Amoco Overthrust

Joe Dellinger[1]

ABSTRACT

A Canadian overthrust synthetic dataset, I believe prepared by Sam Gray and Gary Maclean, using a finite-difference code of John Etgen's. This data was widely circulated among Canadian contractor companies. This dataset was used to make the examples in Gray and Marfurt (1995).

GEOMETRY OF DATA

Raw Data /data/2d_synthetic/amoco-overtherus/shots.HH
Velocity Model /data/2d_synthetic/amoco-overthrust/velmodel.HH,velsmooth.HH,velsmoother.HH
Usage Migration test: (Gray and Marfurt, 1995)
Geometry

```
In3d sort.H
-----------------------------------------------------------------
                ********** sort.H ************
          4 -esize          Synched          data_format-xdr_float
-----------------------------------------------------------------
n1=2000                  o1=0.000000     d1=0.004000     label1=time
n2=123600        o2=1.000000     d2=1.000000     label2=trace_number
Data: in=/net/kana/data/2d_synthetic/amoco-overthrust/sort.H@
     123600 elements,   988800000 bytes in data file
-----------------------------------------------------------------
keynumber=1      keytype=scalar_int      keyname=tracl
keynumber=2      keytype=scalar_int      keyname=tracr
keynumber=3      keytype=scalar_int      keyname=fldr
keynumber=4      keytype=scalar_int      keyname=tracf
keynumber=5      keytype=scalar_int      keyname=ep
keynumber=6      keytype=scalar_int      keyname=cdp
keynumber=7      keytype=scalar_int      keyname=cdpt
keynumber=8      keytype=scalar_int      keyname=trid
keynumber=9      keytype=scalar_int      keyname=duse
keynumber=10     keytype=scalar_int      keyname=offset
```

[1]**email:** joe@sep.stanford.edu

```
keynumber=11     keytype=scalar_int      keyname=selev
keynumber=12     keytype=scalar_int      keyname=sdepth
keynumber=13     keytype=scalar_int      keyname=gx
keynumber=14     keytype=scalar_float    keyname=g_x
keynumber=15     keytype=scalar_float    keyname=s_x
keynumber=16     keytype=scalar_float    keyname=aoffset
keynumber=17     keytype=scalar_float    keyname=s_z
keynumber=18     keytype=scalar_float    keyname=cmp_x
keynumber=19     keytype=scalar_float    keyname=offset_x
keynumber=20     keytype=scalar_int      keyname=data_record_number
n2=123600        o2=1.000000     d2=1.000000     label2=trace_number
Headers in=/net/kana/data/2d_synthetic/amoco-overthrust/sort.H@@@
    2472000 elements,     9888000 bytes in data file
----------------------------------------------------------------
grid axis2       n2=278          o2=0.000000     d2=90.000000    label2=s_x
grid axis3       n3=481          o3=-3600.000000         d3=15.000000    label3=offset_x
Grid   in=/net/kana/data/2d_synthetic/amoco-overthrust/sort.H@@@@@
     133718 elements,      534872 bytes in data file
----------------------------------------------------------------
----------------------------------------------------------------
```

Problem Migration test, statics???
History of Data Gift from BP Amoco (2000)
Proprietary Considerations If you use this data be sure to thank BP Amoco.

REFERENCES

Gray, S. H., and Marfurt, K. J., 1995, Migration from topography: Improving the near-surface image: Can. J. Expl. Geophys., **31**, no. 1/2, 18–24.

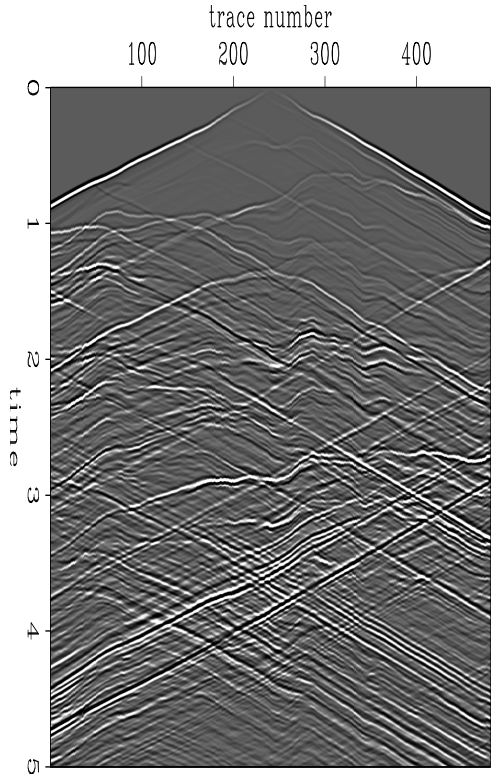

Figure 1: Raw Shot gather amoco-overthrust-gather [ER]

