Company: **LDEO Borehole Research Group**

Well: **1189C** **PCM−3A**

Field: **Eastern Manus Back Arc Basin**

Rig: **JOIDES Resolution**

Rig: JOIDES Resolution
Field: Eastern Manus Back Arc Basin
Location: Bismarck Sea, PNG
Well: 1189C
Company: LDEO Borehole Research Group

Schlumberger

RAB Button Images
Measured Depth
Scale 1:60

Location			Elevation	
	Total depth:	1866 m	K.B.	10.9 m
	Spud date:	27 Dec 00	G.L.	−1689.1 m
	Runs:	1 To 1	D.F.	10.5 m

Permanent datum:	Mean Sea Level	Elev.:	Kelly Bushing
Log measured from:	Top of kelly bushing	10.9 m	above Perm. datum
Depth reference:	Driller's Pipe Tally		

API serial no.	Logging Services:	Longitude	Latitude
	RAB	E 151 40.5240'	S 03 43.2415'

Depth logged:	1700 m To 1866 m	Mag decl:	6.56 deg
Date logged:	27 Dec 00 To 28 Dec 00	Mag dip:	−21.78 deg

Other services:

Bore hole record			Casing record			
Hole size	from	to	Size	Density	from	to
9.875 in	1700 m	1866 m				

Mud record			Borehole deviation record			
Type	from	to	Min	Max	from	to
Sea Water	1700 m	1866 m				

Surface equipment		Software record	
Unit	TWIS	IDEAL Wis	6.1c_03
Depth system	PDA	SPM	6.1c_03
		LWD	5.0b_12
		MWD	

IDEAL
services from
Anadrill

Bit Run Summary

Run number	1		
Bit size	in	9.875	
Bit start depth	m	1700	
Bit end depth	m	1866	
Top interval logged	m	1700	
Bottom interval logged	m	1860	
Begin log: time		17:00	
Begin log: date		27 Dec 00	
End log: time		13:40	
End log: date		28 Dec 00	
Mud data			
Depth	m	1700	
Type		Sea Water	

Type		Sea Water									
Mud weight	ppg	8.9									
Solids											
Chlorides											
Rm	ohm.m @ degC	0.222 @ 24									
Rmf											
Rmc											
Potassium											
Environmental data											
GR											
Mud weight	ppg	8.9									
Bit size	in	9.875									
Resistivity											
Neutron porosity											
Hole Size											
Mud weight											
Temperature											
Mud salinity											
Formation salinity											
Recording rate 1	SEC	10									
Recording rate 2	SEC	10									
Filtering GR		3 point av.									
Filtering density											
Filtering Neutron											
Company representative		G.Iturrino	A.Bartetzko	M.Storms							
Anadrill personnel		A.Strahan									

OTHER SERVICES FOR RUN1	OTHER SERVICES FOR RUN	OTHER SERVICES FOR RUN
REMARKS: RUN NUMBER 1 RAB data acquired in memory mode while drilling from 1700−1866 m Drilled in rotary mode Depth filtered for heave No surveys available − borehole assumed to be vertical Environmental Corrections Applied: GR − borehole size, mud weight Resistivity − borehole size, mud resistivity borehole temperature Rbit measurement is affected by a large vertical resolution (5.12 m) 27 Dec 00 13:11 Program RAB 13:20 BHA below rotary table 17:00 On bottom drilling at 1700 m 28 Dec 00 13:40 TD at 1866 m 22:20 BHA above rotary table − retrieve RAB memory data	REMARKS: RUN NUMBER	REMARKS: RUN NUMBER

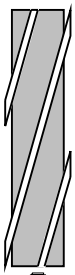
22:20 BHA above rotary table − retrieve
RAB memory data

EQUIPMENT DESCRIPTION

RUN1	RUN	RUN

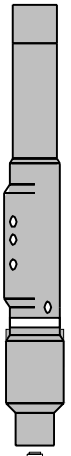
DOWNHOLE E

8 1/2" IB String 10.0



Monel 8.2

RAB6−BA 7.9

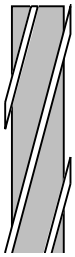


Shallc 6.4
Mediu 6.3
Deep 6.1
Ring R 5.9
R−O p 5.8
GR 5.6

Pin x Pir 4.8

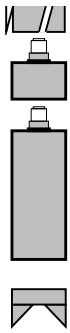
Monel 4.1

Monel 3.8



8 1/2" IB NB 3.3

Bit Re 2.5



Pin x Pin Bottle 1.4

Bit Si 1.1

Mill Toot 0.0(0.2(

MAXIMUM STRING DI

ALL LENGTHS I

IDEAL Version: ID6_1C_03

IDEAL

RAB6−BA **id6_1c_03**

Format: RABFixedImage **Vertical Scale: 1:60** **Graphics File Created: 02−Jan−2001 17:22**

Parameters

DLIS Name	Description	Value	
	RAB: Button Sleeve Diameter	RAB6: 8 1/8 IN	
	LWD RM: Log direction	DOWN	
	LWD RM: Default directory	D:\users\ideal\fm\Clients\ODP\PCM−3a\LWD002\	
	LWD RM: Default file extension	BIN_DB	
	RAB: Stabilizer Diameter	RAB6: 8.25−8.5 IN	
	LWD RM: Generate techlog only?	0	
	LWD RM: Flush depth streams?	YES	
	LWD RM: Depth file name	DEPTH	
BDBHCA	RAB: Button Deep Borehole A Factor	0.0732254	
BDBHCB	RAB: Button Deep Borehole B Factor	−0.0922599	
BHA_COEF_VER	RAB: BHA Coef Generator Version	2	
BITBHCA	RAB: Bit A Borehole Factor	0.0941899	
BITBHCB	RAB: Bit B Borehole Factor	−0.0627806	
BIT_K_FACTOR	RAB: Bit K Factor	8.12816	
BMBHCA	RAB: Button Medium Borehole A Factor	0.107207	
BMBHCB	RAB: Button Medium Borehole B Factor	−0.105328	
BSBHCA	RAB: Button Shallow Borehole A Factor	0.310186	
BSBHCB	RAB: Button Shallow Borehole B Factor	−0.0666146	
BS_RM	Bit Size (RM)	9.875	IN
BUT_KIMP_A	RAB: Button Impedance Coeff A	0.00149	
BUT_KIMP_B	RAB: Button Impedance Coeff B	3.6e−005	
DBUTTON_K_FACTOR	RAB: Button Deep K factor	0.00270707	
DHS_VERSION	RAB: DownHole Software Version	5.0012	
DIPR	magnetic dip	−21.78	DEG
IMAGE_MAX_RES	RAB: Image Maximum Resistivity Value	100	OHMM
IMAGE_MIN_RES	RAB: Image Minimum Resistivity Value	1	OHMM
MBUTTON_K_FACTOR	RAB: Button Medium K Factor	0.00301584	
MDCP	magnetic declination	6.56002	DEG
MST_RM	Mud Sample temperature (RM)	24.4445	DEGC
MW_RM	Mud Weight (RM)	8.9	LB/G
OBM	RAB: Oil base Mud	NO	
ORIENTATION_RM	Rab Image Orientation	NORTH	
RABEC	RAB: Resistivity Env−Cor	YES	
RAB_TEMP_SELECT	RAB Temperature Selection	MEASURED	
READOUT_PORT_MP	RAB: ROP to Bit Face Distance	5.85	M
RINGBHCA	RAB: Ring Borehole A Factor	0.162277	
RINGBHCB	RAB: Ring Borehole B Factor	−0.0883462	
RING_KIMP_A	RAB: Ring Impedance Coeff A	0	
RING_KIMP_B	RAB: Ring Impedance Coeff B	0	
RING_K_FACTOR	RAB: Ring K Factor	0.106596	
RMS_RM	Resistivity of Mud Sample (RM)	0.222	OHMM

