Tap Oil T/47P 3D PSTM

CGGVᴇʀɪᴛᴀs

Common offset migration for
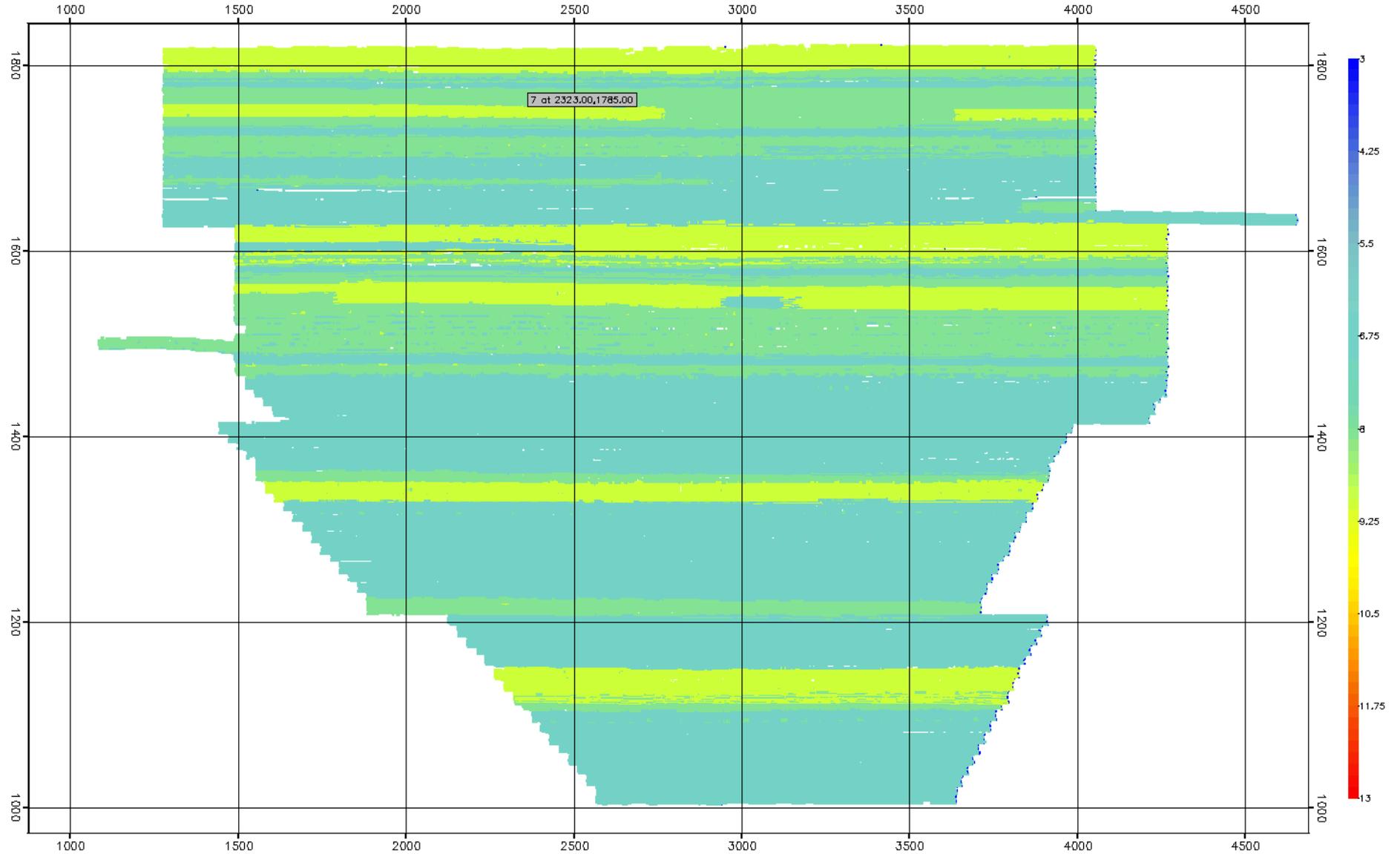matching filter test - revised

