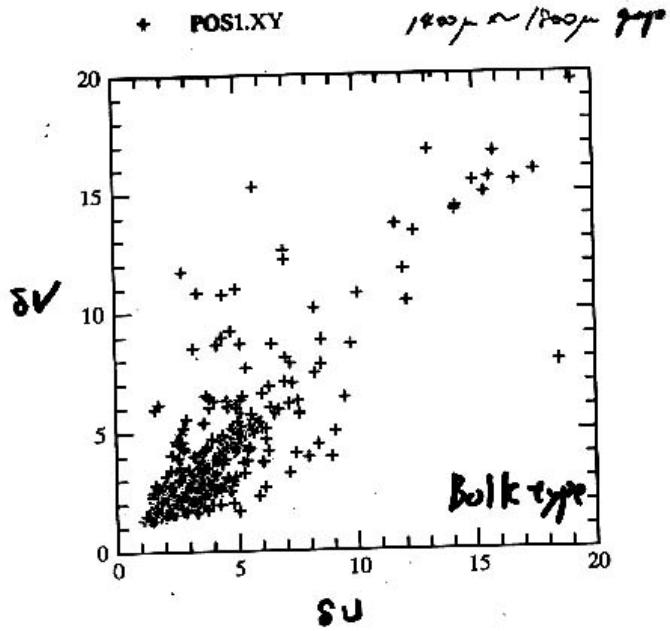
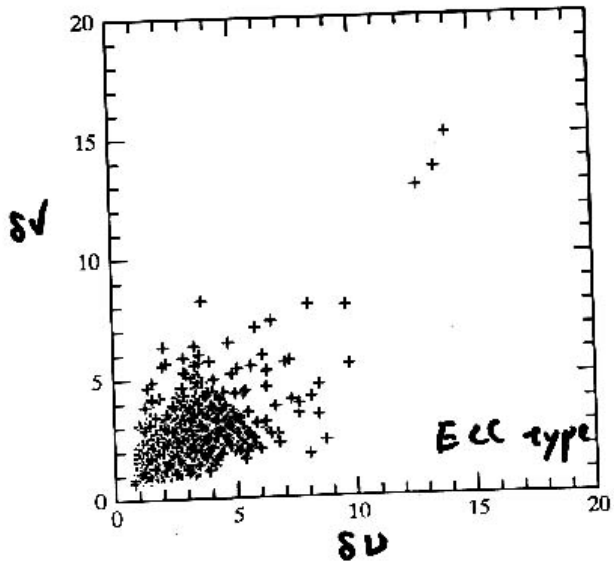
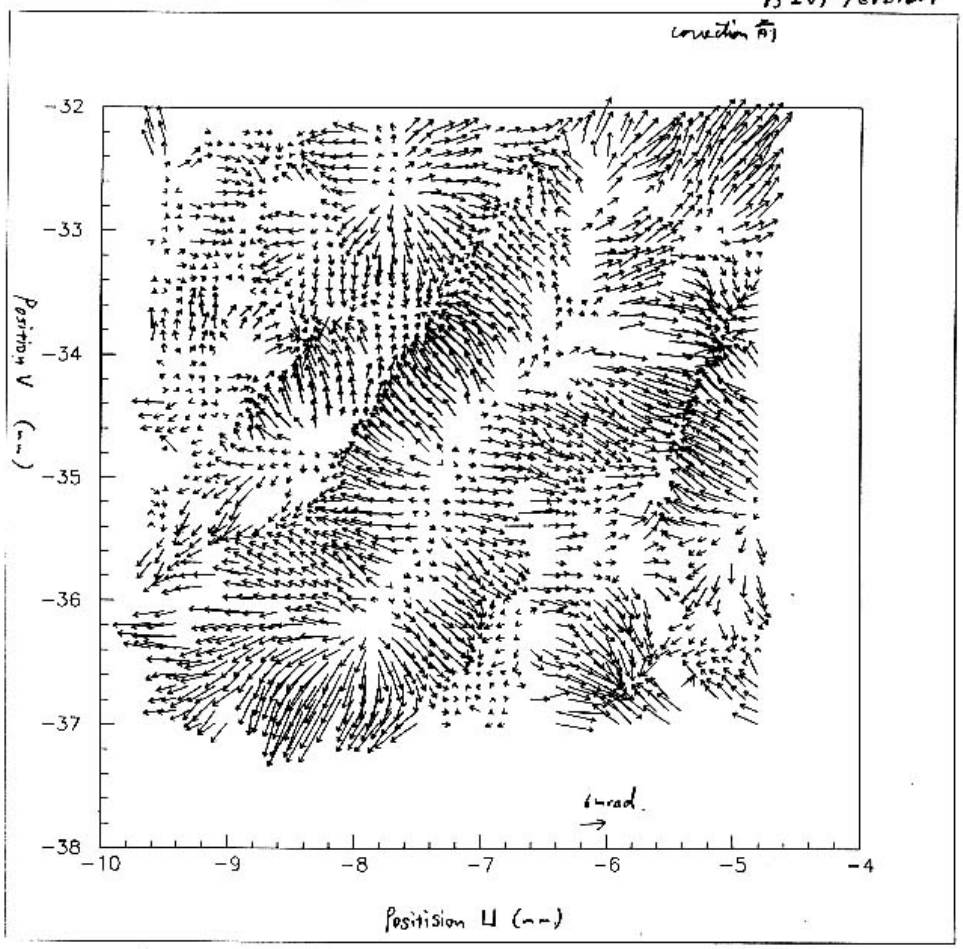

