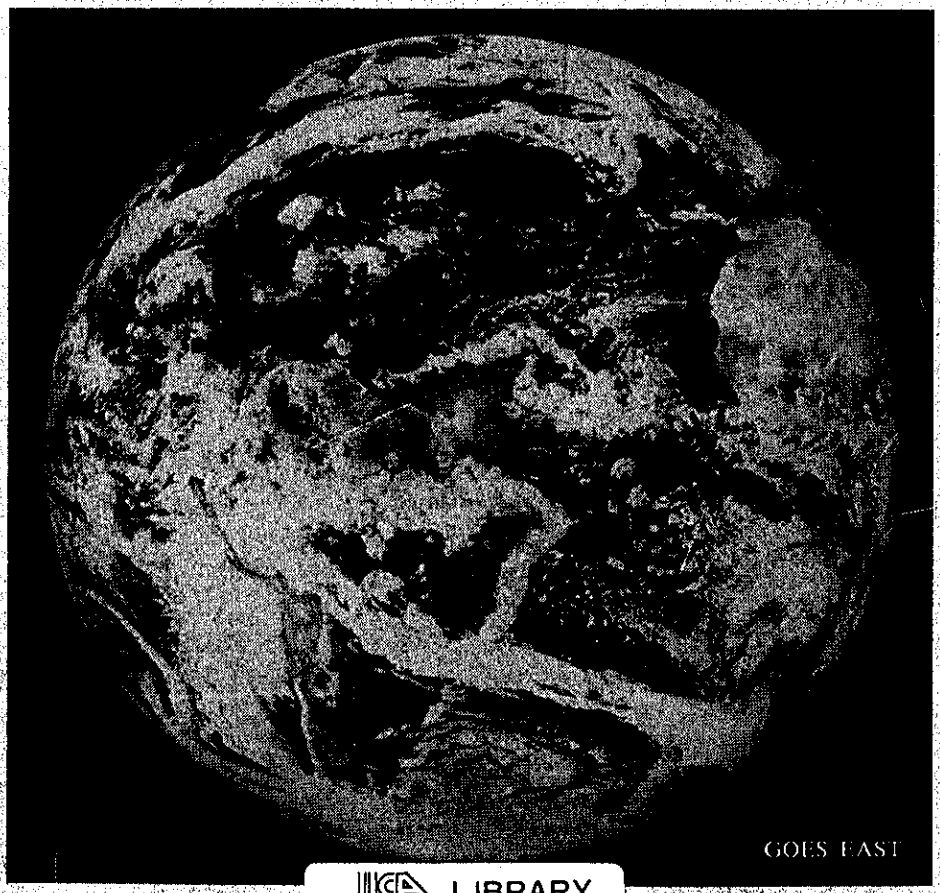
ブラジル農業研究計画に係る
セラード地域における
降雨の地域的変異に関する
研究業務調査報告書



１９９１年３月

国際協力事業団

序文

ブラジル農業研究協力（第１フェーズ）は昭和５２年９月より８年間、ブラジル共和国ミナスゼライス州のセラード地域の農業開発を目的として実施されてきましたが、日伯農業開発協力の試験的事業の対象地域が、マットグロッソ州およびバイア州に拡大したことに伴い、同地域の農業開発を促進するためブラジル政府からブラジル農業研究協力の第２フェーズの要請が為され、昭和６２年８月から５年間の計画で研究協力を実施しています。

今般、本研究計画の一環としてセラード地域の農業生産や営農計画に大きな影響を与える雨季の最中に起こる小乾季（ベラニコ）の発生分布とその特徴に関する解析研究が完了しました。この研究は当該地域の降水量データの統計解析を行ない、降水量の確率出現分布図およびベラニコの出現確率日数分布図等を作成し、今後の開拓や灌漑等の開発計画作成および営農計画作成の基礎資料とすることを目的として（財）日本気象協会に委託し実施されたものです。

本報告書がベラニコの被害を緩和するひとつの指針となり、セラード農業開発のための貴重な資料として、今後のプロジェクト活動に活用されることを願うものであります。

最後に本研究に多大の協力および資料提供をいただいたブラジル気象台のホセ・アリマテア台長、INPEのマルコ・レミー氏、E.J.ネイバ氏、モリオン博士、ネルソン・アライ氏、ミサエ・ヤマモト氏の各氏、また取り纏めにご協力を賜ったブラジル政府関係者およびプロジェクト関係各位へ心より感謝申し上げます。

平成３年３月

国際協力事業団
農業開発協力部長　崎野　信義

（目次）

（資料）

図表の目次

第１章　研究の概要

１－１．研究の目的

ブラジル（Brazil）のセラード（Cerrado）地域を対象として、降水量のデータの統計確率解析を行ない、降水量の確率出現分布図およびベラニコ（Veranico；夏の小乾季：dry spells ）の出現確率日数分布図等の資料を作成し、今後の開拓や灌漑等の農業開発計画の基礎資料とする。

１－２．研究の概要

ブラジルは南米大陸の北緯５度から南緯３３度４７分までの範囲に広がる８５０万Ｋｍ^{2}の広大な国土を持ち、その気候は、大別してアマゾン流域の熱帯雨林気候から南部の亜熱帯気候、南西部の高原台地部のサバンナ気候などに代表される。

Cerradoとはポルトガル語で「閉ざされた場所」という意味で、ブラジルにおいては、「潅木類が疎生しているサバンナ酸性土壌地帯」を指す。セラード地域は、図1-1に示されるように、南緯３度～２３度、西経４２度～６０度に広がる高原上にその大部分が位置している。その海抜高度は２００～１２００ｍ程度で、この地域のほぼ中央に位置する Formosa では、熱帯にあるが海抜高度が約９００ｍのため気温が涼しく、1931～1960年の統計によると年平均気温が２１．３度と、アマゾン川河口の Belem に比較して５～６度低くなっている。また、年平均降水量も１５５９ｍｍと他の地点より少なめでアマゾン川流域の熱帯雨林気候とは明らかに違った気候となっている。さらに降水は夏期（１０月から３月）の６か月に年間の９０％が降り、５月から９月までの乾季５か月間の降水量は４％しか無い。

この地域の全般的な気候は Formosa に代表されるように、年降水量が約１２００～１８００ミリ程度で夏期に雨季がある熱帯サバンナ気候で、主に大豆、稲、トウモロコシ等の栽培が行なわれている。これらの作物にとって、夏期の降水の状態が作柄に大きく影響を与える。特に雨季の最中に起きるVeranicoと呼ばれる短期間無降水日があり、これが作物に必要な水の不足となって、収穫量が大きく減少する。このことがセラード地域の農業の開発と営農上に重大な障害になっている。本調査では、ブラジル農業協力（CPAC）との協力の下に、現地において収集した当該地域に於ける降水量やその他の気象資料等の調査解析を行なう。特に降水量の資料については、各種の確率統計解析を行ない、最大日降水量及び最長無降水継続日数（Veranico日数）の再現期待値を求め、これらのセラード地域での分布図を作成し、CPACに於ける今後の農業協力を行なう上で必要な基礎資料を作成する。

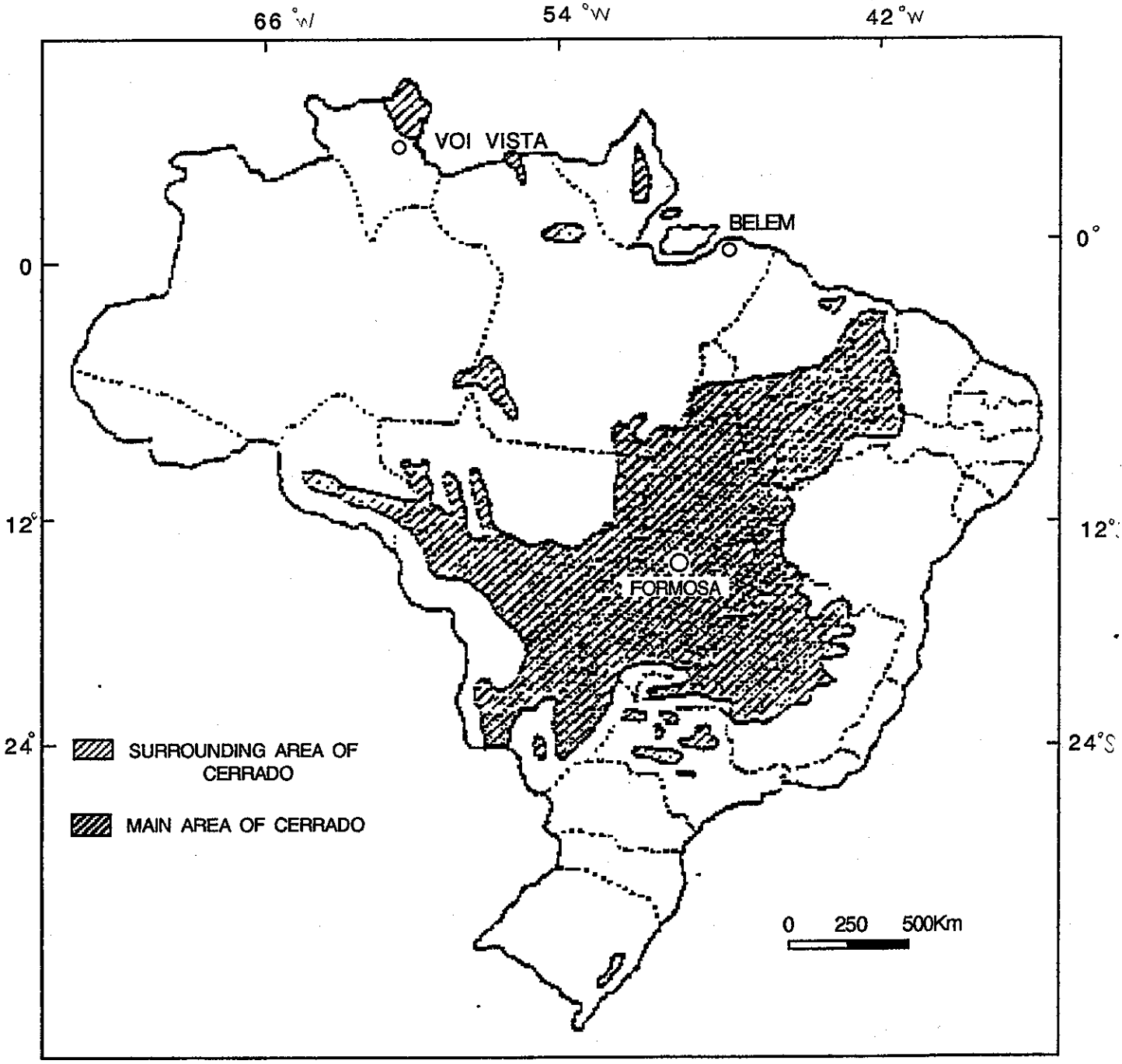


図- 1.1 ブラジルにおけるセラード地域の分布

FIG. 1.1 LOCATION OF CERRADO AREA IN BRAZIL

1-3. 研究の内容

研究の内容については以下の項目について行なった。

（1）データの整理

1) セラード地域103ケ所の降雨データ

2) その他の気象データ（気温、蒸発量、日射量）

3) 天気図

（2）データの統計・解析

現地および国内で収集した資料を、各地点ごとに整理・解析し、以下の図表類を作成する。

1) 各地点別、年別、月別の最大降水量の順位表の作成

収集したデータをもとに、年別、月別の最大順位表を作成する。

2) 各地点別、年別、月別の無降水継続日数の順位表の作成

各地点の雨季（11月～3月）における年別、月別、旬別の無降水継続日数を調べ、順位表を作成する。

3) 各地点別の最大日降水量の再現期待値（5年、10年、30年再現期待値）の計算

各地点別に全観測期間における日降水量を最大値の順位表のデータを用いて確率計算を行ない、5年、10年、30年の再現期間に対応する日降水量の最大極値を求める。

4) 無降水連続日数の再現期待値（5年、10年、30年再現期待値）の計算

各地点別に全観測期間における無降水連続日数の順位表のデータを用いて確率計算を行ない、5年、10年、30年の再現期間に対応する無降水連続日数の極値を求める。

5) 日最大降水量の再現期待値（5年、10年、30年再現期待値）の分布図の作成

確率計算によって得られた、再現期待値を用いてセラード地域の日最大降水量の5年、10年、30年の再現期間に対応する分布図を作成する。

6) 無降水連続日数の再現期待値のセラード地域における分布図の作成

確率計算によって得られた、再現期待値を用いてセラード地域の無降水継続日数の5年、10年、30年の再現期間に対応する分布図を作成する。

1-4. 調査手順

本調査は図1-2に示す調査フロー図に従って行なう。また、実際の計算のフロー図を図1-3に示す。

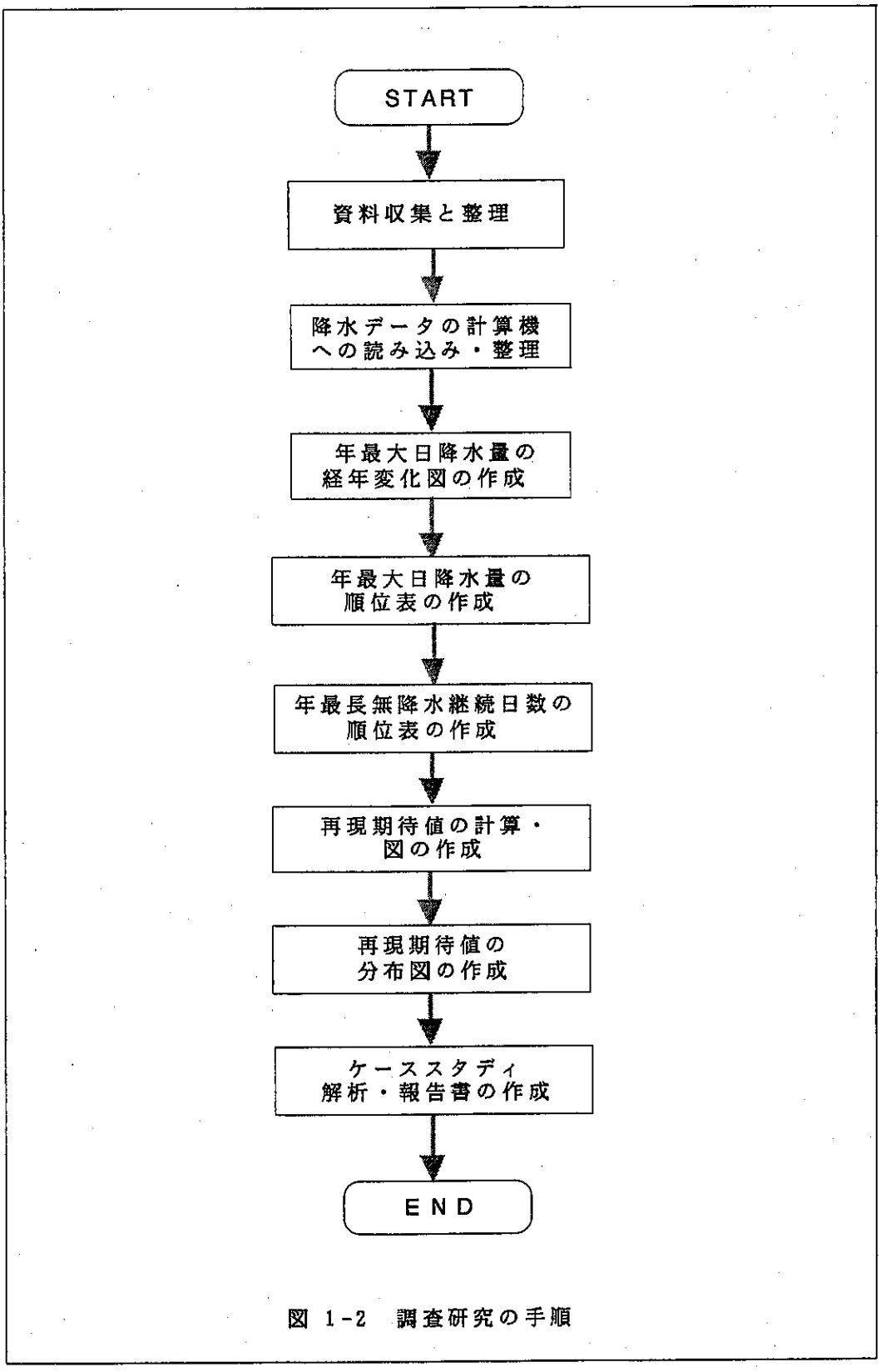


図 1-2 調査研究の手順

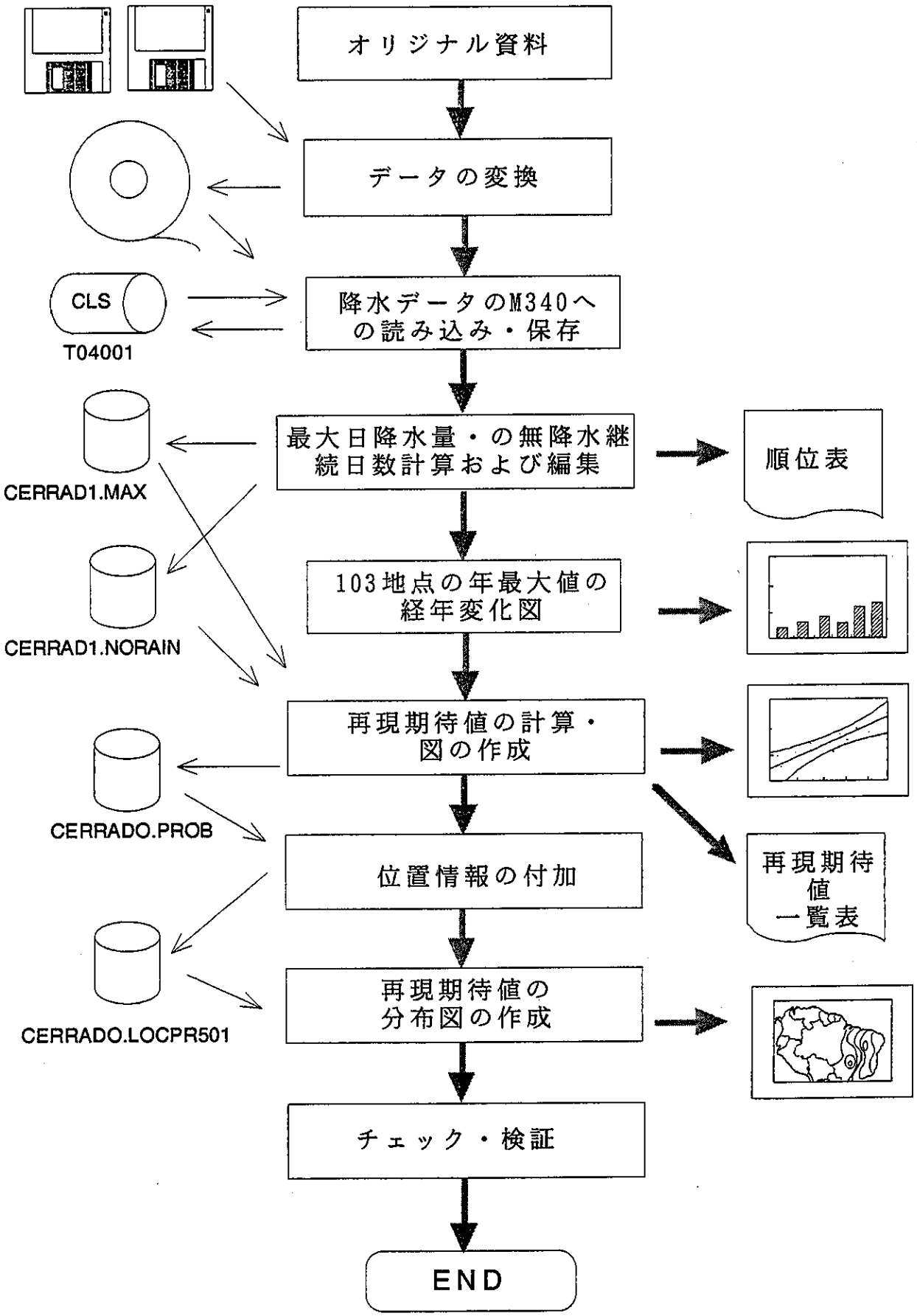


図 1.3　統計計算の手順

FIG. 1.3　FLOW CHART OF CALCULATION OF CERRADO

第２章　研究調査の手法

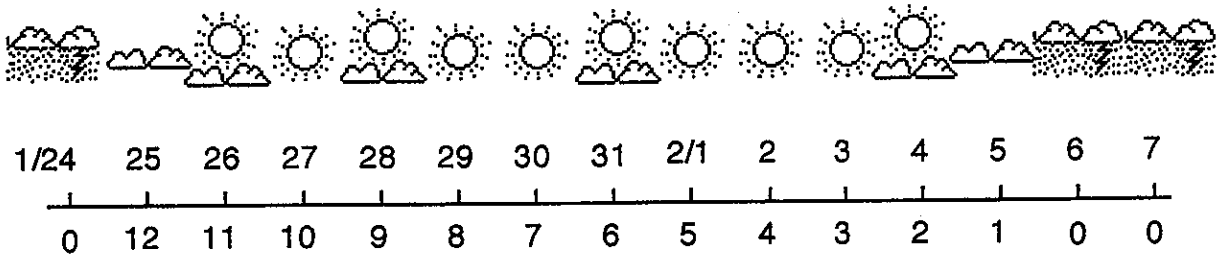
２-１　統計計算上の定義

１）無降水日の判定基準となる日降水量

セラード地域の日蒸散量は CPAC の観測結果から見ると平均４～５mm程度の値になっており、農業特に土壌水分量を問題とする場合、0.5mmでは表層をわずかに湿らせる程度で土壌水分の補給という意味からすると小さすぎる。このため、ここでは1.0mmを閾値として用い、1.0mm未満の日降水量の日を無降水日として定義することとした。

２）無降水期間の定義

雨季（１０月～３月）に日降水量が1.0mm未満であった日が連続した期間をベラニコの発生期間として、ベラニコの発生確率を求めるため統計確率計算を行なった。また、月や年を越えて、無降水日が連続した場合、無降水期間はこの境界で切断せずに、最後の日までを無降水期間とする。（但し、雨季は１０月１日から始まり、終わりは３月は３１日までとする。）従って、図の例のように無降水日が１月２５日から連続して２月５日まで続いた場合、１月２５日からの無降水期間は１２として１月の統計に入れ、２月１日からの無降水期間は５として２月の統計に用いた。この場合、この値がそれぞれの月で最大無降水期間だった場合、その月の極値データとして用いた。



上段；日付

下段；各日が持つ無降水継続日数

図 2.1　無降水継続日数定義の摸式図

2-2確率計算の手法

5、10、30年再現期間（Return Period ）に対応する最大日降水量および最大無降水継続日数の算定は以下に述べる Petruaskas-Aagaard （1970）の手法を用いた。

サンプリングの対象期間が T 年であるとし、この間に発生したある限界値以上の極大値を N 個拾い出す。そして値の大きい方から順位 m を付し、以下の式で未超過確率を計算する。

$$P[V \leqq X_{m,N}] = 1 - \frac{m - \alpha}{N + \beta} \qquad \cdots\cdots\cdots\cdots (2-1)$$

ただし、$X_{m,N}$ は N 個中 m 番目の極大値（ m=1, 2, ... , N ）であり、またαとβは未超過確率にあてはめる分布関数に応じて表 2.2.1 の値を用いる。分布関数としてはグンベル分布、およびワイブル分布の指数 k を0.75～2.0の7通りに変えたものをあてはめ、適合度を検討する。

表 2.1　未超過確率算定のパラメータ

Type No.	分布関数	α	β
1	Gumbel	0.44	0.12
2	Weibull(K=0.75)	0.54	0.64
3	Weibull(K=0.85)	0.51	0.59
4	Weibull(K=1.00)	0.48	0.53
5	Weibull(K=1.10)	0.46	0.50
6	Weibull(K=1.25)	0.44	0.47
7	Weibull(K=1.50)	0.42	0.42
8	Weibull(K=2.00)	0.39	0.37

極大値の未超過確率にあてはめる分布関数は次のとおりである。

グンベル分布：

$$P[V \leqq X] = \exp\left[-\exp\left(-\frac{X - B}{A}\right)\right] \qquad \cdots\cdots\cdots\cdots (2-2)$$

ワイブル分布：

$$P[V \leqq X] = 1 - \exp\left[-\left(-\frac{X - B}{A}\right)^{k}\right] \qquad \cdots\cdots\cdots\cdots (2-3)$$

分布関数をあてはめるためには、各極大値　P［V ≦X］を次式で $\gamma_V=(X-B)/A$ に変換する。

グンベル分布：$\gamma_V = -\ln\{-\ln P[V \leqq X]\}$ ……（2-4）

ワイブル分布：$\gamma_V = [-\ln\{-\ln P[V \leqq X]\}]^{1/K}$ ……（2-5）

そして、XとγVの直線関係を仮定し、その係数の推定値 $\hat{A}$ および $\hat{B}$ を最小自乗法で求める。

$$X = \hat{A}\,\gamma_V + \hat{B} \qquad \cdots\cdots\cdots\cdots（2-6）$$

各分布関数の適合度は、Xとγ_Vの相関係数の値から判断され、最もデータに適合しているもの（即ち、相関係数が最も大きい分布型）を採択する。極大値の再現期間 R_P は未超過確率と次の関係にある。

$$R_P = \frac{T}{N} \cdot \frac{1}{1-P[V \leqq X]} \qquad \cdots\cdots\cdots\cdots（2-7）$$

ここにTは対象期間である。

所要の再現期間に対応する確率値を求めるには、まず（2-7）式より再現期間RPに対する未超過確率P［V ≦X］を求め、次にこれを（2-4）、（2-5）式でγ_Vに変換し、（2-6）にこのγ_Vを代入して確率値を求める。

なお、統計処理に用いた雨量として、誤差を少なくする為に下限値を設定した。すなわち、日降水量は 5 mm未満、無降水継続日数は 5 日未満の値は統計には用いないこととした。

2-3. コンター図の作成法

日降水量および最長無降水日数の再現期待値分布図を作成する為に、セラード地域に散らばって存在する各観測地点のデータから等値線を描く必要がある。解析者の主観が入る恐れもあるので、次の手法を用いて、コンピュータで解析描画させた。

まず、データの散在する領域を任意の平方格子に分割し、それぞれの格子上の値を各観測地点からの距離の二乗で割った値の和の平方平均から求める。このようにすることによって、各格子点の値は距離の重みを持った平均値となる。これを式で表すと次の様になる。

$$P(j,k)=\frac{\sum_{i=1}^{n}\frac{Z_i}{R_i^2}}{\sum_{i=1}^{n}\frac{1}{R_i^2}}$$

このようにして求めた格子点の値を元に、等値線を描くプログラムで描画する。描画のアルゴリズムは設定された等値線の値ごとにどの格子の間を通っているかを探しに行くという方法をとっている。スプライン法などで内挿する方法もあるが、この方法だとデータのない領域に対して極端な値が外挿される危険性があるので、今回は比較的単純な方法を用いた。

第３章　降水量観測データの整理

３－１．　103降水観測地点の位置，観測期間と測得状況

セラード地域における103ケ所の降水観測地点の緯度・経度及び観測期間を表3-1に、また、これらを地図上にプロットしたものを図3.1に示す。（但し、Imperaritzの緯度経度については不明だった為、プロットおよび分布図には用いなかった。）

地図上の番号は表のステーション番号と同じである。この図を見ると観測地点は全体に均質に分布しておらず、南部の地域に集中し、東部から北部にかけては疎な分布になっている。特に北東部の地域では観測地点が少ない。

現地での資料収集に際して、世界気象機関の資料からセラード地域にある降水観測地点を調べた結果、今回収集した地点以外にも観測地点があることがわかった。疎な地点を補間する意味で表 3.1.6 に示す24地点の資料をさらに収集することが誤差を少なくするために有効と考えられたので、これらの地点のデータを得るため各方面に働き掛けたが、残念ながら、色々な手続きの問題やデータの編集に係わる人件費の問題などで、入手することができなかった。今後、機会があればCPACの調査でこれらの地点についての追加の調査が為されることが望ましい。

調査した103ケ所の観測地点における日降水量の年最大値を観測年毎に棒グラフで示したのが資料（1）である。これらの図で各観測地点のグラフは、横軸の西暦の同一年がページの左端から同一の長さの位置に来るようにしてある。このようにすることによって、各観測点における観測期間の違いを視覚的に理解できるようにしている。また、その年の棒グラフが抜けている年は、欠測年である。

これらの図に示されるように、観測期間は1913年から1985年までの間で観測地点毎にかなりバラついており、欠測年も各観測地点の平均で3年ほど見られる。

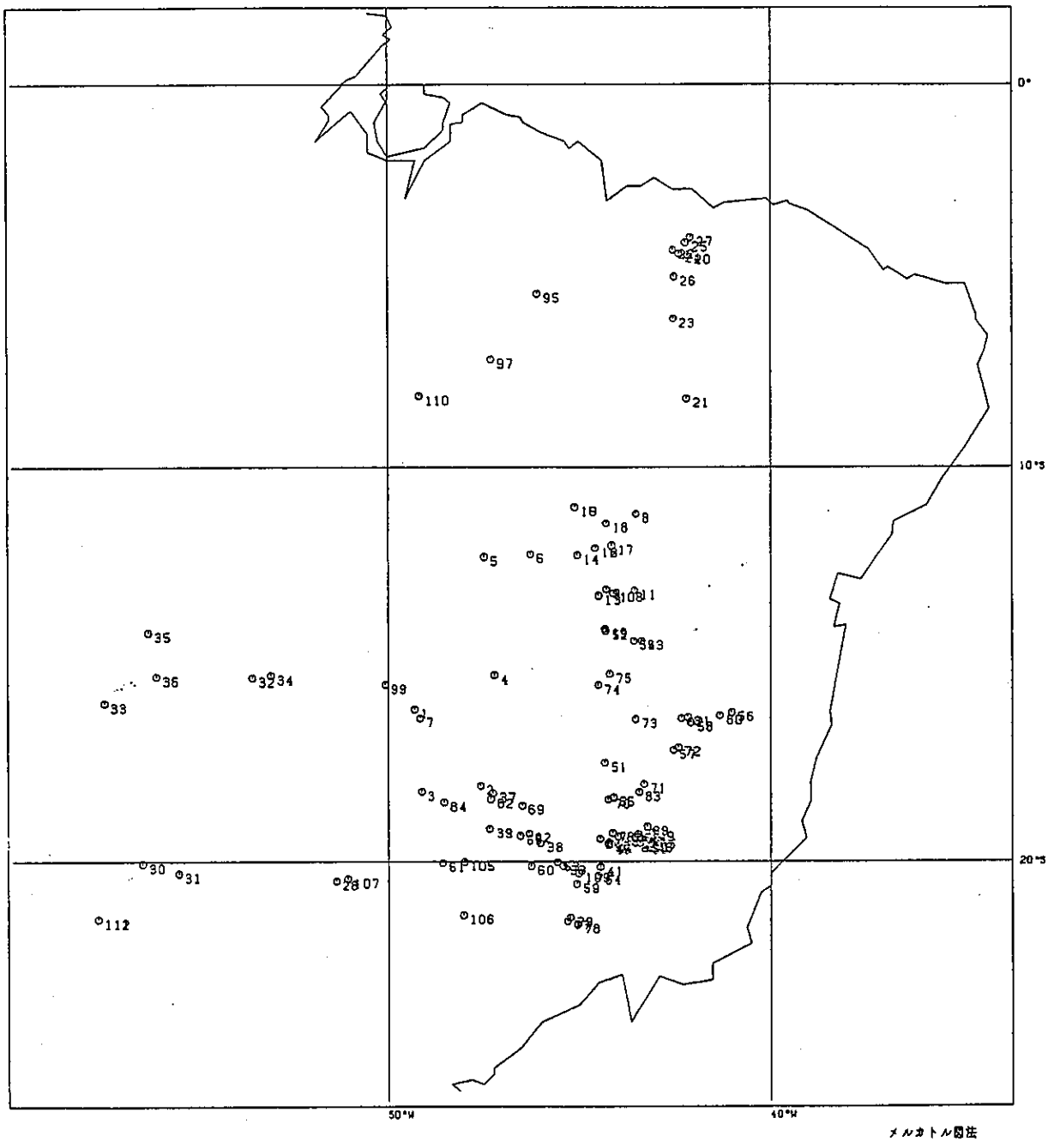


図３．１　セラードにおける降水観測地点

INDEX NO	Station Name	Latitude (°S)	Longitude (°W)	Code	Disk No.	State	Observation Period	
0001	INHUMAS	S161800	0493000	INHUMA	008	GO	1948	1985
0004	FORMOSA	S153200	0472000	FORMOS	020	GO	1949	1985
0002	CATALAO	S181100	0475700	CATALA	014	GO	1949	1985
0003	ITUMBIARA	S182500	0491200	ITUMBI	019	GO	1949	1971
0005	PARANA	S123100	0474600	PARANA	020	GO	1949	1985
0006	TAGUATINGA	S122400	0462600	TAGUAT	020	GO	1949	1985
0007	GOIANIA	S164100	0491600	GOIANI	023	GO	1949	1985
0008	BOQUEIRAO	S112000	0435100	BOQUEI	006	BA	1938	1973
0009	MOCAMBO	S131400	0443000	MOCAMB	014	BA	1946	1973
0010	FORMOSA DO RIO PRETO	S110300	0451200	FORIOP	002	BA	1942	1973
0011	PORTO NOVO	S131600	0435500	PORNOV	002	BA	1937	1973
0012	BARREIRAS	S120900	0445900	BARREI	001	BA	1937	1972
0013	SAÕ MANUEL	S133000	0445000	SAOMAN	014	BA	1947	1973
0014	SITIO GRANDE	S122600	0450500	SITGRA	015	BA	1940	1983
0015	FORMOSA DO RIO PRETO	S110300	0451200	FORPII	015	BA	1937	1982
0016	BARREIRAS	S120900	0445901	BARRII	016	BA	1920	1976
0017	COTEGIPE	S120200	0441600	COTEGI	016	BA	1937	1983
0018	TAGUA-CAMPO LARGO	S114400	0443100	TAGUAX	020	BA	1940	1974
0019	FAZENDA PORTO ALEGRE	S141500	0443300	FAZPAL	004	BA	1941	1985
0020	CAMPO MAIOR	S044900	0421100	CAMPOM	003	PI	1913	1970
0021	SAÕ JOAO DO PIAUI	S082200	0421500	SAOJOP	002	PI	1911	1977

表 3.1.1　　降水観測地点の位置と観測期間

NO	Station	Latitude, Longitude		Code	Disk	State	Observation Period		
0022	UNIÃO	S043500	0425200	UNIAOX	002	PI	1915	1983	
0023	AMARANTE	S061500	0425100	AMARAN	016	PI	1913	1983	
0024	JOSE DE FREITAS	S044500	0423500	JOSFRE	017	PI	1913	1983	
0025	BARRAS	S041500	0421800	BARRAS	018	PI	1913	1983	
0026	TERESINA	S050500	0424900	TERESI	020	PI	1921	1967	
0027	BATALHA	S040200	0420500	BATALH	004	PI	1913	1983	
0028	JUPIA	S204700	0513700	JUPIAX	008	MT	1945	1974	
0030	GUAICURUS	S200500	0564200	GUAICU	019	MT	1927	1981	
0031	AQUIDAUANA	S202800	0554800	AQUIDA	019	MT	1918	1982	
0032	SANGRADOURO	S153900	0535400	SANGRA	013	MT	1925	1973	
0033	CACERES	S160400	0574100	CACERE	018		1913	1984	
0034	COLONIA MERURI	S153300	0530500	MERURI	018	MT	1922	1976	
0035	DIAMANTINO	S142400	0562700	DIAMAN	019	MT	1932	1984	
0036	CUIABA	S153600	0560600	CUIABA	004	MT	1925	1984	
0037	ABADIA DOS DOURADOS	S182900	0472400	ABADIA	005	MG	1941	1985	
0038	TAPIRAI-JUSANTE	S195300	0460100	TAPIRA	005	MG	1942	1985	
0039	SANTA JULIANA	S191800	0473200	STAJUL	005	MG	1942	1985	
0041	CARMO DO CAJURU	S201200	0444600	CARMOX	006	MG	1942	1985	
0042	PEDRO LEOPOLDO	S193700	0440200	PEDROL	006	MG	1942	1985	
0043	TAQUARACU	S193900	0434100	TAQUAR	024		1943	1985	
0044	PONTE NOVA DO PARAOPEBA	S195600	0441900	PTNOVA	024	MG	1942	1984	

表 3.1.2　降水観測地点の位置と観測期間

NO	Station	Latitude, Longitude		Code	Disk	State	Observation Period		
0045	MATEUS LEME	S195900	0442500	MATEUS	024	MG	1942	1976	
0046	USINA PETI	S195300	0432300	USPETI	024	MG	1947	1985	
0047	VESPASIANO	S194100	0435500	VESPAS	007	MG	1942	1985	
0048	RIO PIRACICABA	S195500	0431100	RIOPIR	007	MG	1941	1984	
0049	SANTA MARIA DE ITABIRA	S192700	0430700	STAITA	007	MG	1942	1985	
0050	JABOTICATUBAS	S193100	0434500	JABOTI	007	MG	1942	1985	
0051	LASSANCE	S175300	0443500	LASSAN	003	MG	1949	1985	
0052	SÃO GONCALO	S142000	0443200	SAOGON	003	MG	1947	1972	
0053	QUEIMADAS	S144600	0433500	QUEIMA	001		1937	1967	
0054	MANGA	S144500	0435700	MANGAX	001		1939	1985	
0055	PONTE DO LICINIO	S184000	0441300	PONTEX	008		1942	1978	
0056	JEQUITINHONHA	S162600	0410000	JEQUIT	008		1942	1985	
0057	ITAMARANDIBA	S172100	0425100	ITAMAR	009		1946	1979	
0058	ARACUAI	S165200	0420500	ARACUA	009		1951	1977	
0059	SANTANA DO JACARE	S205400	0450700	SANJAC	009		1942	1985	
0060	FAZENDA AJUDAS	S201000	0462500	FAZAJU	009		1942	1985	
0061	FRUTAL	S200200	0485600	FRUTAL	010		1918	1977	
0062	MONTE CARMELO	S184300	0473000	MTECAR	010		1942	1985	
0063	BAMBUI	S200100	0455800	BAMBUI	010		1941	1985	
0064	CARMO DA MATA	S203300	0445100	CARMAT	011		1942	1976	
0065	ARAXA-DNMET	S193500	0465400	ARAXAX	011		1941	1978	

表 3.1.3　降水観測地点の位置と観測期間

NO	Station	Latitude, Longitude		Code	Disk	State	Observation Period		
0066	CAIXA DE AREIA	S193700	0435500	CAREIA	025		1942	1984	
0067	LAGOA SANTA	S193700	0435300	LAGSAN	011		1941	1970	
0068	SANTA BARBARA	S195800	0432400	SANBAR	011		1942	1985	
0069	CARMO DO PARANAIBA	S185900	0464900	CARPAR	012		1942	1985	
0070	CURVELO	S184500	0442600	CURVEL	012		1941	1974	
0071	MENDANHA-MONTANTE	S180600	0433000	MENDAN	012		1948	1985	
0072	MINAS NOVAS	S171400	0423800	MINANO	012		1947	1979	
0073	MONTES CLAROS	S164400	0435200	MONCLA	013		1941	1985	
0074	SAO FRANCISCO	S155700	0445200	SCHICO	013		1938	1984	
0075	JANUARIA	S152900	0442200	JANUAR	013		1936	1965	
0076	SETE LAGOAS	S192800	0441500	SETLAG	014		1950	1978	
0077	MONSENHOR PAULO	S214600	0453200	MONPAU	015		1941	1985	
0078	CONCEICAO DO RIO VERDE	S215400	0450500	CORIVE	015		1941	1985	
0079	USINA DE VARGINHA	S213700	0452400	USIVAR	017		1943	1978	
0080	ITAOBIM	S163400	0413000	ITAOBI	023		1948	1985	
0081	CORONEL MURTA	S163800	0421300	CELMUR	023		1948	1985	
0082	PORTO MANDACARU	S164100	0423000	PORMAN	023		1946	1985	
0083	GOUVEA	S182700	0434300	GOUVEA	022		1942	1985	
0084	MONTE ALEGRE DE MINAS	S185200	0485200	MTEALE	022		1941	1985	
0085	NOVA ERA	S194600	0430300	NOVERA	022		1941	1979	
0086	SABARA	S195300	0434900	SABARA	022		1942	1984	

表 3.1.4　降水観測地点の位置と観測期間

NO	Station	Latitude, Longitude		Code	Disk	State	Observation Period		
0087	CAETE	S195300	0434000	CAETEX	025		1942	1984	
0088	INSTITUTO AGRONOMICO	S195500	0435400	INAGRO	011		1941	1970	
0089	MORRO DO PILAR	S191200	0432200	MOPILA	025		1946	1984	
0090	FAZENDA ESCOLA	S195300	0442600	FAZESC	025		1942	1984	
0091	JAGUARUNA-JUSANTE	S194300	0444800	JAGUAR	021		1942	1985	
0092	IBIA	S192900	0463100	IBIAMG	021		1945	1985	
0093	IGUATAMA	S201000	0454200	IGUATA	021		1941	1985	
0094	JOSE DE MELO	S194300	0433500	JOSEME	021		1945	1985	
0095	GRAJAU	S054900	0460800	GRAJAU	001		1949	1973	
0097	CAROLINA	S072000	0472800	CAROLI	004		1941	1975	
0099	GOIAS	S155600	0500800	GOIASX	014		1949	1984	
0105	TERRA ROXA	S200000	0480000	TERROR	003		1941	1974	
0106	PONTE GUATAPARA	S213000	0480200	POGUAT	017		1925	1979	
0107	LUSSANVIRA	S204100	0510600	LUSSAN	010		1945	1980	
0108	SANTA MARIA DA VITORIA	S132400	0441200	STAMAR	006		1940	1973	
0109	LAMOUNIER	S202800	0450200	LAMOUN	005		1942	1985	
0110	CONCEICAO DO ARAGUAIA	S081600	0491700	CONCEI	014		1949	1975	
0112	IMPERATRIZ			IMPERA	017		1949	1964	
0111	PORTO MURTINHO	S214100	0575800	PORTOM	018		1966	1978	

表 3.1.5　降水観測地点の位置と観測期間

表 3.1.6 今回収集した観測地点以外に収集することが望ましい地点

Table3.1.6 List of Observe Station which should be collected in the future

No	Name of obs. station	WMO Stn. index No.	Period
1	Porto NACIONAL	83064	1950~1990
2	PEIXE	83228	〃
3	POSSEI	83332	〃
4	BLASILIA	83377	〃
5	BURITIS	83387	〃
6	GELBA CELESTE	83264	〃
7	SANGRADOURO	83365	1974~1990
8	ARAGARCI	83368	1950~1990
9	LIMEIROS	83467	〃
10	COXIM	83512	〃
11	RIO VERDE	83470	〃
12	IPAMERI	83522	〃
13	PARACATU	83479	〃
14	JOAO PINHEIRO	83481	〃
15	PIRAPORA	83483	〃
16	CAETITE	83339	〃
17	CAPINOPOK	83514	〃
18	PARANAIB	83565	〃
19	POMPEU	83570	〃
20	CAMPO GRANDE	83612	〃
21	GRAJAU	82568	1974~1990
22	CAROLINA	82765	1976~1990
23	CONCEICAO DO ARAGUAIA	82861	1976~1990
24	St. JOAO DO PIAVI	82879	1978~1990

3-2　各地点における年最大日降水量の経年変化

調査した103ケ所の観測地点における日降水量の年最大値を観測年毎に棒グラフで示したのが資料（１）である、これらの中から Boqeirao, Campo Maior, Carmo Do Cajuru の観測地点の例を図3-2-1に示す。

これらの経年変化図を見ると一様にばらついており、特に顕著な周期的変化や全地点に共通した異常年などのデータは認められ無かった。これは日降水量の極値が、地形や気流などの極地的な影響を強く受けている為、今回対象とした広い地域に分布した観測点では共通の傾向は現われてこないためと考えられる。

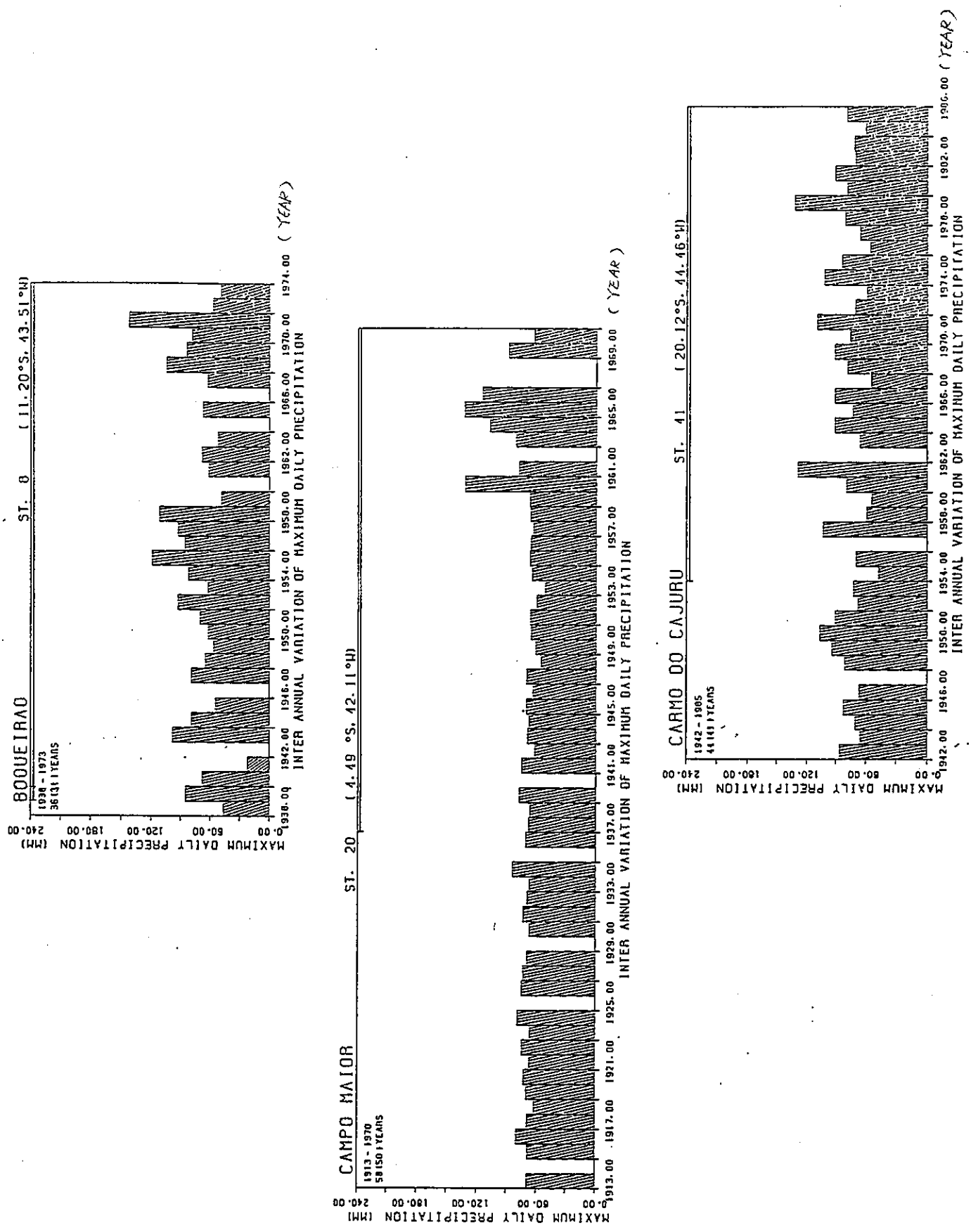


図3.2.1　年最大日降水量の経年変化図

(BOQUEIRAO, CAMPO MAIOR, CARMO DO CAJURU)

3-3．1月における最大無降水継続日数の経年変化

103ケ所の観測地点における1月の無降水継続日数の最大値を観測年毎に棒グラフで示したのが資料（2）である。これらの中から Boqeirao, Campo Maior, Carmo Do Cajuru の観測地点の例を図3-3-1に示す。

これらのデータから1949、1954、1956、1976年に無降水継続日数の大きい地点が多く出現する傾向が見られる。また、1950年代半ばと1970年代半ばに極大、1960年代半ばに極小となるような周期変化が見られる地点が多く認められた。このように最大無降水継続日数の経年変化傾向は、年最大日降水量の経年変化に比較して、地点間の関連性が強くでている。これは長期にわたる無降水継続日数（ベラニコ）の現象が局地性のもので無く、かなり広い範囲に広がった現象だと言うことを示唆していると考えられる。

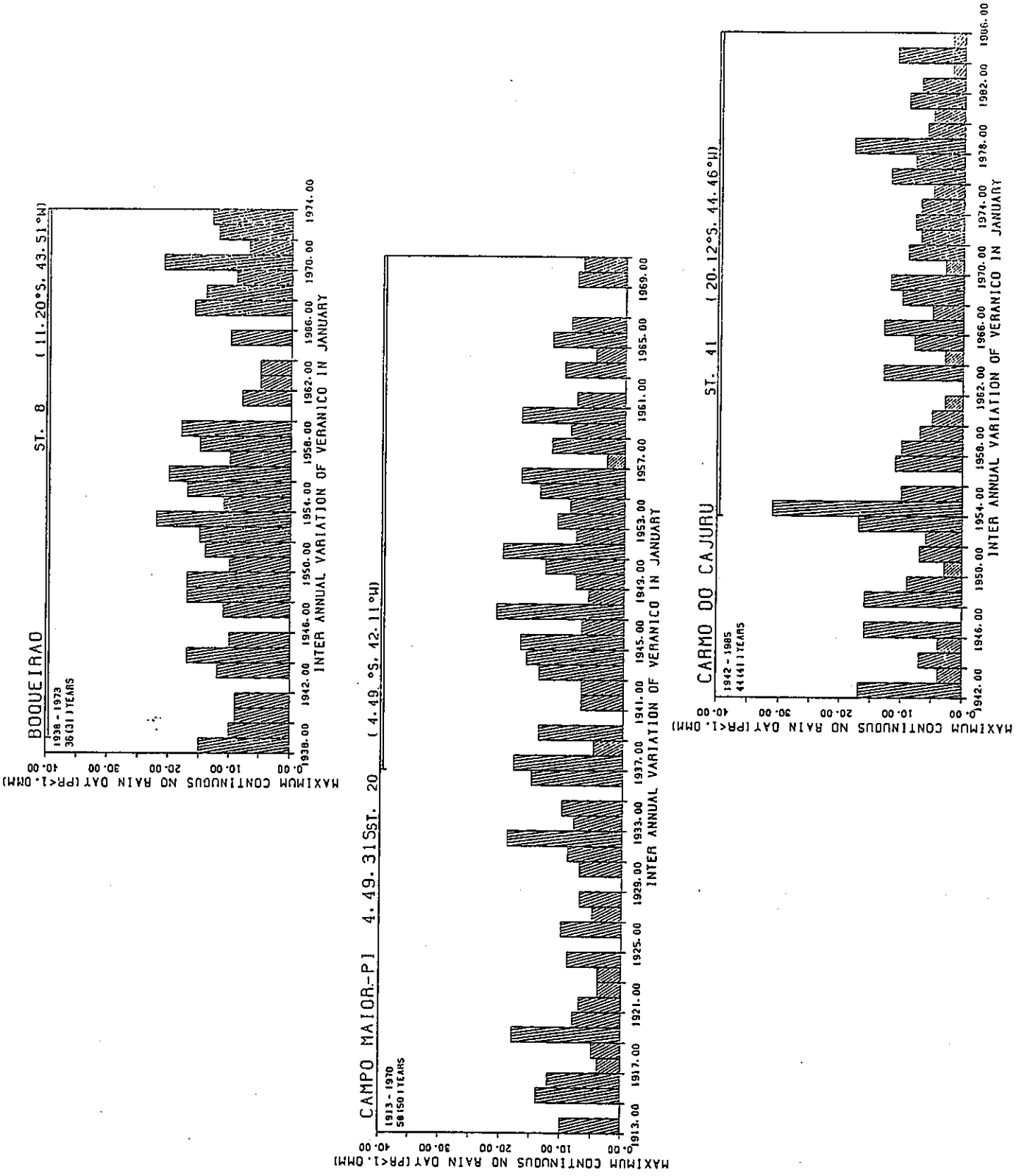


図 3.3.1　1月における最大無降水継続日数の経年変化

(BOQUEIRAO, CAMPO MAIOR, CARMO DO CAJURU)

3-4. 確率統計期間の選定

年最大値のデータを用いて、最大日降水量と最大無降水継続日数の確率計算を行なったが、各地点についてそれぞれ対象とする期間を選定する必要が生じた。今回、得ようとする再現期待値は5、10、30年だが、一般に得ようとする再現期間と同じ程度の期間のデータがあることが望ましい。また、気候値統計では30年のデータを用いる。本調査では以上の2点を考慮して、30年分のデータをそれぞれの地点における対象データとして用いる。ただし、データ数が30年に満たない地点はその地点の全データを、30年以上の地点は最も新しい30年分（30個分）のデータを用いる。

このようにして選定した３０年分のデータの存在する期間を資料（１）および資料（２）の各図における上辺の線分で示した。（図例参照）

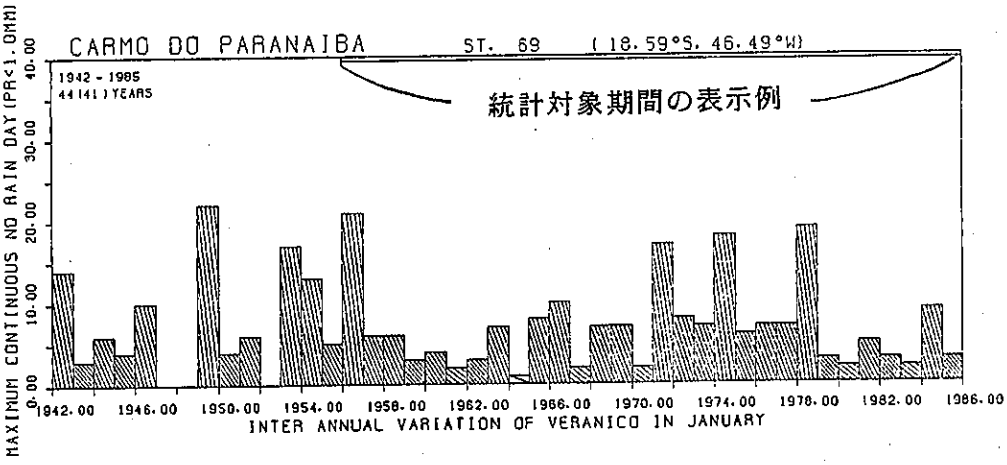


図 3.4.1　統計対象期間の表示例

第４章　日降水量の再現期待値

４-１.日降水量の再現期待値

セラード地域の103地点の日降水量の観測データを対象に確率計算を行ない、年別・月別・旬別（雨季のみ）の日降水量の極大値の再現期待値を求めた。確率計算の手法は第２章で述べた Petruaskas-Aagaard の方法を用い、統計対象期間は第３-４項で述べている期間（30年を基準とした）のデータを用いて計算した。

計算結果のうち１０３地点の年別・月別の最大日降水量順位表、再現期間別・月別再現期待値一覧表および月別再現期待値算定図を巻末資料集(3)、(4)、(5)に掲載する。これらの図表の中から参考例として ABADIA DOS DOURADOS の順位表、再現期待値一覧表および再現期待値算定図を 図 4.1.1～ 4 および表 4.1.1～4.1.3 に示す。

図 4.1.1 の月別再現期待値算定図を見ると横軸の下側が再現期間、上側が再現期間に対応する変換確率値 （γ）、縦軸が日降水量の極大値となっている。図上の点が降水データと順位確率を持ったデータをプロットしたもので、３本の線のうち真ん中の直線が回帰直線、両側の線が95%の信頼区間の上側と下側を表している。図の左上、観測地点名の下にあるのが採用した確率分布型（最も相関係数の高い分布型）、右上の四角の中は、上側から回帰直線の式、相関係数Ｒ、対象期間Ｋ年、データ数ＮＤＴ（下限値 5 mm 以下のデータを除いた後のデータ数）である。

表 4.1.1 および表 4.1.3 は統計対象期間における最大日降水量の順位表である。但し、ANL は全年、OCT ～ MAR は各月を表している。月の後に数字が付く場合は旬別の統計で、１が第１旬（１日～１０日）、２が第２旬（１１日～２０日）、３が第３旬（２１日～月末）をそれぞれ表している。

表 4.1.2 および表 4.1.4 は日降水量の再現期待値一覧表で、表の左端に表示されている期間に対応する年別および月別の日降水量の再現期待値が PR(mm) の下に表示されている。±ΔＰの下の数字は９５％信頼区間の片幅の値を示している。COR. は回帰直線の相関係数、FUNC. は採用した確率分布型（最も相関係数の高い分布型）、DATA NUMBER はデータ数である。

表 4.1.1　最大日降水量の順位表（全年、月別）

ABADIA DOS DOURADOS の例

TABLE 4.1.1 LIST OF MAXIMUM DAILY PRECIPITATION
ABADIA DOS DOURADOS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	115.0	71.0	89.3	115.0	115.0	102.0	80.4
2	115.0	67.0	89.0	100.4	96.0	90.2	73.8
3	105.3	63.4	85.8	93.3	90.0	84.1	72.0
4	102.0	60.0	74.0	84.5	90.0	75.0	65.3
5	100.4	57.2	74.0	81.4	80.2	74.1	57.4
6	93.3	55.0	69.3	75.0	77.1	72.3	54.3
7	90.2	53.2	69.0	70.6	75.0	70.0	51.0
8	90.0	52.2	66.7	66.1	73.5	65.4	49.8
9	90.0	49.8	66.2	65.5	66.6	64.0	48.9
10	89.3	49.0	64.2	62.5	66.0	60.2	48.0
11	84.5	47.3	63.0	62.1	64.1	59.3	45.0
12	84.1	40.8	60.0	54.2	60.2	56.8	42.5
13	83.0	40.0	58.4	51.5	60.0	50.9	40.2
14	81.4	39.0	55.4	50.3	58.3	48.0	39.0
15	80.2	38.0	55.0	50.1	57.0	47.0	35.0
16	78.0	35.2	52.3	49.0	53.5	46.4	33.2
17	75.0	31.8	50.9	48.3	49.0	38.3	31.7
18	75.0	30.0	46.7	48.2	47.3	38.2	31.0
19	74.0	30.0	46.0	48.0	41.0	37.8	30.3
20	73.8	29.4	45.0	47.3	40.6	37.0	29.3
21	73.3	25.8	42.4	45.0	40.0	36.8	27.2
22	70.0	25.7	42.1	42.2	38.0	35.3	27.2
23	67.0	24.4	36.4	39.0	37.1	33.5	25.5
24	66.6	24.0	36.3	39.0	35.4	29.4	24.2
25	65.5	23.4	34.2	36.6	33.8	27.0	24.0
26	64.0	22.3	33.8	35.3	31.3	25.0	23.0
27	63.4	20.0	32.2	32.1	29.7	22.0	20.0
28	62.1	12.0	30.4	29.0	27.6	18.0	13.2
29	60.0	9.3	21.4	29.0	25.4	11.0	6.6
30	37.8	3.3	20.0	27.2	25.0	9.4	4.8

表 4.1.2　日降水量の再現期待値一覧表（全年、月別）

ABADIA DOS DOURADOS の例

TABLE 4.1.2 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

STATION. ABADIA DOS DOURADOS

MONTH	ANL		OCT		NOV		DEC		JAN		FEB		MAR	
YEARS	PR (MM)	±ΔP	PR (MM)	±ΔP	PR (MM)	±ΔP	PR (MM)	±ΔP	PR (MM)	±ΔP	PR (MM)	±ΔP	PR (MM)	±ΔP
5	94.5	9.0	52.3	6.2	69.6	7.3	73.3	5.4	75.8	6.2	68.7	5.8	54.4	5.7
10	103.7	11.9	61.4	8.2	79.9	9.6	87.0	7.4	88.7	8.1	81.6	7.6	64.5	7.5
15	108.4	13.6	66.1	9.4	85.2	11.0	94.3	8.6	95.3	9.3	88.2	8.7	69.7	8.6
20	111.6	14.7	69.2	10.2	88.8	11.9	99.3	9.5	99.7	10.1	92.6	9.4	73.2	9.3
25	113.9	15.6	71.5	10.8	91.4	12.6	103.1	10.1	102.9	10.7	95.9	10.0	75.7	9.9
30	115.8	16.3	73.3	11.3	93.5	13.2	106.1	10.7	105.5	11.1	98.5	10.4	77.7	10.3
50	120.7	18.2	78.2	12.6	99.0	14.7	114.3	12.2	112.4	12.4	105.5	11.7	83.1	11.5
100	127.0	20.6	84.4	14.3	106.0	16.7	124.8	14.1	121.1	14.1	114.2	13.2	89.9	13.1
COR.	0.978		0.989		0.988		0.995		0.995		0.995		0.992	
FUNC.	WI(2.00)		WI(2.00)		WI(2.00)		WI(1.50)		WI(2.00)		WI(2.00)		WI(2.00)	
DATA NUMBER	30		29		30		30		30		30		29	

±ΔP: 95%CONFIDENCE LIMIT

表 4.1.3　最大日降水量の順位表（旬別）

ABADIA DOS DOURADOS の例

NO.	OCT1	OCT2	OCT3	NOV1	NOV2	NOV3	DEC1	DEC2	DEC3	JAN1	JAN2	JAN3	FEB1	FEB2	FEB3	MAR1	MAR2	MAR3
1	71.0	67.0	57.2	89.3	85.8	89.0	81.4	82.0	115.0	77.1	96.0	115.0	90.2	102.0	75.0	80.4	73.8	66.0
2	55.0	63.4	52.2	74.0	66.7	69.3	70.6	65.5	100.4	73.5	90.0	90.0	84.1	74.1	64.0	72.0	40.0	57.4
3	53.2	60.0	49.0	74.0	64.2	69.0	62.5	63.6	93.3	66.6	75.0	80.2	72.3	70.0	56.7	65.3	38.0	48.9
4	49.8	55.0	43.2	60.0	63.0	66.2	51.5	62.1	84.5	66.0	58.3	60.0	60.2	65.4	50.4	54.3	33.0	46.0
5	40.0	50.0	40.3	55.4	55.0	58.4	50.0	54.2	75.0	64.1	57.6	55.2	50.9	59.3	48.0	51.0	32.6	39.0
6	38.0	47.3	35.2	55.0	53.2	50.9	49.0	50.3	66.1	60.2	57.0	50.9	45.2	56.8	47.1	49.8	32.0	35.2
7	31.0	40.8	33.7	52.3	52.0	46.7	48.0	50.0	50.1	56.0	53.5	41.0	39.0	50.0	47.0	48.0	31.0	35.0
8	30.0	39.0	33.5	43.4	42.1	46.0	48.0	49.2	49.6	54.0	50.0	38.0	37.1	39.2	46.4	45.0	30.4	33.2
9	26.0	33.7	31.8	39.0	39.2	45.0	43.0	47.3	48.3	49.0	47.5	35.6	36.8	37.8	38.4	42.5	30.3	31.7
10	24.4	32.9	30.0	33.3	36.4	42.4	39.0	46.4	48.2	40.6	47.3	35.6	36.2	37.0	38.3	40.2	24.2	27.2
11	24.0	31.0	29.4	30.4	36.0	39.0	39.0	39.8	47.3	40.0	47.0	35.2	35.3	31.8	38.2	34.0	24.0	25.0
12	18.1	28.6	28.0	29.0	35.0	36.3	36.1	39.2	45.0	35.2	45.8	32.2	35.3	30.6	35.9	31.0	23.8	24.2
13	12.6	24.8	25.8	25.0	34.2	34.7	35.7	37.3	42.2	35.0	40.0	32.2	28.5	25.0	33.5	29.3	23.0	23.0
14	11.6	22.3	25.7	24.1	32.5	34.0	30.2	35.6	37.0	35.0	38.3	27.6	27.4	24.4	29.4	28.0	20.0	23.0
15	10.6	20.0	25.0	21.4	32.2	33.8	30.0	34.3	36.6	34.0	38.0	27.0	27.1	23.2	28.2	27.2	19.1	21.0
16	10.0	19.3	23.4	20.6	27.4	30.0	29.0	32.3	35.3	33.8	37.1	25.4	27.0	21.2	25.9	26.2	17.3	20.6
17	9.4	18.2	20.0	18.0	26.2	23.0	27.2	32.0	35.2	31.3	36.4	23.5	22.0	20.2	19.2	25.7	17.1	20.0
18	9.3	16.2	18.0	16.0	24.0	20.2	25.1	30.0	35.0	29.7	35.4	23.4	22.0	17.2	17.4	25.5	13.4	15.4
19	6.5	10.6	18.0	13.3	22.2	20.1	24.4	29.0	32.1	28.2	35.2	23.0	18.5	15.3	17.0	23.3	13.0	13.0
20	6.3	10.0	16.2	13.2	22.0	20.1	23.2	28.2	27.0	25.0	28.6	22.4	18.0	13.9	16.4	16.6	13.0	12.2
21	6.1	9.2	14.2	13.0	20.0	19.4	22.3	24.2	27.0	25.0	27.6	20.2	17.6	13.5	14.0	14.9	12.0	11.8
22	1.2	7.6	14.0	12.0	19.4	17.4	20.2	20.2	26.4	22.3	26.5	19.0	16.1	13.0	13.0	14.0	11.5	11.0
23	1.1	4.0	13.0	9.2	15.1	12.3	16.3	18.1	26.0	17.0	25.4	18.2	16.0	12.5	9.4	13.2	11.3	10.0
24	0.3	1.6	12.0	8.4	10.4	12.2	11.7	15.2	21.8	13.3	23.4	14.3	15.0	11.0	8.0	8.3	6.6	9.7
25	0.0	1.3	11.2	8.0	7.8	12.0	9.1	13.2	20.0	10.2	14.3	14.0	13.0	10.0	5.7	4.1	5.5	7.6
26	0.0	1.1	11.0	6.6	7.4	10.4	7.0	12.4	19.0	10.0	3.6	12.8	10.0	9.3	4.2	3.0	4.0	5.0
27	0.0	0.8	9.3	4.2	7.0	10.4	6.3	12.2	18.2	10.0	3.3	11.0	8.2	9.0	1.3	3.0	3.4	4.8
28	0.0	0.0	4.2	0.0	3.2	5.0	3.9	12.1	15.3	5.1	1.1	0.9	8.2	7.5	1.0	0.0	3.1	1.0
29	0.0	0.0	3.3	0.0	0.0	0.0	3.4	9.3	14.5	0.6	1.0	0.0	3.4	1.3	0.0	0.0	2.8	1.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.2	0.0	0.0	0.0	2.9	0.0	0.0	0.0	1.5	0.0

表 4.1.4　日降水量の再現期待値一覧表（旬別）

ABADIA DOS DOURADOS の例

MONTH	OCT1		OCT2		OCT3		NOV1		NOV2		NOV3	
YEARS	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD
5	32.8	5.9	42.5	5.8	35.8	3.5	47.7	8.1	49.9	6.0	50.4	6.1
10	46.1	8.3	53.6	7.9	44.2	4.8	62.6	11.2	61.3	8.0	63.7	8.5
15	53.4	10.0	59.2	9.2	48.7	5.7	70.6	13.1	67.2	9.2	70.8	9.9
20	58.5	11.3	62.9	10.0	51.7	6.3	76.0	14.5	71.0	10.0	75.7	11.0
25	62.3	12.4	65.6	10.7	54.0	6.7	80.1	15.6	73.9	10.6	79.3	11.8
30	65.4	13.2	67.7	11.3	55.9	7.1	83.3	16.5	76.2	11.1	82.3	12.4
50	73.9	15.6	73.4	12.7	60.8	8.1	92.2	18.9	82.2	12.4	90.1	14.2
100	85.0	18.7	80.6	14.6	67.3	9.5	103.5	22.0	89.8	14.2	100.3	16.5
COR.	0.988		0.990		0.994		0.989		0.992		0.992	
FUNC.	WI(1.25)		WI(2.00)		WI(1.50)		WI(1.50)		WI(2.00)		WI(1.50)	
DATA NUMBER	21		22		27		26		27		27	

±ΔP:95%CONFIDENCE LIMIT

MONTH	DEC1		DEC2		DEC3		JAN1		JAN2		JAN3	
YEARS	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD
5	48.9	4.9	51.3	5.3	62.9	9.4	53.5	8.3	56.8	7.4	47.1	6.0
10	59.6	6.5	61.7	7.0	80.6	13.1	65.0	11.0	68.8	10.1	65.7	8.7
15	65.1	7.4	67.0	8.0	90.4	15.6	70.9	12.5	75.6	11.9	77.1	10.8
20	68.7	8.1	70.5	8.7	97.2	17.3	74.8	13.6	80.3	13.3	85.4	12.4
25	71.4	8.6	73.2	9.2	102.4	18.7	77.7	14.5	83.9	14.4	91.9	13.8
30	73.6	9.0	75.2	9.6	106.6	19.8	80.0	15.1	86.8	15.3	97.3	14.9
50	79.3	10.1	80.8	10.8	118.1	22.9	86.1	16.9	95.0	17.8	112.7	18.2
100	86.4	11.5	87.8	12.2	133.2	27.1	93.8	19.2	106.0	21.3	134.2	22.9
COR.	0.994		0.994		0.989		0.987		0.986		0.993	
FUNC.	WI(2.00)		WI(2.00)		WI(1.25)		WI(2.00)		GUMBEL		WI(0.85)	
DATA NUMBER	27		29		30		28		25		27	

±ΔP:95%CONFIDENCE LIMIT

MONTH	FEB1		FEB2		FEB3		MAR1		MAR2		MAR3	
YEARS	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD
5	46.0	7.3	46.9	6.7	45.5	5.4	47.0	4.9	30.0	7.8	36.2	3.3
10	61.2	10.4	64.0	9.5	56.2	7.3	59.5	6.8	40.0	11.2	46.2	4.6
15	70.0	12.6	73.8	11.5	61.6	8.4	66.1	8.1	45.9	13.7	51.6	5.4
20	76.1	14.2	80.6	12.9	65.2	9.2	70.6	8.9	50.1	15.6	55.2	6.0
25	80.8	15.4	85.9	14.0	67.9	9.8	73.9	9.6	53.3	17.2	57.9	6.5
30	84.6	16.5	90.2	15.0	70.0	10.2	76.6	10.2	55.9	18.4	60.1	6.8
50	95.2	19.4	102.0	17.6	75.6	11.5	83.9	11.7	63.3	22.1	66.0	7.8
100	109.4	23.4	117.9	21.3	82.6	13.1	93.3	13.7	73.4	27.2	73.5	9.2
COR.	0.989		0.993		0.992		0.993		0.965		0.996	
FUNC.	WI(1.10)		WI(1.10)		WI(2.00)		WI(1.50)		WI(1.00)		WI(1.50)	
DATA NUMBER	28		28		25		24		25		25	

±ΔP:95%CONFIDENCE LIMIT

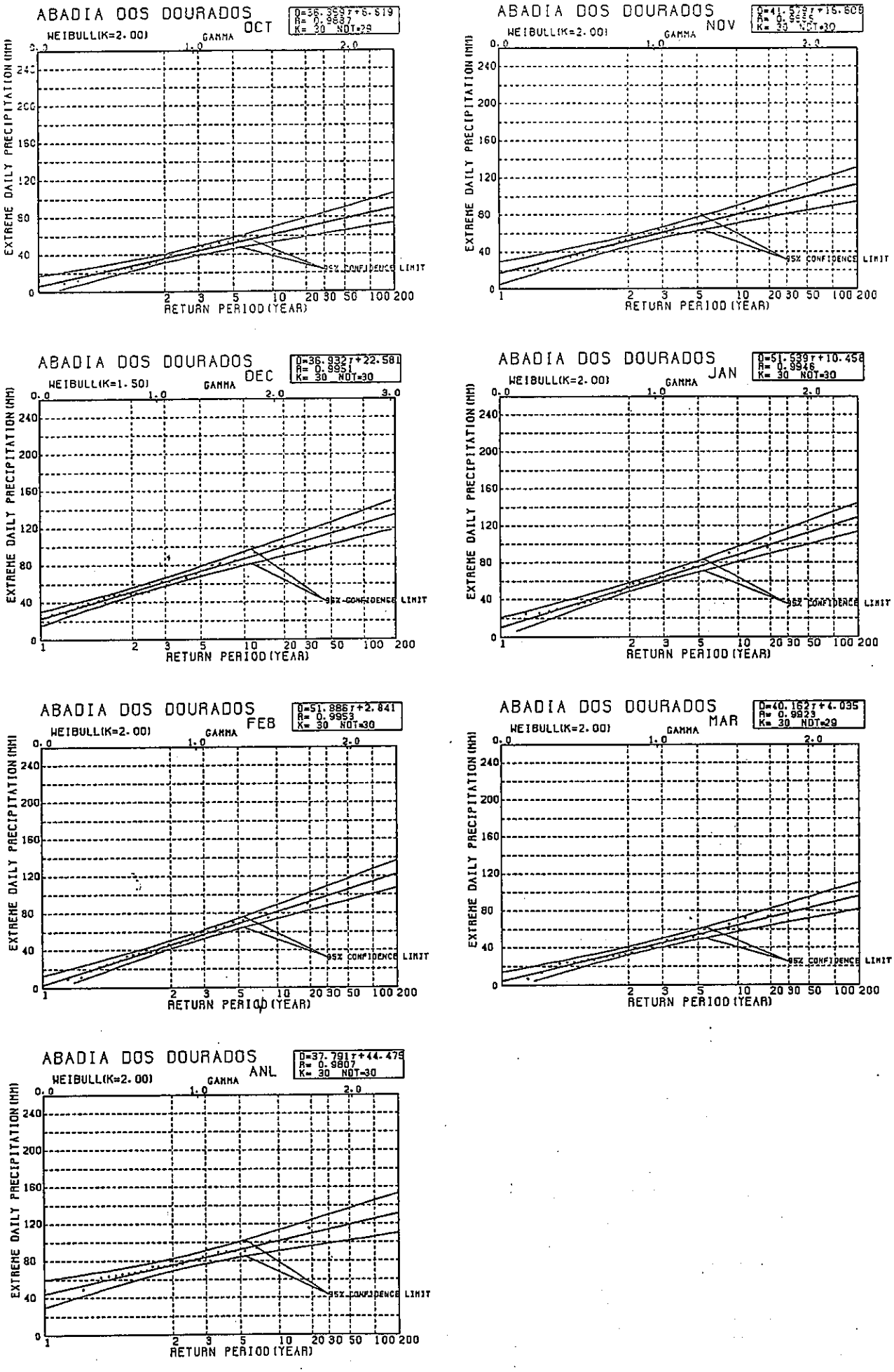


FIG4.1.1 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

図 4.1.1 日降水量の再現期待値算定図（全年、月別、旬別）

ABADIA DOS DOURADOS の例

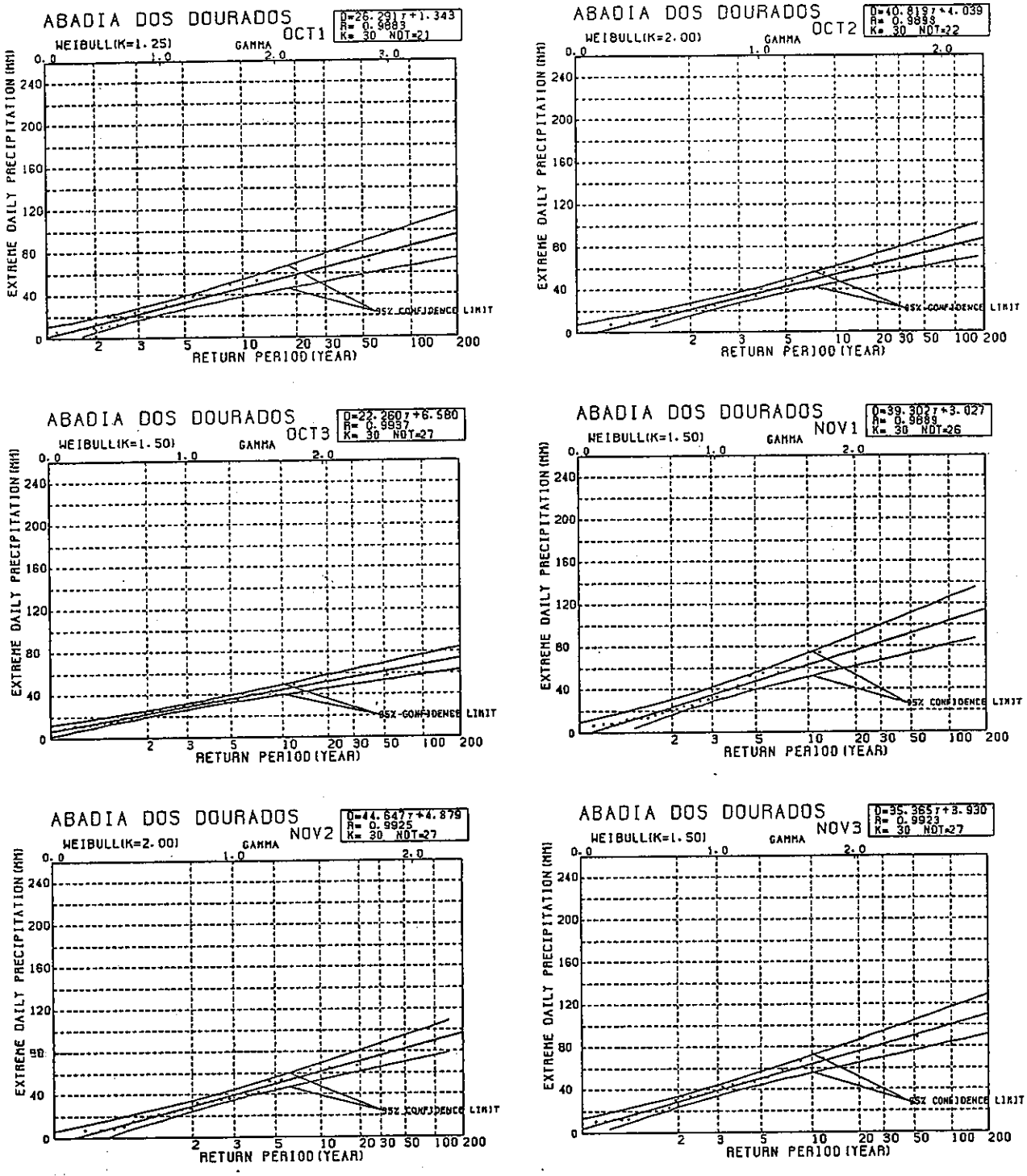


図 4.1.2　日降水量の再現期待値算定図（旬別・10月、11月）

ABADIA DOS DOURADOS の例

FIG.4.1.2　RETURN PERIOD OF EXTREME DAILY PRECIPITATION

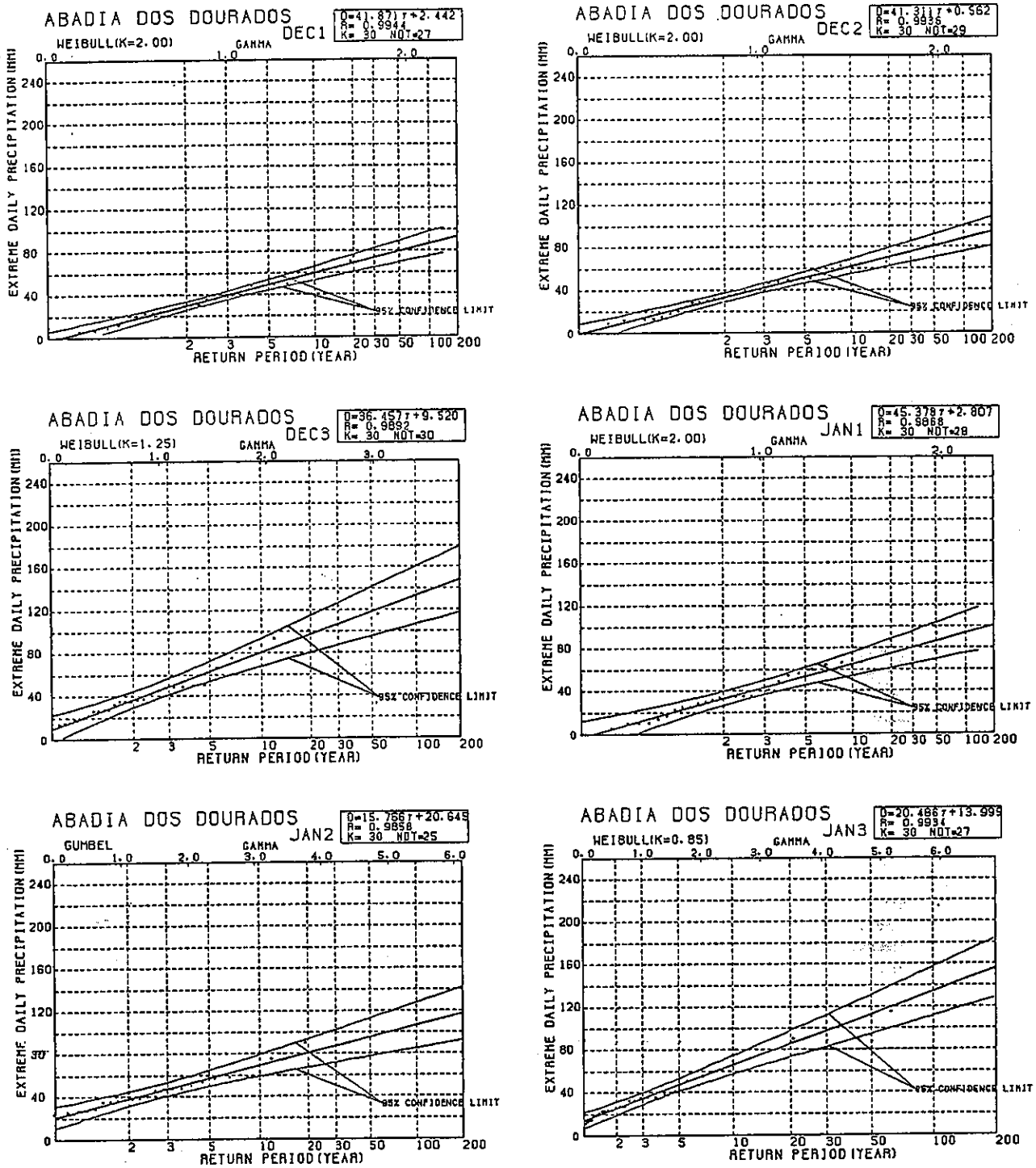


図 4.1.3　日降水量の再現期待値算定図（旬別・12月、1月）

ABADIA DOS DOURADOS の例

FIG.4.1.3　RETURN PERIOD OF EXTREME DAILY PRECIPITATION

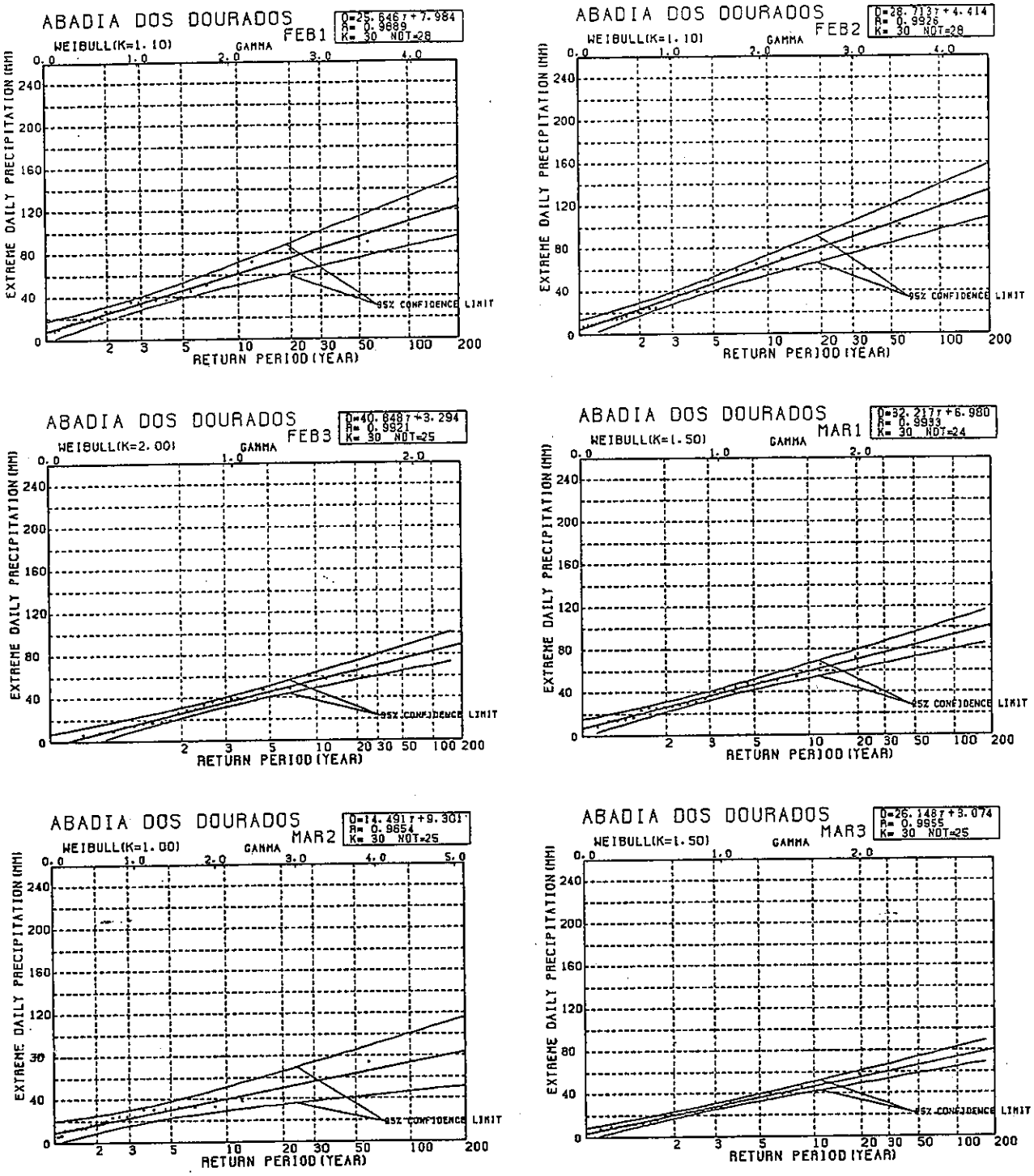


図 4.1.4　日降水量の再現期待値算定図（旬別・2月、3月）

ABADIA DOS DOURADOS の例

FIG.4.1.4　RETURN PERIOD OF EXTREME DAILY PRECIPITATION

4-2. セラード地域における最大日降水量の再現期待値の分布

計算によって得られた103地点の最大日降水量の再現期待値のデータを用いて、セラード地域における分布図を作成した。分布図の作成には第2-3項で述べた方法を用いた。

得られた月別・旬別・雨季期間の再現期待値の分布図を巻末の資料（9）および（10）に示す。得られた月別・全年の 5 年再現期待値の分布図を図 4-2-1～7 に示す。これらの図を見ると月によってその分布形状が違うが、1月の分布に注目すると、南部及び北部の沿岸部で大きく、沿岸部を除く北部で小さい傾向が見られる。

図4-2-8 は1931年から1960年の30年間の平均年降水量の分布図（"Chuvas no Brasil* "からの転載）である。この図と日降水量の再現期待値の分布図を比較してみると、年平均降水量の分布図が西高東低の分布になっているのに対し、年最大日降水量の再現期待値分布は南部、北部の沿岸部および南西部で大きな分布となっている。この相違は日降水量の極値の出現確率が必ずしも、年間降水量の多さと比例しないことを示唆している。つまり、普段は降水日数が少ないが降水がある時は集中的に降る地域があるということである。また、とびとびの島の様なコンターが見られるが、これは第 3.2 項の経年変化の項でも述べたように、日降水量の極大値が局地的な地形特性に影響されている為と考えられる。この傾向はベラニコの発生日数の分布に余り小さな島が散在していないことと対照的である。

問題点としては、降水の観測データの入手が難しいため、得られたデータの期間が統一されておらず、かなり欠測があることが上げられる。また、観測地点の分布が南部に集中しており、中央部と北西部の観測点がまばらであるため、まばらな地域の精度が落ちていることが予測される。

註；Chuvas no Brasil＊収集資料一覧表参照

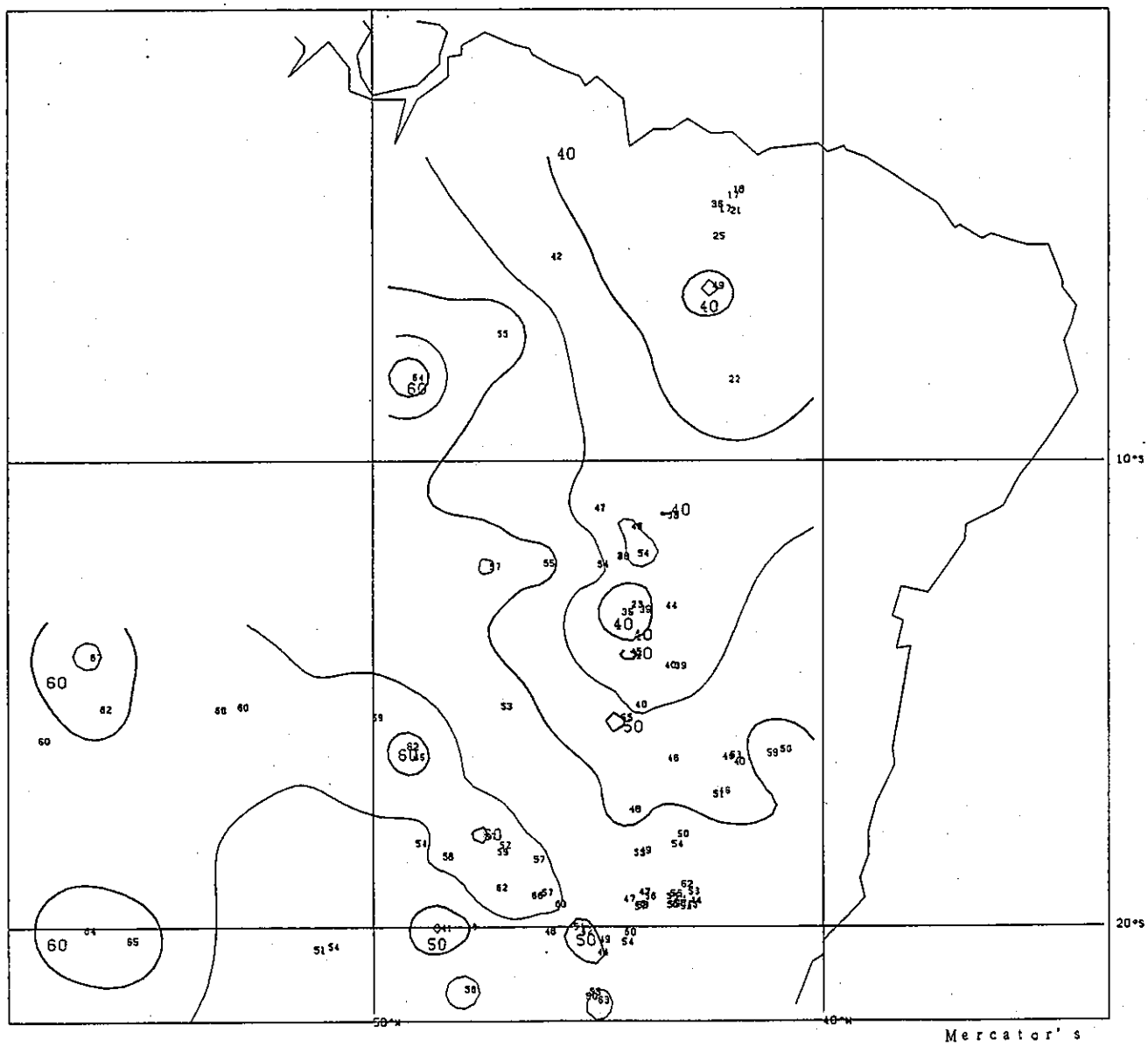


FIG. 4.2.1 DISTRIBUTION MAP OF EXTREME DAILY PRECIPITATION
(RETURN PERIOD : 5 YEARS) OCTOBER

図 4.2.1 １０月の最大日降水量の５年再現期待値分布

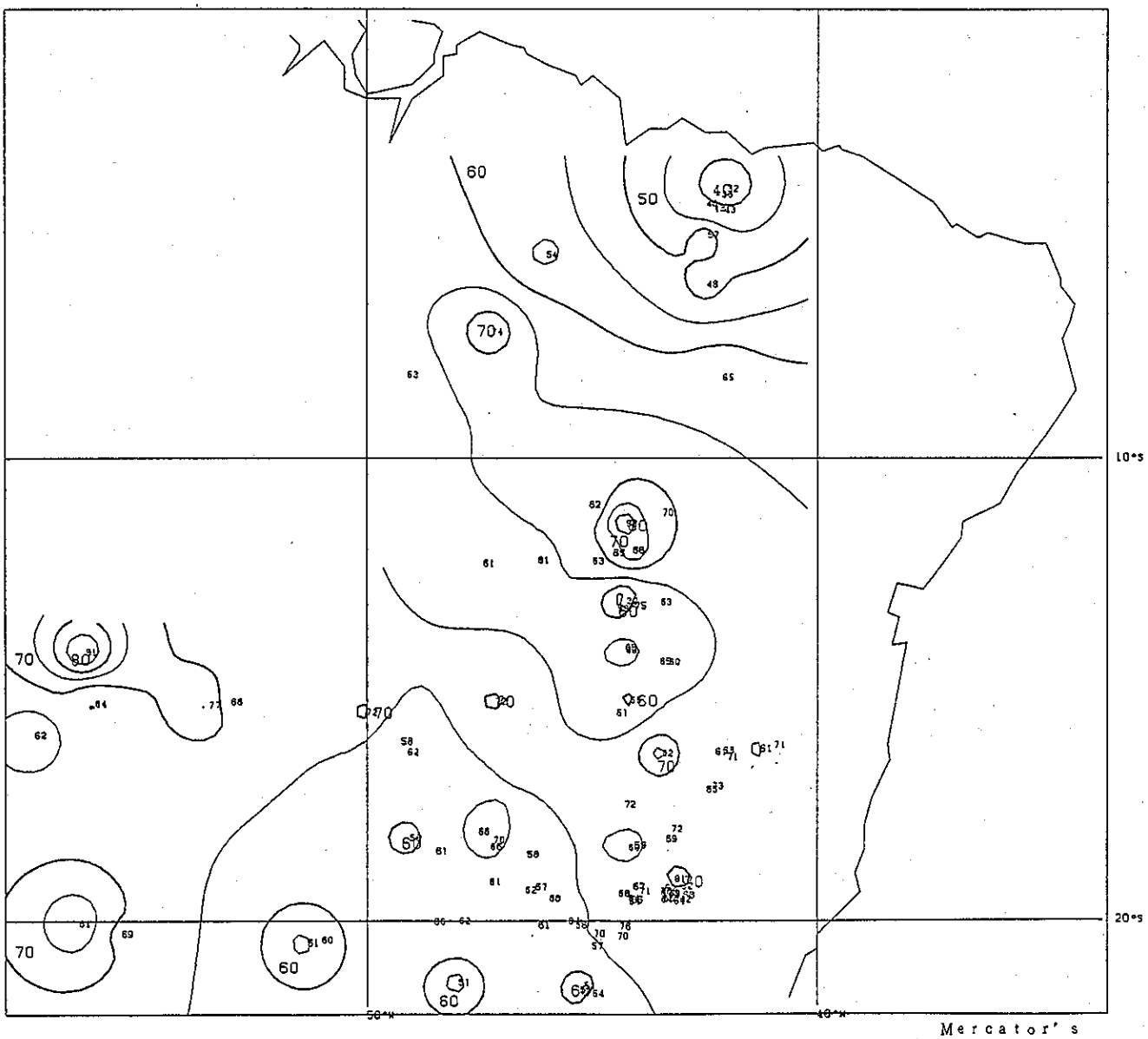


FIG.4.2.2 DISTRIBUTION MAP OF EXTREME DAILY PRECIPITATION
(RETURN PERIOD : 5 YEARS) NOVEMBER

図 4.2.2 １１月の最大日降水量の５年再現期待値分布

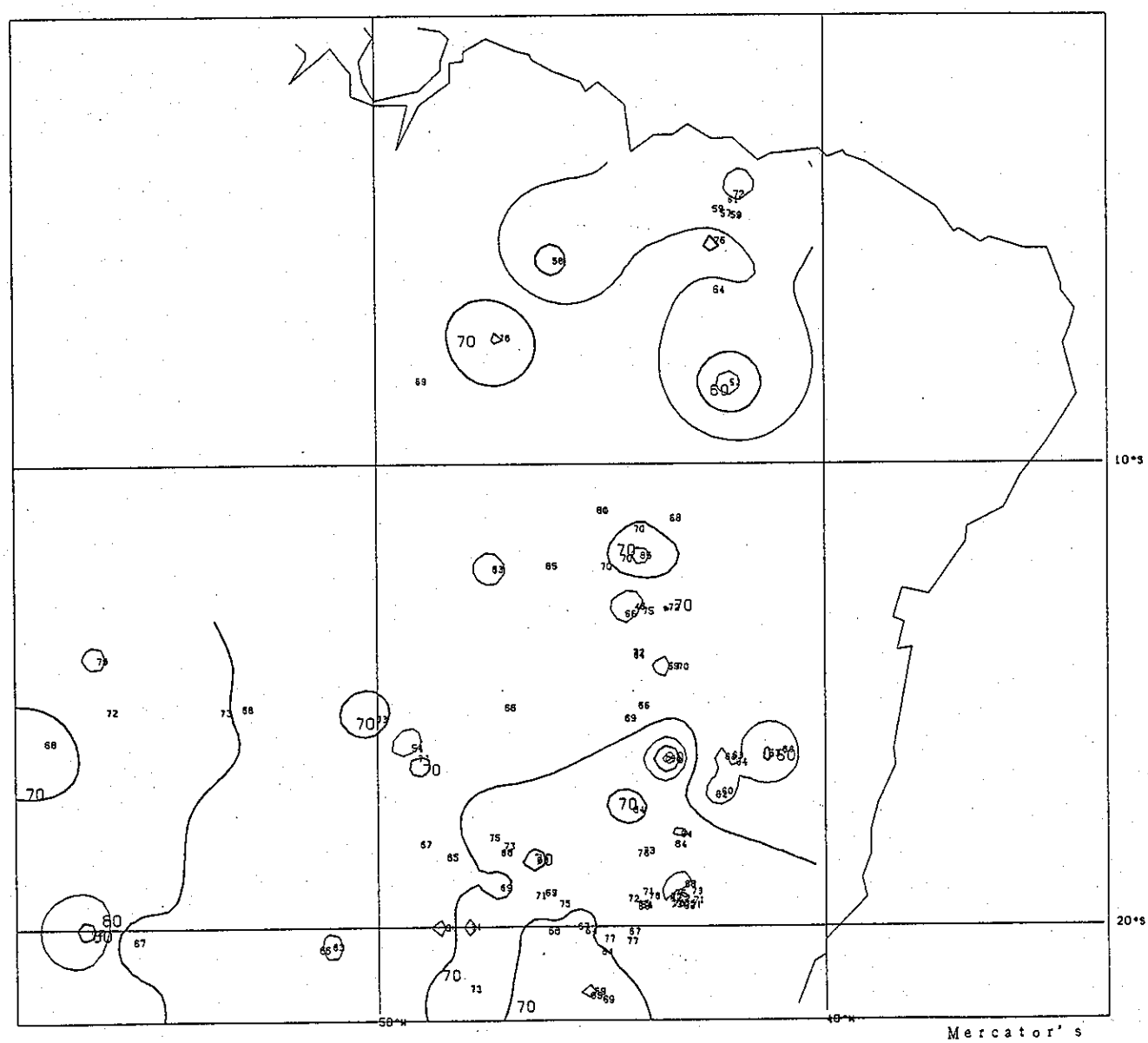


FIG.4.2.3 DISTRIBUTION MAP OF EXTREME DAILY PRECIPITATION
(RETURN PERIOD : 5 YEARS) DECEMBER

図 4.2.3 １２月の最大日降水量の５年再現期待値分布

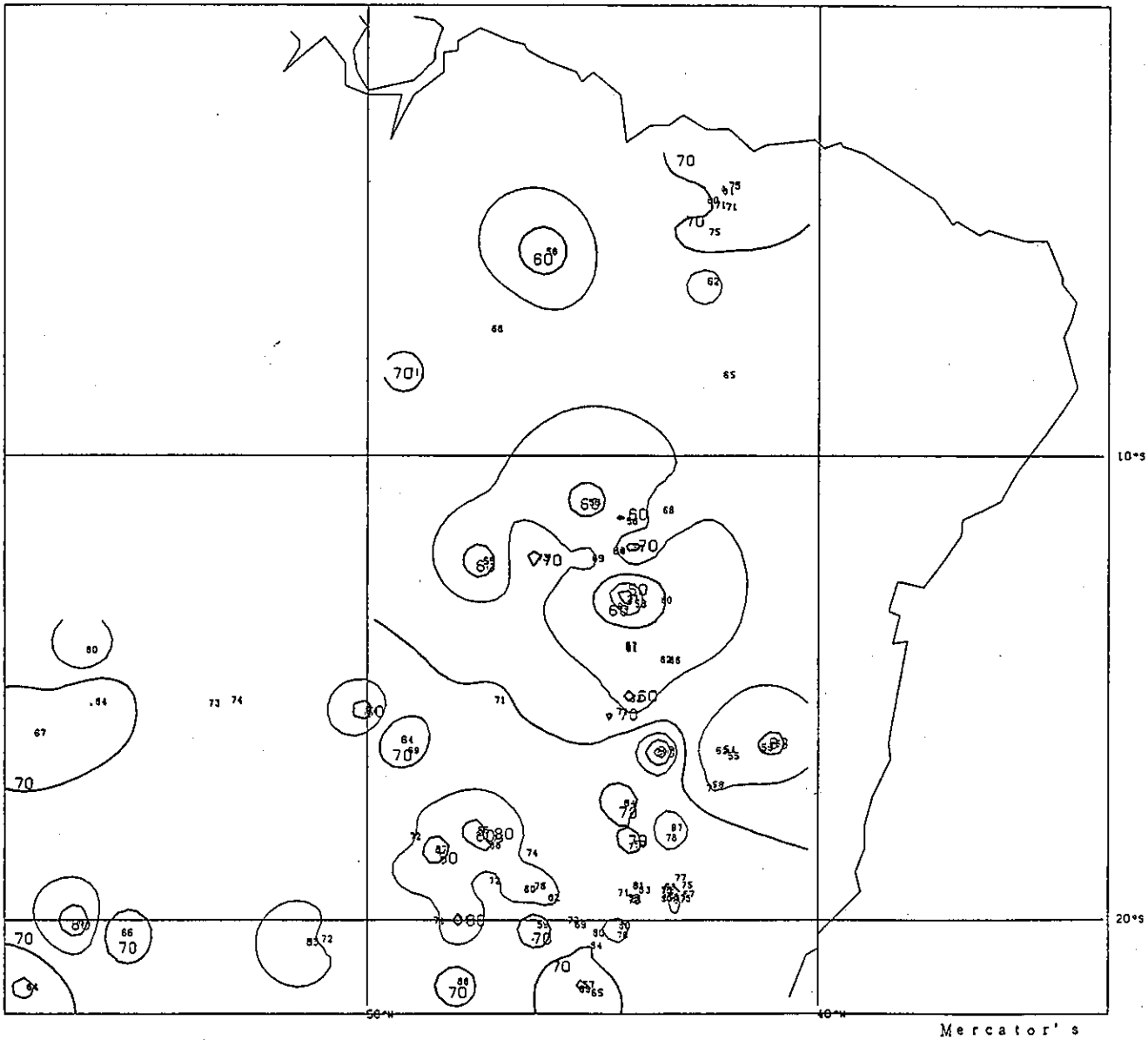


FIG.4.2.4 DISTRIBUTION MAP OF EXTREME DAILY PRECIPITATION
(RETURN PERIOD : 5 YEARS) JANUARY

図 4.2.4 1月の最大日降水量の5年再現期待値分布

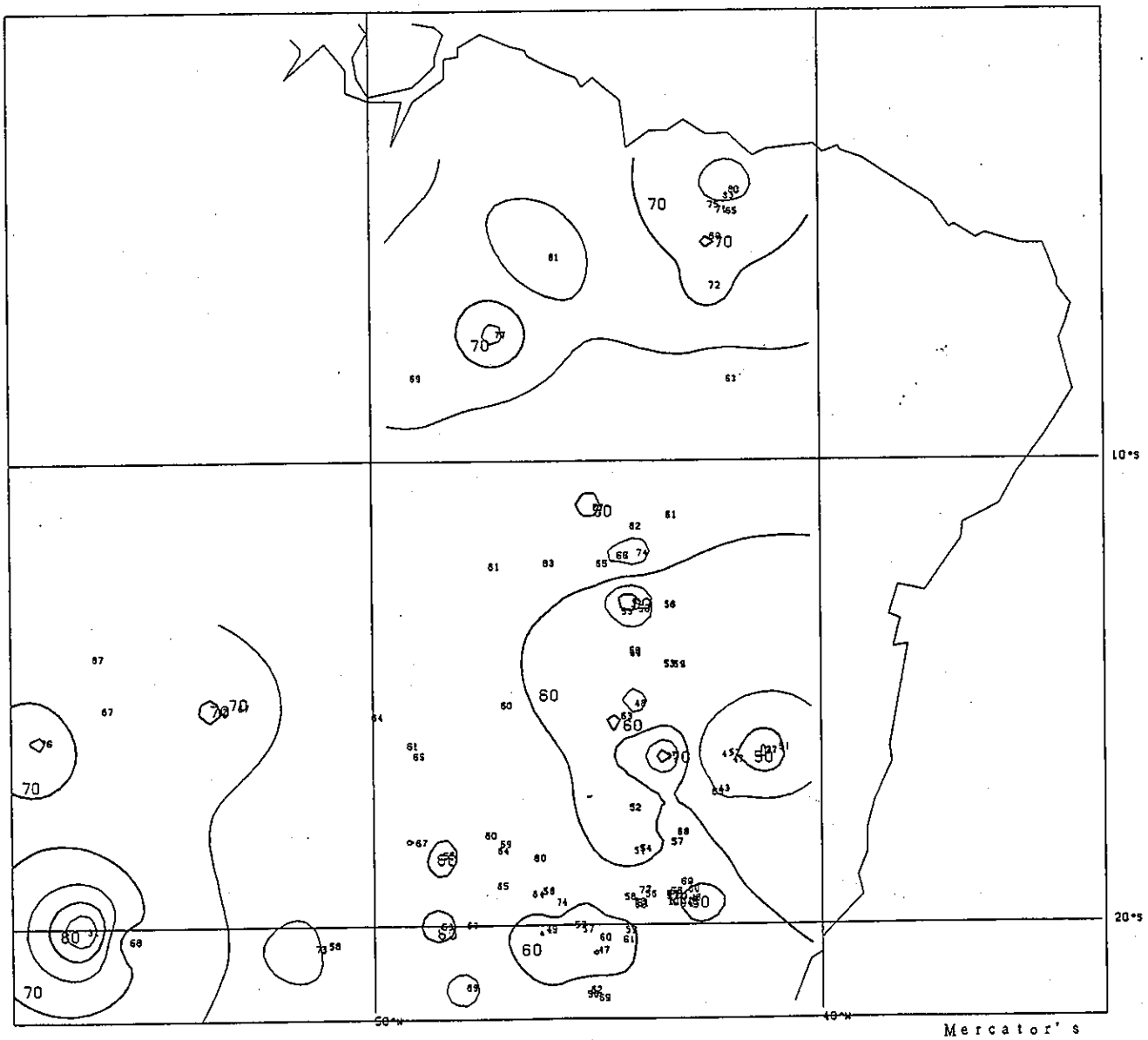


FIG.4.2.5 DISTRIBUTION MAP OF EXTREME DAILY PRECIPITATION
(RETURN PERIOD : 5 YEARS) FEBRUARY

図 4.2.5 2月の最大日降水量の5年再現期待値分布

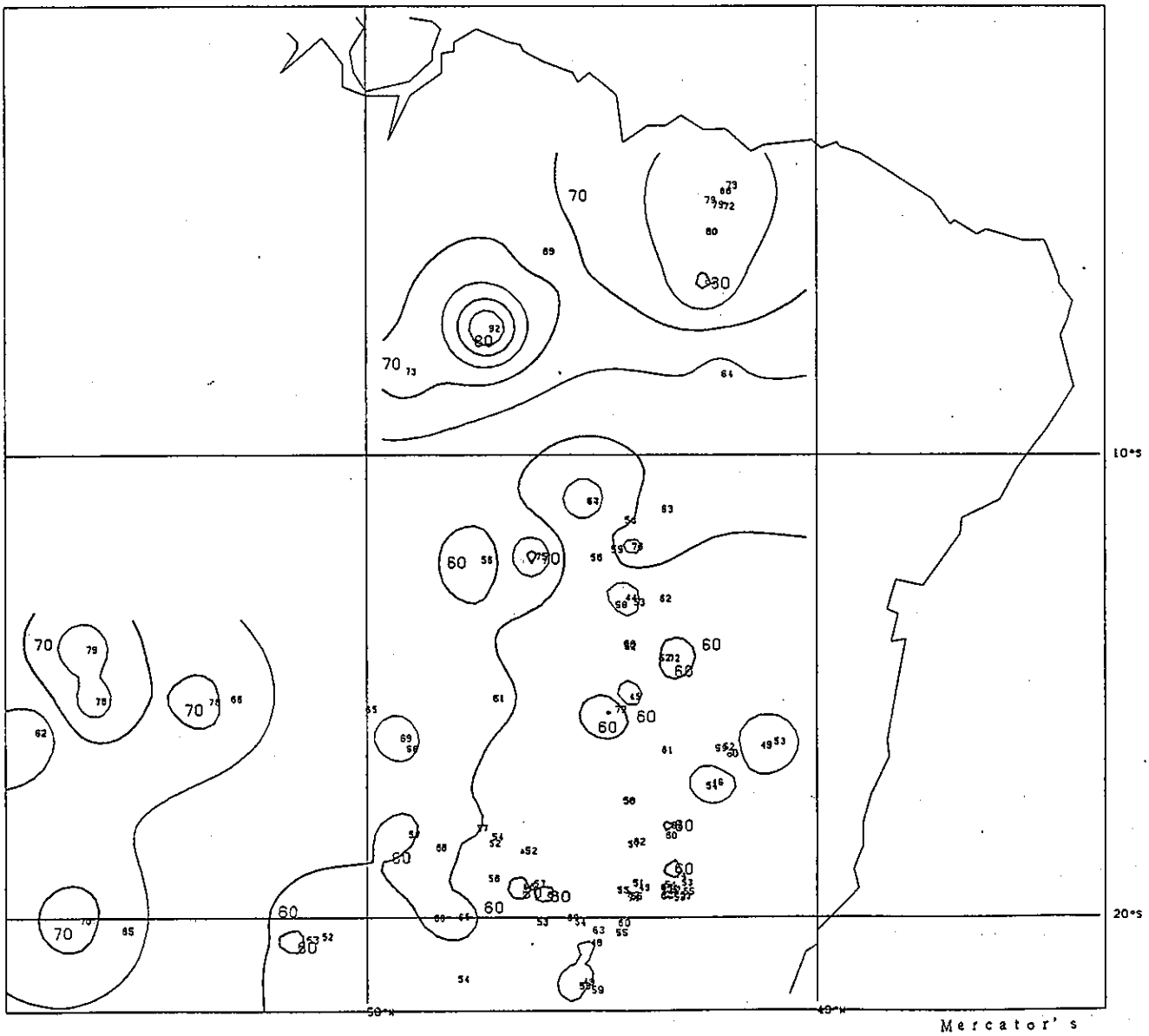


FIG.4.2.6 DISTRIBUTION MAP OF EXTREME DAILY PRECIPITATION
(RETURN PERIOD : 5 YEARS) MARCH

図 4.2.6 3月の最大日降水量の5年再現期待値分布

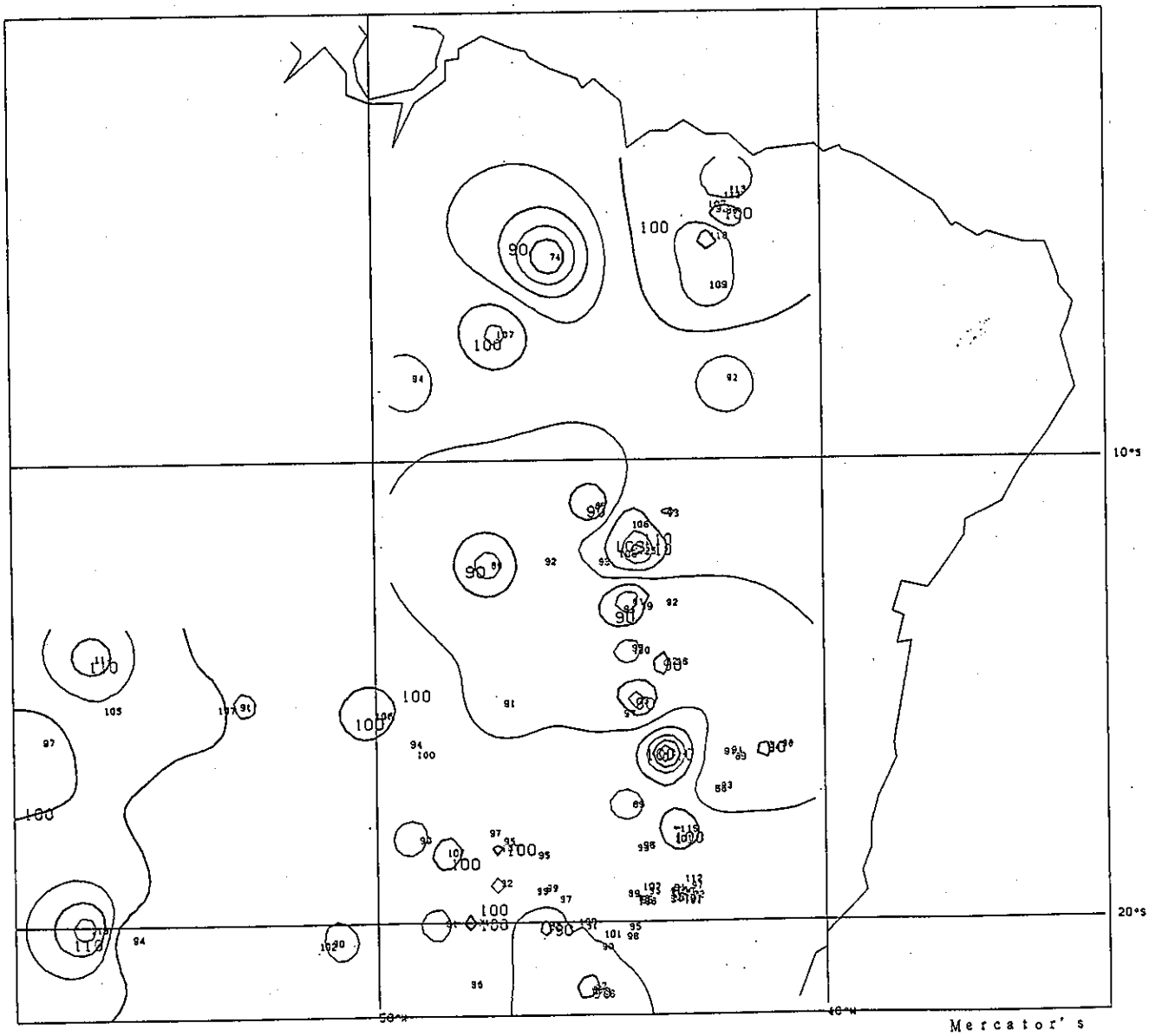


FIG.4.2.7 DISTRIBUTION MAP OF EXTREME DAILY PRECIPITATION
(RETURN PERIOD : YEARS) ALL RAINY SEASON (OCTOBER-MARCH)

