

**A SZIGETKÖZI TALÁJVÍZ-FELSZÍN VÁLTOZÁSÁNAK
ÉRTÉKELÉSE
A DUNA ELTERELÉSE ÓTA ELTELT IDŐSZAKRA**

1991 - 1994. évi adatok

Összeállította:

**Hajósy Adrienne
1995. március**

Jóváhagyta

Gerencsér Tivadar (EDUKÖF)

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A KUTAK IDŐSORA

1991.01.01 - 1994.12.31

A mért vízszint vékony vonal, a modellgörbék vastag vonalak.

Az elterelés előtti időszak mutatja a modellek jóságát. A Dunához közeli kutak esetén a három görbe jó közelítéssel azonos.

Az elterelést követően a három görbe szétválik.

A felső vastag vonal mutatja azt a vízszintet, ami akkor lenne, ha a Dunát nem terelték volna el.

Az alsó vastag vonal mutatja, mennyi lenne a vízszint, ha az elterelés után megmaradt volna a korábbi kapcsolat a Dunával.

A TALAJVIZ FELSZÍN VÁLTOZÁSÁNAK ÉRTÉKELÉSE A DUNA ELTERELÉSE ÓTA ELTELT IDŐZAKRA

A talajvizjárás hosszabb időszakot (hét, hónap) jellemző változásának bemutatása a Duna és a talajvízszint kapcsolati függvényével a legegyszerűbb. A függvény az ún. standardizált érték felhasználásán alapul.

Az standardizált vízallas-ido összefüggés mind a dunai mérések, mind a dunai mérce-talajviz kutak vízszintje között nagyon jó közelítéssel lineáris függvény. Az idősorok mutatják a számítás egyszerűségét és nagy megbízhatóságát.

A standardizált érték

$$W(t) = [w(t) - w^m] / w_s,$$

ahol

$w(t)$: a pillanatnyi vízszint,
 w^m : az idősor átlaga,
 w_s : az idősor empirikus szórása.

A standardizált értékek felhasználásával egyszerű matematikai kapcsolat létesíthető valamilyen rögzített földrajzi hely mért dunai vízszintje és egy kút vízszintje között. A kapcsolati függvény a standardizált vízszintek egyenlőségéből származható:

$$h(t) = a * H(t-t_0) + b,$$

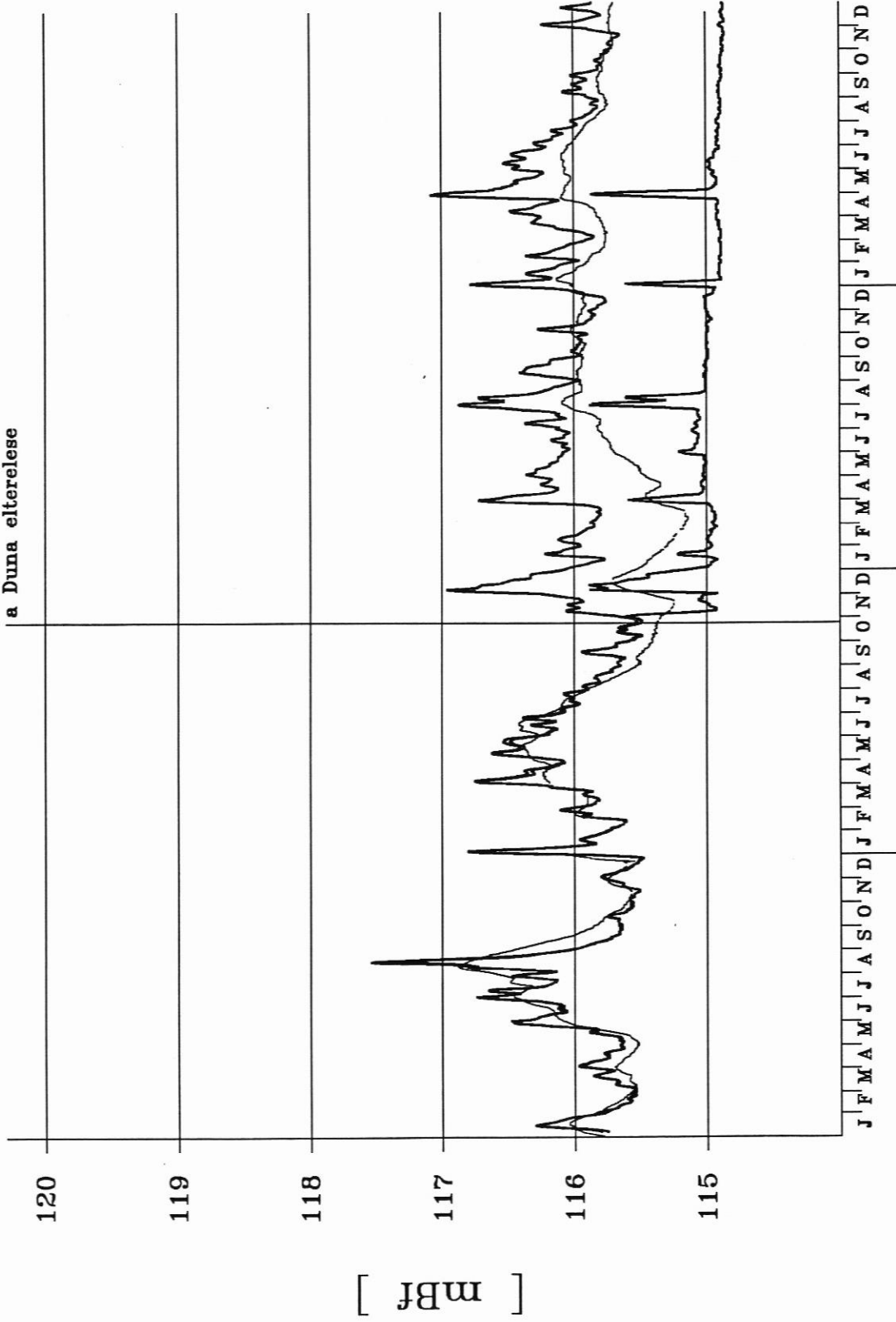
ahol

H : dunai vízszint,
 h : vízszint a kútban,
 a, b : a kútra jellemző állandók,
 t_0 : a kút időkéssége.

A kutaknak a felszíni vizek ingadozását szűrő hatása miatt a felszíni vízallas idősor simított függvényét célszerű szerepeltetni a kapcsolati függvényben.

Az idősor görbékén a mért érték vékony vonal, a vastag vonalak két különböző modellhez tartozó kapcsolati függvények görbéi. A felső a Duna elterelése nélküli vízszint esetén lenne; az alsó azt mutatja, hol lenne a talajvízszint, ha a Duna jelenlegi vízszintje alapján az elterelés előtti kapcsolati függvényből számítható lenne. Az idősorok tükrözik, hogy az elterelés előtt döntő mértékben a Duna határozta meg a talajvízszint helyzetét (a tényleges vízszint és a modellérték majdnem azonos). Az elterelés után megváltozott a helyzet, most más hatások (tározó) jelentősek (a mért talajvízszint és a Duna vízszintje alapján számított modellértékek szisztematikusan eltérnek).

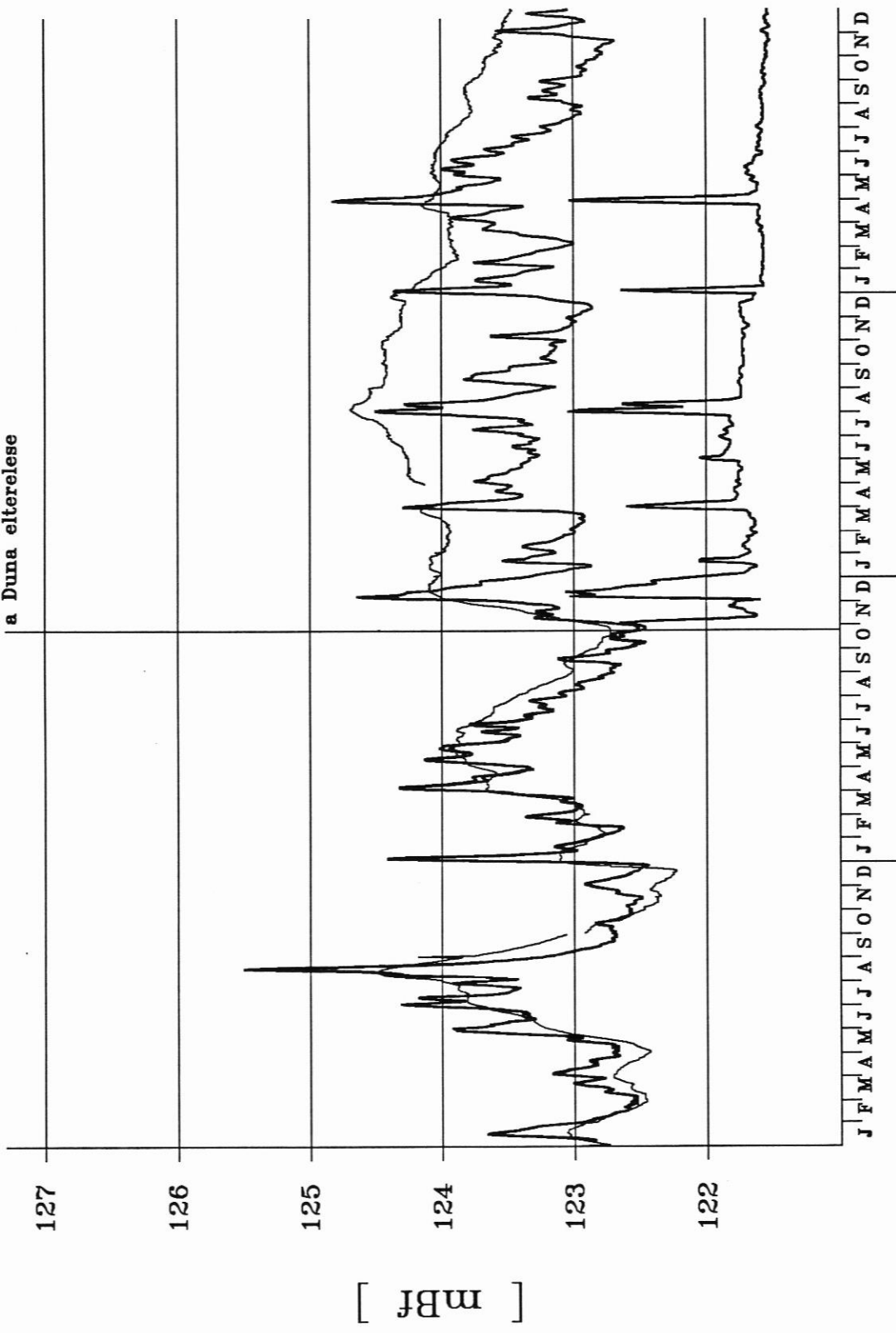
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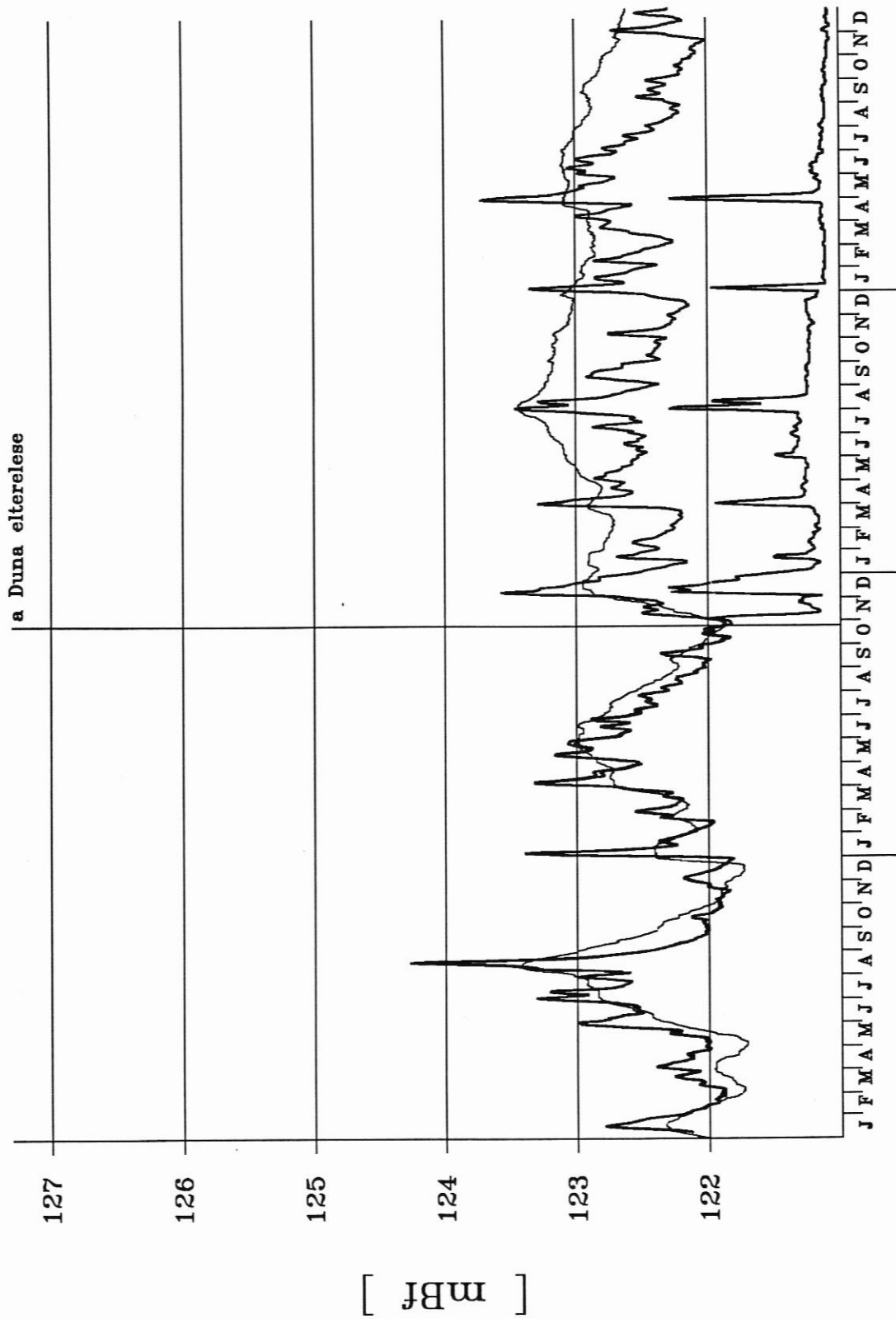


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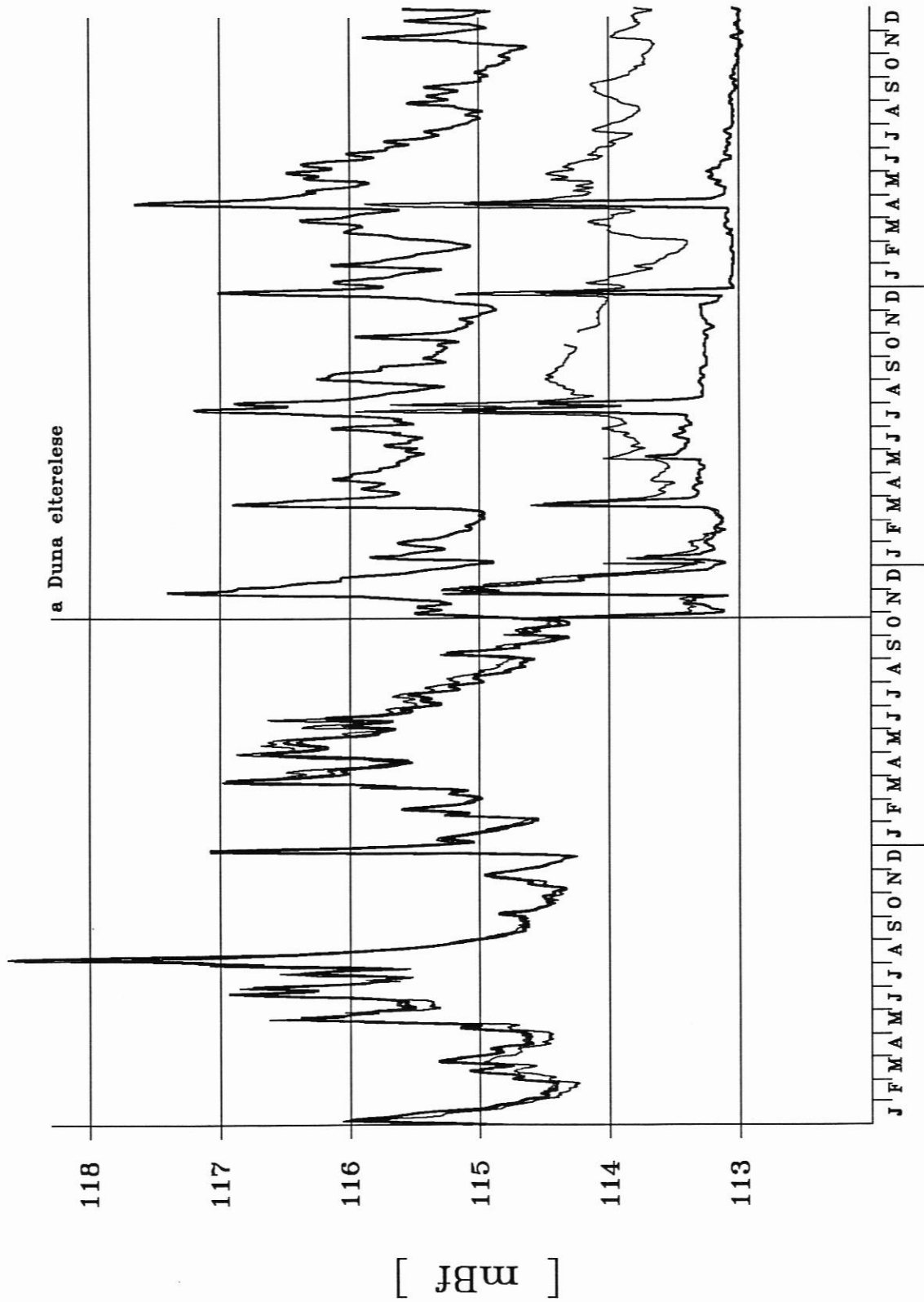
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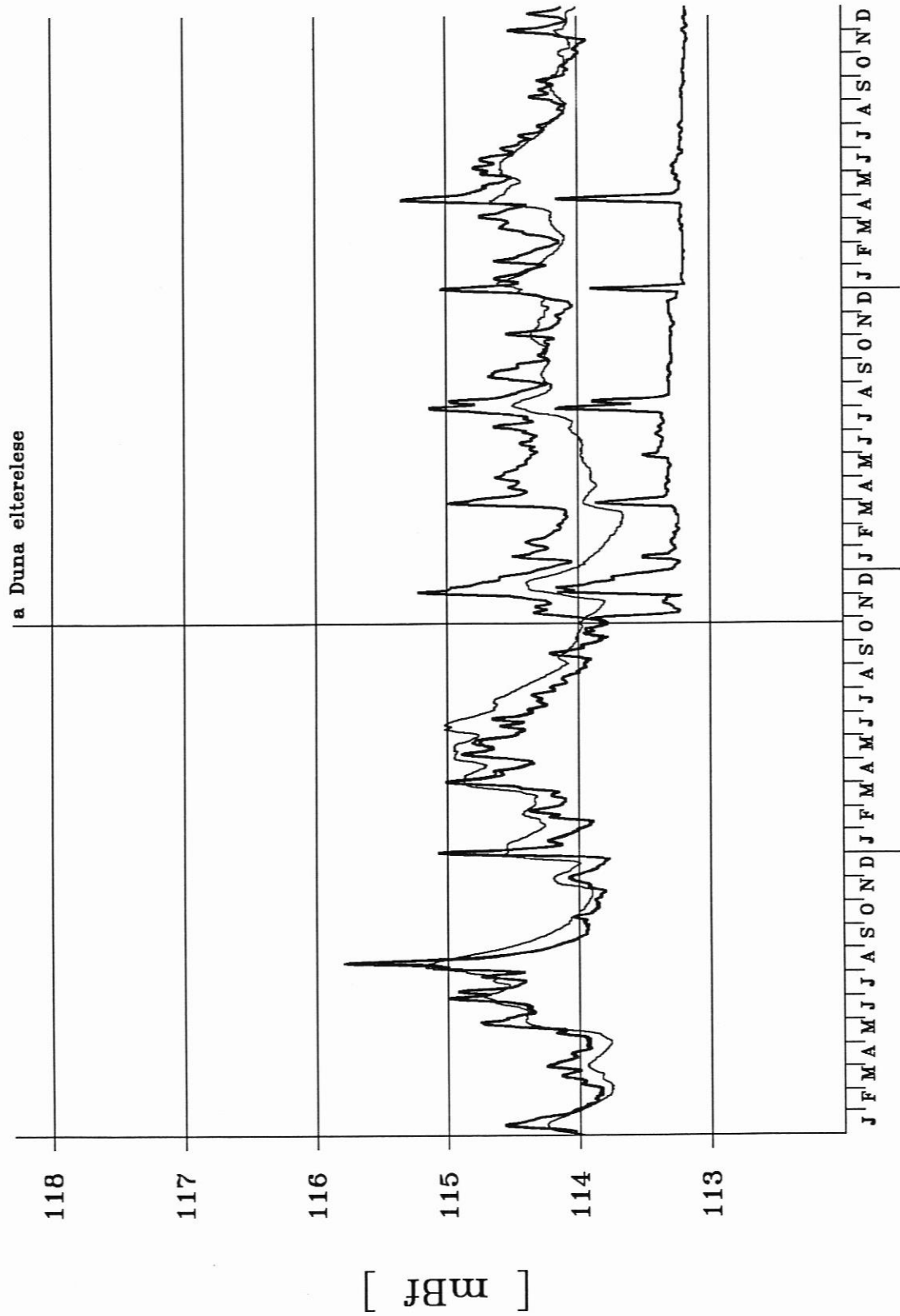


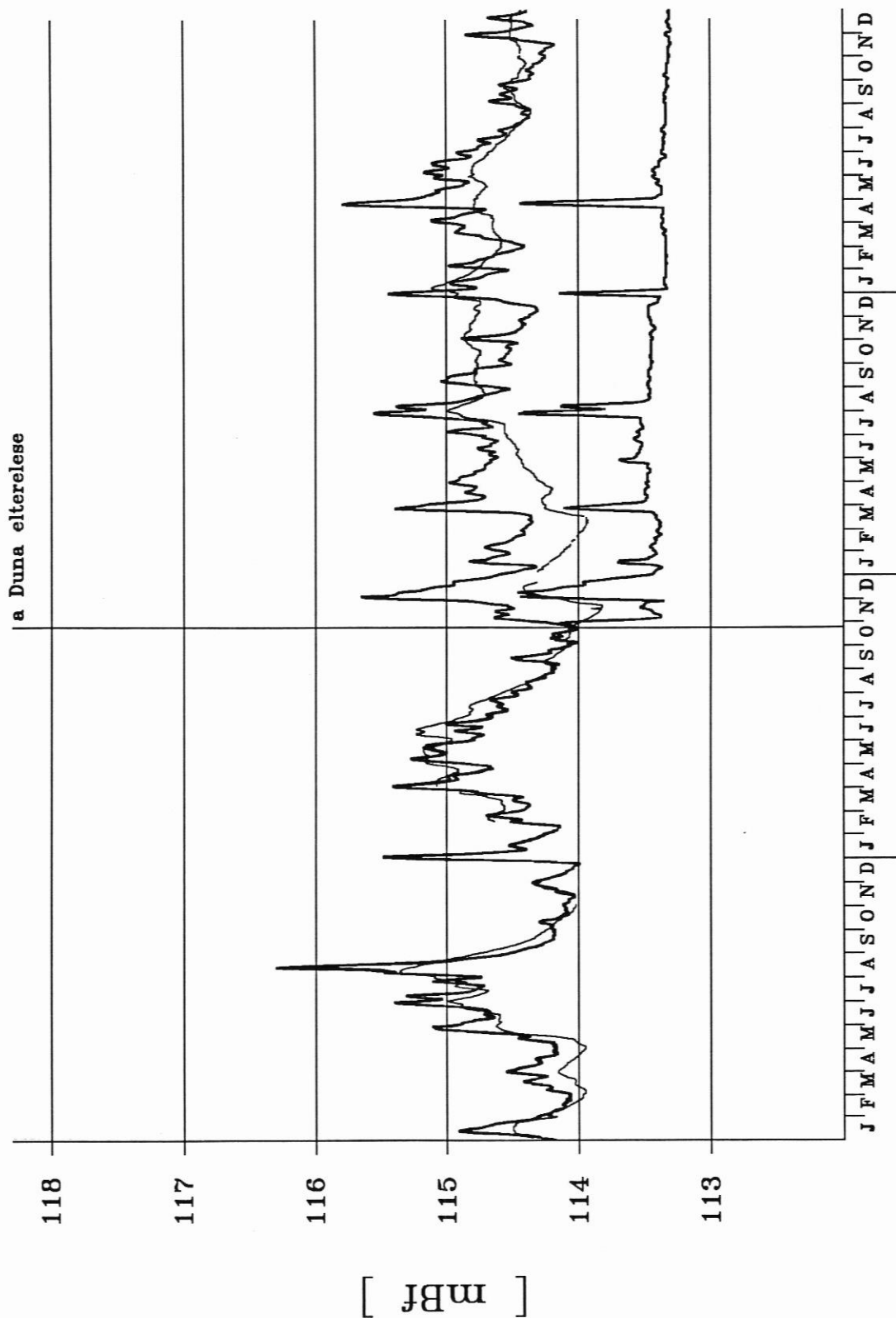


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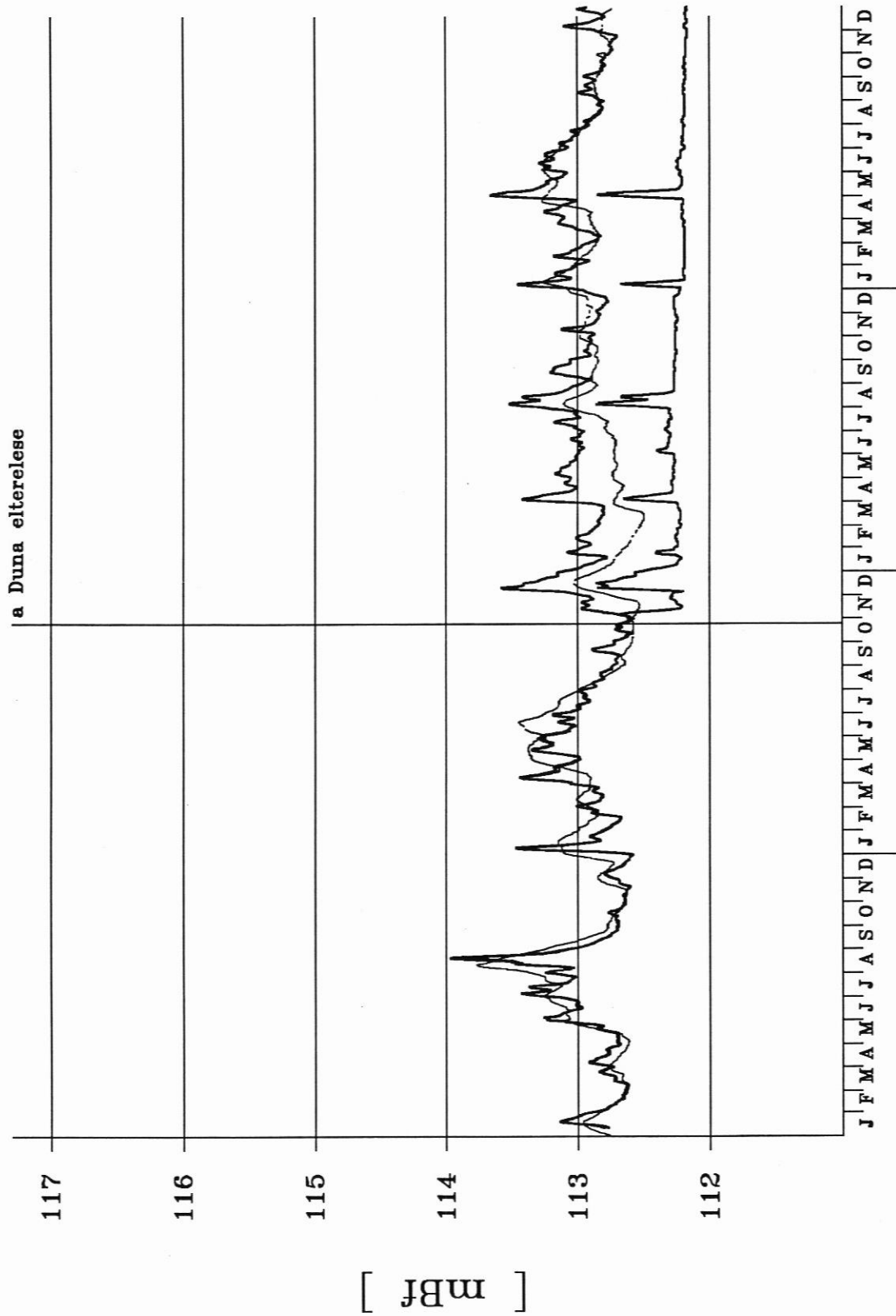


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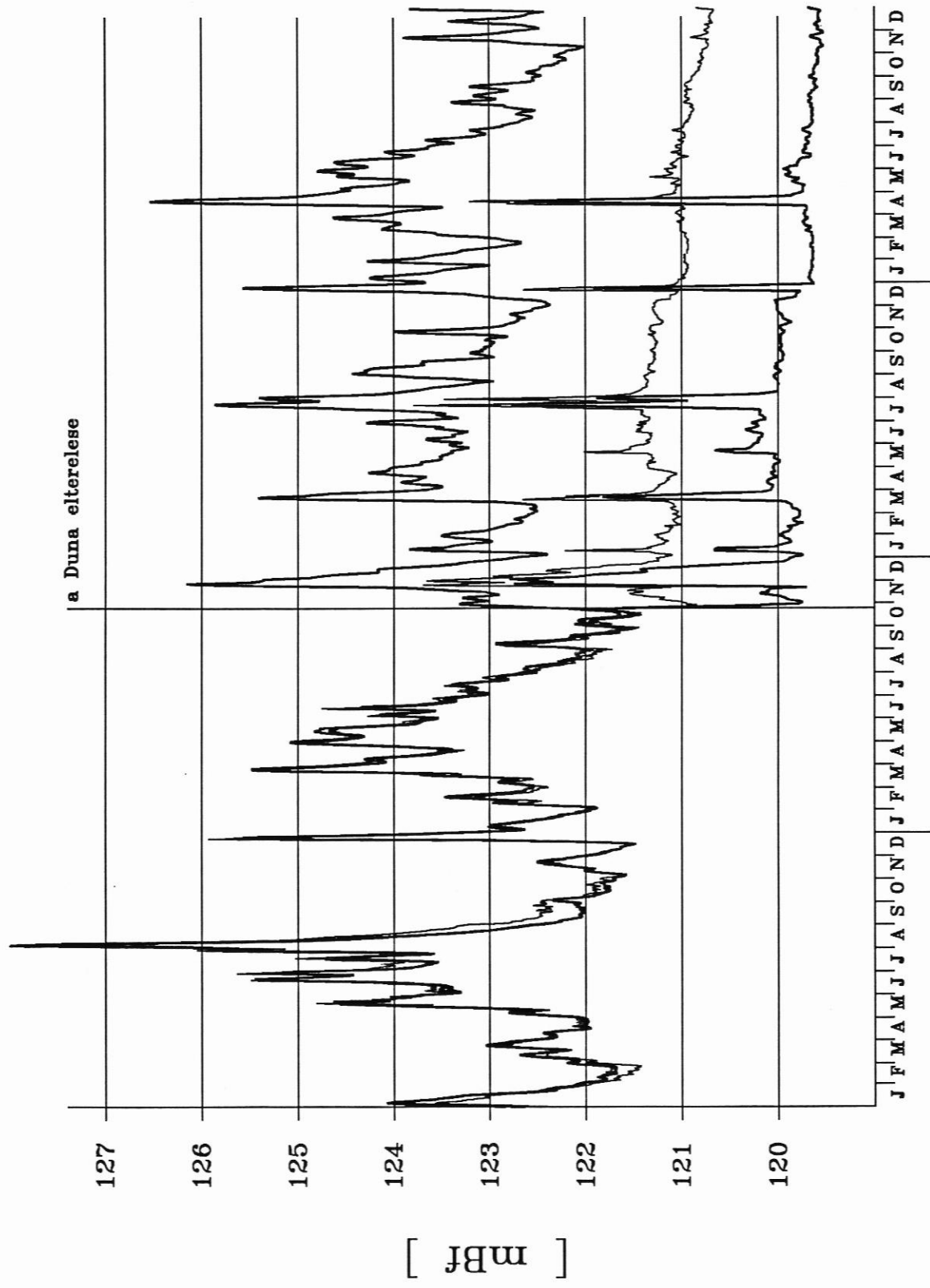




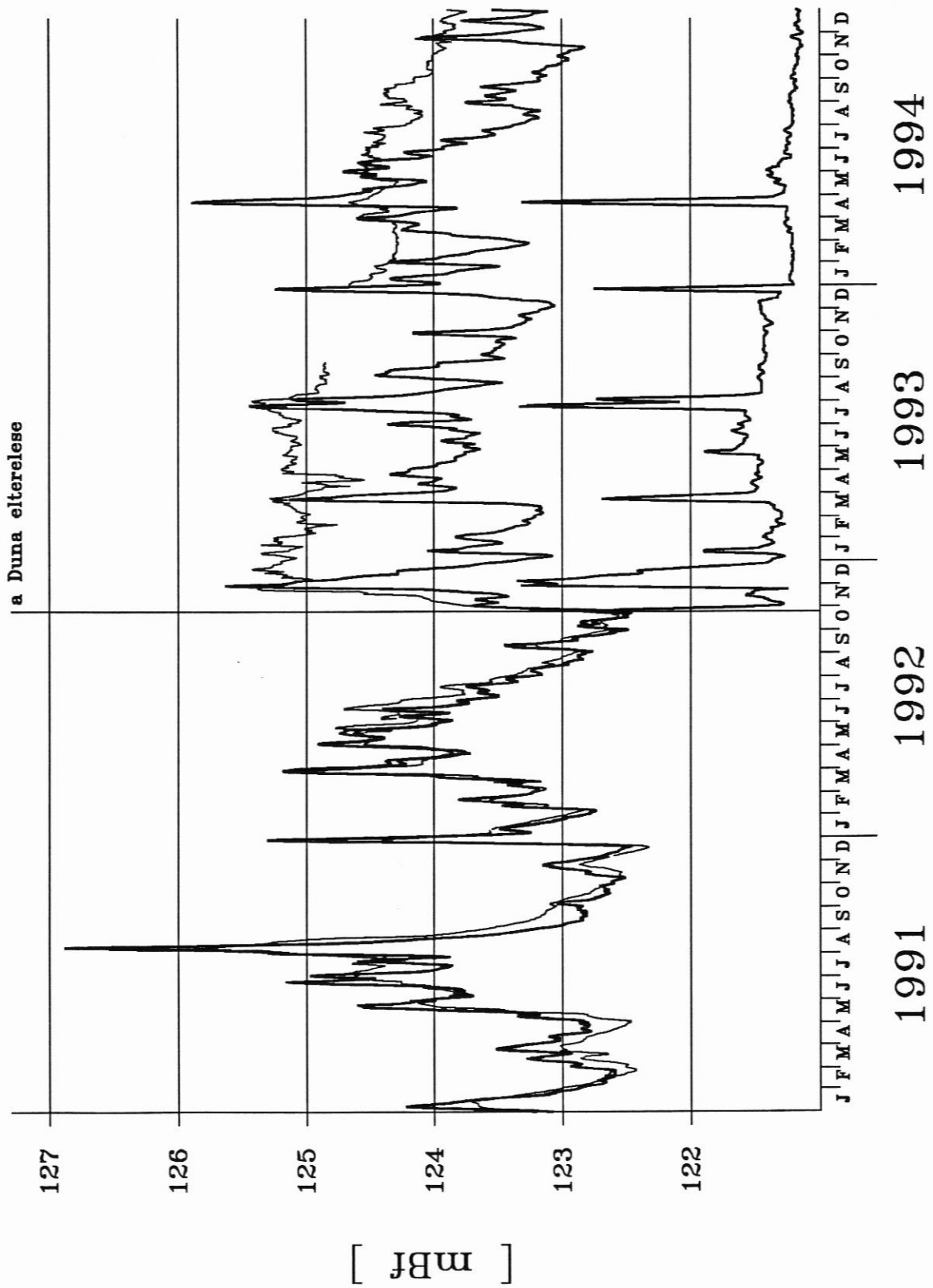
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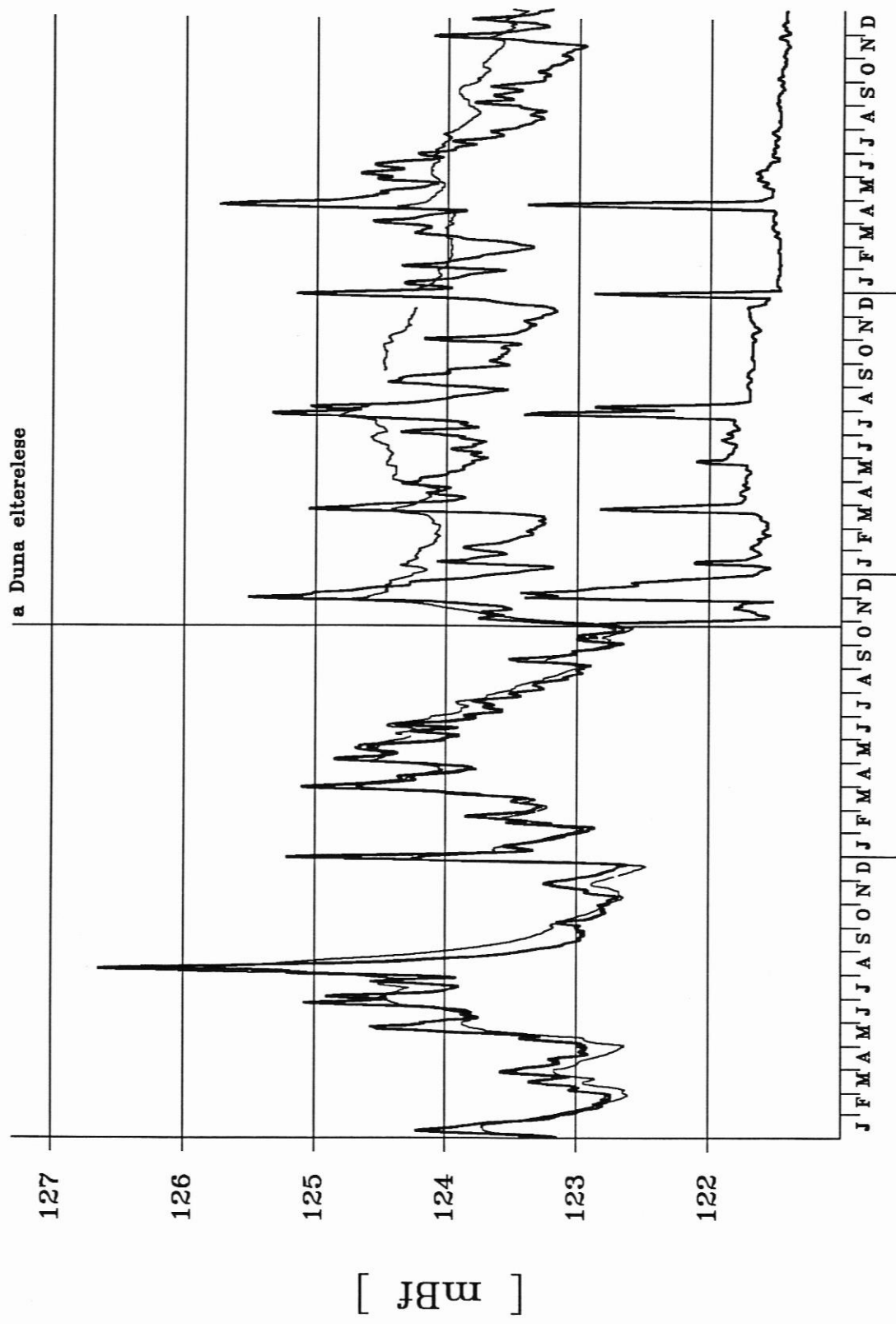


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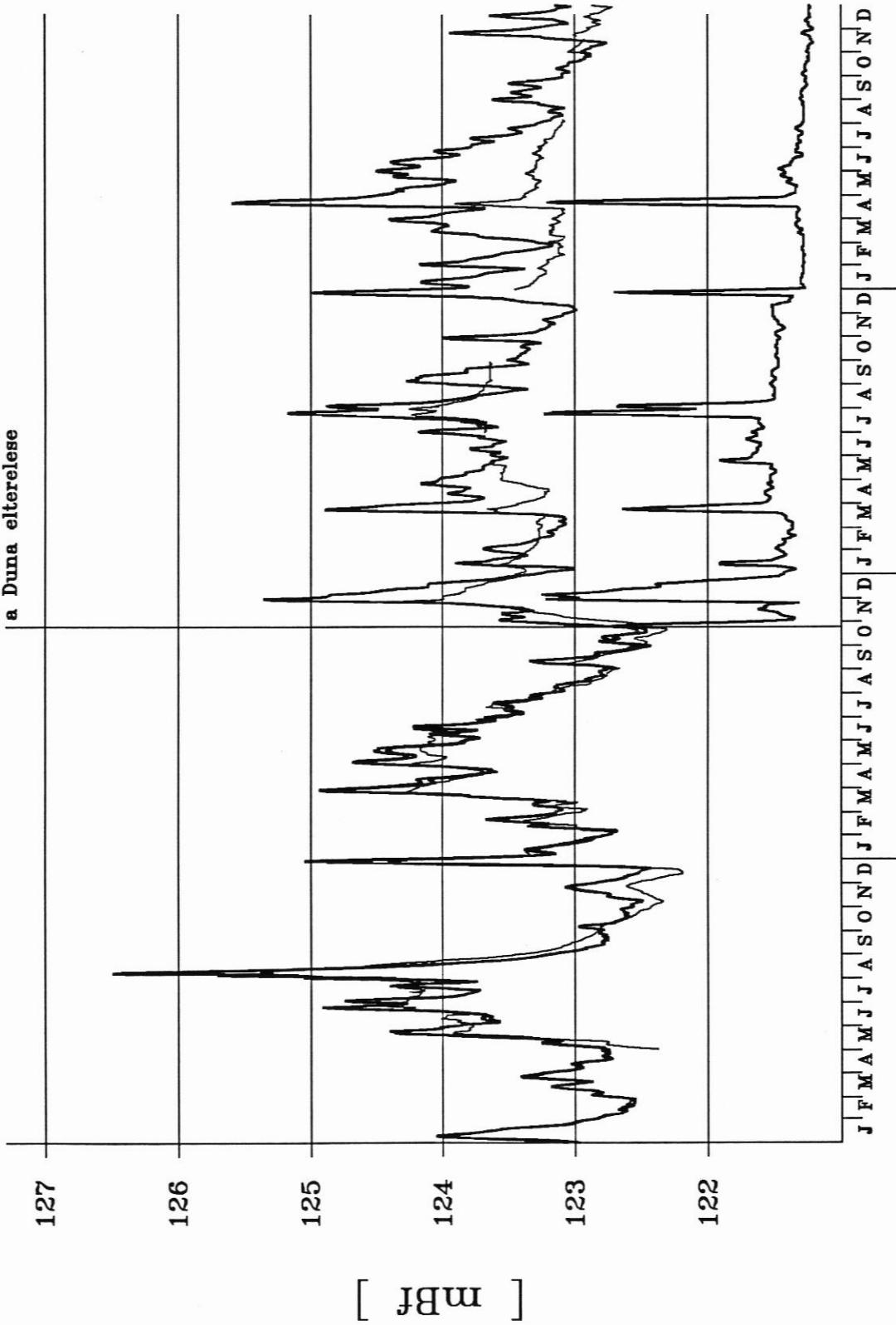


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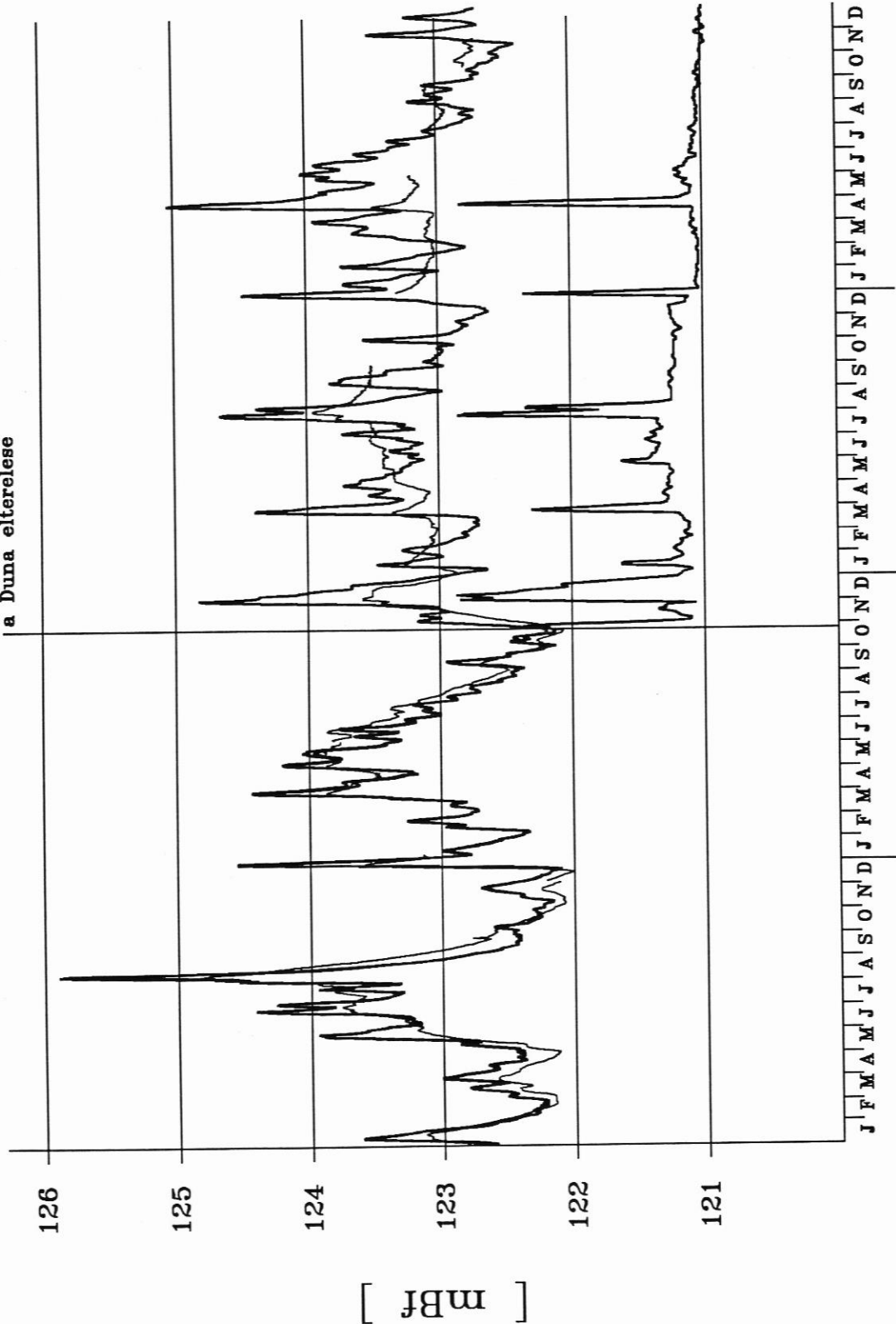


