

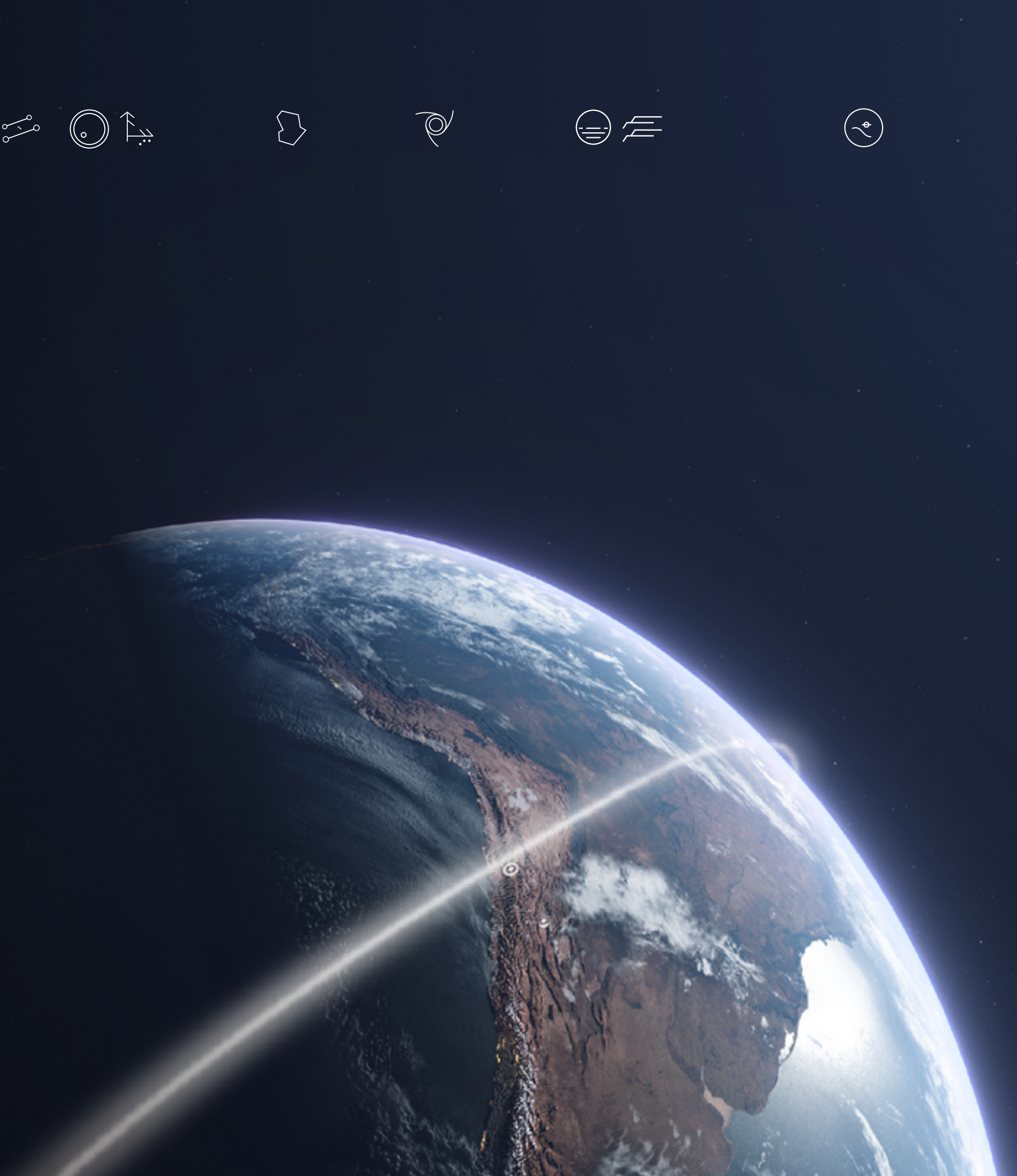


SEPTEMBER 22, 2022

TWELVE EARTHS / SITE 01 / ANNOUNCEMENT

Fathomers is excited to announce Cerros Pachón and Tololo as the first site in artist Michael Jones McKean's long-form planetary sculpture *Twelve Earths*. Nested above the cloudline within the Coquimbo region of Chile's Andes Mountains, is a cluster of intensely powerful telescopes, including the Vera C. Rubin Observatory, which begins operations next year. Once commissioned, Rubin will begin a ten-year observation of the southern sky creating the deepest, widest, and most complete map of the universe ever created, redrawing humanity's understanding of the cosmos and our position within it. As part of the larger effort, this summer McKean inaugurated a five-year artist residency with Rubin that will include developing an artwork at the site of the observatory.

Since 2017, McKean has been developing *Twelve Earths*, a project that connects twelve global sites dispersed along a perfect ring encircling the Earth. Through its culmination in 2029, the artwork will choreograph an exchange between geographic touchpoints quite literally around the world—connecting people, matter, and events. At each of the project's diverse locations, a series of provocations at planetary scale will pose questions of earthly belonging, extending kinship and connection through research, dialogue, and sculpture.



