



RADIAL CEMENT BOND LOG

FILE NO: CH145365
API NO: 05077105180000
COMPANY: LARAMIE ENERGY LLC
WELL: BCU 0993-21-04E
FIELD: BUZZARD CREEK
COUNTY: MESA
STATE: COLORADO

Ver. 4.11

LOCATION:

SHL: 868.0' FNL & 1324.0' FEL
BHL: 868.0' FNL & 1324.0' FEL

OTHER SERVICES
RPM

SEC 21 TWP 9S RGE 93W

PERMANENT DATUM GL ELEVATION 7257 FT
LOG MEASURED FROM KB 30 FT ABOVE P.D.
DRILL. MEAS. FROM KB
ELEVATIONS:
KB 7287 FT
DF
GL 7257 FT

DATE	28-NOV-2018
RUN	1
TRIP	1
SERVICE ORDER	US145365J
DEPTH DRILLER	8441 FT
DEPTH LOGGER	8384 FT
BOTTOM LOGGED INTERVAL	8384 FT
TOP LOGGED INTERVAL	30 FT
TIME STARTED	14:00
TIME FINISHED	16:00
OPERATOR RIG TIME	2.0 HRS
TYPE OF FLUID IN HOLE	WATER
FLUID DENSITY	NA
FLUID SALINITY	NA
FLUID LEVEL	58 FT
LOGGED CEMENT TOP	2010 FT
WELLHEAD PRESSURE	0 PSI
MAXIMUM HOLE DEVIATION	NA
NOMINAL LOGGING SPEED	100 F/MIN
MAX. RECORDED TEMP.	252 DEGF
REFERENCE LOG	NA
REFERENCE LOG DATE	NA
EQUIP. NO.	ML-4291
LOCATION	GRAND JCT.
RECORDED BY	M. BAUKA
WITNESSED BY	NA

IN MAKING INTERPRETATIONS OF LOGS OUR EMPLOYEES WILL GIVE THE CUSTOMER THE BENEFIT OF THEIR BEST JUDGEMENT. BUT SINCE ALL INTERPRETATIONS ARE OPINIONS BASED ON INFERENCES FROM ELECTRICAL OR OTHER MEASUREMENTS, WE CANNOT, AND WE DO NOT GUARANTEE THE ACCURACY OR CORRECTNESS OF ANY INTERPRETATION. WE SHALL NOT BE LIABLE OR RESPONSIBLE FOR ANY LOSS, COST, DAMAGES, OR EXPENSES WHATSOEVER INCURRED OR SUSTAINED BY THE CUSTOMER RESULTING FROM ANY INTERPRETATION MADE BY ANY OF OUR EMPLOYEES.

REMARKS

RUN 1 TRIP 1: *2 OPERATIONS IN WELLBORE*

OPERATION 1: RAL/GR/CCL RUN CENTRALIZED

OPERATION 2: RPM/GR/CCL RUN IN PNC-3D

LOGGED WITH 0 PSI ON WELLHEAD

SJ: 6434' - 6454'

SJ: 7508' - 7528'

EQUIPMENT DATA

RUN	TRIP	TOOL	SERIES NO.	SERIAL NO.	POSITION
1	1	RAL	1426XA	11871500	CENTRALIZED
1	1	GR/CCL	1355XA	11871507	CENTRALIZED

MAIN PASS 0 PSI

ECLIPS 7.0i ECLIPS General Release Rel 7.0i Thu Jun 08 20:36:10 CDT 2017
Updates: 1,32

Plotted: Wed Nov 28 18:05:06 2018

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/LARAMIE_BCU_0993-21-04E/p012g02.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 15.750 ft BOTTOM DEPTH: 8385.750 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
GR	FILTER ()	medium (1)		TOP	BOTTOM
AMPLITUDE	FILTER ()	medium (1)		"	"
TRAVEL TIME	FILTER ()	medium (1)		"	"

RAL CCL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CCL FLOOR	CCL FLOOR	0.00		TOP	BOTTOM

ANALOG RAL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
AMPLITUDE WINDOW (NEAR)	AMP WINDOW START (fgp1*)	187	us	TOP	BOTTOM
	AMP WINDOW START (fgp2*)	187	us	"	"
	AMP WINDOW START (fgp3*)	187	us	"	"
	AMP WINDOW START (fgp4*)	187	us	"	"
	AMP WINDOW START (fgp5*)	187	us	"	"
	AMP WINDOW START (fgp6*)	187	us	"	"
	AMP WINDOW START (fgp7*)	187	us	"	"
	AMP WINDOW START (fgp8*)	187	us	"	"
	AMP WINDOW START (fgpn*)	187	us	"	"
TRAVEL TIME WINDOW (NEAR)	AMP WINDOW LENGTH	25	us	"	"
	TT WINDOW START (ttn*)	160	us	"	"
	TT WINDOW LENGTH	500	us	"	"
	FIRST BRK THRESHOLD (ttn*)	4	mV	"	"
RAL CASING PARAMETERS	PPT NEAR	200.391	us	"	"
RAL TOOL DELAY	TOOL DELAY (str1*)	-70	us	"	"
	TOOL DELAY (str2*)	-70	us	"	"
	TOOL DELAY (str3*)	-70	us	"	"
	TOOL DELAY (str4*)	-70	us	"	"
	TOOL DELAY (str5*)	-70	us	"	"
	TOOL DELAY (str6*)	-70	us	"	"
	TOOL DELAY (str7*)	-70	us	"	"
	TOOL DELAY (str8*)	-70	us	"	"
	TOOL DELAY (strn*)	-70	us	"	"
BASELINE NOISE (NEAR)	NOISE WINDOW START	125	us	"	"
	NOISE WINDOW LENGTH	25	us	"	"

PERCENT BOND CEMENT MAP

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
RAL FREE PIPE AMPLITUDE	FREE AMP REC 1	80	mV	TOP	BOTTOM
	FREE AMP REC 2	80	mV	"	"
	FREE AMP REC 3	80	mV	"	"
	FREE AMP REC 4	80	mV	"	"
	FREE AMP REC 5	80	mV	"	"
	FREE AMP REC 6	80	mV	"	"
	FREE AMP REC 7	80	mV	"	"

	FREE AMP REC 8	80	mV	"	"
RAL FULL BOND AMPLITUDE	FULL BOND AMP REC 1	2	mV	"	"
	FULL BOND AMP REC 2	2	mV	"	"
	FULL BOND AMP REC 3	2	mV	"	"
	FULL BOND AMP REC 4	2	mV	"	"
	FULL BOND AMP REC 5	2	mV	"	"
	FULL BOND AMP REC 6	2	mV	"	"
	FULL BOND AMP REC 7	2	mV	"	"
	FULL BOND AMP REC 8	2	mV	"	"

CURVE DESCRIPTION REPORT

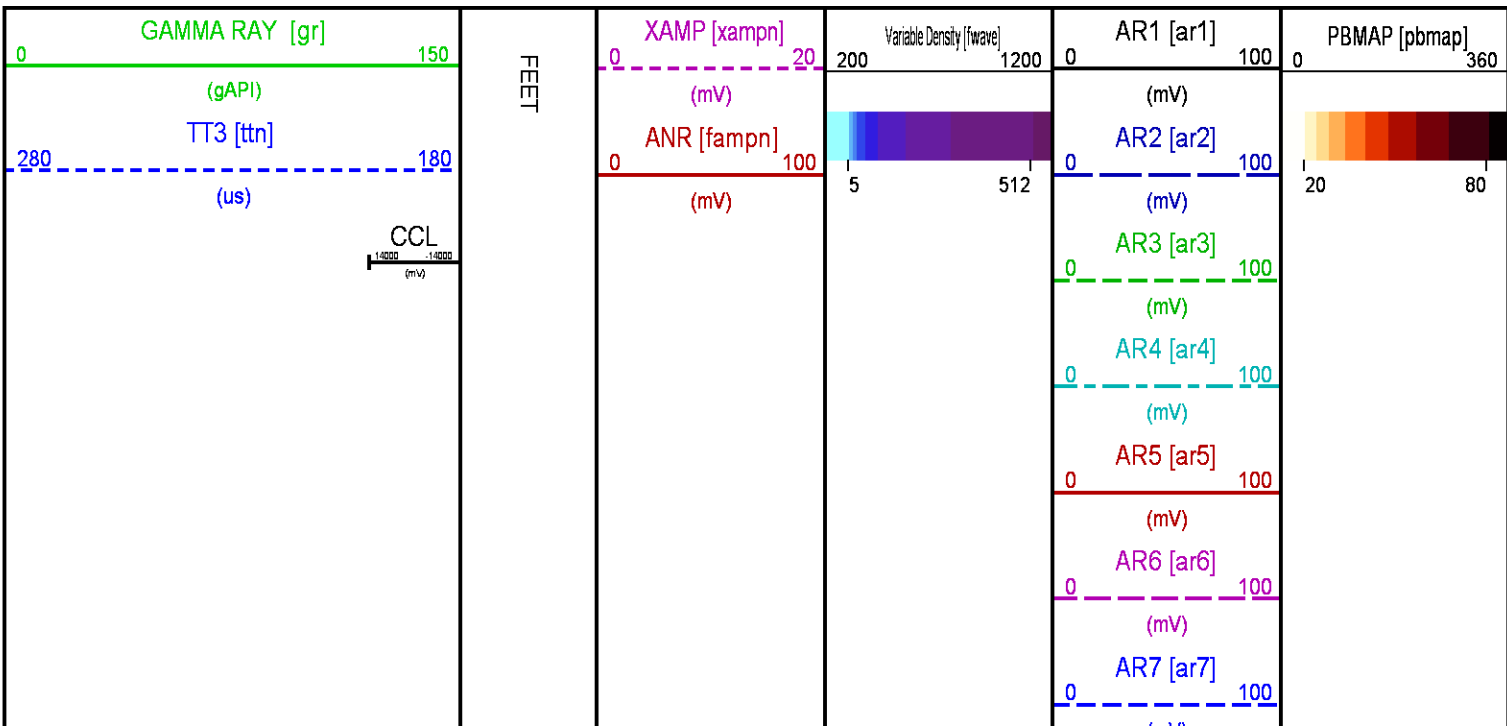
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AR1	Nov 28 14:24:45 2018	FIXED GATE AMPLITUDE T-R1
F1:AR2	Nov 28 14:24:45 2018	FIXED GATE AMPLITUDE T-R2
F1:AR3	Nov 28 14:24:45 2018	FIXED GATE AMPLITUDE T-R3
F1:AR4	Nov 28 14:24:45 2018	FIXED GATE AMPLITUDE T-R4
F1:AR5	Nov 28 14:24:45 2018	FIXED GATE AMPLITUDE T-R5
F1:AR6	Nov 28 14:24:45 2018	FIXED GATE AMPLITUDE T-R6
F1:AR7	Nov 28 14:24:45 2018	FIXED GATE AMPLITUDE T-R7
F1:AR8	Nov 28 14:24:45 2018	FIXED GATE AMPLITUDE T-R8
F1:CCL	Nov 28 14:24:45 2018	CASING COLLAR LOCATOR
F1:FAMPN	Nov 28 14:24:45 2018	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Nov 28 14:24:45 2018	FAR WAVE FORM
F1:GR	Nov 28 14:24:45 2018	GAMMA RAY
F1:PBMAP	Nov 28 14:24:45 2018	PERCENT BOND CEMENT MAP
F1:TTN	Nov 28 14:24:45 2018	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Nov 28 14:24:45 2018	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

CURVE MEASURE POINT OFFSET

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AR1	-11.25	AR5	-11.25	CCL	-5.75	XAMPN	-11.25
AR2	-11.25	AR6	-11.25	FAMPN	-11.25		
AR3	-11.25	AR7	-11.25	GR	-1.75		
AR4	-11.25	AR8	-11.25	TTN	-11.25		

Presentation : SysA:/dat1a/LARAMIE_BCU_0993-21-04E/BCU_0993-21-04E_RAL_MAIN.fvpdf [5"/100' Scale]
Plot Interval : 19.5 - 8398.5 Feet

Data File 1 : F1 : SysA:/dat1a/LARAMIE_BCU_0993-21-04E/45_LARAMIE_BCU_0993-21-04E_RAL_MAIN.xtf
Created On : Nov 28 14:24:45 2018
Company : LARAMIE ENERGY LLC
Well : BCU 0993-21-04E
Field : BUZZARD CREEK
File Interval : 15.75 - 8399.75 Feet
OCT : p012g



WELLHEAD

FLUID LEVEL

GR

TTN

CCL

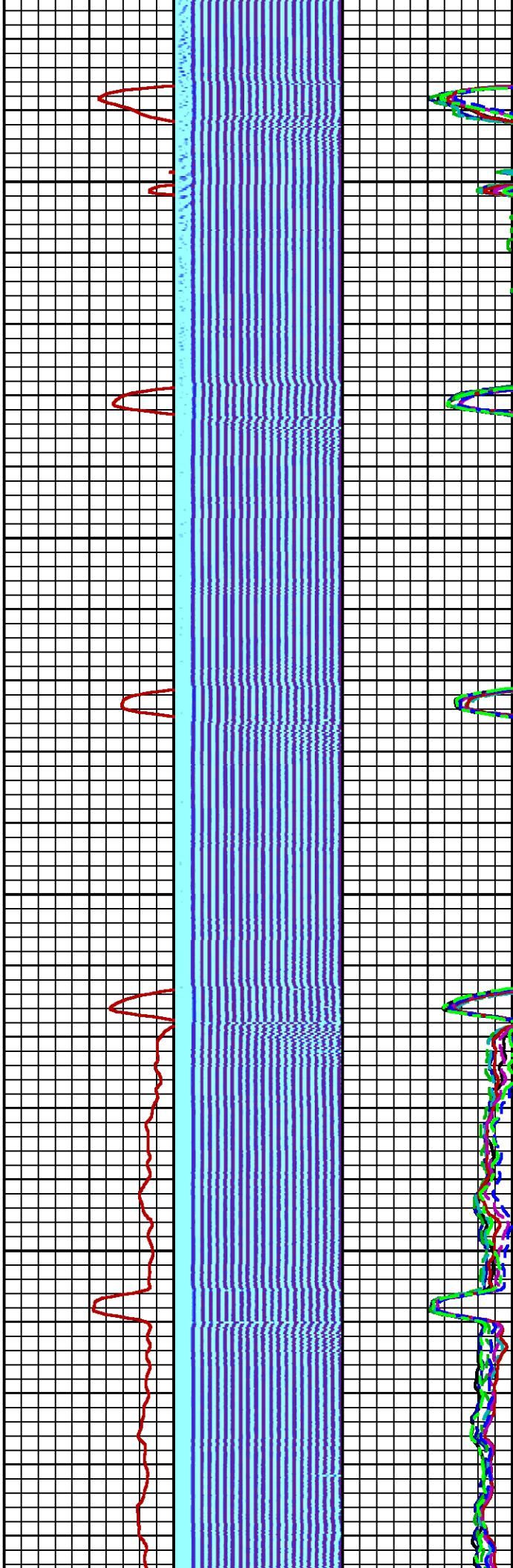
100

200

AR8 [ar8]
(mV)

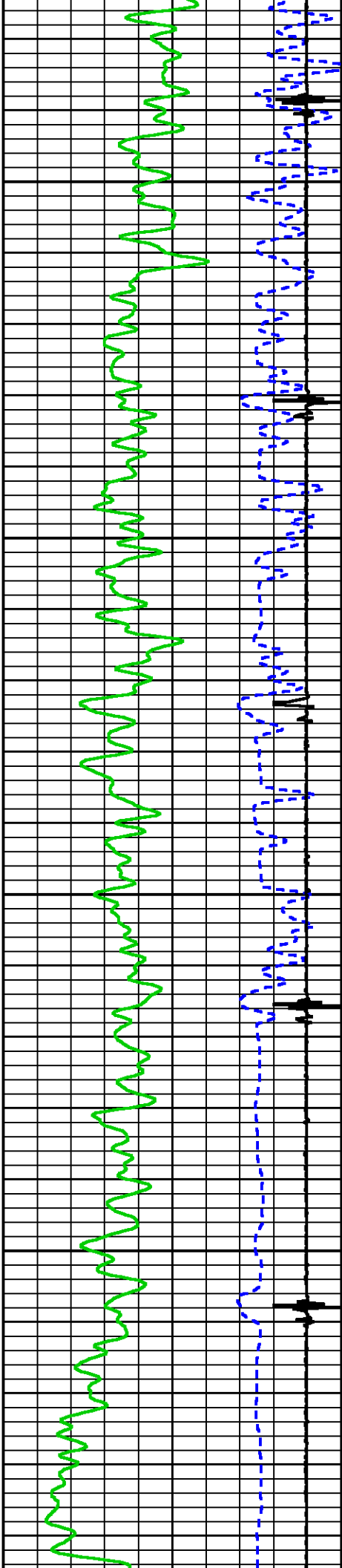
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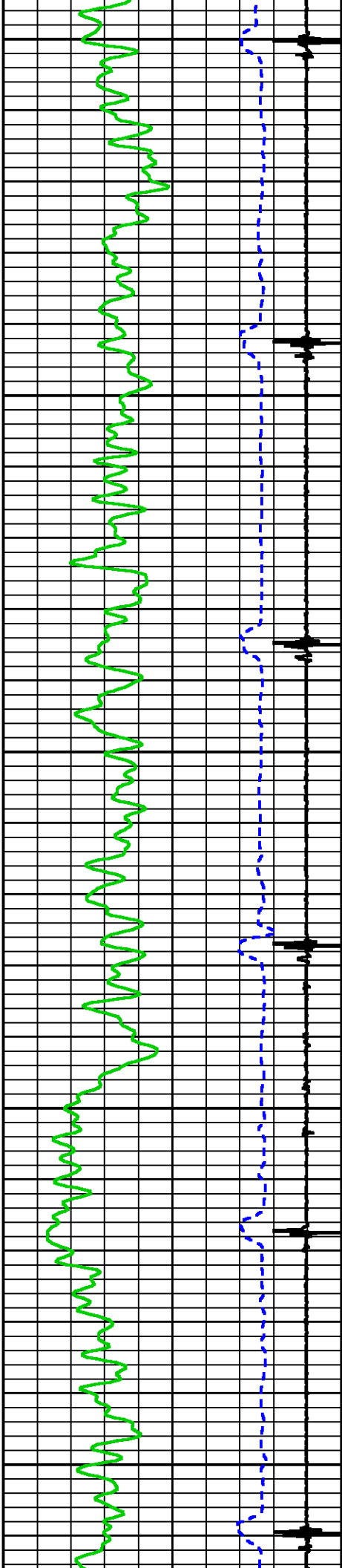
AR8



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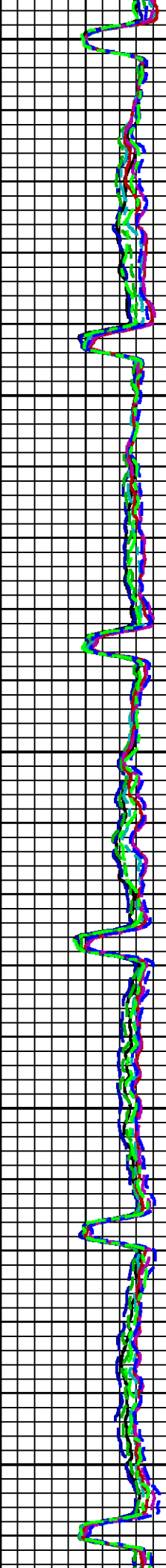
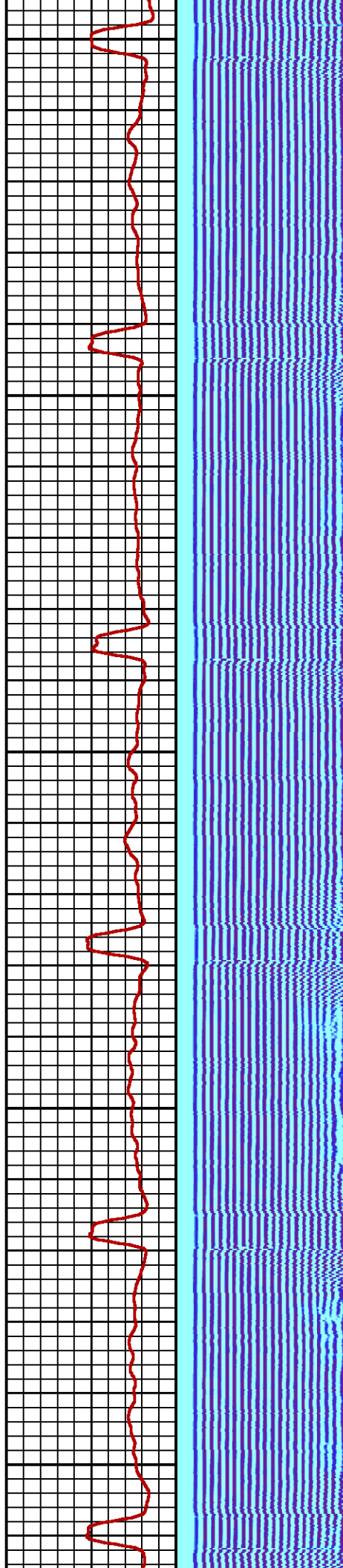
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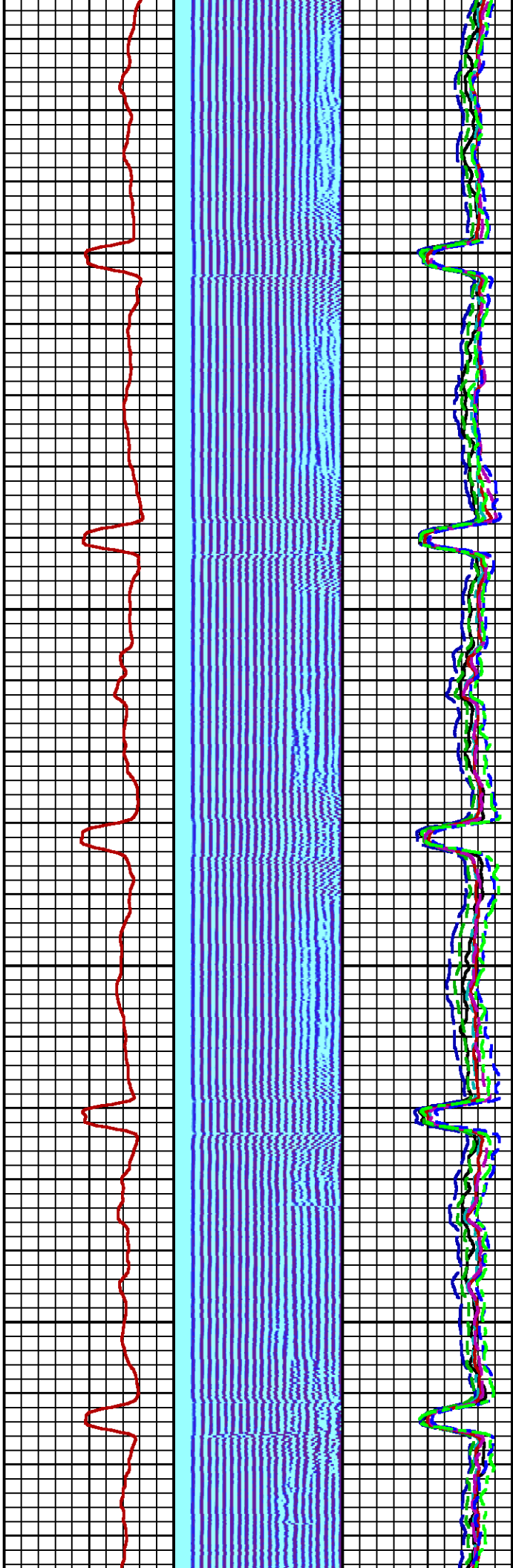




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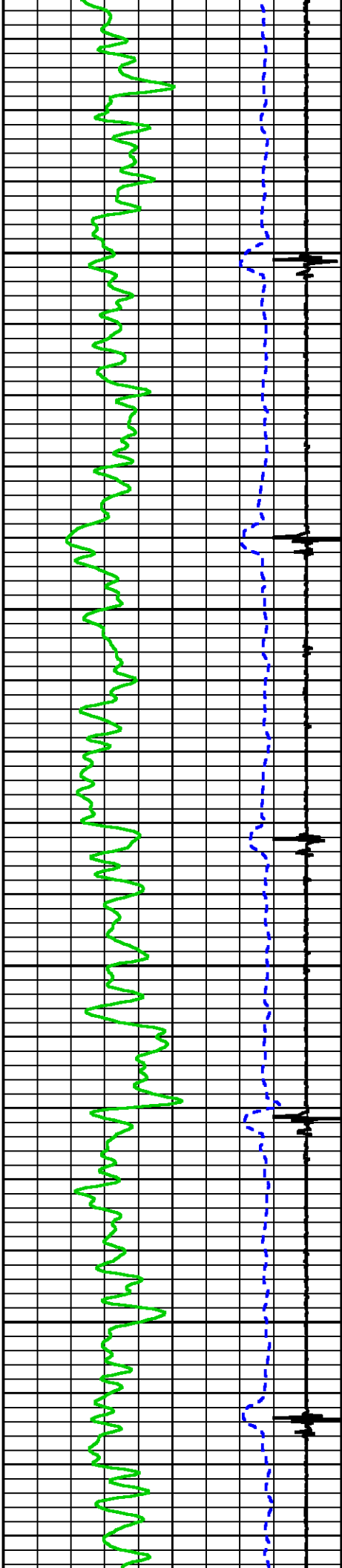
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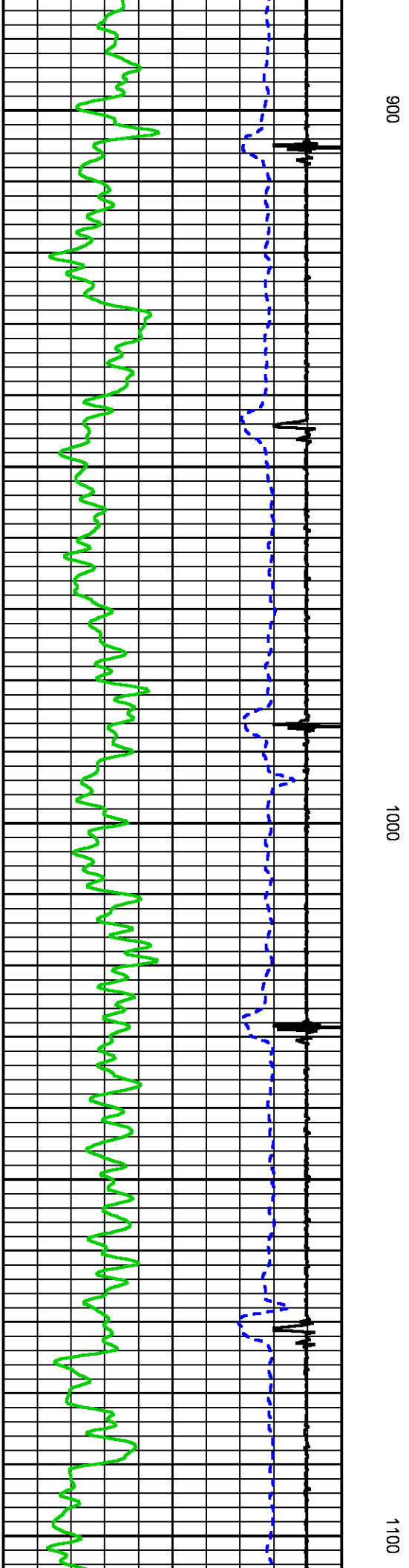
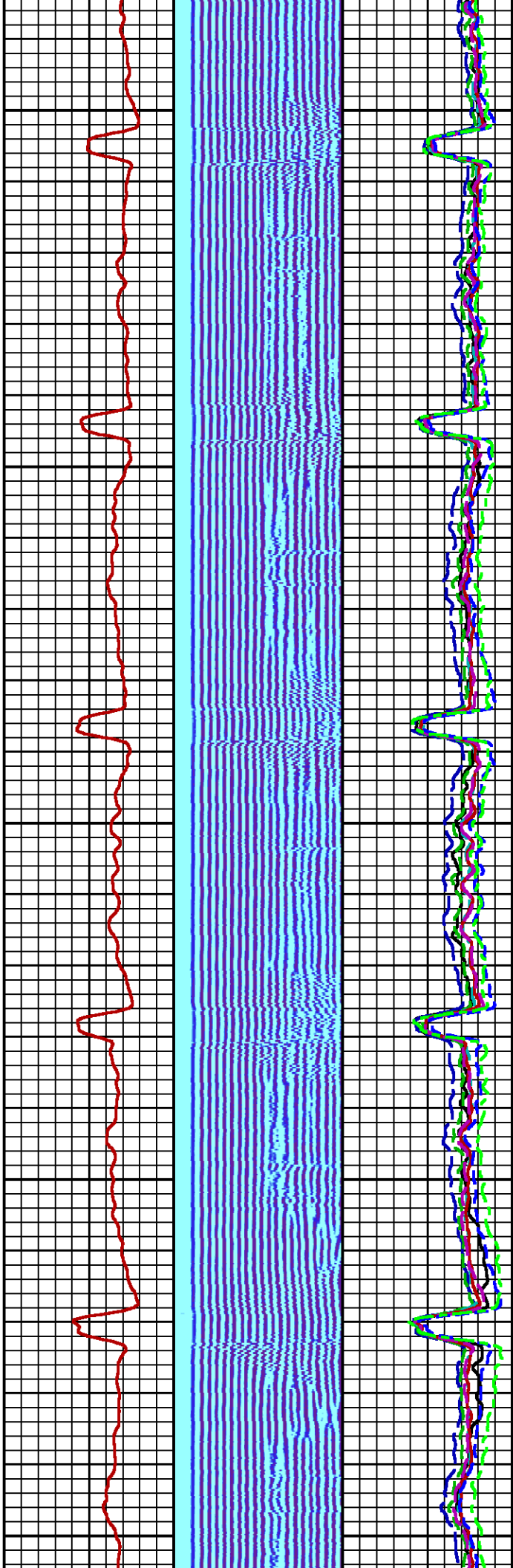