図 4.2.7 雨季の最大日降水量の5年再現期待値分布

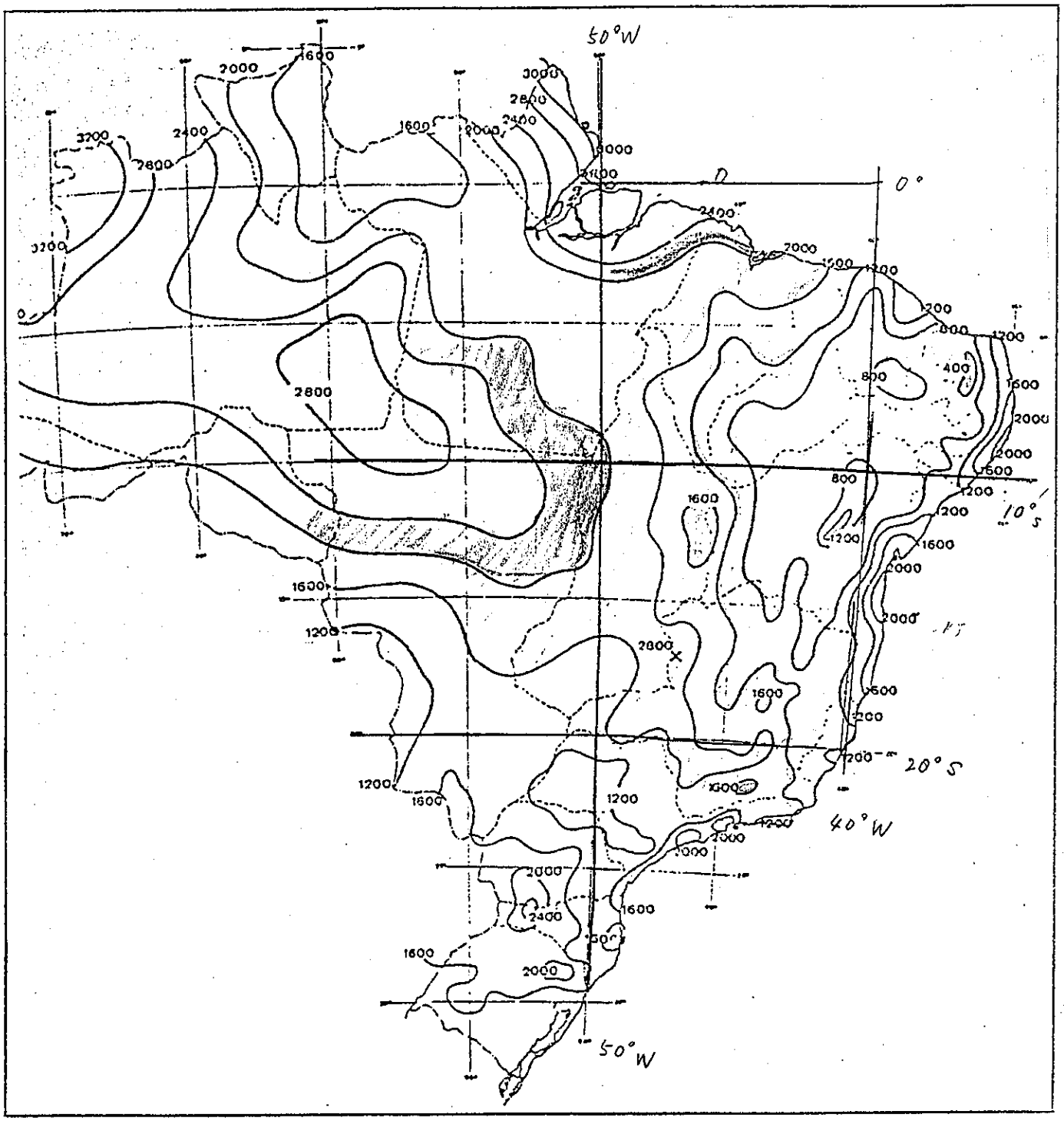


図 4.2.8　年降水量の３０年平均分布

(1931-1960,"CHUVAS NO BRASIL")

第５章　無降水継続日数の再現期待値

５-１．無降水継続日数の再現期待値

セラード地域の103地点の無降水継続日数データを対象に統計確率計算を行ない、年別・月別・旬別（雨季のみ）の無降水継続日数の極大値の再現期待値を求めた。統計確率計算の手法は第２章で述べたPetruaskas-Aagaardの方法を用い、統計対象期間は第３-４項で述べている期間（30年を基準にした）のデータを用いて計算した。

計算結果のうち年別・月別の最大無降水継続日数順位表、再現期間別・月別再現期待値一覧表および月別再現期待値算定図を資料（６）、（７）、（８）に掲載する。これらの図表のうちAbadia Dos Douradosの例を図5.1.2 ～ 5.1.5 および表 5.1.1 ～ 5.1.4 に示す。月別再現期待値算定図について見ると横軸の下側が再現期間、上側が再現期間に対応する変換確率値 （γ:GAMMA）、縦軸が無降水継続日数の極値となっている。図上の点が無降水継続日数データと順位確率を持ったデータをプロットしたもので、３本の線のうち真ん中の直線が回帰直線、両側の曲線が95%の信頼区間の上側と下側を表している。図の左上、観測地点名の下にあるのが採用した確率分布型（最も相関係数の高い分布型）、右上の四角の中は、上側から回帰直線の式、相関係数Ｒ、対象期間Ｋ年、データ数ＮＤＴ（5日未満のデータを除いた後のデータ数）である。また、GAMMA　の右上は統計対象の期間でANLは雨季期間全体、OCT～MARは月、月の後の数字は旬を表している。（例：　JAN;１月１日～３１日、JAN3;１月２１日～３１日）

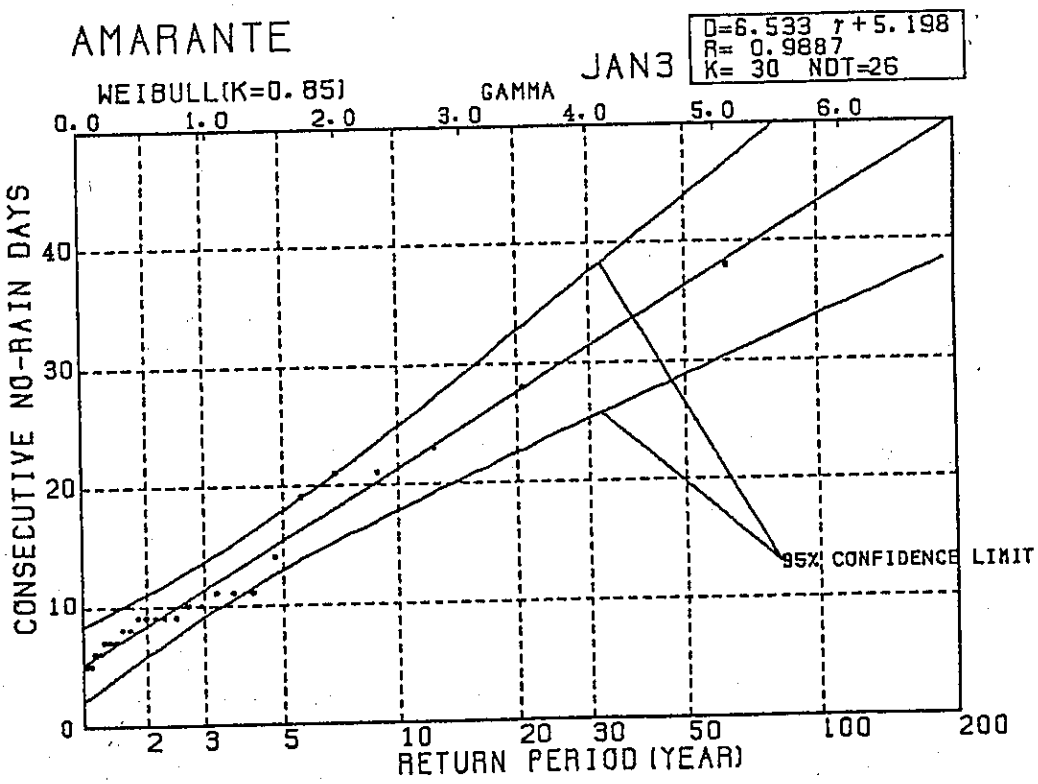


図 5.1.1　無降水継続日数の再現期待値算定図の例

表 5.1.1　最大無降水継続日数順位表（月別、雨季）

TABLE 5.1.1 MAXIMUM CONTINUOUS DAY WITHOUT RAIN
ABADIA DOS DOURADOS

NO.	OCT	NOV	DEC	JAN	FEB	MAR	ANL
1	25.0	20.0	20.0	16.0	23.0	17.0	25.0
2	21.0	18.0	18.0	15.0	21.0	15.0	23.0
3	20.0	16.0	13.0	14.0	21.0	15.0	21.0
4	19.0	16.0	12.0	14.0	18.0	13.0	21.0
5	18.0	12.0	11.0	11.0	16.0	12.0	21.0
6	14.0	12.0	10.0	11.0	15.0	12.0	20.0
7	13.0	11.0	10.0	10.0	12.0	12.0	20.0
8	12.0	10.0	8.0	10.0	11.0	12.0	19.0
9	12.0	10.0	8.0	10.0	11.0	10.0	18.0
10	12.0	9.0	7.0	9.0	10.0	9.0	18.0
11	12.0	9.0	7.0	9.0	10.0	9.0	18.0
12	11.0	9.0	7.0	8.0	9.0	9.0	16.0
13	10.0	9.0	7.0	7.0	9.0	9.0	14.0
14	10.0	8.0	6.0	7.0	9.0	9.0	14.0
15	8.0	8.0	6.0	6.0	8.0	8.0	13.0
16	8.0	7.0	5.0	6.0	8.0	8.0	12.0
17	8.0	7.0	5.0	6.0	8.0	8.0	12.0
18	8.0	6.0	5.0	6.0	7.0	7.0	12.0
19	8.0	6.0	5.0	4.0	7.0	7.0	12.0
20	7.0	6.0	5.0	4.0	7.0	7.0	12.0
21	7.0	5.0	5.0	4.0	5.0	6.0	11.0
22	7.0	5.0	4.0	4.0	5.0	6.0	11.0
23	7.0	5.0	4.0	4.0	5.0	6.0	11.0
24	7.0	5.0	4.0	4.0	5.0	5.0	10.0
25	7.0	4.0	4.0	4.0	5.0	5.0	10.0
26	7.0	4.0	4.0	4.0	4.0	5.0	9.0
27	6.0	4.0	4.0	3.0	4.0	5.0	9.0
28	6.0	4.0	3.0	2.0	3.0	4.0	9.0
29	6.0	3.0	3.0	2.0	3.0	3.0	8.0
30	5.0	3.0	2.0	2.0	3.0	3.0	7.0

表 5.1.2　無降水継続日数の再現期待値一覧表（月別、雨季）

TABLE 5.1.2 RETURN PERIOD OF EXTREME CONTINUOUS NO RAIN DAY

STATION. ABADIA DOS DOURADOS

MONTH	OCT		NOV		DEC		JAN		FEB		MAR		ANL	
YEARS	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD
5	14.2	2.1	11.7	1.4	9.7	1.3	10.9	1.3	13.5	2.3	11.4	1.2	18.7	2.5
10	17.8	2.9	14.6	2.0	12.8	1.8	13.0	1.8	17.2	3.3	13.5	1.7	21.4	3.3
15	19.8	3.5	16.2	2.4	14.6	2.2	14.0	2.1	19.2	3.9	14.7	2.0	22.8	3.7
20	21.3	4.0	17.3	2.7	15.9	2.5	14.7	2.4	20.6	4.4	15.4	2.2	23.7	4.0
25	22.4	4.3	18.2	2.9	16.8	2.8	15.2	2.5	21.7	4.7	16.0	2.4	24.4	4.3
30	23.3	4.6	18.9	3.1	17.7	3.0	15.6	2.7	22.5	5.0	16.5	2.5	25.0	4.5
50	25.8	5.4	20.7	3.7	19.9	3.7	16.6	3.0	24.9	5.9	17.7	2.8	26.4	5.0
100	29.1	6.5	23.2	4.4	23.0	4.5	17.9	3.5	28.0	7.0	19.3	3.3	28.3	5.7
COR.	0.985		0.988		0.988		0.979		0.981		0.988		0.981	
FUNC.	WI(1.10)		WI(1.25)		WI(1.00)		WI(2.00)		WI(1.25)		WI(1.50)		WI(2.00)	
DATA NUMBER	30		24		21		18		25		27		30	

±ΔP: 95%CONFIDENCE LIMIT

表 5.1.3　最大無降水継続日数順位表（旬別）

TABLE.5./.3MAXIMUM CONTINUOUS DAY WITHOUT RAIN
ABADIA DOS DOURADOS

NO.	OCT1	OCT2	OCT3	NOV1	NOV2	NOV3	DEC1	DEC2	DEC3	JAN1	JAN2	JAN3	FEB1	FEB2	FEB3	MAR1	MAR2	MAR3
1	21.0	19.0	25.0	20.0	16.0	16.0	13.0	11.0	20.0	15.0	14.0	16.0	11.0	21.0	21.0	17.0	18.0	9.0
2	20.0	13.0	18.0	18.0	13.0	12.0	12.0	10.0	18.0	13.0	14.0	13.0	8.0	17.0	18.0	15.0	15.0	9.0
3	14.0	12.0	11.0	11.0	12.0	11.0	10.0	8.0	10.0	10.0	11.0	9.0	8.0	12.0	17.0	15.0	12.0	8.0
4	14.0	11.0	11.0	10.0	12.0	9.0	7.0	8.0	9.0	10.0	9.0	9.0	7.0	10.0	16.0	13.0	11.0	8.0
5	12.0	10.0	9.0	9.0	10.0	8.0	6.0	7.0	8.0	10.0	9.0	7.0	7.0	9.0	16.0	12.0	9.0	8.0
6	12.0	10.0	8.0	9.0	10.0	8.0	5.0	6.0	7.0	8.0	8.0	7.0	7.0	9.0	9.0	11.0	9.0	8.0
7	12.0	10.0	8.0	7.0	9.0	8.0	5.0	6.0	7.0	8.0	7.0	6.0	6.0	9.0	7.0	9.0	8.0	8.0
8	10.0	8.0	8.0	6.0	9.0	7.0	5.0	5.0	6.0	8.0	7.0	6.0	6.0	8.0	7.0	8.0	8.0	8.0
9	10.0	8.0	8.0	6.0	8.0	6.0	5.0	5.0	6.0	7.0	7.0	6.0	5.0	7.0	7.0	8.0	7.0	7.0
10	9.0	8.0	7.0	5.0	7.0	6.0	4.0	5.0	6.0	6.0	6.0	6.0	5.0	7.0	5.0	7.0	6.0	7.0
11	8.0	7.0	7.0	5.0	7.0	6.0	4.0	4.0	5.0	6.0	6.0	5.0	5.0	6.0	5.0	6.0	6.0	7.0
12	8.0	7.0	7.0	5.0	6.0	5.0	4.0	4.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	6.0	6.0
13	8.0	7.0	6.0	5.0	6.0	5.0	4.0	4.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0	5.0	6.0	6.0
14	7.0	7.0	6.0	4.0	5.0	5.0	4.0	4.0	4.0	5.0	5.0	4.0	3.0	4.0	4.0	5.0	5.0	6.0
15	7.0	6.0	6.0	4.0	5.0	5.0	4.0	4.0	4.0	5.0	4.0	4.0	3.0	4.0	4.0	5.0	5.0	6.0
16	7.0	6.0	6.0	4.0	5.0	5.0	3.0	4.0	3.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0	5.0	6.0
17	7.0	5.0	6.0	4.0	4.0	4.0	3.0	3.0	3.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0	5.0	5.0
18	7.0	5.0	6.0	4.0	4.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	3.0	4.0	3.0	4.0	5.0	5.0
19	7.0	4.0	6.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	5.0
20	6.0	4.0	6.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	5.0	4.0
21	6.0	4.0	5.0	3.0	3.0	3.0	3.0	2.0	2.0	3.0	3.0	3.0	2.0	3.0	3.0	3.0	4.0	4.0
22	5.0	4.0	5.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0	3.0	3.0	3.0	4.0	4.0
23	5.0	3.0	5.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	3.0	3.0	2.0	2.0	3.0
24	3.0	3.0	4.0	2.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	3.0
25	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	3.0
26	3.0	2.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	2.0	3.0
27	3.0	2.0	3.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	2.0	3.0
28	3.0	2.0	2.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0
29	2.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	2.0
30	2.0	1.0	2.0	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0

表 5.1.4　無降水継続日数の再現期待値一覧表（旬別）

TABLE.5.1.4 RETURN PERIOD OF EXTREME CONTINUOUS NO RAIN DAY

STATION. ABADIA DOS DOURADOS

MONTH	OCT1		OCT2		OCT3		NOV1		NOV2		NOV3	
YEARS	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD
5	11.4	1.7	9.2	1.1	9.1	2.0	7.7	2.1	9.2	0.8	7.5	0.7
10	14.5	2.3	11.7	1.4	12.4	2.6	11.3	2.3	11.6	1.1	9.8	0.9
15	16.2	2.8	13.1	1.8	14.5	3.3	13.4	2.9	12.8	1.3	11.2	1.1
20	17.4	3.2	14.2	2.1	16.1	3.9	15.0	3.4	13.6	1.5	12.1	1.3
25	18.4	3.5	15.0	2.3	17.4	4.4	16.1	3.8	14.2	1.6	12.9	1.5
30	19.1	3.8	15.7	2.5	18.5	4.8	17.1	4.2	14.7	1.7	13.5	1.6
50	21.2	4.5	17.5	3.0	21.5	6.1	19.7	5.2	16.0	2.0	15.2	2.0
100	24.1	5.5	20.0	3.8	26.0	8.0	23.4	6.7	17.6	2.4	17.5	2.5
COR.	0.983		0.986		0.976		0.975		0.991		0.993	
FUNC.	WI(1.10)		WI(1.00)		WI(0.75)		WI(1.00)		WI(1.50)		WI(1.00)	
DATA NUMBER	23		18		23		13		16		16	

±ΔP:95%CONFIDENCE LIMIT

MONTH	DEC1		DEC2		DEC3		JAN1		JAN2		JAN3	
YEARS	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD
5	5.5	2.2	6.1	0.8	7.2	2.5	8.1	1.0	7.8	1.3	6.6	1.3
10	8.0	1.8	7.9	0.8	10.5	2.6	10.3	1.2	10.1	1.6	8.9	1.2
15	9.4	2.1	8.8	1.0	12.6	3.2	11.6	1.5	11.3	1.9	10.4	1.4
20	10.4	2.4	9.4	1.1	14.2	3.8	12.4	1.8	12.2	2.2	11.5	1.6
25	11.1	2.8	9.8	1.3	15.4	4.3	13.1	1.9	12.8	2.5	12.4	1.9
30	11.7	3.1	10.2	1.4	16.4	4.7	13.6	2.1	13.3	2.7	13.2	2.1
50	13.4	3.9	11.1	1.7	19.3	6.1	15.0	2.5	14.7	3.2	15.2	2.7
100	15.6	5.2	12.2	2.1	23.4	8.1	16.8	3.1	16.5	4.0	18.2	3.7
COR.	0.956		0.982		0.966		0.986		0.975		0.984	
FUNC.	WI(1.10)		WI(1.50)		WI(0.85)		WI(1.25)		WI(1.25)		WI(0.85)	
DATA NUMBER	9		10		13		15		14		11	

±ΔP:95%CONFIDENCE LIMIT

MONTH	FEB1		FEB2		FEB3		MAR1		MAR2		MAR3	
YEARS	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD	DAYS	±ΔD
5	6.1	0.8	8.2	1.5	10.2	3.6	9.7	1.7	8.3	0.9	7.5	0.8
10	7.4	0.8	11.5	1.6	14.9	4.1	12.7	2.2	10.9	1.2	8.3	1.1
15	8.1	1.0	13.5	1.9	17.0	5.0	14.2	2.7	12.6	1.5	8.7	1.3
20	8.7	1.2	15.0	2.3	18.4	5.6	15.3	3.0	13.8	1.8	8.9	1.5
25	9.1	1.3	16.2	2.6	19.4	6.1	16.0	3.3	14.7	2.0	9.1	1.6
30	9.5	1.4	17.2	2.9	20.2	6.6	16.7	3.5	15.5	2.1	9.3	1.7
50	10.4	1.8	20.1	3.8	22.2	7.7	18.3	4.2	17.8	2.7	9.7	1.9
100	11.7	2.3	24.1	5.1	24.7	9.2	20.4	5.0	20.9	3.4	10.2	2.2
COR.	0.976		0.985		0.949		0.977		0.992		0.952	
FUNC.	WI(1.00)		WI(0.85)		WI(2.00)		WI(1.50)		WI(0.85)		WI(2.00)	
DATA NUMBER	12		12		11		15		20		19	

±ΔP:95%CONFIDENCE LIMIT

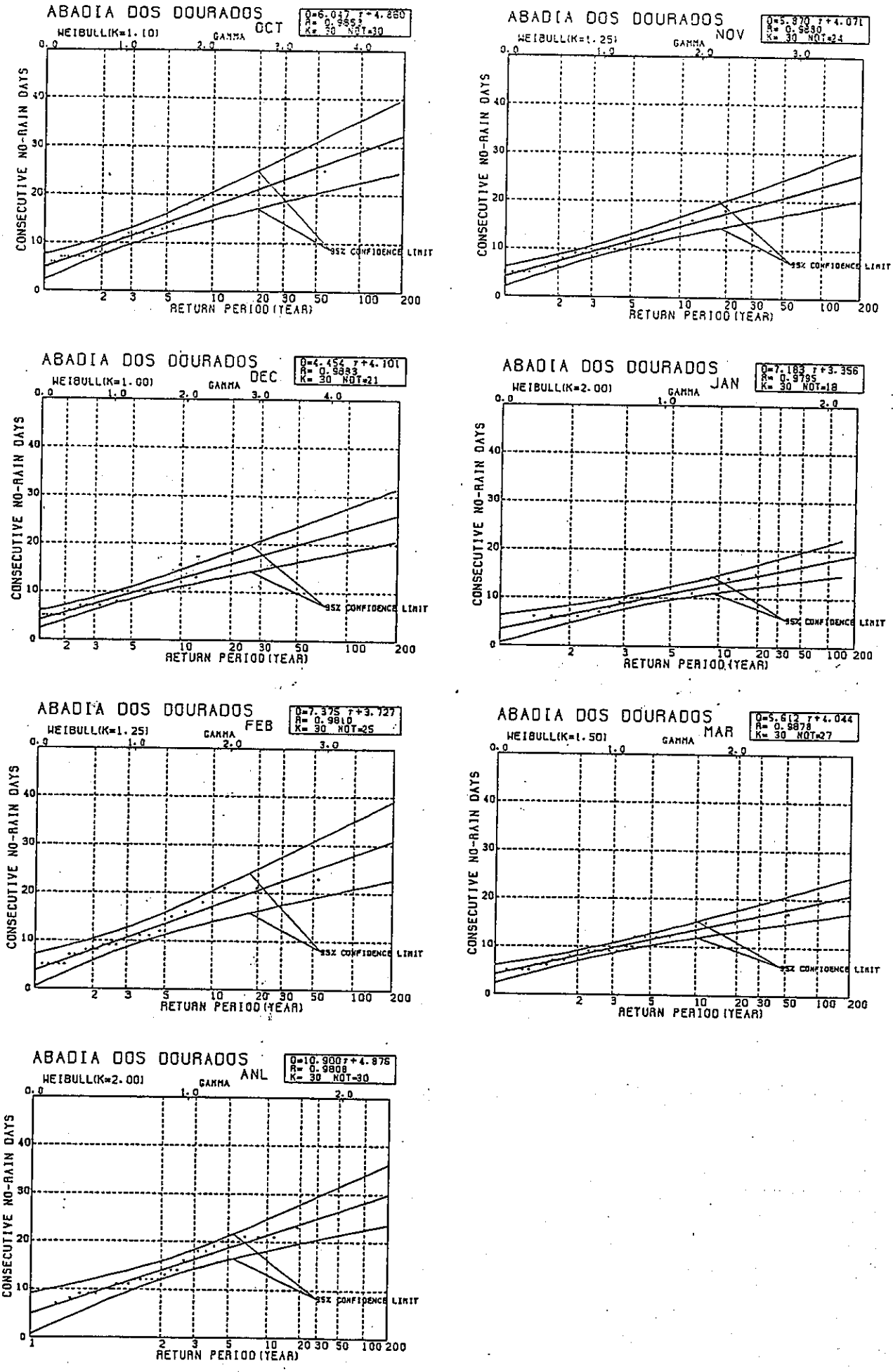
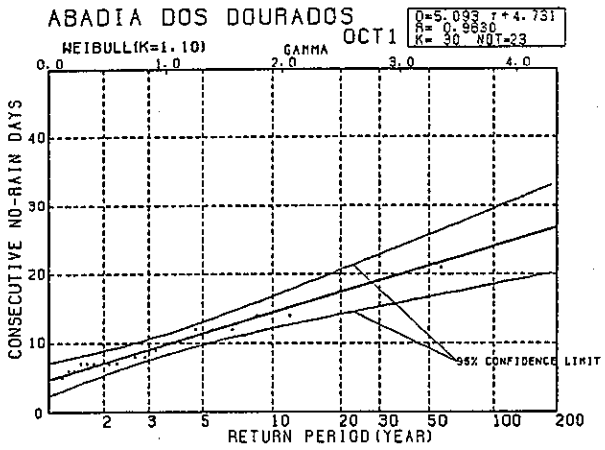
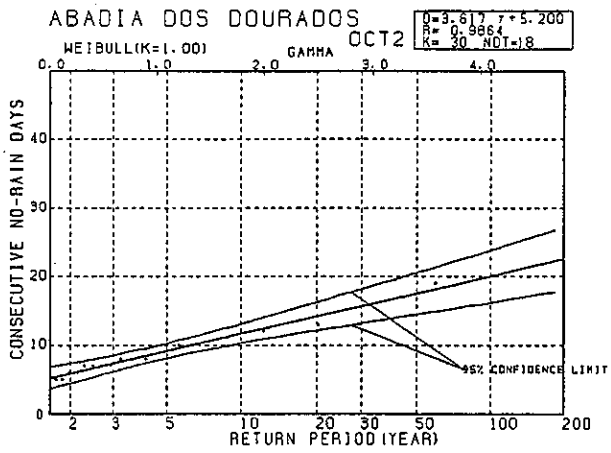
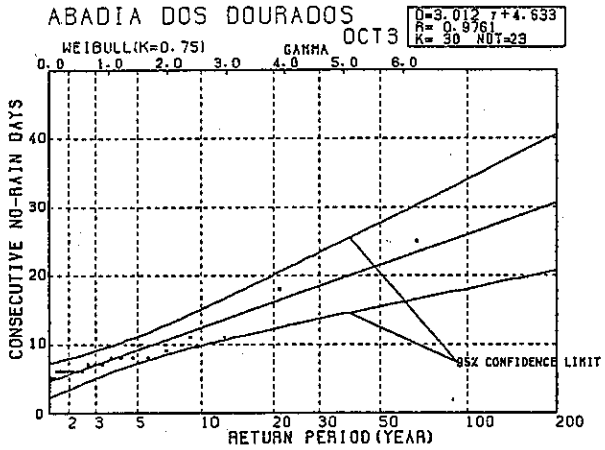


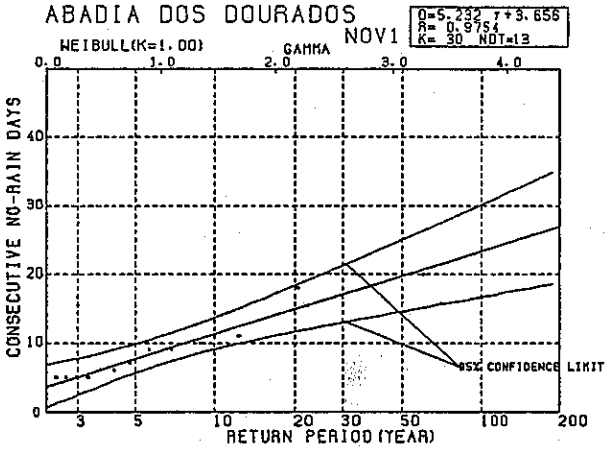
FIG.5.1.2 RETURN PERIOD OF EXTREME CONTINUOUS DAY WITHOUT PRECIPTATION

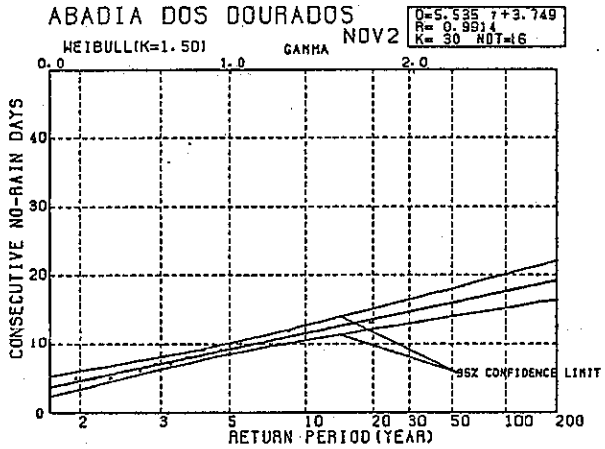
図 5.1.2 無降水継続日数の再現期待値算定図（月別、雨季）











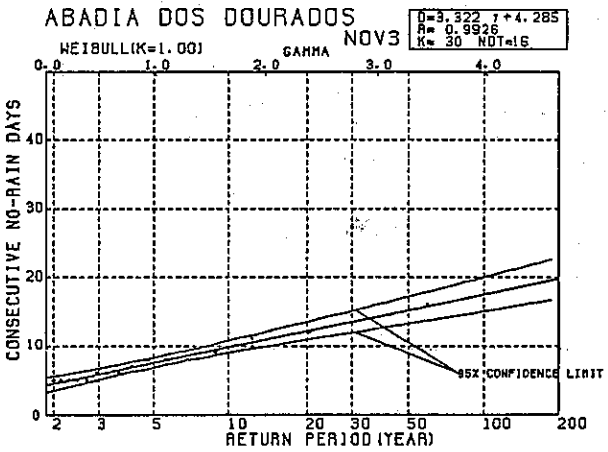


図 5.1.3　無降水継続日数の再現期待値算定図（旬別・10月、11月）

FIG.5.1.3 RETURN PERIOD OF EXTREME CONTINUOUS DAY WITHOUT PRECIPTATION

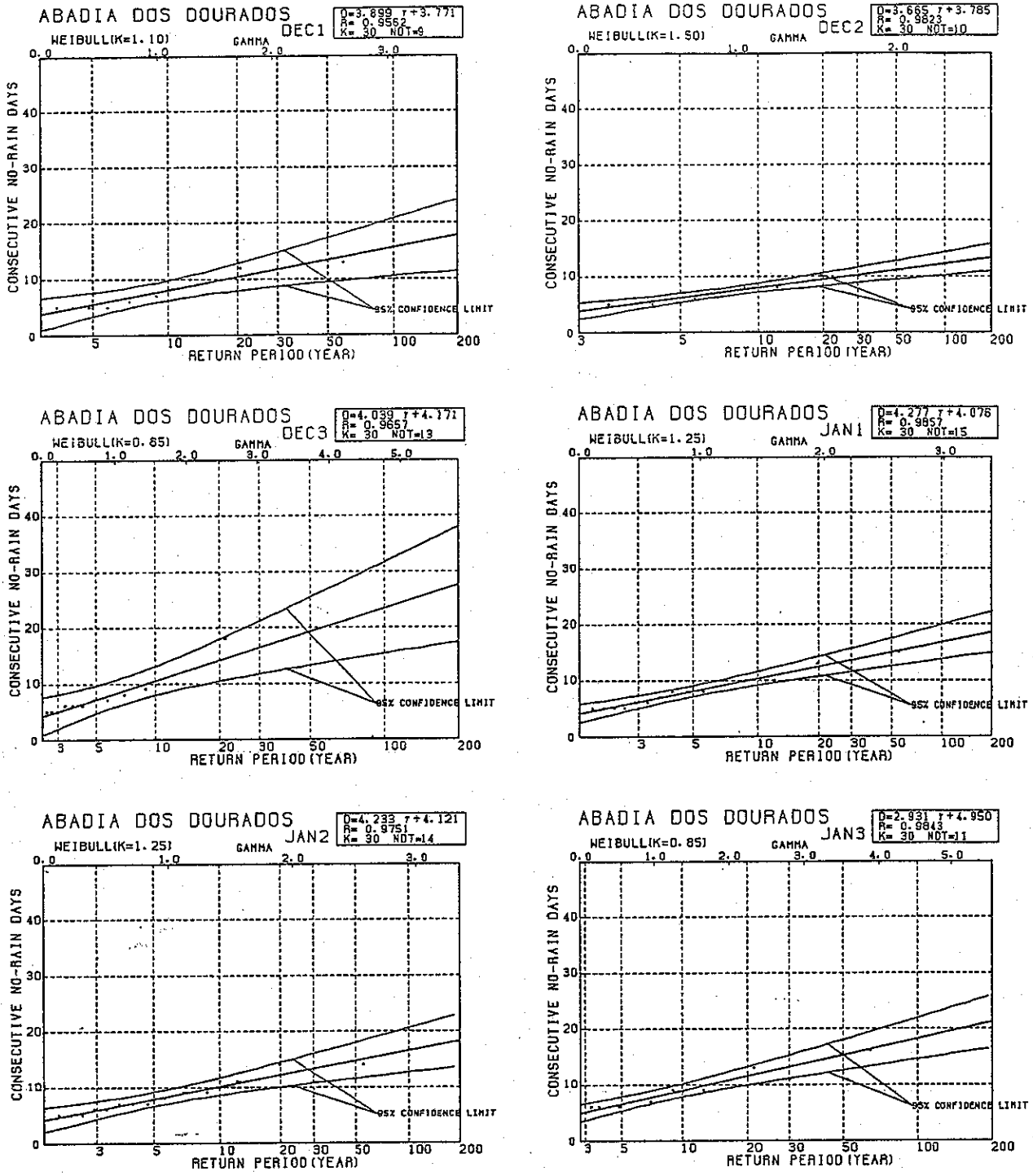


図 5.1.4　無降水継続日数の再現期待値算定図（旬別・12月、1月）

FIG.5.1.4 RETURN PERIOD OF EXTREME CONTINUOUS DAY WITHOUT PRECIPTATION

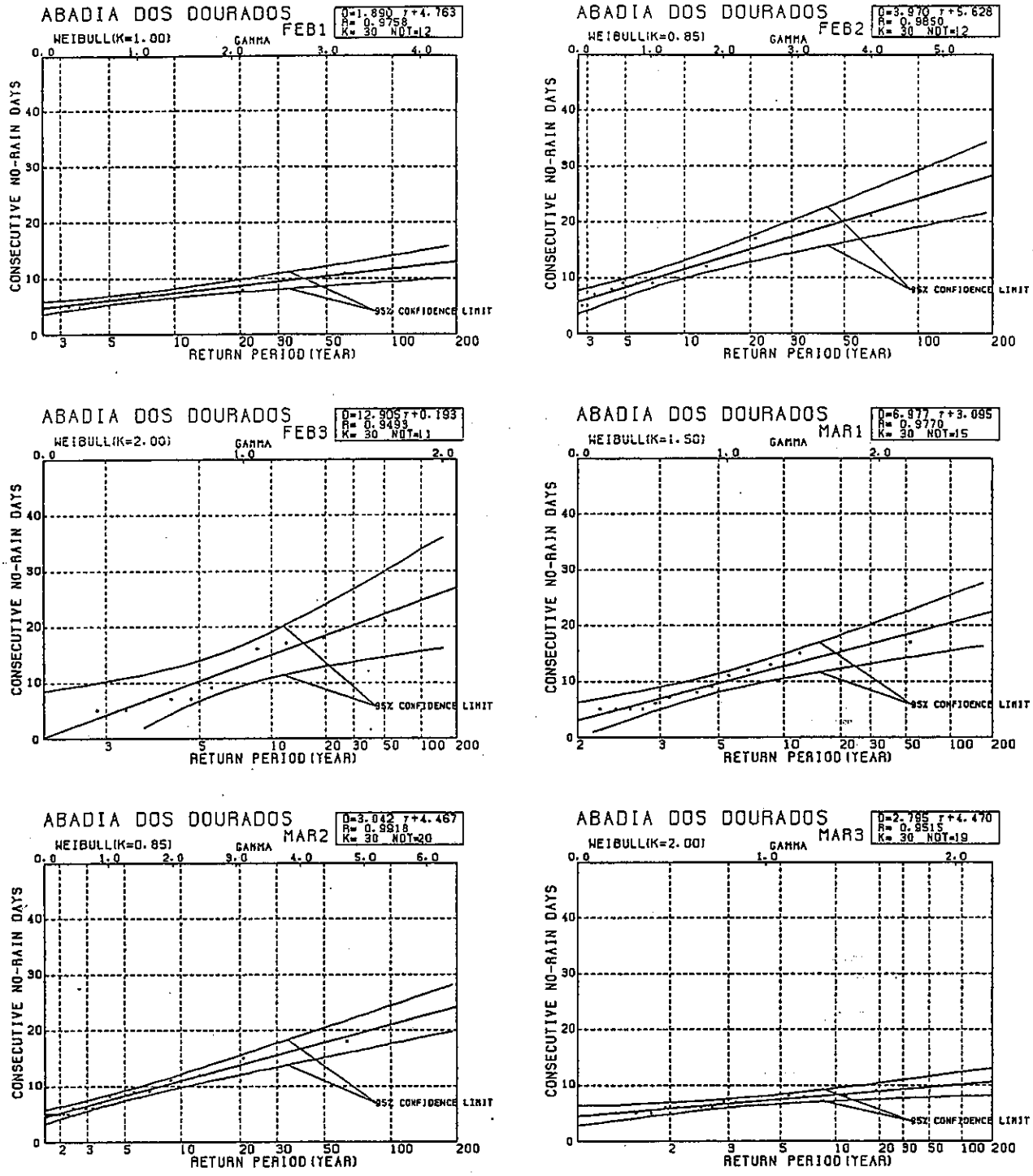


図 5.1.5　無降水継続日数の再現期待値算定図（旬別・2月、3月）

FIG.5.1.5　RETURN PERIOD OF EXTREME CONTINUOUS DAY WITHOUT PRECIPTATION

5-2. セラード地域における無降水継続日数の再現期待値の分布

計算によって得られた103地点の無降水継続日数の再現期待値のデータを用いて、セラード地域における分布図を作成した。分布図の作成には第2-3節で述べた方法を用いている。

得られた月別・旬別・雨季期間の再現期待値の分布図を巻末の資料（11）および（12）に示す。これらの図の中から月別および雨季の５年再現期待値を図 5-2-1～7 に示す。

これらを見るとセラード地域の雨季、特に１月における無降水継続日数の地域的分布は西部の地域で短く、東部で長い傾向が見られる。再現期間５年に対応する無降水の継続日数は西部では８～１２日程度であるのに対して東部では２０～２５日となっている。

図 5-2-8 は１月の無降水継続日数の３０年再現期待値の分布図である。これを図5-2-9の1931年から1960年の30年間における１月の平均降水量の分布図と比較してみると、東西に傾きを持つ等値線の基本的パターンは似ており、降水量の少ない地域と無降水継続日数の長い地域が対応する分布となっている。無降水継続日数２１～２４日の等値線と月降水量 200mmの等値線が比較的対応している。

問題点としては、日最大降水量の統計と同じく、データの期間の不統一、欠測があること、また、観測地点の分布が南部に集中しており、中央部と北西部の観測点は比較的少ないため、この地域の精度が落ちていることが予想される。特に、南緯１０°～１５°、西経４５°～５５°の範囲の観測地点が少なく、精度について危惧される。しかし、年降水量の分布図との比較においては両者は比較的良好な対応関係を見せており、全体的には実用上問題ないと判断した。

旬別の確率ベラニコ日数分布図を見ると、分布パターンは月別のものとほぼ対応した形になっているが、値自体は月別の確率計算結果の方が大きい。これは１０日間の期間を対象としたときに比較して、３０日間を対象とした時の方が当然出現確率が高くなることに起因する。また、今回の計算においては、計算結果の精度を高める為、統計計算に誤差をもたらす原因となる小さい値は、下限値を設けて除いている。しかし、旬別の計算を行なう場合、データ数が少ないので下限値に達せず、足きりによって、省かれるデータの数が多くなり、サンプル数が月の統計計算に比較して少なくなっている。Petruaska-Aagaard の方法は、データ数が少なくなった場合でも、統計期間の上位のデータをもれなくサンプルにしていれば、比較的良い結果をもたらすことが知られているが、やはり、多少の精度の低下は避けられない。このため、旬別の再現期待値は相対的な変化傾向を見るときにだけ用い、数値の絶対値が問題になる場合は月別の計算結果を用いた方が安全だと考える。

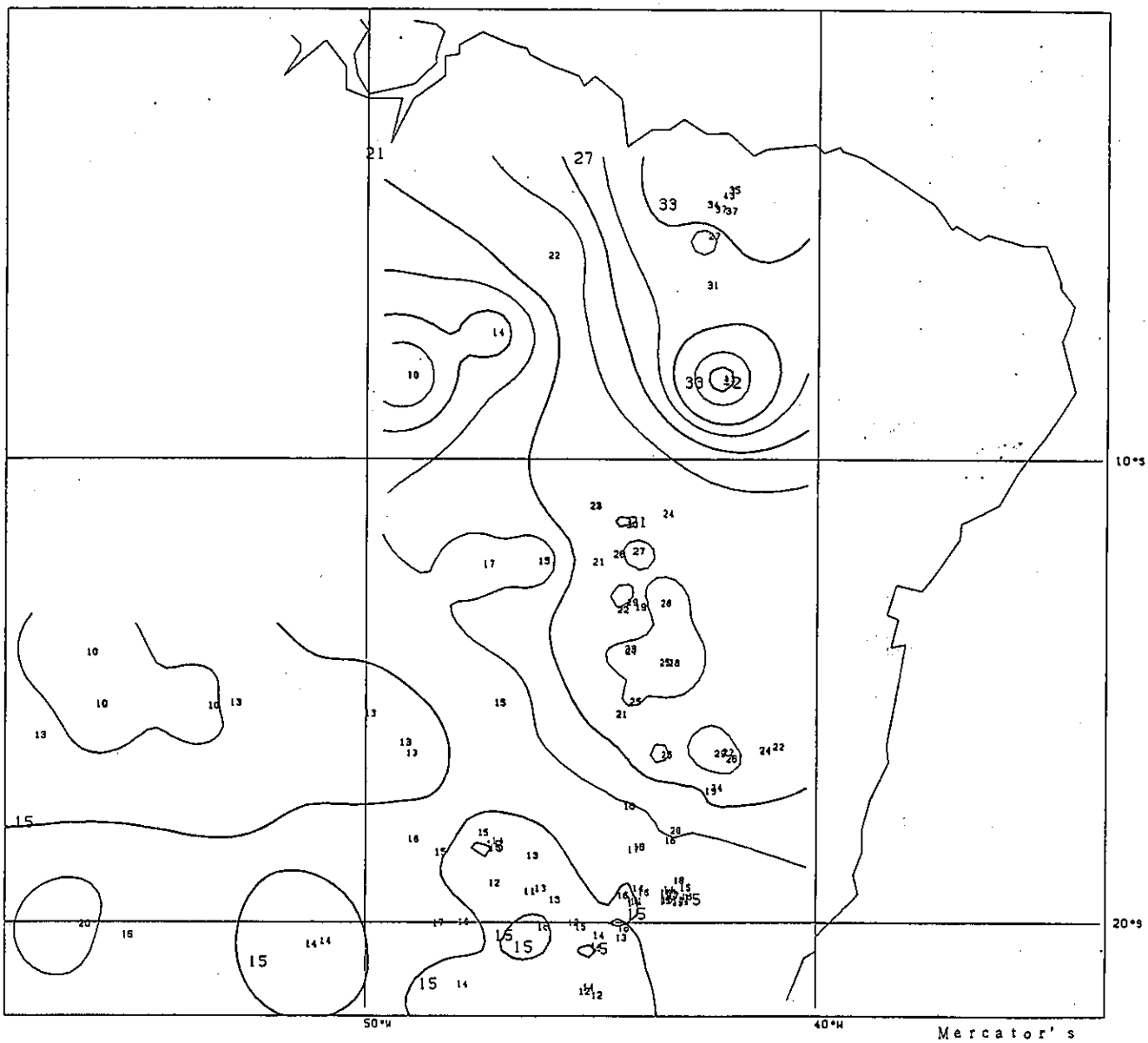


FIG. 5.2.1 DISTRIBUTION MAP OF EXTREME CONTINUOUS DAY WITHOUT PRECIPITATION
(RETURN PERIOD : 5 YEARS) in OCTOBER

図 5.2.1　１０月の無降水継続日数の５年再現期待値分布

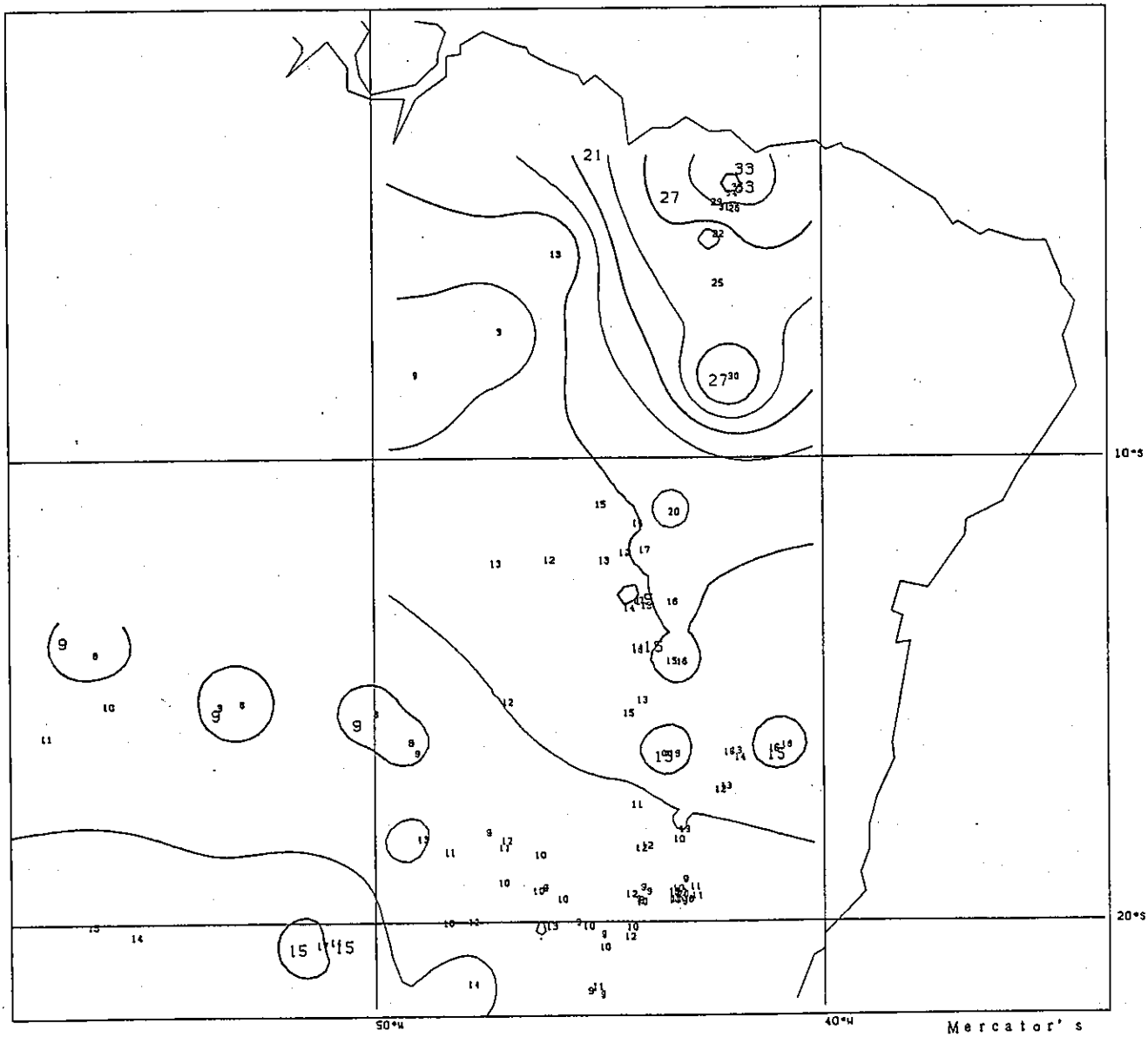


FIG.5.2.2 DISTRIBUTION MAP OF EXTREME CONTINUOUS DAY WITHOUT PRECIPITATION
(RETURN PERIOD : 5 YEARS) in NOVEMBER

図 5.2.2　１１月の無降水継続日数の５年再現期待値分布

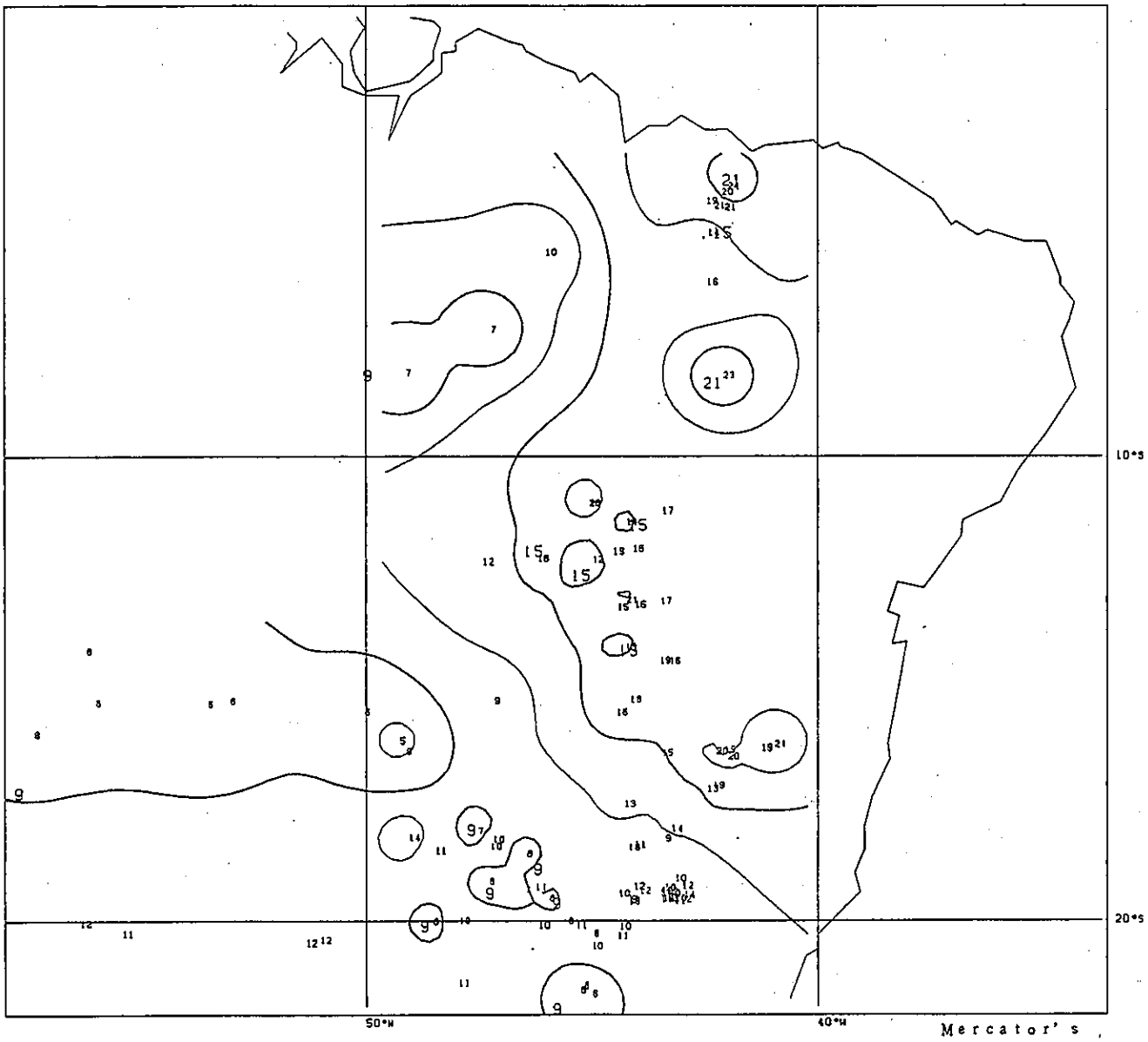


FIG.5.2.3 DISTRIBUTION MAP OF EXTREME CONTINUOUS DAY WITHOUT PRECIPITATION
(RETURN PERIOD : 5 YEARS) DECEMBER

図 5.2.3 １２月の無降水継続日数の５年再現期待値分布

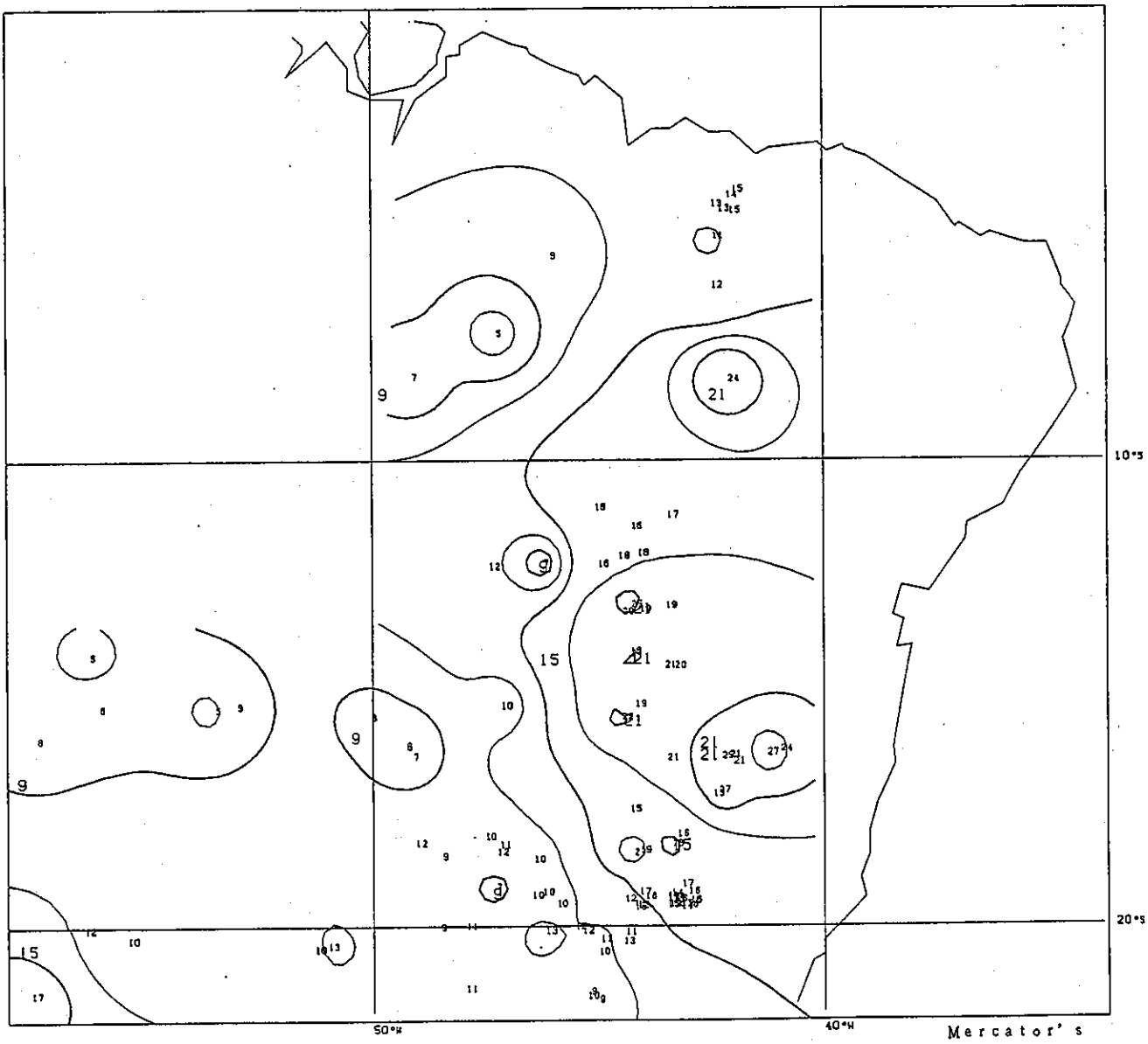


FIG.5.2.4 DISTRIBUTION MAP OF EXTREME CONTINUOUS DAY WITHOUT PRECIPITATION
(RETURN PERIOD : 5 YEARS) JANUARY

図 5.2.4　1月の無降水継続日数の5年再現期待値分布

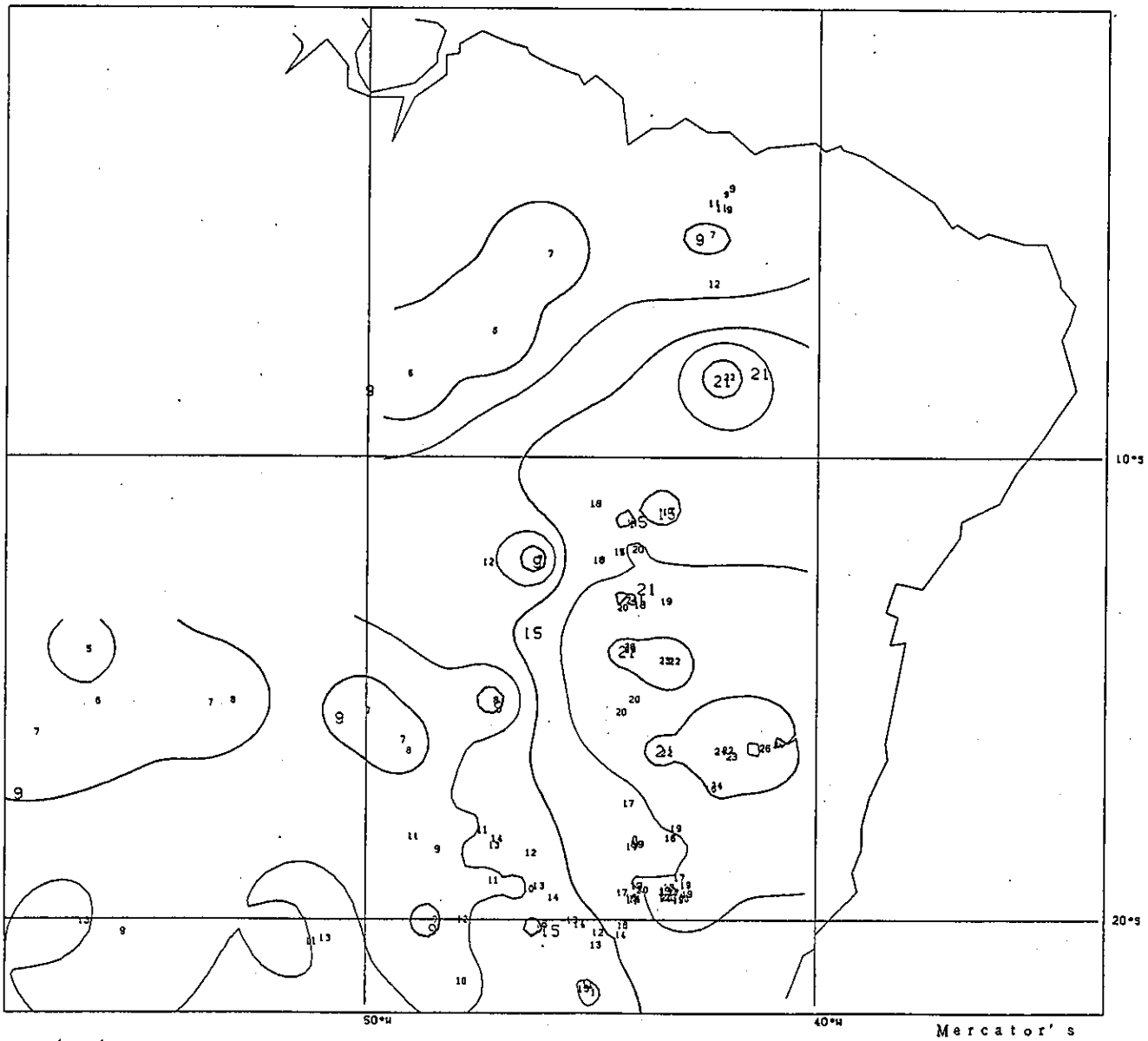


FIG.5.2.5 DISTRIBUTION MAP OF EXTREME CONTINUOUS DAY WITHOUT PRECIPITATION
(RETURN PERIOD : 5 YEARS) in FEBRUARY

図 5.2.5 2月の無降水継続日数の5年再現期待値分布

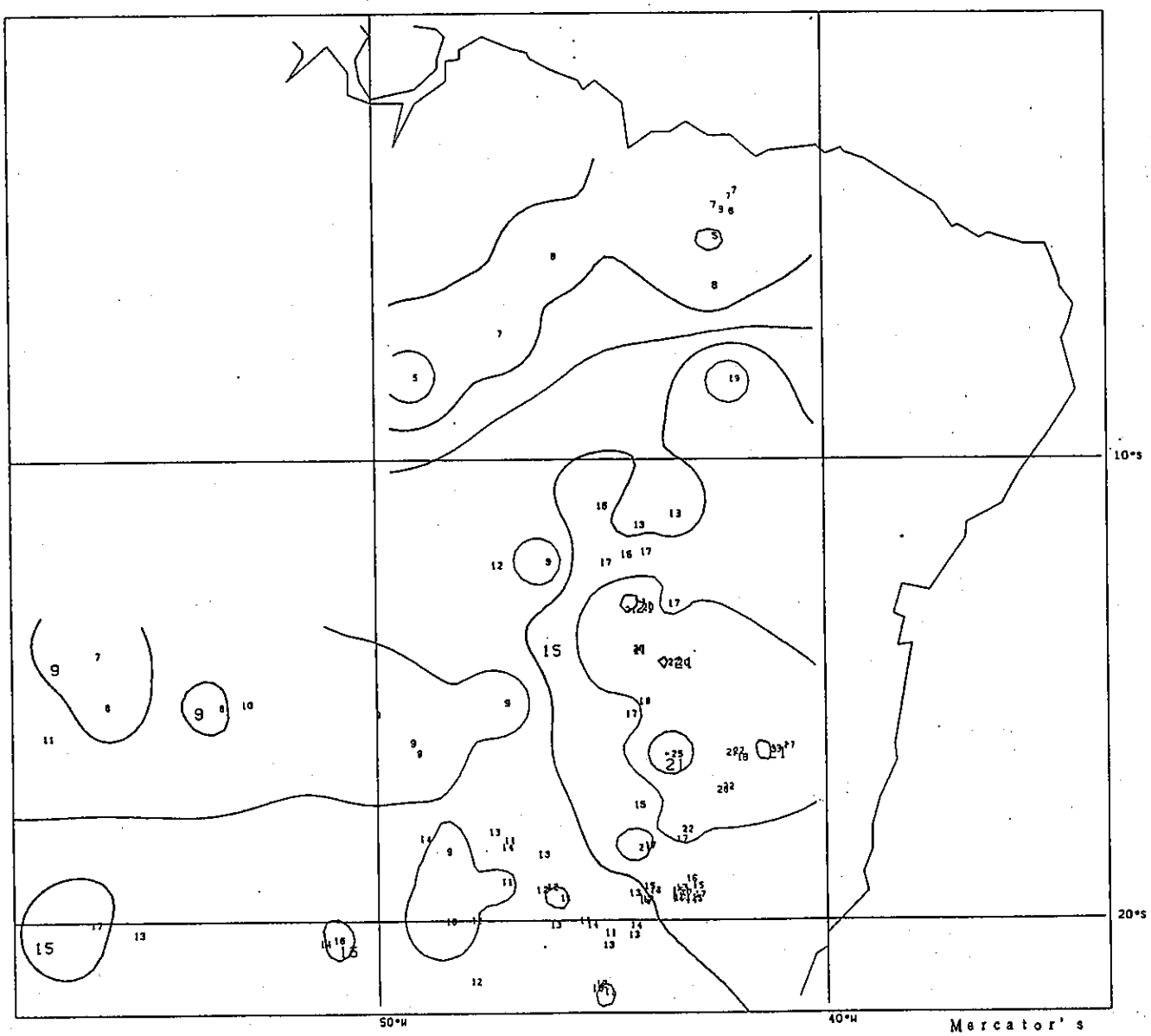


FIG.5.2.6 DISTRIBUTION MAP OF EXTREME CONTINUOUS DAY WITHOUT PRECIPITATION
(RETURN PERIOD : 5 YEARS) in MARCH

図 5.2.6　3月の無降水継続日数の5年再現期待値分布

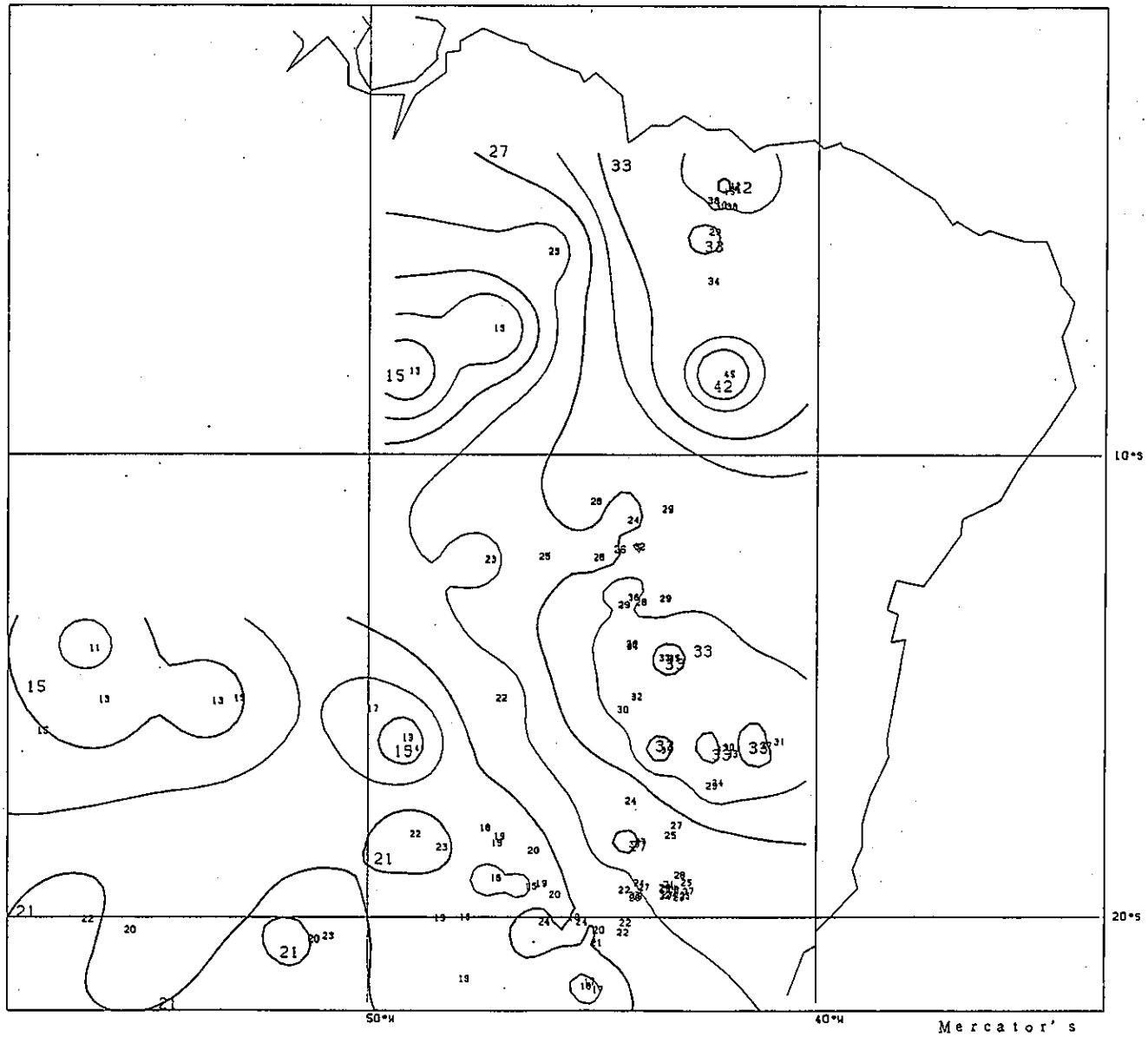


FIG.5.2.7 DISTRIBUTION MAP OF EXTREME CONTINUOUS DAY WITHOUT PRECIPITATION
(RETURN PERIOD : YEARS) in ALL RAINY SEASON (OCTOBER-MARCH)

図 5.2.7 雨季の無降水継続日数の5年再現期待値分布

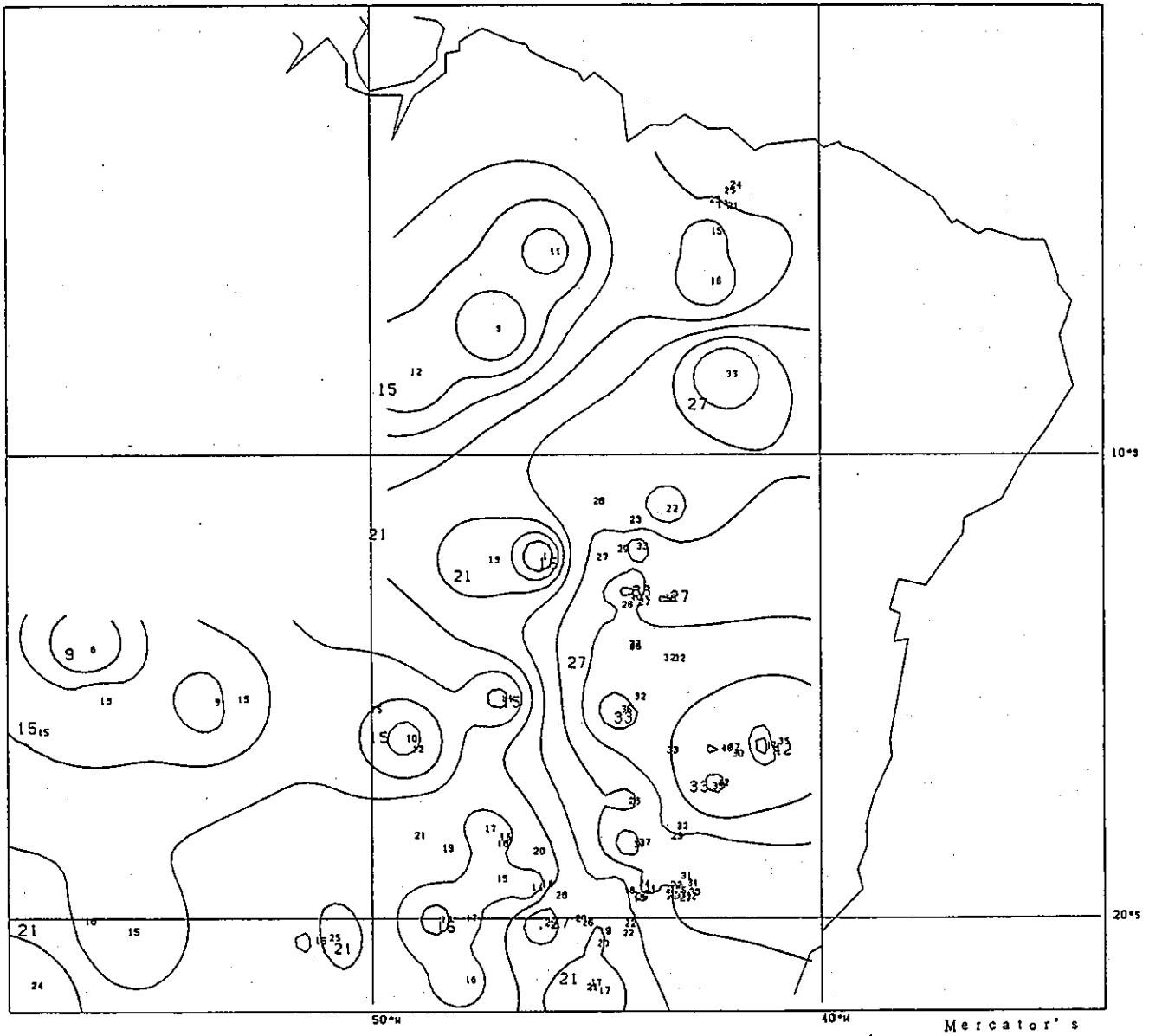


FIG. 5.2.8 DISTRIBUTION MAP OF EXTREME CONTINUOUS DAY WITHOUT PRECIPITATION
(RETURN PERIOD : 30 YEARS) IN JANUARY

図 5.2.8　1月の無降水継続日数の30年再現期待値分布

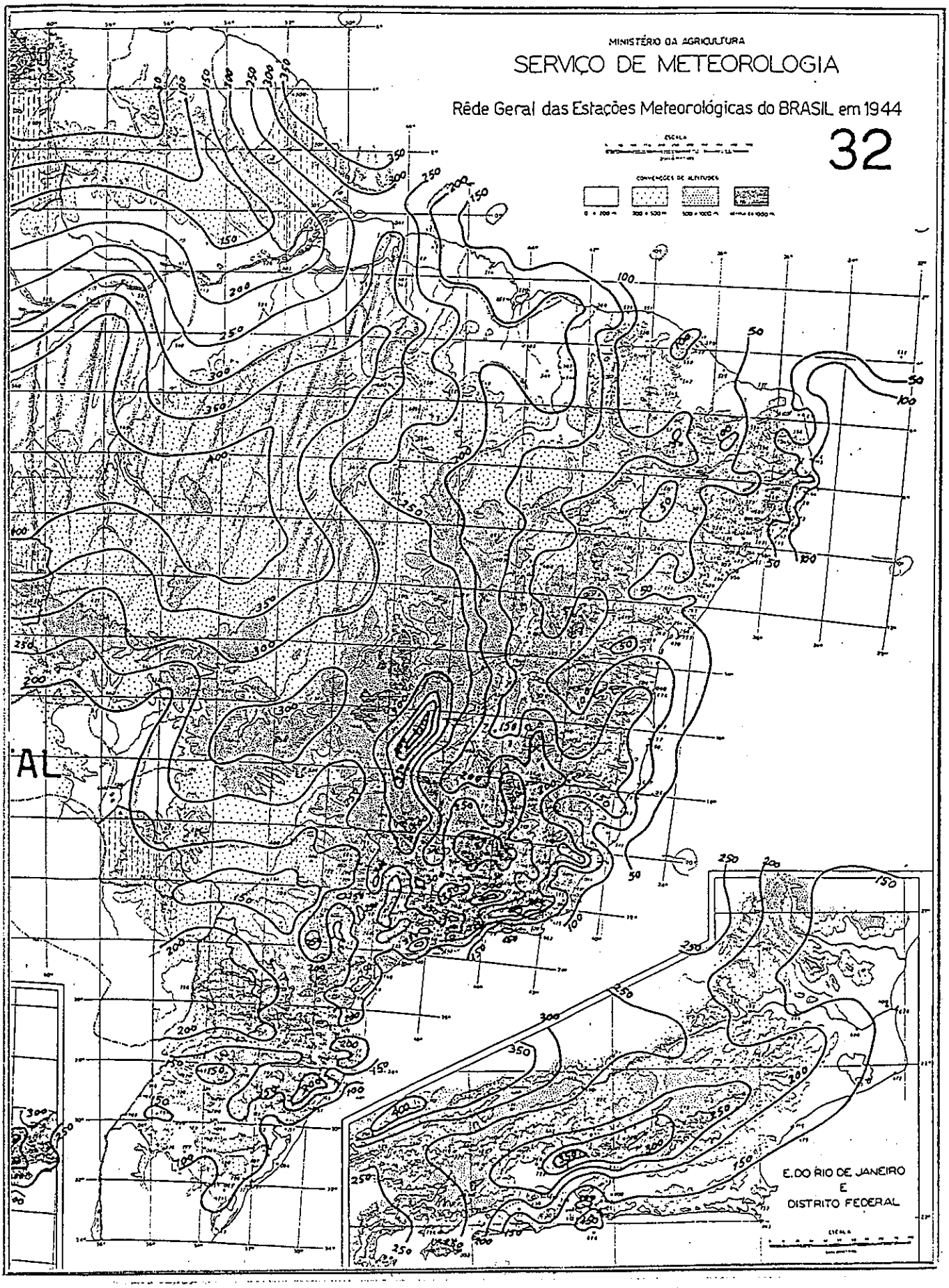


図 5.2.9　1月の月降水量の30年平均分布（1931-1960, ブラジル気象台）

5-3.代表地点における確率ベラニコ日数の雨季期間における変化

103 地点の月別・旬別の確率計算結果の中からセラード地域のいくつかの代表地点を選び（図5.3.1参照）、旬別の確率ベラニコ日数（無降水継続日数の再現期待値）の雨季期間の変化傾向を調べたものが、表 5.3.1～6 および図 5.3.2 ～7 である。

図 5-3-2～7において、横軸が雨季期間の時間軸、縦軸が旬ごとの確率ベラニコ日数で、上側から30、10、5年の値をプロットしている。

(i) FORMOSA (St. No. 04)

表 5.3.1 および図 5.3.2 は FORMOSA における確率ベラニコ日数の変化である。これらによると、１２月中旬から２月下旬までの期間がベラニコの発生確率日数が小さく、特に１２月中旬と１月中旬が短いことが認められる。

３月下旬の日数が短くなっているが、これは、無降水継続日数の統計期間を第３－１節で述べたように３月３１日までにしているため、他の期間に比較して、対象期間を越えた無降水継続日数がカウントされないためである。

(ii) TAGUATINGA (St. No. 6)

表5.3.2および図 5.3.3 は TAGUATINGA における確率ベラニコ日数の変化である。10～12月は比較的ベラニコ日数は長く、１月上旬から３月上旬までの期間が短くなっている。約 370 Km 南の FORMOSA に比べて、ベラニコ日数の短い期間が 20～30 日間程度遅い傾向が見られる。

(iii) CARMO DO PARANAIBA (St. No. 69)

CARMO DO PARANAIBA は FORMOSA から 400 Km 南に位置している。表 5.3.3 および図 5.3.4 は CARMO DO PARANAIBA における確率ベラニコ日数の変化である。これらの図を見ると１２月中旬～下旬の期間がベラニコ日数が短くなっている。これは、FORMOSA に比較すると約 10 ～ 20 日ほど早くベラニコ日数が最小になっている。また、１月のベラニコ日数の再現期待値が FORMOSA に比較して、５日間（３０％）程度長くなっている。

(iv) ARACUAI (St. No. 58)

ARACUAI は FORMOSA から東に約 500Km のセラード地域の東端にあり、大西洋からは約 350 Km 内陸に入ったところに位置する。表 5.3.4 および図 5.3.5 は ARACUAI における確

率ベラニコ日数の変化である。これらの図を見ると１２月中旬～下旬の期間がベラニコ日数が短くなっているが、他地点の4～8日に比較すると4～8日程度長くなっている。また、１月のベラニコ日数の5年再現期待値が他地点の4～8日に比較して、５日間（３０％）程度長くなっている。

(v) CAMPO MAIOR （St. No. 20)

CAMPO MAIOR はセラード地域の北東の端にあり、大西洋からは約 180 Km内陸に入ったところに位置する。表 5.3.5 および図 5.3.6 は CAMPO MAIOR における確率ベラニコ日数の変化である。

これらの図を見ると2～3月のベラニコ日数が短くなっている。10～12月は他の地域に比較して、ベラニコ日数はかなり長くなっており、10、11月は乾季と言えるであろう。

(vi) CUIABA （St. No. 36)

CUIABA は FORMOSA から西へ約 1,000Km のセラード地域の西端に位置する。表 5.3.6 および図 5.3.7 は CUIABA における確率ベラニコ日数の変化である。

ここでのベラニコ日数は全般に他の地域に比較して短く、雨季を通じて安定して雨が降る地域と考えられる。ベラニコ日数が特に短いのは2月と12月上・中旬となっている。

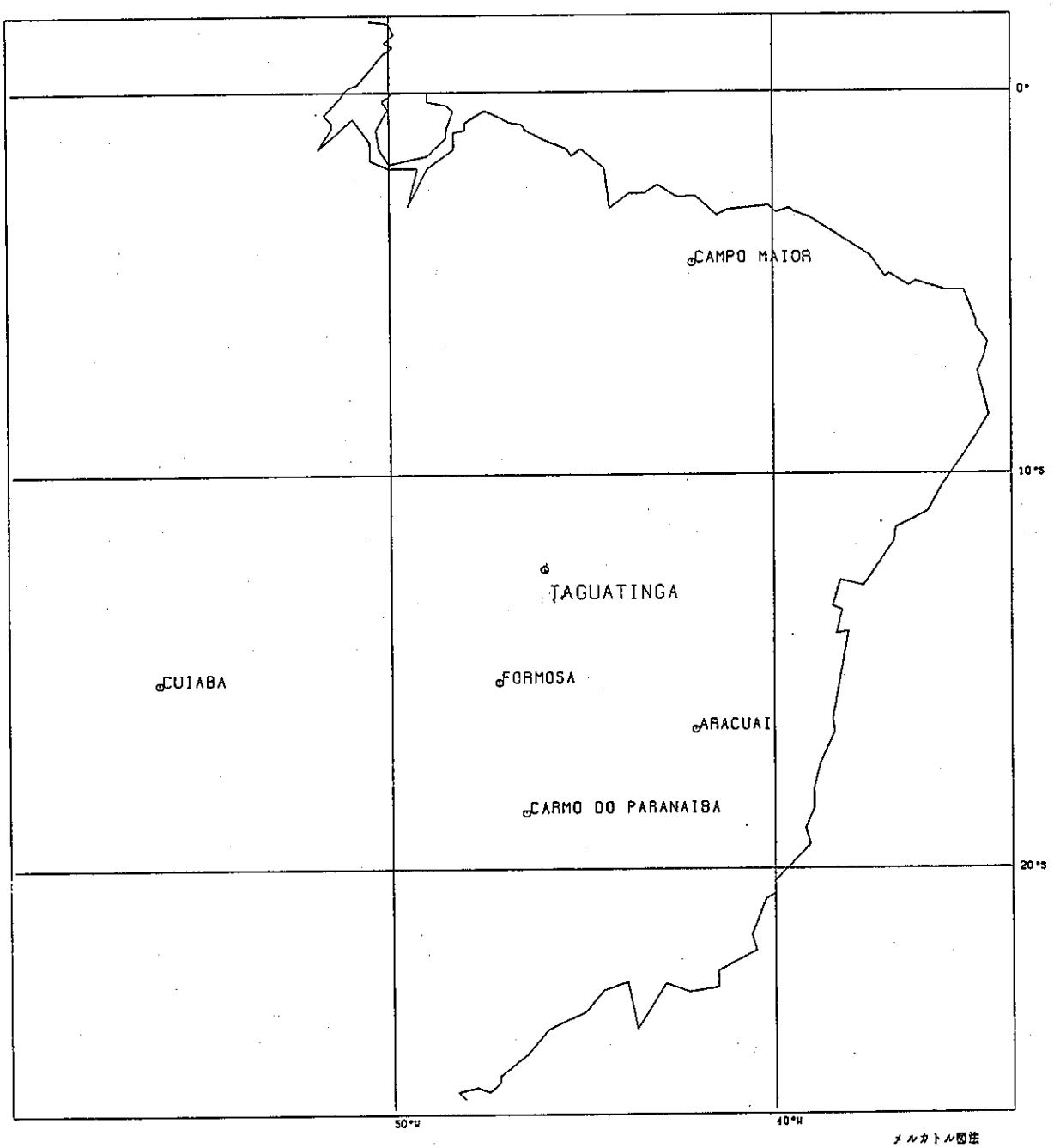


図５．３．１　ベラニコの雨季における変化を調査した降水観測地点

表5.3.1　雨季におけるベラニコ日数の変化

TABLE 5.3.1　VARIATION OF PROBABLE VERANICO DAY in RAINY SEASON

STATION:　NO.4　FORMOSA

RETURN	OCT			NOV			DEC			JAN			FEB			MAR		
PERIOD	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-
5 YEARS	14	9	12	11	6	7	8	5	6	7	5	6	7	7	5	6	7	7
	15			12			9			10			8			9		
10 YEARS	20	14	22	19	13	11	13	8	9	9	7	9	8	8	7	9	10	8
	21			20			15			12			10			11		
30 YEARS	30	22	41	34	25	18	19	15	13	13	10	14	9	9	12	15	14	9
	31			33			25			14			13			16		

図 5.3.2　確率ベラニコ日数の雨季における変化（FORMOSA）

FIG 5.3.2　VARIATION OF PROBABLE VERANICO DAY (NO.4 FORMOSA)

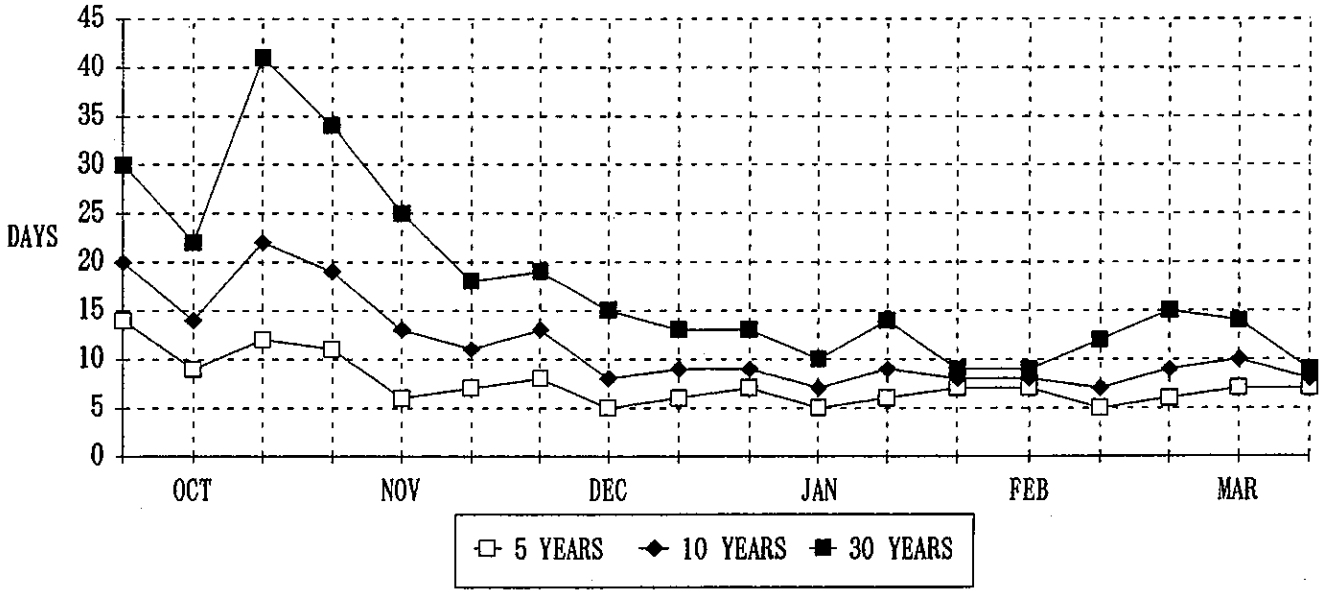


表5.3. 2 雨季におけるベラニコ日数の変化

TABLE 5.3. 2 VARIATION OF PROBABLE VERANICO DAY in RAINY SEASON

STATION: NO.6 TAGUATINGA

RETURN PERIOD	OCT			NOV			DEC			JAN			FEB			MAR		
	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-
5 YEARS	17	12	12	10	9	7	16	12	9	6	5	5	5	6	4	5	7	7
	15			12			16			7			7			9		
10 YEARS	27	20	19	17	14	13	24	18	10	8	6	6	6	7	6	7	10	8
	21			18			21			8			8			11		
30 YEARS	43	35	33	28	21	21	35	24	12	11	7	7	8	8	8	11	14	11
	29			28			34			11			10			15		

図 5.3.3 確率ベラニコ日数の雨季における変化（TAGUATINGA）

TABLE 5.3.3 VARIATION OF PROBABLE VERANICO DAY (NO.6 TAGUATINGA)

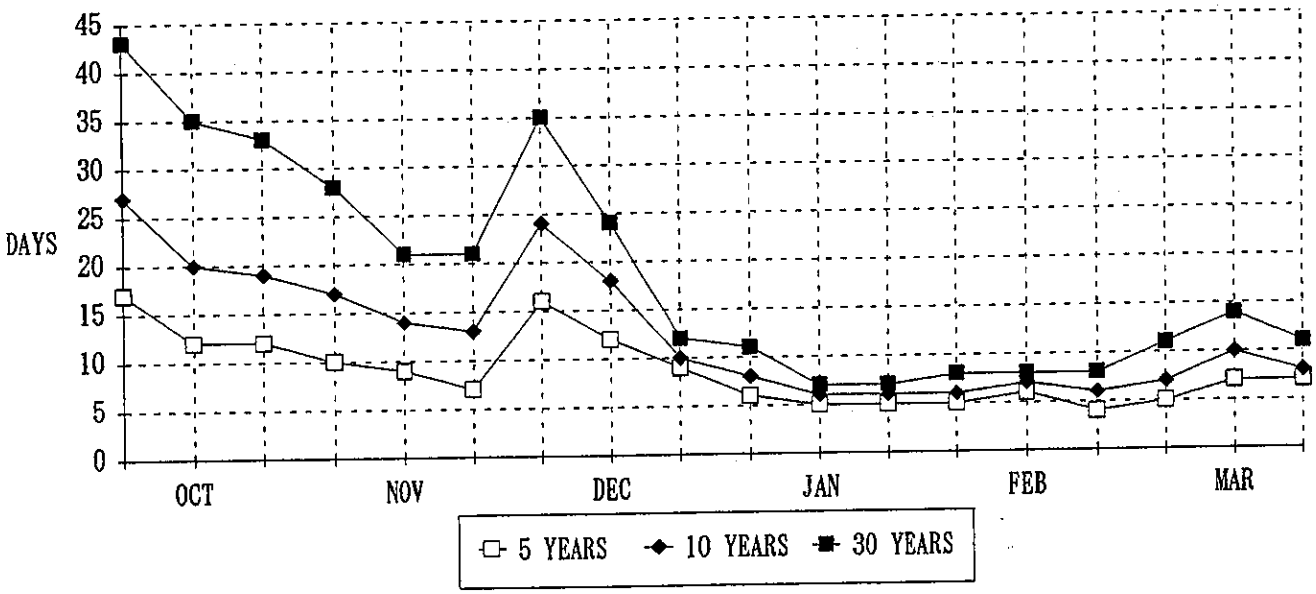


表 5.3.3　雨季におけるベラニコ日数の変化

TABLE 5.3.3 VARIATION OF PROBABLE VERANICO DAY in RAINY SEASON

STATION: NO.69　CARMO DO PARANAIBA

RETURN	OCT			NOV			DEC			JAN			FEB			MAR		
PERIOD	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-
5 YEARS	11	10	8	7	7	6	5	6	6	6	8	8	7	9	8	8	11	8
					10			8			10			12			13	
10 YEARS	15	15	12	10	10	9	8	7	8	12	11	12	9	12	10	11	14	10
		17			13			10			14			16			16	
30 YEARS	24	24	20	15	17	14	12	10	11	18	15	19	11	15	14	16	19	12
		24			19			12			20			25			19	

図 5.3.4　確率ベラニコ日数の雨季における変化（CARMO DO PARANAIBA）

FIG 5.3. 4　VARIATION OF PROBABLE VERANICO DAY
(NO.69　CARMO DO PARANAIBA)

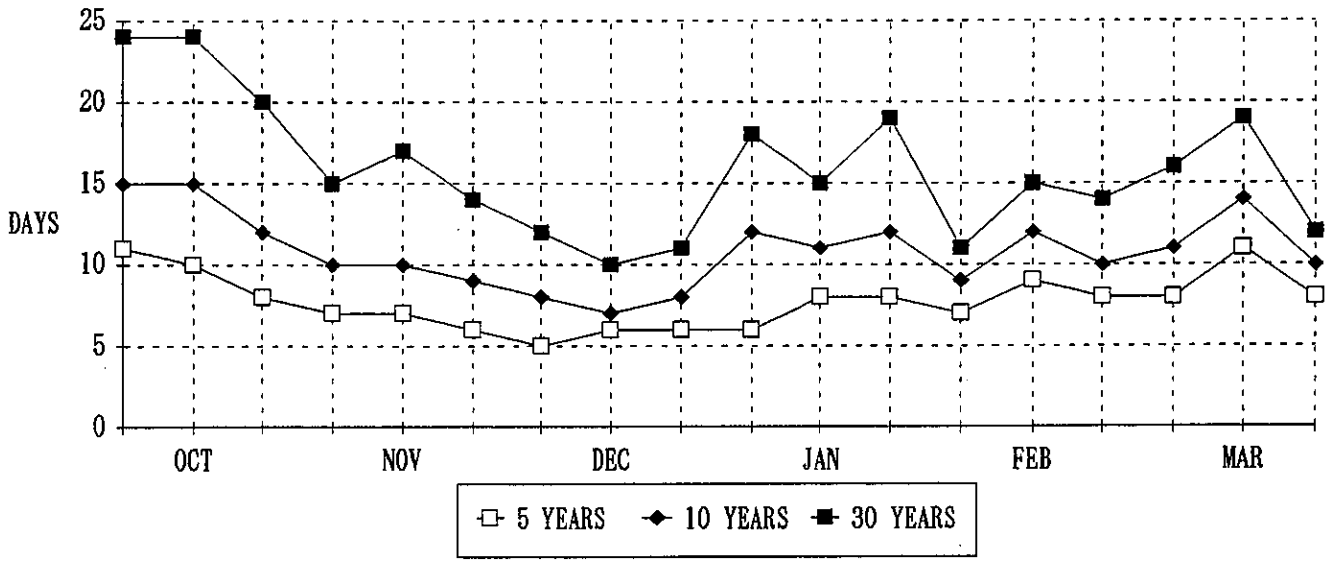


表 5.3.4　雨季におけるベラニコ日数の変化

TABLE 5.3.4　VARIATION OF PROBABLE VERANICO DAY in RAINY SEASON

STATION: NO.58　ARACUAI

RETURN PERIOD	OCT			NOV			DEC			JAN			FEB			MAR		
	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-
5 YEARS	22	21	14	11	10	11	10	14	16	17	15	16	19	19	15	18	16	10
	26			14			20			21			23			18		
10 YEARS	29	28	19	14	13	16	14	19	21	21	19	21	26	23	20	22	19	11
	33			17			25			25			27			23		
30 YEARS	38	37	28	21	19	24	20	28	27	27	28	30	35	30	27	29	23	13
	44			23			31			30			34			29		

図 5.3.5　確率ベラニコ日数の雨季における変化（ARACUAI）

FIG 5.3.5　VARIATION OF PROBABLE VERANICO DAY (NO.58　ARACUAI)

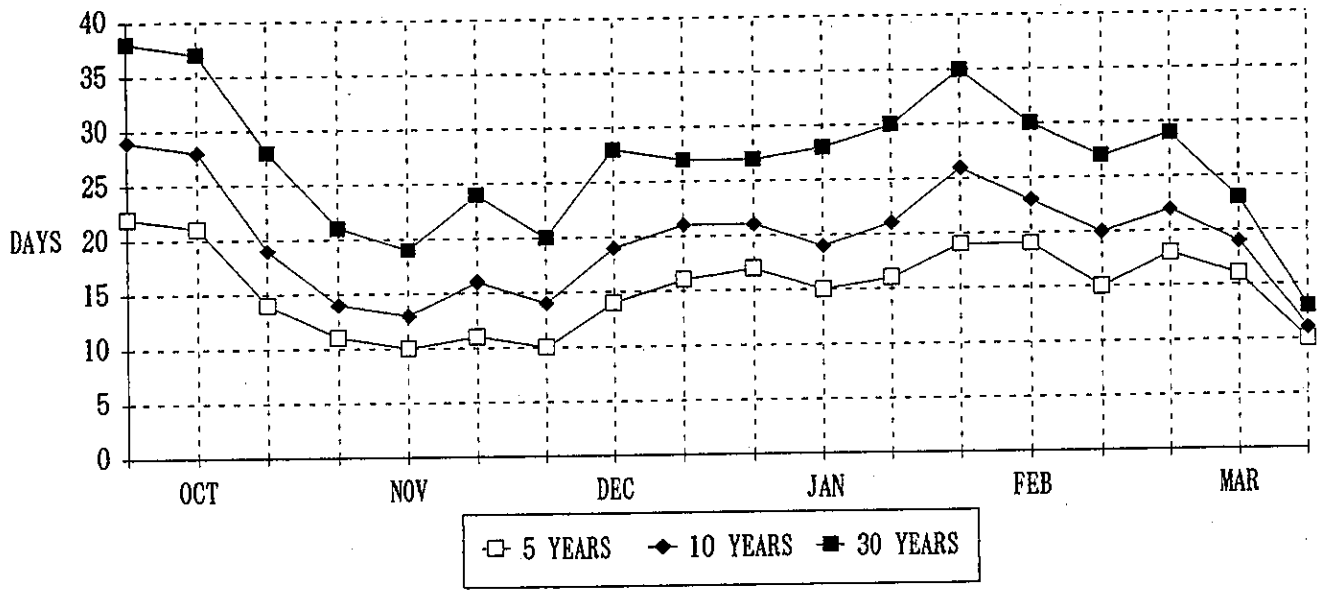


表 5.3.5　雨季におけるベラニコ日数の変化

TABLE 5.3.5 VARIATION OF PROBABLE VERANICO DAY in RAINY SEASON

STATION: NO.20 CAMPO MAIOR

RETURN PERIOD	OCT			NOV			DEC			JAN			FEB			MAR		
	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-
5 YEARS	30	29	26	22	21	22	17	15	15	13	10	8	7	5	6	6	6	6
	37			26			21			15			9			5		
10 YEARS	40	38	33	28	26	28	23	20	20	17	12	11	8	7	8	8	8	7
	44			29			26			18			11			7		
30 YEARS	57	51	50	37	32	37	32	29	28	21	15	15	11	10	10	10	12	8
	53			34			31			21			16			8		

図 5.3.6　確率ベラニコ日数の雨季における変化（CAMPO MAIOR）

FIG 5.3.6　VARIATION OF PROBABLE VERANICO DAY (NO.20 CAMPO MAIOR)

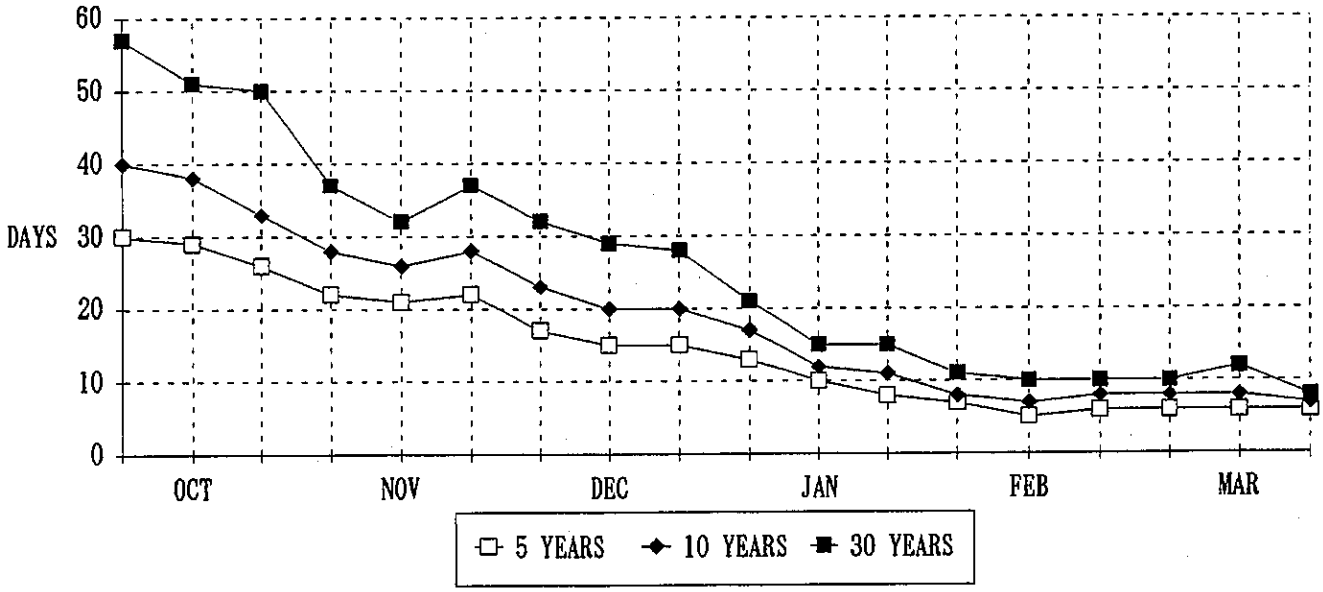


表 5.3.6　雨季におけるベラニコ日数の変化

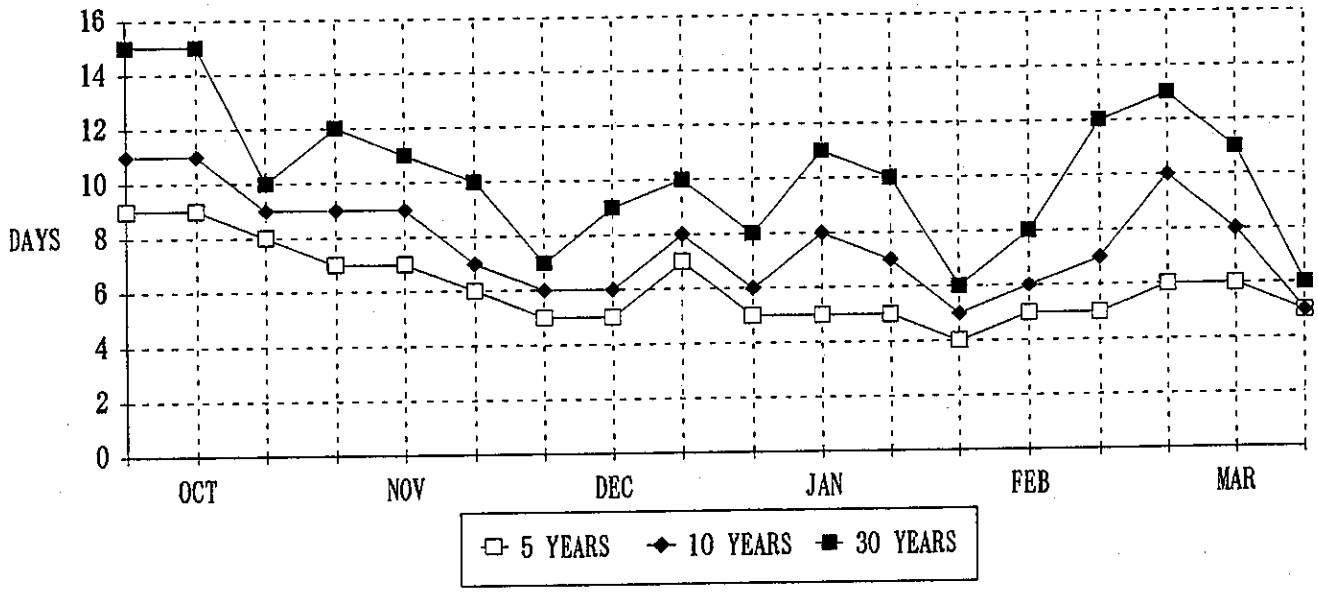
TABLE 5.3.6 VARIATION OF PROBABLE VERANICO DAY in RAINY SEASON

STATION: NO. 36 CUIABA

RETURN PERIOD	OCT			NOV			DEC			JAN			FEB			MAR		
	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-	1-10	11-20	21-
5 YEARS	9	9	8	7	7	6	5	5	7	5	5	5	4	5	5	6	6	5
	10			10			8			8			6			8		
10 YEARS	11	11	9	9	9	7	6	6	8	6	8	7	5	6	7	10	8	5
	12			12			9			10			7			10		
30 YEARS	15	15	10	12	11	10	7	9	10	8	11	10	6	8	12	13	11	6
	17			16			11			13			11			13		

図 5.3.7　確率ベラニコ日数の雨季における変化（CUIABA）

FIG 5.3.7　VARIATION OF PROBABLE VERANICO DAY (NO. 36 CUIABA)



5-4. 代表地点間の比較

前項で抽出した代表６地点の再現期間３０年に対応する月別ベラニコ（無降水継続）日数をまとめたのが表 5.4.1である。また、これらの地点の中から南北方向に離れた４地点を比較したのが図 5.4.1、東西方向に離れた３地点を比較したのが図5.4.2である。

図 5.4.1を見ると、ベラニコ日数が最小となる時期は CARMO DO PARANAIBA が１２月、FORMOSA と TAGUATINGA が１～２月、CAMPO MAIOR が３月と北部に行くほど遅くなっていることが認められる。

一方、図 5.4.2 の東西に離れた３地点の比較図を見ると、FORMOSA では１～２月のベラニコ日数が最小となっているのに対し、西端の TAGUATINNGA では１１月、東端の ARACUAI では１２月が最小となっている。但し、FORMOSA では雨季の前半の１０～１２月はベラニコ日数が長く、後半の１～３月が短いという傾向がはっきりでているのに対し、ARACUAI では後半の１２～３月が長い、FORMOSA とは反対の傾向が見られ、CUIABA では月による変化が小さいことが認められた。

表 5.4.1　観測地点の位置の違いによる確率ベラニコ日数の変化傾向の違い

TABLE 5.4.1　REGIONAL VARIATION OF PROBABLE VERANICO DAY in RAINY SEASON

(RETUR PERIOD : 30years)