+ POS1.XY
1400μ ~ 1800μ gap
δV
δU
Bulk type

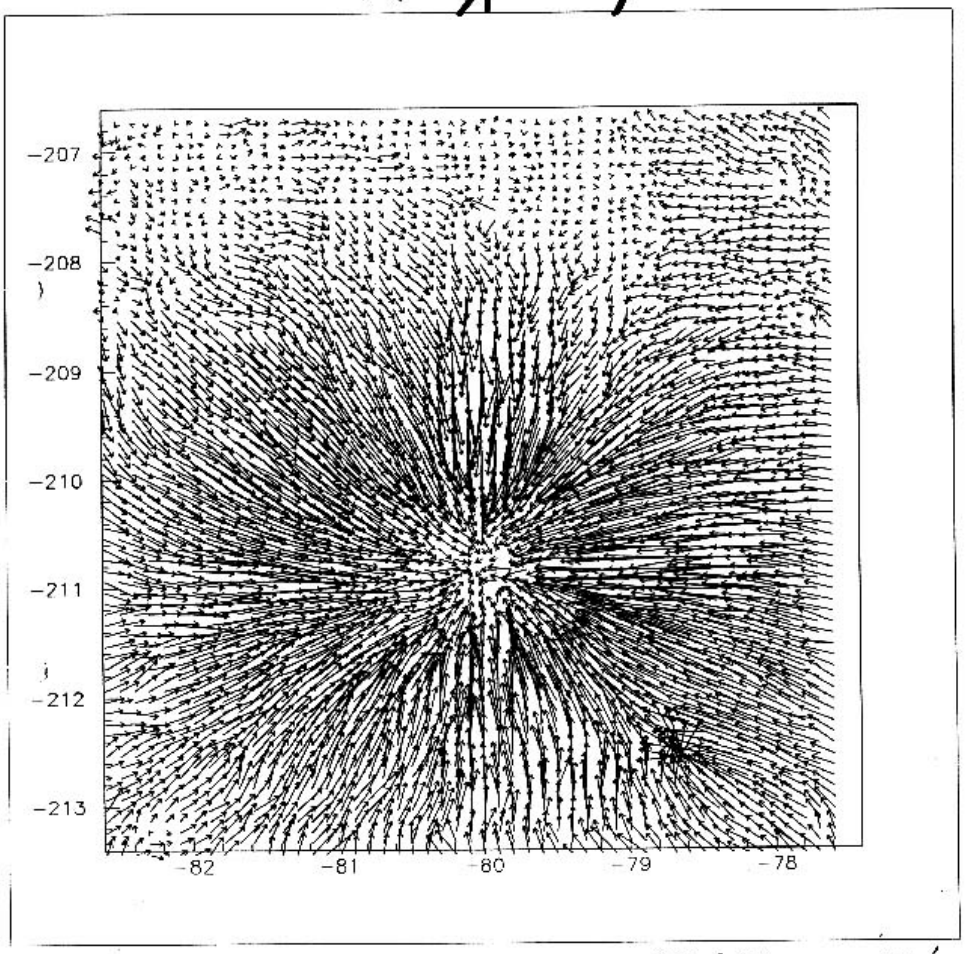

δV
δU
Ecc type

Donuts Bulk.

