

Jak se nechytit do pasti zvané chemtrails díl 3. zastavme geo-inženýrství

Autor: Radovan Dluhý

Znečištěné ovzduší zabíjí až 9 miliónů lidí ročně, tvrdí vědci z Harvardu v Evropě více než 1 milión



'Invisible killer': fossil fuels caused 8.7m deaths globally in 2018, research finds

Pollution from power plants, vehicles and other sources accounted for one in five of all deaths that year, more detailed analysis reveals



Two men walk along Rajpath amid smoggy conditions in New Delhi last month. Photograph: Jewel Samad/AFP/Getty Images

Air pollution caused by the burning of fossil fuels such as coal and oil was responsible for 8.7m deaths globally in 2018, a staggering one in five of all

Oliver Milman

@olliemilman

Tue 9 Feb 2021 19:50 GMT



Rapidní snížení množství hmyzu hrozí kolapsem přírody

Plummeting insect numbers 'thre

theguardian.com/environment/2019/feb/10/plummeting-insect-numbers-threaten-collapse-of-nature

☆ R

Insects

Plummeting insect numbers 'threaten collapse of nature'

Damian Carrington
Environment editor

@dpcarrington

Sun 10 Feb 2019
18.00 GMT



78k 1393



NOVÁ STUDIE NASA UKAZUJE NĚKTERÉ ERUPCE SOPEK PRAVDĚPODOBNĚ KLIMA OTEPLUJÍ

The image is a screenshot of a web browser displaying a NASA article. The browser's address bar shows the URL: <https://www.nasa.gov/feature/goddard/2022/flood-basalts-may-warm-climate>. The page header includes the NASA logo and navigation links: Topics, Missions, Galleries, NASA TV, Follow NASA, Downloads, About, and NASA Audiences. A search bar is located on the right. The main content area is titled "Climate" and features the article title "NASA Simulation Suggests Some Volcanoes Might Warm Climate, Destroy Ozone Layer" dated May 2, 2022. The article text states that a new NASA climate simulation suggests that extremely large volcanic eruptions called "flood basalt eruptions" might significantly warm Earth's climate and devastate the ozone layer. It also notes that this result contradicts previous studies. Below the text is a video player with the title "NASA Simulation Suggests Some Volcanoes Might Warm Climate, Destroy Ozone Layer" and controls for play, share, and volume. On the left side, there is a "Related" section with several other articles, including "NASA Fieldwork Studies Signs of Climate Change in Arctic, Boreal Regions" and "2022 Arctic Summer Sea Ice Tied for 10th-Lowest on Record". The Windows taskbar at the bottom shows the system tray with the date 10.11.2022 and time 6:09.

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Climate

May 2, 2022

NASA Simulation Suggests Some Volcanoes Might Warm Climate, Destroy Ozone Layer

A new NASA climate simulation suggests that extremely large volcanic eruptions called "flood basalt eruptions" might significantly warm Earth's climate and devastate the ozone layer that shields life from the Sun's ultraviolet radiation.

The result contradicts [previous studies](#) indicating these volcanoes cool the climate. It also suggests that while extensive flood-basalt eruptions on Mars and Venus may have helped warm their climates, they could have doomed the long-term habitability of these worlds by contributing to water loss.

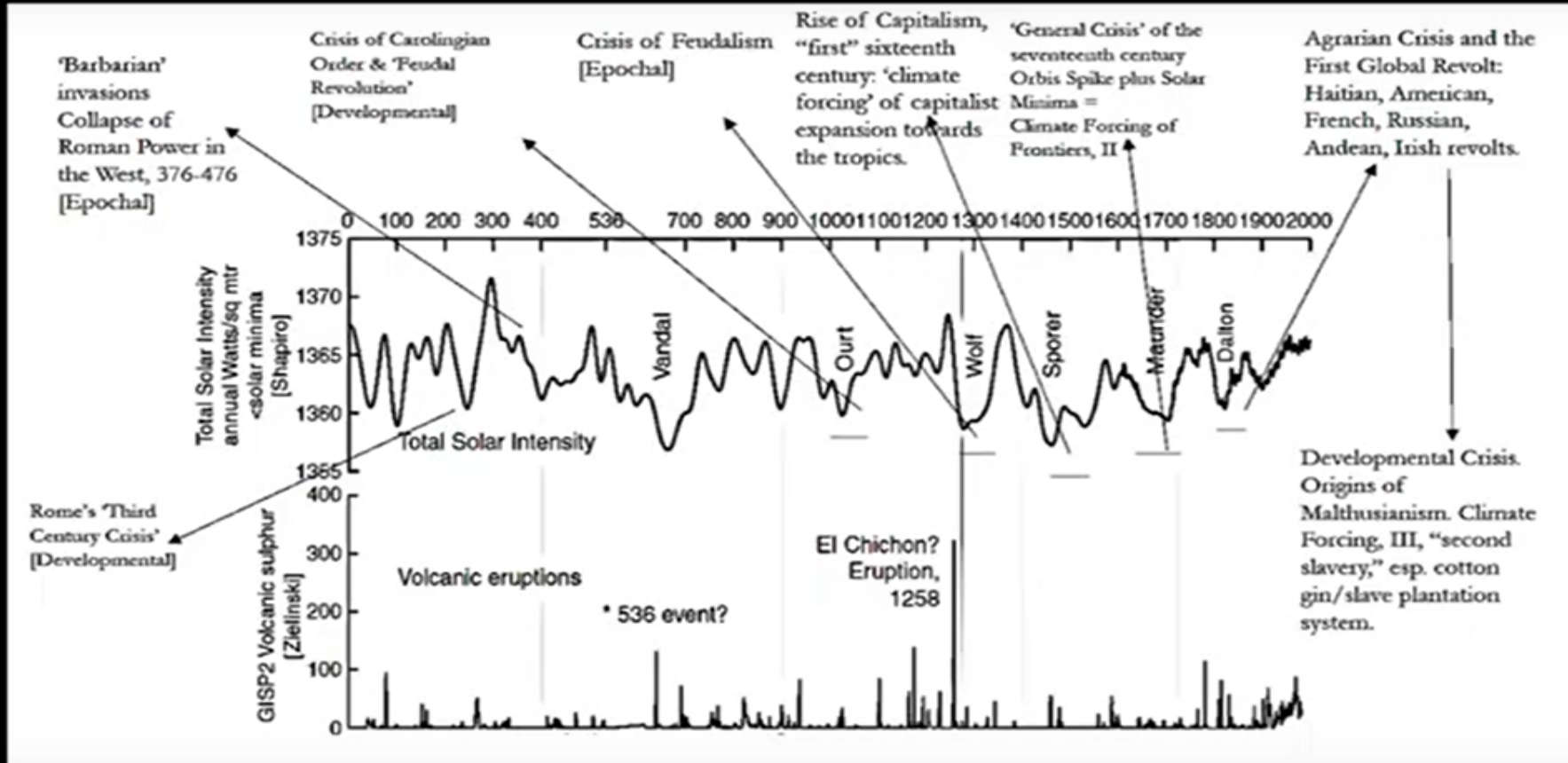
NASA Simulation Suggests Some Volcanoes Might Warm Climate, Destroy Ozone Layer

Přehrát po... Sdílet

6°C Převáž. oblačno 10.11.2022 6:09

OBROVSKÁ ERUPCE SOPKY V ROCE 1258 – PO KRÁTKÉM OCHLAZENÍ PŘIŠLO OTEPLENÍ

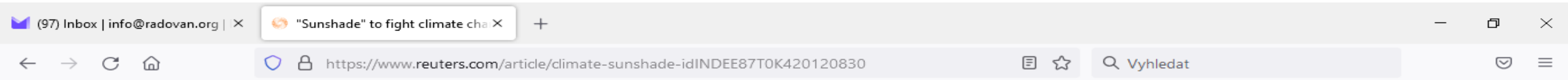
Sustainability, Spaceships & Slaveships: Climates of Class Politics in the Capitalist World-Ecology



1:07:47 / 1:12:50



PODLE VĚDCŮ JE SAI (VYPOUŠTĚNÍ MIL. TUN ČÁSTIC VE VÝŠCE 18KM) MOŽNÉ A EKONOMICKÉ r. 2012



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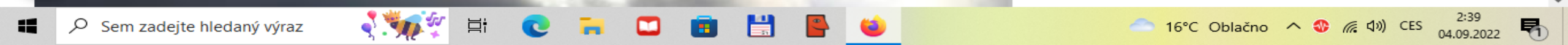
"Sunshade" to fight climate change costed at \$5 bln a year

