



TECHSAS NG

Multiple web-apps

ACQUISITION

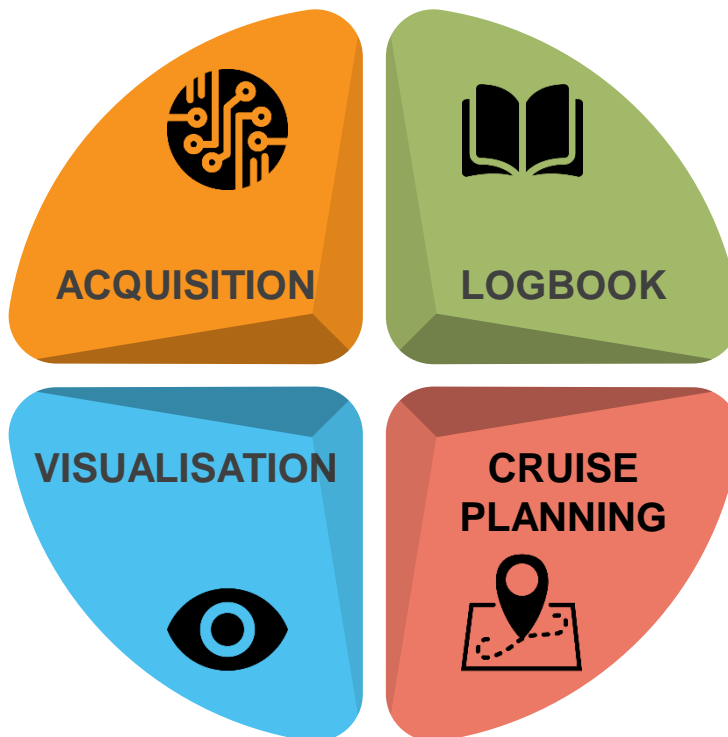
Simple way to:

- add,
- configure,
- monitor your devices
- record data

VISUALISATION

Display:

