

Widening the wind keeper's reach

Peter Bickerton

Earth Observation Editor

March 2023

Who are we talking to and why?

- The Aeolus community - tenet of communication on updates
- Decision makers - highlighting successes with key messaging
- Media - boosting the visibility of Aeolus, ESA & partners
- The general public - inspiring and encouraging future scientists & engineers

- Twitter
- ESA portal
- Earth Online
- Campaign Earth
- YouTube
- SoundCloud
- Wider media, including via partners
- In person events

Articles on the ESA Portal



APPLICATIONS

Looking back at the eruption that shook the world

16/01/2023 13551 VIEWS 202 LIKES

READ



APPLICATIONS

Christmas comes early for Aeolus

15/12/2022 3973 VIEWS 75 LIKES

READ

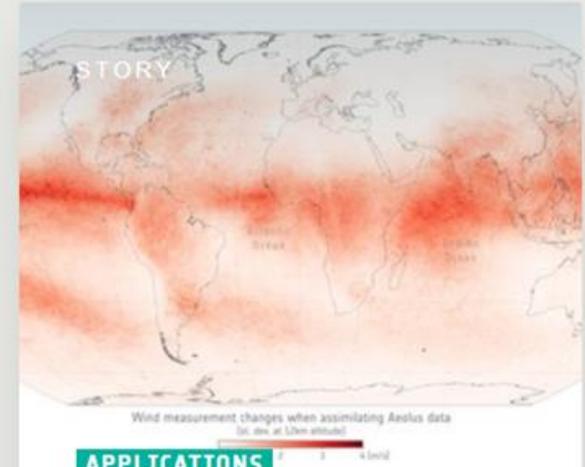


APPLICATIONS

Putting a value on ESA's Aeolus wind mission

18/11/2022 1696 VIEWS 44 LIKES

READ



APPLICATIONS

Keeper of the winds shines on

26/04/2022 4949 VIEWS 74 LIKES

READ





ESA'S WIND MISSION HELPS INVESTIGATE THE NATURE OF VOLCANIC PLUMES

07 Feb 2023

An analysis that drew on wind profiles from ESA's Aeolus mission has resulted in an unexpected discovery concerning the structure and behavi...

News - Success Stories

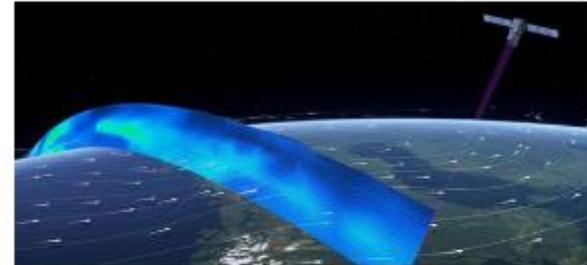


24 Nov 2022

Drones join the campaign to validate Aeolus data

In June and September 2022, the Askos component of the Joint Aeolus Tropical Atlantic Campaign (JATAC), organised b...

News - Success Stories



27 Oct 2022

ESA's wind mission could help to forecast tropical...

Global wind profiles delivered by Aeolus have great potential to improve the projections of a long-established...



Top Tweet earned 31.3K impressions

Why do we care about **#dust**? Not the stuff you see people dramatically blowing off old books in films, but the tonnes of particles picked up by the wind from places like the Sahara Desert... [@natalie_rat_](#) explains all, via her campaign with [@ASKOS_Aeolus](#)

blogs.esa.int/campaignearth/...
pic.twitter.com/nrfatJAbLC



20 93

JATAC campaigns on twitter



esa aeolus mission
@esa_aeolus

A couple of quiet days in Mindelo for @ASKOS_Aeolus as the dust recedes. However, great news... after a months-long saga, the helium has arrived! That's no mean feat, and it means the @USRL_Cyl team can deploy their balloon-UAV launch system 🎈🚀 You read that right! 📢



The Cyprus Institute and USRL The Cyprus Institute

...

After **3** weeks, many days and nights of shining laser beams, dozens of flights, beastly plumes of dust, and ferocious winds... It's goodbye to 🇪🇺 & @OSCM_ Great work from @ASKOS_Aeolus, @EMMECARE, @EAA_NOA, @UniRdg_Met, @USRL_Cyl, @TROPOS_eu 📊🚀📡📶📡📶 On to the data! 📈📊🔍



8:58 AM · Jun 30, 2022

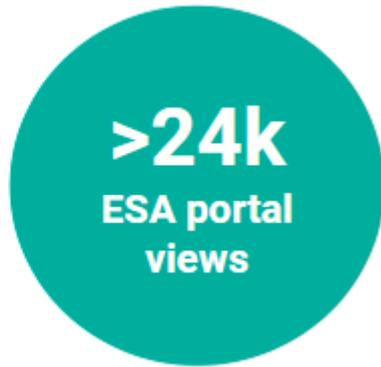
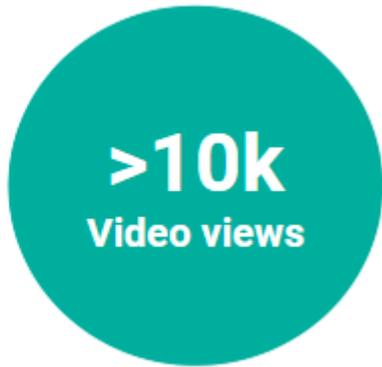
📊 View Tweet analytics