RING_K_FACTOR	RAB: Ring K Factor	0.106596	
RMS_RM	Resistivity of Mud Sample (RM)	0.222	OHMM
SBUTTON_K_FACTOR	RAB: Button Shallow K Factor	0.00415075	
STAB	RAB: Run with Stabilizer	YES	
TOOLTYPE	RAB: Azimuthal Tool	YES	
TS_VERSION	RAB: ToolScope Software Version	6.1013	
VRAB6	Rab Tool type (ENP/PILOT)	RAB6_PILOT	
WIN_SIZE_DYN_IMAGE	RAB: Window Size for Scaling Dynamic Image	0.9144	M

PIP SUMMARY

Ring Samples

Gamma Ray Samples

Absent 0.150 0.350 0.850 2.000 5.000 11.000 21.000 35.000 52.000 79.000

Deep Button Image (R3IM) (OHMM)

Shallow Button Image (R1IM) (OHMM)

Medium Button Image (R2IM) (OHMM)

RAB Gamma Ray (GR_RAB)

0 (GAPI) 200

RAB Rotational Speed (RPM_RAB) (RPM)

250 −10

Shallow Button Resistivity (RES_BS)

0.2 (OHMM) 2000

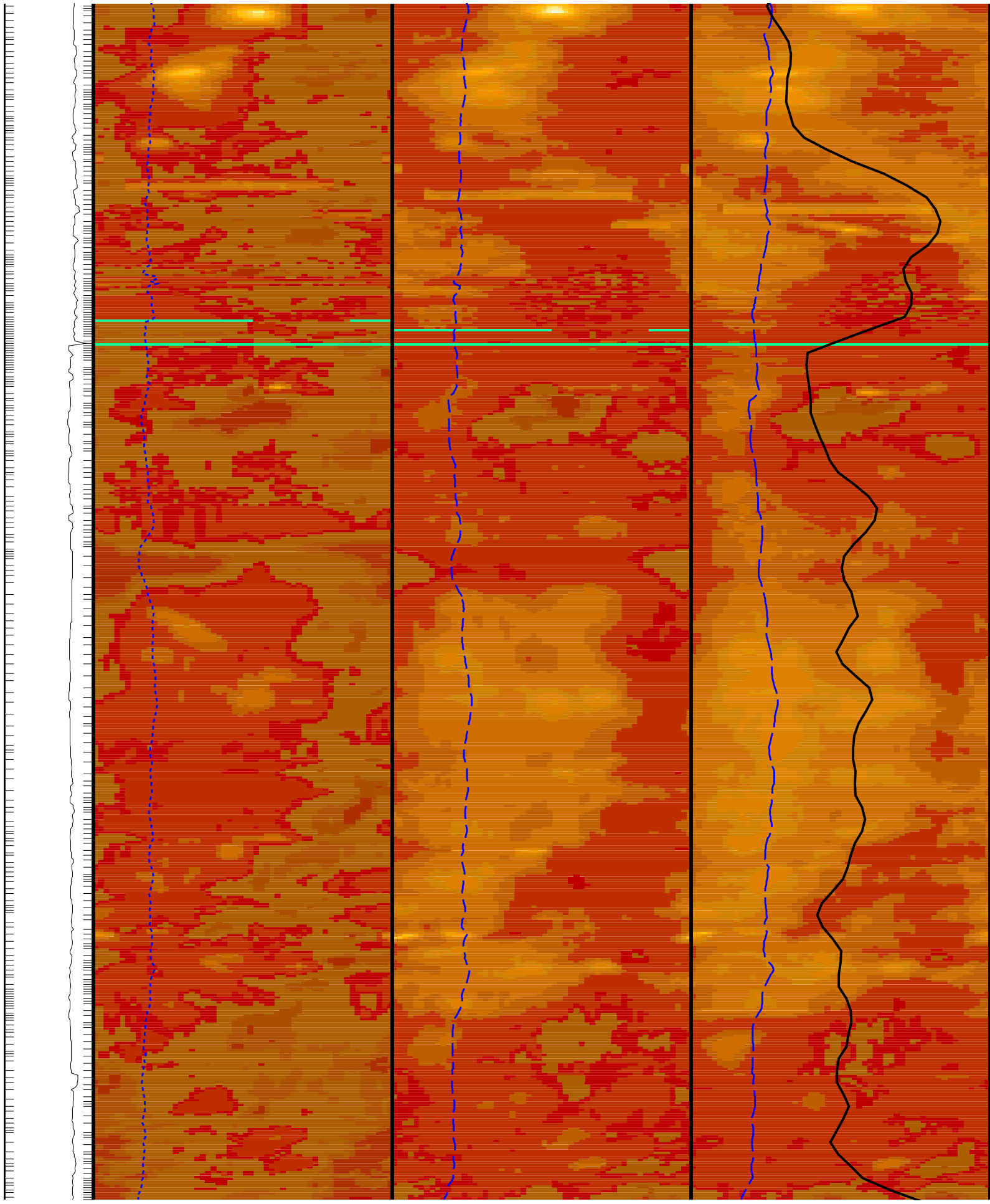
Medium Button Resistivity (RES_BM)

