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Publisher and Printer:
BILNET Printing, Binding, Label &
Creative Paper Products.
Dudullu Organize Sanayi Bolgesi
1. Cadde No:16 Umraniye, 34776
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978-625-409-591-7

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Edition/Year:
Limited Edition (1)/2021

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Preface

Asst. Prof. Dr. Alex Wong previously investigated fog and mist formation (2009-2014) as his conceptual and metaphoric subject in the Himalayan borderlands by highlighting the borderlands' identity dilemma. The ideas of inclusion and exclusion, identity within one's community, and the borderlands' relationship are hard to define, and the possibility of borderless borders. Due to the high altitude and extreme weather conditions in this region, he discovered and started to photograph the challenging, unfriendly, yet intriguing *Vanishing White* series. From 2015 until recently, he continues to arrest subjects and conditions that are below minus degrees Celsius.

At the age of eighteen, he started to use photography to document and retain uncontainable moments. Besides spending painstakingly efforts to arrest and to structure his photographic works in narrative form, he is keen to visualize and interpret his work in a cinematic composition that draws an epic meaning with a purpose to witness, to document, to inspire, and to question. On the other hand, most photographers take the weather as part of their essential factor and consideration to obtain ideal photographic results. However, Dr. Alex's approach uses climate, weather, and its ever-changing phenomena as his artistic subject of investigation and discovery. Therefore, his project is always a work in progress.

Human activities slow down when the temperature drops. The chilling, unfriendliness, and extreme weather condition keeps people away. He finds her gentle yet harsh, hostile yet strangely alluring. She endures his presence but rarely welcoming. In a sense, the cold is his mentor. Dr. Alex aspires to bring a new perspective of capturing the frosty landscape, an epic cinematic and composition that is impossible before. With the frosting snow and ice blanket, the deep silence sounds like an eternity. As such, most of these magical white spaces and moments come and go, uncontainable, vanish.

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01 Eng

Ice Canvas

The journey across the frozen Lake Baikal is part adventure documentary, part environmental saga. This artistic search is to arrest the moments of the epic encounter of the permafrost landscape. This series intends to showcase the unique formation and peculiar facet of the oldest (25 million years ago), deepest (1615 meters) (Alastair. 2012), and biotically diverse existing freshwater lake on earth during the coldest period in winter. Lake Baikal holds one fifth (20%) of the world's freshwater. This lake harbors more species than any other lake globally, and many are endemic (Martin. 1994). More than half of the approximately 2500 animal species (Timoshkin. 1995) and 30% of the 1000 plant species are endemic (Bondarenko et al. 2006). Therefore no lake is more ecological diversified than Lake Baikal. In 1996, UNESCO declared Lake Baikal a World Heritage site in recognition of its biodiversity and endemism. Unfortunately, by the end of this century, the Baikal region's climate will be warmer and wetter, particularly in winter. As the climate changes, ice cover and transparency, water temperature, wind dynamics, and nutrient levels in the soils are the critical abiotic variables that will shift, thus eliciting many biotic responses. Unlike many lakes globally, ice is arguably the single most crucial abiotic driver in Lake Baikal. Among the abiotic variables, ice cover changes will likely alter the food chain structure and function most. It is because of the diverse ways in which ice affects the lake's dominant primary producers (endemic diatoms), the top predator (the world's only freshwater seal), and other abiotic variables (Obolkina et al. 2000). Future shortening in the duration of ice cover could curtail the growth of the lake's endemic diatoms because, unlike most diatoms, they bloom under the ice in springtime and are highly dependent on ice cover for their reproduction and growth (Mackay et al. 2006). Changes in ice transparency, resulting in either more or less light penetration, could also alter the spring phytoplankton bloom, and several scenarios are possible with warmer, wetter winters. The diatoms constitute the principal food of tiny crustaceans abundant in the lake, and these are, in turn, preyed upon by the lake's fish. Melting permafrost will probably exacerbate additional anthropogenic stressors (industrial pollution and cultural eutrophication) and significantly affect ecosystem functioning. Among these stressors, climate change is arguably the most insidious because of its seemingly inexorable momentum and the many ways in which it can create synergisms with other anthropogenic stressors currently confronting the lake.

Climate change is also likely to promote land use and shoreline integrity that could accelerate Lake Baikal's cultural eutrophication. As climate warming continues, ice thickness and coverage in winter will continue to wane, preventing the transport of essential supplies across the ice to shoreline villages. In time, it will speed the construction of land-based roads to villages to ensure the delivery of goods in winter. These roads could promote localized development and nearshore eutrophication. Another example of land-use change with climate warming is more significant tourism and more building construction, which is already occurring in localized areas on highly erodable soils. Finally, thawing permafrost resulting from climate change will exacerbate nearshore inputs of sediments and nutrients that have been elevated in recent decades by anthropogenic shoreline erosion. The potential for climate change to enhance Lake Baikal's cultural eutrophication is particularly significant because its current trophic status may be changing. Although Lake Baikal's offshore waters are still oligotrophic (Tarasova et al. 2006), the entire lake's trophic level is unclear because reliable measurements of nutrient concentrations are rare and intermittent (Granina. 1997).