6 Retweets 1 Quote 34 Likes

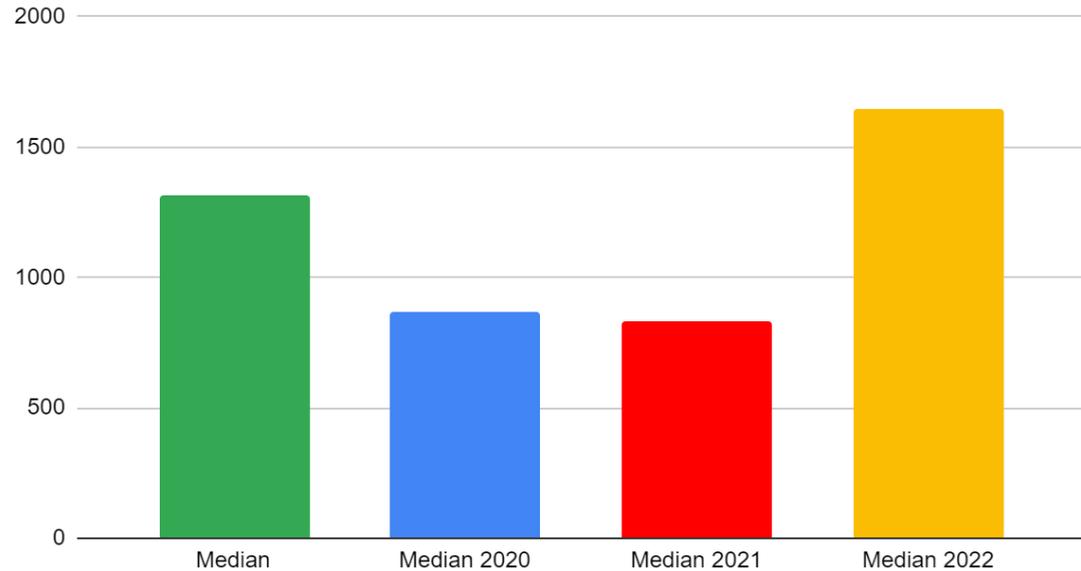
Engagement rate
3.9%

Jun 30
3.2% engagement rate

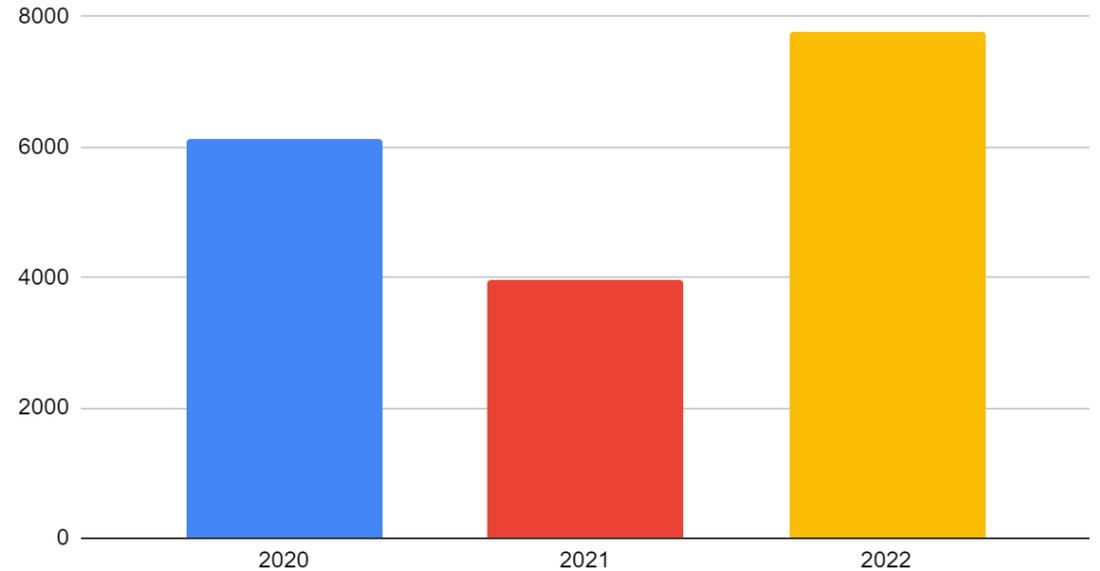


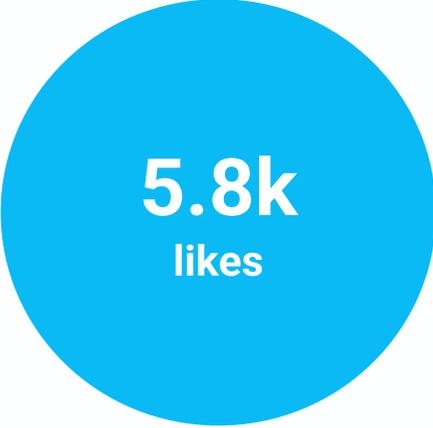