The announcement of *Twelve Earth's* first location highlights the sophisticated astronomical tools that bring us nearer to understanding Earth's cosmic origin story. By counterintuitively looking out and away from the planet into the depths of starlight, we can discover many of Earth's secrets and inner machinations. Peering into the vault of night, humans have encountered some of the most fundamental and existential questions tied to our existence.

Seated atop an arid mountain peak 55 kilometers from the Pacific, near the southern edge of the Atacama Desert, Cerro Tololo holds a complex of 14 international astronomical telescopes built since 1963. Within eyeshot is the second peak, Cerro Pachón, where the famed Gemini South resides, as well as the Vera C. Rubin Observatory. Together, Cerros Pachón and Tololo are arguably the most active and mythical place to observe the cosmos, and in this way, are poetically apt as *Twelve Earth's* first announced site.



*Stacy Switzer*, Curator and Executive Director of Fathomers said,

“For an artwork of this reach, there is no more poignant partnership or place to begin than with the site of the Vera C. Rubin Observatory—where a vast and visionary catalog of the entire night sky photographed over ten years will soon be underway.

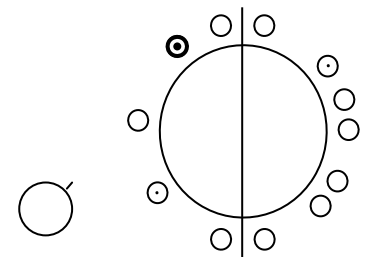
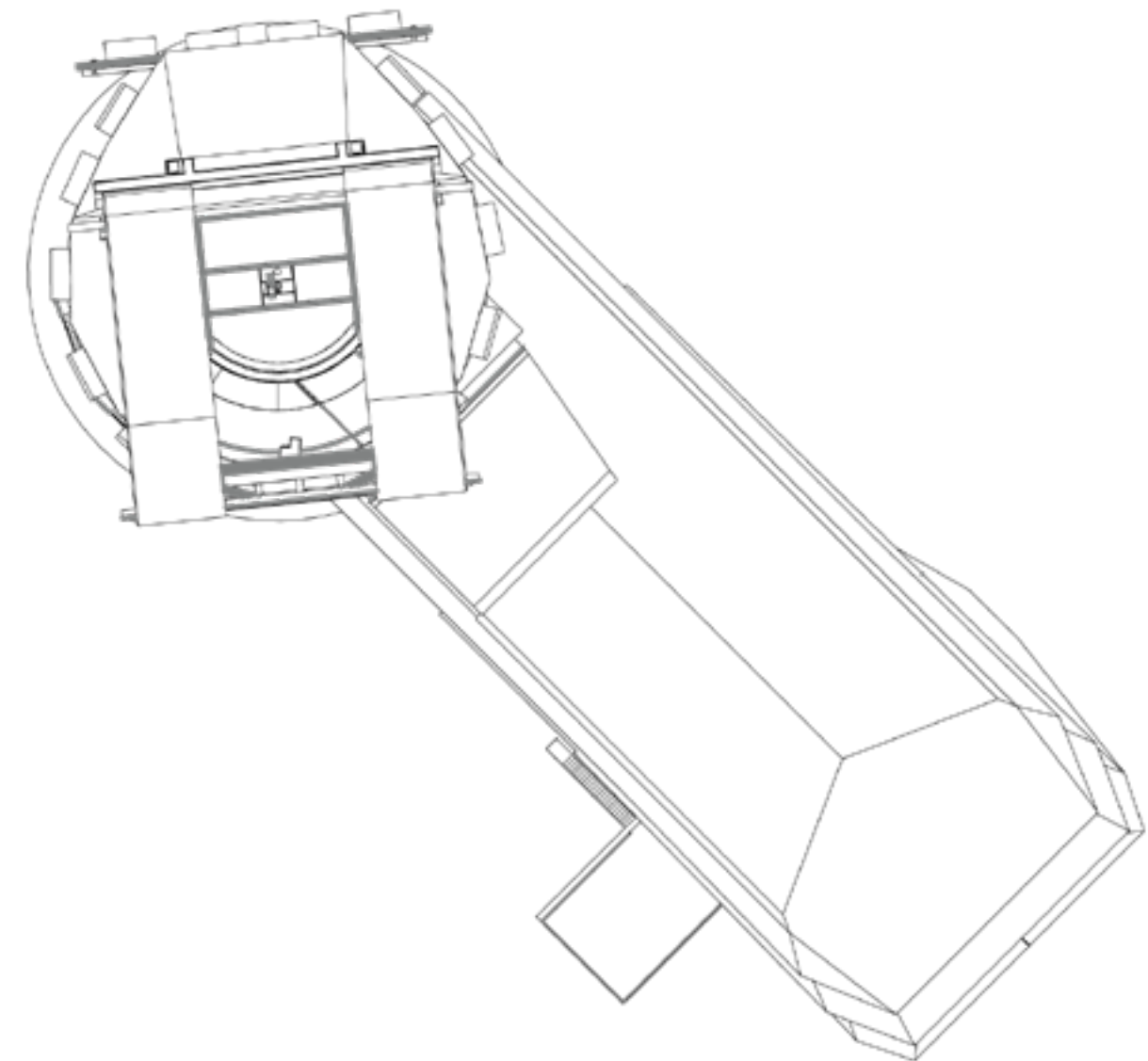
At the heart of *Twelve Earths* is a limitless, ever-expanding curiosity about Earth and its histories and what lies beyond—and Fathomers is excited to share in the vital work of inspiring curiosity together with our partners around the planet.