Processing Flow

- Reformat
- Navigation merge
- Trace edit
- Low cut filter 3Hz 18dB
- Deterministic de-phase filter to convert data to zero phase using far field signature
- Resample to 4ms using AA filter 110Hz 96dB
- System delay correction
- Spherical divergence correction V*V*T using regional velocity
- Swell noise attenuation, threshold 2.25 and despiking; threshold 2.0
- Linear noise attenuation, Velocity -2500m/s to 2500m/s
- Tidal static correction
- Tau-P de-convolution, operator length 280 and gap 24ms
- 1st pass velocity analysis on 1km x 1km grid
- NMO
- Drop alternate trace using K-filter
- Interpolate one trace in cdp domain
- High resolution radon demultiple
- Remove interpolated trace
- **Matching filter test**
- 3D binning, fill in missing trace (flood)
- PSTM on common offset (445)
- Amplitude map display

Summary

- A common offset migration is done to see the amplitude striping along different cable depth
- Two tests are conducted
  - Test 1: Without differential datum correction before binning
  - Test 2: With differential datum correction before binning
- Following amplitude maps are displayed
  - 1. RMS amplitude map
  - 2. Absolute peak amplitude map
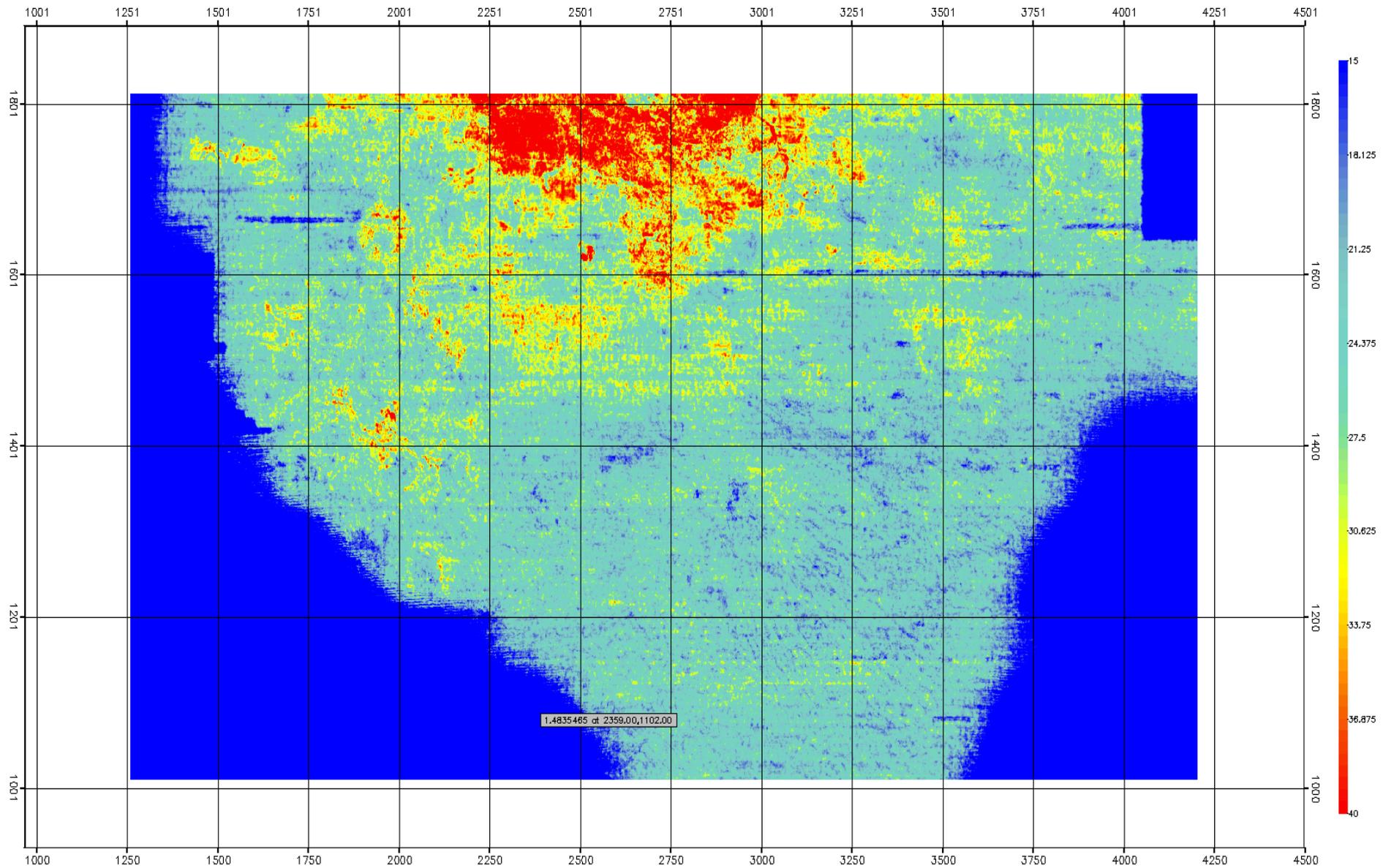- There is not any obvious amplitude striping.

