SeaData

QUICK START · MOBILE

From zero to your first forecast

WHAT IS SEADATA?

SeaData is a website that shows the **weather at sea for your own vessel**: waves, wind, current, tide and rain, taken from many weather models at once. It also answers the question every vessel on a job asks: **can we work today, and when is the next good window?** You do not install anything. You open **seadata.online** in a browser (Chrome, Edge, Safari or Firefox) on a pc, tablet or phone.

Five words you will see everywhere

Word	What it means in plain language
AIS	The radio signal every larger vessel sends with its position. SeaData uses it to know where your vessel is. **No AIS = SeaData does not know where you are.**
MMSI	The 9-digit number of your vessel's radio/AIS. You find it on the AIS unit or the ship's radio licence. You need it to add your vessel.
Hs	Significant wave height in metres – roughly the height of the higher waves you feel on deck.
Model	A computer weather forecast (e.g. HARMONIE, ECMWF). SeaData shows many; the best one for your spot stands **on the left**.
UTC	World time. **Every time in SeaData is UTC**, not your local time. In summer the Netherlands is UTC + 2 h.

Your first 10 minutes – do this in this order

1. **Sign in.** Go to **seadata.online**, click `Login` (bottom right) and type the email and password from your welcome mail. No account yet? Click `Request an account` – every account is checked and released by hand, you get a mail when it is ready.

2. **Add your vessel.** Bottom bar → `Profile` → tab `Vessels`. Type the `MMSI (9 digits)`, a name, and click `Add vessel`. Many vessels? Use `Import fleet list (Excel .xlsx)` with the columns Vessel, IMO, MMSI, Type. Details on page 3.

3. **Choose your start vessel.** Go back to the map. Click the vessel name at the top (next to `VESSEL`) and click the **star** ☆ behind your vessel. From now on SeaData always opens on that vessel, and every screen follows it.

4 **Check the position.** Look at `FIX AGE` in the top bar. **Green** = fresh position, **red** or **no AIS** = SeaData has no good position. Red? Read page 3: “No AIS”.

5 **Look at the weather.** Click the eye button ◉ (top right) for `Overview`: waves, wind, tide and current at your vessel on one card, from 6 hours ago to 24 hours ahead.

6 **Set your working limits.** Tab `Workability` → `Contract` → cog `Working limits`. Until you do this, SeaData uses **example** limits (orange bar). Page 4 shows how.

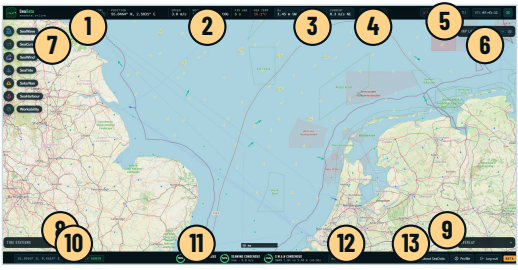
7 **Give your crew or client a look.** Only on a Fleet+ or Fleet admin account: `Profile` → `Viewers`. Page 5 shows how.

> **Stuck?** Click `?` in the top bar. At the top of the manual is the box `Ask about SeaData`: type your question in normal words (for example “how do I add a vessel”) and press Enter.

PAGE 2 · THE SCREEN

What you see and what every button does

After you sign in you see a sea chart. Everything floats on top of it. The numbers in the picture match the table below.



#	Button / item	What it does
1	⊕ + VESSEL	Click the vessel name to pick another vessel; click the ☆ star behind a name to make it your start vessel. The ⊕ button left of it brings the chart back to your vessel.

#	Button / item	What it does
2	Position · speed · heading · FIX AGE	Where your vessel is, how fast it goes and **how old that position is** (green = fresh, yellow < 5 min, orange < 15 min, red = do not trust). Also the sea temperature.
3	Hs · WIND · CURRENT	The waves, wind and current at your vessel right now.
4	? ◷ ⚙	**?** manual + Ask about SeaData · **clock** Data status: are all weather models fresh? · **cog** language, position format, speed unit, Own AIS, Rings, Labels and Track plot.
5	Tide · UTC · ◉	Is the tide rising or falling and when is the next high/low water · the clock (always UTC) · the **eye** opens the Overview card.

