

Tap Oil T/47P 3D PSTM



FLAT3D TEST
Inline 1331

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
- First pass velocity analysis on 1km x 1km grid
- NMO with QC'ed velocity
- Alternate trace drop with K – filter
- Interpolate one trace in cdp domain

Processing flow continued..

- High resolution radon demultiple
- Remove the interpolated trace
- Channel Scaling
- Post radon despiking
- Post radon linear noise attenuation
- 3D binning 12.5 X 25 m grid
- Ralft3D
- Target line migration
- Velocity analysis on 1km x 1km grid
- Reverse NMO
- Remove spherical divergence
- Final migration
- Residual velocity analysis on 0.5 km X 0.5 km grid
- NMO correction with residual velocity
- Second pass radon
- PRAISE
- FLAT3D

Test Summary

- FLAT test is conducted to correct the residual NMO by flattening seismic events within a group of traces.
- Two tests were performed:
 - Test 1:

Time (ms)	Maximum pullup	Maximum pushdown
400	30	30
800	100	100
1000	120	120
1500	140	140
2000	140	140
2500	140	140
3000	80	80
4000	40	60
5000	30	30
6000	20	20

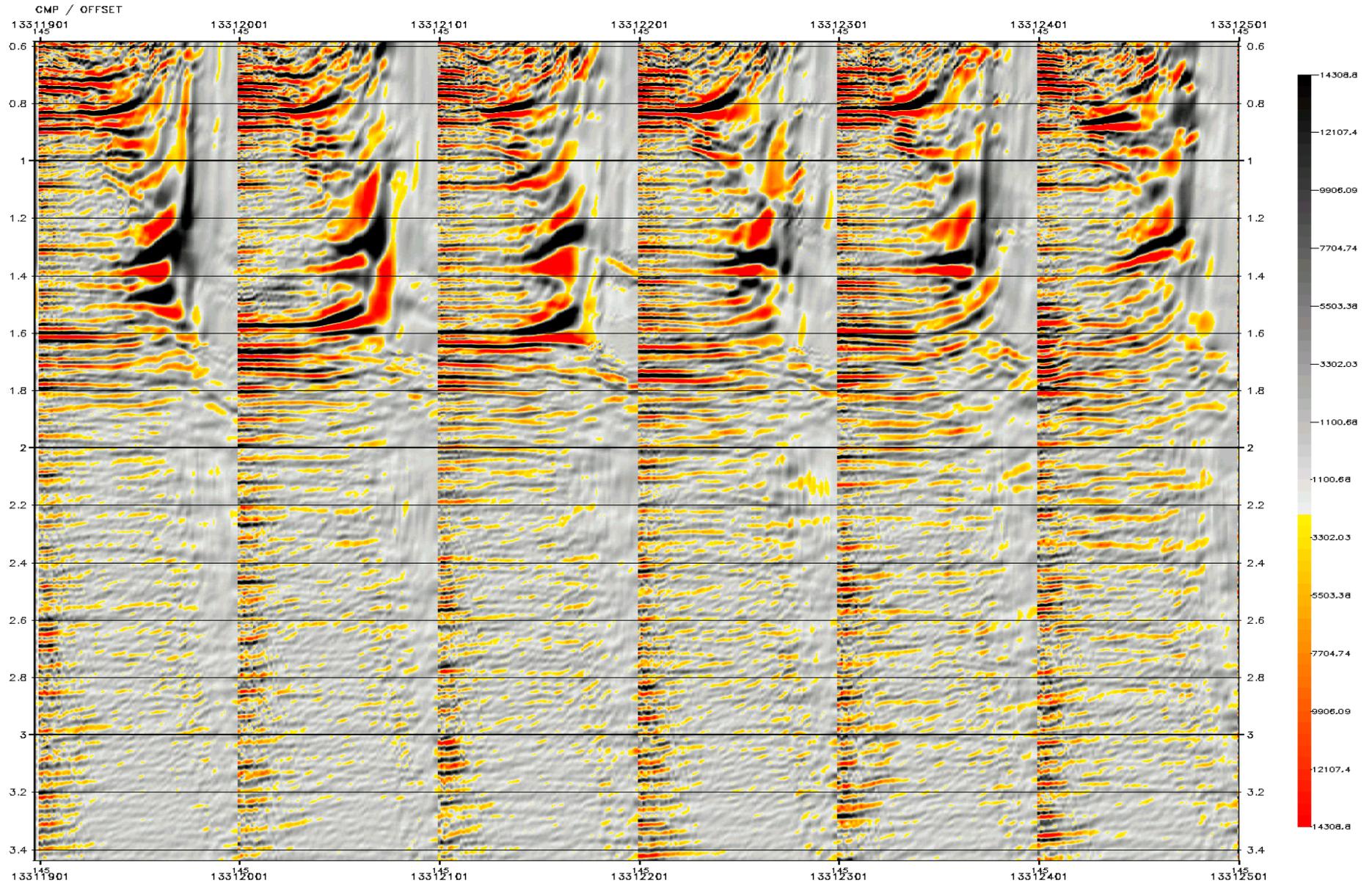
Test Summary

- Test 2:

Time (ms)	Maximum pullup	Maximum pushdown
400	30	30
800	100	100
1000	120	120
1500	140	140
1800	100	100
2000	40	40
2400	30	30
2700	20	20
3000	20	20
4000	10	10
5000	10	10
6000	10	10

