電離層觀測記錄

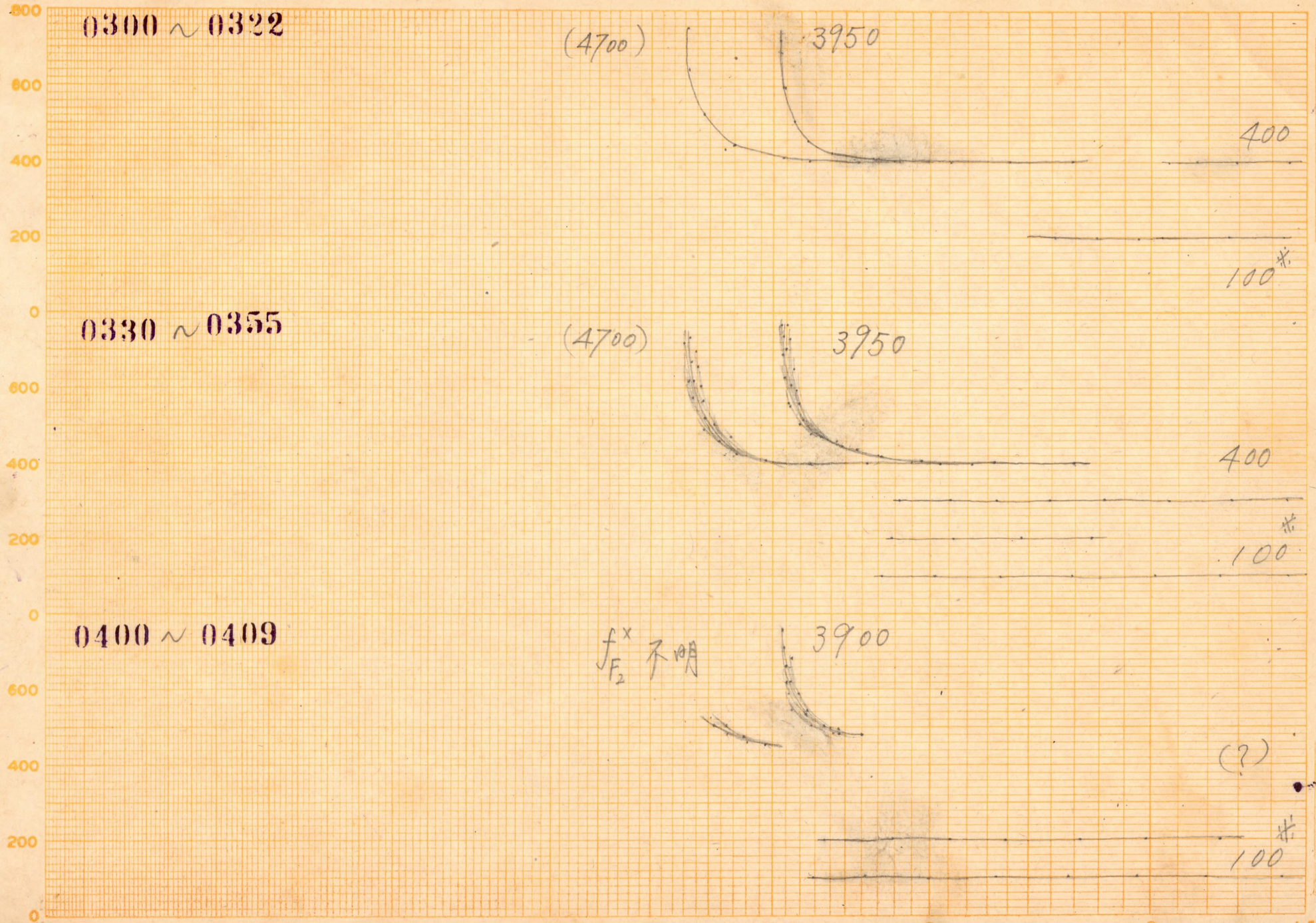
昭和十九年六月

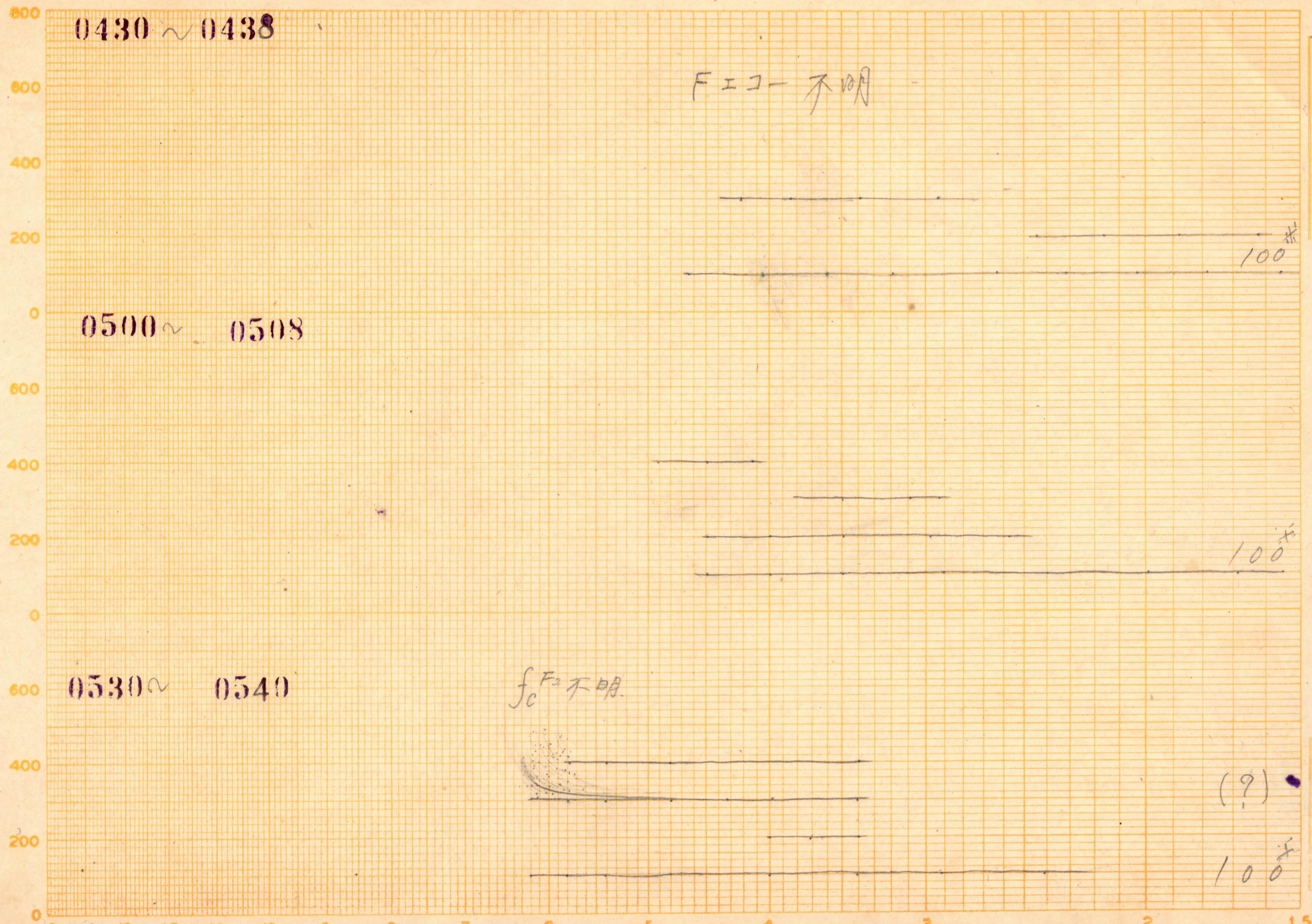
幌　筵

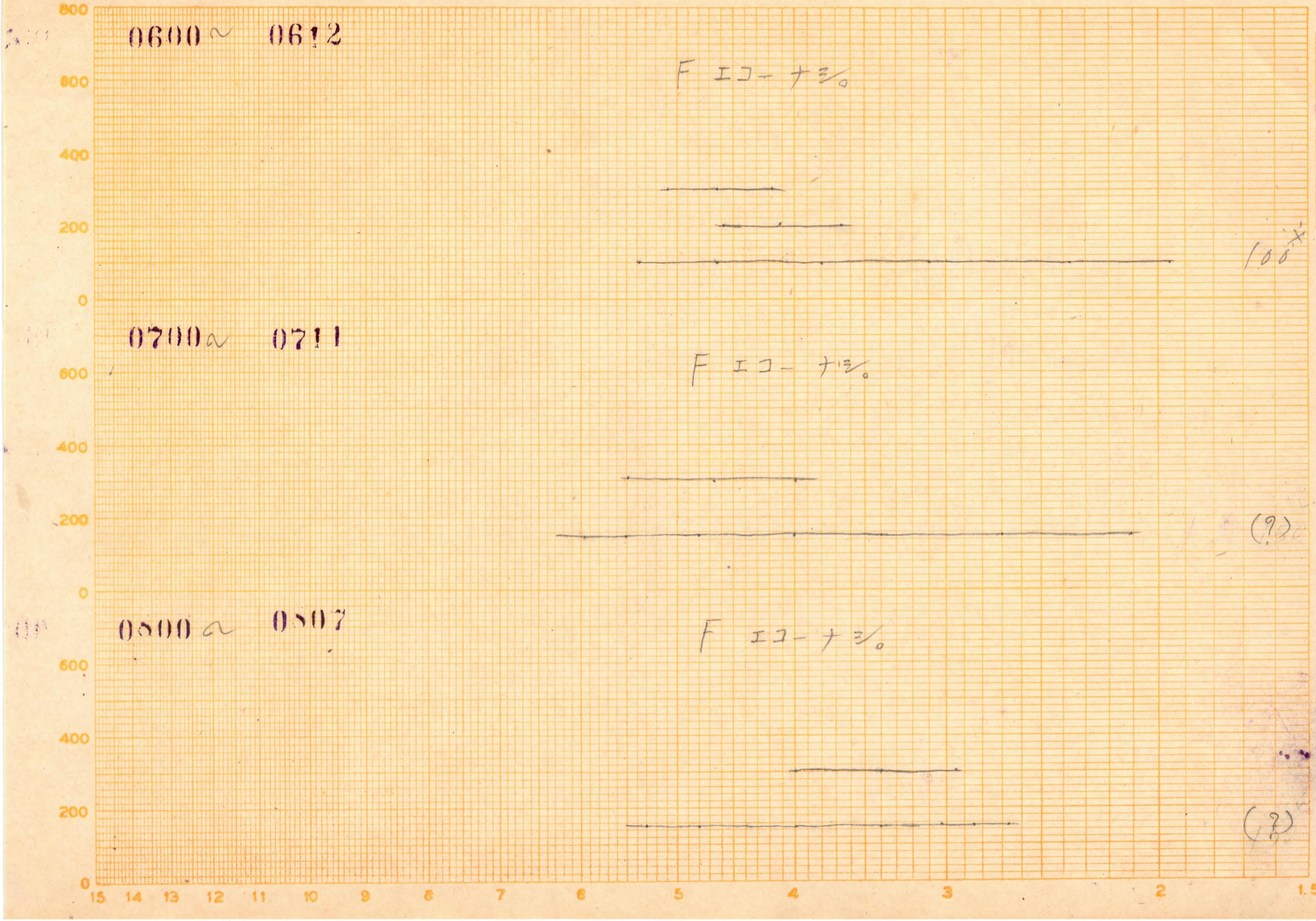
I(524.
8)
328

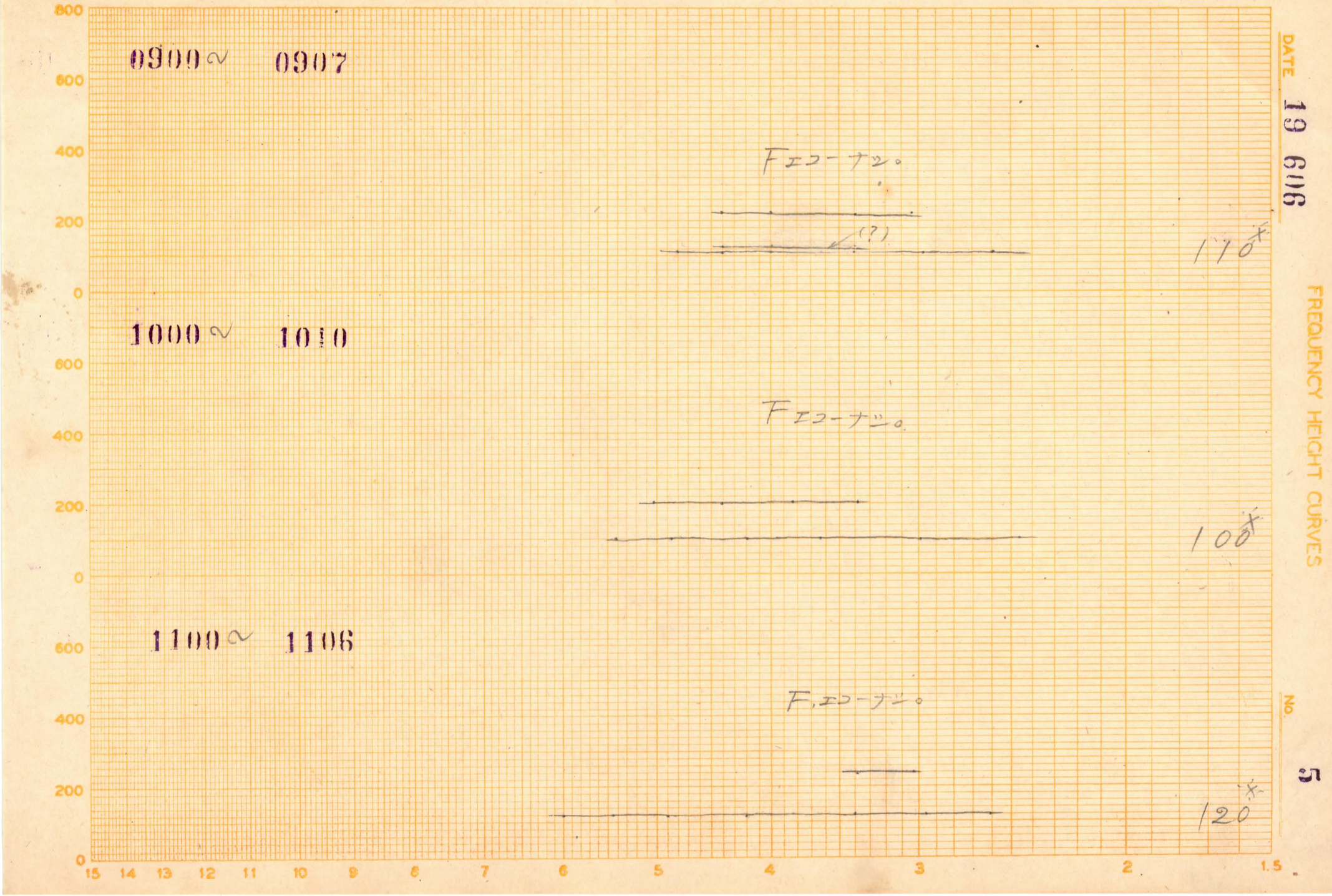
328

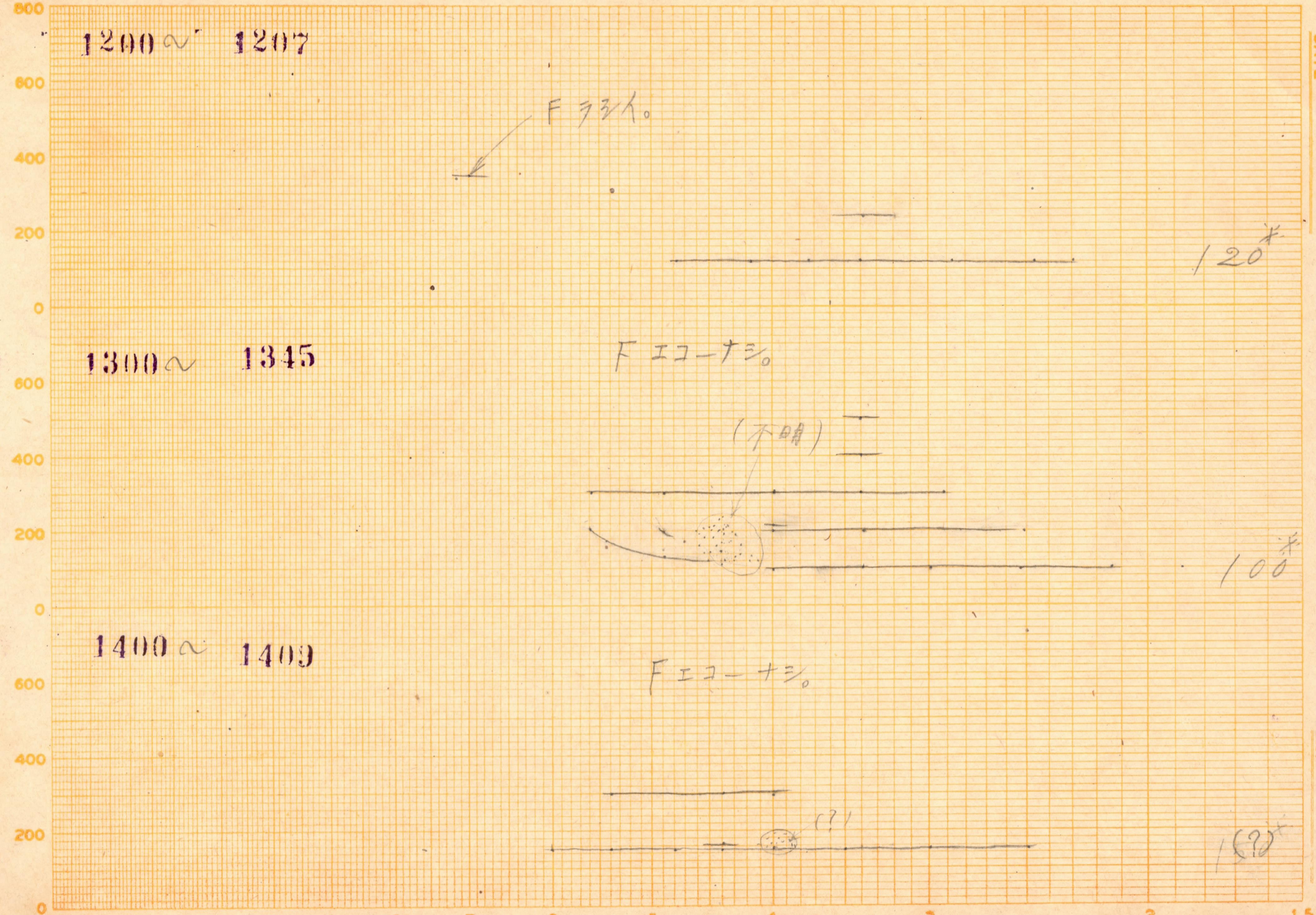
0130～
0200～
0230～
送信機ノ發振不良ニテ
調整ス。
（〇二五七調整完了）
DATE 19 6 16
FREQUENCY HEIGHT CURVES
No. 1
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5

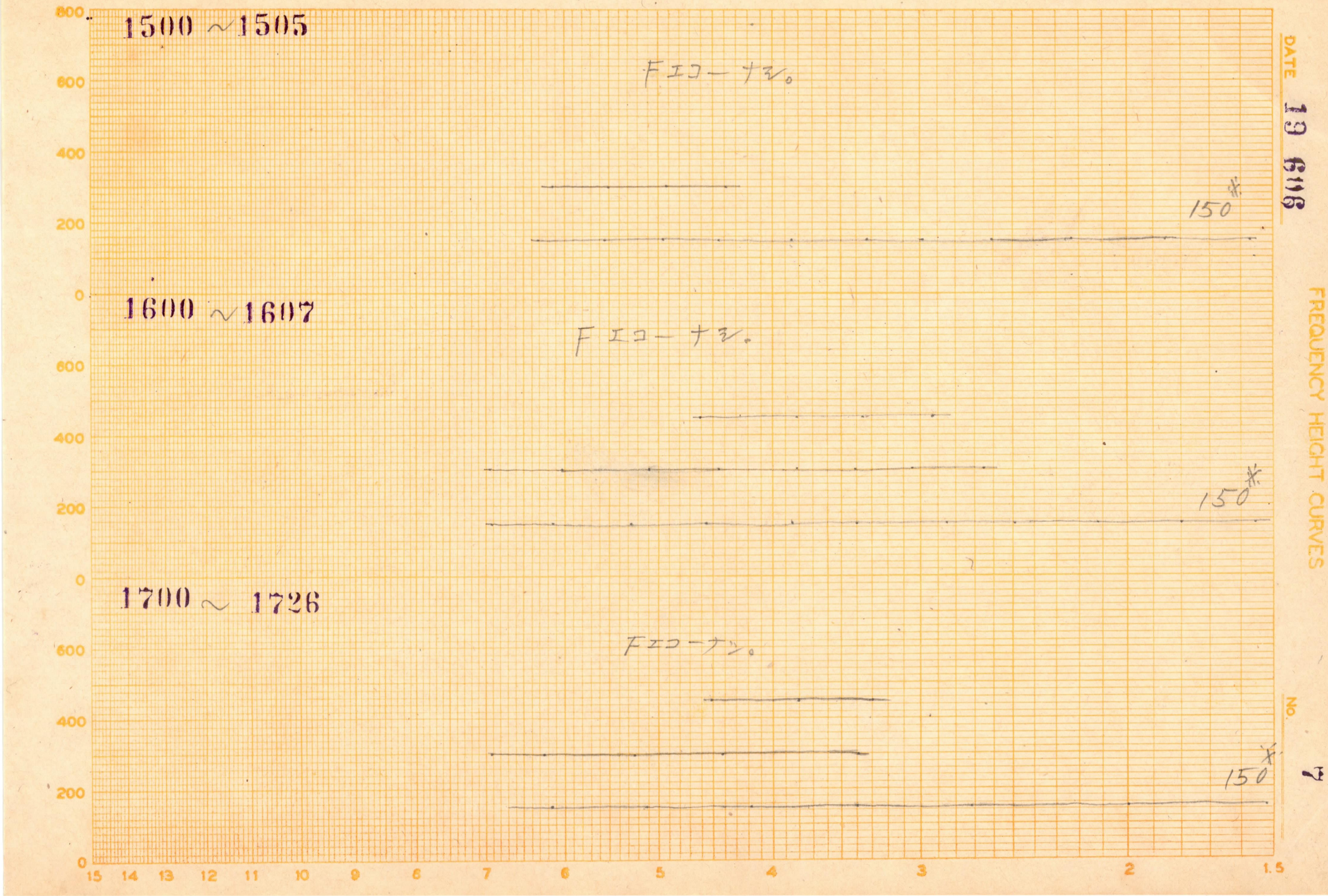

0300 ~ 0322
(4700)
3950
400
100 kc
0330 ~ 0355
(4700)
3950
400
100 kc
0400 ~ 0409
$f^x_{F_2}$ 不明
3900
(?)
100 kc
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 606
FREQUENCY HEIGHT CURVES
No. 2

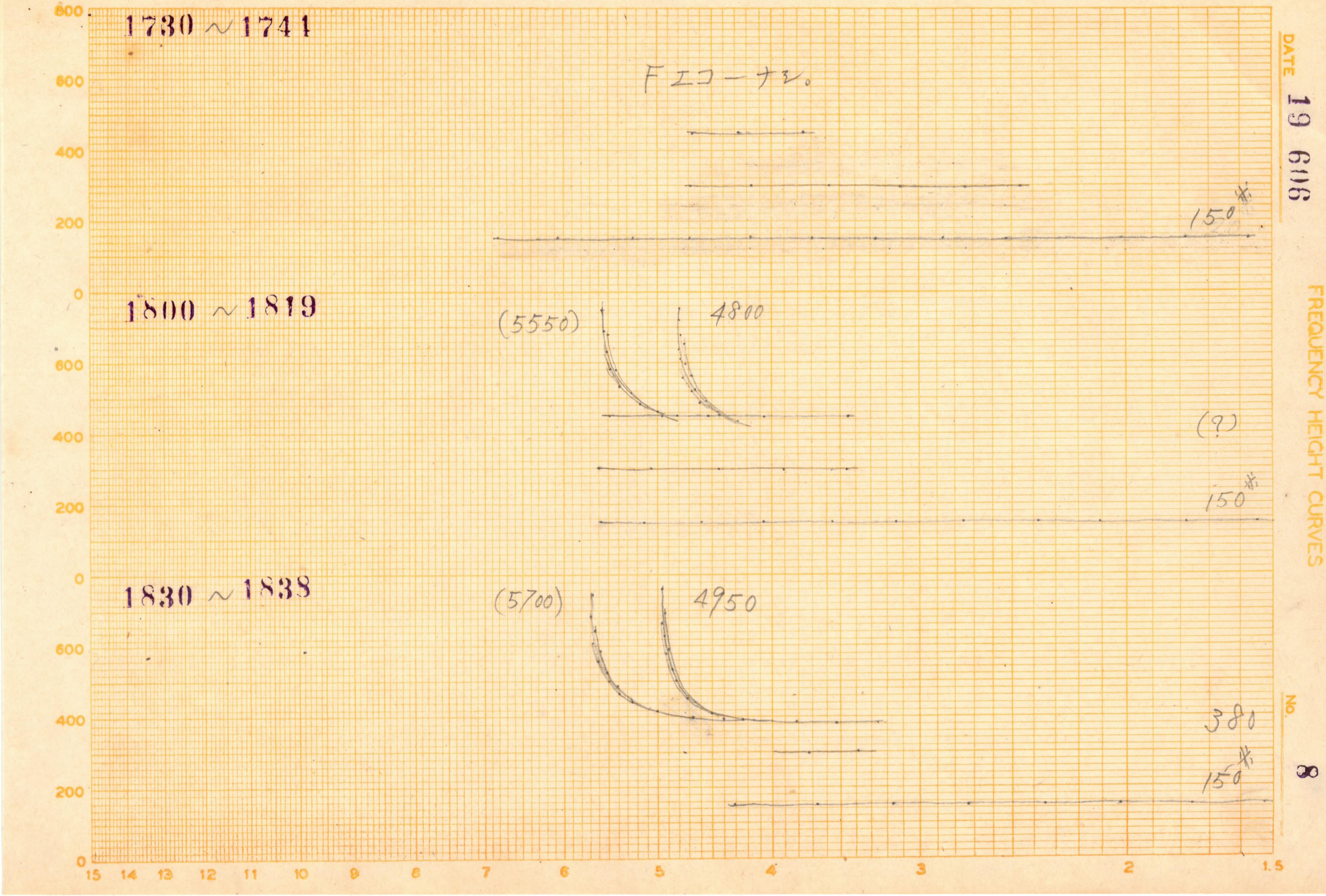

0430 ~ 0438
Fエコー不明
100キ
0500 ~ 0508
100キ
0530 ~ 0540
$f_c^{F_2}$不明
(?)
100キ
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 606
FREQUENCY HEIGHT CURVES
No. 3

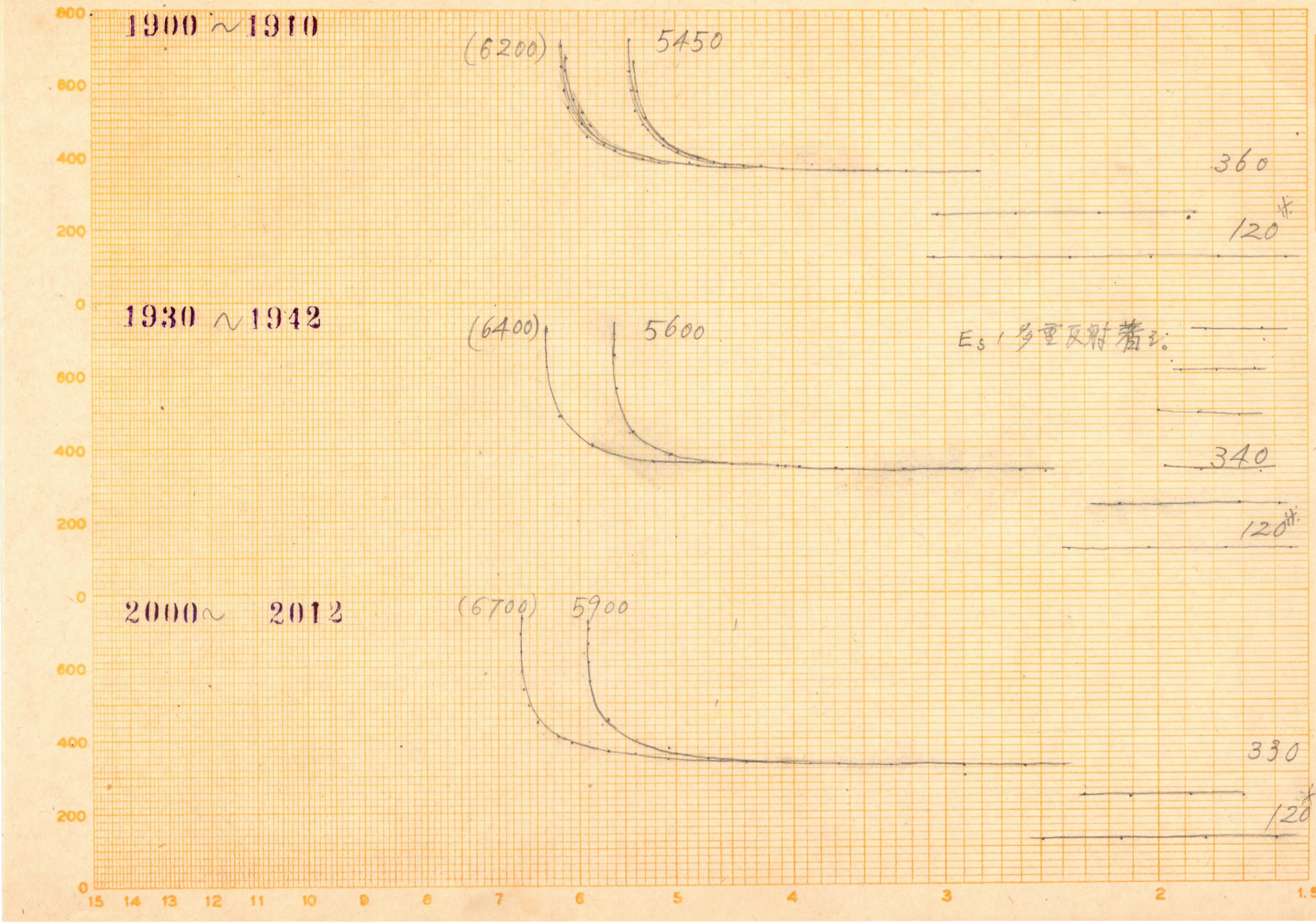

0600 ~ 0612
F エコーナシ。
100
0700 ~ 0711
F エコーナシ。
(9)
0800 ~ 0807
F エコーナシ。
(8)
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6月6
FREQUENCY HEIGHT CURVES
NO. 4

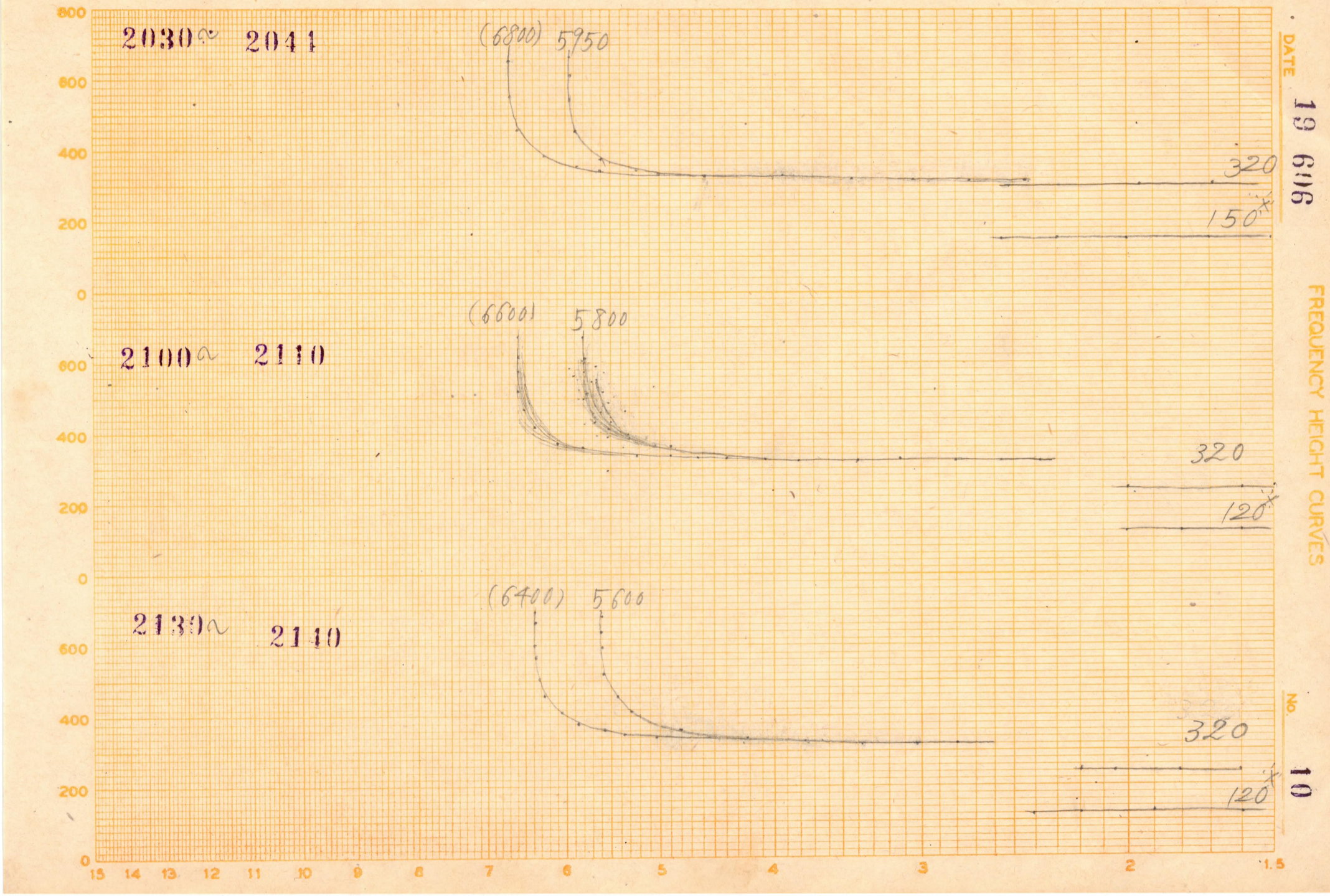

0900∿ 0907
Fエコーナシ。
(?)
170*
1000∿ 1010
Fエコーナシ。
100*
1100∿ 1106
F.エコーナシ。
120*
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 606
FREQUENCY HEIGHT CURVES
No. 5

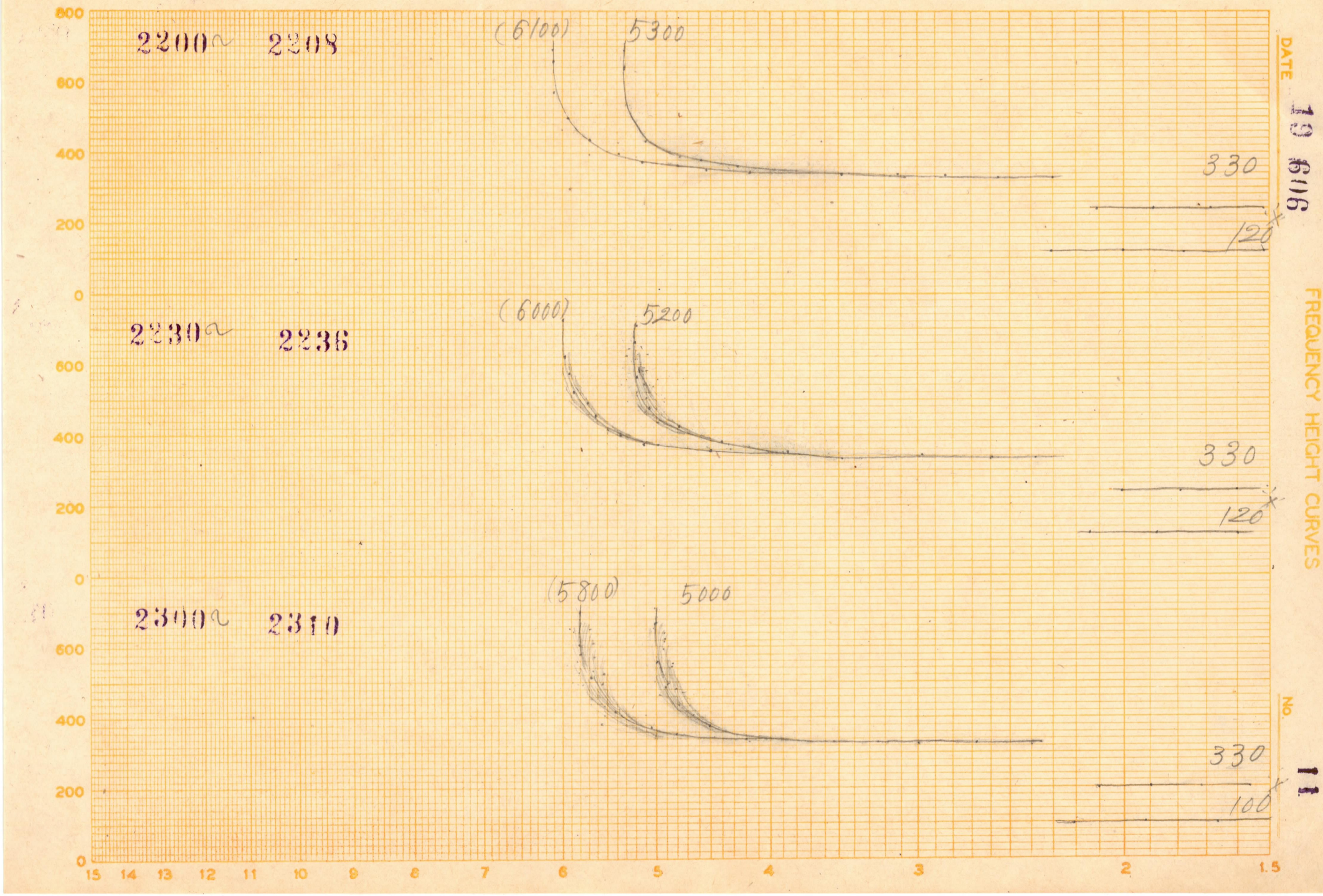

1200 ~ 1207
Fラジル。
120*
1300 ~ 1345
Fエコーナシ。
(不明)
100*
1400 ~ 1409
Fエコーナシ。
(?)
(?)*
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 606
FREQUENCY HEIGHT CURVES
No. 6

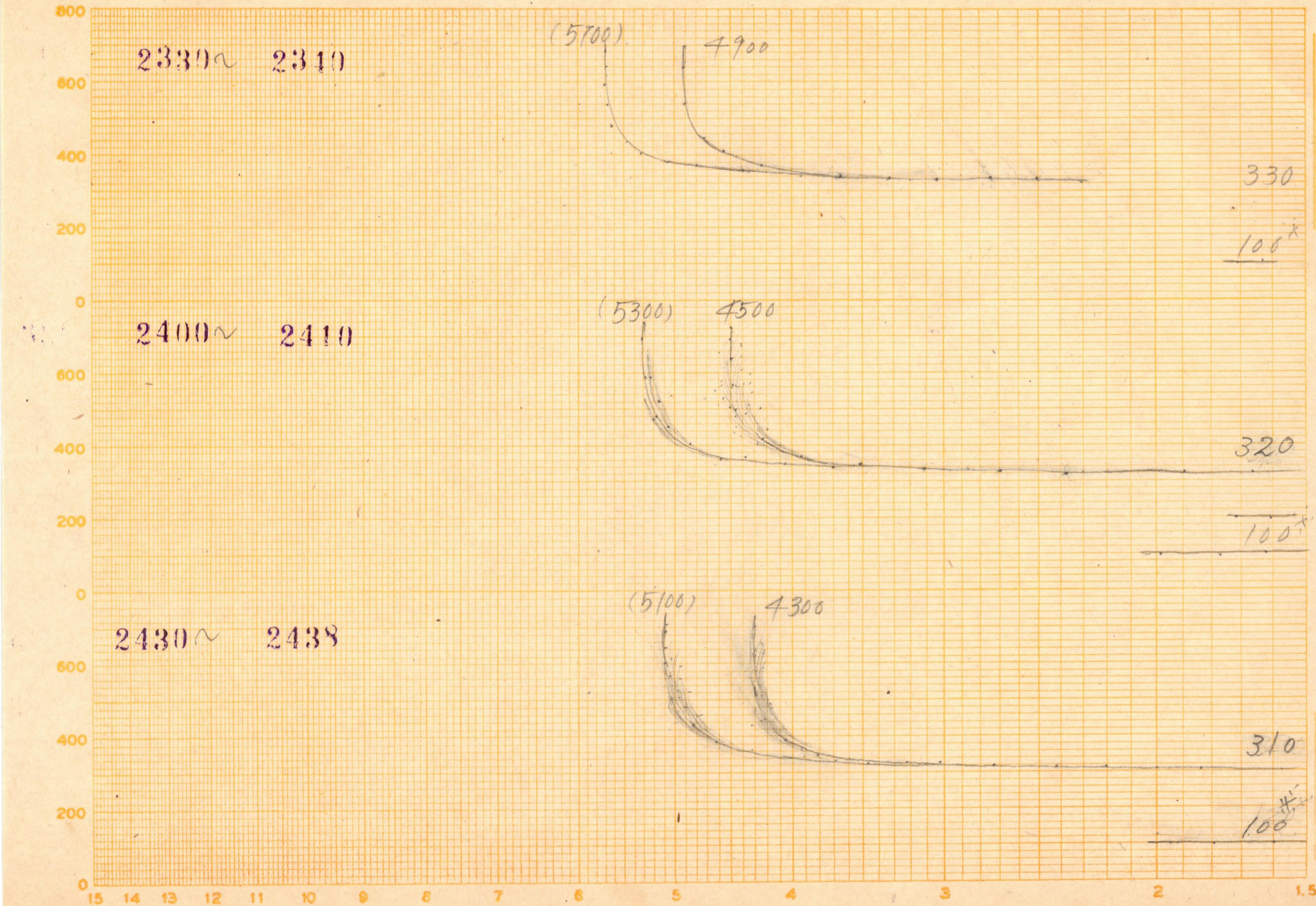

1500 ~1505
Fエコーナシ。
150
1600 ~1607
Fエコーナシ。
150
1700 ~ 1726
Fエコーナシ。
150
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6月6日
FREQUENCY HEIGHT CURVES
No. 7

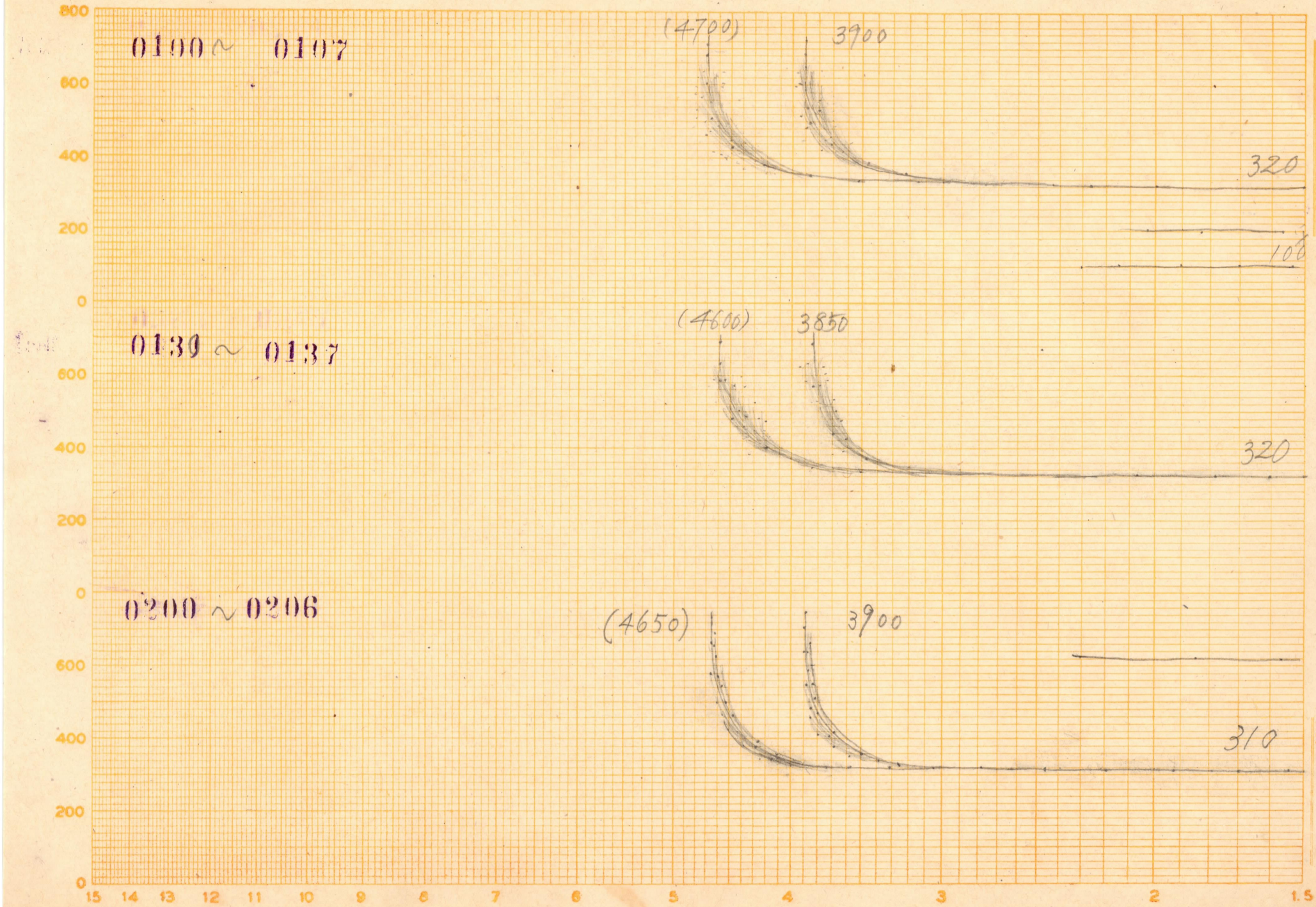

1730 ~ 1741
FエコーナシO
150*
1800 ~ 1819
(5550)
4800
(?)
150*
1830 ~ 1838
(5700)
4950
380
150*
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6月6日
FREQUENCY HEIGHT CURVES
No. 8

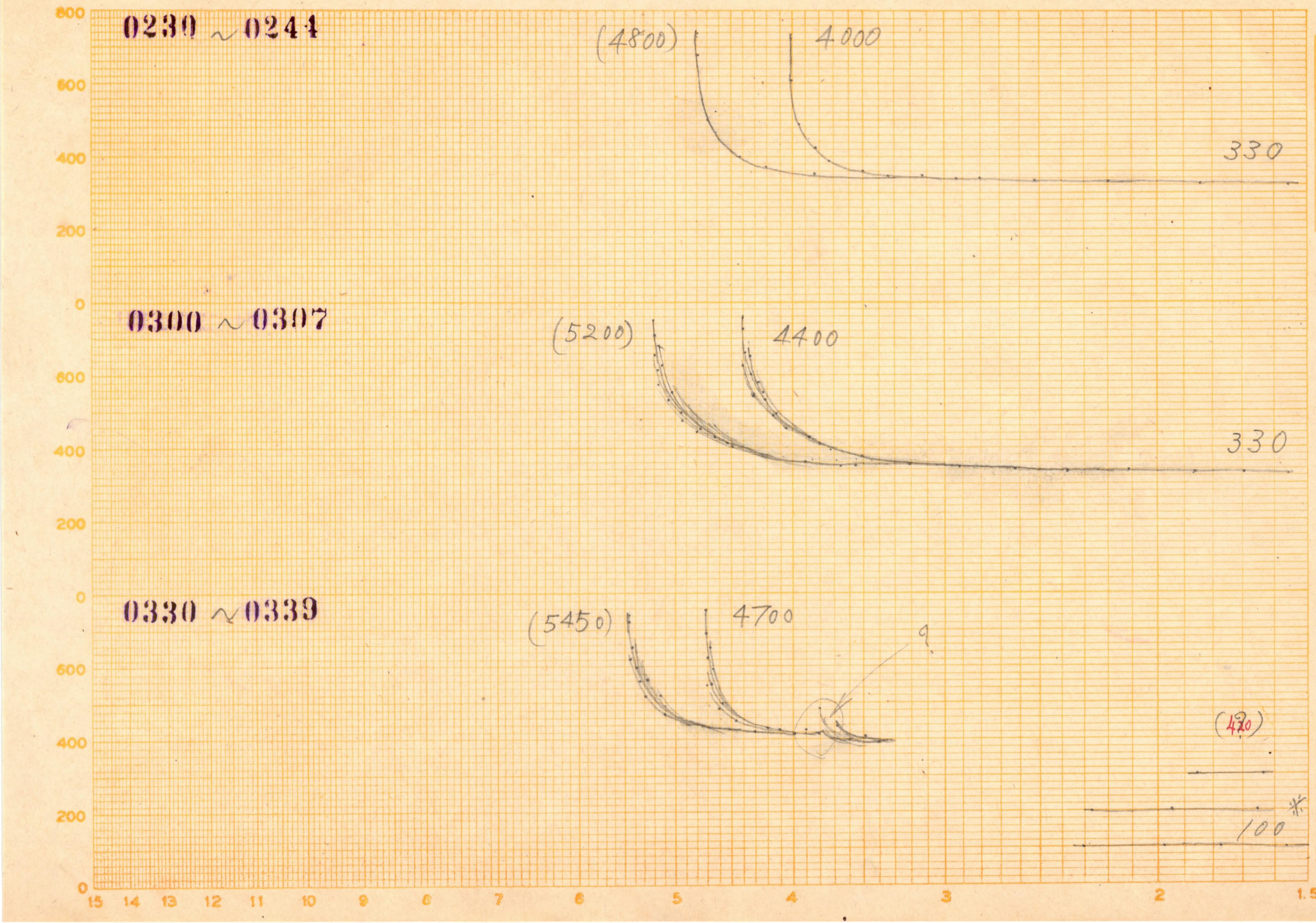

1900 ~ 1910
(6200)
5450
360
120*
1930 ~ 1942
(6400)
5600
Es 多重反射著る。
340
120*
2000 ~ 2012
(6700)
5900
330
120*
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 606
FREQUENCY HEIGHT CURVES
No. 9

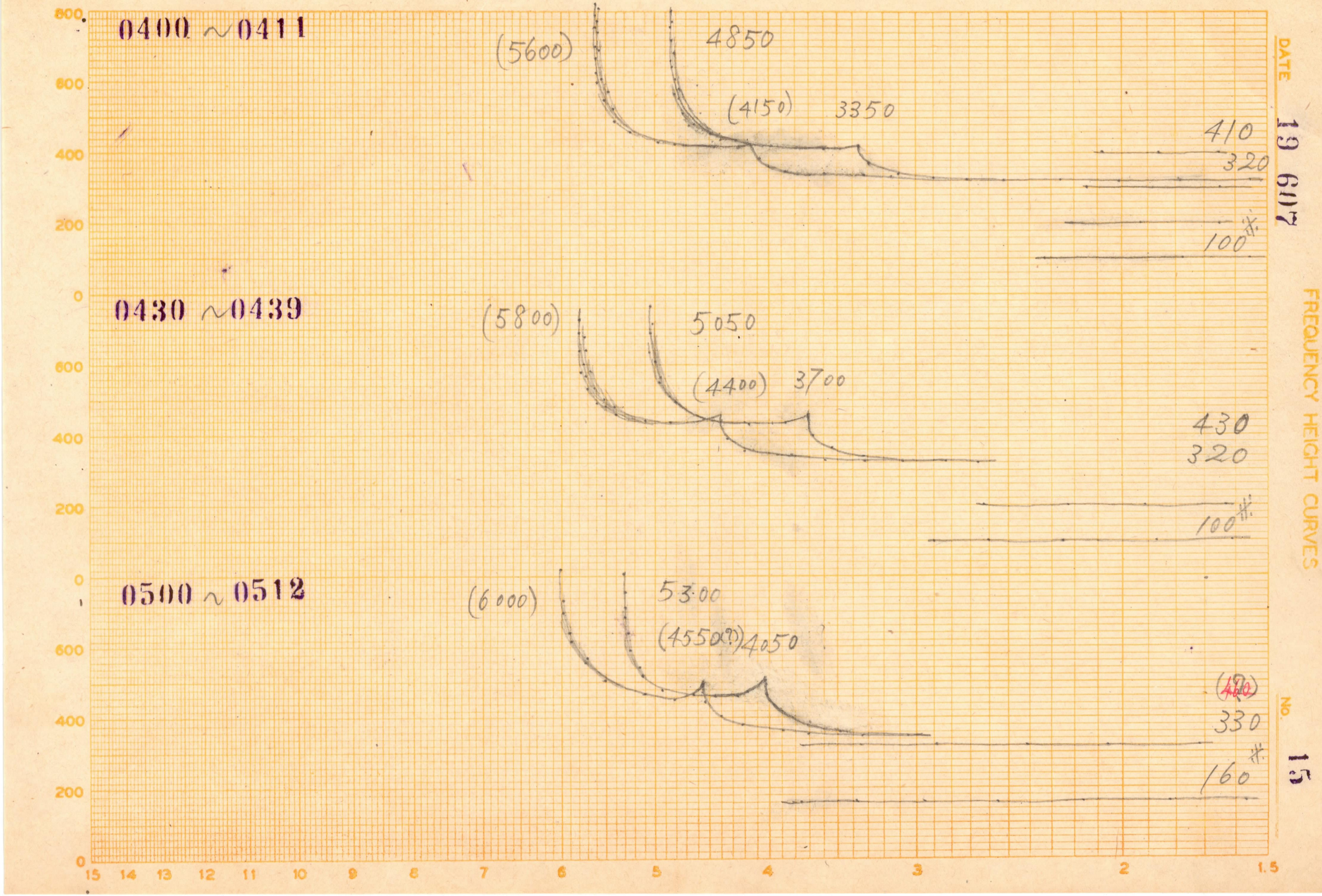

2030 ~ 2041
(6800) 5950
320
150
2100 ~ 2110
(6600) 5800
320
120
2130 ~ 2110
(6400) 5600
320
120
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 606
FREQUENCY HEIGHT CURVES
No. 10

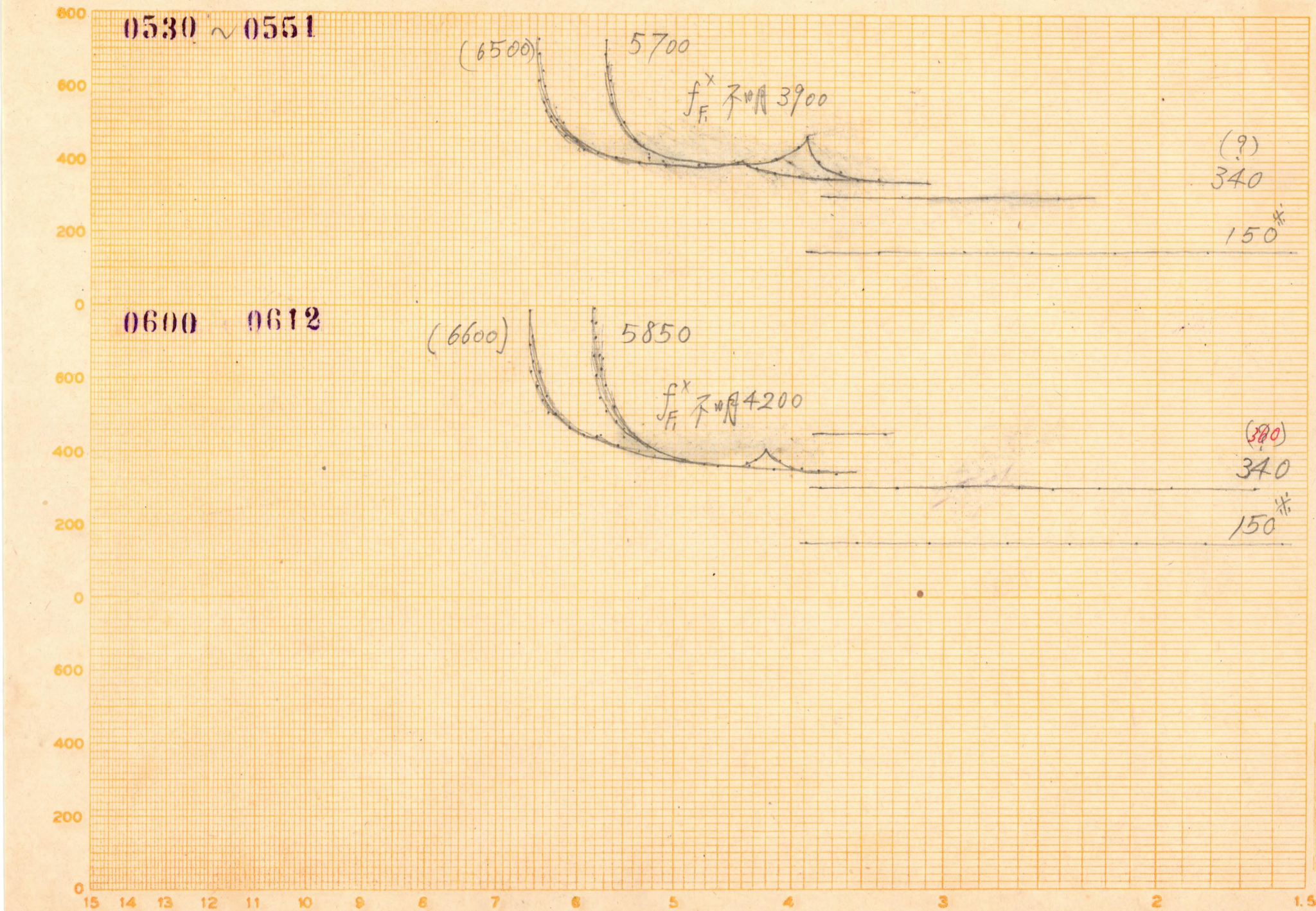

2200 2208
(6100)
5300
330
120
2230 2236
(6000)
5200
330
120
2300 2310
(5800)
5000
330
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6/6
FREQUENCY HEIGHT CURVES
No. 11

