

appendix c

APPENDIX C

FLOOD FREQUENCY PLOTS

LIST OF FIGURES

<u>Data</u>	<u>Period</u>	<u>Log Pearson III</u>	<u>Log Normal</u>	<u>3 Parameter Log Normal</u>	<u>Gumbel I</u>
<u>Grenville</u>					
1. Max. Peak Annual	1870-1910	C-1	C-10	C-19	C-28
2. Max. Peak Annual	1870-1950	C-2	C-11	C-20	C-29
3. Max. Peak Annual	1870-1980	C-3	C-12	C-21	C-30
4. Max. Peak Annual	1911-1950	C-4	C-13	C-22	C-31
5. Max. Peak Annual	1911-1980	C-5	C-14	C-23	C-32
6. Max. Peak Annual	1951-1980	C-6	C-15	C-24	C-33
7. 1st Peak of Year	1911-1980	C-7	C-16	C-25	C-34
8. 2nd Peak of Year	1911-1980	C-8	C-17	C-26	C-35
9. 2nd Peak of Year	1970-1980	C-9	C-18	C-27	C-36
<u>Chats Falls</u>					
Annual Peak	1915-1980	C-37	C-38	C-39	C-40

OTTAWA R AT GRENVILLE 1 1870-1910
 LOG PEARSON TYPE III DISTRIBUTION
 PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

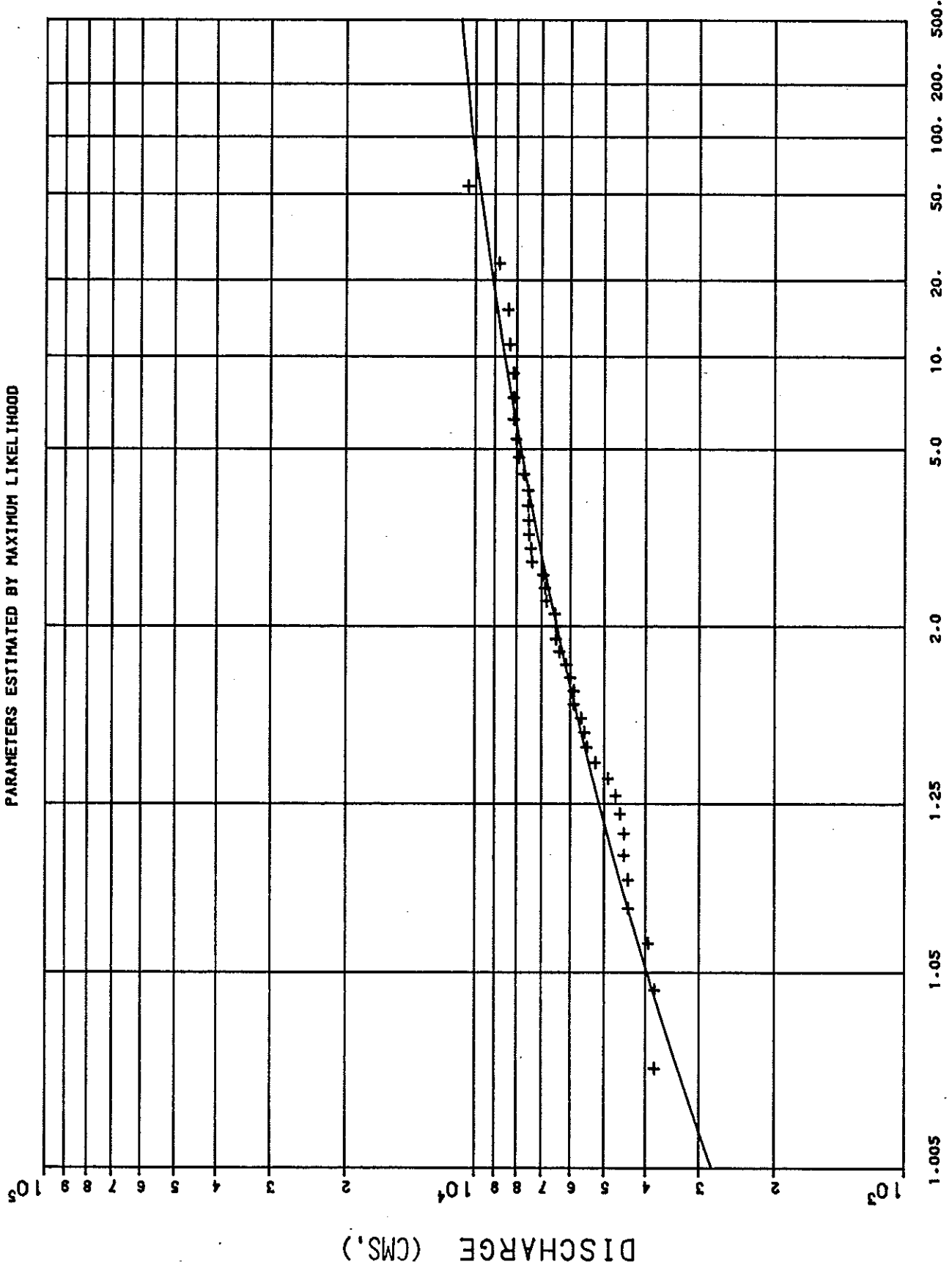


FIGURE C-1

GRENVILLE 2 1870-1950
 LOG PEARSON TYPE III DISTRIBUTION
 PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

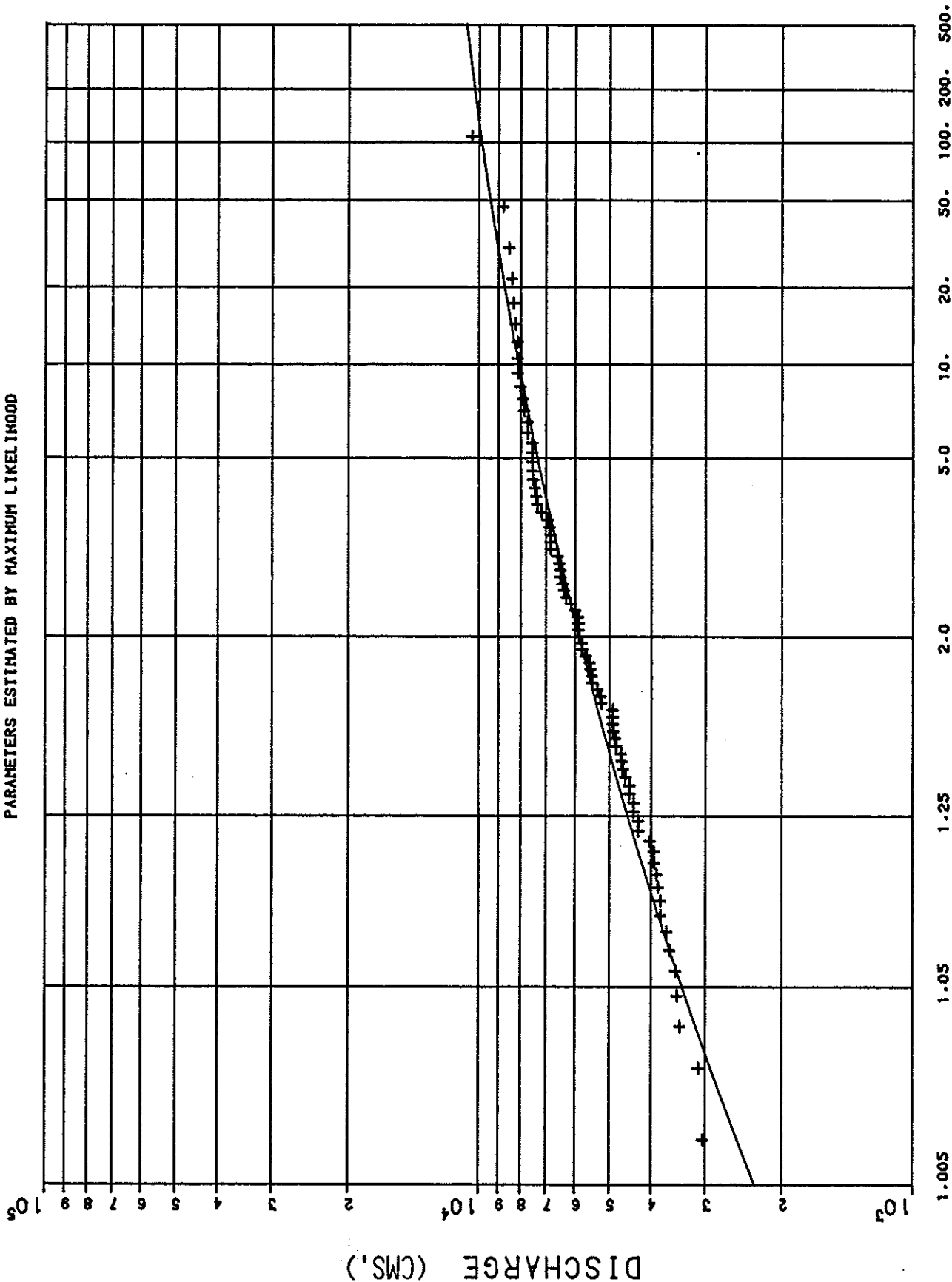


FIGURE C-2

GRENVILLE, QUE. 1870-1980 ANNUAL PEAK FLOWS R.C.#1
LOG PEARSON TYPE III DISTRIBUTION

PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

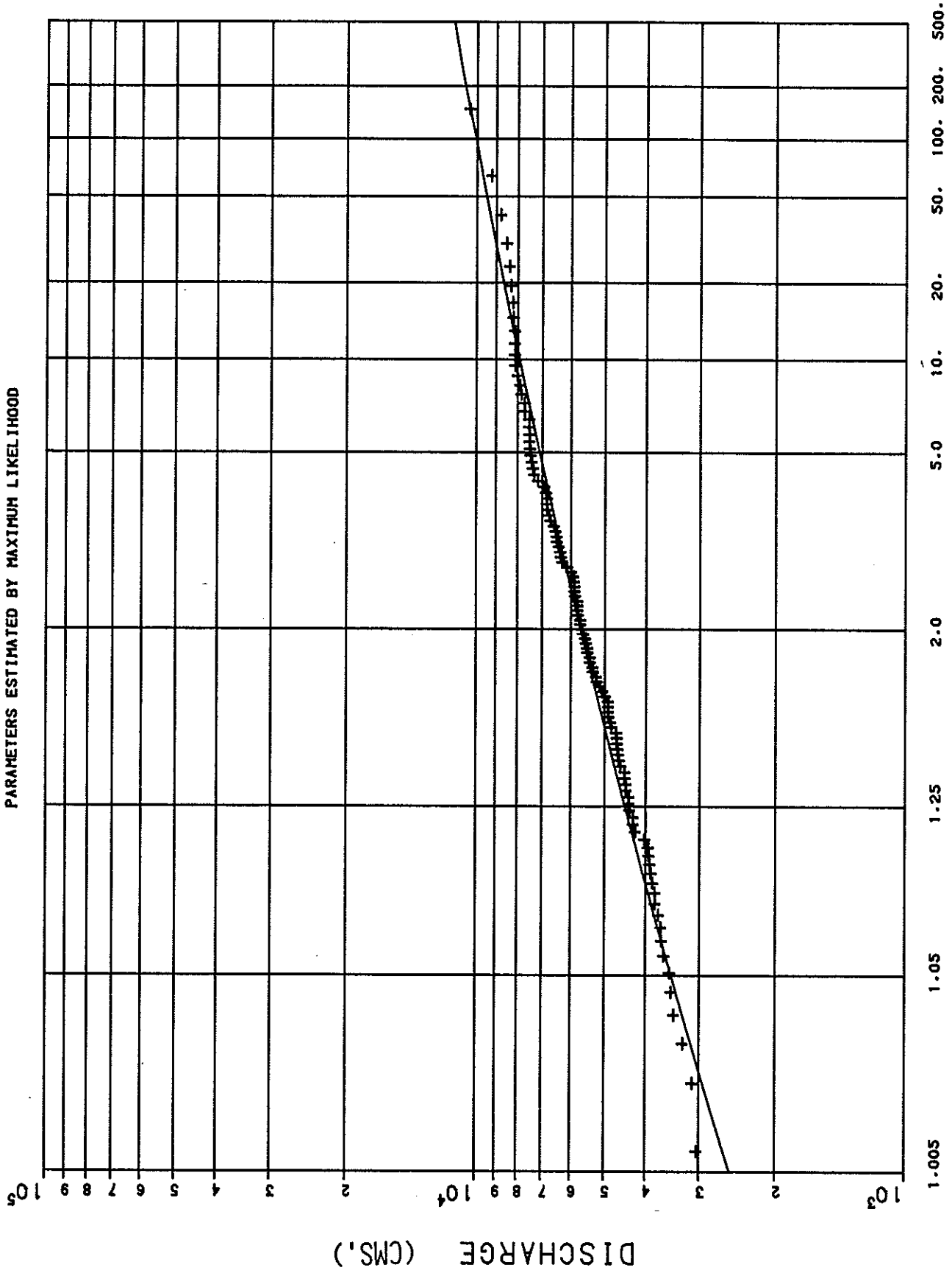


FIGURE C-3

GRENVILLE 4 1911-1950
 LOG PEARSON TYPE III DISTRIBUTION
 PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

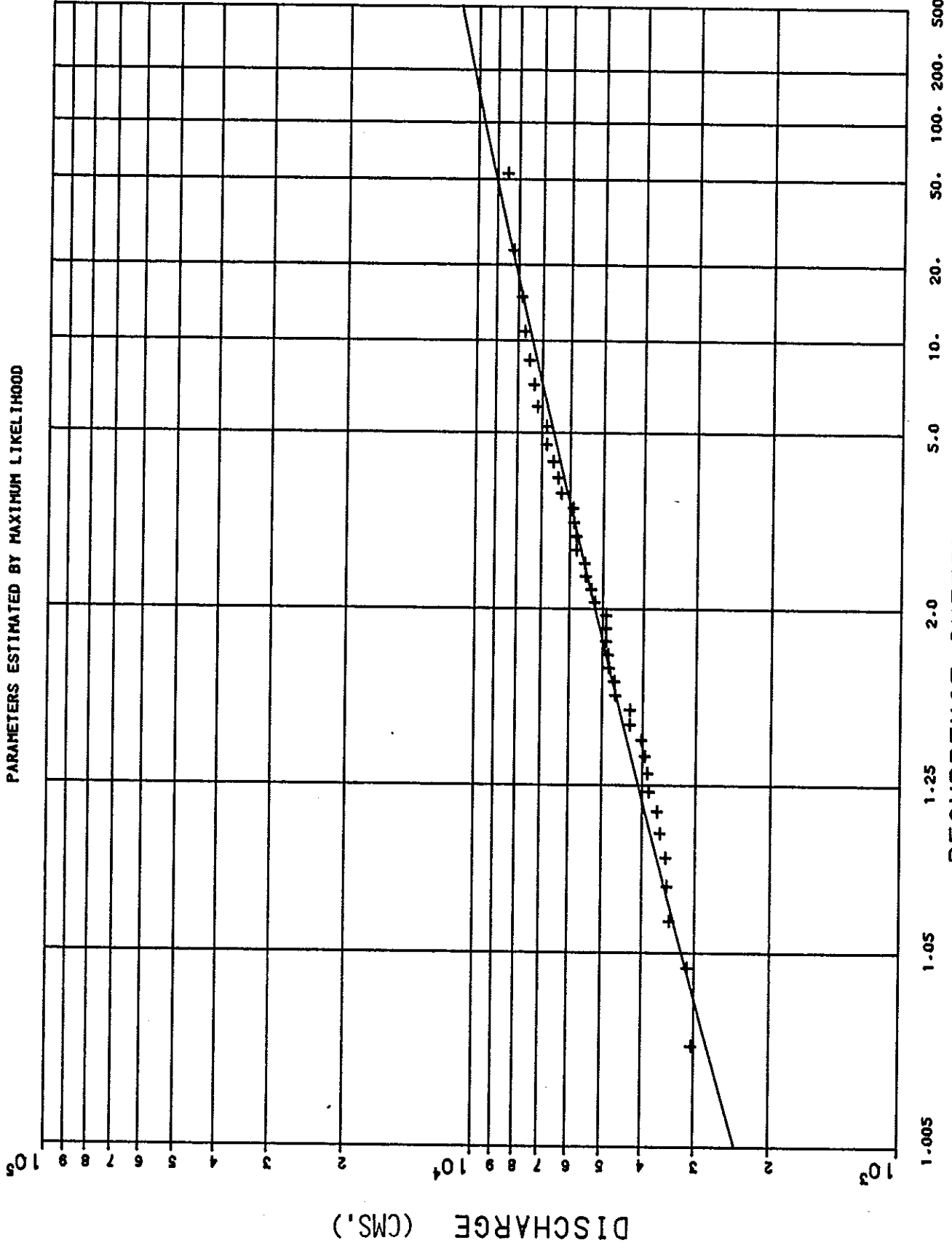


FIGURE C-4

GRENVILLE 5 1911-1980

LOG PEARSON TYPE III DISTRIBUTION

PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

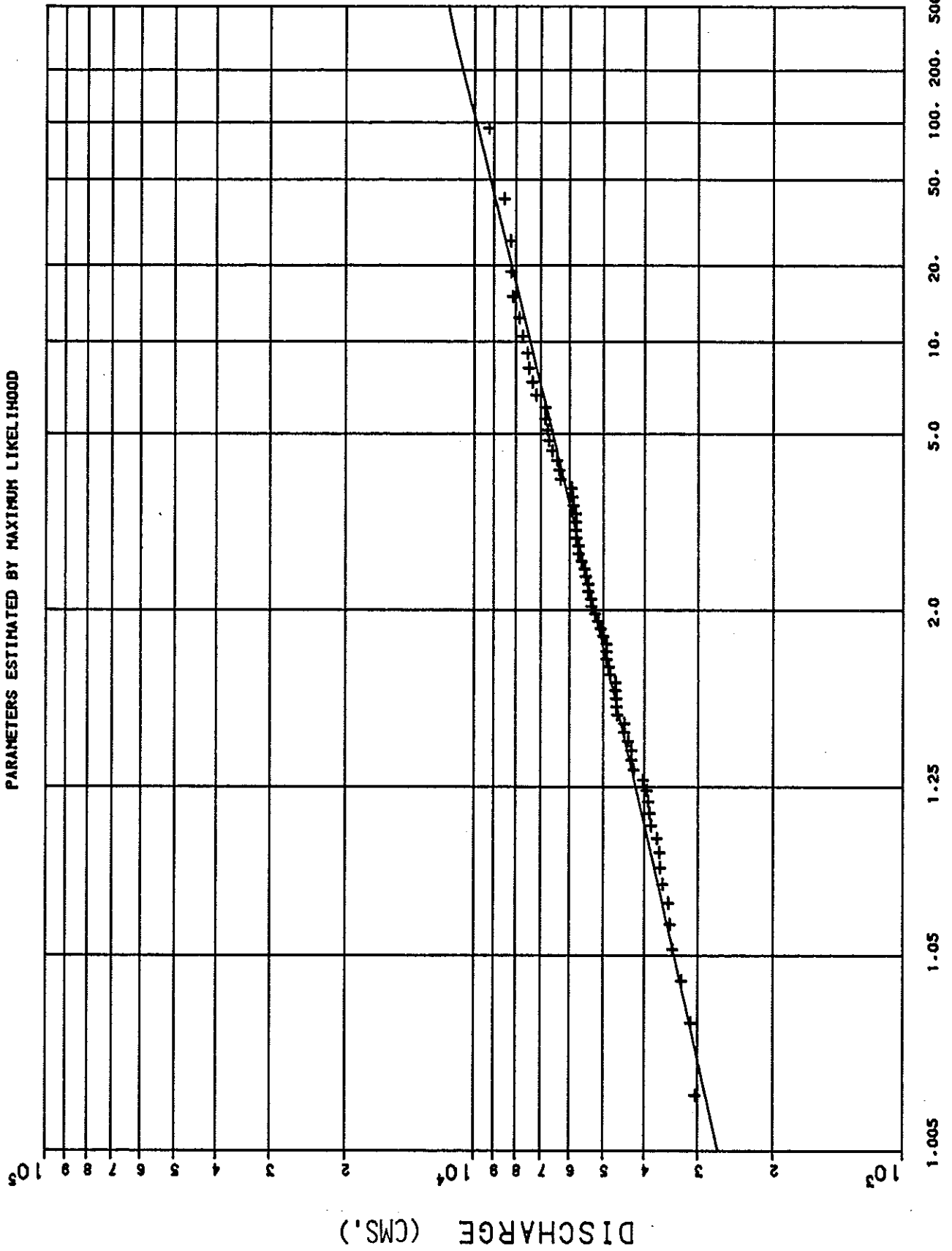


FIGURE C-5

GRENVILLE 6 1951-1980

LOG PEARSON TYPE III DISTRIBUTION
PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

