

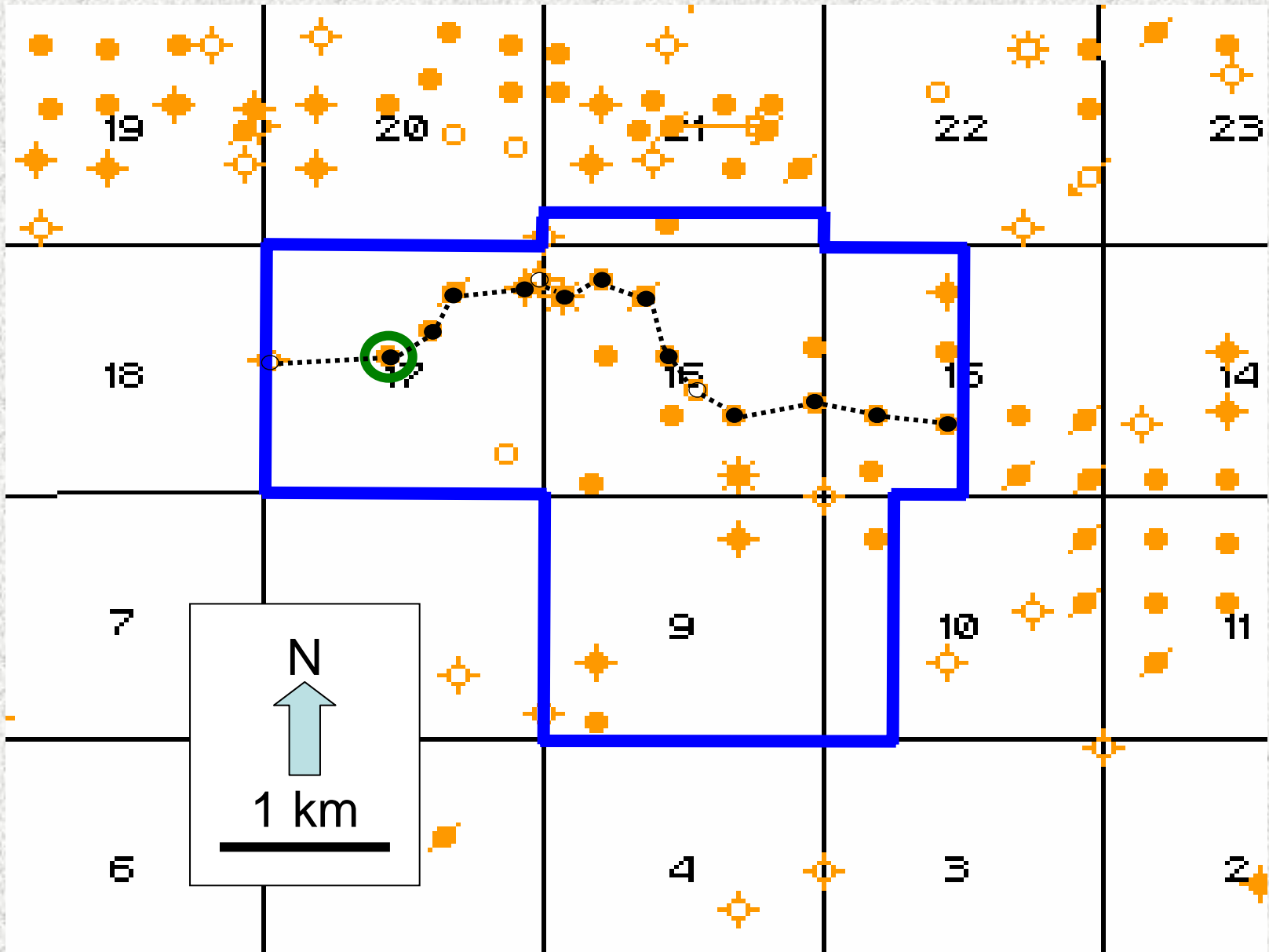
# **Searching for sand reservoirs: Analyzing 3C-3D seismic data from Manitou Lake, Saskatchewan**

