

Quality control, express onboard data processing and Fast-track processing onboard R/V Vyacheslav Tikhonov



Группа набортного контроля качества и обработки SCF GEO



GeoGals QC/Processing system

Initially implemented in 2013

Constant development

Full range of QC procedures, both real time and offline

Express onboard processing

Full range of onboard Fast track processing flows

Combining advantages of both industry leading software packages and GeoGals own developments

Highly qualified personnel

24x7 geophysical and IT support from GeoGals offices

Группа на бортового контроля качества и обработки SCF GEO



Features

QC flows run on powerful workstations – cluster nodes available for processing flows

Network infrastructure optimized for real time QC flows – no delays

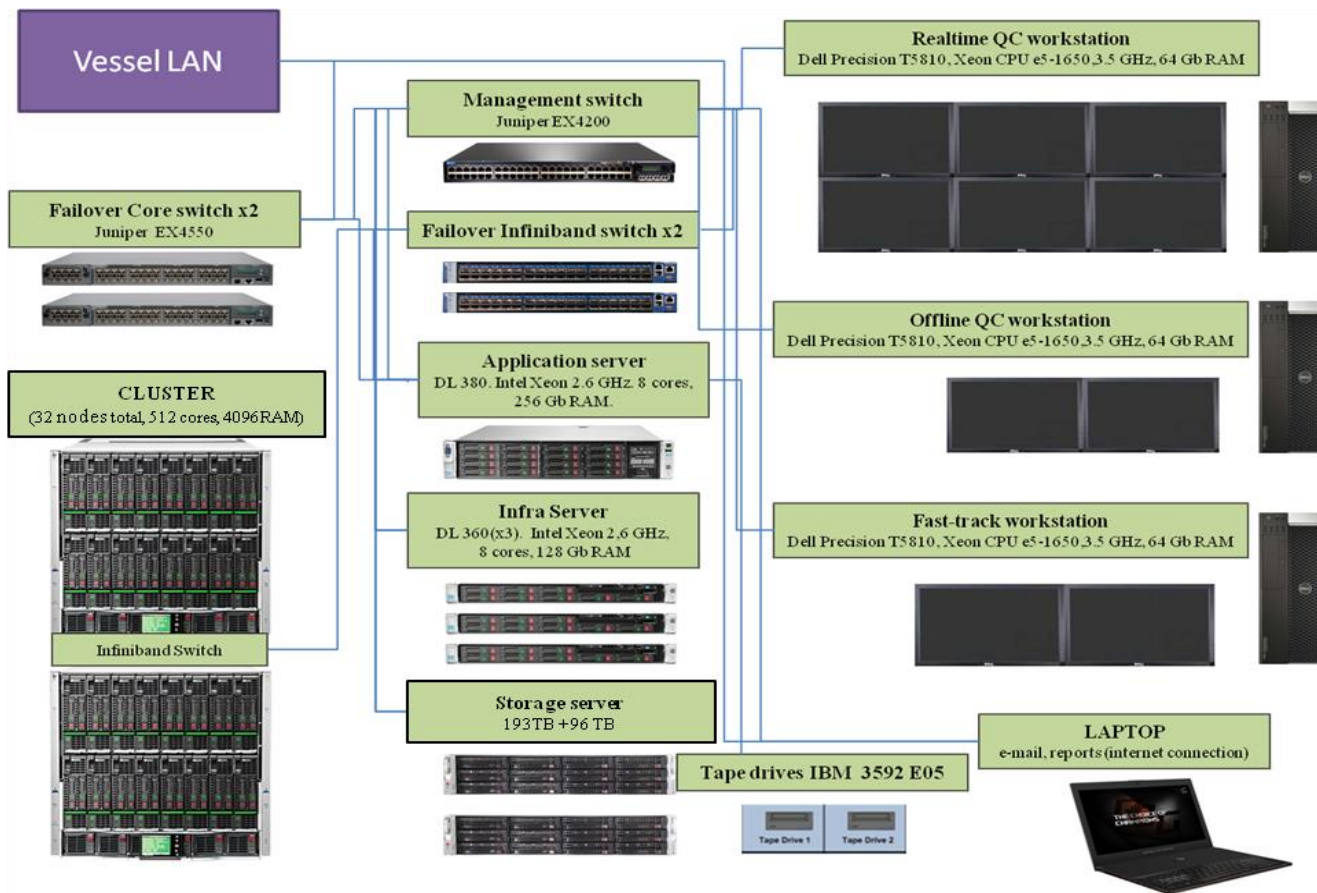
SEG-Y files checksum computation and check for each media – data integrity guaranteed

