

ASTROSKIN

VITAL SIGNS MONITORING PLATFORM



[Live Demo](#)

- ▶ **Presentation of The Astroskin Vital Signs Monitoring Platform**
- ▶ **Demo: Astroskin App, Data Sync & Dashboard**
- ▶ **News & Pricing**
- ▶ **Current & Future Applications**
- ▶ **Q&A**

HEXOSKIN
HEALTH SENSORS & AI

Founded: 2006
Headquarters: Montréal, Canada

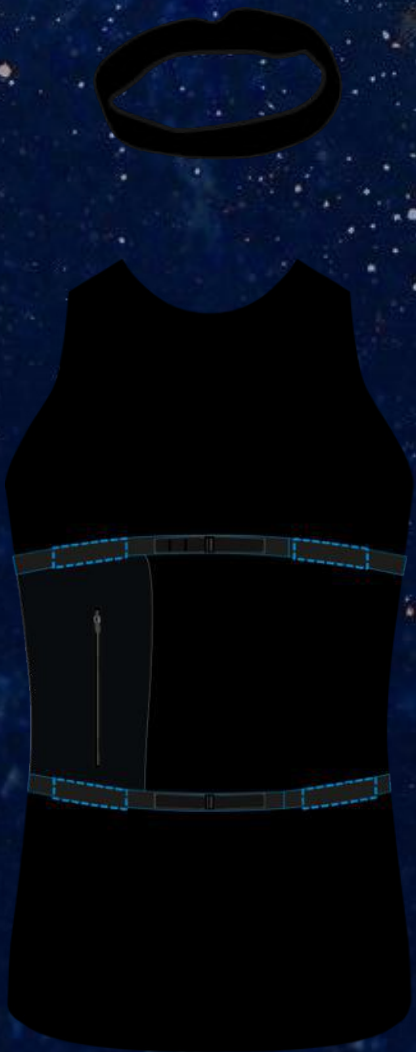
Platforms

Solutions & Services

Industries

HEXOSKIN
CONNECTED HEALTH PLATFORM

ASTROSKIN
VITAL SIGNS MONITORING PLATFORM



Health Sensors



Cloud Solutions,
Software & Services



Data Analytics
& Reporting

- Healthcare
- Academic Research
- Aerospace & Space
- Clinical Development
- Police & First Responders
- Security & Defense
- Sports

The Most Portable Monitor of the Five Vital Signs

Head Band

Astroskin Shirt

Women



Men



The Most Portable Monitor of the Five Vital Signs

ASTROSKIN
VITAL SIGNS MONITORING PLATFORM

Women



Adjustable Bands

Men



The Most Portable Monitor of the Five Vital Signs

ASTROSKIN
VITAL SIGNS MONITORING PLATFORM

Women



Side Pockets

Men



The Most Portable Monitor of the Five Vital Signs

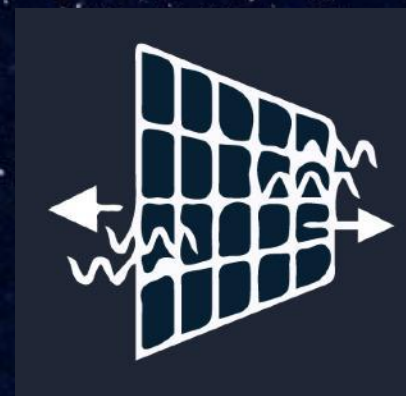
ASTROSKIN
VITAL SIGNS MONITORING PLATFORM



Sizes 2XS up to 4XL

Made in Canada

- Made with Italian fabric
- 73% Polyamide Micro 27% Elastane



Breathable



Antibacterial



UV Protection



Machine Washable



Quick Dry

Monitors Five Vital Signs Continuously

3-Lead ECG

250 Hz, 1uV Resolution

- Heart rate: 30-220 BPM, 1Hz, 16 bits resolution
- QRS event detection: 4ms resolution
- RR intervals: 4ms resolution

Dual Channel Breathing Sensors

RIP 125 Hz

- Breathing rate: 2-90 RPM, 1 Hz, 0.1 RPM resolution
- Minute Ventilation: 3-90 L/min, 1 Hz
- Tidal Volume (last inspiration): 80-10000 mL, 1 Hz, 20 mL resolution
- Inspiration & Expiration Events: 8ms resolution

Pulse Oximetry

- Oxygen Saturation (SpO2 %): 1 Hz, resolution 1%
- Photoplethysmography (PPG): 75 Hz
- Heart rate: 1 Hz

Systolic Blood Pressure (BP)

- Systolic pressure: 60-260 mmHg, 1 Hz, 1 mmHg resolution
- Pulse Transit Time Computation

3-axis Accelerometer

50Hz, +/-16g range

- Actigraphy: 1Hz, 3.9 mG resolution
- Step count: reported at each step
- Cadence: 30-240 rpm, calculated on 8 last steps, 1 Hz

Skin Temperature

1 Hz, 0.1 Celsius resolution



3-Lead ECG

250 Hz, 1uV Resolution

- Heart rate: 30-220 BPM, 1Hz, 16 bits resolution
- QRS event detection: 4ms resolution
- RR intervals: 4ms resolution

Quality Assessment Channels:

- Disconnection detection
- 50-60 Hz noise detection
- Saturated ECG Signal detection
- Movement artifact detection
- RR intervals reliability detection