Han-xing Lu, Kevin W. Hall\* and  
Robert R. Stewart

# Location map

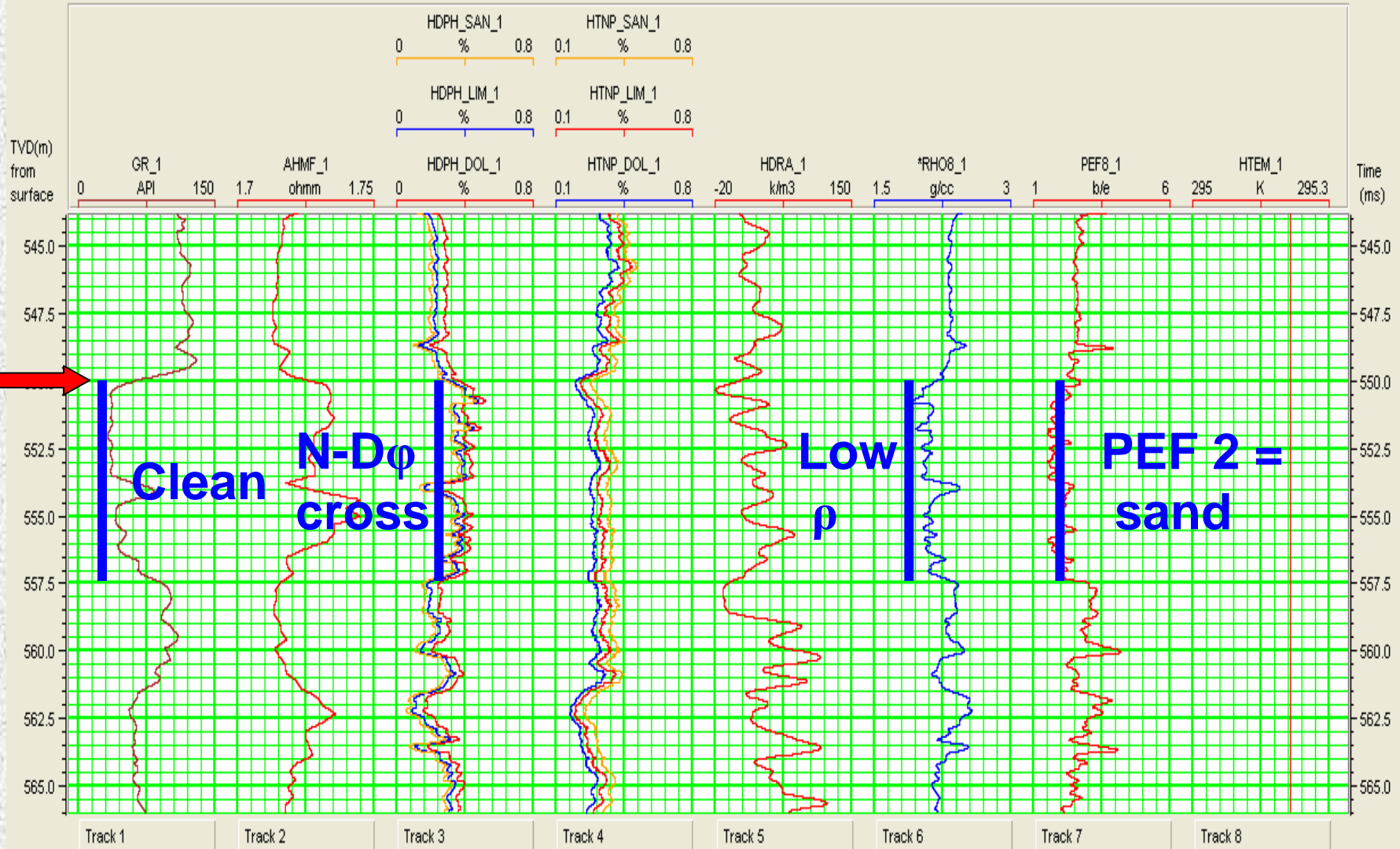


# Well locations



# Log analysis for sands

A11-17-44-27.109R.H2  
 (x=0.00m, y=0.00m) Elevation: kb=637.72m, surface=633.8m

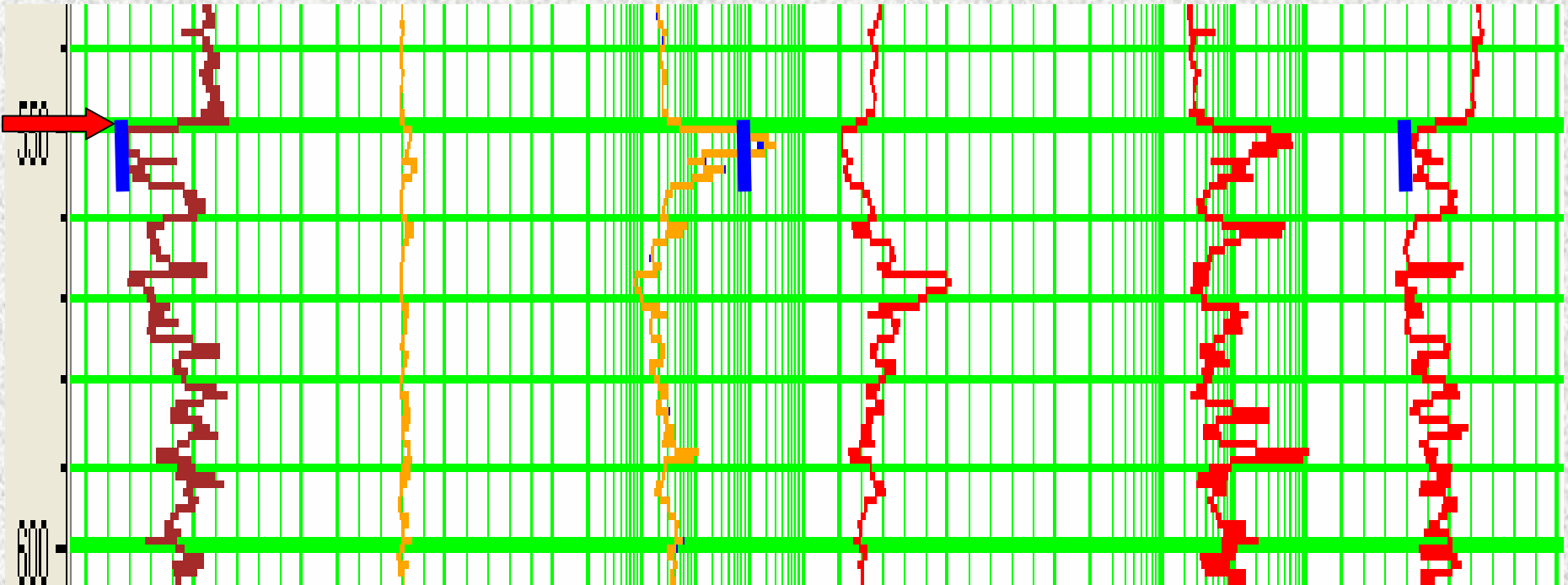
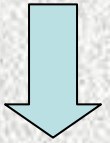
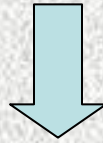
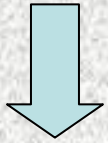