r3267 /ev24207

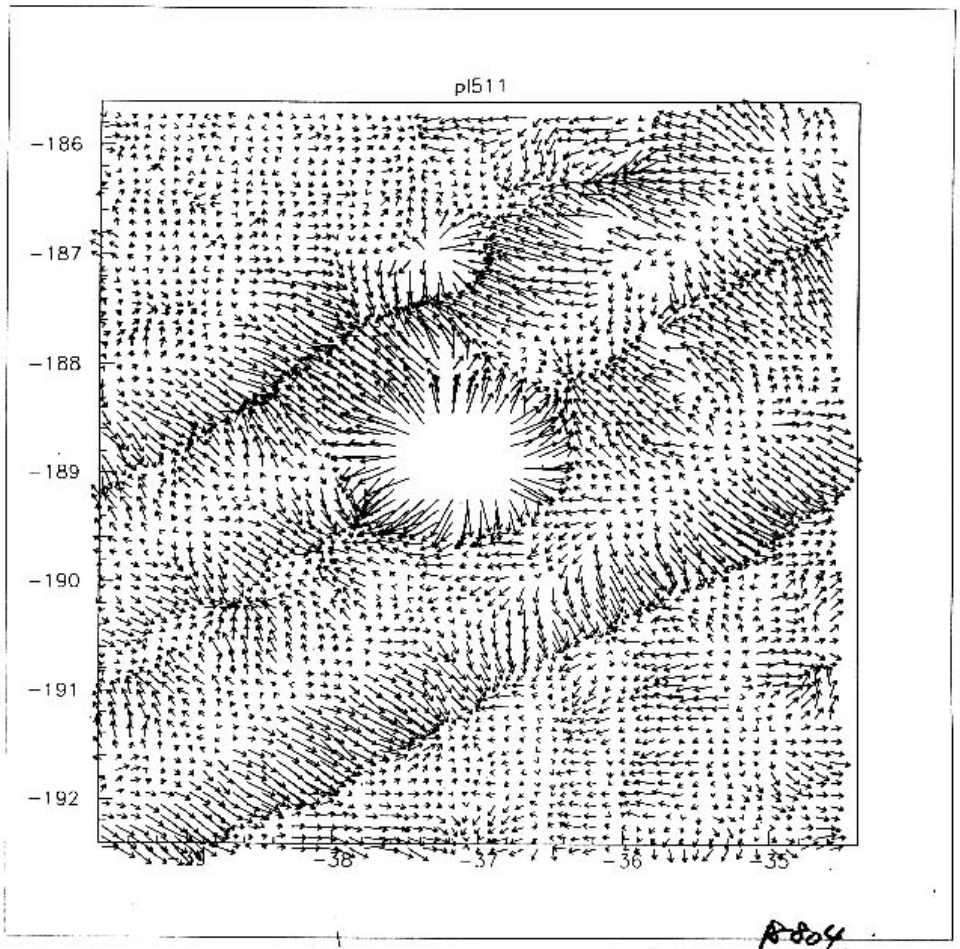


Film type 200 μ Base



3071/8676 Pl 5/151

800 μm Base



R804
r3072/ev ~~R731~~

* Problem of Net Scan Data

Nonaka. Nagoya

1. Efficiency of picking up track segments.

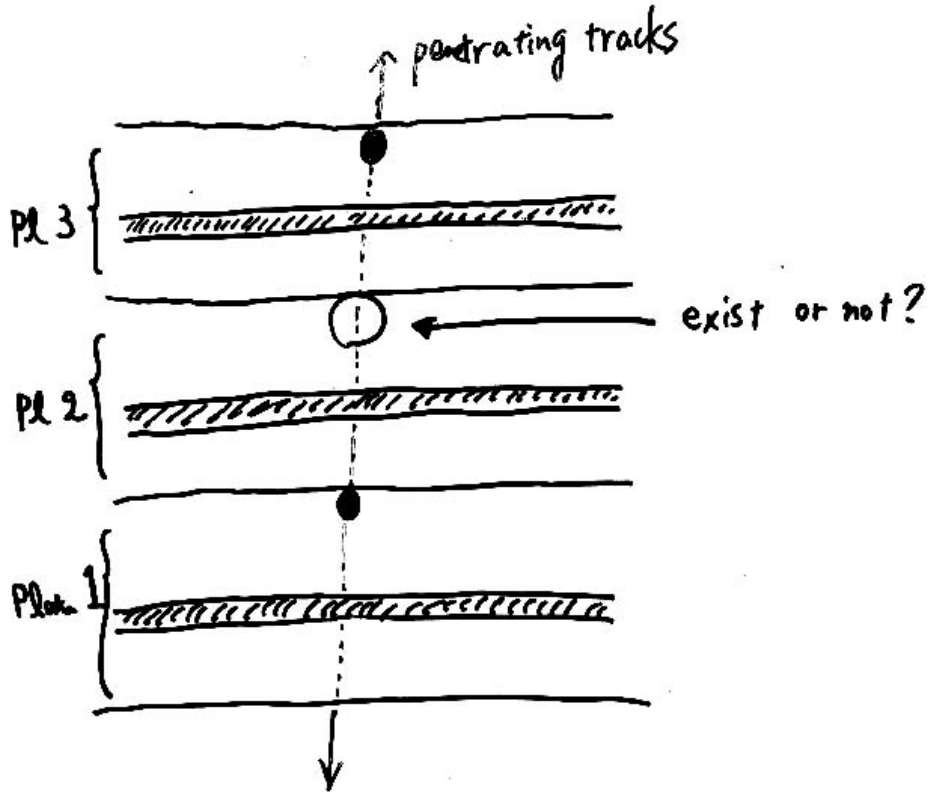
2. Movement emulsion plate on taking the Data

1 Efficiency of picking up track segments

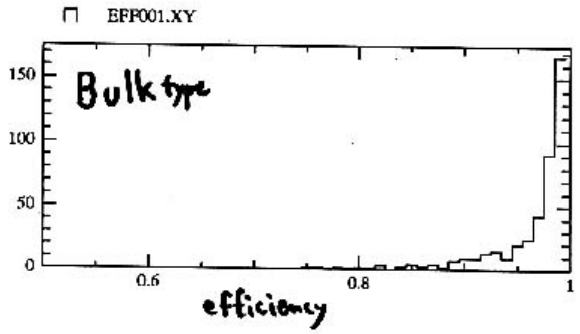
[Method]