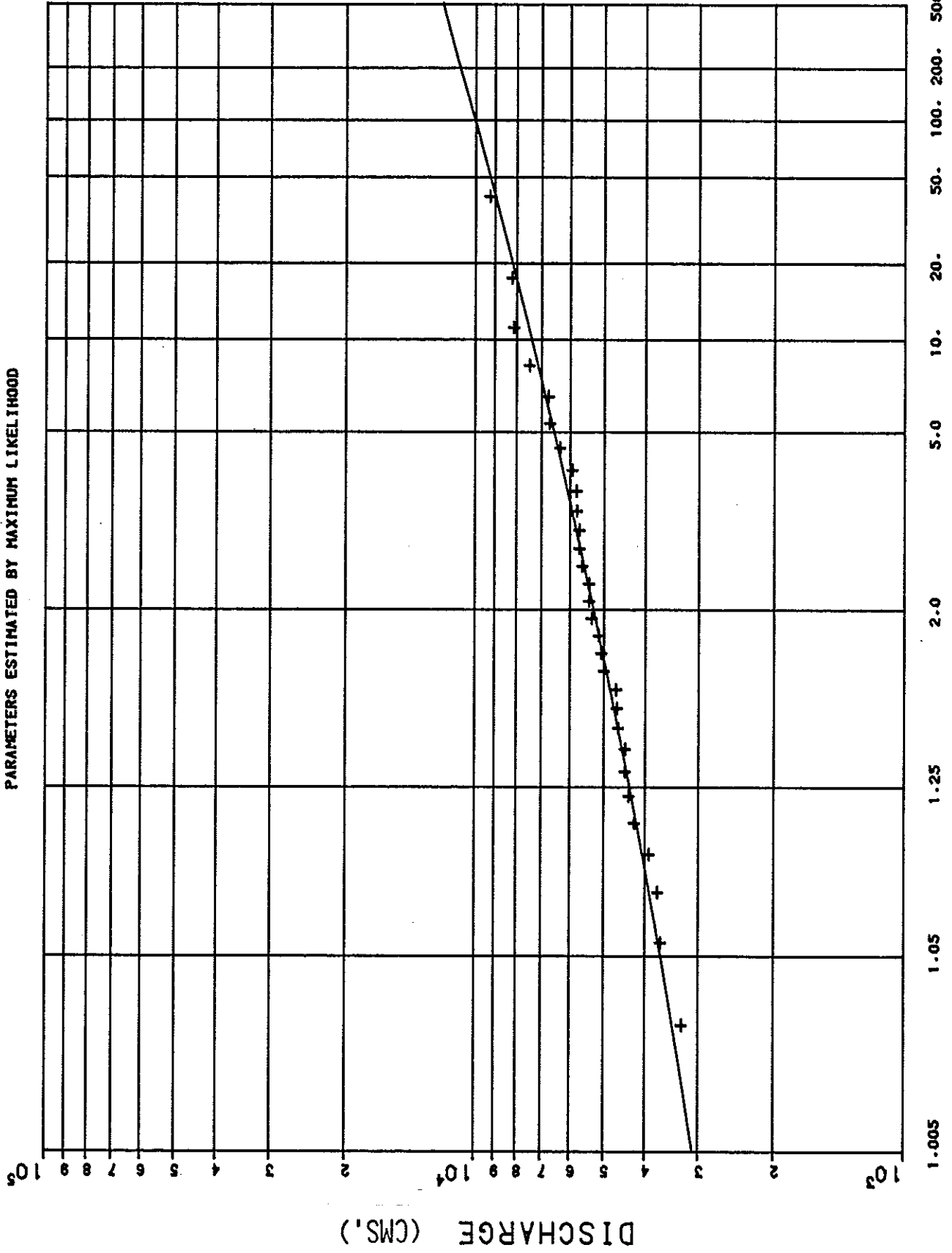


FIGURE C-6

GRENVILLE 7 1911-1980

LOG PEARSON TYPE III DISTRIBUTION
PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

