

Camera Basics for Generative Art VI

An introduction to design and composition.



FROZEN LANDSCAPES

The intricate textures and ethereal beauty of our planet's rapidly diminishing icy realms.

The Textures of Siberia

Frozen landscapes possess a unique aesthetic, showcasing sharp glacier seracs, dramatic ocean fractures, and more. Only a handful of intrepid aerial photographers venture into the frigid realms of our planet, fewer still with an artistic vision for these icy vistas. However, they all share a somber awareness of the unmistakable impact of global warming, visible to the naked eye. These pioneers serve as witnesses to a historic transformation while contributing to our comprehension of these landscapes from above, revealing their abstract textures and forms. **The two views below were captured during my commercial flight over Siberia en route to Shenzhen, China.**



Siberian Landscapes I • 4928 x 2380 • Russian Sibir • 11.16.2018 • f/5.6 • 1/250 sec • 80 mm • Nikon DF • Jazno Francoeur



Siberian Landscapes II • 4096 x 2723 • Russian Sibir • 11.16.2018 • f/5.6 • 1/250 sec • 80 mm • Nikon DF • Jazno Francoeur

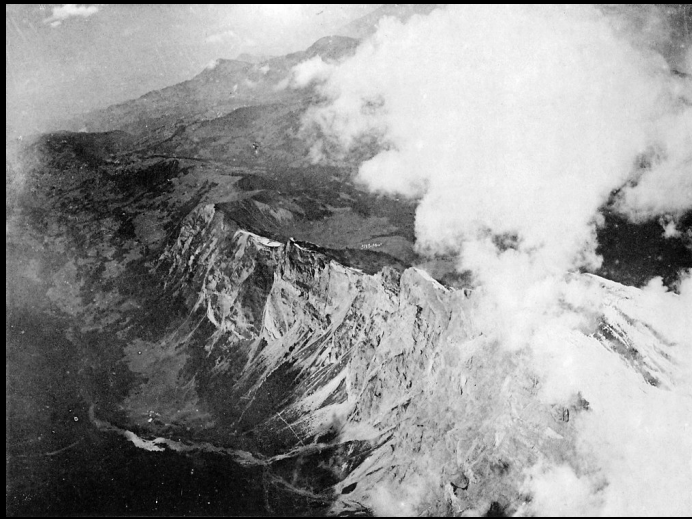
The Textures of Alaskan Glaciers

Endicott Arm is an Alaskan glacial fjord housing Dawes Glacier. It is a tidewater glacier, and its calving events regularly produce icebergs in the fjord's waters. These massive icebergs result from the glacier's continuous movement towards the sea, contributing to the ever-changing landscape of the fjord. This natural process creates a dynamic environment with a mix of blues and whites amidst the fjord's rugged terrain. **Mendenhall Glacier, located in Juneau, Alaska, is a 13.6-mile-long glacier originating from the Juneau Icefield.** This glacier showcases the dramatic impact of climate change through its receding ice, vibrant blue hues, and intricate network of crevasses. Visitors can explore its unique features and ice caves, while the Mendenhall Glacier Visitor Center offers educational insights into the glacier's history and the environmental challenges it faces.



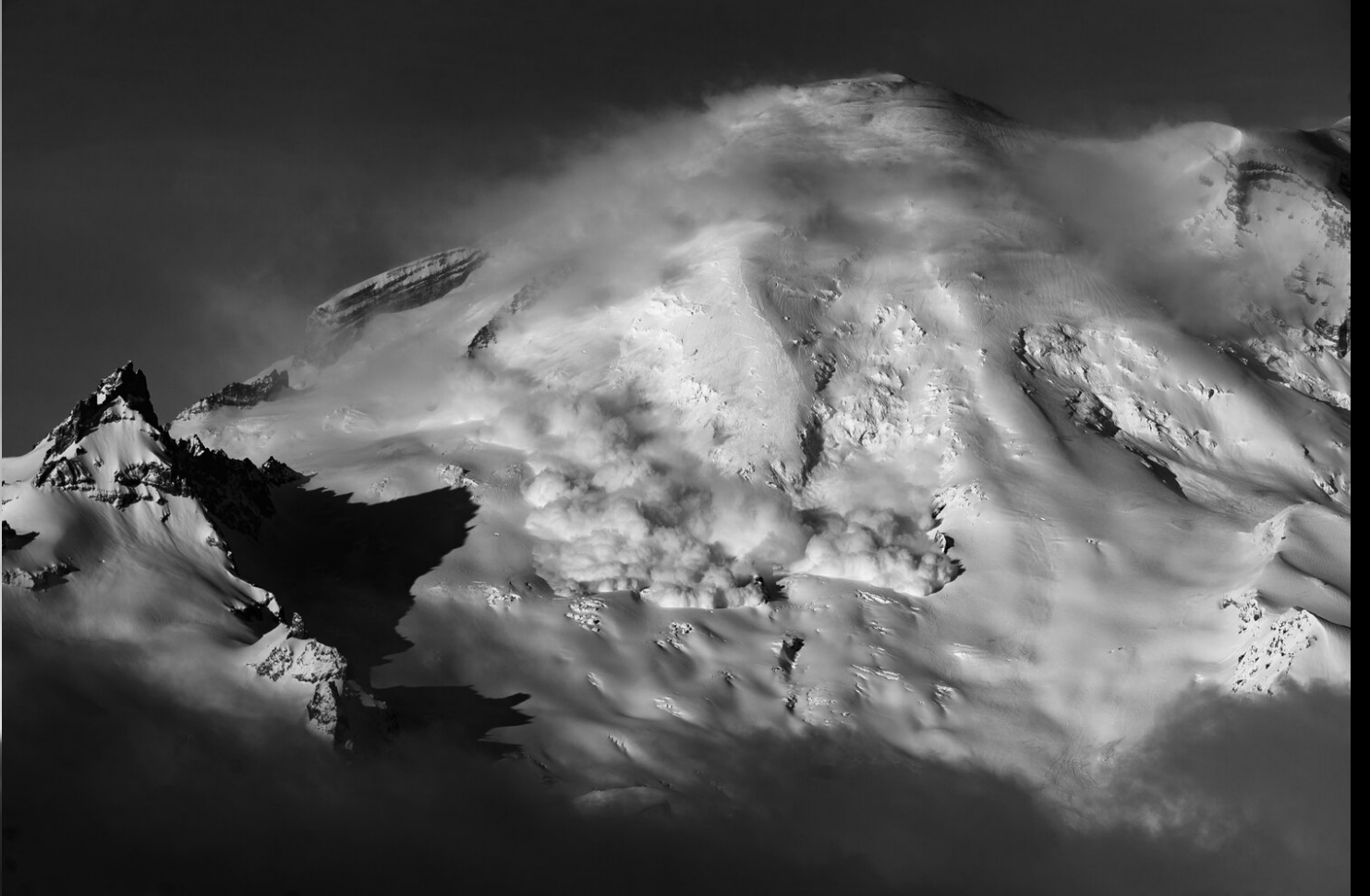
Eduard Spelterini, Early Pioneer of Alpine Photography

This pioneering aerial photographer captured stunning images of mountains and glaciers from a hot air balloon in the late 19th century. His daring exploits predated powered flight, showcasing the abstract beauty of Swiss and Alpine landscapes. These remarkable photographs not only unveiled the allure of high-altitude terrain but also **advanced the art of aerial photography, laying the foundation for modern landscape and adventure photography.**



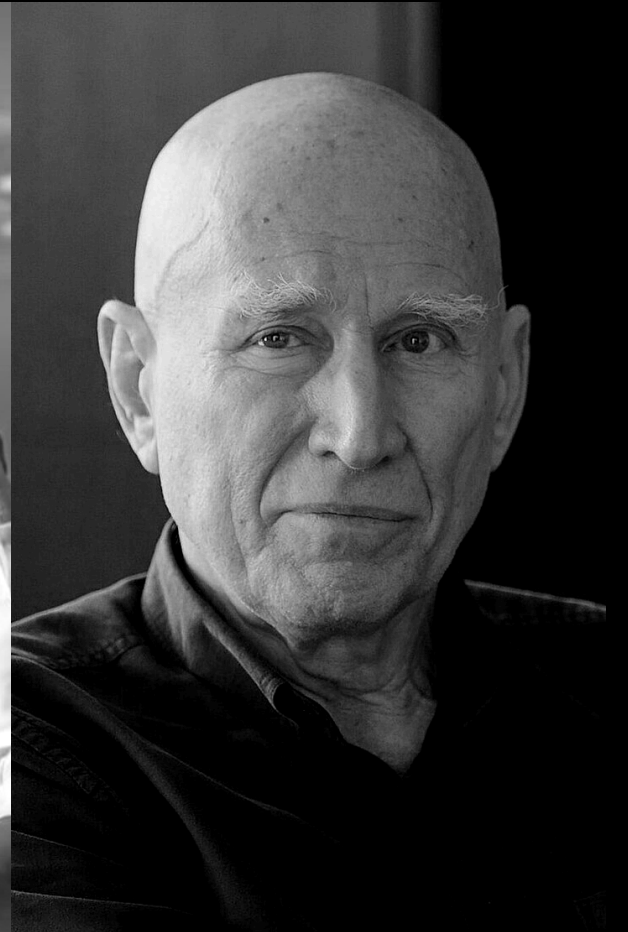
Scott Rinckenberger, Avalanches as Art

More so than any other modern purveyor of snowy realms, Scott Rinckenberger is one of the few who has tackled the subject of avalanches. This is due in part to their rarity and generally needing to be in the right place at the right time. Additionally, it can be very dangerous, depending on the safety of your vantage point. Scott's work spans panoramas of frozen landscapes to boots-on-the-ground documentation of skiers and rock climbers. More importantly for our purposes, **he is also obsessed with taking pictures of snow patterns and textures.**