Station	OCT	NOV	DEC	JAN	FEB	MAR
CAMPO MAIOR	53	34	31	21	16	8
TAGUATINGA	29	28	34	11	10	15
FORMOSA	31	33	25	14	13	16
CARMO DO PARANAIBA	24	19	12	20	25	19
ARACUAI	44	23	31	30	34	29
CUIABA	17	16	11	13	11	13

図 5.4.1　観測地点の位置の違いによる確率ベラニコ日数の変化傾向の違い

FIG 5.4.1　REGIONAL VARIATION OF PROBABLE VERANICO DAY in RAINY SEASON

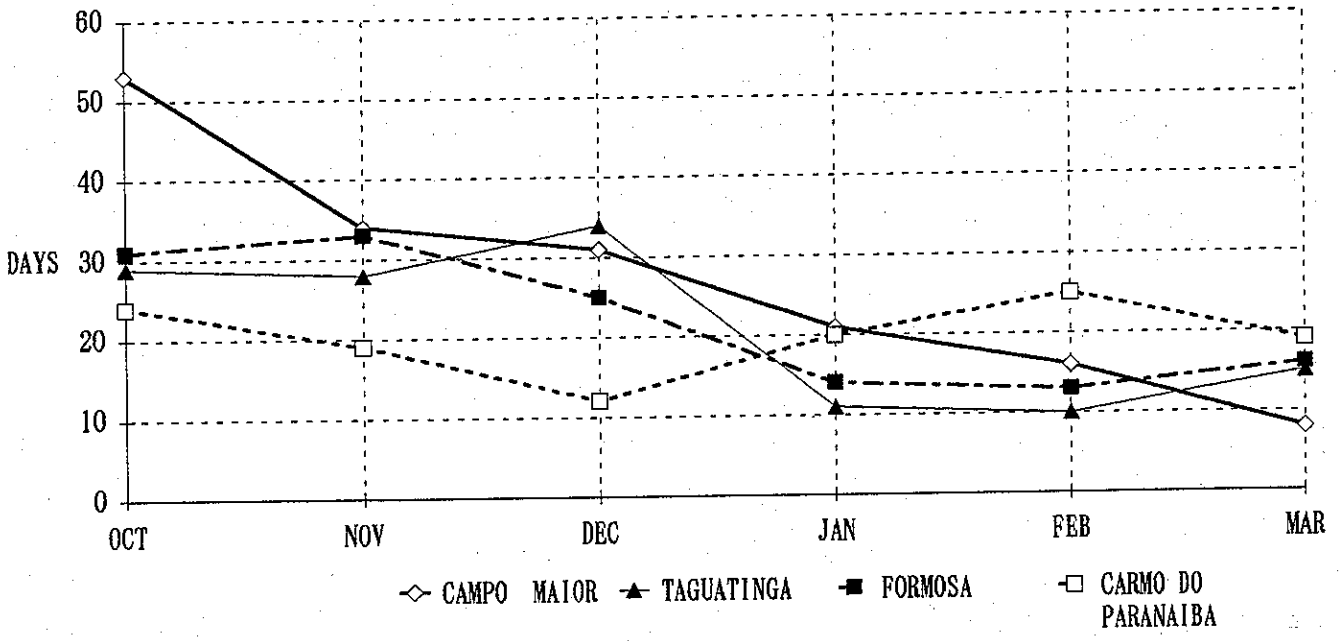
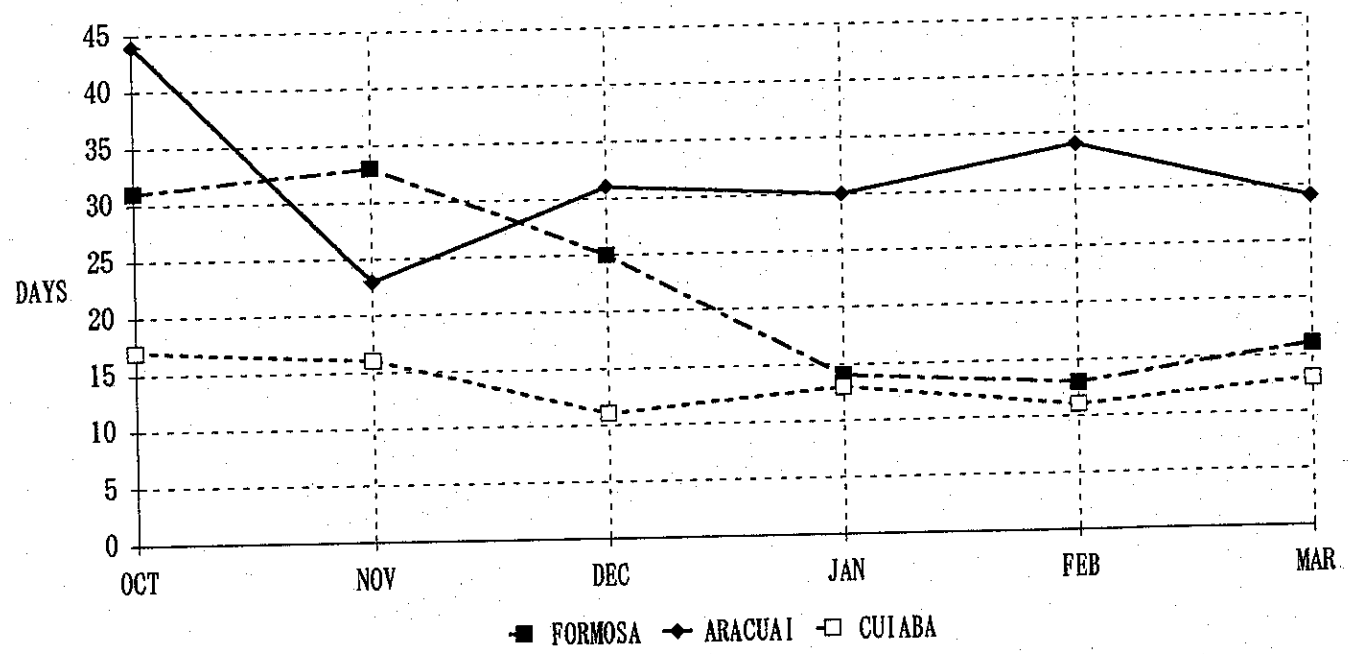


図 5.4.2　観測地点の位置の違いによる確率ベラニコ日数の変化傾向の違い

FIG 5.4.2　REGIONAL VARIATION OF PROBABLE VERANICO DAY in RAINY SEASON



第６章　単独年におけるベラニコの発生分布

本章ではベラニコの期間が顕著に長かった年とそうでない年のいくつかの例について、天気図と比較しながらその特徴を調べる。

6-1.単独年のベラニコの発生分布

（１）ベラニコの期間が短かった年の分布

巻末資料（1）に示される 103 地点の１月の無降水継続日数の経年変化図 からベラニコ日数の短かい地点が多かった 1952 年、1958 年について、それぞれの年の１月の分布を図 6.1.1 および図 6.1.2 に示す。これらの図を見ると、1952 年の分布図では Caetite 付近のベラニコ日数が 20 日間と長く、反対に南東部の Belo Holizonte 付近は 5 日間程度と短くなっている。一方、1958 年の分布では 1952 年に比較して南部のベラニコ日数がわずかに長くなっているのが認められる。

これらの年の１月の天気図を図 6.1.3 および図 6.1.4 に示す。２つの天気図ともサルバドル沖とブラジル南部沖に中心をとする高気圧があり、この間を通る前線（SACZ*）があることは共通している。アマゾン河上流域とセラード地域の Porto Nacional 付近にはそれぞれ高気圧があり、これらの高気圧とサルバドル沖の高気圧の間には弱い気圧の谷になっている。

（２）ベラニコの顕著だった年の無降水継続日数の分布

無降水継続日数の経年変化図においてセラード地域の多くの地点で 1953、1954、および 1956 年のいずれかの年の継続日数が長く、観測期間を通じて第１位の値になっている所が多かった。そこでこの３箇年の１月の無降水継続日数の分布を図 6.1.5 ～ 6.1.7 に作成した。これらの図を見ると 1954 年と 1956 年の分布はセラード南東部の Minas Novas や Belo Horizonte 付近を中心に 30 日以上の長期間の無降水日が継続している。これに対し、1953 年の分布では、南東部の他に Barreiras 付近を中心とした地域にも 30 日以上の長期のベラニコが出現している分布となっている。

これらの図 に見られるようにベラニコの出現分布はその年によってかなり違ったパターンになっていると考えられる。これらの年のうち入手することが出来た 1954 年１月の天気図の中から代表的な天気図を図 6.1.8 に示す。この天気図 をベラニコ日数が短かった 1952 年と 1958 年の天気図と比較すると 1954 年の天気図 ではサルバドル沖の高気圧が大西洋岸から内陸の

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*註：一般的には南大西洋収束帯（South Atlantic Convergence Zone）と呼ばれているが、INPEのDr. Morionは南米大陸の影響の方が強く影響を与えているので南アメリカ収束帯（South America Convergence Zone）の名前の方が本質的だと述べている。

セラード地域に広く張り出しており、SACZ は 1952 年や 1958 年の天気図に比較して南に下がり、アルゼンチンの付近まで押し下げられている。

（３） 1990 年１月に起きたベラニコ発生時のケーススタディ

1990 年１～２月はセラード地域の広い範囲で長期間の無降水日が続き、顕著なベラニコが生じた。このため各地で干魃による大きな被害が生じ、セラード農業に深刻な影響を及ぼした。

日本で得られる世界気象データの中からセラード地域にある観測地点の降水データを抜き出し（図 6.1.9 参照）、１月に始まった無降水継続日数の分布を描いたのが図 6.1.10である。この図を見ると、Barreirasでは 55 日、CaetiteとMontes Claros では 45～46 日の長期に及んでいる。Barreiras の 55 日はこの観測点での１月の無降水継続日数の過去最長記録 33 日より 22 日長くなっており、Caetite と Montes Claros の値も過去数10 年間の 1～2 位の長い期間となっている。

図 6.1.11は各観測地点ないしはそれに近い地点で得られている１月の無降水継続日数の30 年再現期待値からの差の日数の分布である。この図を見るとセラード地域の北東部で 30 年再現期待値よりかなり長い期間のベラニコが生じており、そこから南西に延びる舌の形のような分布となっている。

図 6.1.12 と図 6.1.13 は 1990 年と 1991 年の 1 月 21 日の天気図である。いずれの天気図も前後 20 日位の期間の天気図パターンとほぼ同じになっており、それぞれの 年の１月を代表的する天気図パターンと言える。これらと 1958 年の天気図の３つを比較すると、３つの天気図ともサルバドル沖とブラジル南部沖に中心をとする高気圧があり、この間を通る前線SACZがあることは共通している。一方、長期のベラニコの生じなかった 1958 年と 1991 年の天気図においてはアマゾン河河口域から中流域にかけてに中心を持つ高気圧があり、セラード地域はサルバドル沖の高気圧の間に出来た弱い気圧の谷になっている。これに対し、ベラニコがひどかった 1990 年の天気図ではアマゾン河流域全体が大きな低圧部となって、セラード地域はサルバドル沖から張り出した高気圧に覆われている。前述したように 1990 年の１月はこの天気図パターンが続いており、セラード北東部を中心とした長期のベラニコの直接の原因はこのサルバドル沖の高気圧の張り出しによると考えられる。

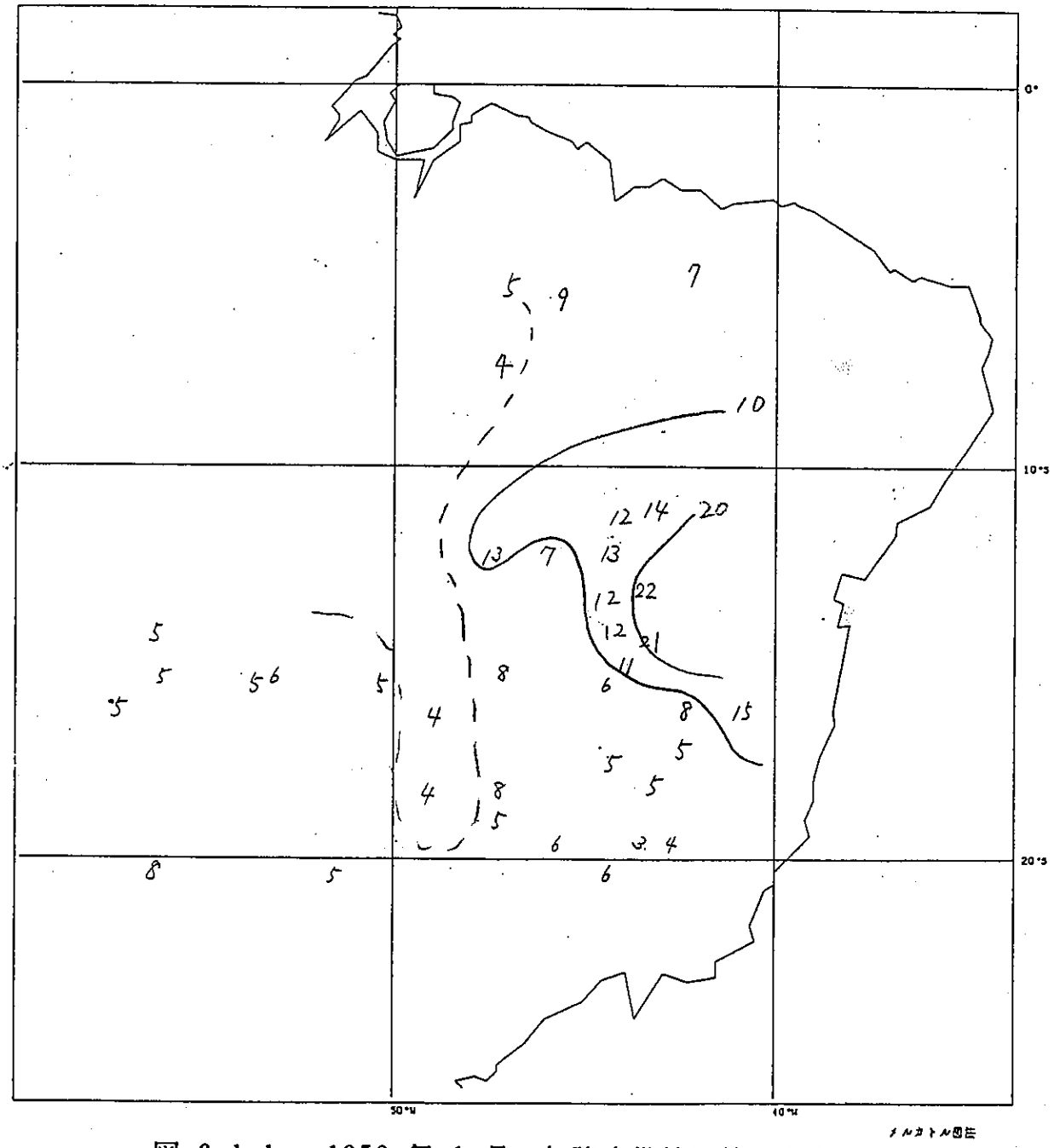

図 6.1.1　1952 年 1 月の無降水継続日数の分布

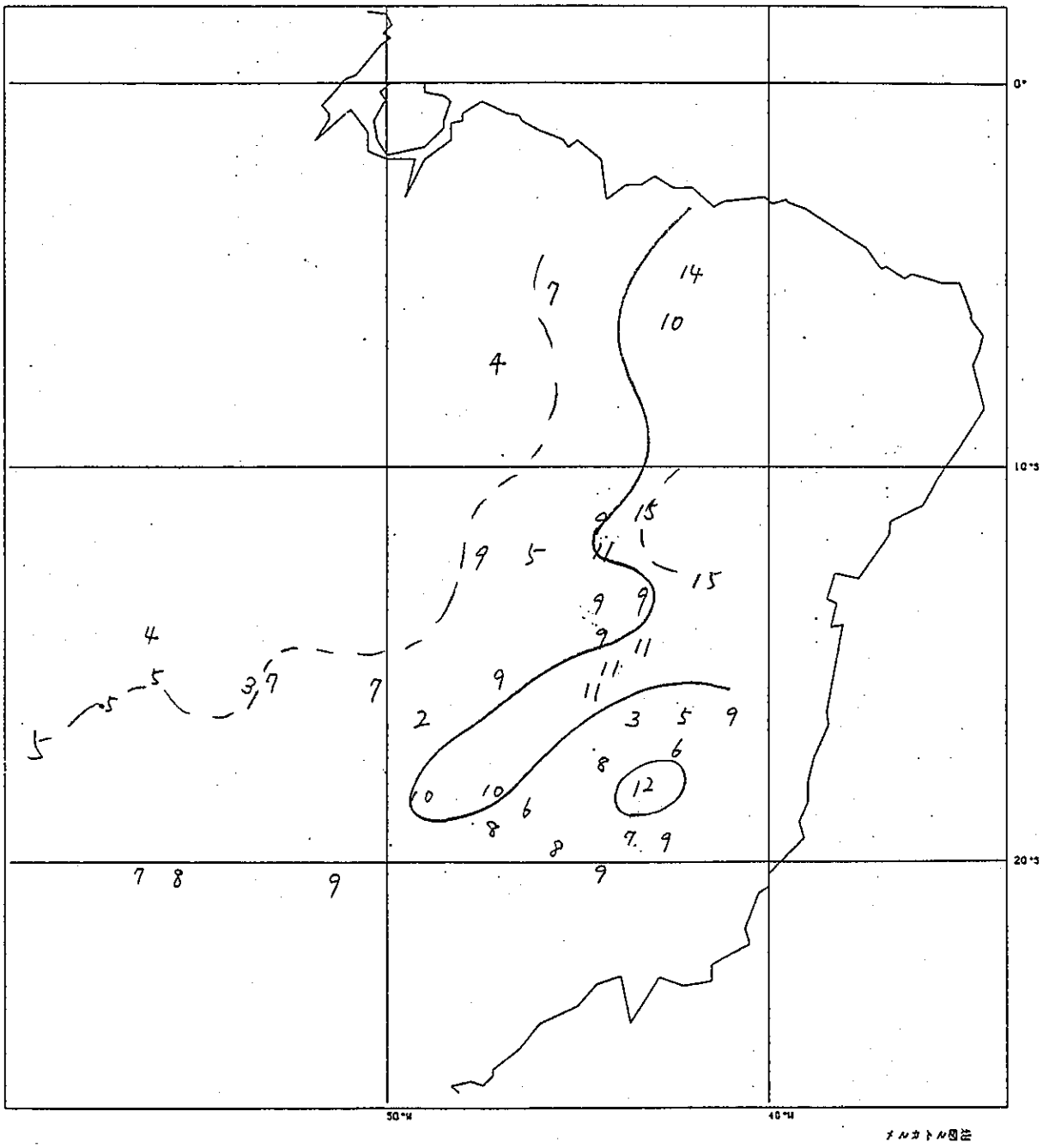

図 6.1.2　1958 年 1 月の無降水継続日数の分布

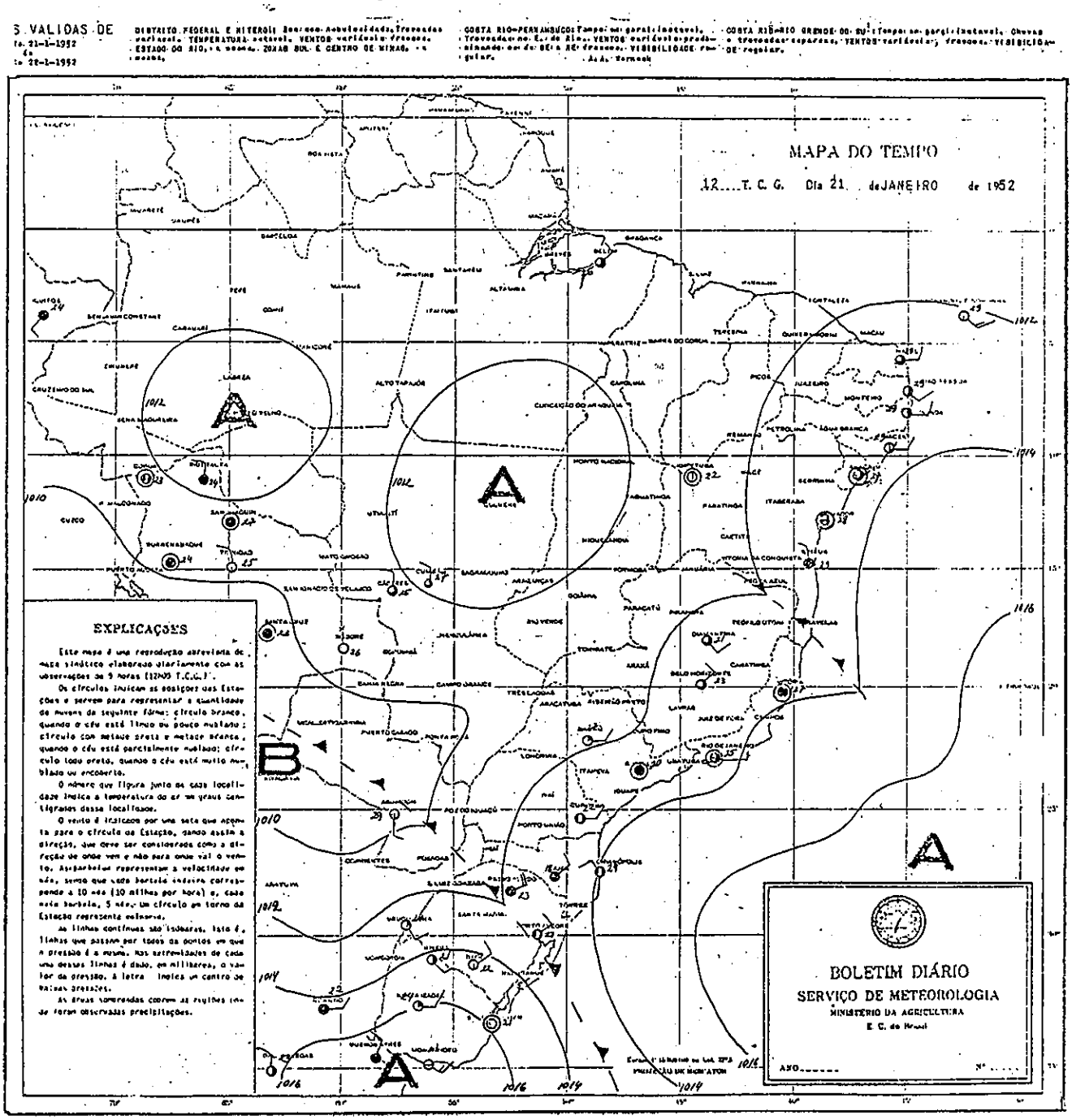

図 6.1.3　1952 年 1 月 21 日の天気図

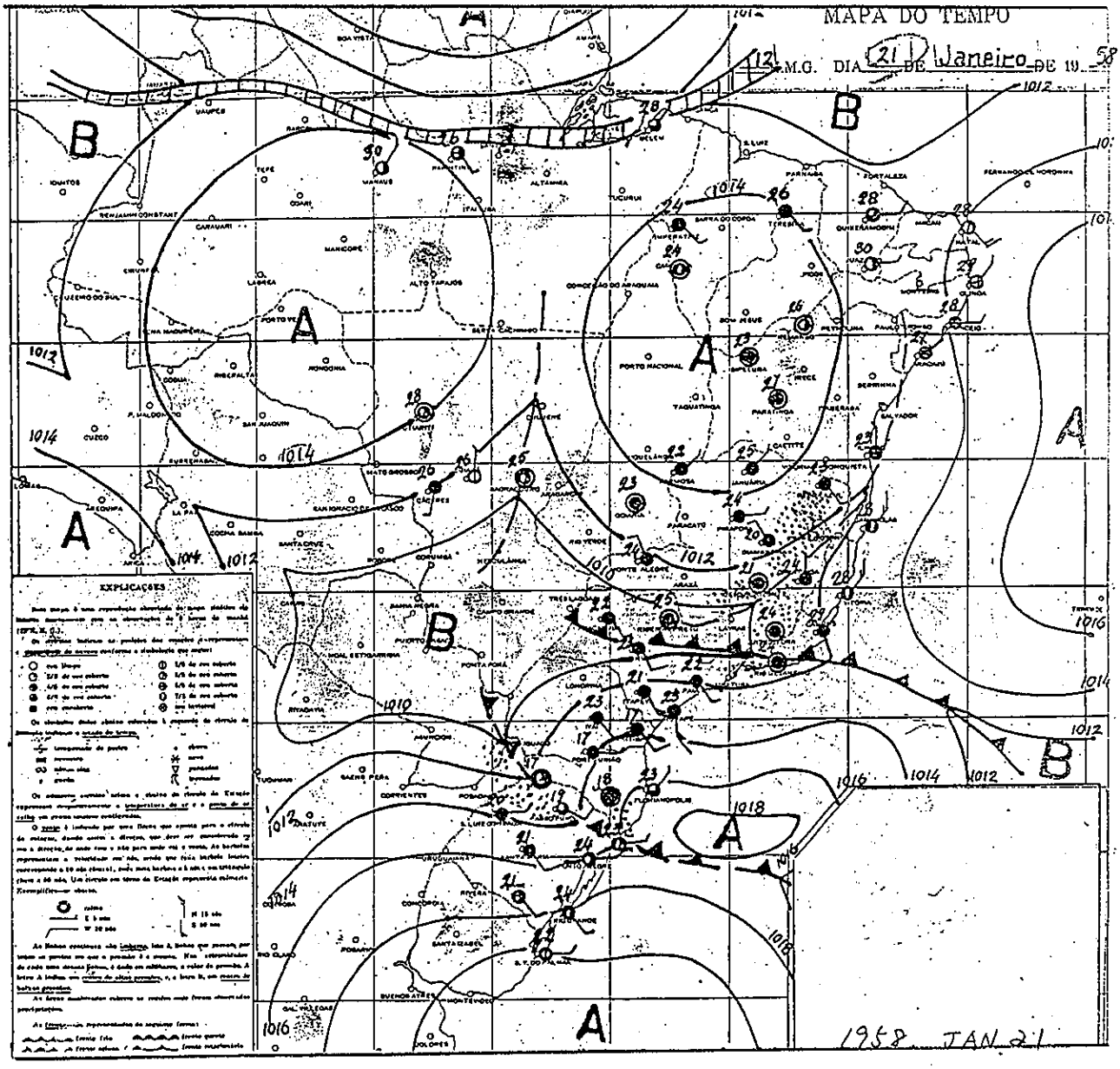

図 6.1.4　1958 年 1 月 21 日の天気図

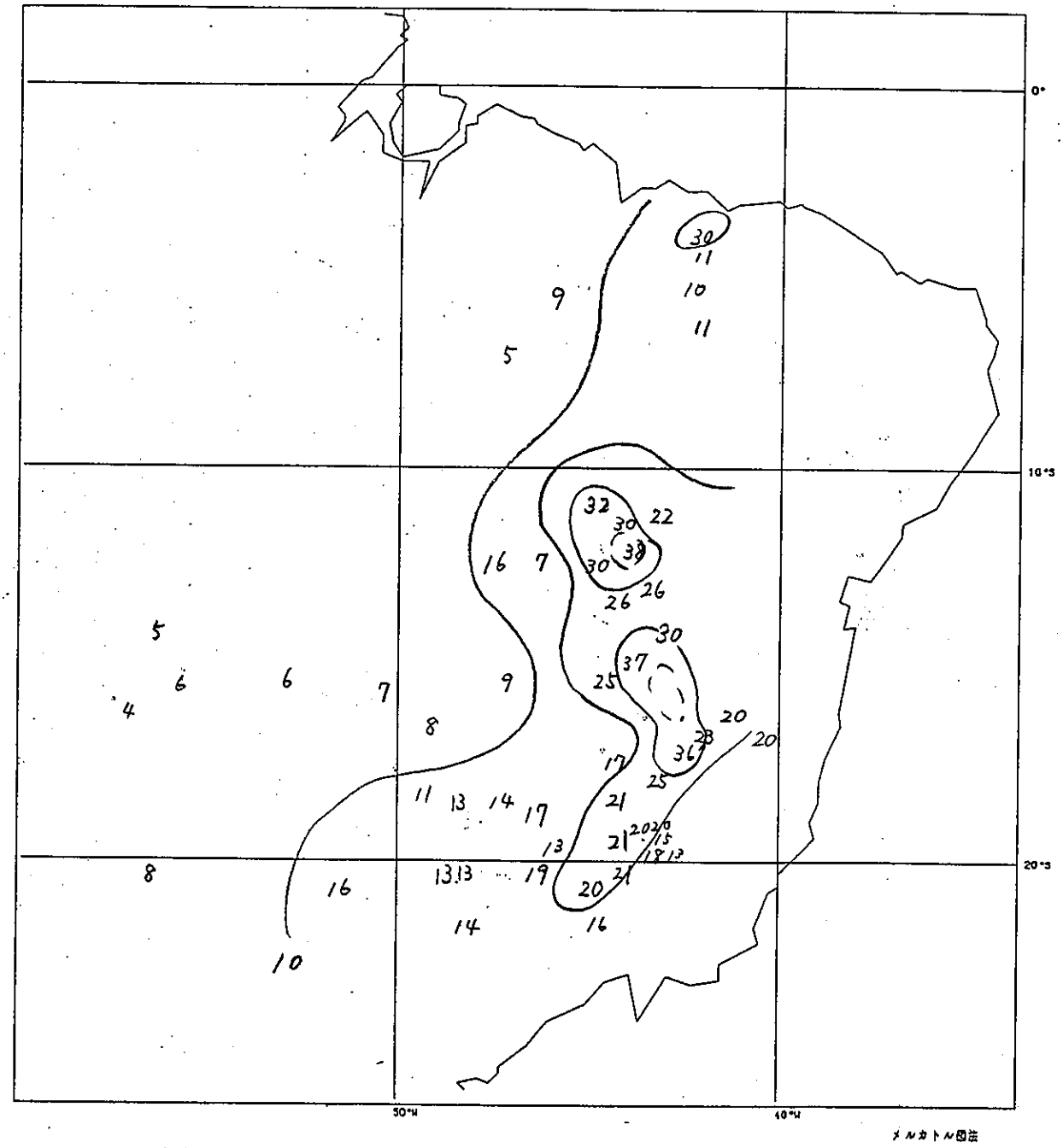

図 6.1.5　1953 年 1 月の無降水継続日数の分布

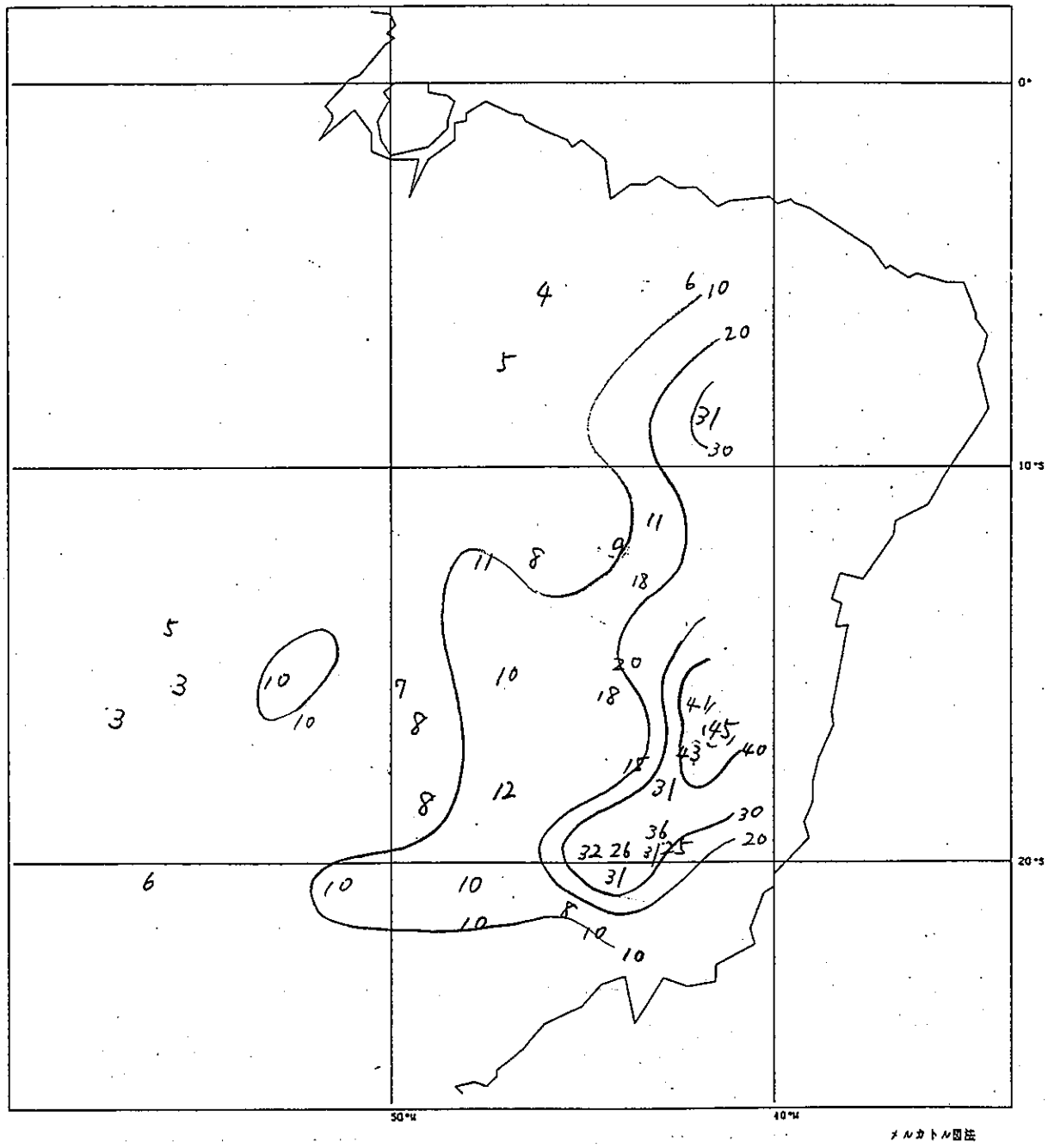

図 6.1.6　1954 年 1 月の無降水継続日数の分布

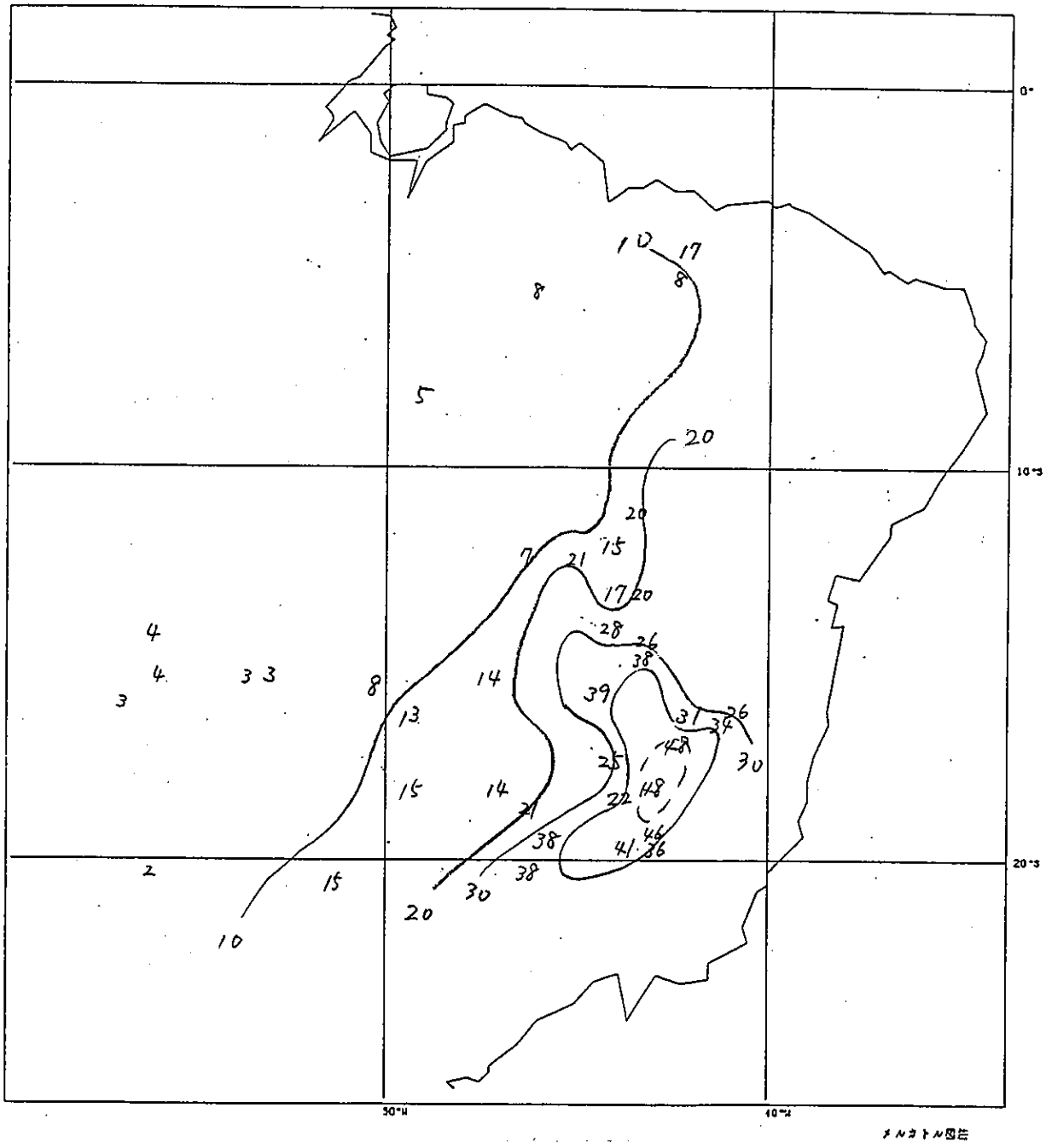

図 6.1.7　1956 年 1 月の無降水継続日数の分布

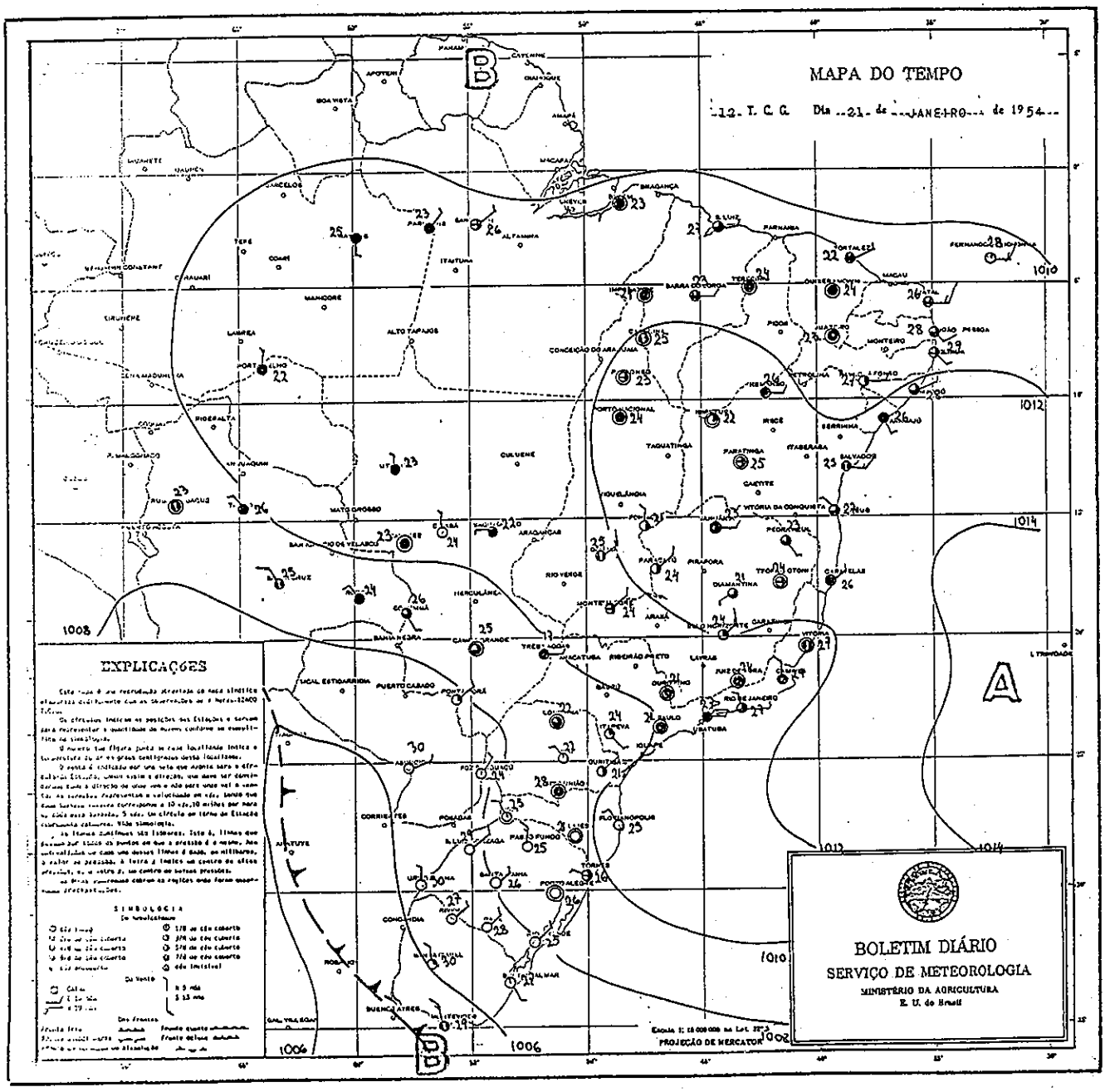

図 6.1.8　1954 年 1 月 21 日の天気図

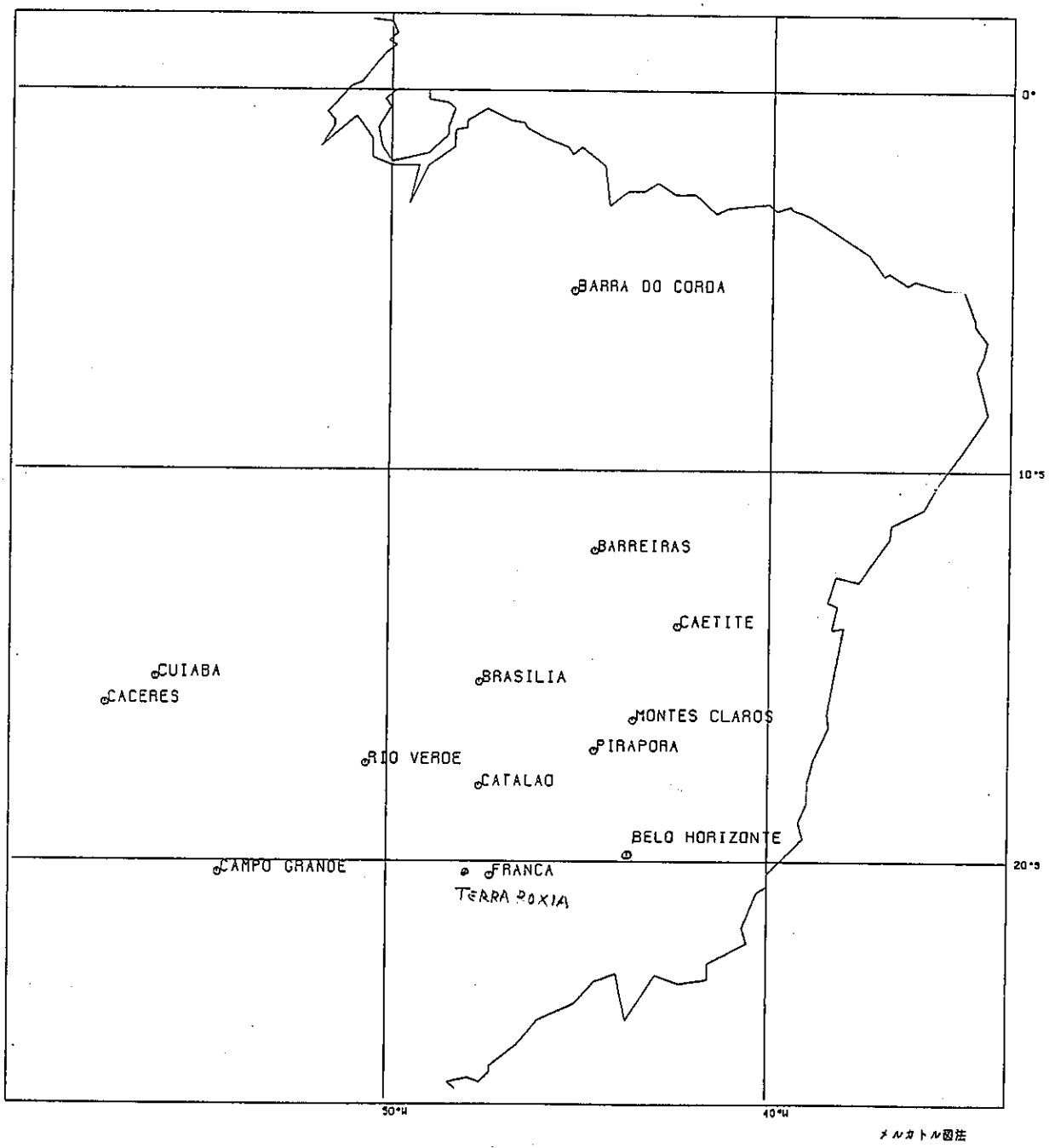

図 6.1.9　1990 年 のケーススタディに用いた観測地点の位置

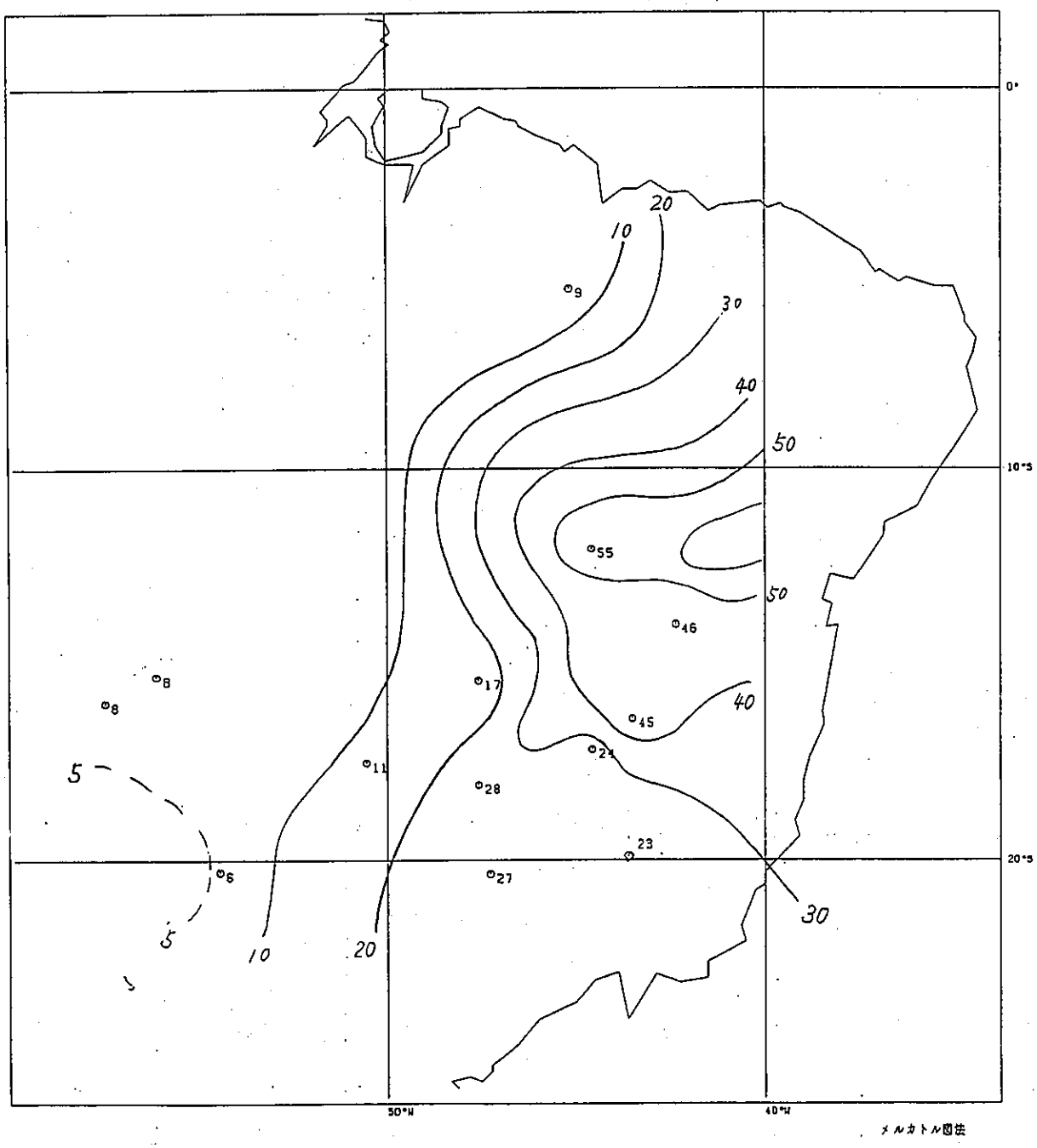

図 6.1.10　1990 年 1 月の無降水継続日数の分布

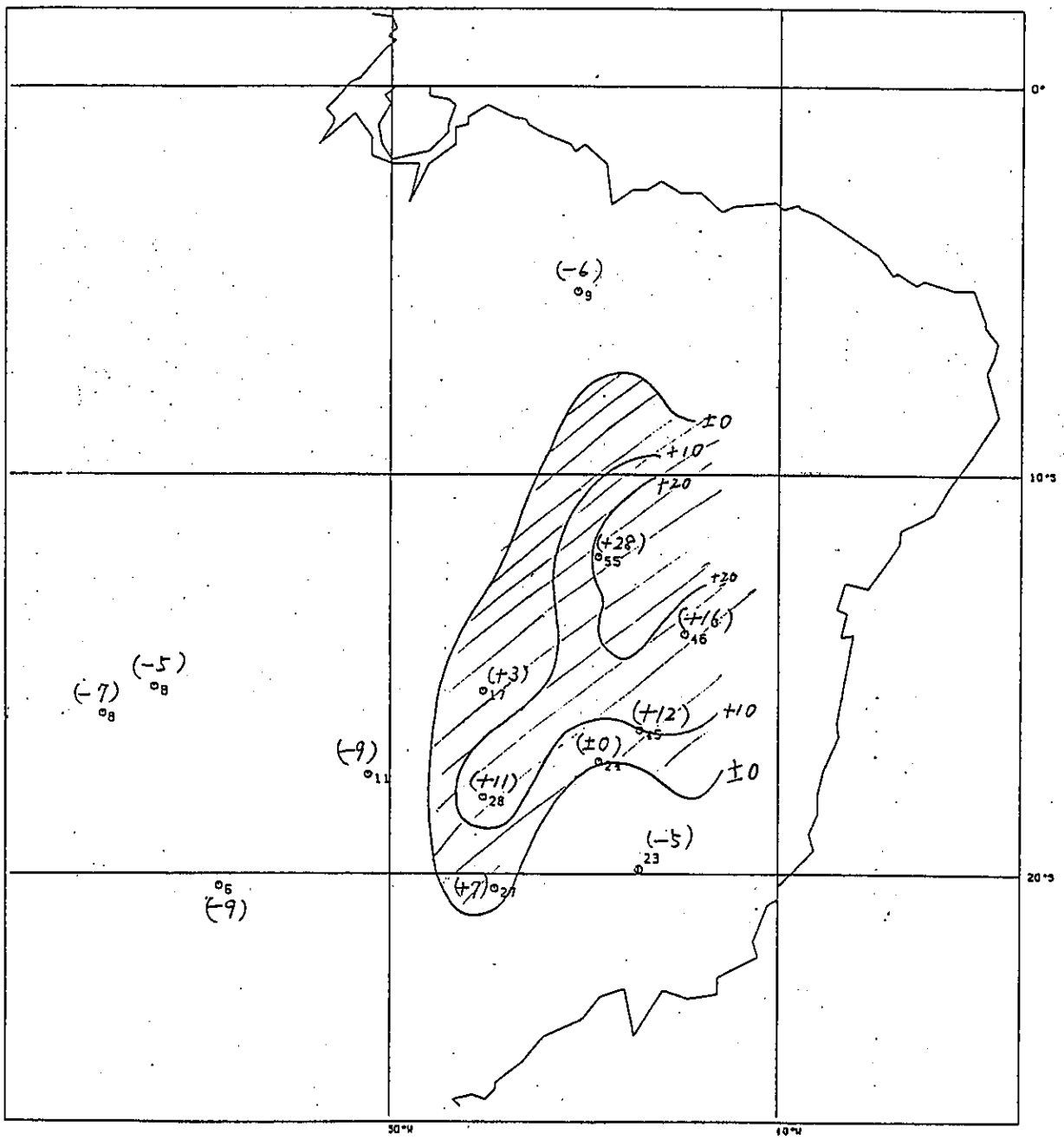

図 6.1.11　1990 年 1 月の無降水継続日数の30年再現期待値との差の分布

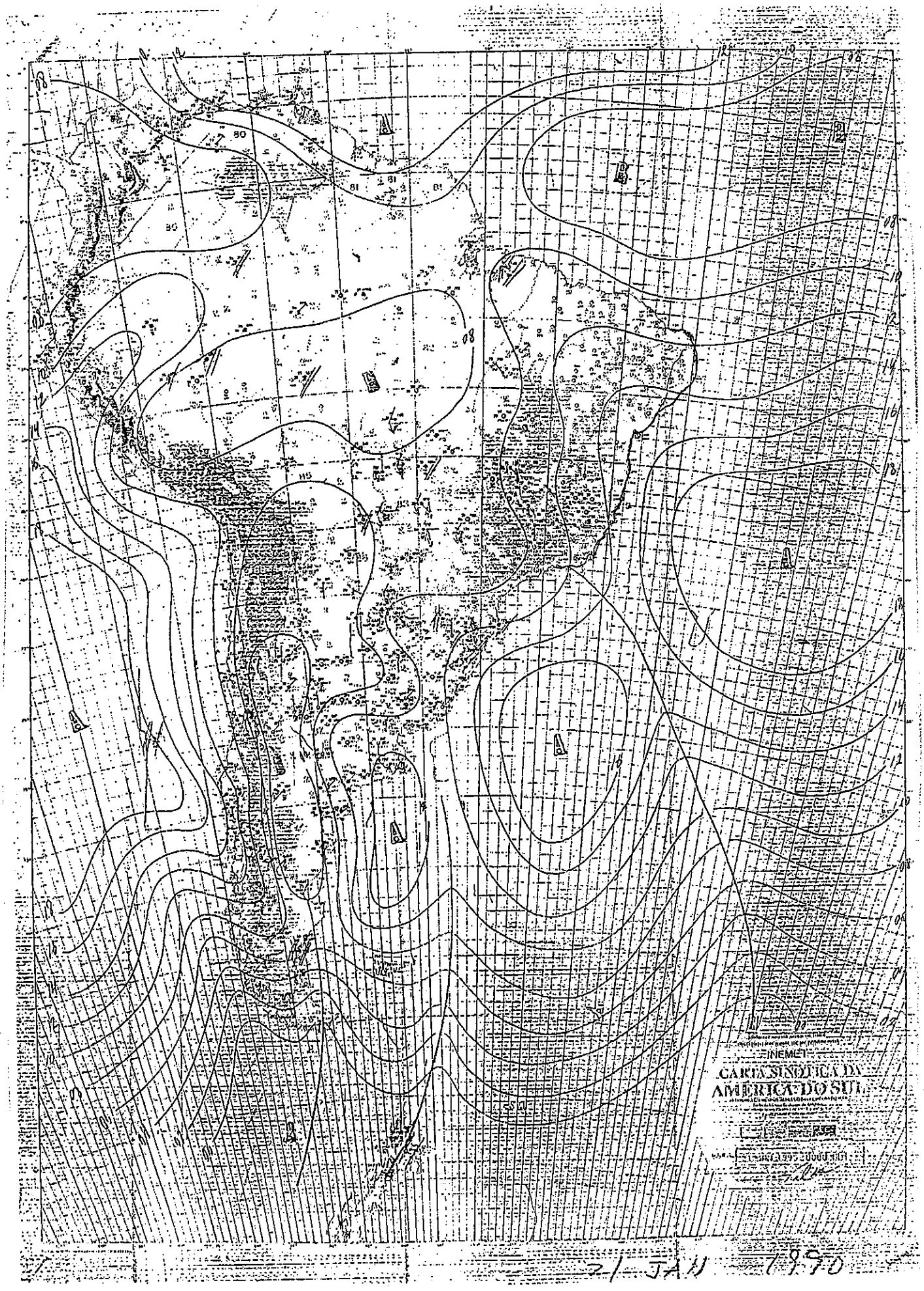

図 6.1.12　1990 年 1 月 21 日の天気図

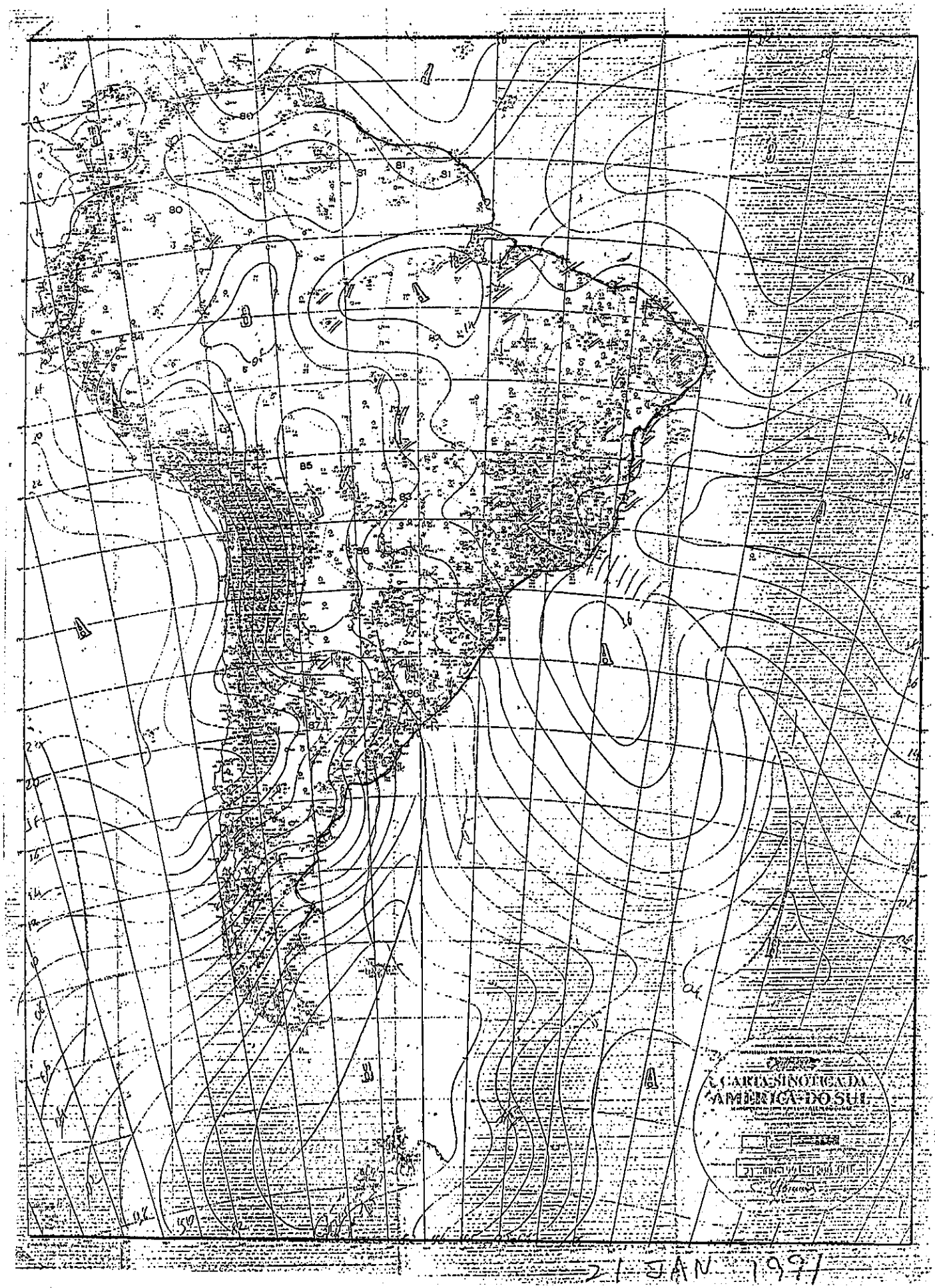

図 6.1.12　1991 年 1 月 21 日の天気図

6-2. ベラニコの発生メカニズムについての仮説の紹介

本研究では主に降水の実測値から統計的アプローチによって、ベラニコの実態を明らかにしてきた。本節では地球規模で見た大気の循環や海洋の表面温度などのマクロな視点からのアプローチしているいくつかの仮説について、その概要を紹介し、今後の研究の方向性について考察した。

1）INPEのDr. Morionの説

INPEのDr. Morionは、筆者がINPEを訪れた際、ベラニコの発生原因について彼の説を直接説明してくれたので、ここで紹介したい。彼の論文はブラジルの学会に発表されており、後日、日本にその論文を送付すると言ってくれたが、現時点ではまだ届いていないので、彼の説明のメモ書きを元にまとめた。

彼の説によるとベラニコの発生に大きく関わっているのは SACZ（南アメリカ収束帯:South America Convergence Zone）の南北への振動と、チリ沖の高気圧のブロッキングによって生じるその停滞に因るものだということだ。また、もう一つの原因としてペルー沖の太平洋の海水温度が通常の年に比べて上昇するエルニーニョ現象によると述べている。

SACZは図 6.2.1の天気図や巻頭に掲載した衛星写真に示されるように、アルゼンチン沖の大西洋からブラジル南部沿岸を貫いて、ブラジル中央部までに達する長大な収束帯で、熱帯気団と温帯気団の境目に生じている。雨季にはこの収束帯がセラード地域の上にかかり、この収束帯に沿ってできた無数の積乱雲群の下の地域に降水をもたらす。この収束帯は通常南北に振動しており、その振動に因って多くの地域に降水をもたらすが、ボリビアン・ハイと呼ばれる高気圧とアルゼンチン沖の高気圧が停滞して、ブロッキングと呼ばれる上層気流の定常状態を作り出すと、この収束帯が停滞してしまい、セラードのある地域に降水がない状態が続く様になる。これがベラニコの一つのパターンである。

もう一つのエルニーニョ現象によるパターンは、次の様な原因による。ペルー沖の太平洋は通常は冷たい寒流が南から流れ込んでいるため、海水温が他の海域に比べて低くなっているが、これが何らかの原因によって水温が上昇することをエルニーニョ現象と呼び、地球全体の大気循環に影響を与えて、以上気象を引き起こすので近年とくに注目されている。図6.1.2に示される様にこの現象が出現すると、通常はアマゾン川の奥地、アンデス山脈の東側で生じていた上昇気流がペルー沖で下降する循環だったのが、ペルー沖の海水温の上昇によってこの海域の空気が暖められ上昇気流域になり、大気の循環のパターンが変わってしまう。これが原因で南アメリカ収束帯が南に押し下げられ、セラード全域で無降水の日が続くようになる。このパタ

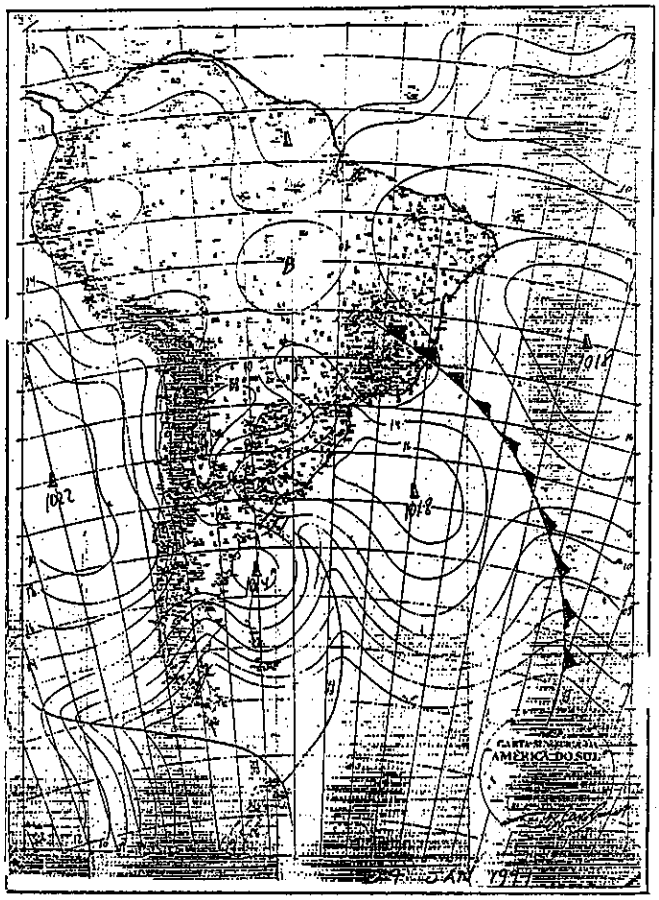

図 6.2.1　雨季の天気図と SACZ （ 1991 年 1 月 24 日）

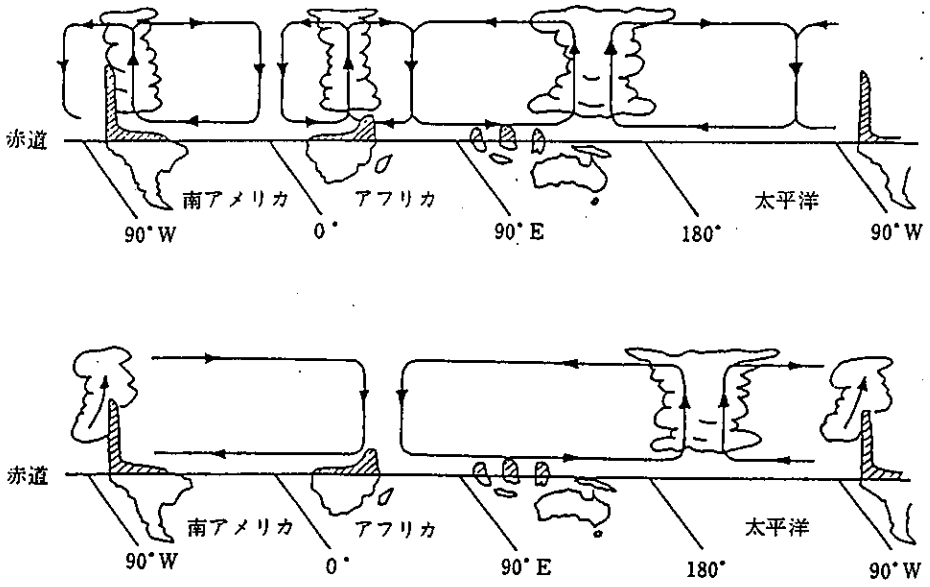

図 6.2.2　赤道対流圏の東西循環を表す模式図

（上）通常の状態
（下）1982／83年の状態（エルニーニョ）

ーンはブロッキング高気圧による無降水より干魃の範囲が広く、被害を受ける地域が広くなるとのことだ。

２）NOAA(アメリカ海洋大気庁：National Oceanic and Atomospheric Administration) の S. George Philander はその著書 "El Niño, La Niña, and the Southern Oscillation "の中で北東ブラジルの降水と大西洋におけるエルニーニョと良く似た海水温の上昇現象との関係について以下のように述べている。

「Southern Oscillation の様な大西洋の水温の年変化は季節のサイクル変化に密接に結びついている。北東ブラジルと南西アフリカを例にとると、年の最初の方の月、この地域の降水は雨季を通じて強められる。普通の年の季節変化だと ITCZ（熱帯収束帯：Inter Tropical Convergence Zone ）は４月から５月にかけての時期、海水温が低下し、貿易風が強まるに伴って、北に向けての移動を開始する。いくつかの寒い乾燥した年はこの北に向けての動きは２月位まで早まる時があり、また、暖かく湿った年には６月位まで遅くなることがある。１９８４年はITCZは７月まで動かなかった。」

「１９８４年は南大西洋の海水の表面温度が例年に比較して高く、貿易風が弱まり、ITCZはいつもの位置より南へ位置し、南西アフリカと北東ブラジルの全域で降水量が多くなっている。」として、赤道の南、大西洋のアフリカ寄り（東側）での表面水温の上昇 → 貿易風の弱まり → ITCZ の南下 → 北東ブラジルでの降水量の増加、という図式が成り立つと述べている。

いずれの説もセラード地域の降水と海洋と大気の相互作用による大気循環システムの変動が大きな相関を持つという点では一致している。今回の研究では統計確率に重きをおいた為これらの説を検証する時間がなかったが、今後、エルニーニョや赤道大西洋の表面水温分布との関係について研究することが重要だと考えられる。

第７章　結論

ブラジル農業研究計画におけるセラード地域の農業計画にとって重要な要素となる、降雨の地域的変異に関して研究を行なった。研究成果について要約すると次の通りである。

（ｉ）セラード地域の無降水継続日数（ベラニコ日数）について、月別、旬別に確率計算を行ない、その再現期待値を求めた。

（ii）再現期間に対応するベラニコ日数の地域的分布を計算機を用いた客観的手法によって、明らかにした。

（iii）日降水量の極値についても、（ｉ）、（ii）と同様に確率計算と地域的分布を求めた。

（iv）（ｉ）、（ii）で得られた結果から、セラード地域の雨季、特に１月における無降水継続日数の地域的分布は西部の地域で短く、東部で長い傾向が見られた。再現期間５年に対応する無降水の継続日数は西部では６～１２日程度であるのに対して東部では２０～２５日の所が多い傾向が見られた。

（v）日降水量の再現期待値分布は月によってその分布形状が違うが、１月の分布に注目すると、南部及び北部の沿岸部で大きく、沿岸部を除く北部で小さい傾向が見られた。

問題点と今後の課題については以下の点が上げられる。

（ｉ）得られたデータの期間が統一されておらず、かなり欠測がある。また、観測地点の分布が南部に集中しており、中央部と北西部の観測点がまばらであるため、まばらな地域の精度が落ちていることが予想できる。今後の観測地点の増設と既にあるデータの管理と整備が大きな課題と考えられる。また、これらの地点を含めて、地形要素を取り入れた、分布図の作成が今後望まれる。

（ii）今回の研究は統計確率的手法を用いたアプローチに重点をおいた調査となったが、今後、もっと多くのケースについて、天気図、海面水温、他の地域の降水量などのデータと比較しながらケーススタディを行ない、ブロッキング・ハイやエルニーニョ現象との関連等のマクロ的な解明を行なうことが、ベラニコ発生の予測等に重要だと考える。

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11,Gumbel ; Extreme Statistics (1948)

（資料）

APPENDICES

Collective information of meteorological statistics in this report is composed of eleven(11) sections each of which contains tables or figures aramged in the following order:

図表類の表示順序

THE ORDER OF FIGURES AND TABLES

order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.
1	ABADIA	22	ARACUA	42	AMARAN	60	CAETEX	79	FORMOS	91	AQUIDA
2	BARREI	23	BAMBUI	43	BARRII	61	CAREIA	80	IMPERA	92	ARAXAX
3	BATALH	24	CARPAR	44	CATALA	62	CELMUR	81	JOSFRE	93	BARRAS
4	BOQUEI	25	CURVEL	45	CONCEI	63	FAZESC	82	LAMOUN	94	CACERE
5	CAMPOM	26	FAZAJU	46	CORIVE	64	GOIANI	83	PARANA	95	CARMAT
6	CARMOX	27	FRUTAL	47	COTEGI	65	GOUVEA	84	POGUAT	96	DIAMAN
7	CAROLI	28	INHUMA	48	FORPII	66	IBIAMG	85	STAJUL	97	GUAICU
8	CUIABA	29	ITAMAR	49	GOIASX	67	IGUATA	86	TAGUAT	98	INAGRO
9	FAZPAL	30	JABOTI	50	JANUAR	68	ITAOBI	87	TAGUAX	99	ITUMBI
10	FORIOP	31	JEQUIT	51	MOCAMB	69	JAGUAR	88	TAPIRA	100	LAGSAN
11	GRAJAU	32	JUPIAX	52	MONCLA	70	JOSEME	89	TERESI	101	MERURI
12	LASSAN	33	LUSSAN	53	MONPAU	71	MATEUS	90	USIVAR	102	PORTOM
13	MANGAX	34	MENDAN	54	MOPILA	72	MTEALE			103	SANBAR
14	PEDROL	35	MINANO	55	SANGRA	73	NOVERA				
15	PORNOV	36	MTECAR	56	SAOMAN	74	PORMAN				
16	QUEIMA	37	PONTEX	57	SCHICO	75	PTNOVA				
17	SAOGON	38	RIOPIR	58	SETLAG	76	SABARA				
18	SAOJOP	39	SANJAC	59	SITGRA	77	TAQUAR				
19	STAMAR	40	STAITA			78	USPETI				
20	TERROR	41	VESPAS								
21	UNIAOX										

(Abbreviated names of observing stations should refer to TABLE 3.1 .)
（短縮名は表3.1.1～5を参照）

（資料　1）
年最大日降水量の年変化

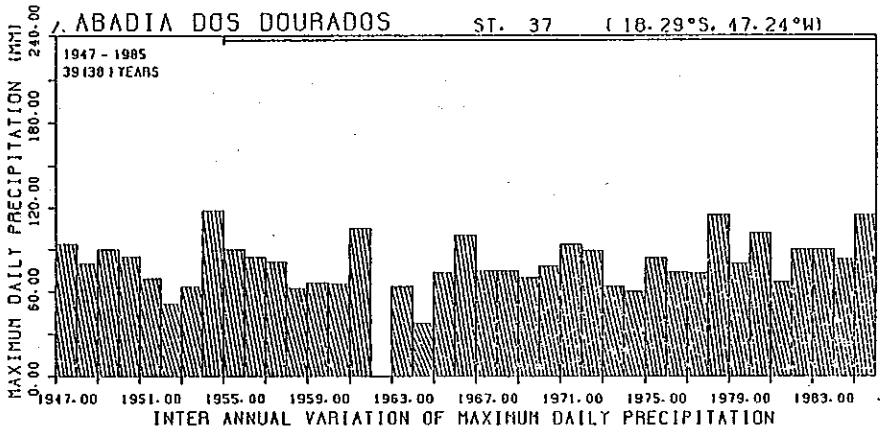
(Section 1)
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

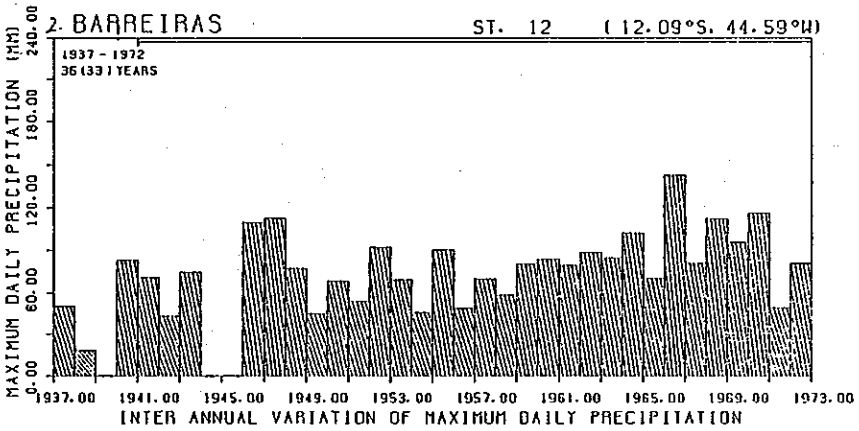
図表類の表示順序

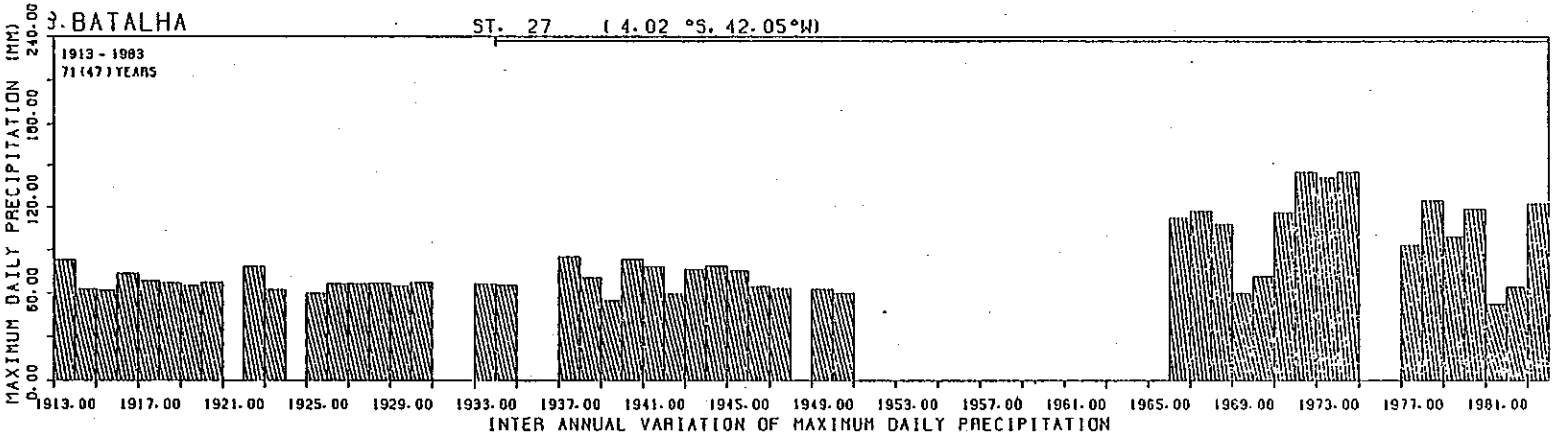
THE ORDER OF FIGURES AND TABLES

order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.
1	ABADIA	22	ARACUA	42	AMARAN	60	CAETEX	79	FORMOS	91	AQUIDA
2	BARREI	23	BAMBUI	43	BARRII	61	CAREIA	80	IMPERA	92	ARAXAX
3	BATALH	24	CARPAR	44	CATALA	62	CELMUR	81	JOSFRE	93	BARRAS
4	BOQUEI	25	CURVEL	45	CONCEI	63	FAZESC	82	LAMOUN	94	CACERE
5	CAMPOM	26	FAZAJU	46	CORIVE	64	GOIANI	83	PARANA	95	CARMAT
6	CARMOX	27	FRUTAL	47	COTEGI	65	GOUVEA	84	POGUAT	96	DIAMAN
7	CAROLI	28	INHUMA	48	FORPII	66	IBIAMG	85	STAJUL	97	GUAICU
8	CUIABA	29	ITAMAR	49	GOIASX	67	IGUATA	86	TAGUAT	98	INAGRO
9	FAZPAL	30	JABOTI	50	JANUAR	68	ITAOBI	87	TAGUAX	99	ITUMBI
10	FORIOP	31	JEQUIT	51	MOCAMB	69	JAGUAR	88	TAPIRA	100	LAGSAN
11	GRAJAU	32	JUPIAX	52	MONCLA	70	JOSEME	89	TERESI	101	MERURI
12	LASSAN	33	LUSSAN	53	MONPAU	71	MATEUS	90	USIVAR	102	PORTOM
13	MANGAX	34	MENDAN	54	MOPILA	72	MTEALE			103	SANBAR
14	PEDROL	35	MINANO	55	SANGRA	73	NOVERA				
15	PORNOV	36	MTECAR	56	SAOMAN	74	PORMAN				
16	QUEIMA	37	PONTEX	57	SCHICO	75	PTNOVA				
17	SAOGON	38	RIOPIR	58	SETLAG	76	SABARA				
18	SAOJOP	39	SANJAC	59	SITGRA	77	TAQUAR				
19	STAMAR	40	STAITA			78	USPETI				
20	TERROR	41	VESPAS								
21	UNIAOX										

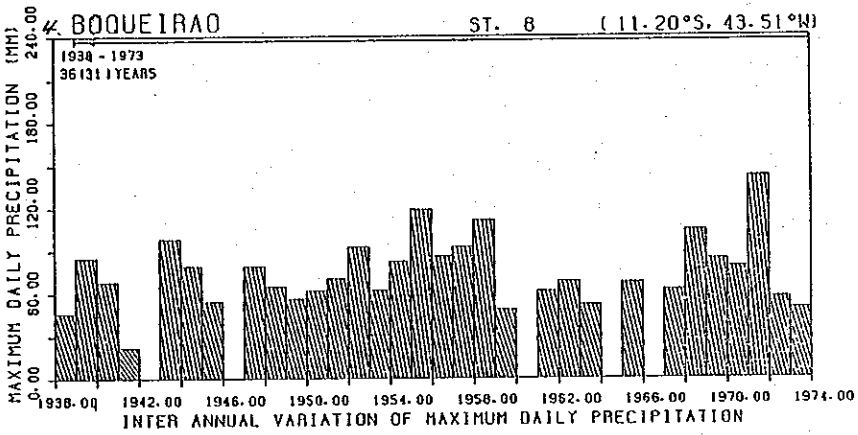
(Abbreviated names of observing stations should refer to TABLE 3.1~5)
（短縮名は表3. 1～5を参照）


1. ABADIA DOS DOURADOS ST. 37 (16.29°S, 47.24°W)
1947 - 1985
39(38) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1947.00 1951.00 1955.00 1959.00 1963.00 1967.00 1971.00 1975.00 1979.00 1983.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

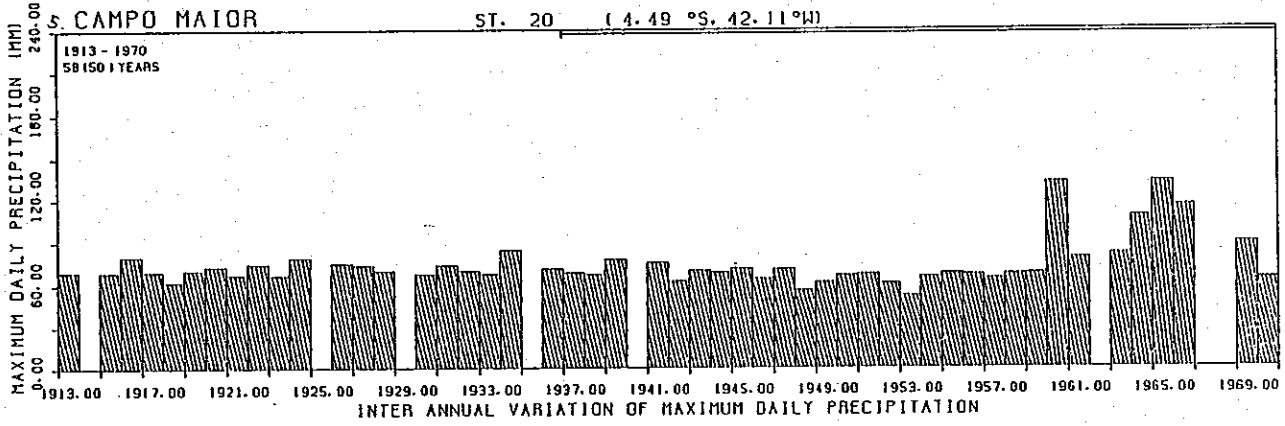

2. BARREIRAS ST. 12 (12.09°S, 44.59°W)
1937 - 1972
36(33) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


3. BATALHA ST. 27 (4.02 °S, 42.05°W)
1913 - 1983
71(47) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1913.00 1917.00 1921.00 1925.00 1929.00 1933.00 1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

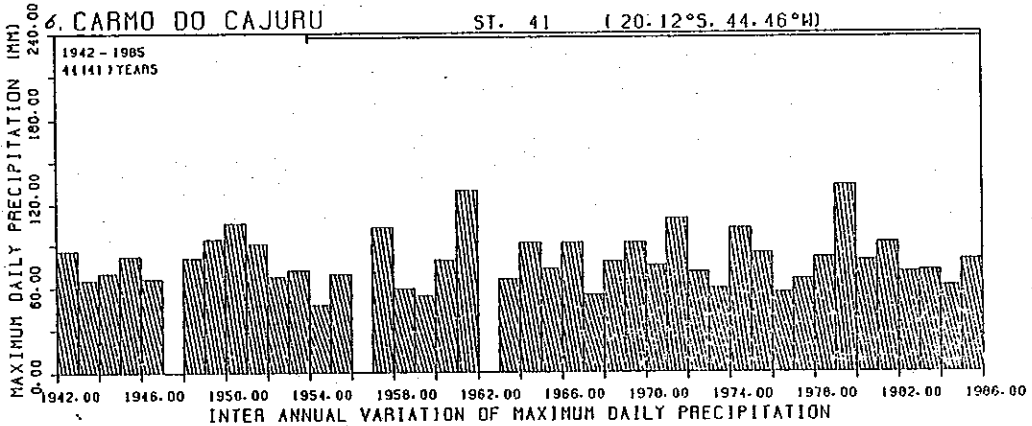
4. BOQUEIRAO ST. 8 (11.20°S, 43.51°W)

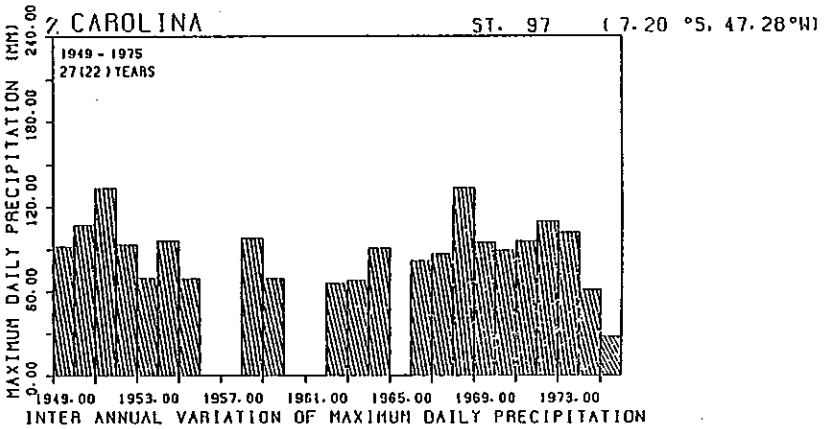


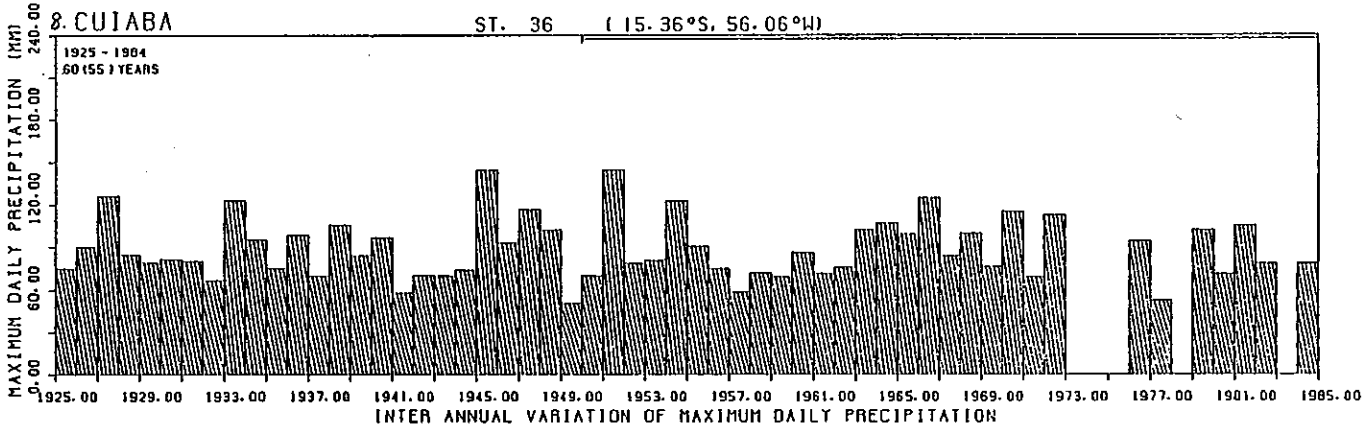
5. CAMPO MAIOR ST. 20 (4.49 °S, 42.11°W)

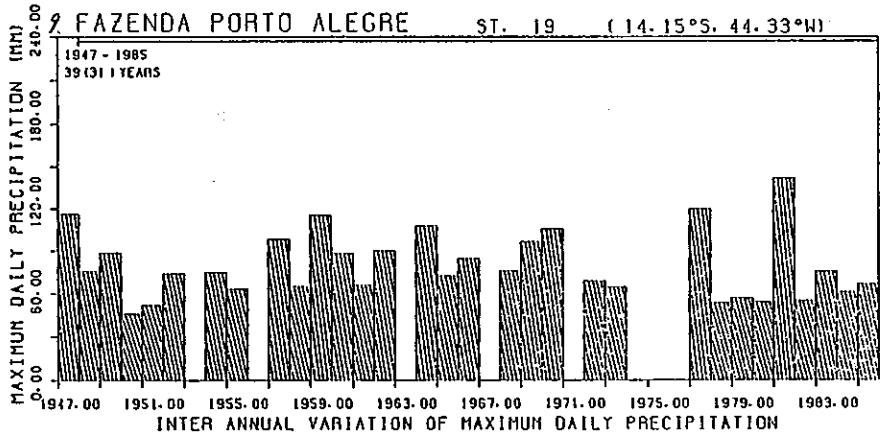


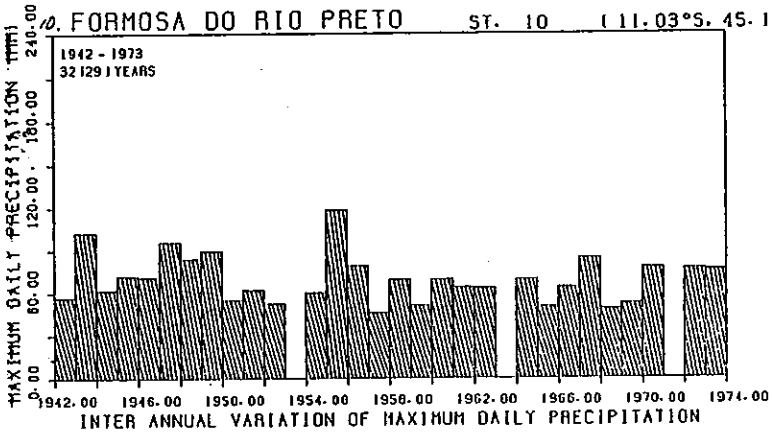
6. CARMO DO CAJURU ST. 41 (20.12°S, 44.46°W)

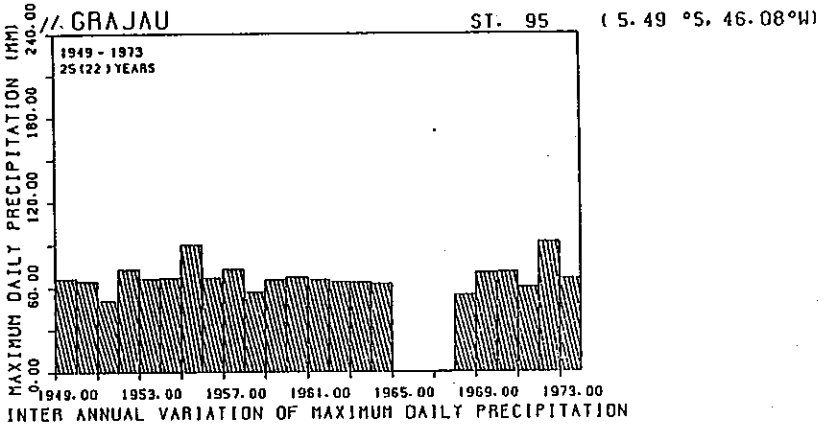


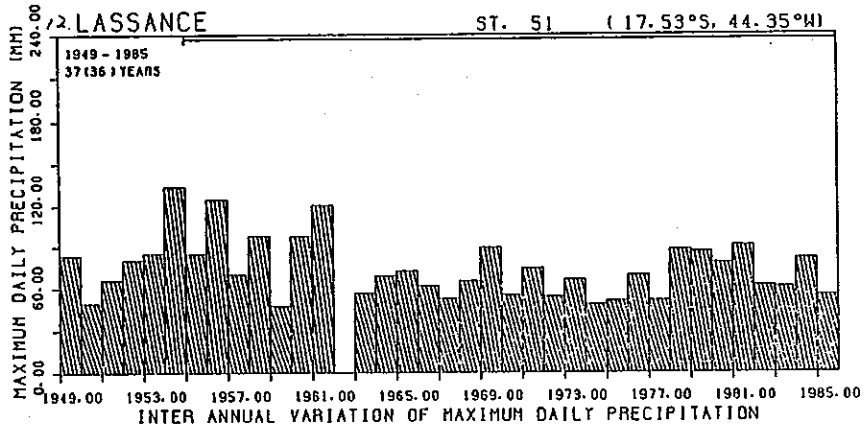

7. CAROLINA
ST. 97
(7.20 °S, 47.28°W)
1949 - 1975
27(22) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

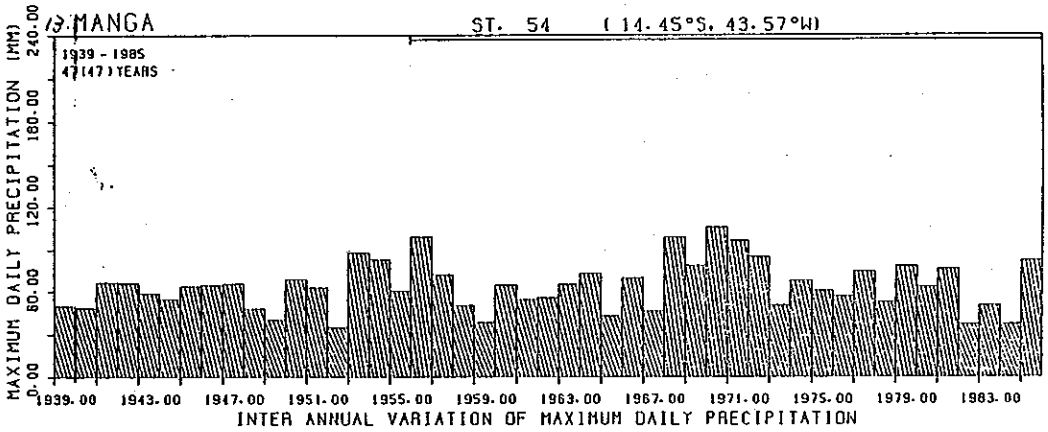

8. CUIABA
ST. 36
(15.36°S, 56.06°W)
1925 - 1984
60(55) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1925.00 1929.00 1933.00 1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

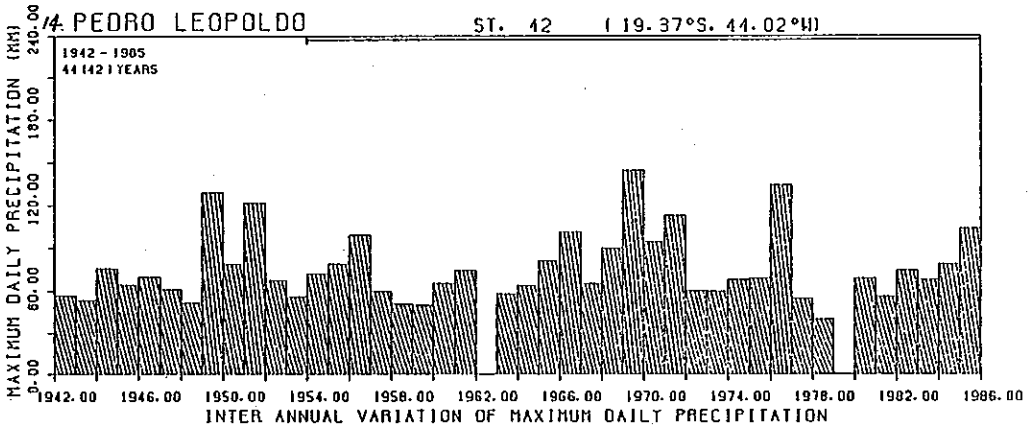

9. FAZENDA PORTO ALEGRE
ST. 19
(14.15°S, 44.33°W)
1947 - 1985
39(31) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1947.00 1951.00 1955.00 1959.00 1963.00 1967.00 1971.00 1975.00 1979.00 1983.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

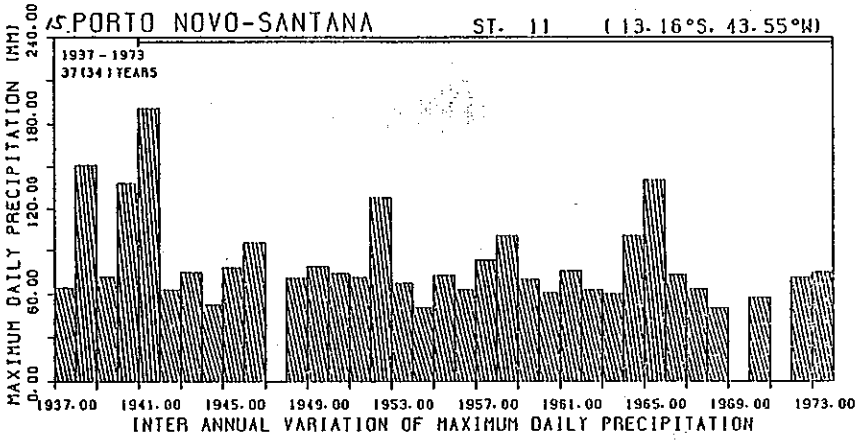

10. FORMOSA DO RIO PRETO ST. 10 (11.03°S, 45.12°W)
1942 - 1973
32 (29) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


11. GRAJAU ST. 95 (5.49 °S, 46.08°W)
1949 - 1973
25 (22) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

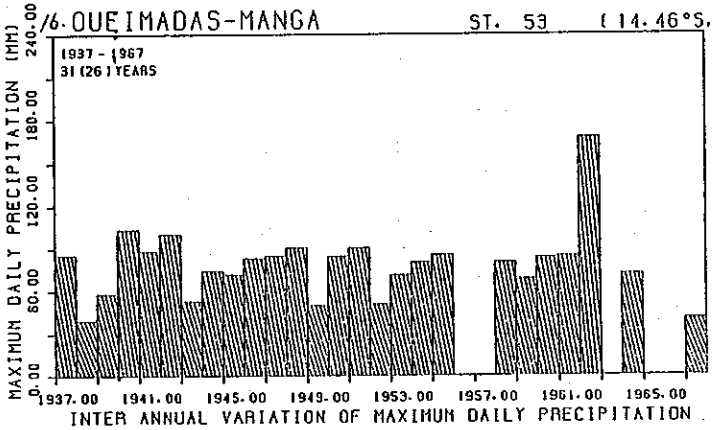

12. LASSANCE ST. 51 (17.53°S, 44.35°W)
1949 - 1985
37 (36) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


13 MANGA
ST. 54 (14.45°S, 43.57°W)
1939 - 1985
47 (47) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1939.00 1943.00 1947.00 1951.00 1955.00 1959.00 1963.00 1967.00 1971.00 1975.00 1979.00 1983.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

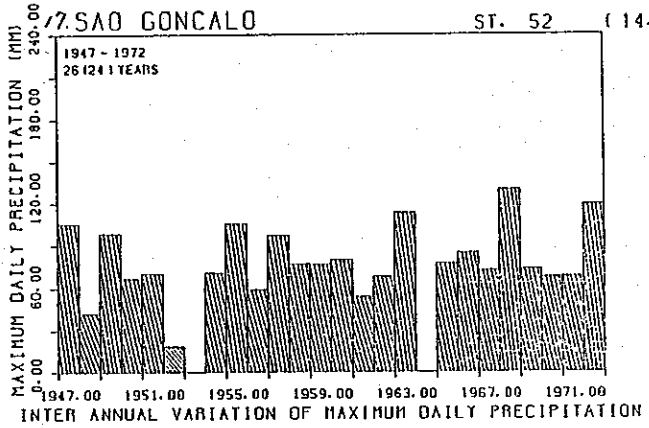

14 PEDRO LEOPOLDO
ST. 42 (19.37°S, 44.02°W)
1942 - 1985
44 (42) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00 1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


15 PORTO NOVO-SANTANA
ST. 11 (13.16°S, 43.55°W)
1937 - 1973
37 (34) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

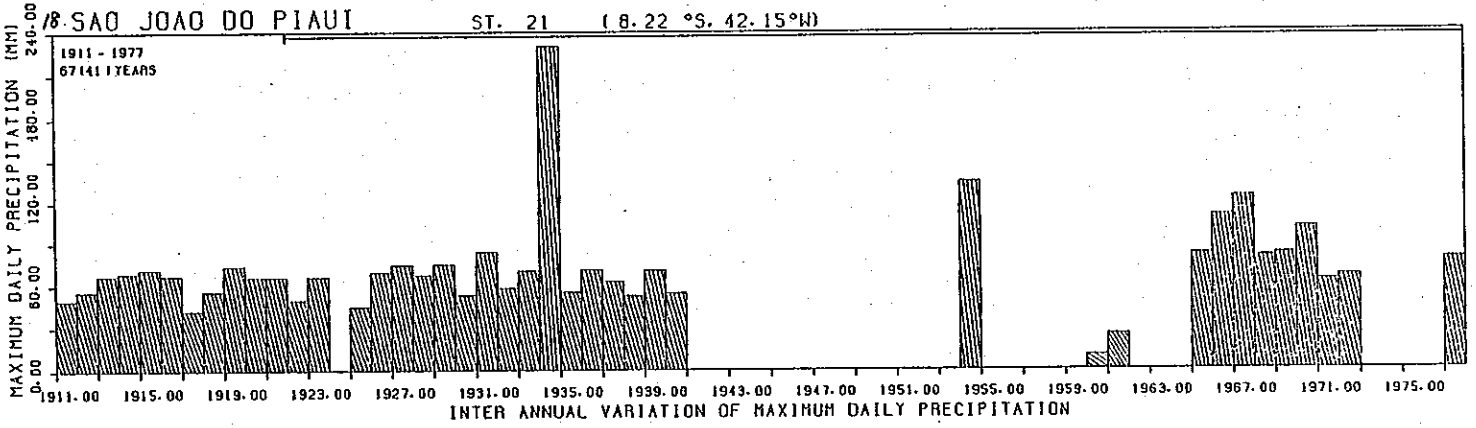
/6. QUEIMADAS-MANGA ST. 53 (14.46°S, 43.35°W)

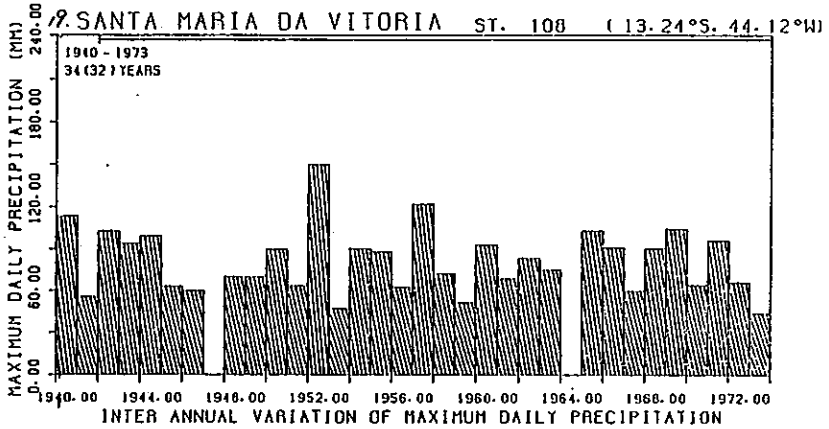


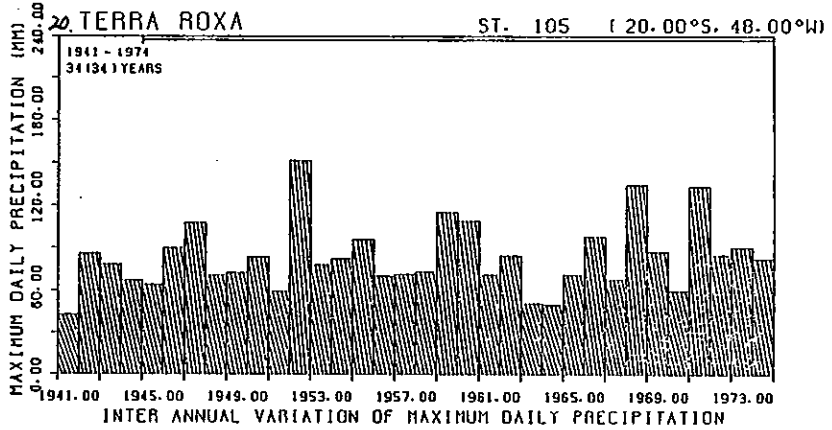
/7. SAO GONCALO ST. 52 (14.20°S, 44.32°W)

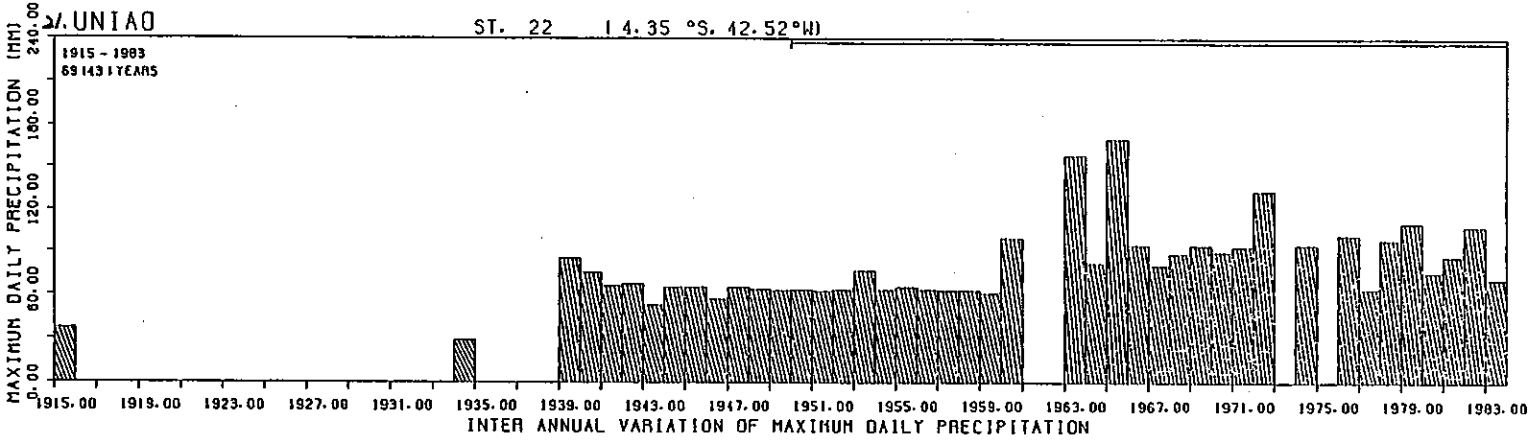


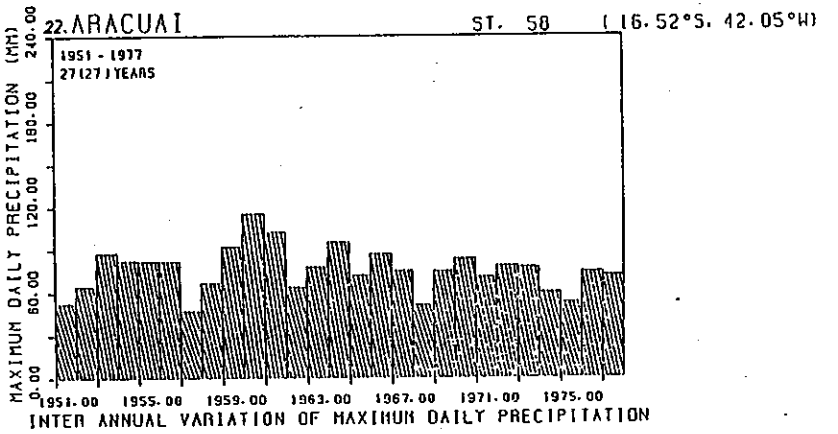
/8. SAO JOAO DO PIAUI ST. 21 (8.22 °S, 42.15°W)

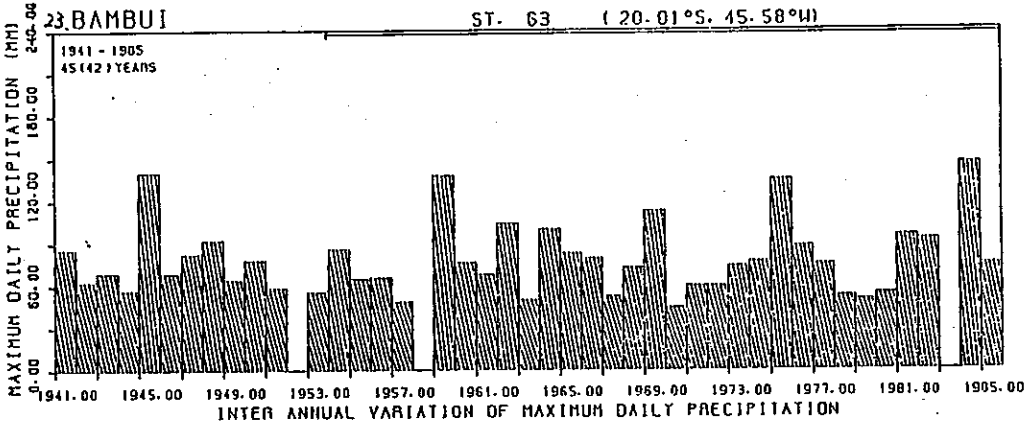


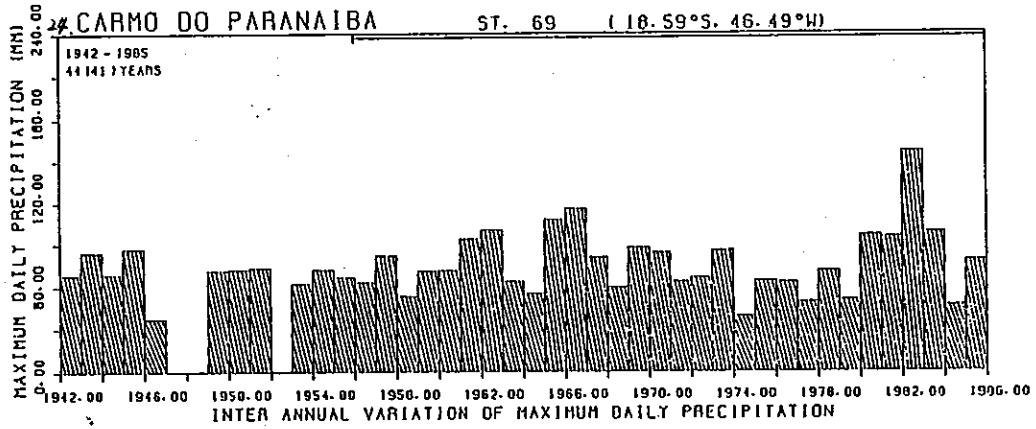

19. SANTA MARIA DA VITORIA ST. 108 (13.24°S. 44.12°W)
1940 - 1973
34(32) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1940.00 1944.00 1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