# Classic gas from log inspection

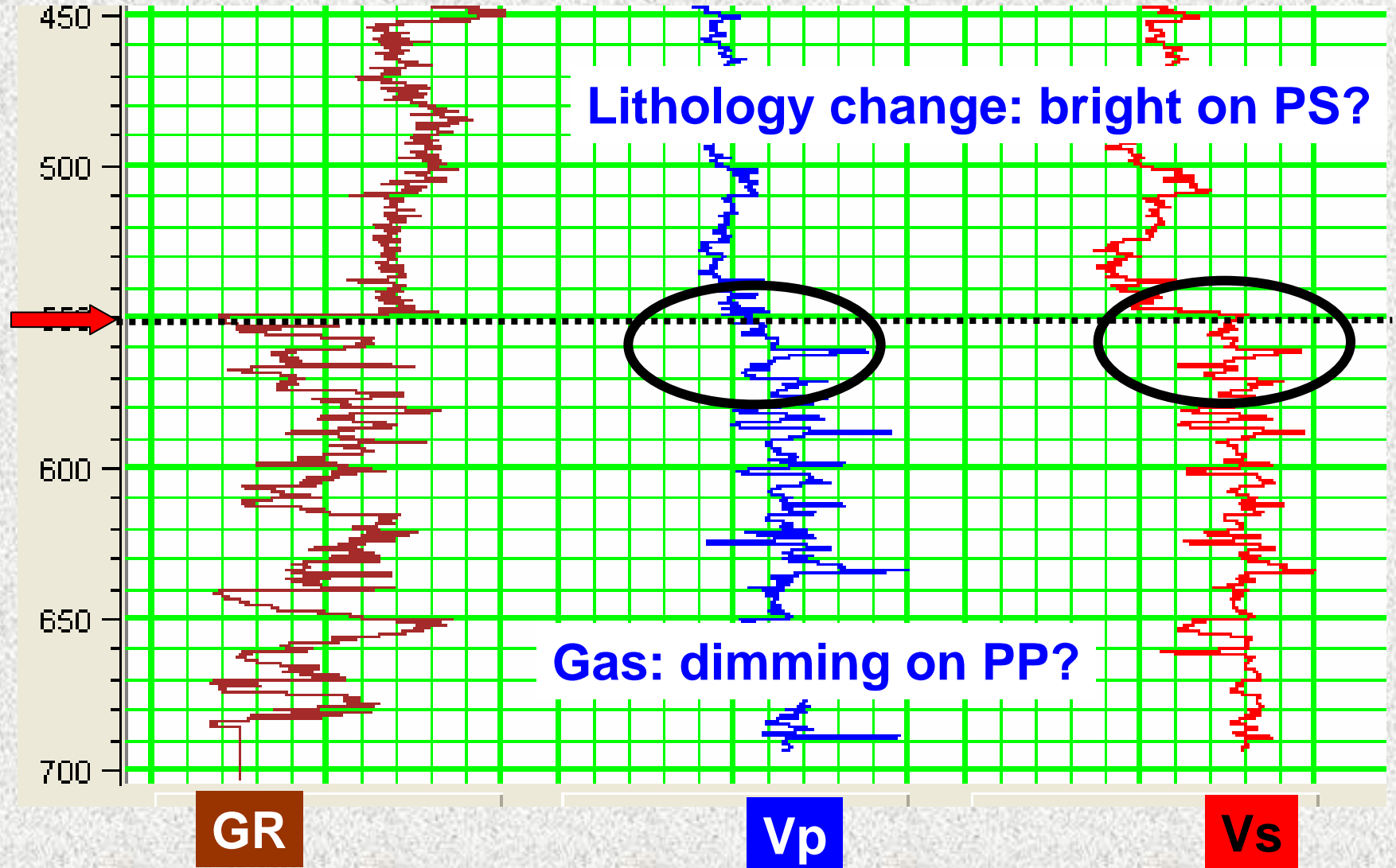
Low gamma

Very high resistivity –  
deep induction

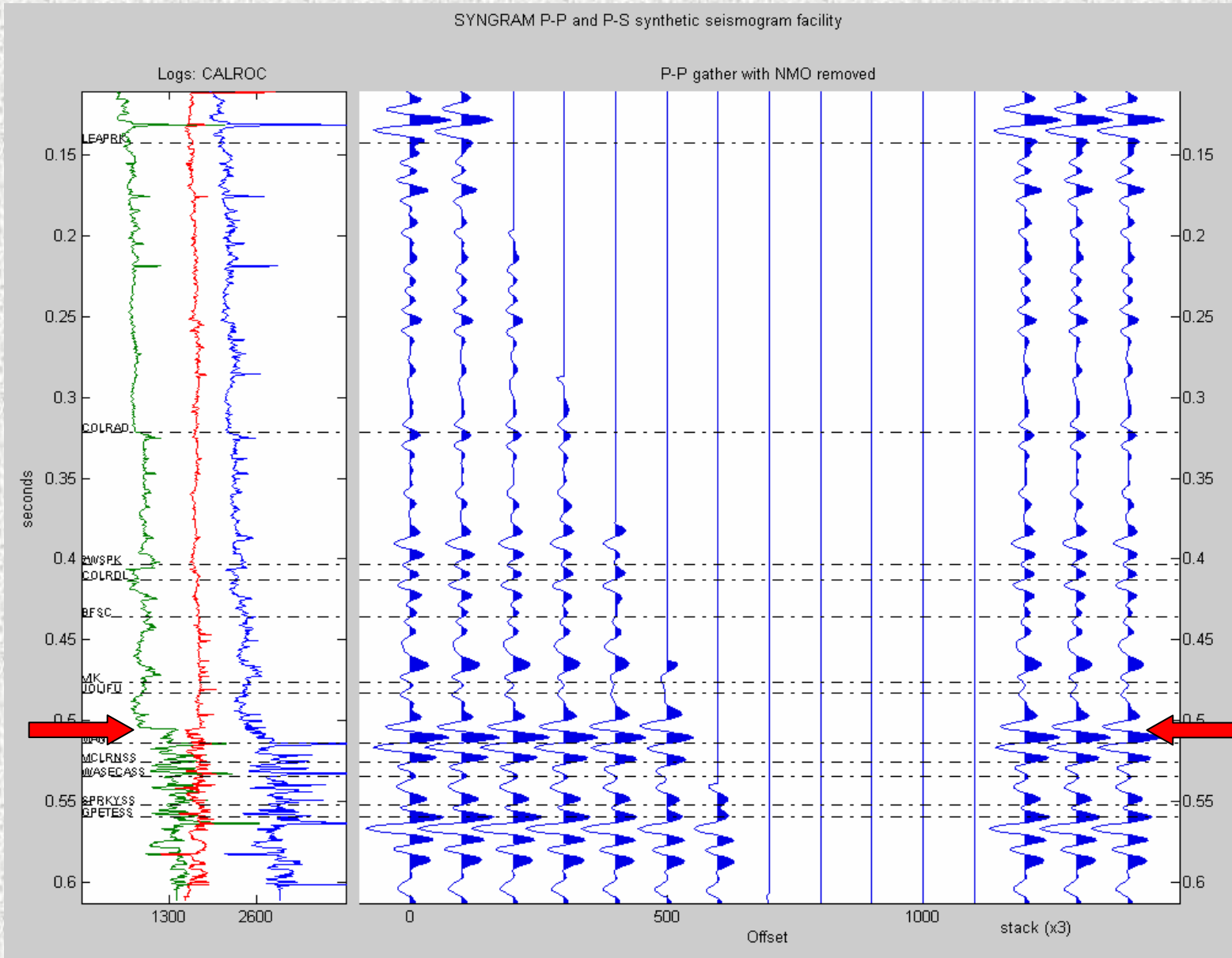