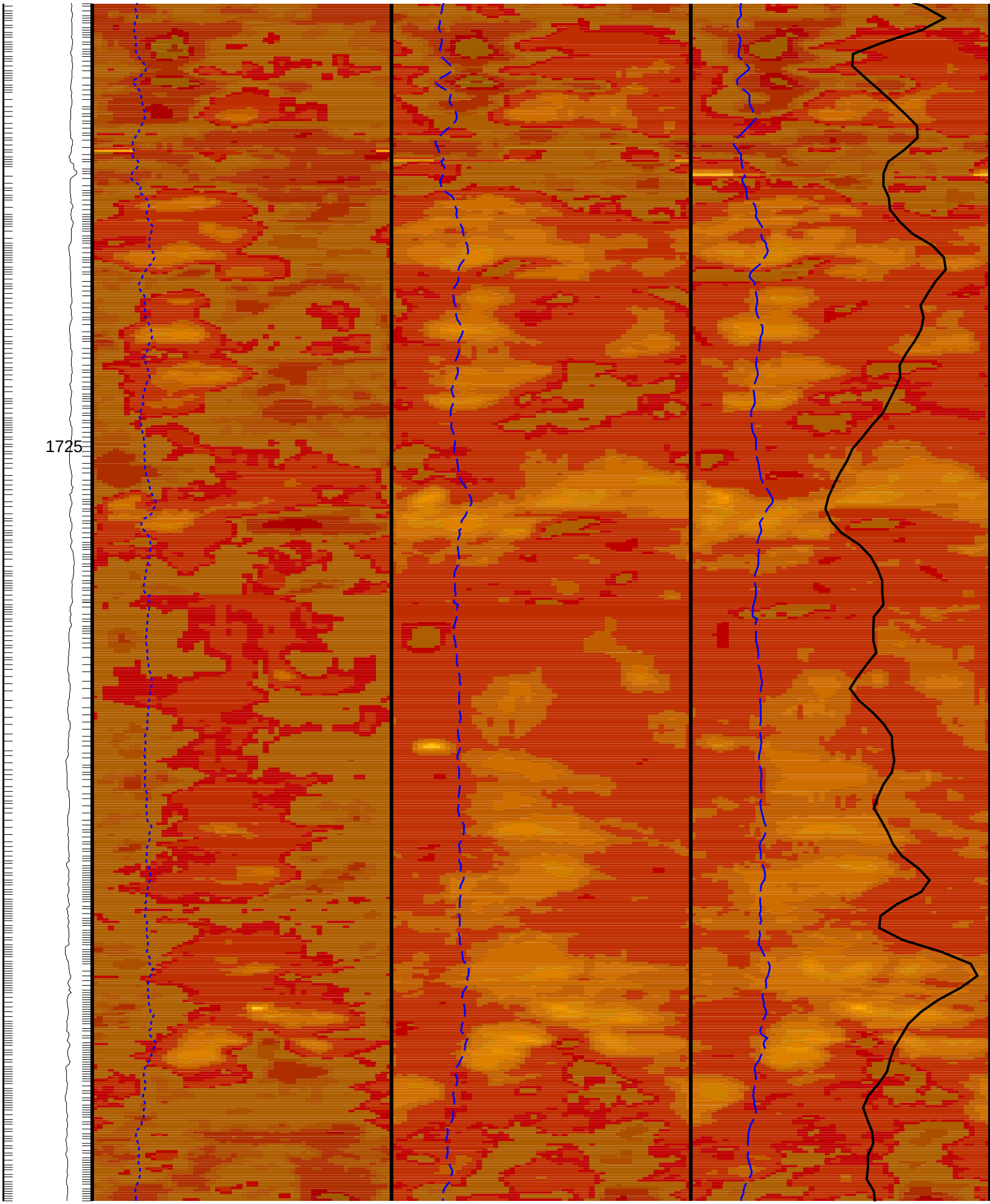
0.2 (OHMM) 2000

Deep Button Resistivity (RES_BD)

