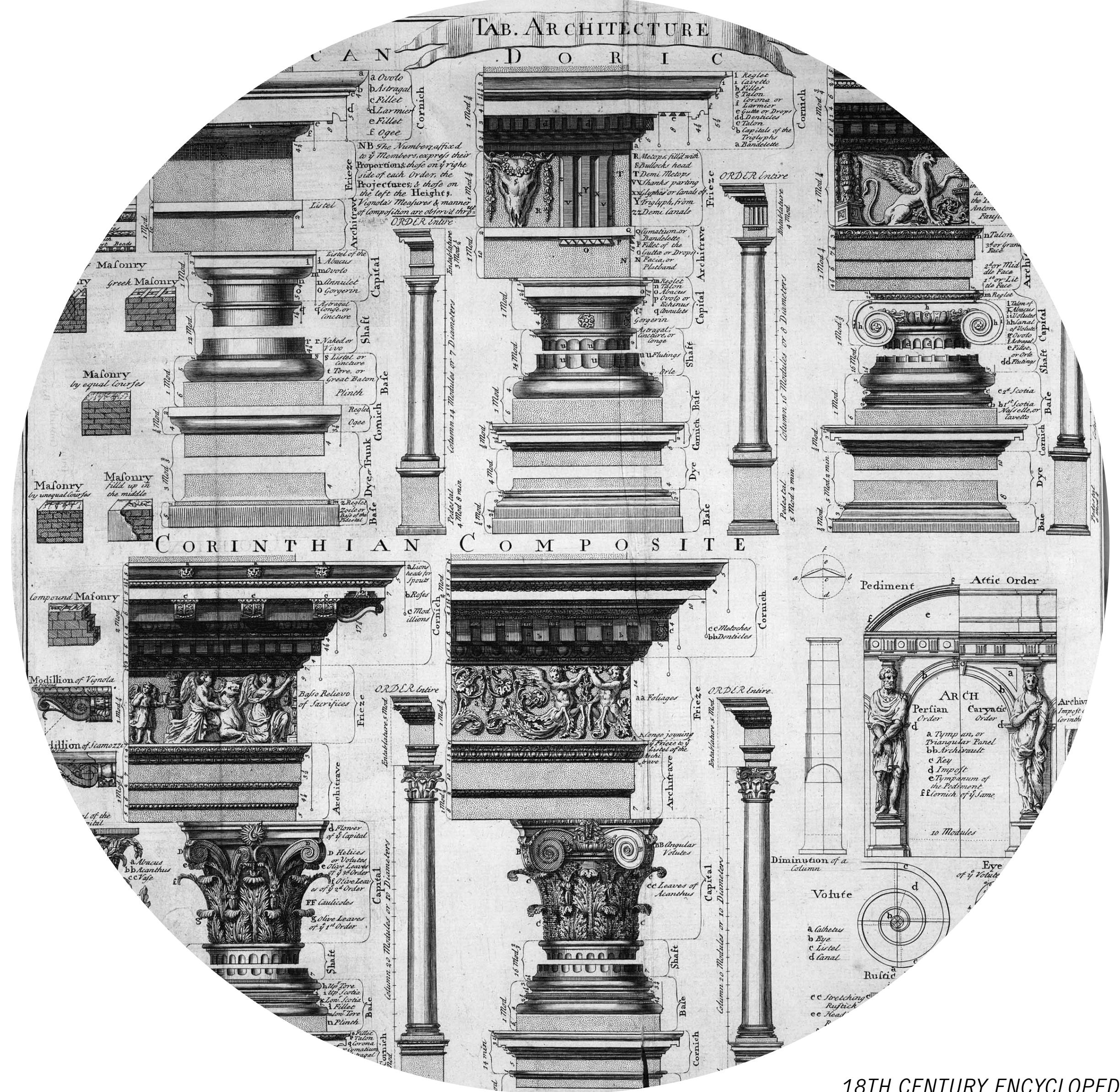


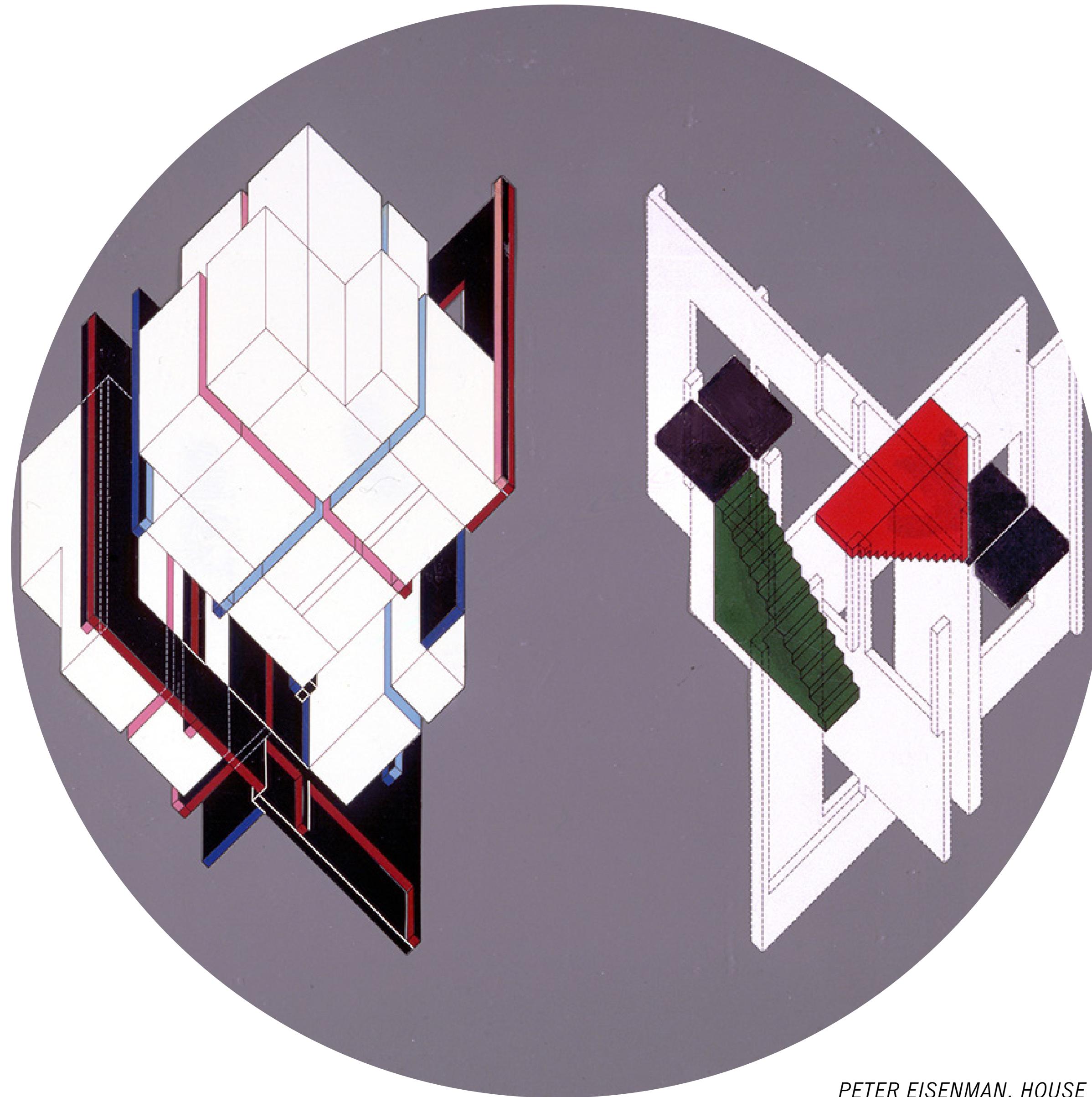
ARCHITECTURAL FEATURE CLASSIFICATION FROM LIDAR DATA



