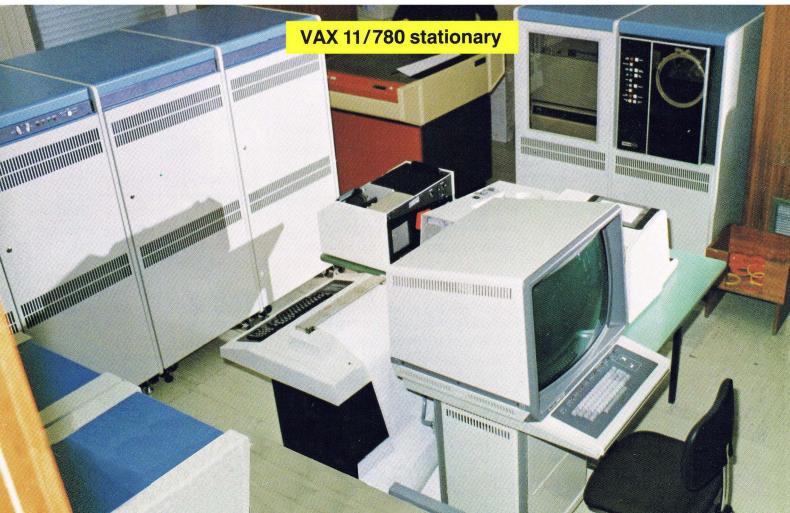
PRAKLA-SEISMOS INFORMATION No. 41

On-site Seismic Processing Center

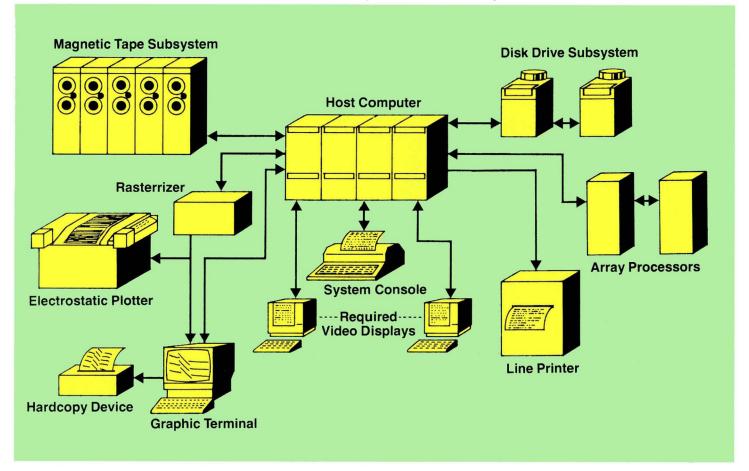






Standard Configuration 1983/1984

based on Host Computer of VAX 11-Family



General Features

Optimal architecture for seismic processing
Highly sophisticated seismic program package DISCOTM
Communications network
Interactive work stations
Realtime capabilities
Application development tools
Diagnostic subsystem

PRAKLA-SEISMOS ist prepared to supply ancillary equipment suitable to meet any environmental condition

- UPS, uninterruptible power supply
- Airconditioning system
- False floor/ceiling

System Software

Seismic Software DISCO™

Standard Seismic Processing

Input

Demultiplexing

Sorting

Editing

Filtering

Deconvolution

Source and receiver static corrections

Dynamic corrections

Stacking

Scaling

Output

Advanced Seismic Software

Migration

Finite difference method

F-K migration

True migration before stack

Signal enhancement technique

Multiple rejection

Dip filter (F-K filter)

Wavelet processing

Advanced velocity package

Modelling

UNRAVEL package

DISCOVERY system

Software Contribution of PRAKLA-SEISMOS

PRAKLA-SEISMOS' aim is not only to use the DISCOTM system but also to contribute its own advanced software developments.

Stand Alone Program

The following stand alone program has been implemented:

Automatic Picking of First Arrivals, an interactive static correction procedure for impulse data or VIBROSEIS* data.

The automatic picking is achieved by a one-trace procedure which observes the increase of the signal amplitude within a time window and determines the first events by a decision logic.

The redundancy of data allows algorithms to eliminate mispicks. Traveltime curves are produced which can be interpreted in the correction procedure.

With this method, basic static corrections are computed and statistically improved, whereby the influence of weathering is fully considered so that long period statics are also mastered.

The hit rate is 75% to 95% for real data.

Modules

Various modules of the DISCO[™] system have been modified and/or extended either to meet client's individual requirements or to achieve optimal execution times.

Furthermore, several new modules have been written and implemented by PRAKLA-SEISMOS for special applications.

Continuous research for new development is carried out on the software systems and the results are made available to the clients in order to maintain a state-of-the-art seismic processing package.

Support of hardware, software, and the training of client's staff will also be carried out by PRAKLA-SEISMOS.

DISCOTM (Trade Mark of DIGICON GEOPHYSICAL CORP.) VIBROSEIS* (Registered Trade Mark of CONOCO INC.)





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