Anytime what is distant and abstract can become closer and more intimate, the possibilities to change and be changed open up. Art, and artists, play a central role in this process.”



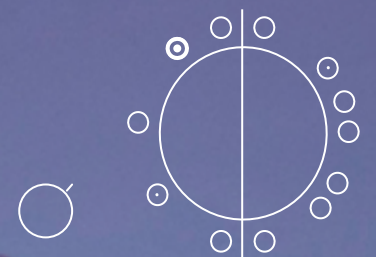
Over 25 years in the making, and one of the most powerful telescopes ever created, Rubin will receive first light in 2024 and commence a ten-year survey of the cosmos, generating and sharing 500 petabytes of data. This data, if transcribed to bookform and stacked side-by-side, would circle the earth over 2,000 times.

Yet the complexity of Rubin's networked systems belies the outward simplicity of its central process. On the summit, with the most powerful camera ever built, a new photograph will be taken every 40 seconds. Continuing this process over four nights, the entire sky is photographed, and when stitched together, the images form a single, though massive, portrait of the cosmos from Earth. This process is repeated again and again for a decade with each image—over 2 million in total—deepening time's register to create an epic film of the universe in motion; its seemingly stoic nature now animated with unseen splendor and detail. The result of this process will be the biggest scientific data set ever produced, ushering in a new era of decentralized, big data astronomy.



Artist *Michael Jones McKean* says,

“On the ridgetops of Cerros Pachón and Tololo, we stand in the shadows of the most complex and aspirational objects humans have ever created. Each of these telescopes is the result of billions of human decisions materialized in a part, a touch, an equation, a technology, all serving to intensify our capacity to see. Rubin lives poetically on the shoulders of countless dreams and discoveries about the material world, crystallized elegantly as an eye into the early origins of cosmic matter.”

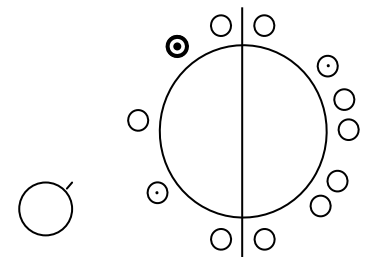
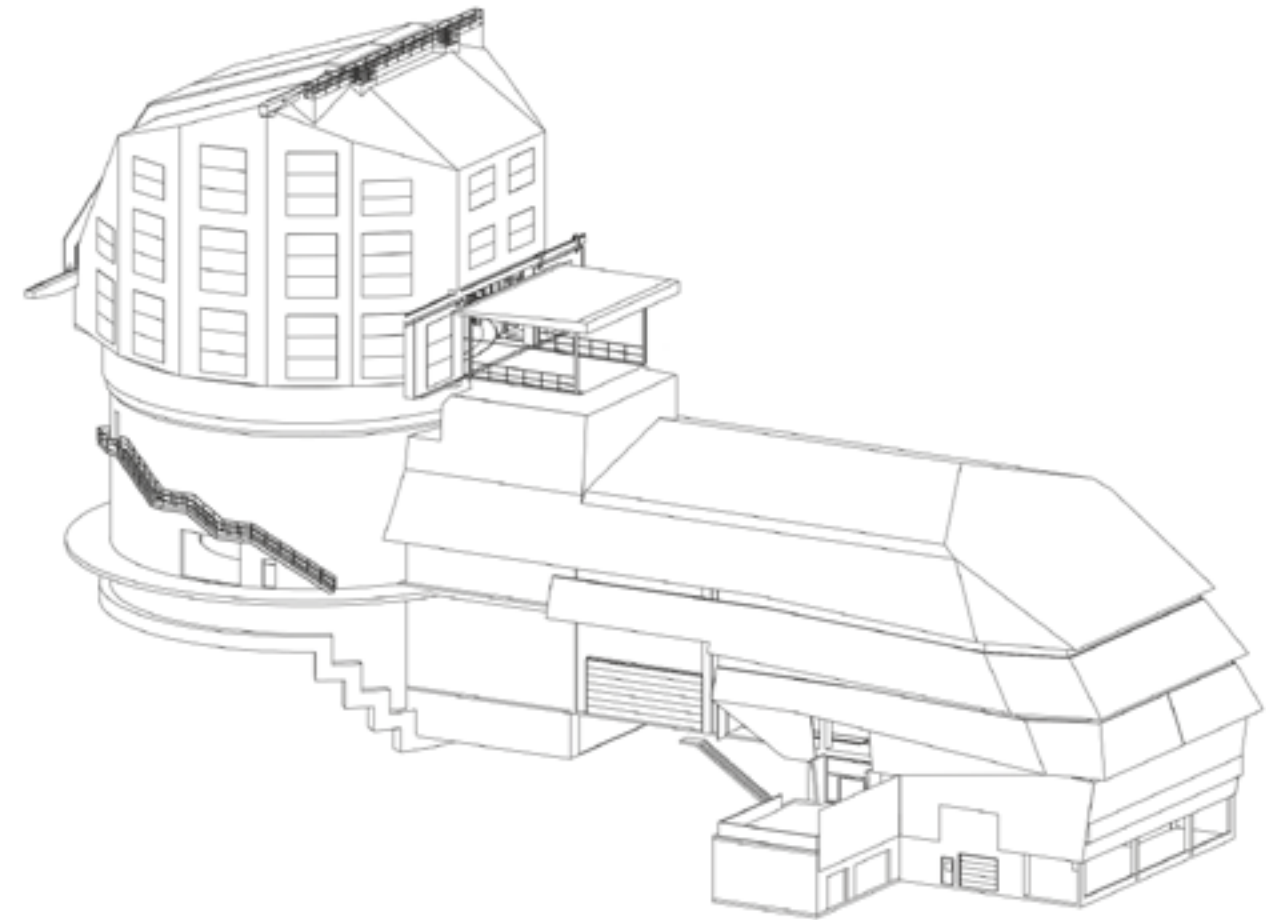


