

A photograph of the aurora borealis (Northern Lights) over a forest at night. The sky is dark blue and green, with vibrant green and purple aurora curtains. The sun is visible on the right side, creating a bright glow and lens flare. The forest is silhouetted against the sky.

Jonas Lind

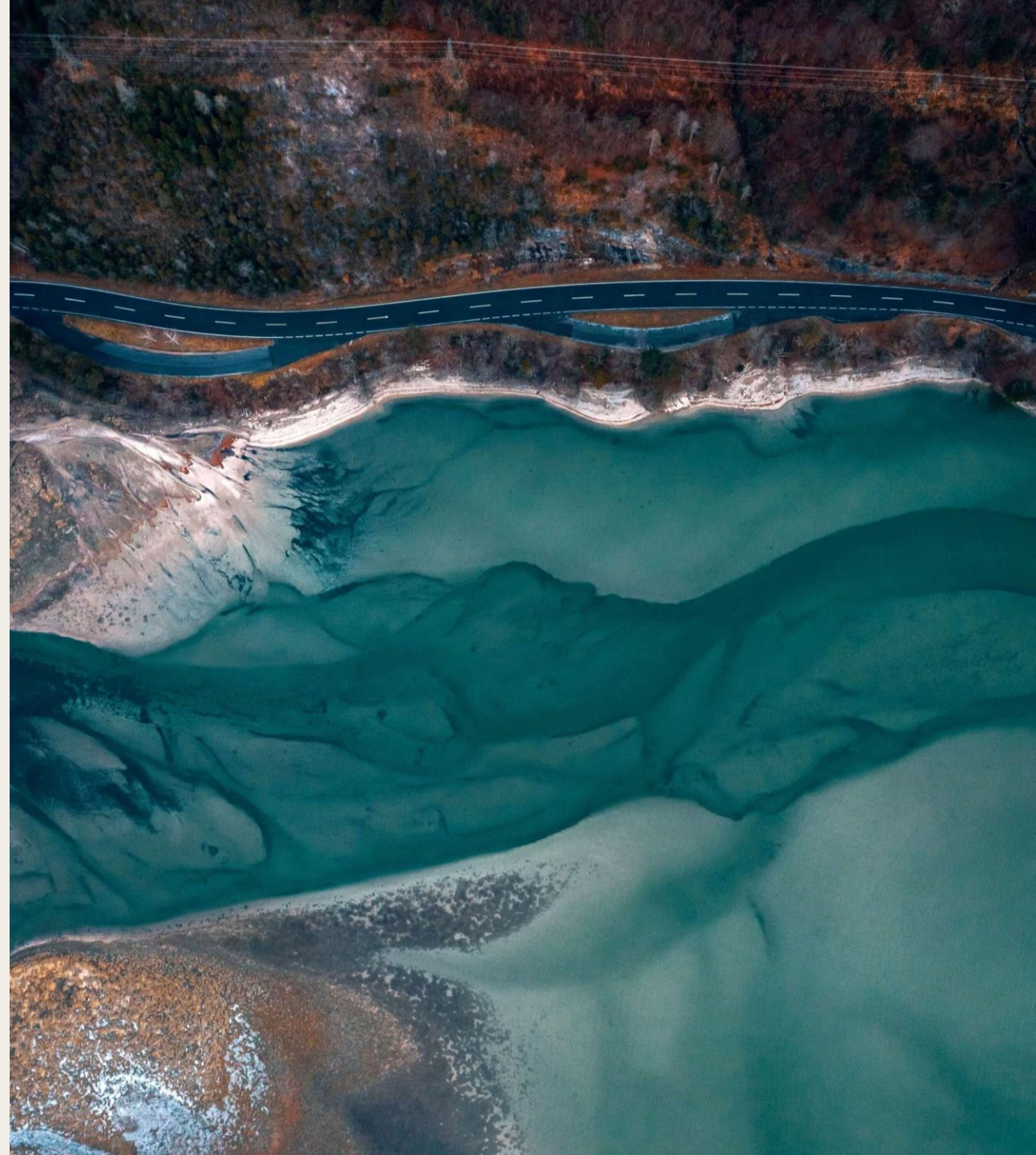
GISS AW, 2023-05-02



Varför ska vi bry oss om Rymden ?