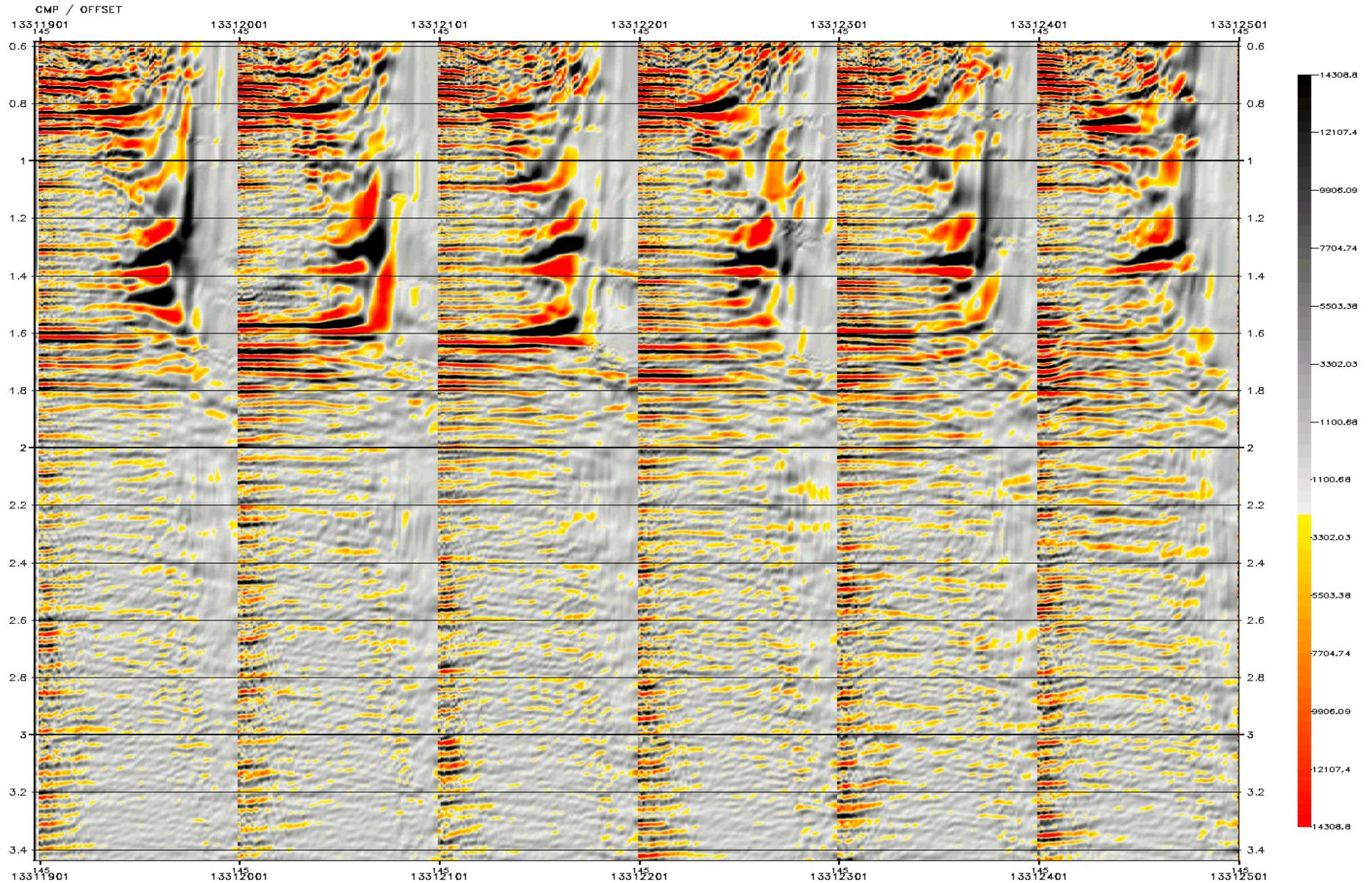
Gathers without FLAT

1331 noflat gthscale 3



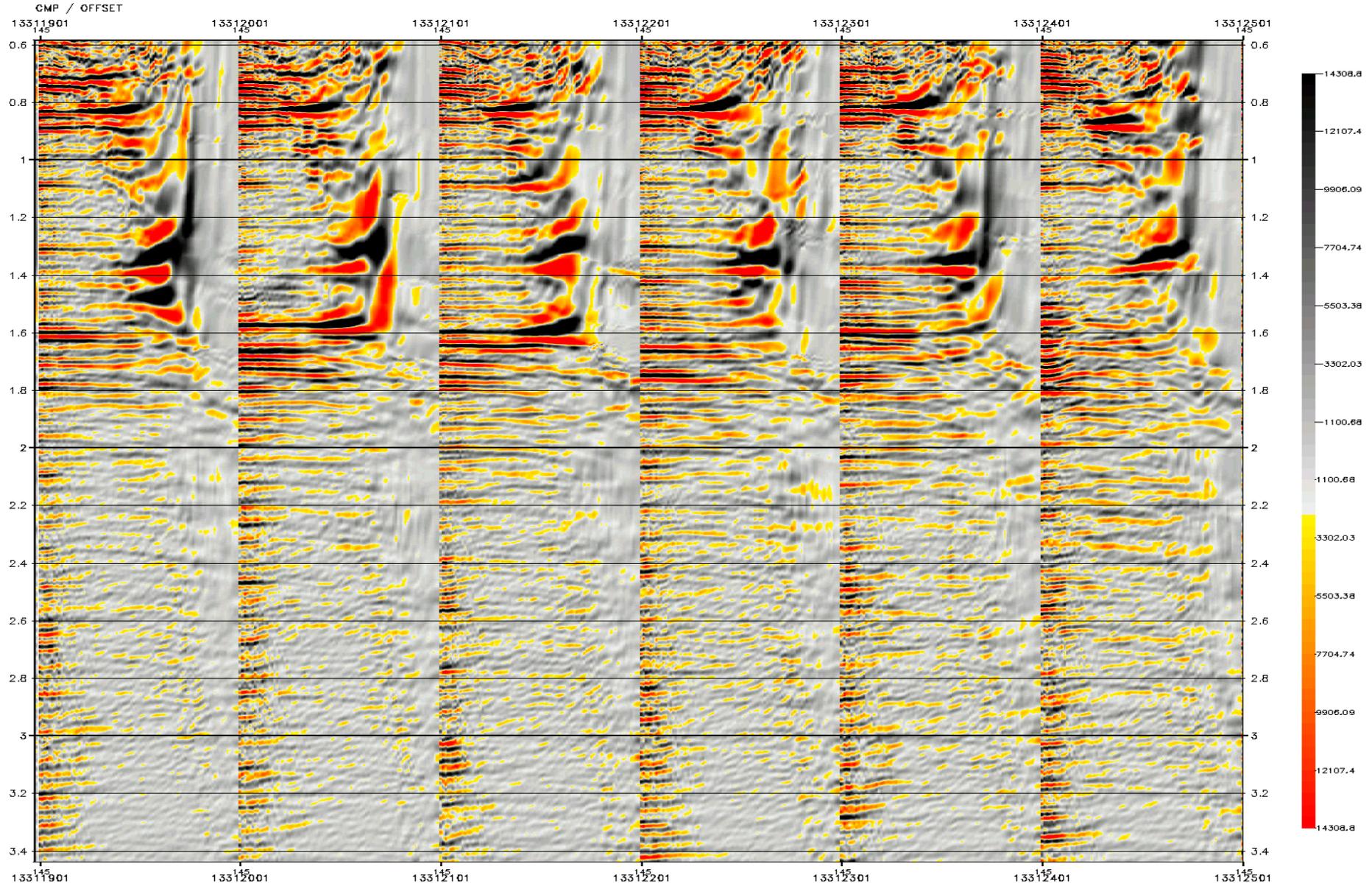