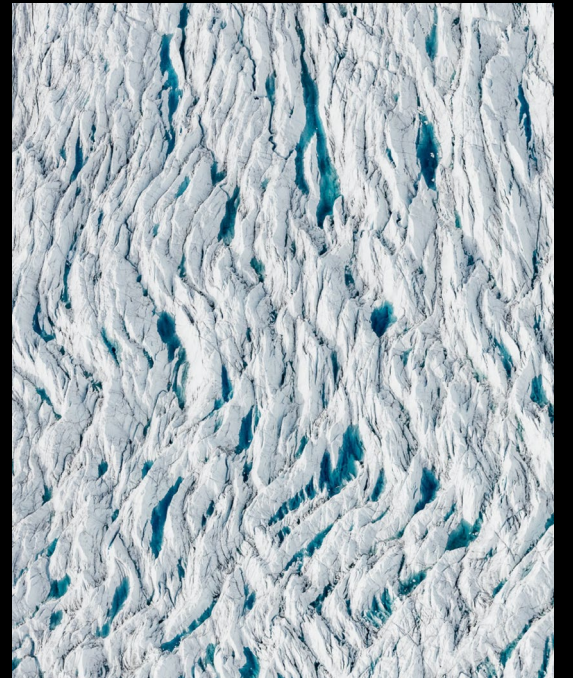
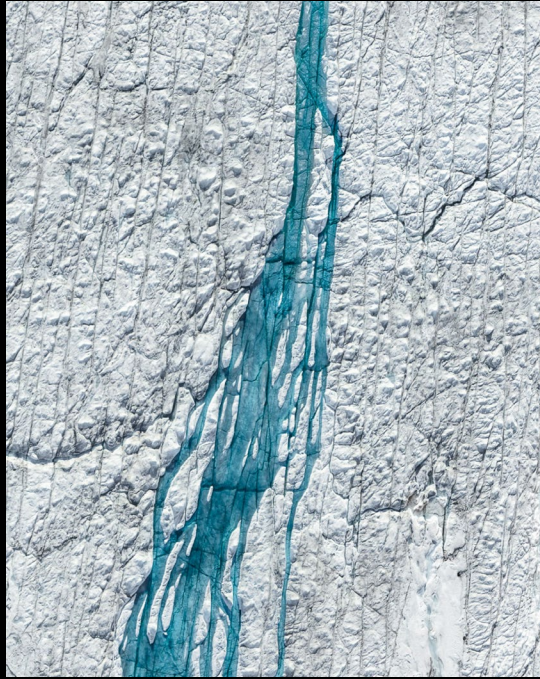
Modern Pioneers of Photography in Frozen Climes

Photographers **Tom Hegen**, **Kacper Kowalski**, **Timo Lieber**, and **Sebastião Salgado** have elevated the depiction of frozen landscapes, intertwining art and environmental advocacy. **Tom Hegen's** lens illuminates the exquisite textures of melting glaciers, revealing climate change's poignant impact. **Kacper Kowalski** blends abstraction and documentation to uncover the Arctic's and Antarctic's unique, artistic textures. His images redefine the polar regions, capturing the abstract beauty of ice's intricacies. **Timo Lieber**, with a focus on aerial photography, delves into the Arctic's surreal frozen landscapes. He contrasts the ice's ethereal allure with its delicate nature. **Sebastião Salgado's** Arctic career spans decades, marked by stunning photography that poignantly portrays the region's vulnerability, accentuating the urgency of environmental conservation through his lens.



Arctic Textures and Melting Glaciers: Tom Hegen

<https://www.tomhegen.com/>



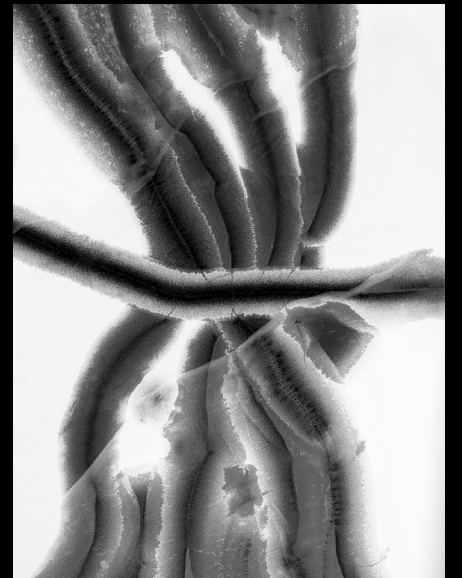
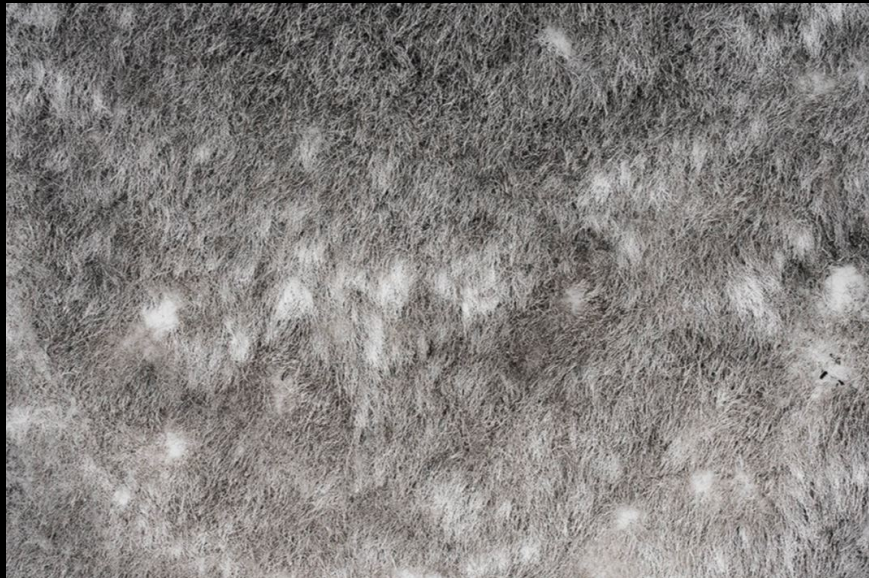
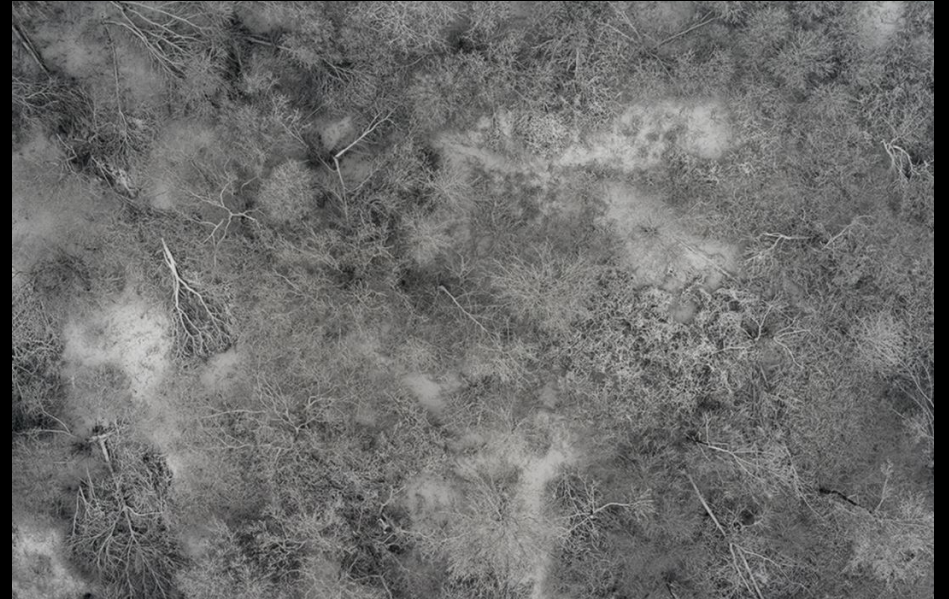
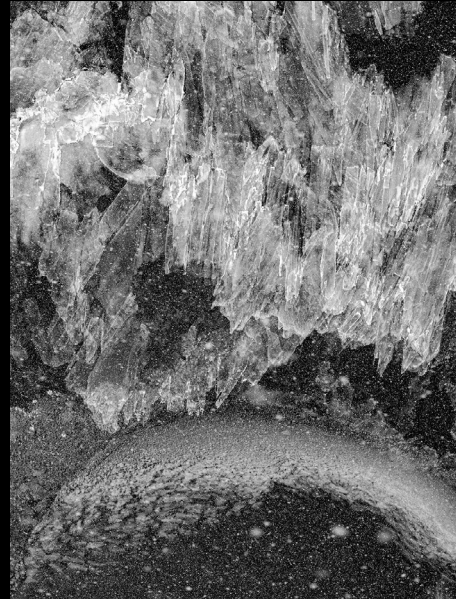


Tom Hegen shoots from helicopters, prop planes, balloons, high vantage points (like bridges), and with the Phantom 4 Pro multicopter drone. He has recently started shooting with a Fujifilm X-H2 Mirrorless Camera. "I use abstraction and aestheticization to get the viewer's attention...the Two Degrees Series explores the effects of global warming, primarily caused by human activities on earth."



