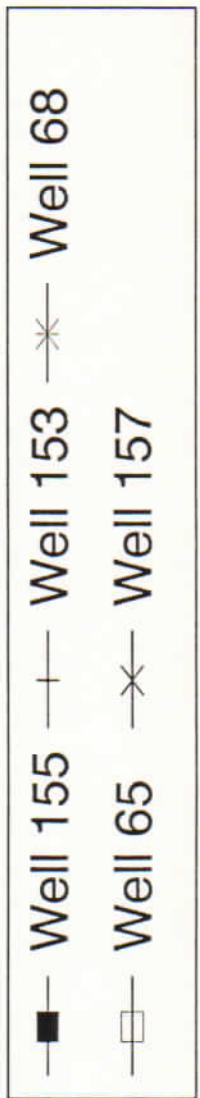
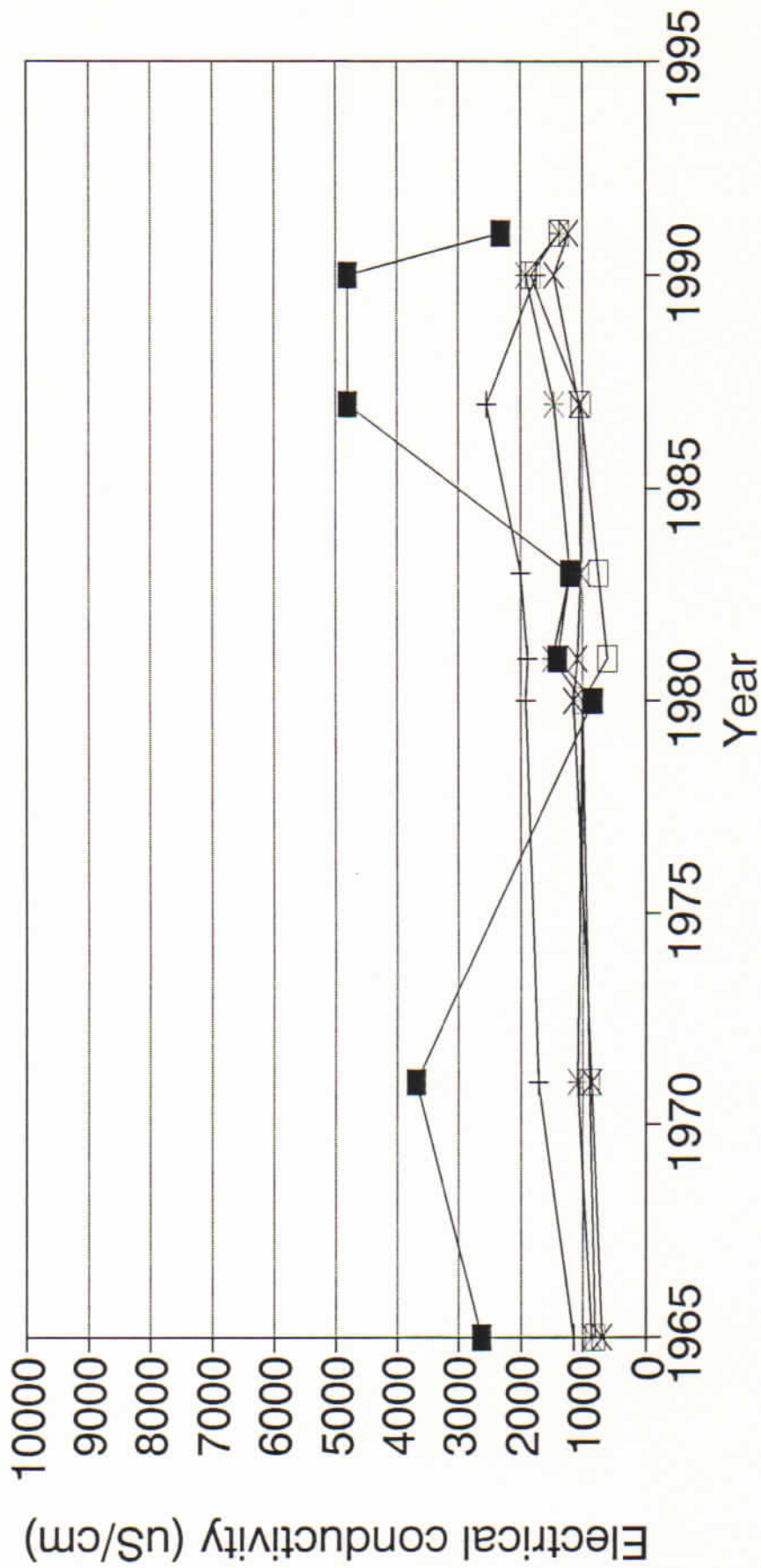


