



Weatherford

**SECUREVIEW
FLUX VIEW**

COMPANY

EAST CHEYENNE GAS STORAGE LLC

WELL

ECGS No 6-21 WPPD004-2

FIELD

WEST PEETZ

PROVINCE/COUNTY

LOGAN

COUNTRY/STATE

U.S.A./COLORADO

LOCATION

SHL:1440' FSL & 2297' FWL

SEC 6

TWP 11N RGE 52W

Other Services
PLUG

Latitude

40.953098

Longitude

-103.220703

API Number

0507509426-0000

Permanent Datum GL, Elevation 4557 feet

Log Measured From KB, 12.00 feet above Permanent Datum

Drilling Measured From KB

Elevations:
KB 4569.00
DF 4566.00
GL 4557.00

Date

13-OCT-2017

PERFORATION RECORD

Run Number

ONE

Service Order

195126223

Type Log

CIT

Depth Driller

5440.00 feet

Depth Logger

5270.00 feet

Top Log Interval

0.00 feet

Bottom Log Interval

5270.00 feet

Hole Fluid Type

WATER

Hole Fluid Level

0.00 feet

Restriction ID

6.151 inches

Max Recorded Temp

Well Head Pressure

0.00 psi

Well Head Equipment

PCE 5K

Time Well Ready

1400

Time Logger Bottom

1800

Unit

14115

Equipment Name

WSSE

Base

CASPER

Recorded By

G. ZAPATA / P. MAZUR

Witnessed By

GARY OHLMAN

Shot	Number of Shots	Depth From feet	Depth To feet	CASING / TUBING RECORD			
				Size inches	Weight pounds/ft	Depth From feet	Depth To feet
				7.000	26.00	0.00	5293.00

CASING / TUBING RECORD

Type	Grade	TypeJoint	Size inches	Depth From feet	Shoe Depth feet	Weight pounds/ft
PRODUCTION	J-55		7.000	0.00	5293.00	26.00

REMARKS

SOFTWARE VERSION 17.01.7206 - COMMERCIAL BUILD VERSION

ALL DEPTH CONTROL PROCEDURES FOR SUBSEQUENT RUN IN HOLE WERE FOLLOWED. LOG RUN FROM 12' K.B.

SURFACE SYSTEM USED: WCM-D 307

TOOLS RUN: ADHM, CMMA, CICA, CISC WERE RAN IN COMBINATION

CUSTOMER DECLINED TO RUN THE MSC TO VERIFY INTERNAL WEAR

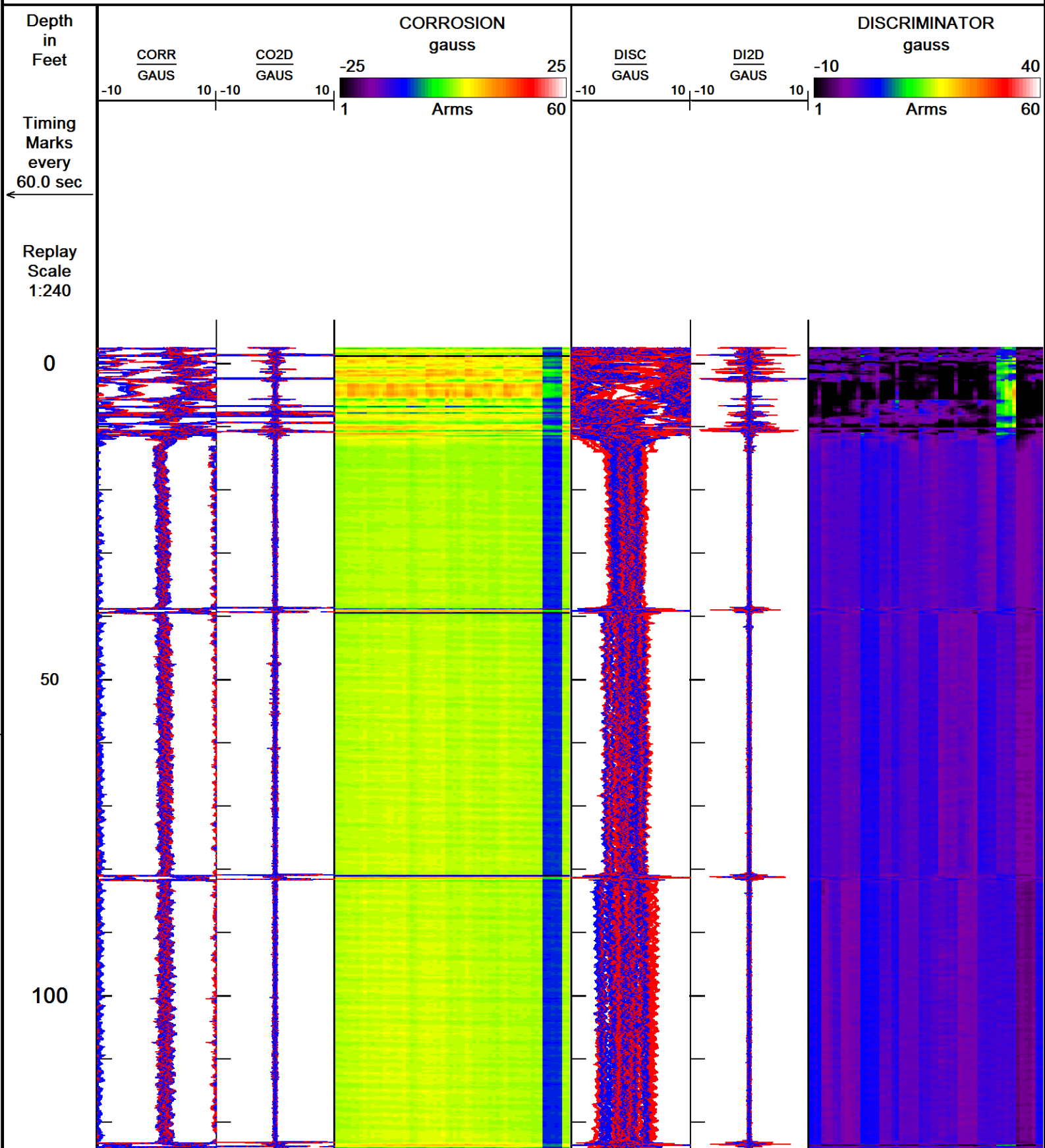
CREW: L. JOHNSON, M. MANDEZ

In interpreting, communicating or providing information and/or making recommendations, either written or oral, as to logs or test or other data, type or amount of material, or Work or other service to be furnished, or manner of performance, or in predicting results to be obtained, the Contractor will give the Company the benefit of the Contractor's best judgment based on its experience and will perform all such Work in a good and workmanlike manner. Any interpretation of test or other data, and any recommendation or reservoir description based upon such interpretations, are opinions based upon inferences from measurements and empirical relationships and assumptions, which inferences and assumptions are not infallible, and with respect to which professional engineers and analysts may differ. ACCORDINGLY ANY INTERPRETATION OR RECOMMENDATION RESULTING FROM THE SERVICES WILL BE AT THE SOLE RISK OF THE COMPANY, AND THE CONTRACTOR CANNOT AND DOES NOT WARRANT THE ACCURACY, CORRECTNESS OR COMPLETENESS OF ANY SUCH

INTERPRETATION OR RECOMMENDATION, WHICH INTERPRETATIONS AND RECOMMENDATIONS SHOULD NOT, THEREFORE, UNDER ANY CIRCUMSTANCES BE RELIED UPON AS THE SOLE OR MAIN BASIS FOR ANY DRILLING, COMPLETION, WELL TREATMENT, PRODUCTION OR FINANCIAL DECISION, OR ANY PROCEDURE INVOLVING ANY RISK TO THE SAFETY OF ANY DRILLING ACTIVITY, DRILLING RIG OR ITS CREW OR ANY OTHER INDIVIDUAL. THE COMPANY HAS FULL RESPONSIBILITY FOR ALL DECISIONS CONCERNING THE SERVICES.

MAIN PASS

Depth Based Data - Maximum Sampling Increment 2.5cm
Plotted on 16-OCT-2017 10:31
Filename: C:\Logs\ECGS 6-21 WP-D004-2 (2)\EAST CHEYENNE MAIN MERGE CIT.dta
Recorded on 13-OCT-2017 20:30
System Versions: Logged with 17.01.7206 Plotted with 17.01.7206

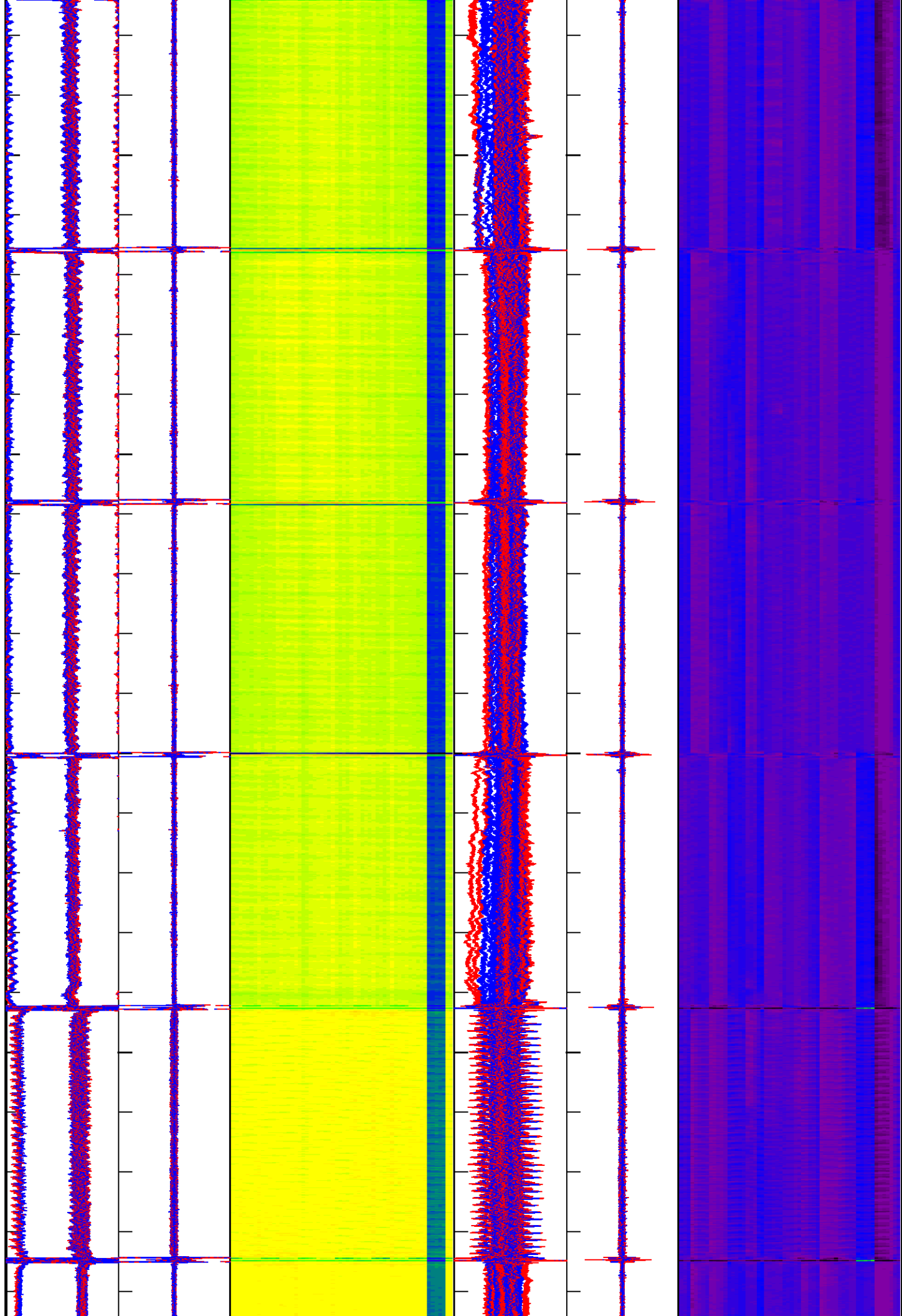


150

200

250

300



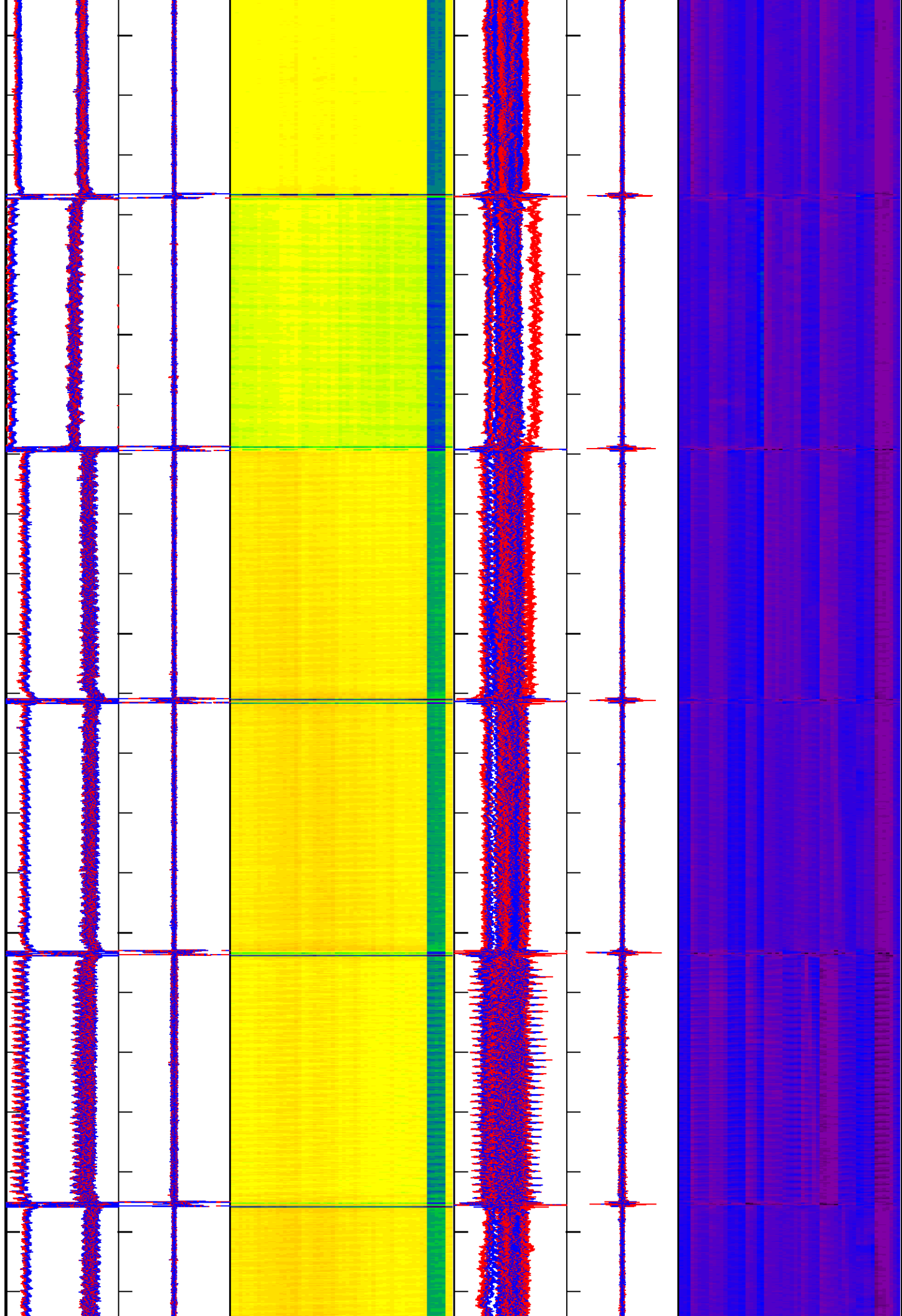
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400