Jonas Lind, GISS AW 2023-05-02

03.05.2023



A close-up, artistic photograph of a human eye. The eye is looking slightly to the right. The iris is a deep blue color, and there is a bright, blue, ethereal reflection on the surface of the eye, resembling a sunset or a digital interface. The eyelashes are dark and well-defined. The overall lighting is soft and moody, with a color palette dominated by blues and purples.

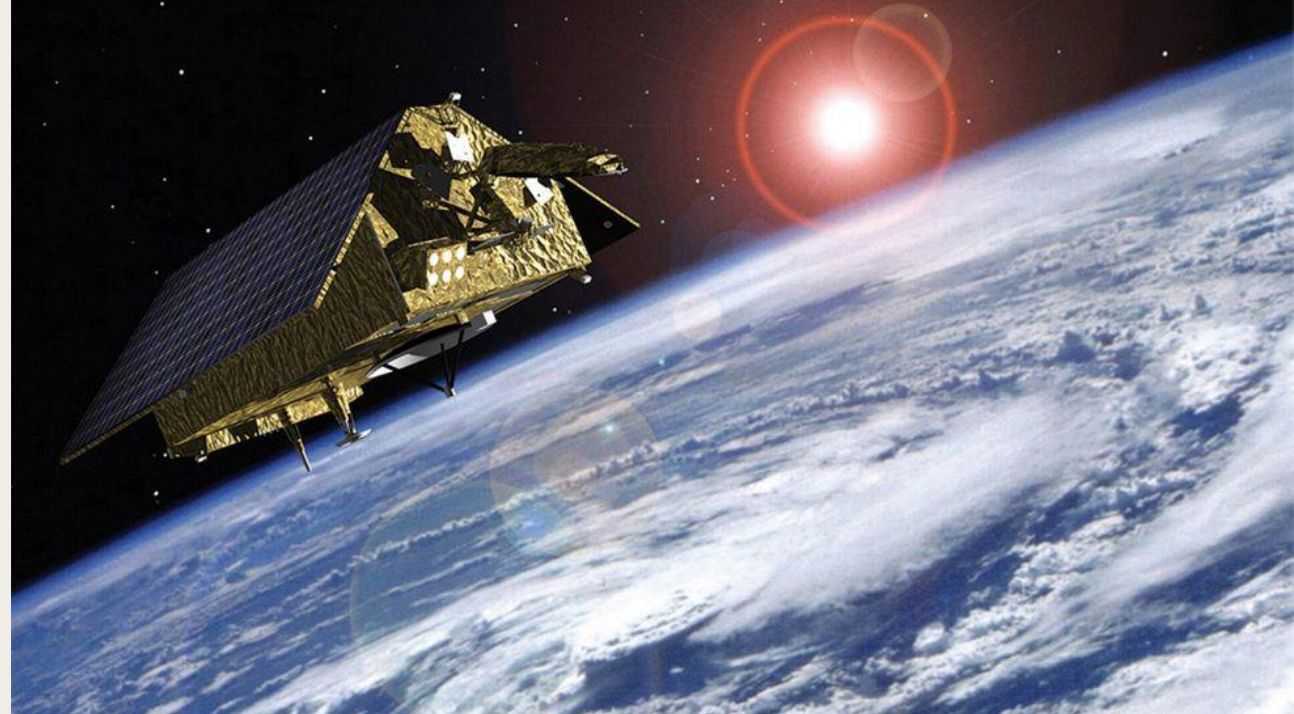
Geodatabranschen

Rymdbranschen



En mänsklig spaning
från en bransch mot
en annan...

...eller ?



Nyfikenhet
Likheter
Skillnader
Nuläge
Framtid



Hur ?