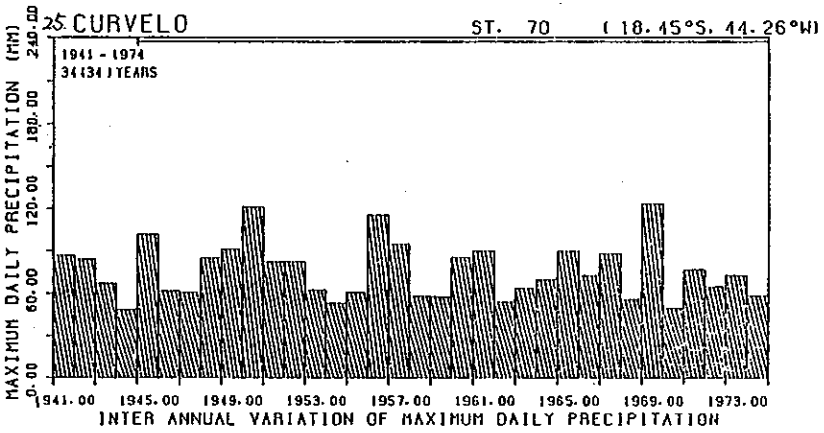

20. TERRA ROXA ST. 105 (20.00°S. 48.00°W)
1941 - 1974
34(34) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

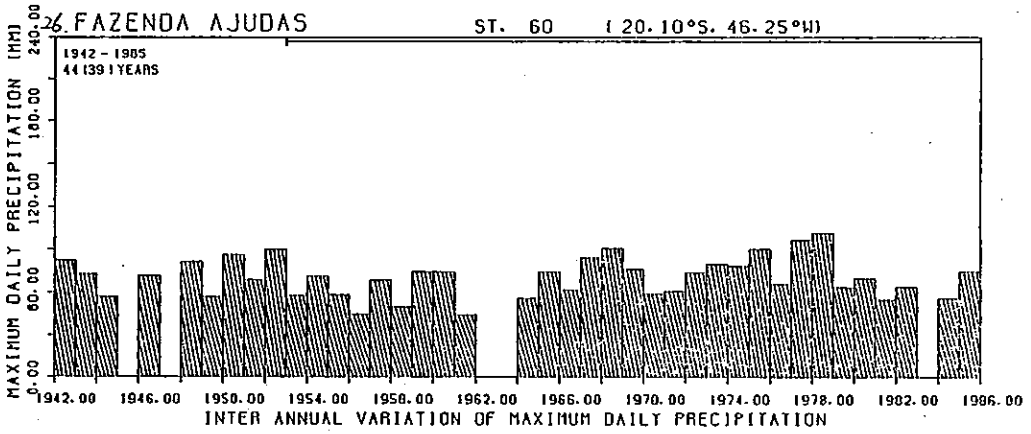

21. UNIAO ST. 22 (4.35 °S. 42.52°W)
1915 - 1983
69(43) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1915.00 1919.00 1923.00 1927.00 1931.00 1935.00 1939.00 1943.00 1947.00 1951.00 1955.00 1959.00 1963.00 1967.00 1971.00 1975.00 1979.00 1983.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

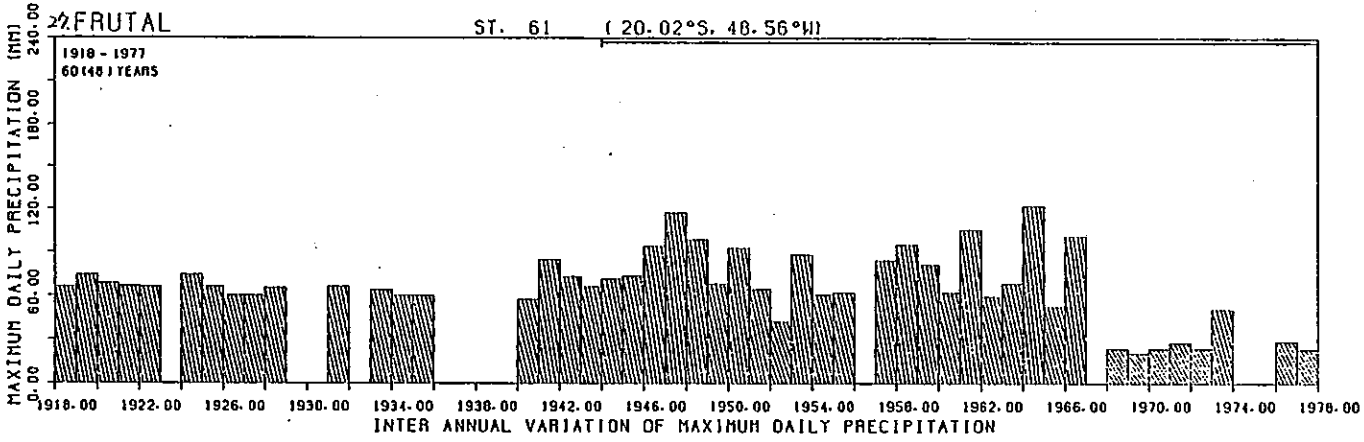

22.ARACUAI
ST. 58
(16.52°S. 42.05°W)
1951 - 1977
27(27) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1951.00
1955.00
1959.00
1963.00
1967.00
1971.00
1975.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


23.BAMBUI
ST. 63
(20.01°S. 45.58°W)
1941 - 1985
45(42) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

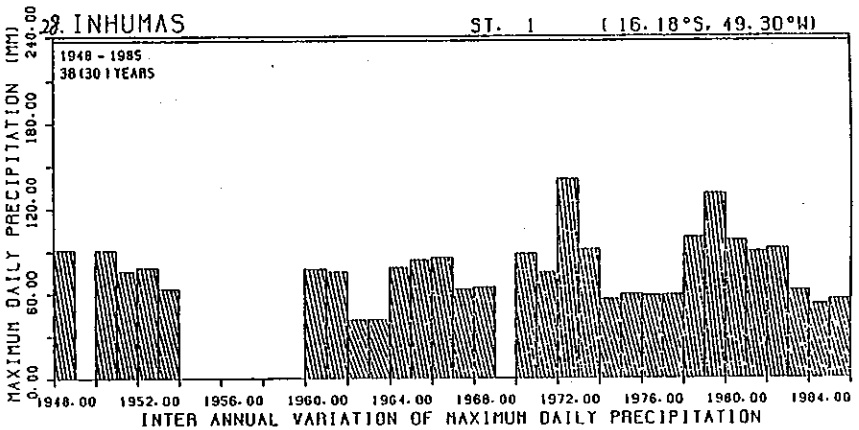

24.CARMO DO PARANAIBA
ST. 69
(18.59°S. 46.49°W)
1942 - 1985
44(41) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


25 CURVELO
ST. 70
(18.45°S, 44.26°W)
1941 - 1974
34 (34) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

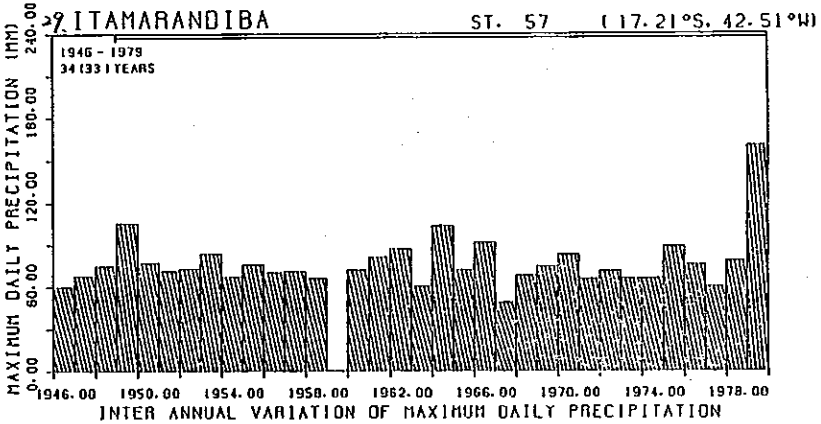

26 FAZENDA AJUDAS
ST. 60
(20.10°S, 46.25°W)
1942 - 1985
44 (39) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00 1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


27 FRUTAL
ST. 61
(20.02°S, 48.56°W)
1918 - 1977
60 (48) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1918.00 1922.00 1926.00 1930.00 1934.00 1938.00 1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

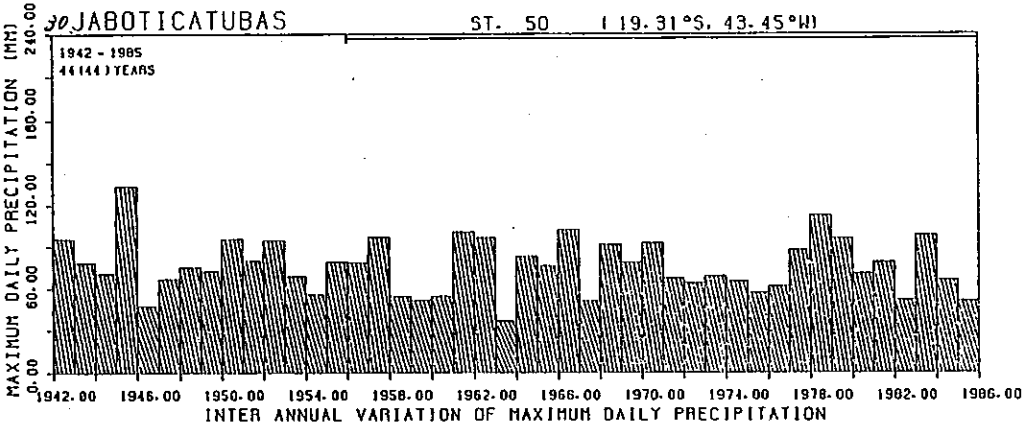
28. INHUMAS ST. 1 (16.18°S, 49.30°W)

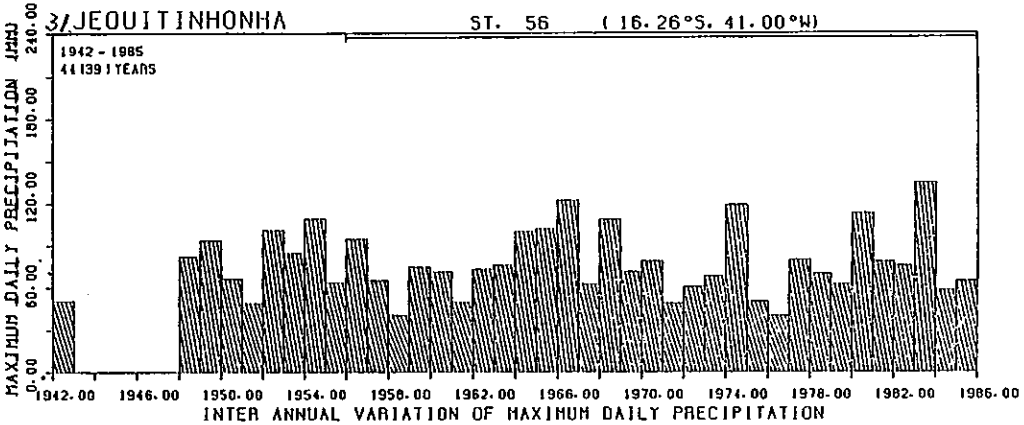


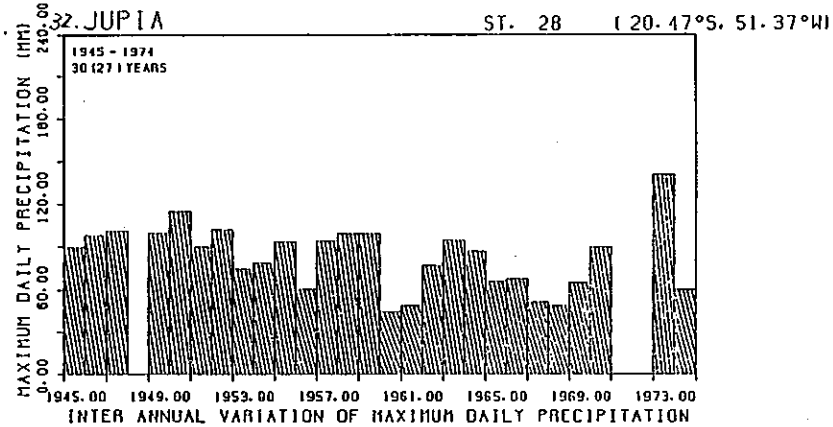
29. ITAMARANDIBA ST. 57 (17.21°S, 42.51°W)

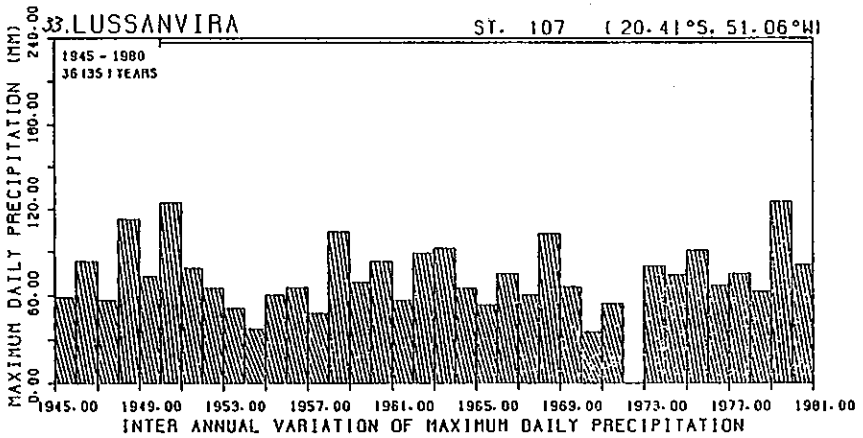


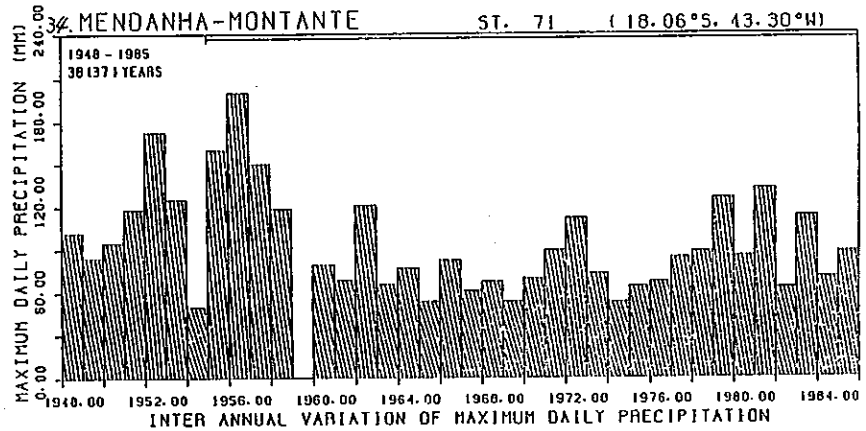
30 JABOTICATUBAS ST. 50 (19.31°S, 43.45°W)

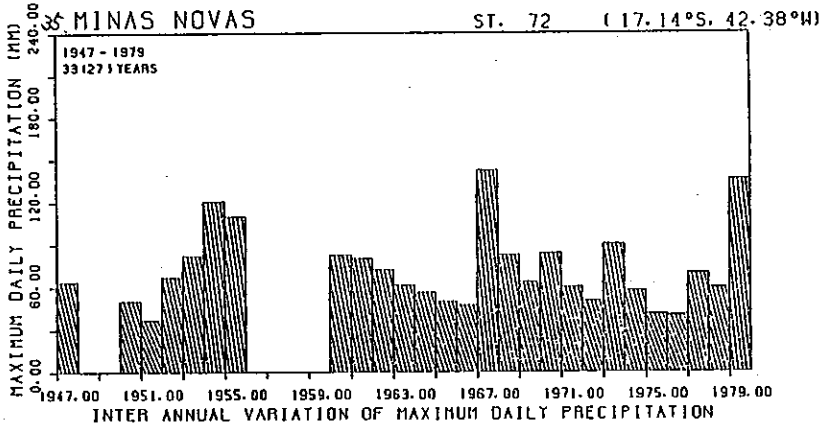


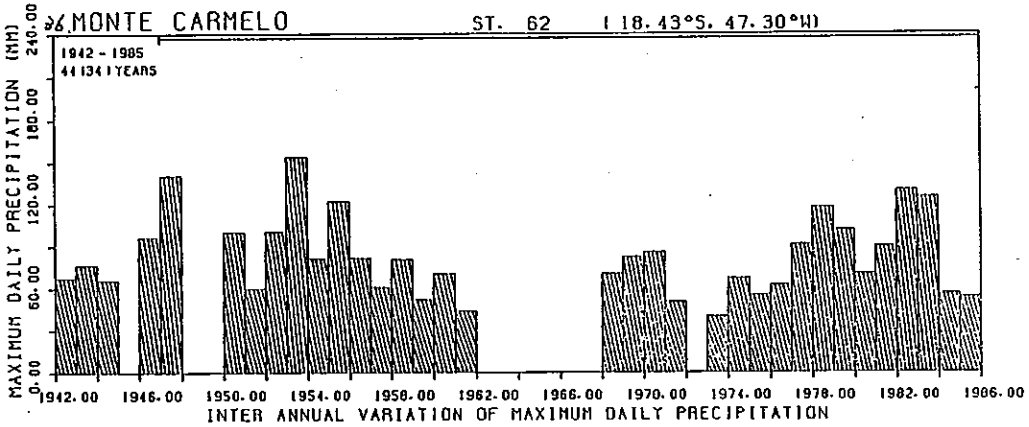

31.JEQUITINHONHA
ST. 56
(16.26°S. 41.00°W)
1942 - 1985
44 (39) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

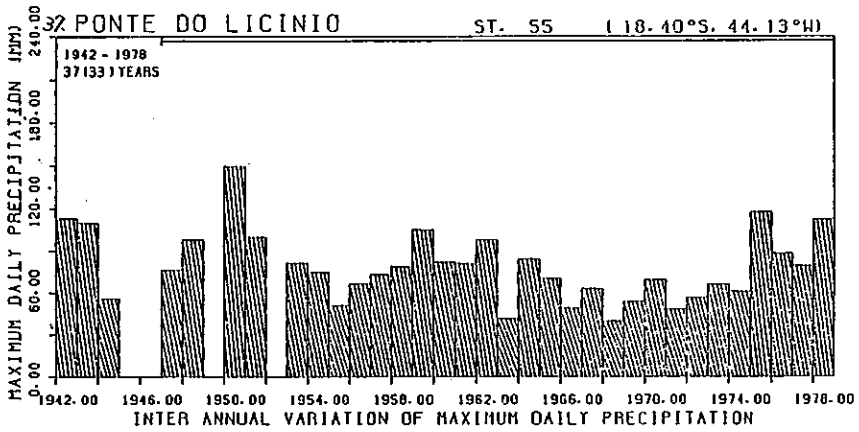

32.JUPIA
ST. 28
(20.47°S. 51.37°W)
1945 - 1974
30 (27) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

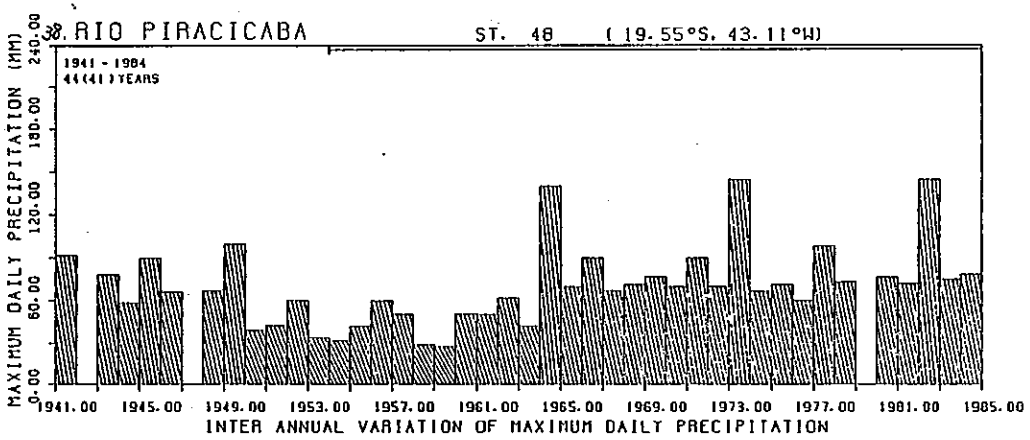

33.LUSSANVIRA
ST. 107
(20.41°S. 51.06°W)
1945 - 1980
36 (35) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

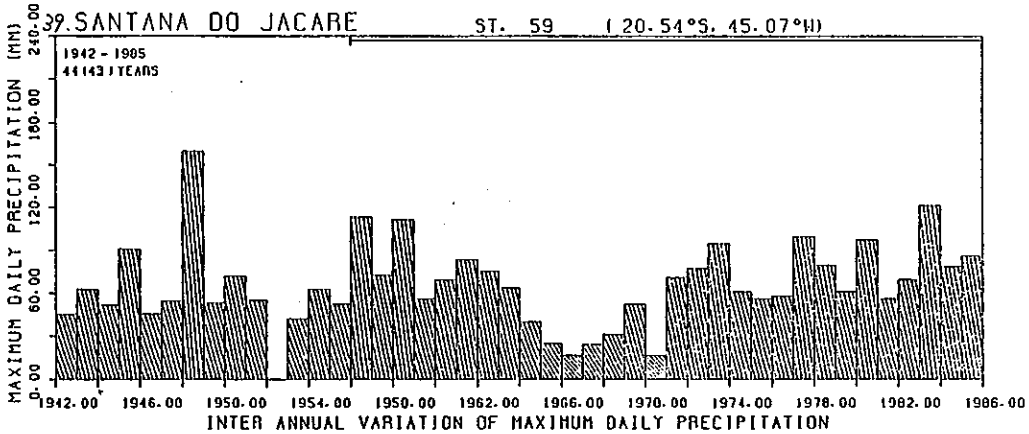

34 MENDANHA-MONTANTE ST. 71 (18.06°S. 43.30°W)
1948 - 1985
38 (37) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00 1976.00 1980.00 1984.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

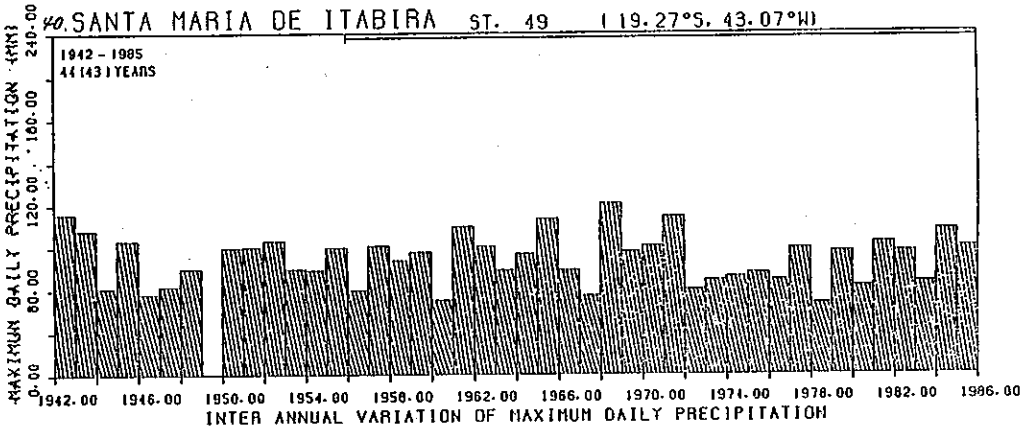

35 MINAS NOVAS ST. 72 (17.14°S. 42.38°W)
1947 - 1979
33 (27) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1947.00 1951.00 1955.00 1959.00 1963.00 1967.00 1971.00 1975.00 1979.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

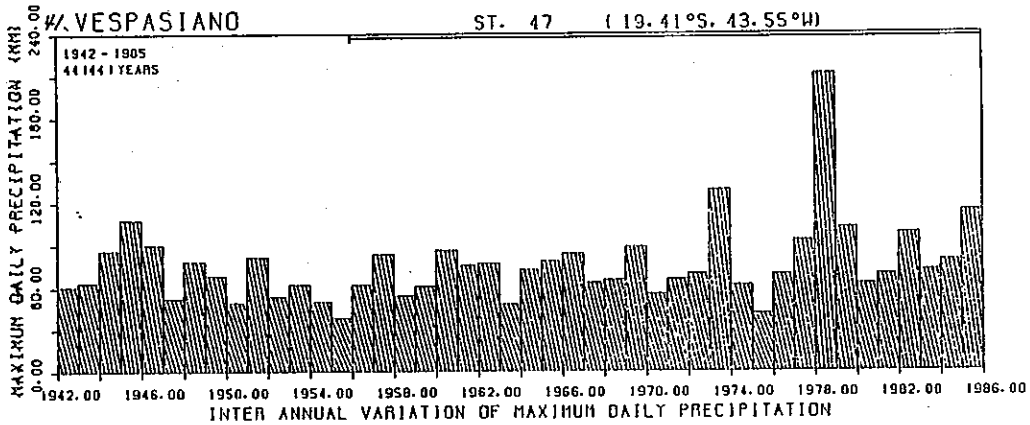

36 MONTE CARMELO ST. 62 (18.43°S. 47.30°W)
1942 - 1985
44 (34) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00 1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

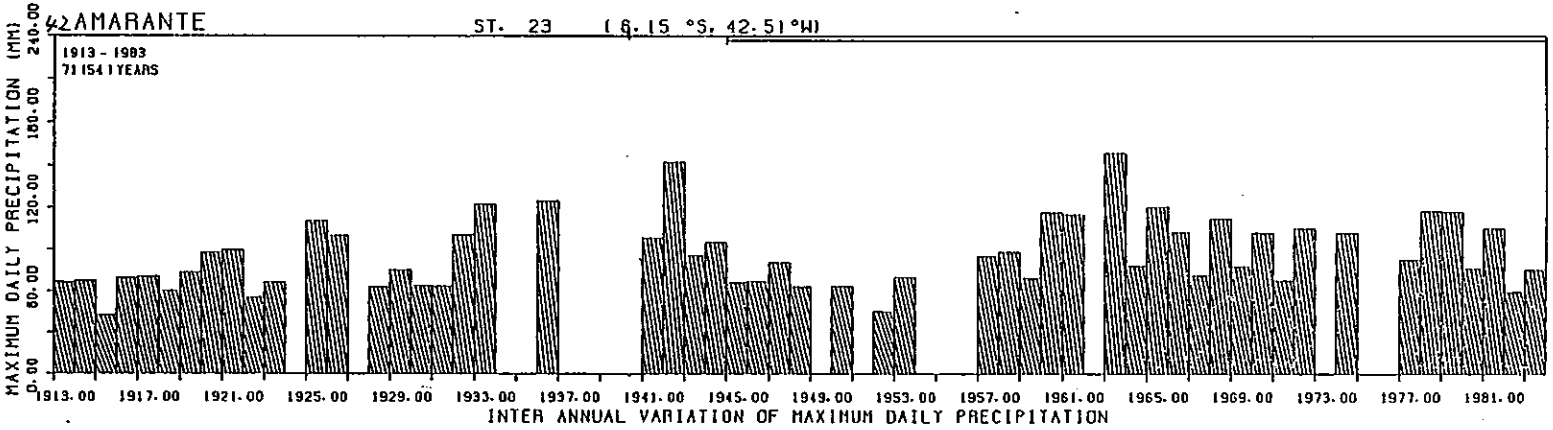

37.PONTE DO LICINIO ST. 55 (18.40°S, 44.13°W)
1942 - 1978
37(33) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

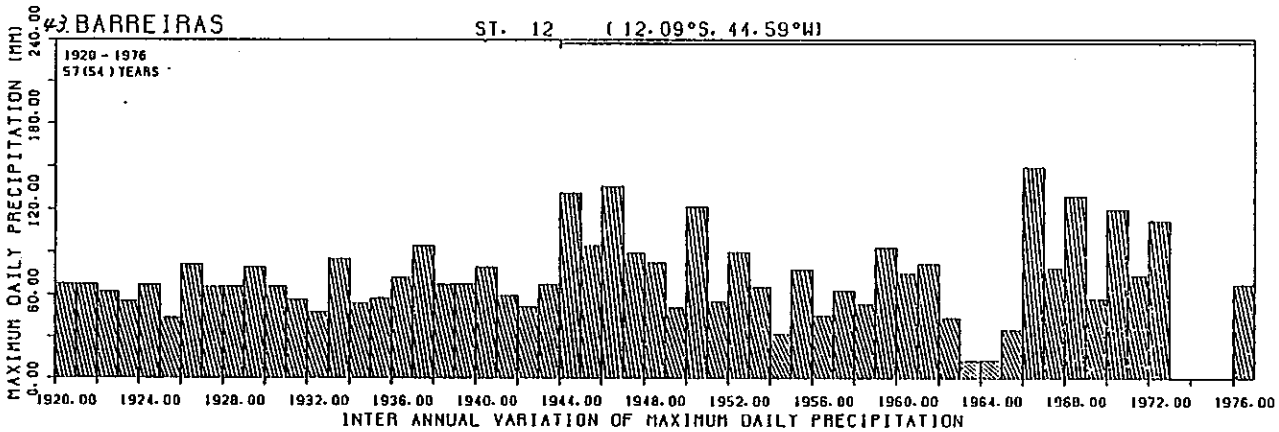

38.RIO PIRACICABA ST. 48 (19.55°S, 43.11°W)
1941 - 1984
44(41) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

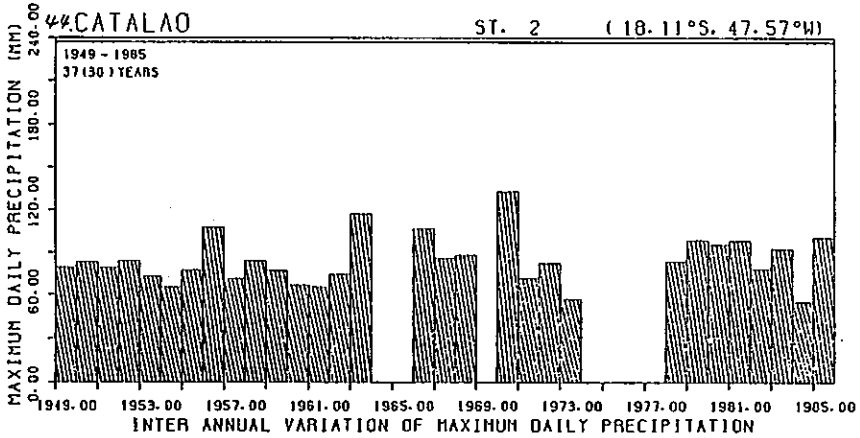

39.SANTANA DO JACARE ST. 59 (20.54°S, 45.07°W)
1942 - 1985
44(43) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

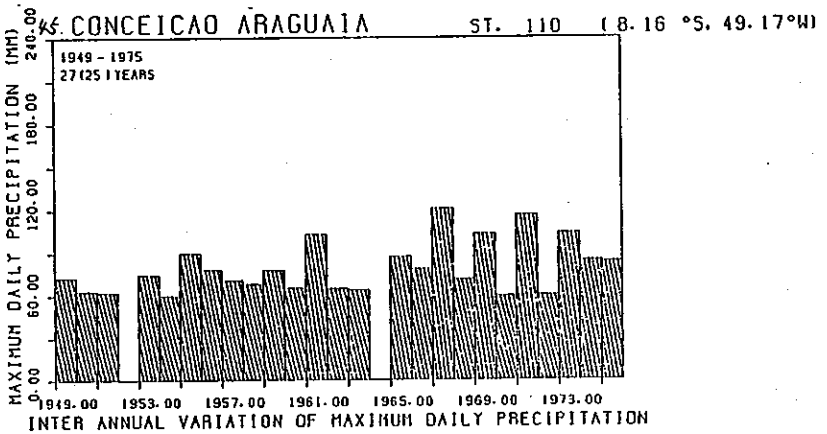

SANTA MARIA DE ITABIRA ST. 49 (19.27°S. 43.07°W)
1942 - 1985
44 (43) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
80.00
120.00
160.00
240.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00 1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

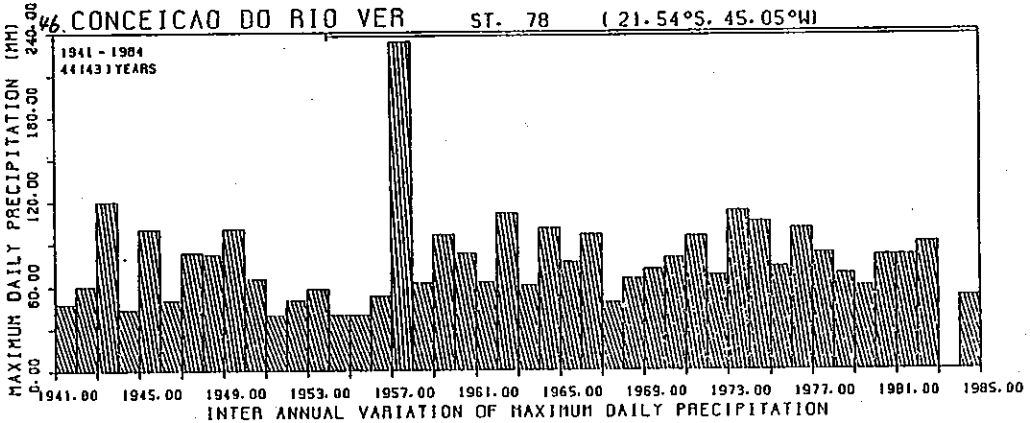

VESPASIANO ST. 47 (19.41°S. 43.55°W)
1942 - 1985
44 (44) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
80.00
120.00
160.00
240.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00 1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

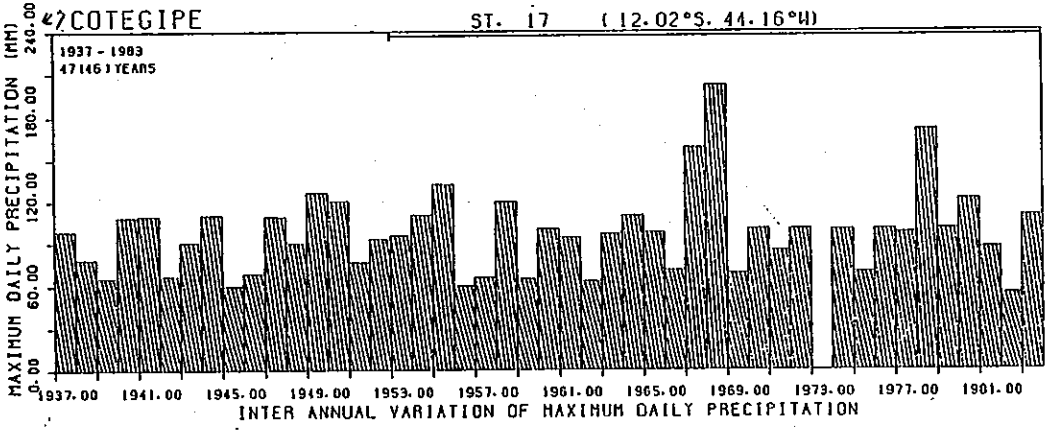

#2 AMARANTE
ST. 23
(6.15 °S, 42.51°W)
1913 - 1983
71(54) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1913.00 1917.00 1921.00 1925.00 1929.00 1933.00 1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

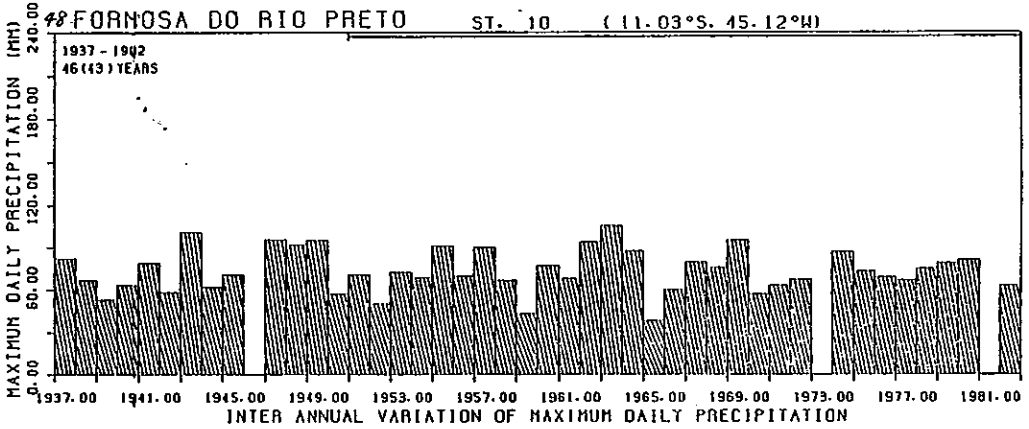

#3 BARREIRAS
ST. 12
(12.09°S, 44.59°W)
1920 - 1976
57(54) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1920.00 1924.00 1928.00 1932.00 1936.00 1940.00 1944.00 1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00 1976.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

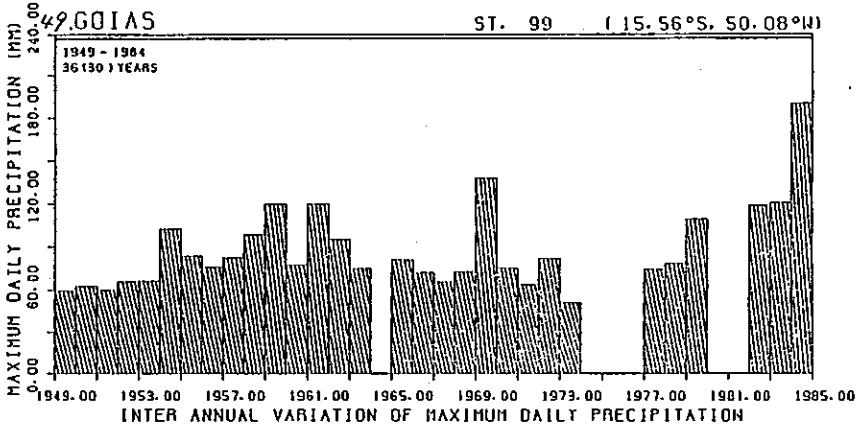

#4 CATALAO
ST. 2
(18.11°S, 47.57°W)
1949 - 1985
37(30) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

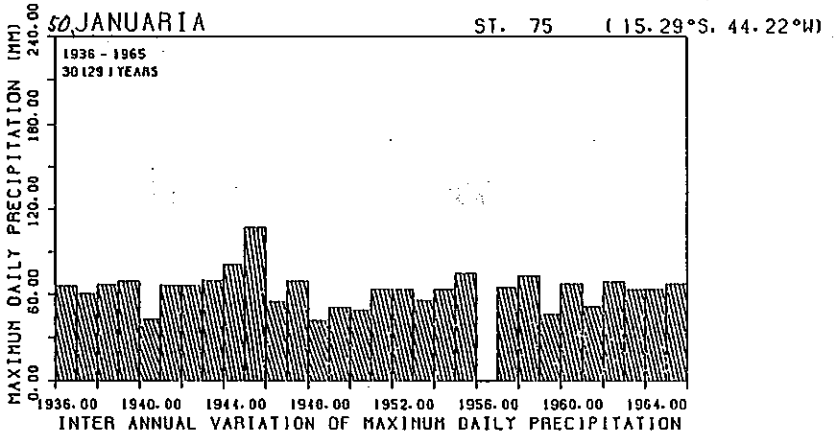

45 CONCEICAO ARAGUAIA ST. 110 (8.16 °S, 49.17°W)
1949 - 1975
27 (25) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

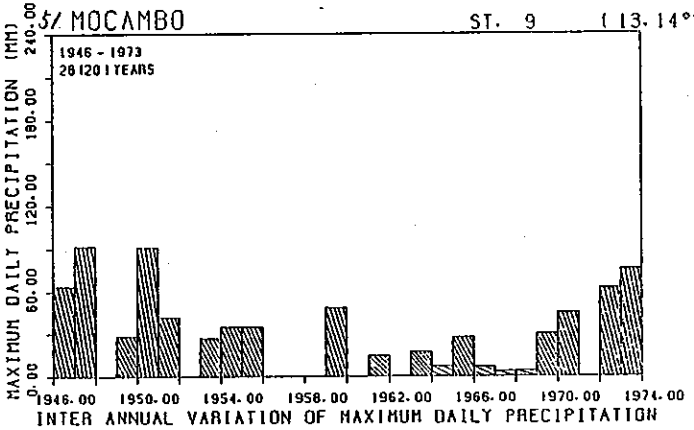

46 CONCEICAO DO RIO VER ST. 78 (21.54°S, 45.05°W)
1941 - 1984
44 (43) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

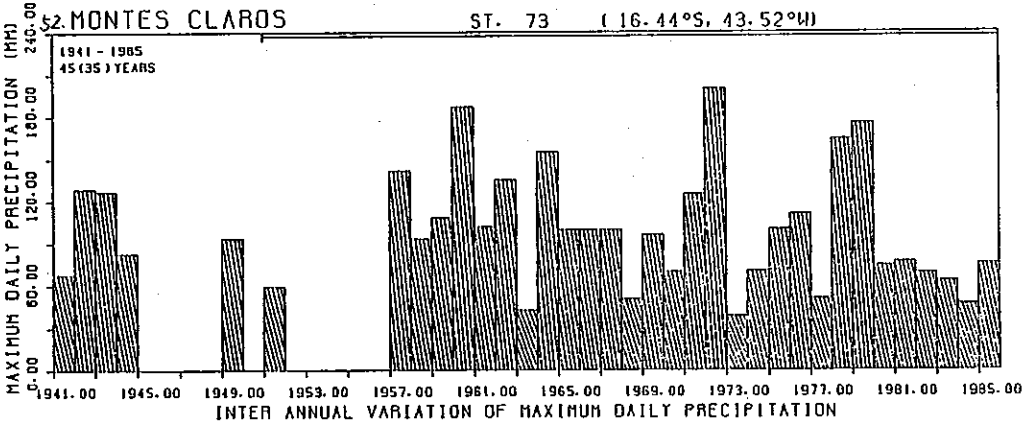

47 COTEGIPE ST. 17 (12.02°S, 44.16°W)
1937 - 1983
47 (46) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1937.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

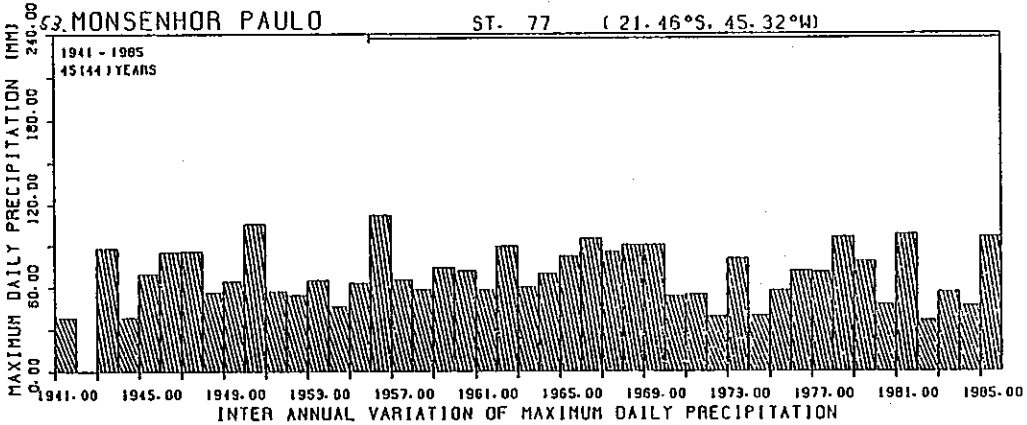

48 FORMOSA DO RIO PRETO ST. 10 (11.03°S. 45.12°W)
1937 - 1982
46 (43) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

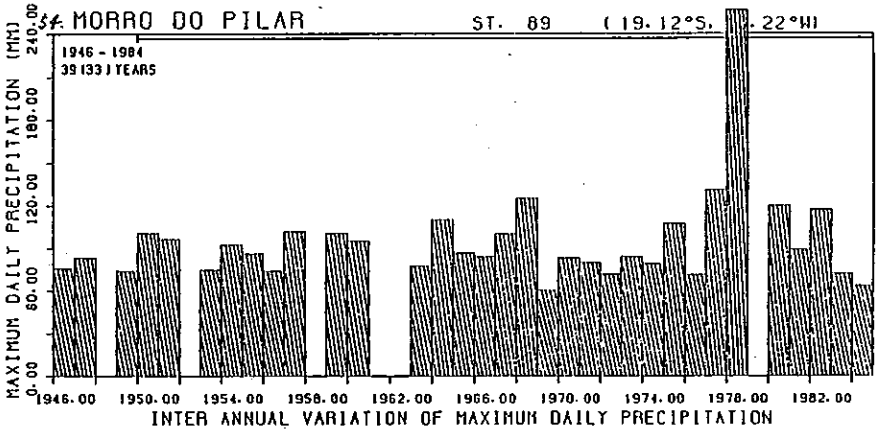

49 GOIAS ST. 99 (15.56°S. 50.08°W)
1949 - 1984
36 (30) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

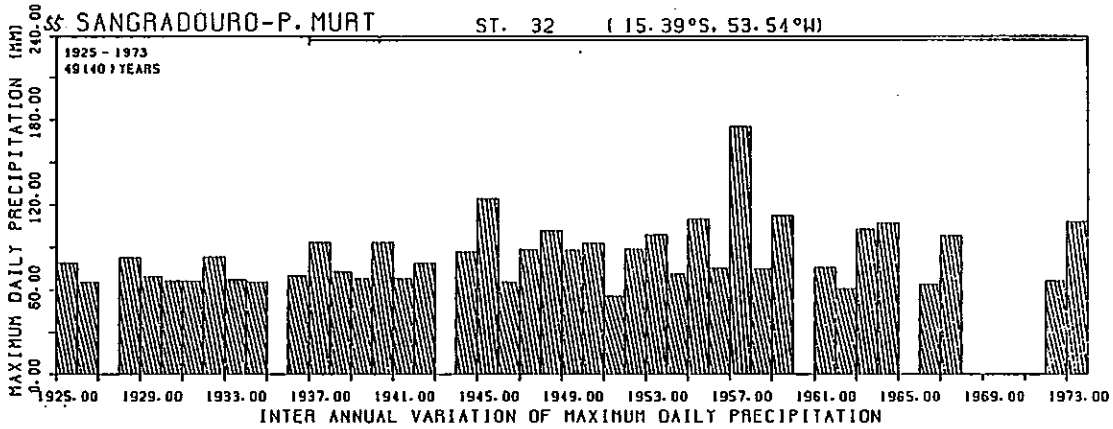

50 JANUARIA ST. 75 (15.29°S. 44.22°W)
1936 - 1965
30 (29) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1936.00 1940.00 1944.00 1948.00 1952.00 1956.00 1960.00 1964.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

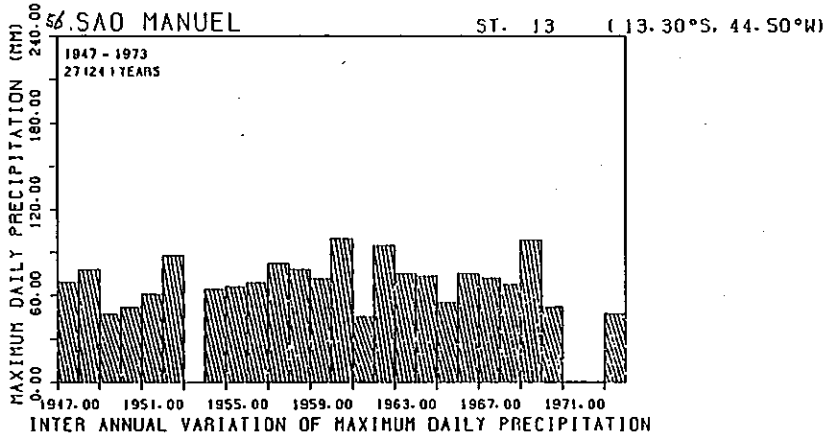

51. MOCAMBO
ST. 9
(13.14°S, 44.30°W)
1946 - 1973
28 (28) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

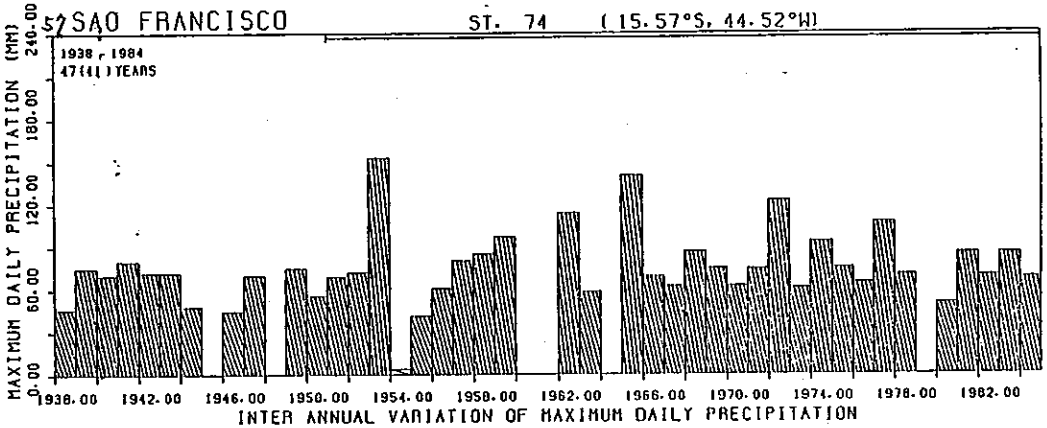

52. MONTES CLAROS
ST. 73
(16.44°S, 43.52°W)
1941 - 1985
45 (35) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

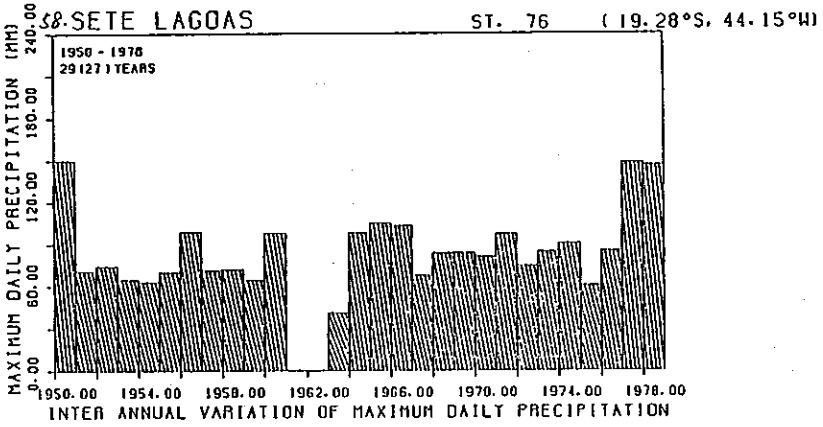

53. MONSENHOR PAULO
ST. 77
(21.46°S, 45.32°W)
1941 - 1985
45 (44) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

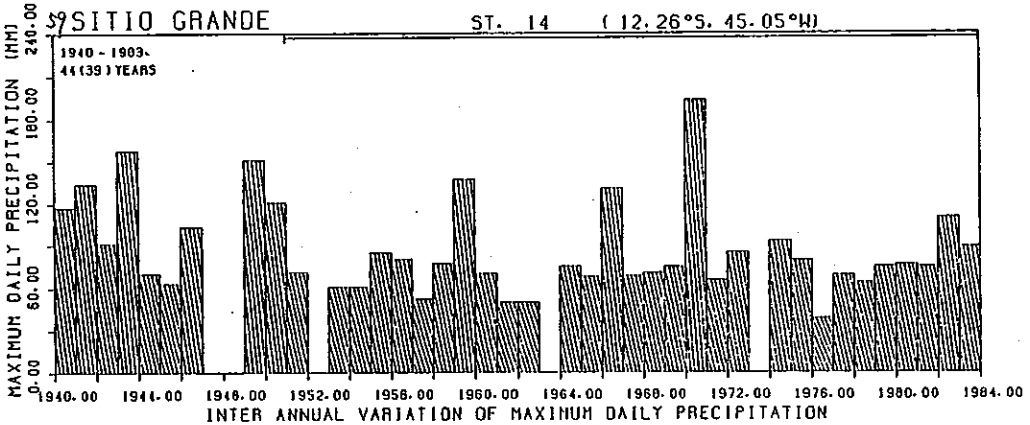

MORRO DO PILAR
ST. 89
(19.12°S,
.22°W)
1946 - 1984
39 (33) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

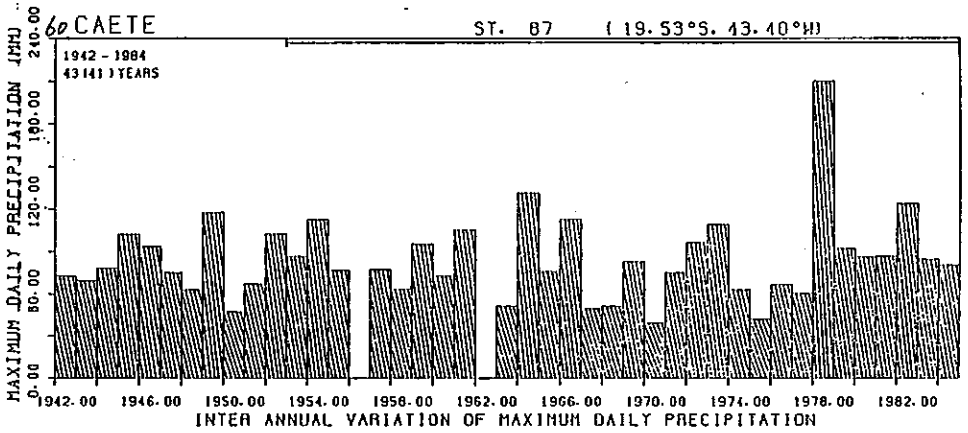

SANGRADOURO-P. MURT
ST. 32
(15.39°S, 53.54°W)
1925 - 1973
49 (40) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1925.00
1929.00
1933.00
1937.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

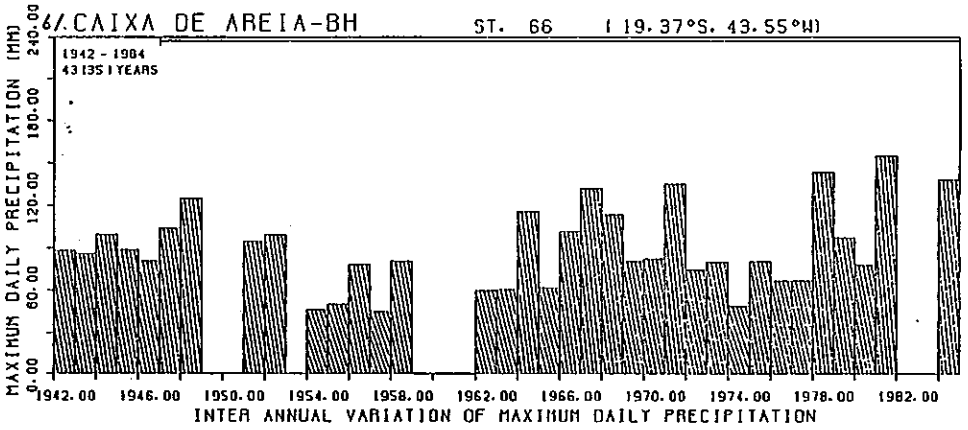

SAO MANUEL
ST. 13
(13.30°S, 44.50°W)
1947 - 1973
27 (24) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1947.00
1951.00
1955.00
1959.00
1963.00
1967.00
1971.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

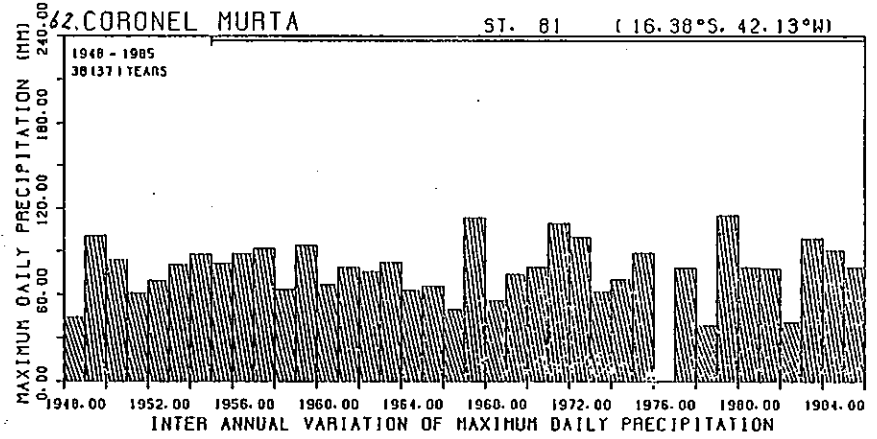

57 SAO FRANCISCO
ST. 74 (15.57°S, 44.52°W)
1938 - 1984
47(41) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1938.00 1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

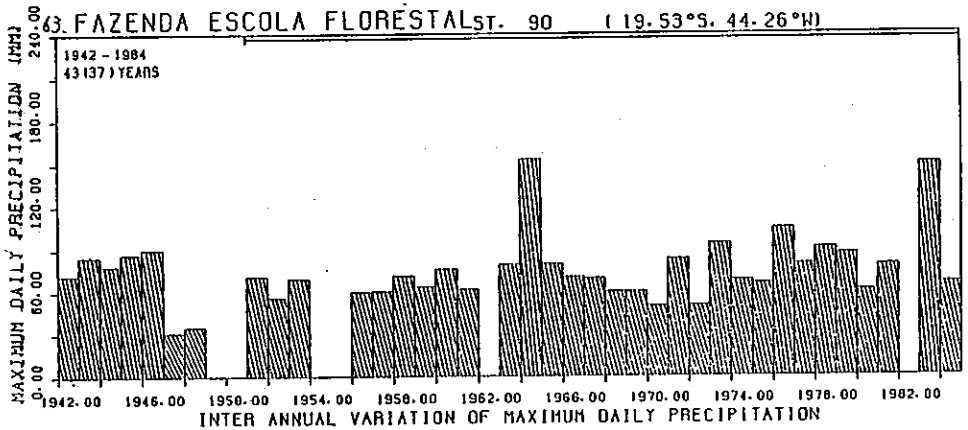

58 SETE LAGOAS
ST. 76 (19.28°S, 44.15°W)
1950 - 1978
29(27) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

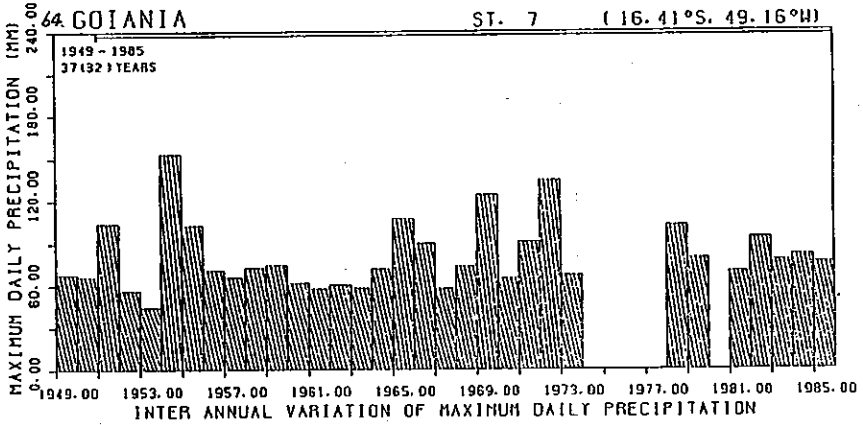

59 SITIO GRANDE
ST. 14 (12.26°S, 45.05°W)
1940 - 1983
44(39) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1940.00 1944.00 1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00 1976.00 1980.00 1984.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

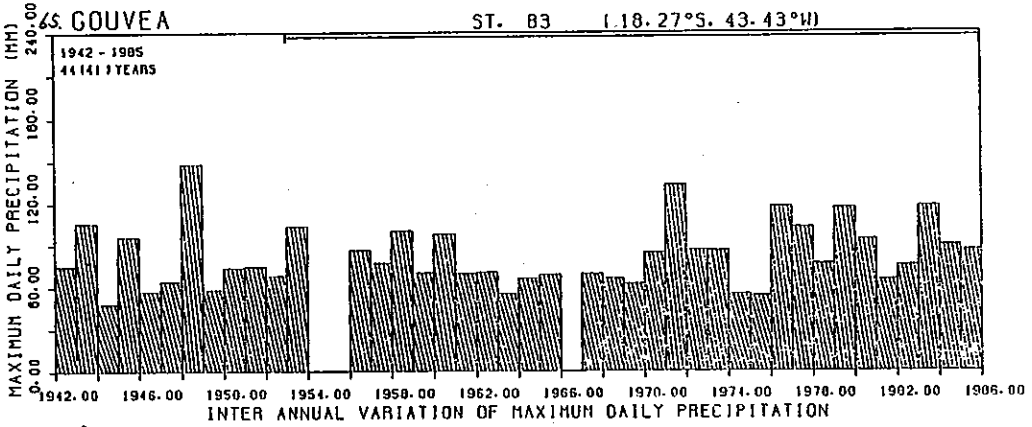

60.CAETE
ST. 87
(19.53°S. 43.40°W)
1942 - 1984
43 (41) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

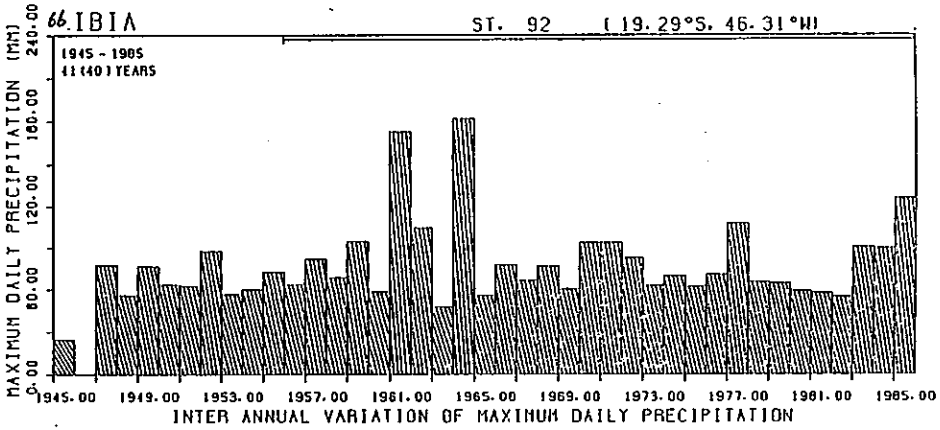

61.CAIXA DE AREIA-BH
ST. 66
(19.37°S. 43.55°W)
1942 - 1984
43 (35) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

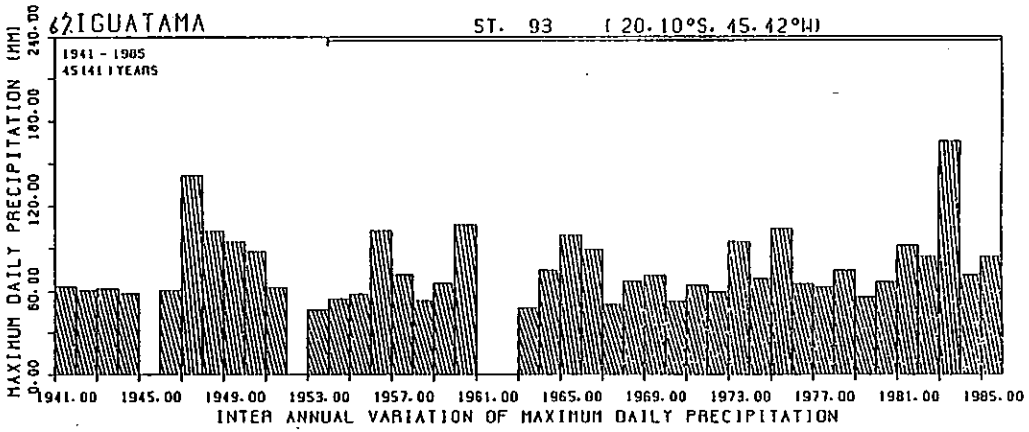

62.CORONEL MURTA
ST. 81
(16.38°S. 42.13°W)
1948 - 1985
38 (37) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1948.00
1952.00
1956.00
1960.00
1964.00
1968.00
1972.00
1976.00
1980.00
1984.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

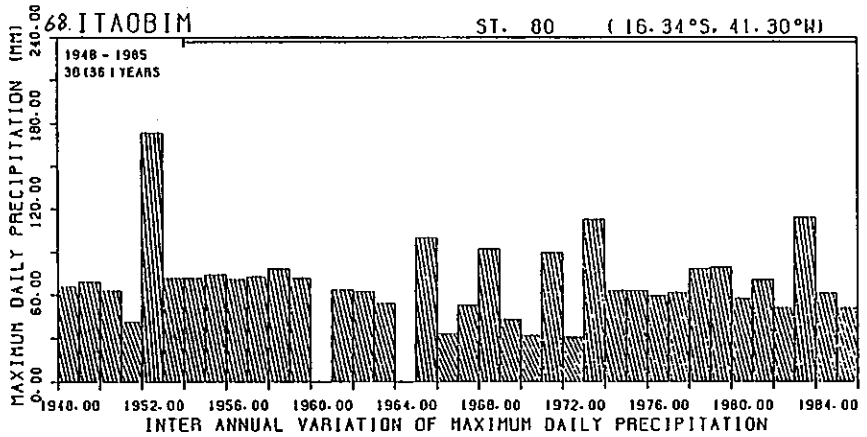

63. FAZENDA ESCOLA FLORESTAL ST. 90 (19.53°S. 44.26°W)
1942 - 1984
43 (37) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

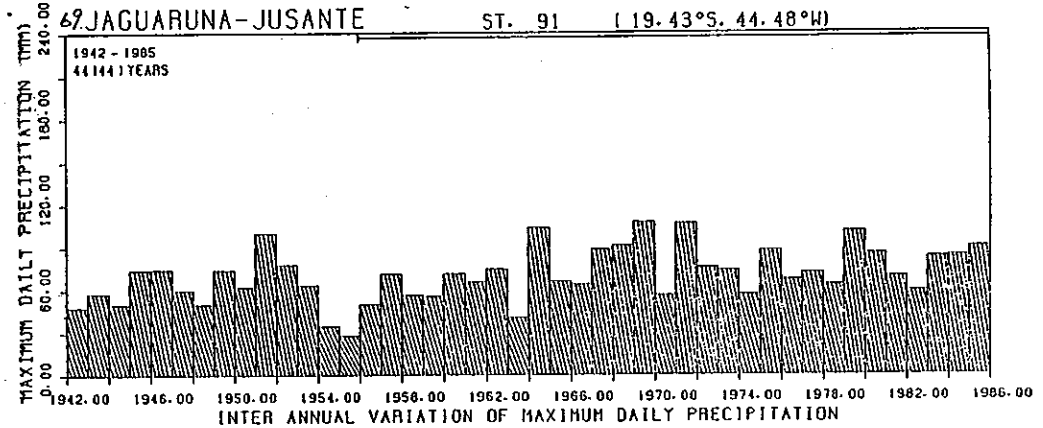

64. GOIANIA ST. 7 (16.41°S. 49.16°W)
1949 - 1985
37 (32) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

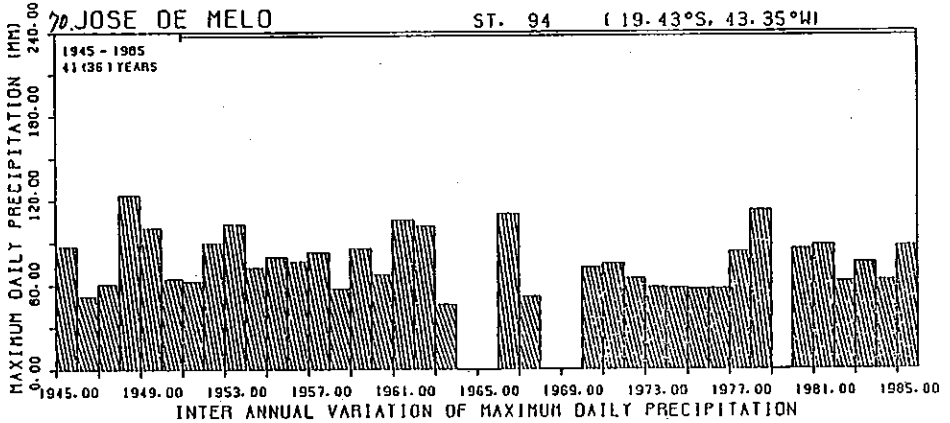

65. GOUVEA ST. 83 (18.27°S. 43.43°W)
1942 - 1985
44 (41) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

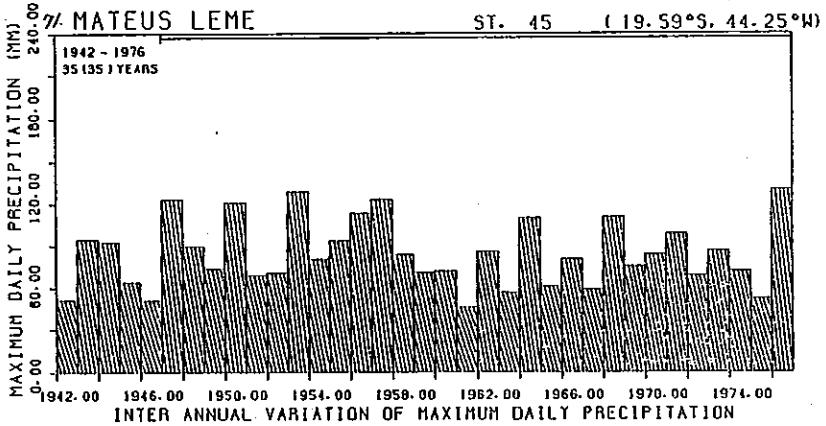

66.IBIA
ST. 92 (19.29°S, 46.31°W)
1945 - 1985
41 (40) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
80.00
120.00
160.00
240.00
1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

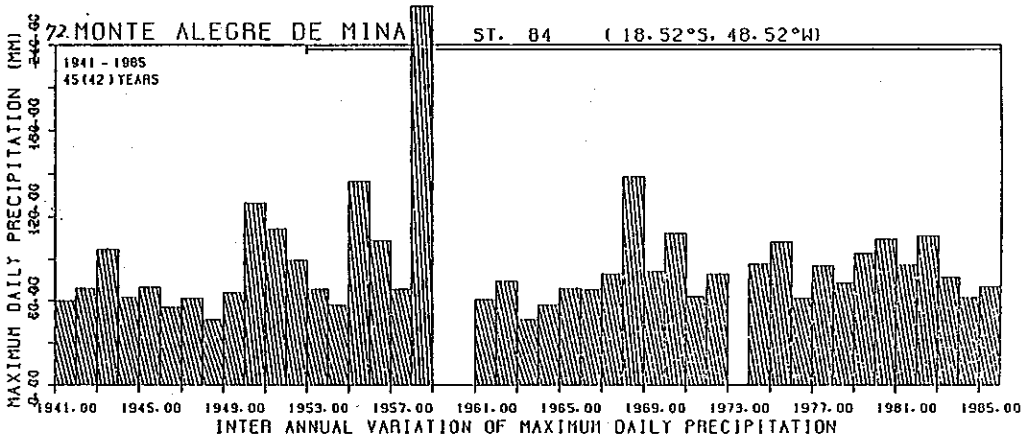

67.IGUATAMA
ST. 93 (20.10°S, 45.42°W)
1941 - 1985
45 (41) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

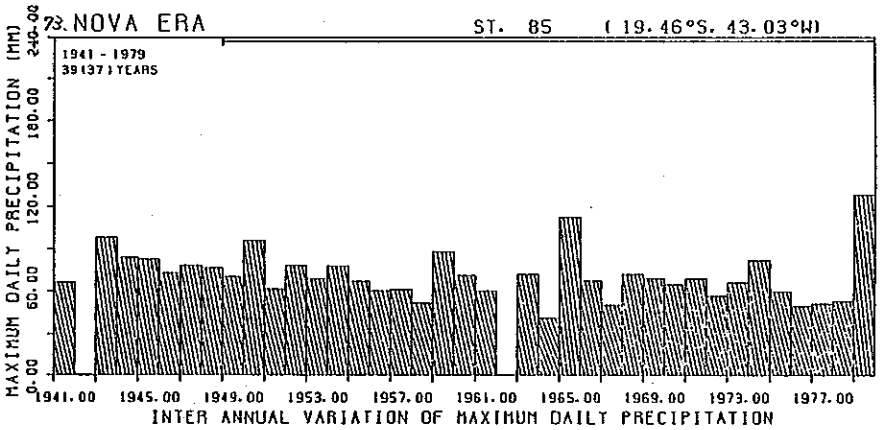

68.ITAOBIM
ST. 80 (16.34°S, 41.30°W)
1948 - 1985
38 (36) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00 1976.00 1980.00 1984.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

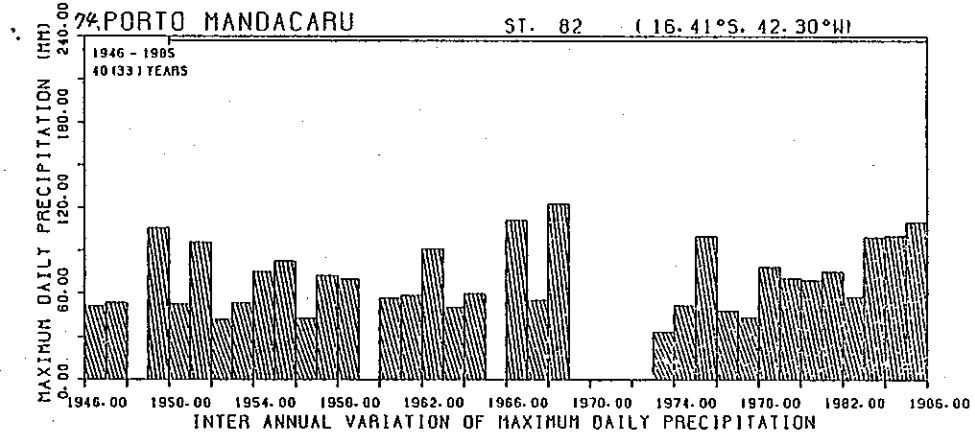

69 JAGUARUNA-JUSANTE
ST. 91
(19.43°S, 44.48°W)
1942 - 1985
44 (44) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

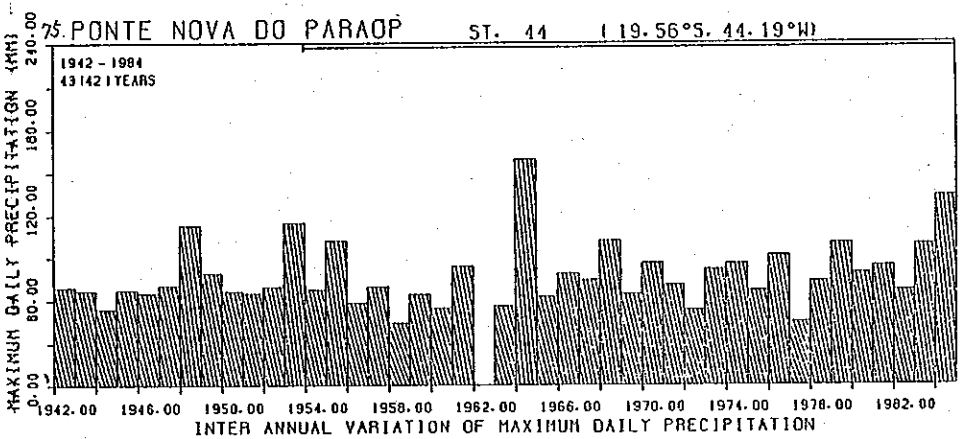

70 JOSE DE MELO
ST. 94
(19.43°S, 43.35°W)
1945 - 1985
41 (36) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

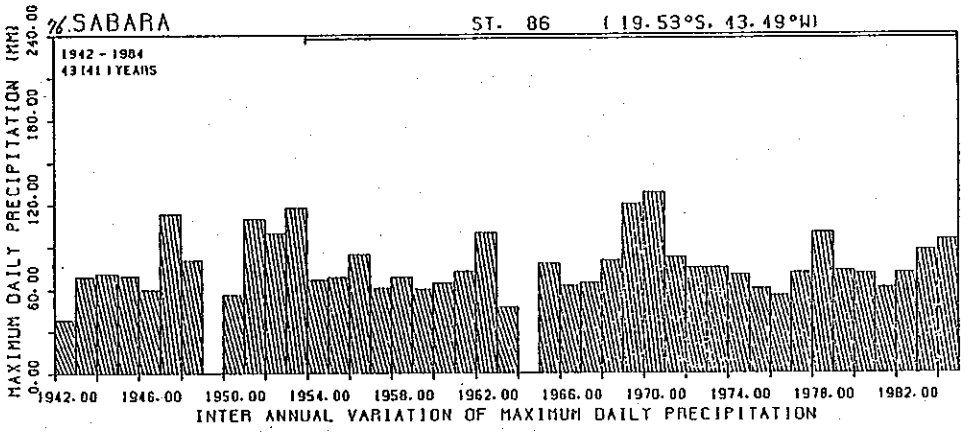

71 MATEUS LEME
ST. 45
(19.59°S, 44.25°W)
1942 - 1976
35 (35) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

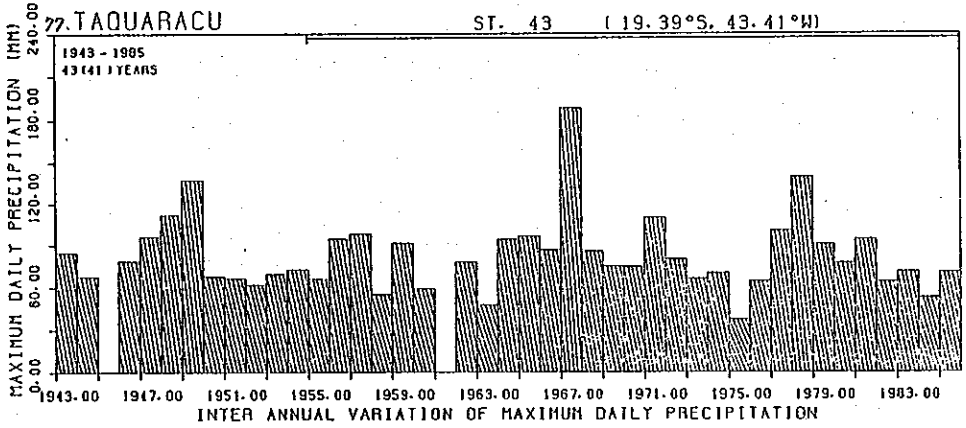

72 MONTE ALEGRE DE MINA
ST. 84
(18.52°S, 48.52°W)
1941 - 1985
45(42) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

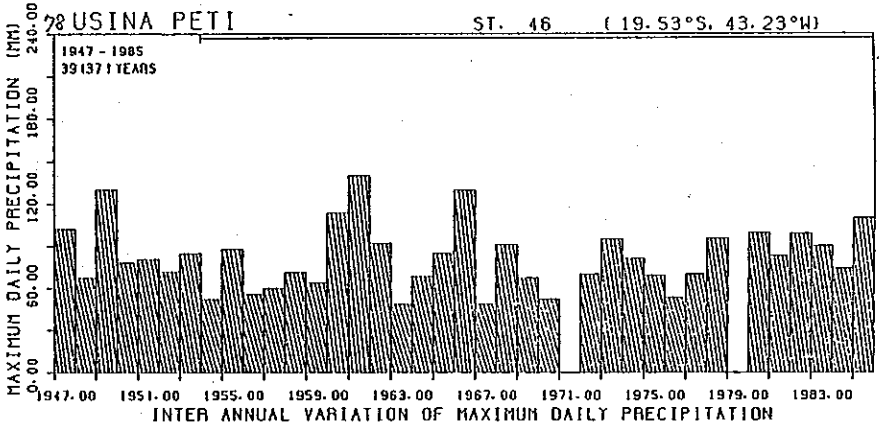

73 NOVA ERA
ST. 85
(19.46°S, 43.03°W)
1941 - 1979
39(37) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


74 PORTO MANDACARU
ST. 82
(16.41°S, 42.30°W)
1946 - 1985
40(33) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

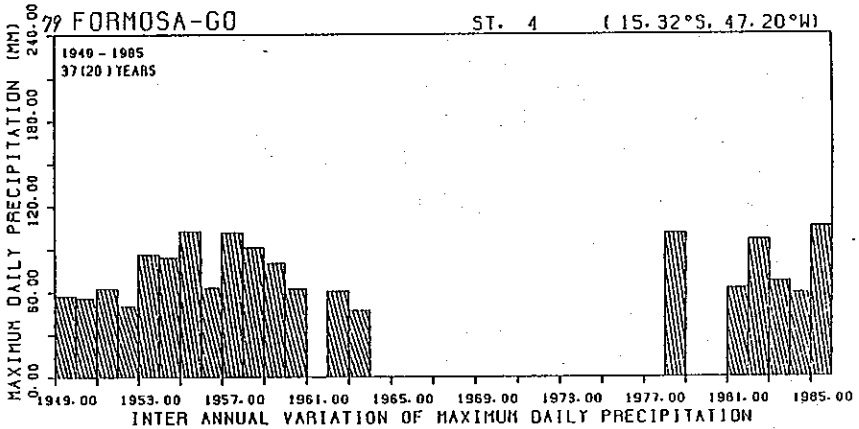

25.PONTE NOVA DO PARAOP ST. 44 (19.56°S, 44.19°W)
1942 - 1984
43 (42) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


26.SABARA ST. 86 (19.53°S, 43.49°W)
1942 - 1984
43 (41) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

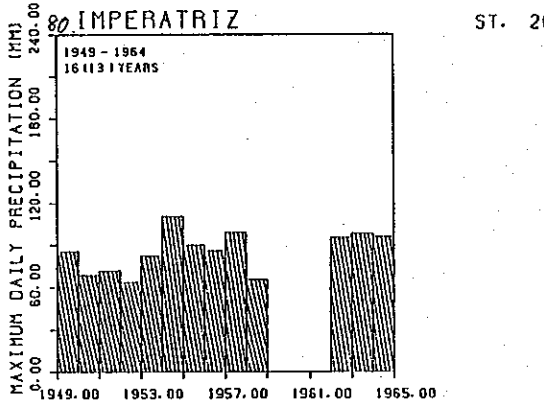

27.TAQUARACU ST. 43 (19.39°S, 43.41°W)
1943 - 1985
43 (41) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1943.00 1947.00 1951.00 1955.00 1959.00 1963.00 1967.00 1971.00 1975.00 1979.00 1983.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


78 USINA PETI
ST. 46
(19.53°S, 43.23°W)
1947 - 1985
39137 YEARS
MAXIMUM DAILY PRECIPITATION (MM)
240.00
180.00
120.00
60.00
0.00
1947.00
1951.00
1955.00
1959.00
1963.00
1967.00
1971.00
1975.00
1979.00
1983.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

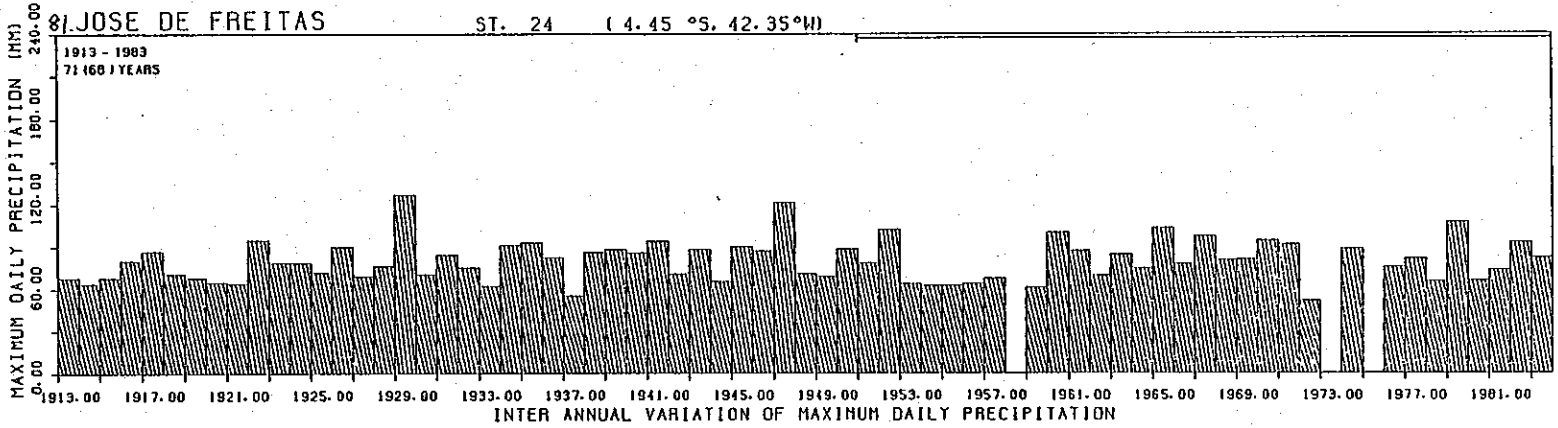
79 FORMOSA-GO ST. 4 (15.32°S, 47.20°W)

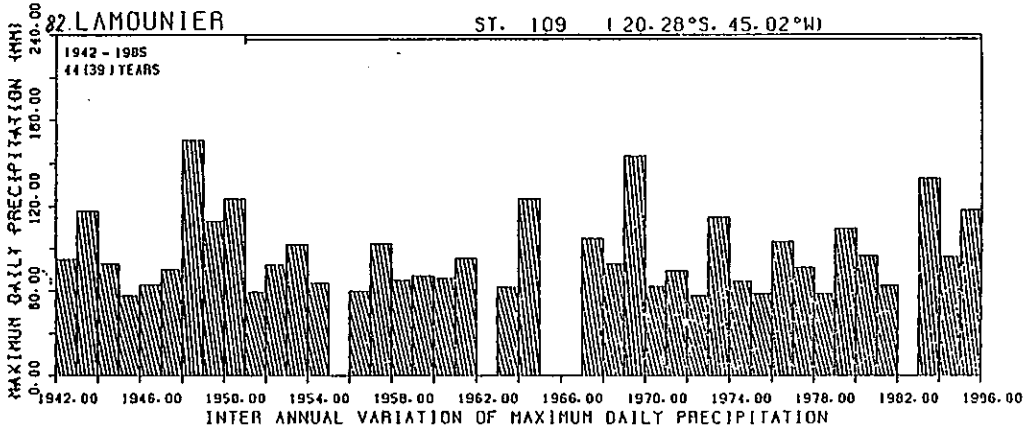


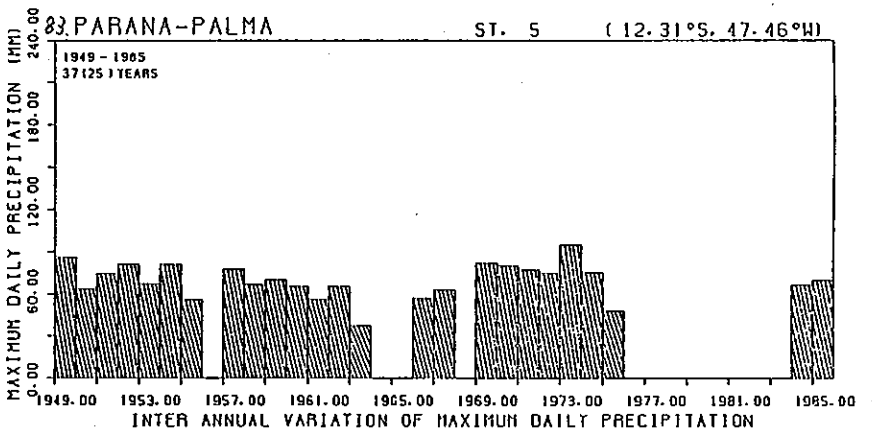
80 IMPERATRIZ ST. 201 (0.00 °S, 0.00 °W)

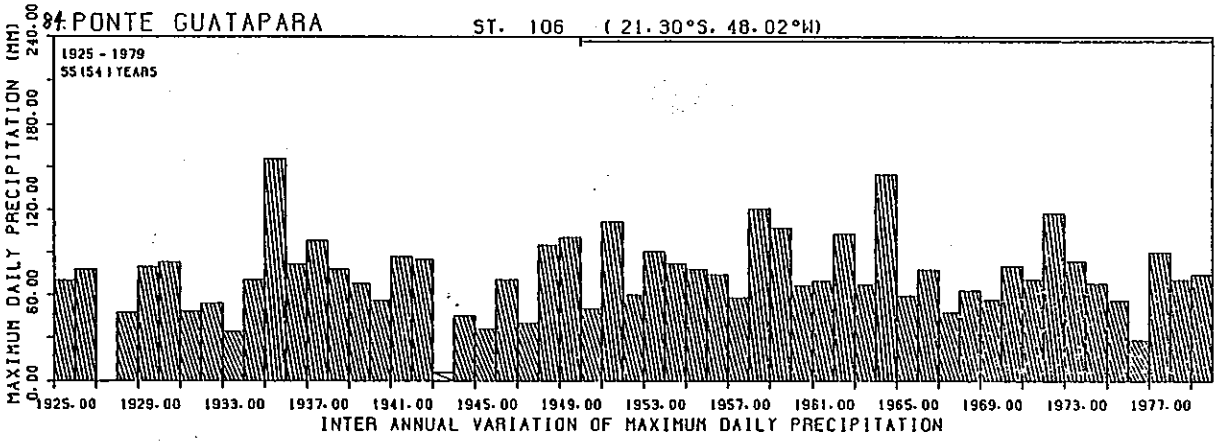


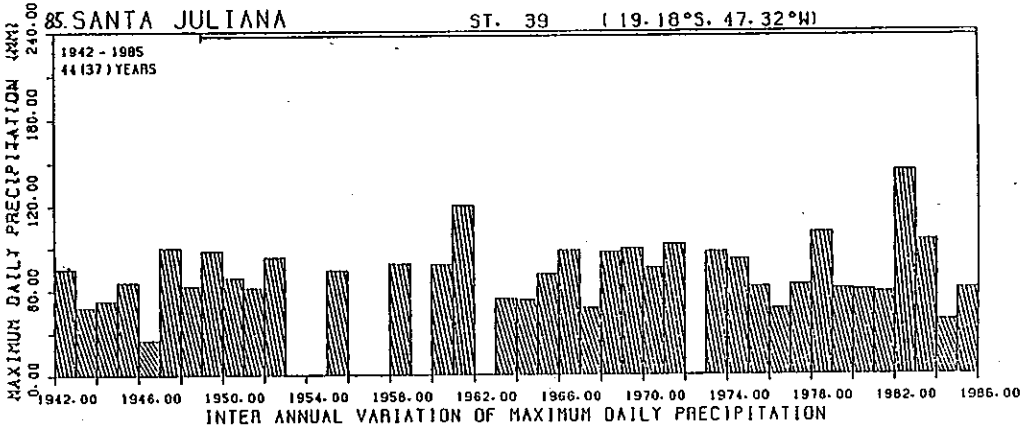
81 JOSE DE FREITAS ST. 24 (4.45 °S, 42.35°W)

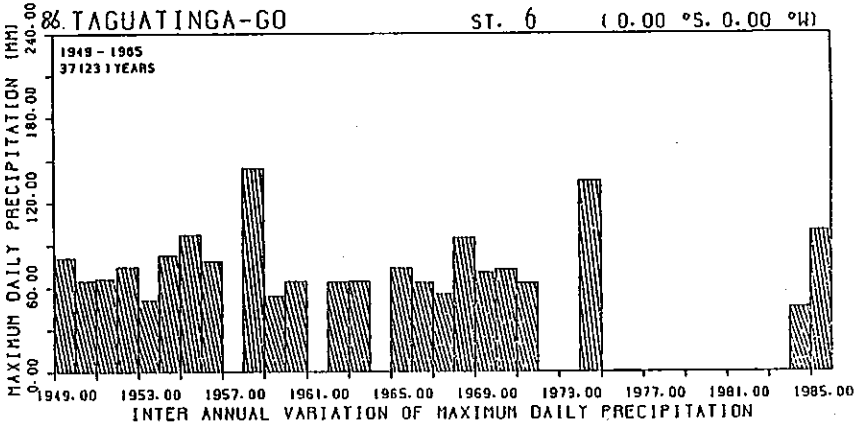


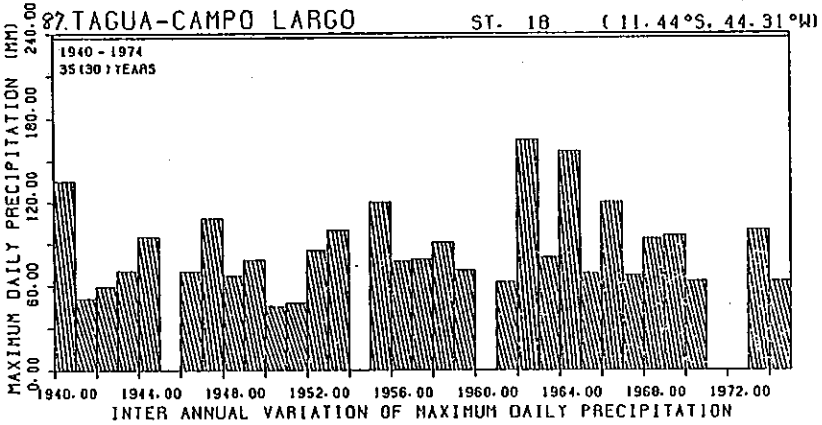

82.LAMOUNIER
ST. 109 (20.28°S. 45.02°W)
1942 - 1985
44 (39) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00 1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

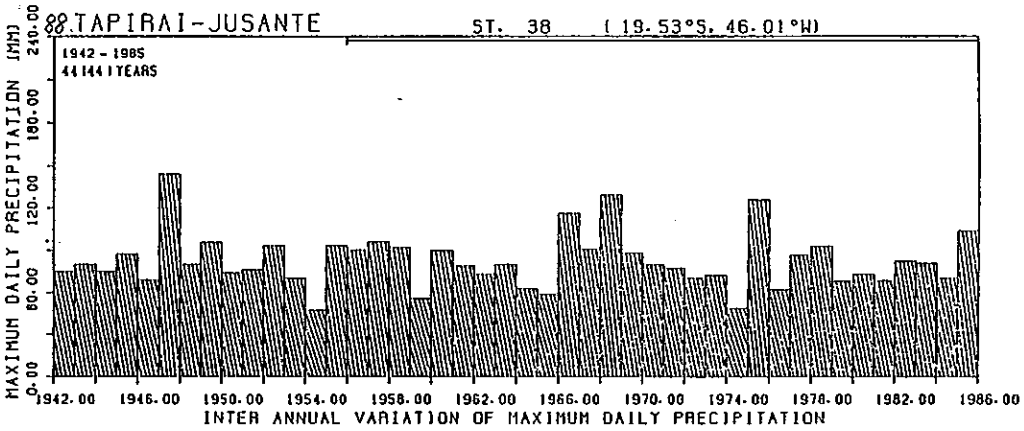

83.PARANA-PALMA
ST. 5 (12.31°S. 47.46°W)
1949 - 1985
37 (25) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

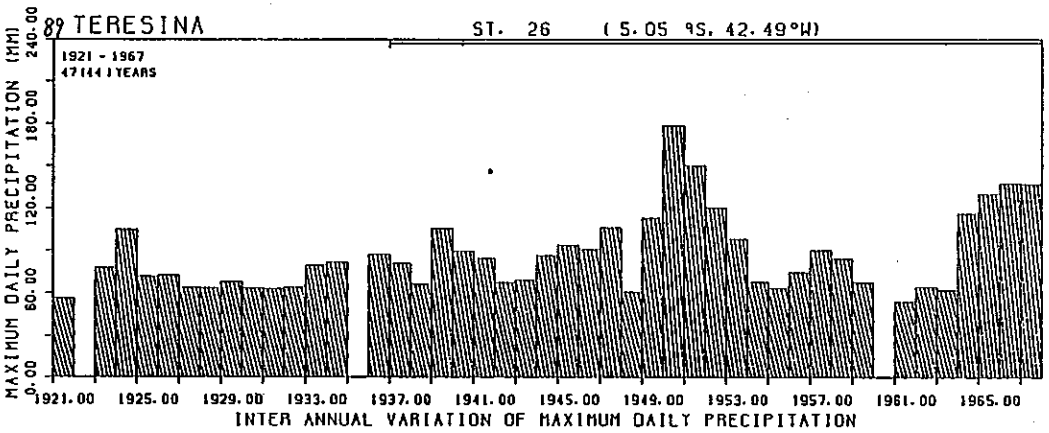

84.PONTE GUATAPARA
ST. 106 (21.30°S. 48.02°W)
1925 - 1979
55 (54) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1925.00 1929.00 1933.00 1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

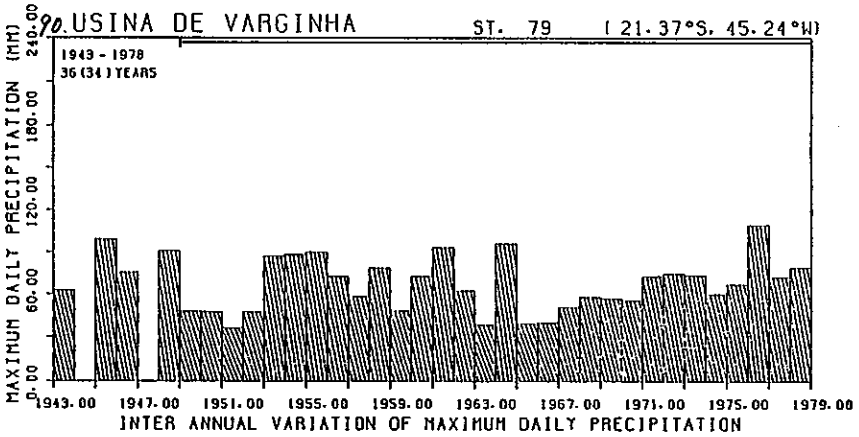

85.SANTA JULIANA
ST. 39
(19.18°S, 47.32°W)
1942 - 1985
44 (37) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

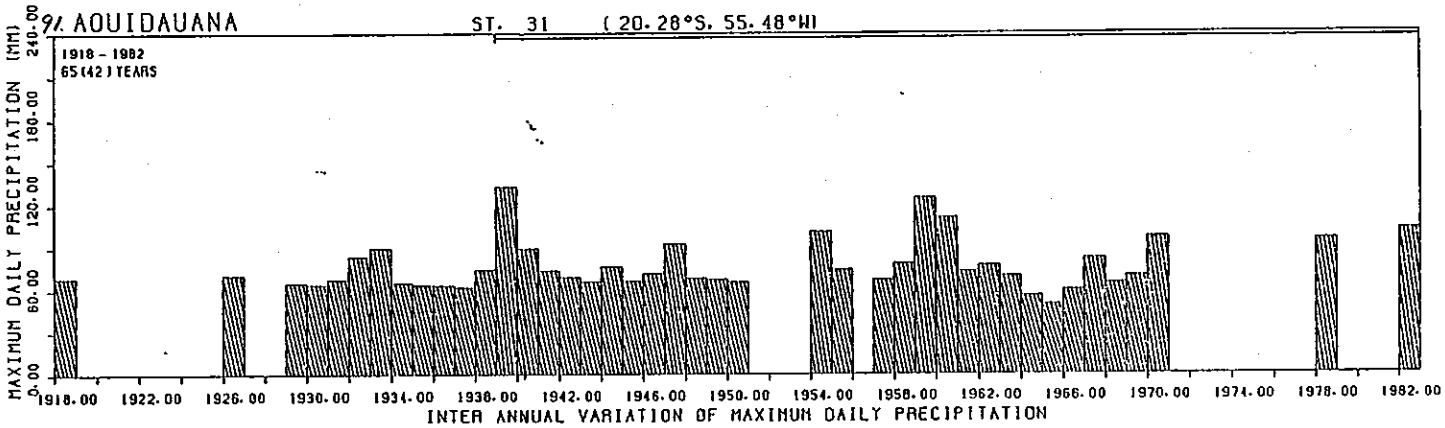

86.TAGUATINGA-GO
ST. 6
(0.00 °S, 0.00 °W)
1949 - 1985
37 (23) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

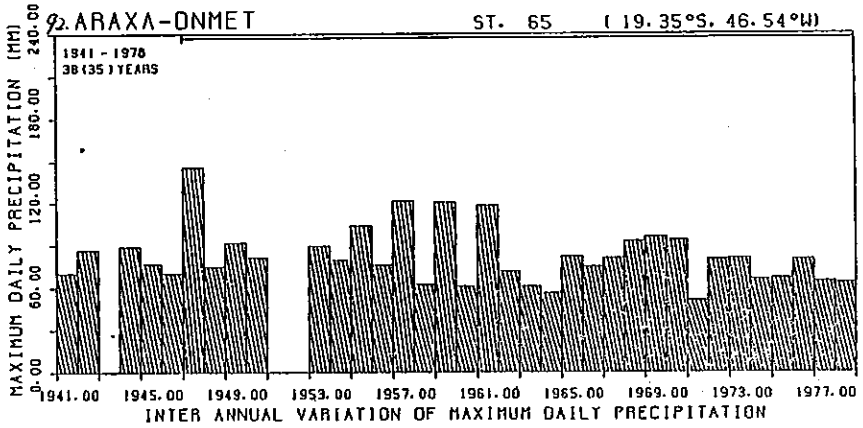

87.TAGUA-CAMPO LARGO
ST. 18
(11.44°S, 44.31°W)
1940 - 1974
35 (30) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1940.00
1944.00
1948.00
1952.00
1956.00
1960.00
1964.00
1968.00
1972.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

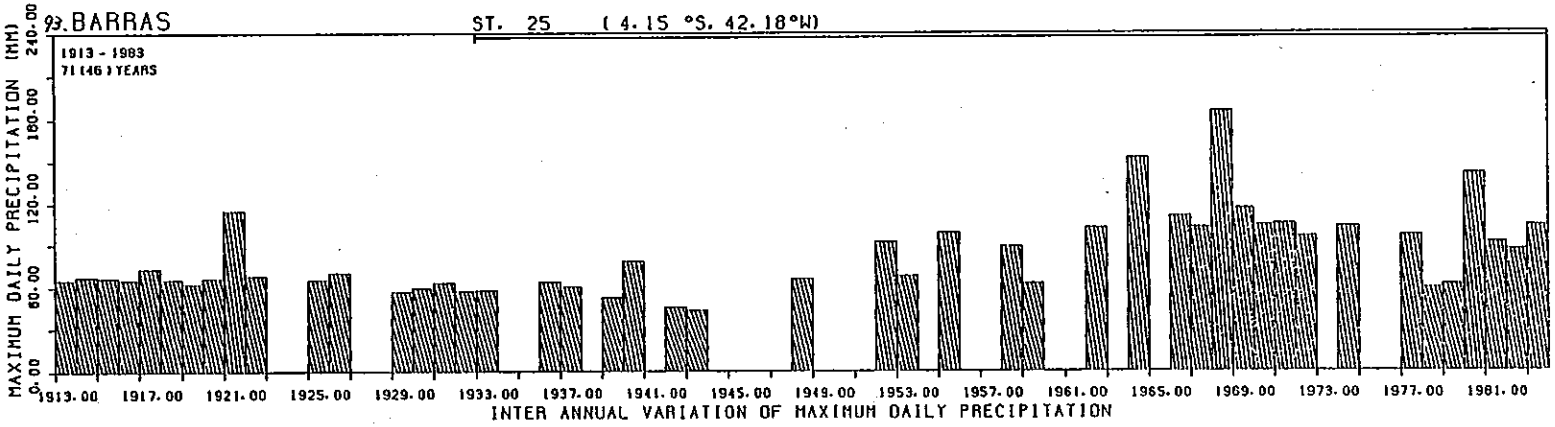

88 TAPIRAI-JUSANTE
ST. 38
(19.53°S, 46.01°W)
1942 - 1985
44 (44) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

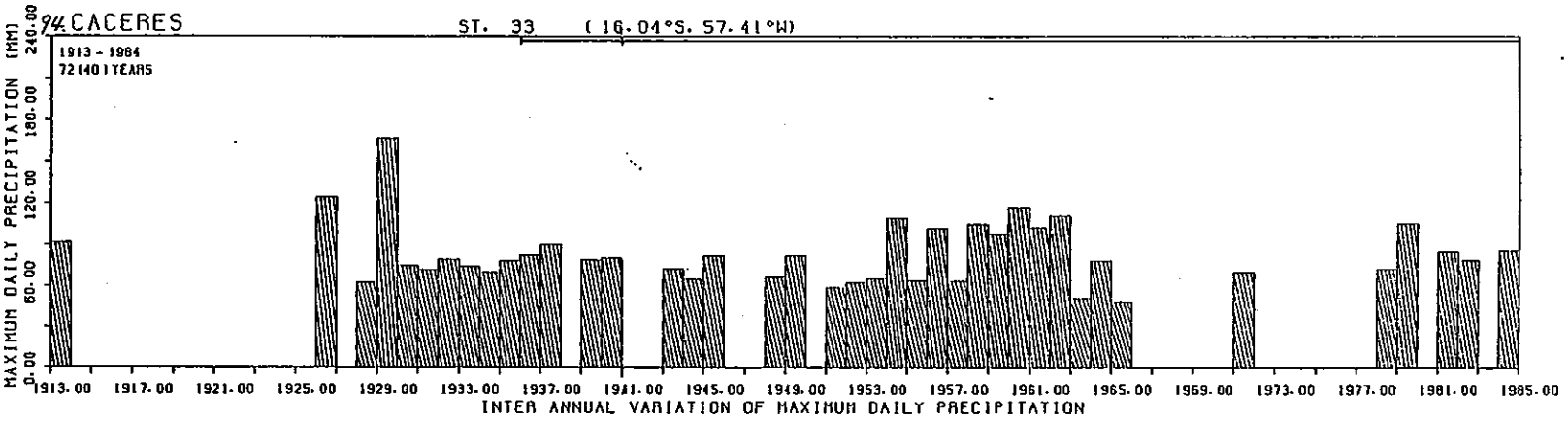

89 TERESINA
ST. 26
(5.05 °S, 42.49°W)
1921 - 1967
47 (44) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1921.00
1925.00
1929.00
1933.00
1937.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

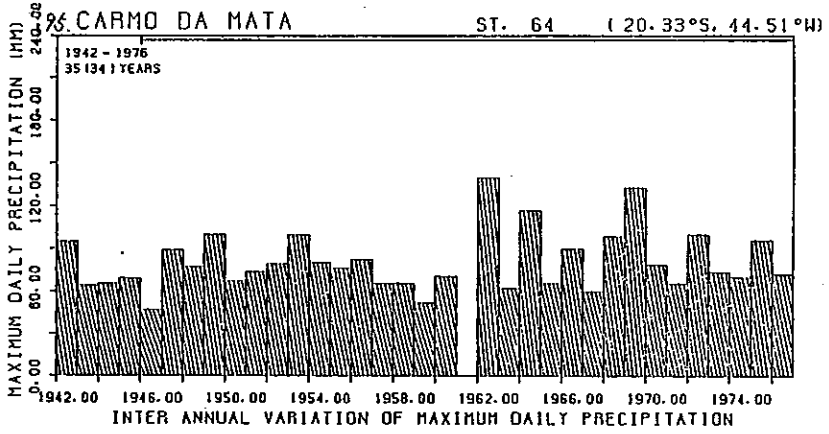

90 USINA DE VARGINHA
ST. 79
(21.37°S, 45.24°W)
1943 - 1978
36 (34) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1943.00
1947.00
1951.00
1955.00
1959.00
1963.00
1967.00
1971.00
1975.00
1979.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

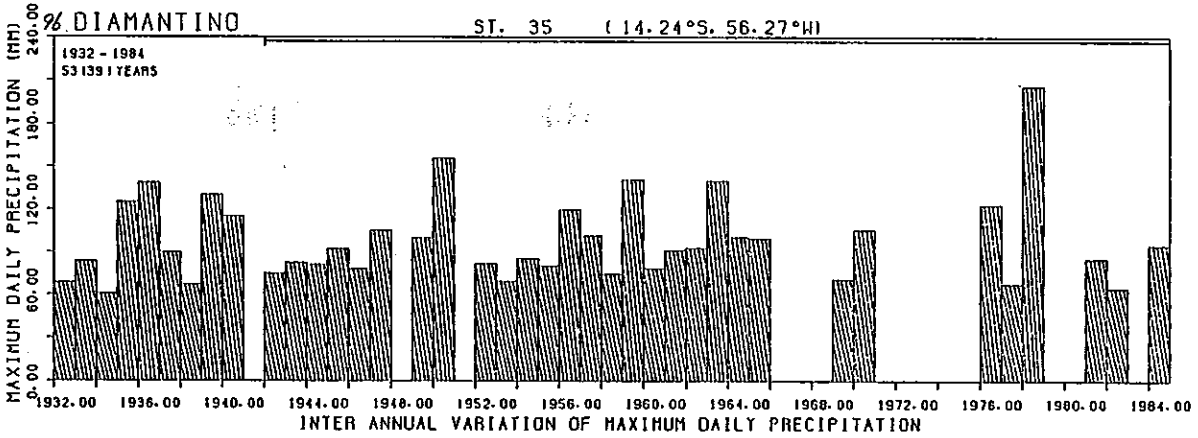

91. AQUIDAUANA
ST. 31
(20.28°S, 55.48°W)
1918 - 1982
65(42) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1918.00 1922.00 1926.00 1930.00 1934.00 1938.00 1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

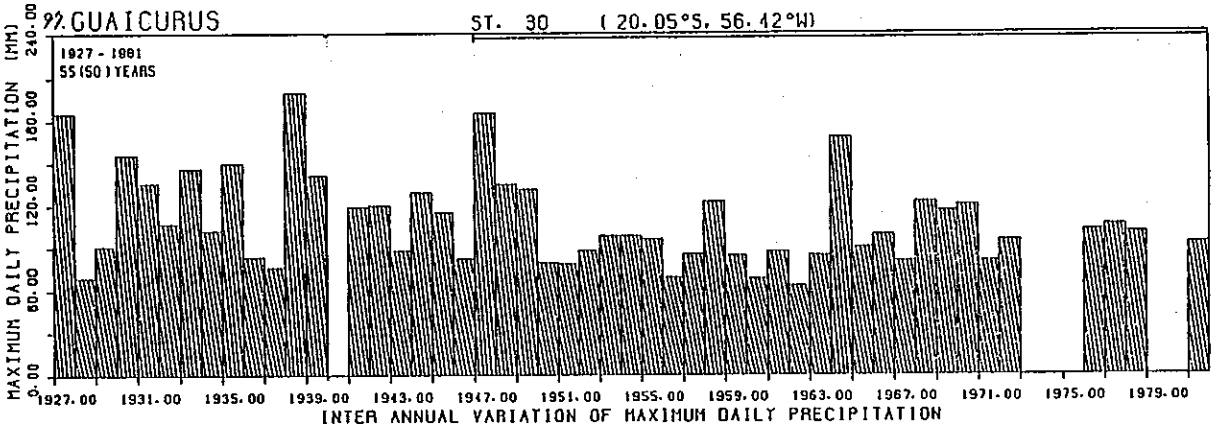

92. ARAXA-DNMET
ST. 65
(19.35°S, 46.54°W)
1941 - 1978
38(35) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

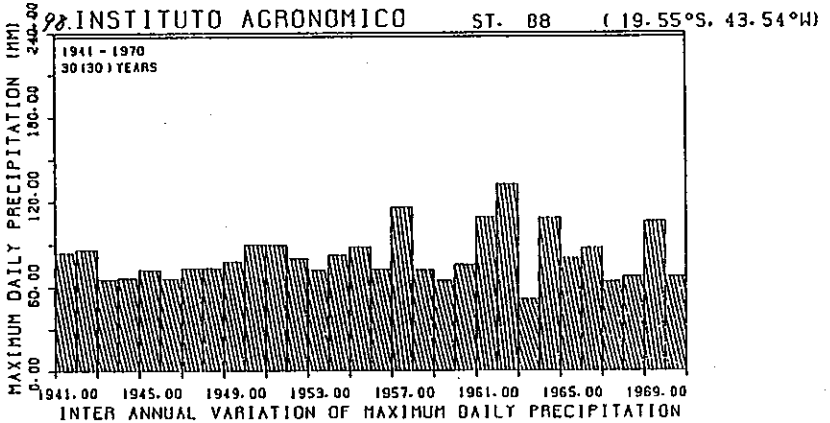

93. BARRAS
ST. 25
(4.15 °S, 42.18°W)
1913 - 1983
71(46) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1913.00 1917.00 1921.00 1925.00 1929.00 1933.00 1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

