

OBLIGATED, SIX NSF AWARDS

ALASKA.AI

\$50,000

to read the water.

\$10,500,000

to read the rock.

SEPTEMBER 1ST

FIVE PROJECTS. SIX AWARDS.
FIVE ALASKA SURFACES.



01 / 09

64°51'N 147°43'W

NSF, SIX AWARDS, FIVE PROJECTS

Five surfaces Alaskans already argue about.

Six awards to University of Alaska campuses. Each project teaches a model to read one physical surface. Obligated dollars total 18,647,929.

01 THE WATER

Depth in coastlines, rivers and lakes

02 THE WASTE

Critical minerals in coal refuse and ash

03 THE BURNING WEATHER

Windows safe enough to light a fire

04 THE MOVING GROUND

Landslides, tested in Alaska

05 THE CONCEALED ROCK

Ore bodies nobody has found



SURFACES DRAWN AS TYPES. NSF'S RECORDS NAME NO FIELD SITES. CONIC EQUAL AREA, 55/65, ROT 154.

02 / 09

64°51'N 147°43'W

AWARD 2630206, I-CORPS

The water, read from orbit.

Explainable AI that turns satellite imagery into high resolution maps of underwater depth for coastlines, rivers and lakes. NSF obligated 50,000 dollars.

ERIN TROCHIM, UNIVERSITY OF ALASKA
FAIRBANKS
PHYSICS INFORMED NEURAL NETWORKS
SEPTEMBER 1ST, 2026 TO AUGUST 31ST, 2027
SECTION, VERTICAL EXAGGERATION X4

WATERLINE

SOUNDING

BED

MODELLED ISOBATH

03 / 09

64°51'N 147°43'W

AWARD 2536745, FIRE-WUI

The weather that decides a burn.

Weather reanalysis read with machine learning, to find the windows safe enough for a controlled burn.

CHRISTINE WAIGL, UNIVERSITY OF ALASKA FAIRBANKS
1,588,147 OBLIGATED DOLLARS, FOUR YEARS
NSF FILES IT UNDER ARTIFICIAL INTELLIGENCE