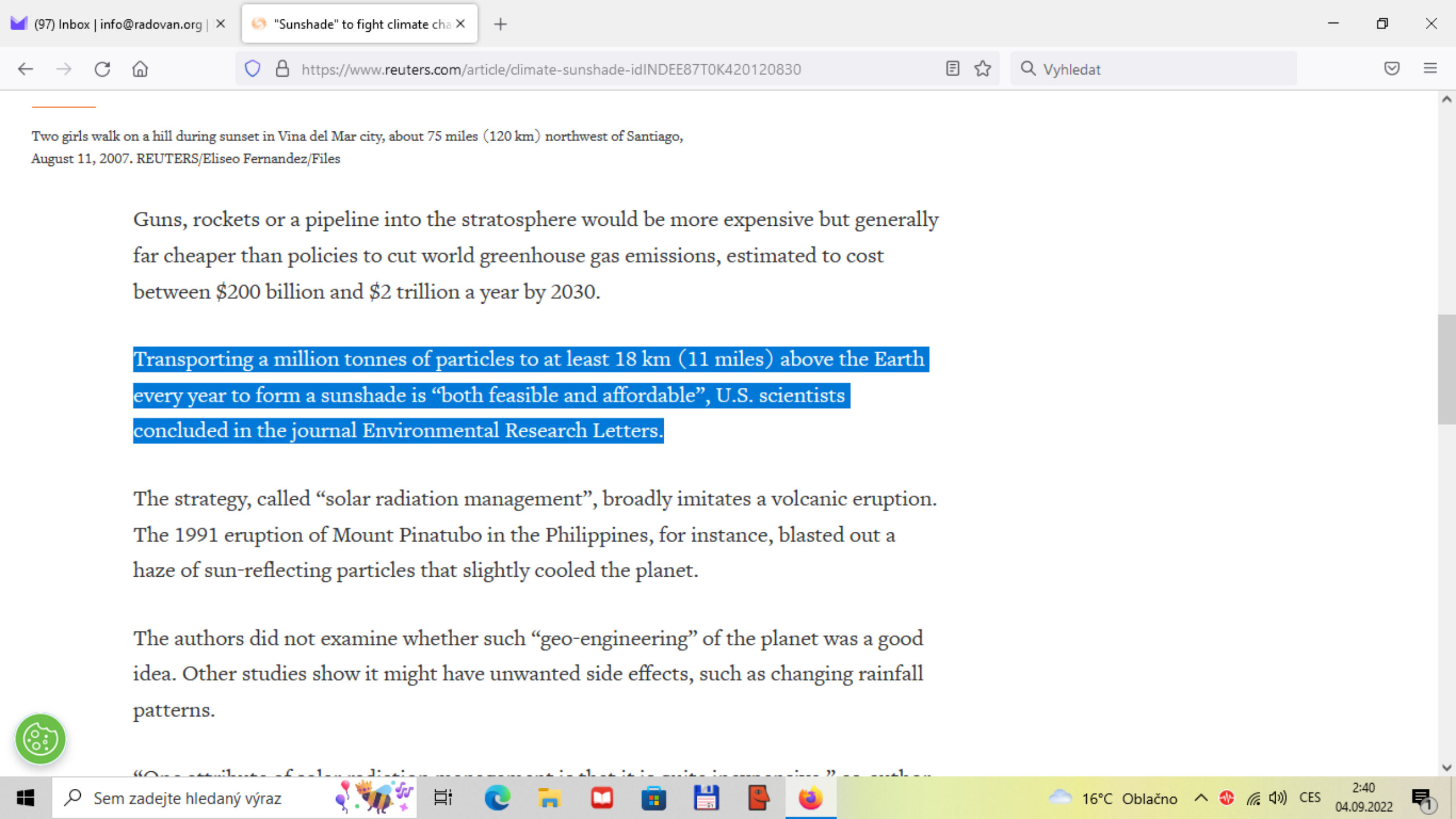
By Alister Doyle, David Fogarty

4 MIN READ



OSLO/SINGAPORE (Reuters) - Planes or airships could carry sun-dimming materials high into the atmosphere for an affordable price tag of below \$5 billion a year as a way to slow climate change, a study indicated on Friday.





Two girls walk on a hill during sunset in Vina del Mar city, about 75 miles (120 km) northwest of Santiago, August 11, 2007. REUTERS/Eliseo Fernandez/Files

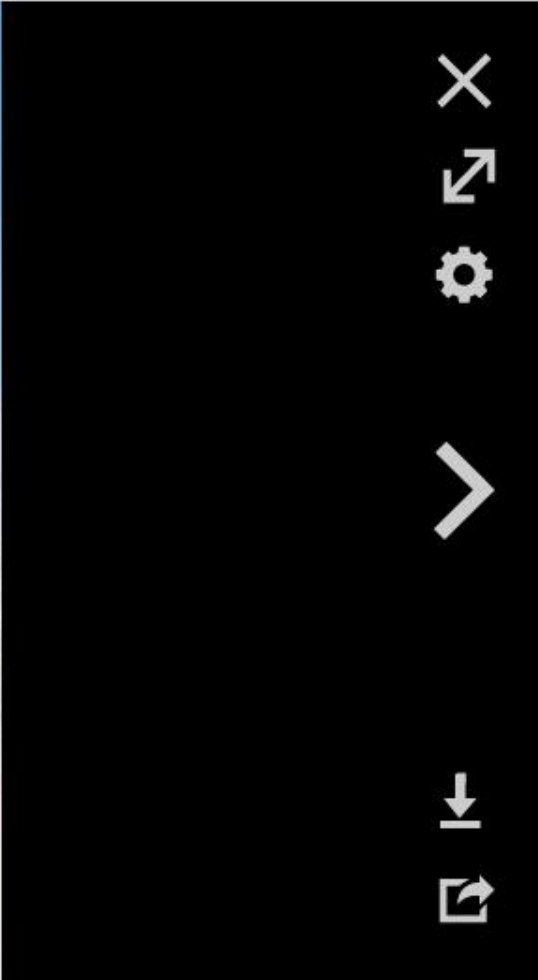
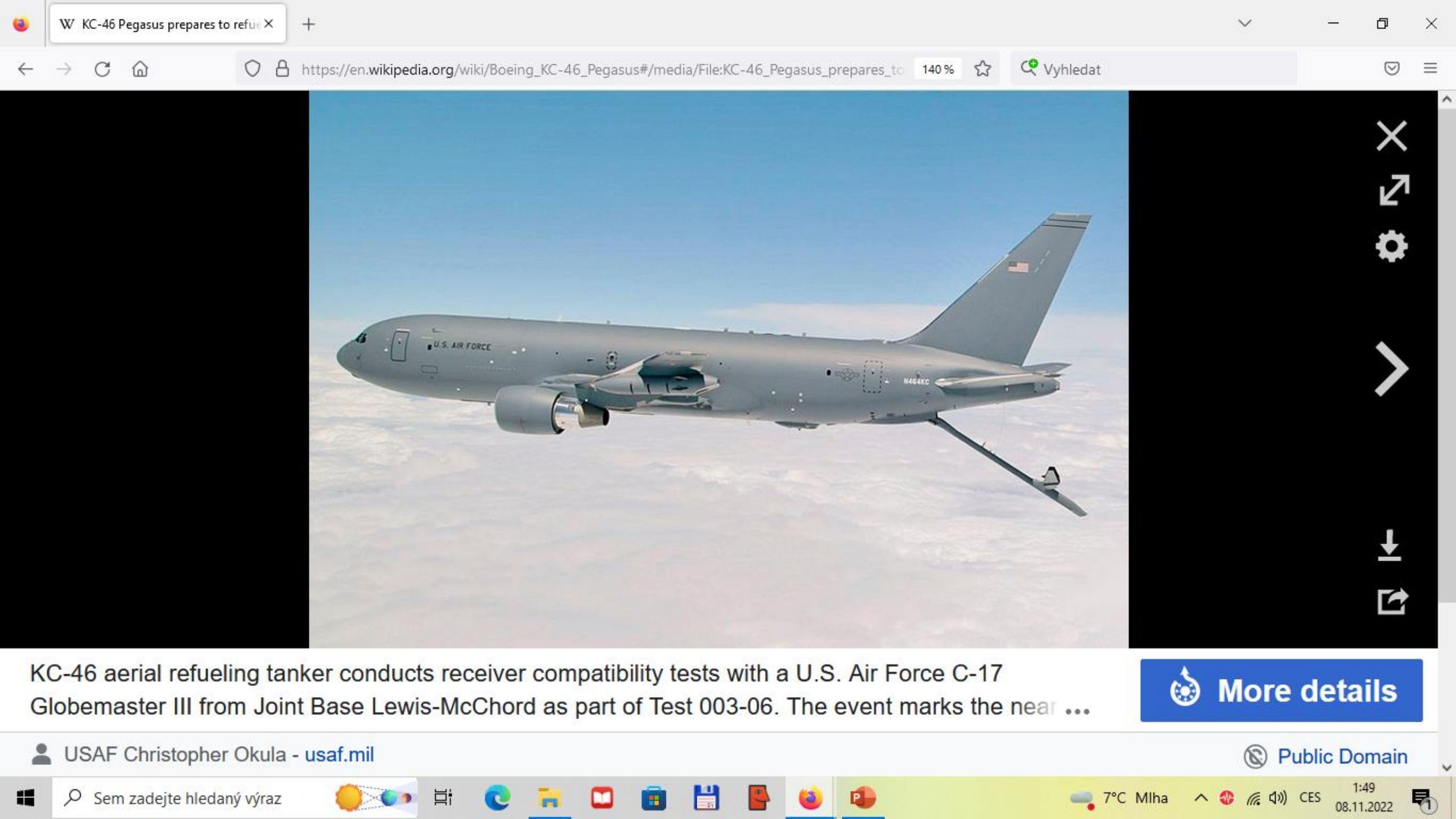
Guns, rockets or a pipeline into the stratosphere would be more expensive but generally far cheaper than policies to cut world greenhouse gas emissions, estimated to cost between \$200 billion and \$2 trillion a year by 2030.

Transporting a million tonnes of particles to at least 18 km (11 miles) above the Earth every year to form a sunshade is “both feasible and affordable”, U.S. scientists concluded in the journal Environmental Research Letters.

The strategy, called “solar radiation management”, broadly imitates a volcanic eruption. The 1991 eruption of Mount Pinatubo in the Philippines, for instance, blasted out a haze of sun-reflecting particles that slightly cooled the planet.

The authors did not examine whether such “geo-engineering” of the planet was a good idea. Other studies show it might have unwanted side effects, such as changing rainfall patterns.

“One attribute of solar radiation management is that it is quite inexpensive.”

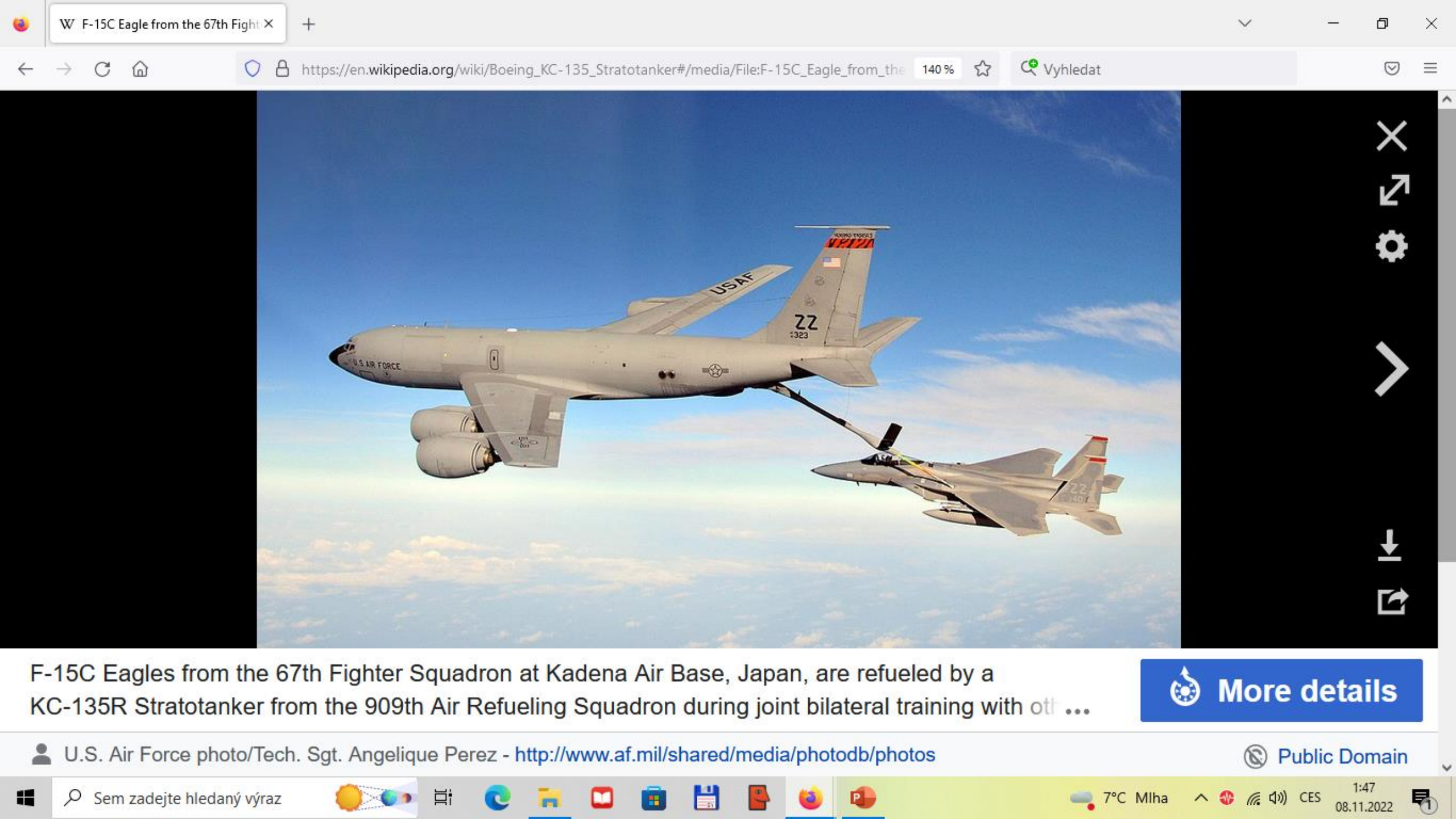


KC-46 aerial refueling tanker conducts receiver compatibility tests with a U.S. Air Force C-17 Globemaster III from Joint Base Lewis-McChord as part of Test 003-06. The event marks the near ...