Dual Channel Breathing Sensors

RIP 125 Hz

- Breathing rate: 2-90 RPM, 1 Hz, 0.1 rpm resolution 1%
- Minute Ventilation: 3-90 L/min, 1 Hz
- Tidal Volume (last inspiration): 80-10000 mL, 1 Hz, 20 mL resolution
- Inspiration & Expiration Events: 8ms resolution

Quality Assessment Channels:

- Disconnection detection
- Noise detection
- Baseline change detection



A Light & Portable System

ASTROSKIN
VITAL SIGNS MONITORING PLATFORM



Dimensions

- **Garments:** 2XS up to 4XL
- **Device:** 3 x 2.4 x 2.5 in / 62 x 78 x 23 mm

Weight

- **Device:** 75 g (without batteries)
- **Garment:** <185 g
- **Headgear:** 22.25 g

Data Storage

- 4 GB Loop Recording
- ~ 9 MB/hour of raw data recording
- +400 hours of raw data recording

Power

- 48h Continuous Autonomy
- 2x AA batteries

Data Visualization & Sync

- Bluetooth 2.1
- USB



Astroskin Vital Signs Monitoring Platform

- iOS App - iPhone & iPad
- Data Synchronization
- Dashboard
- Open API & Free Hosting
- Licensing options for Developers & Organizations

App Demo

Home

BIOMON-2016

John

Power77%

RecordRecording...

Night ModeOFF

BluetoothON

Metrics

Heart Rate 46BPM	Steps 165	Cadence 0step/min
Breathing Rate 13.3resp/min	Ventilation 22L/min	Tidal Volume 1.3L
Oxygen Saturation 99%	Temperature 33.6°C	Blood Pressure 124mmHg

Activity

Recording...

SHOW SENSORS

77%

Real-Time Metrics

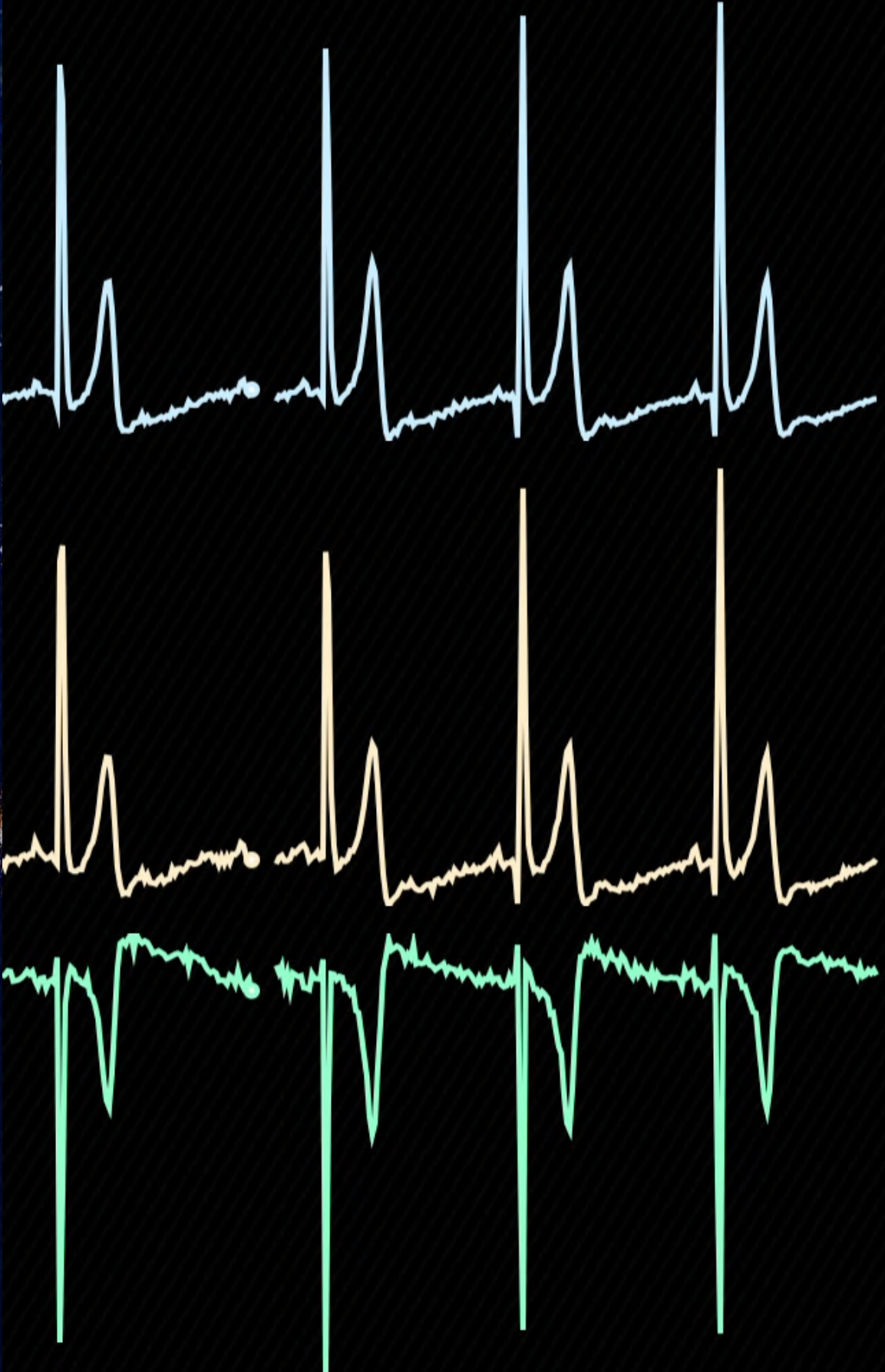
Sensors: BIOMON-2016

ECG

Respiration

Acceleration

Oxygen Sat.