CGGVERITAS

Cable depth plot

Vega:vegas:spr207pc:s563tap:xrmfldshift 00445 xrmfldshift 0044500445/CABDEPI
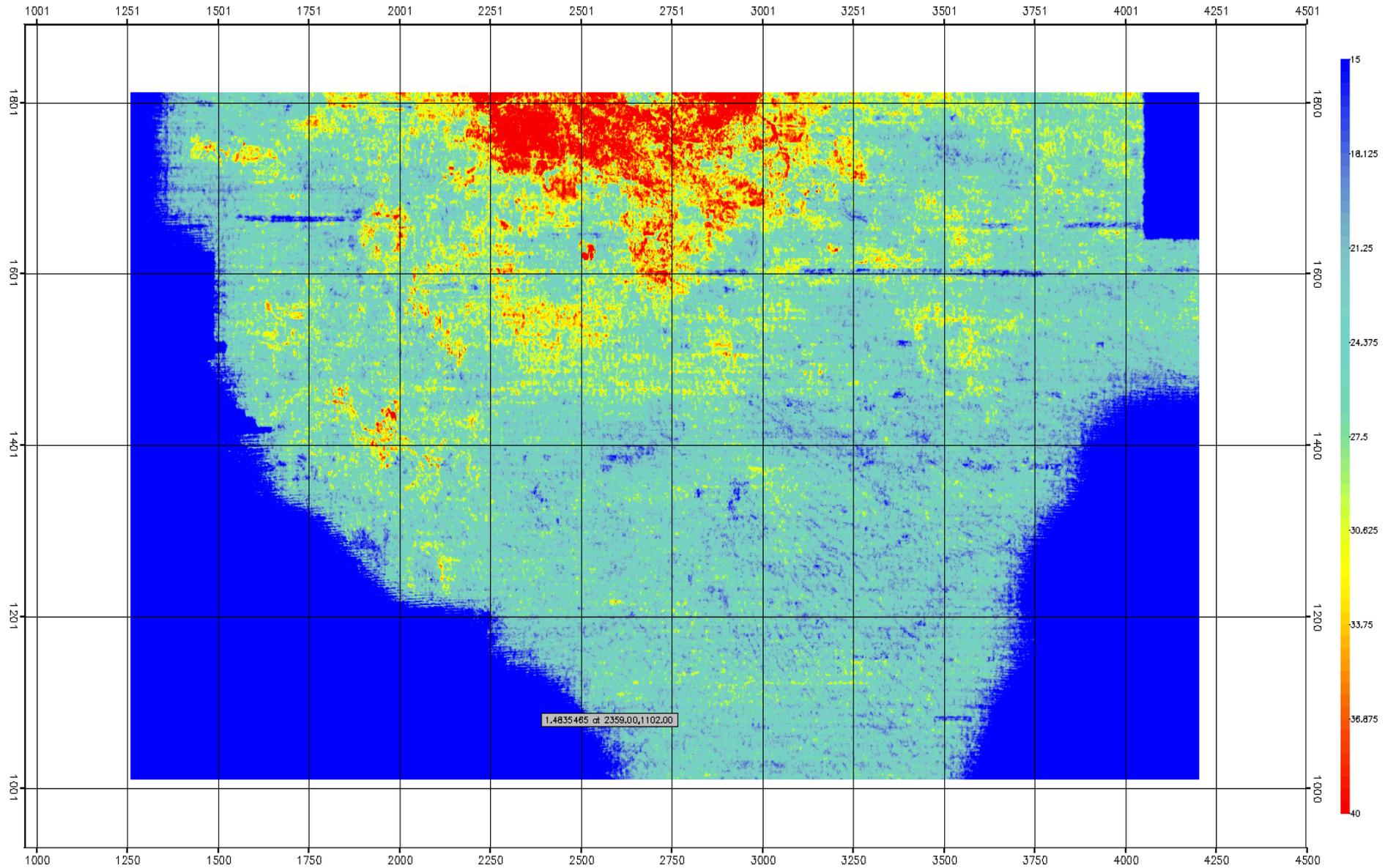
7 at 2323.00,1785.00