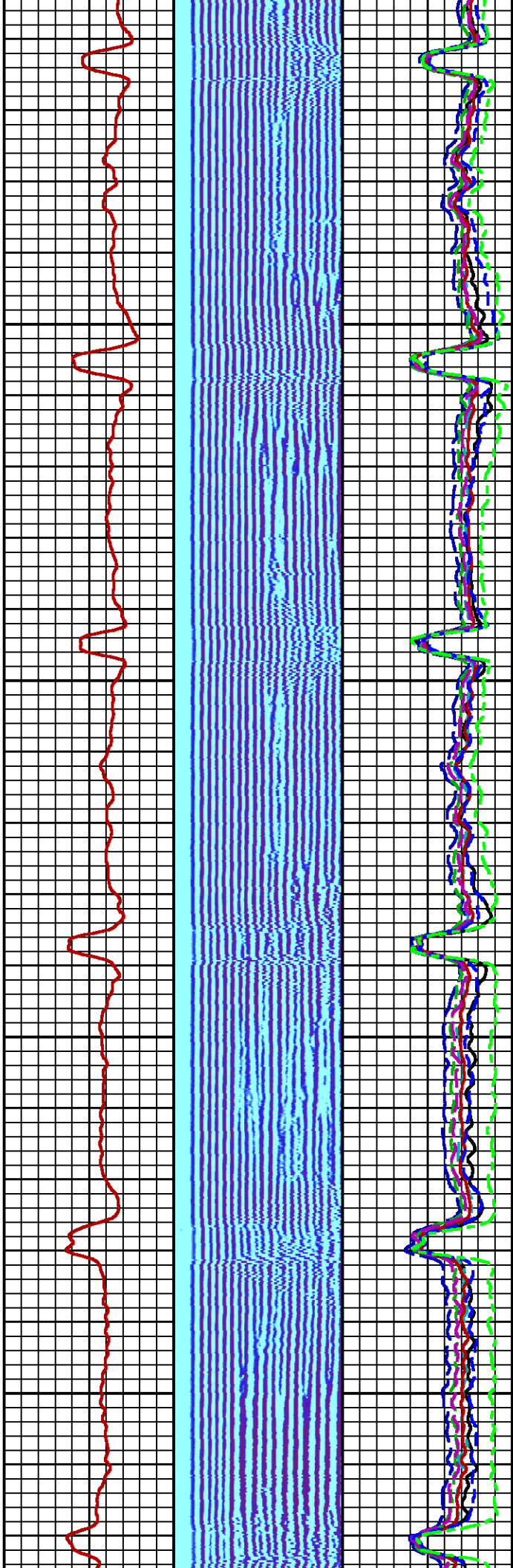


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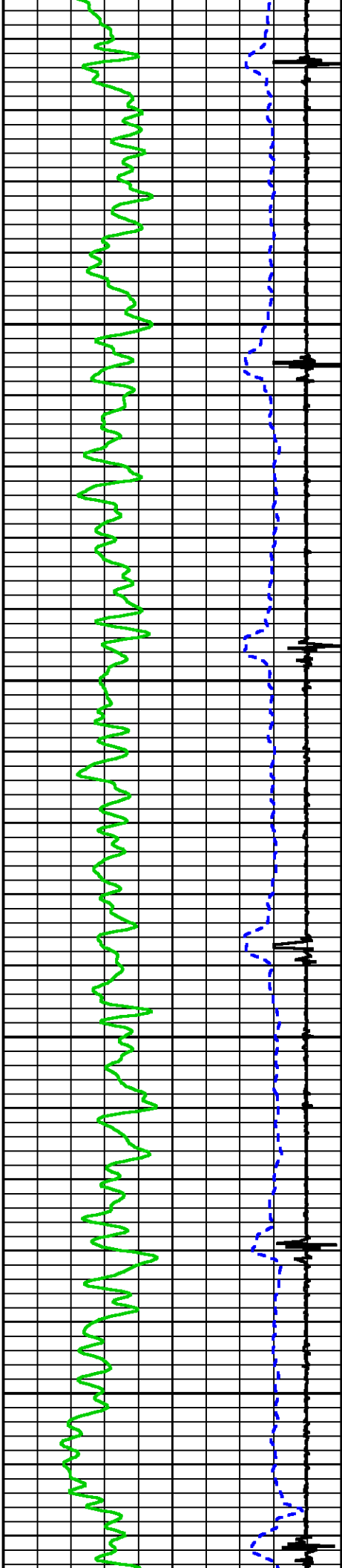


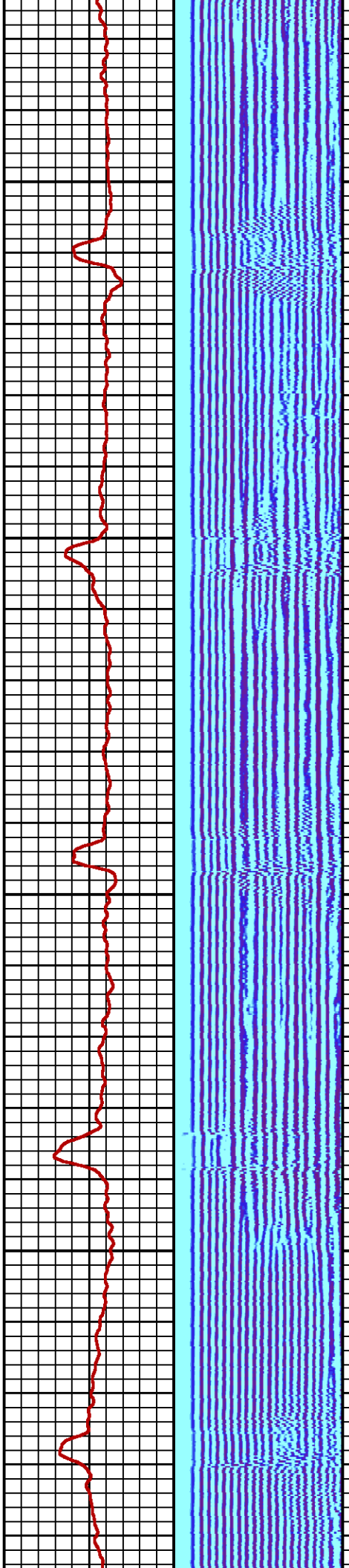
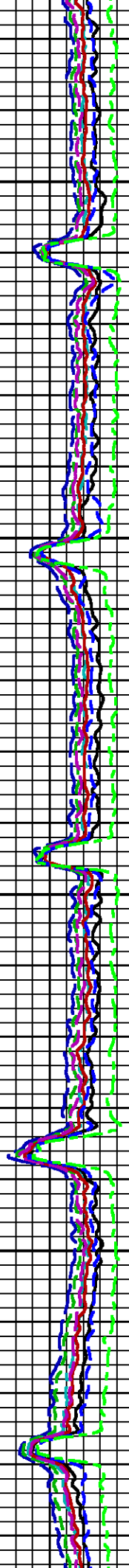




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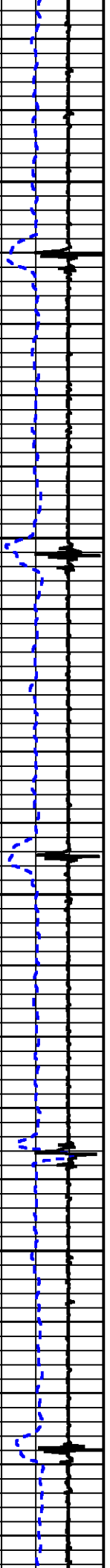
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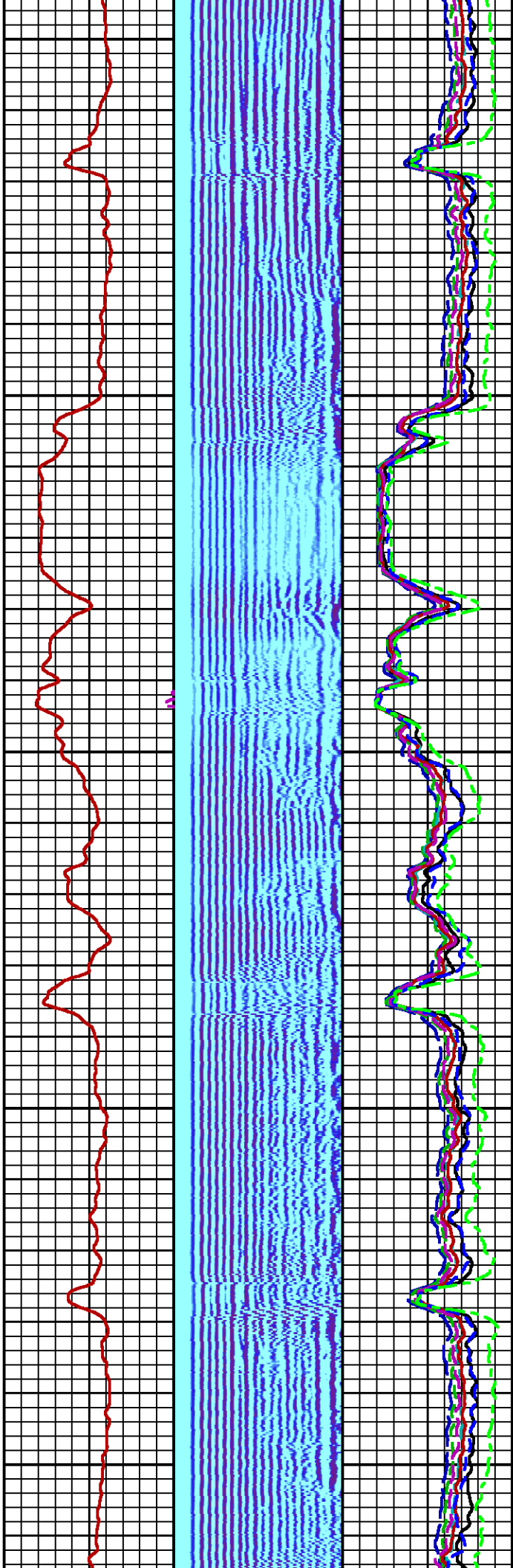
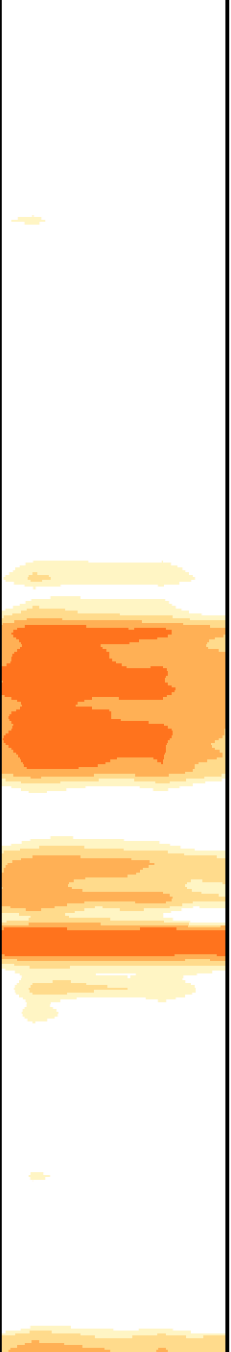




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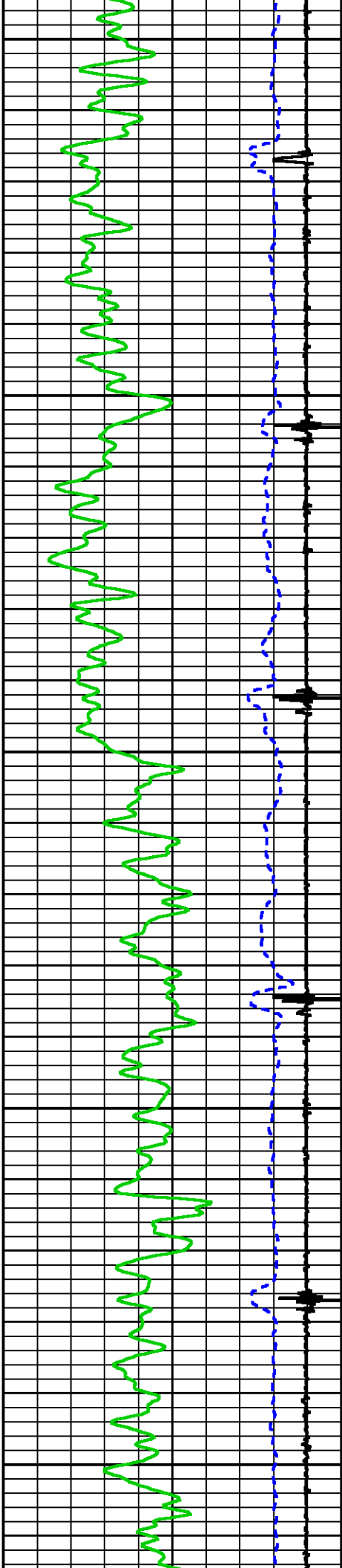
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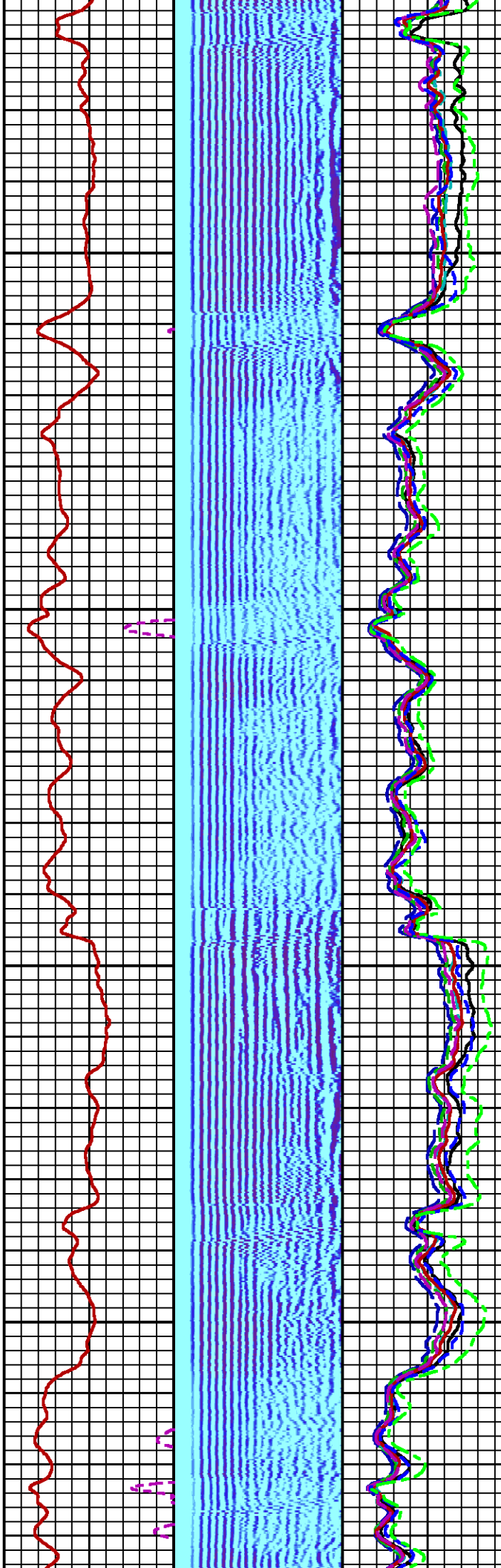
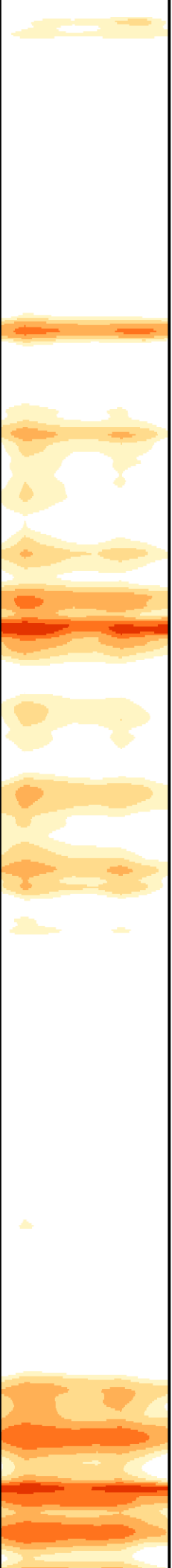




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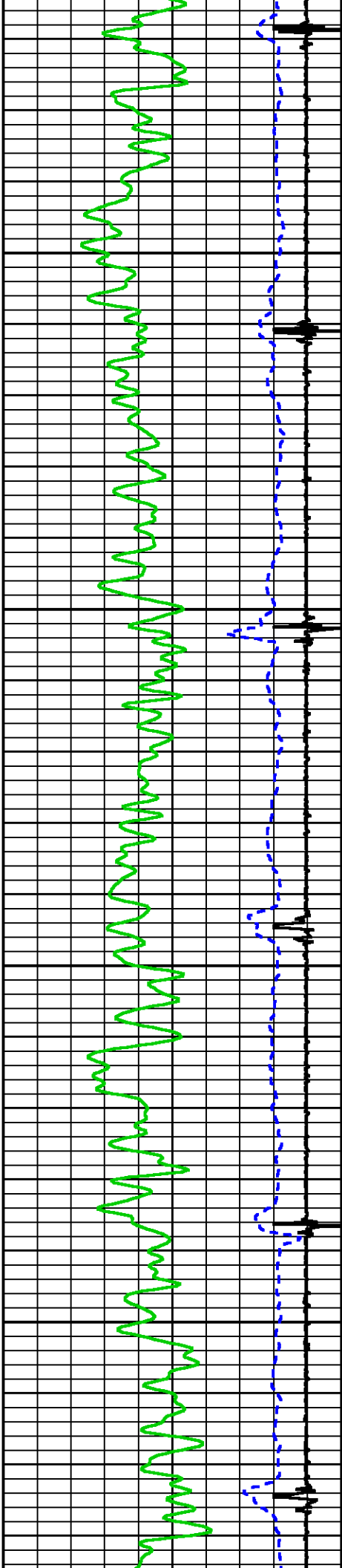
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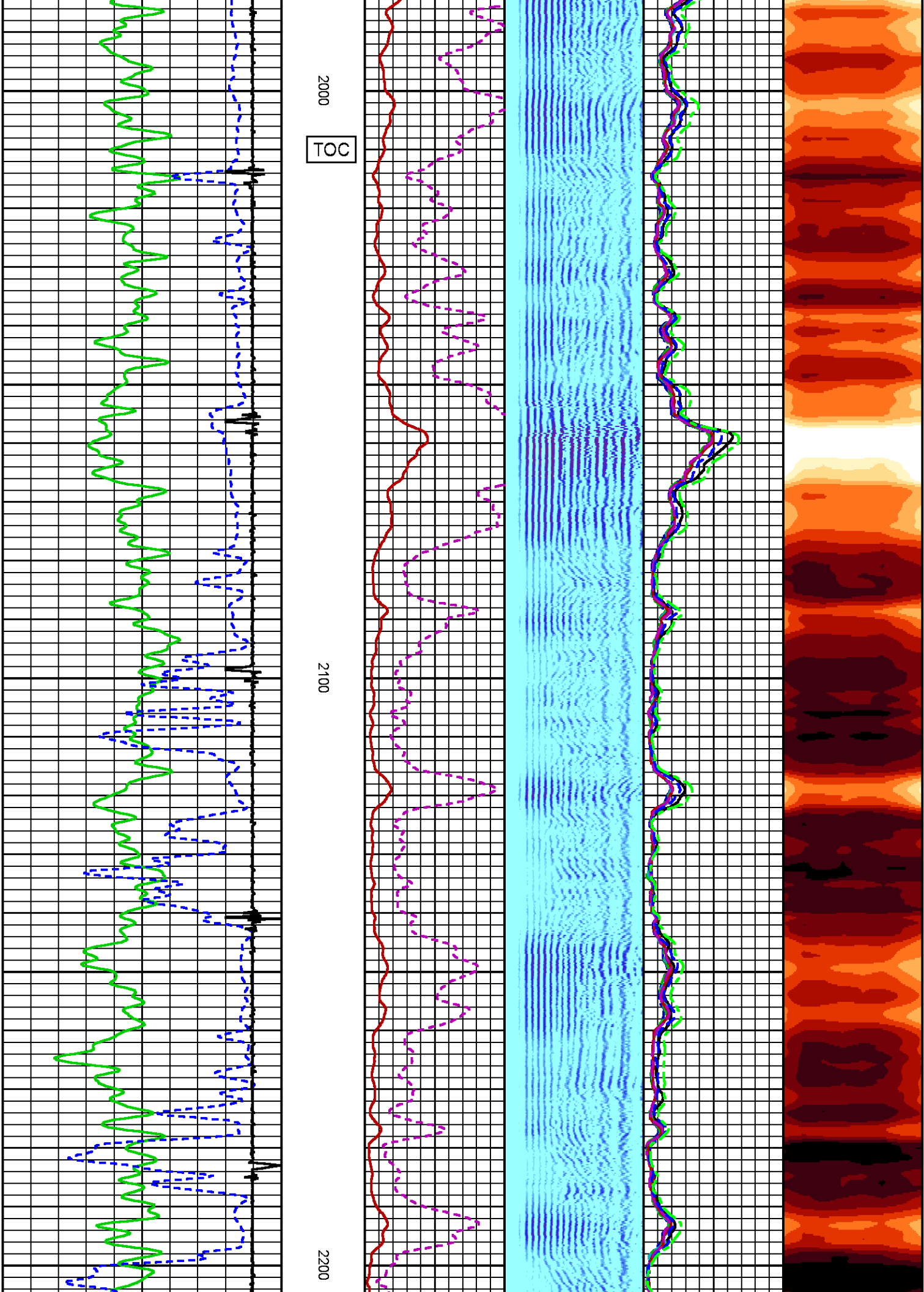


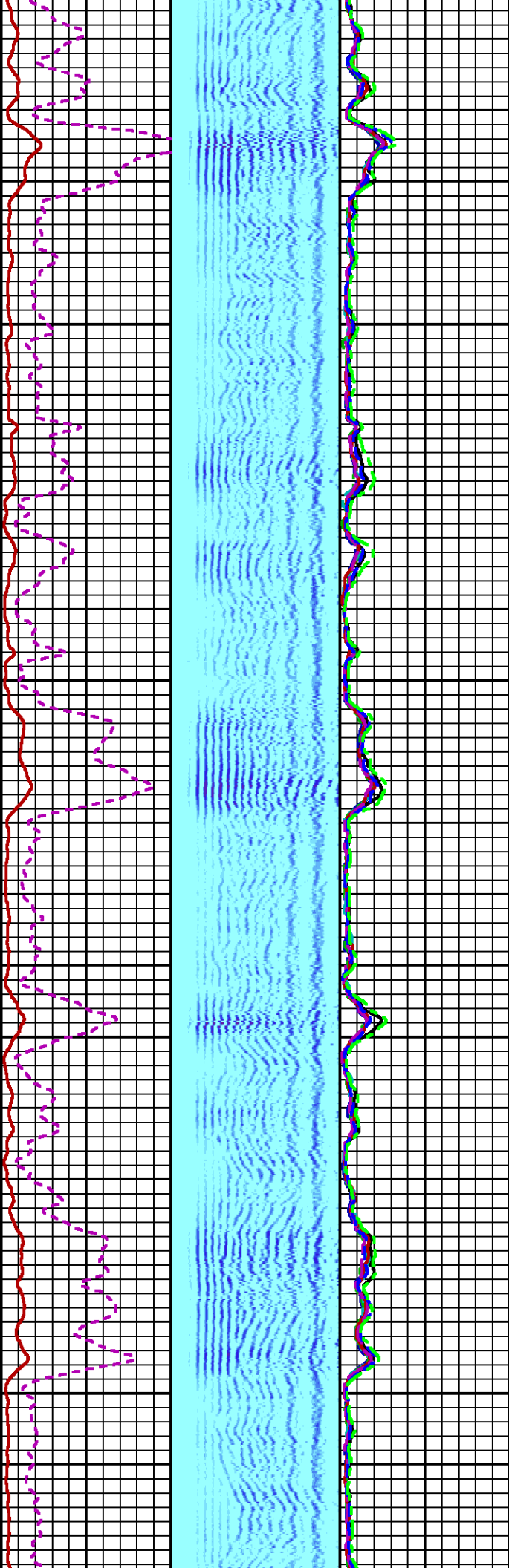
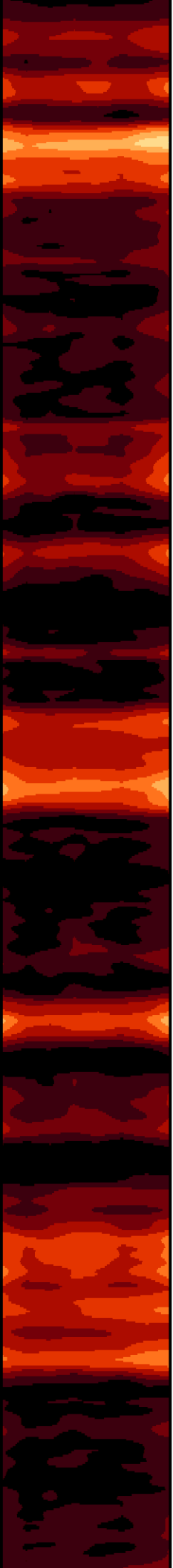