Real-Time 3-Lead ECG

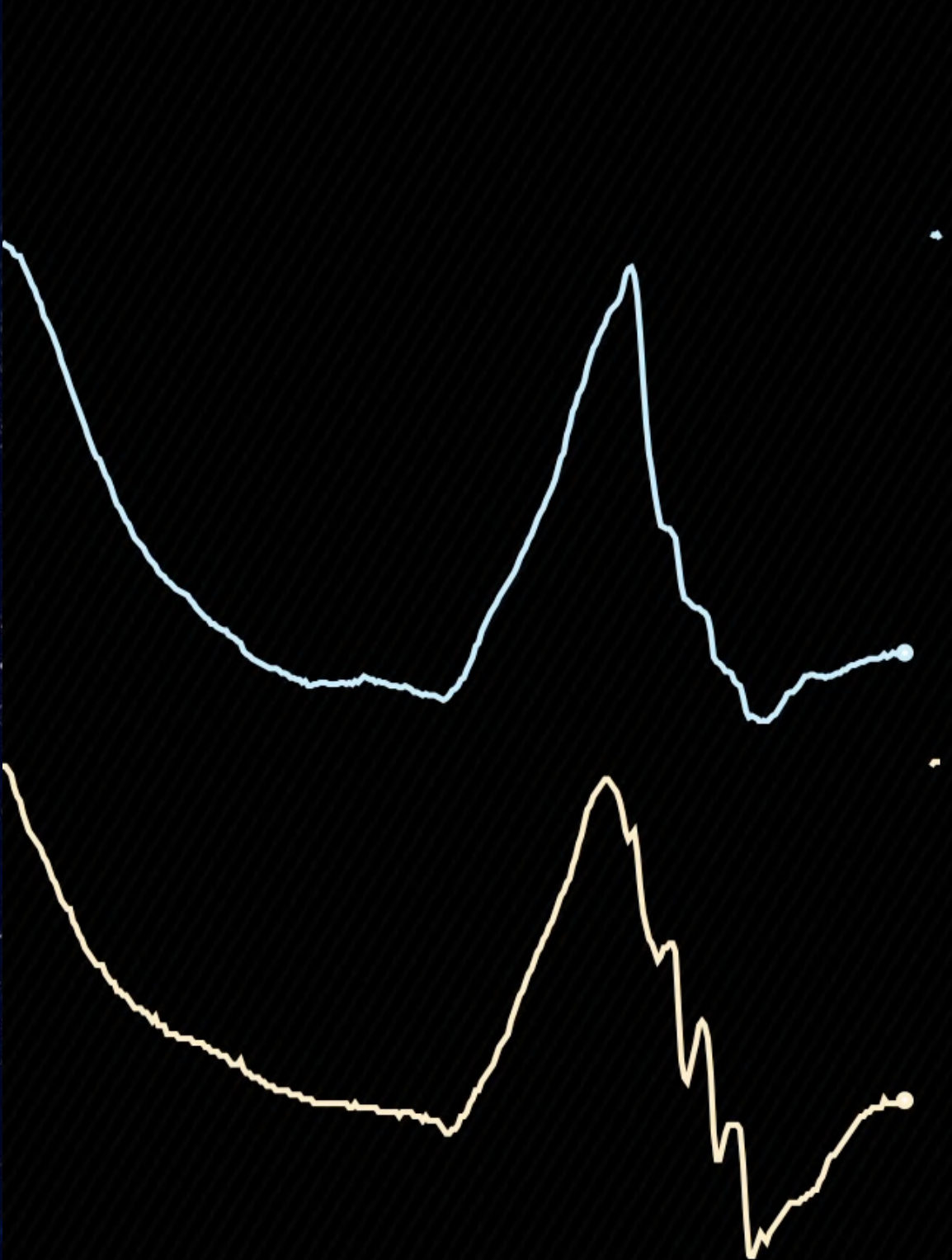
Sensors: BIOMON-2016

ECG

Respiration

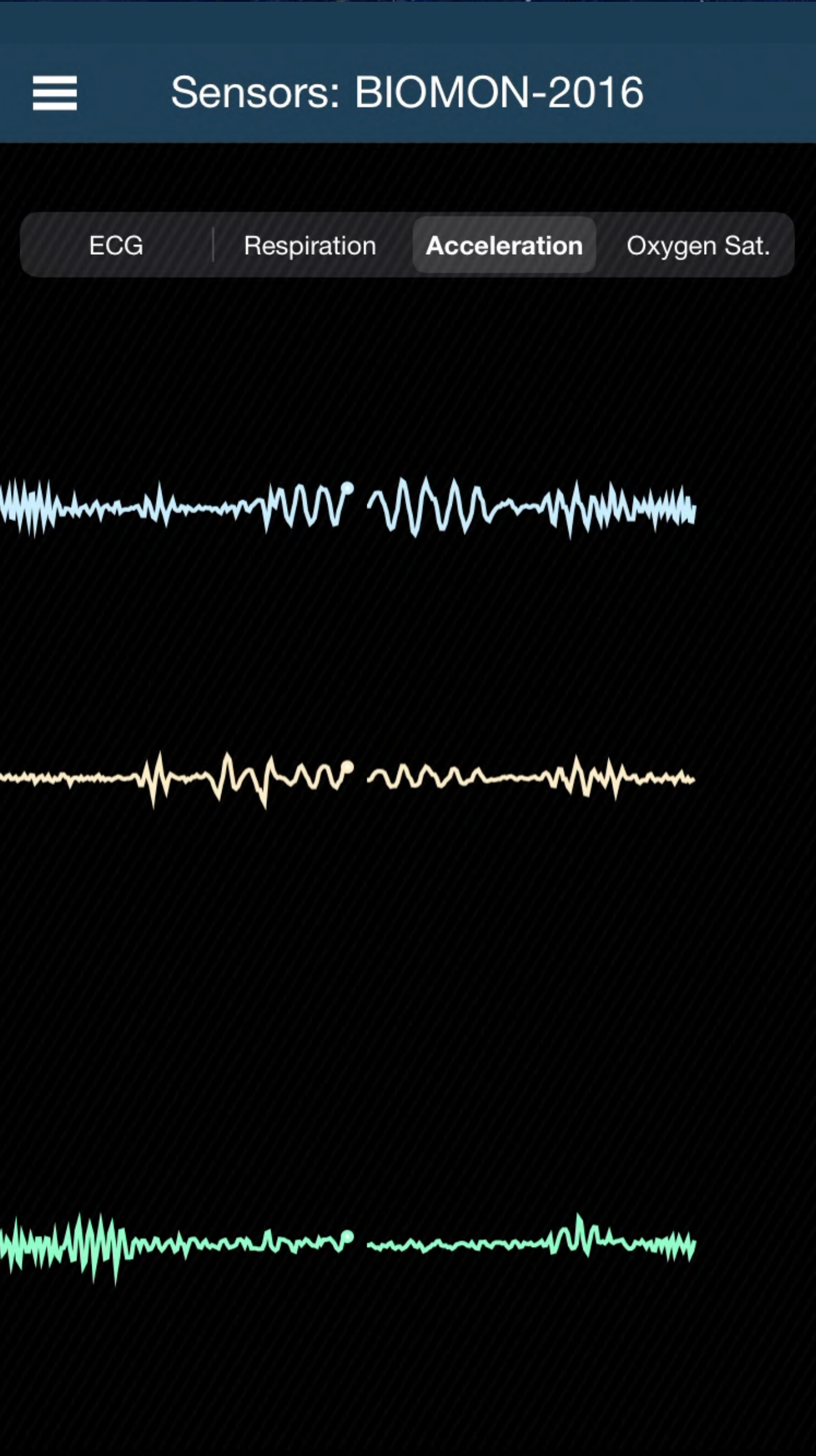
Acceleration

Oxygen Sat.