Integration with other departments' systems – reduces operator errors probability

Hardware and software onboard



Группа на бортного контроля качества и обработки SCF GEO



Equipment for onboard QC and processing:

Cluster HP

32x nodes total

256x processor cores

total amount of RAM 4098 GB

Storage system

total disk space of 260 TB

2x Tape recorders 3592

3x workstations DELL

Dell Precision T5810, Xeon CPU e5-1650,3.5 GHz, 64 Gb RAM

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Laptop Fujitsu& office PC Dell.

List of software installed onboard the vessel "Ivan Gubkin":

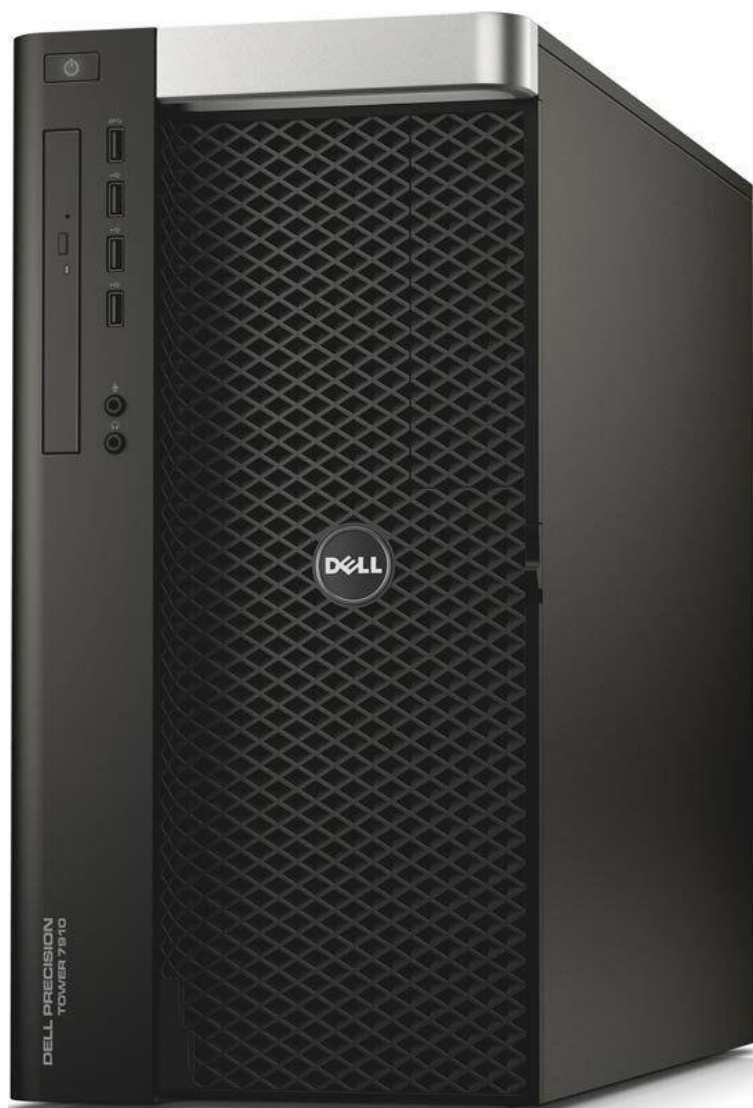
GeoGals– software used for real time seismic data processing and quality control.

OpenCPS – software used for offline data processing and quality control

WeatherGoose 3.3.5 - climate control software.

Grafana – cluster load control system.

CMC –system status monitoring software.