450

500

550

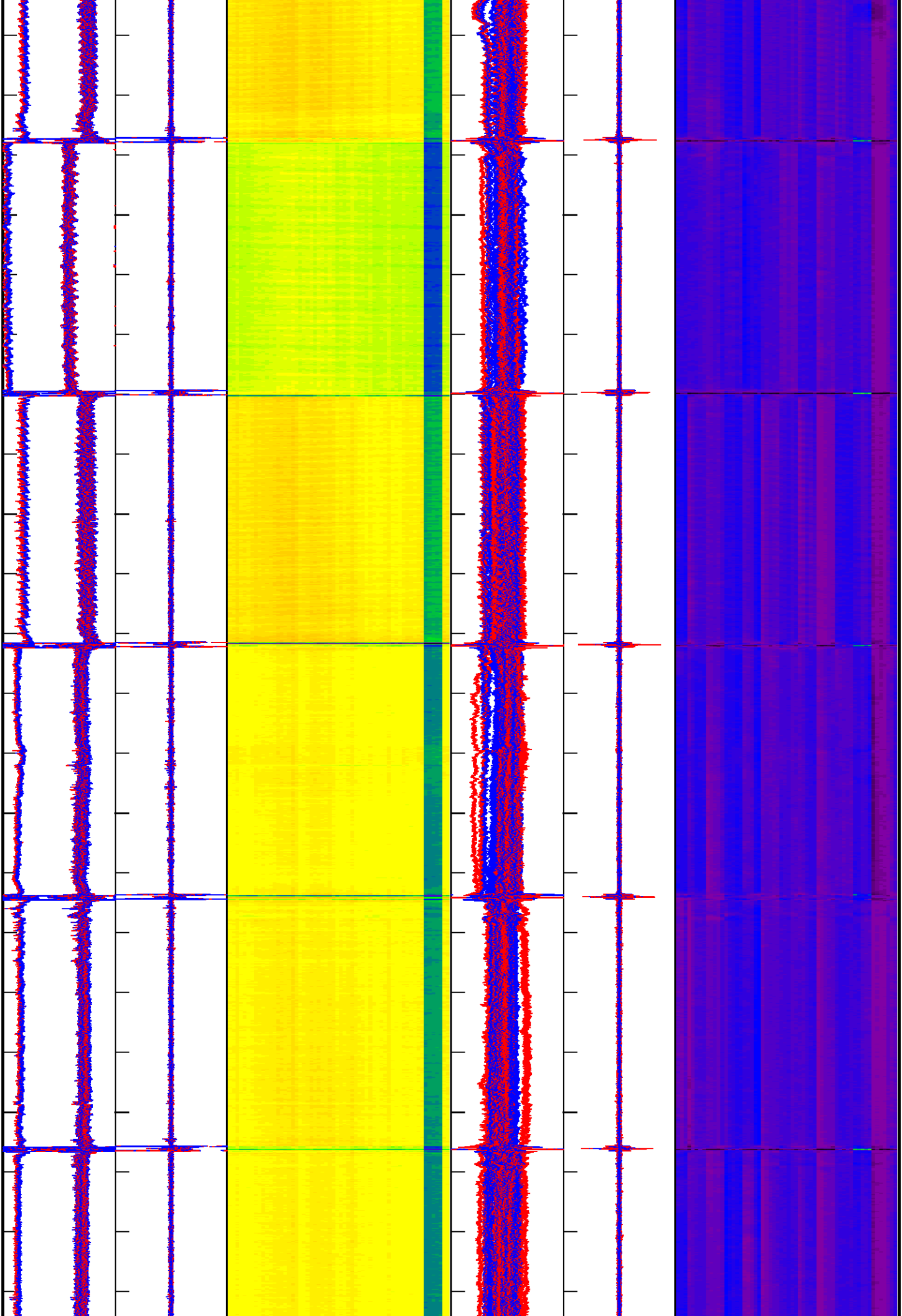


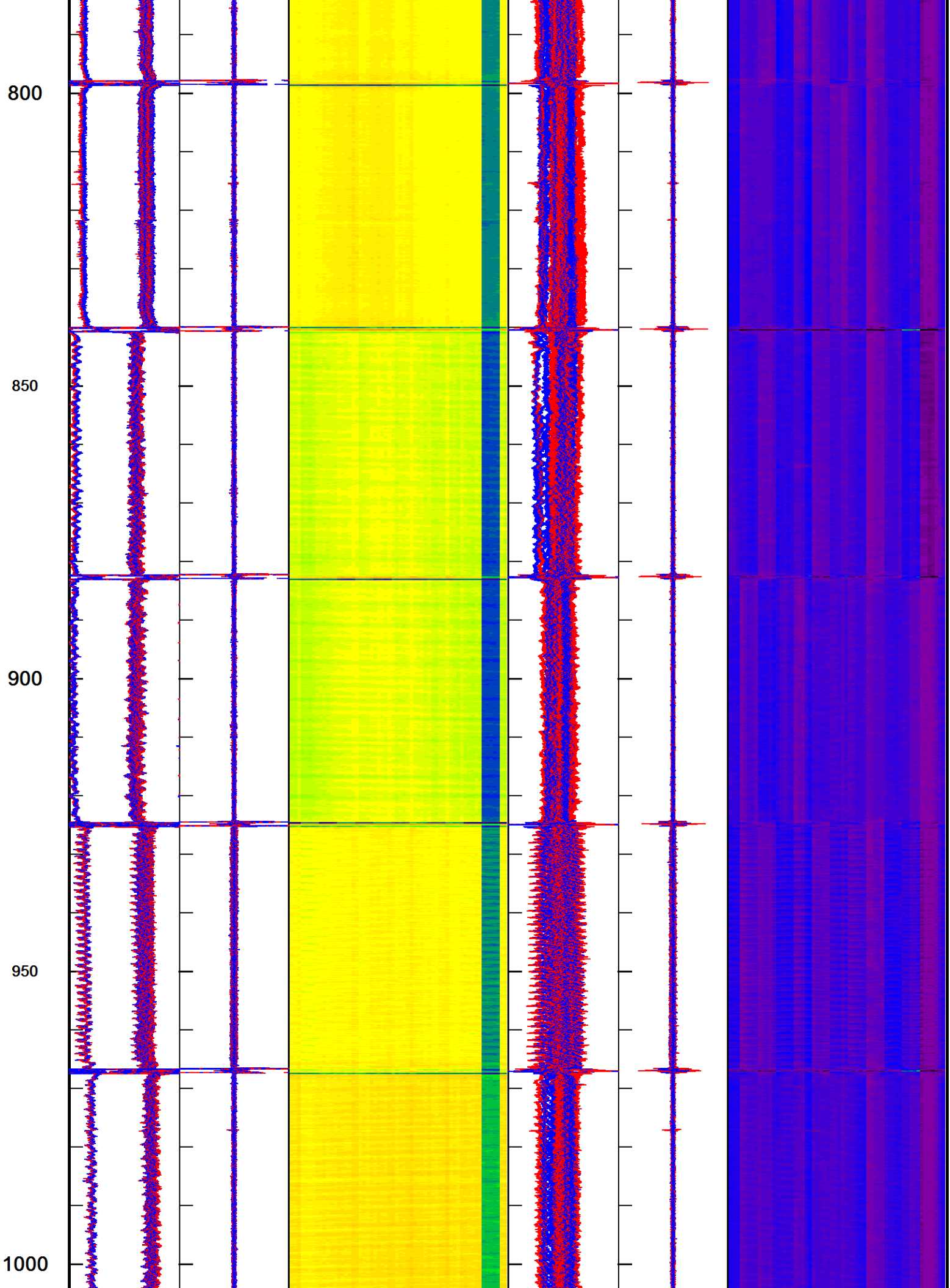
600

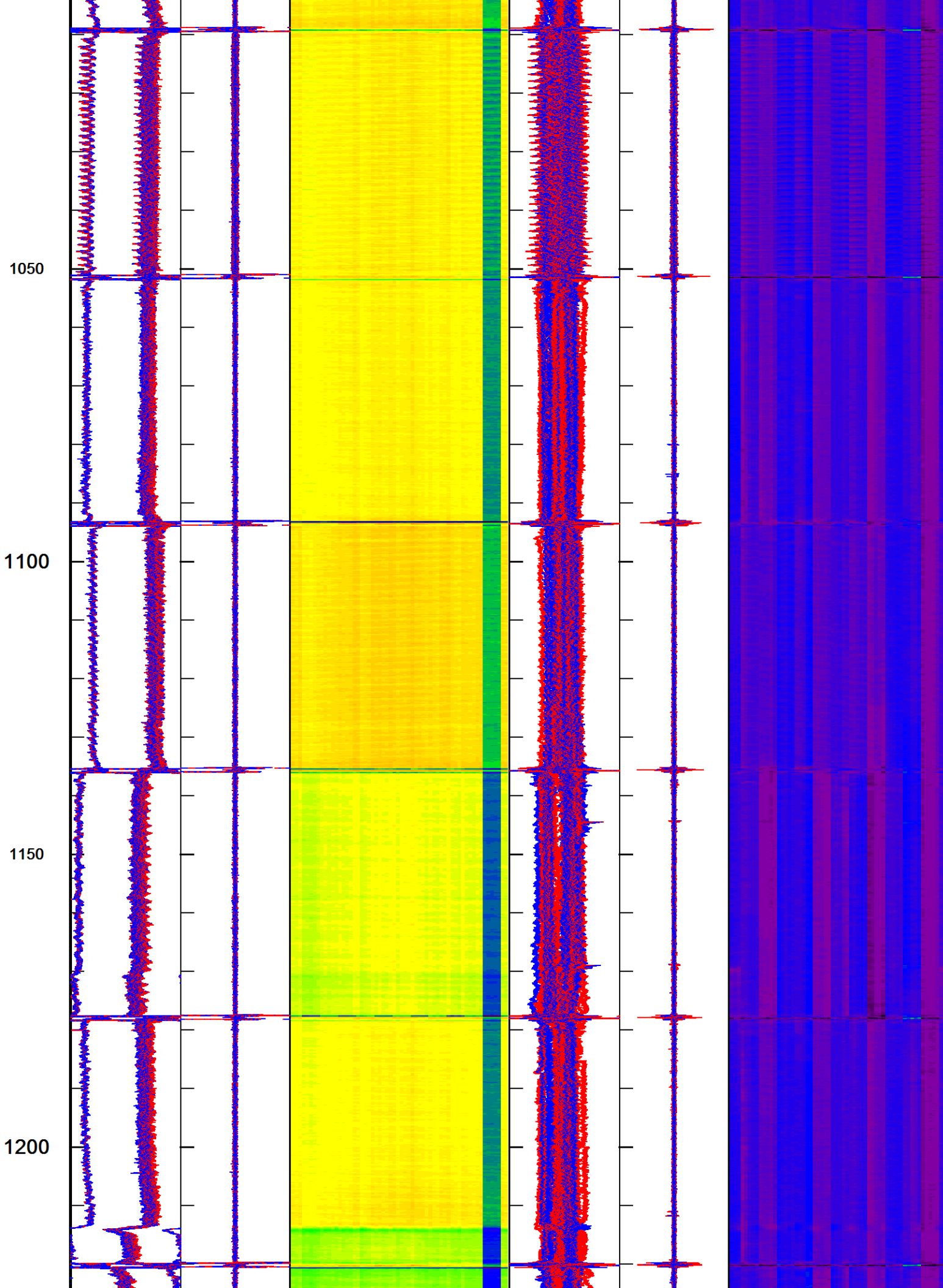
650

700

750





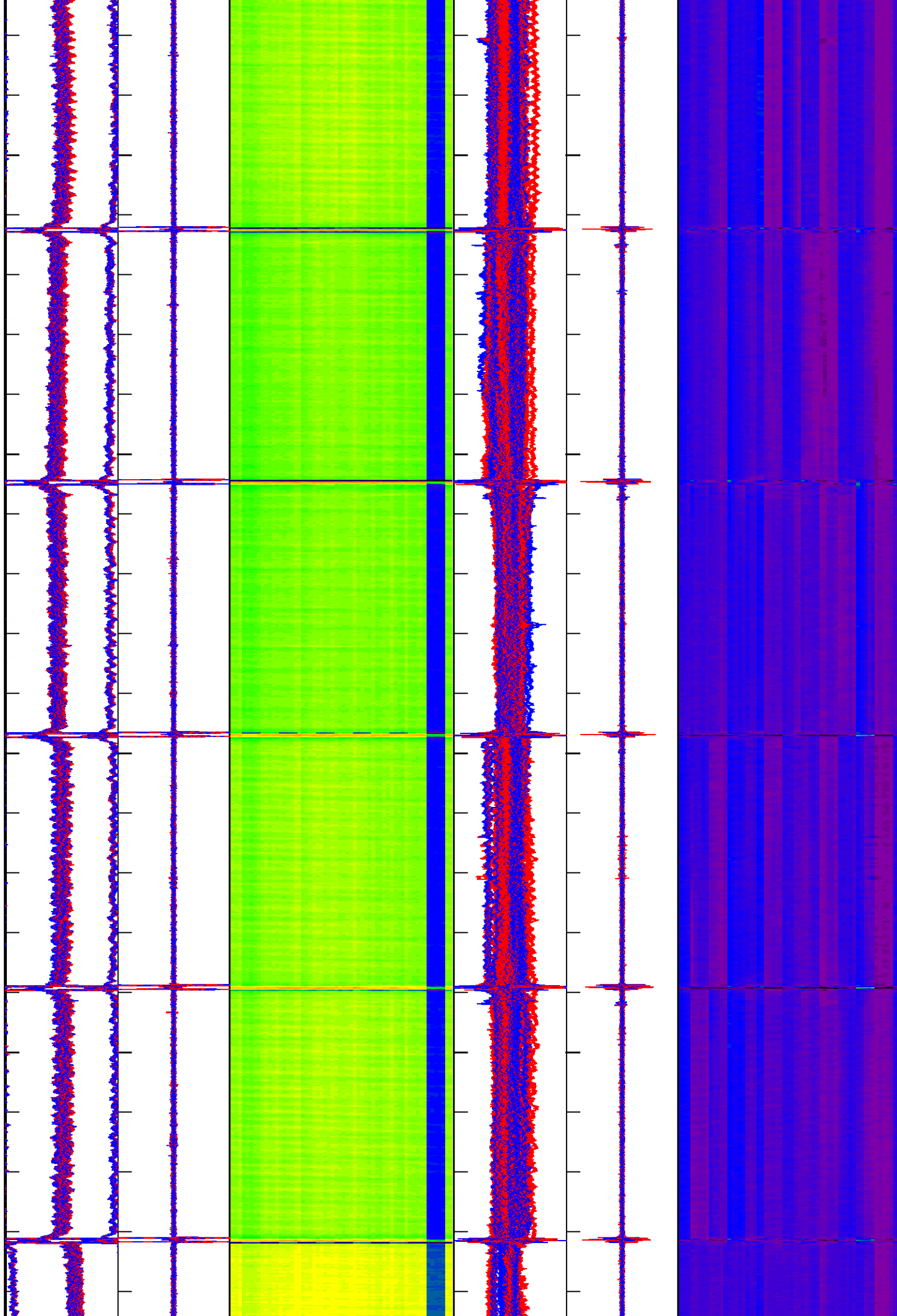


1250

1300

1350

1400



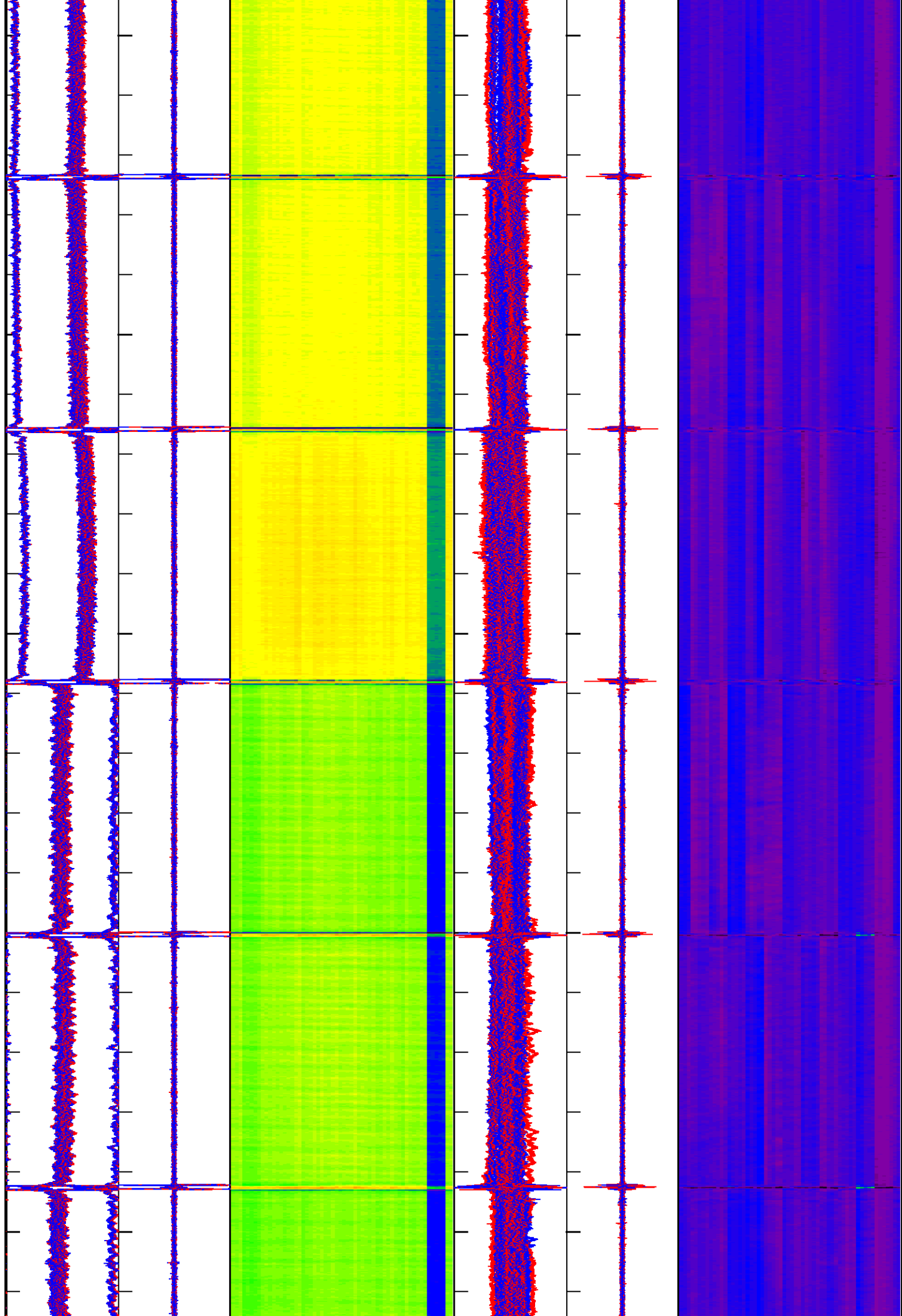
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1500

1550

1600

1650

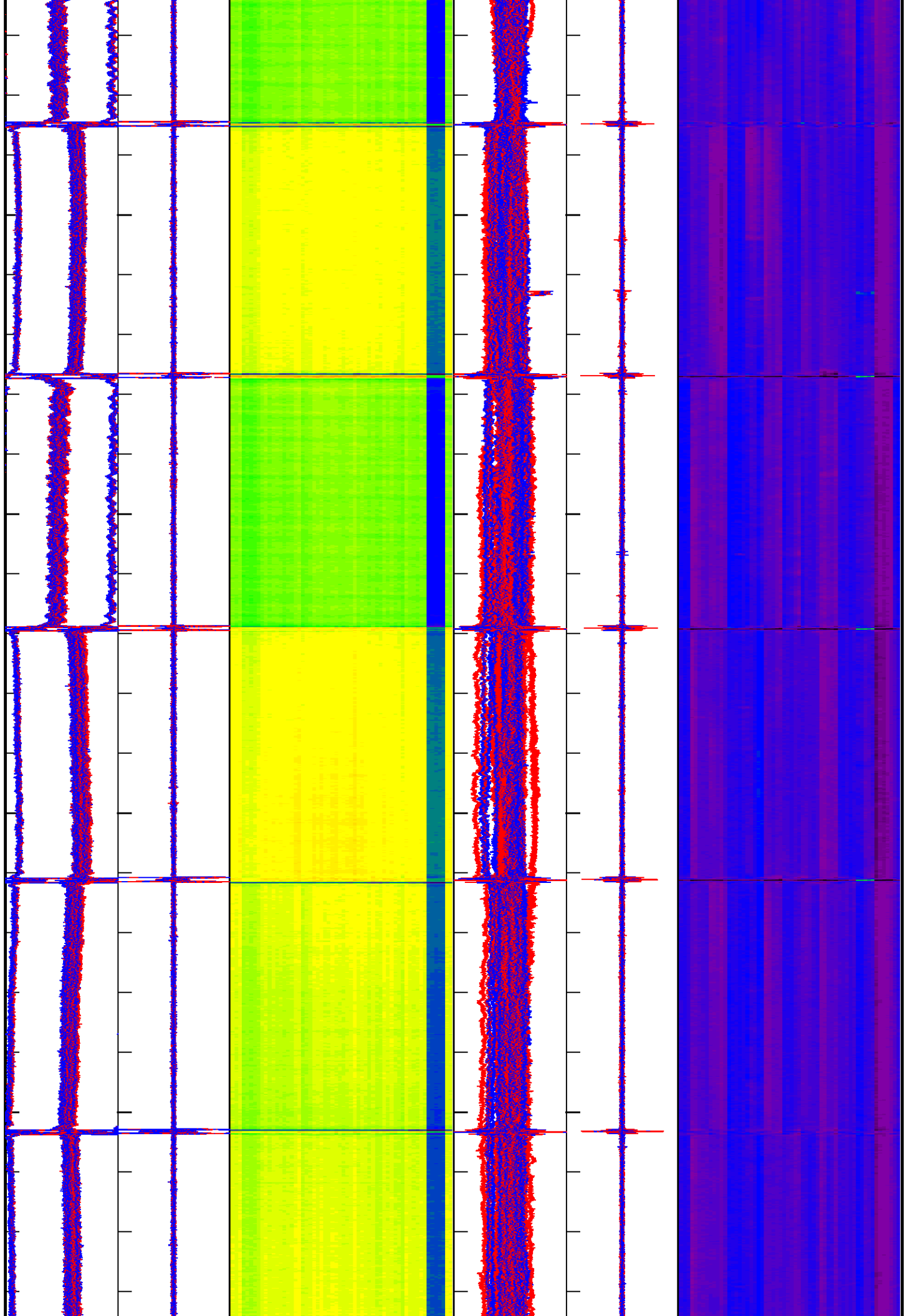


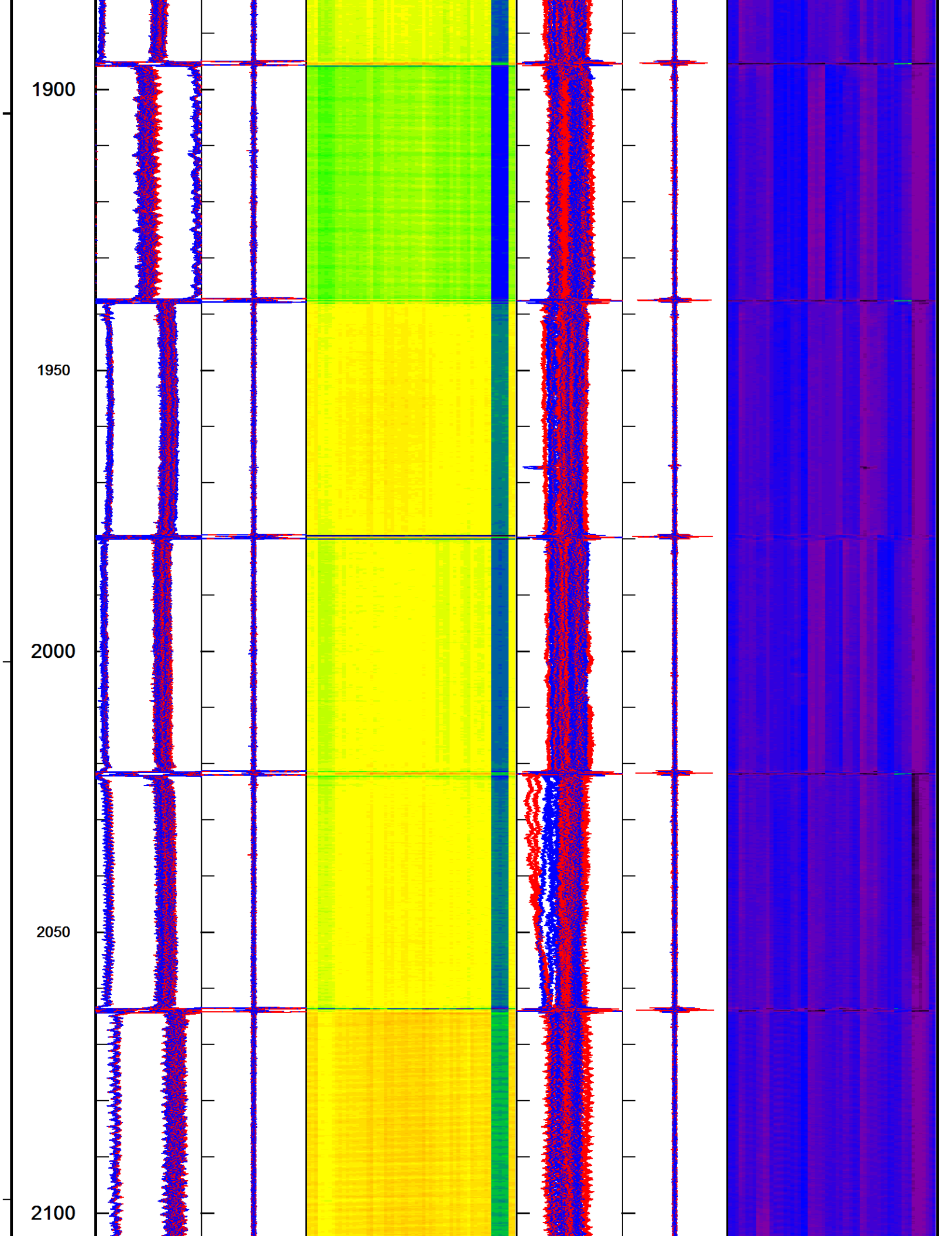
1700

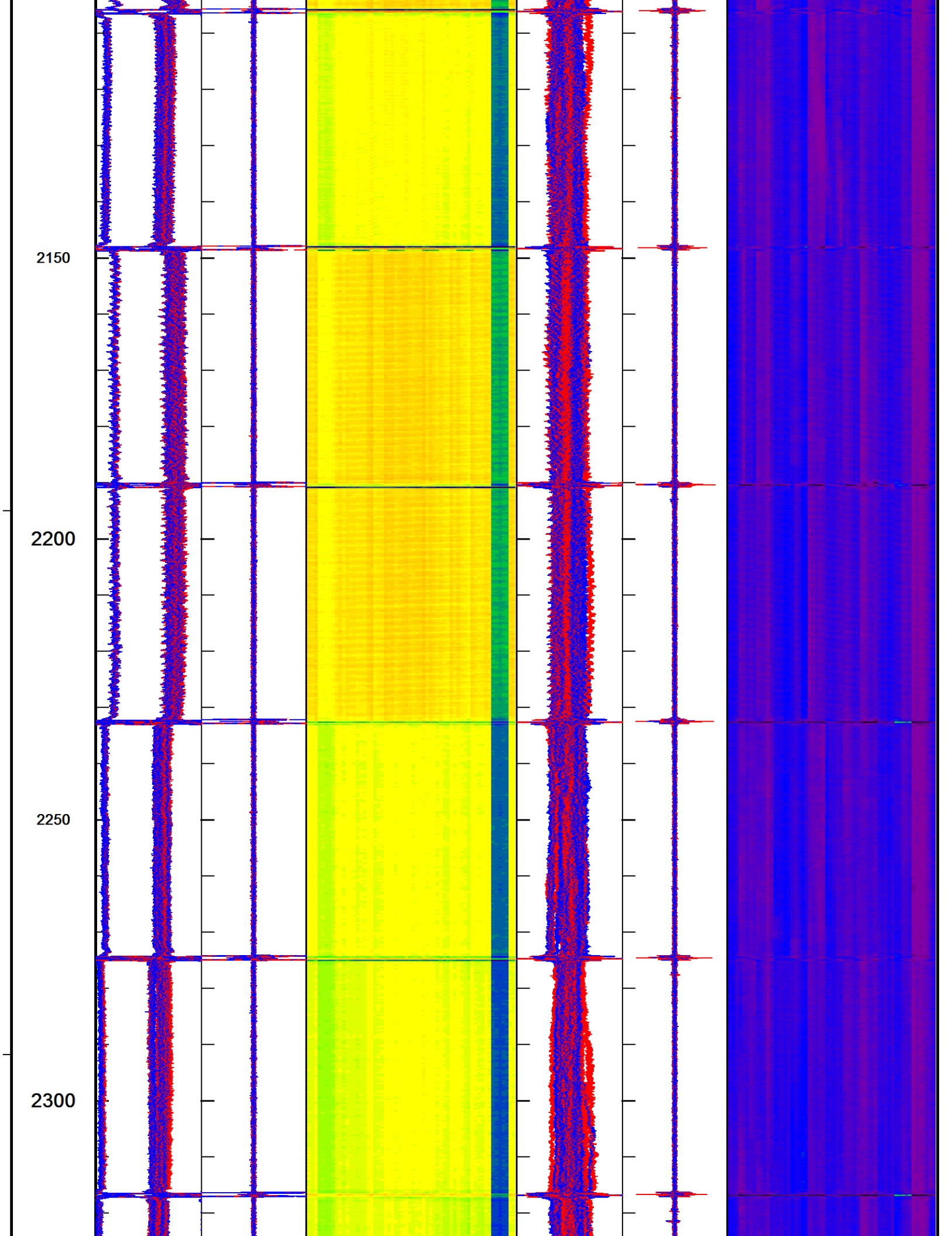
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1800

