HORIZONS OF CHANGE

INNOVATING FOR SURVIVAL AND SPACE



The Mission: Embark on a daring two-month expedition across the planet's most hostile and coldest terrains, pushing the boundaries of innovation with cutting-edge technology designed for future space exploration.

In the heart of the most desolate continent on Earth, six explorers from vastly different backgrounds embark on the ultimate test of human endurance and ingenuity. "Antarctic Edge" is a multidisciplinary expedition that pushes the boundaries of sustainable energy and survival in the harshest conditions imaginable—preparing humanity for future interplanetary missions.

For two grueling months, these brave souls will traverse the icy wastelands from the Union Glacier Camp to the South Pole, culminating at the historic Amundsen Base. Along the way, new and never seen before technology, including unmanned aircraft and immersive virtual and augmented reality, will bring their incredible journey to life.

Their expedition is not just a test of endurance but a quest to find innovative solutions to climate change, showcasing problem-solving and intrinsic ingenuity at every turn. This expedition will tell a story never told before, blending science and adventure in a way that captures the imagination.















The outcome is more than just a journey; it's a 90-minute feature film documentary that promises to captivate audiences worldwide. With special segments dedicated for the new Apple Vision Pro platform. Accompanied by a multifaceted impact and outreach campaign, it offers endless opportunities for educational programs and serves as a profound gift to humanity—deepening our understanding of our planet's fragility and our place within it.

Join us on "Antarctic Edge," where the limits of exploration are redefined, and the spirit of adventure knows no bounds.

EXPLORATION TECHNOLOGIES

Conditions in Antarctica that can affect tech:

DISTANCE: 911 KM

GAINED ELEVATION: 2800M

DURATIO: 50 DAYS

EXPLORERS: 3/6

WEIGHT / PERSON: 60 / 80KG

MIN. TEMPERATURE: -80°C







We benefit from drone delivery systems capable of long-range operations under harsh conditions to reduce our logistic load and increase our agility on the ice.

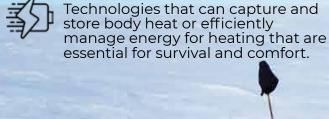






STORYTELLING

In today's dynamic media landscape, we are harnessing cutting-edge technology, developed in collaboration with Apple and Blackmagic Design, to craft exceptional immersive content. Our commitment to innovation extends to using Canon's state-of-the-art portable mirrorless cameras with dual lenses, ensuring we capture stunning visuals even in the most challenging environments. Partner with us to elevate your storytelling and push the boundar-



THERMAL

ies of cinematic excellence.



COLD WEATHER

Experimental clothing and technical gear designed for extreme cold that can offer superior protection, mobility, and comfort that are crucial for the success of our expedition.



ENERGY SOLUTIONS



We rely on compact, lightweight energy systems that can reliably generate and store power in extreme cold, powering everything from electronic devices to heating systems, all to be hauled by foot.





Innovative solutions to manage and repurpose biological waste, ensuring environmental preservation and potential resource recovery.



Virtual reality systems that are lightweight and energy-efficient, providing mental escape and stimulation during the monotonous and isolating conditions of the journey.



COMMUNICATION **TECHNOLOGIES**

Advanced communication systems that offer high bandwidth with minimal energy consumption, ensuring constant contact with the outside world.



SYNOPSIS OF THE FILM

In the frozen vastness of Antarctica, a team of six pioneers embarks on a daring mission to test cutting-edge sustainable technologies, bound for one of the most desolate places on Earth—the South Pole. Their journey through the icy wilderness is more than just an expedition; it is a test of human endurance, a quest for solutions in the face of the climate crisis, and a glimpse into the future of planetary survival.

At the core of the mission is Reut Sorek Abramovich, an astrobiologist and analog astronaut whose groundbreaking work uses bacteria to create eco-friendly building materials. Her expertise in planetary exploration sets the stage for testing these technologies in Antarctica, a place as unforgiving as the terrains we might one day face beyond Earth.

Gal Yoffe, the expedition leader and seasoned explorer, brings his extensive background in operating in extreme conditions. A veteran of disaster zones and conflict regions, Gal's command of logistics and survival strategies ensures that the team navigates the perilous terrain with precision, as they push the limits of human capability.

Xiye Bastida, a 21-year-old climate activist from the Otomi-Toltec Indigenous community in Mexico, carries a personal mission with her. She views the Antarctic ice as an ancestor, holding the story of millions of years of evolution a message the world must learn to understand in order to combat the global climate crisis.

Dr. Eleonore Poli, a renowned materials and engineering researcher, joins the team to test advanced materials that could prove vital in these extreme conditions. With a background in analog space missions and deep expertise in metallurgy, Eleonore is instrumental in assessing how new technologies can sustain life in the harshest environments on Earth.