Tongatapu

Salinity variations in selected wells

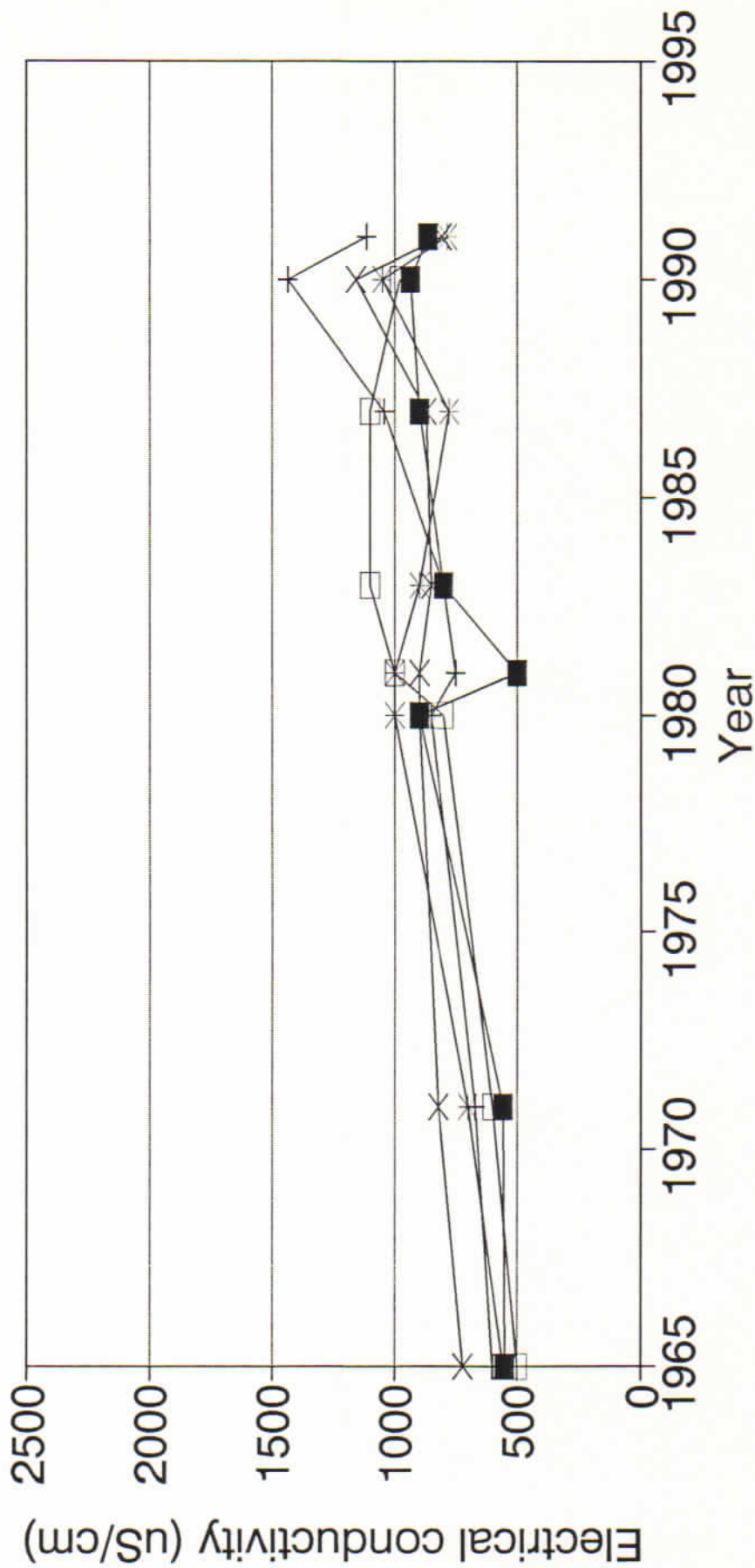


SALINITY VARIATIONS, FAR WEST WELLS ON TONGATAPU, 1965-1990

Figure 5.18

Tongatapu

Salinity variations in selected wells

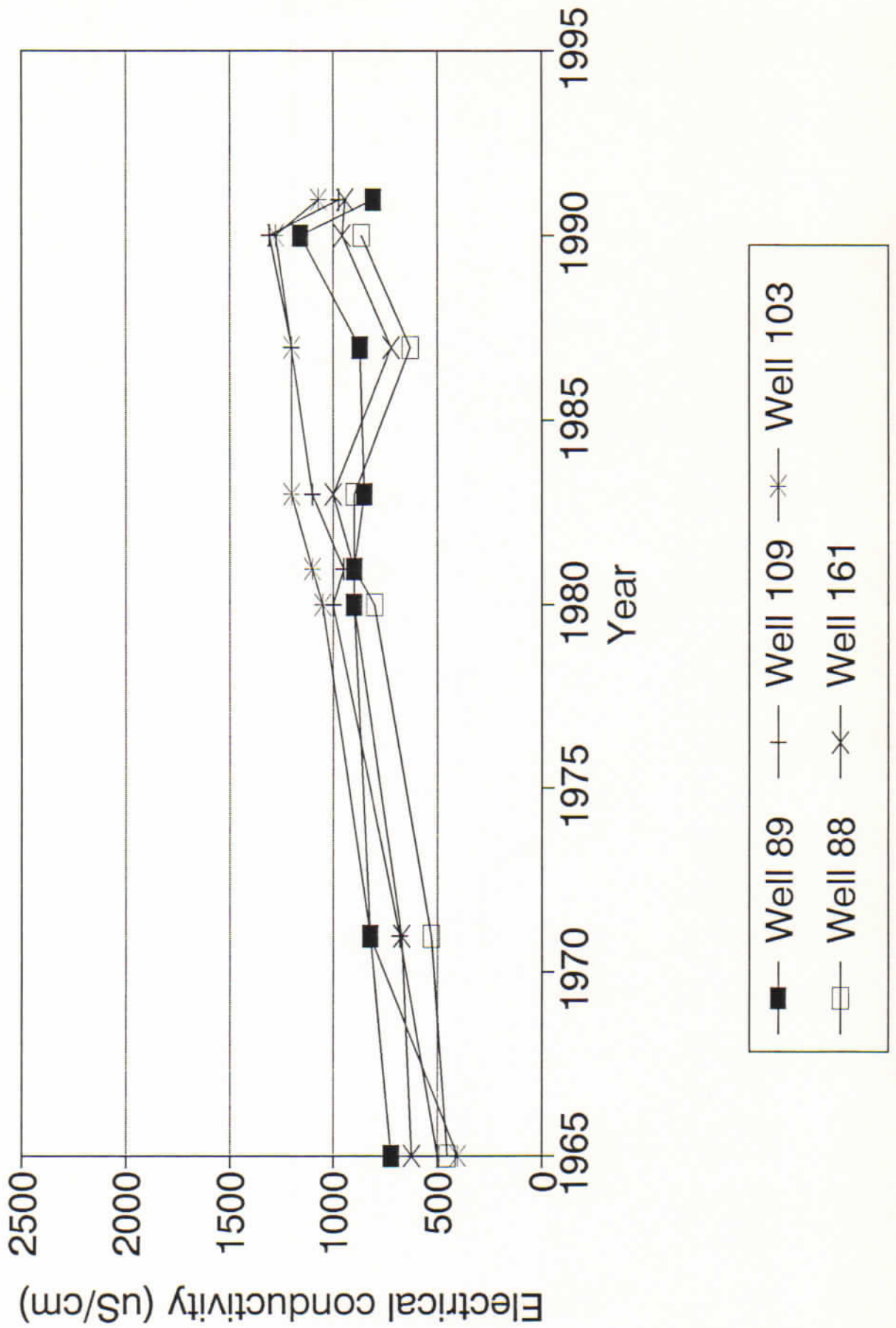


SALINITY VARIATIONS, CENTRAL WEST WELLS ON TONGATAPU, 1965-1990

Figure 5.19

Tongatapu

Salinity variations in selected wells

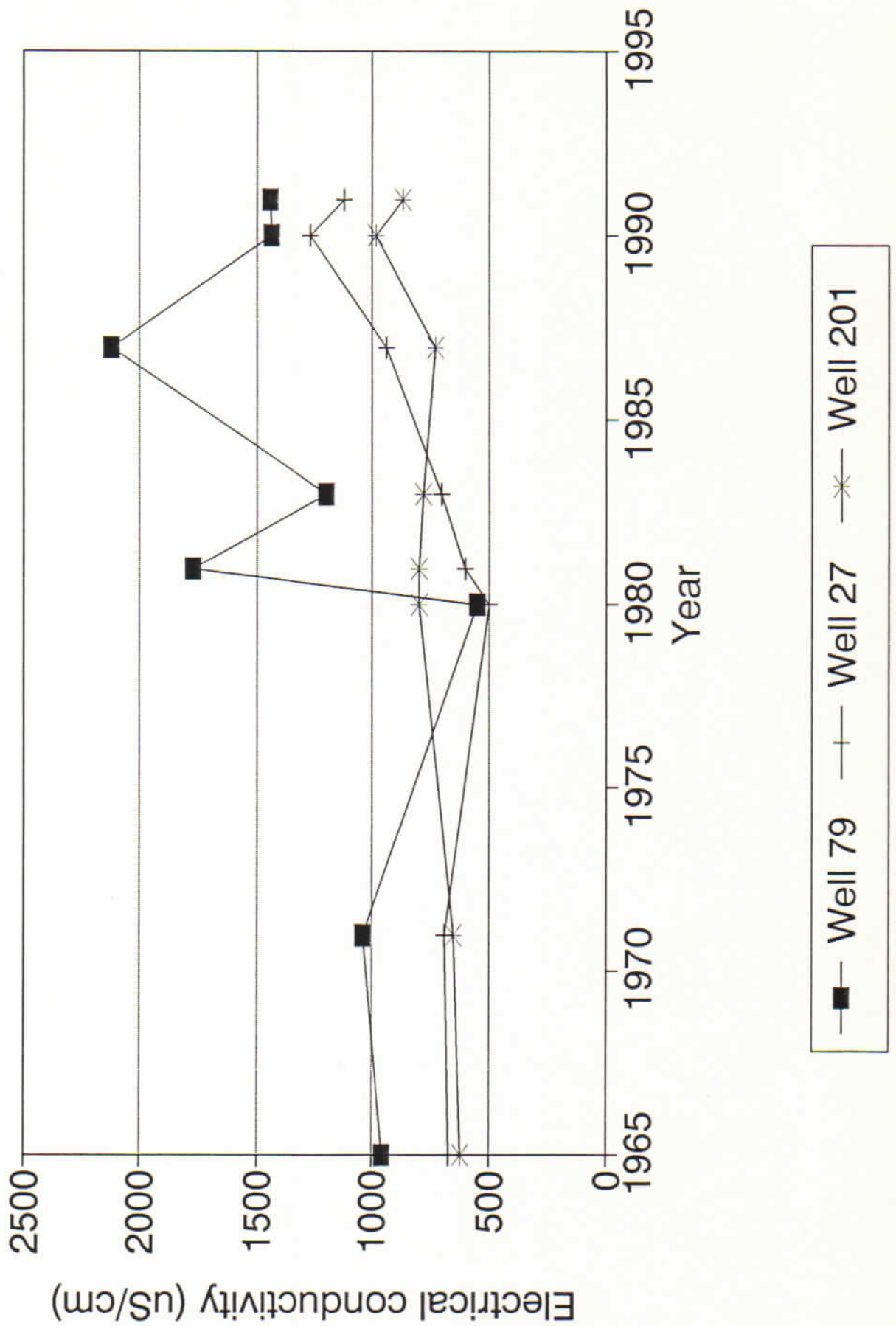


**SALINITY VARIATIONS, INNER WEST WELLS
ON TONGAAPU, 1965-1990**

Figure 5.20

Tongatapu

Salinity variations in selected wells

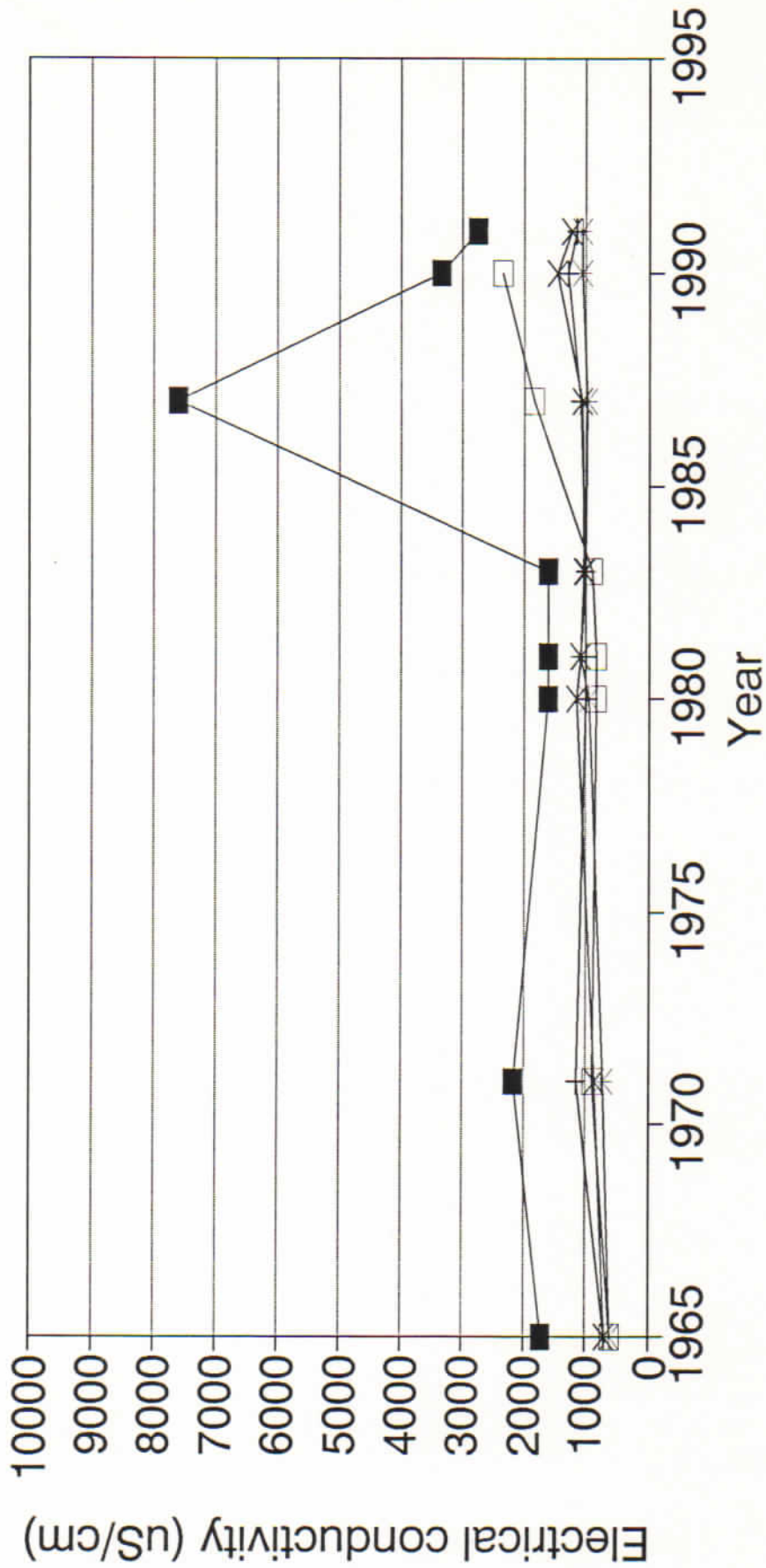


**SALINITY VARIATIONS, CENTRAL WELLS
ON TONGATAPU, 1965-1990**

Figure 5.21

Tongatapu

Salinity variations in selected wells

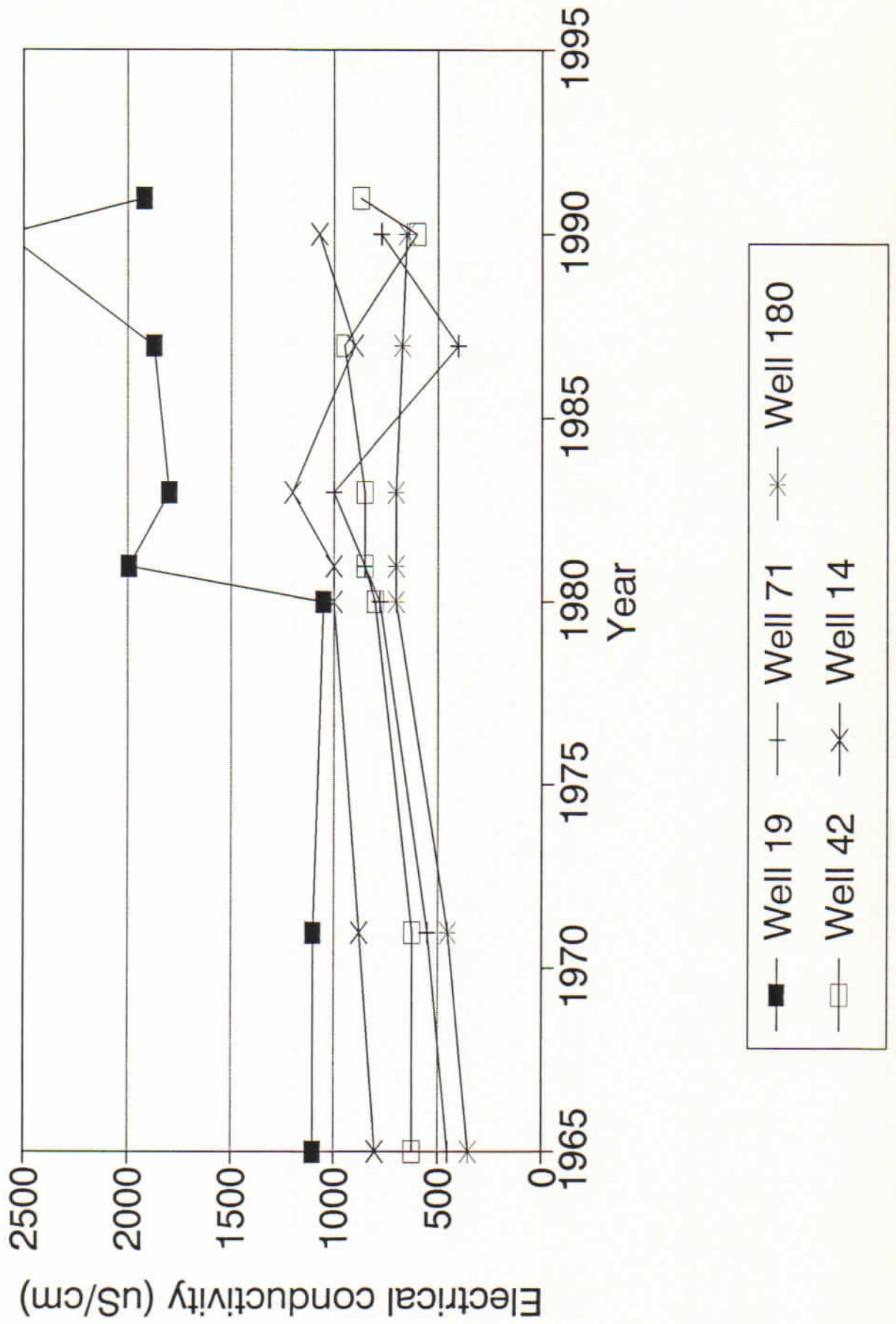


**SALINITY VARIATIONS, NORTHEAST WELLS
ON TONGATAPU, 1965-1990**

Figure 5.22

Tongatapu

Salinity variations in selected wells

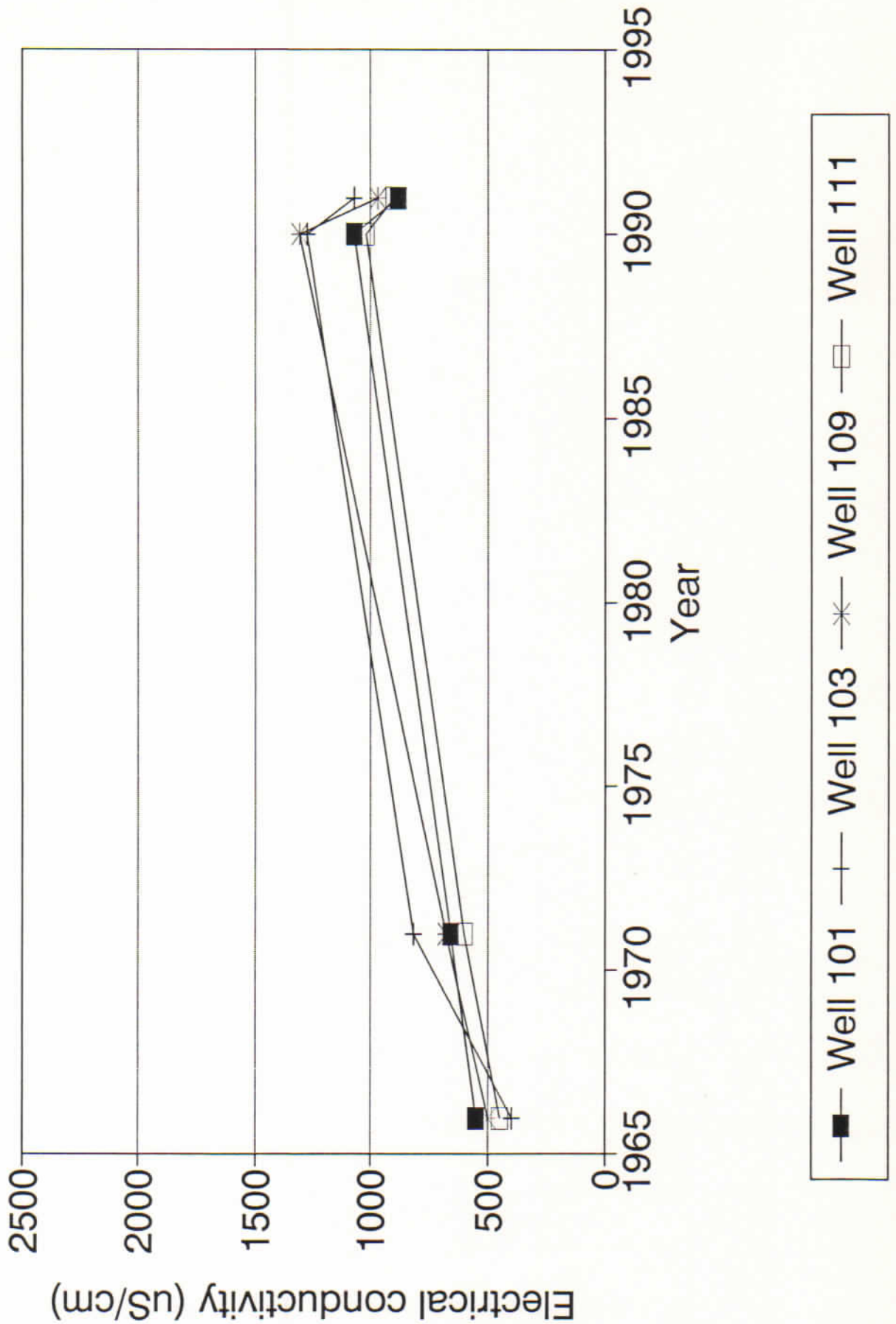


SALINITY VARIATIONS, SOUTHEAST WELLS ON TONGATAPU, 1965-1990

Figure 5.23

Tongatapu, Matakī'eua wellfield

Salinity variations in selected wells

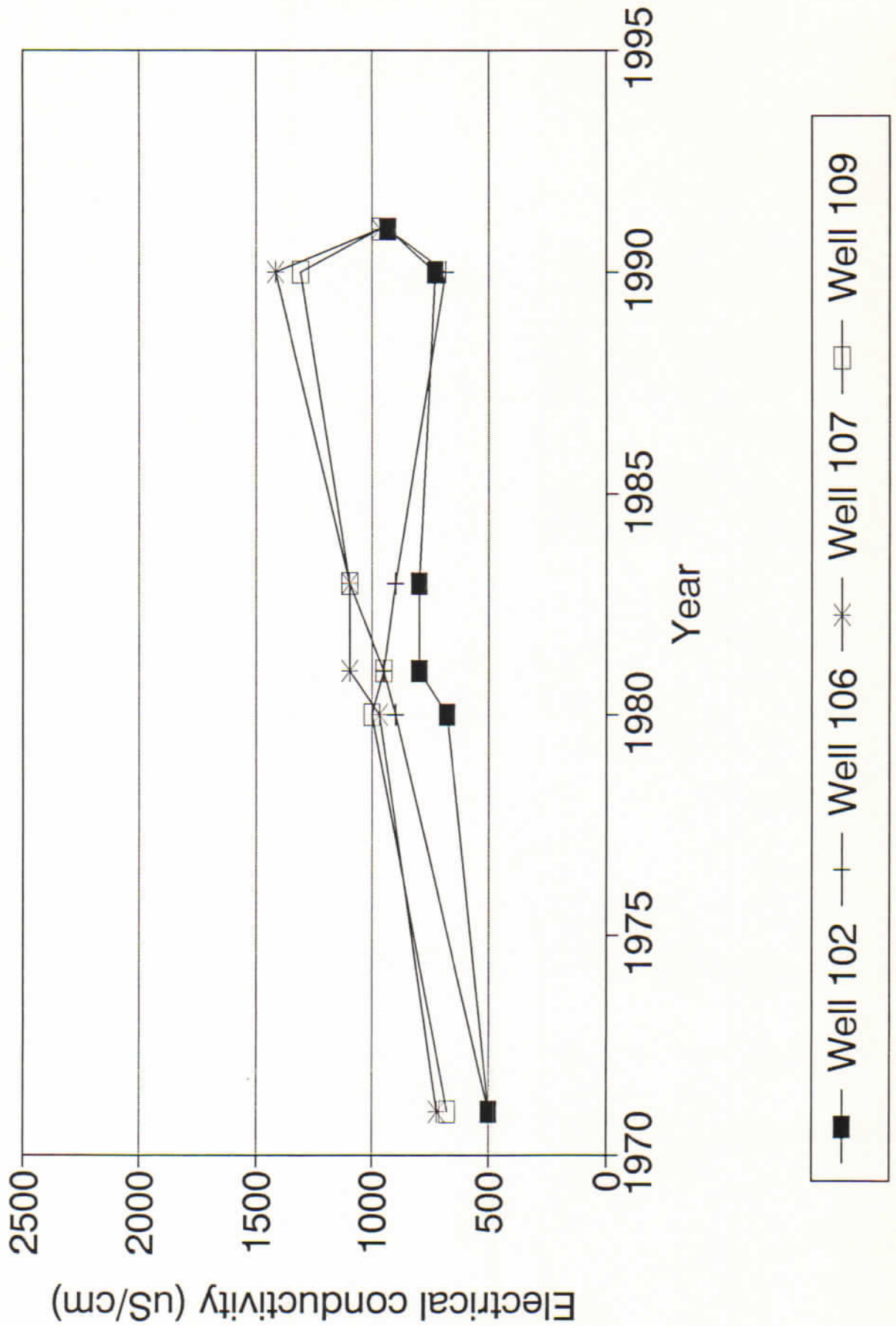


SALINITY VARIATIONS, MATAKĪ'EUA/TONGAMAI WELLFIELD ON TONGATAPU, 1965-1990 (1st GRAPH)

Figure 5.24

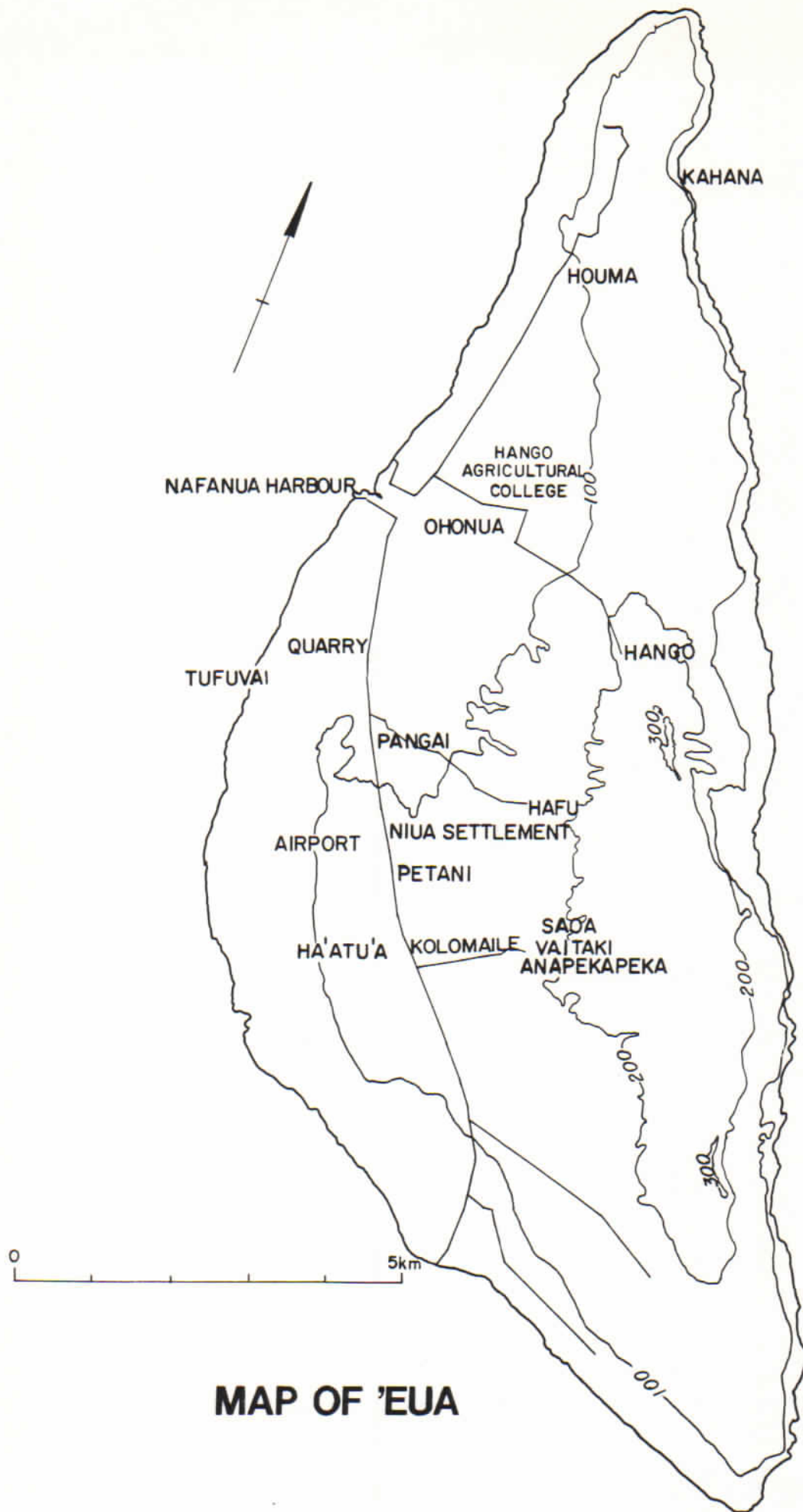
Tongatapu, Matakī'eua wellfield

Salinity variations in selected wells



SALINITY VARIATIONS, MATAKĪ'EUA/TONGAMAI WELLFIELD ON TONGATAPU, 1965-1990 (2nd GRAPH)