1850





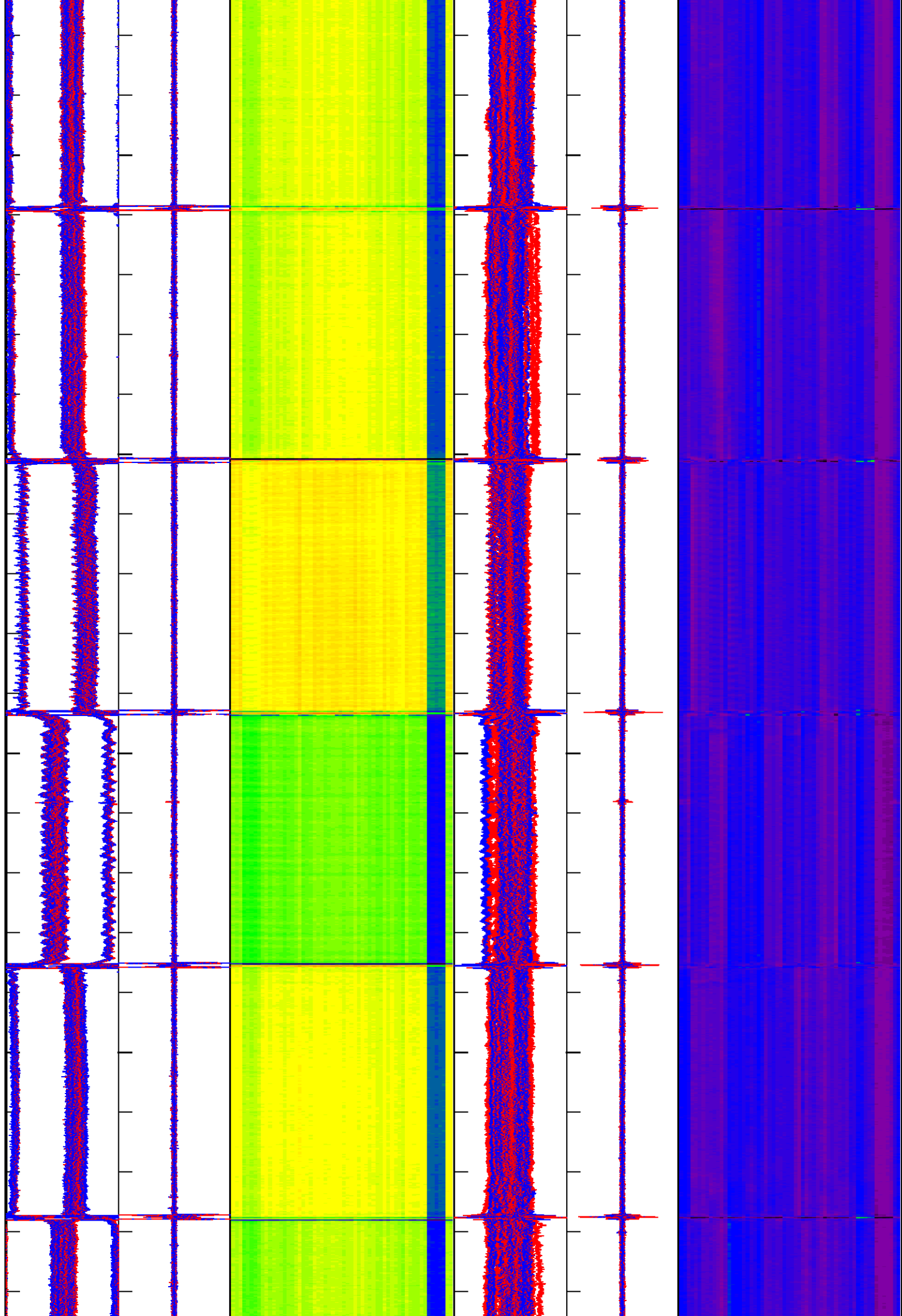


2350

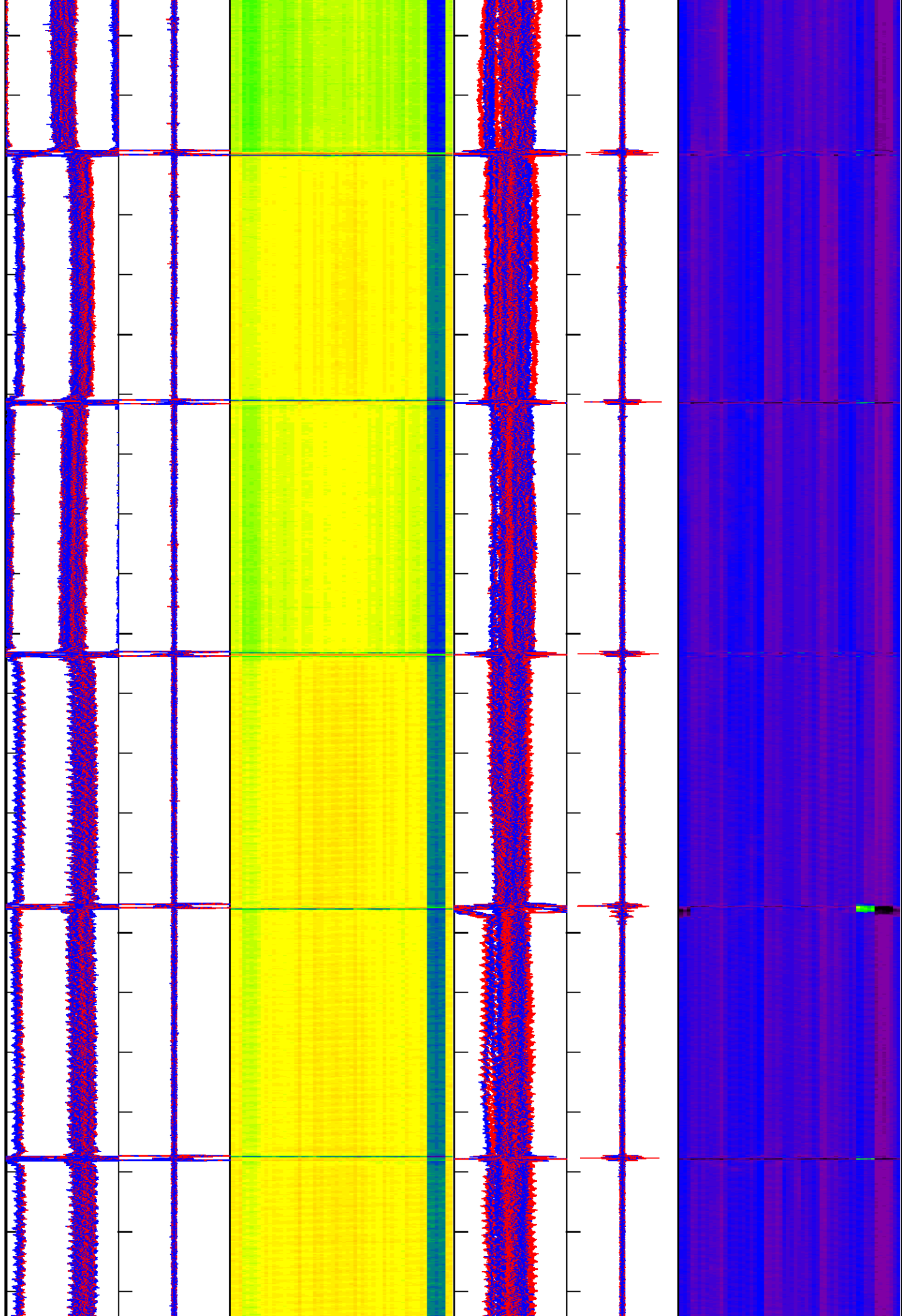
2400

2450

2500



2550
2600
2650
2700
2750

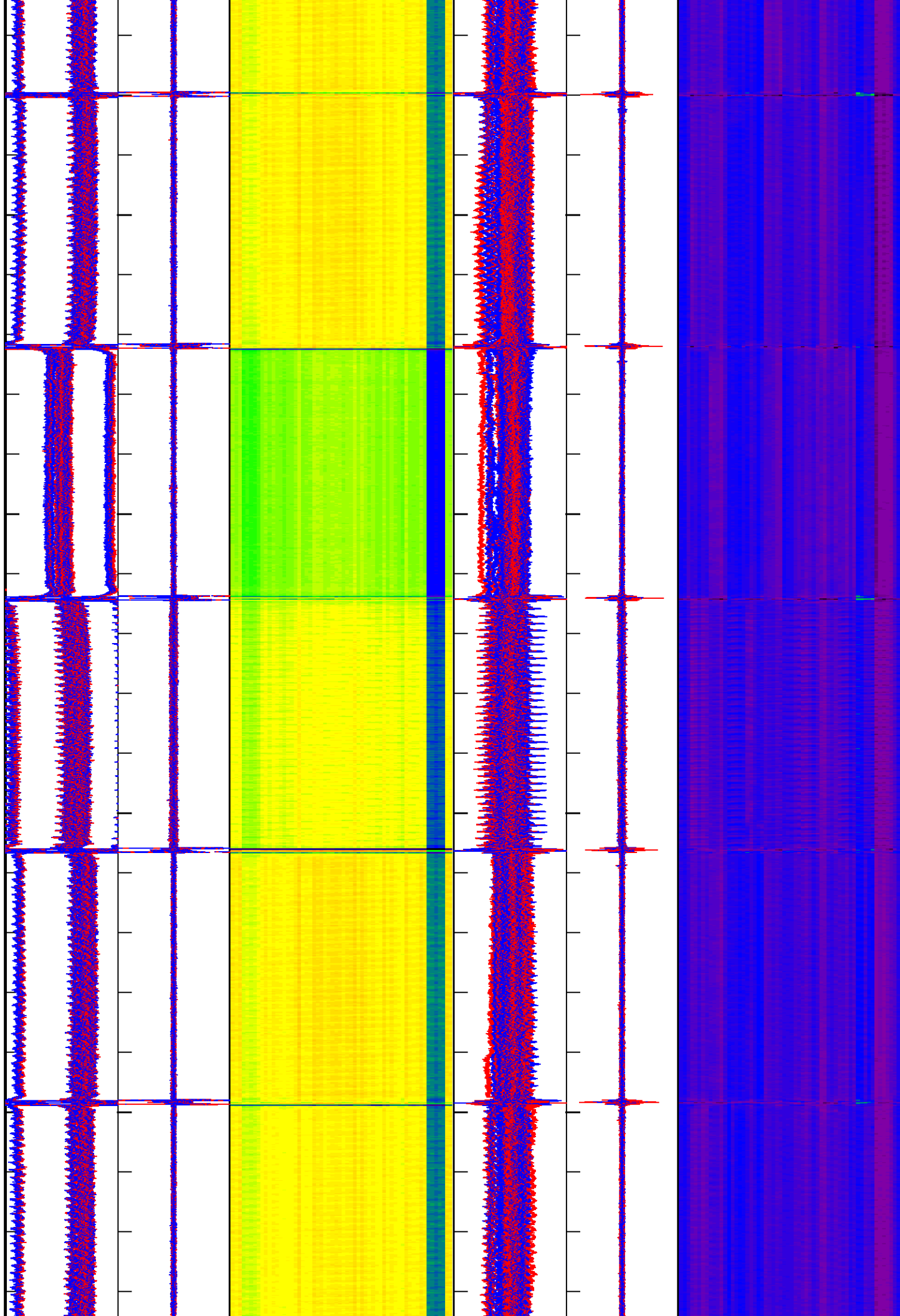


2800

2850

2900

2950



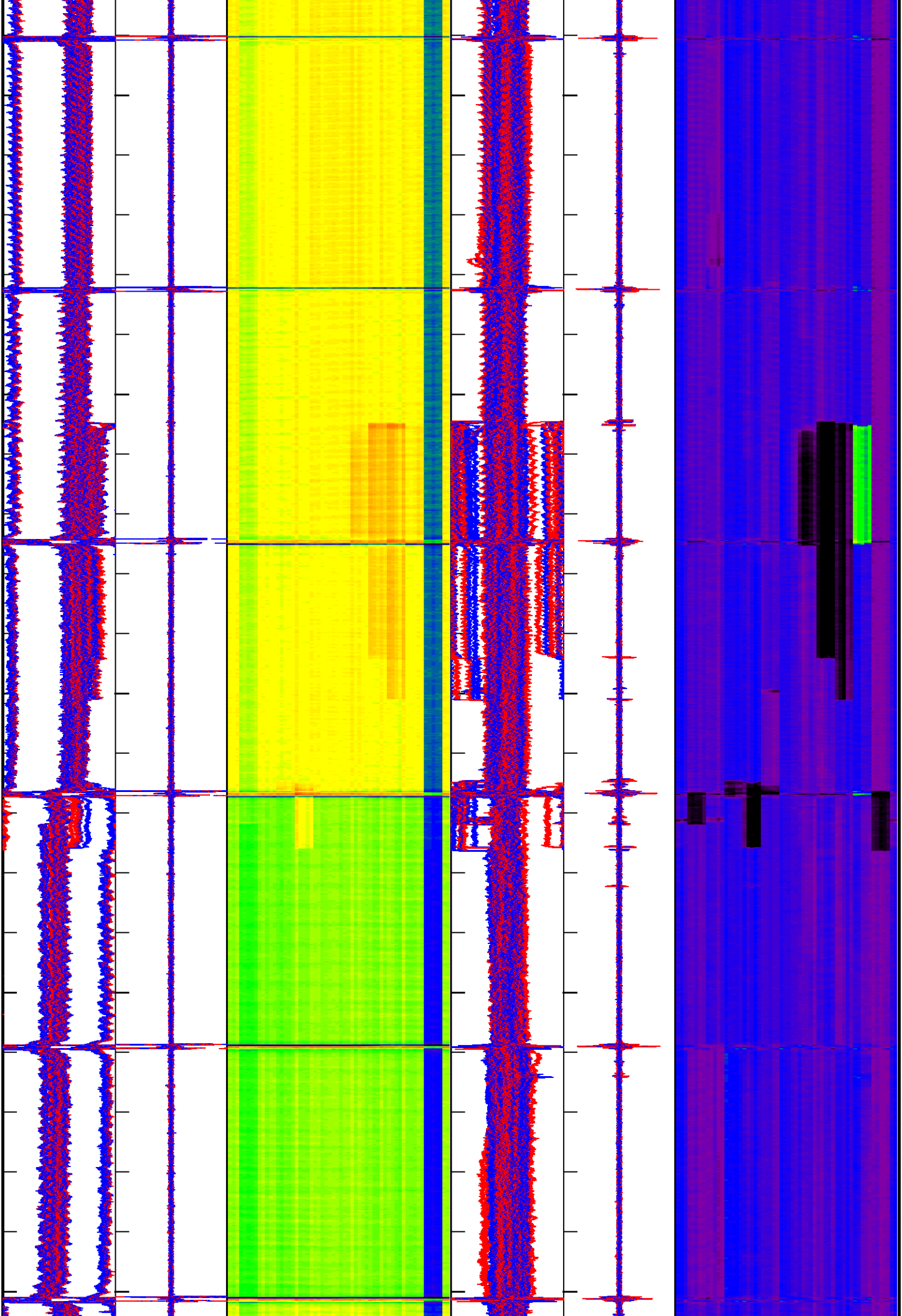
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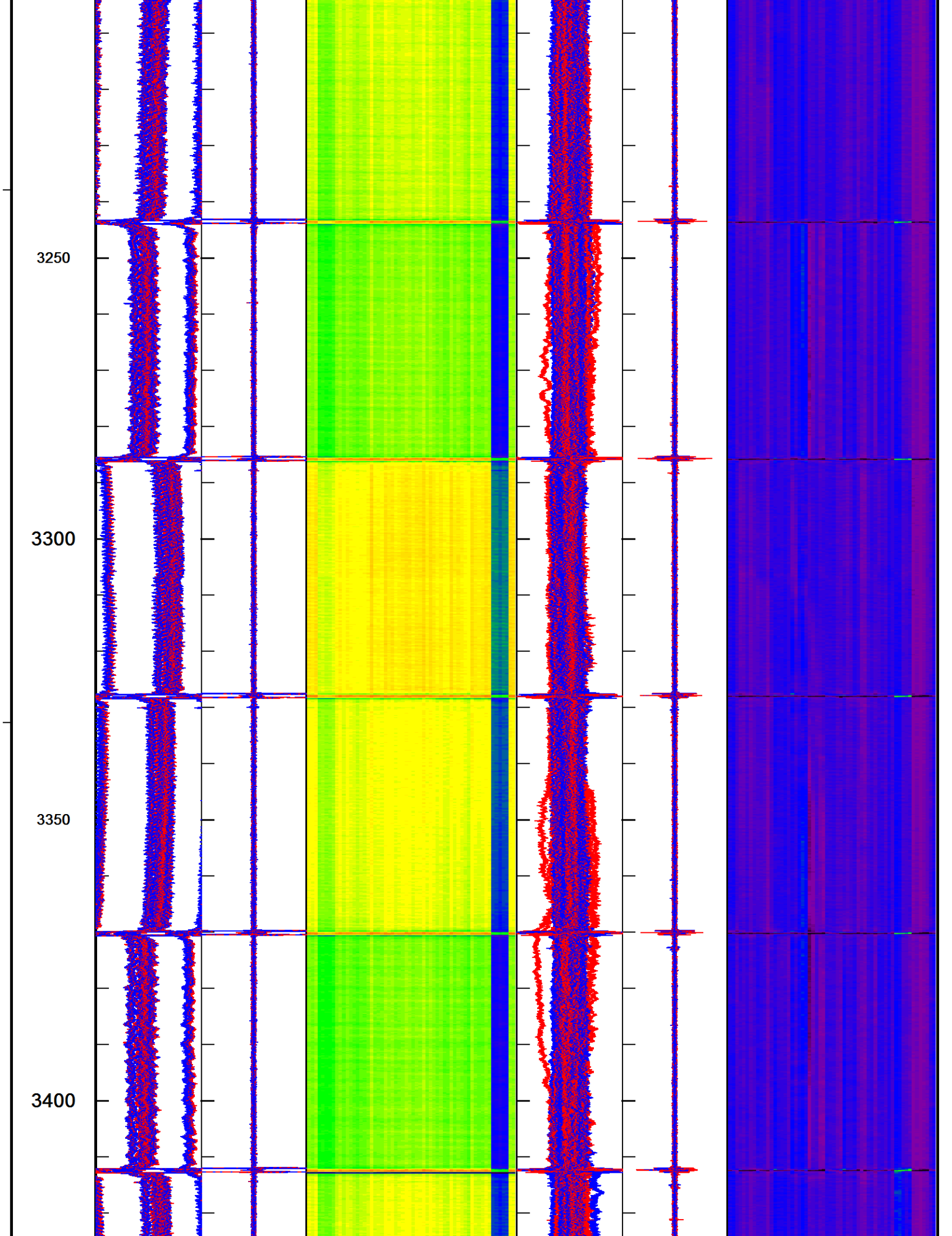
3050

3100

3150

3200



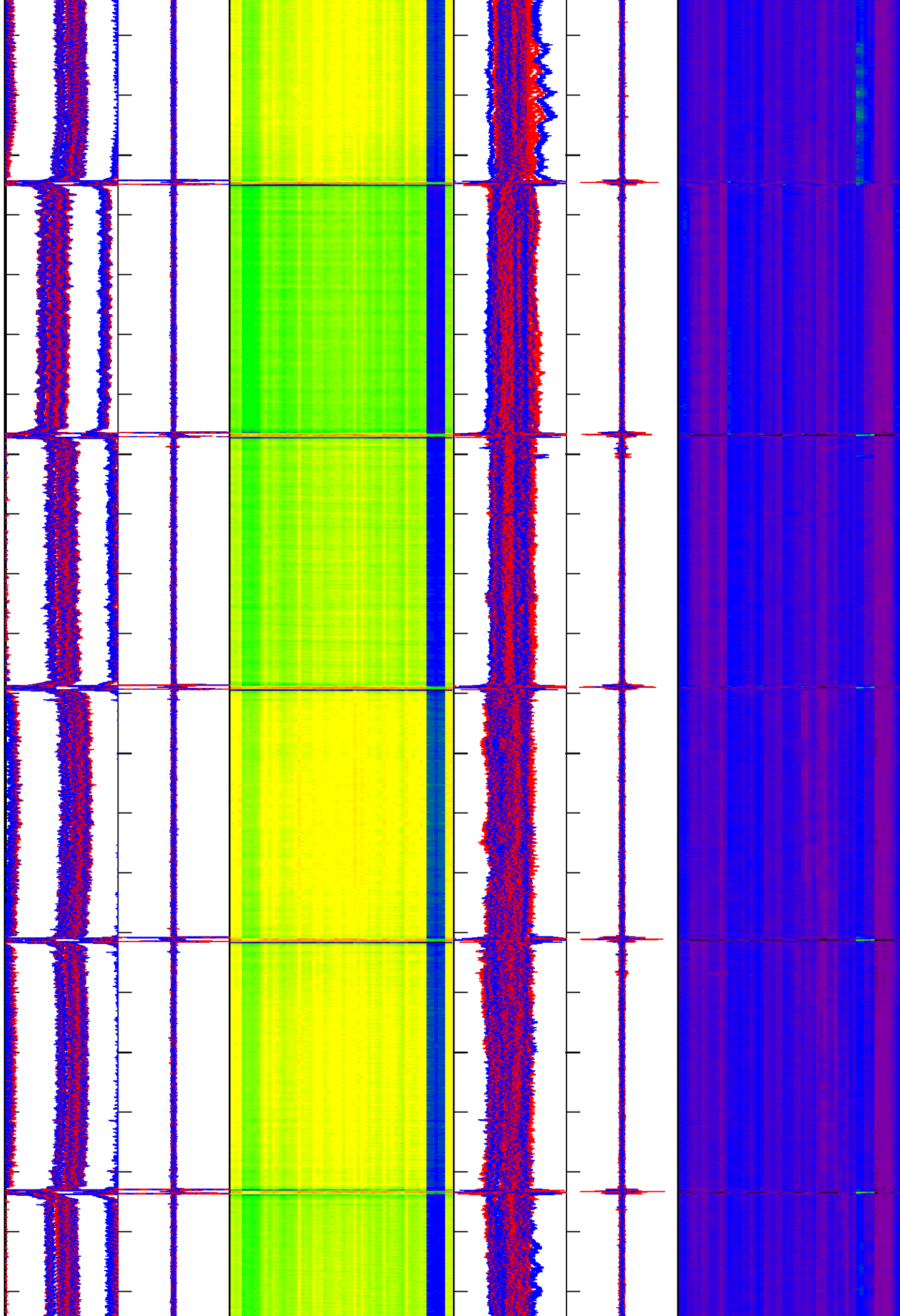


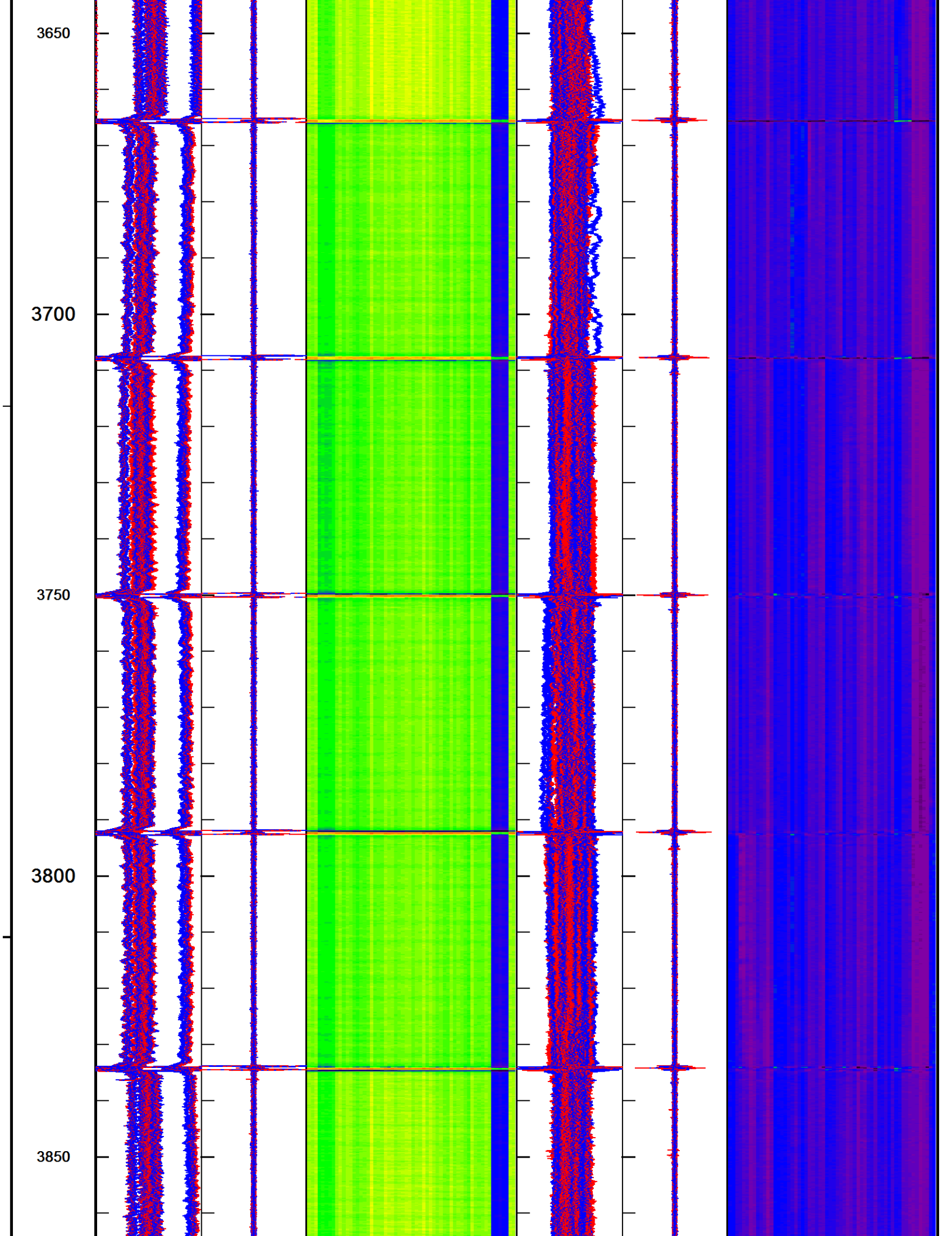
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3500