0.2 (OHMM) 2000

1700

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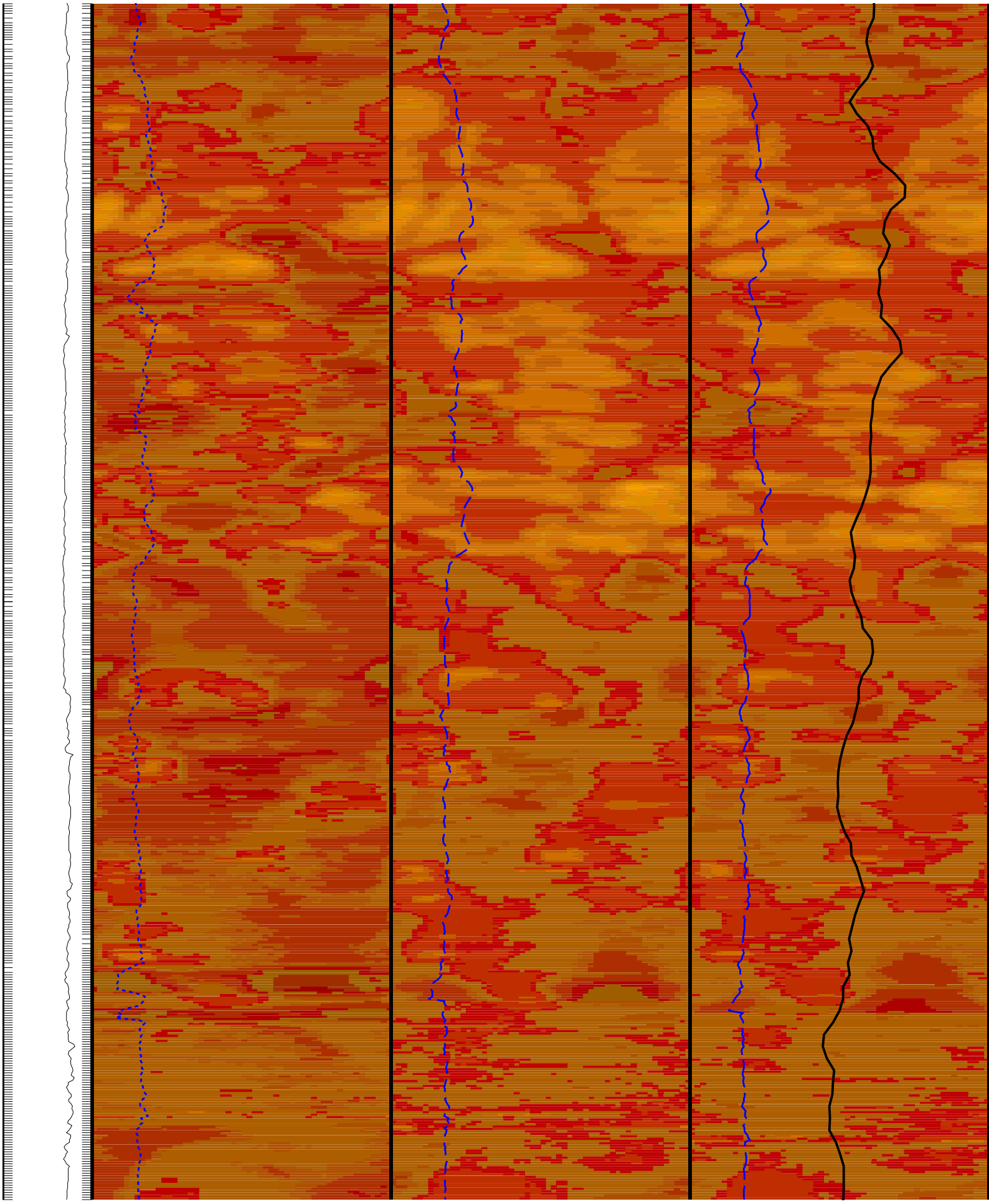
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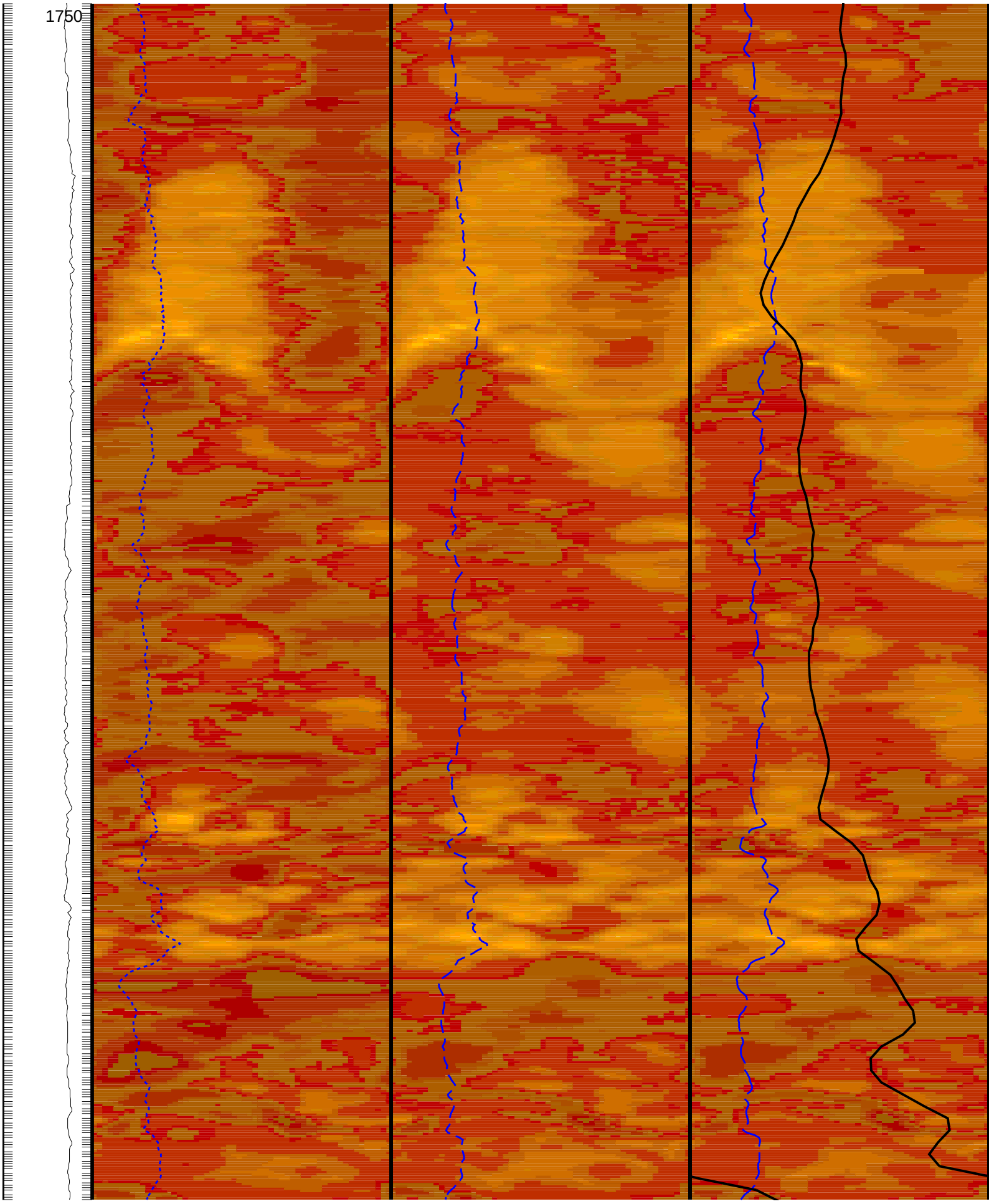
