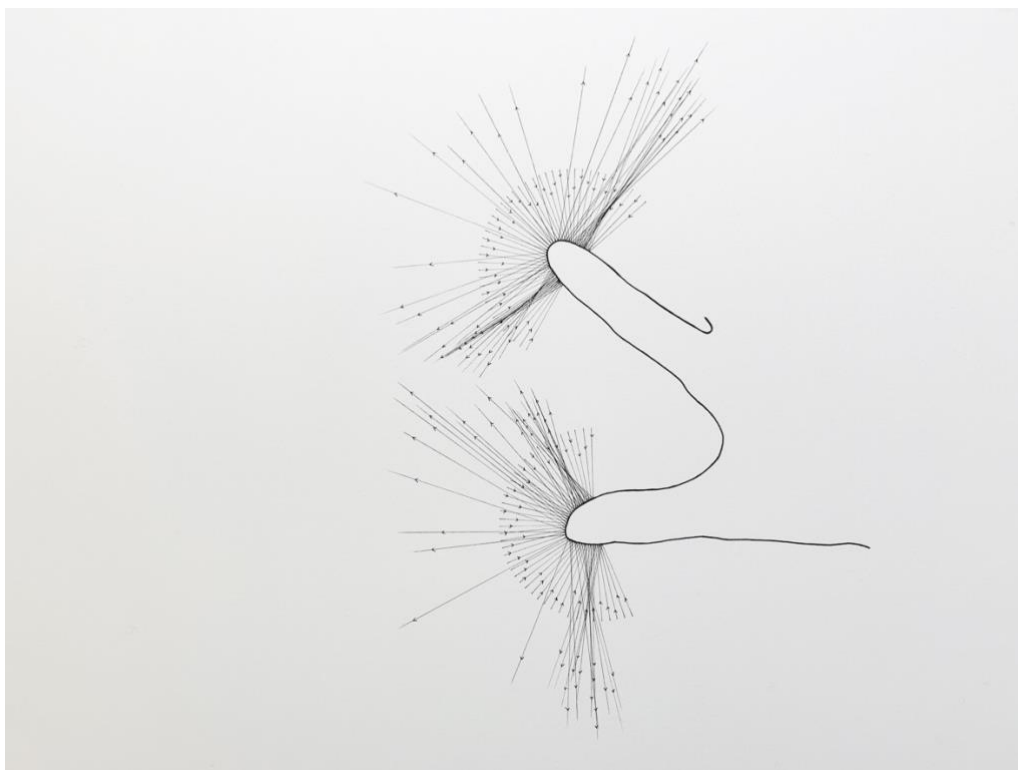
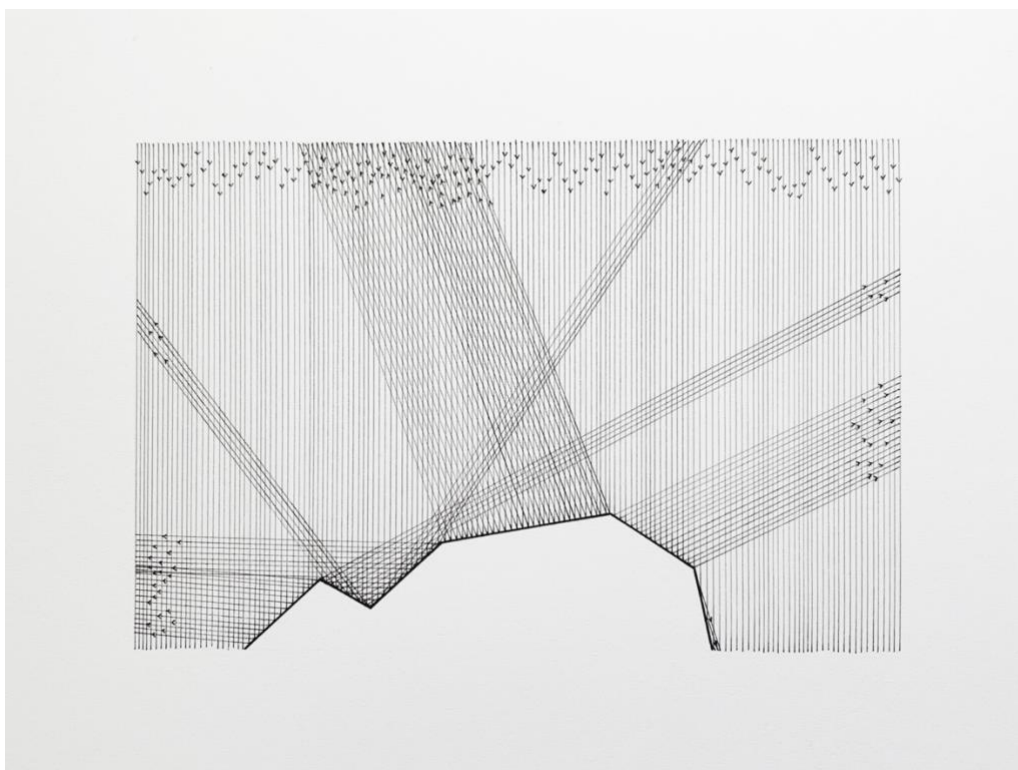