Dell Precision workstations

- 1) 128 GB RAM
- 2) Intel Zeon CPU
- 3) Multiple displays

Software components of GEOGALS system

Real time QC:

GEOGALS 2019.1 RT (based on Radex PRO)

Offline QC:

GEOGALS 2019.1 (based on Radex PRO)

Secondary system– OpenCPS 3.3

Express onboard processing:

GEOGALS 2017.2 (based on Radex PRO)

Secondary system– OpenCPS 3.3

Fast-track :

OpenCPS 3.3

Secondary system– GEOGALS 2017.2 (based on Radex PRO)

Onboard QC/Data processing group workplaces



Группа набортного контроля качества и обработки SCF GEO



REAL - TIME QC

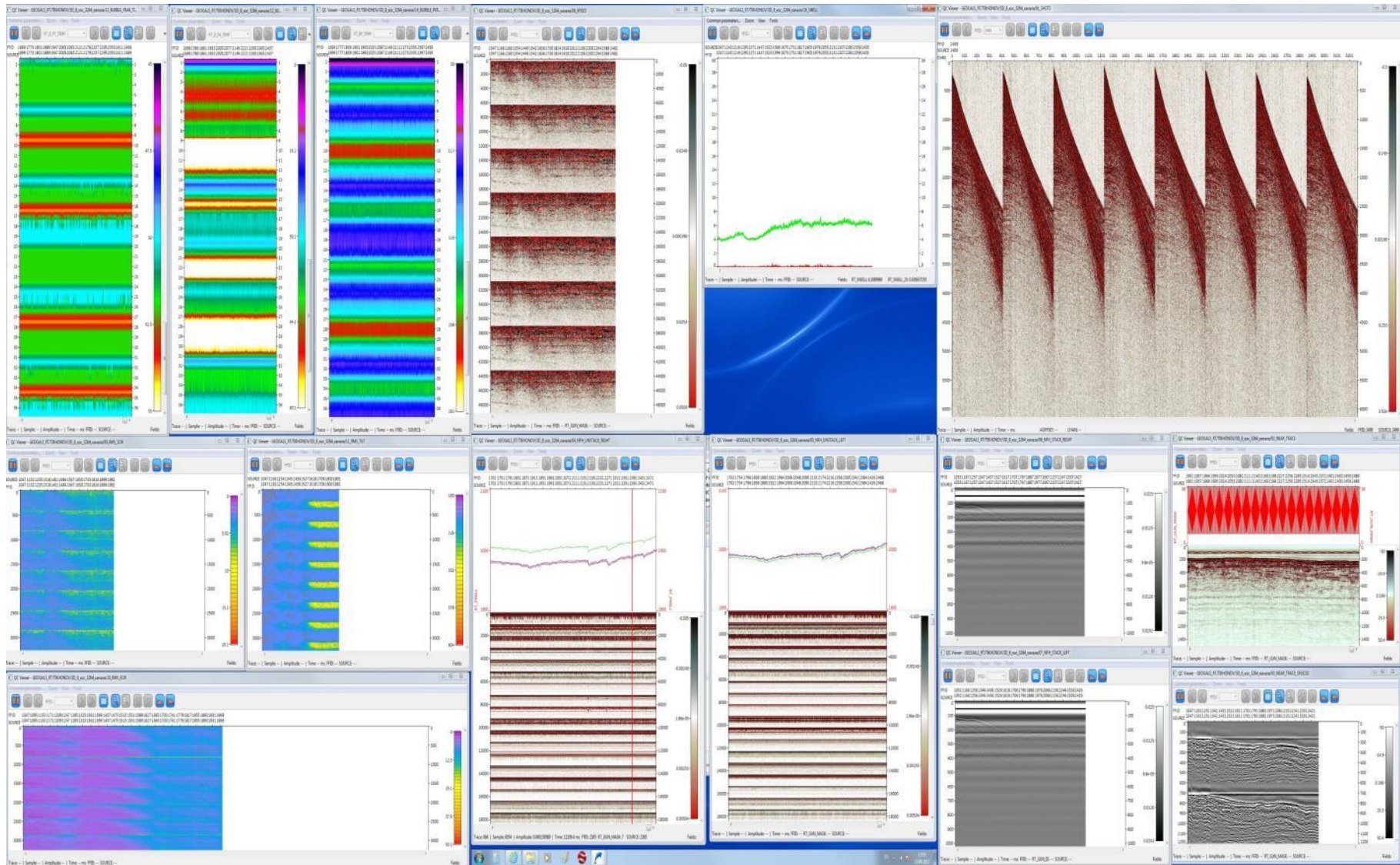


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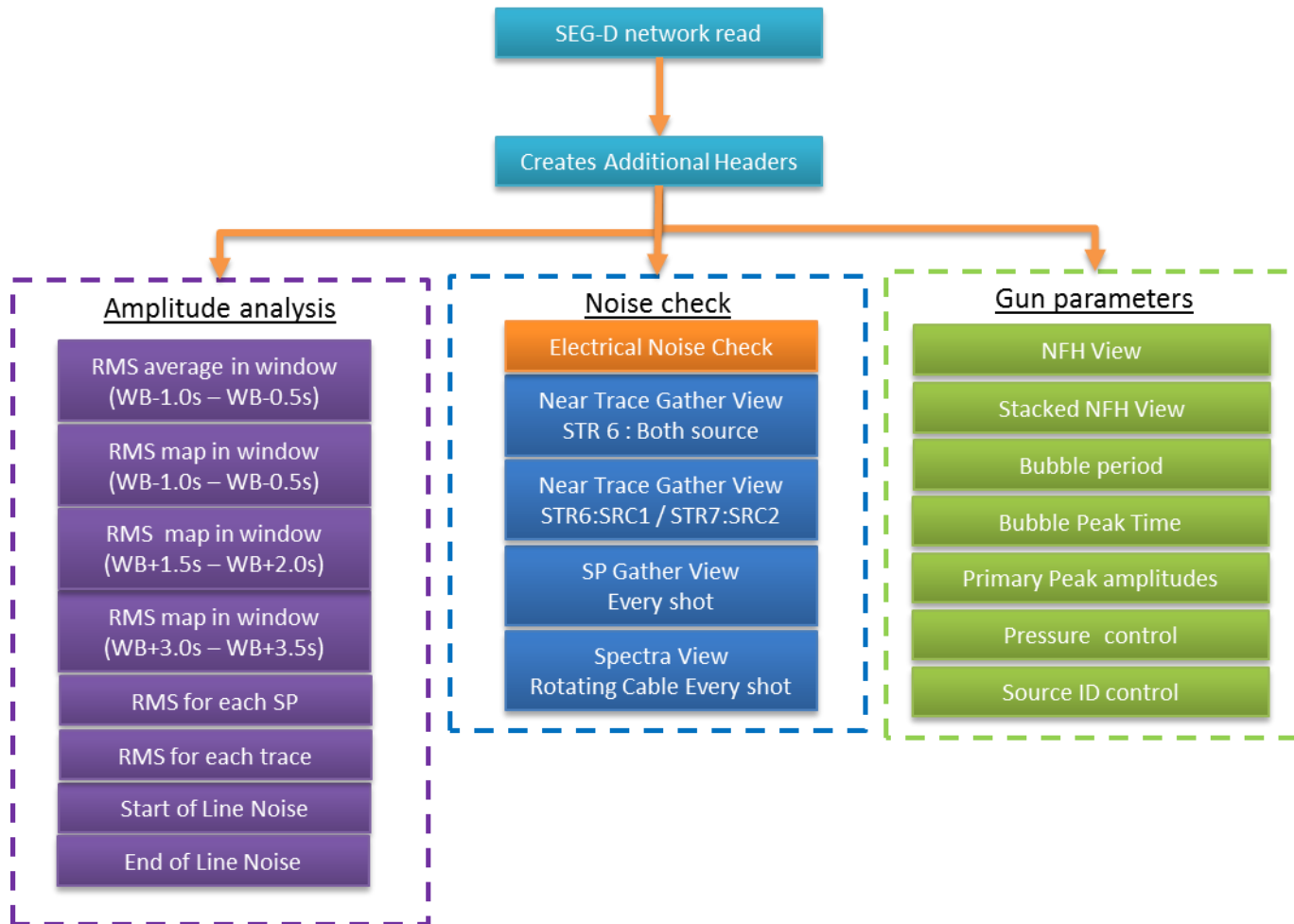
General Real-time QC screens view



