

A hand-drawn geological cross-section diagram illustrating sample collection stages. The diagram features two main vertical columns representing rock units, each with internal layers labeled with values such as 25, 0, 9, and 00. Stage 1/7^a is shown on the left, with arrows pointing from the top layer (25) down through the 0, 9, and 00 layers to the base of the column. Stage 1/7^b is shown on the right, with an arrow pointing upwards from the base of the column through the 00, 9, and 0 layers up to the top layer (25). A vertical scale on the right indicates a height of 135. A horizontal dimension line at the bottom is labeled "5 cm". The entire diagram is titled "Sample stage 1/7^a and 1/7^b".

7.7-3¹. (OSMS26-200)

6

京下P2 2023年序

20240228 - Kyoto /

init 20240228.m : initial file

October 1.

| PCI | O |
|----------------|---|
| 100 | 0 |

grave limit position → 位置飞下限

detector に当たる下限は 1 cm のところ。
+ 1 = 2.5 cm

ether ethalene は $0^{\circ} \sim 28^{\circ}$ + 上向由 打破可.

動風位置の position of wind -

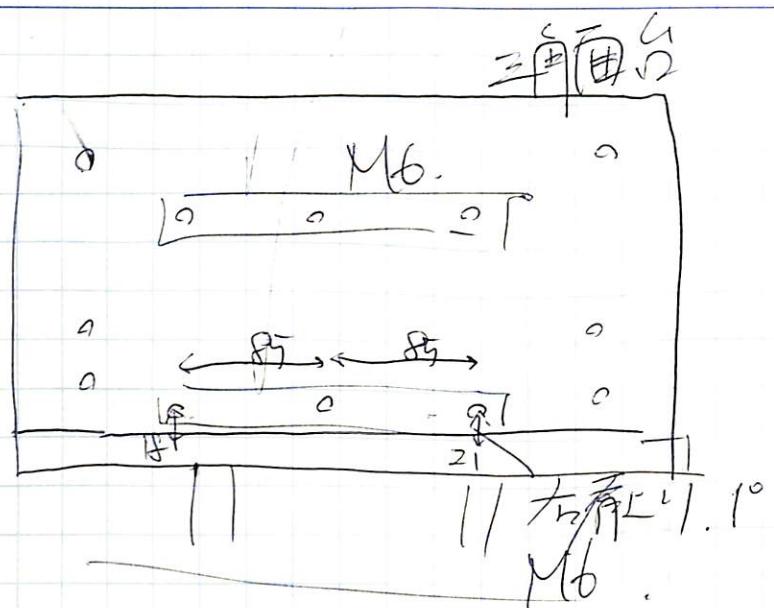
180°-center

X. ethakone ♀ On monitor 94.99781

↓
- 73' 15"

实物目盛 -45mm

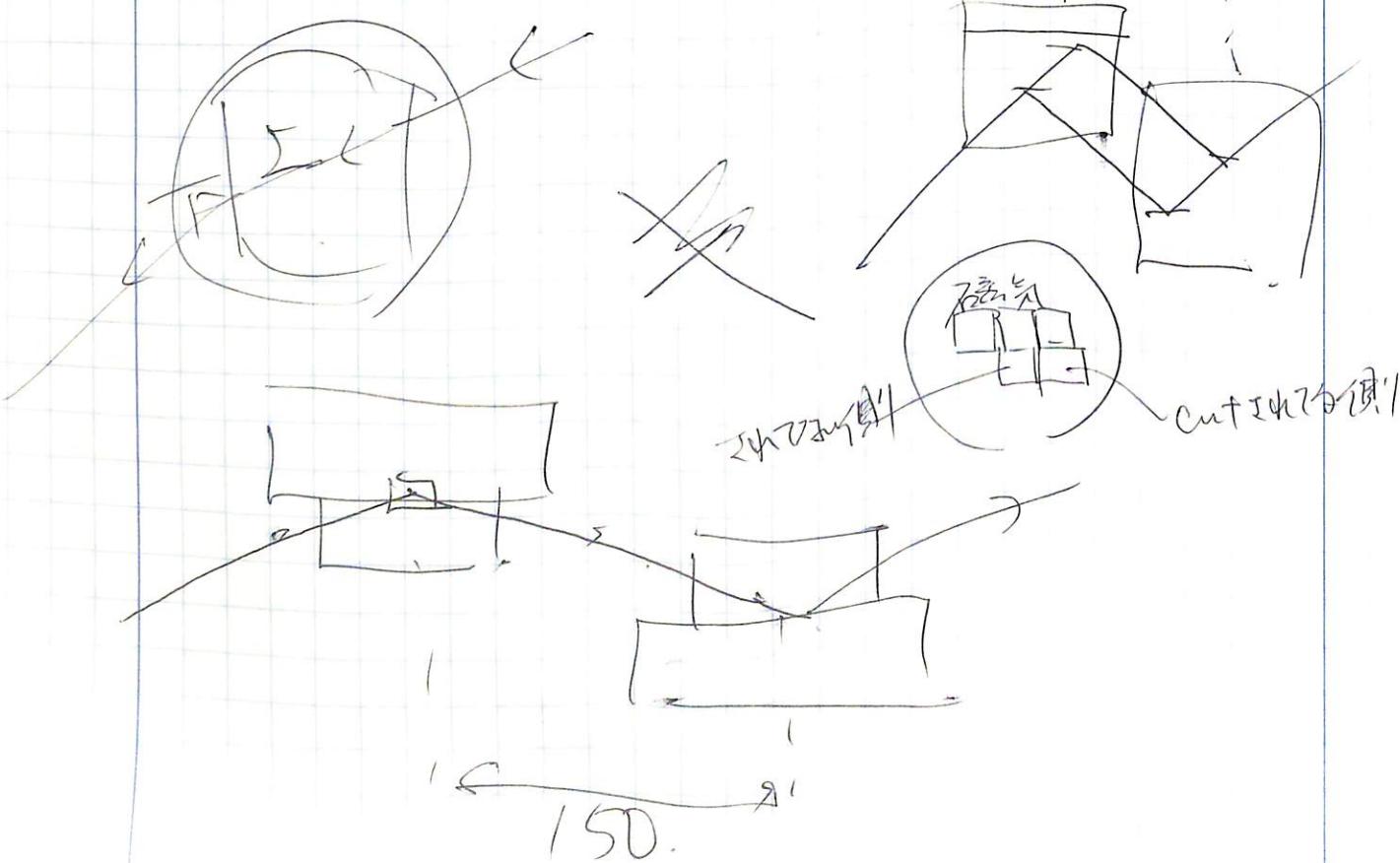
意圖切削穴



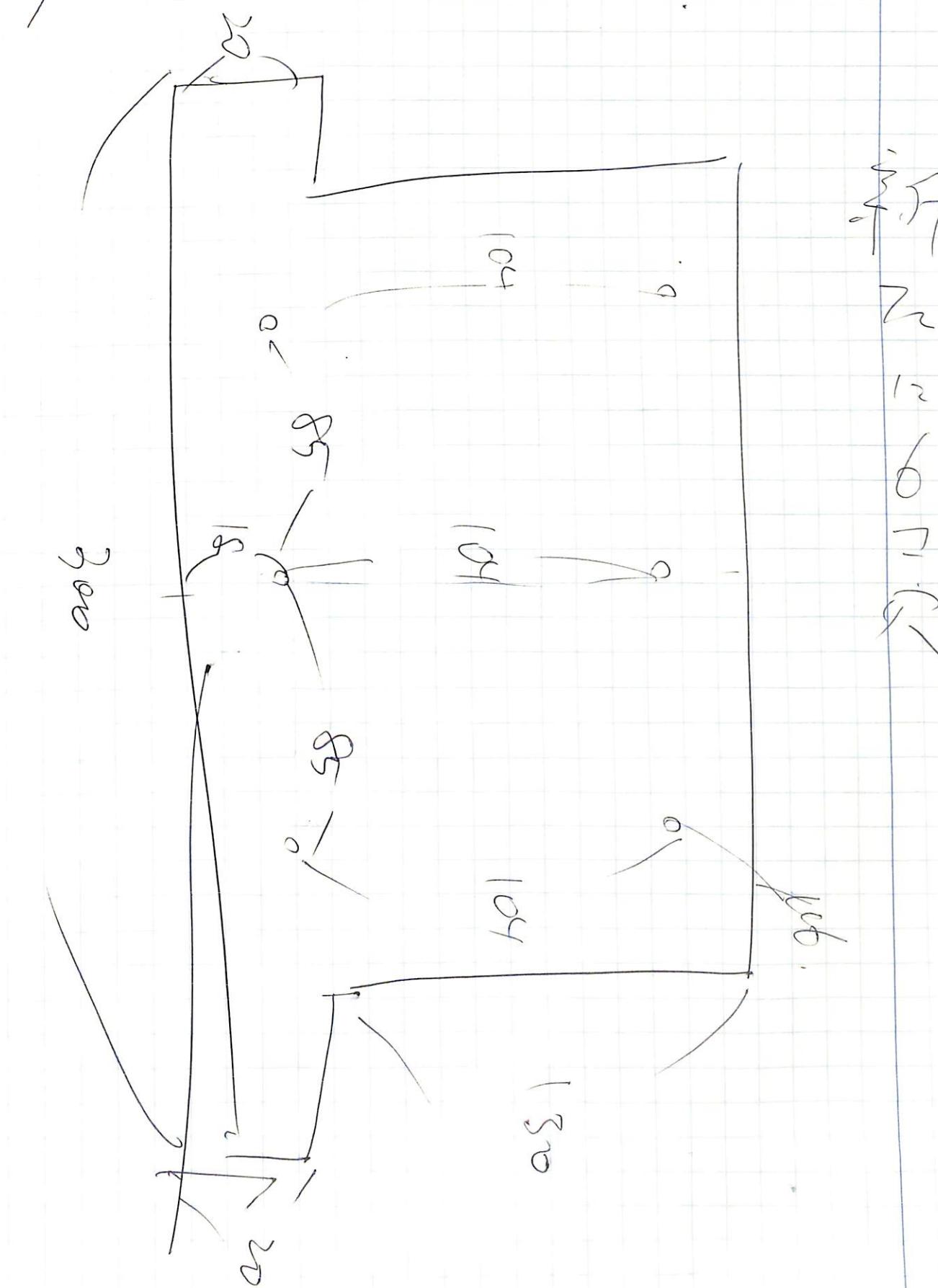
三面刨 theta-ethalae
 $180^\circ \rightarrow 90^\circ$

θ-ethalae on 50-0,003

~~150~~ < 140. ethalae 140



270 = 三面刨的凹口



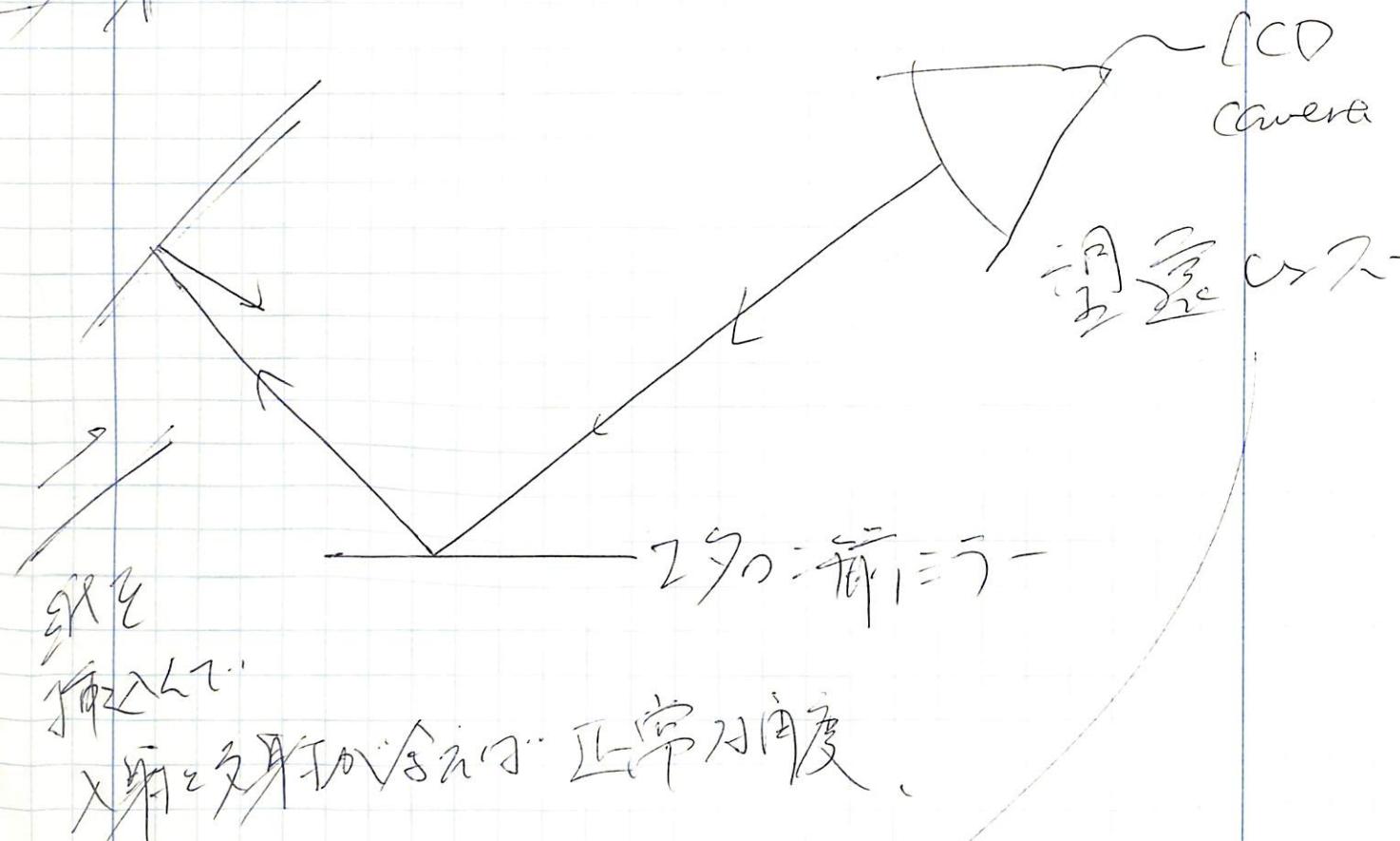
105

南部 太郎, 藤井 和大
(Fujiie Takahiro) D3

実験補助 LTTE7.

名大 MI

オホーツク



平行光と集光光

→ 点で見えてます of

yaw

1st ethalon 7. collimate l7

2nd p^o collimate 万歩計調整

| | |
|------|------|
| roll | 7.52 |
| yaw | 6.25 |

2nd ethalon

1st ethalon

First ~~x~~ Laser collimate

x ethalon 13

θ ethalon 180.51

平行

90°反射 入射角 ~~10°~~ 12°

yaw - ethalon 6.28

theta - ethalon 179.5

x - ethalon 13.002

7.7.6 10°入射

x det 3545

y det 800

detector - 棚壁 $1.83m \times 1.83m = 1.83^2 m^2$

detector - 線板中央 491 mm

n発生 - 棚壁 16 m

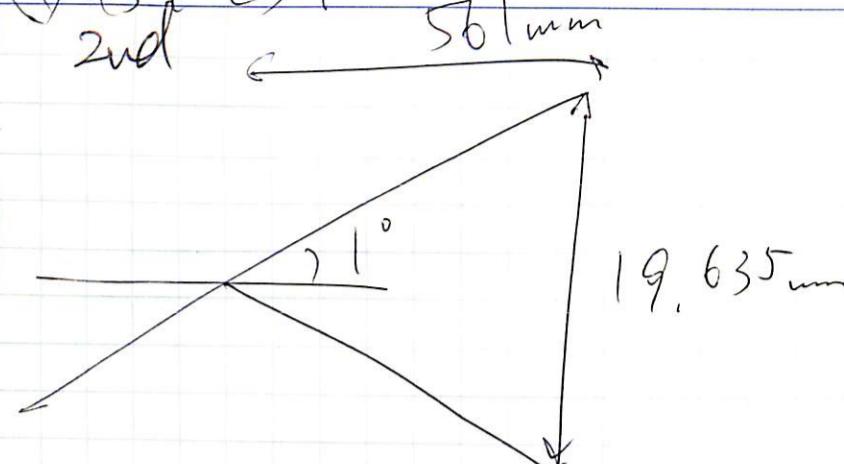
線板中央 - 干渉計 70 mm

106

107

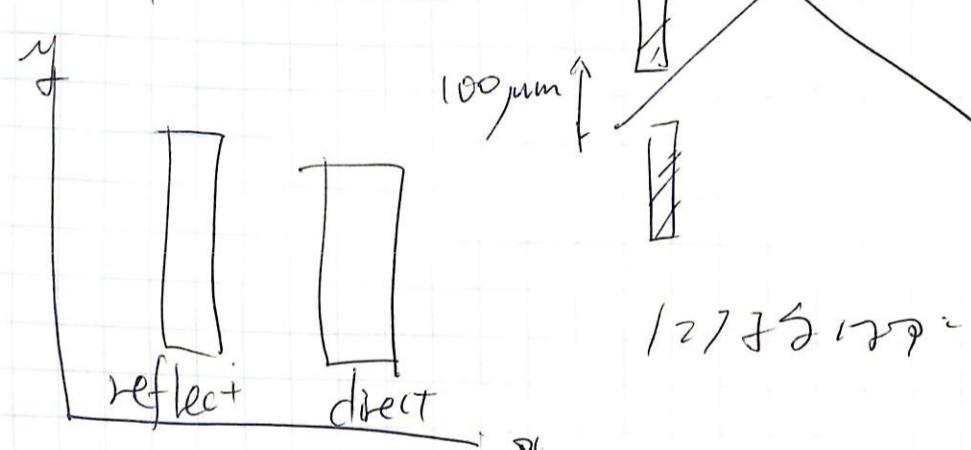
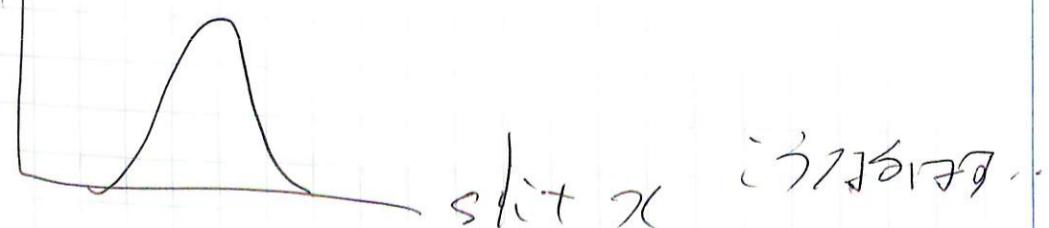
X光の軌跡

① 2nd 反射鏡の角度

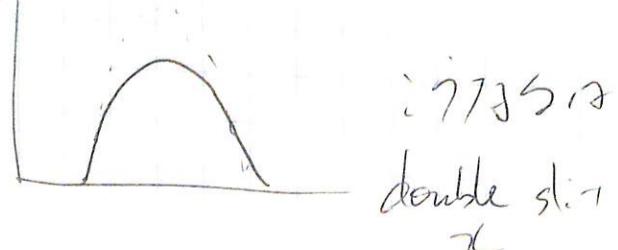


② single slit 入射

2d hist

sum
count

③ double slit 入射

sum
count

(100 μm)