Although Lake Baikal is below the Arctic Circle, the Baikal region shares many characteristics with the terrestrial Arctic, such as extreme weather variability, permafrost within the watershed, and long seasonal duration of ice. The arduous attempt is to capture the freezing lake peculiarity in her coldest period. In winter, the upper layer of ice freezes as thick as two meters. The drone managed to fly between minus 20 to minus 40 Celsius, and occasionally with 50 kph wind speed; it is almost like flying a kite in the air and grounding the drone with the sound of a grass cutting machine. Sometimes the drone would prefer to land itself earlier, and the remote controller screen went blank, as a sign of protest to the madness chilling weather condition. From far away distance, the white splashes seem like sea waves.

01 中文

冰帆布

游走冰封的贝加尔湖，除了是纪实拍摄的历险之旅，亦是为了见证这寒冷环境的传奇奥妙。我这趟追求的艺术创作是想捕捉这万年冻土景观史诗般的邂逅时刻。第一章的系列作品旨在展示地球上现存最古老的(2500万年前)，最深(1615米)(Alastair.2012)，及生物最多样性的淡水湖在极致寒冷的冬季时期的独特形态和殊胜美貌。贝加尔湖被公认拥有世界上五分之一(20%)的淡水。依附在这个湖泊的物种比世界上任何一个湖泊都更多，当中许多是世界上仅有的流水特有种生物(Martin.1994)。而这些特有种生物(Bondarenko et al.2006)不仅在约2500种动物类中(Timoshkin.1995)占了一半以上，同时也在1000种植物类中占了30%。因此，没有任何一个湖泊比贝加尔湖的生态更为丰富和多样化。1996年，联合国教科文组织宣布贝加尔湖为世界遗产，以表彰其生物多样性和地方性。不幸的是，直至本世纪末，贝加尔湖地区的气候将更加温暖与潮湿，尤其在冬季。随着气候的改变，冰层的覆盖率和透明度，水的温度，风的动态和土壤中的营养水平这些关键性非生物变量，都将产生变化，从而引发许多生物反应。有别于世界上许多湖泊，冰可以说是贝加尔湖最重要的一个非生物驱动因素。在非生物变量中，冰层覆盖的变化极可能会改变食物链的结构和功能。这是因为冰会对湖泊中主要的初级生产者(特有的硅藻)，顶级捕食者(世界上唯一的淡水海豹)和其他非生物变量带来各式各样的影响(Obolkina et al.2000)。未来冰层覆盖时间的缩短预计会抑制湖中特有硅藻的生长，因为与大多数硅藻不同的是，春天时贝加尔湖的硅藻会在冰层下绽放开花，并且高度依赖冰层覆盖来进行繁殖和生长(Mackay et al.2006)。冰层透明度的变化，将导致光照的增加或减少，并影响着春季浮游植物的繁殖，在温暖潮湿的冬季，各种的状况都有可能发生。硅藻成为了湖中丰富的微小甲壳类动物群的主要粮食，而这些甲壳类动物又被湖中的鱼类所捕食。冻土融化可能会加剧额外的人为压力因素(工业污染和文化富营养化)的影响，并可能极大地影响生态系统的功能。在这些压力因素中，气候变化可以说是最隐蔽的，因为它的影响似乎无法阻挡，而且它可以通过多种方式与湖泊目前面临的其他人为压力因素产生协同作用。