 [More details](#)

 USAF Christopher Okula - usaf.mil

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Navigation and utility icons for the image viewer, including close, zoom, settings, navigation, and download.

F-15C Eagles from the 67th Fighter Squadron at Kadena Air Base, Japan, are refueled by a KC-135R Stratotanker from the 909th Air Refueling Squadron during joint bilateral training with oth ...



 **More details**

U.S. Air Force photo/Tech. Sgt. Angelique Perez - <http://www.af.mil/shared/media/photodb/photos>

 **Public Domain**

LETADLA TYPU KC-46, KC-135 JSOU SCHOPNÉ JIŽ PÁR DEKÁD LÉTAT DO VÝŠKY MEZI 9-13KM S NÁKLADEM KOLEM 100 TUN ČÁSTIC

A subpolar-focused stratospheric aerosol injection deployment scenario

Wake Smith^{1,2} , Umang Bhattarai^{9,3} , Douglas G MacMartin⁴ , Walker Raymond Lee⁴ , Daniele Vioni⁴ , Ben Kravitz^{5,6}  and Christian V Rice^{7,8} 

Published 15 September 2022 • © 2022 The Author(s). Published by IOP Publishing Ltd

[Environmental Research Communications](#), Volume 4, Number 9

Citation Wake Smith *et al* 2022 *Environ. Res. Commun.* 4 095009

 Article PDF

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Abstract


Stratospheric aerosol injection (SAI) is a prospective climate intervention technology that would seek to abate climate change by deflecting back into space a small fraction of the incoming solar radiation. While most consideration given to SAI assumes a global intervention, this paper considers an alternative scenario whereby SAI might be deployed only in the subpolar regions. Subpolar deployment would quickly envelope the poles as well and could arrest or reverse ice and permafrost melt at high latitudes. This would yield global benefit by retarding sea level rise. Given that effective

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Abstract

Abbreviation:

1. Introduction
2. SAI subpolar deployment scenario
3. Logistical discussion
4. Expected climate impacts
5. Conclusion

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JOURNAL ARTICLES

[Stratospheric Aerosol Geoengineering could lower future risk of 'Day Zero' level droughts in Cape Town](#)

[CCSM3 simulation of pacific multi-decadal climate variability: the role of subpolar North Pacific Ocean](#)

[Oceanic forcing of the interhemispheric SST dipole associated with the Atlantic Multidecadal Oscillation](#)

[Knowledge about aerosol injection does not reduce individual mitigation efforts](#)

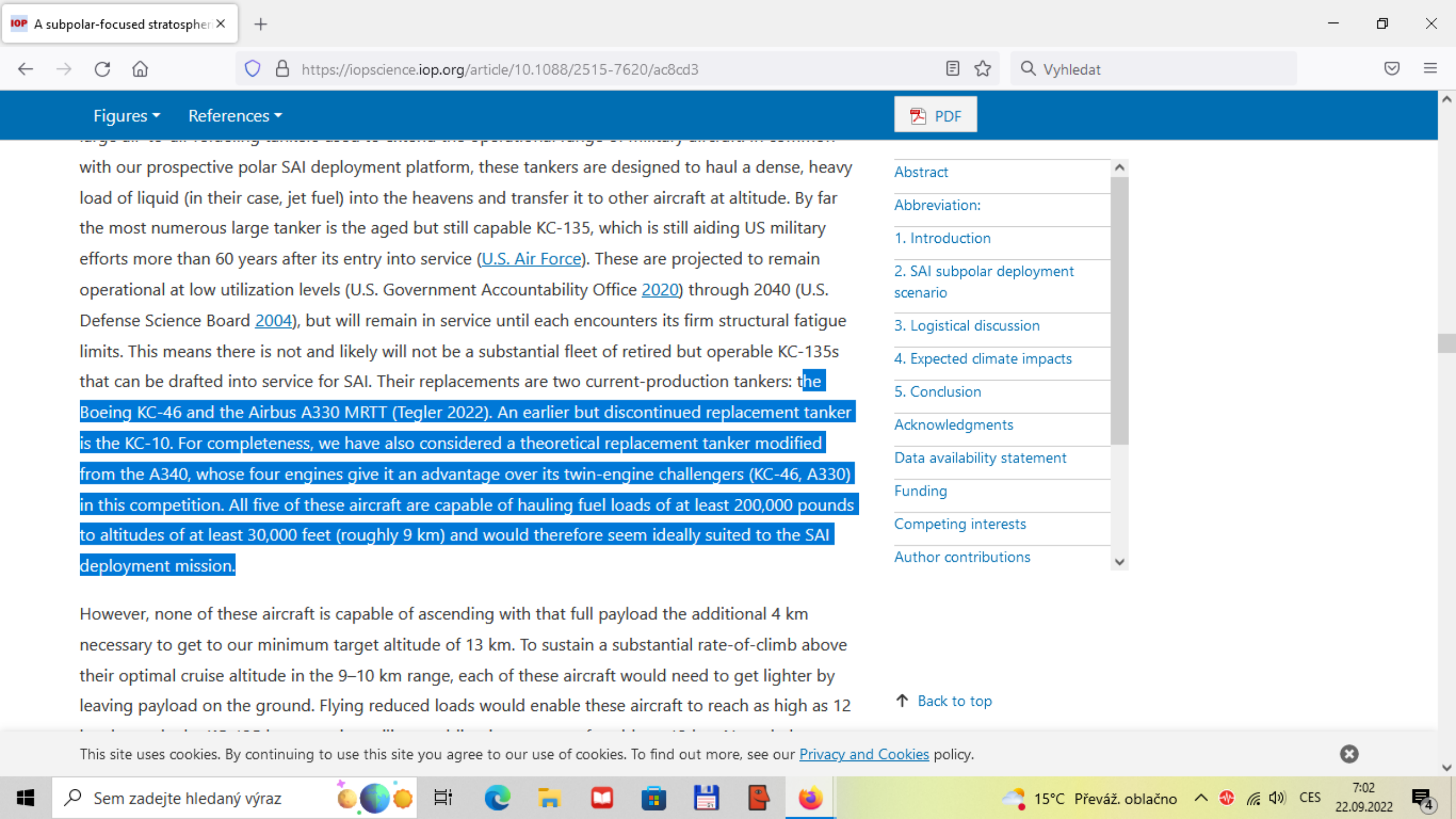
[The cost of stratospheric aerosol injection through 2100](#)

[THE SOLAR MINIMUM CORONA FROM DIFFERENTIAL EMISSION MEASURE TOMOGRAPHY](#)