SP permeable



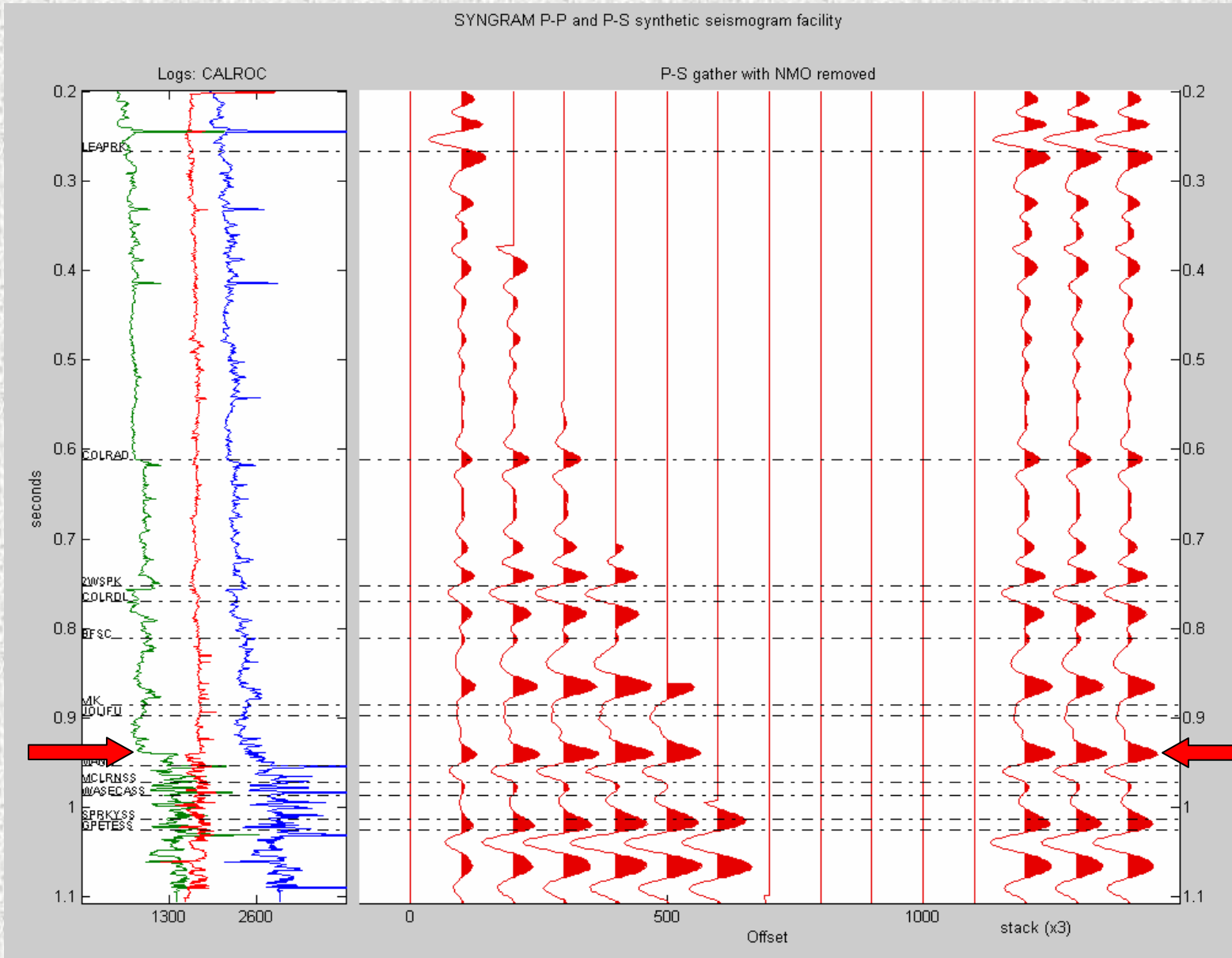
# Interesting elastic effects



# P-P synthetic

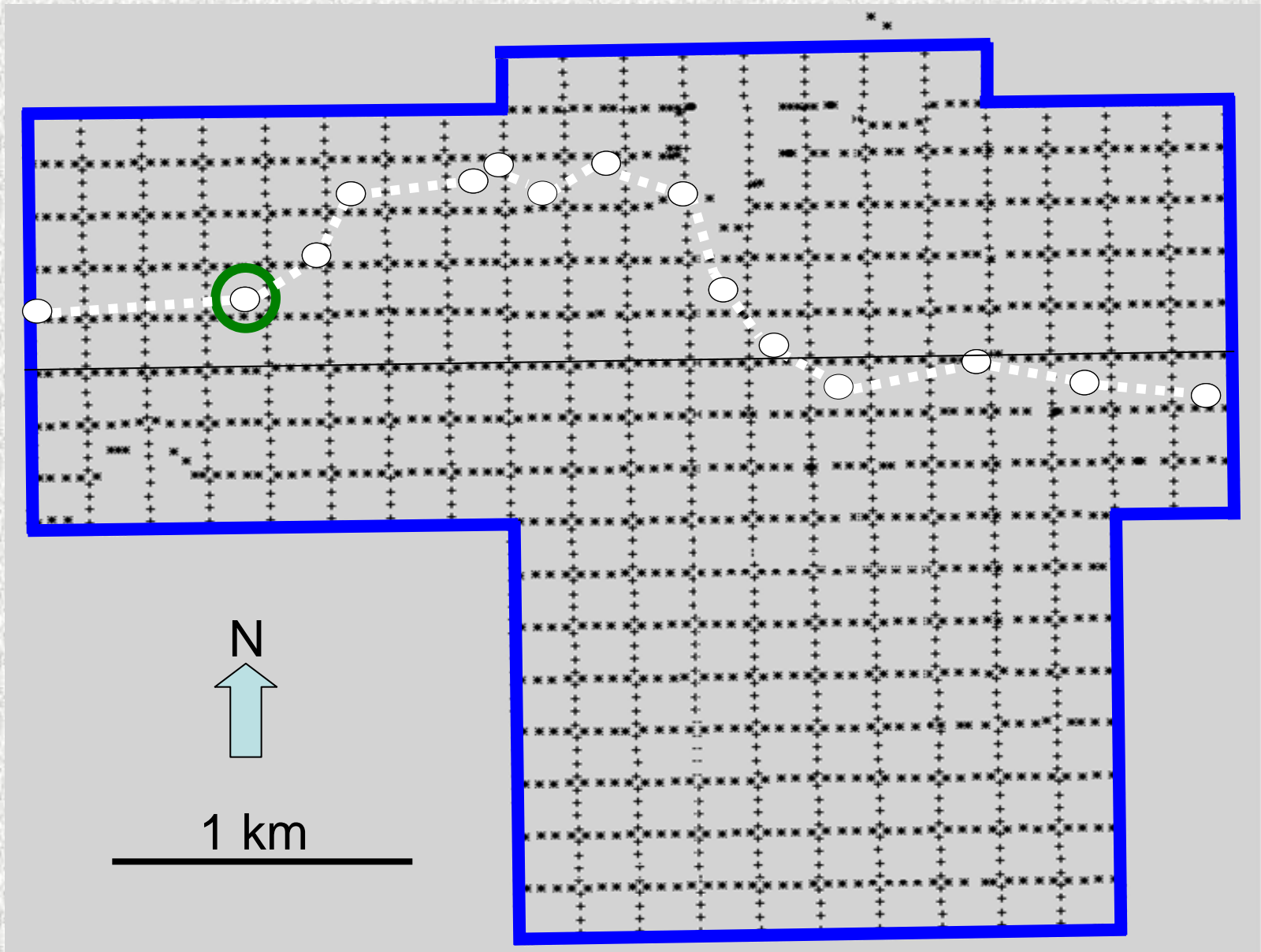