From Sweden to space



Iakttagelser från Rymdforum 2023, Kiruna, Sverige, Planeten Jorden

03.05.2023



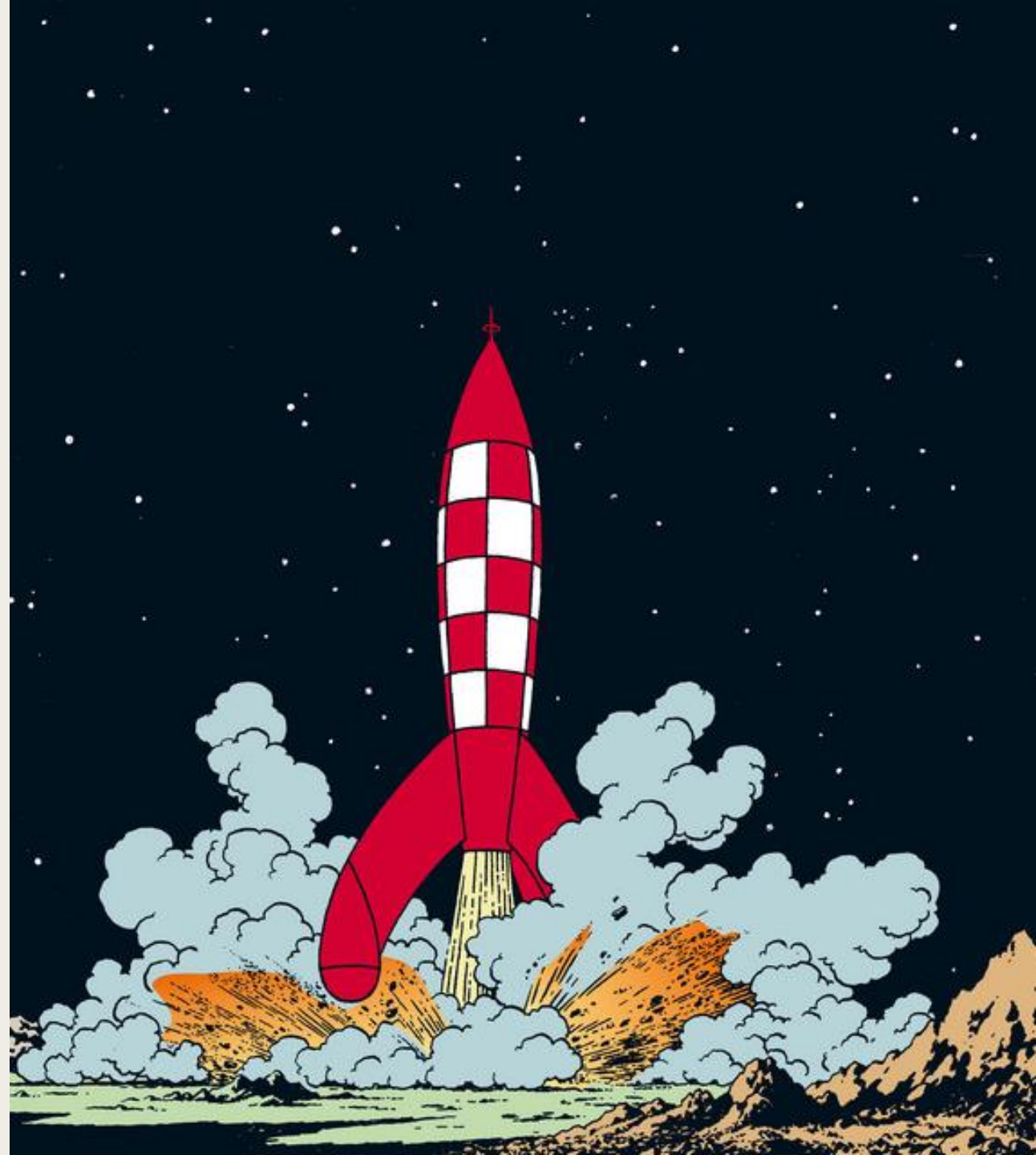


Men först...

Vem är jag ?



1997-2000 Ericsson
2000-2001 Cartesia
2001-2004 3
2004-2010 Bjerking
2010-2011 Grontmij
2011-2018 PE
2019-2023 Field (Terratec)



Ser vi på varandra på
liknande sätt ?

Är samarbetet mellan
branscherna bra idag ?

Tänker vi ens på
varandra ?