1800

1900

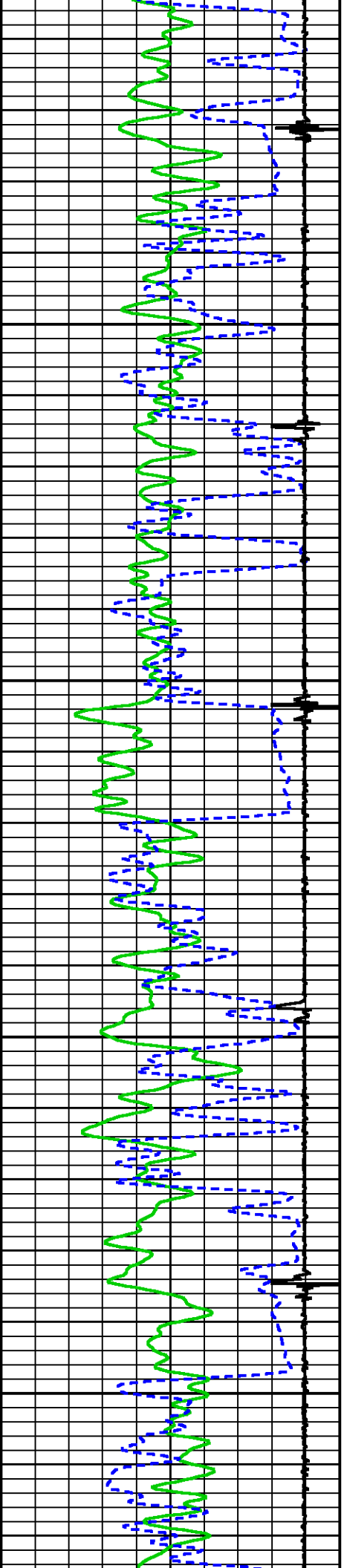


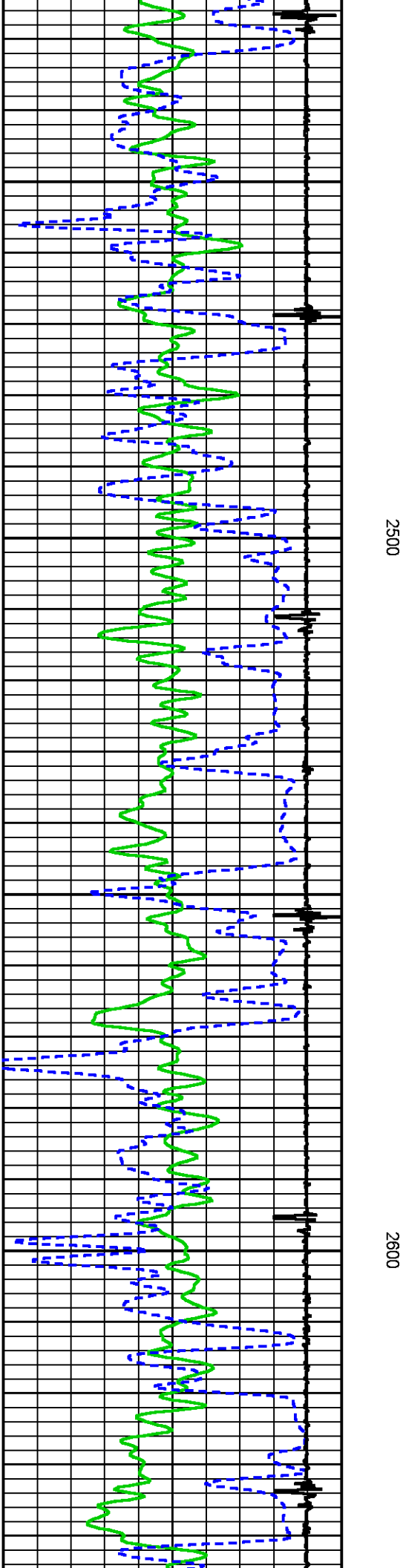
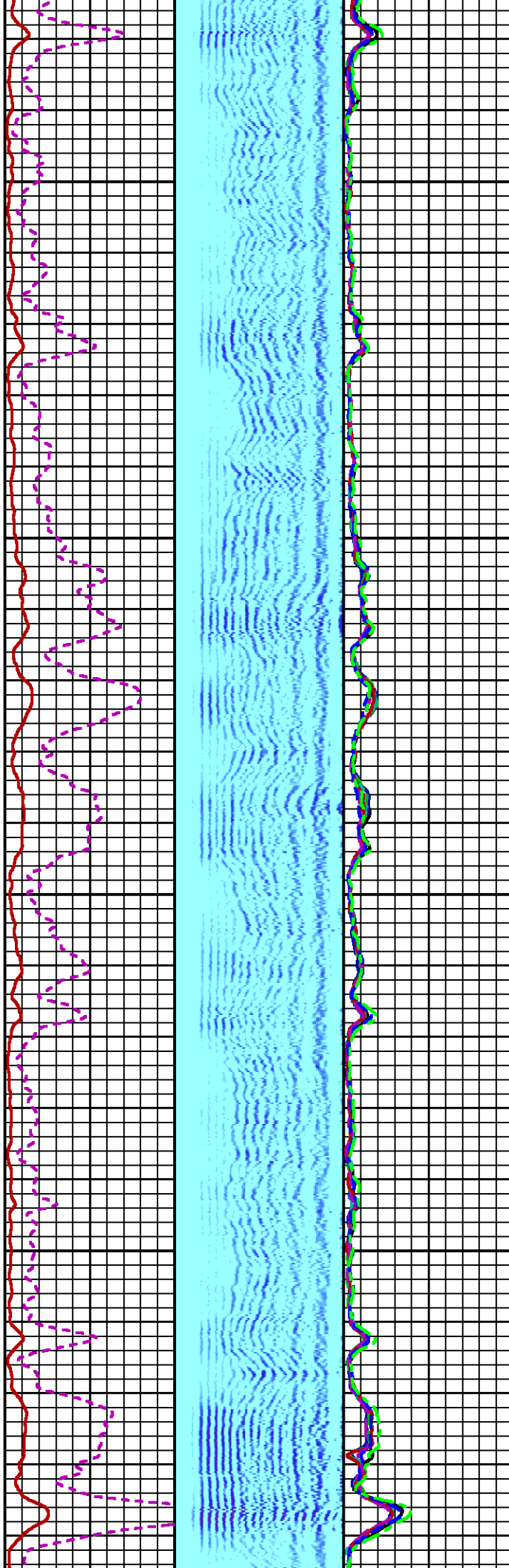
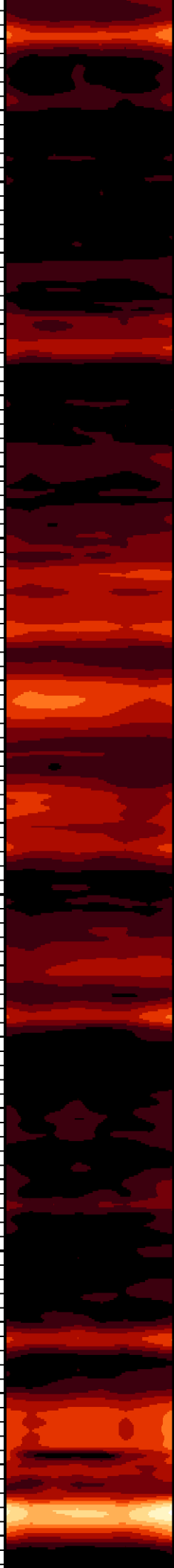


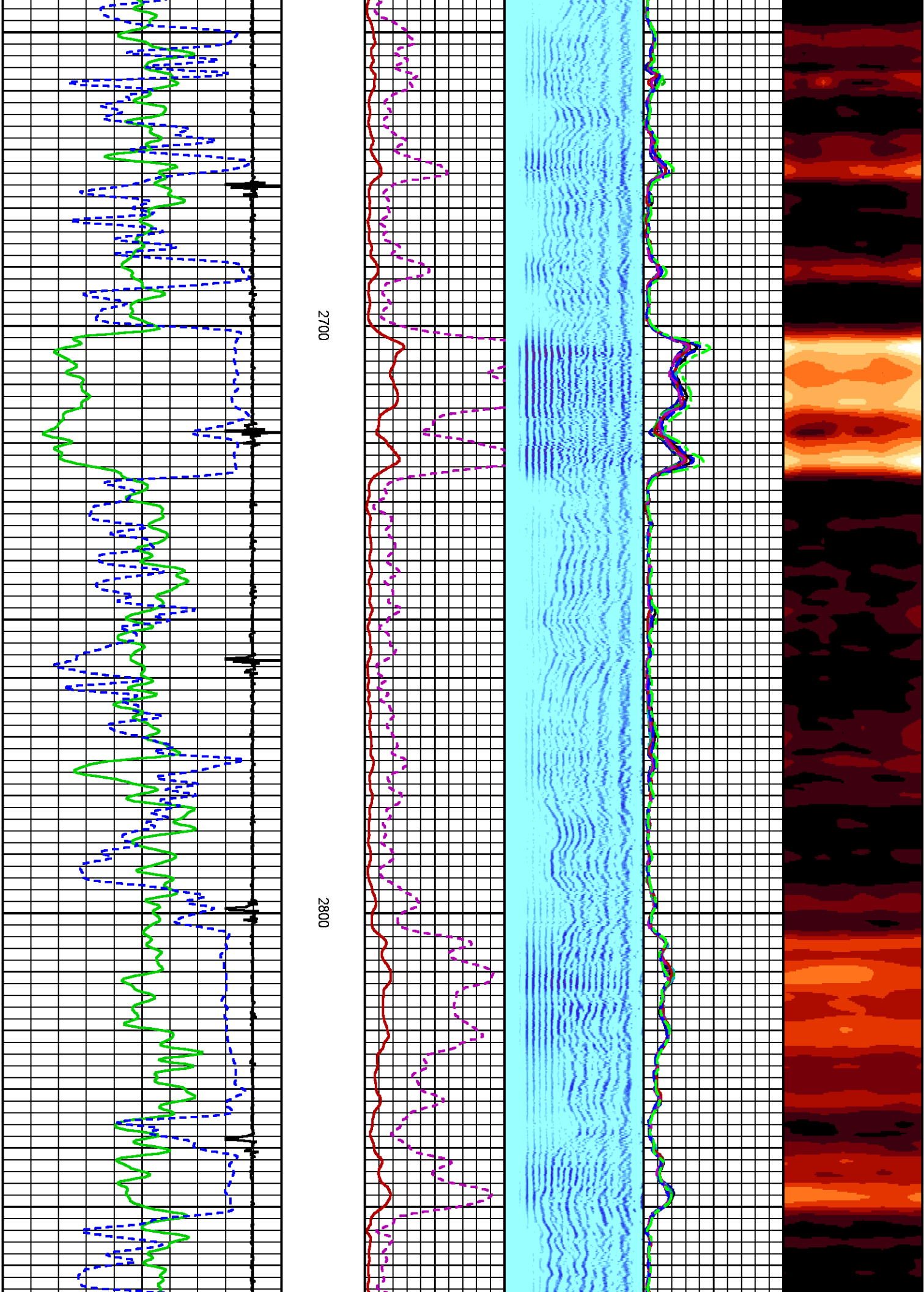


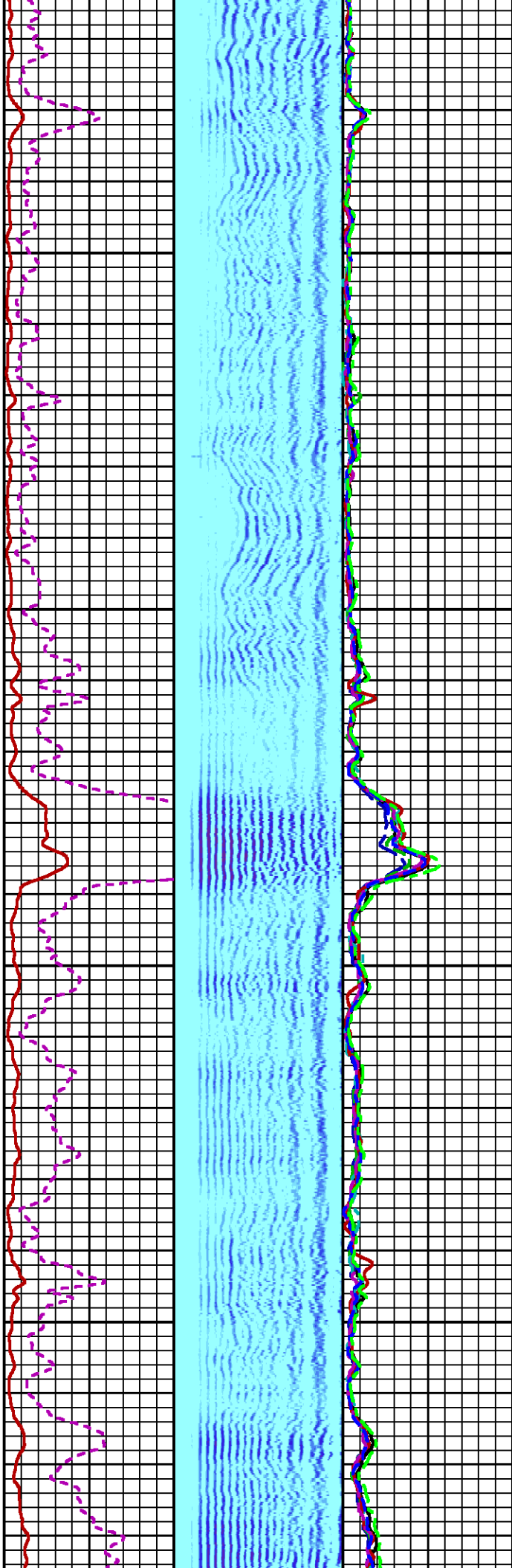
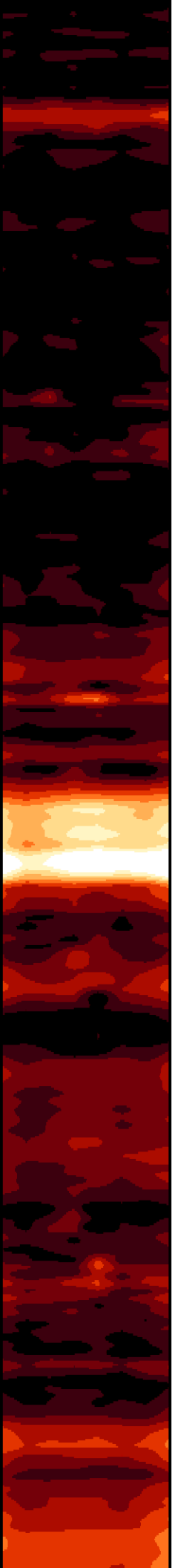
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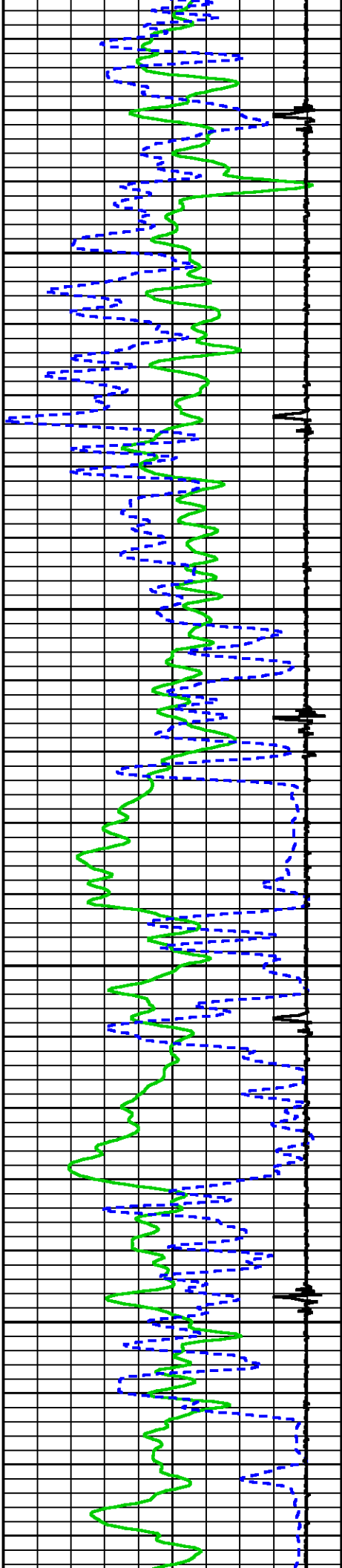


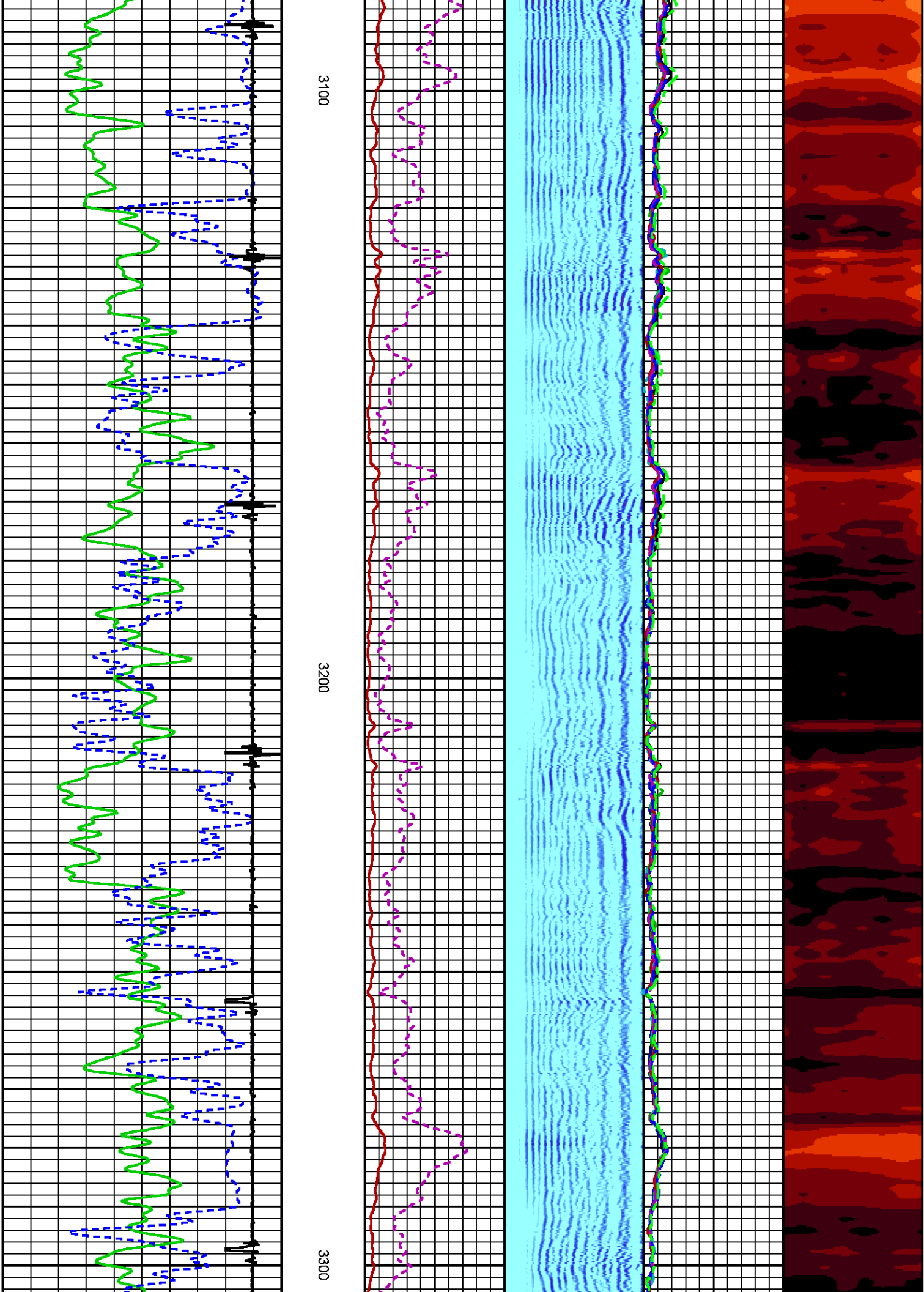


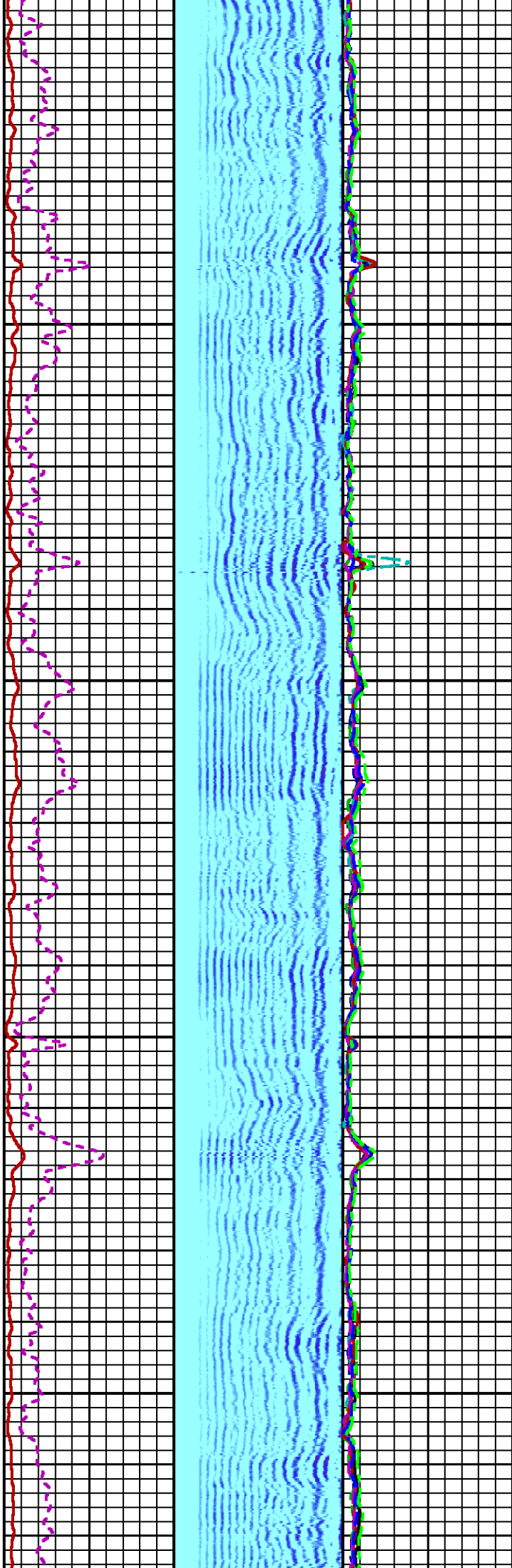
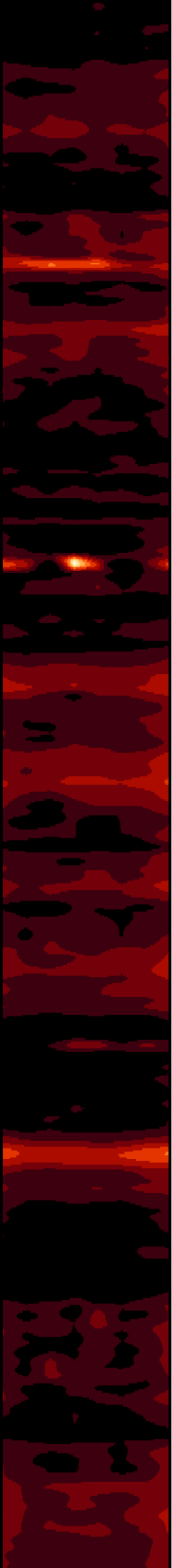


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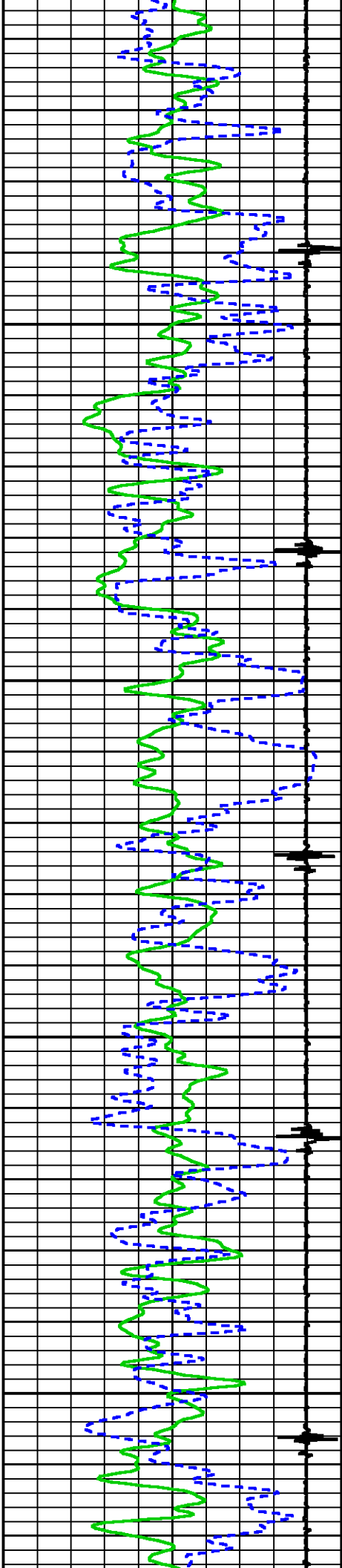