- charts,
- map,
- video on board,
- Cruise messages / information



LOGBOOK

Add events, operations

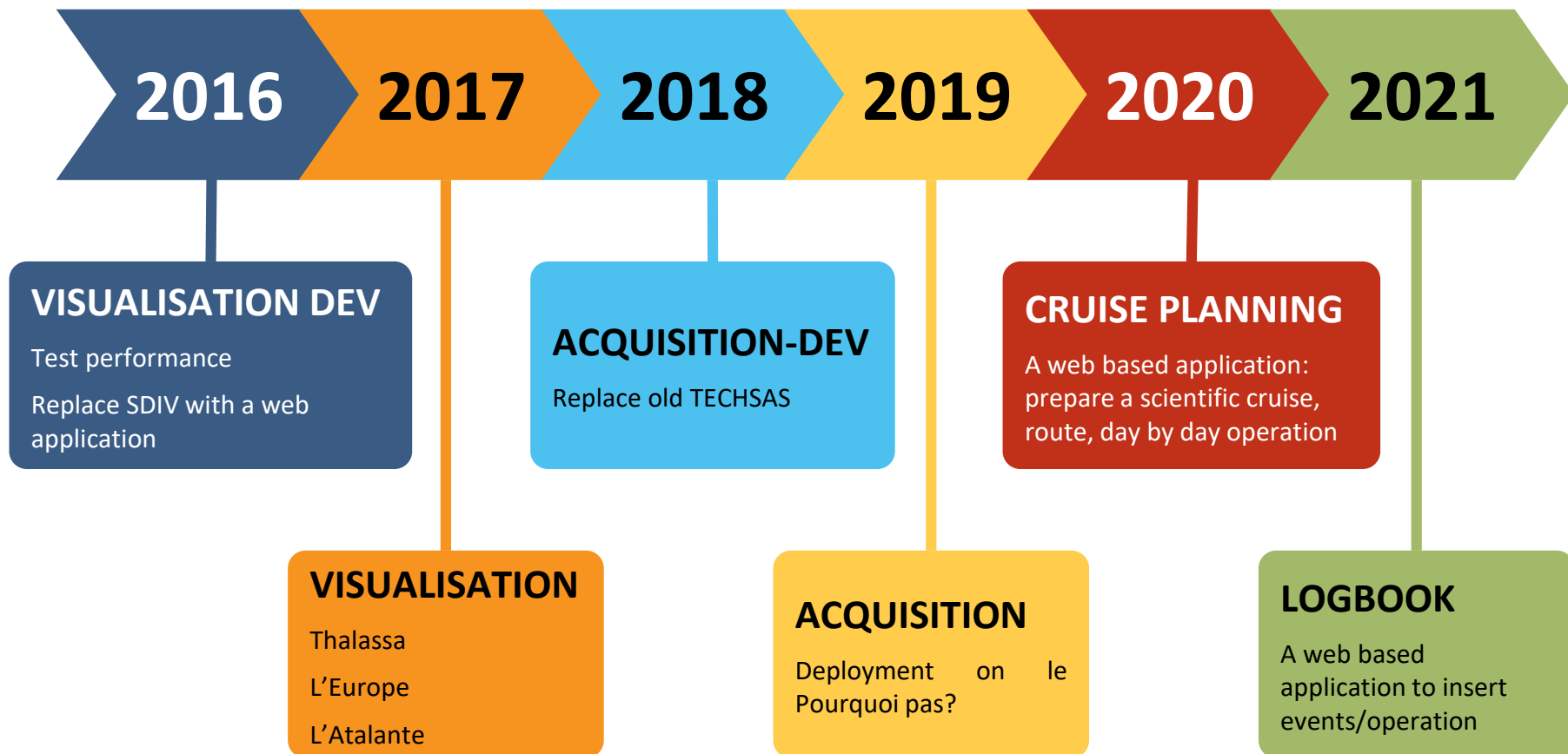
CRUISE PLANNING

Interactive creation of routes on a map, Add different layers, Checkpoints, ETA




General information

- LGPL3 license
- OS: Java 8 compatible runtime
 - **Debian (recommended),**
 - **Windows**
- 20 years experience in data acquisition
- Use nginx to proxy web apps