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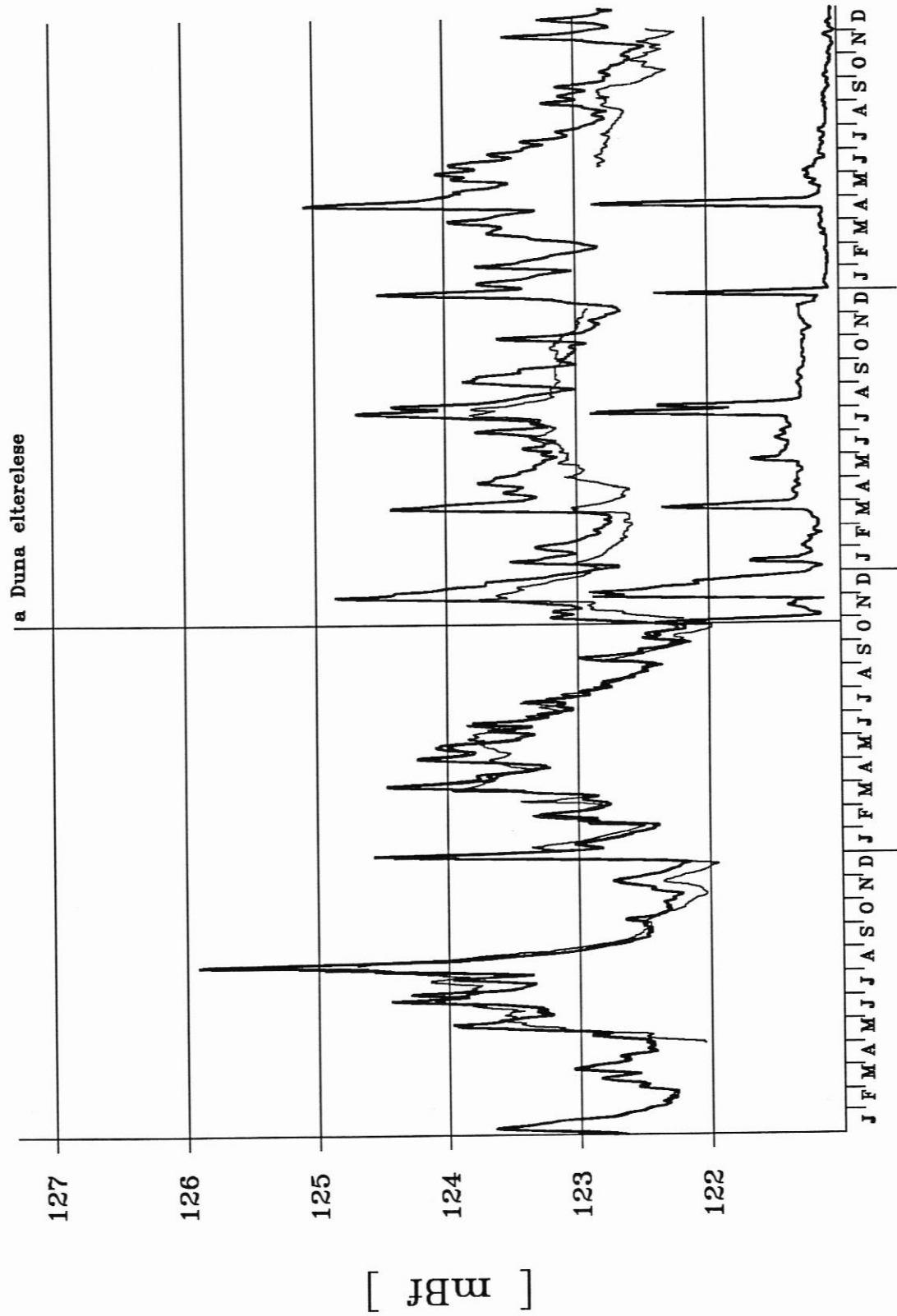


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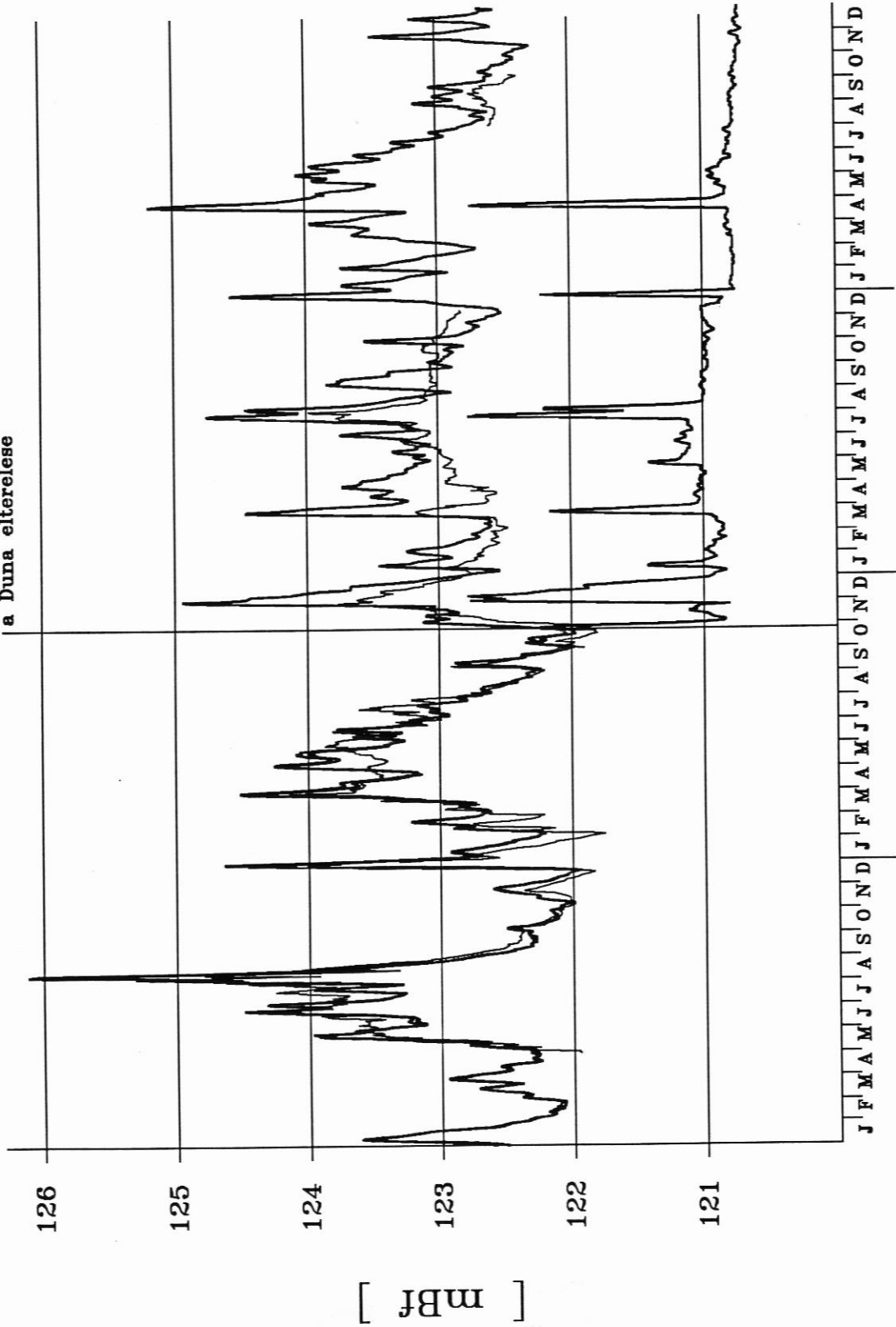
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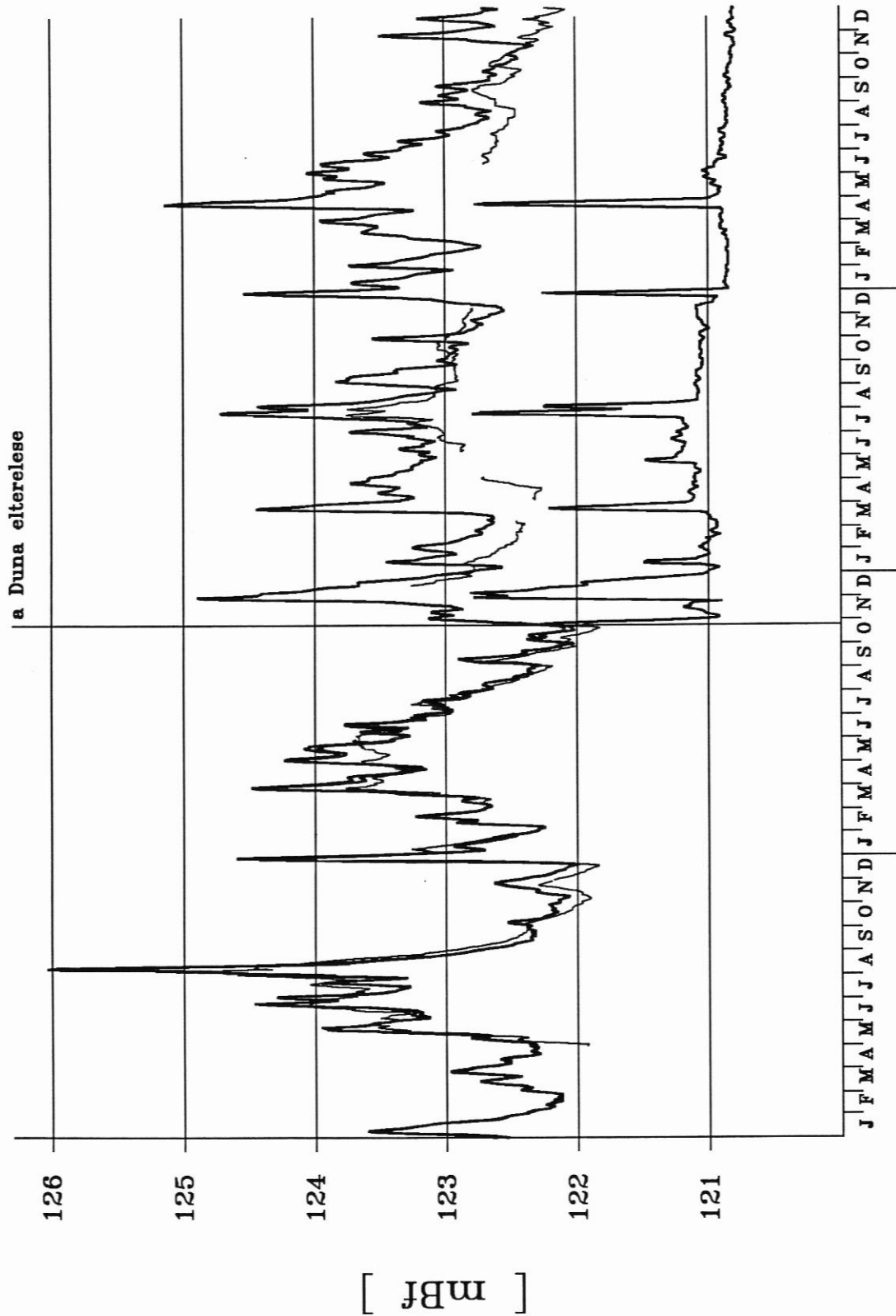
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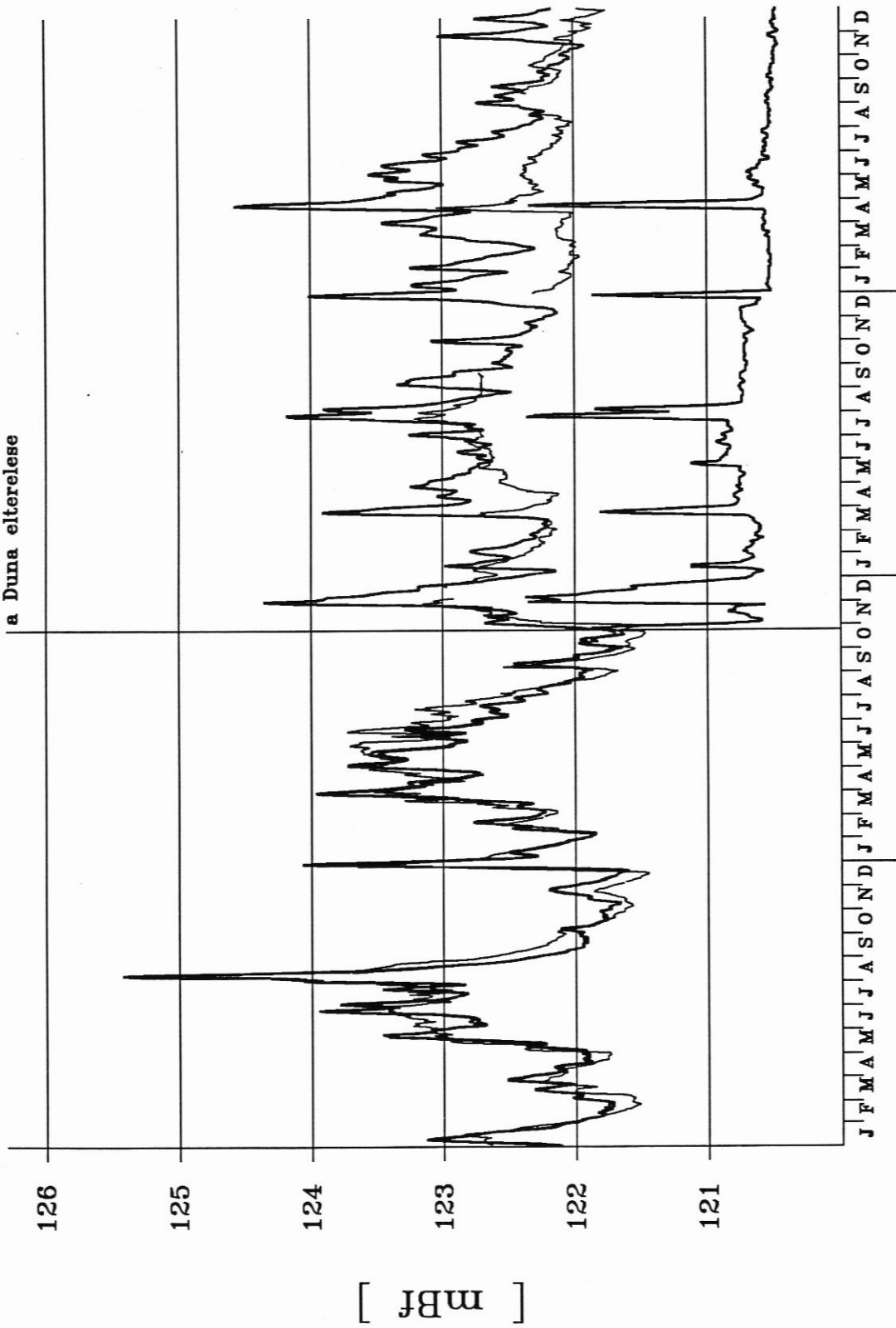
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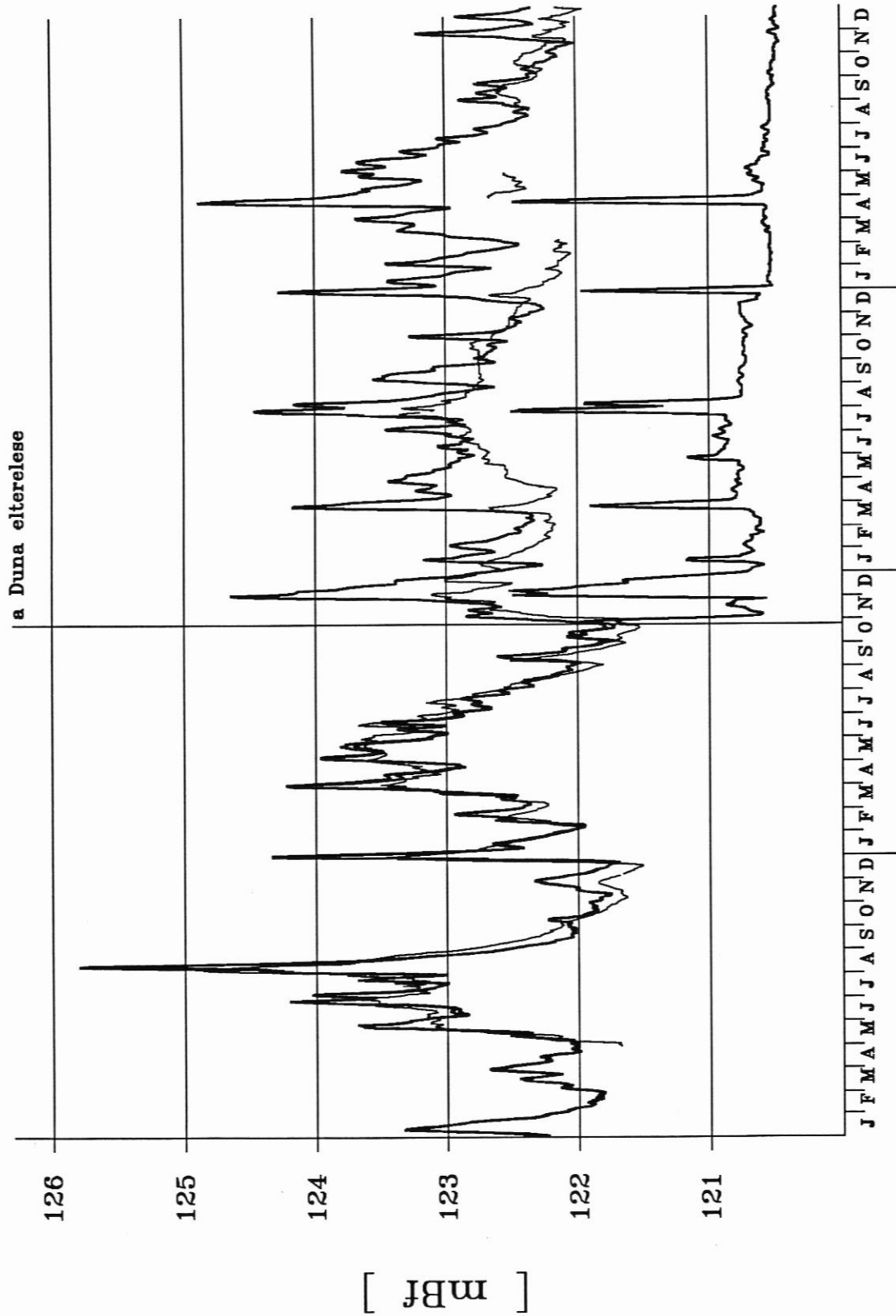
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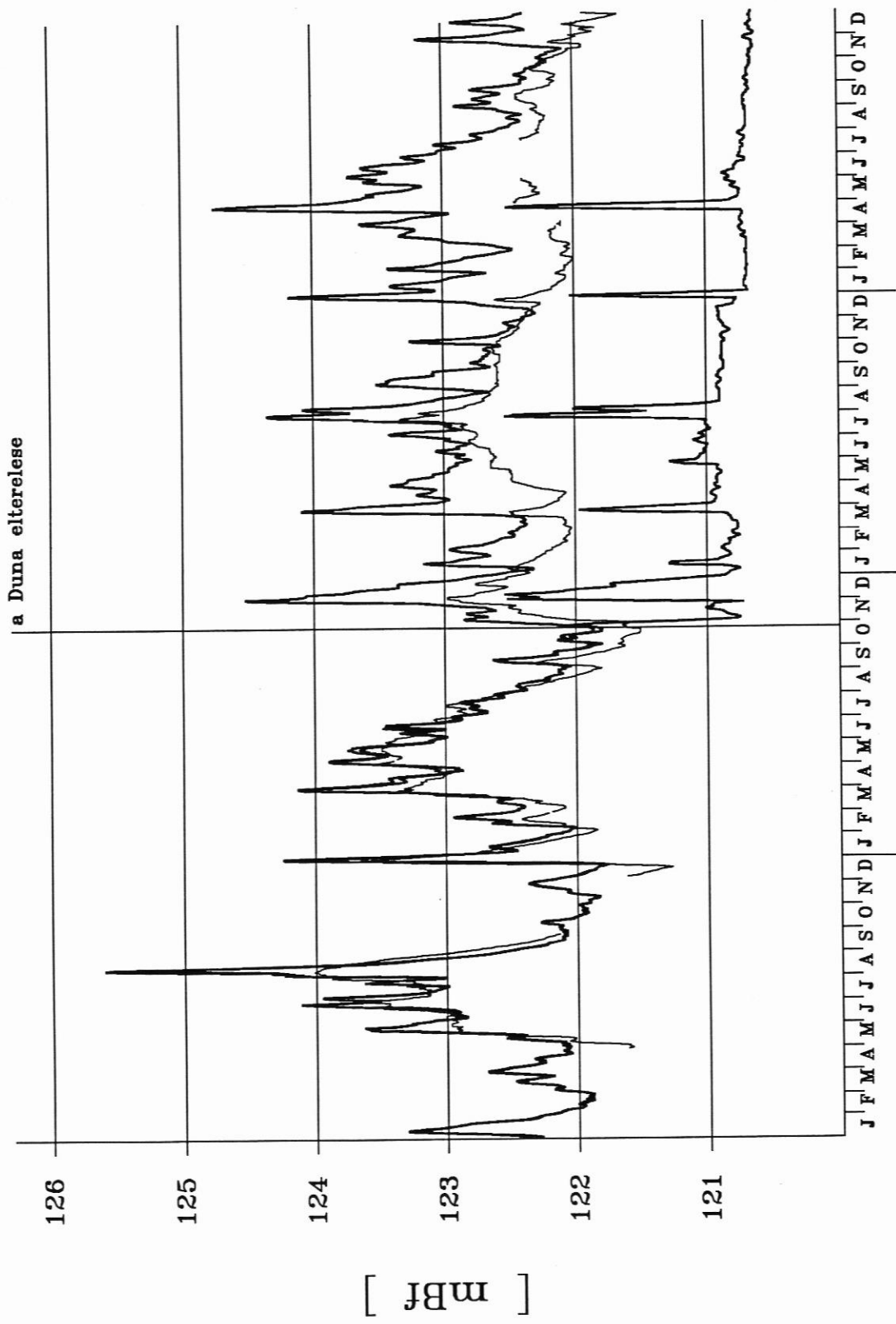
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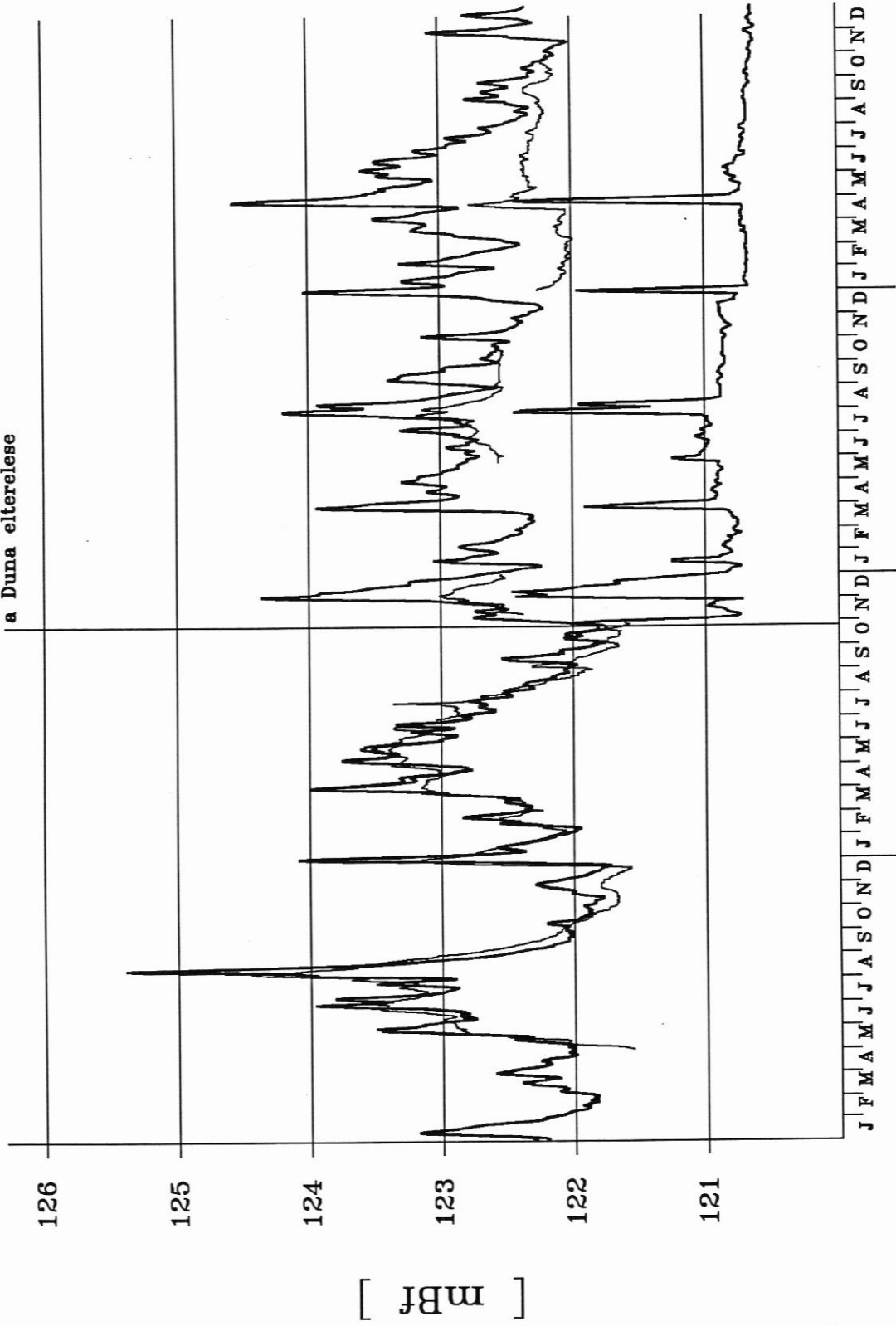


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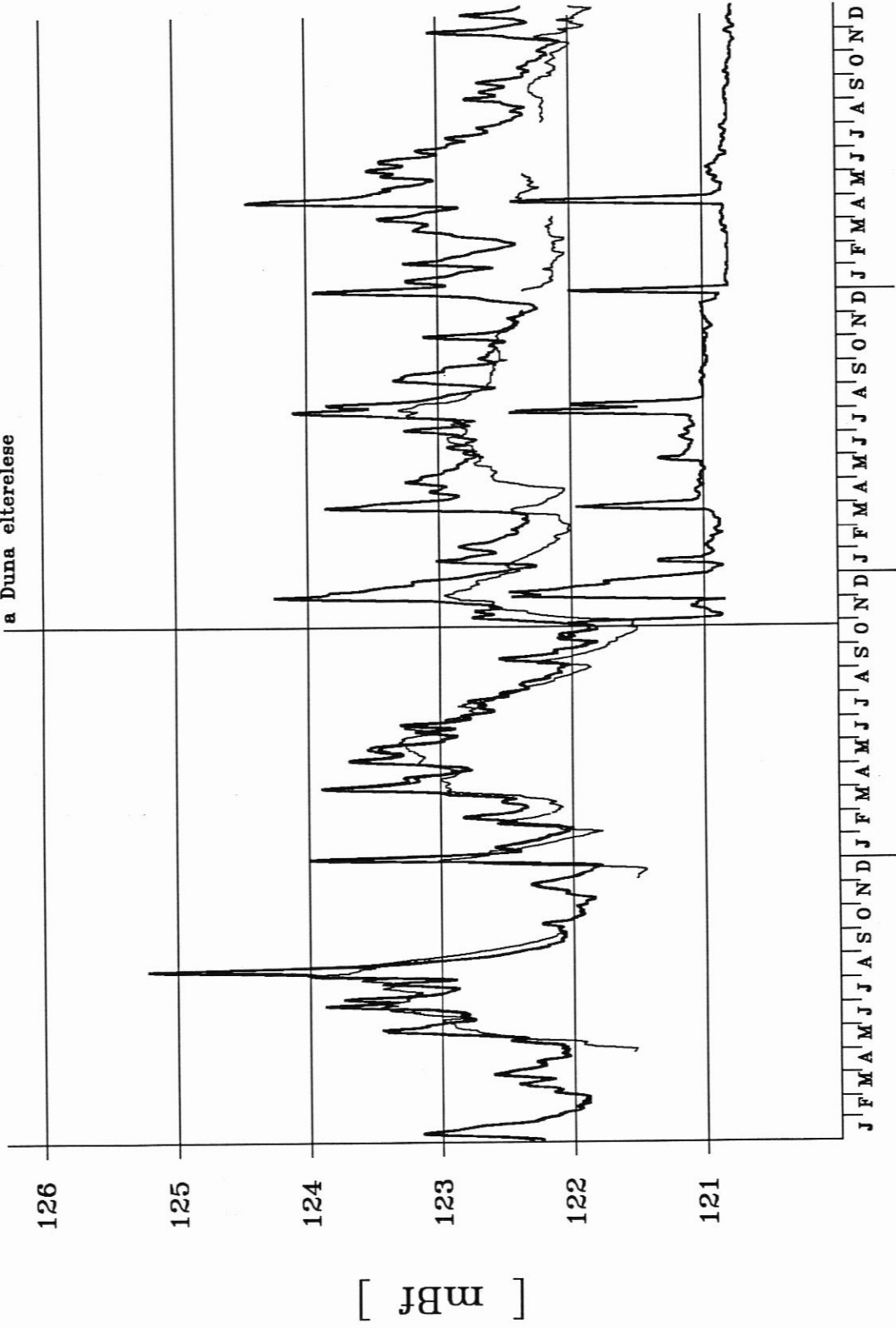
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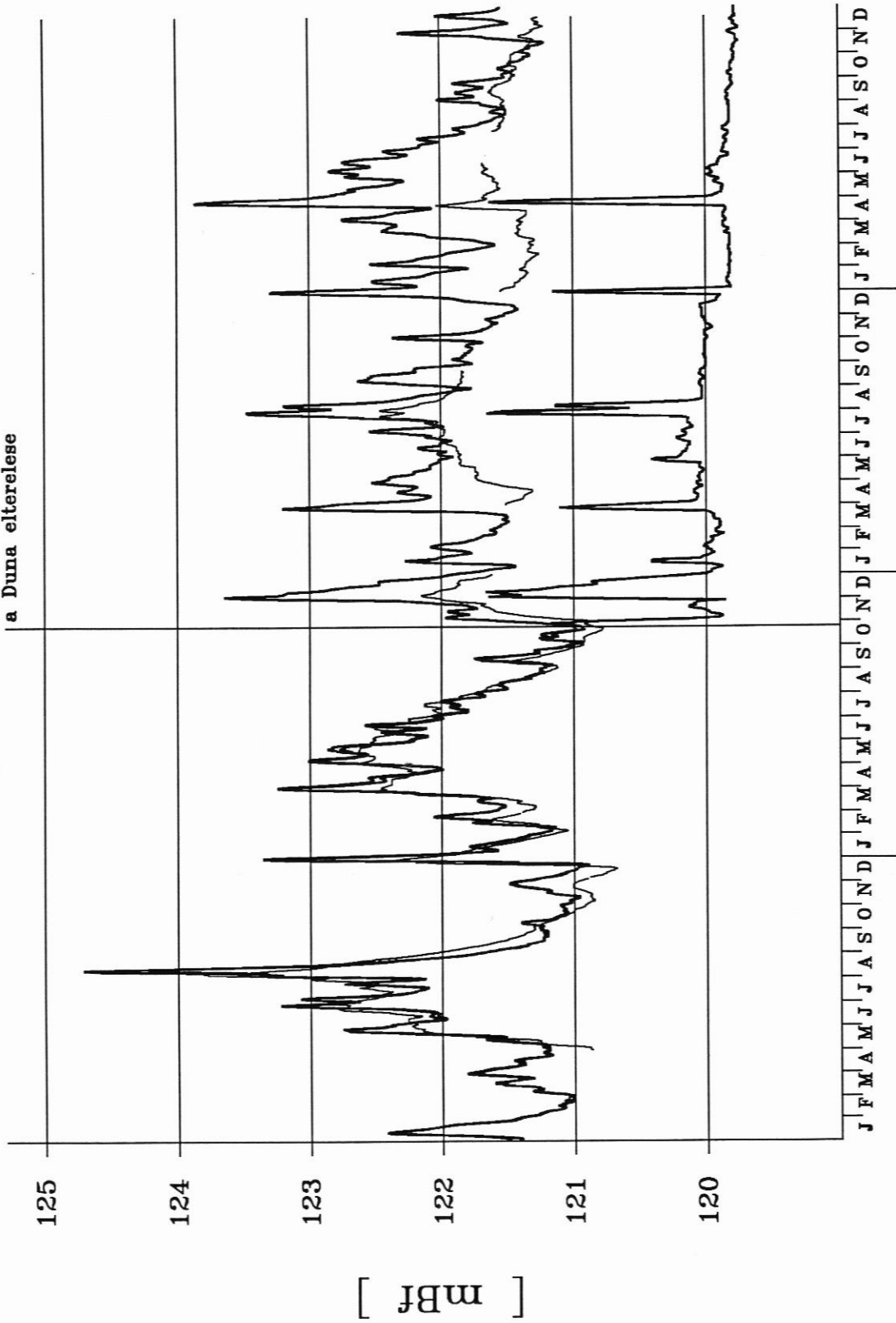
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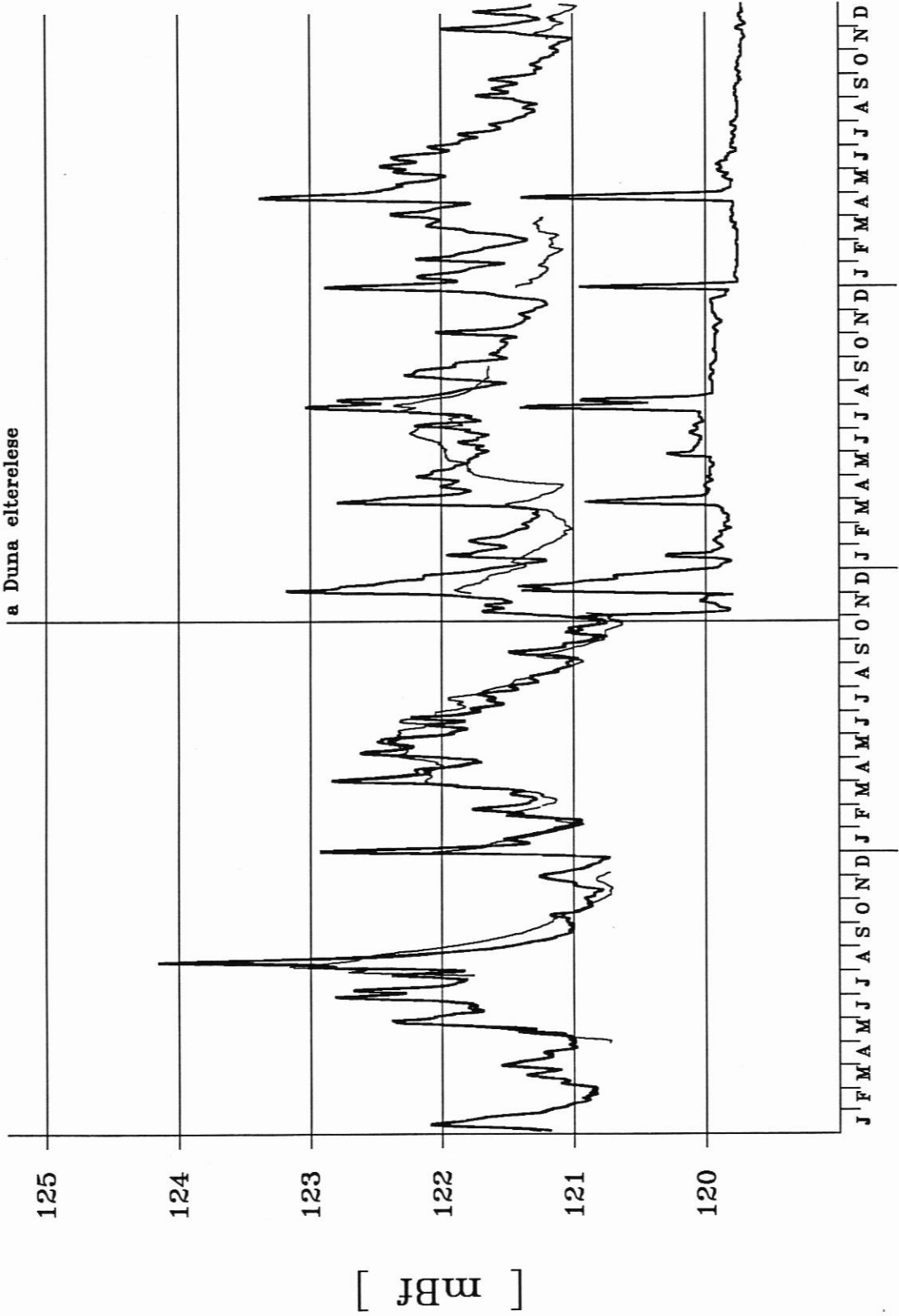
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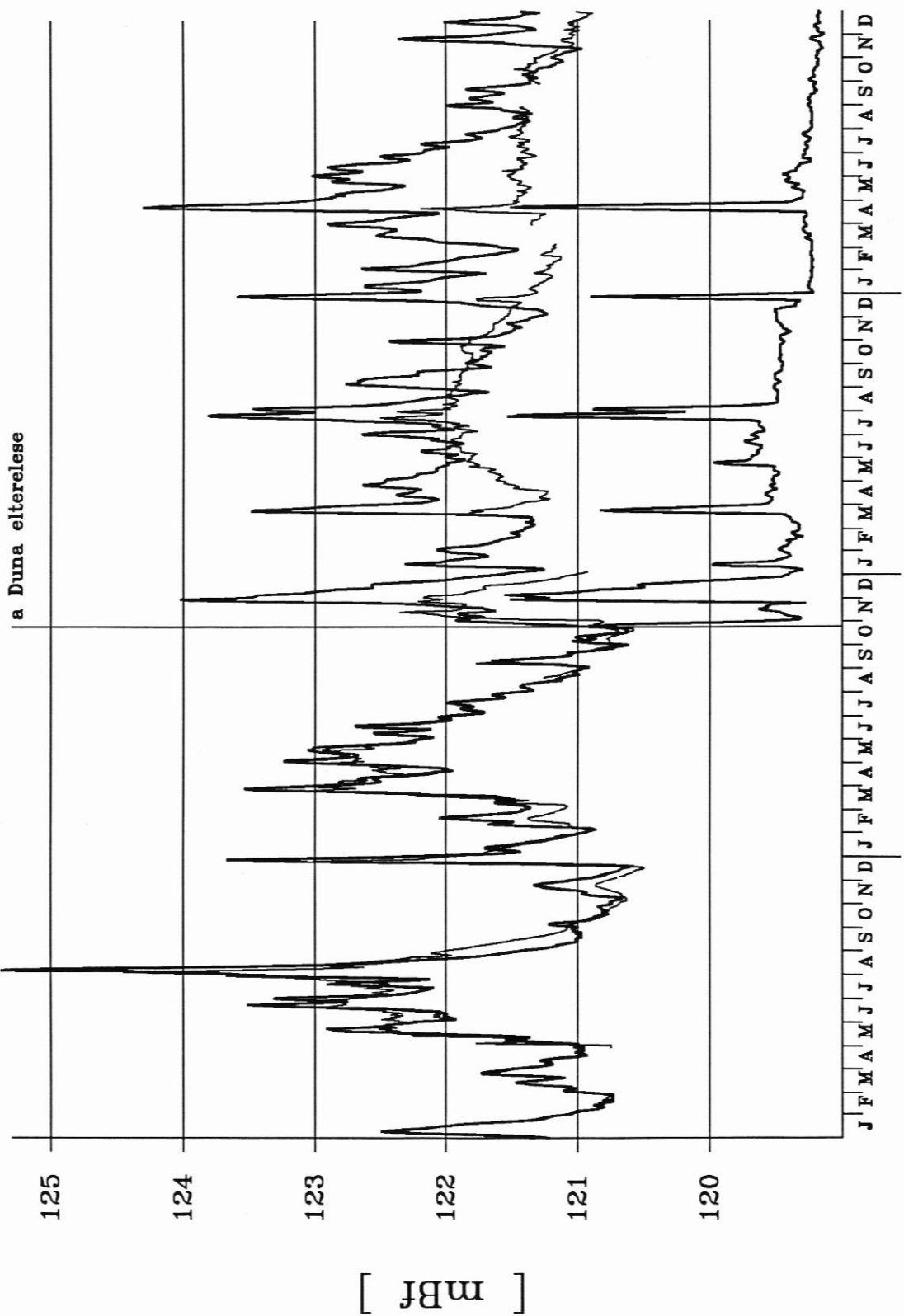


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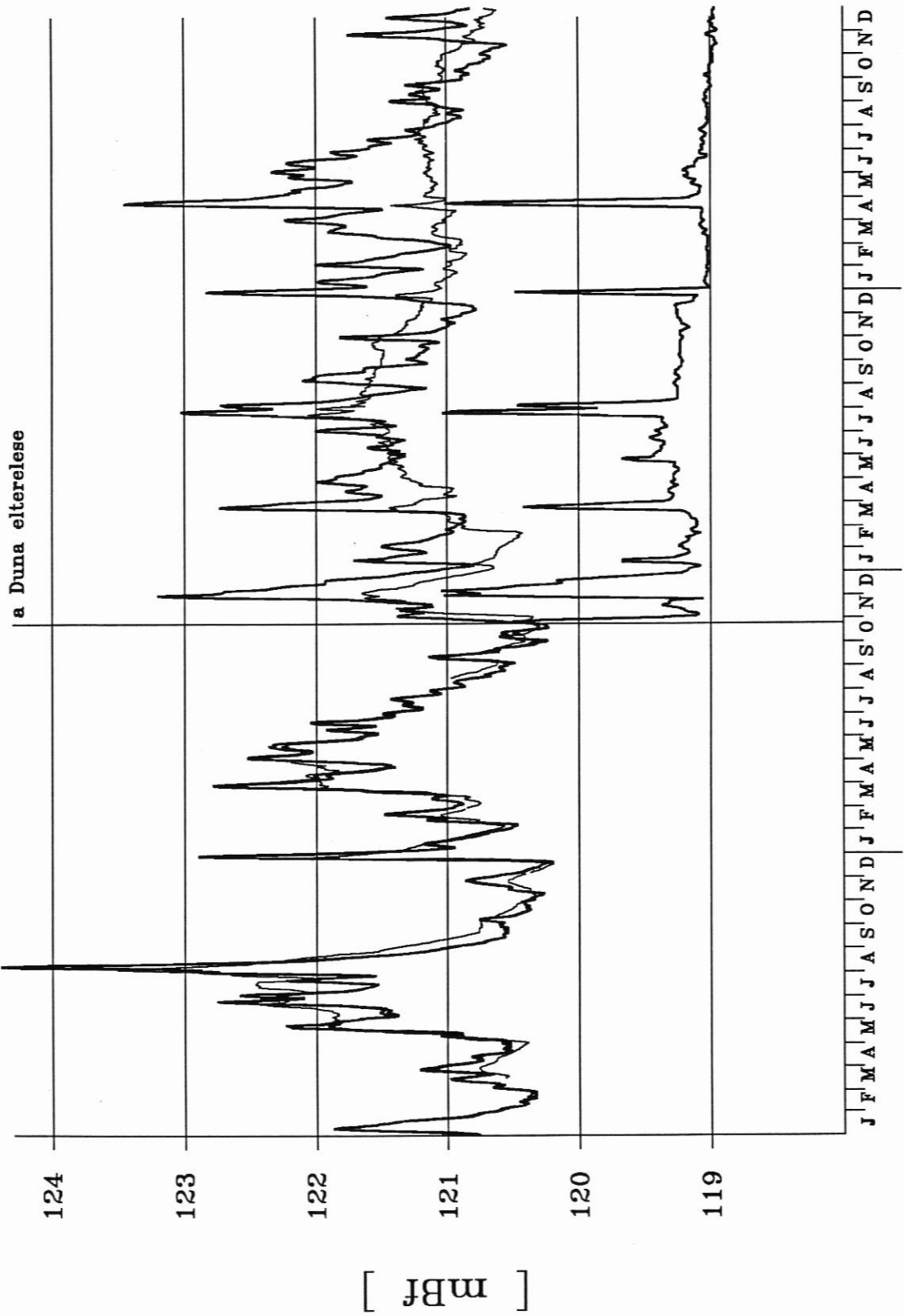
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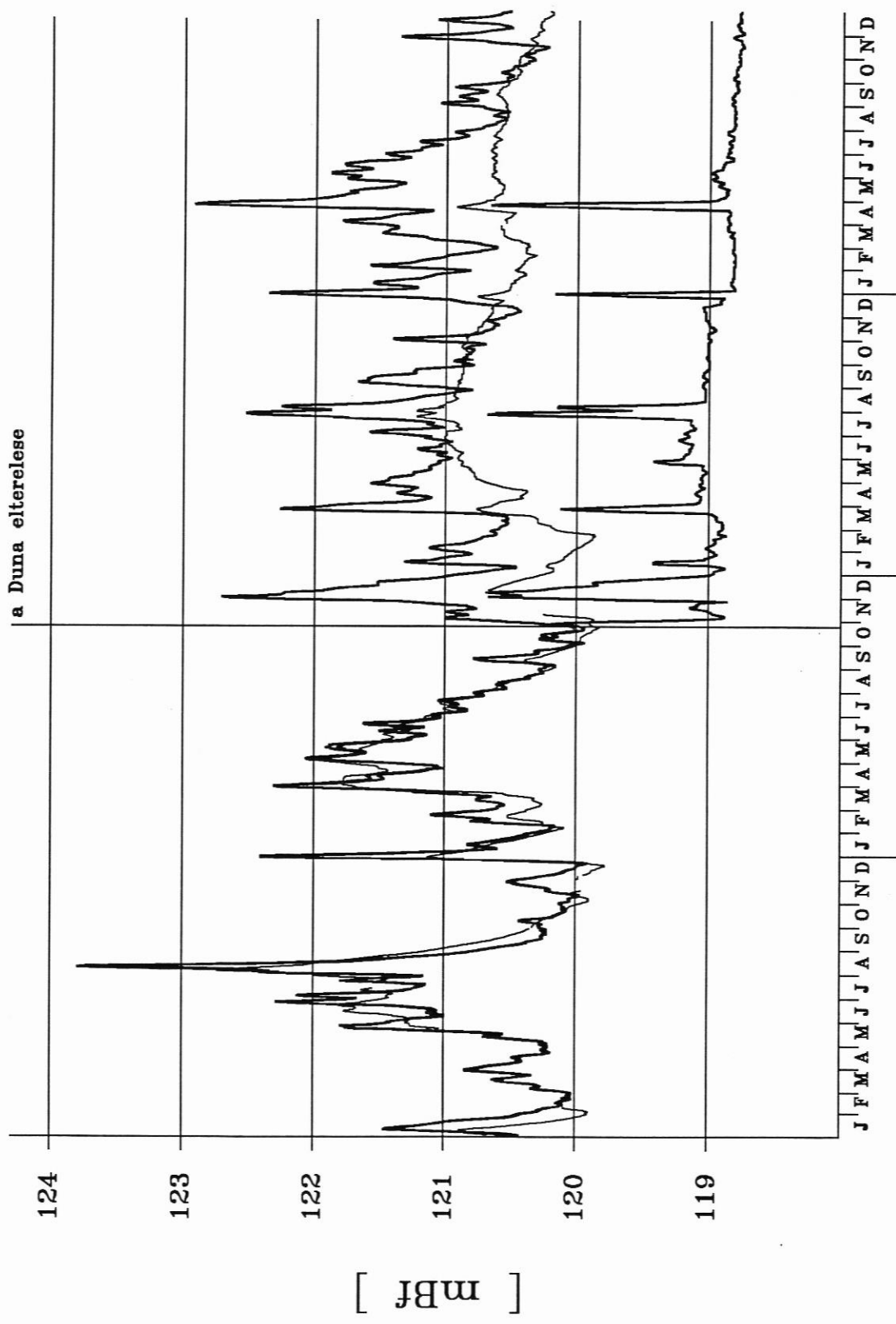
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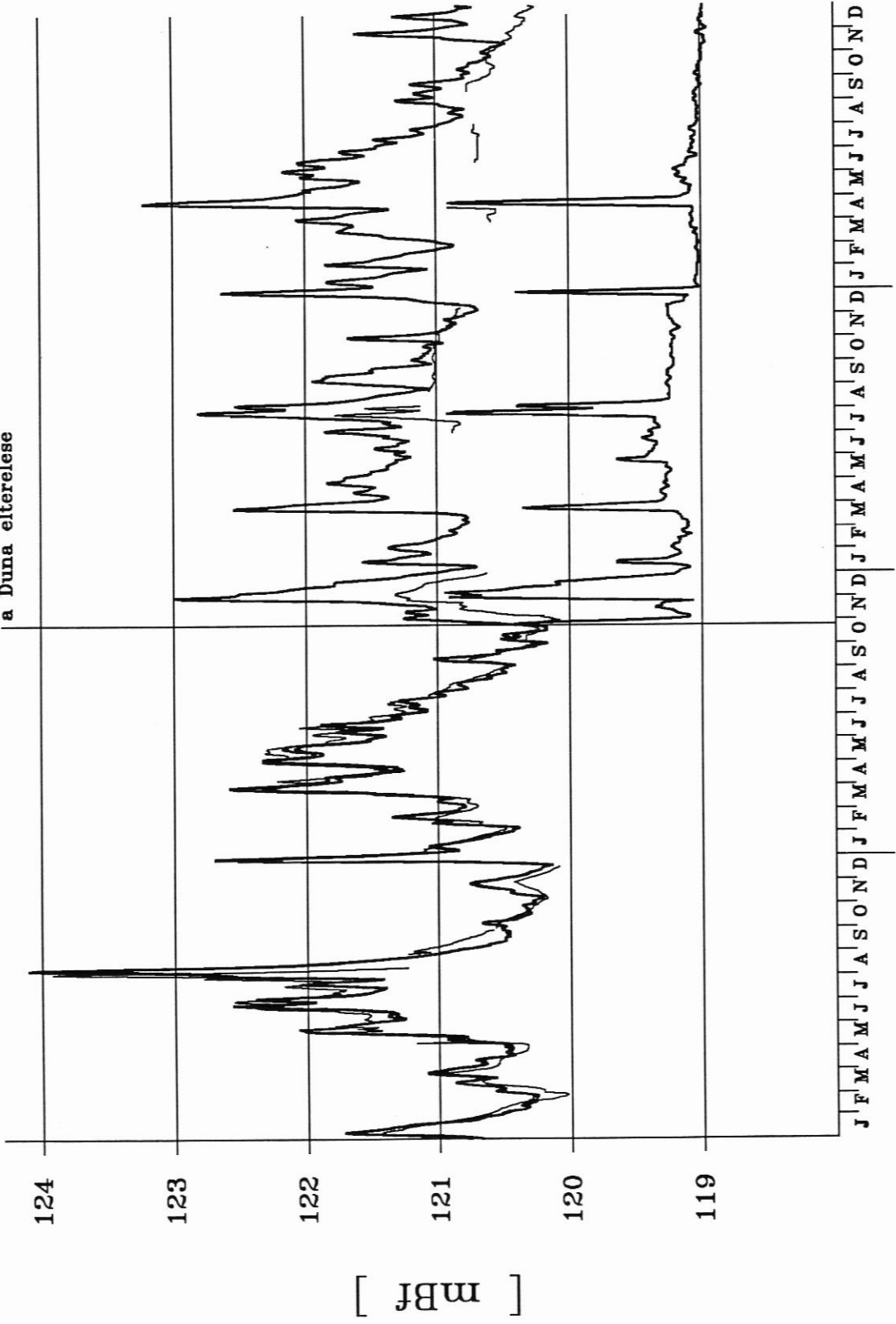