#	Button / item	What it does
6	MAP LAYER	Background chart (OSM, Voyager, Ocean, Topo) and on/off switches for extra layers: Platforms (live buoys and platforms; the cog sets recent data only, always near your vessel and Hs/wind labels), Clouds (satellite cloud image: fog, colour, IR), Areas, and under it AIS other ships, ForeCast official warning areas, SeaRain rain radar.
7	Screens (left)	SeaWave waves · SeaCurrent current · SeaWind wind · SeaTide tide · SolarNav sun, moon, GNSS · SeaHarbour ports · Workability can we work? Click again to close.
8	TIDE STATIONS	Opens the flags per country; 50km (on by default) shows every tide station within 50 km of you.

#	Button / item	What it does
9	OVERLAY	Coloured wave arrows, wind lines and satellite measurements over the chart.
10	◎ + FLEET ADMIN	The bullseye (Fleet+ and Fleet admin only): pick any spot yourself instead of the vessel. Next to it your account type.
11	Consensus rings	How well the models agree on waves, wind and SWAN. A full green ring = they agree.
12	now ▲	Pick the moment for the rings: now, +3h, +6h, +9h or +12h.
13	About SeaData · Profile · Log out	Profile is where you set up vessels, API, areas and viewers, and read notifications.

PAGE 3 · YOUR VESSEL

Set up your vessel – with AIS and without AIS

SeaData shows the weather **where your vessel is**. So first it must know where that is. Normally that comes from AIS. When there is no AIS, you have three other ways.

A. Normal set-up with AIS

1. Bottom bar **Profile** → tab **Vessels**.
2. Type the **MMSI (9 digits)** and optionally a **Name**. Click **Add vessel**. Fleet admin: tick the vessels you want to follow and click **Save** (or **Select all**).
3. Go back to the map, click the vessel name at the top (next to **VESSEL**) and click the ☆ star behind your vessel.
4. Wait a minute and check **FIX AGE**. Green? Done. Stays red or says no AIS? Go to B, C or D below.

> **Good to know:** a vessel cannot be edited. Wrong MMSI? Remove it with the × and add it again. On a **Fleet standard** account the free place stays locked for 7 days after removing a vessel.

Why can there be no AIS?

Shore stations only hear a vessel near the coast. Far offshore, behind an island or in a busy area the signal can be lost. Also a new vessel may simply not be in reception yet. Without a position SeaData does **not** guess: the vessel disappears from the chart after 40 minutes, and without any vessel the data falls back to a **fixed spot in the North Sea** – that weather is then **not** yours.

B. No AIS – let the vessel send its own position (best option)

A small program, **SeaData.exe**, runs on a Windows pc on board. It listens to the ship's GPS/NMEA network and sends the position to SeaData every 6 seconds over the normal internet (https, port 443). It

only sends, nothing has to be opened on the ship's firewall.

1. Bottom bar **Profile** → tab **API**. Copy your API key and click **Download SeaData.exe**.
2. Put the program on the pc on board that is connected to the NMEA network. Paste the API key into **ship_config.ini** next to the program and start it.
3. In **Profile** → **Vessels** tick **Position via SeaData.exe** for that vessel and save. **Without this tick the server refuses the data** – this is the step people forget.
4. Check: **Workability** → sub-tab **Vessel Online**. The ring fills with every message and you see the position arrive. Shore AIS stays as a back-up: switch the program off and the vessel falls back to normal AIS.

C. No AIS – choose the spot yourself (Fleet+ and Fleet admin)

Click the bullseye ◎ in the bottom bar and click the spot on the chart where you work. The button turns yellow and the chart says ChartPos – manual position. All tabs now give the weather for that spot. Click the bullseye again to follow the vessel again. Handy for planning a job before the vessel is there.

D. No vessel yet – just try it out

Every account has a ready-made **`Demo vessel`** in **`Workability`**. You can calculate with it straight away, change it into your own ship, rename it or delete it (it counts as one of your vessels; once deleted it does not come back).

PAGE 4 · WORKING LIMITS

Set your limits – and read the answer

A working limit is the worst weather in which an activity may still be done, as written in your contract or procedure. Example: MBES survey: Hs max 1.5 m, wind max 20 kn, for at least 4 hours in a row. SeaData checks every hour of the next 48 hours against these numbers.

> **Important:** as long as you have not set your own limits, SeaData uses **example limits** (Transit, Standby on Location, MBES, Crane) and shows an **orange bar** `Example limits`. Never rely on the answer while that bar is there.