Группа набортного контроля качества и обработки SCF GEO



Real-time QC flow



Features

Visualization optimized so as to attract operator's attention on any irregularity

Possible to zoom any picture in real time for investigation

Special attention to source control

Shot gathers can be reviewed later

OFFLINE QC (performed after each line completion)

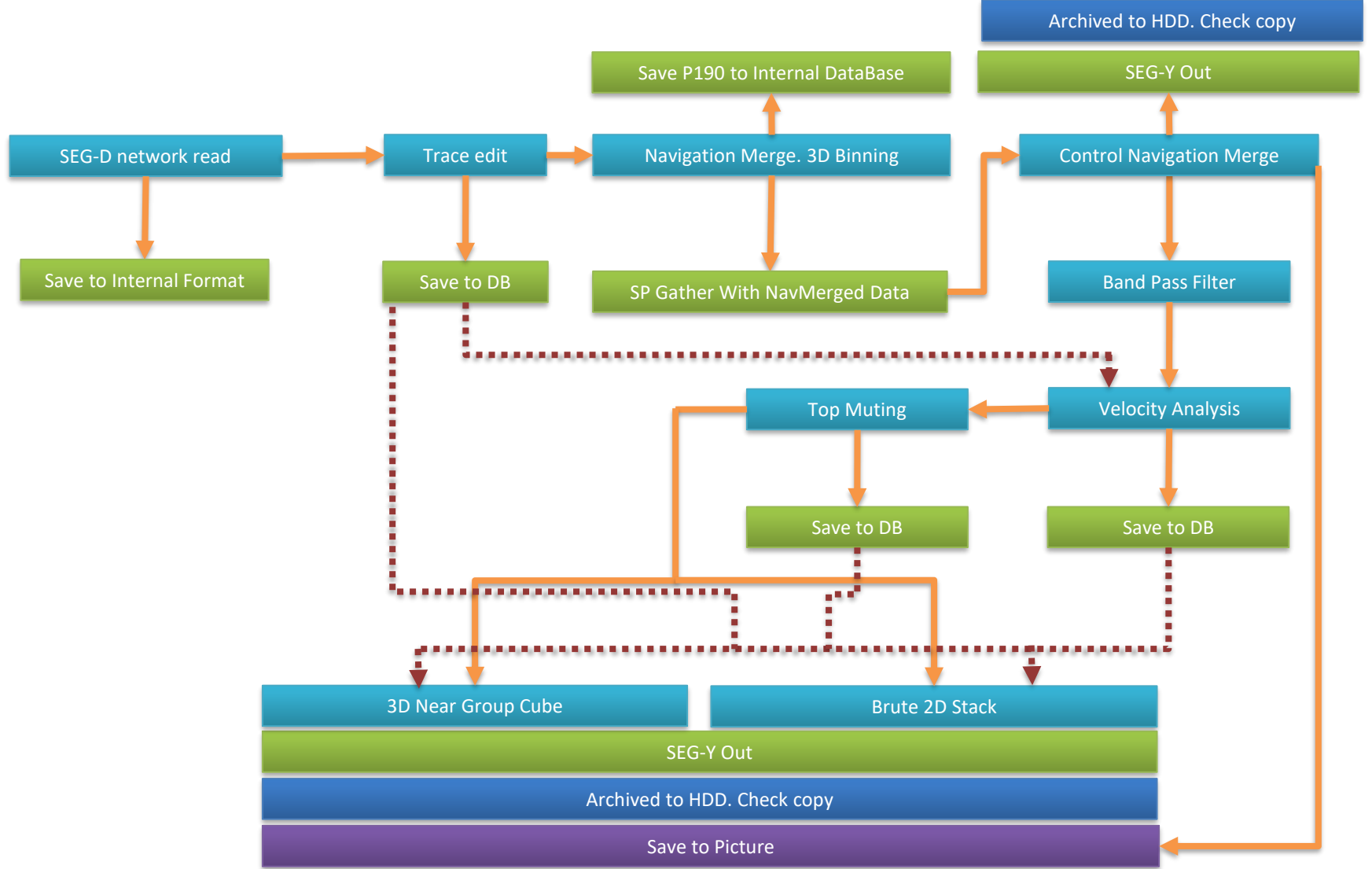


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Offline QC flow
(sample, to be adjusted as per client request)



