



|                 |             |             |              |             |             |  |  |  |
|-----------------|-------------|-------------|--------------|-------------|-------------|--|--|--|
| Scott Sims      | 09 Apr 2016 | 15 Apr 2016 | Brad Leopold | 02 Apr 2016 | 14 Apr 2016 |  |  |  |
| Steven Cano     | 01 Apr 2016 | 09 Apr 2016 | Ryan Kielian | 08 Apr 2016 | 15 Apr 2016 |  |  |  |
| Emuobosan Onosu | 07 Apr 2016 | 15 Apr 2016 | Jason Weltin | 01 Apr 2016 | 15 Apr 2016 |  |  |  |
|                 |             |             |              |             |             |  |  |  |

Mud Properties Record

| Date / Time |       | LWD<br>Run No. | Measured<br>Depth<br>(ft.) | Mud<br>Type         | Density<br>(ppg) | Viscosity<br>(cp) | pH  | Fluid<br>Loss<br>(cc) | Oil /<br>Water | Source         | Total<br>Chlorides<br>(ppm) | K+<br>(%) |
|-------------|-------|----------------|----------------------------|---------------------|------------------|-------------------|-----|-----------------------|----------------|----------------|-----------------------------|-----------|
| 02 Apr 2016 | 23:59 | 1              | 245                        | Water Based - Fresh | 8.4              | 1                 | 9.5 | 48.0                  | 0.0/99.2       | Active Mud Pit | 300                         | N/A       |
| 03 Apr 2016 | 11:59 | 1              | 1300                       | Water Based - Fresh | 8.4              | 1                 | 8.7 | 50.0                  | 0.0/98.9       | Active Mud Pit | 400                         | N/A       |
| 05 Apr 2016 | 11:59 | 1              | 2359                       | Water Based - Fresh | 8.9              | 3                 | 9.1 | 50.0                  | 0.0/95.6       | Active Mud Pit | 400                         | N/A       |
| 07 Apr 2016 | 11:59 | 2              | 6037                       | Synthetic Base Mud  | 10.5             | 15                | N/A | 9.0                   | 78.0/22.0      | Active Mud Pit | 36000                       | N/A       |
| 08 Apr 2016 | 11:59 | 2              | 7050                       | Synthetic Base Mud  | 10.5             | 15                | N/A | 9.0                   | 77.7/22.3      | Active Mud Pit | 33000                       | N/A       |
| 09 Apr 2016 | 11:59 | 2              | 7507                       | Synthetic Base Mud  | 10.4             | 13                | N/A | 9.5                   | 78.1/21.9      | Active Mud Pit | 31000                       | N/A       |
| 10 Apr 2016 | 11:59 | 3              | 9431                       | Synthetic Base Mud  | 10.2             | 17                | N/A | 7.8                   | 77.3/22.7      | Active Mud Pit | 32500                       | N/A       |
| 11 Apr 2016 | 11:59 | 3              | 9962                       | Synthetic Base Mud  | 10.2             | 17                | N/A | 8.9                   | 75.6/24.4      | Active Mud Pit | 33000                       | N/A       |
| 12 Apr 2016 | 11:59 | 3              | 10455                      | Synthetic Base Mud  | 10.2             | 18                | N/A | 8.5                   | 77.0/23.0      | Active Mud Pit | 32500                       | N/A       |
| 13 Apr 2016 | 11:59 | 3              | 10933                      | Synthetic Base Mud  | 10.4             | 52                | N/A | 6.2                   | 73.9/26.1      | Active Mud Pit | 22000                       | N/A       |
| 14 Apr 2016 | 23:59 | 3              | 11120                      | Synthetic Base Mud  | 10.5             | 47                | N/A | 8.4                   | 77.0/23.0      | Active Mud Pit | 27000                       | N/A       |

Mnemonics

| Curve   | Description  | Units |
|---------|--|-------|
| BITSIZE | Bit Size   | in    |
| CALCX   | Acostic Caliper, 0.5ft. Avg.                           | in    |
| DPLX    | Density Porosity (Limestone) 0.5ft Avg.                | pu    |
| DRHX    | Delta Rho Uncertainty                                  | g/cc  |
| GRAM    | Gamma Ray - Apparent, 0.5ft. Avg                       | API   |
| NPLX    | Neutron Porosity (Limestone) 0.5ft Avg.                | pu    |
| ROPA    | Rate of Penetration 0.5 ft. Avg                        | ft/hr |
| RACHX   | Resistivity Attenuation Long Space 2MHz Corrected      | ohm.m |
| RPCHX   | Resistivity Phase Difference Long Space 2MHz Corrected | ohm.m |

Equipment and Service Data

| LWD<br>Run<br>No. | Tool    | Serial<br>Number | Measurement | Bit<br>Offset<br>(ft.) | Max<br>O.D.<br>(in.) | Min<br>I.D.<br>(in.) |
|-------------------|---------|------------------|-------------|------------------------|----------------------|----------------------|
| 1                 | SRIG    | 12342306         | Gamma       | 62.08                  | 6.750                | 0.000                |
| 1                 | DIR     | 123617354        | Directional | 66.79                  | 6.750                | 0.000                |
| 2                 | -       | 12371159         | -           | N/A                    | 6.750                | 2.875                |
| 2                 | AT-LCMP | 12656414         | Gamma       | N/A                    | 6.750                | 2.875                |
| 2                 | AT-LCMP | 12626650         | Pressure    | N/A                    | 6.750                | 2.875                |
| 3                 | CS      | 11982308         | -           | 104.74                 | 7.010                | 2.250                |
| 3                 | CCN     | 10422440         | Neutron     | 99.64                  | 7.552                | 2.260                |

|   |          |          |             |       |       |       |
|---|----------|----------|-------------|-------|-------|-------|
| 3 | ORD      | 12120463 | Density     | 90.99 | 8.375 | 2.250 |
| 3 | ORD      | 12120463 | Caliper     | 93.22 | 8.375 | 2.250 |
| 3 | FLEX SUB | 13598918 | -           | 79.30 | 5.000 | 2.250 |
| 3 | BCPM     | 11949715 | Telemetry   | 68.72 | 7.020 | 2.250 |
| 3 | STAB     | 10499949 | -           | 64.61 | 8.375 | 2.250 |
| 3 | OTK      | 11619555 | Directional | 60.43 | 7.031 | 2.165 |
| 3 | OTK      | 11619555 | Resistivity | 54.62 | 7.031 | 2.165 |
| 3 | OTK      | 11619555 | Gamma       | 50.59 | 7.031 | 2.165 |
| 3 | OTK      | 11619555 | Pressure    | 49.70 | 7.031 | 2.165 |
| 3 | CS       | 12202676 | -           | 45.90 | 7.020 | 2.250 |
| 4 | -        | 12798941 | -           | N/A   | 6.750 | 2.875 |
| 4 | AT-LCMP  | 12391808 | Gamma       | N/A   | 6.750 | 2.875 |
| 4 | AT-LCMP  | 12450684 | Pressure    | N/A   | 6.750 | 2.875 |

#### Service and Tool Mnemonics

| Mnemonic | Name                  | Description  |
|----------|-----------------------|--|
| AT-LCMP  | AT-Curve              | AutoTrak Curve MWD   |
| BCPM     | BCPM                  | Mud pulse telemetry and downhole tool power module   |
| CCN      | Neutron               | Compensated neutron porosity   |
| DIR      | Directional           | Wellbore directional survey  |
| FLEX SUB | Flex Sub              | Flexible sub connection  |
| ORD      | Density               | Azimuthal density, azimuthal density image, bulk density, photoelectric effect and borehole caliper                |
| OTK      | OnTrak                | Propagation resistivity, propagation conductivity, gamma ray, directional, annular pressure, system memory and VSS |
| SRIG     | Inclination and Gamma | Probe based gamma ray and inclination module   |
| STAB     | Stabilizer            | Stabilizer assembly  |
| CS       | Closure Sub           | BHA power ring isolator allowing insertion of inert sub into electrically powered BHA                              |

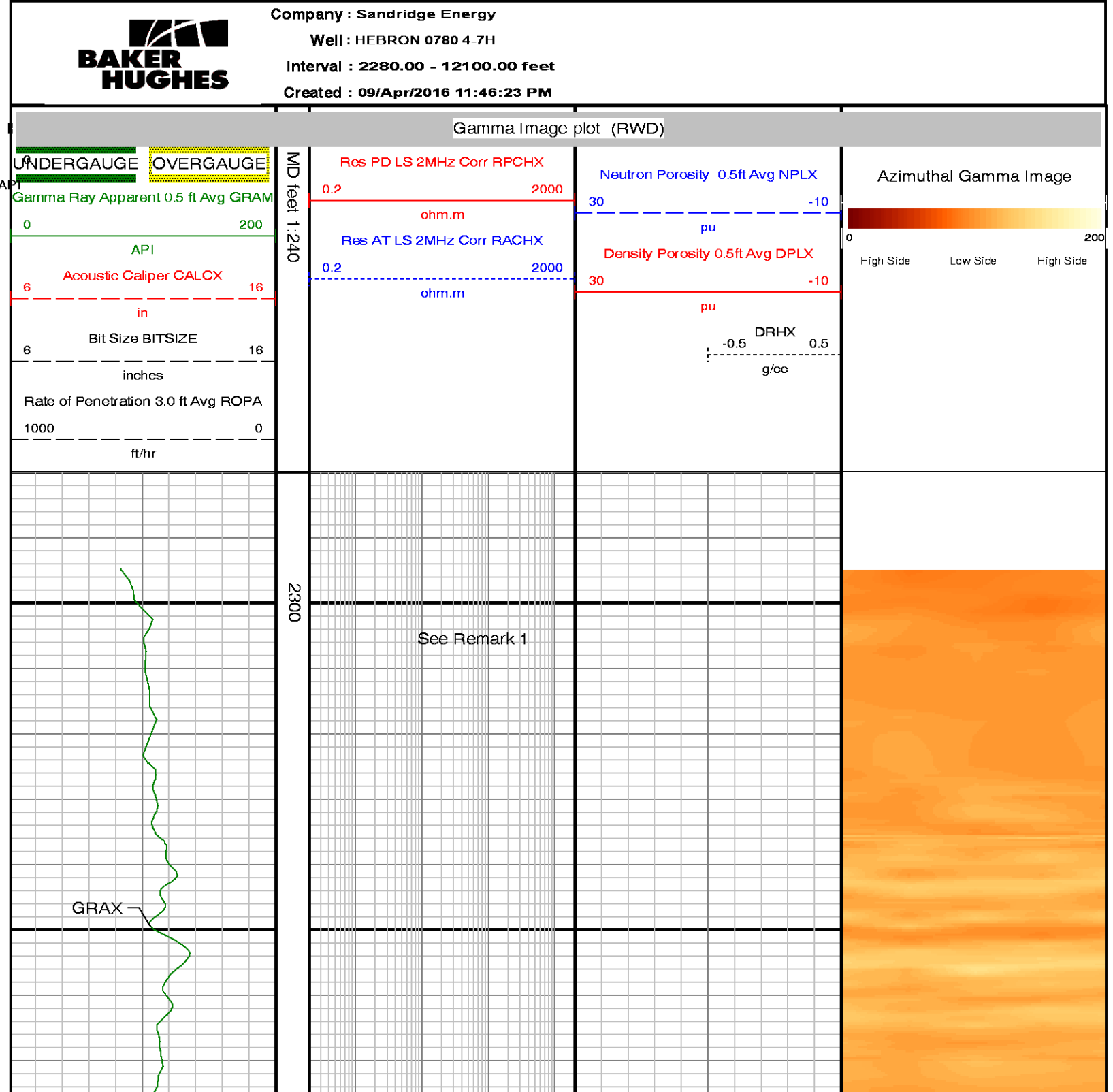
#### Comments

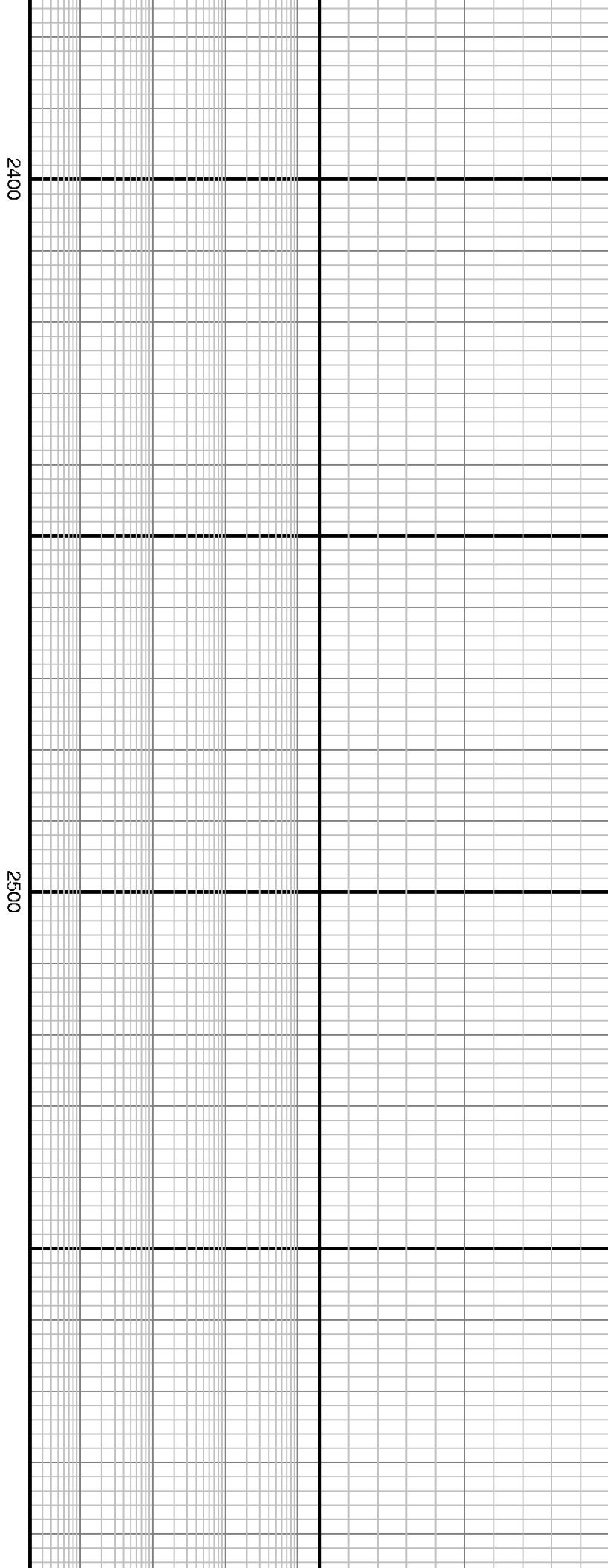
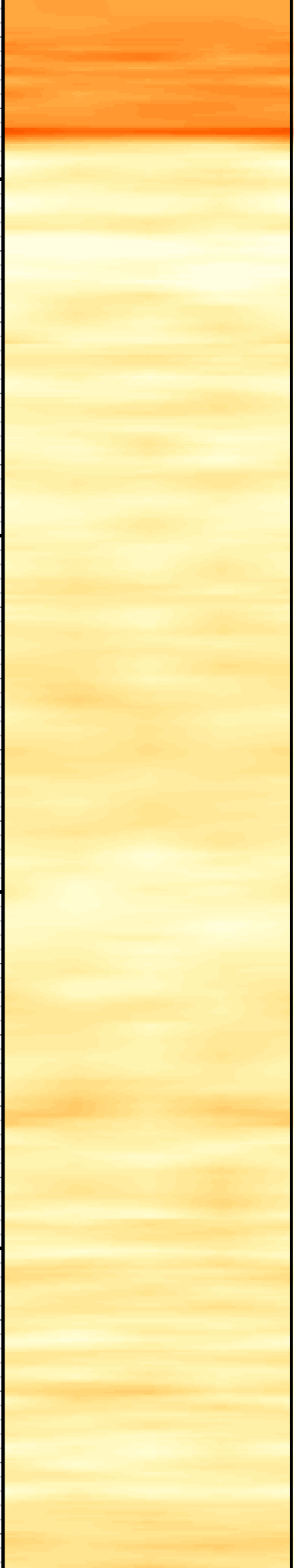
- 1) Depth measurements obtained from a depth control system not supplied or operated by Baker Hughes INTEQ. Due to lack of control by Baker Hughes INTEQ logging engineers, depth calibration and measurements could not be independently verified.
- 2) Baker Hughes LWD run 1 utilized 6 3/4 inch NaviGamma Services (VSS and Directional) behind a 12 1/4 inch bit and steerable assembly from 125 to 2395 feet MD (125 to 2394.20 feet TVD)
- 3) Baker Hughes LWD run 2 utilized 6 3/4 inch AutoTrak Curve Services (Rotary Steerable, Navigamma, VSS and Directional) behind a 8 3/4 inch bit from 2395 to 7833 feet MD (2394 to 7055 feet TVD).
- 4) Baker Hughes LWD run 3 utilized 6 3/4 inch OnTrak and LithoTrak Services (VSS, Directional, Gammar Ray, Multiple Propagation Resistivity, Gamma Ray Imaging, Density Image, Density Porosity, Neutron Porosity, and Photoelectric Effect) behind an 8 3/4 inch bit and steerable assembly from 7833 to 10933 feet MD (7055 to 6909 feet TVD).
- 5) Baker Hughes LWD run 4 utilized 6 3/4 inch AutoTrak Curve Services (Rotary Steerable, Navigamma, VSS and Directional) behind a 8 3/4 inch bit from 10933 to 12084 feet MD (7055 to 6921 feet TVD).

#### Remarks

| Number | Measured<br>Depth<br>(ft.) | Hole<br>Section<br>(in.) | LWD<br>Run No. | Remark  |
|--------|----------------------------|--------------------------|----------------|---|
| 1      | 2395                       | 8.750                    | 2              | Logging services began at 2395' MD (2394'TVD) as per clients request. |

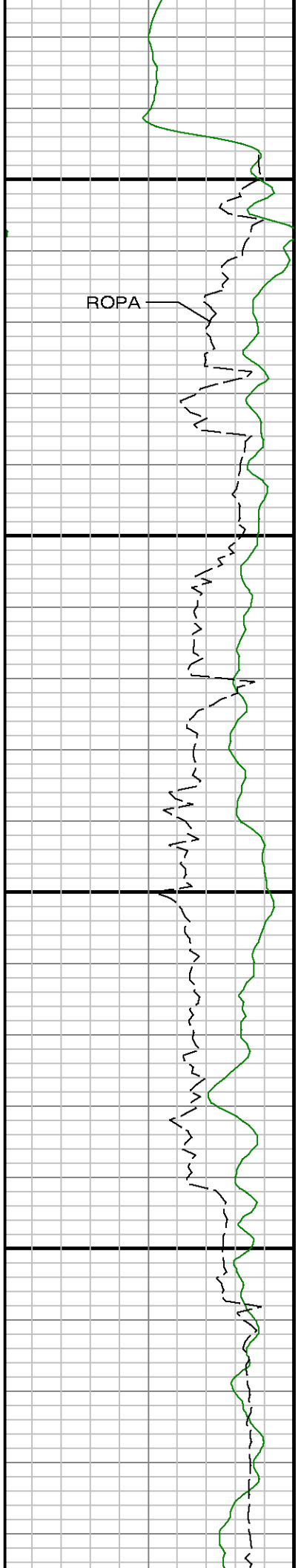
|   |       |       |   |  |
|---|-------|-------|---|--|
| 2 | 7822  | 8.750 | 3 | The interval from 7822 to 7833 feet MD was logged up to 25 hours after being drilled due to a trip out of hole to pick up OnTrak and LithoTrak services. |
| 3 | 7822  | 8.750 | 3 | Only realtime data presented for the interval of 7822 to 10883 feet MD due to downhole tool memory failure.  |
| 4 | 10933 | 8.750 | 4 | The interval from 10883 to 10933 feet MD was logged up to 25 hours after being drilled due to a trip out of hole to pick up AutoTrak Curve services.     |
| 5 | 12084 | 8.750 | 4 | The interval from 12071 to 12084 feet MD was not logged due to bit to sensor offset at TD.   |

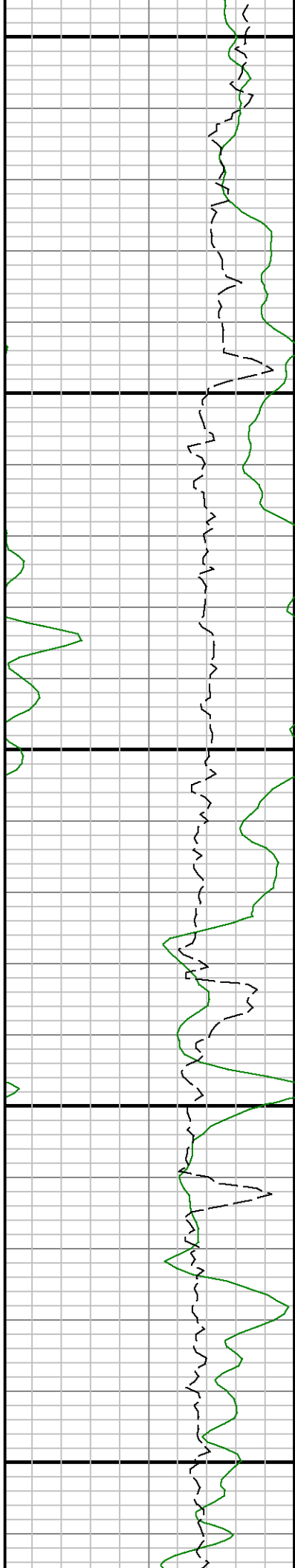
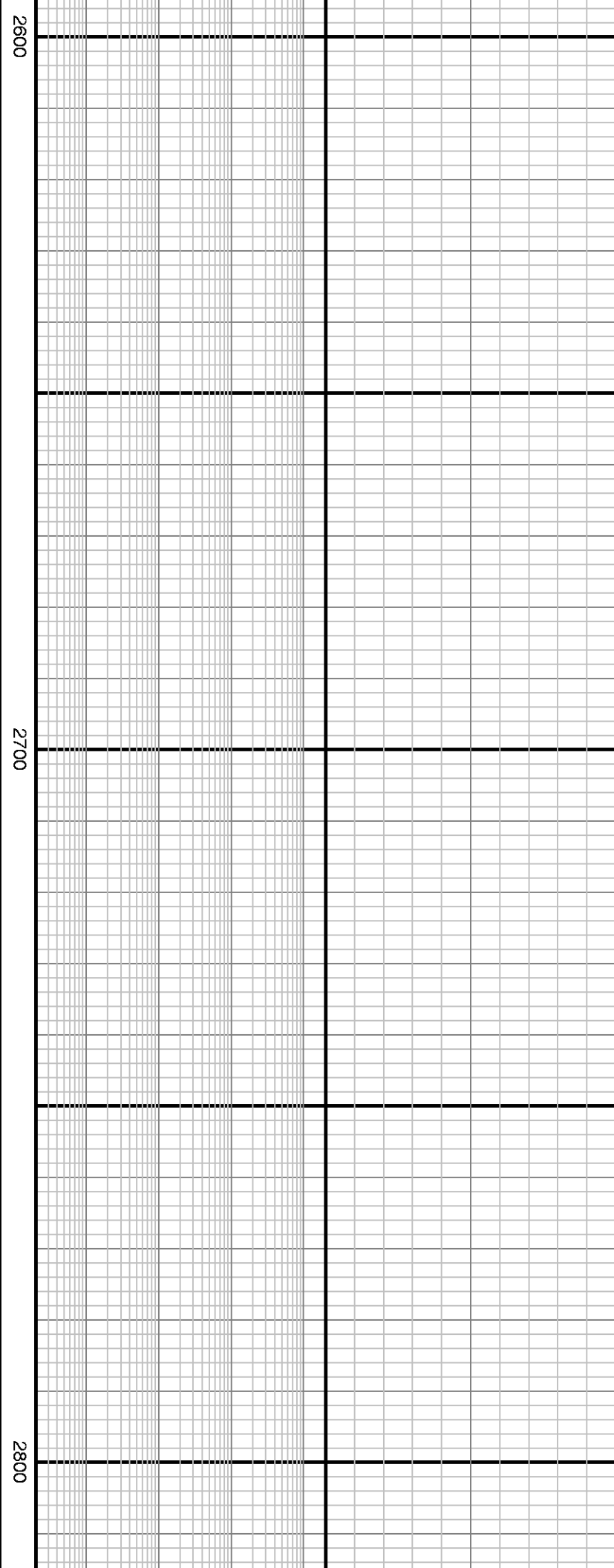


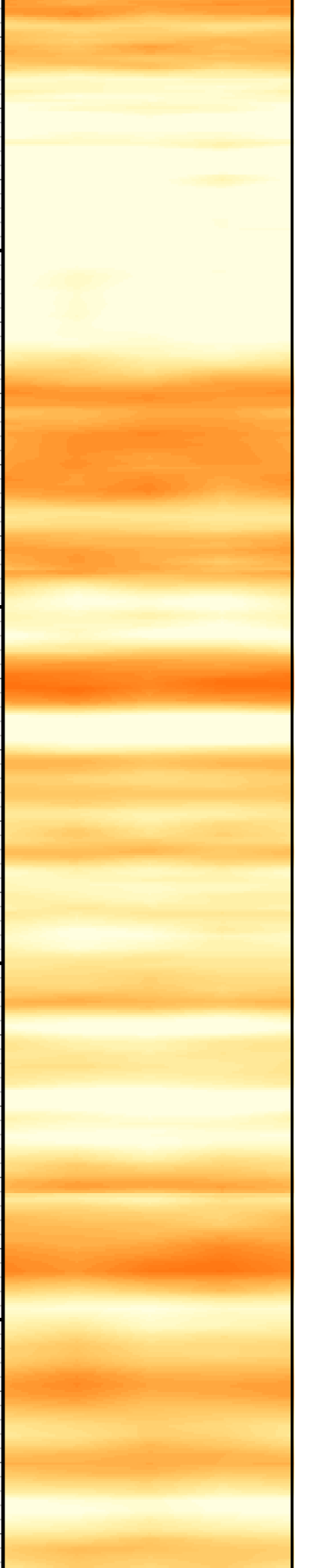
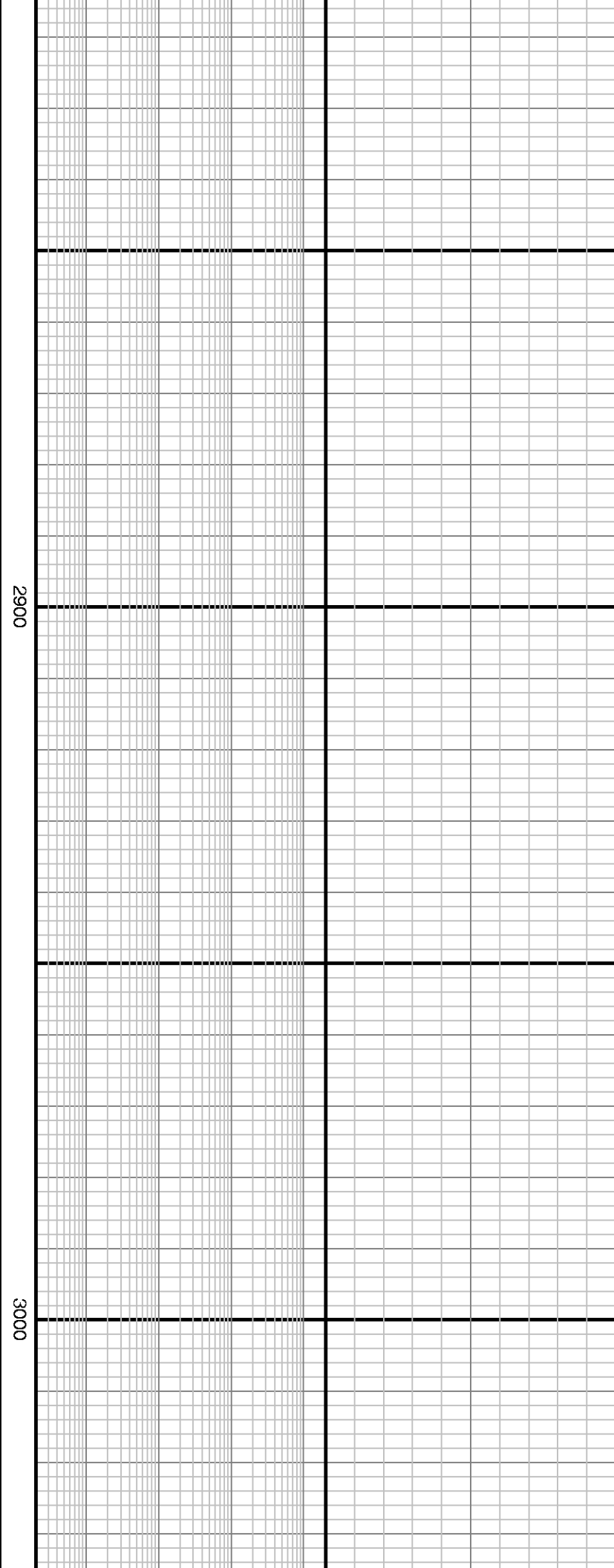
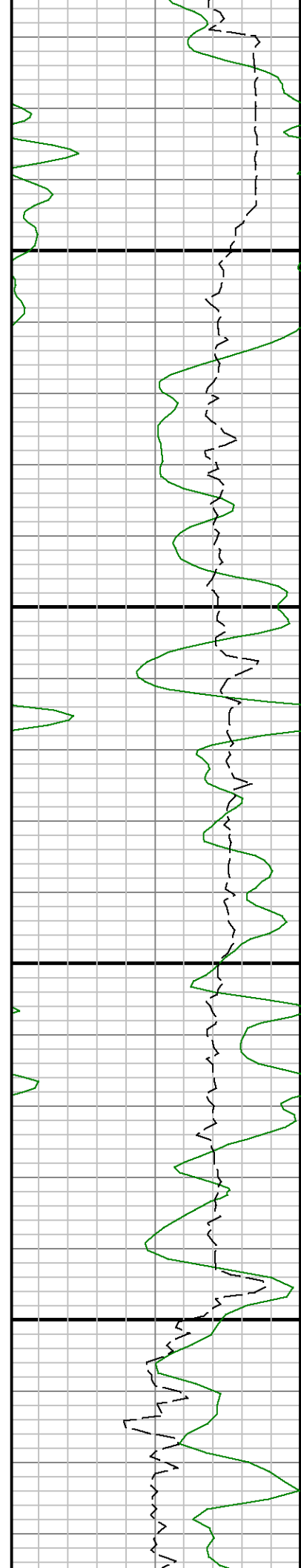