Gathers with FLAT – Test 1

1331 flt gtht11scale 3



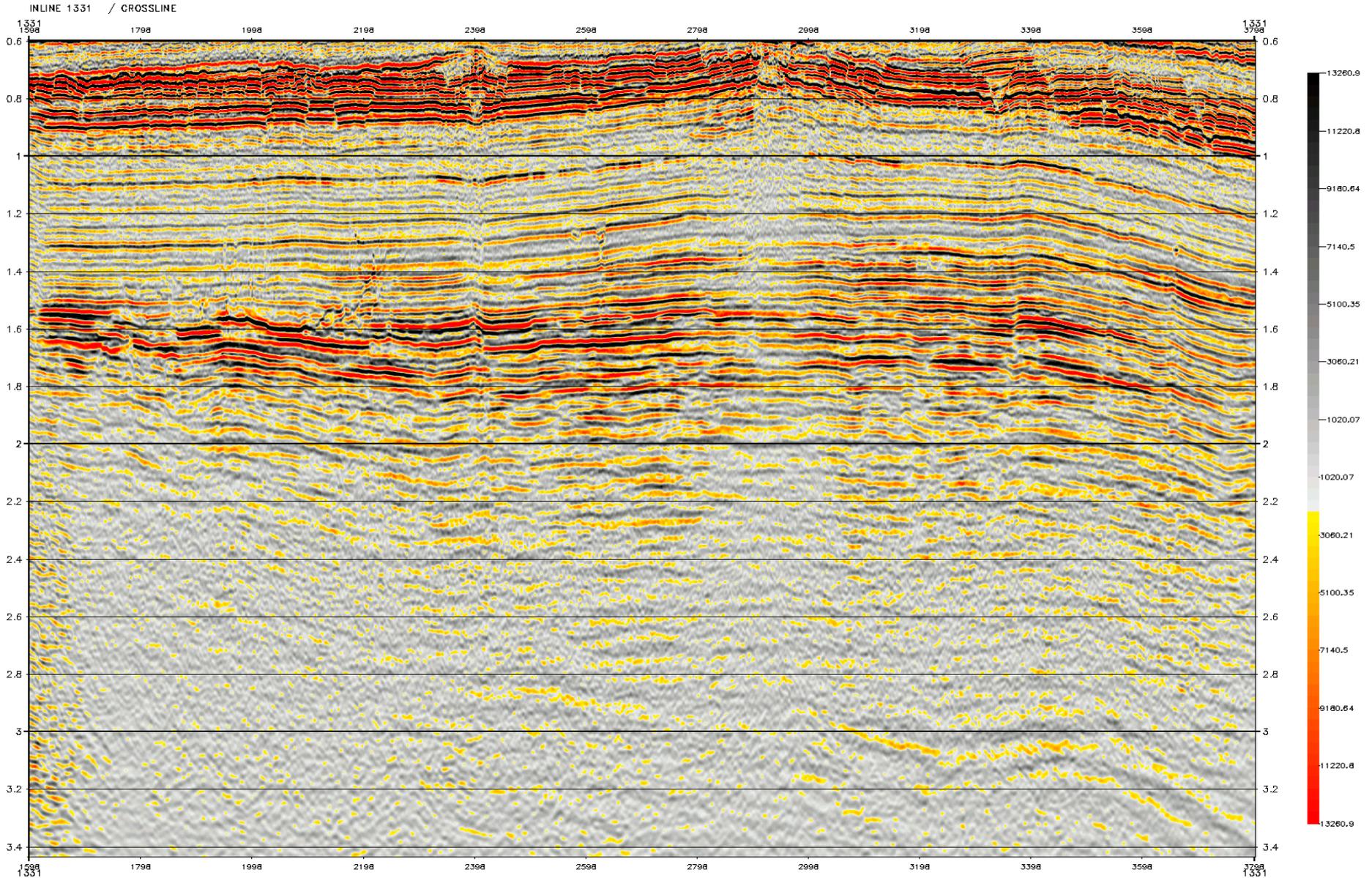