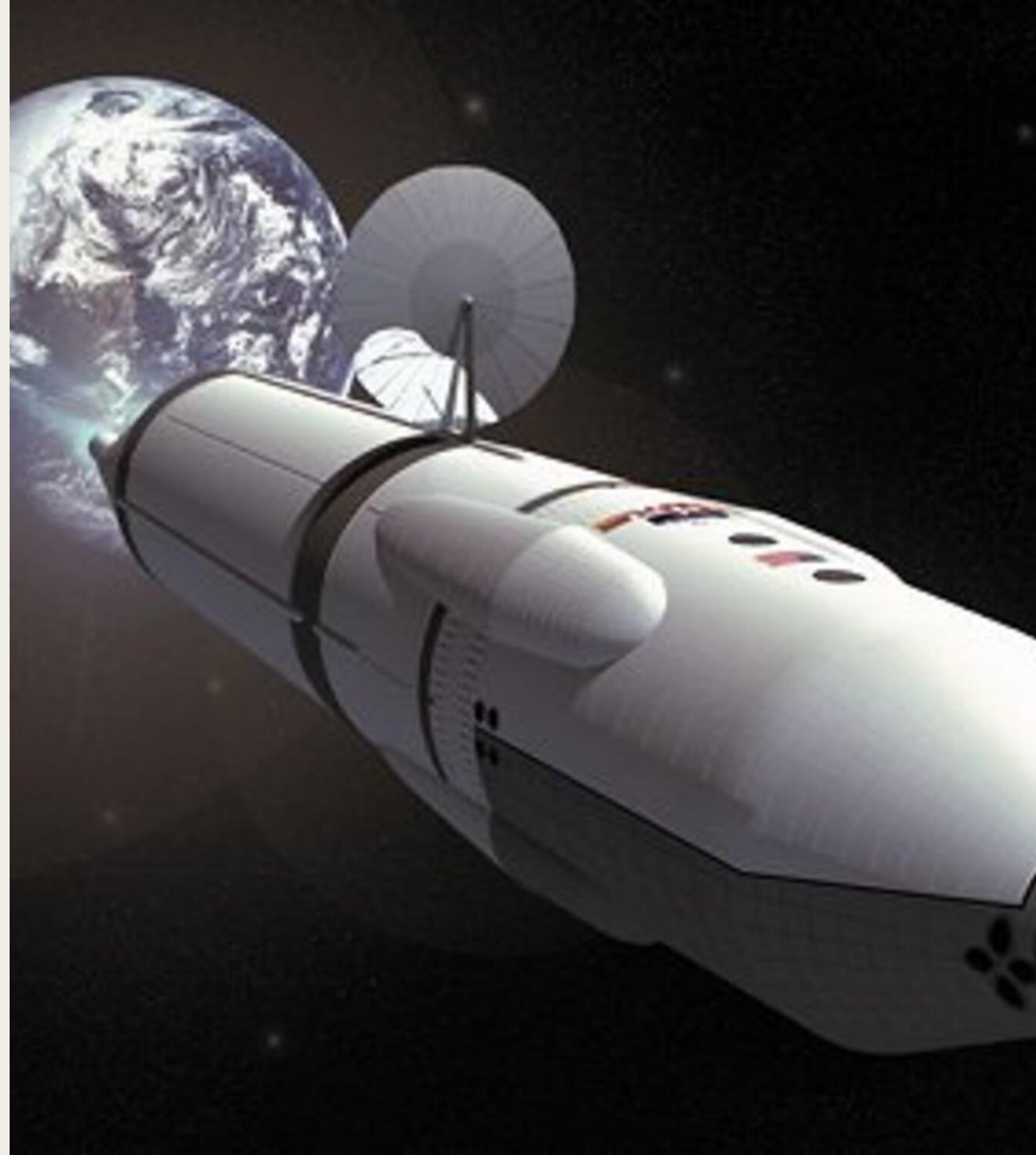


Hur ska jag förstå ?



Så jag åkte till Rymdforum 2023


03.05.2023



A photograph of a space station or satellite in orbit above Earth. The station is on the right side of the frame, with a white cylindrical body and gold-colored thermal blankets. The Earth below is covered in blue oceans and white clouds. The text 'RYMDFORUM' is overlaid in the center in large, bold, black letters.

RYMDFORUM

Sveriges alla rymdaktörer i förening



Rymdforum Sverige är en ideell förening vars syfte är att sprida kunskap om svensk rymdverksamhet och öka informationsflödet mellan olika aktörer i rymdbranschen.