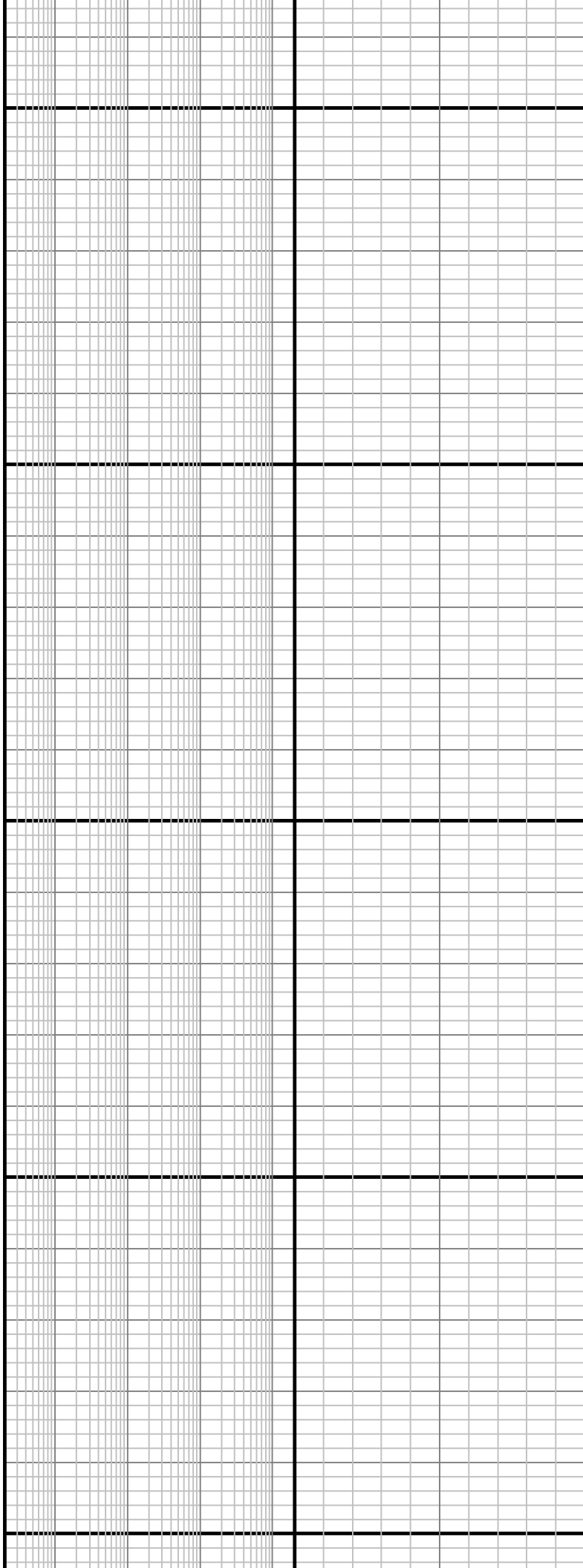
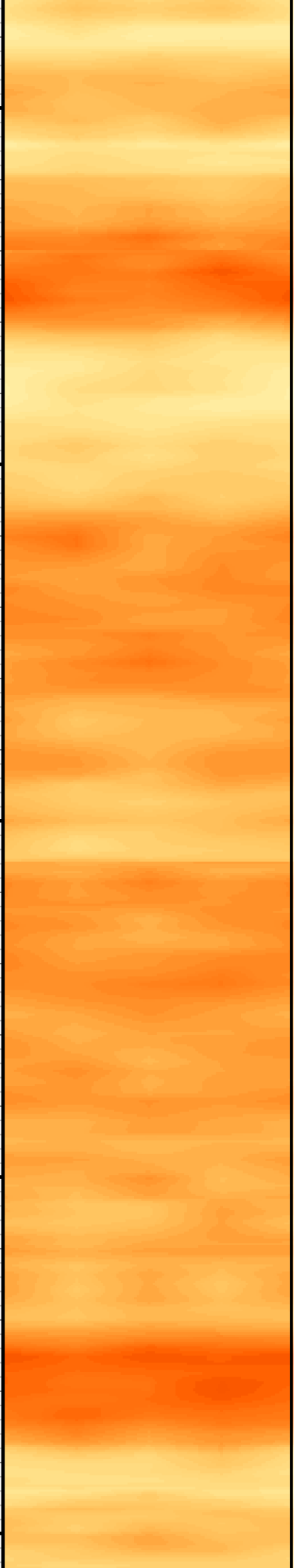
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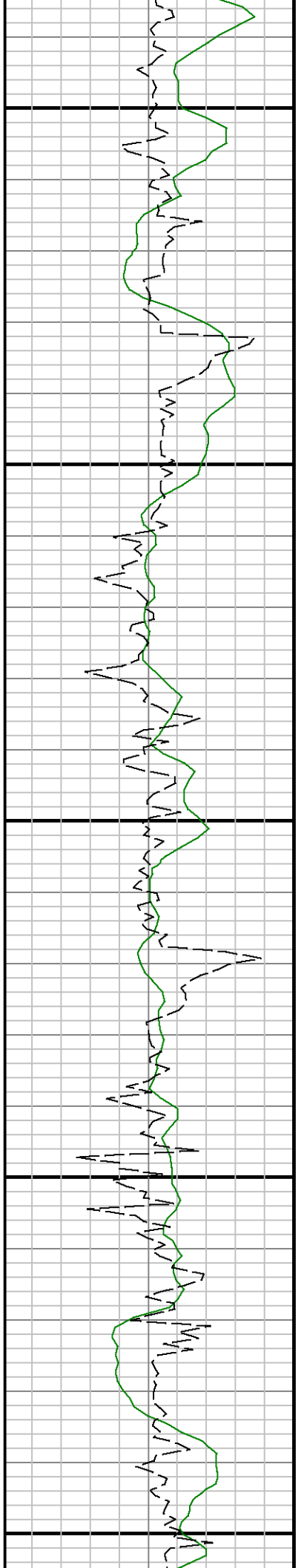




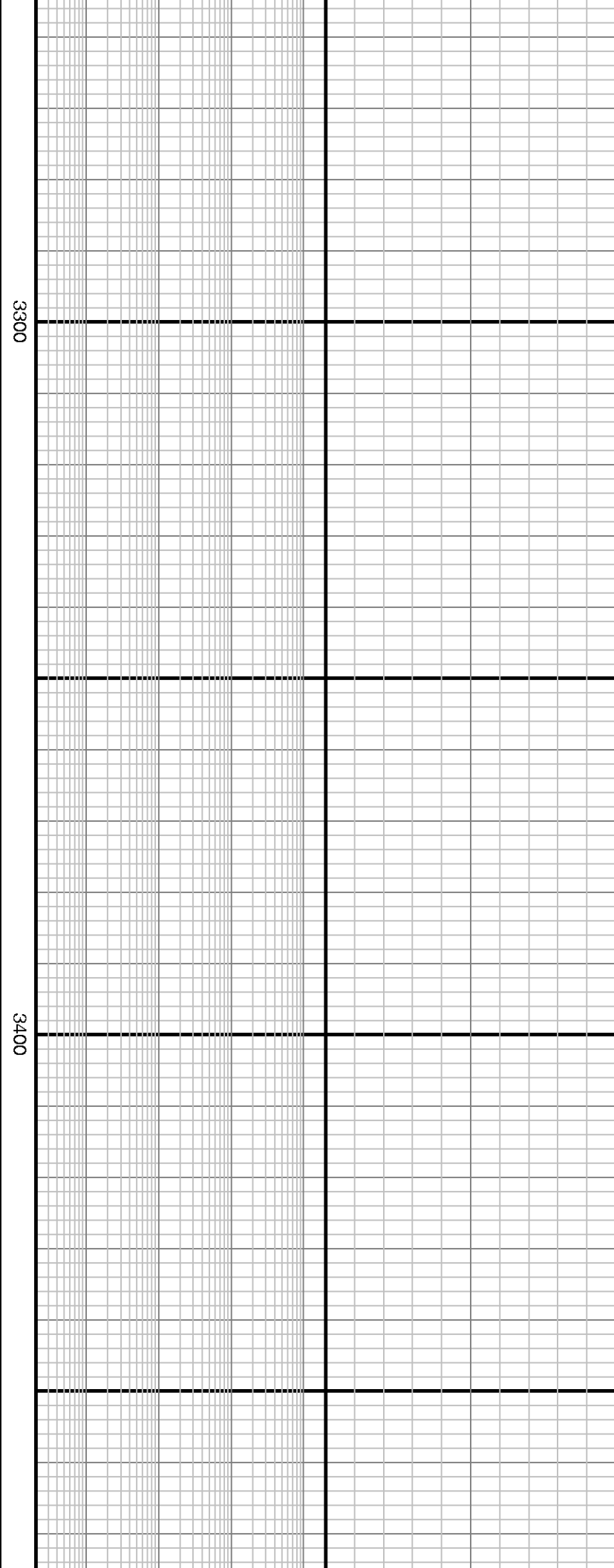
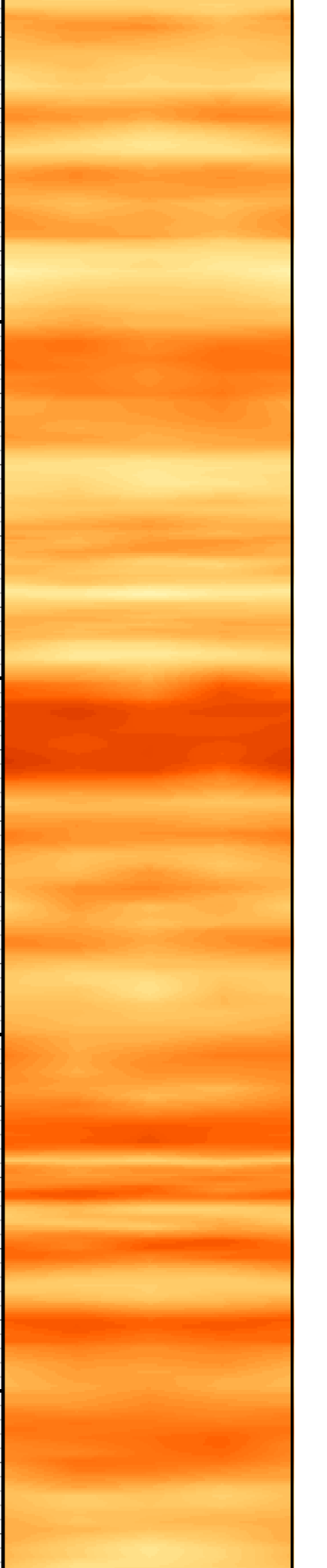


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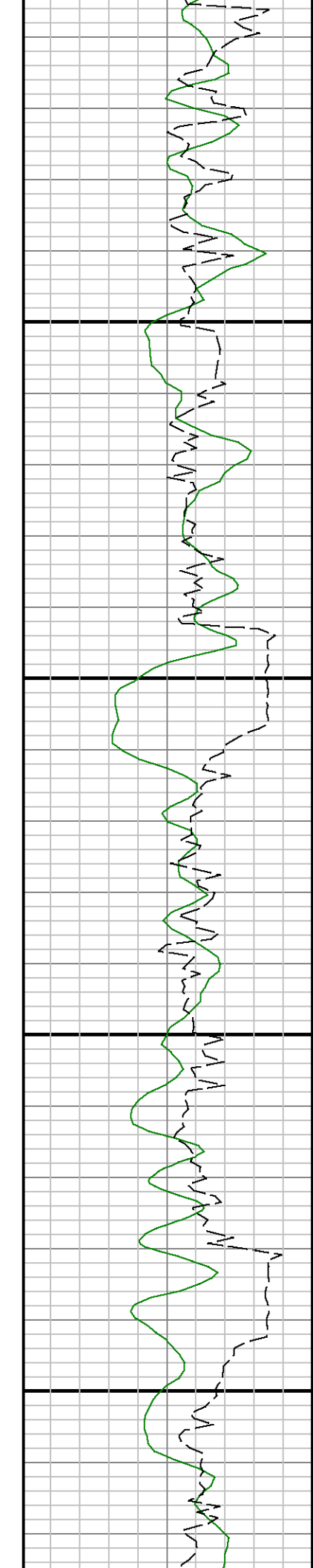


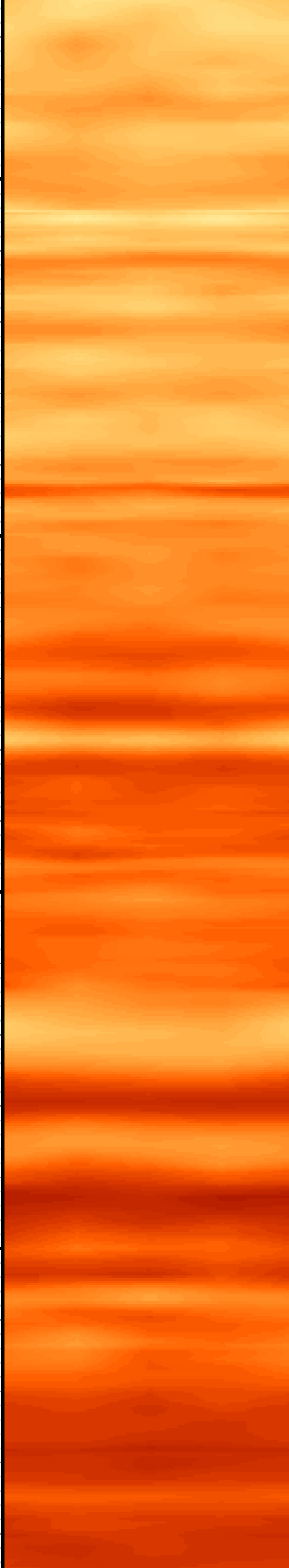
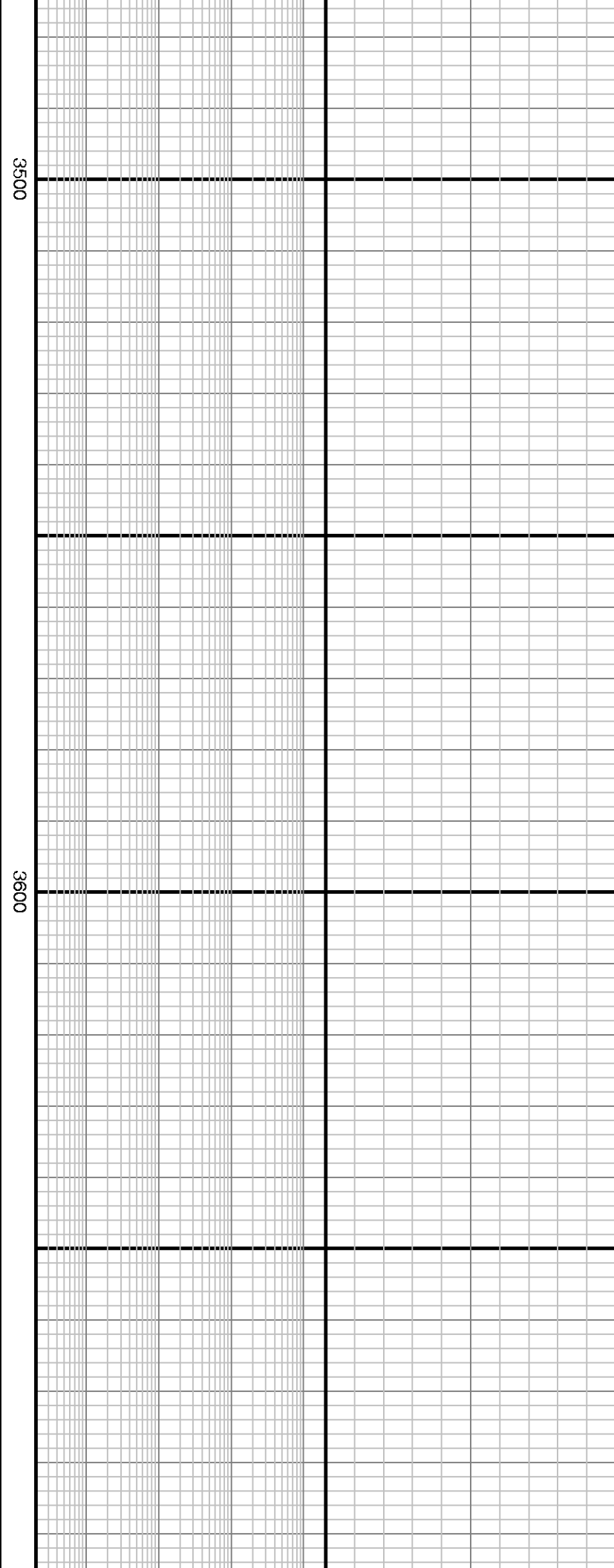
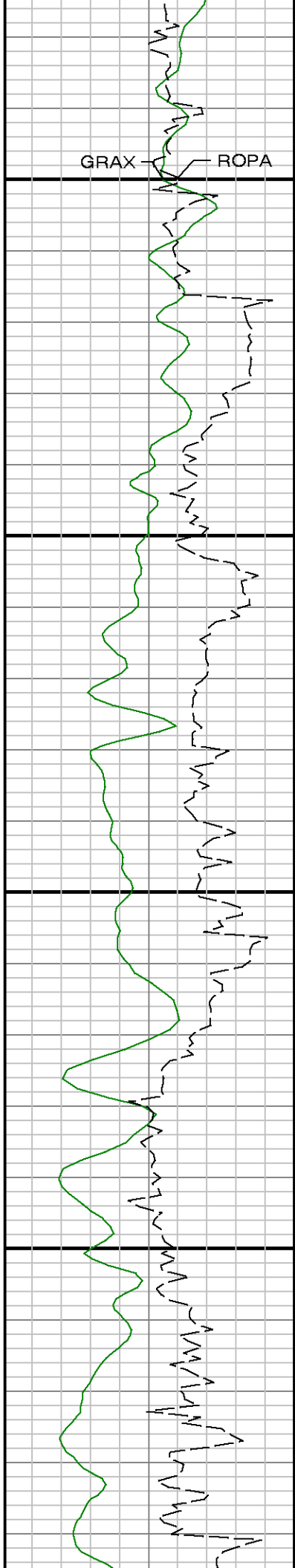


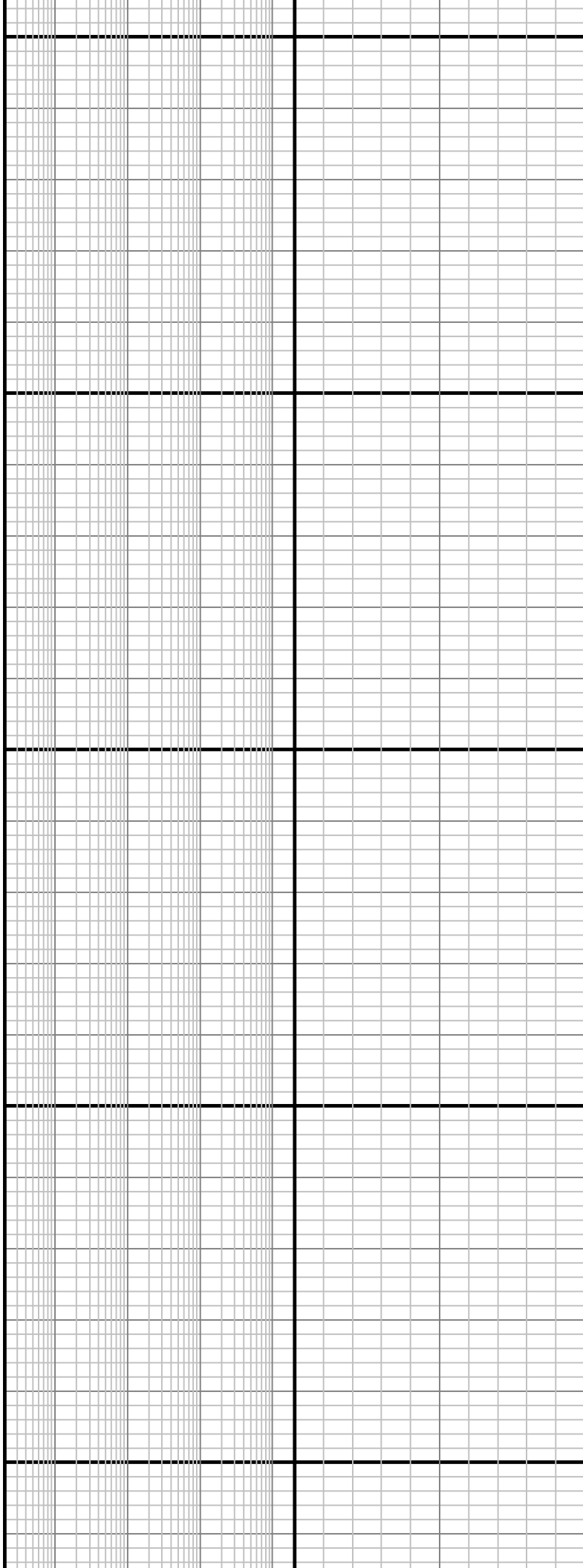
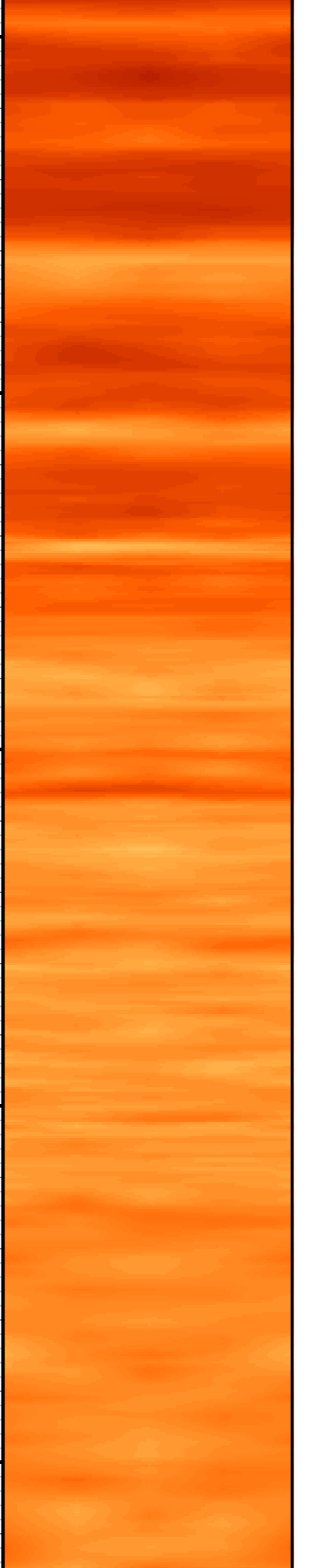


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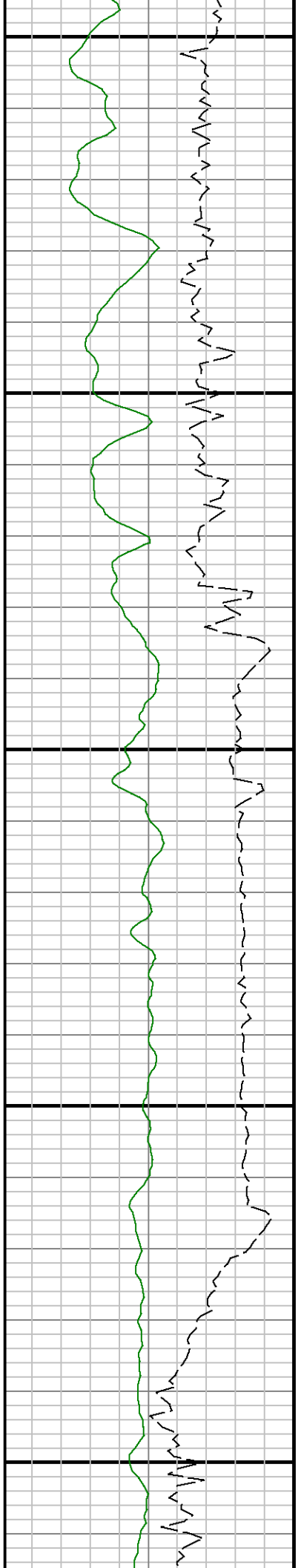
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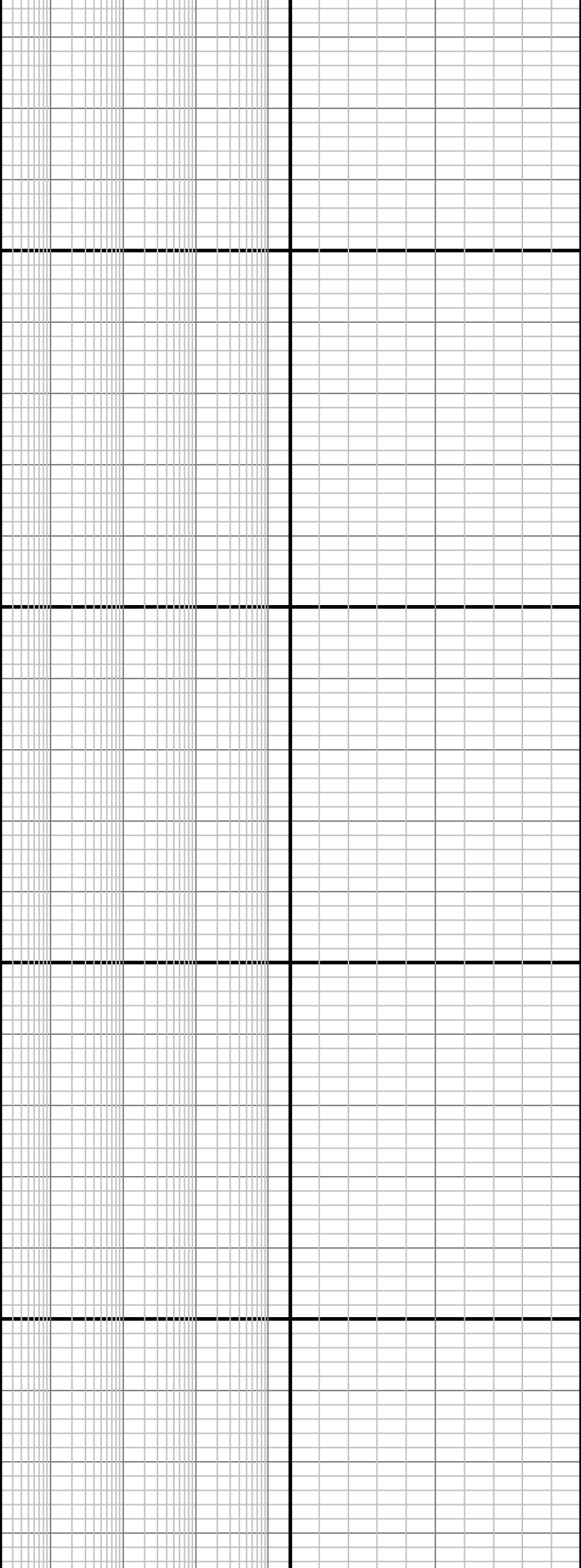
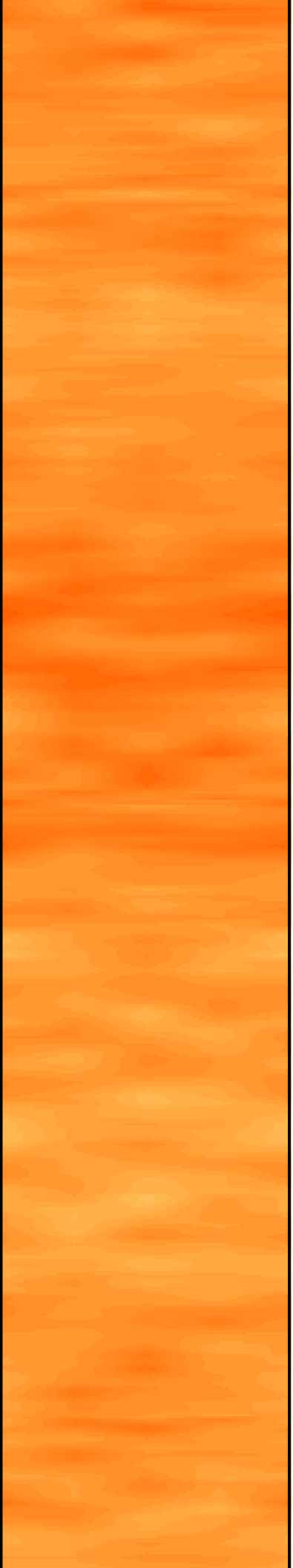