Figure 5.25

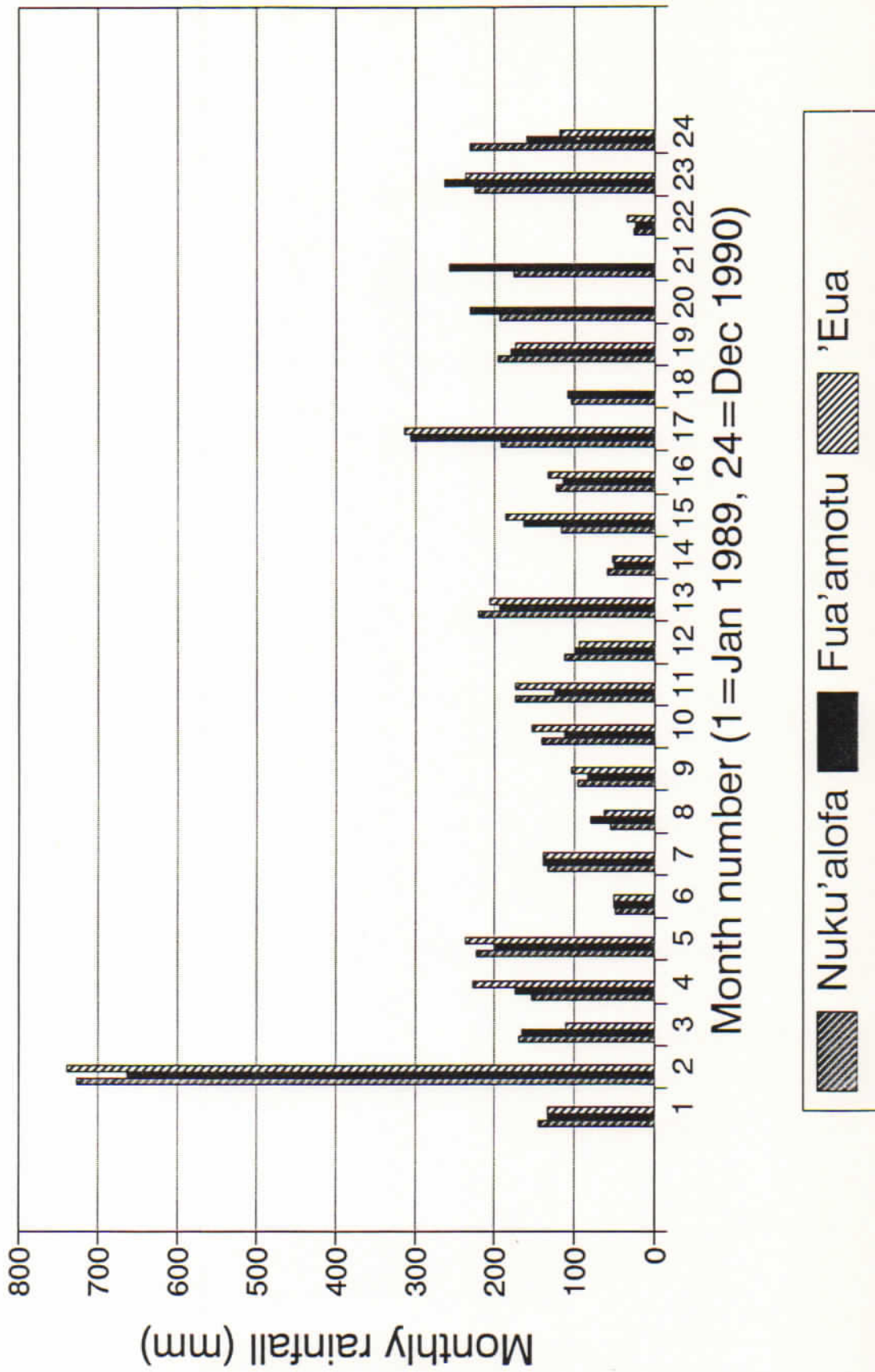


MAP OF 'EUA

Figure 5.26

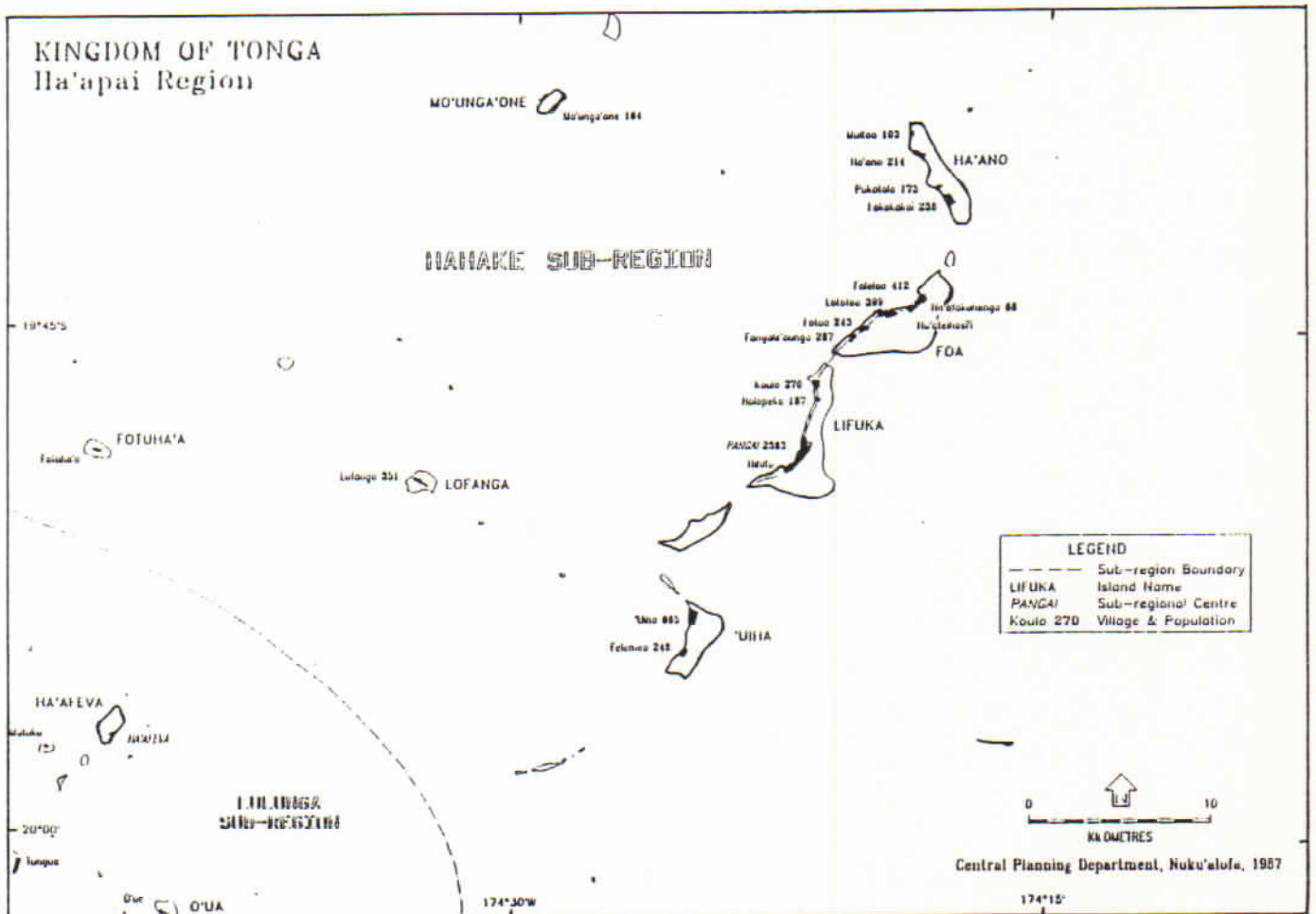
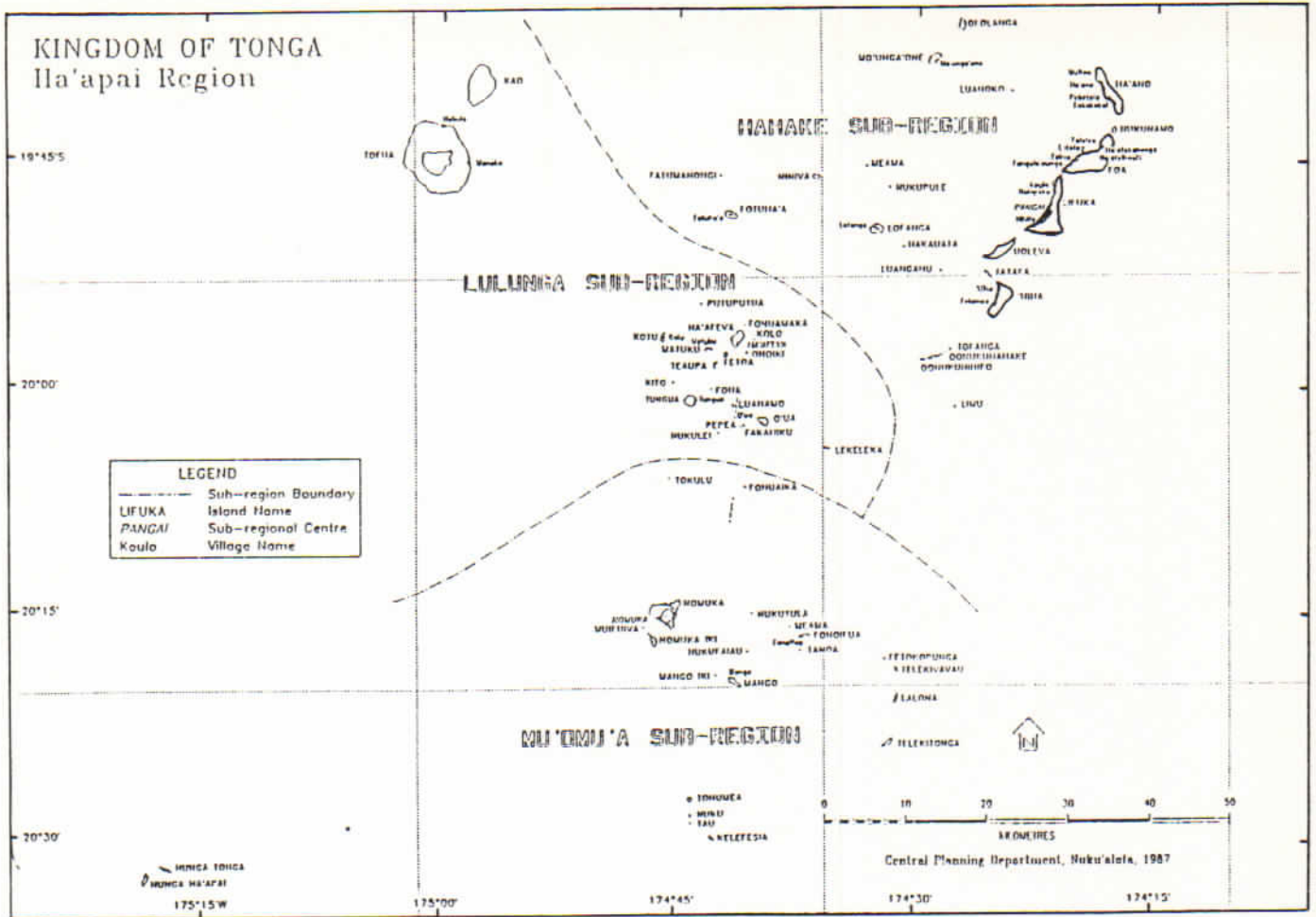
Tongatapu and 'Eua

Monthly rainfall comparison



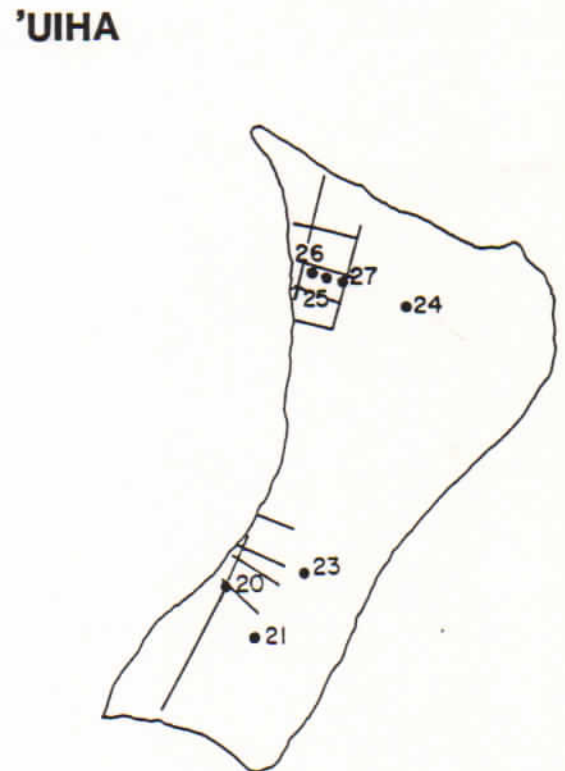
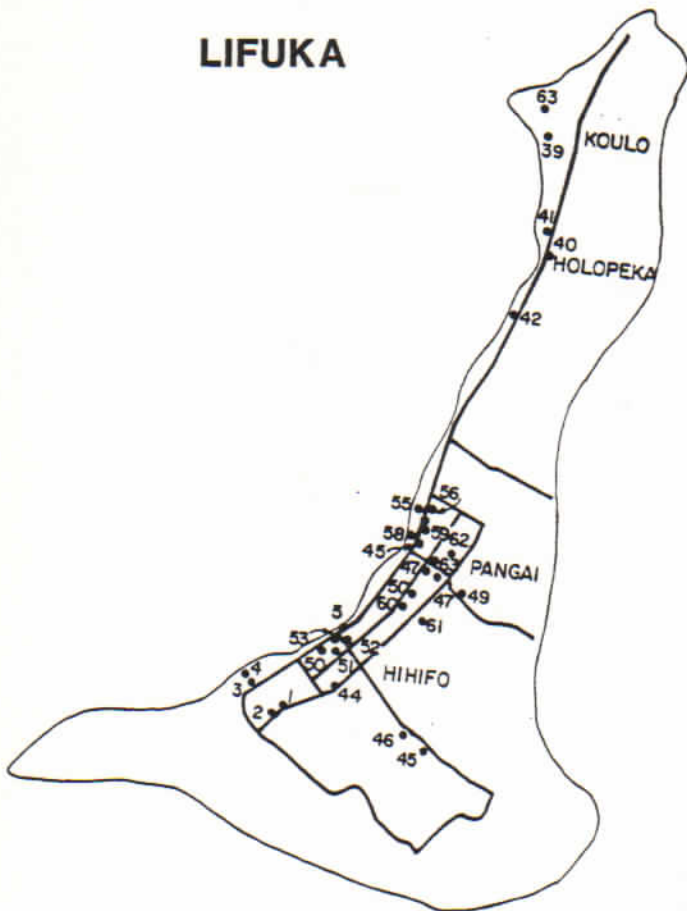
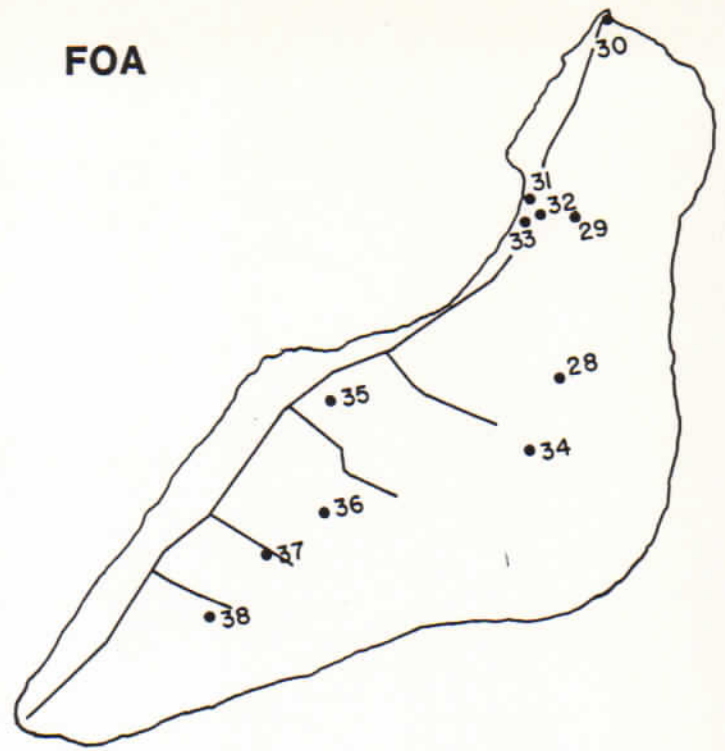
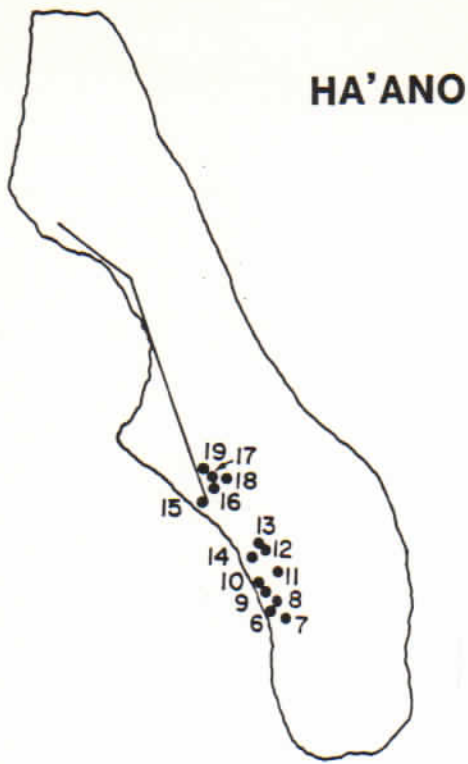
COMPARISON OF MONTHLY RAINFALL AT 'EUA WITH NUKU'ALOFA AND FUA'AMOTU, 1989-1990