Sem zadejte hledaný výraz

15°C Převáž. oblačno

6:57
22.09.2022

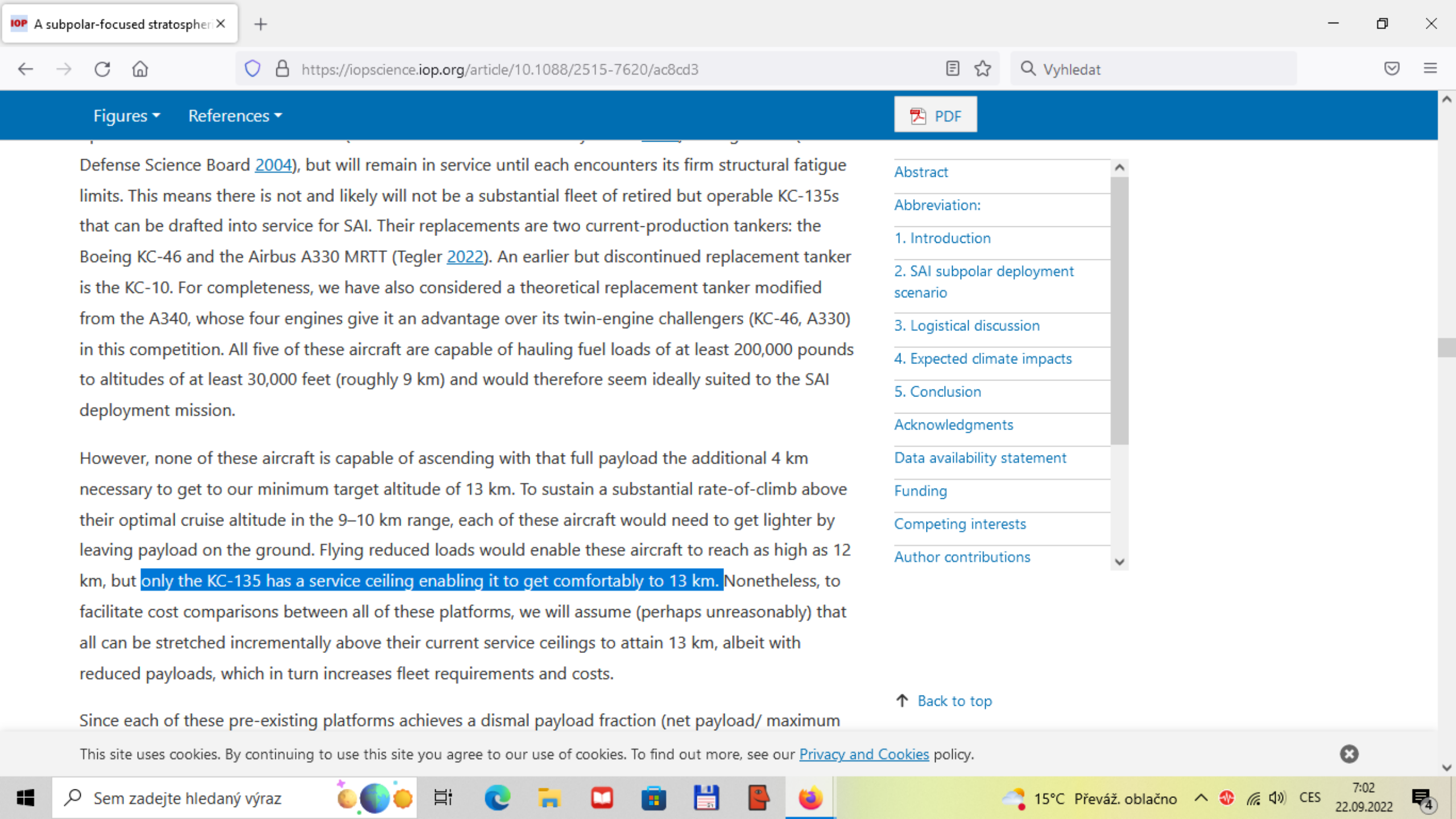


with our prospective polar SAI deployment platform, these tankers are designed to haul a dense, heavy load of liquid (in their case, jet fuel) into the heavens and transfer it to other aircraft at altitude. By far the most numerous large tanker is the aged but still capable KC-135, which is still aiding US military efforts more than 60 years after its entry into service ([U.S. Air Force](#)). These are projected to remain operational at low utilization levels (U.S. Government Accountability Office [2020](#)) through 2040 (U.S. Defense Science Board [2004](#)), but will remain in service until each encounters its firm structural fatigue limits. This means there is not and likely will not be a substantial fleet of retired but operable KC-135s that can be drafted into service for SAI. Their replacements are two current-production tankers: the Boeing KC-46 and the Airbus A330 MRTT (Tegler 2022). An earlier but discontinued replacement tanker is the KC-10. For completeness, we have also considered a theoretical replacement tanker modified from the A340, whose four engines give it an advantage over its twin-engine challengers (KC-46, A330) in this competition. All five of these aircraft are capable of hauling fuel loads of at least 200,000 pounds to altitudes of at least 30,000 feet (roughly 9 km) and would therefore seem ideally suited to the SAI deployment mission.

However, none of these aircraft is capable of ascending with that full payload the additional 4 km necessary to get to our minimum target altitude of 13 km. To sustain a substantial rate-of-climb above their optimal cruise altitude in the 9–10 km range, each of these aircraft would need to get lighter by leaving payload on the ground. Flying reduced loads would enable these aircraft to reach as high as 12

- Abstract
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- Acknowledgments
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- Funding
- Competing interests
- Author contributions

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Since each of these pre-existing platforms achieves a dismal payload fraction (net payload/ maximum

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- Author contributions

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Alan Robock

[\(click here for Biographical Sketch and other photos\)](#)

B.A., University of Wisconsin, 1970

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Meteorology, Advisor: Norman A. Phillips

Ph.D., Massachusetts Institute of Technology, 1977

Meteorology, Advisor: Edward N. Lorenz

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Associate Editor, *Reviews of Geophysics*

Research Interests:

Nuclear Winter

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POZITIVA A NEGATIVA GEOINŽENÝRSTVÍ (Hazard s nebesy str. 332-333)

AGU Benefits, risks, and costs of strato x +

— □ ×

← → ↻ agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2009GL039209

🔍 ☆ ⚙️ R ⋮

Table 1. Benefits and Risks of Stratospheric Geoengineering^u

Benefits	Risks
1. Cool planet	1. Drought in Africa and Asia
2. Reduce or reverse sea ice melting	2. Continued ocean acidification from CO ₂
3. Reduce or reverse land ice sheet melting	3. Ozone depletion
4. Reduce or reverse sea level rise	4. No more blue skies
5. Increase plant productivity	5. Less solar power
6. Increase terrestrial CO ₂ sink	6. Environmental impact of implementation
	7. Rapid warming if stopped
	8. Cannot stop effects quickly
	9. Human error
	10. Unexpected consequences
	11. Commercial control
	12. Military use of technology

Metrics

Citations: 160



Details

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Keywords

geoengineering

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Version of Record online:
02 October 2009

Manuscript accepted:
20 August 2009

NEGATIVA

- Sucha v Africe, Asii
- Ozónová díra
- Kyselý oceán
- Šedý závoj na obloze
- Vojenské zneužití
- a dalších 20

BÍLÝ DŮM ZKOUMÁ MOŽNOSTI JAK ODRÁŽET SLUNEČNÍ SVIT A TÍM OCHLADIT ZEMI

White House pushes ahead rese X

https://www.cnbc.com/2022/10/13/what-is-solar-geoengineering-sunlight-reflection-risks- Vyhledat

MARKETS BUSINESS INVESTING TECH POLITICS CNBC TV INVESTING CLUB PRO

ADAPTATION

White House is pushing ahead research to cool Earth by reflecting back sunlight

PUBLISHED THU, OCT 13 2022-1:35 PM EDT | UPDATED TUE, OCT 18 2022-3:59 PM EDT

 **Catherine Clifford**
@IN/CATCLIFFORD/
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KEY POINTS

- The White House Office of Science and Technology Policy is coordinating a five-year research plan to study ways of modifying the amount of sunlight that reaches the Earth in order to temporarily temper the effects of global warming.
- There are several kinds of sunlight-reflection technology being considered, including stratospheric aerosol injection, marine cloud brightening and cirrus cloud thinning.
- Stratospheric aerosol injection involves spraying an aerosol like sulfur dioxide into

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 Filecoin Foundation
How will Web3

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13°C Přev. slunečno 1:41 19.10.2022

AČKOLIV PŘIZNÁVAJÍ, ŽE OXIDY SÍRY MAJÍ MNOHO NEGATIVNÍCH DOPADŮ – OZÓNOVÁ DÍRA, KYSELÉ DEŠTĚ, RESPIRAČNÍ A DALŠÍ ZDRAVOTNÍ PROBLÉMY

The image is a screenshot of a web browser displaying a CNBC news article. The browser's address bar shows the URL: <https://www.cnbc.com/2022/10/13/what-is-solar-geoengineering-sunlight-reflection-risks->. The page header includes the CNBC logo and the text "White House is pushing ahead research to cool Earth by reflecting back sunlight". There are buttons for "WATCH LIVE" and "CREATE FREE ACCOUNT". The main content of the article is as follows:

First, spraying sulfur into the atmosphere will “mess with the ozone chemistry in a way that might delay the recovery of the ozone layer,” Parson told CNBC.

[The Montreal Protocol](#) adopted in 1987 regulates and phases out the use of ozone depleting substances, such as hydrochlorofluorocarbons (HCFCs) which were commonly used in refrigeration and air conditioners, but that [healing process is still going on](#).

Also, sulfates injected into the atmosphere eventually [come down as acid rain](#), which affects soil, water reservoirs, and local ecosystems.

Third, the sulfur in the atmosphere forms very fine particulates that can cause respiratory illness.

The question, then, is whether these known effects are more or less harmful than the warming they would offset.

“Yes, damaging the ozone is bad, acid deposition is bad, respiratory illness is bad, absolutely. And spraying sulfur in the stratosphere would contribute in the bad direction to all of those effects,” Parson told CNBC. “But you also have to ask, how much and relative to what?”

The Windows taskbar at the bottom shows the date and time as 1:54 on 19.10.2022, along with system icons for temperature (13°C), weather (Přev. slunečno), and network status.

ENVIRONMENT

Geoengineering Could Turn Skies White

Efforts to reflect away the sun's rays might also make the sky whiter, one of many reasons some distrust such geoengineering schemes

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1874

Few in the civil sector fully understand that geoengineering is primarily a military science and has nothing to do with either cooling the planet or lowering carbon emissions (Report, 6 February). While seemingly fantastical, weather has been weaponised. At least four countries - the US, Russia, China and Israel - possess the technology and organisation to regularly alter weather and geologic events for various military and black operations, which are tied to secondary objectives, including demographic, energy and agricultural resource management.

Indeed, warfare now includes the technological ability to induce, enhance or direct cyclonic events, earthquakes, draught and flooding, including the use of polymerised aerosol viral agents and radioactive particulates carried through global weather systems. Various themes in public debate, including global warming, have unfortunately been subsumed into much larger military and commercial objectives that have nothing to do with broad public environmental concerns. These include the gradual warming of polar regions to facilitate naval navigation and resource extraction.

Matt Andersson

Former executive adviser, aerospace & defence, Booz Allen Hamilton, Chicago

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„Málo lidí si uvědomuje, že geoinženýrství je primárně záležitostí armády a nemá nic co dočinění s ochlazováním planety nebo snížením uhlíkových emisí. Alespoň čtyři země, USA, Rusko, Čína a Izrael – mají technologie a schopnost pravidelně měnit počasí a geologické události s cílem umožnit různé armádní a tajné operace...“ *Bývalý hlavní poradce veřejné armádní firmy*

Studie Řízení klimatu pomocí prachu ve stratosféře 1961 (Shvets) – „....injektáž 36 mil. tun mikronových prachových částic do stratosféry, které by do šesti měsíců zakryly severní polokouli..... taková prachová clona sníží sluneční záření o 10% a teploty o 2 až 3 stupně celsia.“ (Hazard s nebesy, str. 337)

Wikipedia - Mikhail Budyko

https://en.wikipedia.org/wiki/Mikhail_Budyko

Mikhail Budyko

From Wikipedia, the free encyclopedia


In this name that follows Eastern Slavic naming conventions, the patronymic is Ivanovich and the family name is Budyko.

あ → A This article may be expanded with text translated from the corresponding article in Russian. (August 2018) Click [show] for important translation instructions. [show]

Mikhail Ivanovich Budyko^[a] (20 January 1920 – 10 December 2001) was a Soviet and Russian climatologist and one of the founders of physical climatology. He pioneered studies on global climate and calculated temperature of Earth considering simple physical model of equilibrium in which the incoming solar radiation absorbed by the Earth's system is balanced by the energy re-radiated to space as thermal energy.

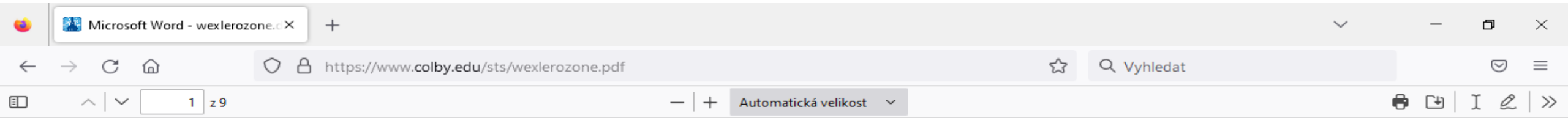
Budyko's groundbreaking book, *Heat Balance of the Earth's Surface*, published in 1956,^[1] transformed climatology from a qualitative into a quantitative physical science. These new physical methods based on heat balance were quickly adopted by climatologists around the world. In 1963, Budyko directed the compilation of an atlas illustrating the components of the Earth's heat balance.