18TH CENTURY ENCYCLOPEDIA, COLUMN ORDERS

THE PROMPT

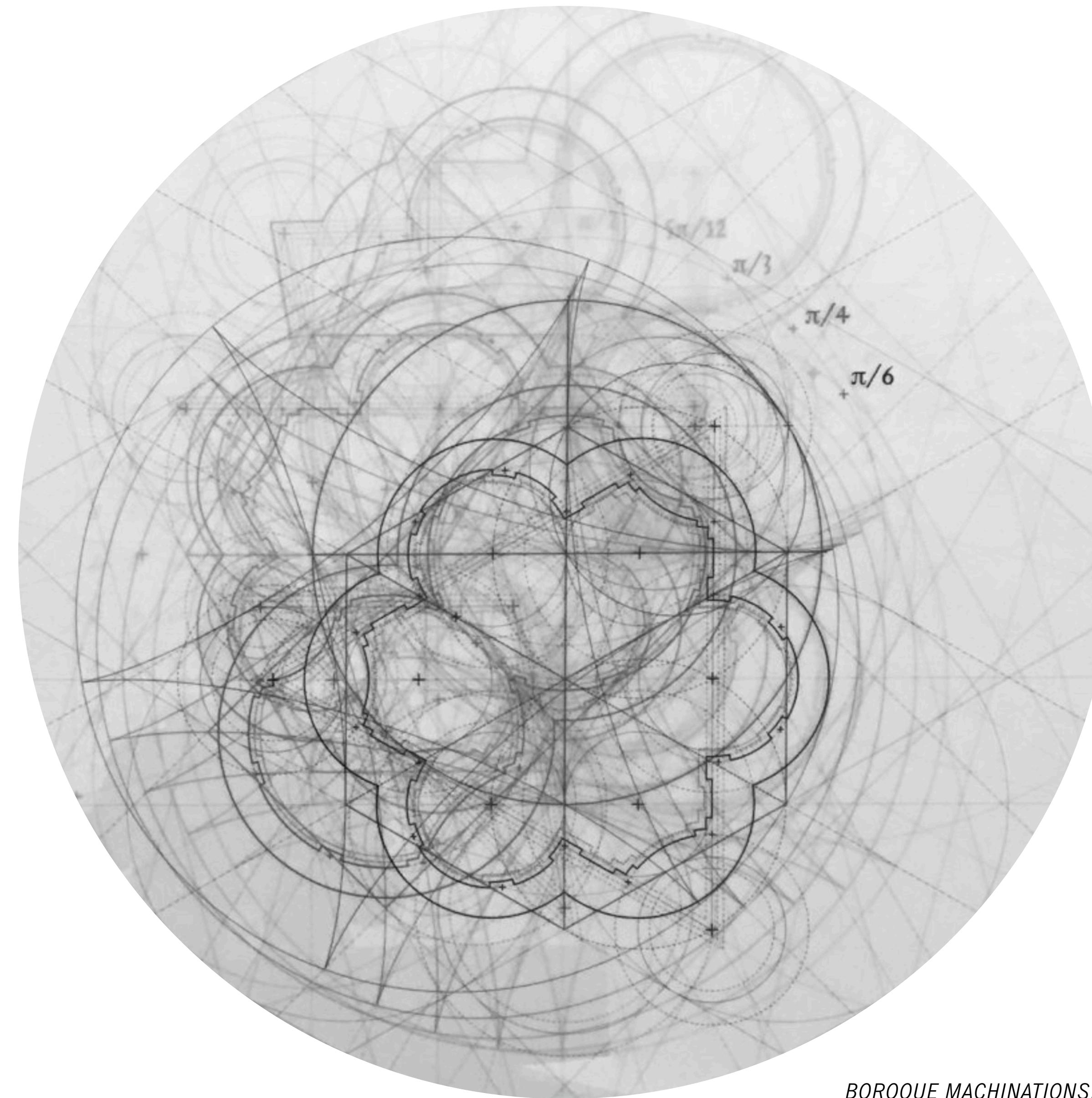
ANALYSIS THROUGH DRAWING



PETER EISENMAN, HOUSE DRAWINGS

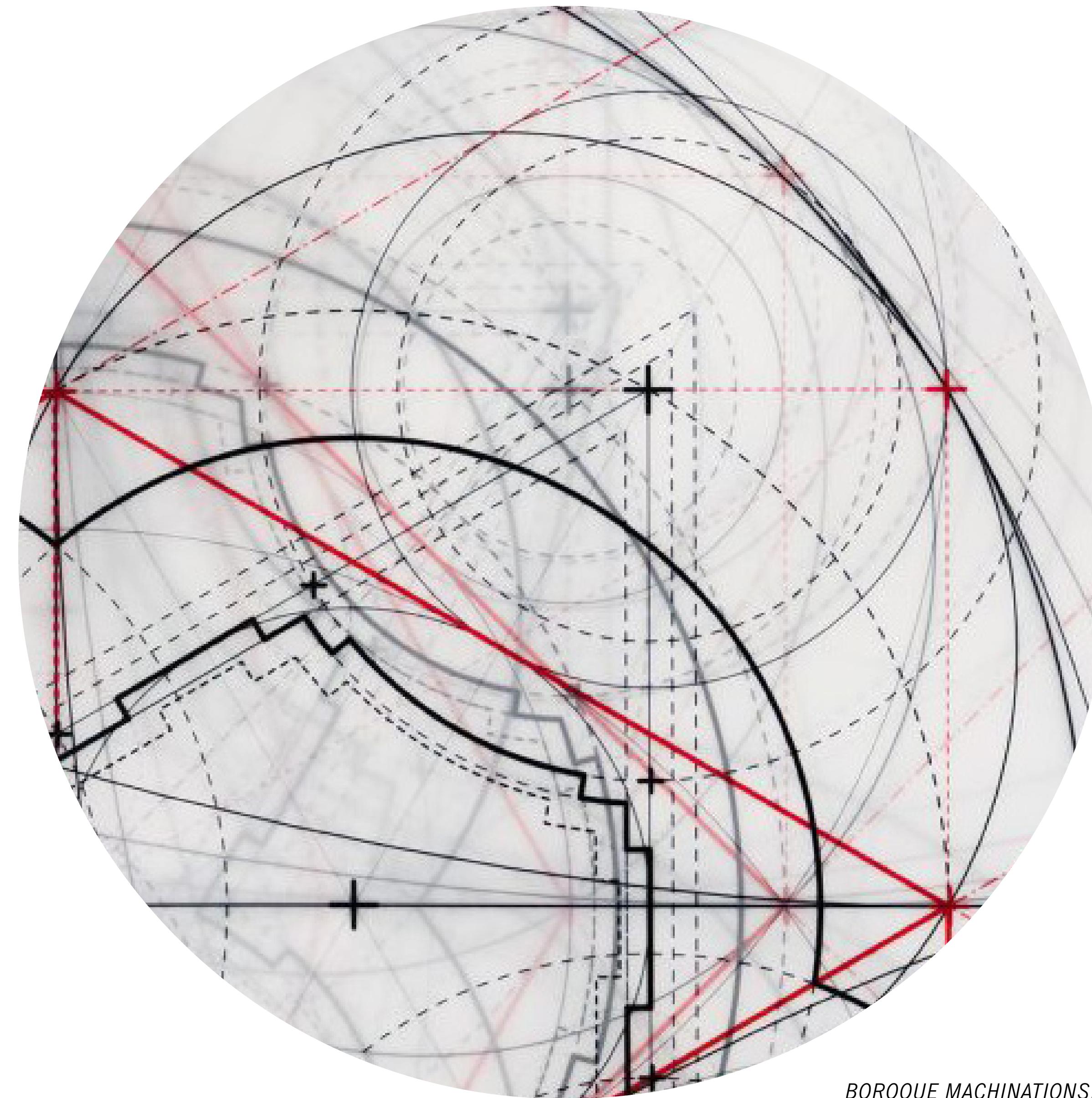
THE PROMPT

**ANALYSIS THROUGH
DRAWING**



BOROQUE MACHINATIONS, HARVARD GSD