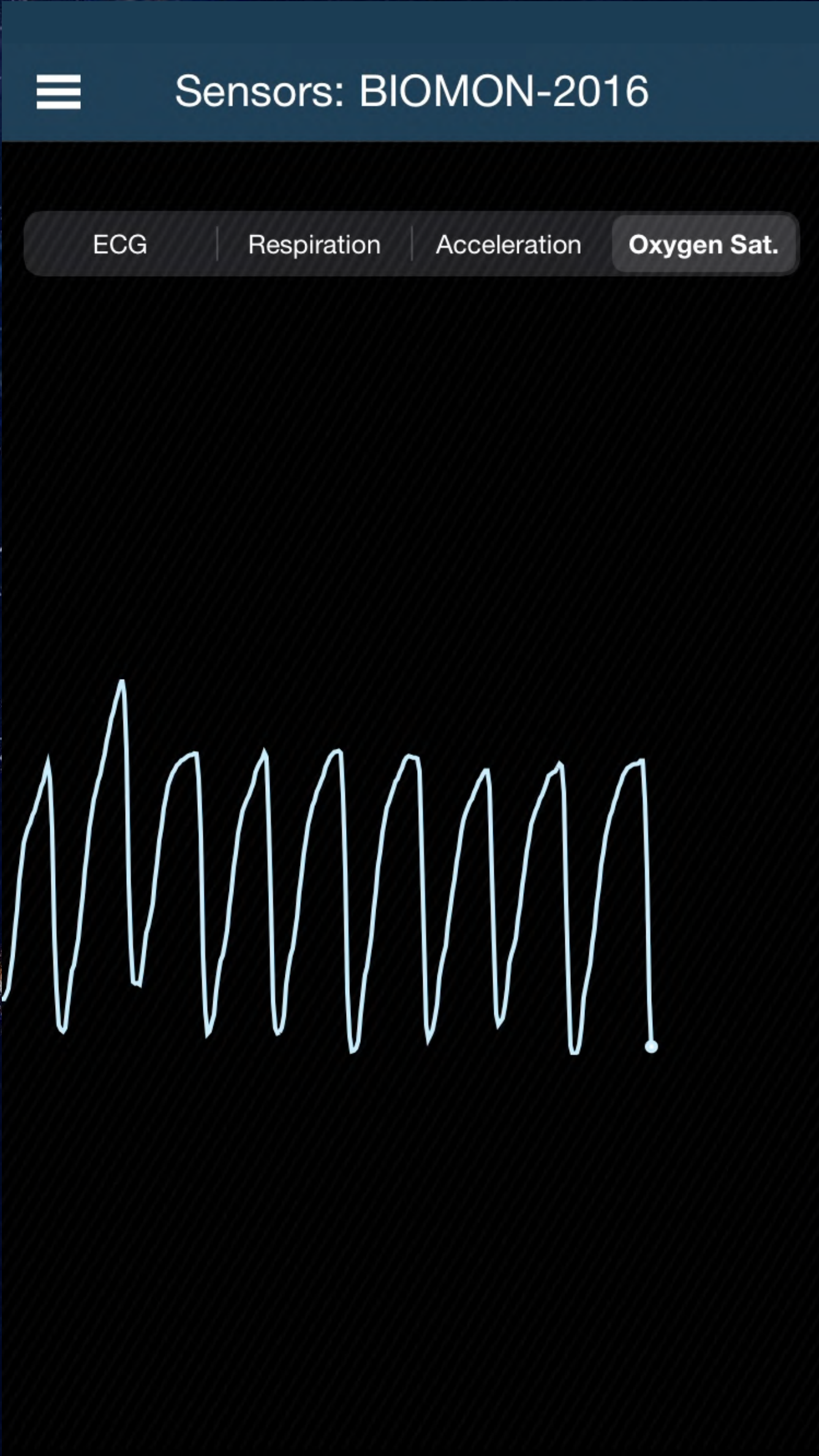


Real-Time Respiration

Copyright © 2021 Carré Technologies Inc. All rights reserved.



Real-Time Accelerometry



Real-Time Oxygen Saturation



Activity Recording

Sync Demo



- [Preferences](#)
- [Support](#)
- [HxServices 5.0.0-5857ad6a](#)

ASTROSKIN
VITAL SIGNS MONITORING PLATFORM
demo@astroskin.com

SNX342016



Externally powered
demo@astroskin.com