Mikhail Budyko
Міхаіл Будыка



Windows taskbar: Sem zadejte hledaný výraz, 7°C Mlha, 2:03 08.11.2022

AMERICKÝ VĚDEC A METEOROLOG, HARRY WEXLER, VARUJE PŘED ZNIČENÍM OZÓNOVÉ VRSTVY GEO-INŽENÝRSTVÍM r. 1962



1

"On the Possibilities of Climate Control" in 1962:

Harry Wexler on Geoengineering and Ozone Destruction

James Fleming

jfleming@colby.edu

Science, Technology and Society Program, Colby College

American Geophysical Union, Dec. 14, 2007

slides are at <http://www.colby.edu/sts/agu2007wexler.ppt>

“The subject of weather and climate control is now becoming respectable to talk about.” So began Harry Wexler in his speech “On the Possibilities of Climate Control,” given in early 1962 to technical audiences in Boston, Hartford, and Los Angeles.¹



Studie z r. 1984 navrhuje využít stopy z letadel pro kompenzaci CO2 Hazard s nebesy str. 348

The image shows a web browser window displaying a Semantic Scholar paper page. The browser's address bar shows the URL: <https://www.semanticscholar.org/paper/Active-measures-for-reducing-the-global-climatic-of-Pe>. The page header includes the Semantic Scholar logo and a search bar with the text "Search 207 144 529 papers from all fields of science".

The main content area features the paper title: **Active measures for reducing the global climatic impacts of escalating CO2 concentrations**. Below the title, the authors are listed as *S. Penner, A. Schneider, E. Kennedy*, and the publication details are "Published 1 June 1984 • Environmental Science • Acta Astronautica". The DOI is 10.1016/0094-5765(84)90045-6 and the Corpus ID is 109166664.

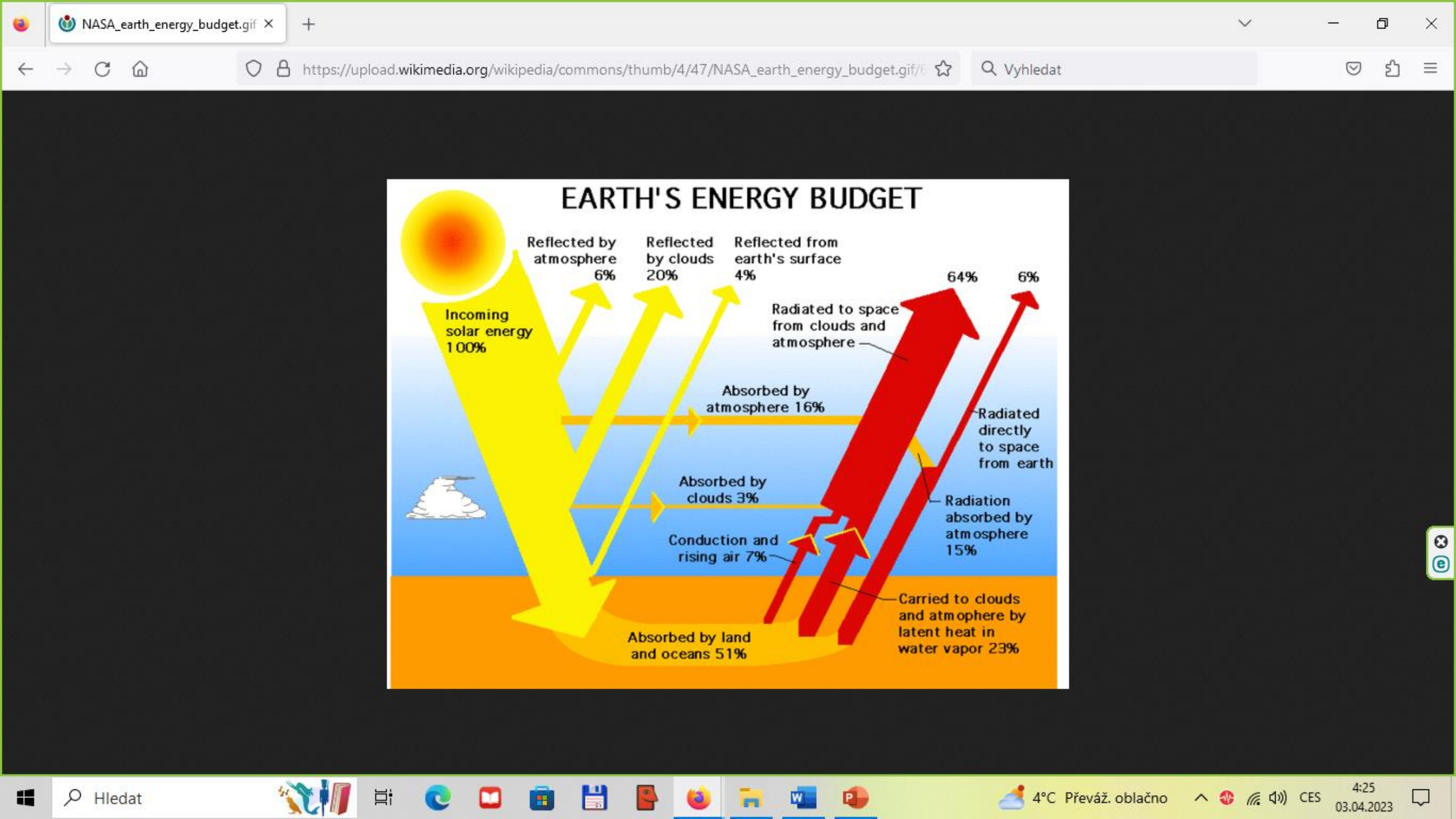
On the right side, there is a "Share This Paper" section with social media icons for Twitter, Facebook, LinkedIn, and Email. Below this, a box displays "4 Citations" with a "View All" button.

At the bottom of the main content area, there are three tabs: "4 Citations", "4 References", and "Related Papers".

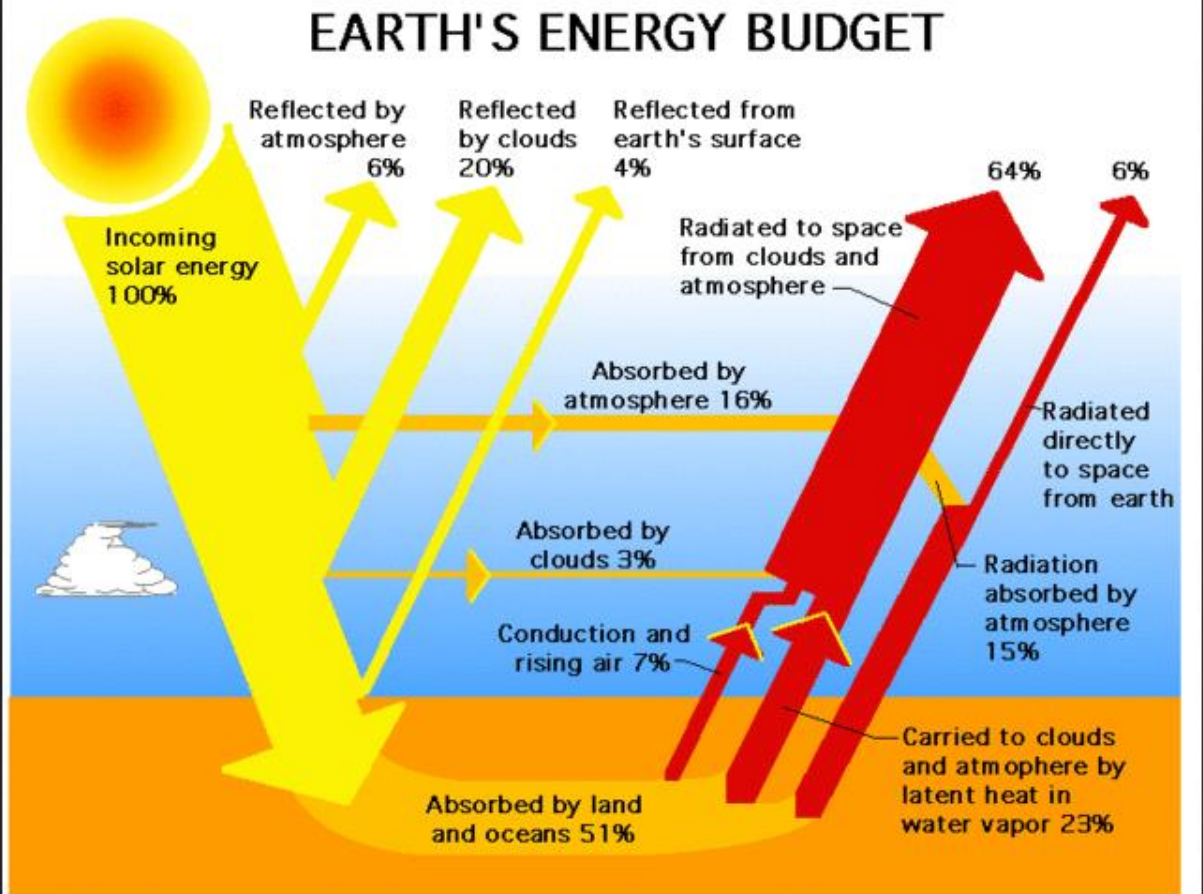
Below the tabs, there is a detailed view of the "4 Citations" section. It includes a search bar labeled "Search within citations" and several filter buttons: "Date Range", "Citation Type", "Has PDF", "Author", and "More Filters". A "Sort by Relevance" dropdown menu is also present.

At the very bottom of the page, there is a blue footer bar with the text: "By clicking accept or continuing to use the site, you agree to the terms outlined in our [Privacy Policy](#), [Terms of Service](#), and [Dataset License](#)". To the right of this text is a white button labeled "ACCEPT & CONTINUE".

The Windows taskbar is visible at the bottom of the screen, showing the time as 5:22 on 05.11.2022, the temperature as 10°C, and the weather as "Oblačno".



EARTH'S ENERGY BUDGET



Národní Akademie věd 1992 – doporučuje vypouštění částic do stratosféry pomocí letadel, raket (Hazard s nebesy str. 350)

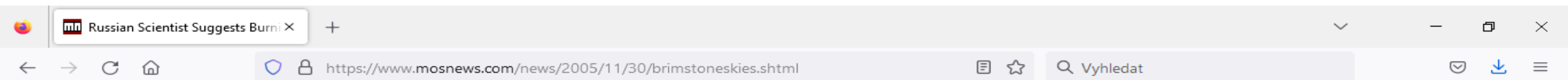
The screenshot shows a web browser window with the URL <https://nap.nationalacademies.org/catalog/1605/policy-implications-of-greenhouse-warmin>. The page header includes the National Academies logo (Sciences, Engineering, Medicine) and navigation links: NAP HOME, BROWSE, MYNAP, HELP, and CART. A search bar and a 'GLOBAL MENU' button are also present.