Gathers with FLAT – Test 2

1331 fit gthf11gscale 3



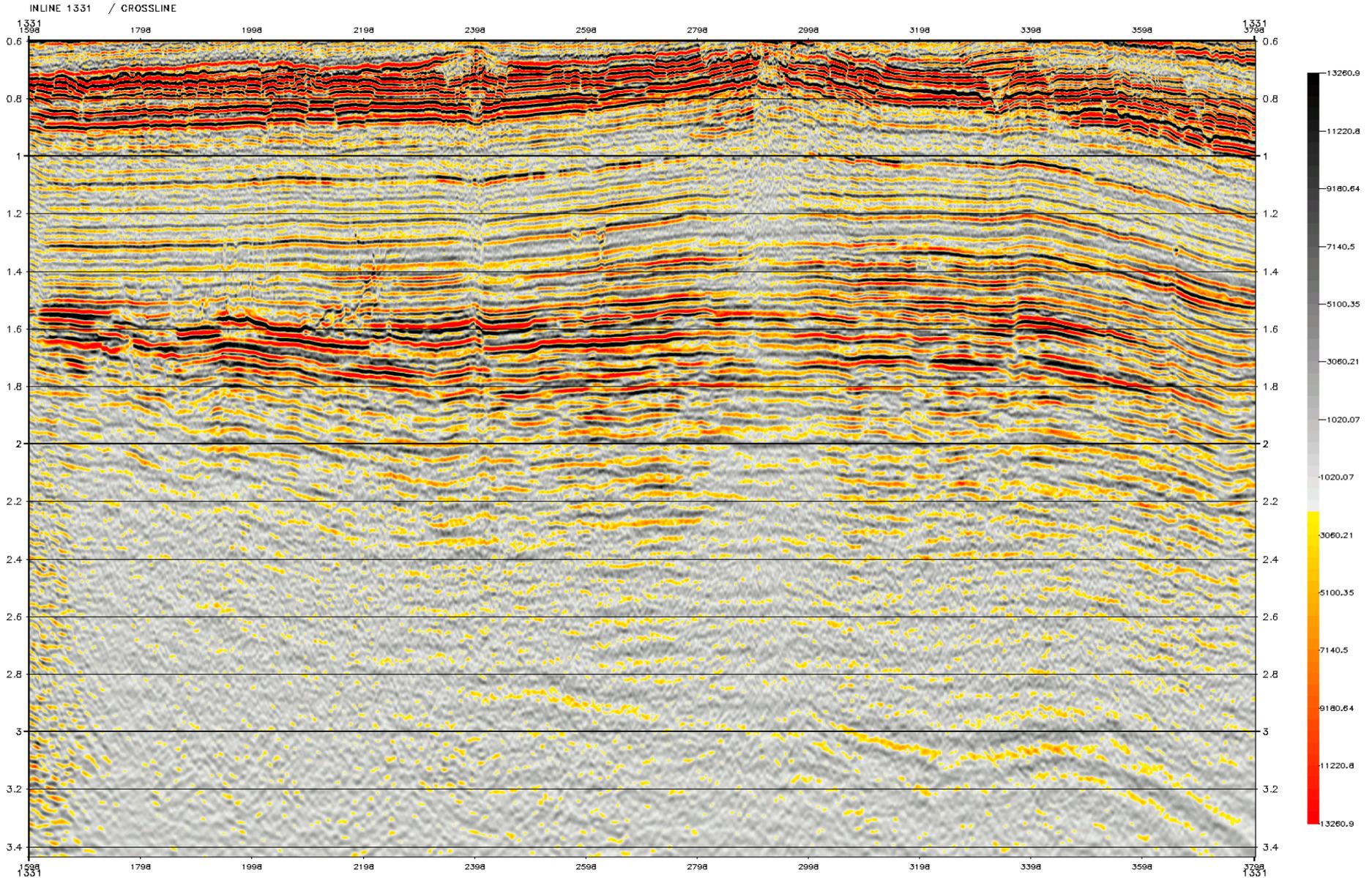
Stack without FLAT

1331 prs stkscale 1



Stack with FLAT – Test 1

1331 fit stk11scale 1



Stack with FLAT – Test 2

1331 fit stk11gscale 1