SYNOPSIS OF THE FILM

Documenting this incredible journey is Franco Campos-Lopez Benyunes, the team's director and a specialist in filming in extreme locations. Franco not only captures the raw beauty and peril of the Antarctic wilderness but also creates immersive content using Apple Vision Pro, offering viewers a groundbreaking virtual and augmented reality experience of the expedition.

The mission takes them from Punta Arenas, Chile, to Antarctica's South Pole, where they face relentless challenges—freezing temperatures, equipment malfunctions, and the strain of isolation. Along the way, they test sustainable energy technologies and explore advanced logistical solutions such as drone supply systems, mirroring the challenges of future space exploration. Personal conflicts and leadership struggles add tension to the mission, but the team's success hinges on their resilience and innovation.

The film culminates at the South Pole's Scott Amundsen Base, where the triumphs of their technological advances stand in contrast to the unresolved emotional battles within the group. Together, they prove that humanity's future lies in the ability to survive and innovate in the most hostile of environments.

Antarctica stands as a symbol of the future—both a scientific frontier and a geopolitically controversial territory. As the world grapples with climate change, the frozen continent is not only a place of discovery but a battleground for the competing interests that will shape the next era of human existence.



MAIN EXPEDITION

Departure: The team leaves Punta Arenas by air, then moves to the base using 4x4 vehicles.

Camp Setup: They establish their camp, testing gear and preparing for skiing pulling their sleighs.

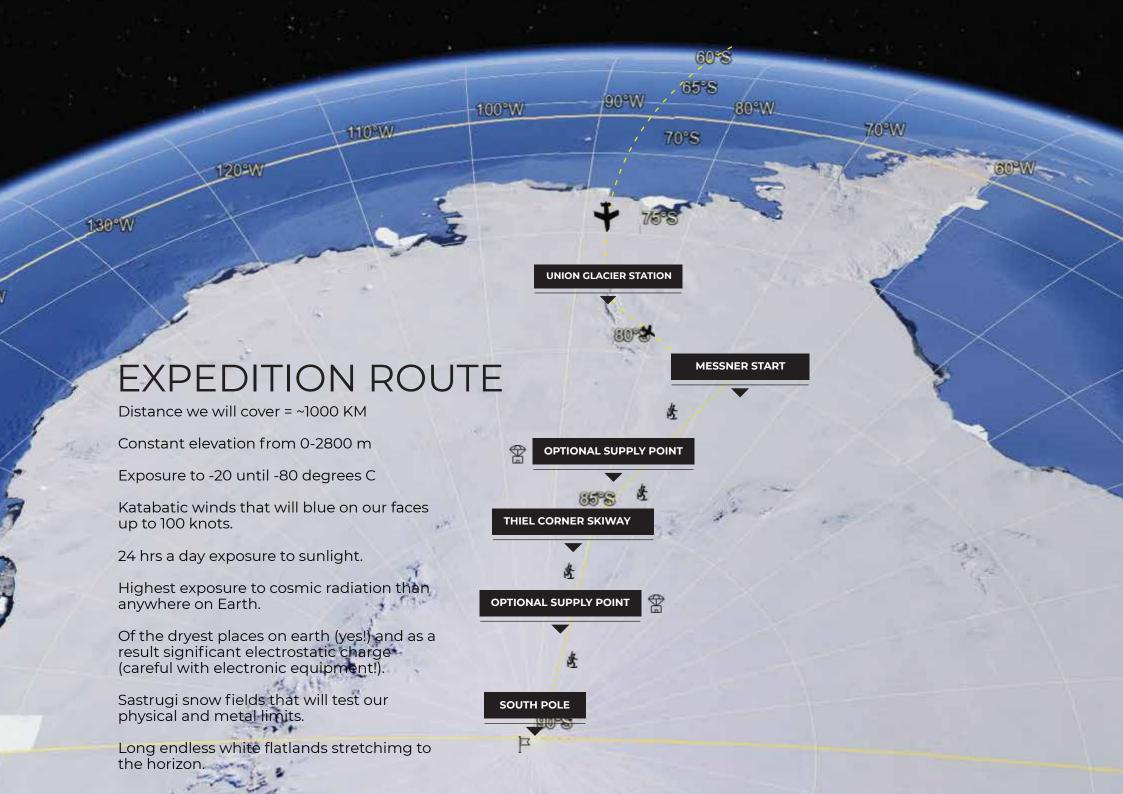
Backstories: The narrative frequently revisits the backstories of each character, deepening the audience's connection to them. Some of these flashbacks are triggered by the use of Apple Vision Pro in their quiet time as they feel at home using this technology showing their houses, families and memories

Journey to Thiel Mountains: The team embarks on their trek, encountering challenges such as gear malfunctions, interpersonal conflicts, and leadership disputes. Their primary goal is to test new technology for sustainable energy in harsh conditions, mirroring interplanetary exploration.

