

OSCAR



2026-08-06 Linux-Ottawa

By J-F Messier

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Background info

- For years, I was told that I was snoring like an 18-wheel truck (that's what my wife keeps telling me) . That I should have a CPAP to better sleep.
- I always refused.....

I was feeling like in the Alien
movies:



But now...

- ♦ At some point, I had no more choice but to get one. I started the process of testing a machine, and all kinds of masks.
- ♦ So I tried those things:



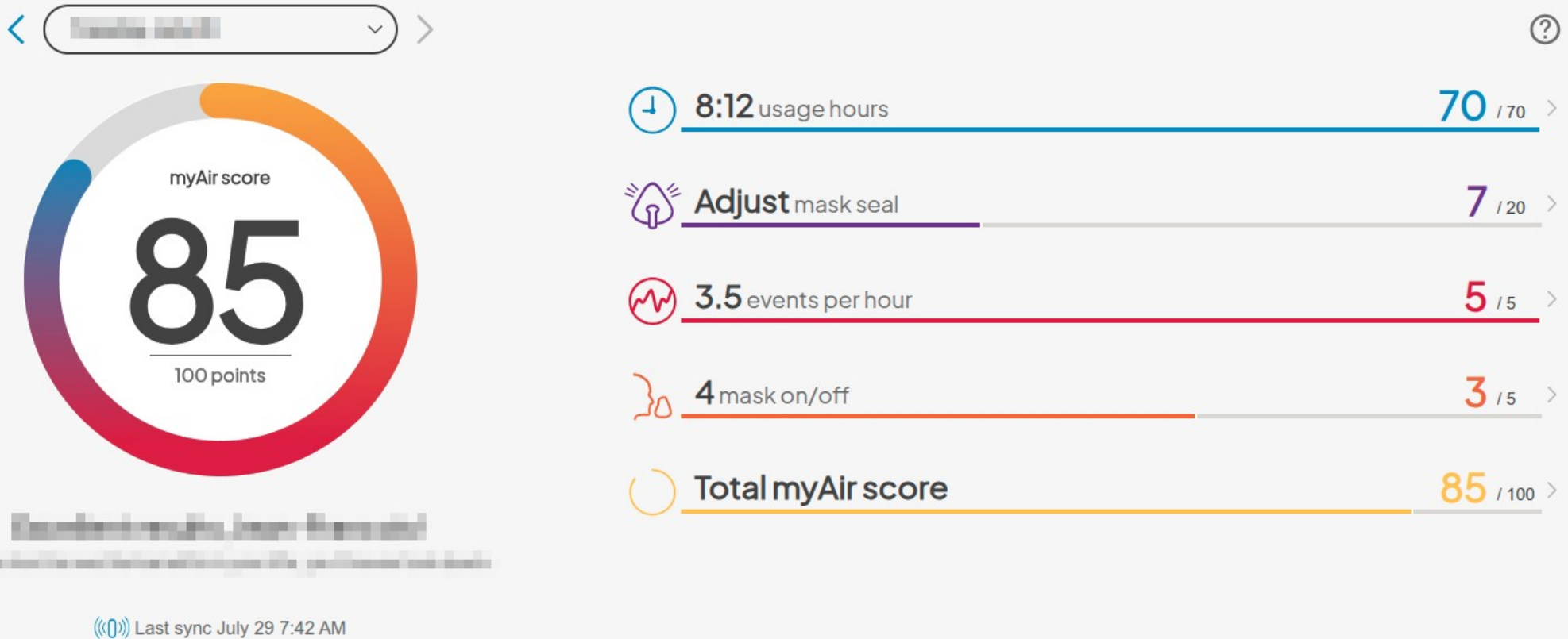
Background info...

- Works OK, not the most comfortable thing to wear 8 hours a day, especially when having a beard. No way am I going to get rid of my beard !!!!!
- As I was talking with another user, I heard about OSCAR. From someone who loves analysing data and stats.....