THE PROMPT
**ANALYSIS THROUGH
DRAWING**



BOROQUE MACHINATIONS, HARVARD GSD

THE PROMPT
ANALYSIS THROUGH
DRAWING



THE DATA

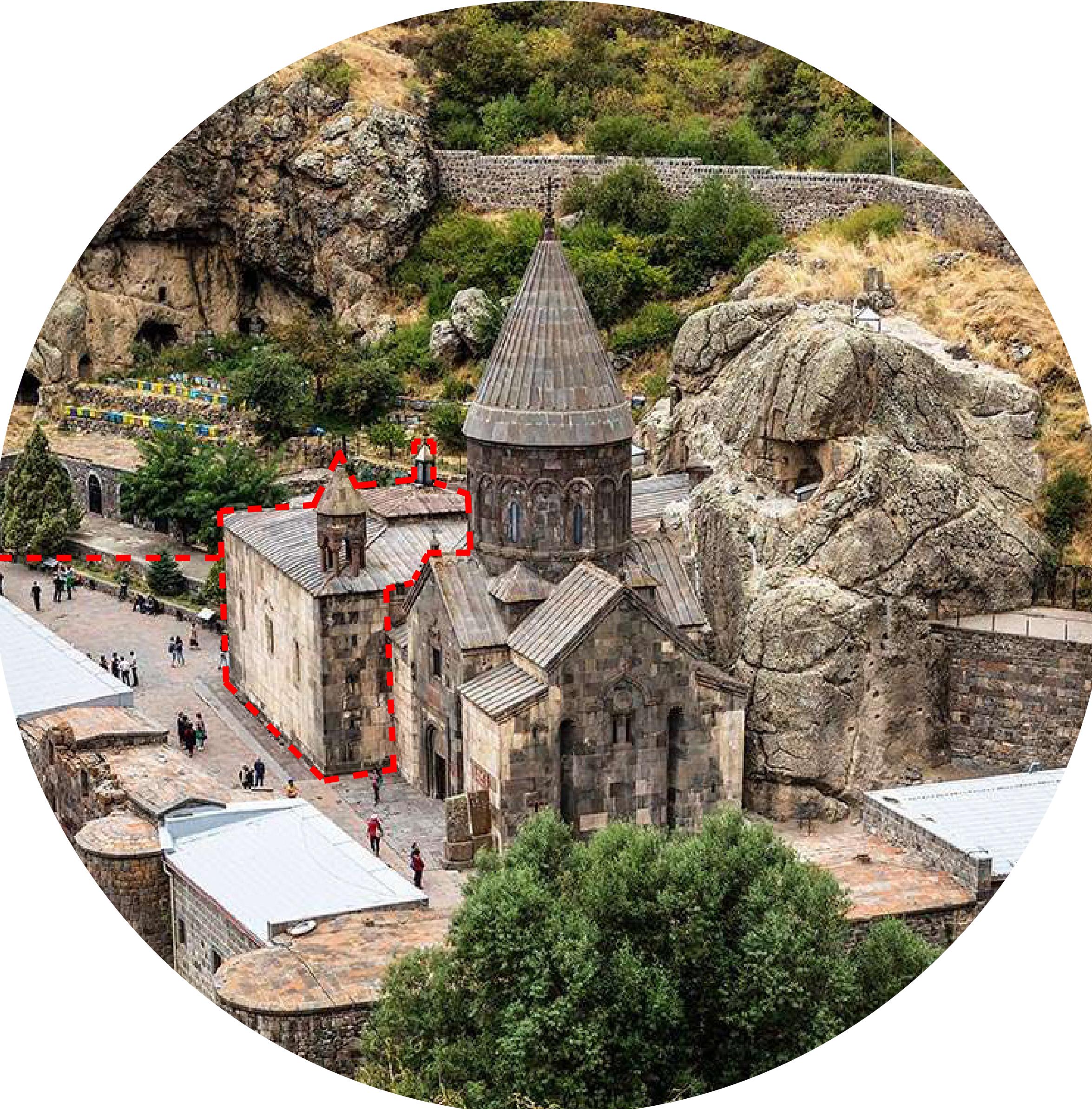
COURTESY OF CYARK



THE DATA

GEGHARD MONASTERY, ARMENIA

CROPPED AREA



THE DATA

