Making the incomprehensible tangible is tricky work. “Imagining Deep Time,” an ambitious, wide-ranging exhibition at the National Academy of Sciences, features the work of 15 artists grappling with how to illuminate “the vast geological timescale, a concept beyond the realm of human experience.” They have mixed success. Simply portraying geological processes—as David Maisel does with photographs of mined-out valleys, or as Diane Burko does with paintings based on aerial views of glaciers—doesn’t provide much added value. Other works are conceptually inspired but practically balky, like Ruth Jarman and Joe Gerhardt’s audio recordings of earthquakes and other natural phenomena, which are hard to hear over the sound of academy employees walking by.

The work of Jonathon Wells, which portrays a thin, 16-mile-wide crust of Boston sitting atop a 4.5-mile-deep swath of rock, digs more deeply, both figuratively and literally. His image powerfully reminds us of how small the reach of humanity actually is. Similarly inspired is a collaboration between Mark Klett and Byron Wolfe. The duo overlaid an 1882
lithograph of a desert expanse in the western United States with circular photographs taken in the modern day, Pop Up Video–style. The piece is a smart reinvention of Klett’s role as a pioneering “rephotographer” of classic western landscape images from the 1800s.

Chul Hyun Ahn, working in the vein of Dan Flavin and Leo Villareal, offers an LED-light-and-mirror work called “Void” that, through careful alignment, concisely suggests the idea of a slowly receding infinity. And Rachel Sussman photographs a melancholy scene in Tasmania: a fire-scarred hillside covered with now-ashen trees that were thousands of years old. The almost Dalí-esque image compels us to mourn the loss of a life form that has survived for eons, despite countless prior disasters.

But the cleverest piece in the exhibit is Arthur Ganson’s kinetic sculpture, which uses more than two dozen interlocked gears, the last of which is designed to make a full revolution every 13.7 billion years—the same amount of time that has passed since the Big Bang. The work skillfully sums up this otherwise inconceivable idea using down-to-earth materials, in all their clickety-clack glory.

If you haven’t heard of the Anthropocene age, you’re not alone. Unlike the Jurassic or the Cretaceous, it’s not on the official geologic timeline. Rather, it’s been proposed as a new way to describe our current period, in which mankind is dominating the landscape, for good and for ill.

“Fossils of the Anthropocene,” an exhibit by Erik Hagen at the American Association for the Advancement of Science, provides some data points to support the concept. (Fun fact: In today’s world, 90 percent of mammalian biomass comes from humans and domestic animals.) The focus, though, is on Hagen’s mixed-media works, which seek to make tangible the high-concept labeling.

Hagen’s large rectangular and circular works show how human detritus might look if it were fossilized and discovered by intelligent beings in the distant future. The success of his pieces depends on their believability, which is uneven. Coins attached to rock strata, which Hagen uses in several works, make sense; people drop change all the time. Ditto for jewelry. Carmaker logos, on the other hand, or bits of metal typeface, seem out of place in Hagen’s faux-geologic tableaux. The numerous lost (and severely degraded) cellphones and iPods
Hagen deploys don’t make much sense, either; people grip these treasures tighter than life itself.

In general, the more elemental the discarded material, the more persuasive the work. Hagen makes particularly creative use of microplastic fragments (tiny pieces of broken-down, floating garbage that endanger ocean life) and plastic microbeads (the exfoliating additives in some cosmetics that are blamed for polluting lakes and waterways). When added to Hagen’s mixed-media works, these environmentally damaging items become visually compelling, adding subtle shadings and textures to the artist’s color swirls.

Two works stand out. The first features a discarded tool—a vise grip with a shape that winkingly suggests an ancient fish. The second embeds a series of tiny toy soldiers in the surface of the work, seemingly reaching out to escape from quicksand. It’s a neat way to break the fourth wall and to encapsulate the dilemmas of living in our determined but self-destructive age. Such successes only underscore how hard it is for an artist to lend immediacy and solidity to an evanescent concept.