Background info

- The company I dealt with were selling those CPAP machines from Resmed. The company's web site can display SOME summary info from your nights. But only SOME very general info.
- <https://www.resmed.com>

Something like:



About OSCAR

- OSCAR stands for:
Open Source CPAP Analysis Reporter
- OSCAR is available under Windows. Mac, Linux, ChromeOS and Raspberry PI.
- It uses data from your CPAP machine and displays more info than you can digest.

I want more info !!!

- What's displayed from resmed.com is so-so.
- The info is sent wirelessly to the company, and all they know is the serial number of the machine.
- The practitioner can get much more information about your sleep nights.

Where's the data ?

- ♦ As data is sent wirelessly to the company, it can also be saved on an SD card. Just insert the card in the slot.
- ♦ The machine will wipe it and setup its own directories and files.
- ♦ Let the machine write its data every night.
- ♦ After a while, it's time to look at it.

Feed OSCAR

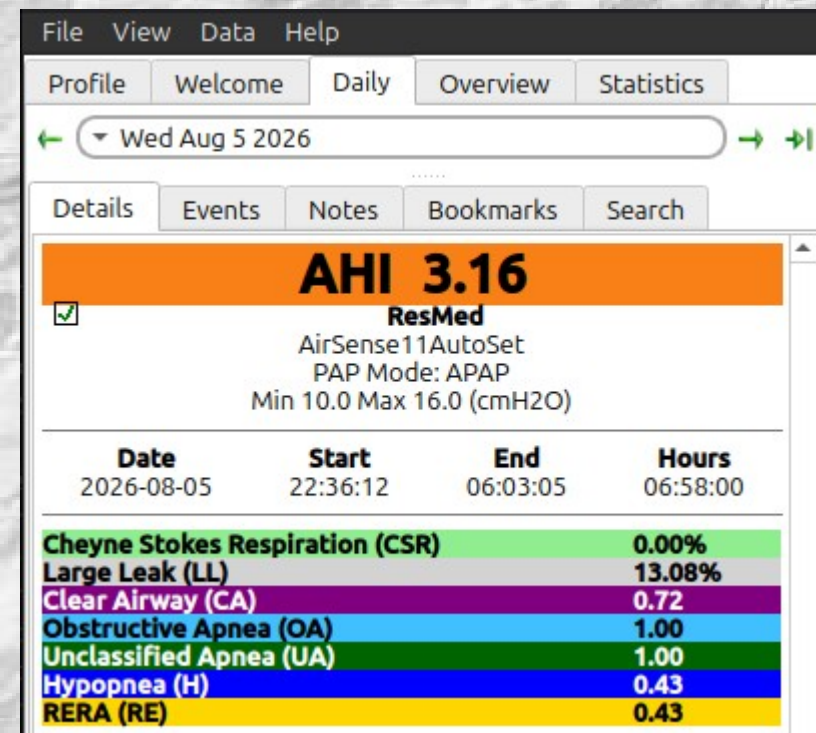
- At install time, OSCAR will ask you about your profile. You need to create at least one profile (gender, height, weight, etc.)
- Then, you can import the data from the SD card.
- It then can display more info than you can digest.

What you can see with OSCAR

- You have a Daily, an Overview and a statistics tabs.
- Under the Daily, you have a summary of the infos for that night.
- Other details of the day are available.