Amplitude map – Test 1. RMS amplitude computed over time window 400 to 1400ms

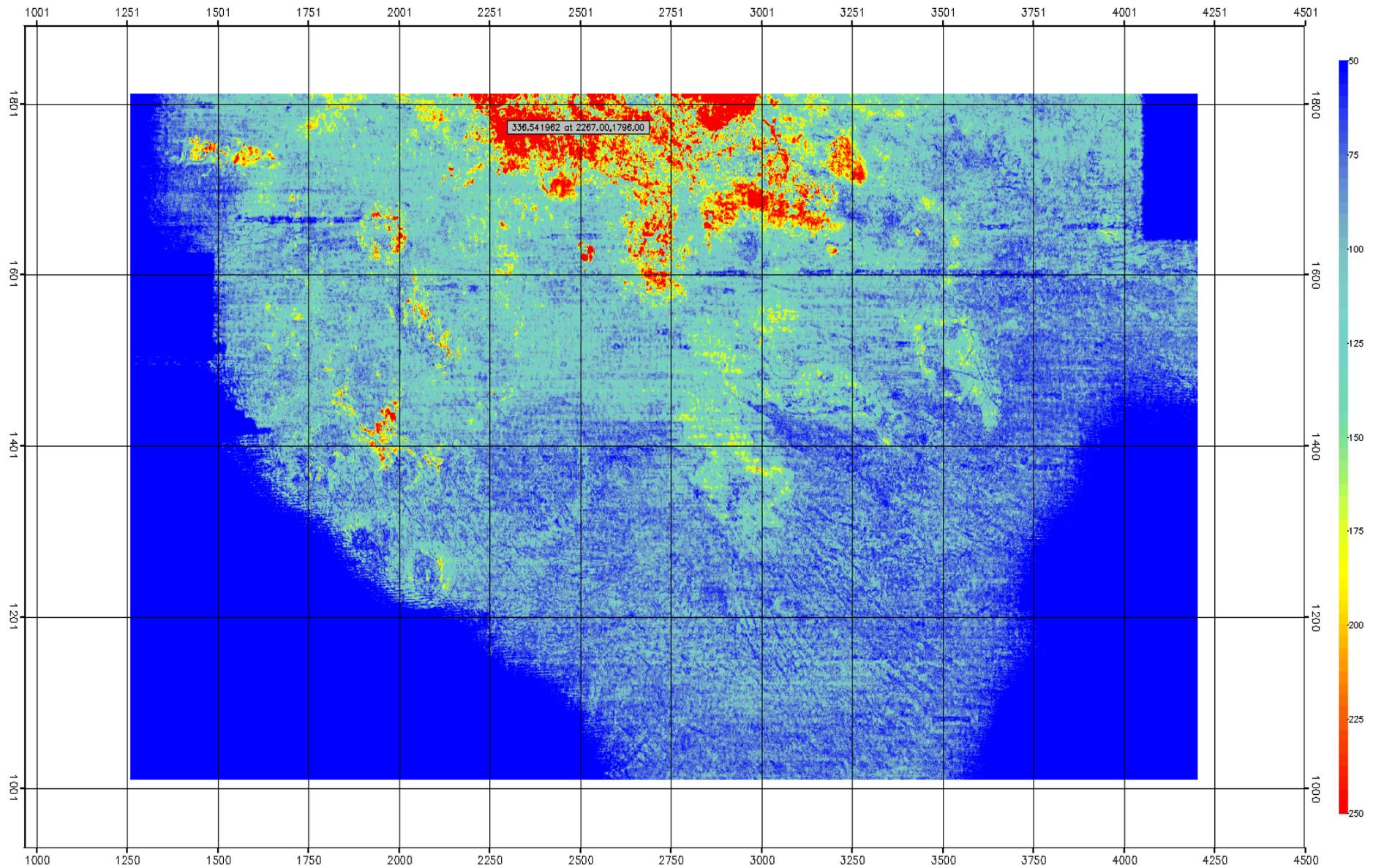Tango:vegas:spr224ws:s563tap:noshift rms amp/ATVAL