根元

手動

127.5177

double slit
x

最終回
single slit
mirror 1
当該位置で
計測
位置を算出

精確な調整

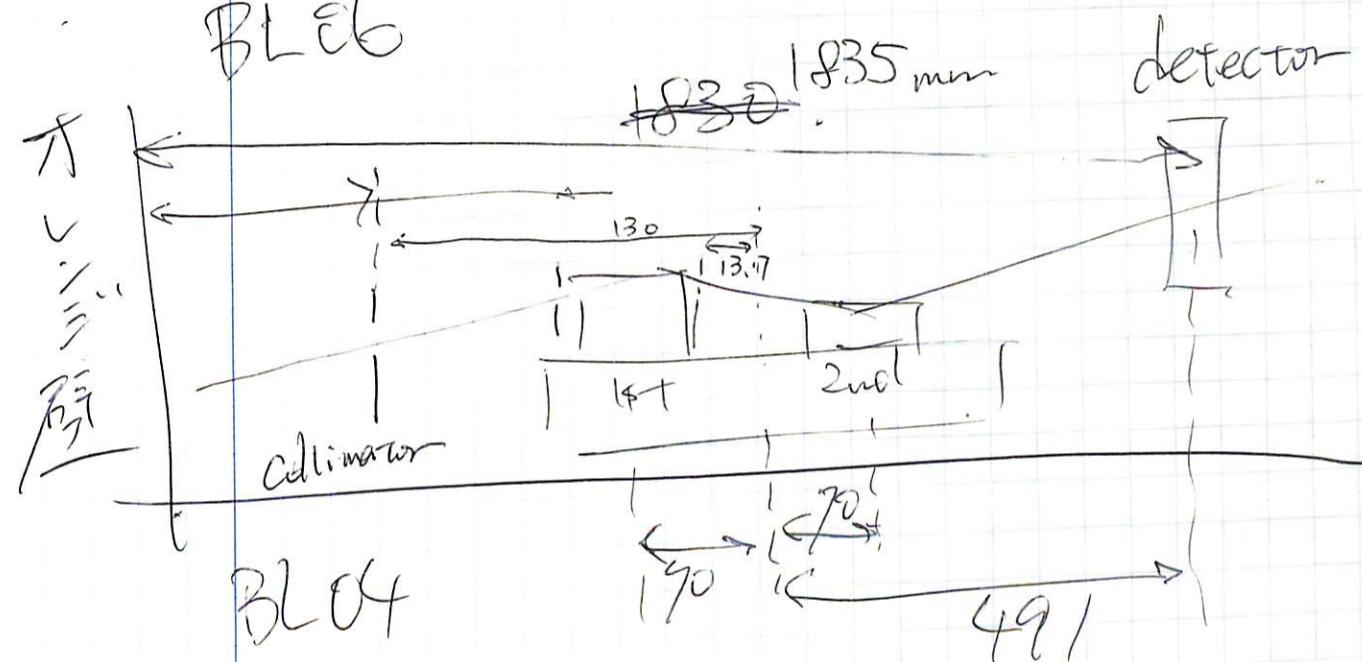
108

④ 2nd Ecoll

X

三角形、つまづき組成鏡式のま。

BL 6



BL 04

Ethalon

Ethalon First - 12月9日 - : f30mm 130mm

" 中心 - 20日 " : 130 mm
(下部)2/29(木)
f=56

8:59

HVEP pd. 950kV → 328

2nd Ethalon (A)

e- - a 照射

2/29 (土) (roll)
0° 入射角測定

2nd ethalon

2024 02 29 09:04:26

9:05 2-ethalon = 13.002

FL-7

角尺取付け

七面台

X軸2

direct FL-7 -> up 13mm
→ 2-ethalon 2024.02.29 13mm

ethalon gap 180 μm

9:58

データ取扱用のDAQ復旧。搬着するまで 30min 休憩。

2/29 の予定

① 入射角測定 (30min)

2nd ethalon EXHIT

② single slit の挿入 (60mm)

③ double slit .. (120min)

④ 2nd ethalon + auto collimation (90min)

⑤ roll 0° 入射角測定 (30min)

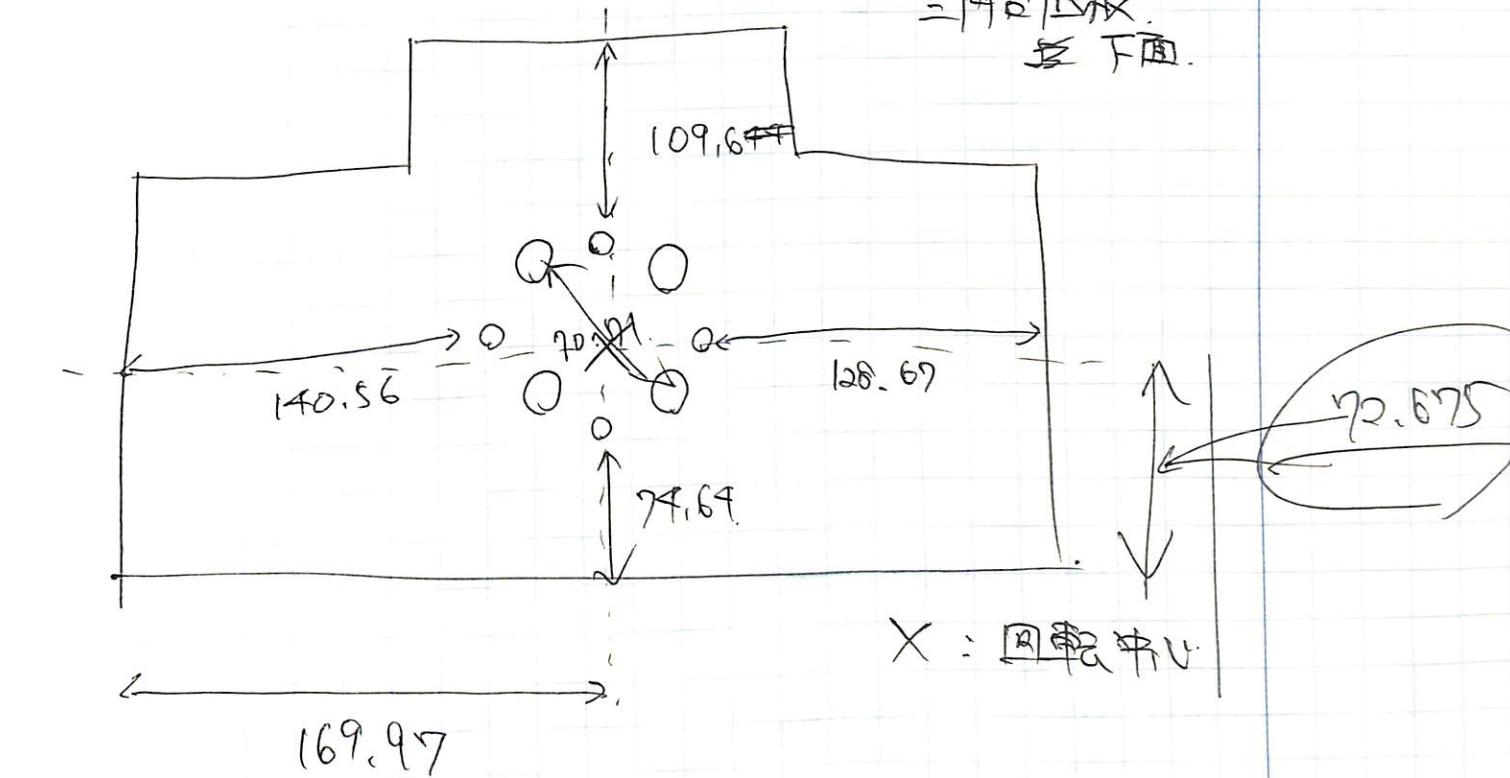
最低限

⑥ 千涉計、三脚台
千涉計と三脚台の高さ差 (30mm)

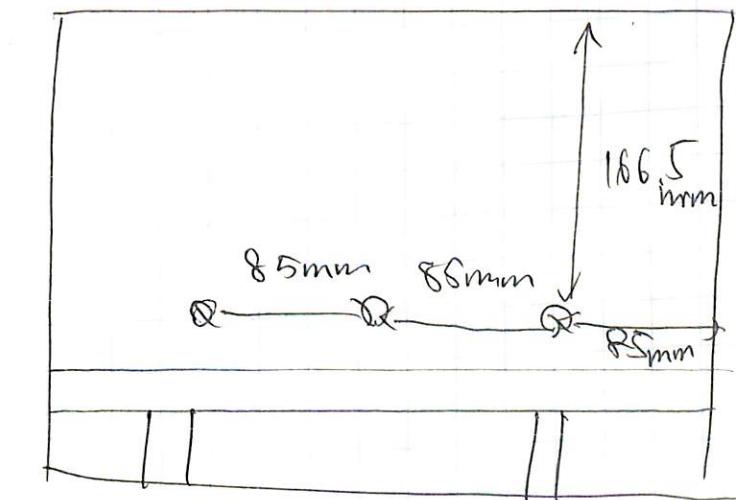
⑦ Auto Collimation. (120min)

⑧ roll 30 deg Tn 計測 (60mm)

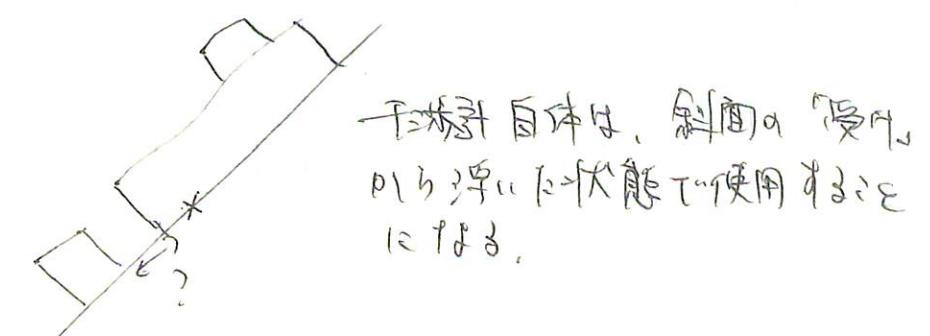
三脚台底板
下面



斜面



取付け後
千涉計 エントロピ 底板からの高さ



干渉計自体は、斜面の「裏面」
から卓上に大體で使用する
ところ。

11:18

① $\alpha = 7^\circ$ 反射角111795
20240229

11:31

① $\alpha = 7^\circ$ 反射角 ③ 反射角見込み。 $178^\circ < \theta < 182^\circ$ で反射角見込み。

11:48

Beam 上の collimator のスリット幅は $372 \mu\text{m}$ 。 $1.0 \mu\text{m}$
 $0.5 \mu\text{m}$

179.25, 179.75 で出力。

反射角をとらへる

12:07

collimator slit width (最大) 2mm

179~180.25 by 0.25

12:18

y-det \rightarrow 10012 F17-7 L-7-E. θ は 179.57° 。~~x~~ \rightarrow x_{ethalon} 15.

y-det 200

12:48

回転 stage の回転方向を ① \rightarrow ② に決定x-det 調整 \rightarrow 亂れなし反射に動く。 $x_{\text{def}} : 34.65 \times 34.75 \Delta$ 35.00

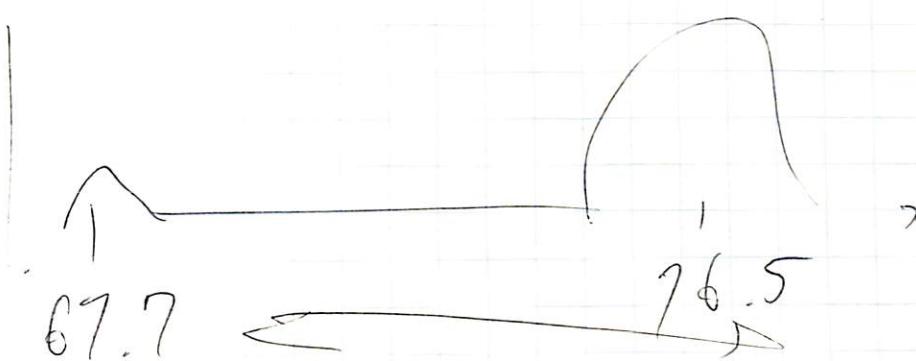
theta ethalon

179.75 \rightarrow $+X$ 反射角179.25 \rightarrow $-X$ 反射角

180.14 大きい

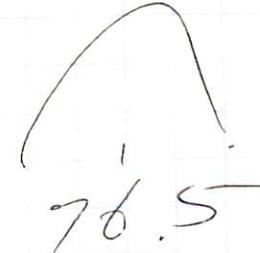
4deg 1.05 deg 入射 \rightarrow 理論上 direct & reflect間隔 $20.957 \sim 21 \mu\text{m}$ ④ $\theta_{\text{ethalon}} = 180^\circ$,

conf.



$$\text{arc-tan} = 0.015^\circ$$

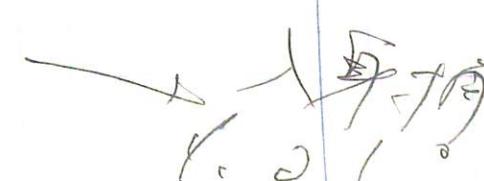
0° 1° 2°

⑤ $\theta_{\text{ethalon}} = 179.7^\circ$ 179.95

67

76.5 \rightarrow 9.5⑥ $\theta = 179.5^\circ$  $\theta = 179.5^\circ$

59.1

76.5 \rightarrow 17.4

$\theta = 179.46^\circ$ $\rightarrow \lambda = 140\text{ Å}$

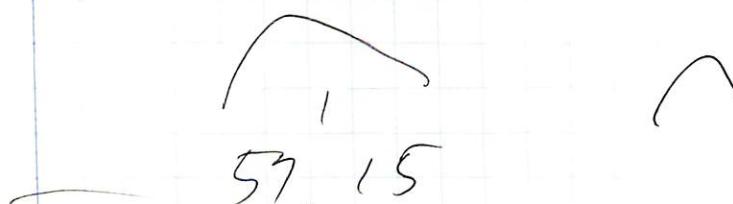
$$\textcircled{Q} \theta = 179.46$$



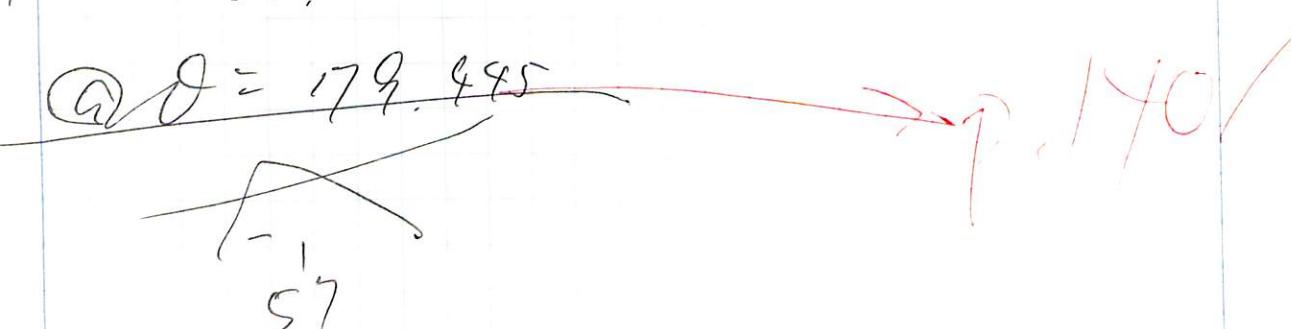
$$\textcircled{Q} \theta = 179.42$$



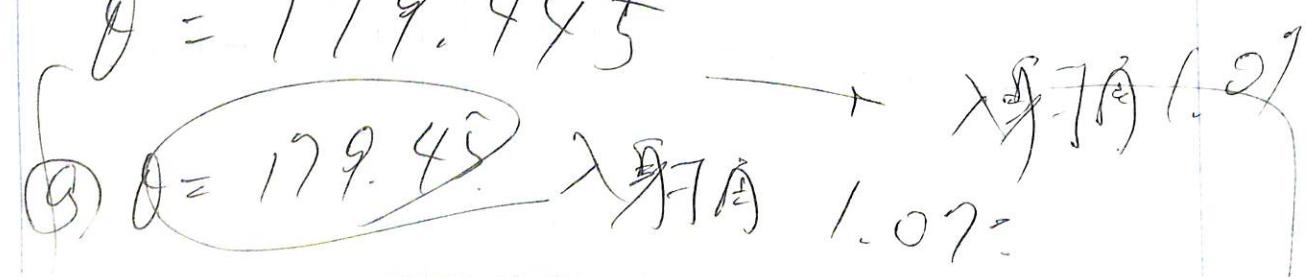
$$\textcircled{Q} \theta = 179.44$$



$$\textcircled{Q} \theta = 179.485$$



$$\theta = 179.485$$



$$\textcircled{Q} \theta = 179.48$$

上流 $z=1 - 0.5$

位置更正

single slit 位置 膜 0.0

14:01

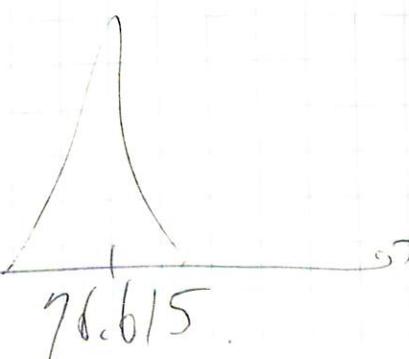
2024 0229 1417 59 x -ethane

$\theta = 15^\circ$

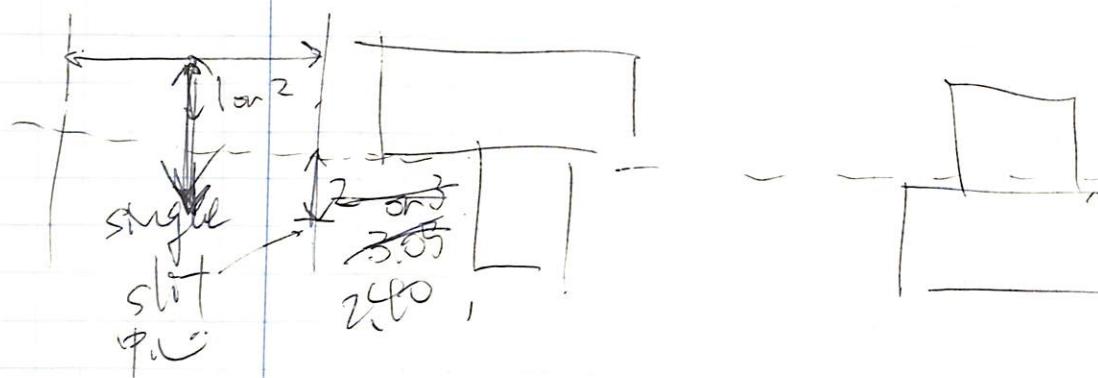
count

2024 0229 1428 55 x -ethane 15. /

count



3mm slit
② α -ethalon 15.



α -ethalon 16.5 direct α 7mm 77.15mm \times "

16.7

16.6

(142855) 2024 02 29 142855

16.7 76.59 mm direct off

16.8 — direct off

16.9 — "

17.0 — "

17.1 — "

17.2 — "

17.3 — "

17.4 — "

17.5 — "

α -ethalon 16.1 direct off 7" 変化なし

16.1

16.2

16.3

15:51

direct off

direct off

"

α -ethalon 16.4 変化なし.