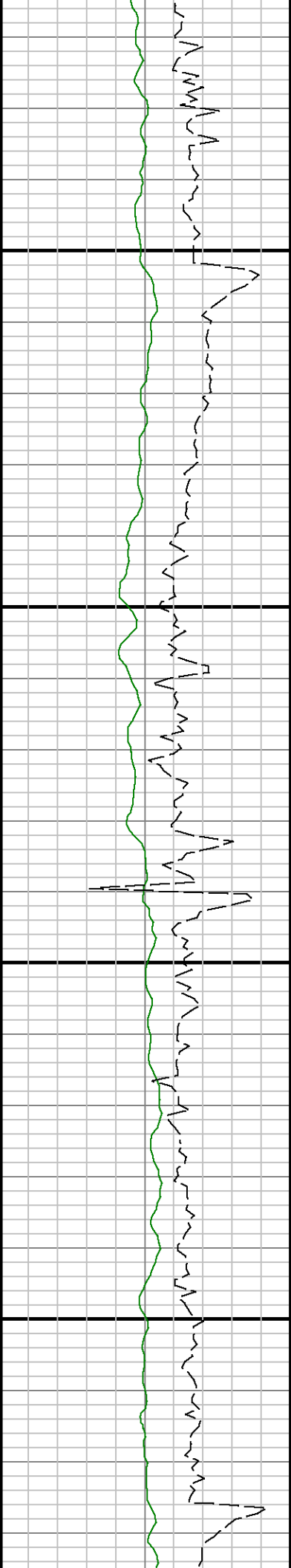
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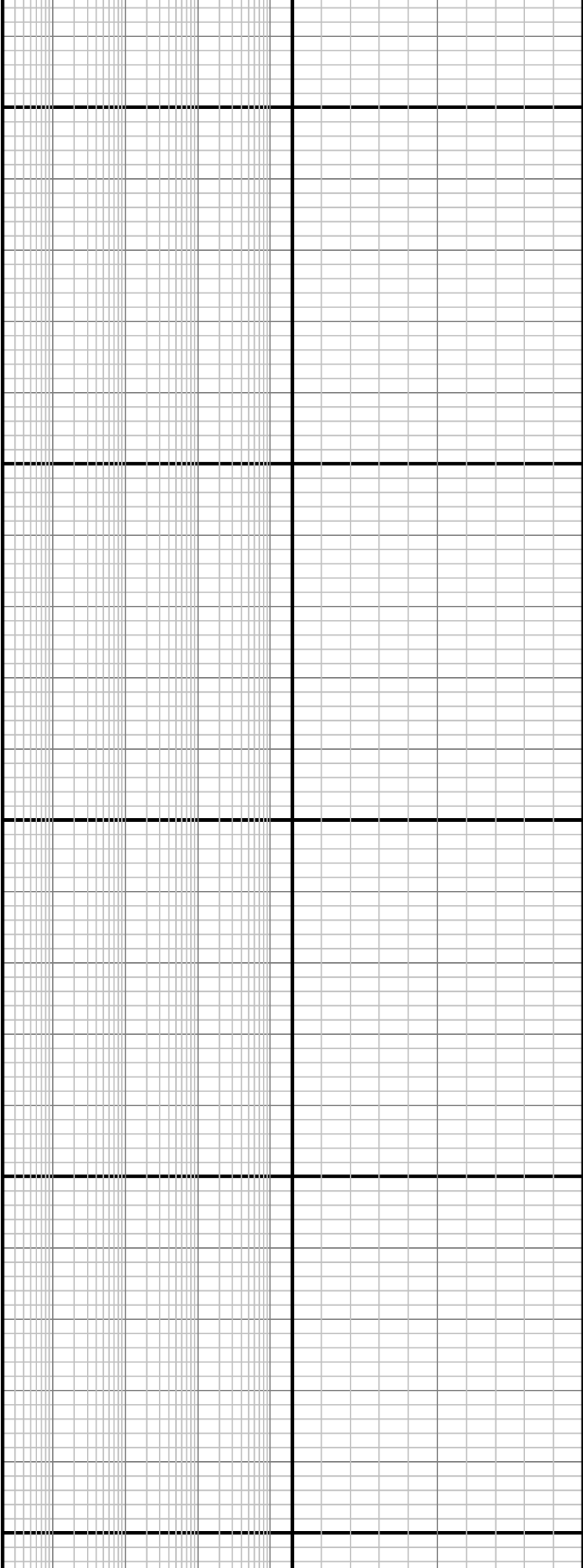
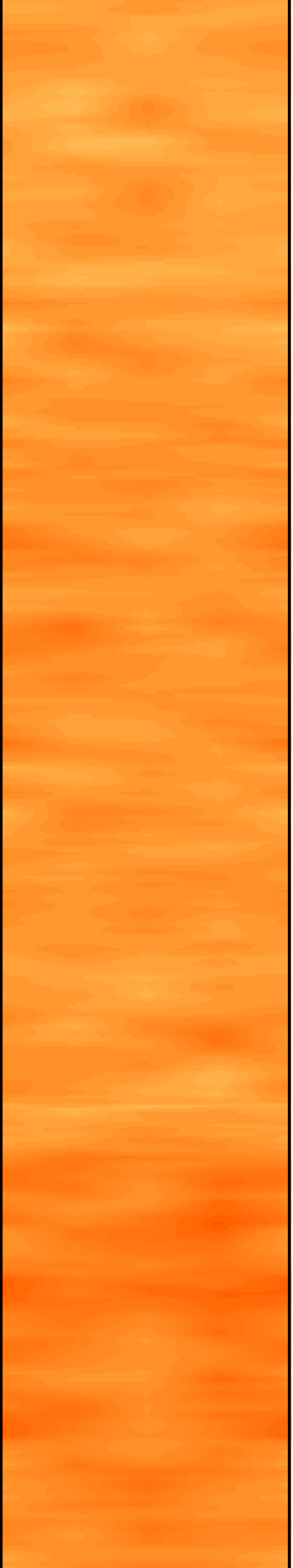




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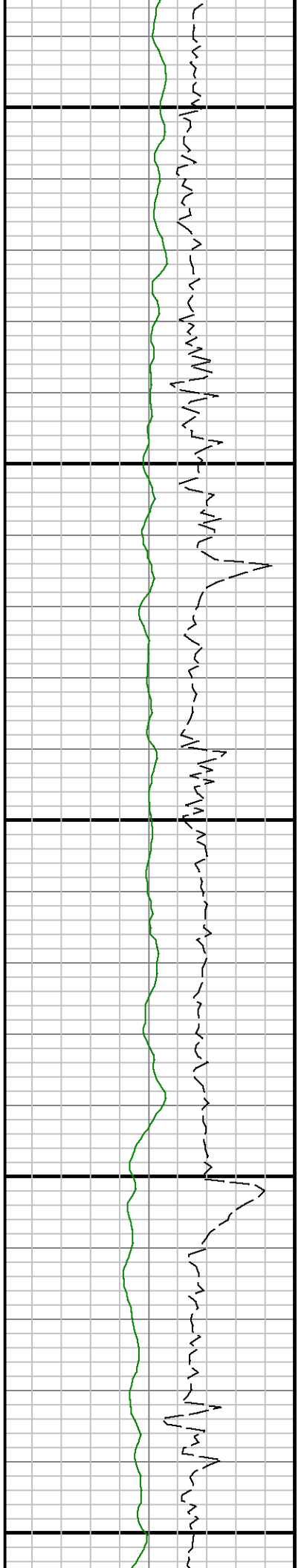
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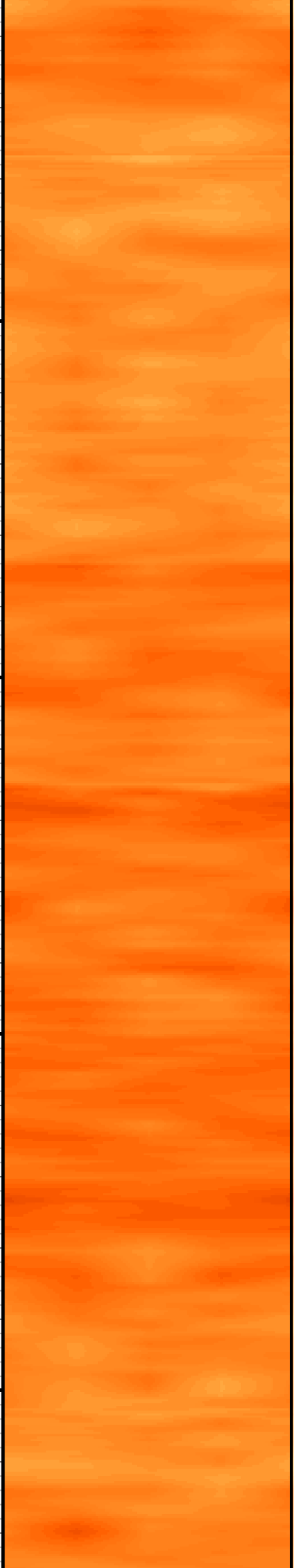




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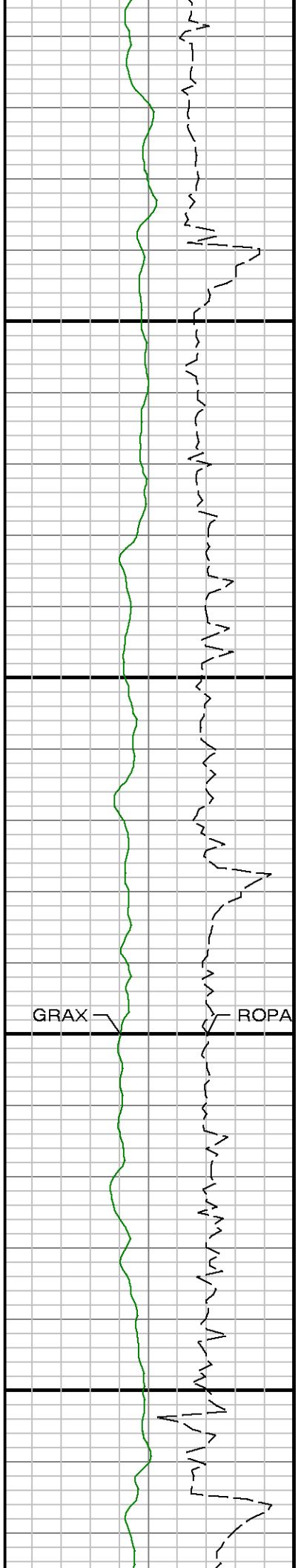
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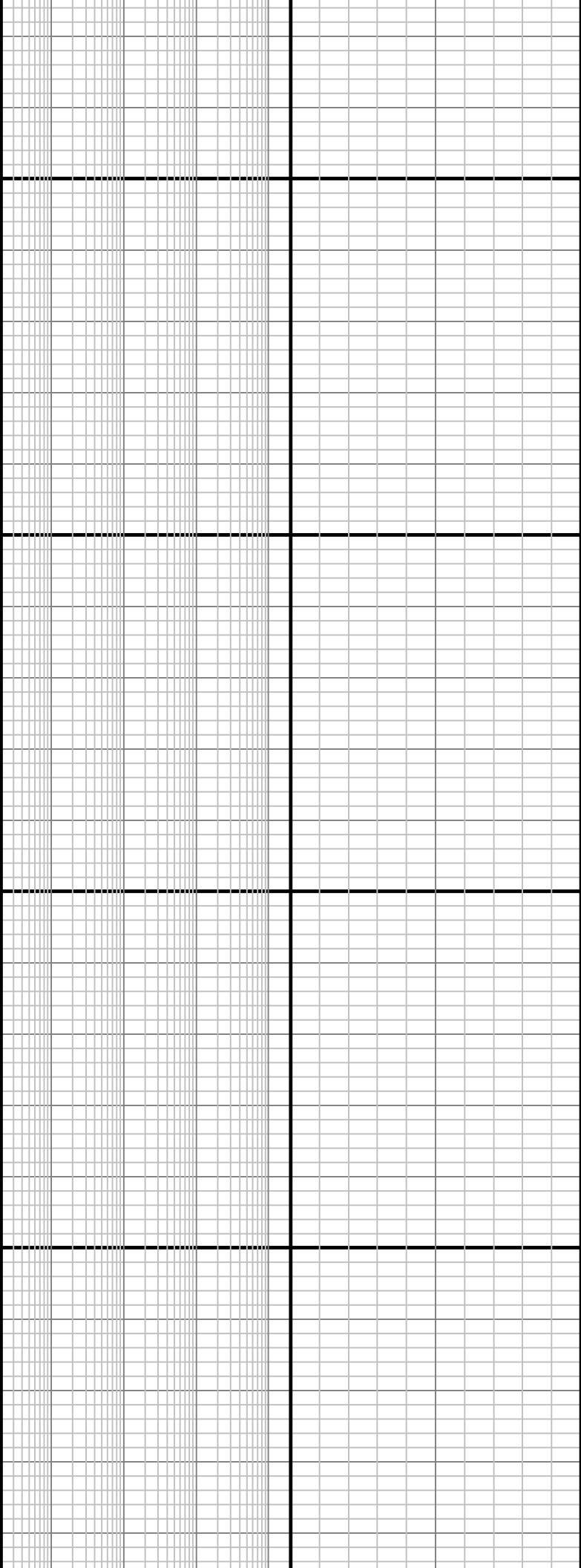
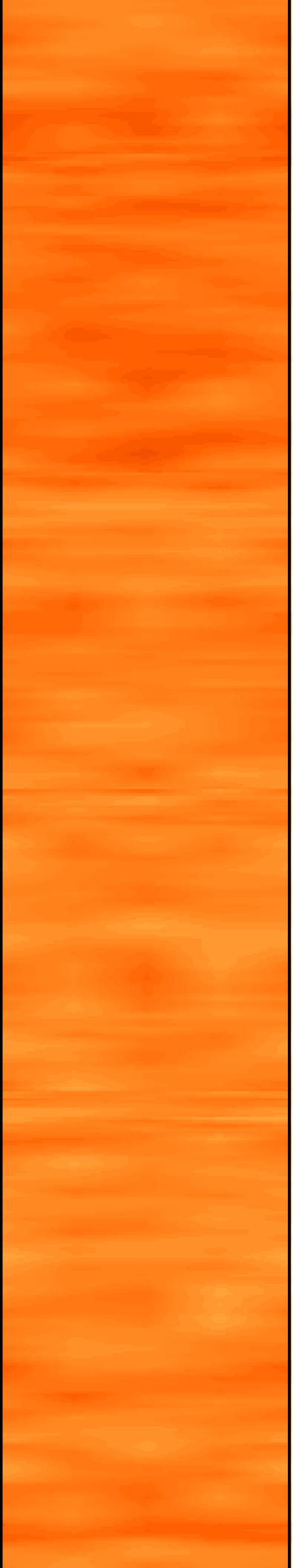




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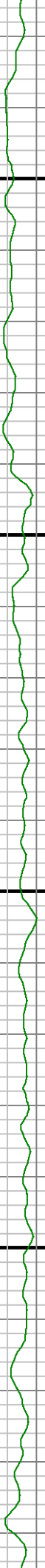
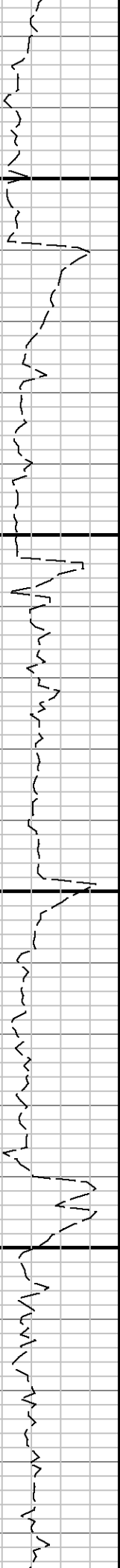
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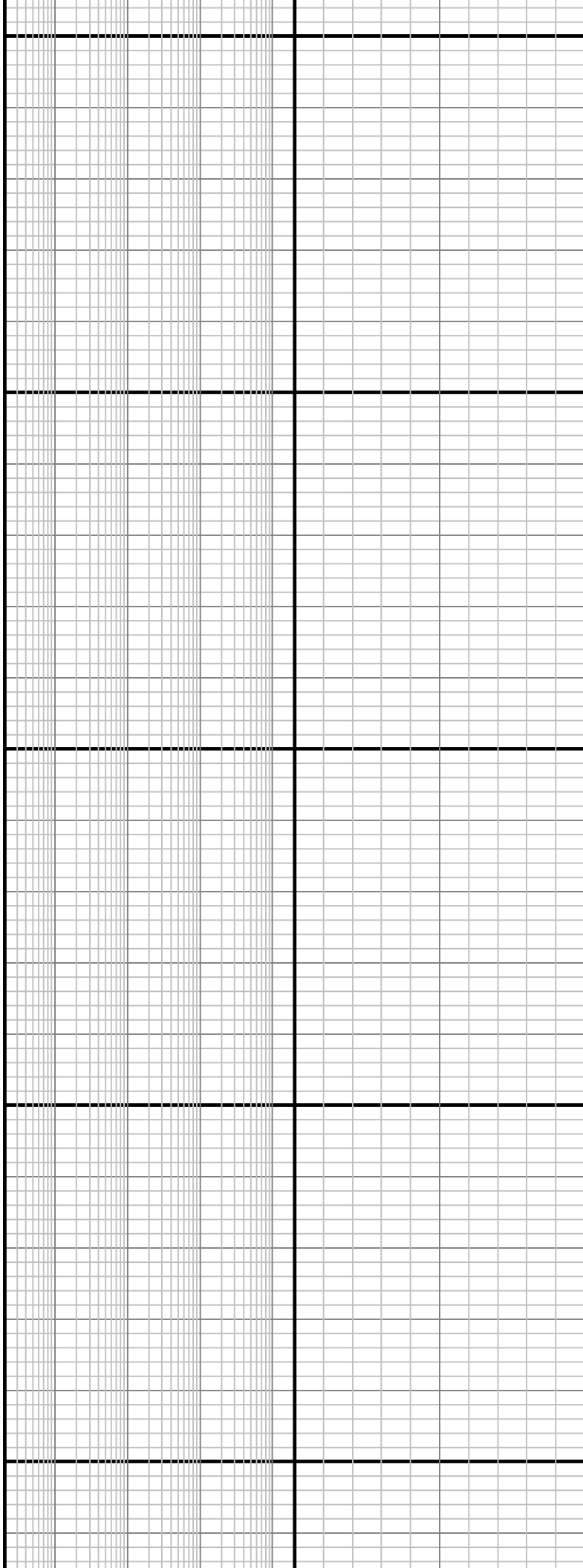
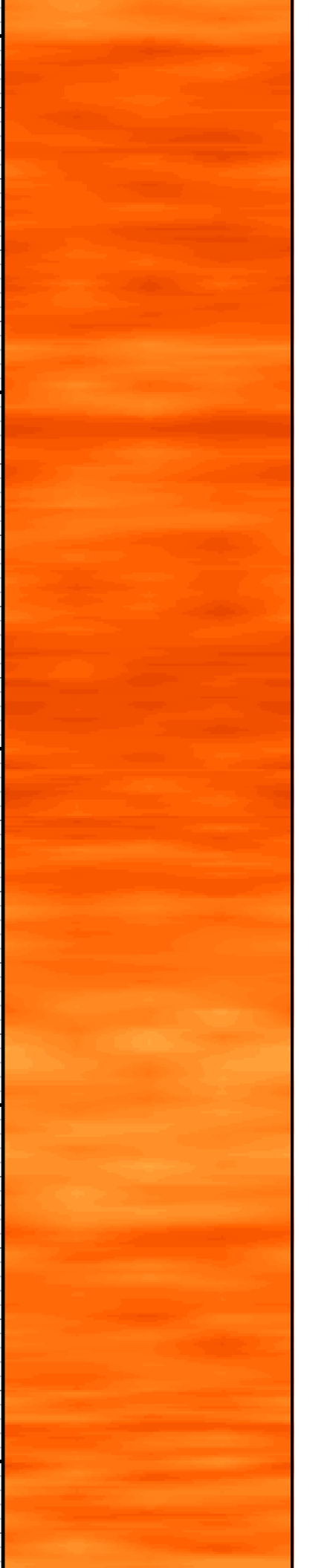




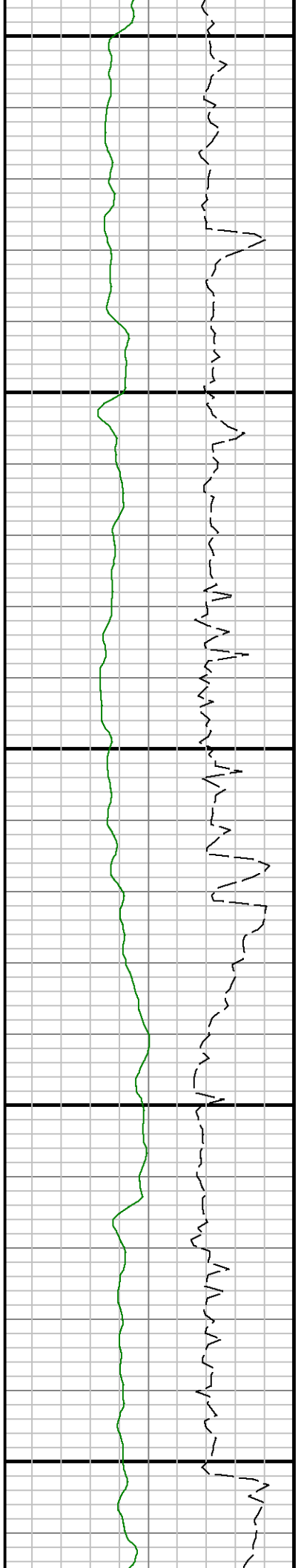
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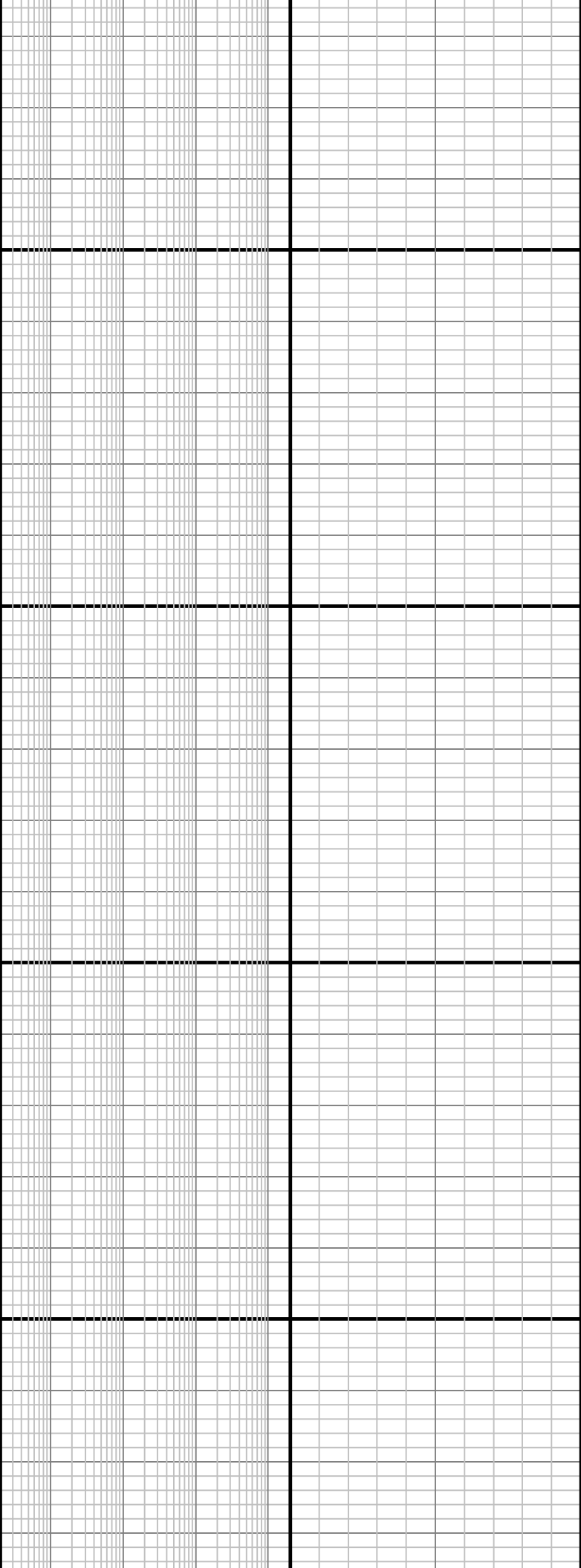
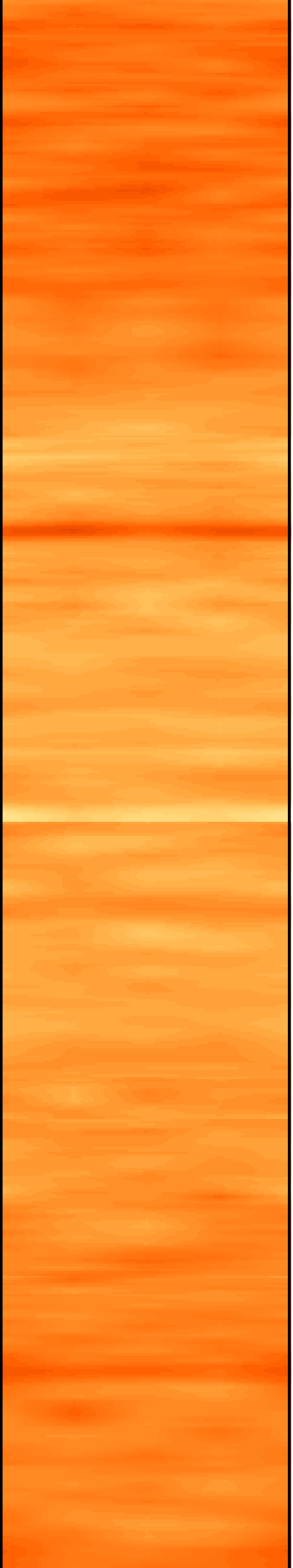




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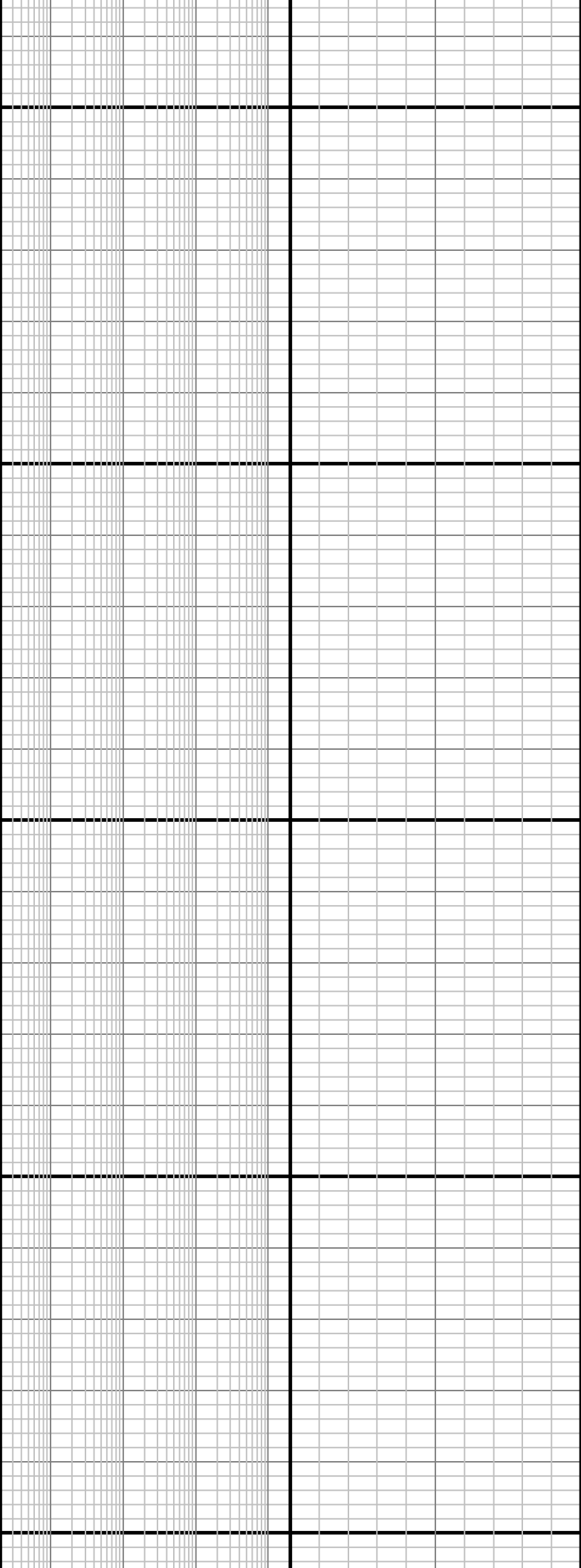
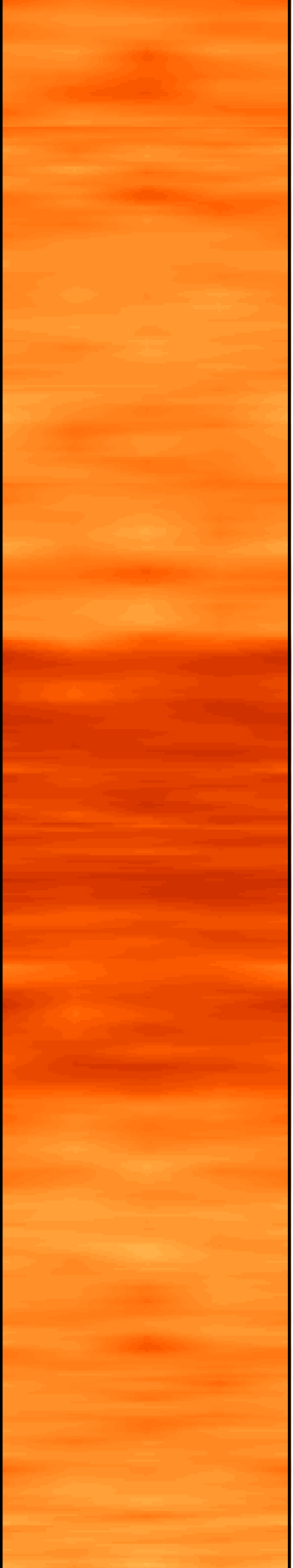