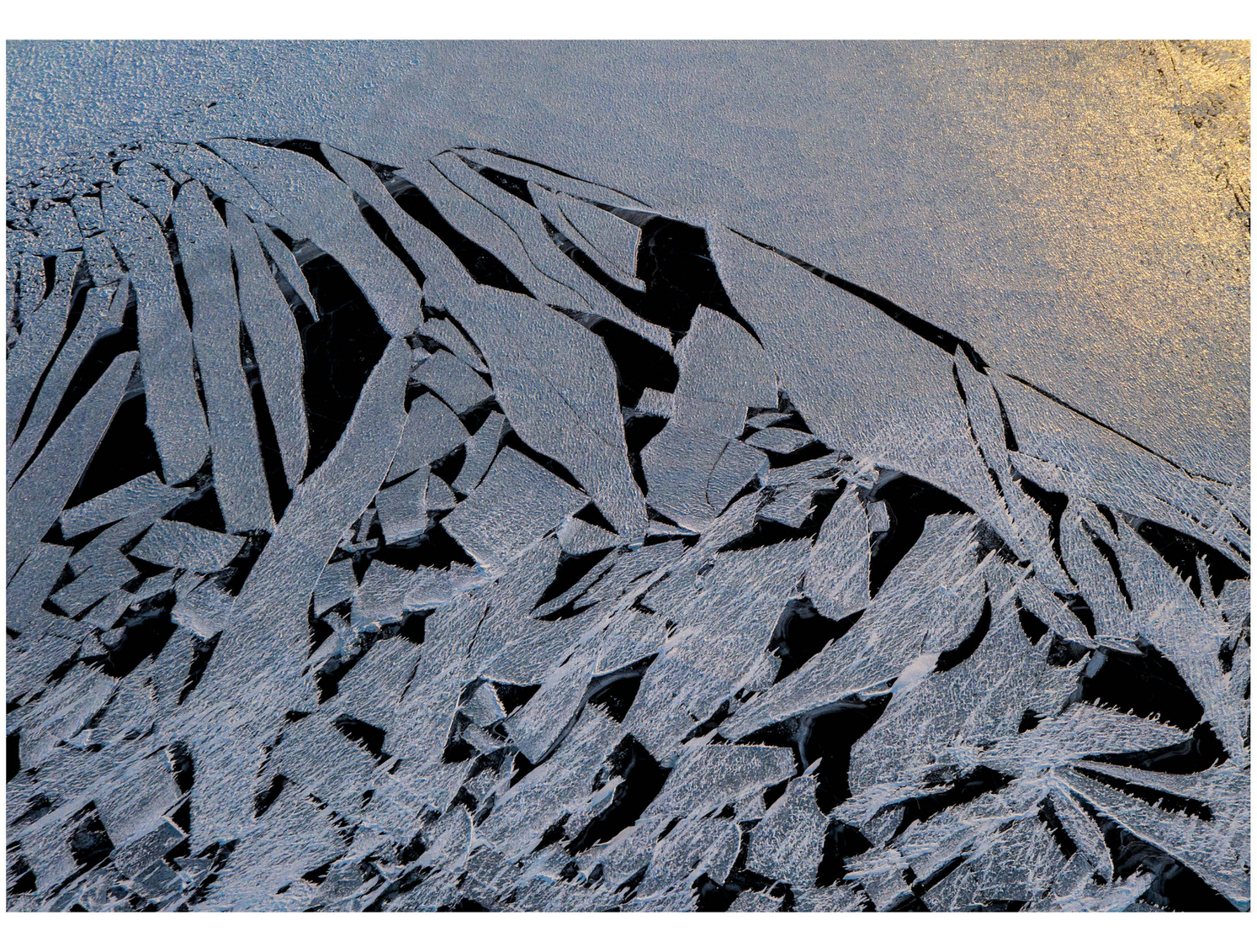
气候变化还可能促使土地使用和海岸线完整性的改变，从而加快贝加尔湖的生态文化优养化。随着延续性的气候暖化，冬季的冰层厚度和覆盖率将持续减弱，进而阻挠了跨越冰层的基本物资沿岸村庄运输。这也导致通往村庄的陆路建设迅速发展，以确保冬季的货物运送无阻。而这些道路也会带动当地的发展和近岸优养化。另一个随着气候变暖而改变土地用途的例子是更蓬勃的旅游业和剧增的建筑工程，这已经在局部地区的高侵蚀性土壤上发生。因此，气候变化导致的冻土解冻将加剧近岸沉积物和营养物质的输入。近几十年来，由于人为的海岸线侵蚀，近岸沉积物和营养物的输入量已经大量的增加。气候变化增强贝加尔湖生态文化优养化的可能性尤为显著，因为该湖目前的营养状态可能正在发生变化。尽管贝加尔湖近海水域仍然是寡营养的(Tarasova et al.2006)但整个湖泊的营养状态尚不明确，因为营养浓度的可靠测量很少，而且是间歇性的(Granina.1997)。

虽然贝加尔湖位于北极圈以下，然而贝加尔湖地区与北极内陆地区有着许多共同的特点，如变化极端的天气，流域内的永久冻土，季节性的长冰期等。在严寒时期的冰冻湖泊捕捉她的殊胜之美是项严峻的考验。冬天，湖面冰层冻得有两米厚。在摄氏零下20至零下40度之间，我操控着航拍机飞行，时而在50公里时速的风速下飞行，感觉像放风筝似的，航拍机降落时的声音仿如割草机般响亮。有时候，我的航拍机也会任性地自己提早降落，空白一片的遥控器屏幕，以示对疯狂寒潮的天气状况提出抗议。远远望去，白色的雪盖仿佛海浪般。然而冬季结冰的湖面，让周边的村庄成了毫无生气的仙境，一片寂静。在这探索中，纵横交错的冰痕，纹理和碎块构成了完美复杂的画布。冰层的移动，破碎，解冻，压缩，令人望而生畏，就像原本坚实的结冰湖面，当水流在底下流动时，冰层瞬间变得脆弱。这些奇妙的临时冰层因温度上升而消失，短暂的存在却又无法抗拒。谁知道呢？随着世界气温的飙升，在不久的将来，或许坚固的冰层将不复存在，也不会再有可供行走的冰冻湖面。