The main content area features a 'Consensus Study Report' tag and a social media sharing sidebar with icons for Facebook, Twitter, LinkedIn, and email. The report title is 'Policy Implications of Greenhouse Warming' with the subtitle 'Mitigation, Adaptation, and the Science Base' and the year '(1992)'. Below the title are three buttons: 'Download Free PDF', 'Read Free Online', and 'Buy Hardcover:\$100.00'. A promotional box on the right encourages users to 'Login or Register for a free MyNAP member account to save 10% off online and receive other benefits.' with a '[Learn More]' link.

The report's abstract begins with: 'Global warming continues to gain importance on the international agenda and calls for action are heightening. Yet, there is still controversy over what must be done and what is needed to proceed. Policy Implications of Greenhouse Warming describes the information necessary to make decisions about global warming resulting from atmospheric releases of radiatively active trace gases. The conclusions and recommendations include some unexpected results. The distinguished authoring committee provides specific advice for U.S. policy and addresses the need for an international response to potential greenhouse warming.'

The Windows taskbar at the bottom shows the system tray with a search bar, task icons, and system information: 10°C, Oblačno, 5:29, 05.11.2022.

RUSKÝ VĚDEC NAVRHUJE SPALOVÁNÍ SÍRY VE STRATOSFÉŘE 2005 (Hazard s nebesy, str. 363-364)



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Russian Scientist Suggests Burning Sulfur in Stratosphere to Fight Global Warming

Created: 30.11.2005 16:56 MSK (GMT +3), Updated: 16:56 MSK
MosNews

Renowned Russian scientist Yuri Israel, the head of the Global Climate and Ecology Institute, has written in a letter to President Putin that global warming requires immediate action and suggests burning thousands of tons of sulfur in the stratosphere as a remedy.

The Rossiiskaya Gazeta daily published an interview with Israel on Wednesday in which he described his plan to counter global warming and called upon Russian authorities to consider it. The scientist says his plan is based on the idea of putting aerosols into the atmosphere at an altitude of 12-20 kilometers to create a reflective layer that would lower the heating effect of solar radiation. Israel claims that the plan could start having an effect within three years.

"In order to lower the temperature of the Earth by 1-2 degrees we need to pump about 600,000 tons of aerosol particles. To do that, we need to burn from 100-200,000 tons of sulfur. And we do not have to burn the sulfur there, we can simply use sulfur-rich aircraft fuel." The Russian scientist said.

Israel said that his method was ecologically safe because it would result in relatively little pollution – only 0.2 milligrams of sulfur per square meter per year would return to the



How many of these *can you* check off?

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Iran Signs Deal With Russia on Tactical Surface-to-Air Missiles Purchase



Iran has signed a deal to buy Russian tactical surface-to-air missile systems. The country plans to buy 29 TOR-M1 systems designed to bring down aircraft and guided missiles at low altitudes.

FEATURE

MosNews
**LISA VRONSKAYA
A Land of Rare Smiles**



You can see more smiles on the faces of ordinary Russians these days. Is it because they are happier with their lives and jobs, or are they smiling merely to keep their jobs? The stereotypical Russian rarely smiles,

RUSKÝ EXPERIMENT ŘÍZENÍ SOLÁRNÍ RADIACE Z ROKU 2009 (Hazard s nebesy str. 366)

ResearchGate interface showing the document title and download options. The browser address bar displays the URL: https://www.researchgate.net/publication/226272452_Field_experiment_on_study. The page title is "(PDF) Field experiment on study". The search bar contains the text "Vyhledat".

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Field Experiment on Studying Solar Radiation Passing through Aerosol Layers

Yu. A. Izrael^a, V. M. Zakharov^a, N. N. Petrov^a, A. G. Ryaboshapko^a,
V. N. Ivanov^b, A. V. Savchenko^b, Yu. V. Andreev^b, Yu. A. Puzov^b,
B. G. Danelyan^c, and V. P. Kulyapin^d

^a*Institute of Global Climate and Ecology, Roshydromet and Russian Academy of Sciences,
ul. Glebovskaya 20b, Moscow, 107258 Russia*

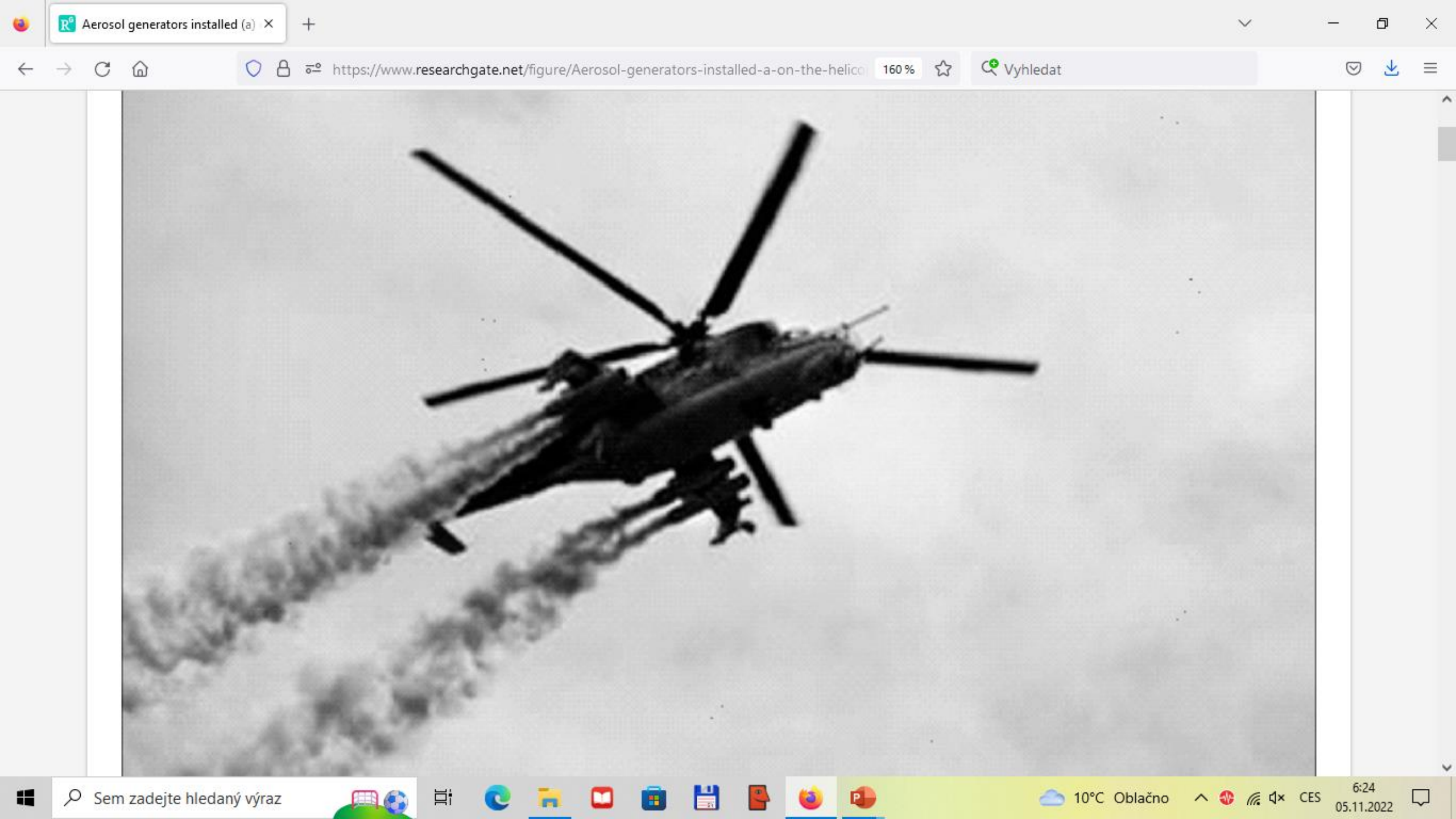
^b*Taifun Scientific Industrial Association, pr. Lenina 82, Obninsk,
Kaluga oblast, 249020 Russia*

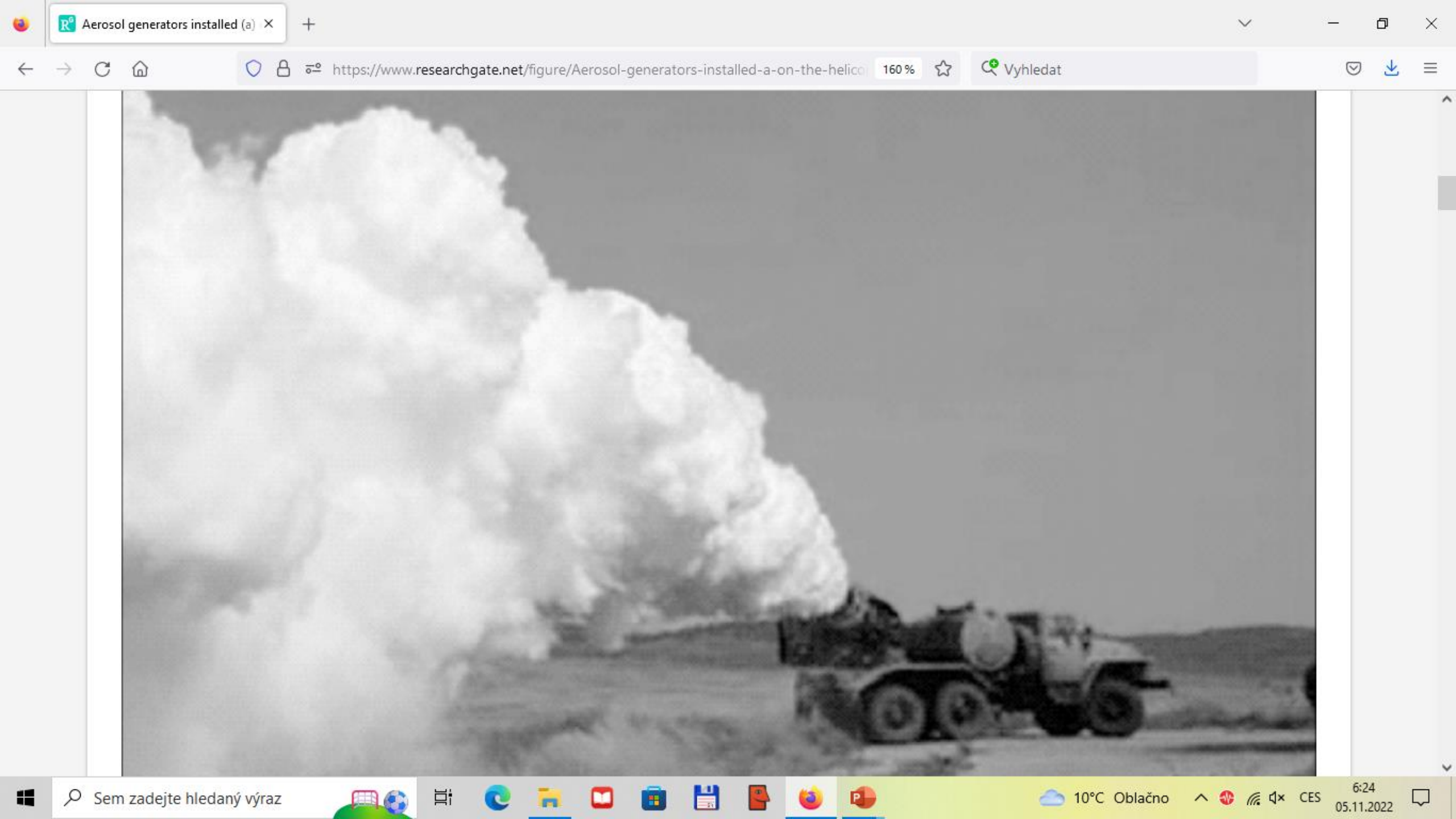
^c*Central Aerological Observatory, Pervomaiskaya ul. 3, Dolgoprudny,
Moscow oblast, 141700 Russia*