Aerial Photography & Abstract Textures: Kacper Kowalski

<https://www.kacperkowalski.pl/en>





Fujifilm GFX 100
with 110mm Lens



Pentax 645Z with
Fixed Focus 90mm lens



Nikon D4



Nikon D3X



Nikor 80-200mm Lens
and Nikor 24-70mm Lens



Miyama 7ii Wide Format



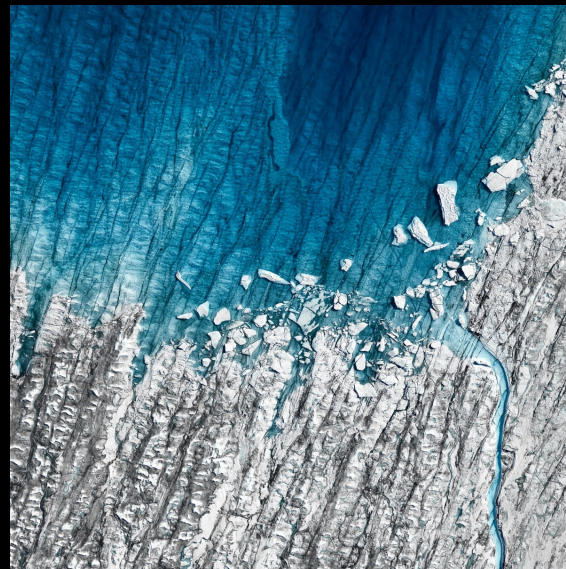
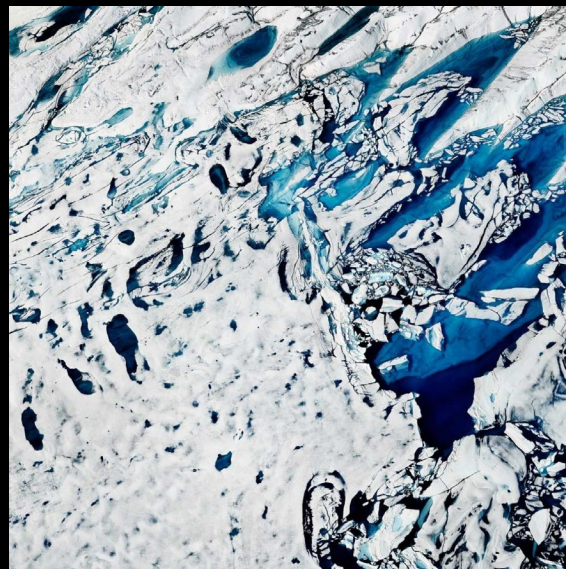
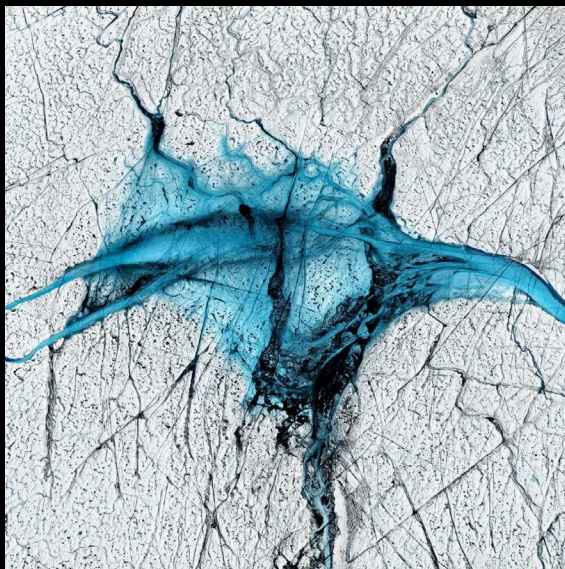
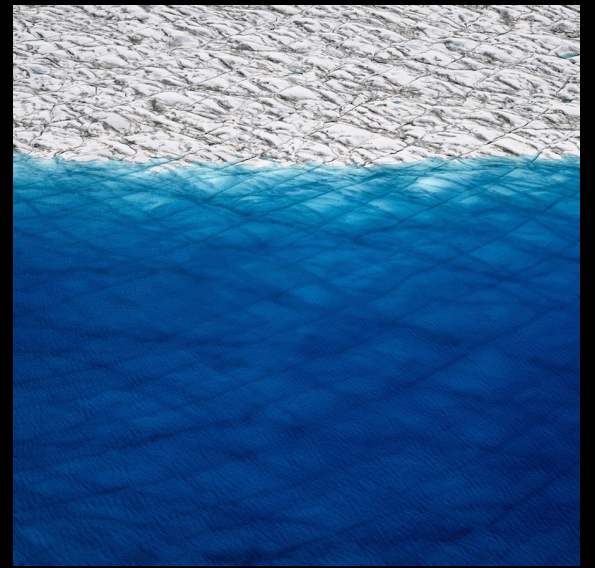
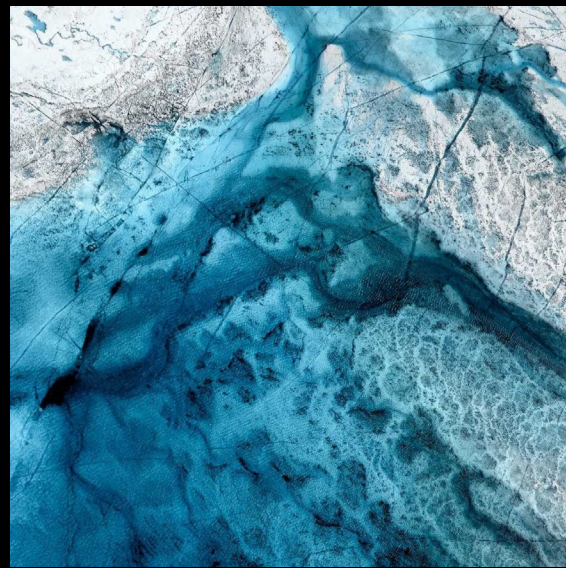
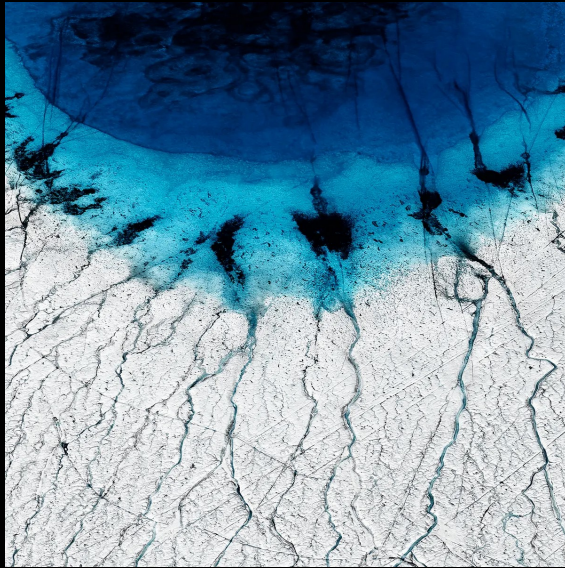
Ken Lab KS08 Gyro stabilizer



Kacper Kowalski: "I use a gyrocopter or a paraglider both of which I steer myself. The camera is not suspended or attached to the cockpit; I don't use remote control. I hold both the camera and the controls in my hand. Neither the gyrocopter nor the paraglider have a closed cockpit. I feel the air with my whole body, I am exposed to temperature, scents and all that's available to senses. I wouldn't trade it for a closed and warm cockpit. Neither would I let anyone else do the steering. I navigate with precision and control the image. I like this part: it's analog and traditional. I enjoy getting tired, experiencing emotions, feeling the vibrations of the engine and the wind in my face. I need to see with my own eyes what I want to capture before I bring the camera up to my face and press the shutter button. I search relentlessly for new perspectives on where I live and new phenomena that I overlooked before. I keep on wondering what makes me focus my attention on specific spots in an infinite landscape. This leads to more questions. They will never end."

Arctic Textures: Timo Lieber

<https://www.timolieber.com>





Sony Phase One IQ3 100MP



Sony 150mm F2.8 Prime Lenses



Yuneed Typhoon-H

Timo Lieber has spent a career documenting climate change in the Arctic by returning to the area and photographing the melting glaciers and changing landscape year after year - resulting in his THAW series. Lieber's shock at the fast and irreversible changes in the region motivated the artist to approach his documentation of this climate change in a more immediate way. Wanting to capture the physical process of passage of time and record the traces of melting ice, Lieber creates large-scale cyanotype abstractions by using ice, sunlight and time to chart the metamorphosis of the melting ice rather than merely document the result. The physicality of the ice crystals melting on the surface of the paper leaves traces of its presence and records a new reality in its absence. Just as the glaciers melt in the Arctic to reveal a new landscape, Lieber's cyanotypes in the C-Blue series are a testament to his commitment to capturing what is lost, what will never be again. Lieber's technique involves strapping himself into a helicopter with the seats ripped out, then hanging out of the aircraft to take his photos. He shoots with a Sony Phase One IQ3 100mp and a Yuneed Typhoon-H drone.

Arctic Textures: Sebastião Salgado

<https://www.peterfetterman.com/artists/171-sebastiao-salgado/works/>





Much of Sebastião Salgado's more famous earlier work was shot with a Leica R6. Later, he decided he wanted to start printing extra big so he switched to a medium format Pentax 645. Since switching to digital, he now shoots primarily with a Canon 1DS. As far as lenses go, he uses virtually the whole line of Canon L lenses. Sebastião Salgado has made it his life's work to document the impact of globalization on humankind. In the past three decades, he has traveled to more than 100 countries for his photographic projects and devotes years to each series in order to grasp the full scope of his topic.



Leica R6



Pentax 645



Canon 1DS

Canon L Lenses



Canon EF 100mm f/2.8 L IS Macro USM



Canon EF 85mm f/1.2 L II USM



Canon EF 50mm f/1.2 L USM



Canon EF 35mm f/1.4 L USM



Canon EF 24mm f/1.4 L USM

Snow Textures: Scott Rinckenberger

<https://www.scottrinck.com/>





“I hope that my work can positively inspire people to seek experiences which spark a close examination of life, create a deep appreciation for its inherent beauty, and result in a lifelong commitment to explore, protect and become an integral part of the beautiful tapestry of nature. My work ranges from large scale commercial advertising projects with RVs and moving vans to shooting technical ski mountaineering where toothbrush handles are sacrificed to save a few grams.”

“We’ll start with the largest, my Commercial Photography Kit. Each individual item, or the whole shooting match can be rented from BorrowLenses.com, which I recommend either as a solution to avoid the overhead of owning equipment, or as a means by which to experiment and test as you work to build your own perfect kit.”

Commercial Photography Kit (from right to left):