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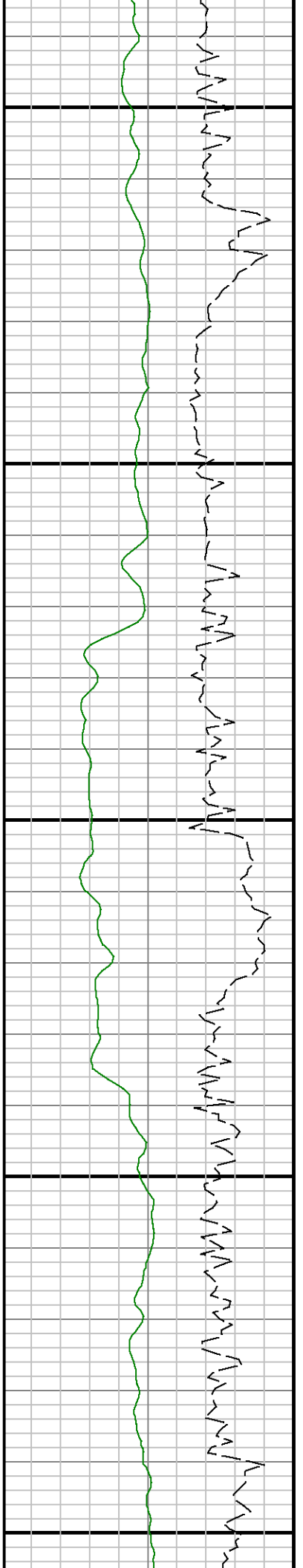
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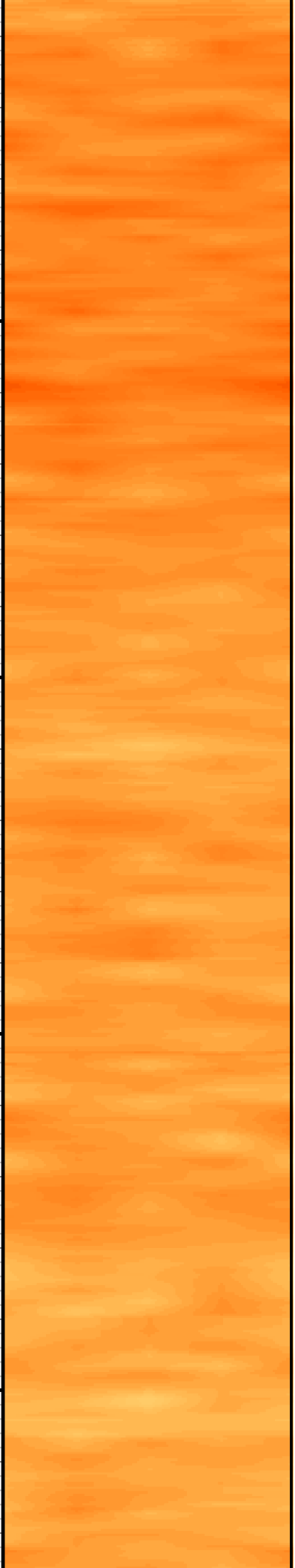
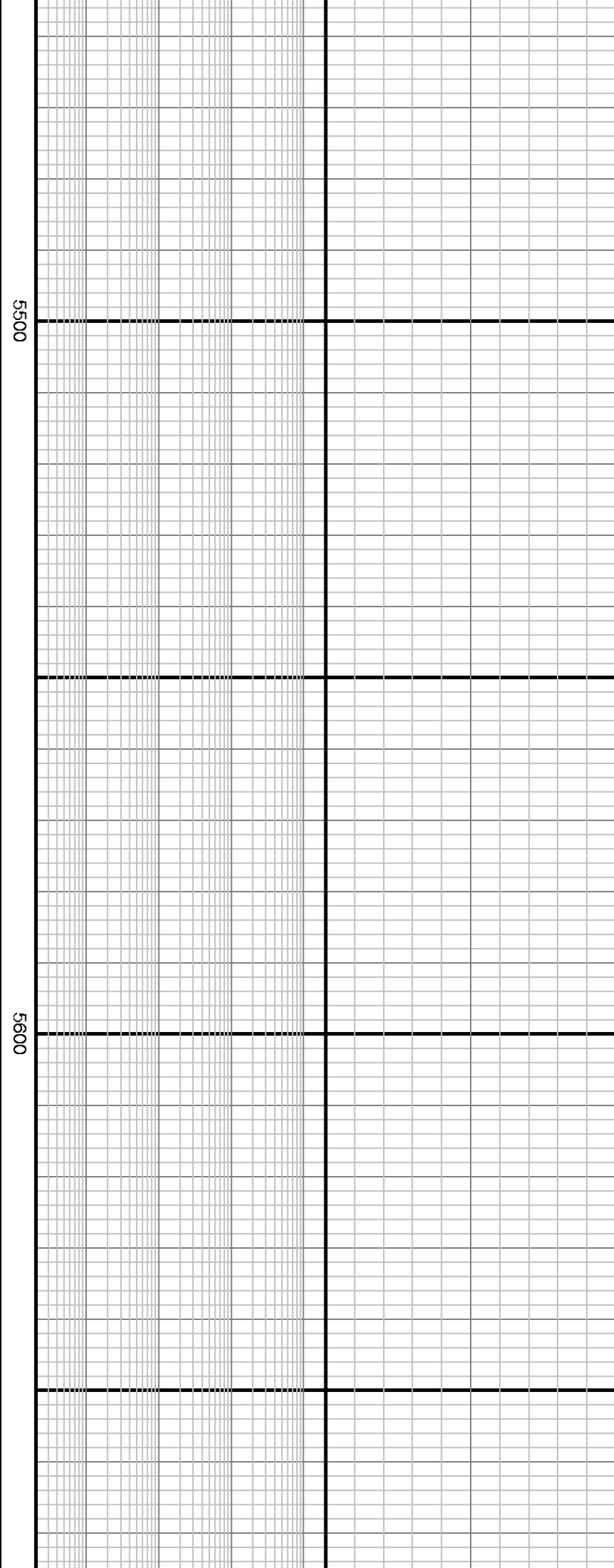
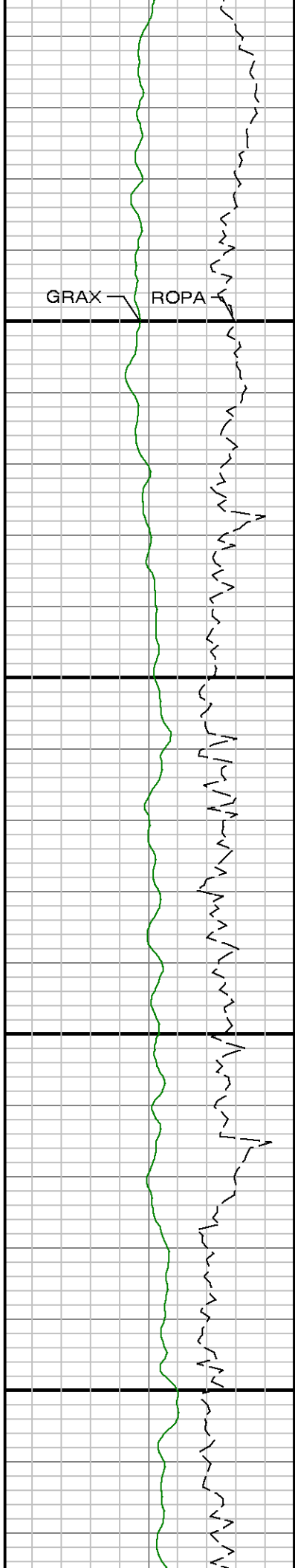


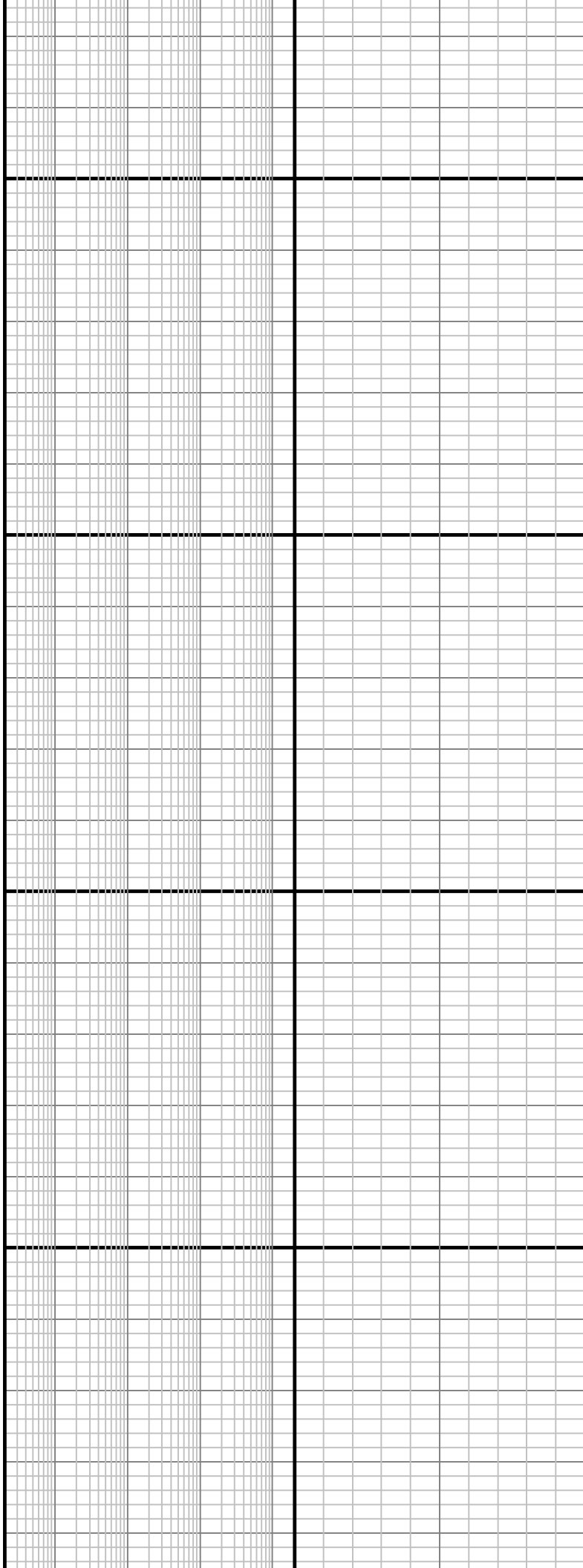
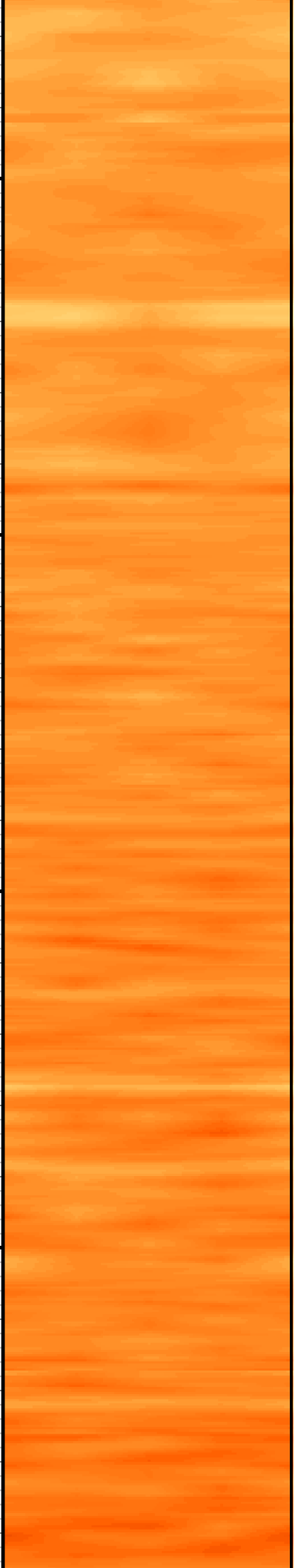


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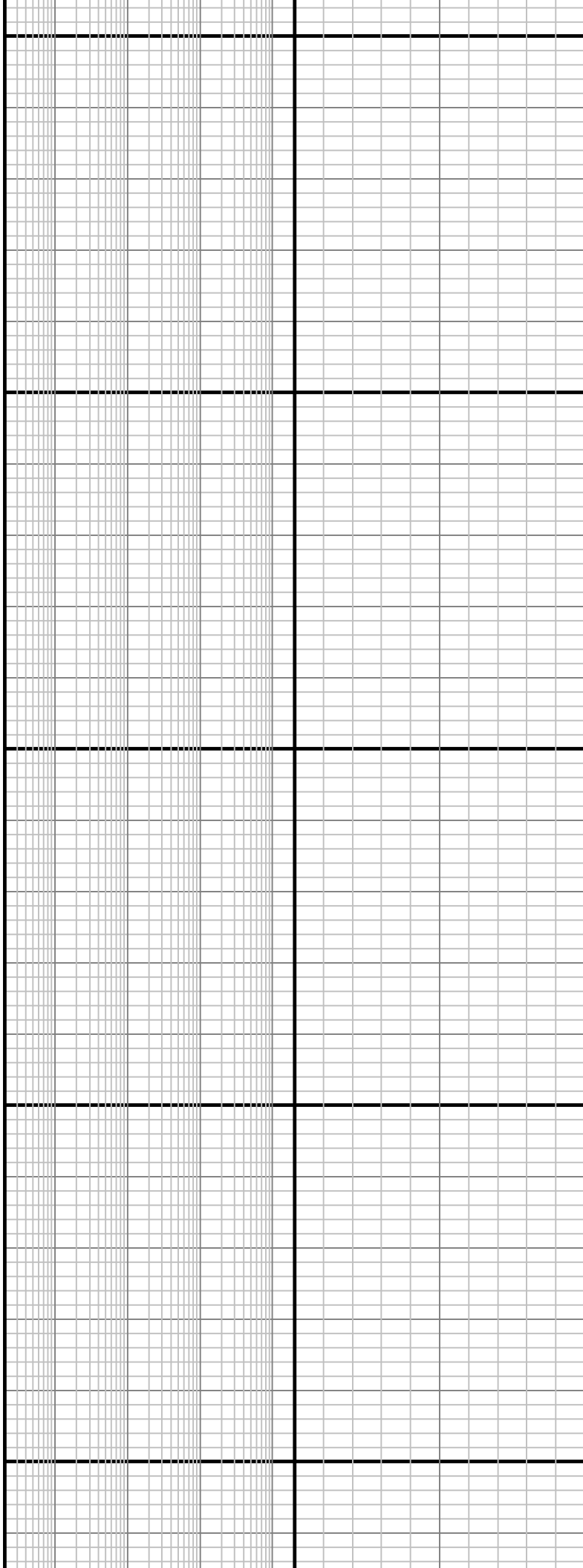
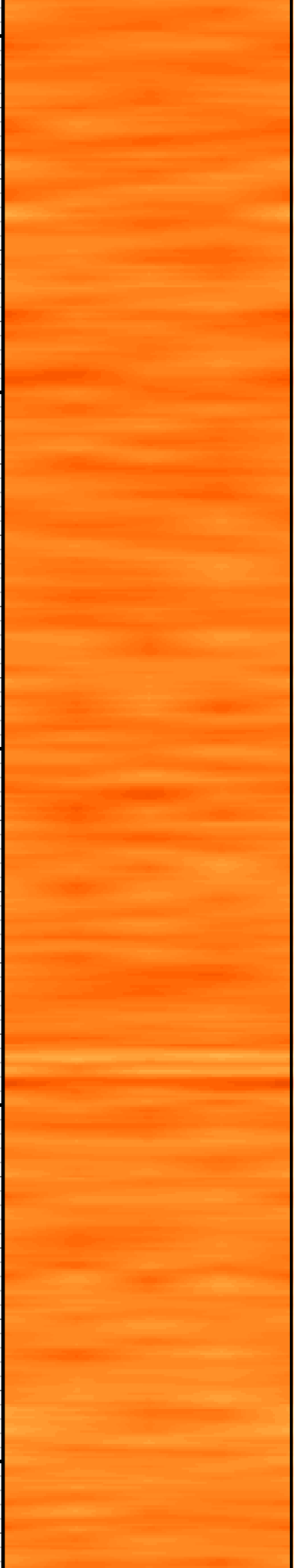




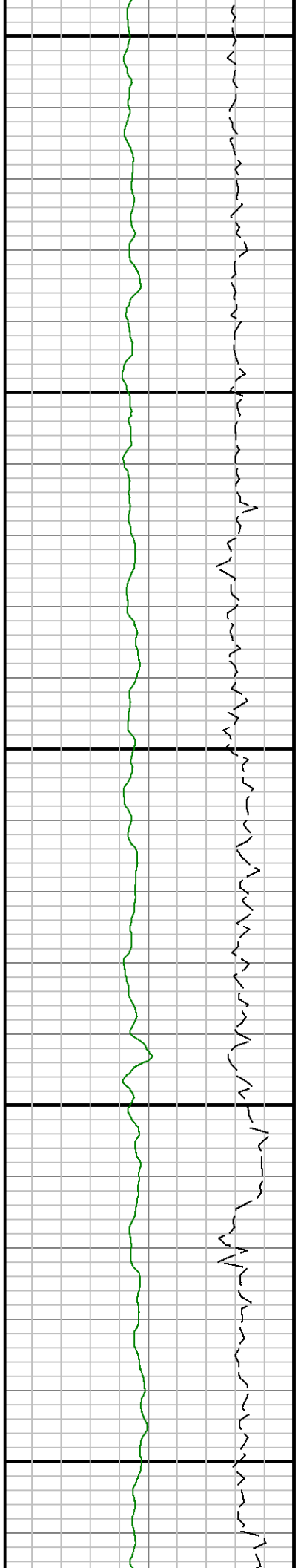
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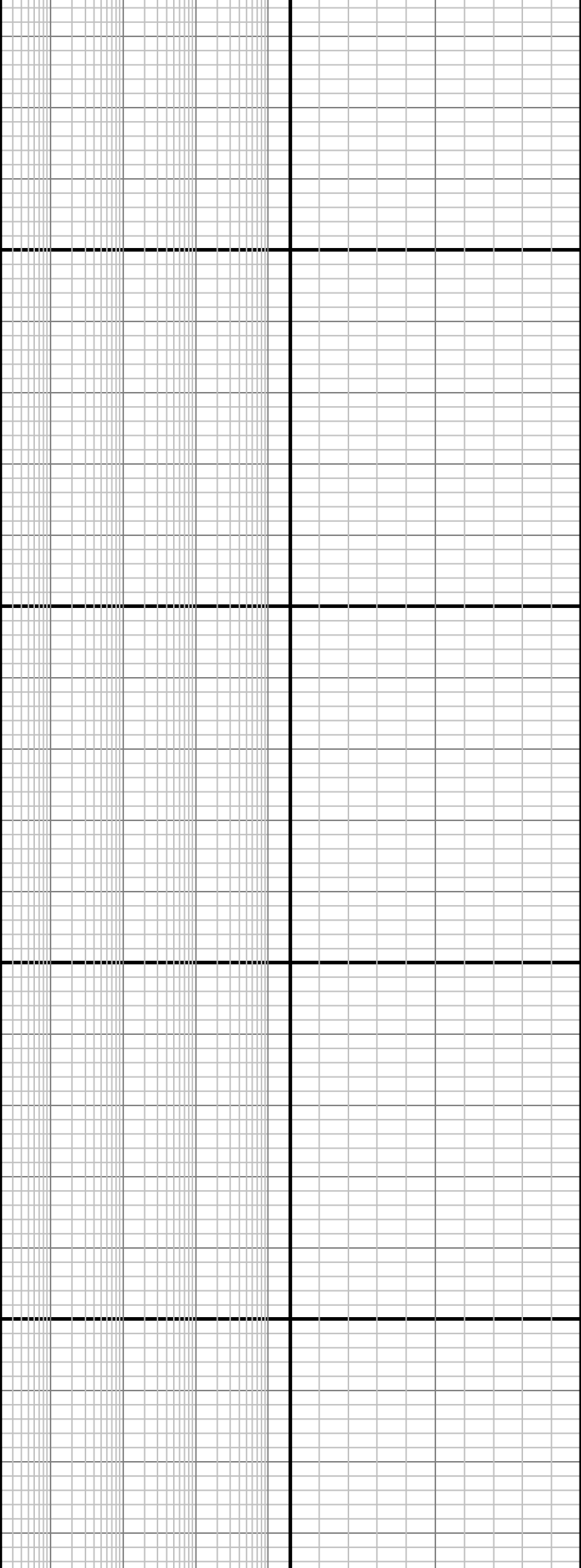
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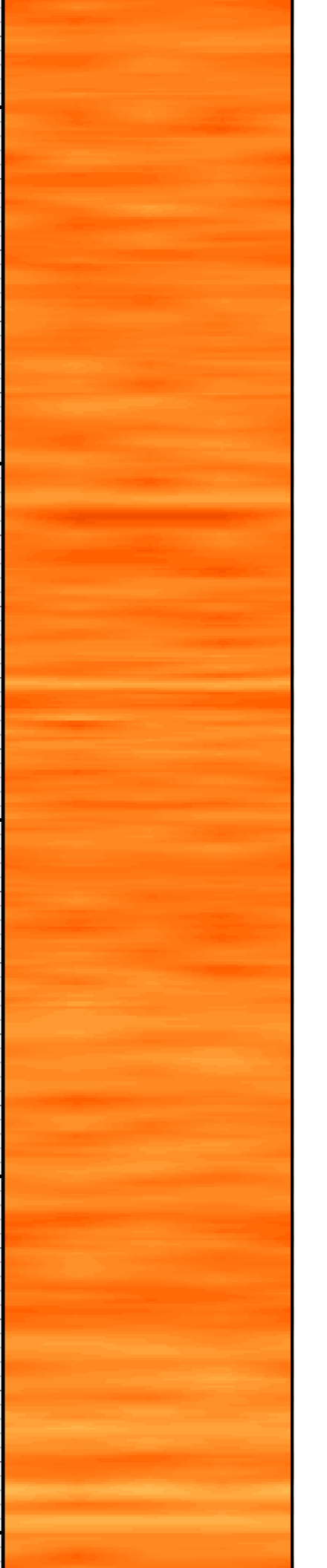
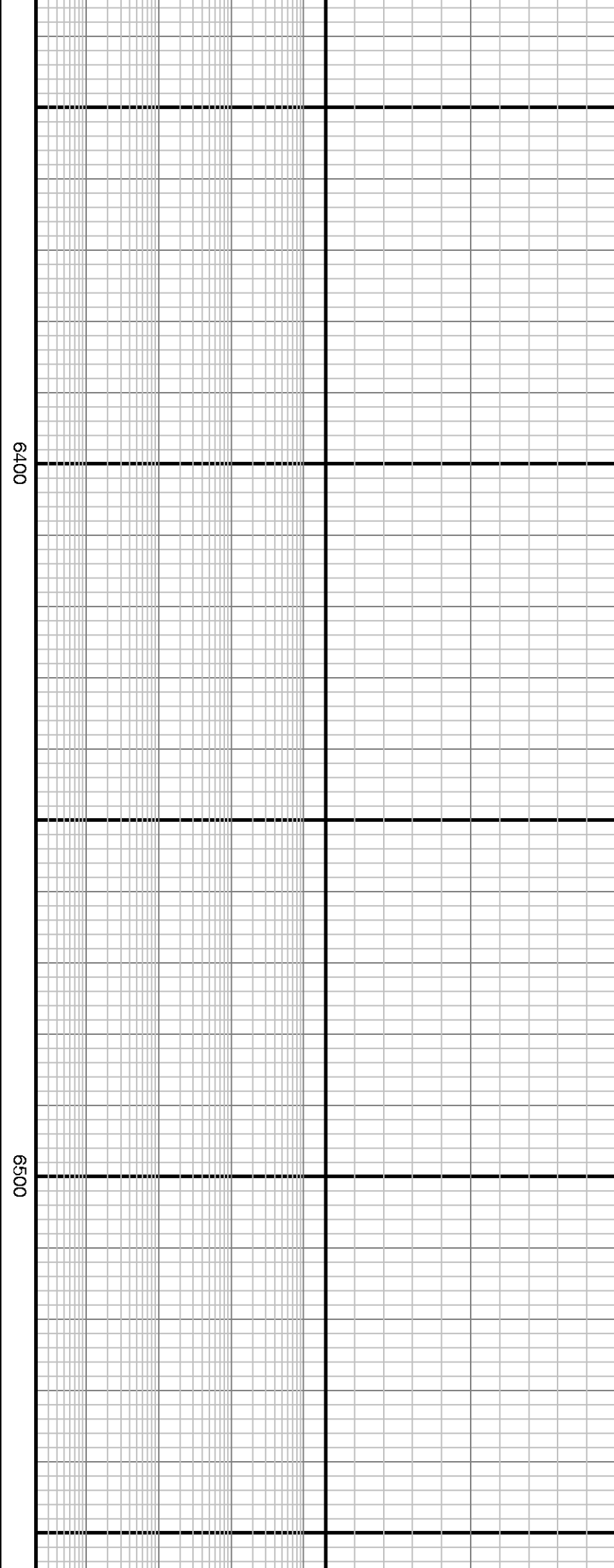
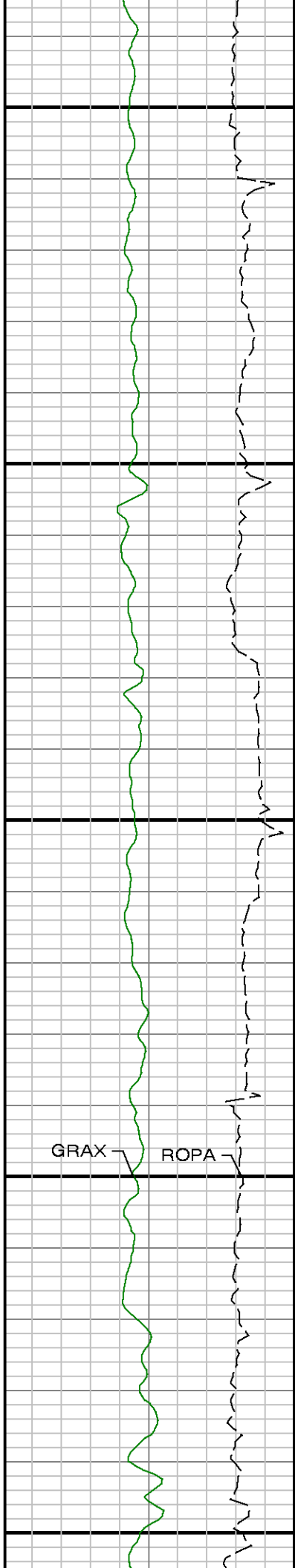


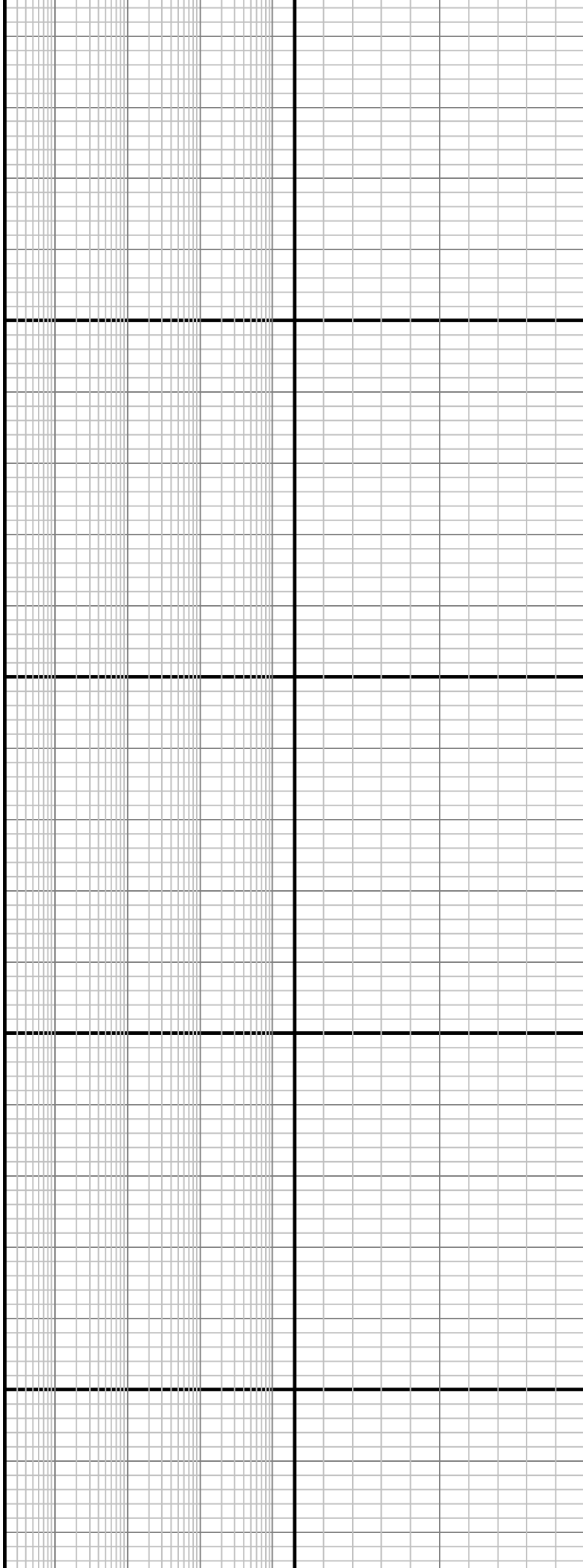
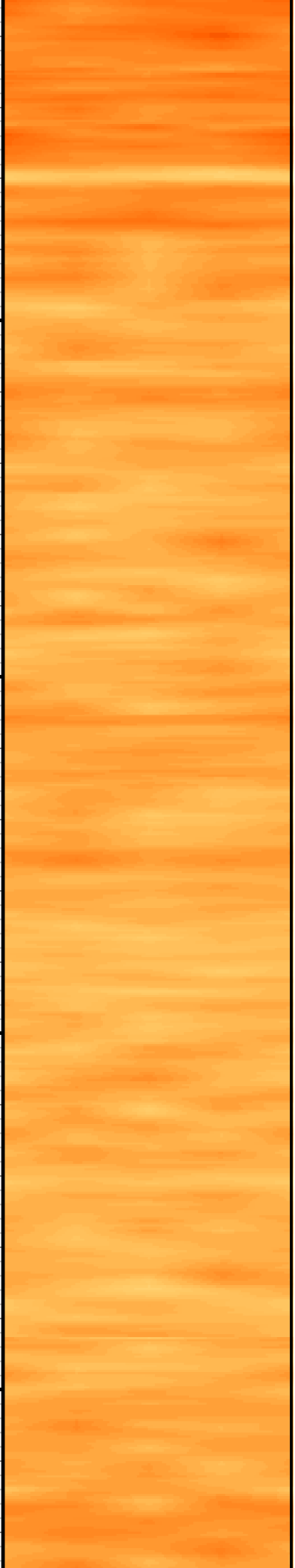


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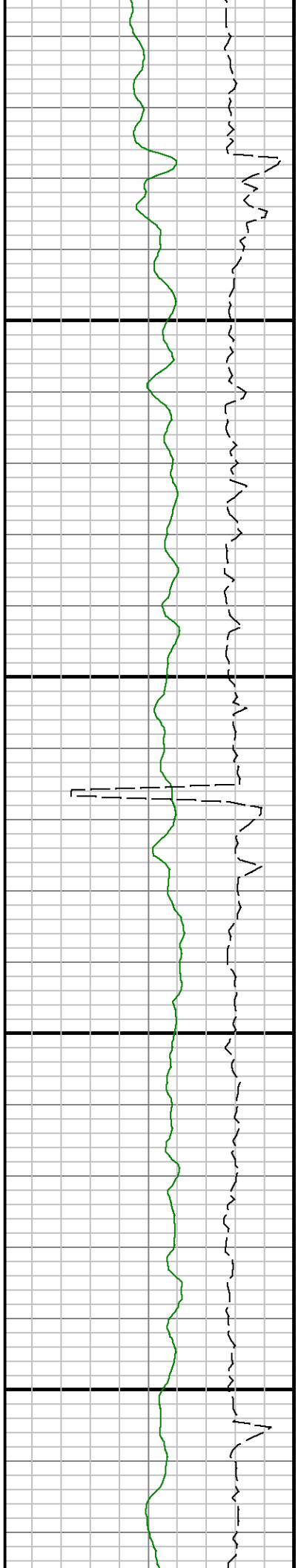