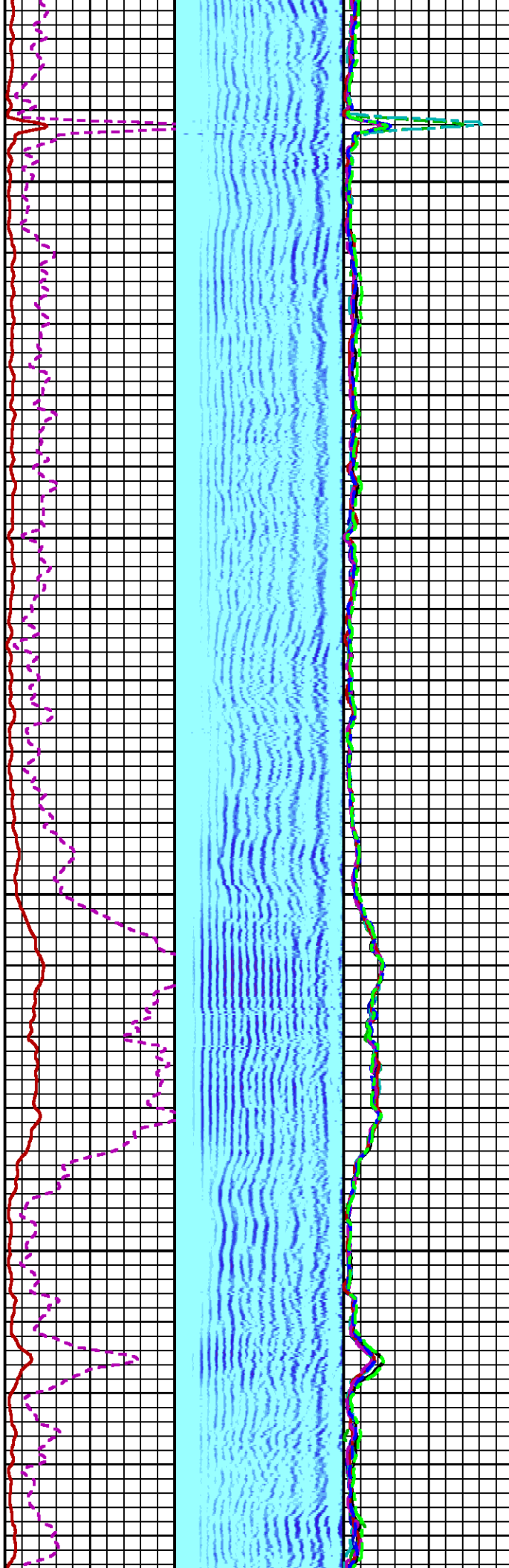
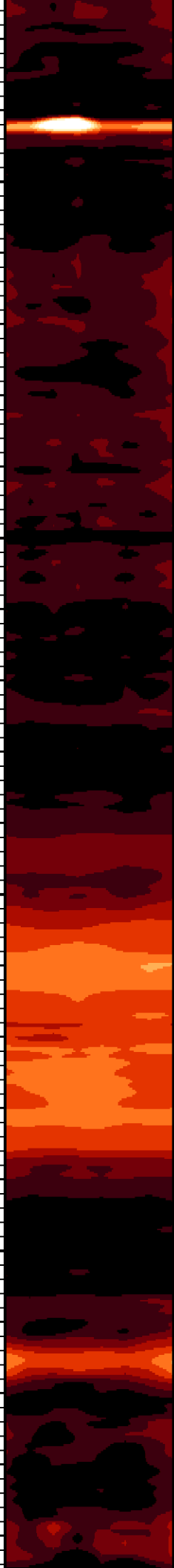




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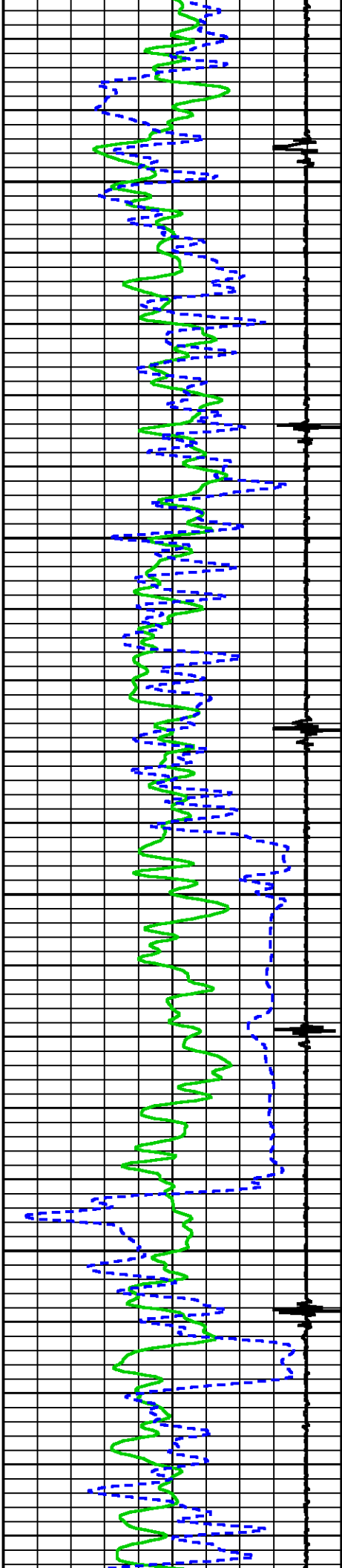
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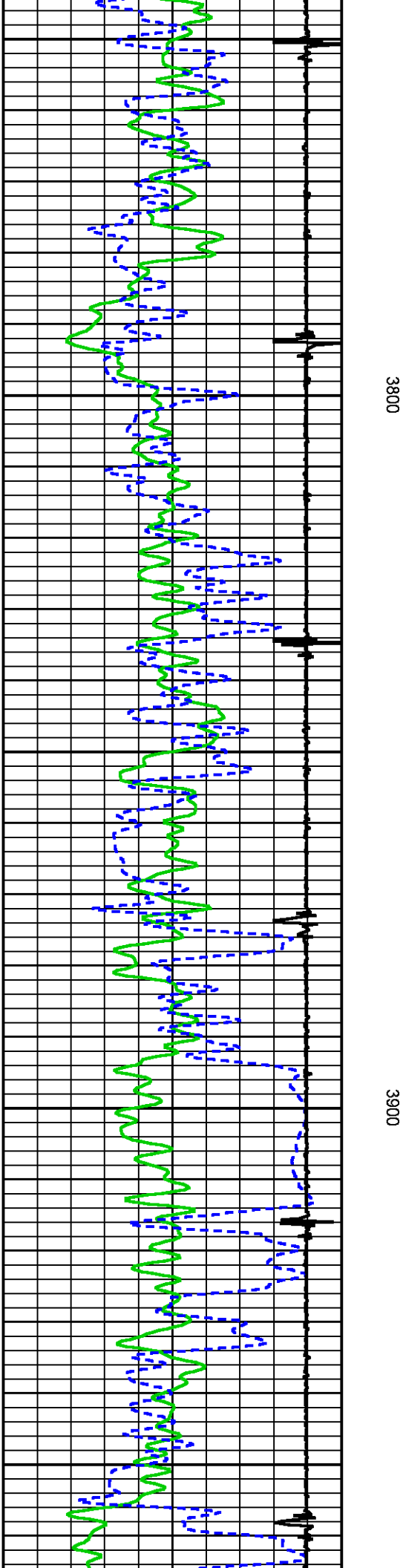
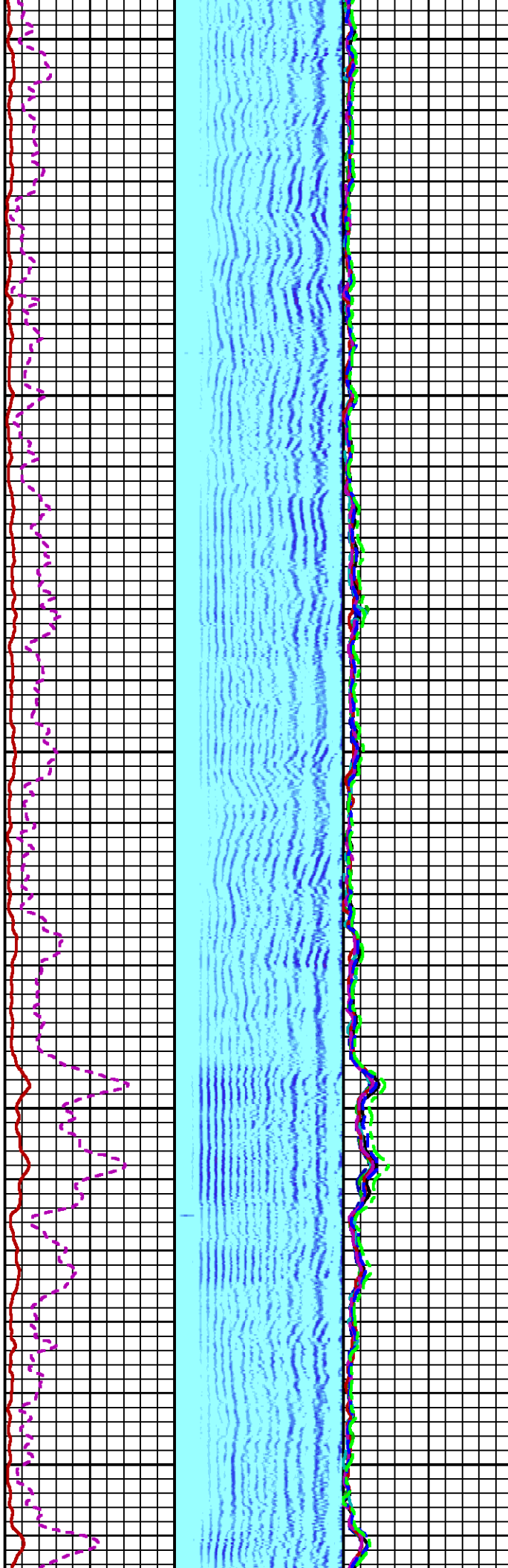
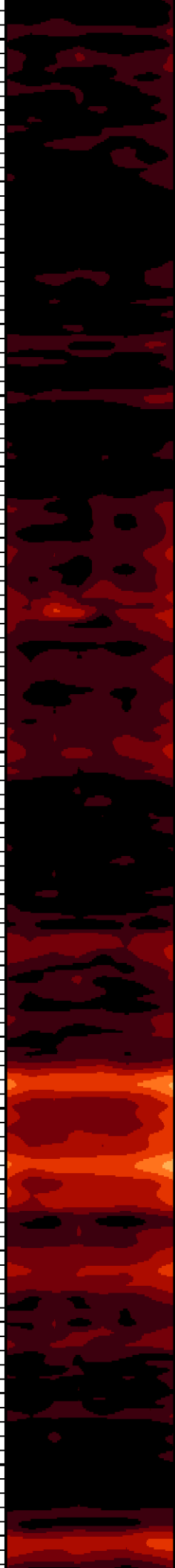


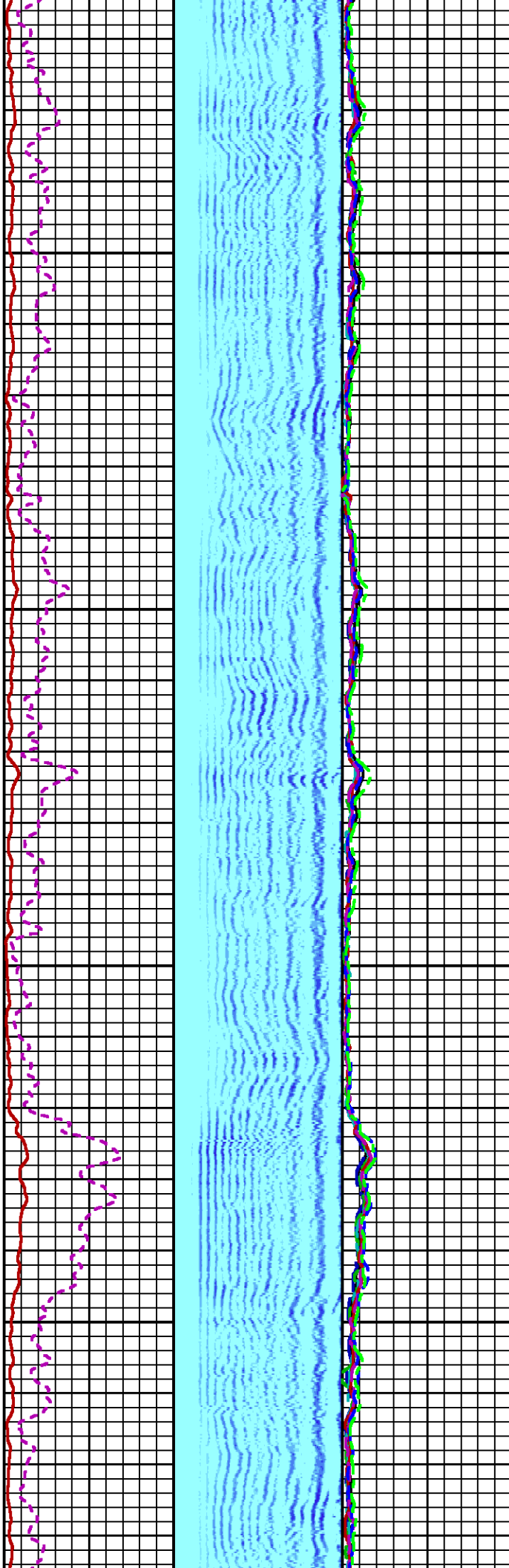
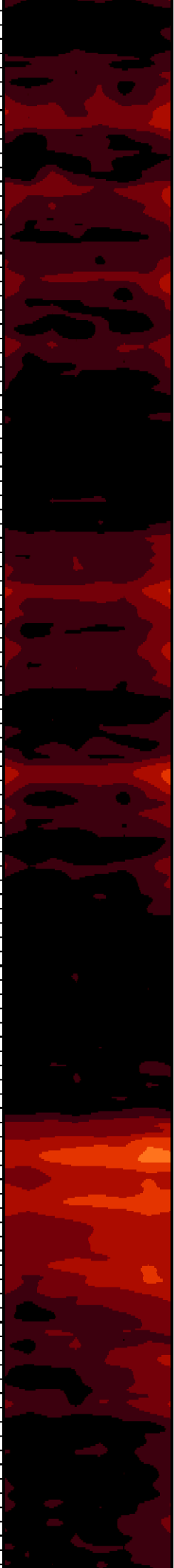


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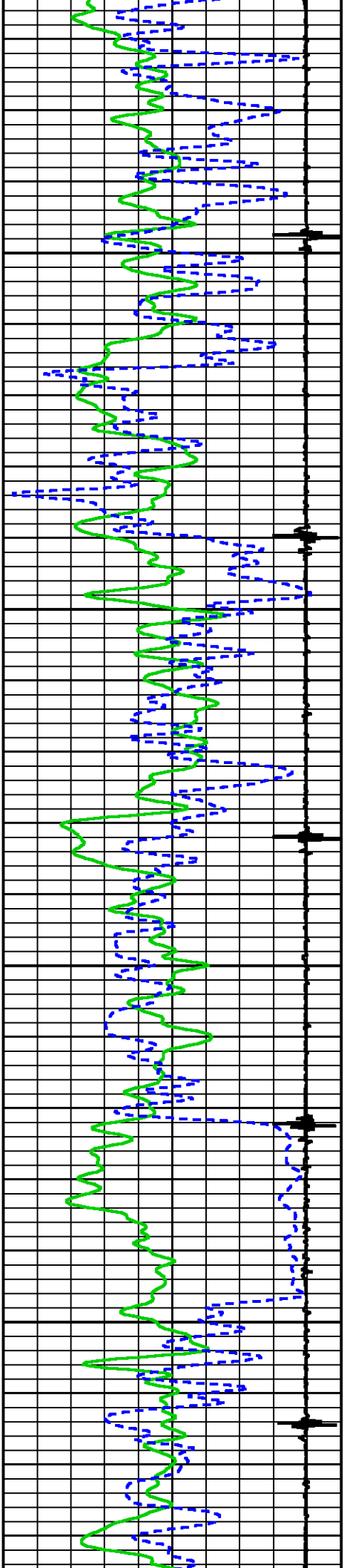


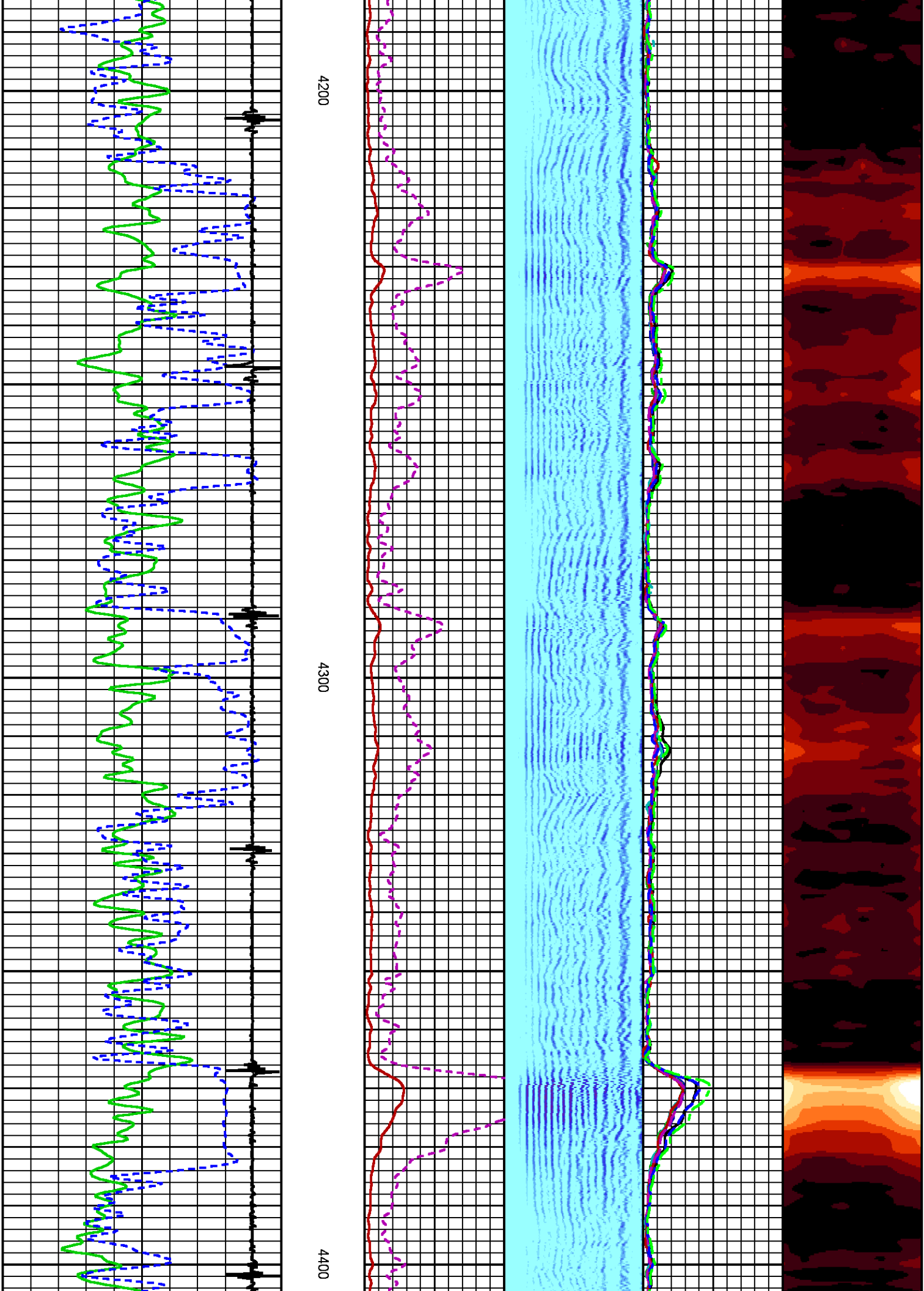


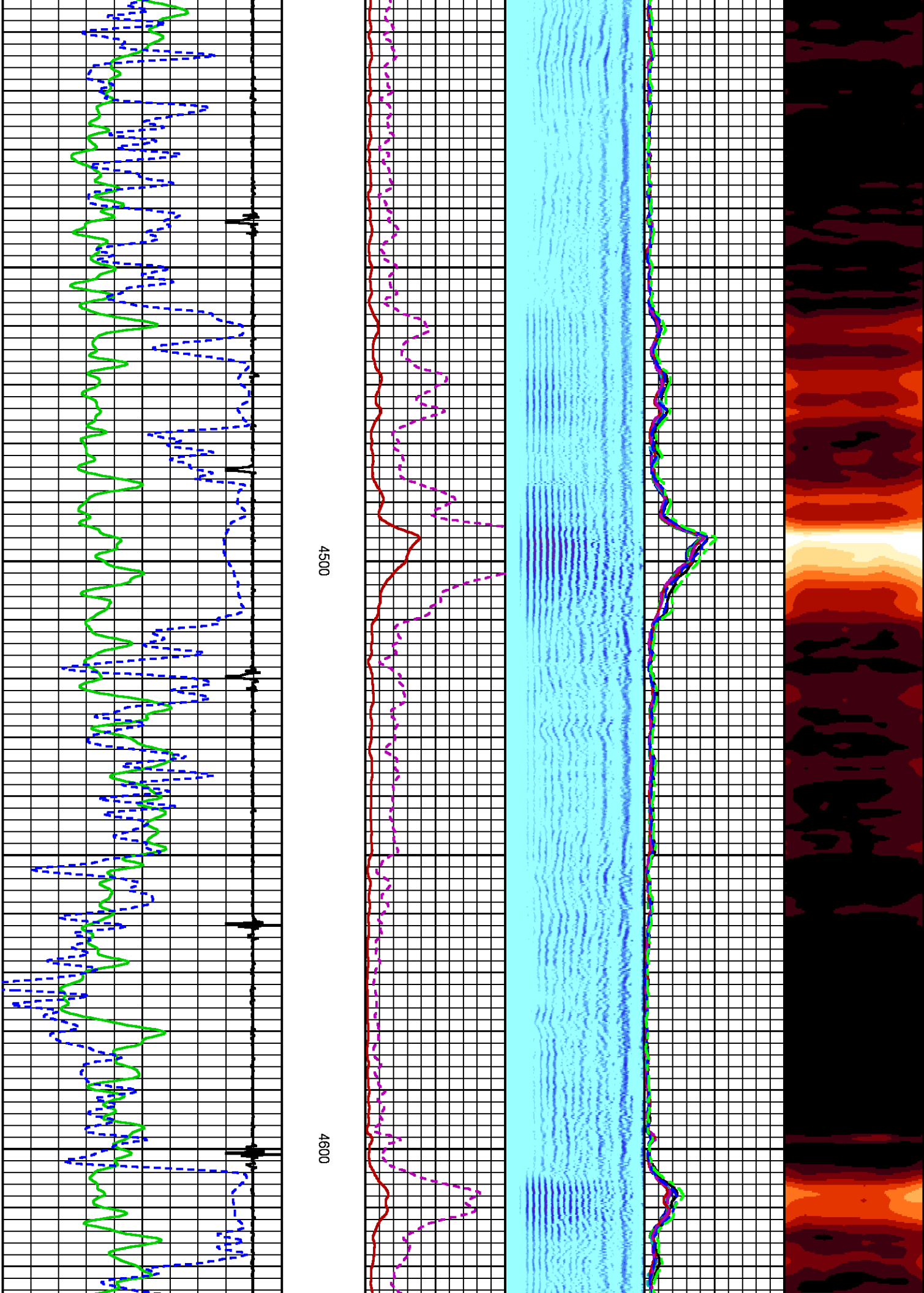


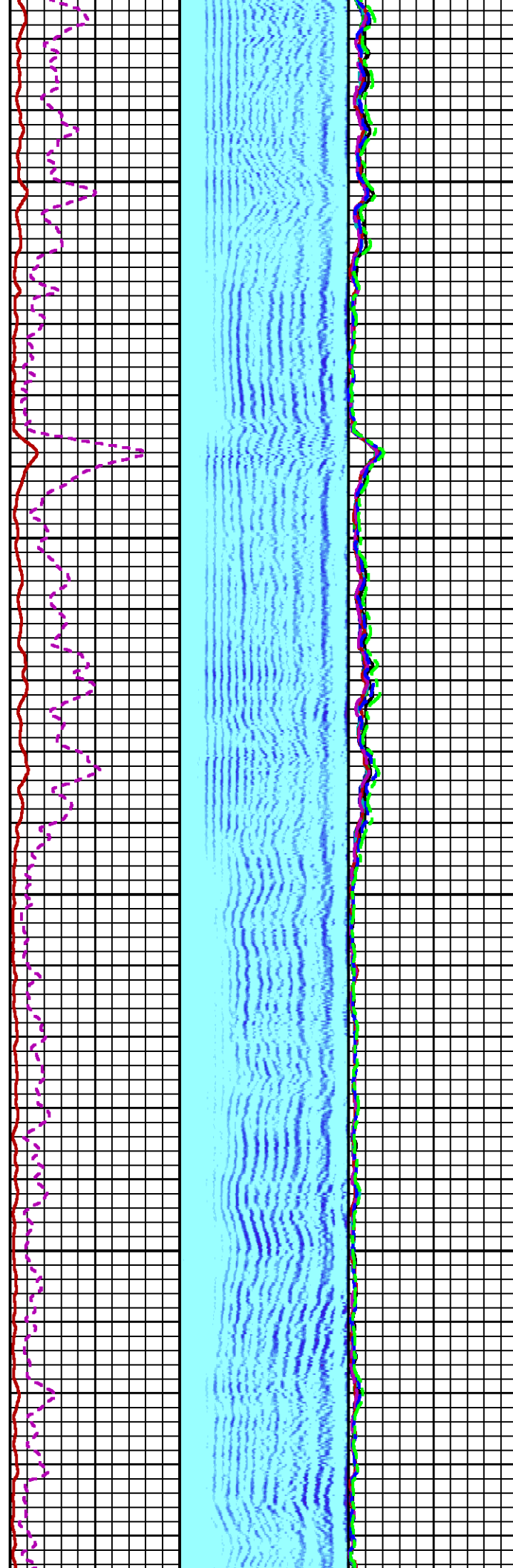
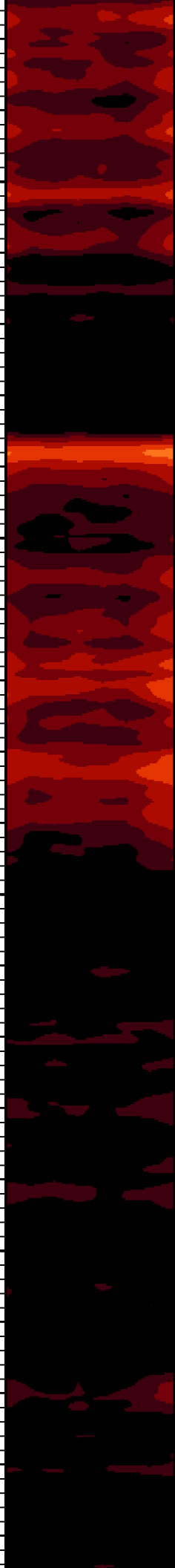
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4100