3550

3600



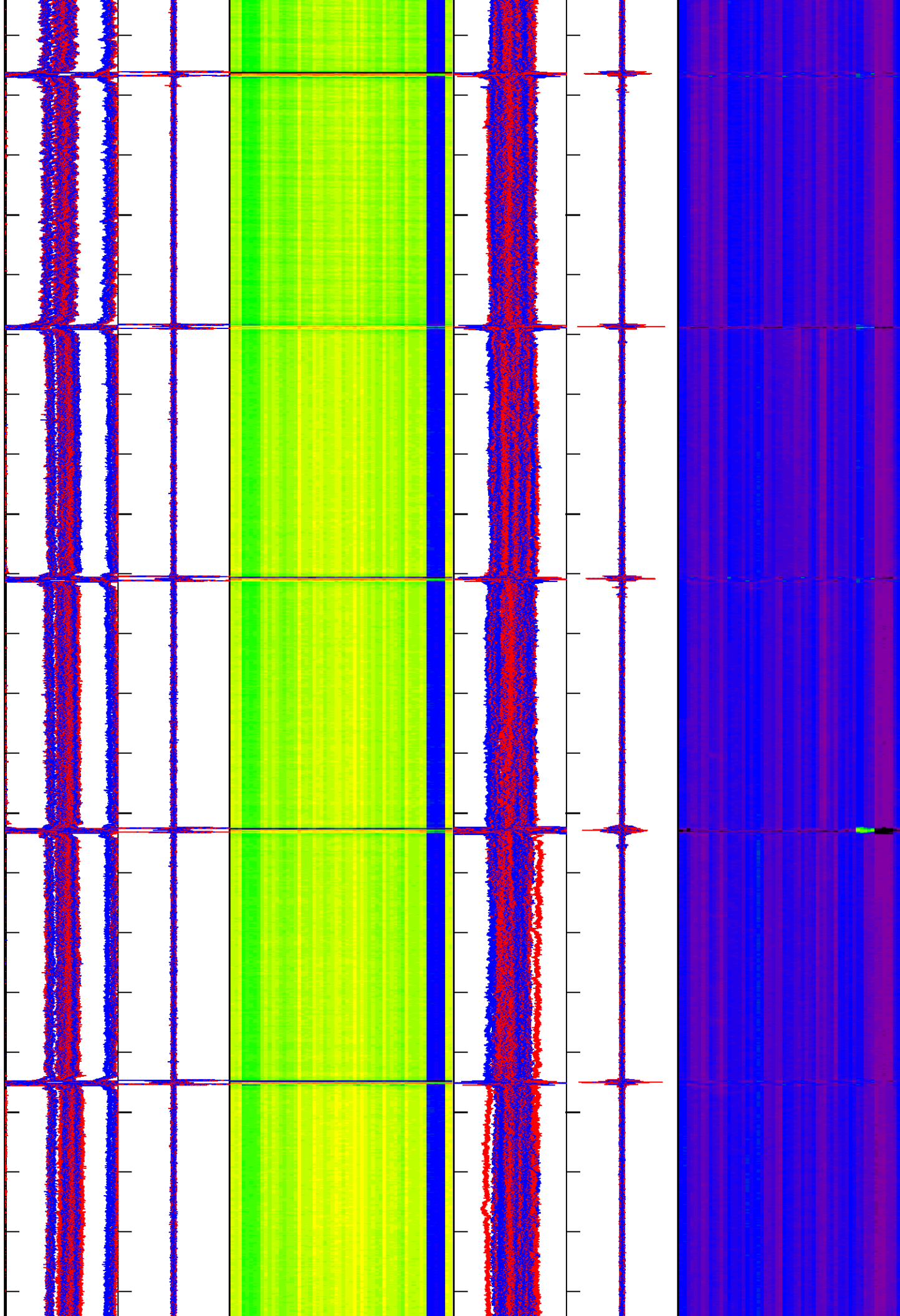


3900

3950

4000

4050



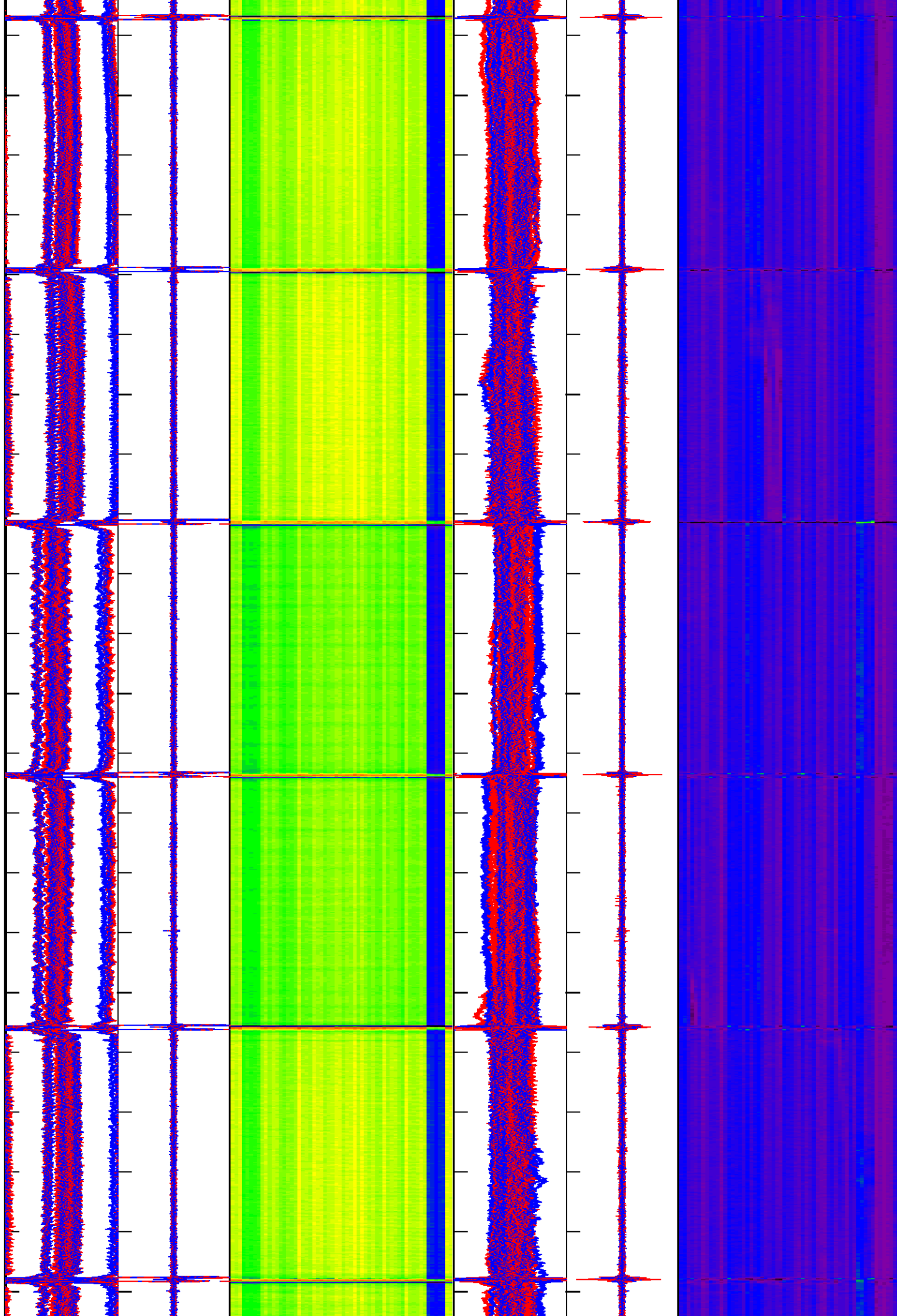
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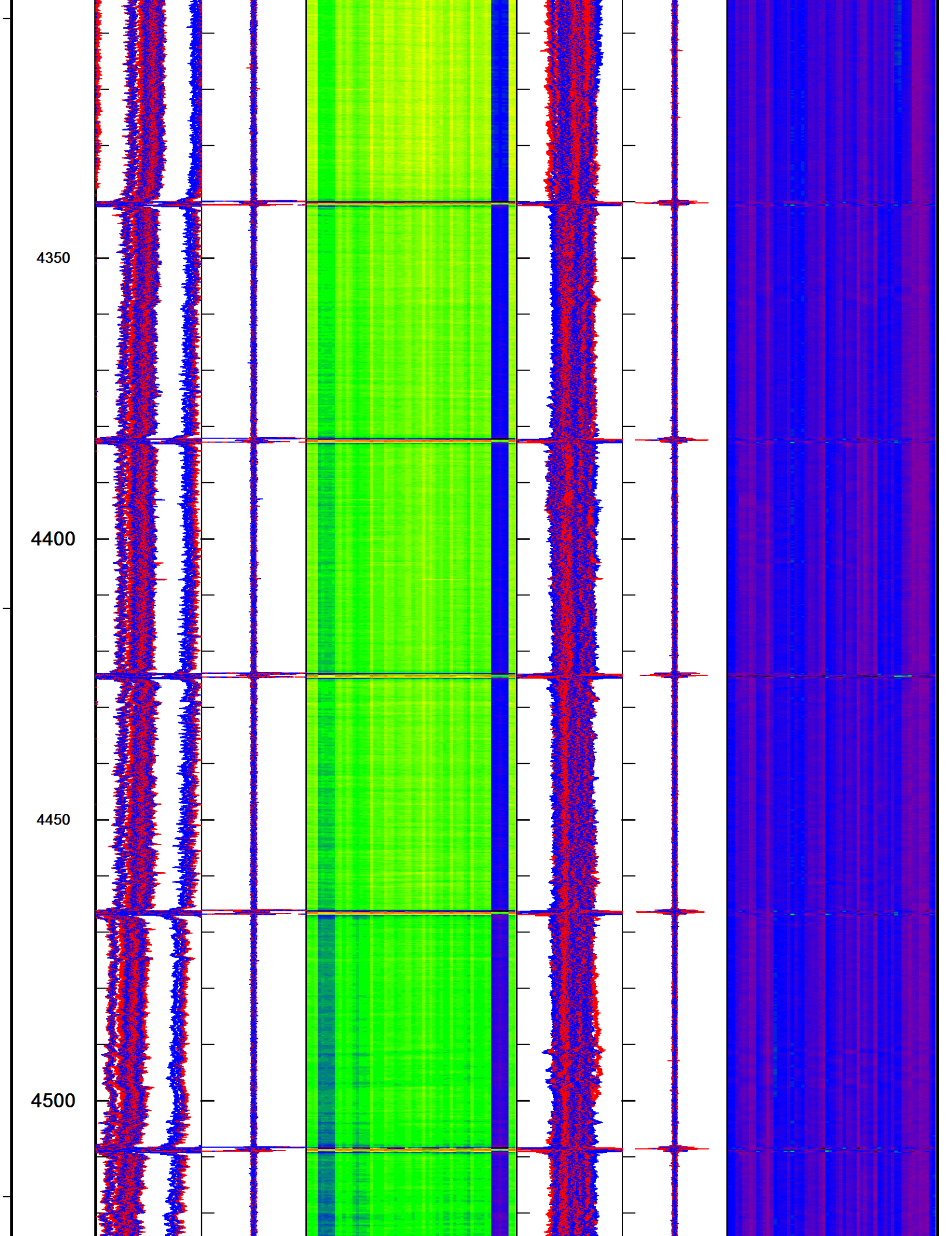
4150

4200

4250

4300



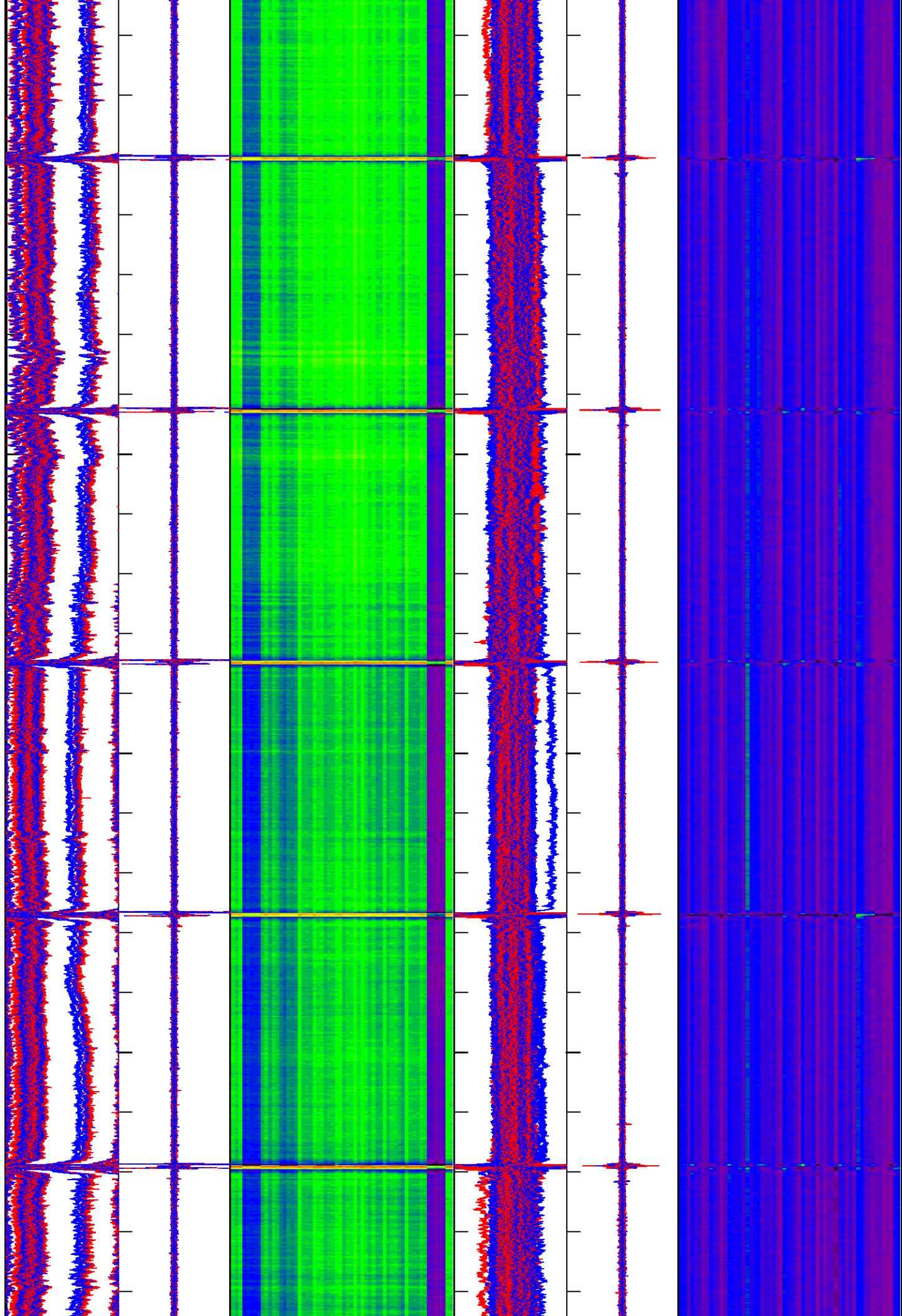


4550

4600

4650

4700



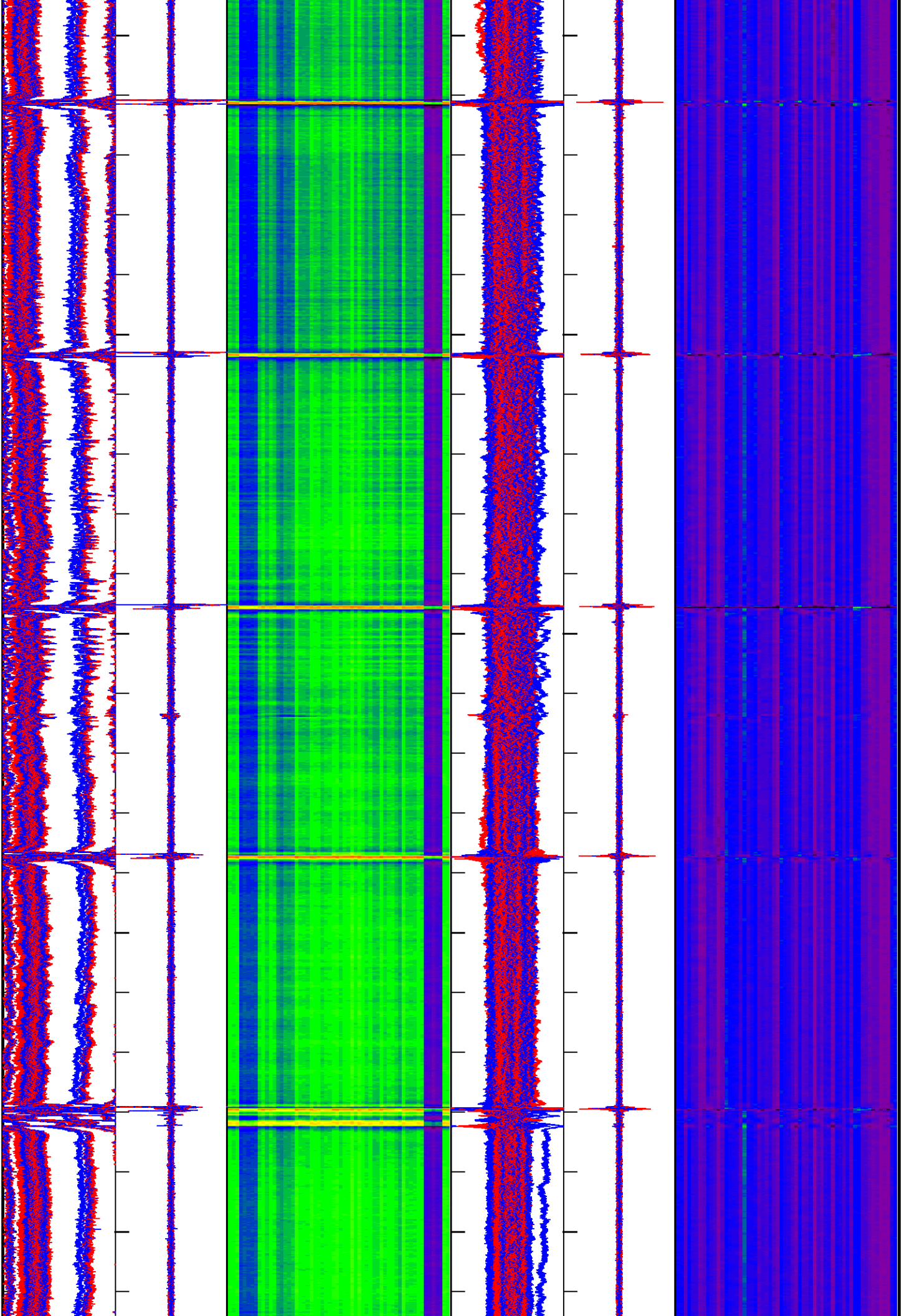
4750

4800

4850

4900

4950

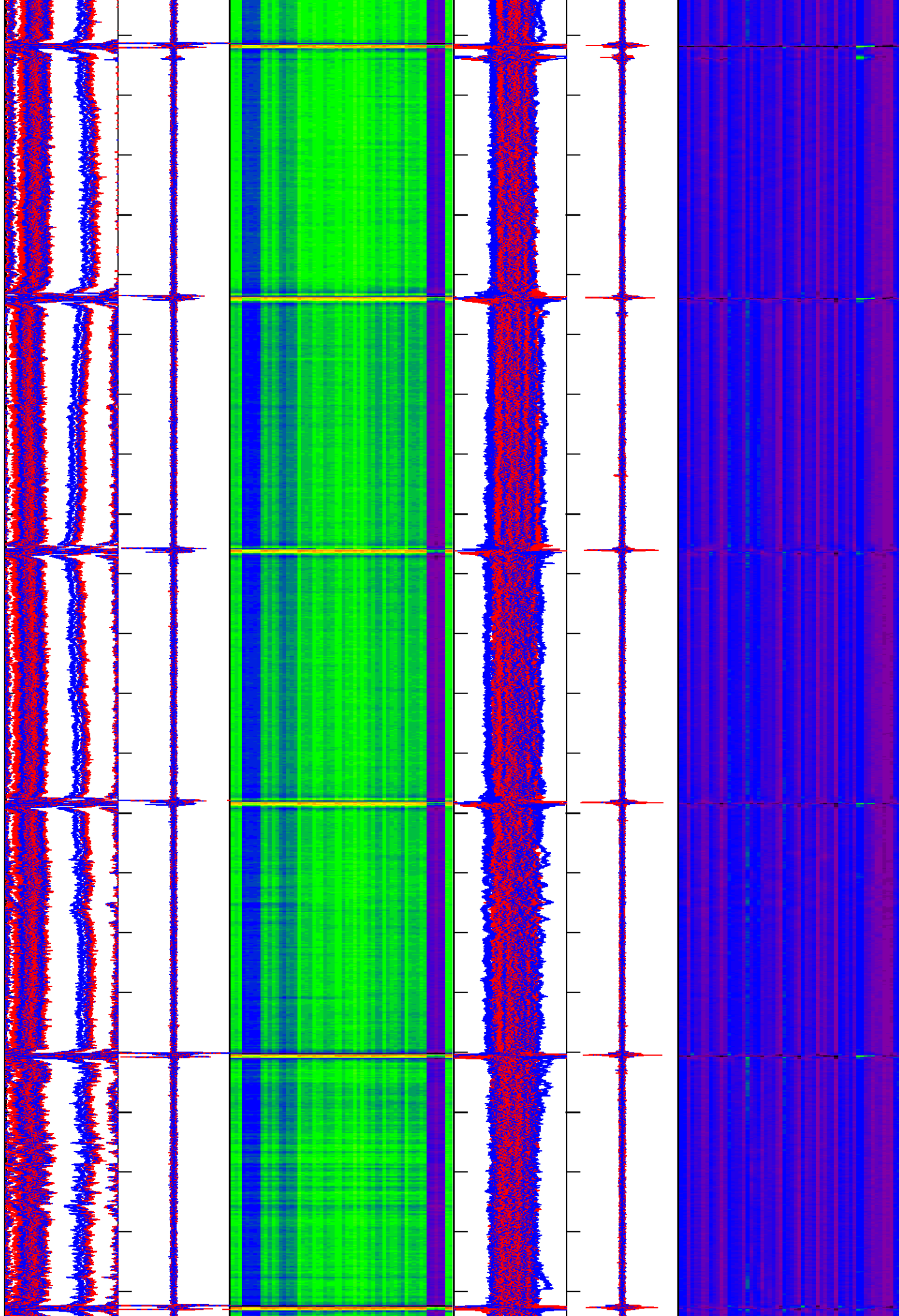


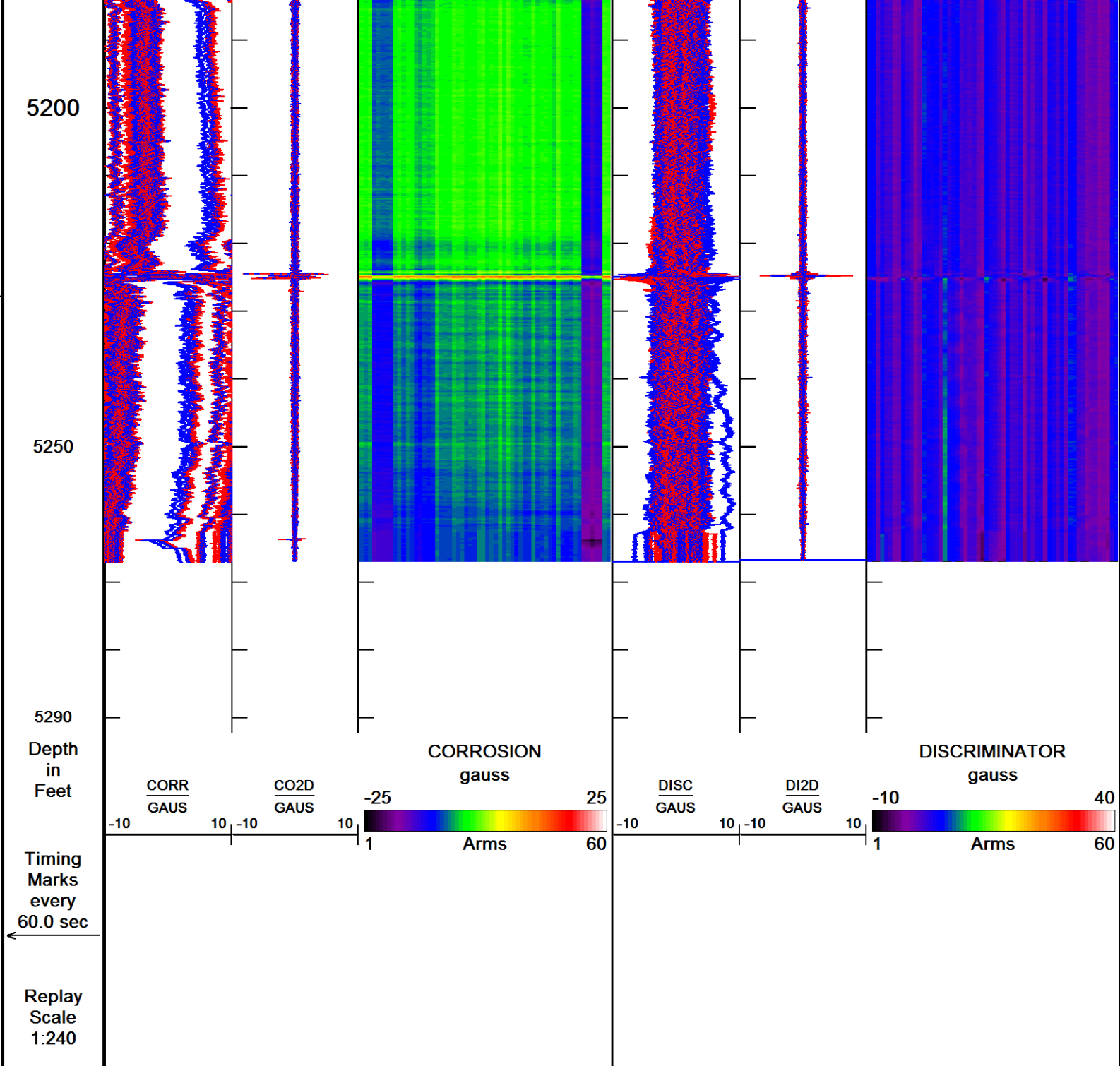
5000

5050

5100

5150





Depth Based Data - Maximum Sampling Increment 2.5cm

Filename: C:\Logs\ECGS 6-21 WP-D004-2 (2)\EAST CHEYENNE MAIN MERGE CIT.dta

System Versions: Logged with 17.01.7206 Plotted with 17.01.7206

Plotted on 16-OCT-2017 10:31

Recorded on 13-OCT-2017 20:30

MAIN PASS

REPEAT PASS

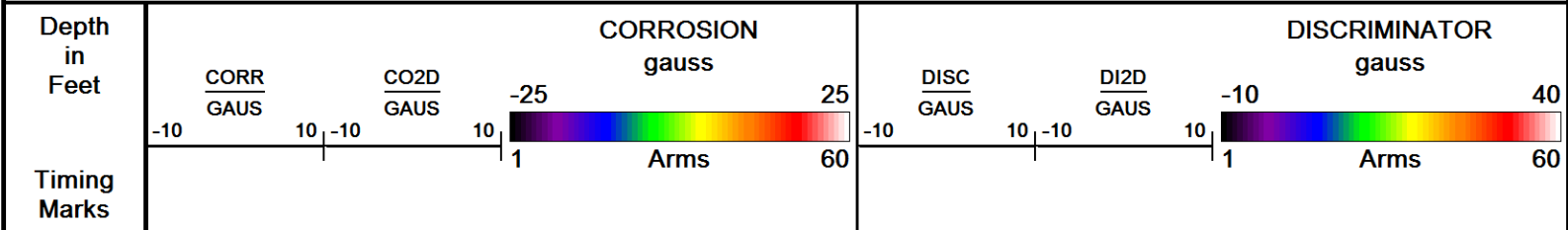
Depth Based Data - Maximum Sampling Increment 2.5cm

Filename: C:\Logs\ECGS 6-21 WP-D004-2 (2)\EAST CHEYENNE REPEAT MERGE CIT.dta

System Versions: Logged with 17.01.7206 Plotted with 17.01.7206

Plotted on 16-OCT-2017 10:31

Recorded on 13-OCT-2017 20:33



every 60.0 sec

Replay Scale 1:240

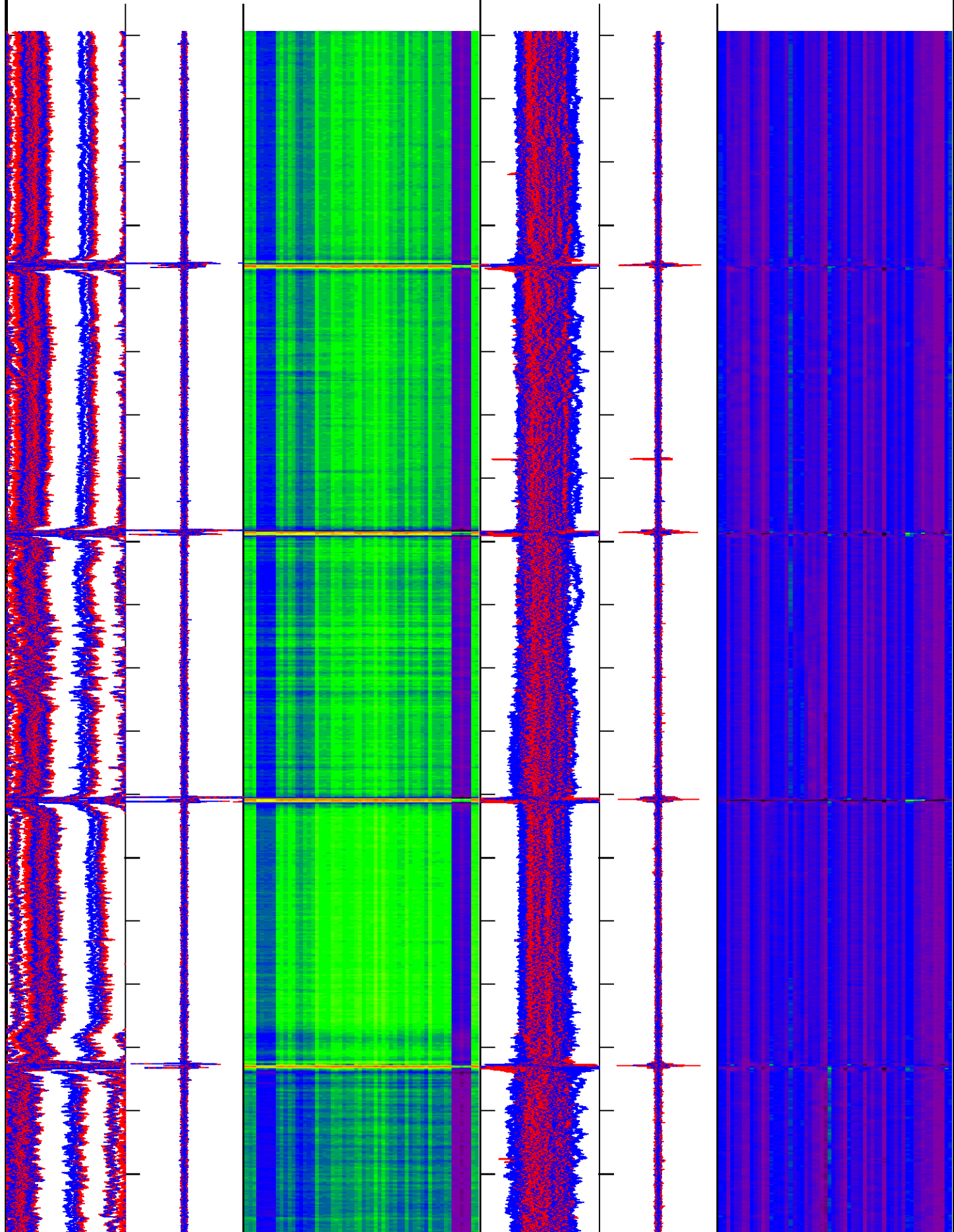
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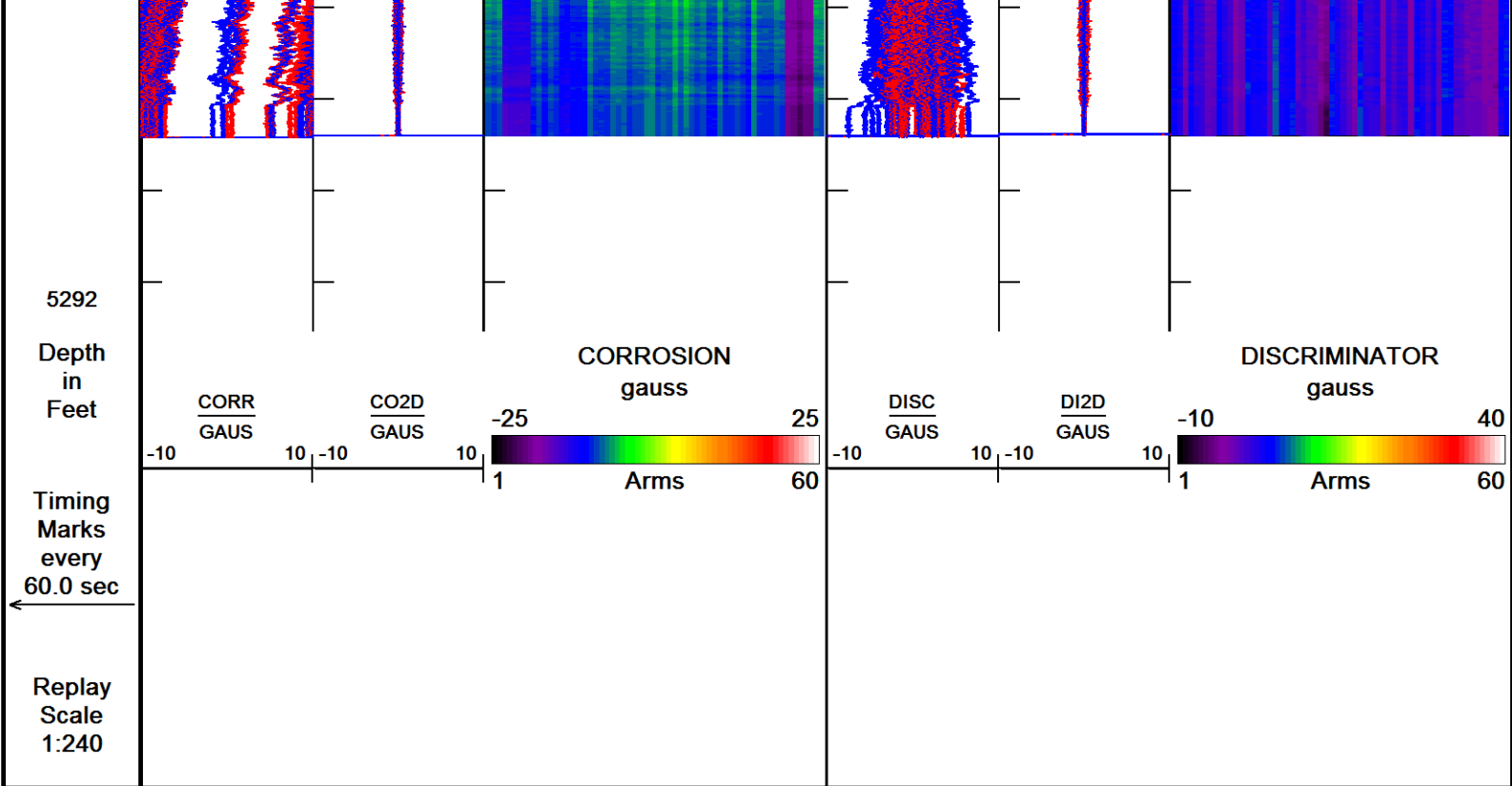
5100