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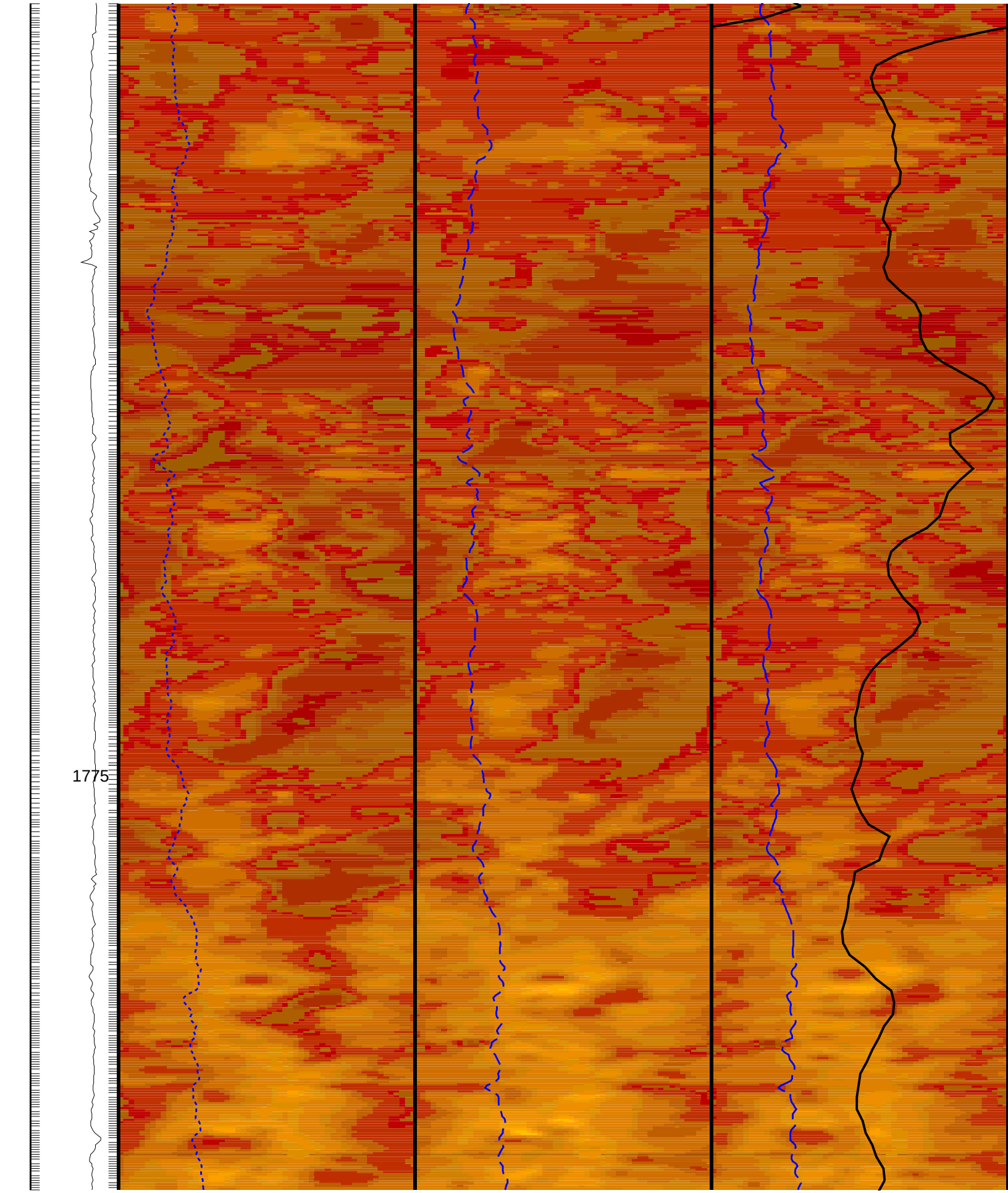
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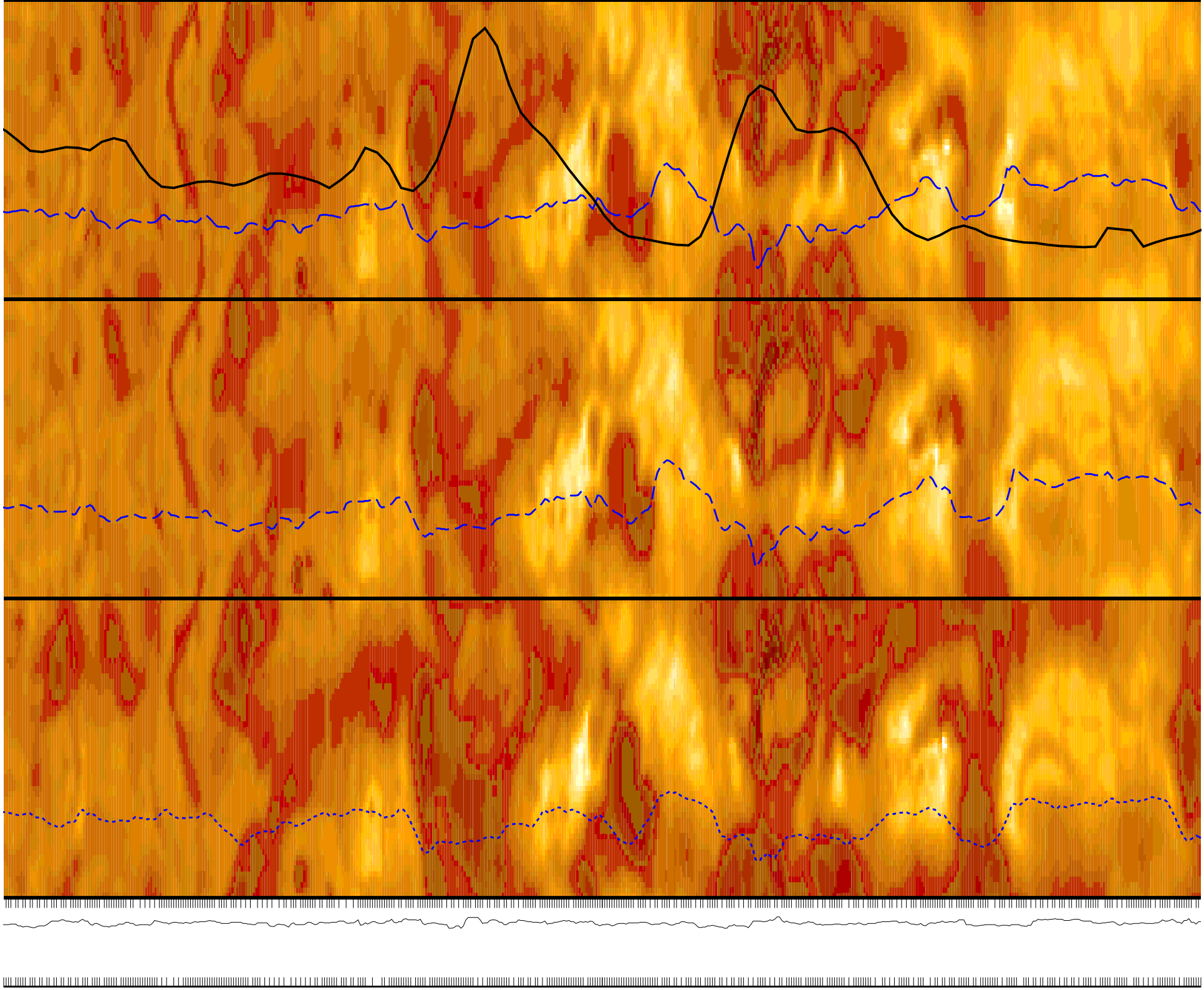