Amplitude map – Test 2. RMS amplitude computed over time window 400 to 1400ms

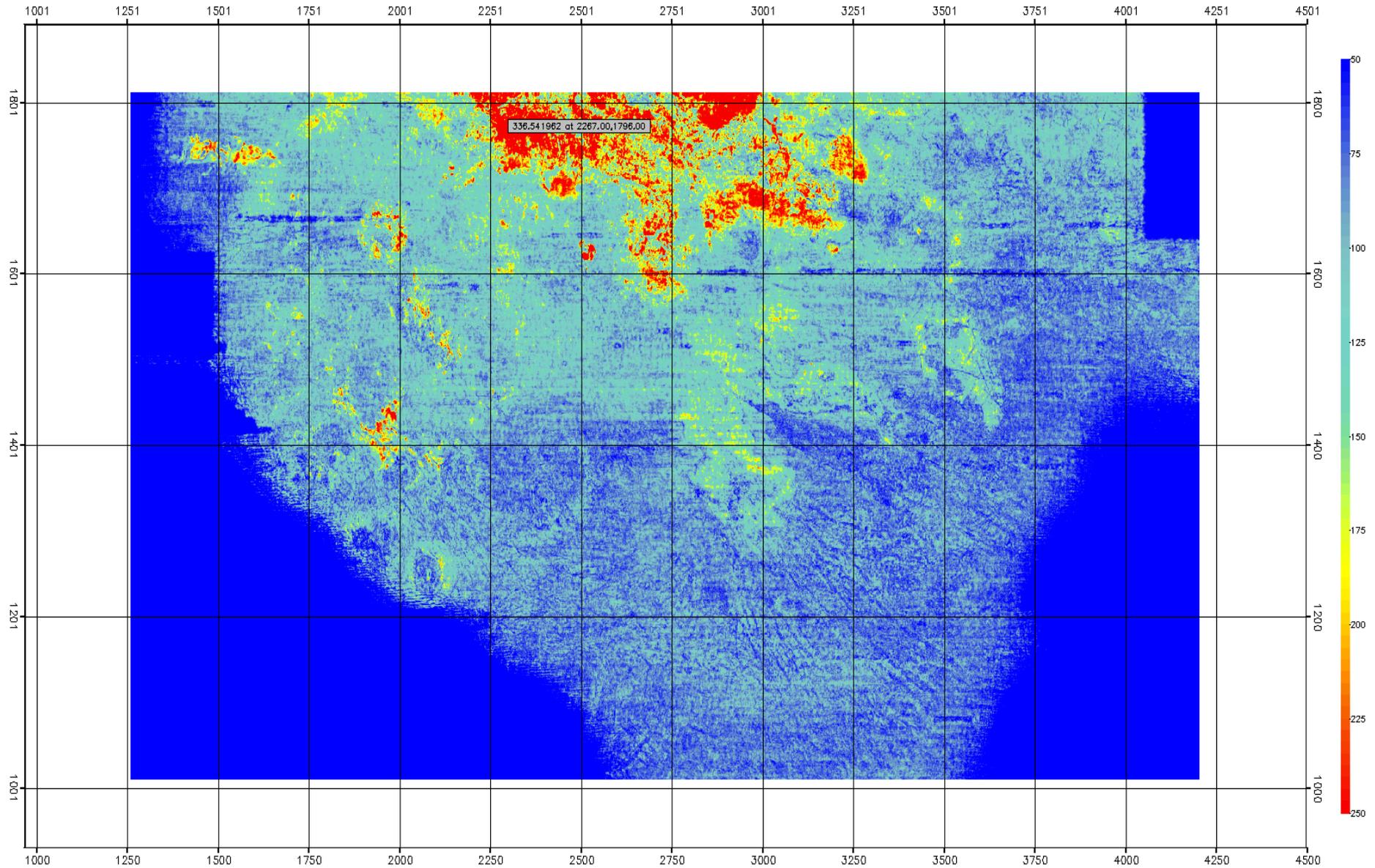Tango:vegas:spr224ws:s563lap:shift2 rms amp/ATVAL

