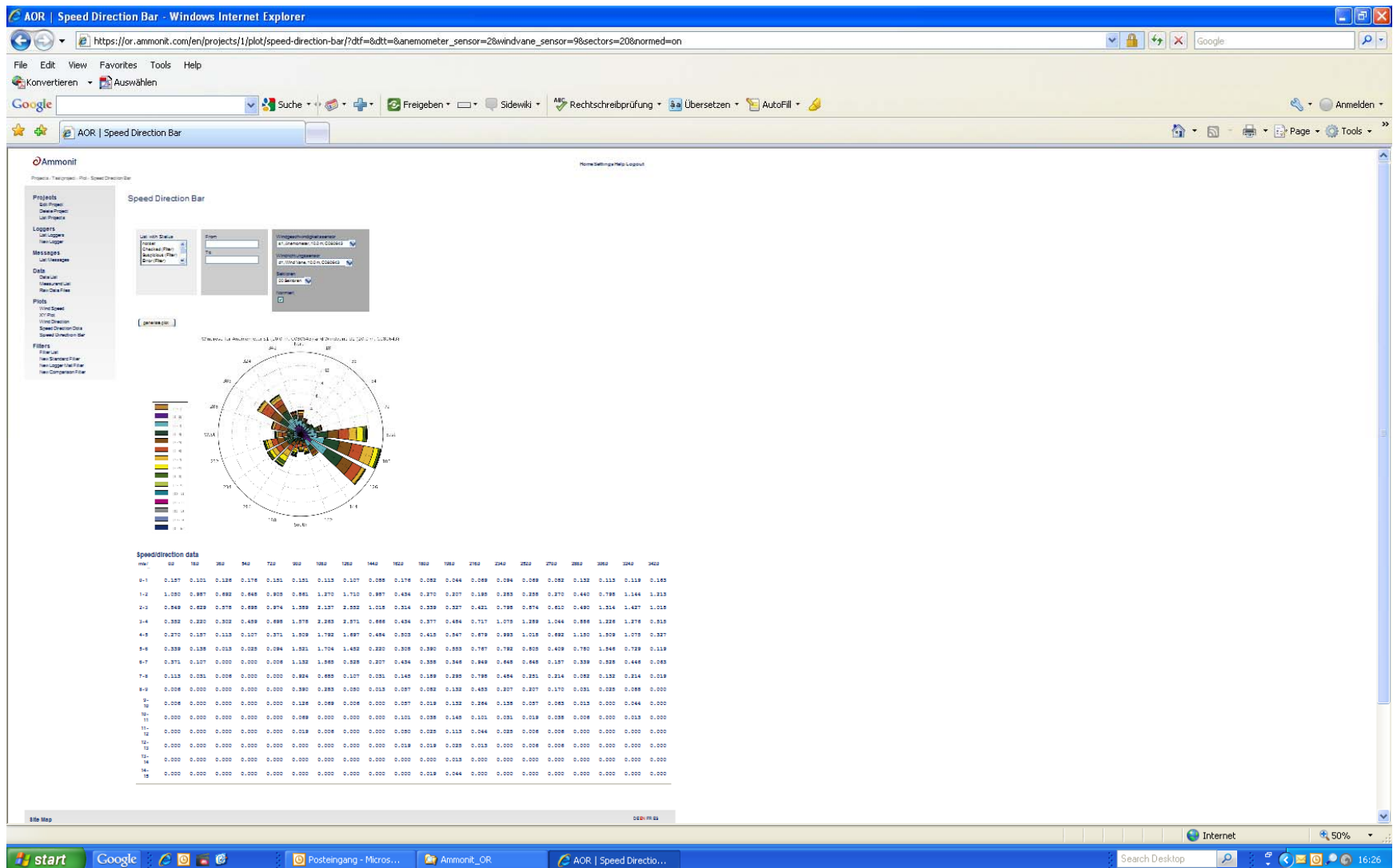
Home
Settings
Help
Logout
Impressum

Projects
Görlitzer Park
Skaltzer Str.
Wrangel

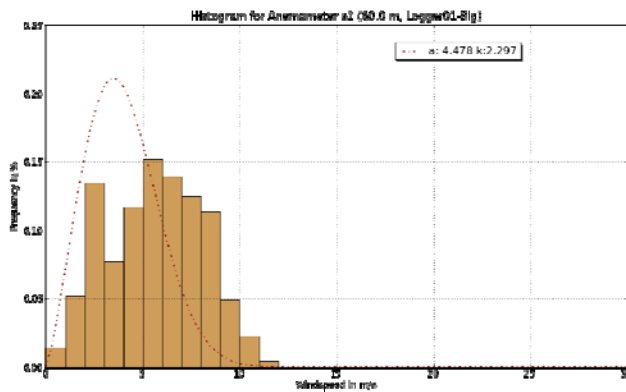
EN

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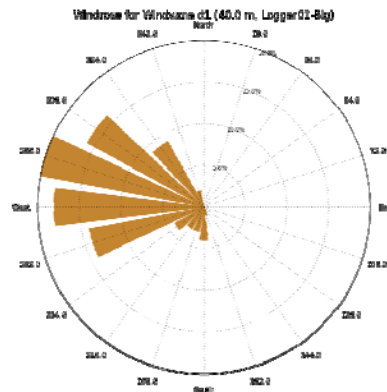
AmmonitOR – Data Visualisation



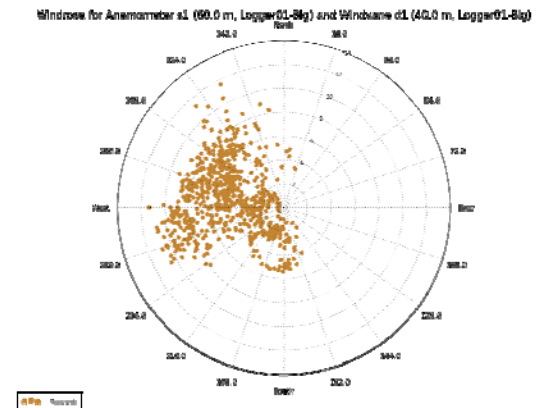
AmmonitOR – Choose your Type of Visualisation