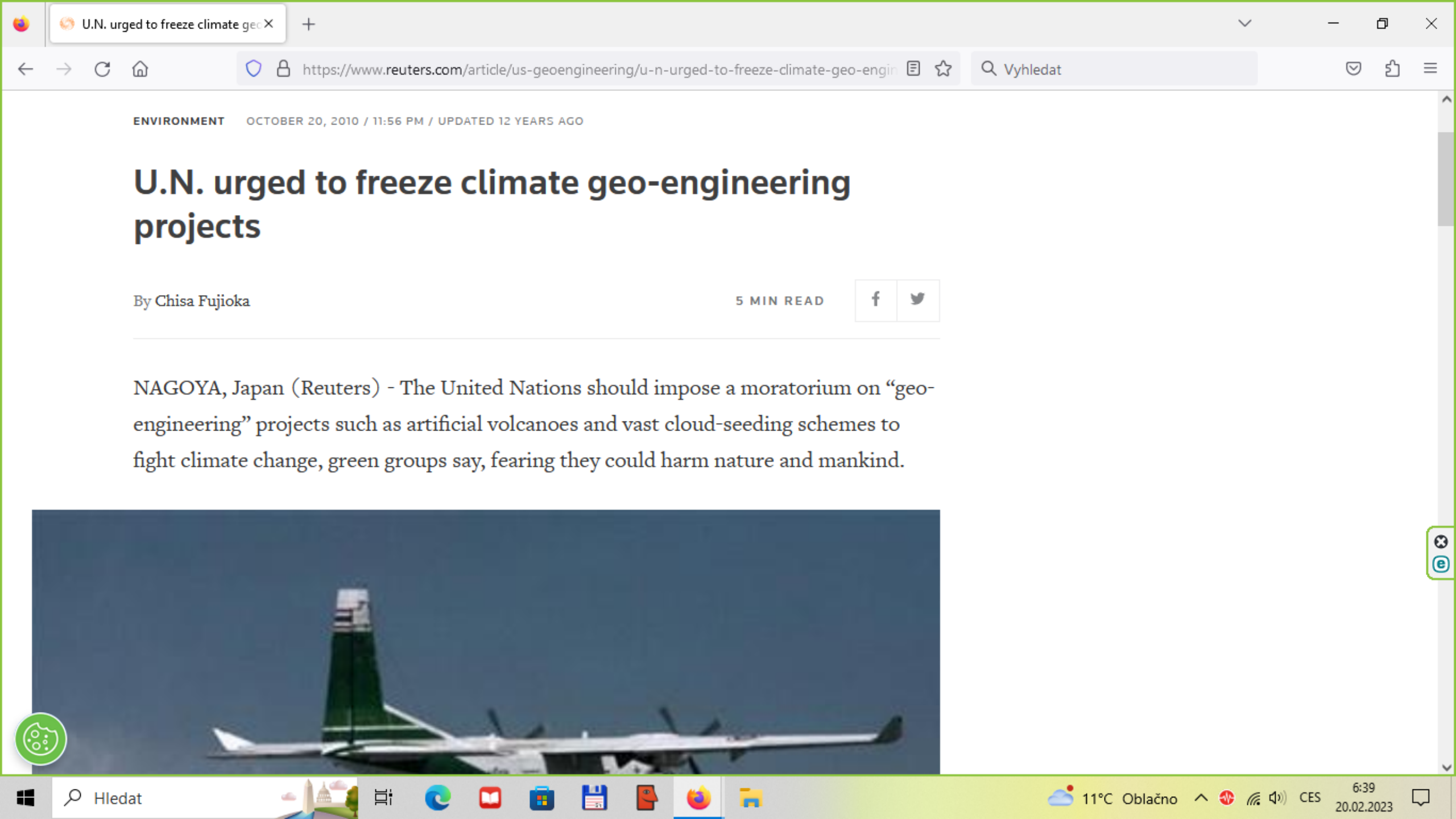
^d*v/ch (Military Unit) 52688*

Received March 26, 2009

Abstract—Results of a field experiment on studying solar radiation passing in the visible wavelength range are described with the model aerosol media created in the surface atmosphere. High-efficiency thermocondensation generators were used for creating model aerosol media. The index of refraction and an average size of the aerosol particles formed are close to those characteristic of the natural strato-







ENVIRONMENT OCTOBER 20, 2010 / 11:56 PM / UPDATED 12 YEARS AGO

U.N. urged to freeze climate geo-engineering projects

By Chisa Fujioka

5 MIN READ



NAGOYA, Japan (Reuters) - The United Nations should impose a moratorium on “geo-engineering” projects such as artificial volcanoes and vast cloud-seeding schemes to fight climate change, green groups say, fearing they could harm nature and mankind.



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Jonathan Watts
@jonathanwatts
Mon 18 Mar 2019 06:00 GMT

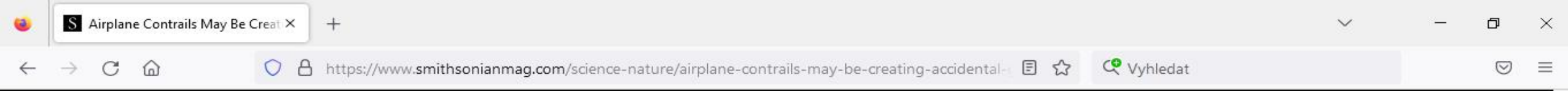


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Airplane Contrails May Be Creating Accidental Geoengineering

Dissipating haze from plane exhaust alters how sunlight reaches the Earth and may be unintentionally affecting our climate



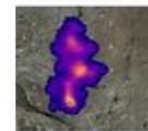
Sarah Zielinski

December 16, 2015



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SD je systém mnoha malých mikro-elektro-mechanických systémů – sensory, roboti a další přístroje, které mohou detekovat světlo, teplotu, vibraci, magnetismus, nebo chemikálie. SD jsou obvykle řízeny bezdrátovou sítí počítačů a distribuovány do prostoru za účelem vykonat určitou úlohu. Reagují totiž na určitou radiovou frekvenci.

The screenshot shows a YouTube video player with the following content:

Smart Dust

Definition of Smart Dust

Smart dust is a system of many tiny microelectromechanical systems (MEMS) such as sensors, robots, or other devices, that can detect, for example, light, temperature, vibration, magnetism, or chemicals.

They are usually operated on a computer network wirelessly and are distributed over some area to perform tasks, usually sensing through radio-frequency identification.

Smart Dust || Information Technologies || IT Shades.com

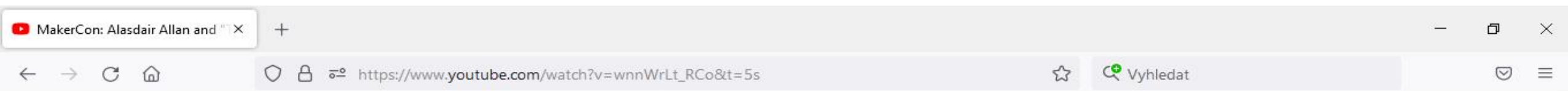
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- From overriding my inner knowing to trusting myself |... (TEDx Talks, 91K views)
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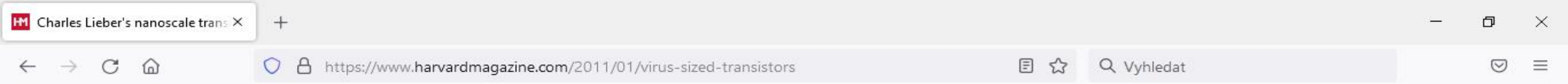


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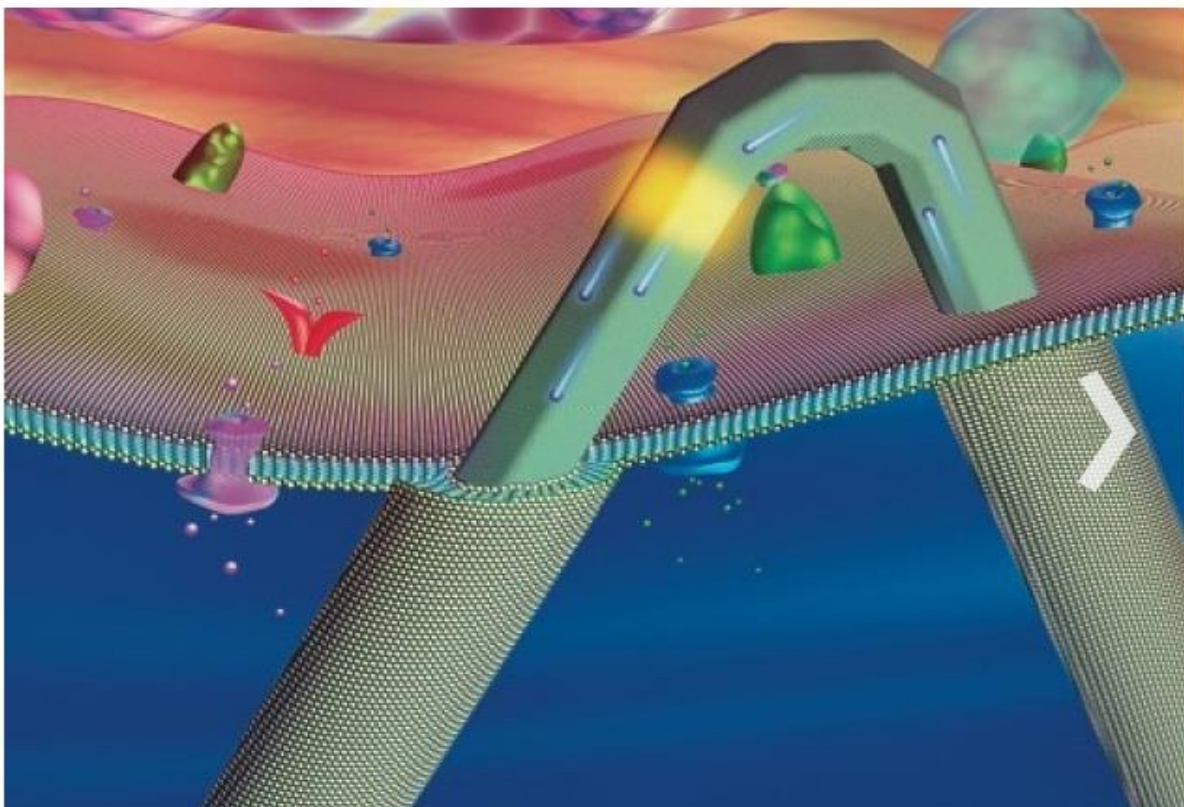


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Virus-Sized Transistors

by JONATHAN SHAW

JANUARY-FEBRUARY 2011



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Hyman professor of chemistry Charles Lieber has created a transistor so small it can be used to penetrate cell membranes and probe their interiors, without disrupting function. The transistor (yellow) sits near the bend in a hairpin-shaped, lipid-coated silicon nanowire. Its scale is similar to that of intra-cellular structures such as organelles (pink and blue orbs) and actin filaments (pink strand).
B.Tian and C.M. Lieber, Harvard University

IMAGINE BEING ABLE to signal an immune cell to generate antibodies that would fight bacteria or even cancer. That fictional possibility is now a step closer to reality with **the development of a bio-compatible transistor the size of a virus.**

Hyman professor of chemistry Charles Lieber and his colleagues used nanowires to create a transistor so small that it can be used to enter and probe cells without disrupting the intracellular machinery. These nanoscale semiconductor switches could even be used to enable two-way communication with individual cells.