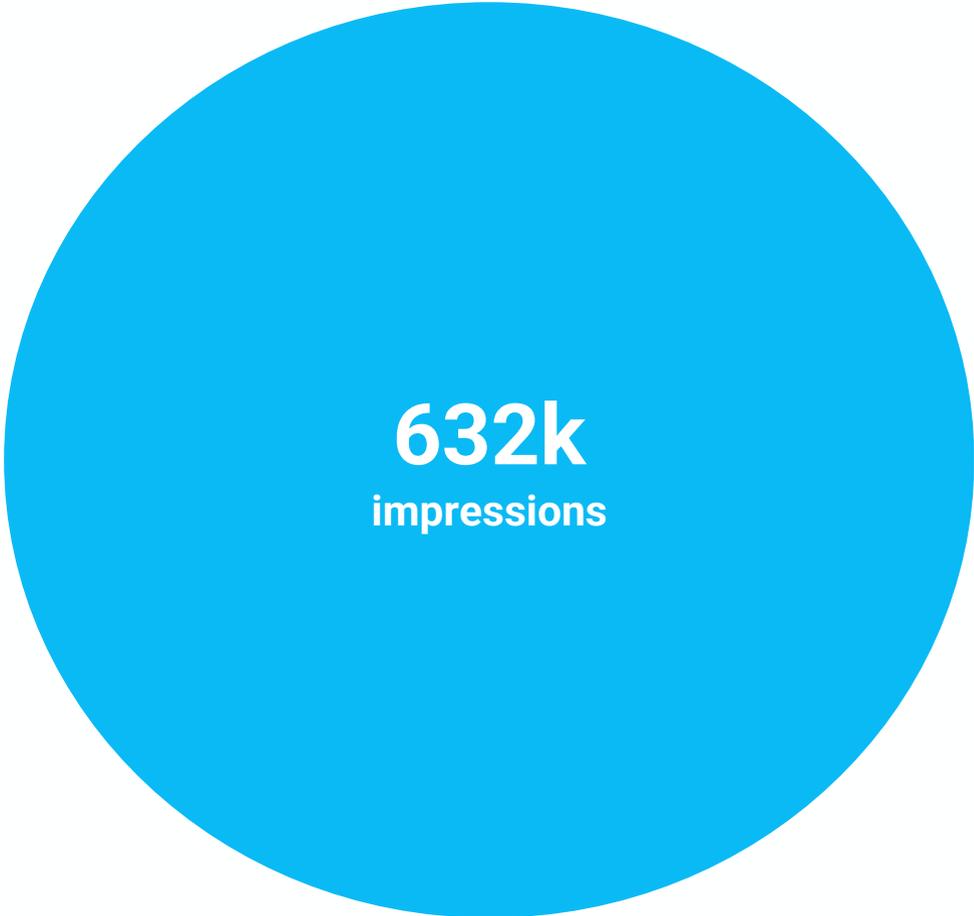
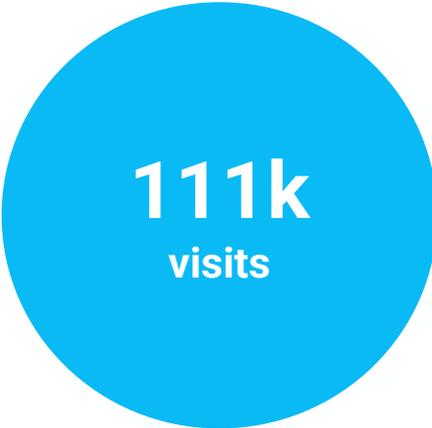


Median monthly ESA portal views for "Aeolus"



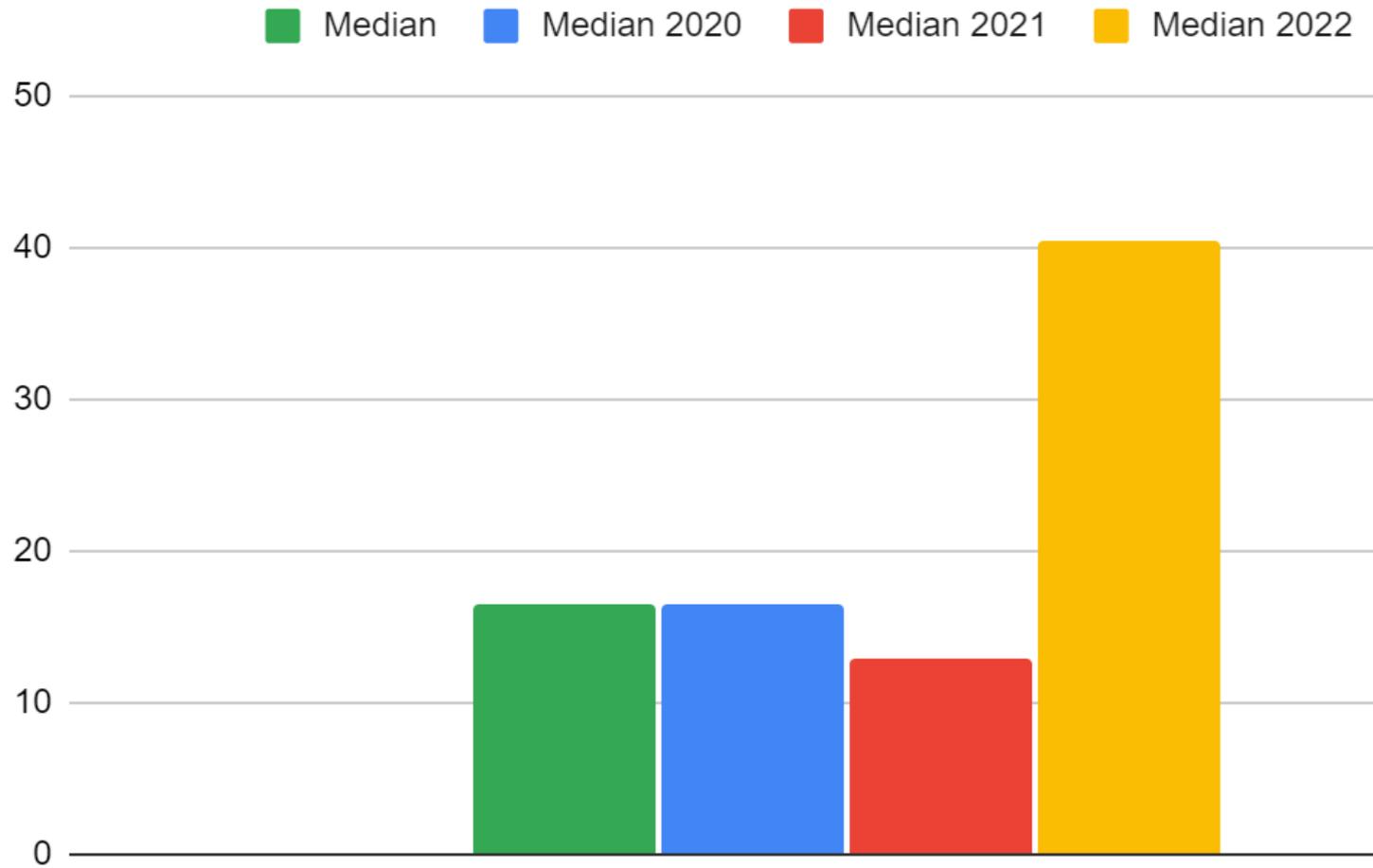
Aeolus homepage views (ESA portal)