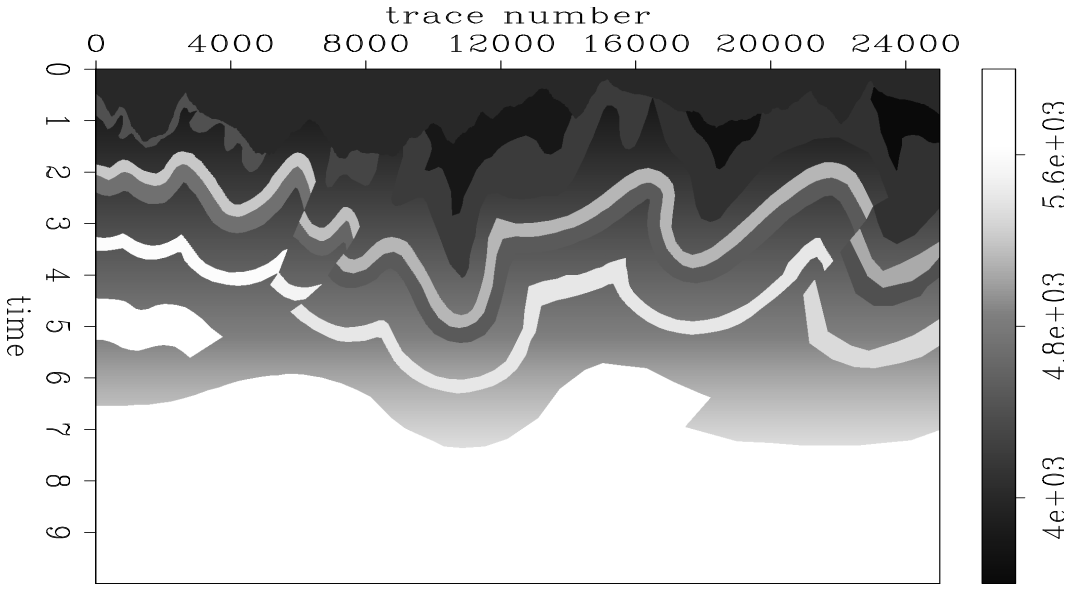

Figure 2: Velocity model amoco-overthrust-velmod [ER]

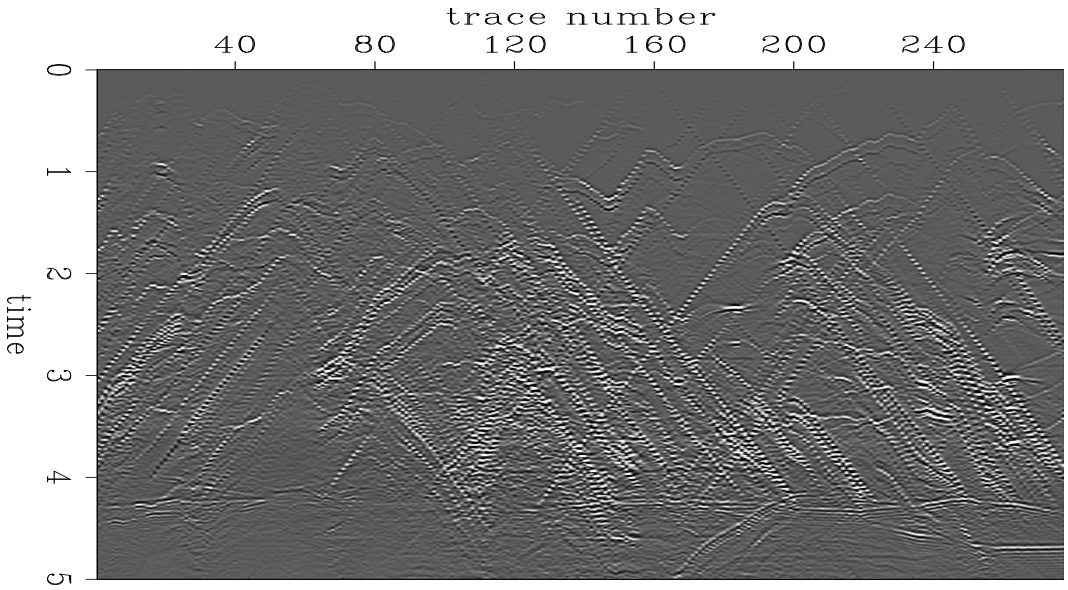

Figure 3: Zero offset image amoco-overthrust-zero [ER]

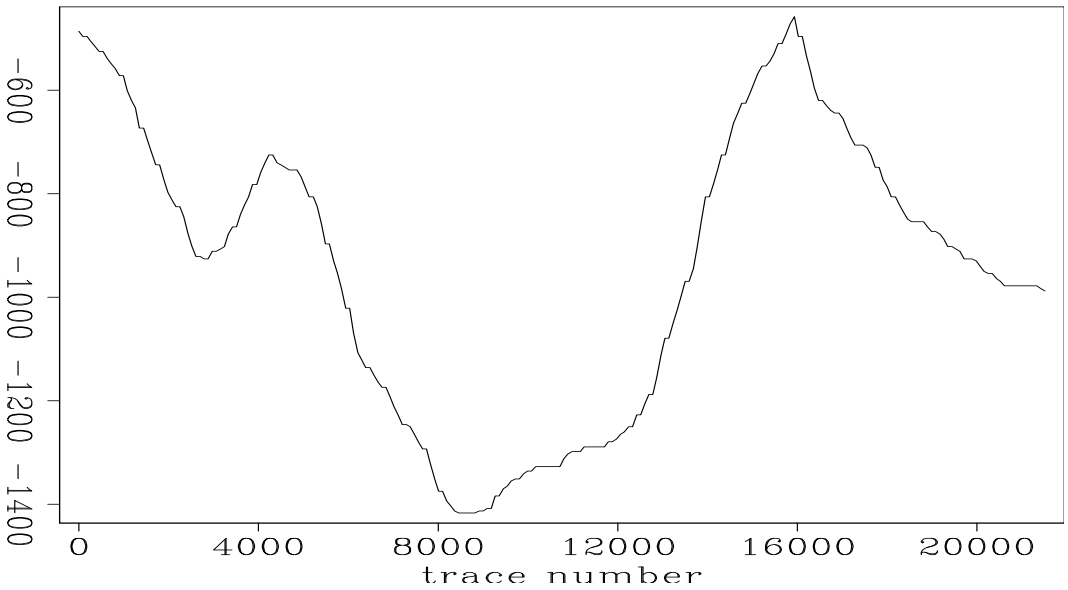

Figure 4: Source elevations amoco-overthrust-elev [ER]