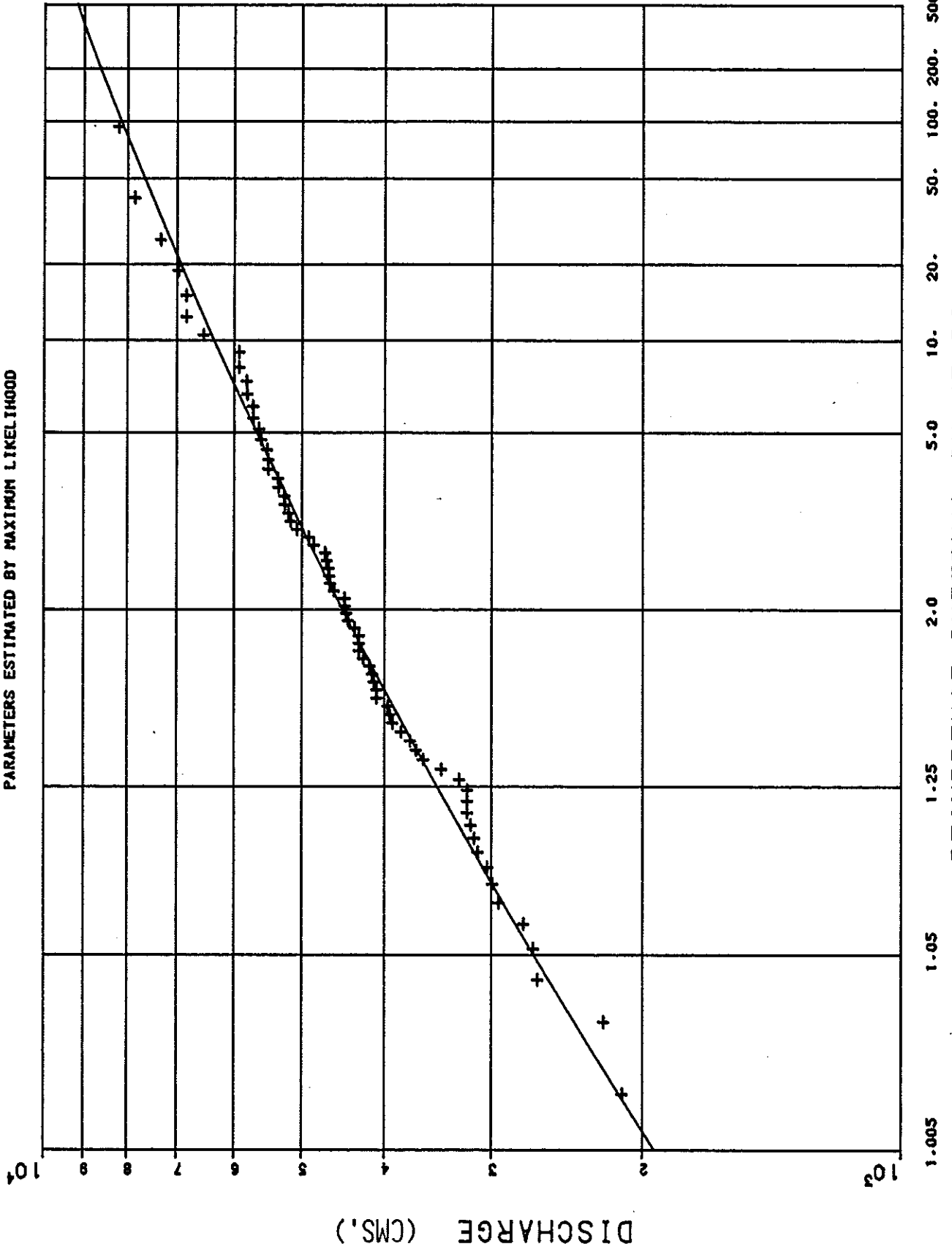


FIGURE C-7

GRENVILLE 8 1911-1980
 LOG PEARSON TYPE III DISTRIBUTION
 PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

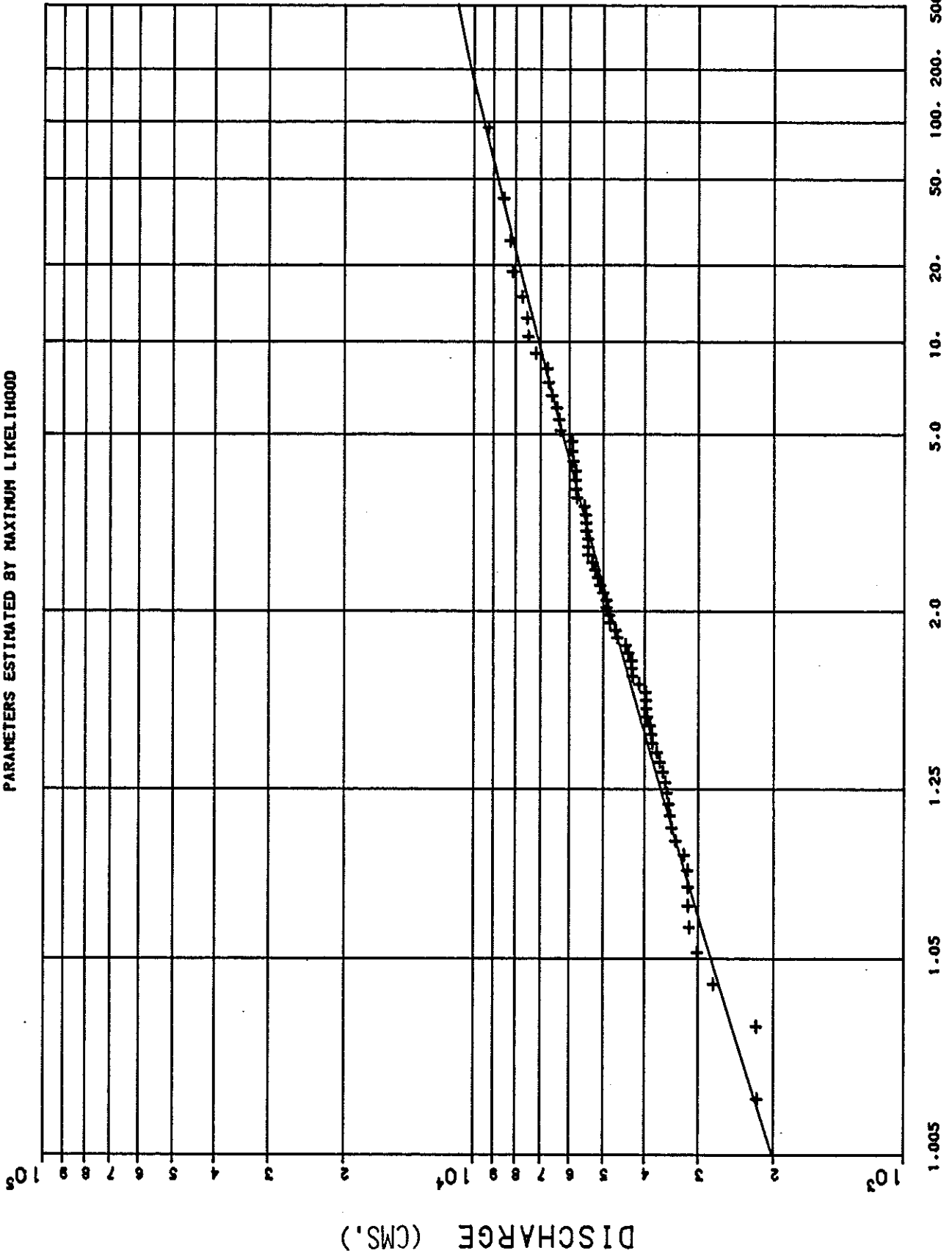


FIGURE C-8

GRENVILLE 9 1870-1980
 LOG PEARSON TYPE III DISTRIBUTION
 PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

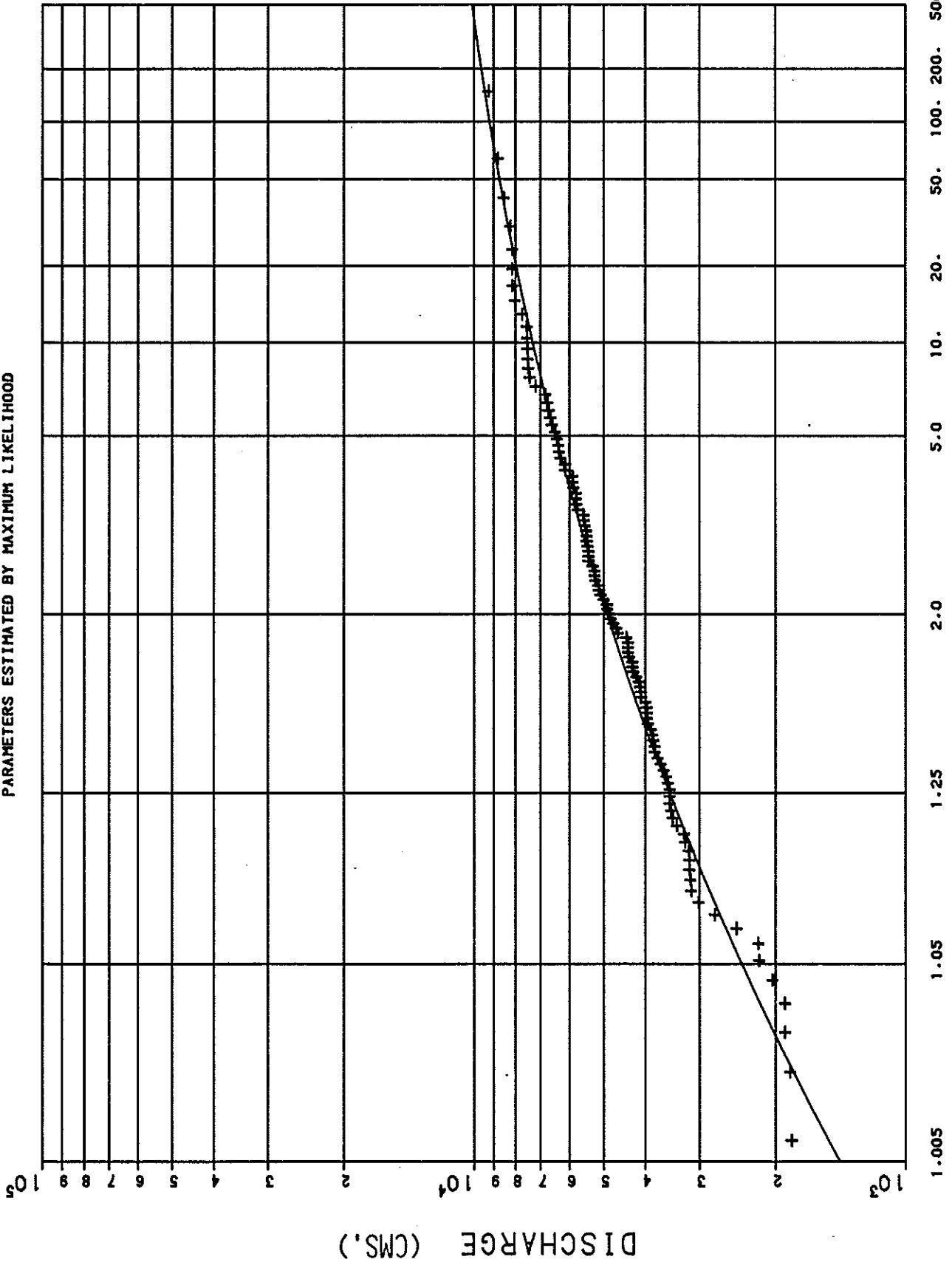


FIGURE C-9

GRENVILLE, QUE. 1870-1910 ANNUAL PEAK FLOWS R.C.#1

LOG-NORMAL DISTRIBUTION

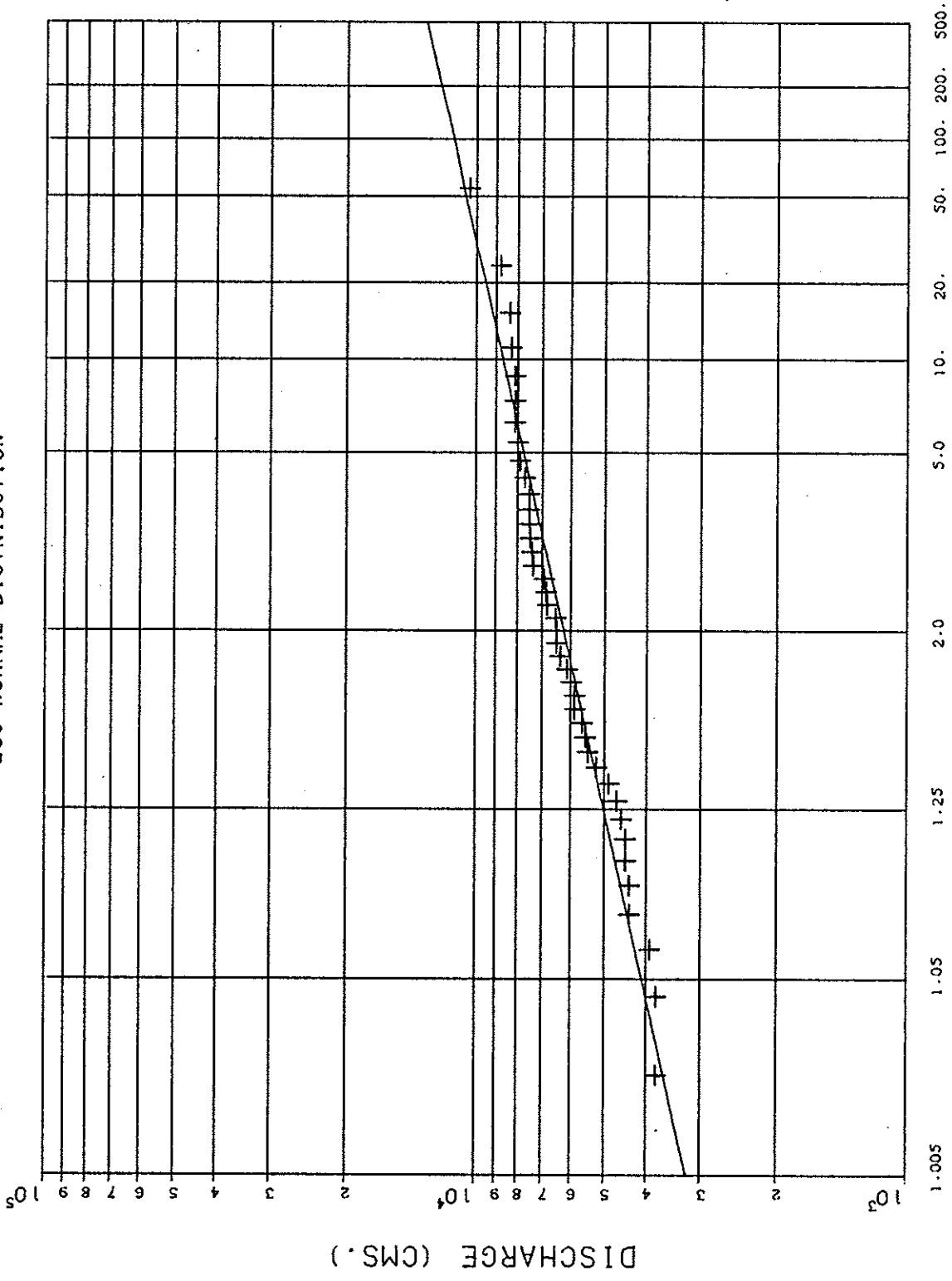


FIGURE C-10

GRENVILLE, QUE. 1870-1950 ANNUAL PEAK FLOWS R.C.#1

LOG-NORMAL DISTRIBUTION

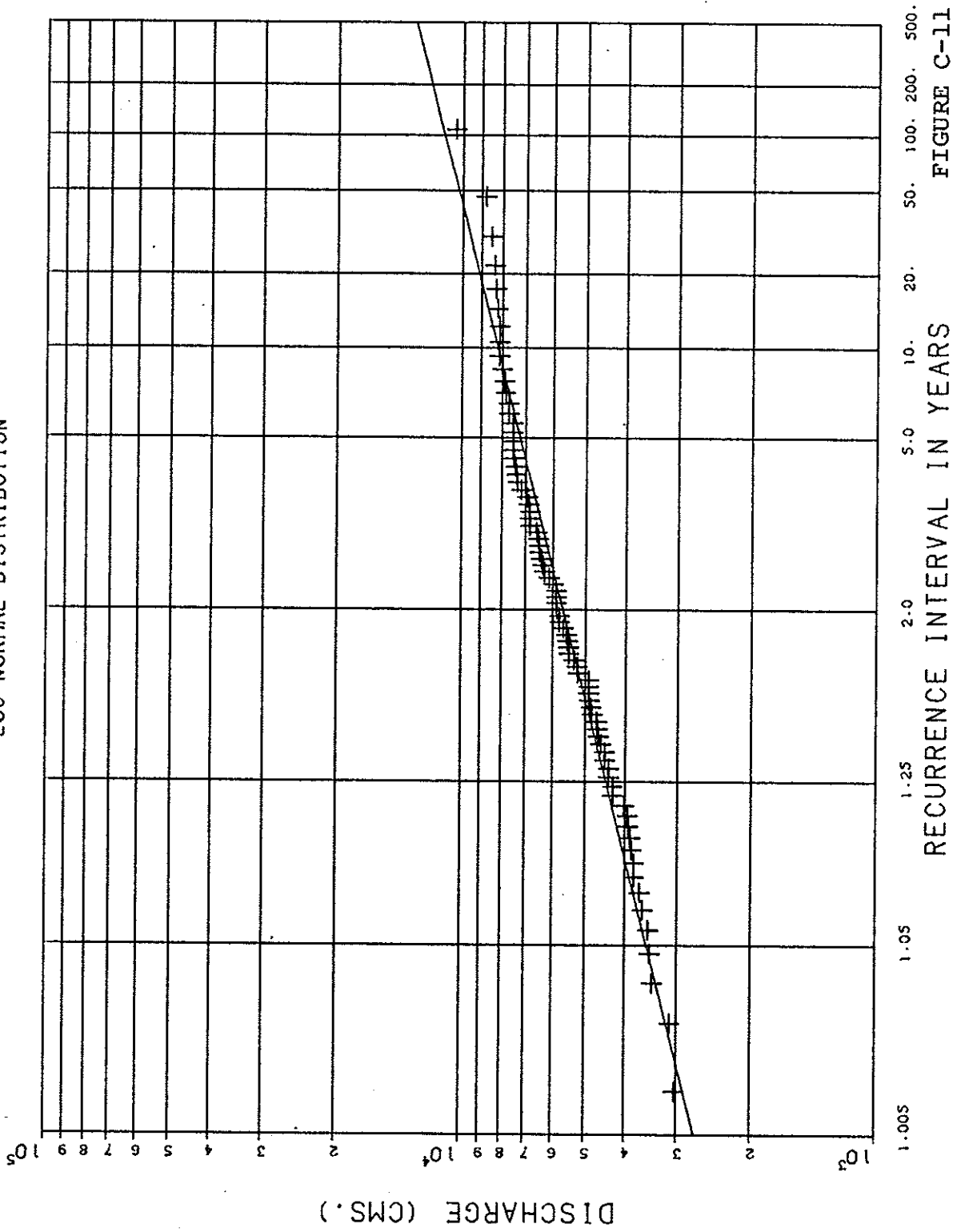


FIGURE C-11

CRENVILLE, QUE. 1870-1980 ANNUAL PEAK FLOWS

LOG-NORMAL DISTRIBUTION

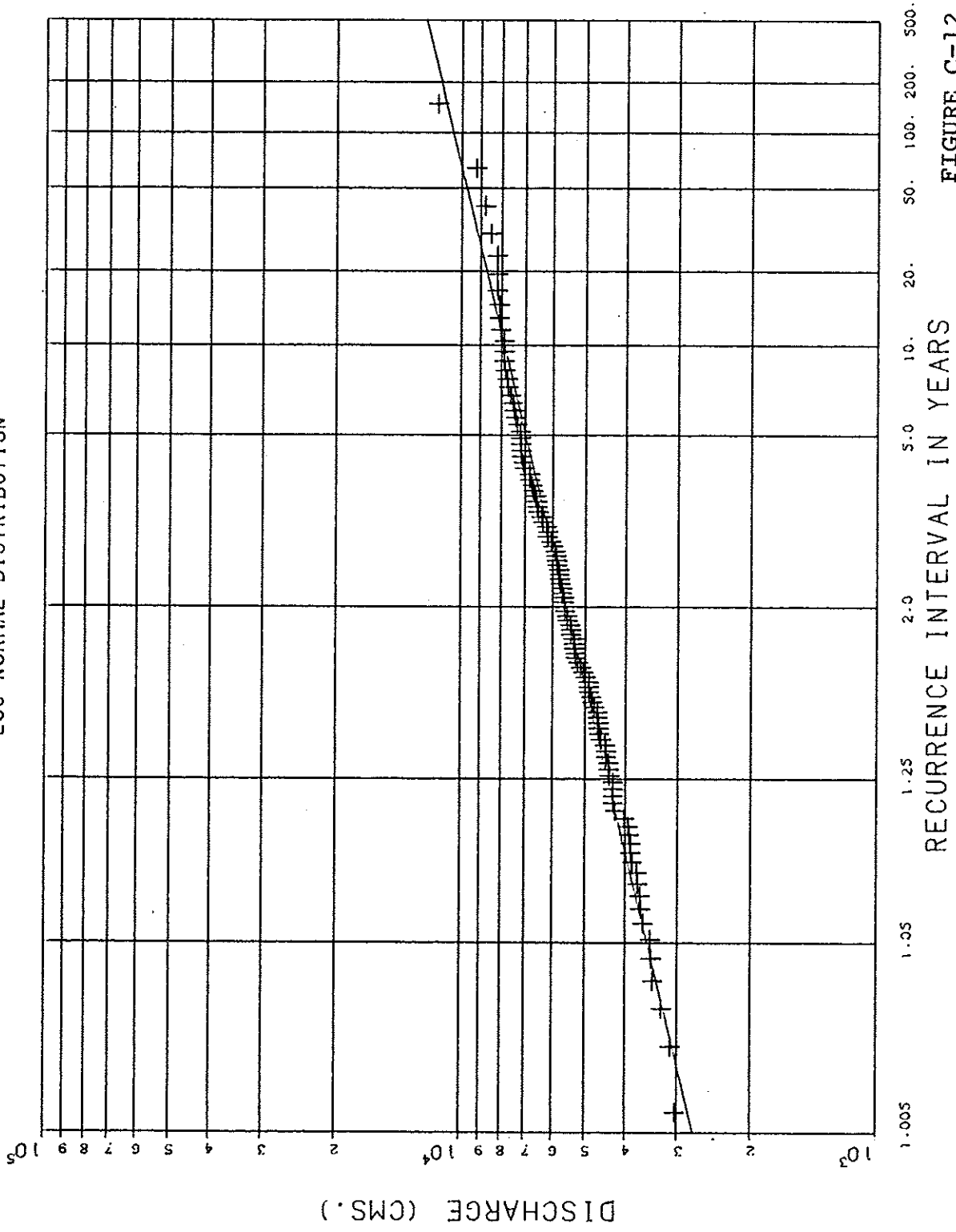
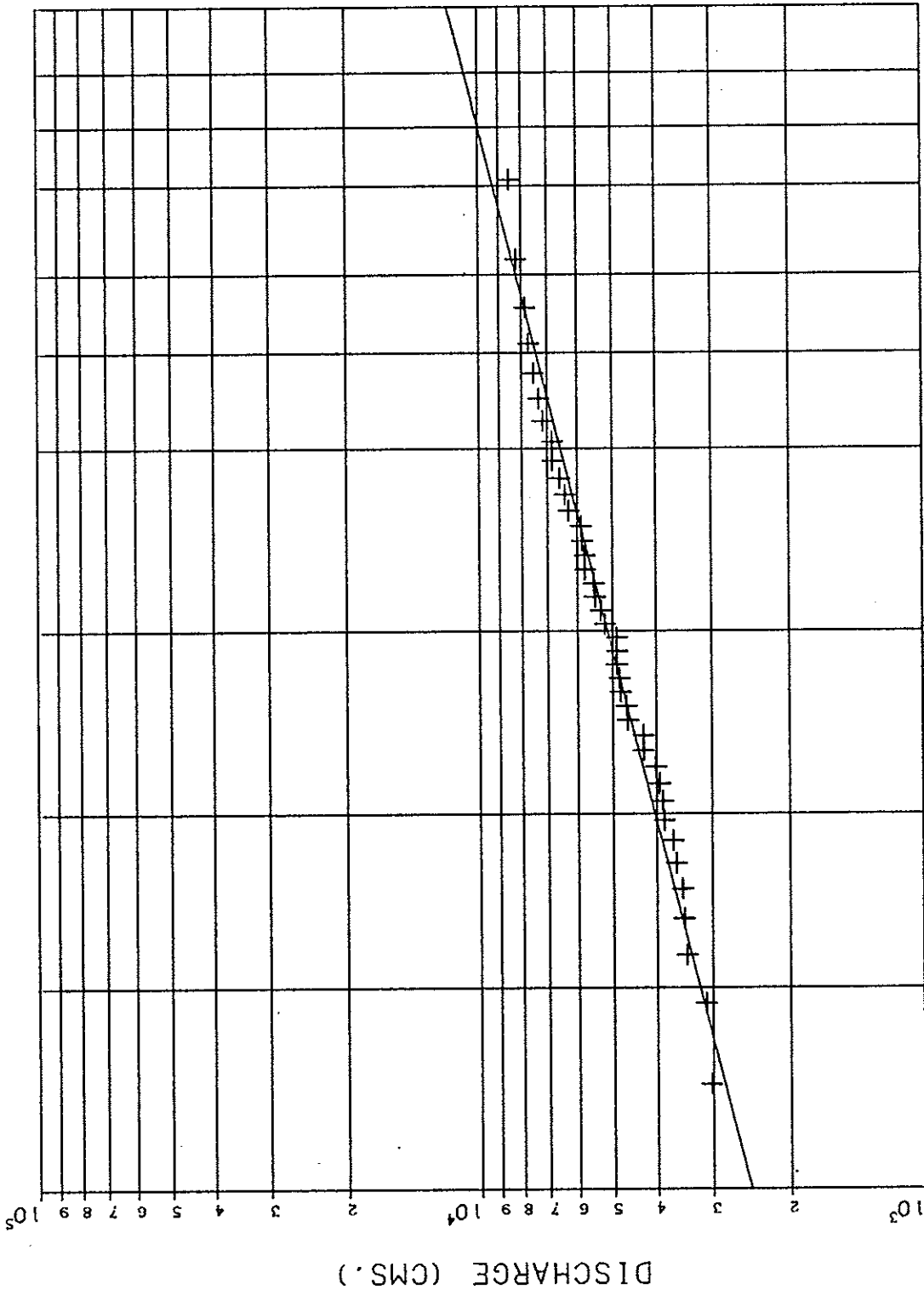


FIGURE C-12

GRENVILLE, QUE. 1911-1950 ANNUAL PEAK FLOWS R.C.#1

LOG-NORMAL DISTRIBUTION



1.005 1.05 1.25 2.0 5.0 10 20 50 100 200 500

FIGURE C-13

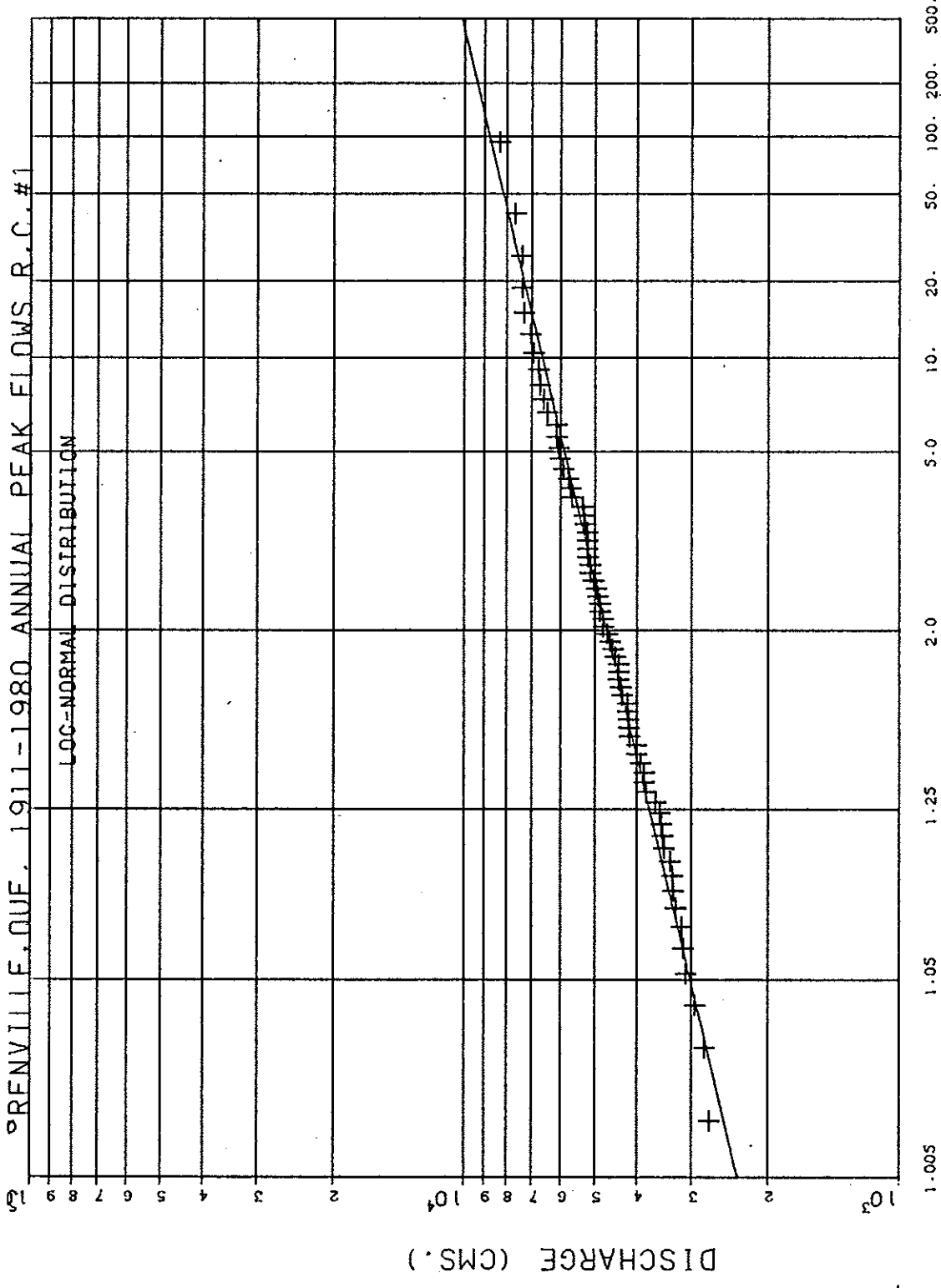


FIGURE C-14

RECURRENCE INTERVAL IN YEARS

GRENVILLE, QUE. 1951-80 ANNUAL PEAK FLOWS R.C.#1

LOG-NORMAL DISTRIBUTION

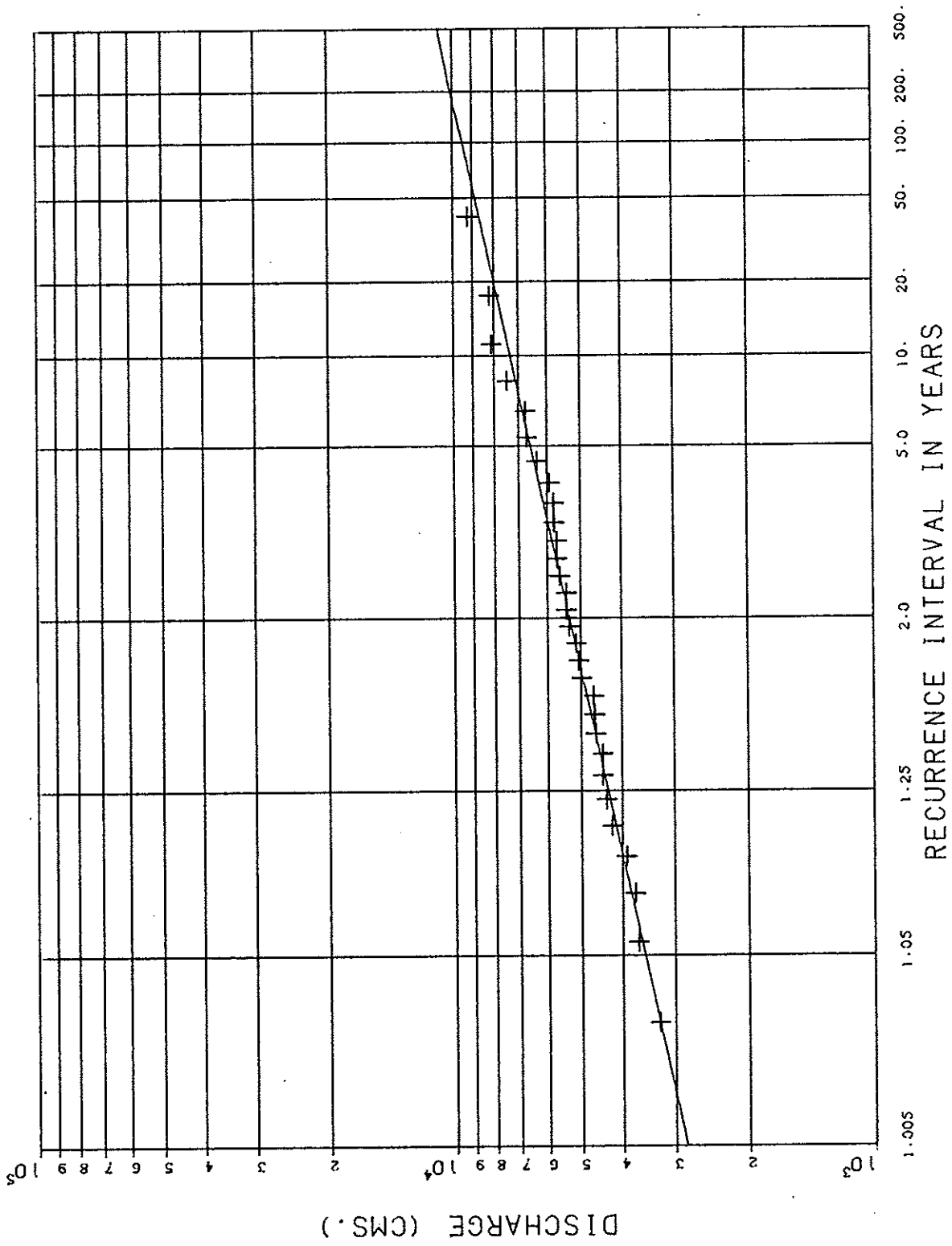


FIGURE C-15

GRENVILLE 1ST PEAK OF THE YEAR (NOT NECESSARILY HIGHEST)