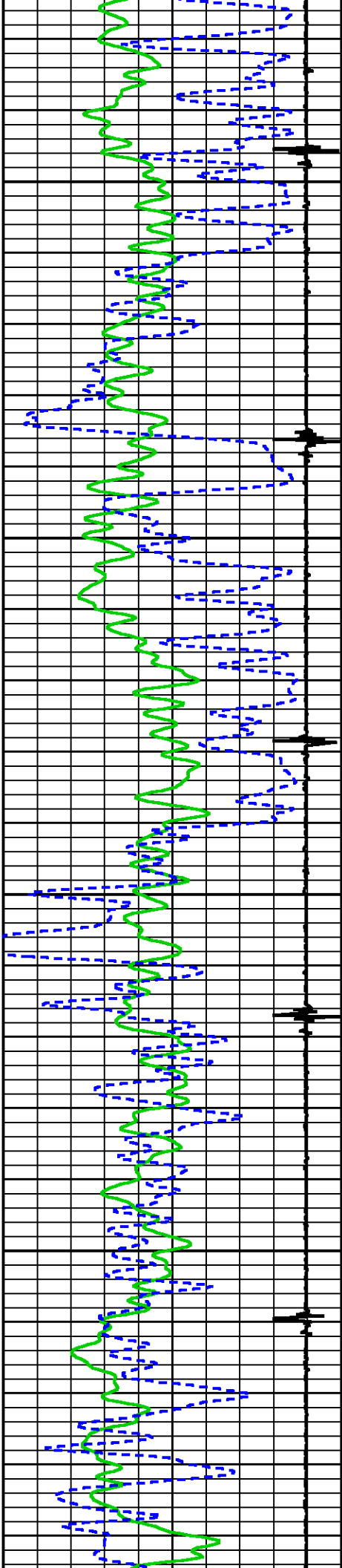


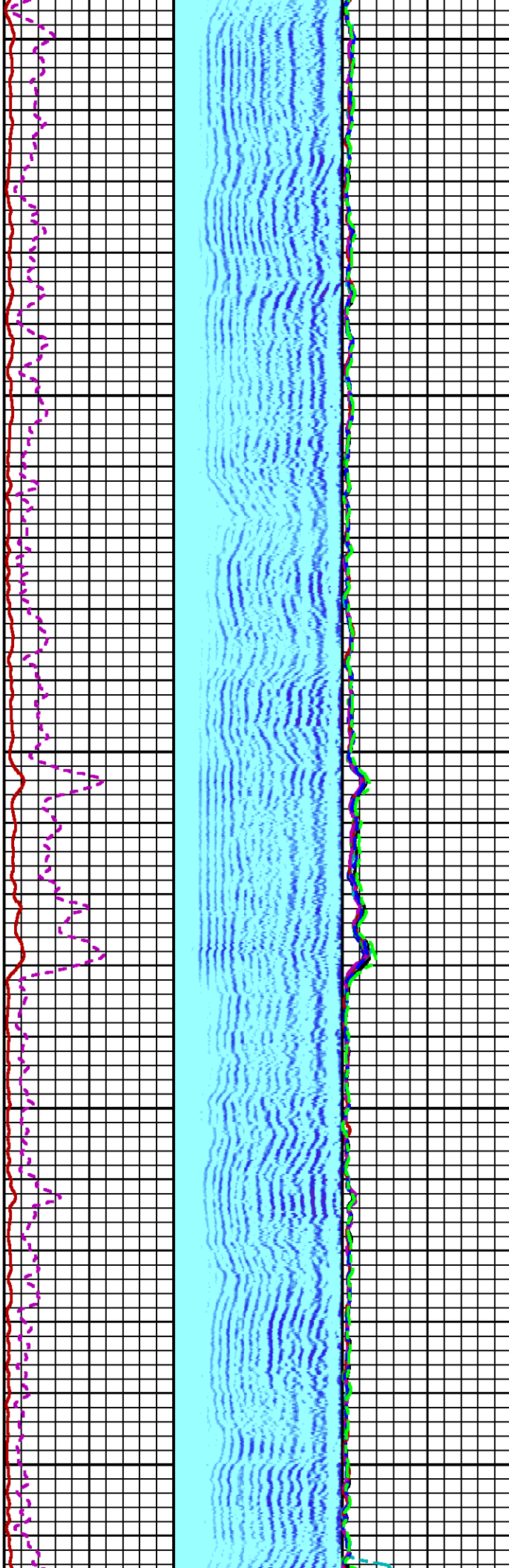
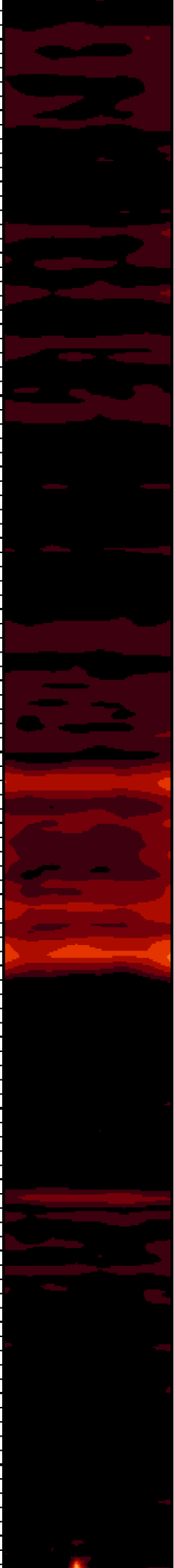




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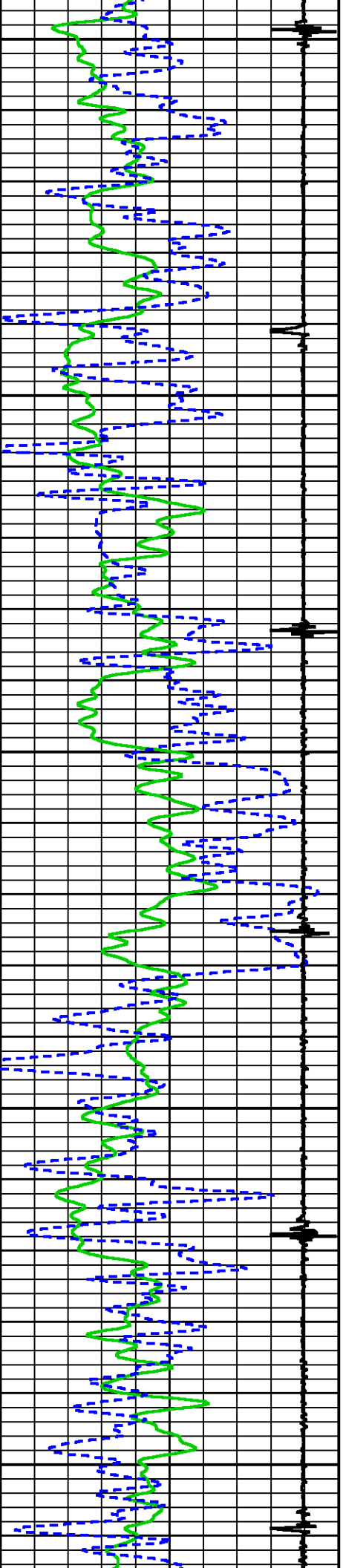
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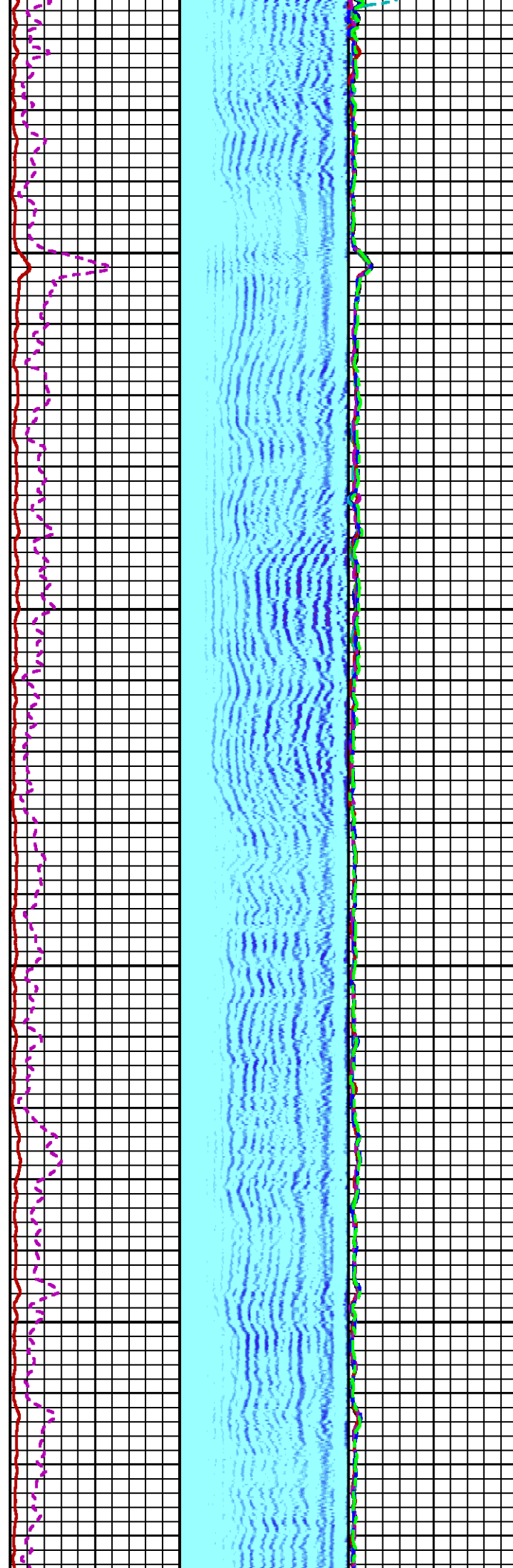
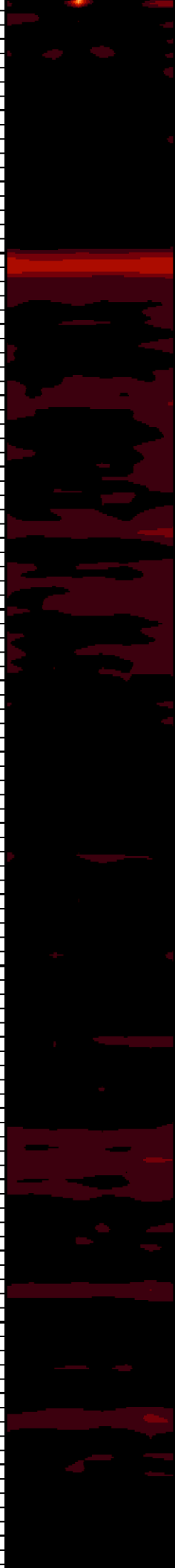




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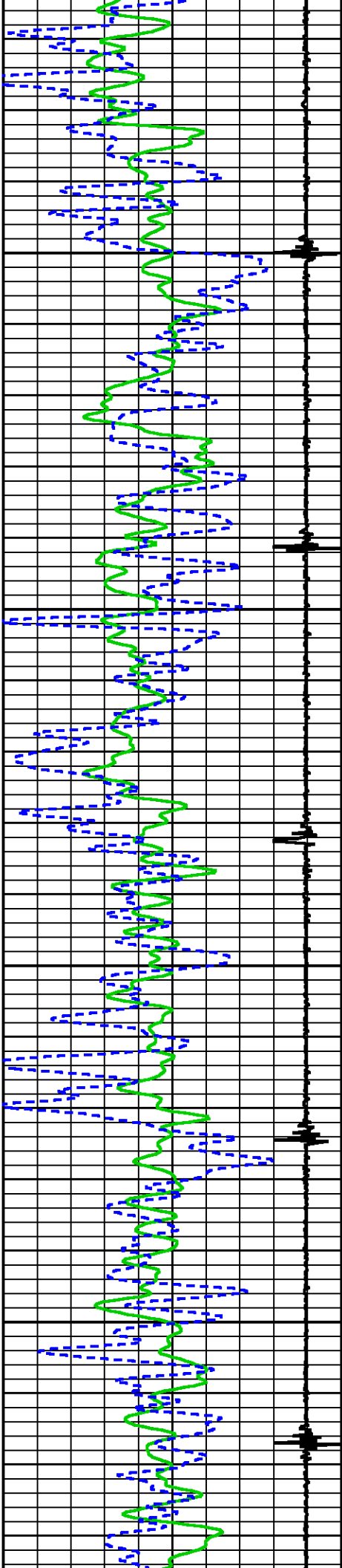
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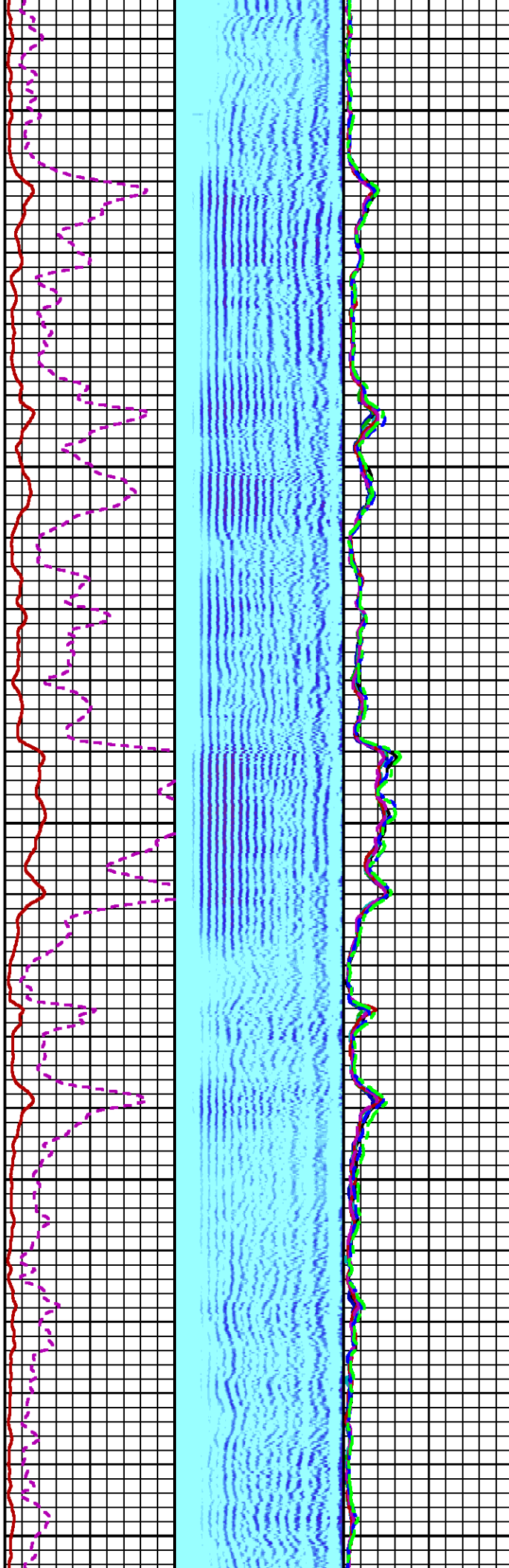
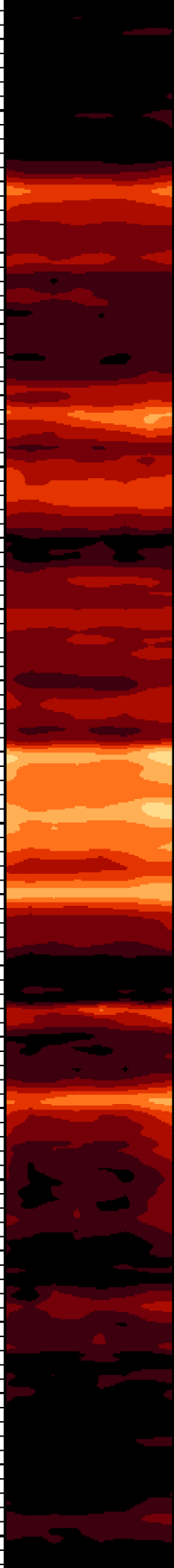




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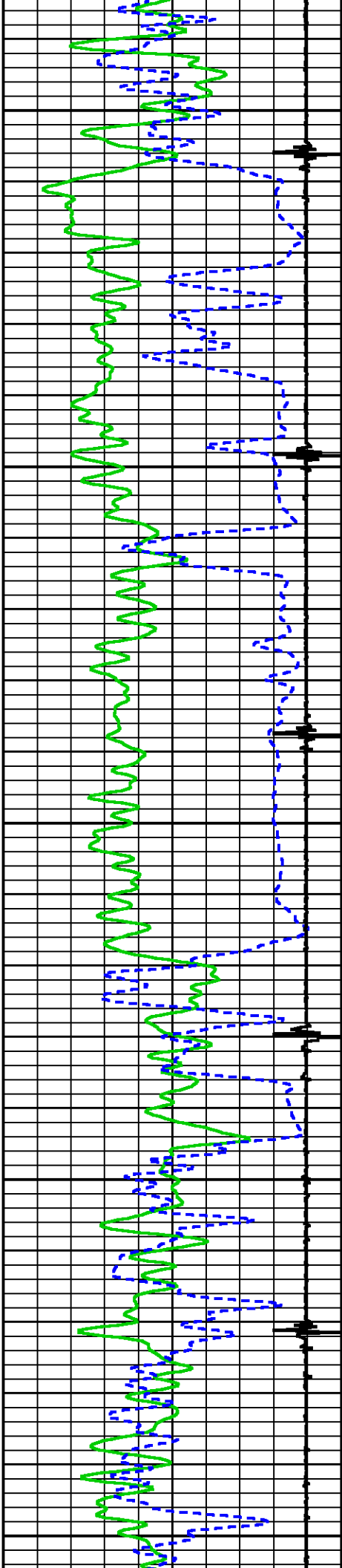


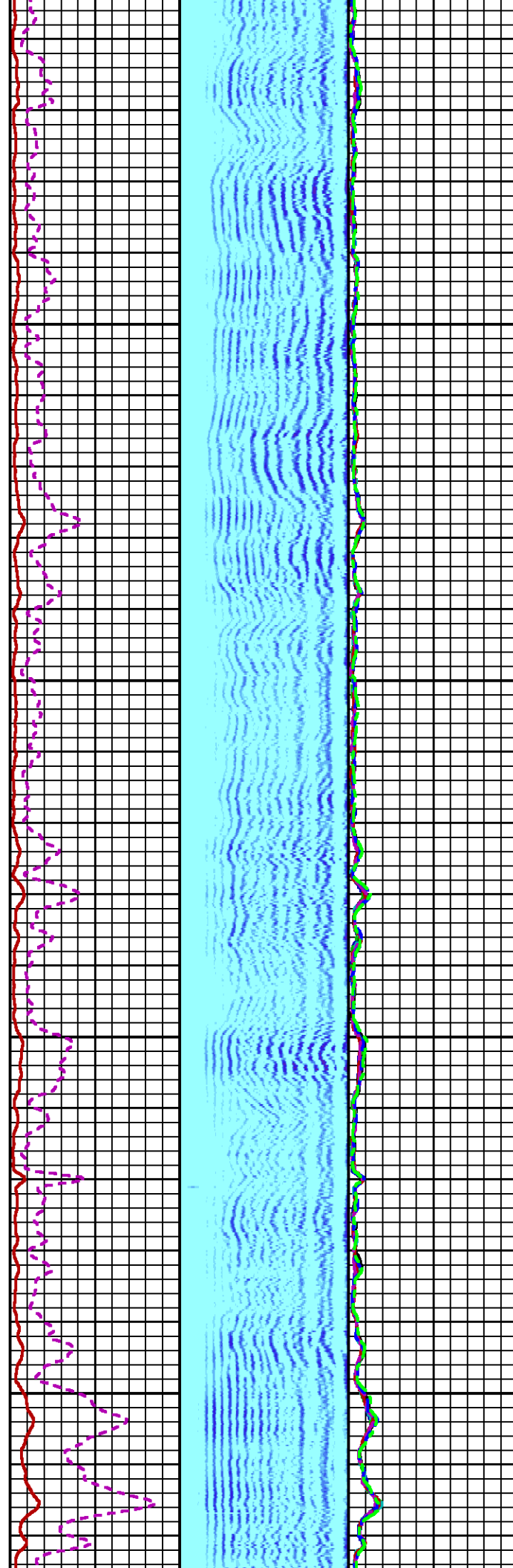
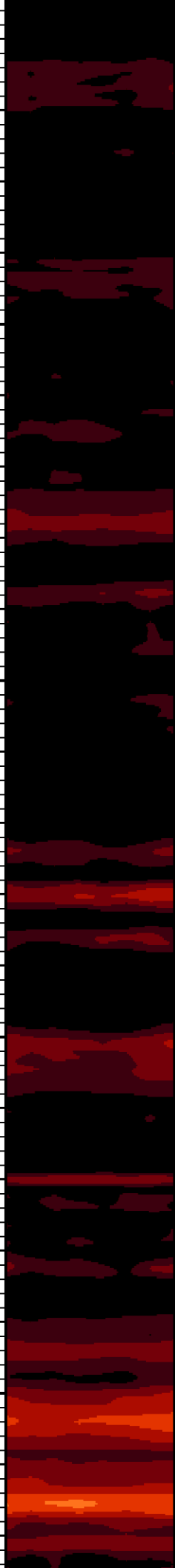


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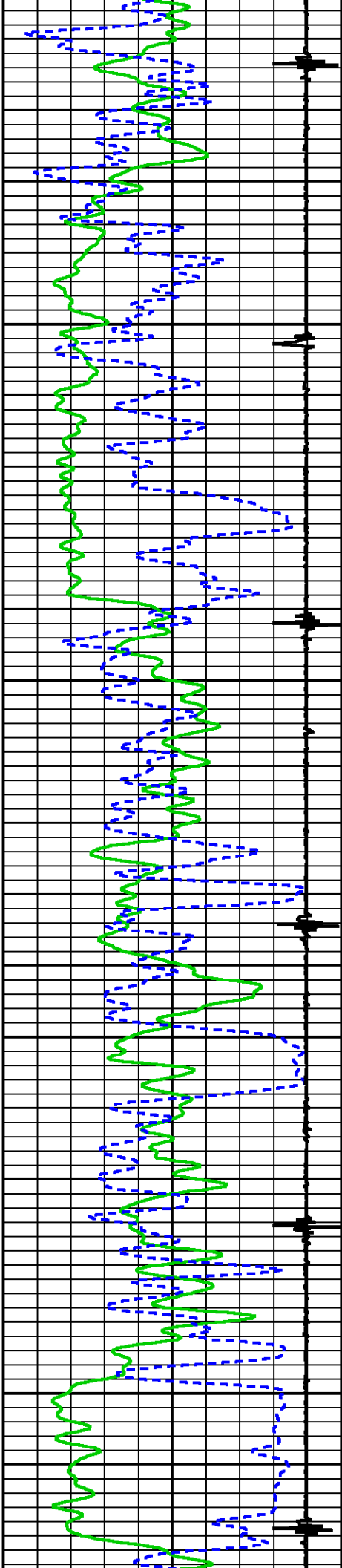
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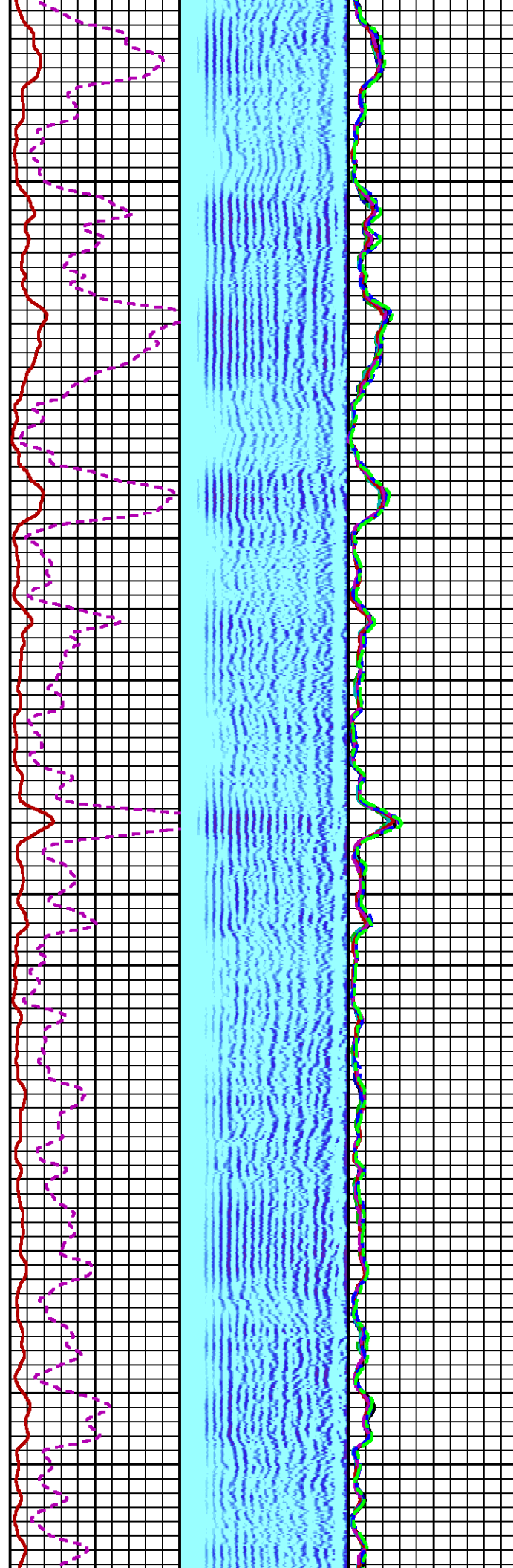
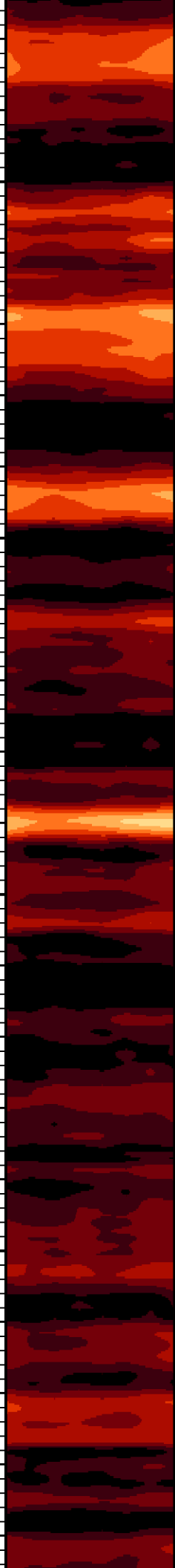