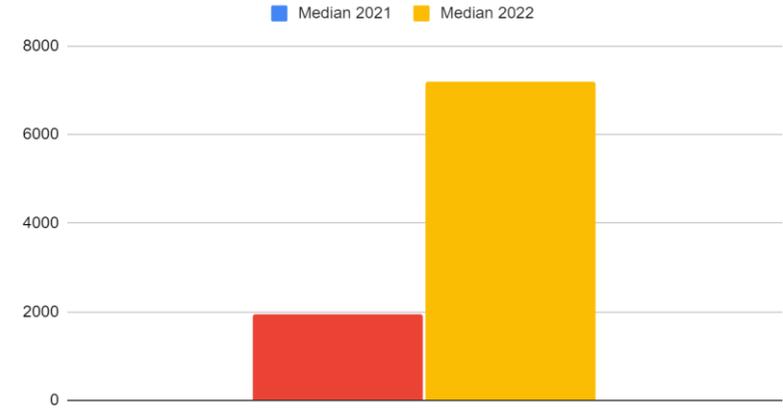


Tweets & 'profile visits'

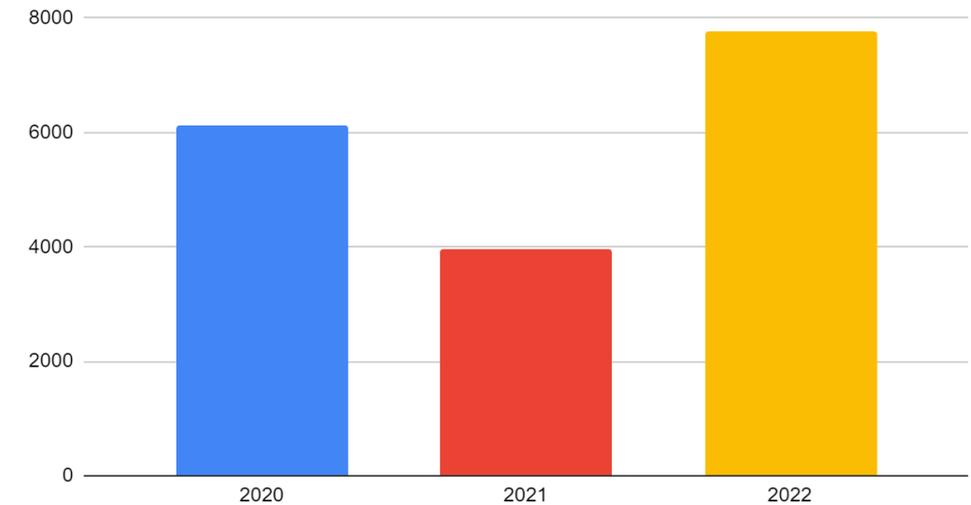
Median tweets per month, per year



Median monthly profile visits

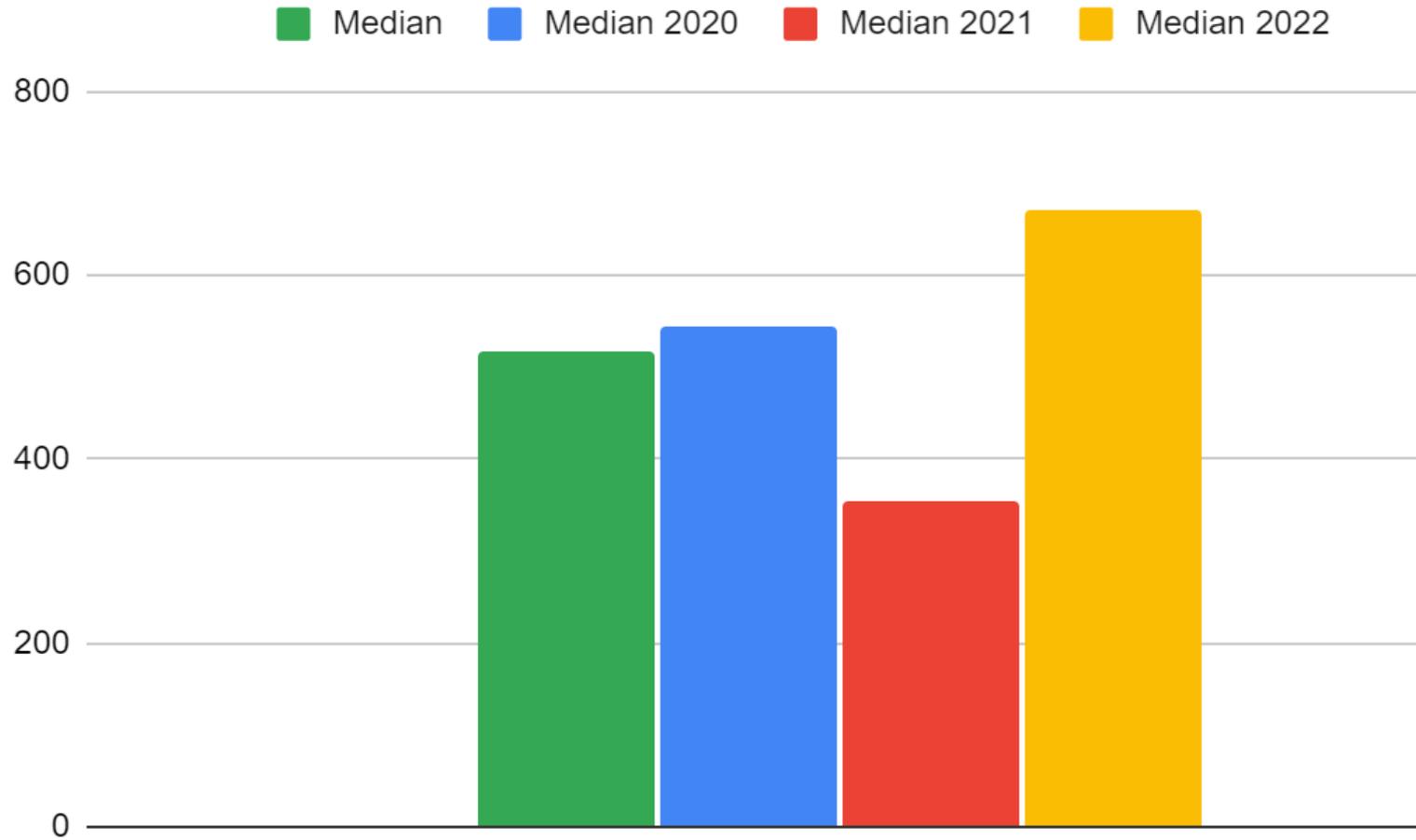