LOG-NORMAL DISTRIBUTION

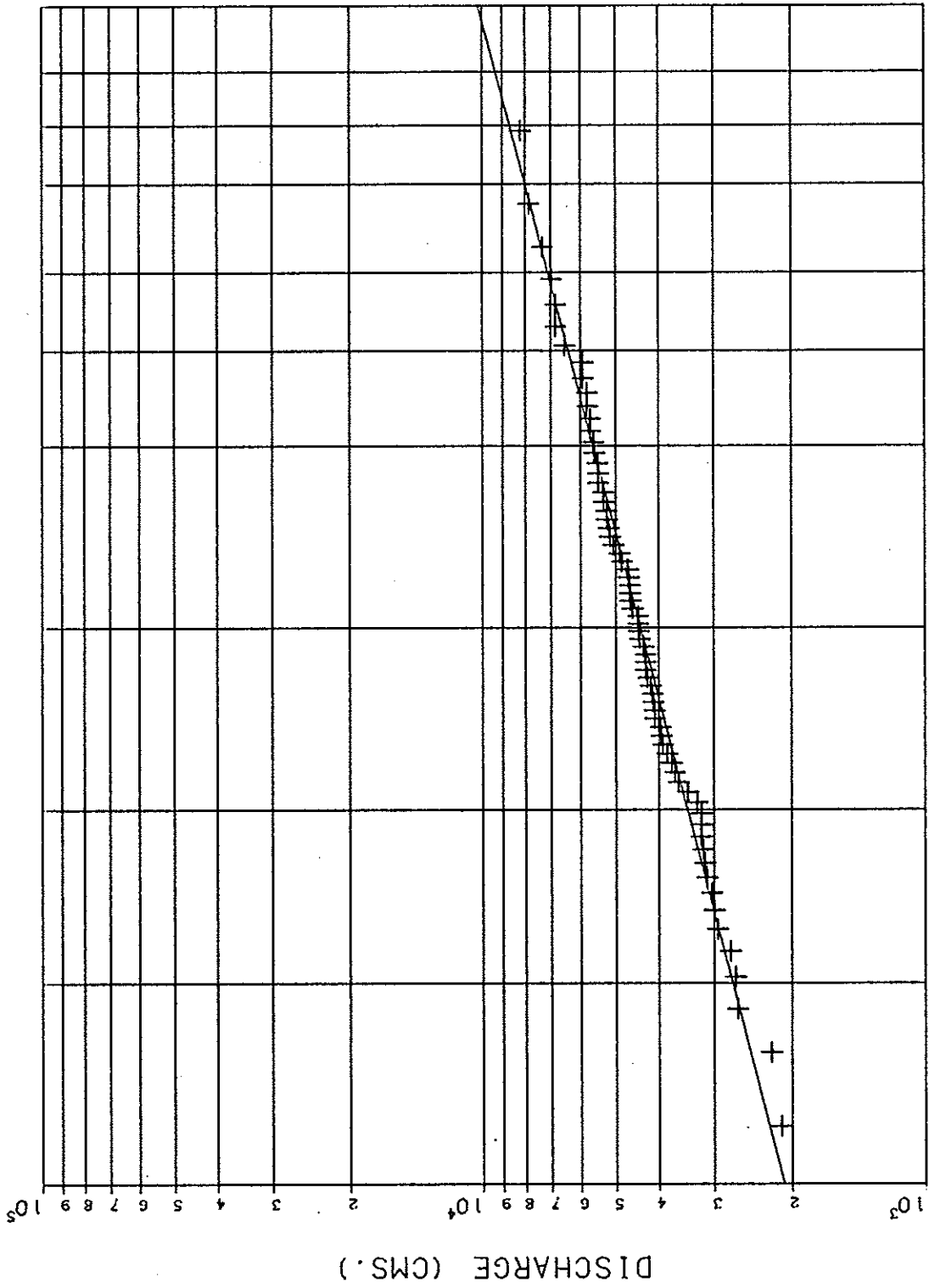


FIGURE C-16

GRENVILLE 2ND PEAK OF THE YEAR (1911-1980)

LOG-NORMAL DISTRIBUTION

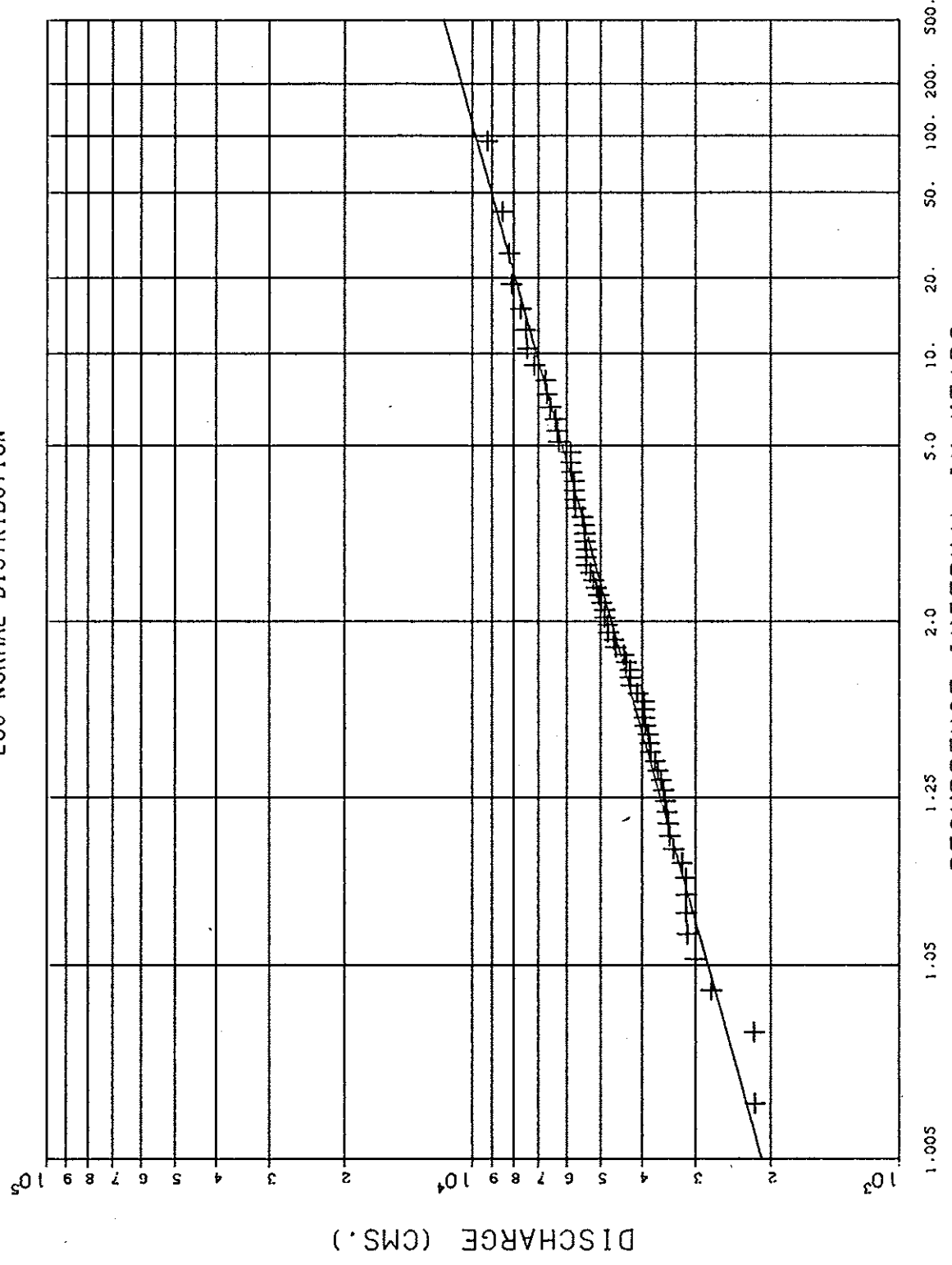


FIGURE C-17

GRENVILLE 2ND PEAK OF THE YEAR 1870-1980

LOG-NORMAL DISTRIBUTION

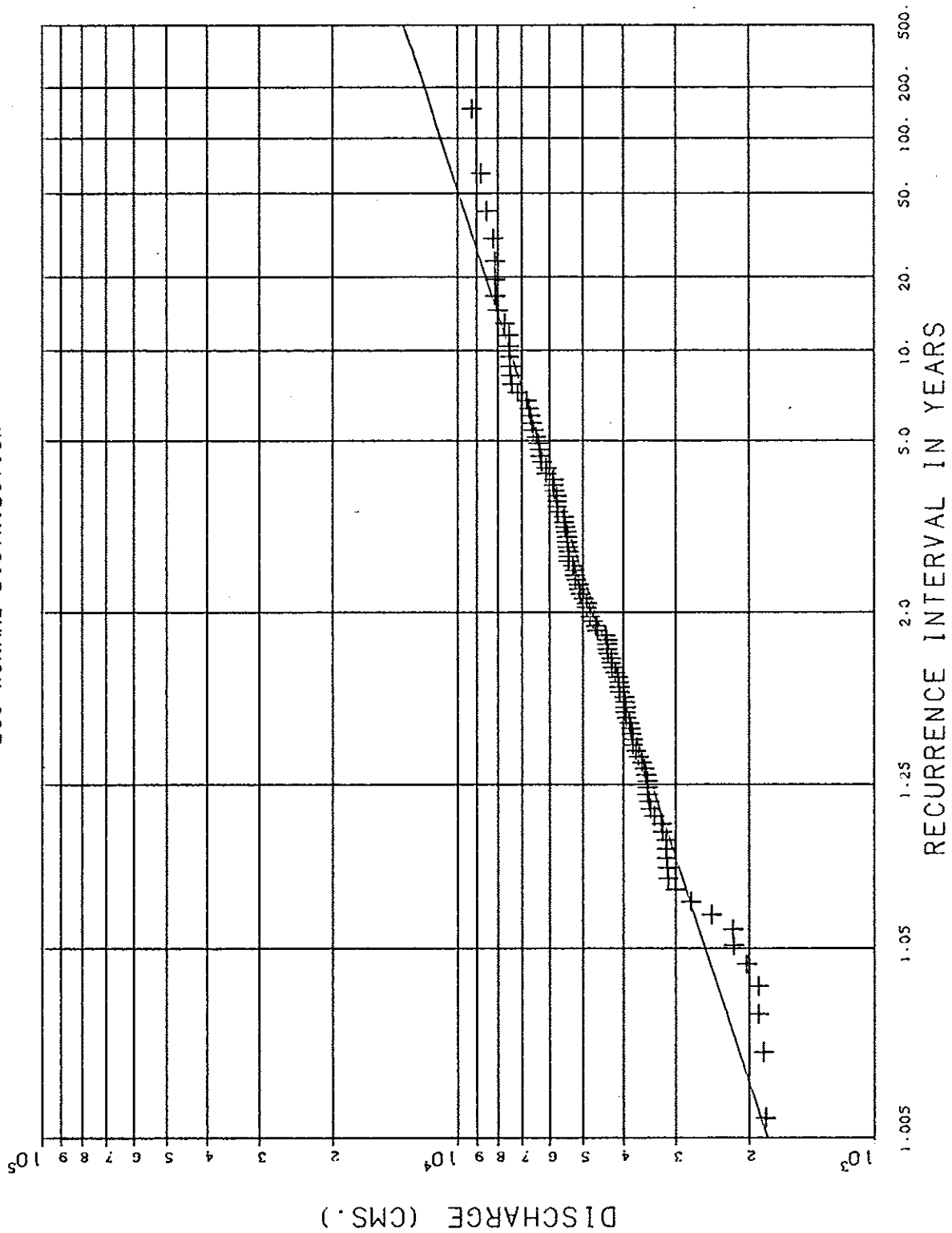


FIGURE C-18

OTTAWA R AT GRENVILLE1 1870-1910
 THREE PARAMETER LOG-NORMAL DISTRIBUTION
 PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