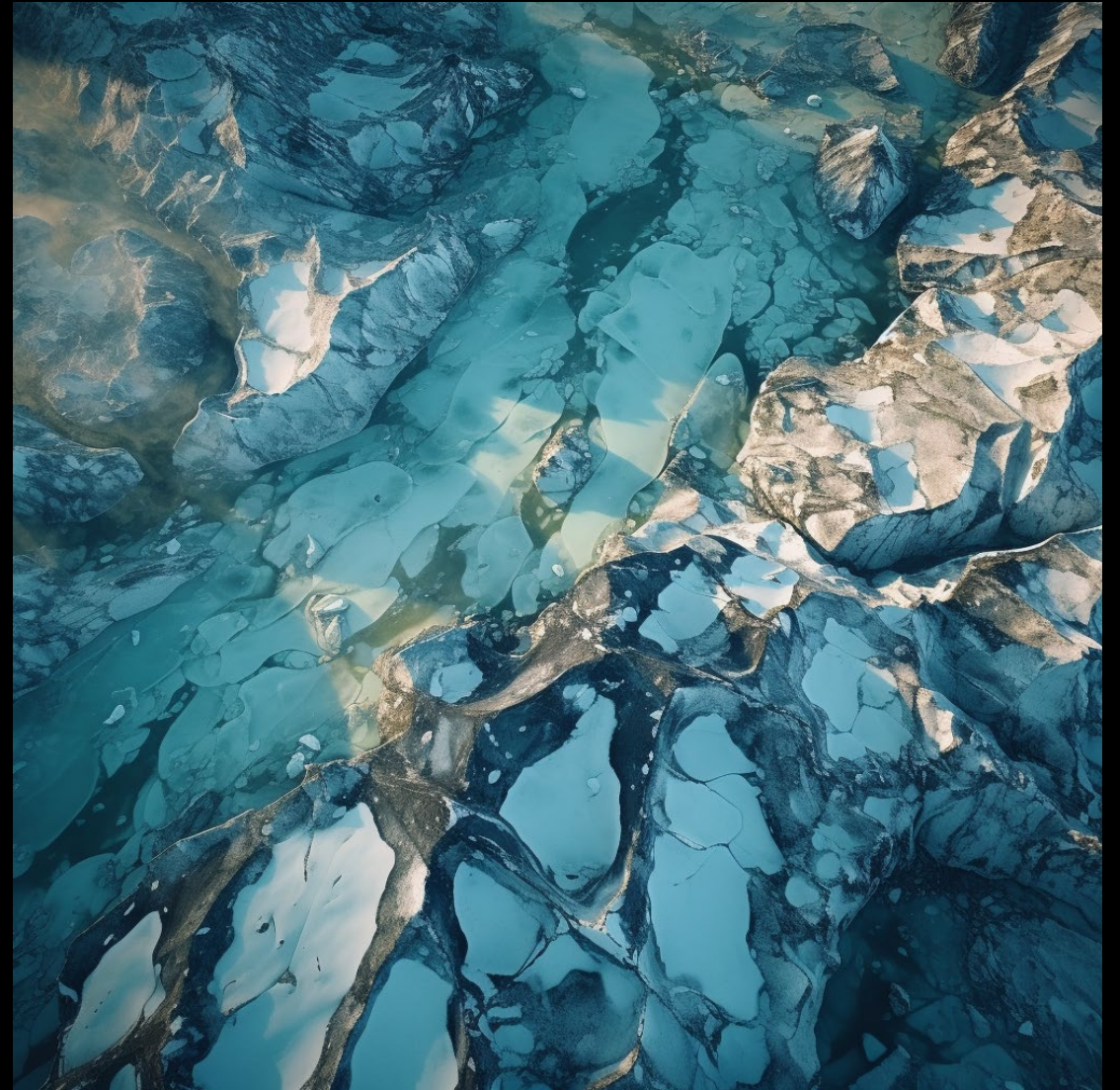
Nikon 14-24mm 2.8 Lens, Nikon SB-910 Flash, PocketWizard Plus III Transceiver, Nikon D4s, Nikon 28-300mm 3.5-5.6 Lens, Nikon 24-70mm 2.8 Lens, Nikon 70-200mm 2.8 Lens, and Nikon 2x Tele-Extender.





Grease Ice: Grease ice is a slushy, soupy ice layer forming when frazil ice crystals adhere together, creating a partially melted, viscous surface.

Prompt: satellite down shot of **grease ice**, sea of blues and greens, 35mm film grain, anamorphic lens, golden hour, detailed textures [\[Midjourney 5.2\]](#)



Vuggy Ice: Vuggy ice features cavities or voids often formed by the melting or dissolution of ice, creating irregular, hole-riddled textures.

Prompt: aerial view, smooth porous melting glacier filled with large cavities and holes, **vuggy ice**, blues and greens, filled with holes, 35mm film grain, anamorphic lens, golden hour, detailed textures [\[Midjourney 5.2\]](#)



Crevasse: A glacial crevasse is a deep, often narrow crack or fissure in a glacier's surface, caused by stress, tension, or movement, representing a potential hazard for mountaineers and glaciologists.

Prompt: Aerial view, **glacier crevasses**, blues and lavenders, 35mm film grain, anamorphic lens, golden hour, detailed textures, glacial ice [\[Midjourney 5.2\]](#)



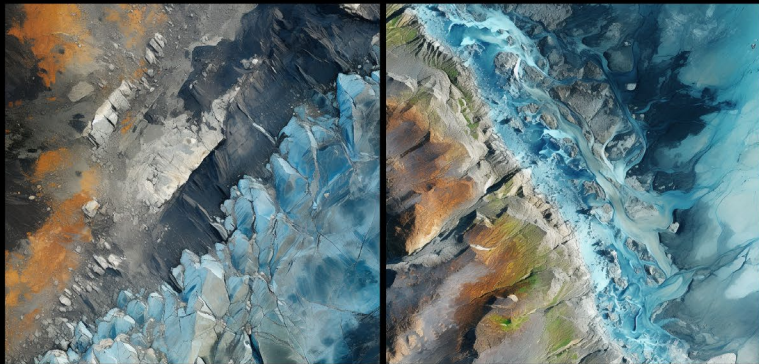
Chevron Crevasse: A chevron crevasse is a V-shaped crevasse found in glacier ice, formed by the glacier's differential movement and stress.

Prompt: **chevron glacier crevasses**, top down satellite view, glacier, blues and greens, 35mm film grain, anamorphic lens, golden hour, detailed textures [\[Midjourney 5.2\]](#)



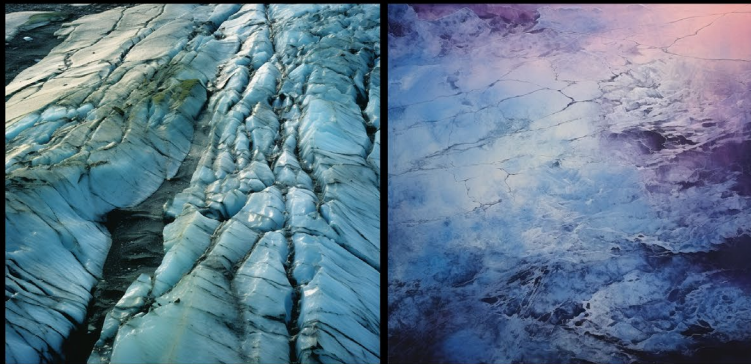
Cracked & Fractured Ice: These are linear features that appear as the ice begins to break apart or when different ice formations interact.

Prompt: satellite down-shot of **cracks and fractures** in ocean ice, pressure ridges from colliding floes, sea of blues and greens, 35mm film grain, anamorphic lens, golden hour, detailed textures [\[Midjourney 5.2\]](#)



Debris Cover: Debris-covered glaciers are valley glaciers that have a layer of rocks/sediment on the ice surface.

Prompt: top down satellite view, Landsat 9, rock fall onto glaciers from valley sides creating **debris cover**, blues + greens, 35mm film grain, anamorphic lens, golden hour, detailed textures [\[Midjourney 5.2\]](#)



Foliation: Foliation in glaciers refers to the layering or banding of ice, reflecting variations in ice properties, such as crystal size and density.

Prompt: top down view, **longitudinal glacier foliation** in the distal flow unit, blues + greens, 35mm film grain, golden hour, anamorphic lens, detailed textures [\[Midjourney 5.2\]](#)



Frazil Ice: Frazil ice comprises small, needle-like ice crystals that form a slushy layer on the surface of frigid water bodies, particularly in cold polar regions.

Prompt: aerial view, **frazil ice on ocean**, dusk, blues + lavenders, gum bichromate print, detailed textures, [\[Midjourney 5.2\]](#)



Ice Floes: Ice floes are flat, floating pieces of sea ice that range in size and result from the breaking apart of larger ice formations, shaping polar seascapes.

Prompt: satellite down shot of pressure ridges rising from colliding **ice floes**, cracks and fractures in ocean ice, sea of blues + greens, 35mm film grain, anamorphic lens, golden hour, detailed textures [\[Midjourney 5.2\]](#)



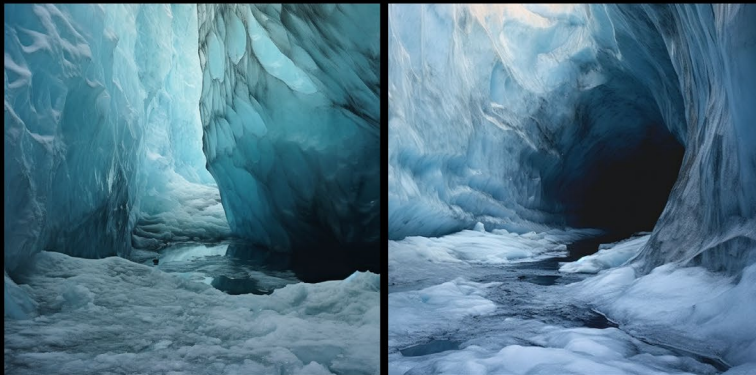
Icebergs: Icebergs are massive, floating ice chunks that have broken away from glaciers or ice shelves. They can vary in size from small to colossal, presenting striking, dynamic features.

Prompt: satellite down shot of **icebergs**, 35mm film grain, anamorphic lens, golden hour, detailed textures, gum bichromate print [\[Midjourney 5.2\]](#)



Medial Moraines: Medial moraines are dark, linear features found on glaciers, formed by the merging of two glacier flows, carrying debris to create a central ridge-like structure.

Prompt: satellite view of **medial moraines**, glacier, blues and greens, 35mm film grain, anamorphic lens, golden hour, detailed textures [\[Midjourney 5.2\]](#)



Moulin: A moulin is a vertical, cylindrical, and often deep shaft or hole within a glacier, created by the draining of meltwater through the ice, channeling water to its base.

Prompt: massive **glacial moulin**, dusk, blues and lavenders, gum bichromate print, detailed textures [\[Midjourney 5.2\]](#)



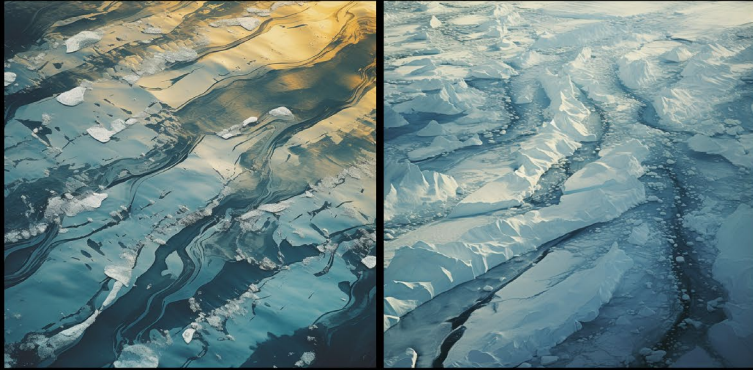
Ogives: Ogives are alternating light and dark bands or ribbons formed on the surface of glaciers, often resulting from seasonal meltwater flow.