Aeolus homepage views (ESA portal)

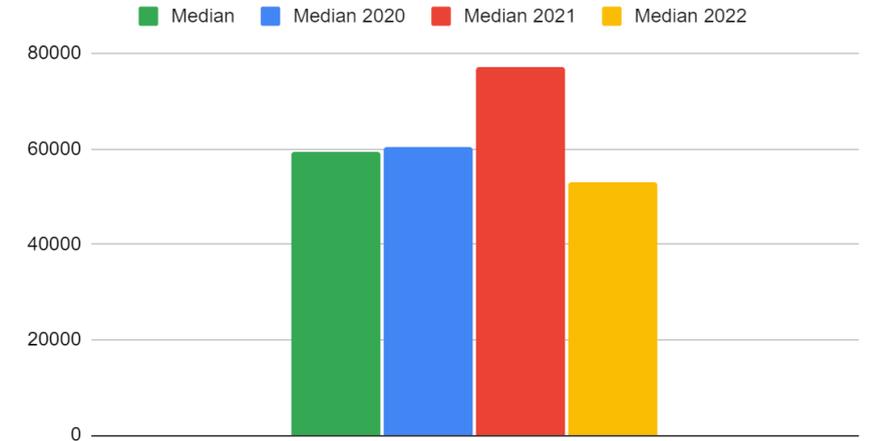


Engagements, impressions, engagement rate

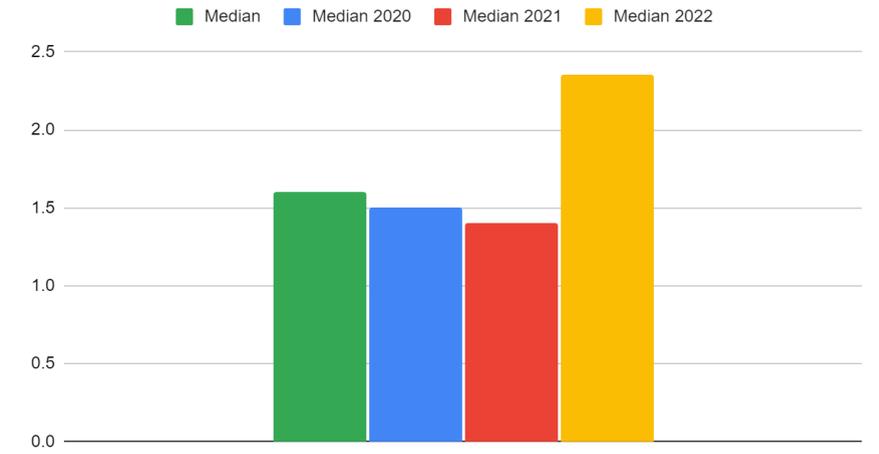
Aeolus median monthly engagements by year