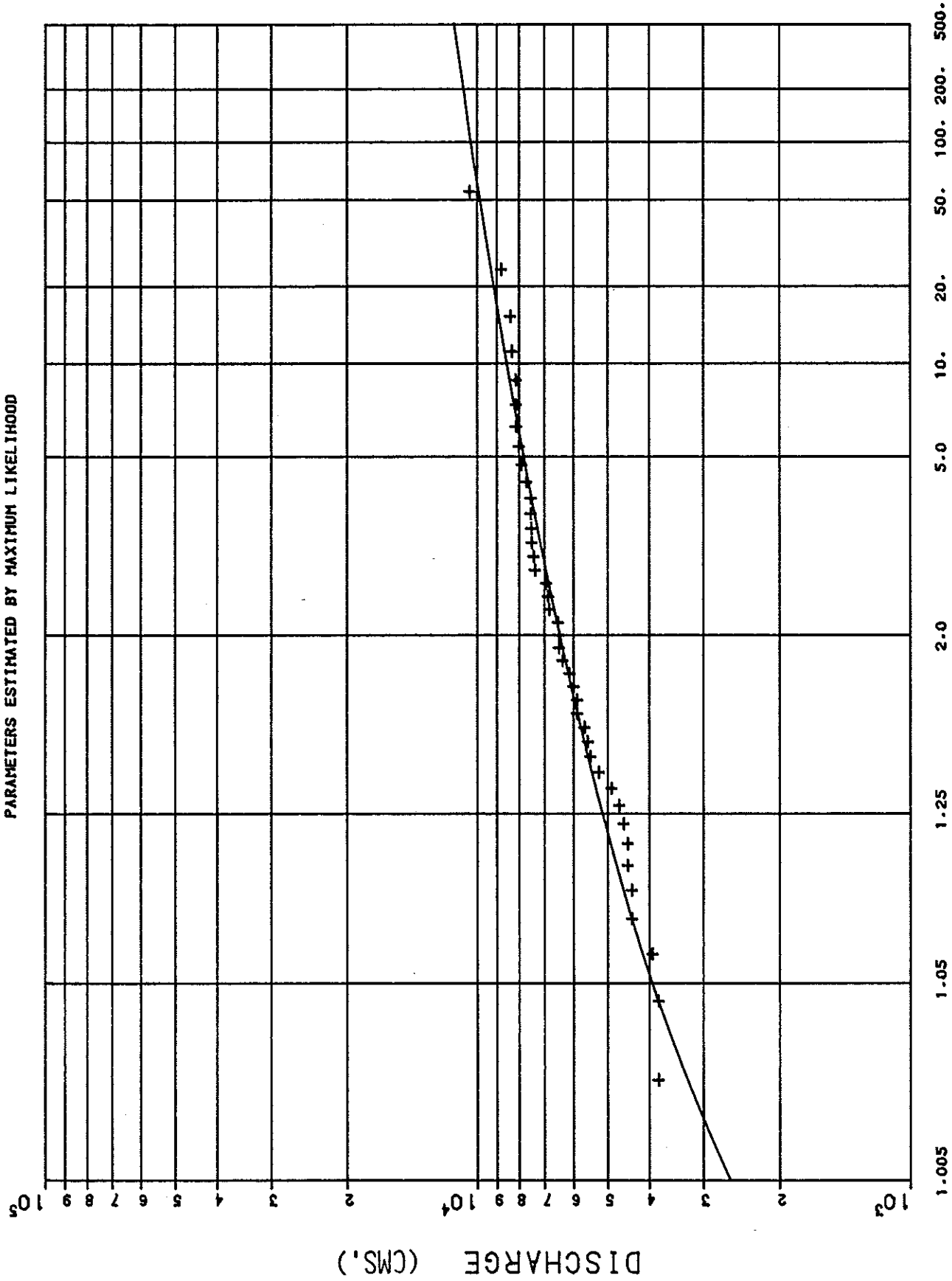


FIGURE C-19

GRENVILLE 2 1870-1950
 THREE PARAMETER LOG-NORMAL DISTRIBUTION
 PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

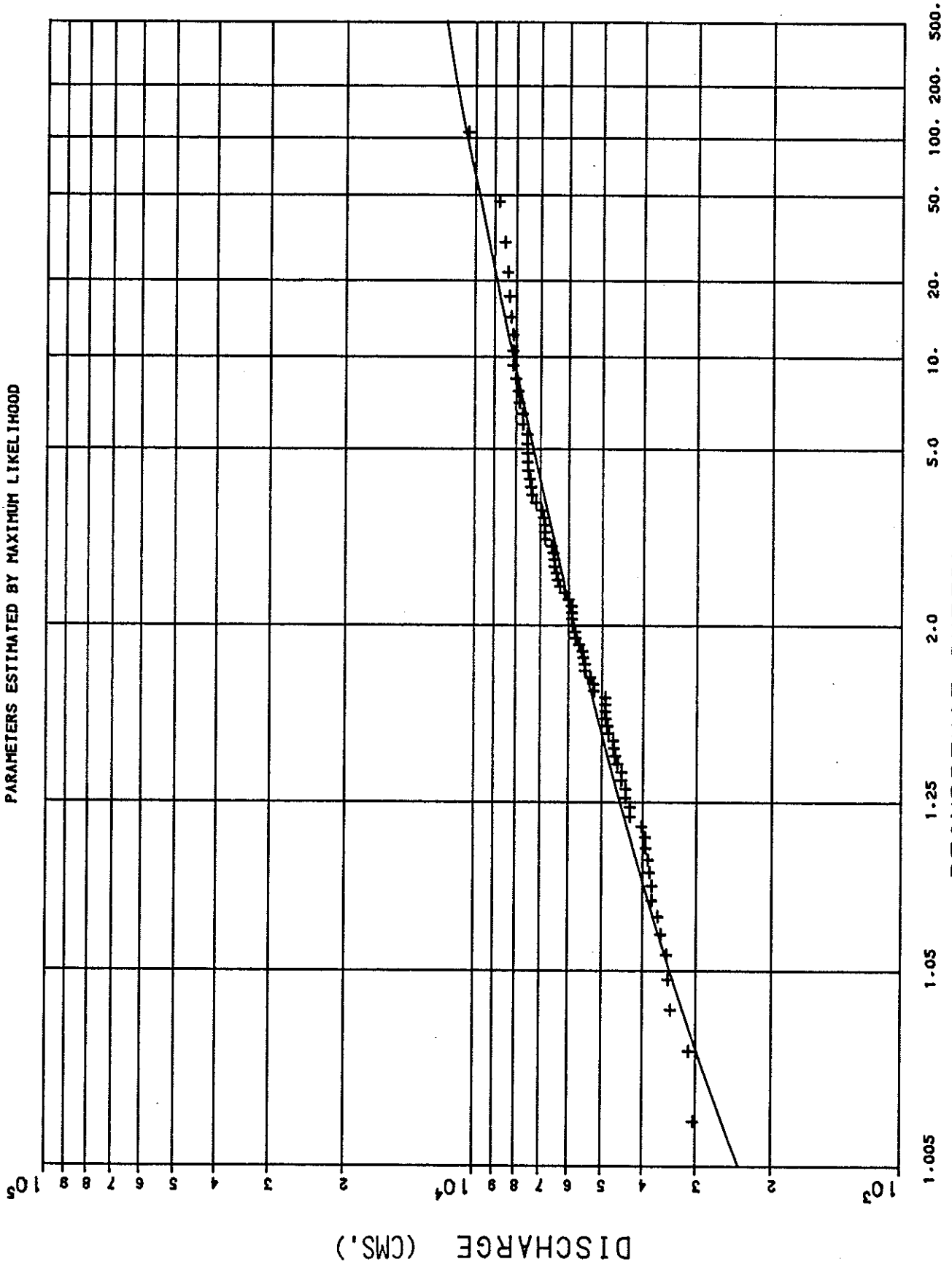


FIGURE C-20

GRENVILLE, QUE. 1870-1980 ANNUAL PEAK FLOWS R.C.#1
THREE PARAMETER LOG-NORMAL DISTRIBUTION

PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

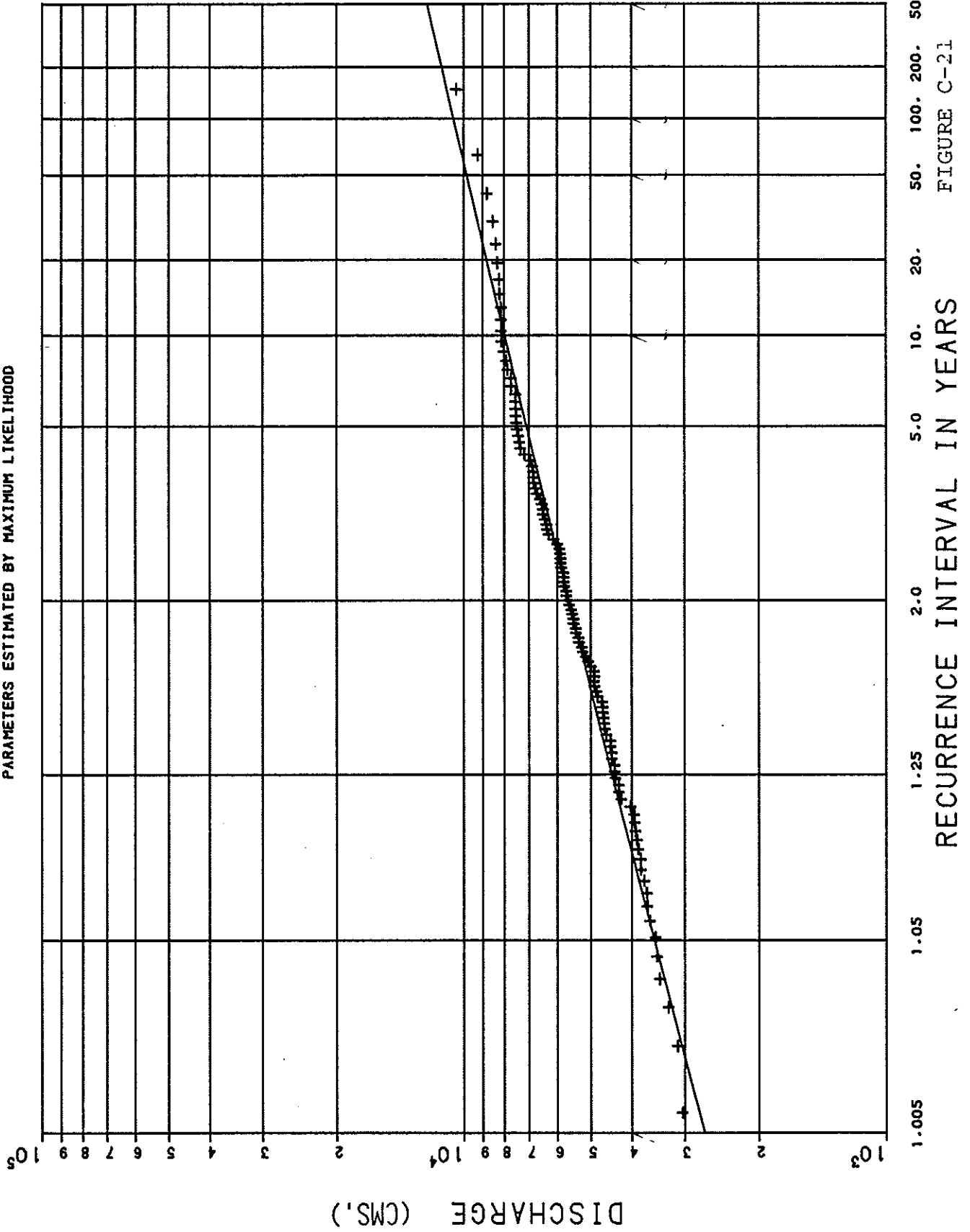


FIGURE C-21

GRENVILLE 4 1911-1950
 THREE PARAMETER LOG-NORMAL DISTRIBUTION
 PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

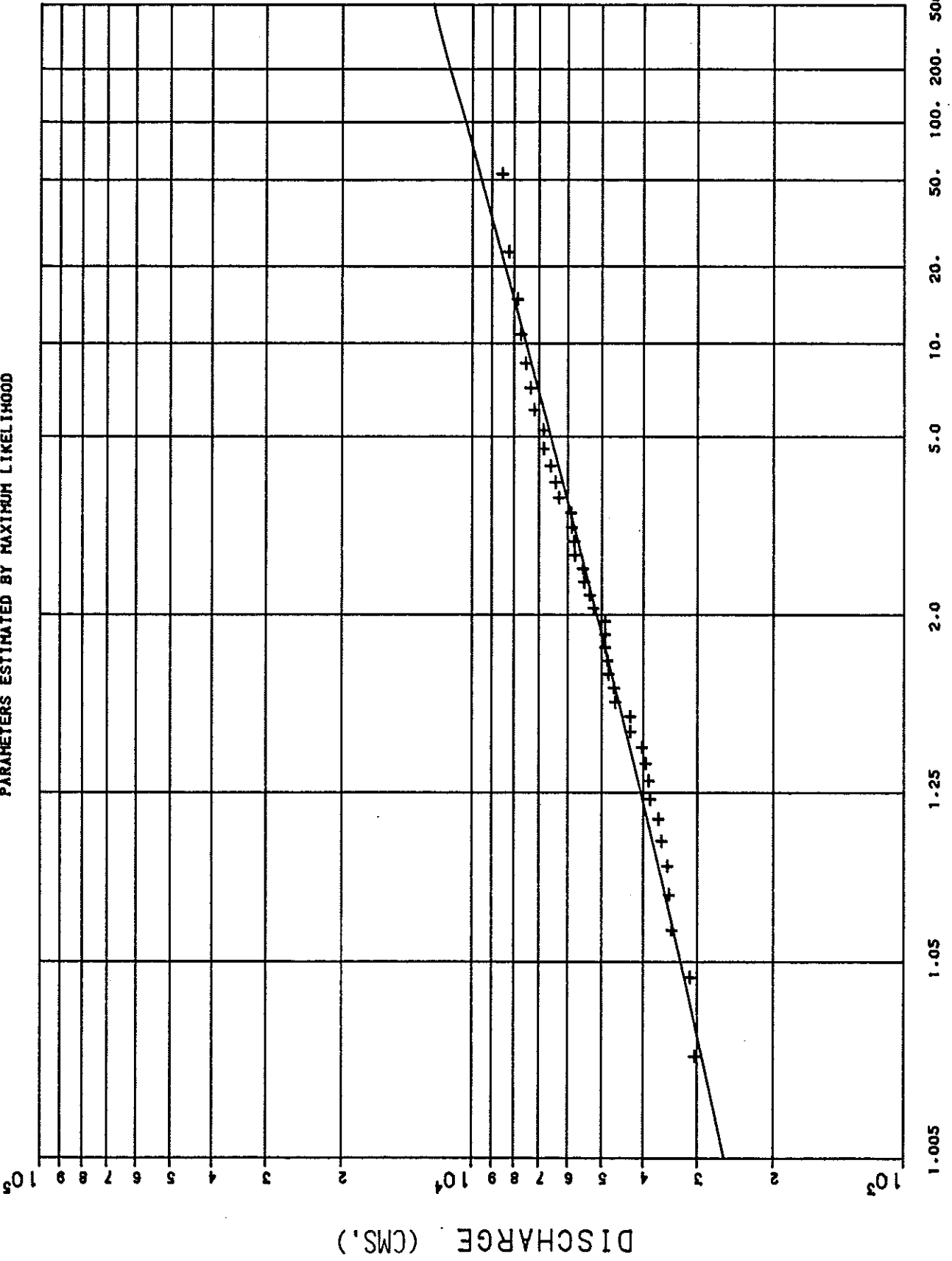


FIGURE C-22

GRENVILLE 5 1911-1980
THREE PARAMETER LOG-NORMAL DISTRIBUTION
PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

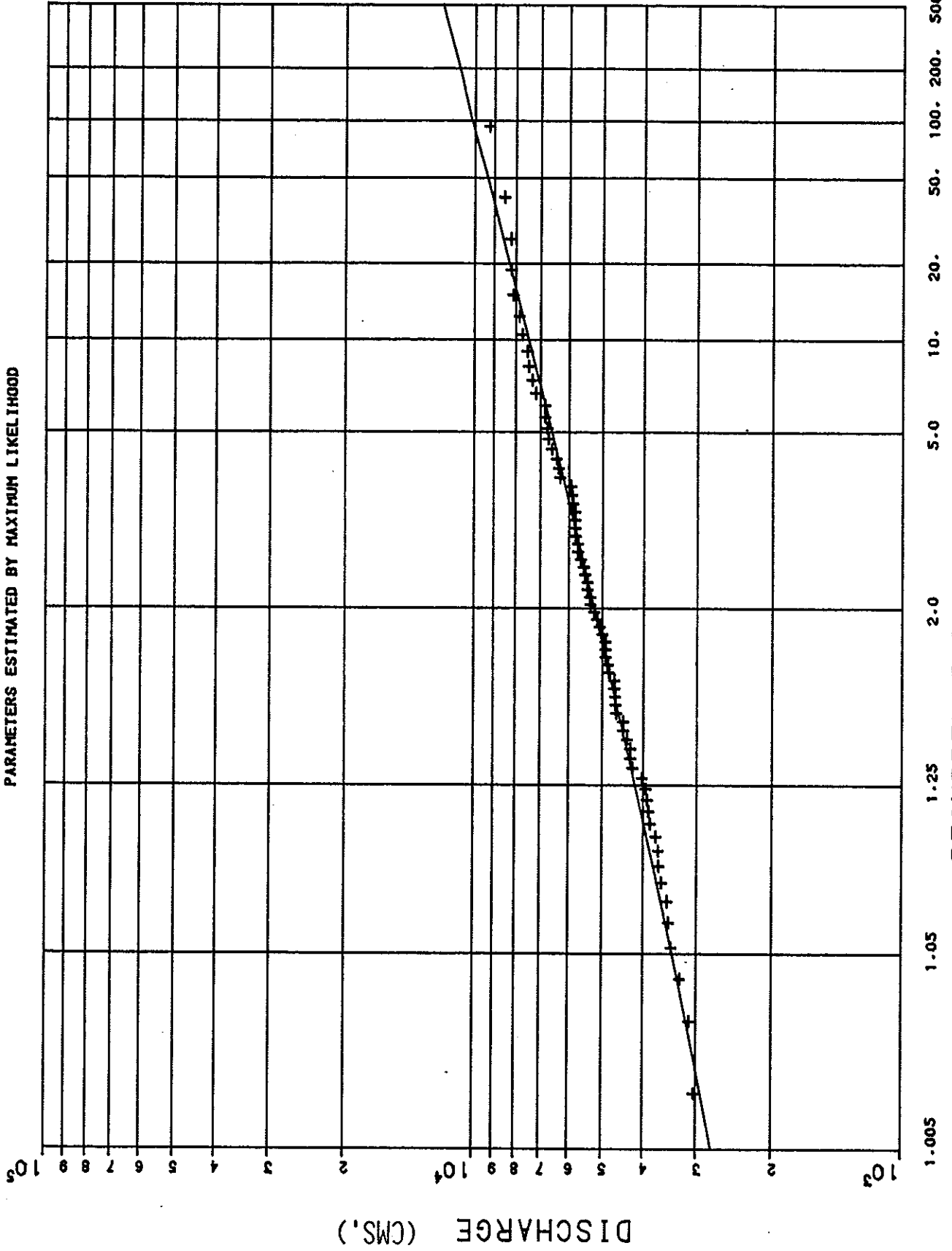


FIGURE C-23

GRENVILLE 6 1951-1980