5600

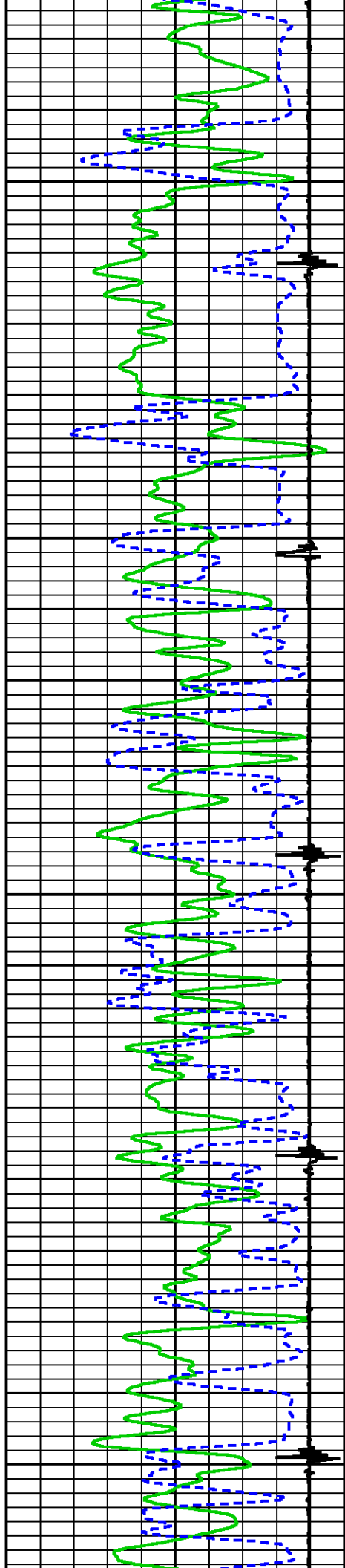
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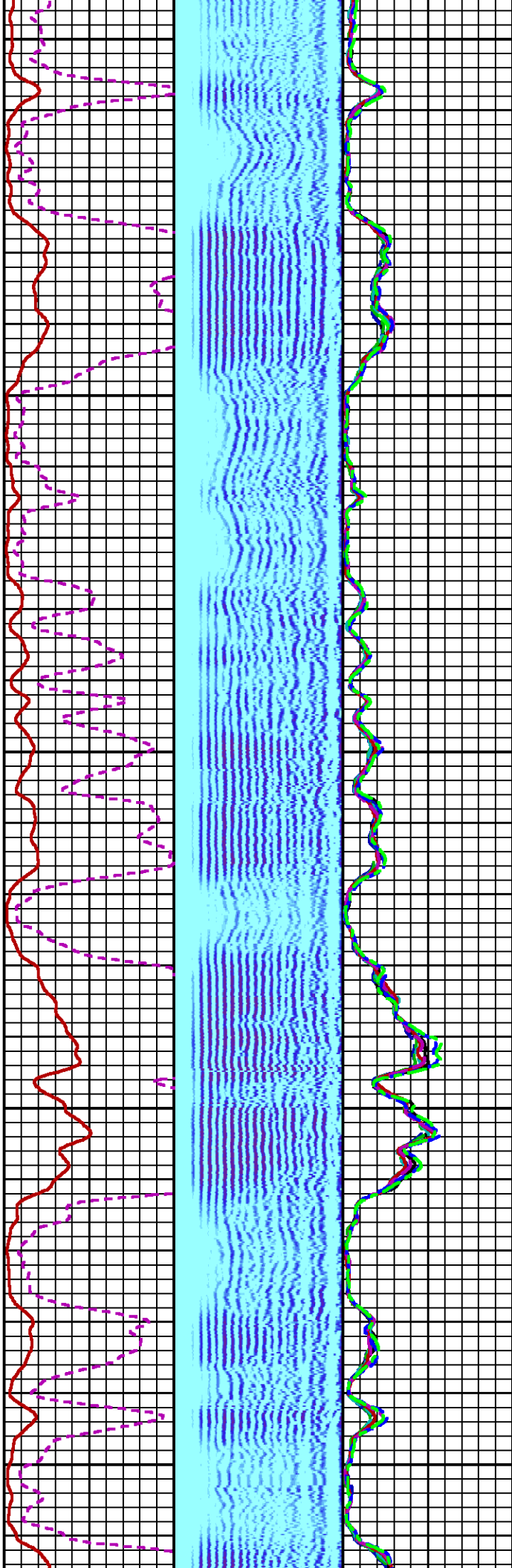
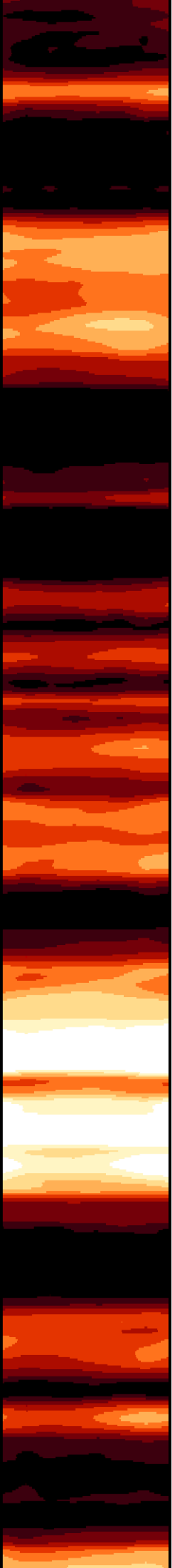




5800

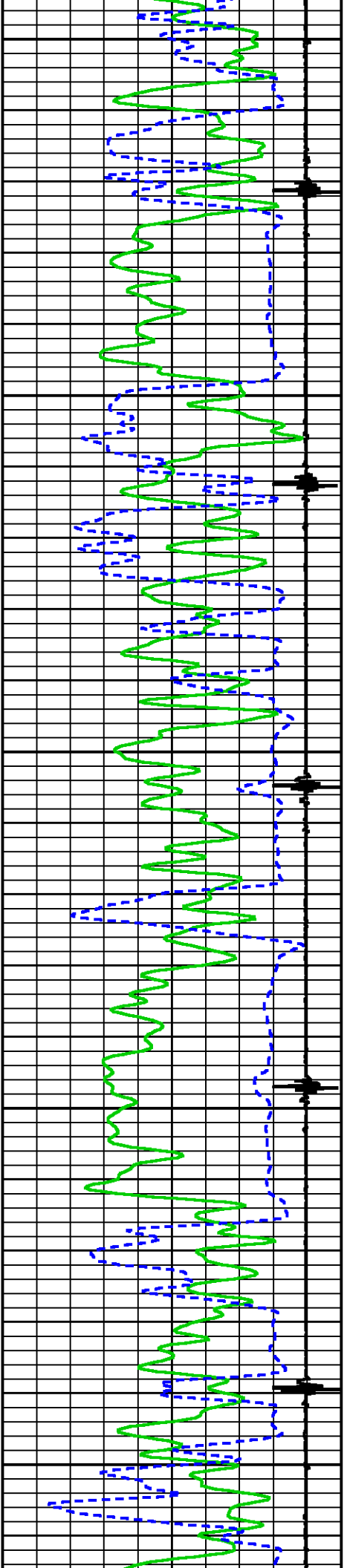
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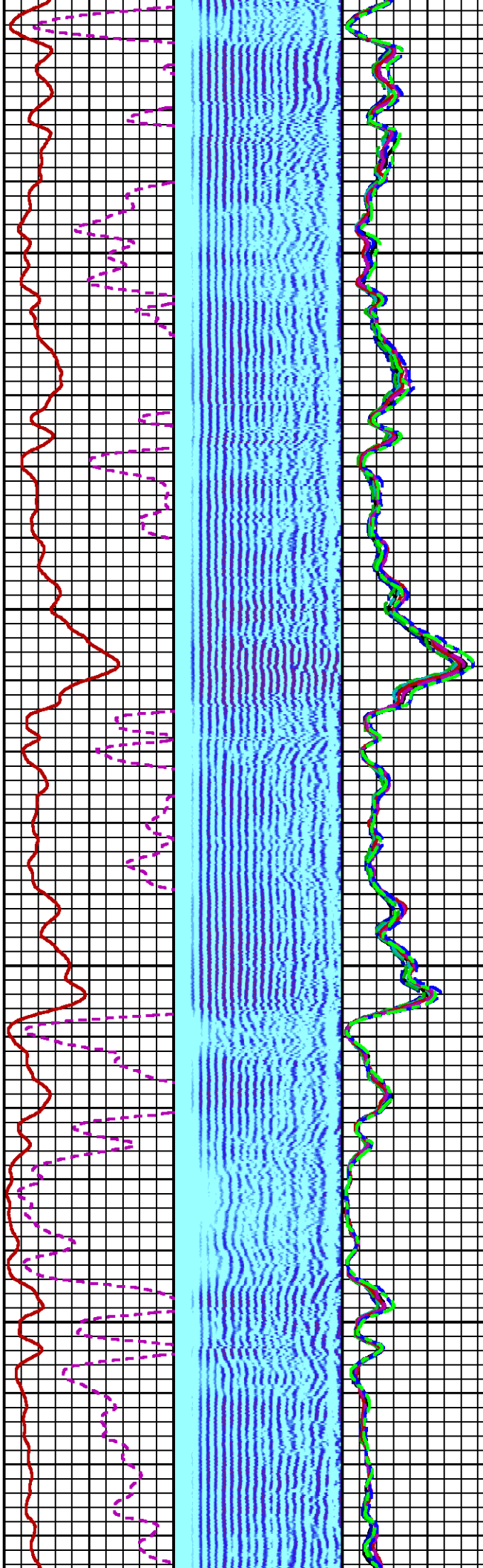
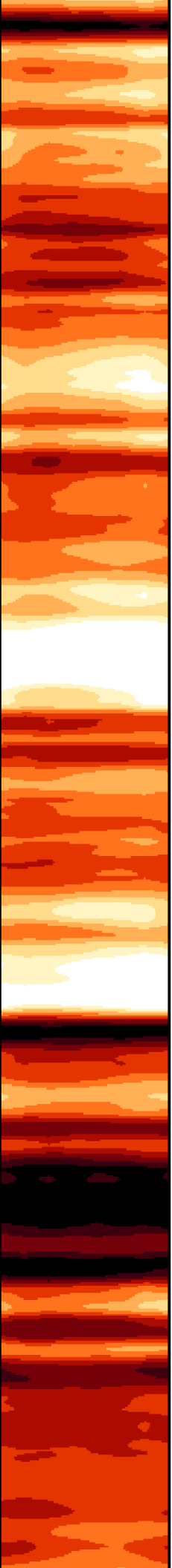




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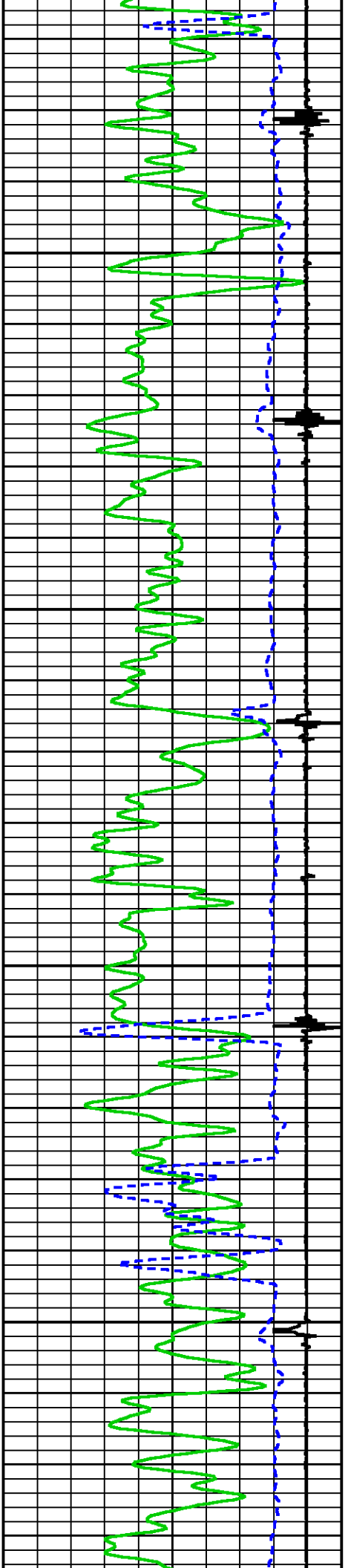
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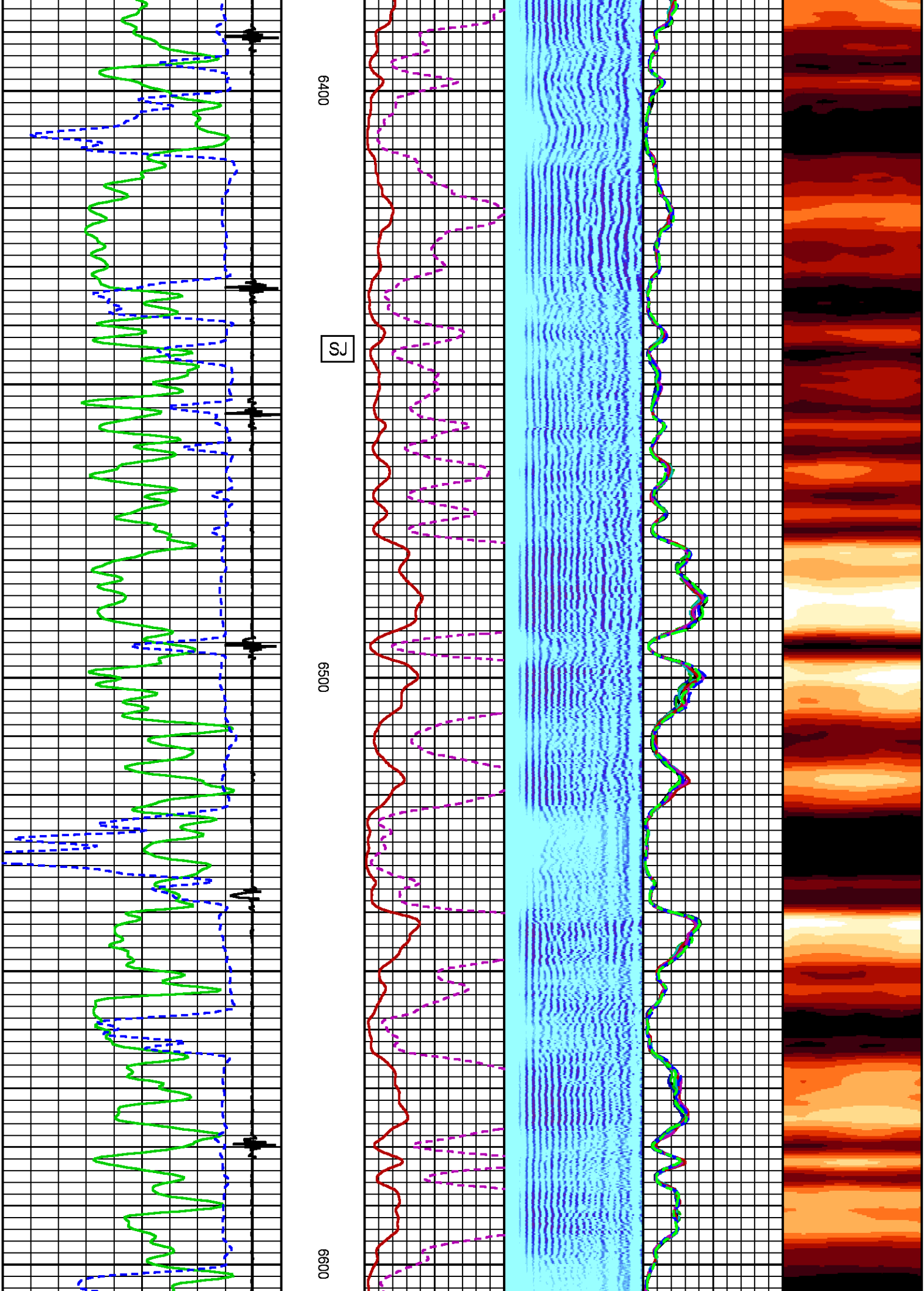


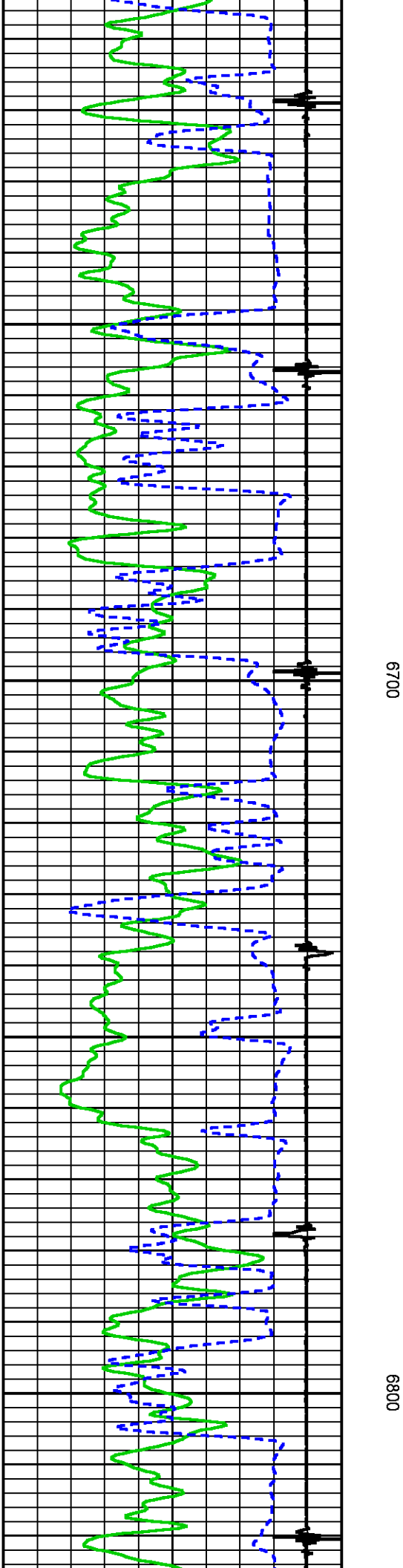
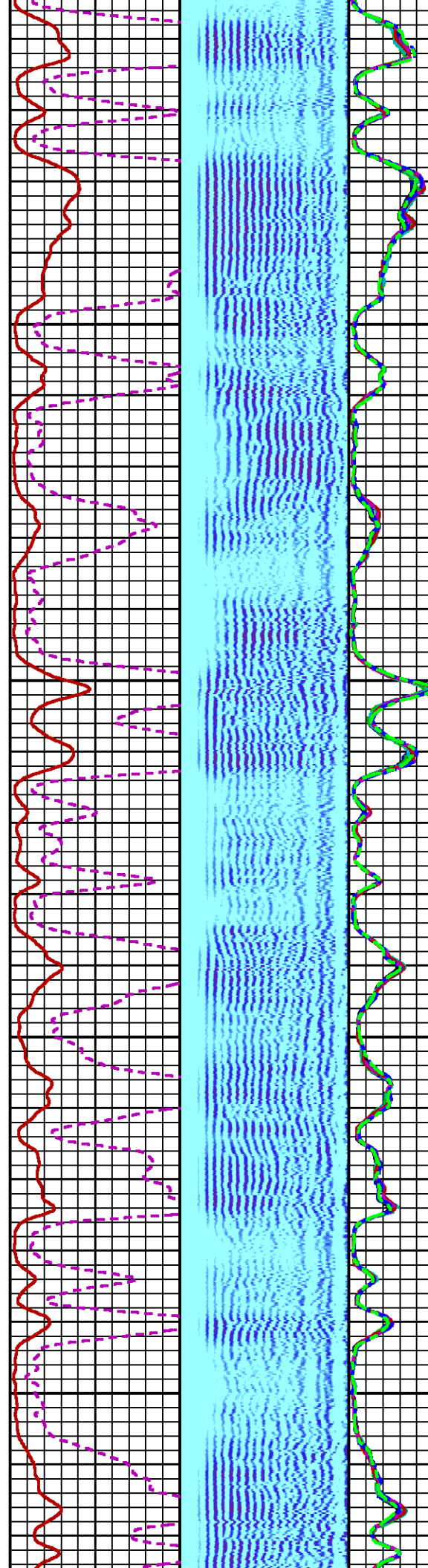
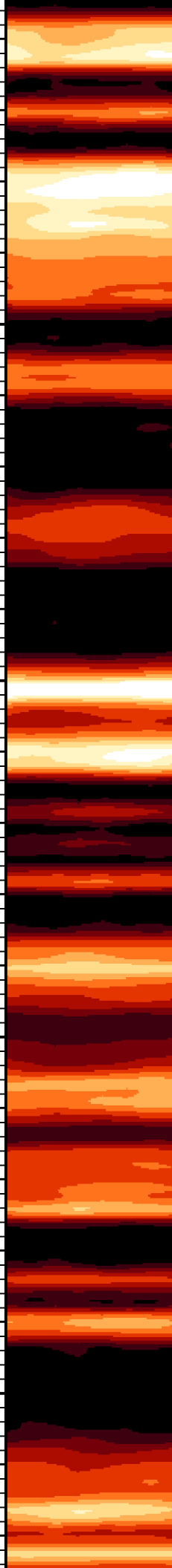


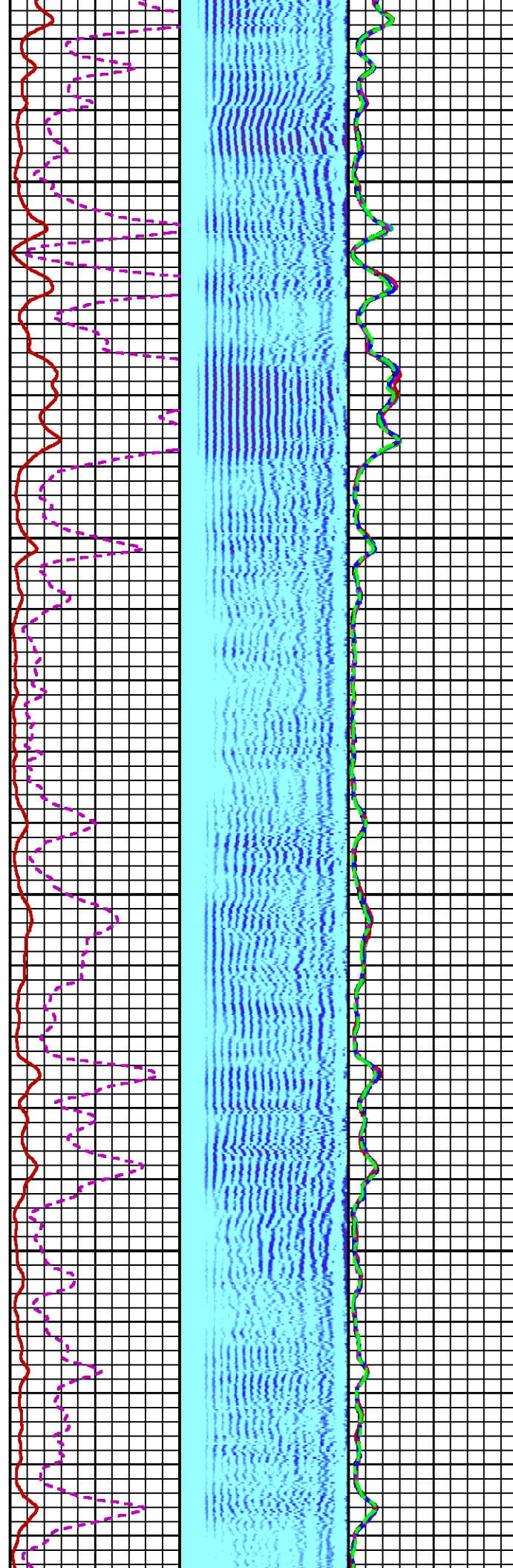
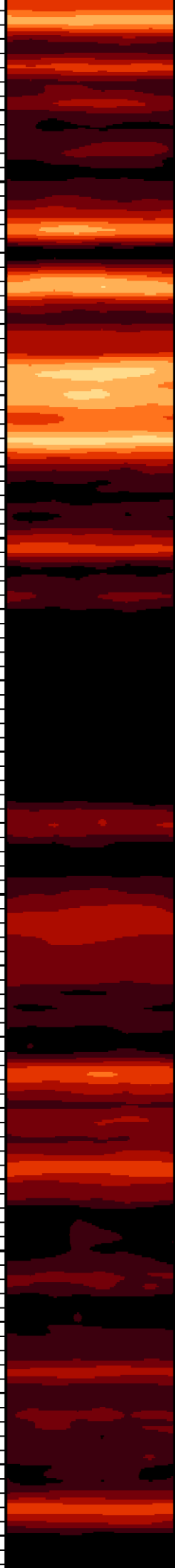
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6300



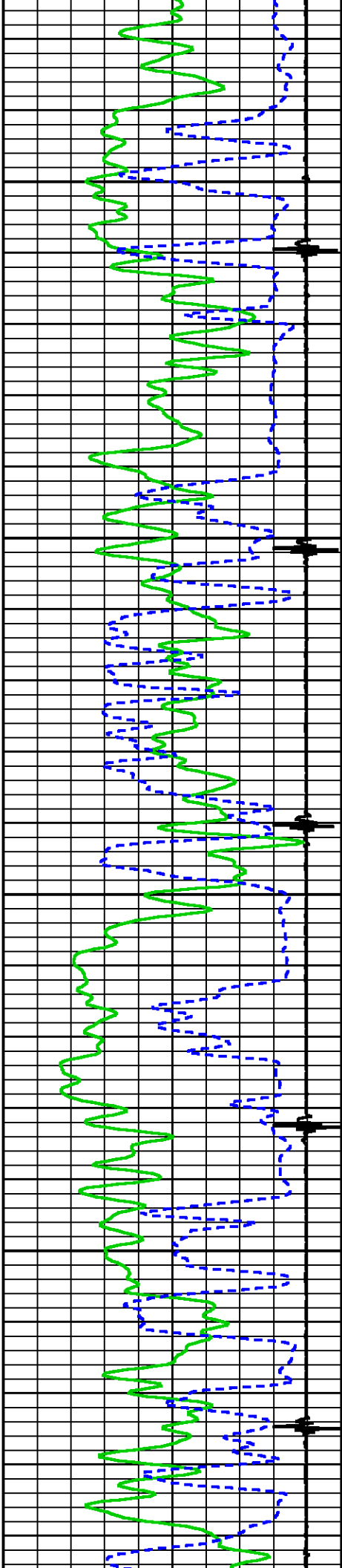


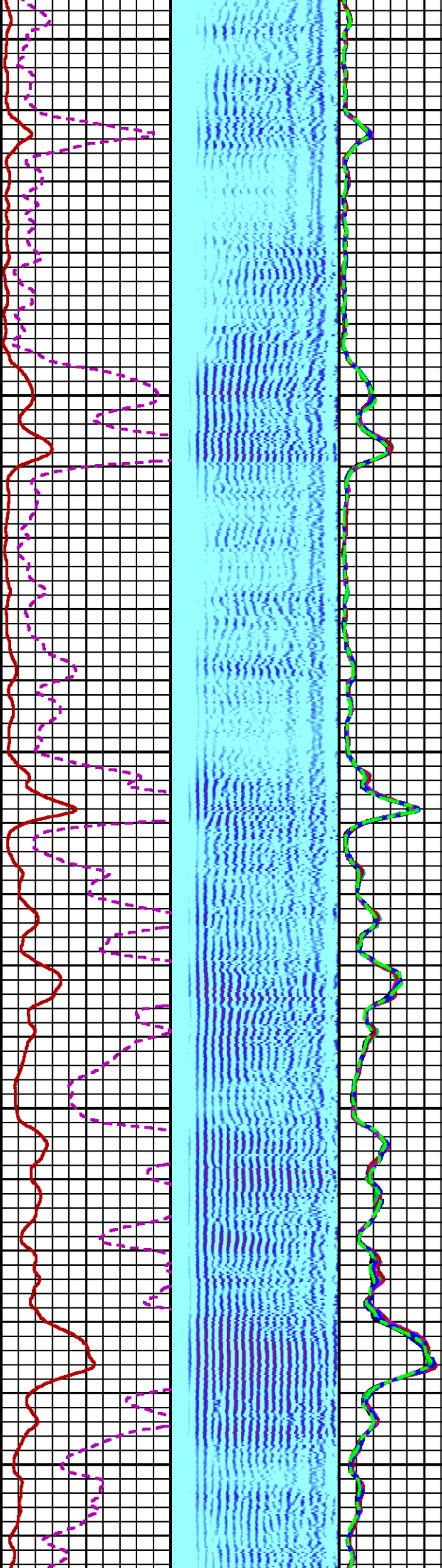
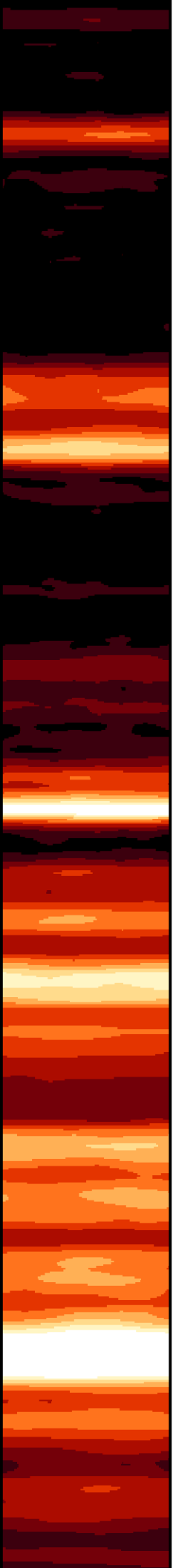




