Unocal salt dome

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ABSTRACT

This 3-D reflection seismic data from offshore Louisiana shows a single salt diapir. Two dataset are available which are the stacked and the migrated versions of the data. The 3-D Stack data was provided to SEP by Unocal. In this dataset the first dimension is in-line, the second dimension is cross-line and the third dimension is time. The top left corner of the data (increasing cross-line, decreasing in-lines) is blank meaning that no seismic data was acquired there. The 3-D Migrated data was provided by 3DGeo Development. The dimensions are transposed compared to the stack version: first dimension is depth, second dimension is in-line and the third dimension is cross-line.

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3-D STACK DATA

Raw Data
Velocity Model
Stack /data/oldq2/Salt_dome/salt.T
Zero-offset Migration
Usage
Geometry

```
salt.T:
in="/q2/Salt_dome/salt.T@"
expands to in="/q2/Salt_dome/salt.T@"
esize=1
n1=455 n2=300 n3=370 n4=1    50505000 elem    50505000 bytes
d1=110 d2=110 d3=80 d4=1
o1=0 o2=0 o3=0 o4=0
```

Problem
History of Data Donated to SEP by Unocal.
Preprocessing
Proprietary Considerations

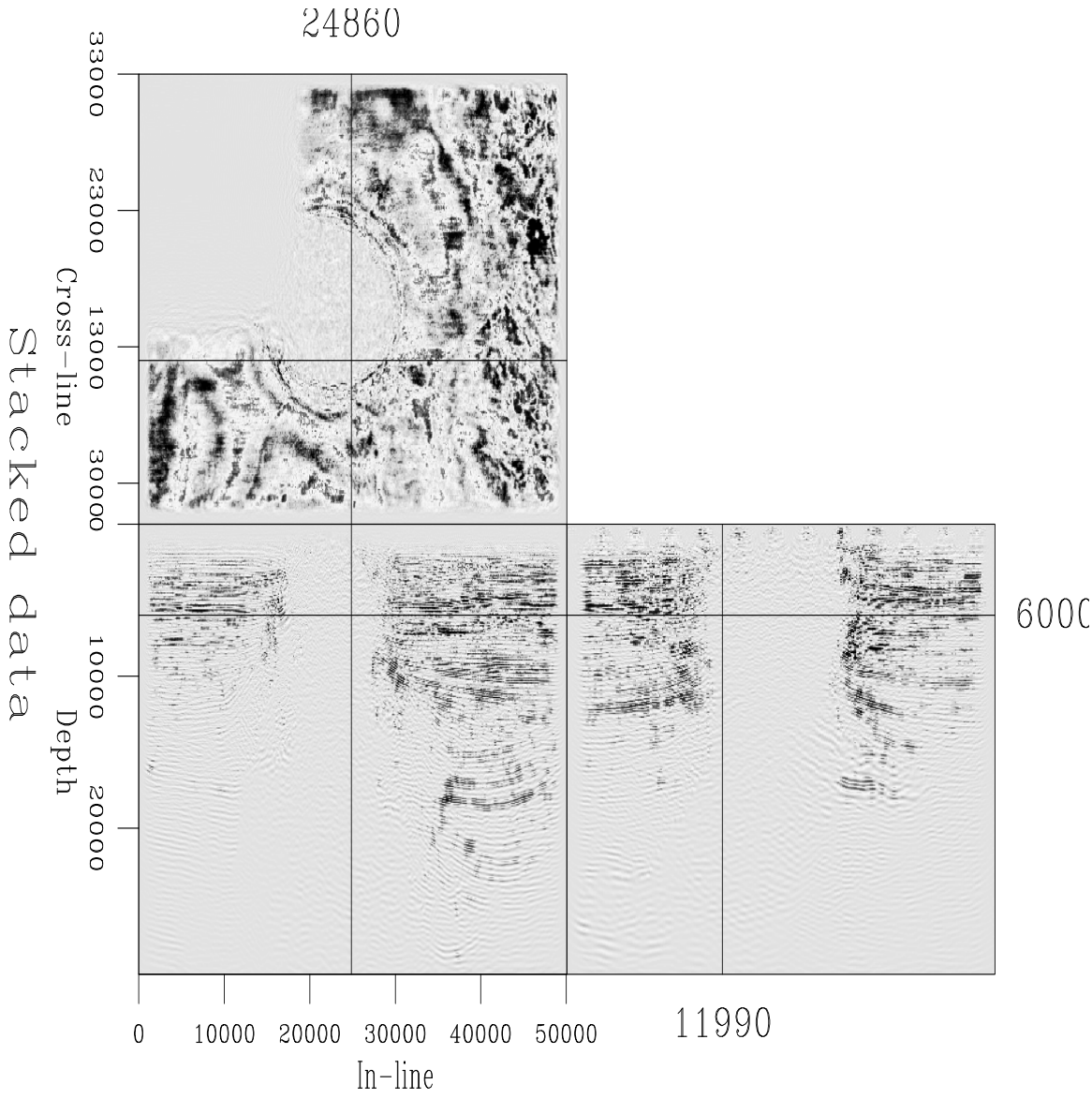

Figure 1: Depth, In-line and cross-line slices from 3-D Stack data unocal-salt-stack [ER]