17.6 "

17.7 "

17.8 "

17.9 "

18.0 "

single slit - 1st ethalon の軸合せ (目視・手作業)

micrometer 240

α -ethalon 15 mm 変化なし. (見える) \nearrow direct off \searrow direct off 透過を見てよろしく

透過なし

14.6 mm "

14.7 mm "

14.8 mm "

14.9 mm "

15.0 mm "

15.1 mm "

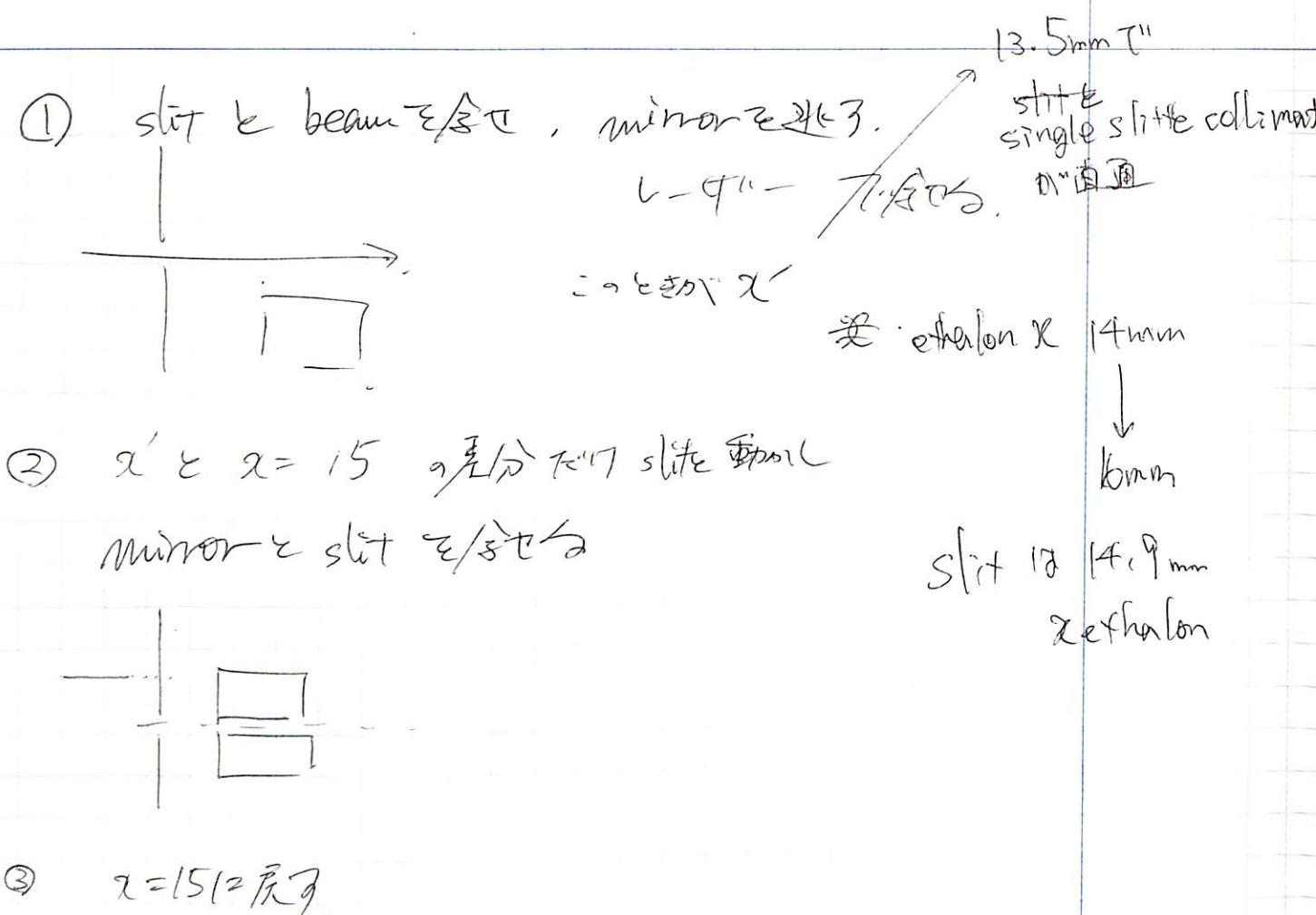
15.2 mm " /

15.3 mm "

15.4 mm "

15.5 mm "

"



2024 0229 165104 → 信号なし. x ethalon 18.4mm
→ " 13.5mm
→ " 13mm

One way / Red crop / Convolver X

2024 14~16 ~ 0.1 すきま, 79177m,

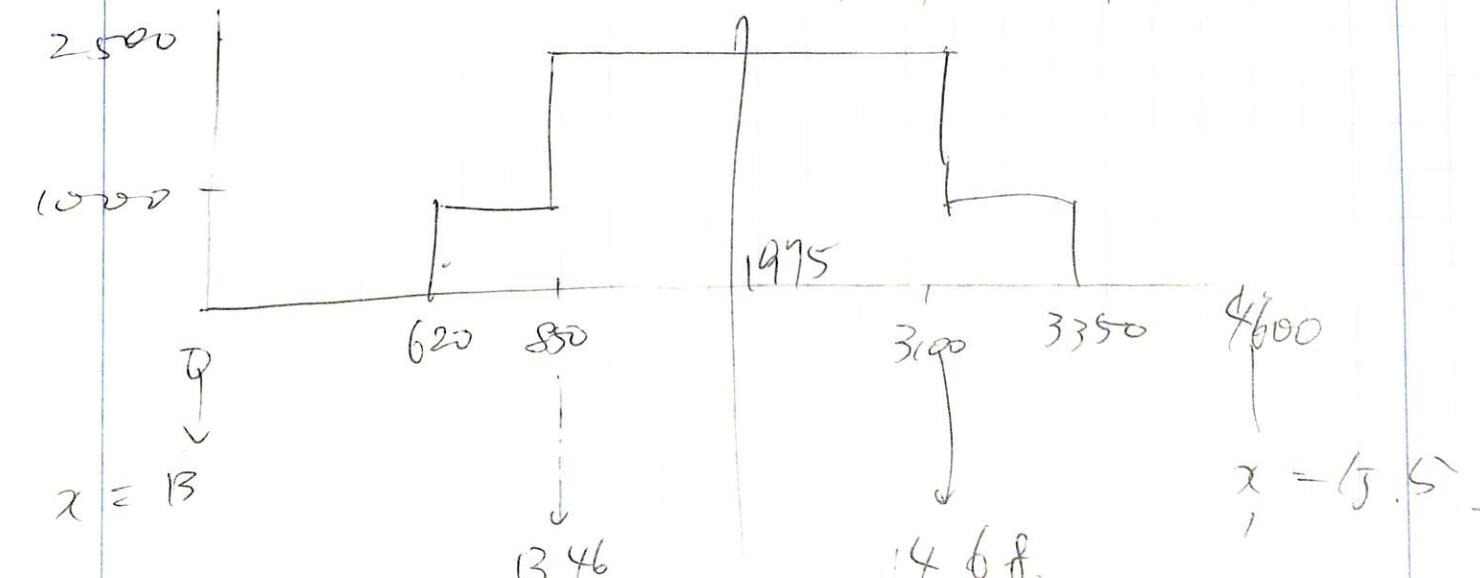
$\chi \approx 18$

12 ~ 14
→ 2024 0229 193802

SCAN_20240228_x-ethalon

01 02 03

x ethalon 13 ~ 15.5



$\chi = 14.07$ すきま of single slit

detxy = 100 がまえ式で
2/3 すきま 75.

18n16
~~18~~

2024 0229 174802 : x ethalon 14.06
cont

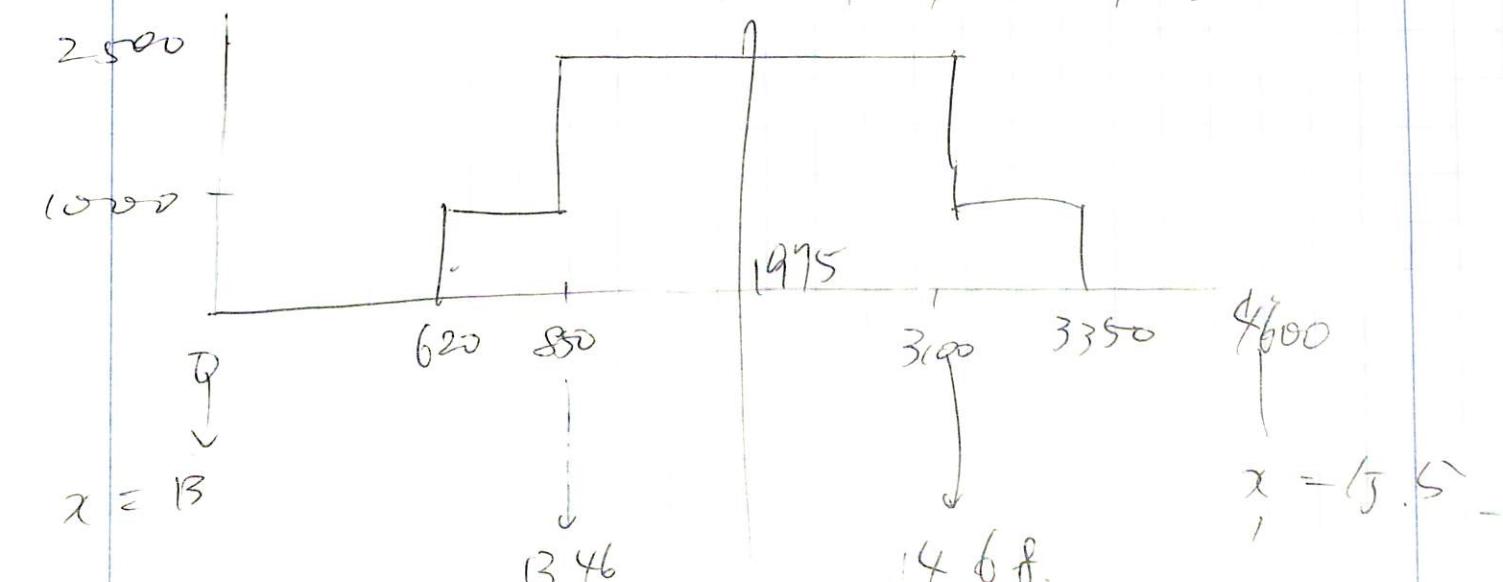
The schematic shows a light source emitting light through a slit. The light passes through a lens and a prism. The beam is then directed through a series of lenses and mirrors, including a beam splitter and a mirror, before reaching a detector. The distance between the slit and the lens is labeled as 16 cm.

2024 0229 174801 : x ethalon 16n18.
cont

The schematic shows a light source emitting light through a slit. The light passes through a lens and a prism. The beam is then directed through a series of lenses and mirrors, including a beam splitter and a mirror, before reaching a detector. The distance between the slit and the lens is labeled as 12 cm.

Scan - 2024 0228 - x - ethalon - 04.m

2024 0229 175344.



2024 5cm root file 12

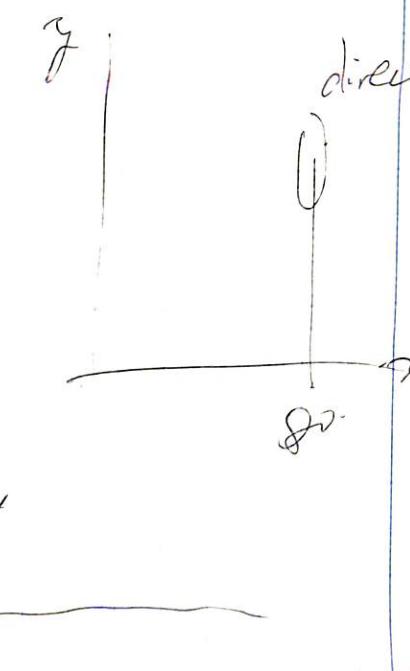
root src/Convert Etalon. ~~cx~~ ("...root")

飞點法.

~~反射測定~~

20240229/83202

21912X-7 - 2.4mm



21912X-7 - 5mm 12.

x etalon 8 ~ 12

~~20240229/84701~~ 2024 13 ~ 15.5 ~~反射測定~~

x etalon 12 or 16 184701. list. root

19:05

single slit 取り外して 反射測定。
→ 反射測定確認済み。

No. 1906 19.

single slit を手動微調 + 中性子照射の再帰処理で
反射の見え込み slit 位置を見つけた。

Cut-direct 14336.8 /s

single slit の micrometer 値

2.1

28

X-etalon

15mm

No. 191253. ~~21912X-7~~ cut-micrometer 2.3
cut-direct: 11.8 cps

micro meter 2.2

No. 191745. cut-direct: 11.3478 /s

上部 2mm single slit micrometer 2.1

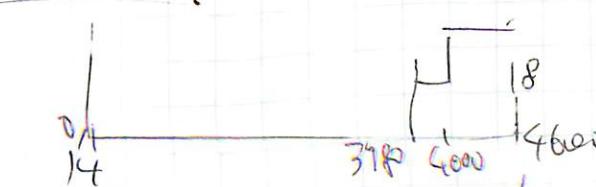
No. 192301 cut-direct: 34.9459 /s.

No. 192549 30V 720mS x-etalon - 7.09.

No. 192735 x-etalon = 16.5.

No. 193002

~~反射測定~~
~~反射 d.~~



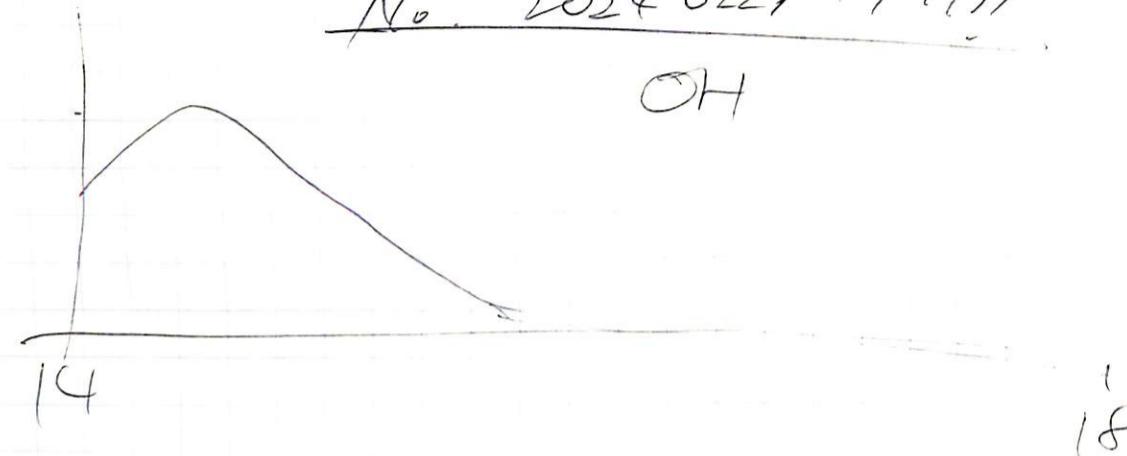
① beam, slit, etalon x 5cm

→ beam, etalon ~~反射~~.

② slit 入射 ~~反射~~.

19:44 single slit 取り外し. 上流のスリット 0.5mm.
 Etalon α の ~~正確~~ \rightarrow ~~反射率が高くなる~~
 scan intensity max \rightarrow α

$$\alpha_{\text{etalon}} = 14 \sim 18$$

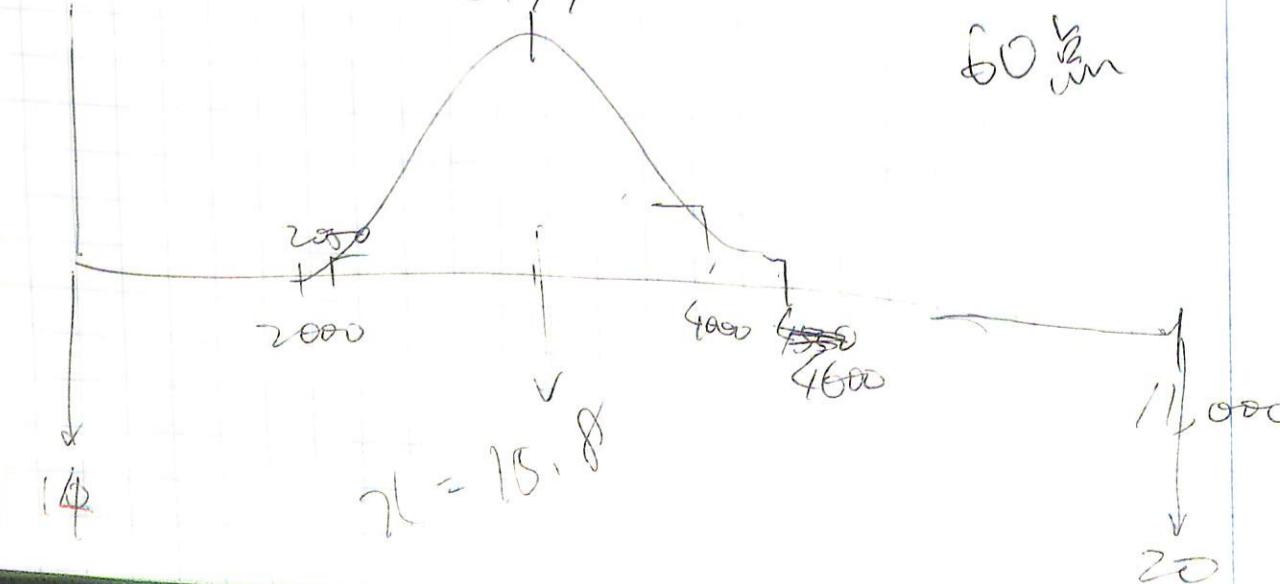


$$\alpha_{\text{etalon}} = 14 \sim 20. \quad \leftarrow \text{scan} \quad \text{scan } 292711L07$$

No. 2024 0229 200030 ~~292711~~

zerobone $10 \sim 16$ by 0.1
 scan 292711L of 6

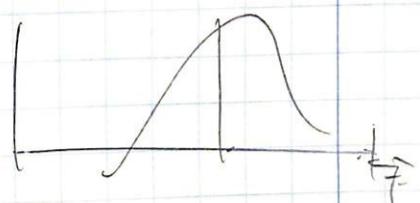
No. 2000 30 $\alpha = 0.1$



19:44 22
 /350 +

h-kp-OH-20030-etalon scan root.

h-kp-OH-20030. root.



etalon

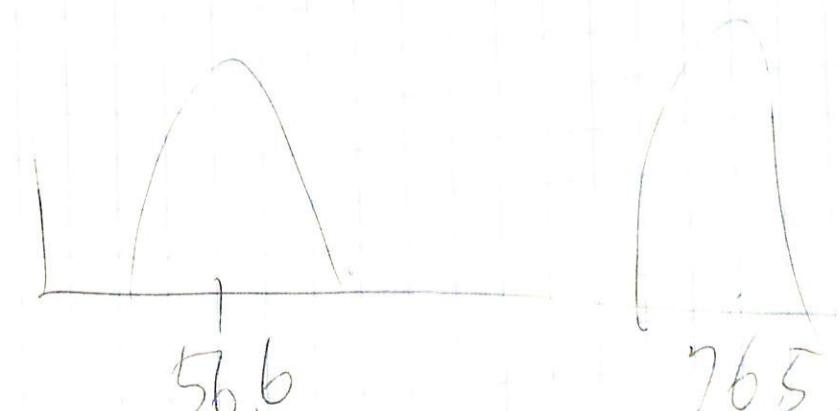
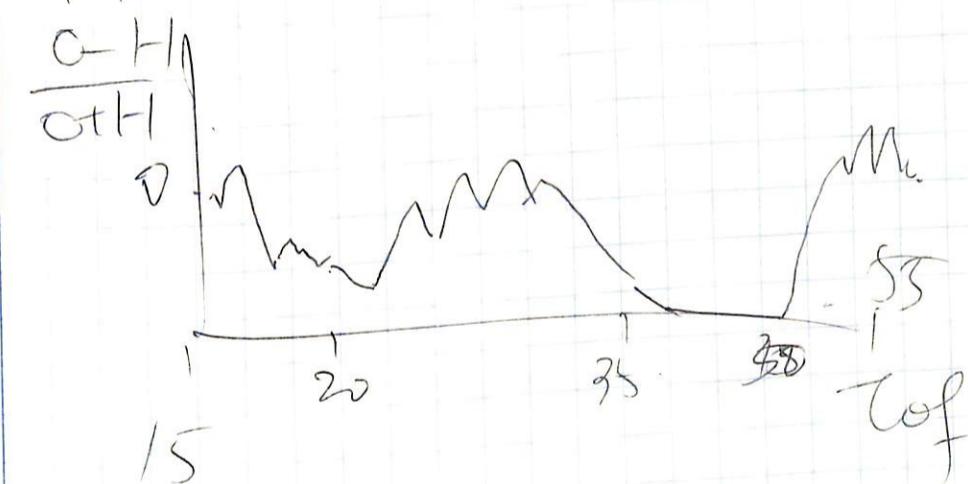
peak 15.65H 分割数 62

$$\alpha = 15.65 \pm 0.2$$

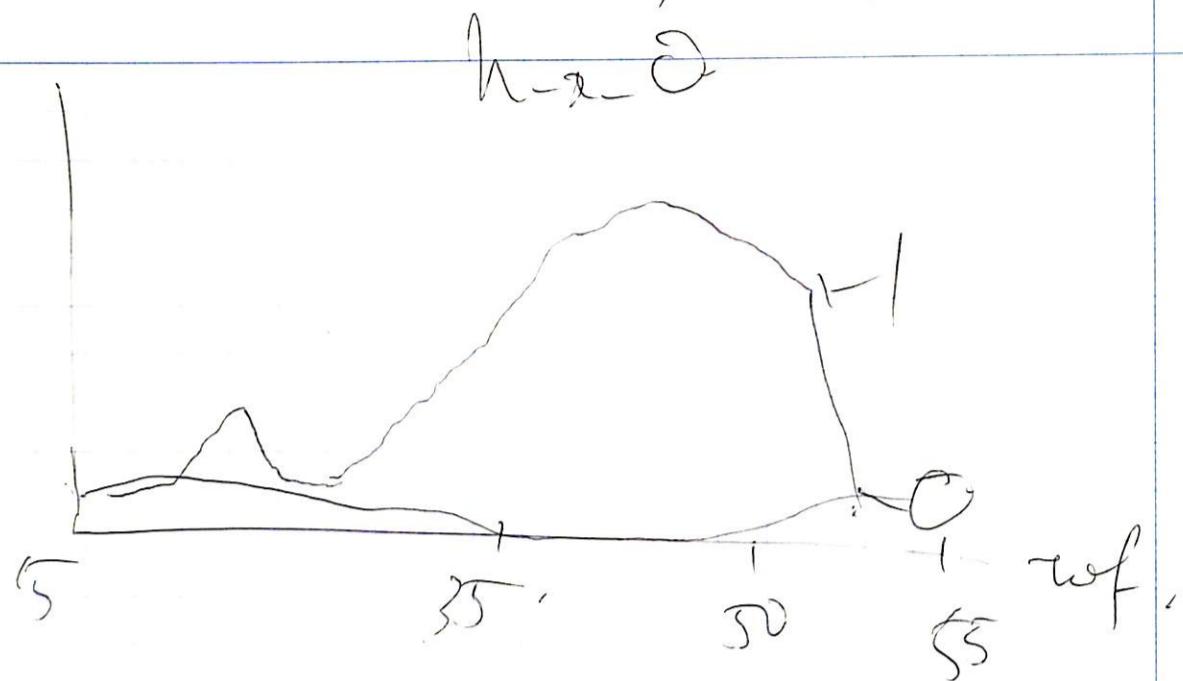
No. 205146

$$\text{cut_direct } 84R2$$

干涉計27.5



χ -etalon 位相決定



χ -etalon 17 15.65 で位相決定

WFT, Single slit の位相決定

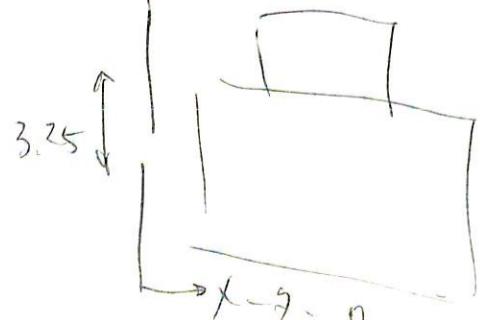
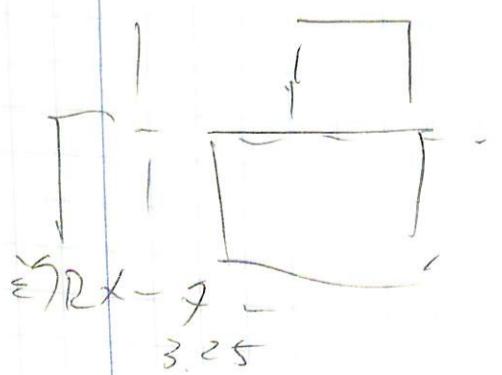
single slit 目視 3.25 mm