**GEGHARD MONASTERY,
ARMENIA**



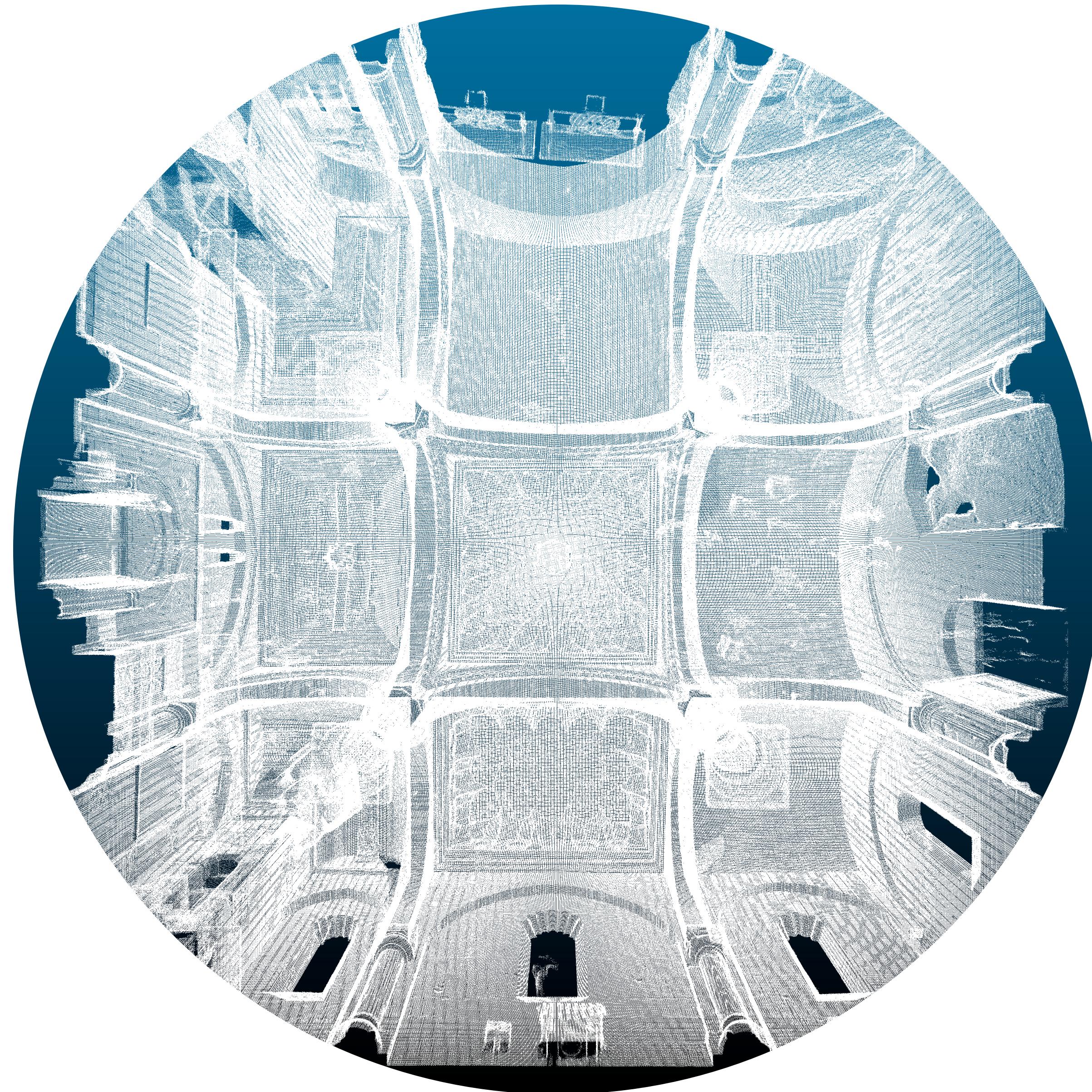
THE DATA

**GEGHARD MONASTERY,
ARMENIA**



THE DATA

**GEGHARD MONASTERY,
ARMENIA**



THE DATA

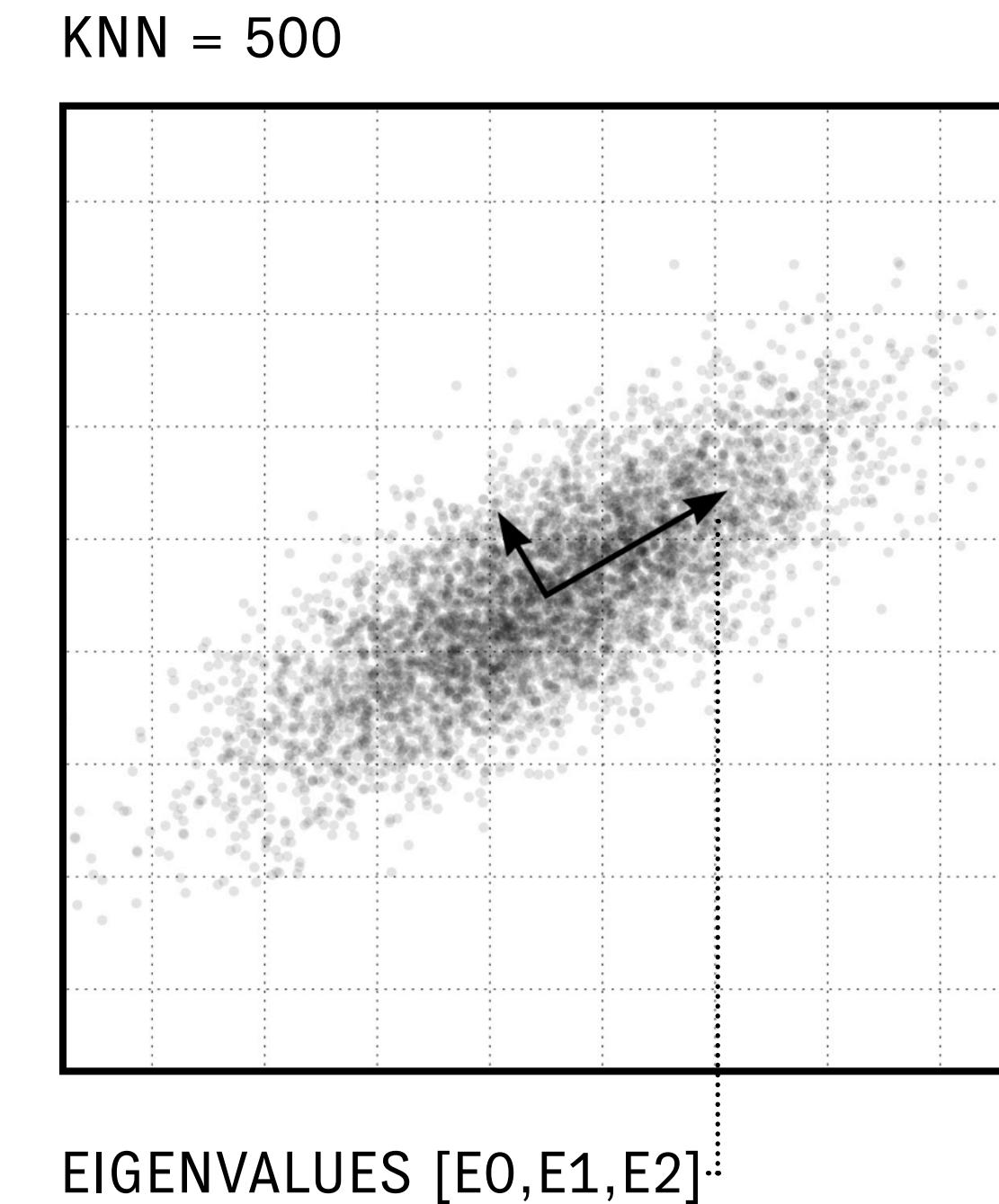
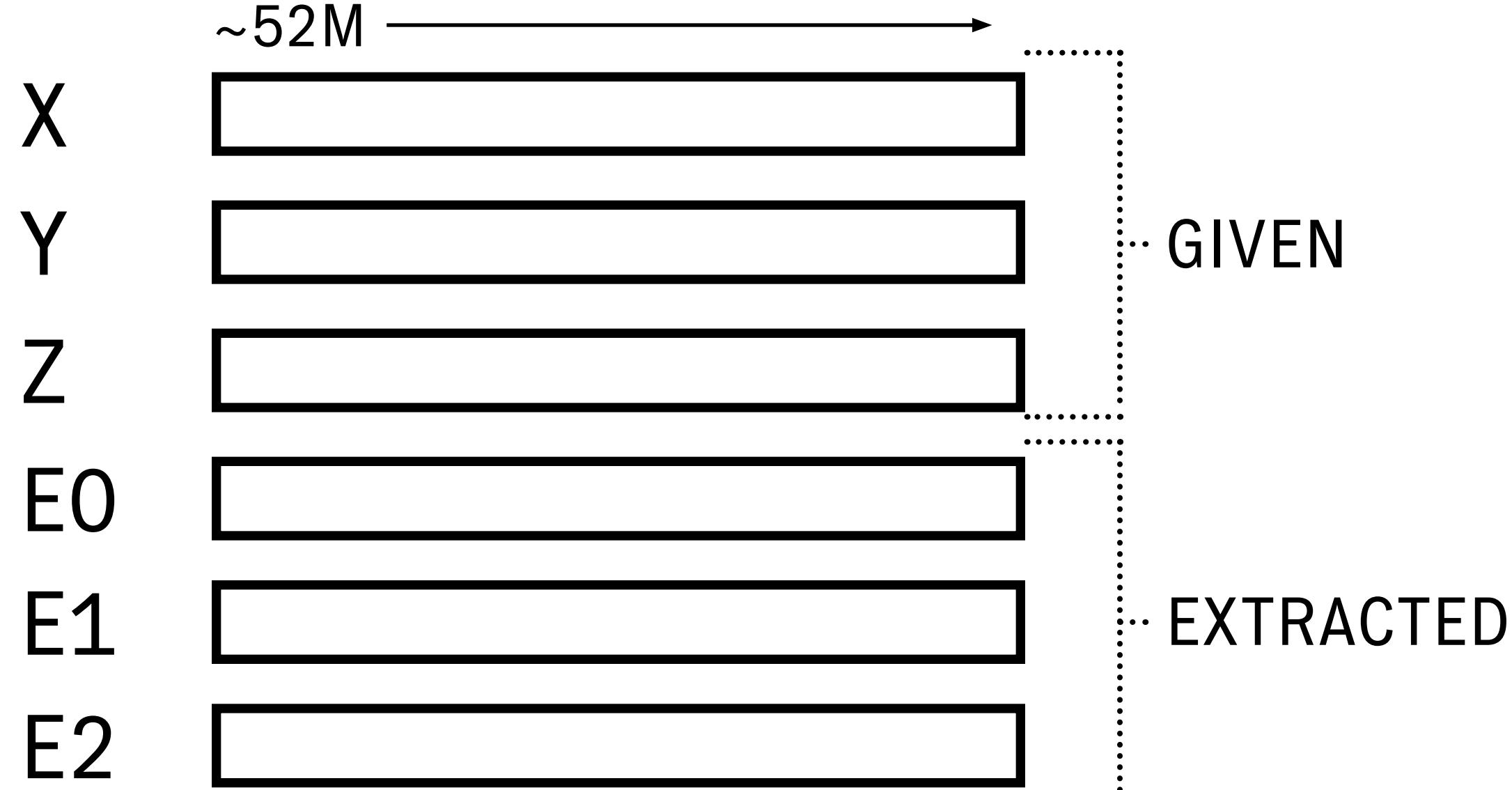
**GEGHARD MONASTERY,
ARMENIA**