Bland annat ordnas återkommande arrangemang för industri, forskare, beslutsfattare, användare av rymdteknik, media och den svenska allmänheten.

Föreningen Rymdforum Sverige bildades år 2002 och har 31 medlemmar.



Vision

- Vara rymdens röst i Sverige genom att generera och sprida information.
- Genom fler medlemmar bredda kompetens och trovärdighet.
- Öka den operativa kraften.
- Medvetandegöra beslutsfattare så att de har redskap att kunna agera.
- Bidra med kunskap till riks-, regionala och kommunala politiker.
- Vara en plattform för informationsutbyte mellan våra medlemmar.

MARCH, 5-8 2023

Kiruna, Sweden





From Sweden to space



Vad handlade det om då ?



Raketer & Satelliter
Hårdvara
Tillgång till Rymden
Rymdsäkerhet
Utbildning
Tech & Innovations
Hållbarhet
Space Data
Earth Observations



Esrange



03.05.2023

Grogu på Esrange

03.05.2023



Presentation template




BROR

Valda delar av "min" bransch
var representerade på plats...

Thyréns
Skogsstyrelsen
Global Trust
Lantmäteriet
Sweco
m.fl.





Självfallet har vi
Rymden att tacka för
mycket.

Enormt mycket...



Copernicus

FULL, FREE AND OPEN
ACCESS TO DATA



-  ATMOSPHERE MONITORING
-  MARINE ENVIRONMENT MONITORING
-  LAND MONITORING
-  CLIMATE CHANGE
-  EMERGENCY MANAGEMENT
-  SECURITY



The image displays two longhorn beetles against a white background. The beetle on the left is shown from a dorsal perspective, highlighting its dark brown, textured thorax and the segmented, reddish-brown legs. The beetle on the right is shown from a lateral view, revealing the profile of its body and the structure of its legs. Both beetles exhibit fine hairs and a segmented appearance characteristic of the order Cerambycidae.

Skogsstyrelsen

Dokumenterar
&
Analyserar

InSAR

InSAR

A detailed illustration of the Galileo satellite navigation system. The Earth is shown from space, with a grid of white lines representing the satellite's orbital paths. Several Galileo satellites are depicted in orbit, each with two large solar panel arrays extending outwards. The word "Galileo" is written in a large, white, sans-serif font across the center of the image. The background is a deep blue space filled with stars.

Galileo



Inte bara data från rymden, utan även precis kunskap om var data på Planeten Jorden finns.

A composite image showing the Earth from space with a grid of latitude and longitude lines. Several Galileo satellites are depicted in orbit around the planet, with their solar panels extended. The background is the dark blue of space with some stars visible.