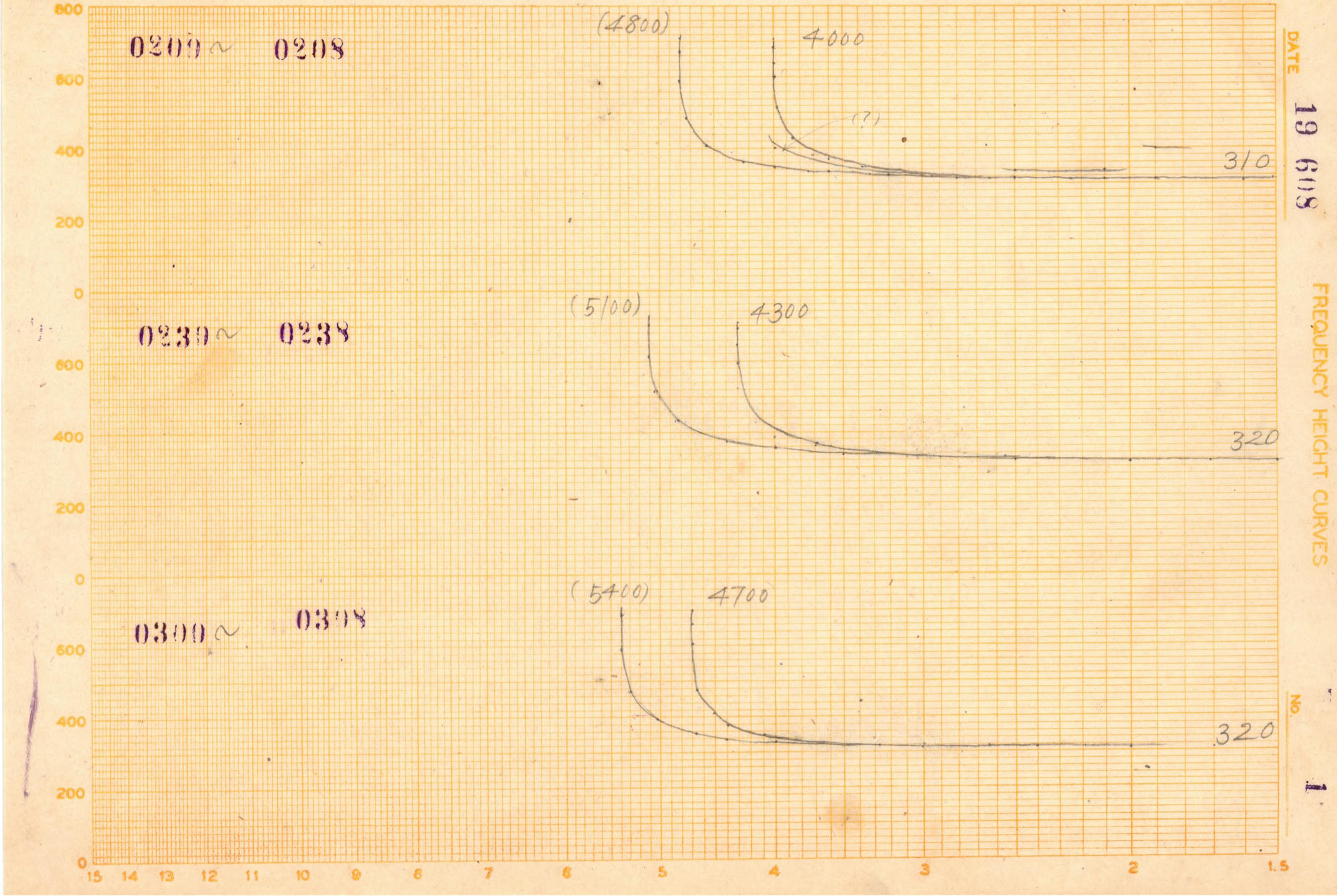

2330~ 2340
(5700)
4900
330
100
2400~ 2410
(5300)
4500
320
100
2430~ 2438
(5100)
4300
310
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6月6日
FREQUENCY HEIGHT CURVES
No. 12

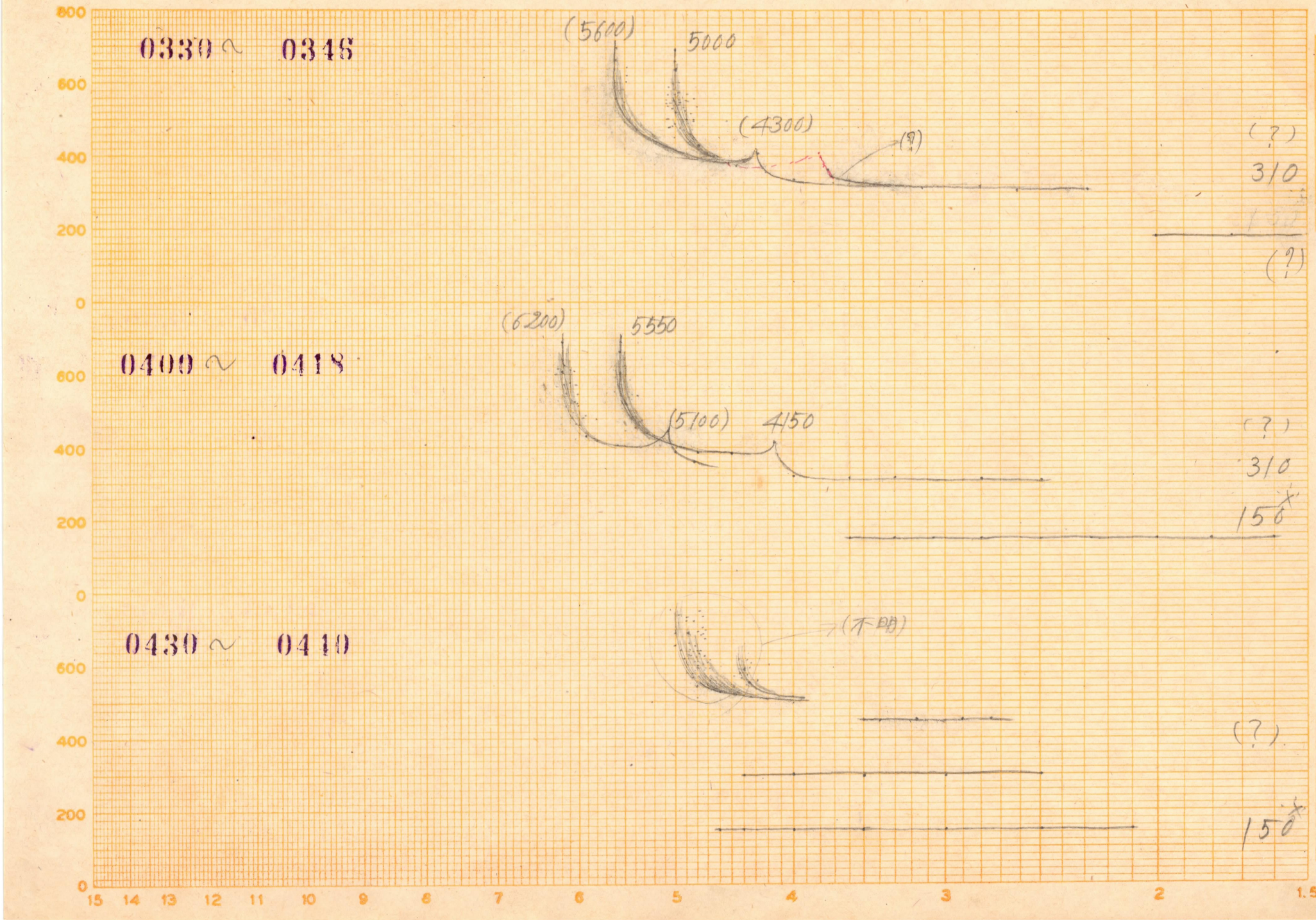

0100 ~ 0107
(4700)
3900
320
100
0139 ~ 0137
(4600)
3850
320
0200 ~ 0206
(4650)
3900
310
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 07
FREQUENCY HEIGHT CURVES
No. 13

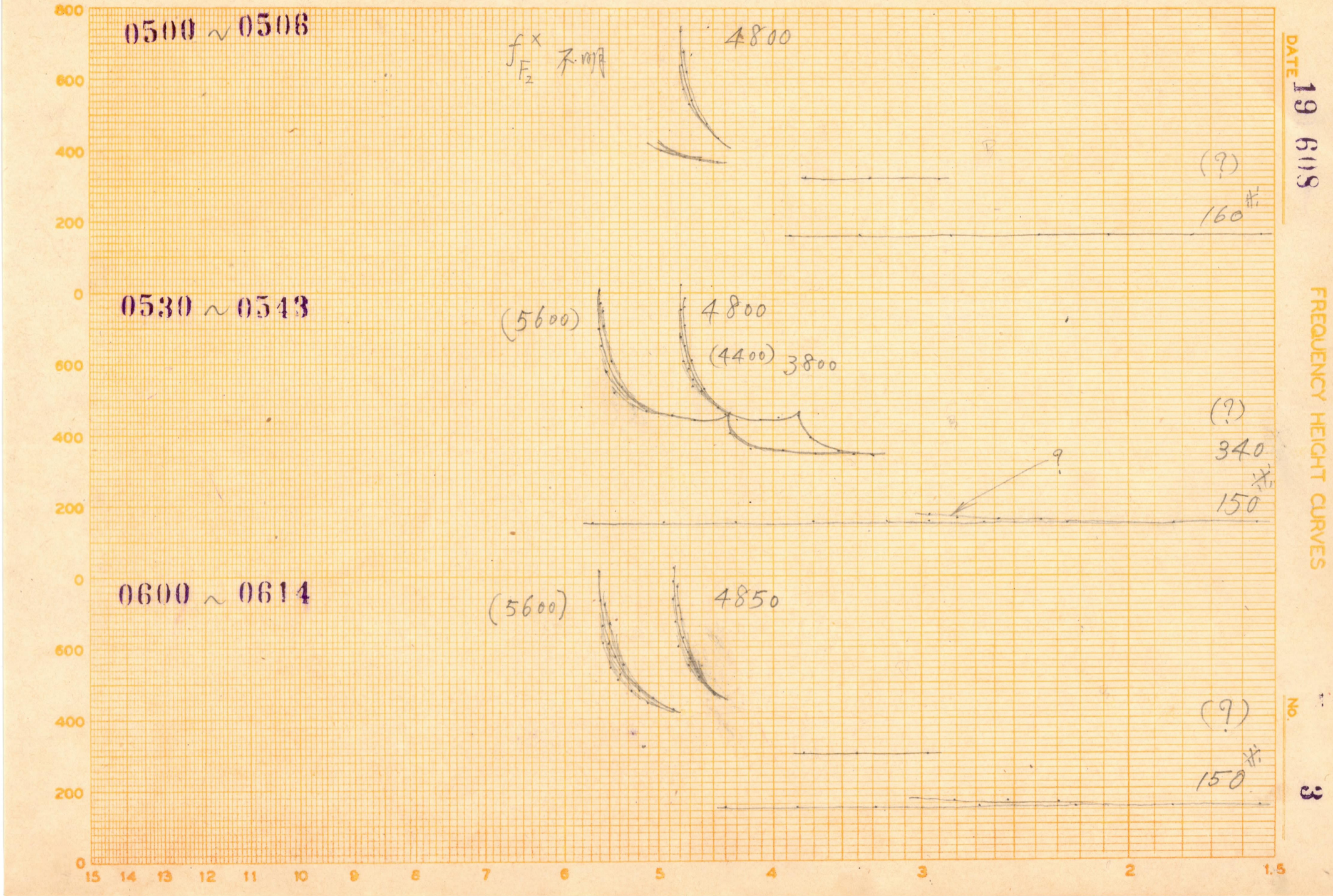

0230 ~ 0244
(4800)
4000
330
0300 ~ 0307
(5200)
4400
330
0330 ~ 0339
(5450)
4700
9
(470)
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 607
FREQUENCY HEIGHT CURVES
No. 14

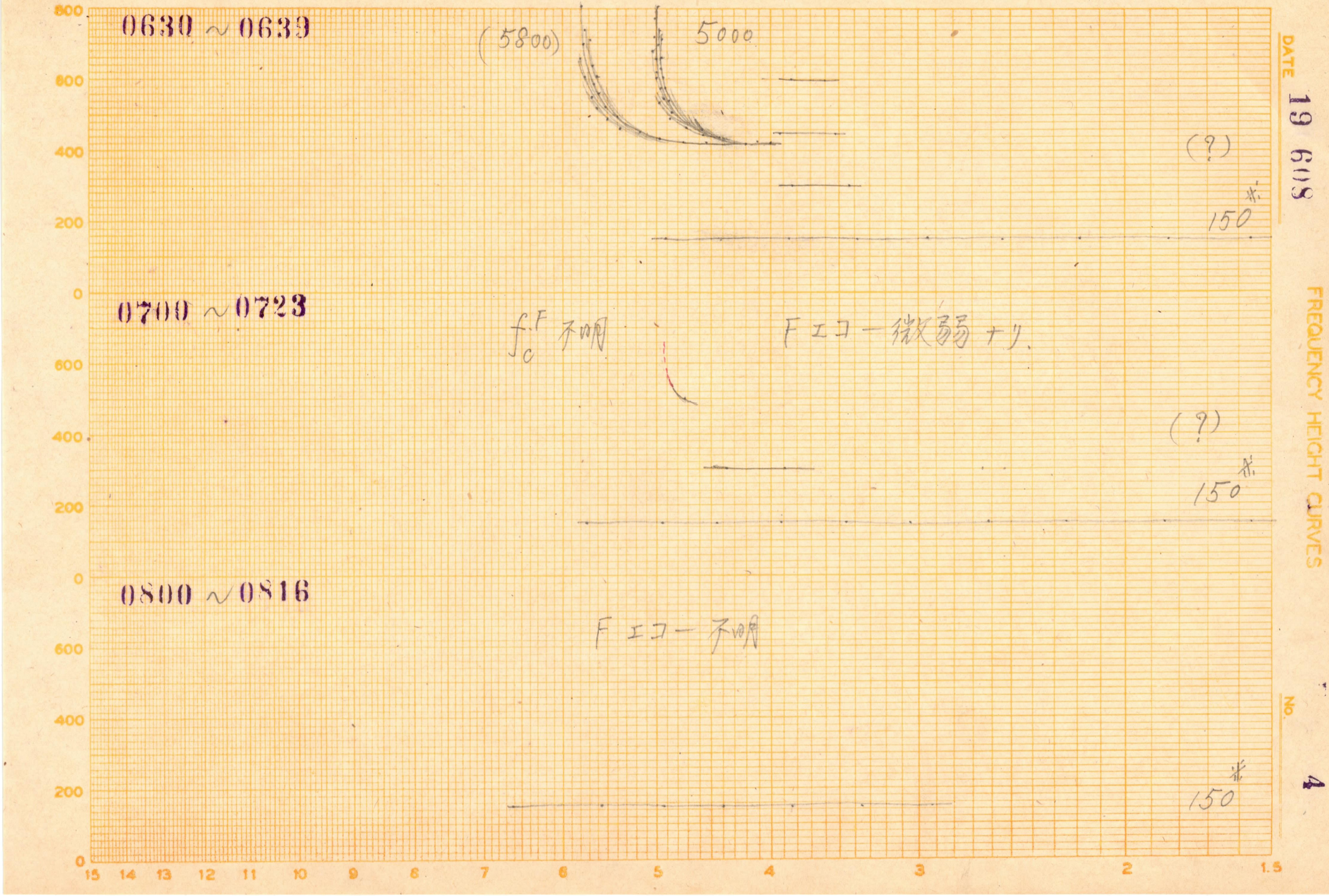

0400 ~0411
(5600)
4850
(4150)
3350
410
320
100#
0430 ~0439
(5800)
5050
(4400)
3700
430
320
100#
0500 ~0512
(6000)
5300
(4550?)
4050
(460)
330
160#
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6017
FREQUENCY HEIGHT CURVES
No. 15

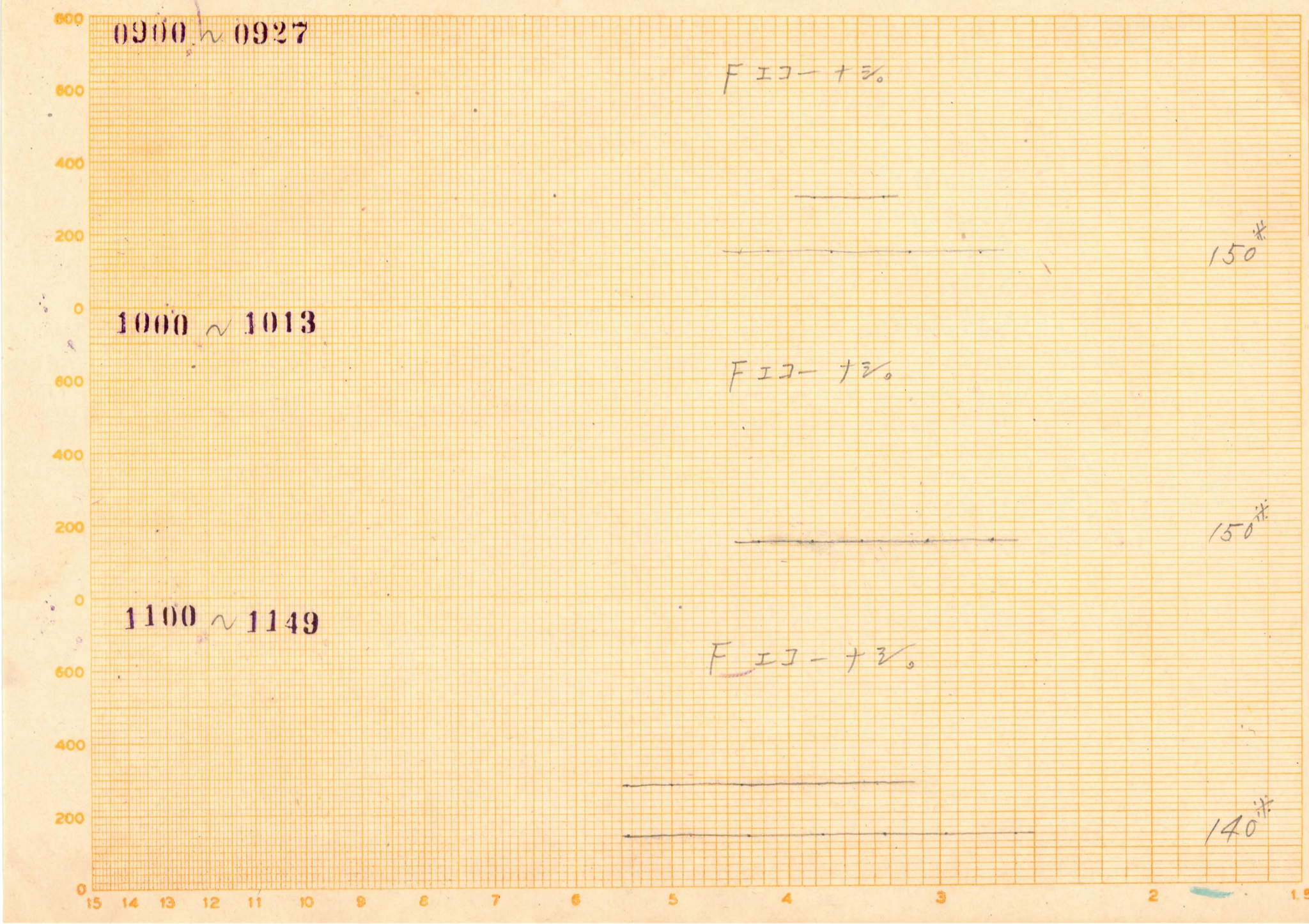

0530 ~ 0551
(6500)
5700
$f_{F_1}^{x}$ 不可能 3900
(?)
340
150*
0600 ~ 0612
(6600)
5850
$f_{F_1}^{x}$ 不可能 4200
(380)
340
150*
800
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 607
FREQUENCY HEIGHT CURVES
No. 15

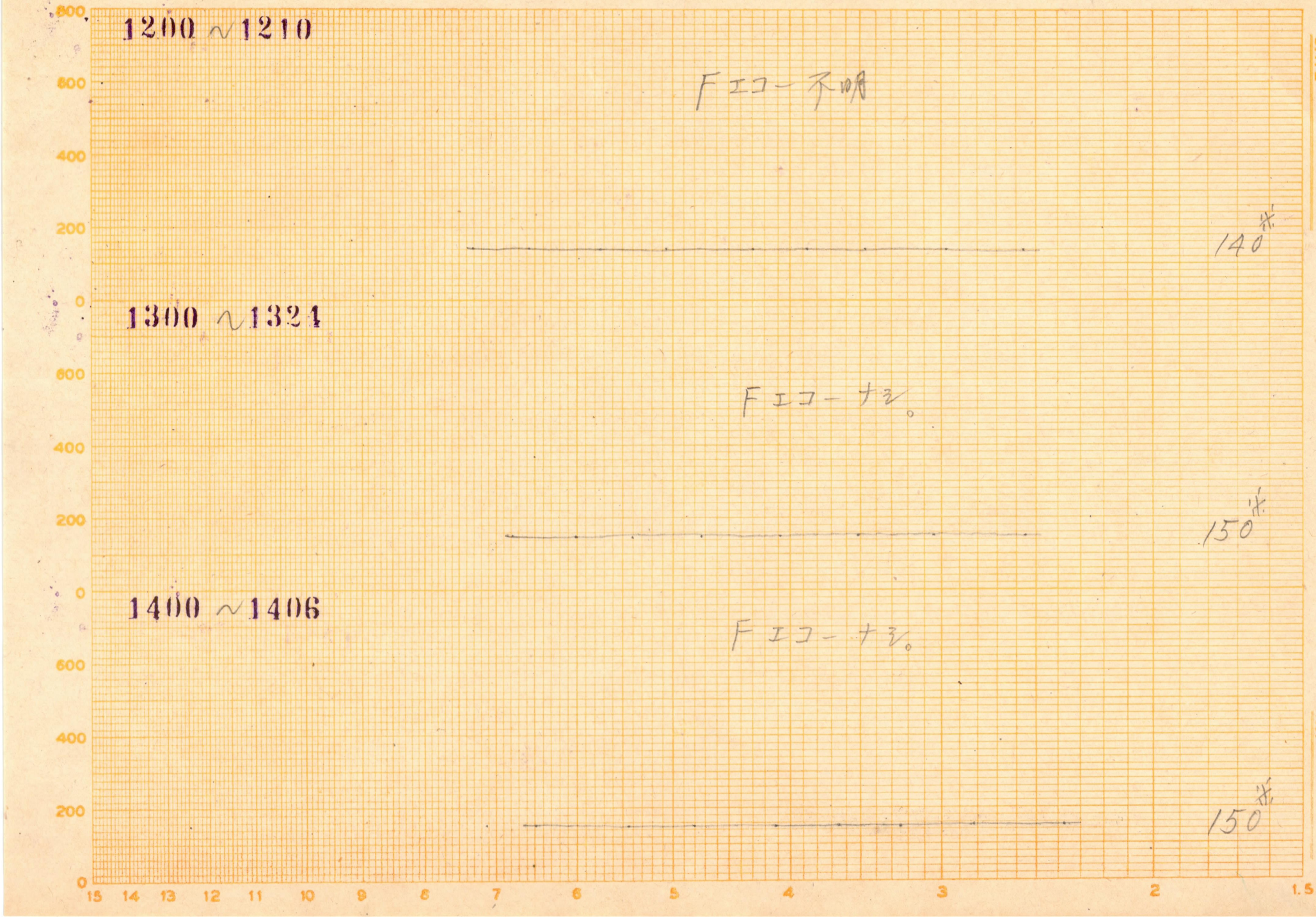

0209 ~ 0208
(4800)
4000
(?)
310
0239 ~ 0238
(5100)
4300
320
0300 ~ 0308
(5400)
4700
320
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 08
FREQUENCY HEIGHT CURVES
No. 1

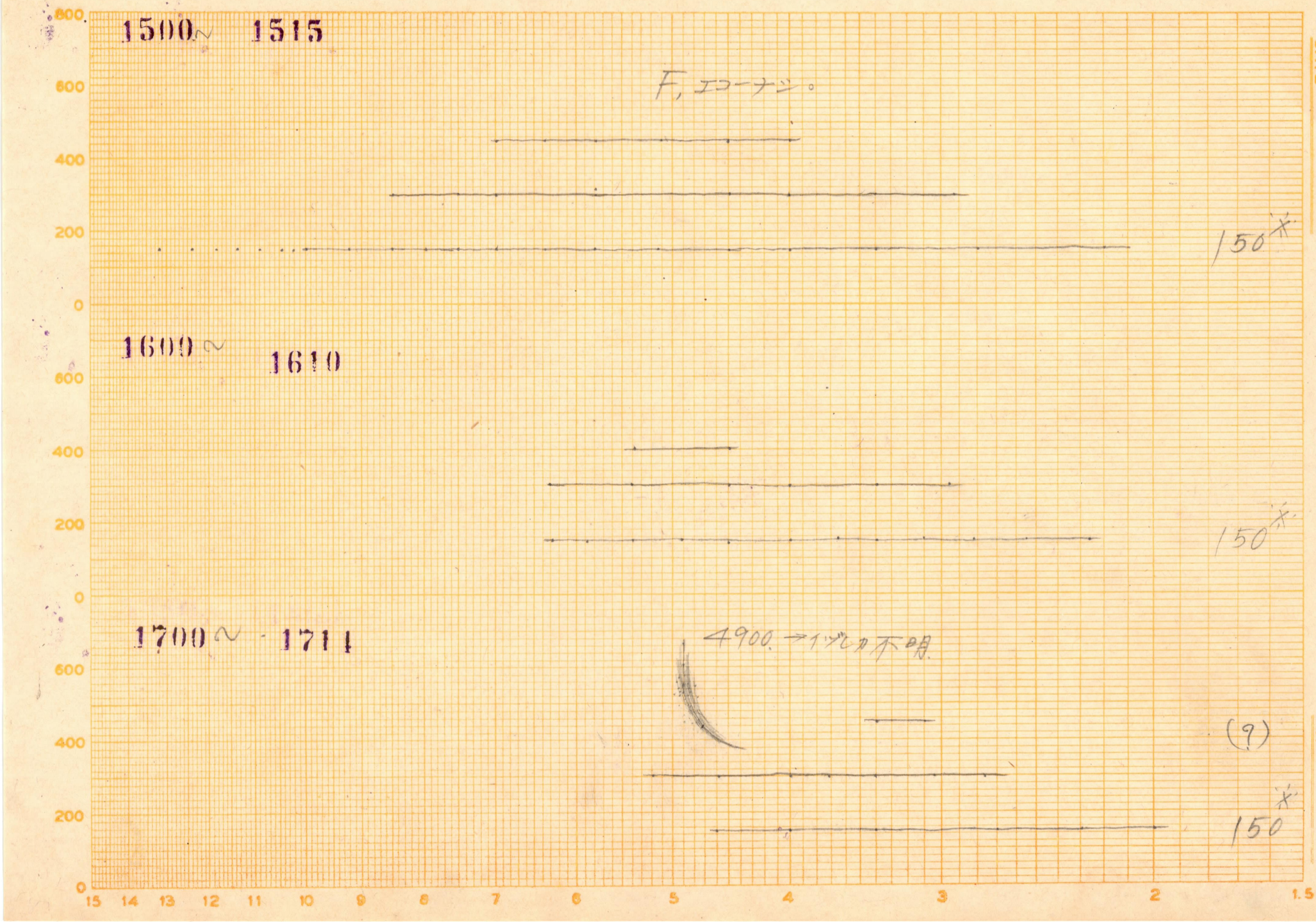

0330 ~ 0345
(5600)
5000
(4300)
(?)
(?)
310
(?)
0400 ~ 0418
(6200)
5550
(5100)
4150
(?)
310
150
0430 ~ 0440
(不明)
(?)
150
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 19
FREQUENCY HEIGHT CURVES
No. 2

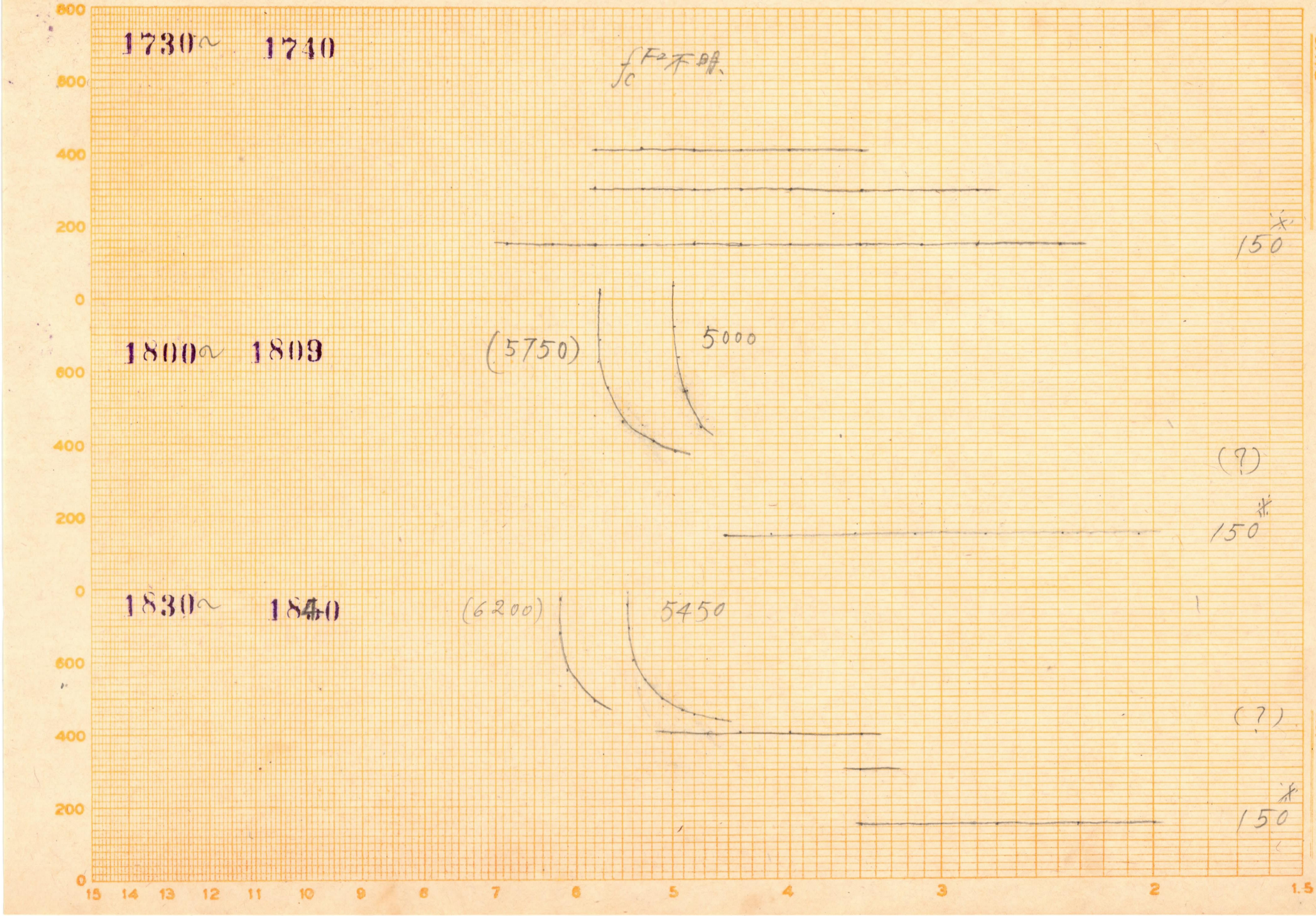

0500 ~ 0506
$f_{F_2}^{x}$ 不明
4800
(?)
160 ㎞
0530 ~ 0543
(5600)
4800
(4400)
3800
(?)
340 ㎞
150 ㎞
0600 ~ 0614
(5600)
4850
(?)
150 ㎞
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 18
FREQUENCY HEIGHT CURVES
No. 3

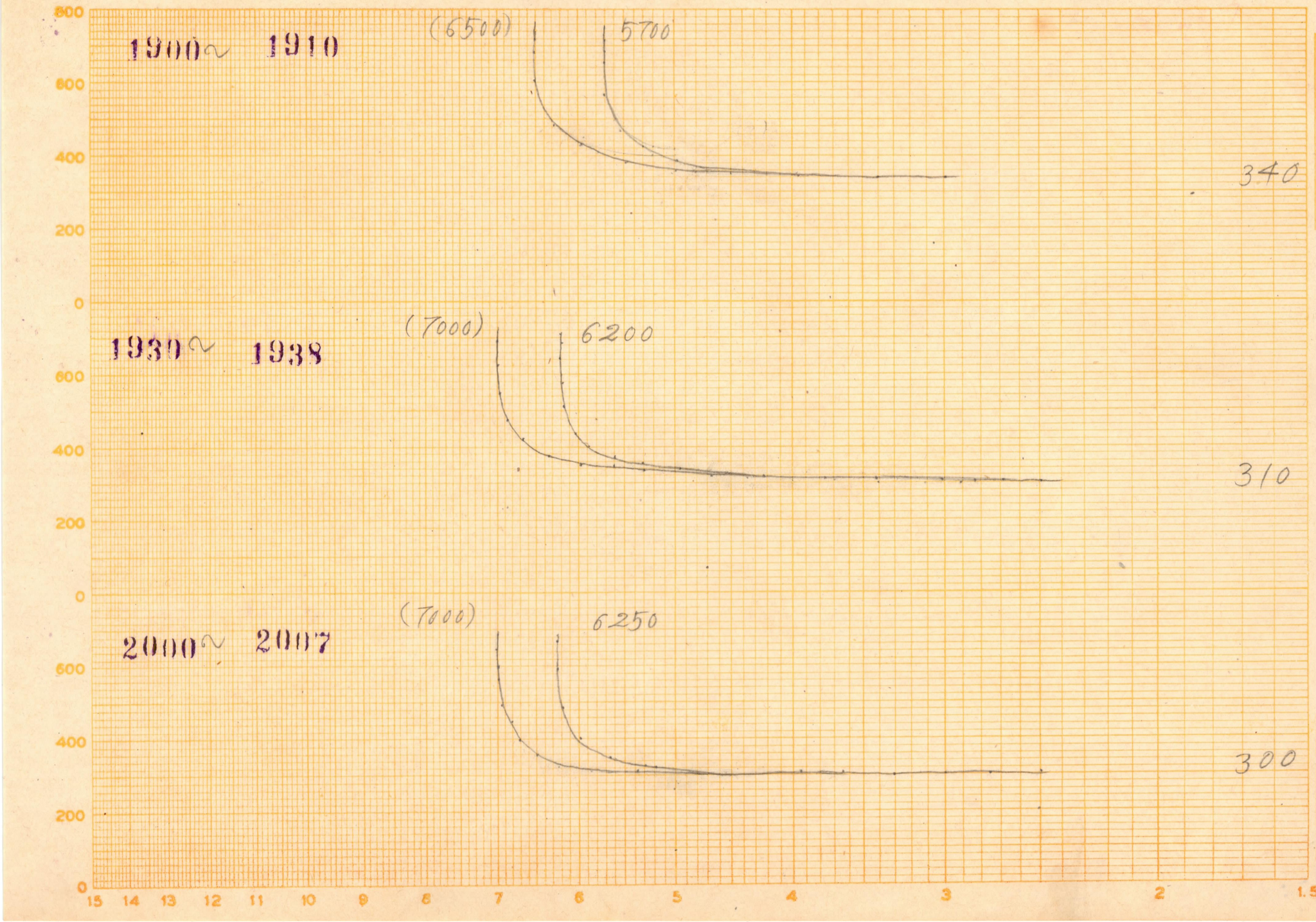

0630 ~ 0639
(5800)
5000
(?)
150
0700 ~ 0723
f_c^F 不明
Fエコー微弱ナリ
(?)
150
0800 ~ 0816
Fエコー不明
150
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 08
FREQUENCY HEIGHT CURVES
No. 4

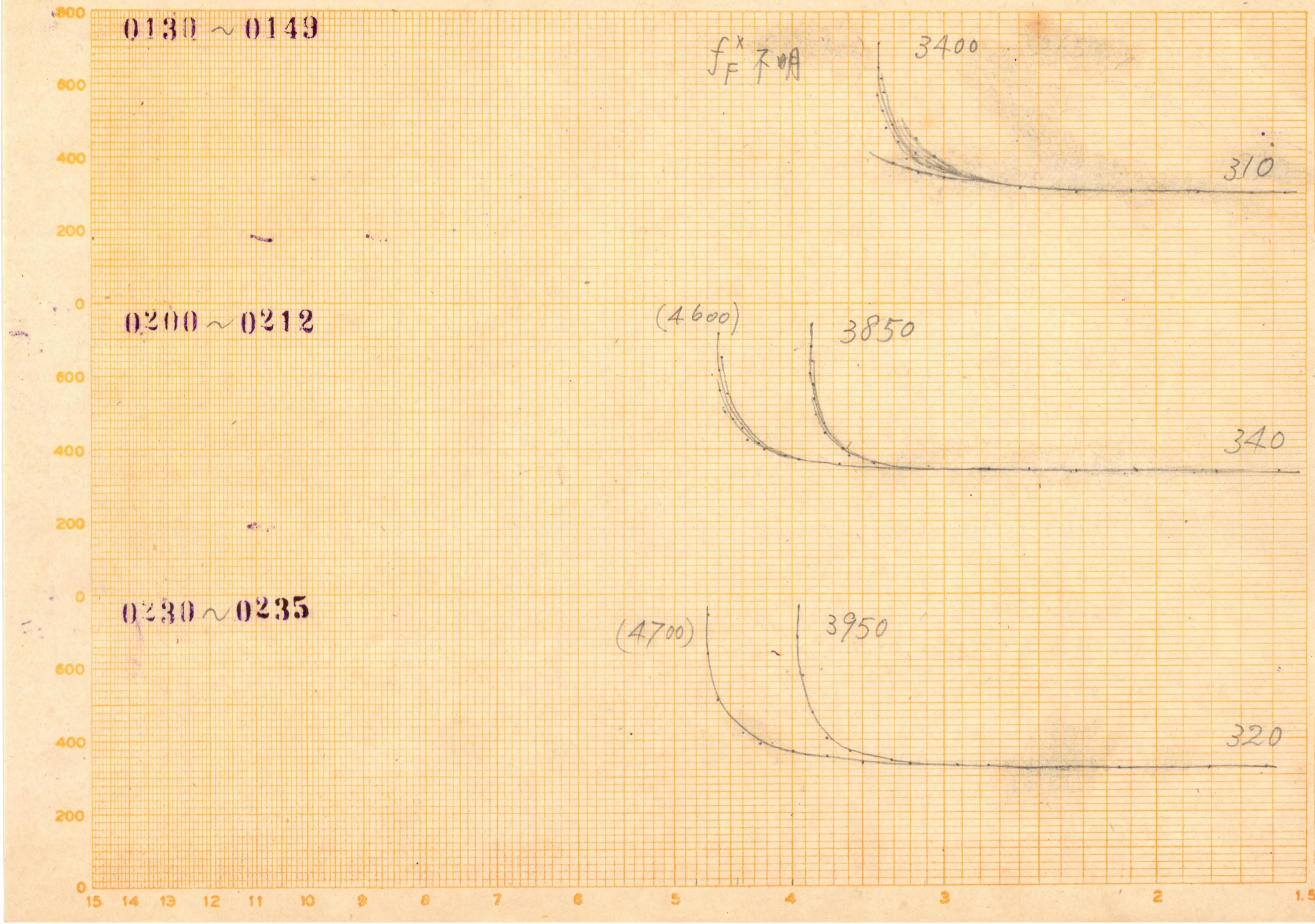

0900 ~ 0927
F エコー ナシ。
150㎞
1000 ~ 1013
F エコー ナシ。
150㎞
1100 ~ 1149
F エコー ナシ。
140㎞
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6月8
FREQUENCY HEIGHT CURVES
No. 5

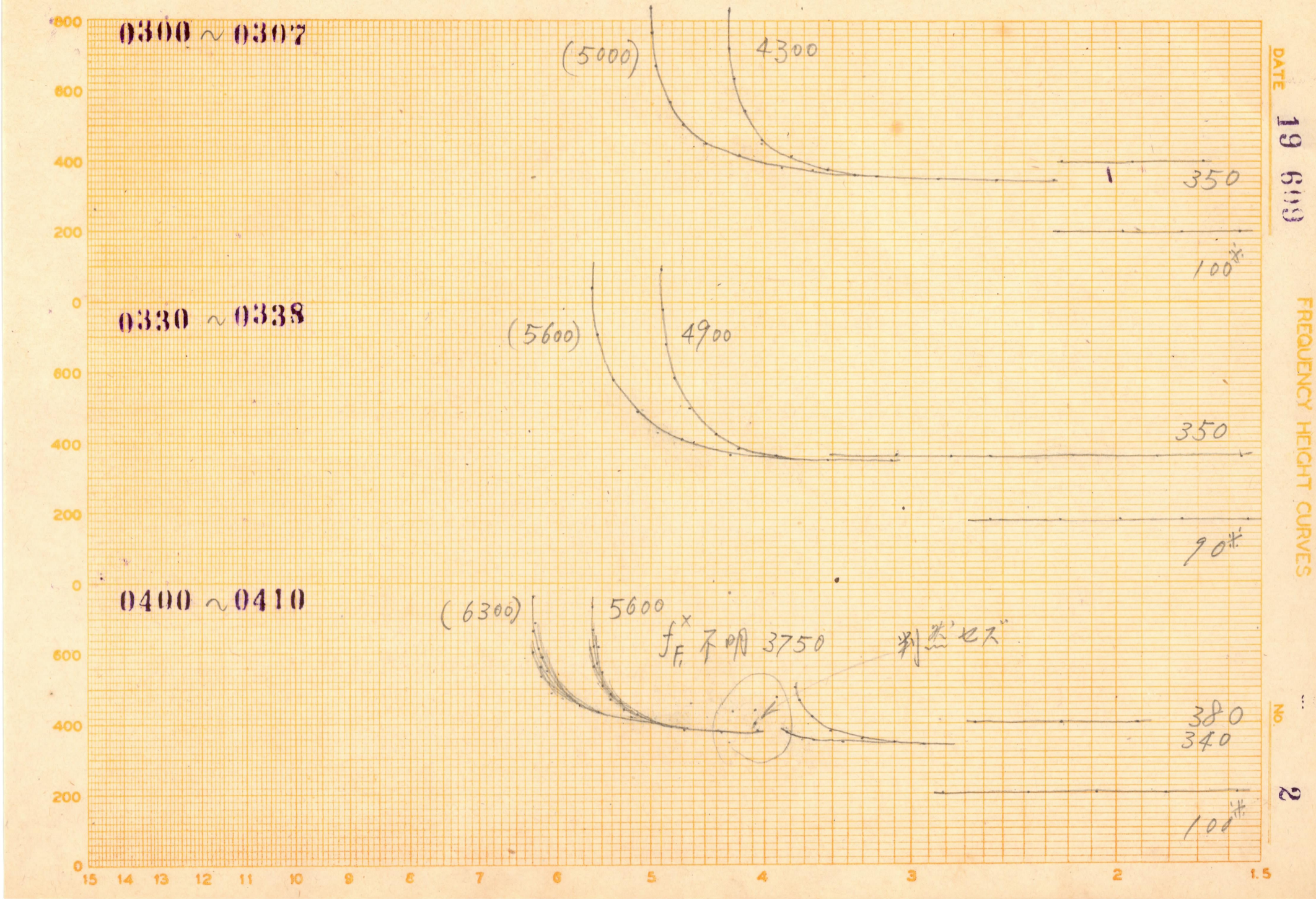

1200 ～1210
Fエコー不明
140米
1300 ～1324
Fエコーなし。
150米
1400 ～1406
Fエコーなし。
150米
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE
19 6/8
FREQUENCY HEIGHT CURVES
No.
6

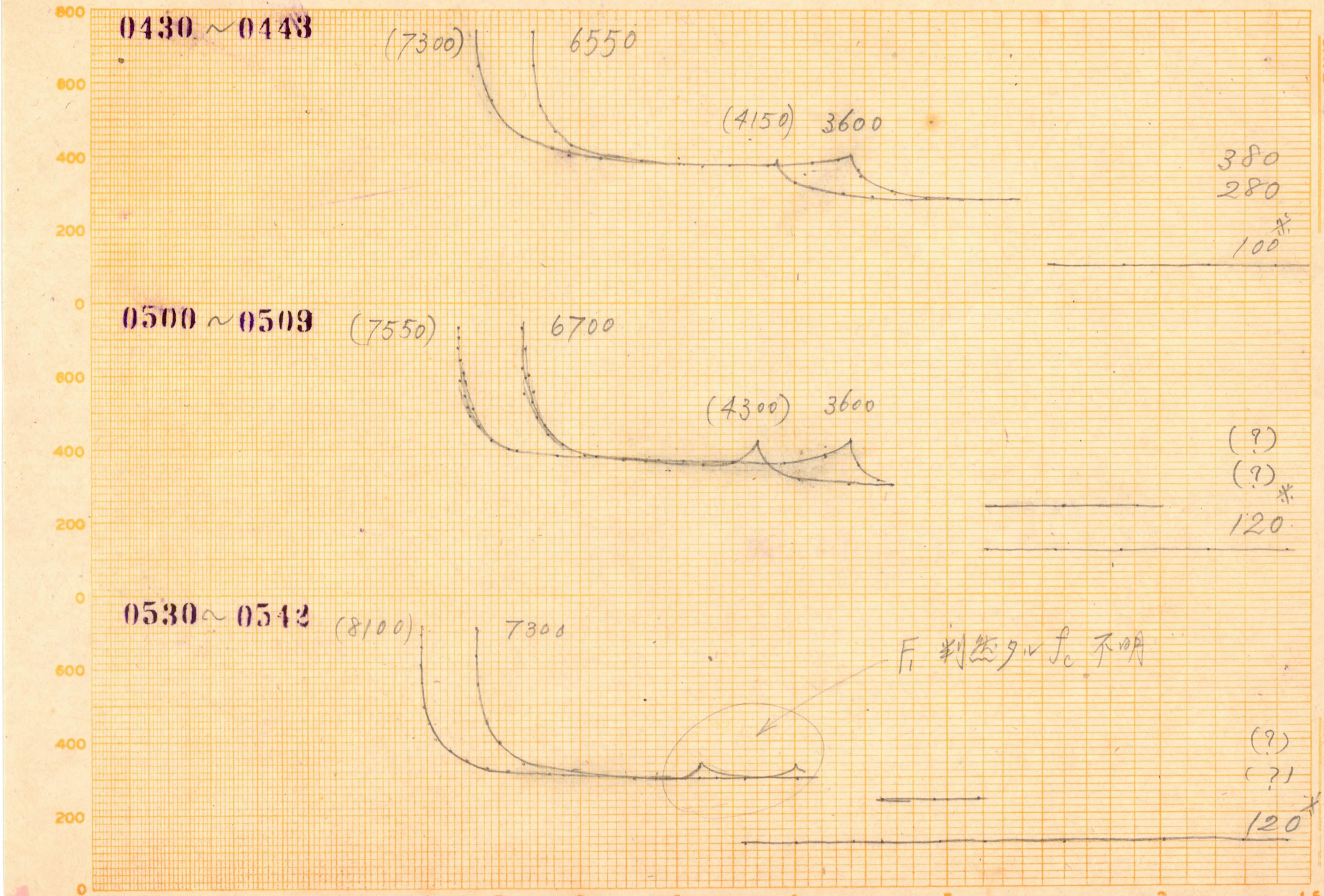

1500~1515
F, エコーナシ。
150
1600~1610
150
1700~1711
4900→イズレカ不明
(9)
150
DATE 19 6/8
FREQUENCY HEIGHT CURVES
No. 7
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5

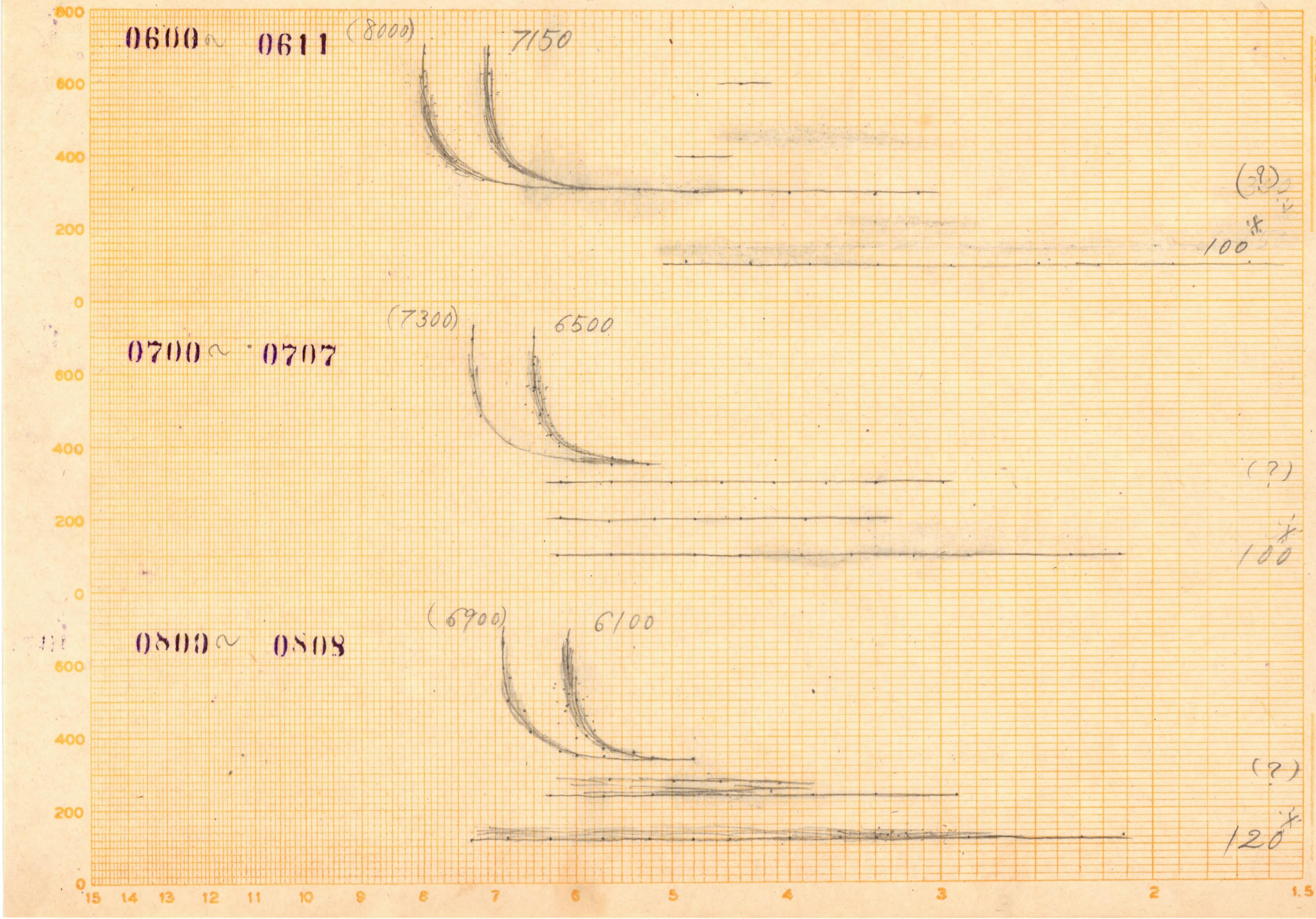

1730~ 1740
$\int_c^{F_2} F dB$.
150
1800~ 1809
(5750)
5000
(?)
150
1830~ 1840
(6200)
5450
(?)
150
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6/9
FREQUENCY HEIGHT CURVES
No. 8

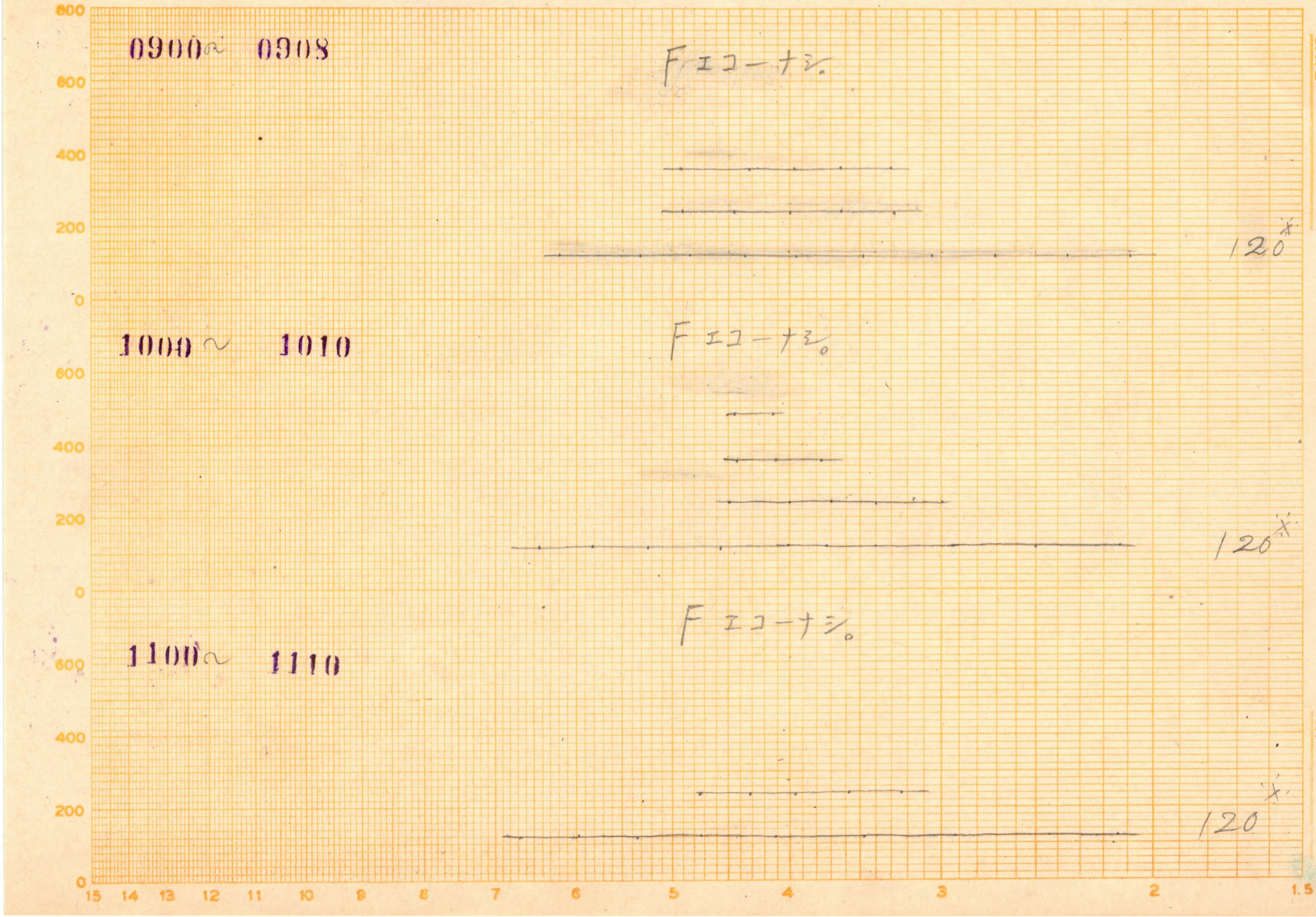

1900~ 1910
(6500)
5700
340
1930~ 1938
(7000)
6200
310
2000~ 2007
(7000)
6250
300
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6/8
FREQUENCY HEIGHT CURVES
No. 9

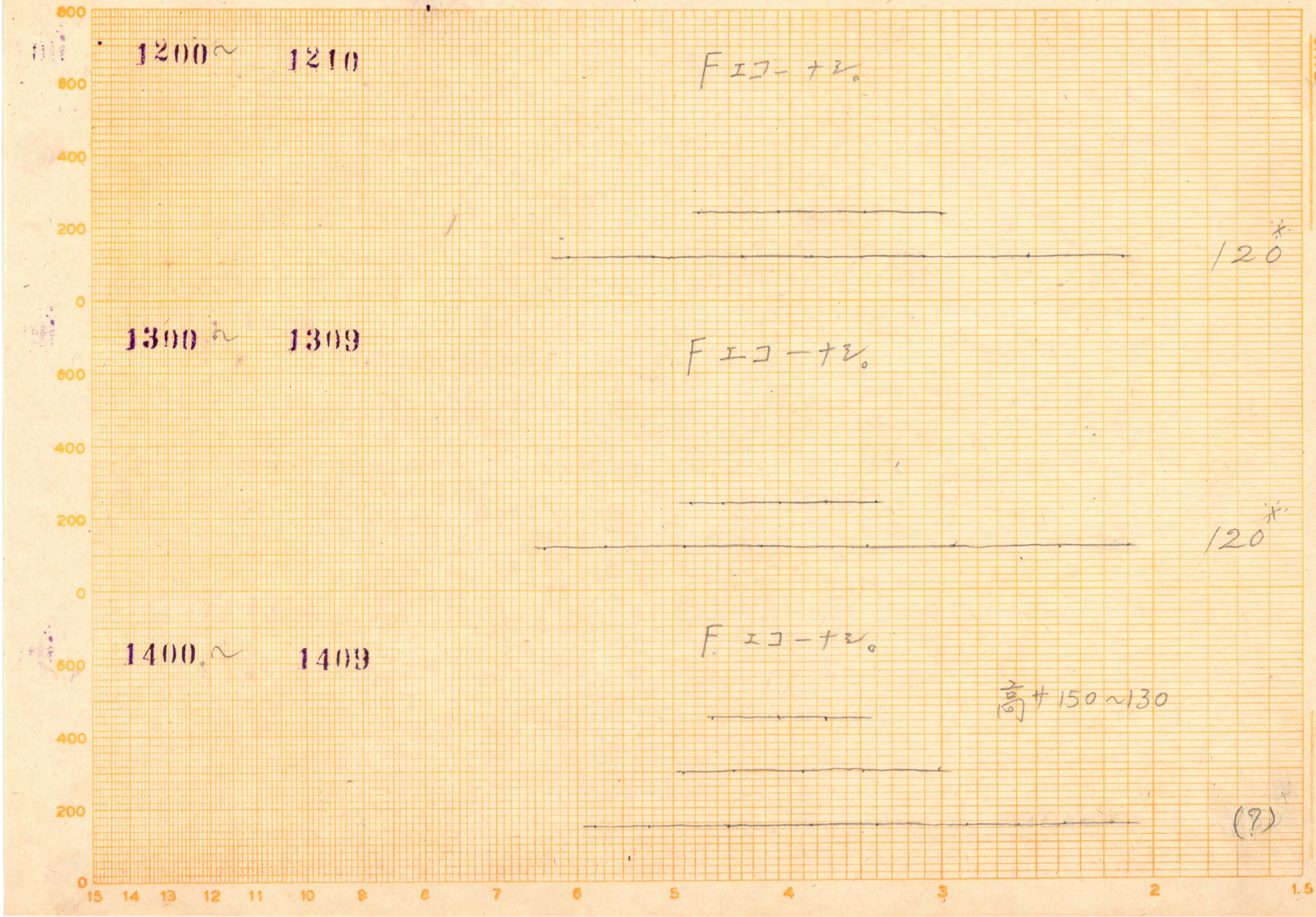

0130 ~ 0149
f_F^x 7MHz
3400
310
0200 ~ 0212
(4600)
3850
340
0230 ~ 0235
(4700)
3950
320
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6[illegible]
FREQUENCY HEIGHT CURVES
No. 1