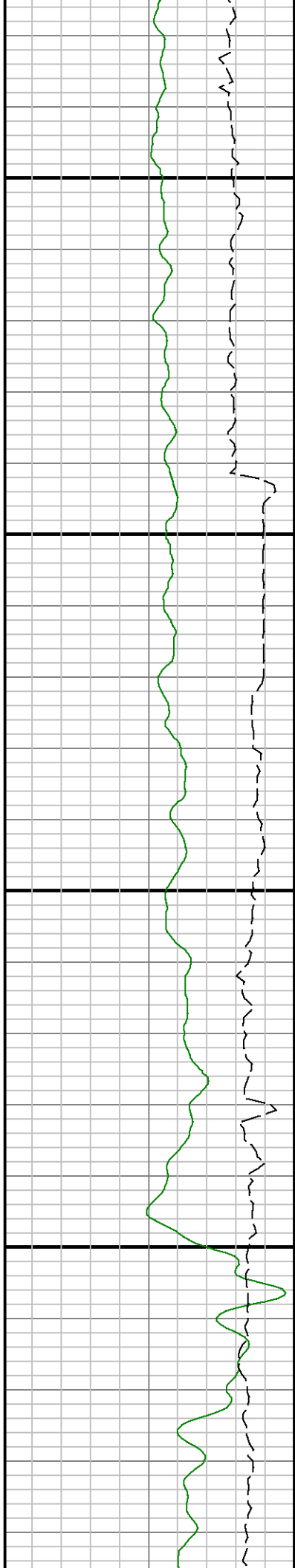


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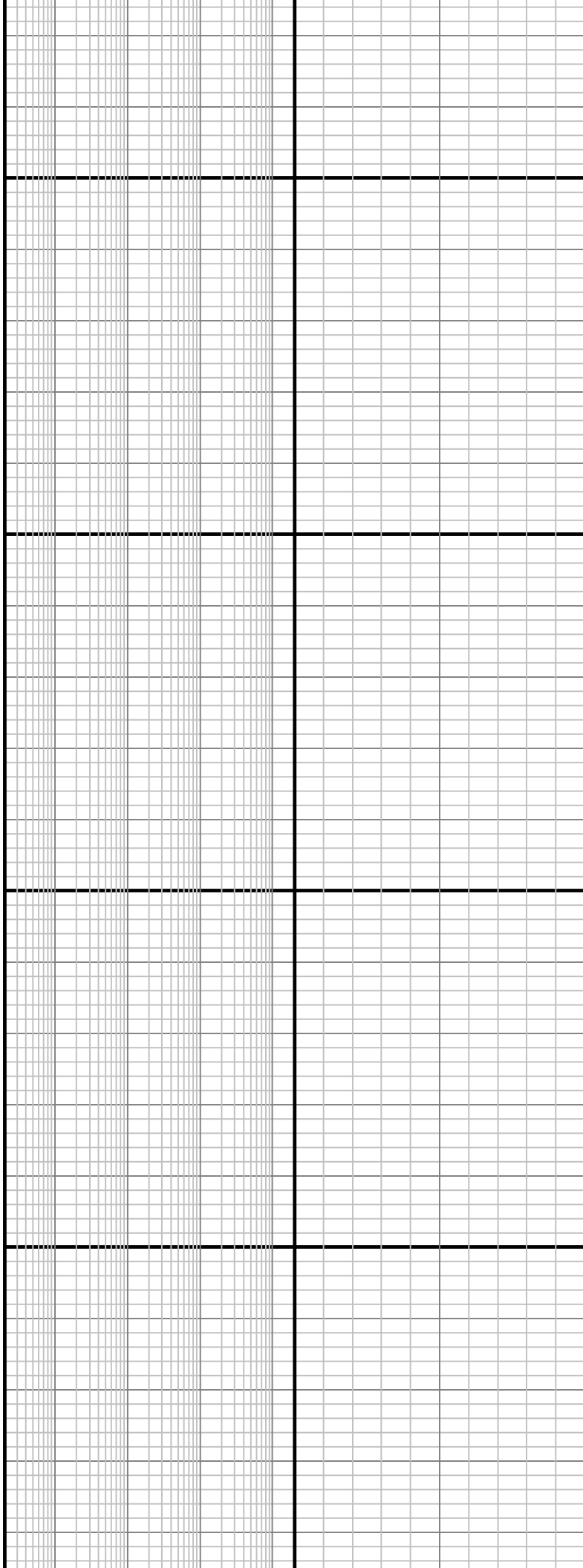


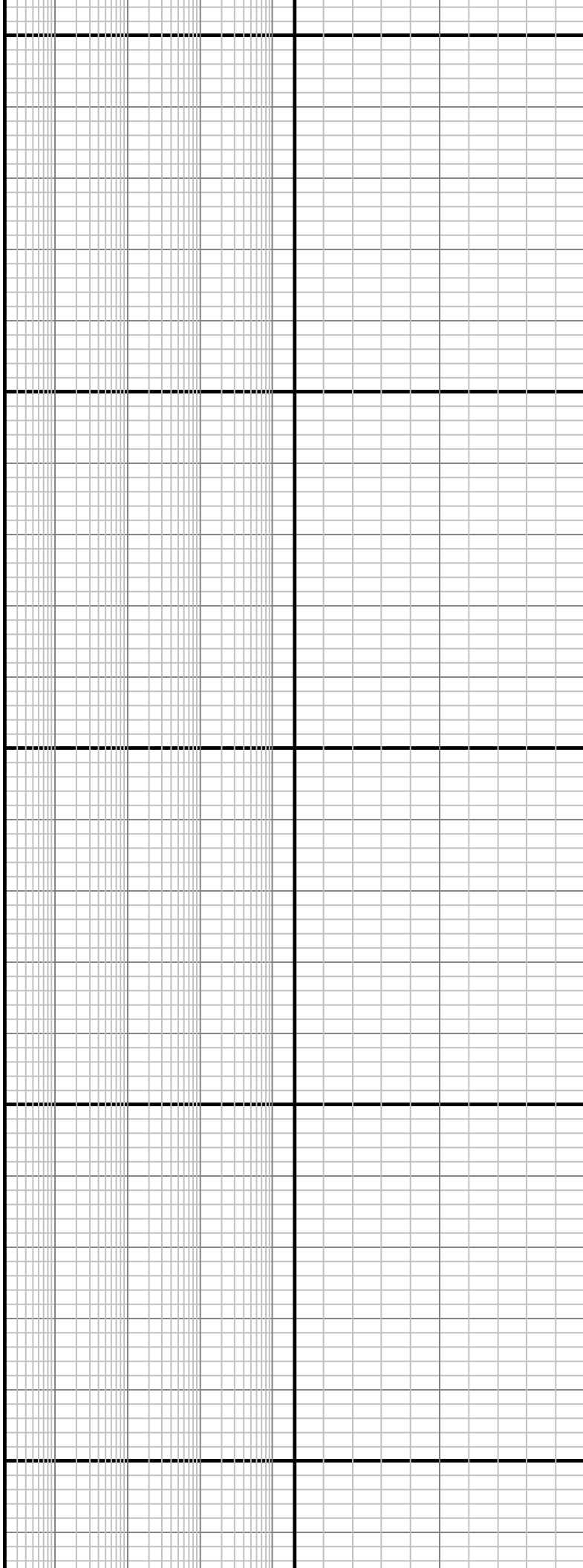




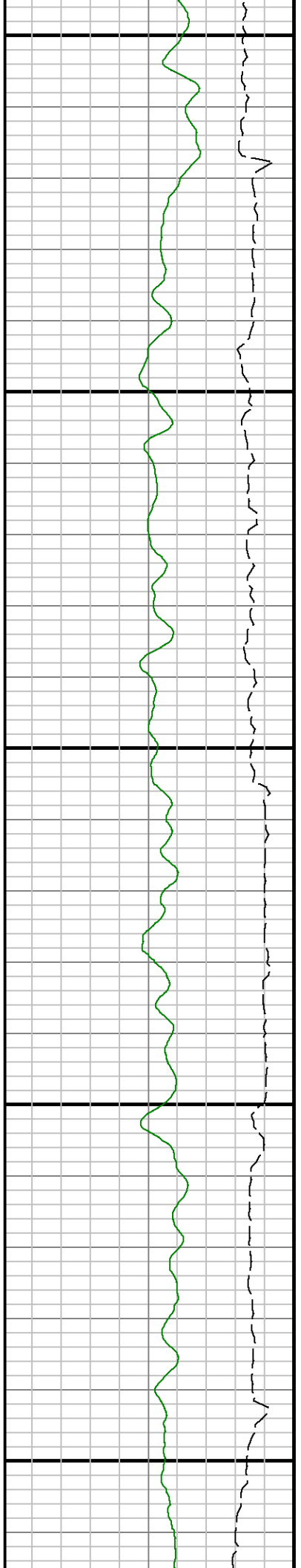
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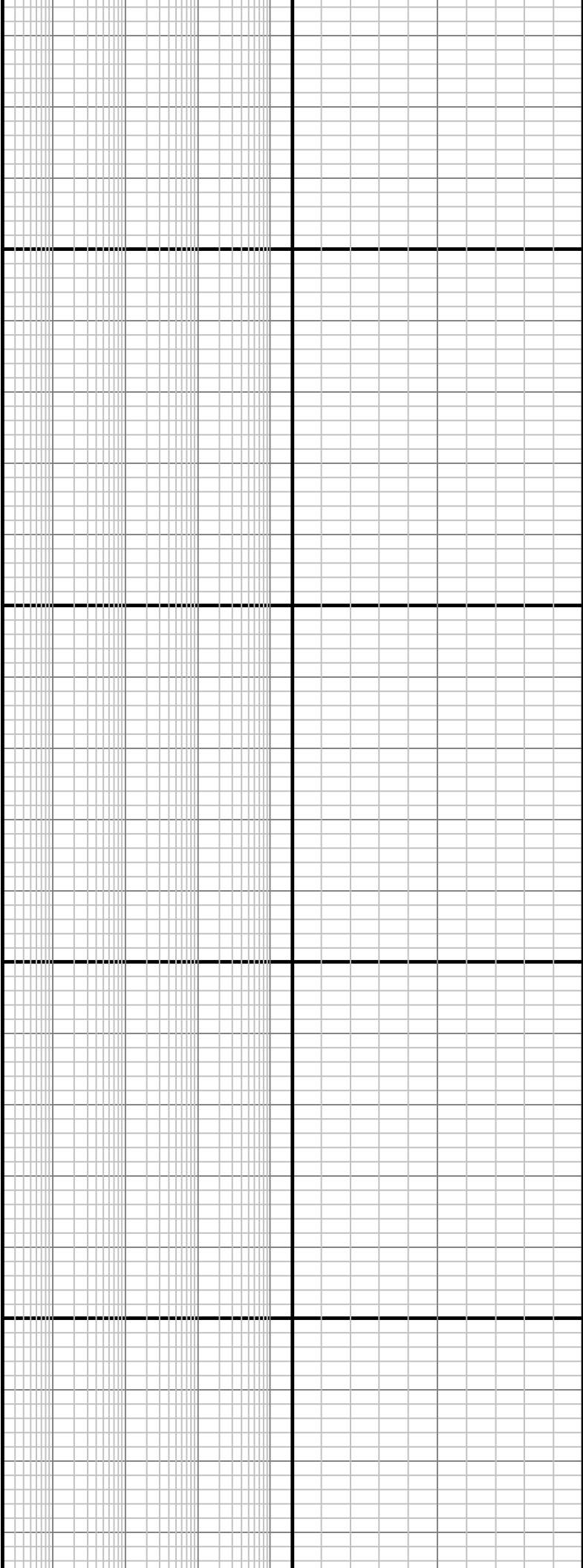
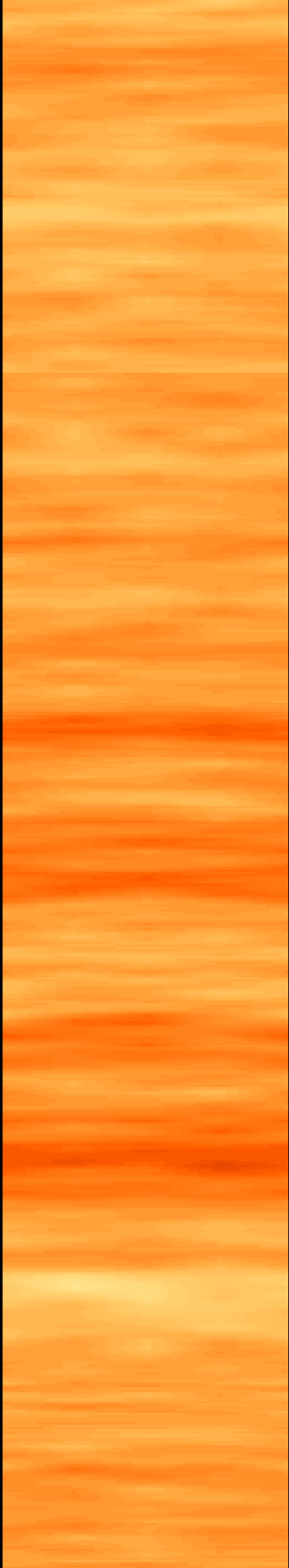
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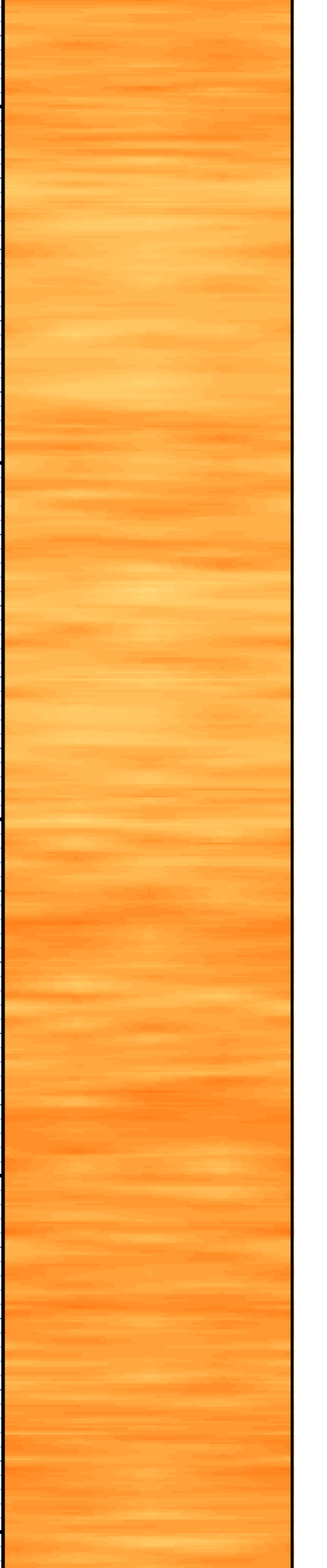
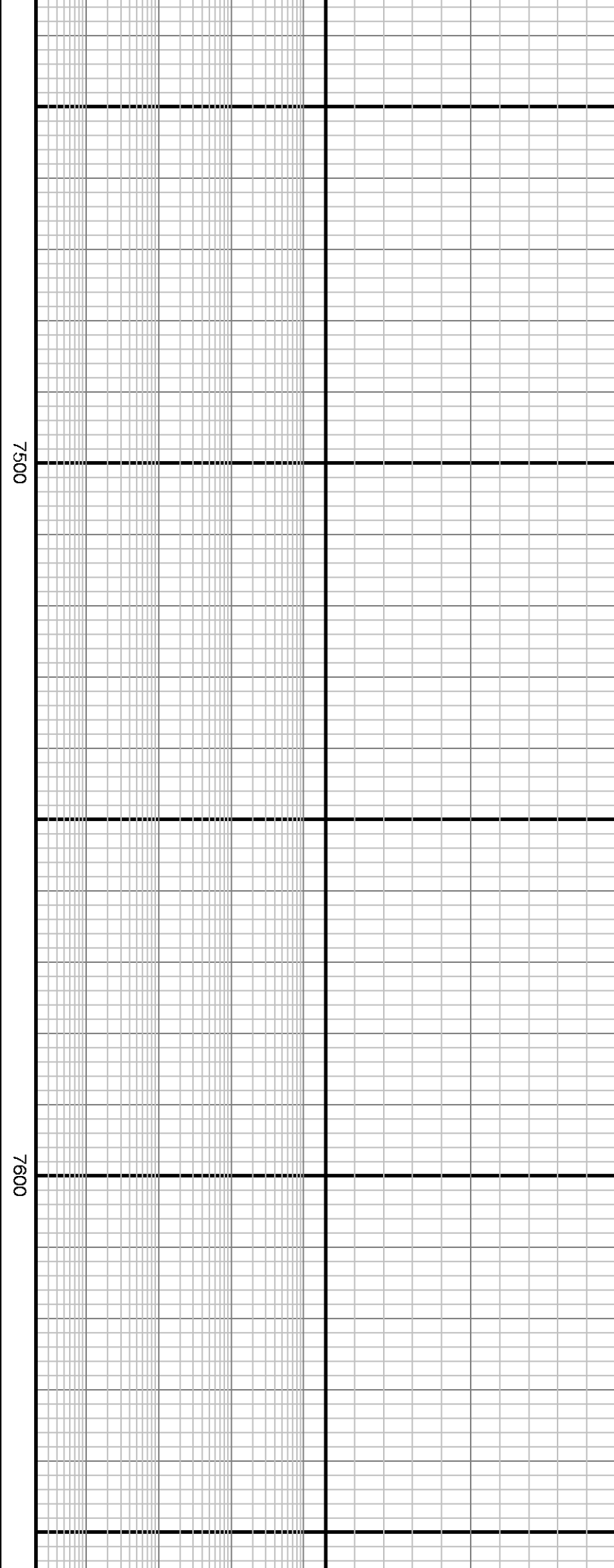
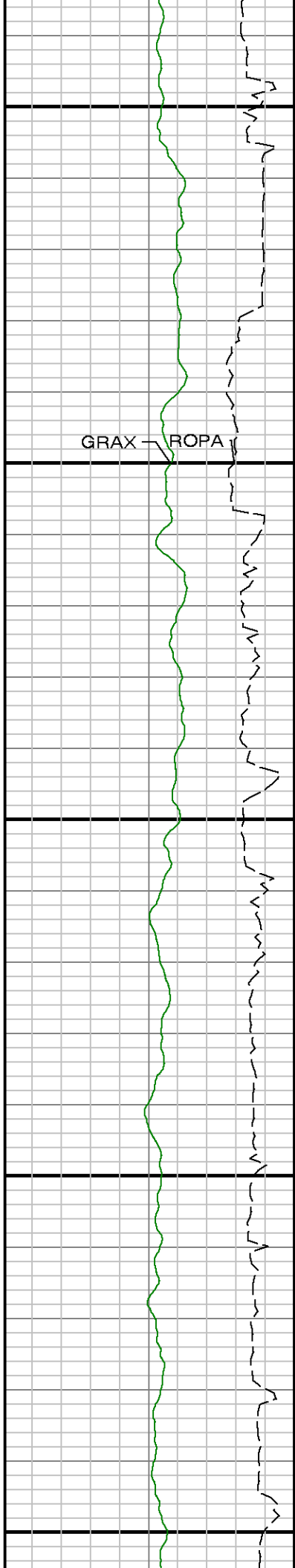


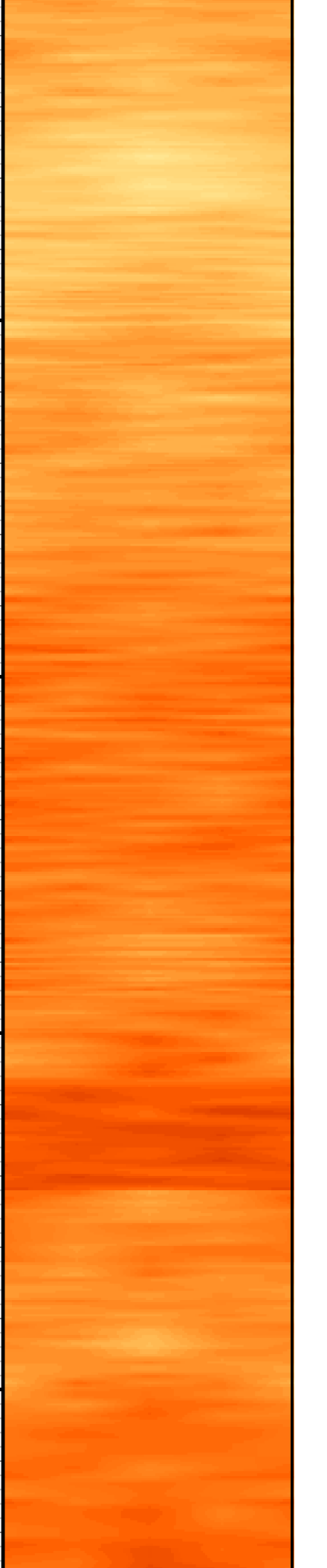
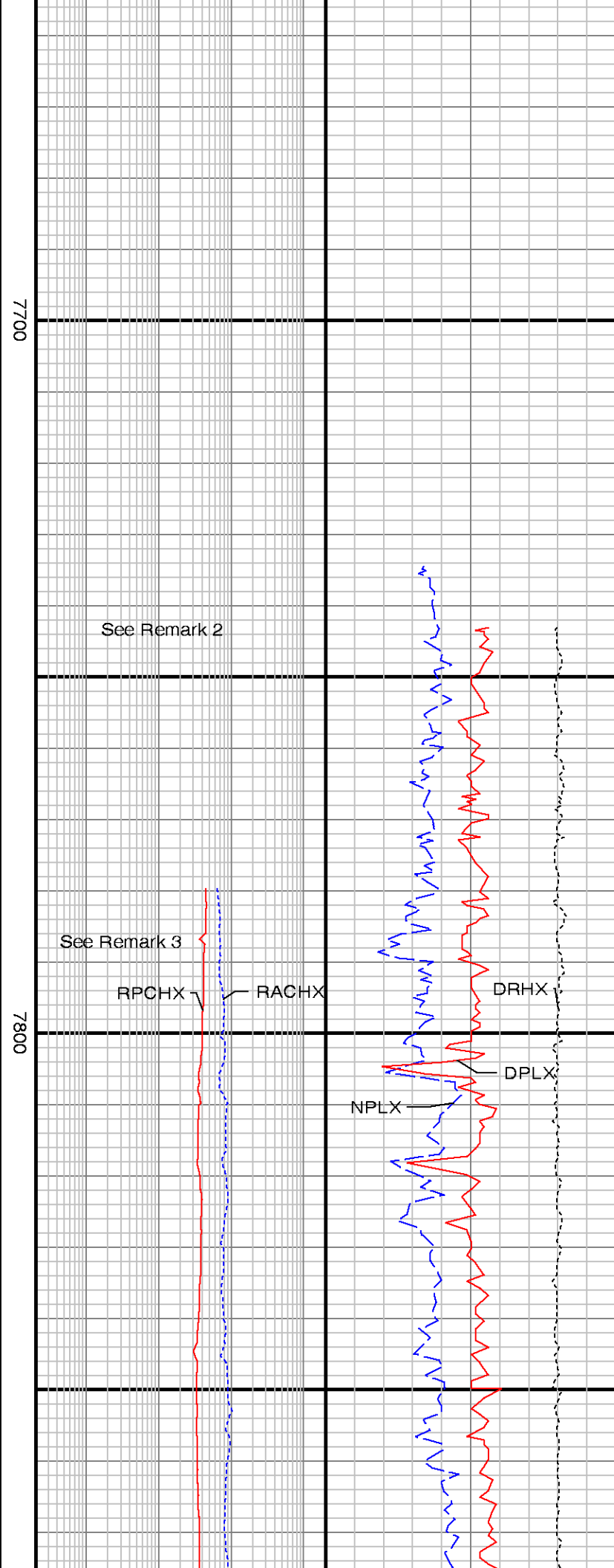
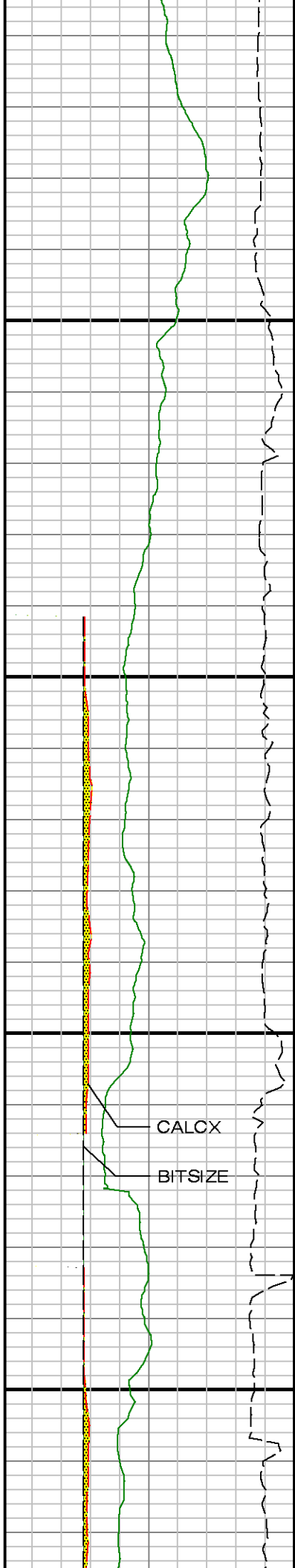