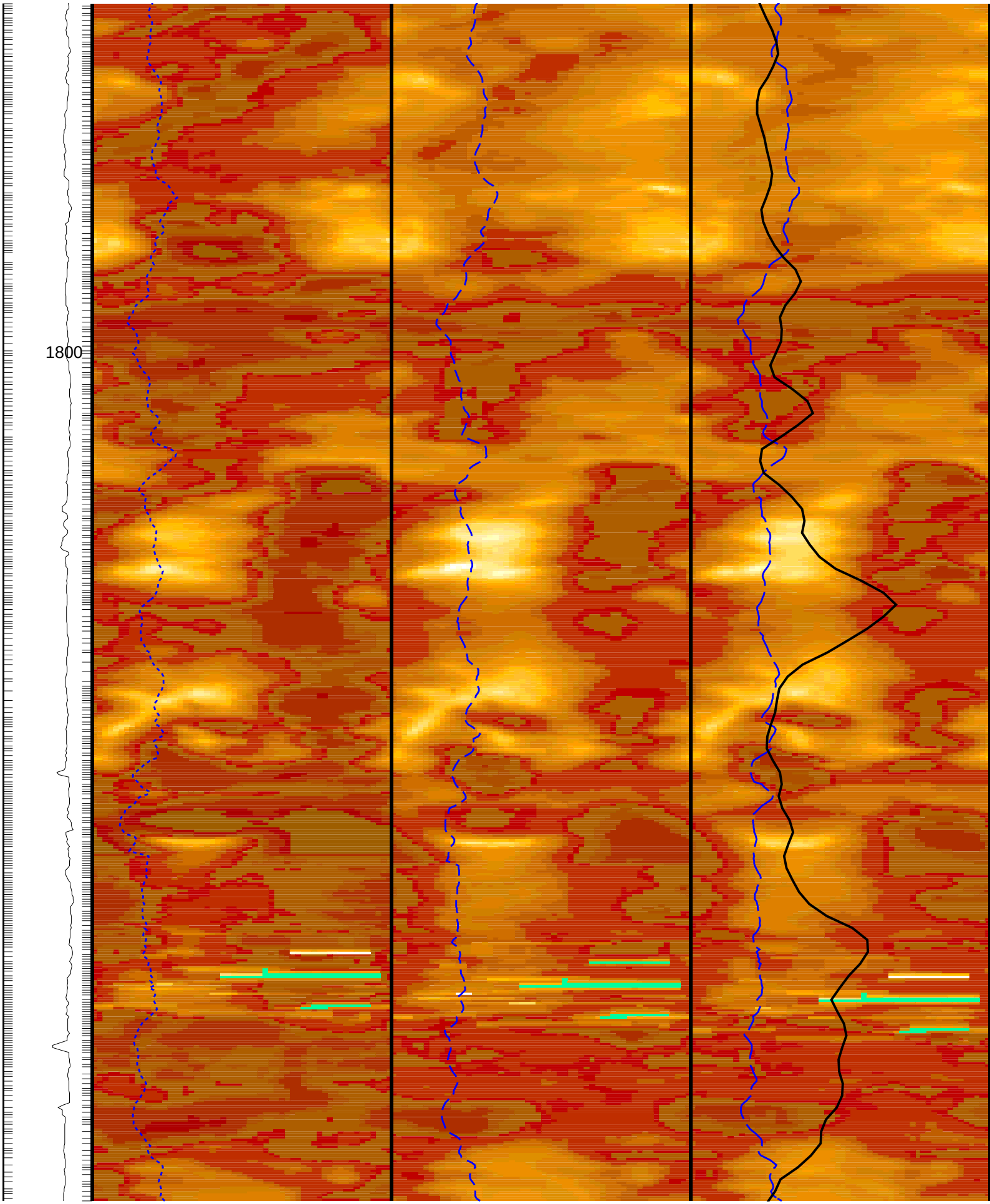
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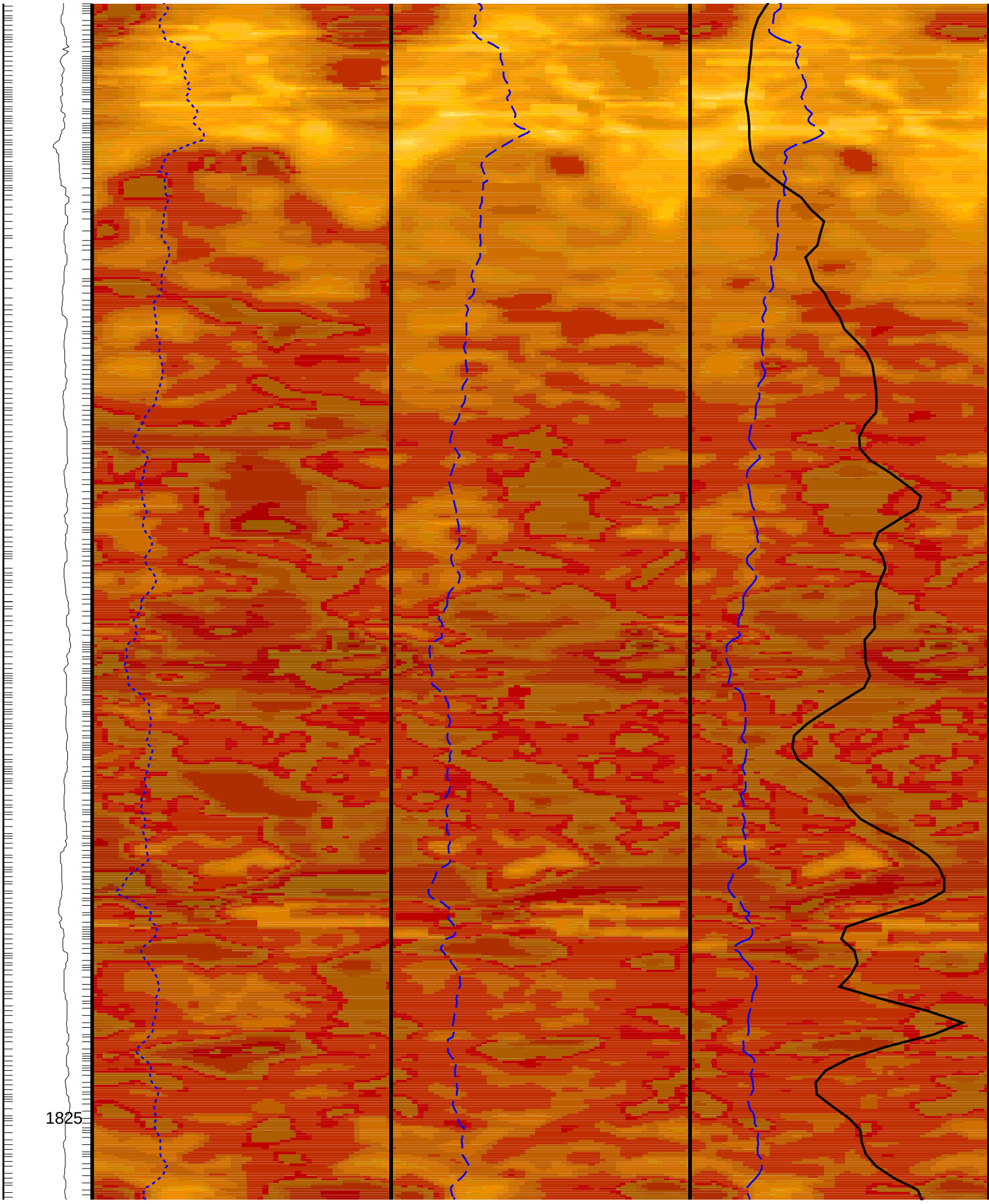
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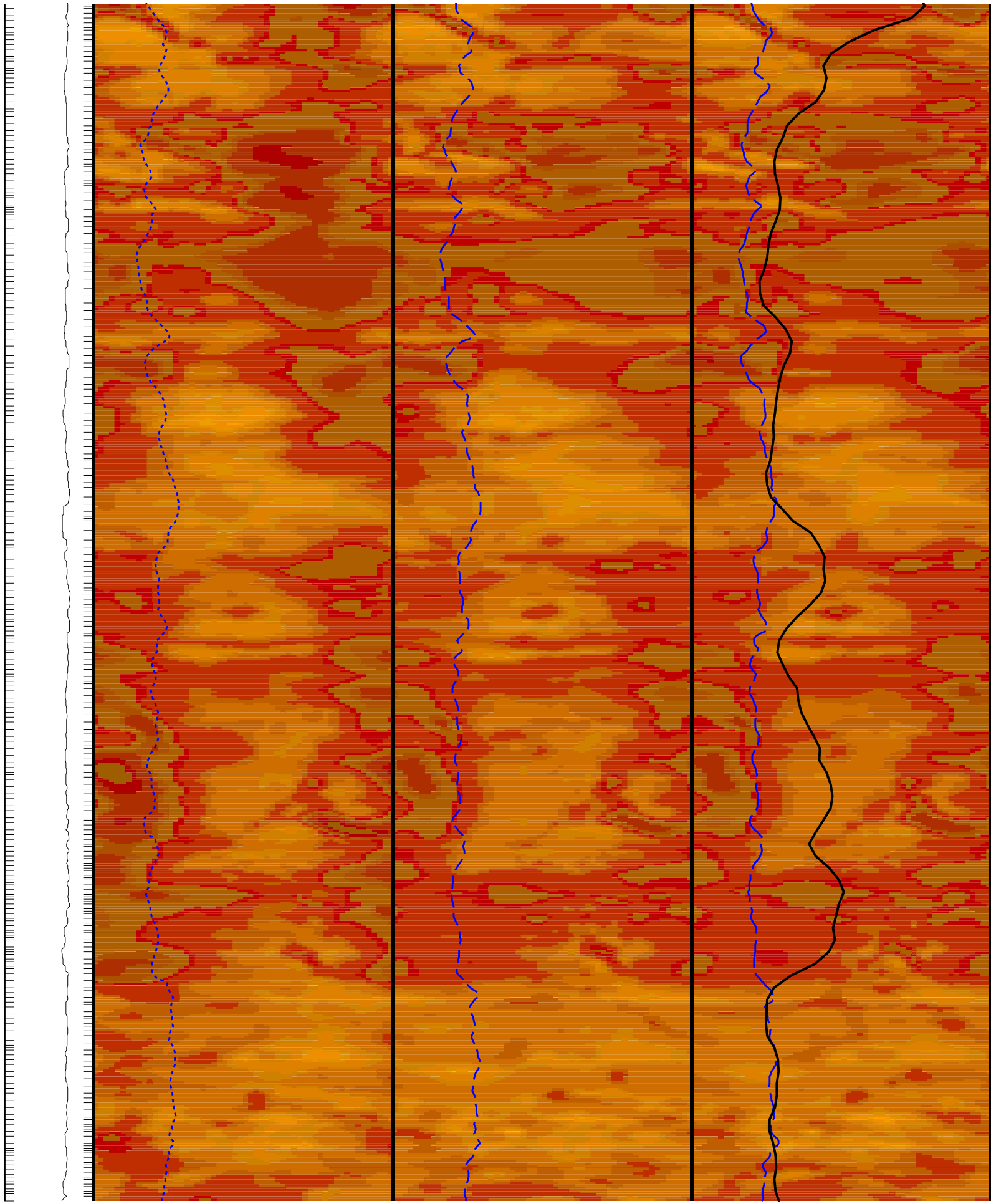