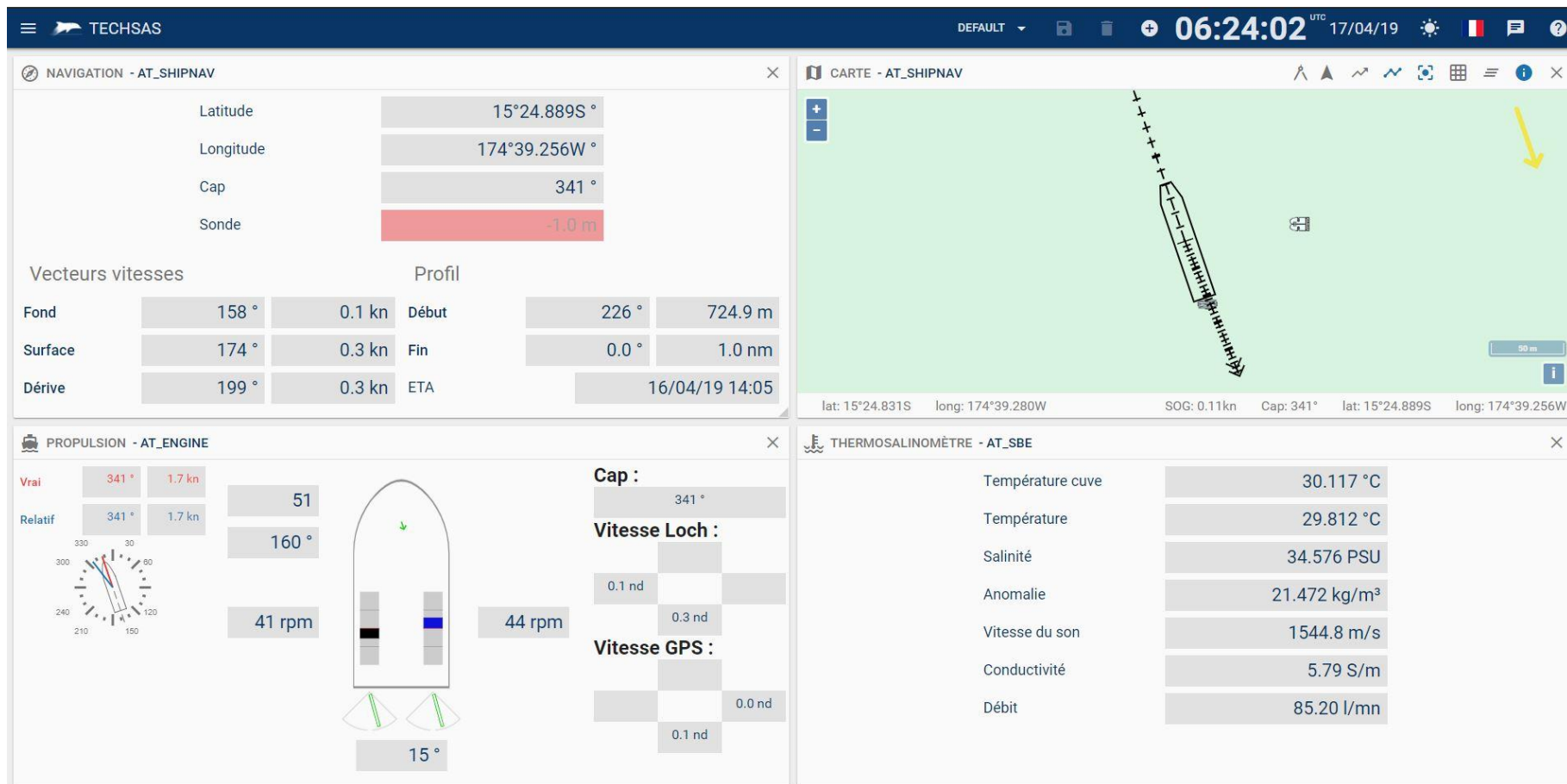
Road map



Visualisation

- Simple and advanced view to monitor data
 - **Charts** 
 - **Engine view**
- Send information messages (day schedule) 
- Video stream 
- Live video web chat

Visualisation



Visualisation

TECHSAS DEFAULT 10:25:16 UTC 03/12/18 🇫🇷

VIDEO - telescience

$\theta = 42^\circ$ $\theta = 16^\circ$ $\text{Clap} = 259^\circ$
 $I = 1.43m$ 2.62°

$I_{\text{mag}} = 0.6 \text{ On}$ $V1 = 0.087 \text{ / s}$ $V_{\text{em}} = 0.0m/s$ $\text{On}(\text{R}) = -1.0m$ $\text{A}(\text{R}) = 0.7m$

CARTE - EU_SHIPNAV

43°18.297N 007°00.550E SOG: 0.42kn Cap: 24° lat: 43°13.295N long: 006°47.282E

VUE NUMÉRIQUE

Latitude	EU_SHIPNAV - shipnav	43°13.295N °
Longitude	EU_SHIPNAV - shipnav	006°47.282E °
Heading	EU_SHIPNAV - shipnav	24.14 °