Amplitude map – Test 1. Absolute peak amplitude computed over time window 400 to 1400ms

Tango:vegas:spr224ws:s563tap:noshift peak amp/ATVAL

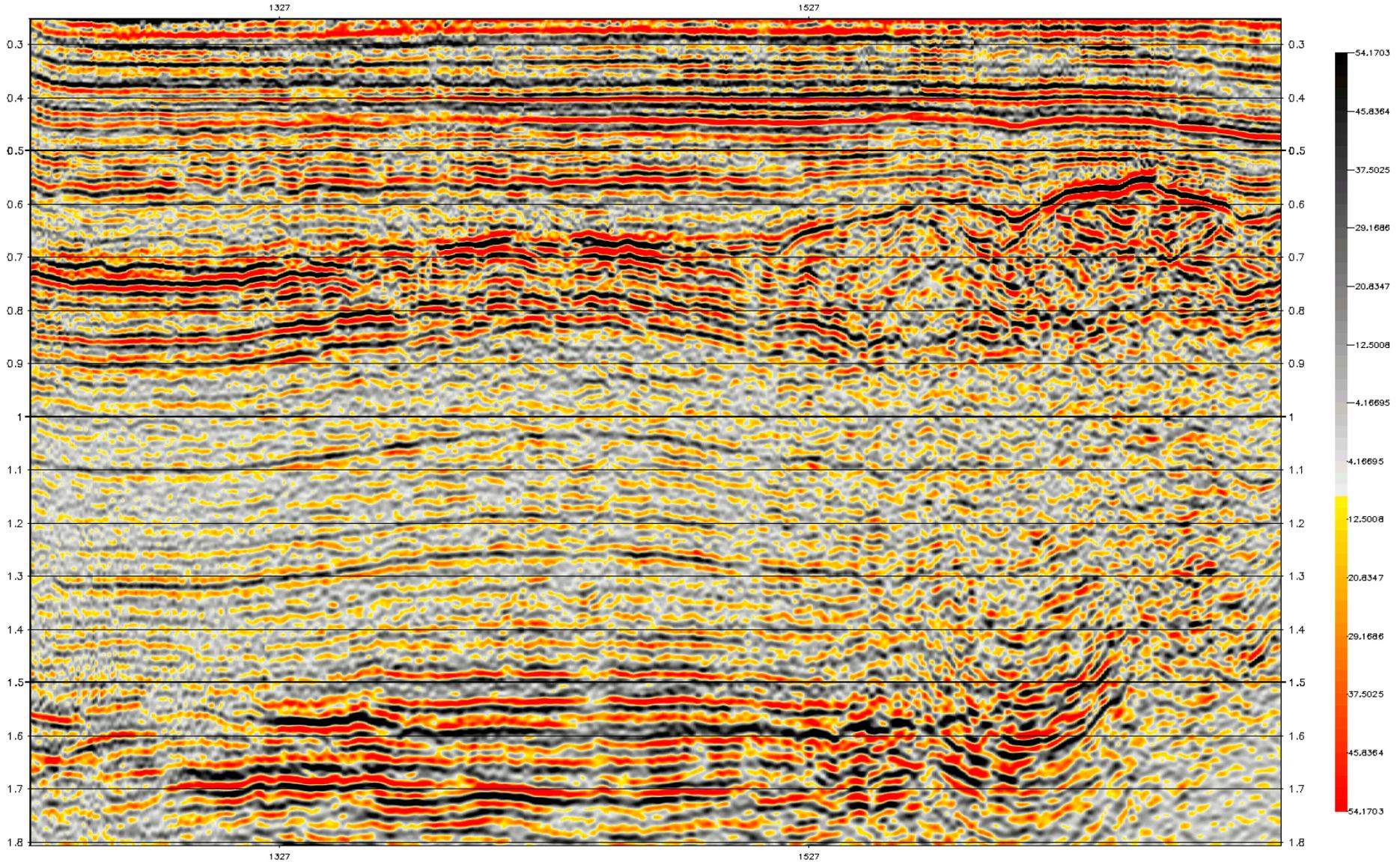# Amplitude map – Test 2. Absolute peak amplitude computed over time window 400 to 1400ms