$\approx 70 \times 70$ 0.0 mm

$$\frac{15.8}{3.25} = 4.8$$

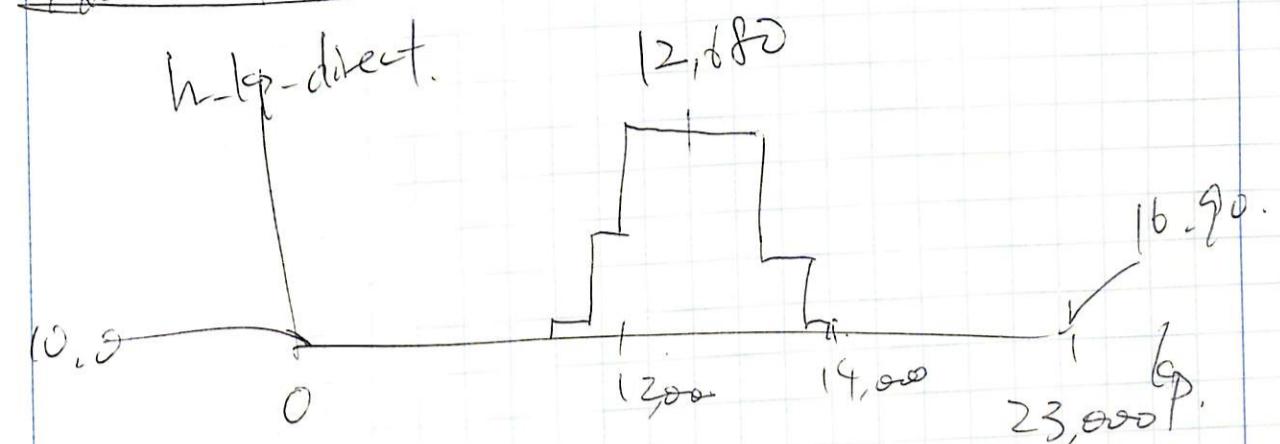
χ -etalon 15.8 \rightarrow 12.55 は“

single slit と上液の
2つが重なる場所。



Scan 10 0.05 10 χ -etalon 10 ~ 17
0.1

No. 212336



$\frac{310.71}{kp} \approx 1 \text{ mm}$ peak E 12,680 ± 33

$$\frac{21750}{670} \approx 310.71 kp \approx 0.1 \text{ mm}$$

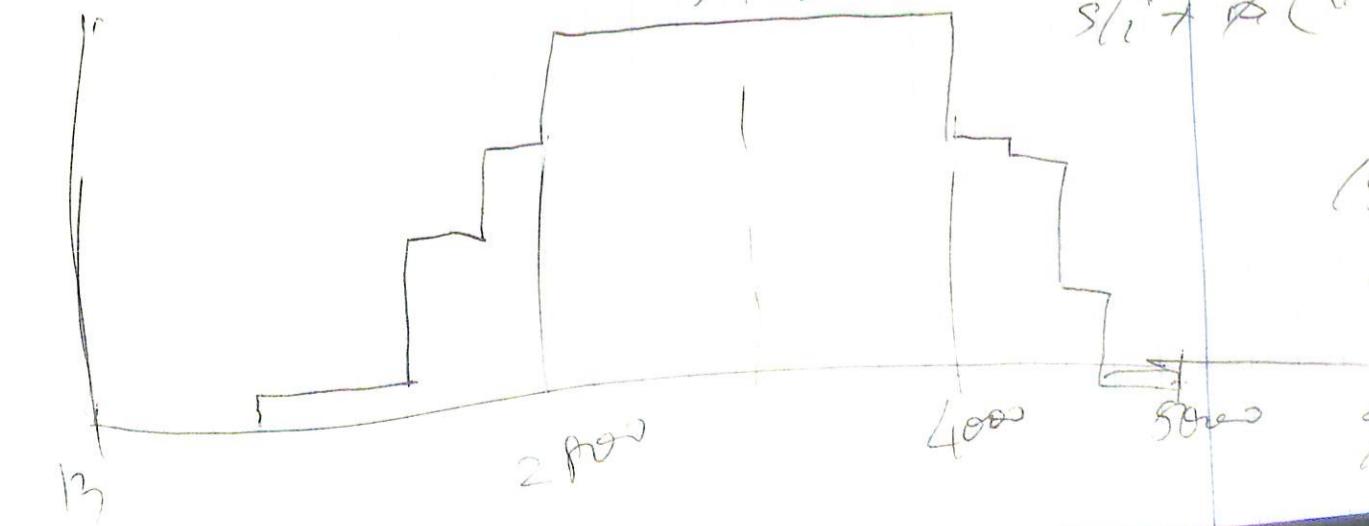
$$1 \text{ mm} \approx 3107.1 kp$$

peak 12 + 4 = 14 (4.07 mm 位相)

約 10000 ~ 16000 kp ~~近似計算~~ 15.8 - 14.07 ~ 1.73 mm

$$13 \text{ mm} \approx 16 \text{ mm}$$

No. 223739



125

1st slit 位置決定

$\Sigma 70x - \gamma - 7^{\circ} 1.7\text{mm}$

direct
反射

- reflect
 $\lambda(\text{ref})$

No. 230117.

out-direct 2824 cps.

1st slit
 $\Sigma 70x - \gamma - 6.17\text{mm}$ 7°
 $\Sigma 70x$

KF 2nd slit 調整

126

2nd

Double slit 改良

$\Sigma 70x - \gamma - \cancel{6.17} \cancel{1.68} 1.4$

No. 231317.
Cut-O+H 0.95/s
Cut-Direct 1.5/s
回立右圓孔

$\Sigma 70x - \gamma - 1.5$ cut O+H 1.07/s

No. 231719 cut-Direct 1.7/s

$\Sigma 70x - \gamma - 1.6$
No. 232851 cut O+H 0.87/s

$\Sigma 70x - \gamma - 1.7$
No. 232837 cut O+H 1.8/s

$\Sigma 70x - \gamma - 1.8$ cut O+H 36/s
No. 233203

$\Sigma_{\text{Dx}} - \gamma = 1.9$
No. 233523

Cut O+H
 $46/\text{s}$

$\Sigma_{\text{Dx}} - \gamma = 2.0$
No. 233859

Cut O+H
 $5/\text{s}$

$\Sigma_{\text{Dx}} - \gamma = 2.1$
No. 234210

Cut O+H
 $12.6/\text{s}$

$\Sigma_{\text{Dx}} - \gamma = 2.2$

No. 234532

Cut O+H
 $104.336/\text{s}$

$\Sigma_{\text{Dx}} - \gamma = 2.3$

No. 234851

Cut O+H
 $69/\text{s}$

$\Sigma_{\text{Dx}} - \gamma = 2.4$

No. 235228

Cut O+H
 $8.6/\text{s}$

$\Sigma_{\text{Dx}} - \gamma = 2.5$

No. 235543

Cut O+H
 $10.58/\text{s}$

Σ_{Dx} ctrl X S
 Root Plan manual scan Ax

$\Sigma_{\text{Dx}} - \gamma = 2.6$
No. 235907

Cut O+H
 $5/\text{s}$

$\Sigma_{\text{Dx}} - \gamma = 2.7$

No. 0301000353

Cut O+H
 12.9

$\Sigma_{\text{Dx}} - \gamma = 2.8$

No. 000749 Cut O+H
 1.2

~~$\Sigma_{\text{Dx}} - \gamma = 2.9$~~ Cut O+H
 1.2

No. 001157

~~$\Sigma_{\text{Dx}} - \gamma = 2.05$~~ Cut O+H
 1.69

No. 002011

~~$\Sigma_{\text{Dx}} - \gamma = 2.05$~~
No. 002338

Cut O+H
 2.54

$\Sigma 70$
2mm No. 002802 cut O+H 1.56

$\Sigma 70 \times -7$ 2.1mm
No. 003303 cut O+H 1.7
4.2/5

$\Sigma 70 \times -7$ 2.2mm
No. 003703 cut O+H 1.76

$\Sigma 70 \times -7$ 2.3
No. 004024 cut O+H 1.42

$\Sigma 70 \times -7$ 2.4
No. 004403 cut O+H 2.66

$\Sigma 70 \times -7$ 2.5
No. 004738 cut O+H 6.7

$\Sigma 70 \times -7$ 2.6
No. 005112 cut O+H ~~3.63.7~~

~~$\Sigma 70 \times -7$ 2.7~~
No. 005487 cut O+H 2.58

12:59

shcr 1.8 shcr 2.6

slit 1 1.7 slit 2 1.9
No. 010237 cut O+H 107.4

$\Sigma 70 \times -7$ 1.8
No. 010602 cut O+H 50.84

$\Sigma 70 \times -7$ 1.7
No. 010935 cut O+H 1.14

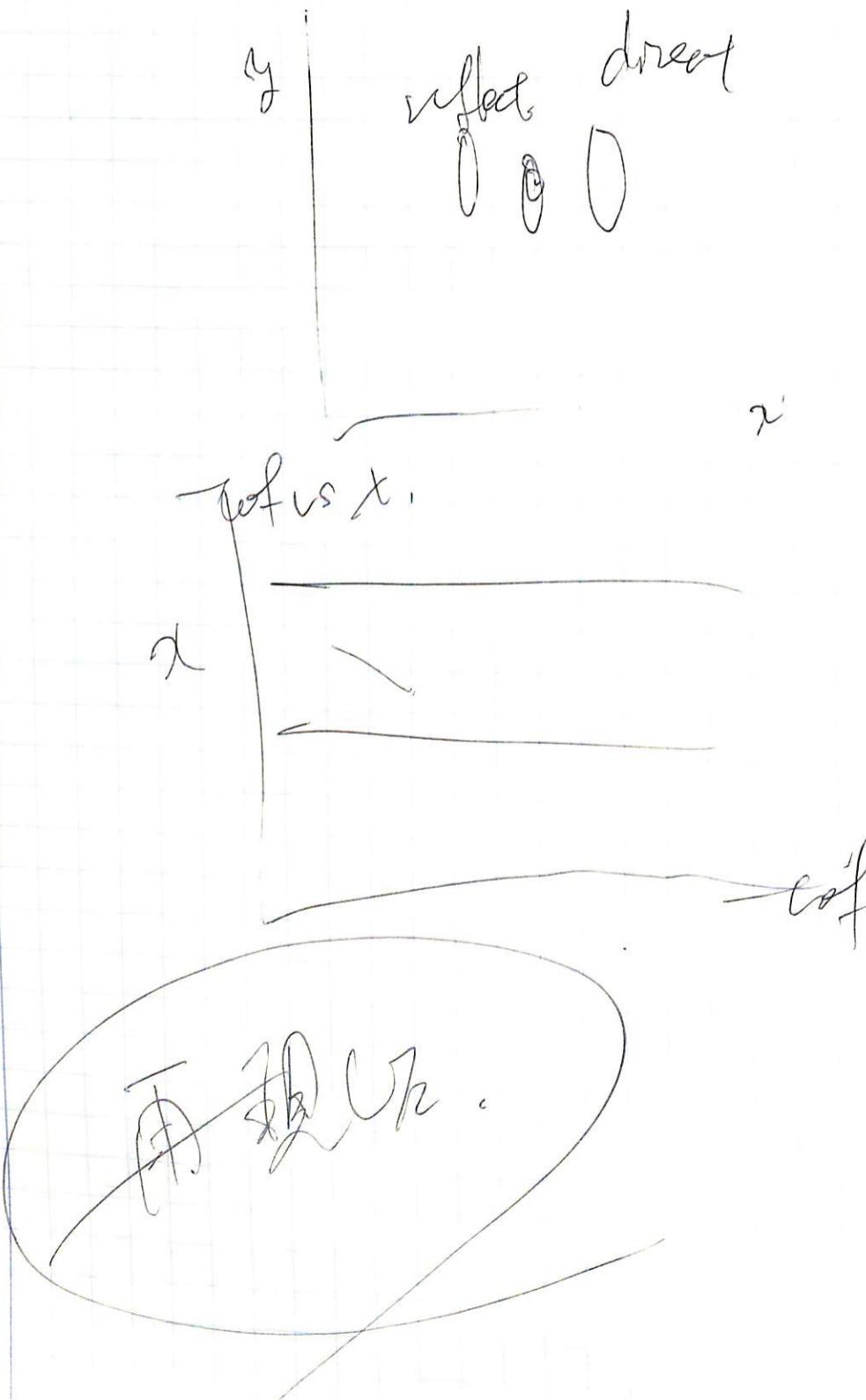
$\Sigma 70 \times -7$ 1.6
No. 011259 cut O-AB

$\Sigma 70 \times -7$ 1.5
No. 011629 cut O+H 1.15

$\Sigma 70 \times -7$ 1.4
No. 012002 cut O+H
 $\Sigma 70 \times -7$ 1.9
No. 012752

01:32 slit2の位置決め中

位置決め

2024
3/1(金)

09:40

09:42

10:20

Double Slit の 設置.

昨日最後、~~no slit~~ no double slit one single slit で Count を測定した 7 パル 2024 03 01 013901 が O+H を確認。⇒ 944.94.

- theta etalon 199.45. x- etalon 15.65 を確認。

slit double slit の ミクロメータ 調節

× 調節範囲 選択の合意 小さく

ミクロ X-7 mm Cut Count of O+H

2.8mm 66.4/s
2.9mm 56.4

2.7mm 95.6

2.6 13.9

2.5 27.8

2.45 109.9

2.15 6.34

2.05 1.99

2.0 105.96

No. 0943/3
No. 0949/4

上から
F1-F2

No. 0951/1

No. 0955/1

No. 100045

No. 100547

No. 100936

No. 101407

No. 100709

No.

3 つ Peak を確認 特定。中央 Peak 附近を精査

ミクロ X-7 Count of O+H file x2 (参考)

2.3 107.89 No. 102134

2.325 169.9 No. 102448

2.350 201.3 No. 102813

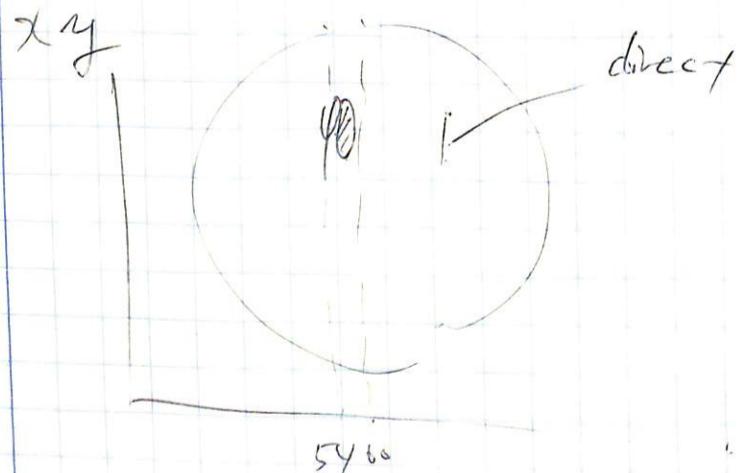
2.375 213.3 No. 103206

2nd slit 設定

| $\Sigma 70X-7$ [mm] | count of O+H | file 略称 |
|-----------------------|--------------|------------|
| 2.375 2.38 | 218.8 | No. 103523 |
| 2.39 | 224.0 | No. 103915 |
| 2.40 | 225.0 | No. 104239 |
| 2.25 | 17.42 | No. 104501 |
| 2.37 | | No. - |

→ 2nd slit
 $\Sigma 70X-7 - 2.37$ は決定

No. 105003

 $\Sigma 70X-7 - 2.37$ cut O+H 217

12:34

オトコリ L-ミヨン完了

 $\Sigma 70X-7 - 175$ 175 mm (2nd etalon の Roll)

Yaw Etalon 6.5

12:38

Roll 0 deg の 反射、透過測定開始

→ H & O の カウント 比 $H > O$

(Date 0301/123339)