5150

5200

5250



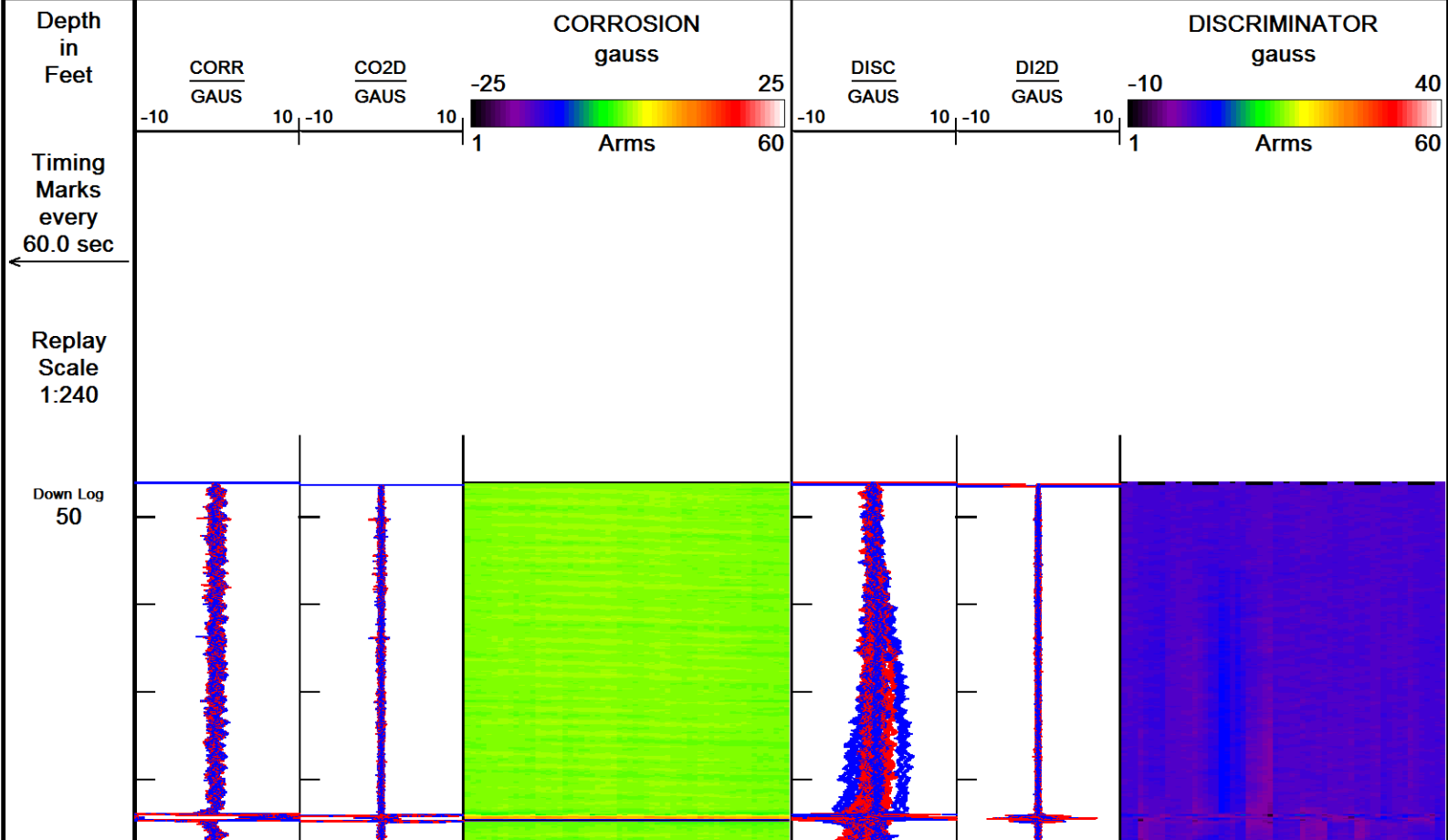


Depth Based Data - Maximum Sampling Increment 2.5cm
 Plotted on 16-OCT-2017 10:31
 Filename: C:\Logs\ECGS 6-21 WP-D004-2 (2)\EAST CHEYENNE REPEAT MERGE CIT.dta
 Recorded on 13-OCT-2017 20:33
 System Versions: Logged with 17.01.7206 Plotted with 17.01.7206

↑ REPEAT PASS ↑

↓ DOWN LOG ↓

Depth Based Data - Maximum Sampling Increment 2.5cm
 Plotted on 16-OCT-2017 10:31
 Filename: C:\Logs\ECGS 6-21 WP-D004-2 (2)\EAST CHEYENNE MAIN MERGE CIT DOWN.dta
 Recorded on 14-OCT-2017 10:32
 System Versions: Logged with 17.01.7206 Plotted with 17.01.7206