Navigation

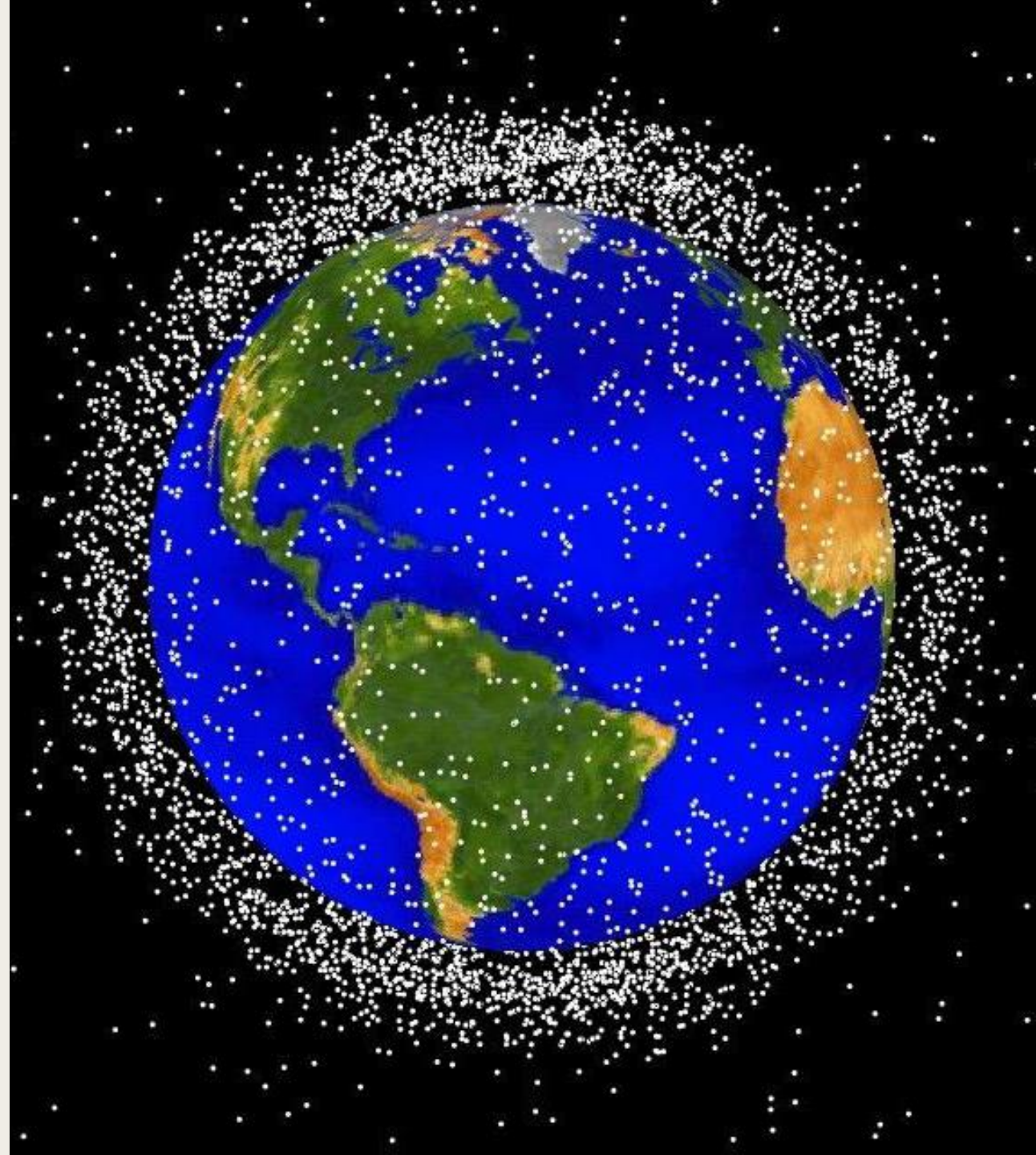
Galileo

Positioning



Stor nytta av
varandra.

Stor kunskap om
varandra



Symbios

A vibrant clownfish with orange and white stripes is swimming within the protective tentacles of a sea anemone. The anemone's tentacles are light purple and have a bulbous, rounded tip. The background is a soft-focus underwater scene with more anemones and coral.

Brandbekämpning
Klimatförändringar
Naturvärden
Övervakning mark
Algblomningar
Havsis
Civil säkerhet
Jordbruket
etc...