VUE NUMÉRIQUE

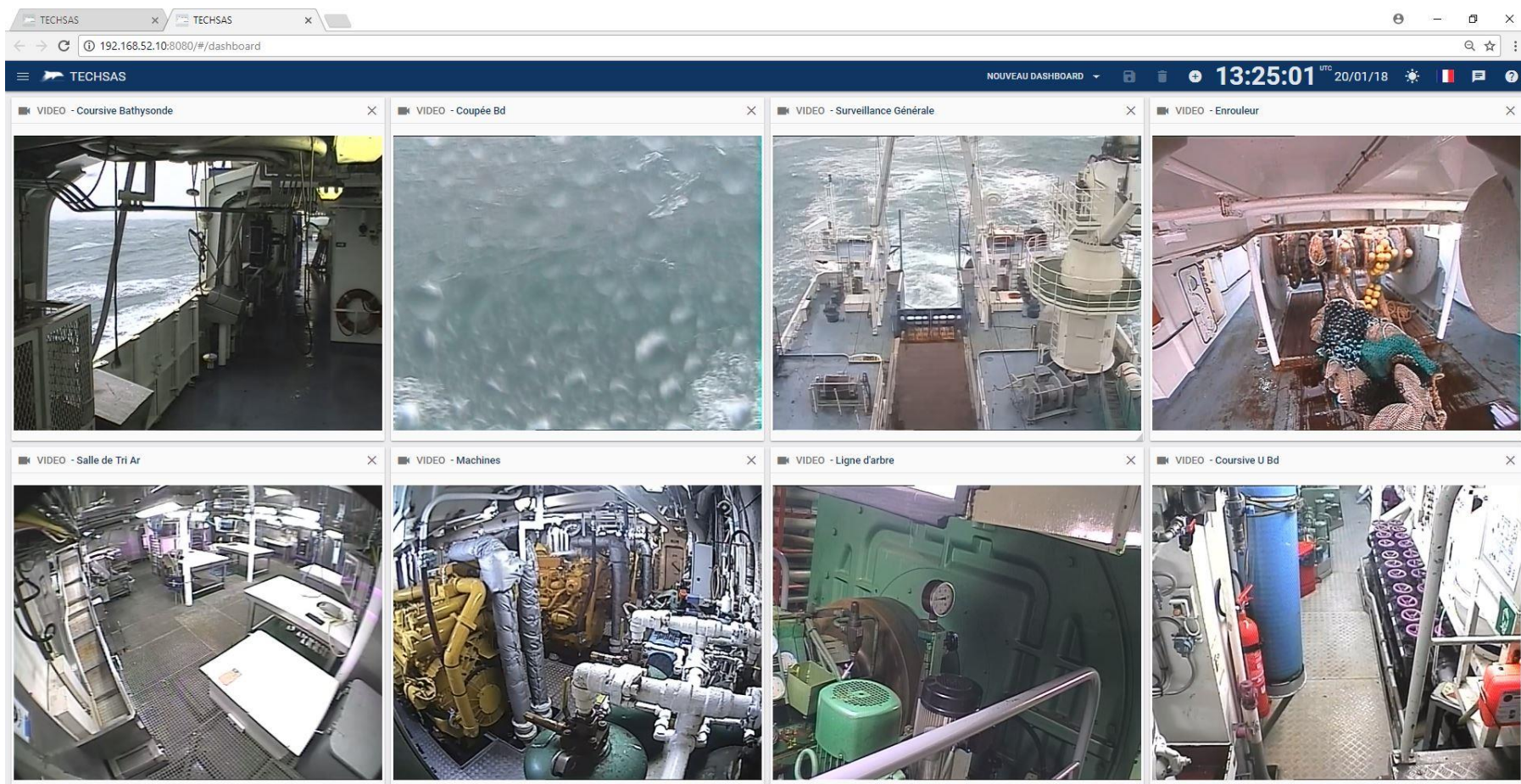
Latitude	HROV_NAV - shipnav	43°13.327N °
Longitude	HROV_NAV - shipnav	006°47.203E °
Heading	HROV_NAV - shipnav	253.40 °
Altitude	HROV_NAV - shipnav	0.700 m
Depth	HROV_NAV - shipnav	86.0000 m