For Michael Jones McKean, the announcement of *Twelve Earths*' first location puts into motion a cascading set of relationships and provocations at the each of the project's 12 locations, including a long-term relationship to Cerros Pachón and Tololo, which began officially this summer with the commencement of a five-year residency with the Vera C. Rubin Observatory.

The residency period will culminate in an artistic gesture at the site that will both honor the location's purpose and histories, while creating a communicative bridge that materially links the Rubin to the region, as well as *Twelve Earths*' eleven other sites.

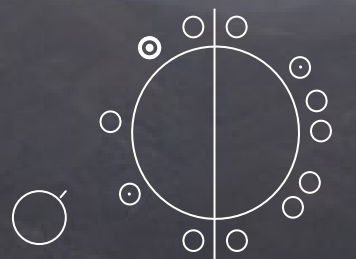
*Twelve Earths*' ring path connects Cerros Pachón and Tololo to a nearly submerged island, a vast precious metals mine, a 15-million-year-old impact crater, a former nuclear testing ground, a primeval forest, an underwater mountain range, landscape of wind turbines, a disappearing island, and more.

As *Twelve Earths* evolves and grows over the years to come, additional details of each site will come into focus creating new connections—in total, communicating as a single beacon through time, toward more distant and unknowable futures.



*Zeljko Ivezic*, Professor of Astronomy at the University of Washington, Director of Rubin Observatory Construction, and Head of the Legacy Survey of Space and Time (LSST) for Operations at Rubin said,

“Rubin Observatory team is very happy to welcome Michael Jones McKean as our first Artist-in-Residence. We are excited about all the connections that Michael uncovered between our Observatory and other sites on his *Twelve Earths*’ ring path. We look forward to ‘peering into the vault of night’ together and connecting science, engineering, and arts—all aspects of our humanity—through this planetary-scale endeavor.”