Elizabeth McTernan: Proposal for Centrum's Open Call | Open Floor 2020–2021

Andscapes + Landshapes



Touch vectors, input-output, ink on paper, 42 x 29.7 cm, 2020.



Sounding Landshapes (Polygon), ink and pencil on paper, 42 x 29.7 cm, 2020.

Concept

***Andscapes + Landshapes* is a series of drawings and performative experiments that deploy sound and abstraction as tools to tune into the concrete world.** In these corona times, the sense of touch has become fraught. Not so long ago, we could freely touch shared objects, surfaces, each other, the neighbor's cat – but now we're experiencing a profound loss of social touch. How has this absence of tactility and intimacy shifted our perception? What knowledge are we missing that is gained only through the hands and physical contact? How can sound as *touch at a distance* begin to fill this gap?

For this project, I have developed my own terms for understanding my work: *Andscapes* are landscapes and *and!* – emphasizing the conjunction “and” over “but.” *Andscapes* are spaces defined by inclusion rather than exclusion. *Andscapes* bring to the fore qualities of surfaces that are usually withdrawn and out of sight, qualities that, if mapped, would likely be edited out as cartographically insignificant or too complex. *Andscapes* exact worlds from worlds. *Andscapes* welcome multiplicity. With *Andscapes*, there are no “buts.”

Meanwhile, *Landshapes* exist in the two-dimensional world of drawing. *Landshapes* are forms in their own right; drawn lines act on and react to them as phenomena rather than representations. *Landshapes* acknowledge the drawing artifact itself as terrain, as operational, as landscape where action happens. *Landshapes* are not just sketches of experiments, but are experiments unto themselves. *Landshapes* are generative. *Landshapes* are defiant in their flatness.

The materials and methods of this project are deliberately humble, in opposition to the proliferation of high-value, high-carbon-emissions production of large art objects. The works use geometry but do not propose a generalist view – their geometry is familiar yet expressly *specific*, indelibly marked with the location, time, and hand in which they were made, themselves records of actions in space and time. Both the drawings and sound experiments operate at the hand-scale, making the artworks ready-to-hand as process-driven tools.