Tango:vegas:spr224ws:s563lap:shift2 peak amp/ATVAL

336.541962 at 2267.00,1796.00

Crossline 2000 – Test 1
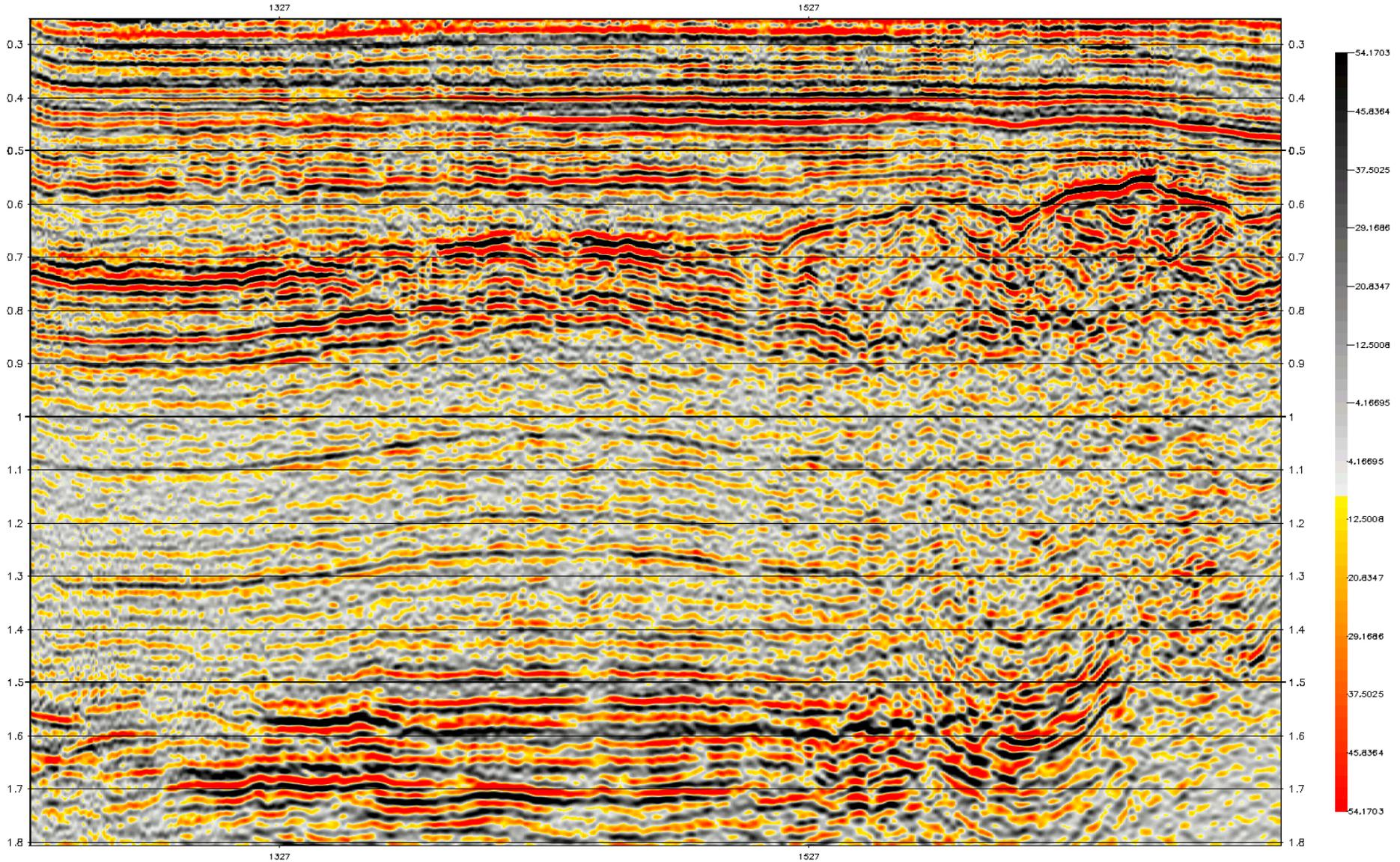

Tango:vegas:spr224ws:s563tap:noshift xl.1