Figure 5.27



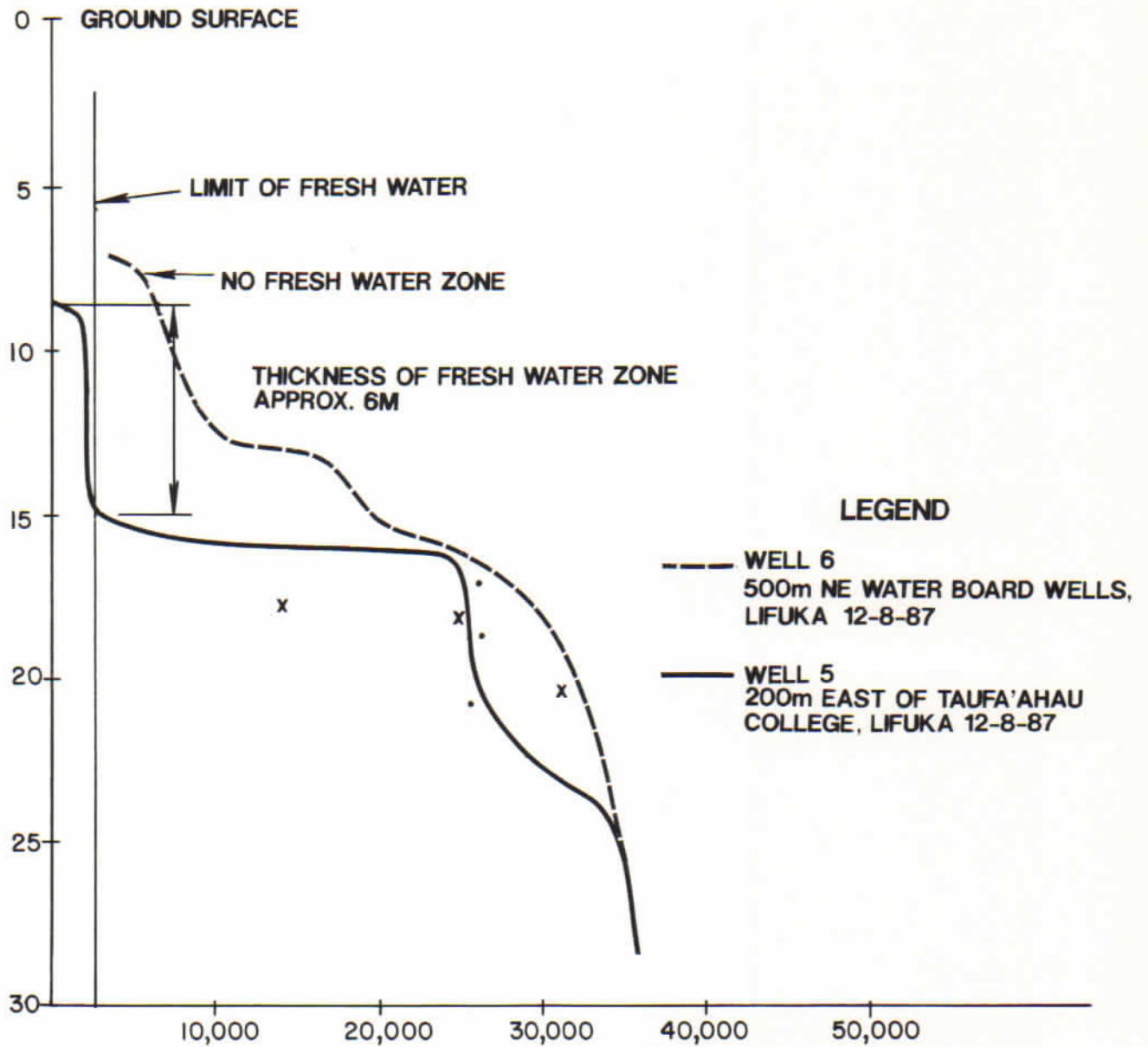
MAP OF THE HA'APAI GROUP

Figure 5.28



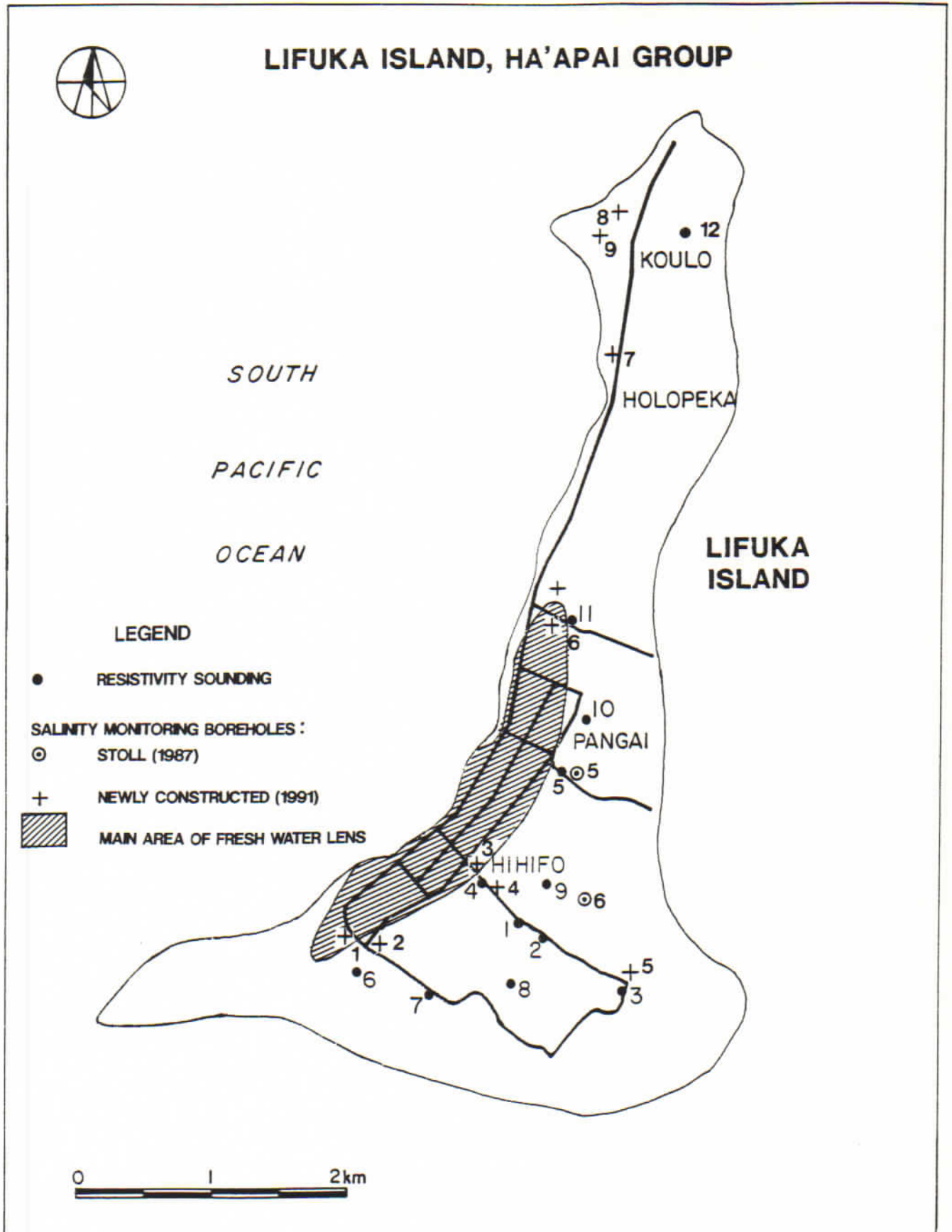
**MAP OF THE MAIN ISLANDS OF THE HA'APAI GROUP
SHOWING LOCATION OF WELLS INCLUDED IN CENSUS**

Figure 5.29



VERTICAL SALINITY PROFILES AT TEST WELLS, LIFUKA

Figure 5.30

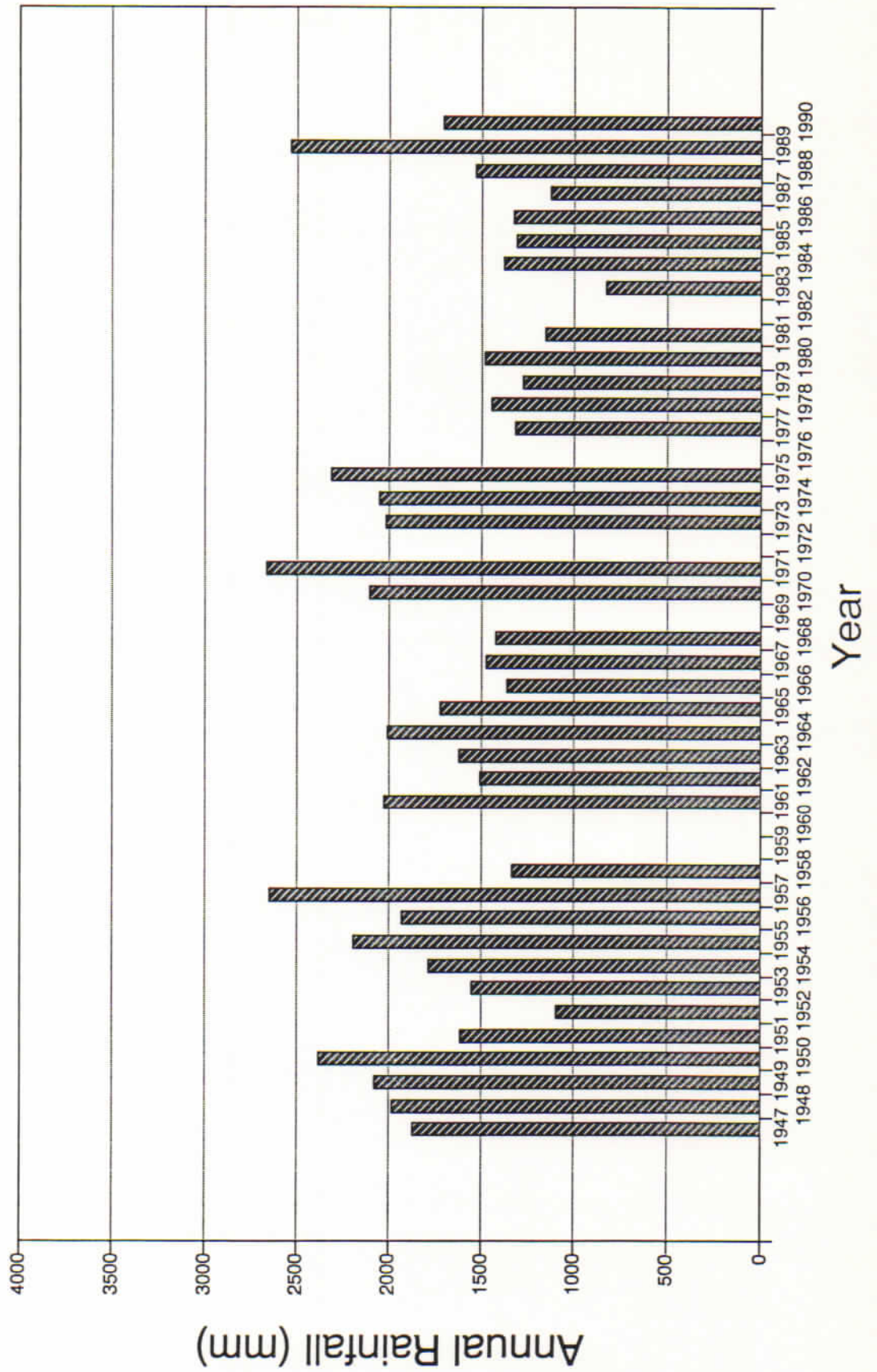


MAP OF LIFUKA SHOWING LOCATION OF ELECTRICAL RESISTIVITY SOUNDINGS, SALINITY MONITORING BOREHOLES AND MAIN AREA OF FRESHWATER LENS