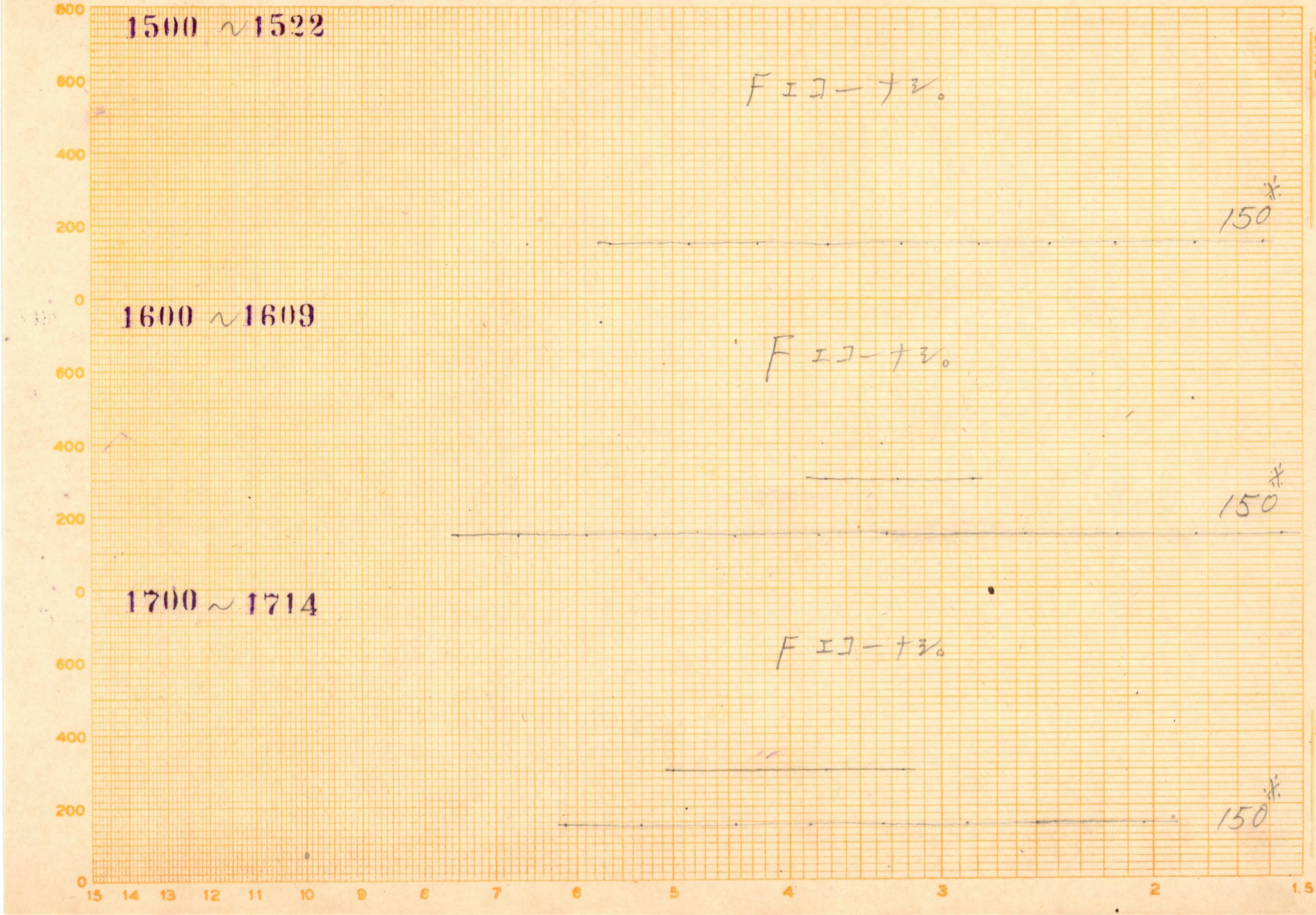

0300 ~ 0307
(5000)
4300
350
100*
0330 ~ 0338
(5600)
4900
350
90*
0400 ~ 0410
(6300)
5600
$f_{F_1}^{x}$ 不明 3750
判然セズ
380
340
100*
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6[illegible]
FREQUENCY HEIGHT CURVES
No. 2

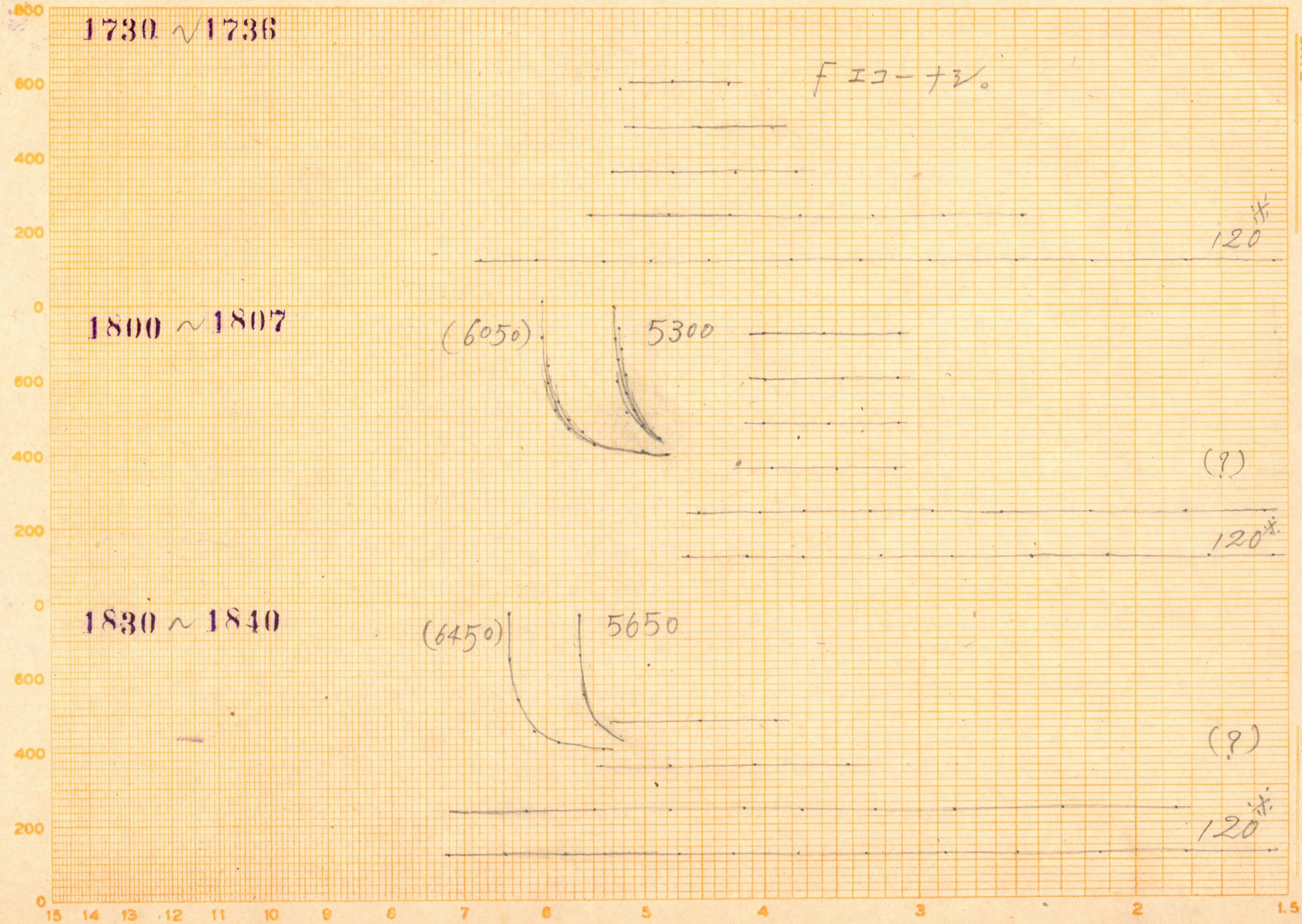

0430 ~ 0443
(7300)
6550
(4150)
3600
380
280
100
0500 ~ 0509
(7550)
6700
(4300)
3600
(?)
(?)
120
0530 ~ 0543
(8100)
7300
F1 判定ﾀﾞｳ fc 不明
(?)
(?)
120
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE
FREQUENCY HEIGHT CURVES
No. 3

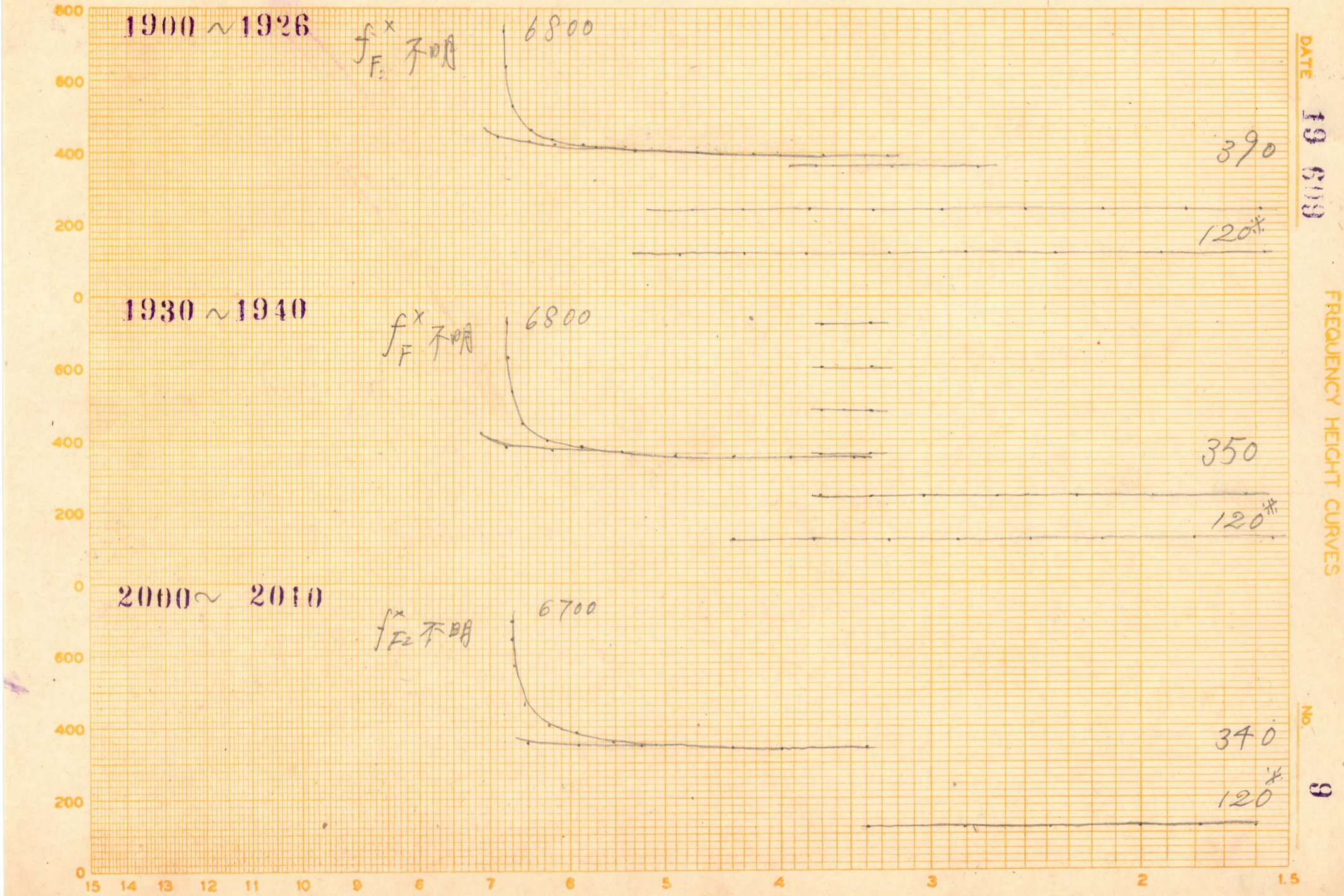

0600 ~ 0611
(8000)
7150
100
0700 ~ 0707
(7300)
6500
100
0800 ~ 0808
(6900)
6100
120
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6[illegible]
FREQUENCY HEIGHT CURVES
No. 4

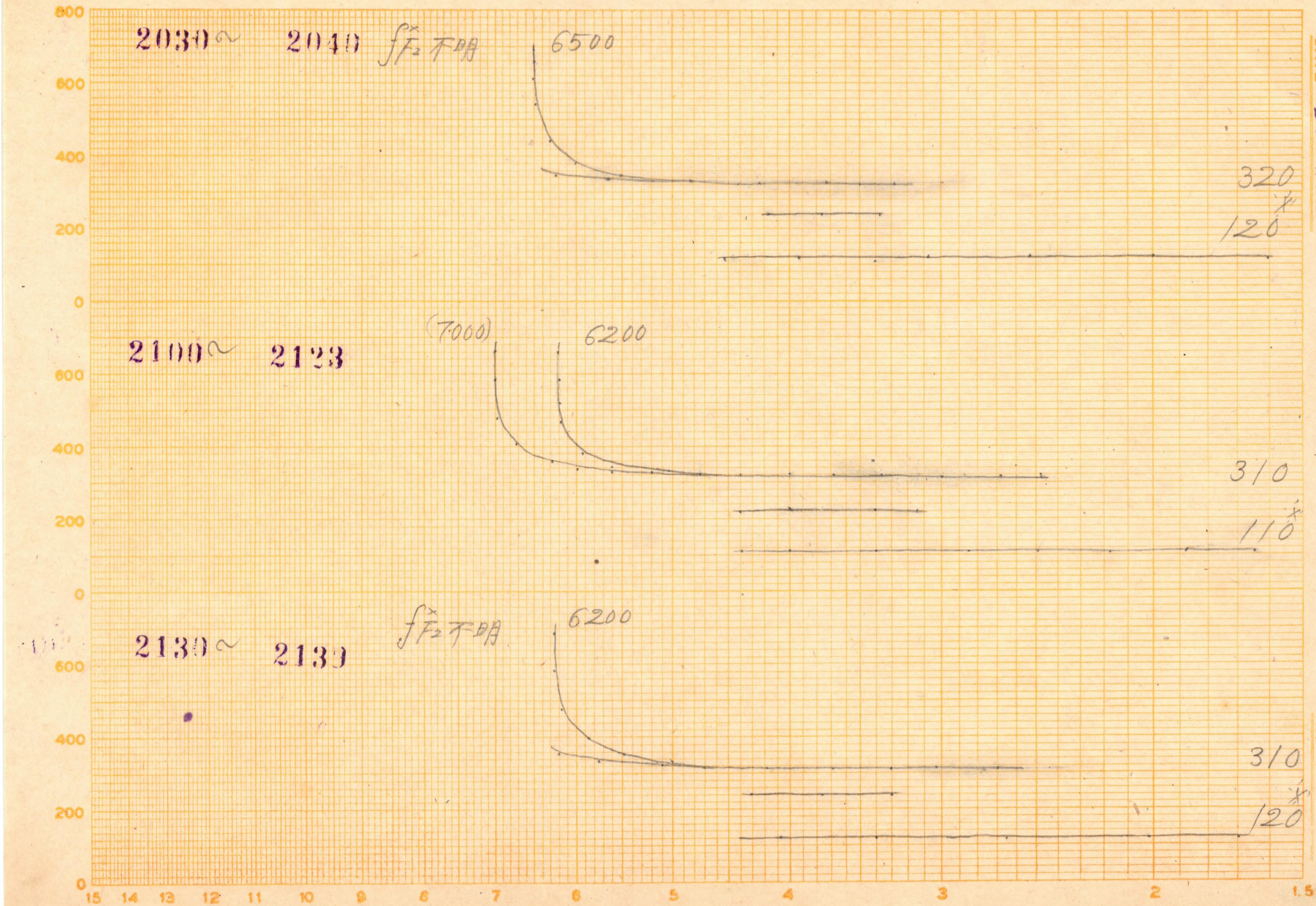

0900~0908
Fエコーナシ。
120
1000~1010
Fエコーナシ。
120
1100~1110
Fエコーナシ。
120
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6[illegible]
FREQUENCY HEIGHT CURVES
No. 5

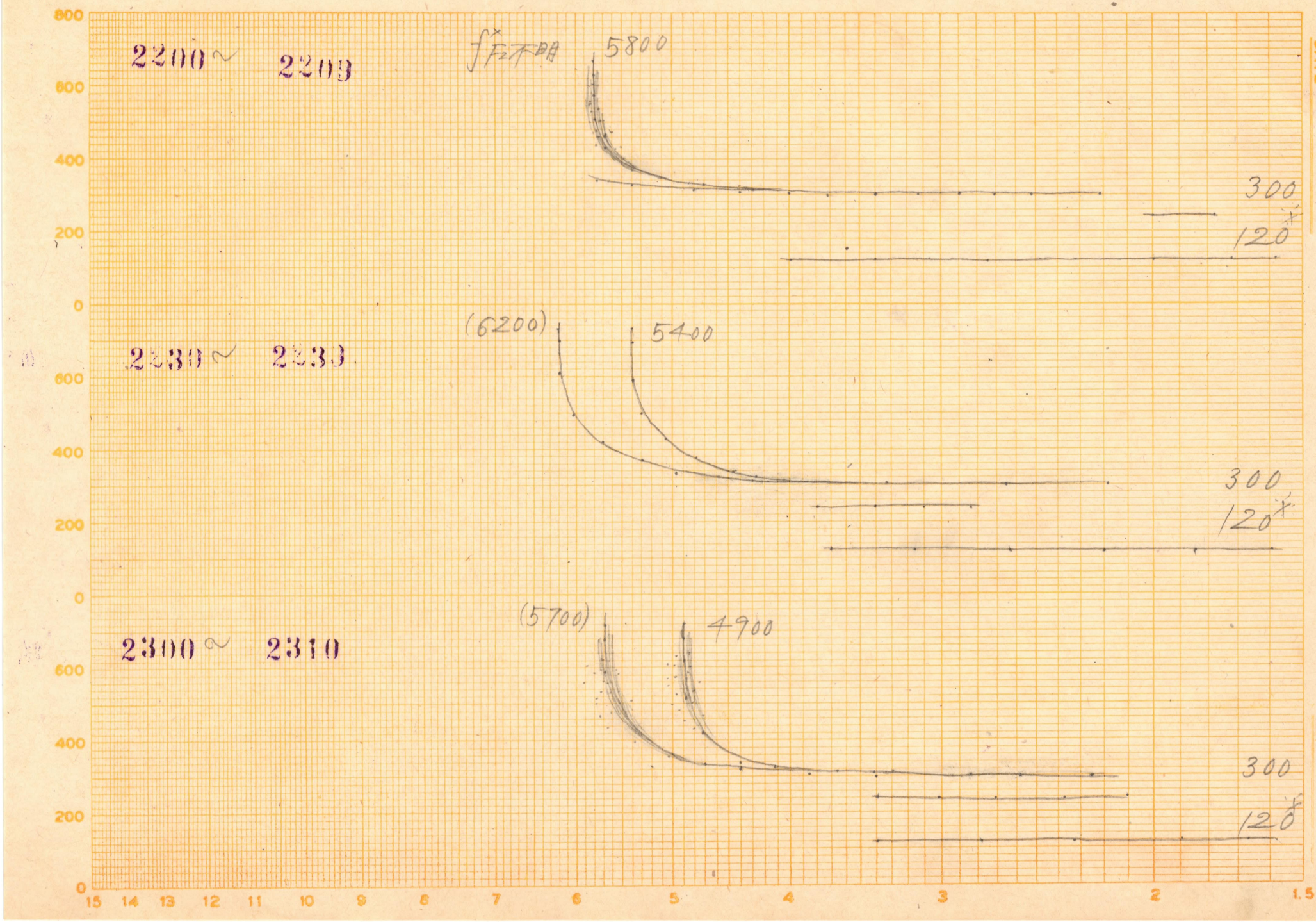

1200~ 1210
Fエコー+2。
120*
1300~ 1309
Fエコー+2。
120*
1400~ 1409
Fエコー+2。
高+150~130
(?)
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6[illegible]9
FREQUENCY HEIGHT CURVES
No. 6

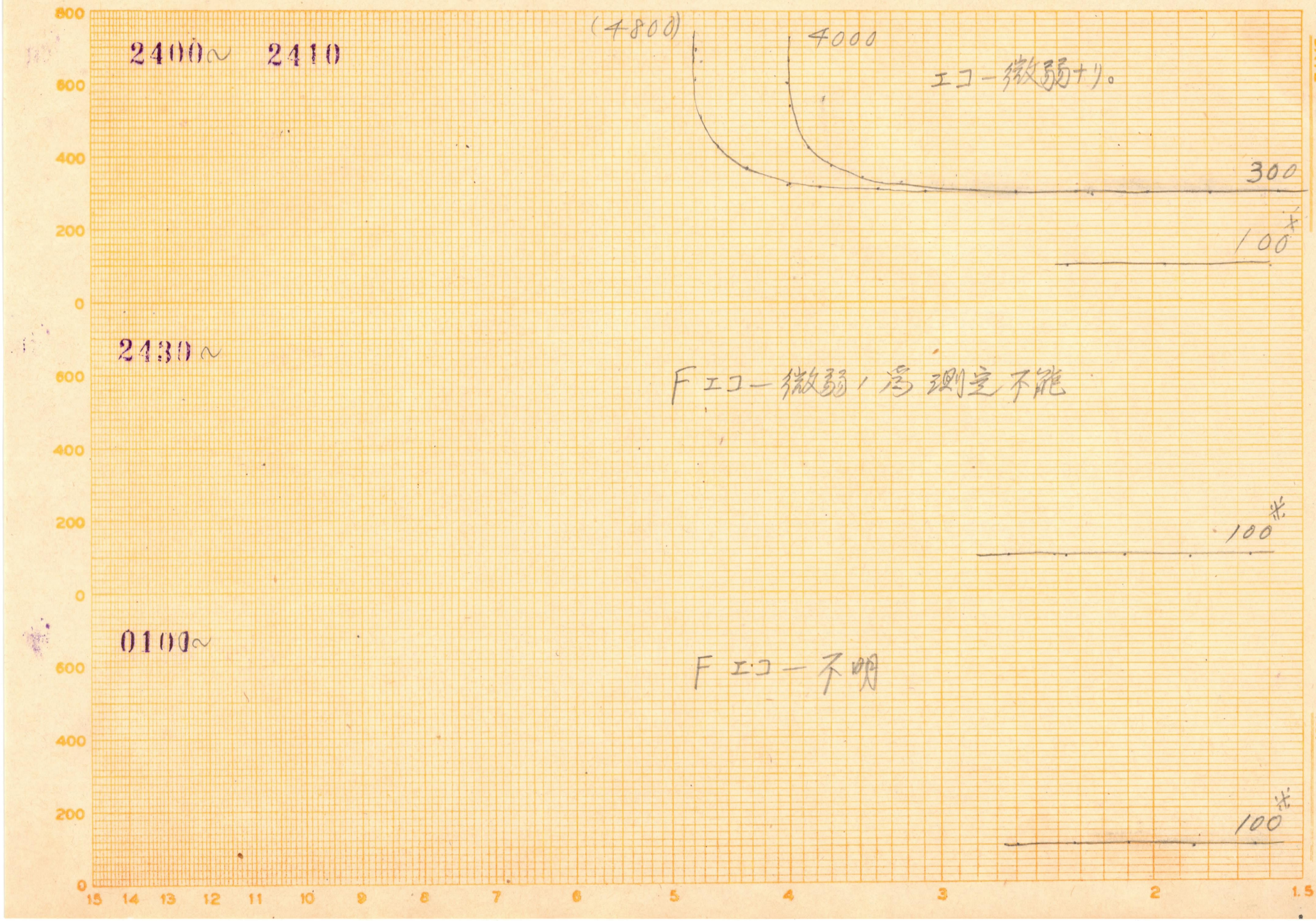

1500 ~1522
Fエコーナシ。
150*
1600 ~1609
Fエコーナシ。
150*
1700 ~1714
Fエコーナシ。
150*
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6/8
FREQUENCY HEIGHT CURVES
No. 7

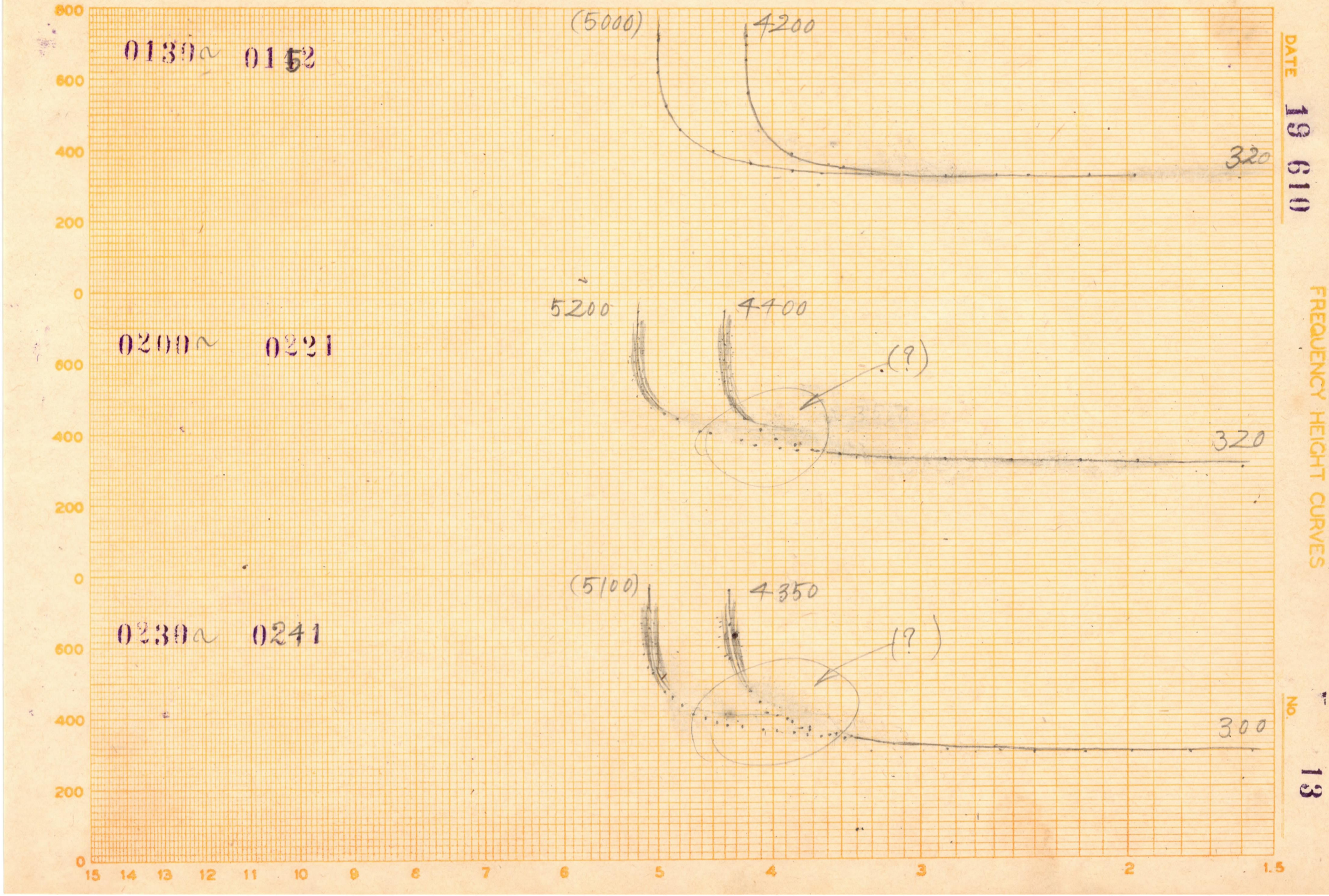

1730 ~ 1736
フエコーナシ。
120
1800 ~ 1807
(6050)
5300
(?)
120
1830 ~ 1840
(6450)
5650
(?)
120
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19
FREQUENCY HEIGHT CURVES
No. 8

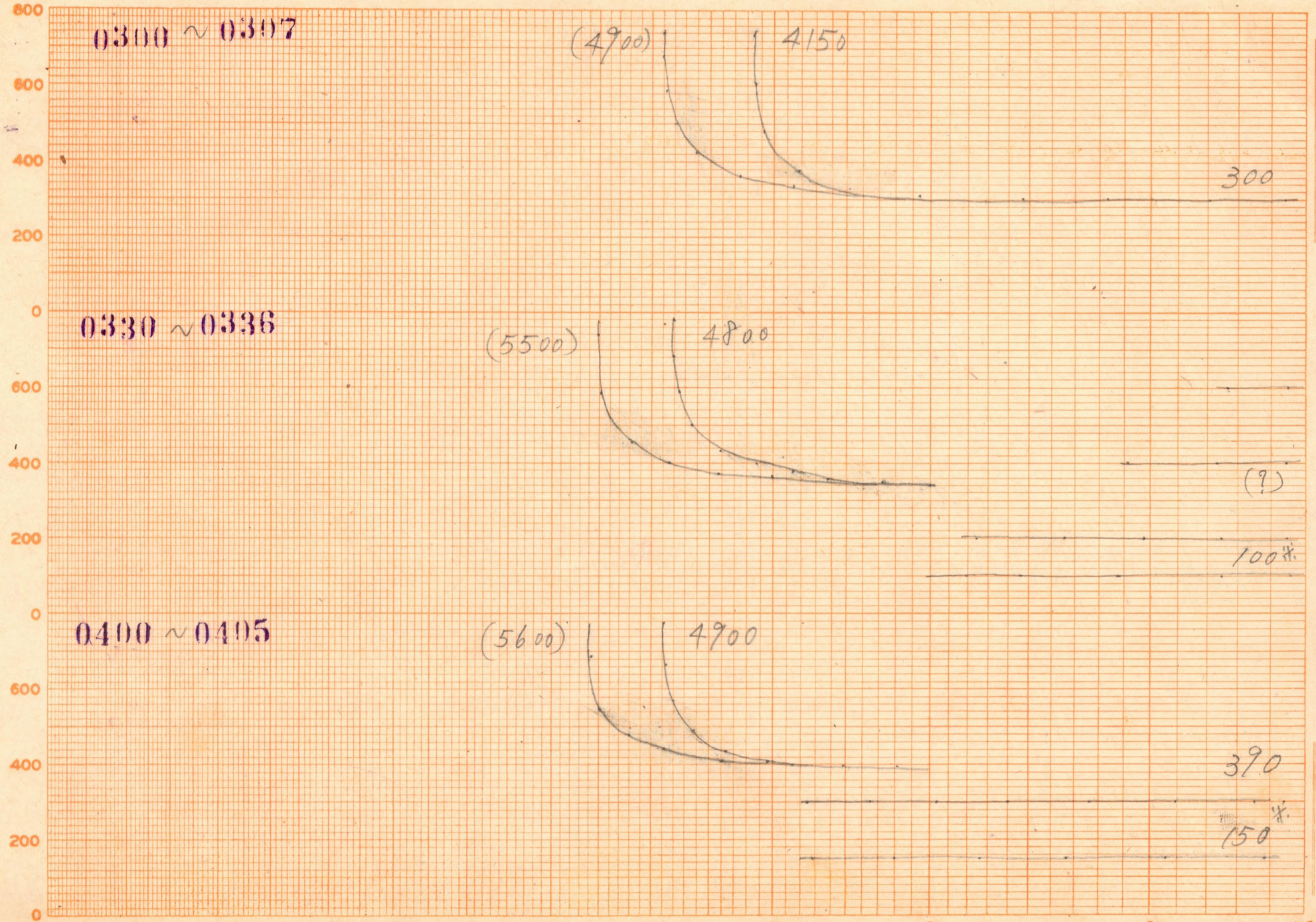

1900 ~ 1926
$f_{F_1}^{x}$ 不明
6800
390
120*
1930 ~ 1940
f_{F}^{x} 不明
6800
350
120*
2000 ~ 2010
$f_{F_2}^{x}$ 不明
6700
340
120*
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6/30
FREQUENCY HEIGHT CURVES
No. 9

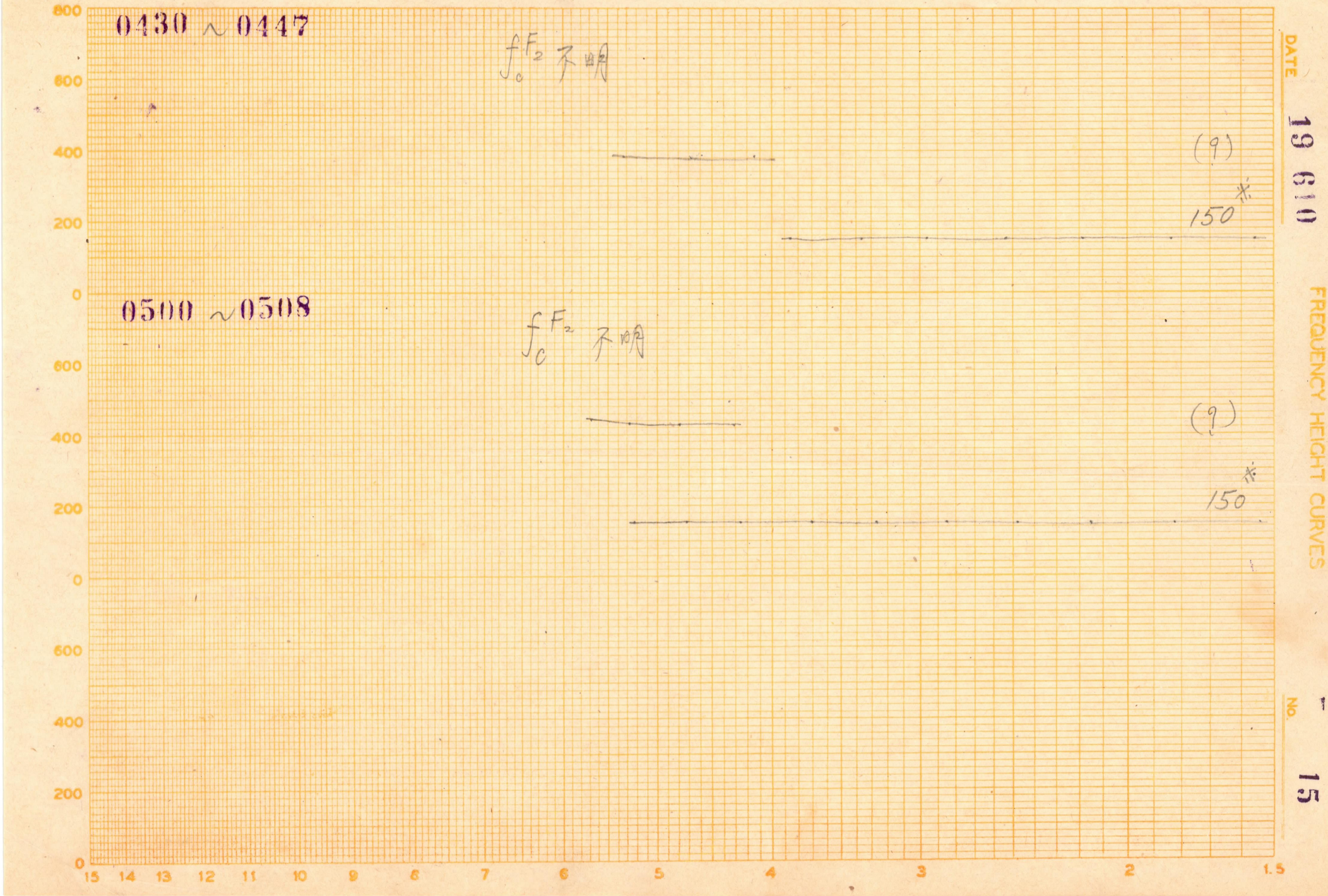

2030~ 2040 f_{F_2} T-DB
6500
320 *
120
2100~ 2123
(7000)
6200
310
110 *
2130~ 2139 f_{F_2} T-DB
6200
310 *
120
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6109
FREQUENCY HEIGHT CURVES
No. 10.

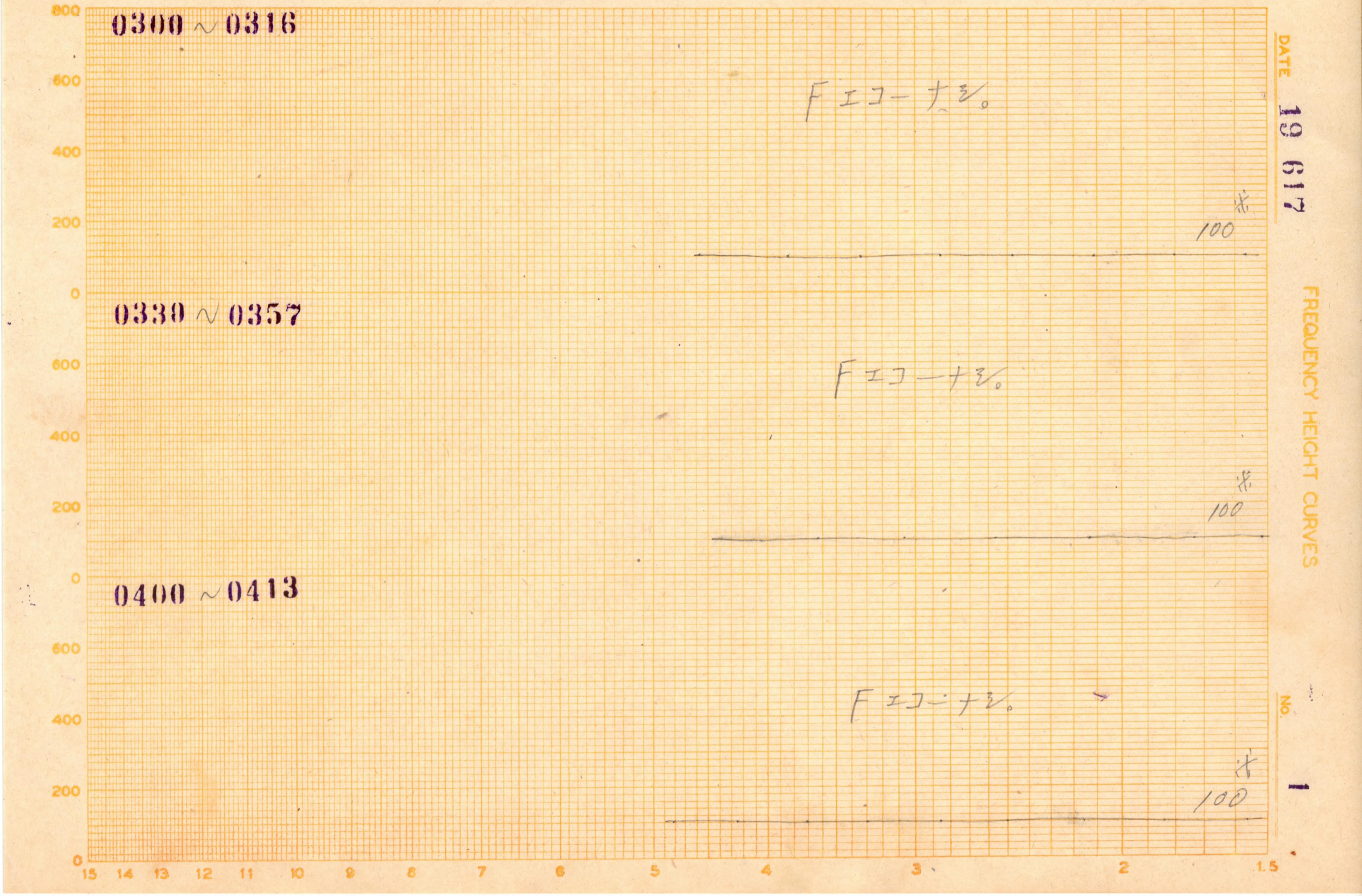

2200 ~ 2209
5800
300
120
2230 ~ 2239
(6200)
5400
300
120
2300 ~ 2310
(5700)
4900
300
120
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6[illegible]
FREQUENCY HEIGHT CURVES
No. 11

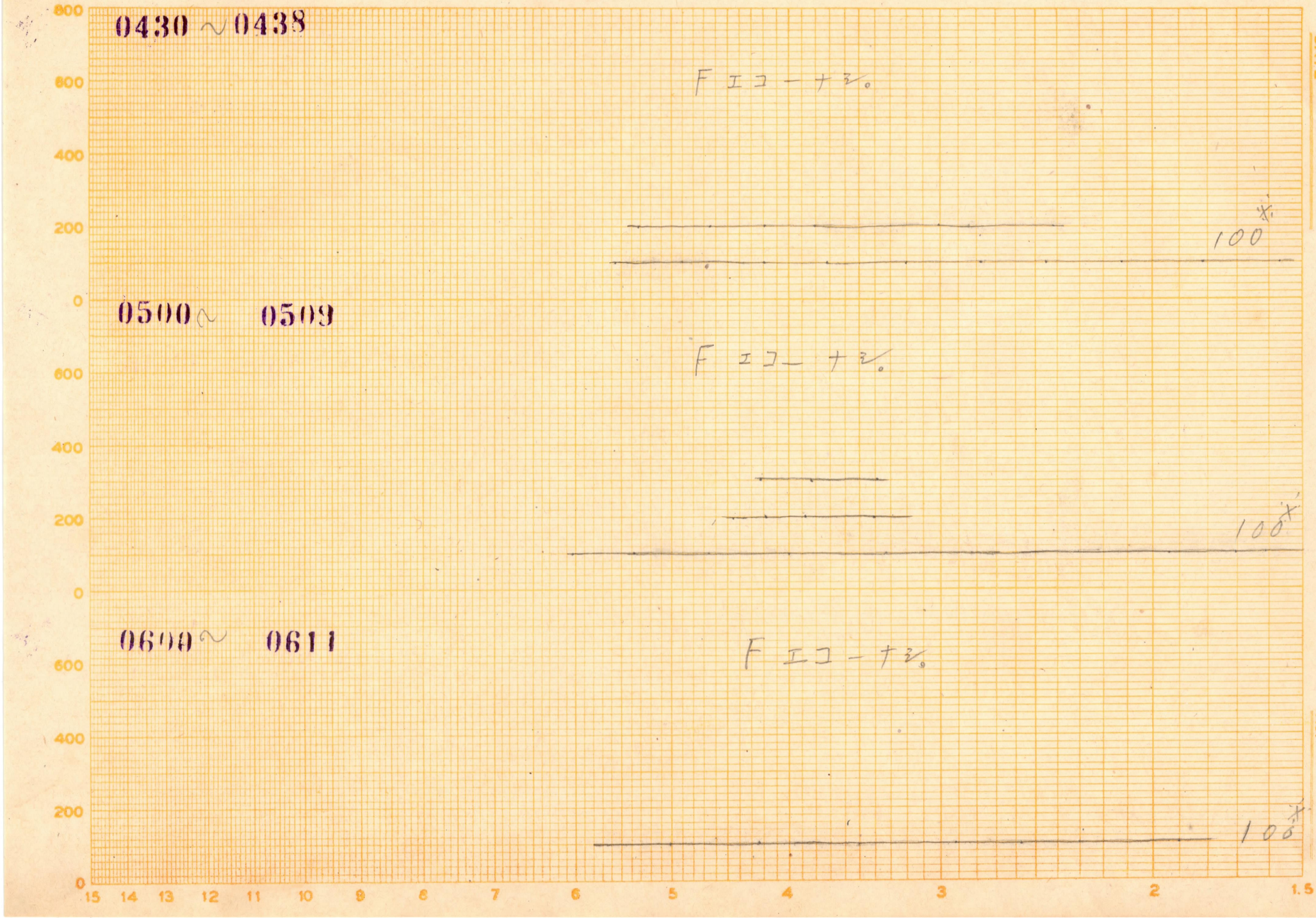

2400~ 2410
(4800)
4000
エコー微弱+り。
300米
100米
2430~
Fエコー微弱、高測定不能
100米
0100~
Fエコー不明
100米
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6/9 19 6/10
FREQUENCY HEIGHT CURVES
No. 12

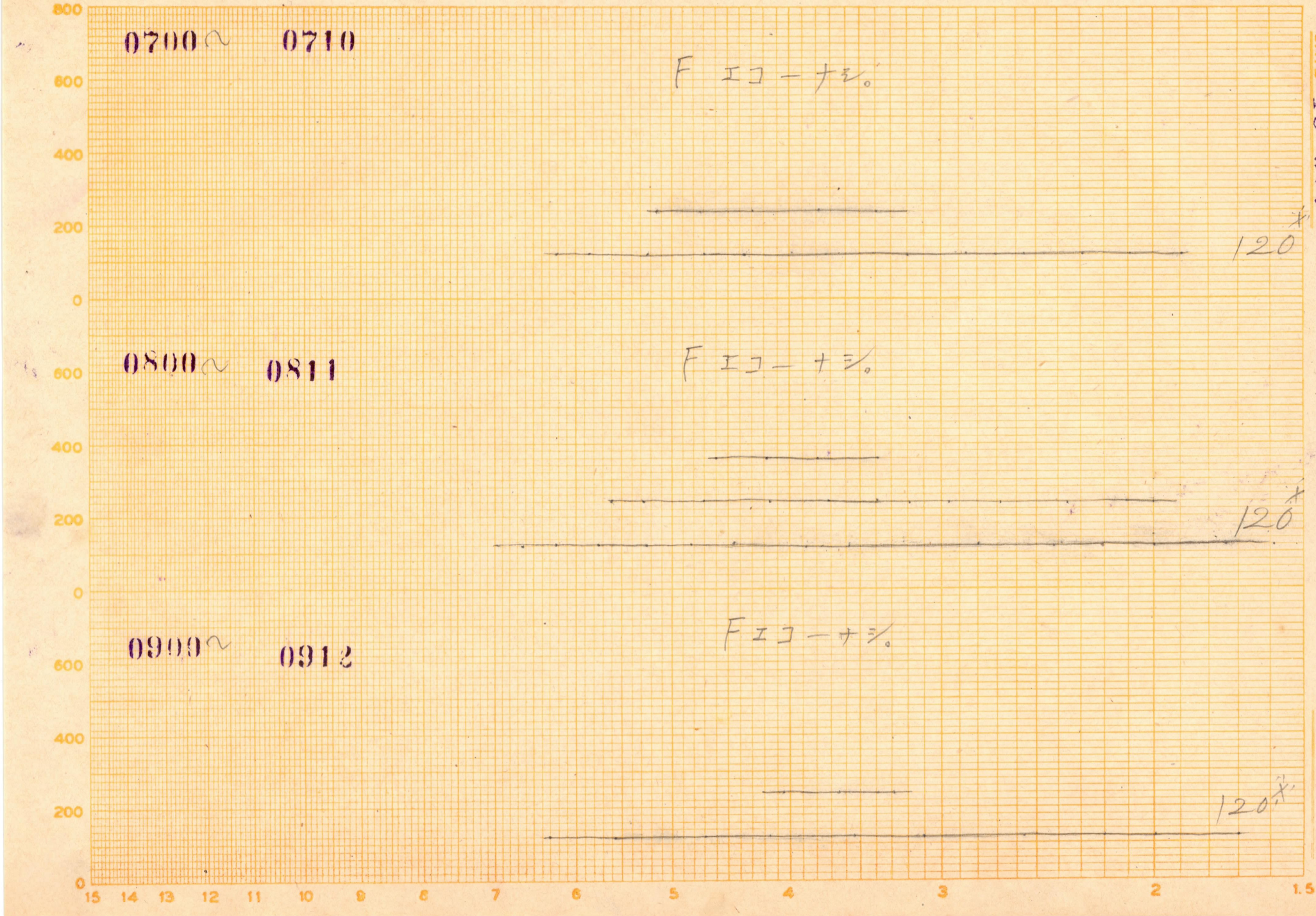

0139~ 0152
(5000)
4200
320
0200~ 0221
5200
4400
(?)
320
0230~ 0241
(5100)
4350
(?)
300
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 10
FREQUENCY HEIGHT CURVES
No. 13

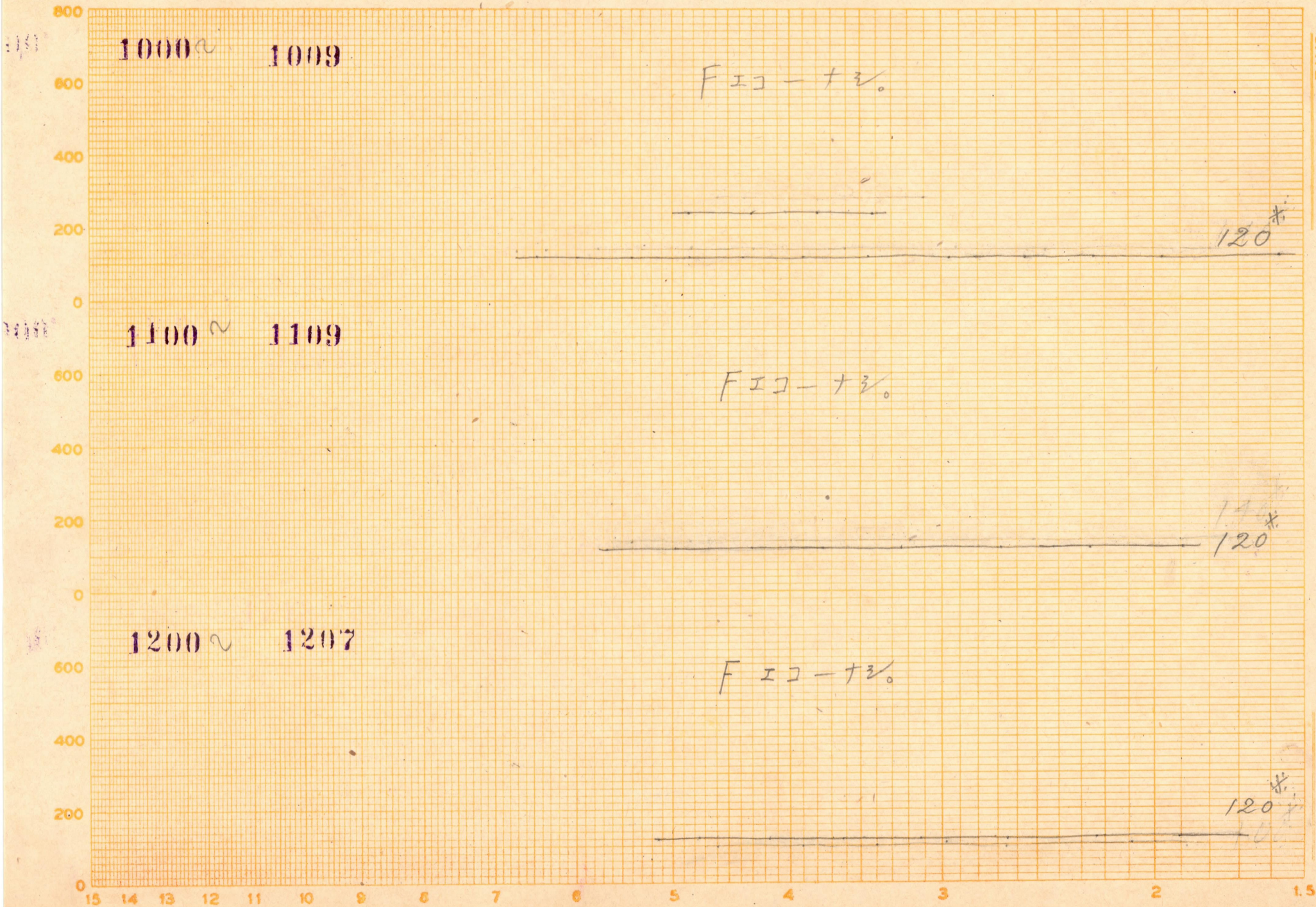

0300 ~ 0307
(4900)
4150
300
0330 ~ 0336
(5500)
4800
(?)
100*
0400 ~ 0405
(5600)
4900
390
150*
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 10
FREQUENCY HEIGHT CURVES
No. 14

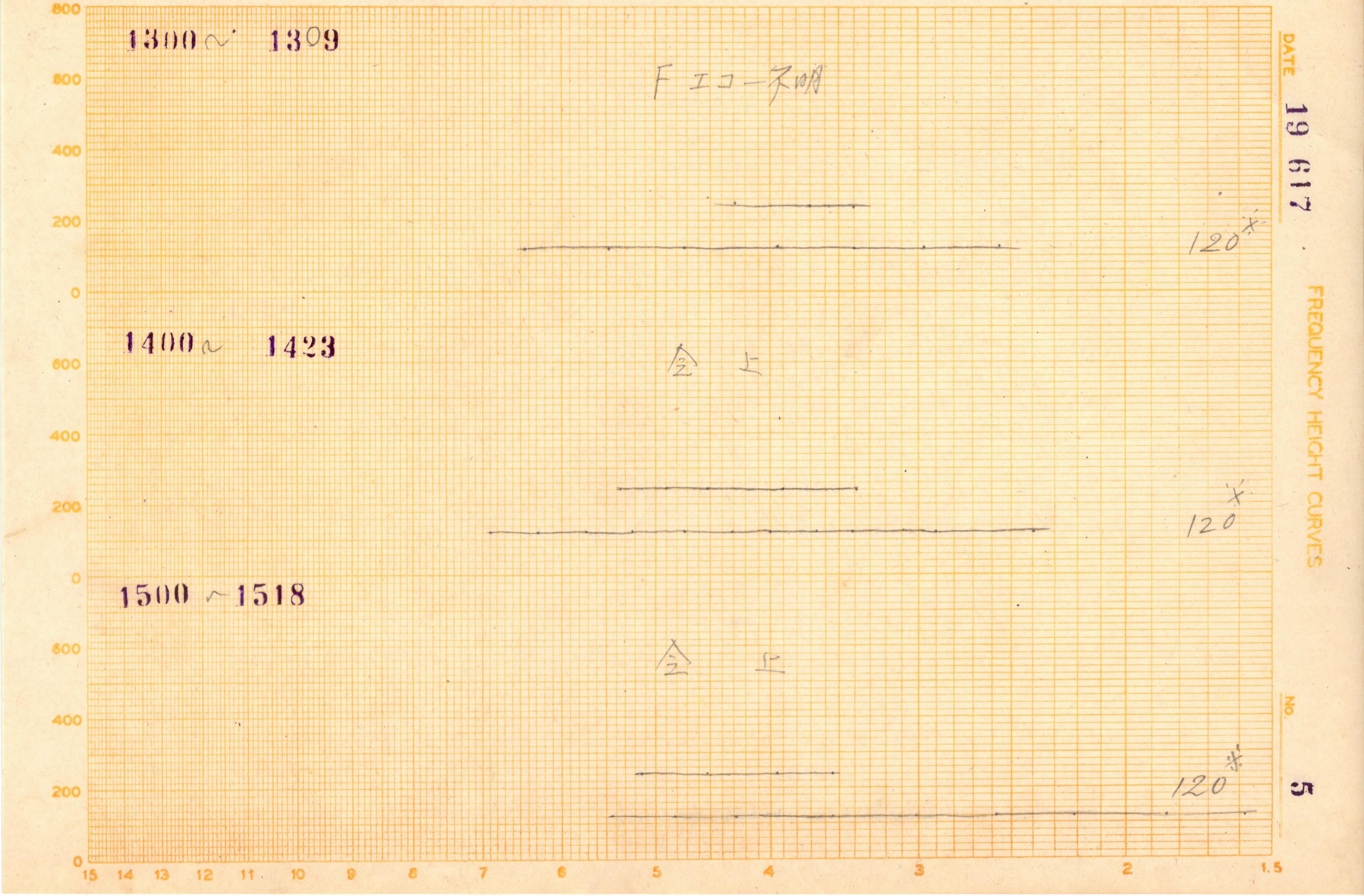

0430 ~ 0447
f_0F_2 不明
(9)
150 ※
0500 ~ 0508
f_0F_2 不明
(9)
150 ※
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 10
FREQUENCY HEIGHT CURVES
No. 15