MÉTÉO - EU_WEATHER

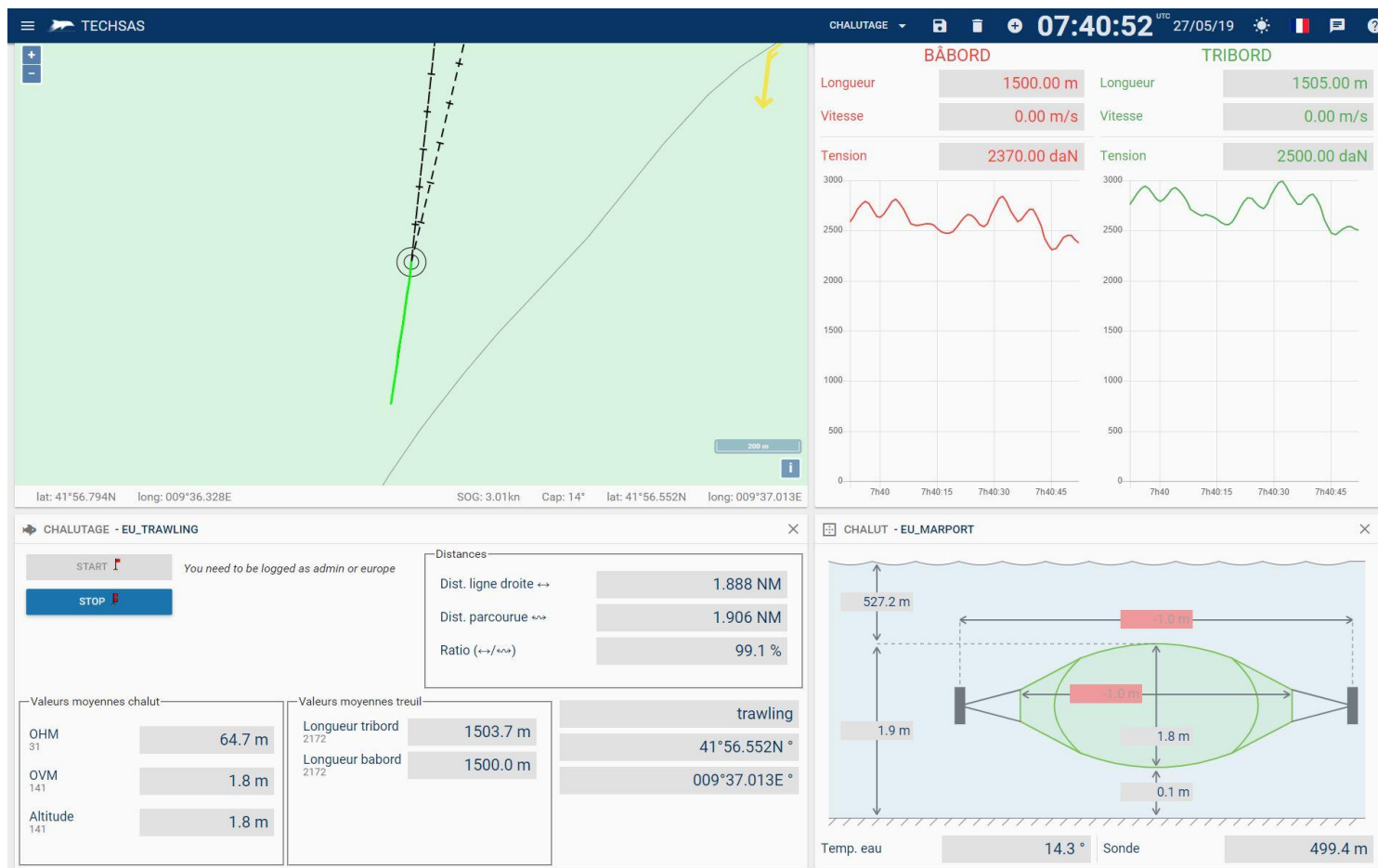
Température de l'air	15.9 °C
Température de l'eau	19.0 °C
Pression de l'air	1013.8 mbar
Humidité	69.9 %
Flux de chaleur	0.0 W/m²
Point de Rosée	10.4 °C