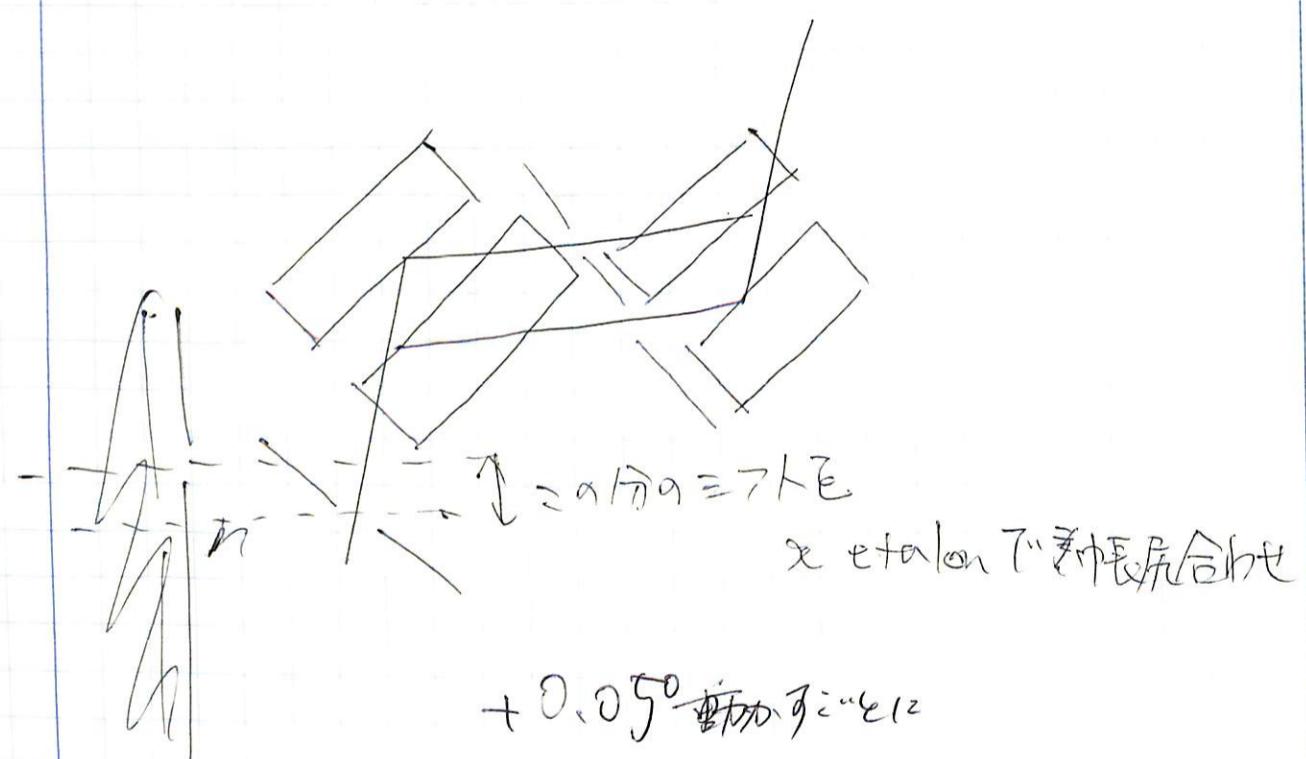
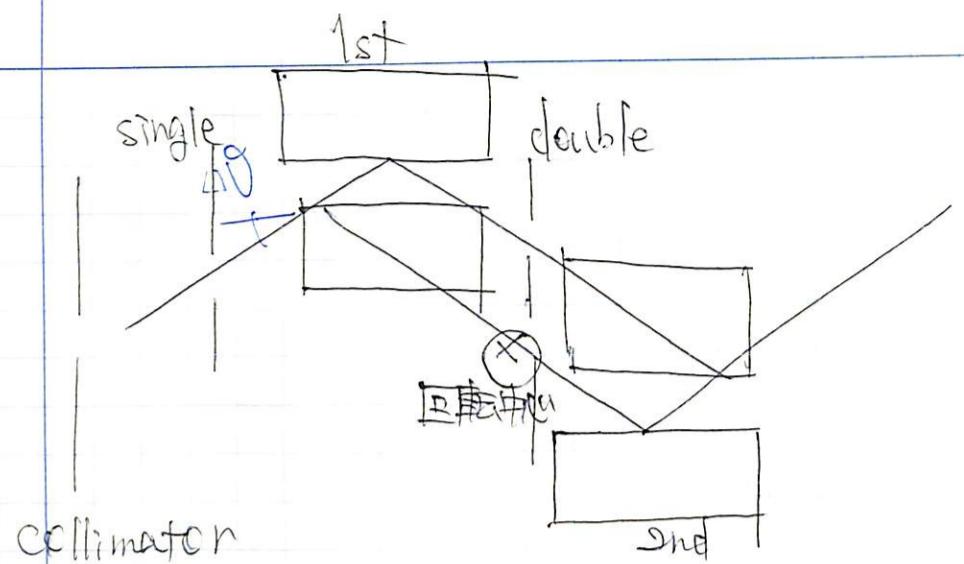
⇒ これにて 1st に なるよう 1st theta etalon を
調整する。現在 theta etalon 179.45 \Rightarrow これを変える。干涉計全体が回転する。 Single slit & collimator
が合わないところが問題。

↓

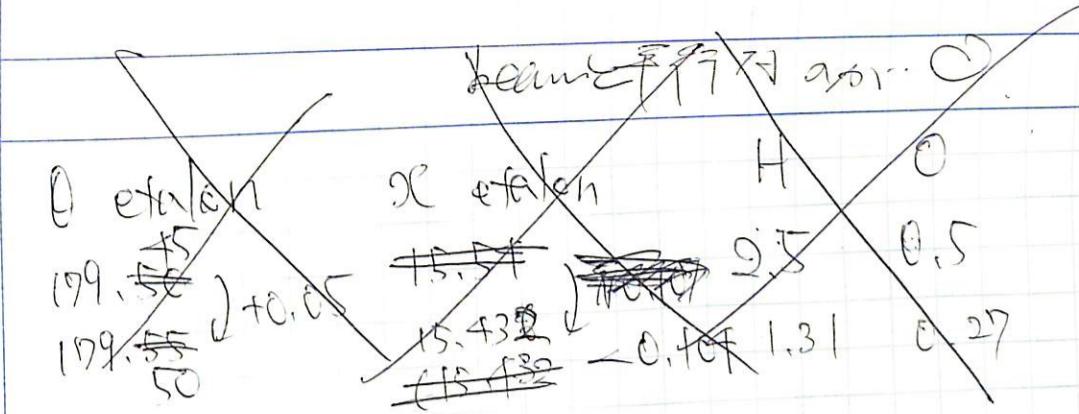
2nd etalon の 調整で解決。

→ 2nd etalon を 23 に 变える。
1st etalon 中心 - slit 間距離
が決まる1st etalon 中心 - 1st single slit 50 mm
(目視)2nd etalon 中心 - double slit 50 mm
(目視)

| | | | | |
|----------------|--|-----------------------------------|------------------------------------|-------------------------|
| H2O Yaw etalon | 2nd etalon | single slit | double slit | theta etalon |
| 6.5 | 15.65 (15.647) 6.5 +0.109 | $\Sigma 70X-7$ 1.7 mm C.107 | $\Sigma 70X-7$ 2.37 mm C.107 | 179.45 deg +0.05 deg |
| | | 15.54 (理論) | | 179.5 |

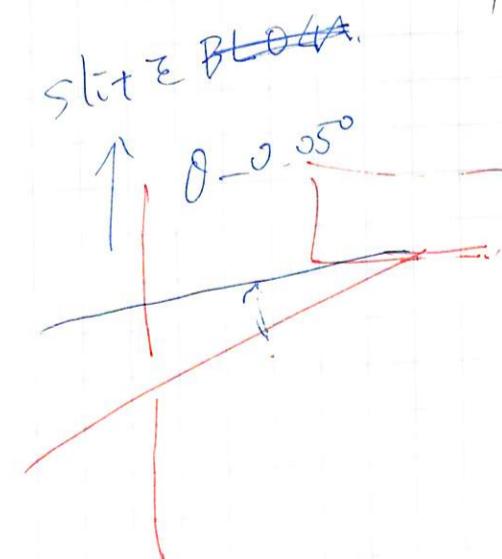


$$x \approx 3 \text{ cm} \text{ と } 5 \text{ cm}$$

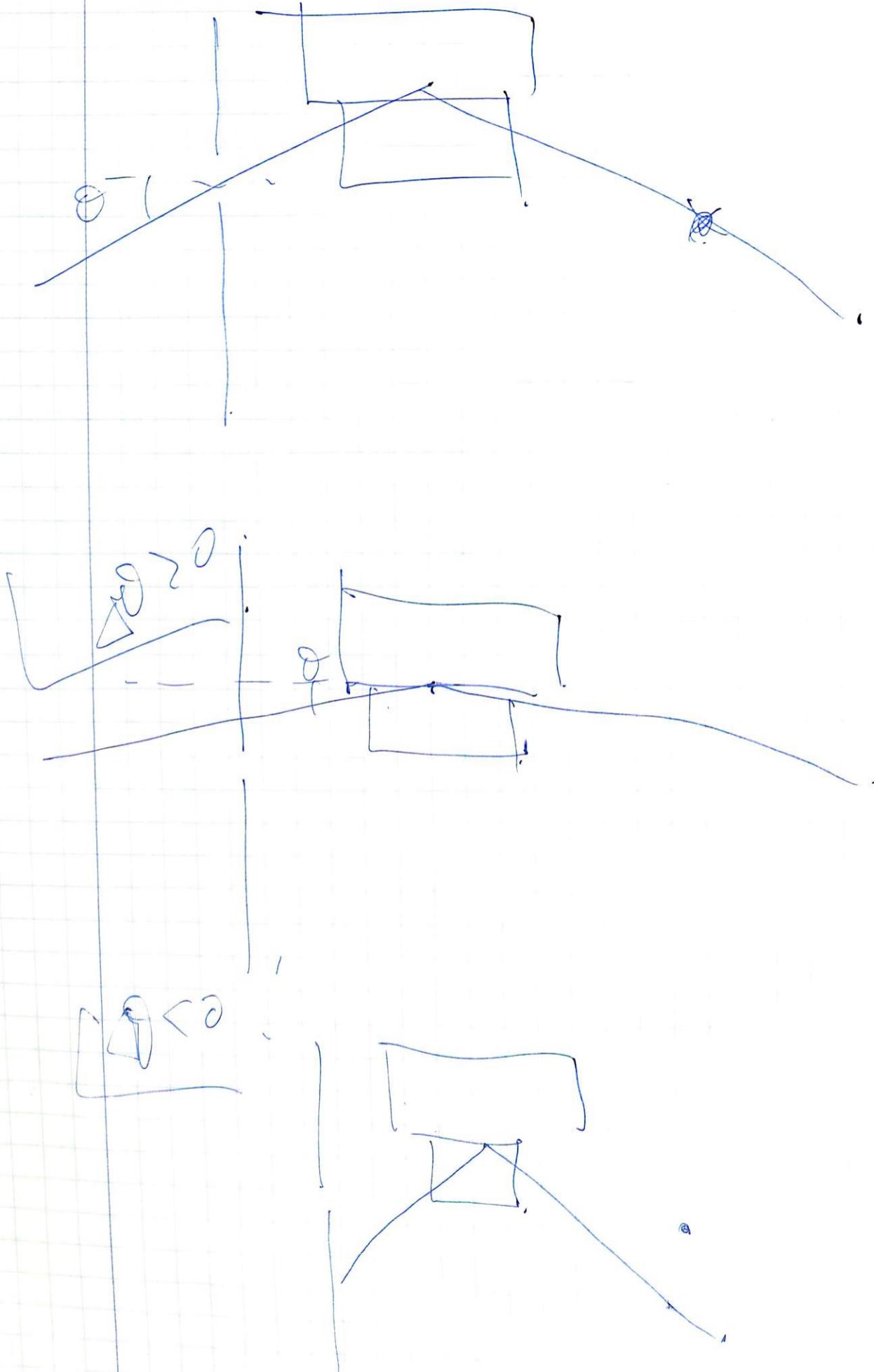


No.
1310SF
132442

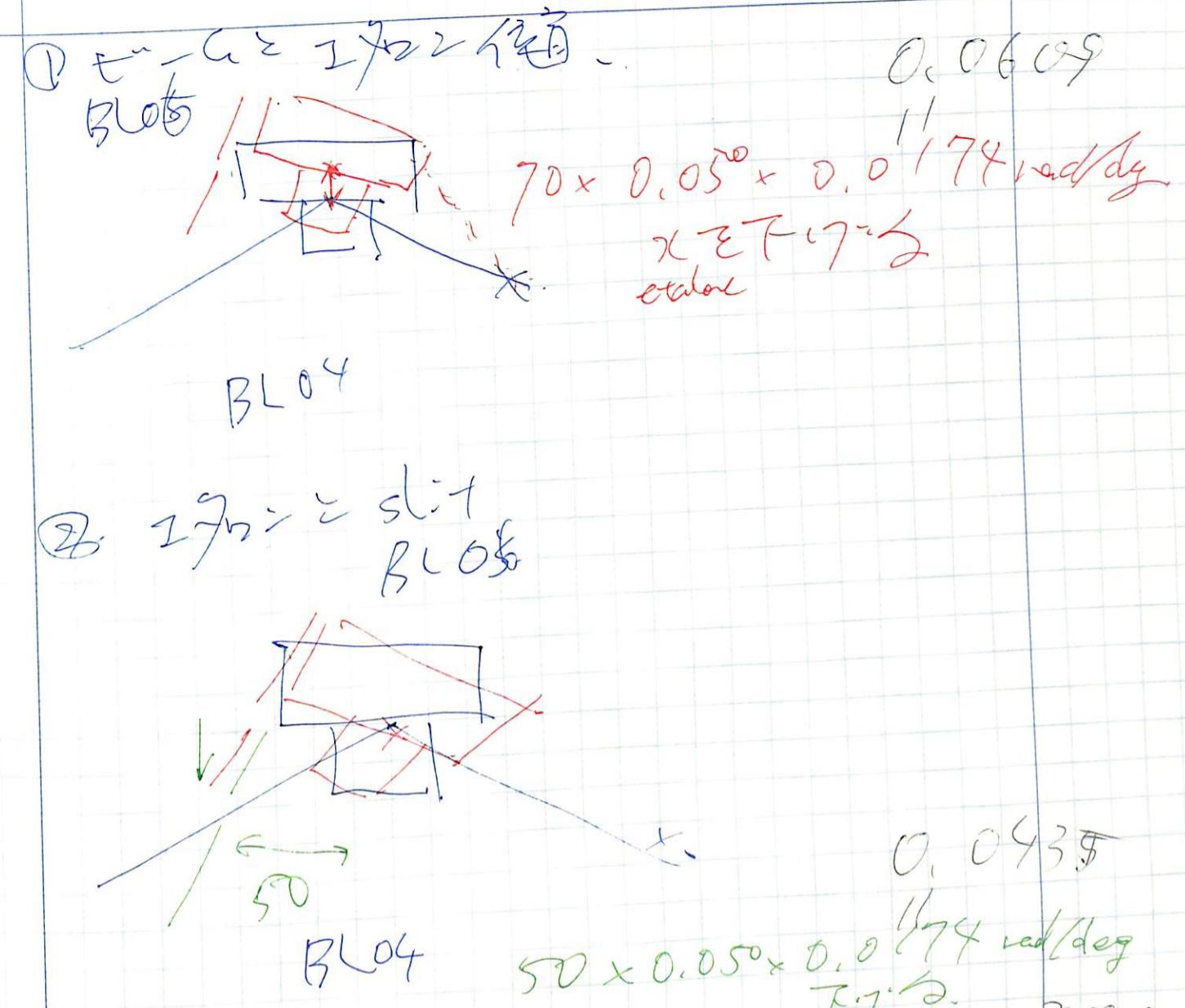
| θ etalon | H | O | No. | $O+H$ |
|-----------------|-----------------------|------------------------|--------|----------------|
| 179.45 | 3.14×10^{-1} | 5.90×10^{-2} | 133907 | 6.427 |
| 179.5 | 1.31 | 0.183 | 132442 | 27.59 |
| 179.55 | 1.51×10^{-1} | 3.158×10^{-1} | 134429 | 149.5 |
| 179.4 | 15.75 | 5.037×10^{-2} | 140007 | 179.55 3.00 |



137



14:43



回転によるイタロの中心のシフト量は
イタロとslit軸と平行な方向で、slitが70°-9.7°調節する
幅が $50 \mu\text{m} \times 0.05^\circ \text{ deg} \sim 0.025 \text{ mm}$

slit 1 $1.7 \rightarrow 1.656$ に変更

double slit $\rightarrow 2.37 \rightarrow 2.39$ に変更

χ_{etalon} ~~0.06097~~ 0.06097°
BL ~~側入~~

θ_{etalon} 194.51°

$\alpha_{\text{etalon}} = 15.707$ ($\leftarrow 15.65$)

$\theta_{\text{etalon}} = 179.45 \rightarrow 179.4$

No. 144931 第1回 α_{etalon} 計算.

支承間 $a + C + H = 6.53 + 6.76$

支承 $"$ 6.53

No. 155058

$\alpha_{\text{etalon}} = 15.707$

$\theta_{\text{etalon}} = 179.8$

$a + C + H = 5.7$

1st slit 16.65, 2nd slit 2.340 です。

一旦オフセットをうなぎで戻して再観測する方法です。

1st slit 1.7

2nd slit 2.37

$\alpha_{\text{etalon}} / 5.65$ (15.6499) p.123

$\text{out } C + H = 3$
[13.27m]

$\theta = 179.45$

No. 15511

PCV 位置

No. 154754

ホルダ 299521

障害物と OVR が P

2nd エタロン 入れ替へ No. 105003 → out 303

次回 No.

16 195.2 は破棄

θ_{etalon} Scan # 179.00 deg ~ 179.95 deg
 $\Delta\theta = 0.05$ deg
 step 0.01 (0.05)

θ_{etalon}

179.6 ~~179.6~~ [?] で SPK 小計 (162987)

$\theta_{\text{etalon}} 179.6$ deg

2nd 2nd etalon 390X7 +84mm

Yaw etalon 6.515

18.4 3/2 丁目
 お38'1)

141

$$0.05 \text{ deg} \times 50 \text{ mm} \times \frac{\pi}{180} \sim 0.0610$$

θ etalon α etalon Yaw etalon 2nd etalon 370X-7
 179.6 deg 15.647 6.515 0.184 mm

~~No. 165928 C+H count 200.7~~
~~200.7~~
~~18.10 0.8178~~
~~C.8178~~

θ etalon C+H H O No.
 179.6 deg 20.7 18.10 0.8178 No. 165928

θ etalon 減らし、H/O が 1 にならぬ θ etalon を見つけた。
 食ひ切った。single slit, double slit の位置を
 変更。

single: 1.7 → ~~1.657~~ double: 2.37 →
 1.657 2.35

$\theta = 179.5$ $x = 15.71$ No. 172129

θ etalon
 179.45 $x = 15.7966$ H/O ~ ~~8/4~~
 single 1.615 15.753 8/4
 double 2.285 No. 172654

θ etalon 179.8

single 1.570 H/O ~ ~~8/4~~

double 2.280

$x = 15.7966$ No. 173482

θ etalon 179.85

single 1.530
 double 2.197

$x = 15.892$

No. 174182

θ etalon 179.425 x etalon 15.800

single 1.5925 double 2.261

No. 175253 H/O ~ 8/3

θ etalon 179.425 x etalon 16.5638 15.7395

single 1.635 double 2.308

No. 180925 H/O ~ 8/3

Oetalon 179.46

$$\chi = 15.7t$$

single ~~f. f=1.4~~ ~~1.65~~ t^2

double ~~2.2914~~ $= 2.291$

No. 181613

923s 1217z.

\Rightarrow 振動橈尾は潰れて消失

Oetalon 179.60

$$\chi = 15.587$$

single ~~f. 7436~~ 1.785

double ~~2.4136~~ $= 2.418$

No. 184101

— 5 " chz.