* **AHI** stands for **A**pnea **H**ypopnea **I**ndex

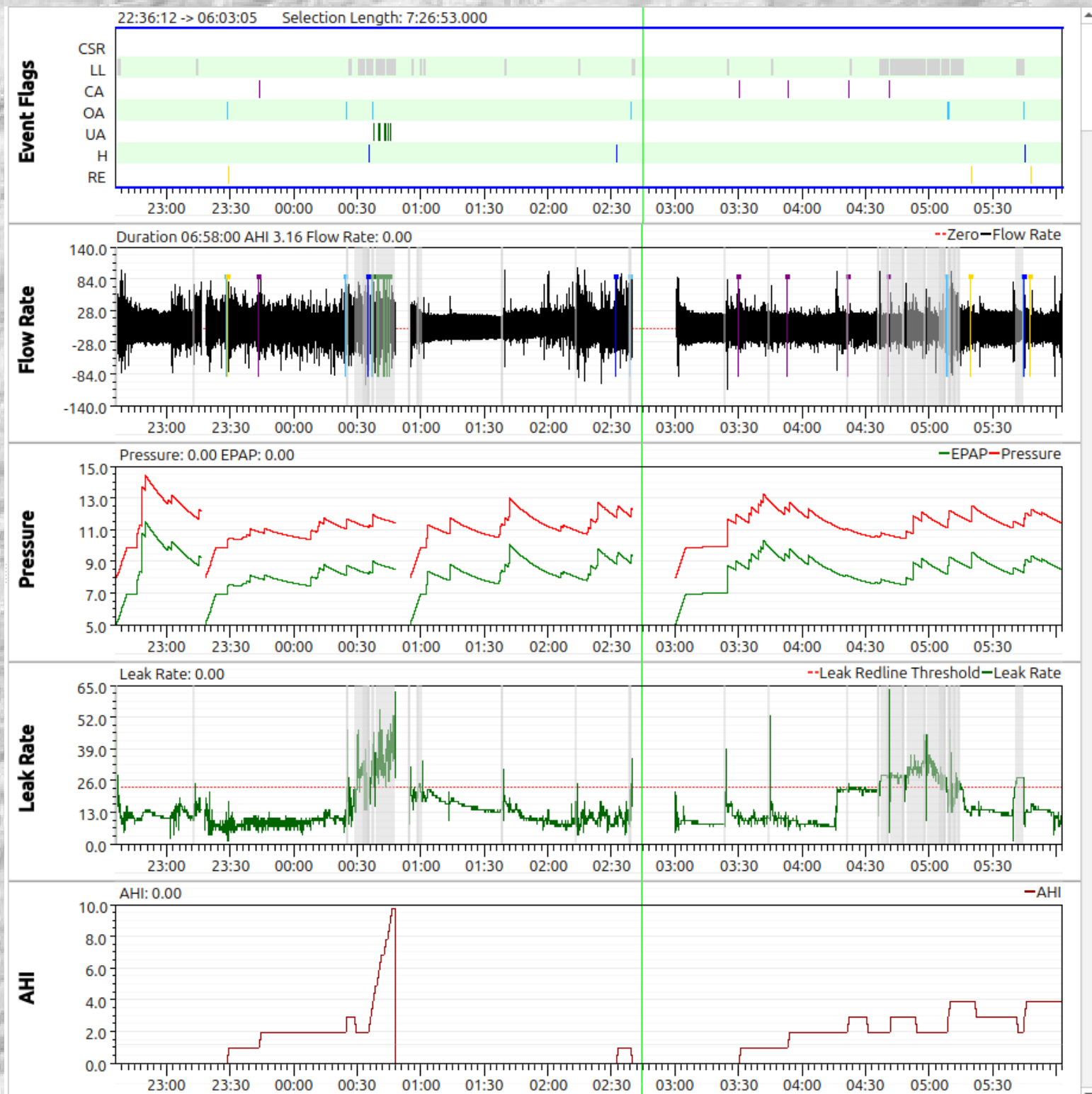
Hypopnea is a partial blockage of the airway that reduces airflow by at least 30% for 10 seconds or more, usually causing a drop in blood oxygen.