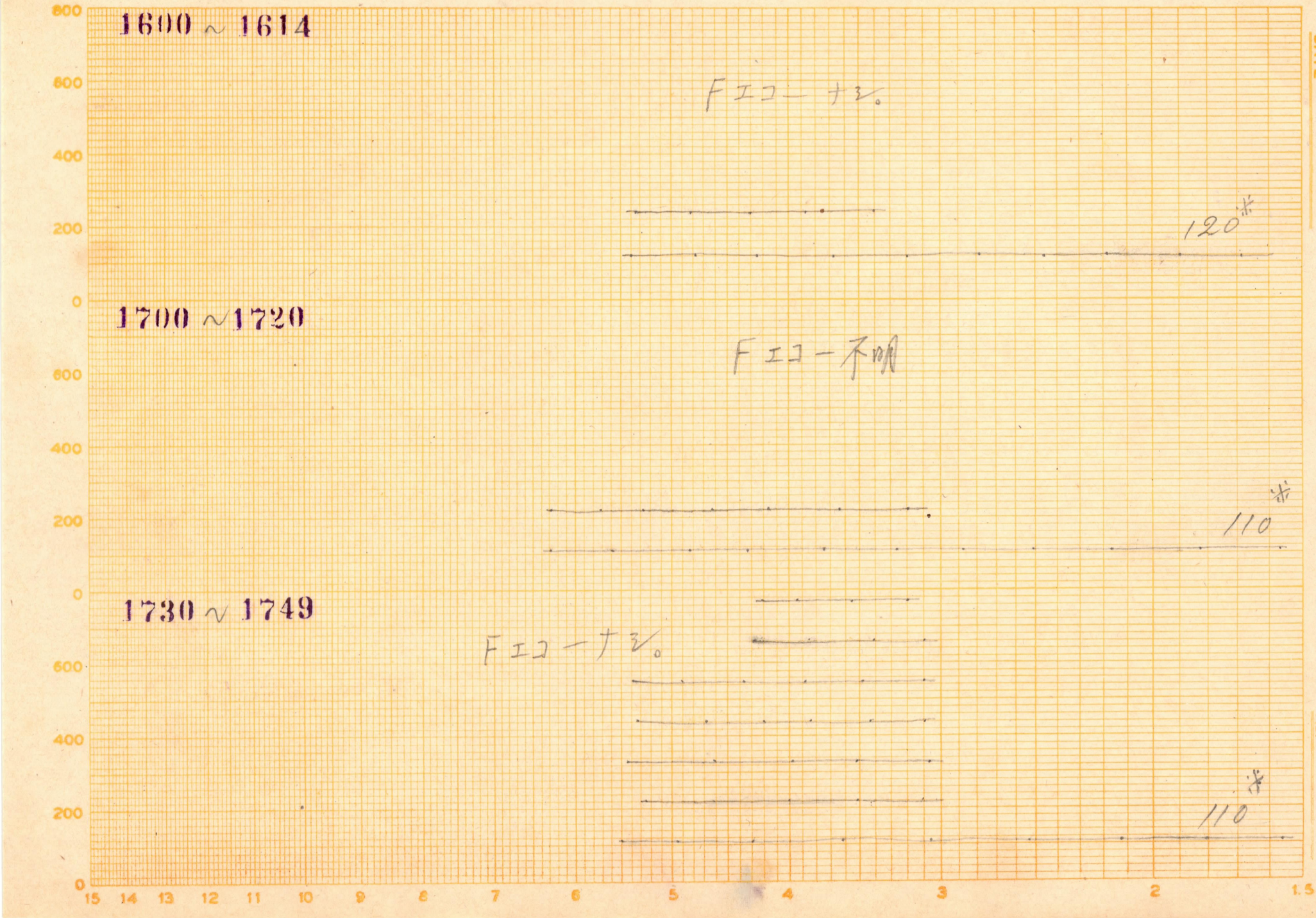

0300 ~ 0316
0330 ~ 0357
0400 ~ 0413
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
Fエコー十ミ。
100
Fエコー十ミ。
100
Fエコー十ミ。
100
DATE 19 6 17
FREQUENCY HEIGHT CURVES
No. 1

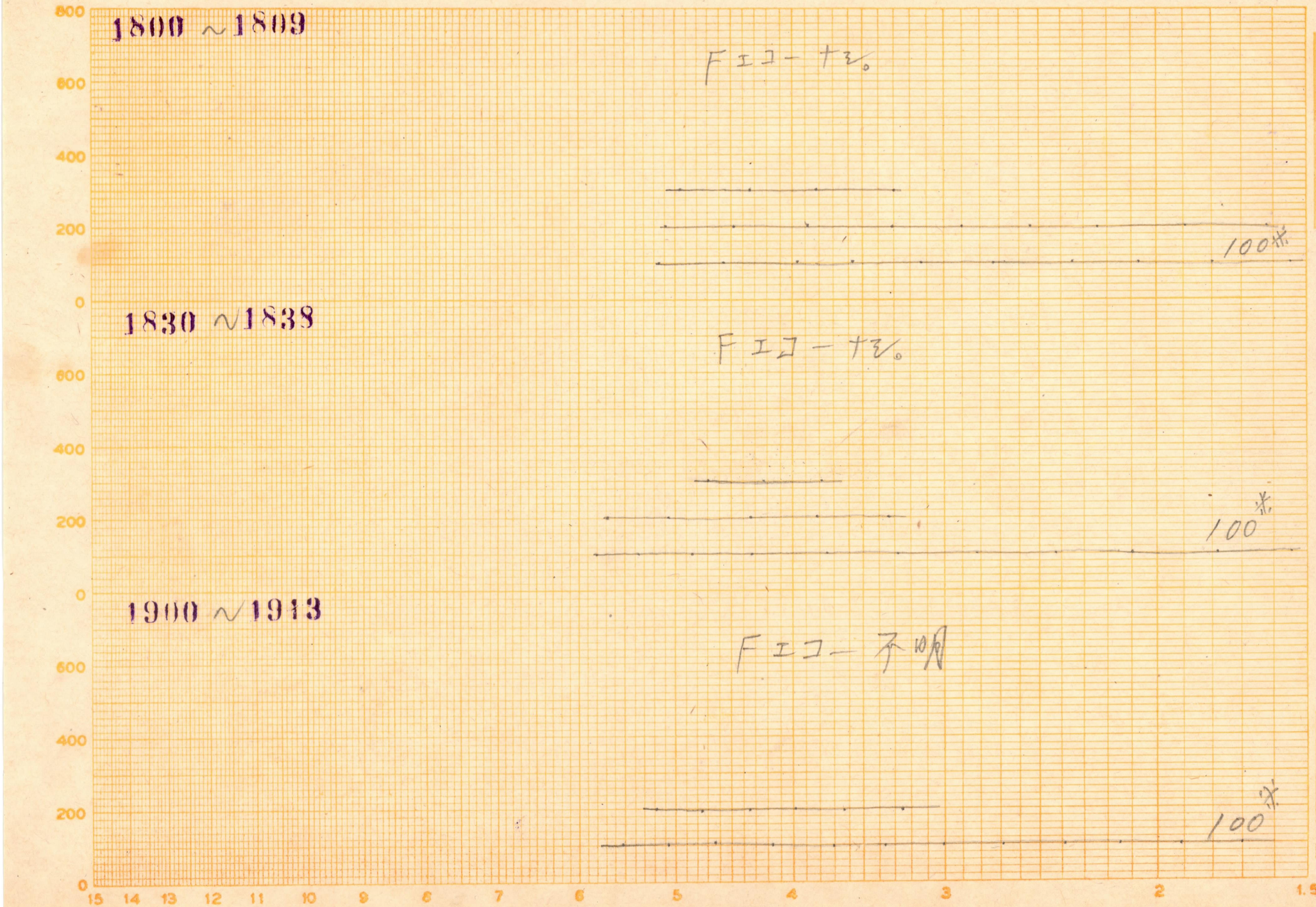

0430 ~ 0438
F エコー ナシ。
100 X
0500 ~ 0509
F エコー ナシ。
100 X
0608 ~ 0611
F エコー ナシ。
100 X
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 17
FREQUENCY HEIGHT CURVES
No. 2


0700~ 0710
Fエコーナシ。
120
0800~ 0811
Fエコーナシ。
120
0900~ 0912
Fエコーナシ。
120
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 17
FREQUENCY HEIGHT CURVES
No. 3


1000 ~ 1009
Fエコーナシ。
120*
1100 ~ 1109
Fエコーナシ。
120*
1200 ~ 1207
Fエコーナシ。
120*
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 617
FREQUENCY HEIGHT CURVES
No. 4


1300 ~ 1309
Fエコー不明
120
1400 ~ 1423
120
1500 ~ 1518
120
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 17
FREQUENCY HEIGHT CURVES
No. 5

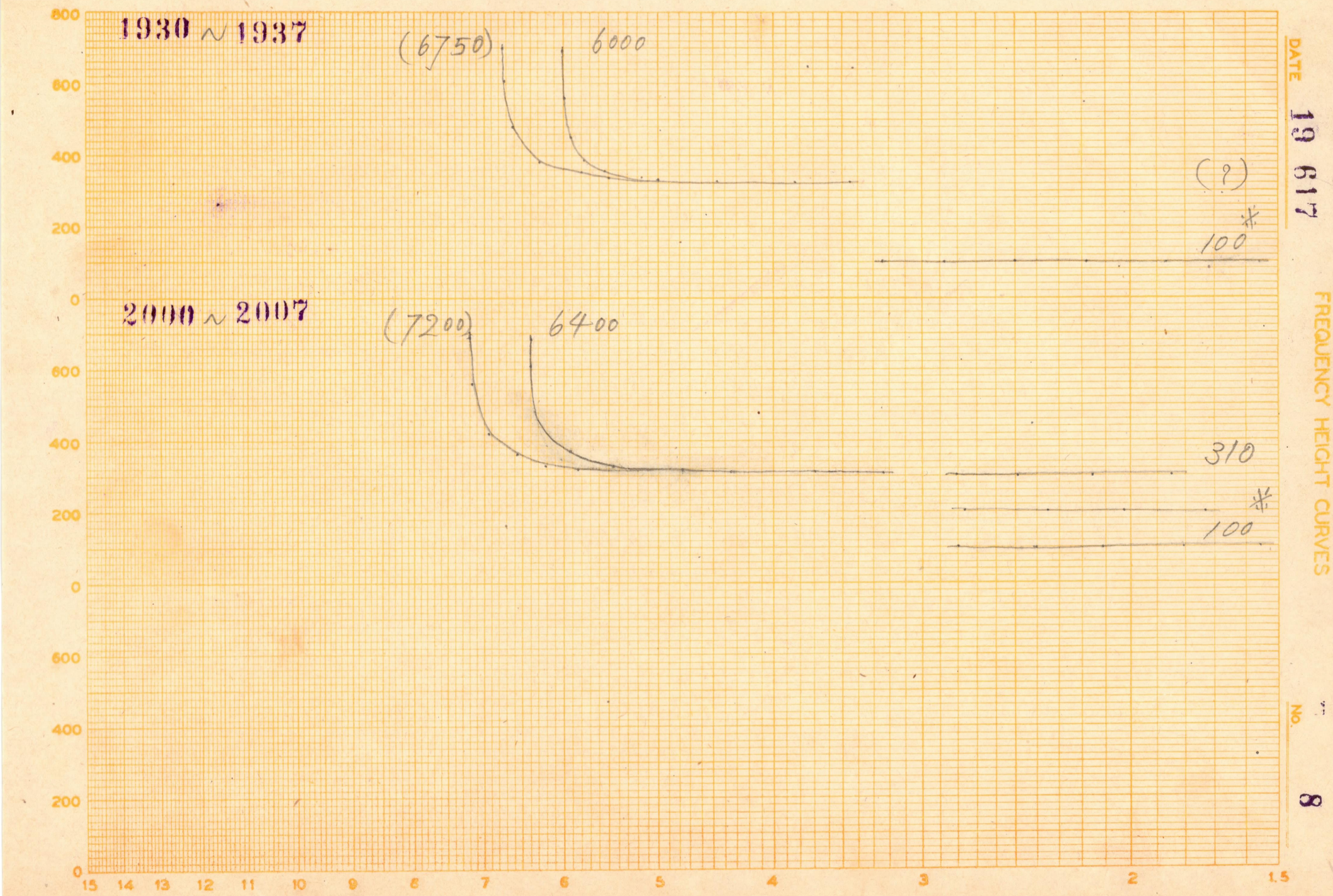

1600 ~ 1614
Fエコー ナシ。
120㌔
1700 ~1720
Fエコー不明
110㌔
1730 ~ 1749
Fエコー ナシ。
110㌔
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 617
FREQUENCY HEIGHT CURVES
No. 6

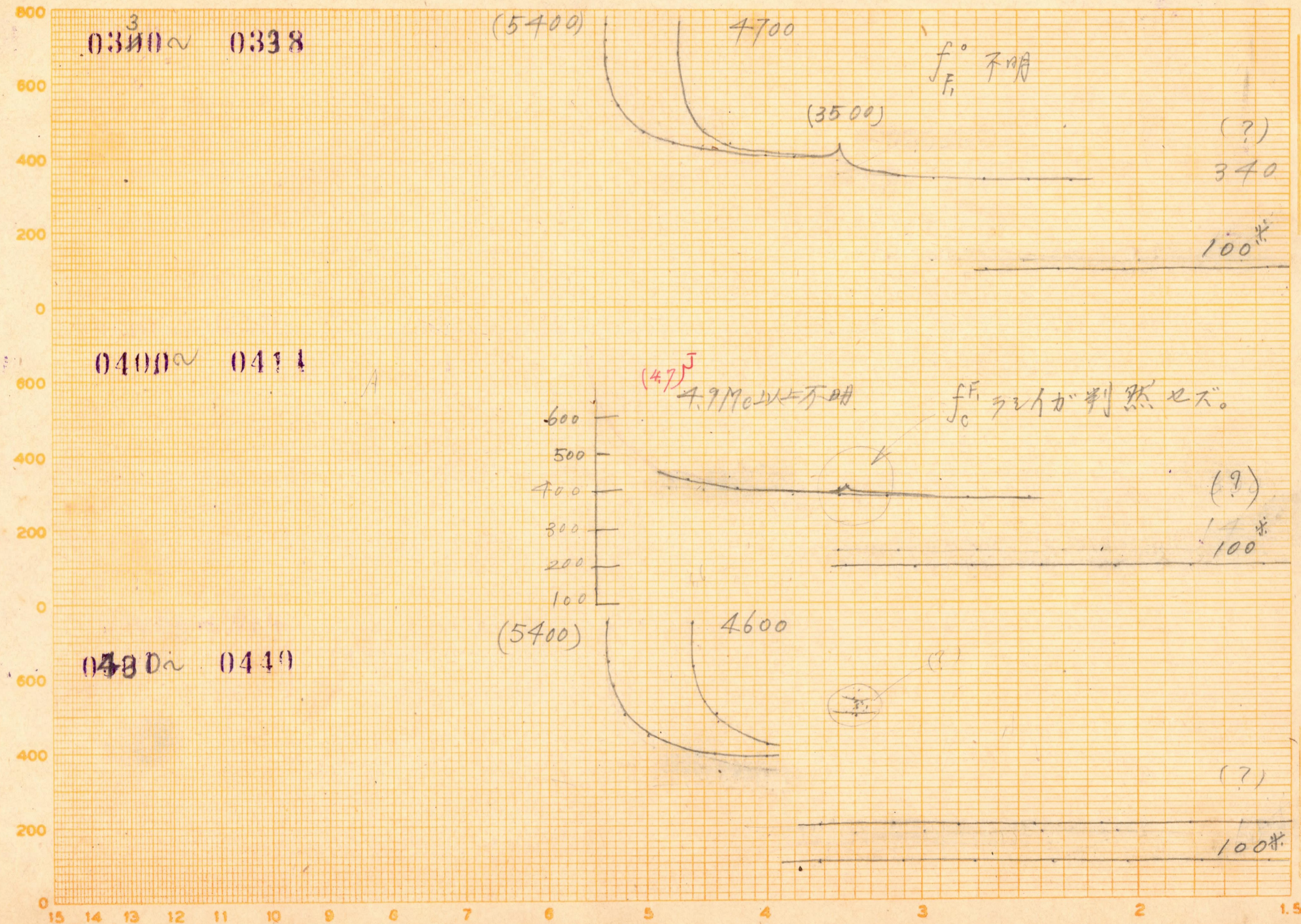


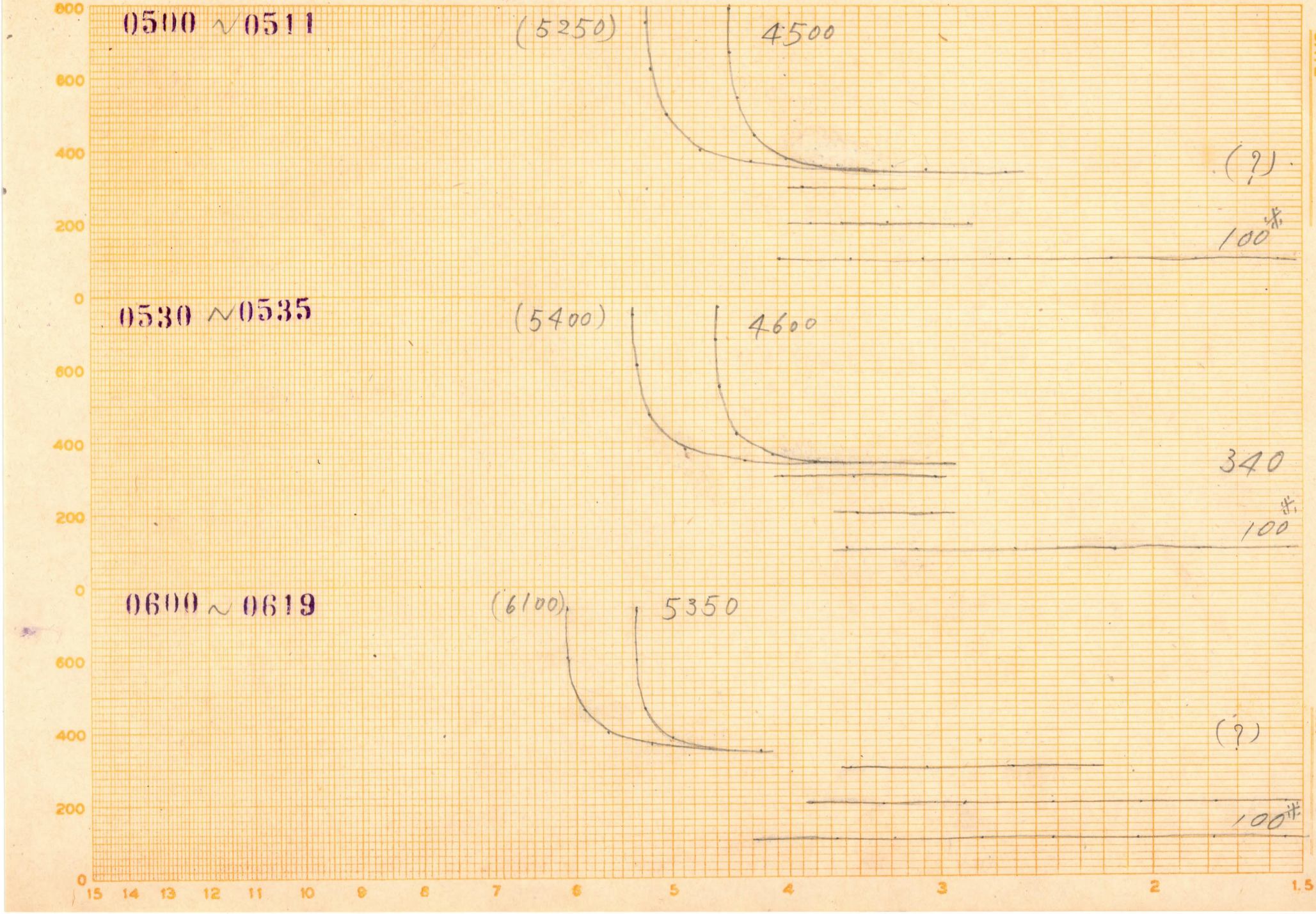
DATE 19 617

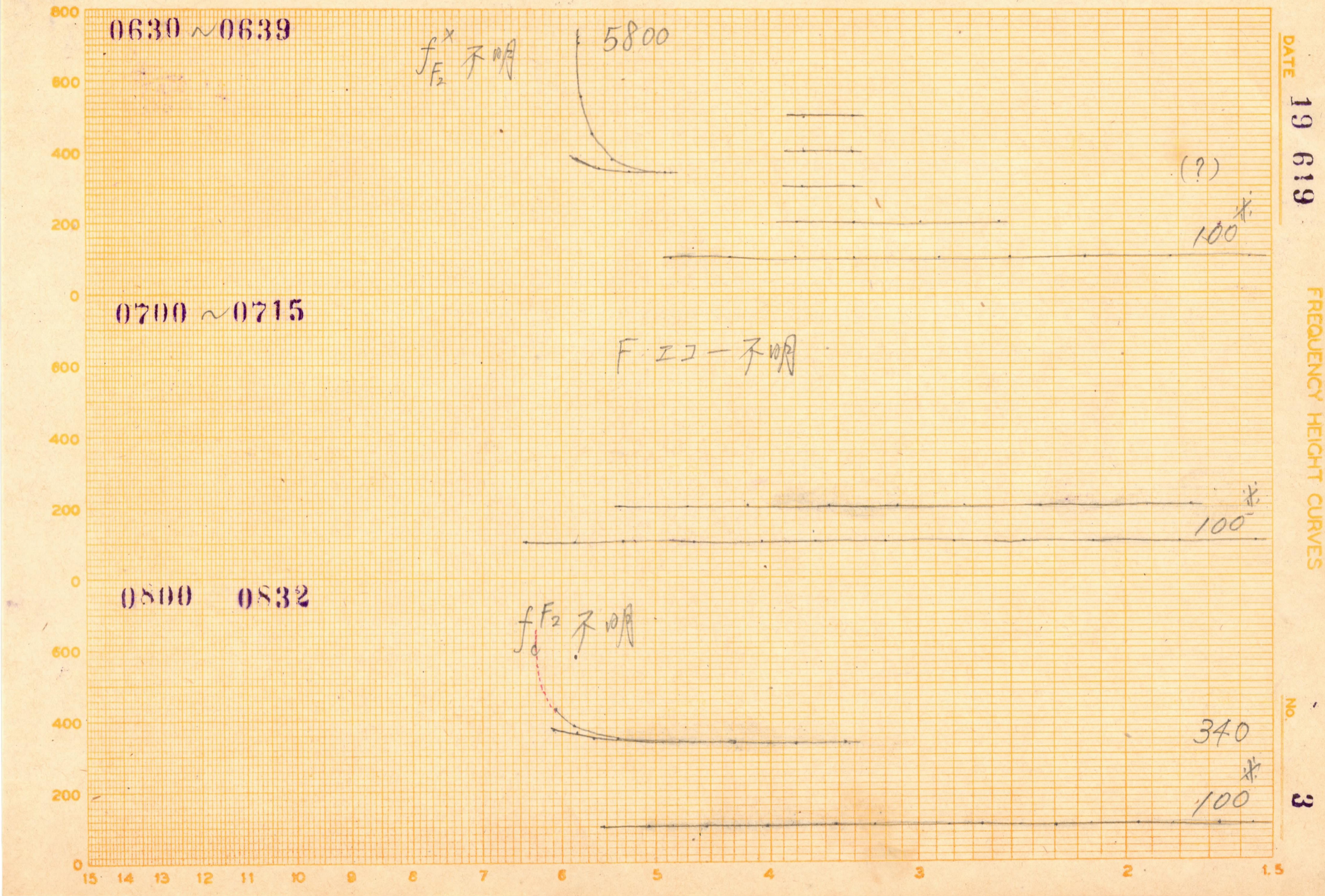
FREQUENCY HEIGHT CURVES

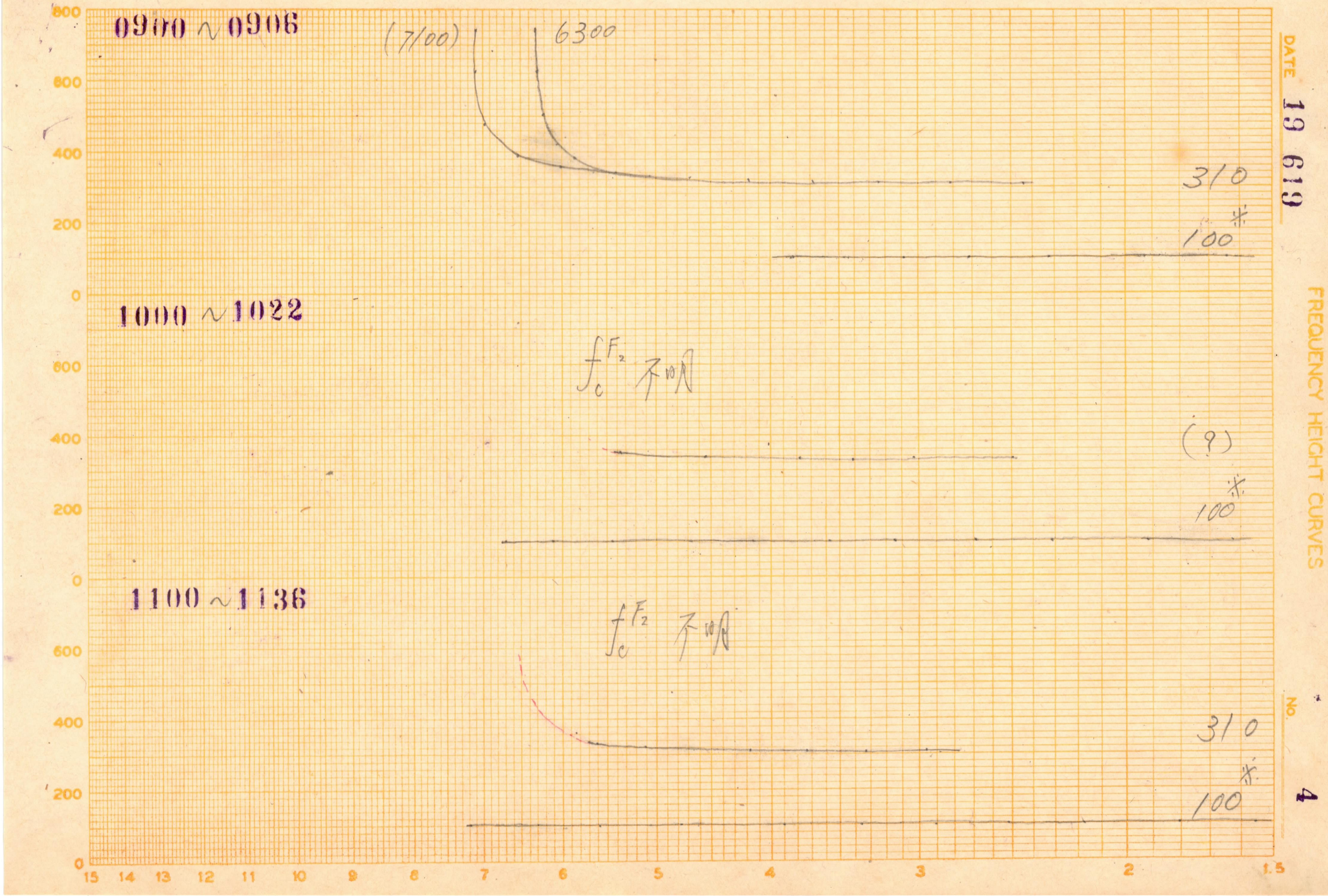
No. 7

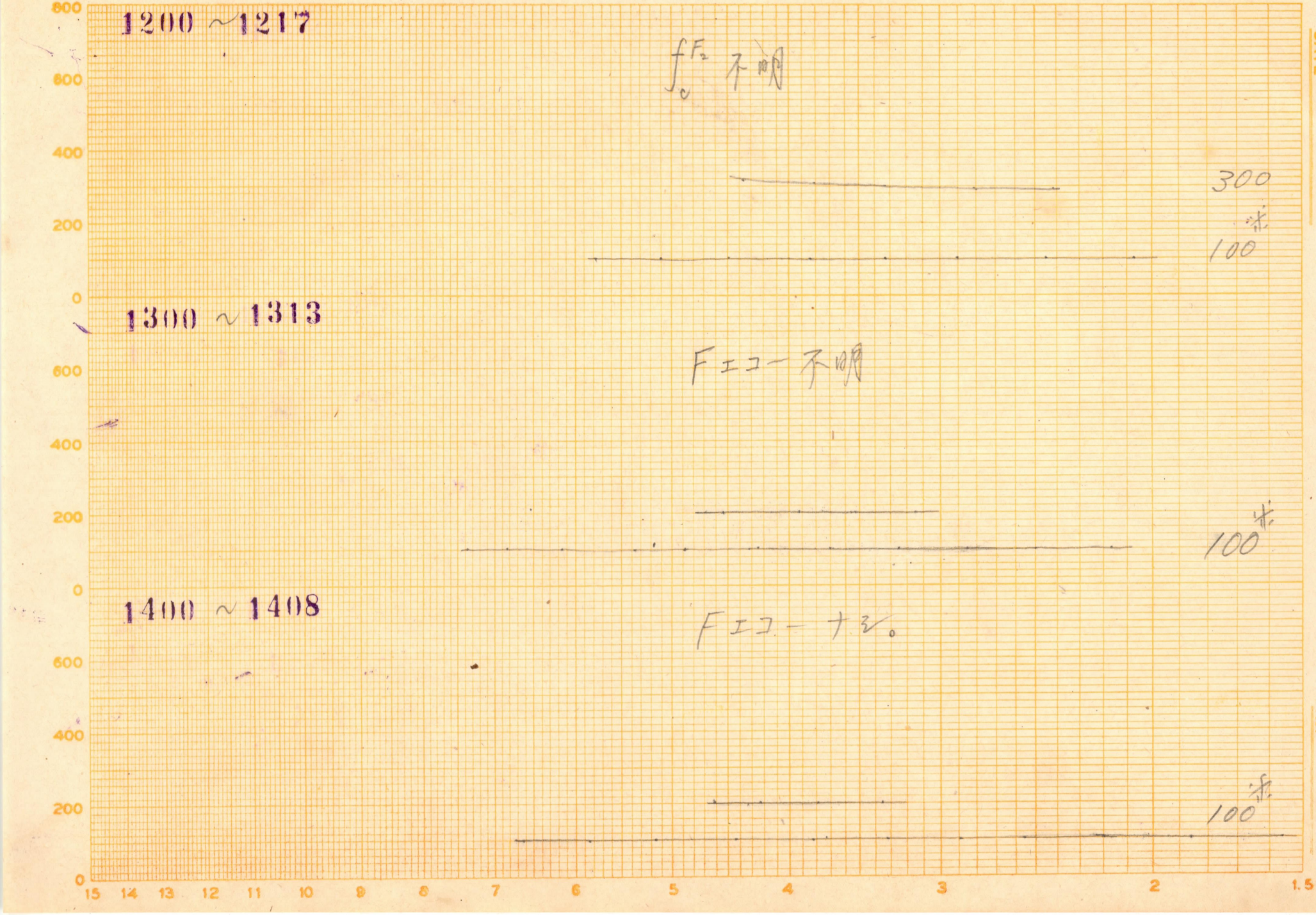

1930 ~ 1937
(6750)
6000
(?)
100
2000 ~ 2007
(7200)
6400
310
100
800
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 617
FREQUENCY HEIGHT CURVES
No. 8

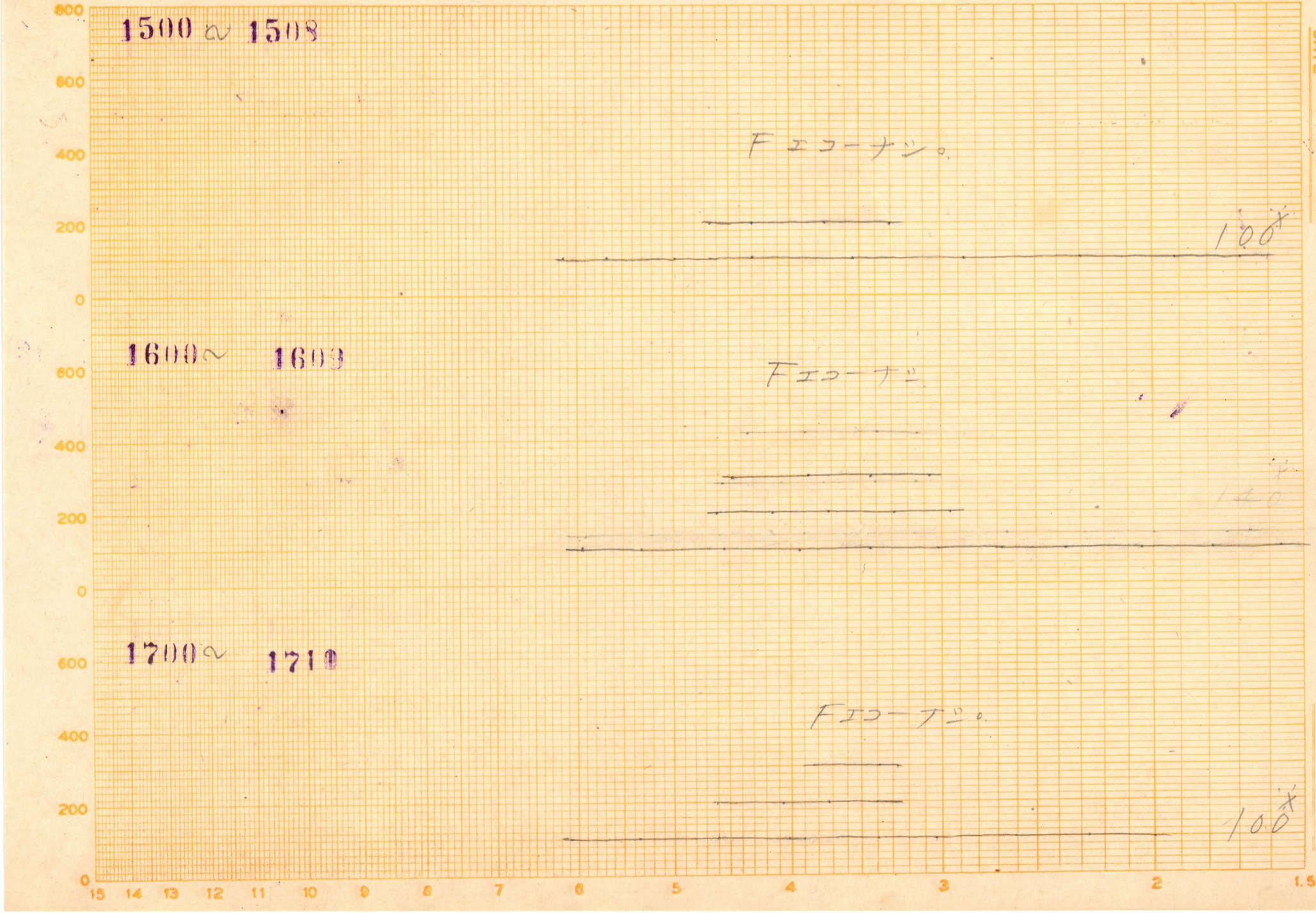

0330～0338
(5400)
4700
(3500)
(?)
340
100米
0400～0414
(47)
4.9Mc以上不明
600
500
400
300
200
100
(5400)
4600
(?)
100米
0420～0449
(?)
100米
DATE 19 619
FREQUENCY HEIGHT CURVES
No. 1
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5

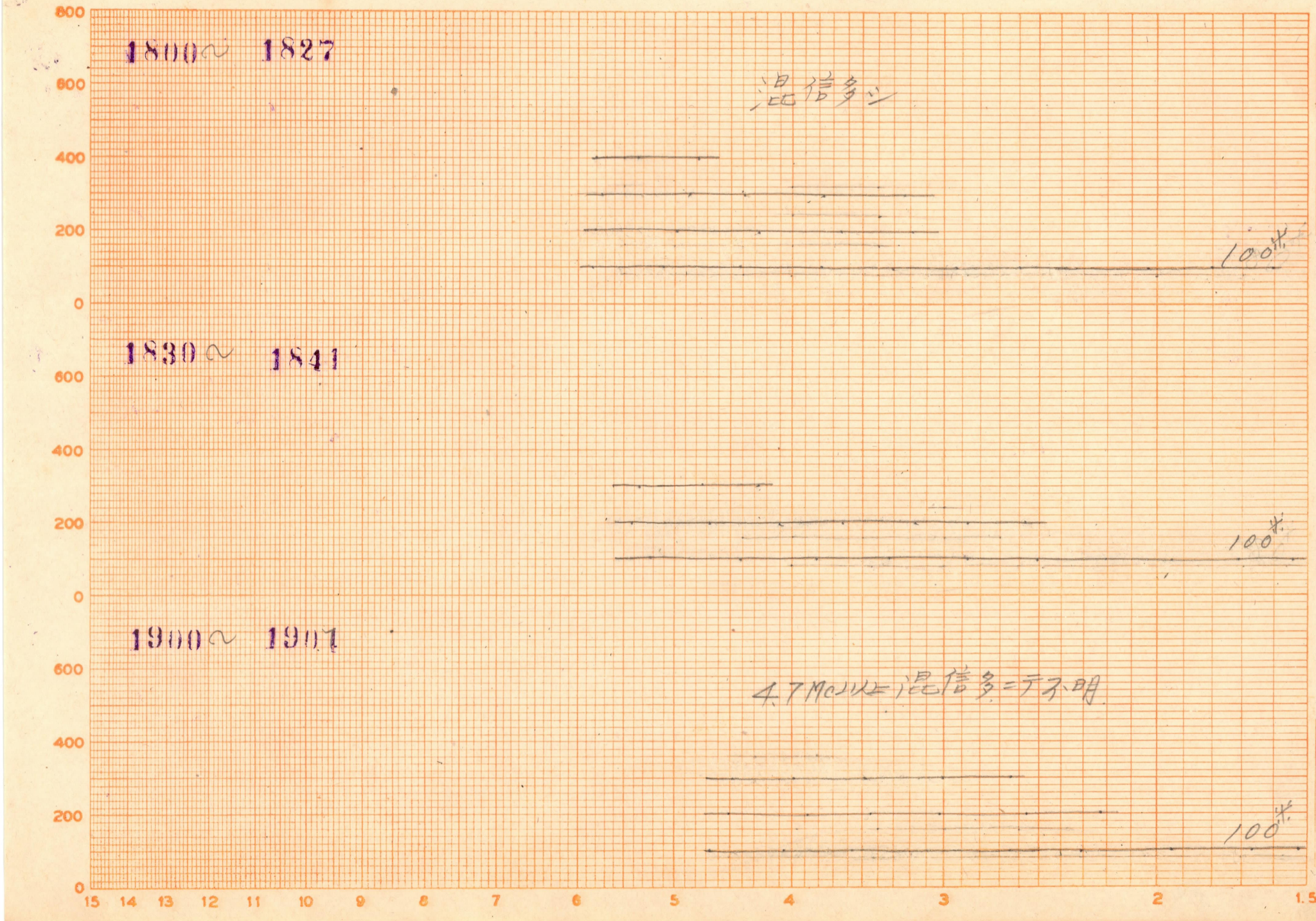

0500 ~ 0511
(5250)
4500
(?)
100
0530 ~ 0535
(5400)
4600
340
100
0600 ~ 0619
(6100)
5350
(?)
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 619
FREQUENCY HEIGHT CURVES
No. 2

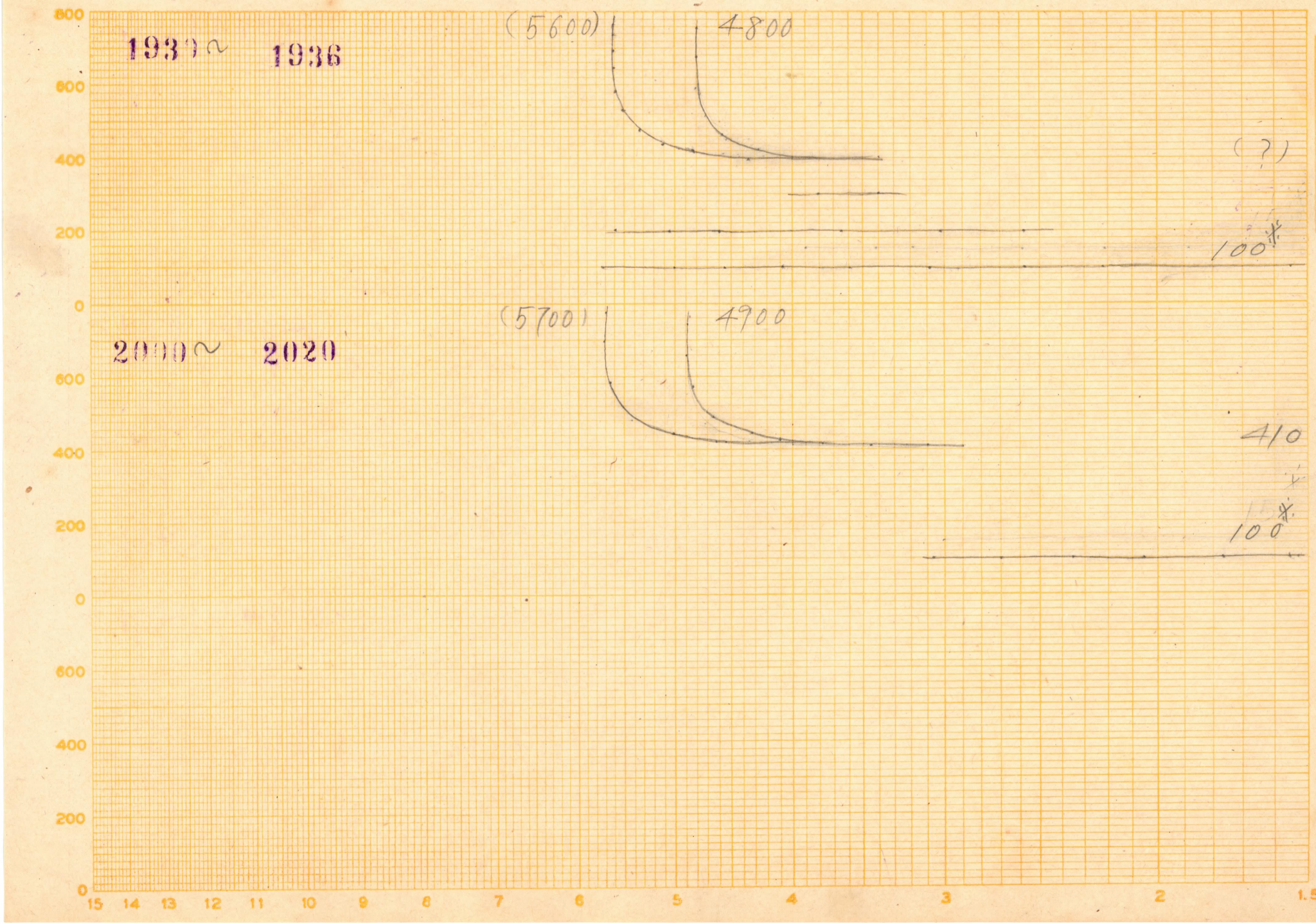

0630 ~0639
$f_{F_2}^{x}$ 不明
5800
(?)
100 米
0700 ~0715
F エコー不明
100 米
0800 0832
f_{F_2} 不明
340 米
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 619
FREQUENCY HEIGHT CURVES
No. 3

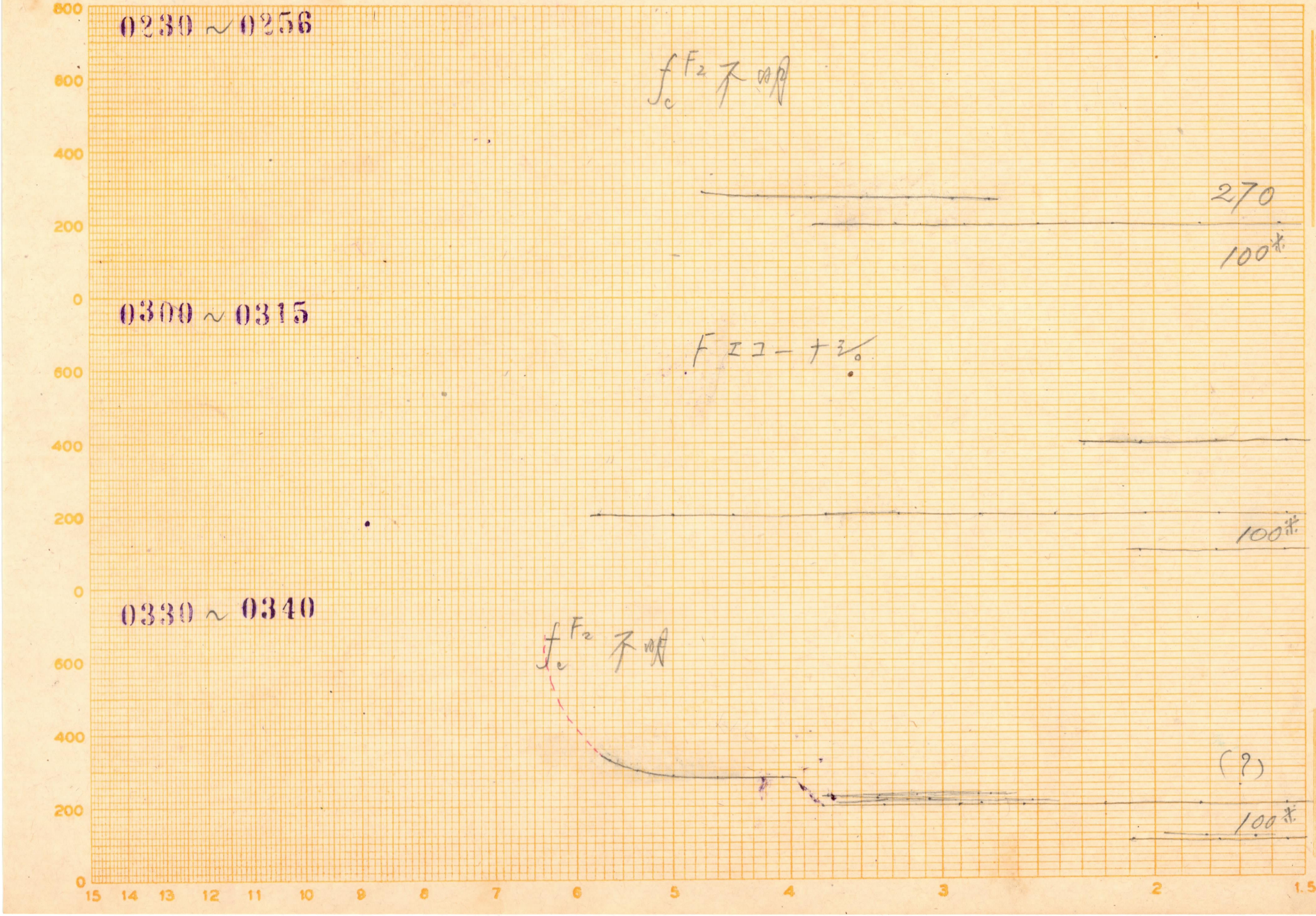

0900 ~ 0906
(7100)
6300
310
100
1000 ~ 1022
$f_c F_2$ 不明
(9)
100
1100 ~ 1136
$f_c F_2$ 不明
310
100
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 619
FREQUENCY HEIGHT CURVES
No. 4

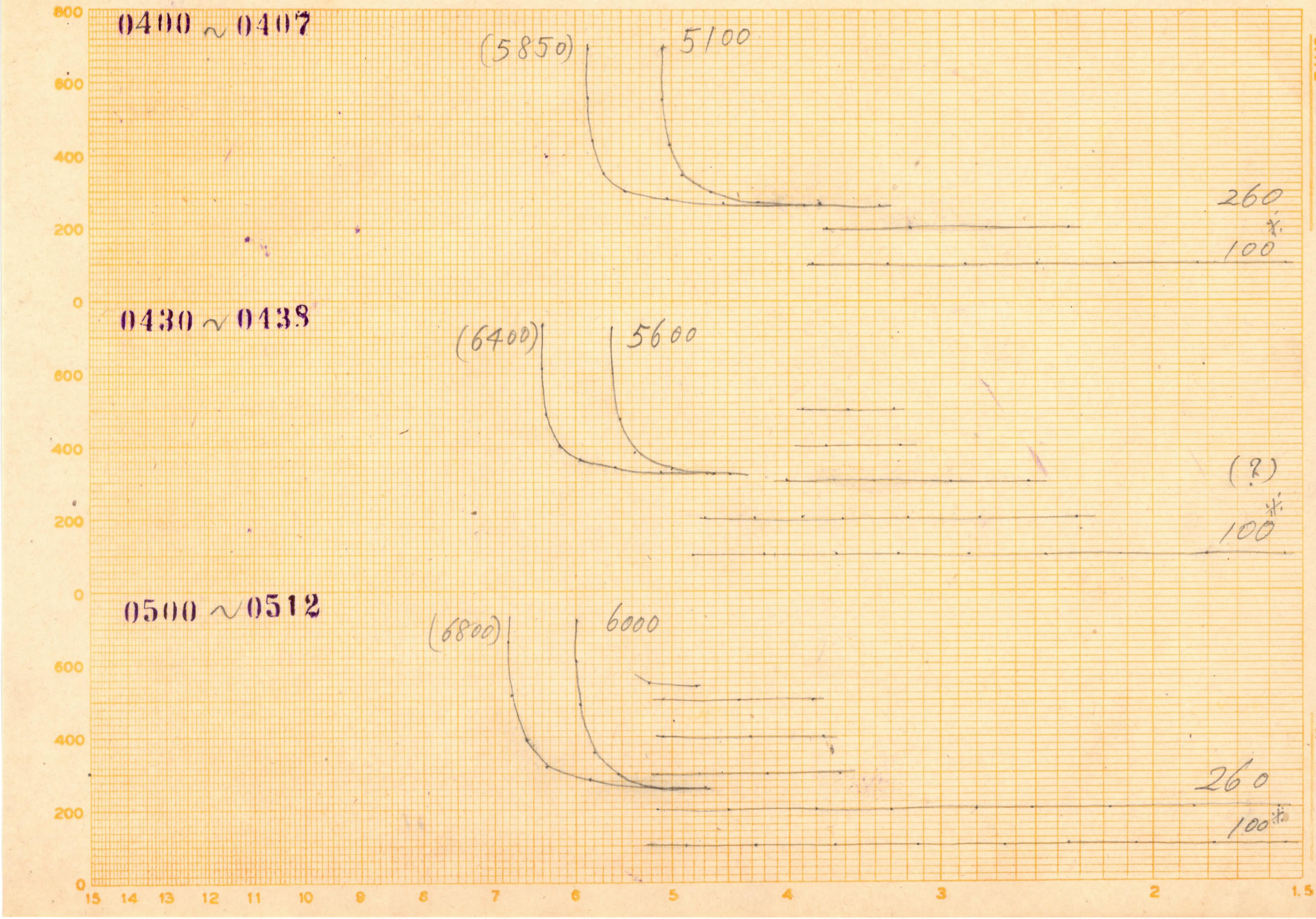

1200 ~1217
$f_0^{F_2}$ 不明
300 粁
100
1300 ~1313
Fエコー不明
100 粁
1400 ~1408
Fエコー ナシ。
100 粁
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 619
FREQUENCY HEIGHT CURVES
No. 5

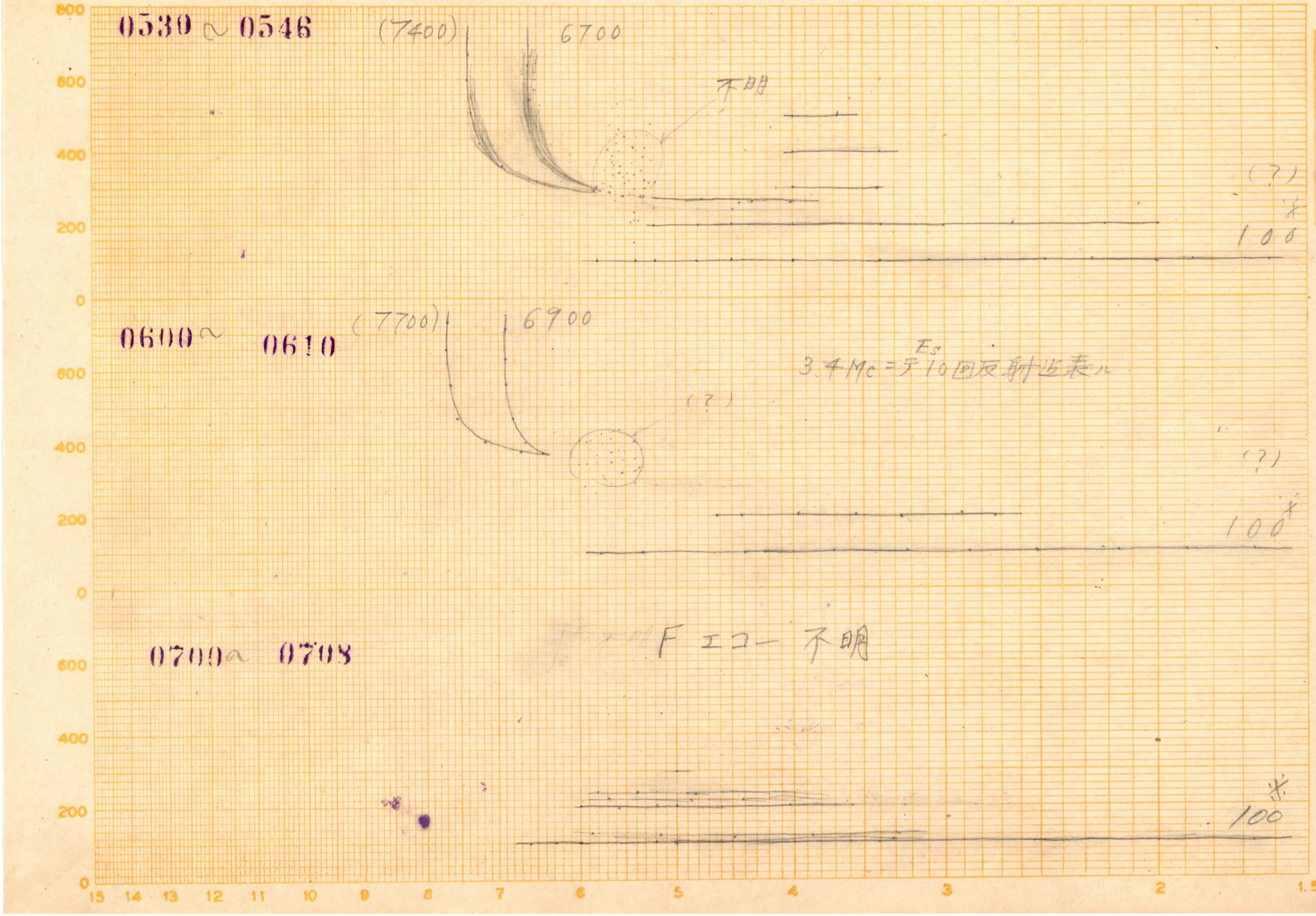

1500 ~ 1508
1600 ~ 1609
1700 ~ 1710
Fエコーナシ。
Fエコーナシ
Fエコーナシ。
100
100
800
600
400
200
0
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1.5
DATE 19 6 19
FREQUENCY HEIGHT CURVES
No. 6

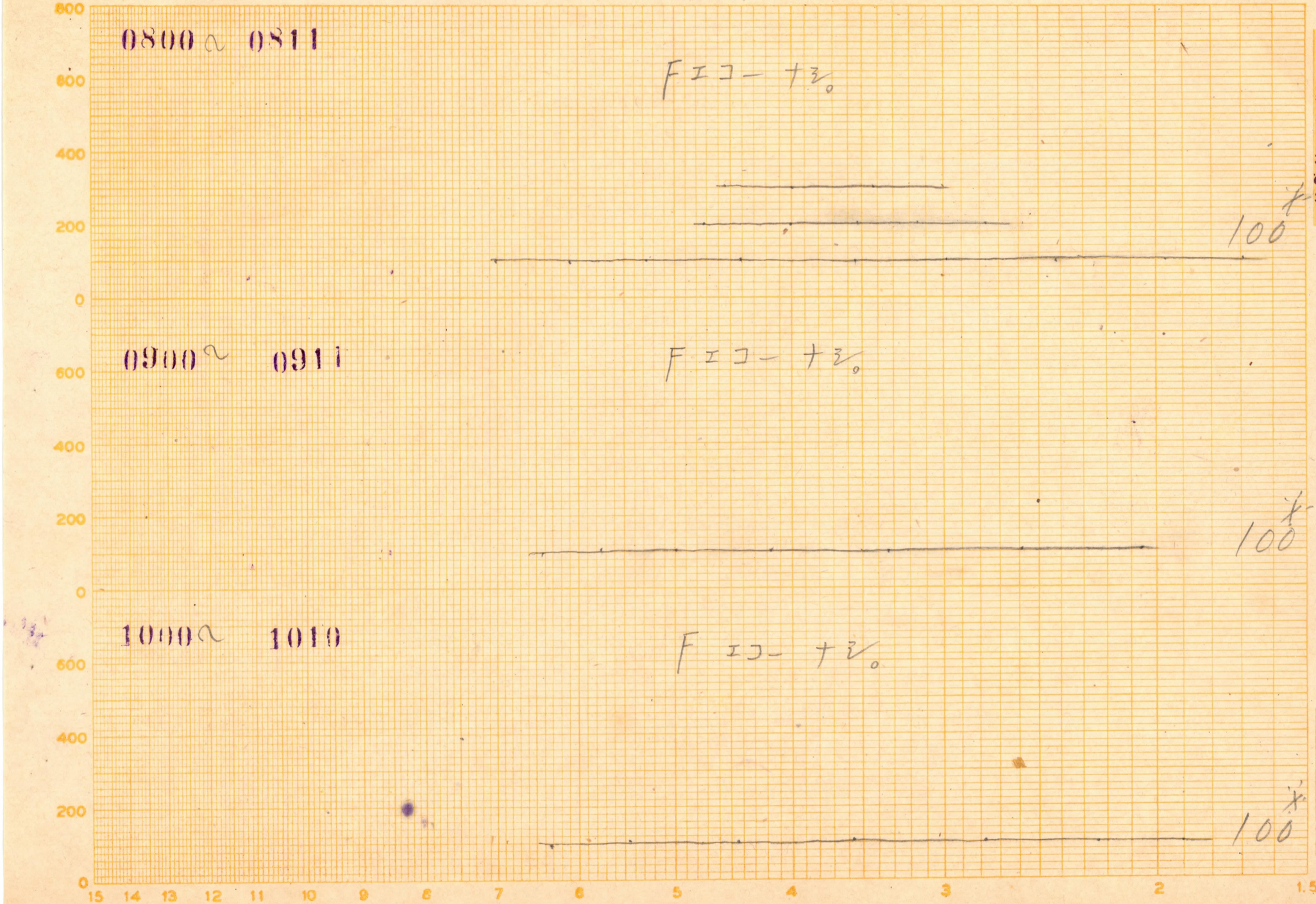

1800~ 1827
混信多シ
100粁
1830~ 1841
100粁
1900~ 1907
4.7Mc以上混信多=テ不明
100粁
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 619
FREQUENCY HEIGHT CURVES
No. 7