Figure 5.31

Ha'apai

Annual Rainfall from 1947 to 1990

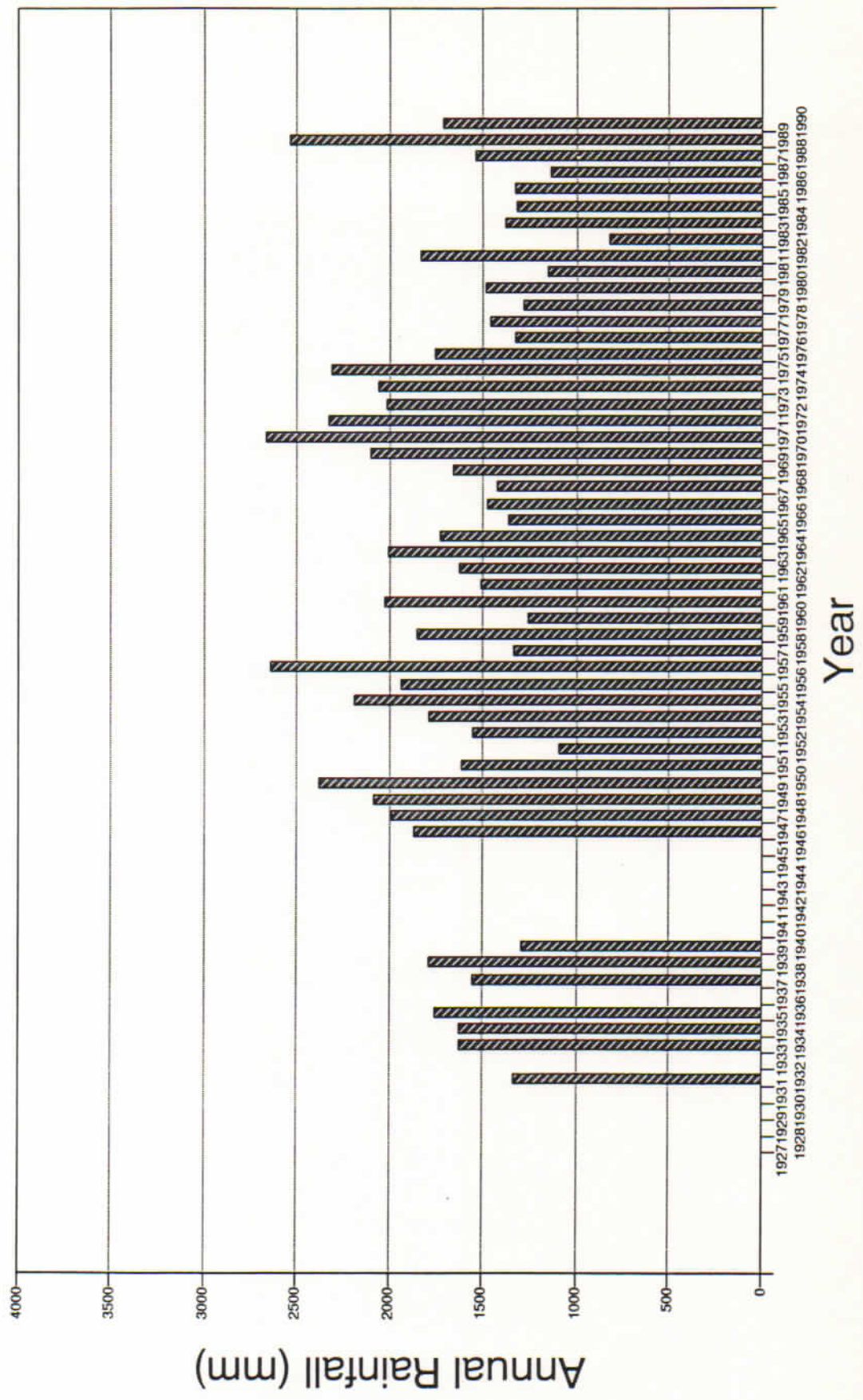


ANNUAL RAINFALL AT LIFUKA, HA'APAI, 1947-1990

Figure 5.32

Ha'apai

Annual Rainfall from 1932 to 1990

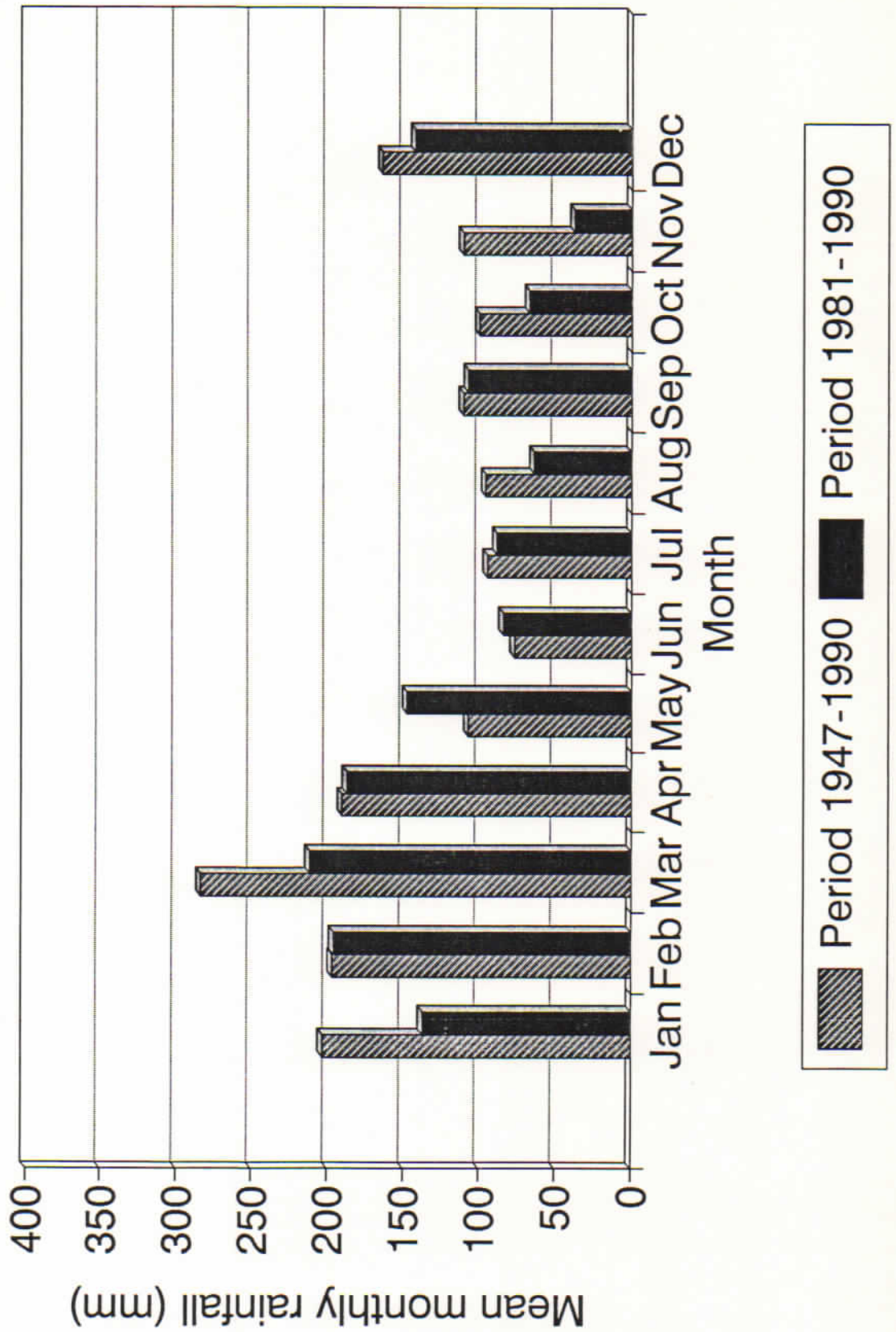


ANNUAL RAINFALL AT LIFUKA, HA'APAI, 1932-1990

Figure 5.33

Ha'apai

Mean monthly rainfall at Pangai, Lifuka

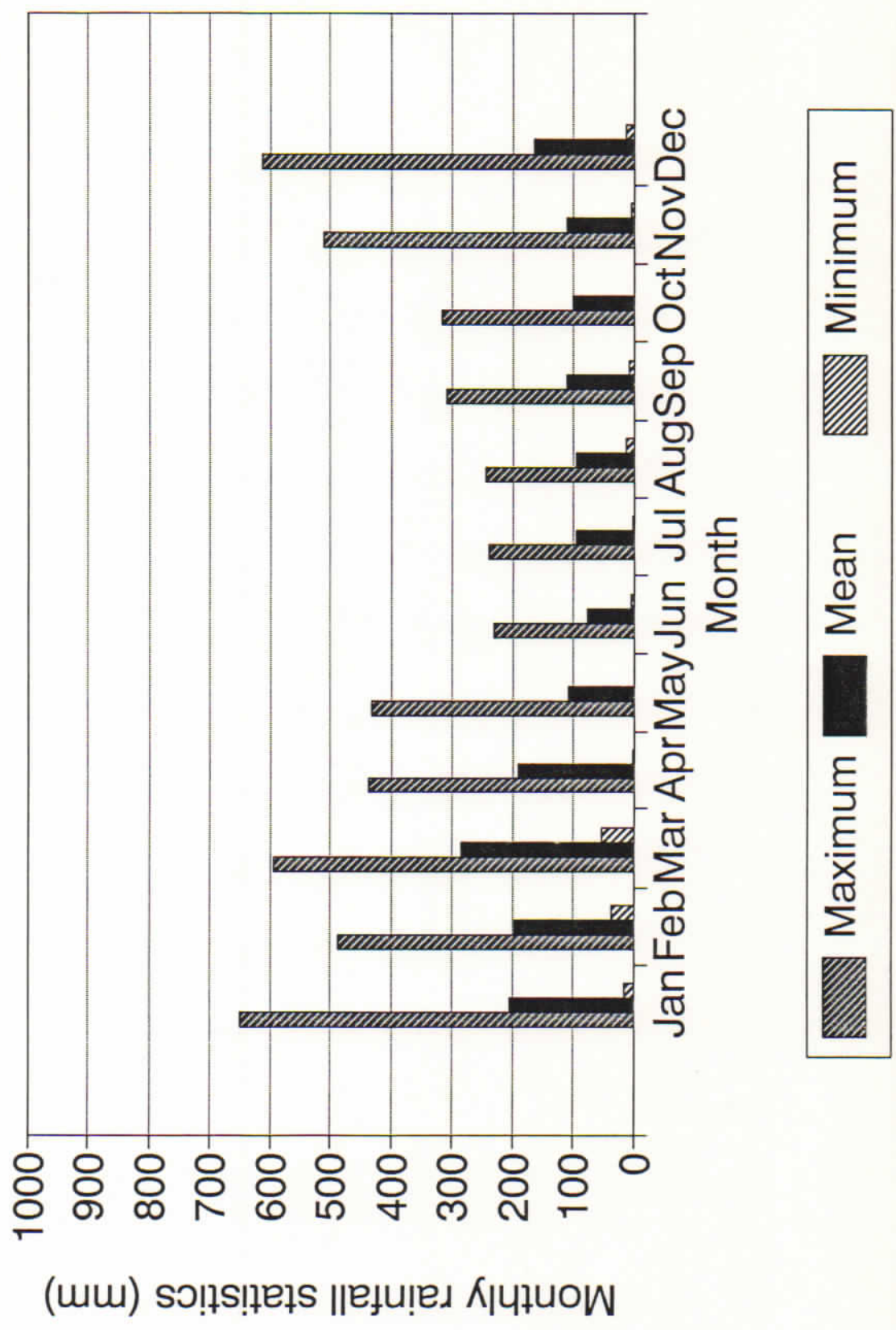


MEAN MONTHLY RAINFALL AT LIFUKA, HA'APAI FOR PERIODS 1947-1990 and 1981-1990

Figure 5.34

Ha'apai

Monthly rain statistics: Pangai, Lifuka

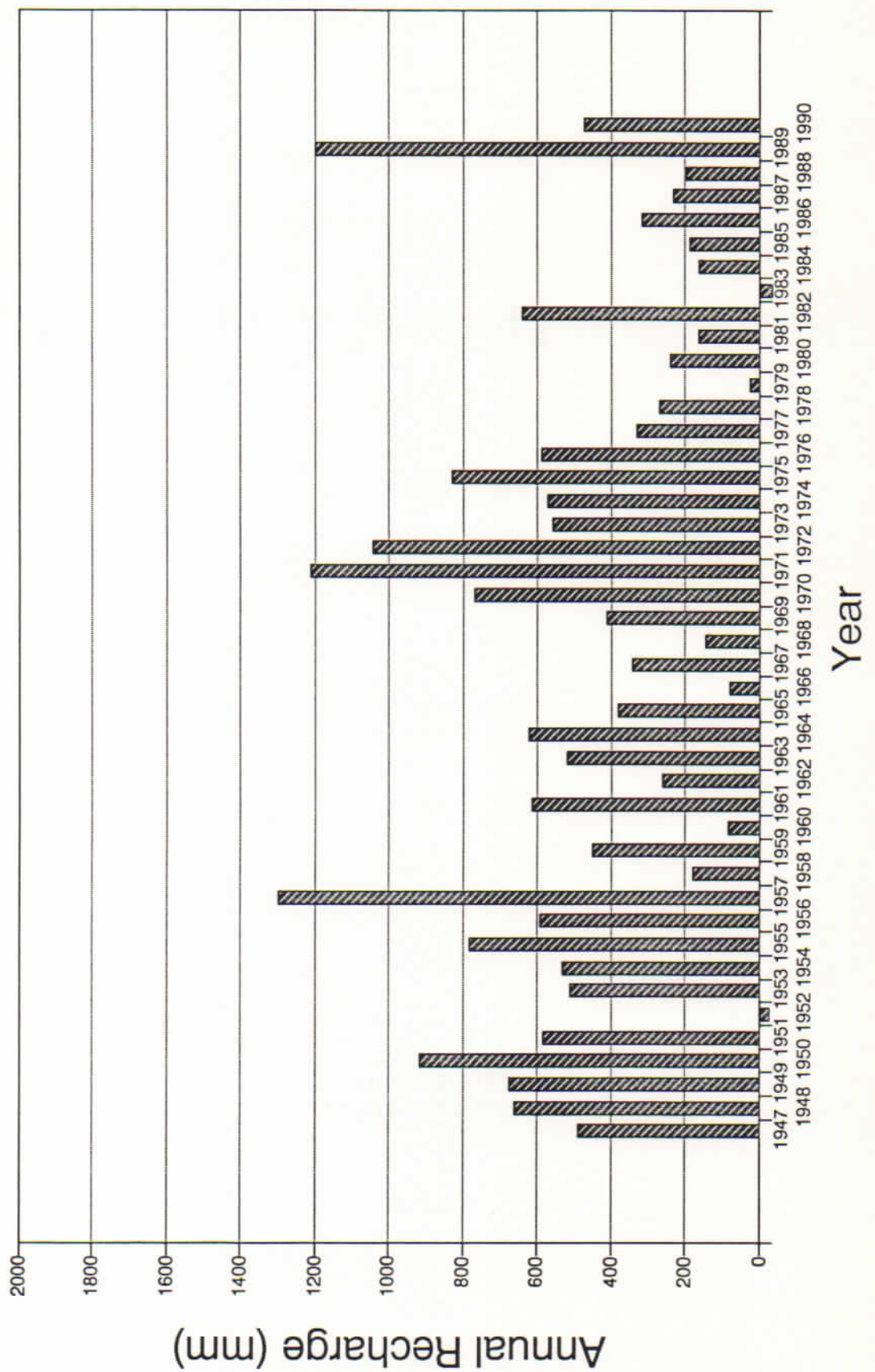


MAXIMUM, MEAN AND MINIMUM MONTHLY RAINFALL AT LIFUKA, HA'APAI FOR PERIOD 1947-1990

Figure 5.35

Ha'apai