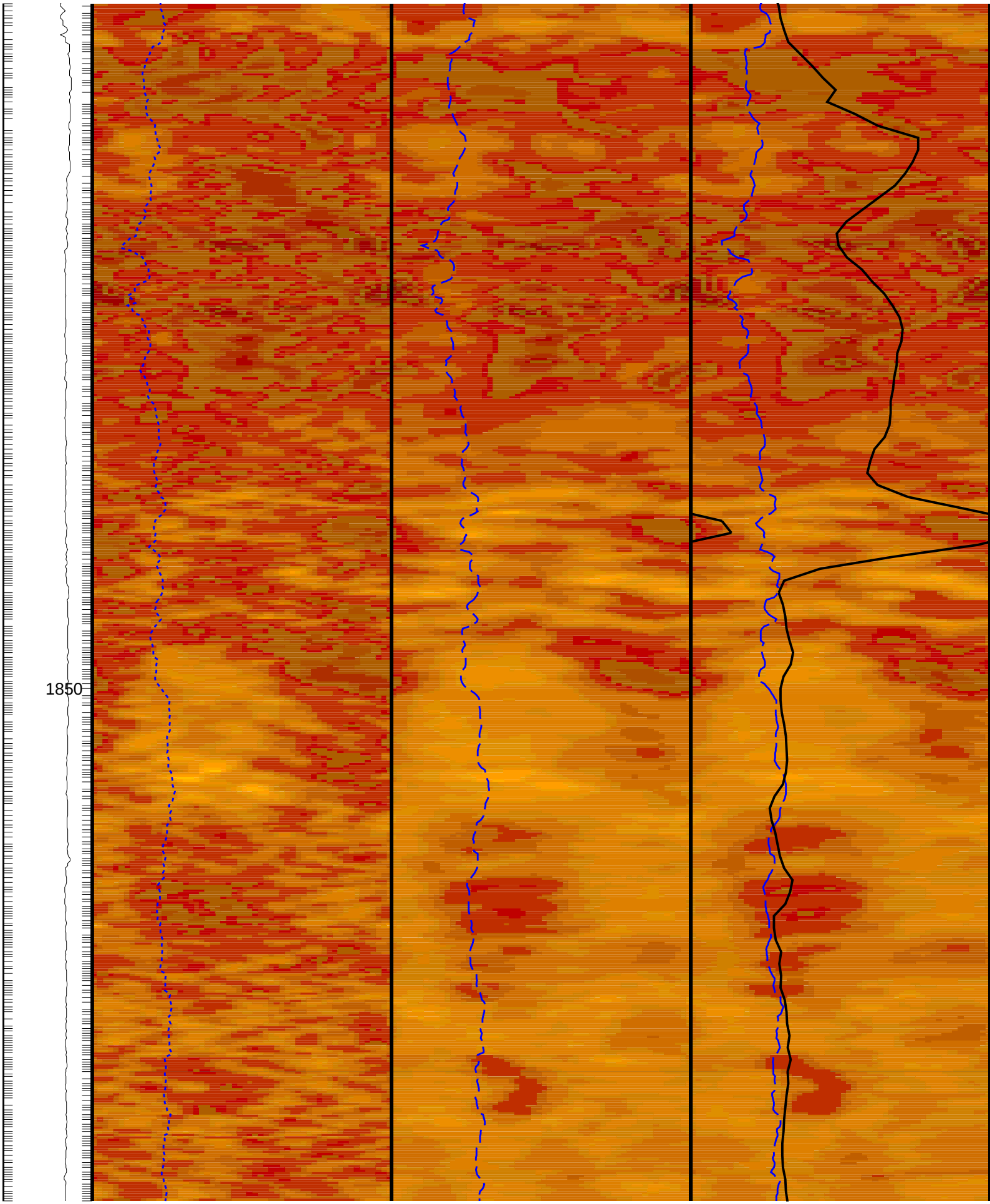
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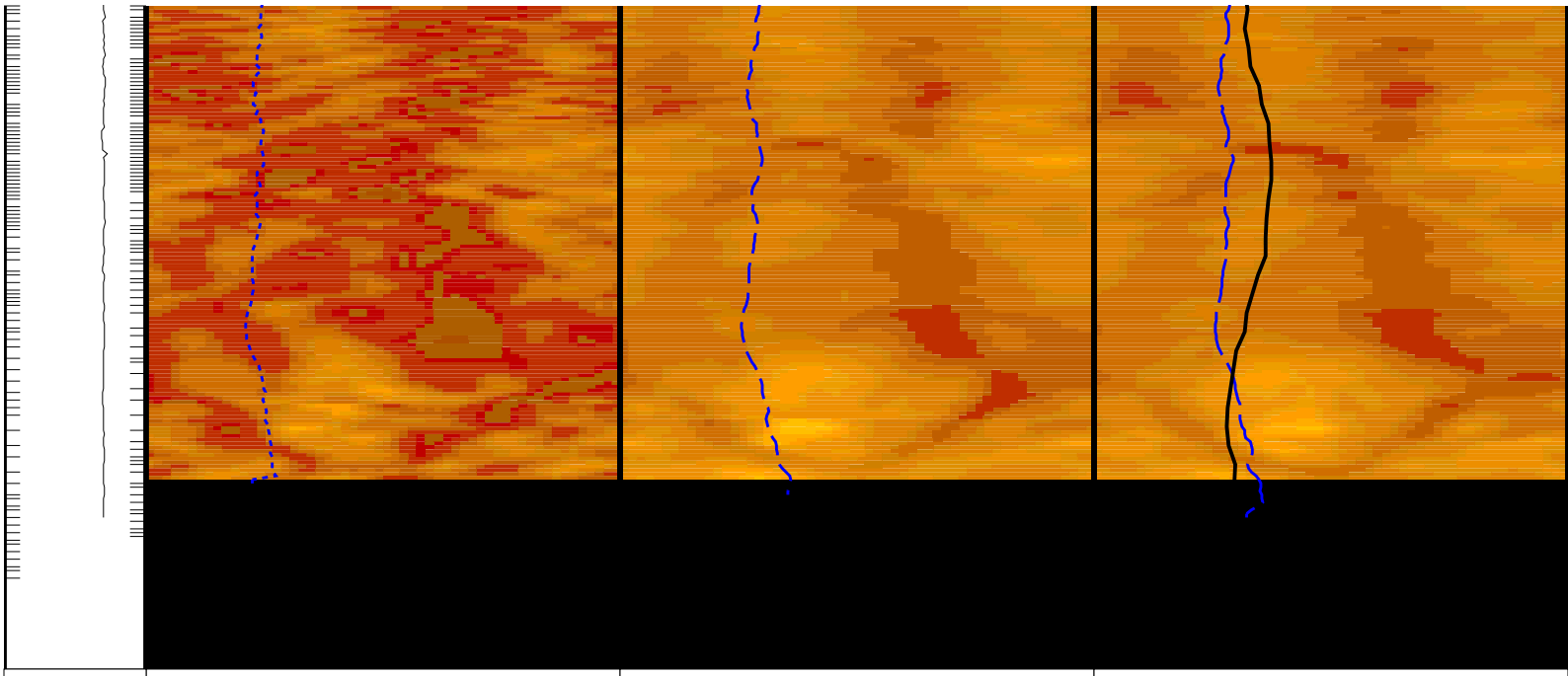