Technological Focus: The story emphasizes the testing of devices crucial for sustainable energy, including scenes of supply drops by drones, highlighting NASA's use of such technology.

Climax and Resolution: The team eventually reaches their destination. The narrative closes with a mix of triumph and unresolved issues for some characters, but the success of their mission and the technology tested stands clear.





STATEMENTS



XIYE BASTIDA STATEMENT

As I journey to Antarctica, I see the ice not just as a frozen landscape, but as an ancestor—holding the memory of millions of years of evolution. This expedition offers me the chance to witness firsthand the fragility of our planet in the midst of the climate crisis. I'm here to connect with the wisdom embedded in the ice, and to bring its message to the world before it's too late.

In the icy silence, I hope to understand how the ancient rhythms of the Earth are disrupted by our modern impact. Each crack and crevasse tells a story of change, and I want to learn how to interpret these signs to advocate for urgent action.



DIRECTOR'S STATEMENT

Our planet, as we know it, is fragile—perhaps reaching its most critical point in history. How is it that, with this precious endangered world in our care, we still seek to conquer other planets and galaxies? And where do we even begin such an endeavor? These questions have driven me to create this

film. The South Pole, with its alien landscape, provides the perfect setting to test everything we need to seek life elsewhere. For me, the pursuit of interplanetary travel deepens our understanding of Earth; it is not an escape from our current fragility, but rather a profound exploration that can inform and inspire.



The challenges we face in Antarctica are a reflection of the broader environmental struggles we must confront globally. By immersing myself in this extreme environment, I aim to amplify the urgency of preserving our planet's delicate balance. This experience is a profound opportunity to bridge past wisdom with present challenges and inspire a collective effort towards sustainable solutions.

Once I return, I am committed to sharing these insights through talks and lectures, hoping to ignite a broader awareness and drive meaningful change. This film represents my greatest challenge as a director, and it would be a formidable task for anyone in my role. I intend to intertwine the backstories of our main characters to enhance the montage and dynamic pacing of the narrative. As a director who is part of this expedition, my perspective is deeply attuned to making the audience feel the majestic trek through both the participants' experiences and my own. By sharing this journey, I hope to capture the essence of exploration and the profound connection between our quest for new worlds and the preservation of our own.

THE TEAM



GAL YOFFE

Gal is passionate about finding synergies between space and earth development, and applying dual-value strategy to solve common challenges in sustaining life on and off the planet. He is a co-founder at Creation Space, a global accelerator for deep-space startups, where he advises and supports entrepreneurs and innovators paving the way for the next human expanse.

He is also the founder of ARK-Terra, a consultancy company that specializes in supporting projects and implementing systems in expeditionary settings. A veteran of the Israeli Special Forces, Gal has vast understanding and experience in technical activities in austere environments, trained as a military mountain guide, professional technical diver, HALO jumper and helicopter pilot.

He is a Member International at The Explorers Club, a prestigious organization that brings together explorers, scientists, and adventurers from around the world.



REUT SOREK

Reut is an award winning geobiologist with vast experience developing applied solutions with structure-forming bacteria.

She leads the rigorous innovation roadmap at Starstone, focused on creating climate positive products that outperform today's building materials.

Reut holds a PhD and post-doc in microbiology, was a scientific advisor at the renowned Weizmann Institute of Science, a lecturer at the International Space University, and is co-founder of two scientific and STEAM oriented NGOs.

THE TEAM



FRANCO CAMPOS-LOPEZ BENYUNES

Franco is an American Chilean-born director, producer and writer made in Buenos Aires. He began his studies in Argentina. His work has taken him around the world, where he has won numerous film awards in the US; he has taught master classes in the US, China and Israel; he has also been deeply dedicated to his conservation efforts in Patagonia, the Amazon, and the Andes.

He moved to the US in 2008 after earning a visa for extraordinary ability in arts. I Did Her Wrong is his first fiction feature film. His recents films "DamBusters" and "The Way Of Whale" have given him world exposure.



XIYE BASTIDA

Xiye is a 21-year-old climate justice activist from the Otomi-Toltec Indigenous community in Central Mexico. An organizer, author, speaker, and student, she champions inclusivity and diversity in the climate movement.

Growing up in San Pedro Tultepec, Xiye moved to New York City in 2015. There, she joined the climate movement, organizing an Activism Training Program and attending her first UN climate conference in 2017. Her efforts earned her the Spirit of the UN award in 2018. As a lead organizer for Fridays For Future NYC, she helped mobilize 300,000 people in a major strike.