 THREE PARAMETER LOG-NORMAL DISTRIBUTION
 PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

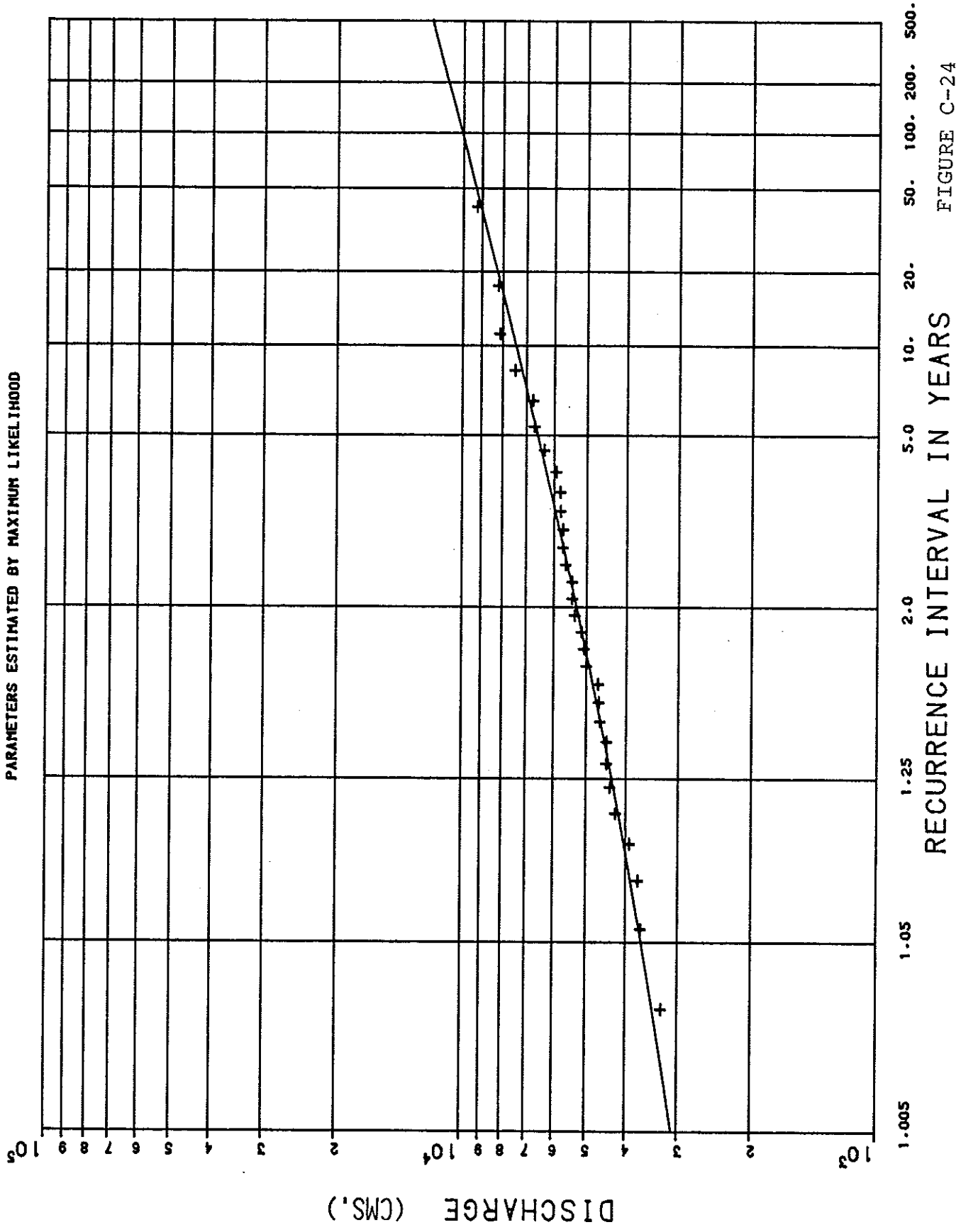


FIGURE C-24

GRENVILLE 7 1911-1980

THREE PARAMETER LOG-NORMAL DISTRIBUTION
PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

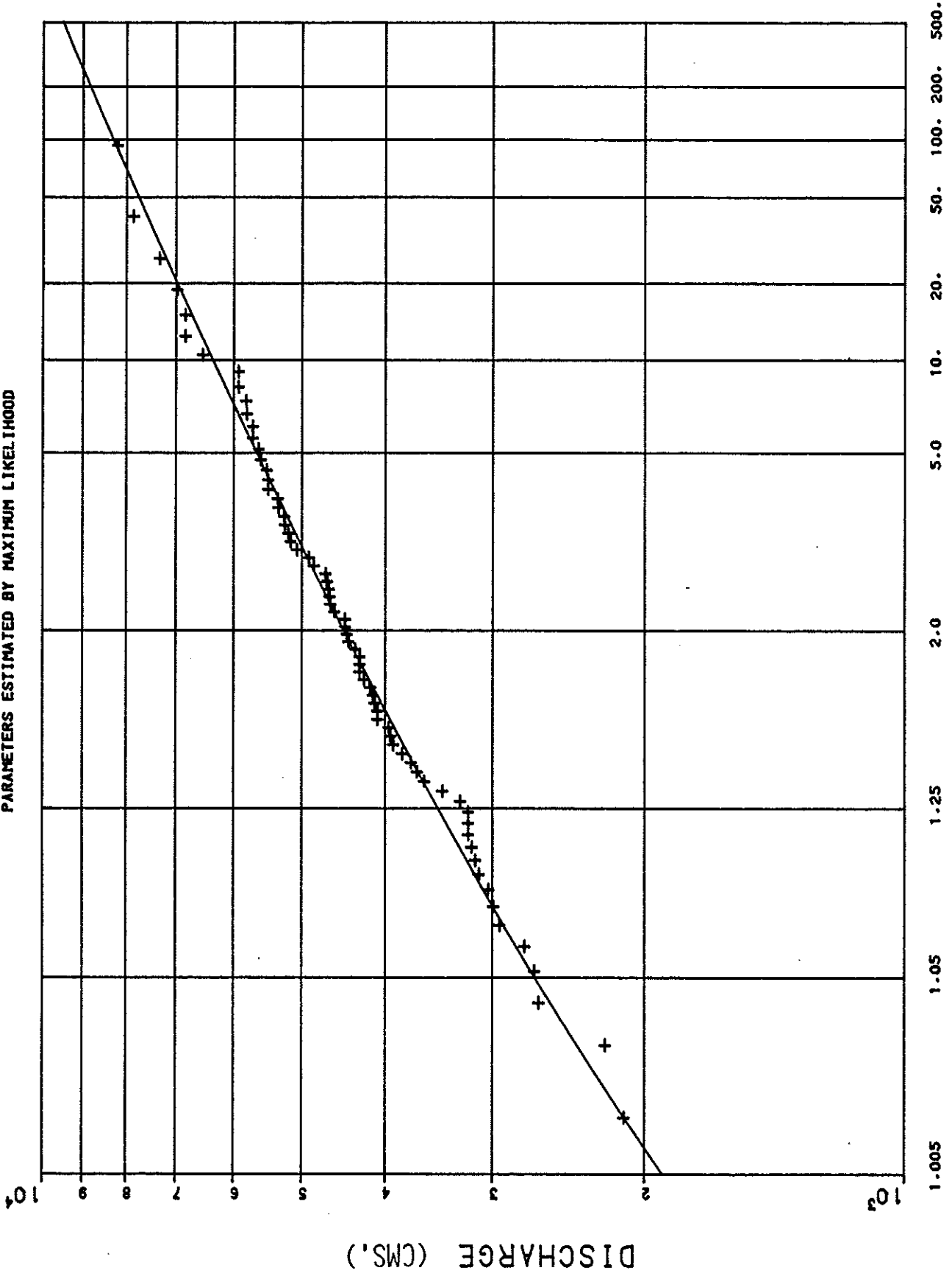


FIGURE C-25

GRENVILLE 8 1911-1980
 THREE PARAMETER LOG-NORMAL DISTRIBUTION
 PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

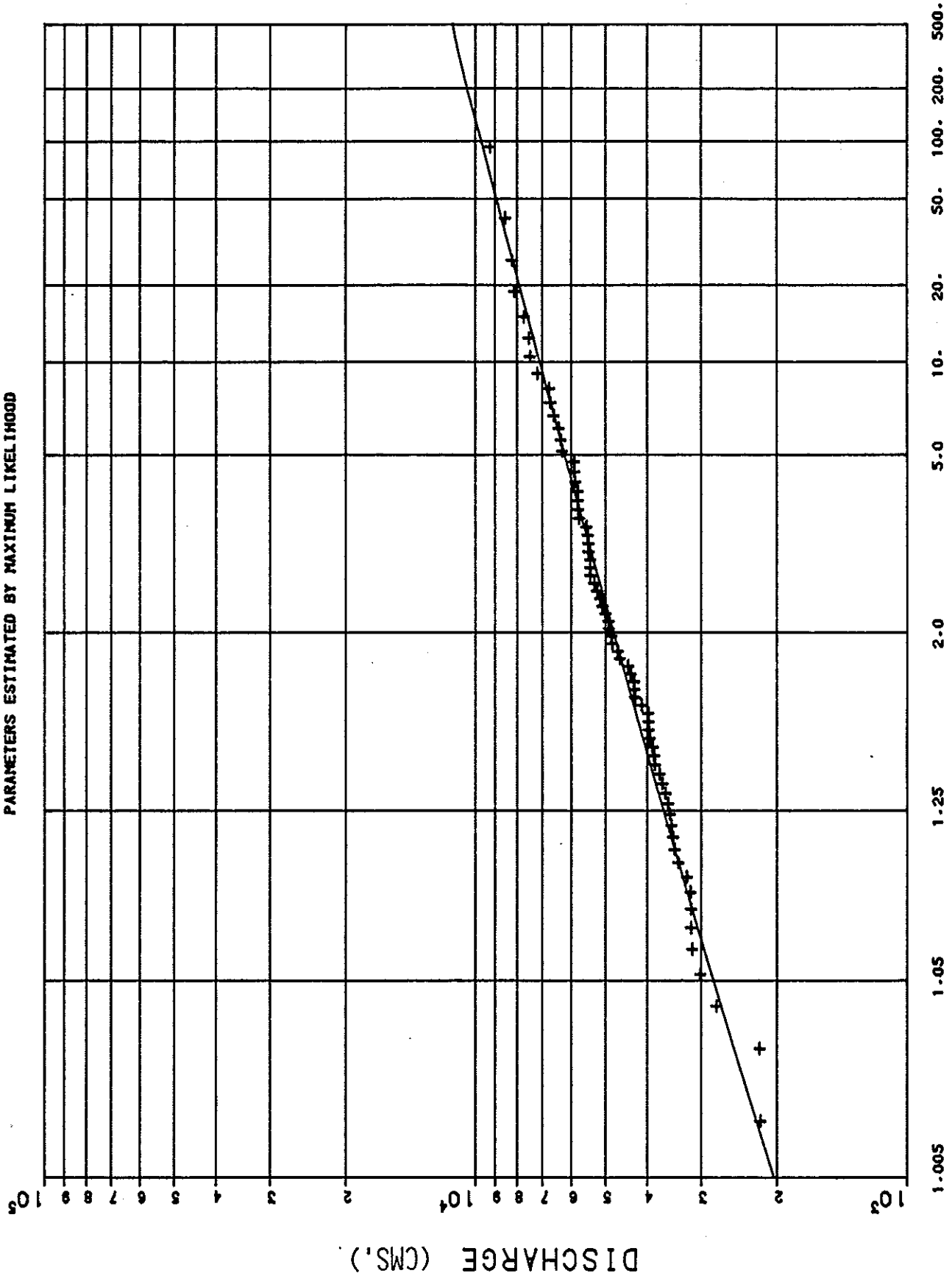


FIGURE C-26

GRENVILLE 9 1870-1980
THREE PARAMETER LOG-NORMAL DISTRIBUTION
PARAMETERS ESTIMATED BY MAXIMUM LIKELIHOOD

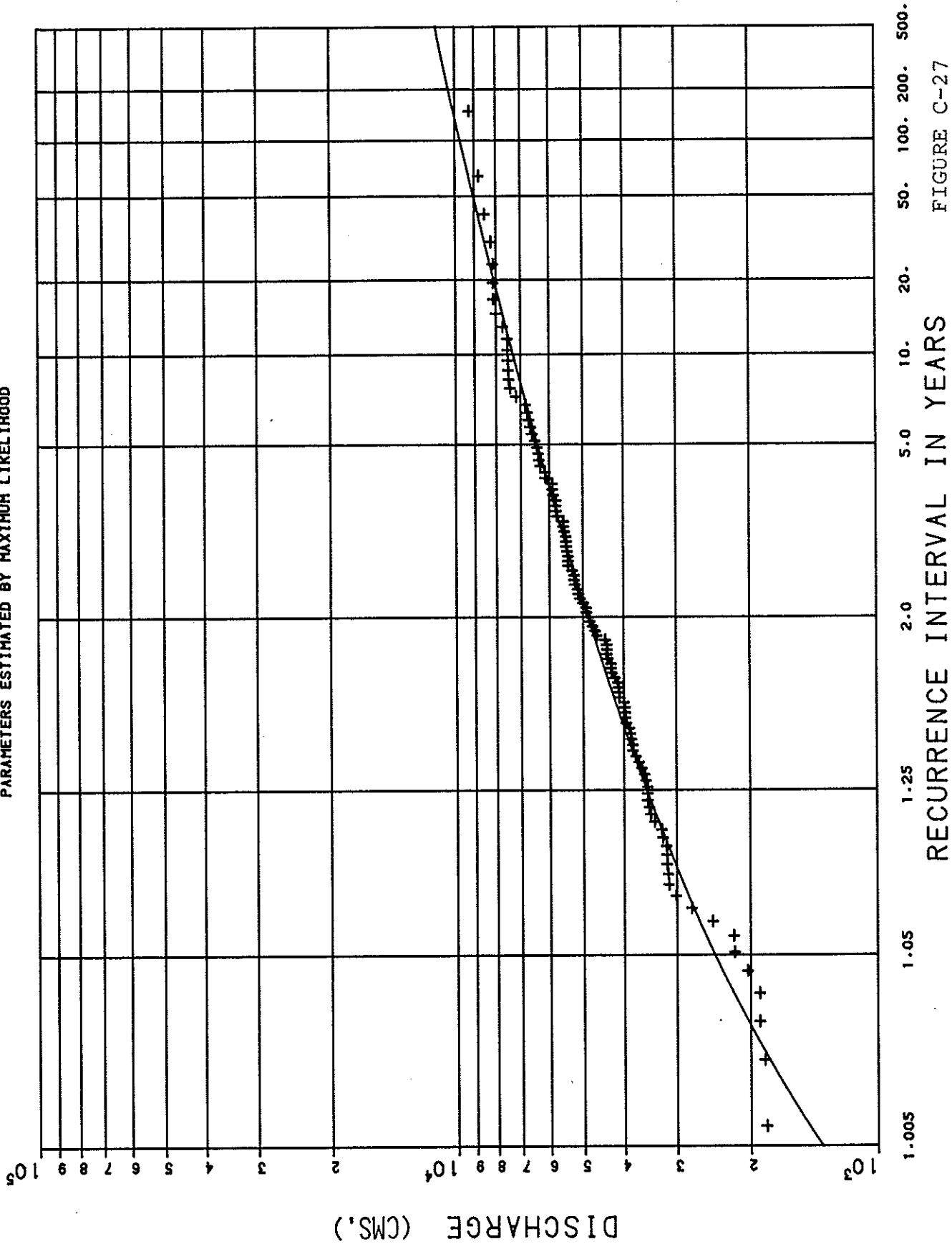


FIGURE C-27

GRENVILLE, QUE. 1870-1910 ANNUAL PEAK FLOWS R.C.#1
GUMBEL I DISTRIBUTION

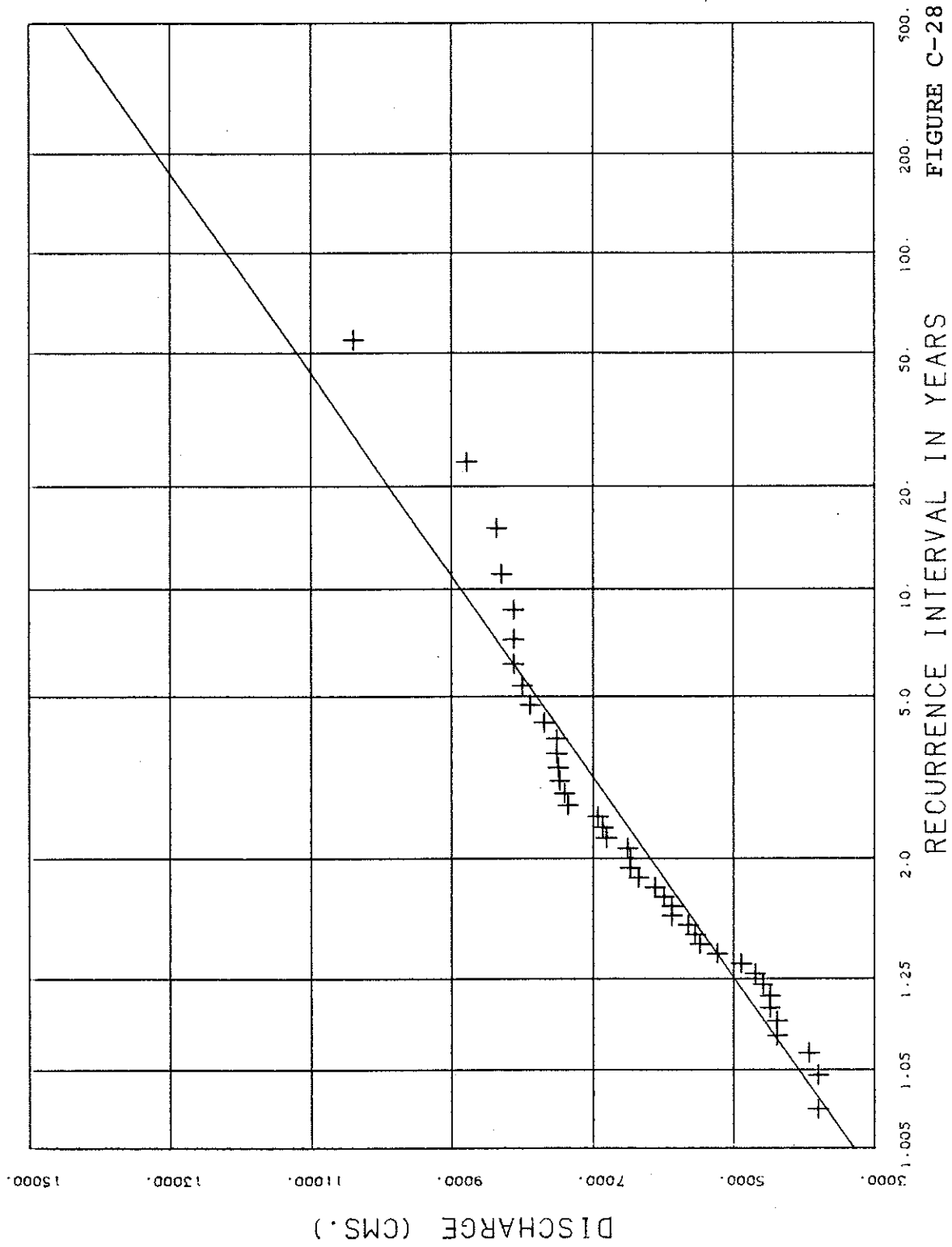


FIGURE C-28

GRENVILLE, QUE. 1870-1950 ANNUAL PEAK FLOWS R.C.#1