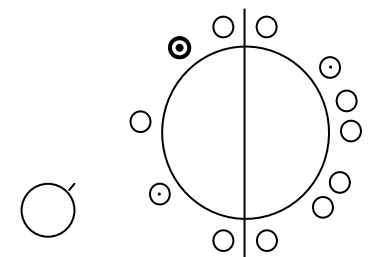
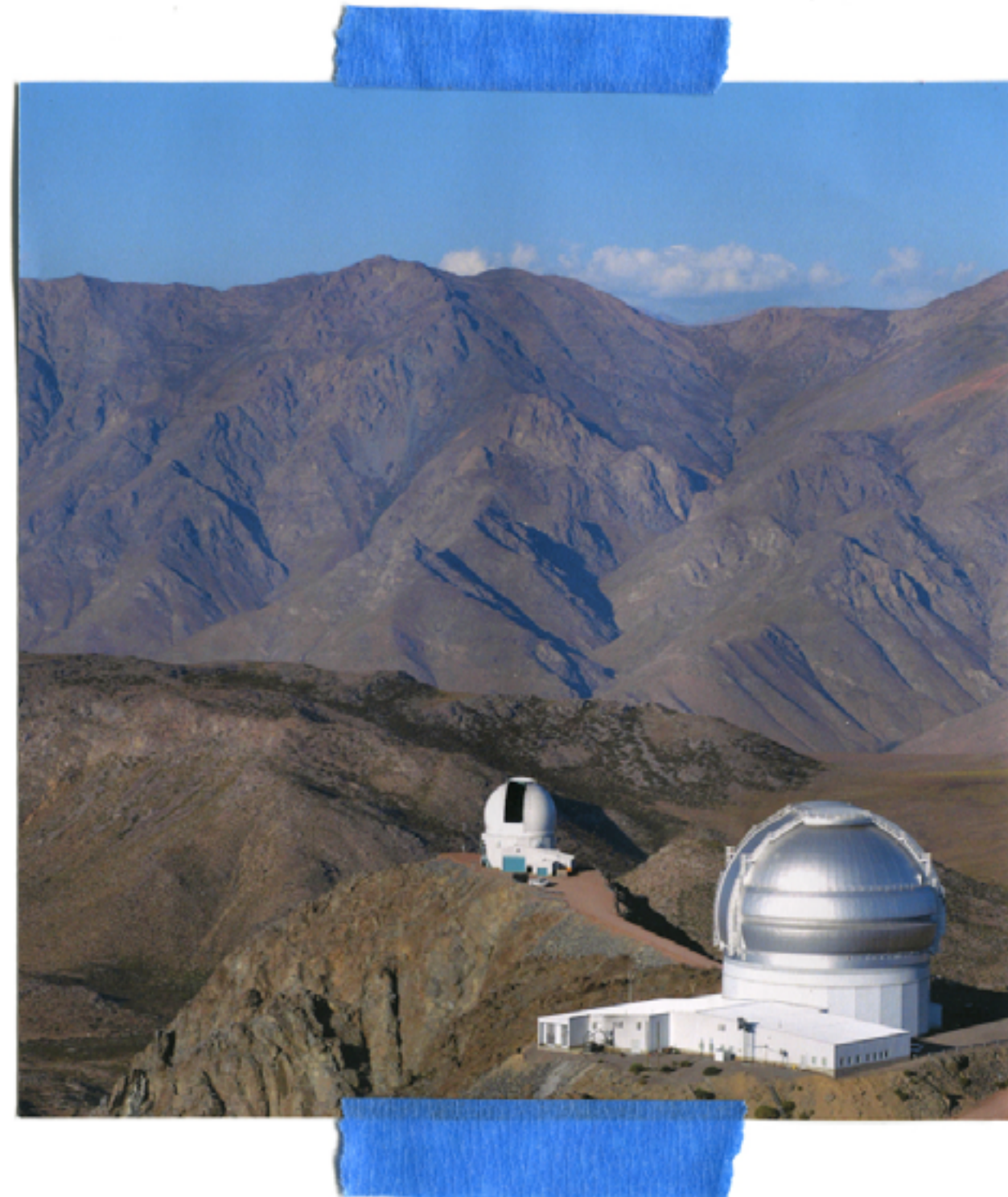


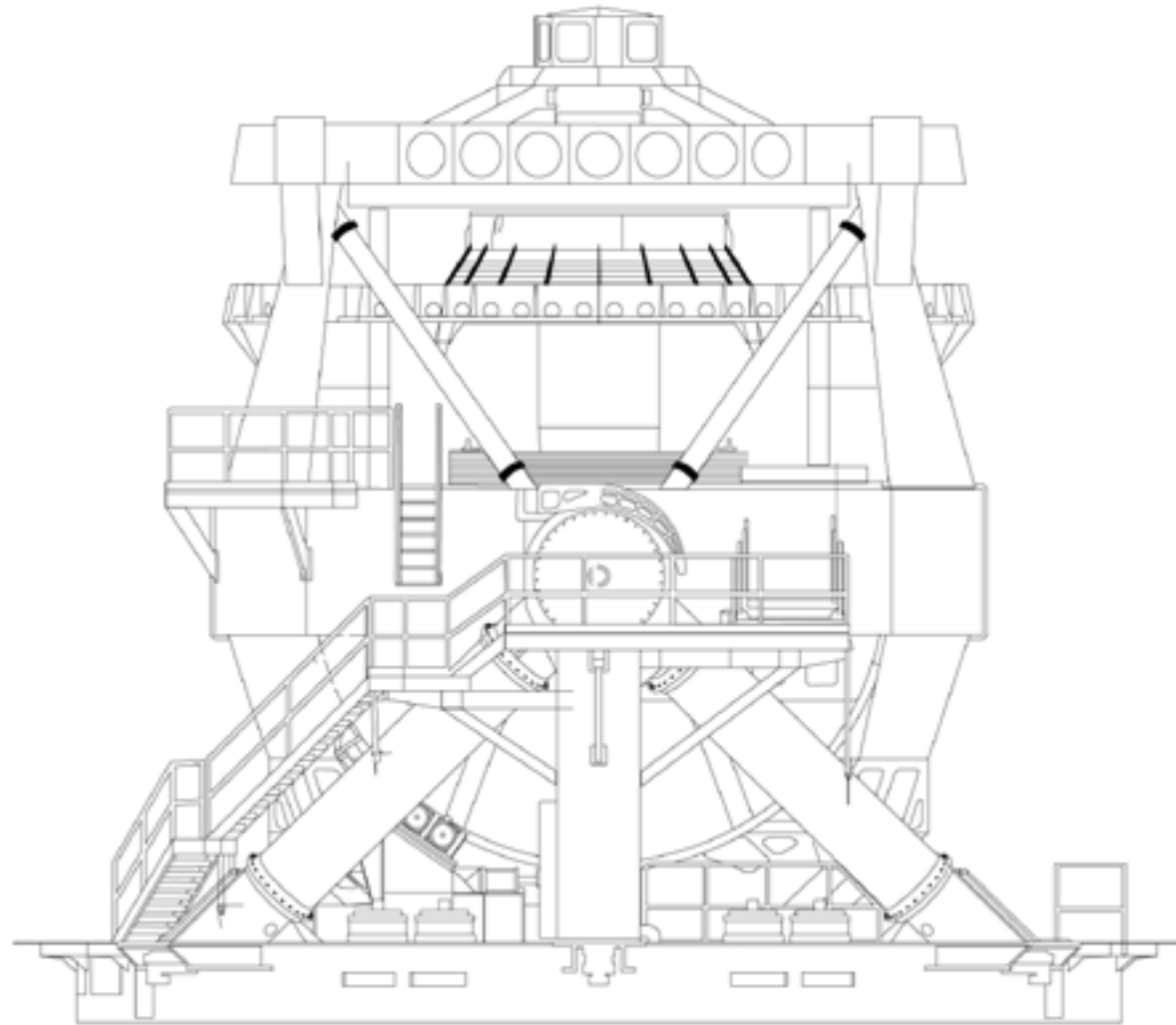
About the scale and form of *Twelve Earths*, Switzer remarked,