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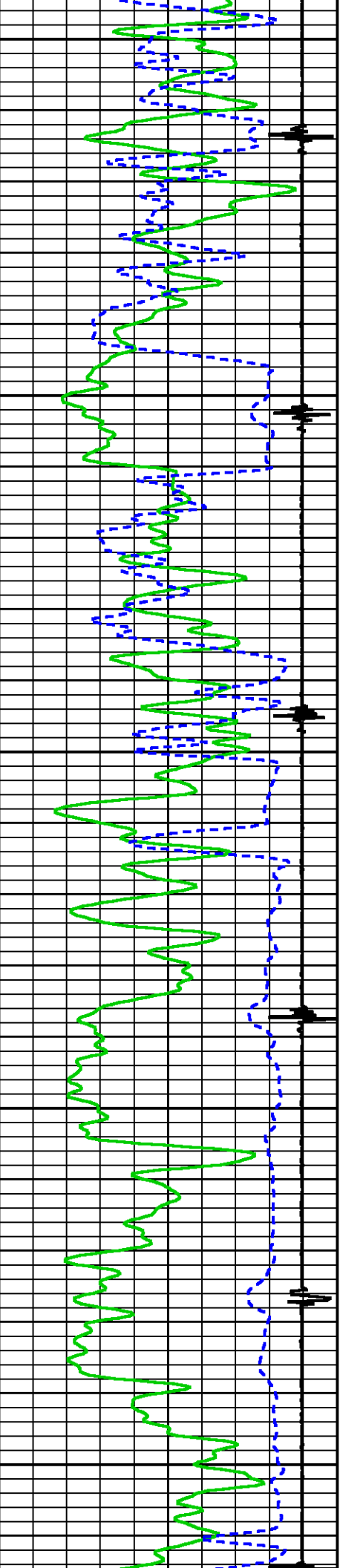
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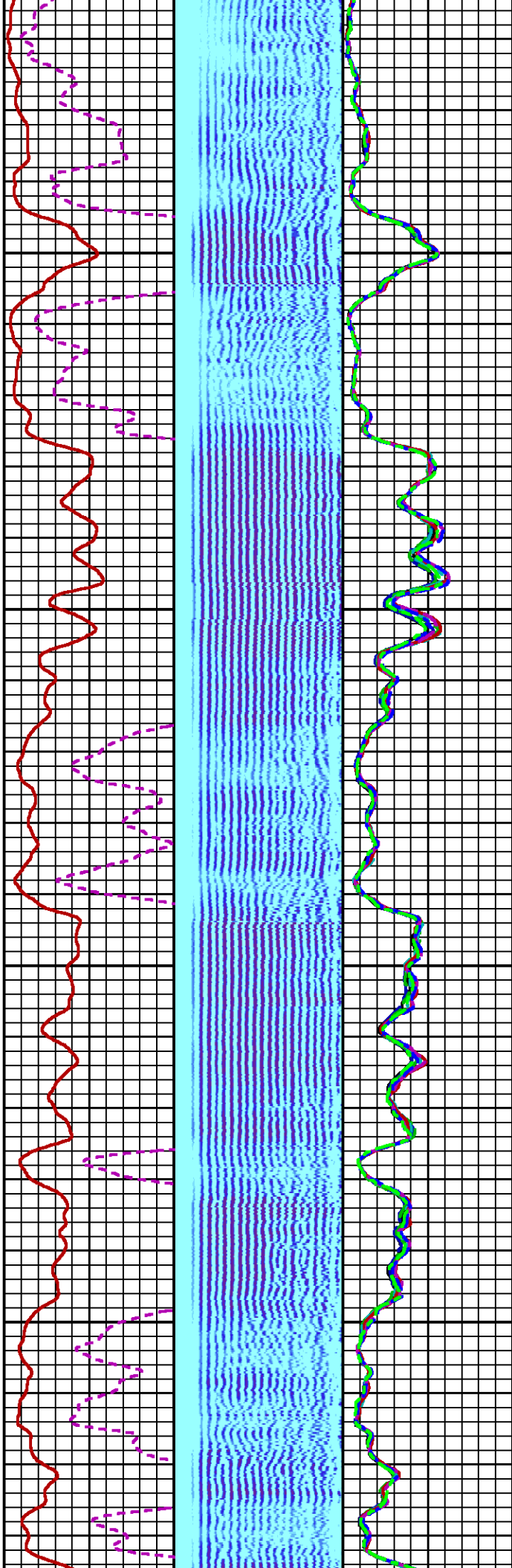




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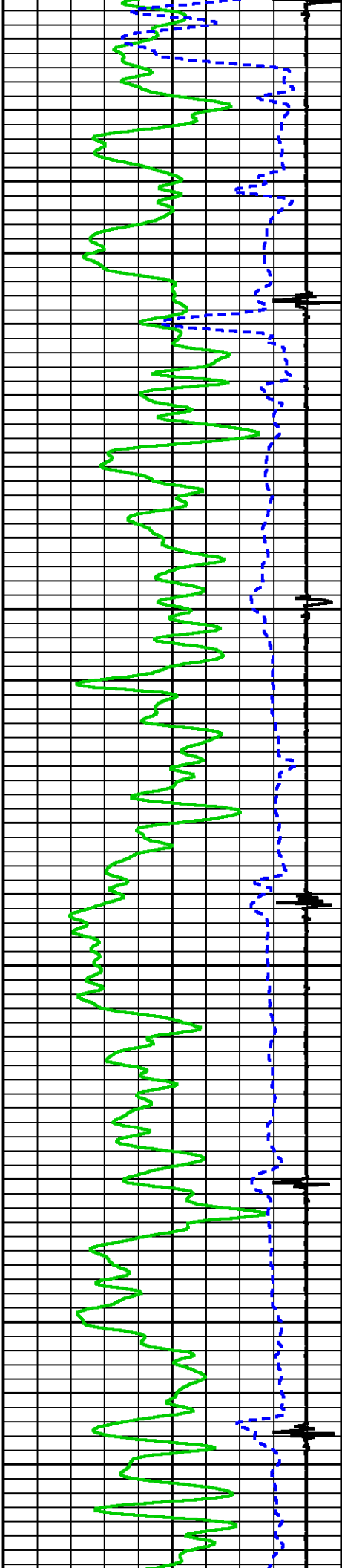
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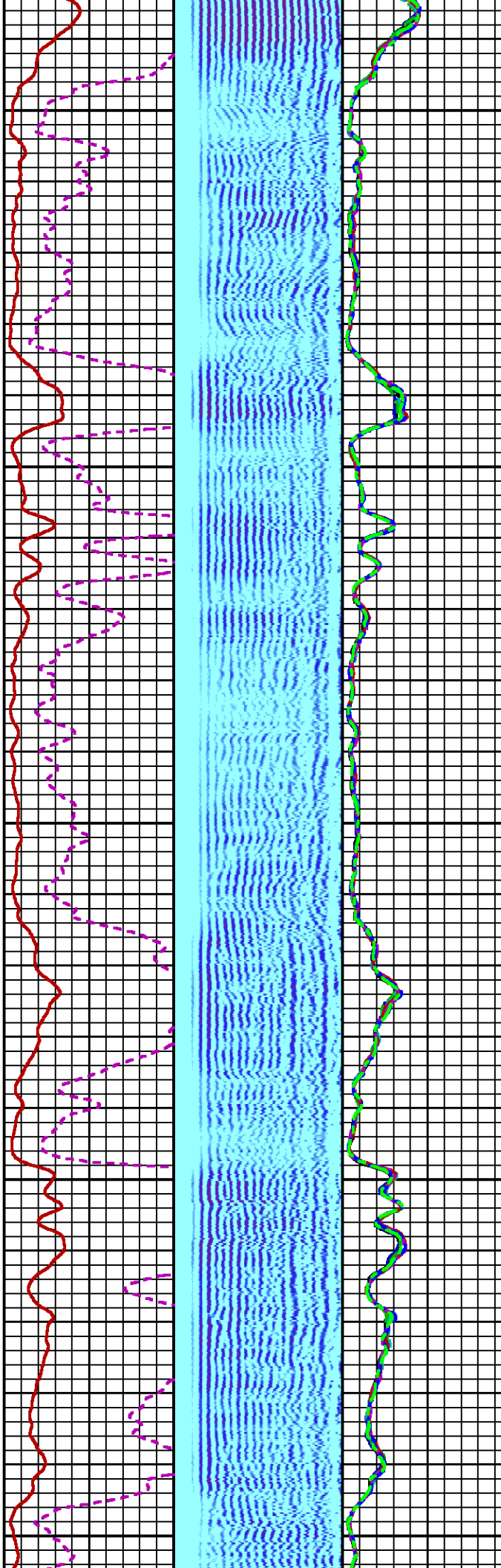
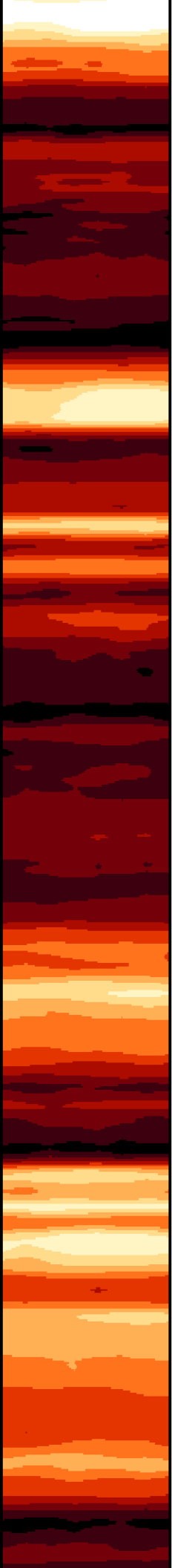




7300

7400



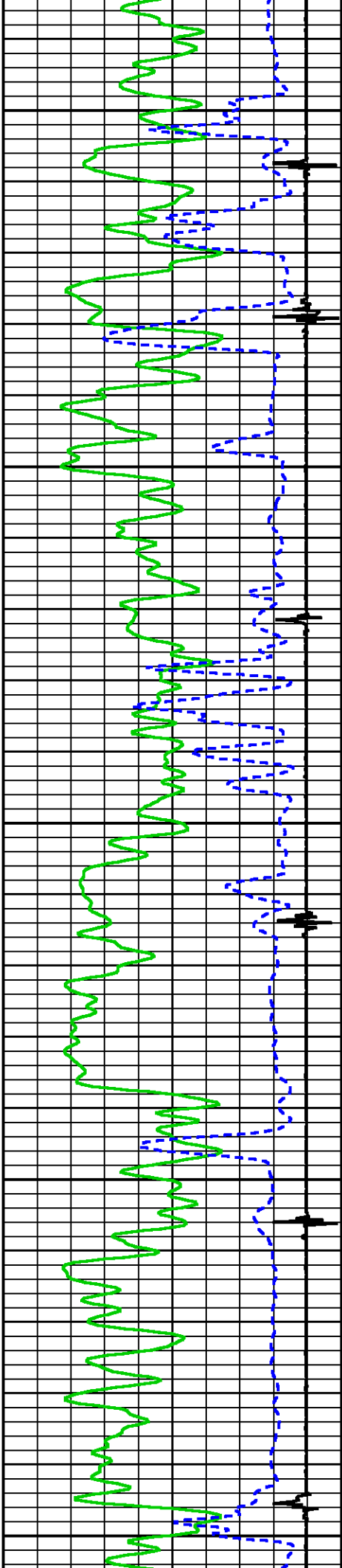


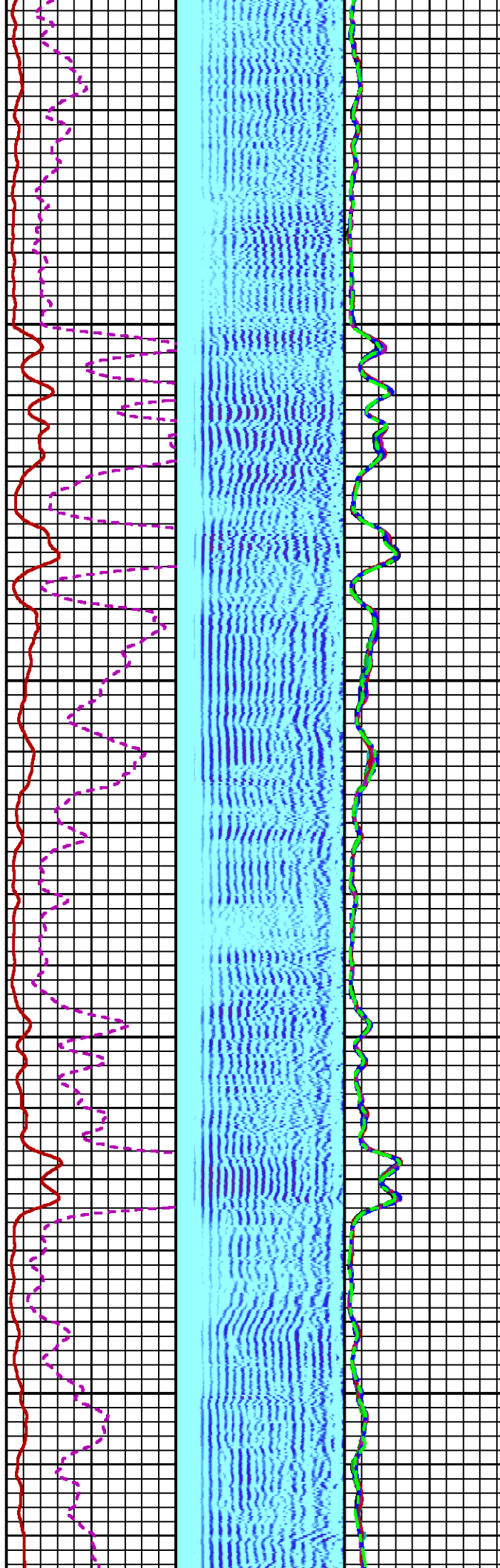
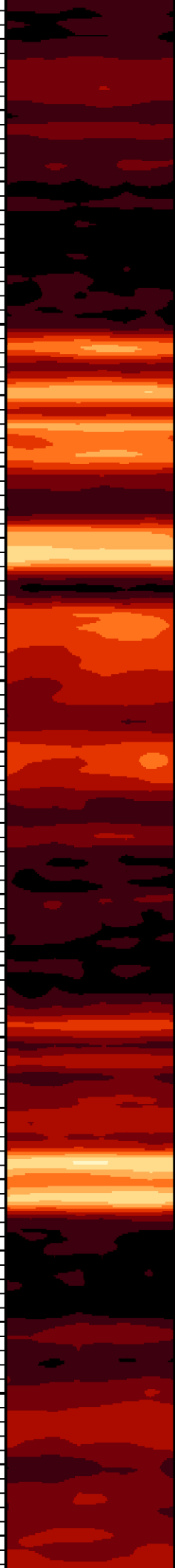
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7600

7700

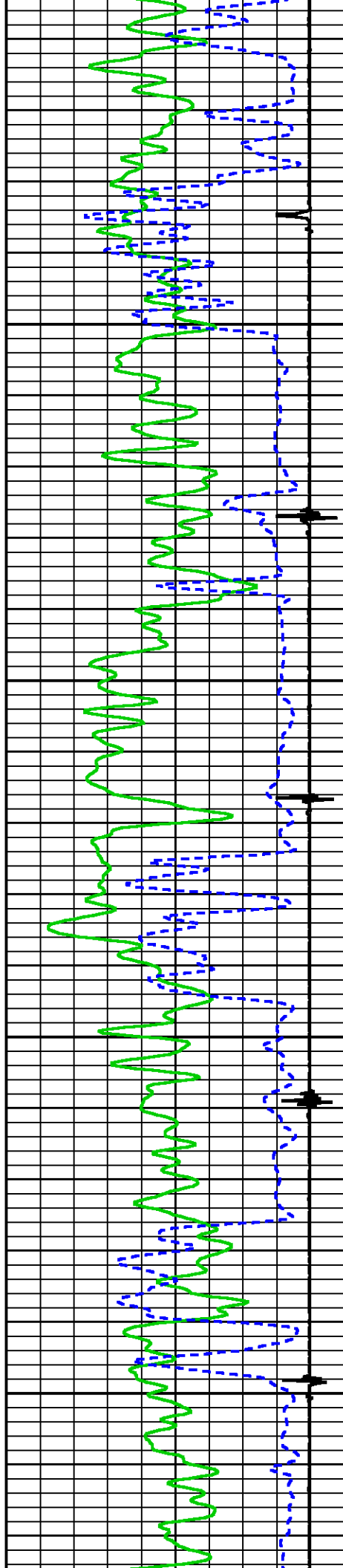
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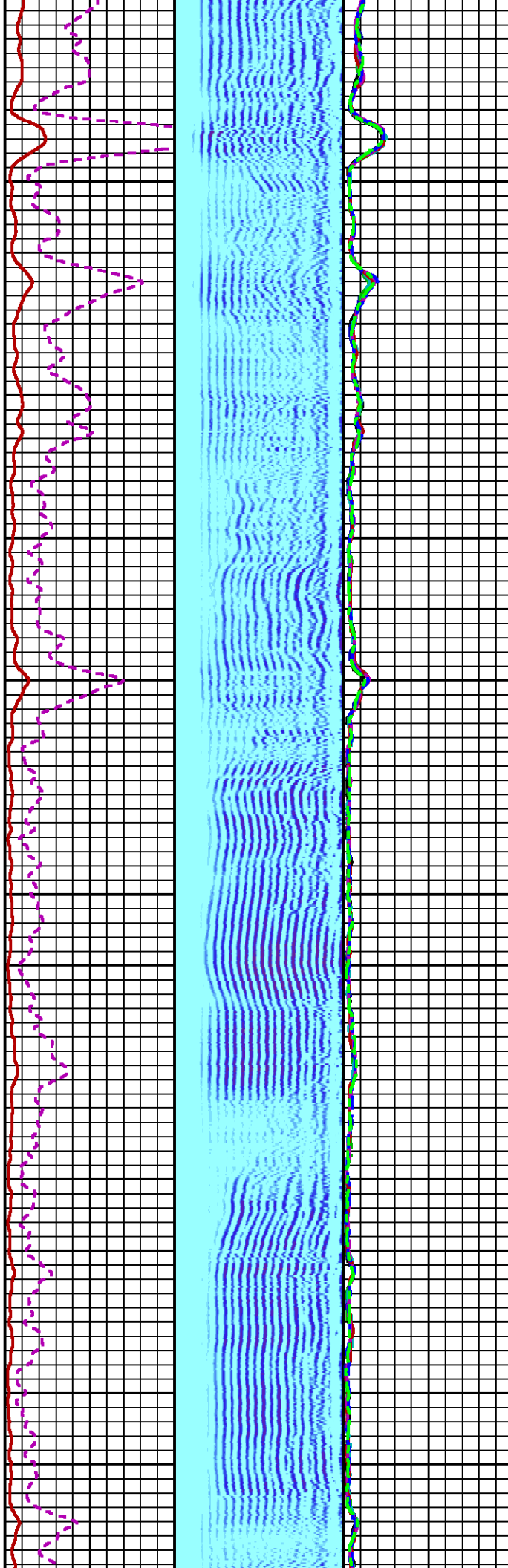
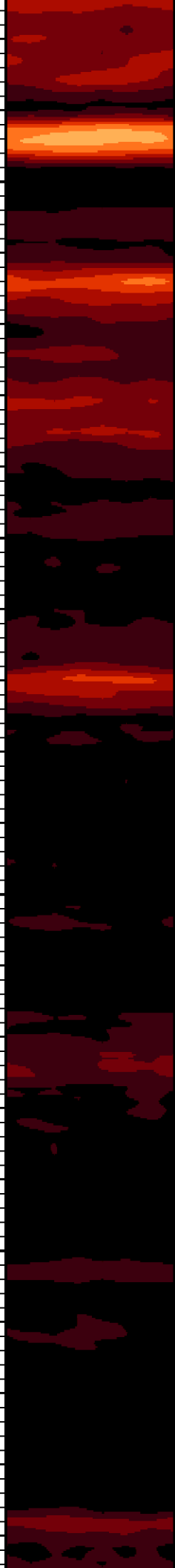




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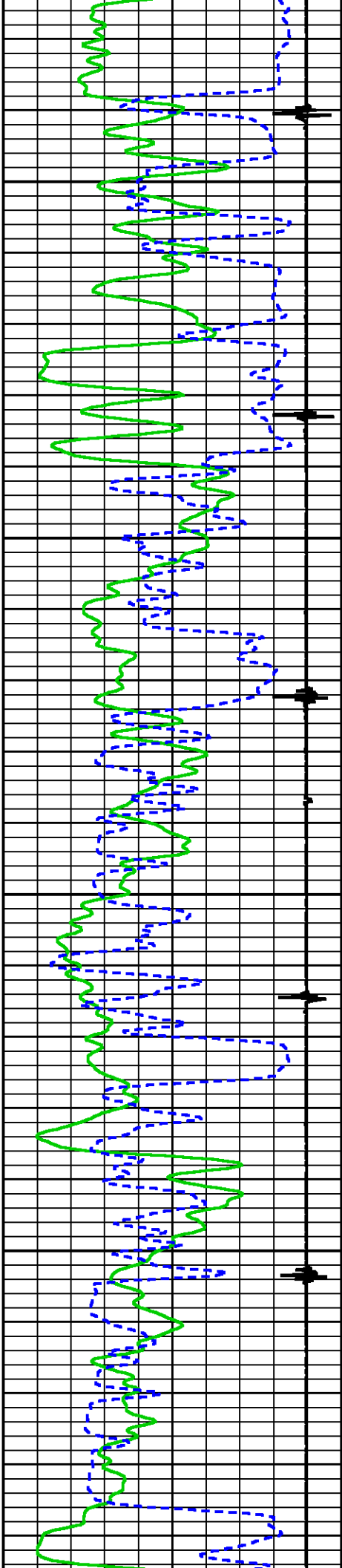
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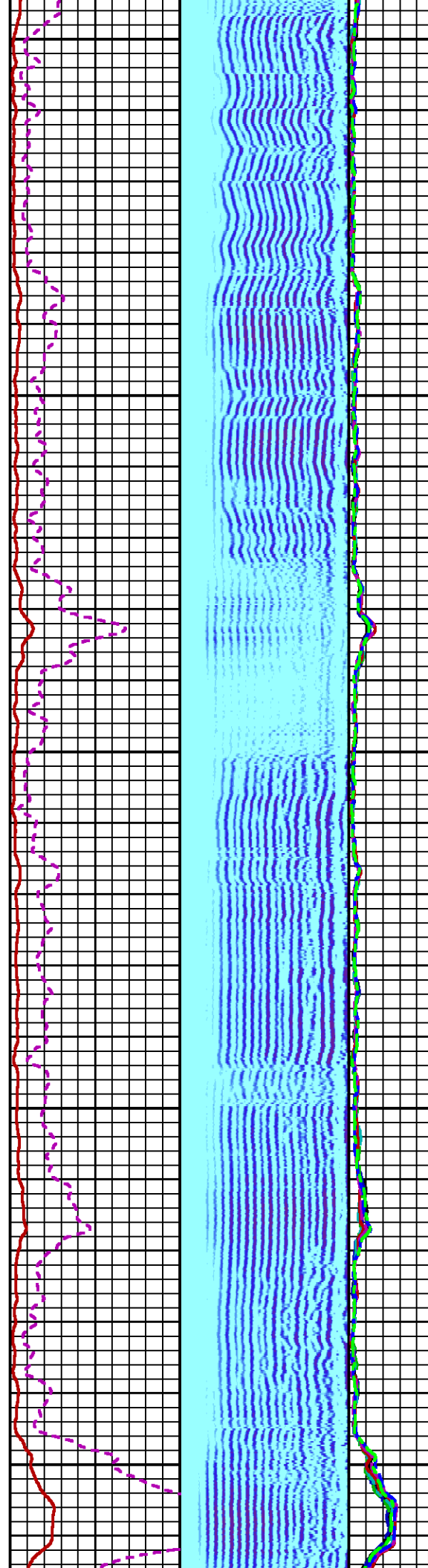
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8100