**Onboard express processing.
Full offset cube.**

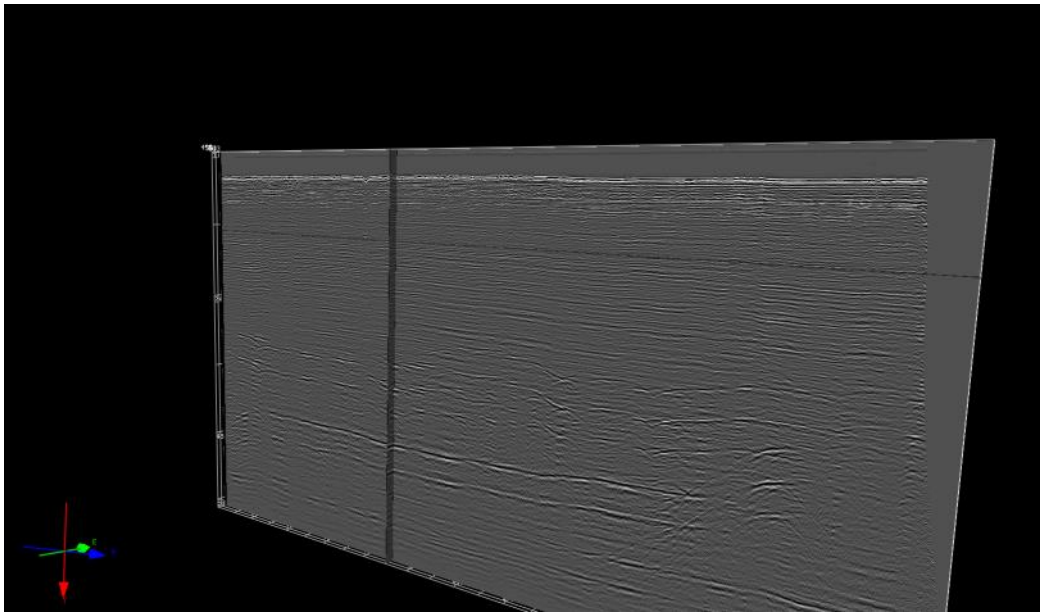


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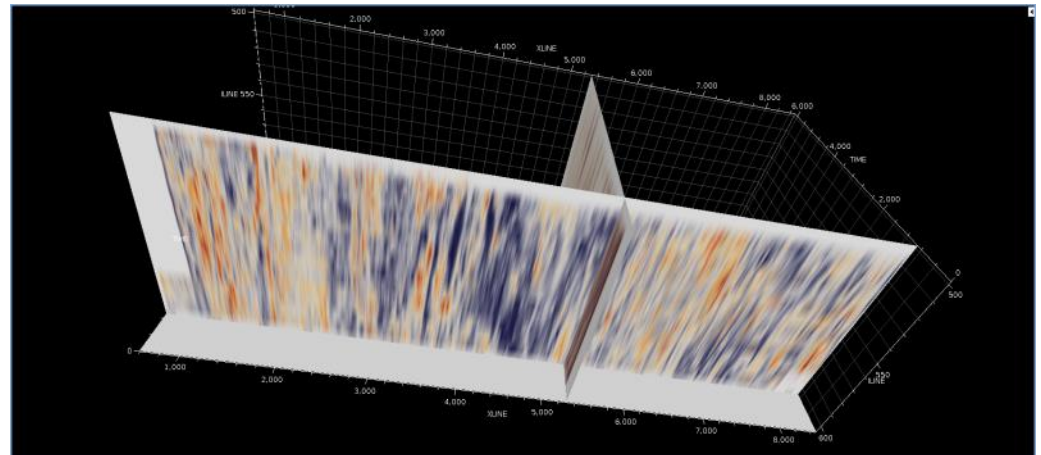
Группа на бортового контроля качества и обработки SCF GEO