03.05.2023

Kart & Bildteknik

Mapping and Image Science 2019:4

TEMA: Rymden

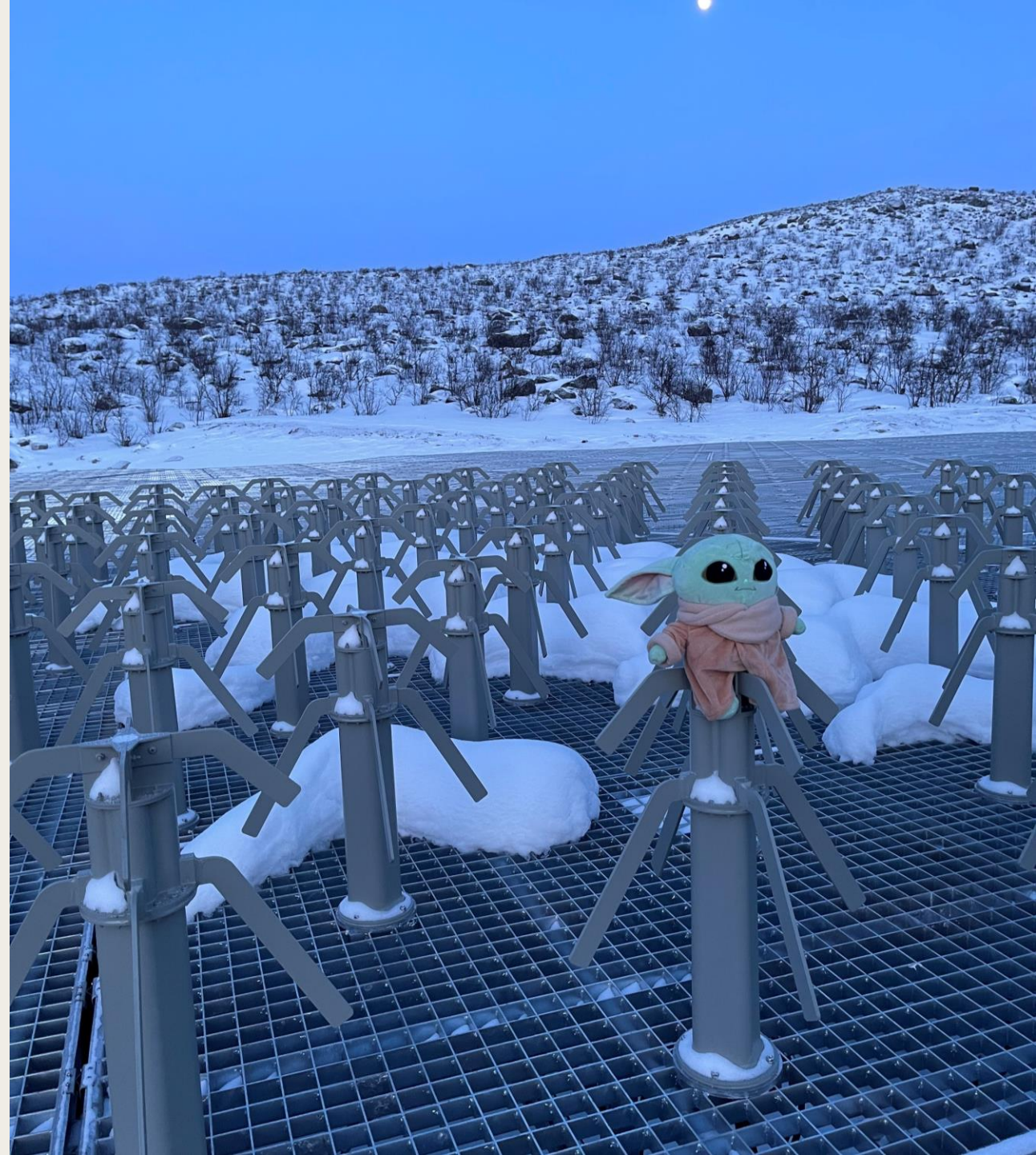


Gott Nytt År



EISCAT 3D

03.05.2023





Spaningar



Försvaret

Ja – den svenska försvarsmakten har numera en Rymdavdelning inom flygvapnet



An aerial photograph of a vast, cracked ice field, likely a glacier or ice shelf. The ice is broken into numerous large, irregular icebergs and smaller ice floes. The ice has a blueish-white hue, and the cracks are deep and dark. The perspective is from a high angle, looking down on the ice field.

Klimatet



Forskning

03.05.2023



SPACE WEATHER IMPACTS

Forskning

AURORA
(NORTHERN LIGHTS)



GPS



SATELLITES



COMMUNICATIONS



HUMAN SPACE
EXPLORATION



AVIATION



ELECTRIC POWER



An aerial photograph of a rural landscape. The left side features a vibrant green field, possibly alfalfa or a similar cover crop. The right side is a brown, harvested field, likely corn. A tall, silver metal power line tower stands in the center-right, with several power lines stretching across the fields. The overall scene is captured from a high angle, showing the textures and colors of the agricultural land.

Jordbruk



Samhälle

An aerial photograph showing a road intersection in a vast green field. The road is a light grey color and runs diagonally from the bottom left towards the top right. It intersects with another road that runs from the top left towards the bottom right. The fields are a vibrant green, with some areas appearing slightly more yellowish, possibly due to the lighting or the type of vegetation. A small blue car is visible on the road near the intersection. The overall scene is a rural landscape.