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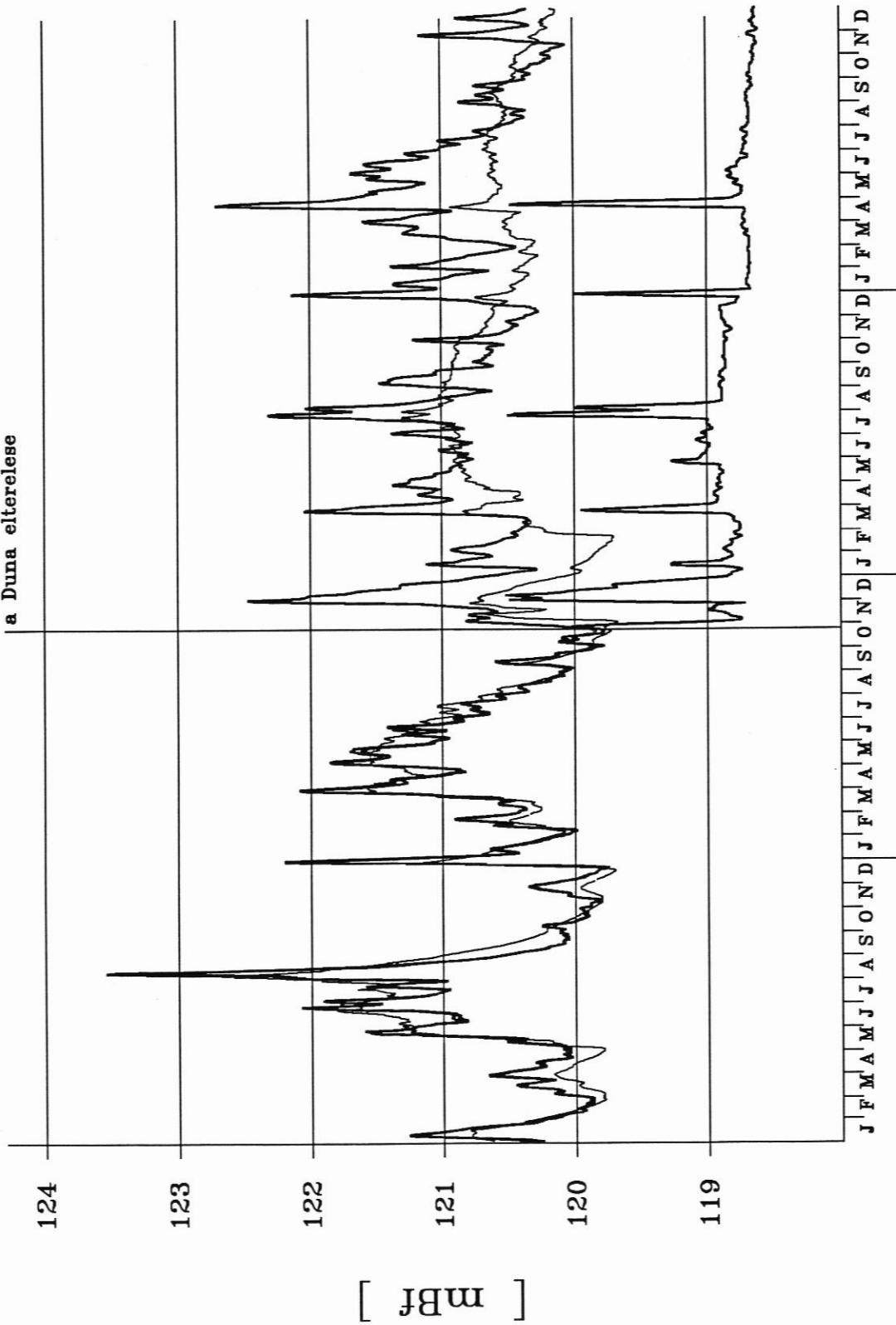
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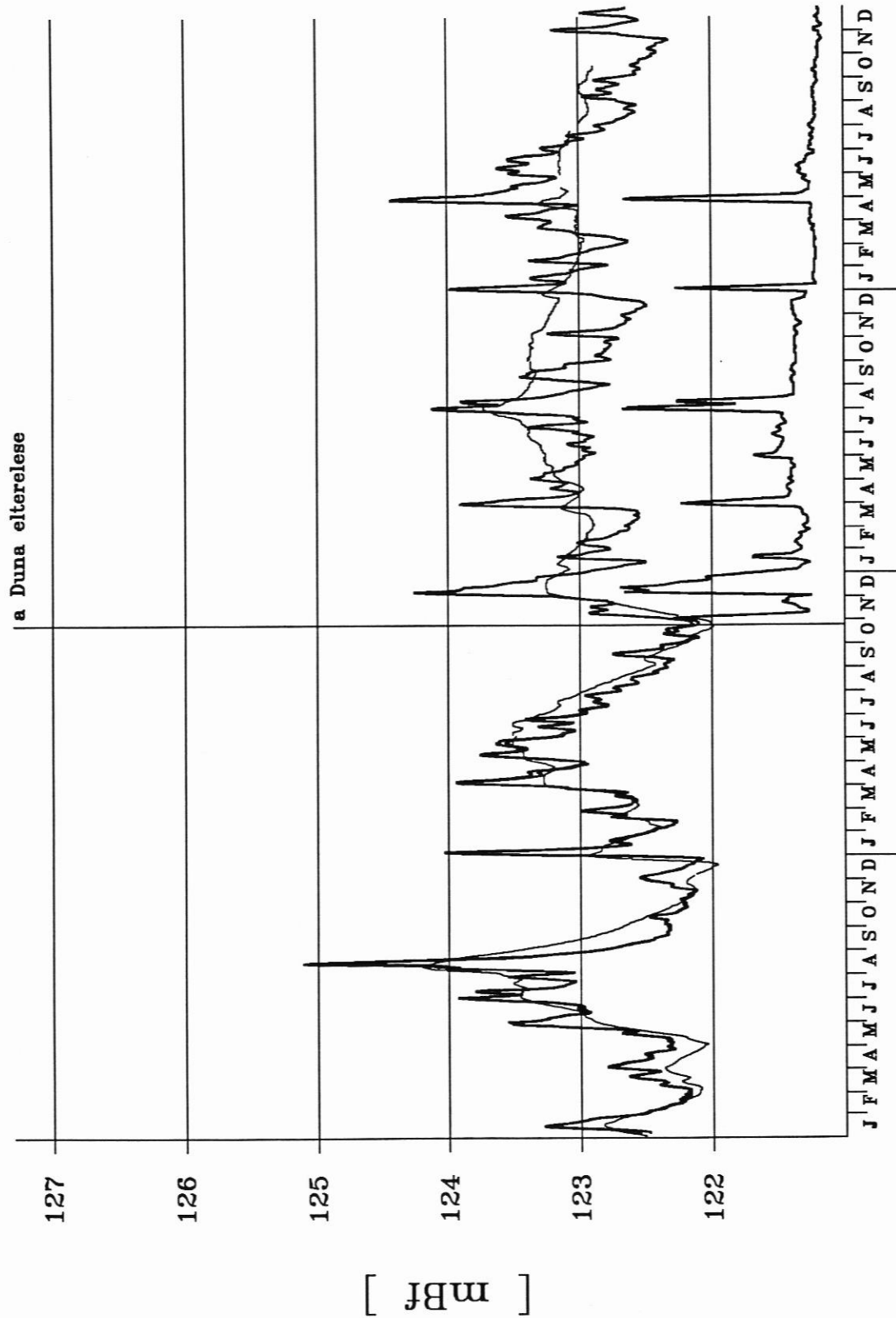


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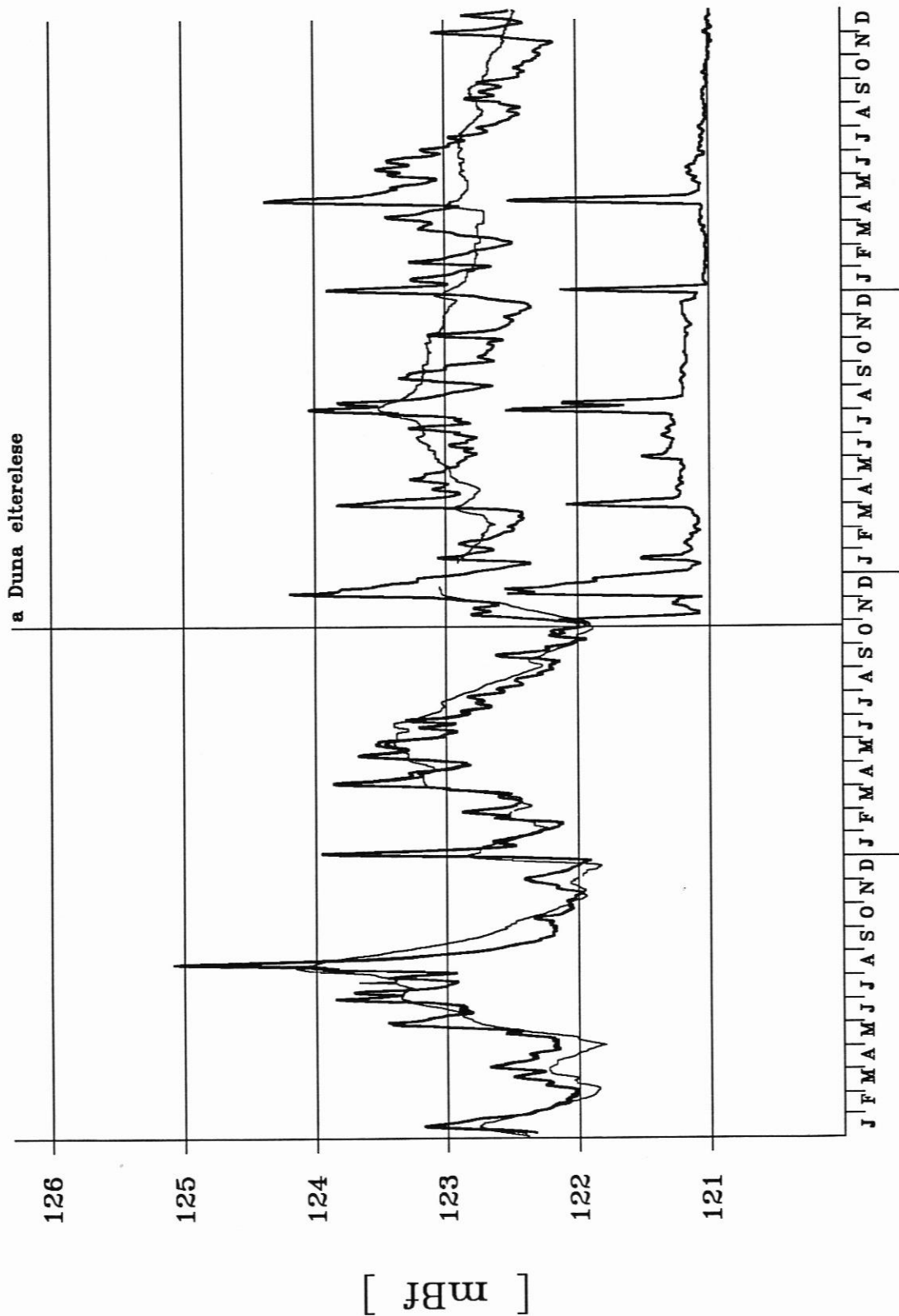
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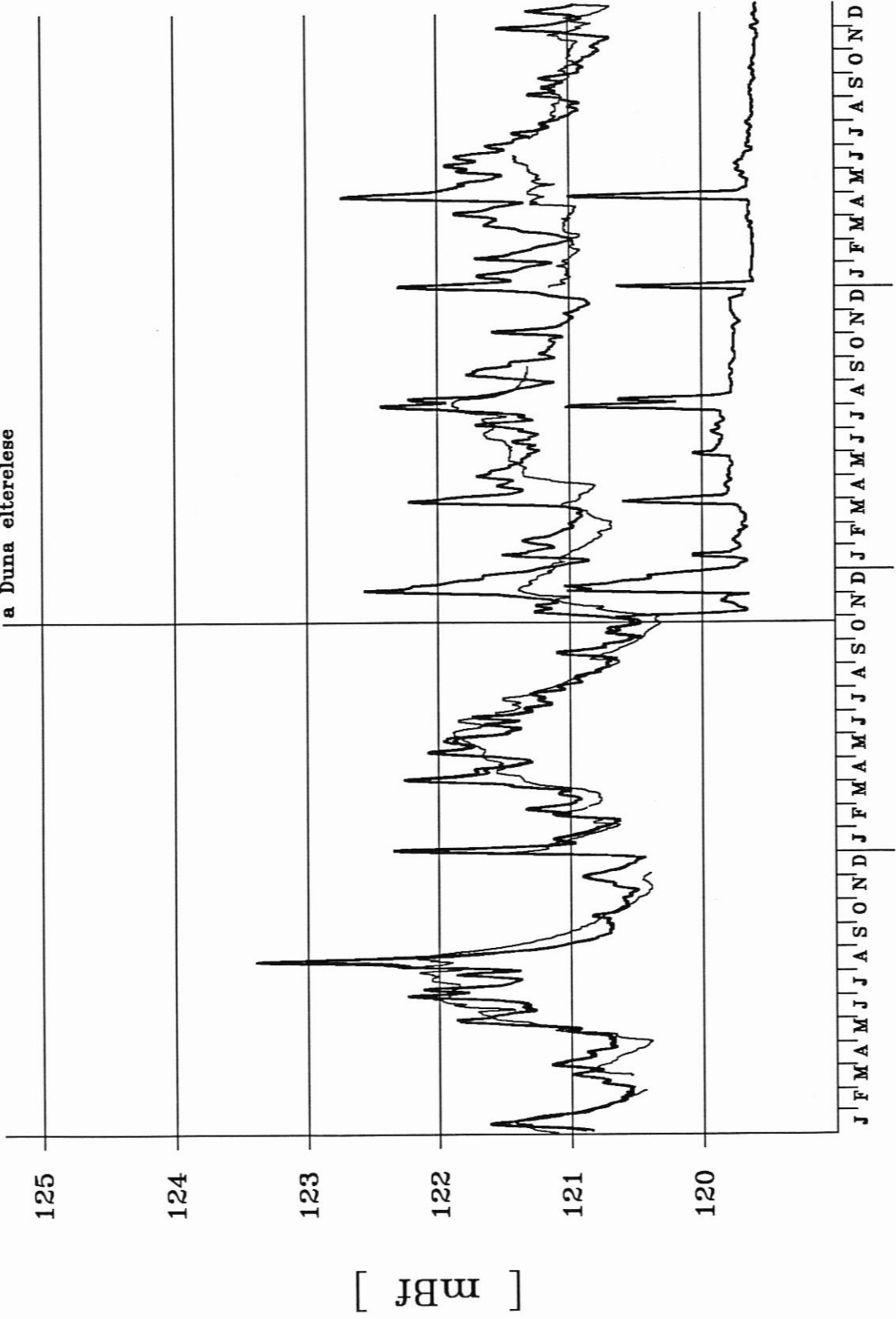
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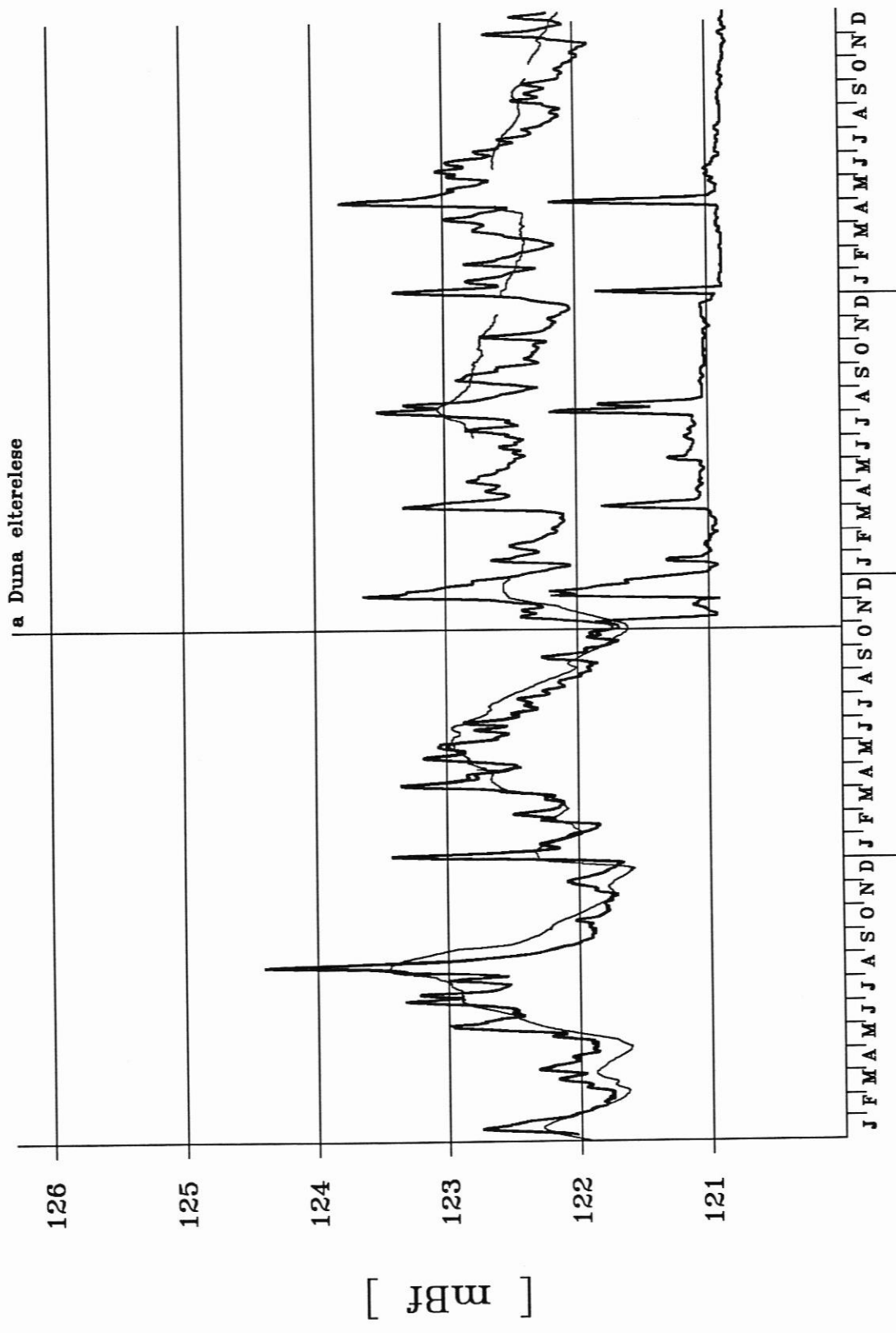
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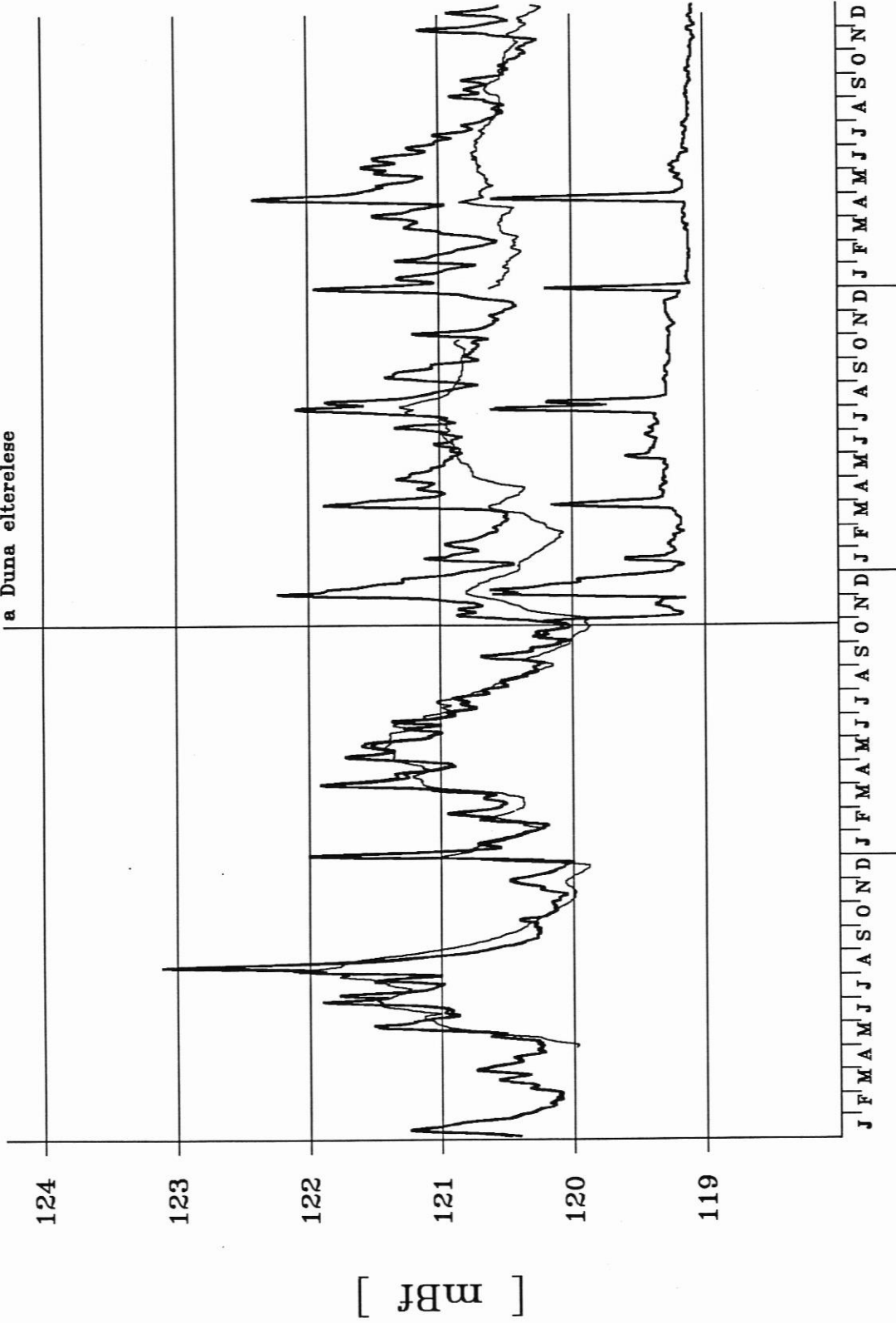
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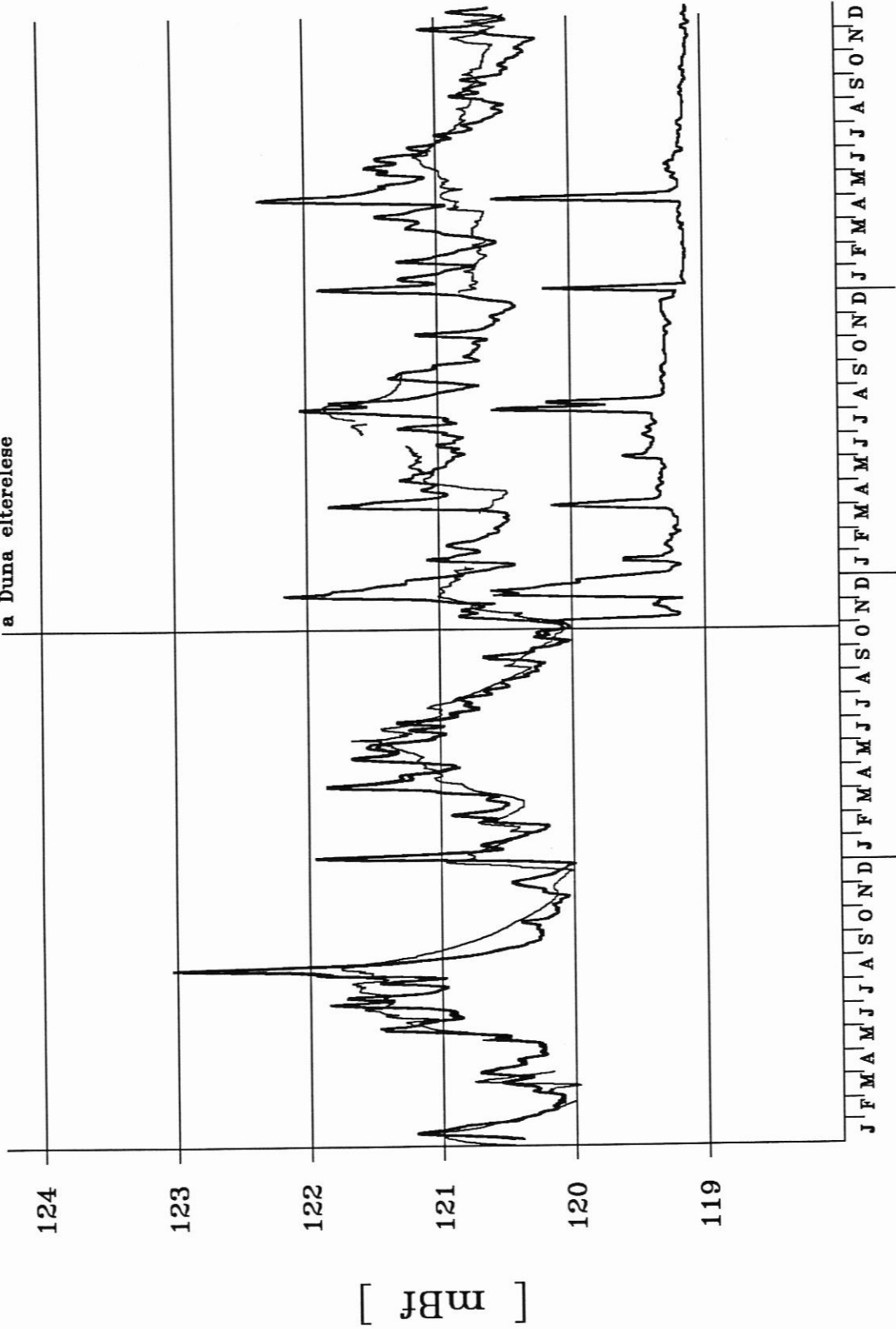


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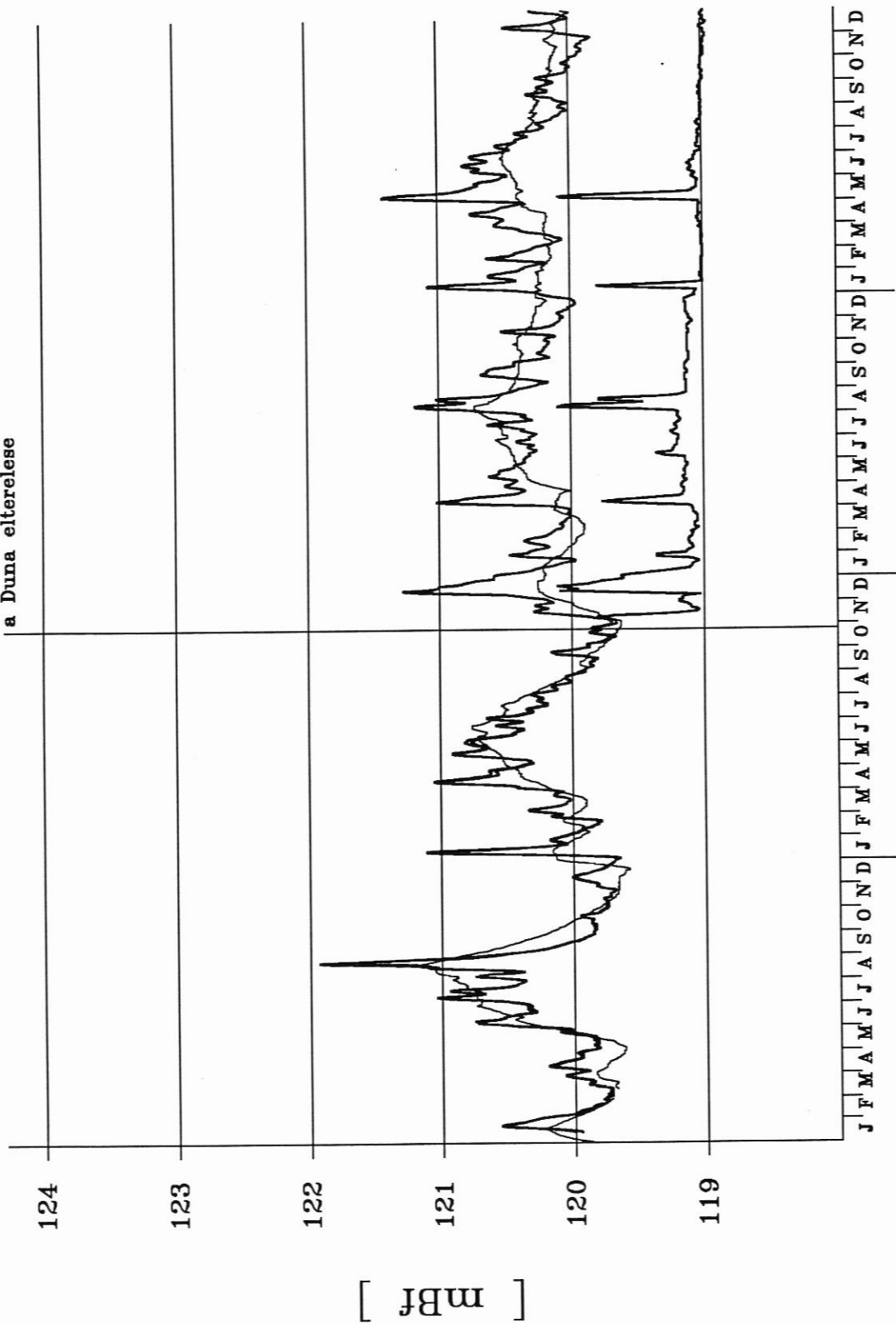
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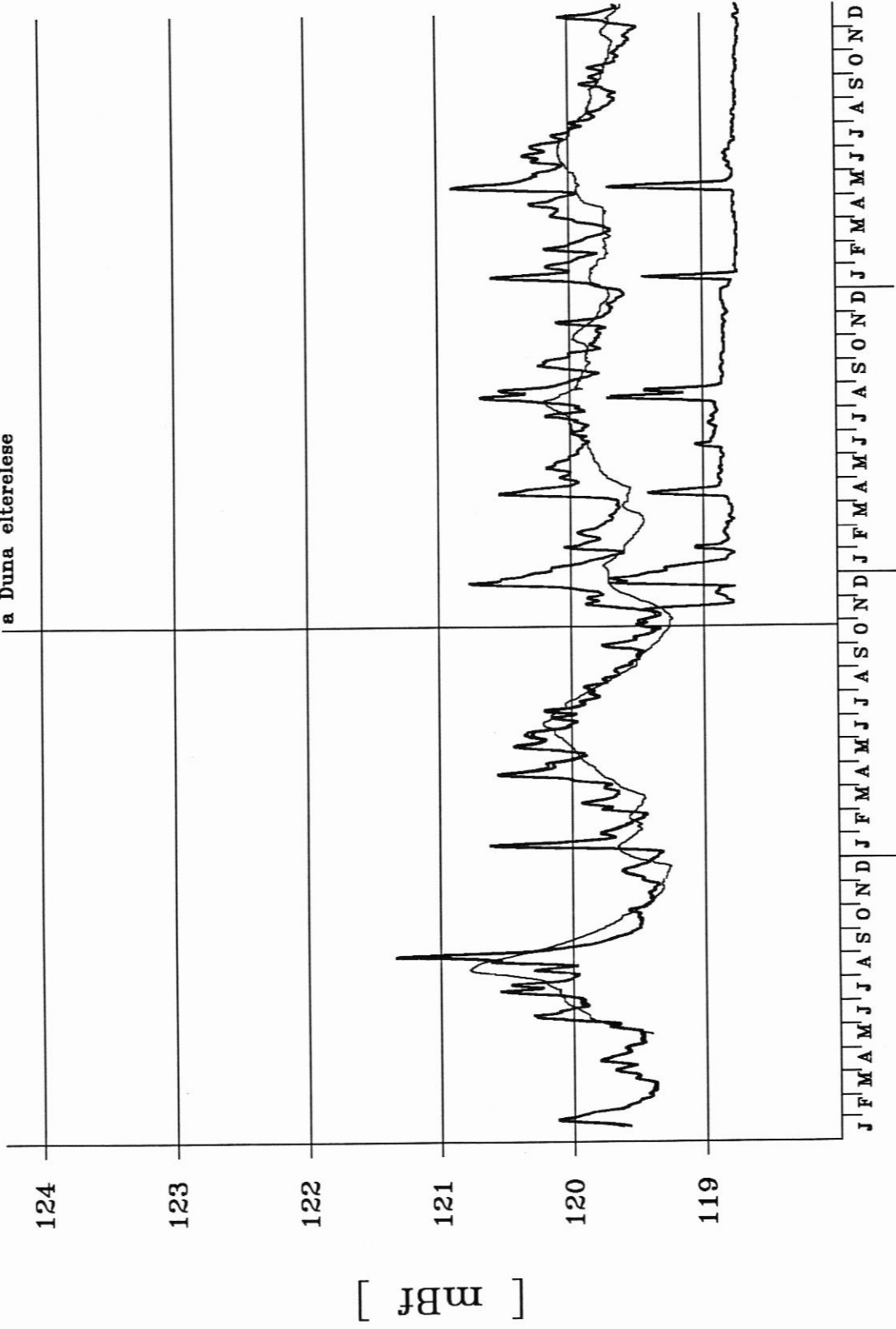
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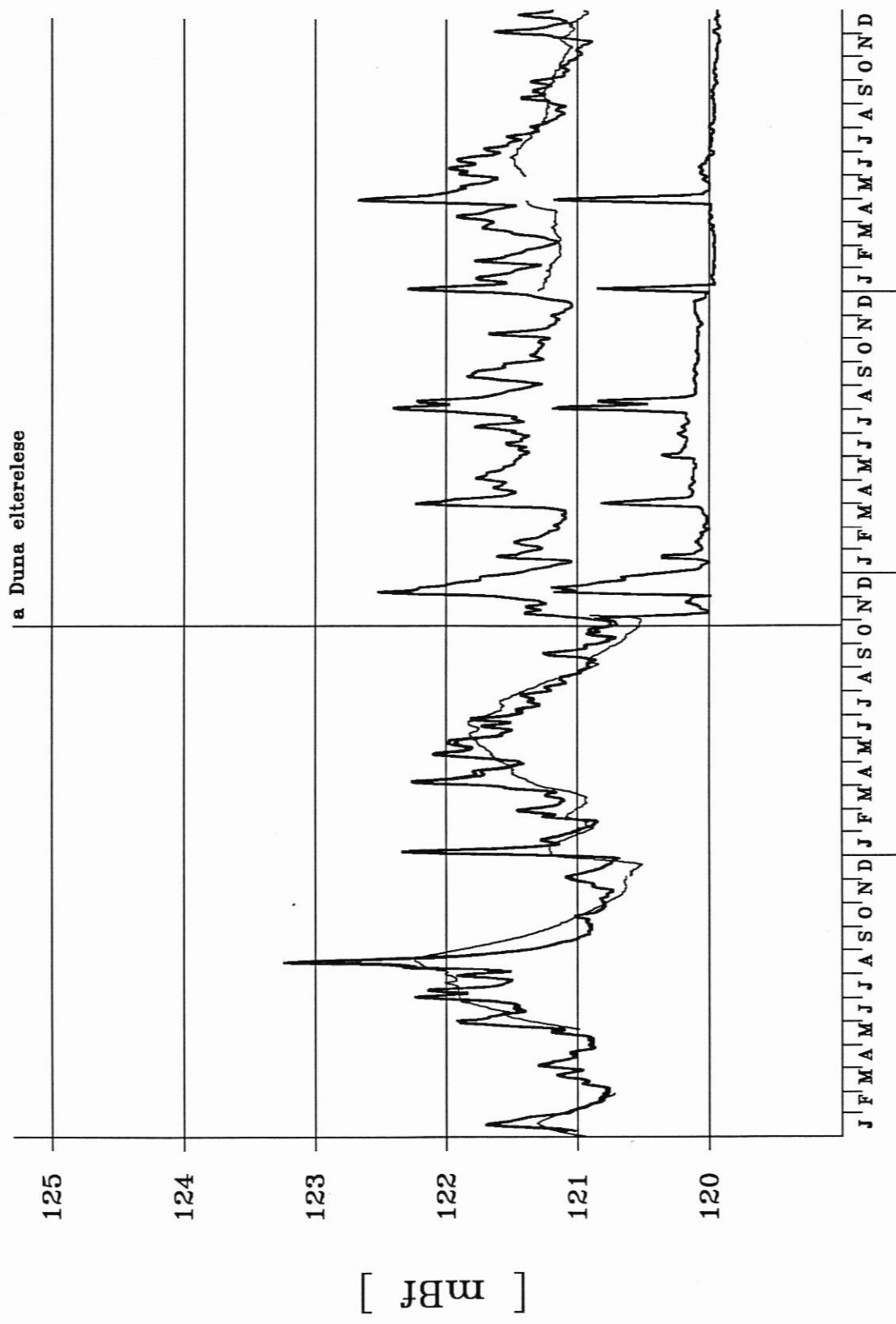