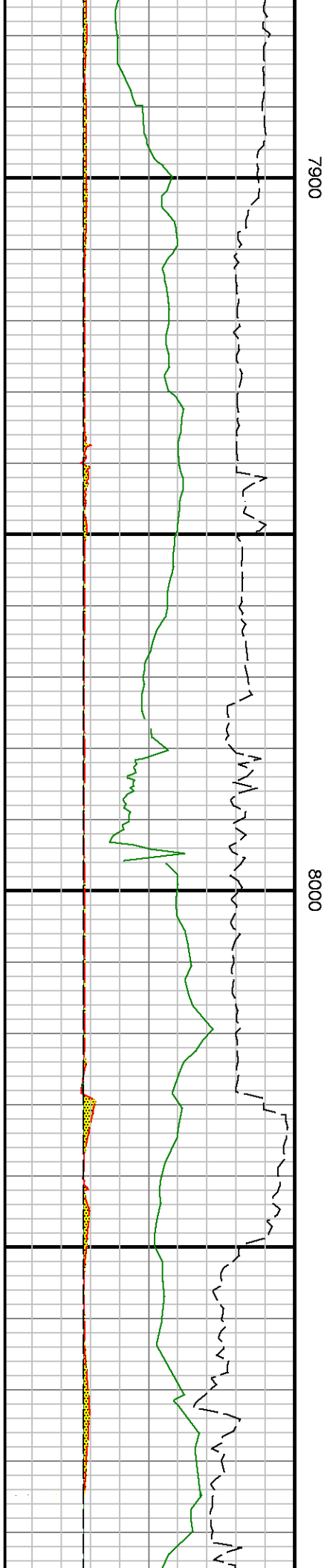
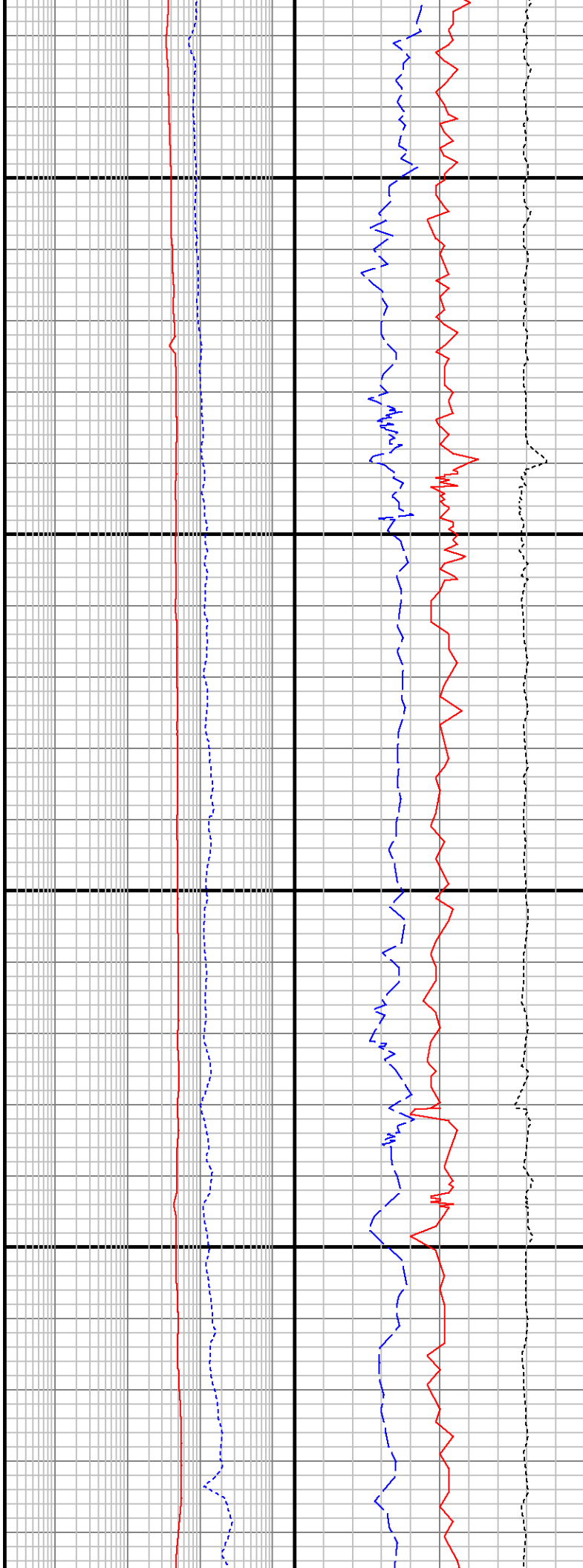
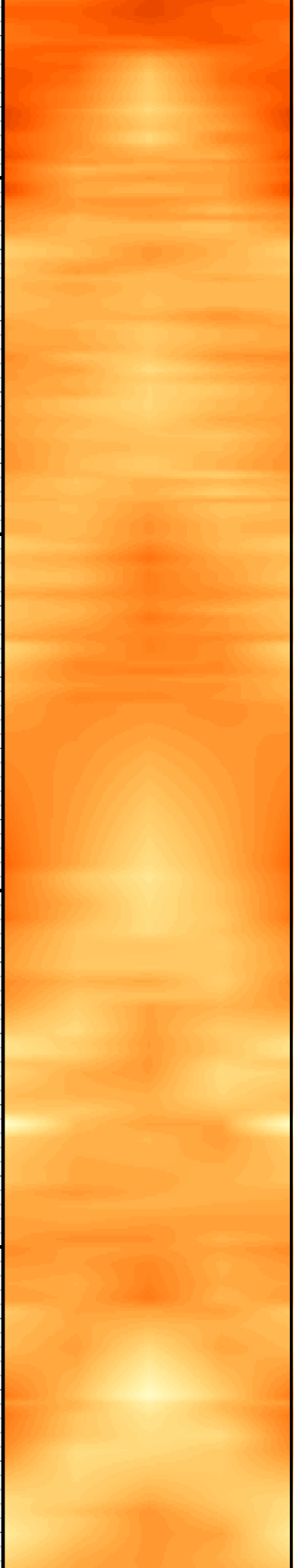
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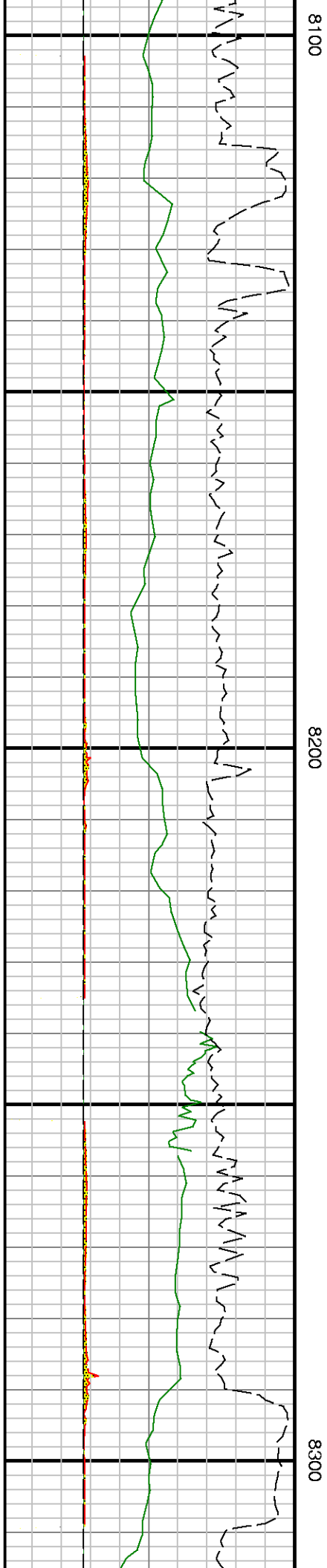
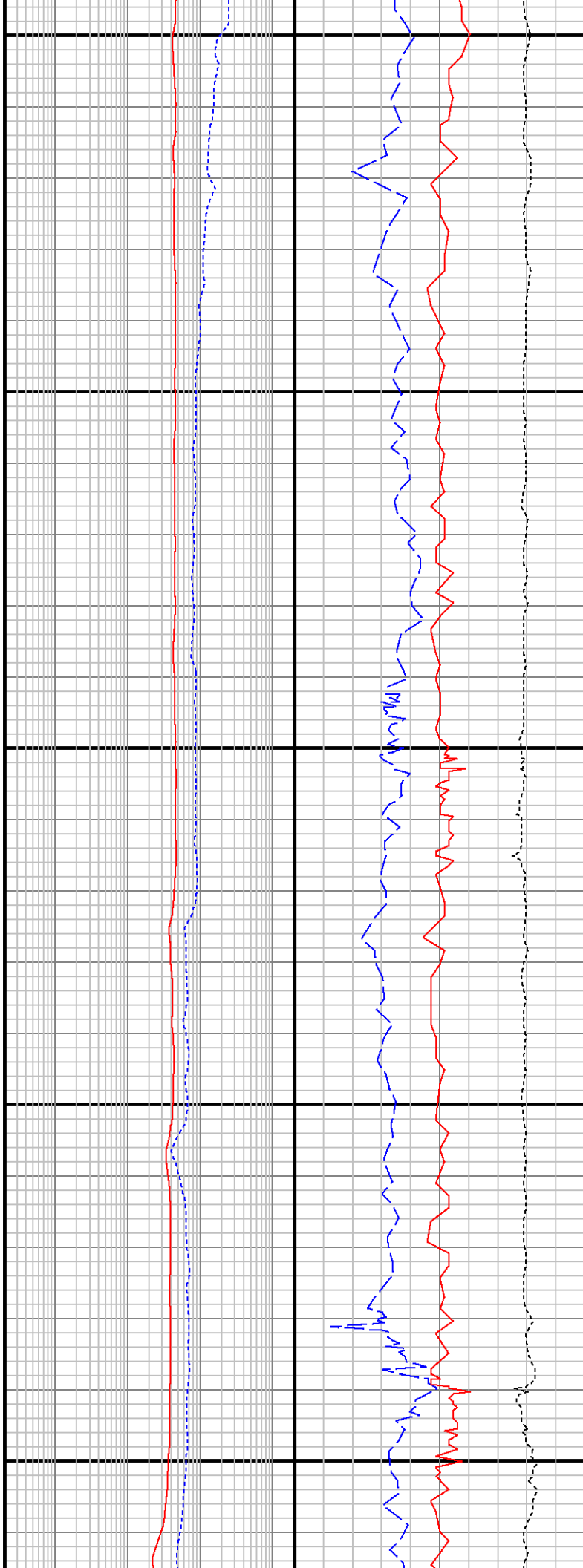
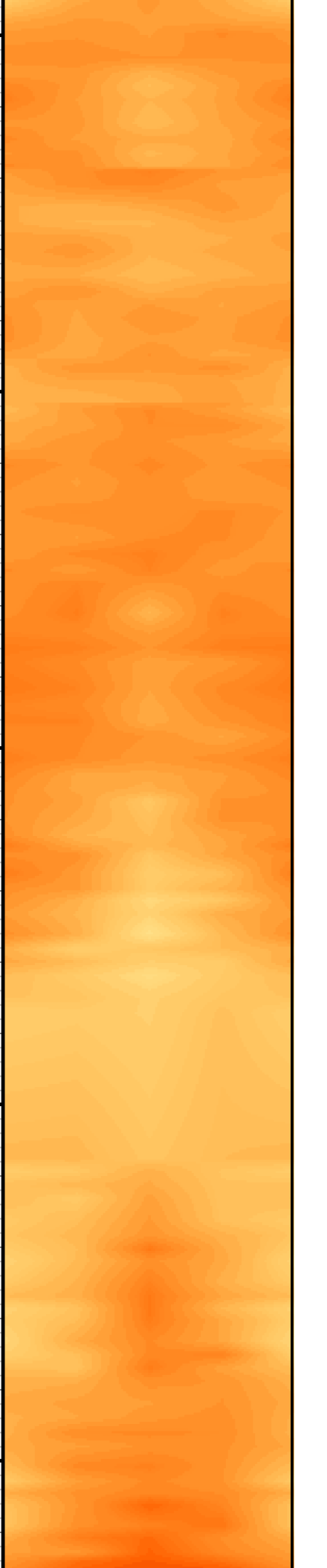
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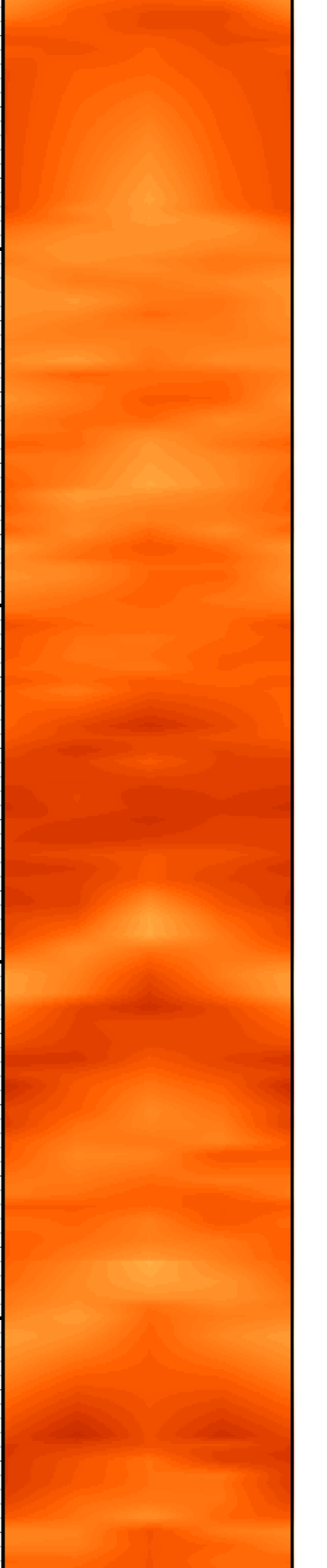
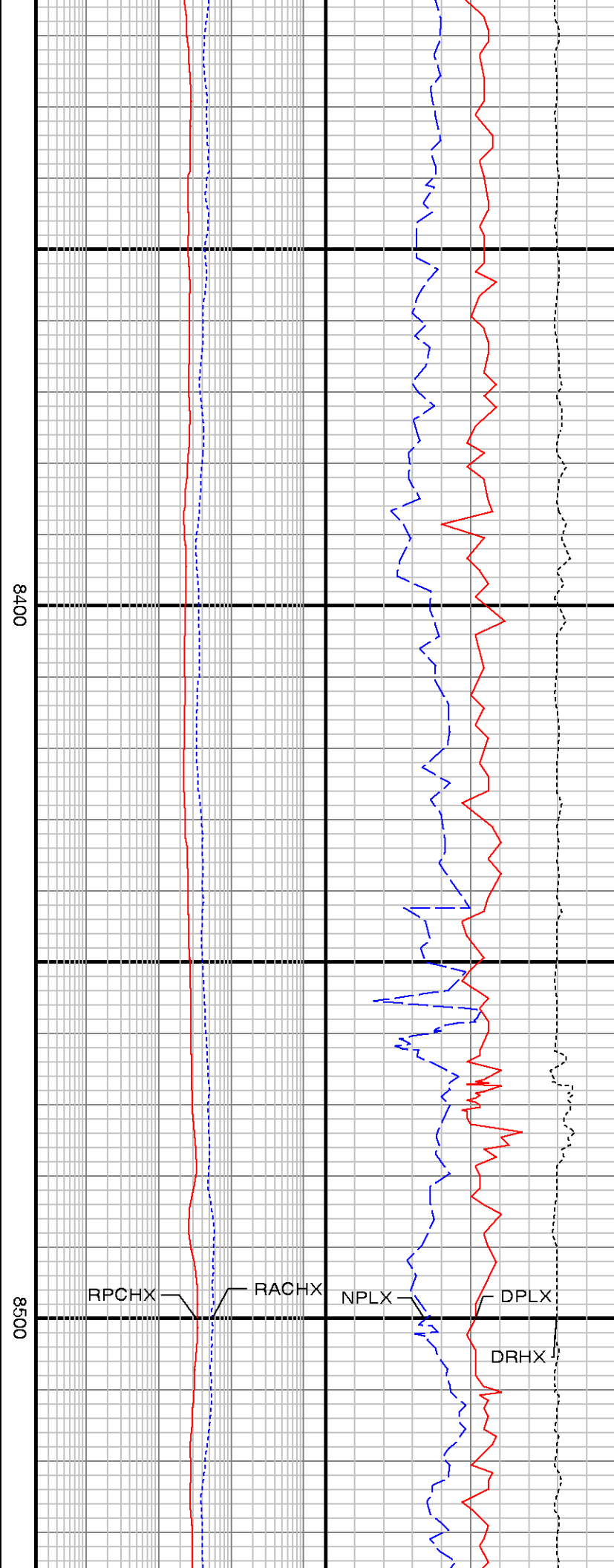
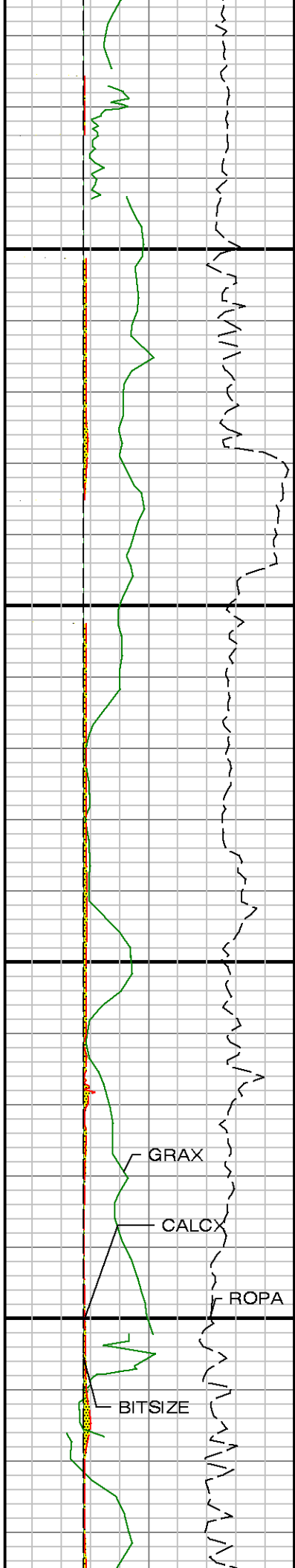




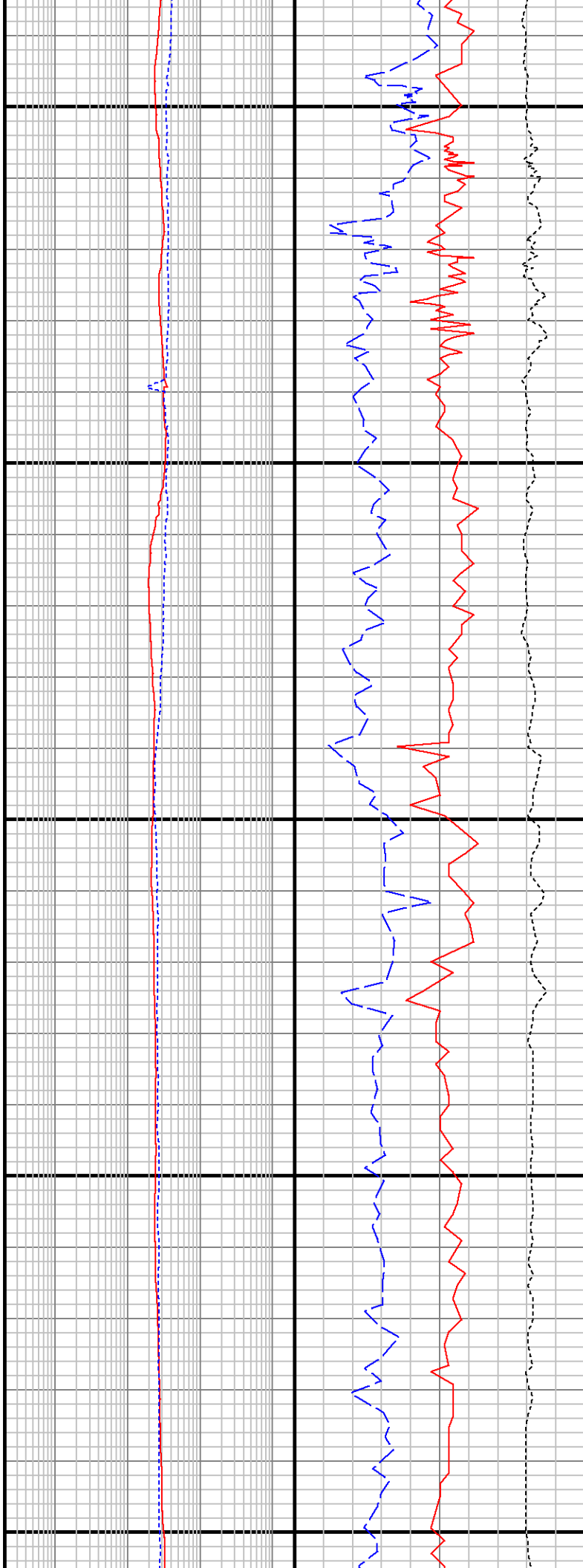
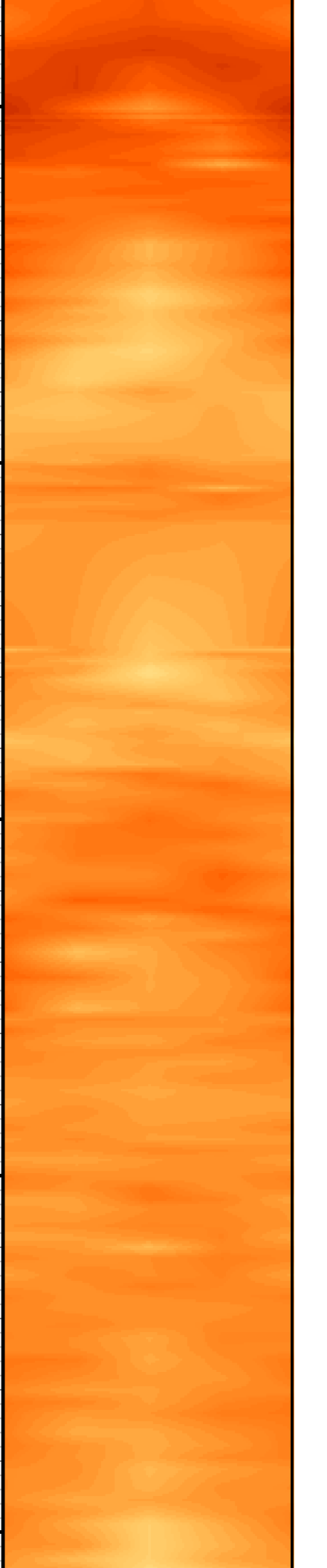






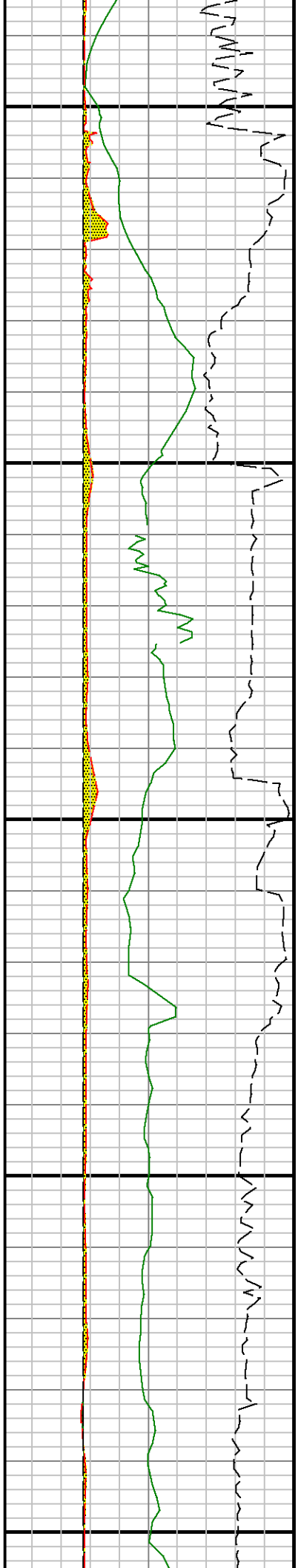


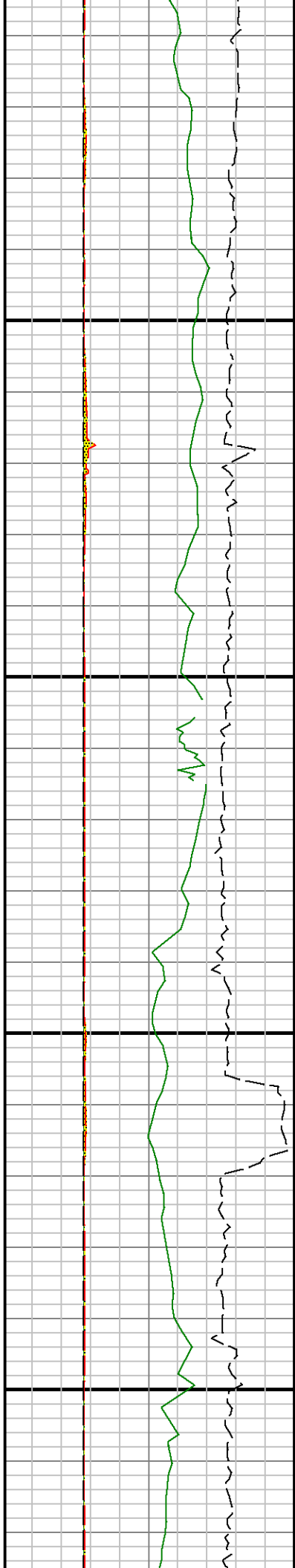




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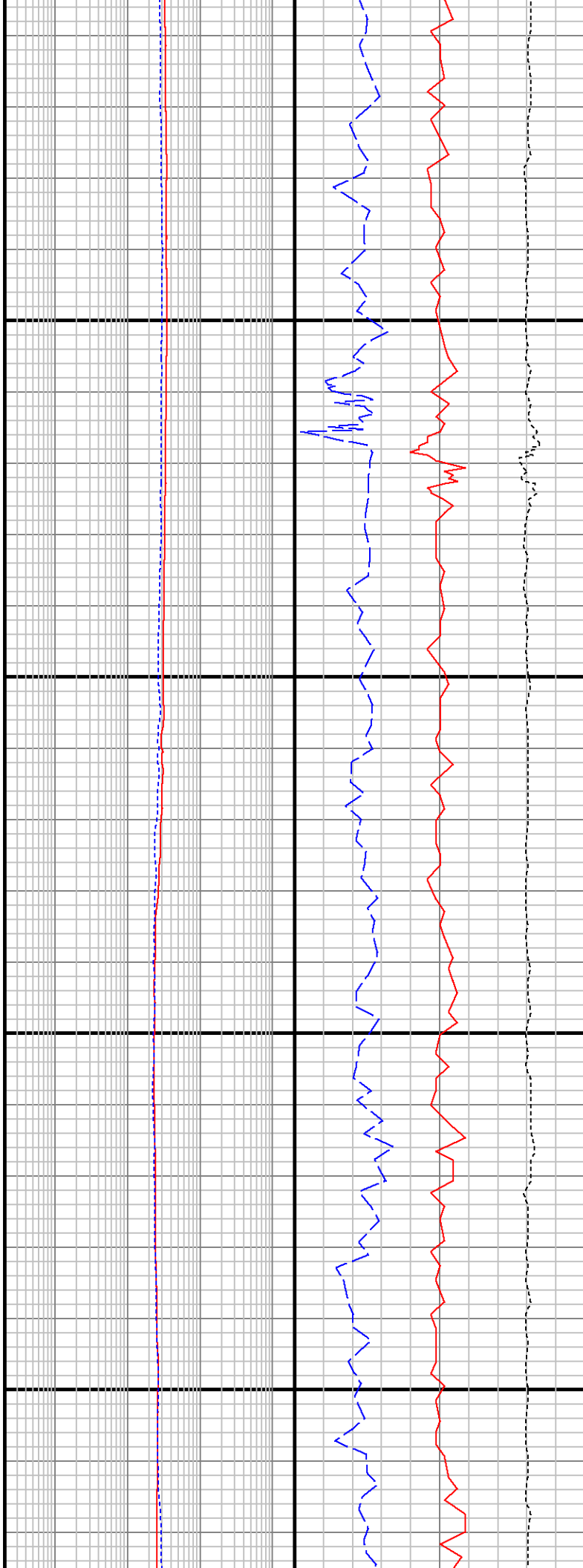
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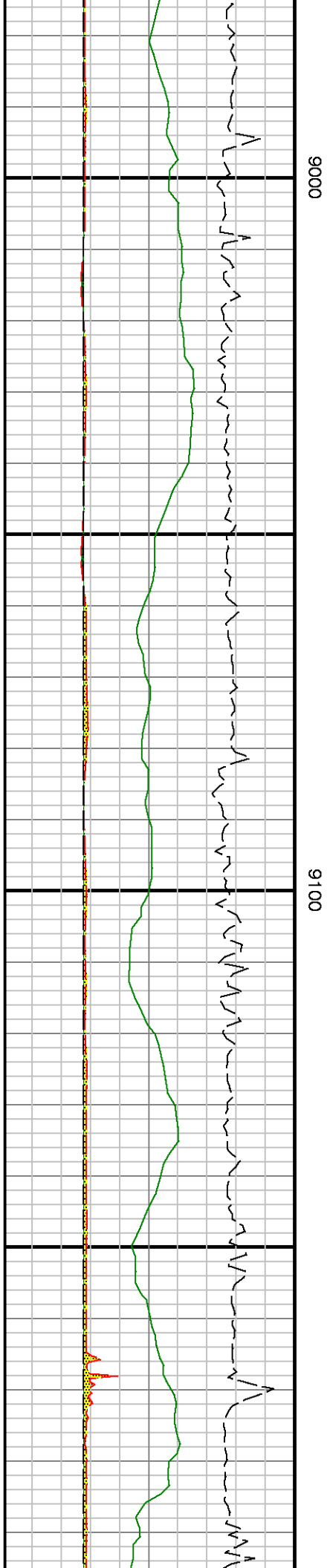
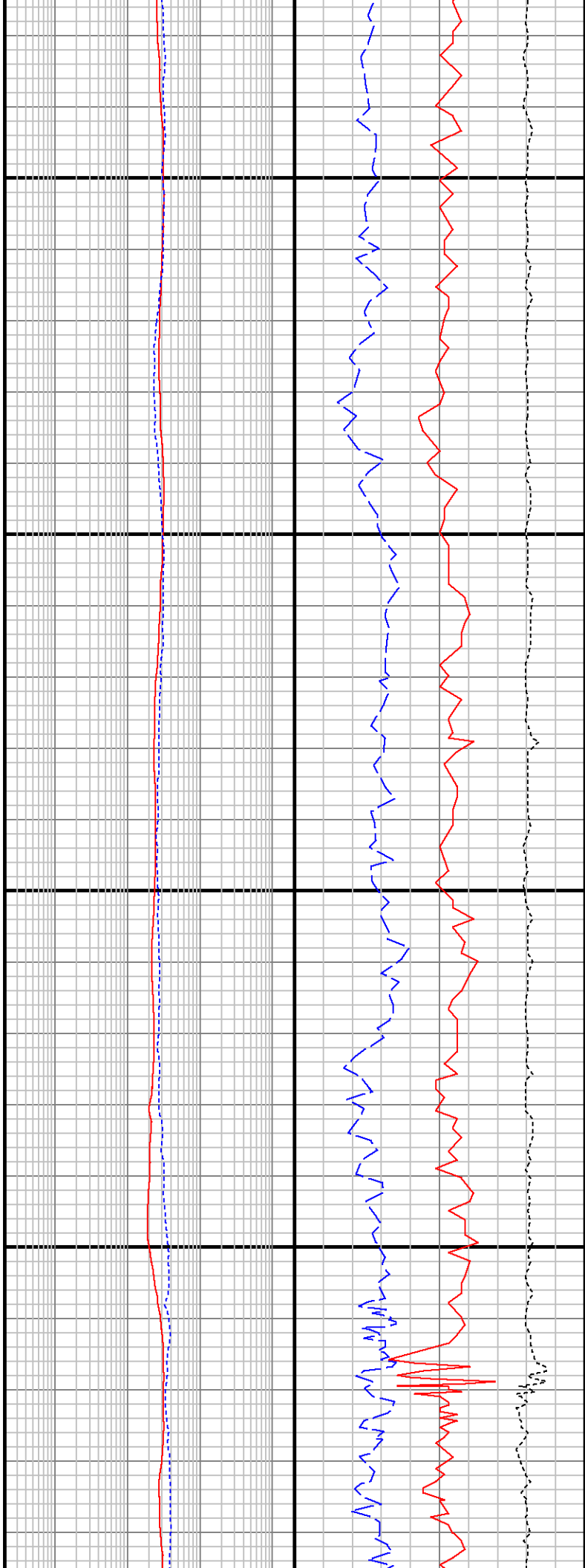
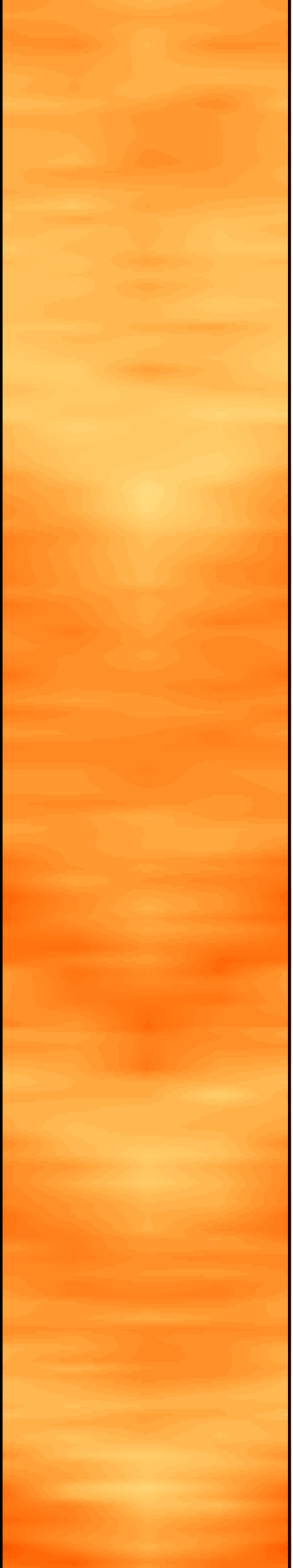


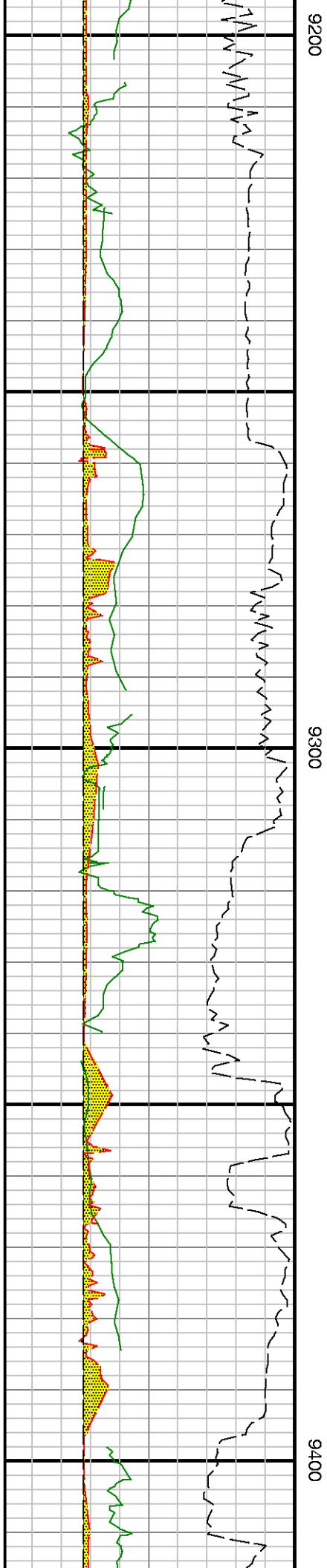
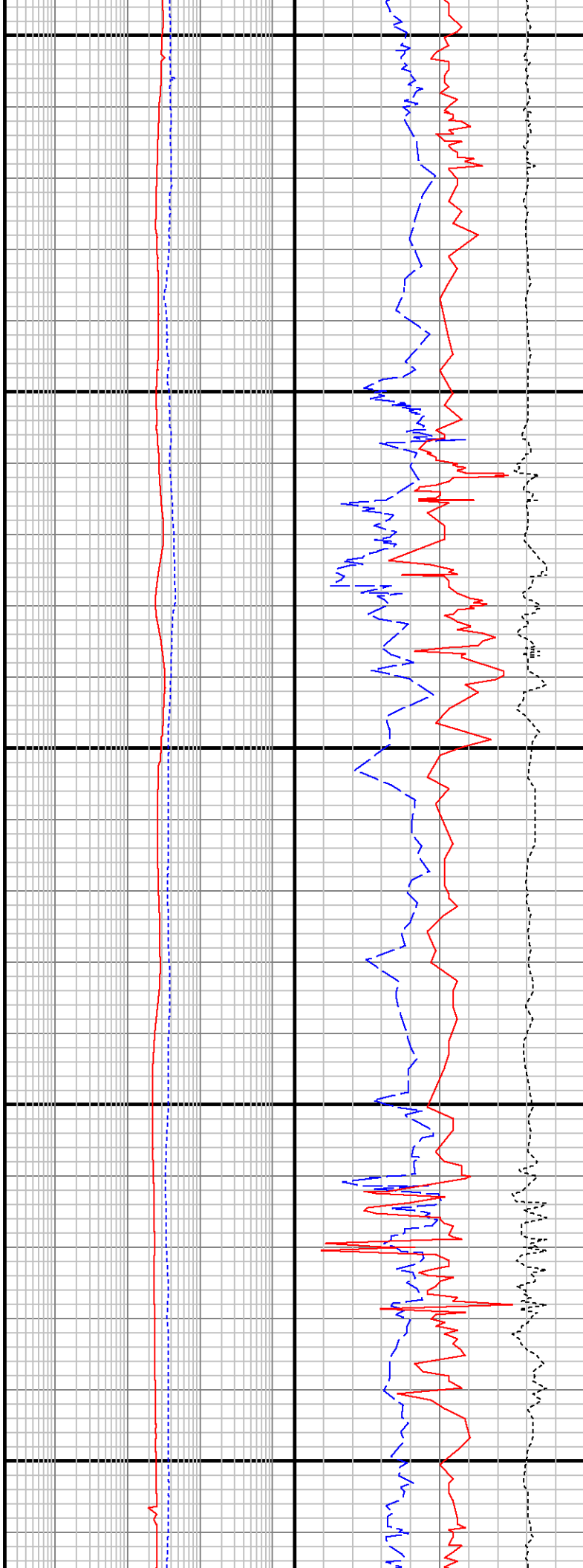
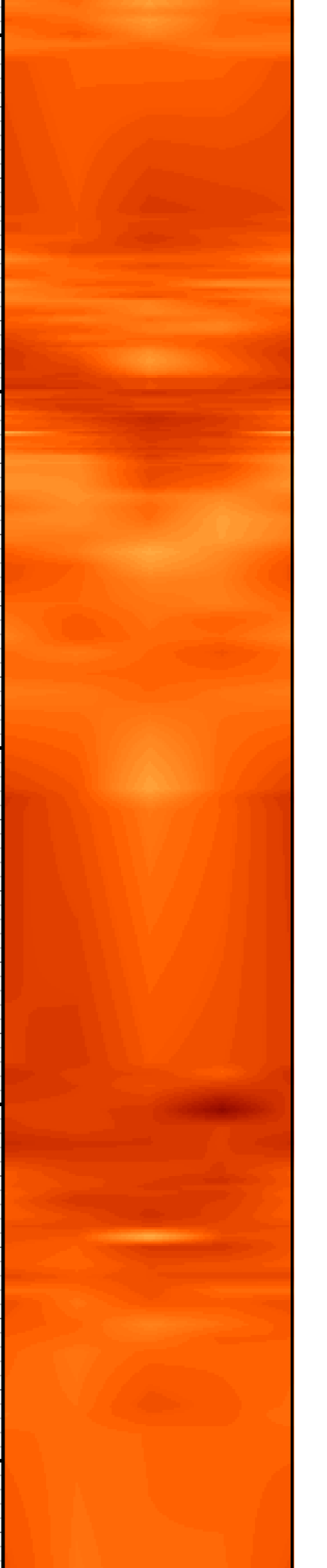


