SENSING PASTS
CASTING FUTURES

RESEARCH STUDIO
@ TU DRESDEN
CHAIR OF DIGITAL CULTURES
JUNE 02–06 2025

GHOST
MINES

TUD|SC
Disruption and
Societal Change

TECHNISCHE
UNIVERSITÄT
DRESDEN

GHOST MINES
SENSING PASTS/
CASTING FUTURES

Located in eastern Germany, the regions of Ore Mountains and Lusatia were heavily exploited for uranium mining and lignite (brown coal) extraction, respectively. Decades of industrial activity left behind significant environmental contamination, degraded landscapes, and disrupted ecosystems. In response, large-scale rehabilitation projects were launched to transform these post-industrial landscapes into sustainable and recreational spaces. In the case of the Ore Mountains efforts focused on cleaning up radioactive contamination and restoring the area for mixed natural and recreational uses. In Lusatia, the conversion involved flooding massive open-pit mines to create the Lusatian Lake District, an extensive network of artificial lakes. Water management played a critical role in both contexts—whether by stabilizing and decontaminating radioactive sites in the Ore Mountains or by engineering hydrological systems to manage Lusatia's new lakes. These projects exemplify how environmental and social scars are being reimagined as opportunities for ecological regeneration, economic diversification, and sustainable futures.

GHOST MINES—Sensing Pasts/Casting Futures invites participants to explore the haunting legacy of abandoned mines and extractive landscapes, questioning how these sites can inform our understanding of resource-driven histories and speculative futures. The research studio delves into the concept of „ghost mines"—both as literal sites of abandonment and metaphorical markers of environmental trauma and contested futures. Through an interdisciplinary lens that draws from environmental sciences, media theory, and science and technology studies, participants will investigate how the remnants of mining reflect cultural memory, embody political struggles, and reveal global economic transformations. Topics will include the spectral presence of labor and exploitation, the transformation of materials into commodities, and the capacity of scarred environments to inspire new narratives of resilience, reclamation, and sustainability.

The studio emphasizes sensory ethnography, environmental mapping, and experimental data practices to uncover the human and ecological entanglements embedded in these landscapes. Participants will explore how digital sensing technologies and biogeochemical analysis can reveal hidden histories and inform future land-use decisions. Our aim is to investigate the historical development of digital data landscapes, moving beyond a mere focus on contemporary cutting-edge technologies and instead situating them within broader contexts. Through active engagement with the methods and mediums of data-making across multiple regional sites and institutional resources, participants will examine how these transformative processes are entangled with the shifting modes of knowledge production and future forecasting. This engagement will help better situate the scope of planetary experiments as they unfold on regional scales.

The research studio is open to early-career researchers and advanced practitioners. The program will cover lectures, screenings, and workshops on digital ecologies and artistic data practices, as well as two days of field trips to the Ore Mountains and Lusatia. It will result in a common online publication bringing together audiovisual and textual contributions created throughout the week. The research studio is free of charge, however participants will have to cover their own travel and accommodation in Dresden. For participants who do not have institutional support we offer a limited amount of stipends. If you need travel/accommodation support please outline your situation in the motivation letter.

In order to participate in the research studio, please send us your CV, portfolio (if applicable) and a short motivation letter (one page) elaborating on your background, research interests and connection to the theme of GHOST MINES—Sensing Pasts/Casting Futures. Documents should be submitted in one PDF file (5 MB max) no later than 31.01.2025 to michaela.buesse@tu-dresden.de

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