$$H/C = 1\frac{1}{4}$$

$\theta = 179.65$

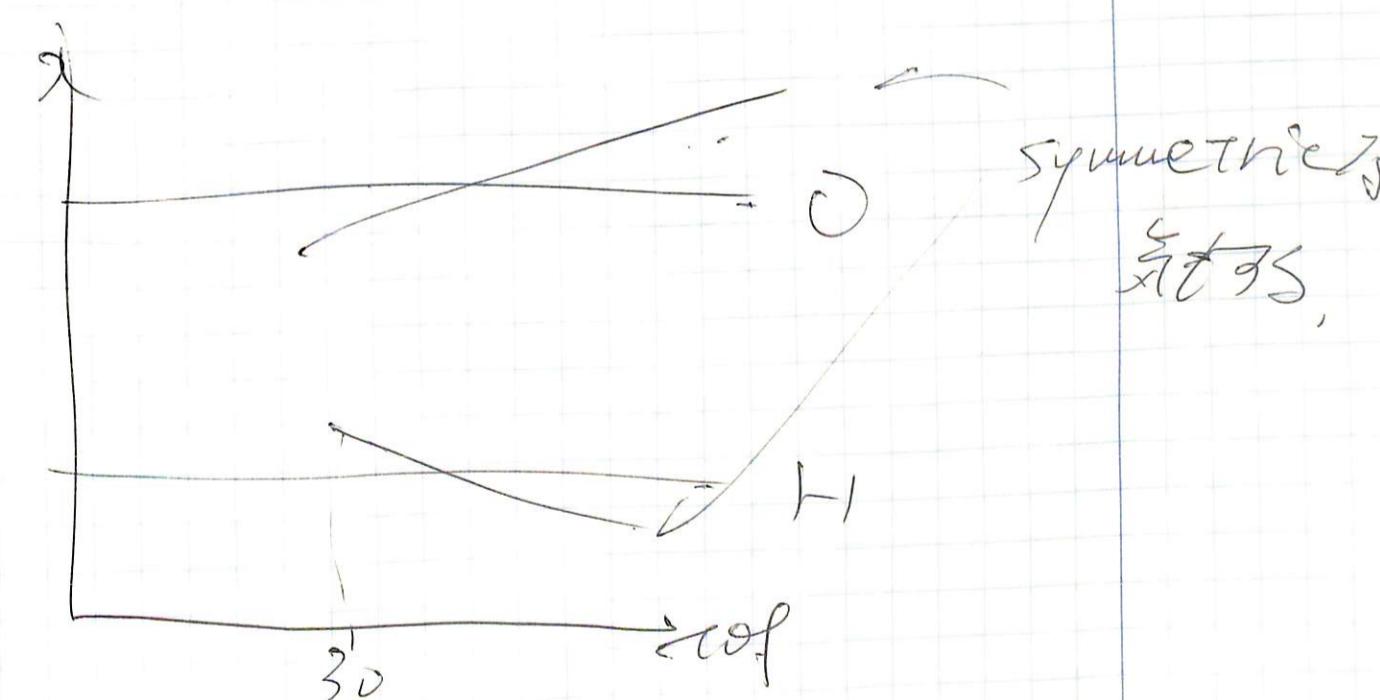
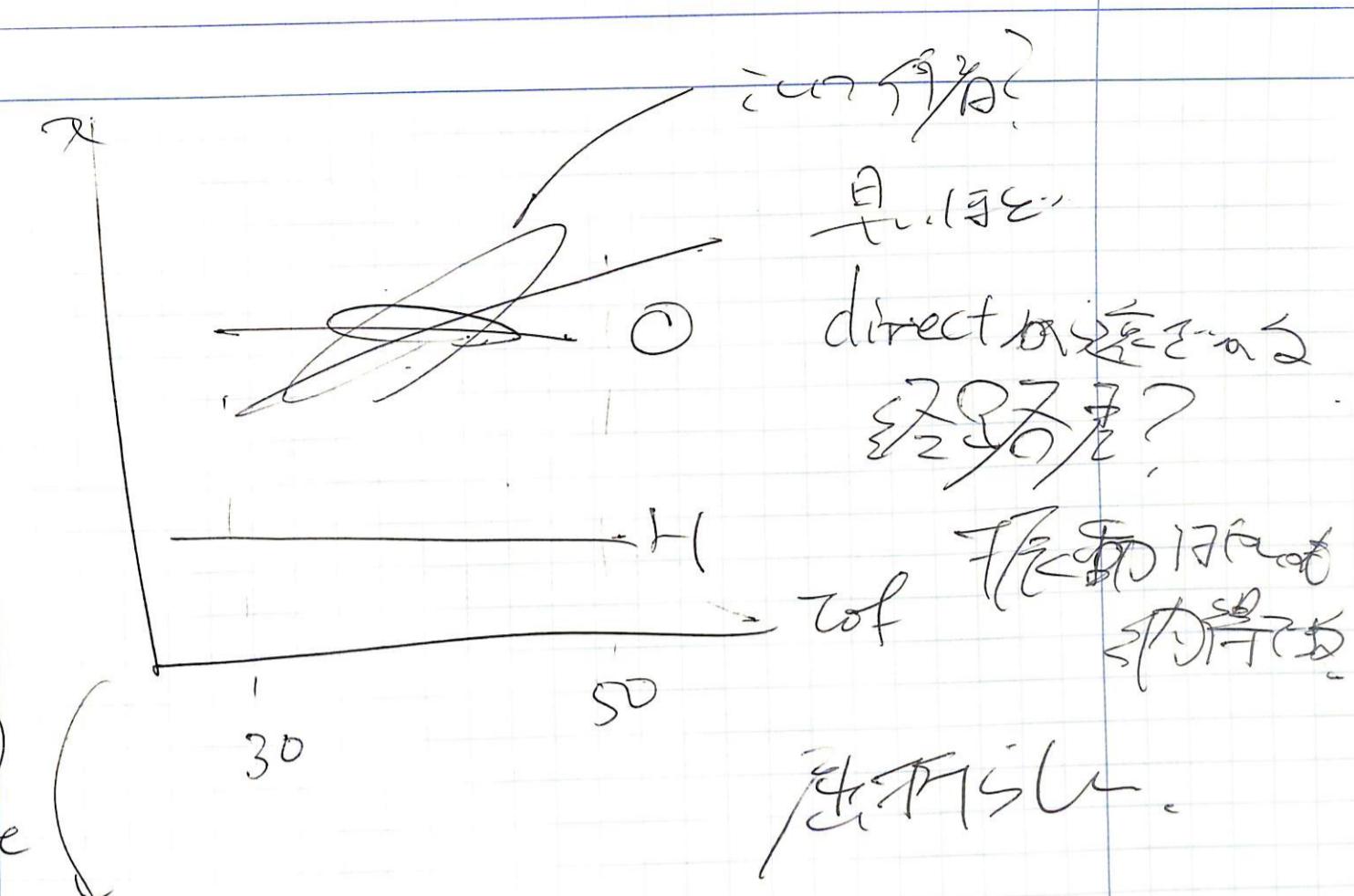
$$\chi =$$

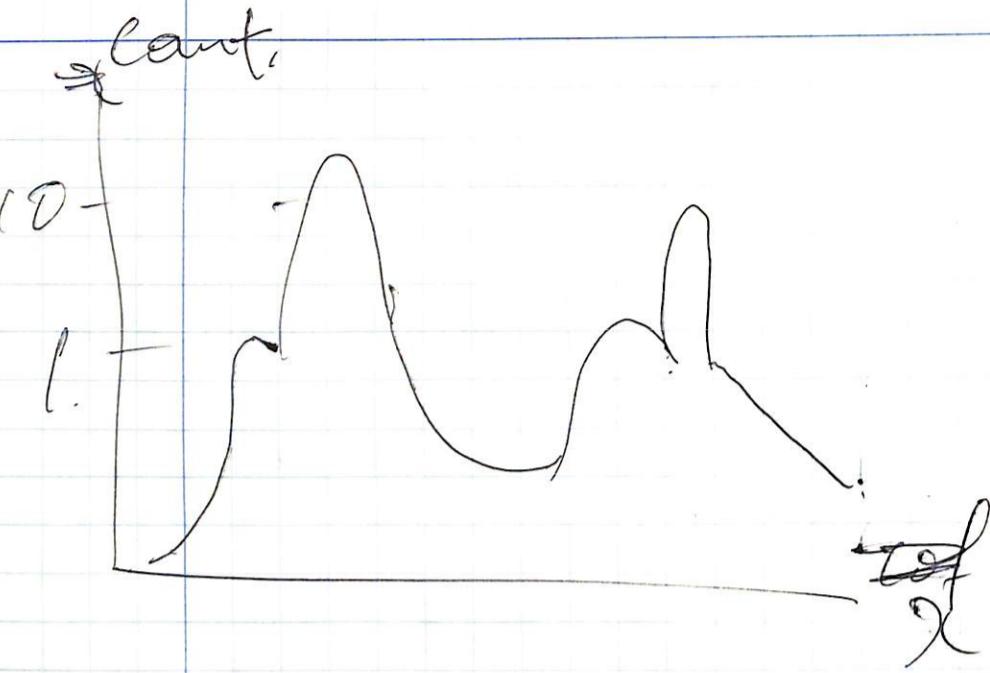
single ~~f. 787~~
1.79

double ~~2.457~~
~~2.455~~

$$H/C \approx 2$$

No. 185431 見た!





$\text{freq} \sim 546\frac{1}{2}$

$$\theta = 179.7$$

$$\lambda = 15.4647 \quad 15.861997$$

$$\text{single } 1.8309 + 1.830$$

$$\text{double } 2.5009 + 2.500$$

No. 191516

$H/D = \frac{20}{3}$
ratio

$$\theta = 179.625$$

$$\lambda = 15.556$$

$$\text{single } 1.7654 \quad 1.765$$

$$\text{double } 2.4354 \quad 2.435$$

No. 192100

$H/D \sim 2$

$$\theta = 179.675$$

$$\lambda = 15.495$$

$$\text{single } 1.809 \rightarrow 1.88$$

$$\text{double } 2.392 \times 78.2.888$$

No. 193556

$H/D \sim 298$

179.65 & 625 a/f 7-1301.

$$\theta = 179.64$$

$$\lambda = 15.538$$

$$\text{single } 1.778 \rightarrow 1.780$$

$$\text{double } 2.448 \rightarrow 2.445$$

No. 193556

$t = 6.572$

No. 194611

integral 158
 $H/D \sim 2$.

single slit $27^{\circ} 57' 27''$, 48.8.5.1-7
mm 48.7

single slit 1.83
才トヨリの鏡位置調整

$$x = 15.534 / 15.539$$

single 矢 1.78

double 2.55

~~データ~~

No. 201231

二重反射子と鏡、平行化するか?

double 2.35 231 15.534 - 15.539?

No. 202344

? 15m - ?

double 2.47

No. 203200

ii. reg. 163

cm + 235

242.

No. 202559

integral 8/-23

integral 41

integral 169

才トヨリ 12 月 27 日

yaw 6.515 m/s 風加減?

yaw

6.53

No. 203550

6.48

No. 2038232

(II) 振動 (72)

拍手による振動

組立高さと視認性 (visibility) の関係について。
見えた? と聞いたら?

組立高さ - 10 - 12 間で 72m. (2 階段)

No. 204644

不十分な visibility 60cm 17 18m 19
80cm 17.75

yaw = 6.45

No. 113350

yaw 6.8 6.48

2nd etalon Roll 18.3 μm?

| | 干渉の有無 | file No. | Time |
|----|---------|----------|-------------|
| 1. | 18.0 μm | X | 213832 101S |
| 2. | 17.5 μm | X | 214746 102S |
| 3. | 18.3 μm | X | 213402 112S |
| 4. | 22 μm | X | 220440 101S |

(Yaw 6.48)
etalon

| | | | |
|----|-------|---|-------------|
| 5. | 20 μm | O | 221204 101S |
|----|-------|---|-------------|

2nd rollはこれ以上動かさない方がいいと結論。

Controller X の操作ミスが反映され
221619

0.5 μmくらいで測定される。
⇒ ディスガクスメント
の間隔

明日予定

1. 11.30mm 実装

No. 231415 → direct att 108

干涉

full scan

roll 22.5

*△

vis.
No. 231415

±0.83
±.9

roll 21.5 *△

vis.
No. 232437

19 △ No. 233128

Scan - 20240228 - yaw- etalon - II. m 17.8
→ yaw etalon scan program

→ Roll 19 m

↓

233624

visibility が全て 1.00 以上何故?

3/2

No. 003111 50 min IUP 取り

yaw 6.465 (start point)

x = 15.54

θ = 179.64

この後 kp を 17.8 に固定
(kp が kp に oscill) とする。

151

yaw-etalon-survey-test.m

6.465 ~ 6.485 を切削 → 6 files
start from

No. 022144 ~ 022713
6.465 ~ 6.485

$$\begin{aligned} \text{173L2} - 6.465 - 173 - 6.475 - 173 \\ - 6.485 \end{aligned}$$

022713 : yaw-etalon 6.485

(本) 実験

No. 022713 023519 ~

file 数は

step 0.001, 6.465 ~ 6.485
1mm → 300

$$\begin{aligned} \text{173L2} - 6.485 \rightarrow 300 \end{aligned}$$

3/1 の 工程終了。
お疲れ様でした。

242

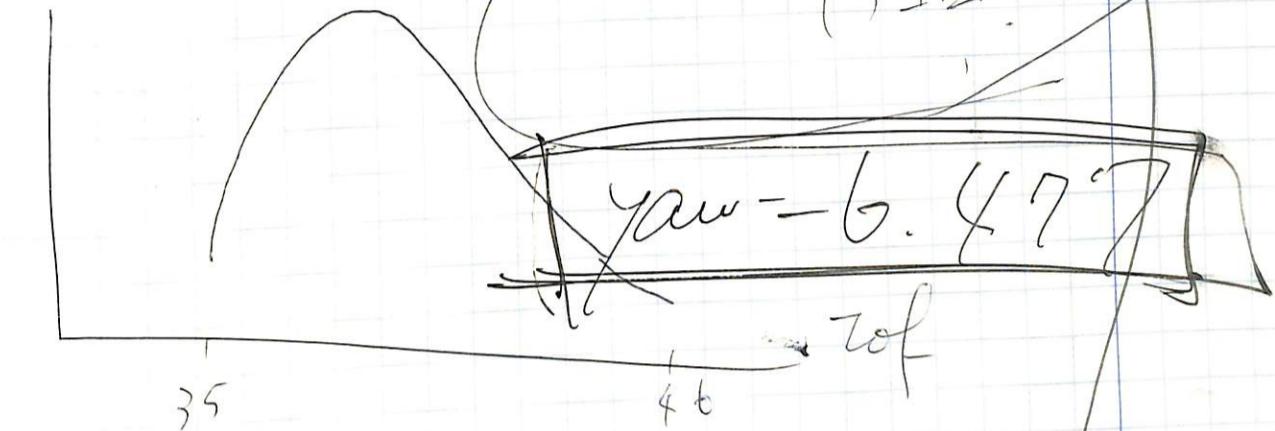
2024.3.2(土)

152

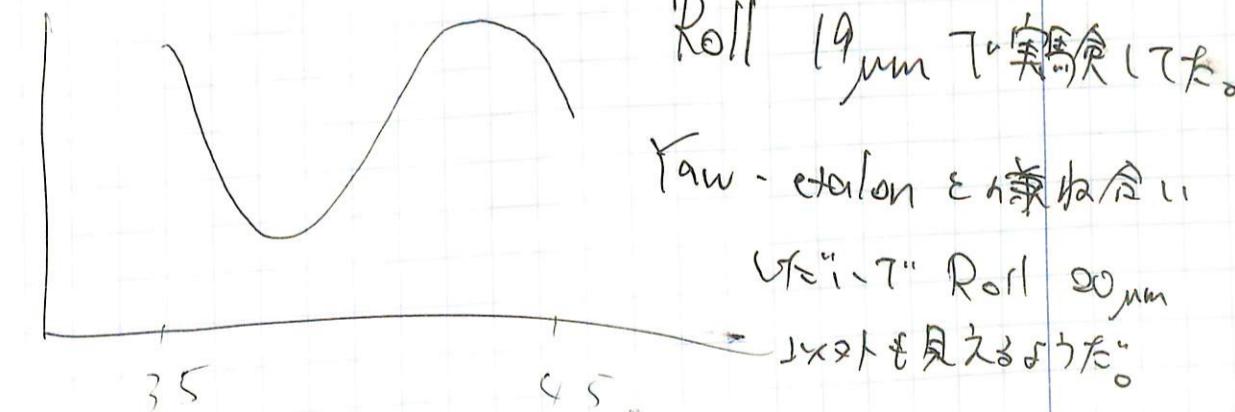
三角ジグに干渉計搭載・測定

昨日 5h 入ってと、ET-7.3020022144
023519 ~ 075541

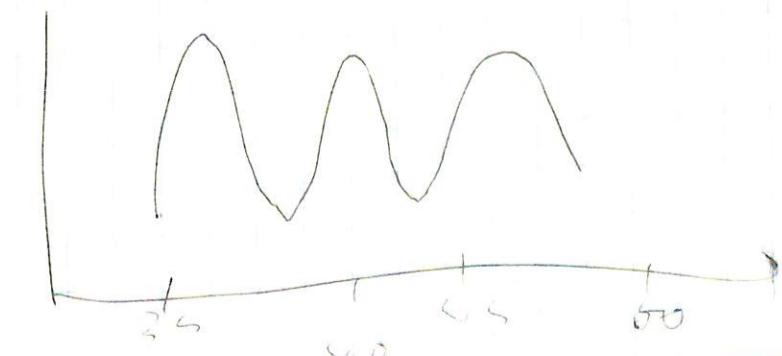
No. 044648



No. 045718



No. 045617



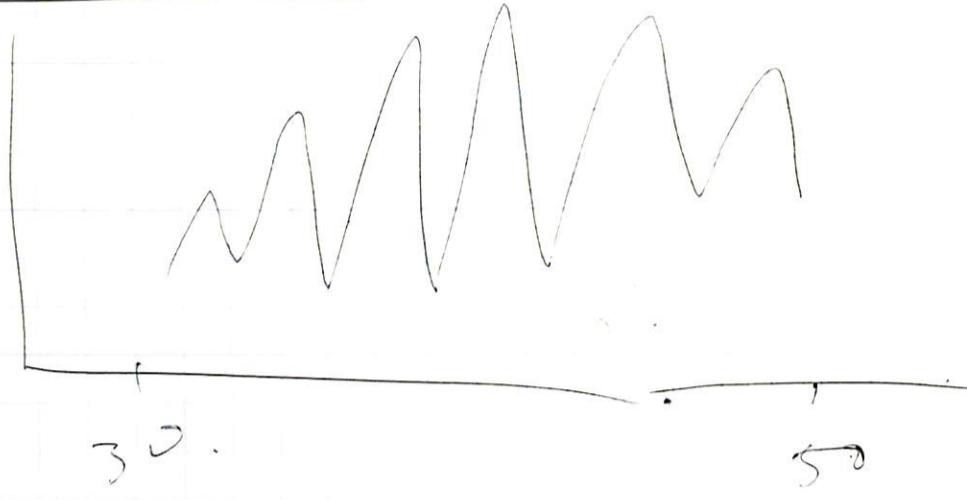
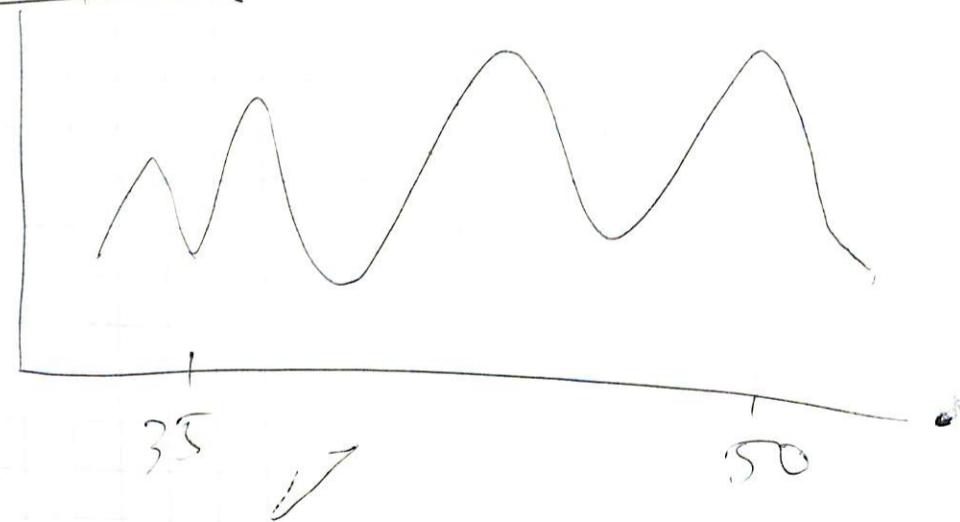
Roll 19 μm で実験してた。

Yaw-etalon と比較ねどり

ET-7" Roll 20 μm

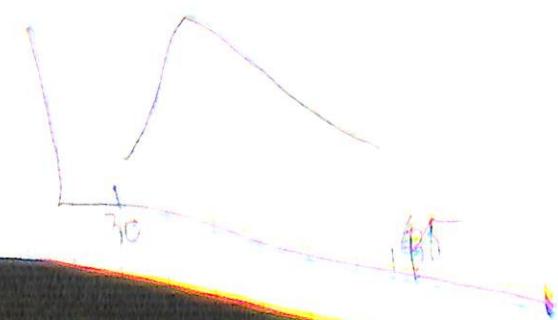
以外も見えなかった。

153

No. 042546No. 050748

Yaw Etalon 6.499m 「最小値」 311.97
247° Roll scanを実行~~た~~。

Roll. Vis 形状 X^2/ndf No. 0302104403
19.5 0.44 X 52/57 C01C4403

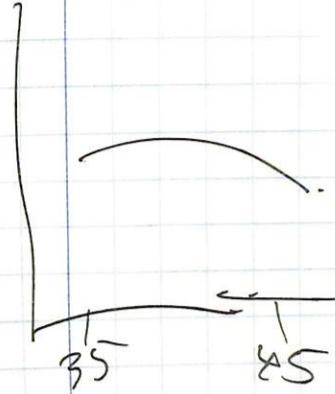


12 BEAM
停止杆

Roll 20
No. 105858

~~形状~~ Vis 150.9

X^2/ndf 81/56



Roll Vis ~~形状~~ X^2/ndf
18.5 1e-12 101/56

No. 110428

19.0 1-~~2~~3.

Roll ~~19.1-2~~7.

yaw 6.477.

