

2008 Processing Sequence

Processing Sequence for 1978 vintage seismic data

Line 78405

Data Preparation

SEG-Y Input
Line Geometry Definition
Record & Trace Edition
Shot delay correction +20 ms to Header Statics

Signal Processing

Coherent Noise Attenuation
Air Blast Attenuation
Wave Eq. Multiple Rejection
True Amplitude Recovery
F-K Filter Arbitrary Polygon reject mode
Normal moveout correction (forward)
F-K Filter Power exponent $k = 1.5$
Normal moveout correction (inverse)
Surface Consistent Decon spiking mode operator length 200 ms
Bandpass Filter 6-12-80-120 Hz
Trace Equalization
Radon Filter (parabolic subtract mode)
Stacking Velocity Analysis using Velocity Spektra
NMO Correction
Trace Muting (top & bottom)
Common Offset F-K DMO

Stolt or Phase Shift 2D Migration (Stolt migrate mode)
CDP/Ensemble Stack
TV Spectral Whitening
Stolt or Phase Shift 2D Migration (Stolt inverse mode)
Implicit FD Time Migration

Postmigration Processing

F-K Filter Power exponent
Spiking/Predictive Decon predictive mode pred.int 28 operator length 100 ms
Bandpass Filter 8-12-70-110 Hz
Coherency Filter
Trace Equalization
Phase Rotation 0

Processing Sequence for 1984 vintage seismic data

Lines: 84249; 84631; 84633

Data Preparation

SEG-Y Input
Line Geometry Definition
Record & Trace Edition
Shot delay correction 0 ms to Header Statics

Signal Processing

Coherent Noise Attenuation
Air Blast Attenuation
Wave Eq. Multiple Rejection
True Amplitude Recovery
F-K Filter Arbitrary Polygon reject mode
Normal moveout correction (forward)
F-K Filter Power exponent $k = 1.5$
Normal moveout correction (inverse)
Surface Consistent Decon spiking mode operator length 200 ms
Bandpass Filter 6-12-80-120 Hz
Trace Equalization
Radon Filter (parabolic subtract mode)
Stacking Velocity Analysis using Velocity Spektra
NMO Correction
Trace Muting (top & bottom)
Common Offset F-K DMO

Stolt or Phase Shift 2D Migration (Stolt migrate mode)
CDP/Ensemble Stack
Adaptive Decon L1 Norm spiking L=60
TV Spectral Whitening
Stolt or Phase Shift 2D Migration (Stolt inverse mode)
Implicit FD Time Migration

Postmigration Processing

F-K Filter Power exponent
Spiking/Predictive Decon predictive mode pred.int 20 operator length 80 ms
Bandpass Filter 8-12-70-100 Hz
Coherency Filter
Trace Equalization
Phase Rotation 90

Processing Sequence for 1987 vintage seismic data

Lines: 87096; 87405; 87649; 87678B

Data Preparation

SEG-Y Input
Line Geometry Definition
Record & Trace Edition
Shot delay correction -68,-72 ms to Header Statics

Signal Processing

Coherent Noise Attenuation
Air Blast Attenuation
Wave Eq.Multiple Rejection
True Amplitude Recovery
F-K Filter Arbitrary Polygon reject mode
Normal moveout correction (forward)
F-K Filter Power exponent $k = 1.4$
Normal moveout correction (inverse)
Surface Consistent Decon spiking mode operator length 200 ms
Bandpass Filter 6-12-80-120 Hz
Trace Equalization
Radon Filter (parabolic subtract mode)
Dip Scan Stack
Stacking Velocity Analysis using Velocity Spektra
NMO Correction
Trace Muting (top & bottom)
Common Offset F-K DMO

Memory Stolt F-K Migration
CDP/Ensemble Stack
Adaptive Decon L1 Norm spiking L=60
TV Spectral Whitening
Stolt Inverse Migration
Kirchhoff Time Migration

Postmigration Processing

F-K Filter Power exponent
Spiking/Predictive Decon predictive mode pred.int 20 operator length 80 ms
Bandpass Filter 8-12-70-110 Hz
Coherency Filter
Trace Equalization
Phase Rotation 180

Processing Sequence for 1989 vintage seismic data

Lines: 89402; 89405; 89096; 89257; 89793; 89795

Data Preparation

SEG-Y Input
Line Geometry Definition
Record & Trace Edition
Shot delay correction (-12 - -48) ms to Header Statics

Signal Processing

Coherent Noise Attenuation
Air Blast Attenuation
Wave Eq. Multiple Rejection
True Amplitude Recovery
F-K Filter Arbitrary Polygon reject mode
Normal moveout correction (forward)
F-K Filter Power exponent $k = 1.5$
Normal moveout correction (revers)
Surface Consistent Decon spiking mode operator length 200 ms
Bandpass Filter 6-12-80-120 Hz
Trace Equalization
Radon Filter (parabolic subtract mode)
Stacking Velocity Analysis using Velocity Spektra
NMO Correction
Trace Muting (top & bottom)
Common Offset F-K DMO
Stolt or Phase Shift 2D Migration (Stolt migrate mode)
CDP/Ensemble Stack
Stolt or Phase Shift 2D Migration (Stolt inverse mode)
Adaptive Decon L1 Norm spiking $L=60$
TV Spectral Whitening
Kirchhoff Time Migration

Postmigration Processing

F-K Filter Power exponent
Spiking/Predictive Decon predictive mode pred.int 20 operator length 80 ms
Bandpass Filter 8-12-70-100 Hz
Coherency Filter
Trace Equalization
Phase Rotation 180

Note: Line 89257 phase rotation = 0

Processing Sequence for 1991 vintage seismic data

Lines: 91097; 91464; 91907

Data Preparation

SEG-Y Input
Line Geometry Definition
Record & Trace Edition
Shot delay correction -40,-44 ms to Header Statics

Signal Processing

Coherent Noise Attenuation
Air Blast Attenuation
Wave Eq. Multiple Rejection
True Amplitude Recovery
F-K Filter Arbitrary Polygon reject mode
Normal moveout correction (forward)
F-K Filter Power exponent $k = 1.4$
Normal moveout correction (inverse)
Surface Consistent Decon spiking mode operator length 200 ms
Bandpass Filter 6-12-80-120 Hz
Trace Equalization
Radon Filter (parabolic subtract mode)
Dip Scan Stack
Stacking Velocity Analysis using Velocity Spektra
NMO Correction
Trace Muting (top & bottom)
Common Offset F-K DMO

Memory Stolt F-K Migration
CDP/Ensemble Stack
Adaptive Decon L1 Norm spiking L=60
TV Spectral Whitening
Stolt Inverse Migration
Kirchhoff Time Migration

Postmigration Processing

F-K Filter Power exponent
Spiking/Predictive Decon predictive mode pred.int 20 operator length 80 ms
Bandpass Filter 8-12-70-110 Hz
Coherency Filter
Trace Equalization
Phase Rotation 180