FEATURE SPACE



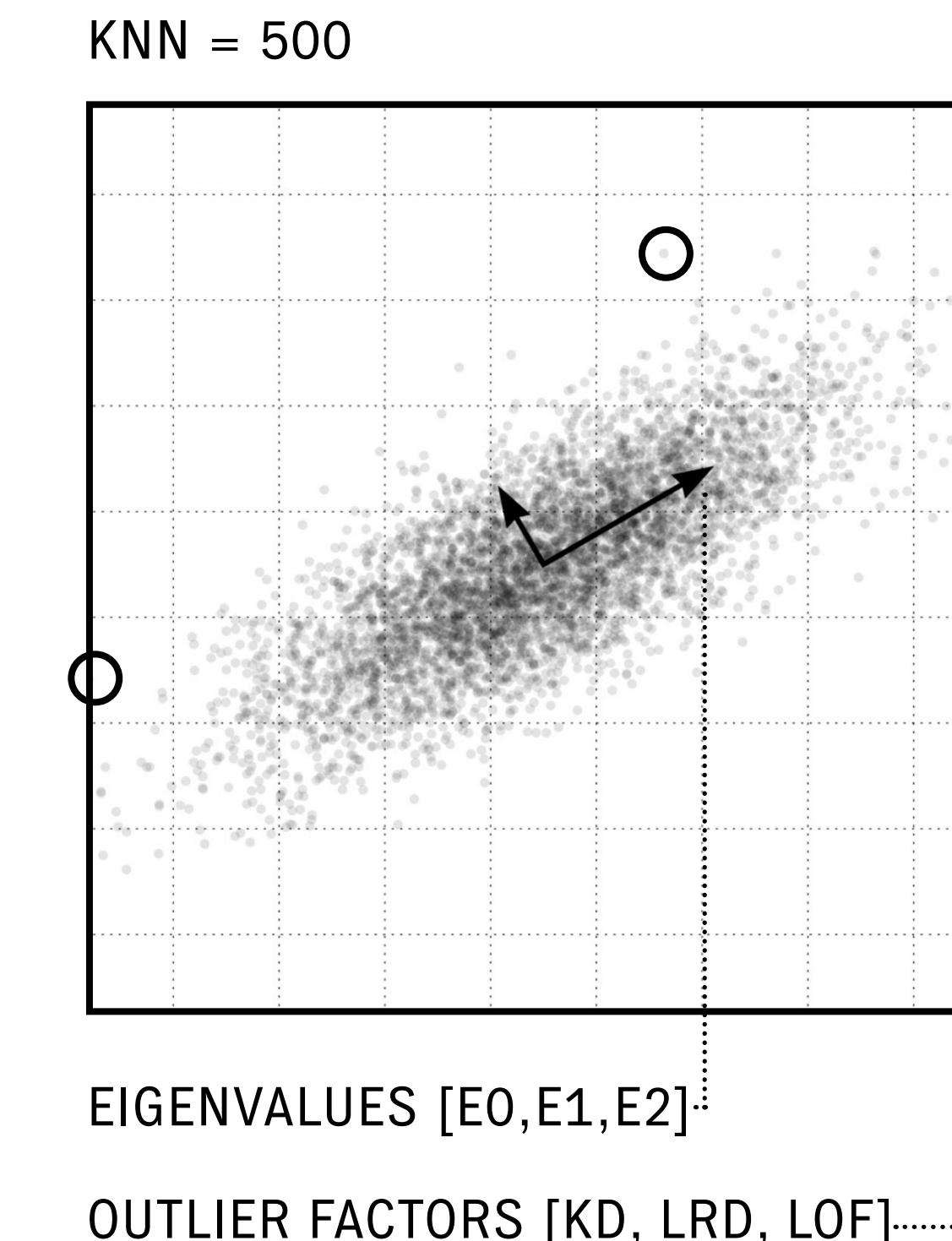
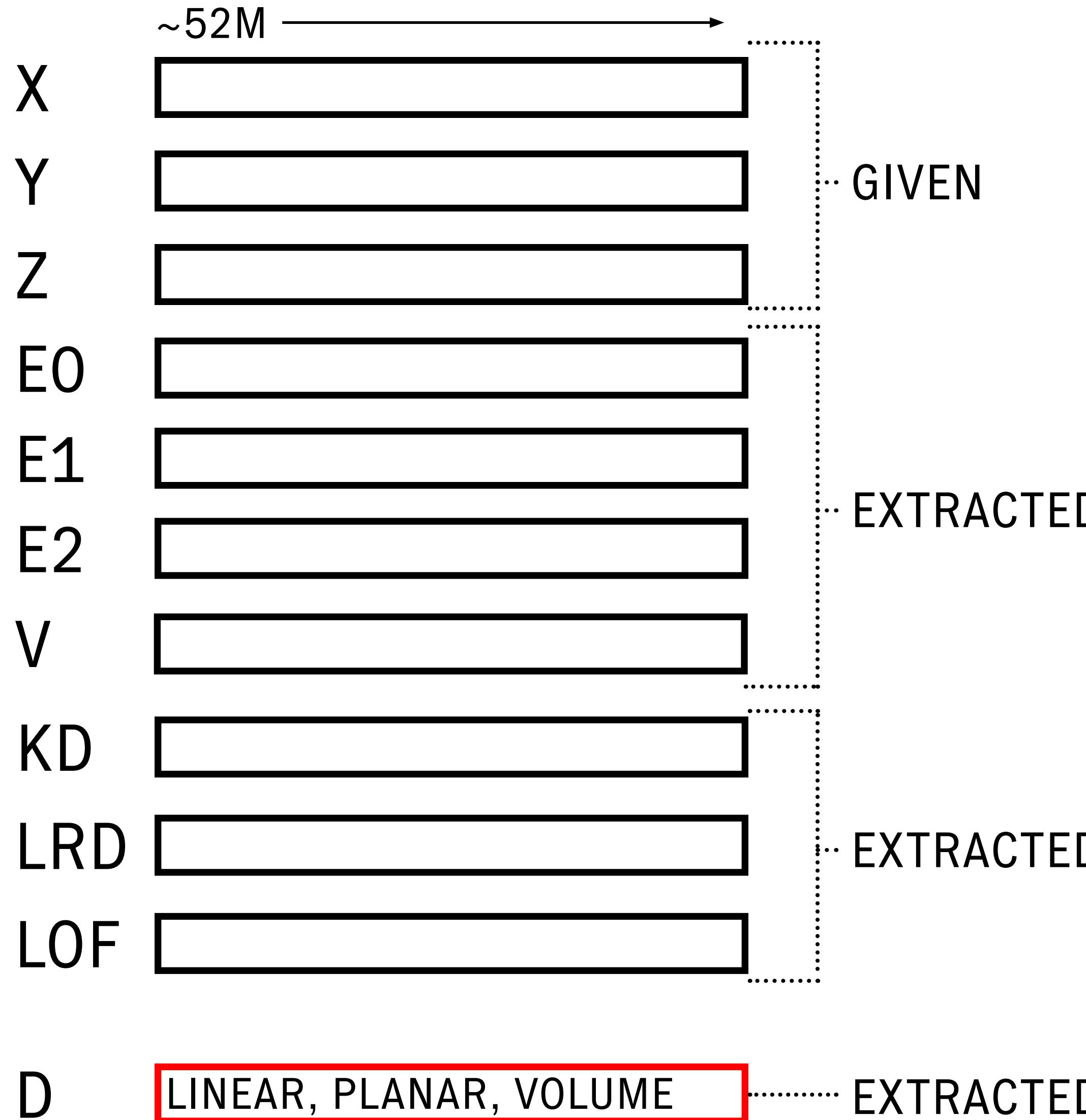
FEATURE ENGINEERING