Median monthly impressions, by year, Aeolus

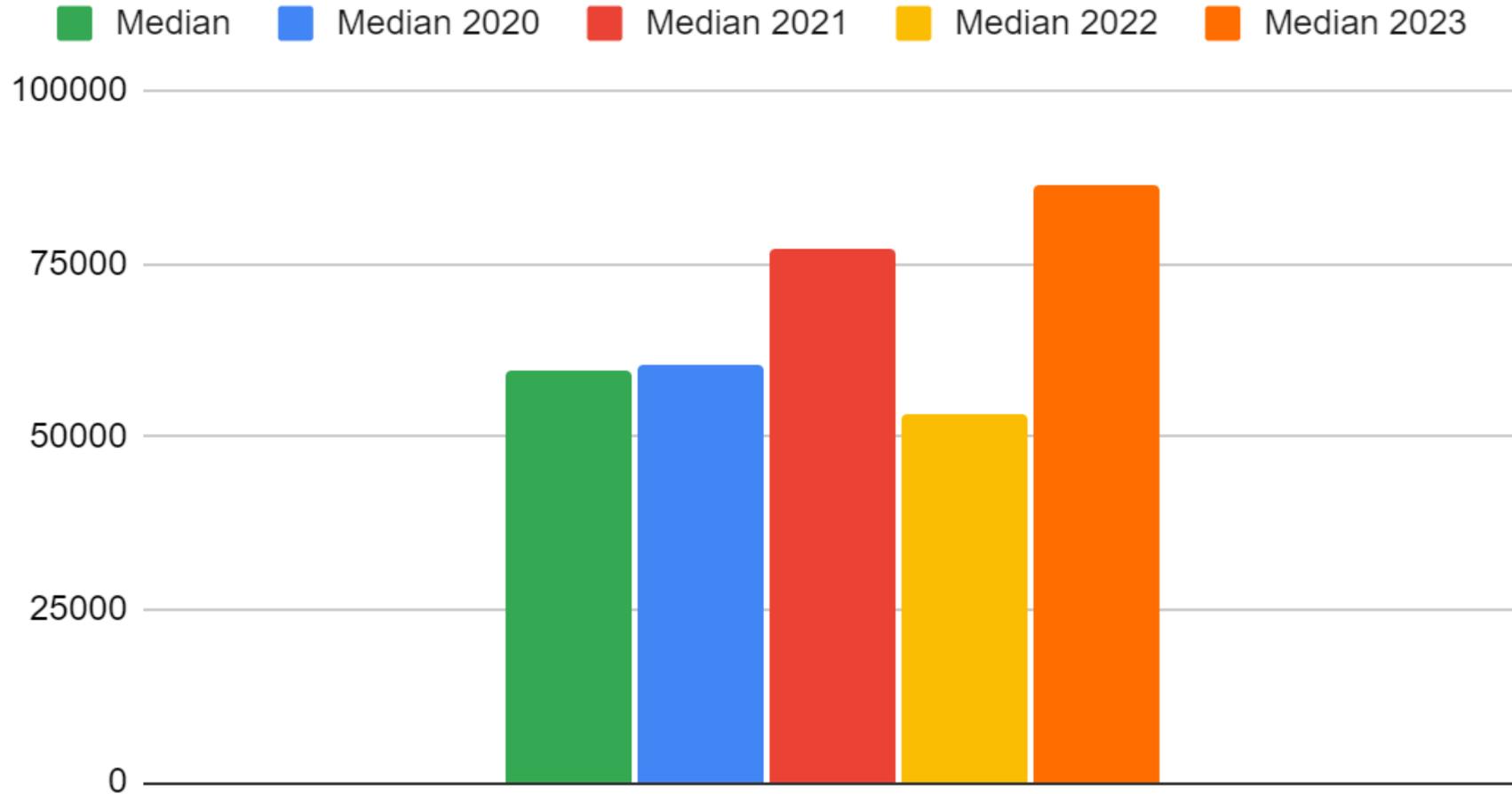


Median monthly engagement rate by year, Aeolus

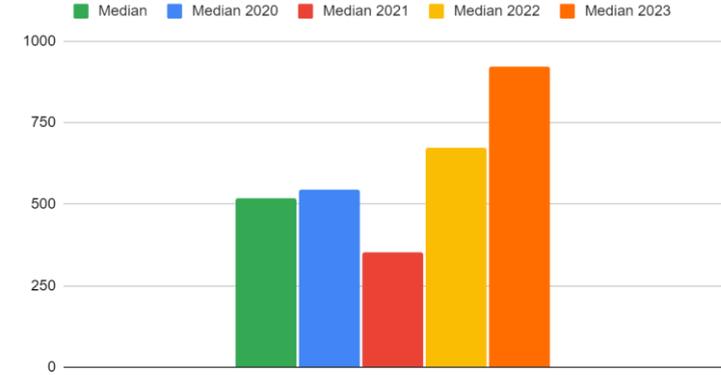


Engagements, impressions, engagement rate

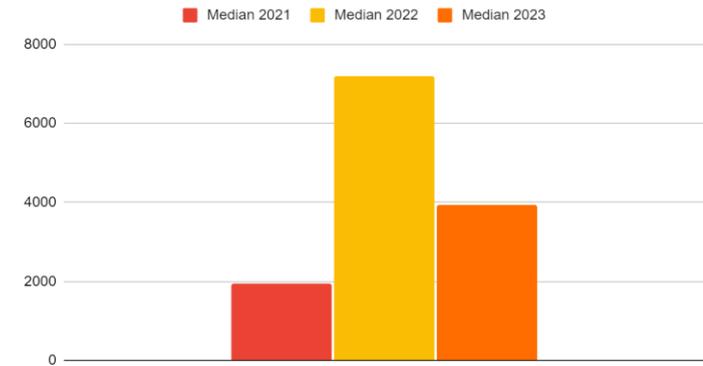
Median monthly impressions, by year, Aeolus



Aeolus median monthly engagements by year



Median monthly profile visits



Twitter has a **low** signal-to-noise ratio



High performing tweets



esa aeolus mission
@esa_aeolus

The Hunga Tonga-Hunga Ha'apai eruption caused widespread destruction, spewing volcanic material up to 58 km 🌋 A year on, you can now hear a sonification of the largest eruption of the 21st Century, created using wind data from @esa's #Aeolus mission.

esa.int/Applications/O...



11:09 AM · Jan 16, 2023 · 74.4K Views

View Tweet analytics

99 Retweets 4 Quotes 558 Likes



Promote

11:09 AM · Jan 16, 2023 · 74.4K Views

View Tweet analytics

99 Retweets 4 Quotes 558 Likes

Top Tweet earned 29.3K impressions

🎄🌲 Christmas comes early for Aeolus 🌲
🎉 Despite a deteriorating laser signal & outliving our design lifetime in space, our engineers have worked some #Christmas magic 🌟🌞 #Aeolus is shining twice as brightly, with our best ever near-real time data!

esa.int/Applications/O...
pic.twitter.com/8e6p8JqQb



3 replies 24 retweets 87 likes

Top Tweet earned 31.3K impressions

Why do we care about #dust? Not the stuff you see people dramatically blowing off old books in films, but the tonnes of particles picked up by the wind from places like the Sahara Desert... @natalie_rat_ explains all, via her campaign with @ASKOS_Aeolus

blogs.esa.int/campaignearth/...
pic.twitter.com/nrfatJAbLC



20 retweets 93 likes

BBC NEWS

Europe's research ministers to commit billions to 'space race'