Prompt: aerial view, **glacier ogives**, blues and greens, 35mm film grain, anamorphic lens, golden hour, detailed textures [\[Midjourney 5.2\]](#)



Pancake Ice: Pancake ice consists of circular, flat ice pieces with raised edges, created by the freezing of slushy or supercooled water.

Prompt: satellite down shot of **pancake ice**, sea of blues + greens, 35mm film grain, anamorphic lens, golden hour, detailed textures [\[Midjourney 5.2\]](#)



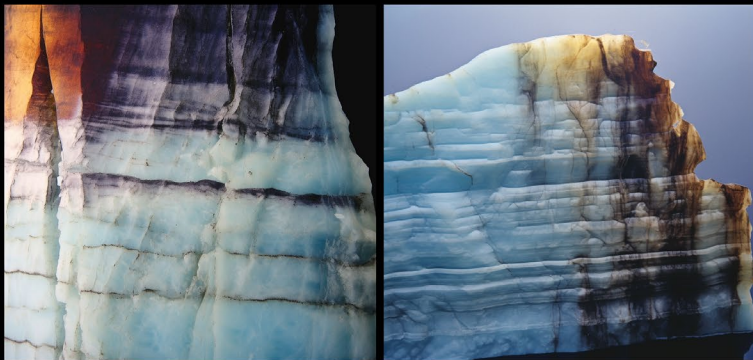
Pressure Ridges: Pressure ridges are raised ice formations formed by ice floes colliding, compressing, and buckling, appearing jagged or wavy.
Prompt: satellite down shot of **pressure ridges** on frozen ocean, floes colliding, 35mm film grain, anamorphic lens, golden hour, detailed textures, blue gum bichromate print [\[Midjourney 5.2\]](#)



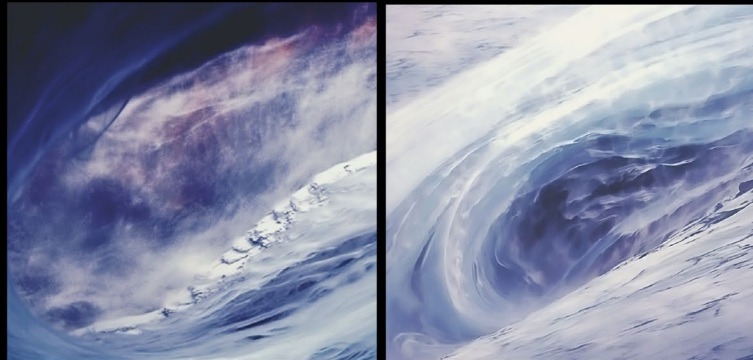
Rubble Ice: Rubble ice consists of small, fragmented pieces of ice, often a result of larger ice formations breaking apart.
Prompt: satellite down shot of **rumble ice** on cracked frozen ocean, 35mm film grain, anamorphic lens, golden hour, detailed textures, glacial ice, blue gum bichromate print [\[Midjourney 5.2\]](#)



Seracs: Towering, angular ice columns and blocks found on glaciers, formed by the differential movement and deformation of glacial ice.
Prompt: bird's eye view of **glacial seracs**, dusk, blues and lavenders, gum bichromate print, extremely detailed textures, glacial ice [\[Midjourney 5.2\]](#)



Stratified Ice: Stratified ice exhibits distinct horizontal layers, often reflecting variations in the conditions of ice formation, creating banded patterns.
Prompt: **stratified ice**, distinct horizontal banding, different layers of color, foliation, horizontal layers, laminated ice, dusk, blues and lavenders, gum bichromate print, distinct textured layers, glacial ice [\[Midjourney 5.2\]](#)



Vortex Shedding: Vortex shedding is a phenomenon where swirling vortices form behind an obstruction, like a bridge pier in a river, due to the flow of fluid or air, creating alternating low-pressure zones.
Prompt: **Vortex shedding** on a glacier, dusk, blues and lavenders, gum bichromate print [\[Midjourney 5.2\]](#)



Wind Scoured Glacier
A wind-scoured glacier is a glacier whose surface features have been shaped or modified by the erosive action of strong, persistent winds.
Prompt: top down bird's eye view of **wind-scoured glacier** snow, blues and greens, 35mm film grain, anamorphic lens, golden hour, detailed textures [\[Midjourney 5.2\]](#)

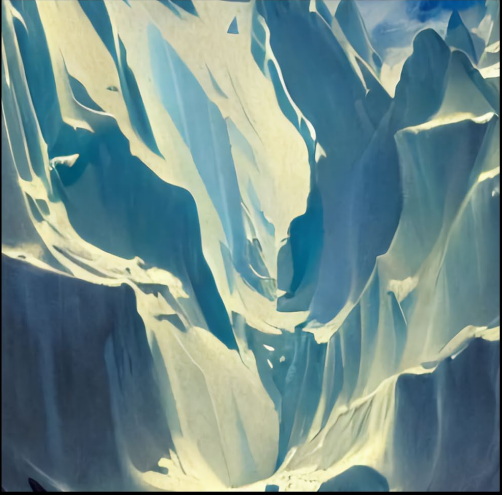
LARGE SCALE TEXTURES, CALVING GLACIER SERIES:

AERIAL VIEW, CALVING GLACIER AND DEBRIS FALLING IN TRANSLUCENT WATER, STYLE OF SARGENT, FORCED PERSPECTIVE, GOLDEN HOUR, COOL COLOR PALETTE, BACKLIGHT, REMBRANDT LIGHTING [\[DALL-E 2\]](#)



LARGE SCALE TEXTURES, CALVING GLACIER SERIES:

AERIAL VIEW, CALVING GLACIER AND DEBRIS FALLING IN TRANSLUCENT WATER, STYLE OF SARGENT, FORCED PERSPECTIVE, GOLDEN HOUR, COOL COLOR PALETTE, BACKLIGHT, REMBRANDT LIGHTING --AR 2:1 --S 750 [STABLE DIFFUSION + MIDJOURNEY 3]



LARGE SCALE TEXTURES, AVALANCHE SERIES:

DRAMATIC **AVALANCHE**, STYLE OF EYVINDE EARLE, **EXPLOSION OF SNOW**, BIRD'S EYE VIEW, BACKLIT, GOD RAYS, EXTREME PERSPECTIVE, GOLDEN HOUR
[MIDJOURNEY 3]



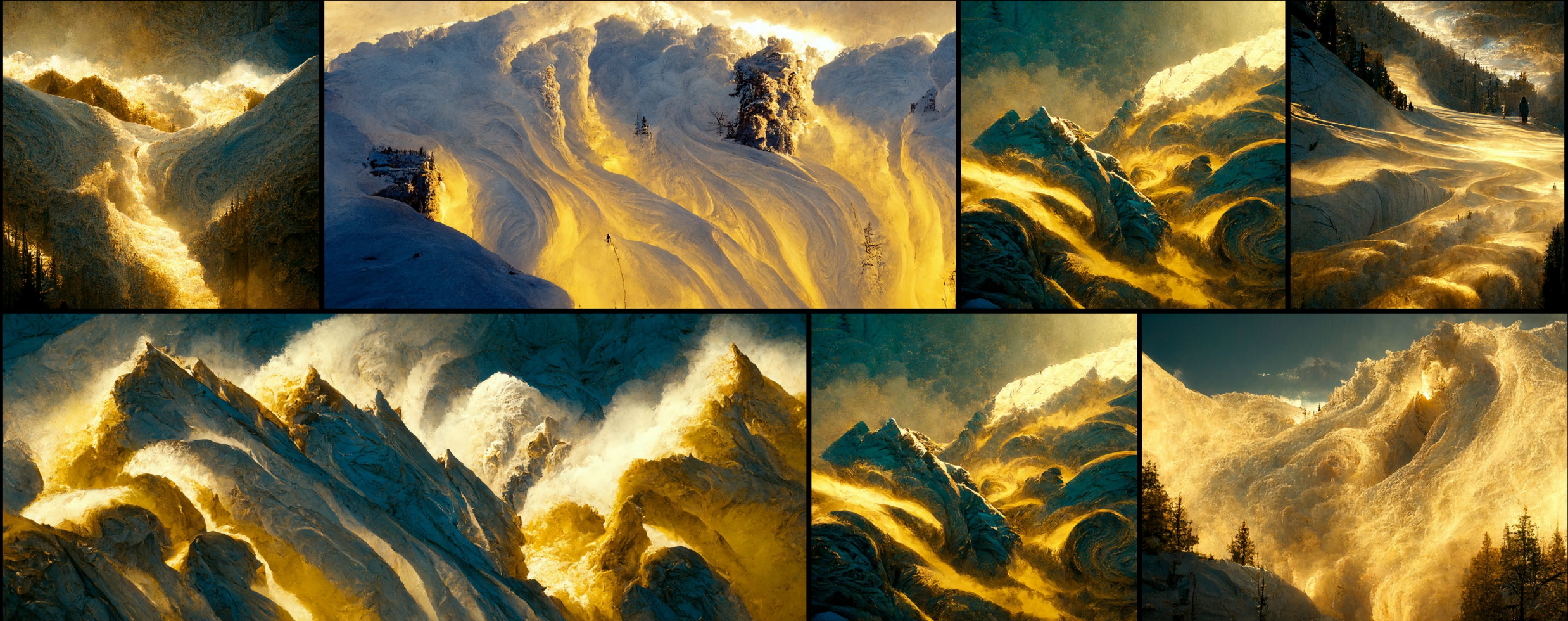
LARGE SCALE TEXTURES, AVALANCHE SERIES:

DRAMATIC **AVALANCHE**, STYLE OF EYVINDE EARLE, **EXPLOSION OF SNOW**, BIRD'S EYE VIEW, BACKLIT, GOD RAYS, EXTREME PERSPECTIVE, GOLDEN HOUR
[MIDJOURNEY 3]



LARGE SCALE TEXTURES, AVALANCHE SERIES:

DRAMATIC **AVALANCHE**, STYLE OF EYVINDE EARLE, **EXPLOSION OF SNOW**, BIRD'S EYE VIEW, BACKLIT, GOD RAYS, EXTREME PERSPECTIVE, GOLDEN HOUR
[MIDJOURNEY 3]



LARGE SCALE TEXTURES, AVALANCHE SERIES:

MAJESTIC AVALANCHE, BLUE INTERPOLATING TO WHITE, 35MM FILM GRAIN, ANAMORPHIC LENS, CINEMATIC LIGHTING + COMPOSITION

--AR 2:1 [\[MIDJOURNEY 3\]](#)



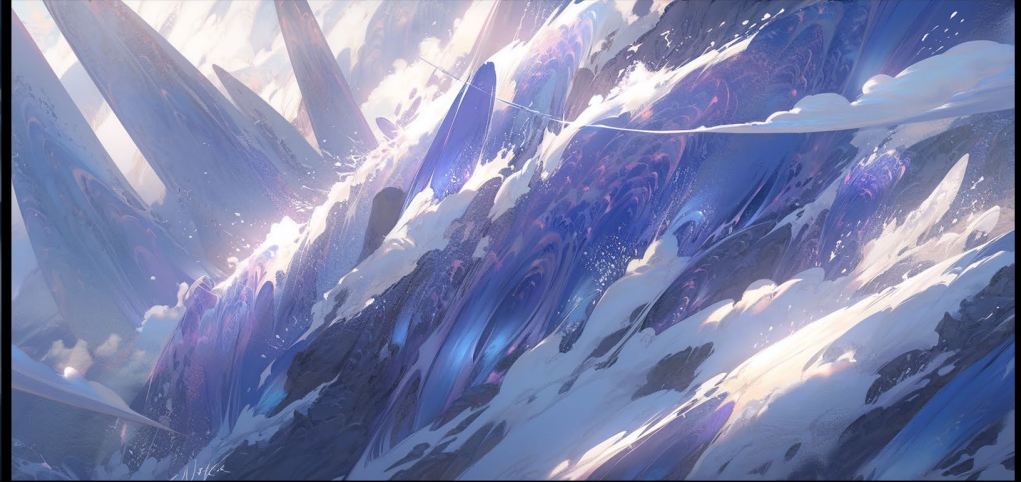
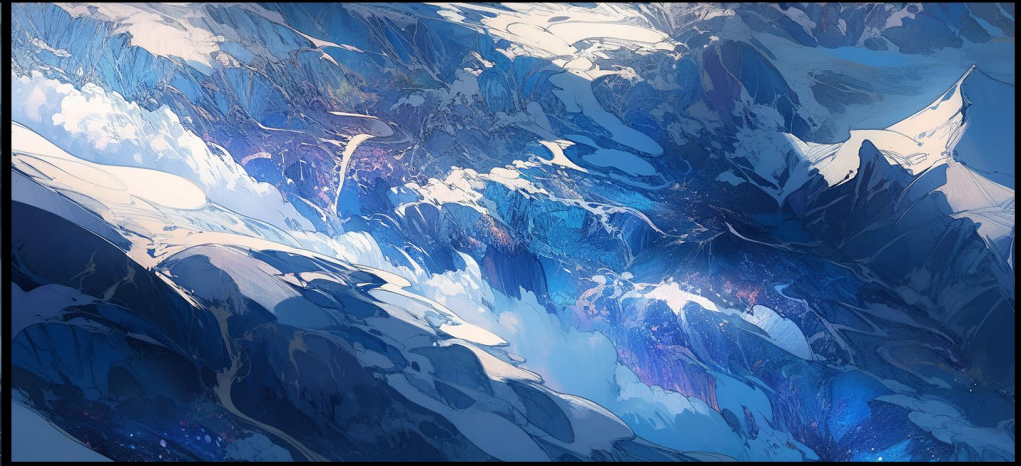
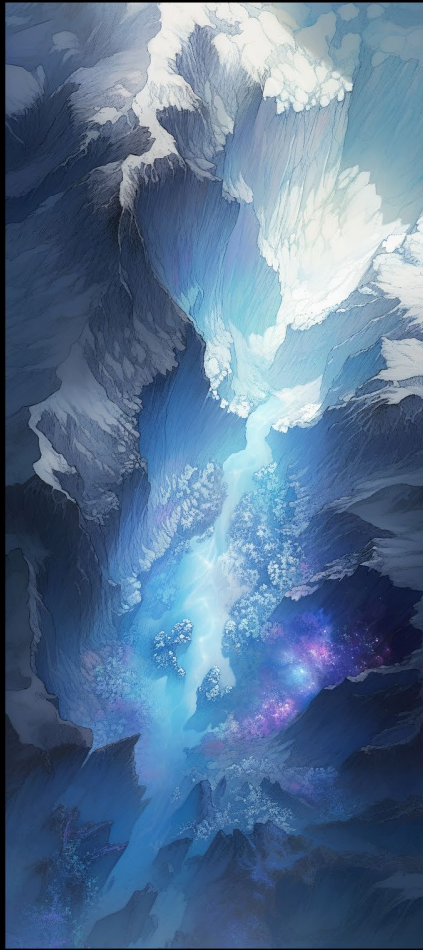
LARGE SCALE TEXTURES, AVALANCHE SERIES:

SATELLITE VIEW OF AN **AVALANCHE-INDUCED GLACIER COLLAPSE** WITH A MAGNITUDE OF SEVERAL GIGATONS RESULTING IN A MASSIVE ICE DISCHARGE WITH A SUBSEQUENT TSUNAMI AS THE ICE ENTERS THE WATER, **GOLDEN HOUR**, MAJESTIC PURPLE AND BLUE PALETTE --AR 2:1 --S 750 [\[MIDJOURNEY NIJI 5\]](#)



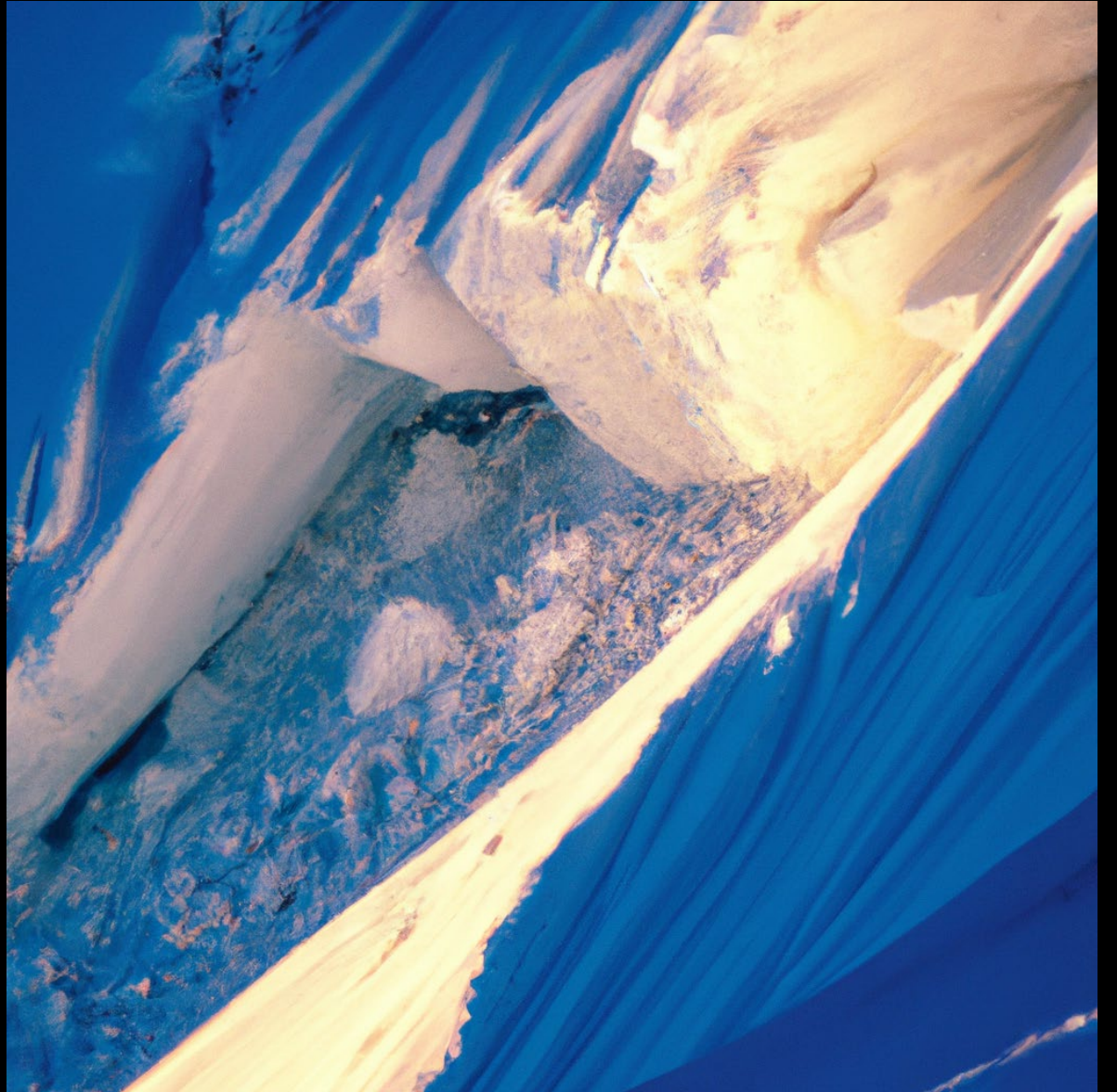
LARGE SCALE TEXTURES, AVALANCHE SERIES:

SATELLITE VIEW OF AN AVALANCHE-INDUCED GLACIER COLLAPSE WITH A MAGNITUDE OF SEVERAL GIGATONS RESULTING IN A MASSIVE ICE DISCHARGE WITH A SUBSEQUENT TSUNAMI AS THE ICE ENTERS THE WATER, GOLDEN HOUR, MAJESTIC PURPLE AND BLUE PALETTE --AR 2:1 --S 750 [MIDJOURNEY NIJI 5]



LARGE SCALE TEXTURES, AVALANCHE SERIES:

MASSIVE AVALANCHE IN A BLIZZARD, INTERPOLATING FROM WHITE TO BLUE, BIRD'S EYE VIEW, DRAMATIC LIGHTING [DALL-E 2]