“What is a wind, a breath, a molecule, a trace of having been, written in light or skin or code? How do matter, materials, and understanding—of ourselves, of others, and the space between, transmute over time? While McKean’s project tests the outer limits of what we might consider sculpture, it is equally about the most intimate and fleeting of gestures and exchanges.”

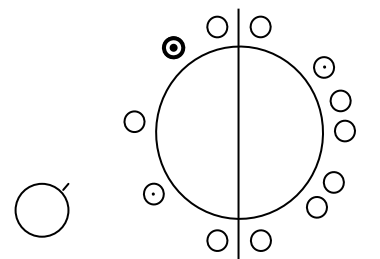
McKean added,

“There is something exceedingly beautiful not only about the landscape at this site, but the way these observatories inscribe planetary-scale collaboration. The function of these objects is not only underwritten in what they can achieve scientifically, but their meaning as poetic, empathic, human objects. The observatories are themselves beacons, living relics for the future recording our collective desires, dreams, and accumulated knowledge.”

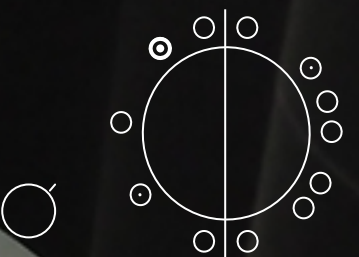
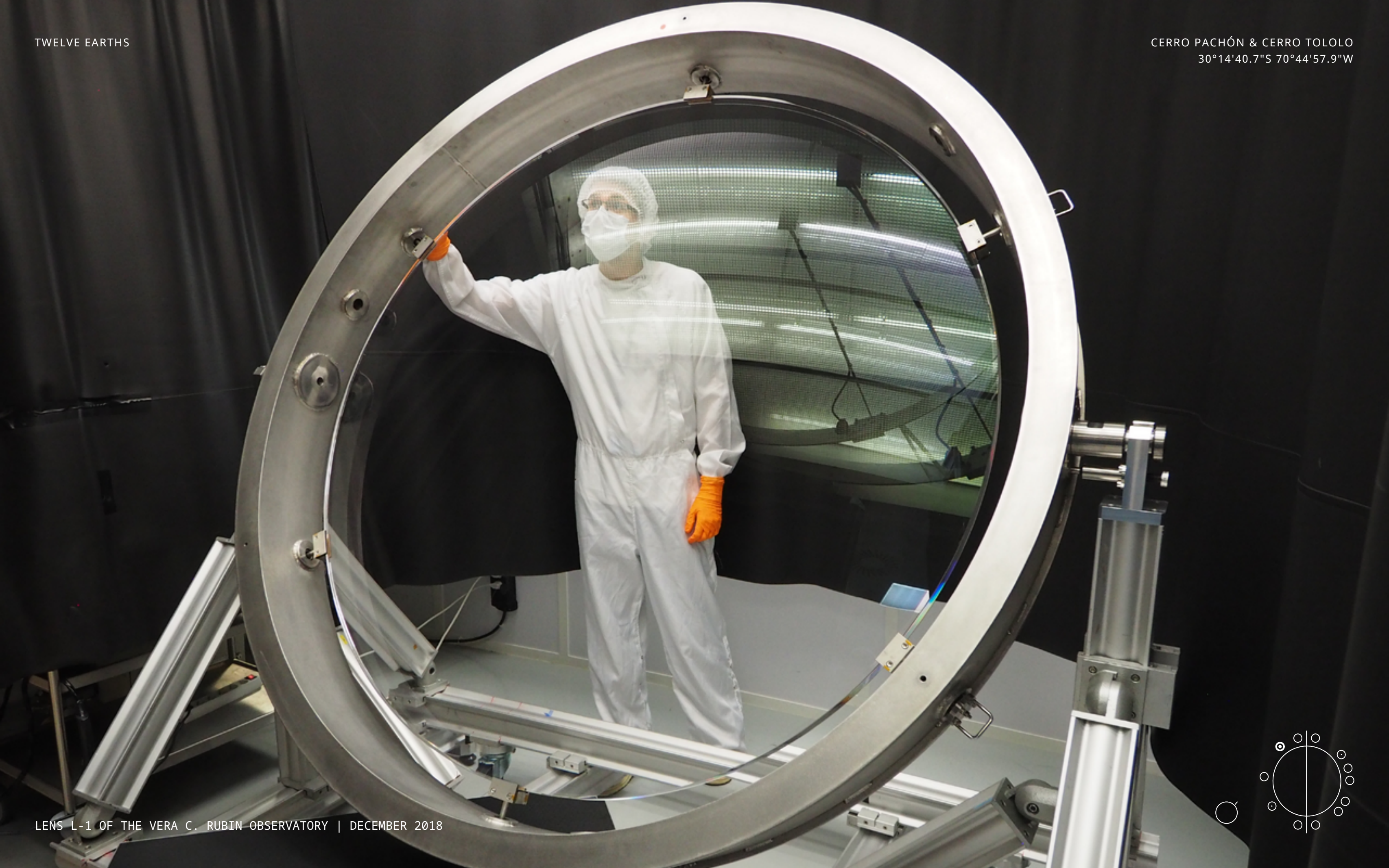