Step 1 – describe your vessel (once)

1. Click tab `Workability` → sub-tab `Vessel` → `Config`.

2. Fill in only the block **Required**: profile name, vessel type, Lpp (length), beam, draught and working speed. Tip: use the **same name** as the vessel in your fleet list, so SeaData links the two. Every field has a what is this?
3. Click `Save`. The other blocks (Stability booklet, Extended – motions, Station keeping) are optional: they make the answer more precise, you can do them later.

Step 2 – set the contract limits

1. Sub-tab `Contract` → click the cog `Working limits`. A table opens: one row per activity.
2. Per activity fill in: **Hs** (m), **wind** (at 10 m height), **current**, **visibility** (max 12000 m) and **Min. window** (how many hours in a row you need). Leave a box empty if that limit does not apply.

3. Need another job? `+ Add activity`. Made a mess? `Reset to example values`.
4. `Near-limit margin` (default 10 %): how close to a limit an hour turns light orange. 0 = off.
5. Click `Save and recalculate`. The limits belong to **this vessel**; each vessel has its own table.

Step 3 – read the answer

Press `Calculate`. The top line says how many activities are workable now and when the next window opens. Below it, each activity has a **timeline**: one block per hour (UTC). The dashed line is now; dimmed blocks before it are history and do not count.

Block colour	Meaning
Green	Workable.
Light orange	Workable, but close to a limit (within your margin). Keep an eye on it.

Block colour	Meaning
Dark orange	Just over a limit – not workable.
Red	Limit exceeded – not workable.
Amber stripes	Weather is fine, but the calm period is shorter than your Min. window.
Green stripes	The window goes past the end of the forecast; its full length is unknown.
Grey	No model has data – this hour is not approved.

The thin **cyan bar** under each hour is the **chance** (from 70 extra model runs) that the weather stays within limits. It is information only: a green hour with a low chance is a green hour to watch. Need to send it on? Sub-tab **Reporting** makes a PDF or e-mail of the same answer.

PAGE 5 · VIEWERS AND HELP

Let others look along – safely

A **viewer** is a login for your crew, your office or your client. They see your account, but they cannot change anything. Only a **Fleet+** or **Fleet admin** account can make viewers.

1. Bottom bar `Profile` → tab `Viewers`.
2. Type the viewer's **email** and optionally a **name**.
3. Click `Add & download PDF` (you pass the PDF on yourself) or `Add & mail PDF` (SeaData mails it to the viewer).
4. The viewer opens **seadata.online**, clicks `Login` and types the email and password from the PDF. That is all.

A viewer CAN	A viewer can NOT
• see the map, your start vessel (the ☆ star) and all weather tabs • see Workability and Contract as last calculated (refreshed at most every 10 min) • open Reporting and download the PDF	• change limits, vessels or settings – limits are even hidden • upload anything, run SWAN or choose another vessel • open Profile or change their password

> **Password:** SeaData makes it and it is **only in the PDF**; it cannot be changed. Lost? Remove the viewer and add them again. Someone leaves the job? Click `Block` or `Remove` – they are logged out within 30 seconds.

Something looks wrong? Quick fixes

What you see	What to do
Position stays empty / **FIX AGE** red	No AIS for that MMSI. Check the MMSI, or use SeaData.exe or the bullseye (page 3).
Vessel gone from the chart	Position older than 40 minutes – hidden on purpose.
Orange bar **Example limits**	You have not set your own limits for this vessel yet (page 4).
Contract says Not assessed	No model covers that value at this spot; that limit is skipped.
Few ships with **AIS** on (in Map layer)	Zoomed out you only see your own fleet – zoom in.
Tide differs from the tide table	The astronomical tide has no wind surge; compare with the actual water level line in SeaTide.
SWAN keeps waiting	One SWAN run at a time for everybody; the result comes by itself.
Chart is slow	Switch Waves and Wind off under **Overlay**.

Three rules to remember

1. **All times are UTC.**
2. **Always look at Fix age.** The weather is for the position shown – an old position means the weather of the wrong place.
3. **SeaData supports your decision, it does not make it.** It is not a navigation aid. The master's judgement, the vessel's own limits, official charts and warnings always come first.

More help: **?** in the top bar (full manual and **Ask about SeaData**) · questions or an account: **admin@seadata.online**