FEATURE SPACE



FEATURE ENGINEERING

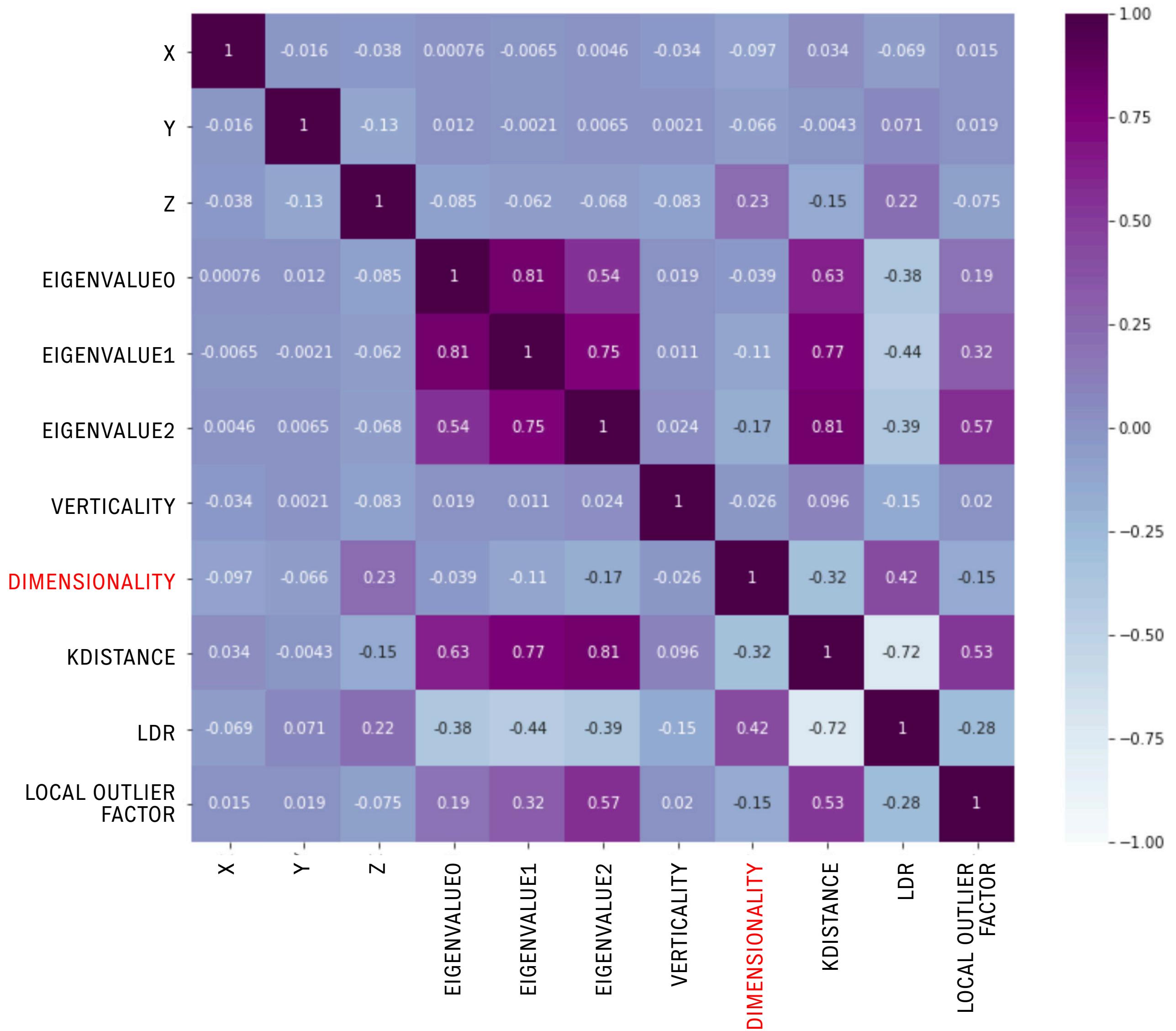
FEATURE SPACE



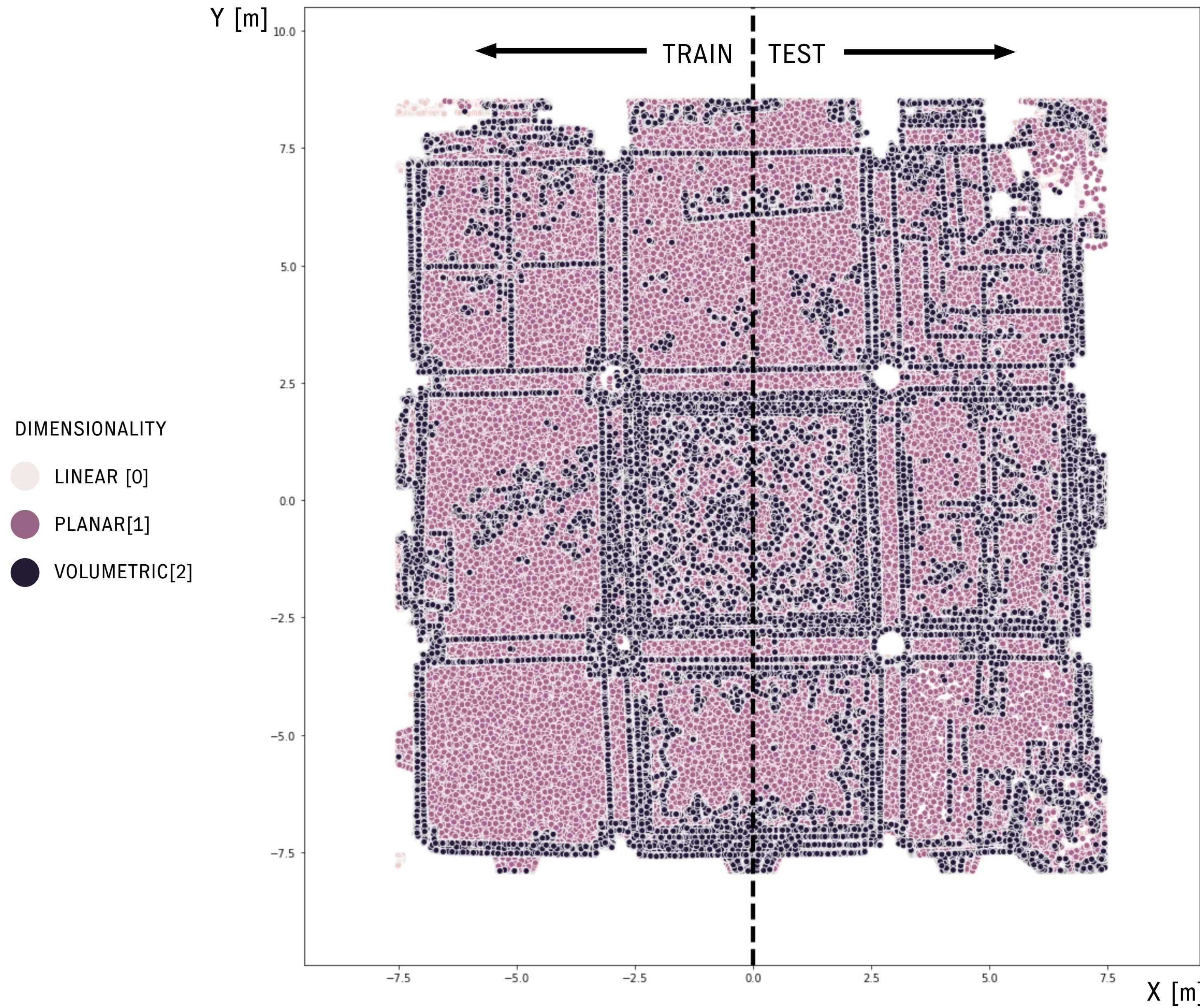
FEATURE ENGINEERING

FEATURE ENGINEERING

CORRELATION MAP