RAB Rotational Speed (RPM_RAB) (RPM)
250 −10

Shallow Button Resistivity (RES_BS)
0.2 (OHMM) 2000

Medium Button Resistivity (RES_BM)
0.2 (OHMM) 2000

Deep Button Resistivity (RES_BD)
0.2 (OHMM) 2000

Absent 0.150 0.350 0.850 2.000 5.000 11.000 21.000 35.000 52.000 79.000

Shallow Button Image (R1IM) (OHMM)

Absent 0.150 0.350 0.850 2.000 5.000 11.000 21.000 35.000 52.000 79.000

Medium Button Image (R2IM) (OHMM)

RAB Gamma Ray (GR_RAB)
0 (GAPI) 200

Absent 0.150 0.350 0.850 2.000 5.000 11.000 21.000 35.000 52.000 79.000

Deep Button Image (R3IM) (OHMM)

PIP SUMMARY

Ring Samples
Gamma Ray Samples

IDEAL Version: ID6_1C_03

IDEAL

RAB6−BA id6_1c_03

6.75−in. Resistivity At−the−Bit / Equipment Identification

Primary Equipment:		
Tool Name and Serial Number	RAB6 − BA	48
Calibration Status	−	

Master: 24−NOV−2000 23:22

6.75−in. Resistivity At−the−Bit Calibration

Resistivity: Fixture

Phase	Ring/T1 factor	Value	Phase	Ring/T2 factor	Value	Phase	M0/T1 factor	Value
Master		0.01081	Master		0.01079	Master		1.105
	0.009500 0.01100 0.01250			0.009500 0.01100 0.01250			0.9000 1.050 1.200	

0.009500 (Minimum)	0.01100 (Nominal)	0.01250 (Maximum)

Phase	M0/T2 factor	Value
Master		1.137

0.9000 (Minimum)	1.050 (Nominal)	1.200 (Maximum)

0.009500 (Minimum)	0.01100 (Nominal)	0.01250 (Maximum)

Phase	M2/T1 factor	Value
Master		0.9956

0.8500 (Minimum)	1.000 (Nominal)	1.150 (Maximum)

0.9000 (Minimum)	1.050 (Nominal)	1.200 (Maximum)

Phase	M2/T2 factor	Value
Master		1.024

0.8500 (Minimum)	1.000 (Nominal)	1.150 (Maximum)

Phase	BTN shallow/T1 factor	Value
Master		0.0006530

0.0005700 (Minimum)	0.0006700 (Nominal)	0.0007700 (Maximum)

Phase	BTN shallow/T2 factor	Value
Master		0.0006840

0.0005700 (Minimum)	0.0006700 (Nominal)	0.0007700 (Maximum)

Phase	BTN medium/T1 factor	Value
Master		0.0006630

0.0005700 (Minimum)	0.0006700 (Nominal)	0.0007700 (Maximum)

Phase	BTN medium/T2 factor	Value
Master		0.0006550

0.0005700 (Minimum)	0.0006700 (Nominal)	0.0007700 (Maximum)

Phase	BTN deep/T1 factor	Value
Master		0.0006740

0.0005700 (Minimum)	0.0006700 (Nominal)	0.0007700 (Maximum)

Phase	BTN deep/T2 factor	Value
Master		0.0006630

0.0005700 (Minimum)	0.0006700 (Nominal)	0.0007700 (Maximum)

Master: 24−NOV−2000 23:16

6.75−in. Resistivity At−the−Bit Calibration

Gamma Ray: Blanket

Phase	Gamma ray factor	Value
Master		4.110

3.500 (Minimum)	4.500 (Nominal)	5.500 (Maximum)

Company: LDEO Borehole Research Group

Well: 1189C PCM−3A

Field: Eastern Manus Back Arc Basin

Rig: JOIDES Resolution

IDEAL services from **Anadrill**

RAB Button Images
Measured Depth
Scale 1:60

Schlumberger