No. 111544 ~~測定~~?

yaw 6.476

No. 111209

yaw 6.478

No. 111544

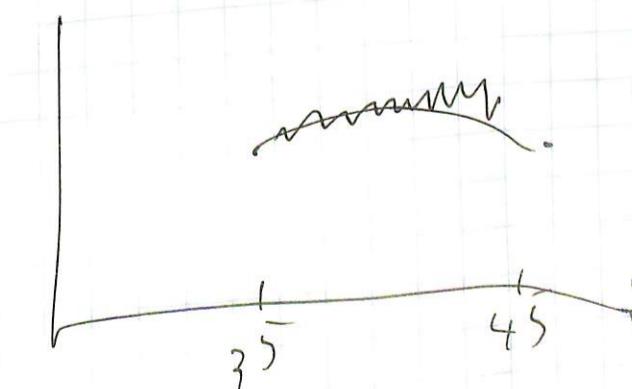
yaw 6.479

No. 112049

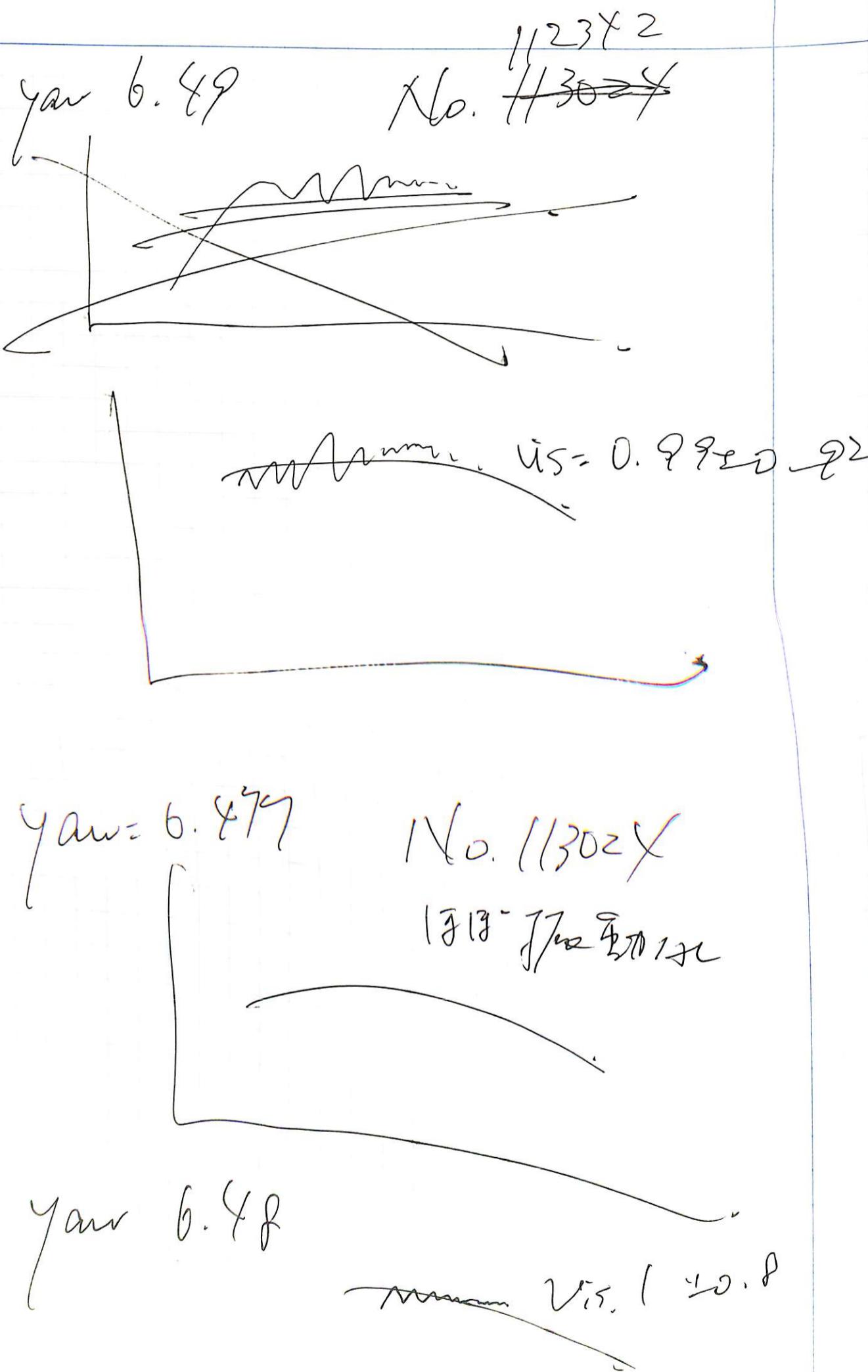
yaw 6.479

1.2.

Vis. = 0.9910.88.



y



roll & 18.3, 17.17.17.25.12
マジックル.

No. 114633

Rdl G

No. 12110 ~~yaw etalon~~ 6.44

yaw etalon 6.40
6.35

No. 121336

No. 121624

6.8

6.5

6.55

No. 122308

8mm → 読みあり
(目視)

三角マークの斜面の中心穴と
回転中心線

yaw to

~~6.477~~
~~7.04~~

✗ yaw Roll
6.477 19mm

No. 123388 → C94648 & A. 頃

No. 124813

yaw = 6.4

yaw 6.85

13:17:52 Yaw - etalon - Survey - test 2

6.435 ~ 6.495 to 0.0/3 → 3min

7 files

No. 125038

↙

No. 131752

yaw
6.435
(回転)

v6.445

1ms

比較実験

6.555

2ms

6.465

2ms

6.475

0.5?

6.485

1ms?

6.495

2ms?

0.5ms?

6.495

1ms

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

6.495

161

セガラウエイ

タニタ一筋

BL6

E_u- Δ

| | | | | | |
|---|---|-----|---|---|---|
| X | o | (X) | o | o | X |
| o | o | o | o | o | o |
| o | o | o | o | o | o |
| o | o | o | o | o | o |
| o | o | o | o | o | o |
| X | o | c | c | c | X |

BL4

家禽食用の C_2 位置は BL0付近に +/ -

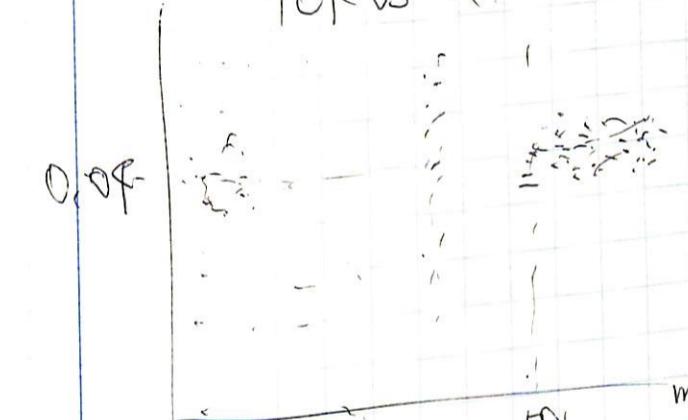
162

3082971783

No. 155215 y det 100mm

No. 155820 ydet f_{c} 73.

top vs X



10i-hxy



X estalon 49.997 Yaw estalon 6.48 theta estalon 180

X Esunley 6745
X Sunley 0802/627.txt

No. 130201

三角台に取付けたことにより).

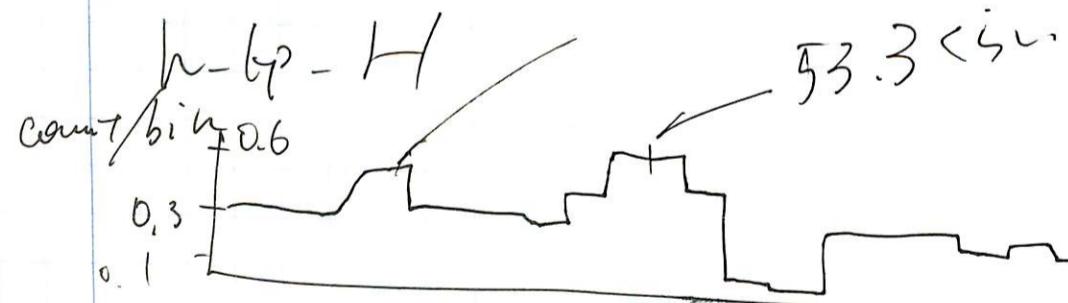
測定は BL04 側に
+43.2741 まで
43.2741 + 15.54 = 58.8141

→ 747265052.

今度は L-H = 2nd strelar で
 $x = 51 \sim 55^{\circ}$ とする。

$x = 51 \sim 55^{\circ} 0.1^{\circ}$ survey 20s \rightarrow

No. 172950



右記の為、3717を除く。一旦 53.3 を取る。

右記 count 指示の 1m の子測(20s)

QH, T, R, H

770

single slit 算出

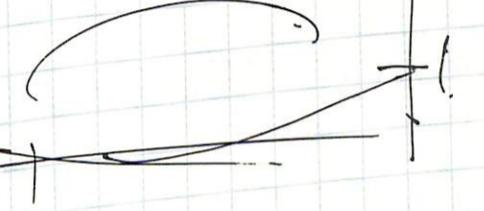
→ 上流 slit まで測定 746.

No. 18/9/0 - 計算結果.

h-hp direct

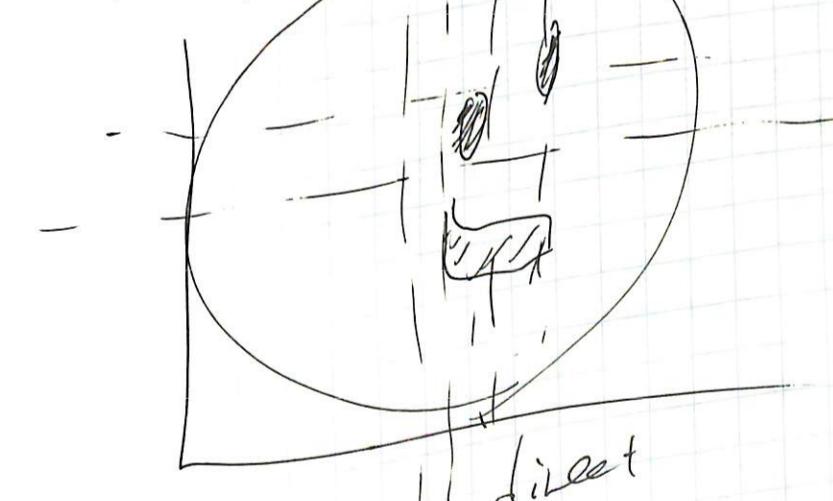


direct 30° 2.5?
slit 172971.0?



5.3

h 700



198?



$$\chi = 53.3$$

θ_{etalon} の理論値は $180, 6 \deg$
 \Rightarrow この辺りで survey $179 \sim 181$

θ_{etalon} のローラーは、最初の方からカウントが大きい
傾向にある。

$$\text{No. } 18508 \sim 201207$$

18508 の後で count が少く (18508 同じ後)

x_{position} が 57 附近に来る。(松井)

$$56 \sim 57.9, 0.1 \text{ 附近}$$

~~Folder 17~~

y_{det} 100 附近で $-C_2$ ~~と 17~~
 漸減 (か - 17) — $\text{No. } 213958$

y_{det} 直近 rerun. ~~Folder 17~~ ~~と 17~~
~~17~~ ~~と 17~~ ~~と 17~~

正し ~~ずれ~~ 動く。 x_{etalon} は \rightarrow a file 12 附近。

No. 221812

$$\chi = 58.7, \text{ No. } 224825, \text{ min}$$

Entries 1727, $\pm 72 \mu\text{m}$, $\pm 47 \mu\text{m}$.

$$\chi = 57.97, \text{ No. } 225947, \text{ Entries } 1731$$

file 故意複数の中再度同じ scan.

$x_{\text{etalon}} - \text{survey 2. } \cancel{\text{mm}}$

$$\chi = 56 \sim 57.9, 0.1, 605$$

$$\chi = 53.3, \theta = 179 (\pm 9.7 \pm 3^\circ) \text{ 7. } 13 \text{ (mm)}$$

these etalon survey2.

1min \rightarrow $178.0 \sim 179.0 \text{ a } \square \text{ files}$
 $\approx 178.5^\circ$
 $\approx 179.5^\circ$?
 $\approx 179.2^\circ$?

レーザ源から Laser 校正です。

Position

$$x_{\text{etalon}} 67 \quad \theta_{\text{etalon}} 109 \deg$$

\downarrow $x_{\text{etalon}} 67$ θ_{etalon} 脱落 (緩く) ~~と 17~~
 組立てに用いた stage A 脱落 (緩く)
 でうまく校正できず。

干渉計を 90° $\pm 1^\circ$ で $\pm 3^\circ$ で $\pm 1^\circ$

θ_{etalon} $\pm 30^\circ$ で $\pm 1^\circ$ で $\pm 1^\circ$
 レーザー $\pm 1^\circ$ 光路中 $\pm 30^\circ$ で $\pm 1^\circ$
 (レーザー 光路中で 目視 $\pm 1^\circ$ で $\pm 1^\circ$)

アライメント用レーザーを θ etalon 90°
~~直面~~ に合わせ、2枚の紙を用い、入
射と反射の光を像が直線上に定位するか
どうかを調べた。

$\Rightarrow 92^\circ$ パースペクティブ



斜面の肉厚を下げる

1 deg 以上 の傾きの
可視性

x etalon 50 θ etalon 92°
 182°

~~この近辺で~~ θ etalon をローラー[↓]
~~224.35~~
~~0.4919~~

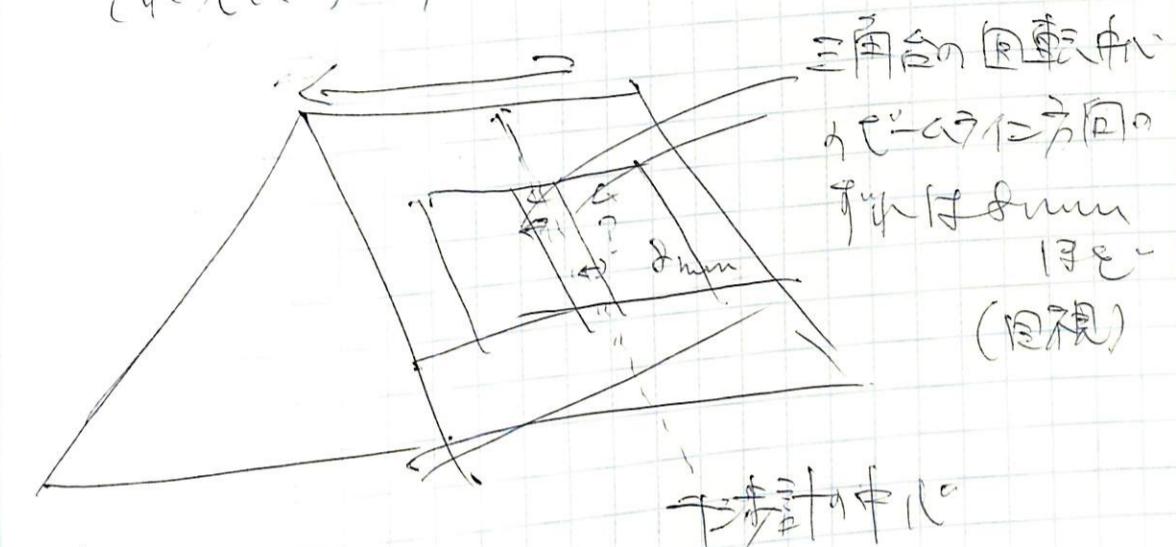
def Y を戻し直した。虚無の 10 分

def Y (determinant じゃねえよ) を zero に
 してローラー開始 (80分)
~~0.4919 ~~~

def 2:15~ / 10 分 80 分

θ etalon $179.0 \sim 180.95$, $\Delta\theta$ etalon 0.05°
 各 2 分間。計 40 個 \uparrow T-7.
~~2024 03 03 021504 ~ 033910~~

それらしいデータは確認できず。



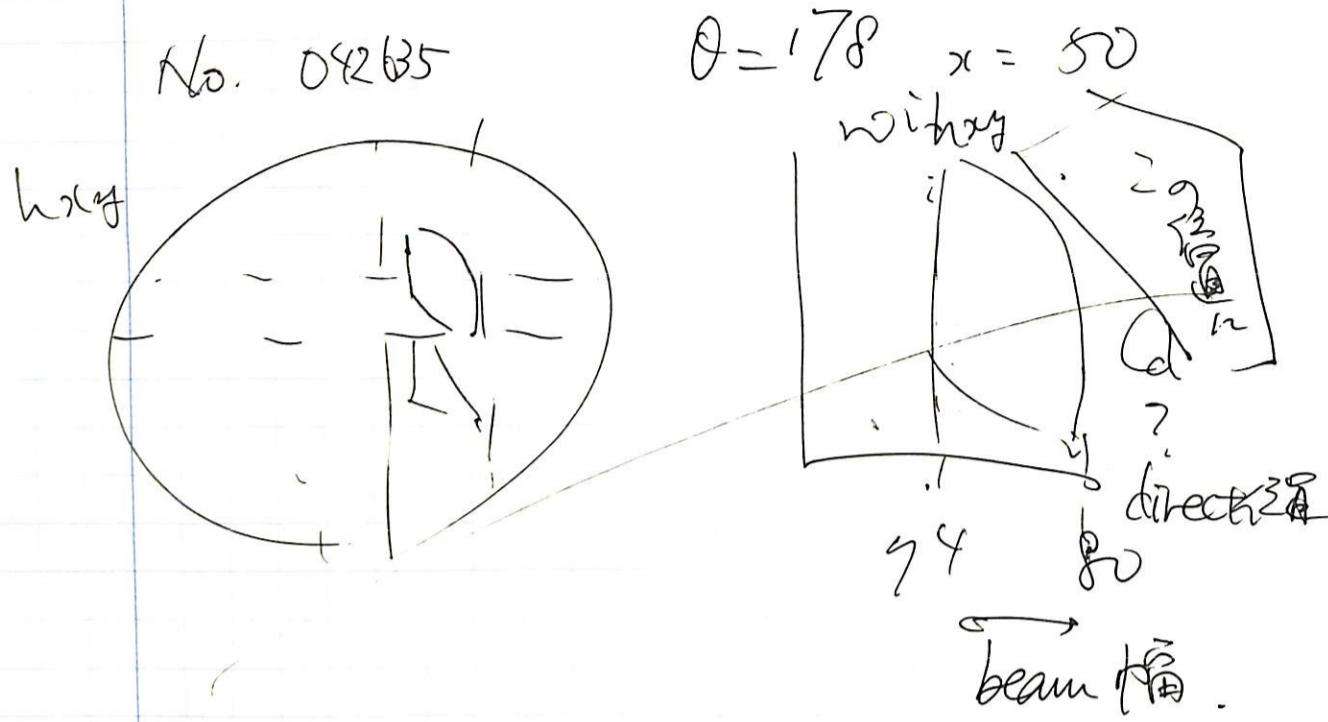
xy テスト.