Artworks

1. Drawings: **Primarily ink and occasionally pencil on paper, the drawings are many variations of “sounding studies” and “surround-sounding studies.”** They are imagined as experiments with sounding signals in the two dimensions of drawing, with hypothetical sonic forces acting upon lines, circles, polygons, and warbly shapes. See images at the following links:
<http://astheworldtilts.com/index.php/2020/touch-vectors/>
<http://astheworldtilts.com/index.php/2020/surface-sounding/>
<http://astheworldtilts.com/index.php/2020/sounding-landshapes/>
2. Sound experiments: Sounding is traditionally a technique by which a vessel, outfitted with a sonar device, floats atop the surface of a body of water and measures its depths. Meanwhile, sonography is a method, most commonly used in medicine, that uses sound to “see” past the human skin, and to image the body’s soft tissues by detecting varying densities. In an interplay of the meanings of *sounding* and *sonography* in this work, the body of water and the human body are conflated, attributing landscape to body and body to landscape. **With my own self-devised sonographic tool, I further extend this sounding of bodies to the sounding of objects, while also extending the 2D sounding studies of my drawings into 3D space.** The sonograph device is binaural, worn on the palms of both hands, and is hovered over the surface of an object with the motions of the hands. It obtains a reading by emitting regular ultrasonic clicks that hit the surface of the object and then bounce back to the device – here, the sound allows the hands to touch the object without touching. The device records both the locations of the hands and the distances between the hands and the object, so the data collected during this process can then be used to reconstitute the form of the object in the space, *as seen through sound*.



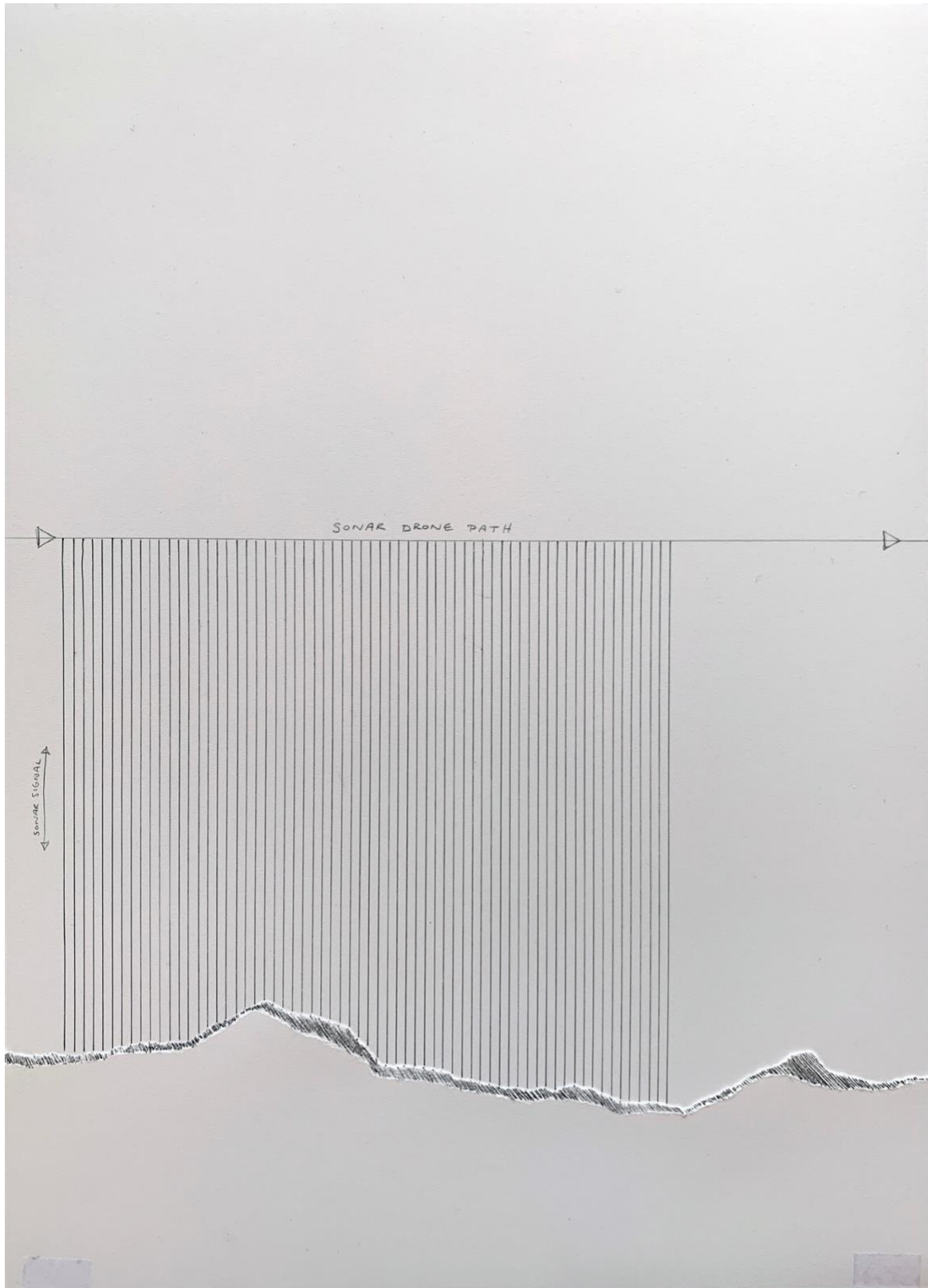
Sounding Landshapes: surface sounding experiment with sphere and sonar, 2020.