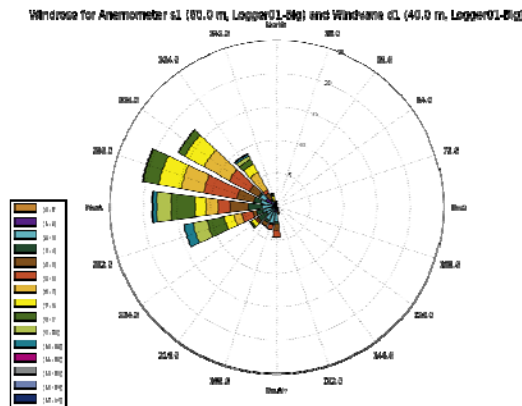
Histogram



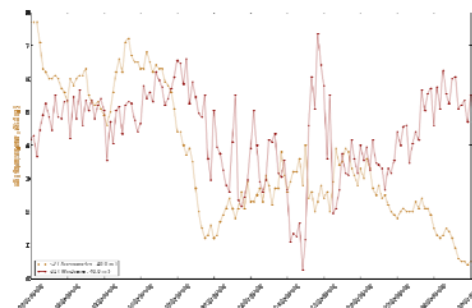
Wind Direction



Wind Speed
Wind Direction



Wind Speed/Wind Direction

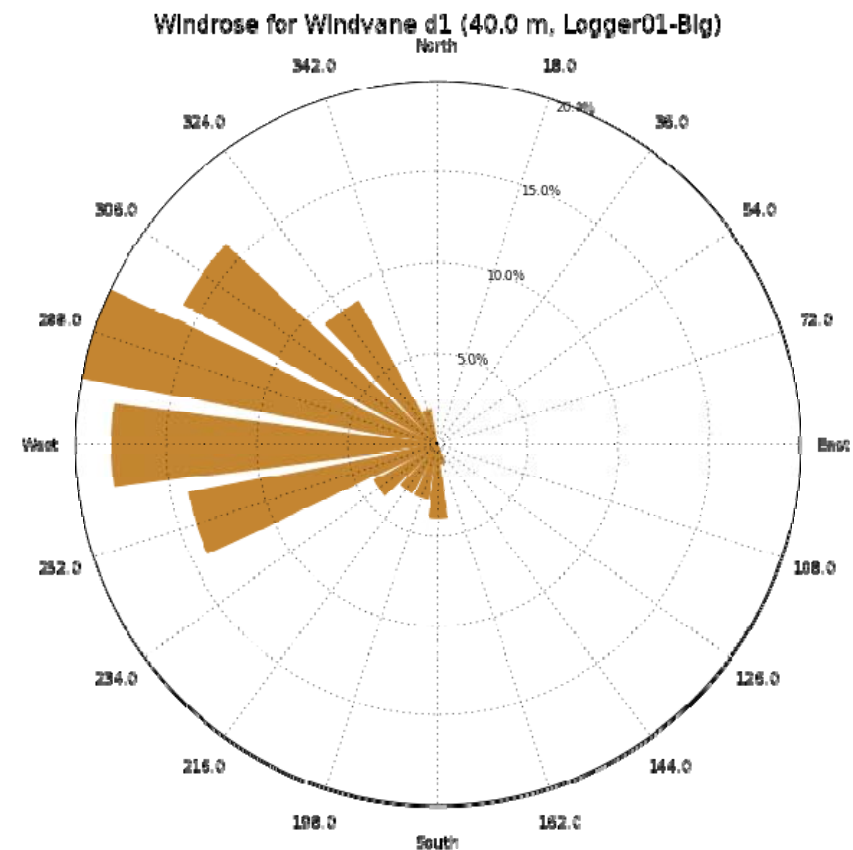


XY-Plot

