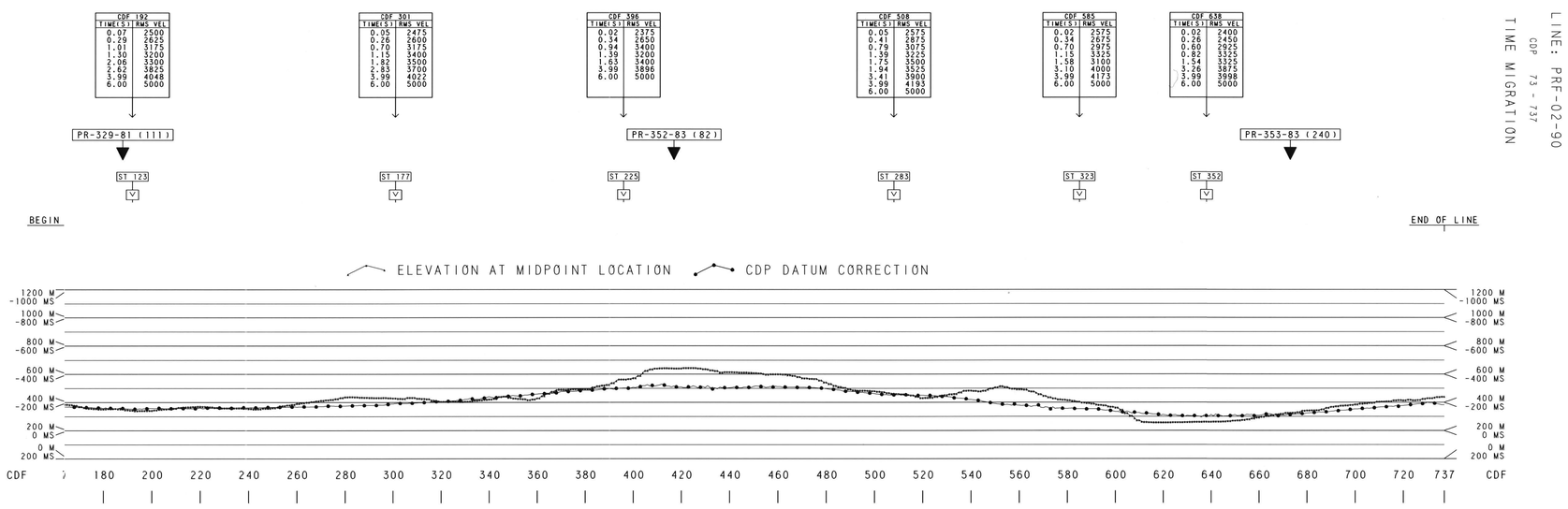
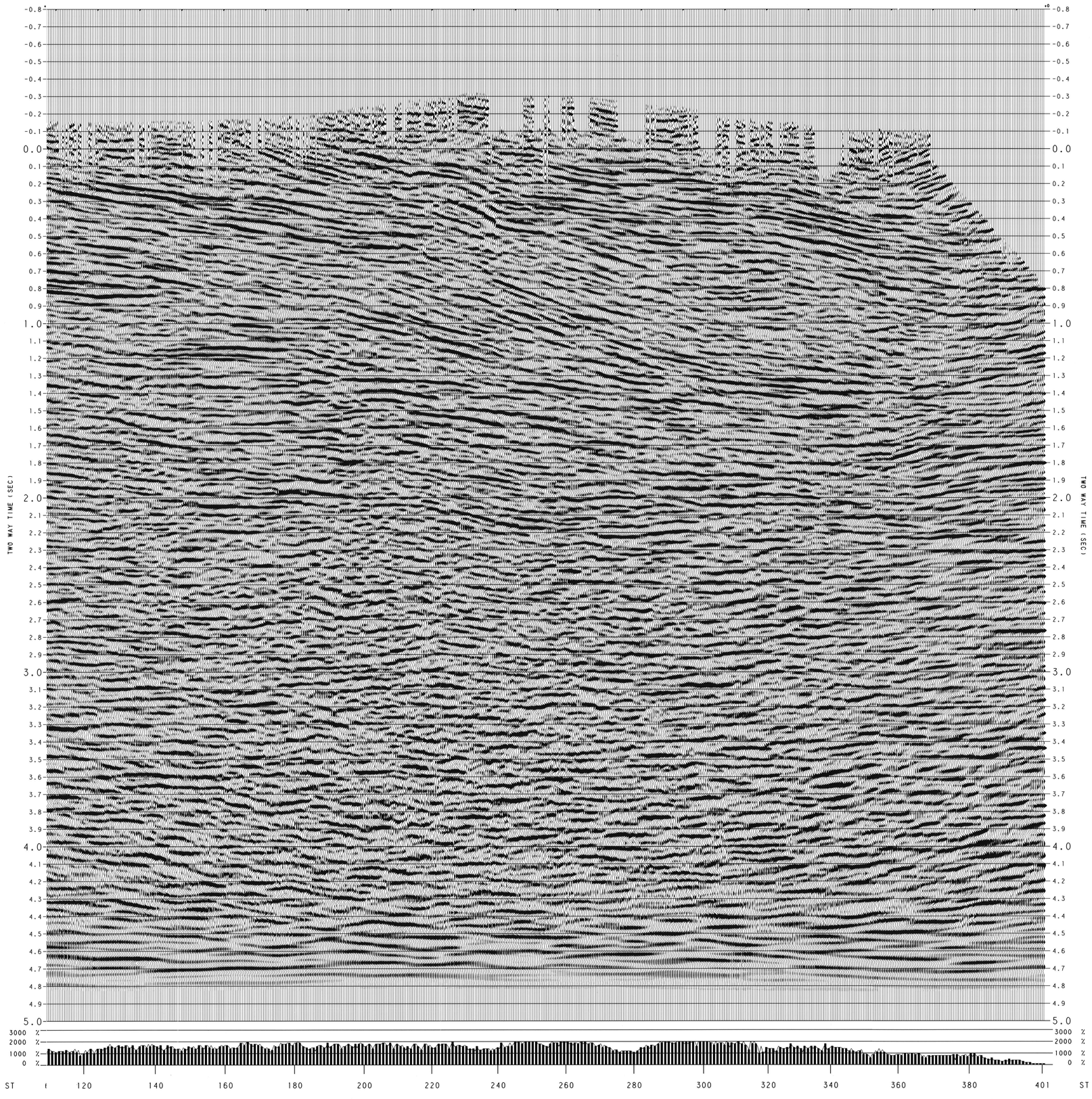
LINE: PRF-02-90