In April 2020, Xiye co-founded Re-Earth Initiative, focusing on the intersectionality of the climate crisis. She has participated in COP25, COP26, COP27, and COP28, and spoke at the 2021 Biden Climate Summit. She contributed to the anthology "All We Can Save" and has written many op-eds. Xiye has spoken alongside notable figures like Leonardo DiCaprio, Jane Fonda, Al Gore, and Greta Thunberg.

THE TEAM



ELEONORE POLI

Dr. Eleonore Poli is a materials and engineering researcher at CSEM in Switzerland, with a PhD in Materials and Metallurgy from the University of Cambridge.

She has a long track record of research and engineering in Switzerland and in the UK, with internships at Pilatus Aircraft Ltd. and working in laboratories and publishing in microscopy. She is an analog astronaut and was the commander for the Asclepios I crew. She has a vast experience in analogue space missions, as a Earth Support for FMARS, co-commander for the GOST team of AMADEE-24, and researcher in the ICARES-2 missions. She has founded CHASM, the Community on Human Analogue Space Missions and created the first complete online course on the topic. She is an amateur athlete (ironman triathlons, handball), pianist and photographer.

She is a board member of the Swiss Space Museum and hepta.aero. She has been trained for expeditions and extreme environments with French explorer Alban Michon and is the space relations officer for his BIODYSSEUS Mission.



GRACE CORDSEN

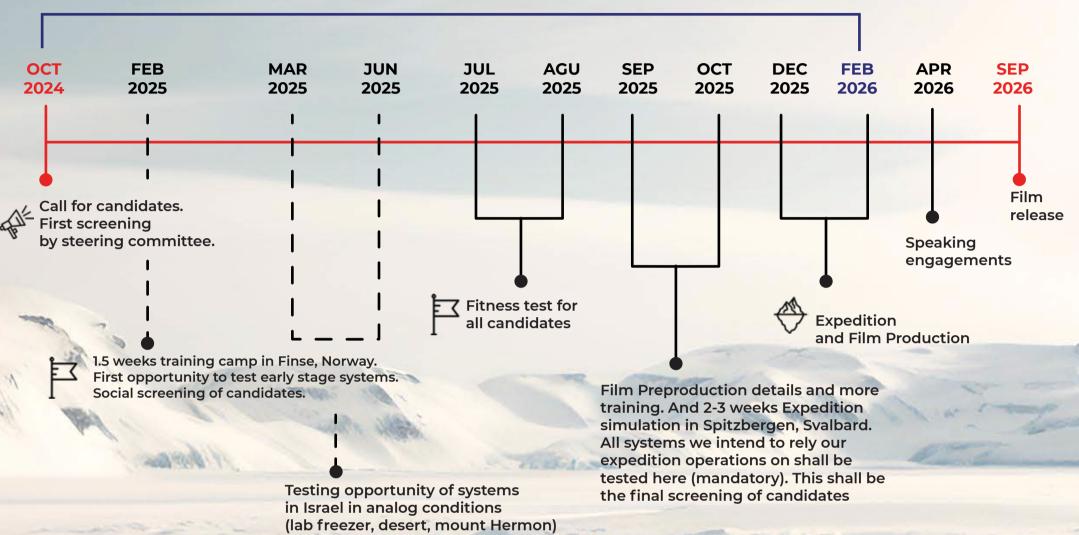
Grace Cordsen is a polar explorer, journalist, and sustainability strategist, using new media and storytelling to bridge science, activism, and exploration. A Princeton graduate and WINGs Flag Carrier, she has worked across the Arctic and Antarctic as a logistics manager, researcher, and communicator.

In 2024, she became one of the youngest women to manage a camp in Antarctica's interior, reaching the geographic South Pole. That same year, she voyaged to the North Pole representing the Arctic Research Foundation, documenting climate change through immersive storytelling.

Currently pursuing a Master's in Sustainability Management at Columbia University, Grace collaborates with The Polar Collective and other global organizations to craft compelling narratives that engage new audiences. As a leader at the Explorers Club's Next Generation of Exploration Network, she is dedicated to empowering future changemakers through media, research, and advocacy.

TIMELINE AND BUDGET

Reach out to all researchers and partners who affect expedition operations.



ITEM	DESCRIPTION	SUBTOTAL (US\$)
PHASE 1	Seed capital, Training, casting, science proposals. Web presence and sizzle reels.	US\$ 175,000
PHASE 2	Testing, production of the film and expedition for science.	US\$ 1,000,000.00
PHASE 3	Distribution of film. Papers for publication Keynote and lectures Impact Campaign	US\$ 350,000