Vrai	352.0 °	7.7 kn
Relatif	325.0 °	7.0 kn

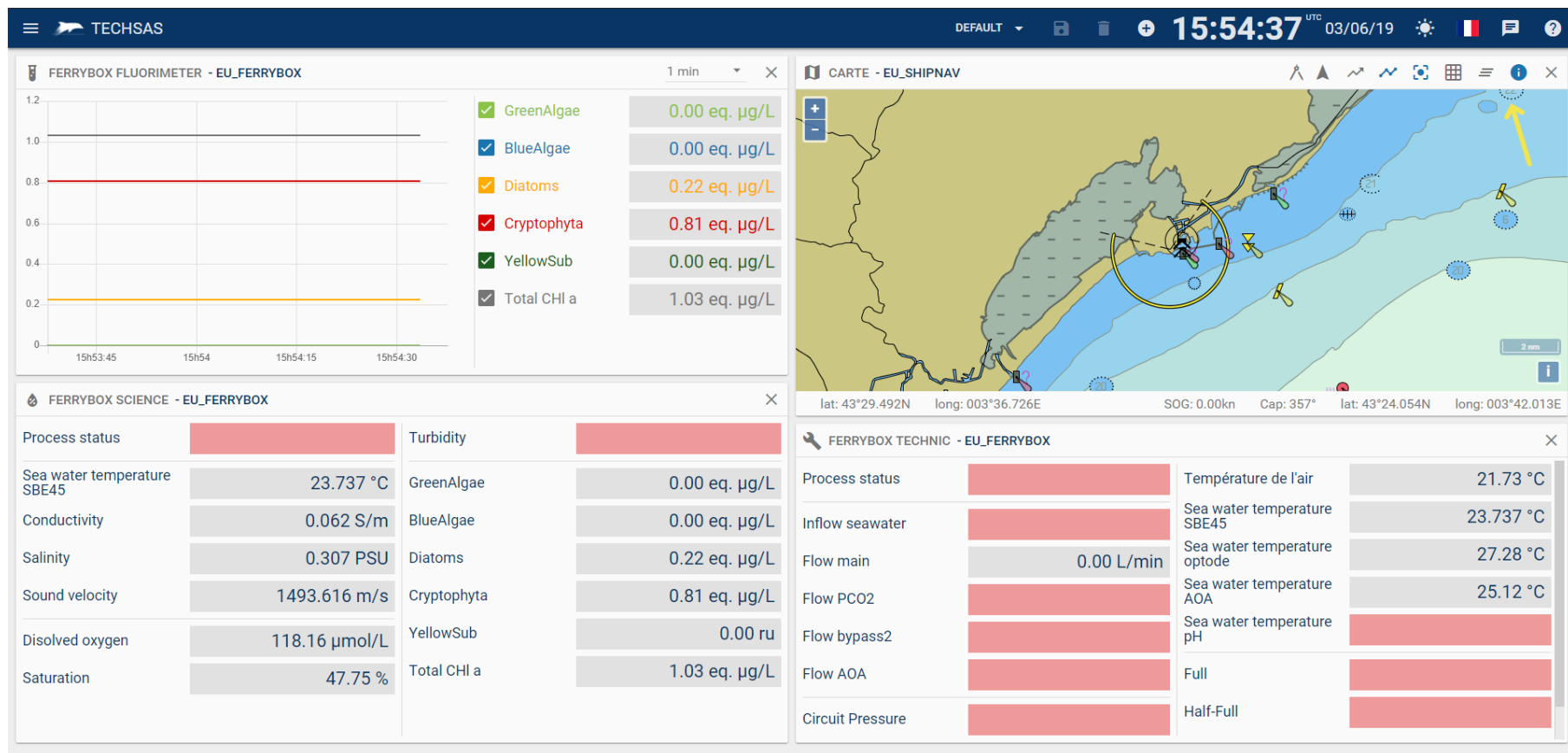
Visualisation



Visualisation



Visualisation



Acquisition

- Simple way to add devices
- Connect almost any kind of sensor
 - **UDP,**
 - **TCP,**
 - **Serial line**
- Log easily data:
 - **Raw data**
 - **NetCDF files**
 - **Database (PostgreSQL)**

Acquisition

Acquisition								12:18:14 ^{UTC} 19/08/19	
adcp150 TL_ADCP_150 35 frames Data missing	adcp38 TL_ADCP_38 71 frames Ok	gill anemometer TL_ANEMOMETER Data missing	ek80_120k TL_EK80_120k 355 frames Ok	ek80_18k TL_EK80_18k 355 frames Ok	ek80_200k TL_EK80_200k Data missing	ek80_333k TL_EK80_333k Data missing	ek80_38k TL_EK80_38k 355 frames Ok		
ek80_70k TL_EK80_70k 355 frames Ok	em2040 TL_EM2040 Data missing	sirehnaDP TL_ENGINE 355 frames Ok	ferrybox TL_FERRYBOX Data missing	flow cufes TL_FLOW_CUFES Data missing	flow sbe TL_FLOW_SBE Data missing	funes TL_FUNES Data missing	gps INNGA TL_INNGA_10010 Data missing		
trawl TL_MARPORT Data missing	me70mb TL_ME70MB Data missing	phins1 TL_PHINS1 3548 frames Ok	phins2 TL_PHINS2 3548 frames Ok	pupitri TL_PUPITRI 9 frames Data missing	reference sounder TL_REFSOUNDER Data missing	sbe TL_SBE 59 frames Ok	TL shipnav TL_SHIPNAV 355 frames Ok		
test TL_TEST 710 frames Ok	weather TL_WEATHER 35 frames Data missing	winch TL_WINCH 355 frames Ok							