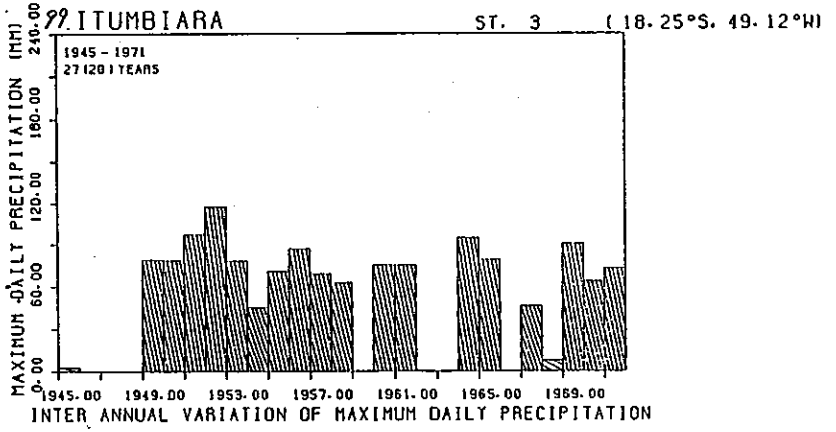

94 CACERES
ST. 33 (16.04°S. 57.41°W)
1913 - 1984
72 (40) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1913.00 1917.00 1921.00 1925.00 1929.00 1933.00 1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

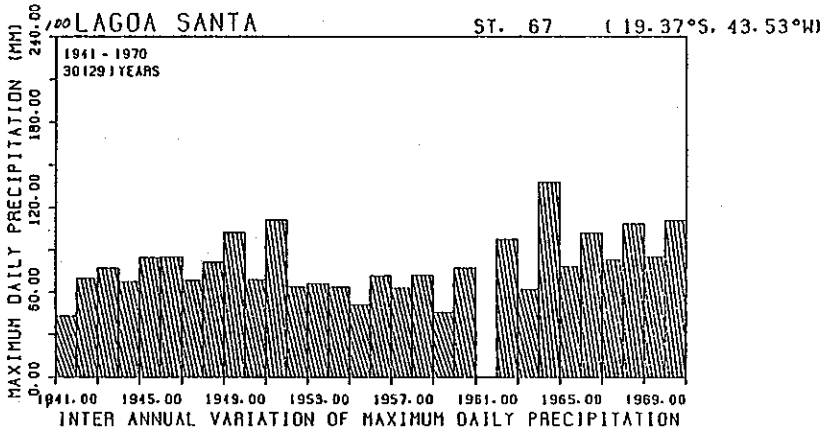

96 CARMO DA MATA
ST. 64 (20.33°S. 44.51°W)
1942 - 1976
35 (34) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

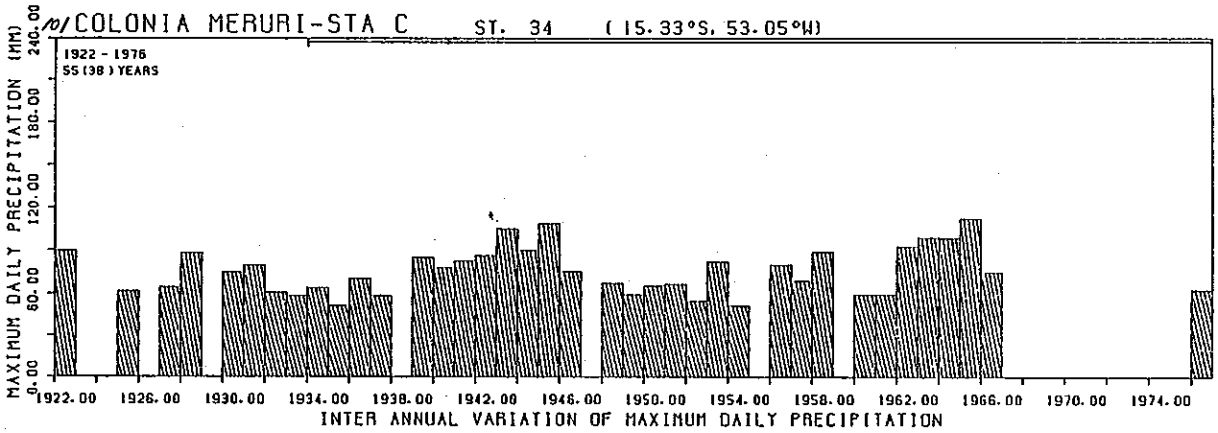

96 DIAMANTINO
ST. 35 (14.24°S. 56.27°W)
1932 - 1984
53 (39) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1932.00 1936.00 1940.00 1944.00 1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00 1976.00 1980.00 1984.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

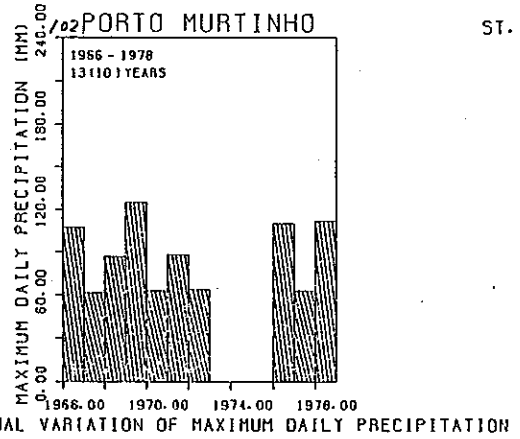

99 GUAICURUS
ST. 30
(20.05°S, 56.42°W)
1927 - 1981
55 (50) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1927.00
1931.00
1935.00
1939.00
1943.00
1947.00
1951.00
1955.00
1959.00
1963.00
1967.00
1971.00
1975.00
1979.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION

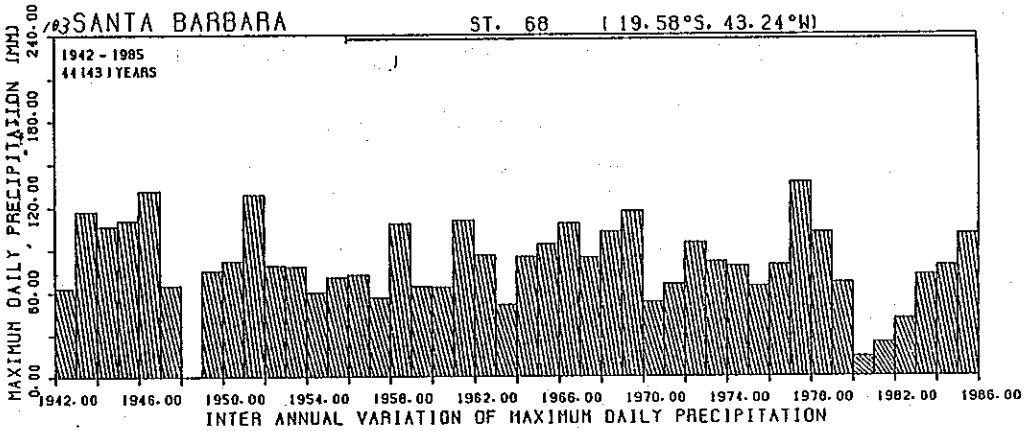

98 INSTITUTO AGRONOMICO
ST. 88
(19.55°S, 43.54°W)
1941 - 1970
30 (30) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


99 ITUMBIARA
ST. 3
(18.25°S, 49.12°W)
1945 - 1971
27 (20) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


100 LAGOA SANTA
ST. 67
(19.37°S, 43.53°W)
1941 - 1970
30(29) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


101 COLONIA MERURI-STA C
ST. 34
(15.33°S, 53.05°W)
1922 - 1976
55(38) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1922.00
1926.00
1930.00
1934.00
1938.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


102 PORTO MURTINHO
ST. 200
(0.00
1966 - 1978
13(10) YEARS
MAXIMUM DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1966.00
1970.00
1974.00
1978.00
INTER ANNUAL VARIATION OF MAXIMUM DAILY PRECIPITATION


SANTA BARBARA
ST. 68
(19.58°S, 43.24°W)
1942 - 1985
44 143) YEARS
MAXIMUN DAILY PRECIPITATION (MM)
0.00
60.00
120.00
180.00
240.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF MAXIMUN DAILY PRECIPITATION

（資料２）

１月の無降水継続日数の年変化

１０３地点

(Section 2)

INTER ANNUAL VARIATION OF VERANICO IN JANUARY

103 Stations

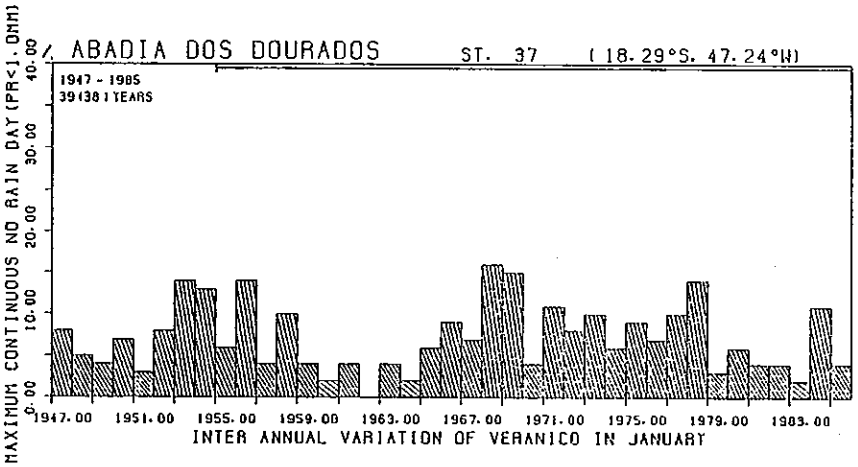
図表類の表示順序

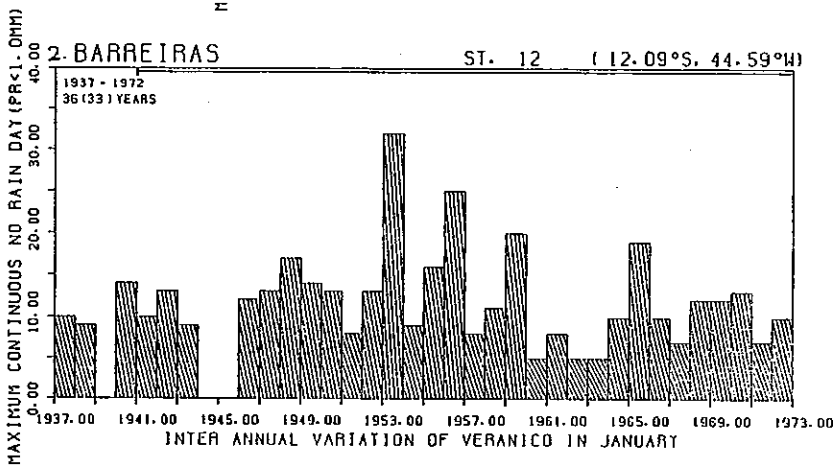
THE ORDER OF FIGURES AND TABLES

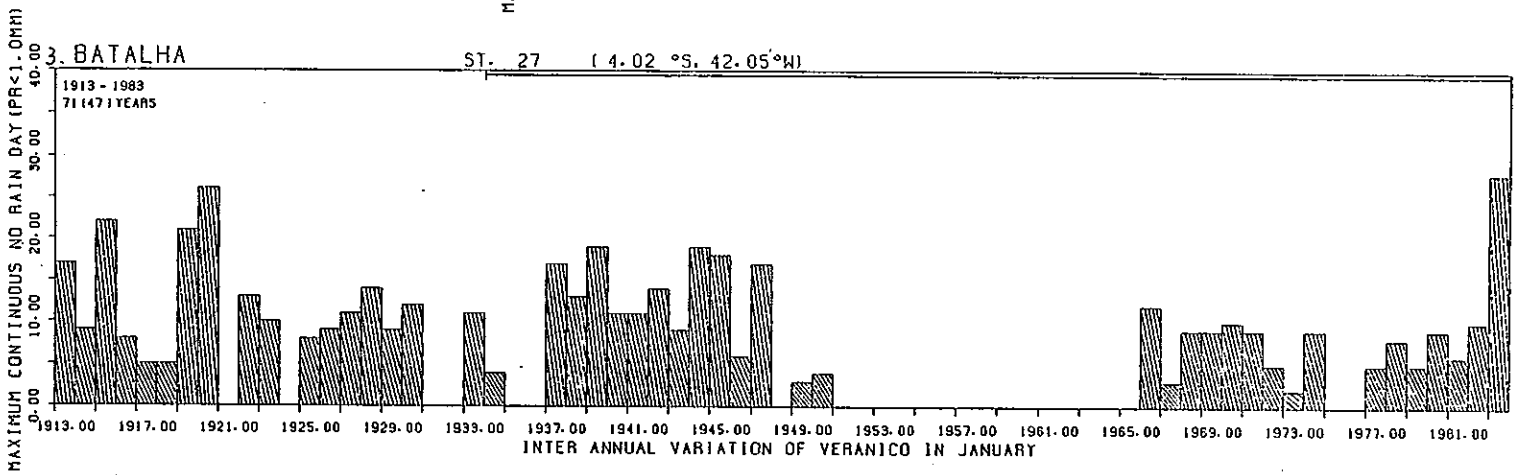
order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.
1	ABADIA	22	ARACUA	42	AMARAN	60	CAETEX	79	FORMOS	91	AQUIDA
2	BARREI	23	BAMBUI	43	BARRII	61	CAREIA	80	IMPERA	92	ARAXAX
3	BATALH	24	CARPAR	44	CATALA	62	CELMUR	81	JOSFRE	93	BARRAS
4	BOQUEI	25	CURVEL	45	CONCEI	63	FAZESC	82	LAMOUN	94	CACERE
5	CAMPOM	26	FAZAJU	46	CORIVE	64	GOIANI	83	PARANA	95	CARMAT
6	CARMOX	27	FRUTAL	47	COTEGI	65	GOUVEA	84	POGUAT	96	DIAMAN
7	CAROLI	28	INHUMA	48	FORPII	66	IBIAMG	85	STAJUL	97	GUAICU
8	CUIABA	29	ITAMAR	49	GOIASX	67	IGUATA	86	TAGUAT	98	INAGRO
9	FAZPAL	30	JABOTI	50	JANUAR	68	ITAOBI	87	TAGUAX	99	ITUMBI
10	FORIOP	31	JEQUIT	51	MOCAMB	69	JAGUAR	88	TAPIRA	100	LAGSAN
11	GRAJAU	32	JUPIAX	52	MONCLA	70	JOSEME	89	TERESI	101	MERURI
12	LASSAN	33	LUSSAN	53	MONPAU	71	MATEUS	90	USIVAR	102	PORTOM
13	MANGAX	34	MENDAN	54	MOPILA	72	MTEALE			103	SANBAR
14	PEDROL	35	MINANO	55	SANGRA	73	NOVERA				
15	PORNOV	36	MTECAR	56	SAOMAN	74	PORMAN				
16	QUEIMA	37	PONTEX	57	SCHICO	75	PTNOVA				
17	SAOGON	38	RIOPIR	58	SETLAG	76	SABARA				
18	SAOJOP	39	SANJAC	59	SITGRA	77	TAQUAR				
19	STAMAR	40	STAITA			78	USPETI				
20	TERROR	41	VESPAS								
21	UNIAOX										

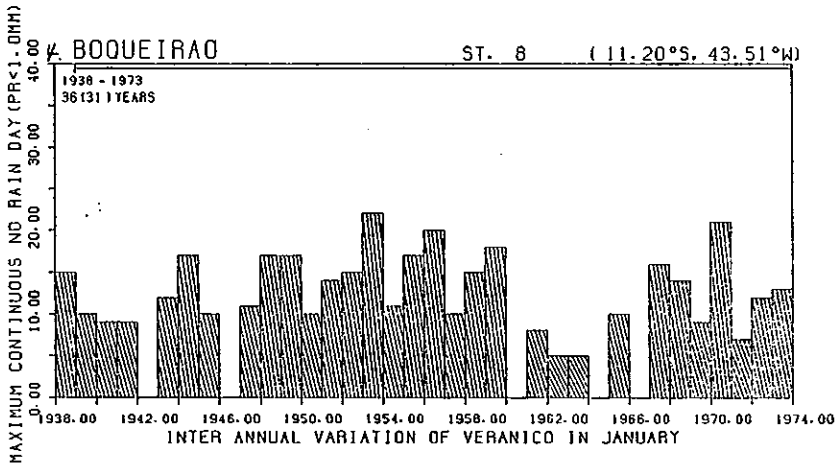
(Abbreviated names of observing stations should refer to TABLE 3.1~5)

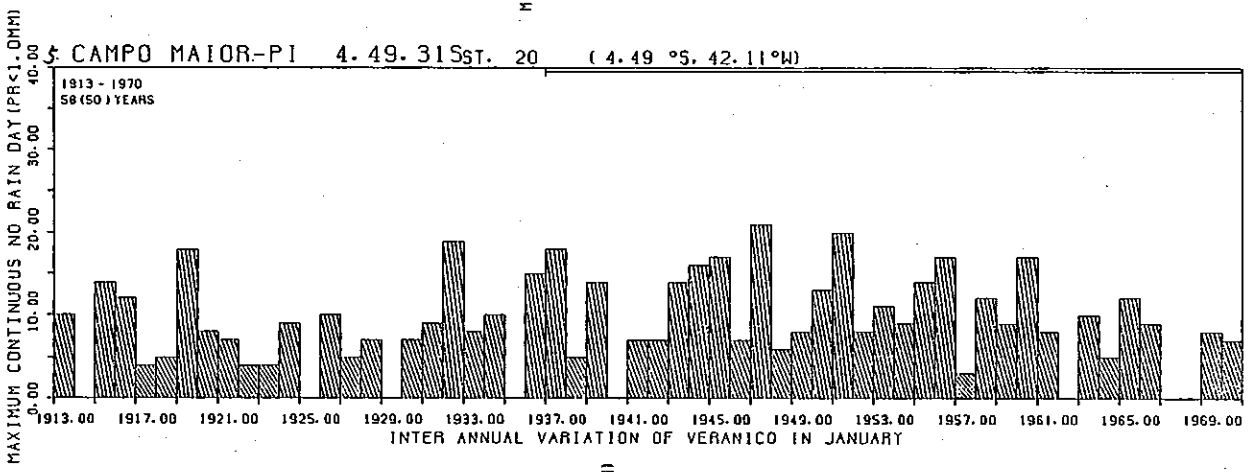
（短縮名は表3. 1～5を参照）

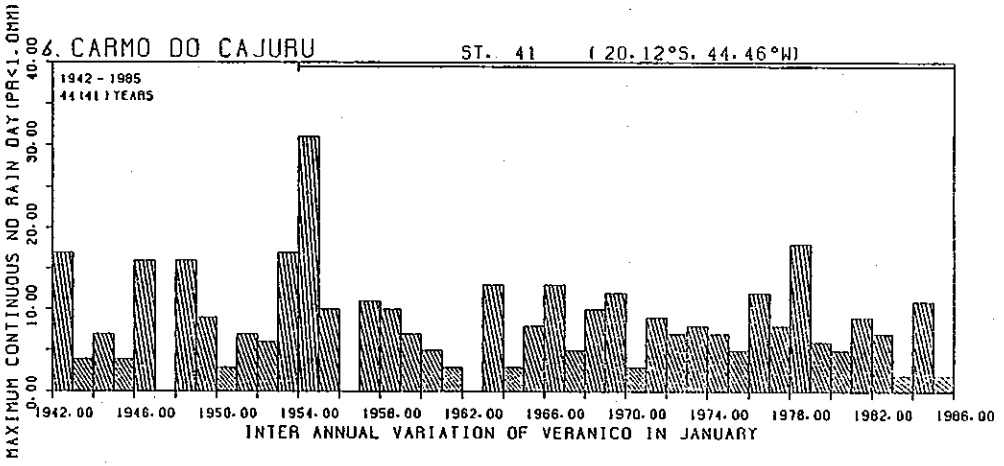

1. ABADIA DOS DOURADOS ST. 37 (18.29°S, 47.24°W)
1947 - 1985
39(38) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1947.00 1951.00 1955.00 1959.00 1963.00 1967.00 1971.00 1975.00 1979.00 1983.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

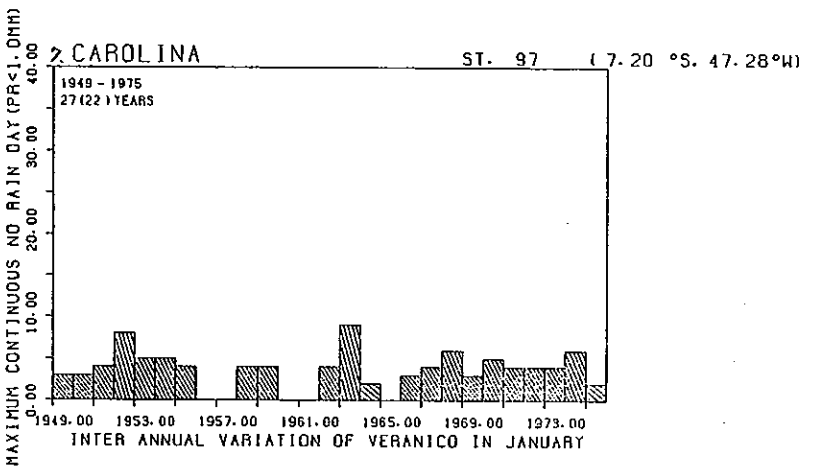

2. BARREIRAS ST. 12 (12.09°S, 44.59°W)
1937 - 1972
36(33) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

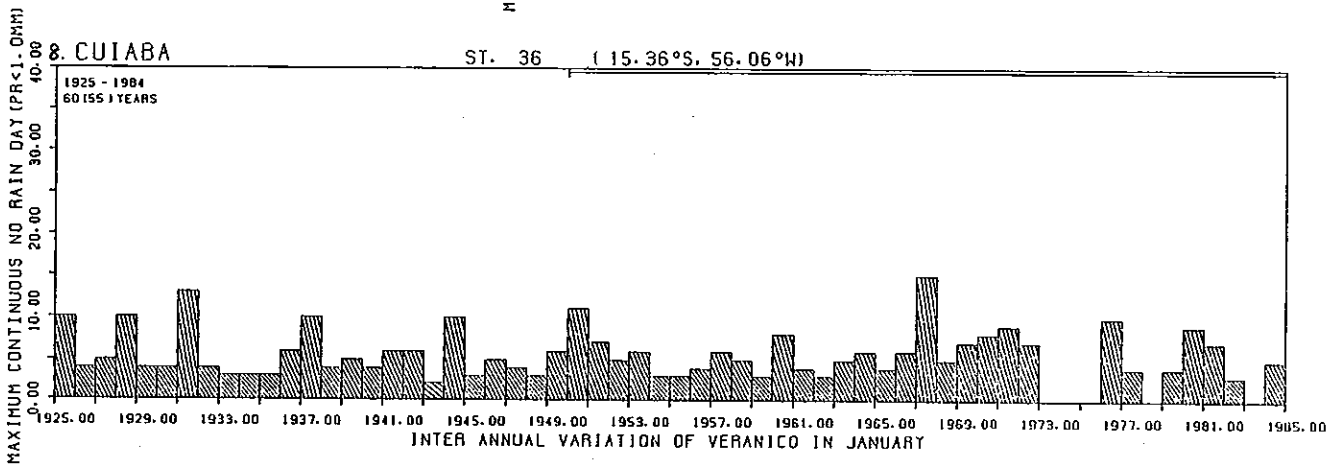

3. BATALHA ST. 27 (4.02 °S, 42.05°W)
1913 - 1983
71(47) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1913.00 1917.00 1921.00 1925.00 1929.00 1933.00 1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

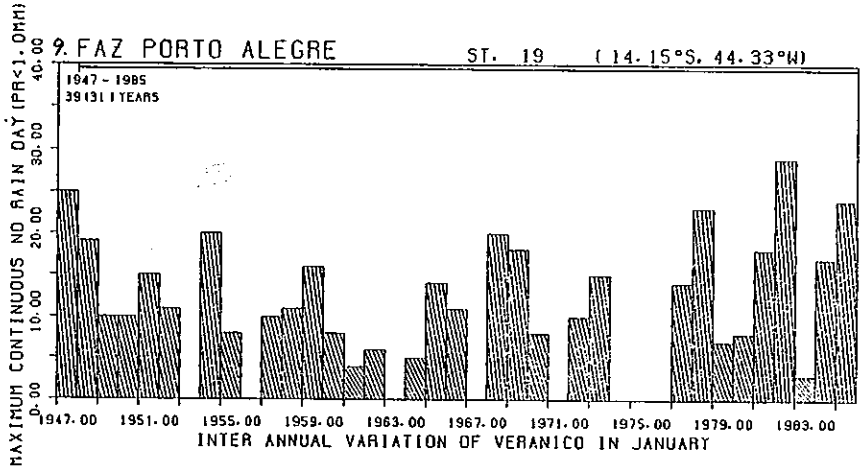

4. BOQUEIRAO ST. 8 (11.20°S. 43.51°W)
1938 - 1973
36(31) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY(PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1938.00 1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

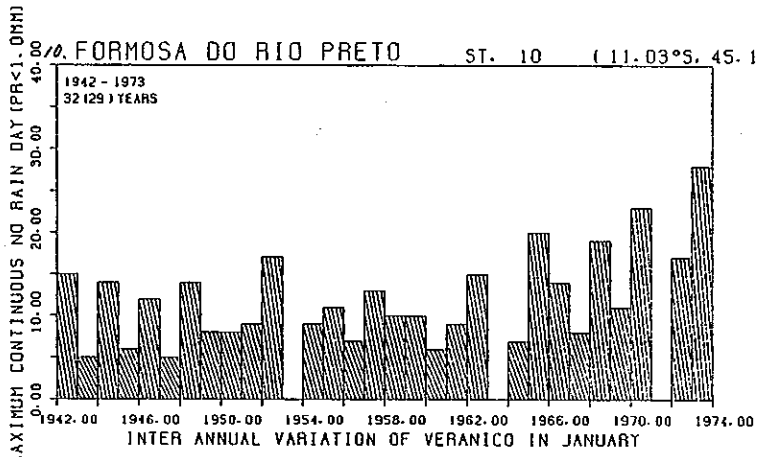

5. CAMPO MAIOR-PI 4.49.31S ST. 20 (4.49 °S. 42.11°W)
1913 - 1970
58(50) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY(PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1913.00 1917.00 1921.00 1925.00 1929.00 1933.00 1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

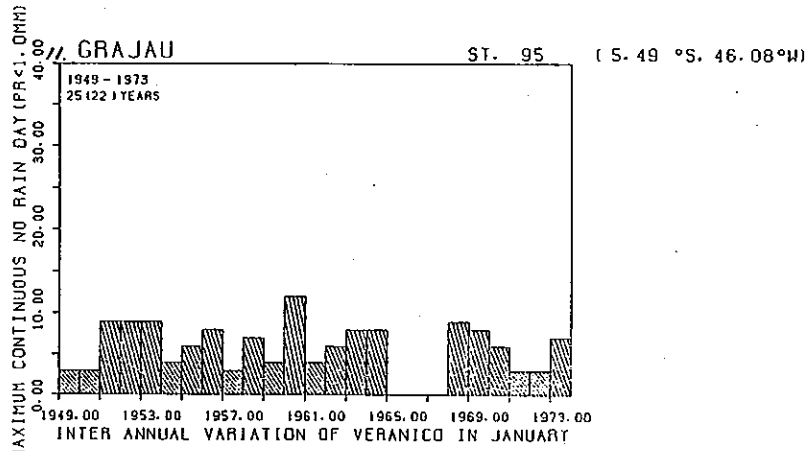

6. CARMO DO CAJURU ST. 41 (20.12°S. 44.46°W)
1942 - 1985
44(41) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY(PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00 1986.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

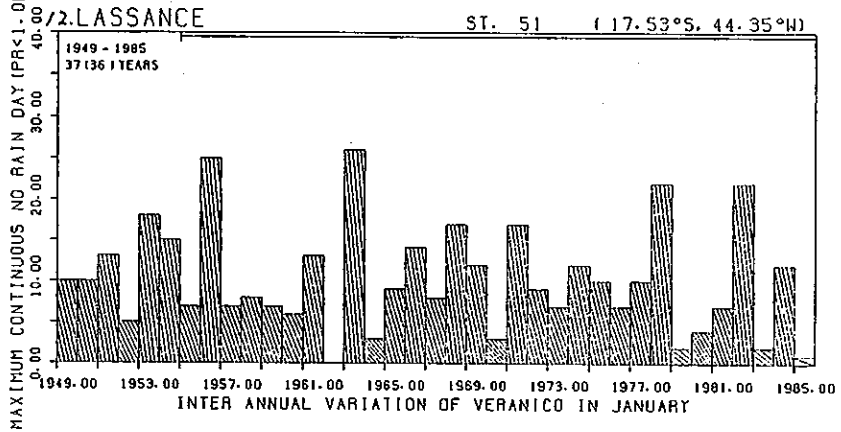

7. CAROLINA
ST. 97
(7.20 °S. 47.28°W)
1949 - 1975
27(22) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY(PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

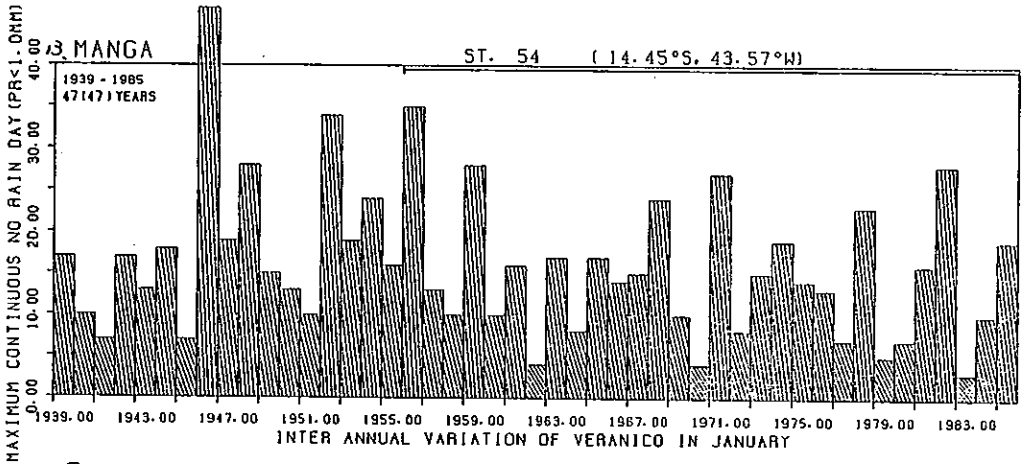

8. CUIABA
ST. 36
(15.36°S. 56.06°W)
1925 - 1984
60(55) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY(PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1925.00
1929.00
1933.00
1937.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

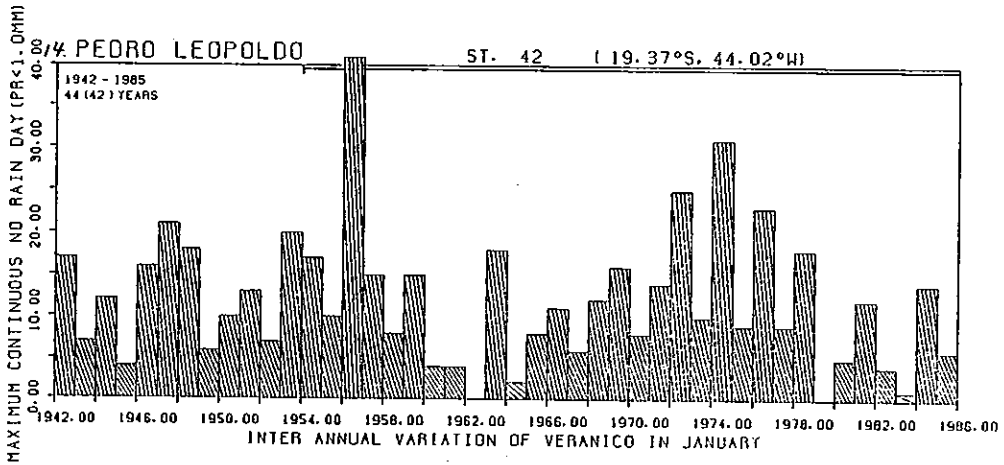

9. FAZ PORTO ALEGRE
ST. 19
(14.15°S. 44.33°W)
1947 - 1985
39(31) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY(PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1947.00
1951.00
1955.00
1959.00
1963.00
1967.00
1971.00
1975.00
1979.00
1983.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

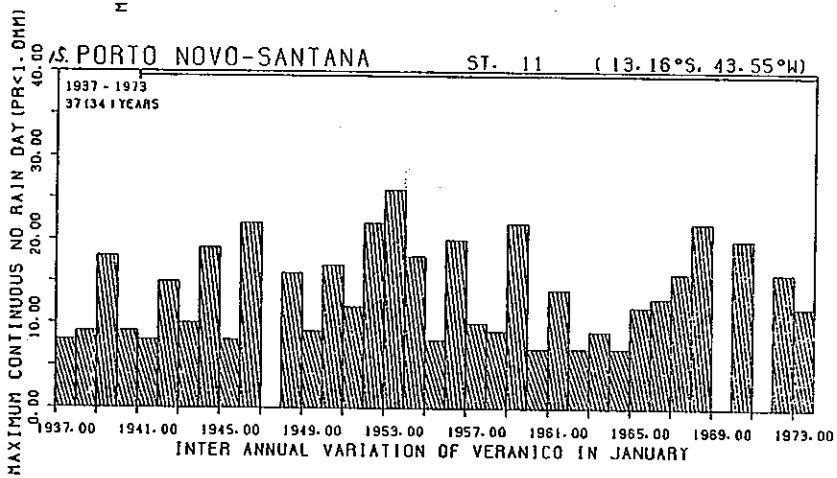

10. FORMOSA DO RIO PRETO ST. 10 (11.03°S. 45.12°W)
1942 - 1973
32 (29) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

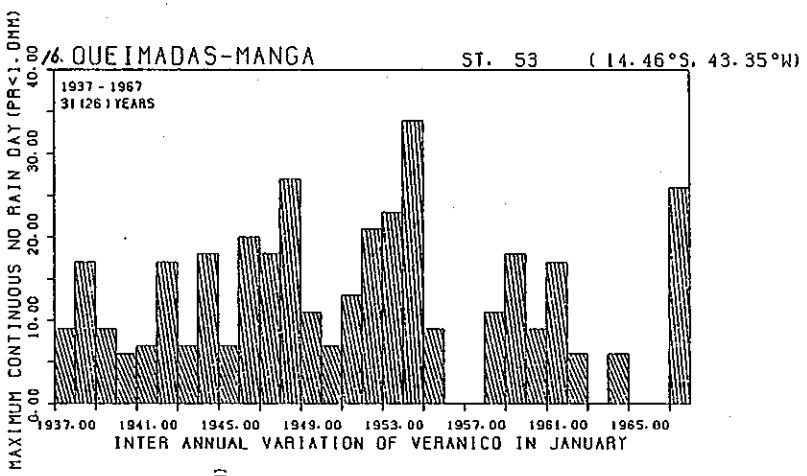

11. GRAJAU ST. 95 (5.49 °S. 46.08°W)
1949 - 1973
25 (22) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

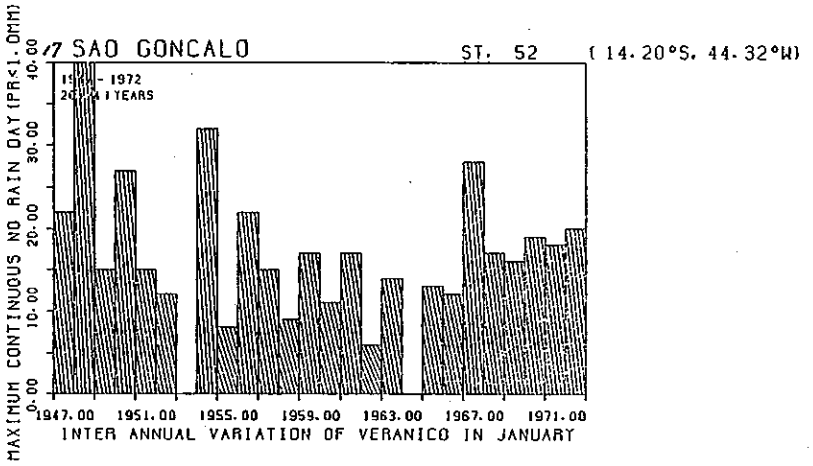

12. LASSANCE ST. 51 (17.53°S. 44.35°W)
1949 - 1985
37 (36) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MMMAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

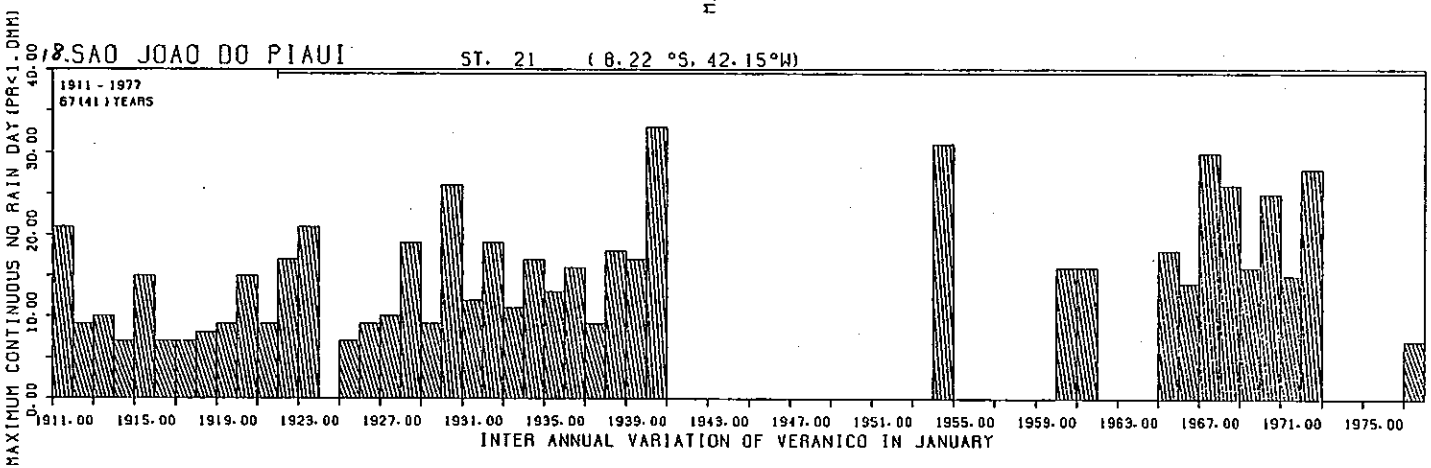

13 MANGA
ST. 54 (14.45°S, 43.57°W)
1939 - 1985
47(47) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1939.00 1943.00 1947.00 1951.00 1955.00 1959.00 1963.00 1967.00 1971.00 1975.00 1979.00 1983.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

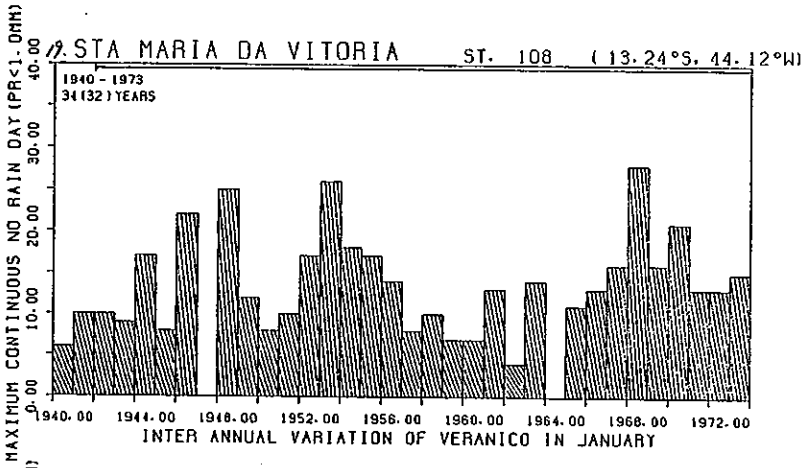

14 PEDRO LEOPOLDO
ST. 42 (19.37°S, 44.02°W)
1942 - 1985
44(42) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00 1986.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

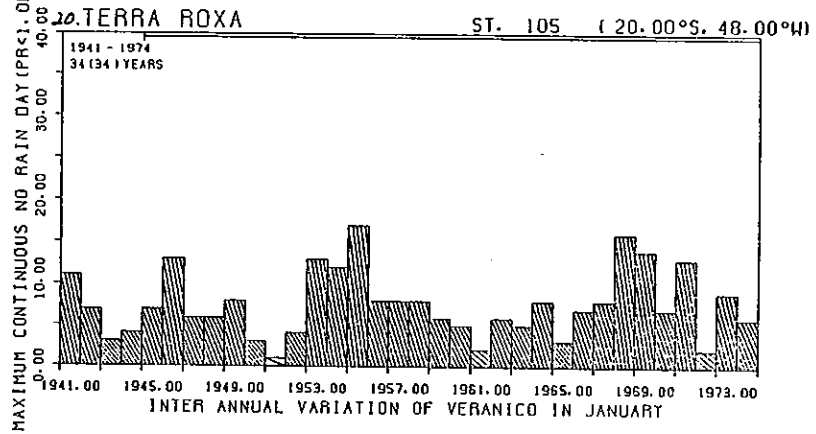

15 PORTO NOVO-SANTANA
ST. 11 (13.16°S, 43.55°W)
1937 - 1973
37(34) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

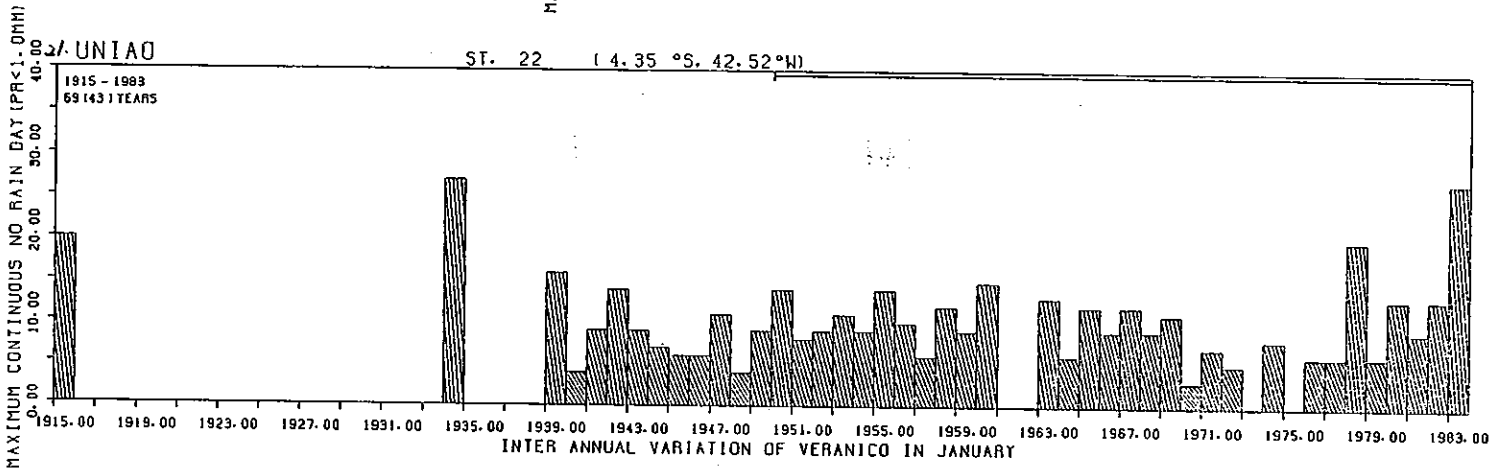

16. QUEIMADAS-MANGA
ST. 53
(14.46°S, 43.35°W)
1937 - 1967
31 (26) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1937.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

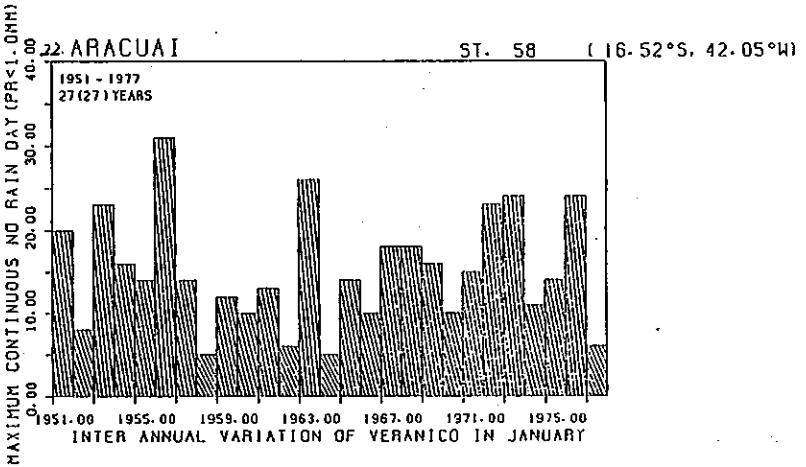

17 SAO GONCALO
ST. 52
(14.20°S, 44.32°W)
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1947.00
1951.00
1955.00
1959.00
1963.00
1967.00
1971.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

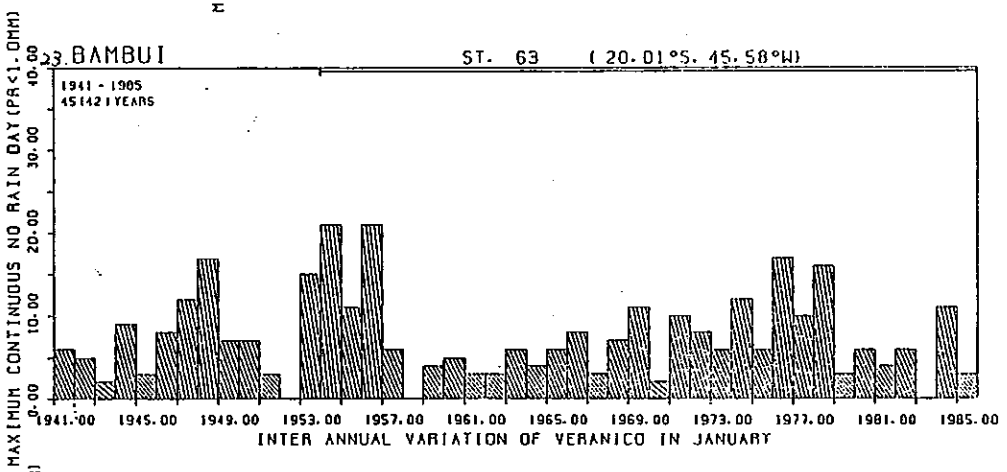

18.SAO JOAO DO PIAUI
ST. 21
(8.22 °S, 42.15°W)
1911 - 1977
67 (41) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1911.00
1915.00
1919.00
1923.00
1927.00
1931.00
1935.00
1939.00
1943.00
1947.00
1951.00
1955.00
1959.00
1963.00
1967.00
1971.00
1975.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

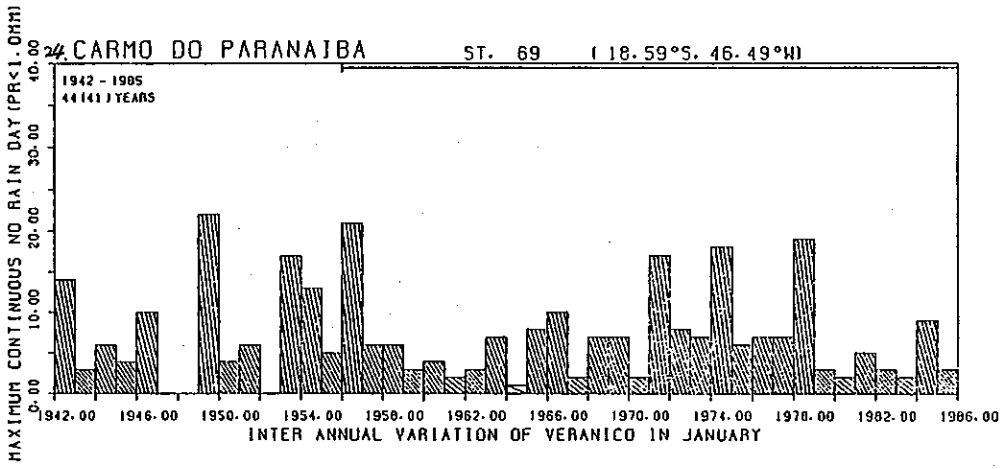

19. STA MARIA DA VITORIA ST. 108 (13.24°S, 44.12°W)
1940 - 1973
34 (32) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1940.00 1944.00 1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

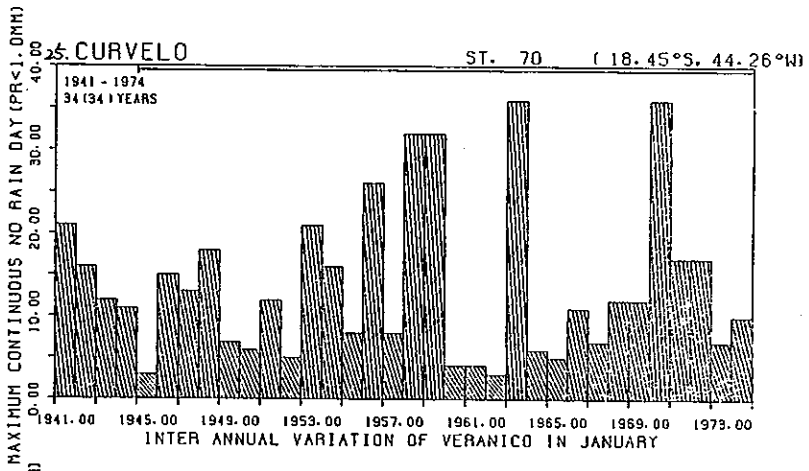

20. TERRA ROXA ST. 105 (20.00°S, 48.00°W)
1941 - 1974
34 (34) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

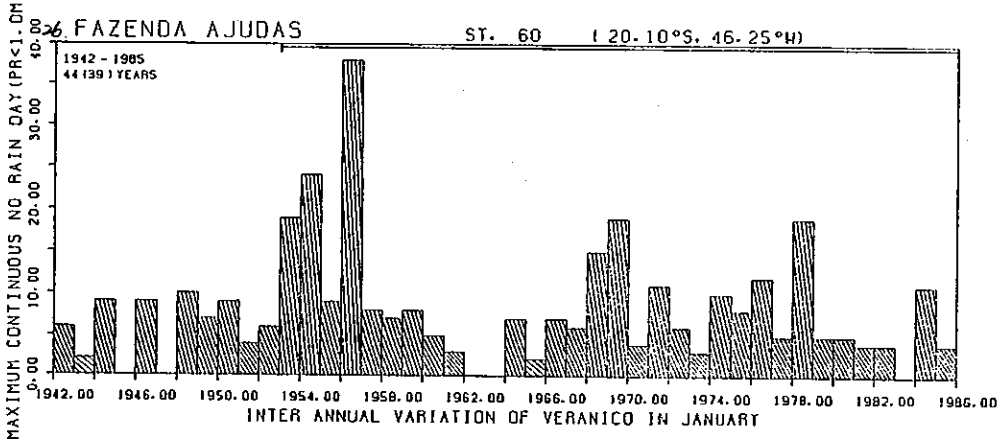

21. UNIAO ST. 22 (4.35 °S, 42.52°W)
1915 - 1983
69 (43) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1915.00 1919.00 1923.00 1927.00 1931.00 1935.00 1939.00 1943.00 1947.00 1951.00 1955.00 1959.00 1963.00 1967.00 1971.00 1975.00 1979.00 1983.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

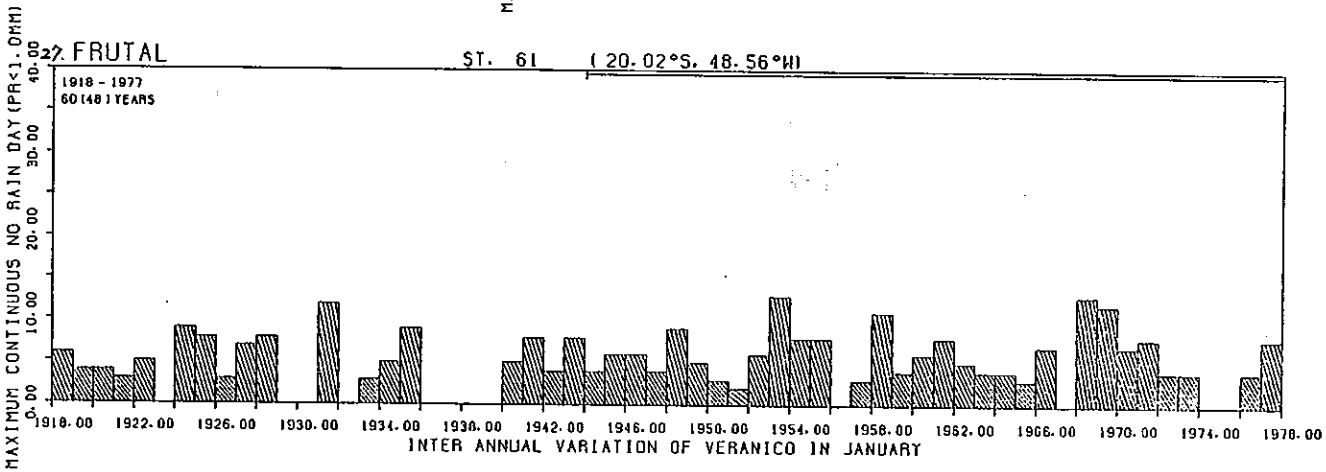

22. ARACUAI
ST. 58
(16.52°S, 42.05°W)
1951 - 1977
27(27) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1951.00
1955.00
1959.00
1963.00
1967.00
1971.00
1975.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

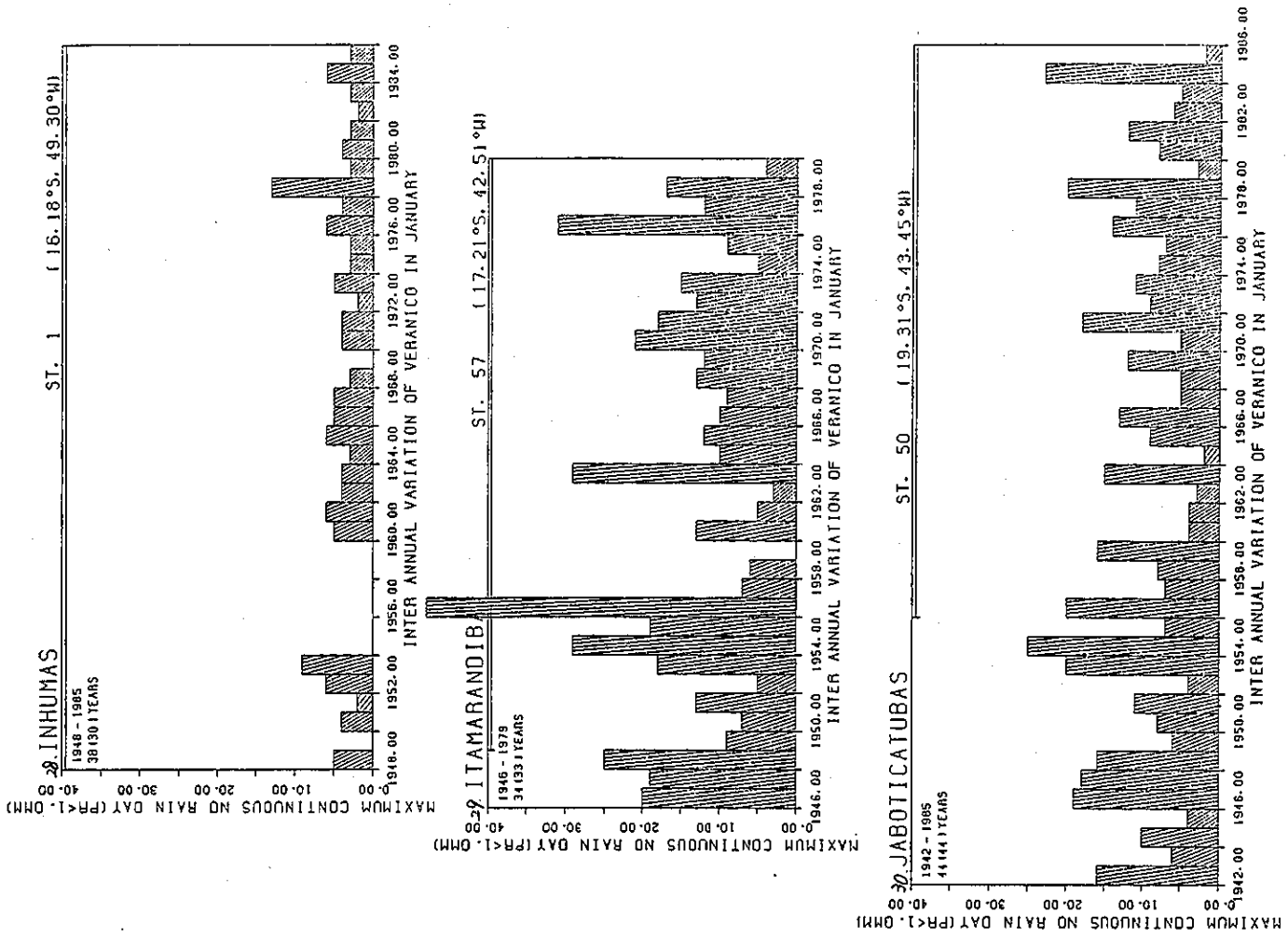

23. BAMBUI
ST. 63
(20.01°S, 45.58°W)
1941 - 1985
45(42) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

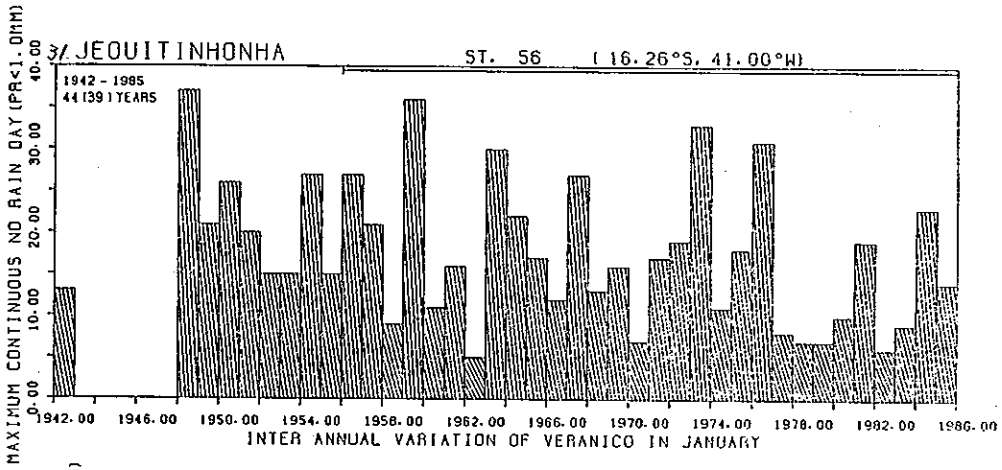

24. CARMO DO PARANAIBA
ST. 69
(18.59°S, 46.49°W)
1942 - 1985
44(41) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

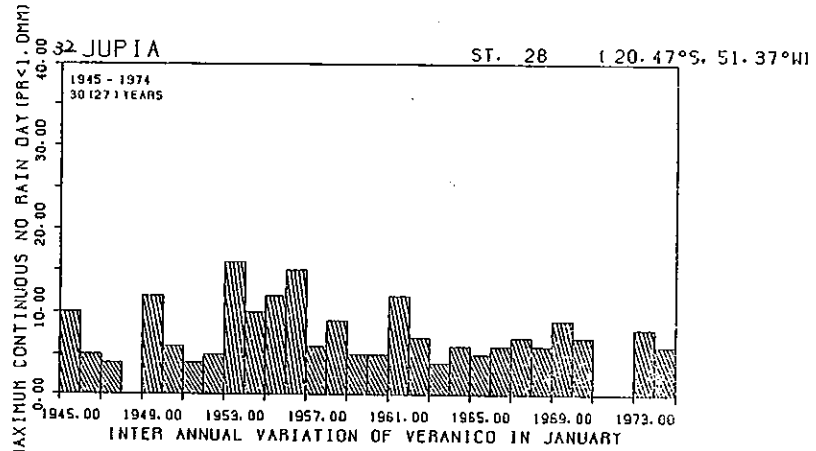

25. CURVELO
ST. 70
(18.45°S, 44.26°W)
1941 - 1974
34 (34) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

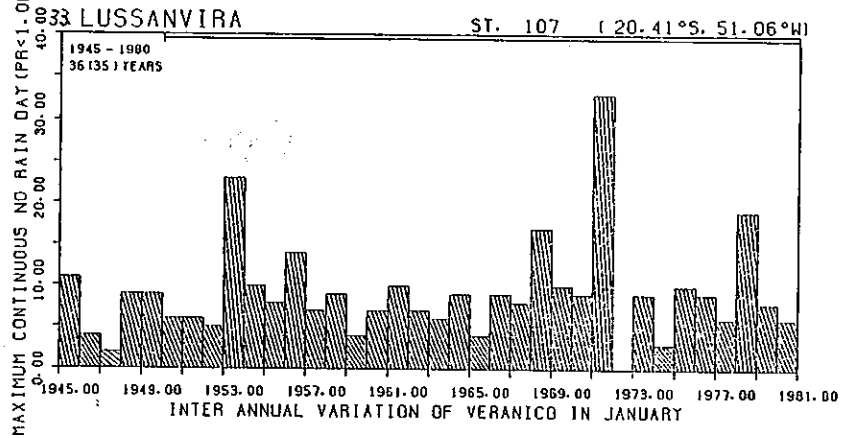

26. FAZENDA AJUDAS
ST. 60
(20.10°S, 46.25°W)
1942 - 1985
44 (39) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

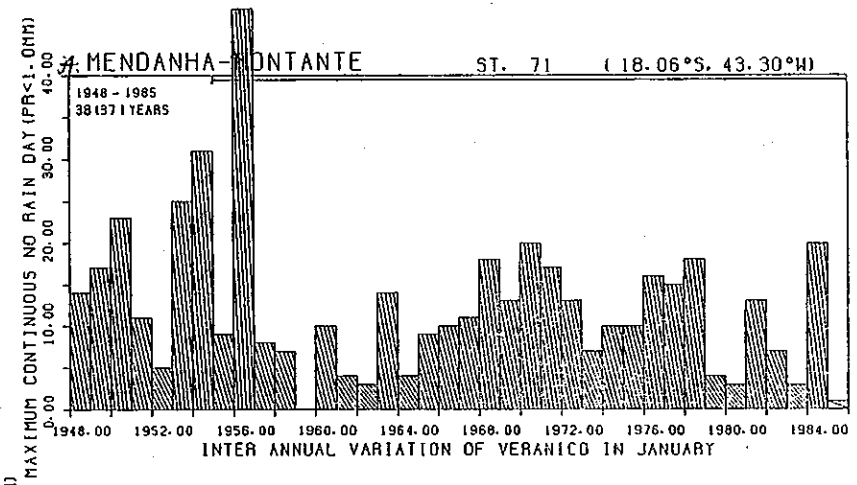

27. FRUTAL
ST. 61
(20.02°S, 48.56°W)
1918 - 1977
60 (48) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1918.00
1922.00
1926.00
1930.00
1934.00
1938.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

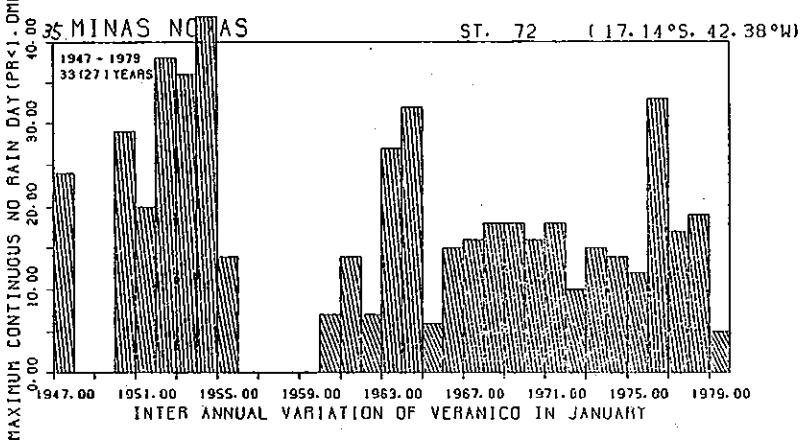

28 INHUMAS
ST. 1 (16.18°S, 49.30°W)
1948 - 1985
38 130 I YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1. 0MM)
INTER ANNUAL VARIATION OF VERANICO IN JANUARY
29 ITAMARANDIBA
ST. 57 (17.21°S, 42.51°W)
1946 - 1979
34 133 I YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1. 0MM)
INTER ANNUAL VARIATION OF VERANICO IN JANUARY
30 JABOTICATUBAS
ST. 50 (19.31°S, 43.45°W)
1942 - 1985
41 144 I YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1. 0MM)
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

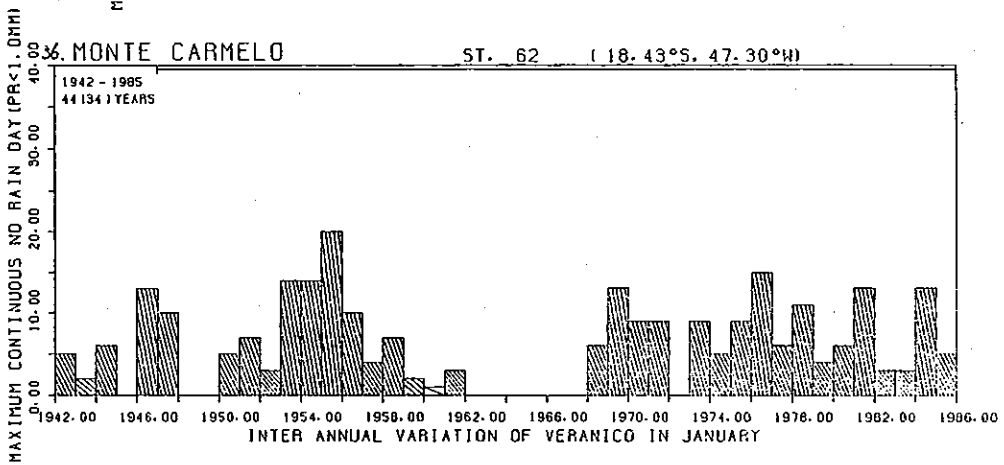

31 JEQUITINHONHA
ST. 56
(16.26°S, 41.00°W)
1942 - 1985
44 (39) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1. DMM)
0.00
10.00
20.00
30.00
40.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

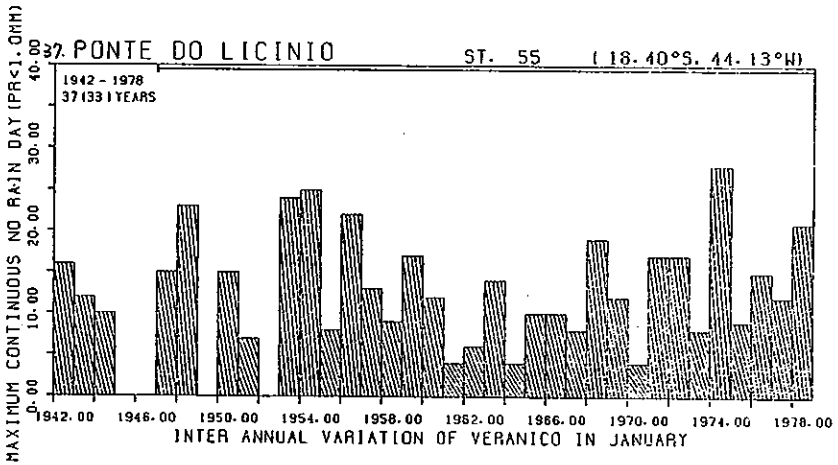

32 JUPIA
ST. 28
(20.47°S, 51.37°W)
1945 - 1974
30 (27) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1. DMM
0.00
10.00
20.00
30.00
40.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

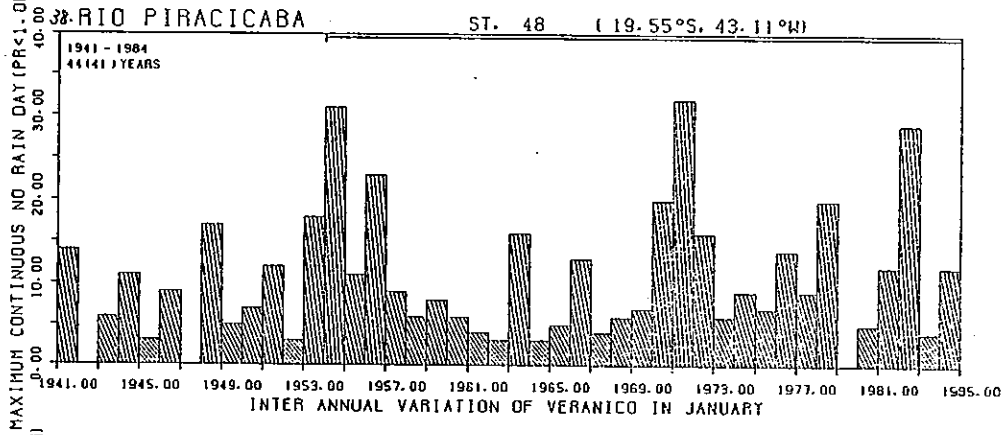

33 LUSSANVIRA
ST. 107
(20.41°S, 51.06°W)
1945 - 1980
36 (35) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1. DMMMAXIMUM CONTINUOUS NO RAIN DAY (PR<1. DMM)
0.00
10.00
20.00
30.00
40.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

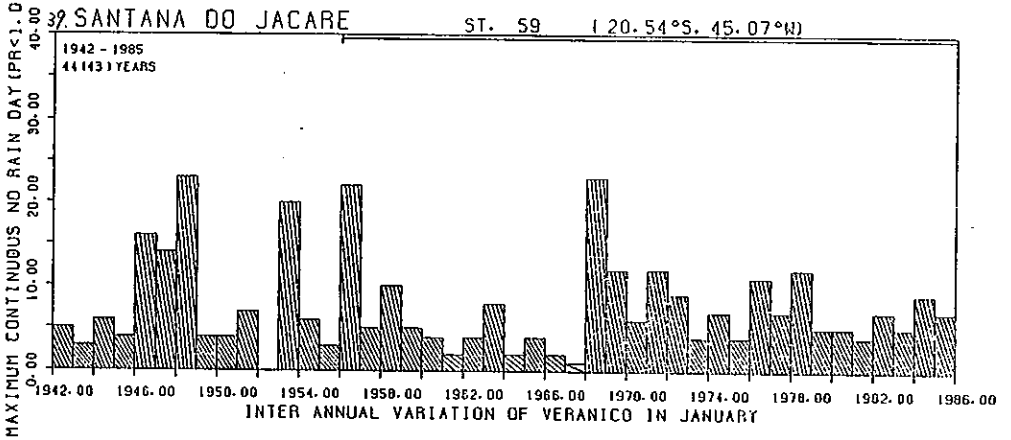

34. MENDANHA-MONTANTE ST. 71 (18.06°S. 43.30°W)
1948 - 1985
38 (37) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00 1976.00 1980.00 1984.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

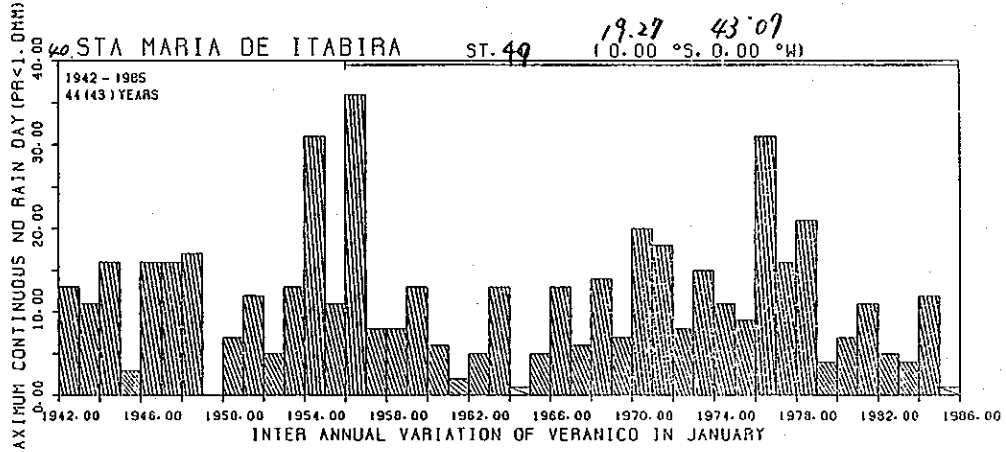

35 MINAS NOVAS ST. 72 (17.14°S. 42.38°W)
1947 - 1979
33 (27) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1947.00 1951.00 1955.00 1959.00 1963.00 1967.00 1971.00 1975.00 1979.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

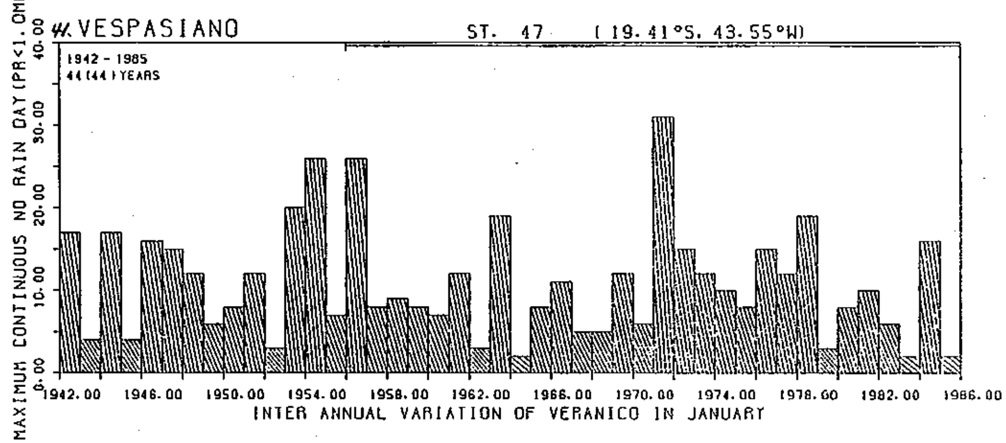

36. MONTE CARMELO ST. 62 (18.43°S. 47.30°W)
1942 - 1985
44 (34) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00 1986.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

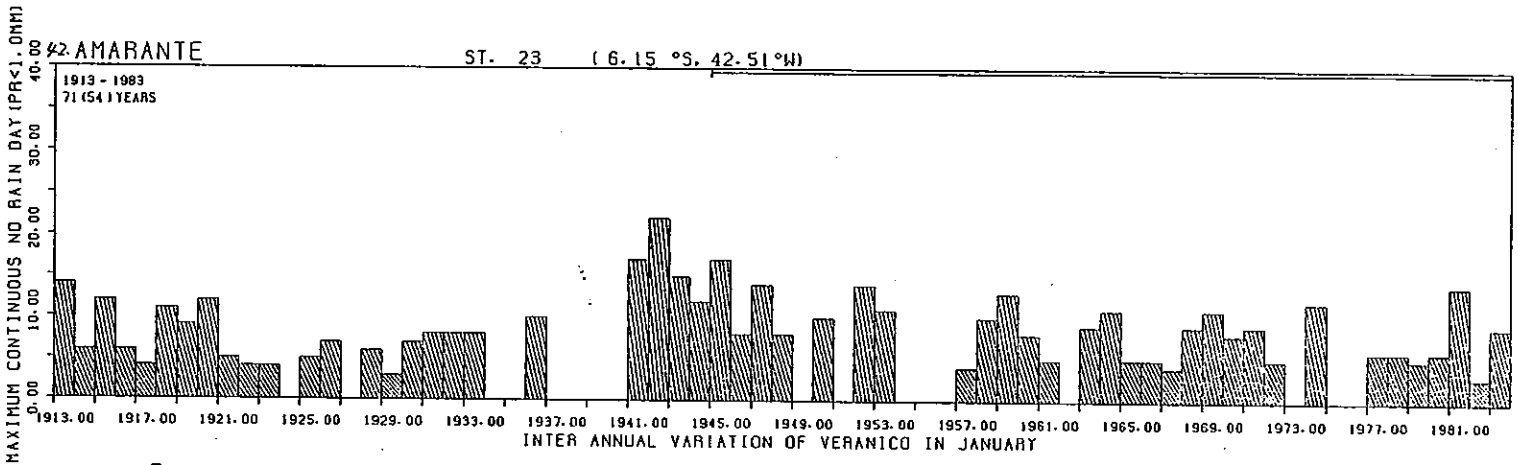

37. PONTE DO LICINIO
ST. 55
(18.40°S, 44.13°W)
1942 - 1978
37(33) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
40.00
30.00
20.00
10.00
0.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

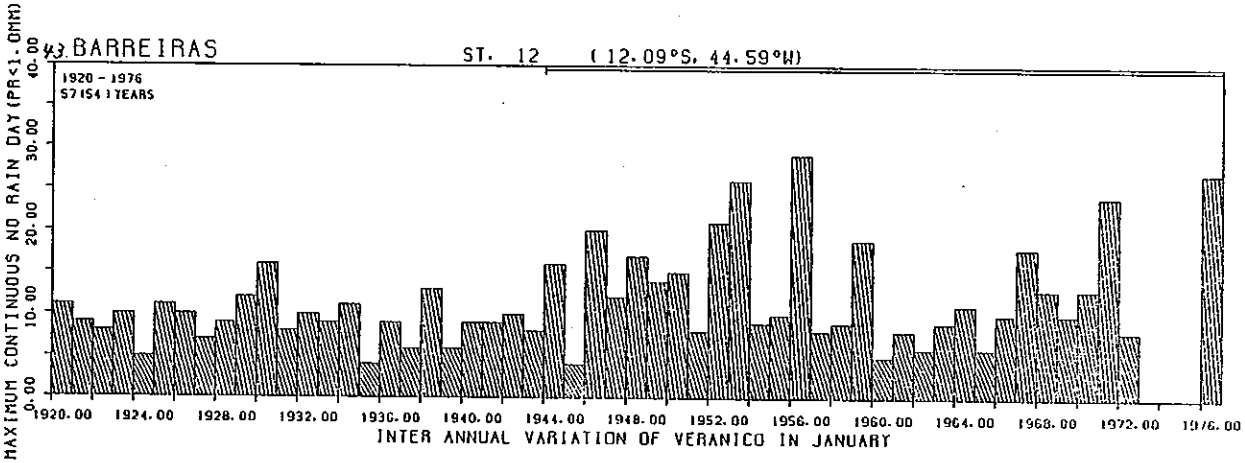

38. RIO PIRACICABA
ST. 48
(19.55°S, 43.11°W)
1941 - 1984
44(41) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
40.00
30.00
20.00
10.00
0.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

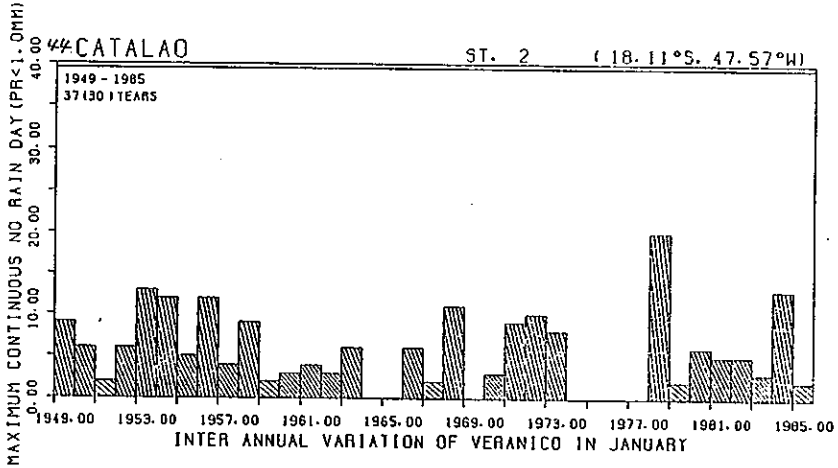

39. SANTANA DO JACARE
ST. 59
(20.54°S, 45.07°W)
1942 - 1985
44(43) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
40.00
30.00
20.00
10.00
0.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

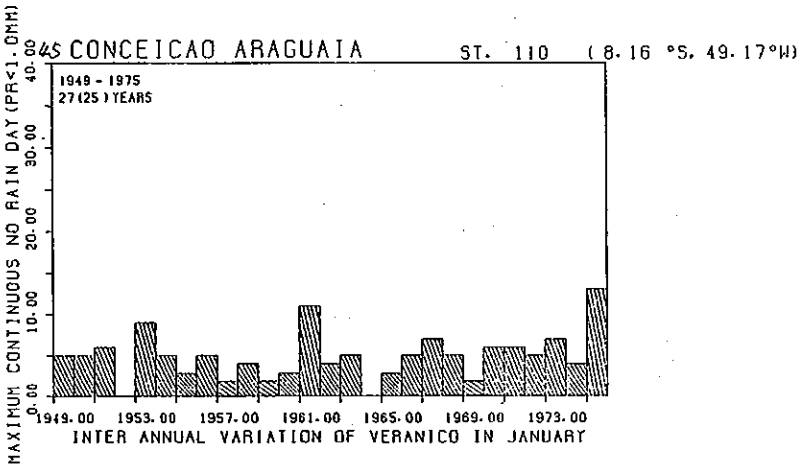

40. STA MARIA DE ITABIRA
ST. 49
19.27 43°07
(0.00 °S. 0.00 °W)
1942 - 1985
44 (43) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

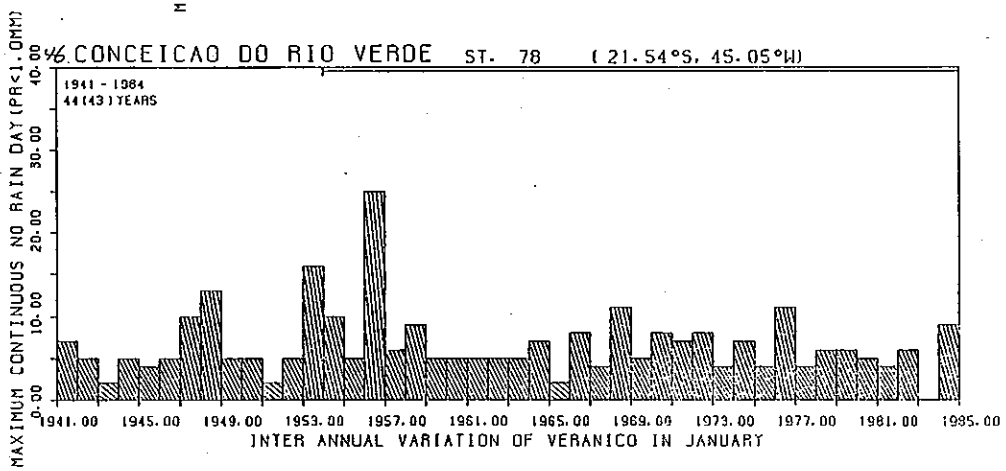

41. VESPASIANO
ST. 47
(19.41°S. 43.55°W)
1942 - 1985
44 (44) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

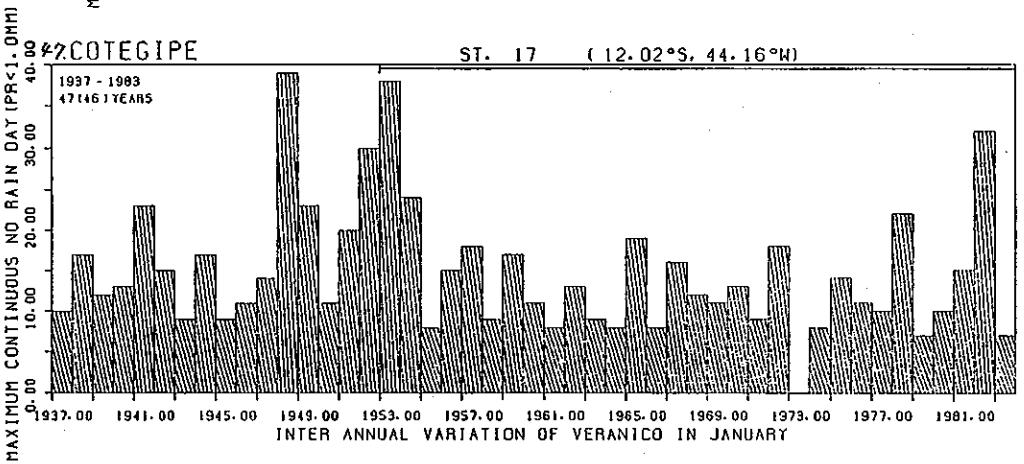

42 AMARANTE
ST. 23 (6.15 °S, 42.51°W)
1913 - 1983
71 (54) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1913.00 1917.00 1921.00 1925.00 1929.00 1933.00 1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

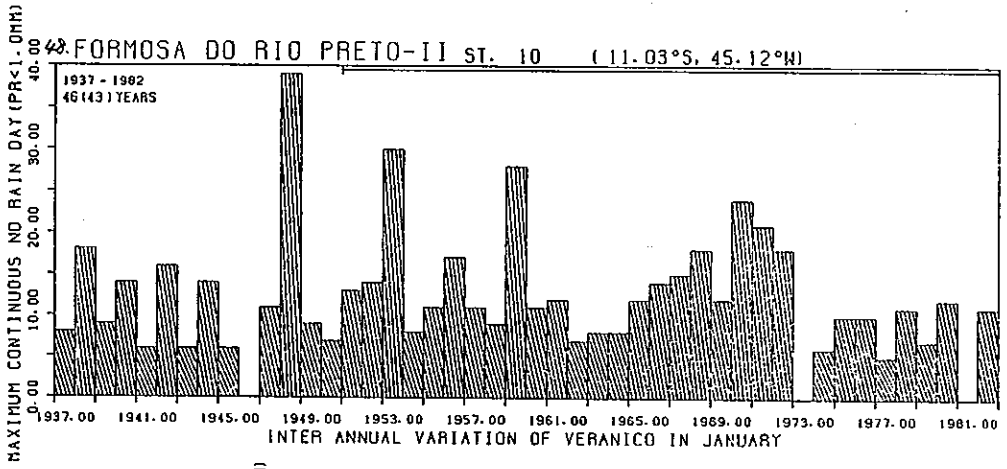

43 BARREIRAS
ST. 12 (12.09°S, 44.59°W)
1920 - 1976
57 (54) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1920.00 1924.00 1928.00 1932.00 1936.00 1940.00 1944.00 1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00 1976.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

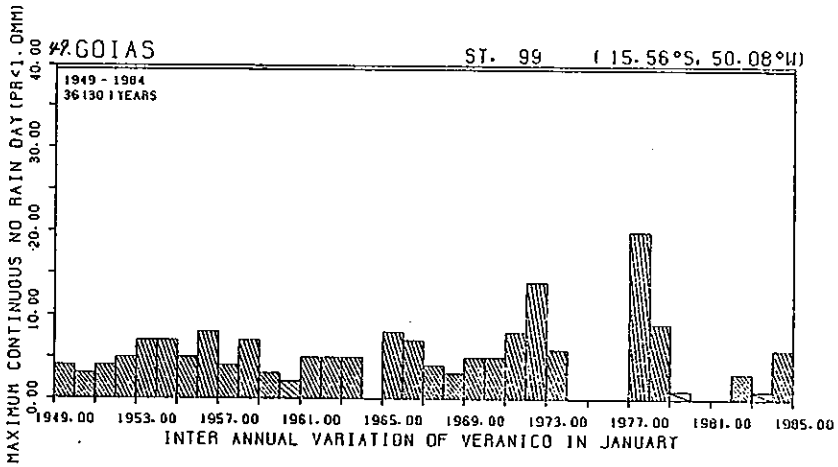

44 CATALAO
ST. 2 (18.11°S, 47.57°W)
1949 - 1985
37 (30) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

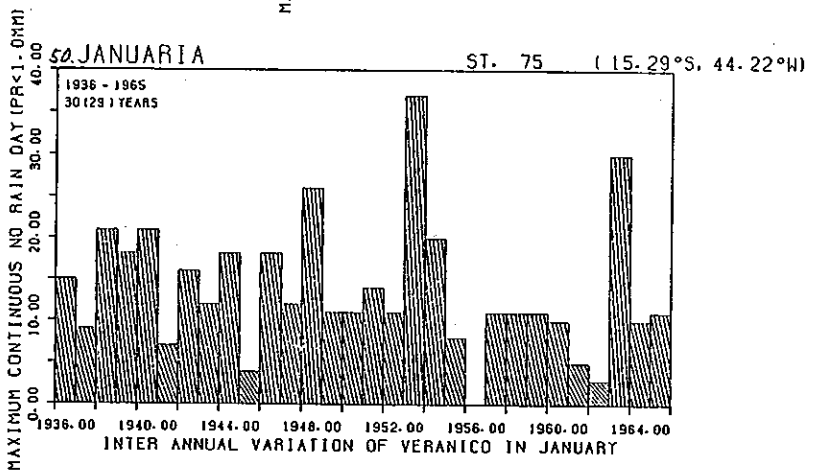

45 CONCEICAO ARAGUAIA ST. 110 (8.16 °S, 49.17°W)
1949 - 1975
27(25) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

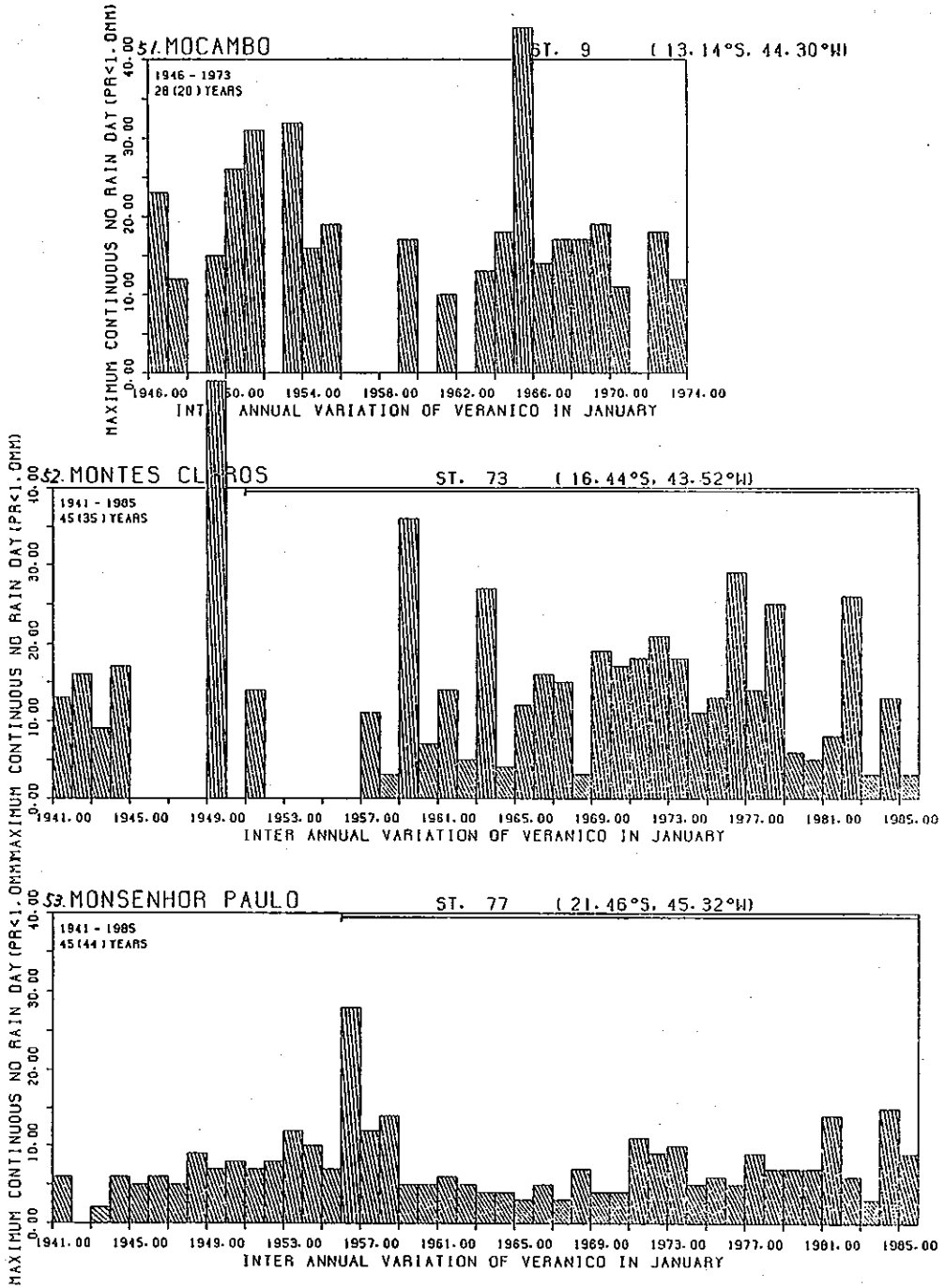

46 CONCEICAO DO RIO VERDE ST. 78 (21.54°S, 45.05°W)
1941 - 1984
44(43) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

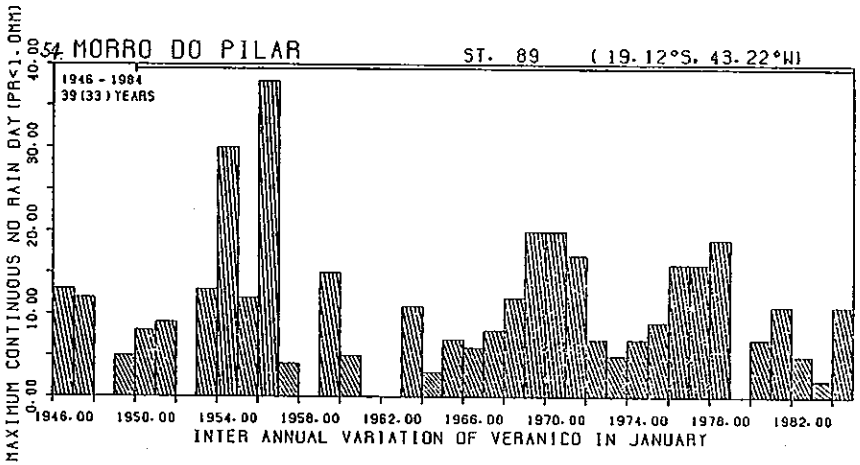

47 COTEGIPE ST. 17 (12.02°S, 44.16°W)
1937 - 1983
47(46) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

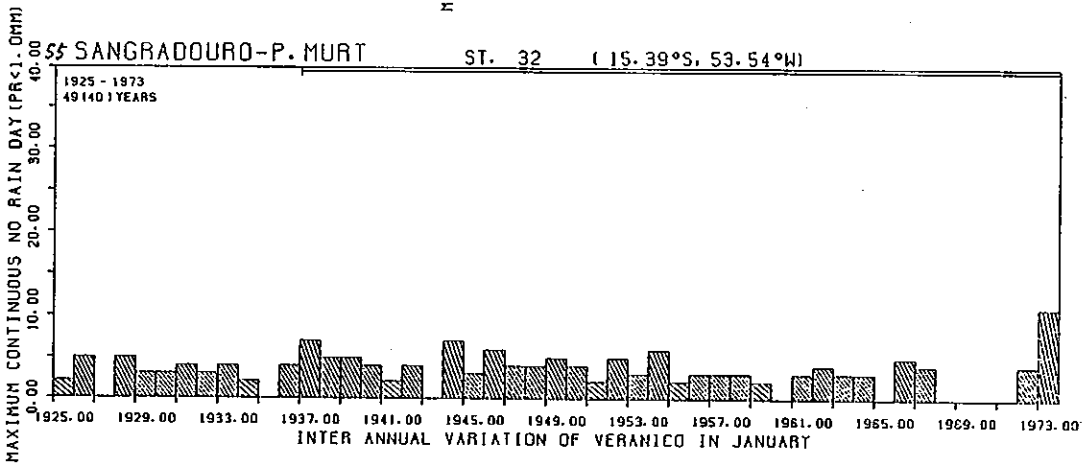

48.FORMOSA DO RIO PRETO-II ST. 10 (11.03°S, 45.12°W)
1937 - 1982
46(43) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY(PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

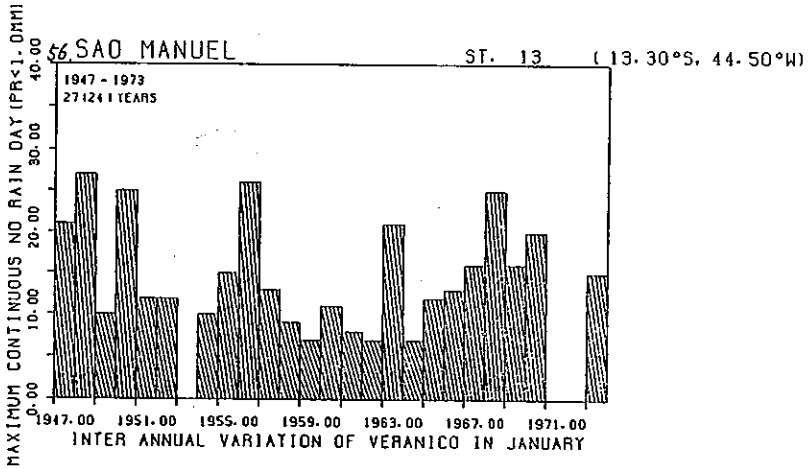

49.GOIAS ST. 99 (15.56°S, 50.08°W)
1949 - 1984
36(30) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY(PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

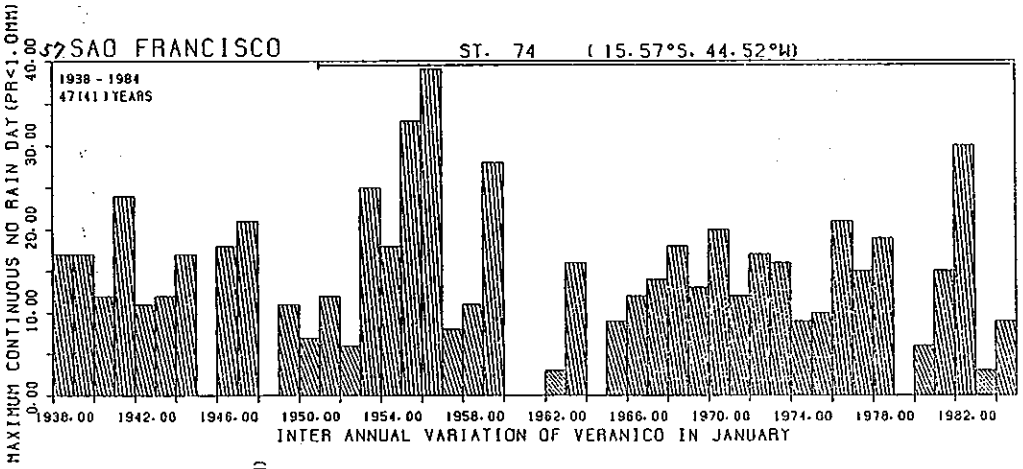

50.JANUARIA ST. 75 (15.29°S, 44.22°W)
1936 - 1965
30(29) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY(PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1936.00 1940.00 1944.00 1948.00 1952.00 1956.00 1960.00 1964.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

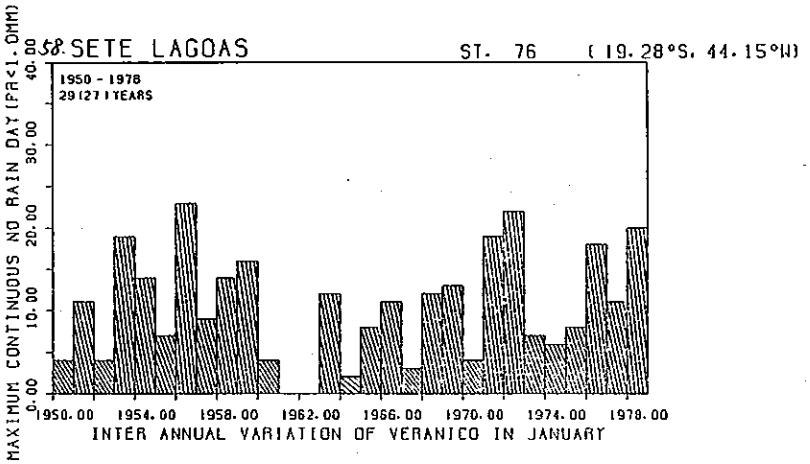

51.MOCAMBO
ST. 9
(13.14°S, 44.30°W)
1946 - 1973
28 (20) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY
52.MONTES CLAROS
ST. 73
(16.44°S, 43.52°W)
1941 - 1985
45 (35) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY
53.MONSENHOR PAULO
ST. 77
(21.46°S, 45.32°W)
1941 - 1985
45 (44) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

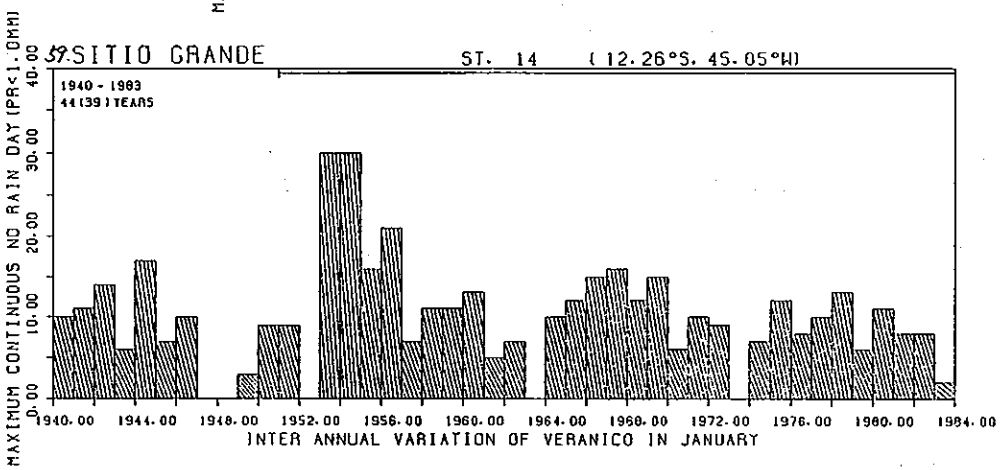

54 MORRO DO PILAR
ST. 89
(19.12°S, 43.22°W)
1946 - 1984
39 (33) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

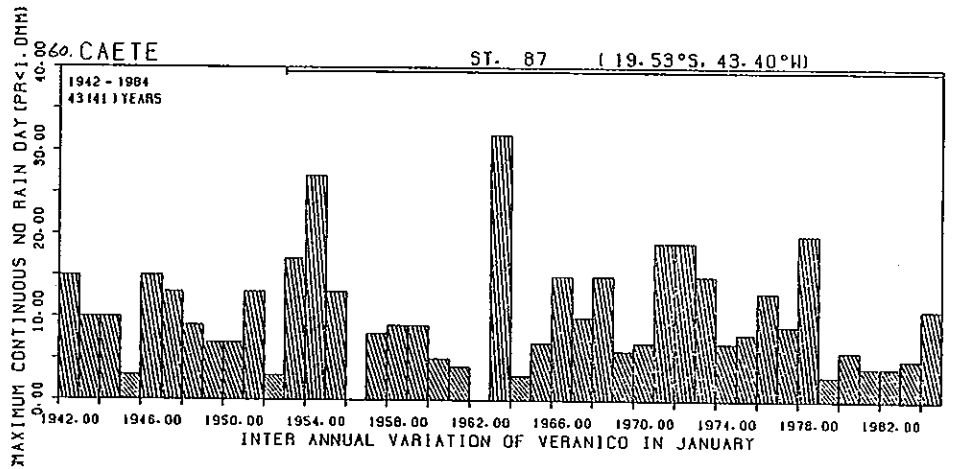

55 SANGRADOURO-P. MURT
ST. 32
(15.39°S, 53.54°W)
1925 - 1973
49 (40) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1925.00
1929.00
1933.00
1937.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

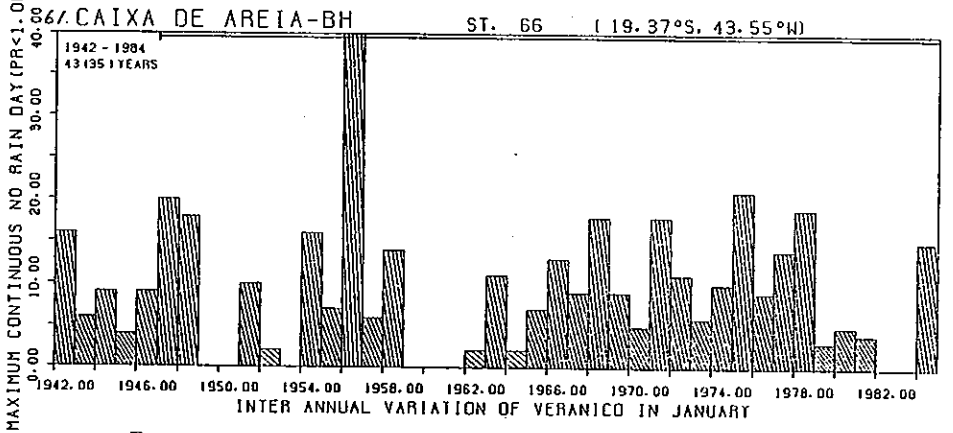

56 SAO MANUEL
ST. 13
(13.30°S, 44.50°W)
1947 - 1973
27 (24) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1947.00
1951.00
1955.00
1959.00
1963.00
1967.00
1971.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

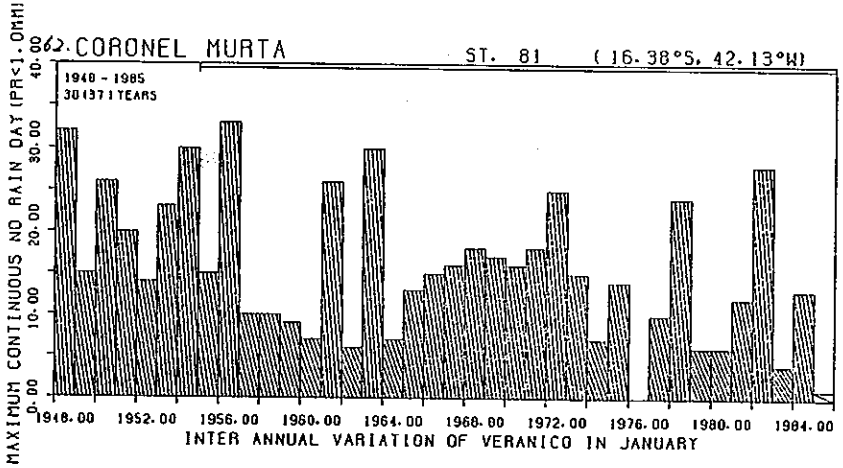

57 SAO FRANCISCO
ST. 74 (15.57°S, 44.52°W)
1938 - 1984
47(41) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1938.00 1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

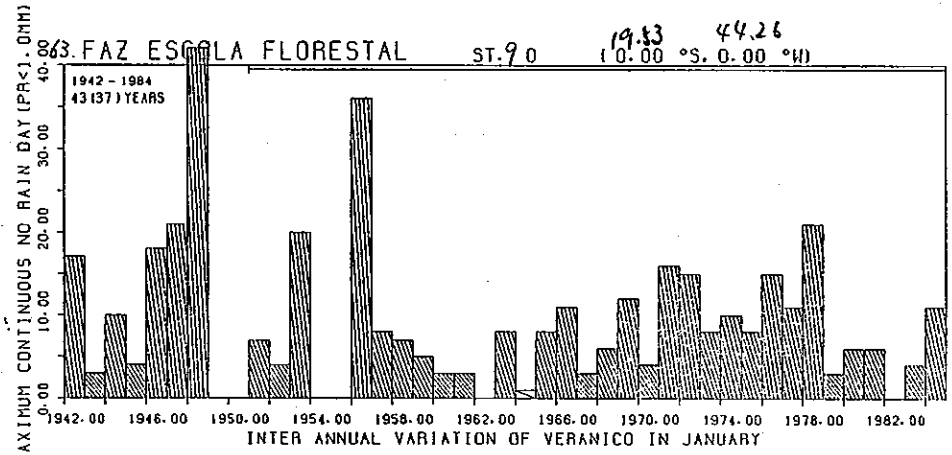

58 SETE LAGOAS
ST. 76 (19.28°S, 44.15°W)
1950 - 1978
29(27) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

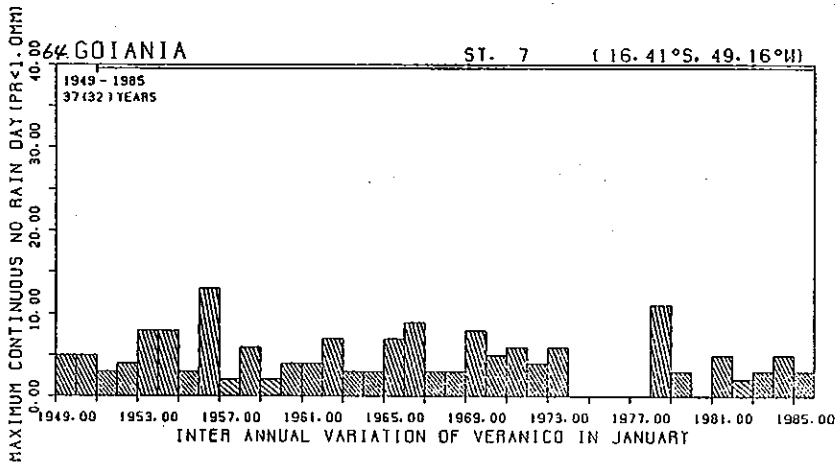

59 SITIO GRANDE
ST. 14 (12.26°S, 45.05°W)
1940 - 1983
44(39) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1940.00 1944.00 1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00 1976.00 1980.00 1984.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