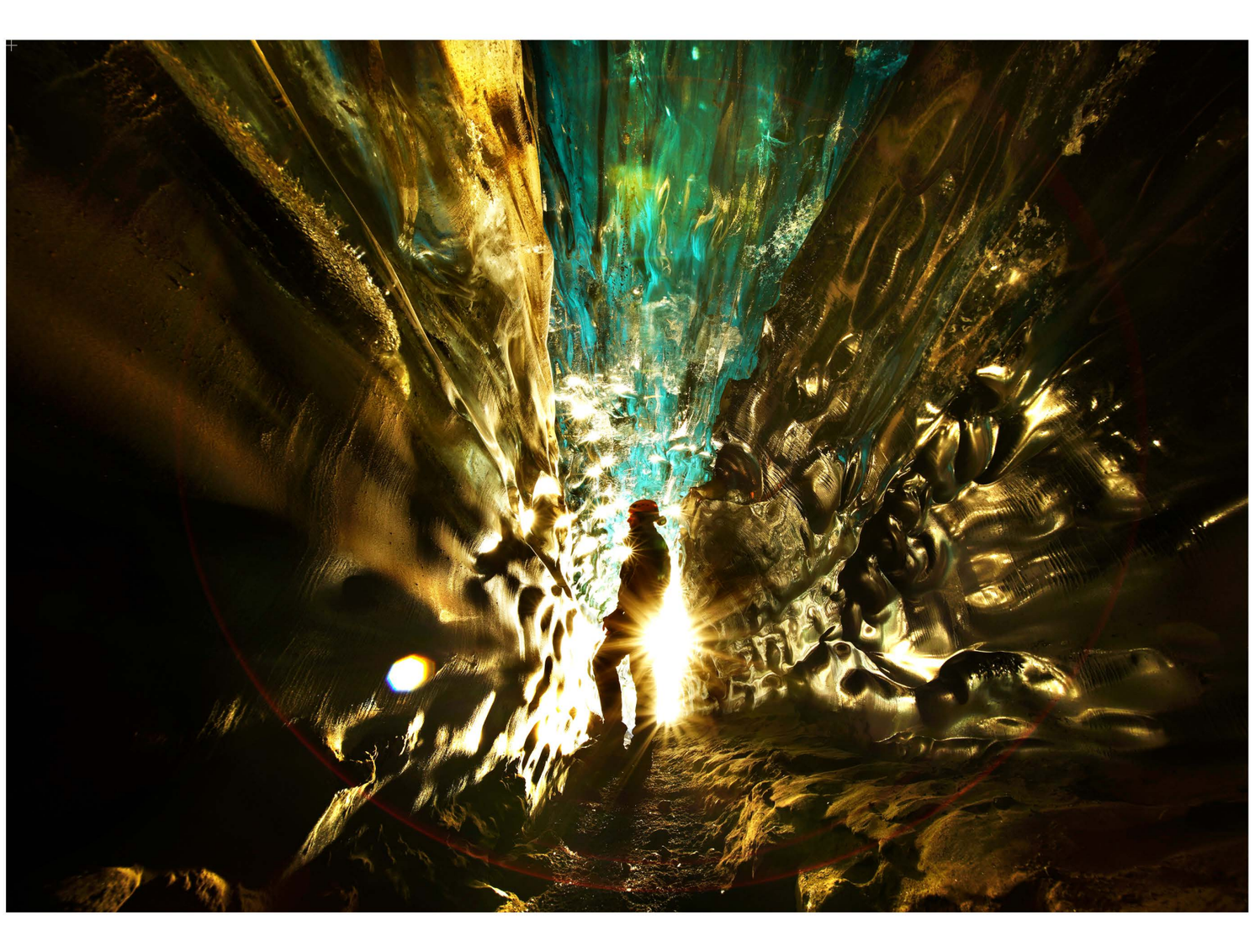
同时，这些被捕捉的照片中，有一部分与美国抽象表现主义者杰克逊·波洛克和弗朗茨·克莱恩的作品相似。杰克逊·波洛克的"滴水画"包括将稀薄的珐琅颜料抛洒和滴落到未拉伸的画布上。他正面的对待材料，物理的参与欢迎重力，速度和即兴的艺术过程，让线条和色彩成为艺术形式。另一方面，弗兰茨·克莱恩认为他的手势画并不是一种表现形式，而是创造一种可以让观众感受到的物理形式和存在的手法。他大胆的风格，僵硬与沉重的黑线几何图形决定了他绘画中的构图。