Looking ahead, on March 20, 2023, McKean and Fathomers will announce *Twelve Earths'* second site, continuing a chain of announcements over the long arc of the project. Each location will unfurl as a series of collaborations, initiating logistically complex, but optically subtle material transformations at, and between the twelve sites.

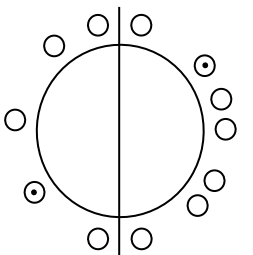






**FAQ: Who is making *Twelve Earths*?** The project is led by artist Michael Jones McKean with critical, long-term support by Fathomers, a creative research institute based in Los Angeles. Working alongside McKean are a number of international thinkers and practitioners from the sciences, arts, philosophy, government, history, business, technology, philanthropy, and more. **Why is the project relevant?** *Twelve Earths* is a planetary sculpture that poses questions of earthly belonging, transformation, and deep time through research, dialogue, and artistic exchange shared between twelve unlikely, but formally linked, locations. It aims to create portals through which to contemplate our lives on the planet and the alchemic material connections we have with Earth itself. The project generates moments of dialogue and exchange at a time in which planetary relations and environmental stewardship are as precarious as ever. **Is *Twelve Earths* a sculpture?** Yes. Early on in the project's development, McKean, a sculptor by training, imagined Earth as a natural human threshold, and in terms of scale, a maximum sculptural unit. The project imagines sculpture as a practice of deep learning tied to emphatic rituals with matter, making, and transformation. **When is it happening?** The project, which has been in development since 2017,

will unfold towards culmination in 2029. By design, the work will exist in different forms indefinitely, continuing to pose questions along deeper timelines in the future. **How is *Twelve Earths* being funded?** *Twelve Earths* has maintained critical support from Fathomers since 2017. The project has also received generous support from a number of organizations, including the National Endowment for the Arts, Sable Systems, WeTransfer, Blueprint Pictures, and the Andy Warhol Foundation for the Visual Arts. **When will the sites be revealed?** Though the sites were determined in 2019, their announcements to the public will be staggered, with locations being revealed in the years leading up to 2029. The first location was announced on the equinox, September 22, 2022. The second location is planned to be revealed the following equinox, March 20, 2023. **Is there an archive?** Yes. A physical archive of the project is currently at McKean's studio and will come to be housed at the Center for Art + Environment at the Nevada Museum of Art after the project's completion. The archive acts as a crumb trail to the project's origins, its methodologies, early and ongoing conversations, source materials, and library, as well as location research, history, geology, current events, and more. A curated archive will also exist on the *Twelve Earths* website.



**How do I experience *Twelve Earths*?** *Twelve Earths* exists as 12 very real locations whose connections are being articulated sculpturally and poetically. While it is certainly possible—and would be rewarding—to physically visit each *Twelve Earths* location, the artwork can be experienced without extensive travel. Local and regional programming will be developed over the longer arc of the project, but participation, however one may define it, may encompass events hosted by affiliated institutions or virtual opportunities for engagement wherever you and your devices may be. While *Twelve Earths* is deeply rooted in specific, singular places, it also exists through ideas, which allow it to be experienced from numerous vantage points. *Twelve Earths* by and large is an antenna that helps modulate real, physical aspects of the Earth into signals—stories that help re-mythologize place.