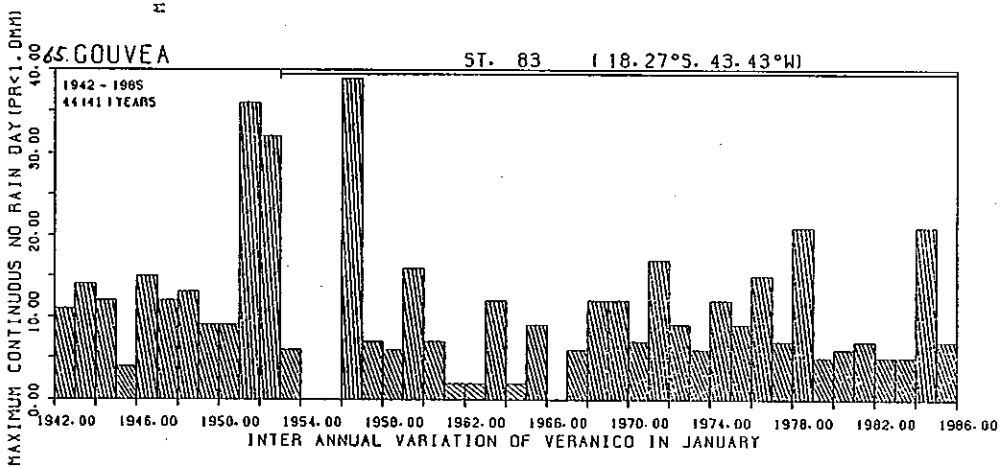

60. CAETE
ST. 87 (19.53°S, 43.40°W)
1942 - 1984
43 (41) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

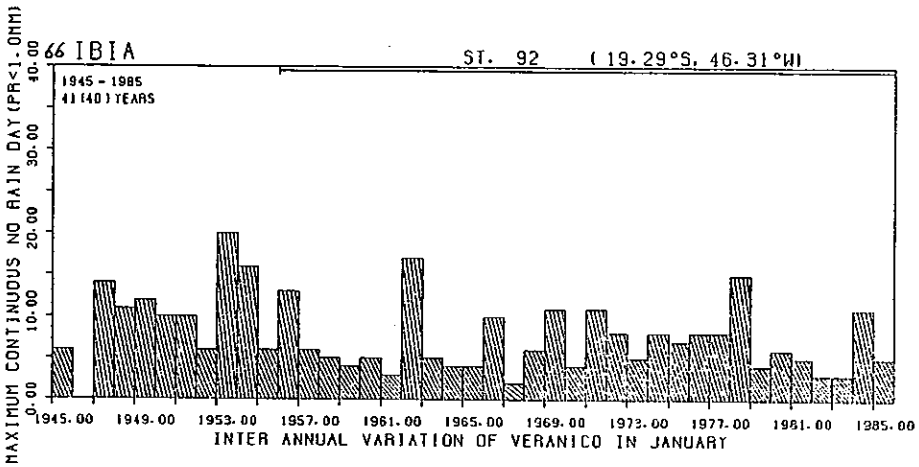

61. CAIXA DE AREIA-BH
ST. 66 (19.37°S, 43.55°W)
1942 - 1984
43 (35) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

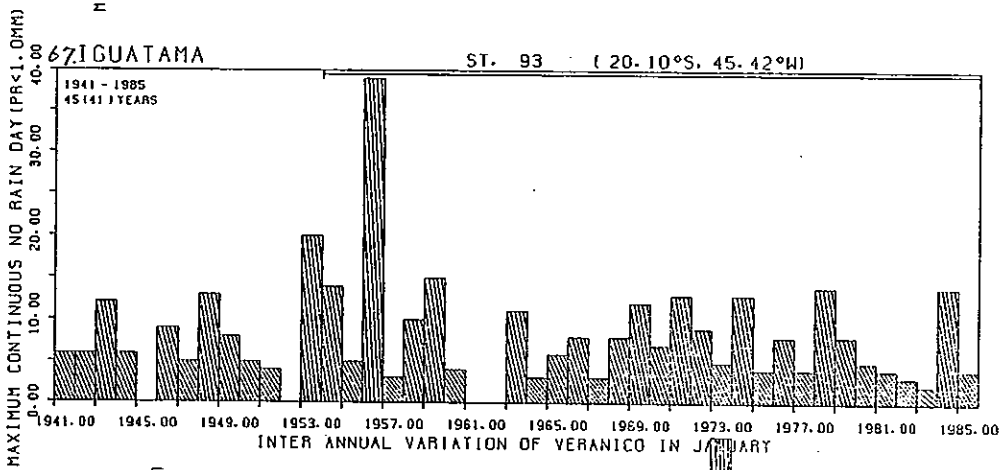

62. CORONEL MURTA
ST. 81 (16.38°S, 42.13°W)
1940 - 1985
30 (37) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00 1976.00 1980.00 1984.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

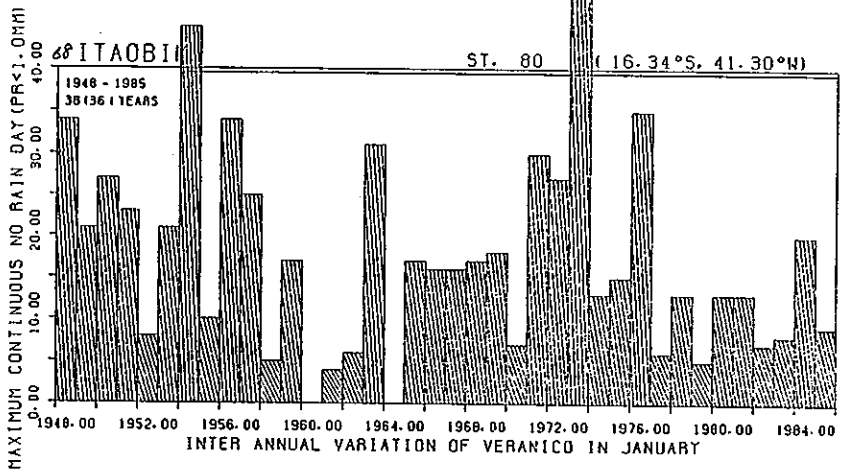

63. FAZ ESCOLA FLORESTAL ST. 90 (0.00 °S. 0.00 °W)
19.33 44.26
1942 - 1984
43 (37) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

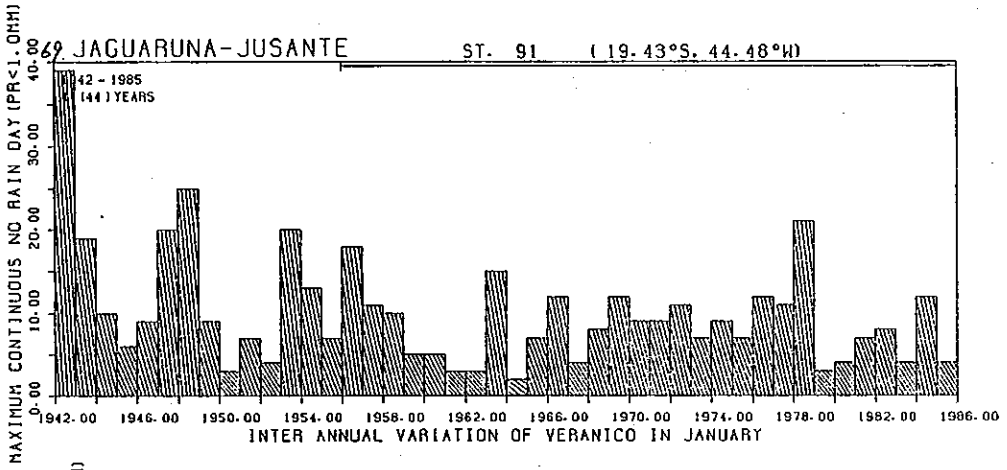

64 GOIANIA ST. 7 (16.41°S. 49.16°W)
1949 - 1985
37 (32) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

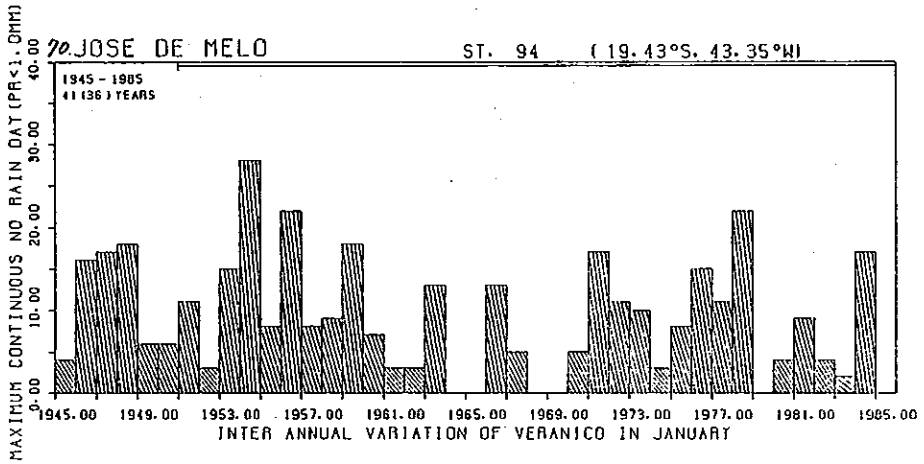

65 GOUVEA ST. 83 (18.27°S. 43.43°W)
1942 - 1985
44 (41) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00 1986.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

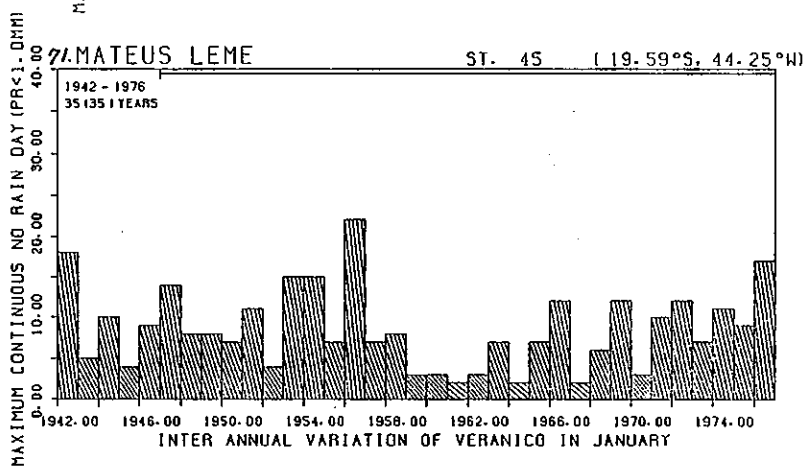

66 IBIA
ST. 92 (19.29°S, 46.31°W)
1945 - 1985
41 (40) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY


67 IGUATAMA
ST. 93 (20.10°S, 45.42°W)
1941 - 1985
45 (41) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY


68 ITAOBI
ST. 80 (16.34°S, 41.30°W)
1948 - 1985
38 (36) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00 1976.00 1980.00 1984.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

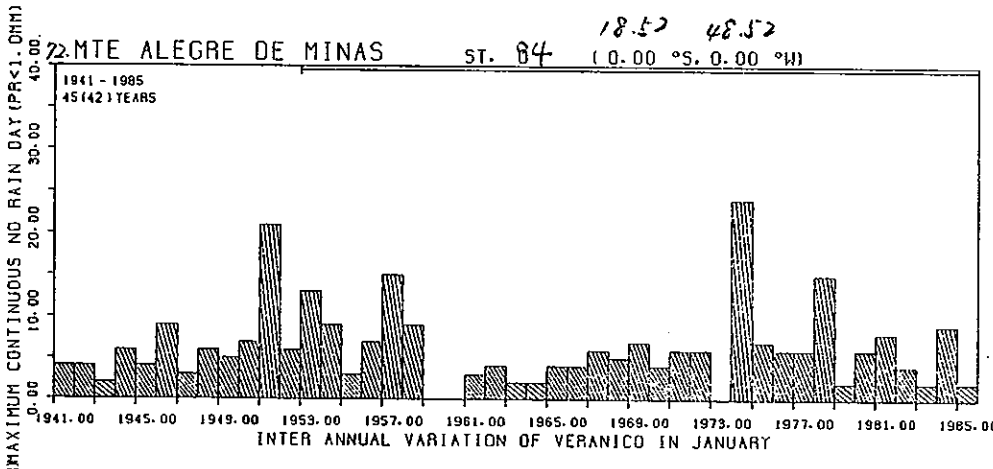

69 JAGUARUNA-JUSANTE ST. 91 (19.43°S, 44.48°W)
1942 - 1985
(44) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00 1986.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY


70 JOSE DE MELO ST. 94 (19.43°S, 43.35°W)
1945 - 1985
41 (36) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

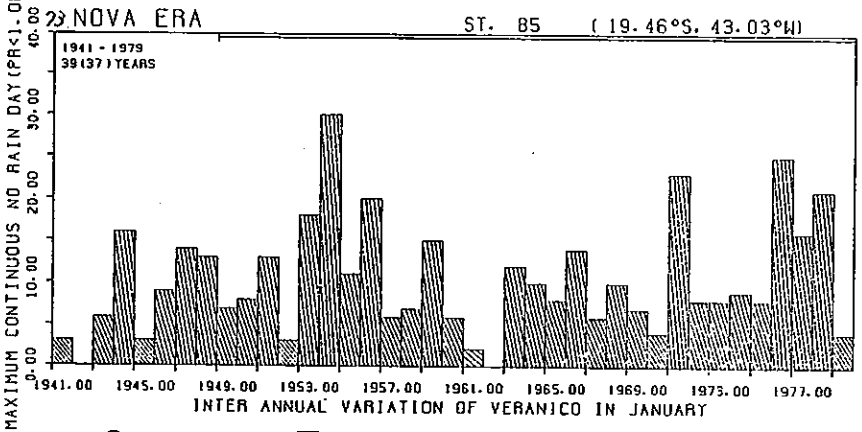

71 MATEUS LEME ST. 45 (19.59°S, 44.25°W)
1942 - 1976
35 (35) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

18.52 48.52

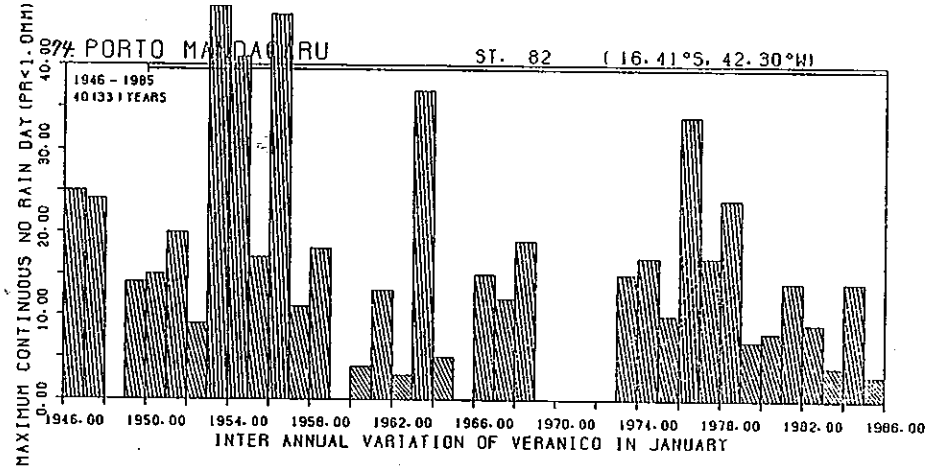
22.MTE ALEGRE DE MINAS ST. 84 (0.00 °S, 0.00 °W)

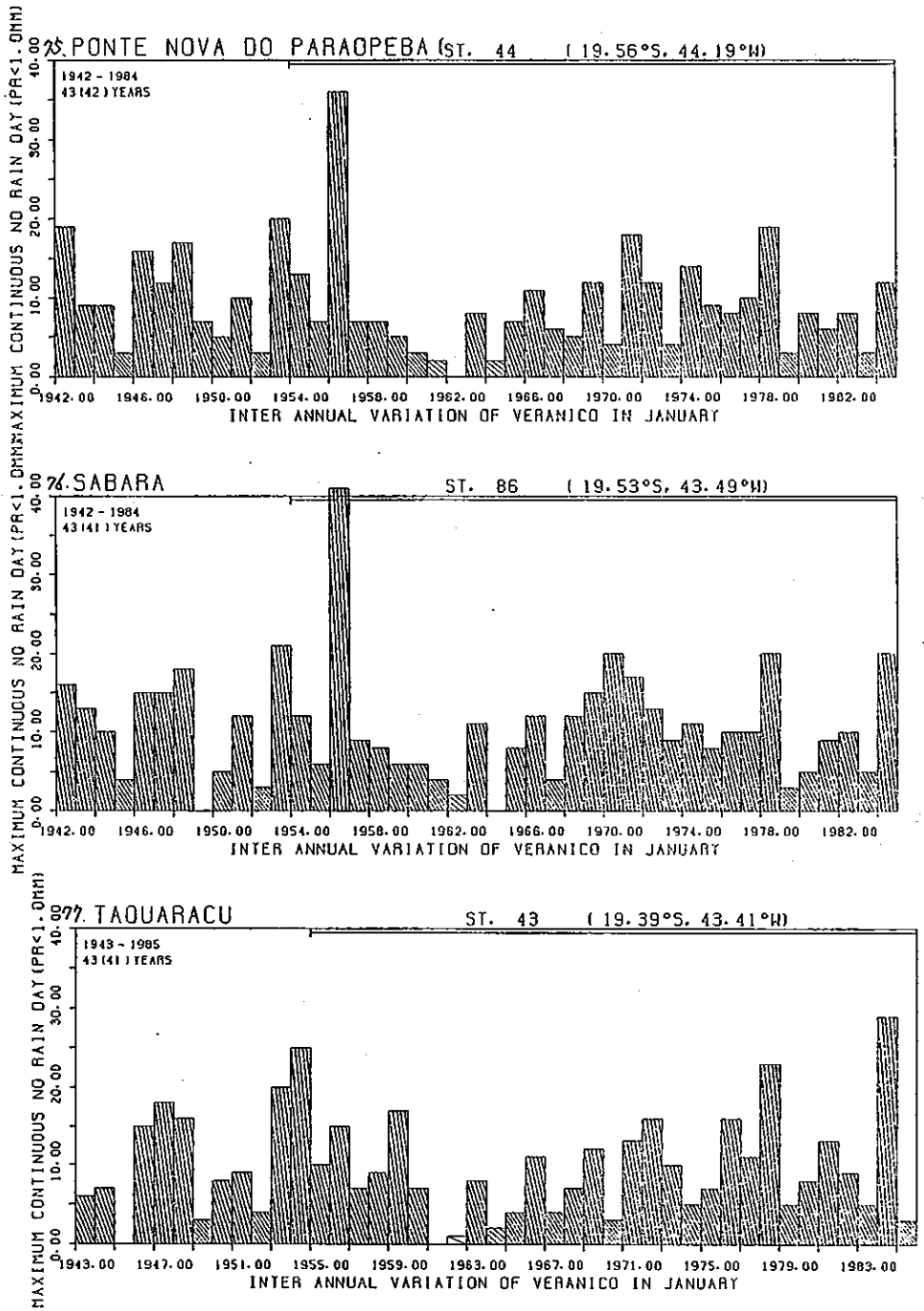


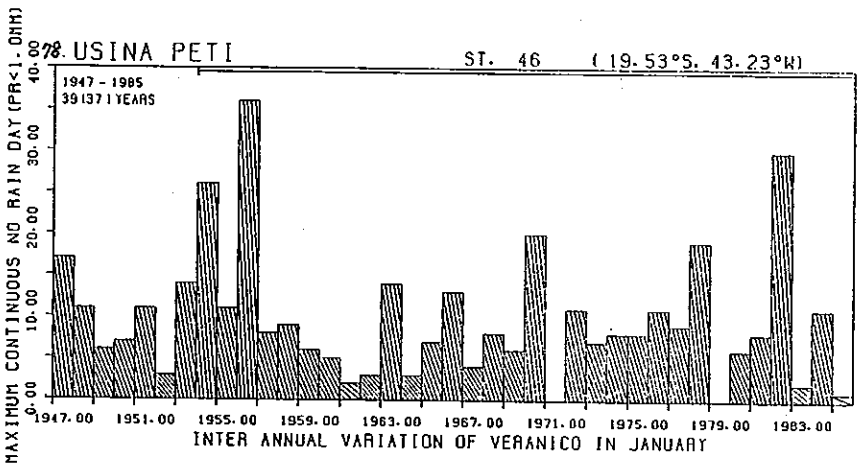
23.NOVA ERA ST. 85 (19.46°S, 43.03°W)

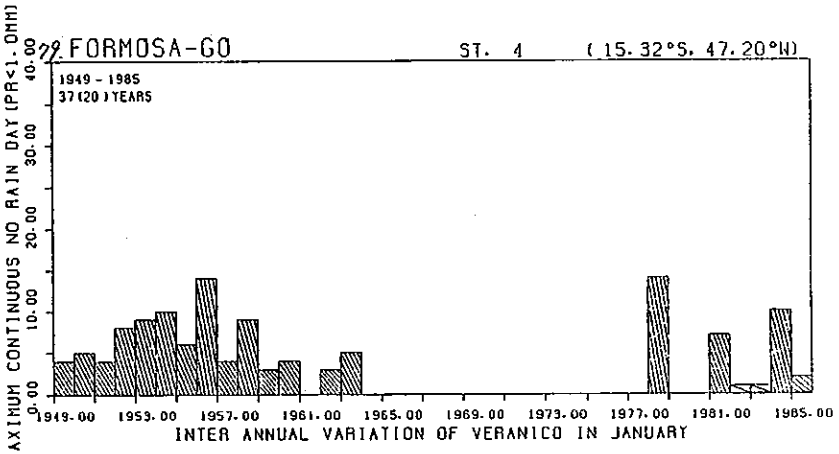


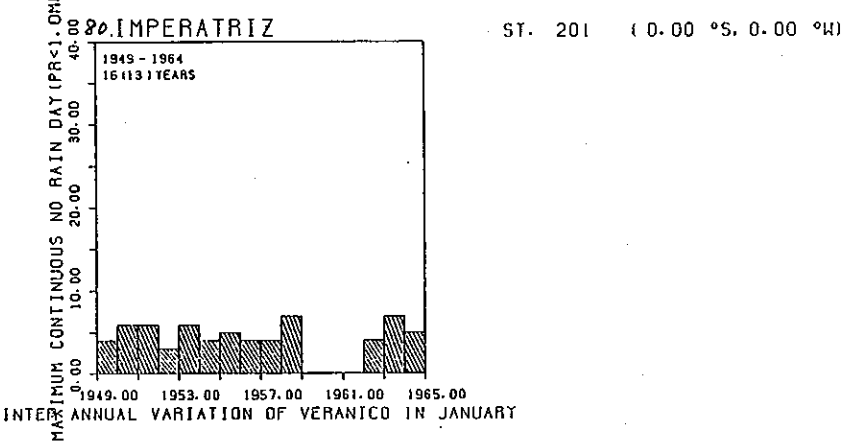
24.PORTO MANDACARU ST. 82 (16.41°S, 42.30°W)

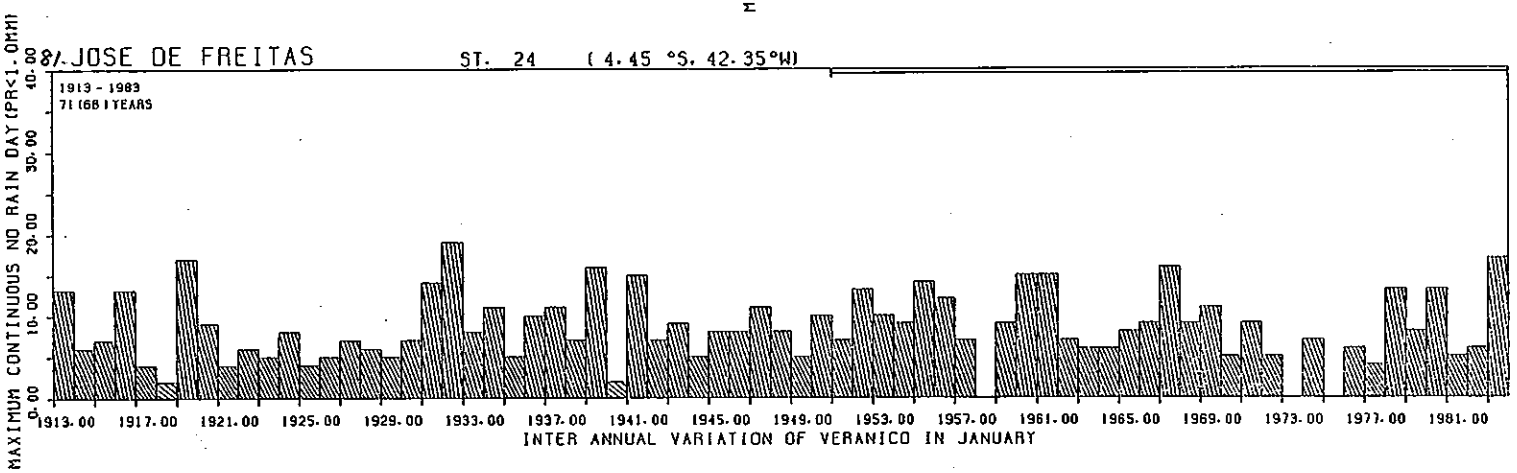


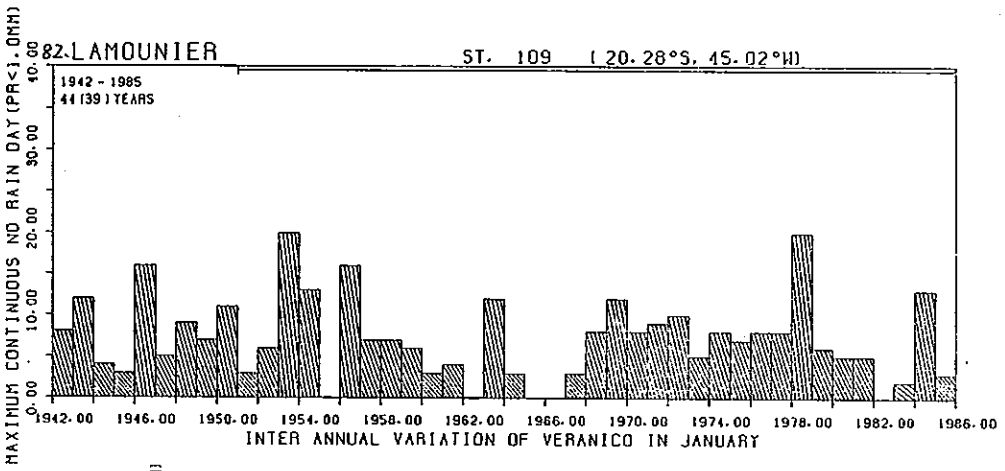

PONTE NOVA DO PARAOPEBA ST. 44 (19.56°S, 44.19°W)
1942 - 1984
43 (42) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY
SABARA ST. 86 (19.53°S, 43.49°W)
1942 - 1984
43 (41) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY
TAQUARACU ST. 43 (19.39°S, 43.41°W)
1943 - 1985
43 (41) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1943.00 1947.00 1951.00 1955.00 1959.00 1963.00 1967.00 1971.00 1975.00 1979.00 1983.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

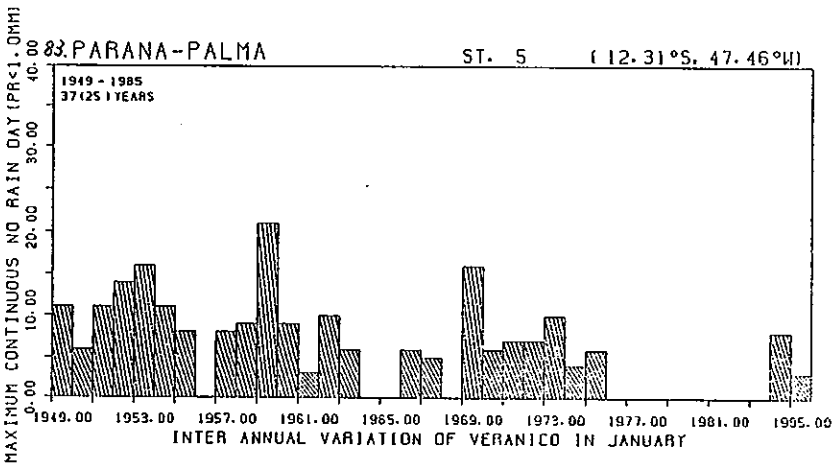

78 USINA PETI
ST. 46 (19.53°S, 43.23°W)
1947 - 1985
39137 YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1947.00
1951.00
1955.00
1959.00
1963.00
1967.00
1971.00
1975.00
1979.00
1983.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

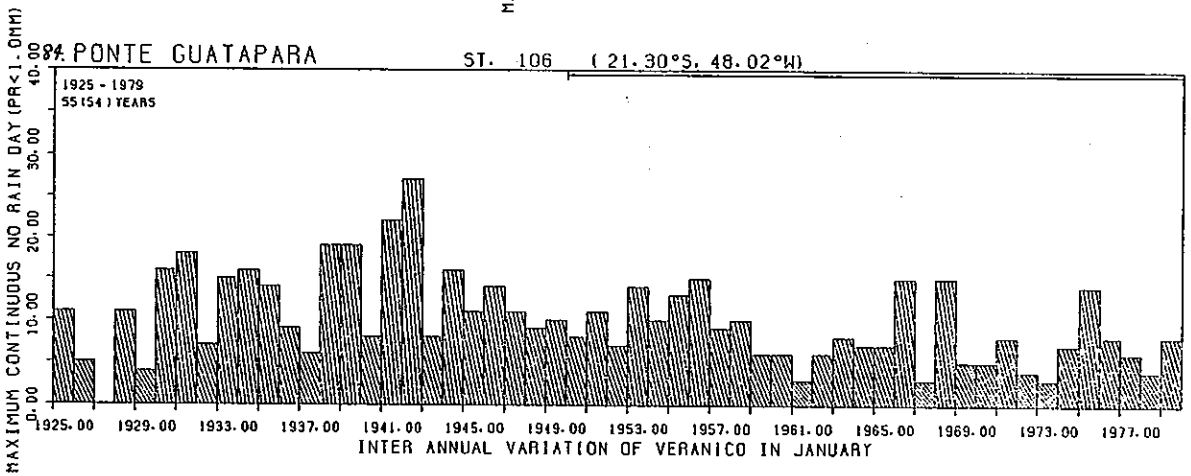

79.FORMOSA-GO
ST. 4
(15.32°S, 47.20°W)
1949 - 1985
37(20) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY(PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

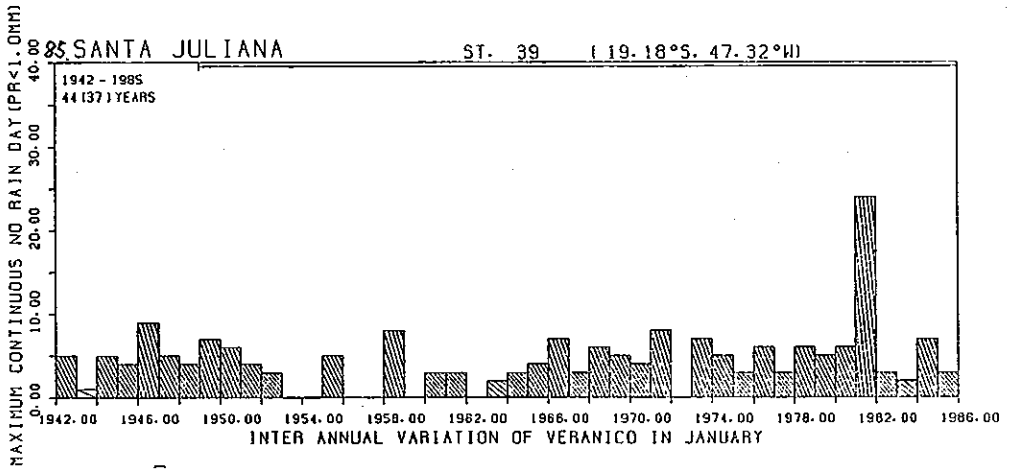

80.IMPERATRIZ
ST. 201
(0.00 °S, 0.00 °W)
1949 - 1964
16(13) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY(PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1949.00
1953.00
1957.00
1961.00
1965.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

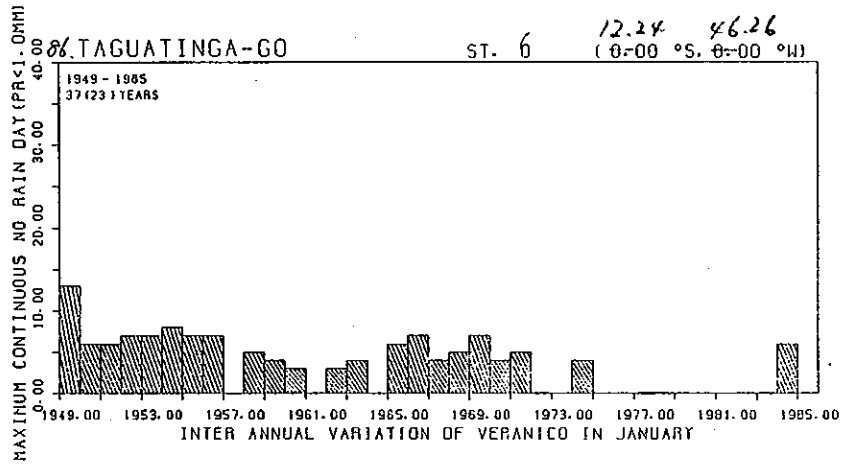

81.JOSE DE FREITAS
ST. 24
(4.45 °S, 42.35°W)
1913 - 1983
71(68) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY(PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1913.00
1917.00
1921.00
1925.00
1929.00
1933.00
1937.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

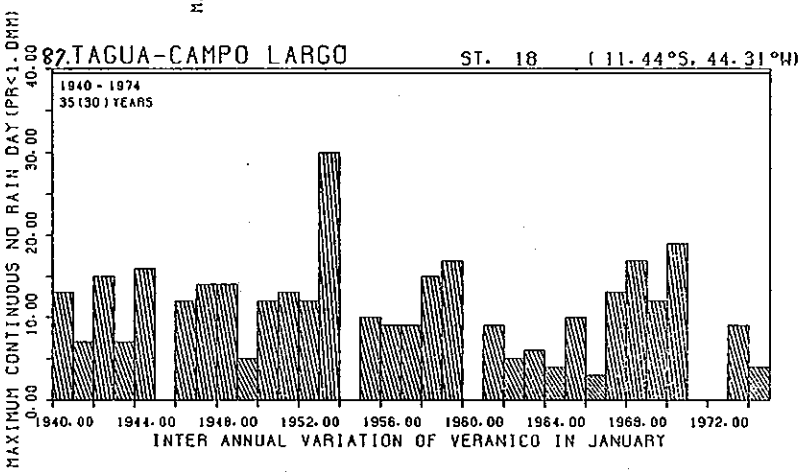

82.LAMOUNIER
ST. 109 (20.28°S, 45.02°W)
1942 - 1985
44 (39) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00 1986.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY


83.PARANA-PALMA
ST. 5 (12.31°S, 47.46°W)
1949 - 1985
37 (25) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

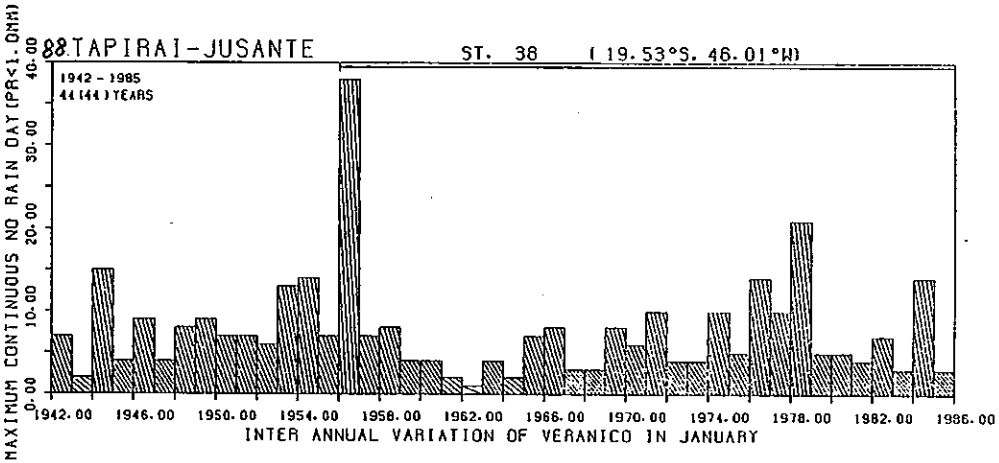

84.PONTE GUATAPARA
ST. 106 (21.30°S, 48.02°W)
1925 - 1979
55 (54) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1925.00 1929.00 1933.00 1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY


85.SANTA JULIANA
ST. 39
(19.18°S, 47.32°W)
1942 - 1985
44 (37) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

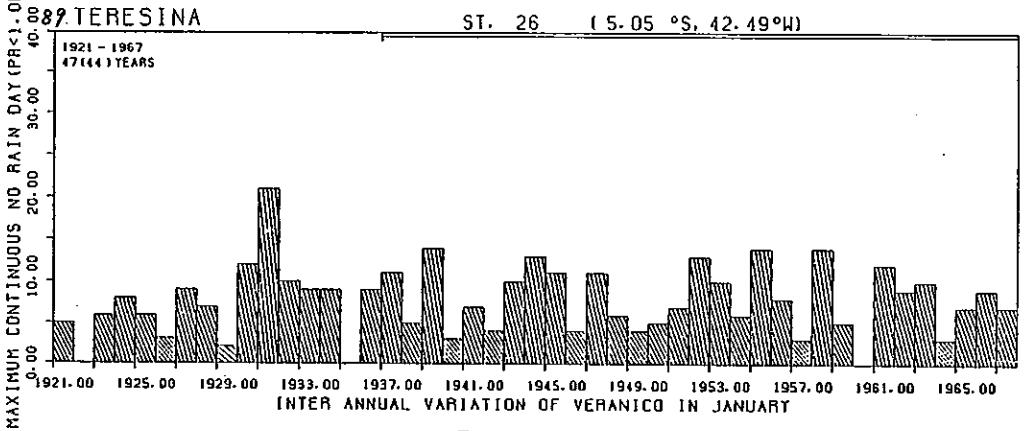

86.TAGUATINGA-GO
ST. 6
12.24 46.26
(0.00 °S, 0.00 °W)
1949 - 1985
37 (23) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
1973.00
1977.00
1981.00
1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY


87.TAGUA-CAMPO LARGO
ST. 18
(11.44°S, 44.31°W)
1940 - 1974
35 (30) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1940.00
1944.00
1948.00
1952.00
1956.00
1960.00
1964.00
1968.00
1972.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

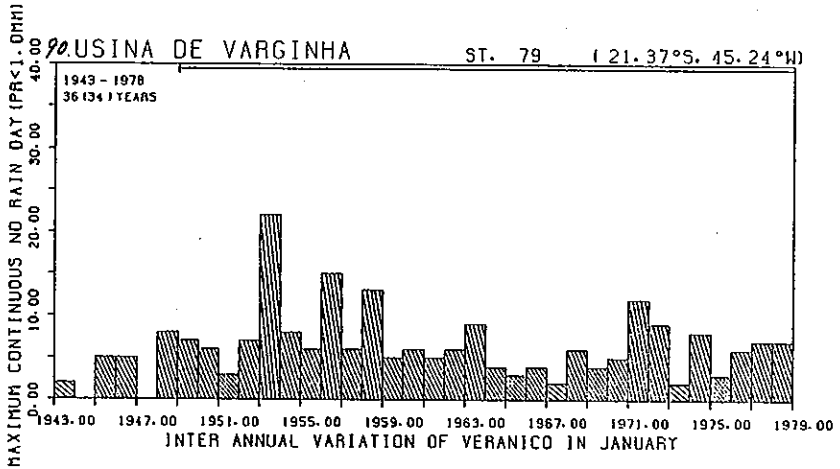
88.TAPIRAI-JUSANTE ST. 38 (19.53°S, 46.01°W)

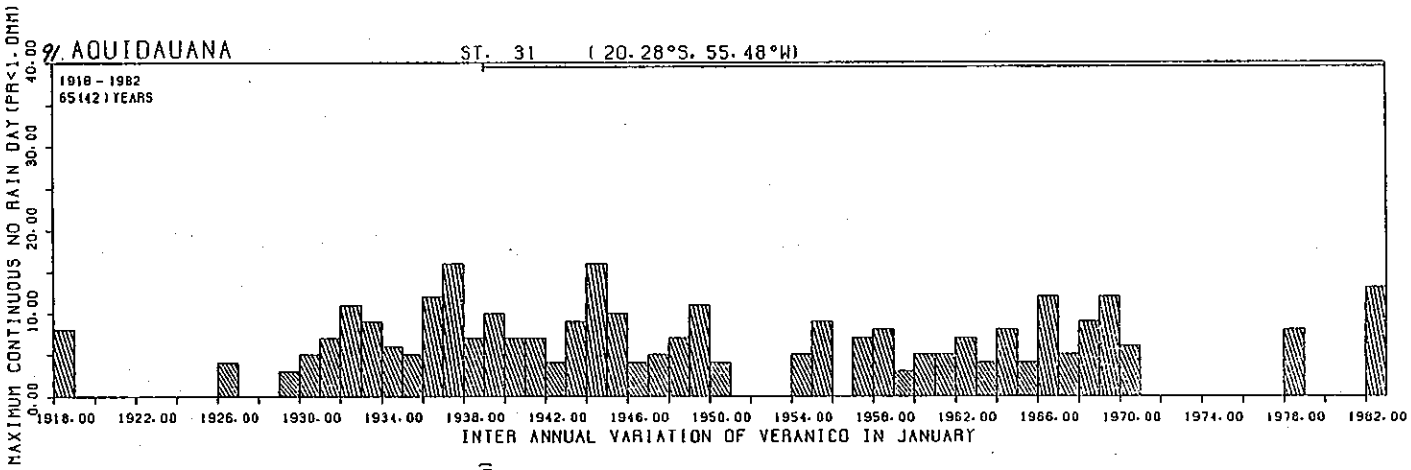


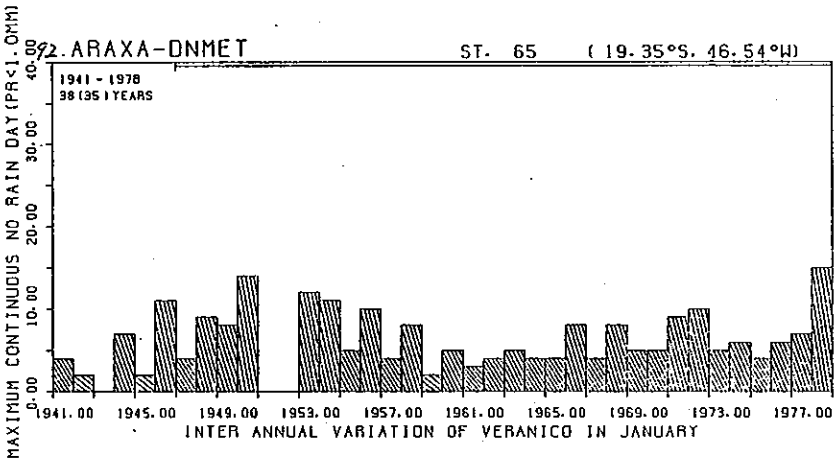
89.TERESINA ST. 26 (5.05 °S, 42.49°W)

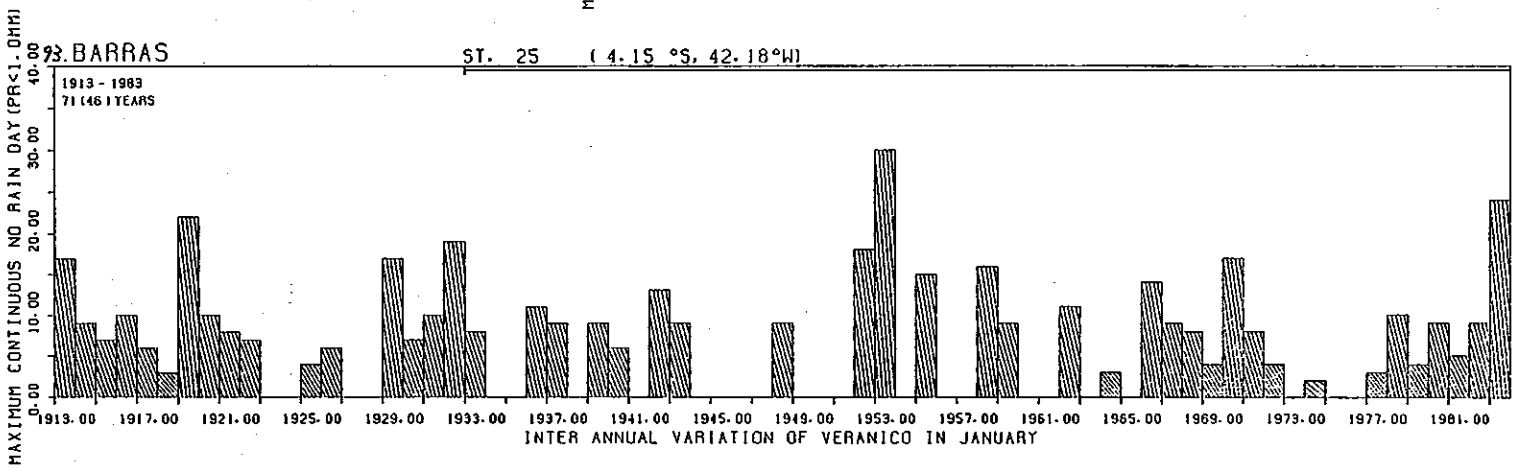


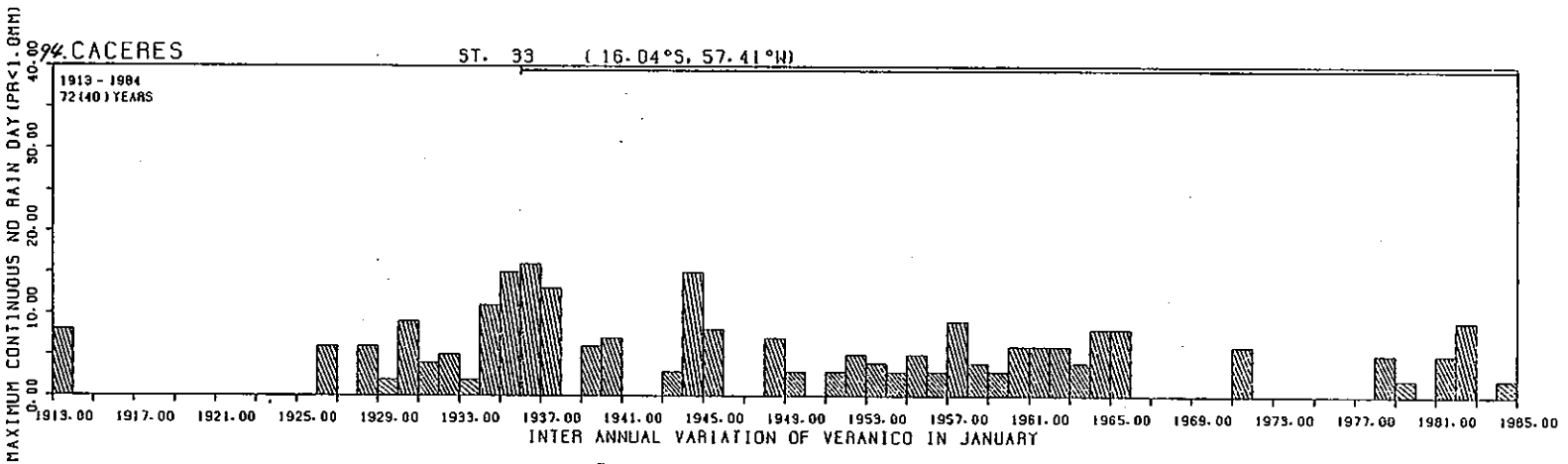
90.USINA DE VARGINHA ST. 79 (21.37°S, 45.24°W)

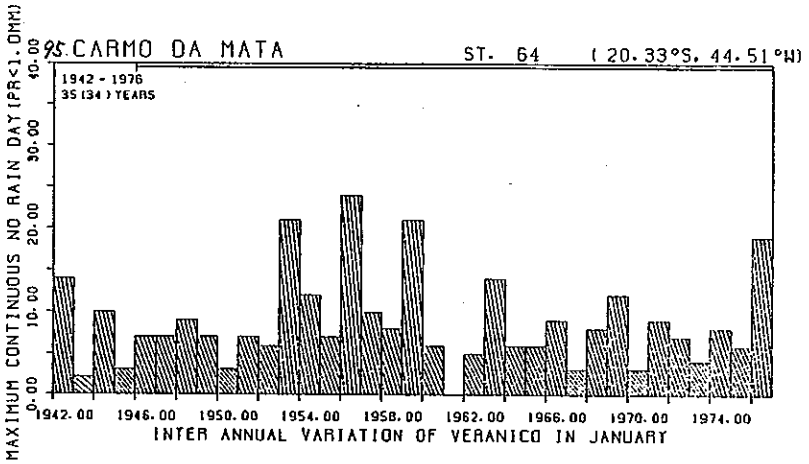


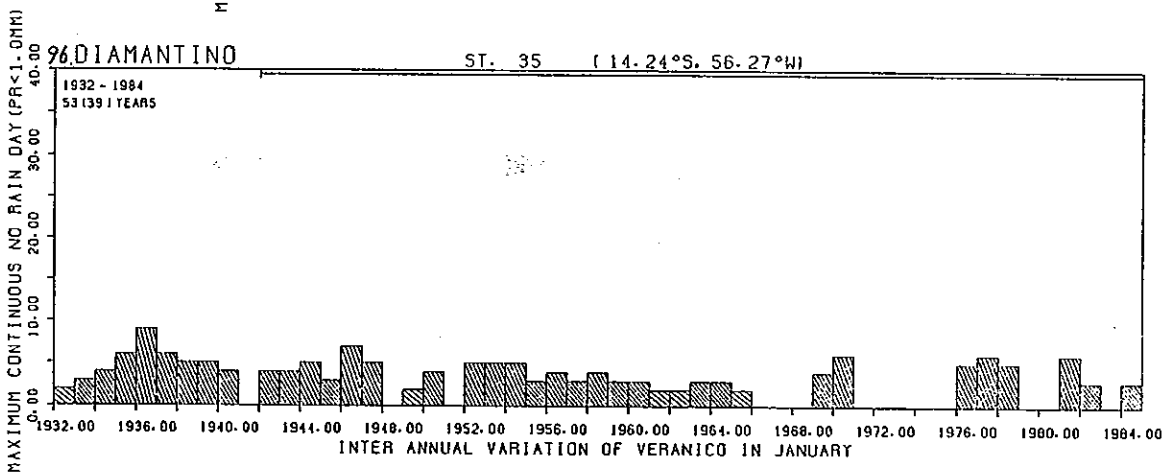

91. AQUIDAUANA
ST. 31 (20.28°S, 55.48°W)
1918 - 1982
65 (42) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1918.00 1922.00 1926.00 1930.00 1934.00 1938.00 1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00 1978.00 1982.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

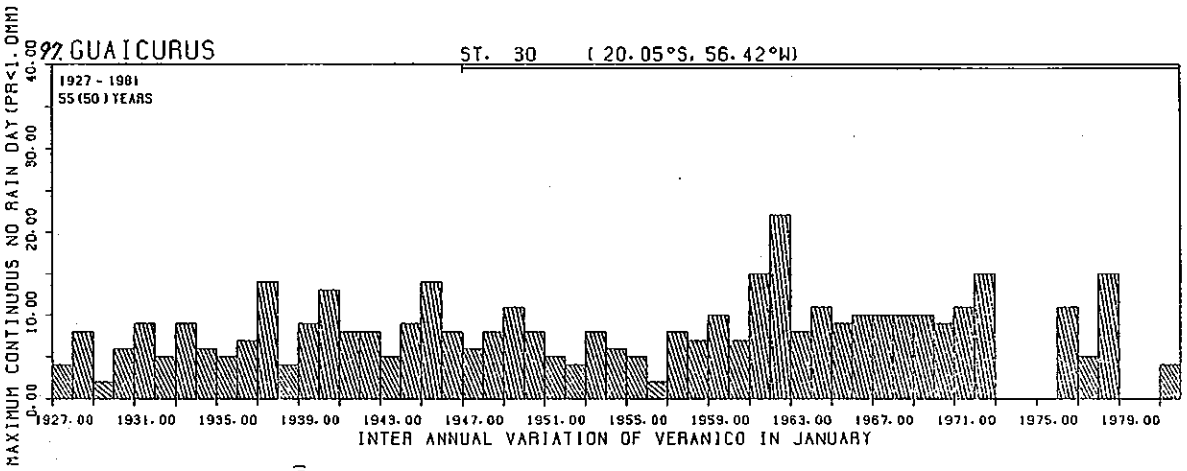

92. ARAXA-DNMET
ST. 65 (19.35°S, 46.54°W)
1941 - 1978
38 (35) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

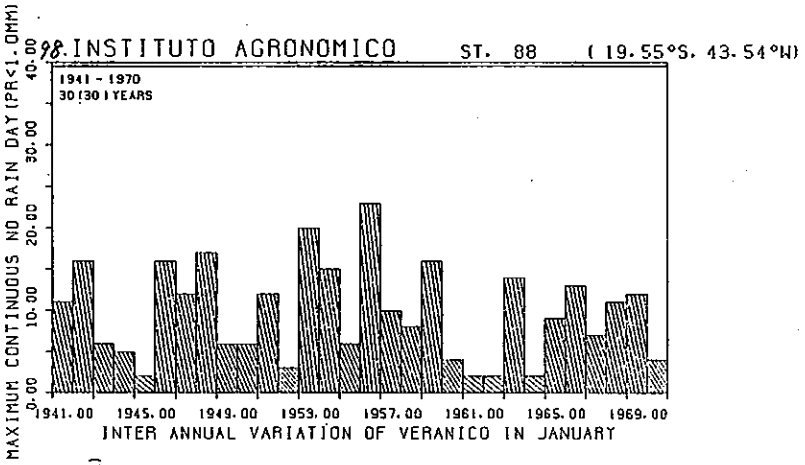

93. BARRAS
ST. 25 (4.15 °S, 42.18°W)
1913 - 1983
71 (46) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1913.00 1917.00 1921.00 1925.00 1929.00 1933.00 1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

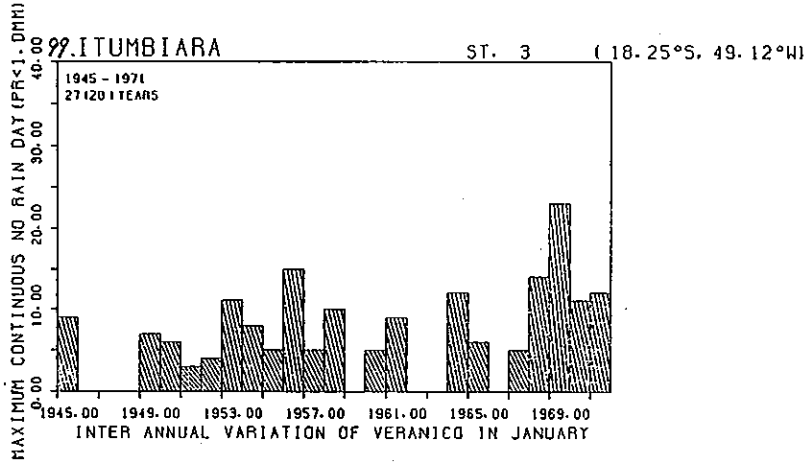

94.CACERES
ST. 33 (16.04°S, 57.41°W)
1913 - 1984
72 (40) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1913.00 1917.00 1921.00 1925.00 1929.00 1933.00 1937.00 1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00 1973.00 1977.00 1981.00 1985.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

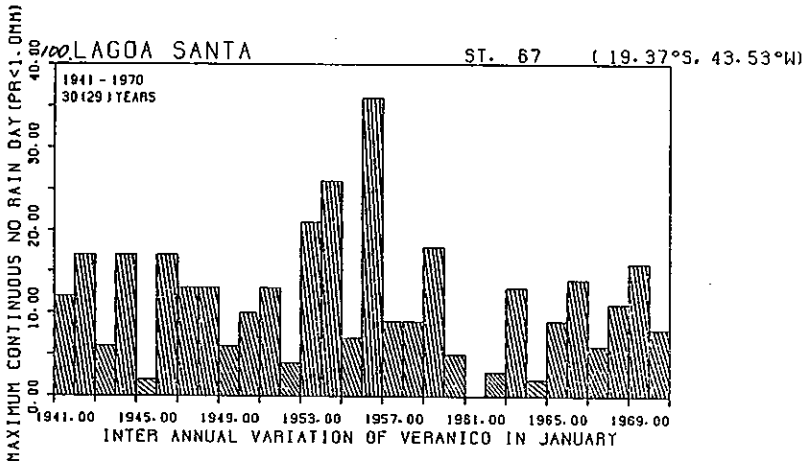

95.CARMO DA MATA
ST. 64 (20.33°S, 44.51°W)
1942 - 1976
35 (34) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1942.00 1946.00 1950.00 1954.00 1958.00 1962.00 1966.00 1970.00 1974.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

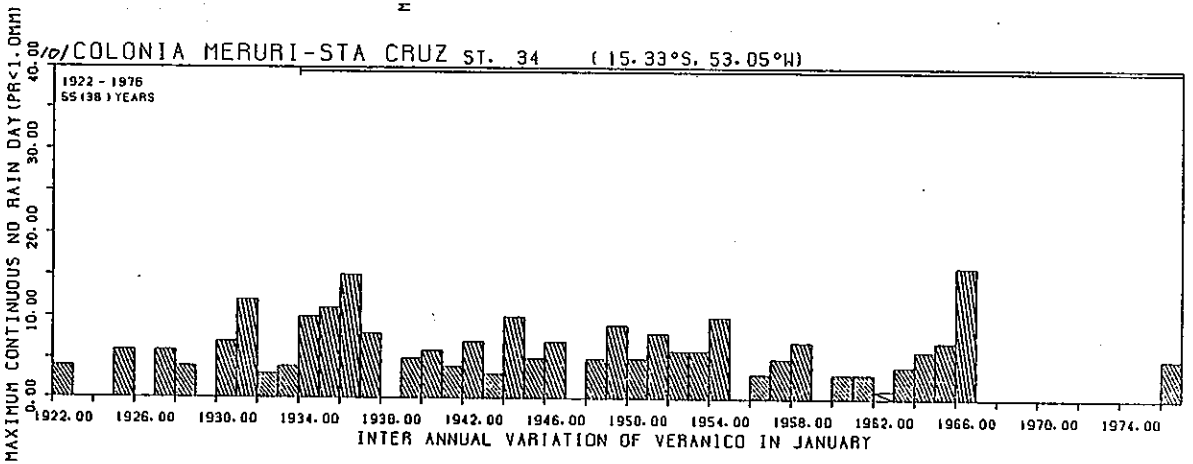

96.DIAMANTINO
ST. 35 (14.24°S, 56.27°W)
1932 - 1984
53 (39) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1932.00 1936.00 1940.00 1944.00 1948.00 1952.00 1956.00 1960.00 1964.00 1968.00 1972.00 1976.00 1980.00 1984.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

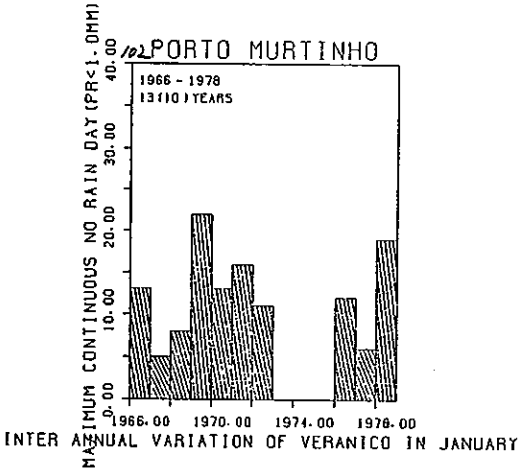

97.GUAICURUS
ST. 30 (20.05°S, 56.42°W)
1927 - 1981
55 (50) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1927.00 1931.00 1935.00 1939.00 1943.00 1947.00 1951.00 1955.00 1959.00 1963.00 1967.00 1971.00 1975.00 1979.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY


98.INSTITUTO AGRONOMICO
ST. 88 (19.55°S, 43.54°W)
1941 - 1970
30 (30) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1941.00 1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

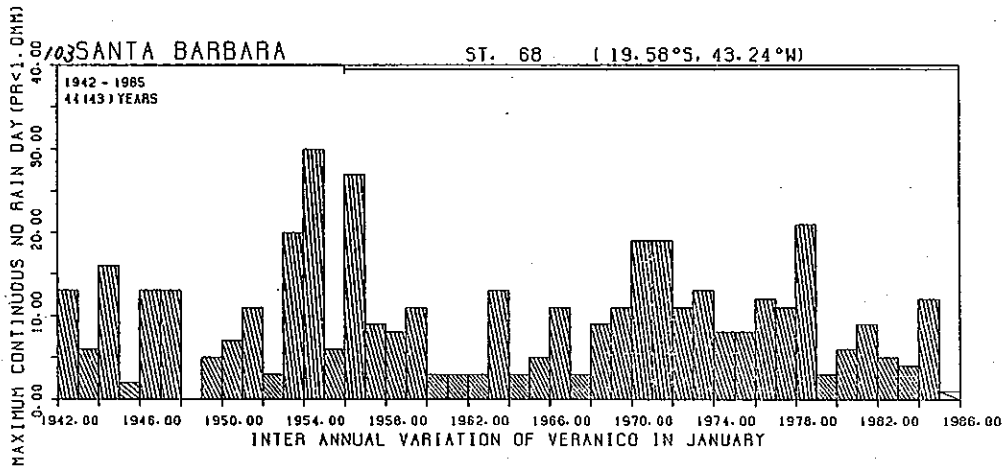

99.ITUMBIARA
ST. 3 (18.25°S, 49.12°W)
1945 - 1971
27 (20) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1945.00 1949.00 1953.00 1957.00 1961.00 1965.00 1969.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY


LAGOA SANTA
ST. 67
(19.37°S, 43.53°W)
1941 - 1970
30 (29) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1941.00
1945.00
1949.00
1953.00
1957.00
1961.00
1965.00
1969.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY


COLONIA MERURI-STA CRUZ
ST. 34
(15.33°S, 53.05°W)
1922 - 1976
55 (38) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1922.00
1926.00
1930.00
1934.00
1938.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY


PORTO MURTINHO
1966 - 1978
13 (10) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
0.00
10.00
20.00
30.00
40.00
1966.00
1970.00
1974.00
1978.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

ST. 200 (0.00


103 SANTA BARBARA
ST. 68
(19.58°S, 43.24°W)
1942 - 1985
44 (43) YEARS
MAXIMUM CONTINUOUS NO RAIN DAY (PR<1.0MM)
40.00
30.00
20.00
10.00
0.00
1942.00
1946.00
1950.00
1954.00
1958.00
1962.00
1966.00
1970.00
1974.00
1978.00
1982.00
1986.00
INTER ANNUAL VARIATION OF VERANICO IN JANUARY

（資料　３）
最大日降水量の順位表
１０３地点
10、11、12、1、2、3月、全年

(Section 3)
LIST OF MAXIMUM DAILY PRECIPITATION
103 Stations
October~March, Whole period of years

図表類の表示順序

THE ORDER OF FIGURES AND TABLES

order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.
1	ABADIA	22	ARACUA	42	AMARAN	60	CAETEX	79	FORMOS	91	AQUIDA
2	BARREI	23	BAMBUI	43	BARRII	61	CAREIA	80	IMPERA	92	ARAXAX
3	BATALH	24	CARPAR	44	CATALA	62	CELMUR	81	JOSFRE	93	BARRAS
4	BOQUEI	25	CURVEL	45	CONCEI	63	FAZESC	82	LAMOUN	94	CACERE
5	CAMPOM	26	FAZAJU	46	CORIVE	64	GOIANI	83	PARANA	95	CARMAT
6	CARMOX	27	FRUTAL	47	COTEGI	65	GOUVEA	84	POGUAT	96	DIAMAN
7	CAROLI	28	INHUMA	48	FORPII	66	IBIAMG	85	STAJUL	97	GUAICU
8	CUIABA	29	ITAMAR	49	GOIASX	67	IGUATA	86	TAGUAT	98	INAGRO
9	FAZPAL	30	JABOTI	50	JANUAR	68	ITAOBI	87	TAGUAX	99	ITUMBI
10	FORIOP	31	JEQUIT	51	MOCAMB	69	JAGUAR	88	TAPIRA	100	LAGSAN
11	GRAJAU	32	JUPIAX	52	MONCLA	70	JOSEME	89	TERESI	101	MERURI
12	LASSAN	33	LUSSAN	53	MONPAU	71	MATEUS	90	USIVAR	102	PORTOM
13	MANGAX	34	MENDAN	54	MOPILA	72	MTEALE			103	SANBAR
14	PEDROL	35	MINANO	55	SANGRA	73	NOVERA				
15	PORNOV	36	MTECAR	56	SAOMAN	74	PORMAN				
16	QUEIMA	37	PONTEX	57	SCHICO	75	PTNOVA				
17	SAOGON	38	RIOPIR	58	SETLAG	76	SABARA				
18	SAOJOP	39	SANJAC	59	SITGRA	77	TAQUAR				
19	STAMAR	40	STAITA			78	USPETI				
20	TERROR	41	VESPAS								
21	UNIAOX										

(Abbreviated names of observing stations should refer to TABLE 3.1~5)
（短縮名は表3. 1～5を参照）

TABLE.3. / LIST OF MAXIMUM DAILY PRECIPITATION
ABADIA DOS DOURADOS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	115.0	71.0	89.3	115.0	115.0	102.0	80.4
2	115.0	67.0	89.0	100.4	96.0	90.2	73.8
3	105.3	63.4	85.8	93.3	90.0	84.1	72.0
4	102.0	60.0	74.0	84.5	90.0	75.0	65.3
5	100.4	57.2	74.0	81.4	80.2	74.1	57.4
6	93.3	55.0	69.3	75.0	77.1	72.3	54.3
7	90.2	53.2	69.0	70.6	75.0	70.0	51.0
8	90.0	52.2	66.7	66.1	73.5	65.4	49.8
9	90.0	49.8	66.2	65.5	66.6	64.0	48.9
10	89.3	49.0	64.2	62.5	66.0	60.2	48.0
11	84.5	47.3	63.0	62.1	64.1	59.3	45.0
12	84.1	40.8	60.0	54.2	60.2	56.8	42.5
13	83.0	40.0	58.4	51.5	60.0	50.9	40.2
14	81.4	39.0	55.4	50.3	58.3	48.0	39.0
15	80.2	38.0	55.0	50.1	57.0	47.0	35.0
16	78.0	35.2	52.3	49.0	53.5	46.4	33.2
17	75.0	31.8	50.9	48.3	49.0	38.3	31.7
18	75.0	30.0	46.7	48.2	47.3	38.2	31.0
19	74.0	30.0	46.0	48.0	41.0	37.8	30.3
20	73.8	29.4	45.0	47.3	40.6	37.0	29.3
21	73.3	25.8	42.4	45.0	40.0	36.8	27.2
22	70.0	25.7	42.1	42.2	38.0	35.3	27.2
23	67.0	24.4	36.4	39.0	37.1	33.5	25.5
24	66.6	24.0	36.3	39.0	35.4	29.4	24.2
25	65.5	23.4	34.2	36.6	33.8	27.0	24.0
26	64.0	22.3	33.8	35.3	31.3	25.0	23.0
27	63.4	20.0	32.2	32.1	29.7	22.0	20.0
28	62.1	12.0	30.4	29.0	27.6	18.0	13.2
29	60.0	9.3	21.4	29.0	25.4	11.0	6.6
30	37.8	3.3	20.0	27.2	25.0	9.4	4.8

TABLE.3.2 LIST OF MAXIMUM DAILY PRECIPITATION
BARREIRAS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	142.6	69.5	112.9	116.4	102.4	142.6	109.6
2	116.4	61.0	112.3	88.6	88.4	106.1	92.4
3	112.9	60.0	96.2	84.8	80.6	91.0	84.2
4	112.3	47.0	91.0	80.4	80.0	90.5	73.3
5	109.6	42.1	80.4	79.5	74.4	70.7	71.2
6	102.4	40.2	74.1	77.0	70.2	60.4	56.3
7	96.2	37.0	64.0	71.1	63.7	59.2	47.5
8	92.4	32.2	63.8	70.0	59.6	58.5	44.0
9	91.0	30.6	60.2	67.2	55.0	57.7	40.5
10	88.6	30.4	59.4	59.2	52.4	53.8	38.8
11	84.8	27.1	58.2	54.5	52.1	50.3	38.0
12	84.2	24.6	58.2	52.7	50.0	49.0	37.2
13	80.4	24.5	58.1	52.2	50.0	46.5	35.8
14	80.4	22.8	55.0	49.3	36.2	46.1	35.2
15	80.0	21.7	53.5	46.4	34.3	42.0	33.2
16	79.5	19.9	50.4	46.1	33.2	40.0	32.6
17	77.0	18.2	49.1	45.3	32.1	37.8	30.3
18	74.1	15.8	45.4	43.4	30.0	31.6	30.0
19	70.7	14.8	38.6	43.1	29.4	31.3	26.3
20	70.2	12.0	33.5	42.0	28.2	30.2	26.2
21	70.0	10.9	33.4	42.0	26.6	30.0	24.5
22	69.5	9.8	30.8	40.2	26.1	29.9	24.5
23	68.5	9.2	28.2	36.3	25.8	27.7	23.0
24	58.5	8.0	26.0	35.5	20.0	26.5	22.9
25	53.8	7.3	25.1	34.6	19.2	23.8	22.5
26	49.1	7.0	20.1	26.3	18.8	22.7	22.4
27	49.0	6.0	18.6	26.0	10.6	22.3	21.0
28	46.5	5.2	11.3	24.4	10.3	22.0	12.5
29	45.4	0.0	9.4	21.0	8.4	6.3	11.4
30	43.1	0.0	7.6	13.7	2.0	6.3	4.2

TABLE.3.3 LIST OF MAXIMUM DAILY PRECIPITATION
BATALHA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	145.2	99.6	64.5	109.3	145.1	124.6	145.2
2	145.1	41.5	58.5	108.1	141.6	119.2	83.0
3	141.6	37.5	40.0	99.3	103.2	112.4	82.3
4	124.6	27.5	39.1	81.4	75.5	93.4	79.0
5	122.7	17.1	39.0	71.6	73.9	89.8	76.5
6	119.2	16.8	36.5	66.6	73.6	85.0	73.5
7	117.2	16.7	35.5	66.5	71.1	67.2	71.6
8	116.1	15.4	35.5	64.6	70.5	66.4	71.5
9	112.4	15.4	28.3	63.5	68.0	63.5	66.0
10	108.1	12.1	18.0	59.5	64.5	60.2	65.2
11	99.6	12.0	17.0	58.5	62.5	60.1	64.2
12	93.4	12.0	12.4	58.0	60.0	59.6	63.7
13	85.0	8.7	12.4	47.9	52.7	59.5	62.4
14	83.0	6.2	12.2	46.6	51.2	59.3	59.8
15	79.0	6.2	12.2	46.3	50.2	58.1	59.4
16	78.5	4.7	8.0	45.8	48.6	55.6	55.5
17	76.5	2.6	7.6	45.6	43.2	55.2	55.1
18	75.5	2.2	4.7	42.8	43.2	54.5	53.9
19	71.6	2.0	4.5	42.3	41.3	53.8	53.0
20	70.5	1.6	3.1	31.3	41.2	52.5	51.7
21	65.6	1.3	2.1	24.2	41.0	52.1	50.2
22	64.6	0.3	1.8	23.5	40.7	51.0	48.2
23	64.2	0.0	1.3	19.5	37.5	47.8	46.7
24	63.5	0.0	0.6	14.2	36.6	45.6	45.1
25	62.4	0.0	0.2	10.5	36.5	39.0	45.1
26	60.1	0.0	0.0	10.4	32.2	35.4	39.6
27	59.8	0.0	0.0	6.1	28.1	32.6	39.6
28	59.5	0.0	0.0	5.3	27.0	28.0	39.1
29	55.5	0.0	0.0	5.1	26.5	26.0	35.4
30	52.1	0.0	0.0	0.0	13.7	19.7	27.9

TABLE. 3.4 LIST OF MAXIMUM DAILY PRECIPITATION
BOQUEIRAO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	141.8	72.1	119.2	111.6	141.8	90.5	104.0
2	119.2	68.6	92.4	85.6	92.5	81.4	83.4
3	111.6	59.0	85.0	77.4	79.0	70.1	82.3
4	104.0	49.0	77.0	74.0	79.0	68.0	80.7
5	98.0	39.0	73.2	68.3	78.2	65.2	70.2
6	92.5	36.0	70.5	66.0	69.0	62.0	66.3
7	92.4	33.2	62.1	65.0	67.2	58.0	61.0
8	85.6	33.0	62.1	64.2	65.0	55.0	50.5
9	85.0	32.4	59.6	63.1	54.3	54.2	48.5
10	83.4	30.0	55.1	61.2	54.0	54.2	47.2
11	82.3	27.0	54.4	56.9	50.5	52.3	46.4
12	79.0	26.3	54.3	56.6	50.3	51.2	45.8
13	79.0	20.3	50.4	54.1	47.6	50.2	45.2
14	78.2	20.2	50.1	51.7	47.4	49.2	43.0
15	70.2	20.0	49.2	50.2	44.1	40.2	42.2
16	68.3	19.4	49.0	50.0	41.8	40.2	38.4
17	68.0	13.2	47.5	41.0	41.3	38.0	37.0
18	67.2	9.2	45.6	39.4	38.4	37.0	35.2
19	65.0	9.0	42.6	39.2	36.0	34.0	33.2
20	62.1	8.2	40.2	39.0	30.6	30.5	31.4
21	62.1	7.0	37.4	31.4	27.2	30.0	30.2
22	61.6	6.2	34.2	30.4	25.5	29.2	27.0
23	61.2	4.0	22.1	25.3	25.0	28.6	26.2
24	56.9	3.4	18.5	22.1	24.0	18.6	19.0
25	56.6	3.2	16.2	21.4	22.1	17.2	15.0
26	54.3	3.0	8.3	18.6	22.0	15.0	14.2
27	51.7	2.4	7.8	17.8	18.1	14.8	10.0
28	49.2	2.0	7.0	15.6	9.4	8.3	6.5
29	49.0	0.0	0.0	9.0	8.0	8.0	5.5
30	22.0	0.0	0.0	6.0	1.0	5.1	0.0

TABLE. 3.5 LIST OF MAXIMUM DAILY PRECIPITATION
CAMPO MAIOR-PI 4.49

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	133.0	49.0	69.6	132.4	107.6	80.6	88.6
2	132.4	34.6	69.5	81.0	98.2	71.3	85.3
3	115.4	33.3	67.5	68.5	75.6	70.9	78.6
4	108.1	26.3	66.0	67.2	70.1	68.2	77.4
5	88.6	25.6	62.5	66.5	67.8	67.1	75.0
6	81.0	24.9	57.0	64.5	67.4	66.9	70.4
7	78.6	23.3	39.9	60.5	67.0	66.6	70.2
8	77.4	18.3	31.5	55.3	66.9	65.9	68.2
9	75.6	16.7	30.5	49.9	65.5	61.3	66.5
10	70.9	16.5	28.7	49.8	64.7	60.4	66.5
11	70.2	16.5	28.6	42.9	63.7	60.2	65.7
12	69.5	10.2	27.7	42.0	60.0	58.1	65.5
13	68.3	10.0	25.5	42.0	59.0	57.2	65.4
14	68.2	8.6	21.7	39.9	54.0	57.0	64.9
15	67.5	8.4	17.5	33.5	54.0	55.5	60.6
16	67.4	7.6	15.6	33.5	52.9	55.2	59.9
17	66.6	5.6	15.3	33.2	52.4	54.5	58.8
18	66.5	5.0	14.5	29.8	47.3	53.4	56.2
19	66.5	2.5	13.1	26.1	46.3	52.4	55.9
20	65.9	1.9	12.9	25.1	45.7	48.2	54.3
21	65.4	1.1	12.9	23.5	45.3	47.2	53.8
22	64.7	0.0	11.8	22.7	44.3	46.2	50.1
23	63.7	0.0	8.4	16.5	43.1	44.6	50.0
24	63.5	0.0	7.5	14.4	34.2	42.2	45.9
25	62.9	0.0	6.1	13.2	33.2	40.4	44.7
26	62.3	0.0	5.9	9.2	29.0	34.8	38.2
27	61.3	0.0	4.3	5.0	25.9	33.6	35.0
28	60.5	0.0	1.6	4.6	25.9	28.9	33.5
29	55.9	0.0	1.1	0.0	25.6	22.7	31.2
30	52.4	0.0	0.0	0.0	10.8	18.6	25.6

TABLE. 3.6 LIST OF MAXIMUM DAILY PRECIPITATION
CARMO DO CAJURU

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	133.0	102.3	103.3	91.1	133.0	78.0	109.3
2	129.0	69.1	91.2	79.4	129.0	64.0	97.0
3	109.3	68.0	91.2	79.0	91.2	61.2	73.2
4	103.3	67.0	91.1	77.2	91.0	57.4	66.4
5	102.3	63.1	84.0	69.4	84.3	56.0	62.1
6	91.2	62.1	79.4	66.1	81.2	55.4	53.0
7	91.2	60.4	75.4	64.2	73.2	55.0	51.1
8	91.2	59.1	75.2	61.4	72.0	49.3	50.2
9	91.1	54.2	71.1	60.4	70.2	46.2	49.1
10	84.0	50.3	66.2	59.3	61.0	46.0	48.0
11	81.2	49.2	66.1	59.2	60.0	45.0	45.0
12	79.4	49.2	64.2	57.1	59.1	42.1	45.0
13	79.4	49.0	59.4	56.0	56.3	41.4	44.2
14	79.0	41.2	55.1	54.1	56.3	39.3	42.0
15	78.5	40.0	54.3	53.5	53.0	39.2	41.2
16	75.4	35.2	54.2	53.0	52.1	37.0	41.0
17	73.2	34.2	51.2	49.2	52.1	37.0	40.4
18	72.0	33.1	49.0	49.1	52.1	36.5	37.0
19	71.1	33.0	47.2	48.4	51.2	36.2	36.2
20	70.2	33.0	47.0	47.3	47.4	33.3	36.2
21	69.4	30.0	46.4	46.2	47.1	33.3	36.1
22	66.2	27.0	45.4	46.0	46.5	31.0	34.0
23	66.1	26.2	43.8	43.3	43.0	31.0	33.6
24	60.4	23.4	41.3	39.4	42.0	29.6	31.0
25	59.3	23.3	38.0	37.0	41.3	27.0	30.2
26	59.1	20.2	33.3	35.0	40.4	22.3	25.1
27	56.0	19.1	31.3	34.4	38.0	20.0	25.0
28	54.3	16.6	21.1	31.0	33.3	17.0	23.0
29	54.2	15.5	21.0	31.0	33.1	15.2	13.3
30	47.3	10.2	16.6	21.1	10.6	2.0	7.0

TABLE. 3.7 LIST OF MAXIMUM DAILY PRECIPITATION
CAROLINA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	133.6	96.0	87.2	95.0	87.2	109.6	133.1
2	133.1	67.2	87.2	93.6	73.4	96.4	107.6
3	109.6	64.6	77.4	92.0	72.5	92.0	102.8
4	107.6	54.0	75.0	84.0	69.4	89.2	102.0
5	102.0	53.0	70.0	82.0	68.4	68.2	91.0
6	98.0	52.2	70.0	81.4	66.3	68.0	89.0
7	96.4	49.0	69.8	64.8	66.0	67.8	87.6
8	96.0	47.0	69.3	62.6	64.6	61.2	69.4
9	95.0	45.4	69.0	61.8	64.6	57.6	68.6
10	93.6	40.0	66.2	57.6	59.0	55.4	68.6
11	92.0	38.0	66.2	54.5	53.6	53.2	66.2
12	91.0	37.8	57.6	51.0	50.4	51.0	66.2
13	89.2	29.4	57.6	50.4	49.2	46.1	65.8
14	87.2	26.0	56.8	46.6	43.6	44.6	63.3
15	82.0	22.5	53.7	44.0	43.0	43.7	61.4
16	70.0	20.4	47.9	40.0	41.5	42.6	57.8
17	69.4	19.0	46.3	38.0	38.0	42.4	49.5
18	69.4	18.6	45.0	32.0	33.5	40.2	43.4
19	68.2	14.2	38.3	28.6	26.4	33.8	43.3
20	66.2	13.4	31.2	28.4	24.6	24.2	36.4
21	61.2	11.4	22.0	25.6	20.0	13.7	28.0
22	28.0	4.2	19.6	15.5	15.6	11.7	27.4

TABLE. 3.8 LIST OF MAXIMUM DAILY PRECIPITATION
CUIABA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	144.7	78.9	115.1	112.7	144.7	124.6	123.2
2	124.6	75.8	83.6	105.2	93.1	102.5	107.0
3	123.2	74.9	71.0	99.5	78.4	99.7	102.2
4	115.1	73.4	68.8	76.5	76.5	79.2	95.0
5	112.7	71.3	68.3	73.2	68.8	78.6	94.2
6	107.0	67.8	68.2	69.4	62.7	71.4	82.7
7	105.2	62.6	64.5	69.2	57.9	64.4	79.0
8	102.5	60.0	59.2	69.0	55.8	61.6	69.8
9	102.2	59.6	58.5	63.1	53.8	57.6	67.8
10	99.7	51.6	58.2	60.0	52.0	57.6	65.0
11	99.5	50.5	55.9	59.0	50.8	49.1	64.5
12	94.2	50.4	54.0	58.2	49.0	46.5	59.8
13	90.8	49.6	49.4	54.0	47.0	45.5	56.3
14	86.0	48.4	47.0	52.4	45.8	44.4	55.0
15	83.8	46.3	45.0	51.1	44.4	42.7	53.2
16	80.5	46.1	40.8	50.4	40.0	38.8	52.2
17	78.8	44.6	40.1	50.0	37.4	36.5	49.4
18	78.6	41.7	39.3	48.0	37.2	36.0	46.4
19	78.4	41.2	37.4	44.3	36.2	34.5	45.8
20	76.5	39.9	36.2	43.6	35.4	34.4	43.4
21	75.8	37.5	35.6	41.7	34.3	32.2	35.4
22	74.9	36.0	32.6	38.7	33.6	31.8	30.1
23	71.4	34.7	32.0	32.4	32.8	31.0	29.6
24	71.3	34.3	31.6	28.2	25.7	30.8	29.6
25	70.7	32.5	28.2	27.4	23.8	30.0	29.0
26	69.8	28.4	27.4	25.7	21.4	27.1	29.0
27	69.0	27.4	23.1	24.7	21.0	26.0	28.1
28	68.8	23.1	18.0	24.6	19.4	24.9	26.1
29	58.2	19.2	13.8	22.8	13.6	22.7	19.7
30	52.6	16.5	9.4	19.3	12.6	16.7	18.4

TABLE. 3.9 LIST OF MAXIMUM DAILY PRECIPITATION
FAZ PORTO ALEGRE

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	141.8	67.5	105.3	119.8	115.4	98.1	141.8
2	119.8	65.1	96.7	96.5	107.5	88.1	75.4
3	115.4	64.7	90.2	89.5	79.2	84.5	71.8
4	107.5	56.2	75.8	81.6	75.1	72.5	64.1
5	105.3	55.8	75.4	79.0	65.9	72.4	61.0
6	98.1	44.6	66.4	75.7	65.8	57.9	60.9
7	96.5	42.6	63.5	74.2	63.2	55.6	59.5
8	90.2	42.3	56.8	64.6	59.8	53.1	57.0
9	88.6	36.9	56.1	64.1	56.1	47.8	56.3
10	88.1	35.1	53.6	63.2	54.8	45.5	53.7
11	84.5	32.8	46.1	55.2	53.6	43.4	52.1
12	75.8	32.6	45.3	54.2	50.6	42.6	50.3
13	75.7	30.9	45.0	53.6	49.7	41.1	47.6
14	75.4	28.1	41.7	52.6	49.2	40.3	46.9
15	75.1	24.5	36.9	52.3	49.2	39.0	44.4
16	74.2	23.3	35.2	49.8	46.2	38.1	37.4
17	72.5	21.8	35.1	46.8	45.8	33.2	35.5
18	68.5	20.2	33.6	46.2	43.4	28.3	32.5
19	66.4	17.4	32.6	44.4	39.6	28.3	31.1
20	65.9	16.7	32.2	44.2	38.3	27.8	29.2
21	65.1	14.9	32.1	42.8	37.4	20.6	28.3
22	64.7	14.6	31.6	40.1	36.7	20.1	28.1
23	63.5	13.2	27.9	38.4	36.5	18.3	26.2
24	60.8	12.6	27.4	37.4	35.2	17.3	23.5
25	56.8	12.2	27.2	37.3	34.2	16.4	22.8
26	54.8	10.9	26.4	36.4	29.3	14.0	21.6
27	54.2	5.6	25.3	36.0	28.6	12.6	15.4
28	53.7	5.4	13.1	23.3	28.0	11.9	1.0
29	52.3	4.7	11.2	17.3	22.9	11.1	0.0
30	46.1	0.0	2.2	11.9	20.6	1.6	0.0

TABLE. 3.10 LIST OF MAXIMUM DAILY PRECIPITATION
FORMOSA DO RIO PRETO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	118.4	89.5	102.9	84.2	118.4	76.5	96.0
2	102.9	63.5	80.1	80.2	69.2	69.2	83.6
3	96.0	63.4	78.3	75.0	64.5	60.0	75.5
4	89.5	50.2	77.3	69.2	62.2	60.0	67.4
5	84.2	49.5	72.0	63.3	61.3	56.0	62.4
6	83.6	46.0	70.9	61.8	57.0	53.8	52.0
7	78.3	45.0	64.0	61.7	57.0	51.6	50.0
8	77.3	43.2	63.0	56.0	53.0	48.0	45.4
9	76.5	42.4	59.9	52.2	52.0	47.0	44.0
10	75.5	41.0	58.0	52.0	50.3	42.0	40.0
11	72.0	38.2	57.0	50.3	48.4	42.0	38.5
12	70.9	38.0	54.4	50.0	43.6	41.8	38.4
13	69.2	28.2	51.0	49.0	41.5	40.8	38.0
14	69.2	27.4	50.8	37.0	41.0	38.2	36.0
15	69.2	27.3	43.8	35.0	37.3	36.4	36.0
16	63.4	25.5	43.8	34.5	35.5	35.4	29.4
17	63.3	25.3	42.6	33.5	35.0	35.2	28.0
18	63.0	25.0	35.4	31.3	34.3	34.4	26.2
19	61.8	20.8	34.0	31.0	34.2	34.2	26.2
20	61.7	19.5	33.0	29.0	32.3	33.9	26.0
21	60.0	19.4	31.8	27.6	32.0	33.0	24.9
22	57.0	17.3	29.0	25.2	28.8	32.4	22.4
23	54.8	13.5	28.2	25.0	26.5	31.3	20.5
24	52.2	8.0	26.0	22.0	25.3	31.2	20.2
25	52.2	8.0	23.3	21.3	24.7	28.7	20.2
26	50.8	2.1	21.7	13.2	24.0	28.5	20.0
27	50.2	1.5	21.3	10.6	16.1	26.5	19.7
28	48.4	0.0	12.6	8.2	14.2	18.0	11.0
29	45.5	0.0	7.7	0.0	14.0	10.8	9.6

TABLE. 3.11 LIST OF MAXIMUM DAILY PRECIPITATION
GRAJAU

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	92.0	66.6	70.2	77.0	65.2	92.0	90.0
2	90.0	53.6	66.3	67.4	63.6	67.8	87.5
3	72.5	51.0	66.0	66.4	62.4	65.6	72.5
4	72.3	49.9	65.2	64.4	59.6	59.4	70.0
5	70.2	49.5	58.0	60.4	59.0	57.0	67.4
6	70.0	42.2	52.5	57.4	57.6	56.8	65.8
7	67.4	34.5	50.5	54.4	54.7	56.6	65.0
8	66.4	32.0	41.8	52.8	54.6	55.2	61.4
9	66.3	31.4	41.0	50.0	50.0	51.2	60.8
10	66.0	25.2	38.6	45.0	49.8	49.6	60.2
11	66.0	24.6	37.5	44.4	48.4	45.2	56.0
12	65.6	24.4	32.6	40.2	42.6	45.0	55.0
13	65.2	20.0	32.0	38.0	40.8	42.0	50.4
14	65.2	18.2	30.0	35.4	39.5	41.2	47.8
15	64.4	17.0	28.4	33.0	34.2	41.1	46.0
16	64.0	15.2	28.4	32.0	34.1	38.9	42.3
17	63.6	14.6	22.6	31.4	32.0	33.6	38.8
18	62.4	14.3	16.5	31.0	27.4	31.8	34.6
19	60.2	9.7	16.2	26.4	27.1	22.8	34.0
20	56.6	9.6	15.0	24.2	22.0	17.0	32.8
21	54.4	4.1	13.6	23.6	21.2	12.0	27.0
22	50.4	0.5	4.3	16.0	18.0	12.0	0.0

TABLE. 3.12 LIST OF MAXIMUM DAILY PRECIPITATION
LASSANCE

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	125.3	72.3	125.3	89.2	120.4	88.0	98.3
2	120.4	55.6	97.8	81.6	90.3	69.2	88.4
3	98.3	52.7	84.4	81.1	86.1	67.3	69.7
4	97.8	50.1	75.3	78.4	77.4	66.4	66.2
5	90.3	47.0	75.2	68.4	61.0	61.5	60.3
6	89.2	46.4	74.3	65.1	60.3	57.4	57.3
7	88.0	45.2	70.1	64.8	54.3	50.1	52.5
8	86.1	44.3	68.6	61.3	50.8	44.6	50.3
9	84.4	44.0	64.6	56.5	50.2	41.2	50.1
10	81.1	43.2	61.2	56.3	48.8	39.4	48.0
11	77.4	38.3	61.1	55.2	48.5	38.2	47.8
12	74.3	37.4	53.8	55.0	47.7	38.2	45.3
13	72.3	36.7	53.5	50.0	47.7	36.3	44.7
14	69.7	36.2	53.0	45.9	46.6	36.3	40.7
15	69.2	36.0	50.5	39.3	45.4	36.2	40.2
16	68.6	35.2	50.3	39.0	41.8	33.4	39.4
17	66.2	32.6	50.2	38.1	41.3	32.5	36.0
18	65.1	30.3	48.0	37.8	40.7	29.5	35.8
19	61.3	27.3	47.3	35.5	39.5	28.9	28.4
20	61.2	26.6	39.2	35.4	39.4	28.2	28.2
21	60.3	25.2	36.8	33.8	36.5	24.7	25.1
22	56.5	24.3	35.5	32.7	36.0	22.7	24.6
23	55.3	22.1	34.2	31.5	35.8	22.1	20.3
24	54.3	19.4	33.5	30.3	33.2	20.2	20.3
25	53.5	18.1	33.0	29.1	31.0	18.6	19.5
26	52.5	16.9	30.2	28.7	29.5	18.6	18.6
27	50.8	16.6	30.0	27.2	28.1	17.4	17.1
28	50.5	8.3	29.2	22.4	14.9	11.2	16.0
29	48.5	8.3	18.1	22.1	14.2	8.4	2.8
30	47.7	5.2	6.4	20.6	9.2	0.3	0.0

TABLE. 3.13 LIST OF MAXIMUM DAILY PRECIPITATION
MANGA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	106.0	61.0	106.0	82.5	85.0	78.6	77.0
2	99.5	50.6	99.5	74.4	78.0	70.0	76.2
3	99.0	48.0	99.0	67.0	73.5	69.8	72.5
4	97.0	47.8	97.0	65.7	70.5	64.4	58.4
5	85.0	43.0	68.6	63.7	68.0	62.0	50.4
6	82.5	43.0	65.4	63.4	65.6	52.7	50.4
7	78.6	39.1	65.0	63.1	65.0	49.2	47.1
8	78.0	36.0	57.8	60.0	58.2	47.5	46.5
9	76.2	36.0	57.0	58.5	55.9	45.5	43.4
10	74.4	35.2	56.4	57.0	55.0	44.7	43.1
11	73.5	33.5	50.6	55.0	54.5	44.5	42.0
12	72.5	32.9	46.2	48.0	54.4	42.0	41.2
13	70.0	31.6	44.0	48.0	54.2	38.0	39.0
14	68.0	31.0	39.0	47.9	52.2	37.0	37.5
15	65.6	29.4	36.3	46.1	43.5	36.7	35.5
16	65.0	27.0	36.2	38.5	38.4	33.2	34.0
17	63.4	24.5	35.9	37.9	37.4	32.0	34.0
18	61.0	22.1	35.5	33.0	33.0	31.8	32.5
19	57.0	17.8	35.0	33.0	32.0	29.9	31.8
20	55.9	16.8	33.7	30.8	31.7	29.2	29.6
21	54.5	14.8	32.5	29.0	30.6	26.0	29.0
22	52.7	14.7	30.0	20.4	29.8	23.8	22.0
23	50.6	12.0	29.8	20.0	29.4	21.8	20.0
24	50.6	8.4	23.4	19.0	25.0	14.2	17.5
25	50.4	6.4	23.0	19.0	23.0	13.7	16.0
26	46.2	2.0	23.0	18.0	19.8	12.4	15.2
27	43.5	1.0	21.0	10.2	14.0	11.4	6.0
28	38.5	0.0	20.4	8.0	10.4	10.6	4.0
29	37.5	0.0	19.3	0.0	8.6	6.8	0.0
30	37.2	0.0	15.1	0.0	3.5	4.3	0.0

TABLE. 3.14 LIST OF MAXIMUM DAILY PRECIPITATION
PEDRO LEOPOLDO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	145.0	130.0	134.6	145.0	104.0	81.0	68.2
2	134.6	93.0	113.0	102.2	75.0	79.4	68.2
3	113.0	79.0	93.0	100.0	74.0	72.0	60.2
4	104.0	67.4	90.0	95.0	67.0	62.0	60.0
5	102.2	58.4	74.2	79.0	66.0	60.0	53.0
6	100.0	53.2	66.0	75.0	65.0	58.0	49.0
7	95.0	52.2	65.0	72.0	64.0	55.0	48.2
8	90.0	50.0	62.2	69.0	60.0	53.0	46.2
9	81.0	45.2	61.0	69.0	56.2	52.0	45.0
10	79.0	43.0	52.6	68.0	54.8	51.2	44.0
11	79.0	42.0	50.0	65.0	54.0	50.8	42.0
12	74.2	40.6	49.8	64.0	51.0	47.0	40.0
13	74.0	39.2	49.8	60.6	48.0	42.2	40.0
14	72.0	38.0	49.6	57.0	45.8	40.0	35.0
15	69.0	31.0	47.0	56.0	44.0	35.0	33.0
16	69.0	30.0	43.0	54.0	40.0	33.0	32.6
17	68.2	30.0	43.0	54.0	38.0	28.0	31.0
18	68.0	26.0	40.0	45.2	35.0	26.0	28.0
19	65.0	21.0	38.0	45.0	35.0	25.7	25.0
20	65.0	18.0	37.0	43.0	33.0	25.0	23.0
21	64.0	17.0	34.0	38.6	32.8	24.0	22.0
22	60.6	15.2	32.0	32.0	32.6	23.2	22.0
23	60.2	15.0	32.0	31.4	32.4	19.0	20.8
24	60.0	13.0	26.2	30.8	30.0	12.0	18.4
25	58.0	12.0	25.7	28.0	24.0	12.0	18.0
26	56.2	11.6	22.8	25.0	22.6	8.0	9.0
27	54.8	11.0	20.0	22.2	21.0	6.4	8.0
28	51.0	9.0	13.2	20.0	17.0	6.2	6.0
29	50.0	6.0	13.0	20.0	11.6	5.0	0.0
30	40.0	2.0	12.0	17.6	11.2	2.0	0.0

TABLE. 3.15 LIST OF MAXIMUM DAILY PRECIPITATION
PORTO NOVO-SANTANA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	191.0	72.0	75.0	102.8	191.0	73.5	127.8
2	140.5	63.4	75.0	100.6	100.9	73.0	95.4
3	127.8	57.4	75.0	83.0	92.0	70.2	78.4
4	100.9	52.4	74.2	76.0	70.2	70.0	71.0
5	100.6	46.4	73.0	75.0	69.0	63.2	70.3
6	95.4	42.0	63.0	71.6	61.0	57.0	66.1
7	83.0	41.2	61.7	70.0	60.0	54.0	60.4
8	79.3	41.0	59.0	67.7	55.0	51.0	56.6
9	78.4	39.2	58.2	67.5	50.4	50.2	56.0
10	76.0	36.2	58.0	66.0	48.2	50.0	54.1
11	75.0	28.4	55.6	60.0	48.0	48.0	47.2
12	75.0	28.0	53.2	59.2	46.0	44.2	41.2
13	74.2	28.0	50.4	53.1	43.7	44.0	40.0
14	73.5	27.4	50.1	52.0	40.1	40.2	39.4
15	73.0	27.0	50.1	50.2	37.0	40.0	39.0
16	71.6	26.2	50.0	49.0	36.0	38.6	37.0
17	71.5	25.3	49.5	47.0	35.0	37.3	34.6
18	71.0	24.0	45.0	46.0	30.0	36.0	32.0
19	70.0	23.2	45.0	43.4	27.0	35.0	25.0
20	67.5	21.8	41.0	42.0	25.0	31.2	22.3
21	63.3	20.7	40.9	40.4	21.4	29.6	21.2
22	63.2	13.0	39.0	37.0	18.4	28.4	21.0
23	63.0	9.0	37.6	35.4	16.5	26.5	20.3
24	63.0	9.0	36.0	35.0	16.0	24.3	19.0
25	61.0	8.3	35.0	27.8	14.0	22.4	15.2
26	60.0	7.0	35.0	27.0	13.4	15.6	11.2
27	57.4	6.8	34.0	26.4	10.0	14.0	7.0
28	52.4	4.6	17.2	20.0	8.0	12.0	4.3
29	50.4	3.0	17.0	17.1	6.0	2.4	0.0
30	50.1	0.4	9.6	7.0	2.0	2.0	0.0

TABLE. 3.16 LIST OF MAXIMUM DAILY PRECIPITATION
QUEIMADAS-MANGA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	168.2	100.4	83.0	90.4	85.2	103.7	168.2
2	103.7	59.0	71.0	88.4	84.5	73.0	90.6
3	100.4	50.2	69.1	83.8	83.4	68.5	85.2
4	90.6	46.3	66.4	74.6	80.4	67.0	85.0
5	90.4	41.2	64.1	73.4	78.2	60.6	80.4
6	88.4	41.0	62.4	73.0	72.0	60.0	70.3
7	85.2	33.4	60.3	72.0	60.8	58.2	61.0
8	85.2	32.1	52.1	72.0	58.2	54.0	55.3
9	85.0	32.0	51.8	57.1	50.7	53.3	54.1
10	84.5	28.6	50.5	55.1	50.6	51.0	52.0
11	84.4	28.0	50.0	53.0	47.8	50.0	50.9
12	83.4	25.8	50.0	52.0	47.4	43.2	50.4
13	83.0	23.0	46.6	50.4	46.2	39.5	50.2
14	80.4	21.3	41.1	50.3	45.4	39.4	49.7
15	80.4	20.5	40.0	50.3	43.2	29.4	49.4
16	74.6	20.4	39.2	50.2	32.2	28.2	47.3
17	72.0	17.6	38.0	47.0	32.2	25.8	35.6
18	72.0	16.0	30.2	45.2	31.2	24.4	33.0
19	71.0	15.1	27.2	40.2	28.4	22.6	30.4
20	68.5	14.3	26.8	38.2	23.3	22.6	26.4
21	58.2	12.0	26.2	36.6	20.3	22.2	20.0
22	53.3	9.8	20.5	29.9	15.4	21.5	13.0
23	50.9	1.5	20.5	29.4	13.0	21.2	12.2
24	50.0	0.0	10.5	18.2	12.5	17.0	4.3
25	40.2	0.0	10.4	15.2	10.5	11.4	0.0
26	39.4	0.0	3.9	0.0	6.5	9.3	0.0

TABLE. 3.17 LIST OF MAXIMUM DAILY PRECIPITATION
SAO GONCALO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	130.4	75.8	130.4	113.1	106.2	106.3	71.6
2	119.0	71.8	72.6	77.0	79.6	97.3	70.1
3	113.1	35.5	70.6	68.0	76.8	84.7	60.4
4	106.3	34.9	68.2	61.8	73.2	70.6	58.6
5	106.2	31.3	67.6	61.6	64.9	63.5	56.3
6	98.8	28.2	67.4	57.4	58.2	53.1	54.8
7	97.3	28.2	67.0	56.8	53.8	44.0	47.6
8	84.7	28.0	66.5	50.6	51.7	42.2	46.5
9	79.6	25.3	60.0	48.2	50.6	38.3	42.2
10	77.4	21.8	56.2	46.2	40.6	35.4	37.6
11	77.0	19.2	52.8	43.9	38.6	34.3	36.3
12	76.8	17.6	45.9	43.5	37.8	31.6	35.4
13	73.2	14.2	45.1	42.1	36.4	29.0	33.9
14	72.6	12.3	44.7	41.0	36.3	27.0	33.5
15	70.6	11.2	40.5	38.7	35.0	25.2	28.5
16	70.1	9.7	38.7	33.4	33.5	23.2	28.3
17	68.2	8.7	36.4	32.8	29.8	21.6	21.8
18	68.0	8.0	34.3	30.1	29.3	18.0	18.7
19	67.6	7.2	28.5	24.3	15.9	17.5	15.9
20	66.5	6.4	23.5	24.0	15.6	14.3	14.2
21	58.6	5.1	21.9	21.2	13.6	10.1	9.5
22	53.8	1.5	14.5	18.4	6.4	9.7	8.4
23	42.1	0.0	13.5	15.1	6.1	8.7	2.6
24	18.4	0.0	2.3	13.1	0.0	6.3	0.0

TABLE. 3.18 LIST OF MAXIMUM DAILY PRECIPITATION
SAO JOAO DO PIAUI

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	230.2	38.1	110.0	76.8	230.2	134.0	82.0
2	134.0	36.5	100.8	75.2	82.0	71.4	80.2
3	123.0	30.5	84.0	66.8	78.2	70.5	76.6
4	110.0	27.3	73.4	66.3	75.5	67.2	72.4
5	100.8	24.6	70.2	58.3	75.0	66.0	71.0
6	84.0	24.0	62.0	52.4	71.0	61.5	71.0
7	82.0	22.9	61.0	52.3	63.3	60.6	67.5
8	82.0	18.0	56.0	48.0	62.2	59.9	61.0
9	80.2	16.9	55.2	48.0	59.3	53.3	60.0
10	78.2	16.3	55.1	45.2	57.7	53.2	58.0
11	75.5	15.5	54.6	40.0	55.3	52.0	56.2
12	75.2	9.6	50.0	38.3	44.8	48.7	55.5
13	71.4	1.5	48.9	37.0	44.0	45.0	54.0
14	71.0	0.0	40.2	36.8	43.5	44.8	53.3
15	70.2	0.0	40.0	35.2	42.0	43.3	46.5
16	69.5	0.0	32.5	31.4	40.3	42.4	46.5
17	67.5	0.0	30.5	31.1	34.5	42.0	42.5
18	66.3	0.0	25.0	30.5	32.8	40.0	42.0
19	66.0	0.0	24.0	30.0	30.6	32.0	41.4
20	63.2	0.0	23.9	30.0	30.5	29.4	38.0
21	62.0	0.0	22.0	29.2	30.4	29.0	34.2
22	57.7	0.0	20.8	28.3	25.0	25.7	31.0
23	55.3	0.0	20.0	26.9	18.2	24.3	29.5
24	54.0	0.0	10.8	26.3	15.2	22.0	27.3
25	53.3	0.0	8.0	25.8	14.6	20.6	13.5
26	52.4	0.0	2.8	25.0	14.6	17.5	10.4
27	50.0	0.0	0.0	20.5	10.1	7.1	8.1
28	45.0	0.0	0.0	15.2	7.2	6.5	3.0
29	25.0	0.0	0.0	3.6	5.0	2.5	0.0
30	10.4	0.0	0.0	0.0	0.0	0.0	0.0

TABLE. 3.19 LIST OF MAXIMUM DAILY PRECIPITATION
STA MARIA DA VITORIA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	150.1	75.3	96.0	150.1	83.6	122.0	90.5
2	122.0	63.8	94.0	104.2	72.3	103.0	80.4
3	104.2	47.4	91.2	103.0	62.0	80.0	76.4
4	103.0	40.0	90.4	99.0	60.5	68.6	63.2
5	103.0	40.0	90.0	93.0	58.0	64.2	63.0
6	99.0	40.0	78.6	75.2	54.8	60.0	58.3
7	96.0	39.6	78.3	67.5	52.4	59.7	55.2
8	94.0	35.2	70.0	66.6	51.8	56.0	54.6
9	93.0	34.0	70.0	66.0	51.0	49.0	43.0
10	91.2	32.0	63.8	64.0	47.0	41.0	41.4
11	90.5	31.2	62.4	63.3	40.1	40.0	40.4
12	90.4	30.0	60.2	51.2	35.6	36.8	38.0
13	90.0	30.0	60.0	51.0	34.4	35.4	32.0
14	88.3	29.6	59.5	51.0	33.0	35.0	30.0
15	83.6	29.0	57.2	42.0	31.6	34.2	30.0
16	75.2	23.4	49.5	40.2	31.0	28.0	27.0
17	72.3	22.6	47.5	40.0	30.0	28.0	25.0
18	70.0	20.0	46.0	40.0	29.0	26.0	24.8
19	70.0	20.0	44.0	39.5	28.2	25.5	24.2
20	68.6	19.6	43.0	38.2	26.0	25.4	22.0
21	66.0	13.3	38.0	36.2	22.3	25.0	19.5
22	64.4	12.7	34.0	36.0	20.8	24.0	18.9
23	63.3	12.6	33.0	35.0	19.2	23.2	18.2
24	63.2	11.0	32.6	32.5	17.2	21.6	17.2
25	62.4	9.0	26.0	31.4	15.0	15.8	17.2
26	60.0	8.3	25.0	29.0	9.5	15.0	13.0
27	60.0	7.0	24.5	28.6	9.1	14.0	8.8
28	51.8	6.2	20.0	27.0	4.5	14.0	8.3
29	47.5	5.3	9.5	16.4	3.2	12.0	0.0
30	44.0	4.3	3.0	11.1	2.0	8.2	0.0

TABLE.3.10 LIST OF MAXIMUM DAILY PRECIPITATION
TERRA ROXA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	151.5	77.2	95.3	151.5	134.2	133.3	100.5
2	134.2	67.0	87.4	108.0	115.8	99.2	93.6
3	133.3	50.7	81.4	98.7	109.5	79.4	90.8
4	115.8	50.2	70.7	97.0	96.0	71.1	79.2
5	109.5	49.2	68.0	89.9	84.8	64.0	73.5
6	108.0	46.4	60.8	85.2	83.8	60.0	71.5
7	98.7	46.0	59.9	78.4	83.2	56.8	61.5
8	96.0	46.0	57.6	74.0	82.4	56.0	58.4
9	90.8	43.0	55.3	70.3	78.6	55.3	53.0
10	89.9	42.5	54.2	69.0	75.3	54.0	52.0
11	87.4	40.0	52.0	67.3	72.5	49.2	47.6
12	85.2	39.3	50.4	60.2	71.2	47.2	47.1
13	84.8	38.0	49.4	58.5	68.0	47.0	45.2
14	83.8	38.0	48.0	53.2	62.7	47.0	43.3
15	82.4	37.7	41.3	53.2	62.0	43.3	40.7
16	82.3	36.0	40.2	51.0	59.8	42.9	39.2
17	78.4	30.4	38.1	50.0	59.7	41.2	38.5
18	73.5	30.0	37.0	50.0	57.2	40.5	38.0
19	72.5	30.0	33.5	50.0	51.2	38.1	34.6
20	71.5	29.2	32.2	44.0	50.5	38.0	33.3
21	71.2	28.0	32.0	40.3	50.2	37.2	33.0
22	71.1	25.6	31.8	38.3	50.0	37.2	32.0
23	70.7	21.5	30.5	37.2	44.2	36.0	31.0
24	70.3	21.0	29.8	31.4	43.3	36.0	30.5
25	68.0	19.8	28.1	30.5	43.3	33.5	27.1
26	64.0	17.2	26.2	30.3	36.0	32.0	25.0
27	60.0	16.3	25.5	30.0	35.8	29.2	24.8
28	59.7	14.6	21.4	29.4	34.0	28.4	22.7
29	51.2	13.6	20.3	19.0	34.0	26.3	21.5
30	50.0	9.9	20.2	10.0	23.4	24.3	14.2

TABLE.3.2/LIST OF MAXIMUM DAILY PRECIPITATION
UNIAO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	170.0	102.0	63.5	132.6	87.1	107.9	159.1
2	159.1	91.1	62.5	91.2	83.6	94.7	100.0
3	132.6	63.5	61.5	74.9	76.8	89.8	92.8
4	110.4	51.0	60.1	63.5	70.8	80.3	92.6
5	107.9	46.2	55.6	62.2	62.5	78.2	88.9
6	102.0	35.5	41.4	60.9	59.5	77.2	76.5
7	100.0	28.5	40.0	60.8	59.0	69.6	74.1
8	98.6	27.4	35.6	53.2	55.2	65.2	70.1
9	95.2	25.3	30.3	47.5	55.0	63.7	66.4
10	95.2	24.0	29.0	47.4	53.4	63.5	65.0
11	94.7	17.4	27.7	42.2	53.0	63.5	64.9
12	94.0	16.2	25.8	39.6	49.0	63.2	64.6
13	89.8	11.5	20.3	39.0	48.4	61.5	64.4
14	88.9	11.3	20.1	38.6	45.8	61.0	63.5
15	87.1	10.2	18.0	37.5	45.4	59.3	59.5
16	82.0	10.0	17.4	37.4	45.2	56.3	57.0
17	80.3	8.6	16.0	33.0	44.8	56.3	56.1
18	76.5	7.1	15.8	31.3	43.0	55.7	52.8
19	74.9	5.3	14.9	30.0	41.6	44.7	52.5
20	70.8	5.0	14.8	29.4	40.5	44.6	52.4
21	65.0	4.6	14.2	24.5	40.0	44.1	51.8
22	63.7	4.2	14.0	22.8	39.2	44.0	49.6
23	63.5	3.6	9.5	22.5	38.0	42.0	43.2
24	63.5	2.0	8.5	21.0	37.1	38.2	41.2
25	63.5	0.0	7.1	16.0	35.6	35.0	40.7
26	63.5	0.0	6.9	11.7	30.0	32.0	37.2
27	62.5	0.0	6.2	7.1	29.5	30.1	37.0
28	62.5	0.0	2.0	6.2	27.6	23.1	34.5
29	62.2	0.0	0.0	6.2	26.3	15.8	27.2
30	61.0	0.0	0.0	0.6	21.5	0.0	0.0