0 of 1

SNX342016
Astroskin



Hardware: 3.0.0 Firmware: 2.1.0

- [Update](#)
- [Restore](#)
- [Erase](#)
- [Identify](#)

demo@astroskin.com	00:08:53 (1.28 MiB)	Completed
Mon Mar 22 16:06:36 2021	100.0... (1.28 MiB)	

Dashboard Demo



































































FILTER BY TIME RANGE

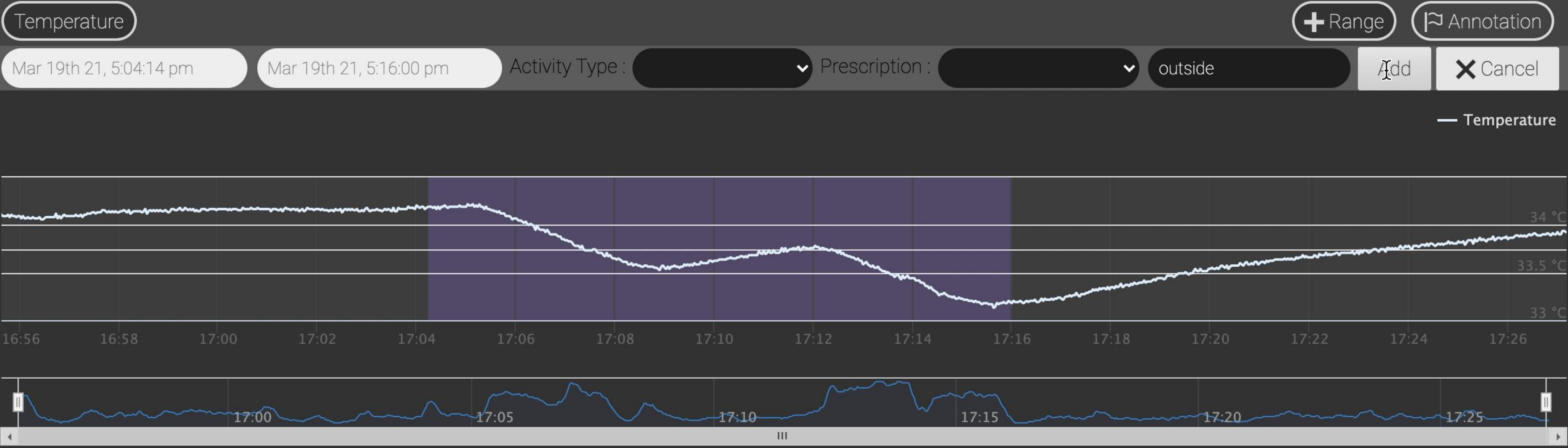
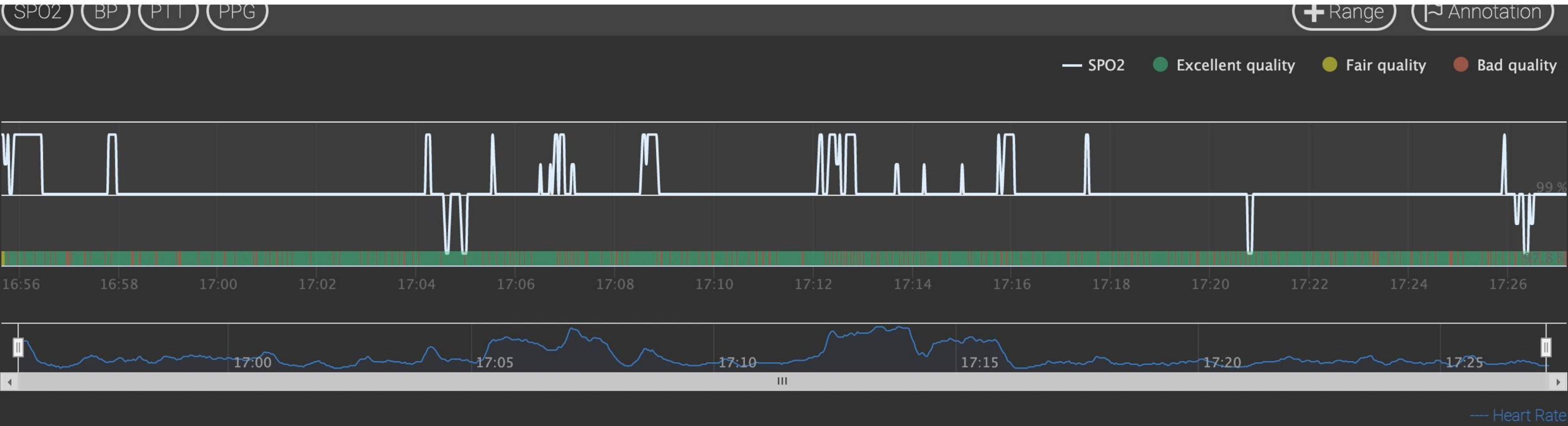