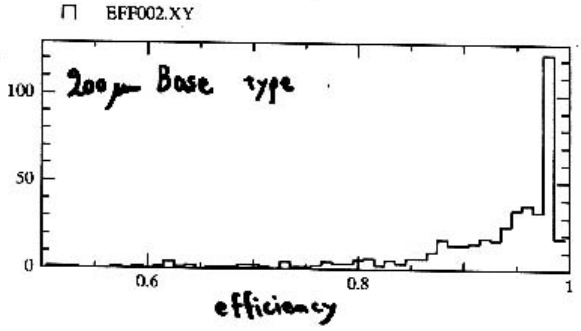
By using the penetrating track,

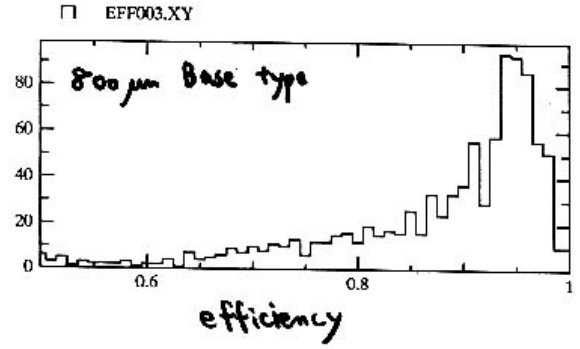
I've checked efficiency $\equiv \dfrac{Pl2}{Pl1 \cdot Pl3}$



Efficiency check (From April to 18/July)