21 Nov



BBC NEWS

Why satellites are key to understanding Pacific volcano

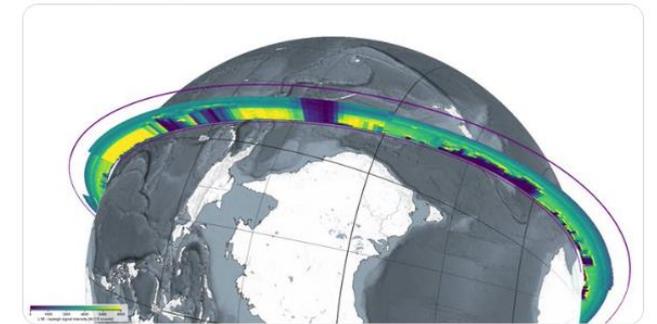
17 Jan 2022



Michael Rennie
@MikePRennie · Follow



Here is an Aeolus orbit starting at 06:42 UTC today (16 Jan) showing massive attenuation of lidar signal downwind of the Tonga eruption (dark). Plot via virES tool. So plume still higher than 20.5 km.
[#HungaTonga](#) [#aeolus](#) [#esa](#)



10:06 AM · Jan 16, 2022

168 Reply Share

Read 3 replies

17



Mind that satellite! The mission to clean up dangerous space junk

Ruimteschip Aarde ☆ 🔗 krooncrv

Wo 22 mrt 20:35 - Seizoen 1 Afl. 4 - Hollandse luchten

We onderzoeken hoe we schonere lucht krijgen. Hoe ooievaars terugkeerden in ons land, en hoe een uitvinder de prachtige vliegtechniek van vogels gebruikt. Amara Onwuka zoomt in op 'het weer'.

De Bilt
Utrecht

11:52 48:05

▶ 🔊 Alle afleveringen ⚙️ 🗉

Aeolus re-entry...

- Story so far
- A special sonification...



Trailblazing Aeolus mission winding down

18/04/2023 6206 VIEWS 101 LIKES

READ →



Aeolus' fiery demise to set standard for safe reentry

08/05/2023 6422 VIEWS 123 LIKES

READ →

... to be continued.

Aeolus re-entry, the story so far

Top Tweet earned 200K impressions

Dear friends, some news. Our time in space is ending 😞

What a time we've had. With one of the most technically challenging instruments ever launched, we've improved weather forecasts & paved the way for future wind missions.

But it's not over just yet.

esa.int/Applications/O...
pic.twitter.com/K70ngAfIHI



15 replies 114 retweets 781 likes

Top mention earned 1,616 engagements



Jonathan Amos

@BBCAmos · Apr 27

This weekend "the impossible satellite" will cease operations. It's exceeded its design life and it's time for the mission to come out of the sky. When they were trying to build the [@esa_aeolus](https://twitter.com/esa_aeolus) wind profiler, engineers were told: "Stop! Just give up; you'll never find the... pic.twitter.com/7SyyKWZWPB



8 replies 72 retweets 670 likes

You Retweeted



ESA Earth Observation @ESA_EO · May 8
[@esa_aeolus](https://twitter.com/esa_aeolus) is coming home back to Earth.

This is the FIRST assisted reentry of its kind; here's what is planned esa.int/Applications/O...

#ByeByeAeolus



3 replies 58 retweets 224 likes 92.3K views

Aeolus re-entry, the story so far

ASKOS Aeolus Cal/Val Campaign @ASKOS_Aeolus · May 8
 As #Aeolus gracefully ends its mission, let's remember the incredible insights and data gathered during the #ASKOS #campaign. Farewell, Aeolus, and thank you for your service! @esa_aeolus @NOA_ReACT @EAA_NOA