CDP 73 - 737

TIME MIGRATION

SOUTH-EAST





Agip GEOF

AREA : ITALIA

PERMIT : SERRAVALLE

LINE : PRF-02-90

DATE: JANUARY,1994

RECORDING DATA

RECORDING PARAMETERS

CONTRACTOR..... SIAG
DATE..... APRIL 1990
SYSTEM..... SN 368
TAPE FORMAT..... SEG D
RECORD LENGTH..... 6000 MS
FILTER L.C..... 8 HZ 18 DB/OCT
H.C..... 178 HZ 72 DB/OCT
NOTCH..... OUT
SAMPLING INTERVAL..... 2 MSEC
COVERAGE..... 18 FOLD

SOURCE

ENERGY SOURCE..... DYNAMITE
N. OF HOLES..... 1
AVERAGE DEPTH..... 27 M
AVERAGE CHARGE..... 5 KG
S.P.INTERVAL..... 100 M

SPREAD

TYPE..... SPLIT
SPREAD CONF.1812.5-37.5-0-37.5-1812.5 M
NO. OF GROUPS..... 144
GEOPHONES PER GROUP.... 24 IN PARALLEL
GEOPHONE TYPE..... SM4-10 HZ
GROUP INTERVAL..... 25 M

SPREAD DIAGRAM

1 72 SP 73 144

1775 M 37.5 37.5 1775 M

GEOPHONE PATTERN

55 M

SCALES

HORIZONTAL 1 : 12500
VERTICAL 1 SEC - 10 CM

0 0.5
KILOMETER

LEGEND

INTERSECTIONS
VELOCITY ANALYSIS

COMMENTS

POLARITY CONVENTION
RECORDING : COMPRESSION PULSE NEGATIVE NUMBER
PROCESSING : COMPRESSION PULSE NEGATIVE NUMBER
DISPLAY : COMPRESSION PULSE TROUGH

DATUM PLANE : 200 M

PROCESSED BY: F. MARCHETTI-M.PASTORI
CONTROLLED BY: A. CASSIS

PROCESSING SEQUENCE

CODE-4 CONVERSION
-SEGD TO CODE4 CONVERSION

RESAMPLING
-TIME SAMPLING TO 4 MS

GEOMETRY AND FIELD STATICS UPDATE
-SKEW CORRECTION
-CROOKED PROFILE ADJUSTMENT
-CDP DATUM CORRECTION COMPUTATION

BAD TRACES EDITING

AMPLITUDE DECAY RECOVERY
-STATISTICALLY COMPUTED FUNCTION
APPLIED TO RECOVER THE OVERALL
ENERGY LOSSES

PHASE SHAPING
-INSTRUMENT AND GEOPHONE RESPONSES
CONVERTED TO MINIMUM PHASE

PREFILTER
0.0 S 12/24 - 80/72 HZ-DB/OCT
2.5 S 8/24 - 80/72 HZ-DB/OCT
4.0 S 8/24 - 45/72 HZ-DB/OCT

ARRAY SIMULATION
-WND 0.0-6.0 S
3 TR 0.150/0.700/0.150

DECONVOLUTION
-TYPE: PREDICTIVE MIN.PHASE INV.FILTER
WND 0.2-2.2 S OP 16-160 MS WN .12
WND 2.0-4.4 S OP 16-160 MS WN .12
WND 4.2-6.0 S OP 16-160 MS WN .12
-TRACES BALANCE TO RMS 2000