GUMBEL I DISTRIBUTION

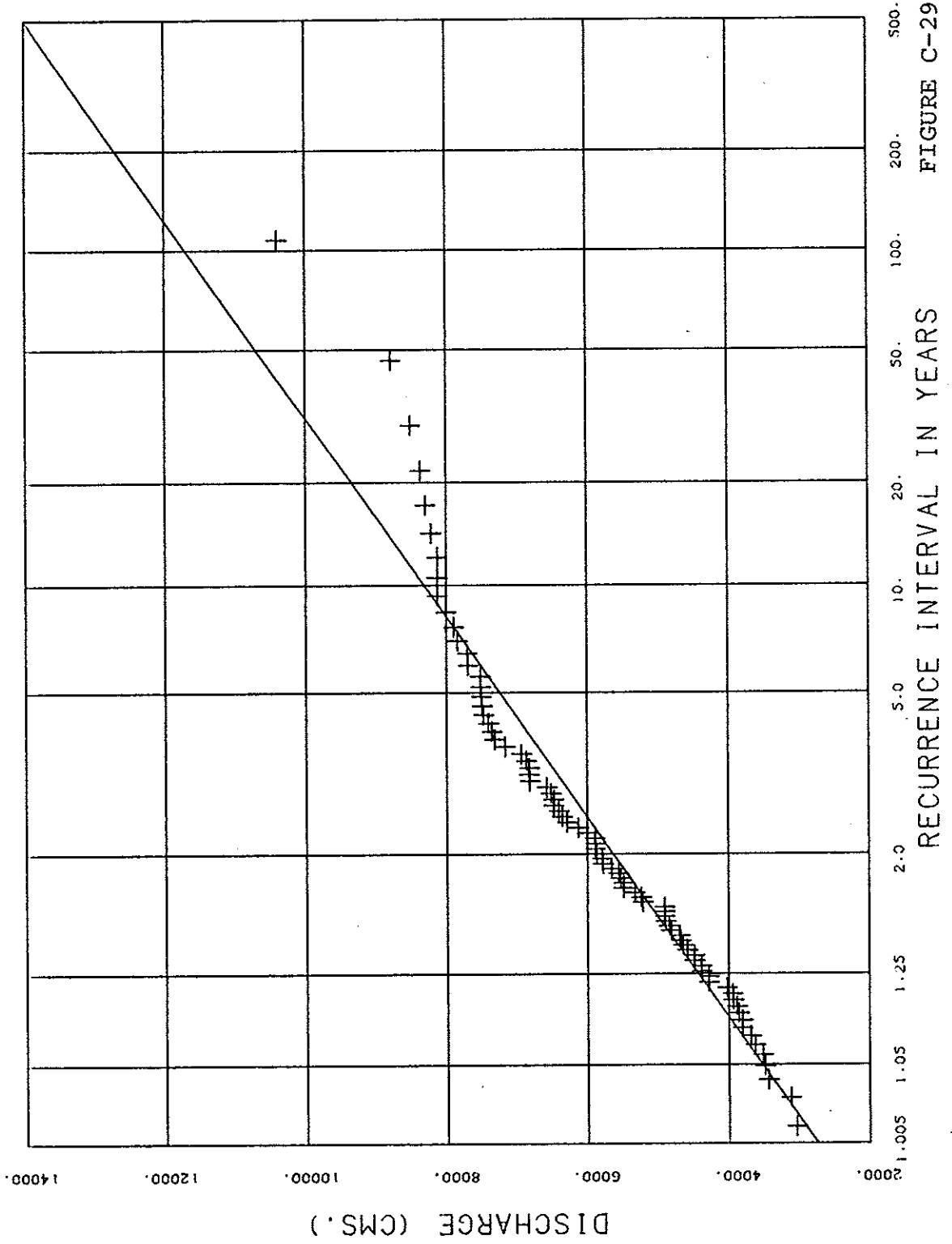


FIGURE C-29

GRENVILLE, QUE. 1870-1980 ANNUAL PEAK FLOWS

GUMBEL I DISTRIBUTION

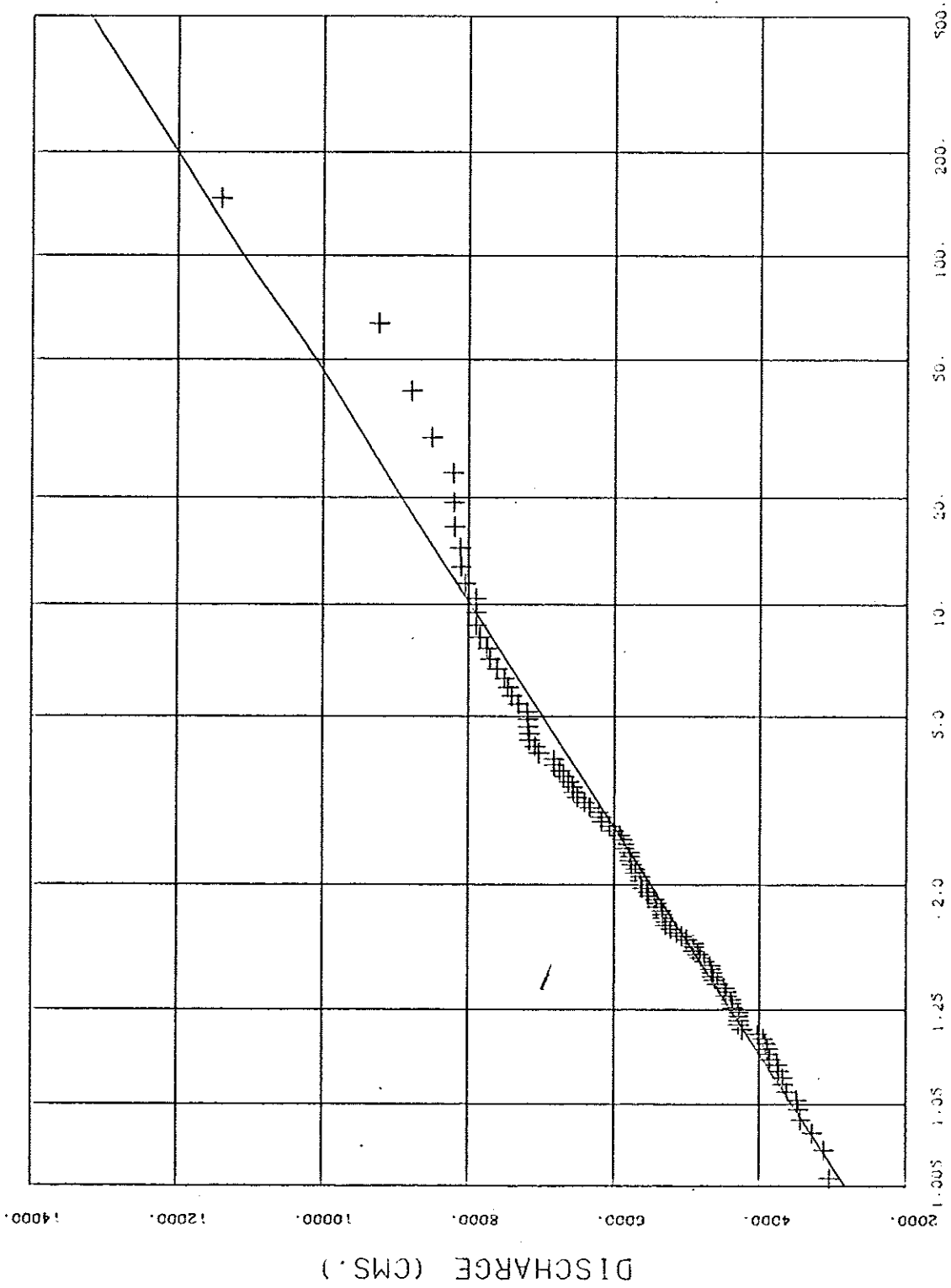


FIGURE C-30

GRENVILLE, QUE. 1911-1950 ANNUAL PEAK FLOWS R.C.#1

GUMBEL I DISTRIBUTION

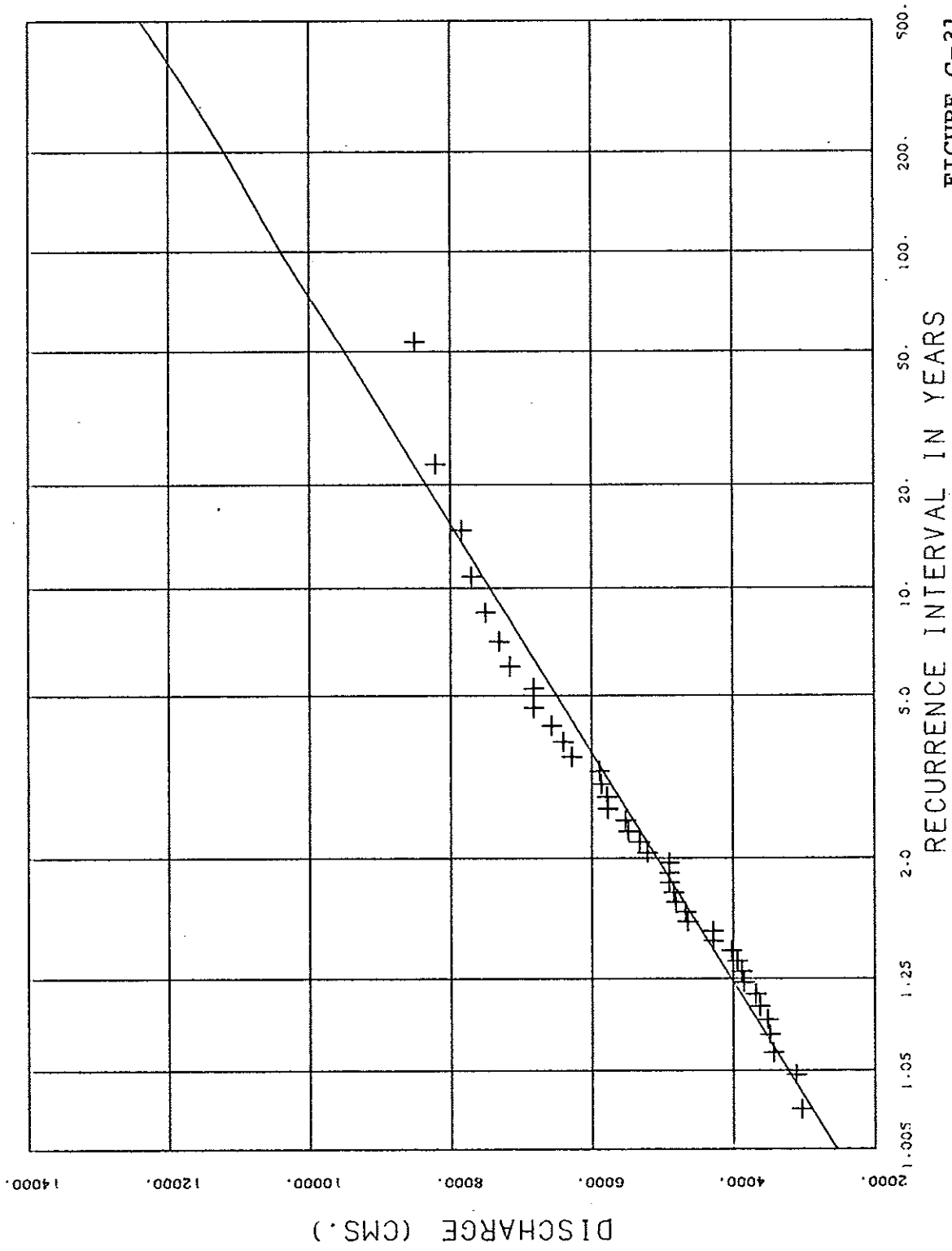


FIGURE C-31

GRENVILLE, QUE. 1911-1980 ANNUAL PEAK FLOWS R.C.#1

GUMBEL I DISTRIBUTION

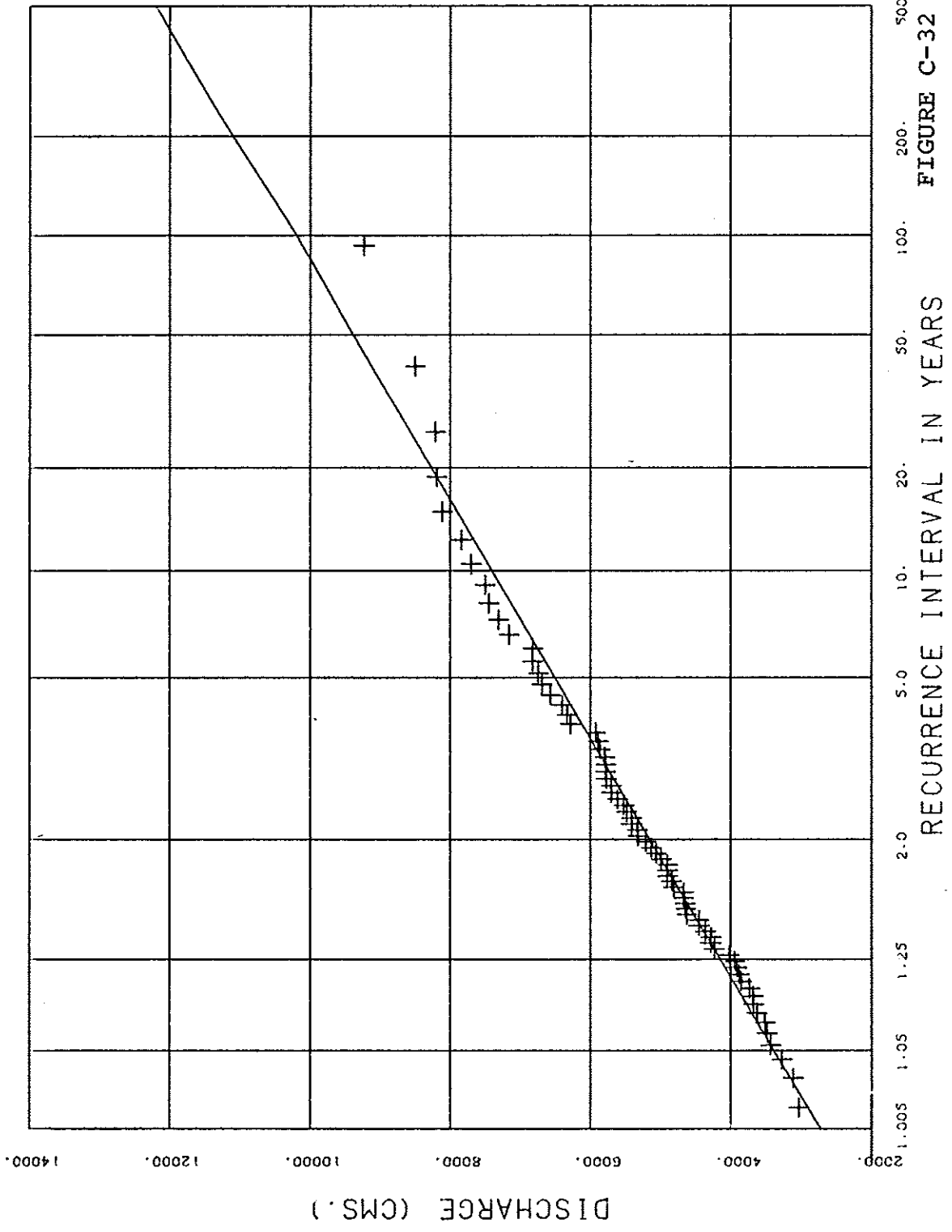


FIGURE C-32

GRENVILLE, QUE. 1951-80 ANNUAL PEAK FLOWS R.C.#1

GUMBEL I DISTRIBUTION

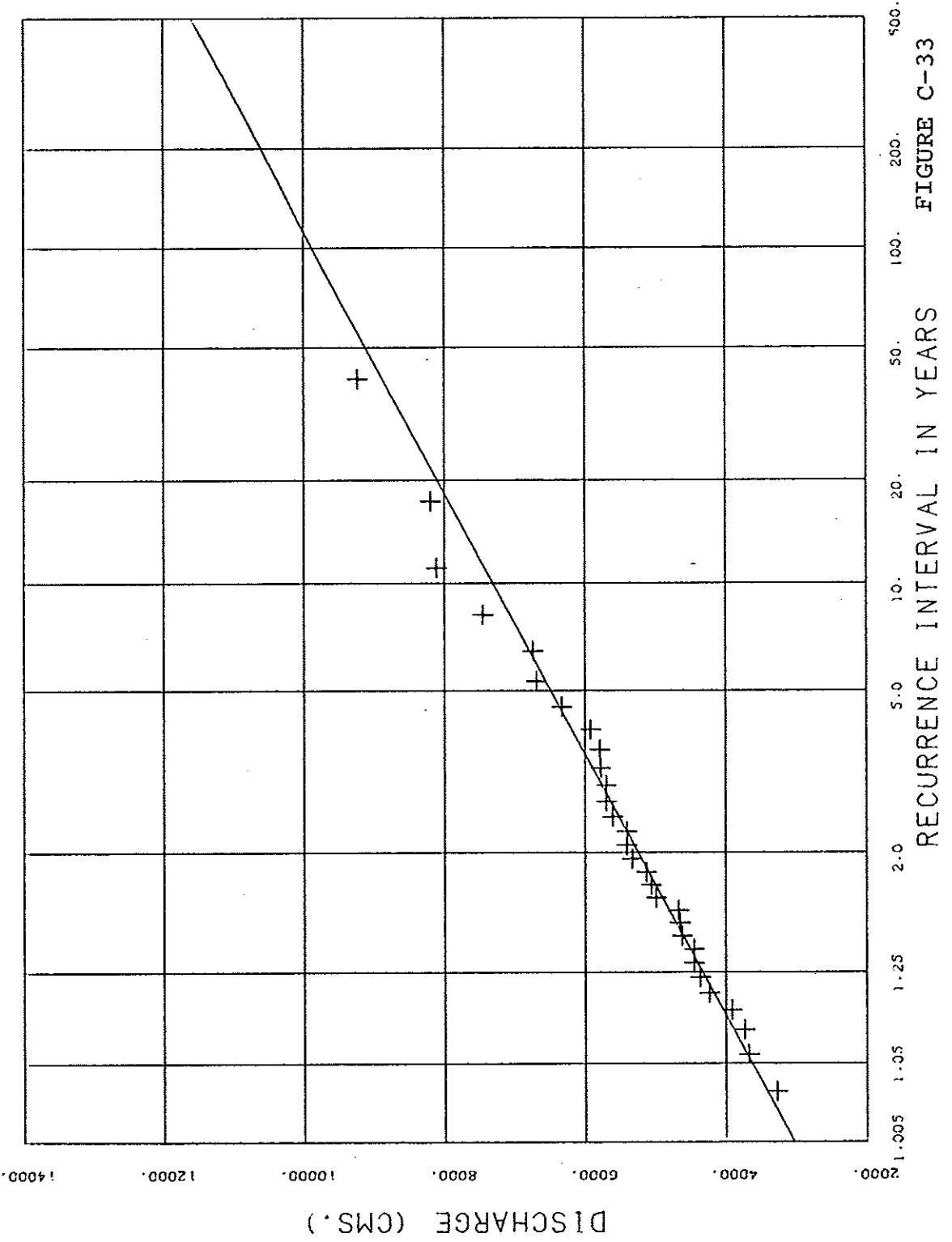
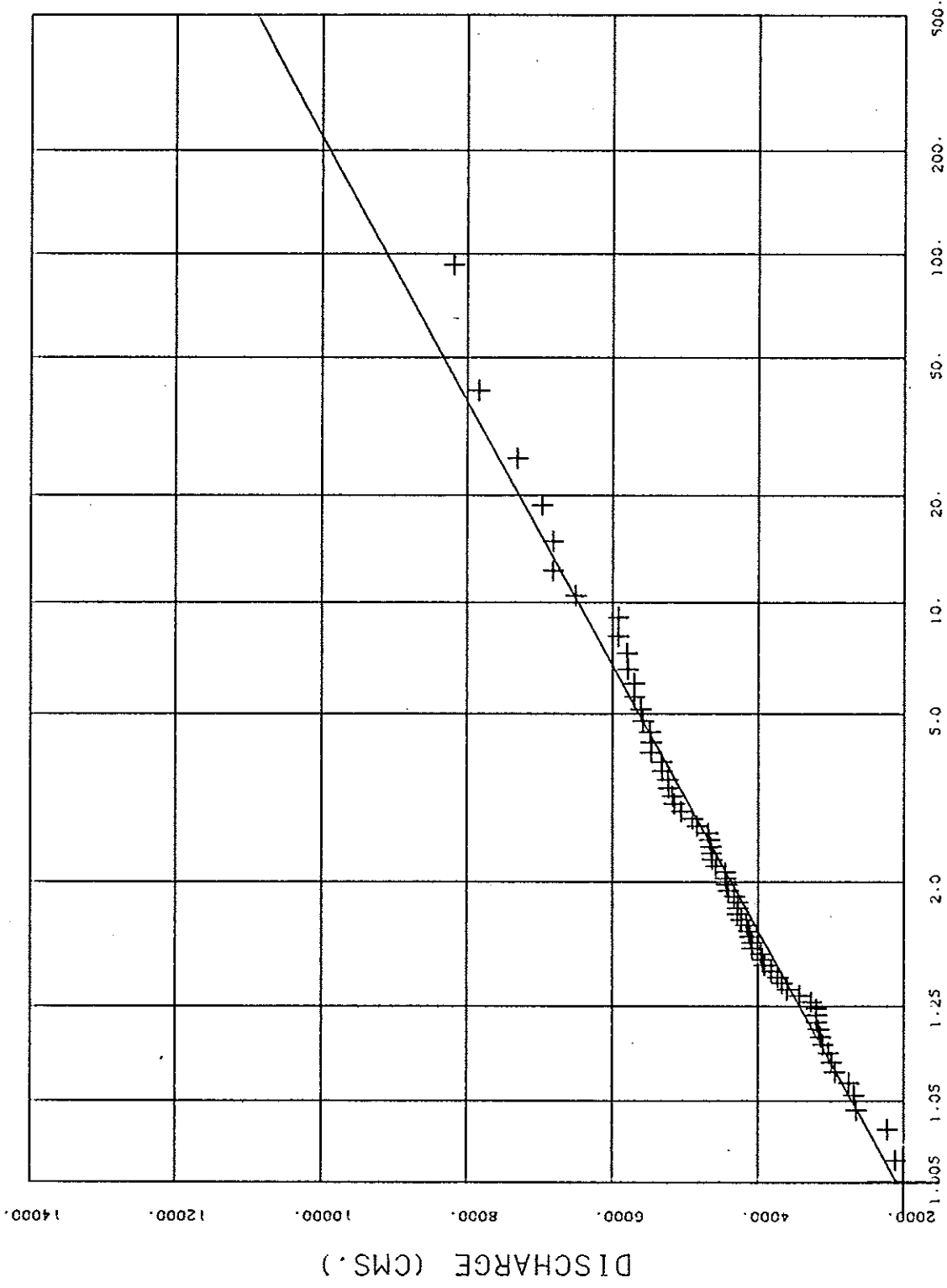


FIGURE C-33

GRENVILLE 1ST PEAK OF THE YEAR (NOT NECESSARILY HIGHEST)

GUMBEL I DISTRIBUTION



RECURRENCE INTERVAL IN YEARS FIGURE C-34

GRENVILLE 2ND PEAK OF THE YEAR (1911 - 1980)