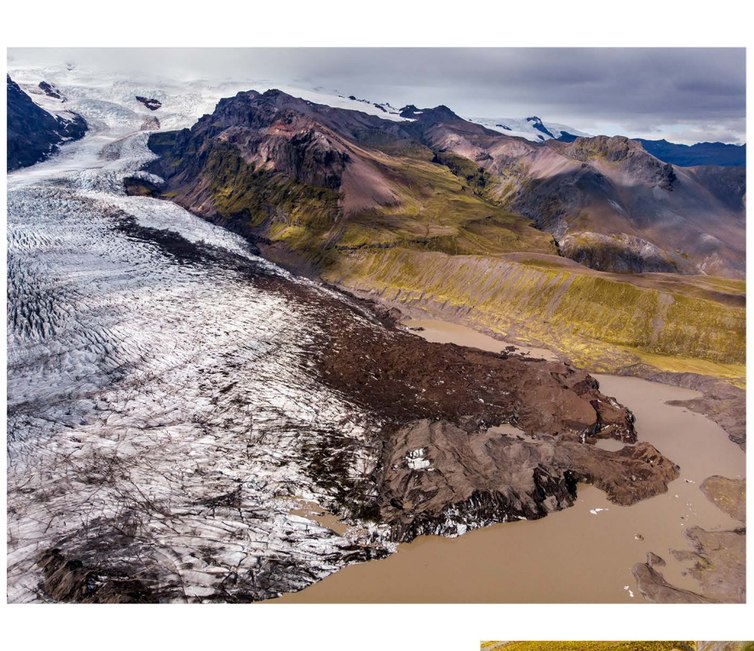


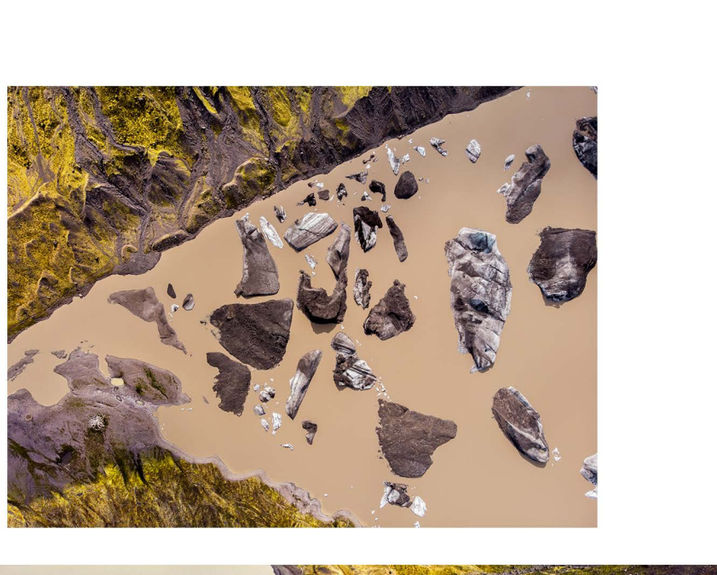


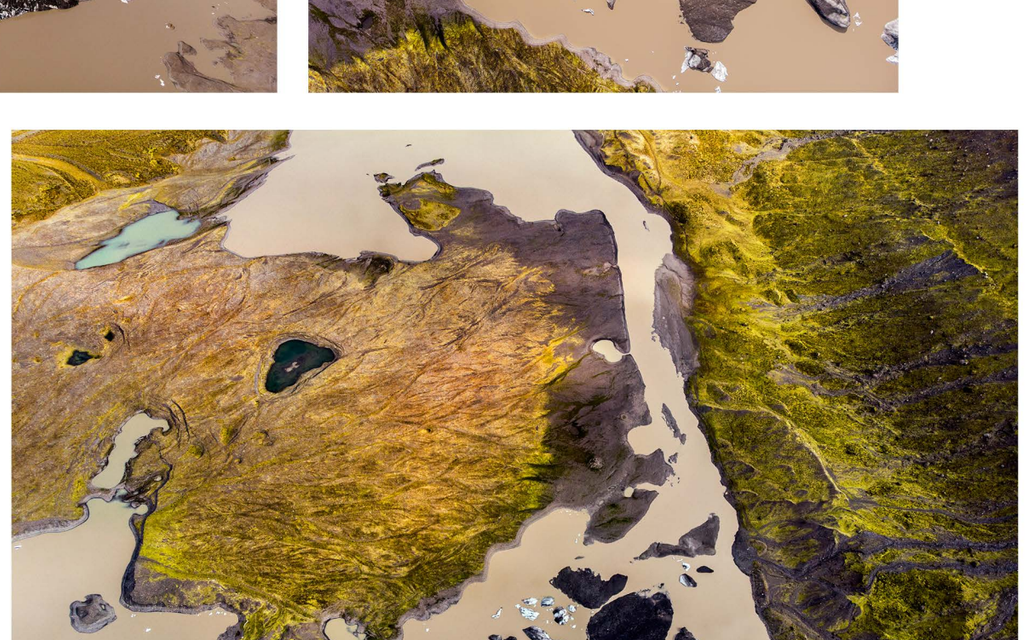


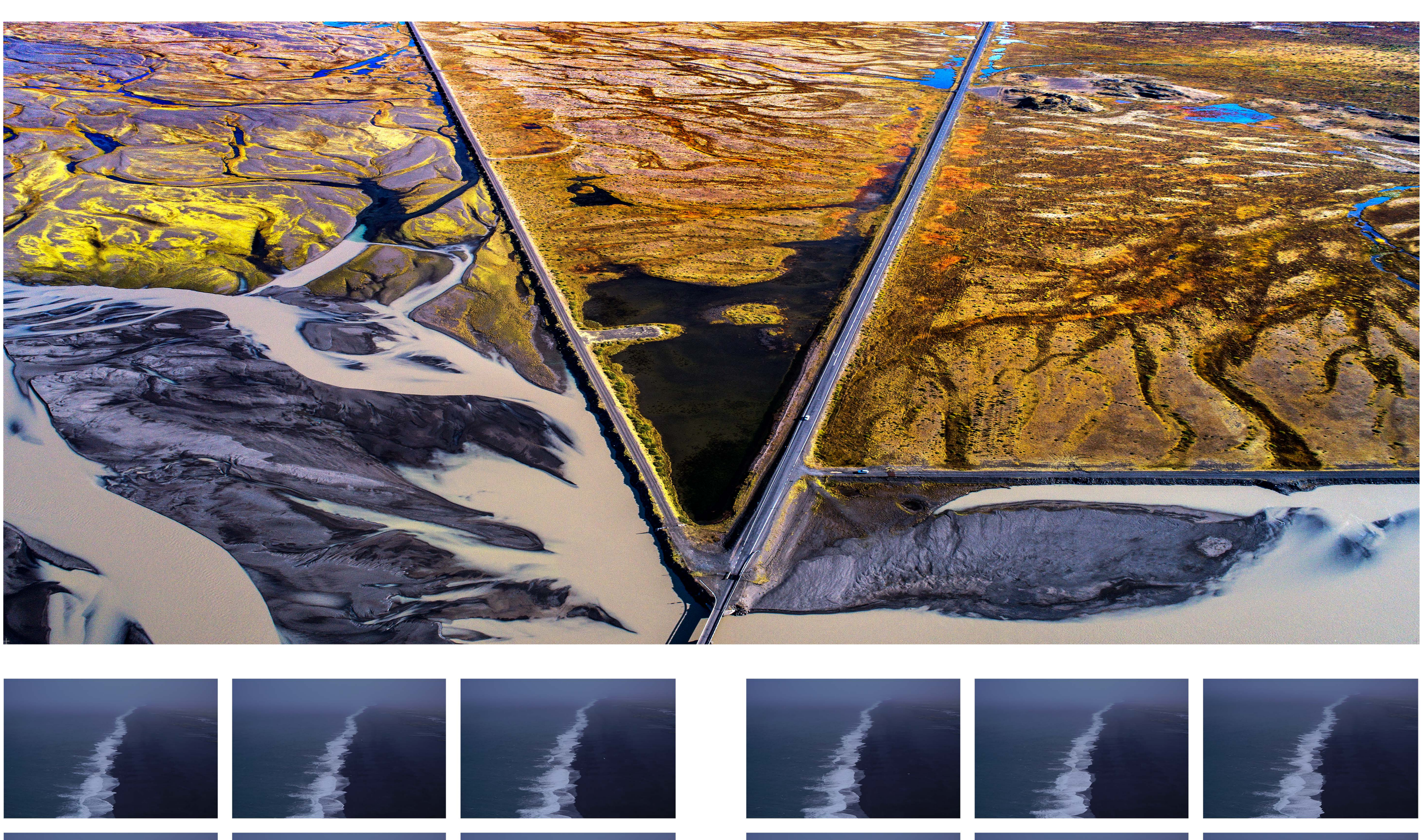


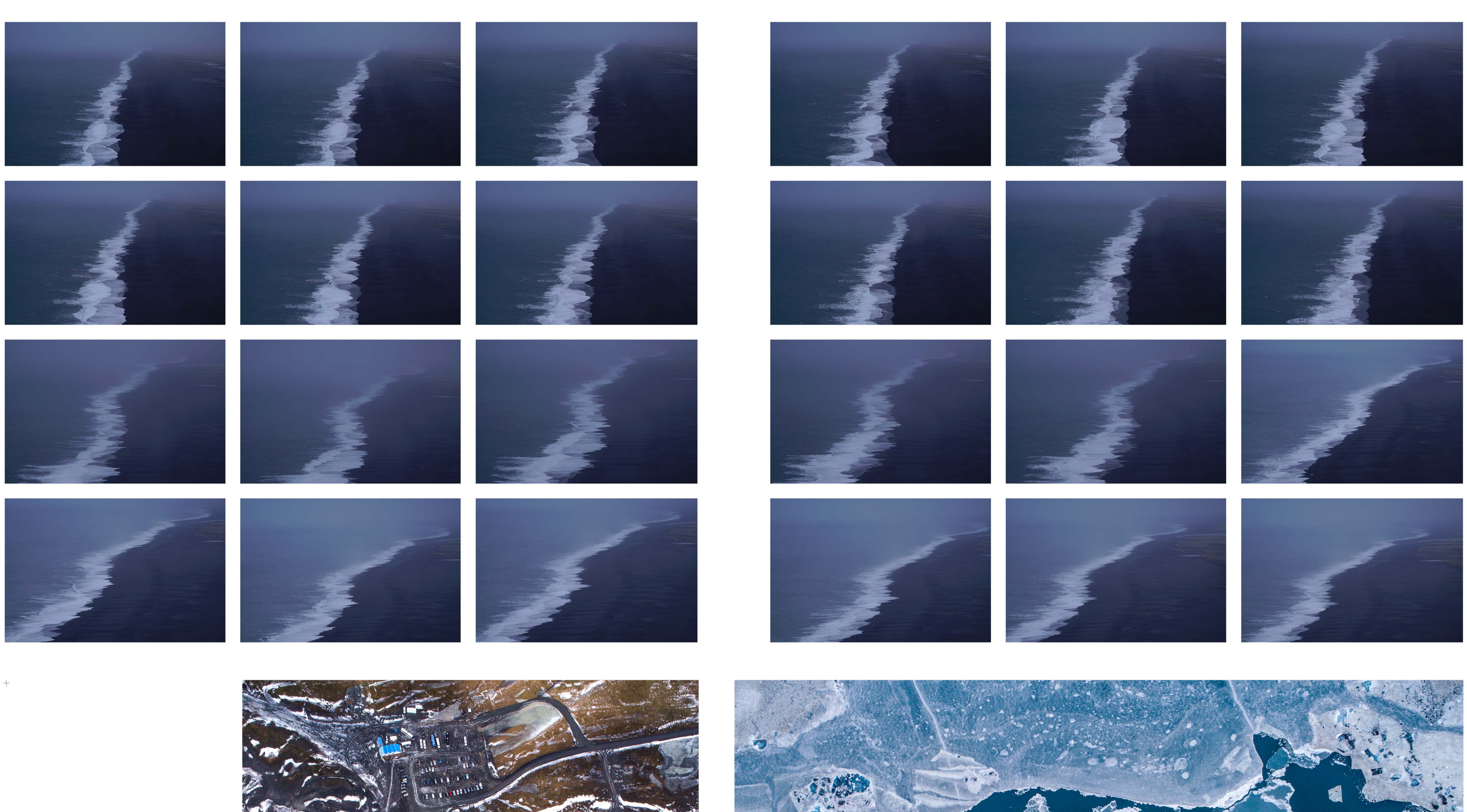


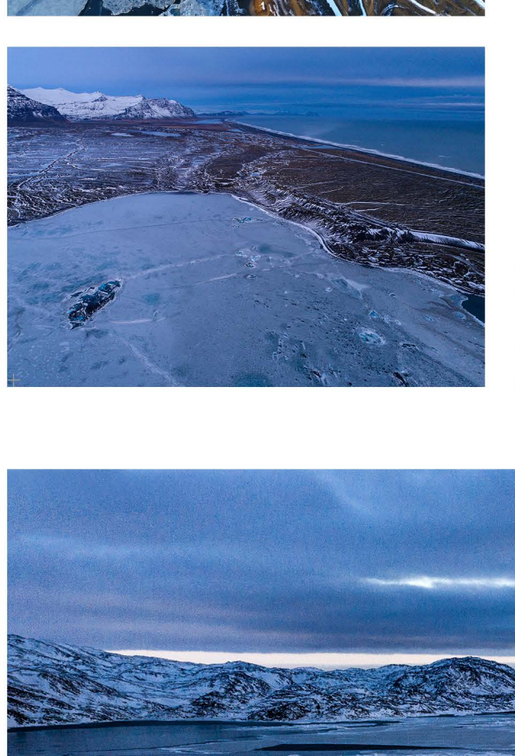


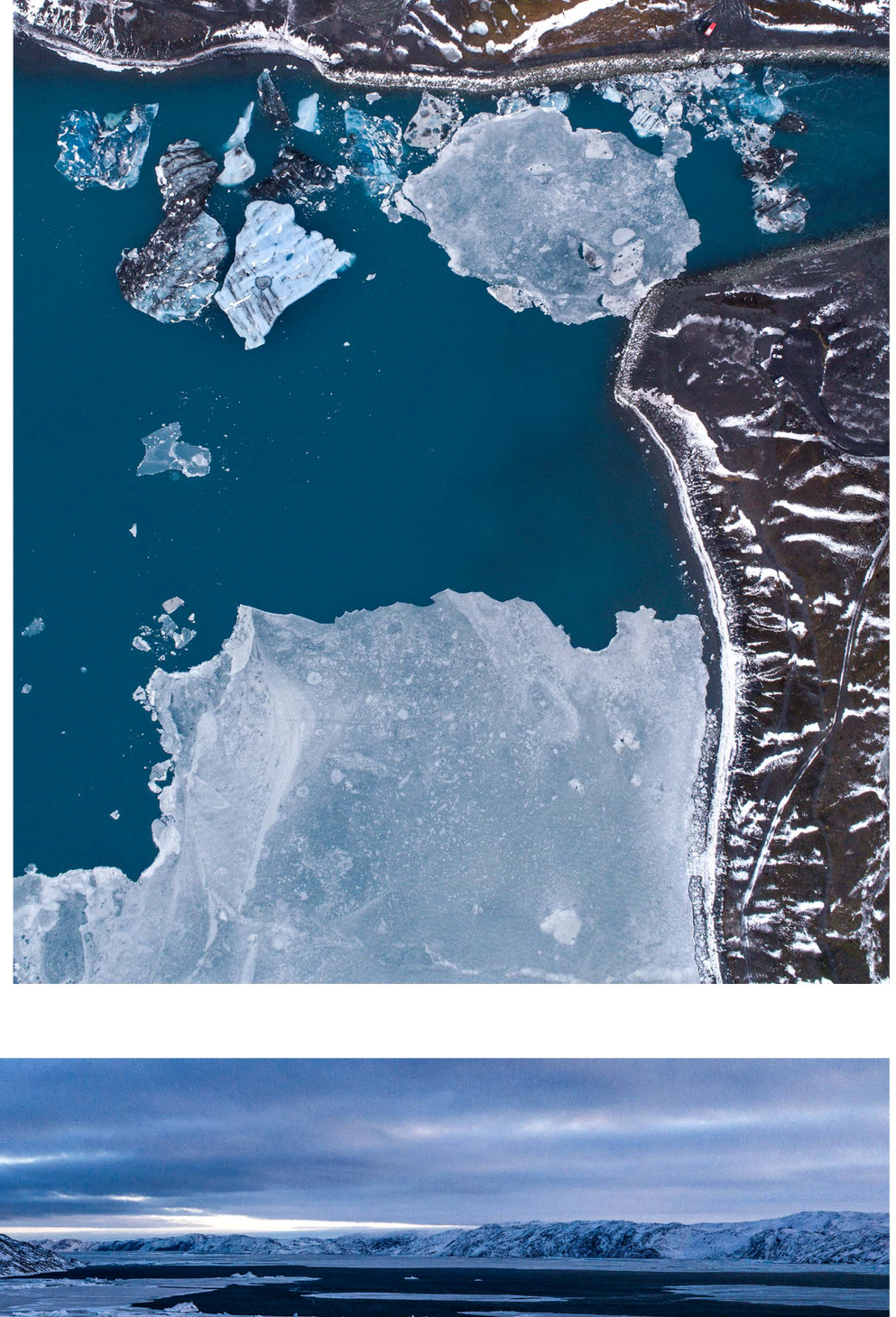






















Author and Photographer Biography

Asst. Prof. Dr. Yoong Wah Alex Wong obtained his Media Arts (Ph.D.) from Bournemouth University, the United Kingdom, Computer Animation (MFA) from SCAD, The University for Creative Careers, Georgia, the United States, Graphic Design (BA) from the Limkokwing University, Malaysia. Since January 2003, he a faculty member at Sabancı University, Istanbul, Turkey, giving