# P-S synthetic

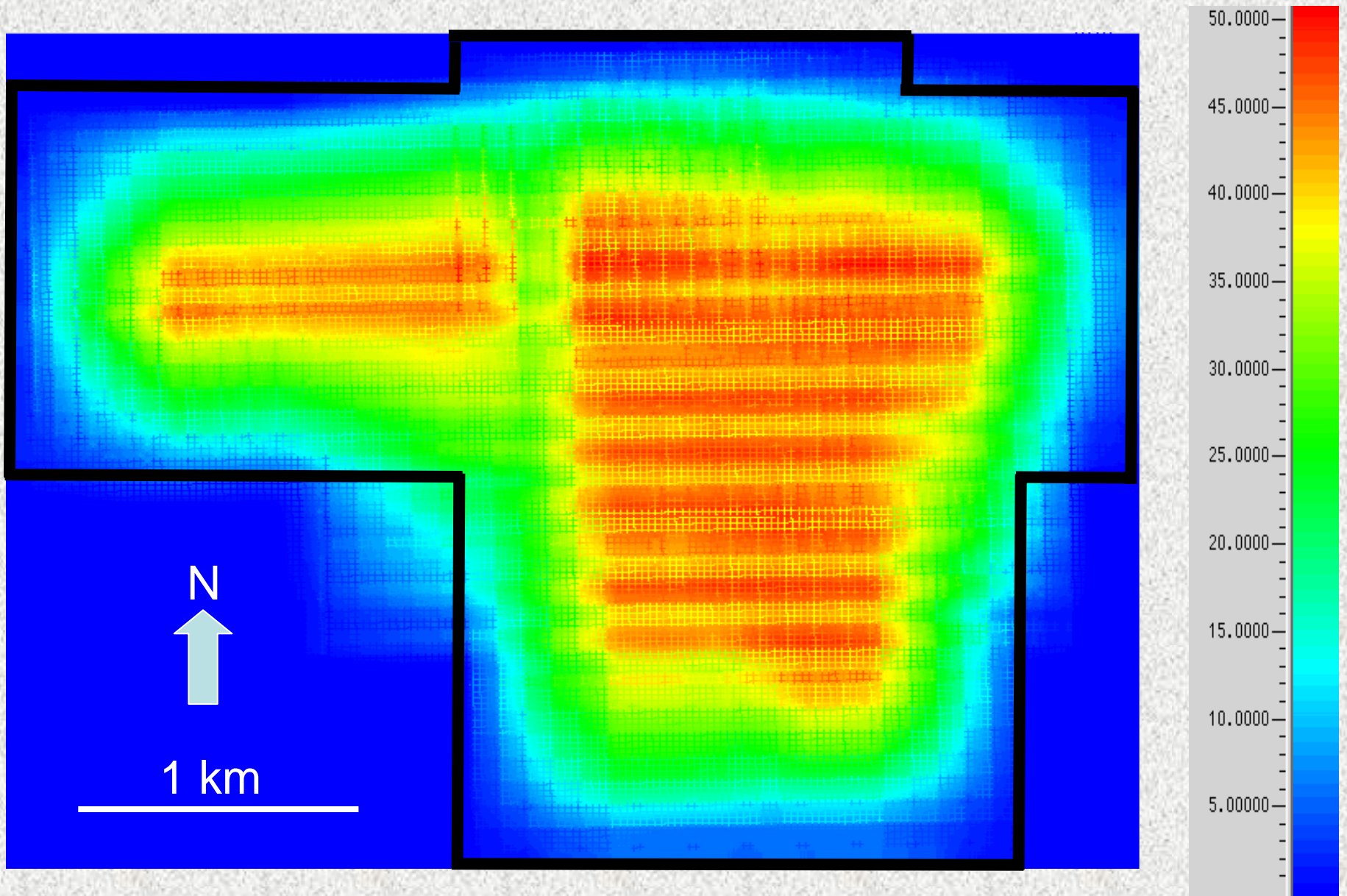




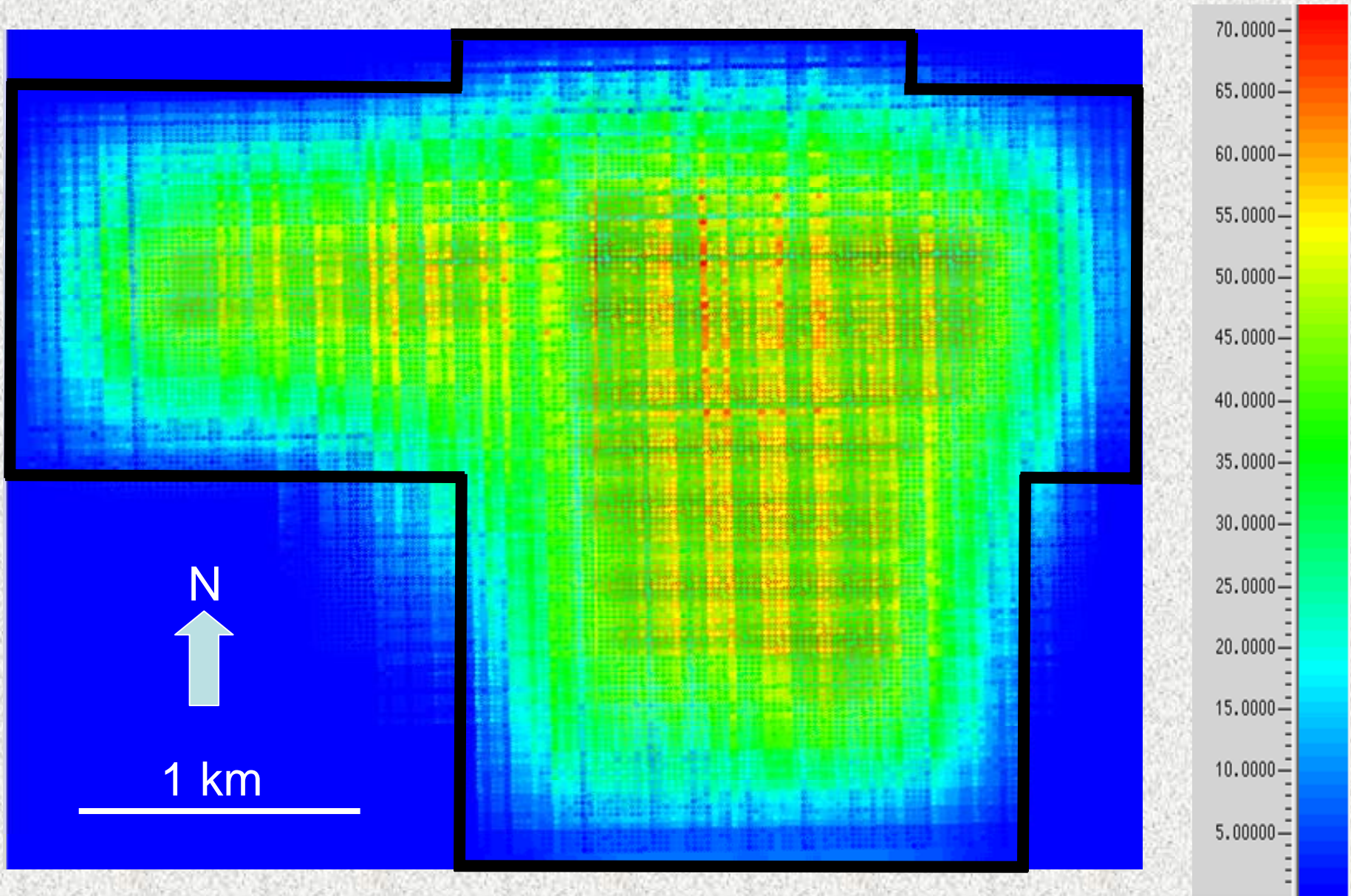
# Survey map



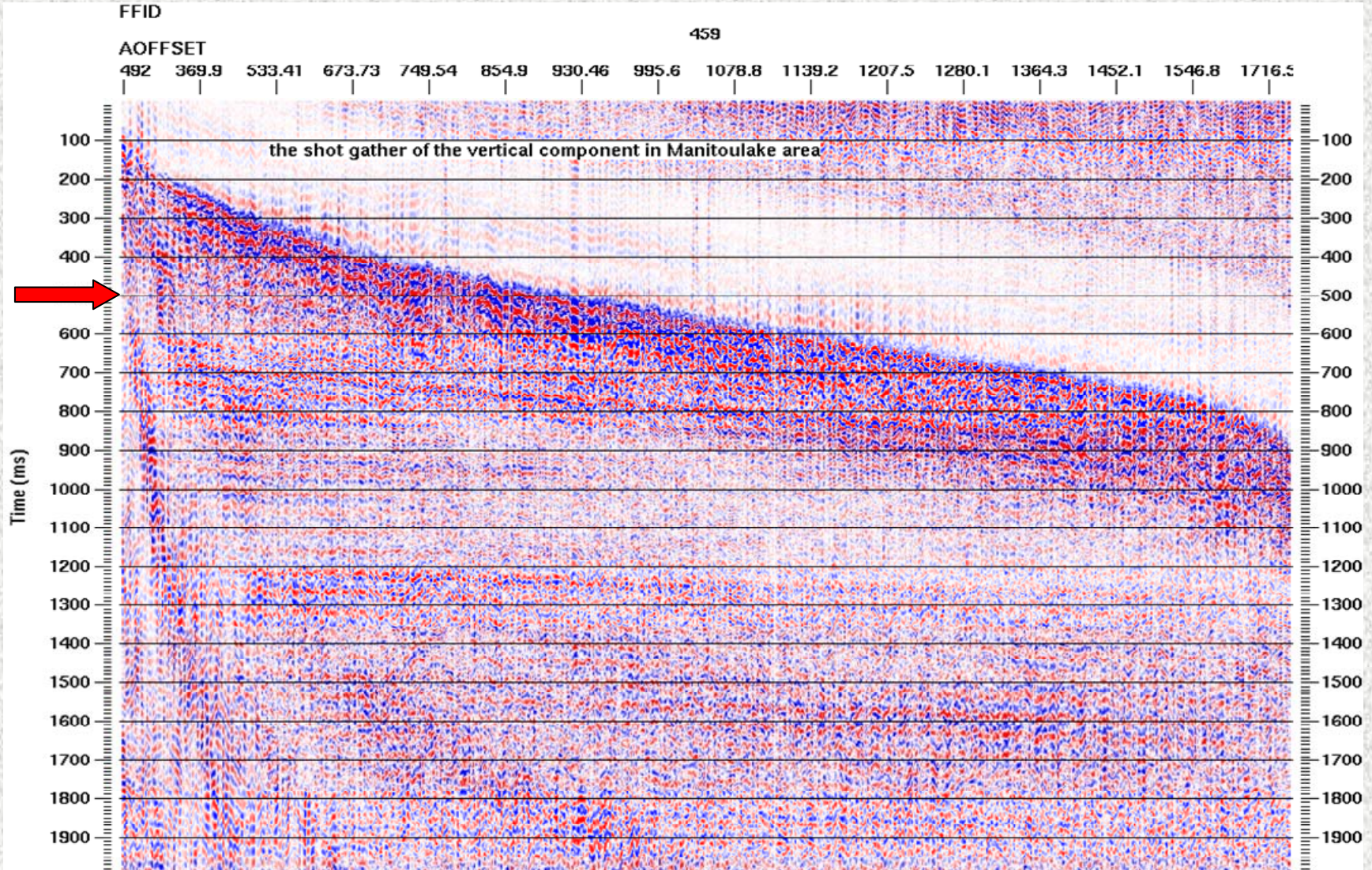
# CDP fold map