GUMBEL I DISTRIBUTION

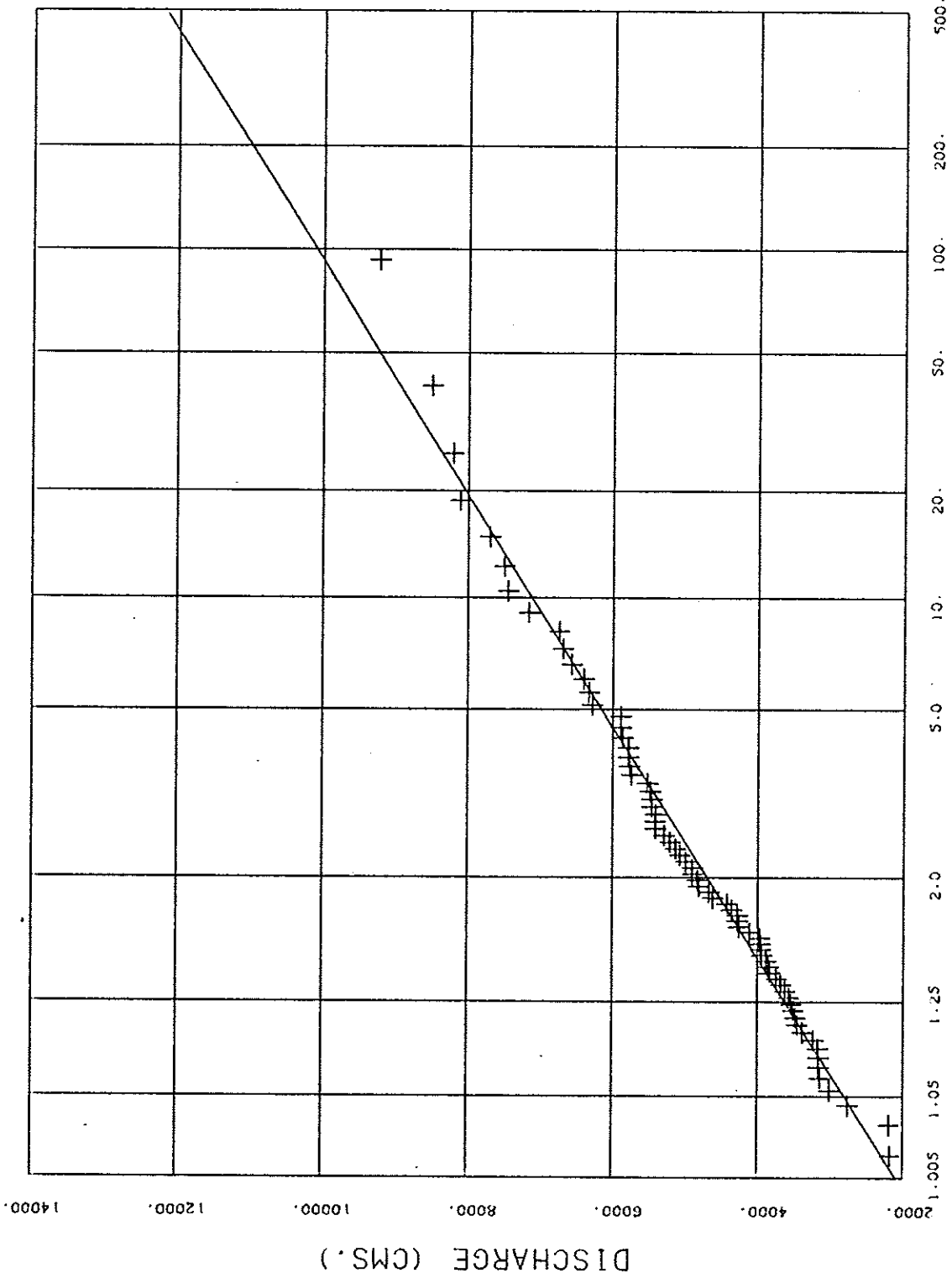


FIGURE C-35

GRENVILLE 2ND PEAK OF THE YEAR 1870-1980

GUMBEL I DISTRIBUTION

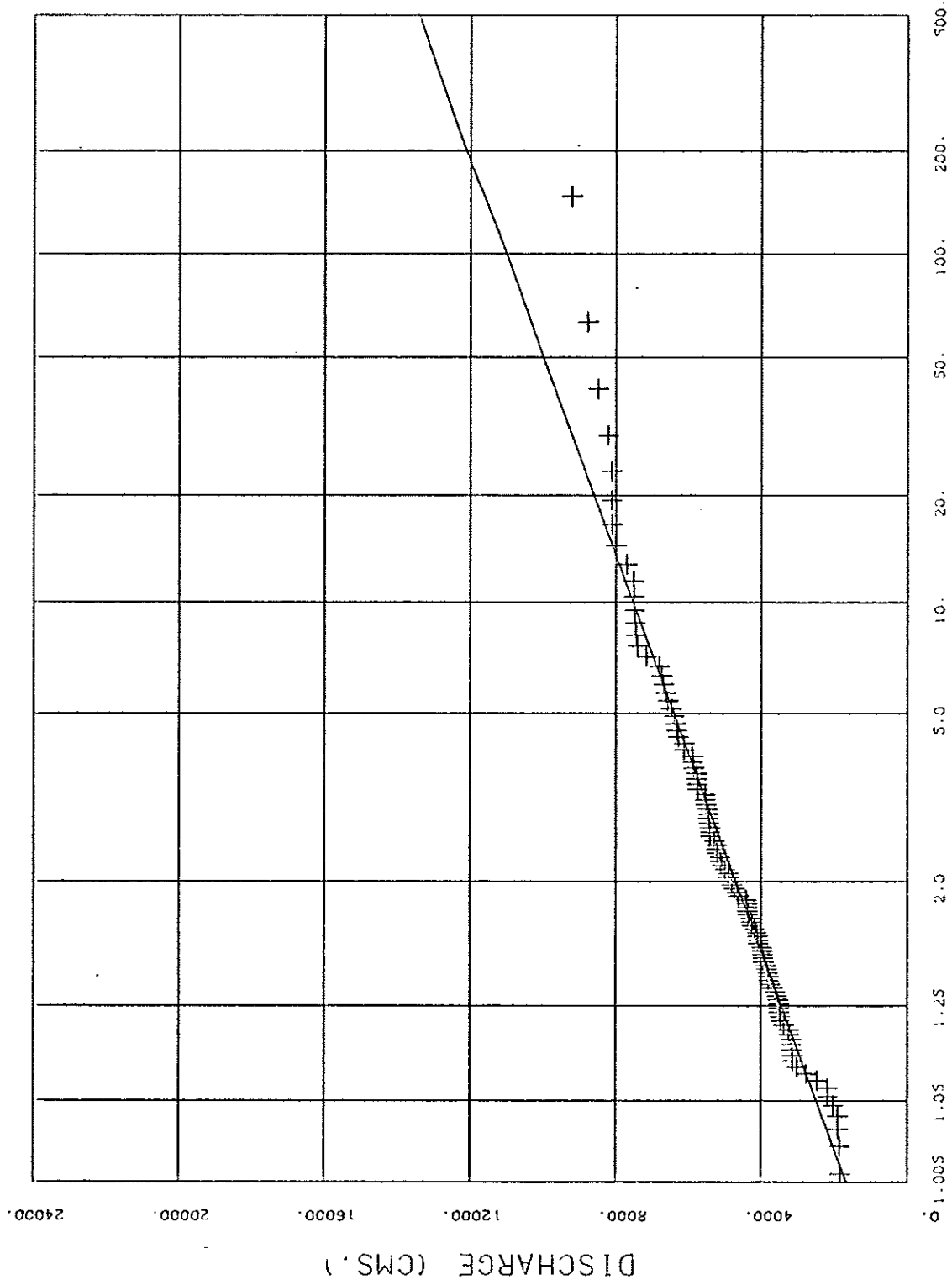


FIGURE C-36

OTTAWA RIVER AT CHAT FALLS DAM STN. NO. 02KF009
 LOG PEARSON TYPE III DISTRIBUTION
 PARAMETERS ESTIMATED BY MOMENTS

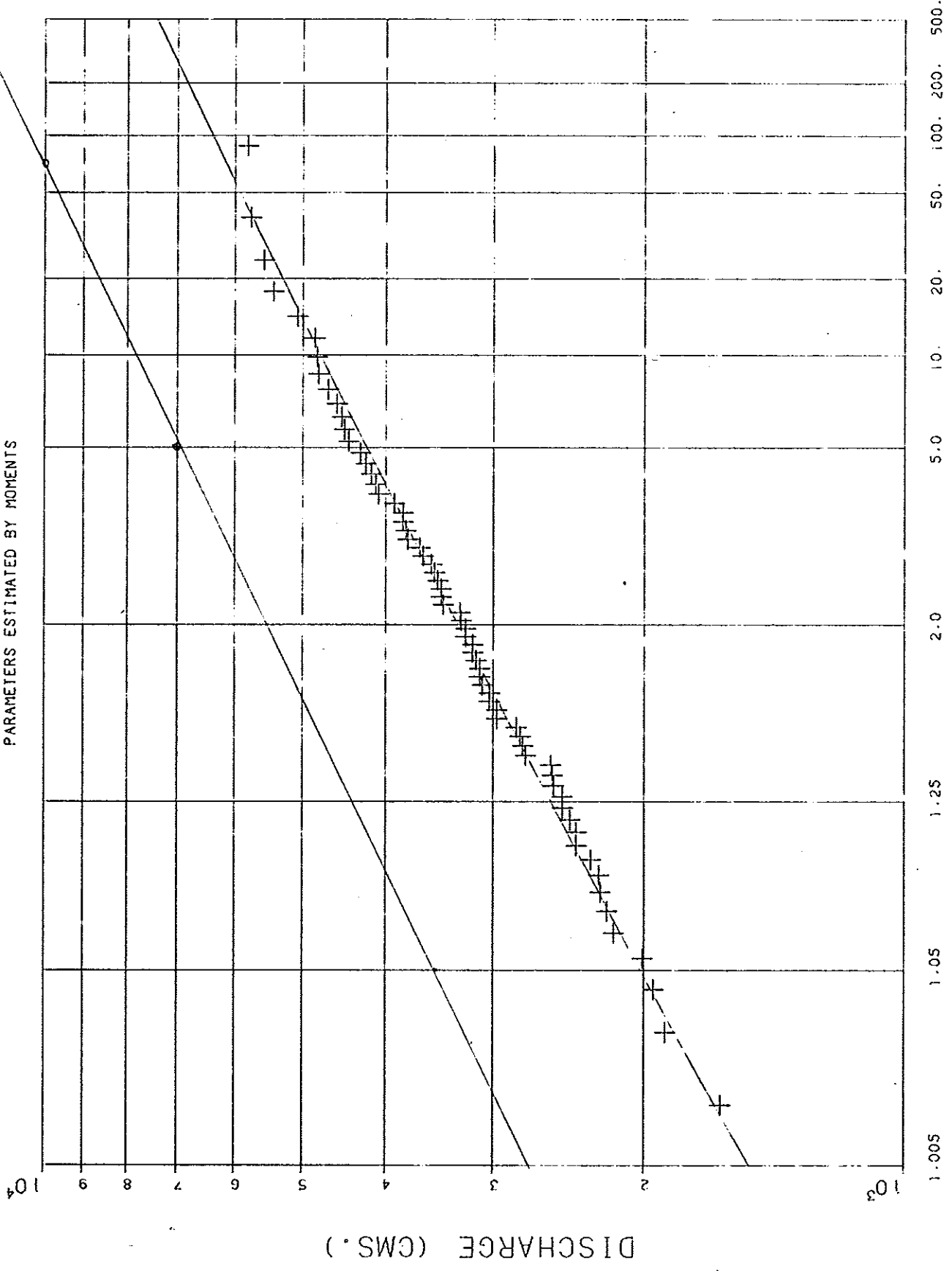


FIGURE C-37

OTTAWA RIVER AT CHAT FALLS DAM STN. NO. 02KF009

LOG-NORMAL DISTRIBUTION

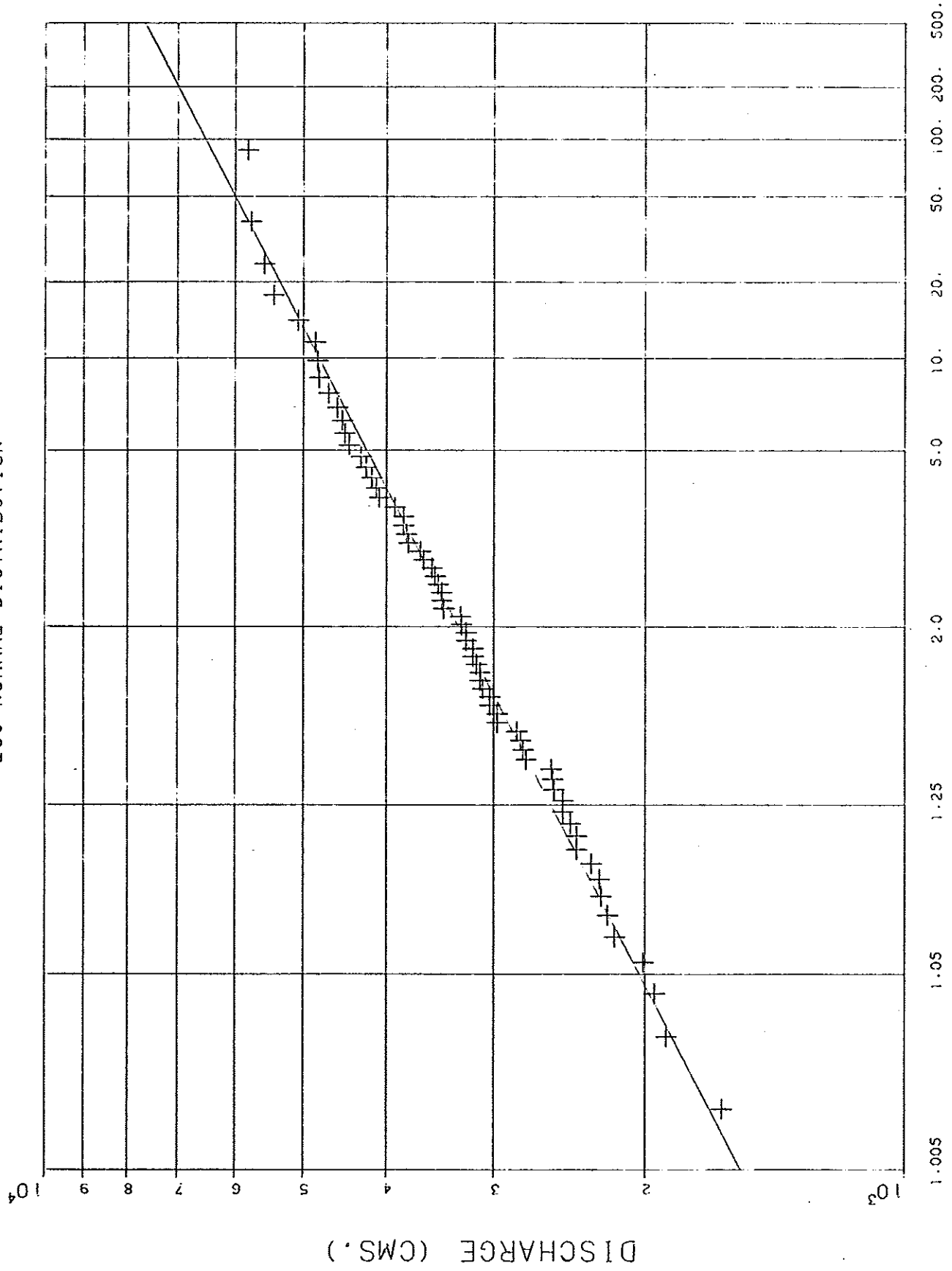


FIGURE C-38

OTTAWA RIVER AT CHAT FALLS DAM STN. NO. 02KF009
THREE PARAMETER LOG-NORMAL DISTRIBUTION

PARAMETERS ESTIMATED BY MOMENTS

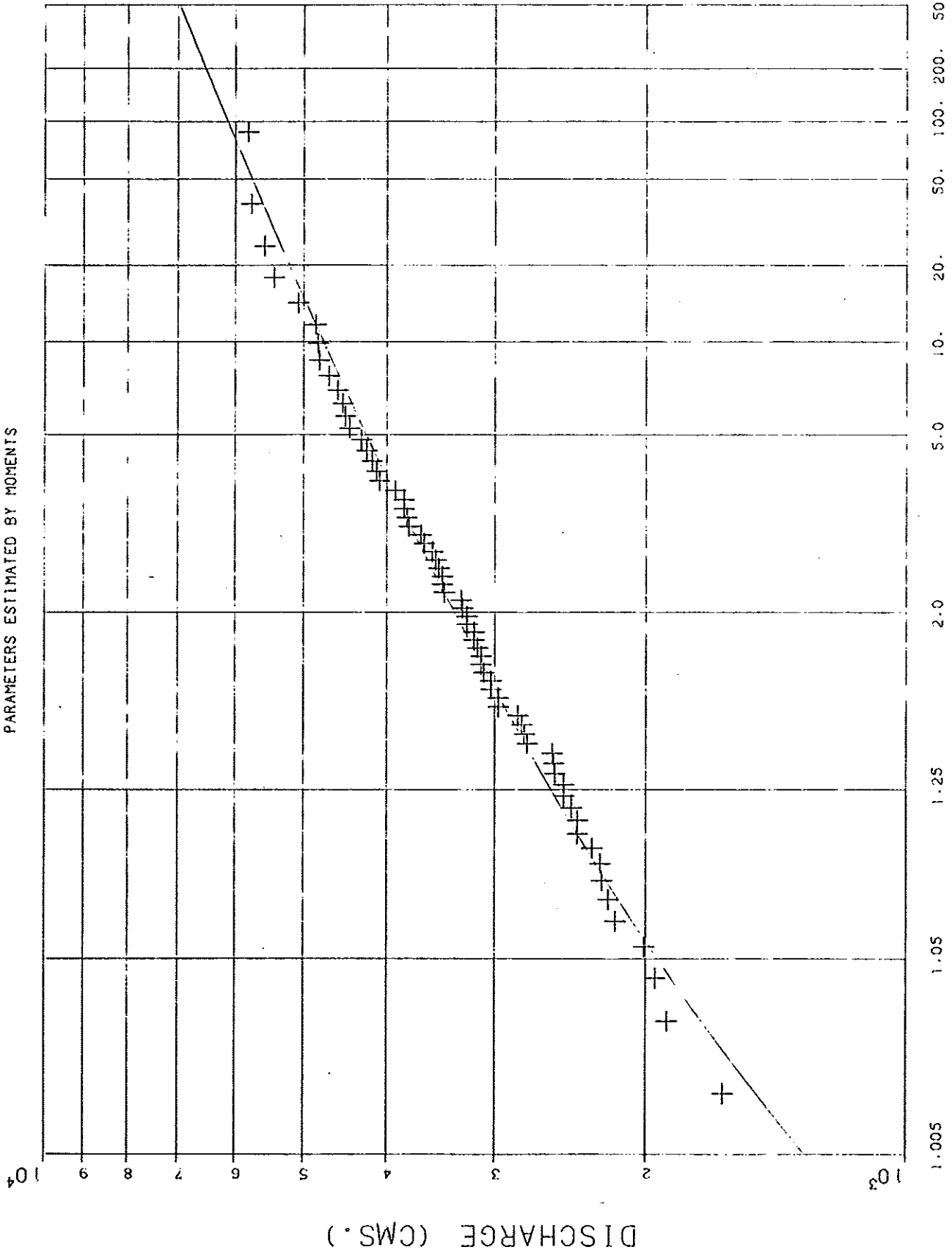


FIGURE C-39

OTTAWA RIVER AT CHAT FALLS DAM STN. NO. 02KF009

GUMBEL I DISTRIBUTION

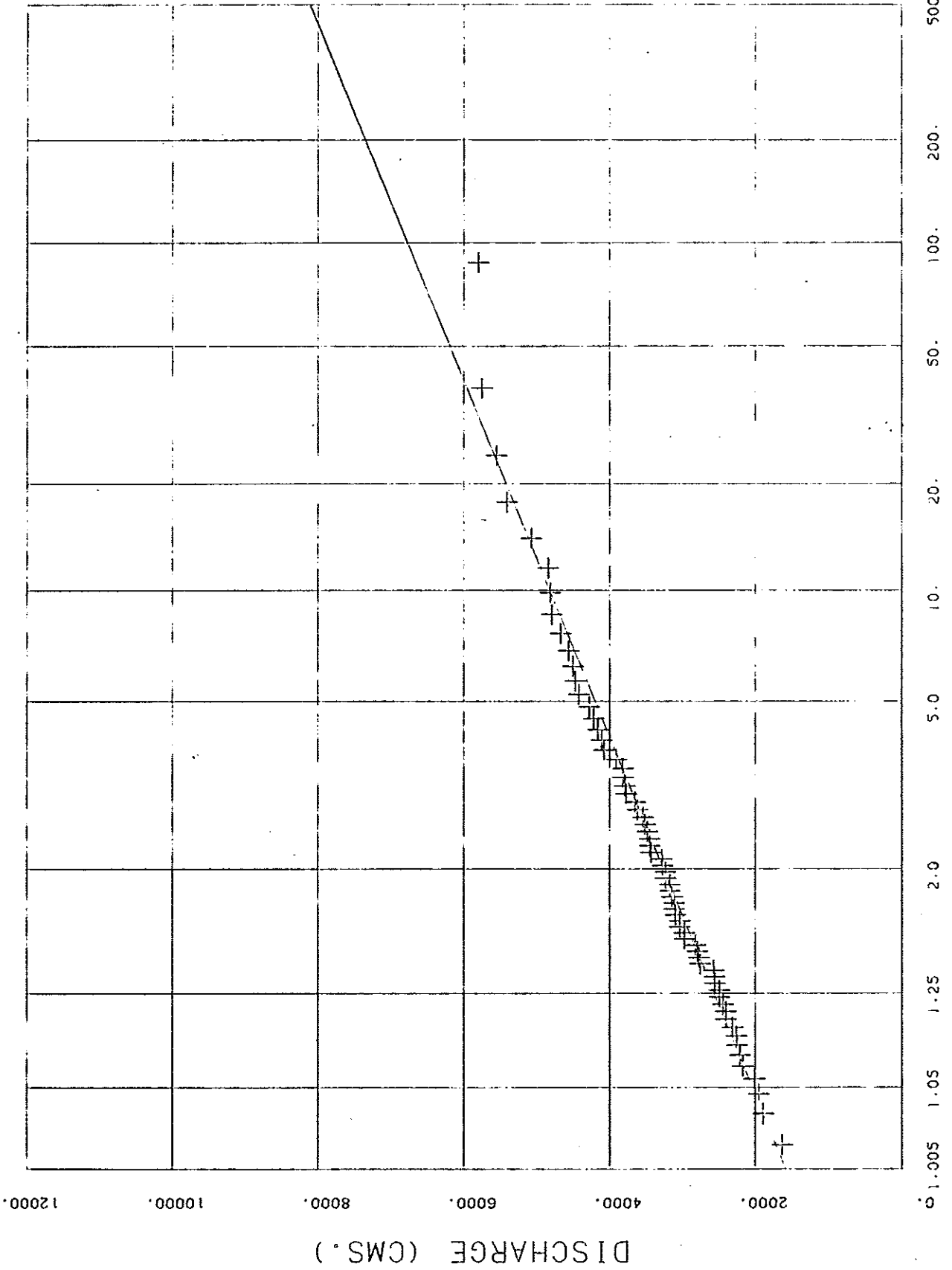


FIGURE C-40