3. Sounding while walking, performative action: I would also like to use this device to sound the ground during walks in landscapes along segments that run north-south, along the meridians used to establish the circumference of the Earth. We often take for granted that the standing scientific evaluation and measurement of the Earth is correct – we agree with it, but it is not an agreement that follows our own investigation. It is a passive agreement; it is affirmation, not confirmation. One could argue that this obedient acceptance of facts limits our human engagement with the world and truncates true empirical experience of physical phenomena. Measurement equations have a tendency to abstract information to the point that they prevent a person from encountering the world on their own terms. Referring to the start of his study of the global critical zones network, Latour wrote that “the scientists I follow seem literally to discover a new planet, each locality having its own idiosyncrasy.” It is this difficult-to-resolve idiosyncrasy that I wish to point to in my own work.

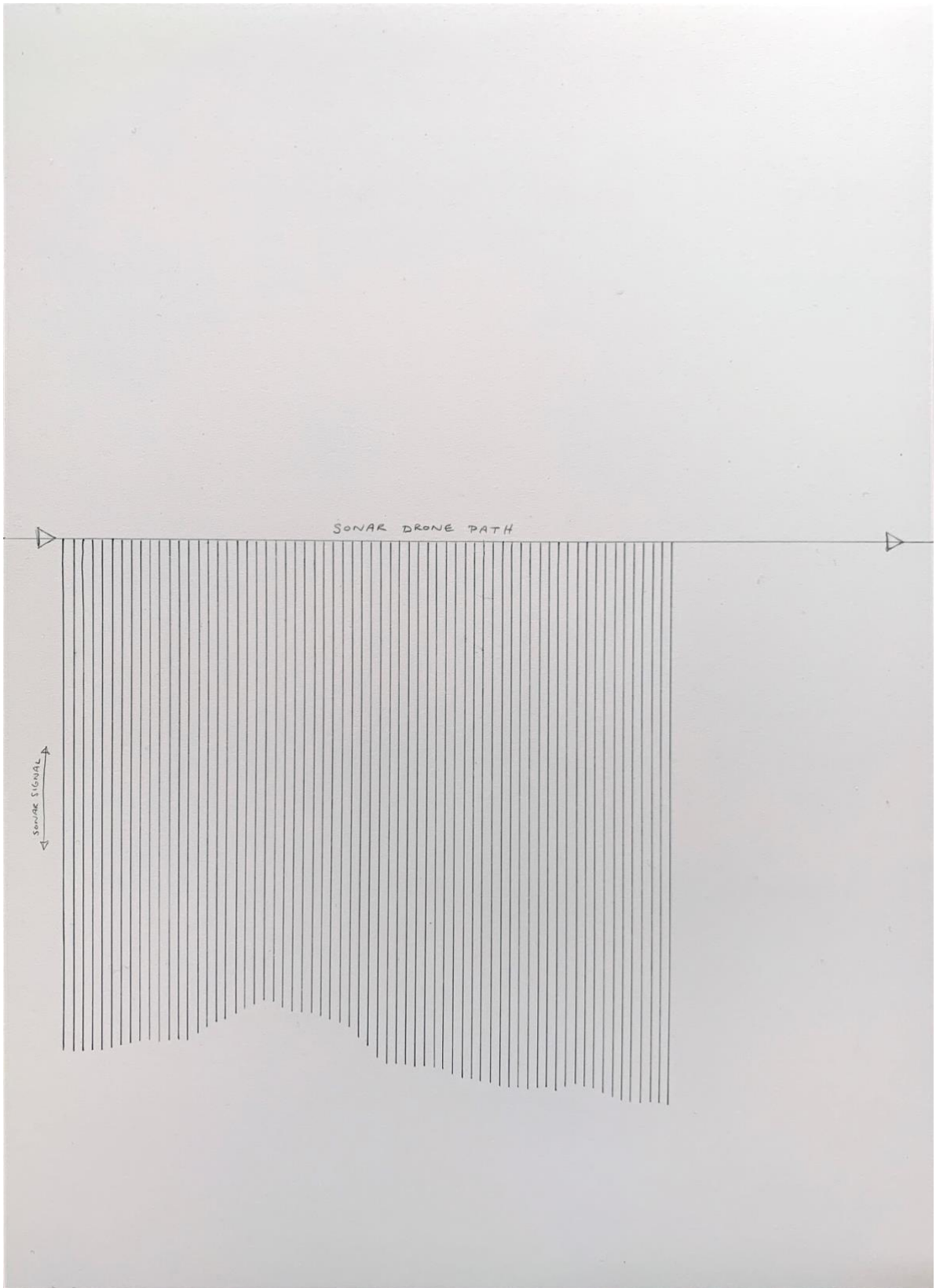
What better place to look for idiosyncrasy than in international standard units of measure? An example that came to my mind recently is the basis for the meter standard. As of 1983, the meter is defined by the International Bureau of Weights and Measures as

“the length of the path travelled by light in vacuum during a time interval of $1/299,792,458$ of a second.” Importantly, this resolution of 1983 sought to stabilize the length of the meter artifact housed in the BIPM, whose length had been determined as $1/10,000,000$ of the distance between the geographic North Pole and the Equator, via the Greenwich Meridian. This accepted and almost forgotten wisdom fascinates me, because built into the statement of this fraction is the perspective of the distance: the distance between the North Pole and the Equator has been determined from a bird’s-eye view, not that of a walking human or any other land-dwelling being. In other words, the circumference of the Earth is calculated not by its surface features at all, or even accounting for its nuanced geodesic properties, but rather by using distances “as the crow flies” between points and angles in relation to other celestial bodies. Surface roughness is altogether disregarded. Granted, now that the meter has been defined by the distance light travels over a precise amount of time, there is no scientific need to know or verify its distance or Earthly references – in fact, there is no need for the Earth at all: it could explode into trillions of pieces, and the abstract equation for the meter would remain intact (provided the space-time continuum of the universe remains unchanged).