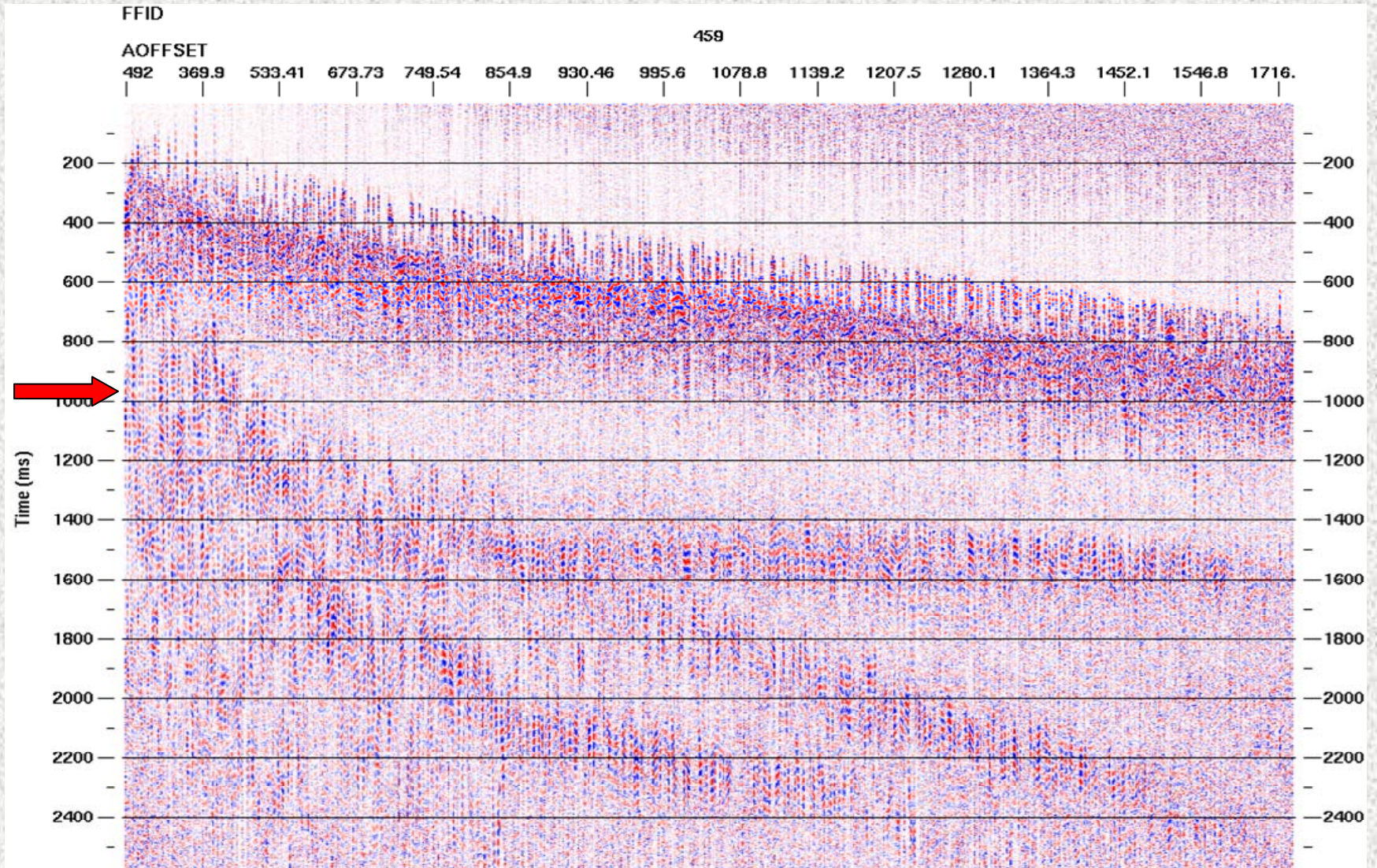
# ACP fold map



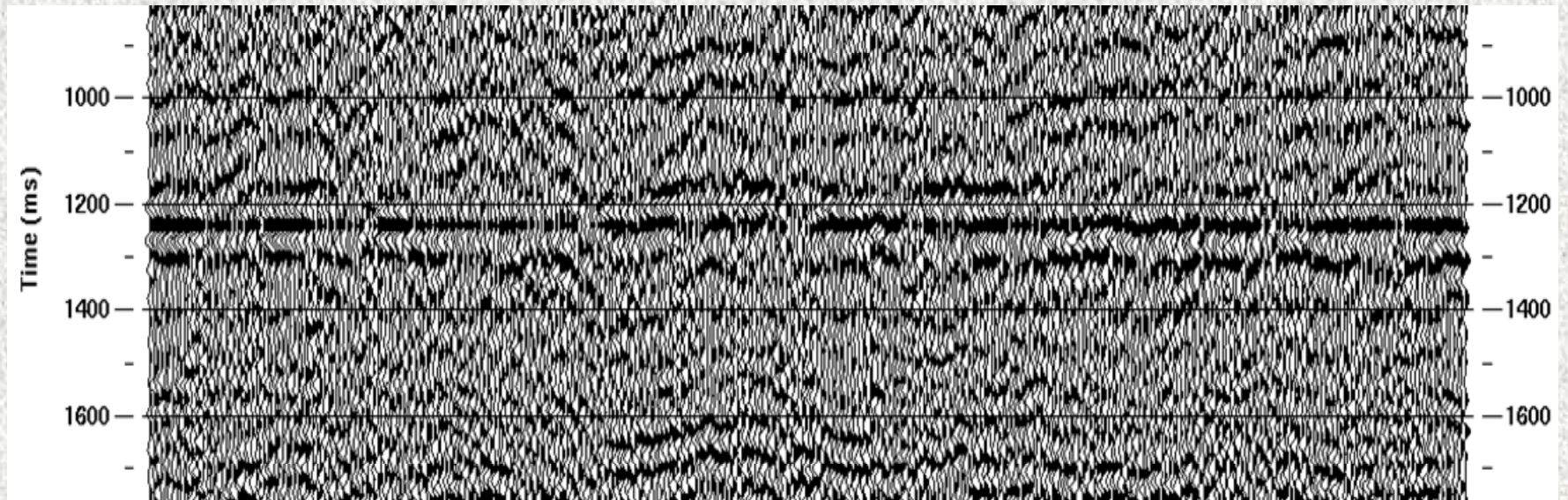
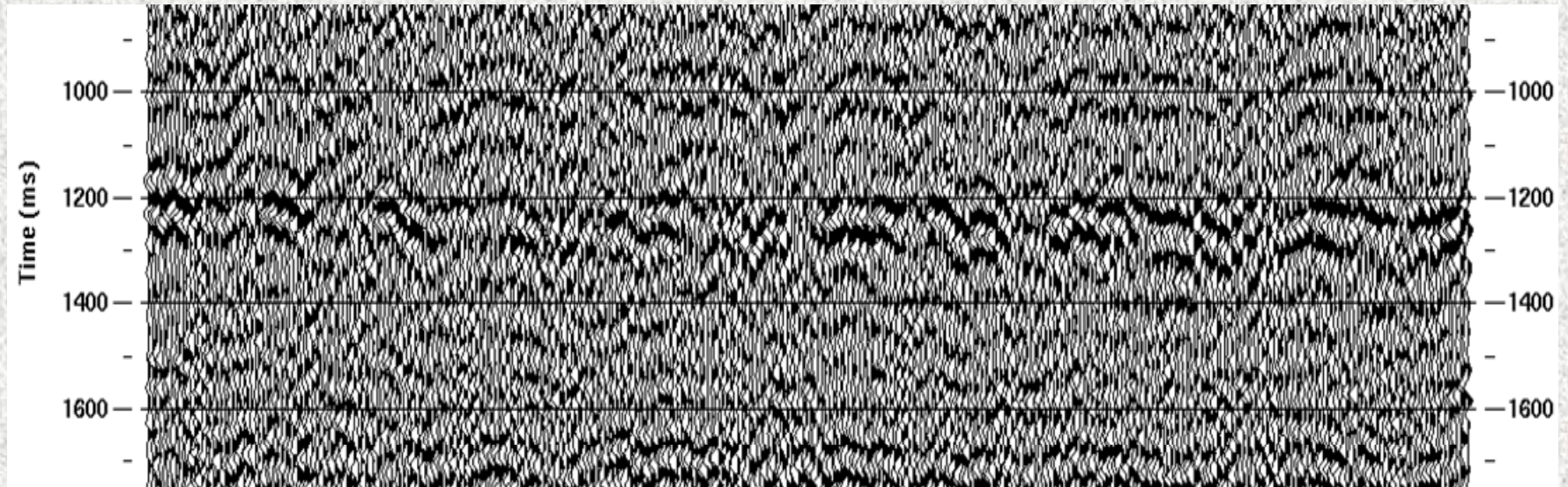
# P-P source gather sorted by |offset|