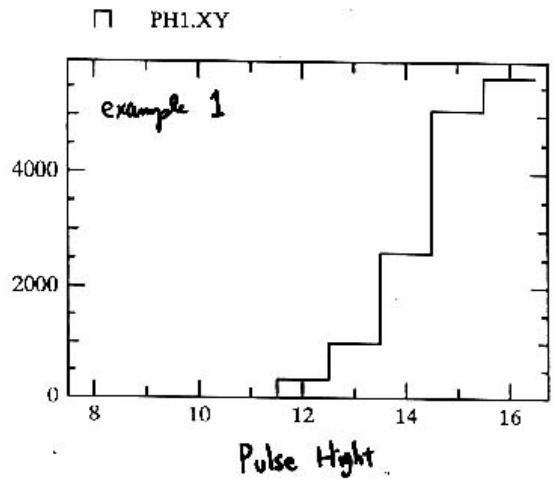


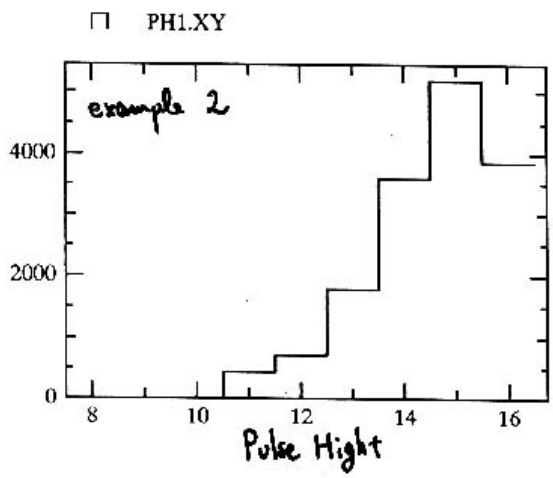




Pulse Hight distribution

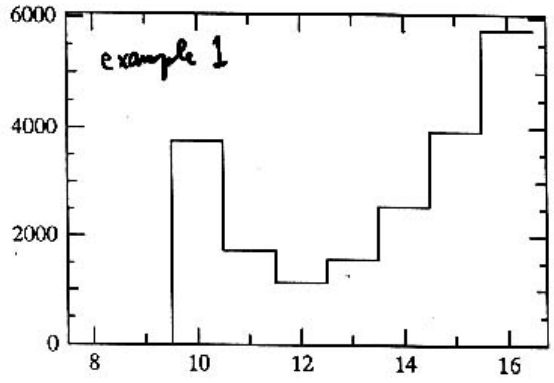
— Bulk type —

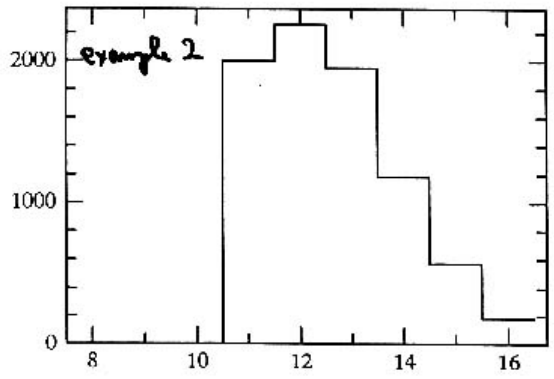




Pulse Hight Distribution