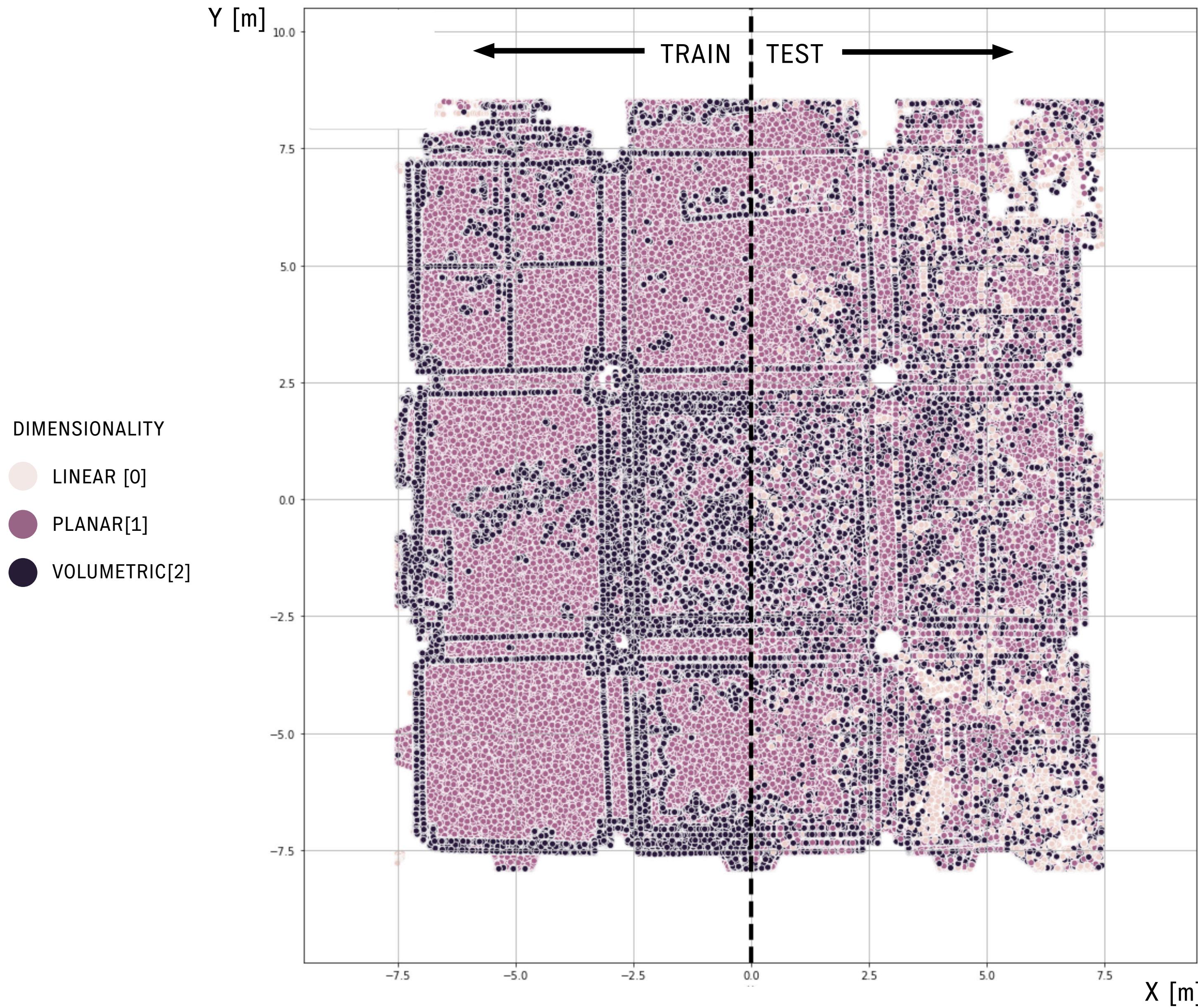


“PLAN” PLOT [X,Y] OF ACTUAL TARGET CATEGORIES



MODEL TRAINING

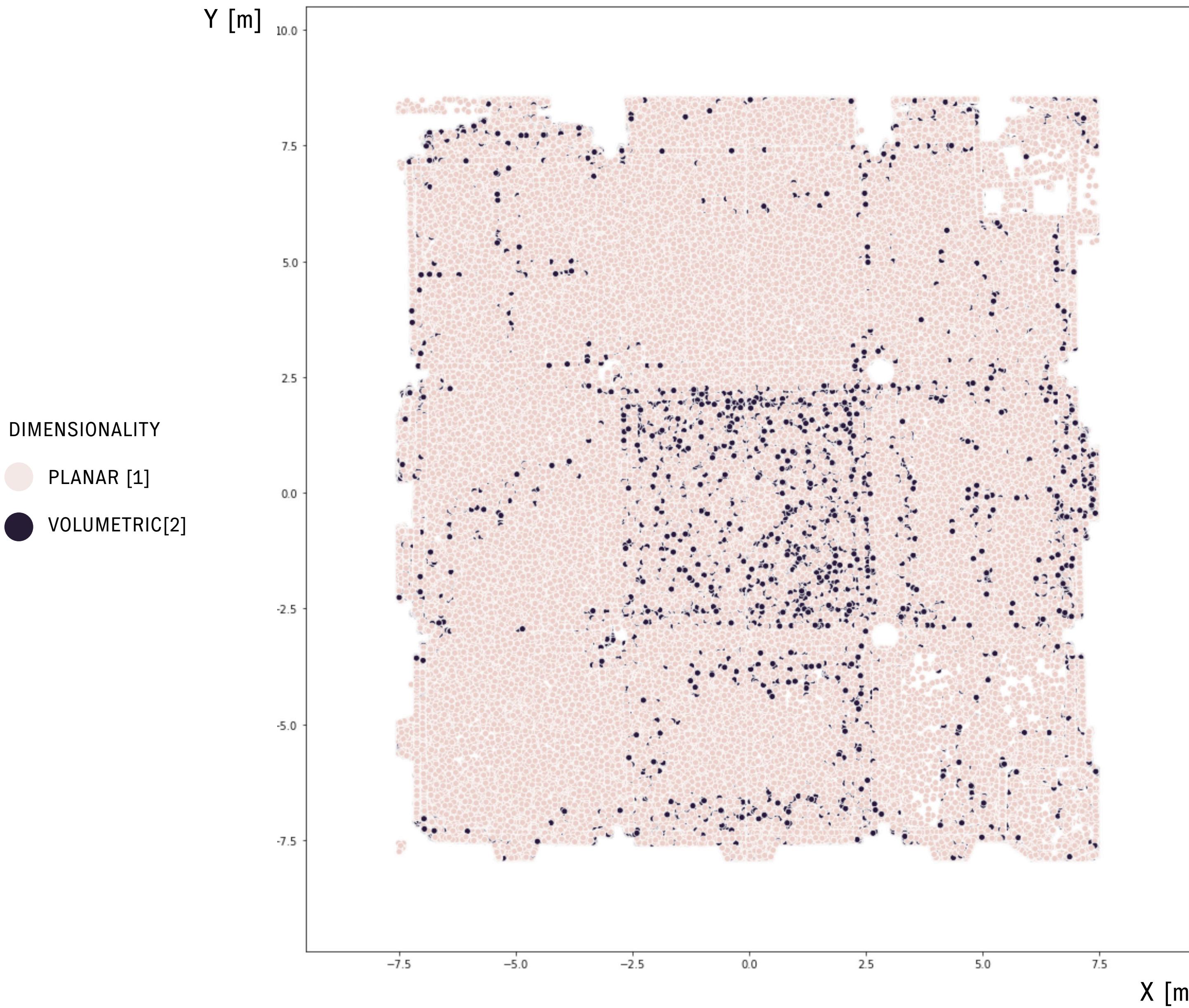
"PLAN" PLOT [X,Y] OF PREDICTED TARGET CATEGORIES