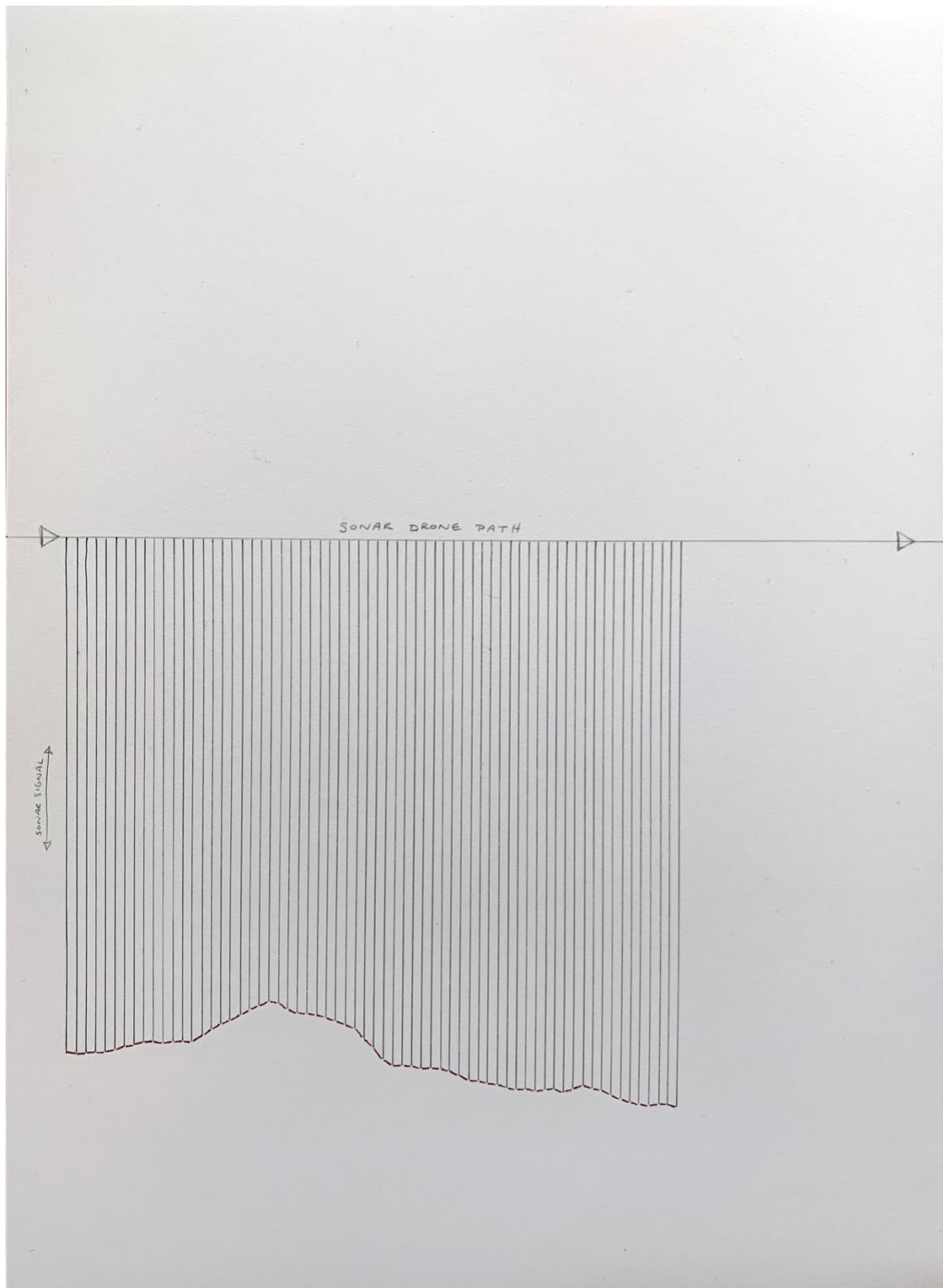
However, artistically, I am specifically interested in returning to and reckoning with the Earth as a significant reference for units of measure – as well as, importantly, the body, both human and non-human. So, I will continue. As the crow flies, the circumference of the Earth (through the poles) is 40,007.863 km. But what if we were to consider the circumference of the Earth from alternative, land-based perspectives? For example, I wonder, what is the circumference of the Earth “as the bug crawls”? And if we were to attempt a calculation of this length, how could it playfully disrupt the presumed fixed definition of the meter itself?