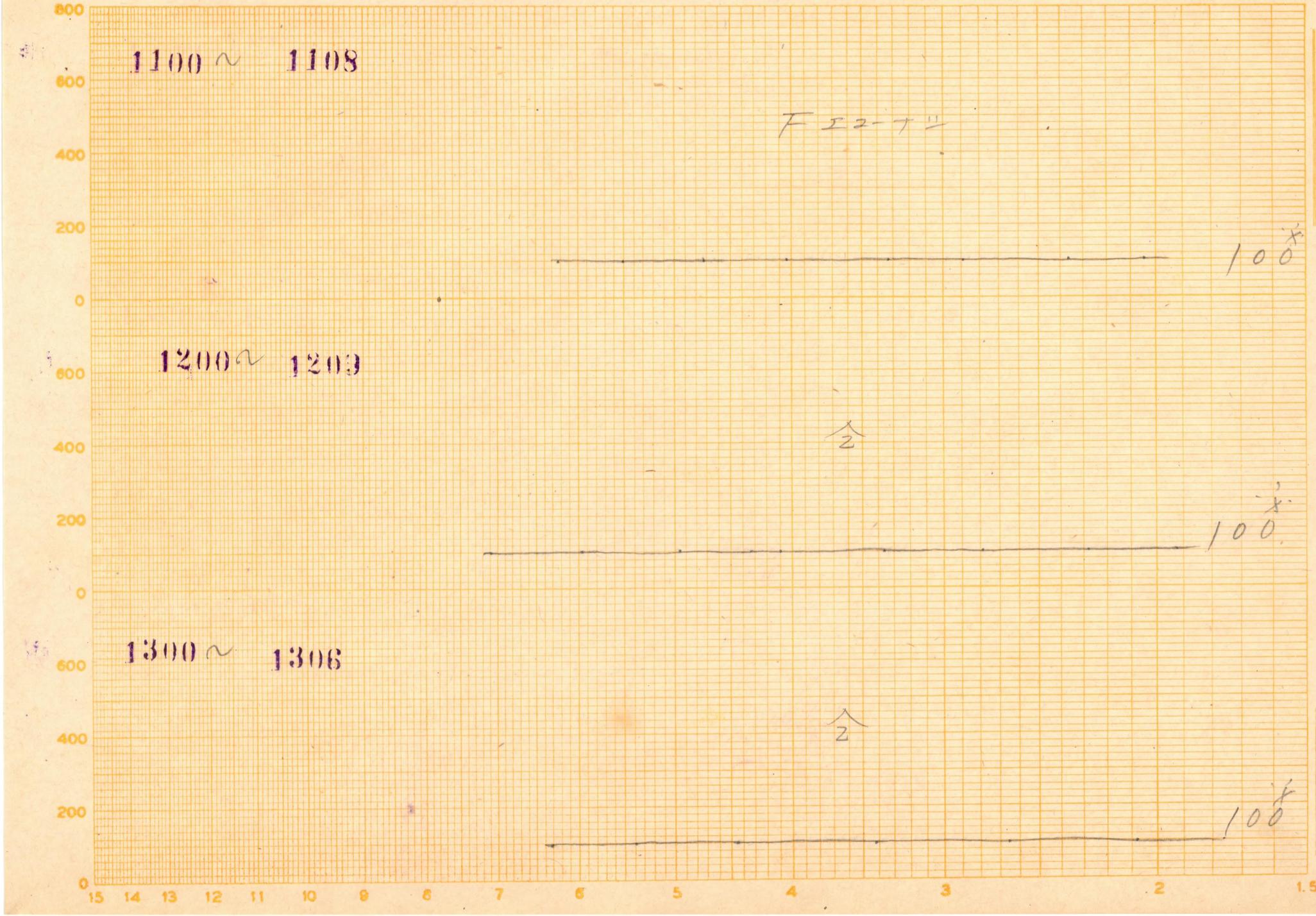

1931~ 1936
(5600)
4800
(?)
100
2000~ 2020
(5700)
4900
410
100
800
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 619
FREQUENCY HEIGHT CURVES
No. 8

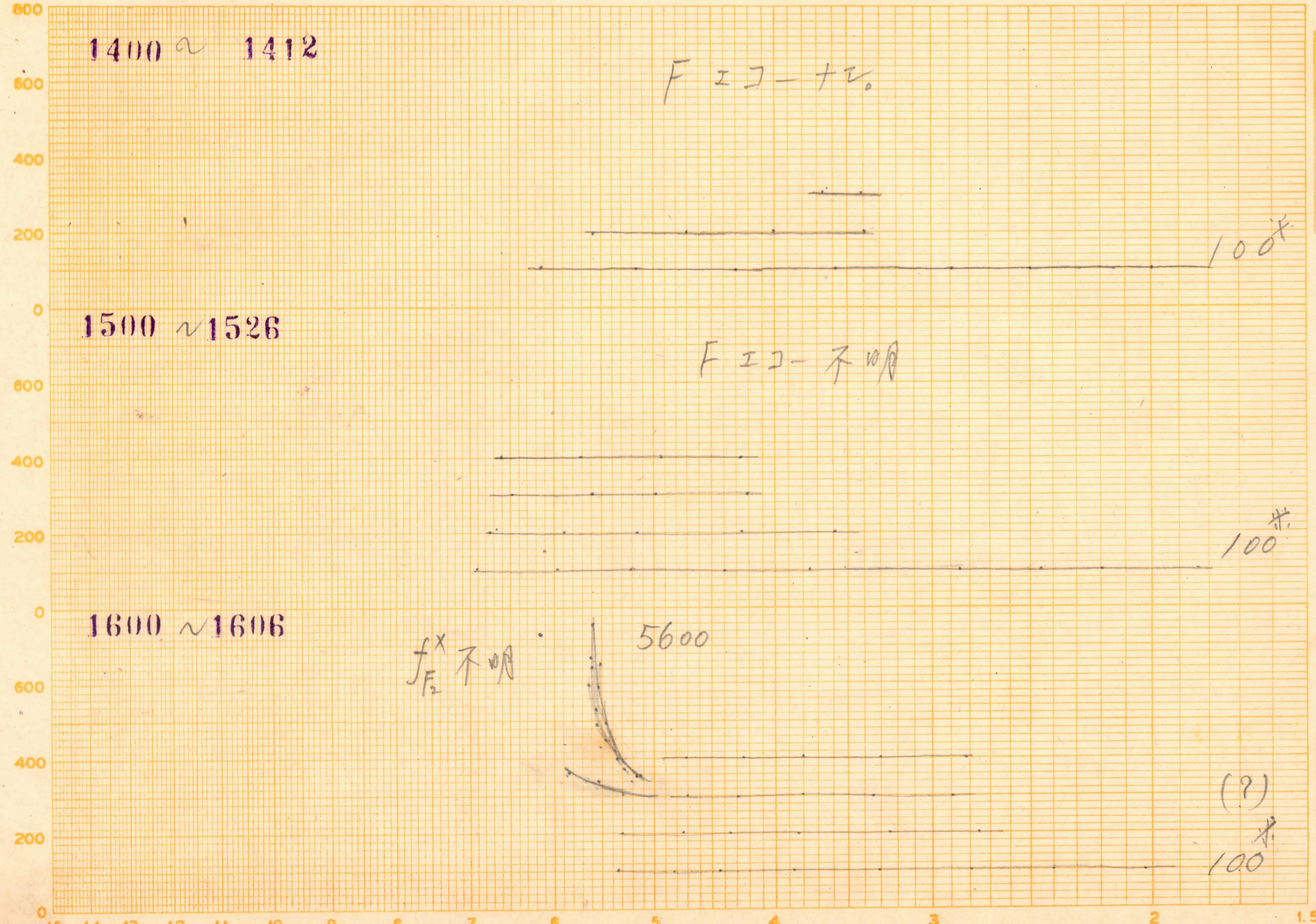

0230 ~ 0256
$f_c^{F_2}$ 不明
270
100粁
0300 ~ 0315
Fエコー十ミ
100粁
0330 ~ 0340
$f_c^{F_2}$ 不明
(?)
100粁
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 620
FREQUENCY HEIGHT CURVES
No. 1

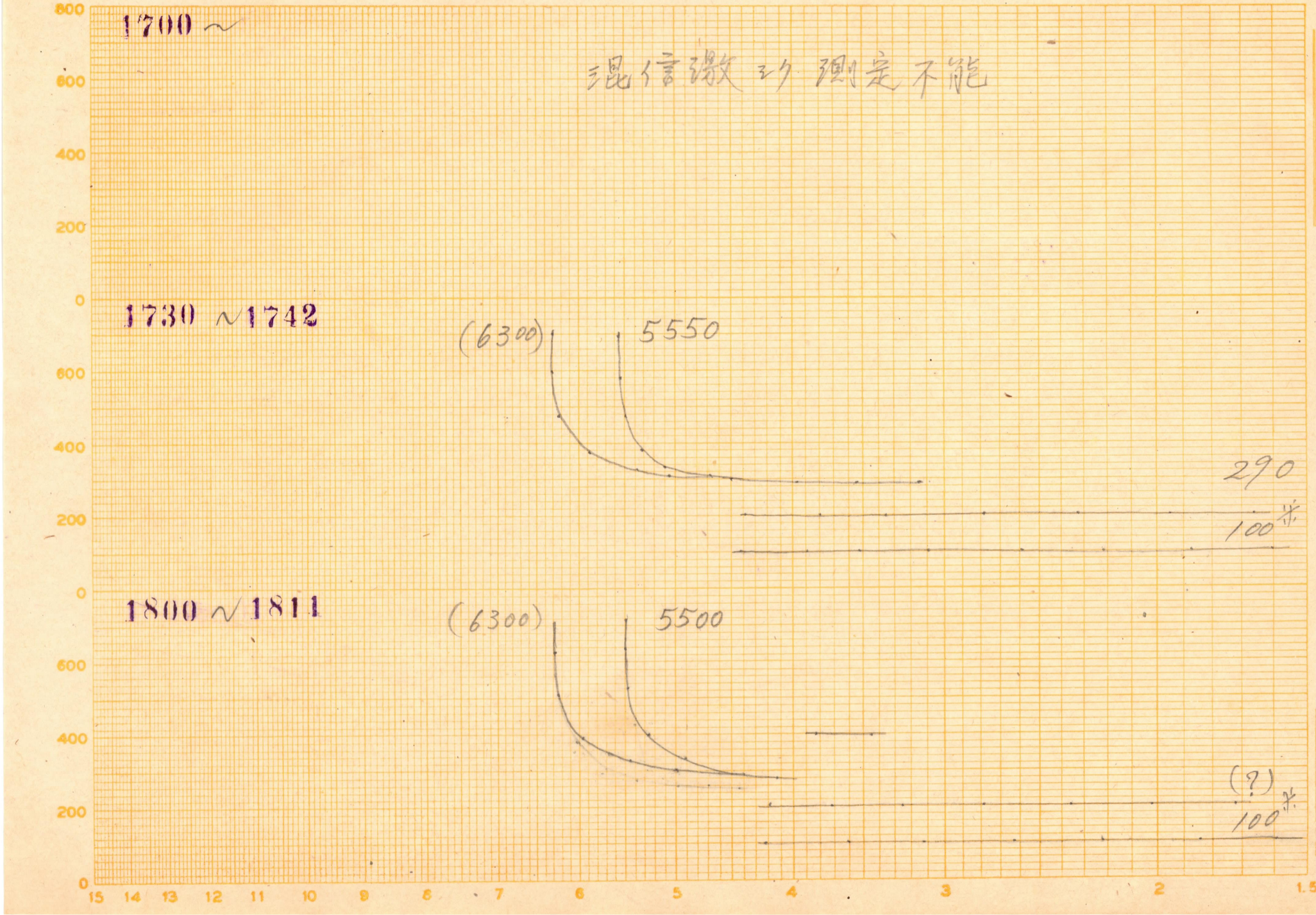

0400 ~ 0407
(5850)
5100
260
100
0430 ~ 0438
(6400)
5600
(?)
100
0500 ~ 0512
(6800)
6000
260
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 620
FREQUENCY HEIGHT CURVES
No. 2

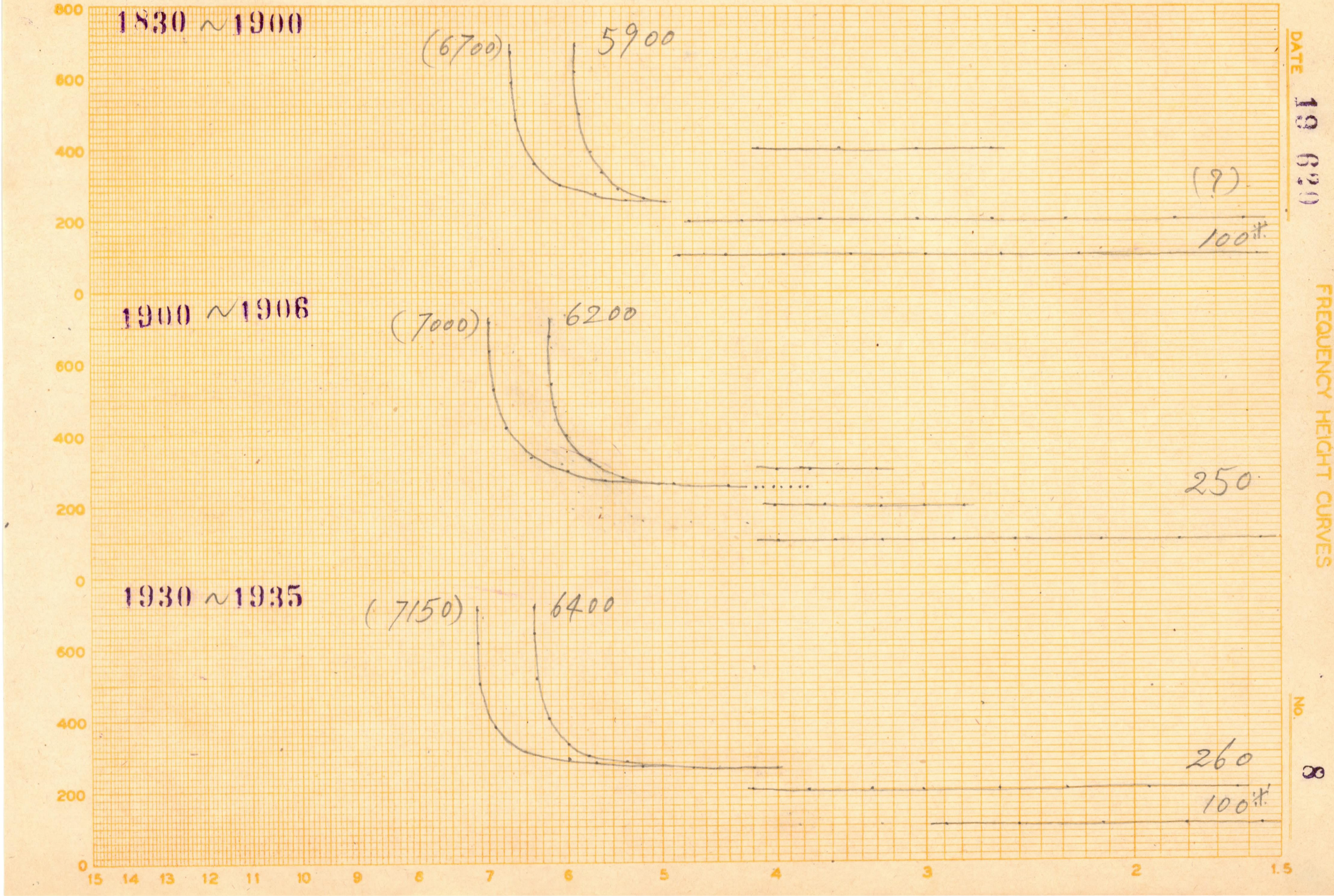

0530 ~ 0546
(7400)
6700
不明
(?)
100
0600 ~ 0610
(7700)
6900
3.4Mc = Es 10回反射と表ル
(?)
(?)
100
0709 ~ 0708
Fエコー 不明
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 620
FREQUENCY HEIGHT CURVES
No. 3

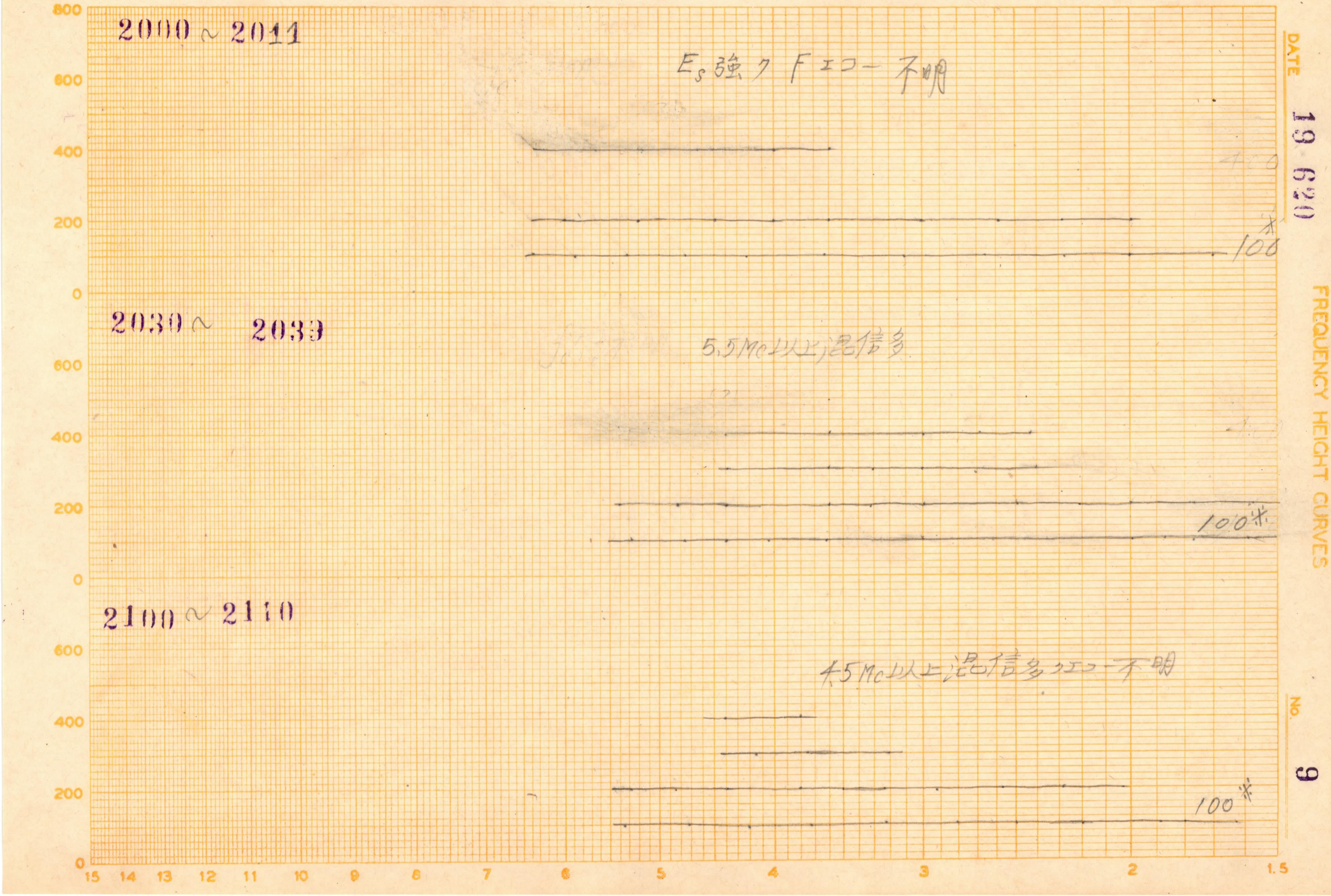

0800 ~ 0811
Fエコー 十ヲ。
100 ヶ
0900 ~ 0911
Fエコー 十ヲ。
100 ヶ
1000 ~ 1010
Fエコー 十ヲ。
100 ヶ
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6.20
FREQUENCY HEIGHT CURVES
No. 4

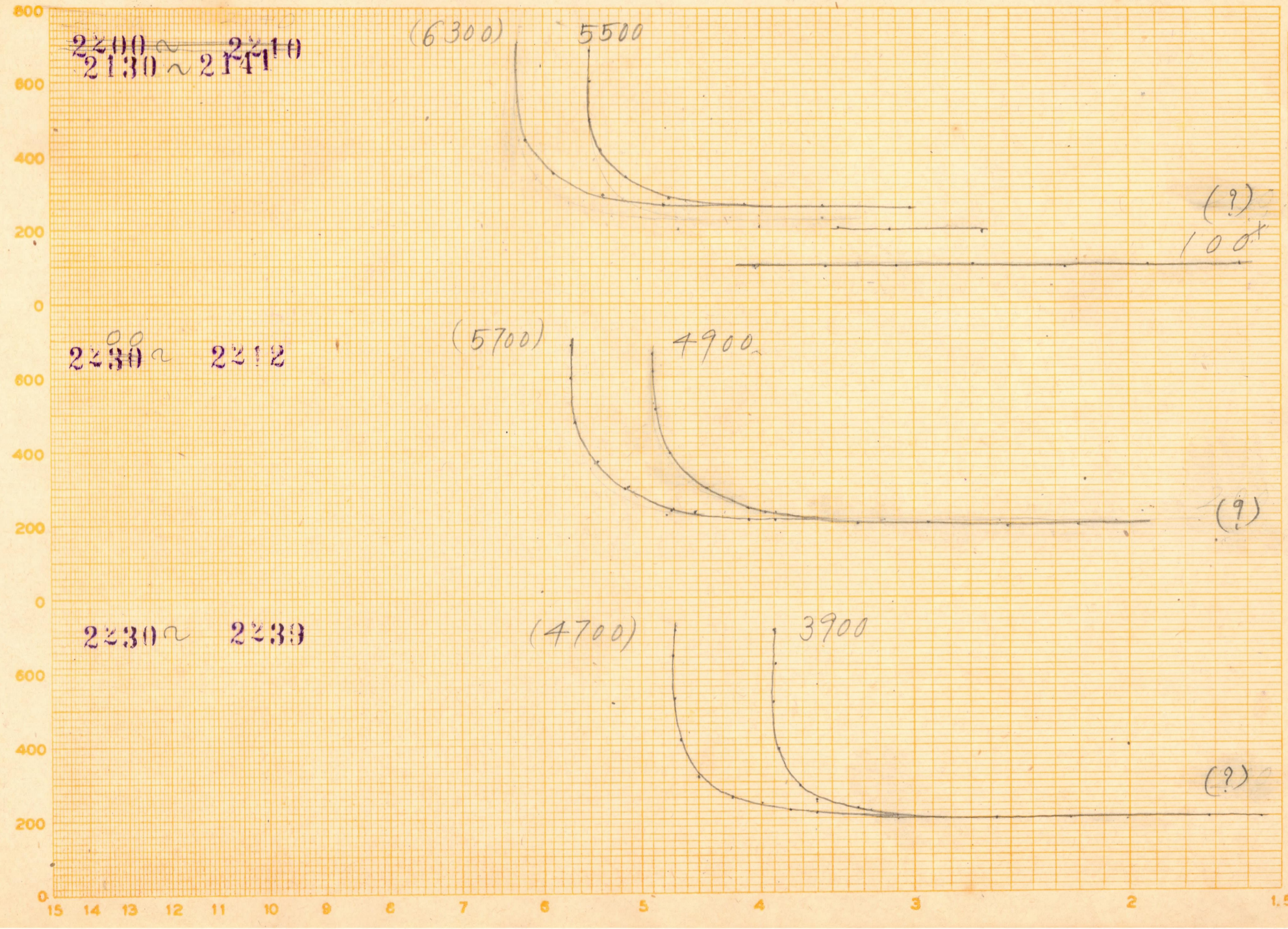

1100 ~ 1108
1200 ~ 1209
1300 ~ 1306
フエヲ-ナリ
100
100
100
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE - 19 620
FREQUENCY HEIGHT CURVES
No. 5

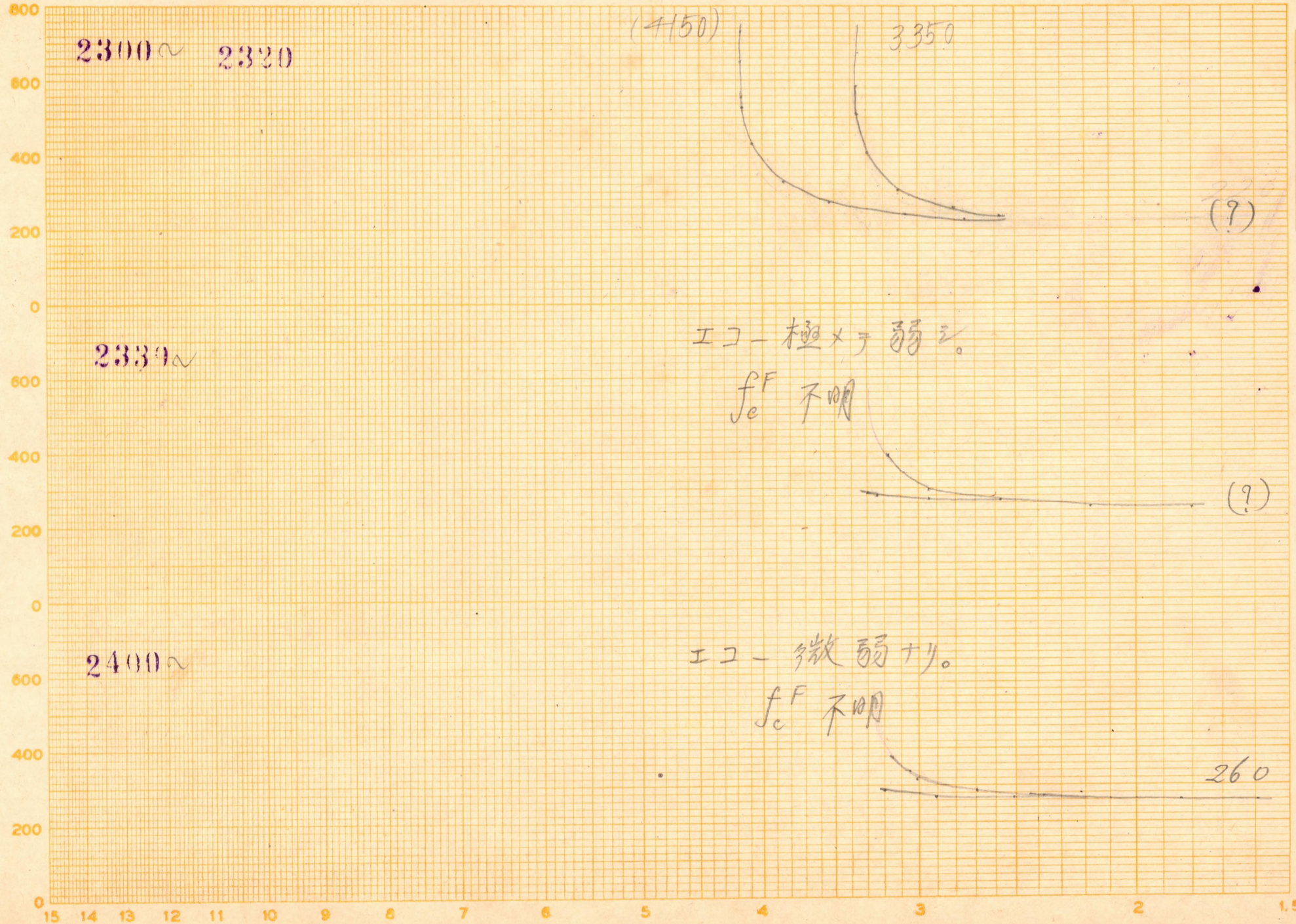

1400 ~ 1412
エコーなし
100粁
1500 ~1526
エコー不明
100粁
1600 ~1606
$f_{F_2}^{X}$ 不明
5600
(?)
100粁
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 620
FREQUENCY HEIGHT CURVES
No. 6

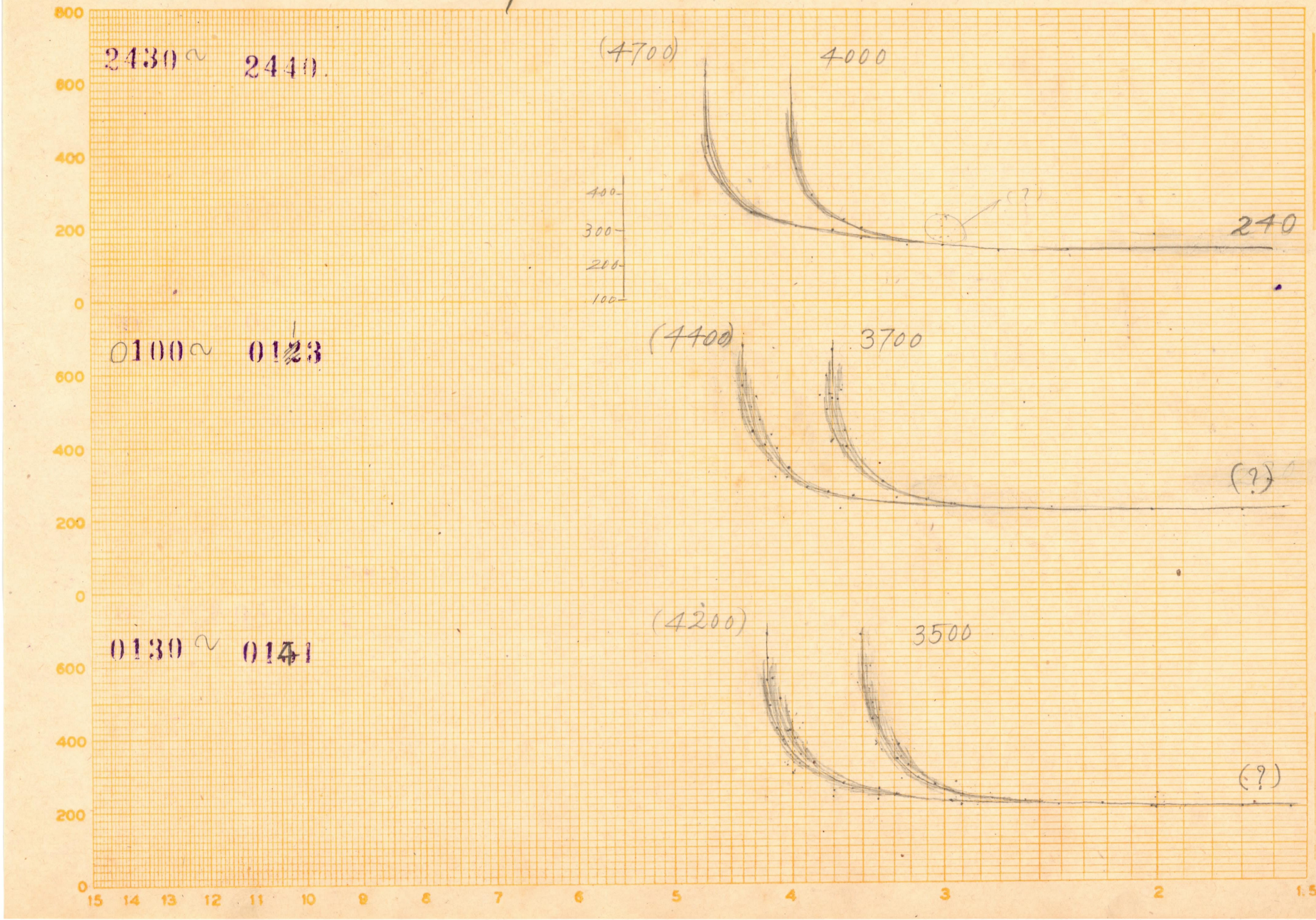

1700 ～
混信激烈ノ為測定不能
1730 ～1742
(6300)
5550
290
100米
1800 ～1811
(6300)
5500
(?)
100米
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 620
FREQUENCY HEIGHT CURVES
No. 7

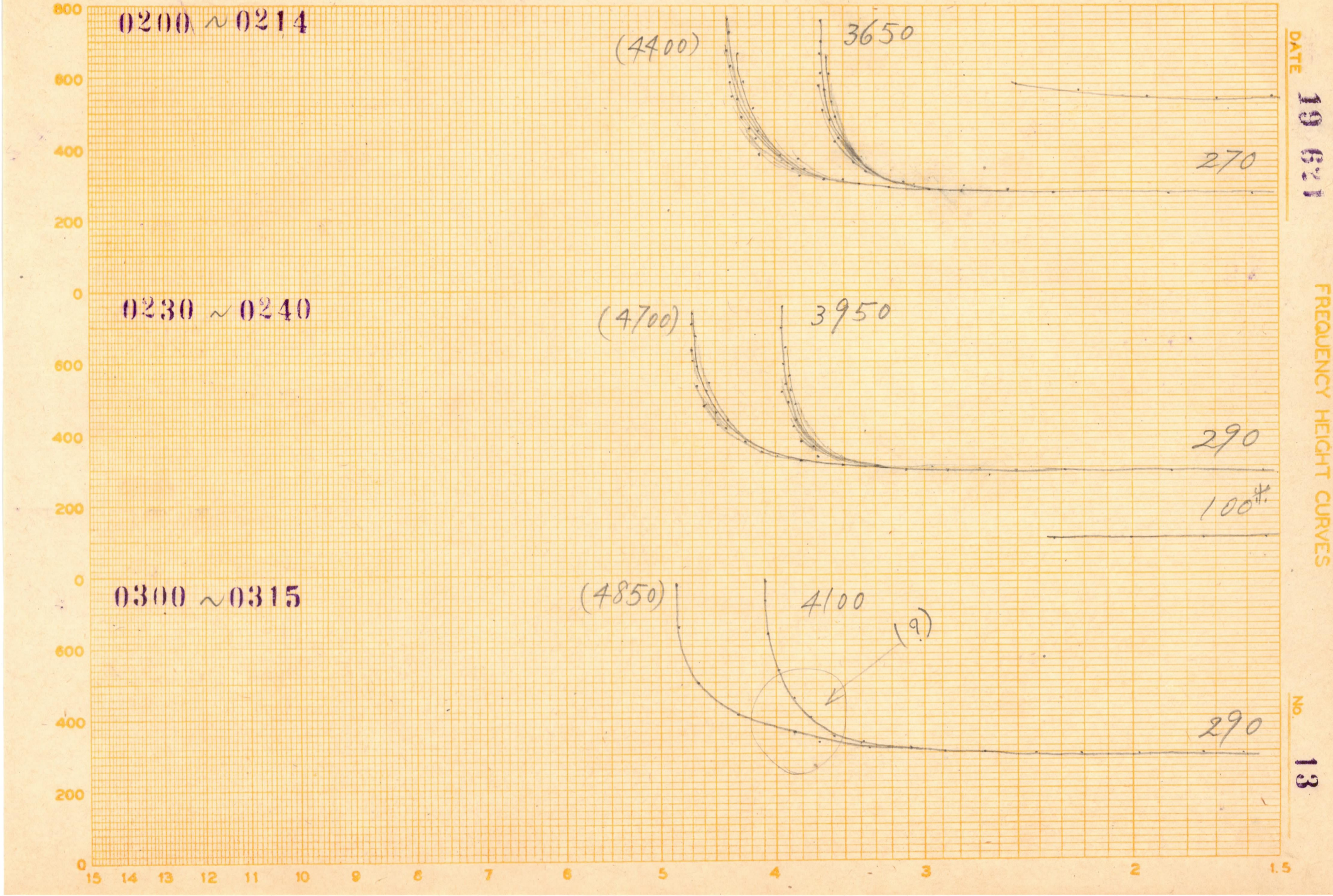

1830 ~1900
(6700)
5900
(?)
100
1900 ~1906
(7000)
6200
250
1930 ~1935
(7150)
6400
260
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 2 0
FREQUENCY HEIGHT CURVES
No. 8

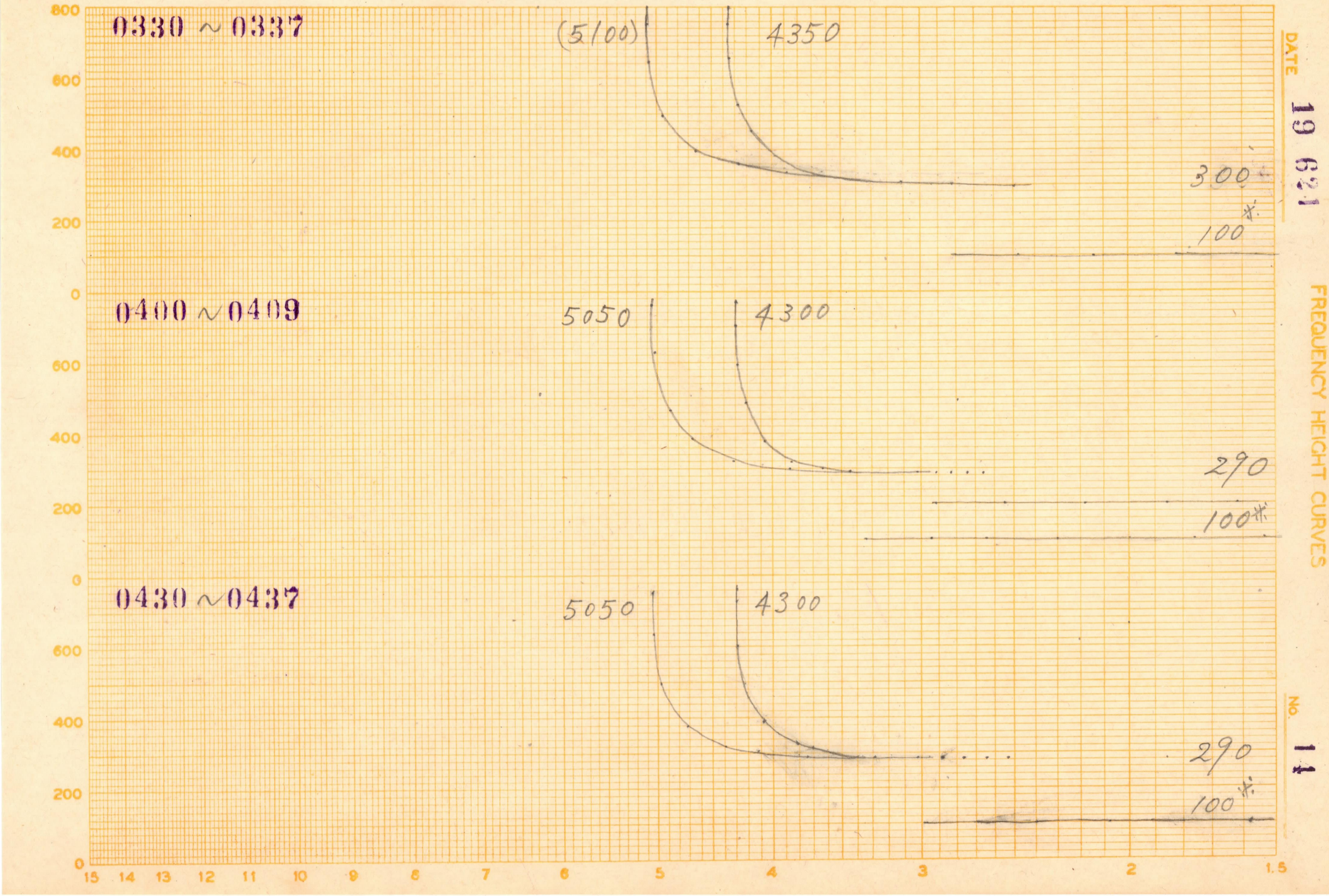

2000 ~ 2011
Es強クFエコー不明
100粁
2030 ~ 2033
5.5Mc以上混信多
100粁
2100 ~ 2110
4.5Mc以上混信多エコー不明
100粁
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 20
FREQUENCY HEIGHT CURVES
No. 9

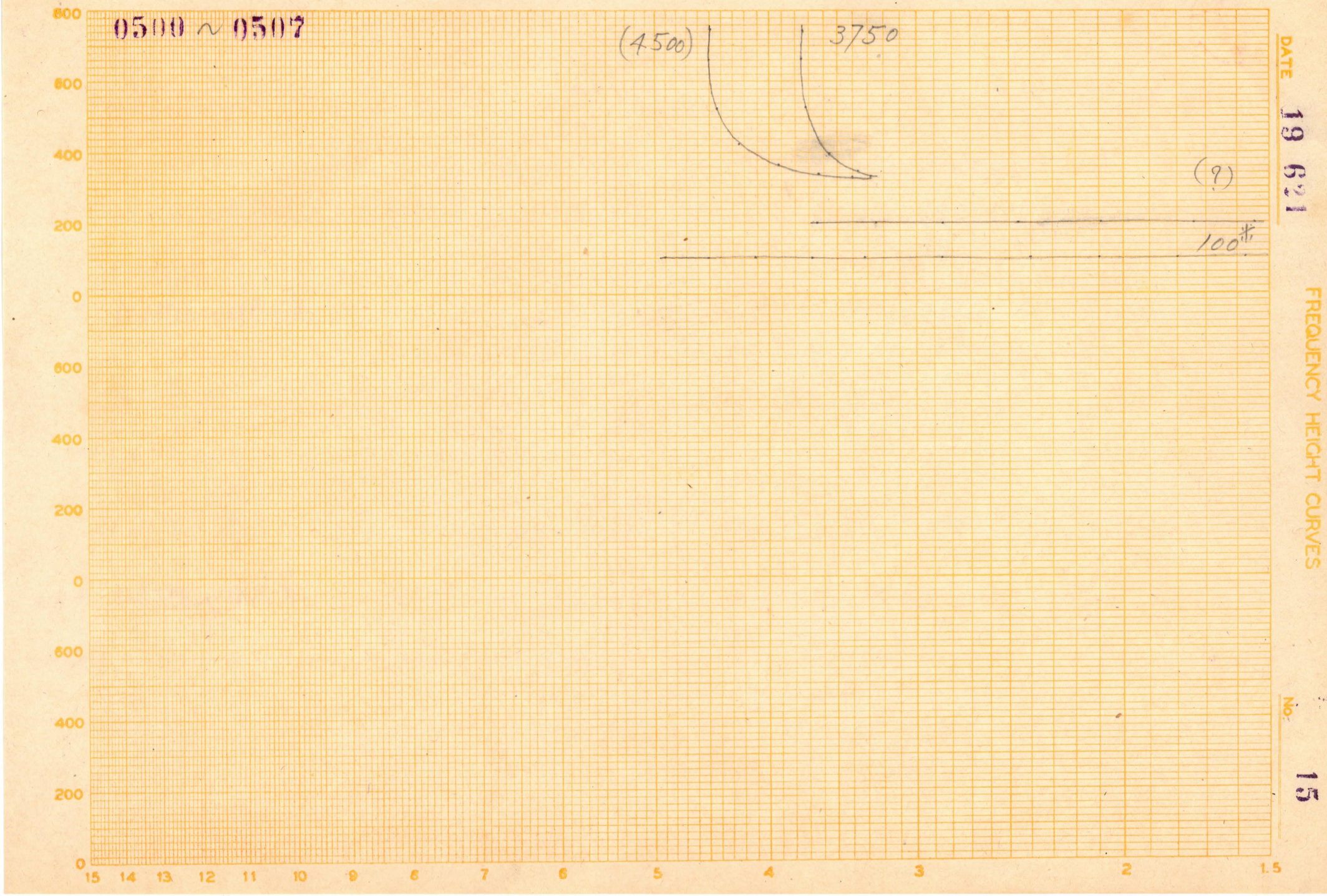

2200 ~ 2210
2130 ~ 2141
(6300)
5500
(?)
100+
2200 ~ 2212
(5700)
4900
(?)
2230 ~ 2239
(4700)
3900
(?)
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6?0
FREQUENCY HEIGHT CURVES
No. 10

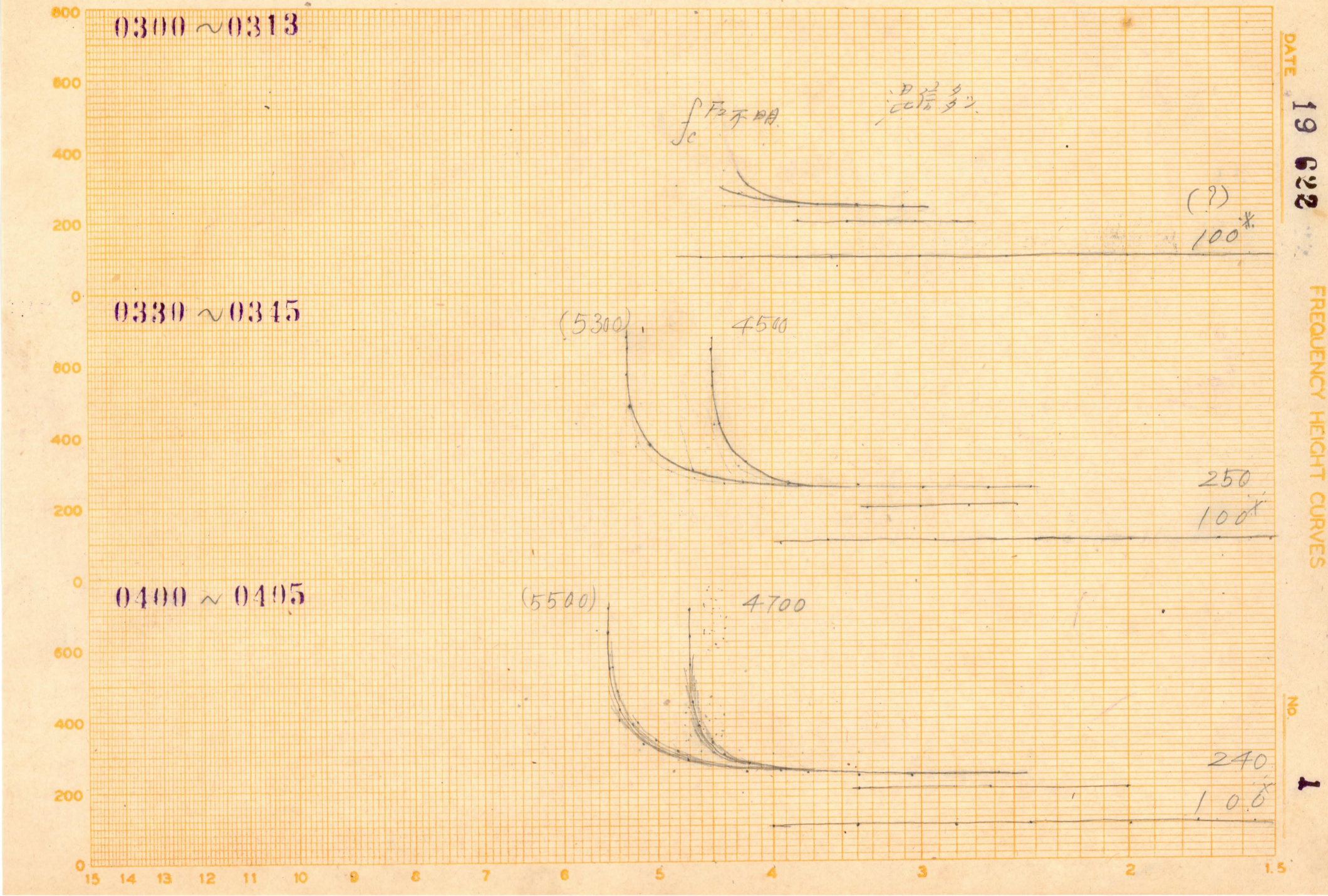

800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
2300～ 2320
2339～
2400～
(4150)
3350
(?)
エコー極メテ弱シ。
f_c^F 不明
(?)
エコー微弱ナリ。
f_c^F 不明
260
DATE 19 6220
19 621
FREQUENCY HEIGHT CURVES
No. 11

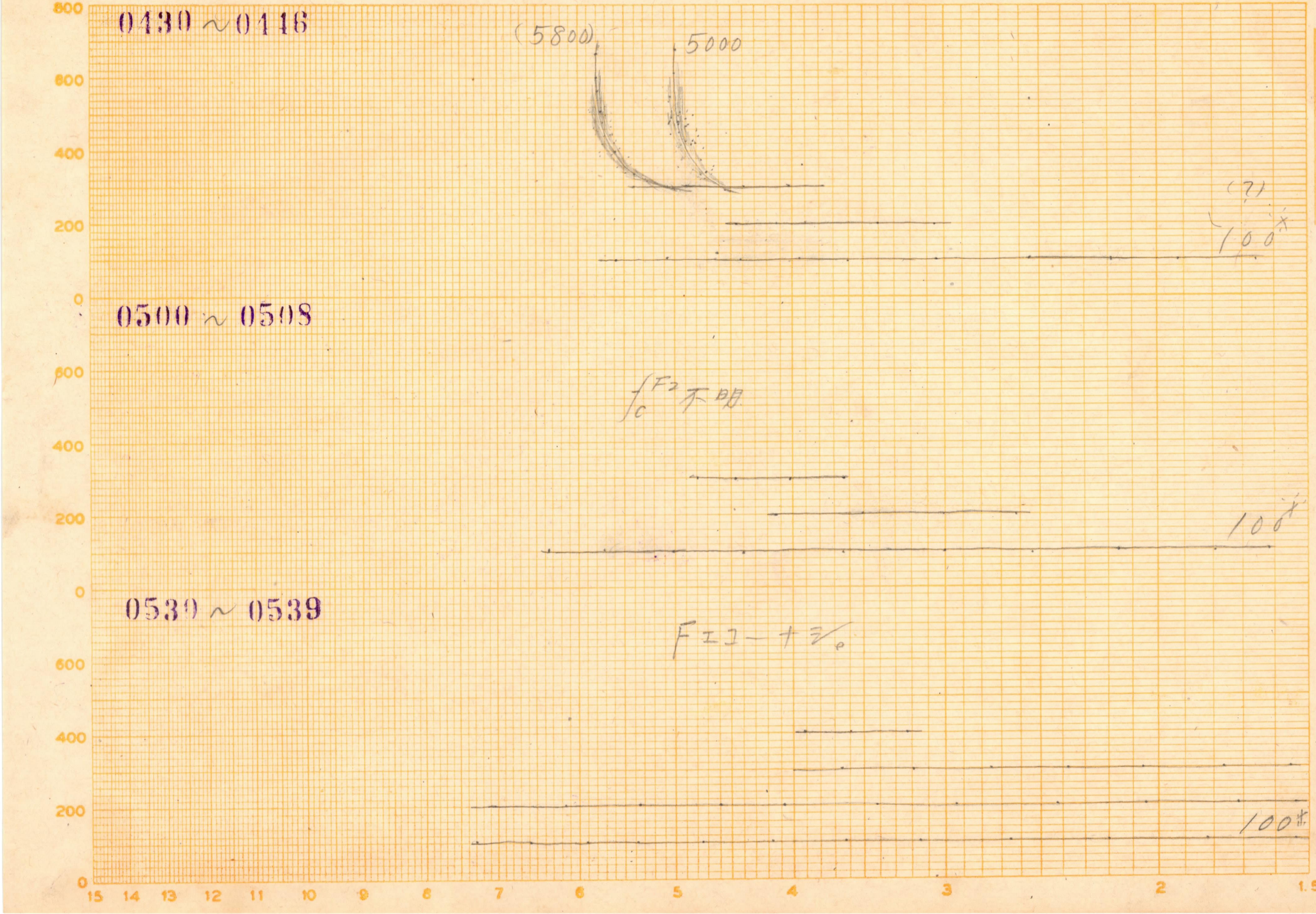

2430 ~ 2440.
0100 ~ 0123
0130 ~ 0141
(4700)
4000
240
(?)
(4400)
3700
(?)
(4200)
3500
(?)
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 62
FREQUENCY HEIGHT CURVES
No. 12

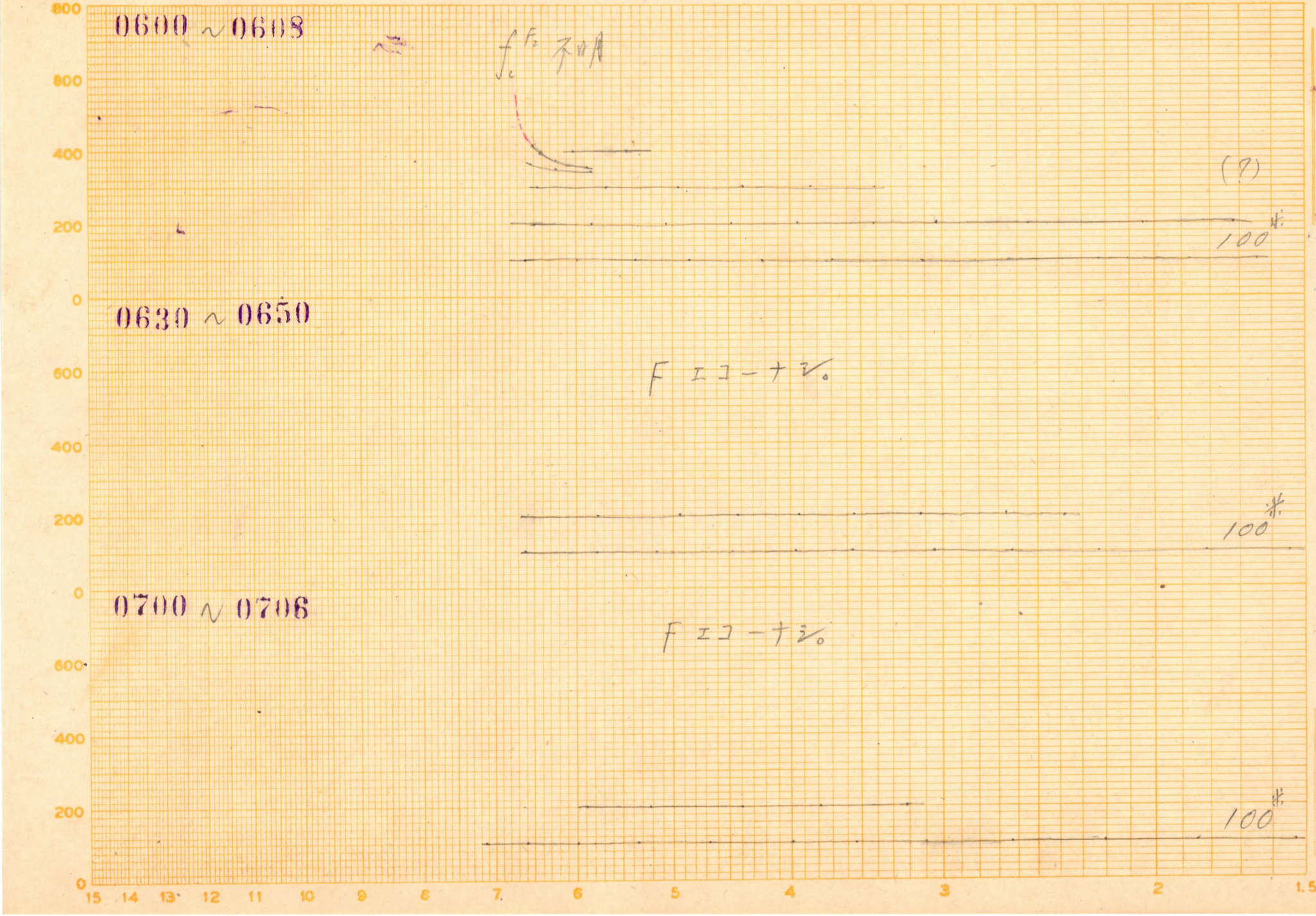

0200 ~ 0214
(4400)
3650
270
0230 ~ 0240
(4700)
3950
290
100
0300 ~ 0315
(4850)
4100
(9)
290
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 621
FREQUENCY HEIGHT CURVES
No. 13

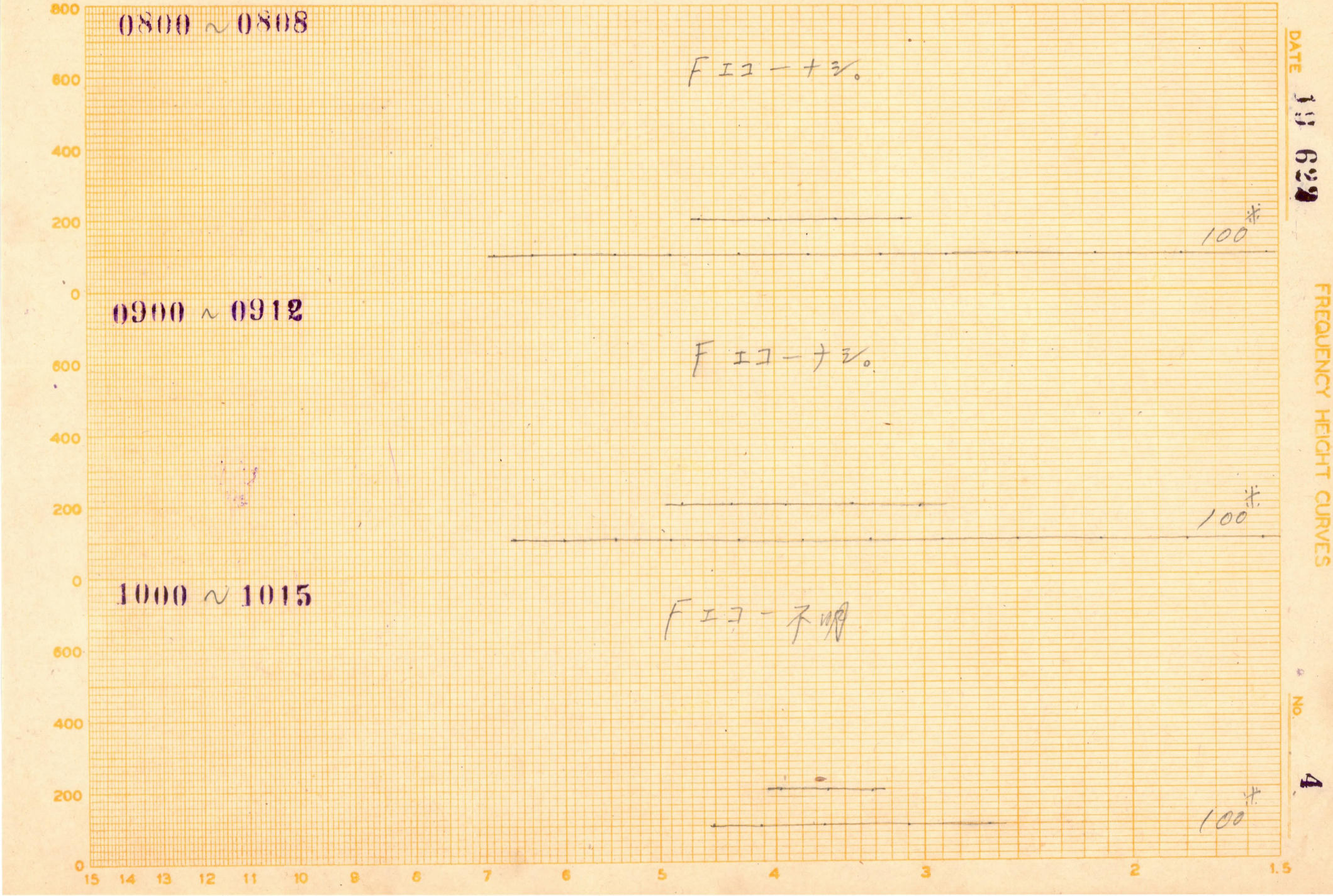

0330 ~ 0337
(5100)
4350
300
100
0400 ~ 0409
5050
4300
290
100
0430 ~ 0437
5050
4300
290
100
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 621
FREQUENCY HEIGHT CURVES
No. 14

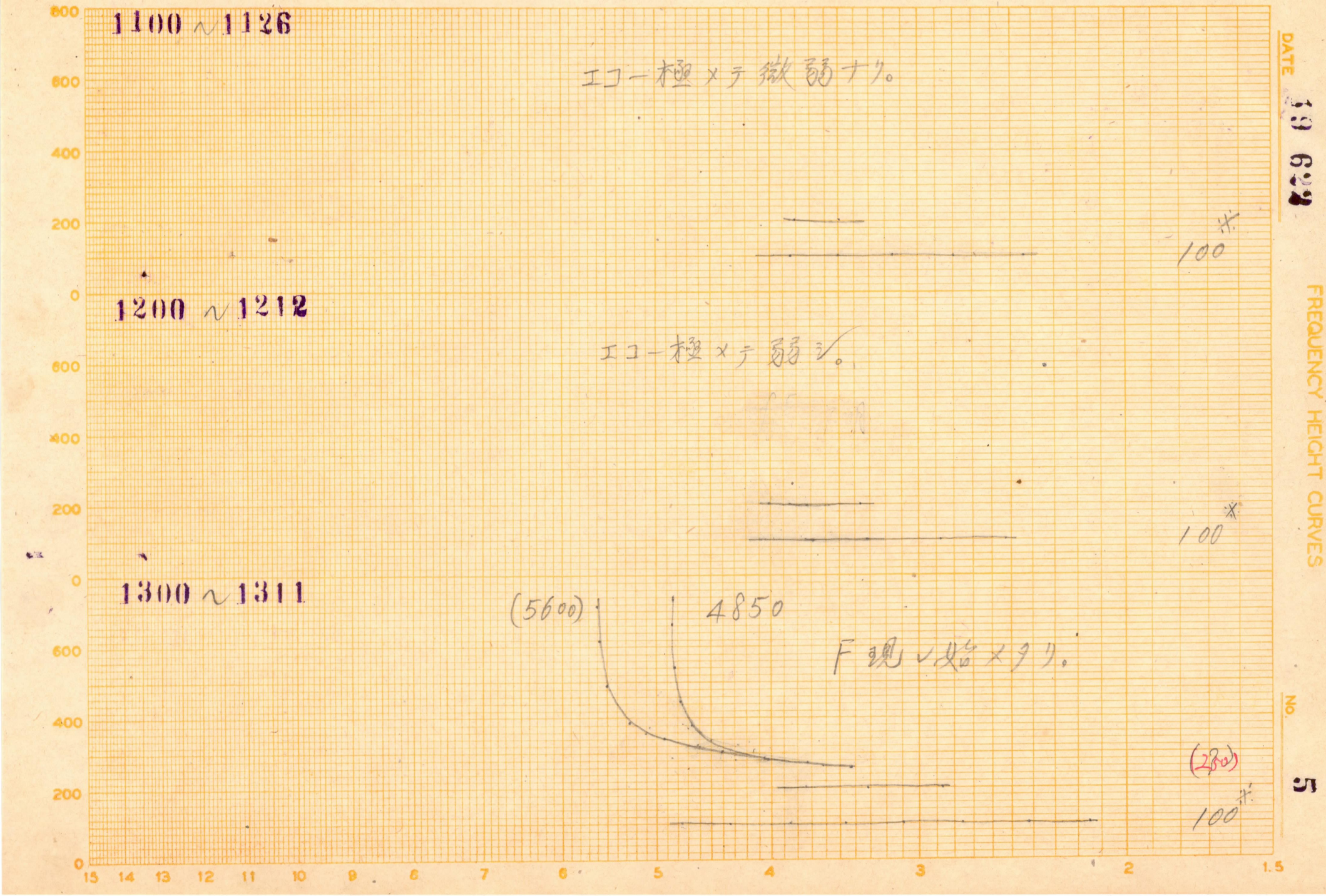

0500 ~ 0507
(4500)
3750
(?)
100米
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 621
FREQUENCY HEIGHT CURVES
No. 15


0300 ~ 0313
0330 ~ 0345
0400 ~ 0405
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
(?)
100
(5300)
4500
250
100
(5500)
4700
240
100
DATE 19 622
FREQUENCY HEIGHT CURVES
No. 1


0430 ~ 0446
(5800)
5000
(7)
100
0500 ~ 0508
$f_c^{F_2}$ 不明
100
0539 ~ 0539
FエコートラブルNo.
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 622
FREQUENCY HEIGHT CURVES
No. 2


0600 ~ 0608
0630 ~ 0650
0700 ~ 0706
f_c F_2 スポA
(?)
100 #
エコー
100 #
エコー
100 #
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 622
FREQUENCY HEIGHT CURVES
No. 3


0800 ~ 0808
Fエコー十ミ。
100
0900 ~ 0912
Fエコー十ミ。
100
1000 ~ 1015
Fエコー不明
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 629
FREQUENCY HEIGHT CURVES
No. 4


1100 ～ 1126
エコー極メテ微弱ナリ。
100 ㍉
1200 ～ 1212
エコー極メテ弱シ。
100 ㍉
1300 ～ 1311
(5600)
4850
F線ノ欠缺メリ。
(280)
100 ㍉
DATE 19 6 22
FREQUENCY HEIGHT CURVES
No. 5
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5

1400 ~ 1421

$f_{F_2}^{x}$ 不明

4900

(?)