3D cubes visualization



GeoGals 2019.1

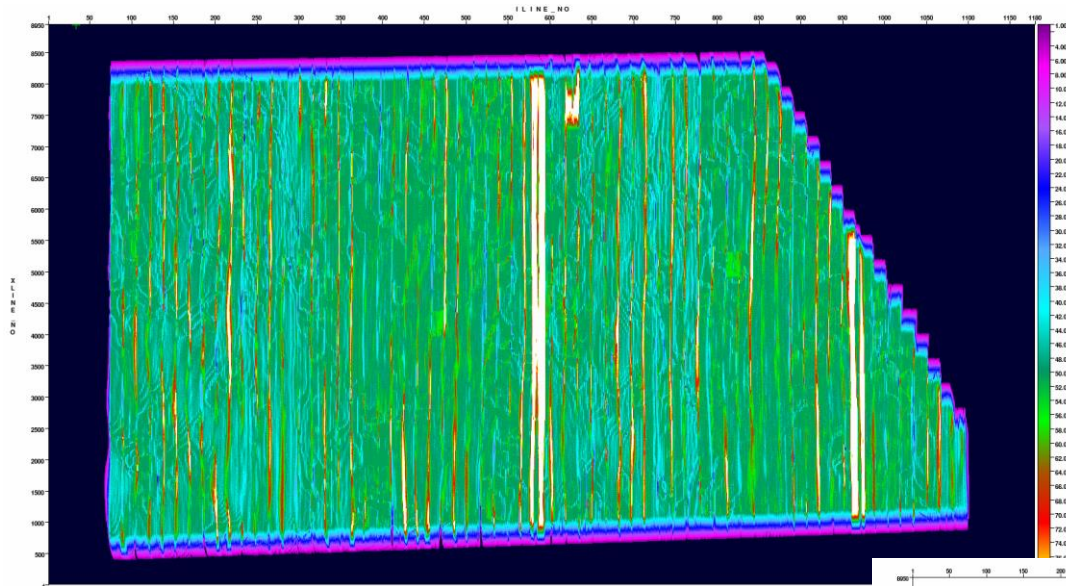
OpenCPS 3.3



Группа наботного контроля качества и обработки SCF GEO

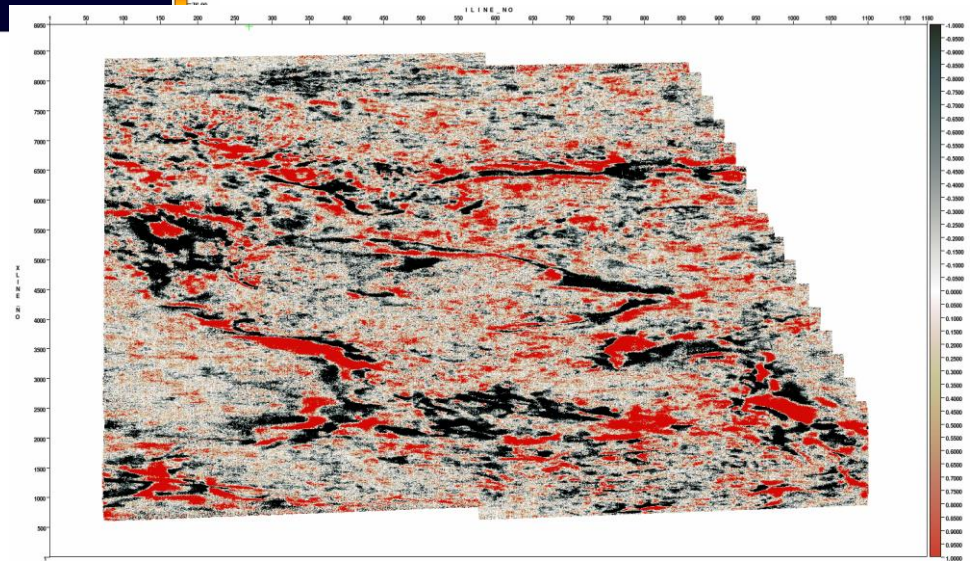


3D cubes visualization



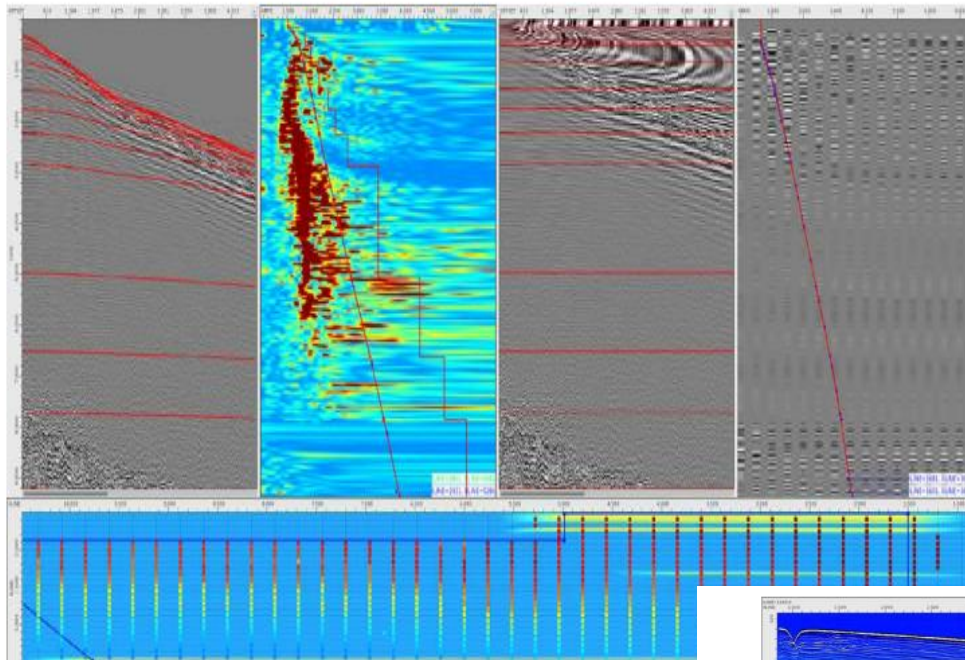