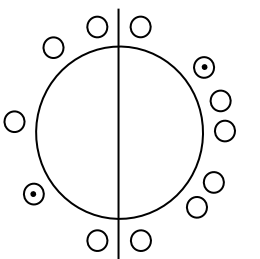
**How were the locations determined?** Determining twelve sites, each linked formally along a continuous path around the globe, required years of research. The process began with the development of a coordinate database with thousands of global locations that each relay different chapters of Earth’s larger story. An algorithm was then developed to sift through the database, drawing millions of paths, or rings, around the Earth. Out of 67 million potential routes, a handful of rings emerged that, against geographic odds, connected a few locations in our database. From individual analysis, these four rings—each remarkable, strange, mysterious, and tonally idiosyncratic—were studied in granular detail. After thorough research and conversations with

partners around the world, *Twelve Earths*’ ring path gradually and gracefully emerged.

**Why twelve sites?** *Twelve Earths* lives in communion with mythic, folkloric, and spiritual traditions. Accordingly, the number twelve has held significance in cultures around the world, showing up in everything from timekeeping systems to musical notes, astrological houses, counting systems, and magic symbolism.

**Why take so long to finish an artwork?** *Twelve Earths* takes cues from the natural speed of the planet. As a team, we are prioritizing building slow, respectful dialogue with local stakeholders at the sites. Relationship-building takes precedent over predetermined outcomes, so we can allow true conversations—and friendships—to blossom. We think of slowness not as an obstacle to surmount, but as a care practice that deepens engagement, and helps us to be in right relationship with each other and the Earth.

**How can I become involved?** In many cases, the best way to experience *Twelve Earths* is through deeper, more personal involvement. An artwork at this scale and complexity requires the support of many voices and skill sets: engineering, material sciences, bio-sciences, geology, wayfinding, philanthropy, and so much more. If you wish to learn more about ways to contribute to the work itself, or if you’d like to simply receive occasional updates and advance notice of public events and announcements, please be in touch at [hello@twelveearth.com](mailto:hello@twelveearth.com). If you wish to explore ways to help lift the project through a gift, we are also eager to speak with you.



TWELVE EARTHS

CERRO PACHÓN & CERRO TOLOLO  
30°14'40.7"S 70°44'57.9"W



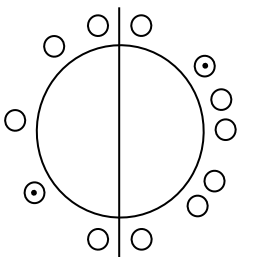
AERIAL VIEW OF CERRO TOLOLO INTER-AMERICAN OBSERVATORY (CTIO)



**MICHAEL JONES MCKEAN** (b. Micronesia, lives/works in the US and France) is a sculptor whose work explores the nature of objects in relation to folklore, technology, anthropology, and geography. McKean has received numerous awards including a Guggenheim Fellowship and a Nancy Graves Foundation Award and has lectured and shown his work extensively around the world. He currently is an Associate Professor Virginia Commonwealth University in the Sculpture + Extended Media Department where he has taught since 2006, and is a Contributing Editor for Art Papers.

**FATHOMERS** founded in 2016, is a creative research institute in Los Angeles dedicated to producing sites and encounters that challenge us to live and act differently in the world. They cultivate the ideas of die-hard dreamers, commission projects that seem far-fetched, and enlist expansive thinkers across disciplines to redefine the limits of scale, scope and support for artist-led projects. They do this because they value discoveries made absent predetermined outcomes, and believe in the power of the realized dream as a test site and model for visionary change.

**THE VERA C. RUBIN** is an Observatory currently under construction in Northern Chile that will conduct an unprecedented, decade-long survey of the optical sky called the Legacy Survey of Space and Time (LSST). Once Rubin Observatory begins operations it will revolutionize the field of astronomy and what we know about the Universe. Rubin Observatory is not just a telescope, it's a complex, integrated system consisting of an 8-meter class wide-field ground-based telescope, a 3.2-gigapixel camera, an automated data processing system, and a public engagement platform.





## TWELVE EARTHS

Doce Tierras

十二地球

Ip-ki Te-ki Nok-in Au

Tekau Ma Rua Nga Whenua

Doze Terras

Zwölf Erden

Двенадцать Земеля

Teruich Mea Teblong El Beluulechad

Он Екі Жер

дванаццаць зямель

Mēbêngôkre kabĕn

## IMAGE CREDITS:

Rubin Observatory/NSF/AURA/Bruno C. Quint: pg. 4

Rubin Observatory/NSF/AURA: pg. 5, 6, 7, 8

SAFRAN: pg. 9

CTIO/NOIRLab/NSF/AURA/D. Munizaga: pg. 14

For more information about *Twelve Earths*, McKean's work with Rubin Observatory, or how to become involved in the project, please visit [WWW.TWELVEEARTHS.COM](http://WWW.TWELVEEARTHS.COM), or reach out to [YES@FATHOMERS.ORG](mailto:YES@FATHOMERS.ORG).

---

[WWW.TWELVEEARTHS.COM](http://WWW.TWELVEEARTHS.COM)  
[@TWELVE\\_EARTHS](https://twitter.com/TWELVE_EARTHS)

---

