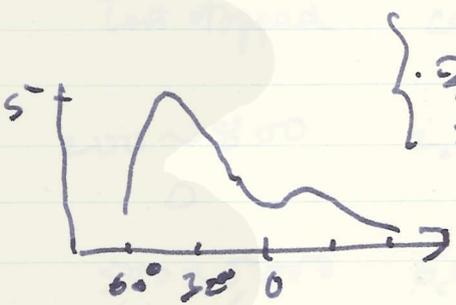


(2)

Fall-out : Sr^{90} , Ce^{137} ; C^{14} ; Pu , U 等
 1957年中期 Sr^{90} mc/km^2 1958年中期

Japan 8
 U.K. 0.8
 U.S.A. 4~21
 U.S.S.R. 3~10
 北半球: 北緯から南緯へ



700の
 223倍

fall-out rate 平均

$R_0 = 1.5 \text{ } \mu\text{C}/\text{km}^2 \cdot \text{y}$

平均 7 mc/km^2
 Japan U.K. USA USSR

Sr^{90} in bones
 of children (0~5 y)

S.U. ('57) 1.14 0.67 2.3
 (1 $\mu\text{C}/\text{cm}^2$) 12米 milk
 food (S.U.) 36262 3026.7 (1956)
 (marrow a few m rem/y)

Ce^{137} 25 $\mu\text{C}/\text{g K} \sim 70 \mu\text{C}/\text{g K}$

(gonad 1~2 m rem/y)

1958年 北緯から南緯へ

20 $\mu\text{C}/\text{km}^2 = \text{Max. } 20 \text{ } \mu\text{C}/\text{km}^2$

平均 30 y dose
 0.09 ~ 0.075 rem

検査: 77%

Contamination a R + b D

R: fall-rate

D: cumulative ground deposit

Gonad (30 y)

U.K. 0.011
 0.04 ~ 0.1

(Japan $\mu = 0.8$ (4%))

Marrow (70 y)

U.K. + U.S.A. 0.011
 0.7 ~ 1.8

rem

Japan 0.50
 3.5 ~ 8.6

Test stopped
 continued

Kodak Color Control Patches

Blue Cyan Green Yellow Red Magenta White 3/Color Black

May 10, 1958 (3)

遺伝的: Genetic effect

doubling dose: 10 rad ~ 100 rad

case per year: Natural Test stopped continued

Leukemia

Threshold 0	16,000	200 ~ 800	2,000 ~ 30,000
400rem	0	0	0

Bone tumour

0	15,000 ~ 30,000	500 ~ 5,000	6,000 ~ 120,000
800rem	0	0	0

Major genetic defects

30,000 ~ 120,000	(total 3,000 ~ 120,000)	1,000 ~ 120,000
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体質的: Somatic effect

造血比: 造血
 骨髄

永久的障害
 一時的

造血比: 白血球, 骨髄細胞.