Annual Recharge from 1947 to 1990

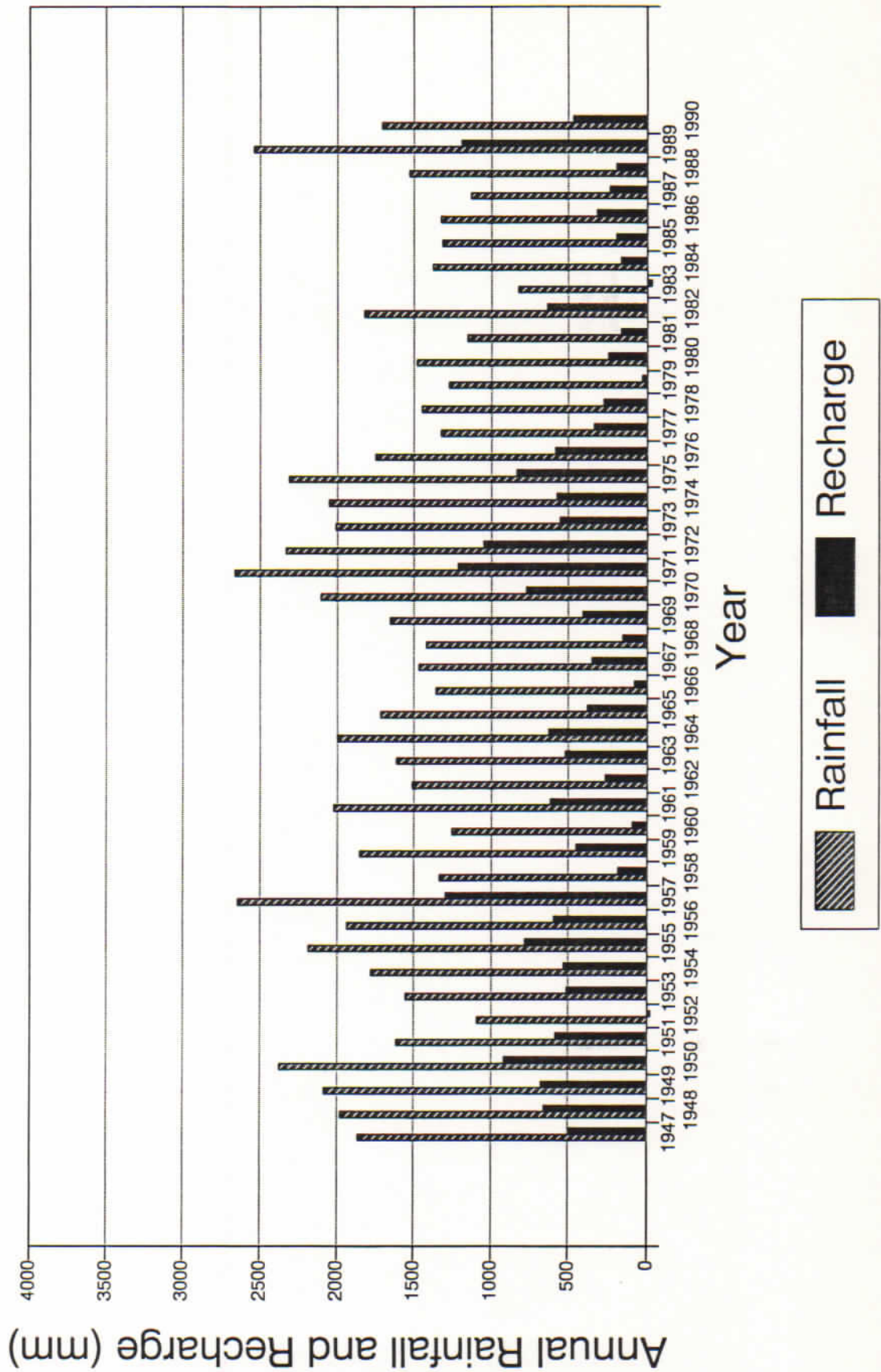


ANNUAL RECHARGE ON LIFUKA, HA'APAI, 1947-1990

Figure 5.36

Ha'apai

Rainfall and Recharge from 1947 to 1990

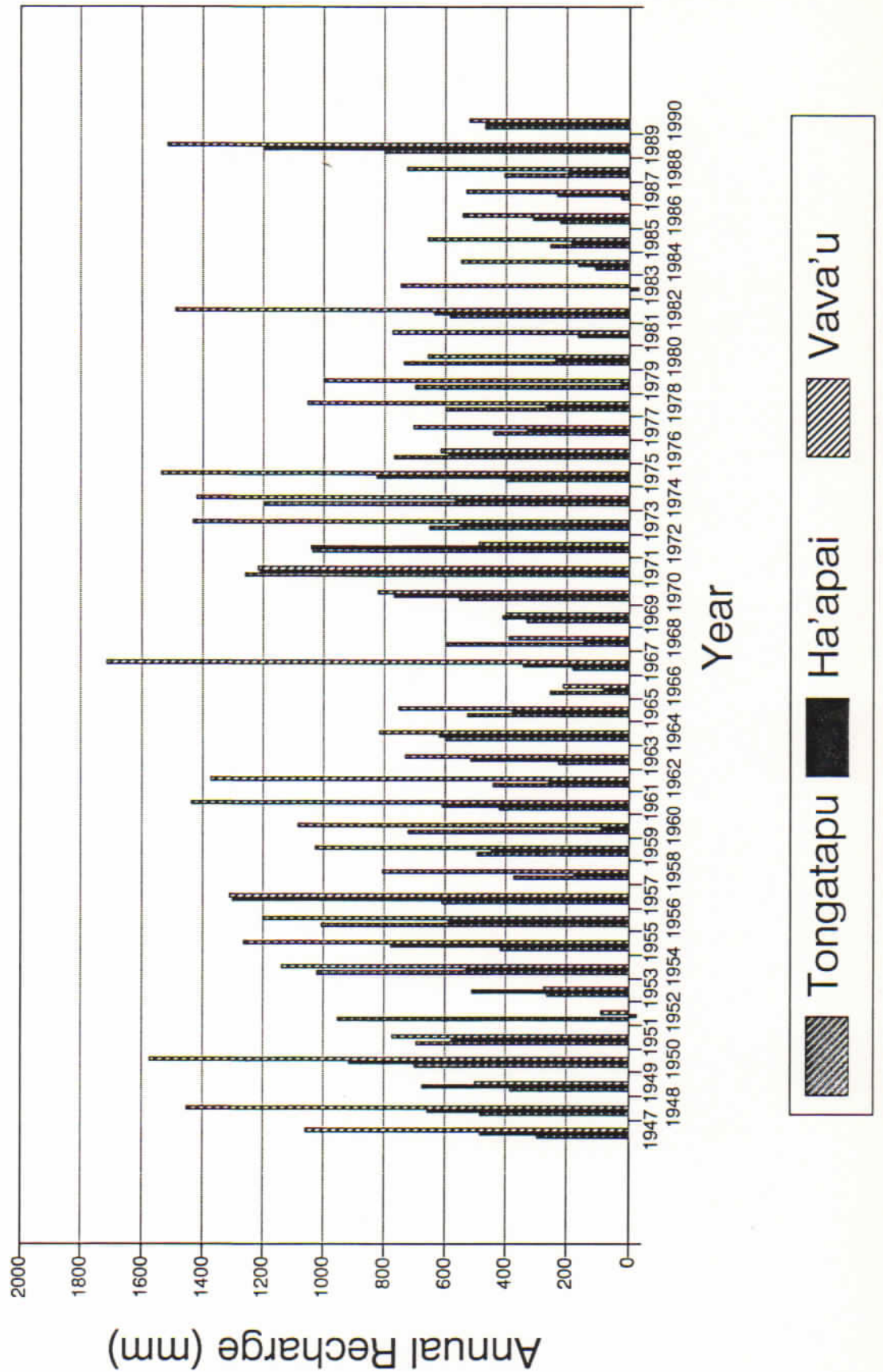


COMPARISON OF ANNUAL RAINFALL AND RECHARGE ON LIFUKA, HA'APAI, 1947-1990

Figure 5.37

Tonga

Annual Recharge from 1947 to 1990

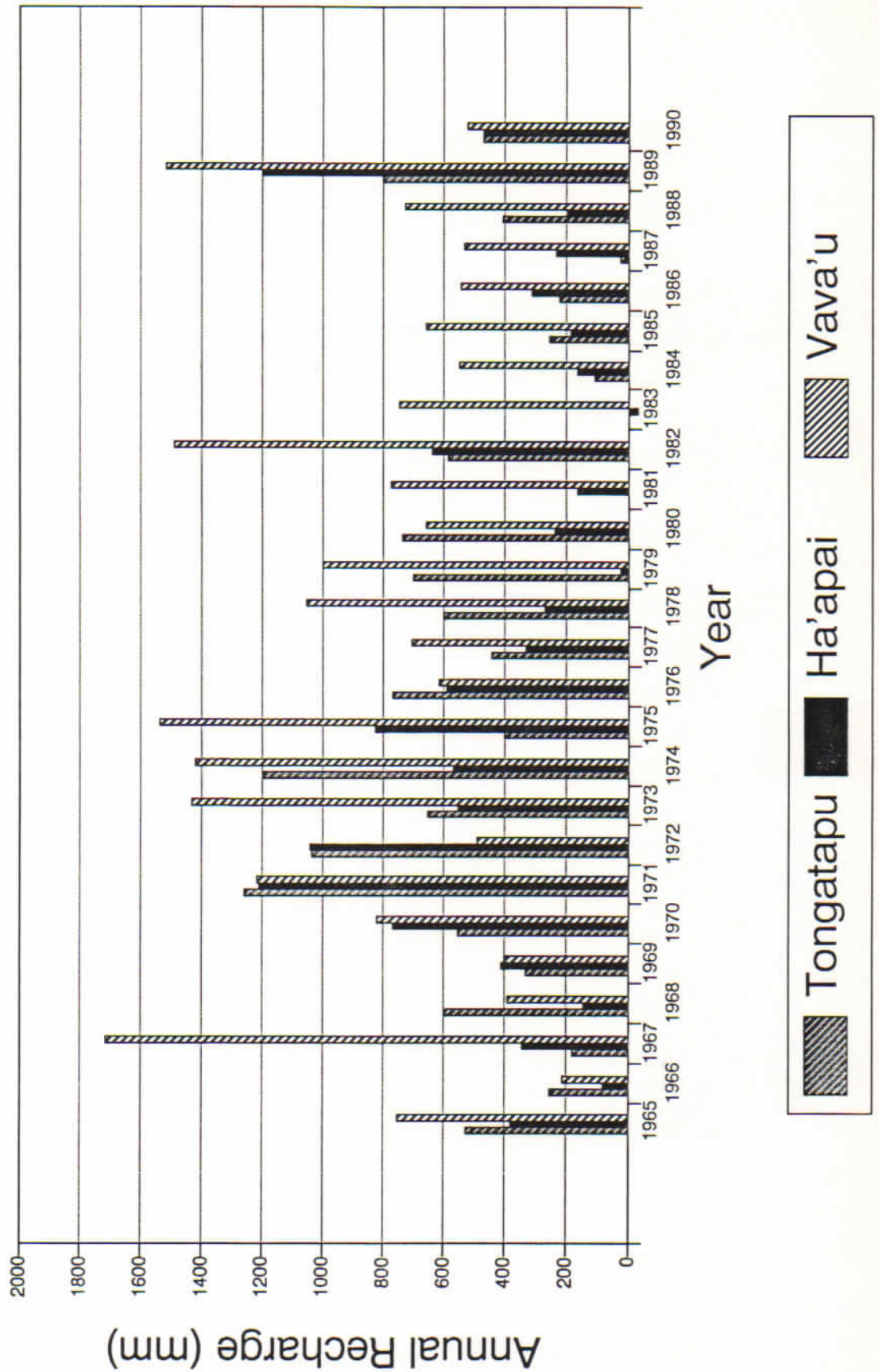


COMPARISON OF ANNUAL RECHARGE IN TONGATAPU, HA'APAI AND VAVA'U, 1947-1990

Figure 5.38

Tonga

Annual Recharge from 1965 to 1990



COMPARISON OF ANNUAL RECHARGE IN TONGATAPU, HA'APAI AND VAVA'U, 1965-1990

Figure 5.39

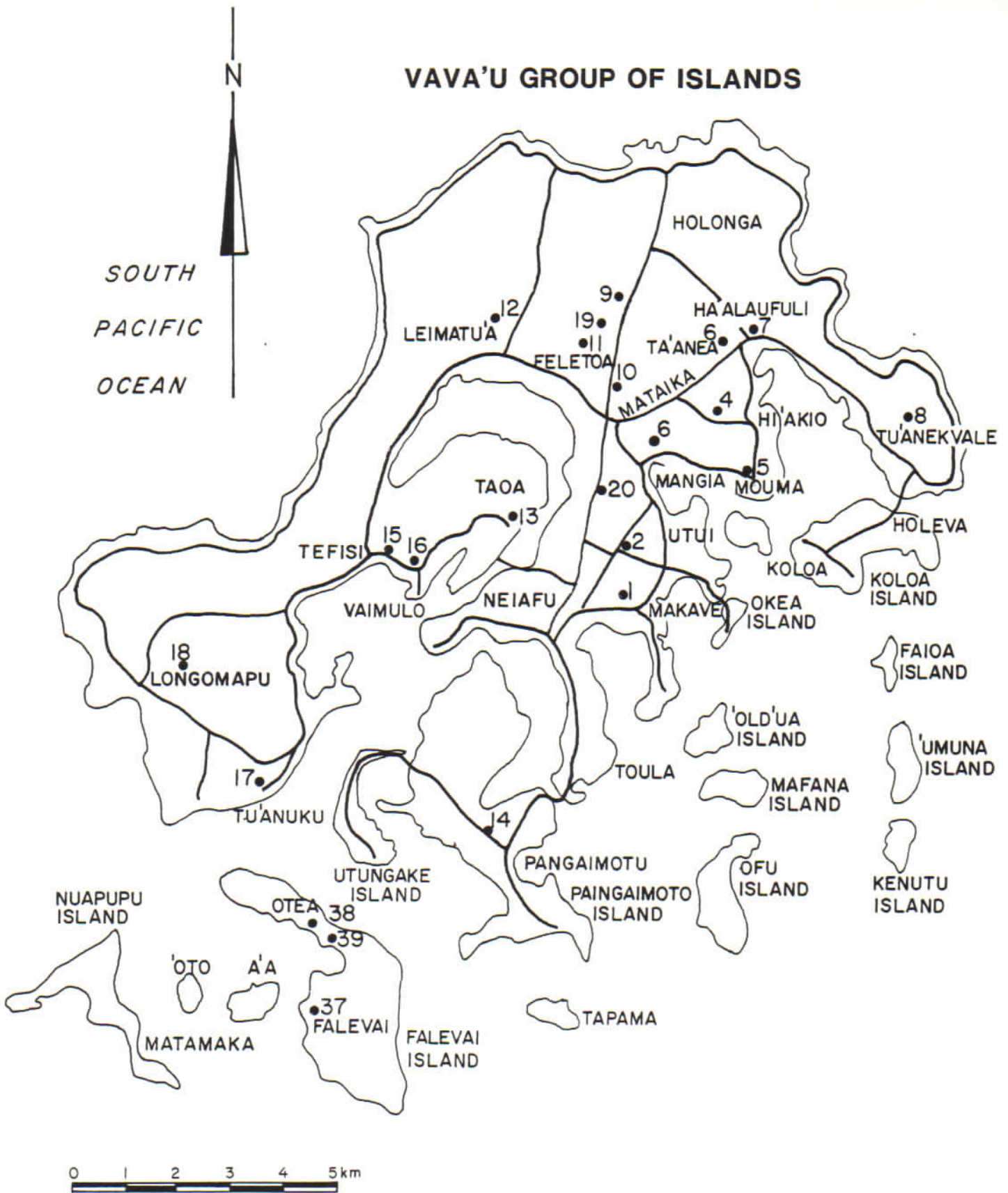
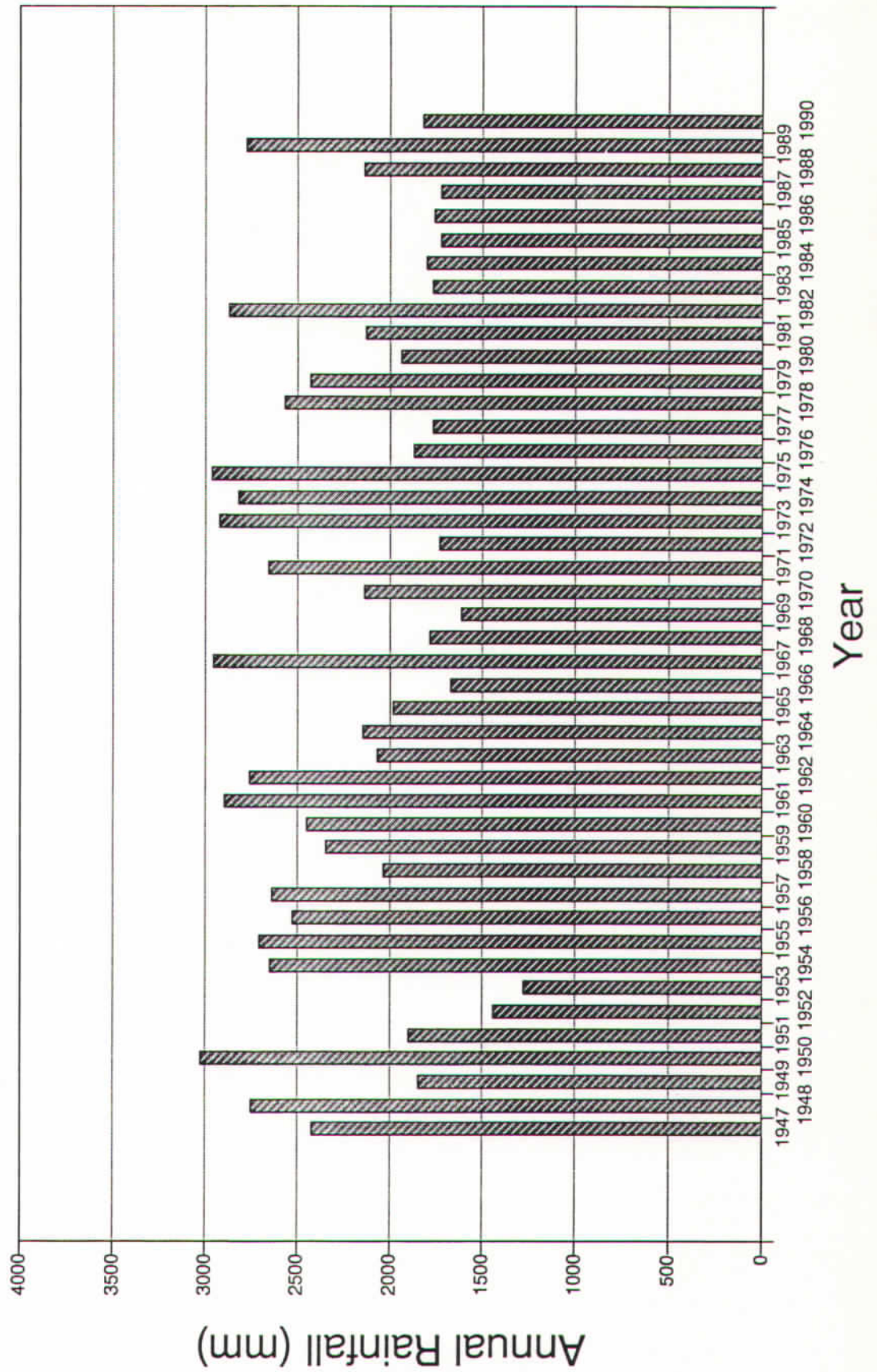