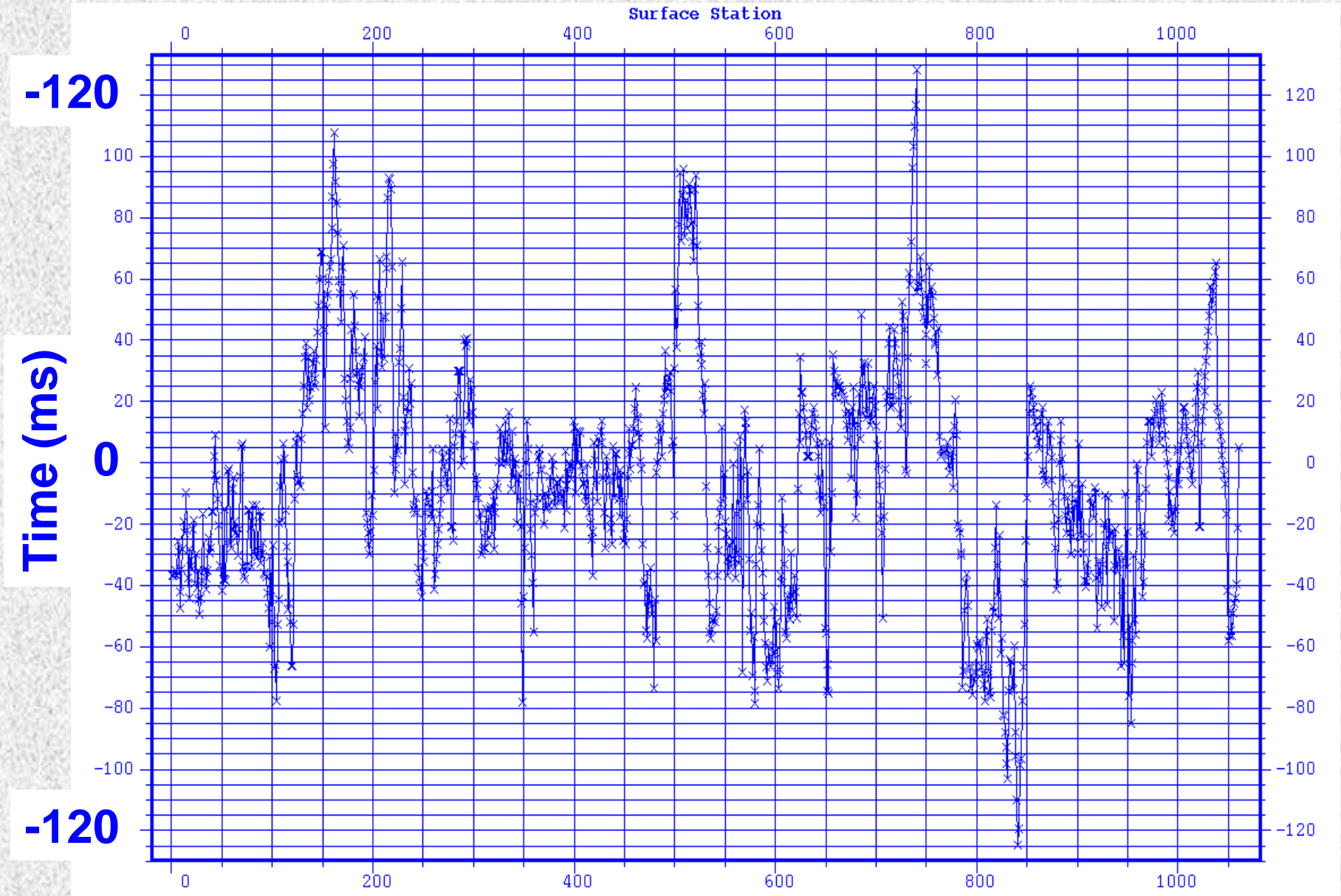
# P-S source gather sorted by |offset|



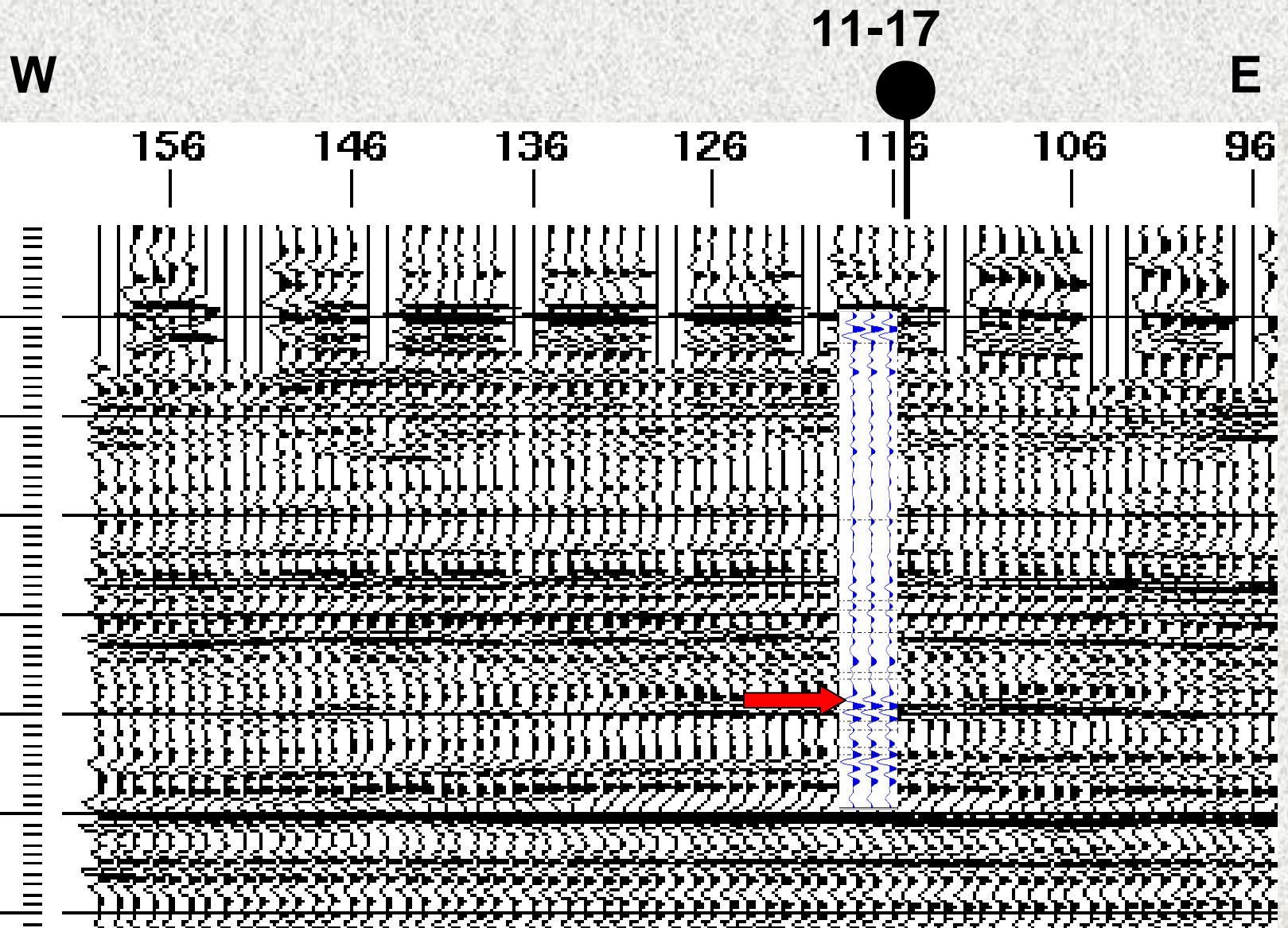
# P-S receiver stacks before and after hand statics