100 kc

1500 ~ 0531

現信・妨害ヲ受ケ測定不能。

1600 ~ 1610

(5.3)

$f_c^{F_2}$ 不明

260

100 kc

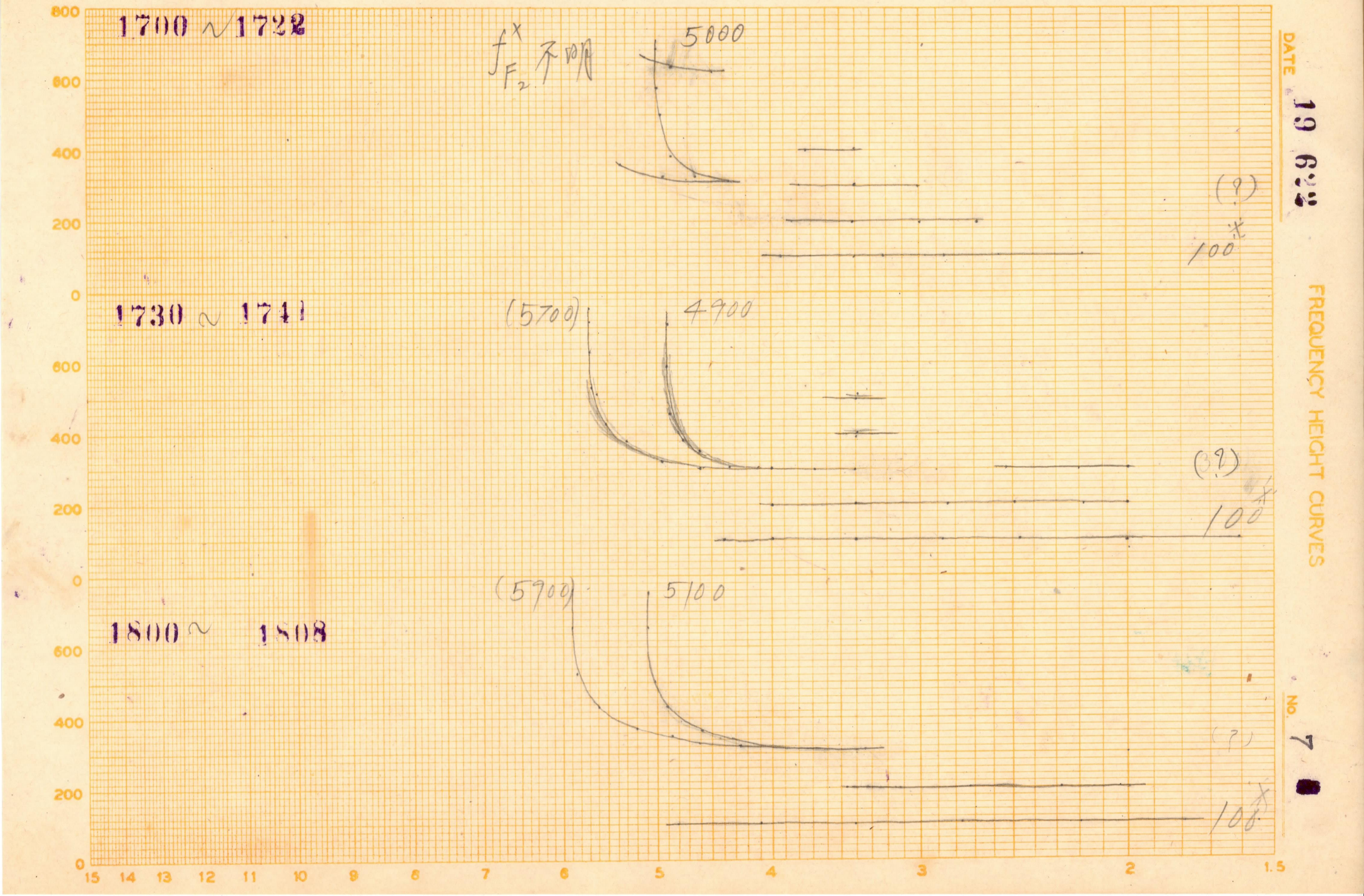
DATE 19 6?.2

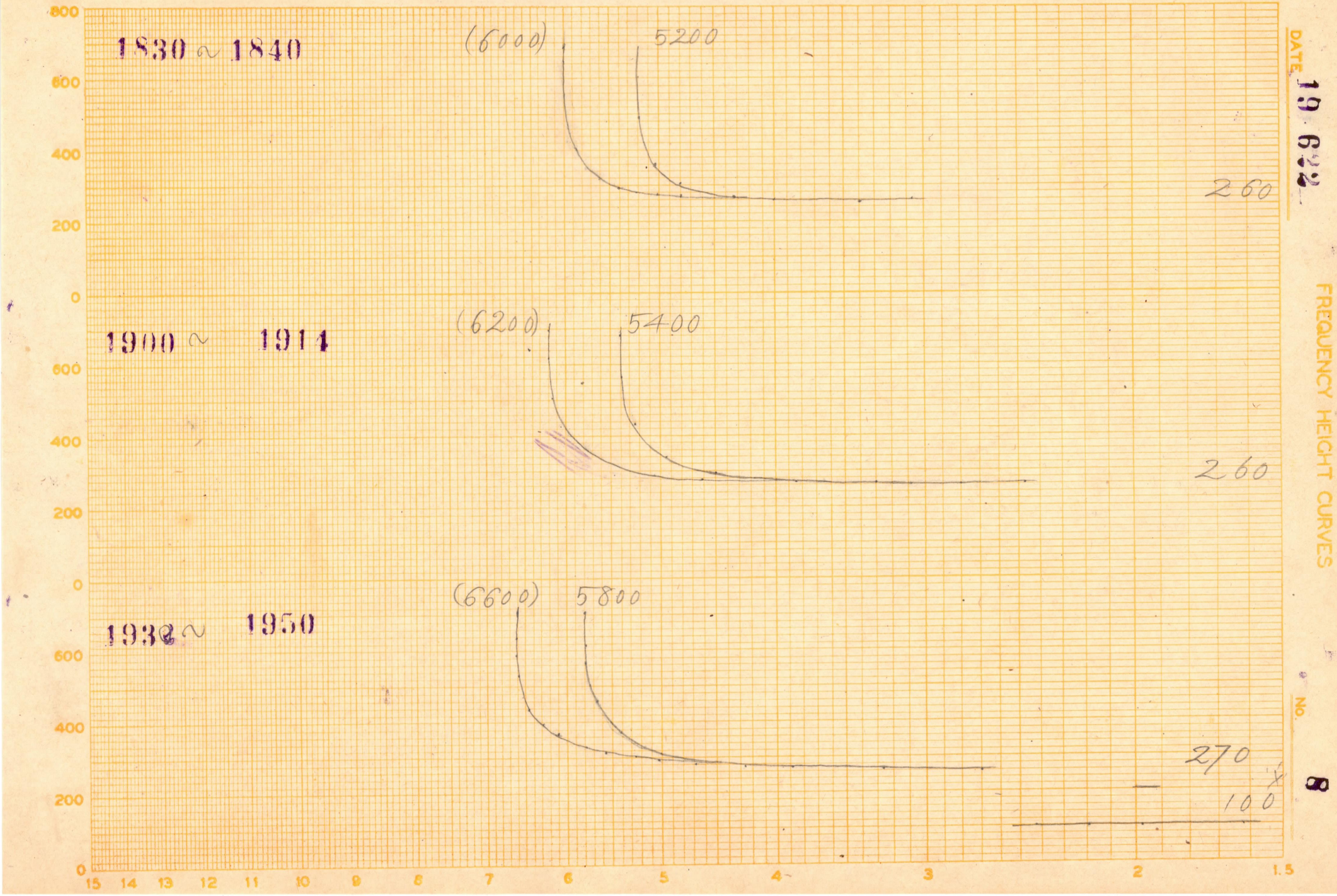
FREQUENCY HEIGHT CURVES

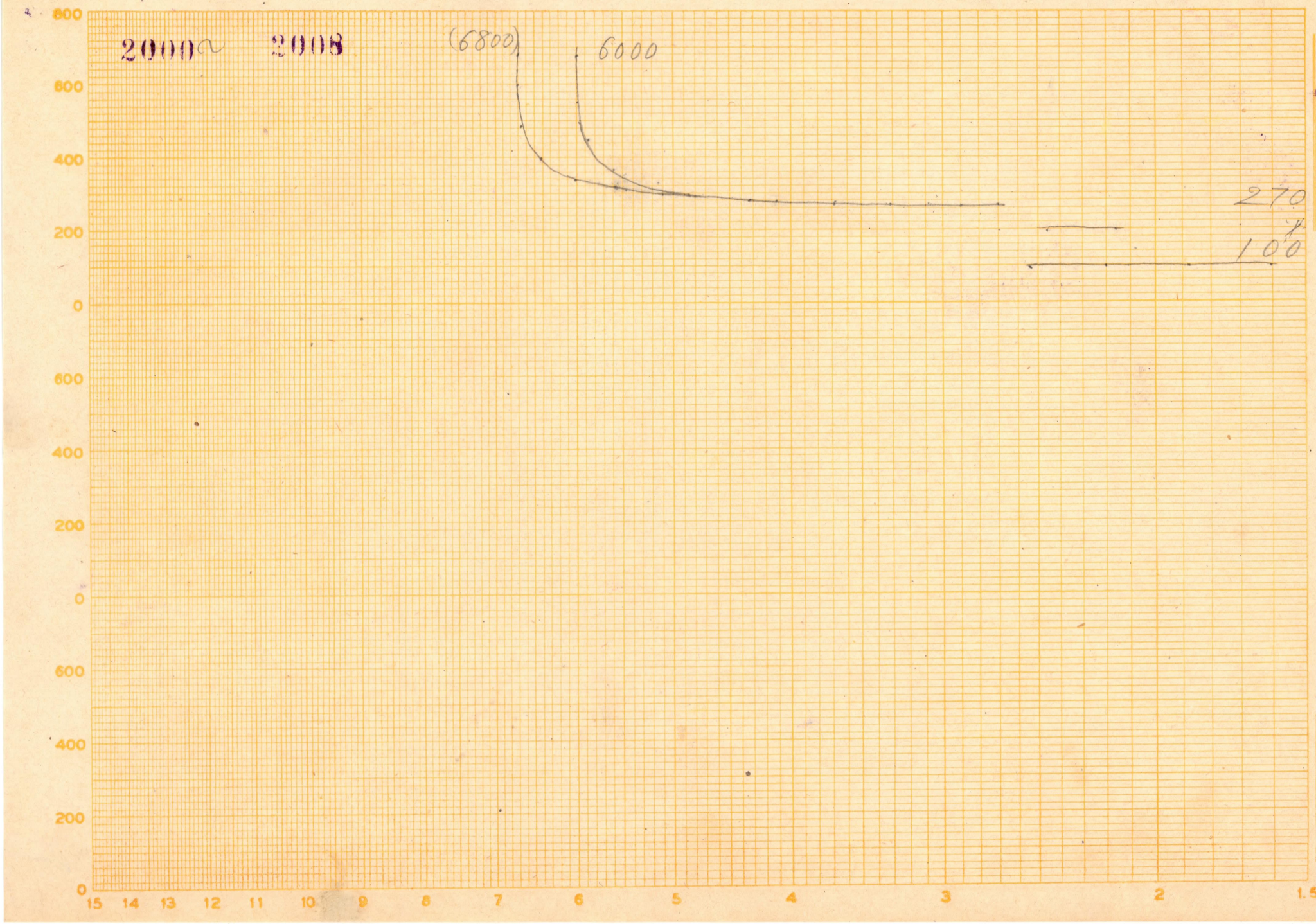
No. 6

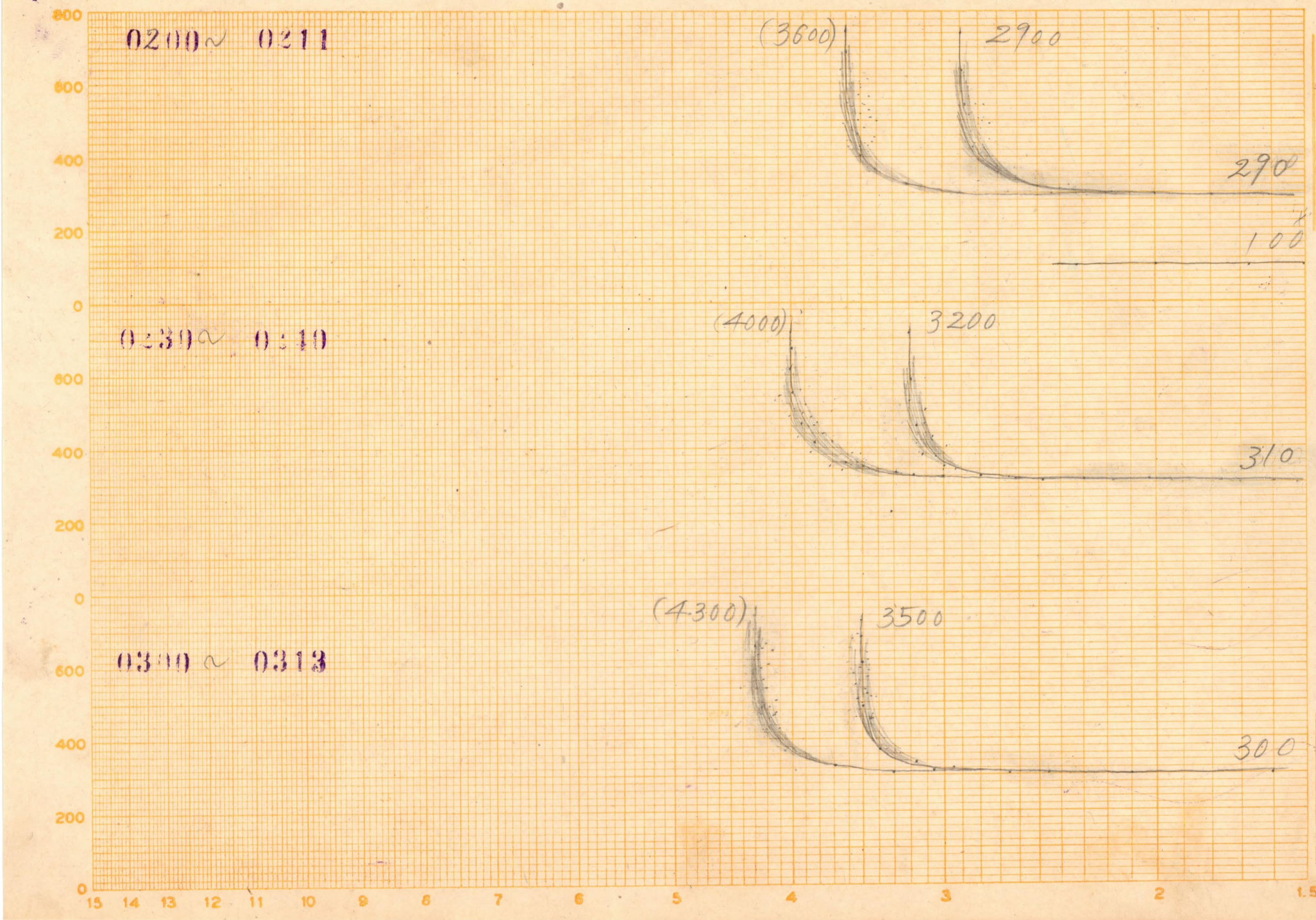
800 600 400 200 0 600 400 200 0 600 400 200 0

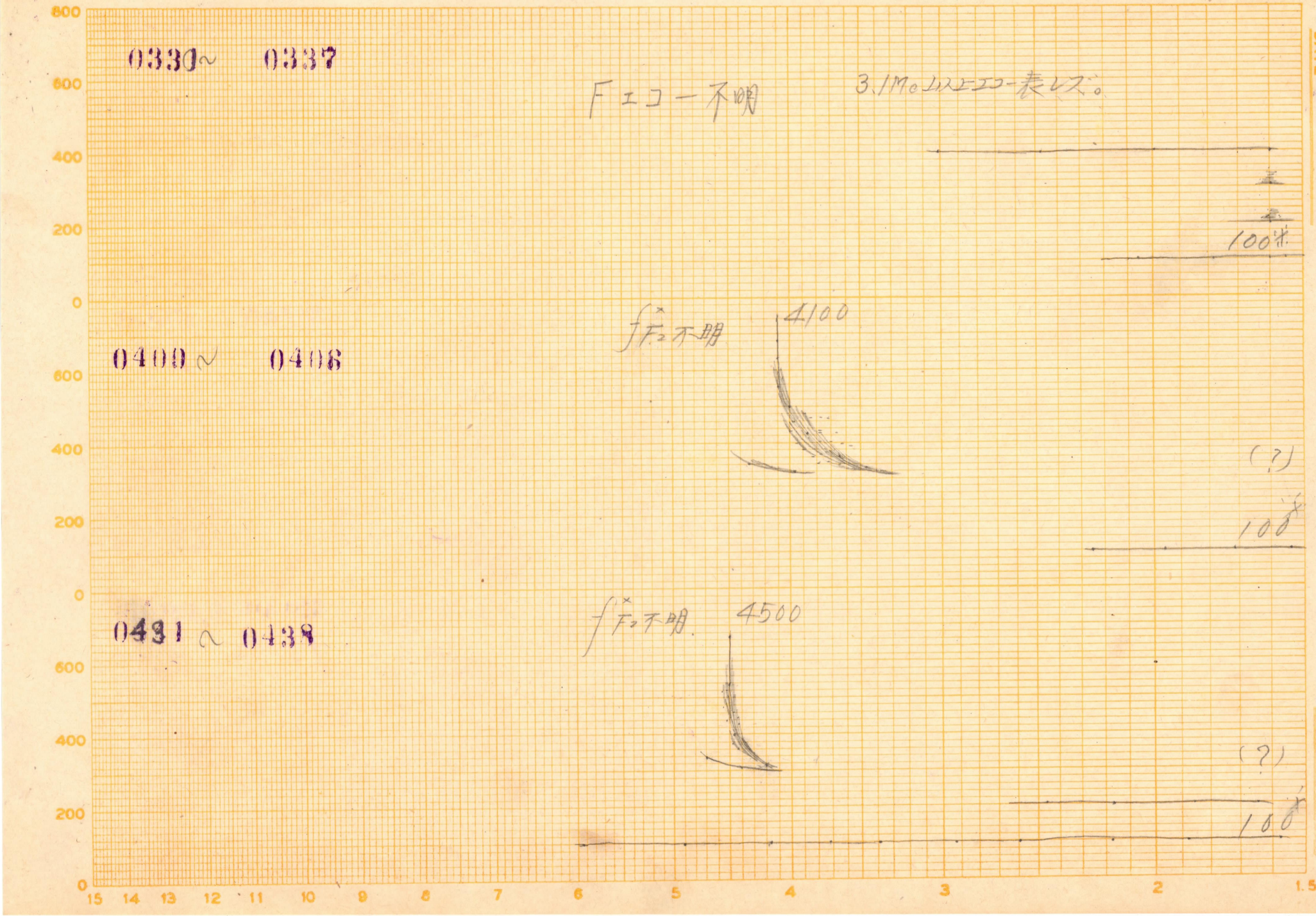
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5


1700 ~ 1722
$f^{x}_{F_2}$ 不明
5000
(?)
100 *
1730 ~ 1741
(5700)
4700
(3?)
100 *
1800 ~ 1808
(5700)
5100
(?)
100 *
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6??
FREQUENCY HEIGHT CURVES
No. 7


1830 ~ 1840
(6000)
5200
260
1900 ~ 1914
(6200)
5400
260
1930 ~ 1950
(6600)
5800
270
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6.22
FREQUENCY HEIGHT CURVES
No. 8


2000~ 2008
(6800)
6000
270
100
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 622
FREQUENCY HEIGHT CURVES
No. 9


0200~0211
(3600)
2900
290
100
0230~0240
(4000)
3200
310
0300~0313
(4300)
3500
300
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 623
FREQUENCY HEIGHT CURVES
No. 1


0330~ 0337
Fエコー不明
3.1Mcルスエコー表レズ。
100粁
0400~ 0406
f×F2不明
4100
(?)
100粁
0431~0438
f×F2不明
4500
(?)
100粁
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 623
FREQUENCY HEIGHT CURVES
No. 2

DATE 19. 6. 23

FREQUENCY HEIGHT CURVES

No. 3

0500 ～

混信妨害ノ為測定不能。

0530 ～0538

Fエコー不明

100粁

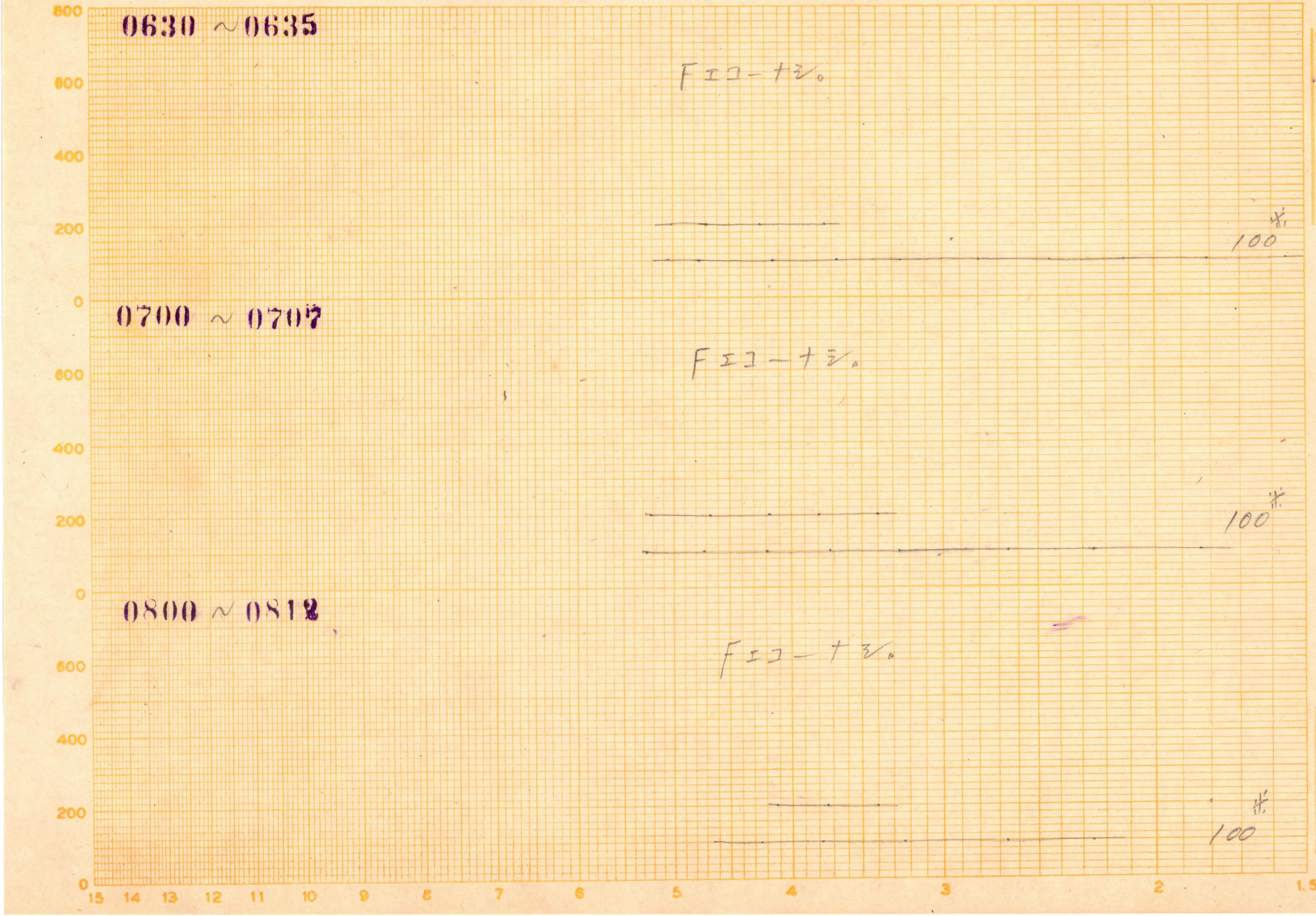
0600 ～0609

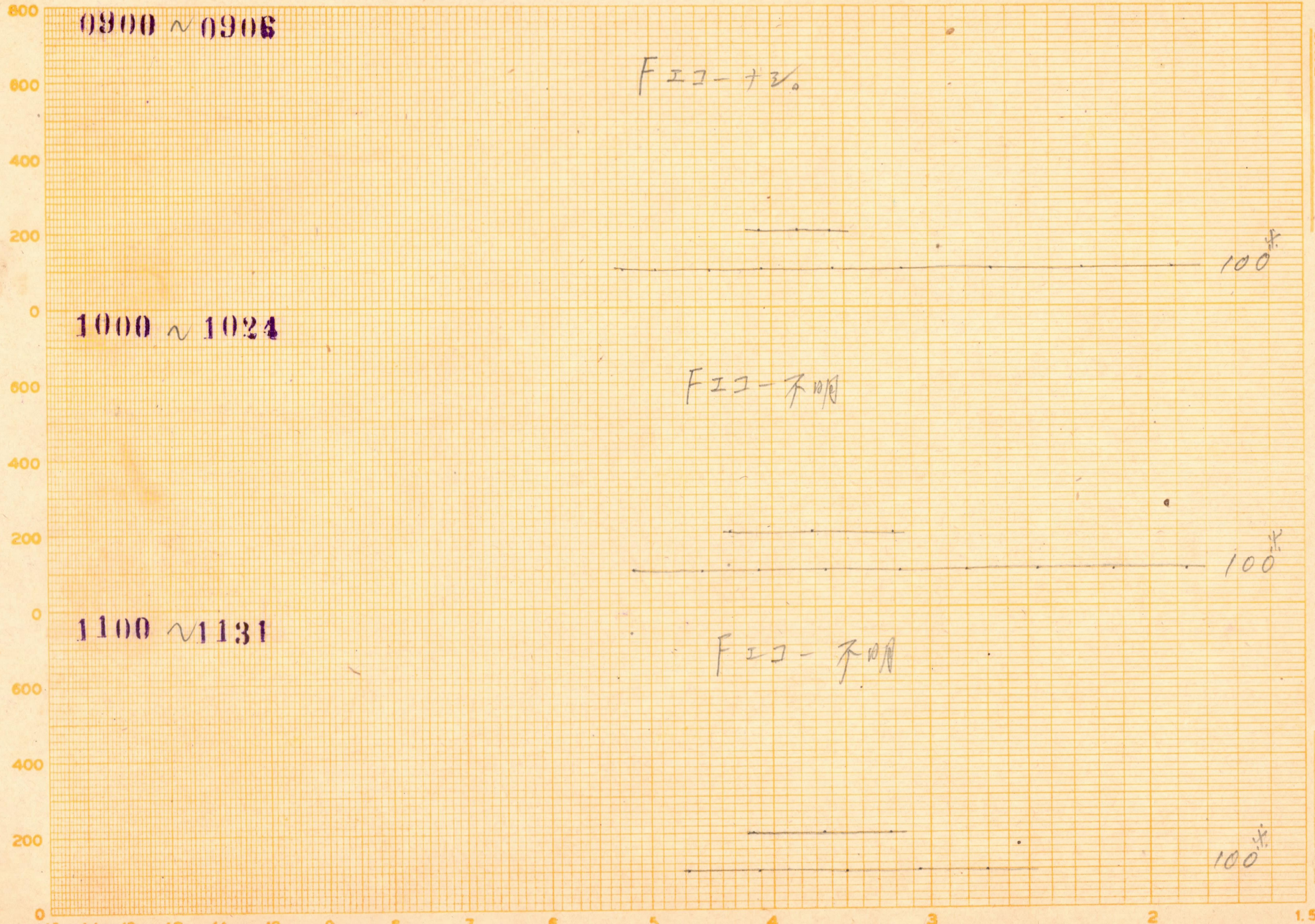
Fエコー十分。

100粁

800 600 400 200 0 600 400 200 0 600 400 200 0

15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5


0630 ~0635
Fエコー十ヲ。
100 粁
0700 ~ 0707
Fエコー十ヲ。
100 粁
0800 ~ 0812
Fエコー十ヲ。
100 粁
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 623
FREQUENCY HEIGHT CURVES
No. 4


0900 ~ 0906
1000 ~ 1024
1100 ~1131
エコー有り
エコー不明
エコー不明
100
100
100
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 10 623
FREQUENCY HEIGHT CURVES
No. 5

800
600
400
200
0
600
400
200
0
600
400
200
0

1200 ～ 1223

エコー微弱ニテ判然セズ

1300 ～ 1317

エコー判然セズ。

1400 ～ 1407

Fエコー十ニ，エコー極メテ弱シ。

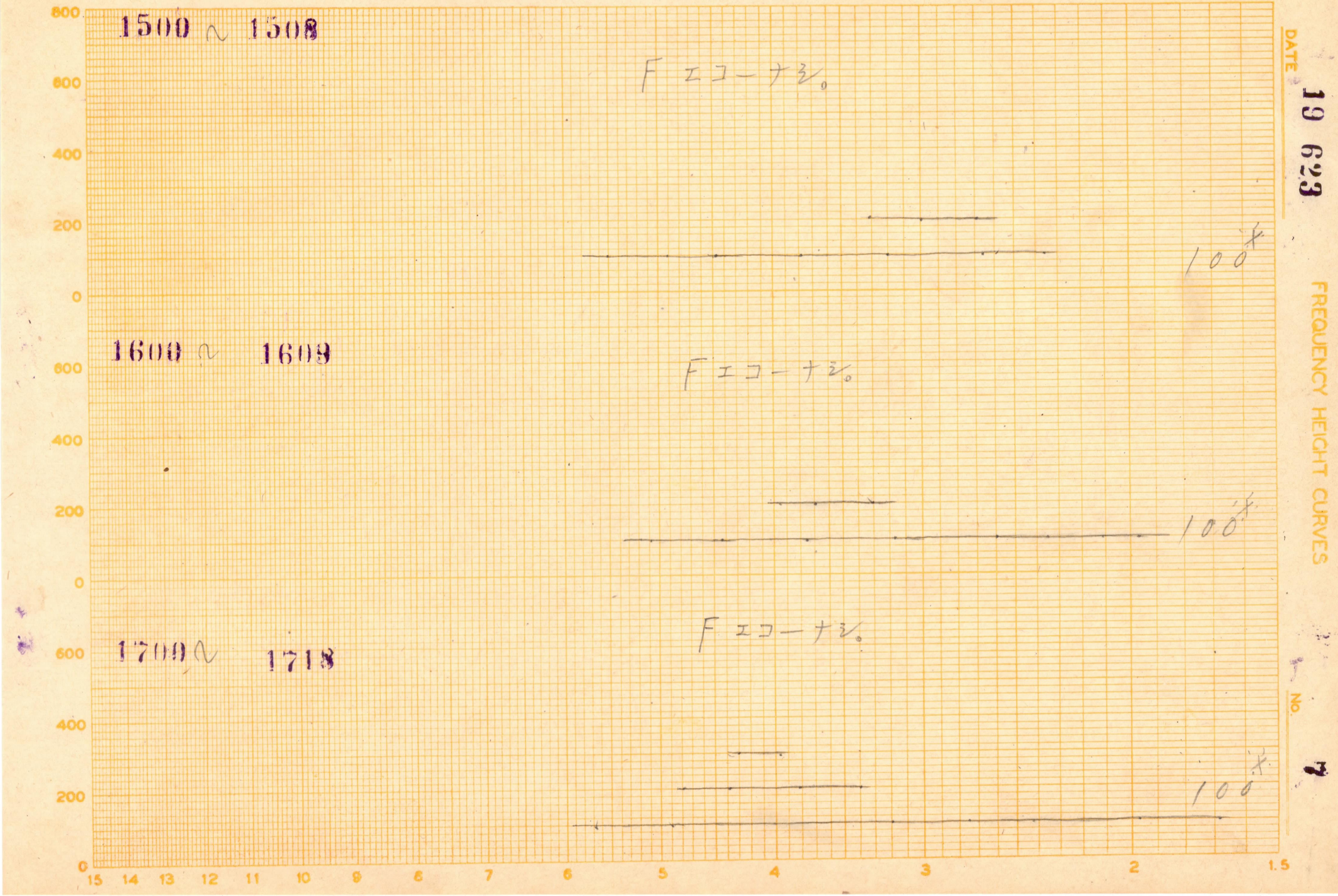
100米

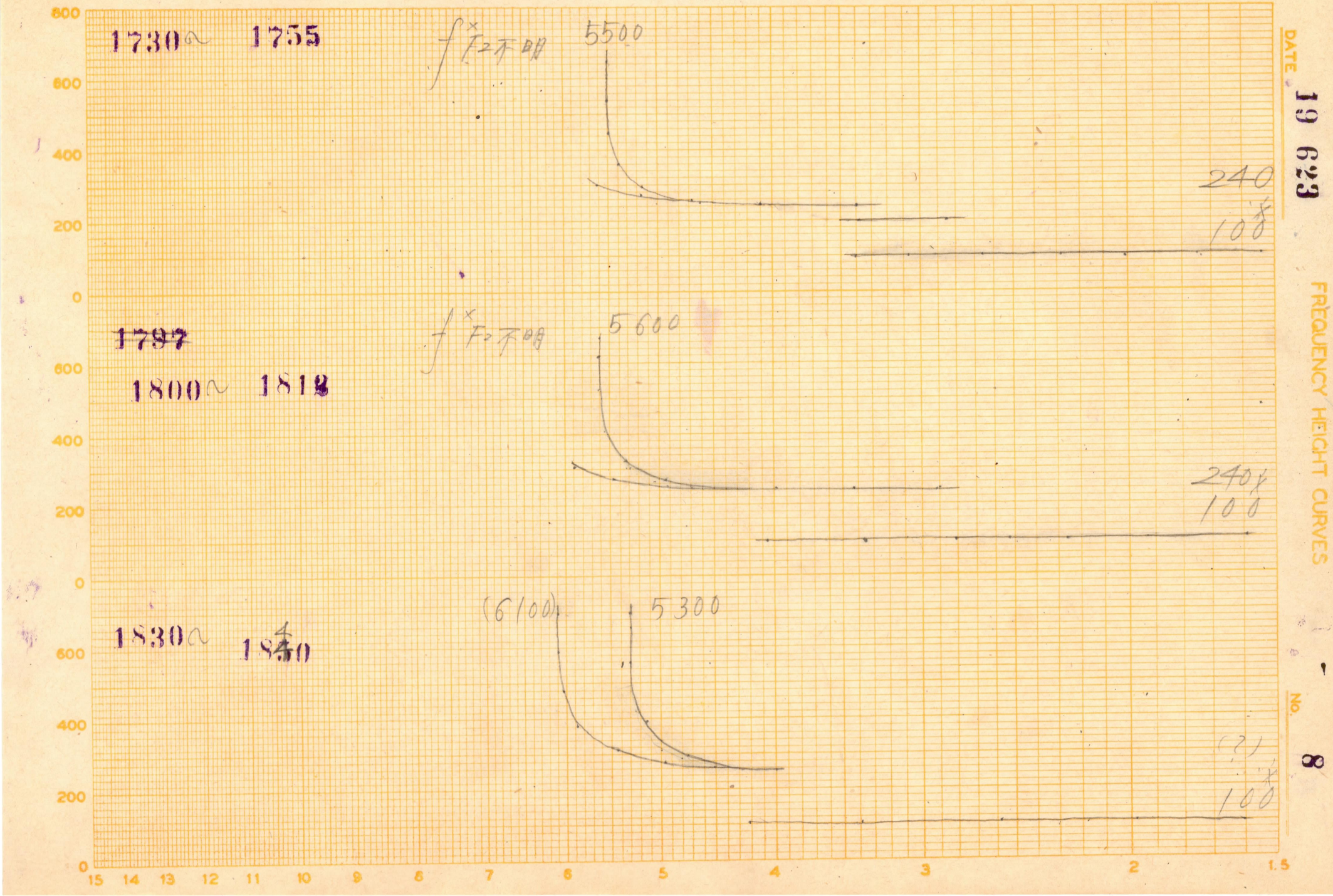
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5

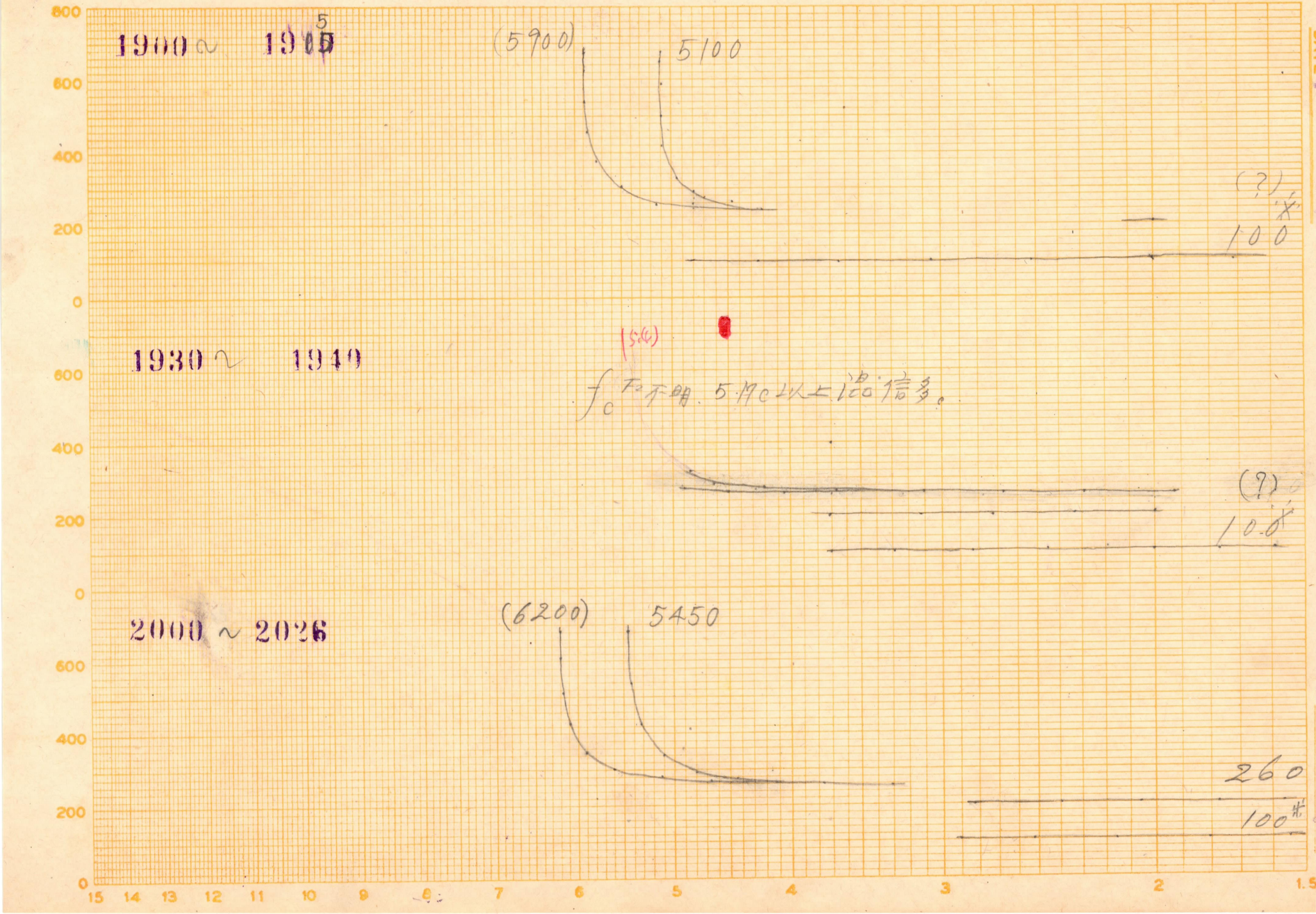
DATE 19 6月28日

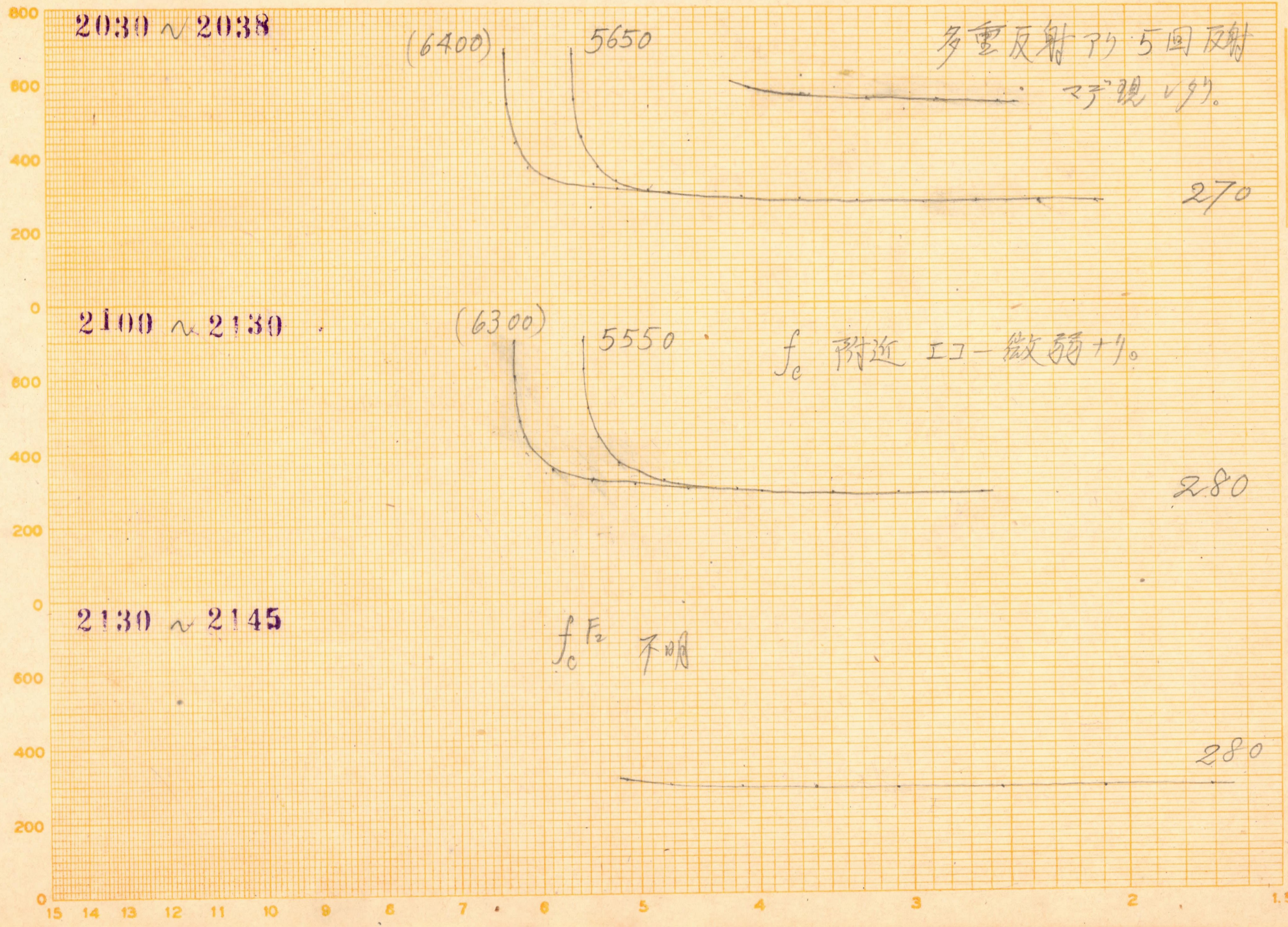
FREQUENCY HEIGHT CURVES

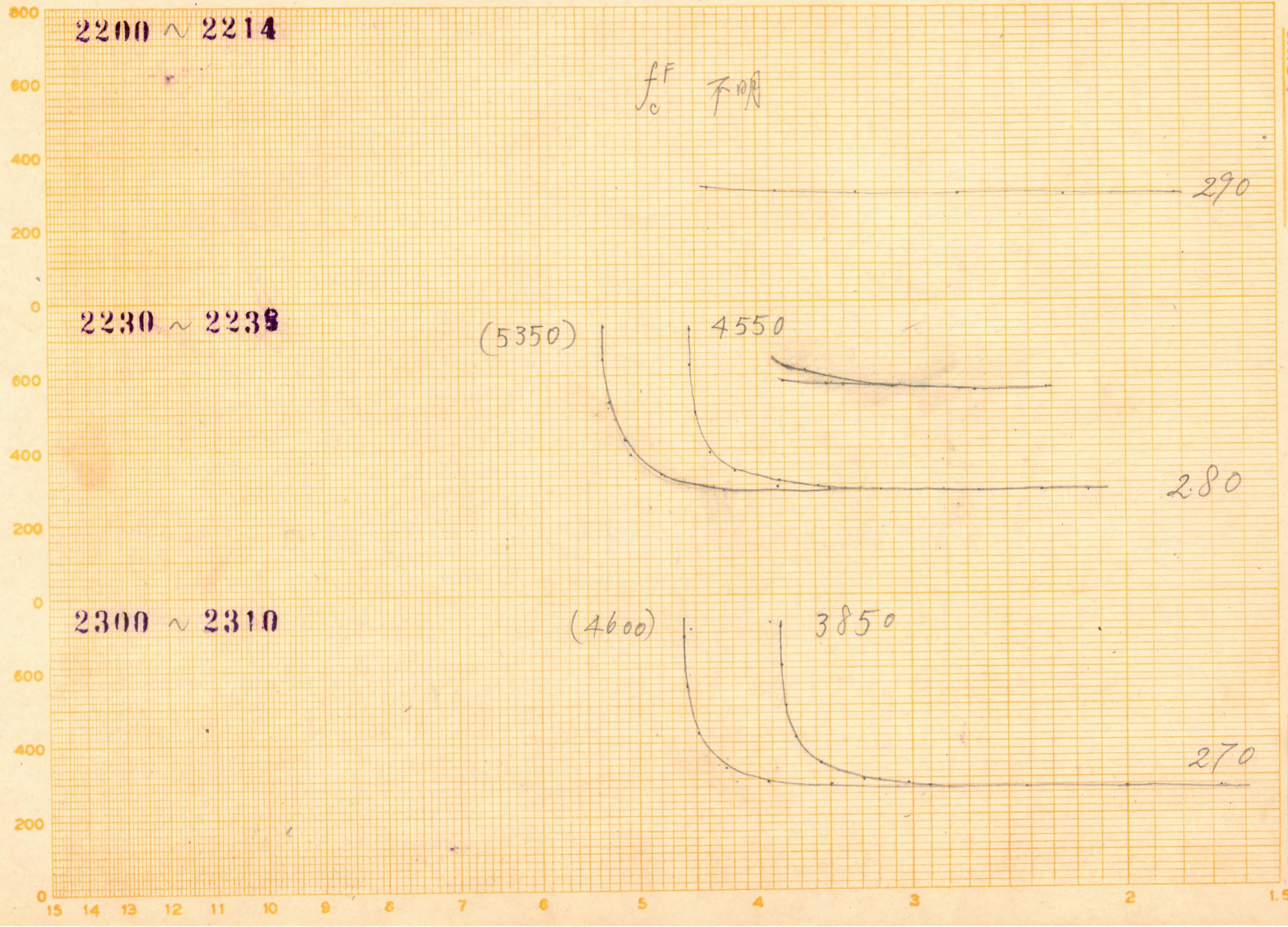
No. 6

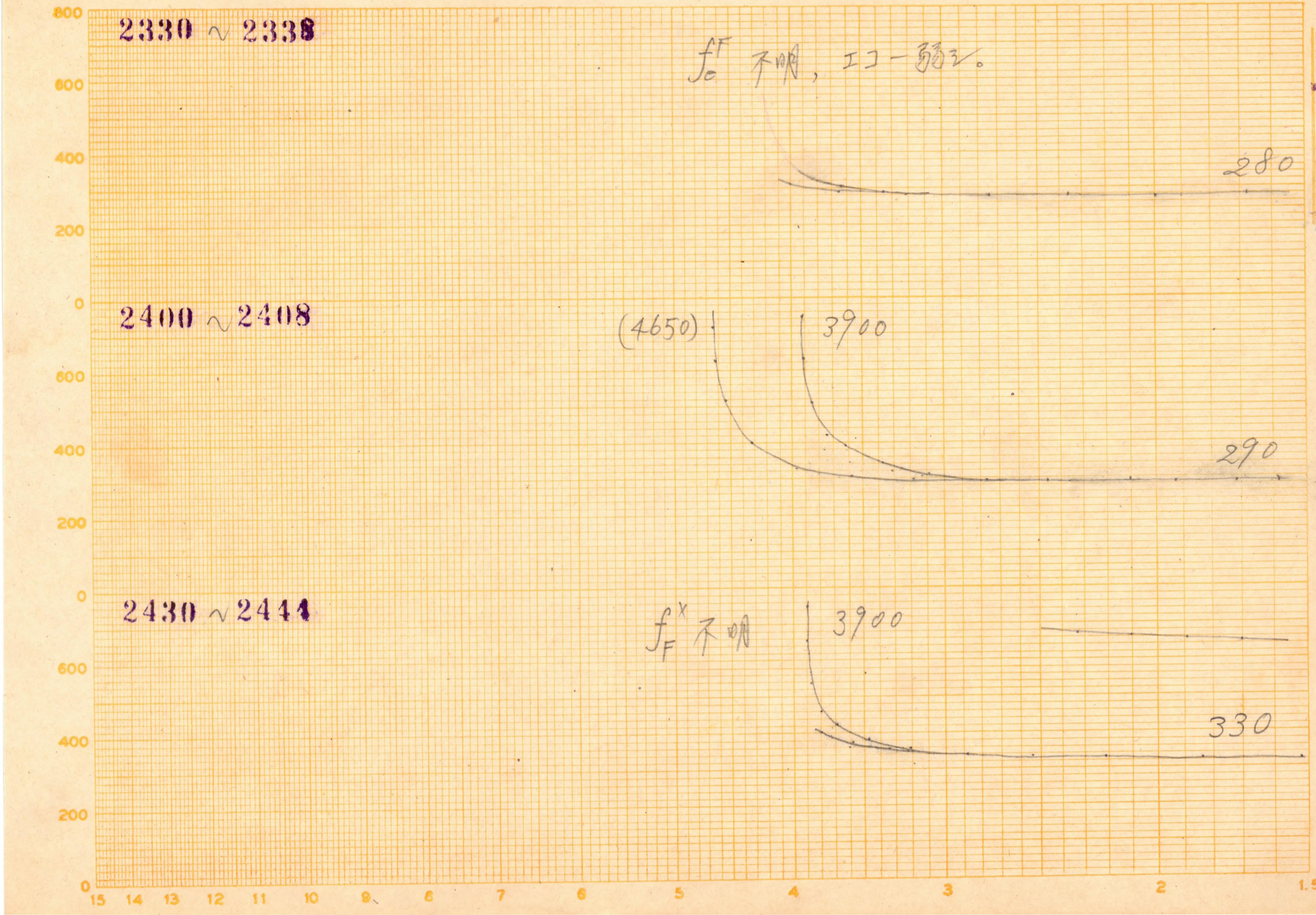

1500 ~ 1508
Fエコーナシ。
100
1600 ~ 1609
Fエコーナシ。
100
1709 ~ 1718
Fエコーナシ。
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 623
FREQUENCY HEIGHT CURVES
No. 7