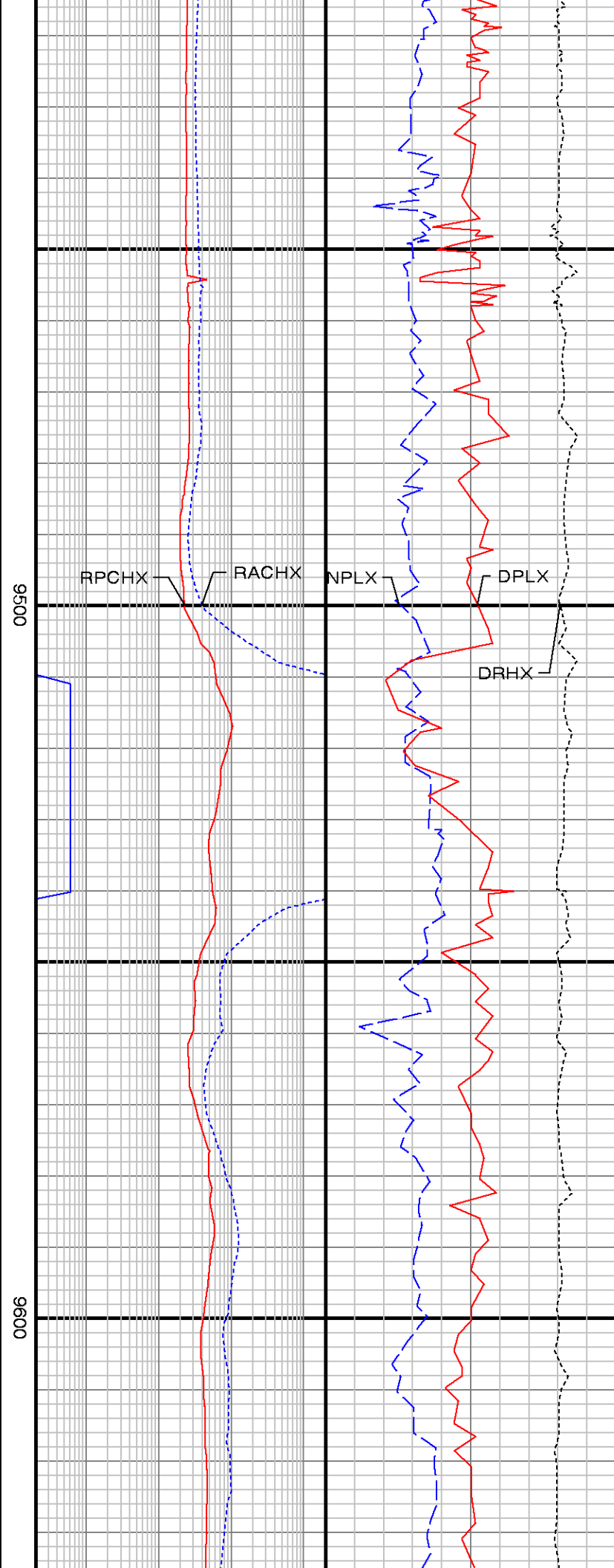
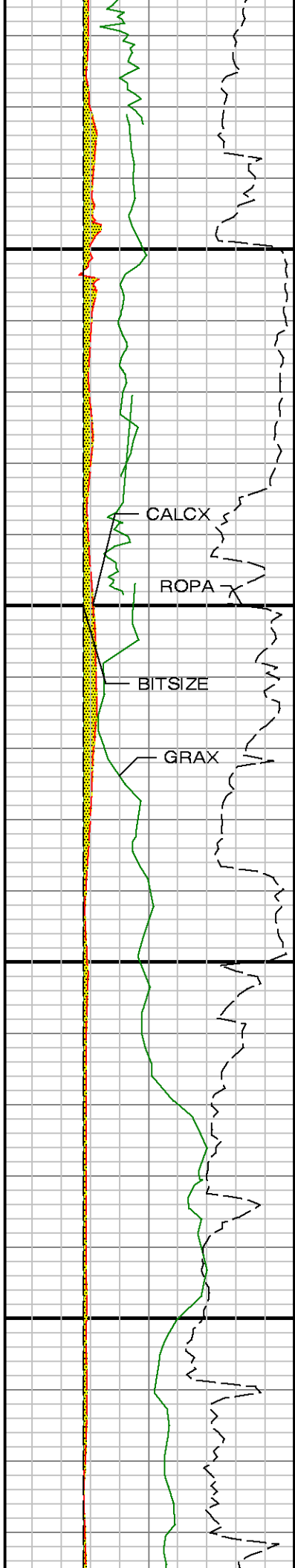
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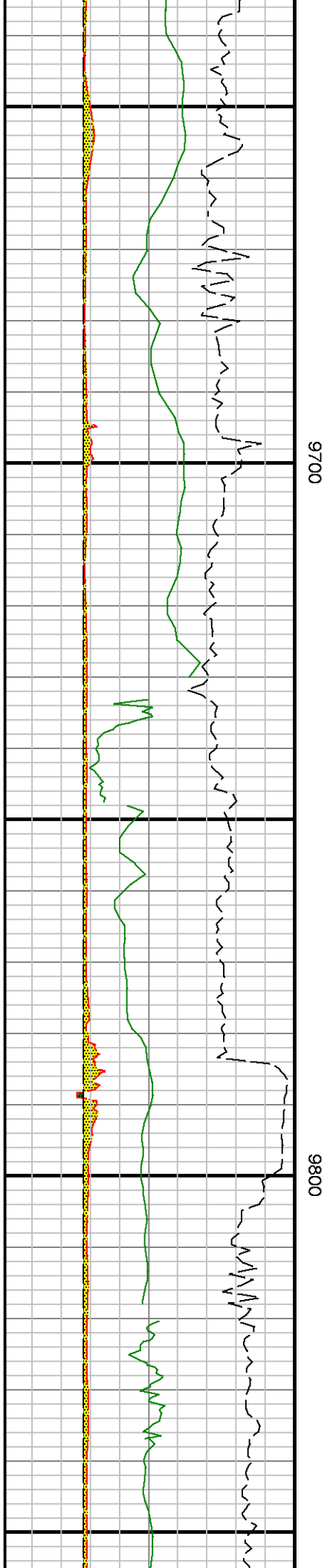
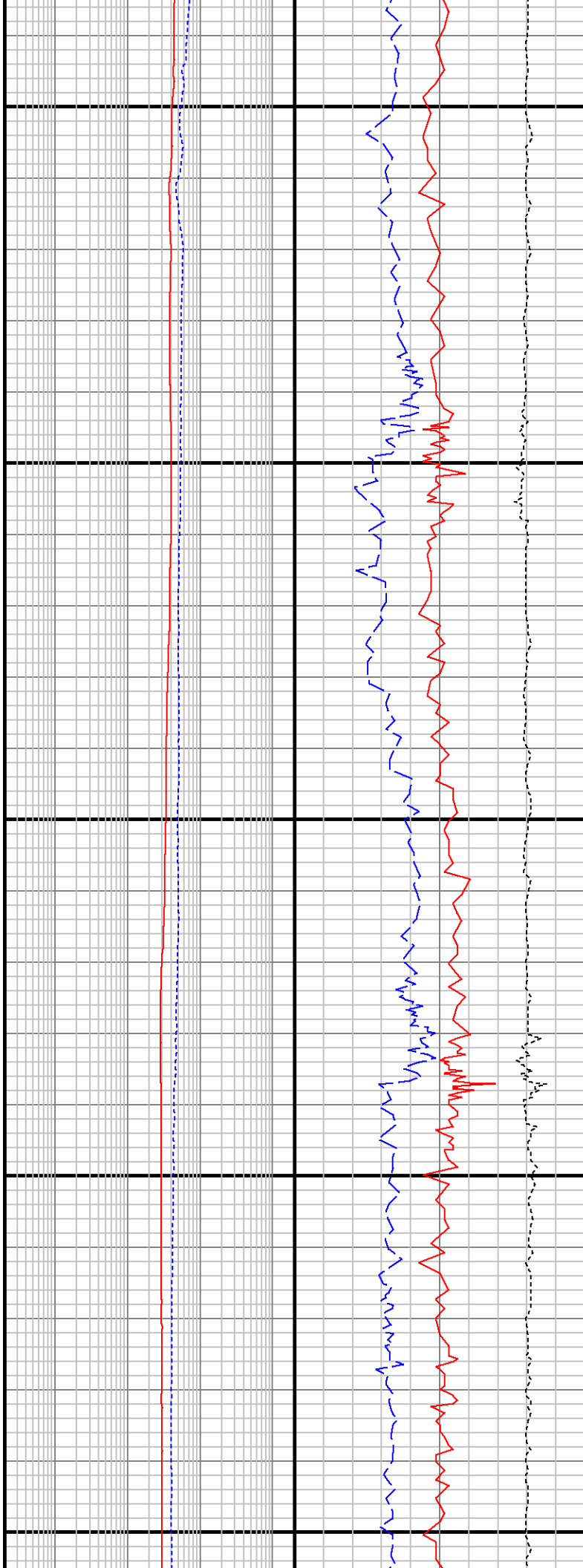
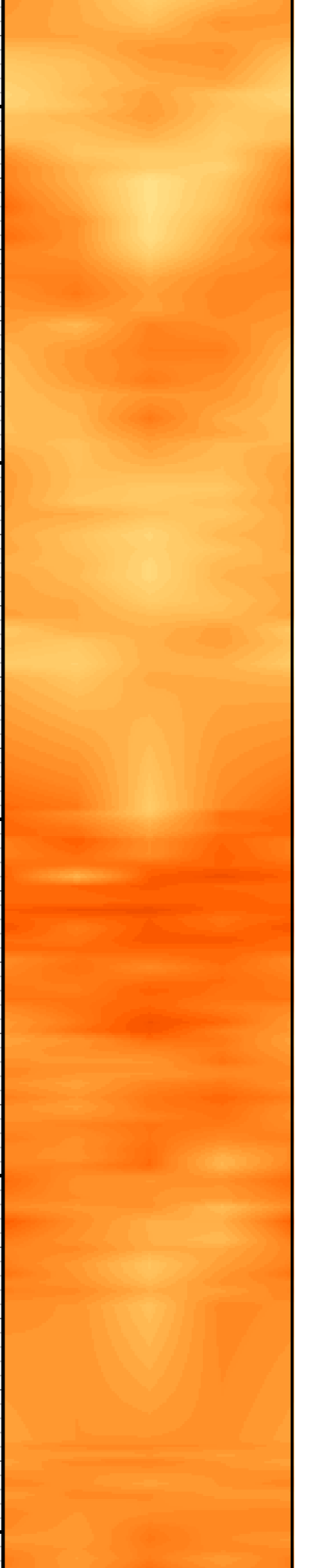
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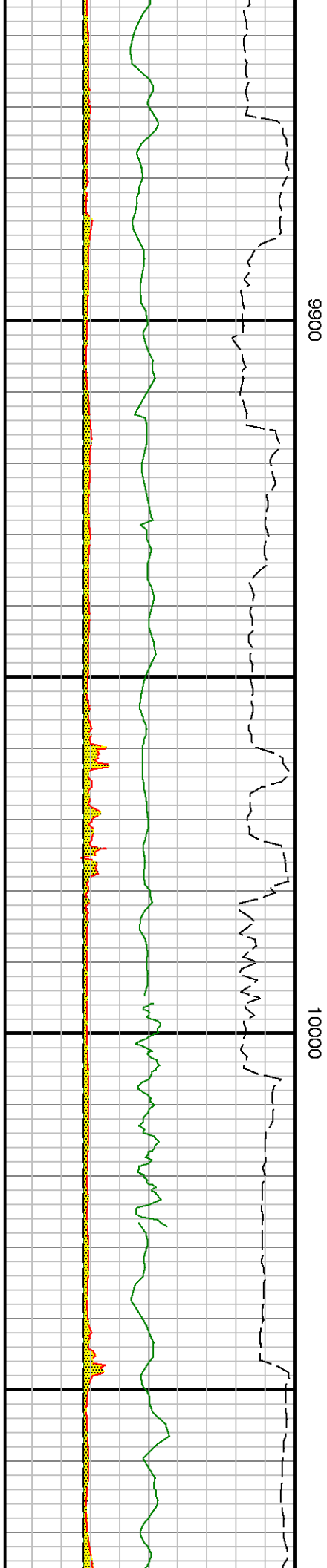
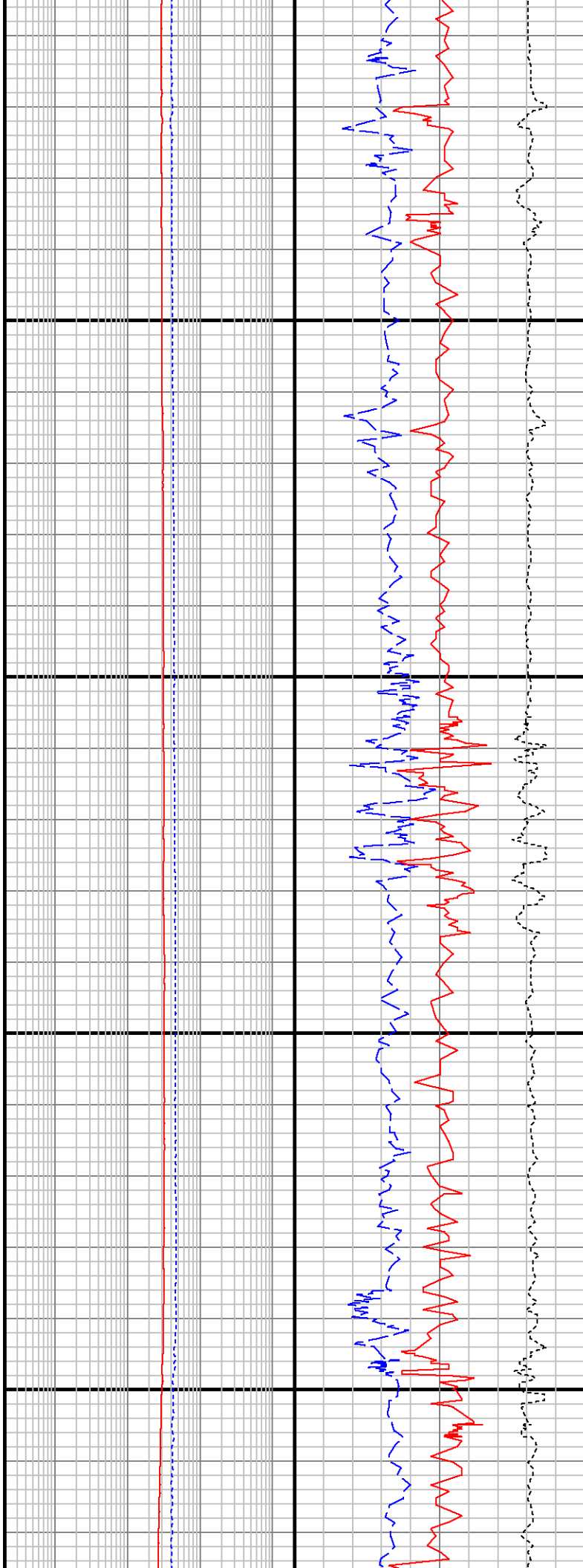
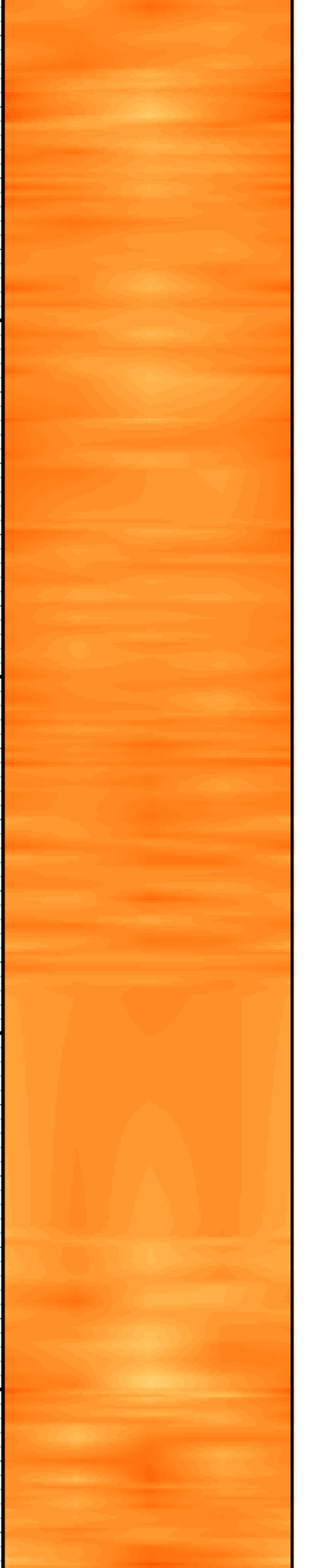


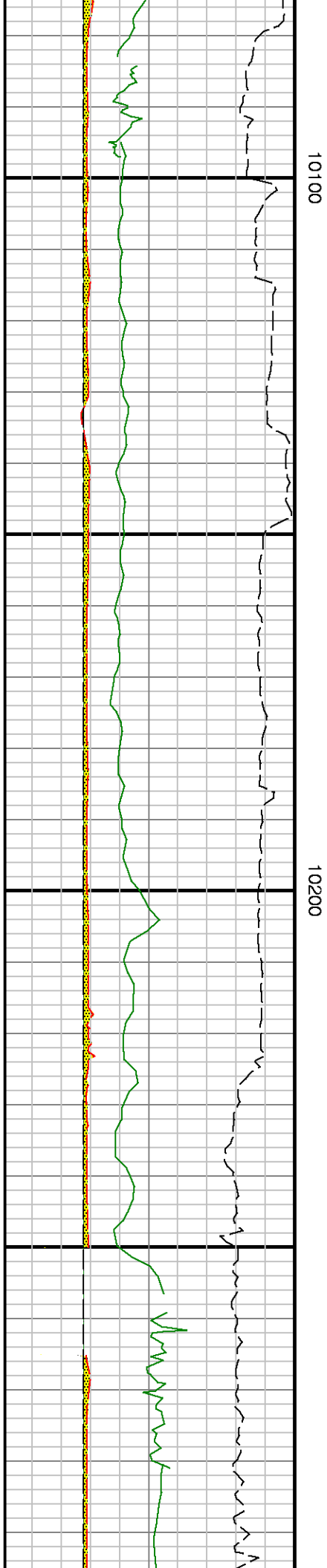
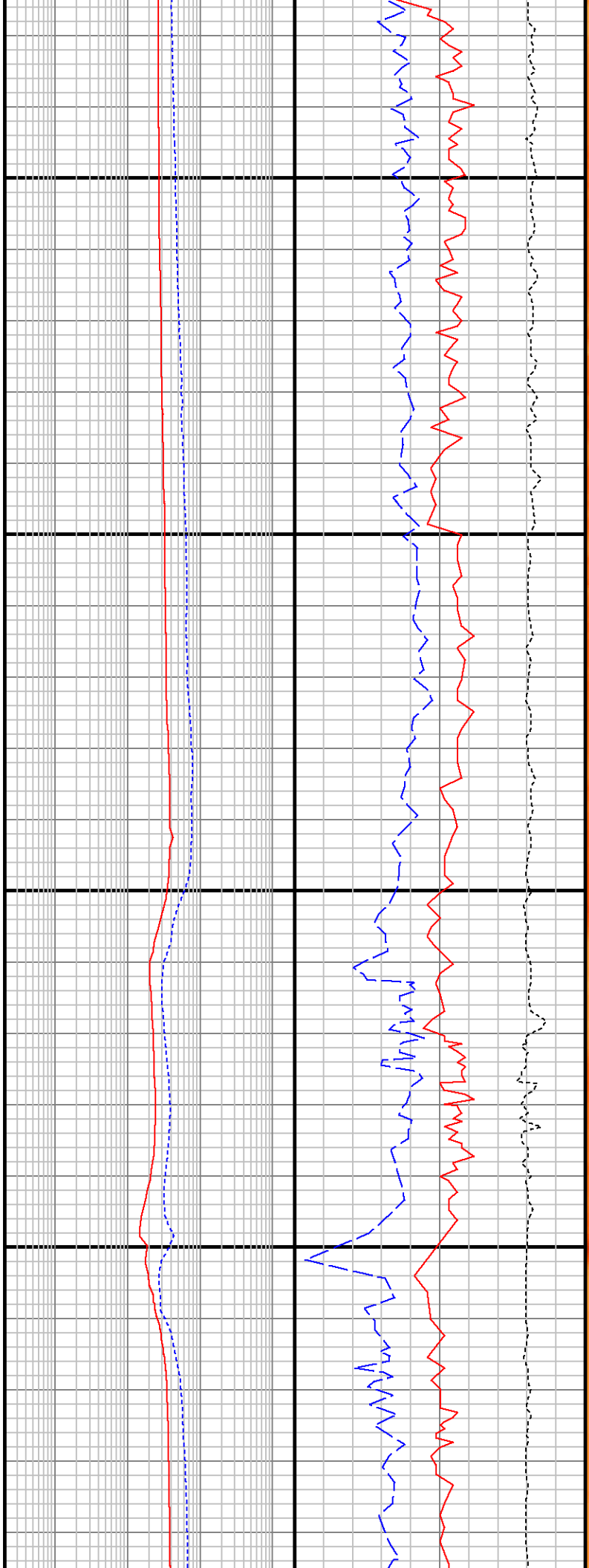
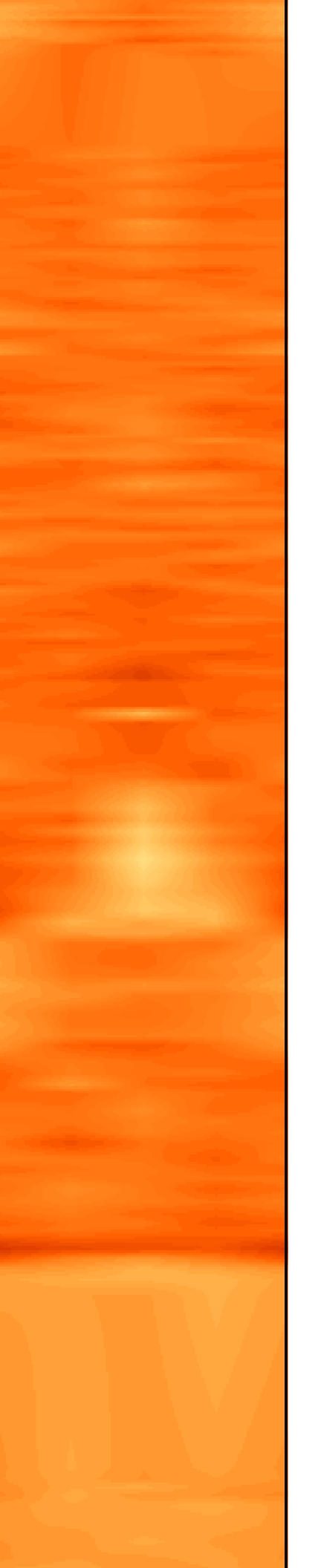