CROSSLINE 2000 / INLINE

Crossline 2000 – Test 2
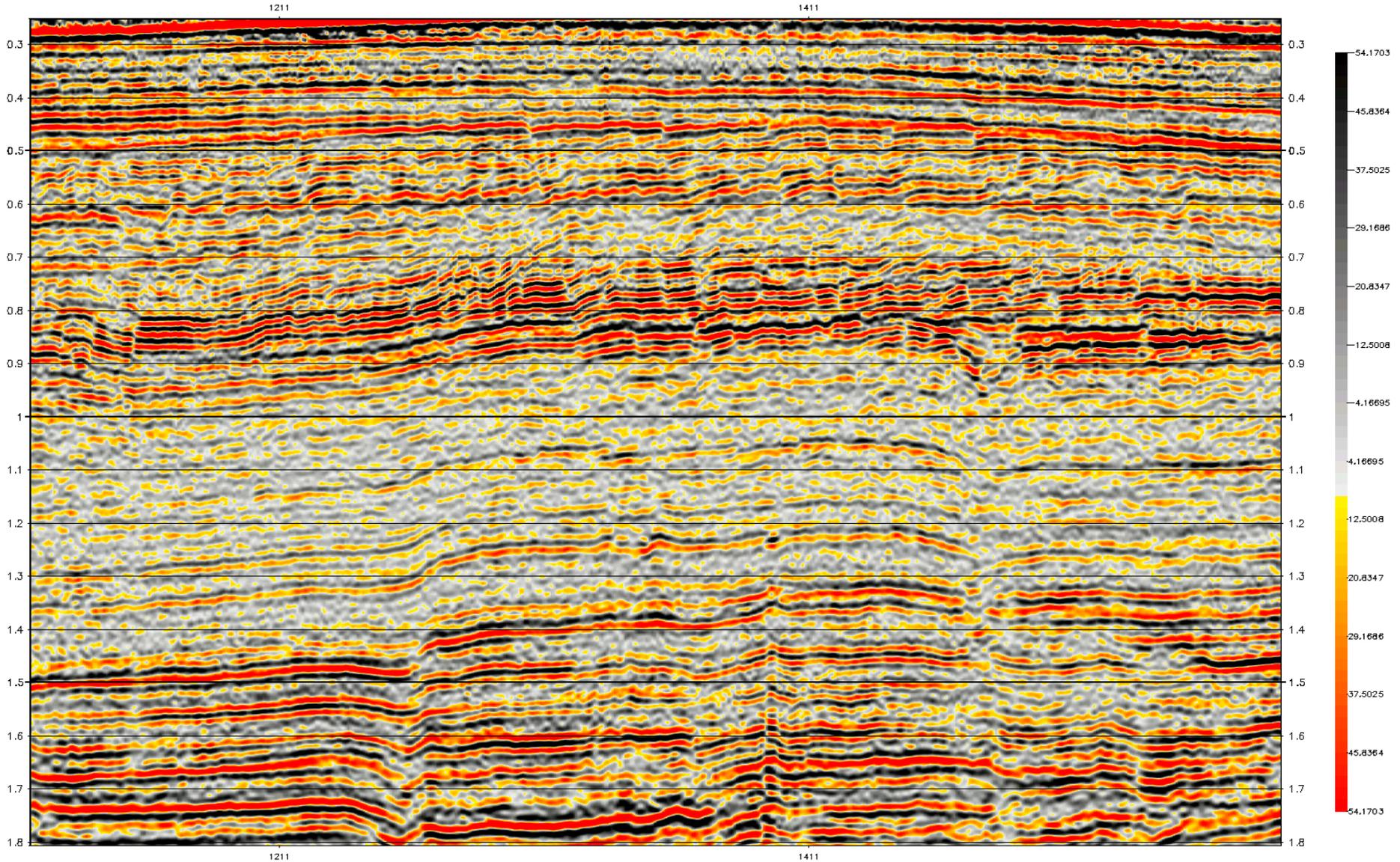

Tango:vegas:spr224ws:s563tap:shift2 xl.1

CROSSLINE 2000 / INLINE

Crossline 3500 – Test 1

Crossline 3500 – Test 2