Figure 5.40

Vava'u

Annual Rainfall from 1947 to 1990

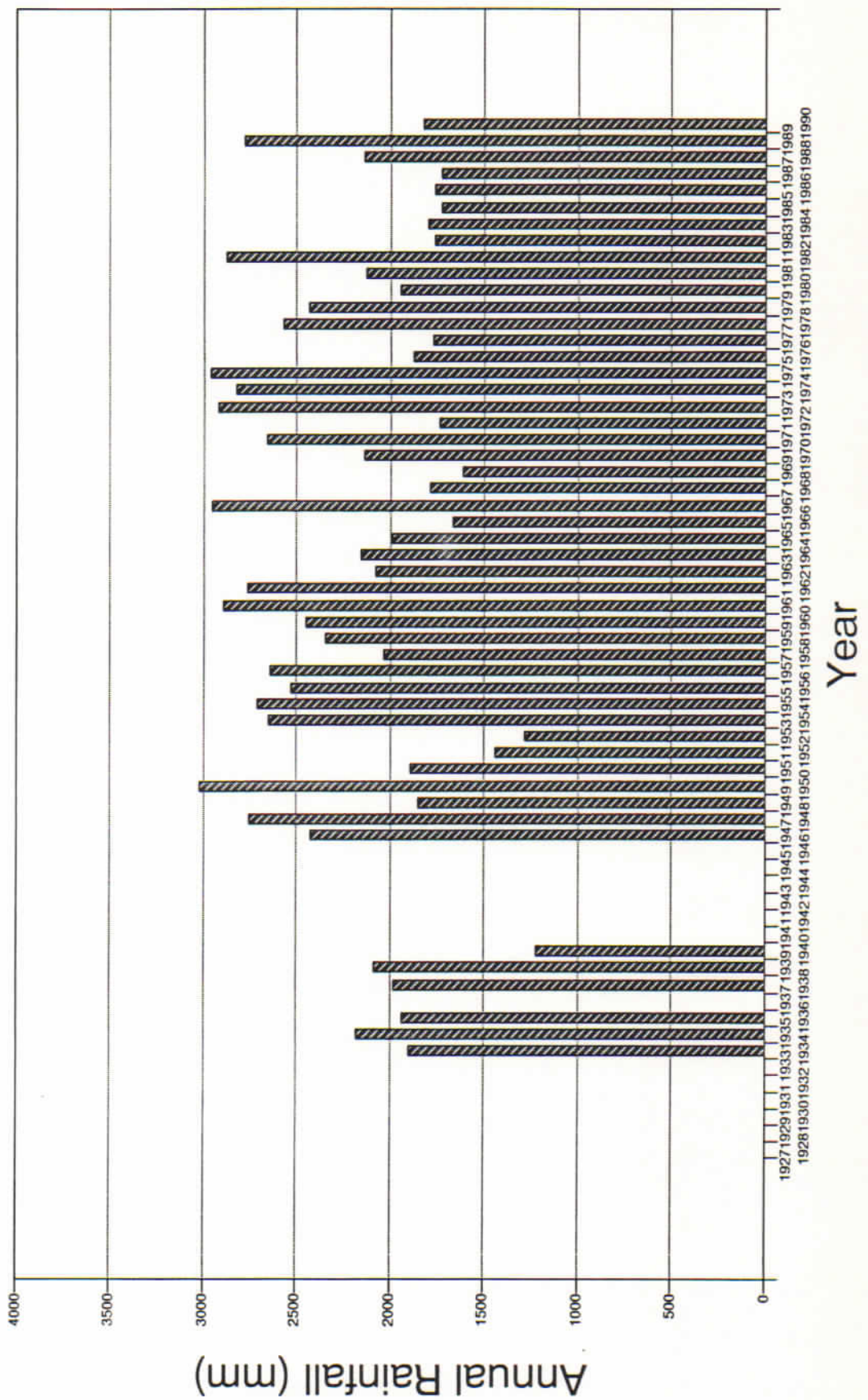


ANNUAL RAINFALL AT NEIAFU, VAVA'U, 1947-1990

Figure 5.41

Vava'u

Annual Rainfall from 1934 to 1990

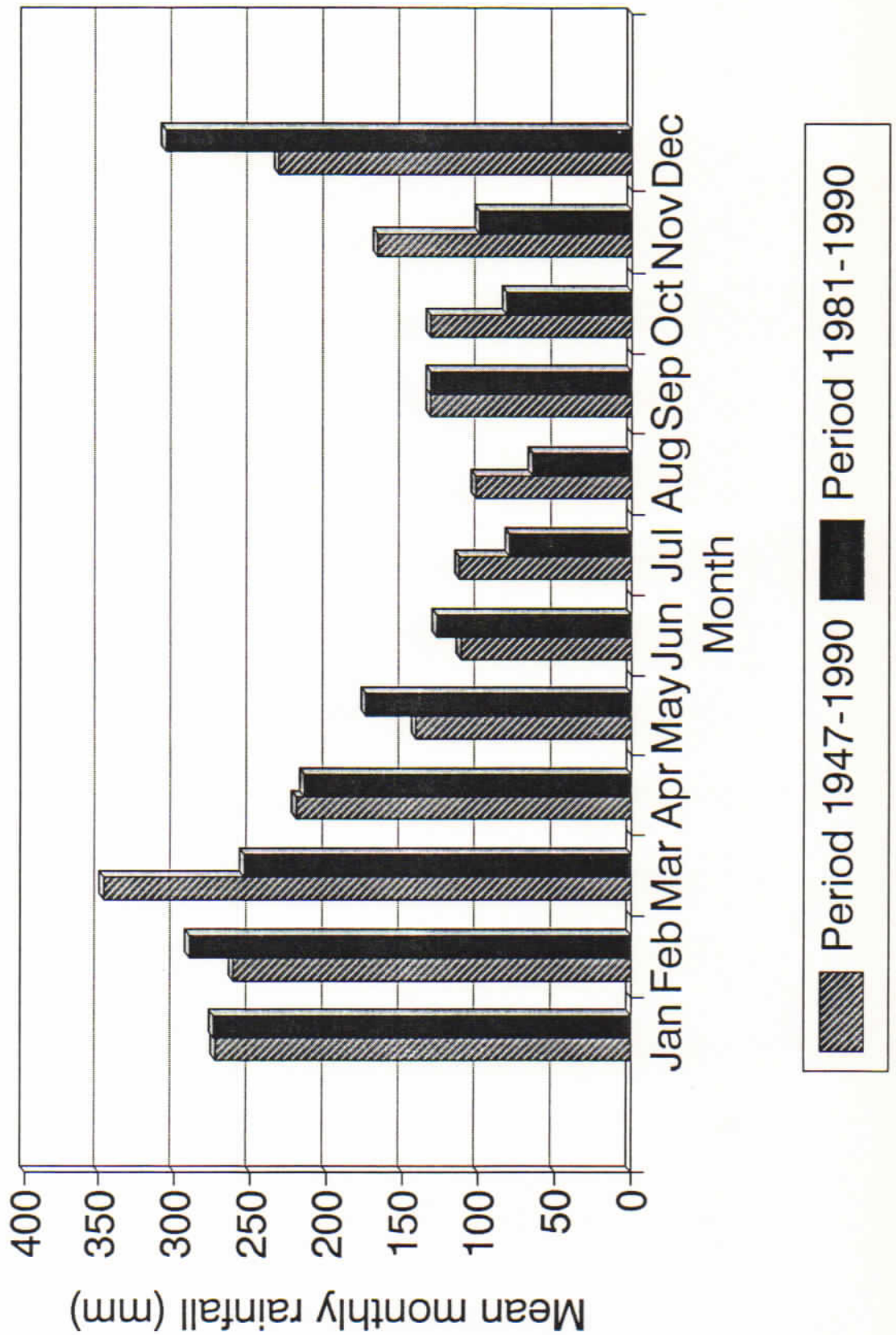


ANNUAL RAINFALL AT NEIAFU, VAVA'U, 1934-1990

Figure 5.42

Vava'u

Mean monthly rainfall at Neiafu

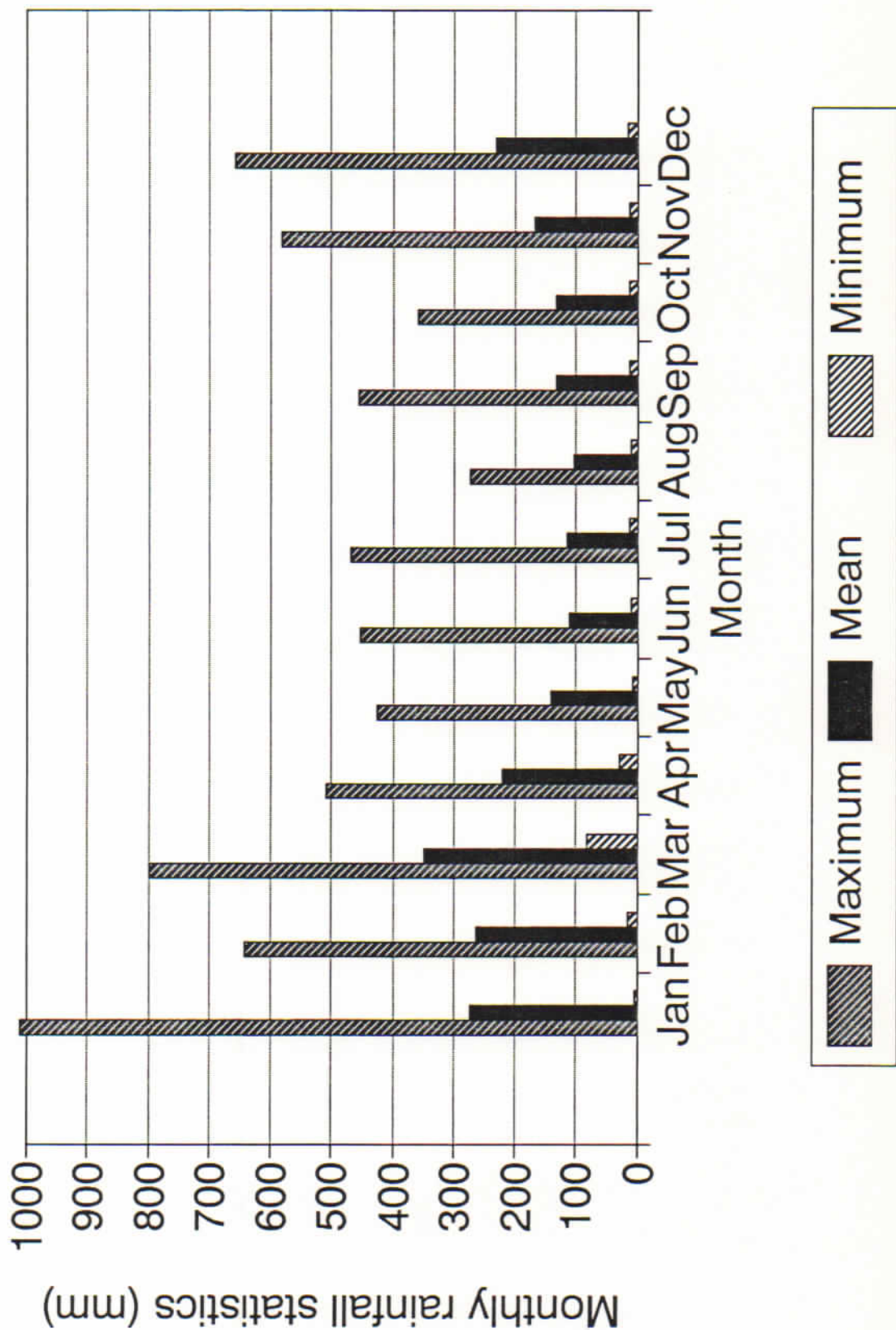


**MEAN MONTHLY RAINFALL AT NEIAFU,
VAVA'U FOR PERIODS 1947-1990 AND 1981-1990**

Figure 5.43

Vava'u

Monthly rainfall statistics: Neiafu

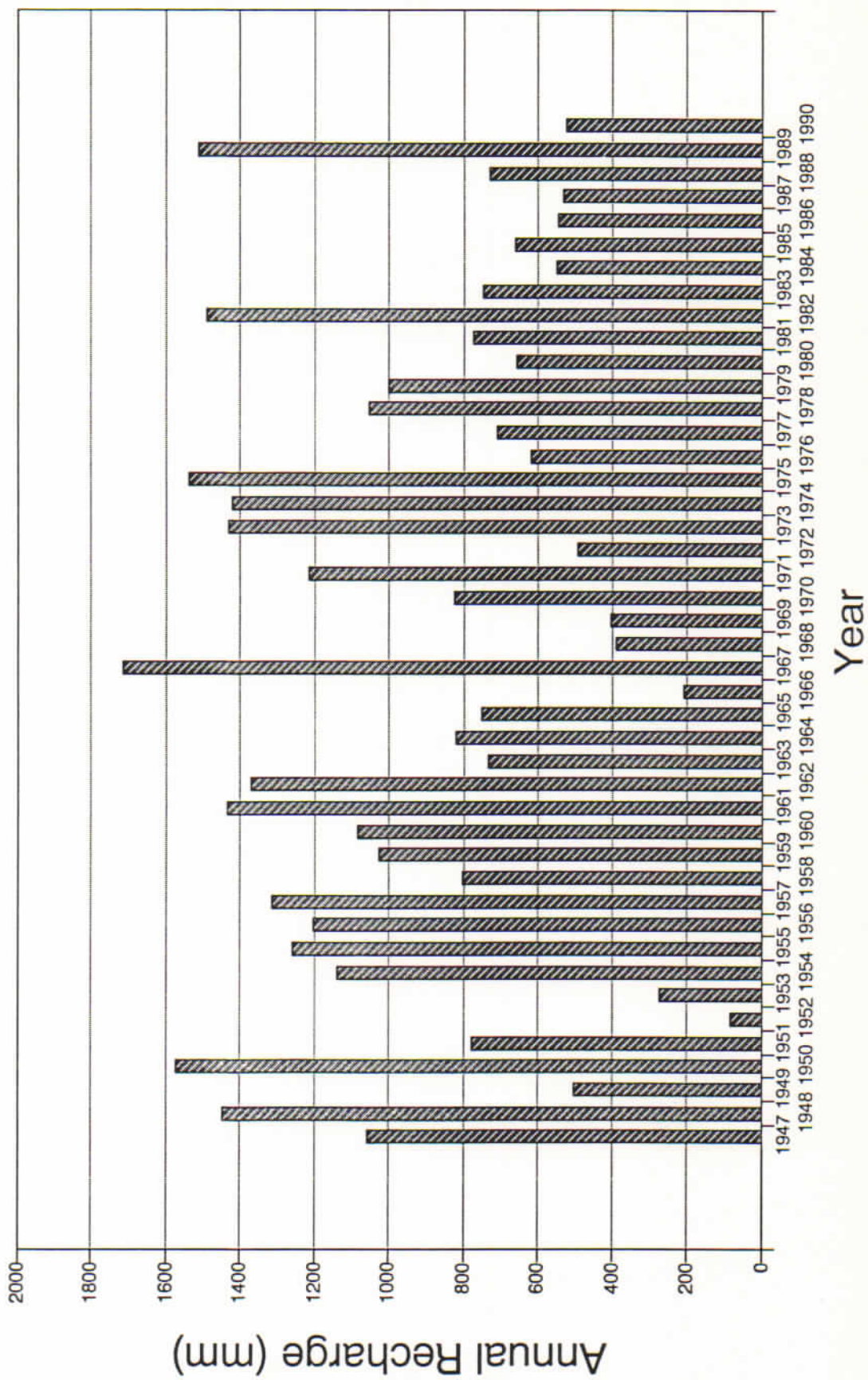


MAXIMUM, MEAN AND MINIMUM RAINFALL AT NEIAFU, VAVA'U FOR PERIOD 1947-1990

Figure 5.44

Vava'u

Annual Recharge from 1947 to 1990

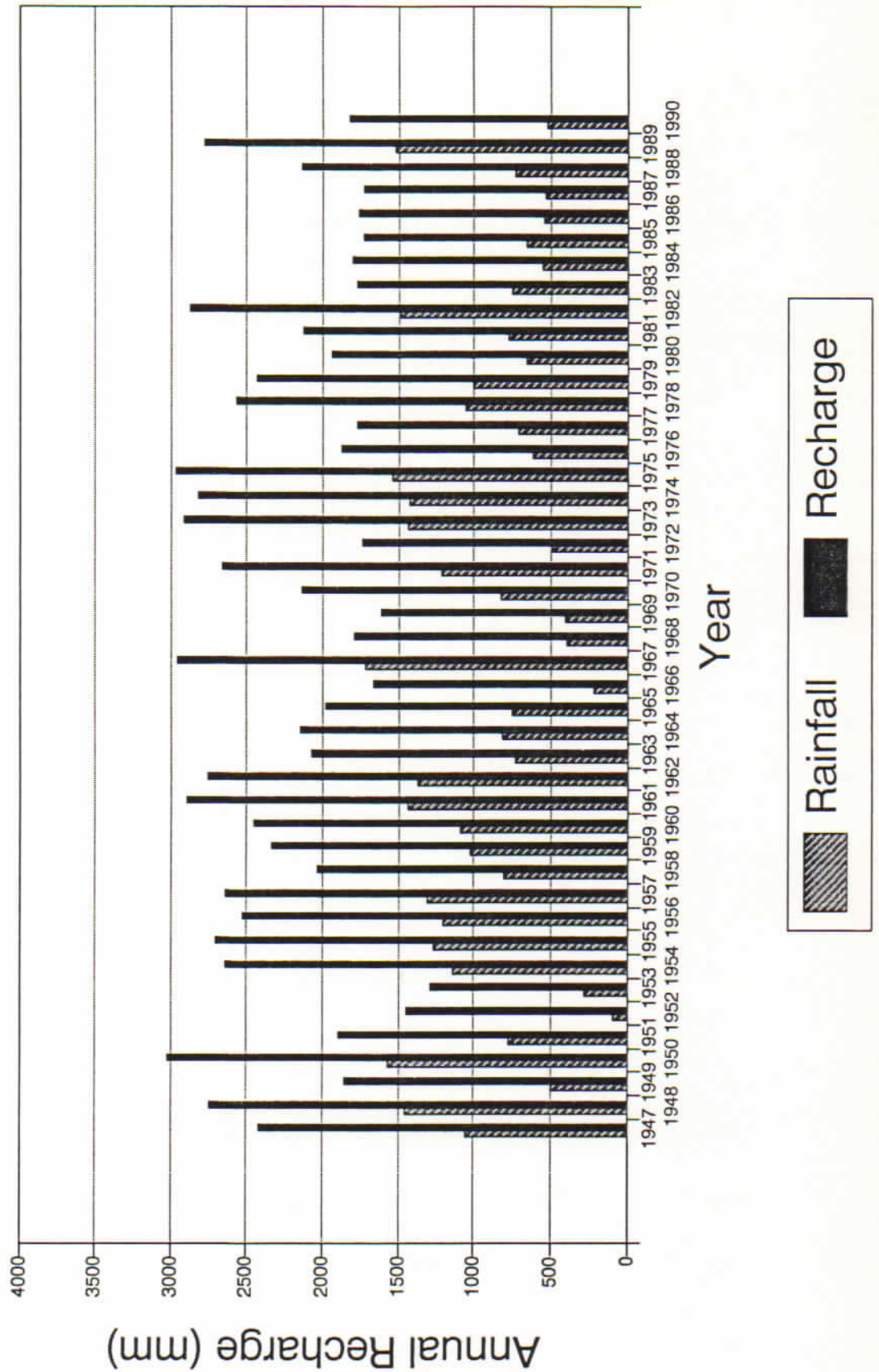


ANNUAL RECHARGE ON VAVA'U, 1947-1990

Figure 5.45

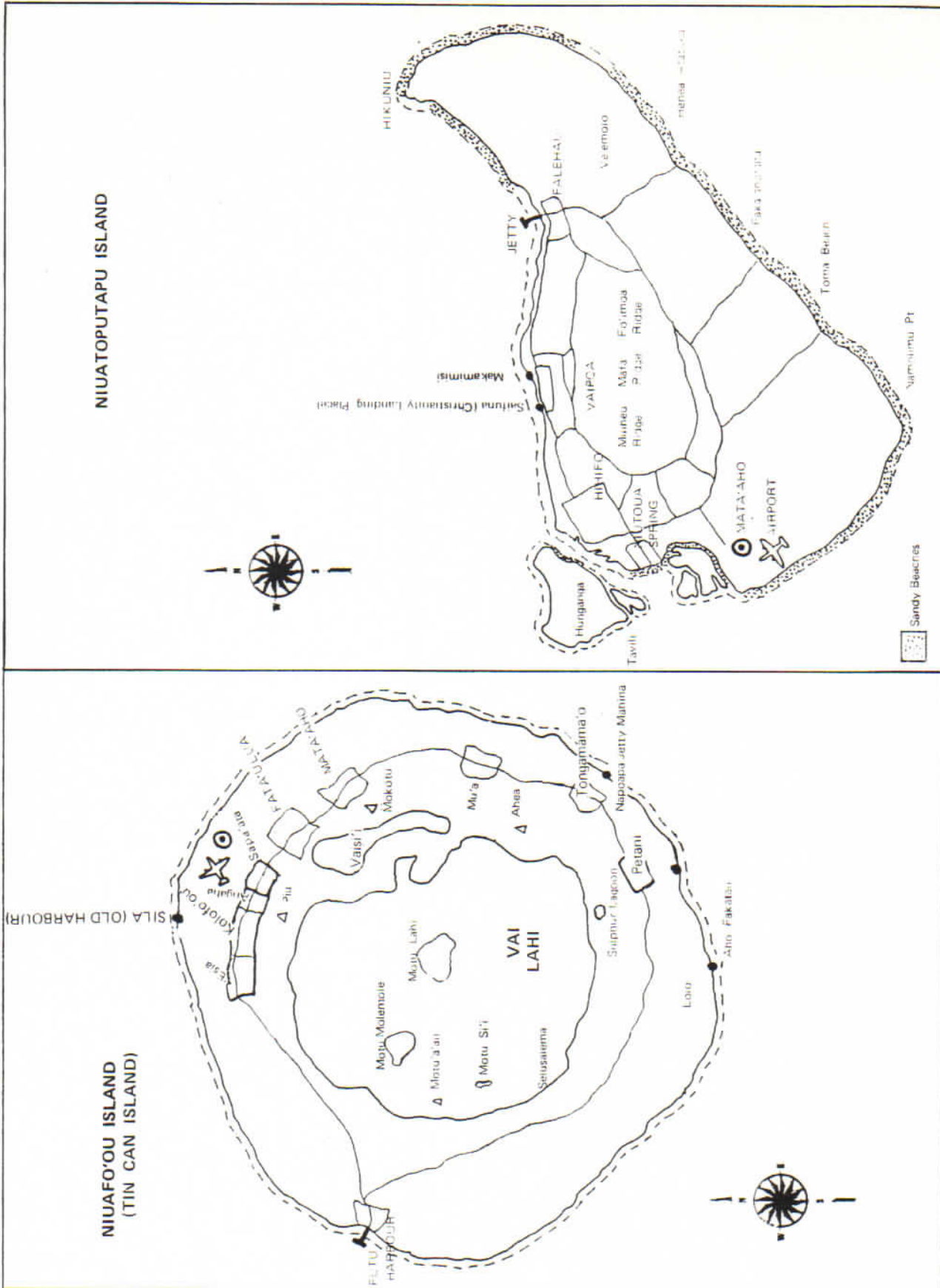
Vava'u

Rainfall and Recharge from 1947 to 1990



COMPARISON OF ANNUAL RAINFALL AND RECHARGE ON VAVA'U, 1947-1990

Figure 5.46