courses such as Digital Modeling, Computer Animation, Digital Video, Motion Graphics, and Arts. In 2006, 2014, and 2018, he received the Graduating Class Teaching Award from all faculties at Sabancı University. In 2010, he received the Teaching Award at the Faculty of Arts and Social Sciences, Sabancı University.

He traveled to more than 70 countries, and he has been active in photography for the past 24 years. He has curated 32 exhibits since 2005. His photographs are in more than 13 permanent collections in reputed galleries and museums worldwide. He has received notable and prestigious awards such as the Global Nikon Award, HIPA Award, International Photography Award (IPA), PX3 Award, The Spider Award, Head On International Photo Festival Award, China Photographers Association Award, Renaissance Prize Award, Bar-Tur Photo Award, World Photographic Arts Award, the Worldwide Photography Gala Award, and EPSON International Photographic Pano Award. He is a regular editor and photographer to Photo Creator Publication and a guest speaker to Malaysia National Art Gallery for photography seminar since 2004. He gave practical photography, video, and computer animation seminars and workshops at various acclaimed academic institutions such as the University of Bremen, Germany, Academy of Fine Arts, Vienna, Austria, Lasalle College of The Arts, Singapore, and Taylor's University, Malaysia. He has exhibited and showcased his artworks at various galleries across Australia, Brazil, Bulgaria, Canada, China, Czech Republic, France, Greece, Hungary, India, Ireland, Italy, Japan, Latvia, Malaysia, Mexico, Netherlands, New Zealand, Poland, Russia, Singapore, Spain, Sweden, Switzerland, Taiwan, Turkey, the United Kingdom, and the United States. He is the computer animation and academic events director for ISEA 2011. He also served as panel jury for Kurzundschoen - International Moving Images Festival, Germany, Baku International Cinema Festival, Azerbaijan, Maribor Student Cuts Film Festival, Slovenia, Asian Mosaic Photography Festival, Singapore, Kuala Lumpur Photography Festival, Malaysia, Filmfreeway online, and other competitions, and festivals.