Final fold map

Time slice

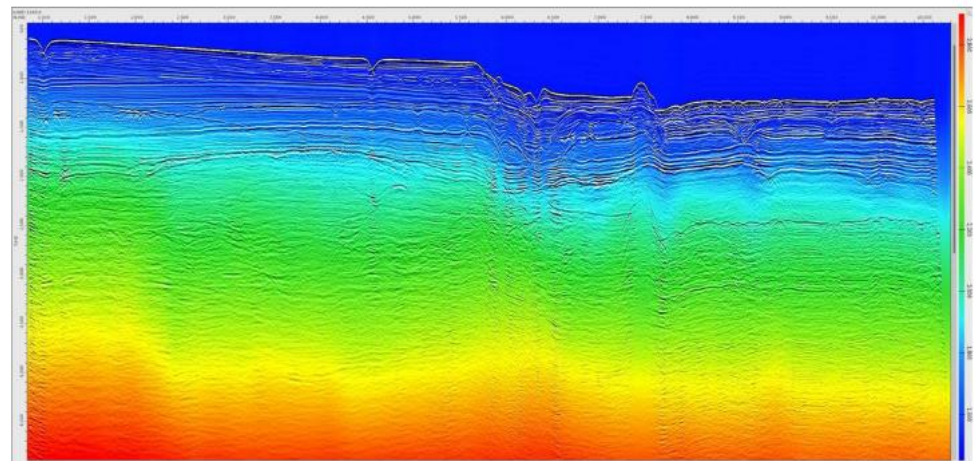


Velocity analysis

General view



Inline section with stacking velocities



Thank you for attention!



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