COMM. OFFSET MULTICHANNEL FILTER
-W/X DECONVOLUTION (RNA) APPLIED ON
72 NMO CORRECTED COMMON OFFSET PLANES
-50% FEEDBACK

SURFACE CONSISTENT RESIDUAL STATICS
-MAX. CORRELATION SHIFT..... +/-36 MS
-CORRELATION WINDOW..... 500-5000 MS
-HEADER UPDATE

COMM. OFFSET MULTICHANNEL FILTER
-RADIAL PREDICTIVE FILTER (RPF)
APPLIED ON 72 NMO CORRECTED
COMMON OFFSET PLANES
29 TRACES DIP -9/+9 MS/TR
70% FEEDBACK
-FIELD STATICS APPLIED BEFORE AND
REMOVED AFTER FILTERING

VELOCITY ANALYSIS
-PERFORMED ON DMO CORRECTED CDP GATHER
WITH VARIABLE PARAMETERS BY
INTERACTIVE WORK-STATION
VEL.INCREMENT..... 100 M/S
VEL.RANGE..... 2200-5000 M/S
CORR. GATE..... 24 MS
CDP'S USED..... 5
MUTE APPLIED BEFORE ANALYSIS

DMO / STACK (BOOZ)
-CDP ORDERED DATA NMO CORRECTED
WITH FINAL VELOCITIES
-MUTE APPLIED TO REMOVE STRETCHED DATA
AND REFRACTED SIGNALS
-MAXIMUM OPERATOR APERTURE..... 51 TR
-MAXIMUM DIP..... 90 DEG

ZERO PHASE CONVERSION
-OPERATOR STATISTICALLY COMPUTED ON
ONE WINDOW
WINDOW..... 500-3000 MS

SPECTRAL WHITENING
-TYPE: FREQUENCY DOMAIN
WND 0.0-6.0 S BW 12-40 HZ WN .12

MULTICHANNEL FILTER
-W/X DECONVOLUTION (RNA)
WND SIZE..... 400 MS X 30 TR
OPERATOR WIDTH..... 7 TR
FEEDBACK..... 50 %

TIME MIGRATION
-FINITE DIFFERENCE (IMPLICIT) ALGORITHM
(CASCADE)
-USING SMOOTHED STACKING VELOCITY FIELD

MULTICHANNEL FILTER
-RADIAL PREDICTIVE FILTER (RPF)
29 TRACES
0.8 SEC DIP -9/+9 MS/TR FEEDBACK 65%
3.0 SEC DIP -9/+9 MS/TR FEEDBACK 65%
5.0 SEC DIP -9/+9 MS/TR FEEDBACK 90%

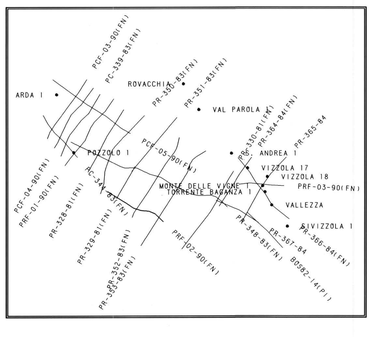
TIME VARIANT FILTER
0.0 S 11/24 - 50/72 HZ-DB/OCT
1.0 S 11/24 - 45/72 HZ-DB/OCT
2.5 S 11/24 - 40/72 HZ-DB/OCT
4.5 S 7/24 - 35/48 HZ-DB/OCT

DATUM CORRECTION RECOMPUTATION
-SUBWEATHERING VELOCITY 2300 M/SEC
-DATUM PLANE 200 M

PLAYBACK
-OUTPUT RMS LEVEL..... 2000
-GAIN WINDOWS (MIXED)..256-1024 MS 75%
256-256 MS 25%
-COSTANT GAIN FACTOR..... 10 DB
-PERCENT OF DEVIATION OF BASE LINE 0%
-PRESENTATION..... VA/50
-PLOTTER..... LASER-DOT

STORED REELS
-STACK RAW MIN.PH.(WGC CDD4).. 615754
(LBIN15)
-FINAL STACK (SEGY)..... 615752(LBIN09)
615753
-FINAL MIGRATION (SEGY) 615752(LBIN10)
615753

LOCATION MAP



ELSI07.CAPS.SERRA.PRF02.MIGGAIN