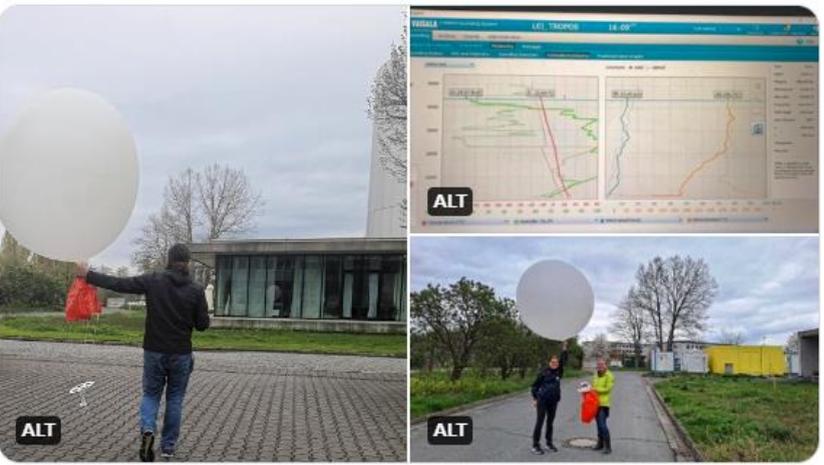


1 5 20 670

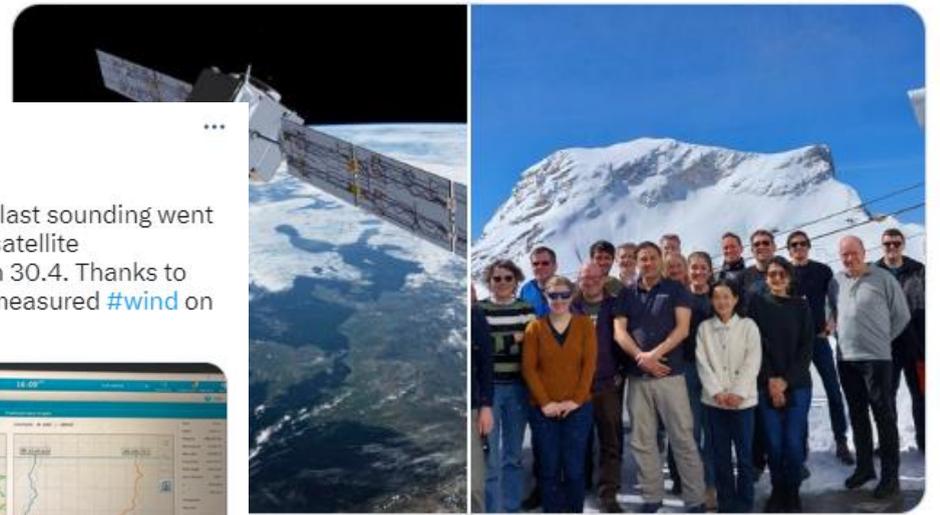
You Retweeted
DLR - English @DLR_en · May 4
 Bye-bye, #Aeolus! 🌍🚀 On 30 April, @esa_aeolus ended its operations after 4.5 years. The satellite was the first to observe Earth's wind profile globally. 🌍 @DLR_de led the DISC consortium responsible for monitoring & improving the mission's #data quality.



TROPOS_eu @TROPOS_eu
 #AEOLUS: After >4.5 years & 150 #radiosondes, the last sounding went up today in #Leipzig for #validation of @esa-#wind satellite @esa_aeolus, whose #EarthExplorer mission ends on 30.4. Thanks to Henriette & @TROPOS_en-#Lidar team who always measured #wind on Fridays at 6:00pm!



9:17 PM · Apr 28, 2023 · 1,276 Views



40 2,652

An Aeolus data sonification



Write a comment

Like | Repost | Share | Copy Link | More

▶ 29.9K | ❤️ 120 | ↻ 12

~30k listens!



Aeolus re-entry, a special sonification

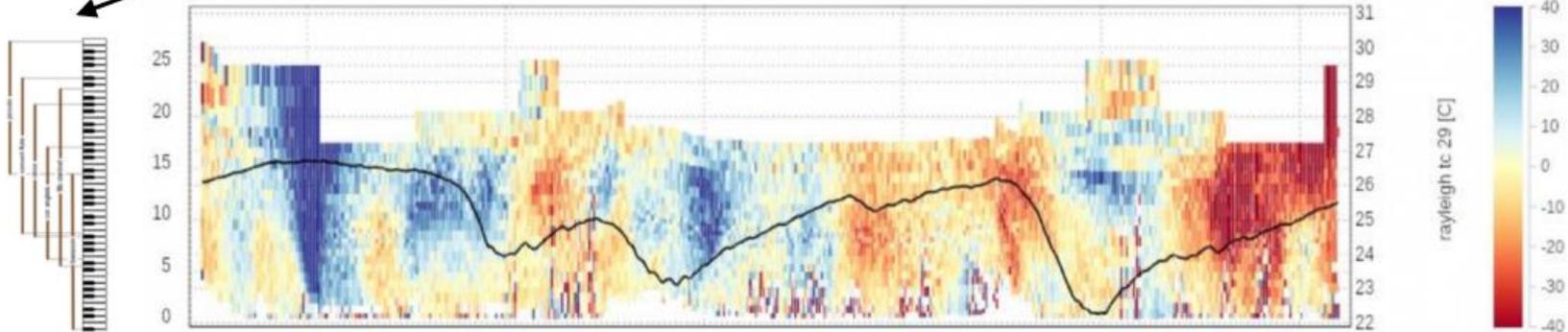
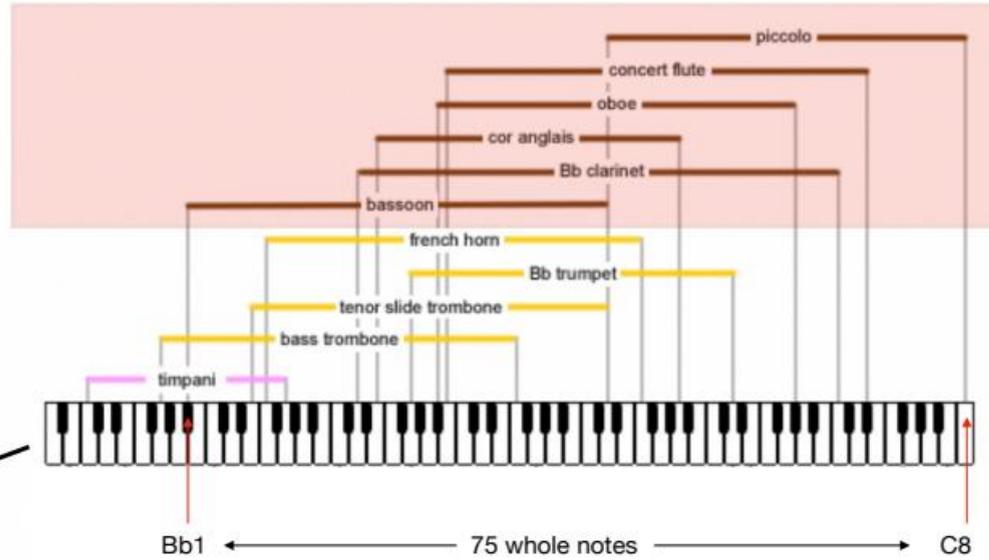
Data to instrument considerations for LoA:

Note Range: 75 intervals (whole musical notes) from ground to highest Aeolus reading range, spanning all main wind instruments from Bassoon to Piccolo.

Data types: Rayleigh, Mie, Range bin Settings

Note Values: pitch, note length and velocity,

Aggregation methods: Mean, Min, Max & STD



Jamie Perera



Daniel Santillan

Thank you for listening (and liking and retweeting)!

Peter Bickerton
Earth Observation Editor
March 2023