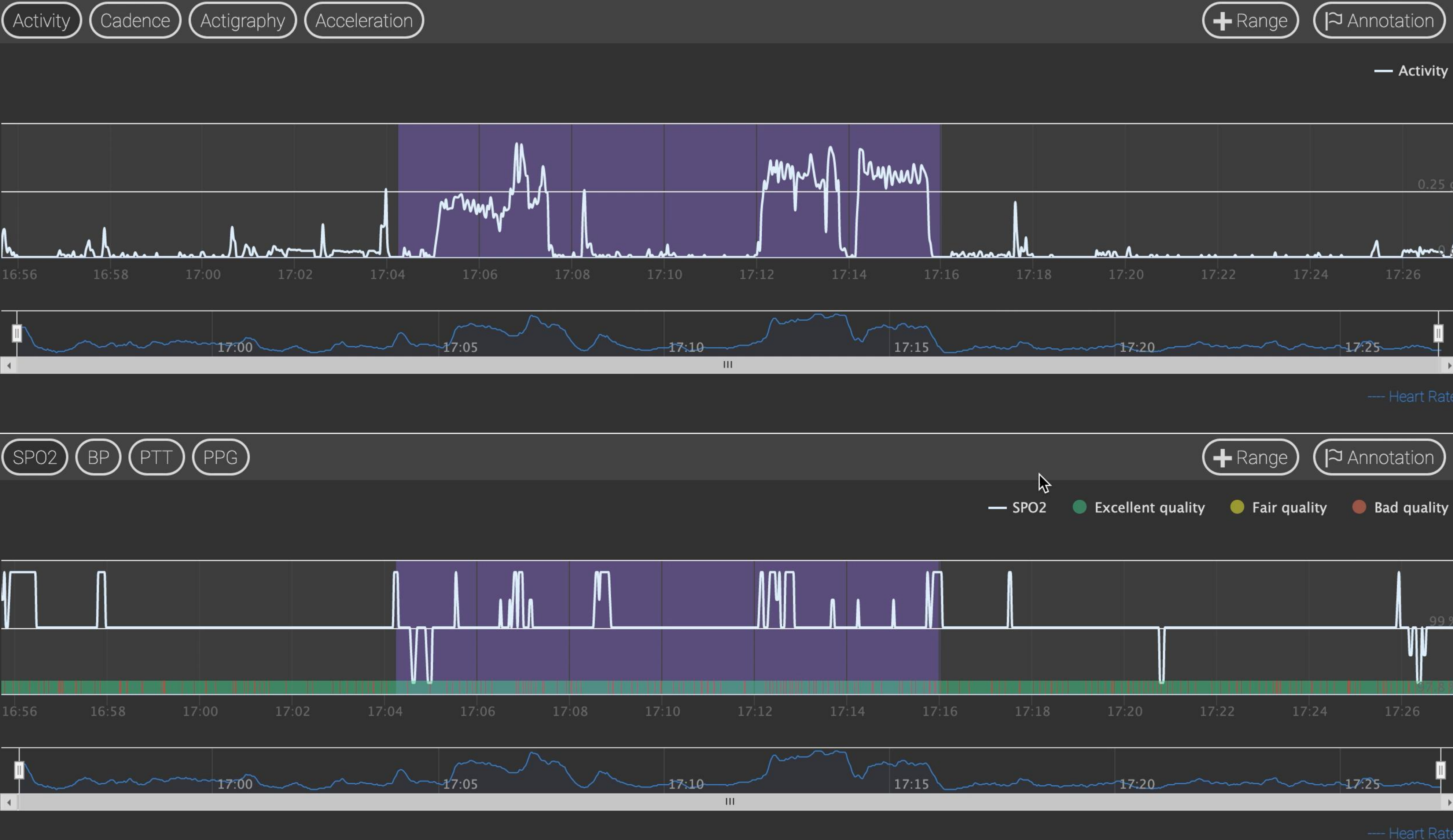
 Filter

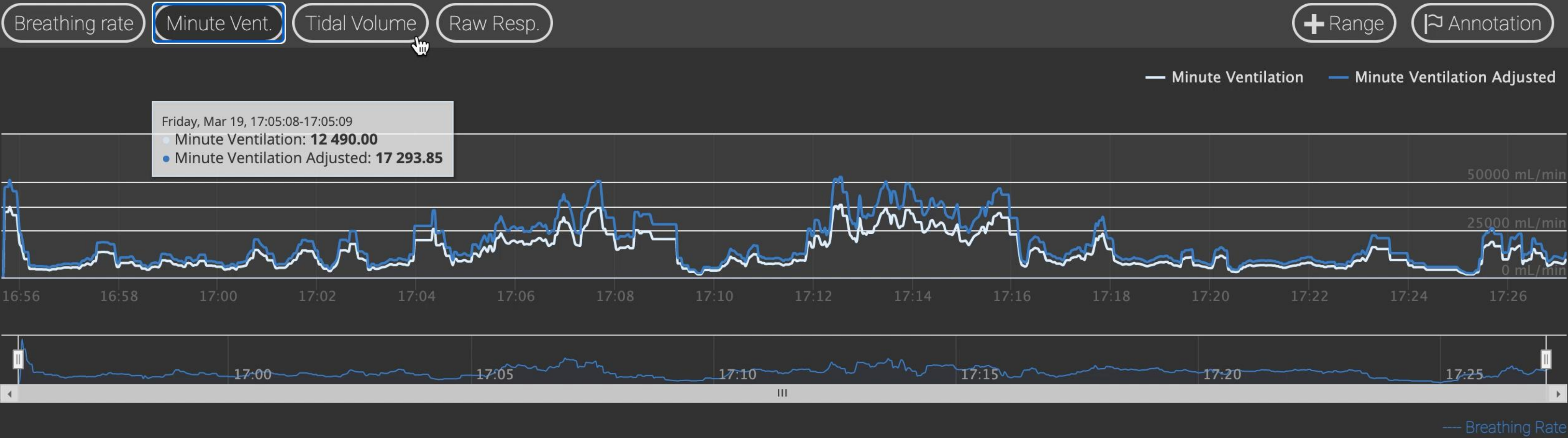
RECORDS

9

Start time 	Duration	User  <div>Filter by username</div>	Status							
			Device	Resp.	ECG	Spo2				
2021-03-19, 6:48 pm	16 minutes	demo@astroskin.com					 View	 CSV	 RAW	 Delete
2021-03-19, 5:29 pm	an hour	demo@astroskin.com					 View	 CSV	 RAW	 Delete
2021-03-19, 4:55 pm	32 minutes	demo@astroskin.com					 View	 CSV	 RAW	 Delete
2021-01-12, 3:54 pm	44 minutes	demo@astroskin.com					 View	 CSV	 RAW	 Delete
2020-03-11, 11:18 am	9 minutes	demo@astroskin.com					 View	 CSV	 RAW	 Delete
2020-02-13, 2:12 pm	3 hours	demo@astroskin.com					 View	 CSV	 RAW	 Delete
2020-02-13, 12:05 pm	2 hours	demo@astroskin.com					 View	 CSV	 RAW	 Delete
2020-02-05, 2:03 pm	42 minutes	demo@astroskin.com					 View	 CSV	 RAW	 Delete







Pricing & Announcements

	Quantity	Price (USD)
ASTROSKIN Device & USB Cable	1 Device	\$4999
ASTROSKIN Shirt	1 Shirt	\$649
ASTROSKIN Head Gear	1 Head Gear	\$349
ASTROSKIN iOS Apps, OneSync Software & Online Dashboard	Included	Free

Our tailored programs support you every step of the way:

- + Discounts on orders of Hexoskin & Astroskin Equipment
- + Access to Apps, Dashboard & Data Analytics tools
- + Free data Hosting & API access
- + Free Onboarding Webinar (value of \$200)
- + Free Data Management Webinar (value of \$200)
- + Q&A sessions (value of \$200)
- + Hexoskin Technical Support
- + Free Shipping