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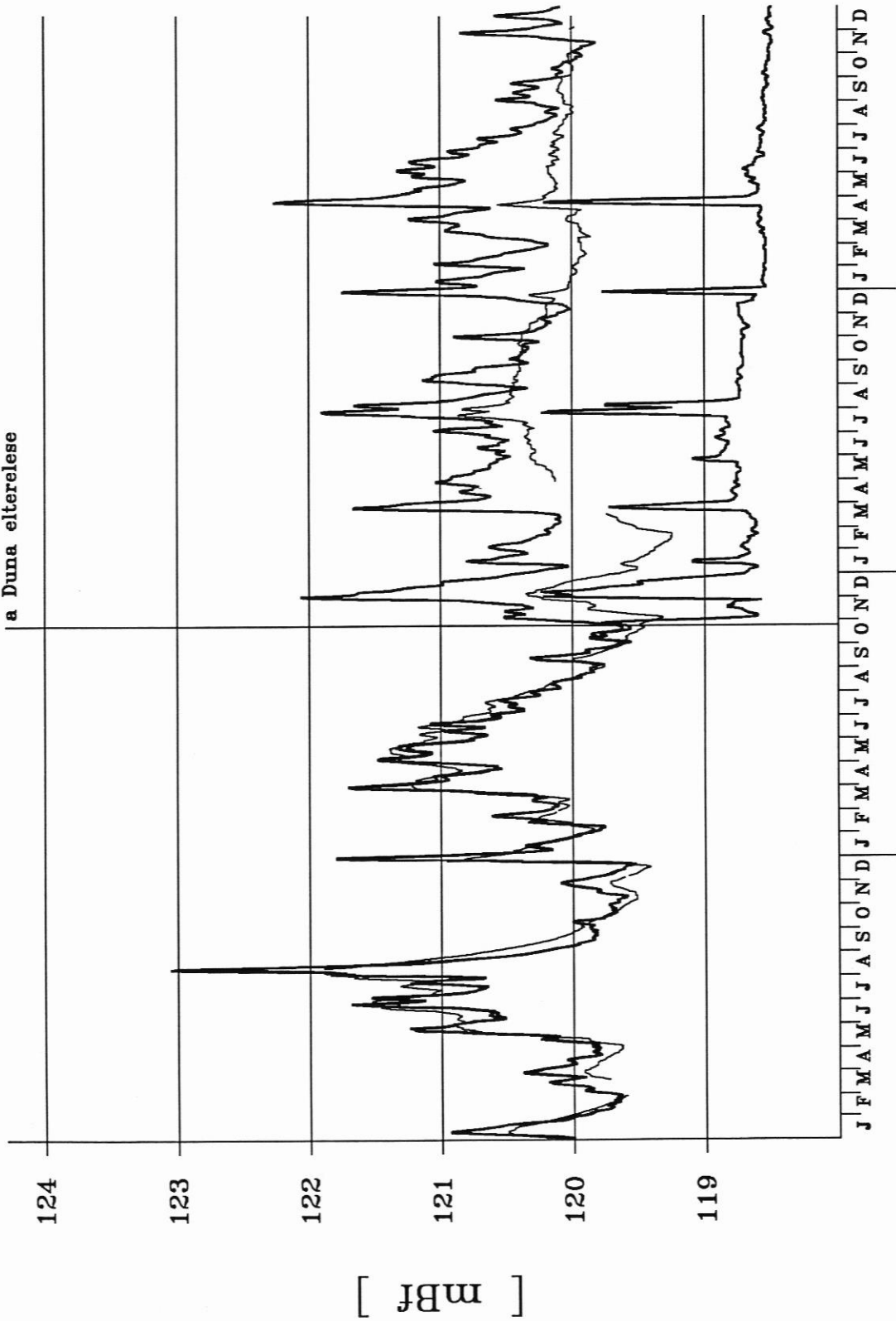
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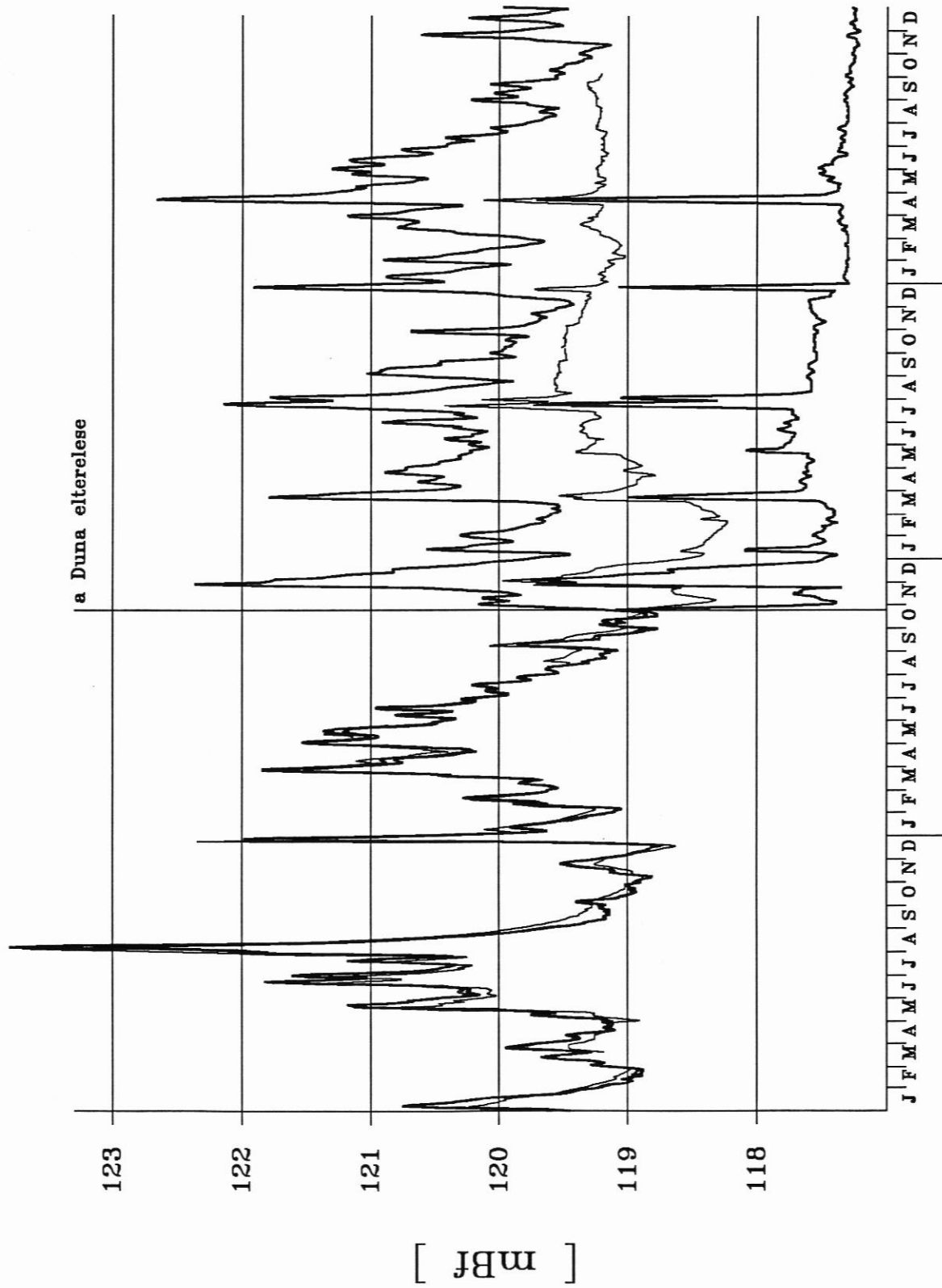
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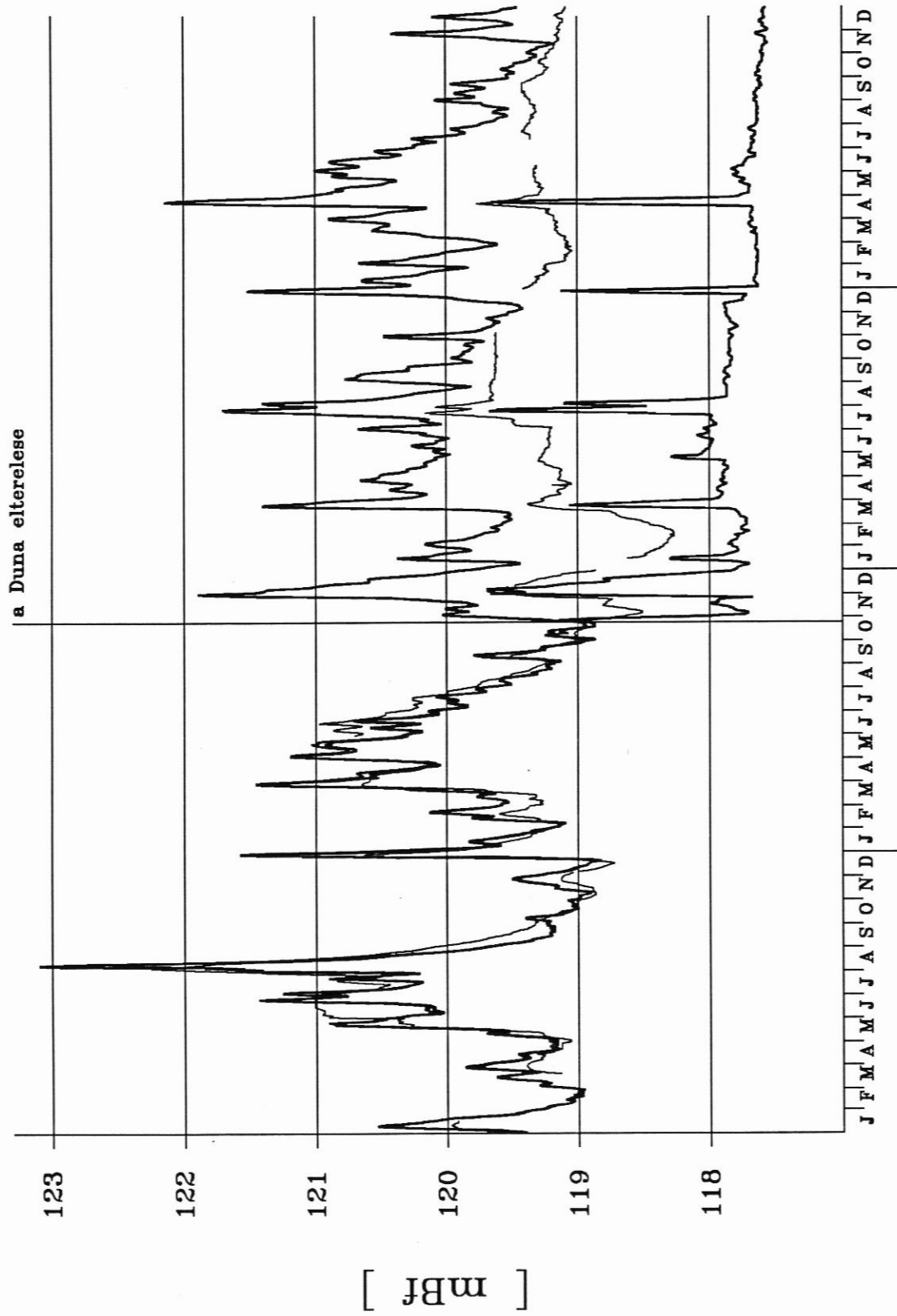
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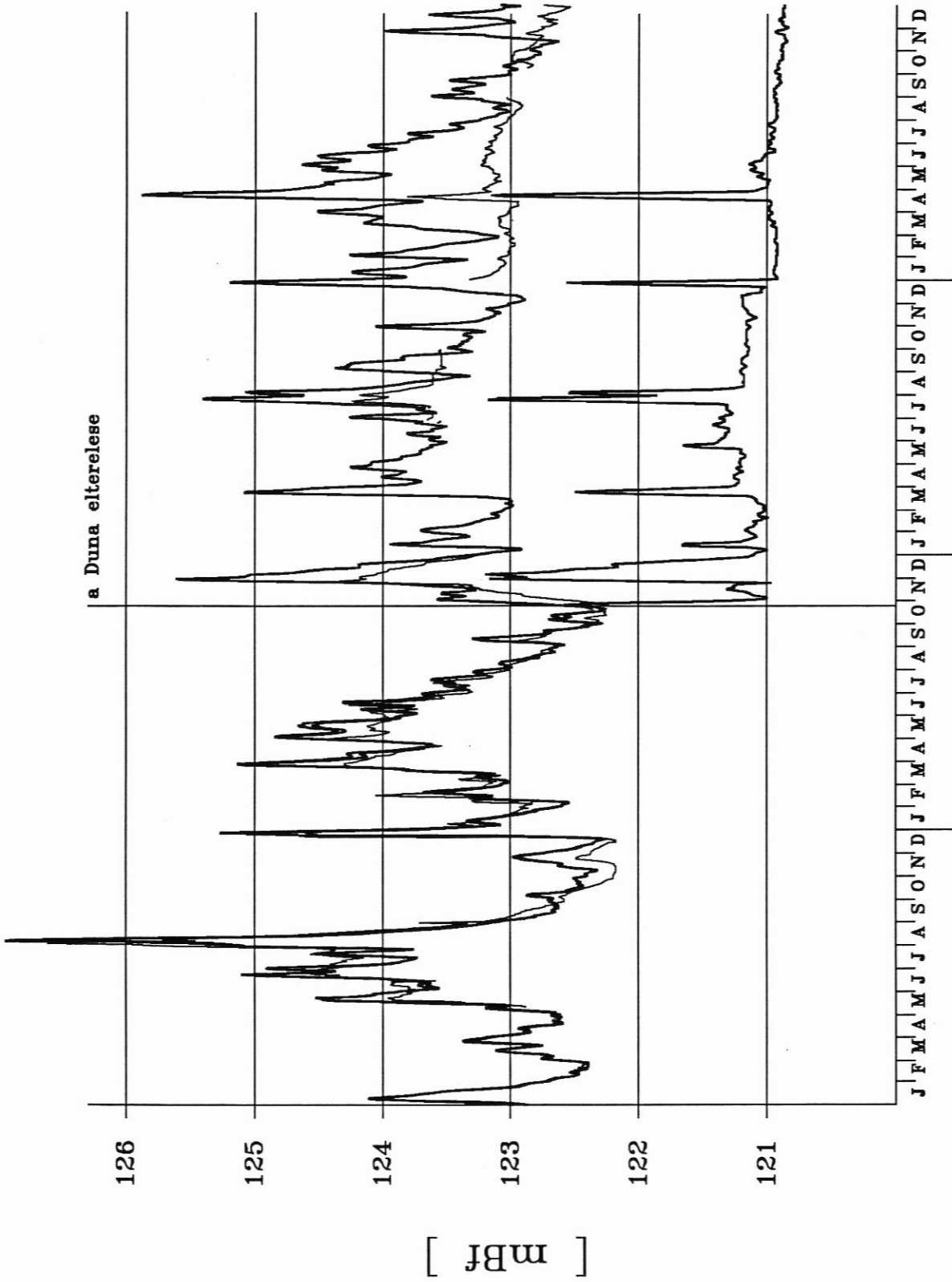


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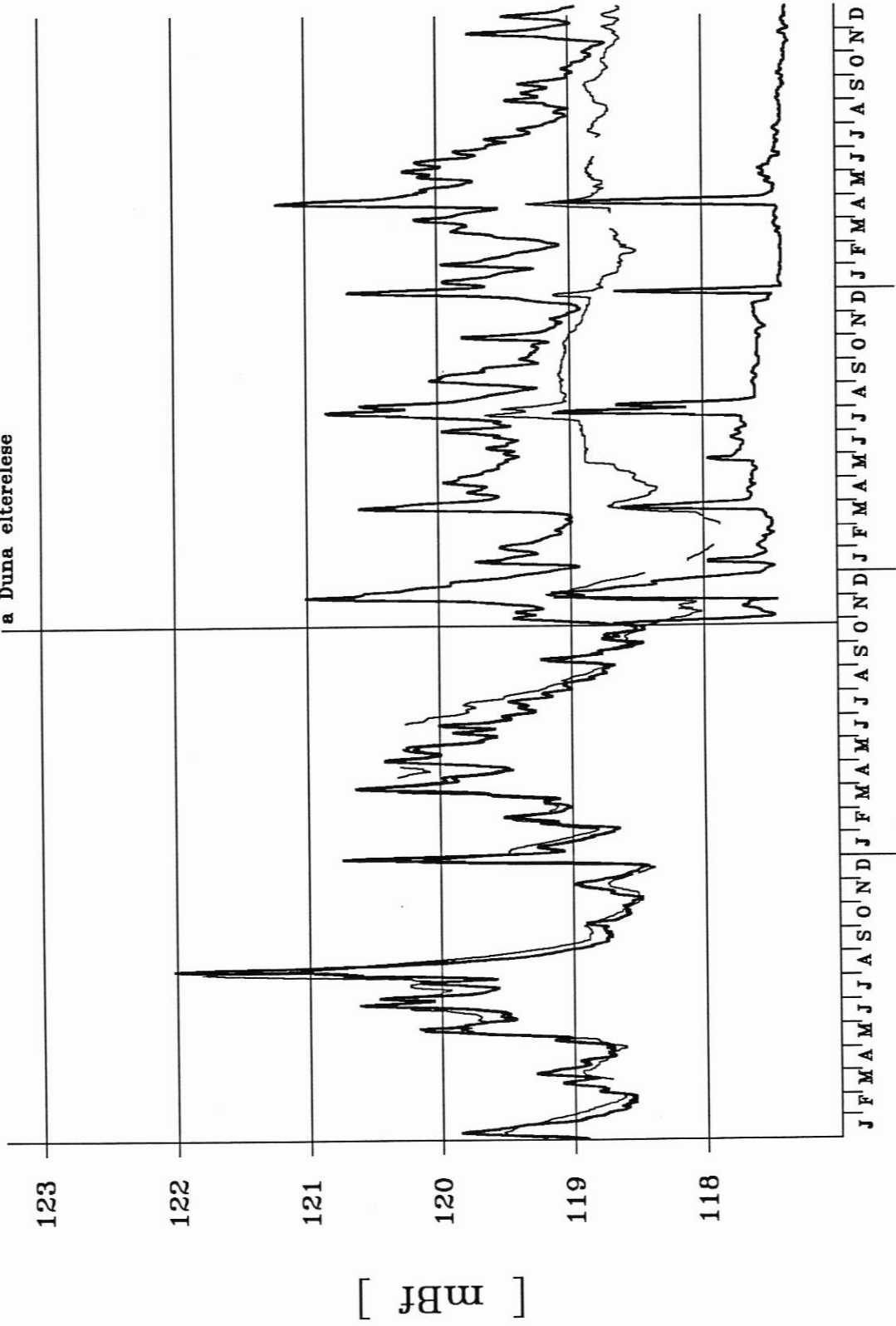
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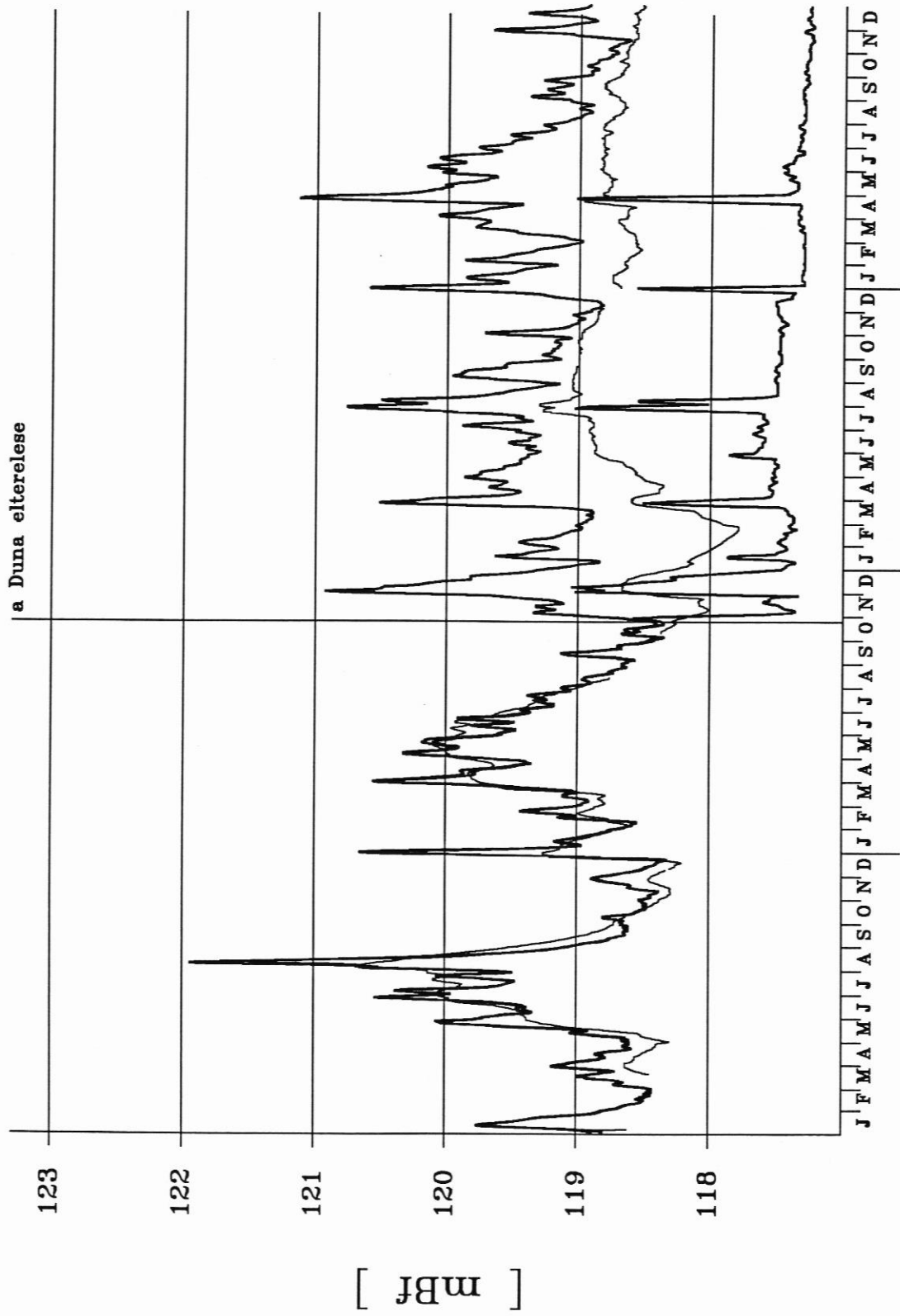


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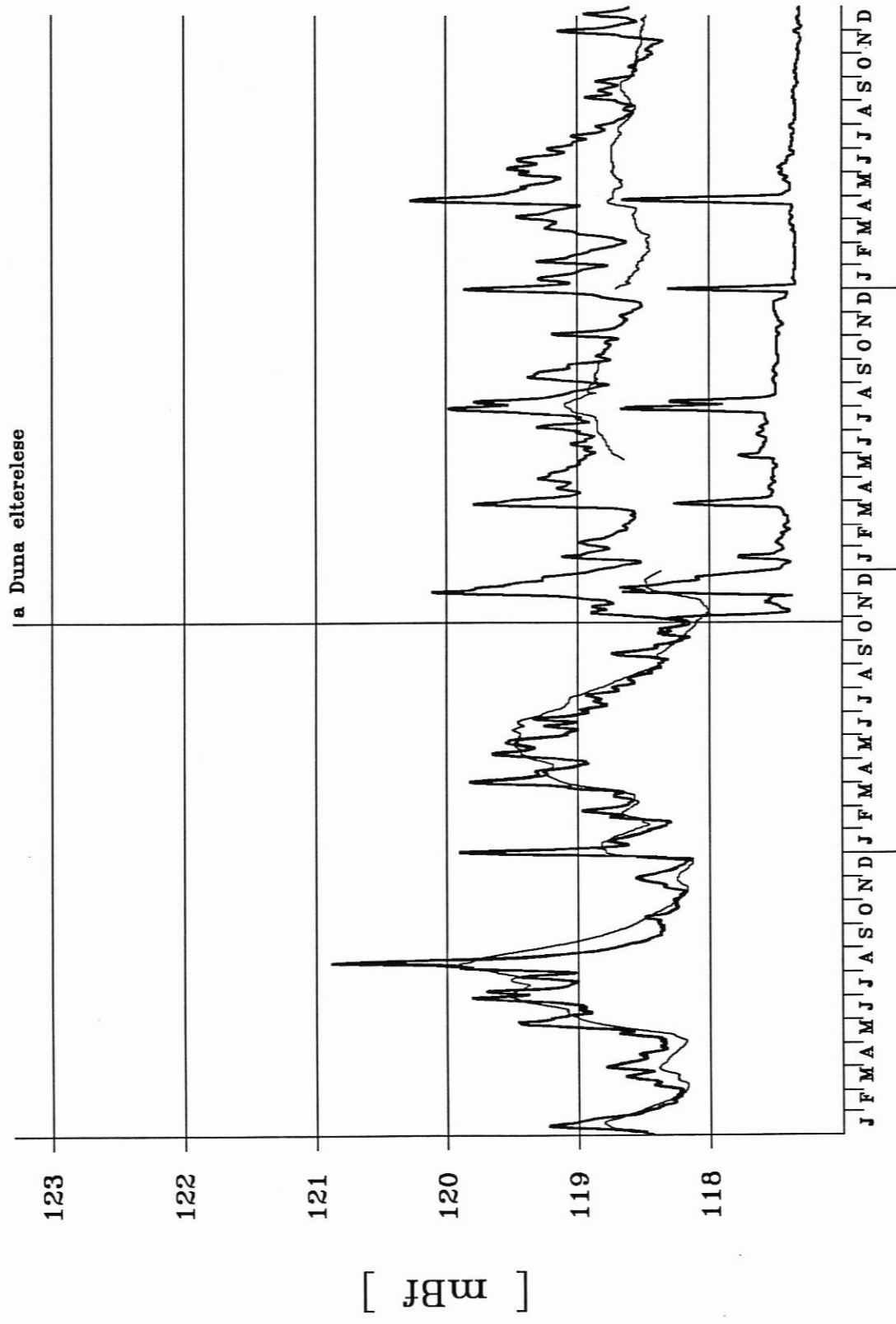
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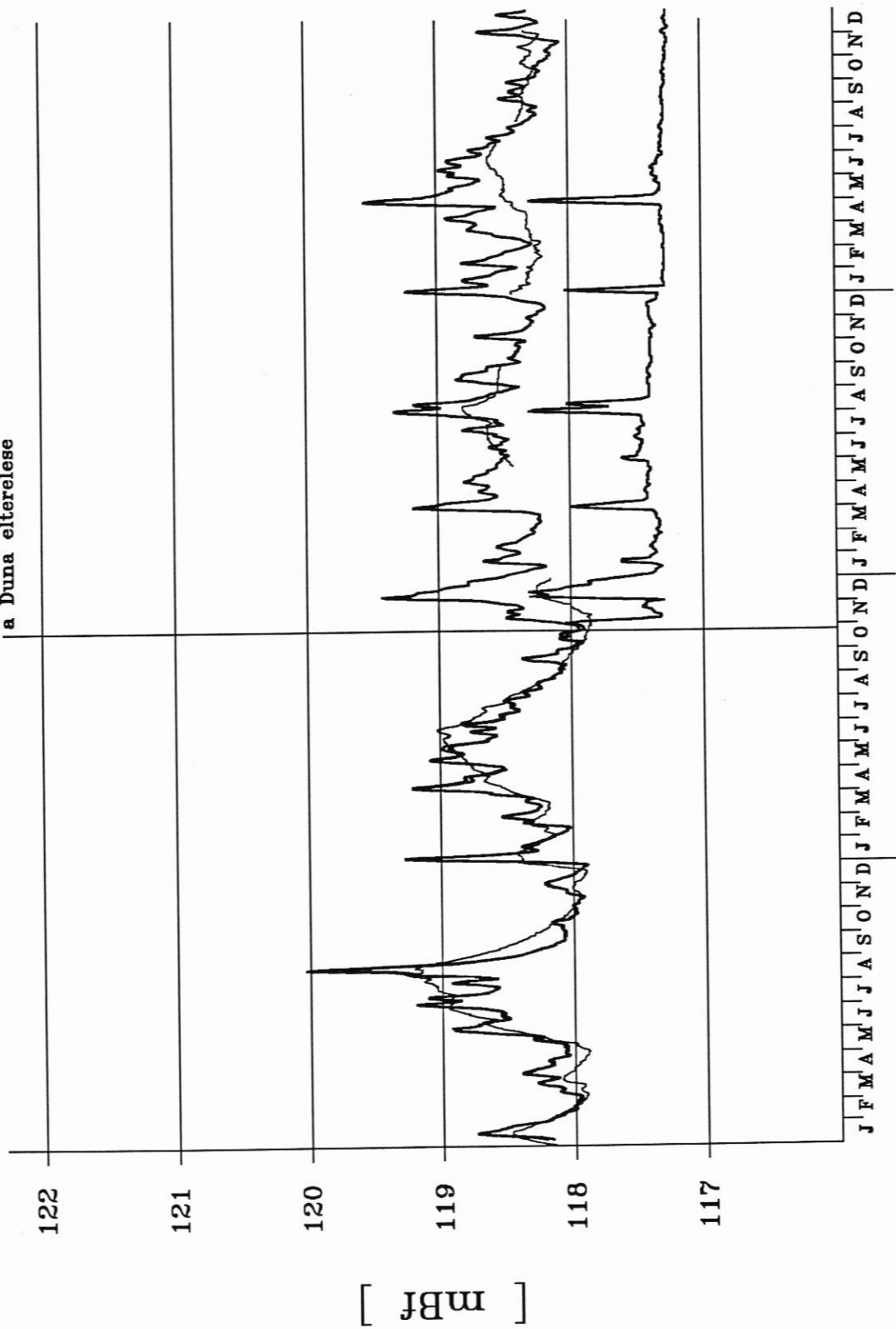


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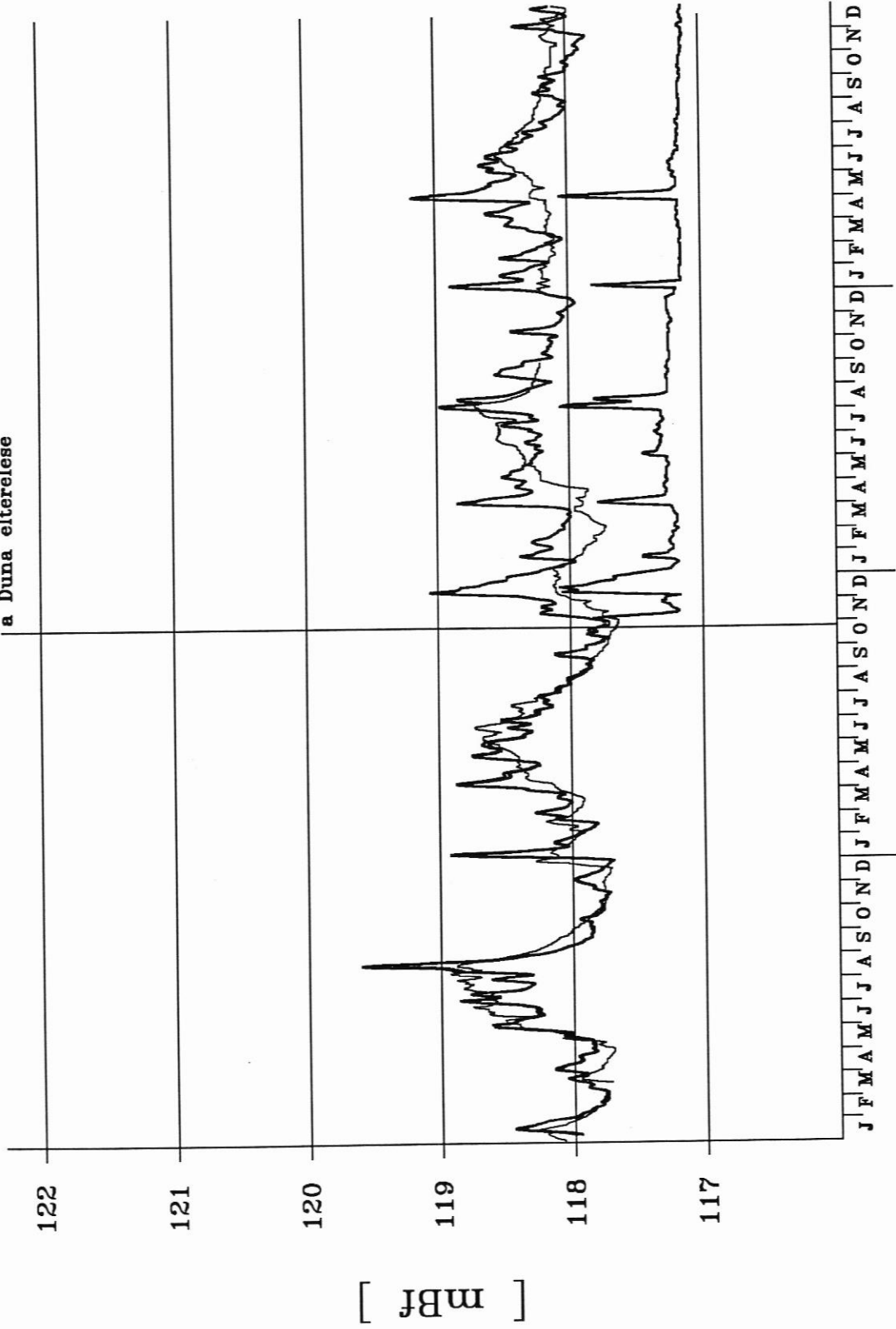
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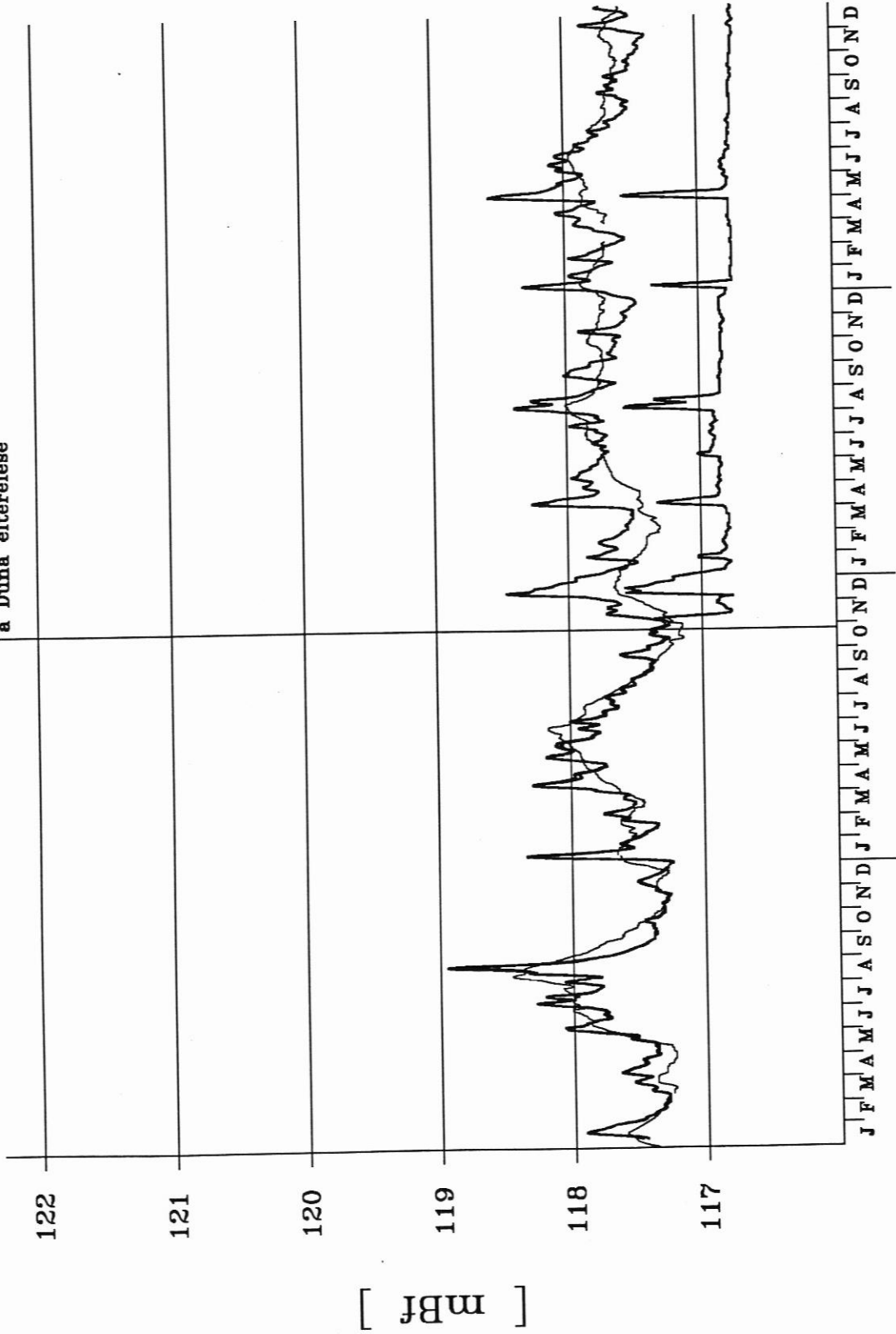
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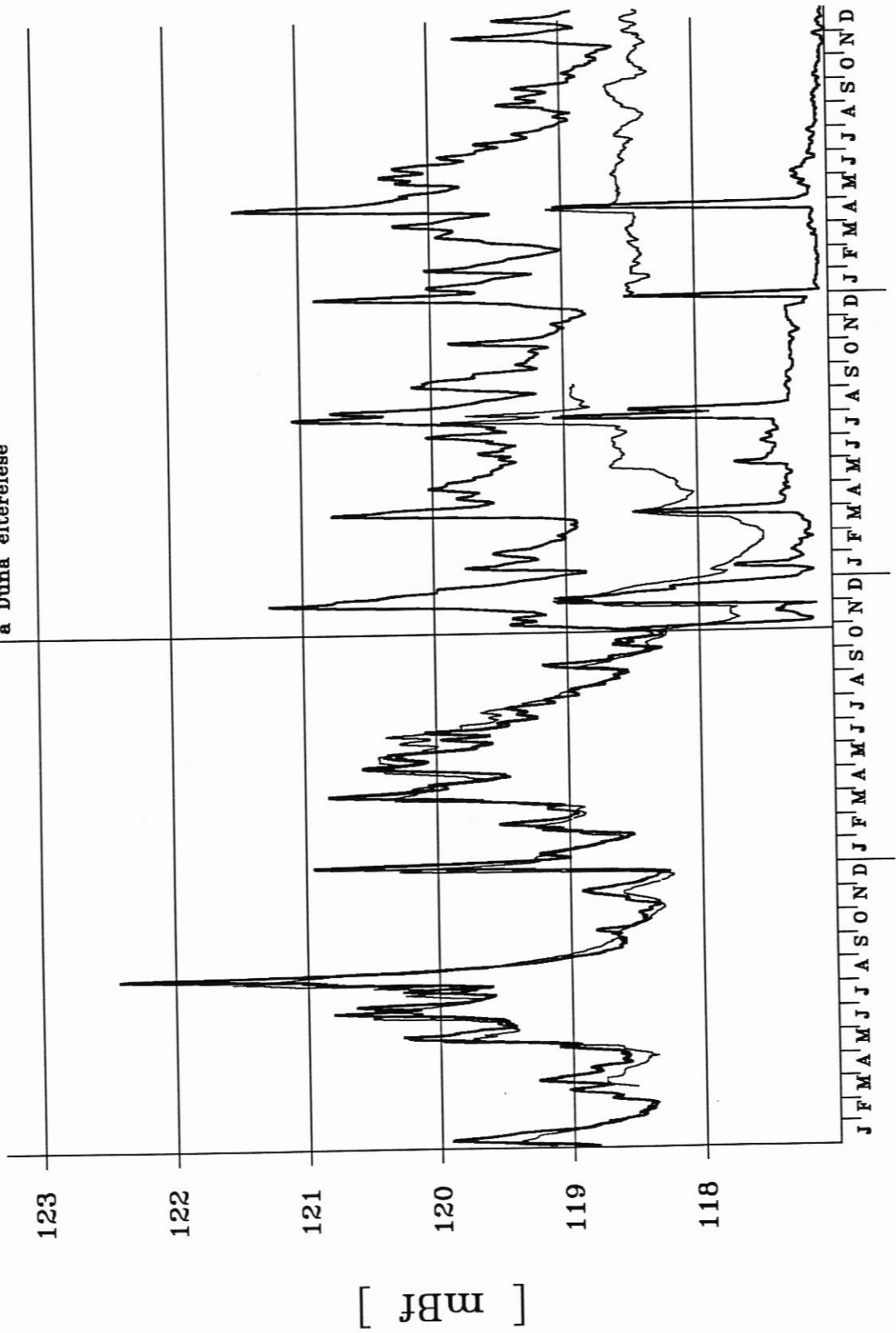
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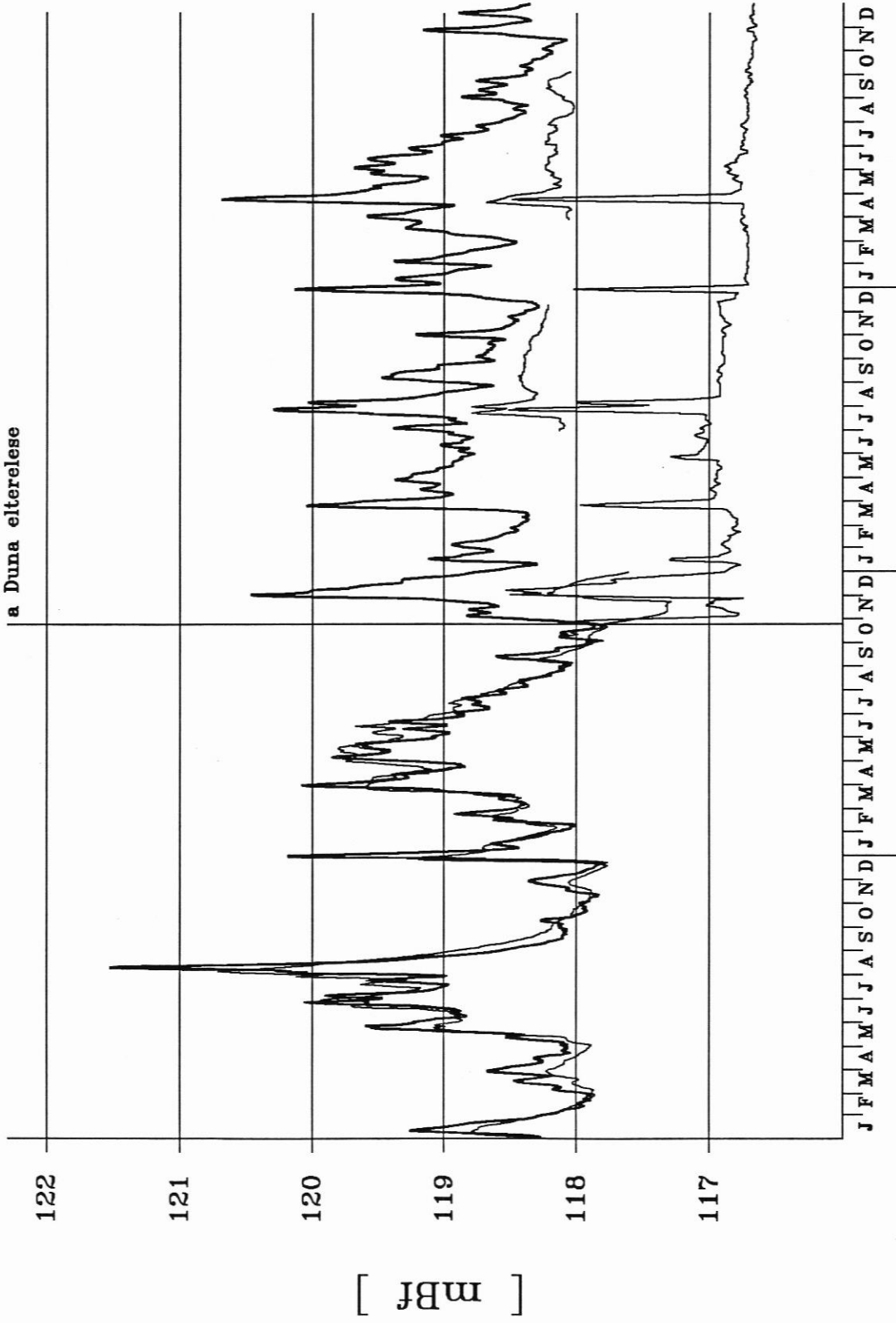
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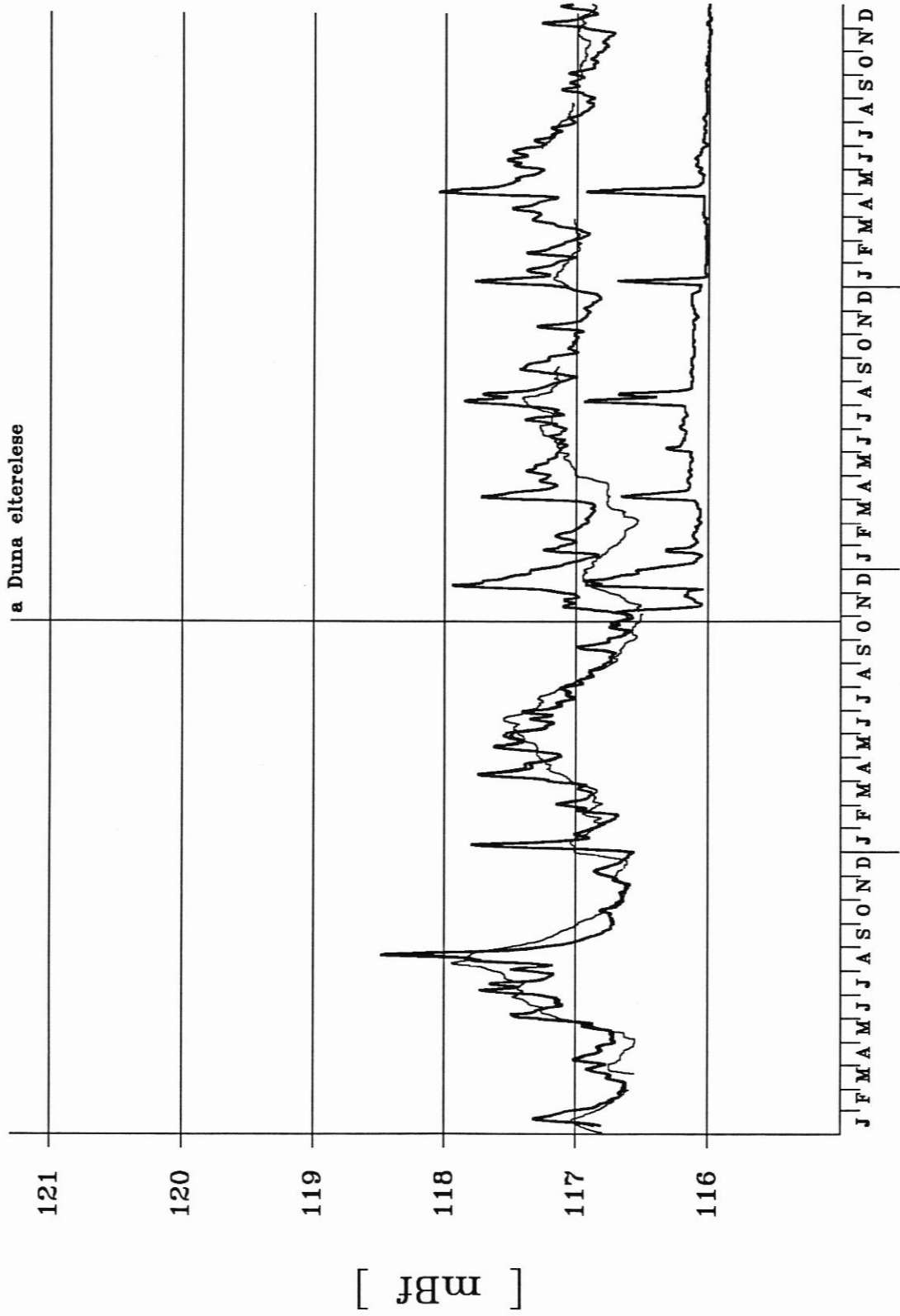


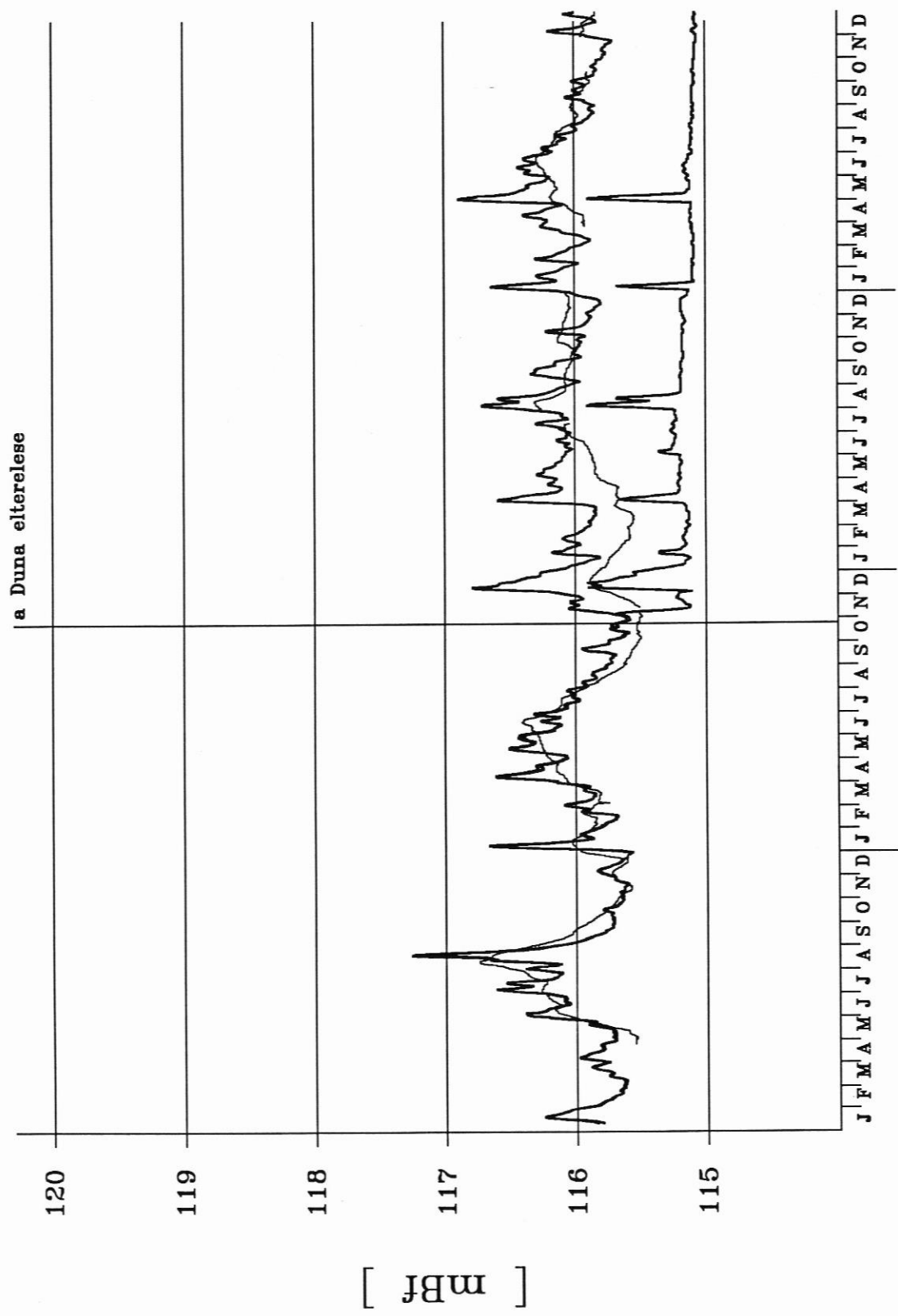
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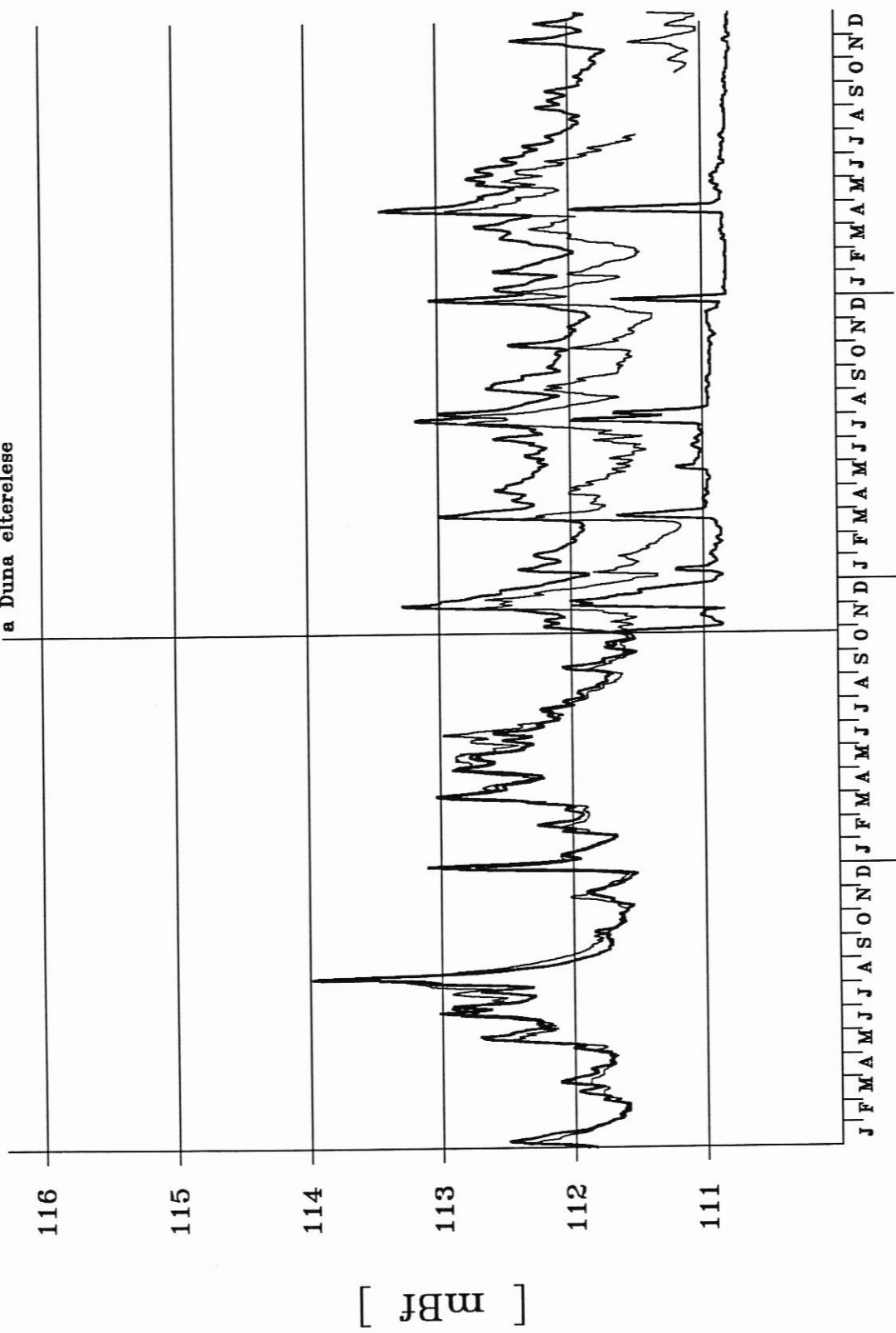