TABLE.3.22 LIST OF MAXIMUM DAILY PRECIPITATION
ARACUAI

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	115.4	64.0	95.4	82.0	115.4	88.0	87.2
2	102.6	52.2	83.0	78.0	75.4	72.0	77.2
3	95.4	50.2	82.4	77.4	71.6	61.4	74.4
4	92.2	49.0	82.0	76.8	67.0	53.0	74.4
5	88.0	44.6	74.4	75.1	63.6	52.6	74.2
6	87.2	40.3	71.2	70.2	56.0	51.6	70.0
7	83.0	36.6	68.8	62.0	52.7	46.4	64.8
8	82.4	35.8	66.8	55.0	51.4	45.8	51.5
9	82.0	35.4	64.6	53.0	48.4	35.6	51.0
10	82.0	28.6	63.8	52.0	36.8	35.2	44.4
11	78.0	27.0	60.6	51.6	35.4	33.4	42.9
12	77.4	24.8	60.0	51.0	35.4	31.4	41.4
13	77.2	24.6	59.6	49.6	31.2	27.6	36.4
14	75.1	24.6	57.0	47.0	30.1	26.8	33.8
15	74.4	24.6	48.2	43.6	30.0	21.7	30.4
16	74.2	23.6	44.4	38.3	30.0	21.2	28.0
17	72.0	22.8	40.4	35.9	29.6	21.0	23.8
18	71.2	18.4	39.2	32.8	27.2	20.0	21.7
19	70.2	13.6	39.2	30.2	24.4	18.0	21.2
20	67.0	11.8	38.8	27.0	24.4	17.4	19.8
21	64.8	11.6	36.8	26.0	21.2	15.8	17.8
22	63.6	10.6	30.8	20.6	21.0	12.6	10.8
23	59.6	7.6	25.4	20.0	21.0	11.7	8.0
24	52.7	2.8	22.3	10.3	20.0	9.0	5.5
25	52.6	0.9	21.2	7.8	11.7	1.6	2.2
26	51.0	0.5	20.6	5.4	8.0	0.9	1.1
27	47.0	0.0	16.8	0.0	1.5	0.0	0.0

TABLE.3.23 LIST OF MAXIMUM DAILY PRECIPITATION
BAMBUI

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	146.0	76.0	138.4	103.6	112.2	73.8	146.0
2	138.4	65.4	135.0	88.0	99.8	73.8	92.0
3	135.0	60.2	95.0	76.6	92.6	59.4	86.2
4	112.2	60.0	73.8	71.8	83.0	53.0	76.4
5	103.6	59.4	71.6	65.2	79.2	52.4	73.2
6	99.8	52.0	55.0	64.4	75.0	50.0	70.0
7	95.0	48.8	55.0	63.0	75.0	50.0	55.0
8	92.6	48.8	54.2	61.0	70.4	49.8	52.8
9	88.0	48.0	51.6	60.6	67.8	46.6	51.2
10	86.2	46.0	51.0	60.6	54.0	45.8	51.0
11	83.0	45.0	50.6	60.1	52.6	45.2	45.2
12	79.2	41.0	50.6	59.2	52.0	45.0	44.2
13	76.6	40.0	43.6	57.6	50.0	44.6	43.4
14	76.4	37.2	42.0	56.0	50.0	44.0	42.6
15	75.0	37.2	39.4	53.1	49.6	43.8	39.4
16	75.0	36.0	39.4	52.8	48.4	42.0	38.2
17	73.2	35.6	38.2	52.0	47.2	40.2	32.4
18	71.8	29.8	38.2	50.0	44.4	40.0	31.6
19	67.8	28.6	37.6	48.8	41.0	38.6	30.4
20	65.2	25.6	37.0	48.6	40.2	38.4	29.8
21	64.4	25.0	35.0	46.6	37.2	35.8	28.2
22	59.4	24.8	34.2	45.0	35.4	29.6	28.0
23	59.2	24.0	32.4	43.8	35.2	27.0	28.0
24	54.6	22.2	32.2	43.2	32.6	26.6	25.2
25	52.8	20.0	28.0	41.0	31.2	25.6	25.0
26	52.6	18.2	24.2	40.1	28.0	25.0	23.2
27	50.0	15.6	23.4	35.8	27.4	24.8	22.0
28	50.0	15.1	22.6	35.6	22.6	22.0	19.6
29	48.8	14.0	22.4	33.2	17.6	18.0	16.2
30	44.4	6.6	17.6	24.8	16.2	10.6	16.0

TABLE. 3.24 LIST OF MAXIMUM DAILY PRECIPITATION
CARMO DO PARANAIBA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	156.1	115.6	87.4	100.5	156.1	98.3	68.0
2	115.6	96.2	82.0	96.0	107.8	83.4	67.6
3	107.8	70.0	80.4	94.6	92.0	80.2	64.1
4	100.5	63.8	63.8	74.0	85.0	78.0	61.2
5	98.3	58.6	63.2	69.8	85.0	74.0	59.1
6	96.0	54.6	61.8	67.1	73.0	71.0	52.2
7	94.6	50.1	52.6	65.6	72.0	60.2	51.0
8	94.0	49.1	50.0	64.0	71.4	48.8	48.0
9	87.4	48.8	49.8	63.6	63.6	48.3	46.2
10	85.0	46.6	48.2	63.6	59.6	48.2	46.0
11	83.4	46.6	47.0	58.6	58.4	45.0	43.2
12	82.0	43.0	46.0	58.4	56.2	42.4	41.8
13	80.4	42.8	46.0	55.0	50.4	41.0	41.2
14	78.0	42.0	45.8	53.0	49.9	40.9	39.6
15	72.0	40.6	45.2	50.6	47.5	38.6	39.0
16	71.4	40.0	45.0	47.0	45.2	37.2	36.6
17	71.0	36.0	44.2	46.4	45.2	34.5	36.2
18	66.6	36.0	39.5	46.2	39.6	34.2	35.0
19	64.0	34.0	38.4	45.6	37.4	34.0	34.6
20	63.8	33.6	36.0	43.4	36.6	34.0	32.4
21	63.6	31.2	36.0	39.6	35.8	33.8	31.6
22	63.6	31.0	34.0	39.4	34.6	33.6	30.0
23	63.2	26.7	33.4	38.0	27.0	32.2	24.1
24	59.1	26.0	33.2	37.9	26.8	30.6	20.2
25	55.0	23.0	30.4	37.4	26.6	30.2	19.6
26	53.0	22.6	28.0	37.4	24.6	25.4	19.2
27	50.4	22.4	25.7	37.0	24.6	22.6	17.2
28	49.1	21.9	24.2	34.1	23.6	22.2	16.4
29	46.2	19.0	17.6	33.4	23.4	21.4	15.0
30	39.0	11.2	12.6	25.0	16.8	13.6	13.6

TABLE. 3.25 LIST OF MAXIMUM DAILY PRECIPITATION
CURVELO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	123.6	90.2	83.2	123.6	101.4	72.1	88.2
2	121.2	69.8	76.8	121.2	95.0	62.2	85.0
3	115.1	64.1	75.0	115.1	91.1	57.4	74.4
4	101.4	59.4	65.0	82.1	90.0	55.7	62.4
5	95.0	55.4	62.0	73.8	85.3	54.0	61.8
6	91.1	53.0	60.9	73.0	82.5	51.4	60.9
7	90.2	51.9	60.8	72.8	79.0	51.2	58.2
8	90.0	50.1	60.7	72.6	58.7	48.9	57.7
9	88.2	50.0	54.4	71.8	58.6	48.0	50.0
10	85.3	48.2	53.0	67.1	56.3	45.3	49.4
11	85.0	47.2	50.8	64.2	54.2	43.8	48.4
12	82.5	37.0	49.0	59.2	53.4	43.4	43.4
13	82.1	35.8	46.2	58.3	49.0	41.8	42.5
14	76.8	35.2	46.2	55.4	48.5	41.3	38.7
15	73.0	31.4	44.8	53.8	45.6	40.9	34.6
16	72.8	30.7	43.1	53.3	43.2	40.4	21.2
17	69.8	29.8	39.4	49.8	41.2	39.3	18.2
18	65.3	27.5	37.0	44.4	35.8	39.0	16.4
19	64.2	27.4	36.4	41.4	34.8	29.7	13.4
20	62.4	27.2	36.2	41.0	33.0	28.4	11.8
21	61.8	20.4	36.1	40.9	31.5	27.7	8.8
22	60.9	17.0	35.4	40.4	28.3	26.4	8.8
23	60.9	16.5	35.0	40.2	26.8	26.4	3.1
24	58.6	14.4	32.9	38.6	15.6	25.9	0.4
25	58.3	11.8	27.9	34.6	13.8	24.7	0.0
26	57.7	9.8	24.2	28.2	6.0	21.6	0.0
27	55.7	9.2	23.6	26.9	0.0	15.8	0.0
28	54.2	8.6	19.8	25.0	0.0	14.9	0.0
29	53.3	6.2	15.7	24.3	0.0	3.9	0.0
30	49.8	2.1	15.4	16.3	0.0	3.7	0.0

TABLE.3.26 LIST OF MAXIMUM DAILY PRECIPITATION
FAZENDA AJUDAS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	102.2	71.2	97.0	102.2	75.3	80.1	69.2
2	97.0	69.0	76.9	91.5	75.0	75.2	66.0
3	91.5	62.3	75.2	91.0	71.5	69.4	61.1
4	91.0	58.3	75.0	85.0	64.3	61.2	56.5
5	85.0	55.2	64.0	79.0	60.1	58.0	54.4
6	80.1	52.2	62.0	74.0	59.5	42.1	54.1
7	79.0	50.3	59.2	61.1	59.3	40.6	54.1
8	76.9	50.1	57.1	55.1	58.0	39.0	53.3
9	75.3	46.2	52.1	53.1	57.2	39.0	52.3
10	75.2	42.0	50.0	52.0	57.1	38.2	51.2
11	75.2	39.7	45.5	50.7	56.0	36.6	50.2
12	75.0	30.0	45.2	49.1	52.1	36.2	47.3
13	74.0	28.3	45.1	49.0	52.1	35.2	46.0
14	71.5	28.2	45.0	48.3	50.2	35.0	43.3
15	70.2	28.1	42.0	46.4	50.0	35.0	43.0
16	69.0	26.2	41.4	45.4	48.1	33.2	36.0
17	66.0	25.7	41.3	45.1	45.5	32.2	35.2
18	64.3	25.2	40.2	45.0	37.3	31.5	35.0
19	64.0	25.0	33.2	44.3	35.2	28.0	30.1
20	62.3	23.0	31.0	41.5	35.0	26.2	28.0
21	61.1	23.0	30.0	36.0	32.2	25.2	25.1
22	59.5	21.2	25.3	35.2	31.6	24.0	25.1
23	58.3	21.2	25.3	31.0	31.0	23.0	25.0
24	58.0	20.3	25.2	30.3	31.0	22.0	23.0
25	56.5	20.0	24.2	29.1	30.2	18.3	20.0
26	56.0	16.0	22.0	28.0	25.2	17.8	18.2
27	55.2	15.3	20.0	22.1	25.0	17.0	13.2
28	50.3	12.0	15.3	21.1	21.0	17.0	11.0
29	45.5	8.3	12.0	12.2	20.0	6.0	7.4
30	45.1	6.2	10.0	10.2	18.1	3.3	6.1

TABLE.3.27 LIST OF MAXIMUM DAILY PRECIPITATION
FRUTAL

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	122.0	62.8	100.8	109.4	122.0	74.8	105.4
2	117.2	57.0	98.4	88.4	117.2	73.4	94.4
3	105.4	52.6	92.4	82.6	95.0	71.3	83.4
4	100.8	48.4	83.8	64.6	83.0	68.2	75.2
5	98.4	42.9	68.2	63.0	81.4	67.7	60.1
6	95.0	42.4	64.2	61.8	77.4	65.2	59.2
7	94.4	41.2	60.6	59.2	74.8	62.4	58.4
8	92.4	41.2	59.6	56.6	71.4	58.2	53.8
9	88.4	40.5	59.4	52.4	66.2	54.8	53.6
10	83.8	39.4	56.7	48.1	62.2	49.2	53.2
11	81.4	33.6	52.4	46.6	50.2	48.4	50.5
12	73.4	28.8	50.6	44.2	50.0	46.2	41.7
13	71.4	27.0	49.3	44.1	44.8	46.0	36.0
14	68.2	26.4	45.6	43.9	42.6	44.4	35.6
15	67.7	25.5	39.0	42.7	41.8	42.6	34.6
16	64.2	22.4	38.8	38.6	39.4	39.5	33.2
17	61.9	19.7	28.5	36.8	31.0	37.6	31.8
18	61.8	19.5	28.4	34.0	28.9	37.2	28.6
19	60.6	18.4	28.2	34.0	26.8	34.8	25.4
20	59.2	17.0	24.6	31.8	26.6	34.6	25.4
21	52.4	16.4	24.0	26.2	25.8	34.2	23.6
22	50.6	16.3	20.7	25.0	18.6	30.0	23.2
23	42.4	12.8	18.6	25.0	15.9	27.8	23.2
24	28.6	11.9	15.1	23.4	15.0	23.8	18.9
25	27.8	9.2	13.0	23.0	14.2	18.6	15.7
26	23.8	8.2	13.0	22.6	13.0	15.9	15.5
27	23.6	5.2	10.2	19.4	13.0	15.0	13.4
28	23.4	0.0	10.0	16.7	11.7	13.7	10.9
29	23.0	0.0	5.4	14.4	10.3	12.4	10.4
30	20.7	0.0	0.0	8.8	7.2	12.0	10.3

TABLE. 3.28 LIST OF MAXIMUM DAILY PRECIPITATION
INHUMAS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	140.0	90.7	83.6	140.0	99.4	97.8	91.8
2	130.2	78.0	70.5	70.0	77.5	85.2	91.2
3	99.4	75.8	64.6	67.9	77.0	75.5	89.7
4	97.8	70.2	63.8	67.5	75.0	75.5	88.2
5	91.8	69.9	63.3	60.6	74.4	64.8	78.0
6	91.4	62.4	62.8	58.6	65.0	64.0	72.6
7	91.2	61.8	55.8	55.0	60.0	62.2	67.0
8	90.7	56.2	54.2	52.2	56.0	61.2	60.0
9	89.7	55.8	52.3	50.2	55.4	50.8	59.3
10	88.2	54.5	51.1	47.1	55.0	50.4	54.4
11	85.2	51.8	49.7	45.2	54.2	50.1	53.4
12	83.6	48.2	49.1	44.6	53.8	46.4	52.8
13	78.0	47.8	49.0	42.4	53.0	41.1	52.2
14	78.0	45.2	47.2	41.8	53.0	39.5	50.4
15	77.0	43.5	45.2	41.2	49.3	39.5	50.2
16	75.8	41.7	41.7	38.0	46.2	38.8	49.0
17	75.5	41.2	39.4	37.5	42.0	38.4	46.7
18	75.0	38.5	38.0	36.6	37.8	38.0	44.3
19	64.8	37.2	37.5	36.2	37.1	37.6	39.5
20	63.3	36.0	35.5	33.3	37.0	37.4	38.4
21	62.8	35.0	35.5	32.8	35.0	37.3	37.5
22	62.2	35.0	34.2	32.2	32.2	32.9	35.0
23	59.6	31.8	33.3	29.9	30.6	29.8	32.3
24	59.3	30.3	29.8	28.0	29.8	28.7	30.5
25	58.6	29.8	29.0	27.4	28.2	26.8	25.8
26	56.0	29.3	28.2	25.8	28.0	22.4	21.2
27	55.8	28.7	25.6	25.2	27.3	22.2	20.5
28	52.2	25.8	23.2	22.5	25.9	20.8	17.3
29	42.0	19.5	20.5	18.0	25.0	19.0	11.7
30	41.7	18.6	9.5	17.5	13.3	15.8	9.0

TABLE. 3.29 LIST OF MAXIMUM DAILY PRECIPITATION
ITAMARANDIBA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	160.5	77.0	88.9	105.2	103.2	160.5	83.0
2	105.2	64.2	74.1	74.0	92.0	84.2	66.6
3	103.2	61.0	72.2	71.0	86.9	79.0	66.0
4	92.0	55.0	69.0	70.4	81.0	75.7	65.4
5	88.9	55.0	65.4	64.0	78.3	71.0	63.0
6	86.9	53.0	65.2	63.2	76.0	71.0	62.8
7	84.2	53.0	64.8	61.2	72.7	68.1	61.0
8	83.0	52.0	62.2	57.2	71.8	64.0	58.0
9	81.0	48.6	61.4	54.4	66.1	62.0	49.6
10	78.3	45.8	60.4	53.0	60.0	58.0	47.4
11	77.0	43.4	57.8	52.6	58.5	49.8	46.0
12	76.0	42.0	57.4	52.3	57.4	48.0	43.8
13	75.7	39.2	56.8	51.6	51.0	47.2	34.2
14	74.0	38.1	54.3	50.0	48.0	46.6	34.0
15	73.0	33.6	52.7	50.0	46.8	46.1	33.0
16	72.2	30.0	52.6	50.0	43.5	44.0	29.6
17	71.8	28.4	49.5	48.8	42.0	43.0	29.2
18	71.0	27.7	47.0	45.0	41.6	34.2	28.0
19	71.0	27.4	46.0	43.8	40.4	28.4	25.5
20	71.0	26.9	43.0	42.8	38.7	24.8	23.0
21	70.4	24.3	43.0	41.0	38.4	23.4	22.0
22	68.1	22.0	42.6	37.0	34.6	18.8	18.9
23	67.2	20.0	42.0	36.4	29.5	16.6	18.0
24	66.1	19.4	39.2	34.4	27.8	14.4	16.0
25	65.4	18.8	36.4	32.0	26.0	11.4	14.4
26	65.4	13.7	31.0	29.0	21.4	10.6	13.8
27	65.2	11.0	31.0	25.4	17.7	8.2	11.4
28	60.4	7.5	28.0	24.6	13.6	7.4	8.6
29	60.0	3.4	26.8	17.6	13.2	6.1	8.6
30	48.8	2.2	10.4	13.2	0.6	2.8	0.0

TABLE. 3.30 LIST OF MAXIMUM DAILY PRECIPITATION
JABOTICATUBAS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	112.7	92.6	97.1	110.6	100.8	88.8	112.7
2	102.8	82.6	95.8	97.2	98.5	83.2	102.8
3	100.8	75.8	91.2	97.0	87.4	79.8	66.6
4	98.5	63.8	90.8	78.6	84.4	78.4	58.6
5	97.2	57.8	69.6	78.5	67.6	62.2	58.1
6	97.0	57.6	62.4	78.2	60.8	56.8	50.7
7	95.8	56.6	61.2	71.2	59.8	48.6	45.9
8	92.6	53.4	60.2	70.3	58.9	47.8	44.5
9	91.2	50.2	58.7	68.6	58.6	45.9	44.2
10	87.4	46.8	56.5	67.4	57.8	44.0	41.9
11	82.6	43.8	55.7	66.2	52.8	41.8	40.6
12	78.6	43.4	53.4	65.2	51.3	39.4	40.6
13	78.5	39.1	52.6	64.5	50.8	39.2	39.2
14	78.2	38.0	51.4	63.2	50.4	38.8	37.2
15	75.8	37.2	47.4	59.2	48.2	37.4	36.8
16	70.3	31.7	45.6	53.8	44.6	35.5	32.8
17	68.6	31.6	45.4	46.2	43.2	33.7	30.6
18	67.4	29.8	42.6	42.6	42.9	33.6	29.8
19	66.2	29.8	39.6	41.6	42.8	33.4	28.6
20	65.2	28.8	39.0	41.2	42.0	29.8	27.6
21	63.8	27.0	37.5	40.4	39.6	29.4	27.3
22	61.2	26.6	36.8	40.2	36.2	23.2	26.4
23	56.7	24.2	35.3	39.0	32.4	23.1	23.5
24	54.2	22.1	32.4	35.0	26.8	21.6	21.8
25	53.8	21.4	30.6	32.6	24.6	18.8	21.2
26	51.4	19.8	27.8	31.2	22.4	16.9	9.8
27	51.3	17.8	26.4	31.2	22.4	16.2	9.2
28	50.8	17.6	24.7	27.2	21.2	15.6	8.5
29	50.4	16.8	24.3	26.3	19.2	12.6	7.4
30	36.8	10.2	17.2	20.5	10.8	2.1	6.4

TABLE. 3.31 LIST OF MAXIMUM DAILY PRECIPITATION
JEQUITINHONHA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	135.1	80.0	122.0	135.1	75.8	113.3	119.0
2	122.0	76.3	100.0	94.5	71.0	102.0	109.0
3	119.0	73.2	79.2	71.0	67.0	80.2	65.3
4	113.3	64.2	78.3	70.6	64.6	62.2	60.6
5	109.0	58.0	75.0	64.0	61.0	57.5	55.0
6	102.0	50.6	73.0	62.0	56.6	53.0	52.9
7	100.0	49.0	70.0	61.4	56.0	50.0	50.0
8	94.5	46.5	68.1	60.4	55.0	40.7	49.1
9	80.2	39.1	68.0	60.3	50.3	37.0	44.0
10	79.2	38.1	60.6	58.4	50.0	36.0	39.0
11	78.3	35.2	56.4	58.4	50.0	35.1	38.4
12	76.3	33.2	56.0	58.0	50.0	31.0	38.3
13	75.8	31.4	54.9	57.5	46.8	31.0	38.3
14	75.0	30.4	54.0	50.0	46.2	30.0	38.0
15	73.4	30.0	53.0	49.3	40.4	28.3	27.0
16	71.0	28.3	51.0	47.0	40.0	27.6	26.4
17	71.0	27.3	49.3	44.2	39.3	26.3	26.0
18	70.0	27.3	47.6	42.4	39.0	26.2	25.4
19	68.1	27.2	47.0	38.4	37.3	21.0	21.6
20	65.3	26.2	39.8	38.3	29.4	19.2	20.3
21	64.6	25.0	39.0	33.0	28.3	18.0	18.3
22	62.2	24.1	38.5	31.0	22.0	18.0	17.4
23	62.0	22.0	38.4	30.2	17.0	17.4	16.4
24	60.6	15.6	37.4	28.4	16.2	14.0	16.0
25	58.4	15.4	30.0	27.2	16.0	12.4	14.3
26	50.5	12.0	29.2	27.0	13.3	12.3	12.5
27	50.0	10.3	29.2	26.0	11.4	12.1	12.0
28	49.3	10.2	23.5	23.0	9.5	7.2	10.0
29	40.7	0.0	15.3	20.8	9.0	3.1	5.3
30	39.8	0.0	3.0	3.8	0.3	3.0	0.1

TABLE. 3.32 LIST OF MAXIMUM DAILY PRECIPITATION
JUPIA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	141.2	81.0	71.2	100.2	115.3	141.2	102.3
2	115.3	78.2	68.8	87.0	101.4	100.0	95.0
3	102.3	60.2	65.0	82.1	100.0	89.6	94.0
4	101.4	60.0	58.2	81.0	98.2	78.0	75.5
5	100.2	52.0	50.8	79.0	95.6	75.0	73.0
6	100.0	50.1	47.8	75.0	94.5	69.2	58.0
7	100.0	47.0	47.1	60.8	90.0	61.2	55.0
8	98.2	44.0	44.1	54.1	77.0	61.0	50.0
9	95.0	39.3	42.4	52.0	70.7	60.2	49.3
10	94.5	39.0	40.2	46.2	69.0	56.7	49.0
11	94.0	38.4	40.0	45.5	66.0	54.0	47.0
12	90.0	38.3	35.0	45.0	65.0	53.0	44.0
13	90.0	38.2	35.0	44.2	50.2	50.2	41.6
14	89.6	38.0	33.7	41.6	49.3	50.2	40.5
15	87.0	37.6	33.2	41.3	49.2	49.0	34.4
16	79.0	33.0	33.0	41.0	49.0	47.0	27.2
17	77.0	31.0	32.0	40.0	46.0	40.3	25.0
18	75.0	26.4	32.0	38.2	43.3	37.0	23.3
19	68.0	23.0	29.6	34.4	38.4	34.0	23.0
20	66.0	22.2	26.3	34.2	35.1	33.3	21.4
21	65.0	21.6	25.0	33.4	31.3	33.0	20.2
22	60.8	21.4	24.2	32.0	28.0	30.2	19.0
23	60.4	20.0	19.0	27.0	27.0	29.0	15.0
24	52.0	20.0	14.2	25.0	26.0	29.0	13.1
25	49.0	18.4	13.5	21.0	26.0	24.3	10.0
26	49.0	17.2	6.6	20.0	23.1	23.2	10.0
27	45.0	14.6	6.0	16.2	19.2	7.0	7.6

TABLE. 3.33 LIST OF MAXIMUM DAILY PRECIPITATION
LUSSANVIRA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	125.4	75.0	103.4	116.2	125.4	91.4	92.6
2	124.3	74.8	80.0	89.1	124.3	72.2	68.1
3	104.6	65.2	71.8	76.8	104.6	69.2	61.2
4	103.4	64.0	66.0	74.2	81.2	66.0	60.0
5	92.6	60.6	65.8	60.4	80.0	64.4	55.4
6	91.4	55.2	65.2	57.0	79.0	56.6	51.4
7	89.1	52.2	63.0	57.0	75.0	56.0	51.4
8	83.0	51.4	56.6	55.9	70.0	55.0	51.0
9	81.2	49.0	56.4	55.0	62.0	54.4	48.6
10	80.0	49.0	50.6	54.0	56.8	47.4	44.4
11	79.0	42.3	50.2	53.0	53.4	46.4	41.8
12	75.0	42.0	50.2	50.0	51.5	45.6	40.0
13	74.8	41.0	46.0	49.0	49.2	45.2	38.8
14	74.2	40.0	45.0	48.4	43.0	45.0	38.6
15	69.2	35.0	43.0	45.6	42.4	45.0	36.8
16	66.8	33.3	41.3	45.0	41.2	44.2	35.4
17	66.0	33.0	40.4	44.4	38.4	43.4	34.6
18	65.4	32.5	39.0	44.0	37.0	42.1	33.9
19	65.2	31.6	35.2	43.8	36.6	40.0	28.4
20	65.2	30.8	35.0	41.0	35.4	38.0	25.3
21	63.0	30.6	29.4	39.6	34.2	36.4	22.8
22	60.6	29.2	28.8	38.0	33.4	35.2	22.0
23	60.4	29.0	28.4	37.2	33.3	34.0	22.0
24	57.0	28.6	27.0	35.0	32.4	33.6	21.2
25	54.4	26.8	27.0	30.0	31.8	32.8	19.4
26	53.4	22.9	25.2	29.2	29.2	32.6	16.6
27	51.4	20.0	23.6	27.3	27.8	28.0	15.0
28	48.2	19.4	20.6	24.2	25.1	24.0	10.1
29	37.2	18.0	16.0	22.0	25.0	19.8	7.6
30	35.2	16.3	6.2	1.2	24.2	0.0	0.0

TABLE. 3.34 LIST OF MAXIMUM DAILY PRECIPITATION
MENDANHA-MONTANTE

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	200.0	80.8	160.0	150.0	150.0	118.2	200.0
2	160.0	75.0	100.2	120.8	125.8	100.0	132.4
3	150.0	64.6	85.0	111.8	118.8	82.2	120.0
4	132.4	57.2	84.2	102.8	113.2	73.0	64.4
5	125.8	54.6	80.0	90.0	88.2	70.4	62.2
6	120.8	50.8	69.8	80.8	88.0	67.2	54.0
7	118.8	47.0	64.9	78.9	80.7	67.2	50.0
8	113.2	44.6	62.7	76.6	75.0	65.4	50.0
9	111.8	43.8	61.0	70.4	74.2	63.8	48.2
10	89.0	41.8	60.5	68.0	69.6	59.2	46.0
11	88.2	37.0	59.6	67.2	68.6	58.6	41.8
12	88.0	36.6	54.2	63.0	63.0	50.8	41.0
13	85.0	33.8	54.2	60.8	62.6	50.7	38.0
14	84.2	33.4	52.8	59.6	56.2	50.0	37.0
15	82.2	32.2	52.6	55.6	56.2	47.2	36.9
16	78.9	32.2	50.6	53.4	53.6	45.4	36.8
17	76.6	32.0	50.2	53.2	52.6	39.2	35.6
18	73.0	30.6	49.4	52.8	51.2	38.6	33.2
19	69.8	28.0	48.2	51.6	50.6	37.4	26.0
20	69.6	27.8	46.4	50.2	49.2	36.6	25.2
21	68.6	24.8	41.2	48.8	46.6	35.4	22.6
22	67.2	24.6	39.2	47.2	45.4	34.8	21.6
23	67.2	22.0	38.8	46.0	44.0	32.4	20.6
24	65.4	21.0	33.0	41.8	39.2	26.8	19.8
25	64.4	21.0	32.2	38.4	38.2	26.4	8.4
26	62.6	18.6	32.0	32.6	34.2	25.7	7.6
27	60.8	15.8	30.6	30.2	33.2	20.6	0.7
28	53.6	12.3	28.8	30.1	33.0	20.0	0.0
29	53.4	10.8	25.2	27.6	18.0	12.0	0.0
30	53.2	3.6	10.0	24.6	15.0	3.0	0.0

TABLE. 3.35 LIST OF MAXIMUM DAILY PRECIPITATION
MINAS NOVAS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	142.1	64.1	120.8	84.1	136.0	72.2	142.1
2	136.0	62.6	109.8	82.3	82.8	56.3	75.0
3	120.8	55.7	90.8	63.6	79.6	56.0	52.8
4	109.8	54.5	82.0	63.1	73.8	49.6	50.3
5	90.8	52.6	72.1	61.4	71.4	46.2	49.3
6	84.1	46.2	71.4	57.3	63.4	45.6	48.6
7	82.8	44.1	69.4	54.3	59.4	41.5	42.6
8	82.3	43.2	66.3	52.9	46.4	37.5	41.6
9	82.0	41.2	60.2	52.1	46.1	32.1	37.6
10	79.6	37.9	56.3	50.3	39.2	28.9	36.5
11	71.4	35.0	54.7	50.1	32.8	28.2	34.8
12	69.4	34.1	53.2	50.0	32.5	28.2	31.6
13	66.3	31.4	46.3	48.8	31.3	28.1	31.1
14	63.6	28.7	45.5	48.8	30.2	27.6	27.2
15	63.4	22.3	43.4	47.3	28.2	18.6	25.2
16	61.4	22.1	42.1	45.2	25.0	15.8	25.0
17	60.2	21.2	41.6	44.8	23.8	14.6	22.0
18	59.4	20.5	39.8	39.8	21.4	12.5	21.4
19	57.3	12.6	38.7	37.2	21.0	11.7	18.6
20	56.3	11.3	38.3	36.4	18.8	10.2	18.2
21	50.1	11.0	37.0	36.0	18.3	9.8	15.8
22	50.0	6.8	36.4	35.2	14.2	7.0	14.6
23	49.6	5.8	34.1	31.0	9.0	4.9	6.2
24	47.3	5.0	21.6	30.0	0.0	3.5	2.1
25	41.2	0.2	20.0	28.6	0.0	2.1	0.0
26	40.2	0.0	12.1	15.5	0.0	0.0	0.0
27	37.2	0.0	0.0	9.6	0.0	0.0	0.0

TABLE.3.36 LIST OF MAXIMUM DAILY PRECIPITATION
MONTE CARMELO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	153.8	91.0	102.0	118.0	140.0	125.0	93.5
2	140.0	79.0	100.3	100.8	130.0	122.0	88.4
3	130.0	76.3	82.0	89.4	118.0	81.0	62.3
4	125.0	67.0	81.2	83.0	100.3	75.8	52.0
5	122.0	62.0	66.4	81.0	97.0	70.0	51.0
6	118.0	60.0	64.1	70.0	92.0	68.0	50.1
7	102.0	56.0	61.2	60.6	85.0	61.0	50.0
8	100.8	54.0	59.8	53.0	80.0	56.0	49.0
9	100.3	53.1	57.0	53.0	77.2	55.0	48.0
10	91.0	50.0	52.0	50.3	70.0	50.0	45.0
11	89.4	50.0	50.1	50.0	63.2	49.0	43.0
12	85.0	46.0	49.2	50.0	59.0	42.0	41.0
13	82.0	46.0	49.0	50.0	56.1	41.9	39.8
14	81.2	45.2	48.0	46.0	56.0	41.3	37.4
15	81.0	42.3	43.0	46.0	53.0	40.0	35.0
16	80.0	31.0	41.0	43.9	50.3	37.5	34.0
17	70.0	30.0	41.0	43.6	50.0	37.0	33.0
18	70.0	30.0	35.8	39.0	49.0	35.0	31.5
19	70.0	29.0	30.0	37.0	45.0	30.0	30.0
20	67.0	25.0	30.0	36.0	42.3	28.1	27.0
21	62.0	24.0	29.0	35.0	41.0	28.0	25.4
22	61.0	22.2	27.0	34.4	35.0	25.0	24.6
23	59.8	21.0	25.0	34.0	34.9	23.0	20.8
24	56.0	21.0	24.4	34.0	34.0	22.0	15.0
25	55.0	21.0	23.0	32.1	33.2	20.4	12.5
26	53.0	18.0	22.4	31.0	30.0	20.4	11.0
27	52.0	11.3	18.0	29.1	25.3	20.0	11.0
28	50.0	10.3	13.6	12.8	24.0	15.0	8.0
29	43.9	9.0	9.0	9.0	24.0	12.0	7.0
30	40.0	5.0	6.0	8.0	8.0	11.0	7.0

TABLE.3.37 LIST OF MAXIMUM DAILY PRECIPITATION
PONTE DO LICINIO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	149.3	88.2	75.4	149.3	117.5	84.2	105.2
2	117.5	69.5	75.2	100.0	112.2	74.0	98.2
3	112.2	63.4	68.2	81.2	82.0	63.6	98.0
4	105.2	63.2	66.8	78.6	79.4	61.2	81.4
5	100.0	54.2	61.3	75.8	65.4	58.6	76.2
6	98.2	50.2	57.0	73.5	56.8	56.4	76.2
7	98.0	42.5	55.4	70.2	55.2	49.0	70.4
8	88.2	42.4	55.3	67.2	51.3	49.0	56.4
9	84.2	42.1	54.0	64.2	50.4	45.4	49.3
10	82.0	40.6	50.8	60.8	50.4	45.4	43.8
11	81.4	36.0	50.8	53.6	45.5	45.3	43.4
12	81.2	33.5	50.0	51.0	42.0	43.6	40.0
13	79.4	32.2	50.0	49.6	33.5	42.4	39.6
14	78.6	30.7	49.2	47.6	33.2	42.0	38.2
15	76.2	30.4	48.6	47.0	32.2	40.0	32.6
16	75.0	30.0	48.6	45.3	32.0	36.2	24.5
17	73.5	26.0	48.6	45.2	31.4	34.0	24.0
18	70.4	25.5	47.8	45.0	31.0	31.7	23.2
19	69.5	24.5	45.2	40.2	29.4	29.0	22.0
20	66.8	23.2	42.2	35.8	26.0	28.0	21.4
21	66.3	21.2	38.5	35.2	24.8	25.5	21.0
22	63.2	19.2	38.2	34.0	23.6	25.4	20.3
23	60.8	14.7	32.0	33.6	21.5	25.2	20.2
24	56.4	14.6	28.4	33.2	20.2	22.7	19.2
25	53.6	14.2	27.6	32.4	14.3	22.6	16.2
26	51.0	11.2	27.6	30.2	13.8	21.2	15.3
27	49.2	10.2	25.4	26.6	12.0	19.2	15.2
28	48.6	10.2	23.0	18.2	12.0	19.2	15.0
29	42.2	8.0	15.2	10.3	10.8	5.1	14.0
30	40.0	5.2	10.0	10.0	9.4	3.0	0.2

TABLE. 3. 38 LIST OF MAXIMUM DAILY PRECIPITATION
RIO PIRACICABA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	145.0	140.0	75.0	78.4	145.0	65.0	100.0
2	145.0	70.0	71.8	76.8	145.0	64.0	71.0
3	140.0	65.6	71.4	76.0	98.0	60.5	70.0
4	98.0	60.0	71.1	75.2	90.0	56.6	65.0
5	90.0	52.4	67.2	66.6	76.4	55.8	60.0
6	90.0	48.6	66.0	63.7	71.0	46.6	54.6
7	78.4	48.2	64.2	63.0	70.8	45.0	53.2
8	76.8	47.4	62.0	57.0	65.1	45.0	50.0
9	76.4	41.6	60.0	56.2	63.1	44.0	40.0
10	75.0	40.6	58.5	55.1	61.0	43.0	39.2
11	73.0	40.0	54.3	54.6	58.0	42.0	39.2
12	71.4	38.0	53.6	52.0	50.0	40.0	37.4
13	71.1	35.8	53.0	45.8	50.0	38.6	37.0
14	71.0	33.6	52.4	44.6	47.8	32.0	35.8
15	70.0	30.0	51.6	44.2	45.8	31.8	35.6
16	70.0	29.6	50.6	42.0	44.0	30.6	32.2
17	70.0	28.2	48.2	40.6	44.0	29.4	31.4
18	67.2	28.0	44.0	36.8	38.6	29.0	29.2
19	66.6	27.2	43.4	36.6	38.0	28.0	28.6
20	62.0	25.2	40.0	35.4	34.0	25.2	26.6
21	60.5	25.0	32.0	35.0	31.2	22.6	25.0
22	60.0	24.6	29.0	31.6	29.0	22.0	24.0
23	50.6	22.2	28.8	30.0	28.0	20.6	23.0
24	50.0	21.0	27.6	28.0	28.0	20.3	21.6
25	50.0	21.0	26.0	27.6	25.0	19.2	21.6
26	42.0	20.6	23.4	27.6	20.8	18.6	20.6
27	42.0	15.4	19.0	20.4	20.0	18.6	17.0
28	32.0	10.8	15.0	20.0	16.4	17.3	9.6
29	29.0	8.4	13.2	14.8	15.0	12.2	8.8
30	27.6	4.2	10.4	12.2	10.3	5.8	4.6

TABLE. 3. 39 LIST OF MAXIMUM DAILY PRECIPITATION
SANTANA DO JACARE

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	121.3	111.5	99.3	121.3	94.6	68.8	78.3
2	113.2	56.9	78.0	113.2	86.1	57.7	56.0
3	111.5	55.5	75.0	72.3	83.3	56.3	55.4
4	99.3	48.9	70.4	69.0	79.5	56.0	50.6
5	97.5	48.0	58.6	68.1	76.7	50.7	50.5
6	94.6	43.3	57.1	60.6	64.0	50.0	47.3
7	86.1	42.5	56.0	57.9	64.0	48.6	46.2
8	83.3	40.8	54.8	56.0	62.1	45.8	44.7
9	79.5	39.5	52.5	52.7	61.0	45.1	42.8
10	78.0	38.0	47.3	52.6	56.2	42.1	42.0
11	76.7	37.0	44.0	47.3	55.3	40.4	42.0
12	75.0	35.6	42.4	42.0	48.0	39.0	41.6
13	72.3	33.0	37.2	41.6	43.5	35.3	38.4
14	70.4	30.0	36.1	40.2	42.2	35.0	35.0
15	69.0	29.2	32.6	40.0	41.0	31.5	33.9
16	68.8	26.0	32.3	39.8	33.0	30.8	30.0
17	64.0	25.0	32.2	39.0	32.7	29.6	28.9
18	61.0	22.2	31.0	39.0	32.0	28.0	28.3
19	60.9	20.8	30.2	35.0	31.0	28.0	28.0
20	57.7	20.0	30.1	33.3	30.9	24.3	26.5
21	56.0	19.0	29.9	31.5	30.0	21.0	25.0
22	56.0	17.0	29.6	30.7	28.0	16.1	24.6
23	56.0	15.0	29.1	29.9	25.0	9.1	24.0
24	52.5	12.0	26.0	25.0	21.0	9.0	23.0
25	40.0	10.0	25.0	17.0	21.0	8.0	10.0
26	31.0	10.0	16.0	8.0	10.0	8.0	8.7
27	25.2	7.3	8.0	7.0	10.0	3.0	8.0
28	25.0	6.5	5.0	7.0	8.0	1.2	7.4
29	17.0	6.0	5.0	7.0	5.0	0.5	7.0
30	17.0	2.7	2.6	6.0	3.9	0.0	2.5

TABLE. 3.40 LIST OF MAXIMUM DAILY PRECIPITATION
SANTA MARIA DE ITABIRA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	121.0	74.0	121.0	102.1	105.2	110.4	80.6
2	112.0	73.6	112.0	93.0	90.2	83.4	77.4
3	110.4	70.0	90.8	91.2	87.2	76.2	66.0
4	105.2	67.0	87.2	81.0	87.1	65.6	65.8
5	102.1	67.0	87.0	80.4	85.2	64.2	51.4
6	93.0	67.0	86.4	72.4	74.2	60.6	50.0
7	91.2	52.4	86.2	69.0	72.0	57.0	49.0
8	91.0	50.4	85.0	65.0	70.0	55.4	48.4
9	90.8	43.0	82.3	64.0	66.0	51.0	48.0
10	90.2	40.6	78.0	62.3	65.3	45.0	47.0
11	89.0	39.1	74.2	60.4	65.0	43.2	45.0
12	87.2	39.0	65.4	60.2	60.4	42.3	41.5
13	87.1	38.2	64.0	60.2	60.0	42.2	40.1
14	87.0	36.4	52.6	60.0	56.2	42.0	40.0
15	86.4	32.6	52.0	55.3	56.0	41.2	40.0
16	85.2	30.2	50.2	54.0	55.6	39.0	40.0
17	81.0	30.0	48.2	53.0	54.4	38.0	38.0
18	74.2	28.3	48.0	50.3	54.0	37.0	34.0
19	74.2	27.2	46.1	50.2	54.0	35.0	33.0
20	72.0	26.0	46.0	48.4	52.0	33.2	32.6
21	69.0	26.0	45.0	45.2	51.0	28.1	32.2
22	67.0	23.0	40.2	40.0	45.0	20.1	32.0
23	67.0	21.3	39.4	38.2	45.0	20.1	30.2
24	65.3	21.0	37.0	35.2	38.0	20.0	30.1
25	62.3	16.6	35.0	35.0	36.0	18.0	28.1
26	60.2	13.2	35.0	34.0	35.0	17.0	27.1
27	60.0	13.1	29.0	32.6	32.0	16.4	27.0
28	56.2	11.0	28.3	32.4	31.0	14.8	27.0
29	52.6	10.5	14.6	32.0	11.8	14.2	9.2
30	50.2	10.2	3.2	30.2	0.0	12.0	4.0

TABLE.3 .41 LIST OF MAXIMUM DAILY PRECIPITATION
VESPASIANO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	210.8	88.2	92.2	86.8	114.0	210.8	128.9
2	128.9	78.0	79.0	82.8	98.2	102.6	86.0
3	114.0	58.6	75.8	77.9	92.9	79.0	84.0
4	102.6	49.2	72.4	77.0	83.4	71.4	71.8
5	98.2	47.4	69.1	69.4	70.0	64.6	62.8
6	92.9	45.4	67.3	69.2	67.6	56.0	59.4
7	88.2	43.0	65.2	66.0	62.1	53.0	55.4
8	86.0	43.0	64.6	63.0	61.9	48.4	42.2
9	84.0	36.6	63.7	62.0	61.2	47.0	39.0
10	83.4	36.2	60.8	61.2	60.2	45.6	38.6
11	79.0	35.2	60.6	61.0	57.4	40.8	37.8
12	79.0	34.5	57.2	58.2	54.2	40.4	33.6
13	77.0	34.4	56.0	57.4	54.0	37.8	28.8
14	75.8	34.0	55.4	56.6	54.0	36.5	28.0
15	72.4	34.0	52.8	55.6	52.2	34.8	27.8
16	71.4	31.0	52.7	54.6	51.0	32.0	25.2
17	69.4	30.8	51.2	52.0	48.8	31.8	25.0
18	69.2	30.4	50.4	50.0	46.0	24.2	24.2
19	69.1	26.6	49.8	49.0	45.8	23.0	23.3
20	65.2	26.2	43.8	47.4	44.2	21.6	17.0
21	64.6	24.8	35.6	39.4	40.4	21.6	16.8
22	62.8	22.2	35.0	38.0	39.6	21.2	16.2
23	62.1	21.0	34.0	37.0	34.6	16.9	15.8
24	62.0	20.4	32.4	36.2	29.8	16.9	15.6
25	61.2	19.2	31.4	35.5	29.8	16.2	13.4
26	60.8	18.7	30.8	34.6	24.2	15.0	12.6
27	55.4	13.6	27.2	34.2	11.4	14.6	11.2
28	54.6	12.4	24.6	27.0	9.5	10.4	10.8
29	48.4	11.6	22.2	14.2	3.5	5.7	7.0
30	41.2	9.6	15.3	8.0	2.6	0.4	0.0

TABLE. 3.42 LIST OF MAXIMUM DAILY PRECIPITATION
AMARANTE

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	158.0	98.0	96.0	158.0	101.7	115.0	120.4
2	120.4	68.1	76.0	116.7	88.2	100.0	116.2
3	117.2	64.6	62.2	73.0	83.2	75.0	111.7
4	116.7	63.4	57.0	67.2	73.3	74.3	105.0
5	116.2	57.4	47.0	66.1	67.4	71.4	101.5
6	115.0	52.0	45.0	65.0	66.4	69.0	85.0
7	111.7	52.0	44.0	63.0	59.8	68.8	80.1
8	105.0	45.4	43.3	62.0	57.0	67.4	78.0
9	105.0	43.0	39.4	60.0	52.0	67.0	75.8
10	102.2	37.0	37.0	59.6	49.0	64.0	65.5
11	101.7	35.2	35.6	51.2	48.8	63.0	62.0
12	101.5	35.0	32.4	50.2	46.0	60.2	60.0
13	88.2	26.0	32.3	44.0	45.8	60.0	59.1
14	85.0	25.0	32.2	43.2	45.0	57.6	57.8
15	82.4	24.3	30.0	40.2	44.4	53.6	57.0
16	80.1	22.0	29.0	40.0	43.6	50.5	50.0
17	77.5	20.0	28.2	38.7	43.0	47.0	48.2
18	77.2	18.0	28.0	37.3	40.1	44.4	45.0
19	76.0	15.2	27.4	35.6	39.0	41.6	44.0
20	75.0	15.0	24.4	31.2	39.0	40.0	43.0
21	70.9	14.9	22.0	31.0	36.0	39.6	42.0
22	70.0	13.7	15.9	30.4	33.2	37.0	39.0
23	69.0	6.4	15.0	30.3	32.2	31.0	36.6
24	67.2	6.0	13.2	30.1	28.2	30.1	33.8
25	67.0	0.0	10.2	30.0	27.8	29.0	32.9
26	66.1	0.0	9.2	21.3	27.0	28.9	32.0
27	64.0	0.0	2.0	20.1	21.0	24.0	29.0
28	63.0	0.0	0.0	16.0	17.8	21.2	28.6
29	59.6	0.0	0.0	14.6	17.8	18.0	27.0
30	45.0	0.0	0.0	11.2	14.6	14.2	23.8

TABLE. 3.43 LIST OF MAXIMUM DAILY PRECIPITATION
BARREIRAS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	149.0	70.6	107.4	119.6	131.2	149.0	135.5
2	135.5	62.7	89.6	111.9	93.3	128.6	90.4
3	131.2	56.1	79.0	94.9	81.3	88.7	74.9
4	128.6	55.2	78.3	82.9	79.2	79.3	73.4
5	122.1	44.2	77.6	81.5	74.0	68.9	70.8
6	119.6	42.8	69.9	75.4	62.8	67.2	58.2
7	111.9	42.2	65.0	63.2	53.5	56.3	57.0
8	94.9	37.8	55.9	55.9	52.8	55.2	55.0
9	93.3	34.2	53.1	54.7	52.4	53.6	51.1
10	90.4	29.3	53.0	53.7	47.2	50.6	46.0
11	89.6	26.9	50.6	52.4	44.2	48.9	44.2
12	82.9	26.0	48.0	52.0	43.0	47.0	43.2
13	81.5	24.0	46.6	50.8	36.3	44.7	36.9
14	79.0	22.4	45.5	49.0	35.9	44.2	34.8
15	77.6	22.2	45.4	48.0	34.8	43.9	32.5
16	74.9	19.5	42.5	44.2	34.6	33.0	32.5
17	73.4	16.3	42.0	42.4	33.8	32.4	30.8
18	67.2	15.5	41.5	42.0	29.2	31.6	28.4
19	65.0	10.8	41.3	39.0	28.8	29.8	26.5
20	62.8	9.7	39.0	35.0	23.9	29.3	25.2
21	57.0	9.1	38.1	32.5	21.1	27.2	25.2
22	55.2	8.4	37.8	32.1	20.3	25.7	24.8
23	53.7	8.4	35.0	30.2	19.9	21.8	24.0
24	50.6	7.5	22.1	27.7	17.5	19.9	20.7
25	45.4	6.5	13.3	25.4	13.2	14.1	18.9
26	44.2	6.4	13.0	24.0	12.2	13.5	12.2
27	35.0	5.8	9.5	15.3	11.4	12.8	9.2
28	32.1	5.5	9.4	11.7	9.2	10.6	7.2
29	13.3	3.2	9.1	9.6	8.5	8.3	6.5
30	12.8	0.0	2.9	9.4	3.6	6.4	4.3

TABLE. 3.44 LIST OF MAXIMUM DAILY PRECIPITATION
CATALAO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	132.4	88.3	107.6	116.9	132.4	95.6	92.4
2	116.9	79.3	82.3	98.7	106.9	92.7	89.2
3	107.6	76.6	74.0	90.1	100.2	78.8	84.2
4	106.9	72.6	72.8	86.3	98.1	64.6	79.6
5	100.2	72.4	71.7	83.2	89.6	63.2	78.6
6	98.7	71.3	69.0	77.0	84.2	63.0	73.8
7	98.1	70.2	68.4	77.0	83.9	58.0	65.2
8	95.6	67.0	65.2	71.0	83.4	51.9	64.2
9	92.4	67.0	60.8	65.2	79.4	51.0	62.8
10	88.3	64.5	60.6	60.6	77.3	49.4	58.1
11	86.3	62.6	60.3	60.2	68.6	47.5	52.8
12	84.2	59.2	54.6	58.9	66.4	46.6	49.1
13	83.9	58.7	54.0	57.6	66.3	45.0	47.2
14	83.4	49.2	53.2	55.1	57.0	44.7	45.8
15	83.2	47.6	50.4	54.8	55.2	43.2	45.1
16	82.3	47.3	49.0	54.4	55.0	41.6	43.6
17	79.4	45.6	47.1	54.1	54.6	40.6	41.7
18	79.3	45.0	42.4	53.6	51.6	40.4	40.0
19	78.6	39.8	41.4	52.9	47.9	40.2	37.0
20	77.3	36.8	41.2	52.6	46.6	39.1	36.2
21	76.6	34.7	40.4	49.8	45.2	38.6	35.6
22	74.0	31.0	40.2	47.9	43.4	36.8	35.2
23	72.8	25.6	39.0	45.5	42.4	36.0	35.2
24	71.7	24.3	38.6	41.6	39.4	33.9	29.9
25	71.0	23.0	36.2	37.0	37.1	33.0	28.0
26	66.4	21.7	32.4	36.6	35.0	32.7	26.5
27	65.2	19.2	32.4	35.0	28.2	32.4	22.8
28	65.2	18.6	31.5	33.6	25.8	28.0	21.9
29	57.0	9.2	29.0	30.3	16.2	17.9	14.5
30	54.8	6.2	23.9	15.5	11.4	0.0	12.5

TABLE. 3.45 LIST OF MAXIMUM DAILY PRECIPITATION
CONCEICAO ARAGUAIA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	121.0	116.0	79.5	93.2	103.4	97.0	121.0
2	116.0	75.0	72.6	90.0	91.0	88.0	103.2
3	103.6	69.6	70.8	73.2	81.0	78.0	84.8
4	103.4	65.6	64.8	72.8	78.2	72.1	71.0
5	103.2	65.0	63.4	71.0	65.0	70.0	64.8
6	90.0	63.4	63.2	63.0	64.6	64.4	63.8
7	88.0	62.6	63.0	63.0	64.0	63.0	62.8
8	84.8	55.2	62.0	62.0	64.0	62.6	62.0
9	84.0	55.0	59.6	59.6	62.8	62.2	62.0
10	79.5	54.0	59.4	58.4	59.3	62.2	59.8
11	78.4	51.2	58.0	56.4	56.0	56.2	57.0
12	78.2	49.2	52.0	55.2	55.6	54.2	53.5
13	75.0	47.8	51.0	52.2	49.5	49.0	51.0
14	72.8	44.0	43.4	51.2	48.6	45.8	50.8
15	71.0	41.6	43.0	49.8	46.0	45.6	50.0
16	70.8	40.0	41.0	44.4	42.6	45.6	45.0
17	68.0	38.4	39.6	42.6	36.4	44.0	43.2
18	65.6	32.0	38.2	40.2	35.6	38.8	42.4
19	65.0	30.2	32.4	37.0	35.2	38.0	41.0
20	64.4	21.2	31.0	33.6	35.0	32.4	40.4
21	63.0	20.0	30.4	31.0	30.0	29.0	39.4
22	62.0	19.0	30.3	26.0	29.6	27.0	37.2
23	60.0	18.0	18.0	23.0	29.4	27.0	35.0
24	59.8	16.0	6.6	21.4	25.6	21.6	30.3
25	59.4	13.6	4.4	6.2	9.8	21.6	6.8

TABLE. 3.46 LIST OF MAXIMUM DAILY PRECIPITATION
CONCEICAO DO RIO VER

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	233.0	112.2	96.0	104.4	100.6	233.0	100.5
2	112.2	94.6	79.3	94.0	96.2	111.0	81.2
3	111.0	80.4	76.4	88.2	90.1	82.4	74.3
4	104.4	80.4	71.0	79.1	82.4	73.0	59.4
5	100.6	70.3	62.7	74.0	70.6	68.3	56.2
6	100.5	65.2	62.6	68.2	63.0	67.3	56.0
7	96.2	62.0	58.4	67.2	61.4	64.8	55.2
8	96.0	58.2	57.3	65.2	59.3	62.4	55.2
9	94.6	46.0	57.0	64.7	59.2	61.5	50.4
10	90.1	45.6	56.2	64.1	55.0	60.4	49.8
11	82.4	45.0	55.7	60.2	54.8	54.6	48.2
12	82.4	44.8	53.4	53.0	53.4	52.2	48.0
13	80.4	44.0	50.2	52.2	52.4	49.0	48.0
14	80.4	43.2	47.3	50.5	46.8	47.2	48.0
15	79.3	40.4	46.4	48.0	40.4	45.2	47.0
16	76.4	40.0	46.3	48.0	40.0	44.2	45.0
17	73.0	38.6	44.2	44.6	39.3	40.6	41.6
18	71.0	38.4	43.4	43.2	38.7	38.4	41.2
19	68.2	38.2	43.3	43.0	37.0	36.4	37.6
20	67.2	35.0	43.2	42.4	36.5	35.0	36.2
21	64.8	34.2	43.2	42.0	35.5	27.2	33.6
22	62.4	33.8	39.6	40.0	33.4	26.1	33.0
23	62.0	32.8	38.4	38.0	31.3	23.2	31.2
24	60.4	31.2	35.0	37.5	31.3	22.4	29.1
25	59.3	30.1	35.0	34.3	31.0	22.0	21.2
26	53.0	28.3	34.4	33.2	29.4	21.4	20.4
27	52.2	27.8	22.6	31.0	28.1	20.0	17.2
28	48.0	22.0	18.4	28.2	22.5	16.1	14.2
29	40.0	14.0	14.0	26.4	20.4	15.2	13.0
30	40.0	8.8	11.0	21.4	7.8	9.0	13.0

TABLE. 3.47 LIST OF MAXIMUM DAILY PRECIPITATION
COTEGIPE

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	201.5	100.2	158.2	121.2	201.5	170.1	110.7
2	170.1	75.3	132.0	117.0	120.2	100.2	100.5
3	158.2	74.5	100.2	109.1	110.0	100.0	98.0
4	132.0	70.0	100.1	100.2	102.5	92.3	86.5
5	121.2	66.1	100.1	96.0	83.2	72.1	84.0
6	120.2	66.0	91.4	96.0	77.1	68.1	80.2
7	110.7	63.4	91.3	94.5	75.0	67.2	75.2
8	110.0	58.1	72.7	87.7	72.4	64.0	68.6
9	109.2	44.4	70.6	68.5	71.6	60.0	67.1
10	100.5	42.2	69.8	65.1	68.9	60.0	66.5
11	100.5	36.0	68.3	65.0	66.4	59.3	63.0
12	100.2	30.0	67.2	64.6	63.5	57.2	61.8
13	100.2	30.0	62.0	60.5	62.5	53.3	61.4
14	100.2	28.4	61.3	60.0	60.1	51.8	60.1
15	100.0	27.3	59.5	54.4	59.4	49.5	54.1
16	98.0	25.2	55.2	50.0	58.0	48.3	54.0
17	97.6	24.0	53.3	50.0	51.3	46.0	53.8
18	97.0	23.6	52.0	48.0	50.2	45.8	50.0
19	96.0	19.0	48.0	45.2	49.6	38.8	30.5
20	94.5	16.6	48.0	40.5	48.6	36.0	30.0
21	86.5	16.2	45.6	40.0	48.0	36.0	30.0
22	84.4	12.5	42.0	34.0	45.5	29.4	25.3
23	71.6	10.2	42.0	30.0	42.0	25.5	24.0
24	70.0	8.3	39.7	25.0	36.3	24.6	18.5
25	68.9	6.0	39.6	24.0	30.0	24.0	18.5
26	66.5	6.0	36.0	22.1	25.6	24.0	16.4
27	65.0	0.0	27.2	21.8	20.2	18.6	15.8
28	63.5	0.0	25.0	18.3	12.4	12.0	15.3
29	60.0	0.0	8.0	14.0	4.0	5.2	6.0
30	54.1	0.0	0.0	6.3	0.0	0.0	0.0

TABLE. 3.48 LIST OF MAXIMUM DAILY PRECIPITATION
FORMOSA DO RIO PRETO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	105.4	69.0	93.3	105.4	91.0	95.1	67.3
2	95.1	66.7	90.0	88.4	78.2	87.0	62.0
3	93.3	53.2	75.9	87.5	73.1	81.0	57.1
4	91.0	50.0	67.0	79.6	71.6	78.4	55.2
5	90.0	49.5	65.2	70.7	67.0	77.0	50.0
6	87.5	43.3	59.2	70.0	57.5	75.0	50.0
7	87.0	40.0	59.0	68.2	50.2	72.8	45.0
8	81.0	38.0	58.4	65.0	48.4	68.2	41.8
9	79.6	36.5	56.0	65.0	47.6	60.7	41.0
10	78.4	36.3	54.4	62.8	44.2	60.0	40.5
11	77.0	33.0	52.0	62.0	43.7	60.0	40.0
12	75.9	28.3	50.3	59.1	42.6	59.9	39.2
13	75.0	27.0	50.0	58.3	41.5	56.9	38.0
14	73.1	26.2	43.3	52.2	38.6	41.6	38.0
15	72.8	25.0	40.0	51.5	38.1	40.1	37.0
16	70.7	22.6	39.1	50.0	37.0	39.3	35.1
17	70.0	20.7	38.0	50.0	36.1	37.8	35.0
18	69.0	20.0	33.4	46.0	34.8	36.0	29.7
19	69.0	18.9	33.0	45.6	30.2	35.0	29.2
20	68.2	15.0	31.0	45.0	28.1	33.9	28.5
21	67.3	13.5	31.0	36.0	25.6	32.1	25.0
22	67.0	13.5	29.5	35.6	22.1	31.9	23.0
23	66.7	12.5	28.2	35.4	21.4	30.9	22.0
24	63.0	12.1	27.0	30.2	20.1	30.6	20.7
25	62.8	11.6	25.6	30.0	19.1	28.5	20.0
26	60.0	10.0	22.0	26.5	17.3	28.0	17.8
27	56.9	8.0	18.0	26.4	16.5	25.0	16.2
28	50.0	0.0	13.5	26.0	16.1	25.0	15.1
29	43.3	0.0	8.7	23.4	10.0	24.3	12.0
30	38.0	0.0	0.0	22.1	1.7	20.0	3.5

TABLE. 3.49 LIST OF MAXIMUM DAILY PRECIPITATION
GOIAS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	190.2	190.2	138.2	102.4	120.8	109.5	120.0
2	138.2	81.8	120.0	95.0	119.0	73.8	97.4
3	120.8	79.4	80.8	83.0	101.8	70.0	75.8
4	120.0	78.6	77.4	82.0	98.4	68.0	70.4
5	120.0	71.5	75.0	79.0	83.8	62.0	66.2
6	119.0	51.0	72.4	78.6	82.4	61.4	65.4
7	109.5	51.0	67.6	72.2	79.2	60.4	61.6
8	102.4	50.2	63.4	70.3	75.6	60.2	59.6
9	98.4	47.8	62.4	68.0	75.0	60.2	57.9
10	95.0	47.0	60.2	68.0	74.3	58.2	56.8
11	83.8	43.0	58.0	63.6	74.1	54.8	55.6
12	82.4	42.8	58.0	62.4	65.2	52.2	54.8
13	82.0	41.0	57.4	54.0	63.2	51.4	51.4
14	80.8	40.8	55.4	52.0	62.6	50.4	50.0
15	78.6	39.6	51.4	51.2	61.4	49.8	48.0
16	77.4	39.0	49.8	50.6	60.0	49.4	45.6
17	75.8	39.0	49.0	50.0	59.0	49.4	45.0
18	75.6	36.0	45.0	48.6	56.2	48.2	44.6
19	75.0	30.2	42.2	47.6	55.0	48.2	44.4
20	74.3	29.4	41.8	45.8	52.9	46.0	44.2
21	72.4	26.8	40.4	43.2	40.0	44.2	39.4
22	72.2	26.0	40.2	41.2	39.7	42.0	37.8
23	66.2	24.2	38.5	41.2	35.6	41.4	35.4
24	65.4	24.2	34.0	40.0	34.0	37.0	35.2
25	65.2	23.0	33.2	39.9	32.2	36.6	32.6
26	63.4	22.3	31.4	38.8	31.0	35.6	31.4
27	62.4	18.6	31.2	31.0	30.0	35.4	31.0
28	60.2	5.2	28.8	29.5	29.0	22.4	30.6
29	59.0	0.0	26.2	26.0	28.0	3.8	22.6
30	51.0	0.0	18.8	25.6	18.5	0.0	0.0

TABLE. 3.50 LIST OF MAXIMUM DAILY PRECIPITATION
JANUARIA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	106.7	69.2	75.0	106.7	65.6	65.2	66.0
2	80.9	67.2	74.6	80.9	63.9	58.3	65.2
3	74.6	60.0	66.5	72.8	63.5	57.0	60.4
4	72.8	59.4	66.0	69.5	63.3	56.2	55.8
5	69.5	59.4	64.0	69.0	62.0	49.3	44.8
6	69.2	34.4	63.8	67.4	61.4	48.0	43.2
7	69.0	32.6	63.8	67.0	55.2	47.0	42.4
8	68.4	25.8	52.0	66.4	51.5	42.5	41.6
9	67.4	25.6	51.0	60.6	48.7	42.4	39.3
10	67.2	25.6	43.0	56.0	46.4	41.6	39.0
11	67.0	25.4	41.8	54.7	45.2	39.4	38.8
12	66.5	24.0	41.6	52.6	40.0	39.0	34.0
13	66.4	22.0	40.5	51.4	38.2	38.9	26.4
14	66.0	20.8	40.4	50.5	36.6	37.8	26.2
15	65.2	18.1	39.6	50.0	36.4	36.8	24.0
16	64.0	16.0	39.6	49.5	35.6	35.4	23.6
17	63.9	14.6	36.8	46.8	35.0	32.0	23.2
18	63.8	14.5	30.7	43.2	32.8	30.6	21.0
19	63.8	13.1	28.2	40.0	27.0	29.6	21.0
20	63.3	7.7	27.6	39.6	25.4	27.4	19.6
21	60.6	7.4	25.2	38.0	24.0	26.0	19.4
22	56.0	7.0	25.2	38.0	23.4	25.3	19.0
23	54.7	3.8	24.4	36.8	20.8	24.2	18.6
24	51.4	3.4	21.0	34.7	19.0	23.5	18.6
25	51.0	2.7	21.0	34.0	18.6	22.0	14.0
26	49.5	1.7	18.0	26.7	18.0	14.0	5.4
27	46.4	1.0	17.8	18.8	16.0	13.0	5.4
28	43.0	0.0	17.2	0.0	12.5	6.9	3.0
29	41.8	0.0	11.2	0.0	0.0	3.2	0.1

TABLE. 3.51 LIST OF MAXIMUM DAILY PRECIPITATION
MOCAMBO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	91.6	65.2	63.6	91.6	77.1	67.6	91.0
2	91.0	35.0	35.0	75.6	49.0	35.0	77.5
3	75.6	30.7	35.0	62.2	35.0	35.0	59.3
4	63.6	28.2	35.0	45.0	35.0	30.4	44.9
5	62.2	27.0	29.0	42.0	21.4	27.0	35.0
6	49.0	21.0	28.3	35.0	21.0	27.0	35.0
7	45.0	14.5	27.0	35.0	21.0	21.4	35.0
8	42.0	14.0	21.5	30.0	10.9	14.5	24.0
9	35.0	7.2	21.0	28.2	7.5	14.0	22.7
10	35.0	7.0	14.5	27.6	7.3	12.3	21.0
11	30.0	3.5	14.3	27.0	5.6	7.0	14.0
12	28.2	3.0	14.1	24.0	5.0	5.0	4.2
13	27.6	2.8	7.3	17.5	4.5	4.9	4.0
14	27.0	2.7	5.3	4.5	4.5	3.7	3.5
15	17.5	2.1	5.0	3.7	4.2	3.5	3.5
16	14.5	1.4	4.0	3.5	4.2	3.5	3.5
17	7.5	1.4	3.5	3.5	3.5	3.5	3.0
18	7.0	0.7	3.5	3.5	3.5	2.5	1.4
19	4.5	0.0	3.5	3.5	2.7	2.1	0.0
20	4.0	0.0	3.0	3.5	2.1	1.4	0.0

TABLE. 3.52 LIST OF MAXIMUM DAILY PRECIPITATION
MONTES CLAROS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	200.1	90.2	200.1	164.0	155.0	186.8	125.4
2	186.8	57.4	115.5	110.4	152.2	175.4	125.2
3	175.4	55.0	100.4	108.4	142.0	100.0	95.0
4	164.0	50.4	100.4	108.0	135.4	98.1	77.0
5	155.0	50.0	100.0	100.2	113.6	83.0	75.5
6	142.0	49.2	80.0	100.0	101.8	75.5	62.8
7	135.4	47.1	76.0	98.2	75.8	75.0	59.5
8	125.2	45.2	75.8	95.8	75.4	73.0	49.2
9	110.4	42.6	70.0	93.6	75.0	70.0	48.0
10	108.4	40.0	67.5	90.2	75.0	60.3	47.5
11	101.8	38.1	64.4	75.4	74.2	57.4	41.0
12	100.4	35.1	60.0	75.2	74.0	52.0	28.1
13	100.0	35.0	59.3	70.0	70.4	50.4	25.2
14	100.0	33.0	50.8	70.0	68.8	50.4	25.0
15	100.0	29.4	50.5	66.0	60.0	47.0	25.0
16	95.8	25.5	50.2	63.2	56.4	42.9	25.0
17	93.6	25.4	50.0	63.0	53.0	30.8	23.8
18	77.0	25.1	48.0	50.3	51.0	28.2	15.8
19	76.0	25.0	44.0	50.2	49.2	28.1	15.4
20	74.0	22.7	38.4	46.0	47.0	25.6	13.1
21	70.4	11.5	36.8	45.5	39.7	25.5	8.0
22	70.0	9.3	32.3	38.2	38.3	25.0	7.7
23	68.8	8.6	32.0	37.2	35.0	22.6	6.0
24	63.2	7.7	30.4	35.4	34.6	19.0	0.8
25	59.5	7.5	26.6	31.2	25.5	18.5	0.6
26	51.0	7.2	20.1	29.1	25.1	17.1	0.5
27	50.4	1.5	16.1	26.0	25.0	16.4	0.1
28	47.1	1.4	14.0	25.6	21.0	12.5	0.0
29	42.9	0.0	2.0	15.0	9.0	8.2	0.0
30	38.4	0.0	0.0	7.5	8.0	7.8	0.0

TABLE. 3.53 LIST OF MAXIMUM DAILY PRECIPITATION
MONSENHOR PAULO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	112.3	94.8	96.0	95.0	98.2	90.0	92.8
2	98.2	72.2	72.0	85.0	90.2	89.0	80.0
3	96.0	65.0	70.4	82.0	85.0	80.1	75.0
4	96.0	54.4	65.0	72.0	82.2	65.4	66.0
5	95.0	53.5	62.3	72.0	80.0	60.0	51.5
6	90.2	52.0	57.4	70.6	71.2	57.6	49.0
7	90.0	48.0	56.1	70.0	70.0	56.0	45.4
8	89.0	47.2	54.2	68.2	66.4	54.2	45.0
9	85.0	45.2	53.2	58.2	66.0	50.0	41.2
10	82.0	40.0	52.0	56.0	60.0	47.0	40.6
11	80.0	40.0	50.0	56.0	58.0	40.2	39.0
12	78.0	37.0	47.4	49.6	52.4	40.0	37.0
13	74.0	37.0	46.4	45.3	50.0	38.4	36.2
14	72.2	35.2	46.0	44.2	48.3	38.0	35.6
15	72.0	34.1	45.0	40.0	47.0	37.4	35.3
16	71.2	32.3	45.0	40.0	46.4	36.2	35.0
17	70.0	32.3	43.2	40.0	43.2	33.6	34.0
18	65.4	31.2	42.4	39.6	41.0	32.3	32.2
19	60.0	31.1	40.1	39.2	40.4	28.6	32.2
20	58.2	28.0	39.2	38.0	38.0	27.2	32.0
21	58.0	26.6	38.1	36.3	35.8	20.5	32.0
22	57.4	26.0	33.0	36.2	32.6	19.0	30.4
23	56.1	22.3	30.0	34.2	32.4	18.4	26.2
24	54.4	22.2	29.4	30.0	27.2	18.0	25.1
25	53.2	22.0	27.1	29.1	24.4	16.2	25.0
26	47.4	22.0	24.6	26.2	22.1	12.3	20.2
27	46.4	21.2	24.0	25.2	18.2	11.0	11.2
28	40.0	20.0	23.2	22.0	17.2	9.2	9.6
29	39.2	18.0	22.2	21.2	16.2	8.5	8.2
30	36.2	10.2	8.4	17.0	16.0	0.0	8.0

TABLE. 3.54 LIST OF MAXIMUM DAILY PRECIPITATION
MORRO DO PILAR

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	257.4	87.0	100.6	120.0	125.0	95.5	257.4
2	131.0	87.0	98.2	102.0	117.0	93.0	92.4
3	125.0	83.0	95.6	100.7	110.0	91.2	75.3
4	120.0	74.0	95.0	100.2	90.0	75.4	75.2
5	117.0	69.0	93.0	97.0	77.4	75.2	75.0
6	110.0	62.0	86.2	92.3	74.2	71.0	72.6
7	107.5	60.1	84.0	89.0	74.0	70.0	70.0
8	102.0	58.0	80.6	86.4	72.6	65.0	69.0
9	100.7	52.8	80.0	86.2	71.4	60.7	65.2
10	100.6	52.0	75.3	84.0	67.0	60.3	60.0
11	100.2	49.0	64.0	81.0	61.2	53.4	59.6
12	97.0	47.8	64.0	79.1	59.0	53.0	58.0
13	95.6	46.0	63.0	74.0	58.0	52.0	55.0
14	92.4	46.0	62.3	72.0	57.2	51.7	50.3
15	89.0	44.0	62.0	66.0	51.0	50.6	50.0
16	87.0	43.0	62.0	63.2	50.2	49.6	46.5
17	86.2	43.0	61.0	53.0	50.0	45.0	46.4
18	84.0	41.0	60.0	52.3	50.0	44.6	45.0
19	84.0	37.4	56.0	52.0	49.0	41.0	42.5
20	83.0	34.0	55.0	49.7	49.0	40.0	42.0
21	80.0	28.2	49.6	48.0	47.5	37.0	38.0
22	79.1	28.0	44.4	45.6	47.0	36.0	37.6
23	77.4	27.6	42.0	45.0	44.6	30.9	34.0
24	75.2	26.0	39.0	44.2	43.9	29.0	28.0
25	74.0	24.6	37.0	39.0	43.0	28.0	27.0
26	72.6	19.6	37.0	36.4	43.0	26.4	23.4
27	72.0	18.2	32.0	34.6	42.0	23.4	22.4
28	71.0	16.0	31.1	26.4	42.0	23.0	19.0
29	64.0	14.4	27.6	25.0	39.0	15.0	4.8
30	60.3	14.0	7.2	17.0	27.4	4.7	0.0

TABLE. 3.55 LIST OF MAXIMUM DAILY PRECIPITATION
SANGRADOURO-P.MURT

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	174.7	85.6	102.9	110.1	174.7	124.7	112.2
2	124.7	75.2	102.0	108.2	98.4	121.6	107.2
3	112.2	74.5	99.3	79.0	98.2	85.5	94.0
4	110.1	68.8	90.3	77.4	93.4	84.7	94.0
5	108.2	68.0	89.3	75.9	88.5	73.0	88.9
6	107.2	66.5	71.0	75.3	73.5	72.3	68.0
7	102.9	65.0	69.0	73.5	65.2	62.5	67.0
8	102.0	64.0	68.2	71.0	63.9	60.0	66.6
9	99.3	57.5	68.0	67.5	62.8	60.0	66.0
10	98.4	53.5	66.0	65.0	62.0	59.4	62.2
11	94.0	48.9	65.9	62.0	60.8	58.9	61.9
12	94.0	45.8	65.0	58.9	59.0	56.0	60.2
13	93.4	42.4	60.5	57.8	57.4	55.6	60.1
14	89.3	42.0	60.3	55.7	55.7	54.3	56.0
15	88.9	41.8	57.8	52.4	55.4	52.5	50.5
16	88.5	39.2	57.4	48.5	51.8	47.5	50.2
17	86.8	38.6	54.8	48.2	50.0	47.0	48.3
18	79.0	38.6	52.6	46.1	49.5	46.2	48.3
19	75.9	34.2	52.0	45.0	48.7	45.2	48.2
20	75.3	31.7	48.1	44.9	46.5	45.1	46.6
21	75.2	30.6	47.9	43.0	46.1	45.0	38.5
22	73.0	30.4	44.5	42.6	45.4	44.4	36.6
23	71.0	27.7	42.7	38.0	43.6	40.6	35.6
24	68.0	24.4	39.3	37.7	42.0	40.2	33.6
25	68.0	24.1	36.5	36.0	41.0	39.5	33.2
26	65.9	24.0	31.7	35.2	37.0	39.0	30.0
27	65.0	22.5	26.4	35.2	36.9	36.0	26.7
28	64.0	22.0	25.8	35.0	34.0	27.0	26.5
29	60.8	20.7	25.3	32.0	32.0	26.0	18.0
30	55.7	19.8	0.0	22.4	29.0	20.2	16.9

TABLE. 3.56 LIST OF MAXIMUM DAILY PRECIPITATION
SAO MANUEL

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	99.9	78.4	75.4	75.6	99.9	82.1	96.2
2	99.2	48.2	69.2	75.4	99.2	73.6	87.8
3	95.1	47.6	67.6	75.2	95.1	72.4	69.4
4	87.8	36.2	64.8	71.6	78.5	72.2	67.8
5	82.1	35.2	59.2	70.4	66.4	64.2	54.8
6	78.5	33.2	55.2	68.2	55.2	58.9	52.4
7	78.4	30.5	55.2	67.2	50.3	55.3	51.8
8	75.6	30.2	54.8	64.8	49.6	49.2	44.7
9	75.4	30.2	50.3	63.2	47.2	47.8	44.4
10	73.6	26.6	50.0	60.8	45.2	47.4	40.3
11	72.4	25.3	50.0	53.2	41.6	45.2	37.2
12	72.2	21.2	45.8	51.2	39.6	36.4	35.6
13	69.4	20.1	45.2	50.1	39.6	35.8	33.2
14	69.2	17.6	45.1	46.6	36.6	26.4	31.6
15	67.6	16.2	44.0	41.8	34.6	26.4	27.8
16	66.4	14.2	42.2	40.4	33.7	25.4	26.4
17	64.8	13.8	38.4	36.2	23.6	25.1	26.4
18	60.8	13.4	33.8	36.2	19.8	24.8	25.2
19	55.2	12.8	25.2	32.4	15.8	17.2	22.6
20	51.8	12.6	25.1	28.4	14.3	16.4	20.2
21	51.8	11.4	23.4	27.8	14.1	14.6	16.6
22	47.6	11.3	20.2	22.4	14.1	12.2	13.2
23	47.2	9.8	18.6	21.2	10.2	11.8	8.4
24	45.4	0.0	15.2	18.4	7.1	1.4	0.0

TABLE. 3.57 LIST OF MAXIMUM DAILY PRECIPITATION
SAO FRANCISCO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	153.0	100.0	85.0	122.0	140.0	86.0	153.0
2	140.0	69.0	83.0	83.4	114.0	82.0	93.0
3	122.0	64.7	75.0	74.4	107.0	80.4	87.0
4	114.0	64.0	74.0	71.0	97.0	76.0	84.7
5	107.0	62.2	71.5	69.0	85.0	73.4	83.7
6	97.0	60.4	68.0	66.5	76.6	69.7	80.4
7	93.0	57.4	67.8	66.4	72.4	61.0	70.0
8	86.0	52.0	59.0	66.0	62.0	60.4	69.2
9	85.0	43.2	49.0	65.6	61.2	59.0	67.0
10	85.0	40.4	48.2	65.0	60.0	58.6	61.0
11	84.7	39.4	44.0	60.0	57.0	50.4	54.5
12	80.4	38.0	43.0	58.0	52.0	49.6	48.6
13	75.0	36.6	42.9	57.0	50.0	46.0	45.0
14	74.4	35.0	42.0	56.0	45.0	41.6	40.0
15	74.0	33.2	41.3	55.1	44.2	40.0	35.4
16	72.4	32.4	39.0	54.2	42.3	36.4	34.0
17	69.7	30.4	38.2	53.8	39.0	34.5	30.4
18	69.2	29.0	37.1	46.6	35.2	34.5	28.3
19	69.0	24.2	35.2	46.0	34.0	30.2	27.0
20	69.0	19.4	30.2	45.3	33.0	26.6	25.0
21	67.8	15.4	30.0	40.0	31.5	25.0	24.0
22	64.7	14.9	28.4	39.4	30.0	24.1	22.0
23	62.2	12.2	27.1	37.0	28.6	18.4	18.8
24	62.0	9.0	25.0	29.0	27.9	17.8	16.8
25	61.0	6.4	24.6	28.2	25.0	10.0	6.3
26	61.0	6.0	24.2	23.0	15.0	4.4	3.0
27	58.6	5.4	23.0	22.0	13.0	4.0	1.8
28	50.2	5.0	19.0	19.5	9.5	2.0	1.3
29	42.0	1.6	12.0	7.9	3.4	1.5	0.0
30	4.4	0.6	2.1	2.1	1.4	1.3	0.0

TABLE. 3.58 LIST OF MAXIMUM DAILY PRECIPITATION
SETE LAGOAS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	149.8	82.0	97.2	149.8	148.5	146.7	71.2
2	148.5	74.8	84.8	99.6	119.1	105.0	70.1
3	146.7	54.2	84.1	90.8	103.5	98.5	64.5
4	105.0	49.0	71.8	85.3	84.0	98.0	59.0
5	103.5	47.0	68.9	74.8	80.9	75.7	53.6
6	99.6	43.5	68.1	71.5	76.7	70.1	47.6
7	98.5	42.1	64.9	68.1	72.5	68.8	47.5
8	98.0	39.4	59.4	63.4	70.6	68.1	47.0
9	97.2	38.5	57.6	63.2	68.3	57.2	46.9
10	90.8	36.2	56.3	60.4	68.2	57.0	41.6
11	85.3	35.2	56.3	56.2	62.4	55.6	35.2
12	84.8	34.5	55.8	52.6	60.4	54.7	35.0
13	84.1	32.1	50.0	52.0	58.3	49.6	33.9
14	84.0	30.5	46.8	51.1	47.3	48.6	33.1
15	80.9	30.0	43.0	46.4	43.9	48.0	32.7
16	74.8	28.5	42.6	45.6	42.8	43.1	31.4
17	74.8	26.6	41.2	43.2	41.4	38.0	27.8
18	72.5	24.9	39.6	42.4	39.4	35.5	25.4
19	71.4	21.9	34.6	42.1	36.9	35.2	24.6
20	71.2	21.8	33.4	41.1	35.0	30.4	23.3
21	70.1	21.8	33.3	41.0	34.2	30.3	20.1
22	68.3	20.3	22.0	39.2	34.0	26.1	20.0
23	64.9	14.8	21.0	38.1	27.9	23.6	17.8
24	64.5	12.8	18.2	37.3	25.2	20.2	16.5
25	63.2	9.8	16.3	36.6	19.6	10.5	14.3
26	60.4	9.1	16.2	31.0	13.0	6.8	14.2
27	41.0	3.2	15.6	25.4	10.0	3.6	0.0

TABLE. 3.59 LIST OF MAXIMUM DAILY PRECIPITATION
SITIO GRANDE

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	193.0	79.2	193.0	92.5	137.0	130.6	88.2
2	137.0	75.0	78.0	84.6	110.0	77.8	80.0
3	130.6	70.4	75.0	77.0	84.3	75.0	72.0
4	110.0	66.0	72.0	75.8	80.0	75.0	71.0
5	92.5	57.5	69.0	75.2	76.4	74.0	68.0
6	88.2	57.0	65.2	75.0	75.5	70.4	63.0
7	84.6	57.0	59.0	70.0	69.0	68.0	63.0
8	84.3	52.5	57.0	68.0	65.0	64.4	55.0
9	80.0	43.2	56.0	65.5	56.0	62.0	50.8
10	79.2	43.2	55.0	64.0	55.0	59.0	50.0
11	77.0	38.0	51.0	62.8	53.3	58.7	43.0
12	76.4	38.0	50.5	62.0	50.3	58.7	42.0
13	75.5	37.8	50.0	61.0	50.0	43.5	36.5
14	75.2	37.0	50.0	59.5	50.0	40.5	35.0
15	75.0	33.6	49.2	54.8	47.0	40.0	32.0
16	75.0	32.5	49.0	52.4	46.8	38.0	31.0
17	72.0	31.0	43.6	50.5	40.0	35.0	30.0
18	71.0	28.2	43.3	48.2	38.0	35.0	30.0
19	70.4	25.0	40.0	46.2	37.0	35.0	29.0
20	69.0	24.4	38.0	42.3	35.2	30.3	28.5
21	68.7	22.2	37.0	42.0	31.0	25.0	25.0
22	68.0	21.0	37.0	40.0	30.0	25.0	21.0
23	65.5	21.0	32.4	38.0	30.0	21.5	19.0
24	64.0	18.4	29.0	34.0	27.2	20.9	18.9
25	61.0	12.0	27.0	34.0	27.0	20.6	17.2
26	60.8	8.5	26.0	34.0	27.0	19.0	17.0
27	52.4	6.0	25.0	28.0	25.0	15.2	17.0
28	50.0	2.0	10.0	25.0	25.0	13.0	16.6
29	50.0	0.0	8.0	23.0	19.0	10.0	13.9
30	38.0	0.0	6.3	22.8	15.2	7.0	0.0

TABLE. 3.6a LIST OF MAXIMUM DAILY PRECIPITATION
CAETE

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	210.2	82.8	112.8	96.6	131.0	210.2	109.0
2	131.0	76.8	112.7	87.0	123.6	95.7	84.6
3	123.6	70.8	86.6	86.3	105.5	92.1	66.4
4	112.8	53.6	86.5	83.1	76.6	81.0	65.6
5	112.7	50.8	75.0	81.2	64.8	75.9	61.6
6	109.0	50.0	74.7	81.0	60.6	75.2	60.2
7	105.5	49.6	72.5	80.7	56.3	73.0	60.0
8	96.6	49.3	66.4	77.0	55.2	66.8	49.6
9	95.7	46.6	63.3	71.5	52.1	63.0	49.4
10	92.1	42.4	61.5	67.4	52.0	63.0	48.6
11	87.0	42.4	60.6	66.9	50.9	60.0	47.3
12	86.6	39.8	60.0	64.8	50.0	54.7	41.4
13	86.3	38.0	57.2	64.6	50.0	41.6	41.3
14	84.6	37.7	55.6	63.0	49.0	39.1	38.8
15	82.8	36.6	54.4	61.2	49.0	39.1	37.2
16	80.7	36.0	50.4	54.0	47.1	36.6	36.1
17	77.0	34.0	49.5	53.5	46.0	35.6	33.2
18	76.6	32.8	48.7	53.4	42.0	34.0	31.0
19	75.9	32.1	47.8	53.4	41.3	32.1	30.8
20	75.0	30.2	47.6	51.6	40.0	29.0	28.5
21	73.0	29.8	46.1	51.4	35.7	27.4	28.2
22	66.9	24.7	42.8	44.0	33.8	27.3	28.0
23	63.3	22.4	41.8	39.0	30.4	25.6	24.6
24	63.0	21.5	40.9	38.9	28.9	21.0	16.4
25	60.6	20.4	39.3	35.3	27.8	21.0	15.1
26	51.6	18.9	27.5	28.6	26.0	20.6	11.9
27	51.4	14.7	26.0	25.1	25.0	16.1	10.5
28	49.6	12.6	25.0	21.7	24.0	7.6	10.1
29	42.4	6.5	23.0	21.4	23.3	5.6	8.1
30	39.3	4.2	20.1	7.4	19.0	5.1	0.0

TABLE. 3.6/ LIST OF MAXIMUM DAILY PRECIPITATION
CAIXA DE AREIA-BH

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	155.0	90.0	155.0	138.4	129.0	143.0	100.2
2	143.0	70.6	135.0	118.0	116.0	132.0	98.6
3	138.4	63.6	80.6	106.2	100.0	125.0	80.0
4	135.0	63.6	75.0	104.0	83.0	114.2	80.0
5	132.0	62.0	74.0	102.0	82.2	97.5	76.0
6	125.0	56.0	70.2	80.6	80.4	95.0	75.0
7	116.0	53.2	65.0	78.4	65.0	81.0	70.2
8	114.2	52.0	62.0	75.0	62.0	75.0	70.2
9	104.0	50.4	61.4	75.0	61.0	72.0	63.0
10	102.0	50.0	60.6	72.0	60.0	67.2	54.0
11	100.0	42.0	57.0	69.5	59.0	64.2	51.2
12	97.5	41.0	56.6	62.0	57.0	58.0	50.0
13	95.0	40.2	55.0	60.2	56.0	50.0	47.5
14	82.2	40.0	55.0	60.0	56.0	50.0	46.6
15	80.6	39.0	54.2	60.0	52.6	47.2	46.0
16	80.6	37.5	49.3	57.0	52.0	38.0	45.2
17	80.4	34.0	49.0	52.0	50.7	38.0	44.0
18	80.0	31.0	46.2	49.0	50.2	36.0	38.4
19	78.4	30.2	40.2	47.6	50.0	32.0	37.8
20	78.2	28.4	40.2	46.0	50.0	30.2	34.0
21	75.0	27.6	38.6	45.8	50.0	30.2	33.4
22	67.3	24.2	32.0	45.6	47.6	27.0	31.0
23	67.2	22.0	31.2	44.2	36.0	26.3	30.2
24	62.0	19.8	31.2	44.0	31.0	24.9	26.4
25	61.0	16.2	26.2	43.0	30.6	23.4	19.0
26	60.0	15.2	26.0	42.0	30.4	20.6	17.6
27	50.2	12.2	26.0	35.0	30.0	20.0	12.0
28	49.0	12.0	22.0	29.5	26.2	20.0	4.0
29	46.6	10.5	20.4	29.2	23.5	10.0	2.0
30	45.6	0.2	20.2	22.4	14.0	3.5	0.0

TABLE. 3.62 LIST OF MAXIMUM DAILY PRECIPITATION
CORONEL MURTA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	115.0	78.4	109.0	113.2	88.7	115.0	77.0
2	113.2	75.0	94.4	99.6	81.0	66.6	70.4
3	109.0	73.4	91.8	98.6	78.4	66.2	68.4
4	99.6	65.8	90.6	88.3	78.2	65.6	67.0
5	98.6	61.6	72.8	82.0	74.8	62.6	58.0
6	94.4	59.0	70.0	68.4	65.0	57.6	55.6
7	91.8	58.0	64.2	68.2	62.2	49.6	51.4
8	90.6	45.8	63.4	68.0	59.8	47.4	49.0
9	88.7	44.6	56.7	62.8	58.2	46.0	46.6
10	88.3	42.2	56.0	58.6	57.0	41.3	42.0
11	82.0	38.2	50.0	54.2	56.8	40.0	41.3
12	81.0	37.0	49.8	52.0	56.0	37.6	40.7
13	78.4	34.9	47.6	40.8	54.5	35.0	38.0
14	78.4	31.6	46.0	38.0	52.6	34.2	37.0
15	78.2	30.5	43.4	38.0	45.2	32.7	33.6
16	78.2	29.6	42.8	38.0	41.8	32.2	32.4
17	77.6	29.5	42.0	37.0	36.2	30.4	31.5
18	77.0	28.0	38.0	35.2	35.8	30.2	28.2
19	74.8	27.0	36.0	32.6	35.4	19.6	26.2
20	73.4	26.4	34.8	32.0	35.0	16.0	19.8
21	70.0	26.0	34.2	31.0	34.0	13.5	18.8
22	66.6	26.0	29.8	29.2	27.8	12.4	15.8
23	65.6	23.0	29.0	28.6	25.0	12.2	13.2
24	63.4	23.0	27.3	28.4	17.0	11.0	11.8
25	62.6	22.8	27.1	24.4	15.0	10.6	11.2
26	61.6	11.6	25.6	23.8	14.6	10.0	7.2
27	56.0	6.1	21.6	23.0	14.2	10.0	1.4
28	49.6	3.0	20.4	17.2	11.0	7.6	0.0
29	40.7	1.0	18.2	16.4	7.8	3.0	0.0
30	38.2	0.0	4.7	10.1	7.6	2.0	0.0

TABLE. 3.63 LIST OF MAXIMUM DAILY PRECIPITATION
FAZENDA ESCOLA FLORESTAL

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	153.2	62.2	91.0	80.0	153.2	150.0	104.6
2	150.0	57.4	78.0	79.8	120.0	87.0	94.0
3	104.6	57.4	69.4	79.0	86.4	75.9	82.6
4	94.0	57.0	69.0	70.2	79.2	72.0	79.2
5	91.0	56.2	65.8	69.6	78.0	71.5	61.6
6	87.0	50.3	64.4	68.0	66.2	70.6	61.4
7	82.6	50.0	60.8	61.0	65.0	64.4	59.3
8	79.8	49.0	60.0	60.9	61.8	63.4	55.8
9	79.2	49.0	60.0	58.8	59.0	63.2	52.4
10	79.2	46.2	59.8	58.2	57.4	60.2	52.0
11	78.0	44.6	57.5	57.5	48.8	55.6	49.9
12	75.9	42.2	54.0	56.6	46.9	51.6	49.4
13	71.5	40.2	53.4	55.8	45.4	45.8	42.4
14	70.6	35.8	53.4	53.0	44.4	43.3	40.0
15	70.2	32.5	52.0	51.4	42.2	42.2	39.4
16	69.6	32.0	50.2	50.0	40.4	42.0	39.0
17	69.4	30.2	50.0	50.0	40.0	41.2	36.8
18	68.0	29.0	47.6	49.0	39.0	37.6	36.0
19	66.0	25.8	44.6	48.6	37.6	36.0	34.2
20	65.8	25.0	41.8	46.0	36.6	35.8	33.3
21	64.4	22.4	39.0	45.4	35.4	35.4	31.5
22	61.8	21.6	38.7	45.0	32.8	35.0	30.0
23	61.0	19.4	34.2	39.0	32.2	30.0	24.4
24	60.4	19.0	32.2	38.0	31.6	27.0	24.0
25	60.2	17.6	29.1	37.6	31.4	22.0	23.4
26	60.0	13.2	29.0	36.2	30.0	19.4	19.8
27	59.8	13.0	28.6	34.2	24.2	18.0	19.0
28	56.2	9.7	28.0	33.0	23.0	14.2	18.0
29	50.2	8.0	27.8	24.0	13.8	7.2	12.9
30	49.9	6.4	14.0	12.6	12.5	3.2	9.8

TABLE. 3.64 LIST OF MAXIMUM DAILY PRECIPITATION
GOIANIA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	153.6	107.4	88.2	153.6	124.2	102.4	97.0
2	134.0	104.0	69.5	134.0	102.7	76.8	77.9
3	124.2	91.4	67.4	94.0	97.8	75.0	76.1
4	107.4	70.0	66.8	89.8	81.2	74.5	73.1
5	104.0	68.5	64.5	89.0	72.9	73.8	70.0
6	102.7	64.9	60.4	71.3	66.8	65.6	68.4
7	102.4	61.6	58.2	68.0	66.6	62.6	66.5
8	94.0	60.5	58.2	66.6	58.3	61.6	60.8
9	91.4	57.6	57.4	64.6	58.2	60.8	57.5
10	89.8	56.5	56.6	59.8	57.8	60.7	55.8
11	81.6	56.2	56.0	56.4	56.6	57.8	54.4
12	79.1	51.4	54.0	56.2	56.0	56.6	53.8
13	77.9	45.4	53.9	55.9	55.6	52.8	53.0
14	76.1	41.2	53.8	52.2	54.9	51.0	51.6
15	75.0	36.9	53.2	52.1	53.0	50.7	50.9
16	73.8	36.8	51.2	52.0	51.4	49.4	50.3
17	72.9	36.0	46.8	51.7	48.8	49.0	48.0
18	72.0	32.2	45.2	48.6	47.5	48.7	45.2
19	71.3	30.1	44.6	48.1	46.4	45.6	44.7
20	70.0	29.5	43.2	47.8	43.5	45.2	44.4
21	67.4	28.8	40.5	46.2	41.0	41.6	43.5
22	65.6	28.3	39.4	45.6	40.4	41.4	42.8
23	64.9	22.0	39.2	40.8	38.3	37.0	42.5
24	61.6	21.0	36.4	39.6	37.9	36.4	37.6
25	60.5	20.8	33.3	37.7	37.8	33.6	35.6
26	57.8	20.6	28.3	30.0	36.7	33.0	28.7
27	57.5	14.6	26.8	26.4	36.2	32.9	28.3
28	57.4	5.5	23.7	23.9	35.2	28.0	23.0
29	56.6	0.0	23.4	21.8	33.0	15.4	20.1
30	45.6	0.0	15.6	20.6	29.7	0.0	17.5

TABLE. 3.65 LIST OF MAXIMUM DAILY PRECIPITATION
GOUVEA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	133.2	84.0	133.2	104.0	117.0	95.6	89.0
2	117.0	78.3	116.0	91.3	117.0	94.0	75.0
3	117.0	65.0	102.0	86.3	103.0	76.1	70.2
4	116.0	61.0	98.0	86.2	100.4	66.3	69.3
5	104.0	57.3	66.4	72.2	96.3	61.4	65.2
6	103.0	53.0	65.0	69.0	85.3	58.0	62.0
7	100.4	50.0	60.4	55.2	85.2	54.4	60.0
8	98.0	48.3	57.0	54.4	71.2	49.2	58.6
9	94.0	47.6	53.6	54.3	68.1	44.0	56.2
10	89.0	47.4	53.0	52.3	63.2	43.3	50.2
11	86.3	44.2	52.0	51.6	60.0	42.1	50.0
12	86.2	43.4	51.2	48.0	54.3	42.0	49.0
13	85.3	42.0	50.2	48.0	51.2	41.3	46.4
14	85.2	40.0	48.2	45.3	48.2	39.0	45.2
15	84.0	40.0	48.1	41.3	47.2	38.6	44.6
16	77.2	34.0	45.0	41.0	47.0	36.0	38.1
17	76.1	33.2	43.0	40.0	45.2	33.0	37.0
18	75.0	32.2	42.3	39.0	41.2	31.3	35.3
19	71.2	31.0	41.1	36.4	40.0	31.3	34.2
20	70.2	28.3	36.4	34.6	39.3	31.2	30.1
21	70.0	27.2	35.2	33.4	37.0	27.4	29.4
22	69.3	25.0	33.4	33.2	37.0	27.1	26.3
23	69.0	24.3	33.2	32.4	36.0	23.2	25.6
24	66.4	19.2	33.0	30.2	30.3	23.1	20.6
25	66.3	18.4	31.0	29.4	28.3	22.0	19.0
26	65.0	18.3	31.0	29.0	25.4	20.0	15.0
27	62.0	14.1	29.4	28.4	24.4	16.3	14.0
28	55.2	13.4	24.0	25.2	19.6	10.2	12.3
29	54.4	8.2	20.3	25.0	19.3	6.4	1.0
30	53.0	5.0	15.4	24.3	18.2	2.3	0.0

TABLE.3.66 LIST OF MAXIMUM DAILY PRECIPITATION
IBIA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	182.0	125.7	78.6	105.2	182.0	173.0	78.0
2	173.0	91.0	65.0	93.8	108.2	74.0	74.6
3	125.7	83.0	63.0	90.0	95.0	66.4	71.0
4	108.2	67.6	60.6	77.0	94.0	64.0	64.0
5	105.2	62.6	60.6	70.2	83.0	59.6	61.0
6	95.0	59.0	59.0	69.4	82.4	58.6	61.0
7	94.0	55.0	58.2	62.0	72.0	56.3	56.0
8	93.8	44.0	58.0	59.4	69.0	52.6	54.6
9	91.0	43.0	54.6	59.0	67.0	50.0	53.0
10	90.0	41.6	52.0	58.7	64.8	50.0	48.0
11	83.0	41.0	51.4	58.0	63.0	49.2	42.6
12	82.4	40.0	50.2	57.4	60.0	49.0	42.0
13	78.0	39.0	47.0	56.0	55.0	48.0	42.0
14	77.0	39.0	46.0	53.6	53.2	45.0	41.4
15	71.0	38.0	46.0	53.2	52.0	44.4	41.0
16	70.2	37.0	44.6	52.0	52.0	42.4	41.0
17	69.0	36.0	43.0	49.0	51.2	39.2	38.6
18	67.0	32.0	42.5	49.0	51.0	38.0	36.2
19	66.0	27.2	42.0	48.0	46.6	35.0	35.0
20	65.0	27.0	41.8	45.0	40.0	33.0	35.0
21	64.0	26.0	41.0	43.0	39.4	31.0	34.6
22	63.0	25.0	40.4	41.0	38.0	29.3	32.8
23	62.0	24.0	37.8	39.6	36.2	29.0	29.6
24	60.6	23.0	36.2	38.0	35.6	28.4	28.6
25	59.0	19.0	35.6	36.0	33.0	24.0	26.2
26	58.7	17.2	35.2	35.0	32.0	19.8	25.2
27	58.0	16.0	35.0	33.0	28.2	17.2	25.0
28	56.0	15.0	33.0	33.0	26.8	17.0	16.0
29	55.0	11.4	32.6	27.0	26.0	16.0	13.6
30	48.0	11.2	18.0	12.4	18.0	16.0	4.2

TABLE.3.67 LIST OF MAXIMUM DAILY PRECIPITATION
IGUATAMA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	165.0	61.2	104.2	92.2	100.0	165.0	107.0
2	107.0	55.0	61.4	78.8	89.0	103.0	95.0
3	104.2	51.4	59.8	75.0	84.6	75.0	72.2
4	103.0	51.2	59.6	71.1	84.4	67.2	66.2
5	100.0	50.0	59.0	69.2	74.4	60.6	59.6
6	95.0	43.8	57.8	65.0	74.2	60.0	55.5
7	92.2	43.0	55.8	64.2	71.0	53.8	51.2
8	89.0	42.8	50.6	63.0	66.4	53.4	50.4
9	84.6	36.2	50.4	56.4	65.6	50.6	46.0
10	84.4	36.0	48.4	54.0	63.2	50.0	45.2
11	74.4	35.8	48.4	54.0	56.2	49.3	40.4
12	74.2	35.0	47.0	52.0	55.4	41.0	40.0
13	71.6	31.4	47.0	49.8	55.0	39.0	33.2
14	71.1	30.0	46.2	48.0	53.0	35.0	32.0
15	71.0	28.0	42.8	47.9	46.8	32.2	31.4
16	69.2	25.3	41.6	46.4	43.4	32.0	30.0
17	67.2	25.2	39.4	44.0	37.2	31.4	29.0
18	66.4	24.4	36.4	41.4	36.2	30.2	27.8
19	65.6	24.0	35.2	40.0	33.6	26.6	25.0
20	65.0	19.4	35.0	40.0	33.3	26.2	24.0
21	64.2	18.2	33.4	37.2	31.0	25.4	22.0
22	63.2	16.4	29.6	37.0	30.6	25.2	21.6
23	59.0	15.8	25.0	36.0	28.0	25.0	21.4
24	57.8	14.0	25.0	35.2	27.2	25.0	21.2
25	55.8	11.0	25.0	31.8	23.0	24.4	19.0
26	55.0	9.2	24.0	27.4	22.4	23.0	18.2
27	53.4	8.0	23.6	27.0	20.0	22.0	16.8
28	53.0	5.0	23.0	25.0	19.4	18.6	15.2
29	50.6	5.0	10.2	4.8	18.4	17.0	0.0
30	48.4	4.1	8.0	0.0	11.2	16.4	0.0

TABLE. 3.68 LIST OF MAXIMUM DAILY PRECIPITATION
ITAOBIM

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	114.0	89.7	112.7	114.0	79.3	100.4	72.6
2	112.7	82.2	92.2	74.0	78.0	79.1	72.0
3	100.4	77.9	73.0	70.1	71.0	51.0	69.6
4	92.2	71.0	72.0	60.0	66.1	47.1	62.2
5	89.7	62.4	59.3	53.8	63.3	42.0	57.0
6	79.1	59.0	58.1	51.2	62.8	37.4	56.0
7	78.0	57.0	56.9	49.0	61.2	35.1	56.0
8	77.9	56.0	56.2	49.0	60.7	30.5	52.7
9	74.0	51.0	53.2	48.3	60.6	28.9	52.7
10	73.0	50.7	50.0	46.2	52.6	28.6	32.7
11	72.0	48.0	49.5	43.6	51.0	25.1	28.0
12	72.0	46.0	45.2	43.6	47.0	24.7	28.0
13	71.0	46.0	44.0	42.4	45.0	24.0	27.3
14	70.1	43.2	43.0	42.2	44.3	22.8	25.2
15	63.3	42.5	42.0	34.3	43.4	14.5	23.6
16	62.8	33.0	39.6	34.0	40.8	13.0	19.2
17	62.4	30.4	39.6	32.1	35.0	12.0	18.3
18	62.2	29.2	39.0	31.3	33.7	11.9	18.2
19	61.2	29.1	37.2	30.3	32.2	11.0	17.8
20	60.7	23.0	32.4	29.2	32.1	10.2	17.5
21	59.3	20.2	32.0	28.8	26.2	7.0	12.8
22	57.3	16.3	29.1	27.5	25.6	6.2	12.2
23	53.8	14.8	27.4	27.0	25.0	4.8	10.2
24	52.6	12.9	26.0	26.3	18.8	4.2	3.4
25	51.2	9.0	25.3	25.4	16.4	4.2	3.2
26	51.0	8.0	25.3	23.8	15.6	3.0	0.1
27	43.2	7.2	19.8	23.2	12.0	2.3	0.0
28	33.6	7.0	19.2	20.0	3.2	0.0	0.0
29	32.0	2.8	18.2	14.4	2.6	0.0	0.0
30	30.4	0.0	18.2	3.1	0.0	0.0	0.0

TABLE. 3.69 LIST OF MAXIMUM DAILY PRECIPITATION
JAGUARUNA-JUSANTE

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	107.4	83.5	107.4	106.8	94.1	104.0	86.4
2	106.8	64.7	91.2	101.3	90.2	75.3	72.2
3	104.0	55.3	75.2	88.0	88.8	74.1	66.2
4	101.3	54.3	71.4	75.9	82.8	66.5	63.8
5	91.2	50.5	69.2	75.0	73.1	66.1	63.3
6	90.2	46.1	67.3	72.6	72.5	65.5	62.3
7	88.8	45.3	65.3	69.3	72.2	65.0	60.9
8	88.0	45.3	64.6	64.1	65.2	57.0	55.2
9	85.2	43.0	61.8	63.4	60.4	49.1	55.0
10	83.5	42.0	61.7	61.3	59.2	46.2	40.1
11	82.8	40.2	61.6	60.4	58.8	41.1	40.0
12	75.9	37.2	58.3	60.0	57.3	40.3	39.8
13	75.0	37.1	58.1	59.4	56.4	39.0	36.2
14	74.1	36.1	55.4	56.6	56.0	37.6	35.9
15	72.5	34.4	52.2	53.3	55.6	35.2	32.7
16	72.2	31.1	42.3	51.2	55.6	35.0	32.4
17	72.2	31.0	41.5	50.0	52.1	29.1	32.0
18	69.3	26.3	41.1	47.0	51.8	28.2	31.9
19	67.3	25.8	38.3	46.1	50.4	27.2	30.3
20	66.5	24.0	37.3	41.3	46.9	25.6	29.4
21	66.2	23.2	34.9	40.0	45.1	24.3	28.3
22	64.1	20.5	32.1	39.2	44.3	23.2	28.0
23	63.4	18.4	30.3	37.4	41.1	22.2	27.2
24	59.2	15.1	28.4	35.8	37.4	20.9	25.8
25	56.6	12.2	28.0	32.2	36.0	15.2	21.1
26	56.4	11.4	22.1	31.4	33.2	14.2	18.4
27	55.6	10.1	22.0	27.2	32.3	12.3	18.2
28	55.2	9.5	21.0	25.3	25.5	8.2	18.2
29	50.0	2.3	16.3	24.7	16.2	8.2	11.9
30	41.1	0.0	16.2	16.4	11.3	5.7	9.7

TABLE.3.70 LIST OF MAXIMUM DAILY PRECIPITATION
JOSE DE MELO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	112.3	74.0	102.1	103.1	110.1	112.3	94.3
2	110.1	60.1	85.0	102.2	106.0	85.3	89.4
3	106.0	57.3	80.1	88.0	87.1	82.1	85.1
4	103.1	53.0	79.2	76.0	83.2	72.4	83.1
5	102.2	47.1	75.1	75.0	75.3	59.3	79.4
6	89.4	43.0	68.2	72.2	72.1	58.2	76.1
7	88.0	40.3	67.0	67.3	68.4	58.0	62.4
8	87.1	40.1	63.1	67.3	64.0	51.2	60.0
9	85.3	37.0	58.4	64.3	63.1	50.2	57.1
10	85.0	36.4	58.2	63.2	62.1	48.2	54.3
11	83.2	36.1	57.1	62.0	58.0	47.1	53.1
12	82.1	35.1	57.0	62.0	55.2	46.3	50.2
13	79.2	35.0	55.1	58.4	55.2	43.0	50.1
14	76.1	34.1	54.0	57.4	54.1	42.1	48.0
15	75.3	34.0	52.1	57.1	52.0	40.0	41.2
16	75.1	30.4	48.1	57.1	49.1	38.3	38.2
17	72.2	28.2	48.0	56.4	46.1	38.3	37.0
18	72.1	27.0	47.3	56.1	46.0	36.3	36.1
19	67.0	26.2	47.1	55.4	45.1	36.1	35.4
20	64.3	26.1	45.1	54.1	42.3	35.0	34.3
21	63.1	26.0	45.1	52.4	34.0	33.2	34.1
22	62.4	23.2	42.0	51.3	33.0	32.3	31.2
23	62.1	23.1	34.4	51.3	28.0	31.0	31.1
24	58.0	22.0	31.2	50.3	25.3	31.0	30.1
25	57.3	20.4	27.3	41.0	23.2	29.2	29.2
26	57.1	20.1	27.0	40.2	20.0	25.3	27.3
27	57.0	19.0	25.3	37.2	19.0	25.2	21.0
28	56.4	17.0	24.3	35.0	18.0	17.3	15.3
29	52.0	16.4	12.2	30.3	17.2	15.4	3.3
30	46.1	13.3	12.0	30.2	15.3	4.1	2.1

TABLE.3.71 LIST OF MAXIMUM DAILY PRECIPITATION
MATEUS LEME

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	129.7	74.2	80.4	122.8	122.8	113.2	123.2
2	128.4	72.0	80.2	120.8	110.2	109.4	89.4
3	122.8	71.2	72.9	110.4	93.8	78.4	86.0
4	122.8	68.6	71.2	98.6	83.2	75.4	80.2
5	120.8	61.1	70.4	85.4	73.8	62.4	79.8
6	113.2	57.8	69.0	83.2	68.8	60.8	78.0
7	110.4	57.4	68.2	73.4	64.4	56.8	75.0
8	110.2	54.8	67.4	72.4	63.4	50.4	71.8
9	98.6	51.0	60.2	67.2	60.8	50.4	62.0
10	93.8	50.4	58.0	62.6	56.8	49.2	60.4
11	89.4	50.2	55.2	60.2	55.4	48.6	53.8
12	86.0	49.0	54.0	60.0	54.6	43.8	52.2
13	85.4	46.8	53.4	59.8	52.4	42.6	50.4
14	83.2	43.4	52.0	58.8	52.0	42.0	44.6
15	83.2	43.4	51.2	58.4	51.8	38.8	43.0
16	80.2	39.8	51.0	56.4	50.2	37.0	43.0
17	80.2	39.4	48.1	55.0	47.8	35.8	40.8
18	75.0	35.4	41.4	49.8	46.0	33.7	40.6
19	73.8	33.0	41.2	48.0	45.8	31.2	40.2
20	72.0	32.6	37.4	47.9	44.2	31.2	39.0
21	71.8	30.4	36.8	45.4	43.6	30.4	37.6
22	71.2	22.4	35.0	44.8	42.8	30.2	36.8
23	71.2	22.0	33.4	44.4	42.2	29.0	36.8
24	68.8	20.2	32.4	40.2	30.8	22.4	32.8
25	68.6	18.2	30.8	37.8	30.8	21.0	30.8
26	60.8	14.8	30.0	33.8	27.0	20.4	29.4
27	58.8	14.4	25.2	32.6	26.4	19.6	22.2
28	56.4	12.4	25.0	32.4	23.8	19.2	19.0
29	52.0	10.8	22.8	32.2	20.8	9.3	18.2
30	45.8	6.4	20.8	30.0	19.6	8.6	4.2