Lieber has worked for the past decade on the design and synthesis of nanoscale parts that will enable him to build tiny electronic devices (see **"Liquid Computing,"** November-December 2001, page 20). Devising a biological interface, in which a nanoscale device can actually communicate with a living organism, has been an explicit goal from the beginning, but has proven tricky. At its simplest, the problem was inserting a transistor constructed on a flat plane (think of the surface of a computer chip) into a three-dimensional object: a cell perhaps 10 microns in size. Merely piercing the cell was not enough, because transistors need a source wire from which electrons flow and a drain wire through which they are discharged.

The key, Lieber says, was figuring out how to introduce two 120-degree bends into a linear wire in order to create a "V" or hairpin configuration, with the transistor near the tip. Getting

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DARPA (Agentura ministerstva obrany USA pro pokročilé výzkumné projekty) pracuje na projektu nanočástic, které prostoupí mozkiem a budou schopny číst jeho neurosignály

The image is a screenshot of a web browser displaying an article on the Neoscope website. The browser's address bar shows the URL <https://futurism.com/neoscope/darpa-nanoparticles-brain-neural-signals>. The article's title is "DARPA IS FUNDING NANOPARTICLES THAT PERMEATE BRAIN TO READ NEURAL SIGNALS" in large, bold, white capital letters. Below the title, a subtitle reads "THE MILITARY ALREADY WANTS THEM FOR NEW BRAIN-COMPUTER INTERFACE TECH." The author's name, "BY DAN ROBITZSKI", and the date, "3. 19. 21", are visible in smaller text. At the bottom of the article preview, there is a colorful, abstract image of a brain surface with a heatmap overlay. The browser's taskbar at the bottom shows various application icons, including Windows, Edge, File Explorer, Mail, Photos, and PowerPoint, along with system information like "11°C Slunečno" and the date "13.04.2022".


DARPA IS FUNDING NANOPARTICLES THAT PERMEATE BRAIN TO READ NEURAL SIGNALS

THE MILITARY ALREADY WANTS THEM FOR NEW BRAIN-COMPUTER INTERFACE TECH.

Magnetické nanočástice jsou pohodlnější a komfortnější než čipy a implantáty

DARPA Is Funding Nanoparticle x +

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 **NEUROSCIENCE/BRAIN SCIENCE**

Instead of getting invasive neural implants needed into your brain, doctors may someday be able to flood your head with millions of nanoparticles that can read your neural signals from inside and relay them to a nearby computer.

At least, that's the future that University of Miami engineer Sakhrat Khizroev is hoping for. He's developed magnetoelectric nanoparticles (MENPs) that can travel through your bloodstream, permeate your brain, and read individual neurons' signals in a way that can be picked up by a specialized helmet, according to a university press release.


In short, it's a tool that could drastically change the way scientists approach brain-computer interface tech by taking away invasive, localized probes and replacing them with millions of particles that are injected like any other shot and can cover the entire brain – and one that's already attracting interest from the military.

"Right now, we're just scratching the surface," Khizroev said in the press release. "We can only imagine how our everyday life will change with such technology."

IMAGE BY NIH


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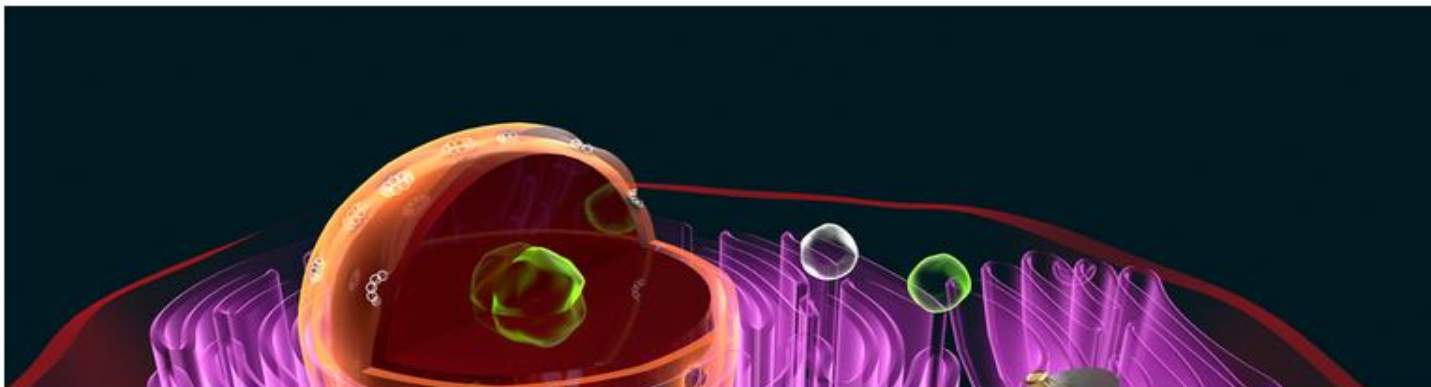
SEARCH NEWS 🔍

Cell Rover: Exploring and augmenting the inner world of the cell

MIT researchers demonstrate an intracellular antenna that's compatible with 3D biological systems and can operate wirelessly inside a living cell.

Michaela Jarvis | MIT Media Lab
September 22, 2022

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An artist's rendition of the Cell Rover, an intracellular antenna for exploring and augmenting the inner world of the cell

Image: Irakli Zurabishvili for Deblina Sarkar, with models by IronWeber and Lauri Purhonen.

Windows taskbar: Search (Sem zadejte hledaný výraz), Task View, Edge, File Explorer, Mail, Calendar, Photos, Firefox, PowerPoint, S&P 500 (+1,14%), System tray (2:40, 19.10.2022, CES, 3 notifications)

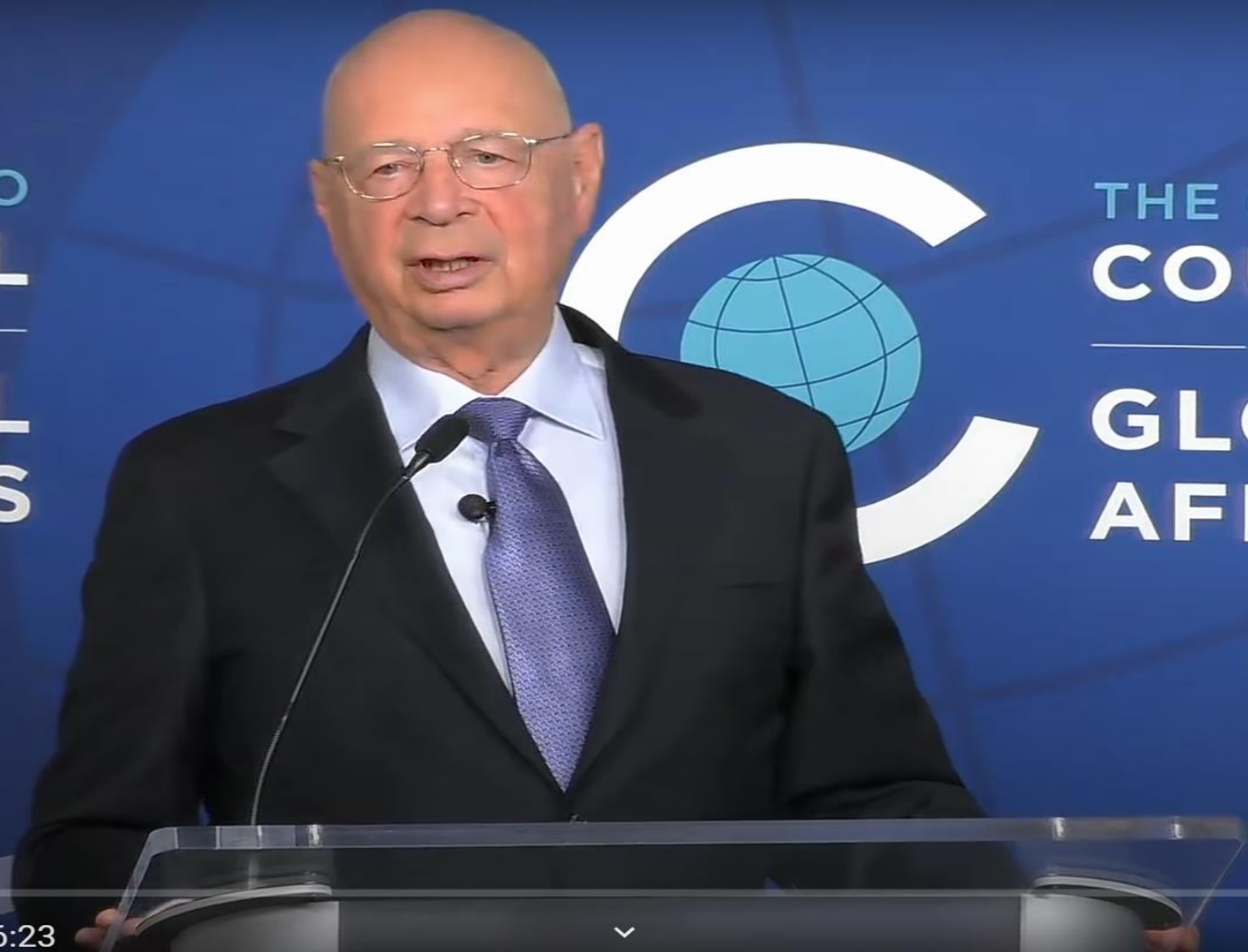
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World Economic Forum Founder Klaus Schwab on the Fourth Industrial Revolution



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7:27 / 56:23



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