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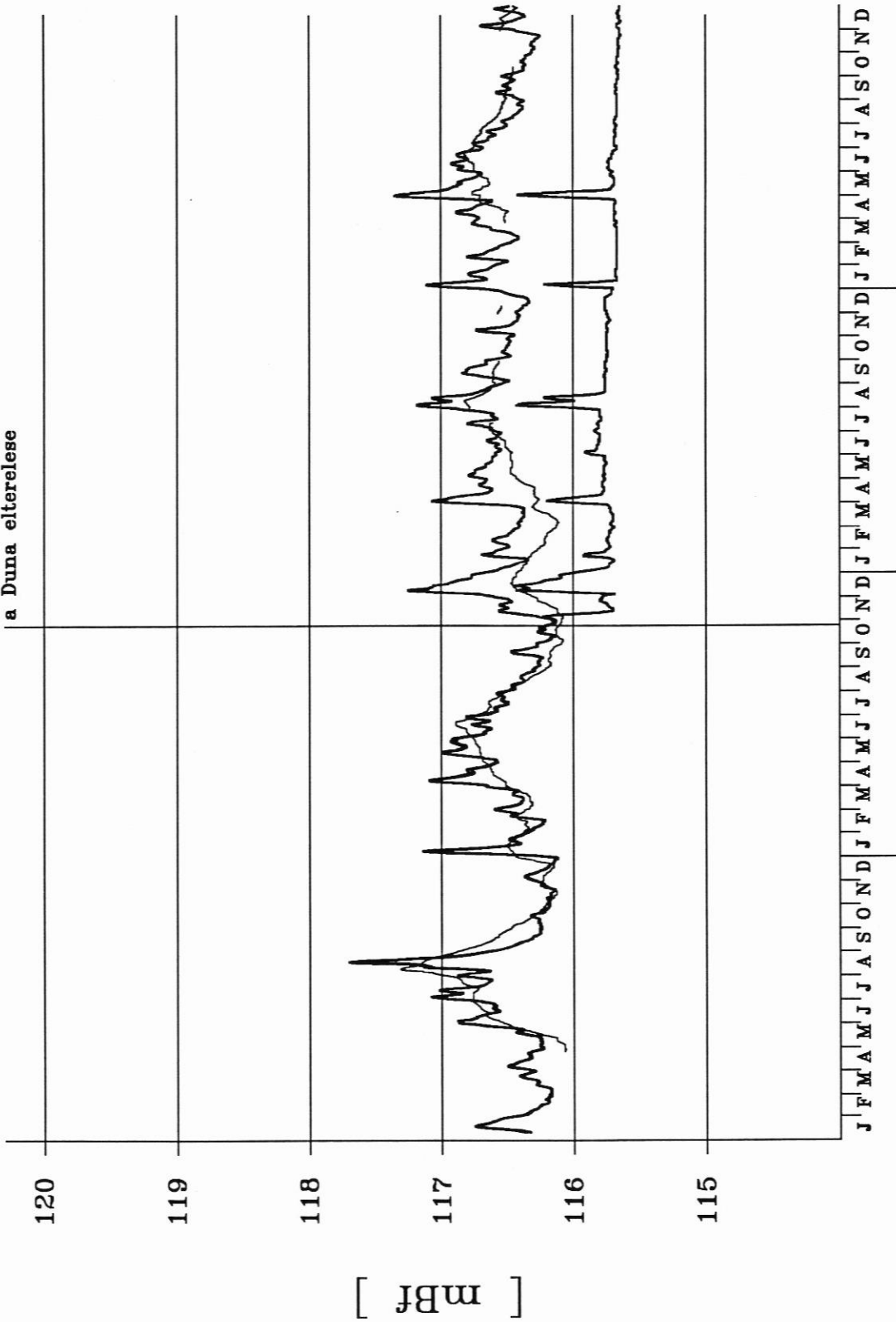


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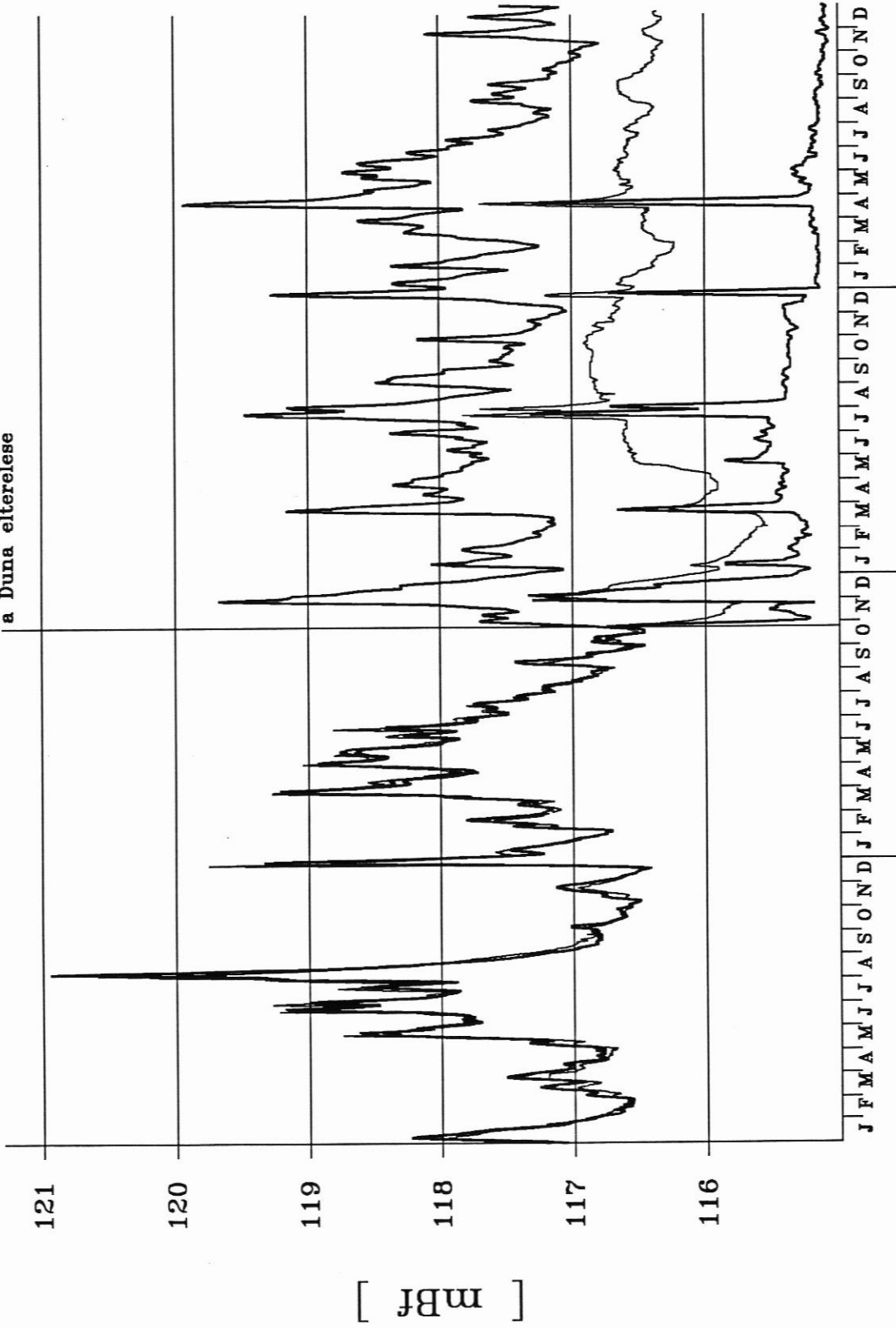
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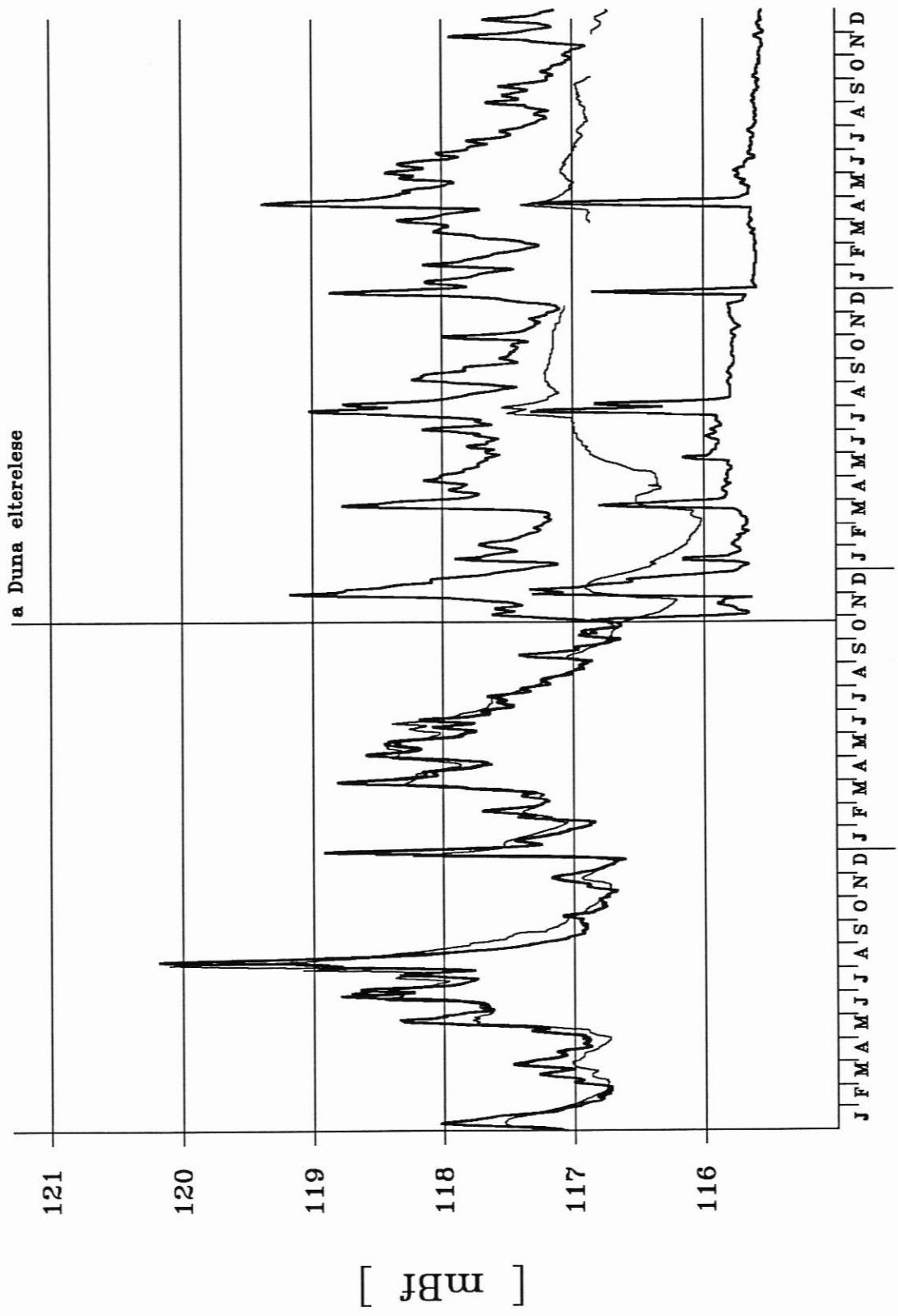
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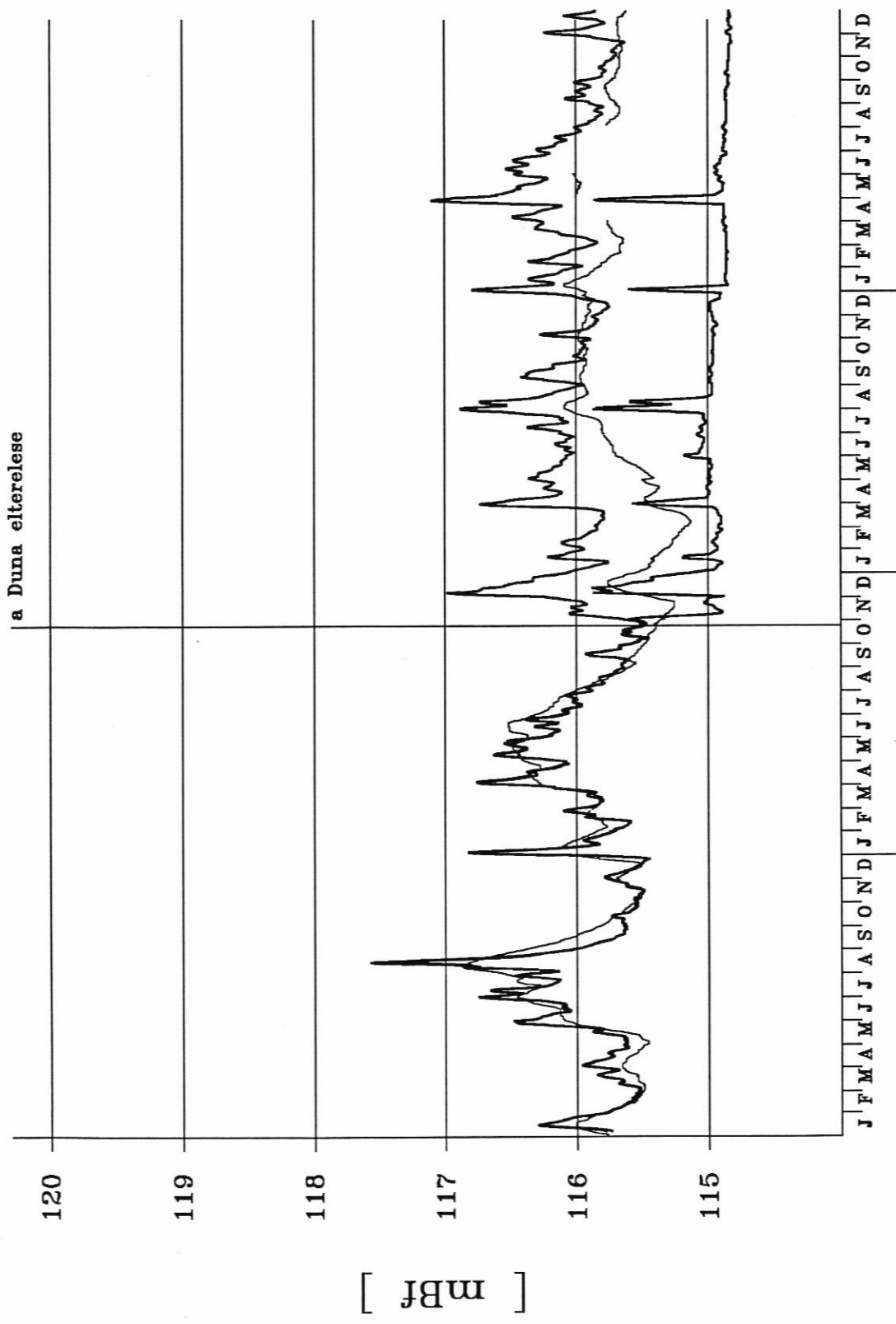


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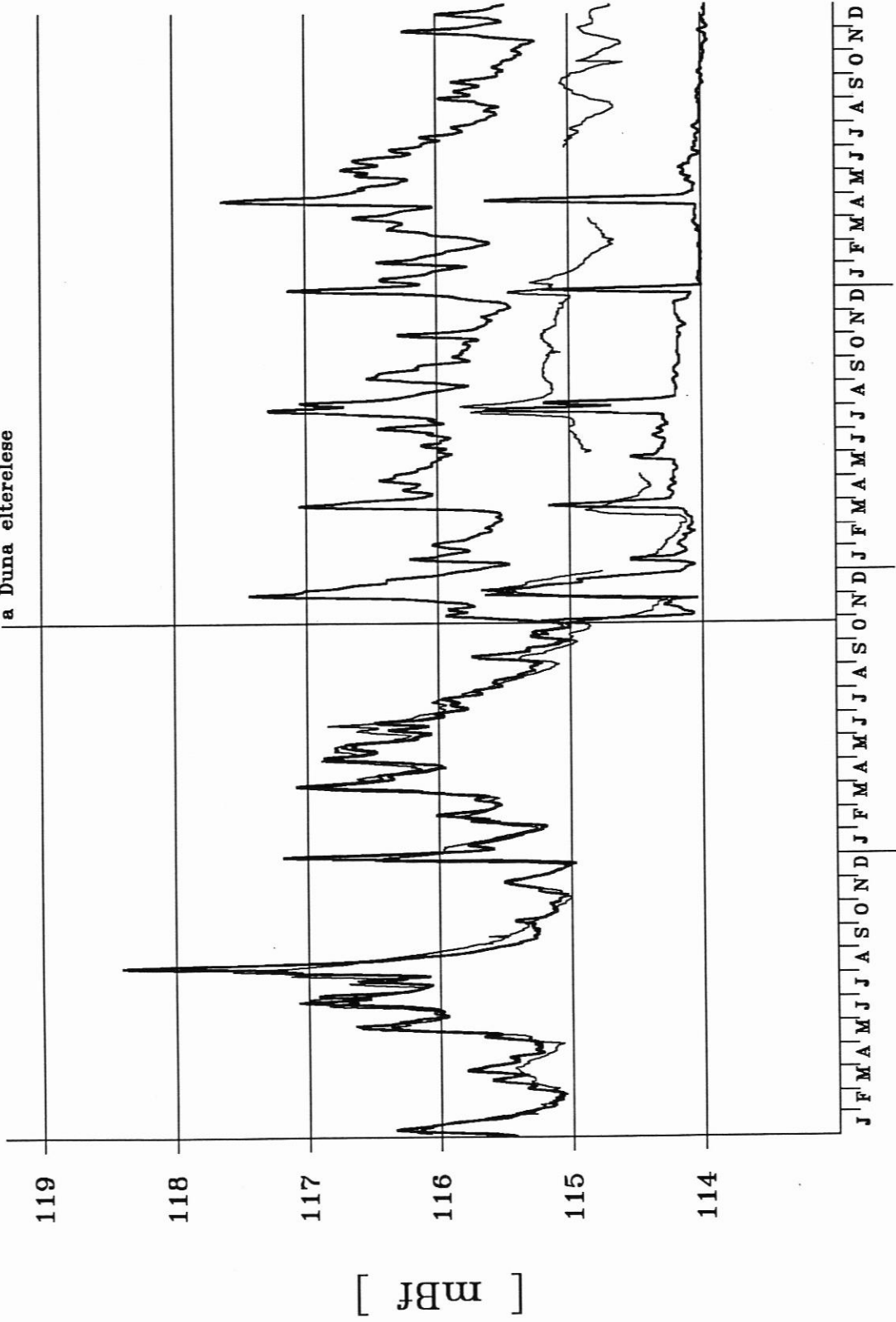






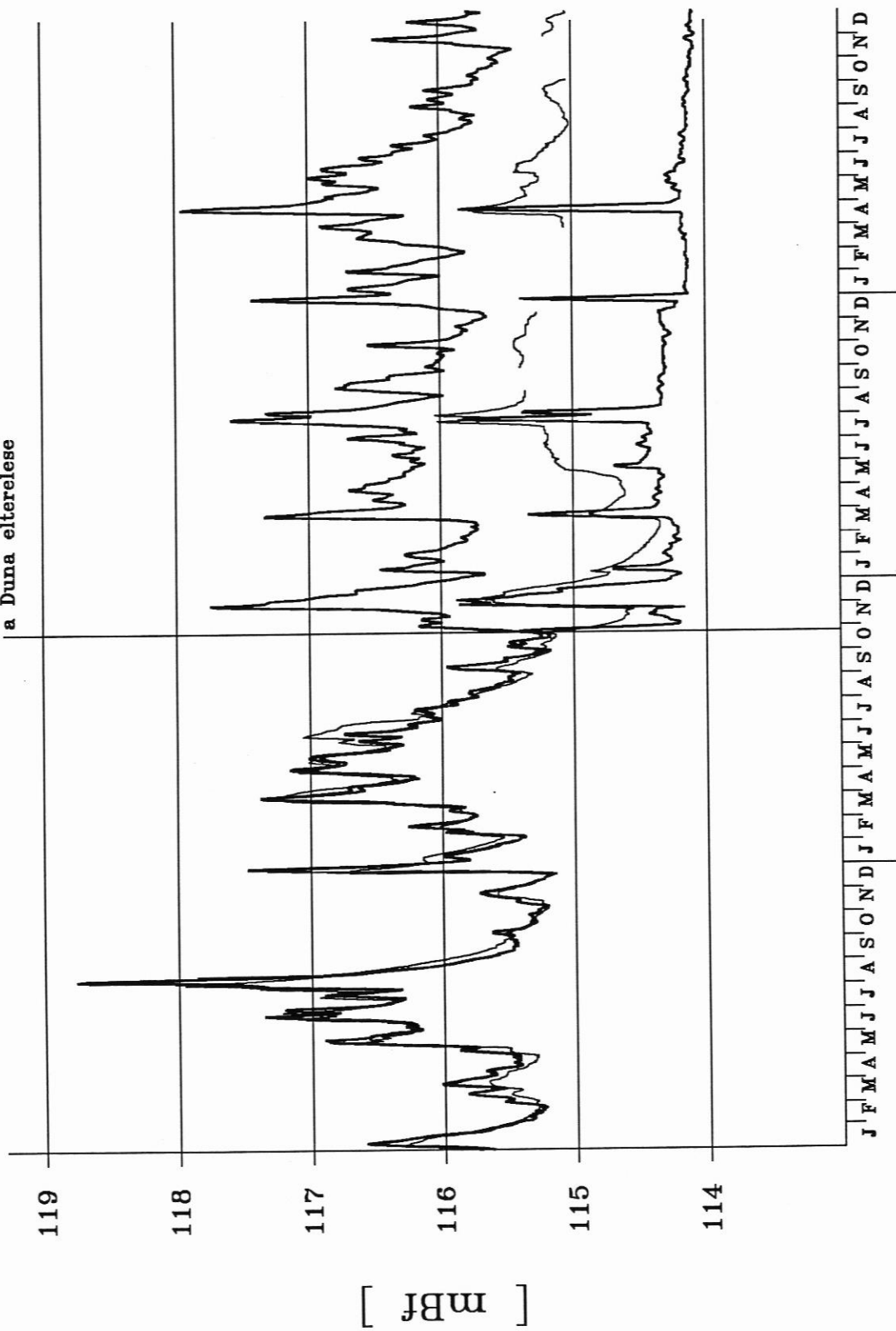
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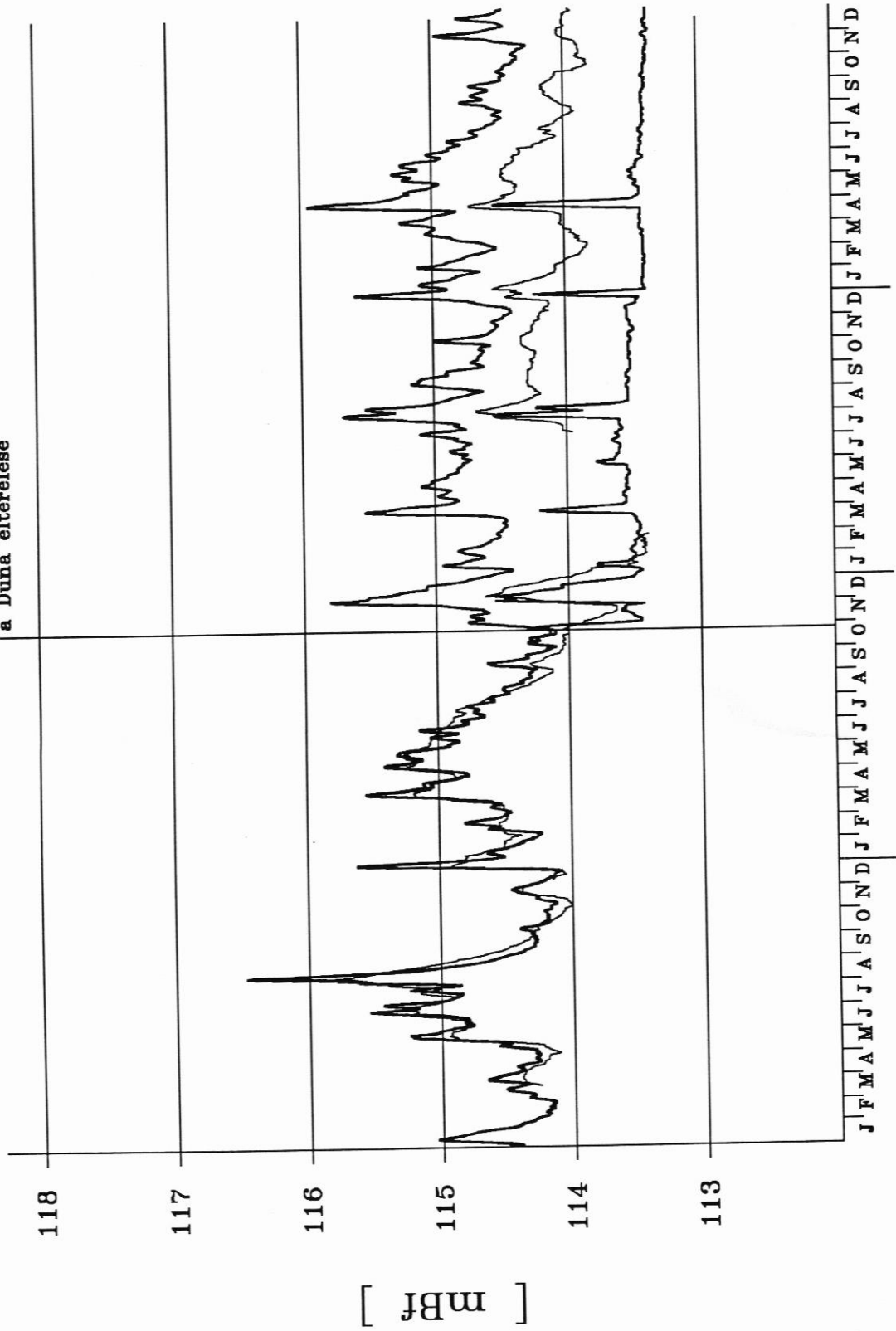
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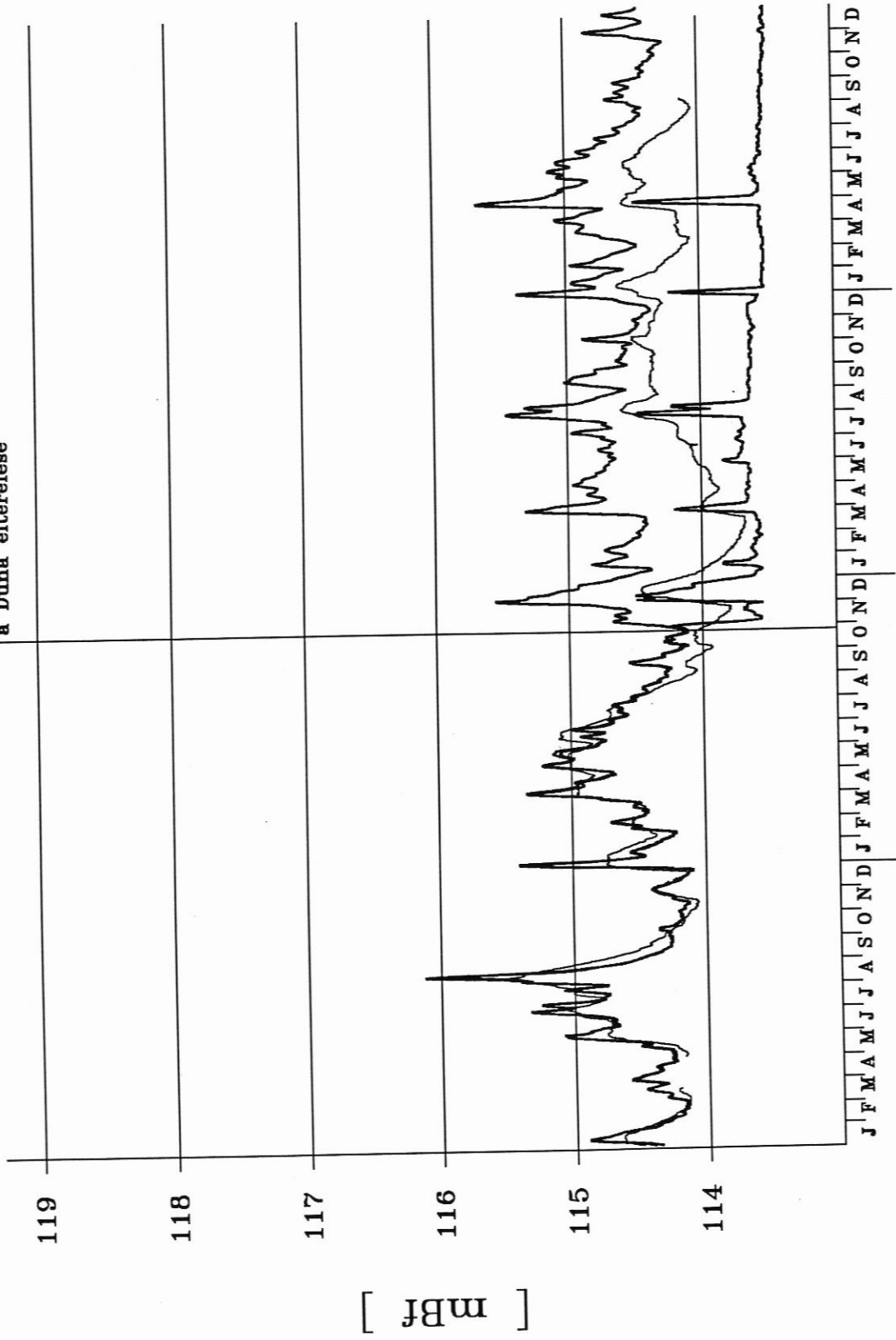
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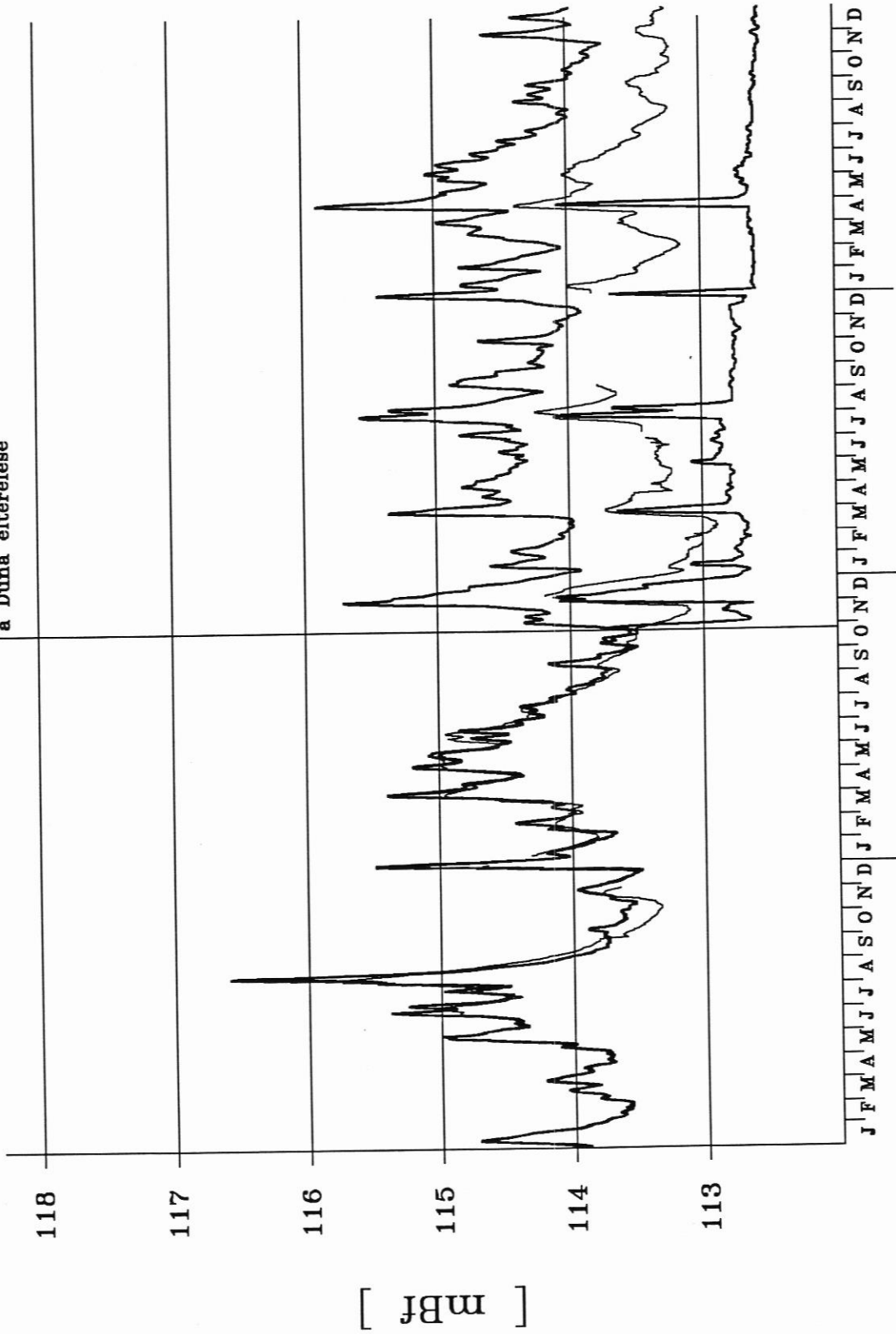
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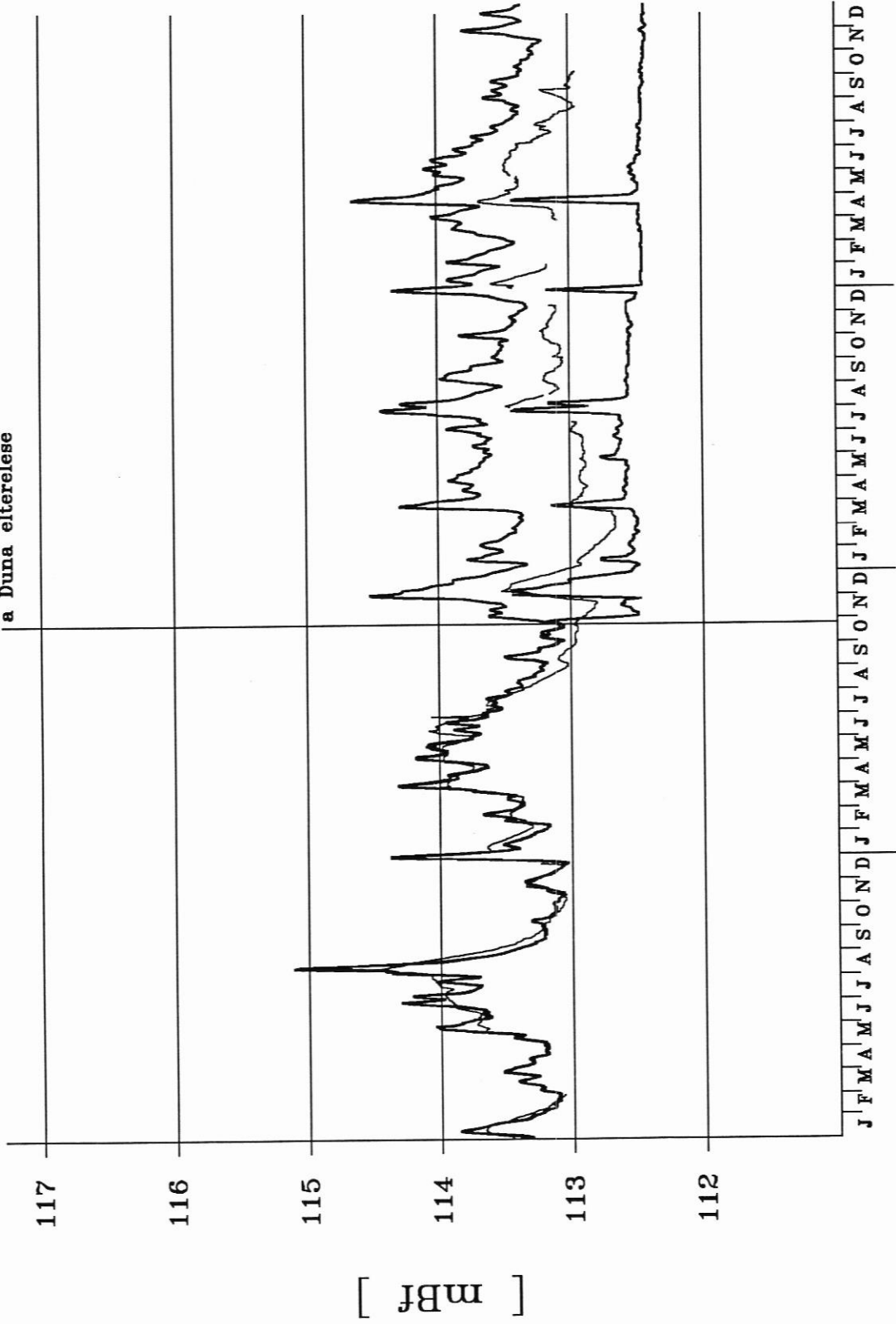
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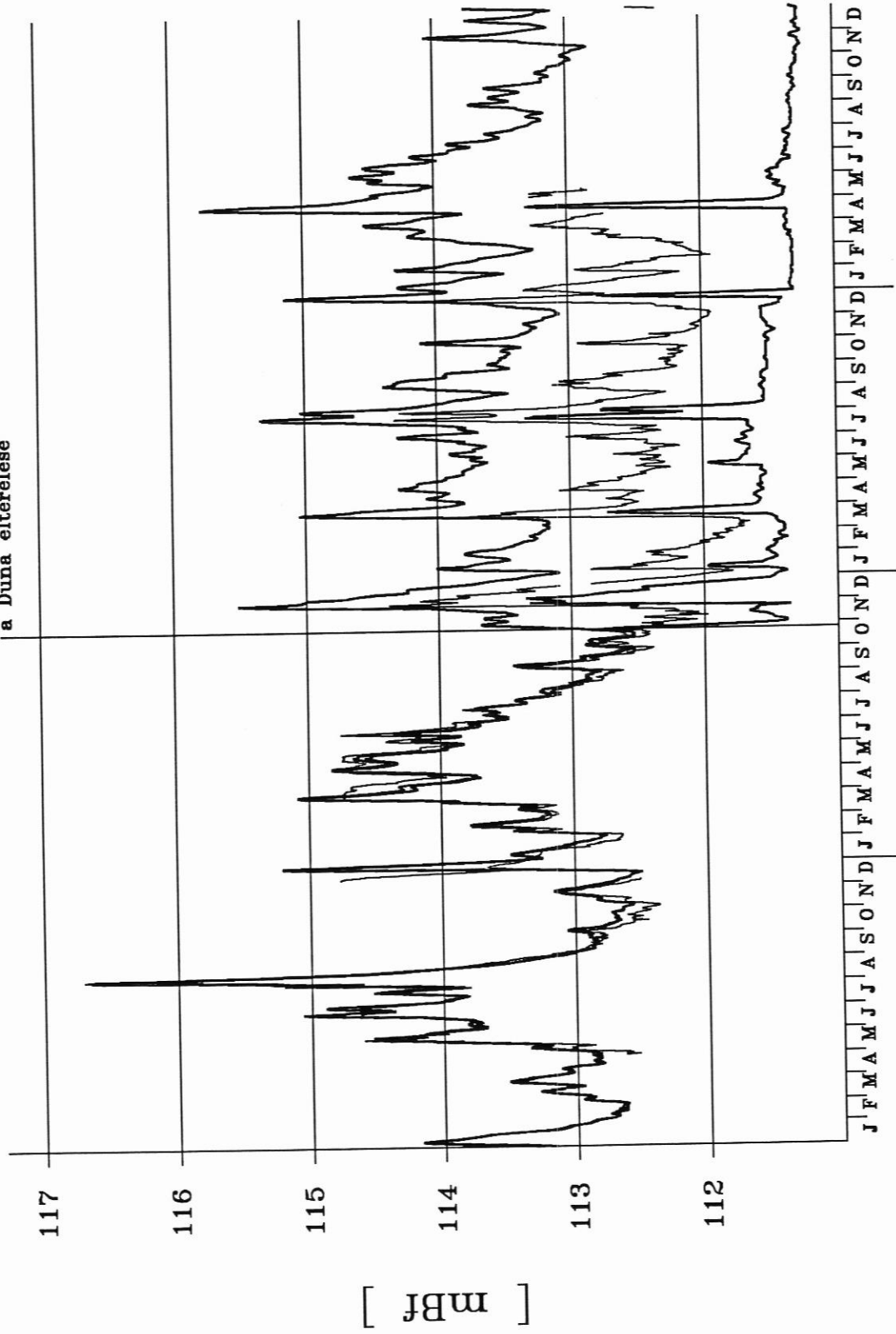
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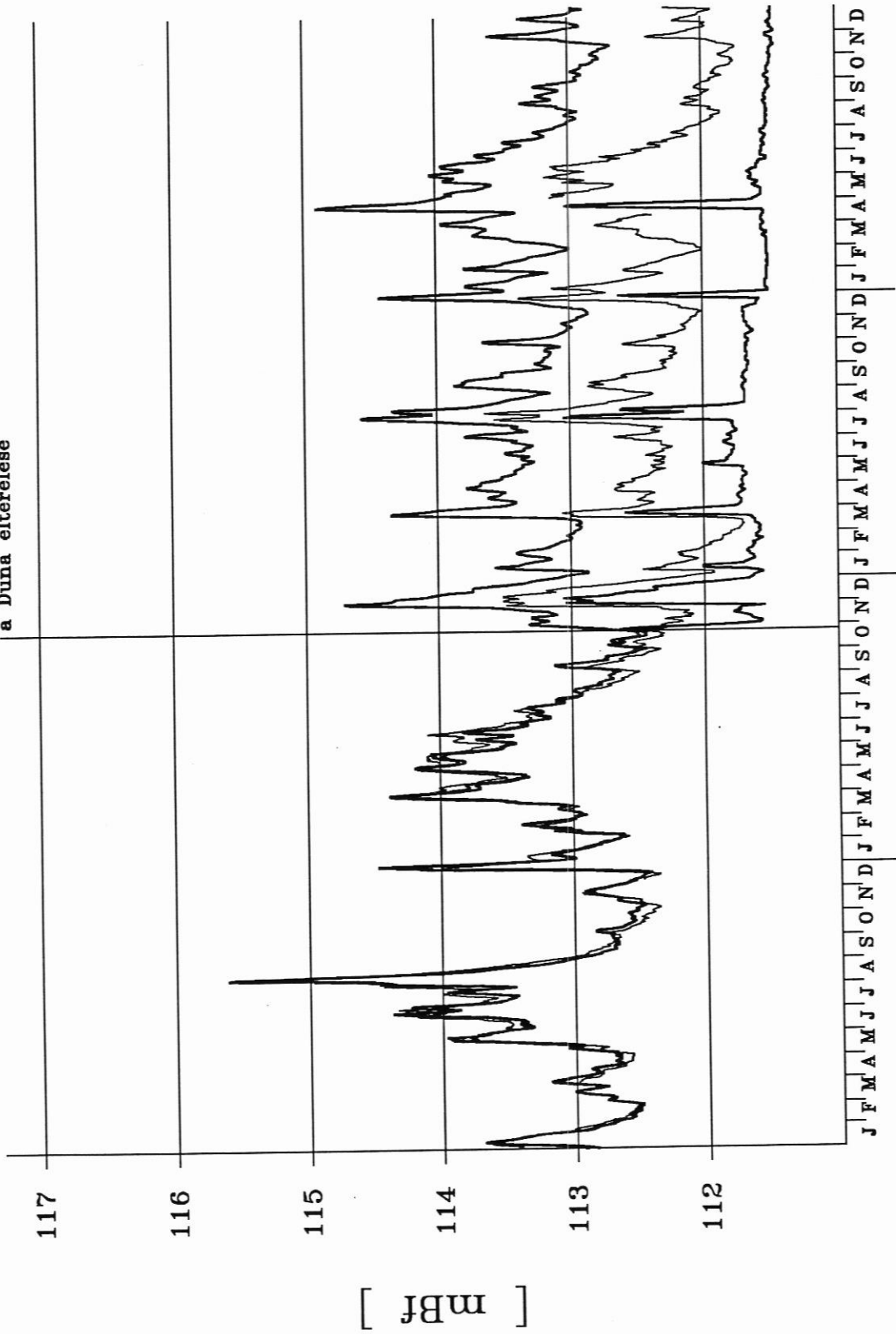
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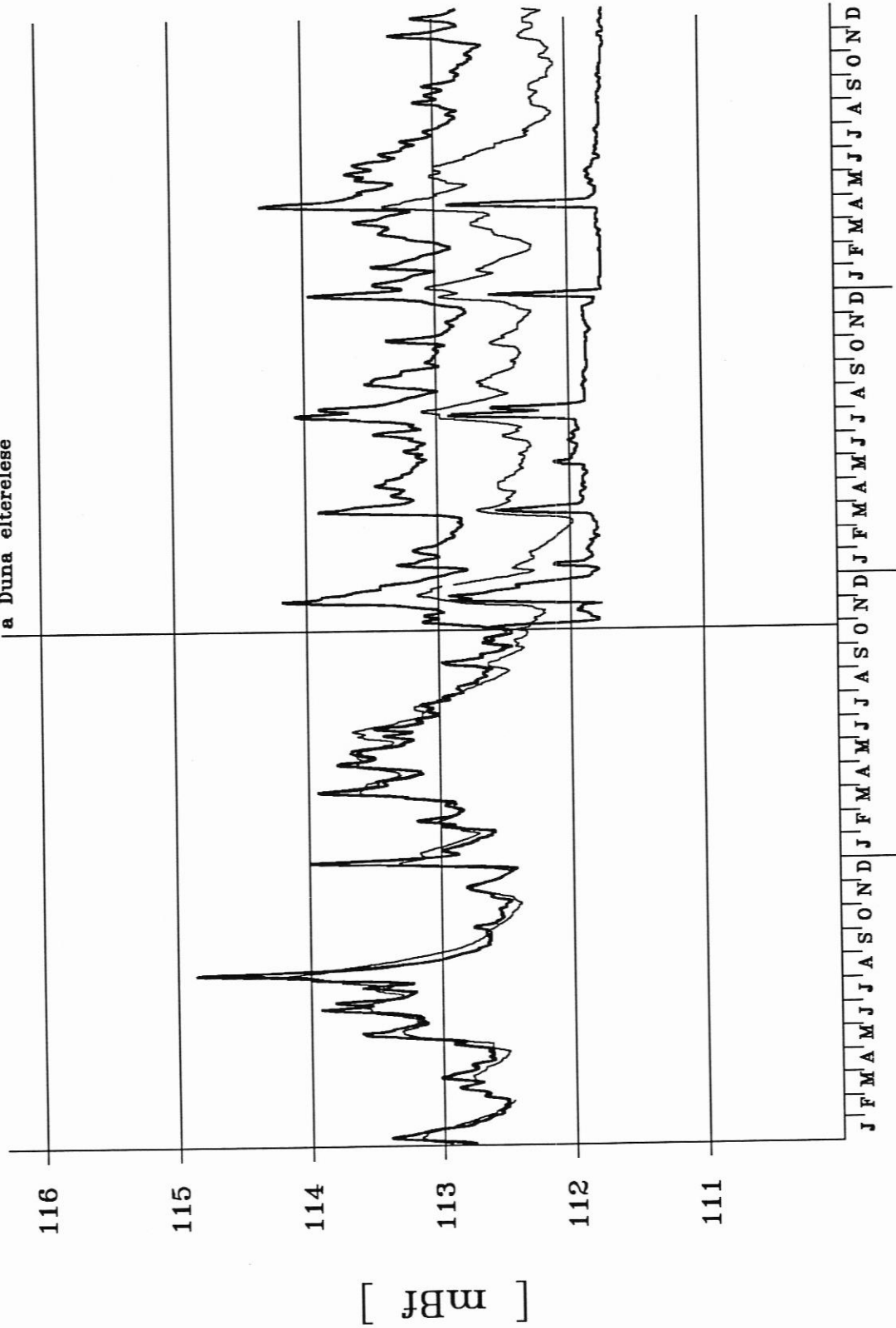