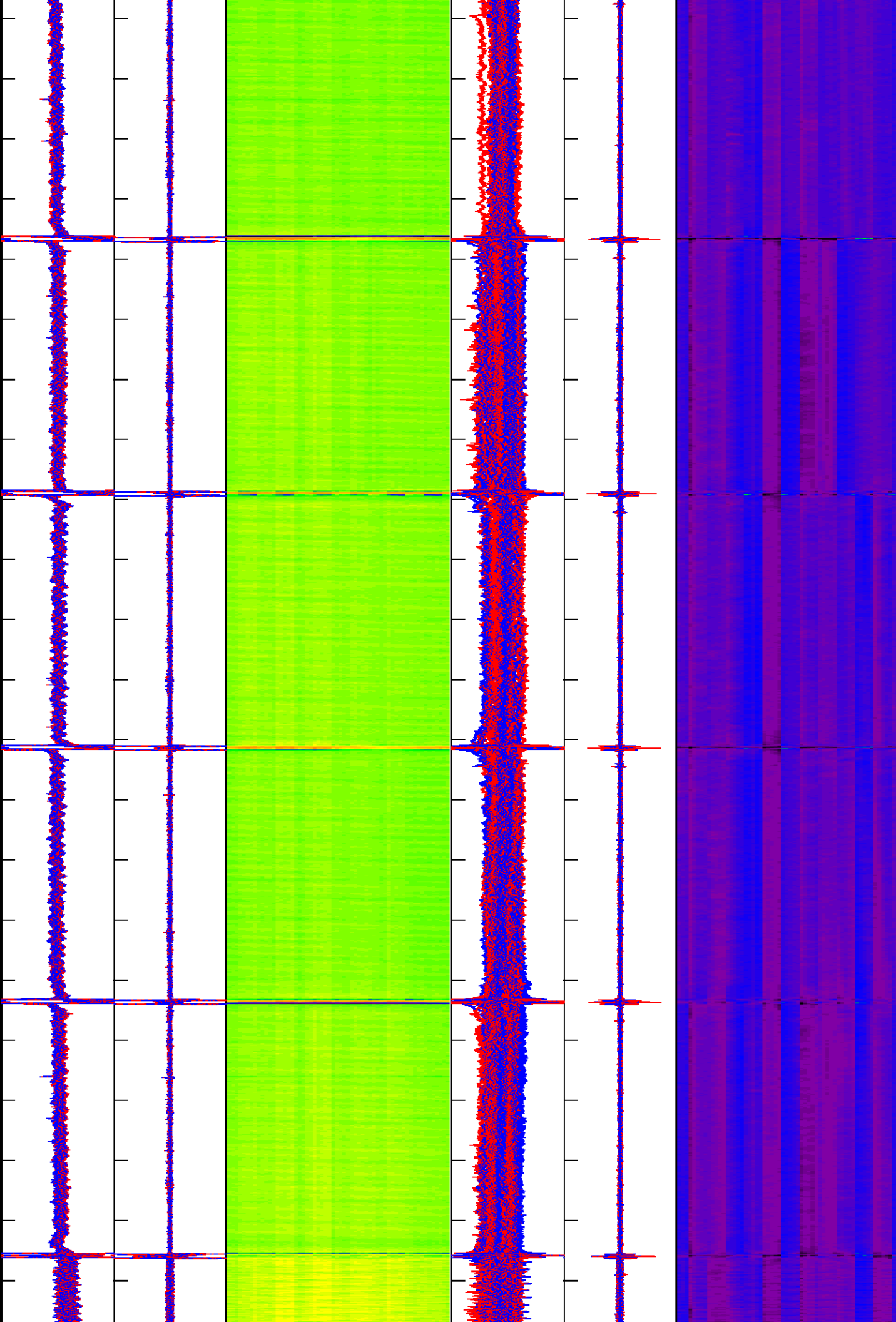
Down Log
100

Down Log
150

Down Log
200

Down Log
250

Down Log
300

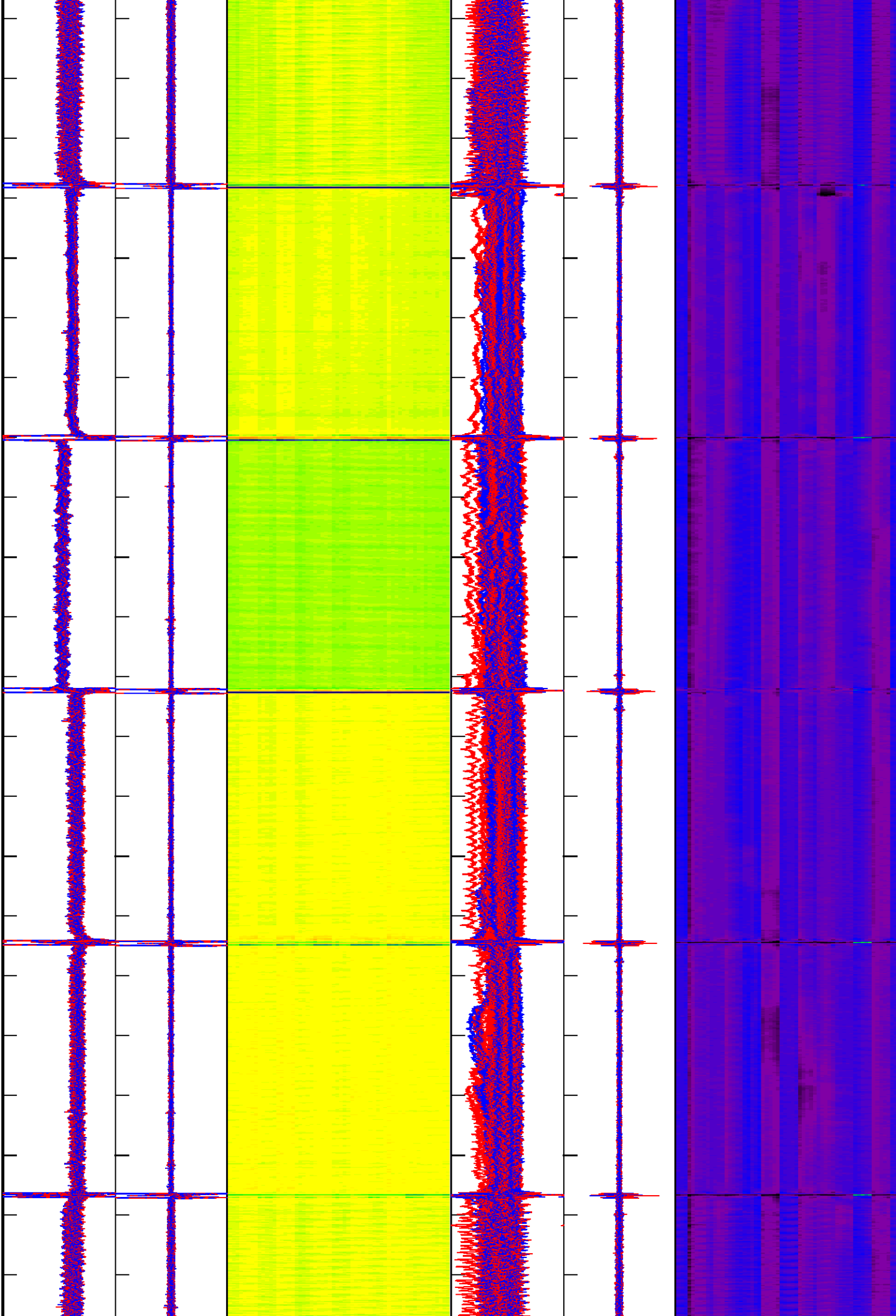


Down Log
350

Down Log
400

Down Log
450

Down Log
500

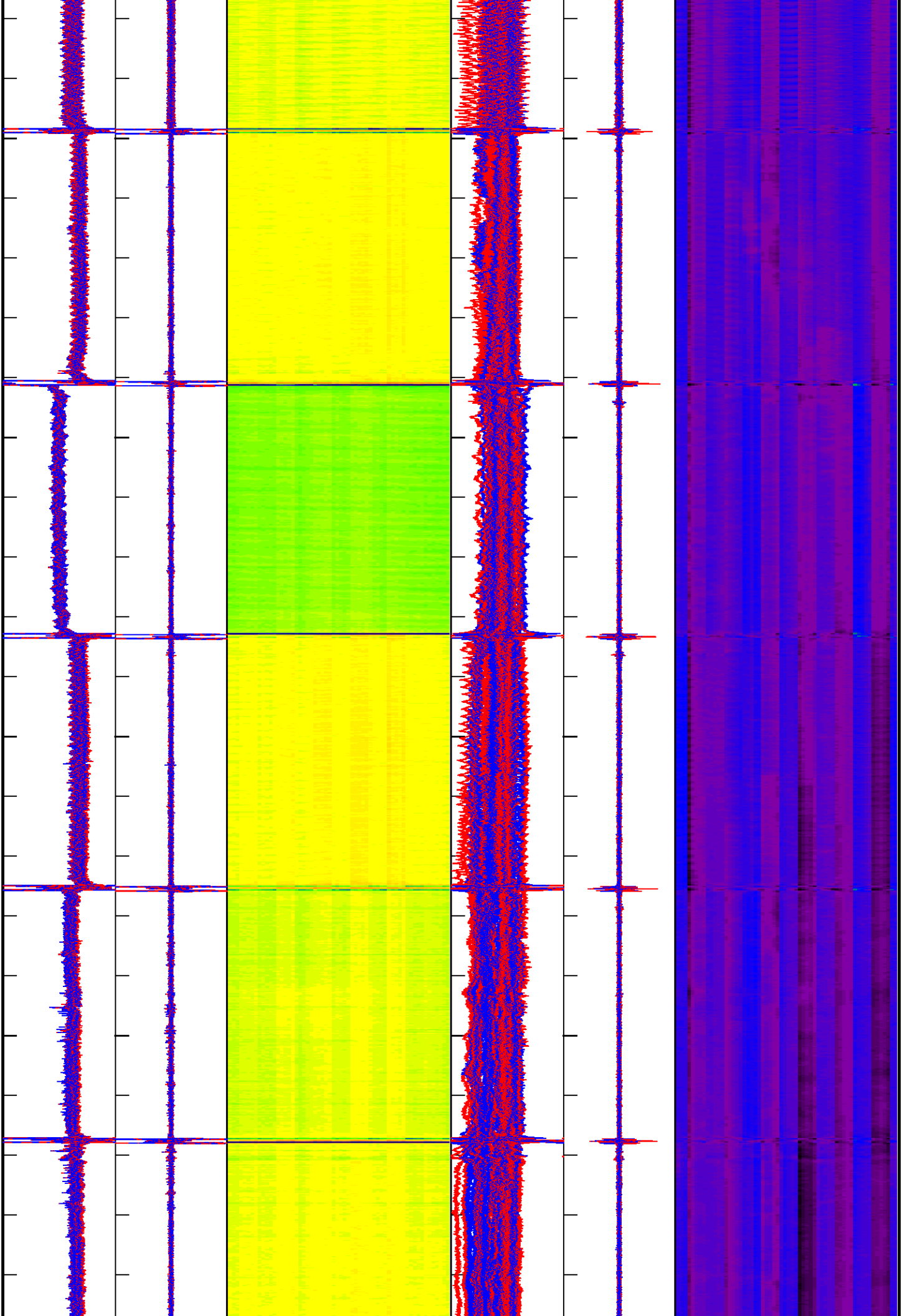


Down Log
550

Down Log
600

Down Log
650

Down Log
700



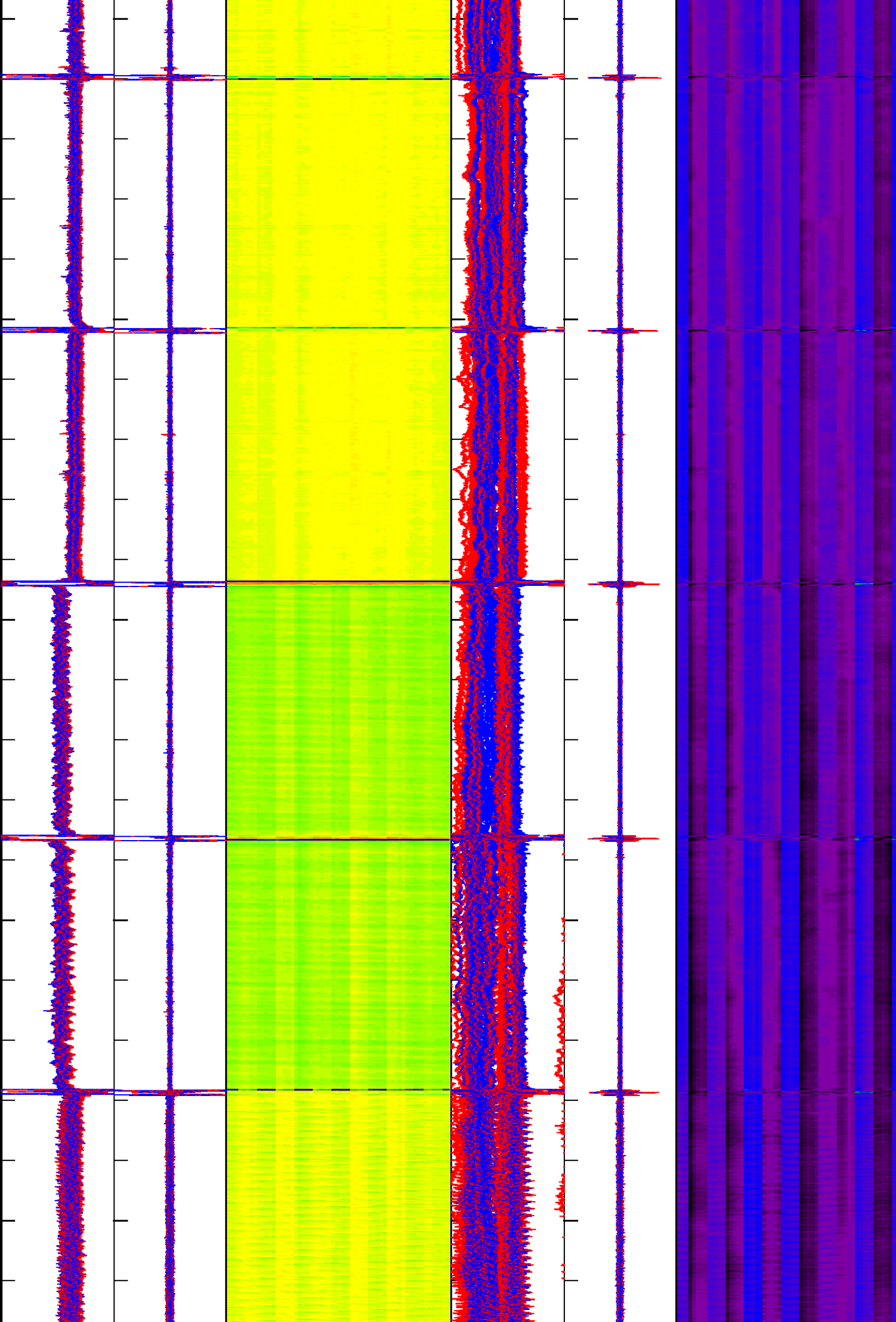
Down Log
750

Down Log
800

Down Log
850

Down Log
900

Down Log
950

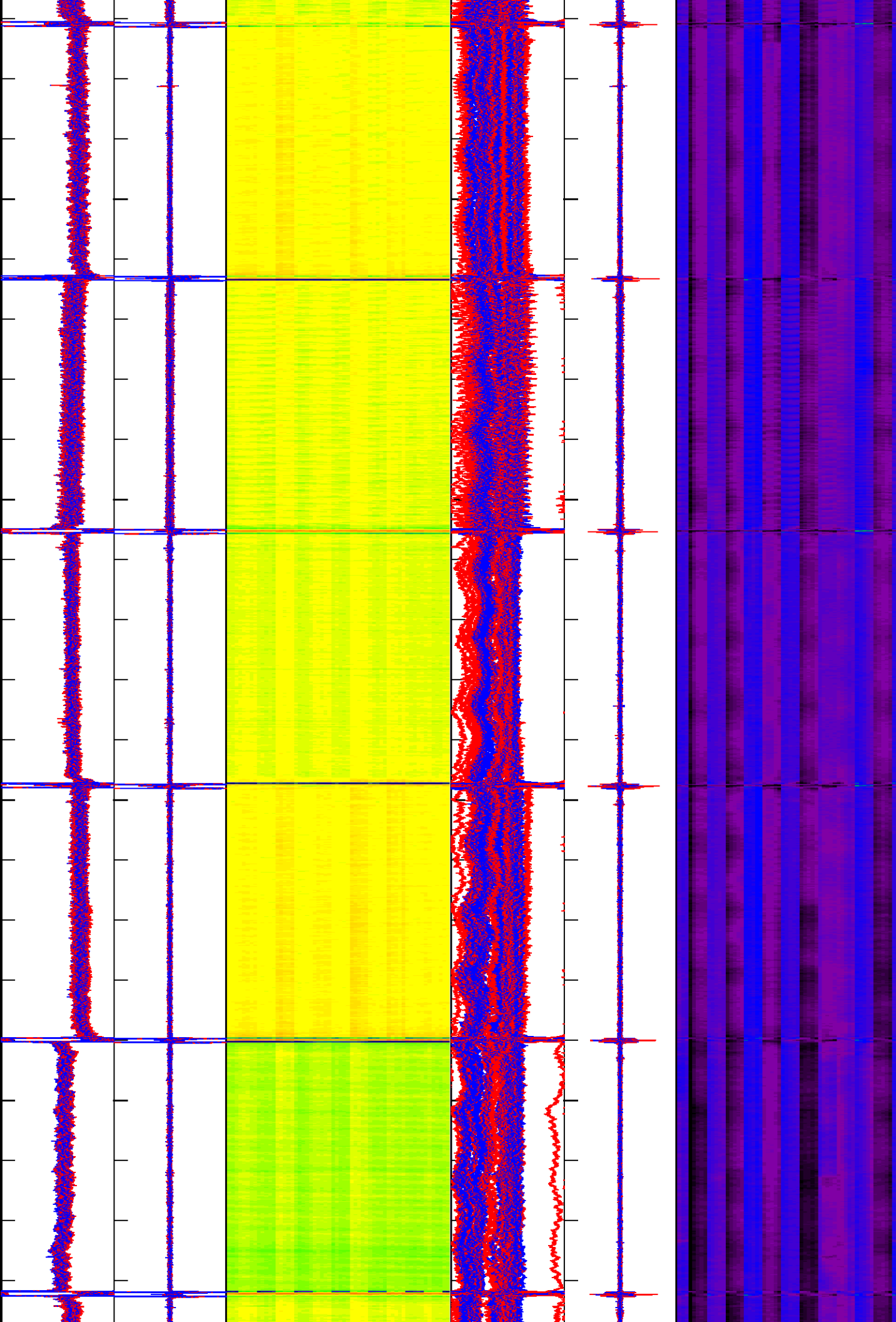


Down Log
1000

Down Log
1050

Down Log
1100

Down Log
1150



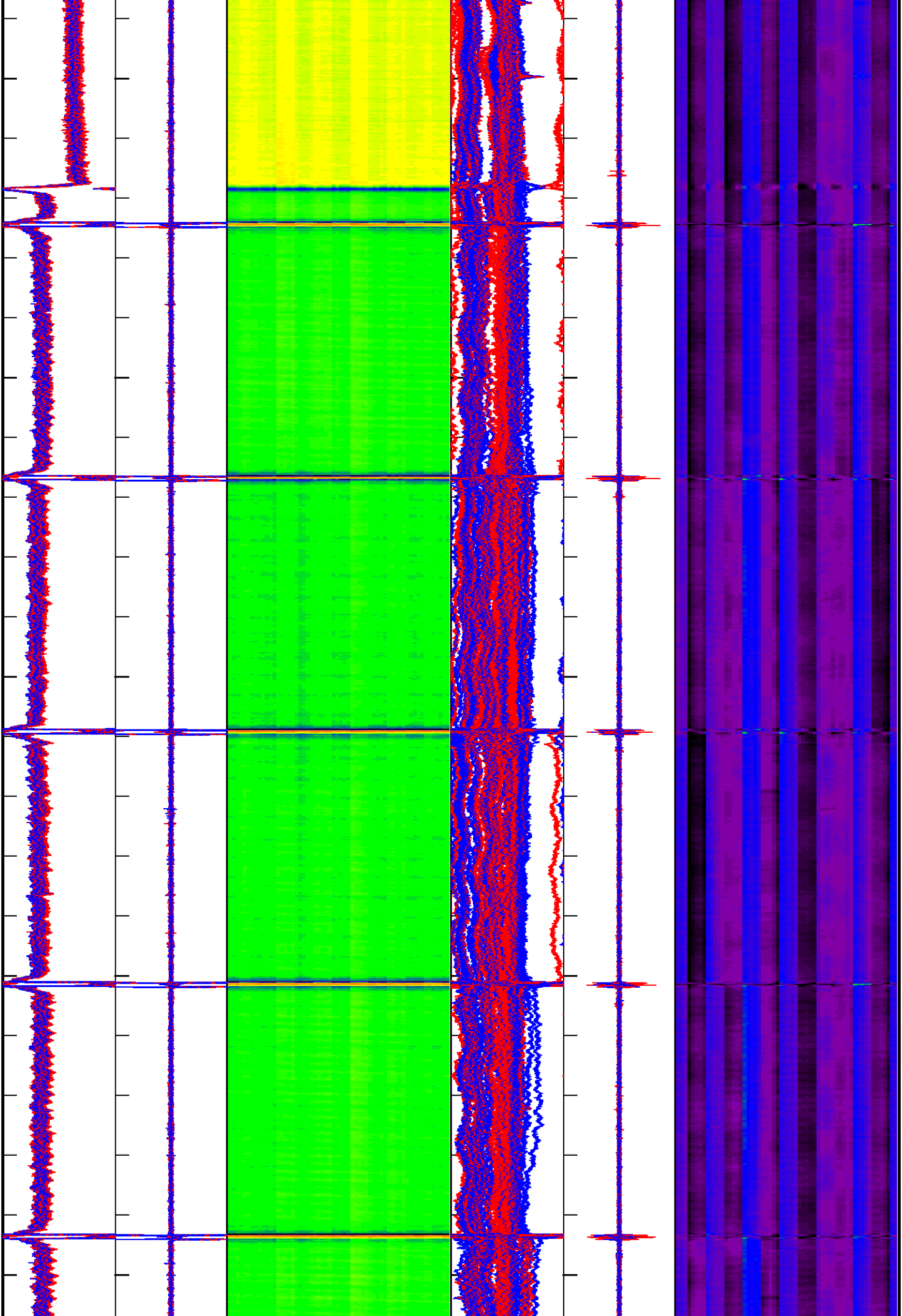
Down Log
1200

Down Log
1250

Down Log
1300

Down Log
1350

Down Log
1400

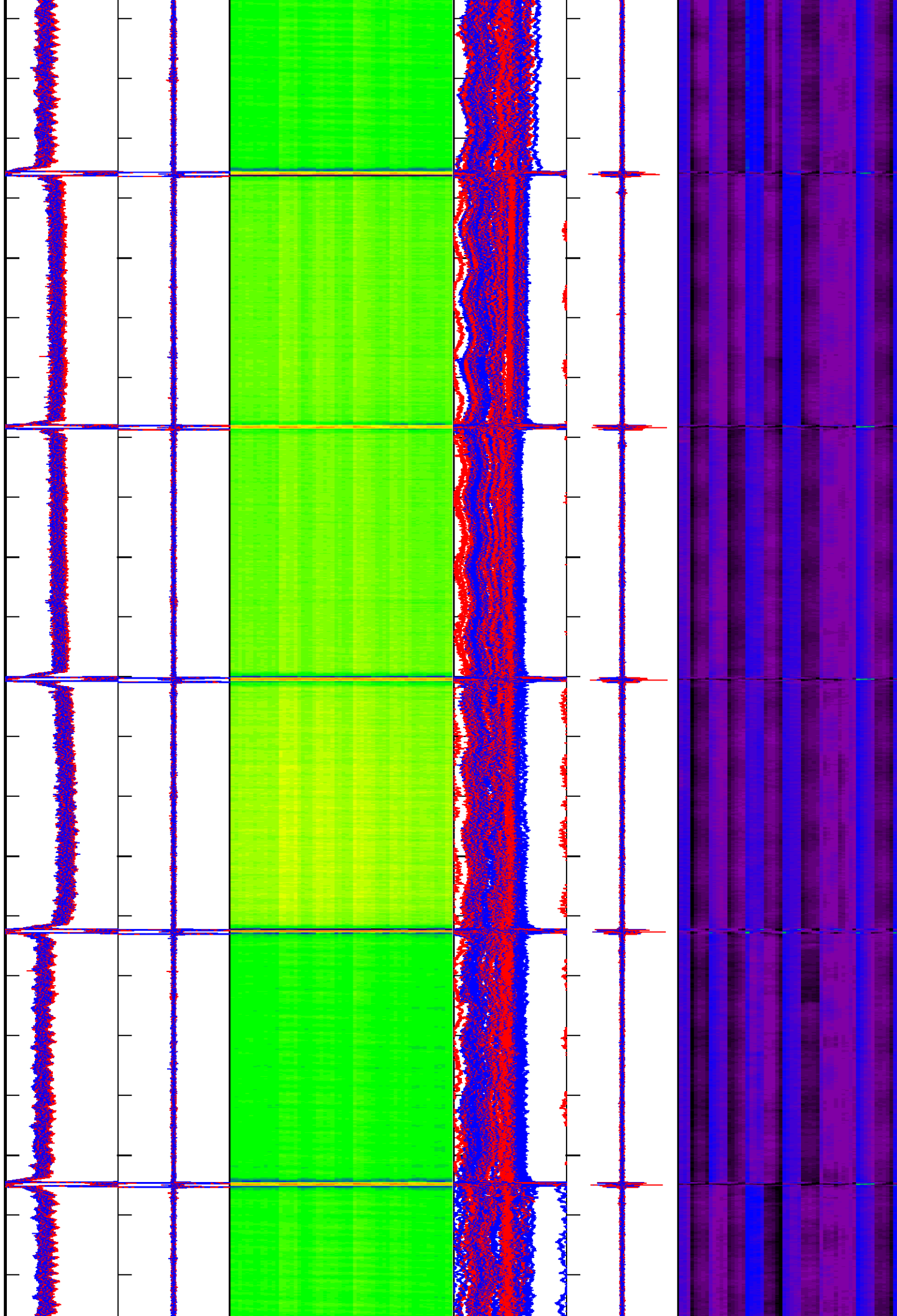


Down Log
1450

Down Log
1500

Down Log
1550

Down Log
1600

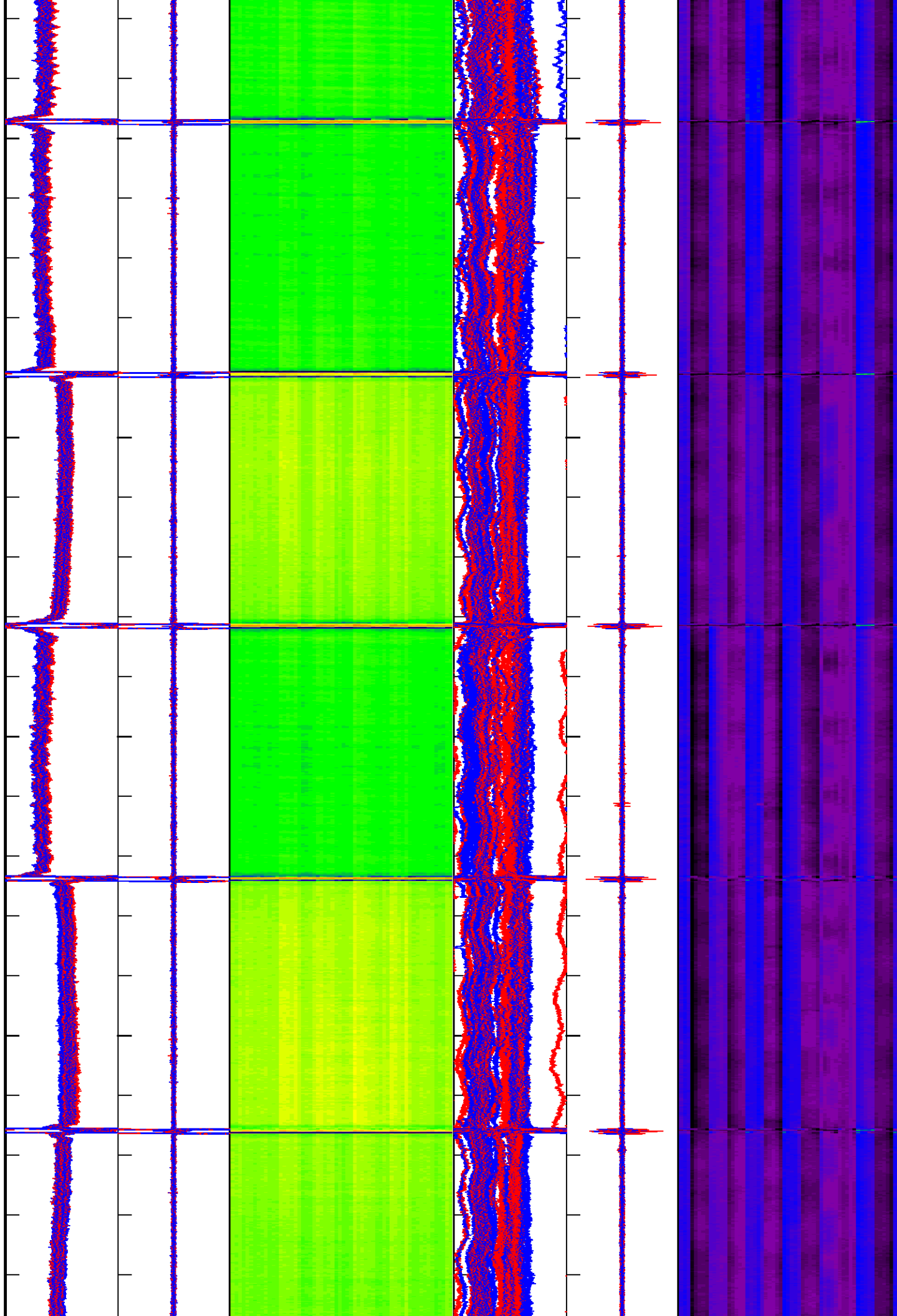


Down Log
1650

Down Log
1700

Down Log
1750

Down Log
1800



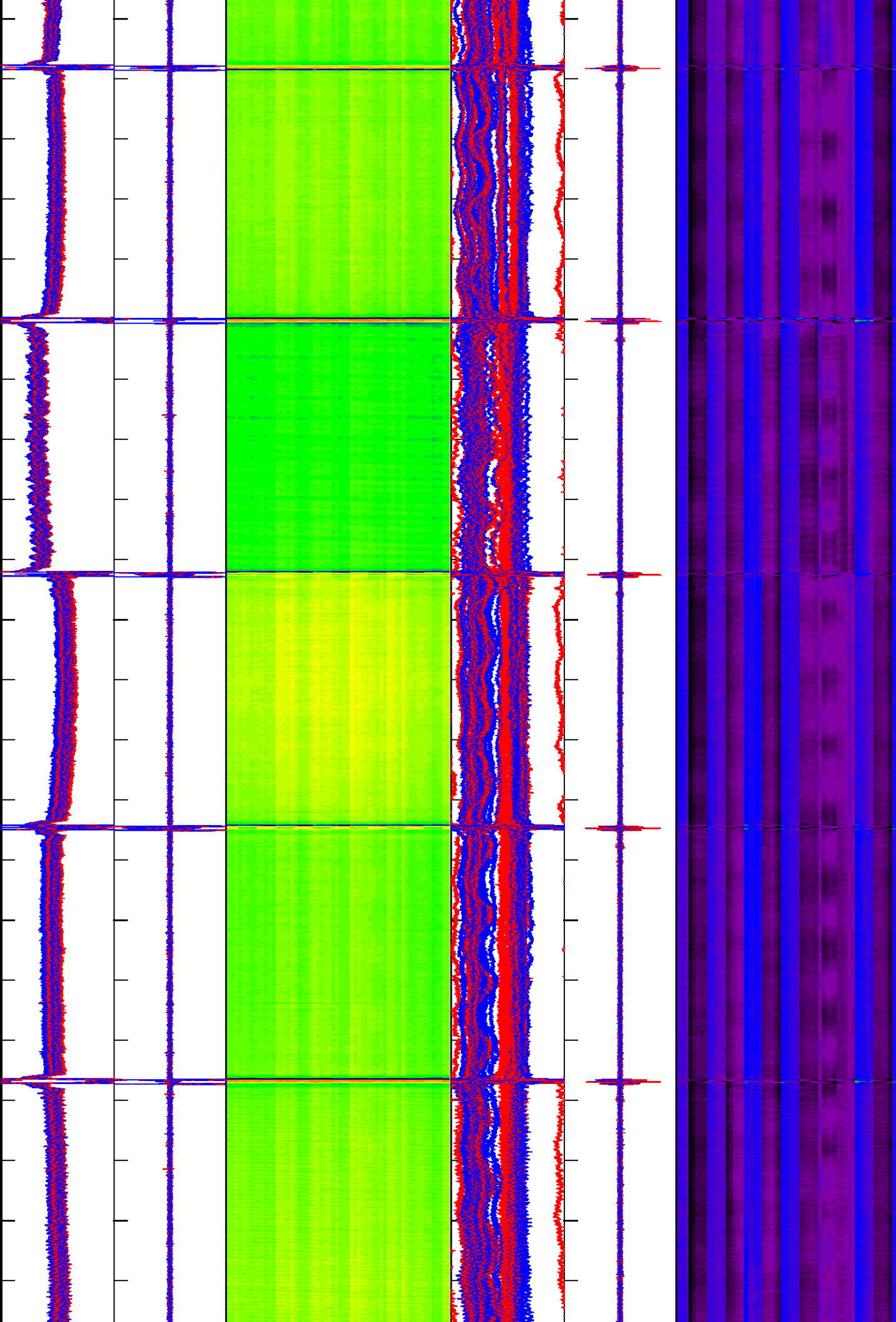
Down Log
1850

Down Log
1900

Down Log
1950

Down Log
2000

Down Log
2050

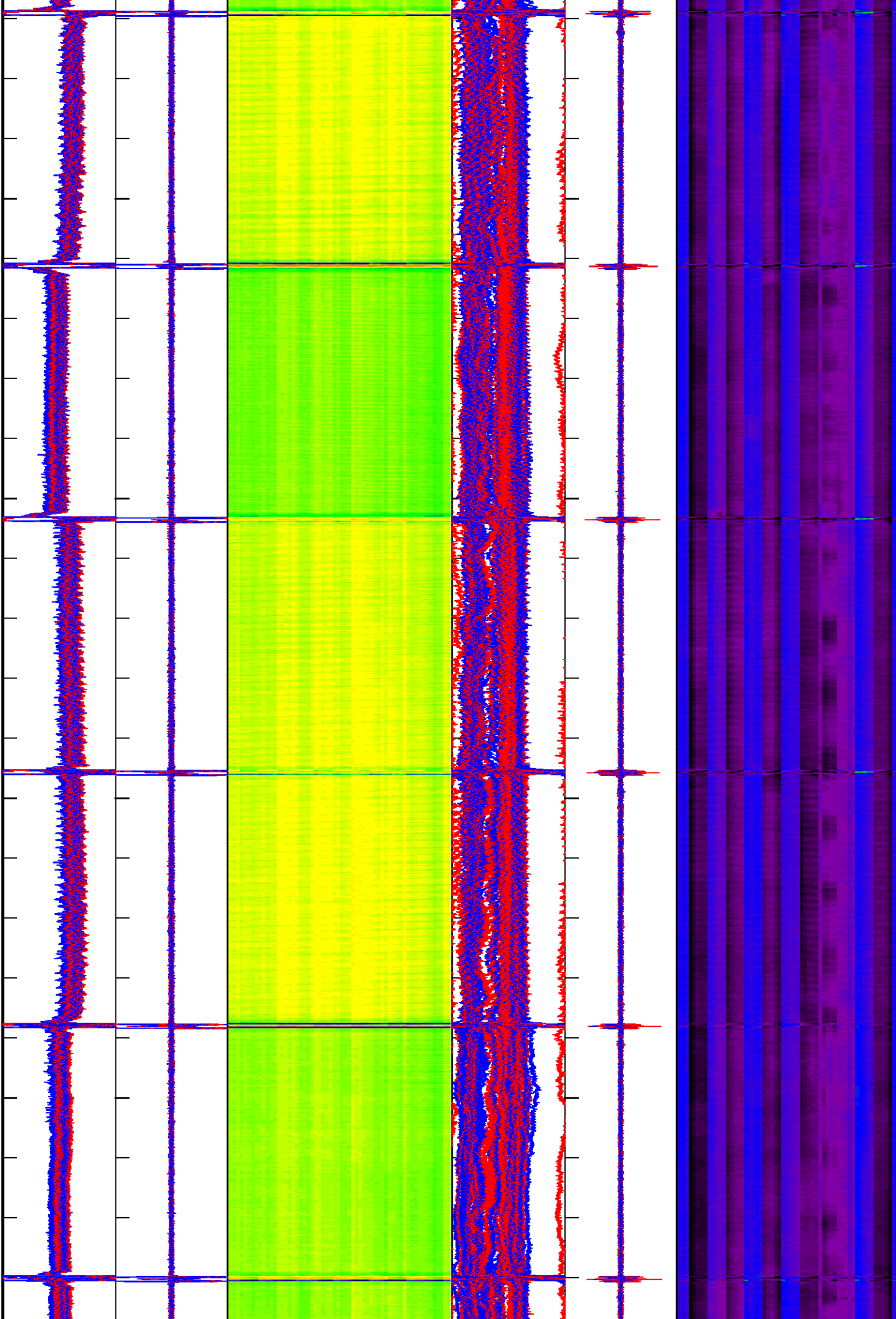


Down Log
2100

Down Log
2150

Down Log
2200

Down Log
2250



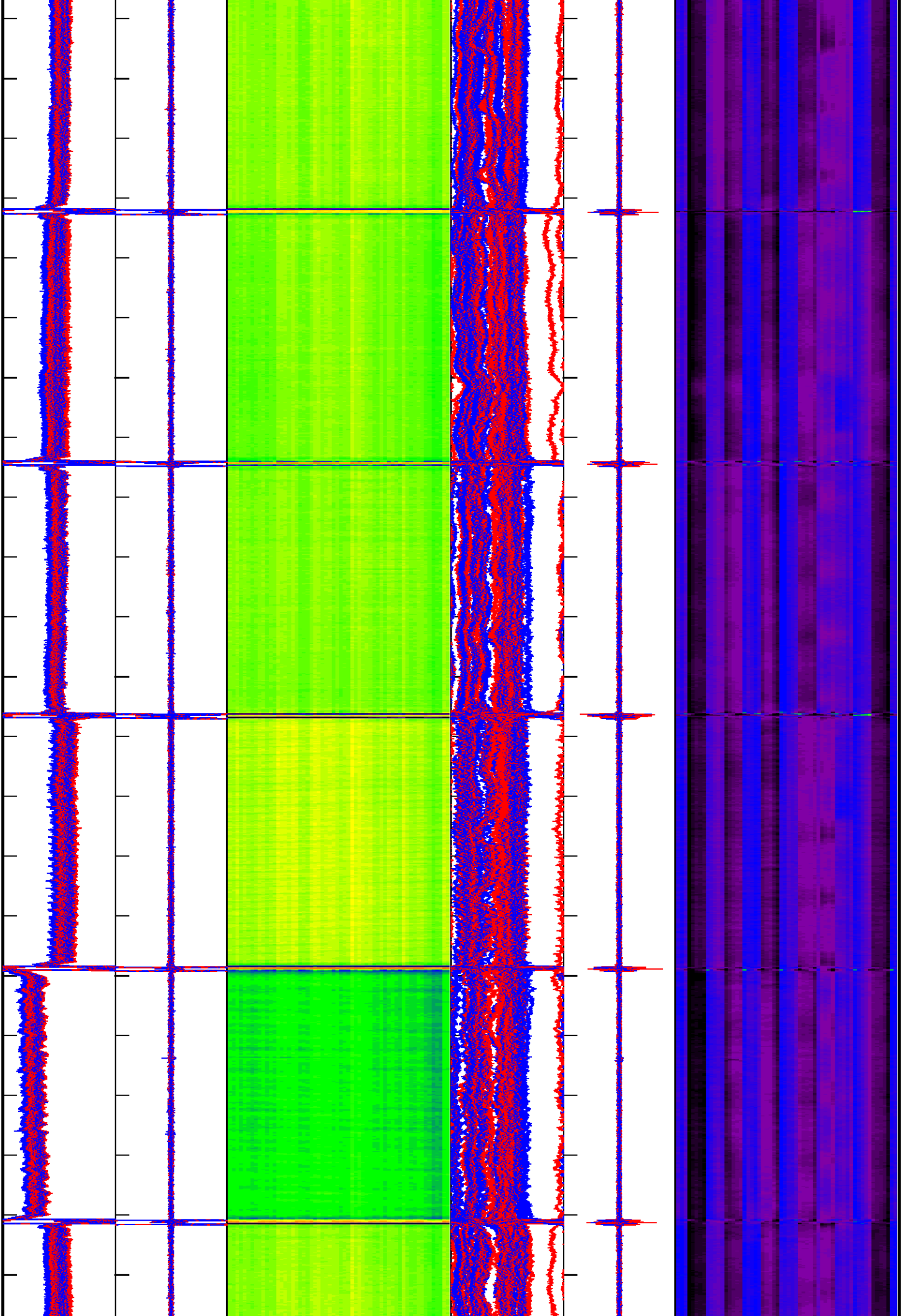
Down Log
2300

Down Log
2350

Down Log
2400

Down Log
2450

Down Log
2500

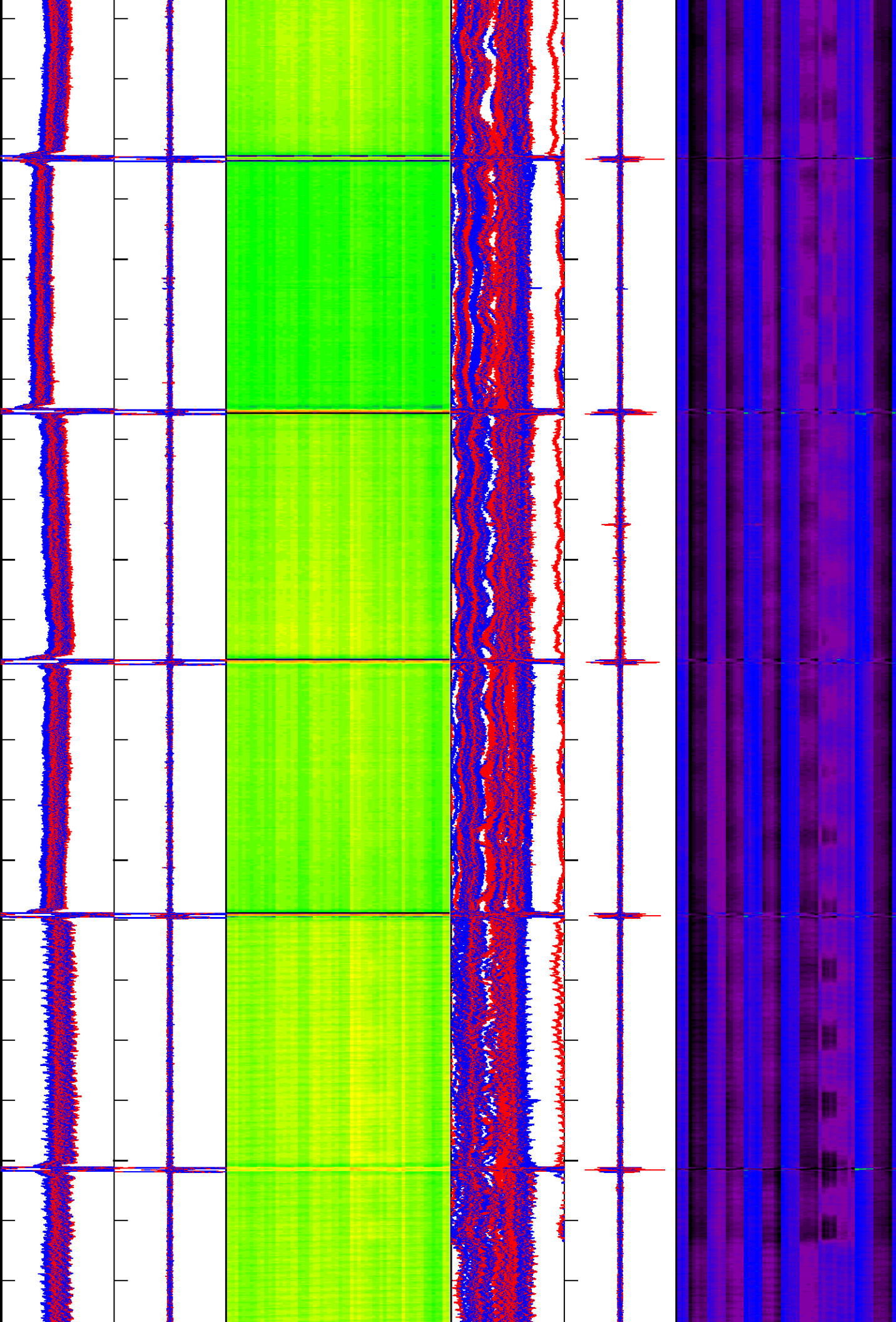


Down Log
2550

Down Log
2600

Down Log
2650