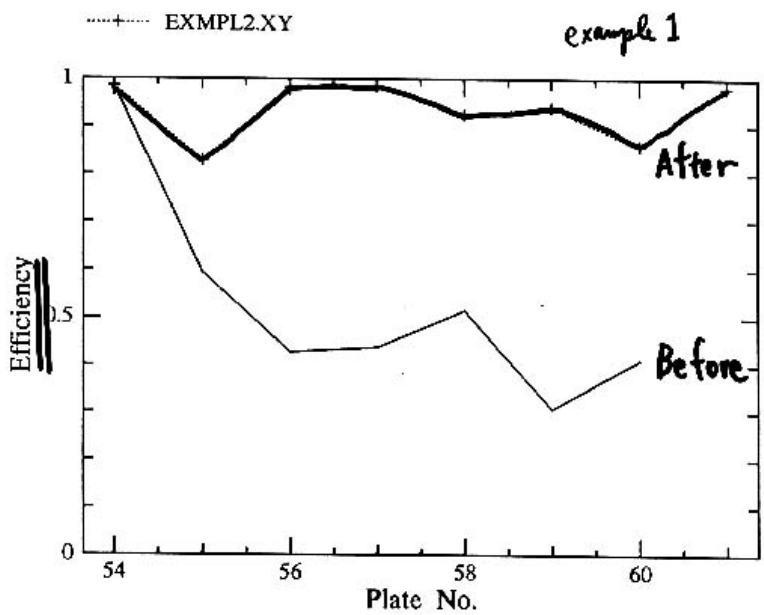
— 800 μm Base type —



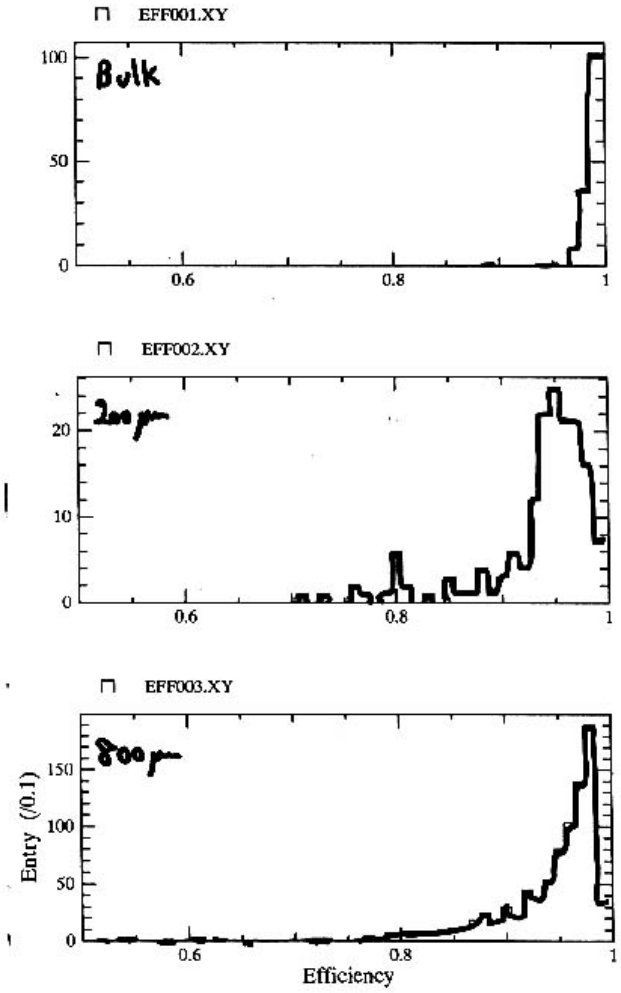


Descide PH threshold at Online

Pre-Scanning
↓
Checking PH distribution
↓
Start Main Scanning



Efficiency check (From 18/July ~)