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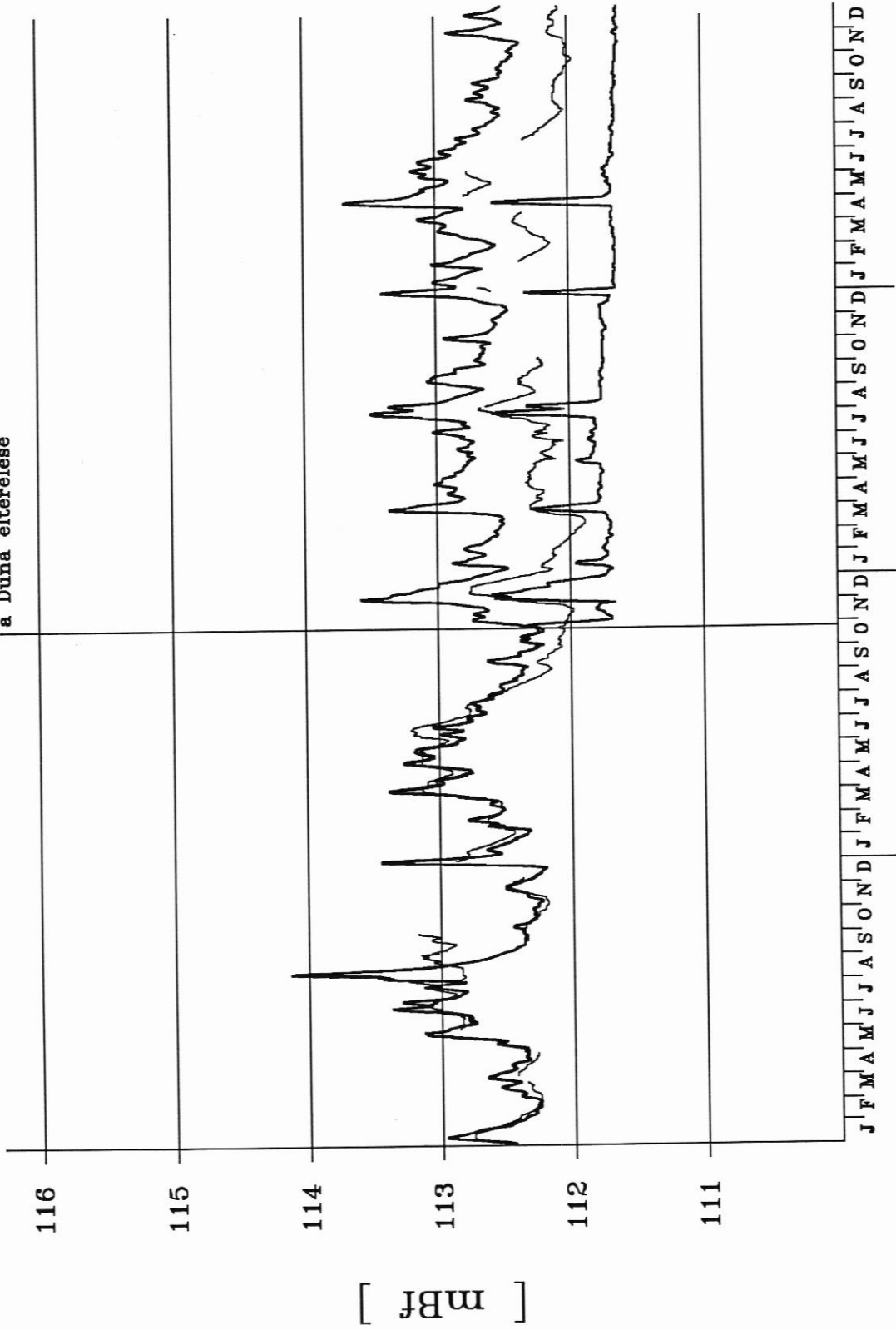


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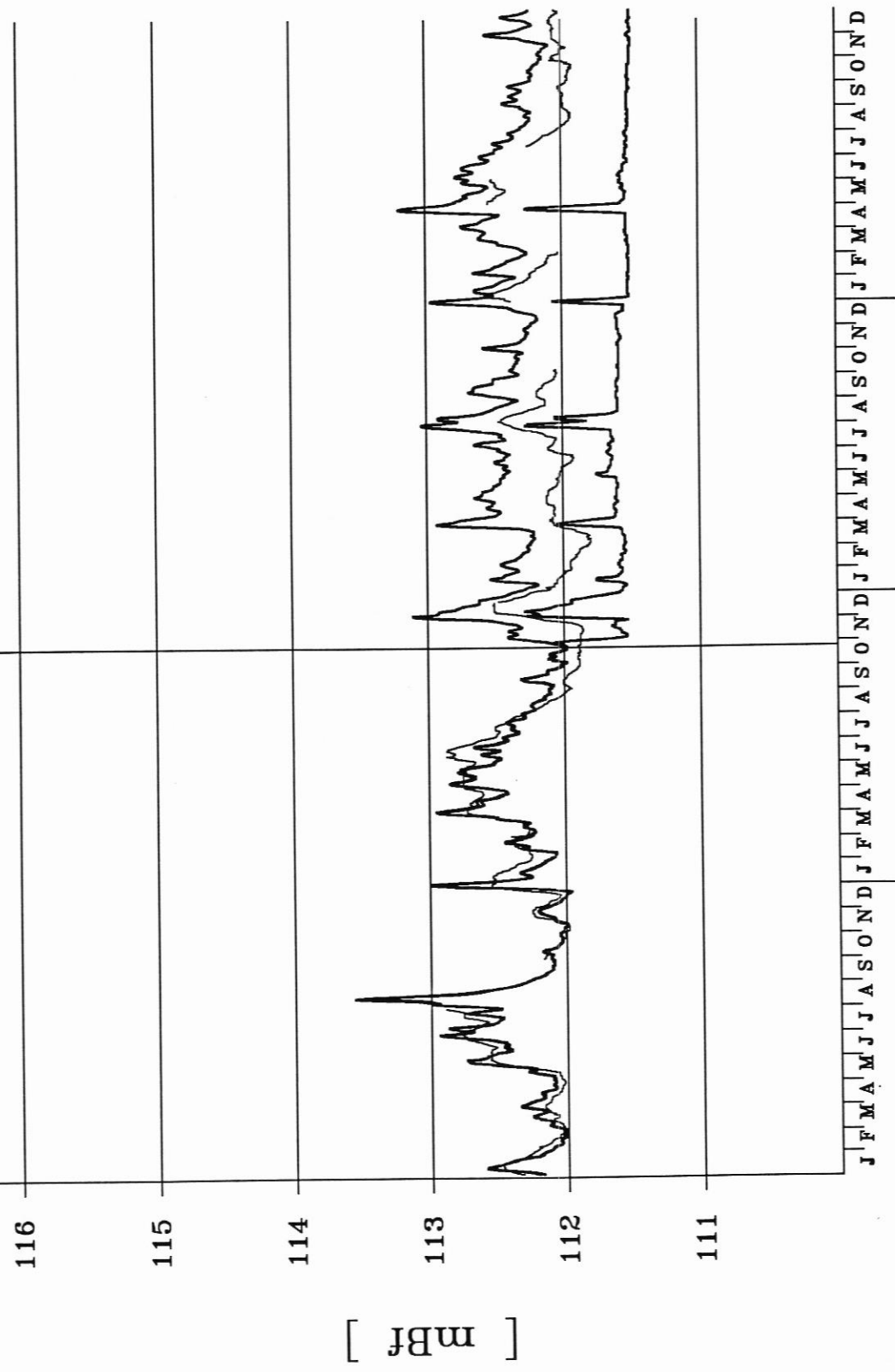


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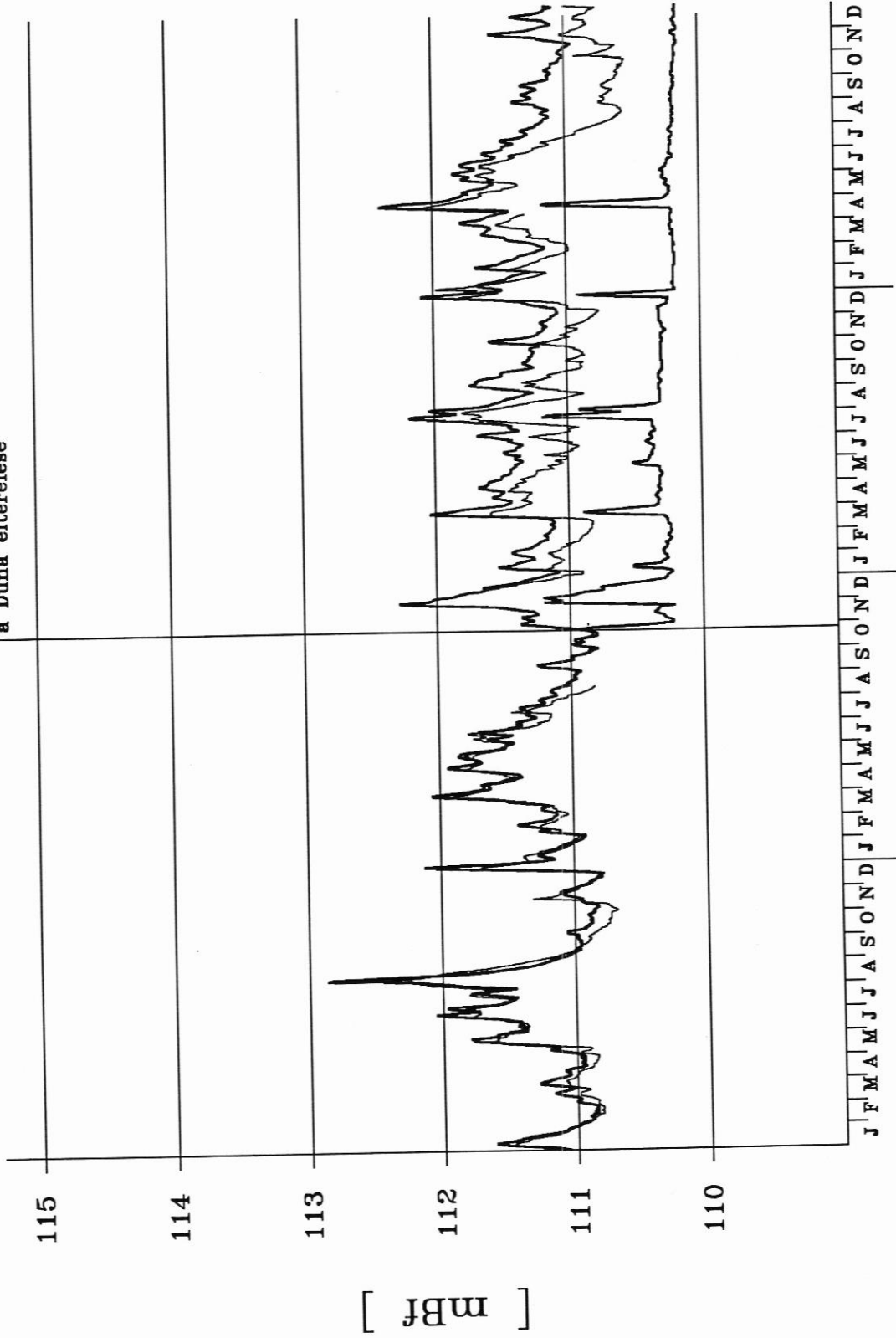


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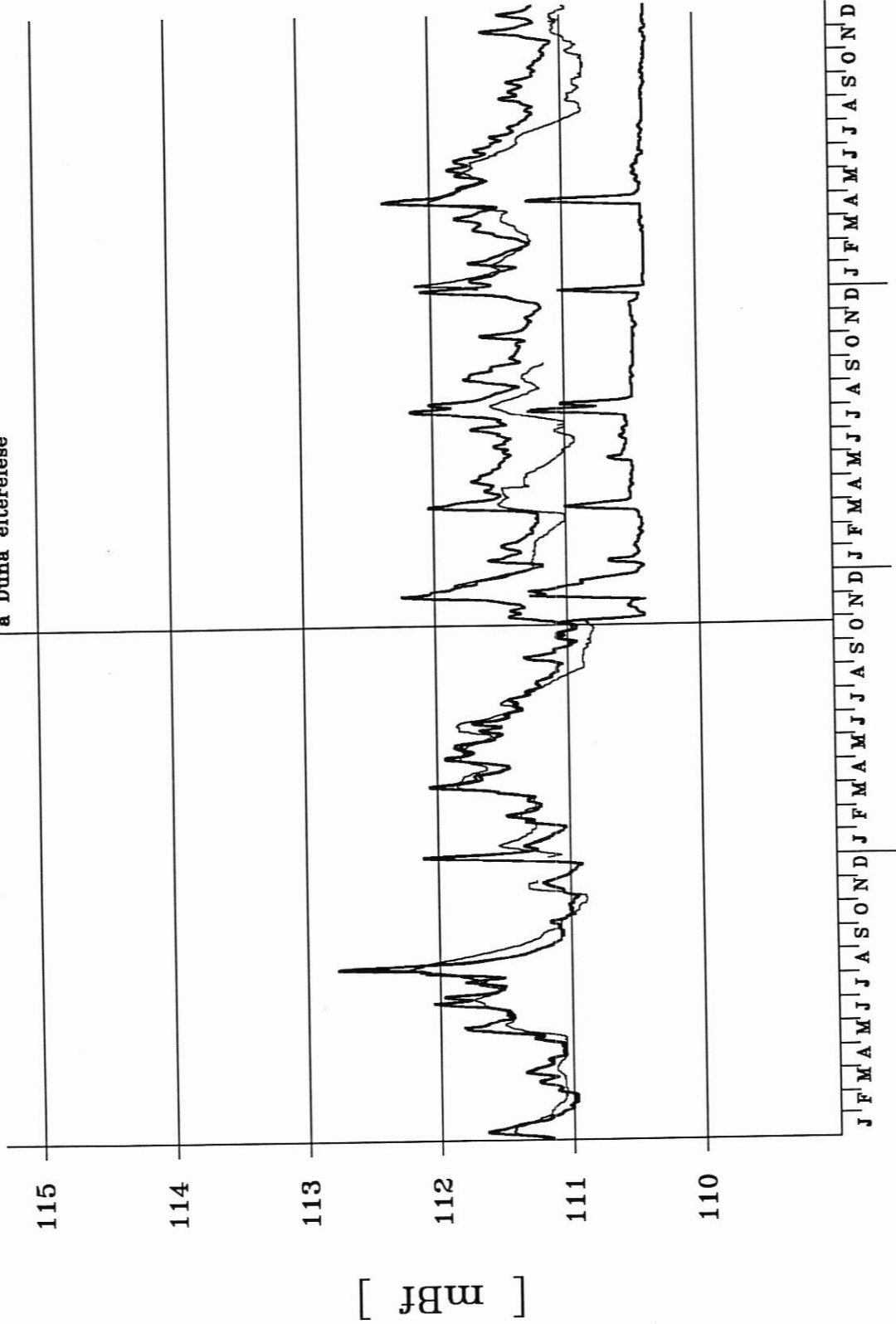
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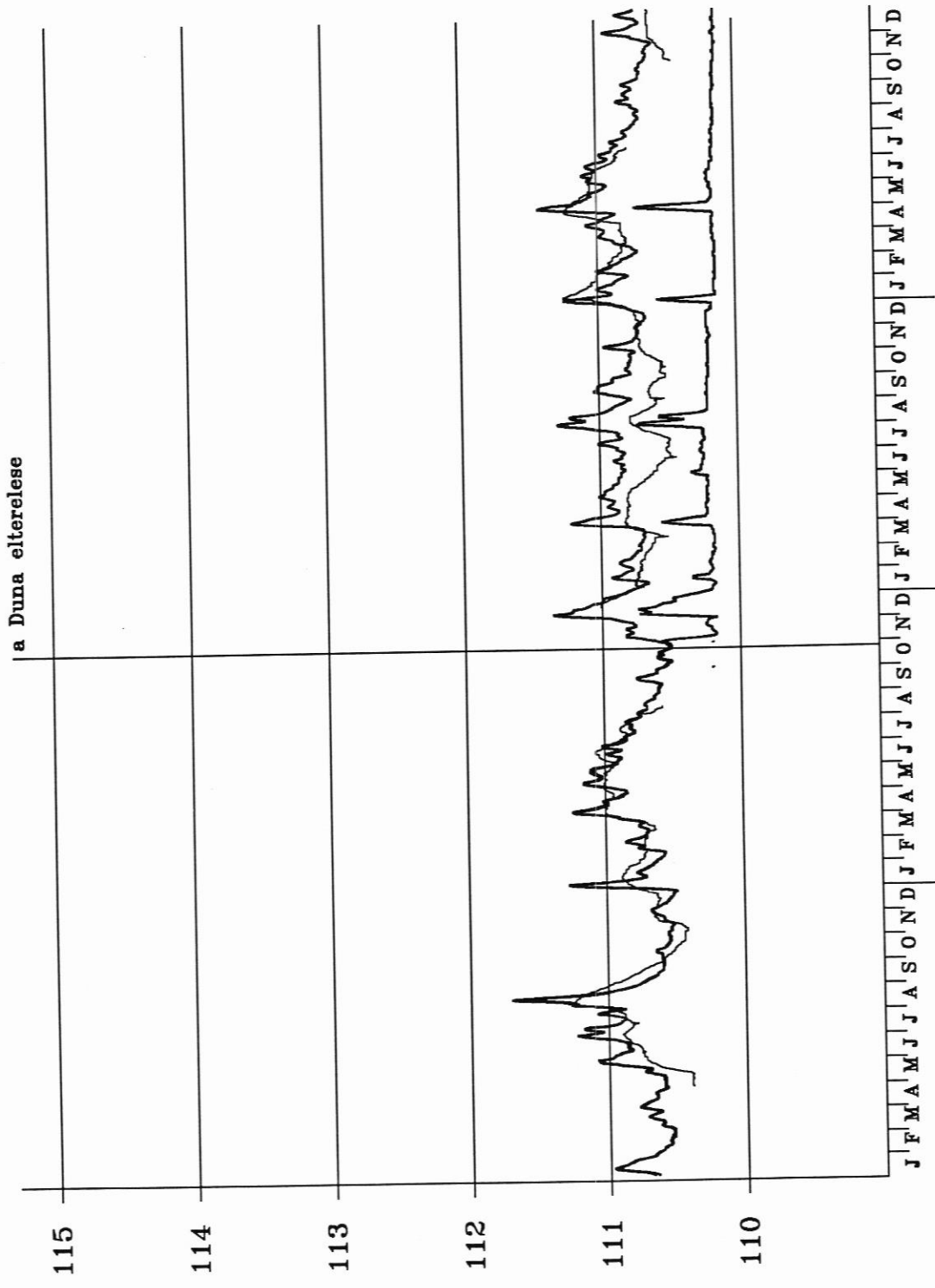


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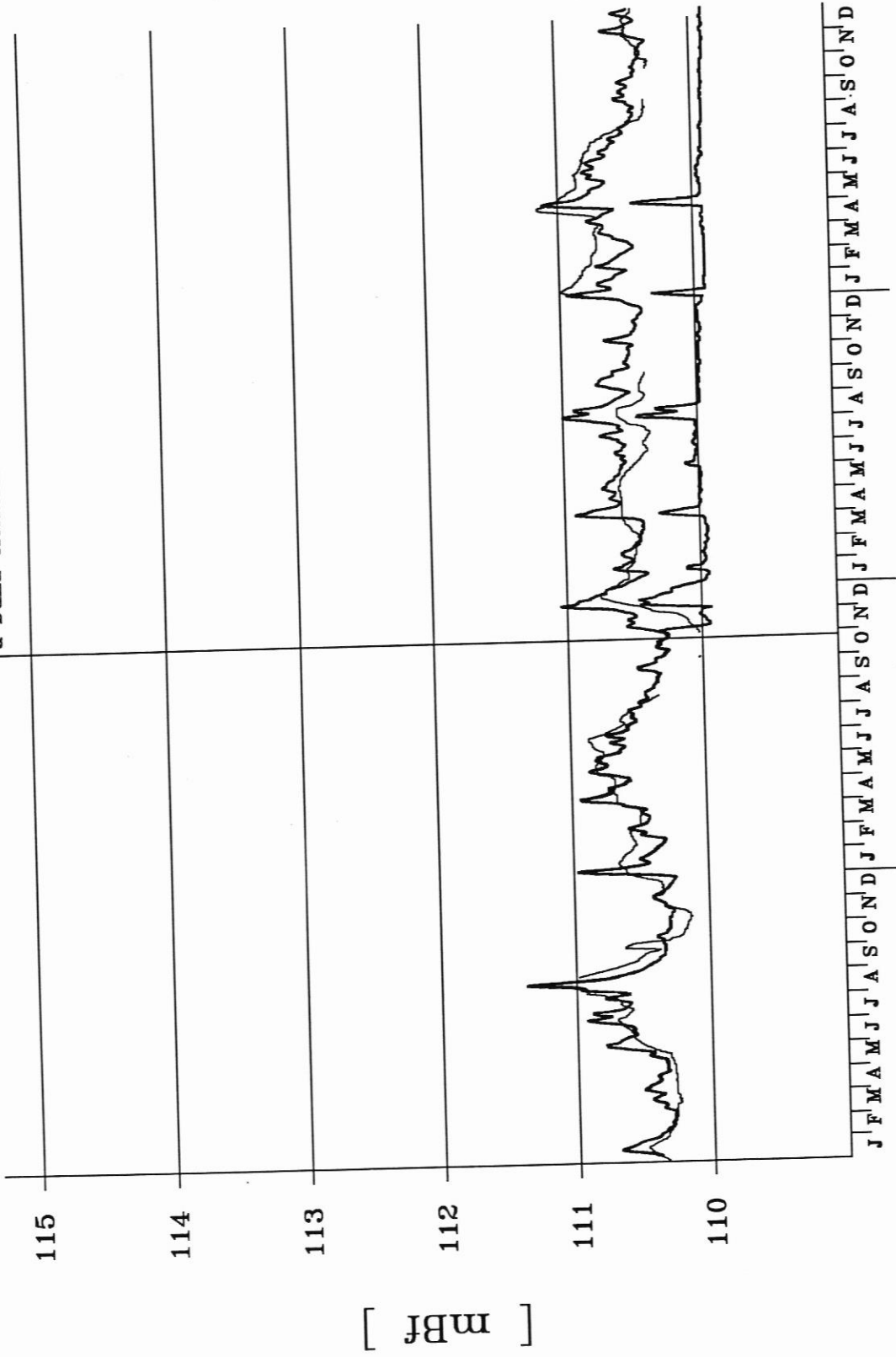
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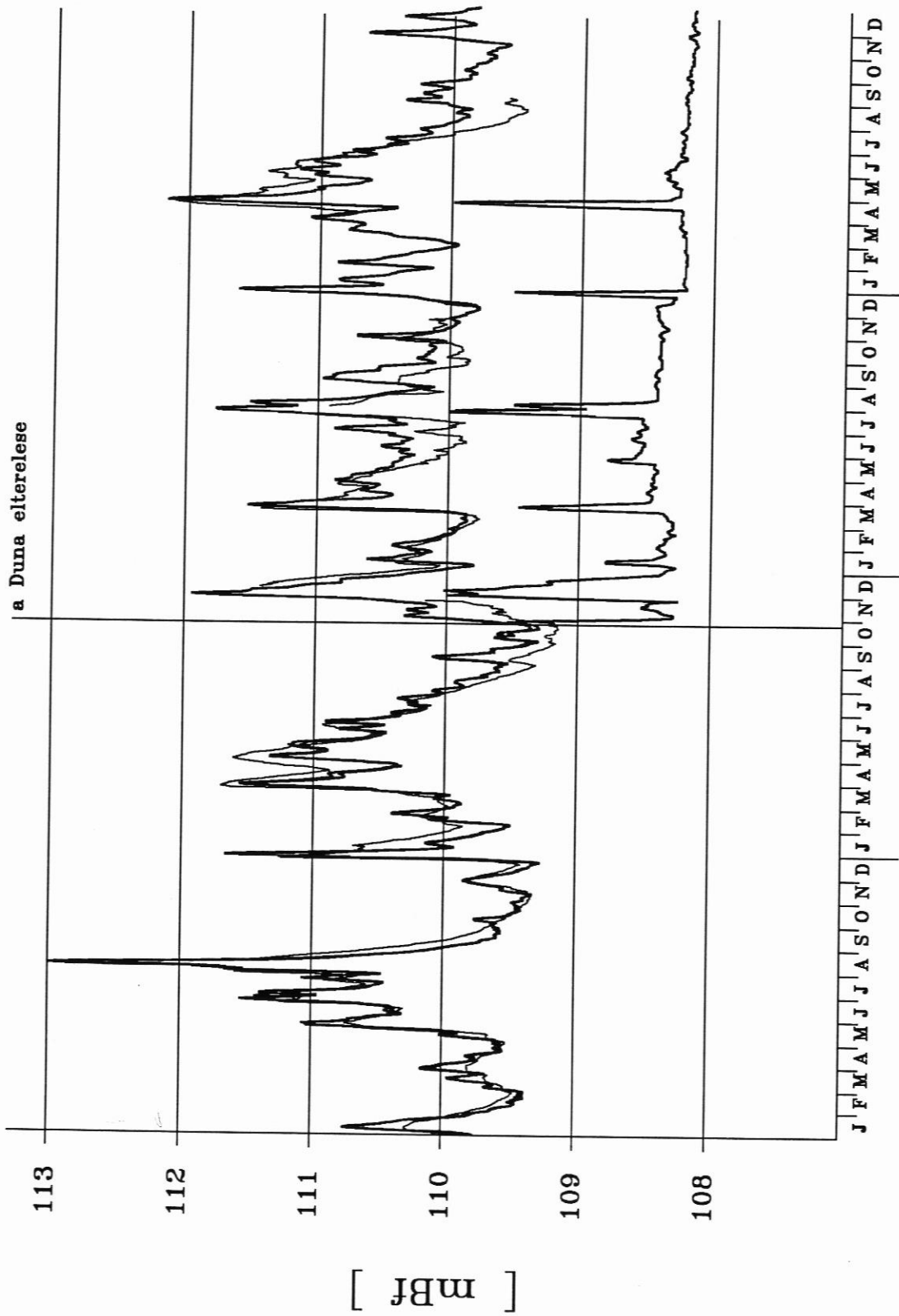
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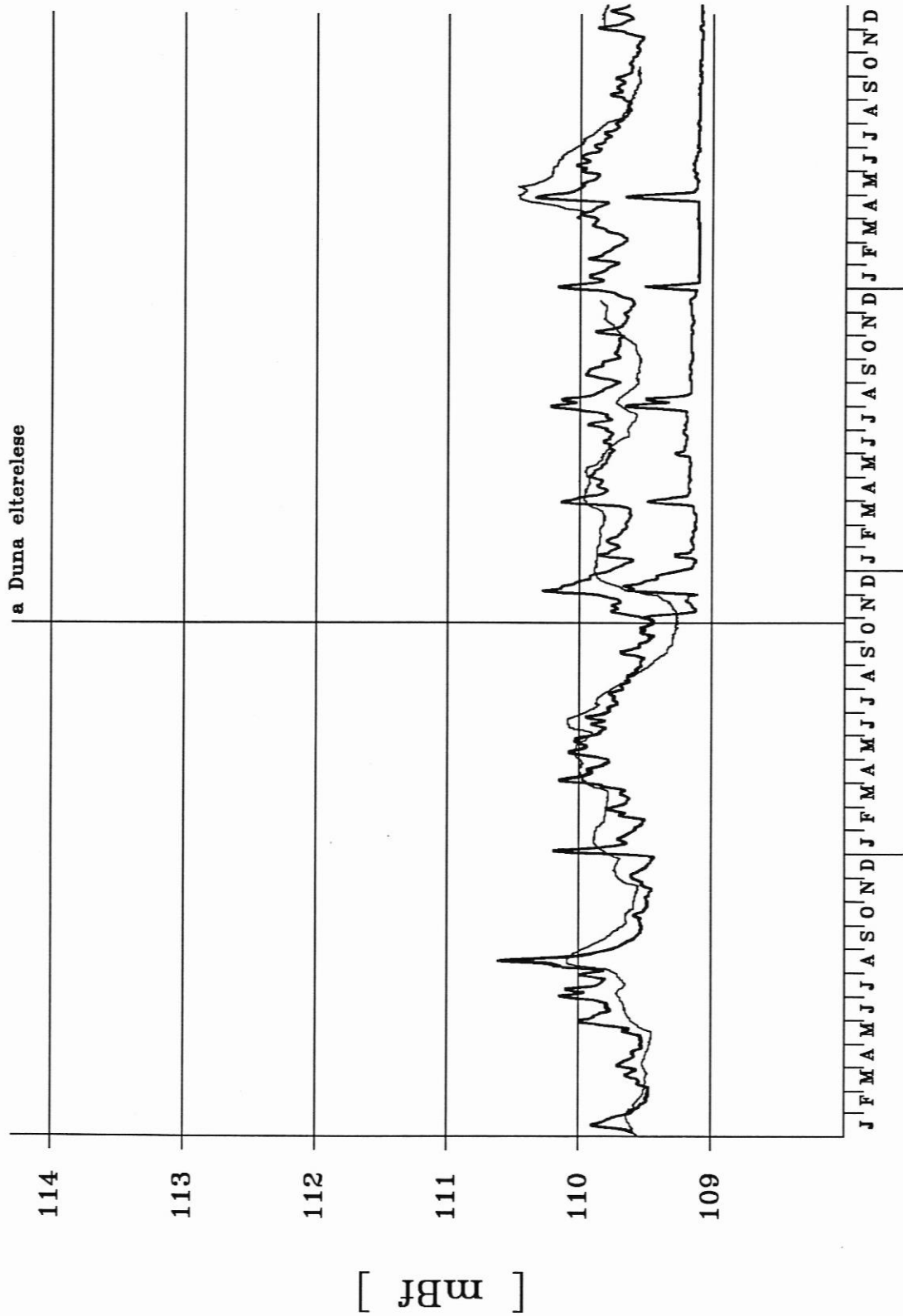
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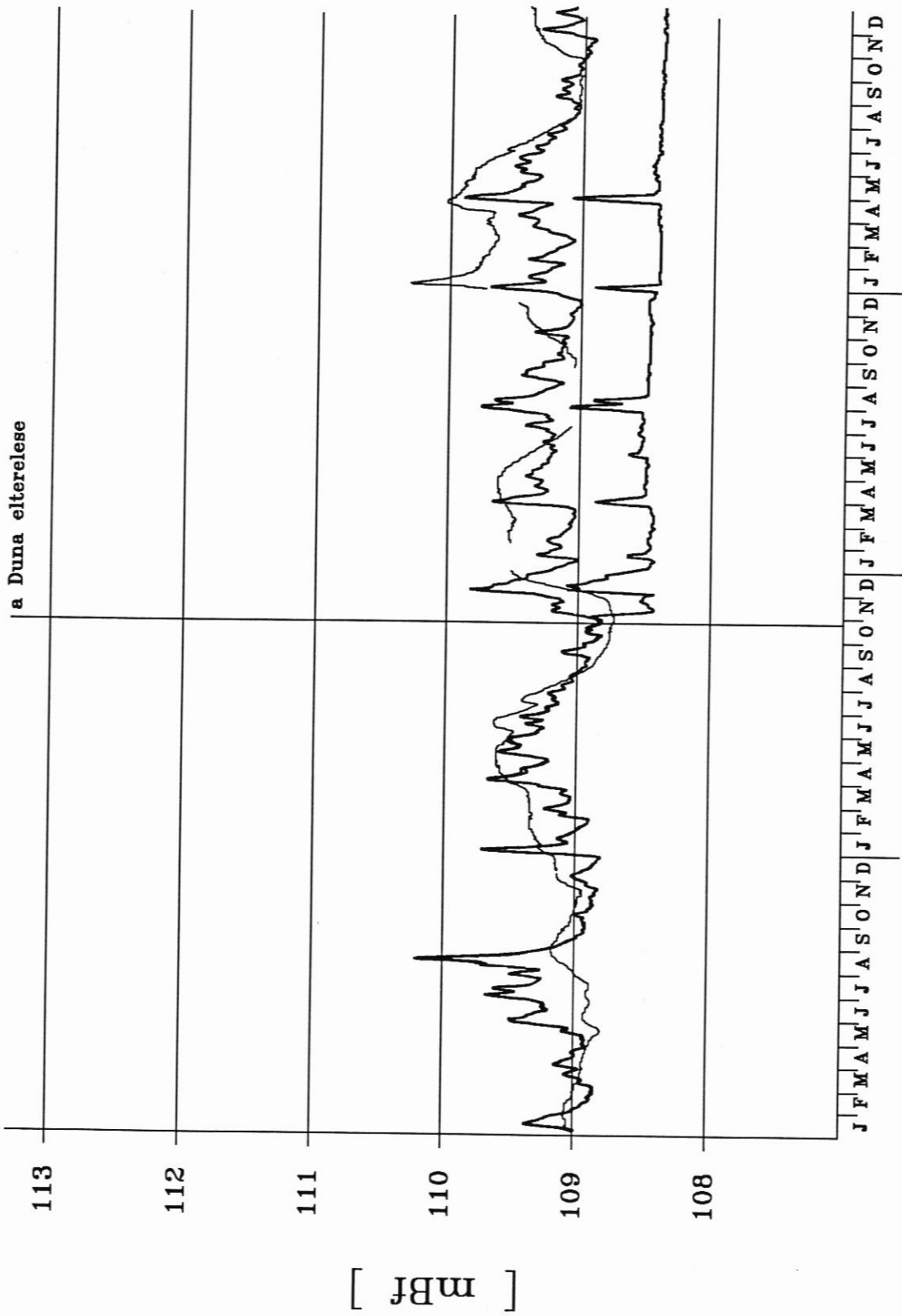
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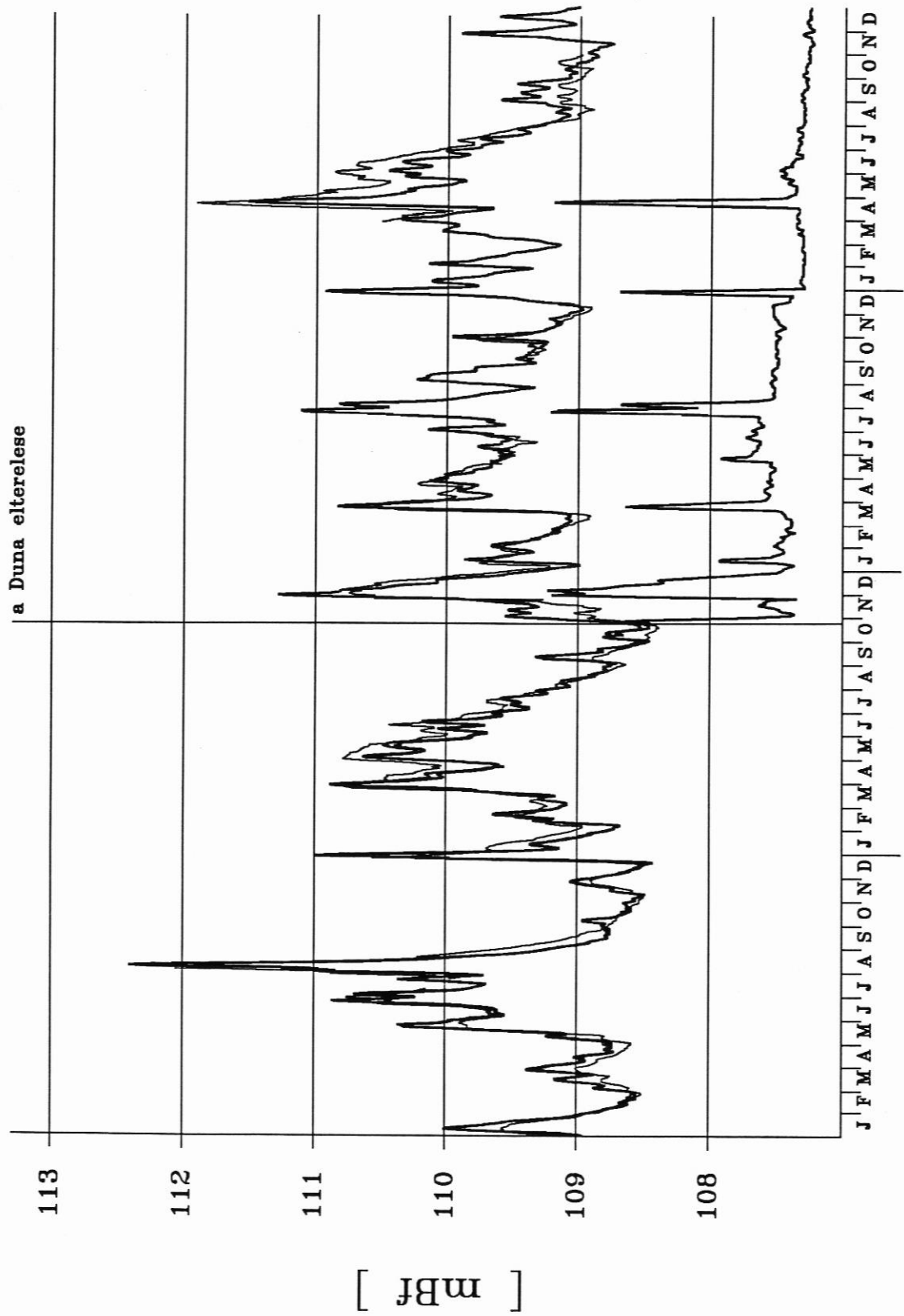
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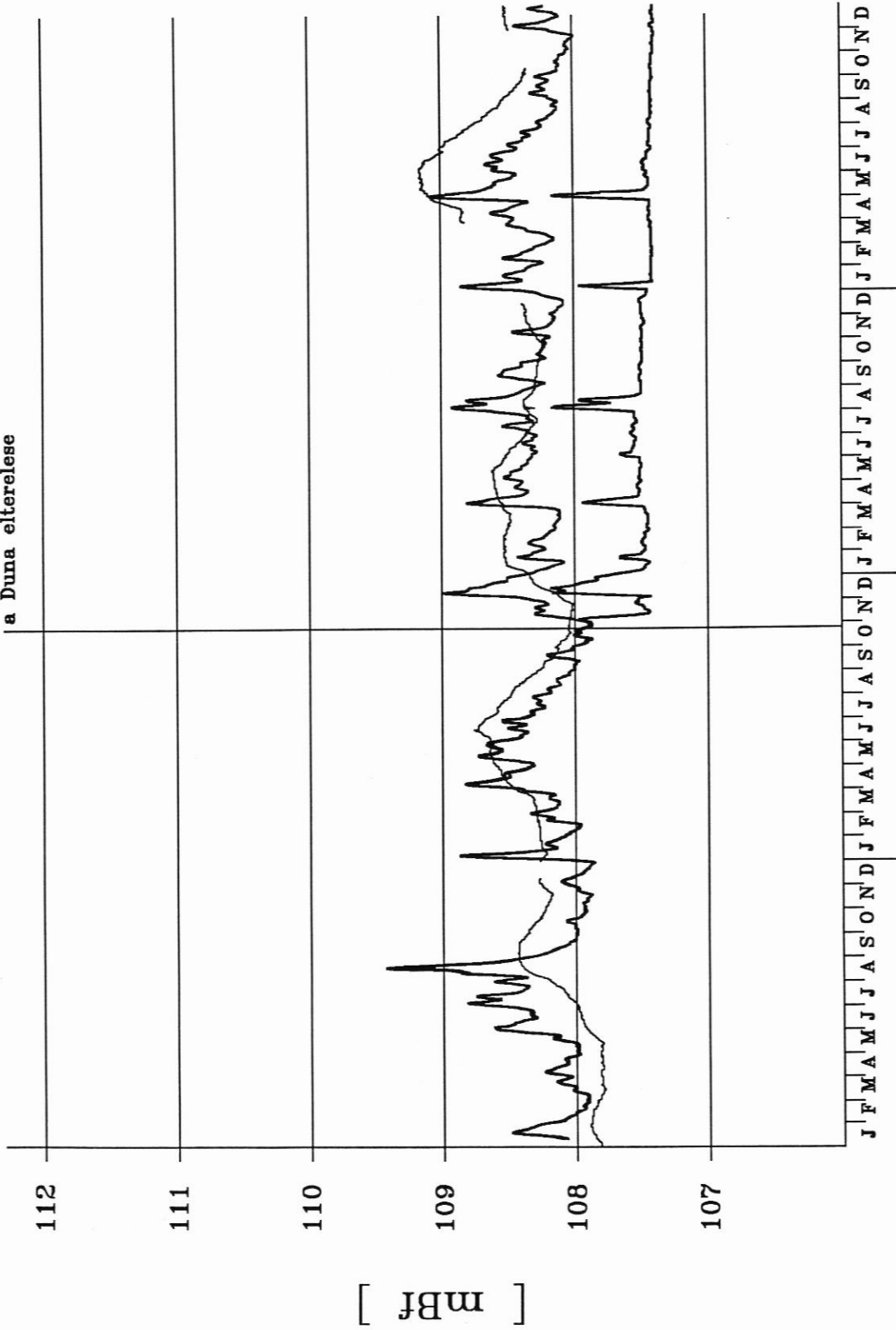


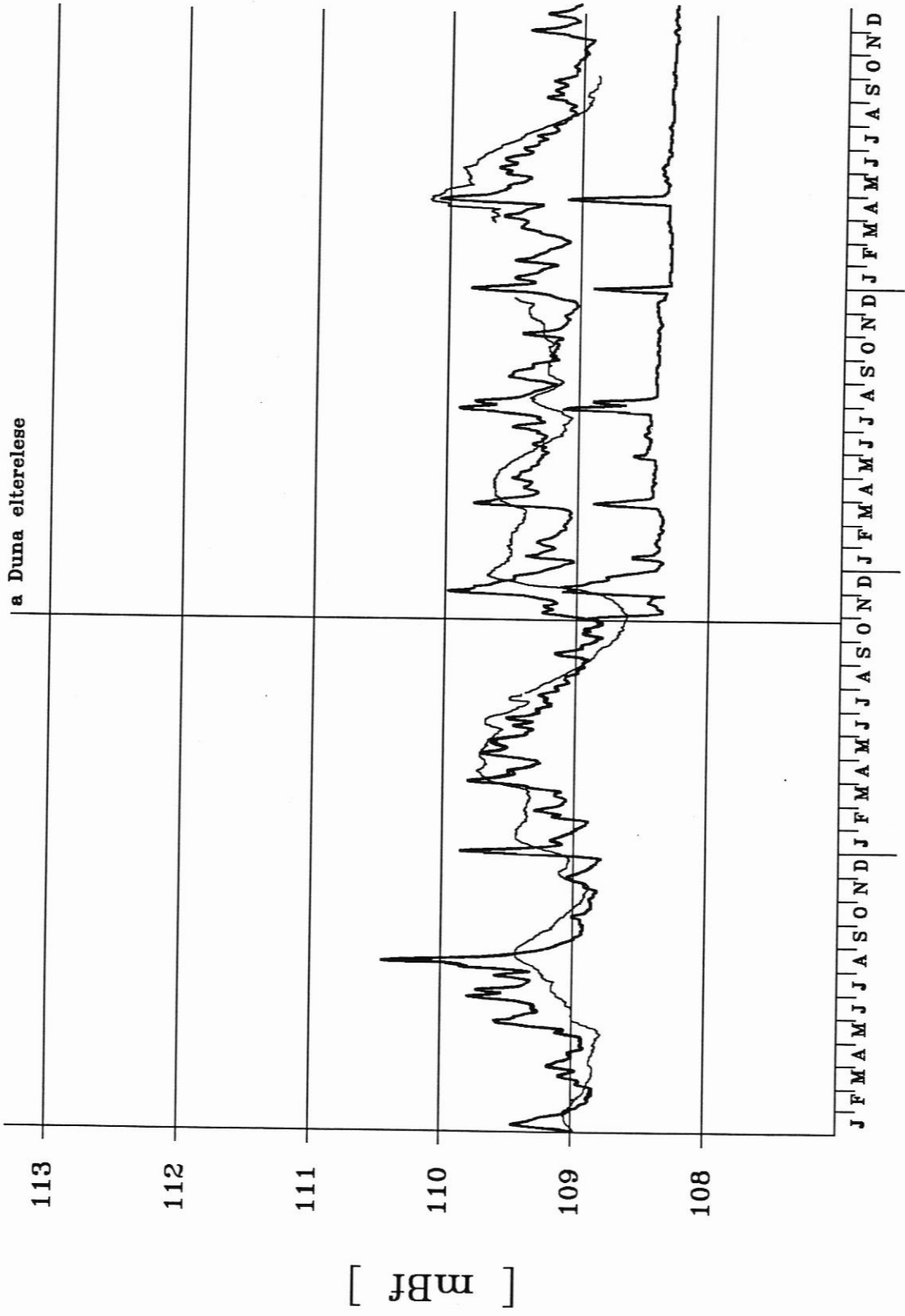


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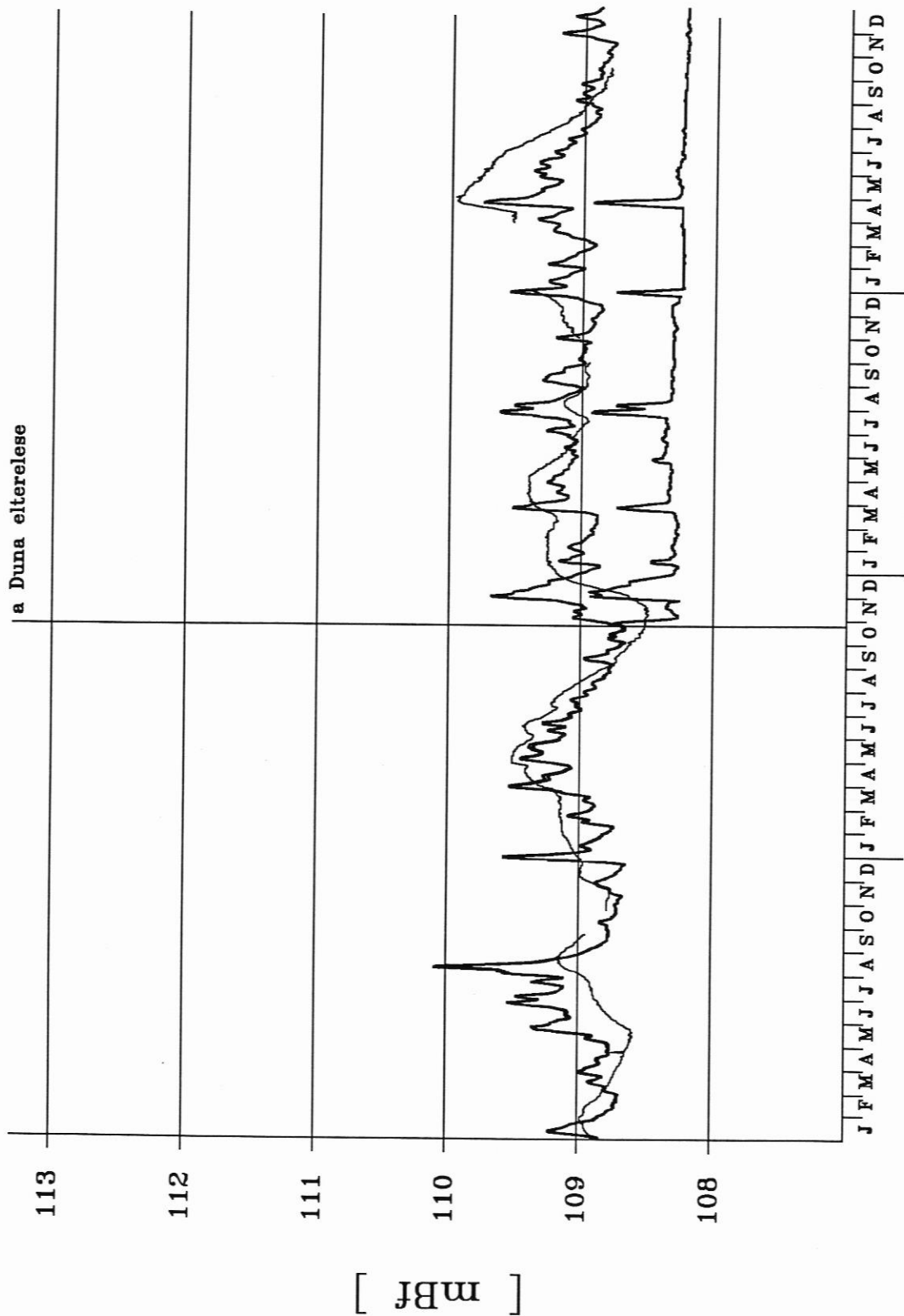