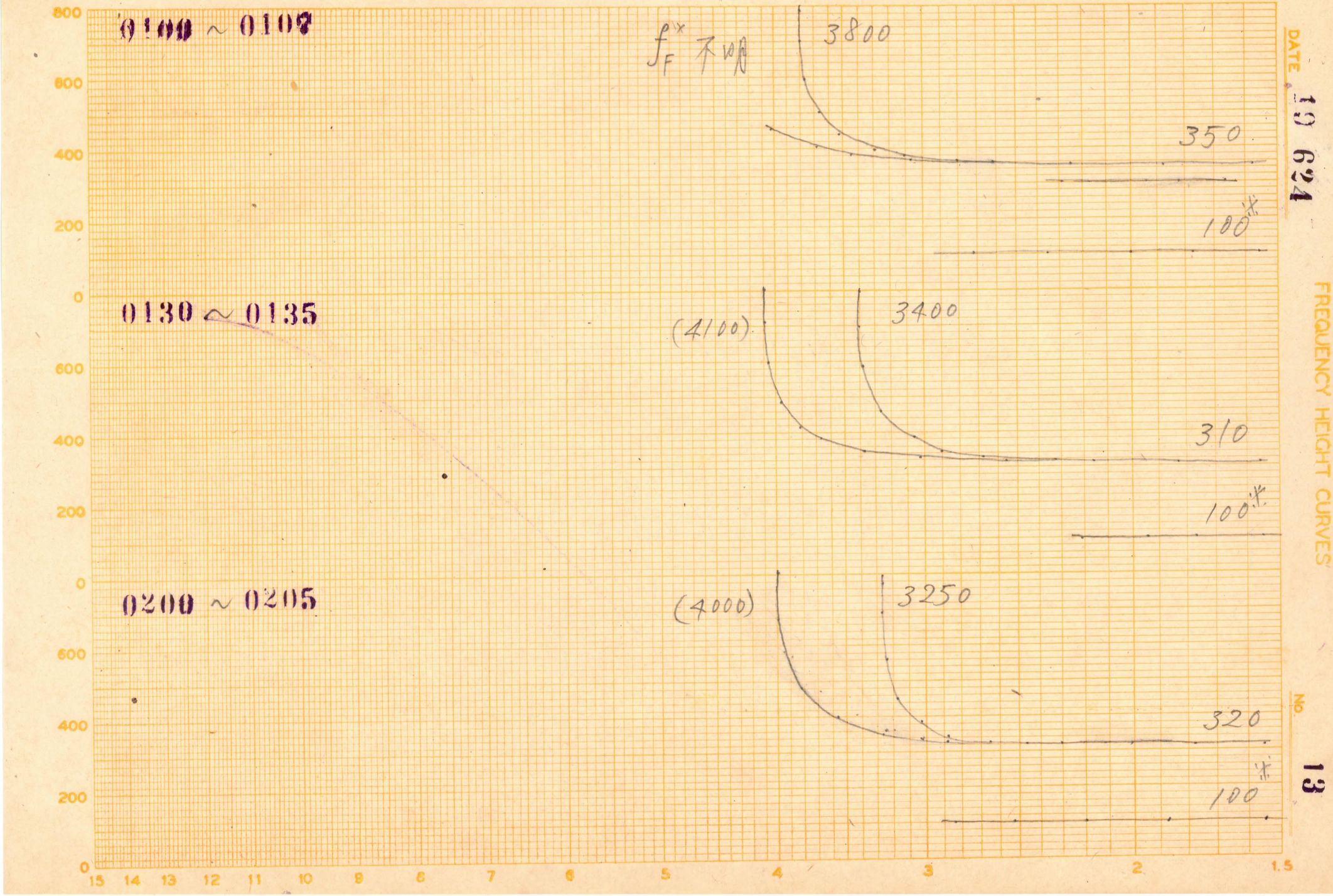

1730~ 1755
5500
240
100
1797
1800~ 1812
5600
240
100
1830~ 1850
(6100)
5300
(?)
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 623
FREQUENCY HEIGHT CURVES
No. 8


1900 ~ 1905
(5900)
5100
(?)
100
1930 ~ 1949
(5.6)
fc 下の方 5 MC 以上に 100 個
(?)
10.0
2000 ~ 2026
(6200)
5450
260
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 623
FREQUENCY HEIGHT CURVES
No. 9


2030 ~ 2038
(6400)
5650
多重反射より5回反射
まで観測り。
270
2100 ~ 2130
(6300)
5550
f_c 附近 エコー微弱+1。
280
2130 ~ 2145
$f_c F_2$ 不明
280
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6.2.3
FREQUENCY HEIGHT CURVES
No. 10


2200 ~ 2214
f_c^F F層
290
2230 ~ 2238
(5350)
4550
280
2300 ~ 2310
(4600)
3850
270
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 1957 6 23
FREQUENCY HEIGHT CURVES
No. 11


2330 ~ 2338
2400 ~ 2408
2430 ~ 2444
f_o^F 不明, エコー弱い。
280
(4650)
3900
290
f_F^X 不明
3900
330
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 6 23 19 6 24
FREQUENCY HEIGHT CURVES
No. 12


0100 ~ 0107
0130 ~ 0135
0200 ~ 0205
f_F^x 不明
3800
350
100*
(4100)
3400
310
100*
(4000)
3250
320
100*
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 624
FREQUENCY HEIGHT CURVES
NO. 13

0230 ~

DATE 19 6 24

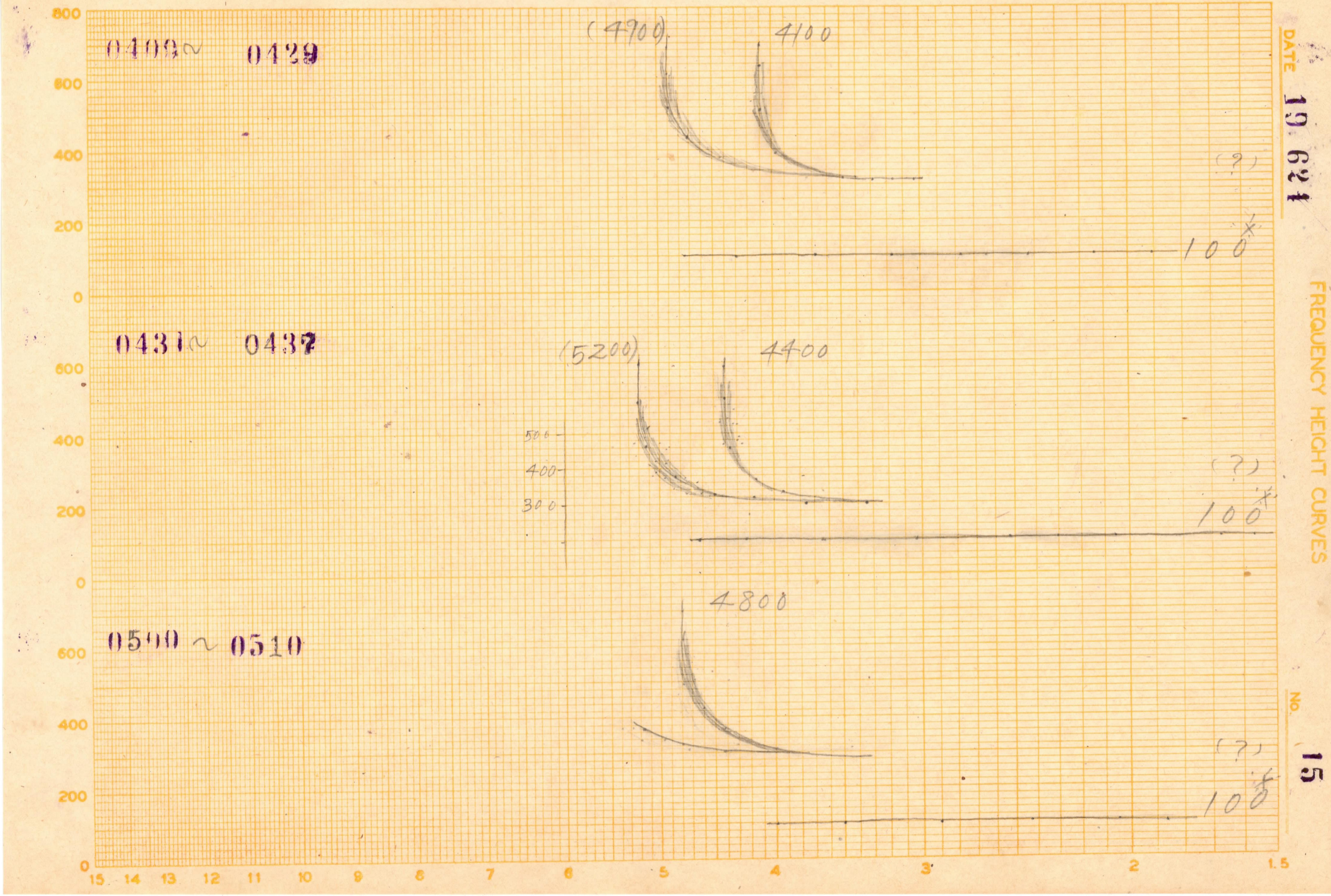
FREQUENCY HEIGHT CURVES

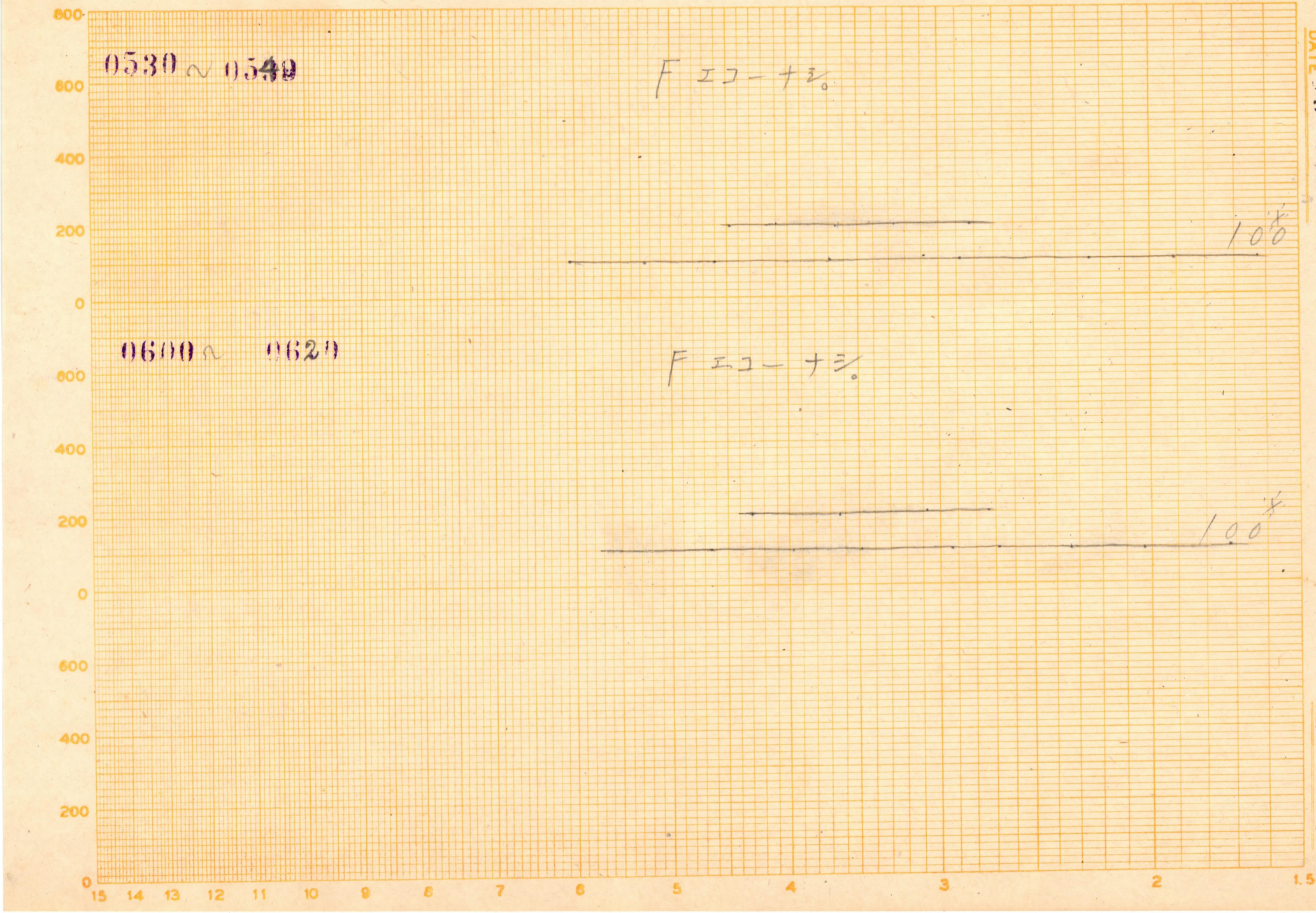
No. 14

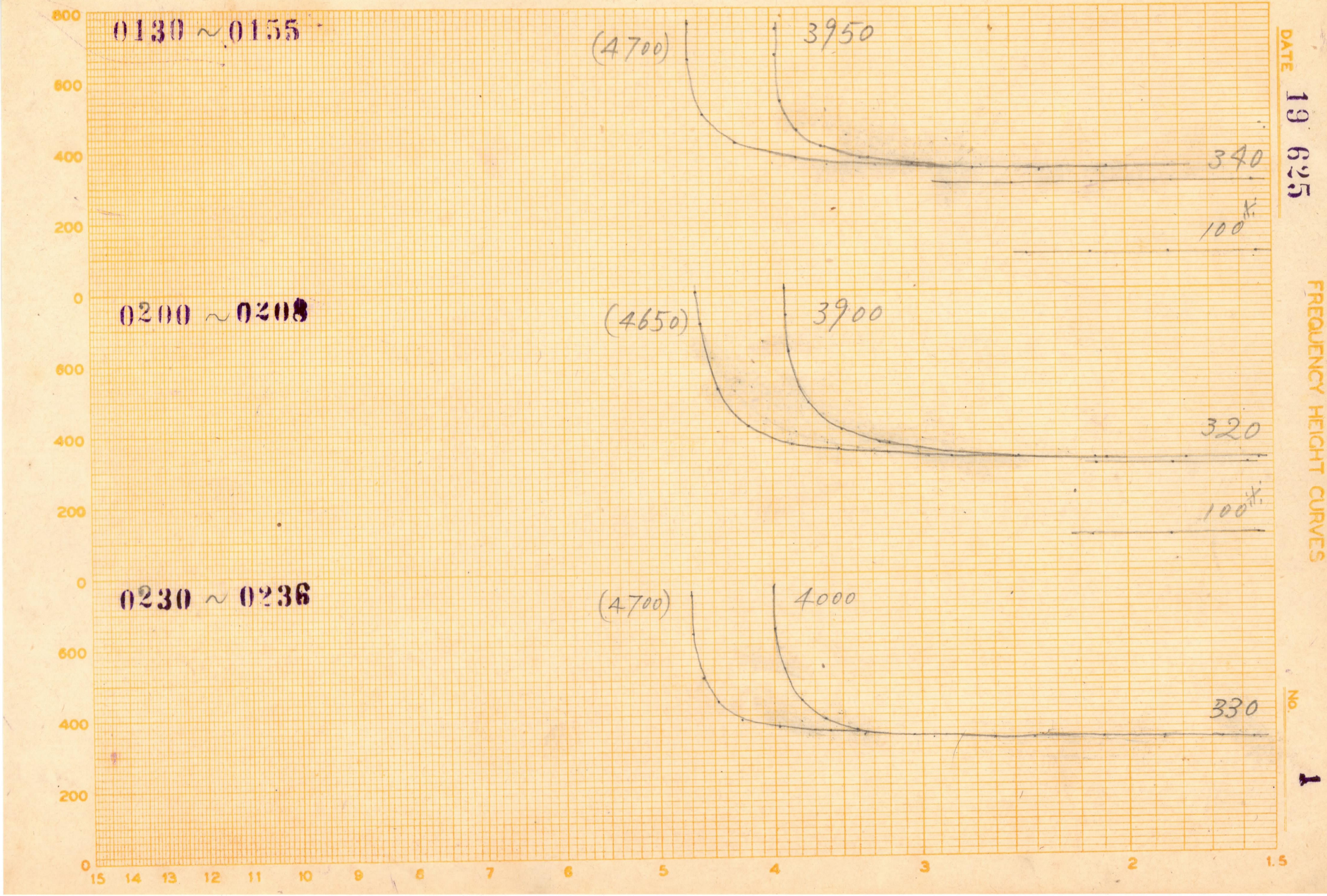
800 600 400 200 0 600 400 200 0 600 400 200 0

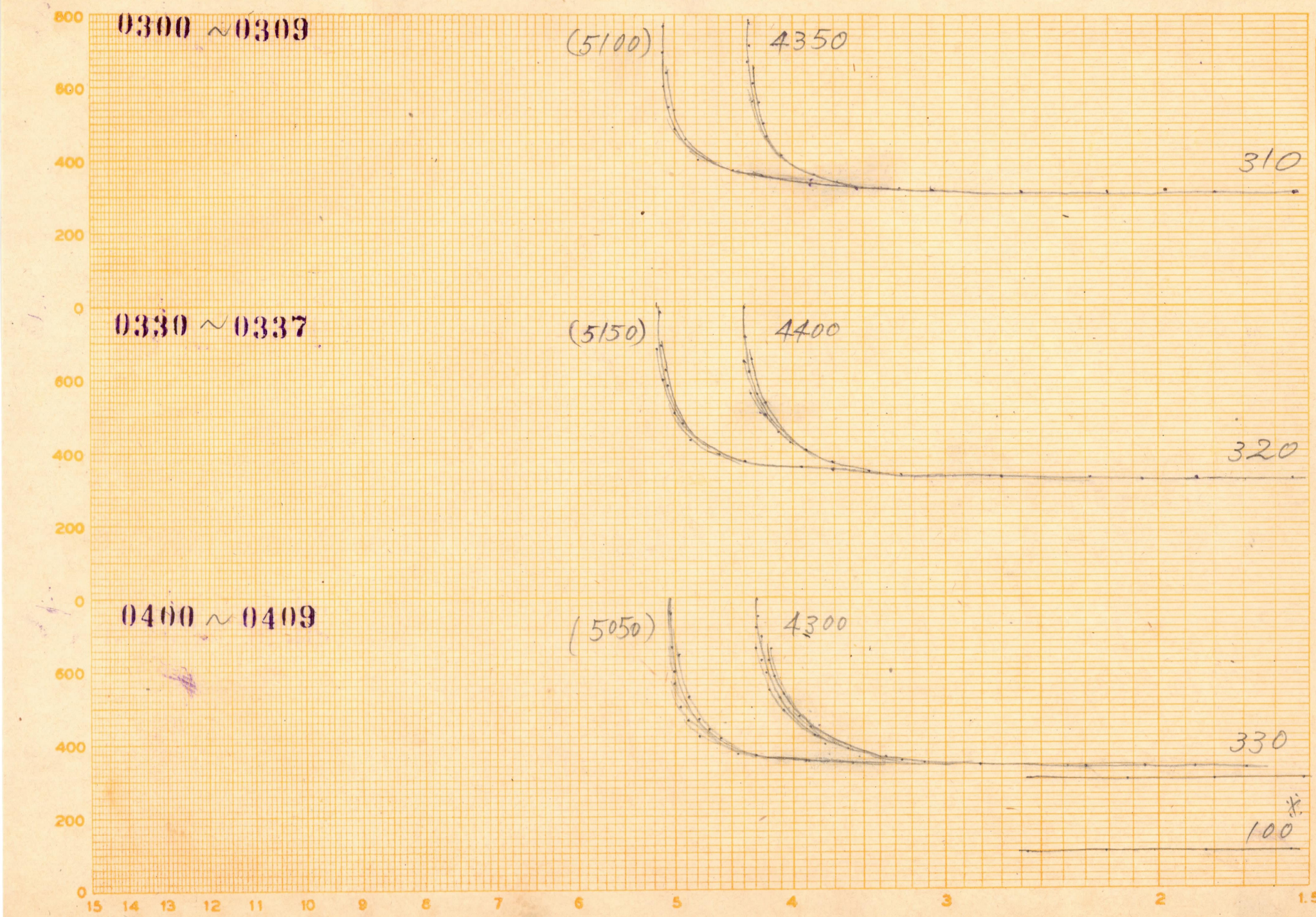
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5

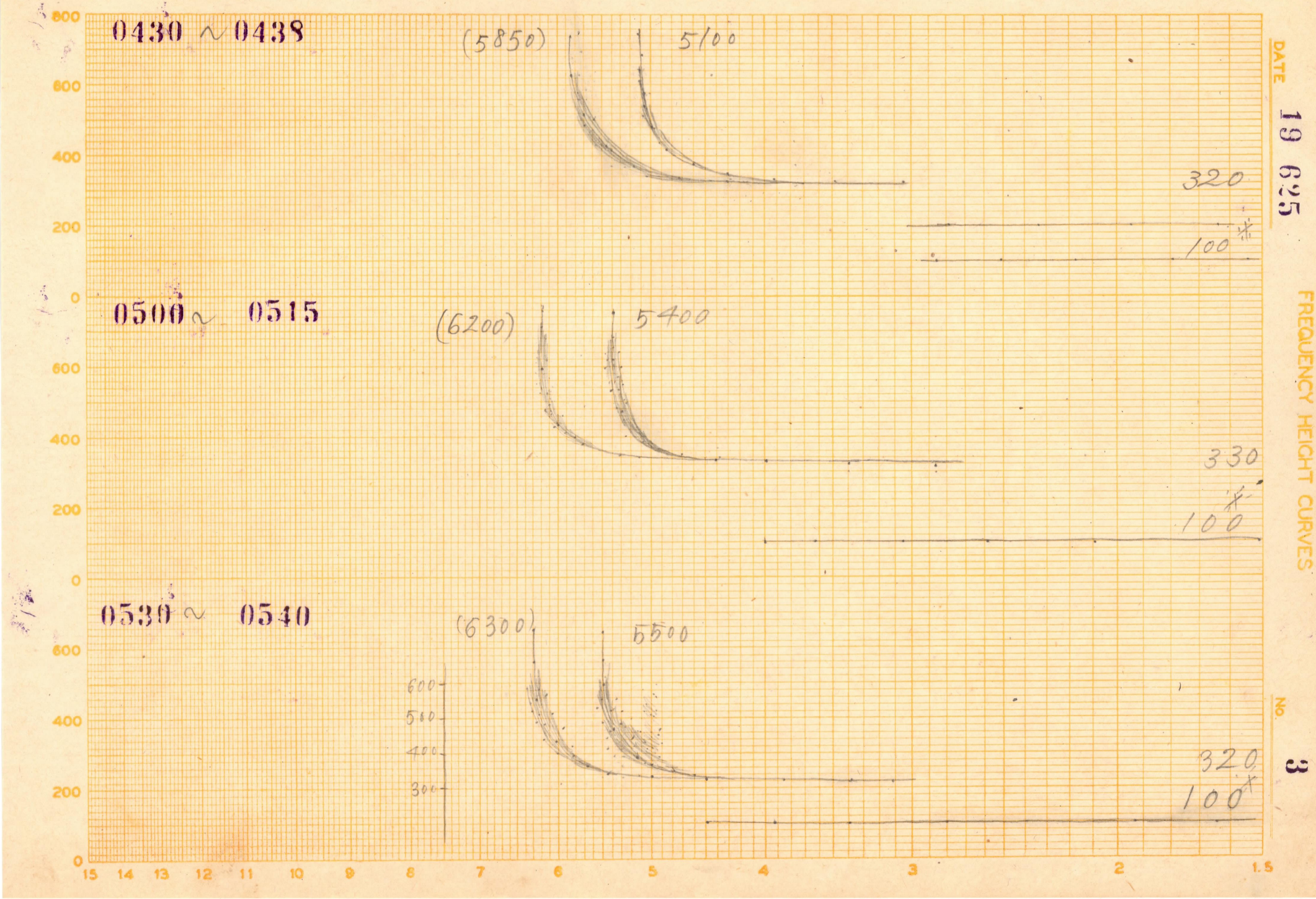
インパルスノ發生不安定ナル爲
調整ス。
（〇三四五修理完成ス）

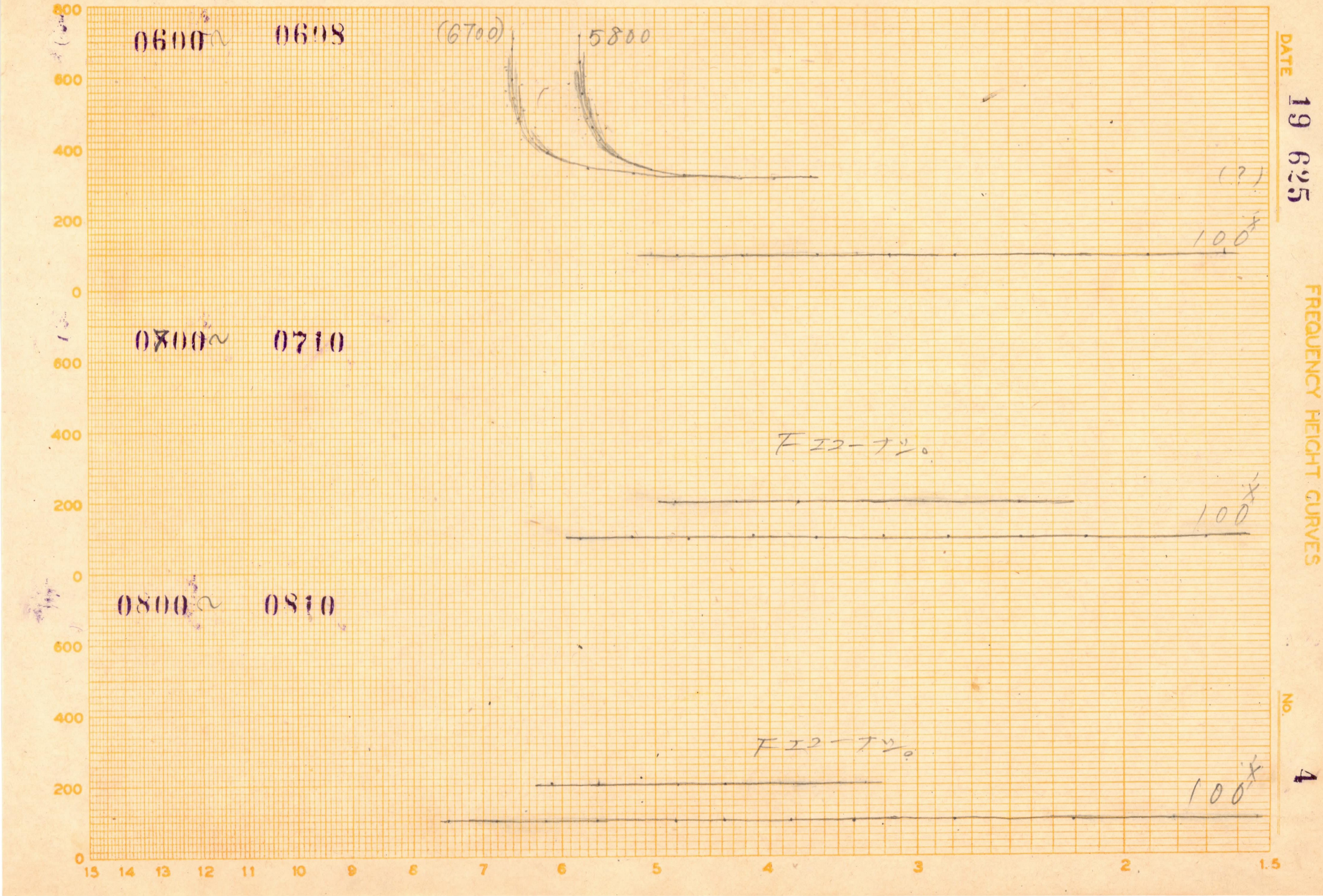

0409~ 0429
(4700)
4100
(?)
100
0431~ 0437
(5200)
4400
500
400
300
(?)
100
0500 ~ 0510
4800
(?)
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 624
FREQUENCY HEIGHT CURVES
No. 15

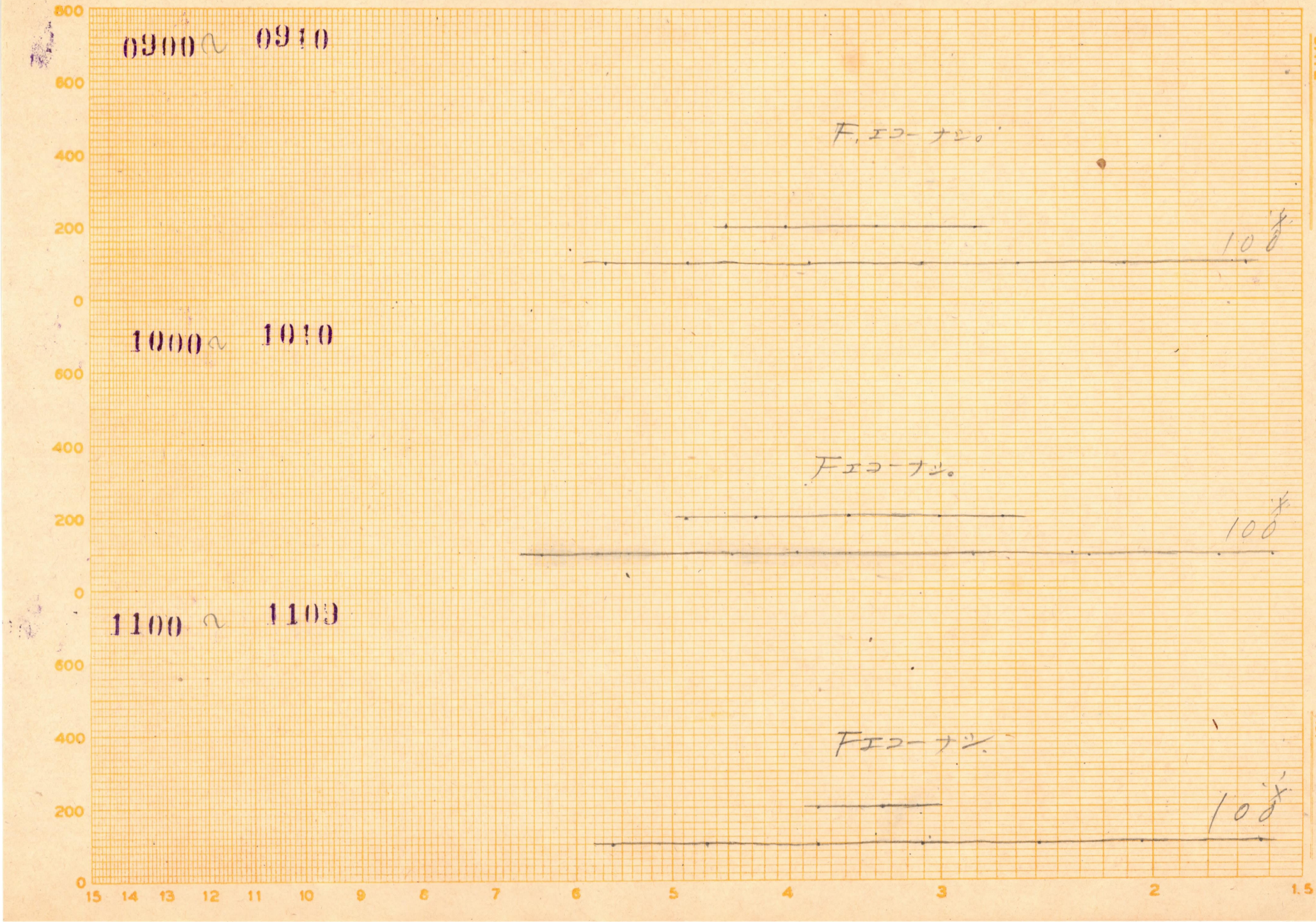

0530 ~ 0549
F エコー ナシ。
100%
0600 ~ 0629
F エコー ナシ。
100%
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 624
FREQUENCY HEIGHT CURVES
No. 16

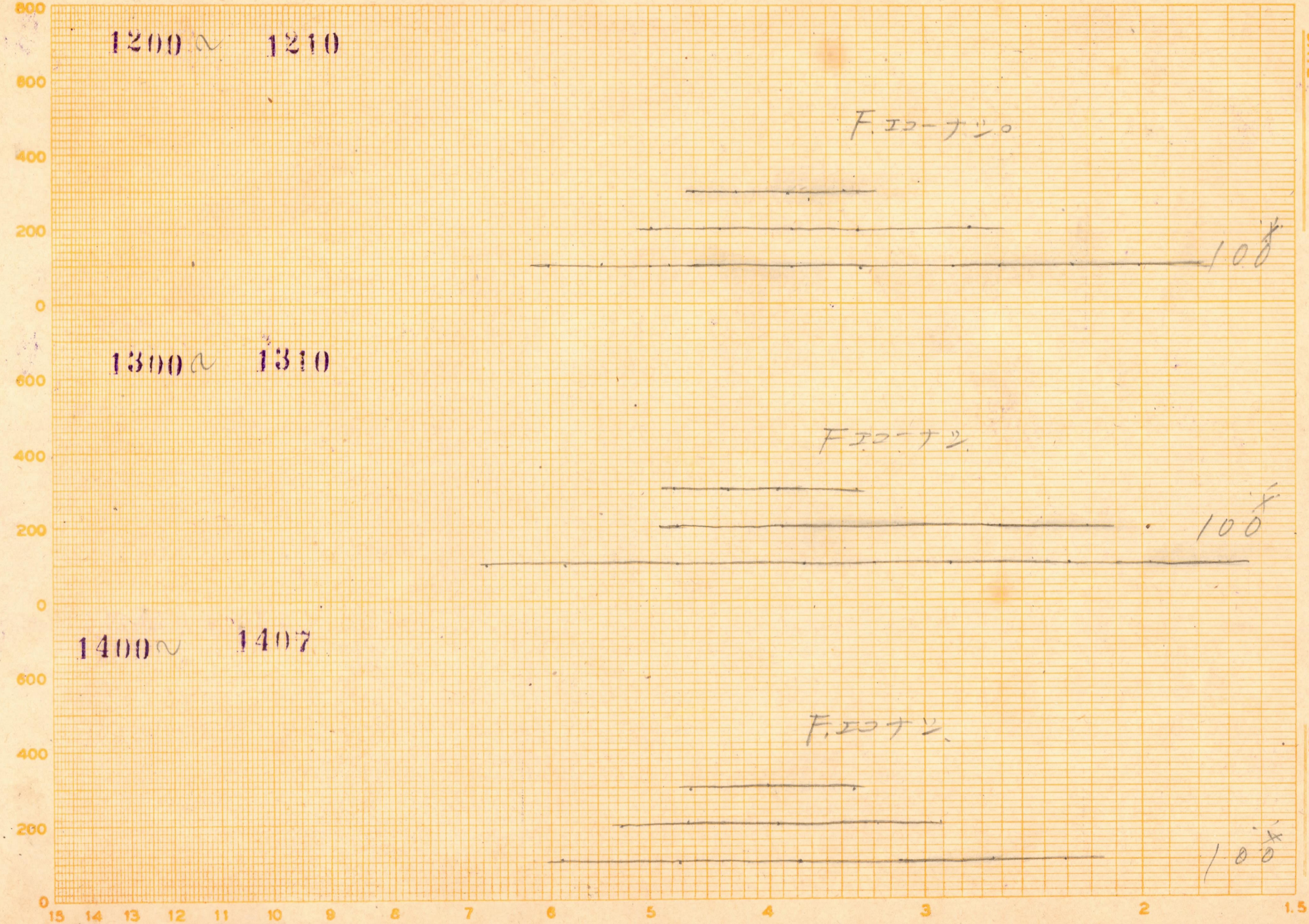

0130 ~ 0155
(4700)
3950
340
100 K.
0200 ~ 0208
(4650)
3900
320
100 K.
0230 ~ 0236
(4700)
4000
330
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 625
FREQUENCY HEIGHT CURVES
No. 1

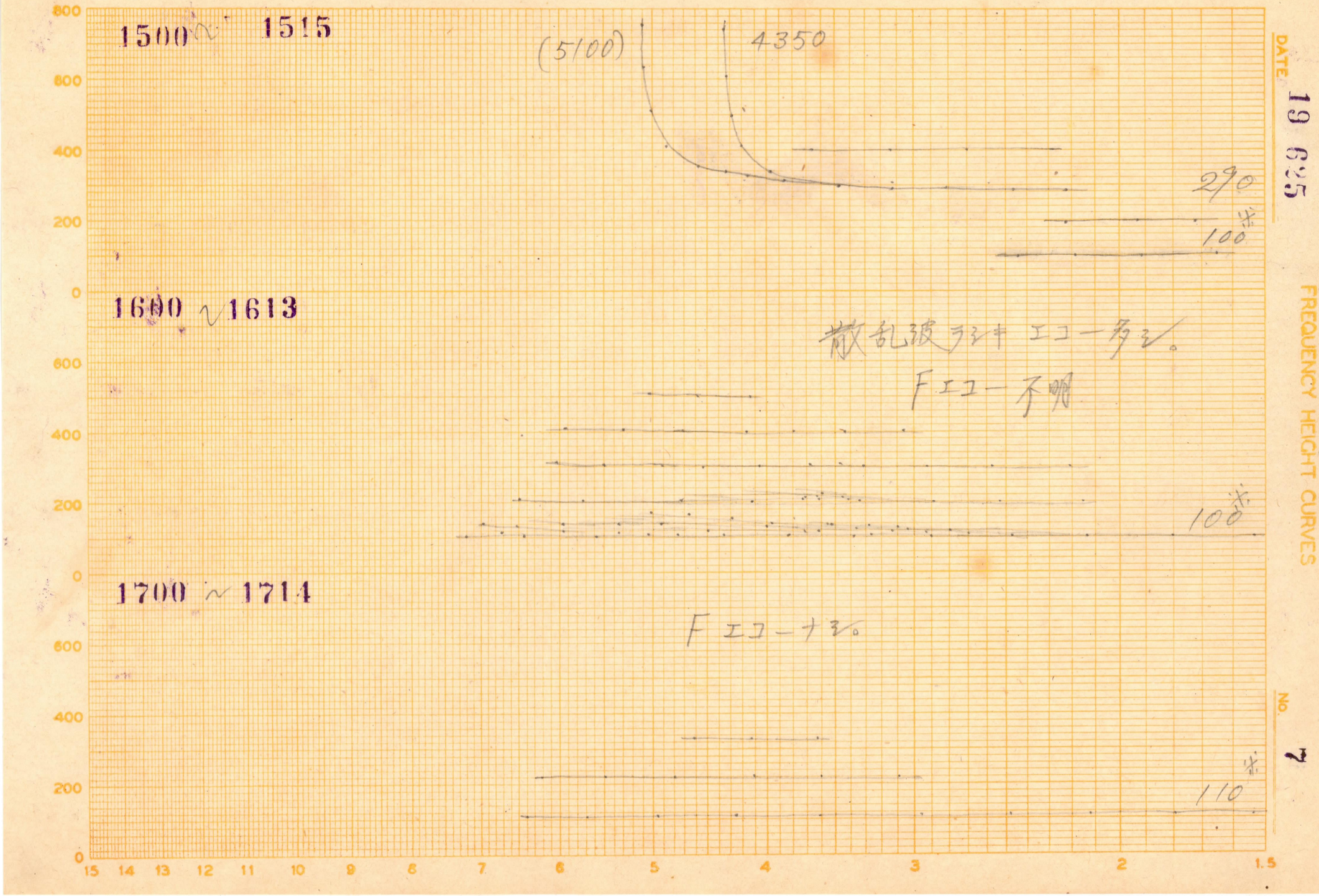

0300 ~0309
(5100)
4350
310
0330 ~0337
(5150)
4400
320
0400 ~0409
(5050)
4300
330
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 625
FREQUENCY HEIGHT CURVES
No. 2

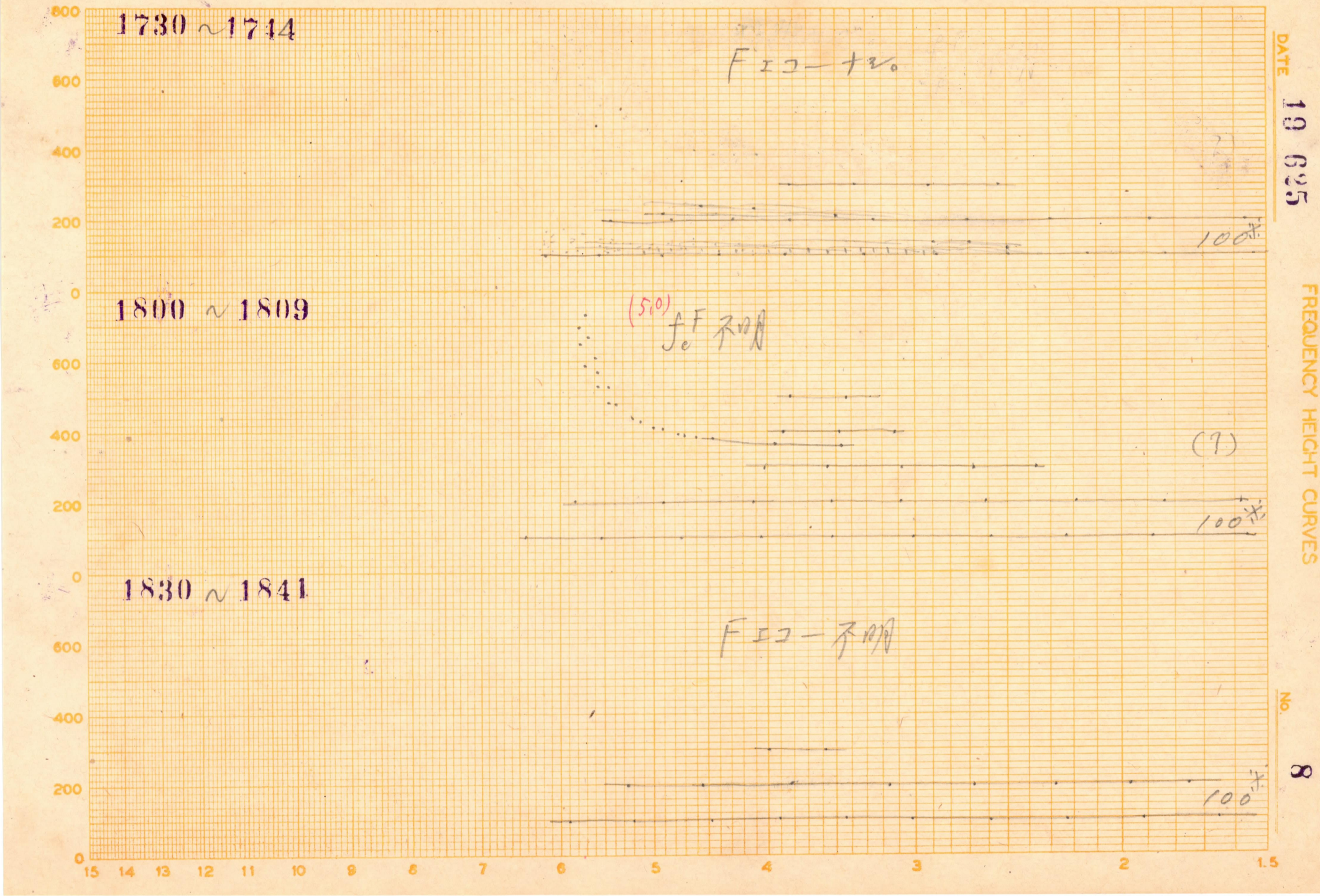

0430 ~ 0438
(5850)
5100
320
100
0500 ~ 0515
(6200)
5400
330
100
0530 ~ 0540
(6300)
5500
320
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
600
500
400
300
DATE 19 625
FREQUENCY HEIGHT CURVES
No. 3

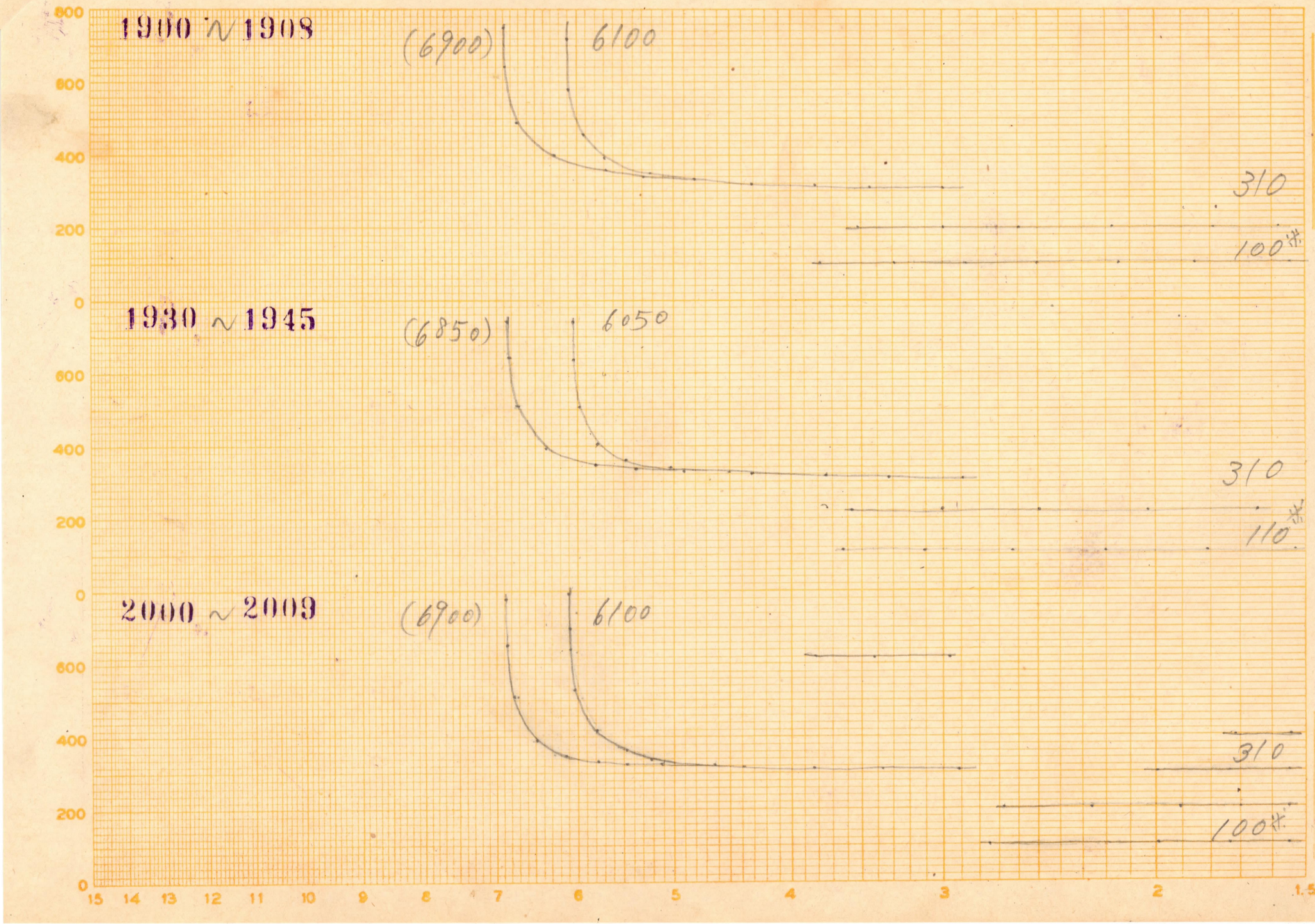

0600~ 0698
(6700)
5800
(?)
100
0800~ 0710
エコーナシ。
100
0800~ 0810
エコーナシ。
100
DATE 19 625
FREQUENCY HEIGHT CURVES
No. 4
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5

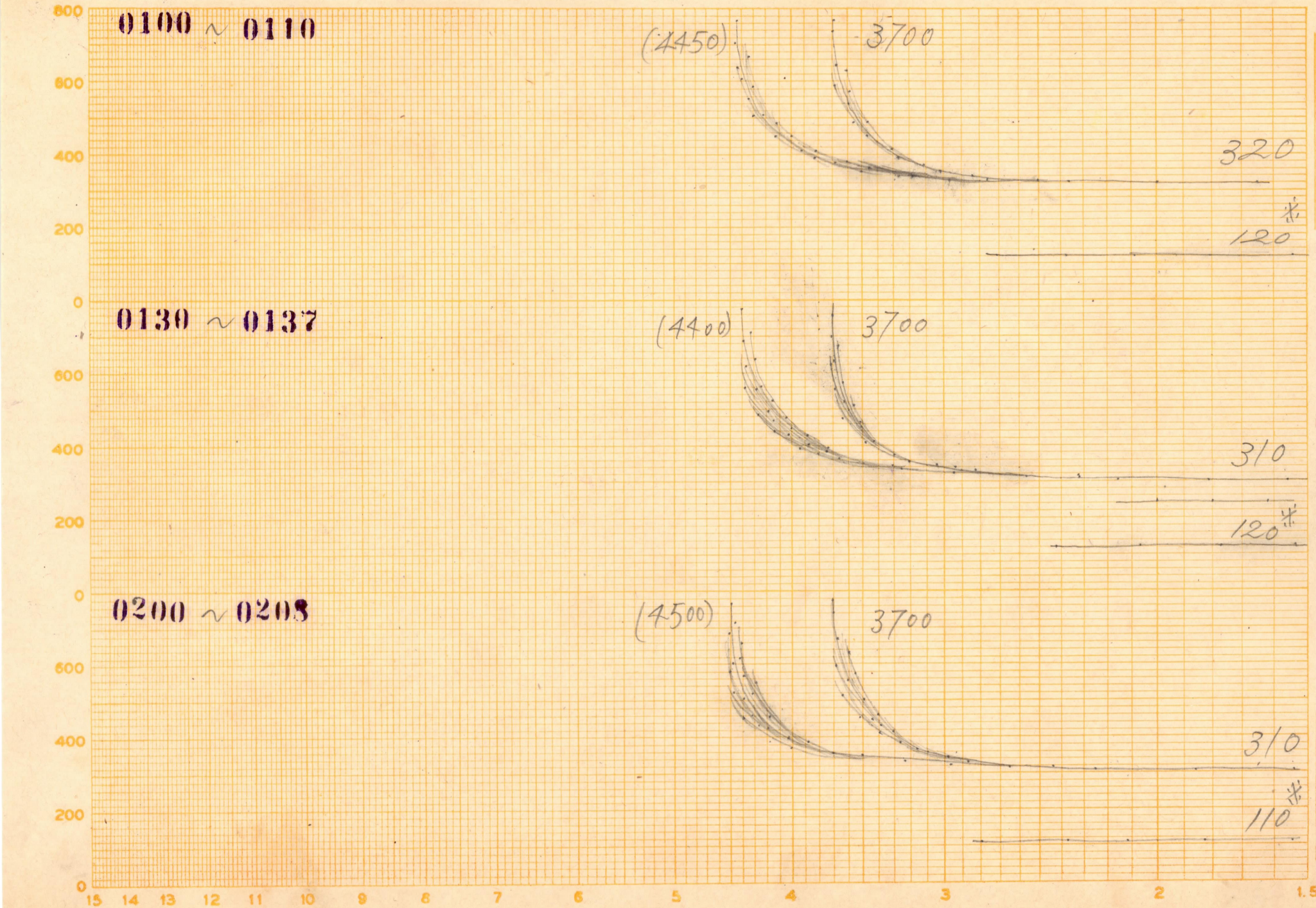

0900 ~ 0910
1000 ~ 1010
1100 ~ 1103
F. エコーナシ。
100 %
F エコーナシ。
100 %
F エコーナシ。
100 %
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 625
FREQUENCY HEIGHT CURVES
No. 5

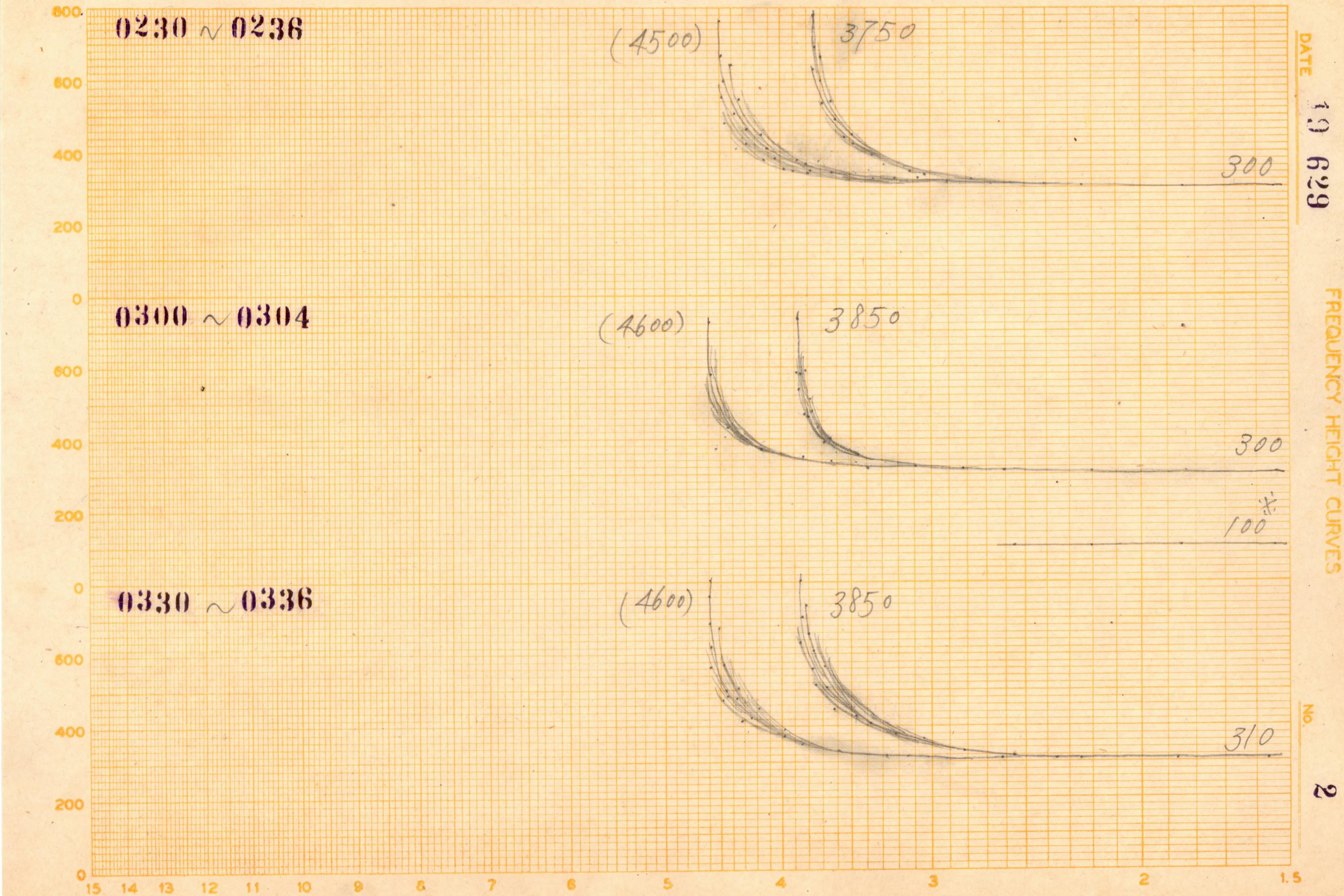

1200～1210
F.エコーナシ。
100
1300～1310
F.エコーナシ
100
1400～1407
F.エコーナシ
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 625
FREQUENCY HEIGHT CURVES
No. 6

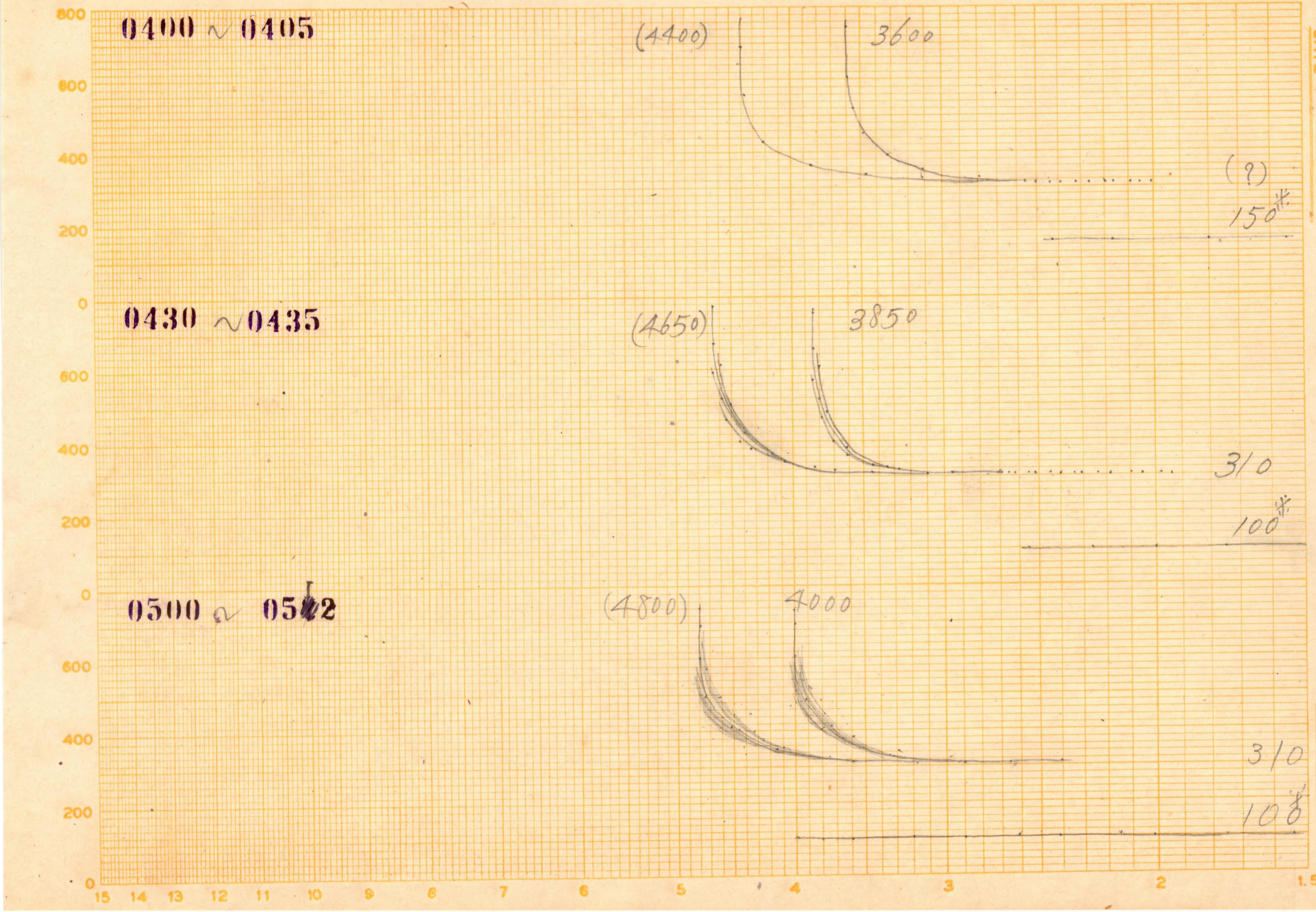

1500 ~ 1515
(5100)
4350
290 米
100 米
1600 ~ 1613
散乱波ラシ+エコー多シ。
Fエコー不明
100 米
1700 ~ 1714
Fエコーナシ。
110 米
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 625
FREQUENCY HEIGHT CURVES
No. 7