Down Log
2700

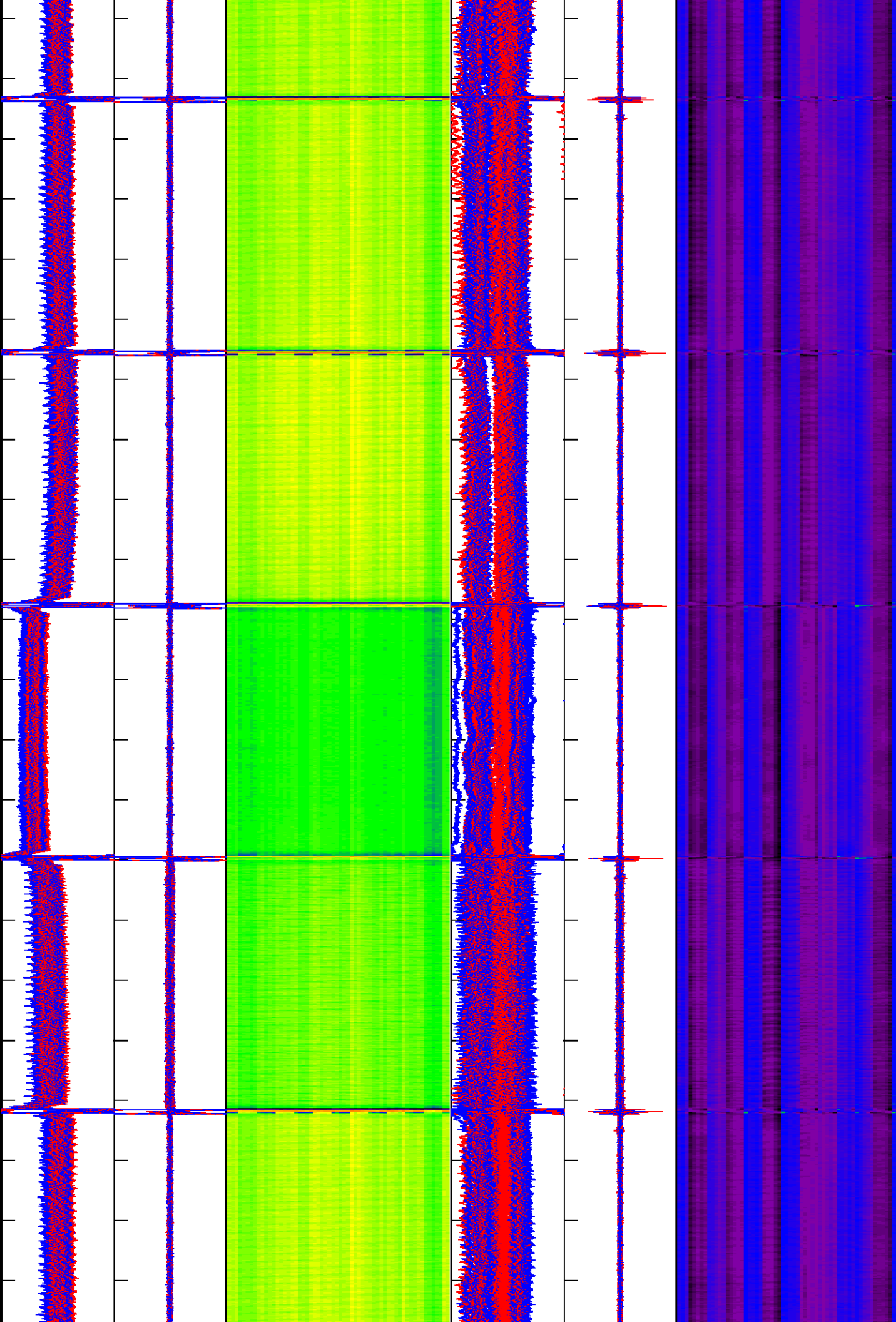


Down Log
2750

Down Log
2800

Down Log
2850

Down Log
2900



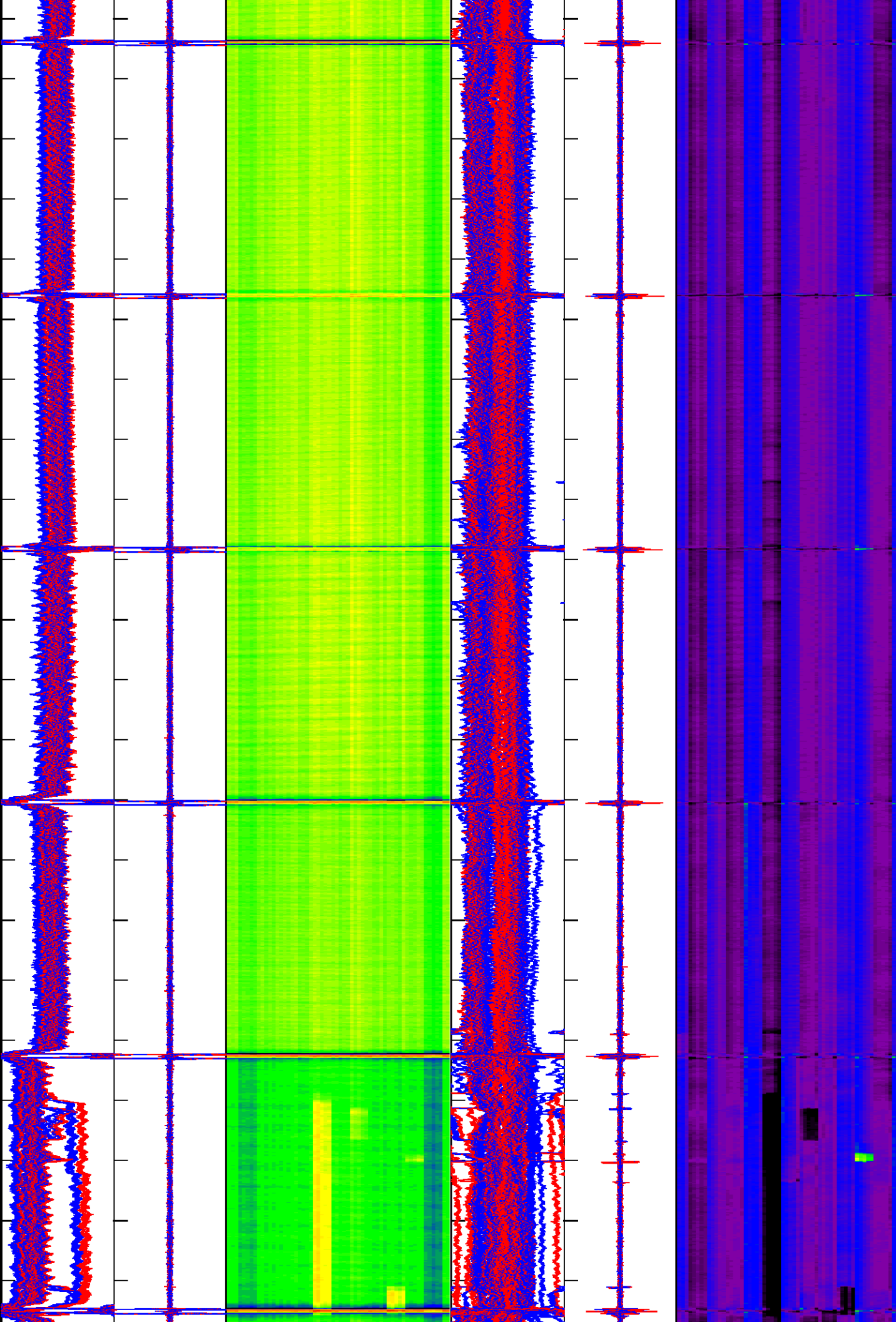
Down Log
2950

Down Log
3000

Down Log
3050

Down Log
3100

Down Log
3150

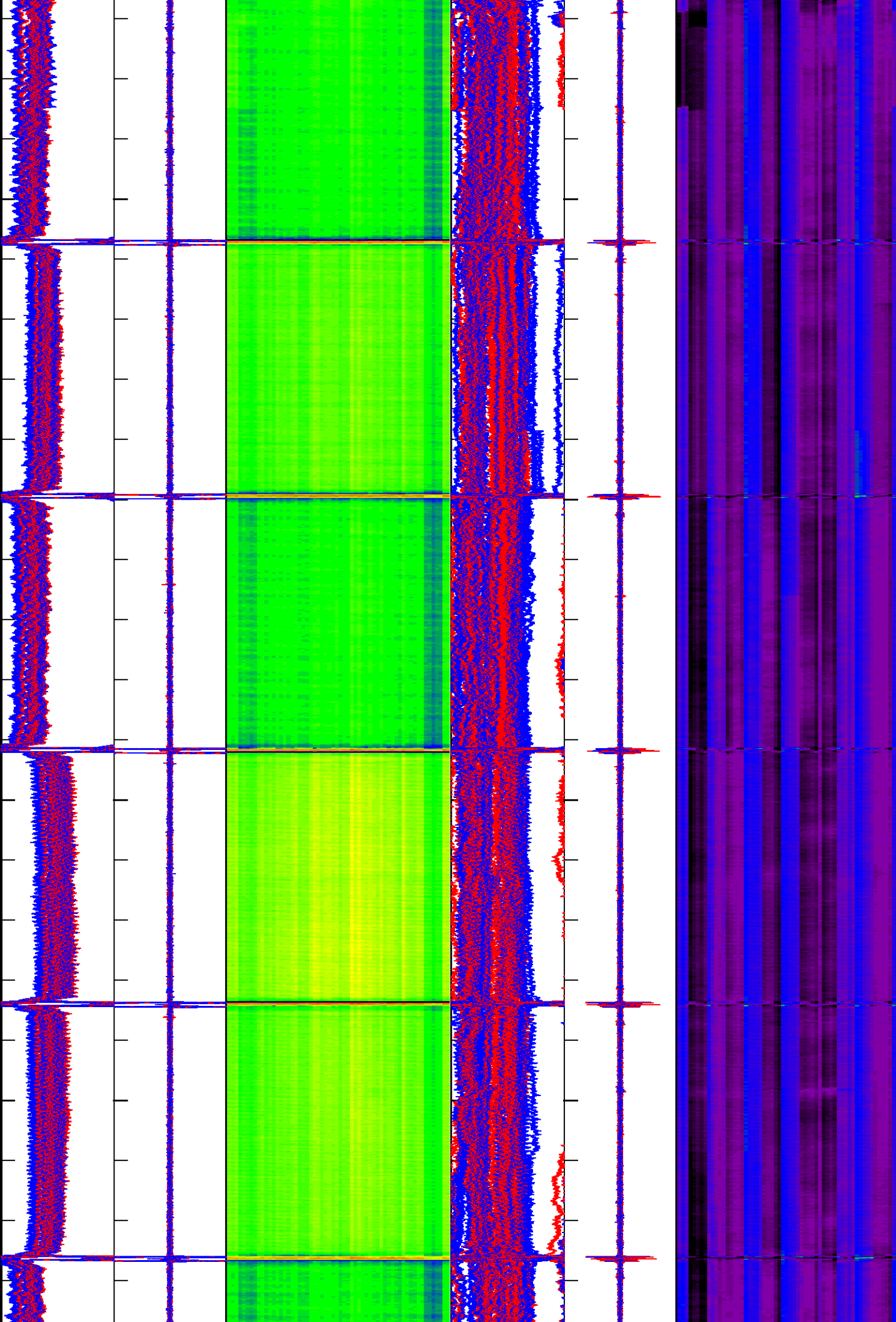


Down Log
3200

Down Log
3250

Down Log
3300

Down Log
3350



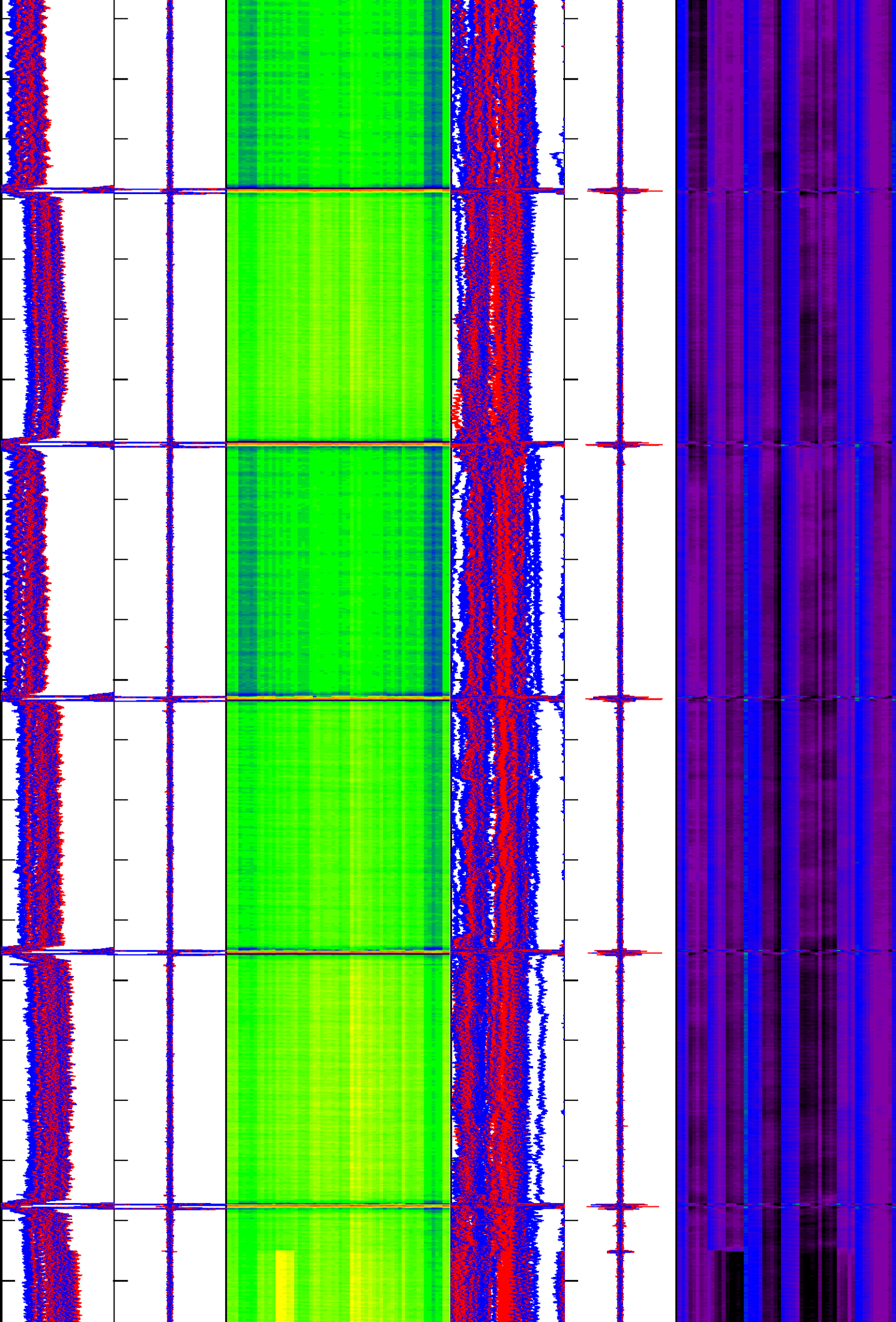
Down Log
3400

Down Log
3450

Down Log
3500

Down Log
3550

Down Log
3600

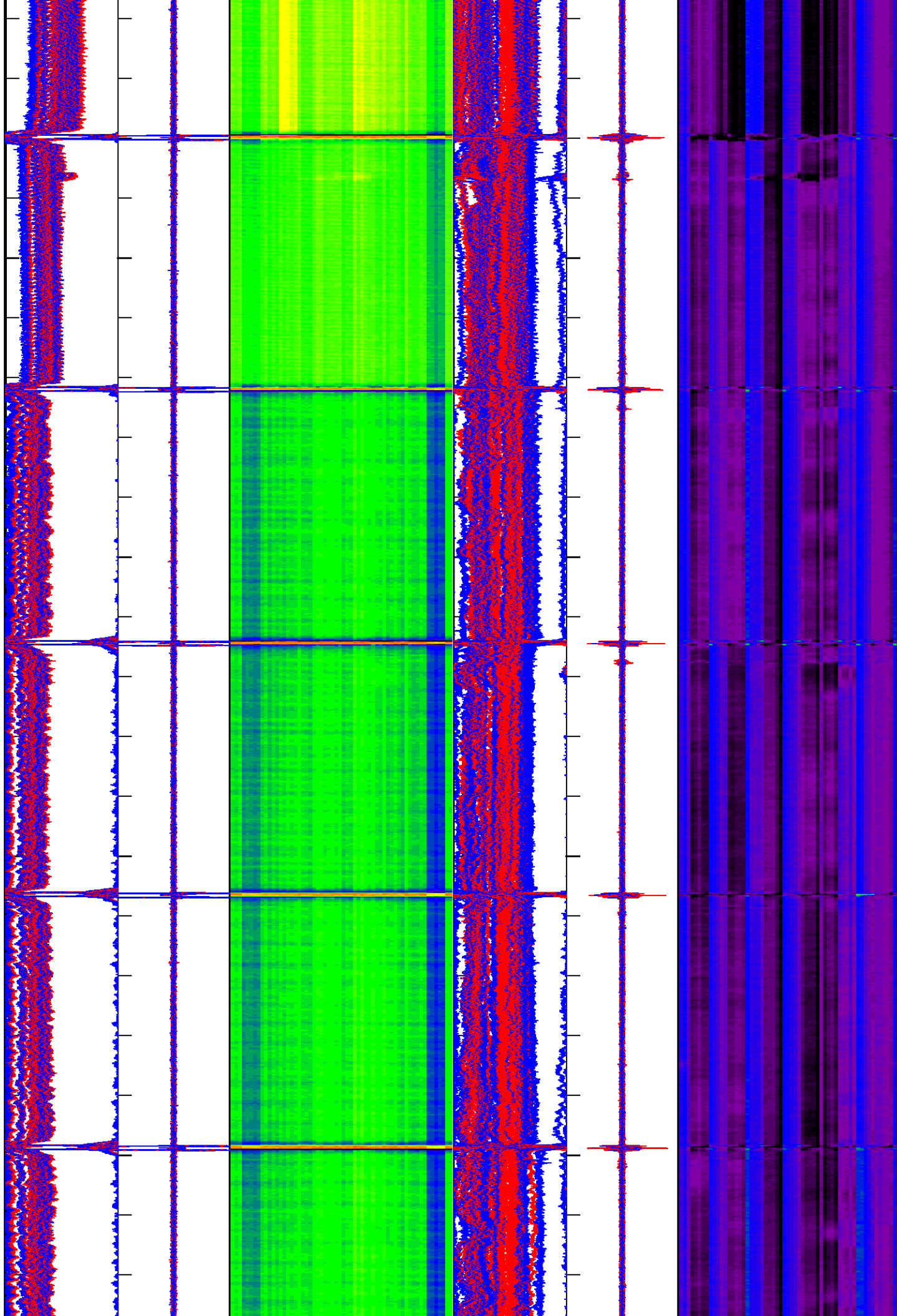


Down Log
3650

Down Log
3700

Down Log
3750

Down Log
3800

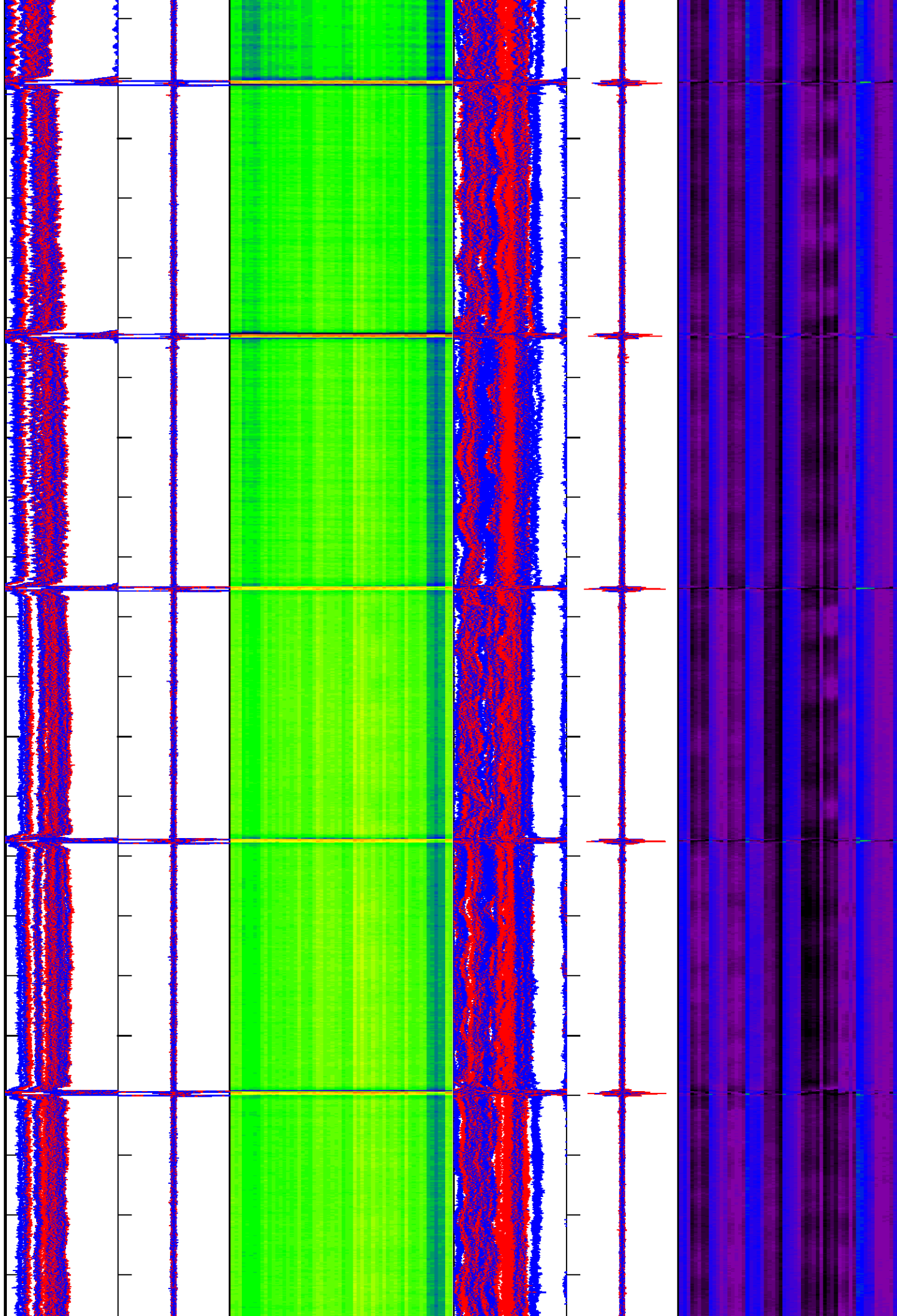


Down Log
3850

Down Log
3900

Down Log
3950

Down Log
4000



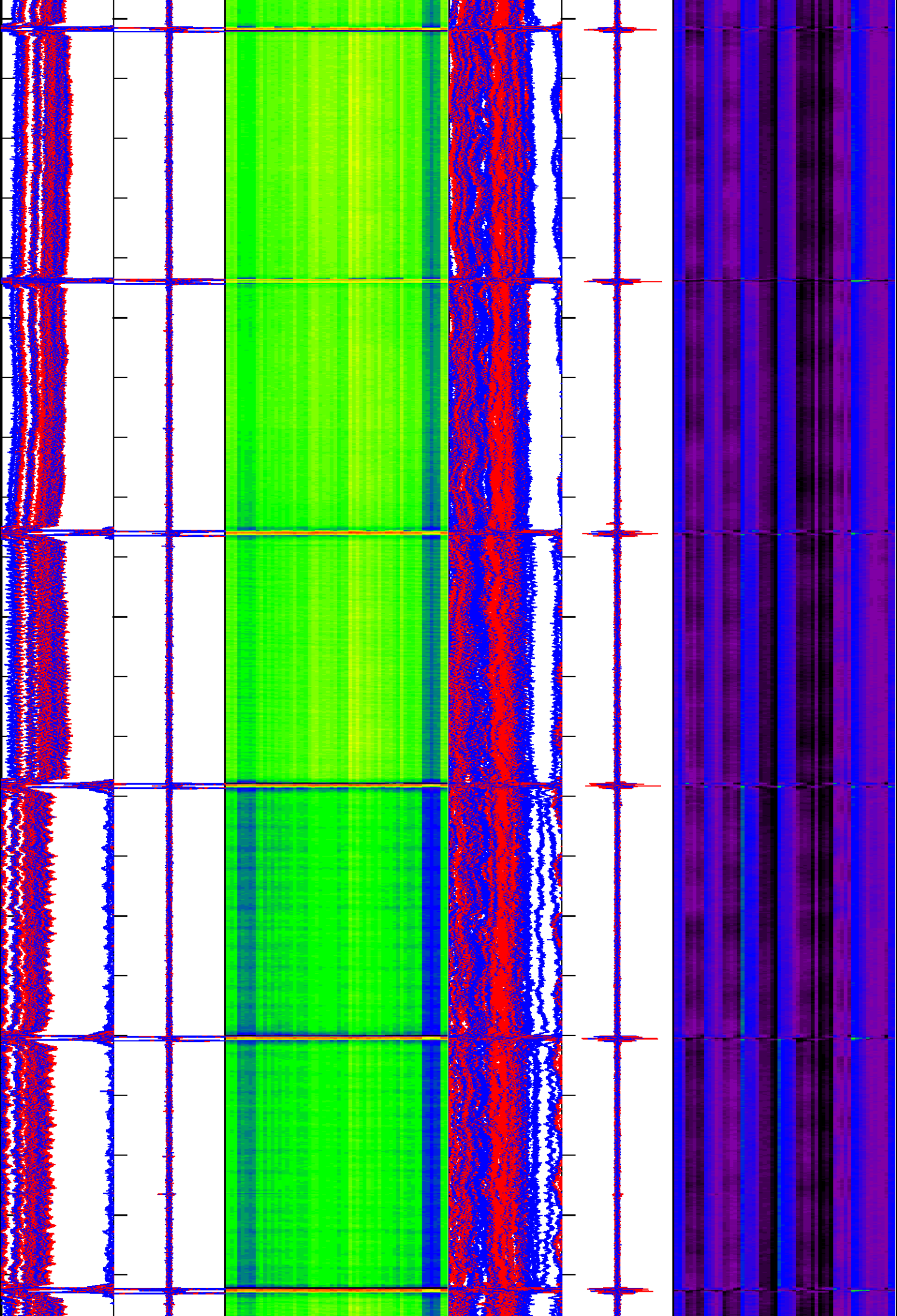
Down Log
4050

Down Log
4100

Down Log
4150

Down Log
4200

Down Log
4250

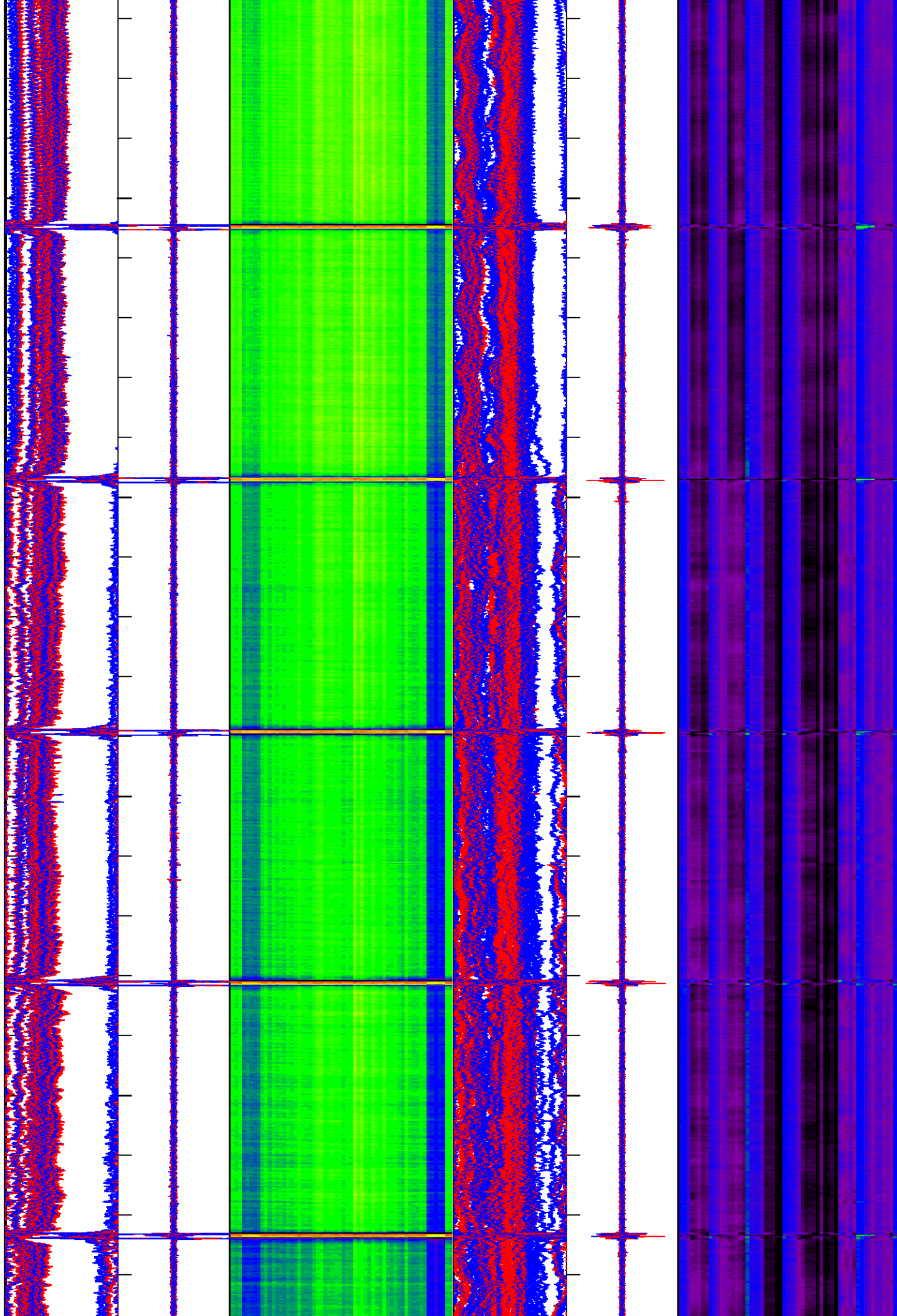


Down Log
4300

Down Log
4350

Down Log
4400

Down Log
4450



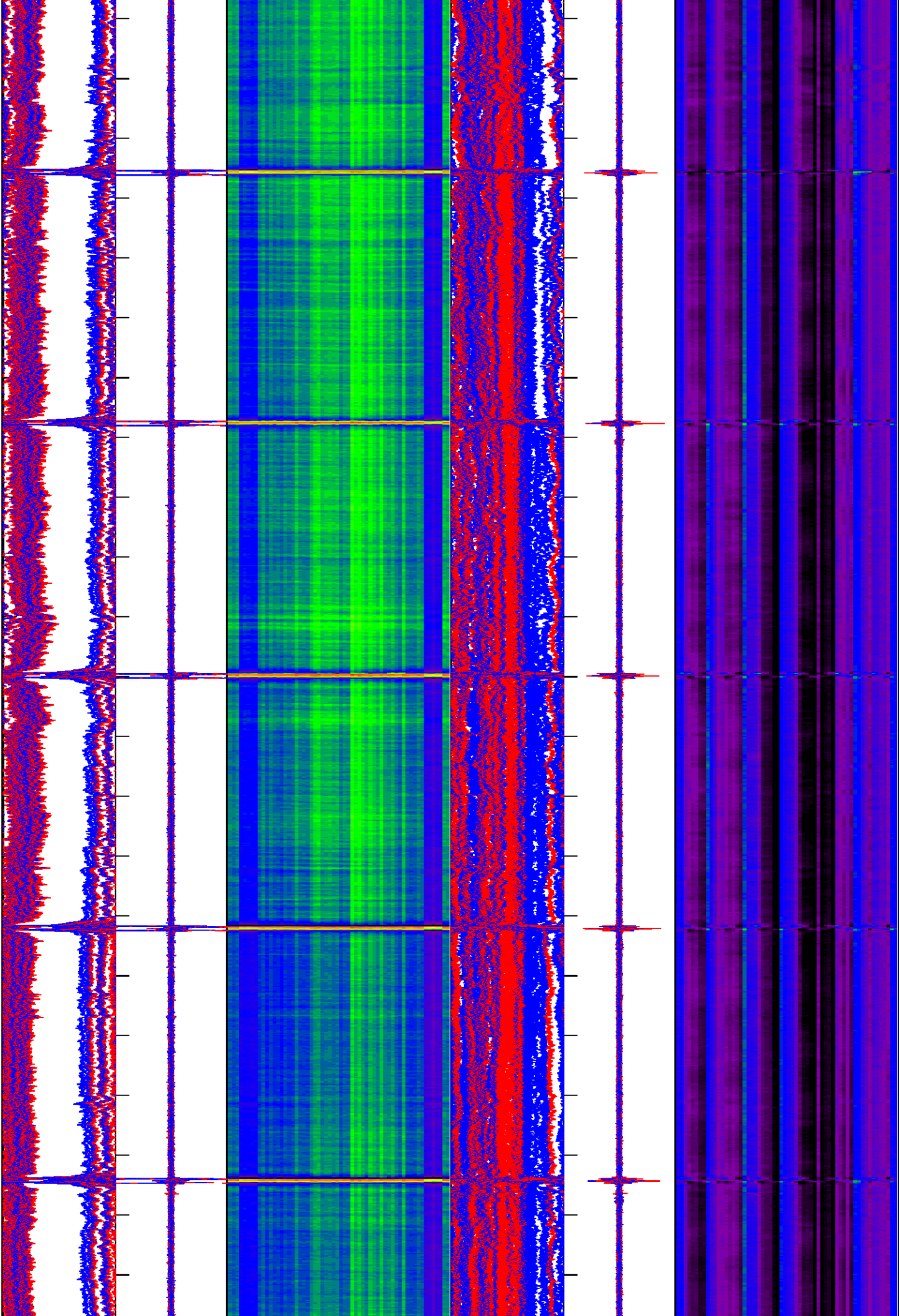
Down Log
4500

Down Log
4550

Down Log
4600

Down Log
4650

Down Log
4700

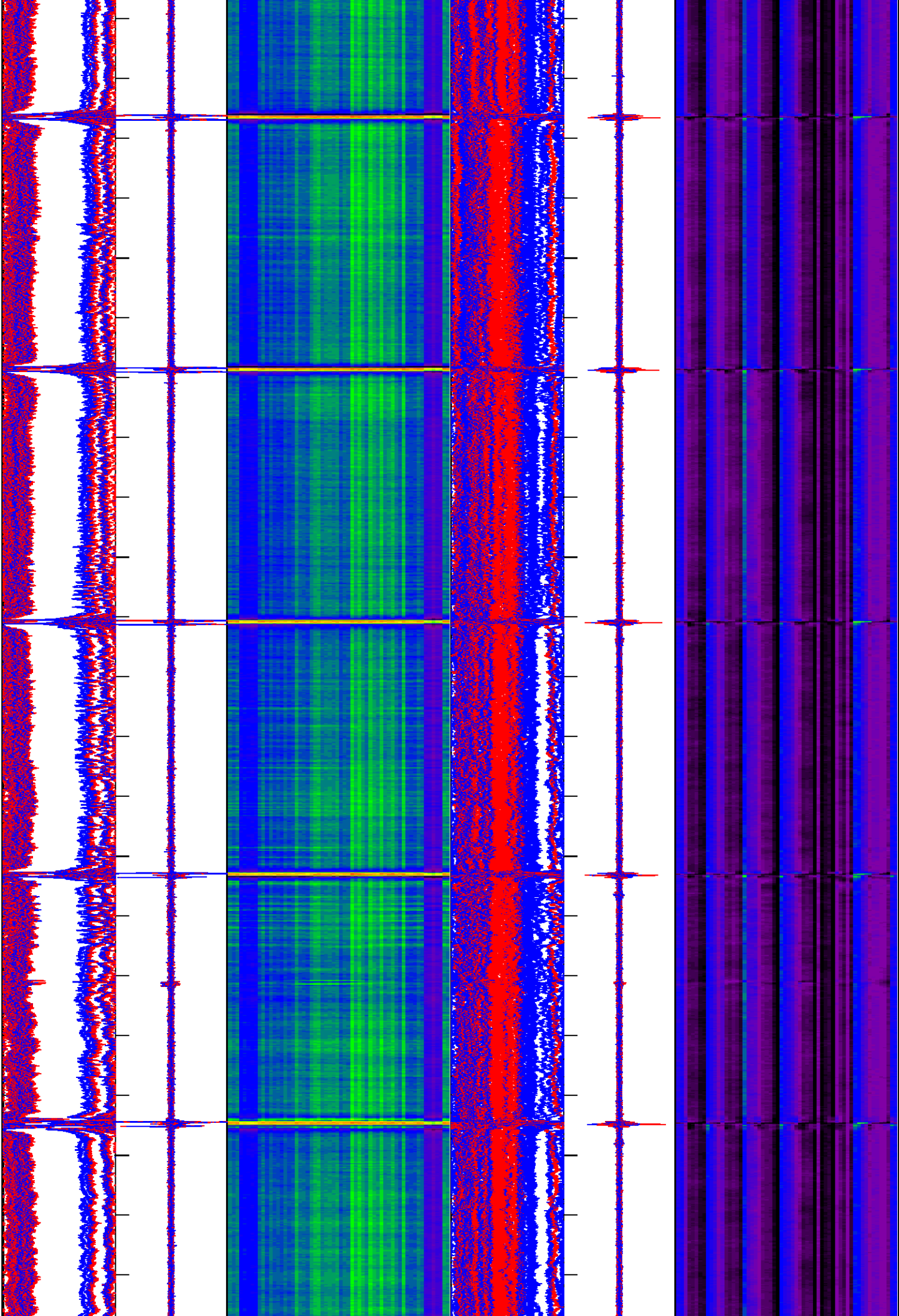


Down Log
4750

Down Log
4800

Down Log
4850

Down Log
4900

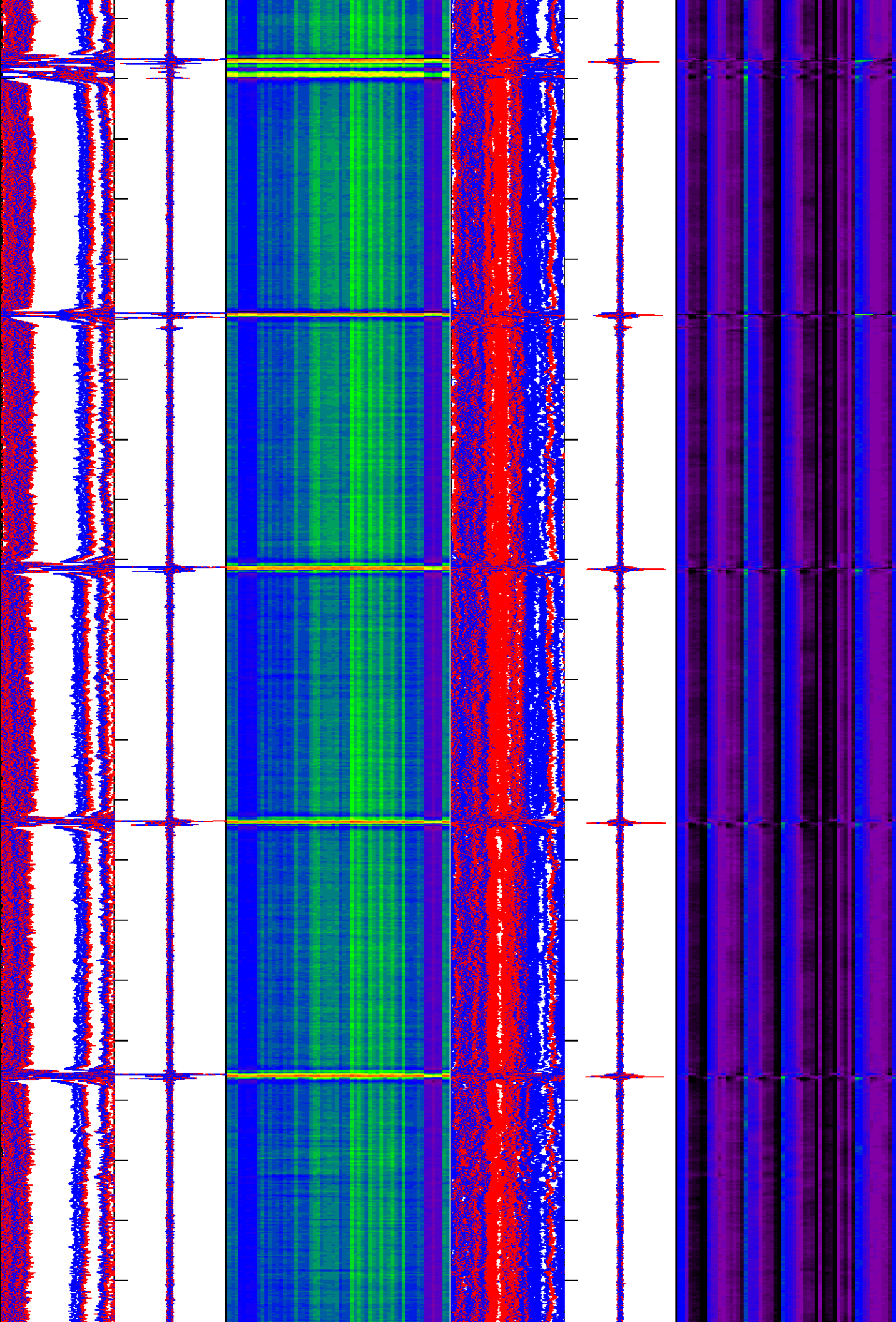


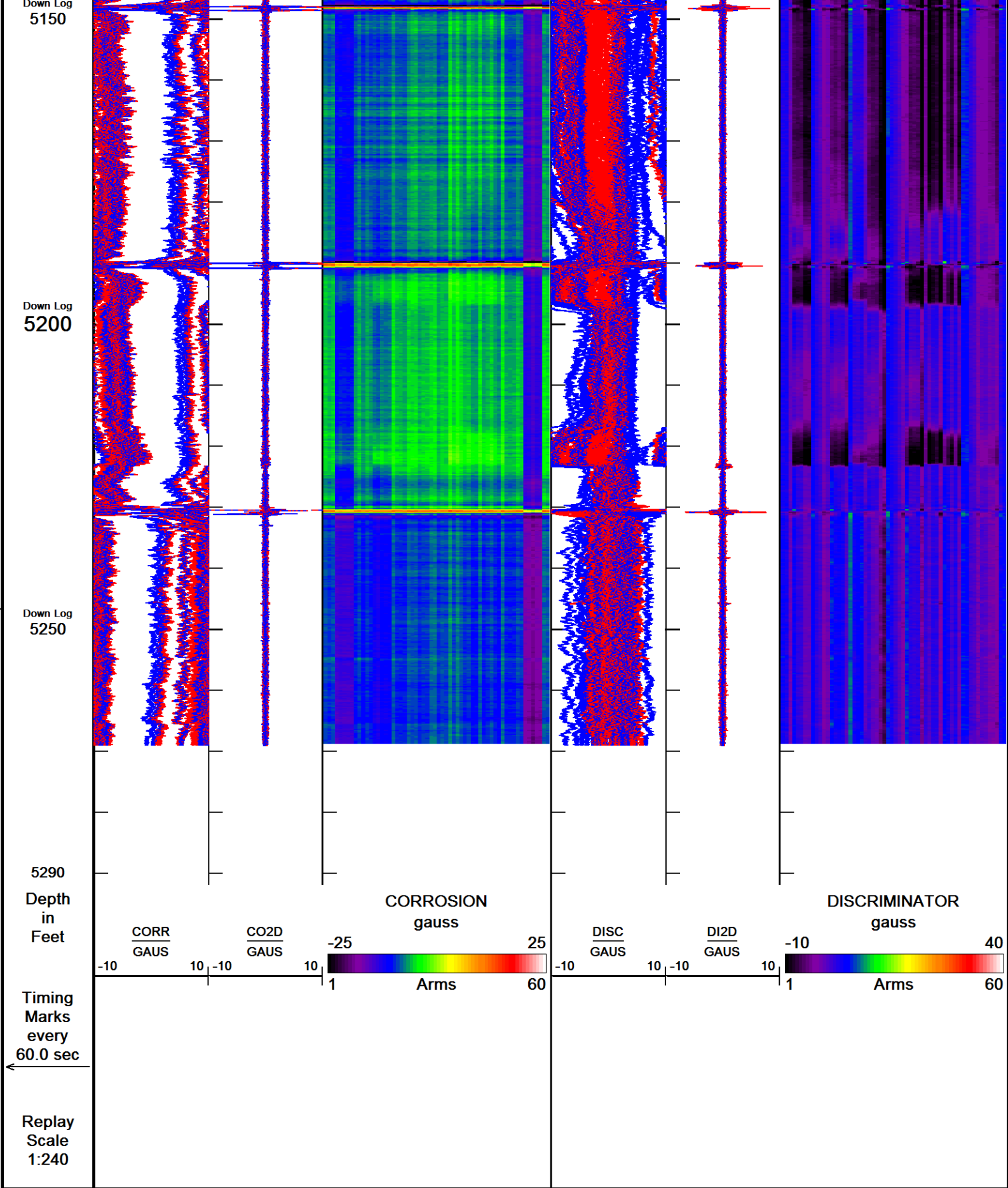
Down Log
4950

Down Log
5000

Down Log
5050

Down Log
5100