- Short Summary -

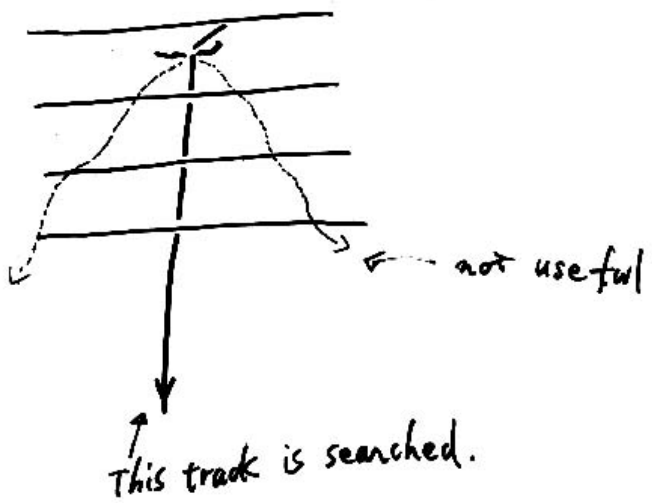
1. Pulse Hight distribution change by each emulsion.
   So we must descide the PH threshold by each
   But, not only that cause, another exist.
   → Now studying.

2. By changing Humidity, Temperature,
   emulsion plate is moving on the stage,
   if not strictly fixed on the stage.
   → Require more stable condition
   in the room.

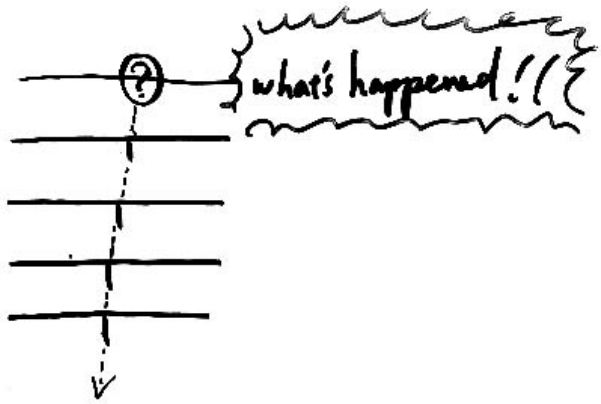
☆ Searching 'Single stop track' (VTX)

☆ Change the way of thinking about location

If we search the High Momentum stop track,
we will be able to locate the VTX.
not need all VTX tracks for VTX location.



☆ What is 'stop track'?

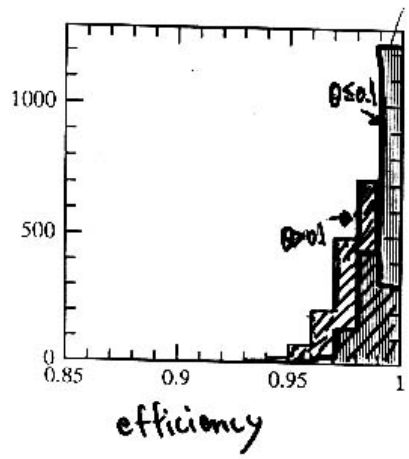


[used Data]

- CHORUS experiment Bulk emulsion
- Data size 2.4 cm × 2.4 cm × 1.6 cm (19 plate)
- 20000 tracks exist init.