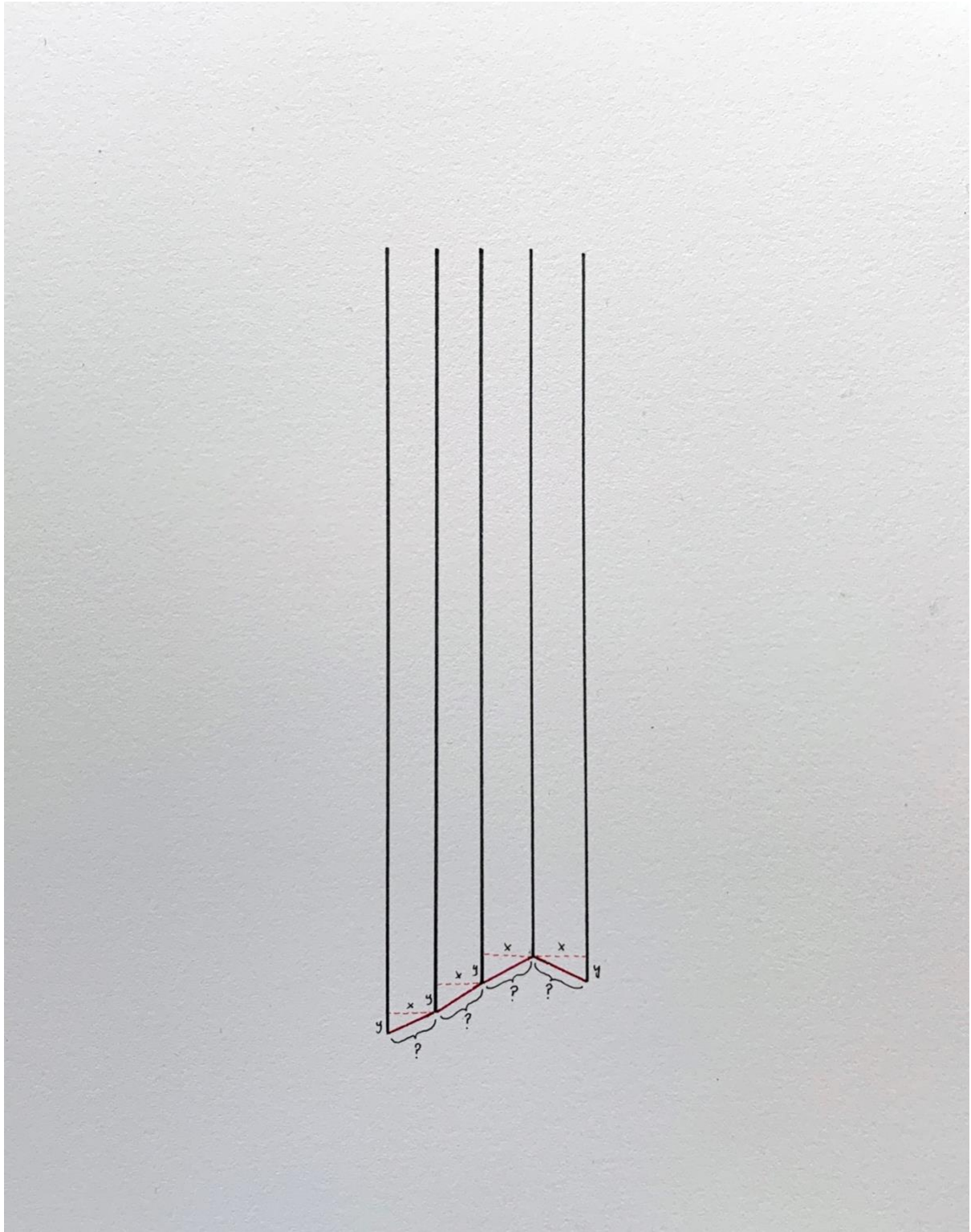
Sketch: drone-mounted sonar device passing over landscape, charting elevations of the ground at regular intervals.



Visualization of sonar data collected (y distances).



Visualization of sonar data collected with end points connected to determine unknown distances.



x (a) and y (b) distances between plot points used to calculate roughness (c) of landscape, using trigonometry ($a^2 + b^2 = c^2$).