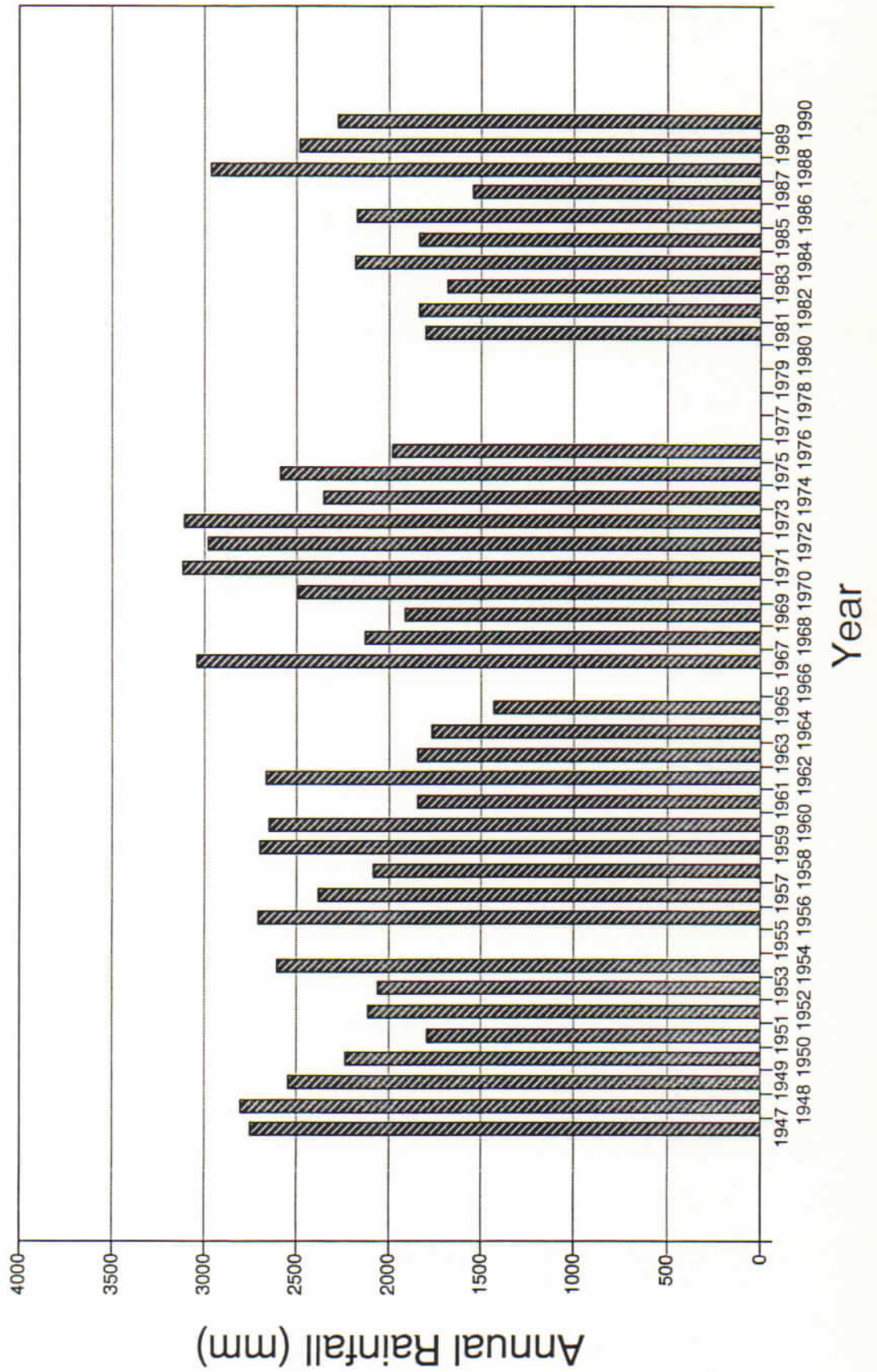


MAP OF NIUAFO'OU AND NIUATOPUTAPU

Figure 5.47

Niutoputapu

Annual Rainfall from 1947 to 1990

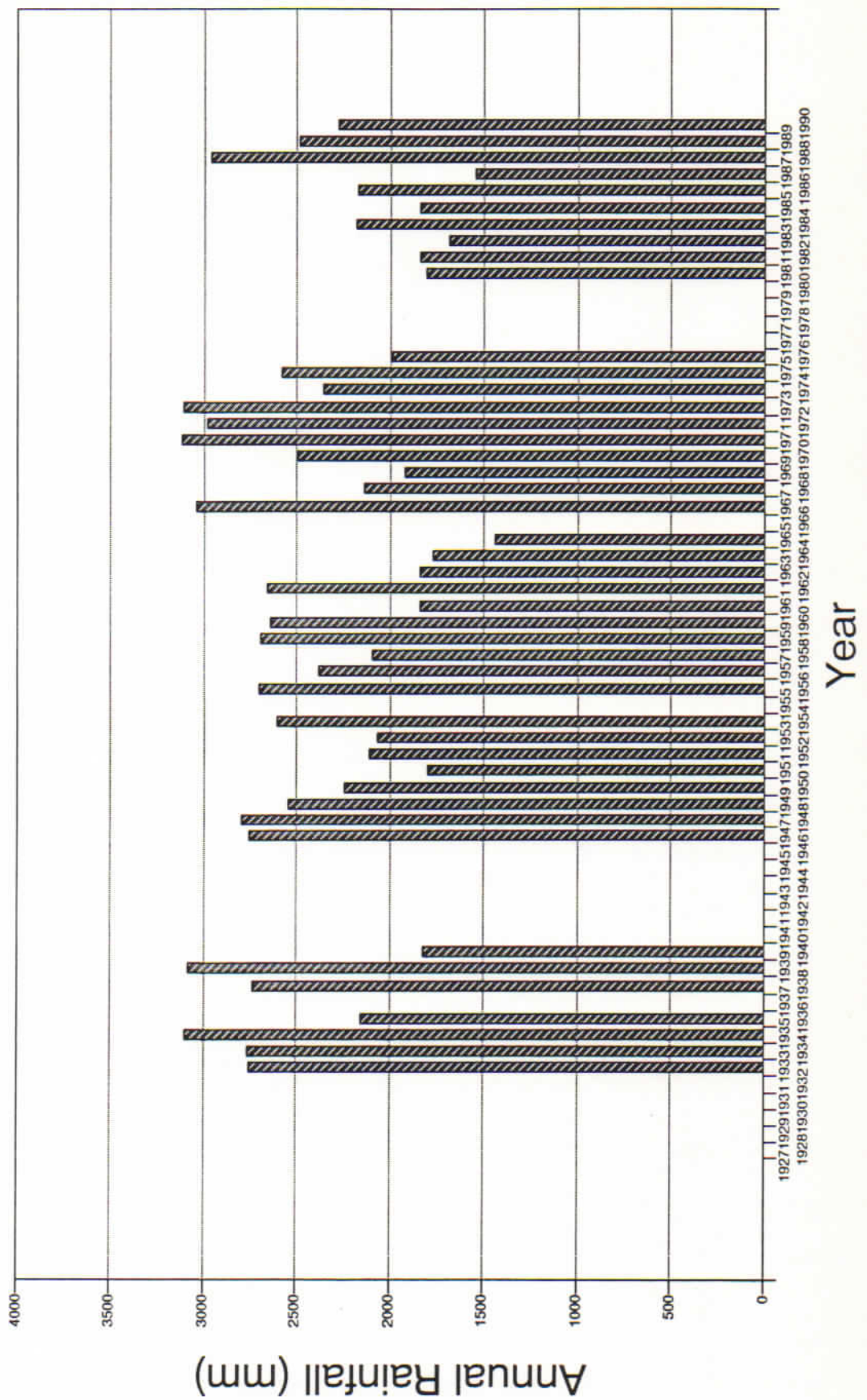


ANNUAL RAINFALL AT NIUTOPUTAPU, 1947-1990

Figure 5.48

Niutopotapu

Annual Rainfall from 1933 to 1990

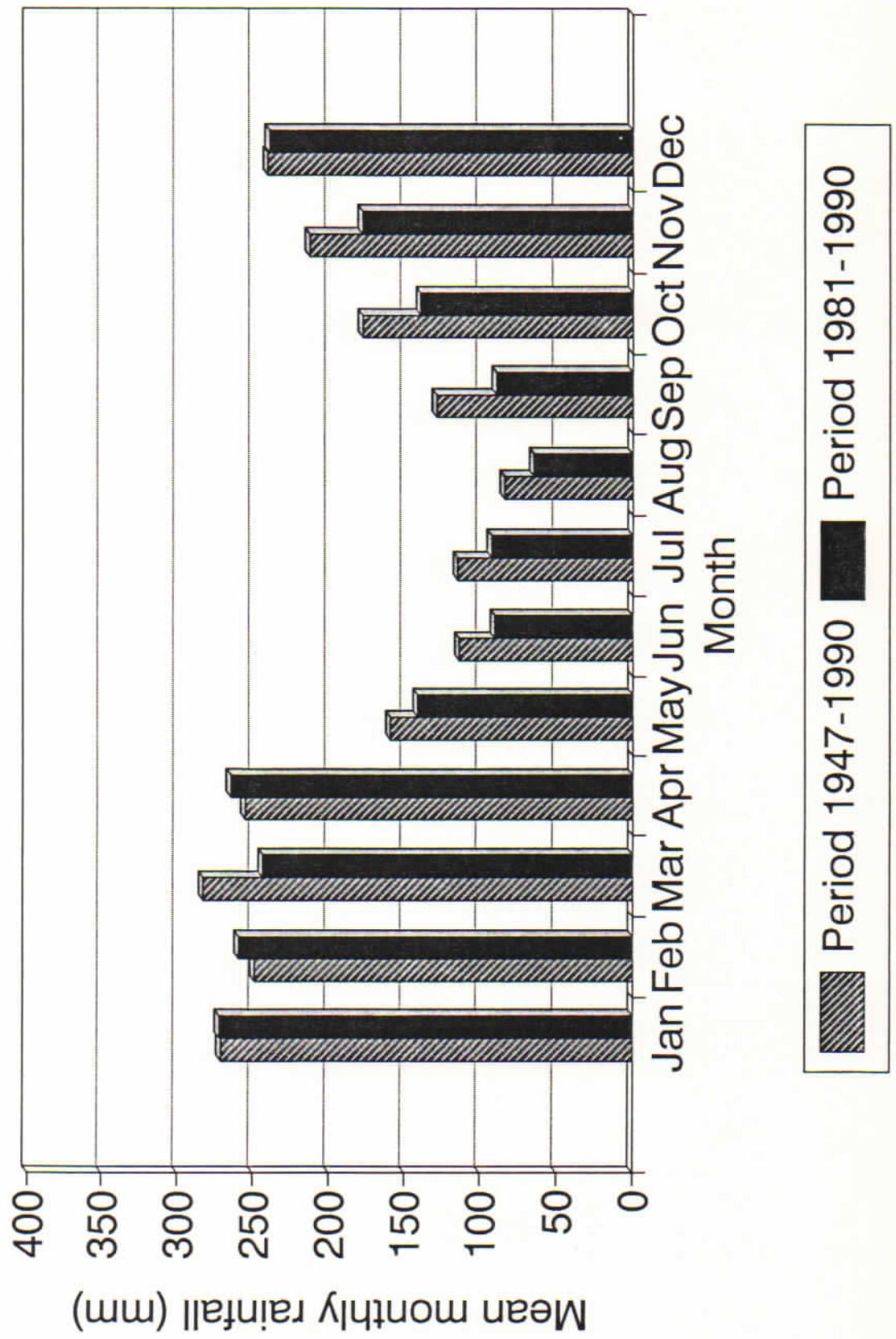


ANNUAL RAINFALL AT NEIAFU, VAVA'U, 1933-1990

Figure 5.49

Niutoputapu

Mean monthly rainfall: Falehau (Keppel)

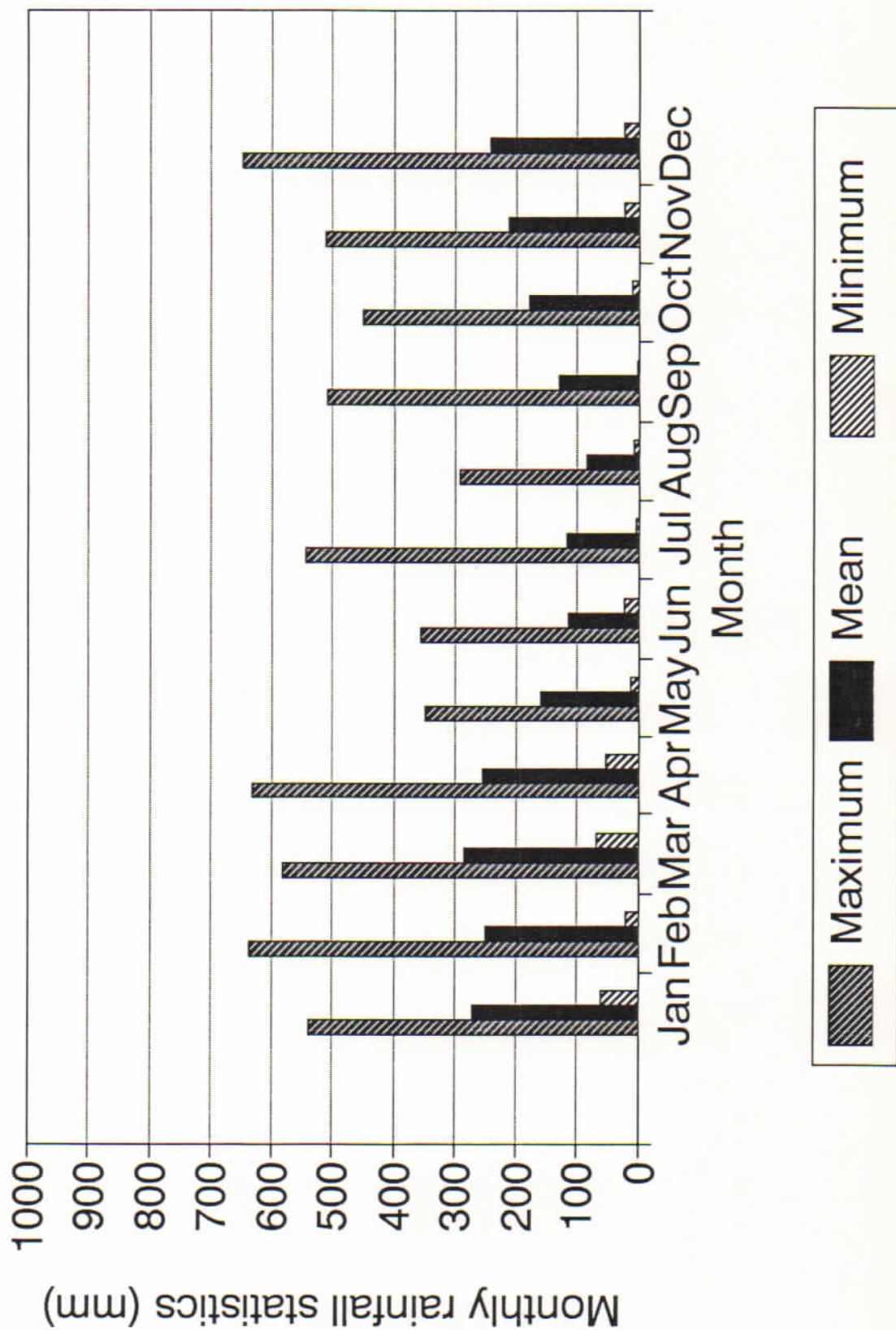


MEAN MONTHLY RAINFALL AT FALEHAU, NIUTOPUTAPU FOR PERIODS 1947-1990 AND 1981-1990

Figure 5.50

Niutoputapu

Monthly rainfall statistics

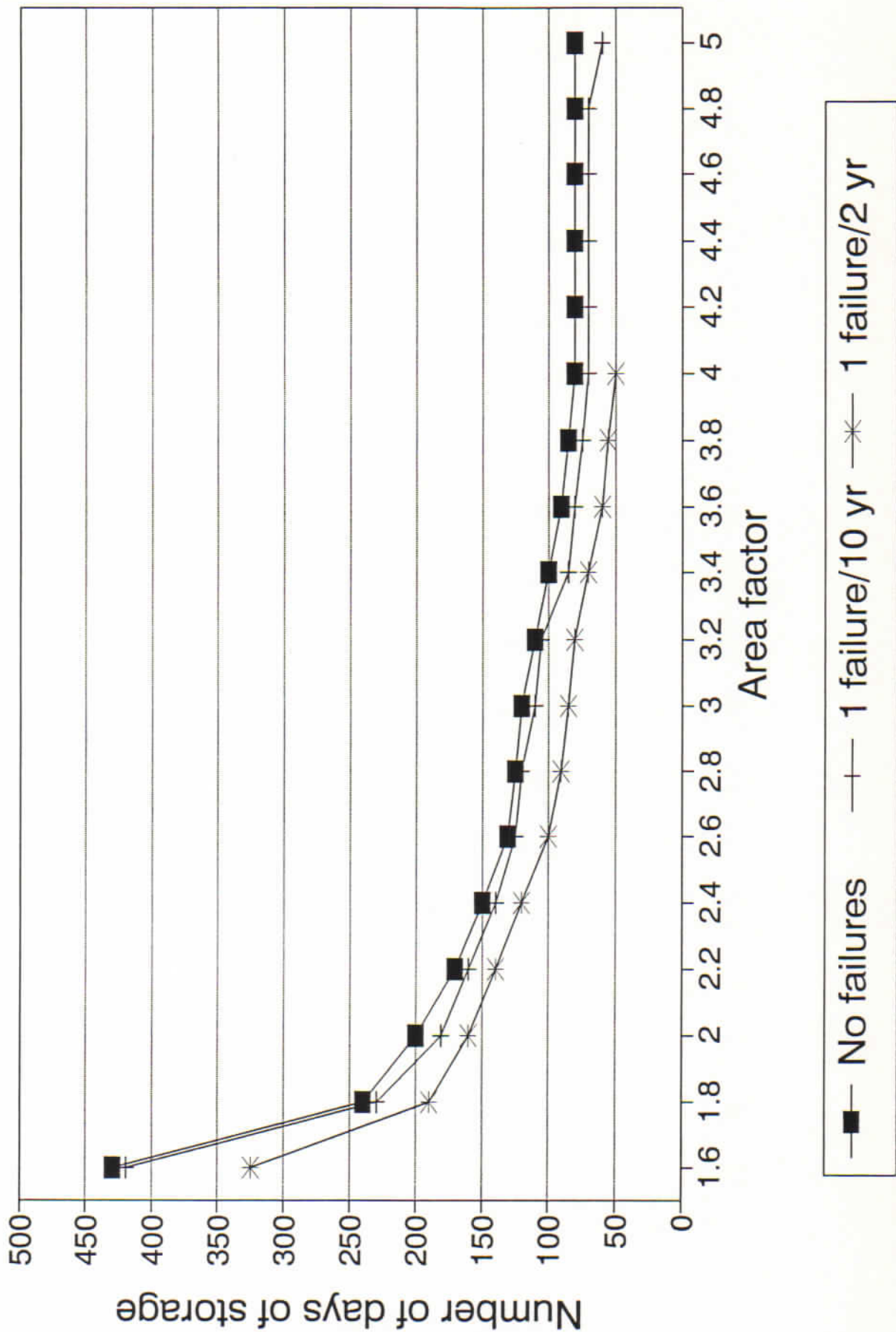


MAXIMUM, MEAN AND MINIMUM MONTHLY RAINFALL AT FALEHAU, NIUATOPUTAPU FOR PERIOD 1947-1990

Figure 5.51

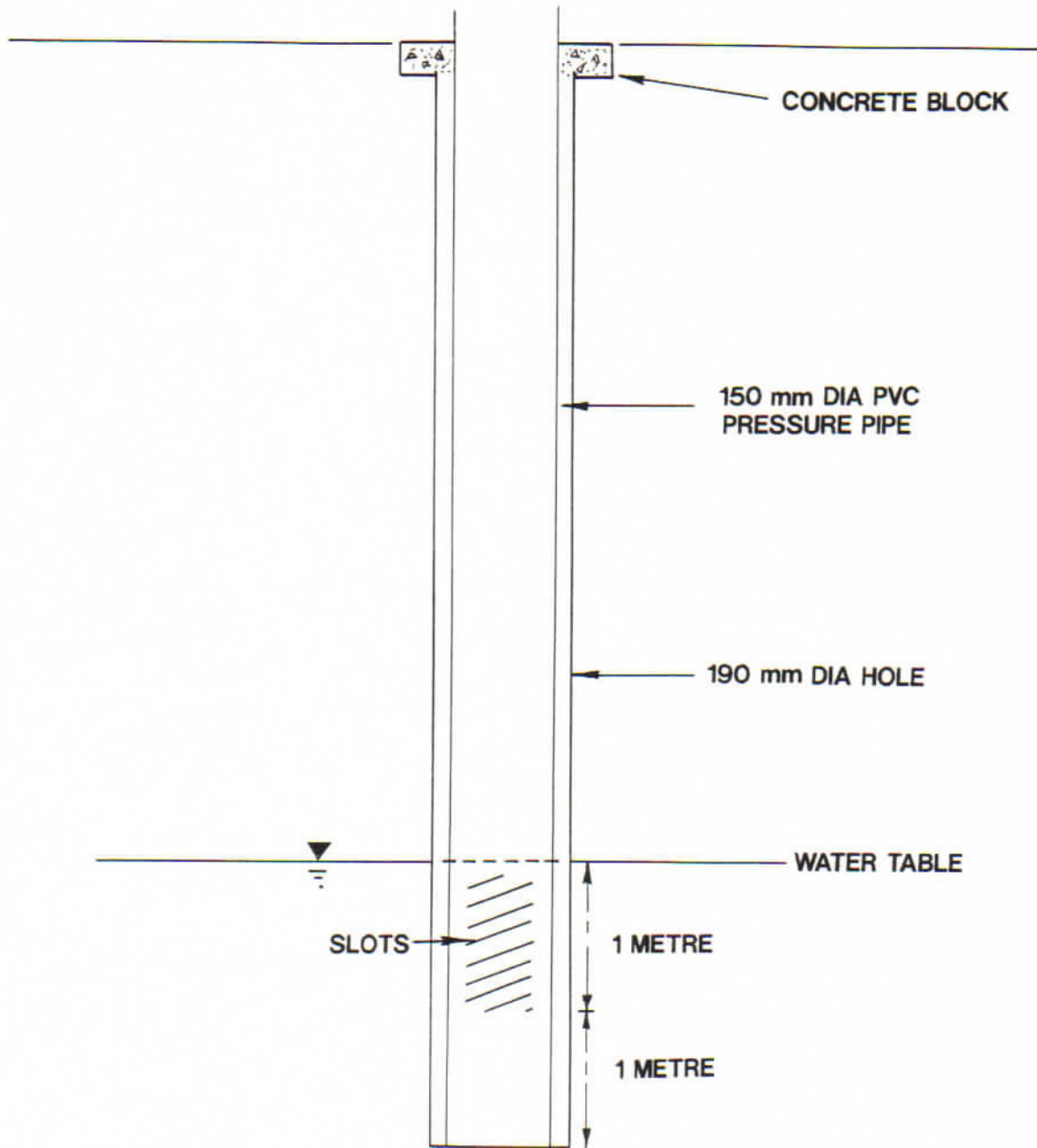
Rainwater catchment analysis: Tonga

Nuku'alofa rainfall (1/1/71-31/12/90)



RAINWATER CATCHMENT ANALYSES FOR TONGATAPU

Figure 5.52



STANDARD WELL DESIGN

Figure 5.53