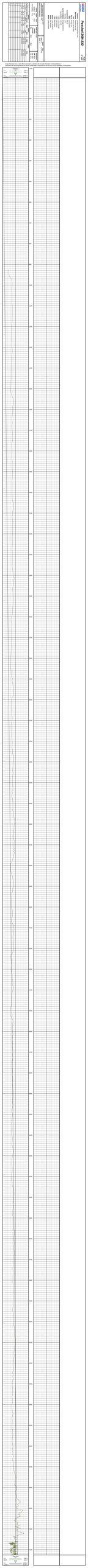
PhaseNet DAS3D
Phase Picking and Association using Deep Learning for Distributed Acoustic Sensing Array
Author: Weiqiang Zhu, Gregory C. Beroza
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Seismological Research Letters
Publication Info: Zhu, W., & Beroza, G. C. (2019). PhaseNet: A Deep-Neural-Network-Based Seismic Arrival Time Picking Method. Geophysical Journal International, 216(1), 261-273.
Model Architecture
Input: 3000 x 1 x 3
Output: 3000 x 1 x 3
Conv + BatchNorm + ReLU
Max Pooling
Concatenation
Copy
Conv + Softmax
Training Dataset
STEAD: A Global Dataset for Seismic Deep Learning
Mousavi, S. M., Sheng, Y., Zhu, W., & Beroza, G. C. (2019). STEAD: Large-Scale Earthquake Dataset and Deep Learning Benchmark. IEEE Access, 7, 179464-179476.
Input Data
Raw DAS data
Output Data
Phase picks
Event location
Application
Earthquake detection
Phase picking
Event location
Author Info
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