Contact our team:
sales@hexoskin.com

One To Unify Them All

ASTROSKIN
VITAL SIGNS MONITORING PLATFORM

OneSync

Data Synchronization
For Hexoskin & Astroskin
Windows & macOS

Available in April

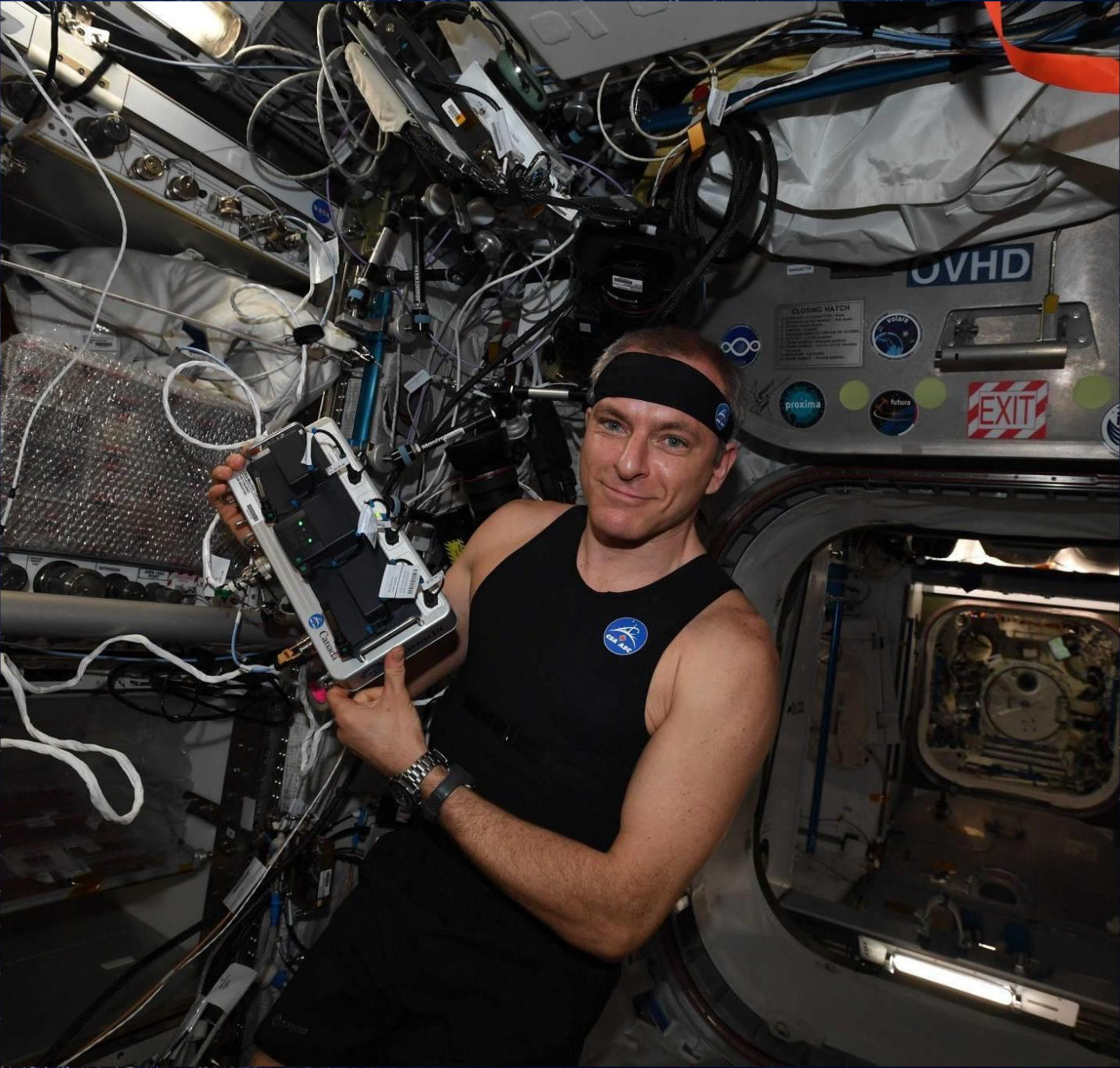
OneSDK

Real-Time Data Streaming
For Hexoskin & Astroskin
Android

**Available in April
Pre-Order Today!**

Contact our team:
sales@hexoskin.com





David Saint-Jacques 

Courtesy of the Canadian Space Agency - 2019



Luca Parmitano 

Copyright © 2021 Carré Technologies Inc. All rights reserved.



Faint (vasovagal) reaction during blood donation s

Fainting can occur at the donor clinic, or in the hours post-donation, and may result in donor injury

Some key benefits include continuous non-invasive spo2 and pulse oximetry monitoring to better understand the cause of vasovagal reaction

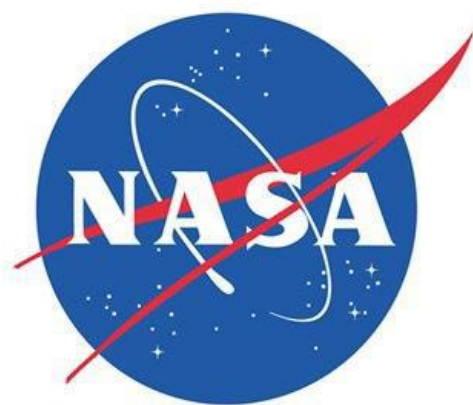


14-days Mt Everest climb by researcher Roxanne Vogel

Understanding of how different environments or stressors impact the human body & performance

Monitoring health vitals in high altitudes

They Are Using Astroskin



THALES

NOKIA



GOVERNMENT OF DUBAI

ENERGIC



ASTROSKIN

VITAL SIGNS MONITORING PLATFORM

Let's Stay In Touch:

hexoskin.com
facebook.com/Hexoskin/
linkedin.com/company/hexoskin
@hexoskin

1-888-887-2044
sales@hexoskin.com