Människa & Miljö



Vem äger egentligen
rymden?

Vem äger rymdens
data?



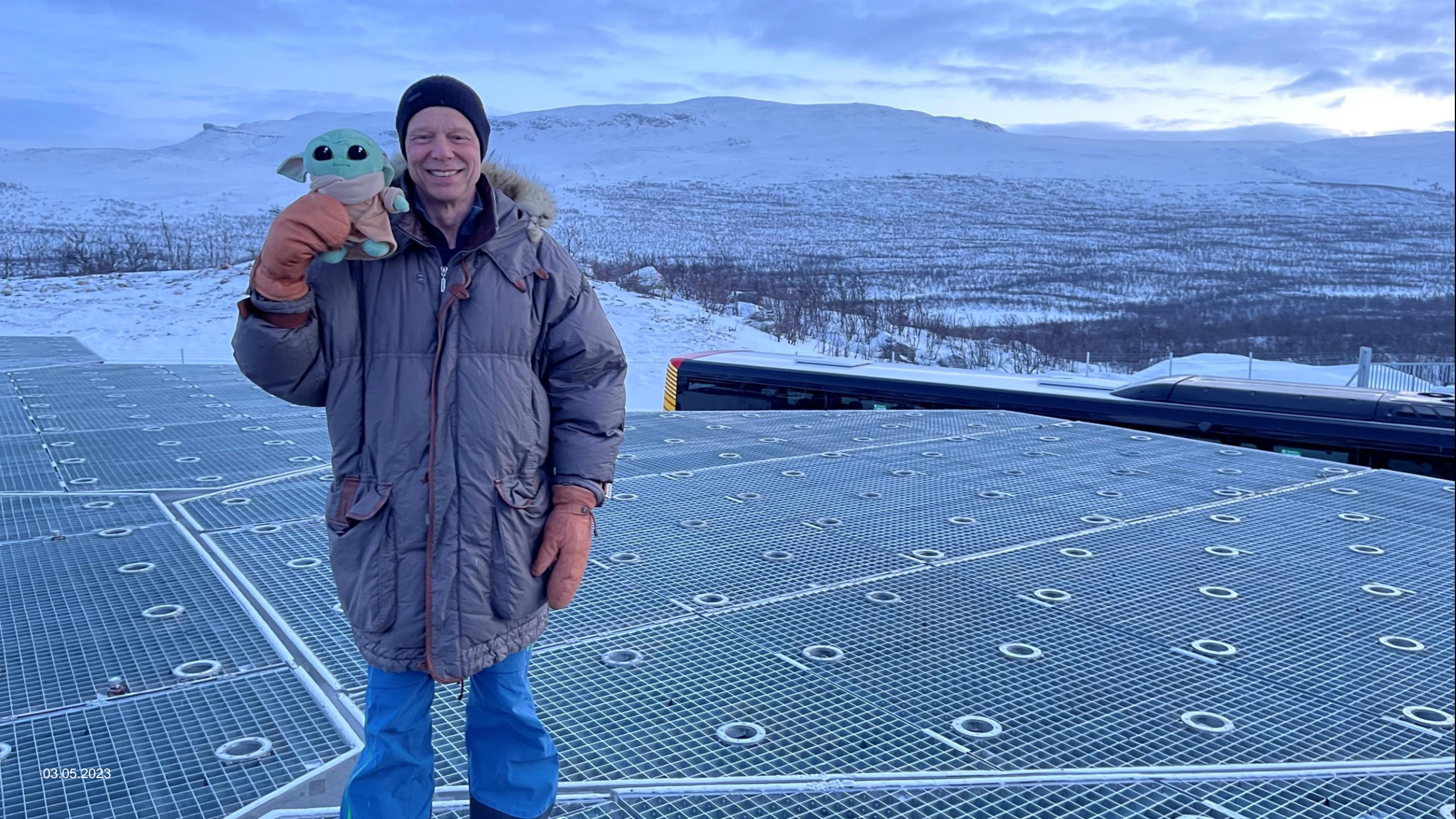


Kanske var mitt eget
perspektiv som
behövde justeras...



På tal om perspektiv...





03.05.2023



Tack..!