File View Data Help			
Profile Welcome Daily Overview Statistics			
← Wed Aug 5 2026 → →			
Details Events Notes Bookmarks Search			
AHI 3.16			
✓ ResMed			
AirSense11AutoSet			
PAP Mode: APAP			
Min 10.0 Max 16.0 (cmH2O)			
Date	Start	End	Hours
2026-08-05	22:36:12	06:03:05	06:58:00
Cheyne Stokes Respiration (CSR)			0.00%
Large Leak (LL)			13.08%
Clear Airway (CA)			0.72
Obstructive Apnea (OA)			1.00
Unclassified Apnea (UA)			1.00
Hypopnea (H)			0.43
RERA (RE)			0.43

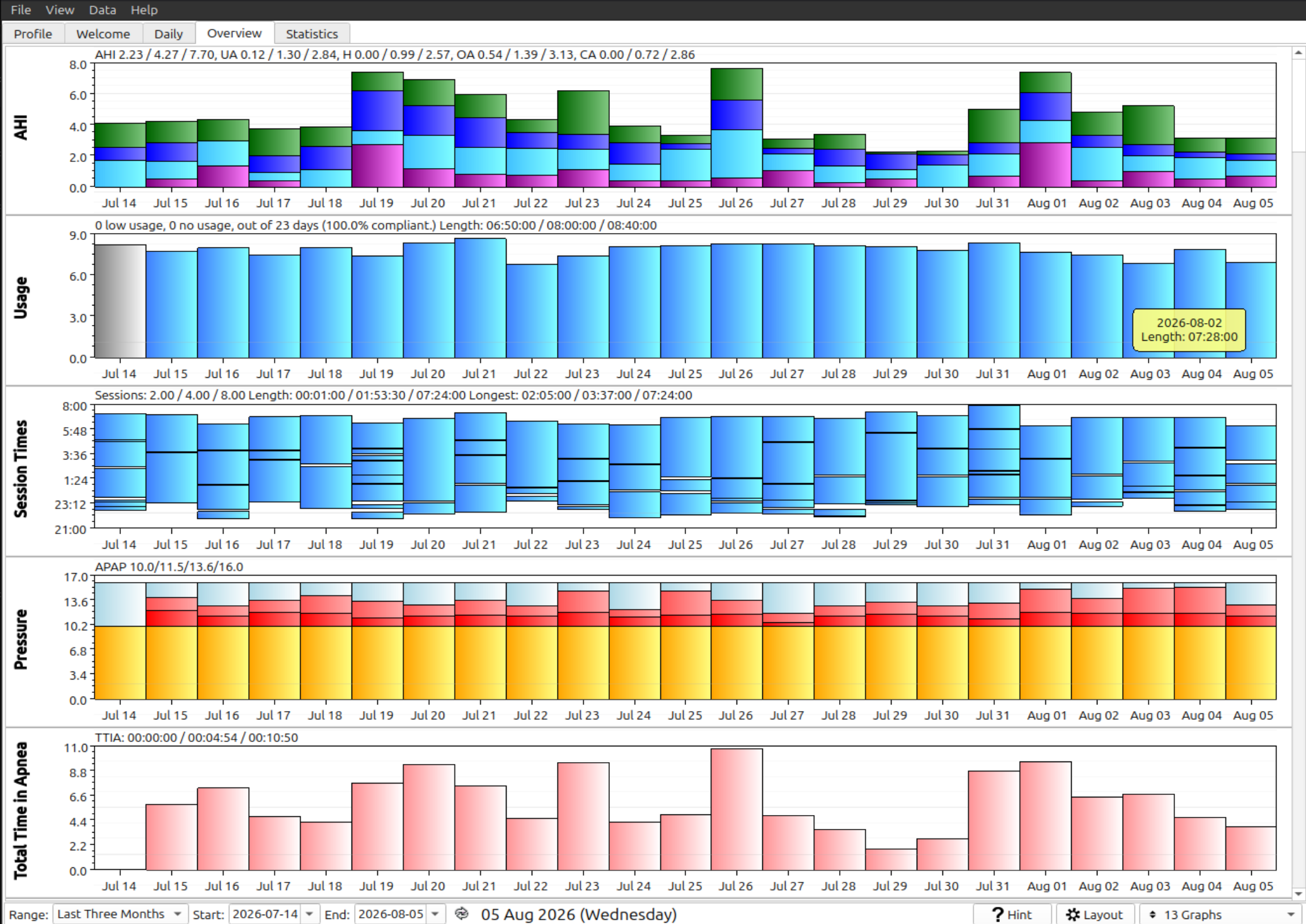
What you can see with OSCAR

- Next to this daily summary column, you have graphs for the entire sleep duration for different kinds of information.
- Those are: Event Flags, Flow rates, Pressure, Leak Rate, Flow Limit, Snore, Tidal Volume, Mask Pressure and so many more.....
- As those are for the entire sleep night, you can use the scroll wheel with Ctrl to see more details in a specific time.



What about the overview

- The overview will have bar graphs with info for every day that is recorded in the database.
- Again, several bar graphs are available, more than you can assimilate.



* AHI stands for **A**pnea **H**ypopnea **I**ndex

The statistics tab

- This tabs will show other global statistics.
- You can choose to have them for the entire data, or a specific month or date range.
- This is not the most interesting tab (IMHO).

CPAP Statistics

The reporting period is 23 days between Tue Jul 14 2026 and Wed Aug 5 2026
Database has 23 days of CPAP Data, between Tue Jul 14 2026 and Wed Aug 5 2026

Details	Most Recent 2026-08-05	Last Week 2026-07-30 - 2026-08-05	Last 30 Days 2026-07-14 - 2026-08-05
CPAP Usage			
Total Days	1	7	23
Used Days	1	7	23
Days Not Used	0	0	0