KNN MODEL

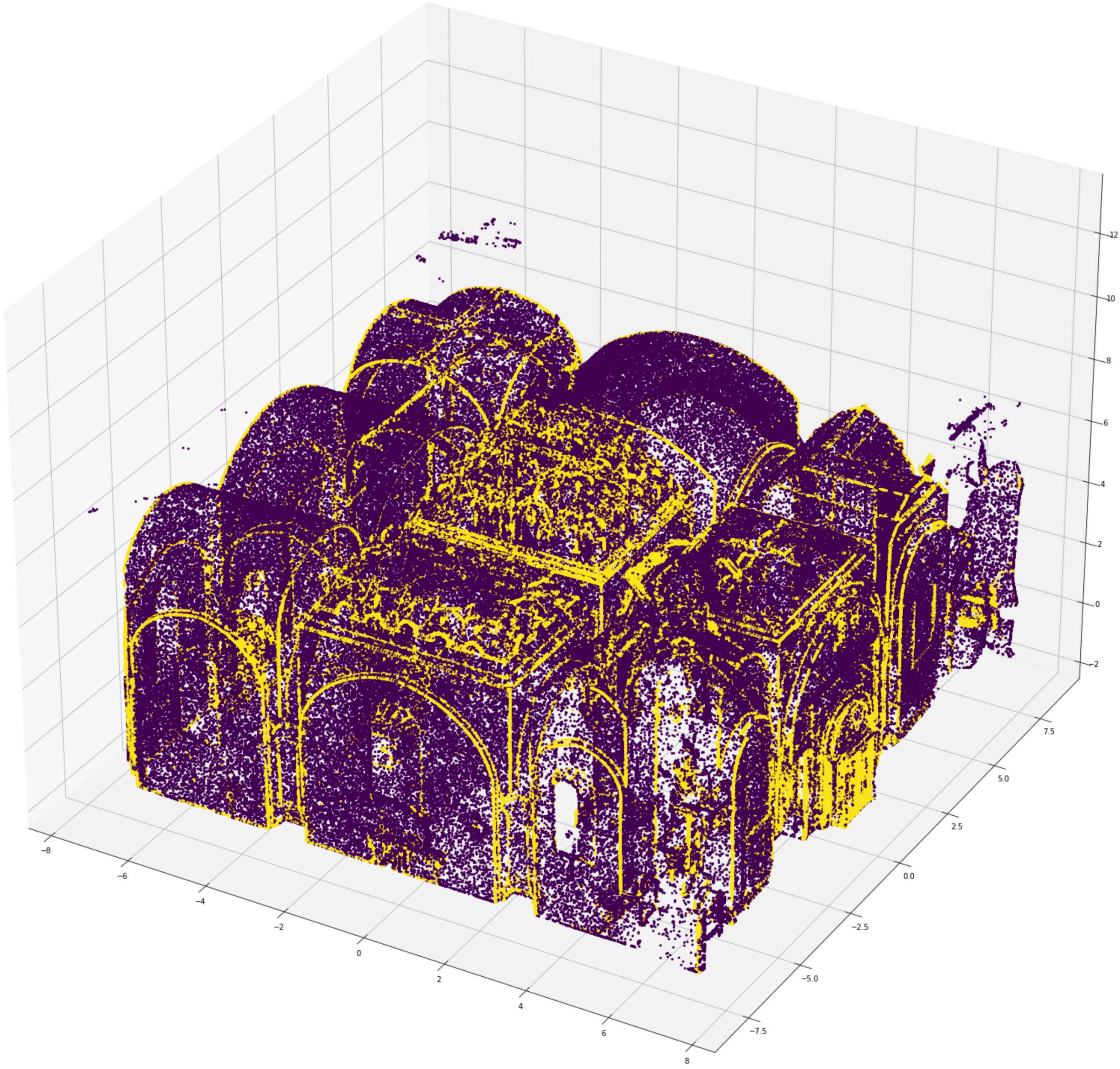
ACCURACY SCORE: .65

“PLAN” PLOT [X,Y] OF PREDICTED TARGET CATEGORIES



LOGISTIC MODEL

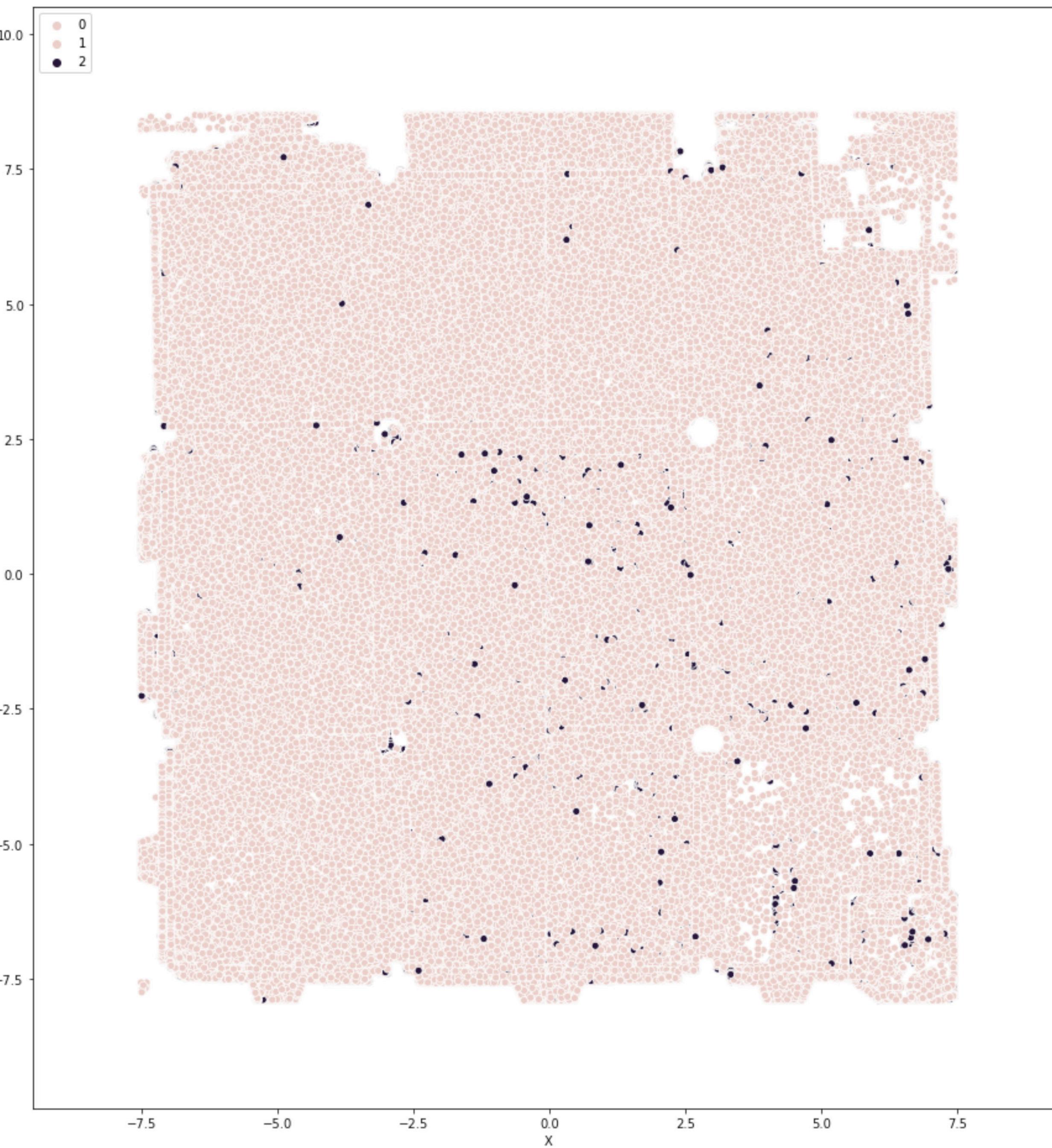
PRECISION: .87
RECALL: .95
F-1 SCORE: .91



XGBOOST MODEL

PRECISION: .985
RECALL: .989
F-1 SCORE: .987

APPENDIX



XGBOOST MODEL

PRECISION: .985
RECALL: .989
F-1 SCORE: .987