MODELLED WINDOW

STATION

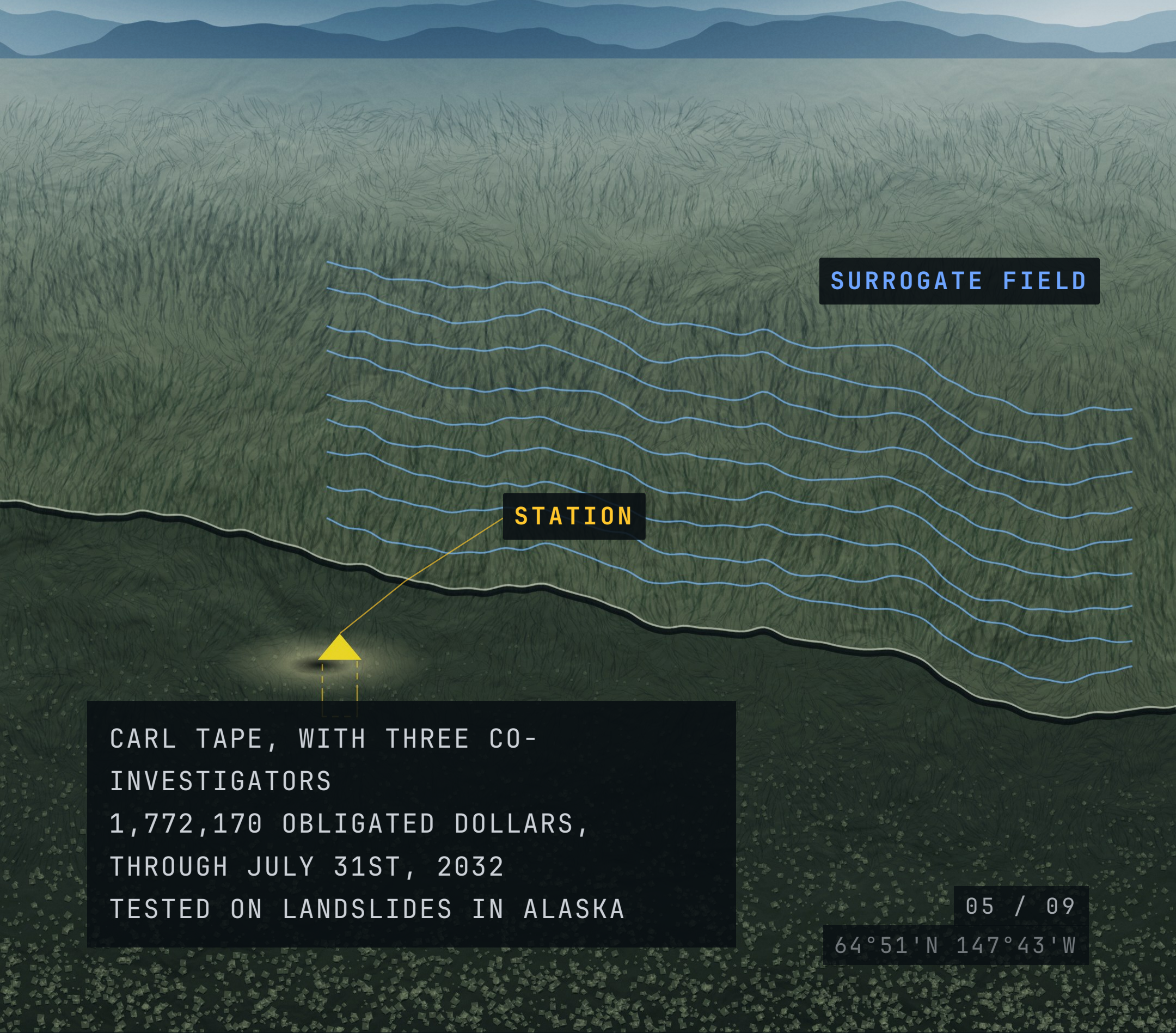
04 / 09

64°51'N 147°43'W

AWARD 2608510, GAIA

The ground that is already moving.

Surrogate models fed live observations, producing real time digital twins that forecast geohazards.



SURROGATE FIELD

STATION

CARL TAPE, WITH THREE CO-
INVESTIGATORS
1,772,170 OBLIGATED DOLLARS,
THROUGH JULY 31ST, 2032
TESTED ON LANDSLIDES IN ALASKA

05 / 09

64°51'N 147°43'W

AWARDS 2614749, 2614751, 2532372

The same rock, from both ends.

CONCEALED BODY, MODELLED

ASSAY

Critical minerals recovered from coal refuse and ash, through 2030. An Engine hunting ore nobody has found, through 2036.

4,737,612 OBLIGATED, ANCHORAGE AND FAIRBANKS. ANCHORAGE HOLDS ABOUT FOUR TIMES FAIRBANKS.

10,500,000 OBLIGATED OF A 15,000,000 ESTIMATED TOTAL. COOPERATIVE AGREEMENT.

THE ABSTRACT NAMES ALASKA NATIVE CORPORATIONS AMONG PARTNERS

WORKING FACE

06 / 09

64°51'N 147°43'W

Six awards, one page.

AWARD	SURFACE	OBLIGATED	STARTS	ENDS
2630206	WATER	50,000	SEP 1 2026	AUG 31 2027
2536745	BURNING WEATHER	1,588,147	SEP 1 2026	AUG 31 2030
2614749	WASTE, ANCHORAGE	3,824,575	SEP 1 2026	AUG 31 2030
2614751	WASTE, FAIRBANKS	913,037	SEP 1 2026	AUG 31 2030
2608510	MOVING GROUND	1,772,170	AUG 1 2026	JUL 31 2032
2532372	CONCEALED ROCK	10,500,000	AUG 1 2026	JUL 31 2036
TOTAL OBLIGATED		18,647,929		
10,500,000 OBLIGATED				
		15,000,000 ESTIMATED TOTAL		

OBLIGATED DOLLARS, NOT PROJECT VALUE. THE ENGINE'S 15,000,000 IS AN ESTIMATED TOTAL ON A TEN YEAR COOPERATIVE AGREEMENT.

GROUND RELIEF ON EVERY SLIDE IS SCALED FROM THAT AWARD'S OBLIGATED DOLLARS AND ITS PERFORMANCE PERIOD. ON THIS PAGE THE HEIGHT FIELD IS LOG SCALED, SO THE 50,000 AWARD STAYS VISIBLE BESIDE THE 10,500,000 ONE.

Fifteen headlines,
none of these six.

AUGUST 11TH, RURAL POWER GRIDS

SEP 1

08 / 09

64°51' N 147°43' W

Which surface should Alaska know best in 2036?



Four clocks started September 1st. Two started August 1st. The last one runs to July 31st, 2036.