* 何でミラに信号が消えている?
 * 上と下に 2 つ信号入力は何故?
 \uparrow

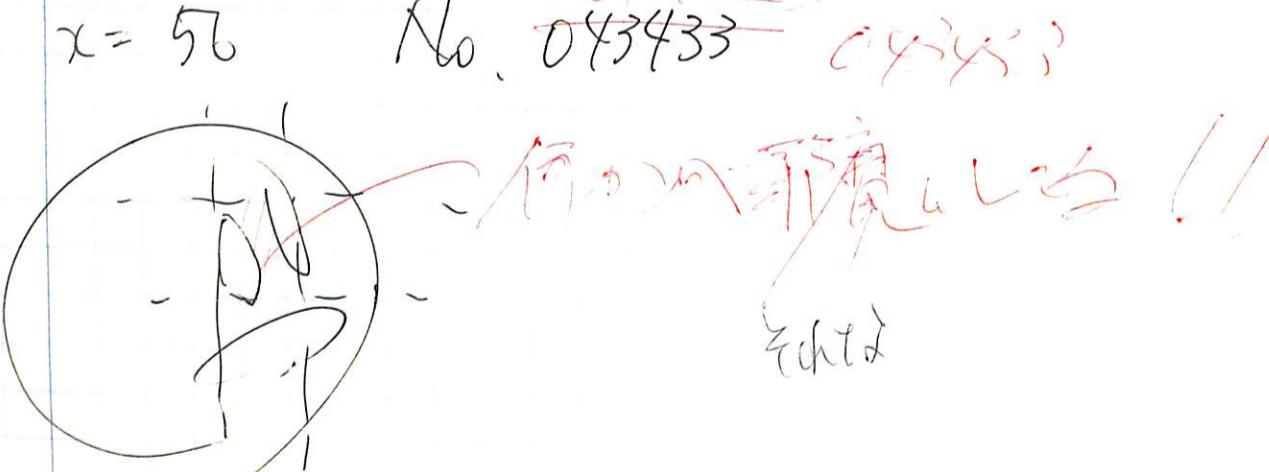
θ etalon 183° T-7. 上の像は消えた。

θ etalon 185° T-7. 下の像は残っている。

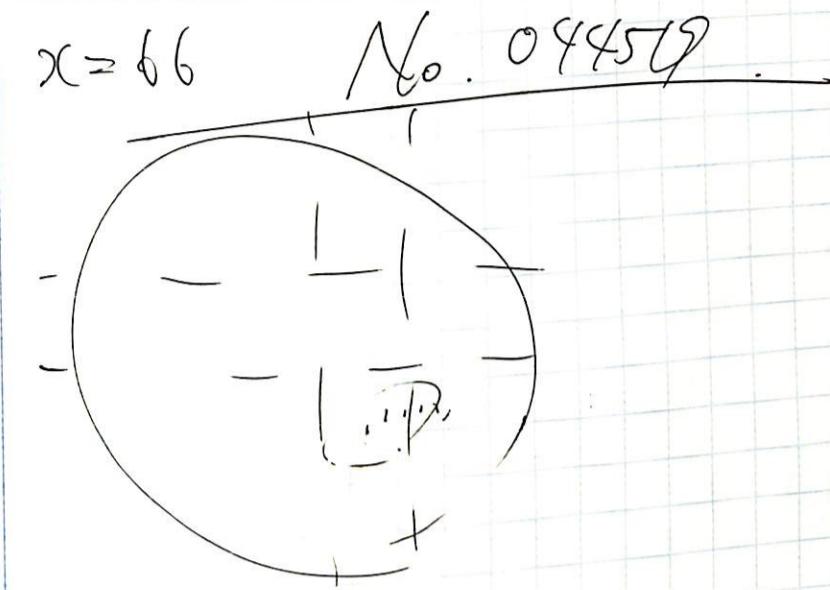
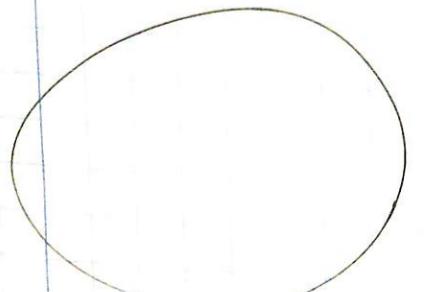
θ etalon 188° T-7. 上の像が濃く、下の像は薄くなっている。



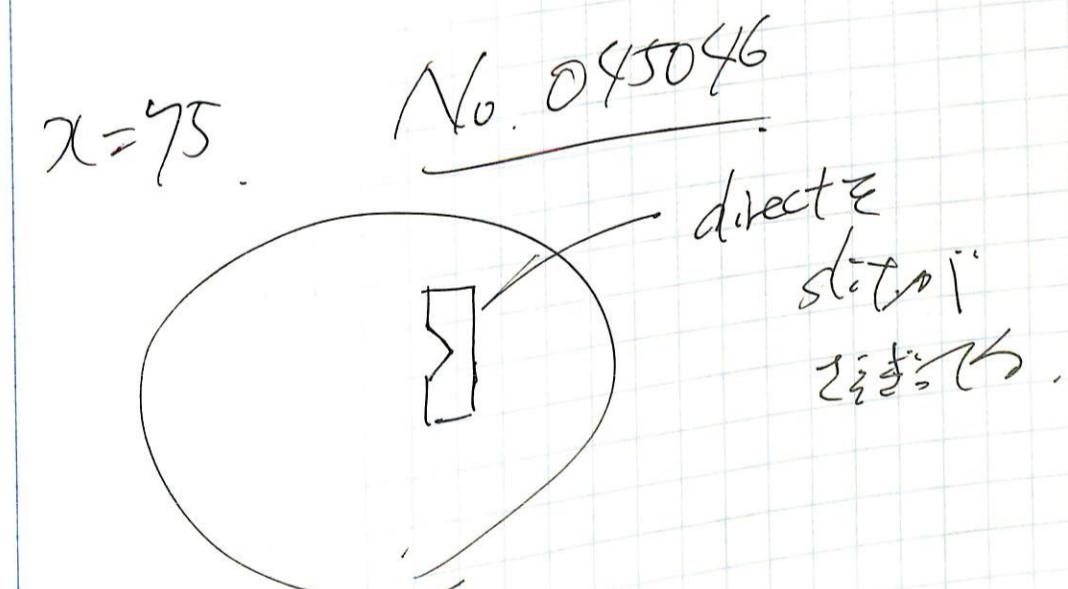
TL: お位置の slit が他のものと直接接続する.



$x = \cancel{60}$ No.

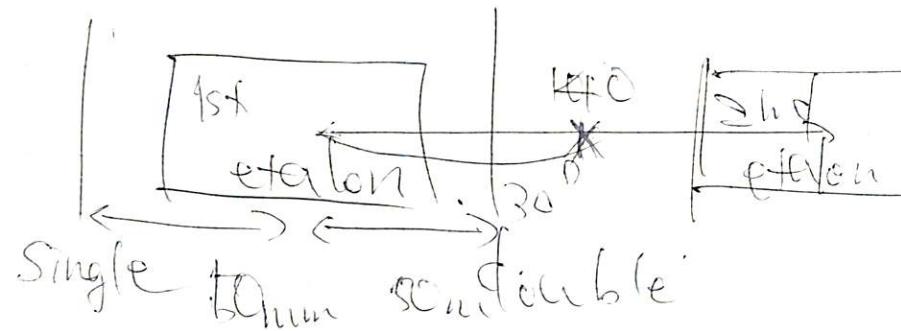


$x = 70$ No.



slit ~~は~~ single, double & 80mm x 30mm

slit は 高さ 15mm



$\chi = 45$

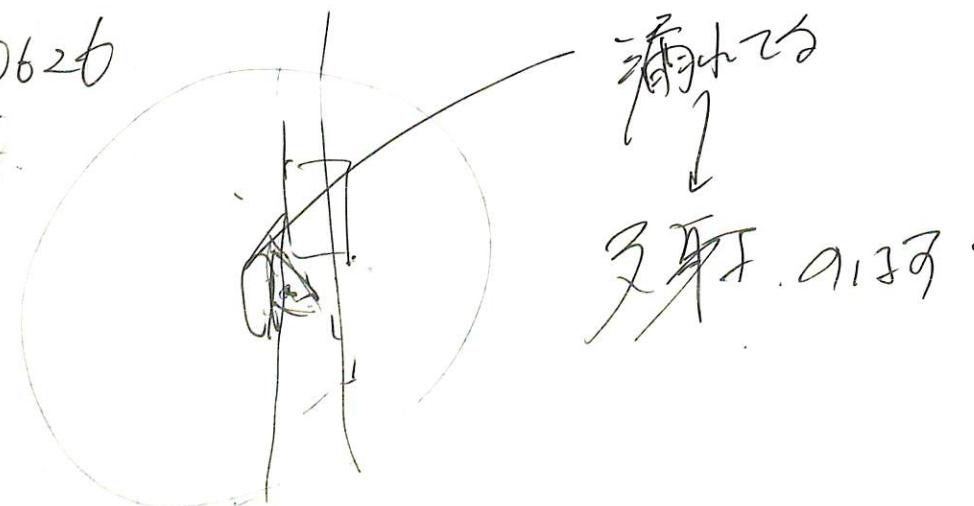
No. 050453

contour

D. director director

No. 050626

$\chi = 45$



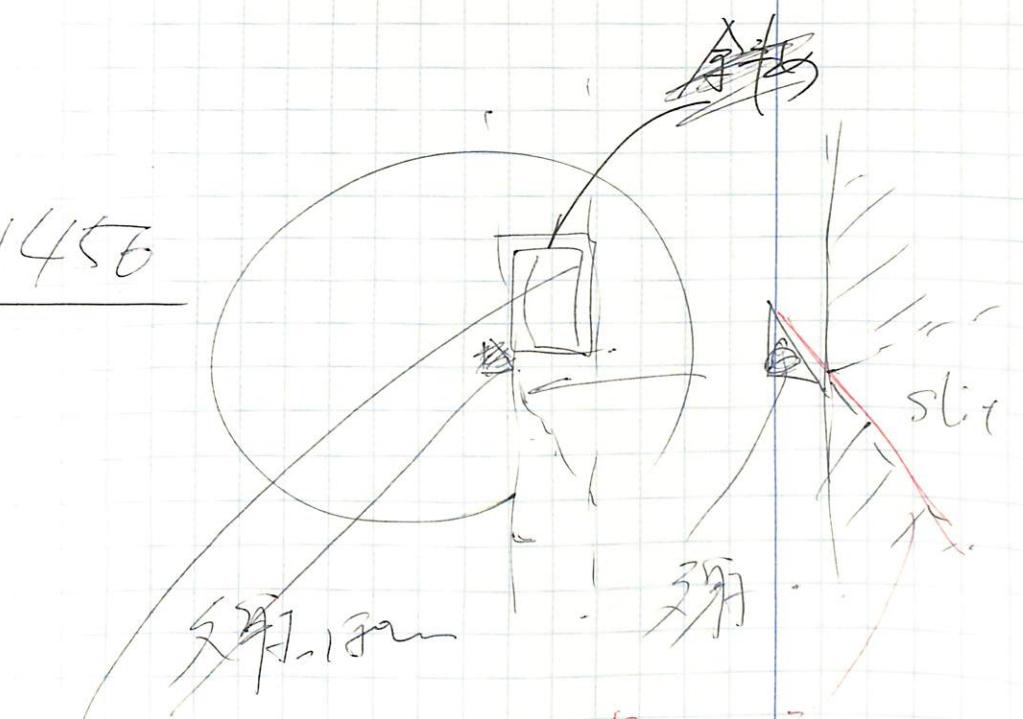
$\chi = 80$

No. 051411

OKura 27.

$\chi = 45$

No. 051456



slit 横 0.3? 10mm

高さ/幅/横 15mm

ホーリー?

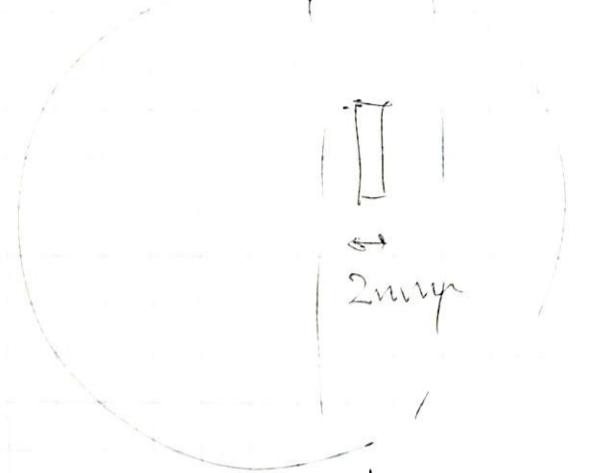
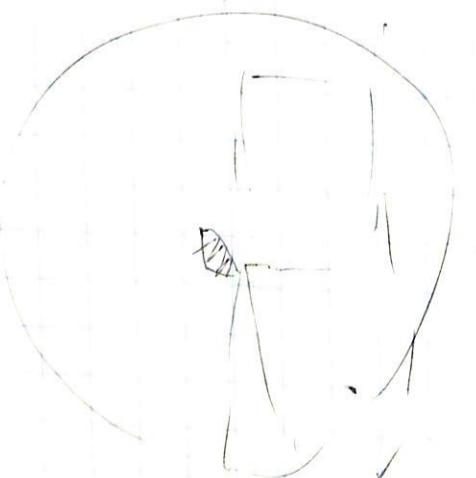
30mm. 9137

OKura 27.

Line slit & summit, 2mm λ

(W 7.72)

173

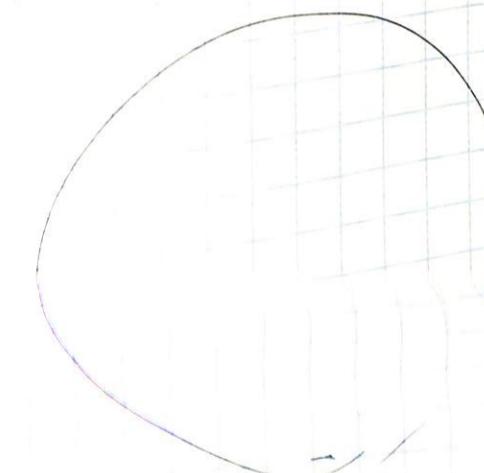
 $x = 49$ $\pm \Delta 6$, 053145 $\theta = 178$ slit 8mm + (目盛 7.72, 2- \bar{A} 1 CBL-1)e. $\theta = 178.5$ No. 053649

cut direct 19

174

 $\theta = 179$ No. 054309

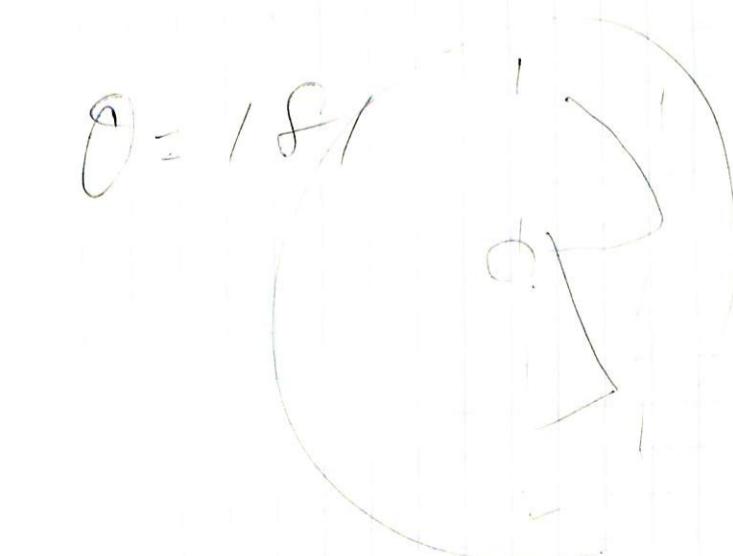
cut direct 15

 $\theta = 180$ No. 054647

No. 055822

cut direct

2.865

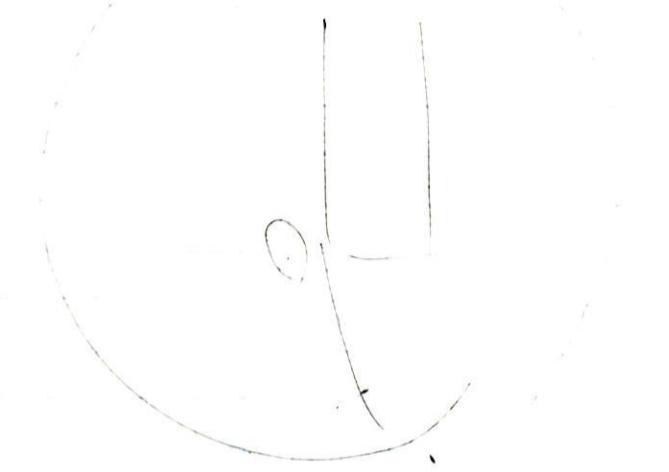
 $\theta = 178^{\circ} 02'$

3° 7' 57"

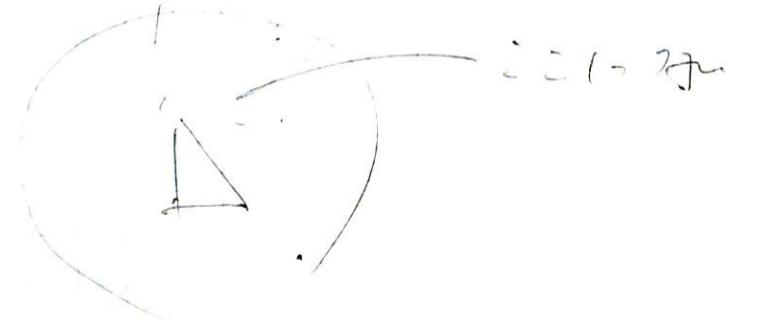
3 mm \times 1 mm

175

$\theta = 177$ No. 055884



$\theta = 183$ No. 060881



$\theta = 177$ No. 061017

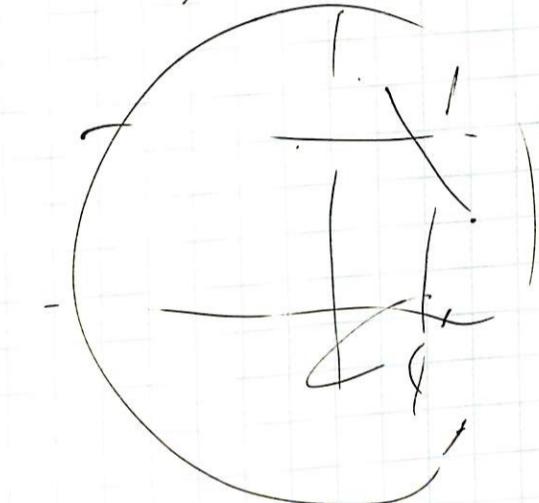
$\theta = 182$, No. 061341



~~$\chi = 72, \theta = 177$~~

$49\text{mm} \rightarrow 55\text{mm}$

$\chi = 55, \theta = 182$ No. 062327



Cut direct
0.96

$\chi = 52, \theta = 182$, No.
out direct 0.2

~~χ~~
50mm 20240228 - etalon - 12.14

素板 2h. No. 062548

$\chi = 49 \sim 51.4, 105^\circ$, No. 064025

$\alpha = 51.5 \approx 53.4$
No. 064743

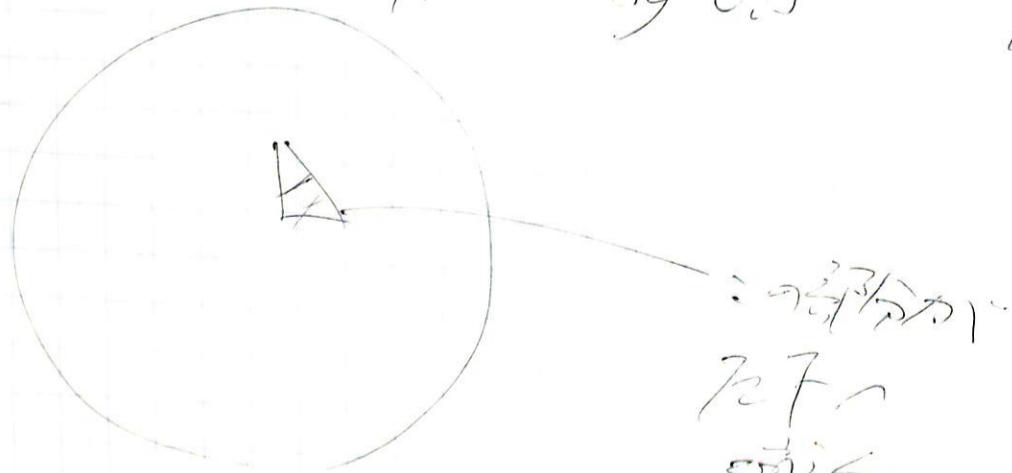
No. 065158

$\alpha = 51.5 \approx 52.5$
305 T-

No. 065748

No. 0702230

$\alpha = 52.3$,
 $\theta = 178^\circ 182^\circ \text{ by } 0.5^\circ$ min T



No. 070833

No. 071716

305 T- 727.770 1013 4547627 T-10

20 files

34.17 cm

0.74

11 files

305 T-

$\theta = 182.5 \approx 185.5$ by 0.5

min

reflect

172.

185.5 T.

direct

270 = 0 完 - 頭 - 172

direct 171.7 - 180.5 ≈ 181.5 T.

eff 2.5

180.5 ≈ 181.5 0.1 deg T

theta - elev. survey 3 m

11 files

No.

原因の実験を続。

double slit 24を除いて

θ , H の見えた方向をみて

Count A (カウント) が原因か

2nd slit 2

原因?

double slit 3. X83

原因?

No. 081305

$\theta = 183.5^{\circ}$ reflect 2nd slit

(G2)

Cetalon

183.5

θ 081521

081724

081820

081856

179

17

182

181

180

178

177

176

175

174

173

172

171

170

169

168

167

166

165

164

163

162

161

160

159

158

157

156

155

154

153

152

151

150

149

148

147

146

145

144

143

142

141

140

139

138

137

136

135

134

133

132

131

130

129

128

127

126

125

124

123

122

121

120

119

118

117

116

115

114

113

112

111

110

109

108

107

106

105

104

103

102

101

100

99

98

97

96

95

94

93

92

91

90

89

88

87

86

85

84

83

82

81

80

79

78

77

76

75

74

73

72

71

70

69

68

67

66

65

64

63

62

61

60

59

58

57

56

55

54

53

52

51

50

49

48

47

46

45

44

43

42

41

40

39

38

37

36

35

34

33

32

31

30

29

28

27

26

25

24

23

22

21

20

19

18

17

16

15

14

13

12

11

10

9

8

7

6

5

4

3

2

1

Xetalon 5h 084525 C : REAM. 開け
西方奥入瀬。

090025 +7747-117e. 動かすやつ

091415 +7711,

No. 083733 a setup 両現

1st etalon 1-17 当て

2nd etalon 1-17 あうす

27127-6当て a Zunsta