3-D MIGRATED DATA

Raw Data
Velocity Model
Stack
Zero-offset Migration /data/oldq2/Salt_dome/mig_salt_transp.T
Usage
Geometry

```
mig_salt_transp.T:
in="/q2/Salt_dome/DATA_mig_salt_transp.T"
expands to in="/q2/Salt_dome/DATA_mig_salt_transp.T"
esize=1
n1=740 n2=455 n3=300   101010000 elem   101010000 bytes
d1=40 d2=110 d3=110
o1=0 o2=0 o3=0
label1=Depth
label2=In-line
label3=Cross-line
```

Problem
History of Data Donated to SEP by 3DGeo Development.
A `README` file in the data directory stays:

```
The stacked dataset is provided courtesy of Unocal.
The migrated dataset is provided courtesy of 3DGeo Development.
The dataset was migrated using MCTMIG (tm) without any acquisition balancing.
```

Preprocessing
Proprietary Considerations

REFERENCES

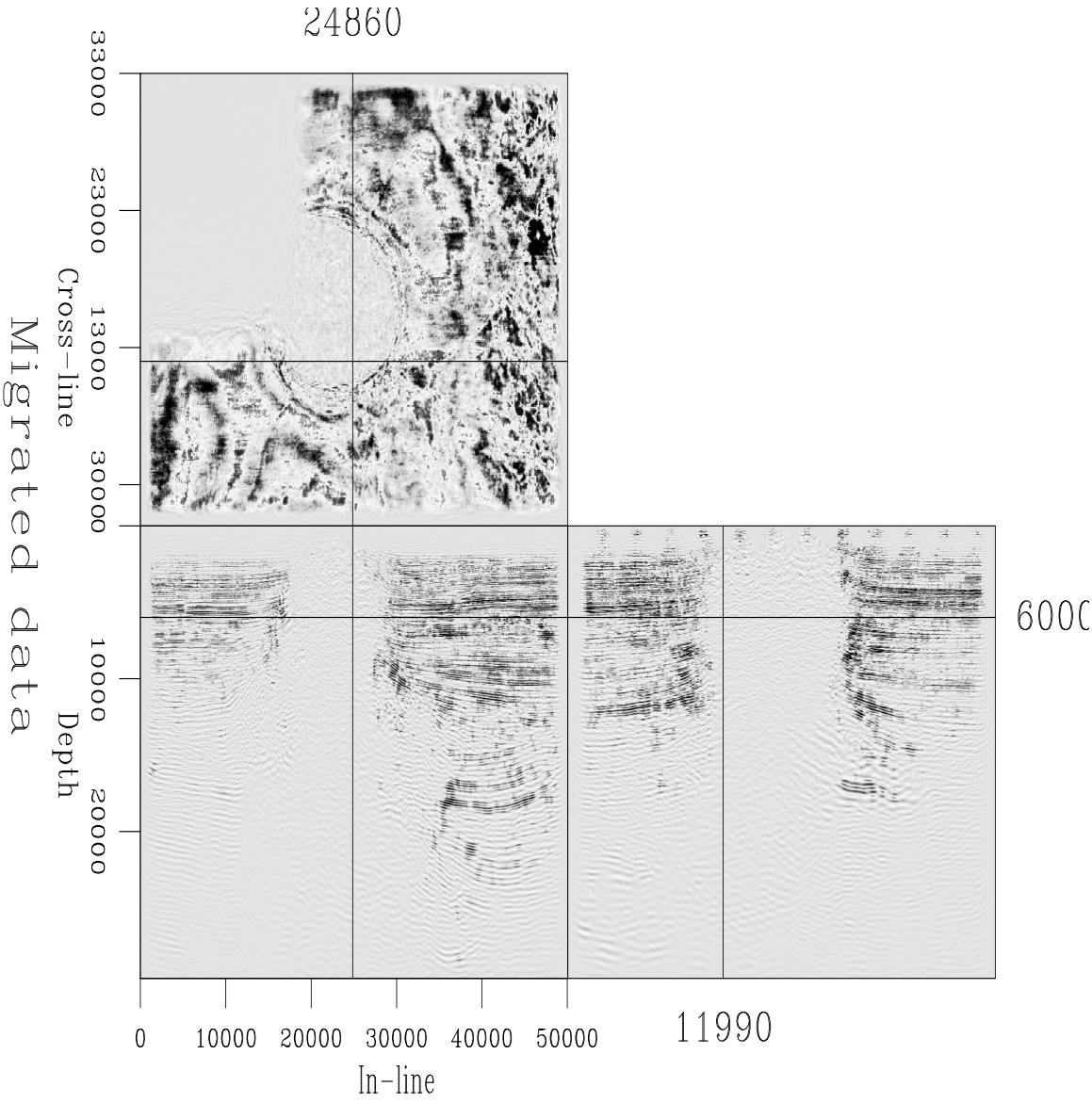

Figure 2: Depth, In-line and cross-line slices from 3-D Migrated data unocal-salt-mig [ER]