Used Days >= 4 hrs/day	1	7	23
Used Days < 4 hrs/day	0	0	0
Percent Total Days >= 4 hrs/day	100.00%	100.00%	100.00%
Percent Used Days >= 4 hrs/day	100.00%	100.00%	100.00%
Average Hours per Night	06:58	07:34	07:50
Median Hours per Night	06:58	07:41	08:00
Therapy Efficacy			
AHI	3.16	4.45	4.62
AHI Median	3.16	4.82	4.27
Obstructive Apnea (OA) Index	1.00	1.41	1.45
Hypopnea (H) Index	0.43	0.79	1.08
Unclassified Apnea (UA) Index	1.00	1.36	1.32
Clear Airway (CA) Index	0.72	0.89	0.78
RERA (RE) Index	0.43	0.21	0.23
95% Flow Limitation	0.03	0.05	0.06
% of time in Cheyne Stokes Respiration (CSR)	0.00%	0.00%	0.00%
Leak Statistics			
Average Leak Rate	15.04	17.45	15.99
95% Leak Rate	31.20	39.60	42.00
% of time above Leak Rate threshold	13.08%	18.31%	18.23%
Pressure Statistics			
Average Pressure	11.41	11.75	11.64
Min Pressure	8.02	8.02	8.00
Max Pressure	14.64	16.00	16.00
95% Pressure	12.94	14.48	13.82
Average EPAP	8.41	8.75	8.64
Min EPAP	5.02	5.02	5.00
Max EPAP	11.64	13.00	13.00

Changes to Device Settings

First	Last	Days	AHI	FL	Device	Pressure Relief	Mode	Pressure Settings
Tue Jul 14 2026	Wed Aug 5 2026	23	4.62	0.00	ResMed	EPR: Full Time 3 cmH2O	APAP	Min 10.0 Max 16.0 (cmH2O)

Device Information

Brand	Model	Serial	First Use	Last Use
ResMed	AirSense11AutoSet (39520)	23262103578	Tue Jul 14 2026	Wed Aug 5 2026

This report was prepared on Thu Aug 6 2026 18:46 by OSCAR 2.0.1+377654fe

Reference:

You can find OSCAR on the following web site:

<https://www.sleepfiles.com/OSCAR/>

OSCAR is available in multiple languages, including English, French, Spanish, Italian, etc....

The definition of AHI and Hypoapnea were from the page:

<https://my.clevelandclinic.org/health/articles/apnea-hypopnea-index-ahi>