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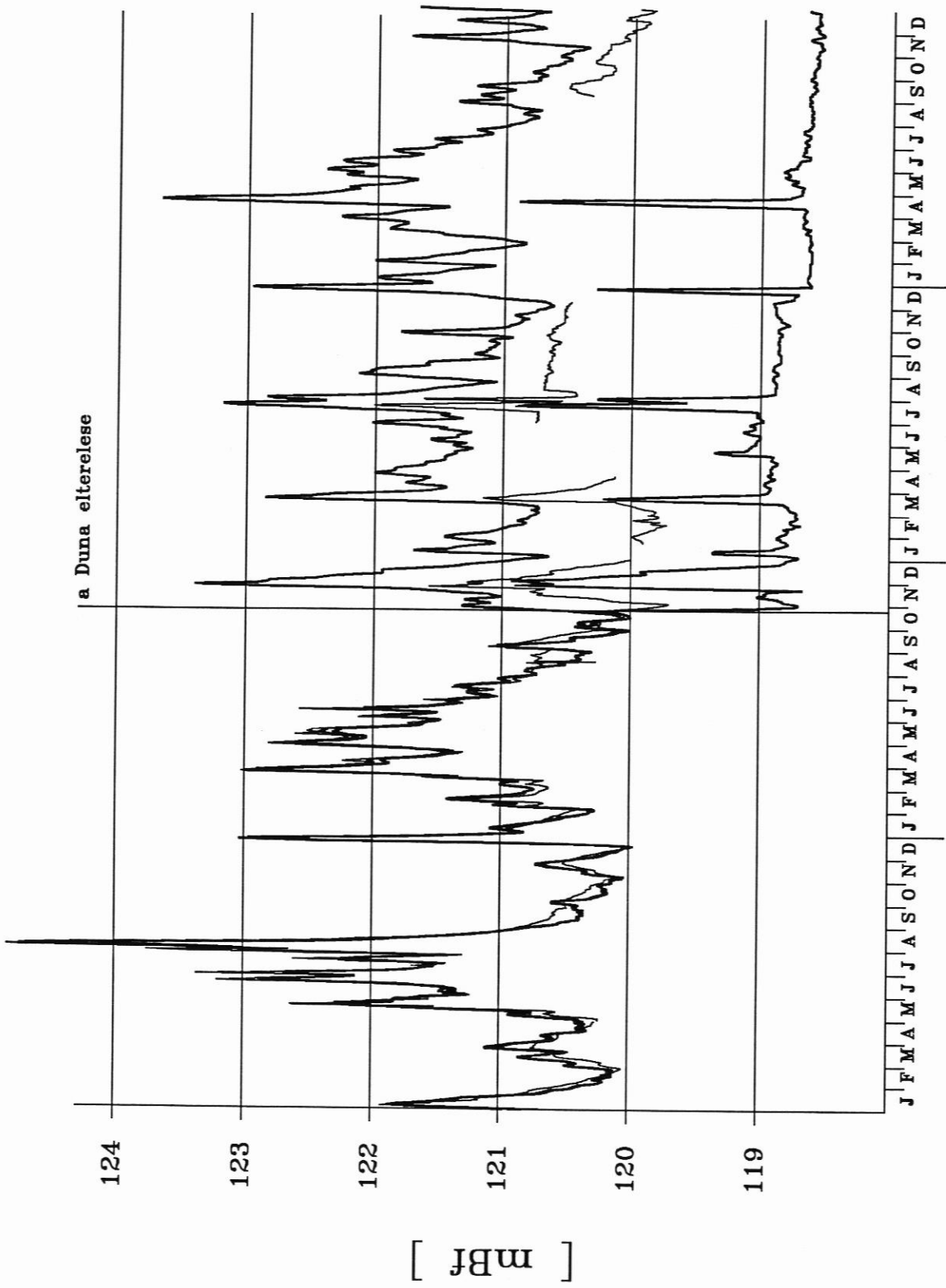




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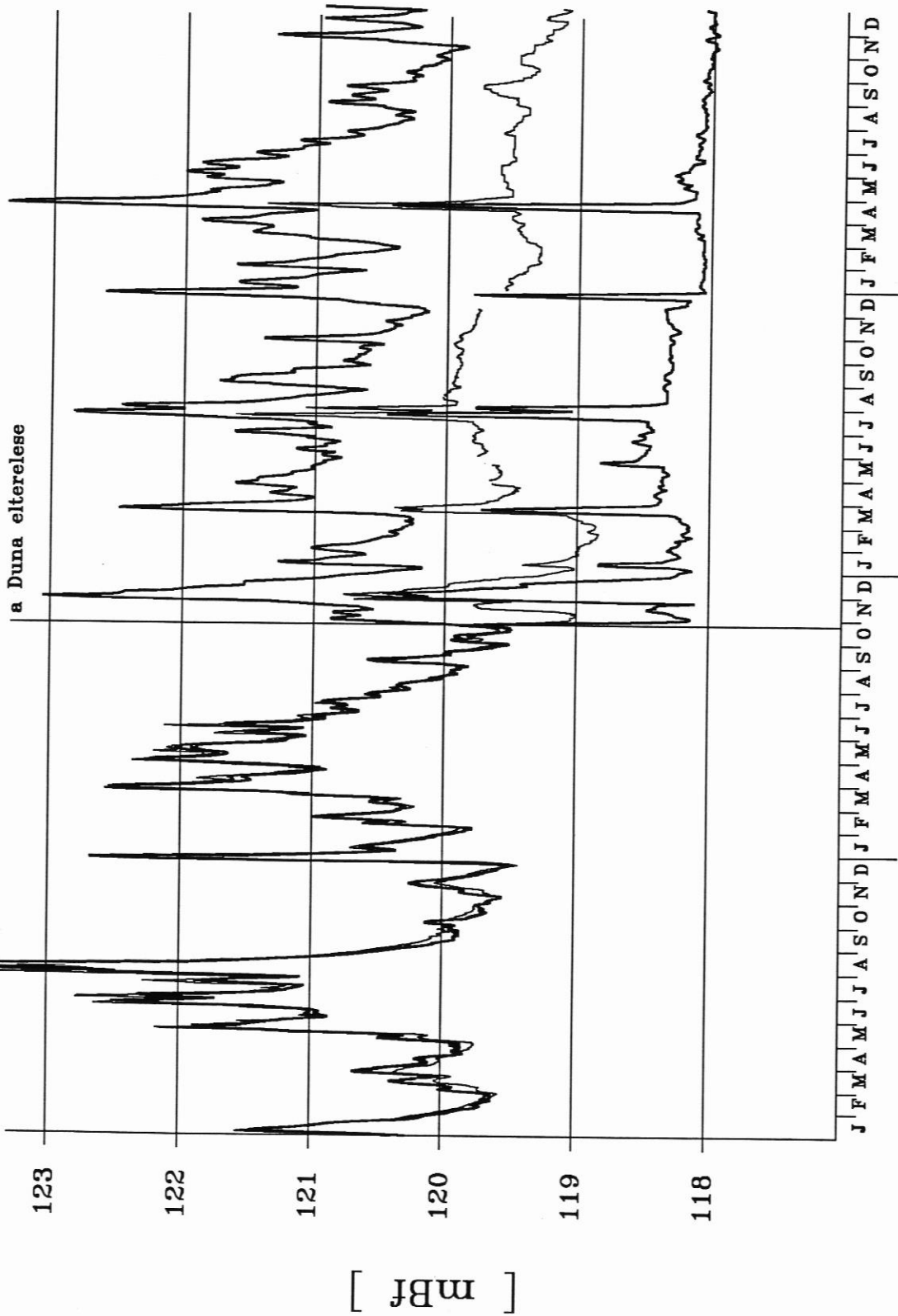


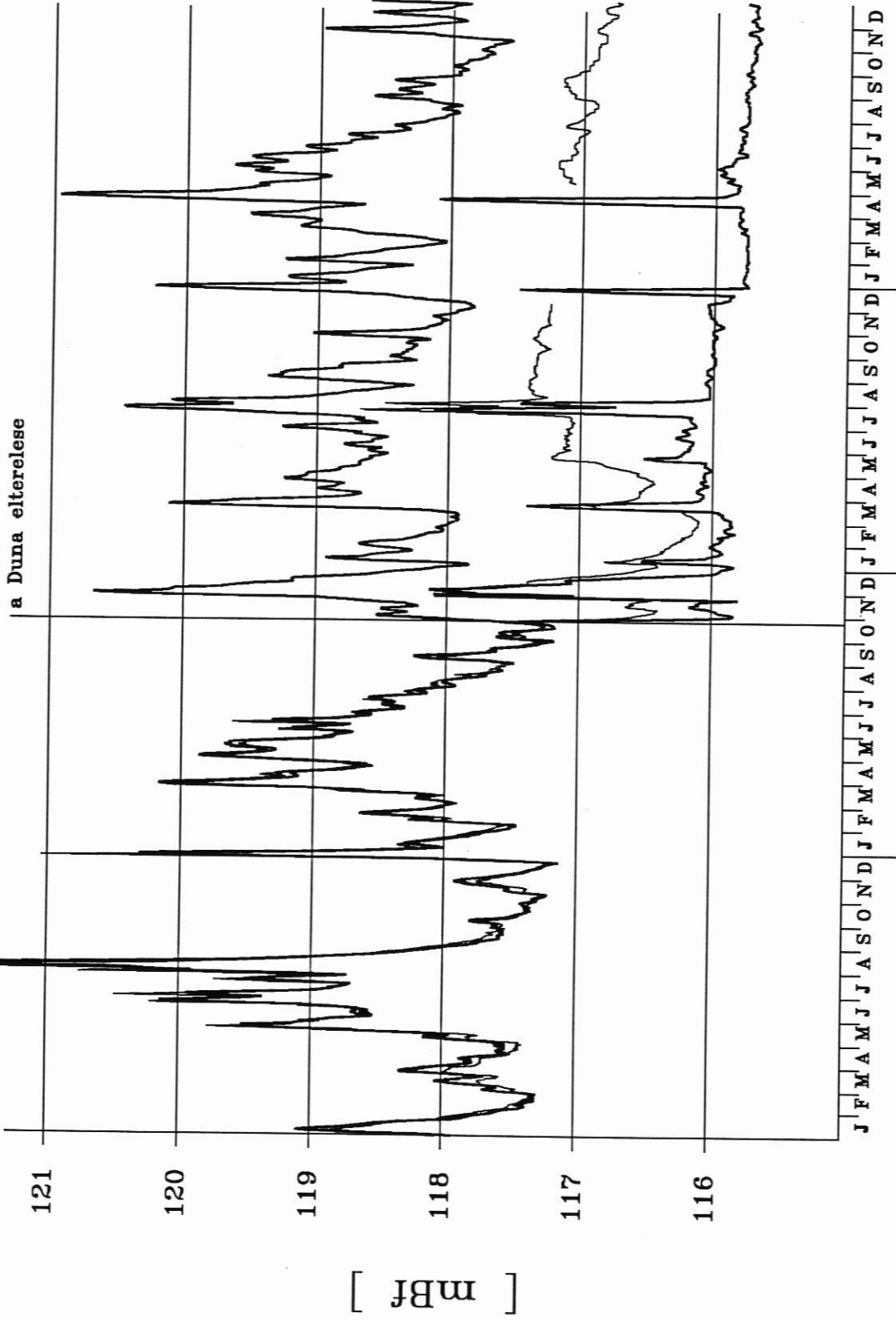
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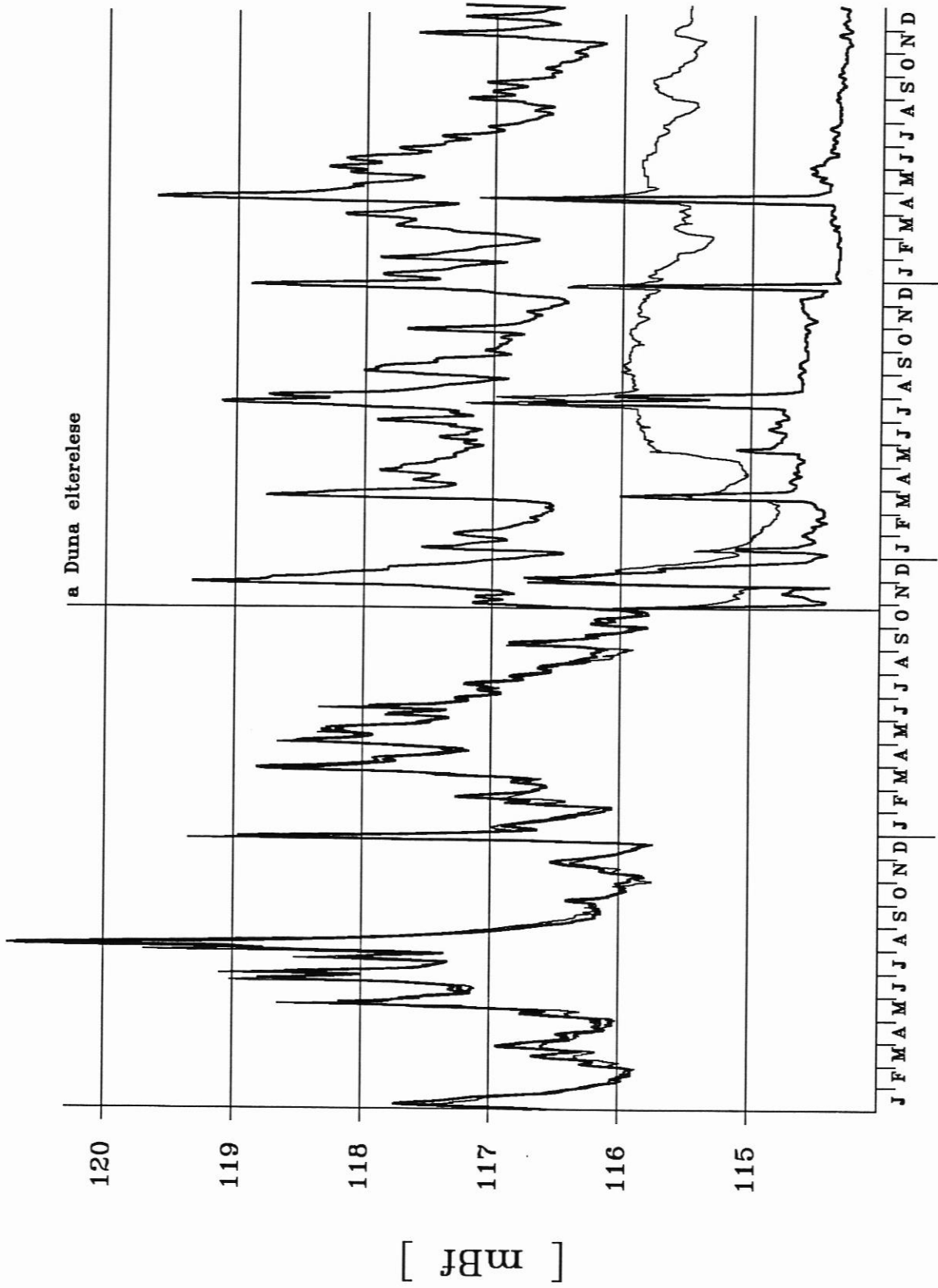
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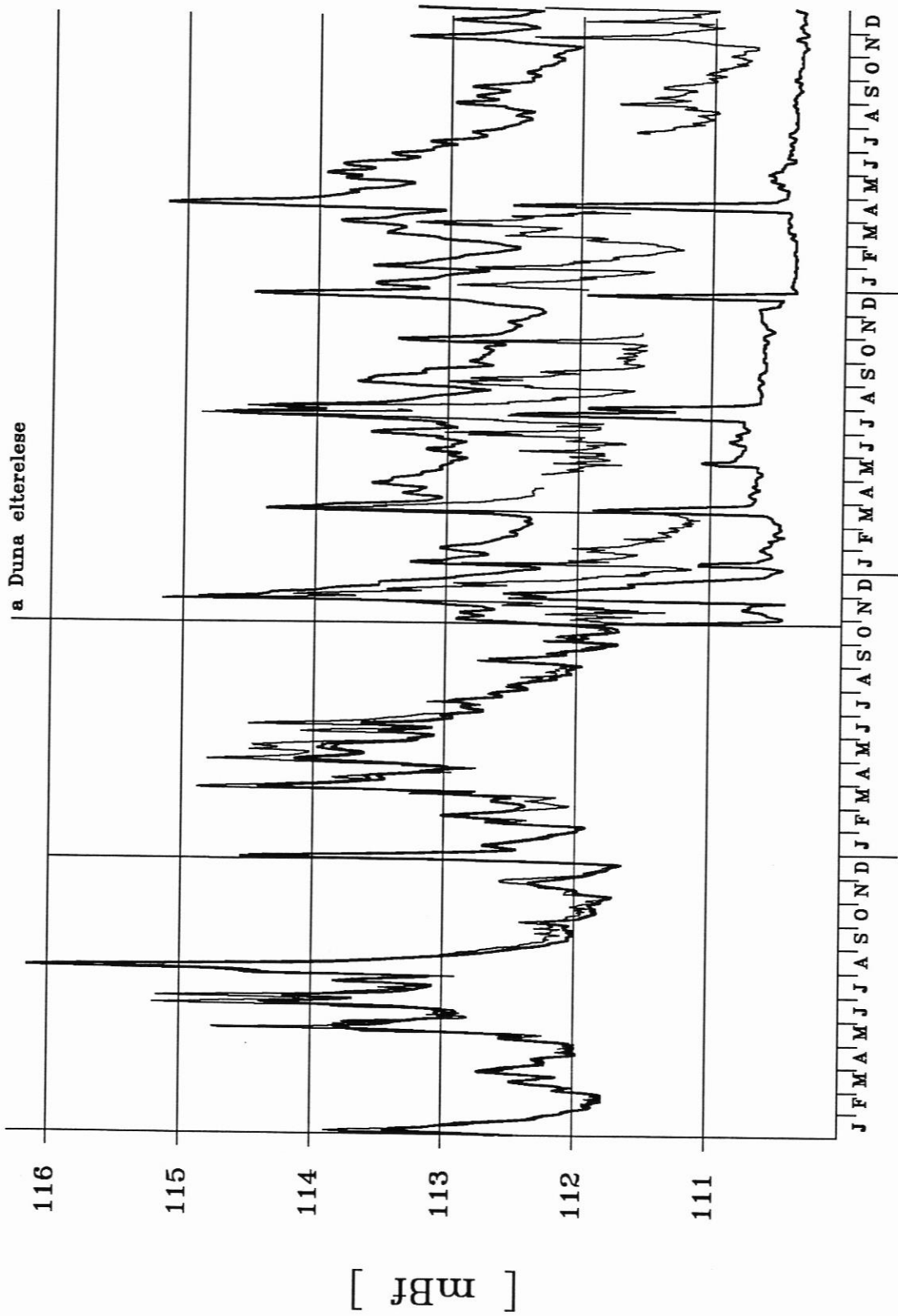




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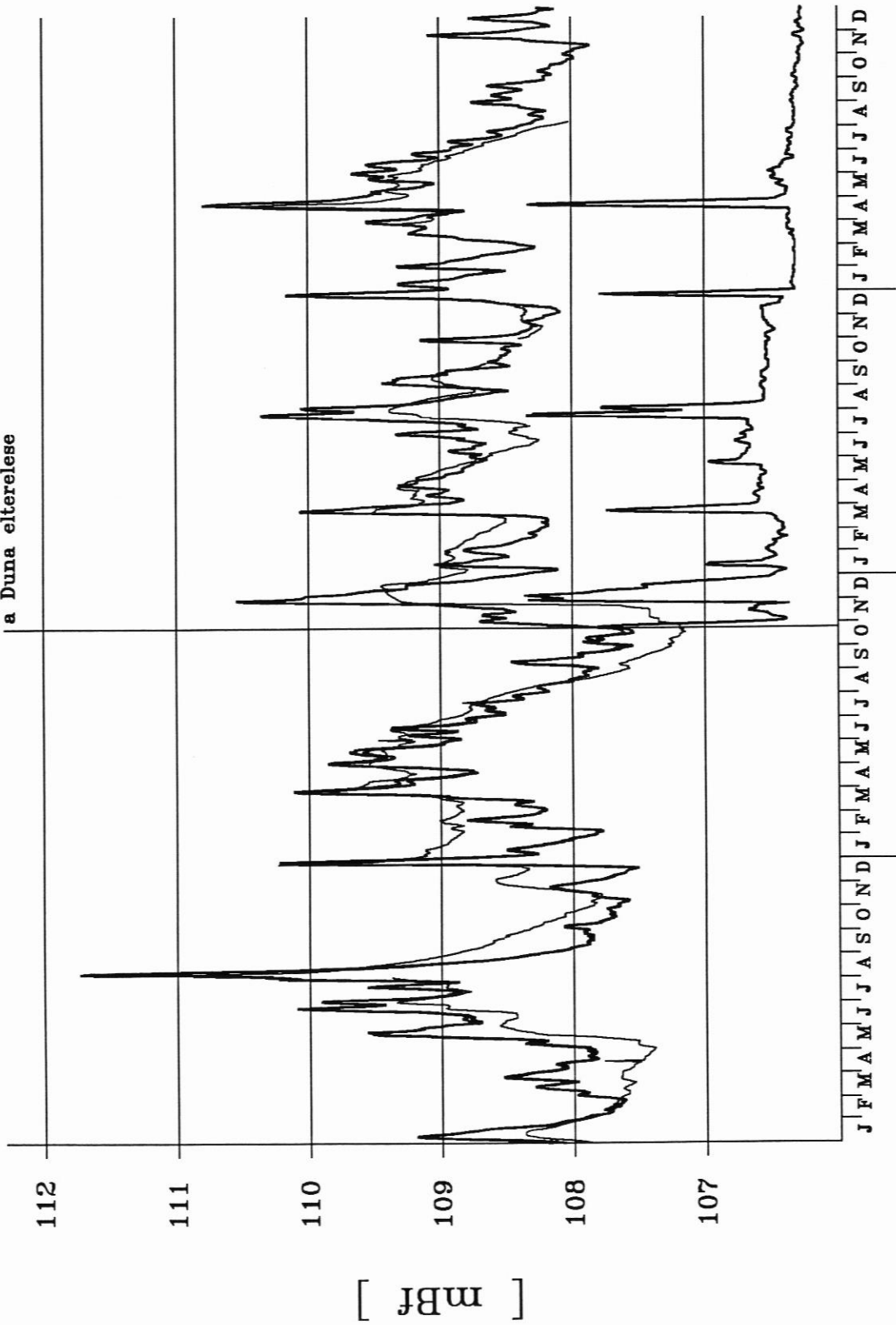
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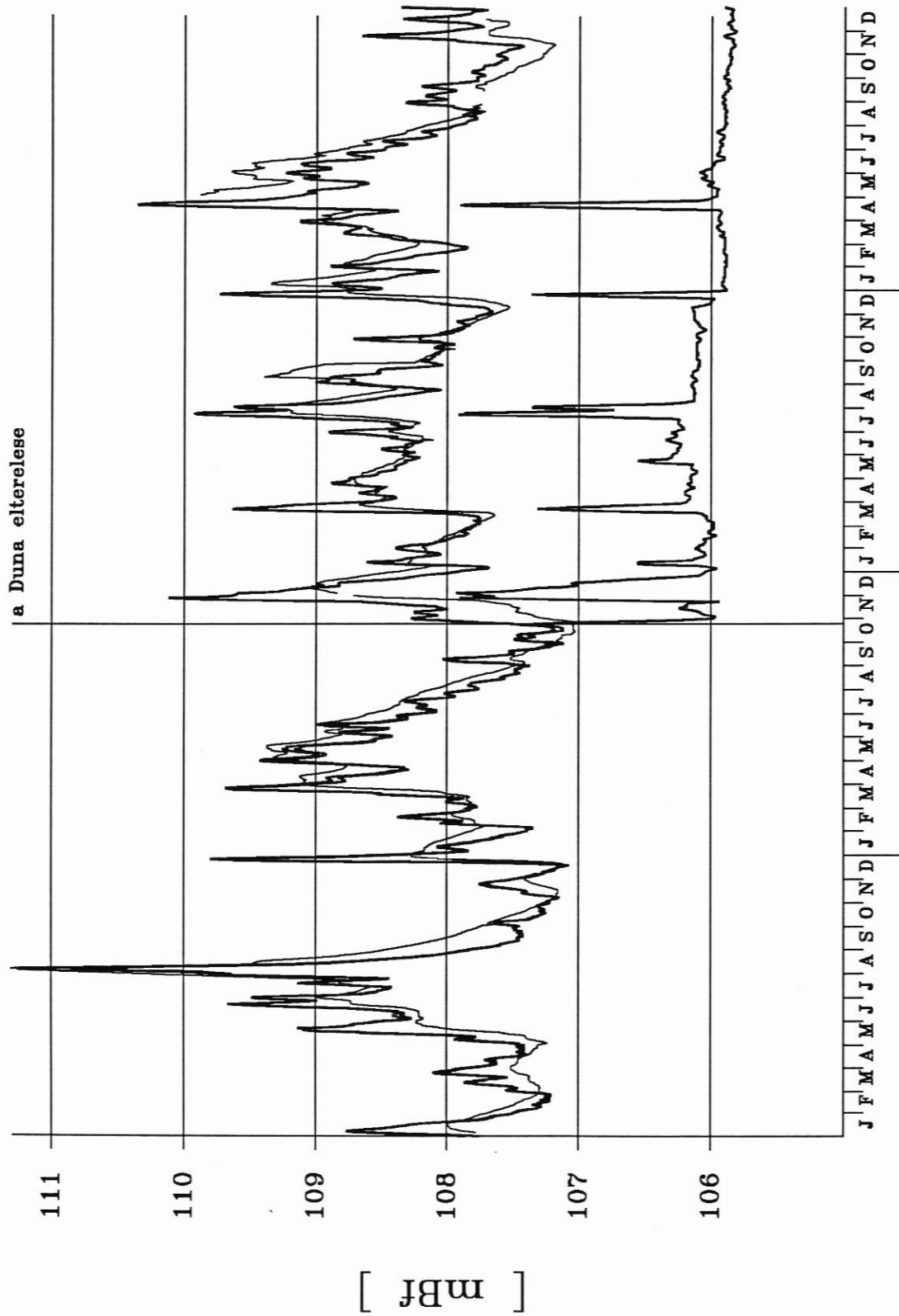




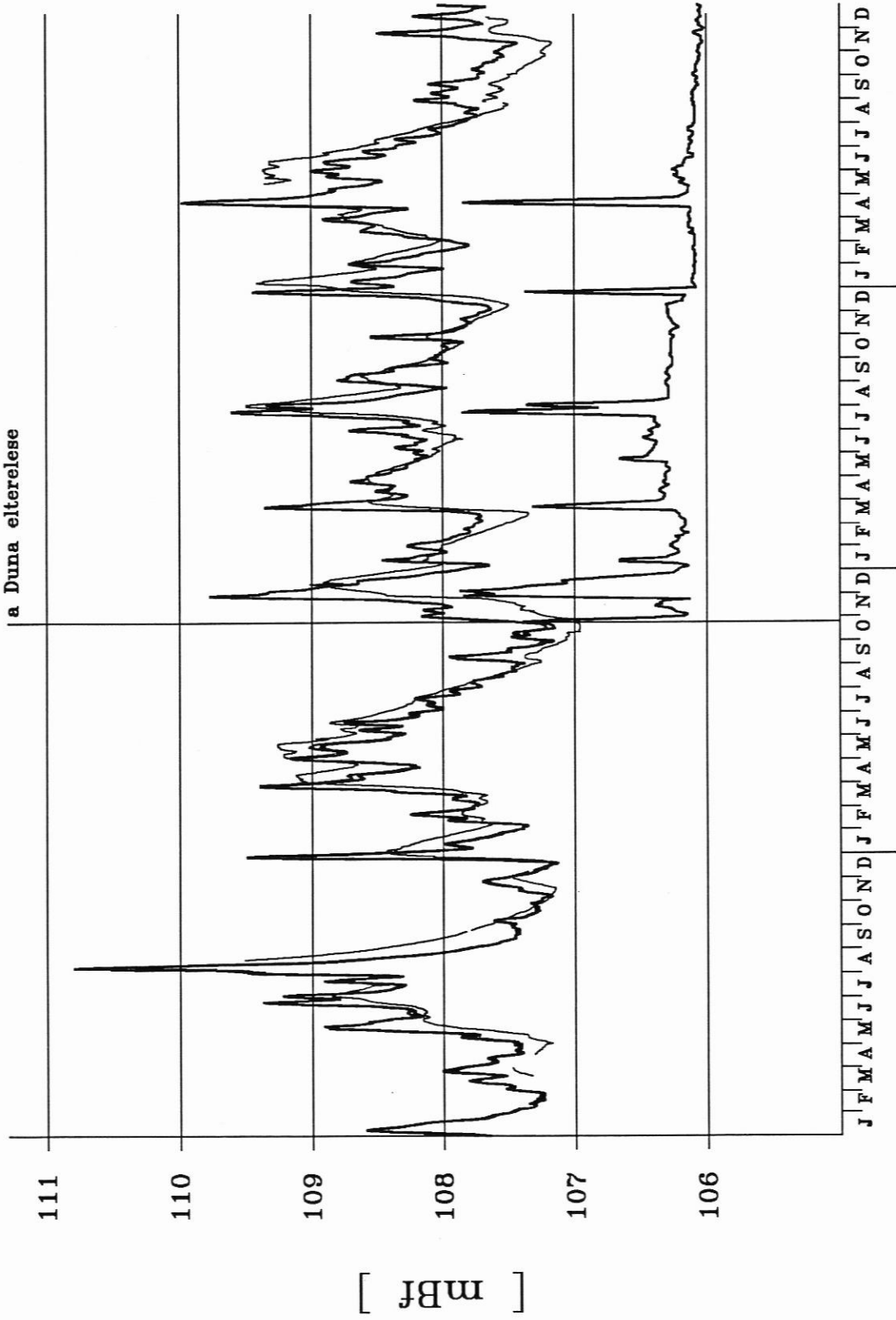
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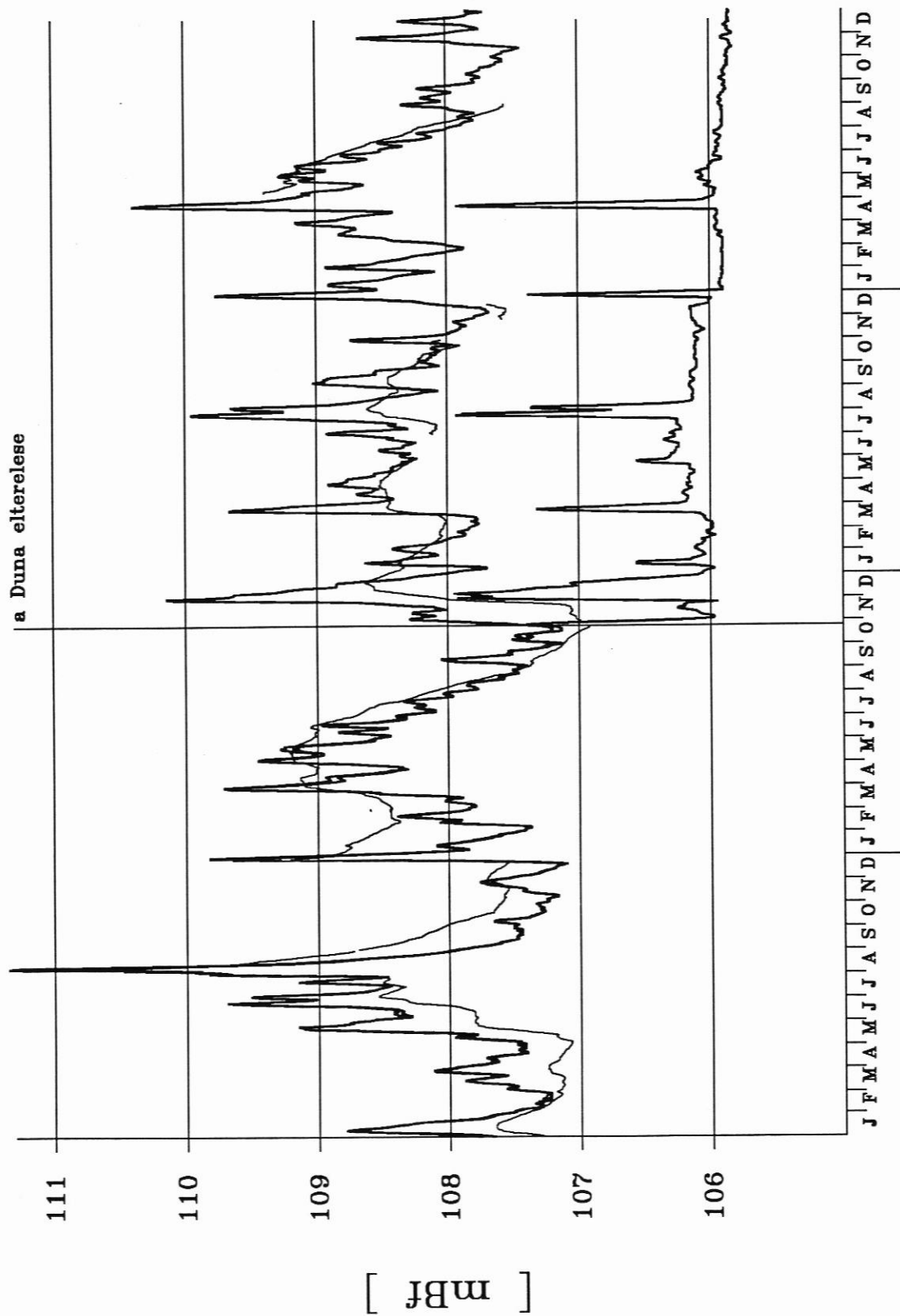
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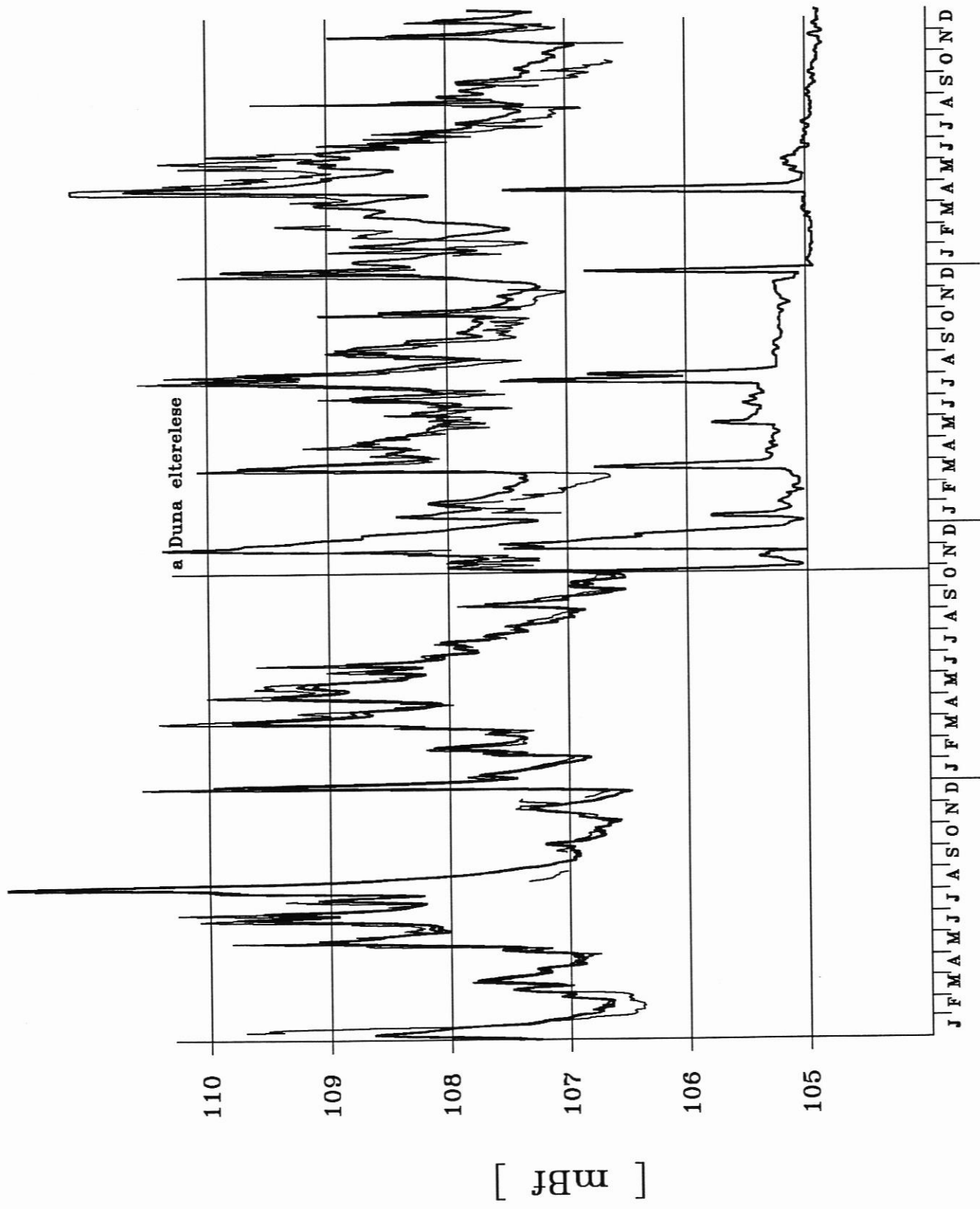




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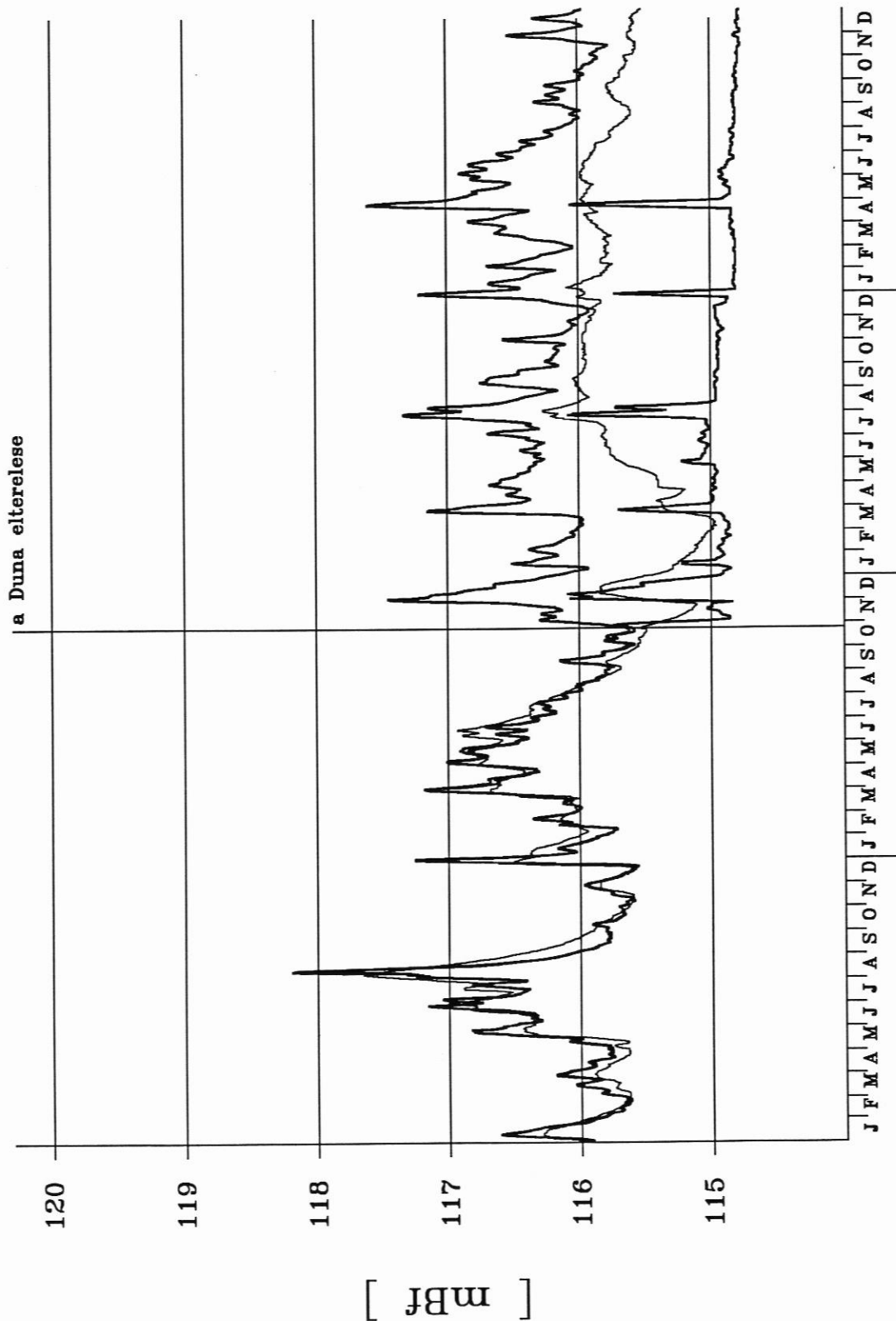






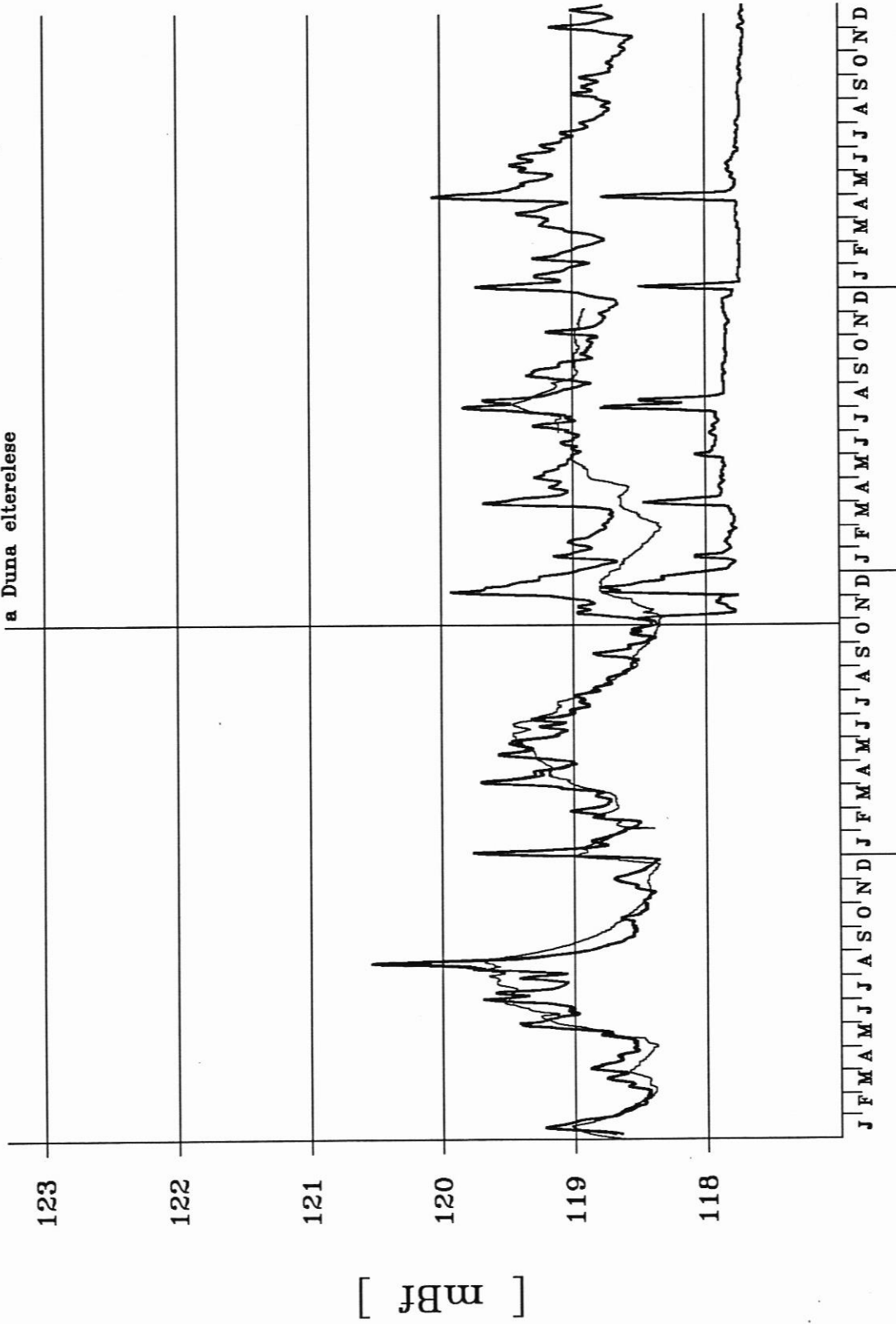
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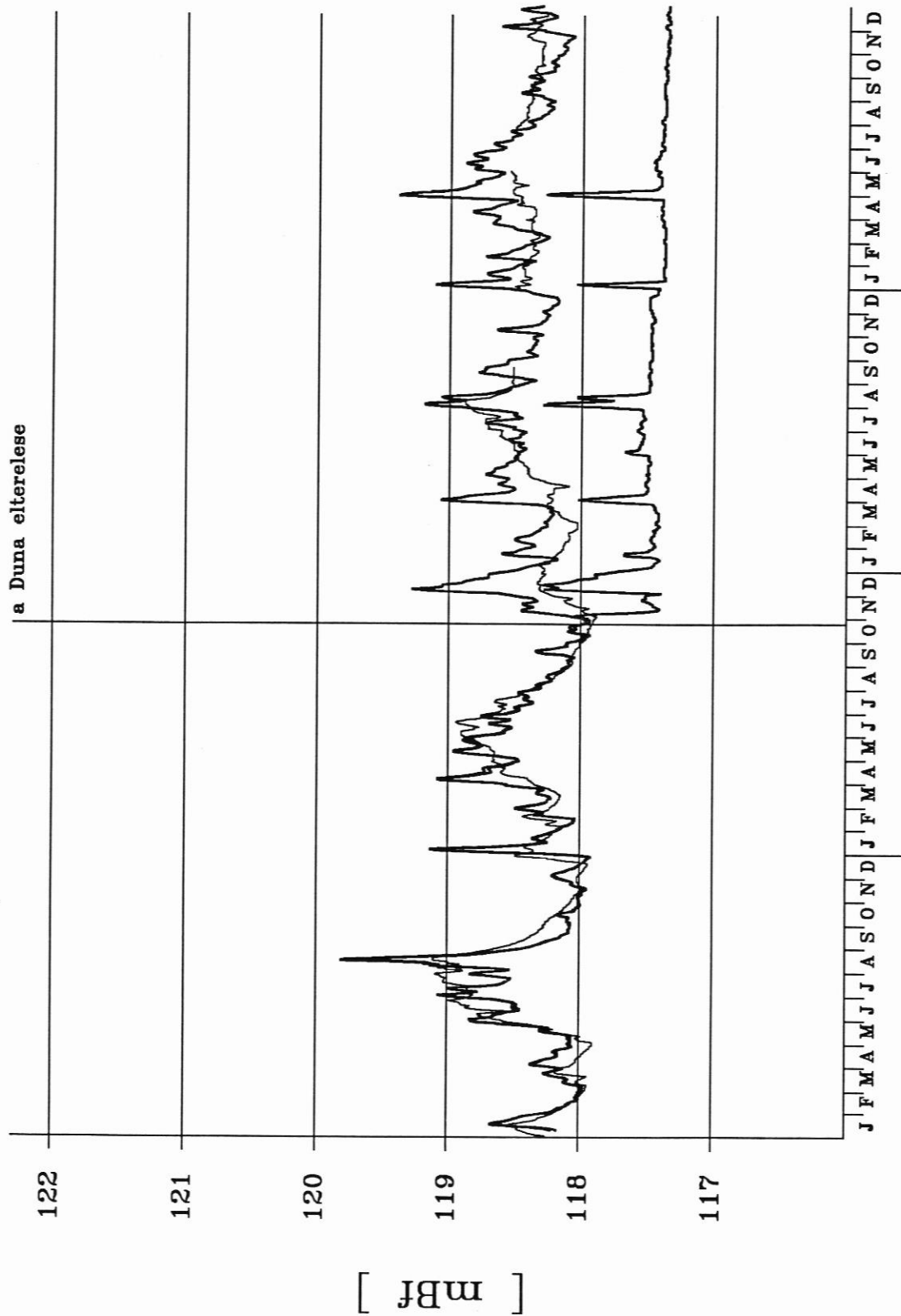