AmmonitOR – Data Visualisation

- Visualise your data with selected diagrams:

Wind Direction Channel

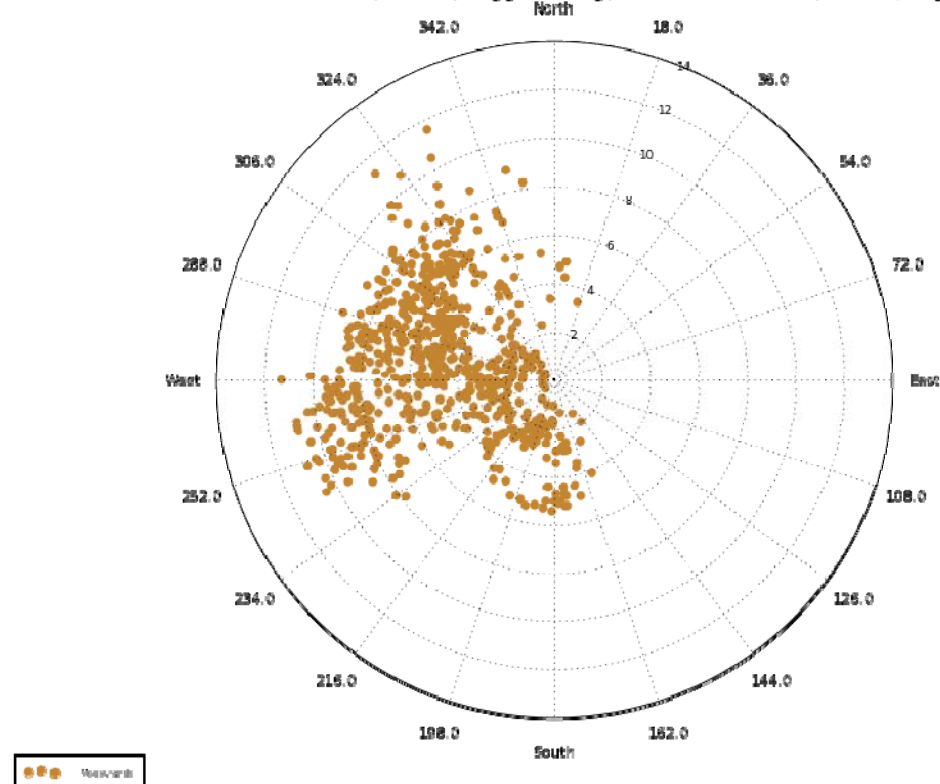


AmmonitOR Data Visualisation

- Visualise your data with selected diagrams:

Wind Speed
Wind Direction

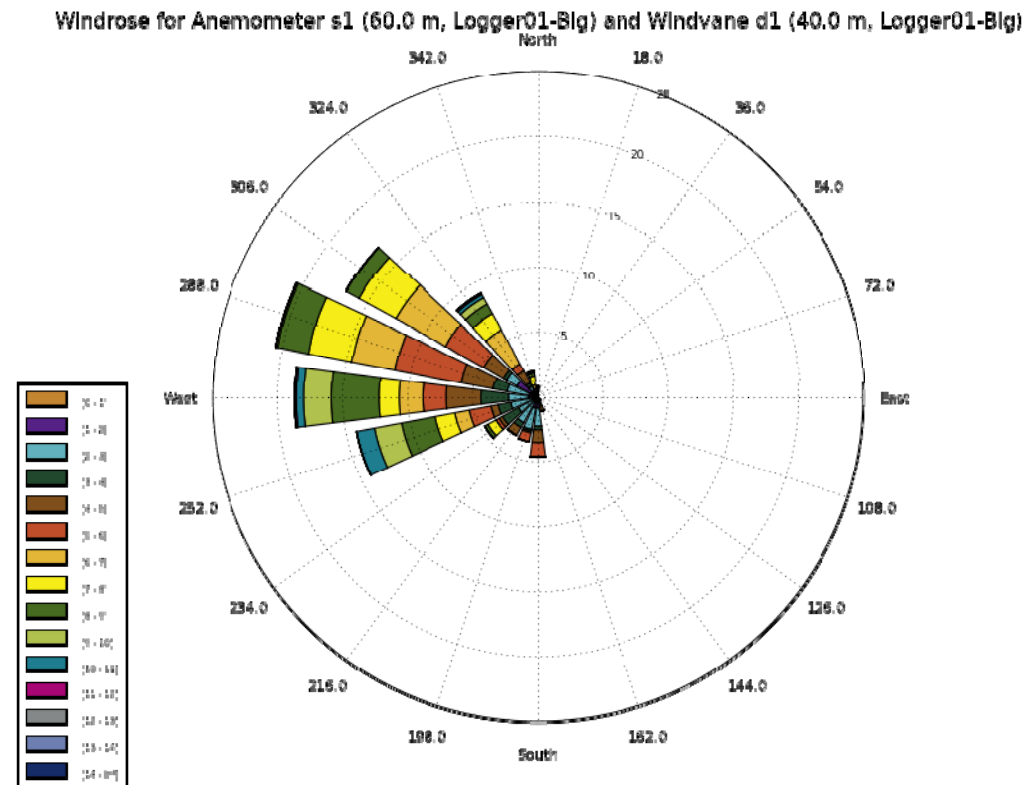
Windrose for Anemometer s1 (60.0 m, Logger01-Blg) and Windvane d1 (40.0 m, Logger01-Blg)



AmmonitOR – Data Visualisation

- Visualise your data with selected diagrams:

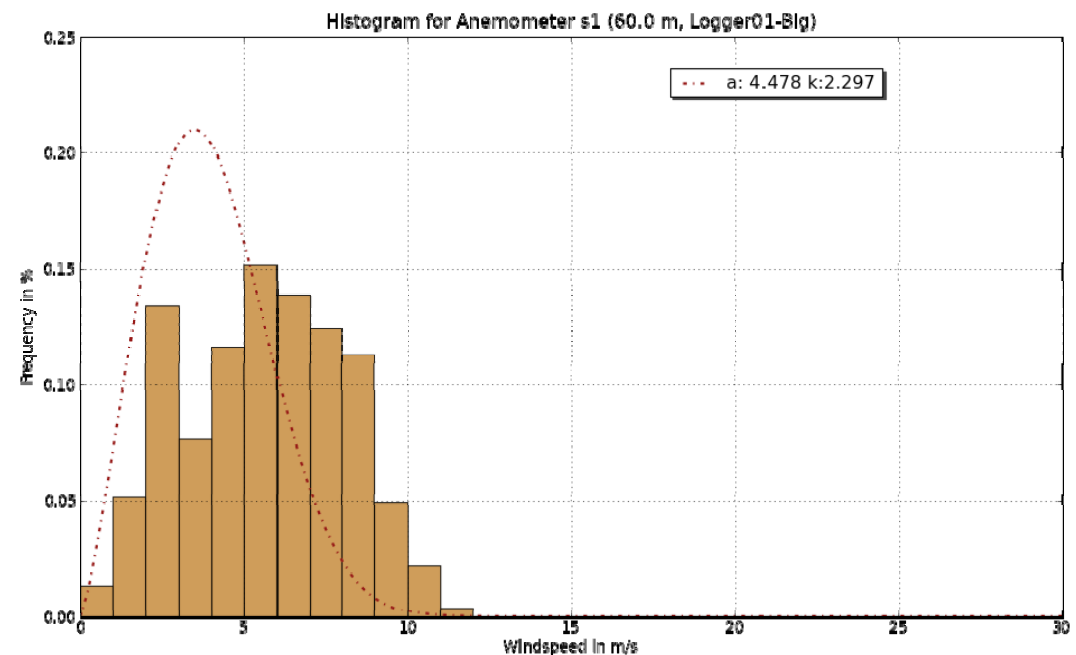
Wind Speed
Wind Direction



AmmonitOR – Data Visualisation

- Visualise your data with selected diagrams:

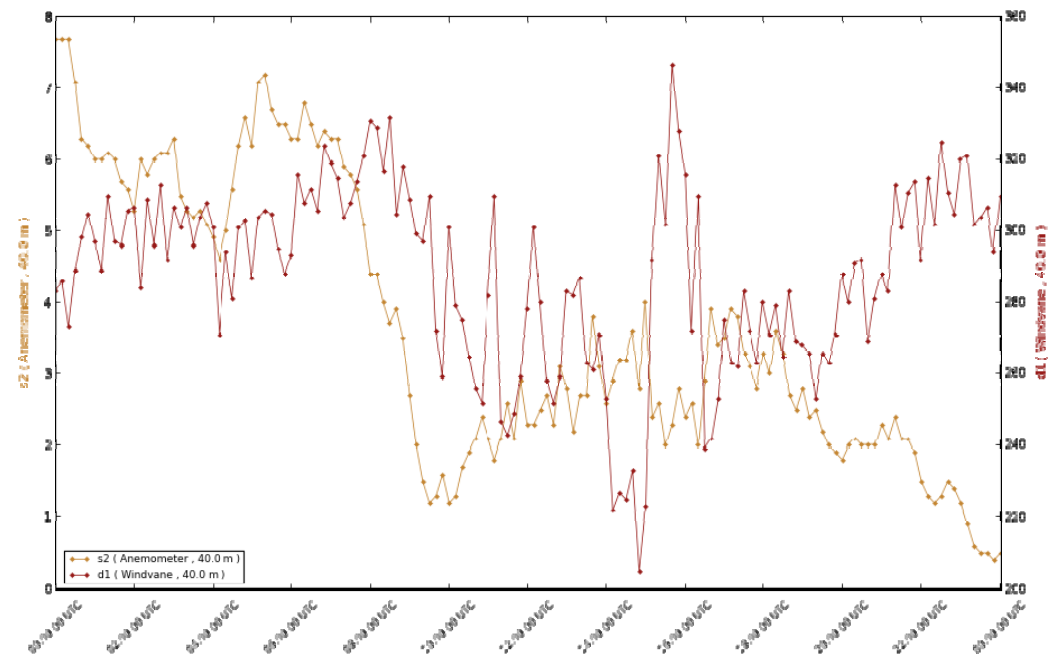
Histogram



AmmonitOR – Data Visualisation

- Visualise your data with selected diagrams:

XY- Plot



Register by emailing us:

ammonitor@ammonit.com

Thanks for your attention !

Author: Ammonit, July 2010

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