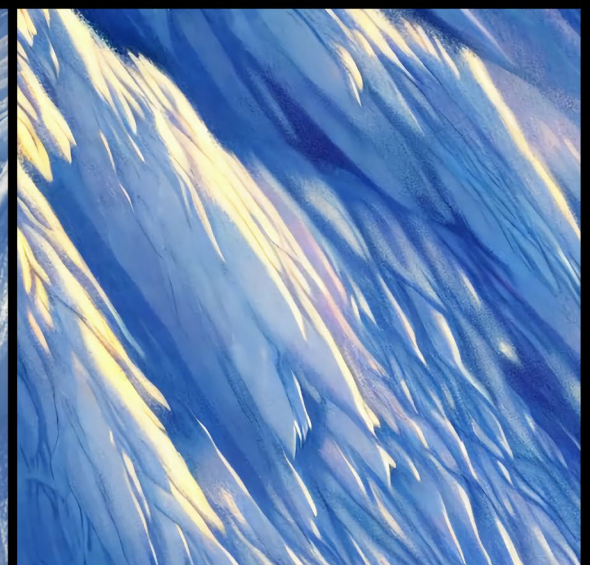
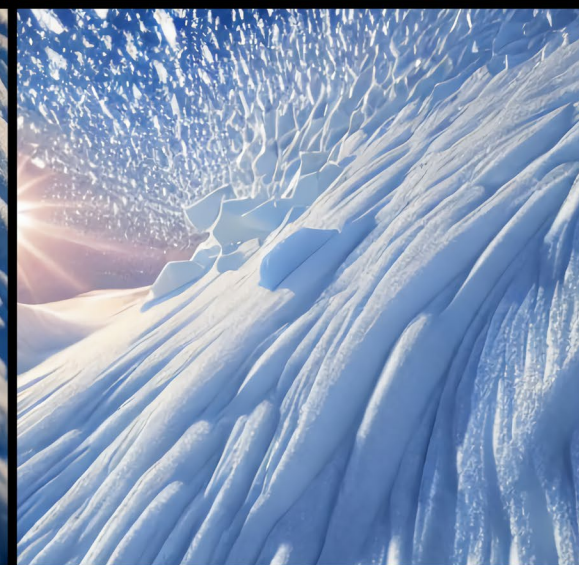
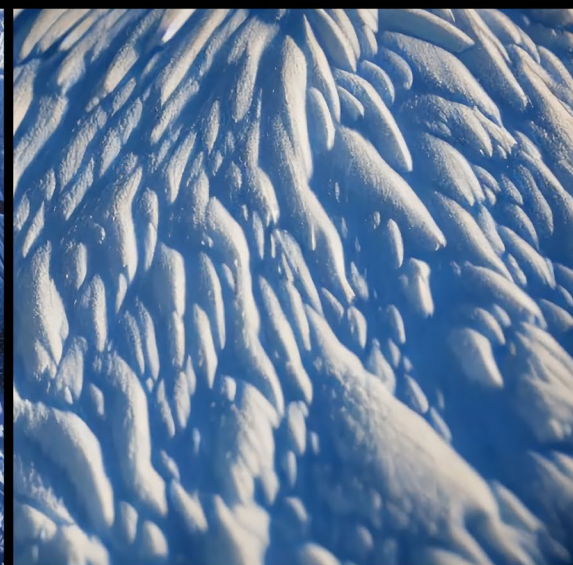
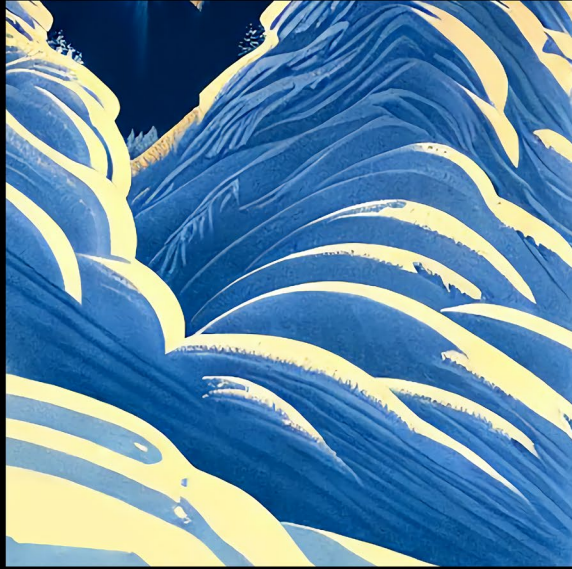
LARGE SCALE TEXTURES, AVALANCHE SERIES:

SATELLITE VIEW OF AN AVALANCHE-INDUCED GLACIER COLLAPSE WITH A MAGNITUDE OF SEVERAL GIGATONS RESULTING IN A MASSIVE ICE DISCHARGE, MAJESTIC PURPLE AND BLUE PALETTE [DALL-E 2]



STYLIZED GRAPHICAL TEXTURES, AVALANCHE SERIES:

AVALANCHE IN THE STYLE OF WPA POSTERS AND ART DECO, EXPLOSION OF SNOW, BIRD'S EYE VIEW, BACKLIT, GOLDEN HOUR [STABLE DIFFUSION]



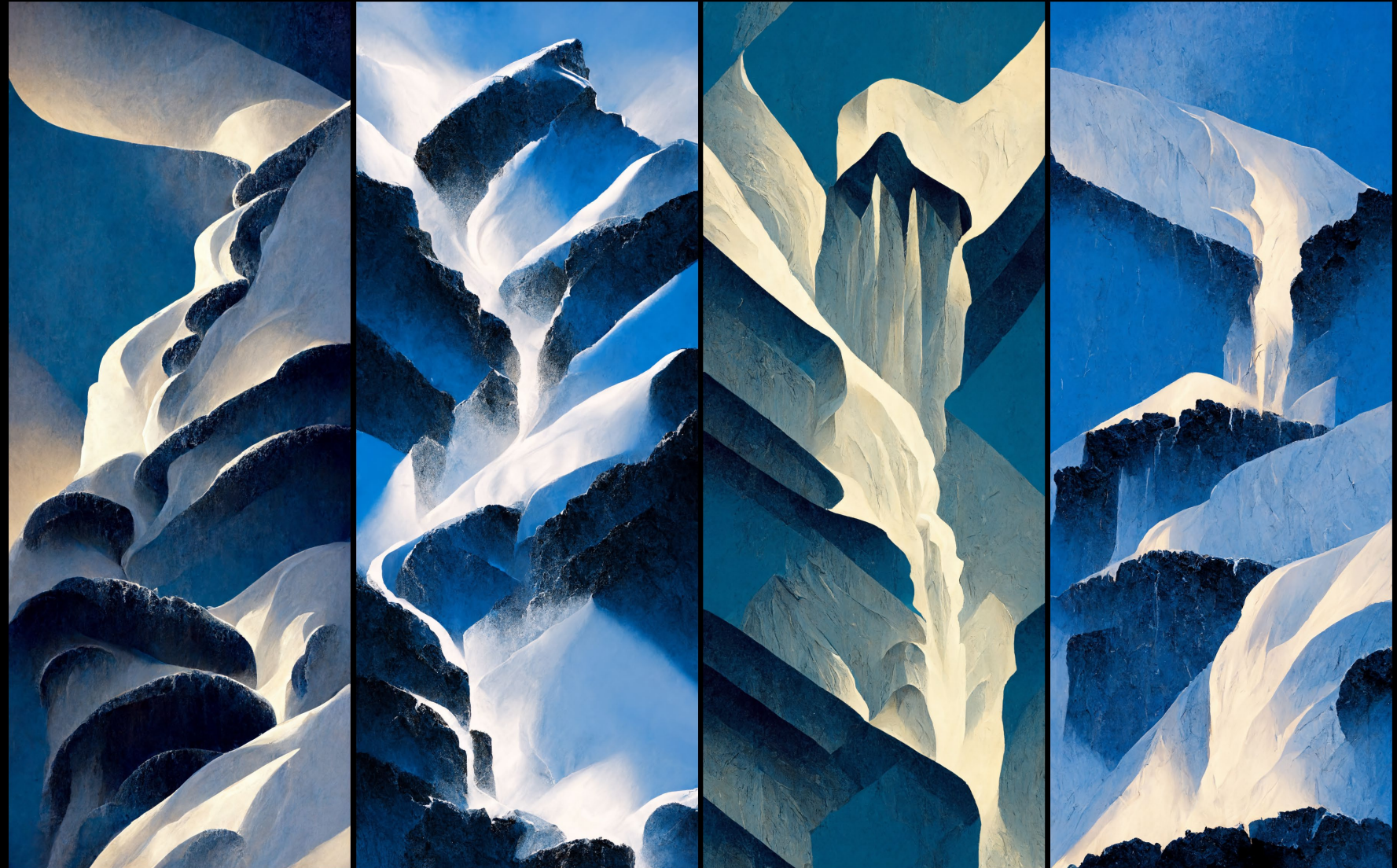
STYLIZED GRAPHICAL TEXTURES, AVALANCHE SERIES:

AVALANCHE IN THE STYLE OF WPA POSTERS AND ART DECO, EXPLOSION OF SNOW, BIRD'S EYE VIEW, BACKLIT, GOLDEN HOUR [STABLE DIFFUSION]



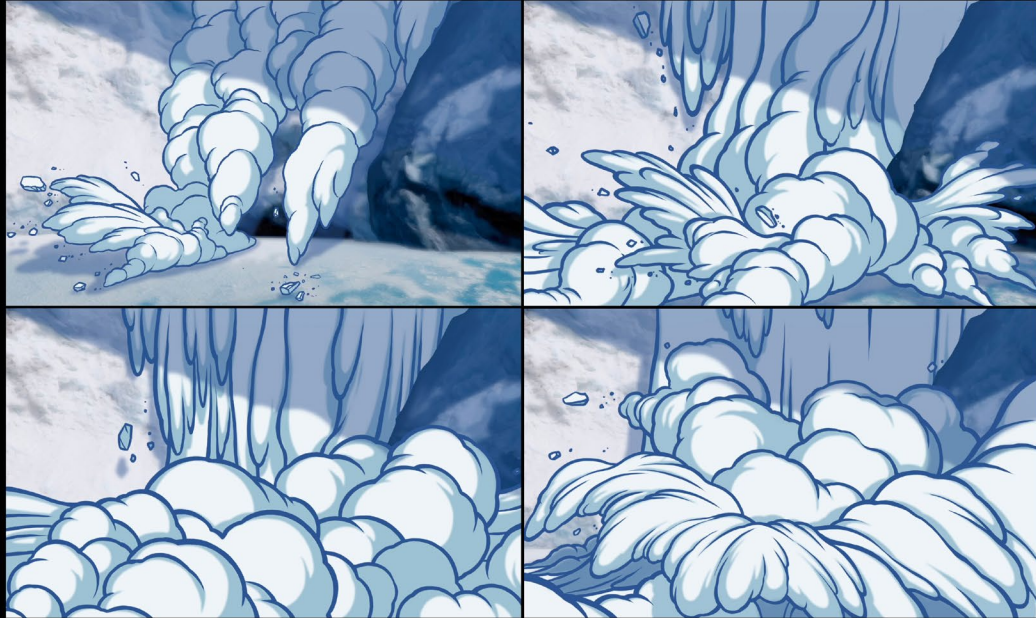
STYLIZED GRAPHICAL TEXTURES, AVALANCHE SERIES:

AVALANCHE WITH LARGE CHUNKS OF CASCADING DEBRIS IN THE STYLE OF **ART DECO POSTERS**, LOOKING UP, TWILIGHT, FORCED PERSPECTIVE, BACKLIT, DRAMATIC LIGHTING, COLOR INTERPOLATING FROM BLUE TO WHITE TO AUBERGINE --AR 2:39 [MIDJOURNEY 3]

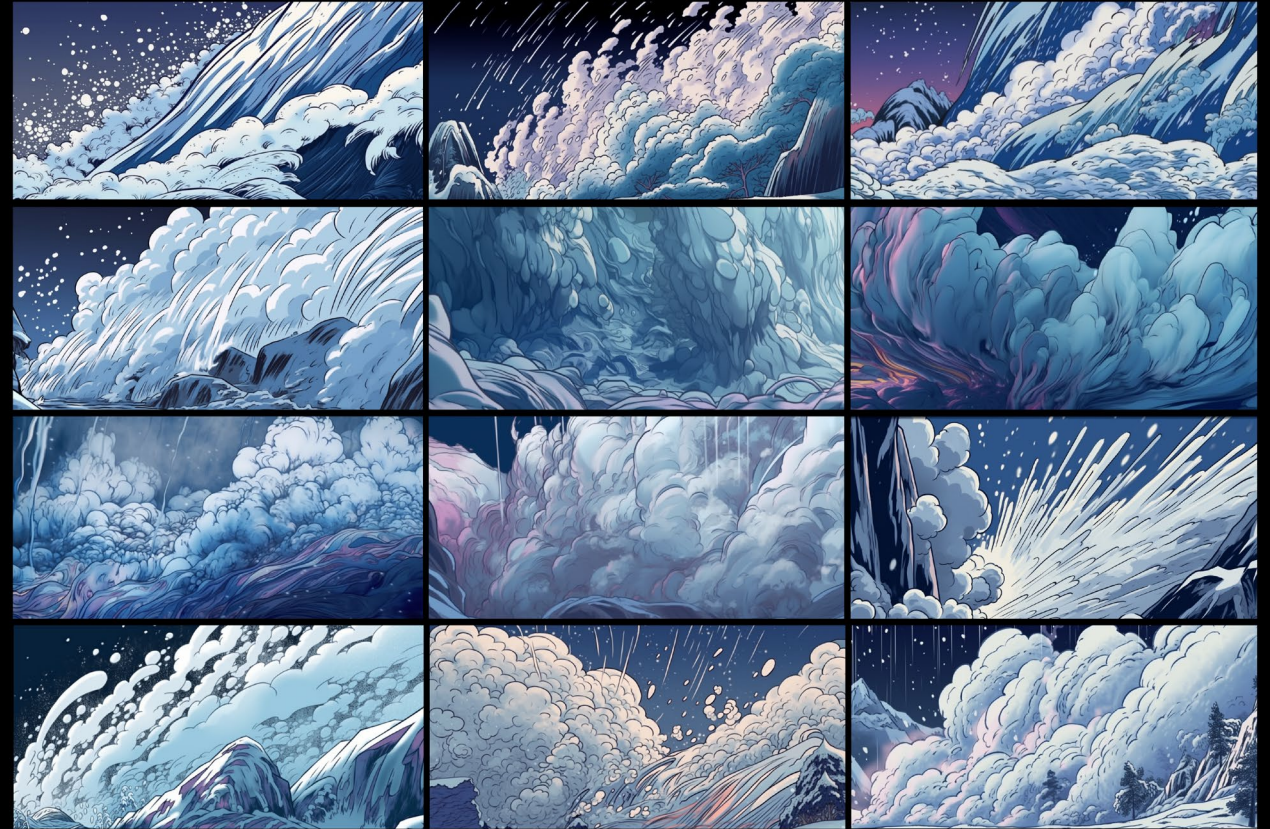


STYLIZED GRAPHICAL TEXTURES, AVALANCHE SERIES:

[HTTPS://S.MJ.RUN/W9AJCWL0R04](https://s.mj.run/w9ajcwl0r04) A GRAPHICAL [STYLE HERE: NOUVEAU OR JAPANESE WOODBLOCK PRINT] AVALANCHE SHOOTS DOWN THE MOUNTAIN AT TWILIGHT, BEAUTIFUL INTERTWINED SNOW SHAPES, INTERPOLATING FROM DARK BLUE TO LIGHT BLUES + PURPLES, DRAMATIC PERSPECTIVE AND ANGLE, EXTREME ENERGY, MOTION BLUR, PARTICLES --AR 2:1 --S 750 [MIDJOURNEY 5]



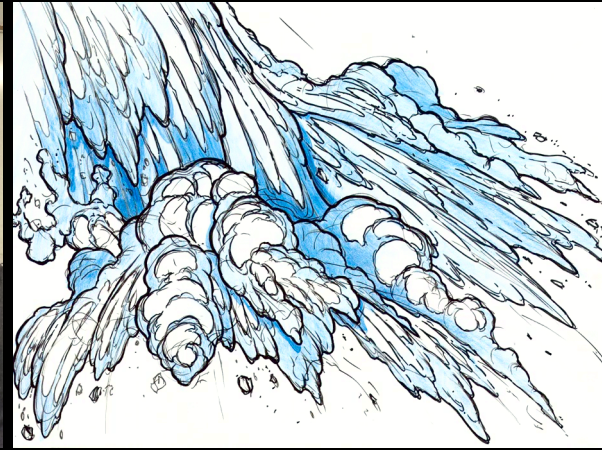
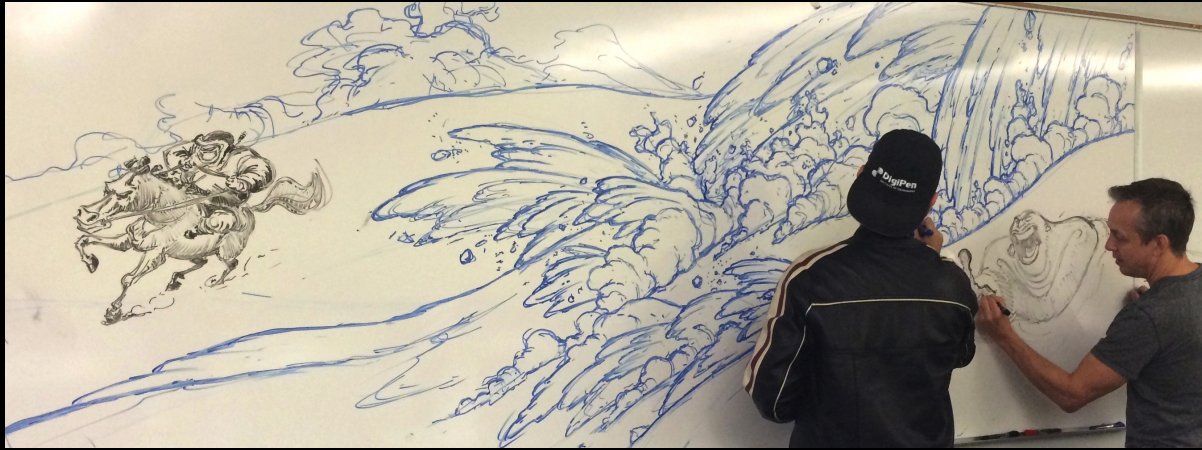
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The four images above are stills from an avalanche I animated in Procreate. I used these as blend images to create the stylized textures to the right. This was the only way I could get the textures to appear graphical and within the range of my style.

STYLIZED GRAPHICAL TEXTURES, AVALANCHE SERIES:

[HTTPS://S.MJ.RUN/AG-ZY3FPKVU](https://s.mj.run/AG-ZY3FPKVU) **AVALANCHE** FROM MULAN OVERTAKING AN ASSASSIN ON HORSEBACK AND A BALD ASSASSIN IN FOREGROUND, REVENANT ILLUSTRATION SKETCH, PENCIL & PEN BY ME & ADAM, C, IN THE STYLE OF NATURALISTIC AVALANCHE, KATSUHIRO OTOMO, SNOW SCENES, GLEN KEANE, SKY-BLUE AND BLUE, CLOSE-UP INTENSITY, FLOWING SILHOUETTES --AR 3:1 [\[MIDJOURNEY 5.2\]](#)



Above: I did this whiteboard avalanche demo in my ANI 398: Designing Nature course with former Disney colleague Travis Blaise before the pandemic. I took pictures of the final, including my other visual development, and then used them as blend images. Incidentally, Travis animated the Mulan assassins (he's drawing one to the right of me) and just happened to pop by my class as he was preparing to teach his own course. Though I rarely use the 'describe' function in Midjourney, I found it useful in this case to help approximate the style and textures **(to the right)**.



ACKNOWLEDGMENTS:

MANY OF MY LIVE-ACTION PHOTOS TAKEN IN THIS SERIES CAN BE VIEWED AT JAZNO.COM. THANKS TO **WIKIPEDIA**, FOR PROVIDING A FAIR AMOUNT OF CONTENT/CONTEXT (ALL IMAGES AND TEXT HAVE BEEN ATTRIBUTED ON RESPECTIVE SLIDES, UNLESS CREATIVE COMMONS). ALSO, THANKS TO **CHAT GPT** FOR HELPING ME STREAMLINE MY EDITING FOR THE SLIDE DECK. AND LASTLY, A ROUND OF APPLAUSE TO **JUAN JAMES PHAN, DAVID JACQUES** AND **GIL ALTER** FROM THE **MIDJOURNEY: PROMPT TRICKS FORUM** FOR THEIR LEADERSHIP IN THE AI SPHERE.

The next lecture in this texture series, 'Stormy Weather', continues exploring large-scale textures, still under the umbrella of **Camera Basics for Generative Art VI**.

Camera Basics for Generative Art VI

An introduction to design and composition.