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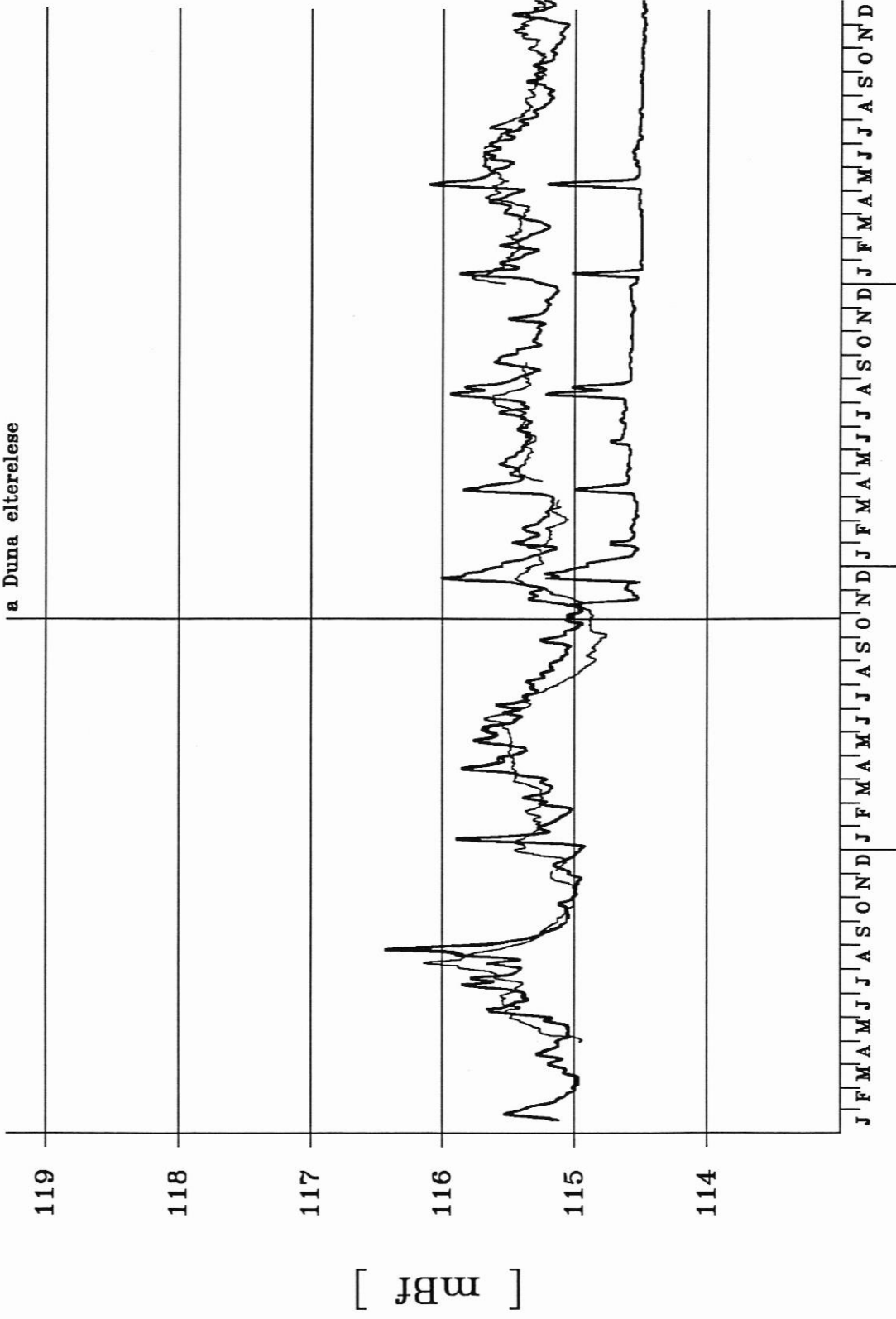


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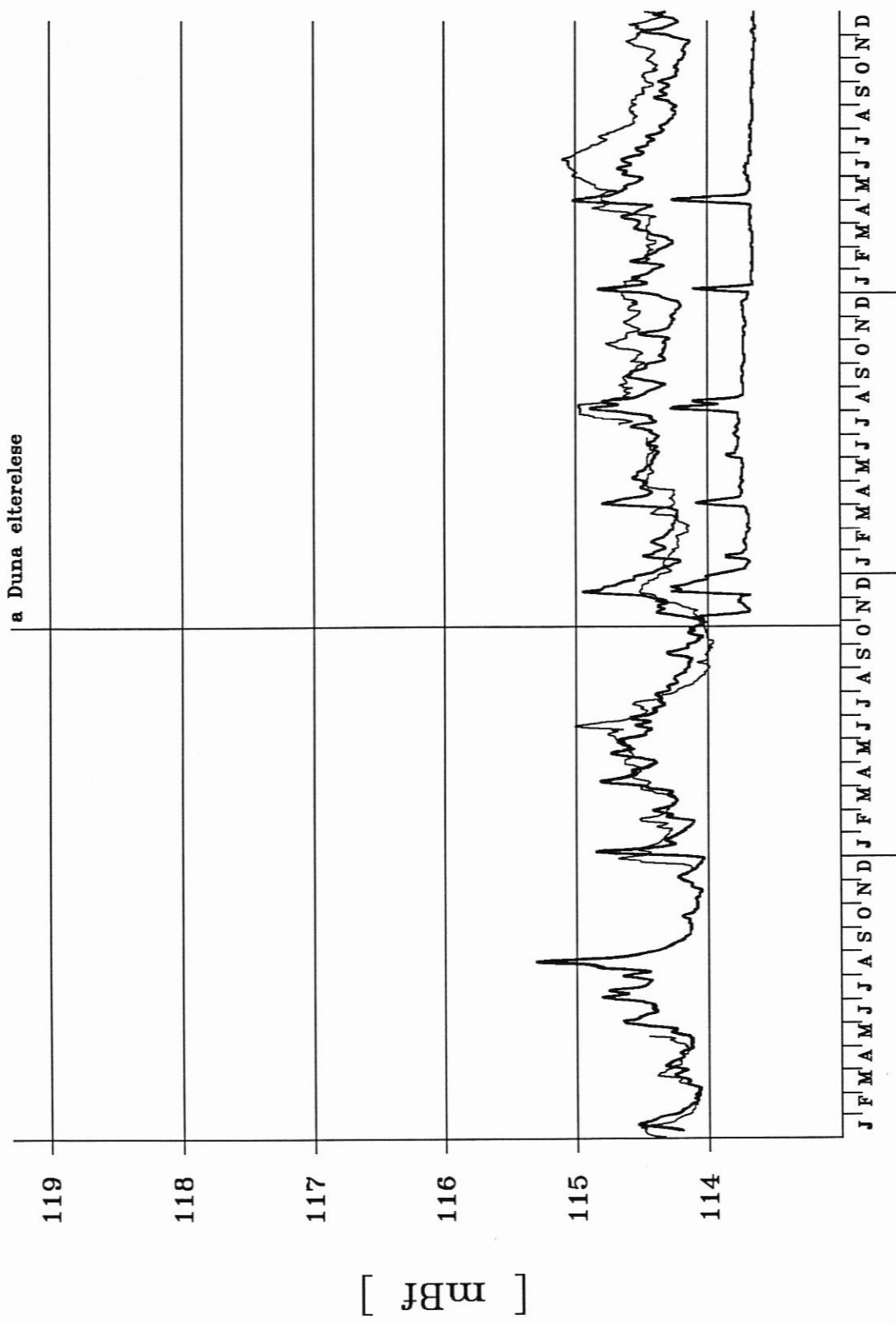


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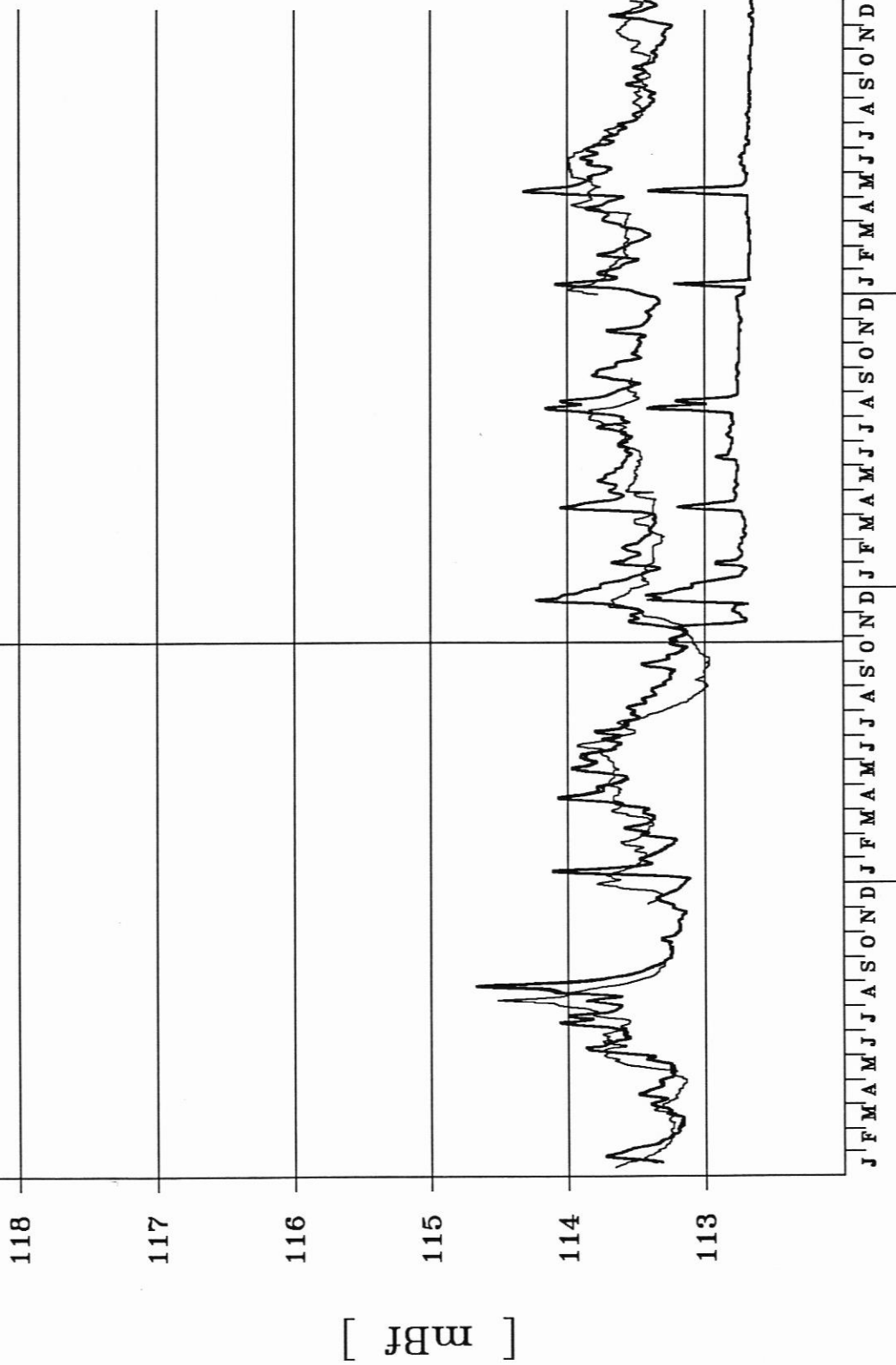
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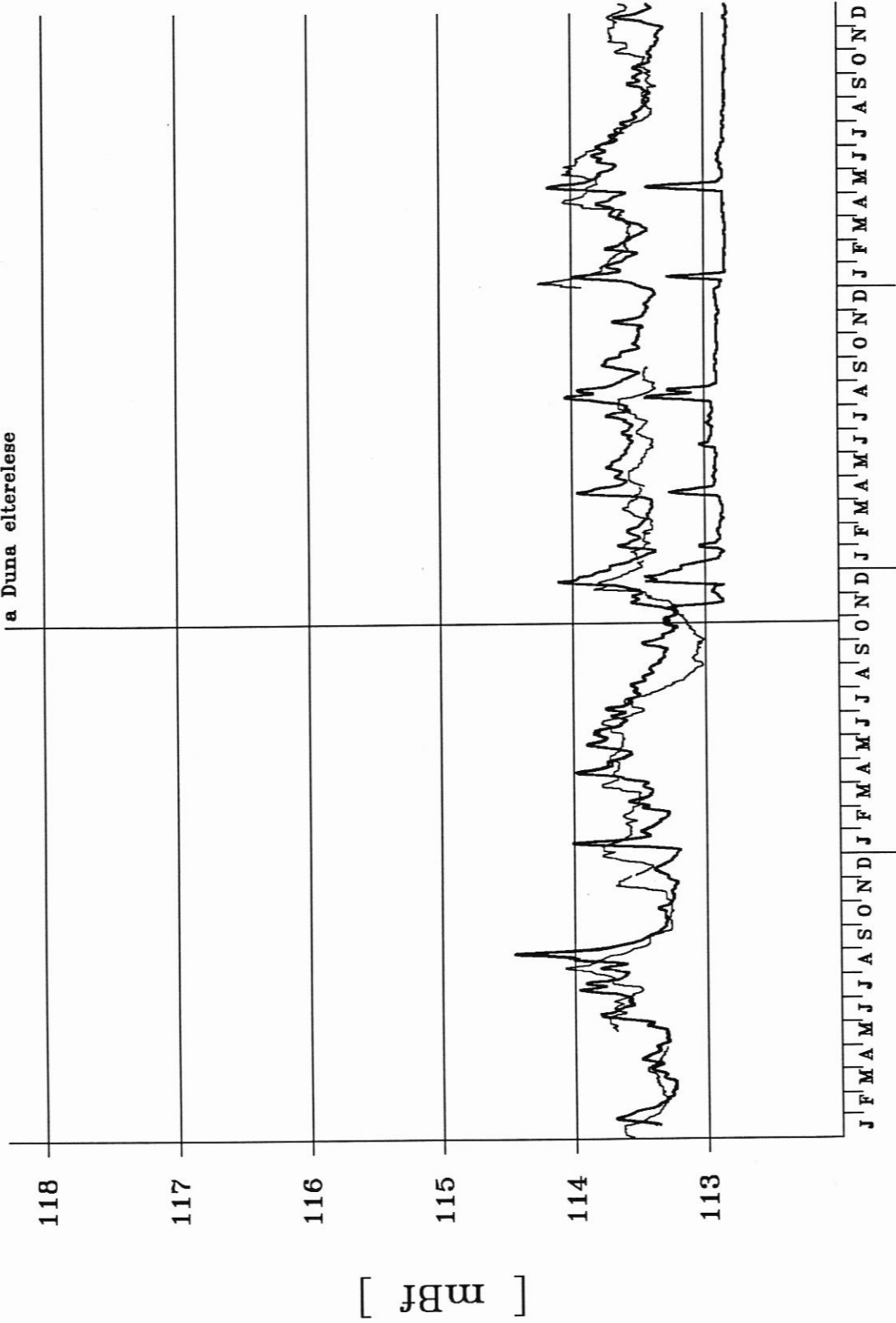


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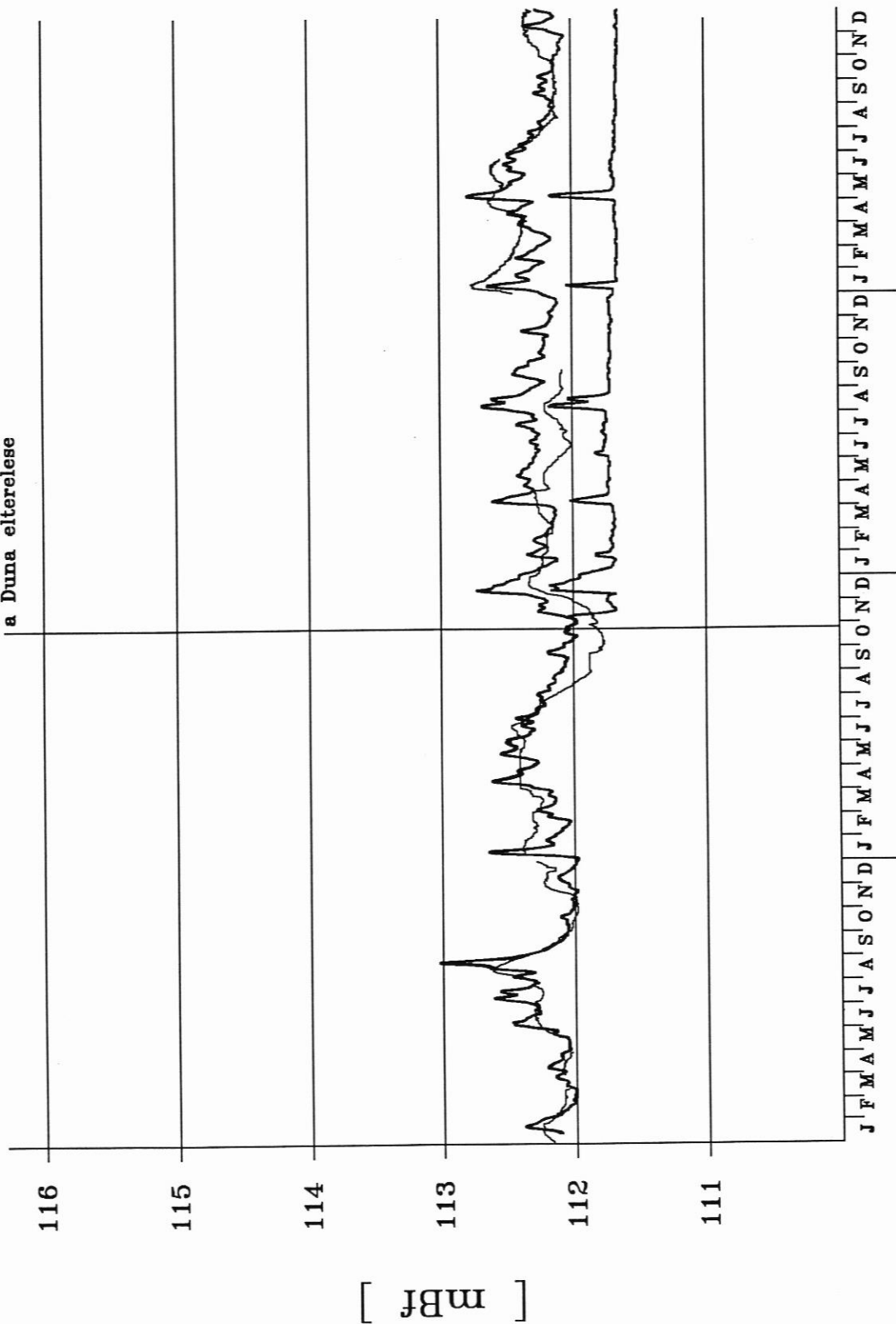
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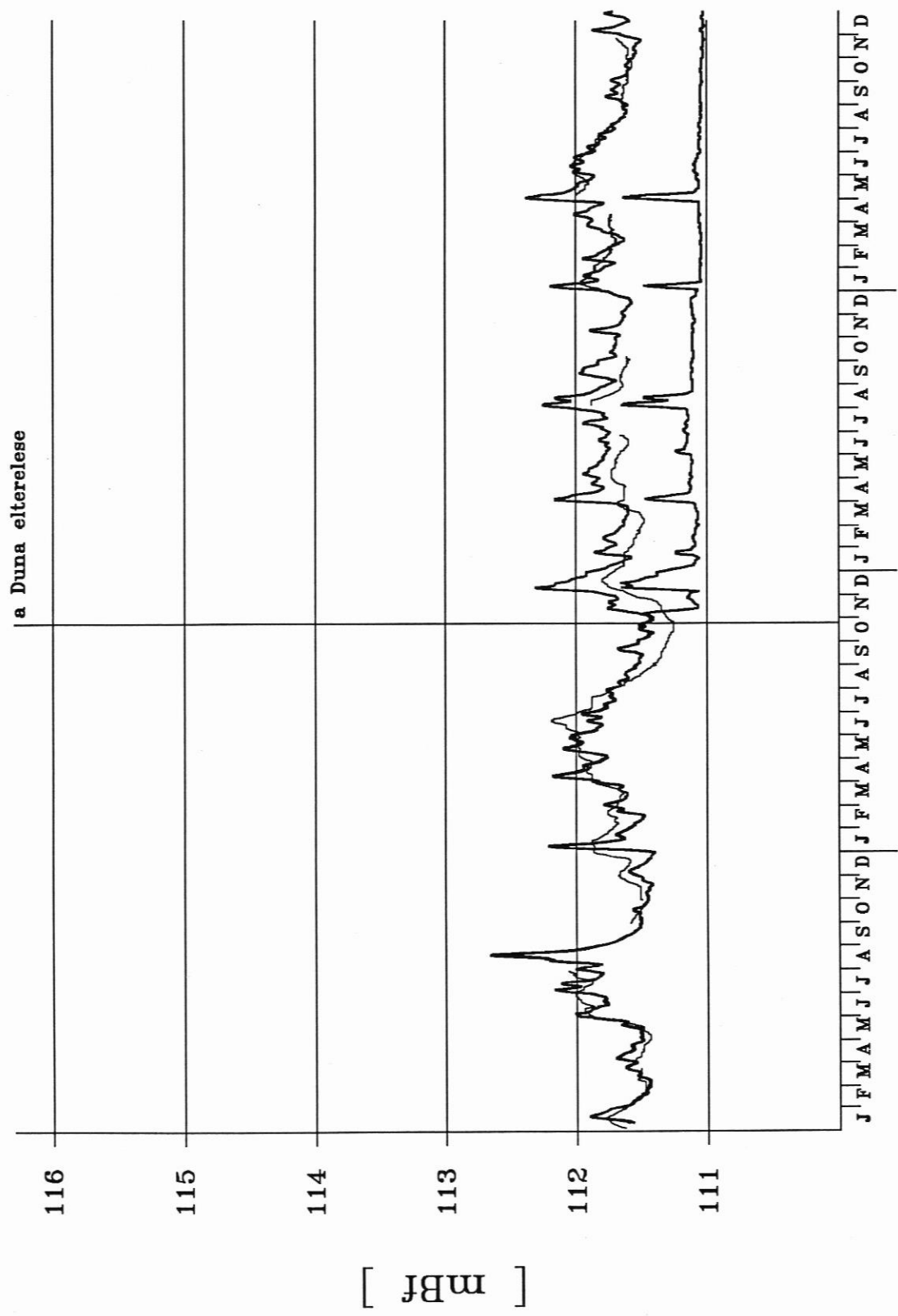


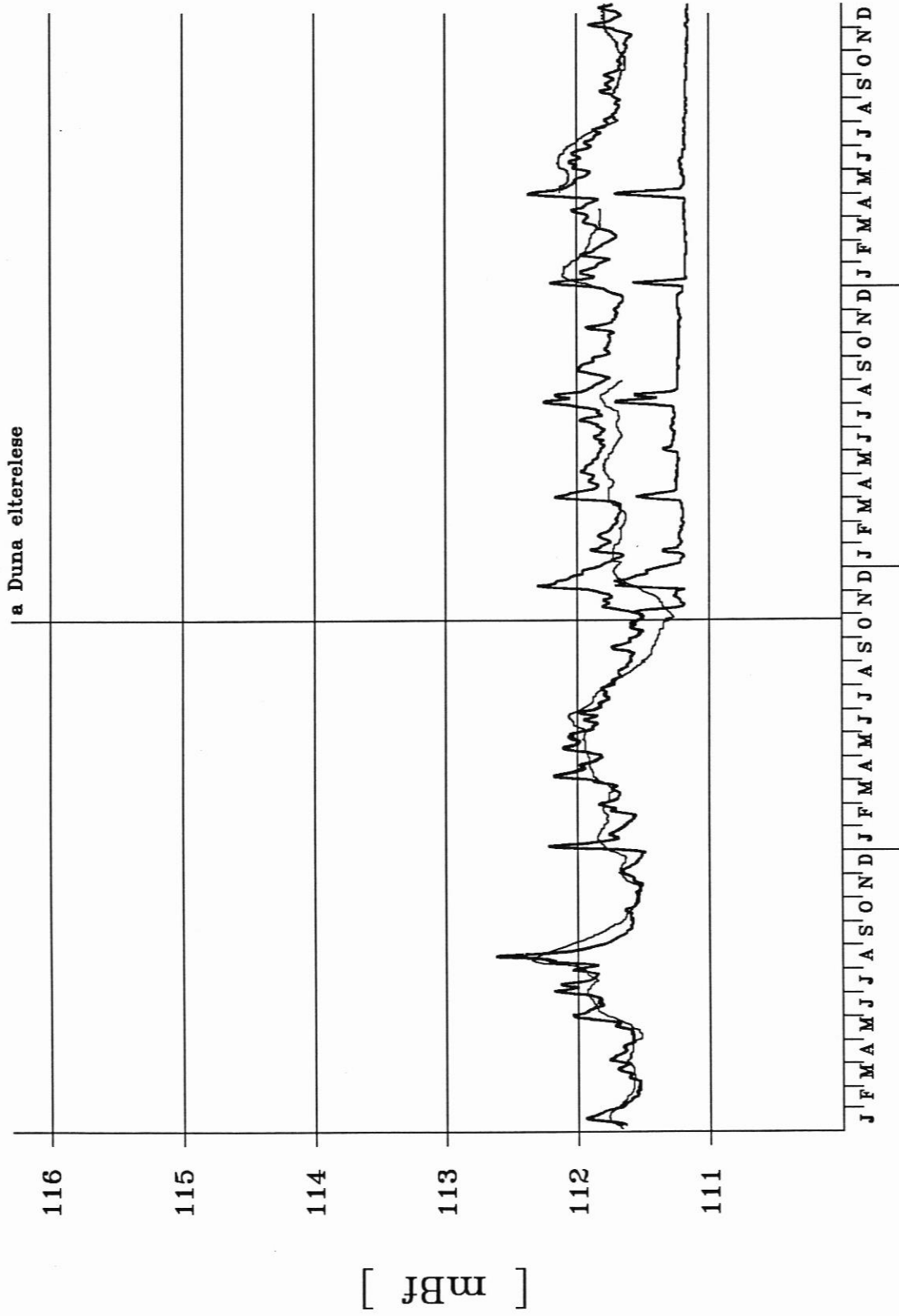
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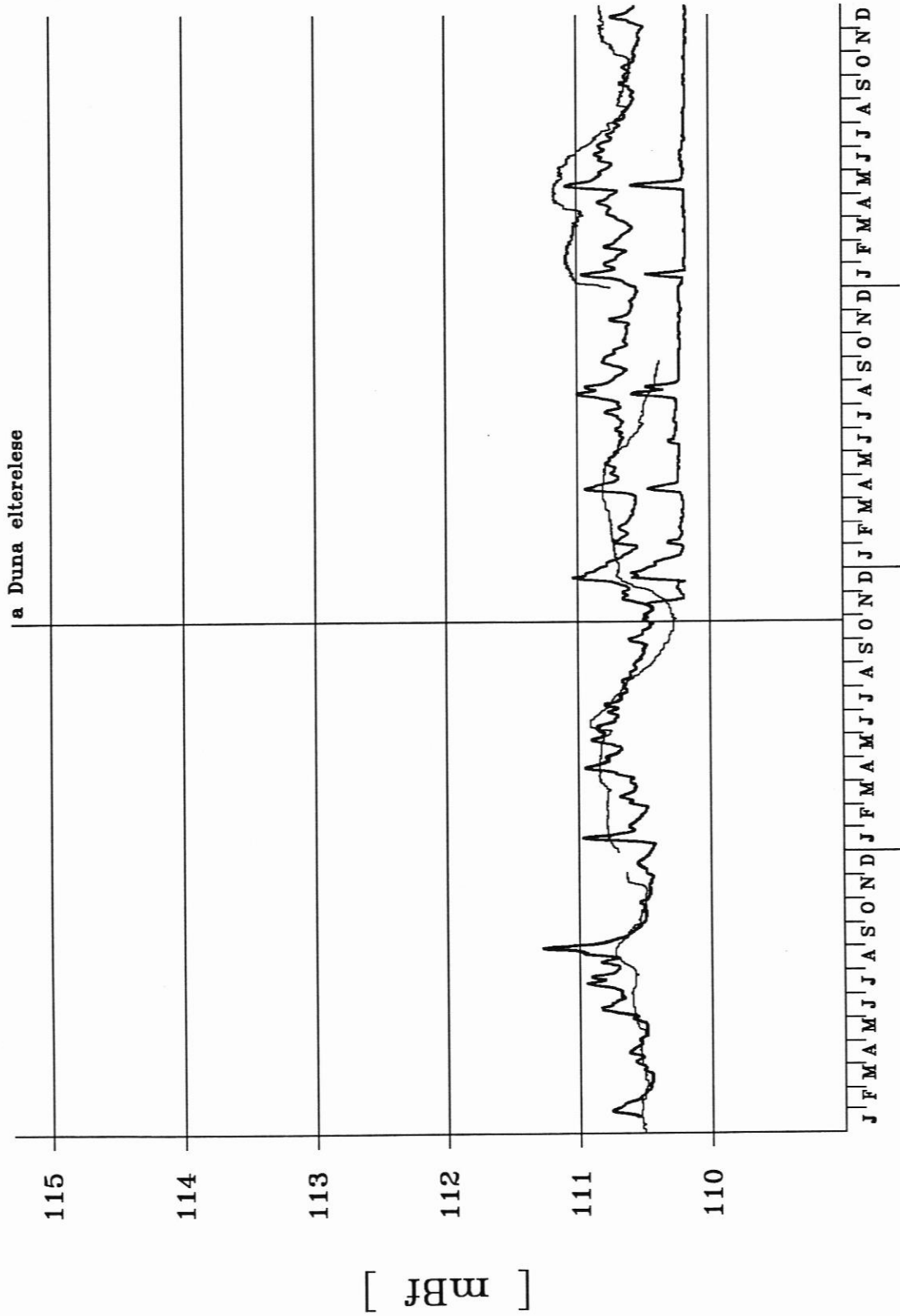
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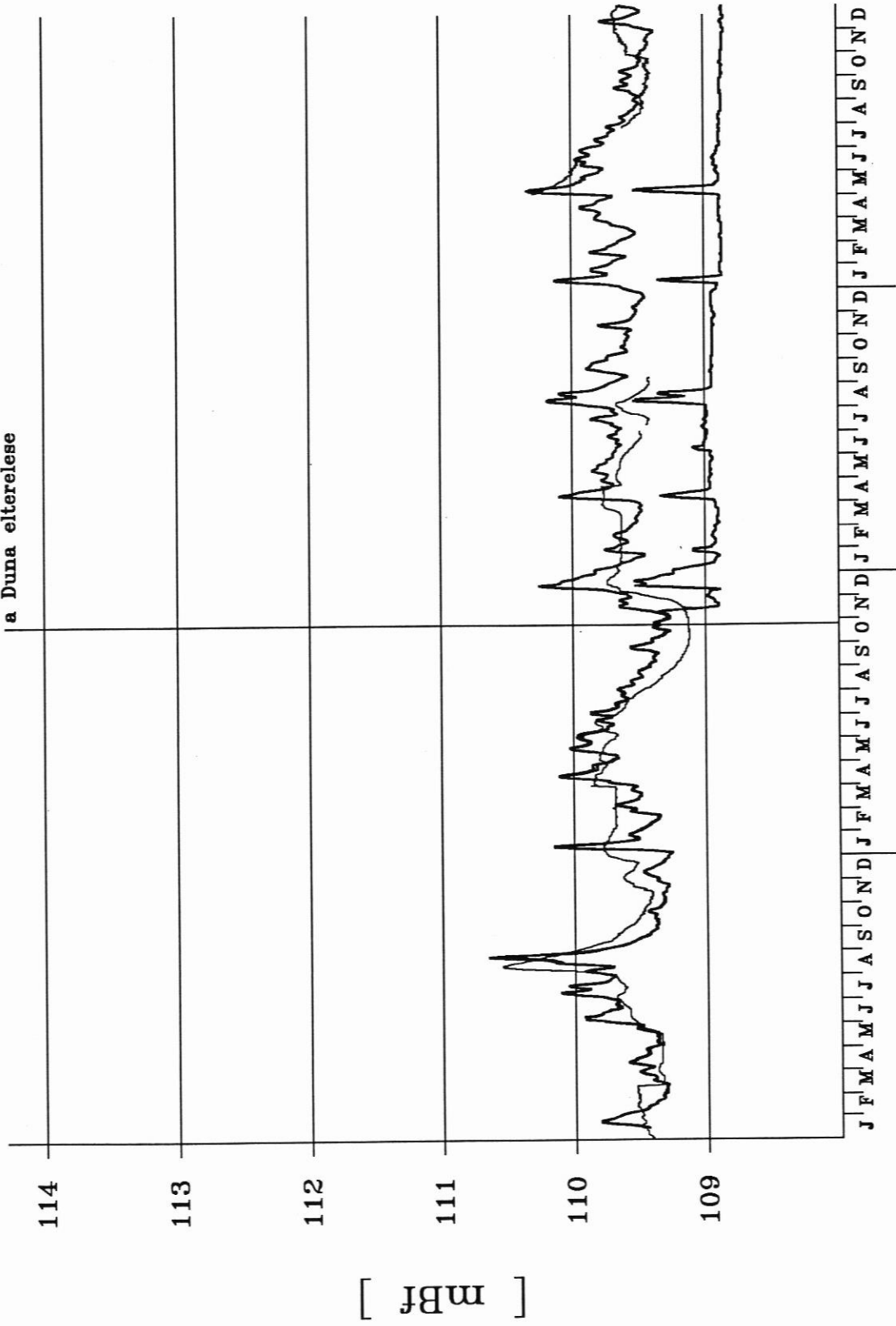
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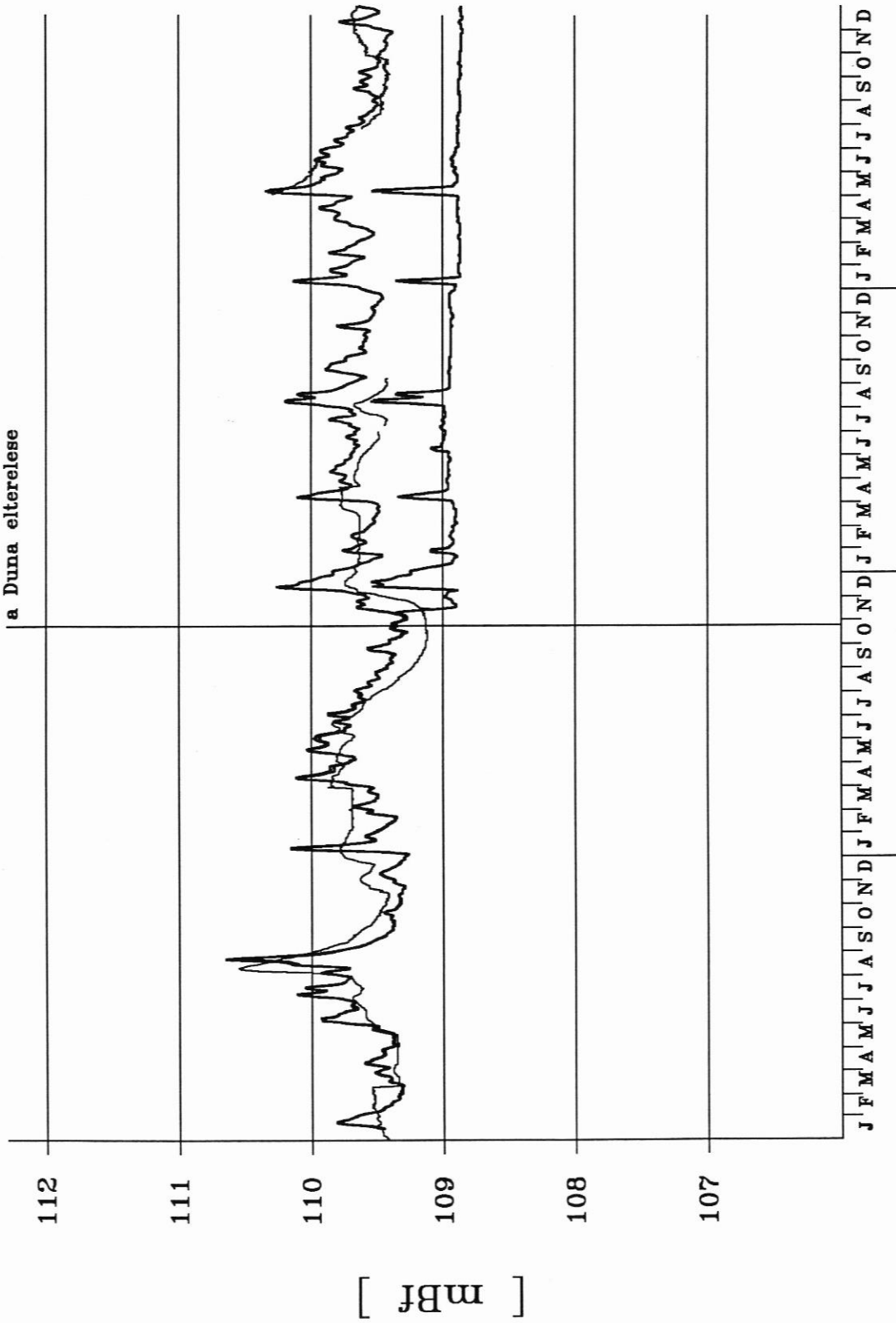




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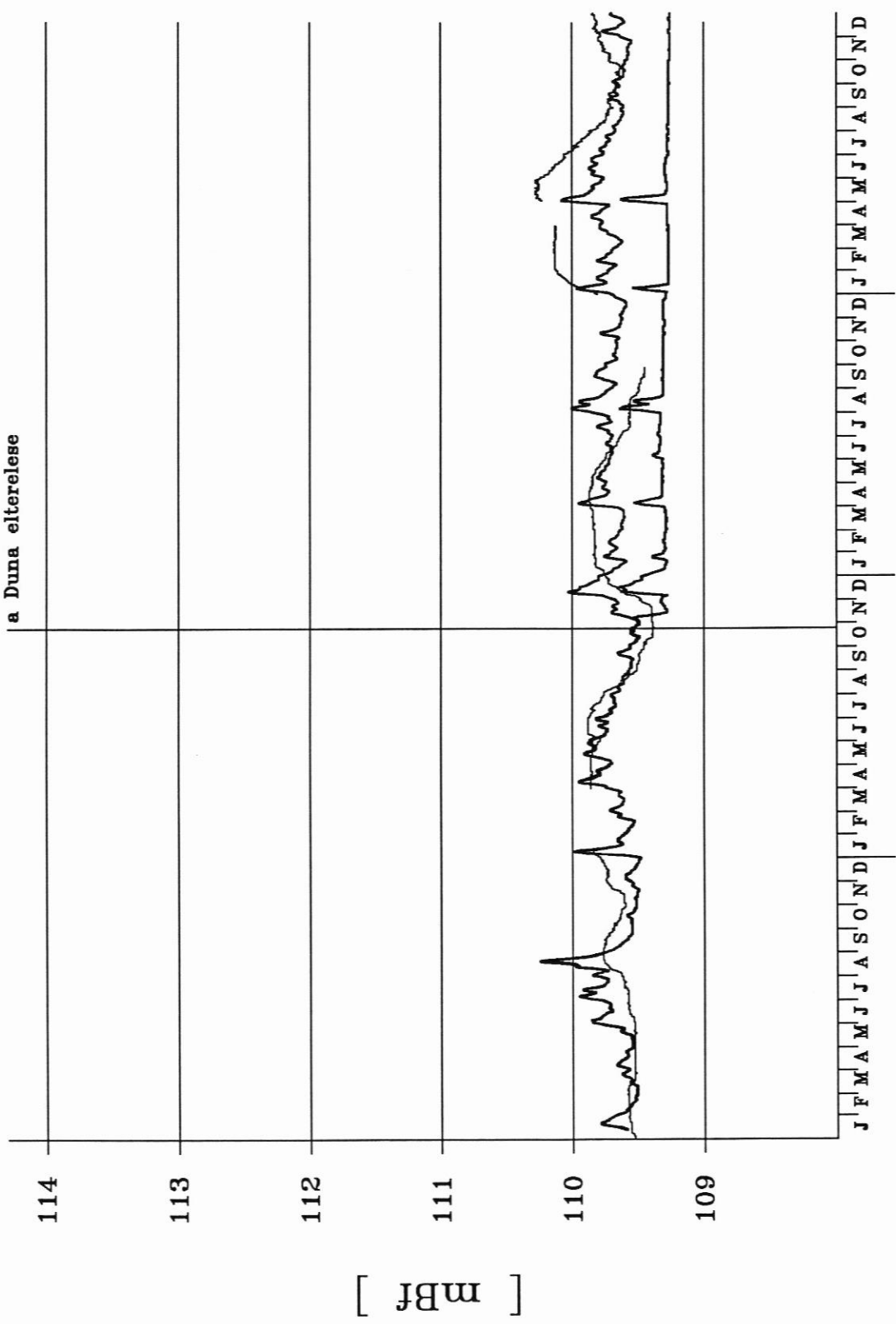


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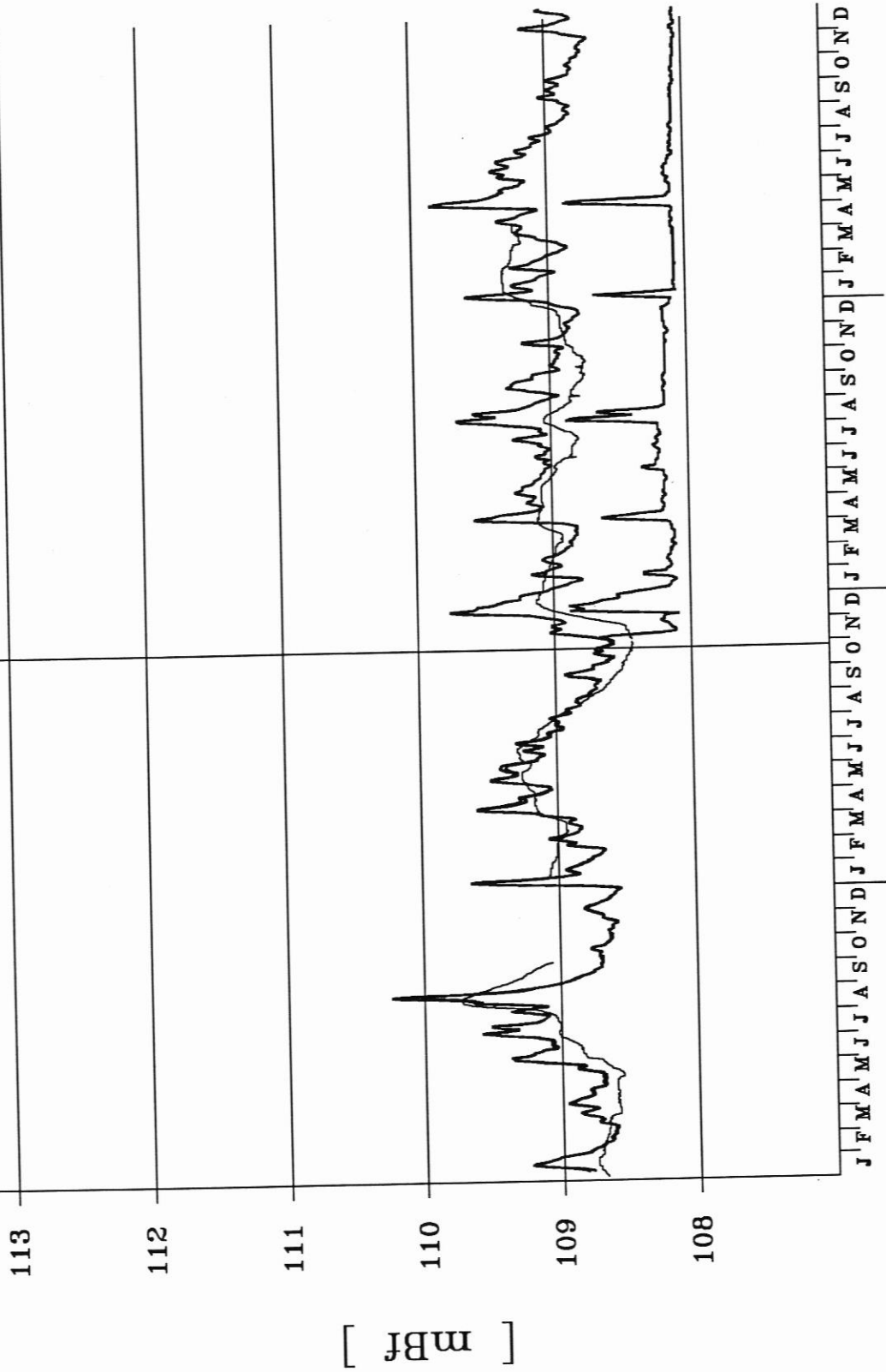
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