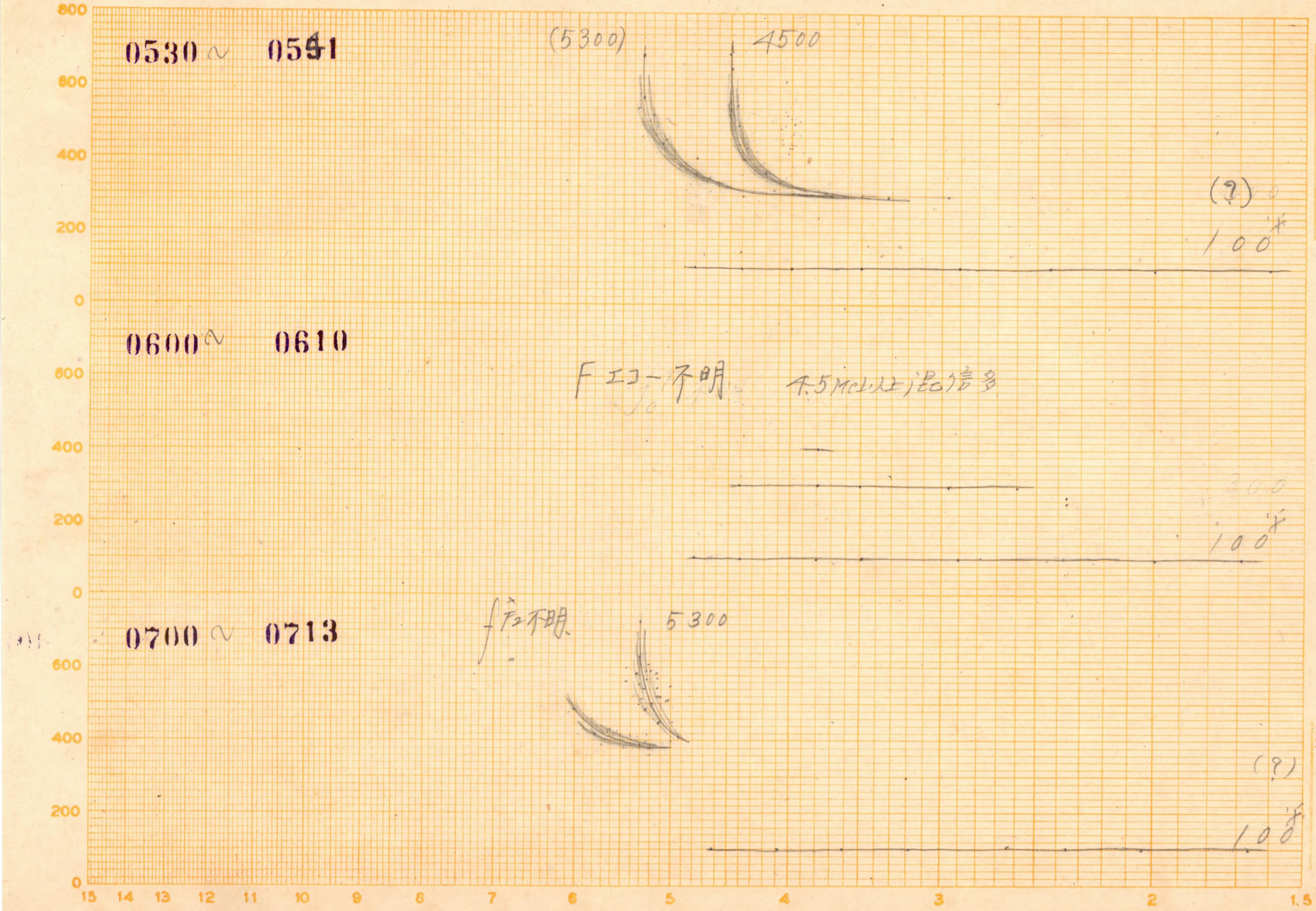

1730 ~ 1744
Fエコー+Es
100kc
1800 ~ 1809
(510)
fe F不明
(7)
100kc
1830 ~ 1841
Fエコー不明
100kc
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 625
FREQUENCY HEIGHT CURVES
No. 8

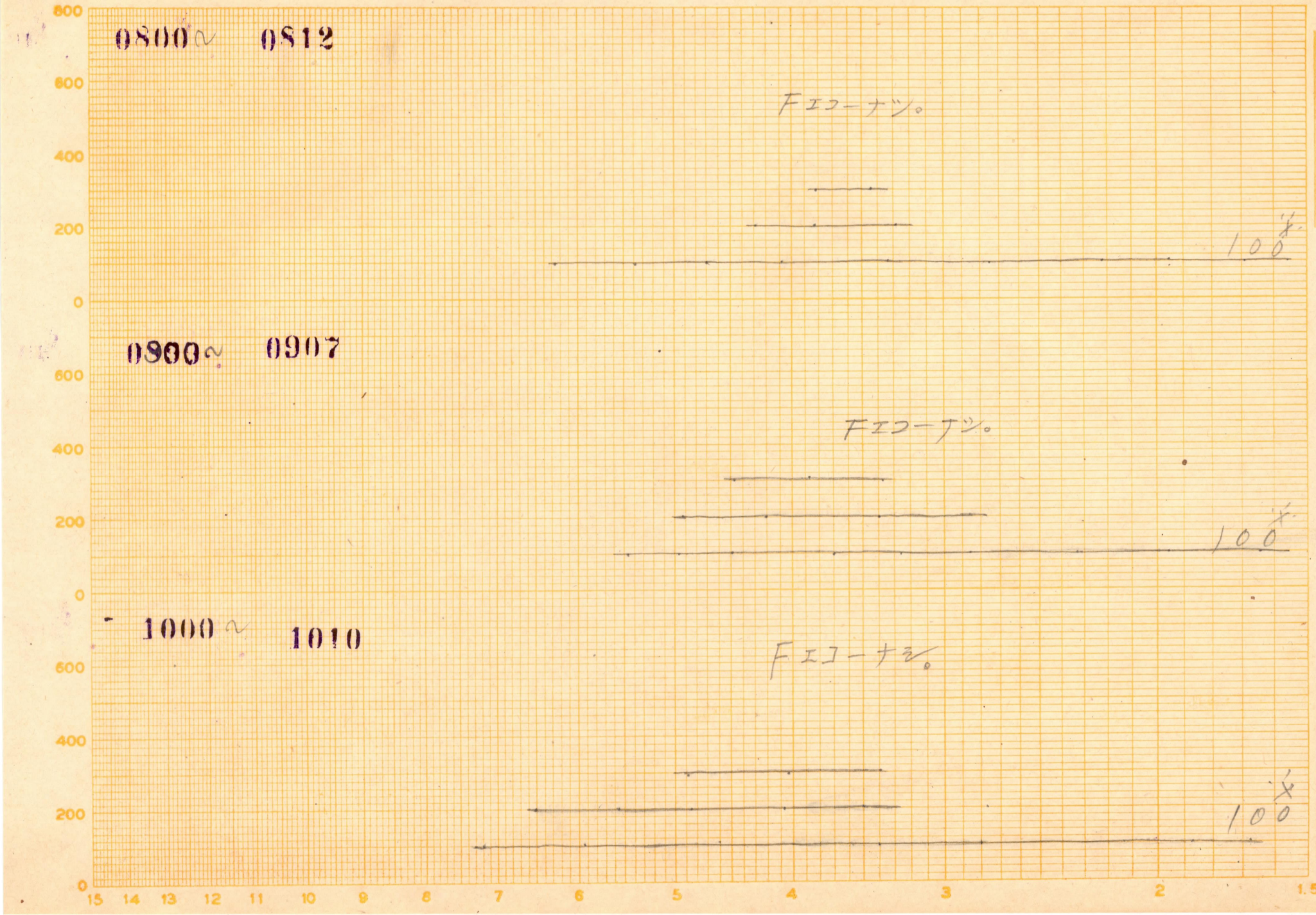

1900 ~ 1908
(6900)
6100
310
100
1930 ~ 1945
(6850)
6050
310
110
2000 ~ 2009
(6900)
6100
310
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 625
FREQUENCY HEIGHT CURVES
No. 9

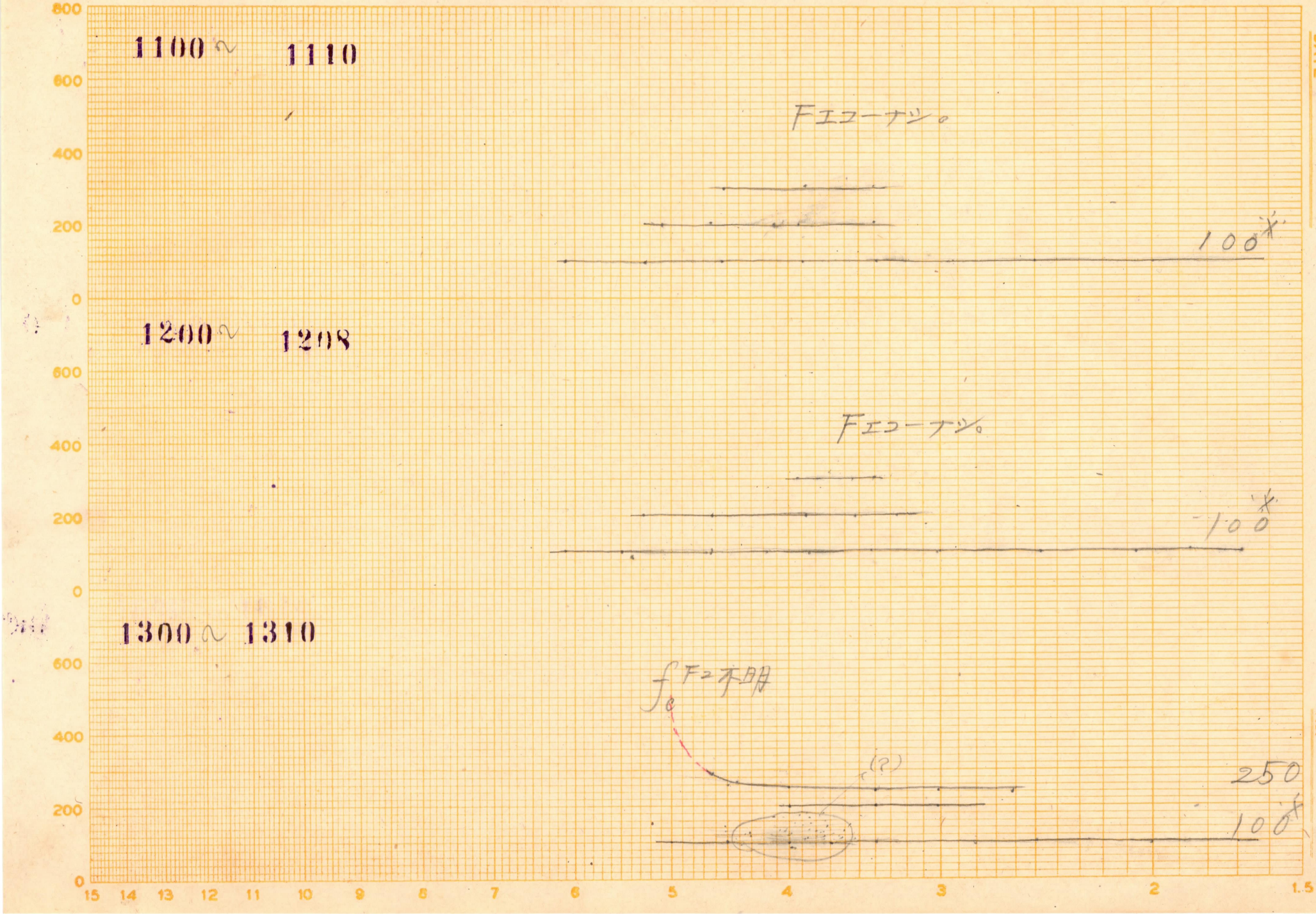

0100 ~ 0110
(4450)
3700
320
120
0130 ~ 0137
(4400)
3700
310
120
0200 ~ 0208
(4500)
3700
310
110
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 629
FREQUENCY HEIGHT CURVES
No. 1

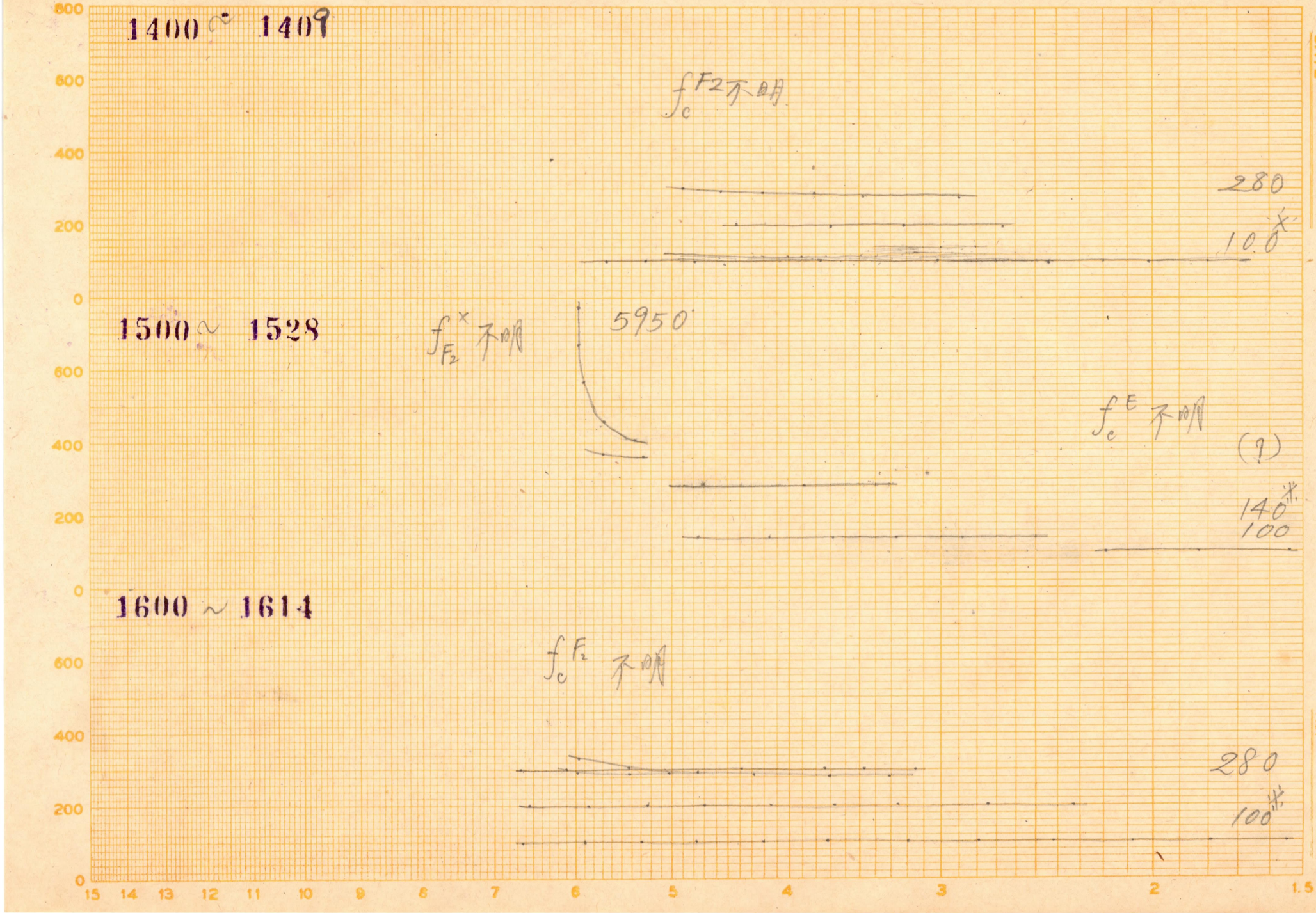

0230 ~ 0236
(4500)
3750
300
0300 ~ 0304
(4600)
3850
300
100
0330 ~ 0336
(4600)
3850
310
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 629
FREQUENCY HEIGHT CURVES
No. 2

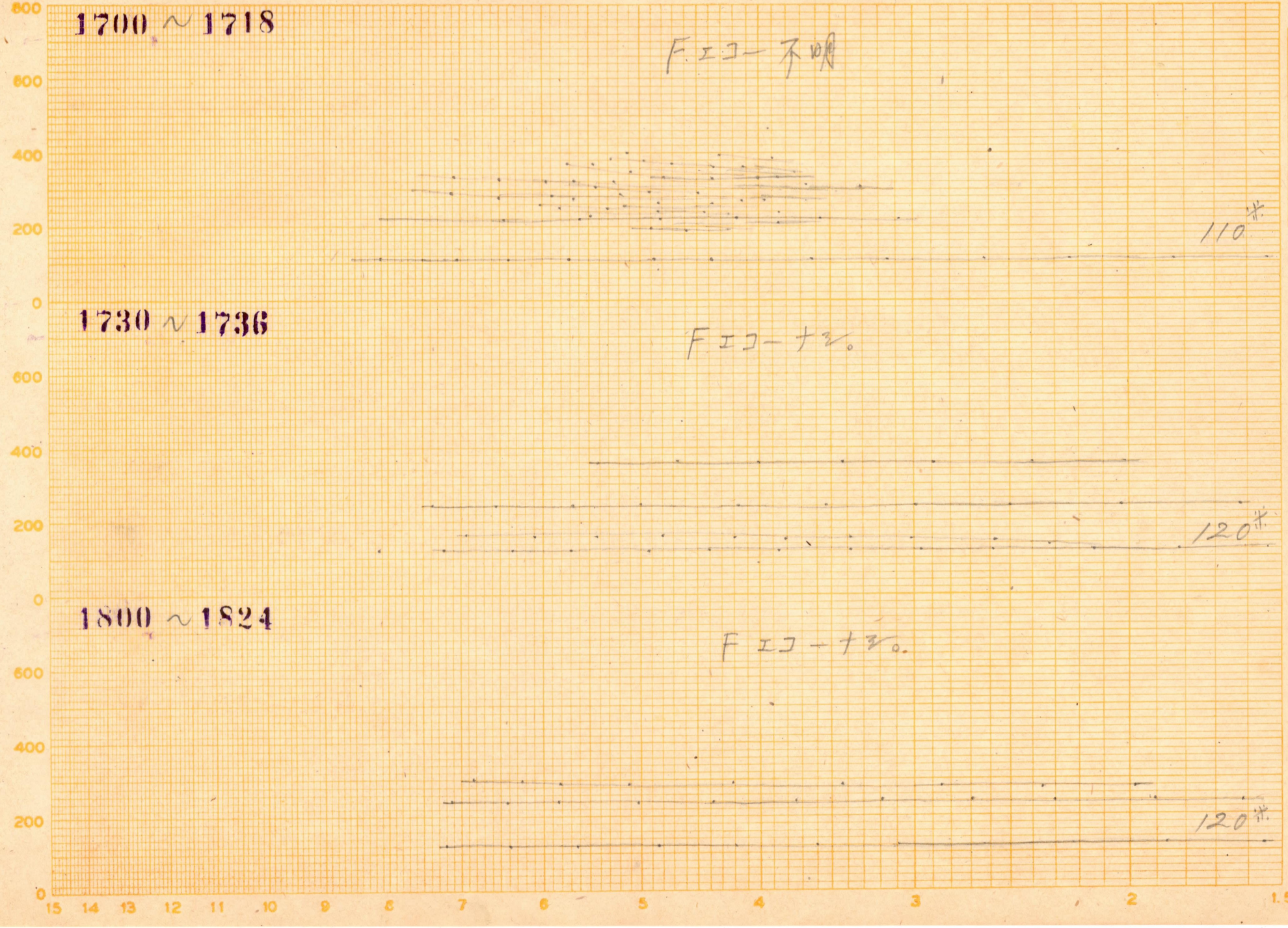

0400 ~ 0405
(4400)
3600
(?)
150*
0430 ~ 0435
(4650)
3850
310
100*
0500 ~ 0512
(4800)
4000
310
100*
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 629
FREQUENCY HEIGHT CURVES
No. 3

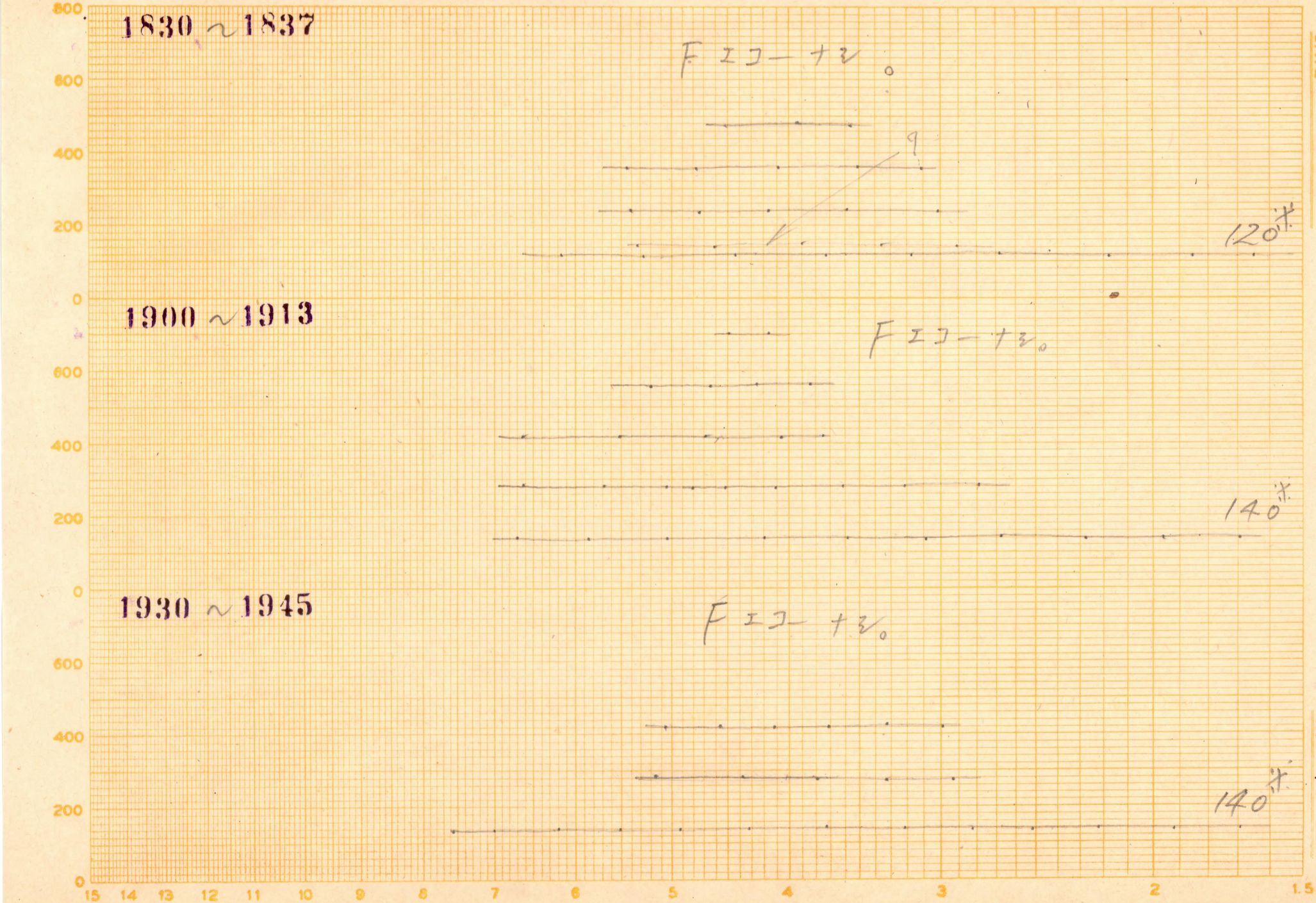

0530 ~ 0541
(5300)
4500
(?)
100
0600 ~ 0610
F エコー不明
4.5 Mc以上混信多
100
0700 ~ 0713
f F2不明
5300
(?)
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 629
FREQUENCY HEIGHT CURVES
No. 4


0800~ 0812
Fエコーナシ。
100キロ
0900~ 0907
Fエコーナシ。
100キロ
1000~ 1010
Fエコーナシ。
100キロ
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 10 629
FREQUENCY HEIGHT CURVES
No. 5


1100 ~ 1110
Fエコーナシ。
100
1200 ~ 1208
Fエコーナシ。
100
1300 ~ 1310
f_8 F=不明
(?)
250
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 629
FREQUENCY HEIGHT CURVES
No. 6


1400 ~ 1409
f_c^{F2} 不明
280
100
1500 ~ 1528
$f_{F_2}^{x}$ 不明
5950
f_c^{E} 不明
(?)
140
100
1600 ~ 1614
$f_c^{F_2}$ 不明
280
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 629
FREQUENCY HEIGHT CURVES
No. 7

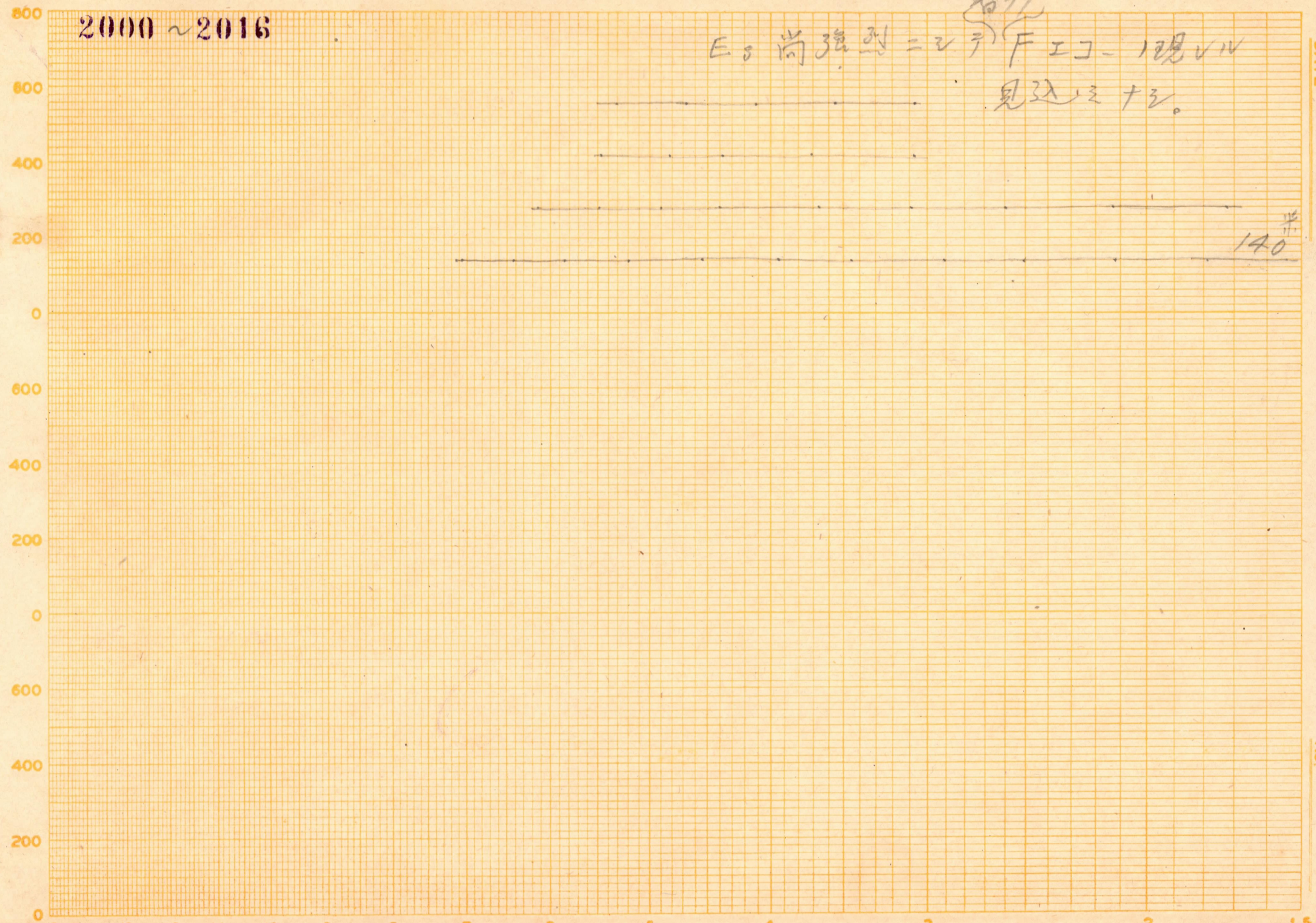

1700 ~ 1718
Fエコー不明
110㌔
1730 ~ 1736
Fエコー十分。
120㌔
1800 ~ 1824
Fエコー十分。
120㌔
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 629
FREQUENCY HEIGHT CURVES
No. 8

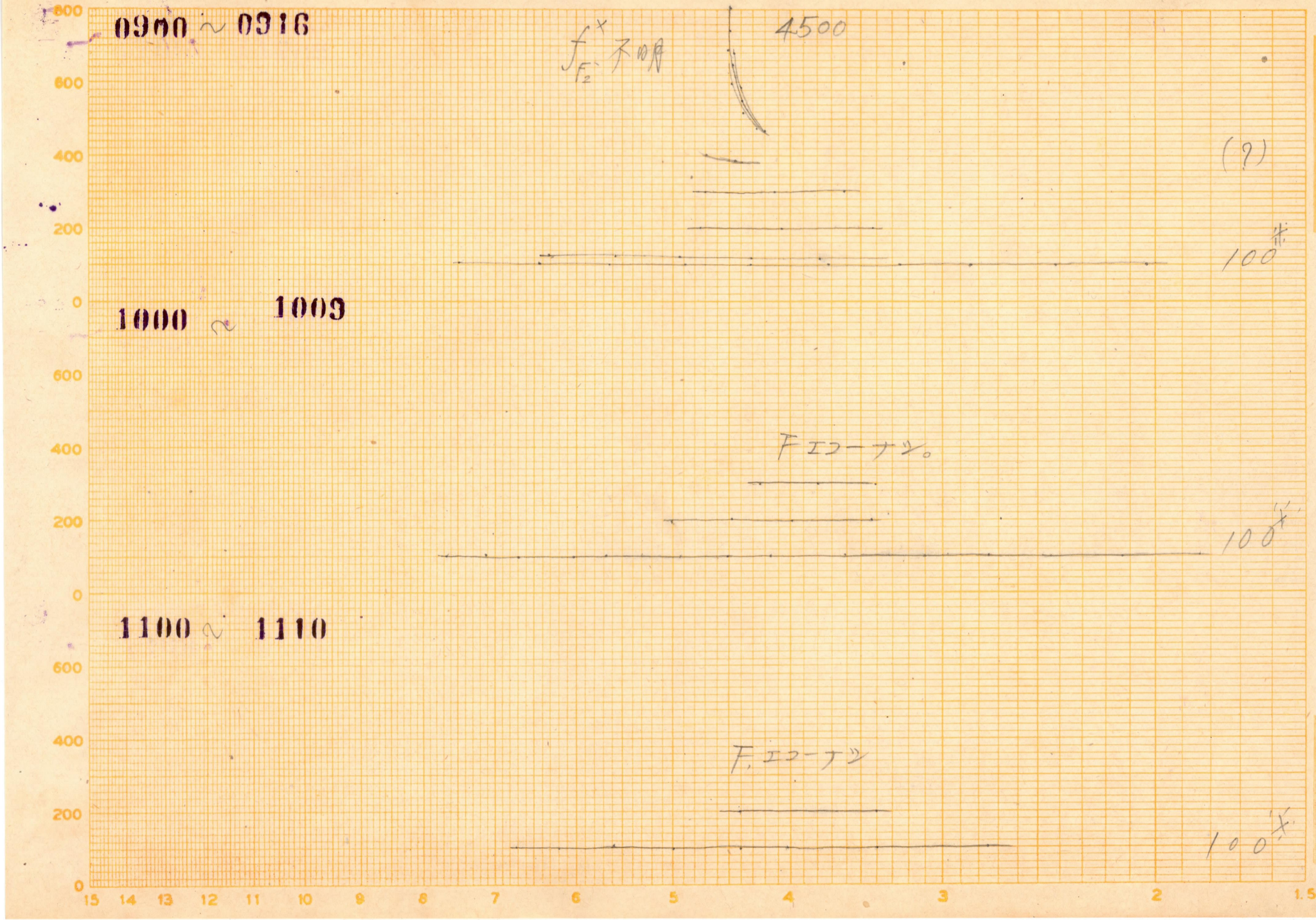


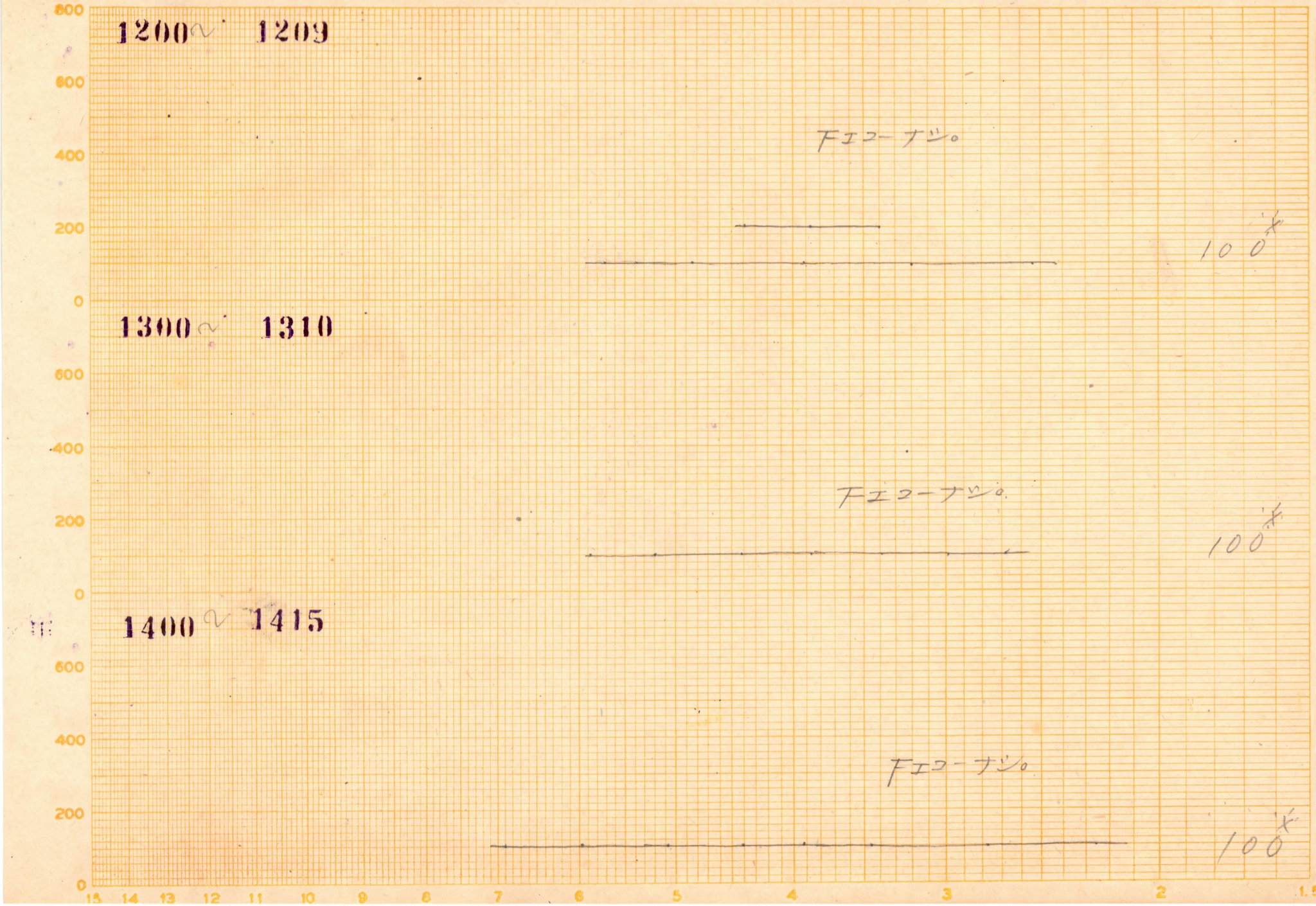
DATE 19 629

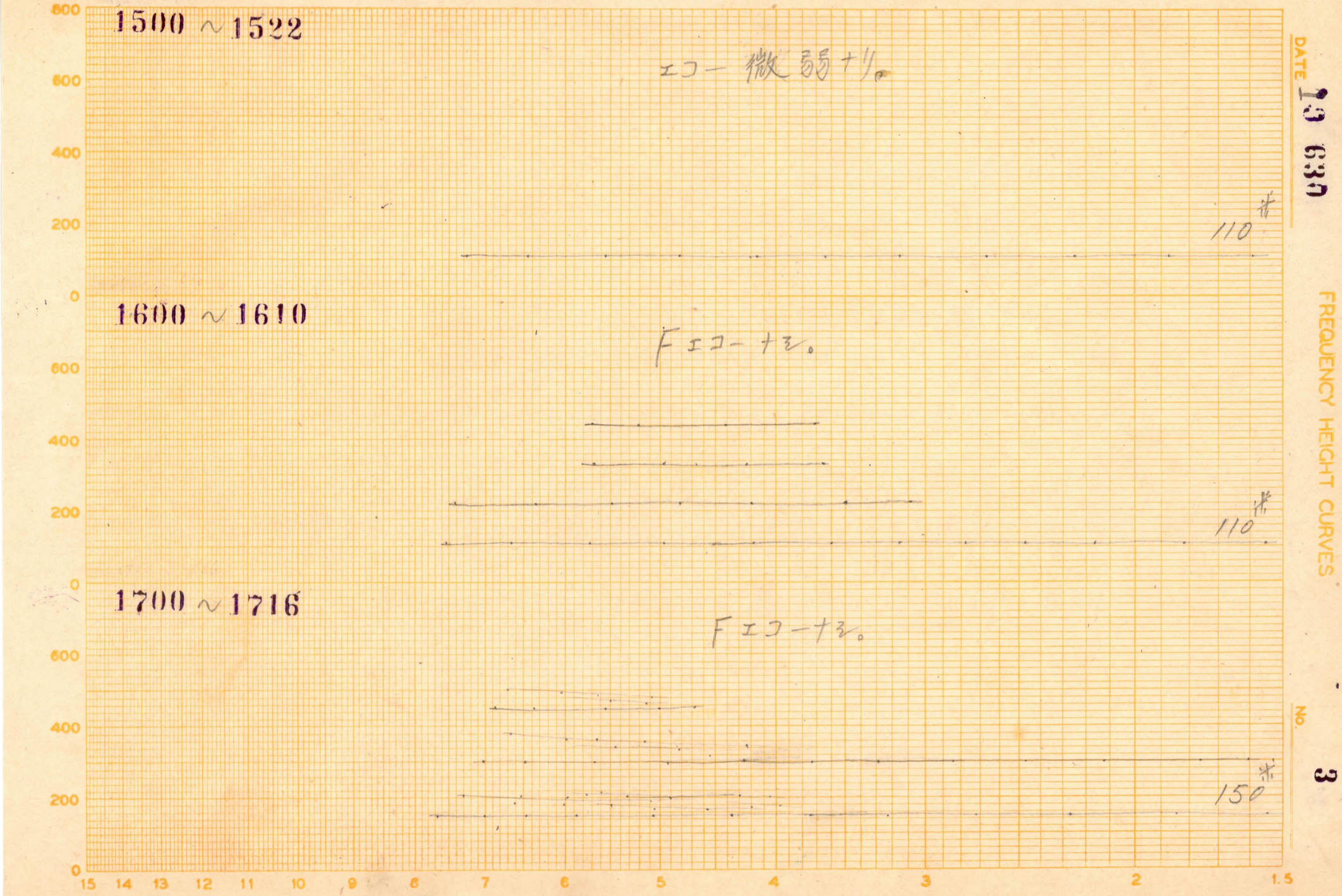
FREQUENCY HEIGHT CURVES

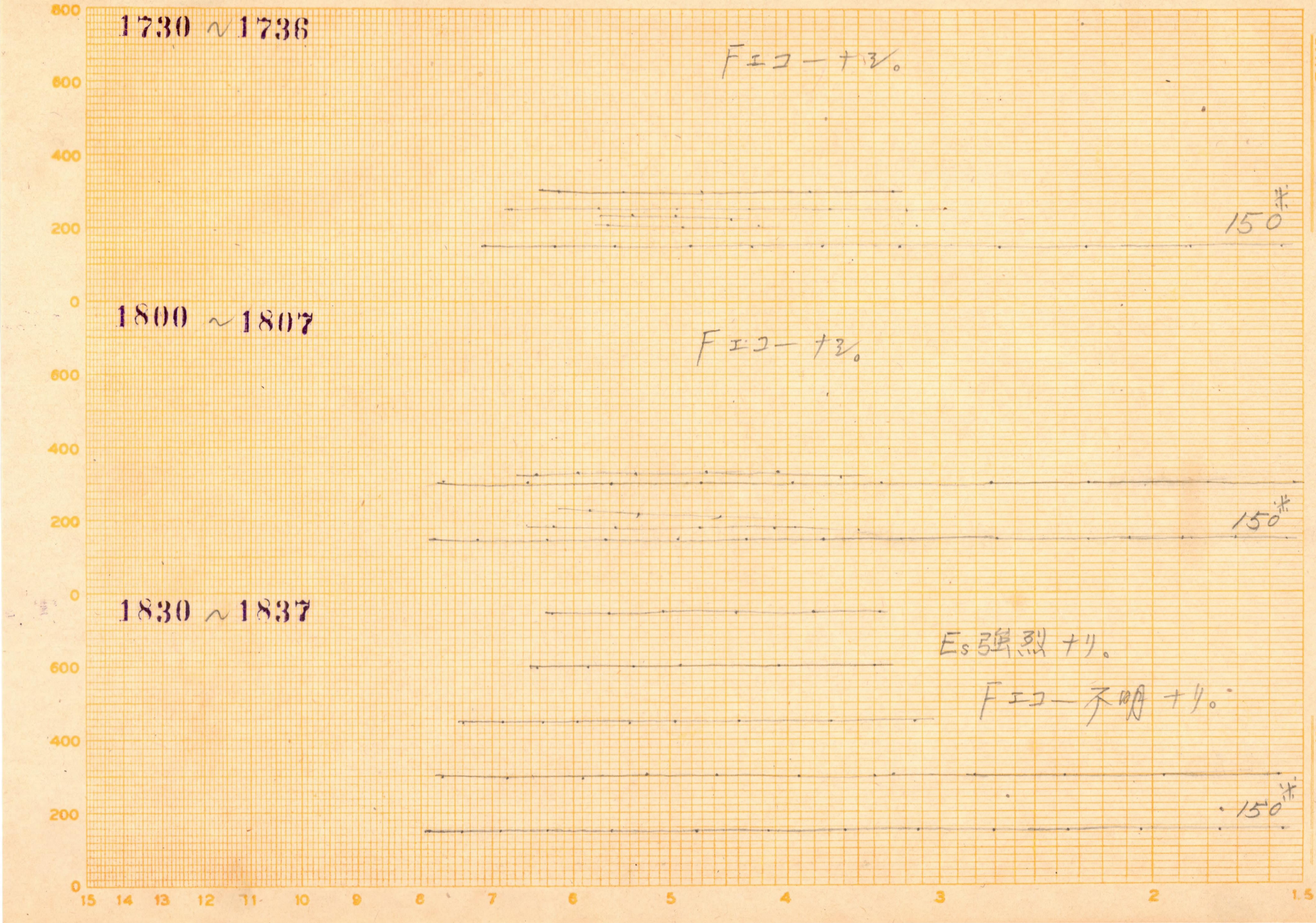
No. 9

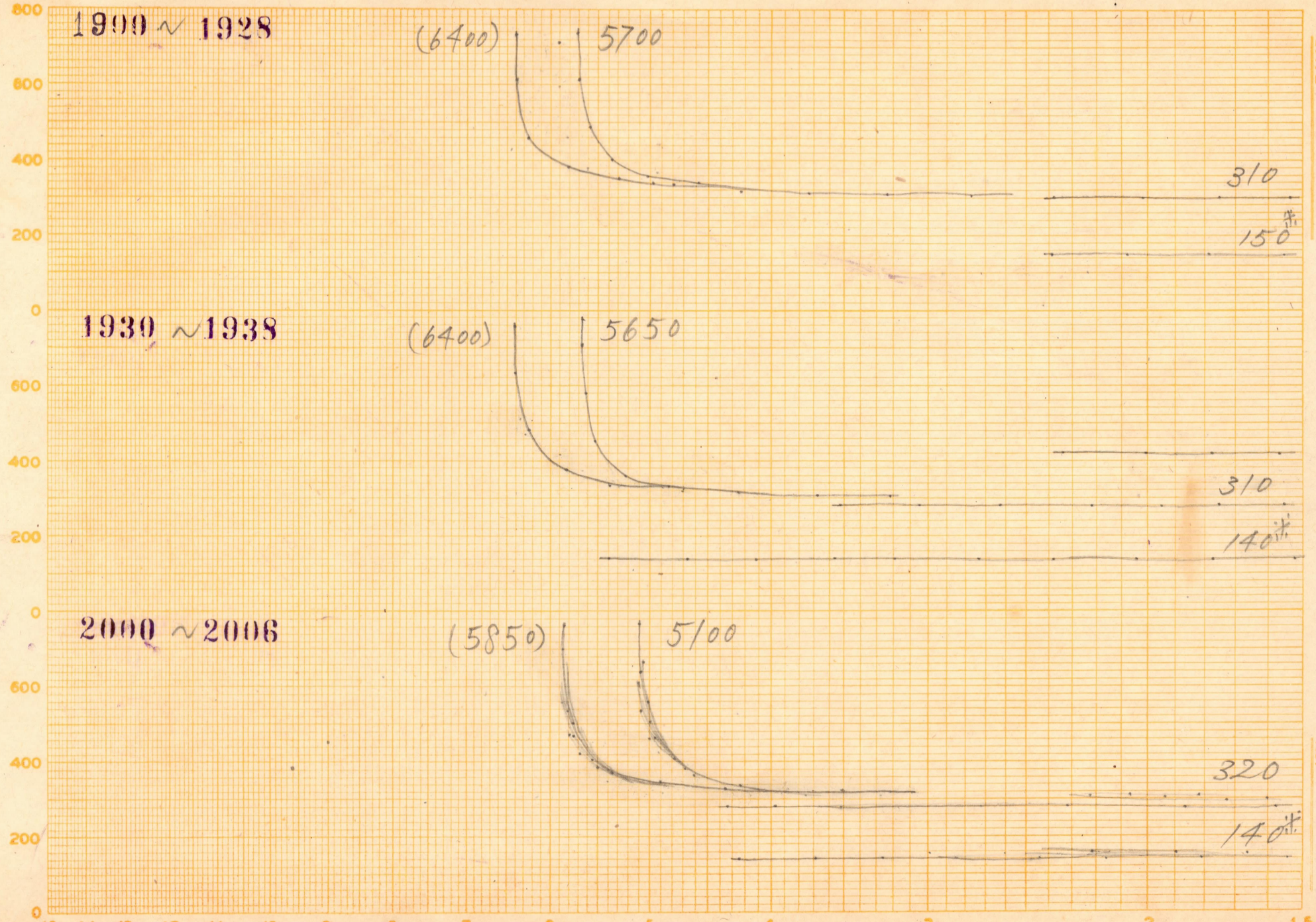

2000 ~ 2016
E₂ 尚強烈 ニテ 磐ラ Fエコー 1現レバ
見込ミナシ。
140
DATE 19 629
FREQUENCY HEIGHT CURVES
No. 10
800
600
400
200
0
600
400
200
0
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5

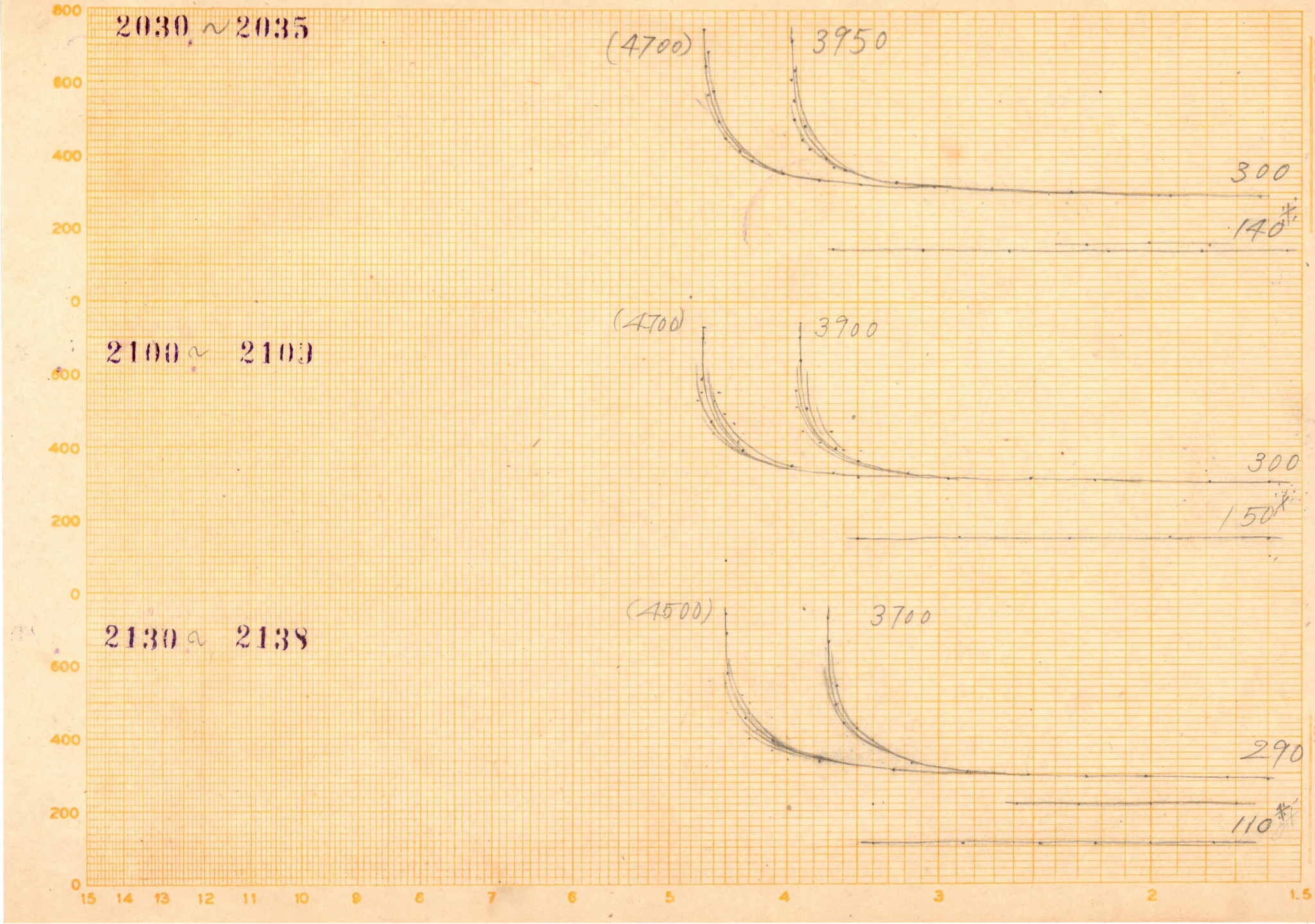

0900 ~ 0916
$f^x_{F_2}$ 不明
4500
(?)
100
1000 ~ 1009
Fエコーナシ。
100
1100 ~ 1110
Fエコーナシ
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19·6·34
FREQUENCY HEIGHT CURVES
No. 1

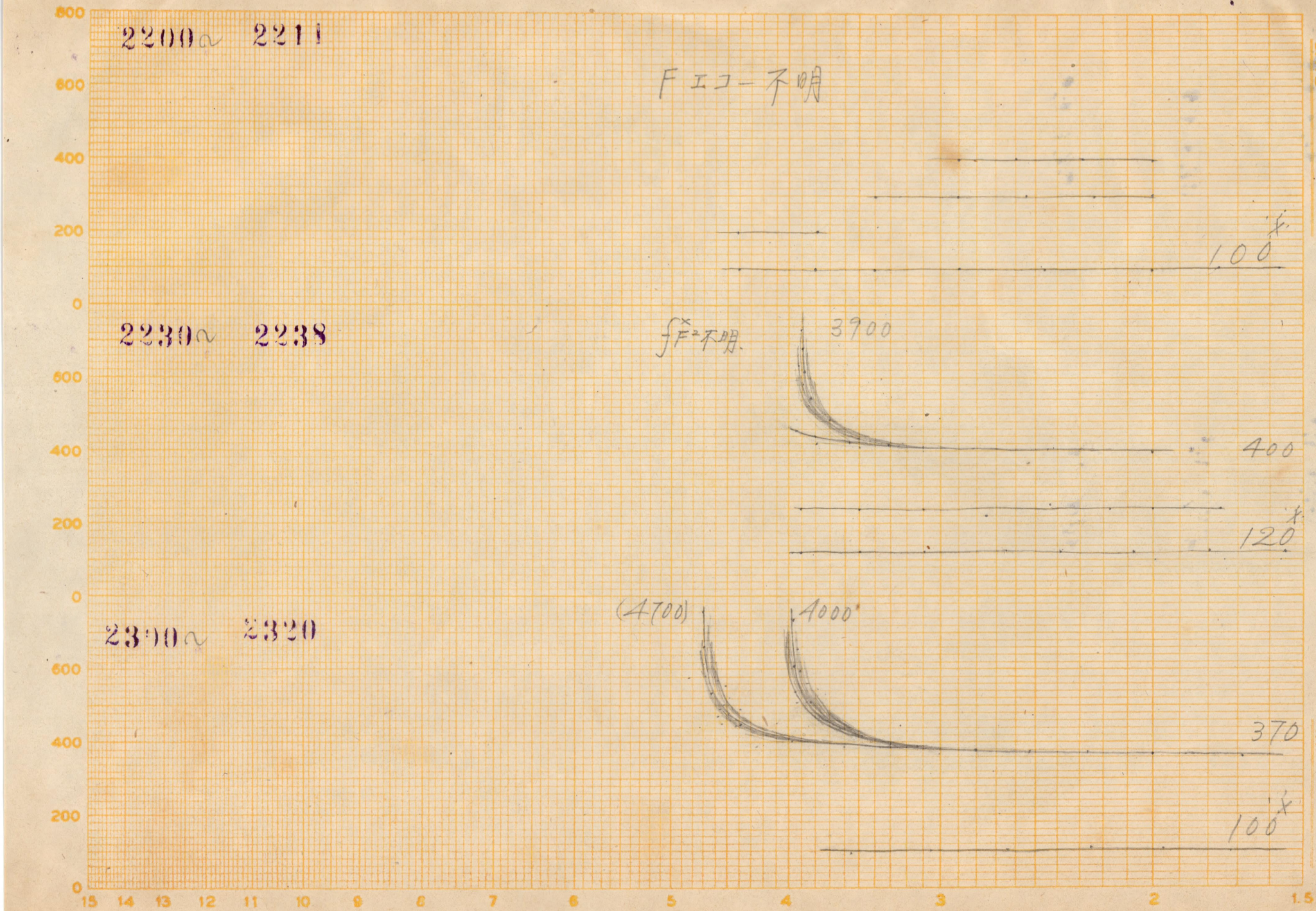

1200 ~ 1209
1300 ~ 1310
1400 ~ 1415
フエコーナシ。
フエコーナシ。
フエコーナシ。
100
100
100
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 13 6 30
FREQUENCY HEIGHT CURVES
No. 2


1500 ~ 1522
エコー微弱+1。
110 粁
1600 ~ 1610
Fエコー十3。
110 粁
1700 ~ 1716
Fエコー十3。
150 粁
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 13 6 30
FREQUENCY HEIGHT CURVES
No. 3


1730 ~ 1736
Fエコー+1/0
150粁
1800 ~ 1807
Fエコー+1/0
150粁
1830 ~ 1837
Es強烈+1/0
Fエコー不明+1/0
150粁
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 630
FREQUENCY HEIGHT CURVES
No. 14


1900 ~ 1928
(6400)
5700
310
150*
1930 ~1938
(6400)
5650
310
140*
2000 ~2006
(5850)
5100
320
140*
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 630
FREQUENCY HEIGHT CURVES
No. 5


2030 ~ 2035
(4700)
3950
300
140*
2100 ~ 2109
(4700)
3900
300
150*
2130 ~ 2138
(4500)
3700
290
110*
800
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5
DATE 19 630
FREQUENCY HEIGHT CURVES
No. 6


2200~2211
Fエコー不明
100
2230~2238
f̃F²不明
3900
400
120
2300~2320
(4700)
4000
370
100
DATE 19 630
FREQUENCY HEIGHT CURVES
No. 47
600
400
200
0
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1.5