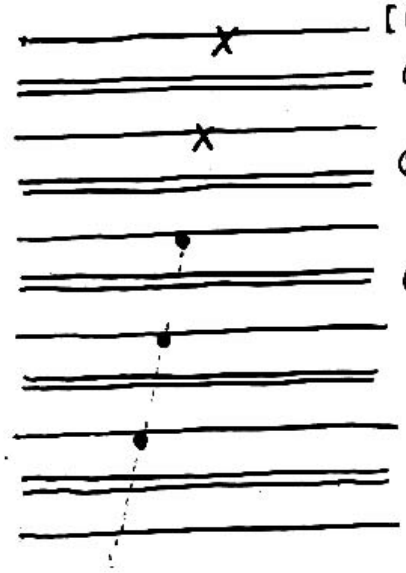
Data check

- linkage efficiency



98.8% efficiency of linkage

Judgement 'stop tracks'

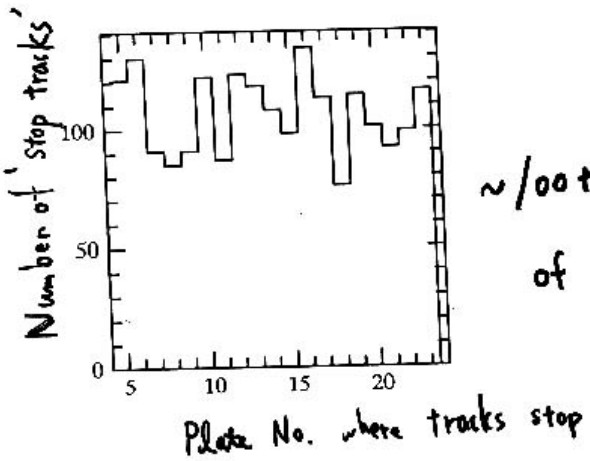


[Conditions]

① Can connect between 3 plates

② Cannot find the candidate tracks, at upper 2 plates

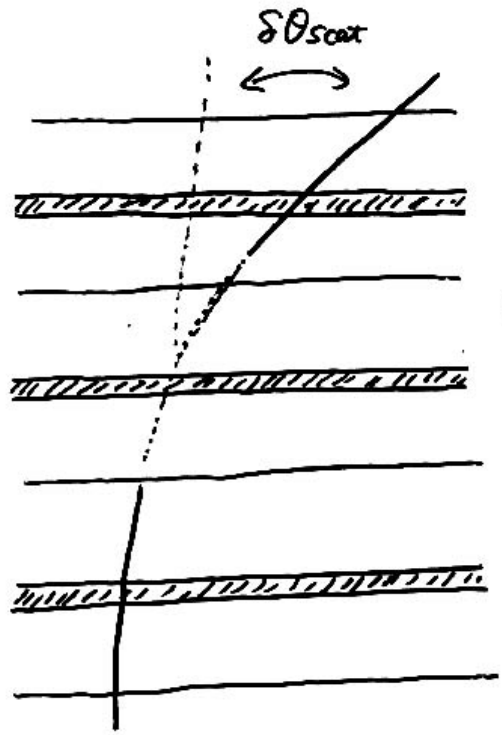
③ Tracks angle ≤ 0.1 rad (Temporary condition)



~100 tracks / plate.

of 18,800 tracks

Linkage for Multiple Scattering



$$\delta\theta_{scat} = \frac{21}{P}\sqrt{\frac{t}{X_0}}$$

Angle allowance

$$= \sqrt{\delta\theta_{meas}^2 + \delta\theta_{scat}^2}$$

position allowance

also. estimate.

★ Result of Net scan

check 'stop tracks' in the emulsion

	Number of stop tracks	After re-link (P≥1 GeV/c)
1ry VTX	9	9
2ry VTX	4	4
e-pair etc.	91	87
knock on electron	6	6
Low momentum	137	40 ※
On the FO mark Dust	14	14
not yet check.	31	31
	292	191

※ 20000 tracks $\times \underbrace{(\text{inefficiency})^2}_{\sim 0.01} = 36$ tracks

$\times$ 19 plate