Depth Based Data - Maximum Sampling Increment 2.5cm

Filename: C:\Logs\ECGS 6-21 WP-D004-2 (2)\EAST CHEYENNE MAIN MERGE CIT DOWN.dta

System Versions: Logged with 17.01.7206 Plotted with 17.01.7206

Plotted on 16-OCT-2017 10:32

Recorded on 14-OCT-2017 10:32

↑ DOWN LOG ↑

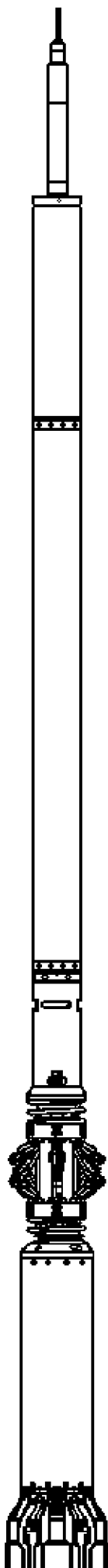
DOWNHOLE EQUIPMENT

Mono-Cablehead
MCH-AA 0 LG: 1.03 ft WT: 2.2 lb OD: 1.457 in

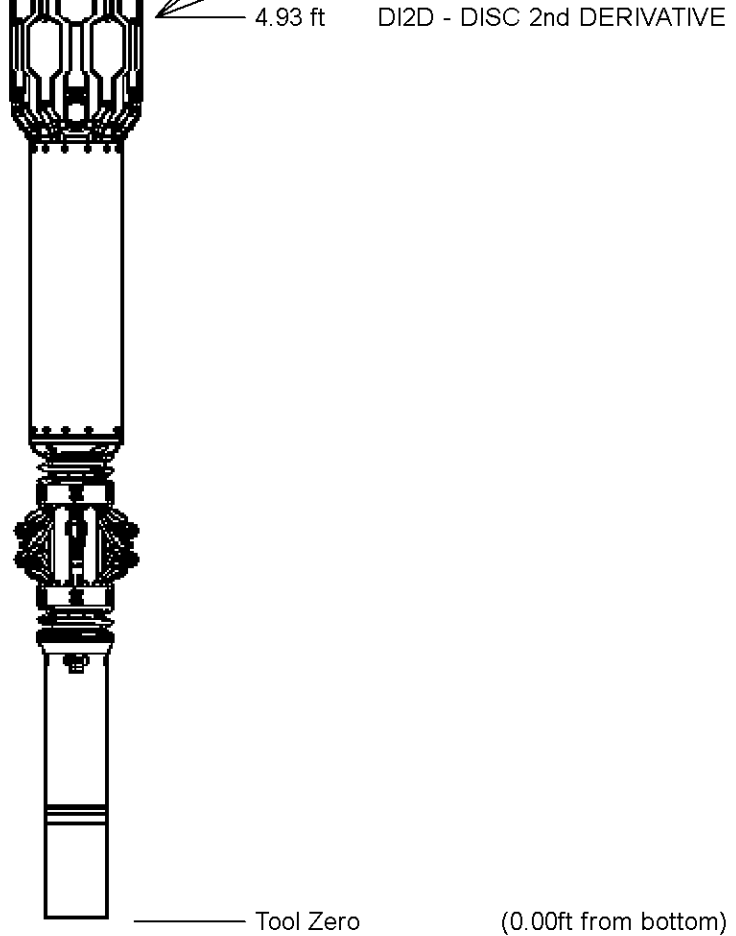
CIT Memory Section
CMM-AA 152 LG: 2.53 ft WT: 44.1 lb OD: 3.346 in

CIT Electronics Section
CIC-AA 137 LG: 6.28 ft WT: 121.3 lb OD: 3.346 in

Casing Imaging Tool, 6 5/8" OD, 12 pads(
CIS-CA 122 LG: 9.22 ft WT: 416.7 lb OD: 5.118 in



4.93 ft CORR - Corrosion
4.93 ft CO2D - CORR 2nd DERIVATIVE
4.93 ft DISC - Discriminator



Total Length: 19.07 ft Weight: 584.2 lb

All measurements relative to tool zero.

SHOP AND FIELD CALIBRATIONS

C:\Logs\ECGS 6-21 WP-D004-2 (2)\EAST CHEYENNE MAIN MERGE CIT.dta

COMPANY	EAST CHEYENNE GAS STORAGE LLC
WELL	ECGS No 6-21 WPD004-2
FIELD	WEST PEETZ
PROVINCE/COUNTY	LOGAN
COUNTRY/STATE	U.S.A./COLORADO

Elevation Kelly Bushing	4569	feet	Bottom Log Interval	5270.00	feet
Elevation Drill Floor	4566	feet	Depth Driller	5440.00	feet
Elevation Ground Level	4557	feet	Depth Logger	5270.00	feet



Weatherford[®]

SECUREVIEW
FLUX VIEW