Acquisition

Acquisition						12:25:03 ^{UTC} 19/08/19	
Device name	Status	Frames	Files	Size			
adcp150 TL_ADCP_150	Data missing	76	TL_ADCP_150-watercurrentvelocity-2019-0819-12.nc	1.71 Mb			
adcp38 TL_ADCP_38	Ok	153	TL_ADCP_38-watercurrentvelocity-2019-0819-12.nc	3.41 Mb			
gill anemometer TL_ANEMOMETER	Data missing						
ek80_120k TL_EK80_120k	Ok	764	TL_EK80_120k-sb_depth-2019-0819-12.nc	25.20 Kb			
ek80_18k TL_EK80_18k	Ok	764	TL_EK80_18k-sb_depth-2019-0819-12.nc	25.20 Kb			
ek80_200k TL_EK80_200k	Data missing						
ek80_333k TL_EK80_333k	Data missing						
ek80_38k TL_EK80_38k	Ok	764	TL_EK80_38k-sb_depth-2019-0819-12.nc	25.20 Kb			
ek80_70k TL_EK80_70k	Ok	764					
em2040 TL_EM2040	Data missing						
sirehnaDP TL_ENGINE	Ok	764	TL_ENGINE-tpropulsion-2019-0819-12.nc	62.64 Kb			
ferrybox TL_FERRYBOX	Data missing						
flow cufes TL_FLOW_CUFES	Data missing						
flow sbe TL_FLOW_SBE	Data missing						
funes TL_FUNES	Data missing						
gps INGGA TL_INGGA_10010	Data missing						
trawl TL_MARPORT	Data missing						

No message

Used disk space: NaN %

4 steps to add a device:



Step1 : configure metadata


Device edit ✕


ID: TL_INGGA_10010
Name: gps INGGA
Trigger: frame (\$INGGA)


Frames
 position 1.0


Channels / Drivers


-  gps10010
-  GPGGA001

1

General configuration


Channel configuration


Data frames


Driver configuration


Summary & Validate

Step 1: General informations about your device

Device name *	Device ID *	Trigger Mode *	Trigger Frame
gps INGGA	TL_INGGA_10010	FRAME	▾ \$INGGA

Install date	📅 First use date	📅 Latest calibration date	📅 Calibration parameters	Working parameters
Date format MM/DD/YYYY				
Position	x 0	y 0	z 0	

Next

4 steps to add a device:



Step2 : configure input


Device edit ✕

ID: TL_INGGA_10010
Name: gps_INGGA
Trigger: frame (\$INGGA)


Frames
position 1.0

Channels / Drivers


-  gps10010
-  GPGGA001




General configuration




Channel configuration



Data frames



Driver configuration



Summary & Validate

Step 2: Edit channel list

Channel ID	URL		
gps10010	udp://127.0.0.1:20010	+	-

Back
Next

4 steps to add a device:


Step3 : configure output


Device edit ✕


ID: TL_INGGA_10010
 Name: gps_INGGA
 Trigger: frame (\$INGGA)


Frames
 position 1.0


Channels / Drivers
 gps10010
 GPGBA001


 General configuration


 Channel configuration


3
 Data frames


 Driver configuration


 Summary & Validate

Step 3: Select data frames

Frame name	Version	+
position	1.0	✕

Back
Next

4 steps to add a device:



Step4 : configure drivers


Device edit ✕


ID: TL_INGGA_10010
 Name: gps_INGGA
 Trigger: frame (\$INGGA)


Frames
 position 1.0


Channels / Drivers


-  gps10010
-  GPGGA001


General configuration




Channel configuration


Data frames


Driver configuration


Summary & Validate

Step 4: Edit drivers

Driver name	Channel ID	Header	Class	+
GPGGA001	gps10010	\$INGGA	PositionDriver	 

Preview: GPGGA001 ▼

Back
Next

Cruise planning

- Add/Edit Point of interest
- Create, update routes
 - **Calculate estimated time, distance**
- Import/export routes, POI
- Add layers
 - **WMS from QGIS server**
 - **WMS from ENC server**
- Share cruise schedule using a link

Cruise planning

TECHSAS 09:28:57 UTC 20/08/19

MAP - TL_SHIPNAV

Mode ajout de route : vous pouvez cliquer sur la carte pour dessiner des routes

AJOUTER QUITTEZ LE MODE EDITION

Couches

- Fond de carte
- QGIS layer
- MNT_25m_decoup
- Zonex
- Monaco
- AUV
- WP_G2
- sismique
- WP_G1
- CASINO layer
- Cruise
 - Ship route
 - Ship trace
 - Multibeam
 - AIS
 - Mobile
 - Ship

lat: 50°11.012N long: 002°24.431E

SOG: 7.39kn heading: 313° lat: 50°25.665N long: 000°21.767E

LogBook

- Cruise metadata:
 - **Cruise name, dates, working zone, institute, ...**
- Create device and associated status
 - **(ex CTD – start / stop)**
- Add custom events,
- Generate cruise summary report

Contacts

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Thank you for your attention

Any question ?