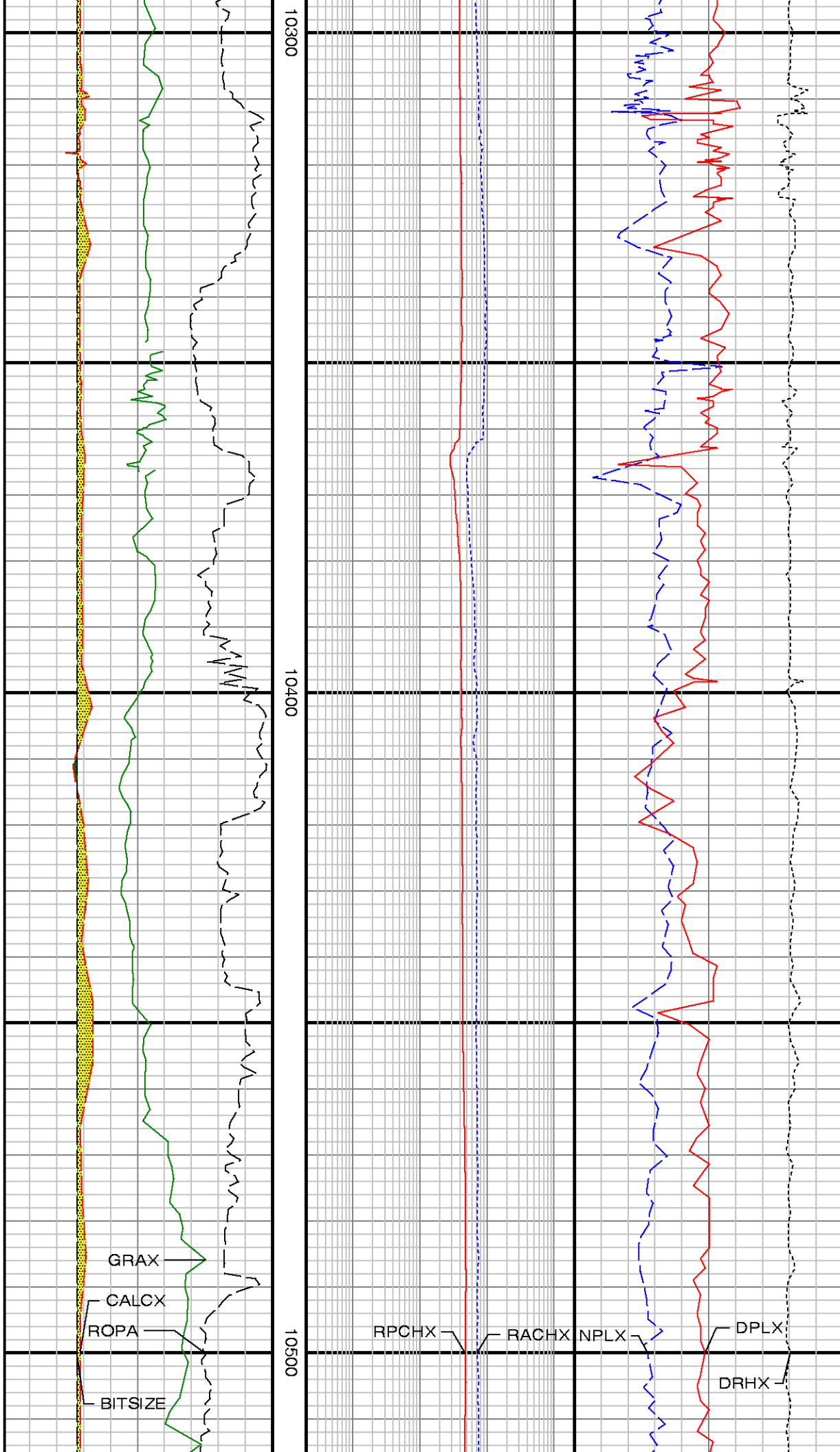


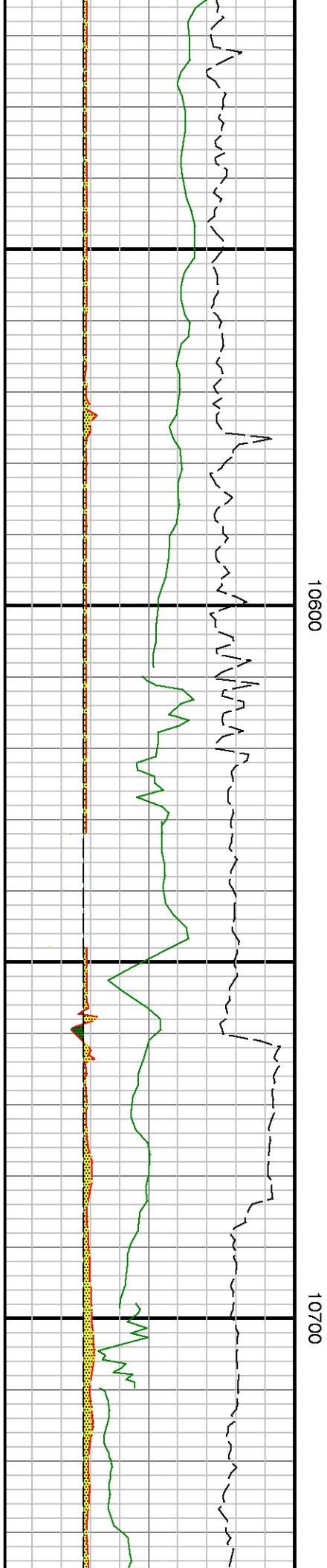
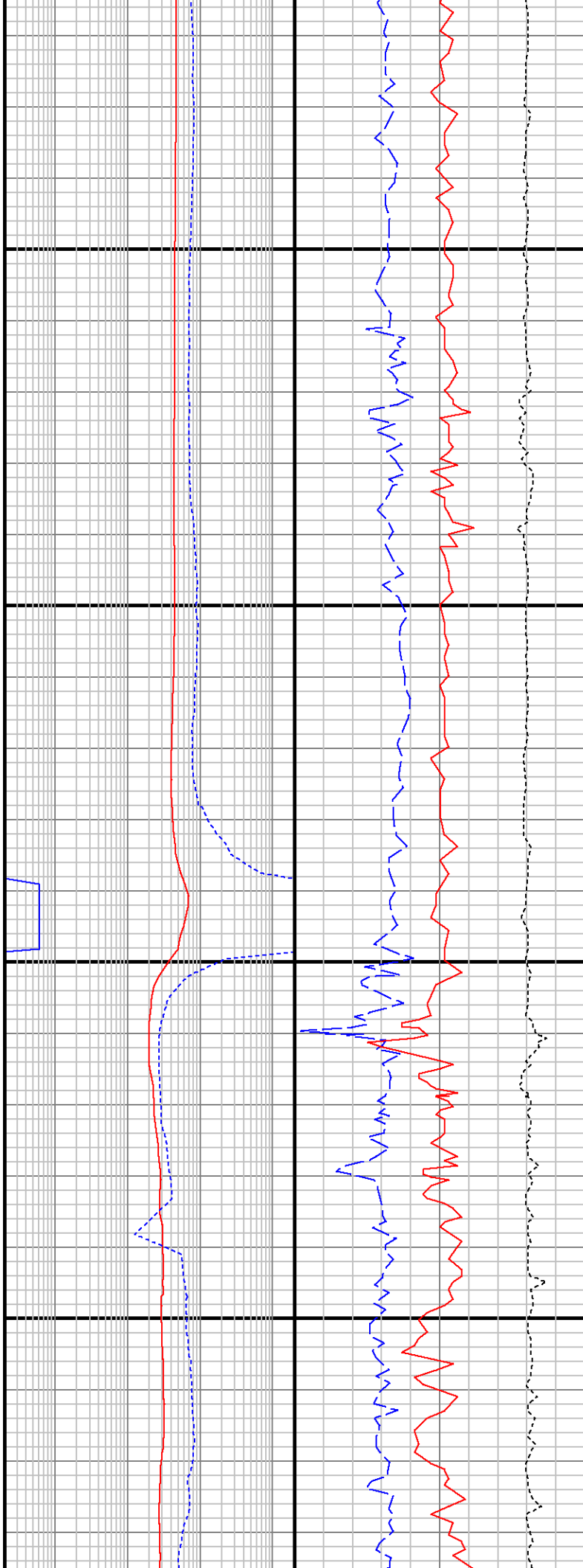
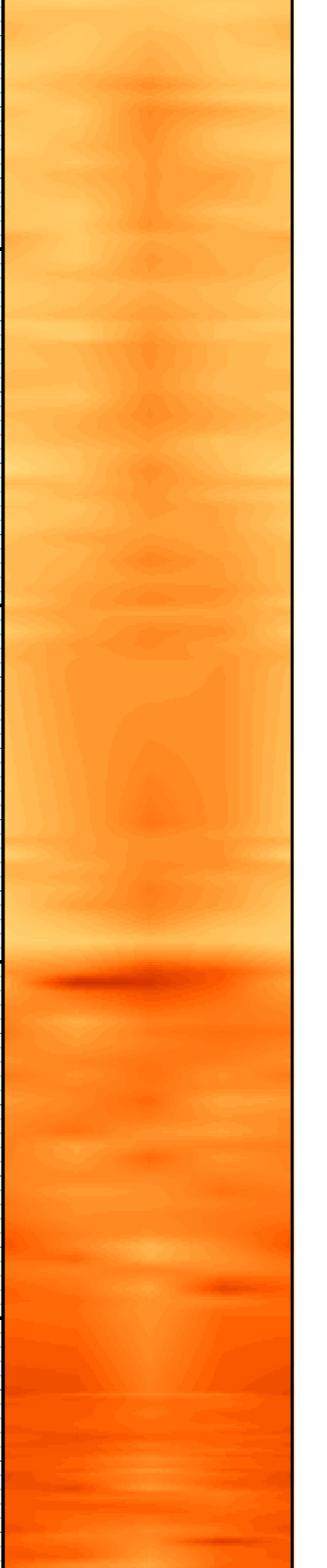


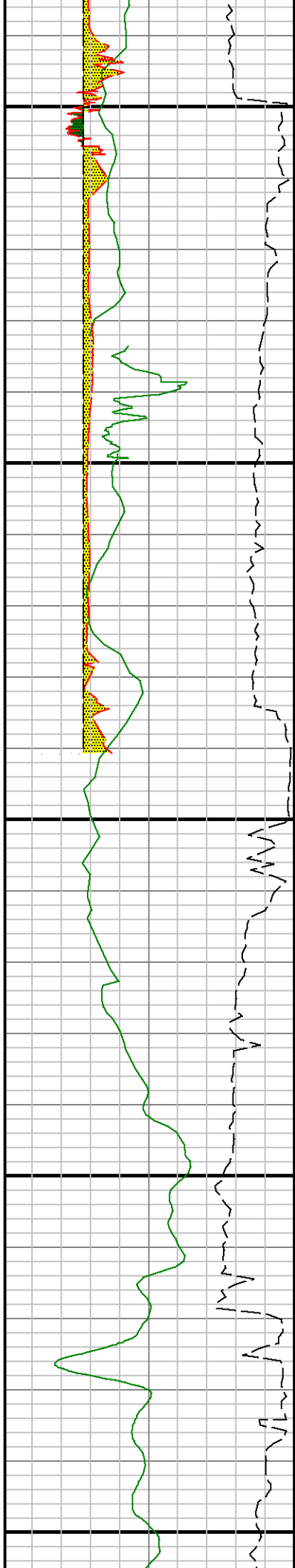






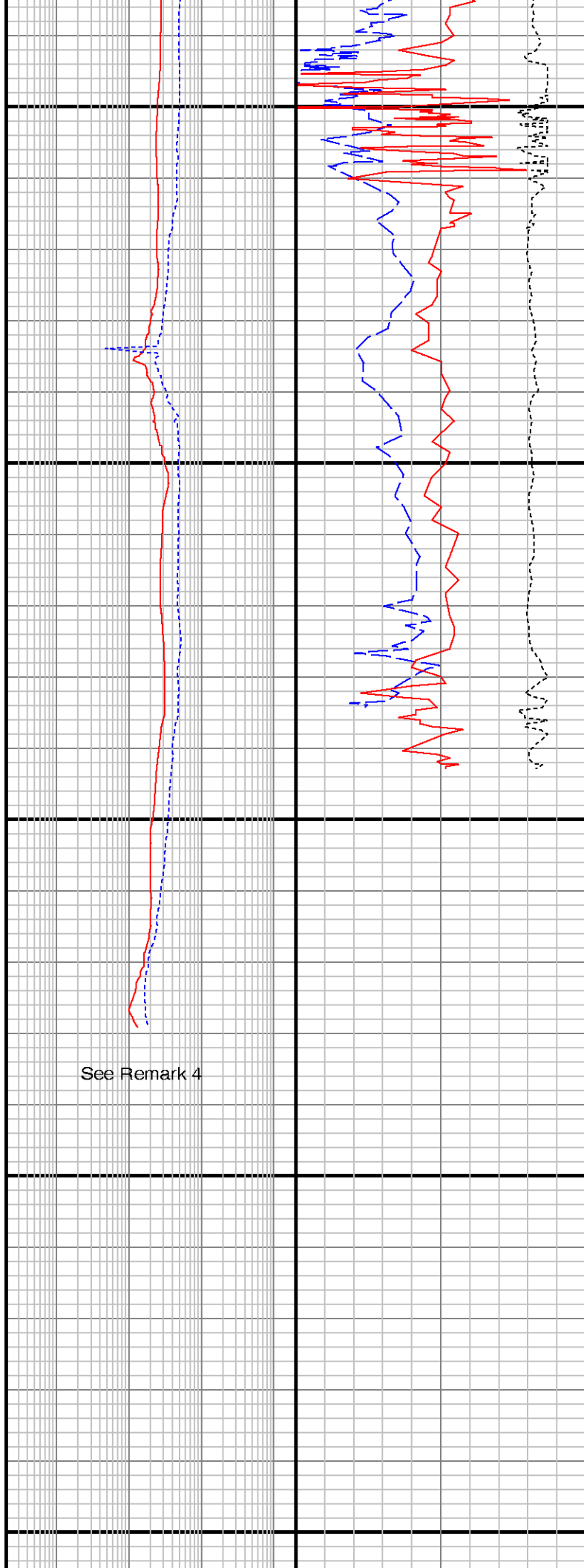




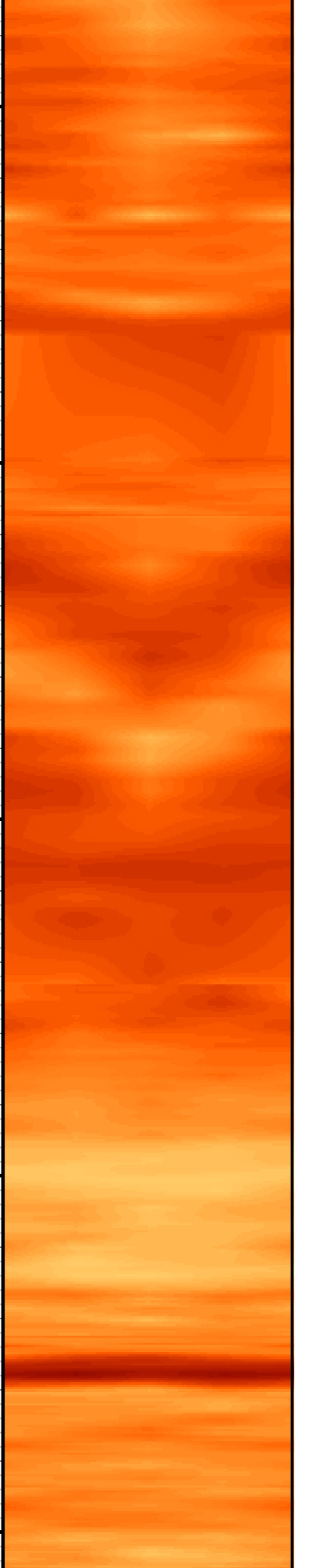


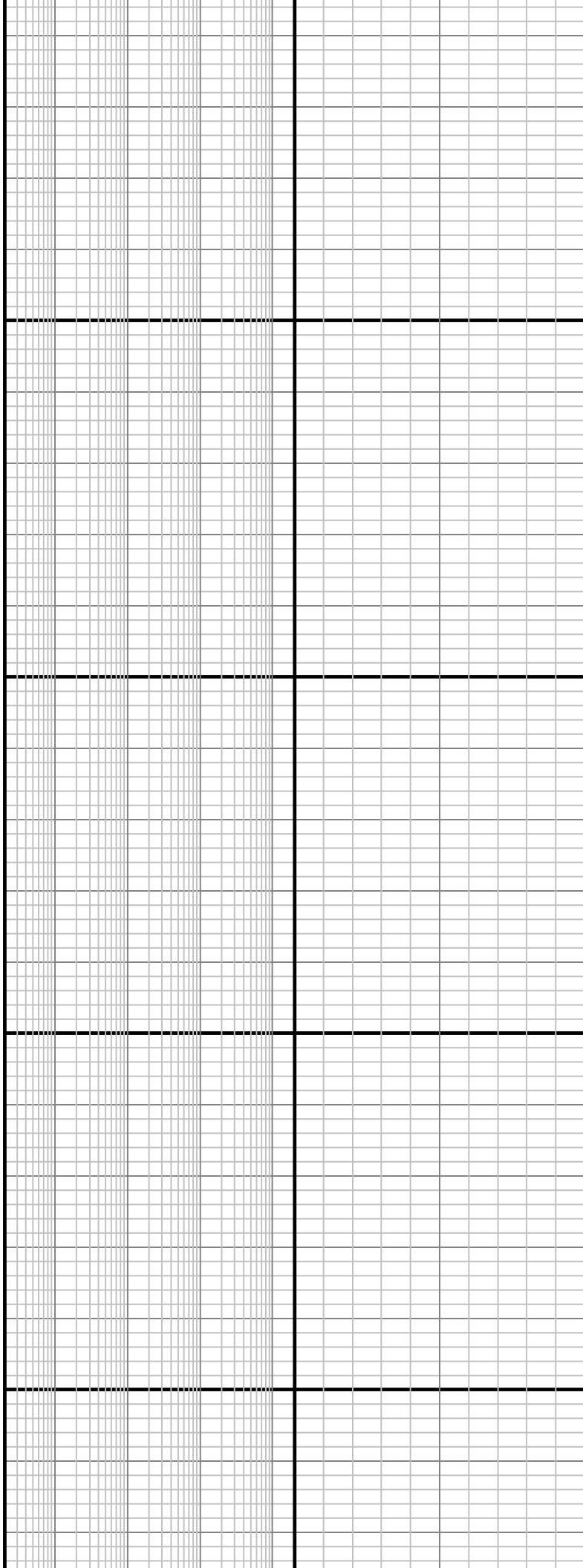
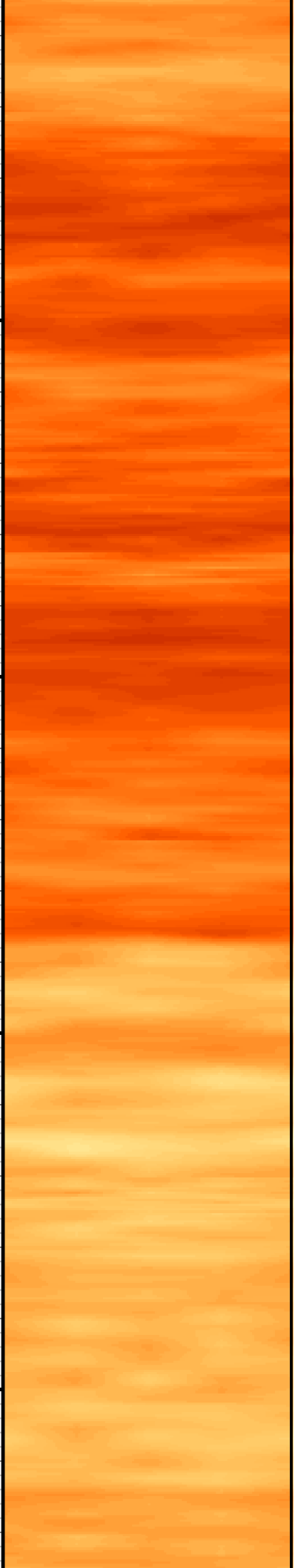
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10900



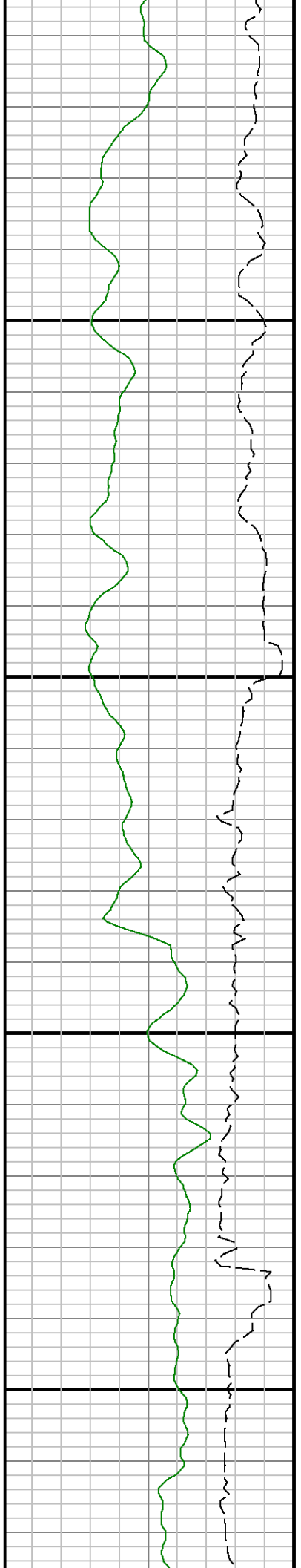
See Remark 4

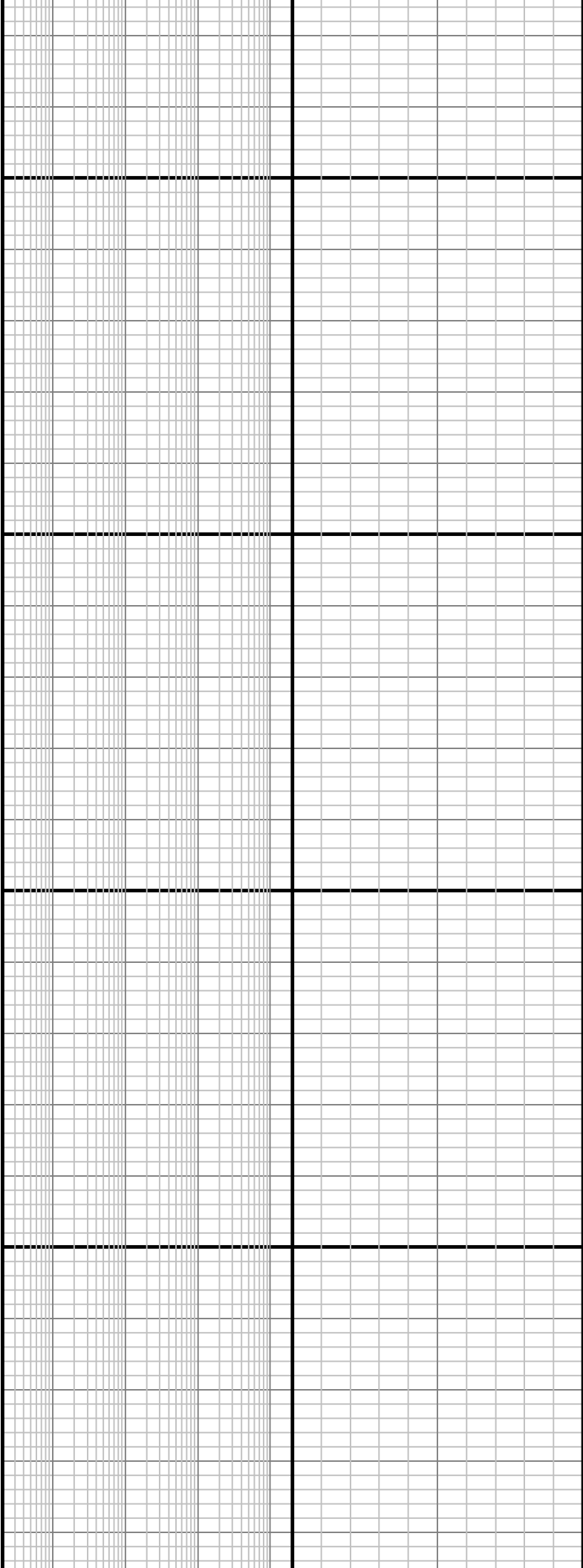




11000

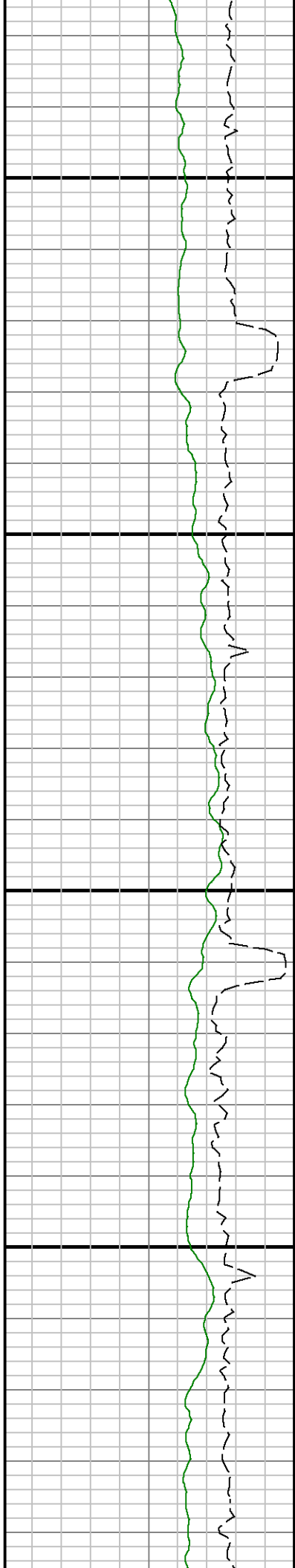
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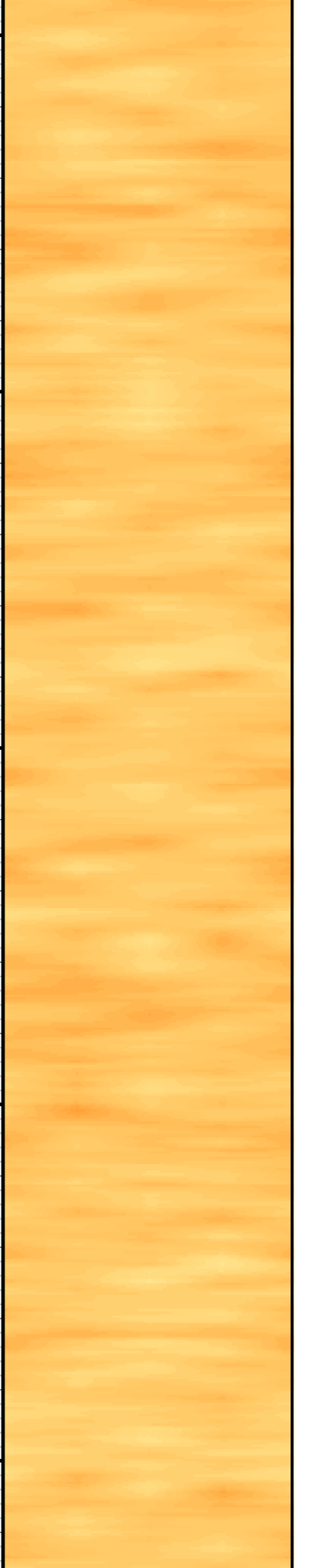
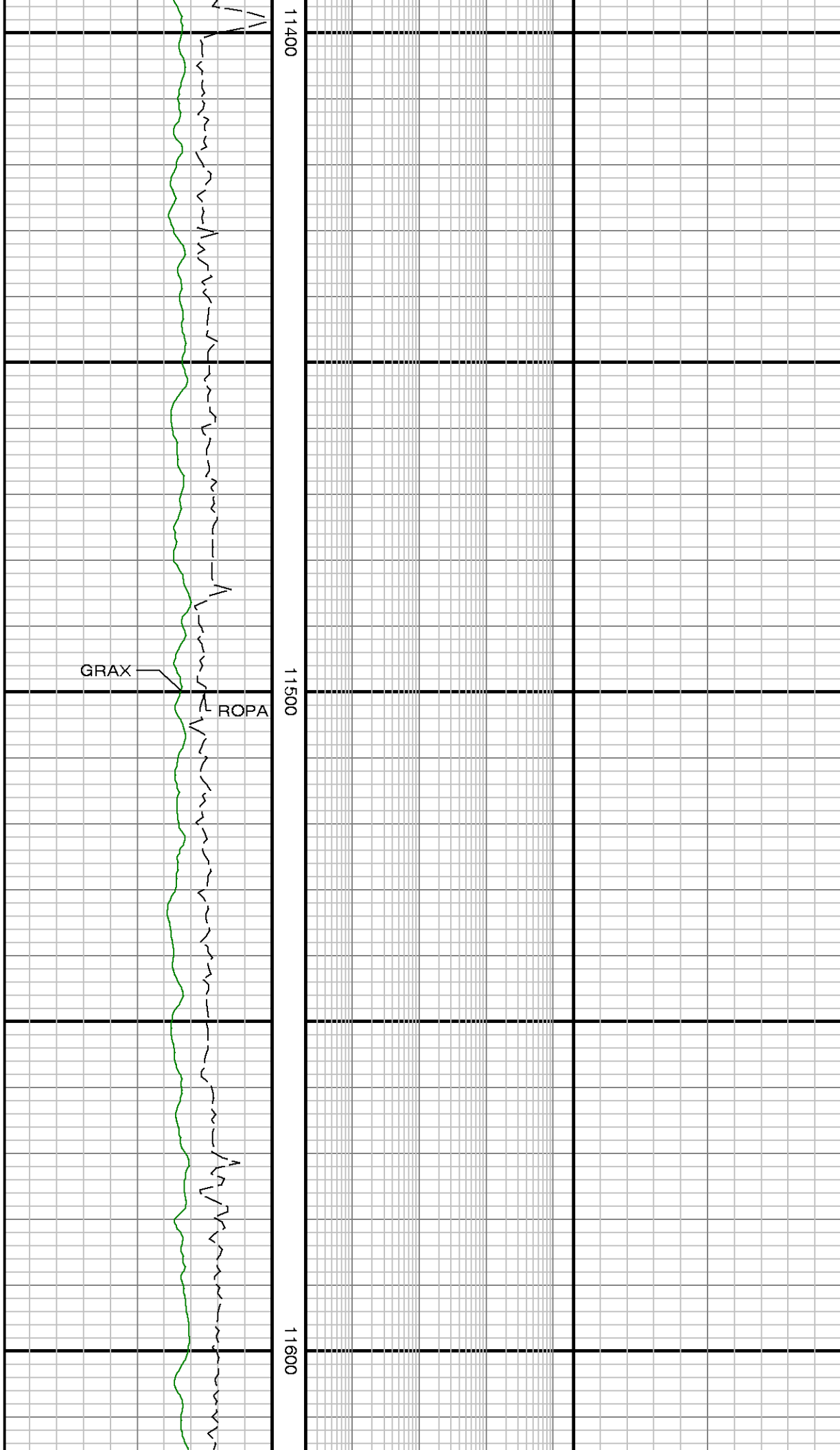


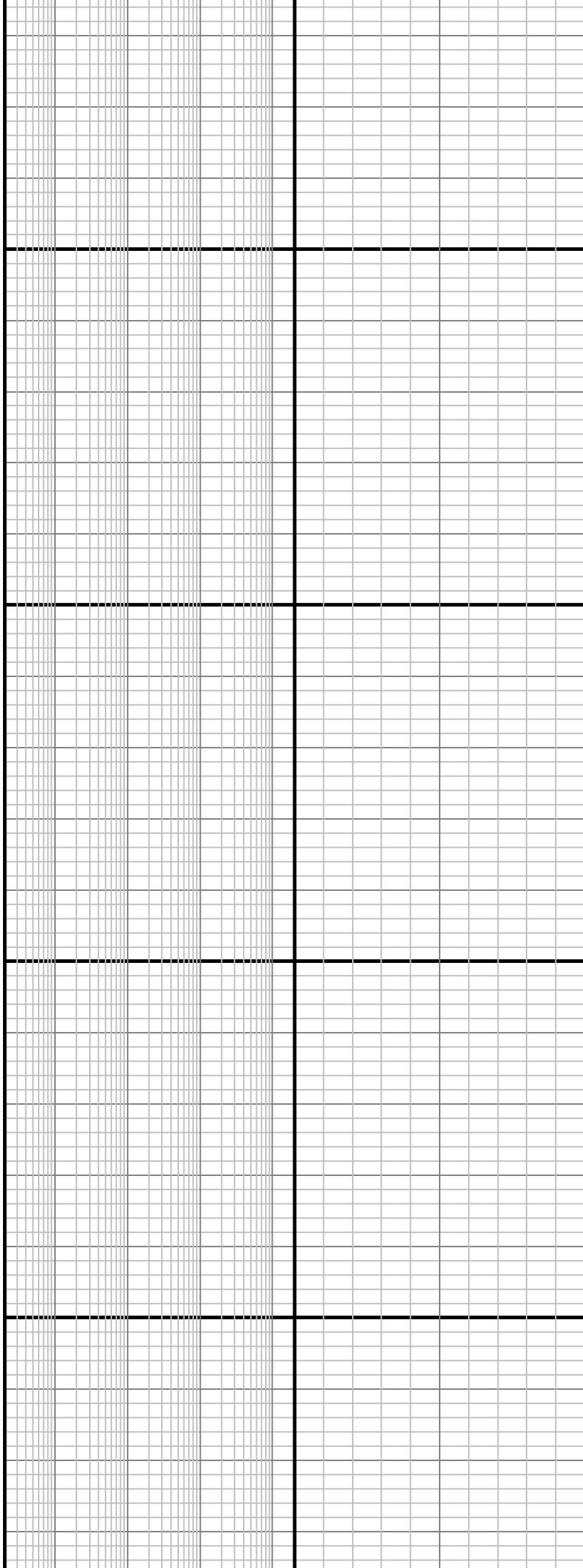
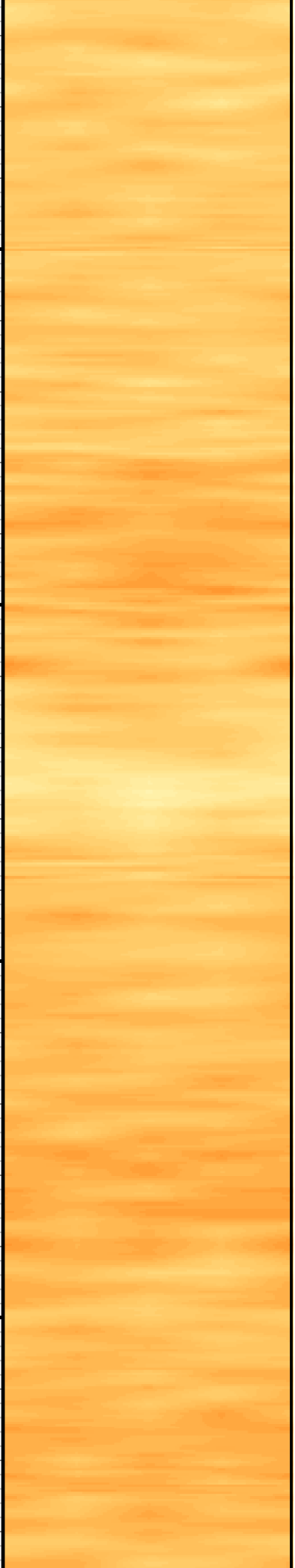


11200

11300







11700

11800