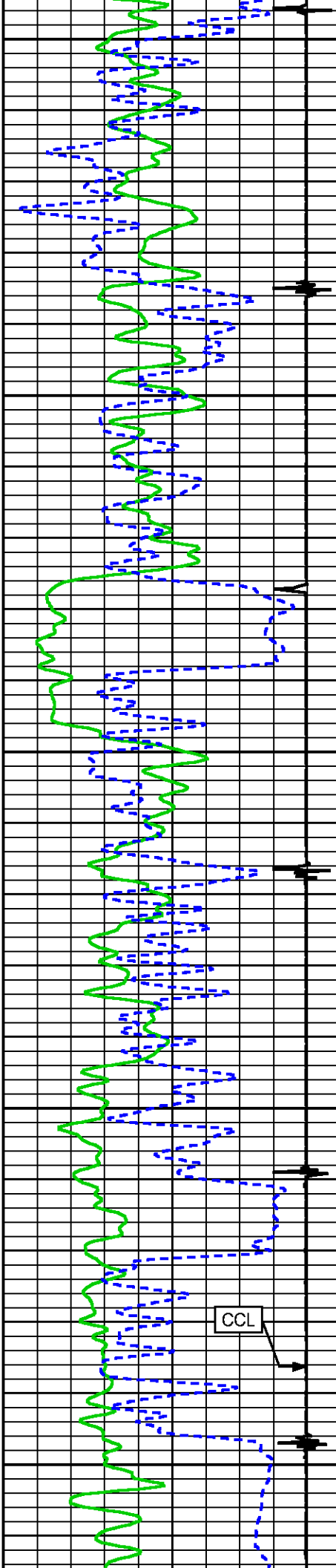
AR7
AR5
AR3
AR1
AR2
AR4
AR6

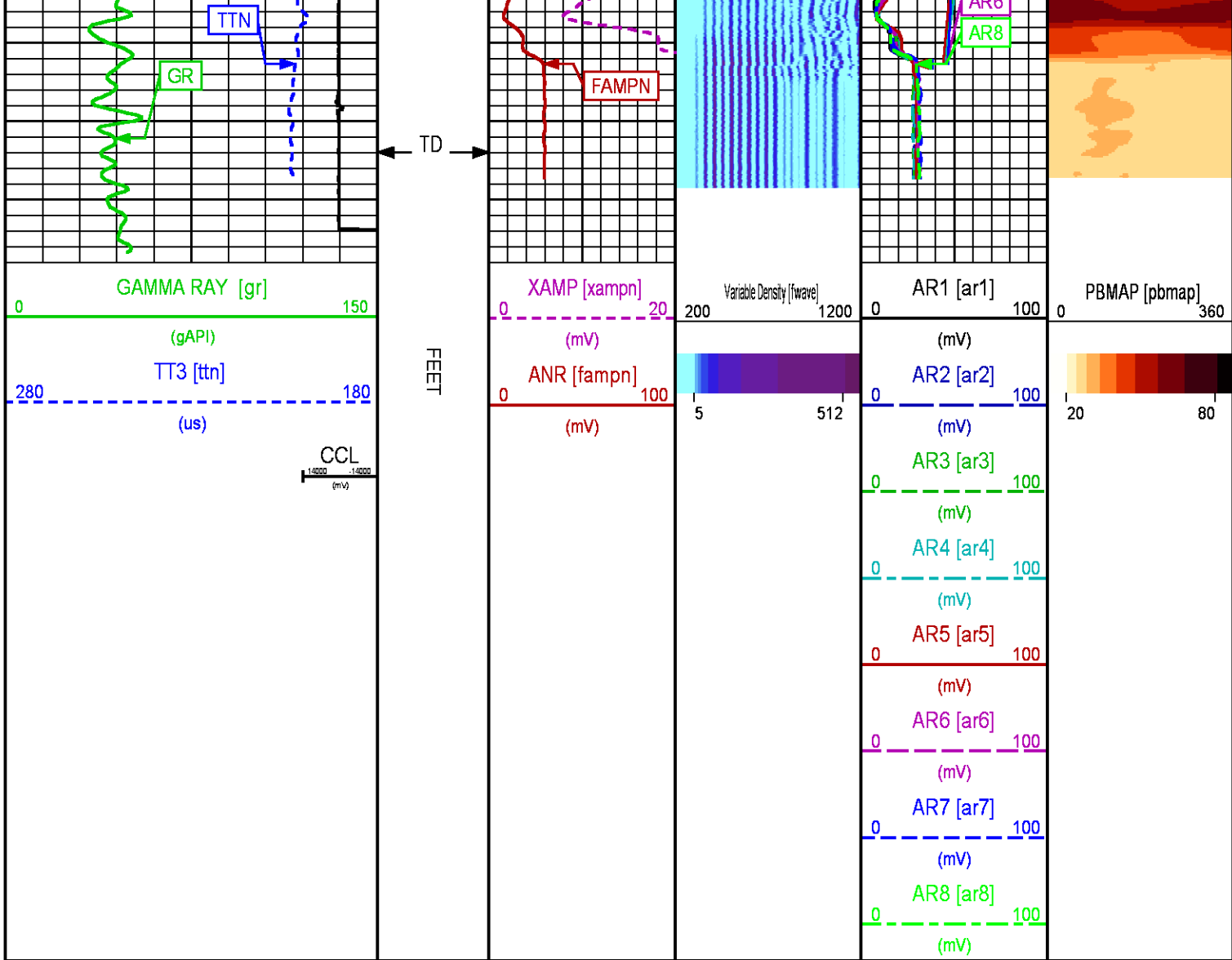


8200

8300

CCL





REPEAT PASS 0 PSI

ECLIPS 7.0i ECLIPS General Release Rel 7.0i Thu Jun 08 20:36:10 CDT 2017
Updates: 1,32

Plotted: Wed Nov 28 18:07:07 2018

PARAMETER AND FILTER SUMMARY REPORT

FILE: /dat1a/LARAMIE_BCU_0993-21-04E/p012g01.prm
LOGGING MODE: DEPTH DIRECTION: UP
TOP DEPTH: 8035.000 ft BOTTOM DEPTH: 8339.750 ft

SYMMETRIC FILTER

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)
GR	FILTER ()	medium (1)		TOP BOTTOM
AMPLITUDE	FILTER ()	medium (1)		" "
TRAVEL TIME	FILTER ()	medium (1)		" "

RAL CCL PROCESSING

MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
CCL FLOOR	CCL FLOOR	0.00		TOP	BOTTOM
ANALOG RAL PROCESSING					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
AMPLITUDE WINDOW (NEAR)	AMP WINDOW START (fgp1*)	187	us	TOP	BOTTOM
	AMP WINDOW START (fgp2*)	187	us	"	"
	AMP WINDOW START (fgp3*)	187	us	"	"
	AMP WINDOW START (fgp4*)	187	us	"	"
	AMP WINDOW START (fgp5*)	187	us	"	"
	AMP WINDOW START (fgp6*)	187	us	"	"
	AMP WINDOW START (fgp7*)	187	us	"	"
	AMP WINDOW START (fgp8*)	187	us	"	"
	AMP WINDOW START (fgpn*)	187	us	"	"
	AMP WINDOW LENGTH	25	us	"	"
TRAVEL TIME WINDOW (NEAR)	TT WINDOW START (ttn*)	160	us	"	"
	TT WINDOW LENGTH	500	us	"	"
	FIRST BRK THRESHOLD (ttn*)	4	mV	"	"
RAL CASING PARAMETERS	PPT NEAR	200.391	us	"	"
RAL TOOL DELAY	TOOL DELAY (str1*)	-70	us	"	"
	TOOL DELAY (str2*)	-70	us	"	"
	TOOL DELAY (str3*)	-70	us	"	"
	TOOL DELAY (str4*)	-70	us	"	"
	TOOL DELAY (str5*)	-70	us	"	"
	TOOL DELAY (str6*)	-70	us	"	"
	TOOL DELAY (str7*)	-70	us	"	"
	TOOL DELAY (str8*)	-70	us	"	"
	TOOL DELAY (strn*)	-70	us	"	"
BASELINE NOISE (NEAR)	NOISE WINDOW START	125	us	"	"
	NOISE WINDOW LENGTH	25	us	"	"

PERCENT BOND CEMENT MAP					
MEASUREMENT TYPE	PARAMETER	VALUE	UNITS	INTERVAL (ft)	
RAL FREE PIPE AMPLITUDE	FREE AMP REC 1	80	mV	TOP	BOTTOM
	FREE AMP REC 2	80	mV	"	"
	FREE AMP REC 3	80	mV	"	"
	FREE AMP REC 4	80	mV	"	"
	FREE AMP REC 5	80	mV	"	"
	FREE AMP REC 6	80	mV	"	"
	FREE AMP REC 7	80	mV	"	"
	FREE AMP REC 8	80	mV	"	"
RAL FULL BOND AMPLITUDE	FULL BOND AMP REC 1	2	mV	"	"
	FULL BOND AMP REC 2	2	mV	"	"
	FULL BOND AMP REC 3	2	mV	"	"
	FULL BOND AMP REC 4	2	mV	"	"
	FULL BOND AMP REC 5	2	mV	"	"
	FULL BOND AMP REC 6	2	mV	"	"
	FULL BOND AMP REC 7	2	mV	"	"
	FULL BOND AMP REC 8	2	mV	"	"

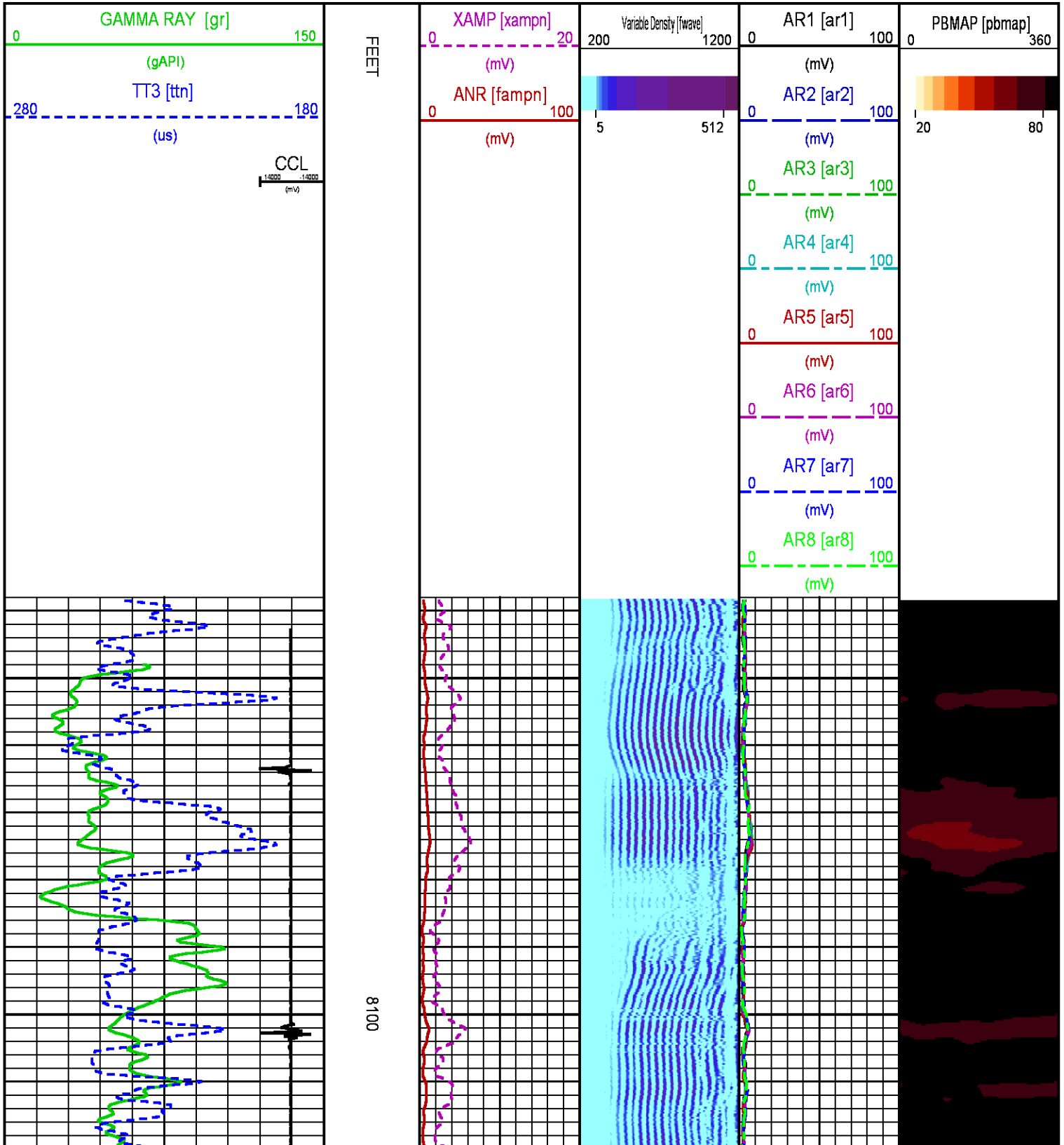
CURVE DESCRIPTION REPORT		
CURVE NAME	CREATION DATE	CURVE DESCRIPTION
F1:AR1	Nov 28 14:18:27 2018	FIXED GATE AMPLITUDE T-R1
F1:AR2	Nov 28 14:18:27 2018	FIXED GATE AMPLITUDE T-R2
F1:AR3	Nov 28 14:18:27 2018	FIXED GATE AMPLITUDE T-R3
F1:AR4	Nov 28 14:18:27 2018	FIXED GATE AMPLITUDE T-R4
F1:AR5	Nov 28 14:18:27 2018	FIXED GATE AMPLITUDE T-R5
F1:AR6	Nov 28 14:18:27 2018	FIXED GATE AMPLITUDE T-R6
F1:AR7	Nov 28 14:18:27 2018	FIXED GATE AMPLITUDE T-R7
F1:AR8	Nov 28 14:18:27 2018	FIXED GATE AMPLITUDE T-R8
F1:CCL	Nov 28 14:18:27 2018	CASING COLLAR LOCATOR
F1:FAMPN	Nov 28 14:18:27 2018	FIXED GATE AMPLITUDE NEAR RECEIVER
F1:FWAVE	Nov 28 14:18:27 2018	FAR WAVE FORM
F1:GR	Nov 28 14:18:27 2018	GAMMA RAY
F1:PBMAP	Nov 28 14:18:27 2018	PERCENT BOND CEMENT MAP
F1:TTN	Nov 28 14:18:27 2018	TRAVELTIME FROM NEAR TRANSMITTER-RECEIVER
F1:XAMPN	Nov 28 14:18:27 2018	FIXED GATE AMPLITUDE NEAR RECEIVER TIMES FIVE

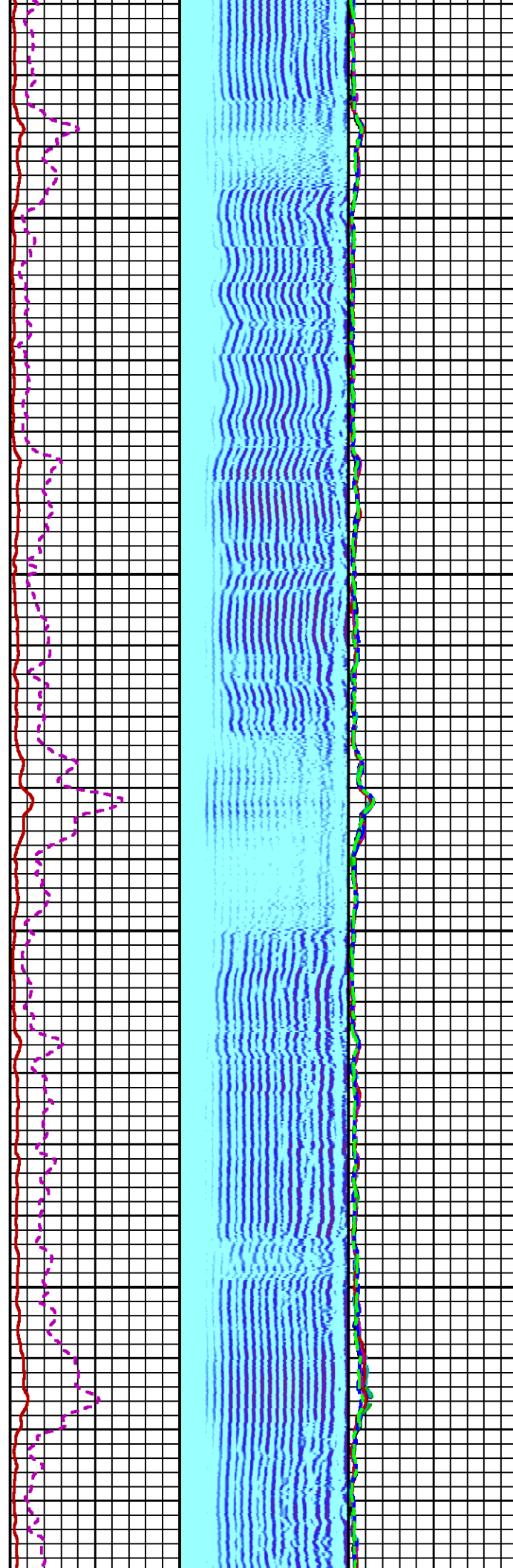
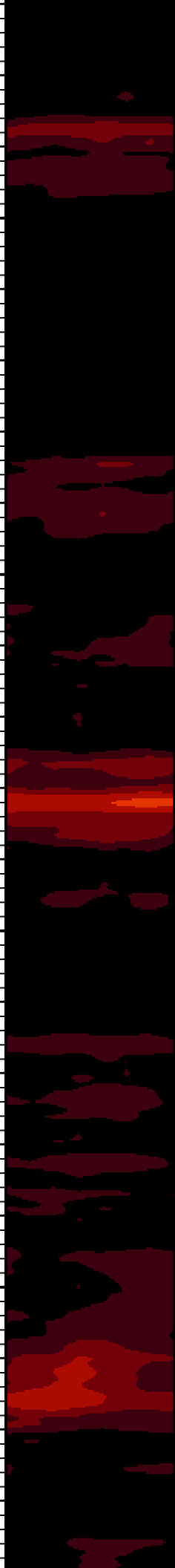
CURVE MEASURE POINT OFFSET					
CURVE	OFFSET (#)	CURVE	OFFSET (#)	CURVE	OFFSET (#)

CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)	CURVE	OFFSET (ft)
AR1	-11.25	AR5	-11.25	CCL	-5.75	XAMPN	-11.25
AR2	-11.25	AR6	-11.25	FAMPN	-11.25		
AR3	-11.25	AR7	-11.25	GR	-1.75		
AR4	-11.25	AR8	-11.25	TTN	-11.25		

Presentation : SysA:/dat1a/LARAMIE_BCU_0993-21-04E/BCU_0993-21-04E_RAL_REPEAT.fvpdf [5"/100' Scale]
Plot Interval : 8038.25 - 8352.25 Feet

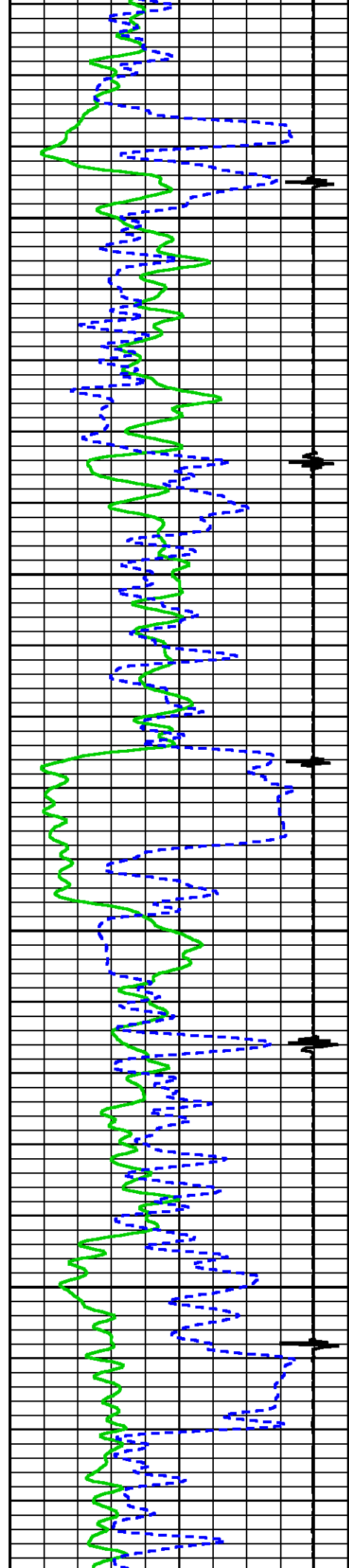
Data File 1 : F1 : SysA:/dat1a/LARAMIE_BCU_0993-21-04E/45_LARAMIE_BCU_0993-21-04E_RAL_REPEAT.xtf
Created On : Nov 28 14:18:27 2018
Company : LARAMIE ENERGY LLC
Well : BCU 0993-21-04E
Field : BUZZARD CREEK
File Interval : 8035 - 8353.5 Feet
OCT : p012g

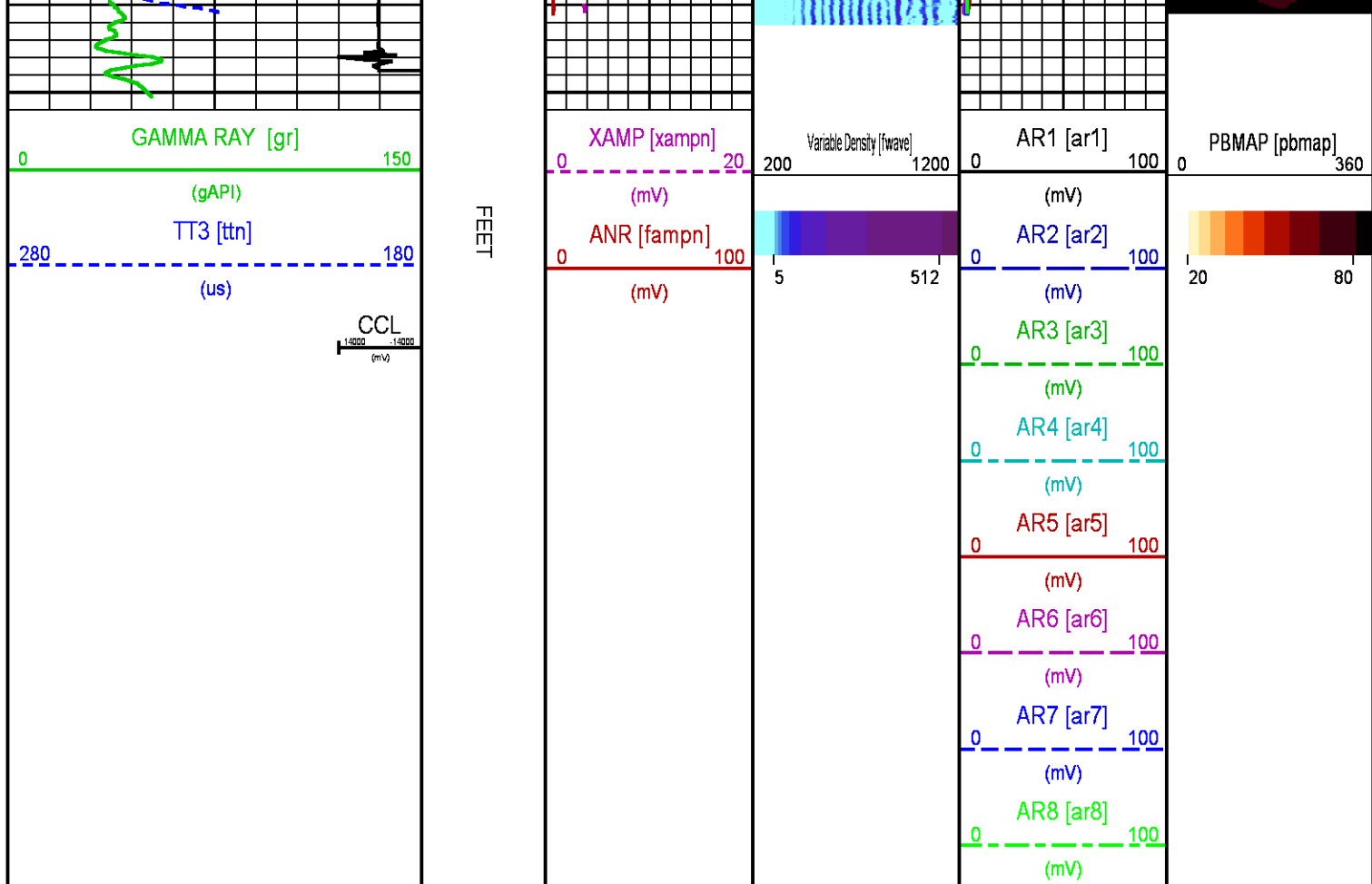




8200

8300





CALIBRATION / VERIFICATION SUMMARY

Source File: /dat1a/LARAMIE_BCU_0993-21-04E/p012g.tp1

RAL PRIMARY CALIBRATION SUMMARY

TOOL #: 1426XA 11871500

DATE/TIME PERFORMED: Wed Nov 28 11:42:26 2018

UNIT #: 5753XD 111111

	NEAR (mV)	RADIAL (mV)	FAR (mV)
TARGETS	100.00	100.00	150.00

	NEAR	R1	R2	R3	R4	R5	R6	R7	R8	FAR	CAL
ZERO (mV)	-0.35	-0.13	0.00	-0.33	-0.16	-0.11	-0.11	0.25	-0.01	-0.74	0.00
AMP FLUID (mV)	43	42	42	42	43	43	43	42	42	58	41
TT (us)	219	219	219	218	218	217	217	217	219	326	219
M FACTOR	2.30	2.37	2.38	2.33	2.32	2.32	2.32	2.39	2.37	2.57	2.42

RAL BEFORE LOG VERIFICATION SUMMARY

TOOL #: 1426XA 11871500

DATE/TIME PERFORMED: Wed Nov 28 13:54:58 2018

DAYS SINCE CAL: 0

UNIT #: 5753XD 111111

CABLE #: ML4291 SMALL1

	NEAR	R1	R2	R3	R4	R5	R6	R7	R8	FAR	CAL
	(mV)	(mV)	(mV)	(mV)	(mV)	(mV)	(mV)	(mV)	(mV)	(mV)	(mV)
ZERO	-0.76	-0.76	-0.17	-0.86	-0.76	-0.36	-0.30	-0.02	-0.15	-2.53	0.00
AMP AIR	0.77	0.77	0.17	0.89	0.77	0.36	0.32	0.11	0.16	2.15	99.87

GR PRIMARY CALIBRATION SUMMARY

TOOL #: 1355XA 11871507

DATE/TIME PERFORMED: Sun Jul 22 17:33:05 2018

UNIT #: 5753XD 10412898

CALB JIG #: 4702NK DA-438

	BACKGROUND	CALBRTR ON	CR DIFF	MULT	BACKGROUND	CALBRTR ON	CALBRTR
	(cts)	(cts)	(cts/s)		(gAPI)	(gAPI)	(gAPI)
GR	145.29	316.44	171.2	0.876	127.33	277.33	150

GR PRIMARY VERIFICATION SUMMARY

TOOL #: 1355XA 11871507

DATE/TIME PERFORMED: Sun Jul 22 17:34:29 2018

UNIT #: 5753XD 10412898

VERI JIG #: 4702NK DA-438

	BACKGROUND	CALBRTR ON	MULT	BACKGROUND	CALBRTR ON	DIFF.
	(cts)	(cts)		(gAPI)	(gAPI)	(gAPI)
GR	148.04	317.09	0.876	129.75	277.90	148.16
						140.00 160.00

INSTRUMENT CONFIGURATION

Source File: /dat1a/LARAMIE_BCU_0993-21-04E/p012g~RAL-tdg

A3 CABLEHEAD
Diameter : 1.37"

RADIAL BOND TOOL

Diameter : 2.75"
Length : 11.17'
Weight : 126 lbs
Series : 1426XA
Mnemonic : RAL
Measure Point: 5.75': XMTR
Measure Point: 4.21': NEAR MP
Measure Point: 3.25': FAR MP
Measure Point: 2.67': NEAR RCVR
Measure Point: 0.75': FAR RCVR

18.85'

XMTR — 12.71'

NEAR MP — 11.17'

FAR MP — 10.21'

NEAR RCVR — 9.62'

RAL GR/TEMP/CCL/CHV DETECTOR

Diameter : 2.75"
 Length : 6.96'
 Weight : 85 lbs
 Series : 1355XA
 Mnemonic : RAL
 Measure Point: 5.79': CCL
 Measure Point: 1.67': GR
 Measure Point: 0.17': TEMP



FAR RCVR 7.71'

CCL 5.79'

GR 1.67'

TEMP 0.17'

TOTAL LENGTH: 18.85'
 TOTAL WEIGHT: 227 lbs
 MAX DIAMETER: 0'4.00"



COMPANY

LARAMIE ENERGY LLC

WELL

BCU 0993-21-04E

FIELD

BUZZARD CREEK

COUNTY

MESA

STATE COLORADO

FILE NO:

CH145365

API NO:

05077105180000

LOCATION:

SHL: 868.0' FNL & 1324.0' FEL

BHL: 868.0' FNL & 1324.0' FEL

ELEVATIONS:

KB 7287 FT

DF

GL 7257 FT

SEC 21

TWP 9S

RGE 93W

DATE

28-NOV-2018