# Hand statics

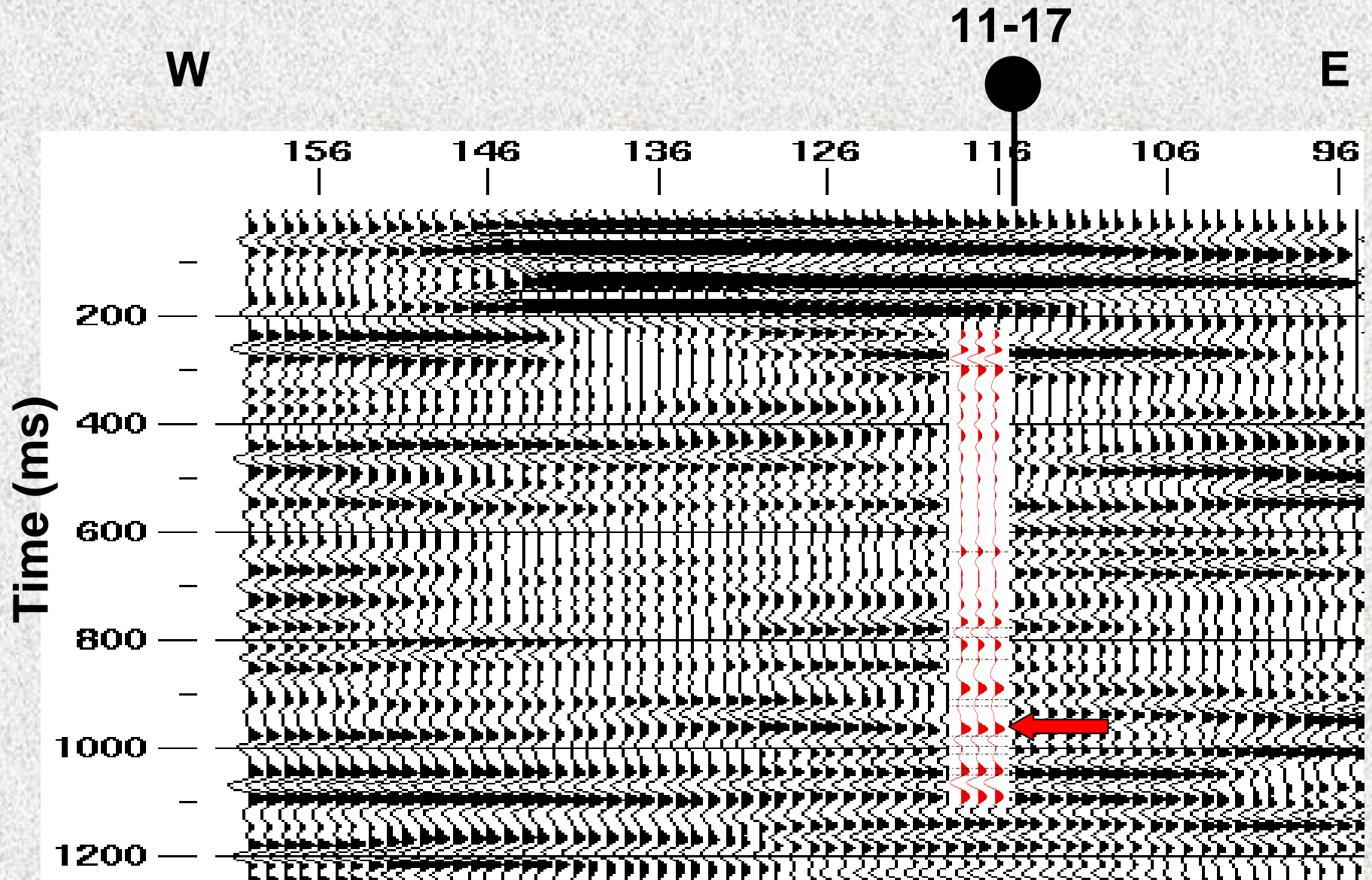


# P-P synthetic to seismic comparison

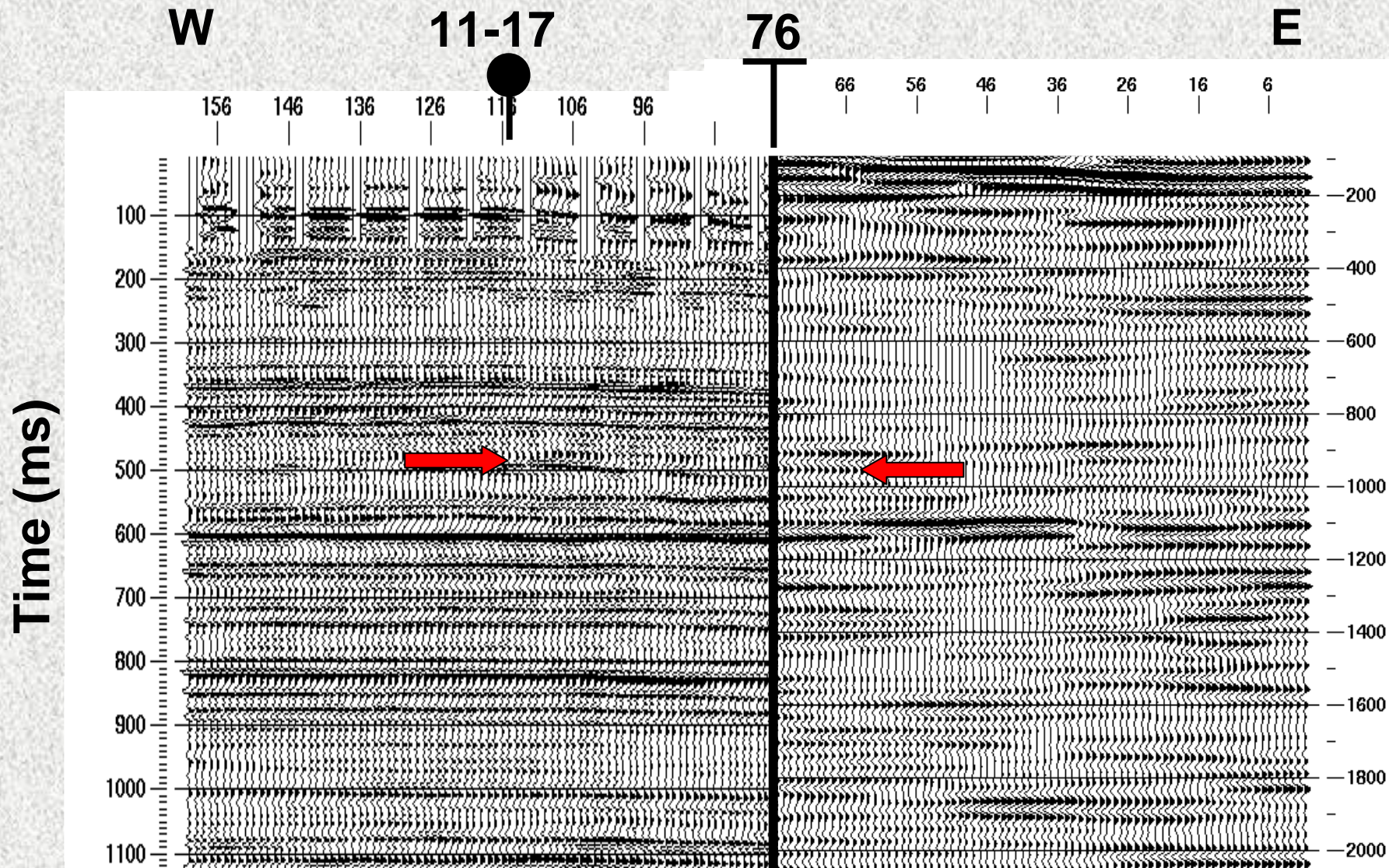




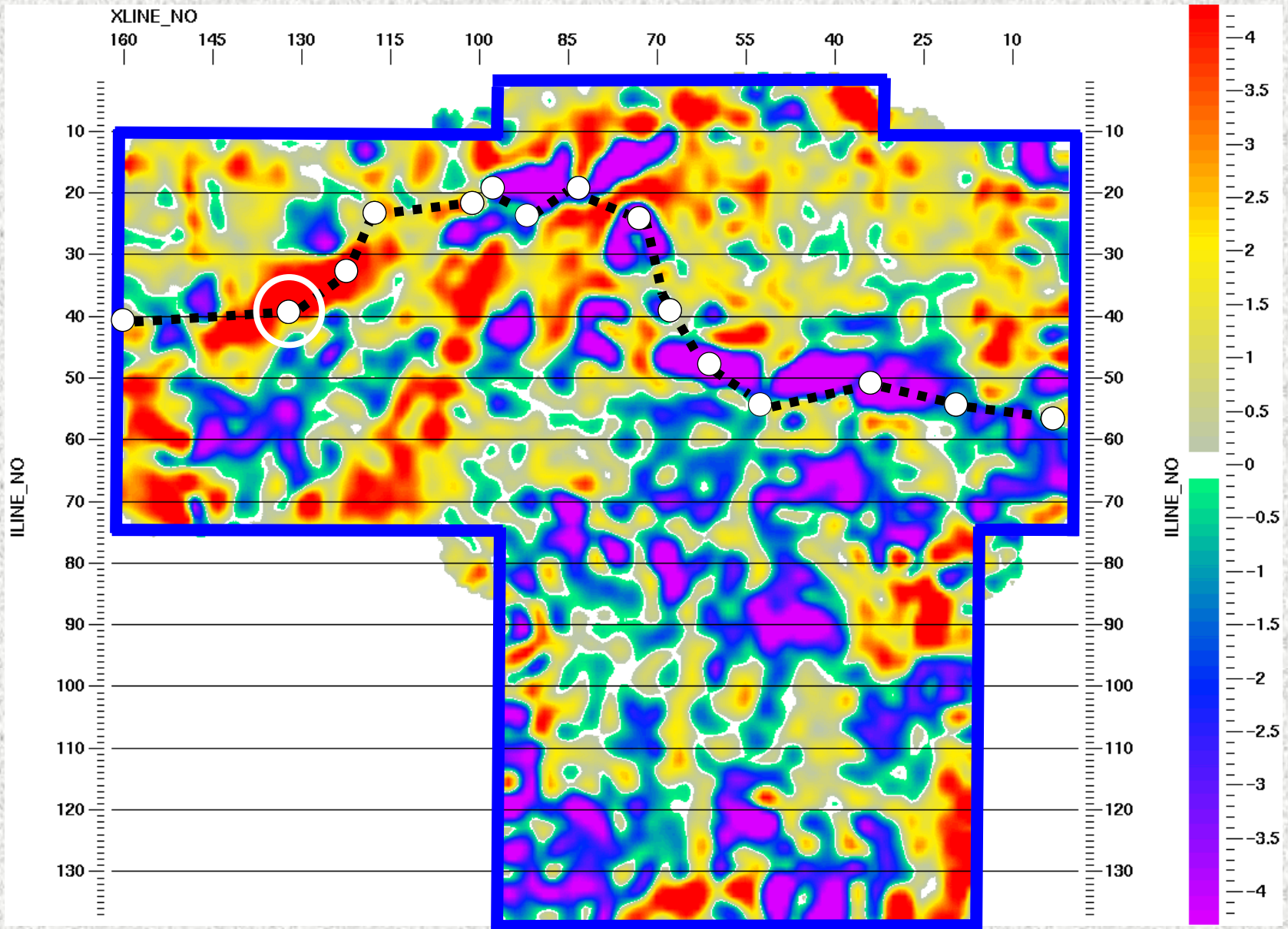
# P-S synthetic to P-S seismic comparison



# P-P to P-S seismic comparison



# P-P amplitude map (time slice)



# Conclusions

- Stay tuned!
  - Formation analysis study
  - Final seismic volumes
  - Interpretation

# Acknowledgements

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