TABLE. 3.72 LIST OF MAXIMUM DAILY PRECIPITATION
MONTE ALEGRE DE MINAS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	268.4	84.7	102.0	147.8	268.4	104.0	103.1
2	147.8	77.2	83.8	93.8	144.8	70.6	98.5
3	144.8	66.5	79.0	88.1	108.2	63.3	79.5
4	108.2	64.2	72.2	80.3	106.3	60.9	79.0
5	106.3	60.0	70.3	74.0	86.0	52.5	70.0
6	104.0	58.5	59.2	63.2	81.0	52.0	69.0
7	103.1	50.0	58.8	62.0	76.6	50.0	64.5
8	102.0	48.2	54.0	61.2	74.4	48.5	61.8
9	93.8	48.0	53.5	56.8	73.0	47.3	61.4
10	86.0	47.9	49.0	52.7	70.2	47.2	56.1
11	85.2	47.2	48.9	52.0	69.2	46.9	53.7
12	84.7	44.2	48.8	50.6	68.4	45.8	53.2
13	81.0	43.0	46.3	48.4	63.6	44.4	50.0
14	79.0	41.2	45.0	47.0	60.8	43.4	49.6
15	79.0	41.0	42.8	46.0	58.6	41.5	48.4
16	76.6	35.5	41.8	43.7	57.2	40.0	46.2
17	74.0	34.9	41.2	43.2	57.1	38.8	41.0
18	73.0	31.2	40.8	43.0	56.4	37.6	40.4
19	70.2	31.0	38.6	41.2	52.6	36.4	36.2
20	69.0	29.0	38.2	40.8	45.4	36.3	35.4
21	68.6	28.8	36.8	40.0	39.2	35.2	33.4
22	68.4	28.2	34.4	38.0	37.8	35.0	31.6
23	68.0	24.6	30.2	33.8	37.2	33.2	29.4
24	63.2	24.3	29.0	33.5	36.2	33.0	29.4
25	62.0	19.4	29.0	30.4	36.0	26.0	28.0
26	61.8	19.0	28.4	30.0	35.0	24.0	27.6
27	60.9	15.4	24.0	25.2	30.0	23.6	25.6
28	57.2	0.0	22.2	6.9	23.8	22.4	18.2
29	57.1	0.0	0.0	0.0	22.0	19.8	13.4
30	46.4	0.0	0.0	0.0	21.2	13.0	12.6

TABLE. 3.73 LIST OF MAXIMUM DAILY PRECIPITATION
NOVA ERA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	128.0	82.0	82.0	115.2	128.0	70.3	112.2
2	112.2	70.0	68.8	96.0	90.0	56.4	77.8
3	96.0	60.2	67.9	88.2	78.6	51.4	65.0
4	88.2	47.2	67.8	77.0	72.2	47.4	52.5
5	82.0	46.2	65.4	71.2	72.0	47.0	51.2
6	78.6	45.8	64.7	69.0	66.7	45.3	50.1
7	77.8	40.0	60.5	68.8	60.0	43.8	50.0
8	72.2	38.6	56.4	66.0	58.4	43.1	49.4
9	72.0	34.3	56.2	65.8	55.8	41.4	49.4
10	71.2	33.5	50.3	61.6	55.1	41.1	43.4
11	70.3	33.3	49.4	61.2	53.3	40.2	41.0
12	69.0	33.2	47.2	60.8	52.1	39.0	40.4
13	68.8	33.1	46.0	60.6	51.9	38.5	40.0
14	68.8	32.3	42.0	53.0	51.1	38.0	39.0
15	67.8	31.6	41.0	51.6	50.0	35.6	38.9
16	66.7	26.0	41.0	51.1	49.8	33.2	36.9
17	65.8	25.0	40.1	51.0	47.2	33.2	35.7
18	64.7	24.0	38.9	50.0	44.6	32.5	34.1
19	61.6	22.2	38.8	44.0	43.0	30.0	33.2
20	61.2	21.8	37.1	42.6	42.6	28.3	29.8
21	60.6	21.2	36.4	41.6	41.9	27.2	28.7
22	60.5	21.0	34.6	41.4	39.3	26.4	28.0
23	60.2	20.1	33.5	39.4	34.1	24.9	27.6
24	56.4	18.8	32.4	37.0	33.0	23.7	26.0
25	53.0	15.8	31.4	35.8	26.4	20.0	19.2
26	51.6	12.5	30.6	35.0	25.6	18.1	19.1
27	51.0	12.2	29.6	33.0	24.3	14.0	18.4
28	50.0	8.0	28.5	27.8	24.0	8.0	14.4
29	49.4	5.1	28.2	24.0	23.0	7.2	8.0
30	41.0	1.5	25.3	8.2	15.5	0.0	0.0

TABLE. 3.74 LIST OF MAXIMUM DAILY PRECIPITATION
PORTO MANDACARU

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	122.4	82.2	122.4	100.2	110.2	91.4	111.6
2	111.6	68.1	100.2	83.2	75.0	83.5	99.6
3	110.2	61.6	75.0	75.0	70.0	69.0	96.2
4	100.2	57.6	72.4	65.7	69.2	58.0	78.1
5	100.2	51.4	70.2	65.0	67.3	48.1	75.2
6	99.6	51.4	68.6	63.1	63.1	45.3	63.7
7	96.2	47.2	56.4	58.3	59.4	45.0	52.0
8	91.4	40.0	52.0	55.0	58.5	44.2	50.4
9	82.2	38.4	50.3	54.8	58.2	43.8	47.2
10	78.1	35.3	50.0	53.0	57.3	36.3	38.9
11	75.2	32.3	48.6	52.2	57.3	35.0	36.1
12	75.0	28.4	45.3	50.4	45.1	30.5	35.2
13	72.4	28.2	45.2	50.2	39.3	29.2	34.0
14	70.2	28.1	45.0	49.6	37.3	26.1	30.2
15	70.0	26.3	43.2	43.0	37.0	25.4	26.4
16	69.2	24.1	38.4	42.0	37.0	23.2	25.6
17	59.4	21.2	31.4	39.0	32.4	23.0	25.3
18	58.5	20.7	31.1	38.1	32.1	22.3	25.0
19	57.3	16.4	30.0	35.6	26.6	20.1	25.0
20	56.4	15.2	28.2	35.4	26.3	19.2	21.2
21	54.8	11.2	27.7	32.3	25.8	18.4	20.0
22	53.0	11.0	27.4	26.3	25.2	15.2	19.2
23	52.2	8.3	27.2	26.1	23.3	13.5	18.2
24	51.4	4.8	25.6	25.1	23.0	12.7	15.3
25	50.2	3.2	25.2	25.0	23.0	12.3	12.5
26	48.1	0.1	22.3	24.7	16.0	8.1	10.6
27	43.2	0.0	21.4	24.3	4.6	7.4	5.2
28	43.0	0.0	18.4	22.5	0.7	5.0	0.2
29	42.0	0.0	17.3	15.3	0.1	2.0	0.0
30	34.0	0.0	5.1	0.0	0.0	0.7	0.0

TABLE. 3.75 LIST OF MAXIMUM DAILY PRECIPITATION
PONTE NOVA DO PARAOP

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	159.4	99.0	133.0	101.6	159.4	100.0	81.3
2	133.0	66.3	91.3	92.2	102.2	93.4	66.6
3	102.2	66.0	83.4	76.6	85.6	75.3	65.4
4	101.6	64.2	75.0	70.3	85.3	67.3	62.3
5	100.0	62.3	71.2	69.6	83.4	64.3	58.6
6	99.0	51.3	69.6	61.8	78.4	61.3	54.4
7	91.3	48.1	68.0	60.3	78.3	58.4	54.3
8	85.6	47.2	63.7	58.3	74.3	56.2	53.2
9	85.3	46.4	56.4	57.2	72.8	54.4	53.0
10	83.4	43.4	56.2	55.4	70.0	54.2	52.4
11	83.4	41.4	51.4	54.3	69.3	48.4	51.3
12	81.3	37.2	51.0	52.1	64.4	47.1	50.4
13	78.4	36.2	49.2	47.3	63.8	46.2	44.4
14	78.3	36.0	46.4	46.4	63.1	44.0	41.4
15	74.3	35.4	45.4	46.3	62.1	43.3	41.0
16	72.8	32.3	43.4	44.2	59.6	41.0	38.4
17	70.3	30.4	43.4	44.0	58.4	40.2	37.4
18	69.3	30.4	40.4	43.2	48.4	39.3	34.2
19	67.3	30.2	39.4	42.4	48.4	38.4	33.1
20	66.6	26.3	37.2	40.3	44.2	37.4	32.3
21	66.3	24.8	34.3	40.2	44.1	35.4	30.2
22	64.4	20.6	33.4	37.4	41.2	34.4	29.4
23	64.2	18.2	33.2	36.2	41.0	31.4	29.1
24	62.3	18.0	29.4	33.2	34.4	31.2	24.6
25	58.3	16.2	27.3	32.4	33.1	30.3	24.1
26	56.2	15.0	26.2	31.2	33.1	29.4	22.7
27	54.4	13.4	26.2	29.8	28.1	23.4	20.2
28	53.0	12.4	23.8	24.2	24.2	20.6	16.2
29	44.4	12.1	22.1	23.4	22.1	10.4	8.2
30	44.1	11.0	15.1	21.3	15.2	7.0	6.3

TABLE.3.76 LIST OF MAXIMUM DAILY PRECIPITATION
SABARA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	128.0	71.6	82.6	120.0	128.0	100.0	87.4
2	120.0	63.0	75.0	100.0	74.6	80.0	75.0
3	100.0	60.0	71.6	94.8	72.0	78.0	70.0
4	100.0	58.8	70.6	85.0	70.8	72.6	69.6
5	94.8	52.0	70.4	80.0	70.6	72.0	58.6
6	87.4	51.0	70.0	75.0	68.0	64.0	57.6
7	85.0	48.0	69.4	75.0	68.0	59.8	53.0
8	82.6	47.2	66.0	70.0	62.0	59.8	51.0
9	80.0	41.0	65.8	70.0	60.8	57.0	50.0
10	78.0	41.0	65.4	64.8	60.0	55.2	50.0
11	75.0	40.0	60.6	64.0	56.0	50.0	48.4
12	75.0	38.6	58.0	64.0	53.0	50.0	48.0
13	72.6	37.6	57.0	61.0	52.0	47.0	45.0
14	72.0	36.0	54.0	60.0	51.0	44.8	39.0
15	70.8	35.8	54.0	58.4	50.0	42.0	31.0
16	70.6	34.4	50.0	55.6	50.0	38.0	25.0
17	70.4	33.8	48.0	50.0	50.0	38.0	24.0
18	69.6	33.0	46.0	50.0	50.0	35.0	24.0
19	68.0	33.0	40.0	50.0	48.0	28.0	22.2
20	68.0	31.2	39.6	49.0	47.6	26.0	22.0
21	66.0	25.0	39.0	45.8	40.0	25.0	20.0
22	64.0	24.6	38.6	45.6	37.6	24.0	19.6
23	64.0	23.0	36.0	43.8	37.6	22.6	19.2
24	62.0	20.4	35.4	42.0	36.0	22.0	15.6
25	61.0	19.0	33.0	40.8	35.6	21.4	13.6
26	60.6	18.6	32.0	38.6	35.0	19.0	11.0
27	60.0	18.2	32.0	38.0	25.0	15.0	10.0
28	59.8	18.0	29.0	36.0	23.6	7.0	9.0
29	55.2	11.0	28.6	29.0	22.2	0.0	0.0
30	47.0	1.0	21.0	28.0	17.0	0.0	0.0

TABLE.3.77 LIST OF MAXIMUM DAILY PRECIPITATION
TAQUARACU

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	188.0	96.0	93.4	110.2	100.0	188.0	118.2
2	139.0	72.4	85.4	97.8	94.0	139.0	86.6
3	110.2	65.8	80.2	94.2	90.2	72.2	69.8
4	100.0	62.2	78.2	91.0	82.0	69.0	58.6
5	97.8	54.6	77.2	78.4	70.2	68.4	58.4
6	96.0	50.2	74.2	76.6	67.2	59.0	54.6
7	94.2	48.2	73.2	75.2	64.0	54.4	52.2
8	94.0	47.4	64.4	74.4	62.8	50.4	48.4
9	93.4	40.2	60.2	71.2	62.4	50.4	47.2
10	91.0	40.2	56.8	70.0	62.2	47.6	43.2
11	90.2	39.0	55.6	69.6	57.2	46.1	42.0
12	86.6	36.8	54.2	68.4	56.5	38.0	41.2
13	85.4	34.0	50.3	66.2	56.2	35.4	37.4
14	80.2	33.6	50.0	66.0	52.2	34.4	37.2
15	78.4	33.2	47.3	63.4	51.2	34.4	36.4
16	77.2	33.0	47.2	60.2	50.2	34.2	36.4
17	75.2	32.4	45.4	56.4	47.4	29.4	30.0
18	74.4	30.0	45.2	54.4	46.8	27.0	30.0
19	71.2	29.6	45.2	52.2	45.8	27.0	29.2
20	70.2	26.2	41.6	50.2	40.6	26.2	28.4
21	70.0	25.1	40.0	47.2	38.2	26.2	23.0
22	66.2	25.0	38.2	47.0	31.2	26.2	22.2
23	66.0	24.2	36.2	45.2	30.4	25.2	20.0
24	64.4	22.0	34.4	42.8	29.4	25.0	19.8
25	64.0	18.1	31.6	42.2	28.0	25.0	18.0
26	59.0	18.0	27.0	35.2	23.4	24.4	16.6
27	54.8	14.8	22.8	34.1	21.2	24.0	15.8
28	52.2	14.4	17.2	33.0	17.0	21.2	14.6
29	47.4	11.9	14.2	30.0	13.2	20.4	11.4
30	37.0	10.0	12.0	28.0	7.4	1.2	3.4

TABLE. 3.78 LIST OF MAXIMUM DAILY PRECIPITATION
USINA PETI

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	140.0	85.0	140.0	100.1	114.0	96.2	130.0
2	130.0	68.0	94.6	74.2	110.2	80.2	95.6
3	114.0	66.4	91.4	70.0	99.8	78.4	90.4
4	110.2	62.2	85.0	69.5	99.6	69.0	81.4
5	99.8	53.4	83.0	68.8	92.2	62.9	78.0
6	99.6	50.2	69.0	66.4	90.4	62.6	73.0
7	96.2	50.1	64.4	62.0	88.4	56.6	70.0
8	95.6	50.0	62.0	61.4	79.0	56.4	69.9
9	92.2	47.8	59.4	60.0	71.3	52.8	68.3
10	91.4	42.0	58.4	59.4	69.2	50.7	48.2
11	90.4	39.9	56.4	59.0	68.8	50.1	46.2
12	88.4	38.8	56.4	57.4	67.4	49.6	40.3
13	85.0	38.4	56.0	57.2	65.0	47.4	39.4
14	83.0	37.0	55.6	56.3	63.6	45.4	37.8
15	81.4	36.6	53.5	52.4	59.8	43.4	34.8
16	74.2	36.5	51.4	51.2	57.8	43.0	33.9
17	71.3	36.0	50.0	51.0	55.8	42.2	31.8
18	70.0	34.8	49.0	50.4	52.2	41.2	29.6
19	70.0	33.5	48.5	47.0	49.0	35.2	28.7
20	69.2	29.0	48.0	46.4	46.0	34.6	25.0
21	68.0	28.4	46.2	45.0	45.6	31.2	24.0
22	67.4	27.0	46.0	43.0	40.6	30.0	23.4
23	64.4	25.3	40.4	42.4	38.2	28.9	22.6
24	59.8	23.6	36.1	40.4	38.0	27.0	21.6
25	55.6	23.4	34.1	40.4	37.2	19.4	21.6
26	53.4	18.2	33.2	39.8	33.4	18.8	21.6
27	52.4	16.2	30.0	36.8	30.4	12.0	20.1
28	52.2	14.3	24.2	34.2	29.0	11.6	19.4
29	49.0	13.4	19.6	32.8	22.2	4.4	16.4
30	49.0	10.2	17.0	23.2	19.4	2.4	0.0

TABLE. 3.79 LIST OF MAXIMUM DAILY PRECIPITATION
FORMOSA-GO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	105.8	103.4	101.0	105.8	101.8	86.1	96.8
2	103.4	62.0	97.2	91.4	93.5	75.9	67.6
3	101.8	60.4	84.8	80.8	80.4	69.1	62.6
4	101.0	59.4	83.9	73.8	68.6	62.9	62.0
5	96.8	56.2	72.2	58.2	67.4	56.0	59.0
6	91.4	46.0	61.6	56.4	66.0	54.5	56.7
7	86.1	40.1	57.6	54.1	61.9	50.9	53.0
8	83.9	39.9	49.6	46.1	60.8	50.0	50.5
9	80.4	39.7	48.8	44.0	58.0	49.6	49.1
10	67.4	39.0	47.2	41.2	53.6	45.0	46.9
11	62.9	36.0	45.9	41.2	51.4	43.4	45.6
12	62.6	35.2	45.0	40.2	47.0	40.2	45.0
13	62.0	35.0	30.6	39.5	46.6	39.0	41.6
14	62.0	33.2	28.4	39.3	46.0	38.6	40.0
15	60.4	26.0	27.6	34.2	44.1	38.0	39.3
16	59.2	24.7	26.4	32.1	41.5	34.6	39.0
17	57.6	16.0	20.3	28.9	39.8	34.6	38.2
18	56.2	4.0	19.8	24.6	35.6	30.1	37.8
19	50.5	3.4	19.8	21.3	34.5	27.4	30.2
20	47.0	0.0	0.0	0.0	18.2	12.8	21.0

TABLE. 3.80 LIST OF MAXIMUM DAILY PRECIPITATION
IMPERATRIZ

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	110.0	56.4	110.0	94.4	99.0	86.0	97.7
2	99.0	53.2	86.0	71.0	81.4	85.8	95.4
3	97.7	31.2	67.0	67.0	76.8	85.3	95.0
4	95.4	30.9	63.4	65.2	71.0	85.0	75.9
5	95.0	24.8	52.0	60.8	63.4	82.4	68.4
6	90.6	23.7	50.2	55.0	54.7	64.0	67.4
7	86.0	14.4	44.0	52.5	51.0	51.8	61.0
8	85.6	13.8	36.5	41.0	50.4	44.0	55.8
9	82.4	13.6	25.0	40.4	50.0	42.6	43.0
10	71.4	12.0	20.0	36.8	44.0	41.2	39.6
11	68.4	10.4	15.0	35.2	42.2	34.0	39.0
12	65.2	9.4	12.4	34.0	38.0	25.2	33.9
13	63.4	9.4	8.2	31.6	25.0	24.2	27.2

TABLE. 3.81 LIST OF MAXIMUM DAILY PRECIPITATION
JOSE DE FREITAS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	107.2	84.0	80.2	87.0	102.0	107.2	100.0
2	103.2	25.2	75.1	72.2	94.2	90.8	97.2
3	102.3	25.1	58.4	70.1	92.5	81.4	92.1
4	100.0	21.1	52.5	67.0	78.2	77.2	91.3
5	97.2	20.1	49.3	64.5	67.0	75.0	81.2
6	94.2	18.2	48.5	61.7	66.4	71.2	80.5
7	92.5	18.2	42.5	60.2	66.0	65.4	79.3
8	91.3	16.0	38.8	55.8	65.2	65.3	78.0
9	88.4	15.9	36.2	50.8	62.5	65.0	73.2
10	87.0	11.8	31.0	50.5	62.3	64.0	72.6
11	84.0	10.9	29.2	46.3	62.2	62.5	71.0
12	81.4	10.2	29.0	45.3	61.1	61.0	69.8
13	81.2	10.0	28.0	43.8	57.8	59.0	69.0
14	80.5	8.2	20.8	39.0	53.2	57.5	63.7
15	80.2	7.8	19.0	38.2	52.5	54.3	61.5
16	78.0	6.6	16.5	38.0	50.4	54.0	61.3
17	77.2	6.4	14.8	32.7	50.1	51.3	59.5
18	75.1	6.3	14.3	30.4	47.2	51.1	57.1
19	74.0	6.1	14.2	25.1	47.1	50.3	57.1
20	72.9	4.5	12.8	24.9	44.5	49.8	57.0
21	69.0	4.0	11.8	23.3	43.0	49.4	53.0
22	67.2	3.5	10.8	23.3	39.3	47.5	50.0
23	65.4	3.2	8.5	22.0	34.2	47.3	49.5
24	65.1	0.8	6.0	17.3	30.6	44.7	48.2
25	64.0	0.0	5.3	14.5	29.5	39.2	45.2
26	63.7	0.0	5.2	8.5	28.0	35.7	44.0
27	62.3	0.0	4.6	8.1	26.0	35.0	39.3
28	62.2	0.0	3.2	2.3	25.5	27.0	34.5
29	61.0	0.0	0.0	1.8	22.3	17.0	33.2
30	51.1	0.0	0.0	0.6	19.5	0.0	26.0

TABLE. 3.82 LIST OF MAXIMUM DAILY PRECIPITATION
LAMOUNIER

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	155.0	70.6	100.2	97.2	155.0	112.2	84.4
2	139.0	55.4	94.6	93.6	125.2	76.2	82.6
3	125.2	55.2	78.6	93.0	116.8	68.6	80.2
4	116.8	55.0	76.2	86.2	104.0	64.6	65.4
5	112.2	54.2	75.4	84.0	84.8	64.4	64.4
6	104.0	52.2	69.0	83.4	83.2	62.8	61.0
7	97.2	51.0	68.8	80.2	70.2	62.4	58.6
8	94.6	49.2	66.8	79.2	68.4	61.4	57.0
9	93.6	48.0	61.8	74.2	67.2	56.2	55.6
10	93.0	47.4	61.2	67.0	67.0	56.0	55.2
11	84.8	45.0	59.6	63.4	59.8	52.4	55.0
12	84.0	44.0	59.2	62.4	58.2	47.2	54.4
13	83.2	39.6	58.2	59.8	57.0	47.2	51.2
14	79.2	39.4	57.2	59.4	52.4	41.4	50.2
15	78.6	37.8	56.0	58.2	45.2	38.2	49.2
16	76.2	37.2	50.2	58.0	45.2	36.4	48.0
17	74.2	36.7	49.8	57.4	40.6	33.8	46.4
18	70.2	28.4	49.6	54.2	40.6	33.0	46.4
19	68.4	26.8	37.0	53.8	40.2	31.4	44.8
20	67.2	26.6	36.8	53.4	39.8	29.6	39.2
21	67.0	26.4	36.2	46.2	37.4	29.4	38.6
22	65.4	24.0	35.4	45.0	37.2	27.6	35.2
23	63.4	20.0	34.2	42.9	34.0	26.2	35.0
24	62.8	18.4	30.2	39.2	33.4	23.4	31.4
25	62.4	16.8	30.0	39.0	33.2	22.0	30.0
26	59.8	14.0	28.6	39.0	30.2	21.4	29.8
27	59.4	10.6	27.2	39.0	29.8	19.8	28.6
28	58.2	8.8	26.0	37.0	25.4	18.6	26.6
29	58.2	5.4	25.0	32.2	12.8	17.8	18.0
30	57.2	0.0	24.8	21.0	10.8	9.6	15.6

TABLE. 3.83 LIST OF MAXIMUM DAILY PRECIPITATION
PARANA-PALMA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	95.0	77.0	75.0	82.0	70.0	81.0	95.0
2	86.0	70.0	70.0	81.1	65.8	77.4	75.0
3	82.0	67.2	67.0	75.4	61.5	73.5	58.0
4	81.1	66.8	66.5	74.1	61.0	67.2	56.0
5	81.0	63.5	64.8	66.4	56.8	65.0	56.0
6	80.0	63.0	64.0	65.0	56.0	56.8	54.6
7	77.4	62.8	63.0	63.0	55.3	55.3	51.7
8	77.0	56.0	62.8	53.5	50.0	54.5	51.7
9	75.4	53.3	54.4	49.0	50.0	51.0	45.3
10	75.0	45.3	52.6	48.2	47.0	48.0	44.2
11	74.1	42.0	52.2	48.0	47.0	48.0	44.0
12	70.0	36.8	50.0	46.5	42.0	45.7	42.8
13	70.0	33.0	48.6	45.5	41.6	45.1	42.2
14	67.2	27.0	46.8	43.0	41.1	43.0	41.5
15	66.6	25.0	42.0	37.6	37.6	38.9	41.2
16	66.4	22.2	34.6	36.7	37.0	38.5	35.0
17	65.0	21.0	32.3	33.5	35.8	36.2	33.7
18	65.0	21.0	31.2	33.2	35.6	31.3	33.2
19	63.5	16.0	31.0	29.8	33.0	30.0	32.6
20	63.0	14.6	28.0	27.0	31.4	28.0	30.0
21	56.8	12.6	21.0	26.0	31.0	19.0	25.3
22	56.0	12.4	19.3	24.0	24.6	19.0	23.3
23	56.0	12.2	13.0	23.7	20.0	15.0	21.3
24	48.6	10.3	8.8	19.5	15.5	11.0	20.5
25	37.6	5.0	7.0	0.0	10.5	10.8	0.0

TABLE. 3.84 LIST OF MAXIMUM DAILY PRECIPITATION
PONTE GUATAPARA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	144.8	90.3	76.7	144.8	117.7	100.8	103.5
2	120.8	90.0	76.0	120.8	112.0	90.5	69.3
3	117.7	78.9	62.4	77.5	107.2	82.3	67.8
4	112.0	74.0	56.7	75.6	82.3	78.0	64.0
5	107.2	63.0	56.0	74.2	80.5	71.0	62.7
6	103.5	61.2	54.5	71.0	67.0	70.4	59.0
7	90.3	56.0	50.0	70.5	66.0	66.3	54.0
8	90.0	50.4	48.4	64.4	50.3	60.5	50.3
9	83.6	46.5	46.0	62.8	48.5	60.1	44.4
10	82.3	45.4	44.3	61.5	43.7	59.0	43.9
11	80.5	44.6	40.8	60.0	43.0	58.6	40.7
12	78.0	42.4	36.4	54.0	42.2	57.8	39.8
13	77.5	40.8	36.0	52.4	42.0	57.0	38.5
14	74.2	40.6	34.0	48.2	40.3	56.3	35.3
15	74.0	36.8	32.7	46.0	38.0	54.4	31.8
16	70.5	36.6	32.2	46.0	36.4	54.2	31.3
17	70.4	36.0	30.3	42.4	35.8	48.5	30.7
18	69.3	35.0	28.4	42.2	34.0	48.3	30.2
19	67.8	32.7	28.1	40.0	33.0	36.5	30.0
20	67.0	30.6	26.8	39.0	31.5	36.4	28.5
21	66.3	26.6	20.6	38.3	31.5	35.8	28.4
22	63.0	25.5	20.0	34.1	30.8	33.4	26.0
23	60.1	22.4	16.4	34.0	30.0	33.2	24.6
24	59.0	20.3	16.0	30.5	26.3	30.5	24.0
25	57.8	19.0	15.0	27.2	25.2	28.5	23.8
26	56.7	18.6	14.8	27.0	23.2	25.0	21.6
27	56.2	17.4	12.2	18.4	10.8	24.2	12.2
28	50.4	12.8	9.2	12.6	10.5	22.0	8.2
29	48.2	12.2	0.0	8.3	9.5	8.6	8.1
30	28.5	7.4	0.0	7.3	8.6	7.3	7.4

TABLE. 3.85 LIST OF MAXIMUM DAILY PRECIPITATION
SANTA JULIANA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	143.8	94.8	100.6	97.8	143.8	120.0	86.9
2	120.0	92.0	84.0	87.0	83.1	88.0	74.8
3	100.6	89.3	70.0	78.4	82.0	87.8	70.4
4	94.8	63.3	68.2	78.0	81.0	72.8	65.4
5	92.0	62.2	62.0	74.0	76.0	71.2	61.2
6	89.3	59.4	61.0	71.0	65.3	65.0	59.0
7	88.0	58.0	60.0	69.2	64.0	60.4	58.2
8	87.8	58.0	57.5	68.8	62.0	59.8	48.6
9	87.0	53.4	56.4	67.9	61.8	54.2	47.0
10	86.9	53.0	56.0	60.7	60.8	53.0	47.0
11	83.1	46.7	54.2	58.0	59.5	49.0	43.0
12	82.0	46.0	54.0	57.6	58.2	48.2	43.0
13	78.4	45.2	44.0	57.2	57.4	46.0	42.6
14	78.0	43.0	43.8	55.6	56.0	44.0	41.2
15	76.0	40.6	42.2	52.2	55.6	41.0	40.6
16	74.0	38.0	40.0	52.0	55.0	39.8	39.0
17	71.2	35.7	39.4	46.4	54.0	38.6	36.0
18	69.2	34.4	39.0	43.4	49.0	37.0	35.4
19	63.3	34.0	38.0	42.6	47.2	36.0	33.4
20	62.0	34.0	38.0	42.0	47.0	35.8	31.2
21	61.8	32.0	36.9	38.2	46.8	34.6	31.0
22	61.0	28.6	33.0	35.0	39.6	34.6	31.0
23	60.8	26.4	31.2	35.0	38.7	34.0	29.8
24	59.8	24.0	28.6	34.9	37.8	31.0	28.0
25	58.2	23.2	28.0	34.3	36.0	29.4	28.0
26	54.0	19.4	28.0	30.3	35.0	26.0	27.0
27	53.0	14.5	26.0	29.0	34.0	22.8	25.6
28	47.0	7.7	22.8	28.0	32.0	10.6	19.7
29	46.7	7.6	20.7	23.0	22.2	7.0	17.1
30	38.2	6.8	7.8	8.7	22.0	6.2	16.6

TABLE. 3.86 LIST OF MAXIMUM DAILY PRECIPITATION
TAGUATINGA-GO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	144.9	99.8	74.7	95.0	98.2	81.0	135.4
2	135.4	65.5	71.9	70.7	97.4	78.7	92.7
3	99.8	57.1	63.6	67.8	75.1	70.9	83.1
4	97.4	57.1	61.9	66.6	69.6	67.2	73.6
5	95.0	53.8	61.8	66.1	68.3	64.2	72.9
6	83.1	51.8	61.3	66.0	66.6	61.7	66.5
7	81.0	51.4	58.5	64.0	65.6	60.6	64.2
8	78.7	51.4	58.3	63.6	64.7	56.2	62.6
9	75.1	50.4	56.6	51.2	64.4	54.8	57.5
10	73.6	46.0	54.0	51.0	64.2	50.3	55.8
11	72.8	37.5	53.7	51.0	61.5	47.6	55.3
12	70.7	33.9	49.3	48.8	61.1	46.1	55.0
13	66.0	33.1	48.5	46.8	59.9	41.2	50.6
14	64.7	30.0	45.2	45.6	57.3	40.6	49.7
15	64.4	26.2	36.4	44.6	52.2	40.0	47.8
16	64.2	26.0	33.2	37.2	45.3	39.2	44.6
17	64.0	22.4	32.1	36.4	43.8	36.2	44.2
18	63.6	21.3	30.7	28.8	39.0	35.8	43.0
19	63.0	19.0	22.0	27.2	37.6	33.0	41.2
20	55.3	17.7	21.4	19.0	33.6	31.0	39.6
21	54.0	13.6	18.8	0.0	32.2	30.2	31.8
22	51.0	9.5	0.0	0.0	30.3	26.1	28.3
23	46.0	0.0	0.0	0.0	23.2	23.4	15.4

TABLE. 3.87 LIST OF MAXIMUM DAILY PRECIPITATION
TAGUA-CAMPO LARGO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	165.0	76.0	165.0	100.0	71.3	132.0	96.0
2	157.0	71.8	157.0	93.6	70.4	120.0	78.0
3	135.4	56.0	120.0	91.0	67.2	83.6	66.7
4	120.0	50.0	108.5	82.4	65.3	78.0	62.8
5	120.0	49.2	95.6	82.4	62.4	68.5	62.6
6	108.5	46.6	93.6	80.0	59.8	63.0	62.0
7	100.0	43.8	85.0	79.0	59.3	63.0	58.0
8	99.8	40.1	78.5	68.8	56.6	55.2	54.4
9	96.0	37.5	77.0	58.4	52.2	51.0	52.0
10	95.6	36.1	70.0	58.0	51.2	50.0	51.0
11	93.6	36.0	68.1	57.8	47.2	44.0	50.2
12	91.0	33.8	67.4	52.0	43.0	43.6	49.3
13	85.0	30.0	63.6	48.6	42.8	43.0	43.0
14	80.0	29.2	63.0	48.1	41.0	41.6	39.0
15	79.0	28.5	63.0	45.6	39.8	41.0	35.0
16	78.5	24.6	62.5	45.4	37.6	39.7	34.6
17	77.0	24.2	61.2	43.6	37.2	37.5	30.0
18	71.3	21.7	53.2	42.9	36.8	37.4	29.5
19	70.4	20.8	50.7	39.0	35.4	37.4	29.1
20	70.0	18.0	49.2	30.0	34.1	35.5	27.4
21	68.5	15.6	49.0	28.4	27.0	34.2	22.2
22	67.4	15.2	42.6	27.6	25.6	34.2	21.6
23	66.7	13.6	41.4	27.0	21.4	34.2	20.0
24	63.0	9.3	40.1	26.9	18.5	32.0	19.6
25	63.0	5.6	38.0	25.6	17.8	31.2	18.2
26	62.0	5.4	30.4	23.2	16.4	30.0	17.2
27	59.0	4.6	21.2	21.2	12.1	28.2	16.0
28	51.2	3.7	20.4	20.2	8.0	27.1	13.4
29	48.1	2.0	17.8	18.2	6.0	19.0	9.0
30	45.4	1.8	5.0	15.6	1.0	14.5	3.1

TABLE. 3.88 LIST OF MAXIMUM DAILY PRECIPITATION
TAPIRAI-JUSANTE

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	129.6	80.0	126.1	91.2	116.0	129.6	92.2
2	126.1	74.1	90.1	90.6	104.0	96.6	80.0
3	116.0	68.4	73.4	90.2	93.0	88.4	77.3
4	104.0	68.1	70.3	84.5	91.0	83.0	76.2
5	96.6	68.0	68.3	81.1	86.4	82.1	72.4
6	93.0	61.4	68.1	79.1	81.0	80.0	68.3
7	92.2	58.1	65.2	75.1	80.0	70.0	64.3
8	91.0	58.0	62.3	73.2	74.3	68.2	63.0
9	90.6	56.3	60.4	70.4	70.1	63.0	60.3
10	90.1	53.2	60.2	64.2	69.4	62.4	52.1
11	88.4	52.5	58.1	63.1	68.3	61.3	52.1
12	86.4	52.3	56.2	63.0	68.0	59.1	52.0
13	82.1	52.3	56.1	62.3	65.3	56.0	49.0
14	81.0	48.0	56.1	62.3	65.0	52.0	46.3
15	80.0	45.2	49.0	62.3	64.3	52.0	46.1
16	80.0	45.2	47.0	62.0	63.2	51.0	44.5
17	79.1	39.5	43.0	62.0	63.1	48.2	38.4
18	77.3	38.0	42.3	52.1	62.0	48.1	38.0
19	73.4	37.1	42.1	48.0	61.0	46.2	37.1
20	73.2	36.1	40.2	47.3	60.2	40.1	37.0
21	72.4	34.5	39.1	47.3	56.2	40.1	30.4
22	70.2	32.1	38.5	47.0	54.8	38.3	28.2
23	70.1	31.0	35.2	46.2	52.3	37.3	26.2
24	68.4	29.3	35.1	40.2	49.0	36.2	23.1
25	68.1	28.0	34.0	37.3	44.3	35.3	21.0
26	63.0	26.3	34.0	35.4	43.2	32.3	19.6
27	62.3	22.3	32.3	34.2	43.1	31.0	17.4
28	59.1	22.0	32.1	28.3	36.3	28.0	13.1
29	56.1	20.1	23.4	24.3	35.7	6.0	12.1
30	49.0	17.0	19.1	20.8	27.1	2.3	6.2

TABLE. 3.89 LIST OF MAXIMUM DAILY PRECIPITATION
TERESINA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	178.9	59.1	138.2	120.5	137.6	150.0	178.9
2	150.0	54.0	100.4	106.6	113.1	97.3	116.4
3	138.2	43.4	98.0	93.8	104.4	97.2	106.0
4	137.6	28.4	90.9	92.0	81.1	81.8	89.5
5	130.8	25.9	65.3	90.5	78.3	80.0	88.6
6	120.5	25.5	52.1	86.6	71.4	74.9	84.9
7	116.4	23.9	49.2	77.2	69.7	68.2	74.8
8	113.1	19.1	44.9	64.2	67.9	62.8	72.1
9	106.6	16.6	43.6	61.7	66.2	58.8	69.6
10	106.0	15.8	41.9	60.6	64.6	53.9	67.8
11	98.0	15.2	36.3	53.5	60.0	53.5	66.7
12	93.8	15.1	34.0	53.4	59.1	51.1	64.1
13	90.9	15.1	33.2	46.2	53.1	50.7	63.5
14	89.9	12.8	28.5	45.8	53.0	49.6	62.1
15	89.5	10.8	26.9	45.3	51.6	48.4	58.3
16	86.6	9.9	20.3	45.2	51.2	47.3	57.5
17	84.9	9.5	17.1	43.1	43.6	44.9	50.3
18	84.5	9.1	16.8	42.5	42.5	44.6	50.3
19	80.9	8.8	15.3	40.4	42.3	42.9	47.3
20	74.8	8.0	14.9	37.2	40.9	42.4	46.6
21	69.6	7.5	11.2	31.9	40.6	39.9	45.3
22	68.2	5.6	9.8	30.6	40.4	39.6	43.2
23	67.9	4.0	6.4	20.2	34.1	39.0	42.6
24	67.8	3.1	5.9	19.9	30.7	38.4	40.6
25	66.2	2.6	5.4	16.9	29.6	36.8	39.4
26	64.2	1.4	5.3	13.4	28.9	36.6	37.8
27	63.5	1.2	3.3	12.6	25.4	34.4	37.5
28	62.1	1.0	2.9	12.0	22.3	33.5	32.1
29	60.8	0.3	2.7	4.0	20.2	33.2	31.5
30	53.9	0.0	2.0	3.5	16.4	27.4	25.0

TABLE.3.90 LIST OF MAXIMUM DAILY PRECIPITATION
USINA DE VARGINHA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	108.7	108.7	72.3	83.2	90.0	96.2	67.2
2	96.2	87.4	68.0	74.0	68.4	93.0	63.3
3	93.0	78.8	56.1	68.3	65.3	88.5	59.8
4	90.0	78.3	54.3	66.4	65.2	72.3	58.0
5	88.5	72.4	53.0	65.3	63.0	66.8	57.8
6	87.4	60.2	50.6	65.2	58.3	62.3	53.2
7	78.8	55.9	49.8	63.2	56.8	62.3	48.3
8	78.3	50.3	48.3	60.0	55.0	57.0	48.2
9	74.0	39.3	48.0	55.3	48.6	55.3	47.3
10	73.2	38.8	44.3	54.8	47.0	46.2	44.3
11	72.4	36.3	44.1	48.0	46.3	46.0	40.0
12	72.3	34.6	42.5	46.2	45.0	44.1	39.0
13	72.3	33.4	38.4	46.0	44.8	42.3	38.3
14	72.2	30.0	38.3	43.7	44.8	41.6	36.3
15	66.8	28.4	38.2	39.4	44.7	41.0	33.0
16	62.3	28.3	36.0	37.0	43.5	36.4	32.3
17	59.8	28.0	34.4	36.2	43.4	36.3	30.0
18	58.3	27.9	34.0	34.3	43.4	36.0	30.0
19	58.0	26.3	32.4	33.6	42.3	33.4	30.0
20	57.0	26.0	30.2	32.4	41.5	32.6	28.8
21	55.9	25.6	29.0	32.4	40.0	32.0	27.4
22	50.6	23.4	27.3	32.3	38.3	30.0	27.3
23	48.3	21.3	26.2	28.3	33.3	27.6	26.3
24	48.0	21.3	25.1	25.6	33.2	26.0	25.6
25	47.3	19.3	25.1	24.5	32.3	24.6	25.2
26	47.0	18.4	20.2	23.0	32.2	24.3	22.3
27	40.0	18.3	20.0	22.6	28.0	24.2	20.6
28	39.3	12.3	13.1	22.2	27.8	20.0	20.2
29	38.3	10.2	12.3	21.2	22.4	18.3	18.0
30	36.2	8.2	8.0	20.0	18.2	8.2	12.0

TABLE.3.91 LIST OF MAXIMUM DAILY PRECIPITATION
AQUIDAUANA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	132.8	124.6	132.8	110.8	101.2	89.6	97.2
2	124.6	75.0	95.5	102.0	75.0	78.6	82.4
3	110.8	68.6	76.8	76.0	74.6	74.0	74.2
4	102.0	66.4	72.2	68.6	70.9	69.6	68.8
5	101.2	65.2	67.3	67.4	69.7	67.8	67.8
6	97.2	64.4	66.2	64.0	67.6	66.8	66.0
7	95.5	63.4	66.1	63.0	67.2	66.8	65.6
8	92.6	62.1	59.0	61.4	66.8	65.6	64.9
9	89.6	58.2	57.6	61.0	65.2	65.2	64.0
10	82.4	57.0	55.9	60.6	59.8	64.2	60.6
11	78.6	54.8	53.4	59.2	58.8	63.0	55.3
12	77.0	53.2	53.0	57.8	58.6	60.2	52.8
13	76.8	53.0	50.8	54.6	54.2	58.6	49.2
14	74.6	50.4	49.8	52.4	48.8	56.7	47.0
15	74.0	47.6	49.5	51.8	48.4	56.4	45.3
16	73.2	45.0	48.6	49.6	47.5	56.4	42.8
17	72.2	44.8	48.3	46.4	47.3	55.7	41.2
18	69.8	42.6	46.8	45.0	41.0	52.6	40.8
19	69.7	40.0	43.0	43.6	39.6	51.7	40.6
20	69.6	39.6	42.4	41.3	36.8	50.6	39.9
21	68.6	38.8	38.6	41.0	36.4	48.2	38.4
22	67.6	38.8	38.4	39.2	31.6	48.2	35.1
23	67.3	37.6	34.6	35.6	30.9	41.7	33.8
24	66.8	36.6	34.4	35.4	30.4	39.8	32.2
25	66.4	34.6	32.4	29.4	28.0	39.4	30.4
26	66.0	31.2	25.4	29.0	27.4	32.0	19.8
27	65.2	23.8	24.6	27.2	18.2	23.2	19.8
28	59.8	18.8	18.8	26.4	17.6	19.1	16.0
29	55.7	10.3	17.6	21.6	16.0	12.4	14.8
30	49.6	0.0	0.0	15.2	11.6	10.4	5.4

TABLE.3.92 LIST OF MAXIMUM DAILY PRECIPITATION
ARAXA-DNMET

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	146.0	96.0	146.0	93.4	142.2	81.4	118.2
2	121.8	94.0	120.6	83.8	104.2	80.7	89.7
3	120.6	93.0	68.7	76.3	92.0	79.6	80.0
4	118.2	80.0	65.3	76.2	89.6	78.0	68.0
5	104.2	78.0	63.0	75.0	85.8	69.0	67.0
6	96.0	65.2	61.0	75.0	83.4	66.0	66.4
7	94.0	62.1	61.0	71.1	82.7	60.4	65.2
8	93.0	54.0	60.1	71.0	81.0	59.6	64.8
9	92.0	54.0	57.0	68.0	74.8	56.3	61.0
10	89.7	53.1	54.0	66.2	70.4	55.1	54.0
11	82.7	51.6	53.0	65.8	68.5	54.2	52.4
12	81.4	50.1	49.4	64.2	64.0	52.9	51.0
13	81.0	47.8	47.0	63.0	62.0	52.2	50.4
14	81.0	47.6	45.7	61.0	60.2	50.4	49.4
15	80.0	41.5	45.0	58.2	55.4	50.0	45.4
16	80.0	40.8	45.0	55.0	52.5	49.5	45.0
17	79.6	40.6	43.5	53.6	51.8	48.8	43.2
18	76.3	38.1	43.2	50.4	49.6	46.4	40.0
19	75.0	35.2	42.0	50.1	49.0	40.9	38.4
20	75.0	34.0	42.0	48.4	44.5	39.8	38.4
21	71.0	32.4	42.0	47.3	43.4	35.8	38.2
22	66.2	31.1	41.0	45.7	41.0	35.6	37.0
23	65.2	30.6	36.7	45.7	39.1	35.0	35.4
24	64.0	29.8	36.6	38.0	38.6	34.0	32.4
25	63.0	28.0	34.9	37.6	37.2	32.2	30.8
26	62.0	23.4	34.4	37.4	35.0	30.0	28.0
27	61.0	21.2	31.0	34.1	30.4	25.8	22.0
28	61.0	17.8	30.6	33.5	24.0	24.0	14.8
29	56.2	14.0	26.6	22.0	23.8	20.0	4.2
30	50.4	10.6	8.1	16.0	18.8	15.4	2.2

TABLE.3.93 LIST OF MAXIMUM DAILY PRECIPITATION
BARRAS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	184.9	51.6	67.0	140.6	152.0	110.5	184.9
2	152.0	36.5	49.0	101.0	103.8	104.6	115.7
3	140.6	30.5	44.0	96.1	101.8	102.8	101.4
4	115.7	30.0	40.6	68.6	98.0	102.8	92.6
5	110.5	22.5	39.8	62.4	88.5	100.1	91.2
6	104.6	21.3	34.6	53.6	81.9	90.6	88.2
7	103.8	18.0	30.2	53.6	80.8	81.7	85.5
8	102.8	10.6	30.1	53.5	78.9	75.0	81.4
9	102.6	8.2	30.0	53.0	68.7	70.1	78.2
10	101.4	8.1	26.9	49.5	65.0	68.5	73.9
11	101.0	6.0	19.4	49.4	62.9	67.4	70.2
12	98.0	5.5	19.0	45.2	57.8	61.9	67.5
13	96.1	2.9	18.6	40.4	56.6	61.6	66.3
14	95.0	2.9	15.6	40.4	56.3	60.8	65.5
15	91.2	2.8	14.0	38.3	56.2	60.7	62.6
16	90.6	0.1	12.2	35.0	53.9	59.9	58.2
17	88.5	0.0	8.8	34.4	52.6	57.5	58.1
18	85.5	0.0	6.6	32.6	50.1	56.2	55.8
19	78.2	0.0	2.3	31.6	45.3	56.2	55.0
20	67.5	0.0	2.1	30.5	42.9	53.5	51.0
21	65.5	0.0	1.8	26.2	38.0	53.5	49.1
22	63.4	0.0	1.3	22.3	37.7	51.9	42.1
23	61.6	0.0	1.0	22.3	36.3	51.0	42.0
24	60.8	0.0	0.0	21.0	34.2	46.0	37.3
25	59.9	0.0	0.0	15.2	29.2	41.8	37.0
26	58.1	0.0	0.0	12.6	28.2	36.2	36.6
27	57.5	0.0	0.0	12.6	25.9	28.8	35.5
28	51.9	0.0	0.0	10.5	24.9	28.1	33.6
29	45.2	0.0	0.0	6.6	24.9	21.7	32.6
30	42.9	0.0	0.0	0.0	14.7	18.8	32.0

TABLE. 3.94 LIST OF MAXIMUM DAILY PRECIPITATION
CACERES

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	116.8	109.5	80.1	110.8	85.7	116.8	102.0
2	110.8	78.0	75.0	105.4	77.7	105.0	90.0
3	109.5	75.0	70.1	82.5	76.0	102.3	85.0
4	105.4	66.6	69.2	82.0	75.0	98.0	74.0
5	105.0	64.3	68.5	78.4	72.4	82.0	65.4
6	102.3	64.2	68.4	73.4	72.2	78.6	62.6
7	102.0	64.0	64.0	63.0	71.6	75.0	61.4
8	98.0	63.4	64.0	60.7	71.0	72.6	54.6
9	90.0	61.0	63.0	60.2	67.1	65.2	52.2
10	85.7	59.0	60.2	59.0	60.3	63.6	52.0
11	85.0	51.5	56.2	57.0	59.9	59.8	49.5
12	82.5	40.0	51.0	51.0	58.0	53.4	45.3
13	82.0	39.0	50.2	49.5	57.5	53.0	45.0
14	82.0	35.4	45.6	47.0	57.0	52.5	44.9
15	80.1	35.2	43.2	45.8	50.0	49.8	43.4
16	78.6	35.0	43.0	45.2	49.0	49.0	43.3
17	78.4	34.6	42.0	44.5	47.3	47.5	42.6
18	78.0	33.0	38.8	44.1	46.8	46.4	40.0
19	72.6	30.8	36.7	42.0	38.2	44.4	35.2
20	72.4	28.0	36.0	40.4	37.2	42.0	34.8
21	70.0	27.9	32.9	38.8	36.8	41.6	32.8
22	66.6	26.0	32.6	38.7	35.0	40.9	32.3
23	65.4	25.0	30.8	38.4	34.4	37.4	31.0
24	65.0	25.0	27.4	36.0	33.5	36.0	27.0
25	64.2	25.0	25.0	35.8	30.2	35.6	26.6
26	64.0	15.6	24.2	34.6	28.1	32.6	22.5
27	62.6	13.0	22.2	30.2	27.7	30.0	22.0
28	59.0	12.4	21.5	29.2	24.8	30.0	20.0
29	51.0	10.1	18.2	27.4	24.0	29.5	17.5
30	49.0	5.8	18.1	25.0	10.6	23.1	13.2

TABLE. 3.95 LIST OF MAXIMUM DAILY PRECIPITATION
CARMO DA MATA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	140.1	100.3	96.0	100.5	140.1	83.1	90.1
2	133.2	70.0	86.0	100.2	133.2	78.1	71.2
3	117.1	67.0	82.0	99.2	117.1	77.3	63.2
4	100.5	65.1	80.2	89.0	89.1	69.0	62.1
5	100.3	62.1	79.0	82.1	79.3	67.3	59.0
6	100.2	52.1	74.0	79.3	73.3	65.1	56.2
7	99.2	48.1	72.0	76.1	65.1	57.1	49.3
8	96.0	45.1	71.2	73.1	64.1	57.1	49.1
9	90.1	44.0	70.1	73.1	61.2	56.1	47.2
10	89.0	42.2	70.1	72.2	61.0	56.0	46.1
11	82.1	42.1	67.0	65.0	60.4	54.1	46.1
12	80.2	42.0	60.1	64.1	60.1	52.1	44.1
13	79.3	42.0	53.1	61.0	58.0	50.2	42.4
14	79.0	39.2	49.1	60.1	53.0	48.0	42.0
15	77.3	37.2	48.1	56.1	47.1	47.1	38.0
16	76.1	36.2	45.0	56.0	46.2	47.0	38.0
17	73.3	36.0	42.1	49.1	42.5	42.1	33.0
18	73.1	35.0	42.1	49.0	42.0	42.1	32.5
19	72.2	32.2	35.2	46.1	42.0	42.0	30.0
20	70.1	32.0	35.1	45.1	41.1	30.1	28.0
21	70.0	28.1	34.0	40.0	38.4	26.3	25.1
22	67.0	28.1	33.1	37.2	38.0	26.1	24.1
23	65.1	27.2	33.0	37.1	35.1	25.2	18.3
24	65.1	22.1	32.4	35.2	34.2	25.0	14.1
25	65.1	21.0	29.2	34.1	34.0	25.0	14.0
26	65.0	20.2	26.2	29.0	26.1	24.2	10.2
27	62.1	18.1	25.1	23.1	21.1	24.1	10.1
28	60.1	6.2	24.0	22.0	20.1	22.1	7.1
29	52.1	4.1	23.0	21.1	16.2	20.0	7.0
30	47.2	0.0	1.1	19.3	12.1	7.2	5.1

TABLE. 3.96 LIST OF MAXIMUM DAILY PRECIPITATION
DIAMANTINO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	206.0	123.2	139.2	102.7	155.4	114.4	140.2
2	155.4	100.0	119.4	96.0	105.3	75.4	104.0
3	140.2	82.2	105.0	91.4	100.4	74.6	96.2
4	139.2	78.4	99.6	88.2	93.2	71.2	89.4
5	123.2	71.2	92.3	82.7	80.4	70.2	88.5
6	119.4	68.0	85.4	75.7	76.6	70.1	80.2
7	105.3	61.8	85.0	74.0	75.0	69.2	78.0
8	105.0	58.0	84.8	73.9	74.6	68.4	76.6
9	101.0	57.6	81.8	67.0	74.2	64.2	72.6
10	100.4	56.6	81.0	65.8	70.8	61.4	66.6
11	100.0	56.6	77.5	64.7	66.6	58.2	66.4
12	99.6	54.8	73.2	63.2	64.0	57.4	61.4
13	95.0	48.6	72.7	63.0	62.6	56.2	56.4
14	93.2	44.6	68.5	59.0	60.2	55.0	56.2
15	92.3	43.1	66.3	54.7	60.0	53.6	55.2
16	91.4	41.2	63.0	53.6	56.2	50.0	52.4
17	85.4	38.2	61.2	51.0	52.0	48.2	51.0
18	85.0	38.0	60.6	50.0	51.0	48.0	50.0
19	82.2	36.6	59.3	48.2	50.6	46.6	49.2
20	81.8	34.4	54.8	45.0	47.2	45.0	47.4
21	81.0	34.2	52.4	44.0	47.0	42.0	43.0
22	80.2	34.1	51.2	43.0	45.0	40.8	39.1
23	78.4	31.7	50.0	43.0	44.0	38.8	38.4
24	77.5	30.4	43.6	42.9	41.1	36.8	36.2
25	74.6	28.1	38.0	38.8	39.2	35.0	35.8
26	74.0	27.4	36.8	38.8	37.3	34.2	35.1
27	70.8	27.0	30.4	34.3	37.2	32.0	33.3
28	69.2	22.2	29.1	30.8	28.4	29.0	33.2
29	67.2	17.8	21.8	22.0	27.8	26.4	30.6
30	64.2	13.6	20.4	19.6	27.2	20.6	28.6

TABLE. 3.97 LIST OF MAXIMUM DAILY PRECIPITATION
GUAICURUS

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	185.0	84.0	108.0	131.0	122.0	135.0	168.0
2	168.0	84.0	107.0	102.0	120.0	122.0	99.0
3	135.0	80.0	106.0	100.5	98.0	119.0	93.0
4	131.0	80.0	93.5	100.0	90.0	115.8	90.0
5	122.0	72.5	93.0	82.0	90.0	96.0	90.0
6	122.0	69.0	85.0	82.0	80.0	95.0	84.0
7	120.0	66.0	84.0	81.0	77.0	88.0	72.5
8	115.8	59.0	79.0	76.0	74.0	83.0	71.0
9	106.0	58.5	78.0	76.0	71.0	80.0	65.4
10	102.0	56.5	73.0	75.0	70.0	79.0	64.0
11	100.5	49.5	69.0	74.0	70.0	77.0	58.0
12	99.0	48.0	68.0	71.0	66.0	68.0	54.5
13	98.0	46.0	63.0	64.0	65.0	68.0	53.0
14	98.0	45.0	56.0	62.0	64.0	65.0	48.0
15	96.0	42.0	56.0	60.0	63.0	62.0	47.0
16	95.0	41.5	54.0	60.0	62.0	54.0	40.0
17	92.5	41.0	53.5	46.0	60.0	49.0	38.0
18	90.0	41.0	51.5	44.0	57.0	47.0	37.0
19	88.0	36.0	47.0	39.0	57.0	45.0	35.0
20	87.0	36.0	32.2	37.0	53.0	45.0	34.0
21	85.0	32.0	32.0	34.0	48.0	40.0	30.5
22	84.0	31.0	31.0	34.0	47.0	38.0	30.0
23	84.0	24.0	31.0	33.0	44.5	35.0	28.0
24	80.0	24.0	27.0	29.0	39.0	33.0	24.0
25	80.0	22.0	23.5	27.0	35.0	25.0	15.0
26	79.0	21.0	22.0	26.0	32.5	24.0	15.0
27	78.0	19.0	18.0	24.0	26.0	23.0	13.5
28	69.0	17.5	12.0	22.0	24.0	22.0	9.0
29	68.0	9.0	9.0	20.0	16.0	22.0	5.0
30	63.0	5.0	8.0	17.0	15.0	18.0	5.0

TABLE. 3.98 LIST OF MAXIMUM DAILY PRECIPITATION
INSTITUTO AGRONOMICO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	133.0	80.0	81.4	105.8	133.0	109.0	89.4
2	116.2	67.4	73.4	94.0	116.2	108.4	76.0
3	109.0	65.0	71.8	90.0	107.2	86.8	63.7
4	108.4	63.6	71.8	87.5	90.0	80.0	63.6
5	105.8	61.6	71.4	86.4	88.2	76.2	63.0
6	90.0	58.0	69.8	84.6	86.3	73.6	62.7
7	89.4	56.4	67.6	82.2	80.0	69.0	61.0
8	88.2	56.2	65.4	78.0	73.4	69.0	59.6
9	87.5	49.8	63.2	73.5	72.2	66.8	58.0
10	86.4	48.8	61.6	72.4	72.0	66.2	57.8
11	84.6	45.7	52.4	67.4	66.0	61.4	54.8
12	82.2	45.1	52.0	67.4	58.6	60.3	54.0
13	80.0	43.0	51.8	64.2	56.6	58.0	53.0
14	80.0	41.0	50.6	63.4	53.1	56.0	50.6
15	78.0	40.2	50.6	62.6	52.0	50.8	49.0
16	76.0	38.6	50.0	60.2	50.6	50.4	47.4
17	73.5	38.2	48.0	56.8	50.6	45.2	45.6
18	73.4	37.0	46.4	54.0	50.4	40.6	42.0
19	72.4	35.6	46.0	53.0	45.0	40.2	40.6
20	72.2	35.0	46.0	47.8	39.8	40.0	34.6
21	71.8	32.0	45.2	46.8	38.6	39.8	34.0
22	71.8	27.2	41.8	44.8	35.8	35.8	33.6
23	67.4	23.8	41.0	44.6	29.2	33.2	32.6
24	67.4	21.0	36.8	42.8	28.8	30.1	26.2
25	66.0	18.0	34.6	36.2	25.8	29.6	24.8
26	65.4	17.8	34.6	36.0	23.0	29.4	21.2
27	65.0	17.4	34.2	35.6	21.8	28.2	18.6
28	64.2	16.8	32.5	34.6	19.4	26.8	17.8
29	63.4	14.8	30.0	28.0	9.6	25.2	10.0
30	52.0	5.6	25.0	0.0	5.8	23.2	2.6

TABLE. 3.99 LIST OF MAXIMUM DAILY PRECIPITATION
ITUMBIARA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	117.2	117.2	74.8	95.0	97.6	90.0	84.6
2	97.6	79.0	70.6	90.0	86.6	79.0	77.6
3	95.0	63.4	68.4	71.6	78.2	75.2	68.0
4	90.0	56.0	60.3	71.0	75.0	73.0	54.4
5	86.6	54.0	59.0	66.2	64.0	70.0	50.2
6	79.0	49.8	58.0	60.0	63.5	69.2	49.0
7	79.0	36.4	49.2	57.3	62.4	68.2	48.4
8	78.2	34.6	46.6	54.2	62.0	50.2	45.2
9	77.6	31.2	39.8	49.4	60.4	46.0	45.0
10	75.2	29.6	34.8	46.0	60.0	44.4	39.2
11	74.8	28.2	34.1	37.6	52.8	43.1	34.6
12	73.0	26.8	27.6	37.0	50.1	39.8	28.0
13	71.0	25.0	25.0	29.6	47.8	38.8	23.2
14	68.8	20.0	24.0	28.0	40.8	29.4	22.6
15	64.0	20.0	20.0	26.2	33.0	29.1	10.9
16	62.4	19.6	17.6	19.6	13.8	19.0	7.2
17	46.0	14.4	13.4	15.2	8.0	6.3	5.0
18	45.0	10.0	7.5	7.0	6.6	4.4	4.9
19	7.5	5.2	6.0	5.6	4.0	3.8	2.2
20	3.0	1.6	1.5	1.8	1.6	2.4	1.6

TABLE.3./00 LIST OF MAXIMUM DAILY PRECIPITATION
LAGOA SANTA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	137.5	111.0	85.0	111.5	137.5	102.0	77.0
2	111.5	77.0	72.0	103.0	108.5	79.0	72.2
3	111.0	75.0	70.0	97.7	86.4	78.0	71.0
4	108.5	75.0	66.5	85.0	83.0	75.8	68.5
5	103.0	64.7	60.8	84.5	81.5	71.4	61.5
6	102.0	62.6	60.5	81.5	81.2	65.8	61.0
7	97.7	57.5	59.2	75.0	81.0	63.0	60.6
8	85.0	50.0	58.3	72.0	71.6	60.0	58.1
9	85.0	43.0	58.0	64.5	70.0	51.0	56.0
10	84.5	42.0	56.0	64.5	69.0	49.5	55.0
11	83.0	42.0	56.0	62.0	67.6	47.0	53.0
12	81.5	40.6	48.0	62.0	63.0	40.5	51.0
13	78.0	37.5	47.5	61.0	63.0	39.5	47.9
14	77.0	35.5	47.0	60.7	62.6	39.2	46.0
15	77.0	32.7	40.5	57.3	62.0	39.2	37.0
16	72.5	32.2	40.5	56.0	58.4	36.1	36.0
17	72.0	29.2	38.5	54.2	55.0	35.7	35.5
18	70.0	27.0	37.5	49.6	51.5	35.2	34.0
19	69.0	27.0	37.0	48.0	45.0	33.0	32.0
20	68.5	26.5	36.0	47.2	44.5	33.0	23.0
21	67.6	26.5	36.0	46.5	42.5	32.8	22.0
22	66.5	24.5	34.0	45.7	41.0	31.7	21.5
23	64.5	24.4	33.5	43.0	35.0	31.0	16.4
24	64.5	24.4	32.5	41.8	33.0	29.6	14.4
25	63.0	20.8	31.2	39.5	28.5	28.4	10.5
26	62.0	19.0	30.4	37.5	27.0	28.0	10.5
27	51.5	19.0	25.2	37.0	23.0	20.0	0.0
28	45.7	14.5	25.0	32.0	20.0	19.4	0.0
29	43.5	0.0	21.5	26.0	14.0	7.0	0.0

TABLE.3./0/ LIST OF MAXIMUM DAILY PRECIPITATION
COLONIA MERURI-STA C

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	112.4	105.0	95.5	99.5	112.4	99.1	93.0
2	109.0	79.8	83.5	89.0	109.0	90.3	84.1
3	105.0	70.2	83.1	80.6	98.6	74.1	81.0
4	99.5	65.2	78.7	80.0	86.4	67.5	74.5
5	99.1	65.0	75.4	78.2	85.2	67.1	69.2
6	93.0	64.6	67.2	66.5	83.0	63.6	69.0
7	90.3	53.8	66.3	64.0	65.8	63.0	66.5
8	89.0	51.7	65.3	63.8	63.0	62.2	57.5
9	86.4	51.5	59.2	62.6	59.7	62.0	56.8
10	85.2	49.6	58.8	59.3	59.0	61.5	56.4
11	83.1	49.5	58.1	55.4	56.0	58.4	54.5
12	82.5	49.0	57.6	54.7	54.2	57.6	54.0
13	80.0	48.5	54.6	53.8	53.8	56.6	53.1
14	78.2	48.2	47.4	53.8	52.0	56.6	51.0
15	75.4	47.6	45.5	53.3	50.0	52.9	48.8
16	74.5	44.2	43.0	52.9	49.7	51.7	48.2
17	70.2	43.5	43.0	49.2	49.6	51.6	48.0
18	69.0	42.7	43.0	48.4	49.0	50.6	44.6
19	67.1	42.5	42.3	46.0	48.6	49.8	43.0
20	66.5	38.6	42.0	45.4	47.0	48.5	39.0
21	65.3	37.5	41.4	44.0	46.2	48.3	38.0
22	63.8	31.3	39.8	43.2	45.2	47.0	37.5
23	62.6	30.8	37.7	41.6	44.7	45.9	34.8
24	59.7	24.6	37.2	40.6	38.0	45.6	32.5
25	59.2	24.3	36.3	37.1	36.9	42.0	28.4
26	59.0	19.1	35.5	35.5	36.6	40.7	28.0
27	58.1	16.8	32.8	31.8	34.0	40.0	23.7
28	54.7	15.3	29.2	30.6	33.6	35.1	23.6
29	52.0	13.2	28.7	30.5	31.3	30.8	20.8
30	51.7	4.6	26.2	26.9	13.5	26.6	18.0

TABLE. 3.102 LIST OF MAXIMUM DAILY PRECIPITATION
PORTO MURTINHO

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	125.0	88.0	112.0	125.0	86.5	61.5	107.0
2	112.0	67.0	63.0	110.0	81.5	61.0	70.0
3	110.0	57.0	61.5	66.5	72.0	56.0	52.5
4	107.0	37.0	58.5	61.0	45.0	42.0	50.0
5	88.0	29.0	44.0	49.0	38.0	36.5	49.0
6	86.5	27.5	38.0	47.0	32.0	32.5	41.0
7	64.0	25.5	33.5	38.5	27.0	27.0	31.0
8	63.0	20.0	27.5	35.0	25.0	24.5	24.0
9	63.0	16.0	18.0	31.0	24.5	20.0	22.5
10	61.5	16.0	12.0	24.0	24.0	4.5	18.5

TABLE. 3.103 LIST OF MAXIMUM DAILY PRECIPITATION
SANTA BARBARA

NO.	ANL	OCT	NOV	DEC	JAN	FEB	MAR
1	136.2	93.4	102.2	86.3	136.2	116.4	108.1
2	116.4	73.1	79.1	81.4	110.1	84.4	78.1
3	110.1	71.8	75.1	78.0	108.2	78.3	77.4
4	108.2	61.2	73.1	73.4	101.2	76.4	64.0
5	108.1	54.1	72.4	72.4	100.0	70.3	63.2
6	102.2	52.2	70.2	66.1	94.4	65.0	58.1
7	101.2	50.2	65.4	65.3	86.0	64.0	54.0
8	100.0	47.2	64.4	64.1	85.0	61.2	48.0
9	94.4	45.0	63.4	60.1	82.1	60.2	47.3
10	93.4	44.1	51.3	57.0	80.2	55.2	47.2
11	86.3	39.1	51.2	56.1	65.4	52.1	42.0
12	85.0	37.2	49.0	55.8	61.3	48.0	41.1
13	84.4	36.9	46.3	55.1	58.1	46.2	39.4
14	81.4	34.4	45.3	54.1	56.4	45.4	37.3
15	79.1	34.4	44.1	54.1	55.6	45.4	33.4
16	78.1	34.0	38.3	53.1	54.1	39.0	33.4
17	78.0	32.3	37.3	51.2	52.2	34.4	32.2
18	72.4	31.0	33.2	48.1	51.6	33.4	31.3
19	71.8	31.0	30.1	47.3	51.2	30.1	30.3
20	66.4	27.4	27.1	44.3	39.3	28.3	29.5
21	65.4	25.1	25.4	43.1	38.4	27.4	27.4
22	64.4	24.9	24.0	41.2	31.2	26.4	26.2
23	64.4	23.4	23.2	38.2	30.1	25.0	23.1
24	63.4	21.0	21.3	36.4	26.3	24.2	17.5
25	56.4	19.1	21.2	35.4	26.2	24.0	16.3
26	53.1	18.3	19.1	29.1	24.3	14.0	13.0
27	51.6	12.2	18.5	24.4	23.0	10.4	8.4
28	41.2	8.0	15.1	15.0	17.0	9.0	7.3
29	24.0	7.0	14.3	13.0	15.6	5.0	6.3
30	14.0	6.0	14.0	10.0	12.5	0.0	1.9

（資料４）
日降水量の再現期待値算定図
１０３地点
10、11、12、1、2、3月、全年

(Section 4)
RETURN PERIOD OF EXTREME DAILY PRECIPITATION
103 Stations
October~March, Whole period of years

図表類の表示順序

THE ORDER OF FIGURES AND TABLES

order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.	order	abbrevi.
1	ABADIA	22	ARACUA	42	AMARAN	60	CAETEX	79	FORMOS	91	AQUIDA
2	BARREI	23	BAMBUI	43	BARRII	61	CAREIA	80	IMPERA	92	ARAXAX
3	BATALH	24	CARPAR	44	CATALA	62	CELMUR	81	JOSFRE	93	BARRAS
4	BOQUEI	25	CURVEL	45	CONCEI	63	FAZESC	82	LAMOUN	94	CACERE
5	CAMPOM	26	FAZAJU	46	CORIVE	64	GOIANI	83	PARANA	95	CARMAT
6	CARMOX	27	FRUTAL	47	COTEGI	65	GOUVEA	84	POGUAT	96	DIAMAN
7	CAROLI	28	INHUMA	48	FORPII	66	IBIAMG	85	STAJUL	97	GUAICU
8	CUIABA	29	ITAMAR	49	GOIASX	67	IGUATA	86	TAGUAT	98	INAGRO
9	FAZPAL	30	JABOTI	50	JANUAR	68	ITAOBI	87	TAGUAX	99	ITUMBI
10	FORIOP	31	JEQUIT	51	MOCAMB	69	JAGUAR	88	TAPIRA	100	LAGSAN
11	GRAJAU	32	JUPIAX	52	MONCLA	70	JOSEME	89	TERESI	101	MERURI
12	LASSAN	33	LUSSAN	53	MONPAU	71	MATEUS	90	USIVAR	102	PORTOM
13	MANGAX	34	MENDAN	54	MOPILA	72	MTEALE			103	SANBAR
14	PEDROL	35	MINANO	55	SANGRA	73	NOVERA				
15	PORNOV	36	MTECAR	56	SAOMAN	74	PORMAN				
16	QUEIMA	37	PONTEX	57	SCHICO	75	PINOVA				
17	SAOGON	38	RIOPIR	58	SETLAG	76	SABARA				
18	SAOJOP	39	SANJAC	59	SITGRA	77	TAQUAR				
19	STAMAR	40	STAITA			78	USPETI				
20	TERROR	41	VESPAS								
21	UNIAOX										

(Abbreviated names of observing stations should refer to TABLE 3.1~5)
（短縮名は表3. 1～5を参照）

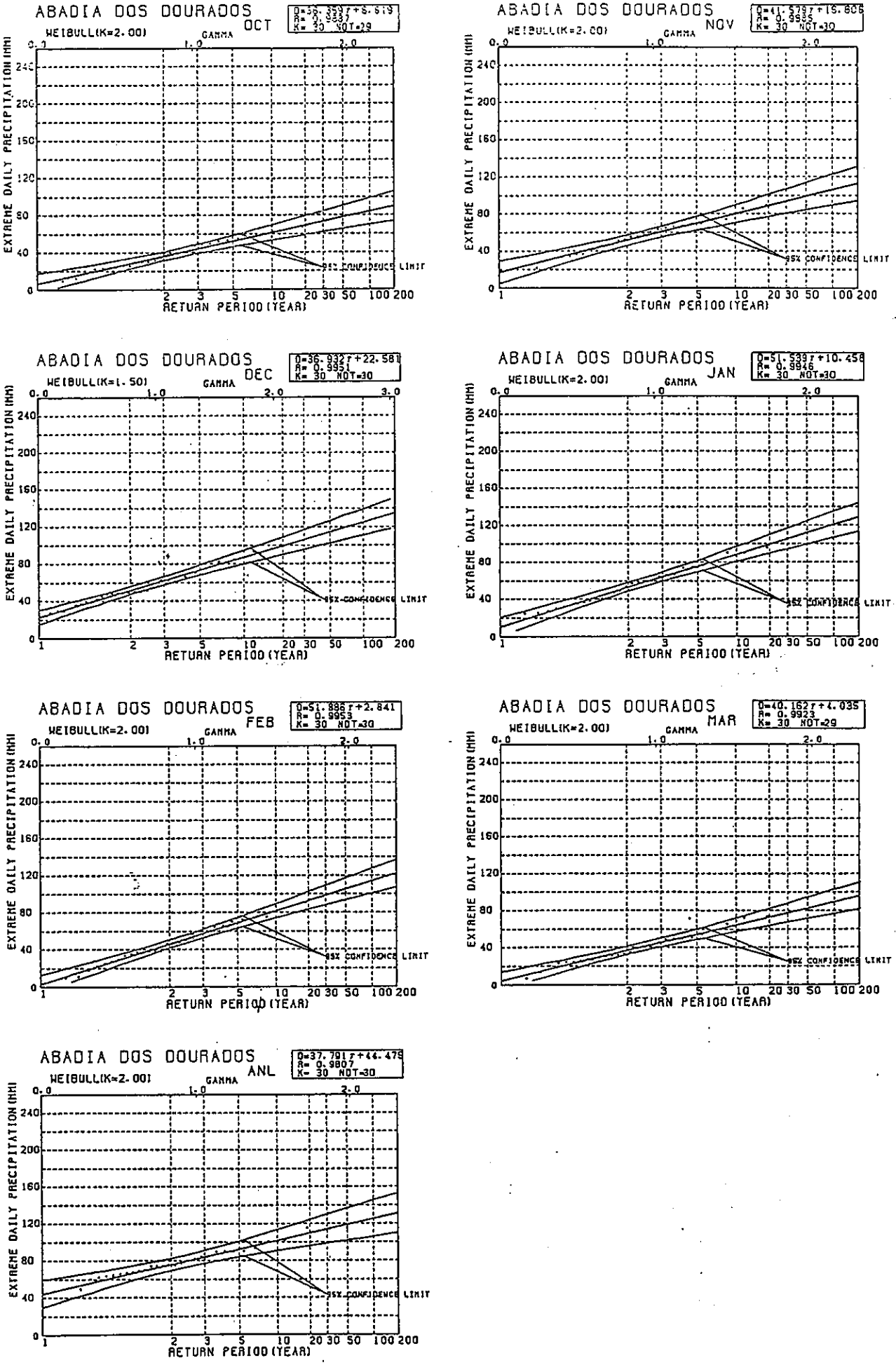


FIG.4.1 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

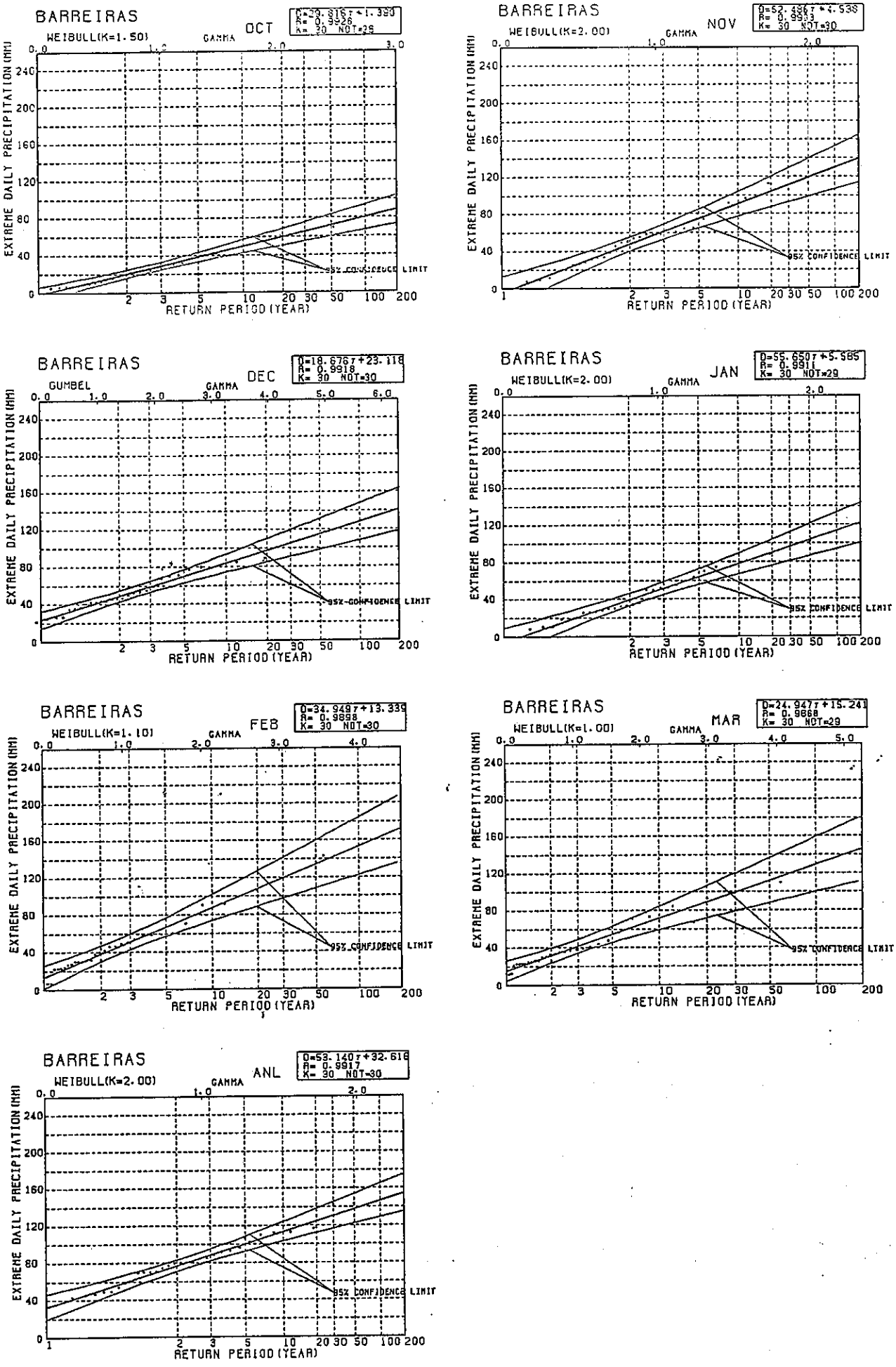


FIG.4 .2 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

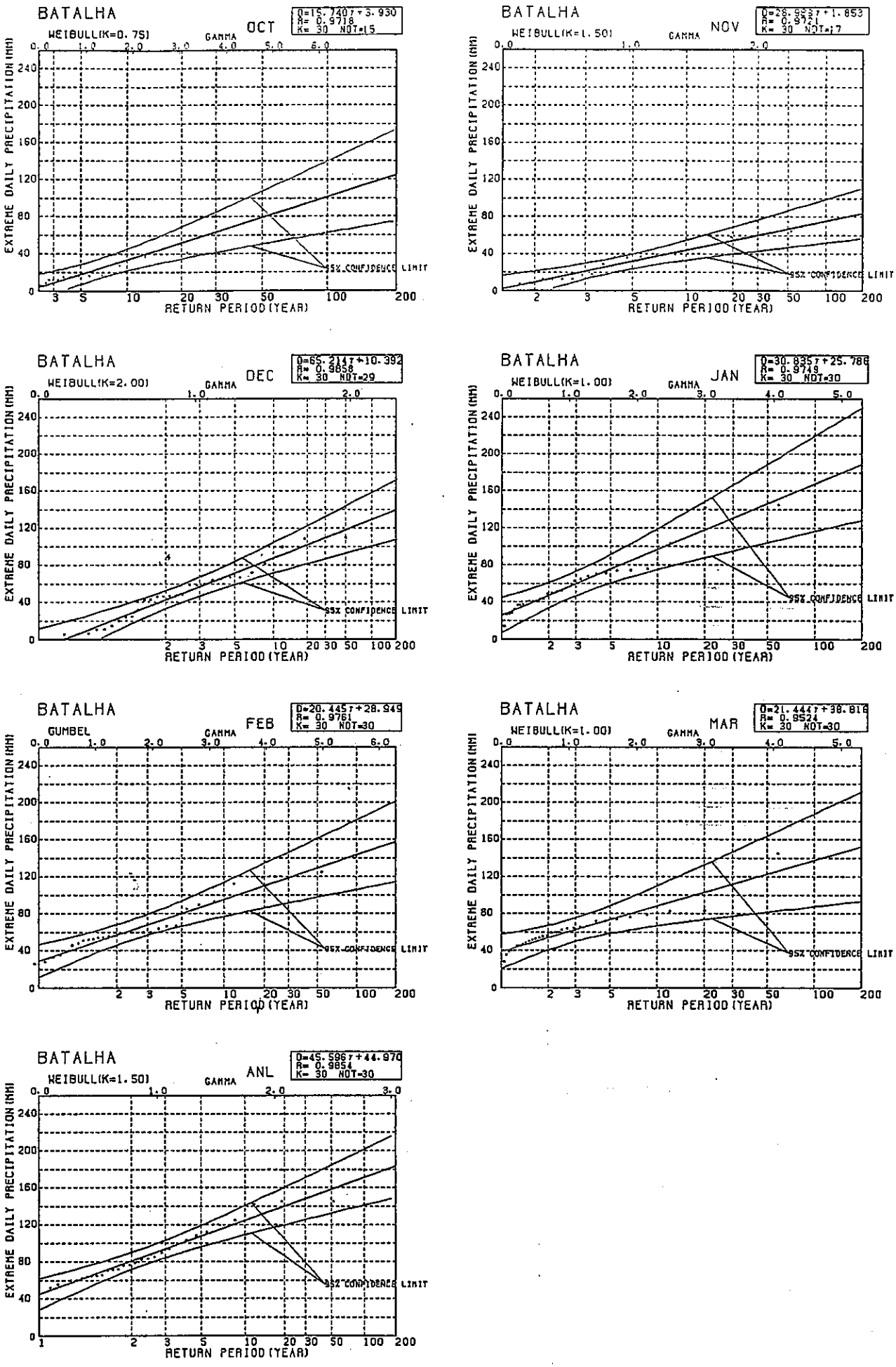
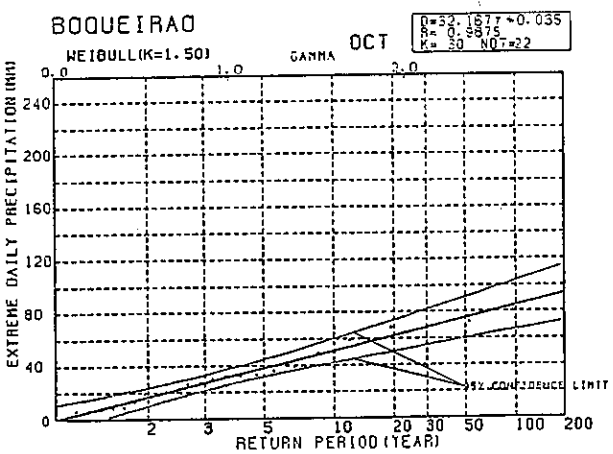
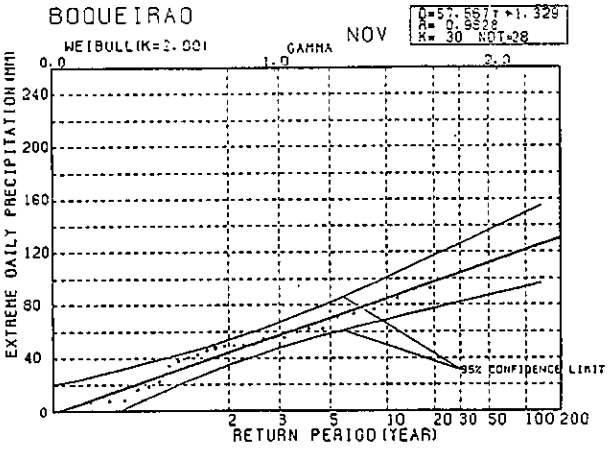
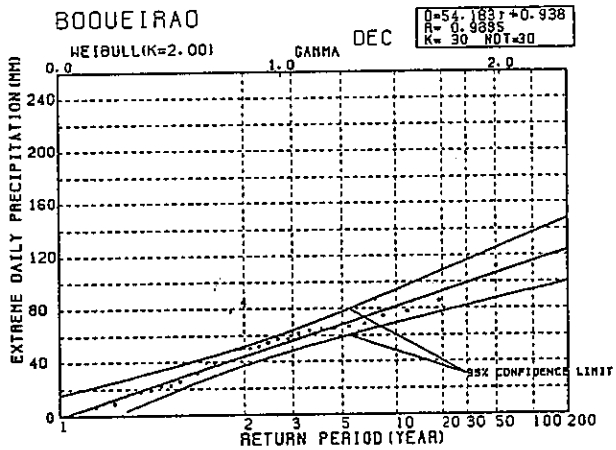
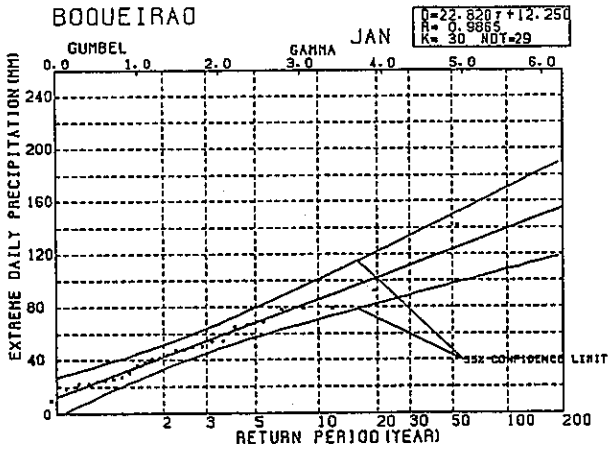


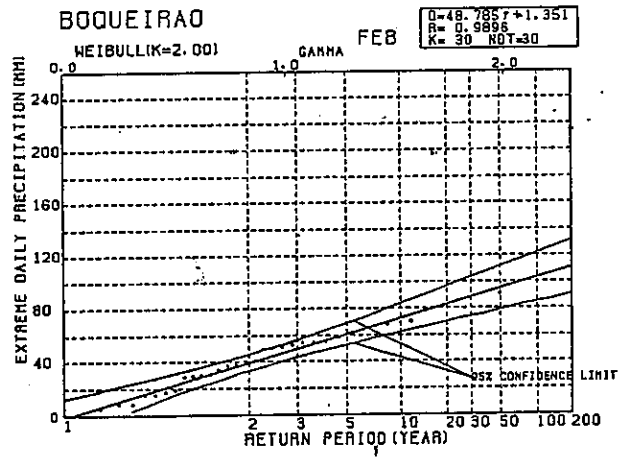
FIG. 4.3 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

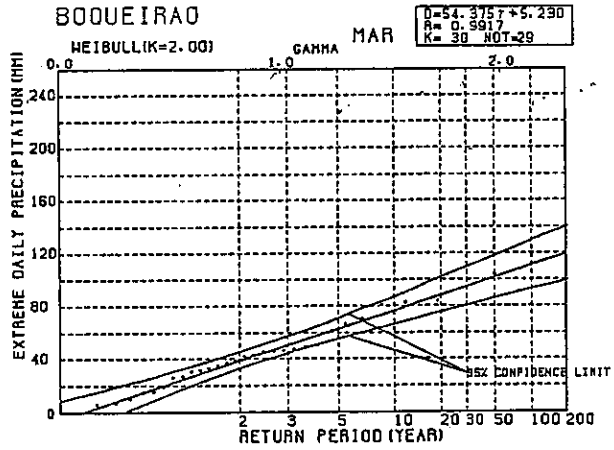












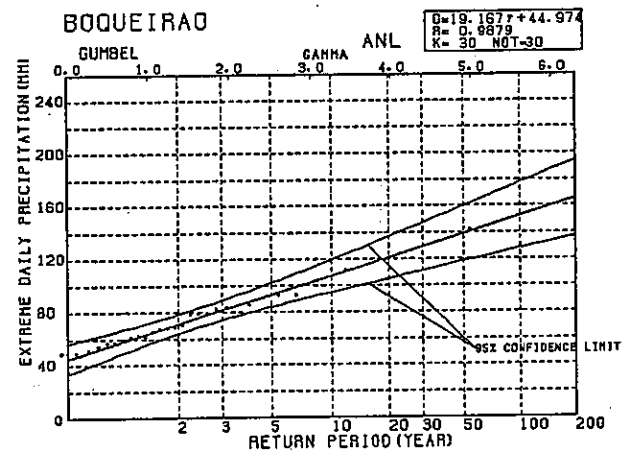


FIG. 4.4 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

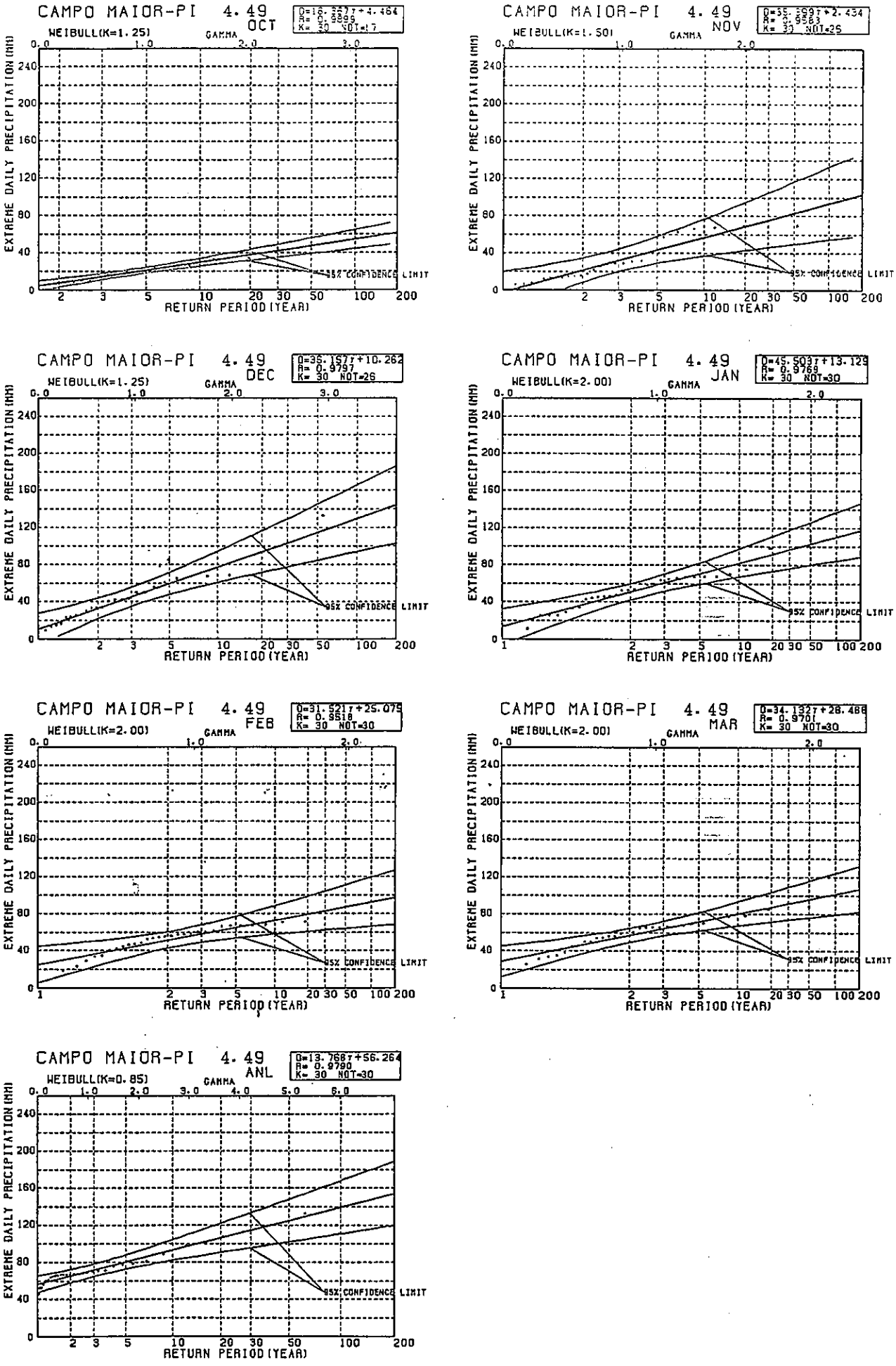


FIG. 4.5 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

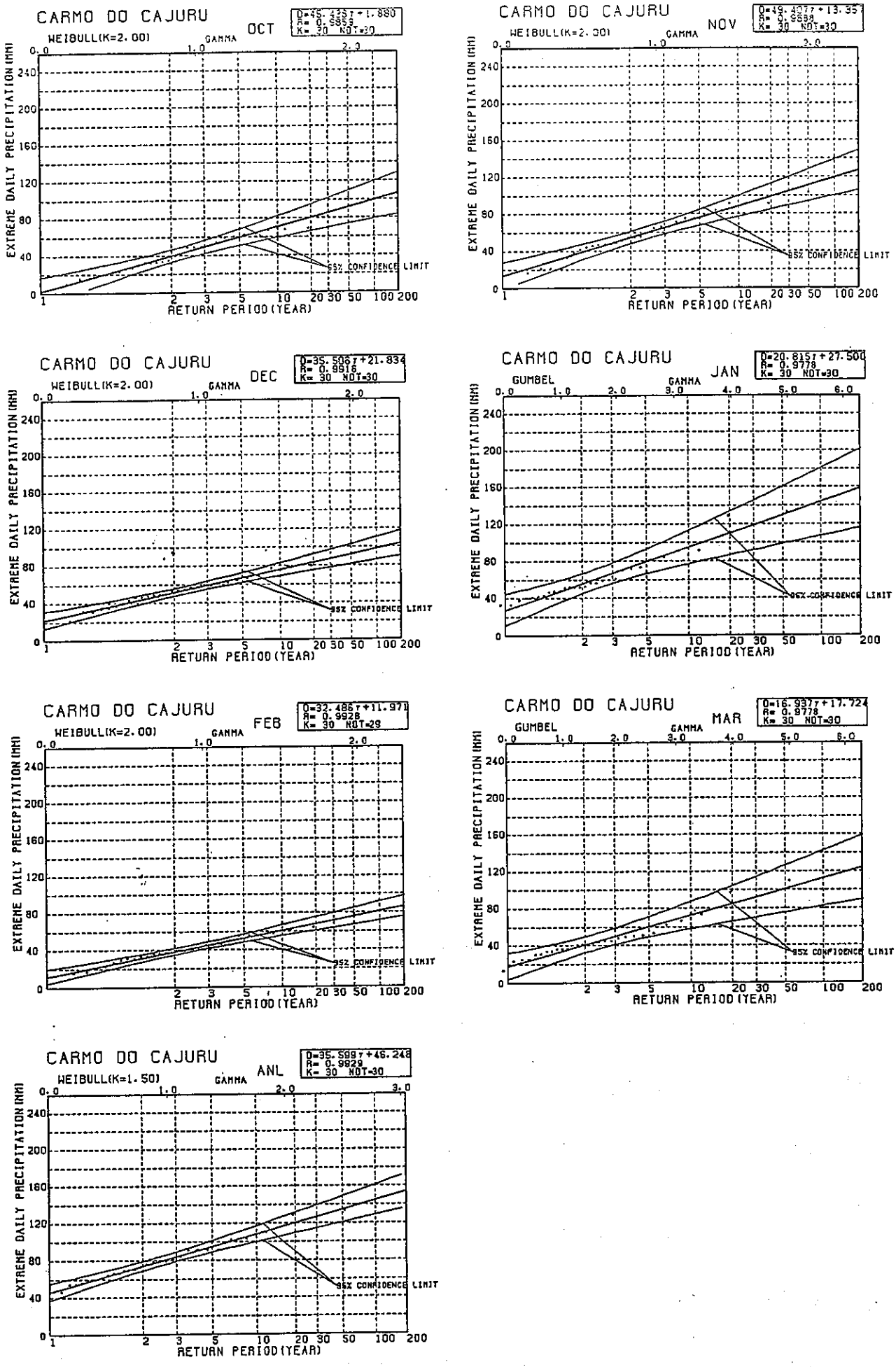
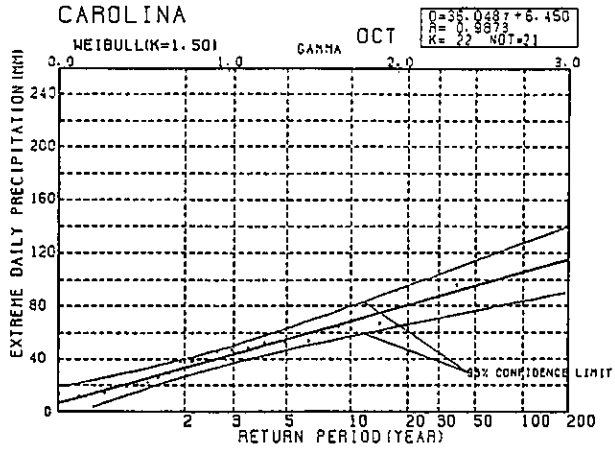
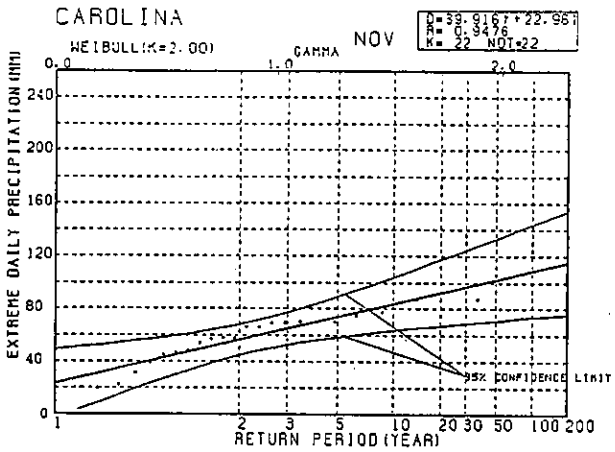
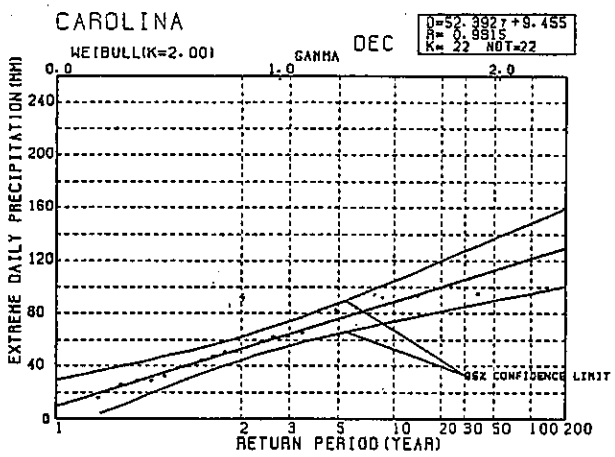
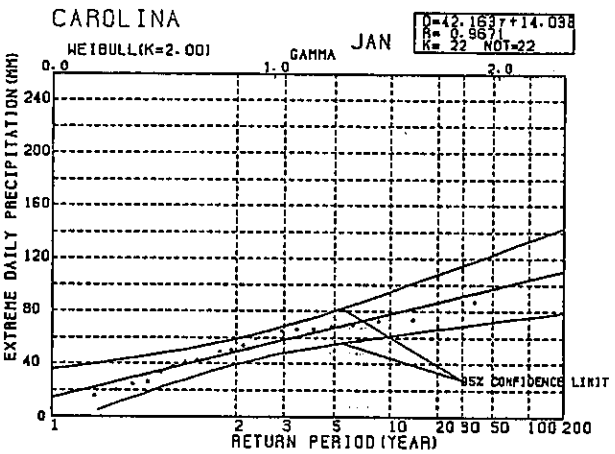


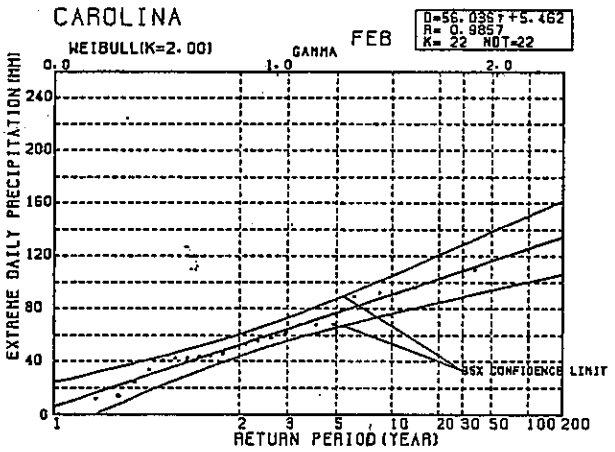
FIG. 4.6 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

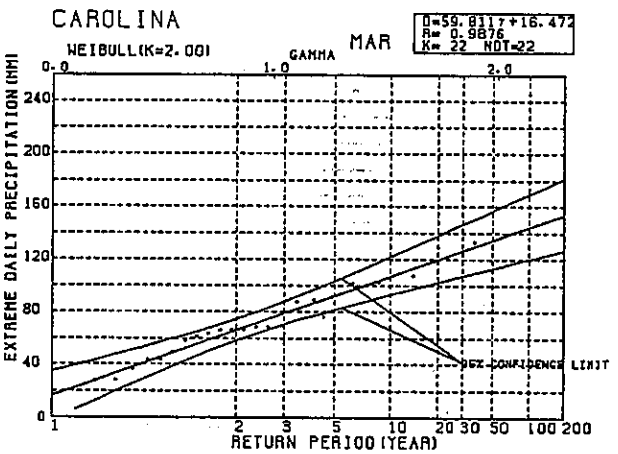












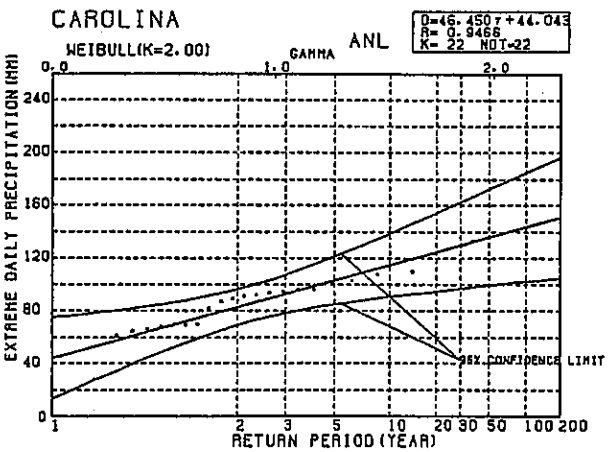


FIG. 4 · 7 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

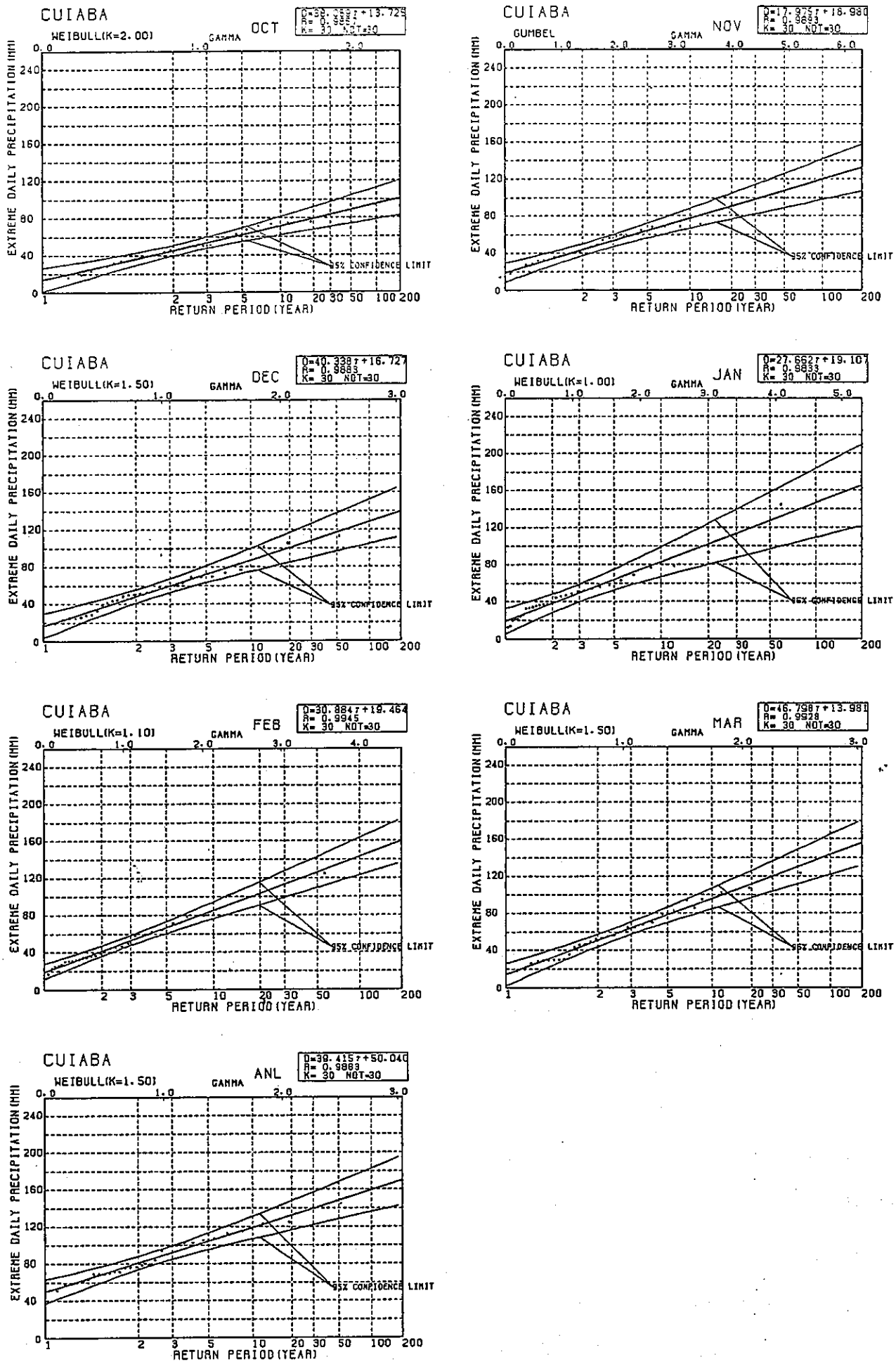


FIG. 4 . 8 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

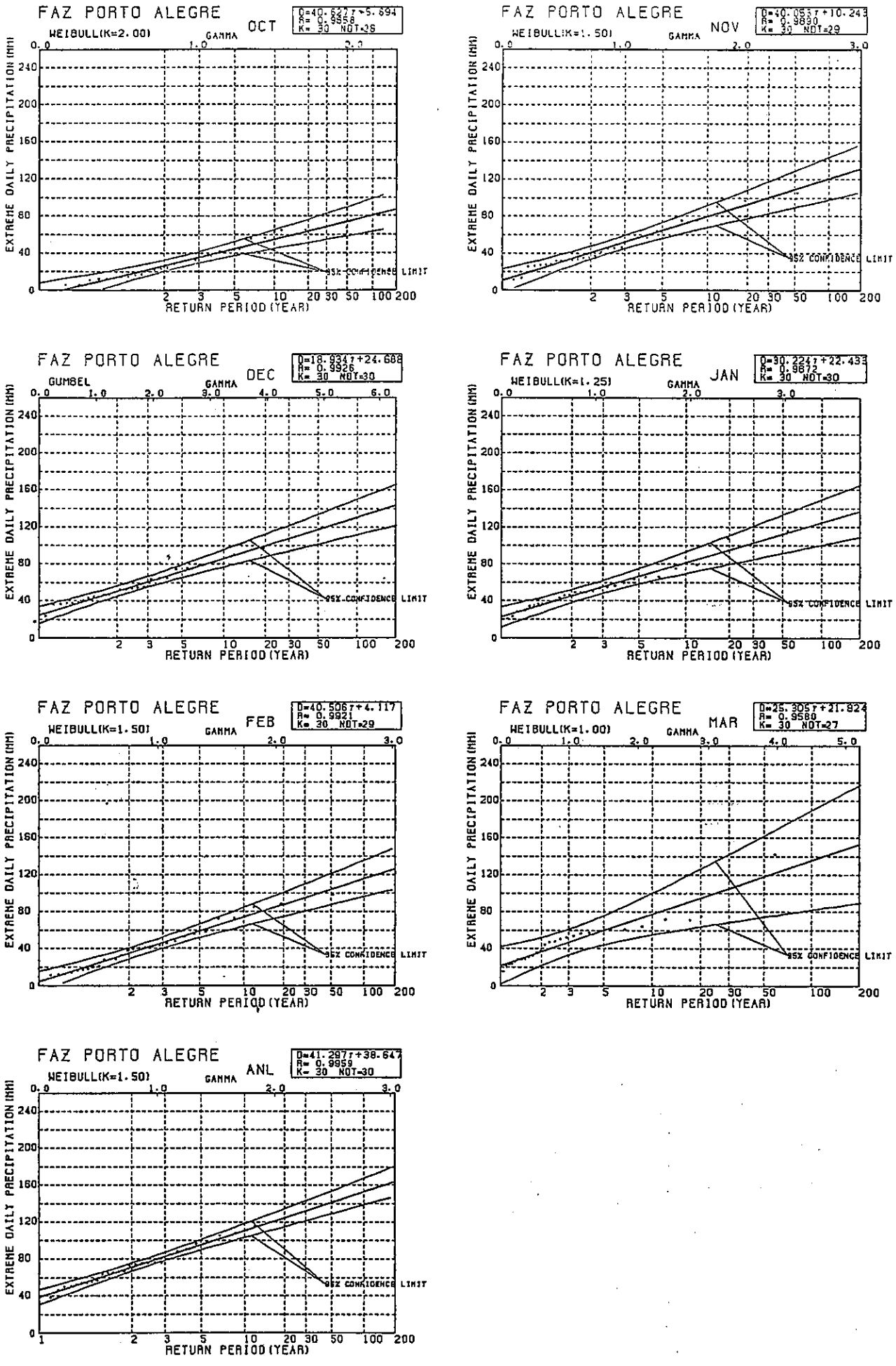
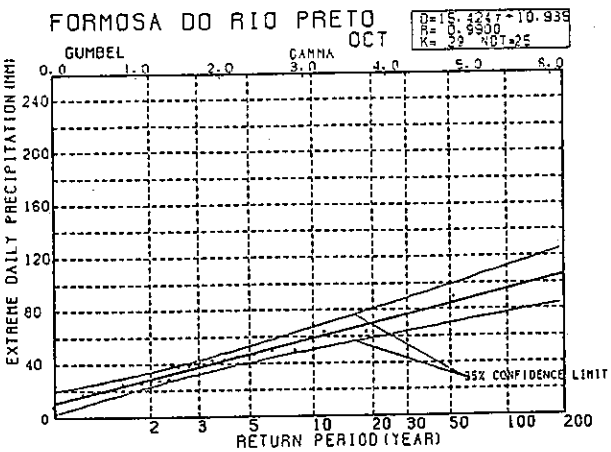
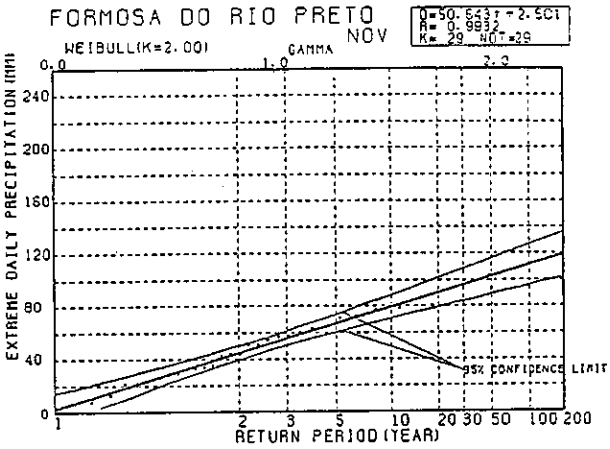
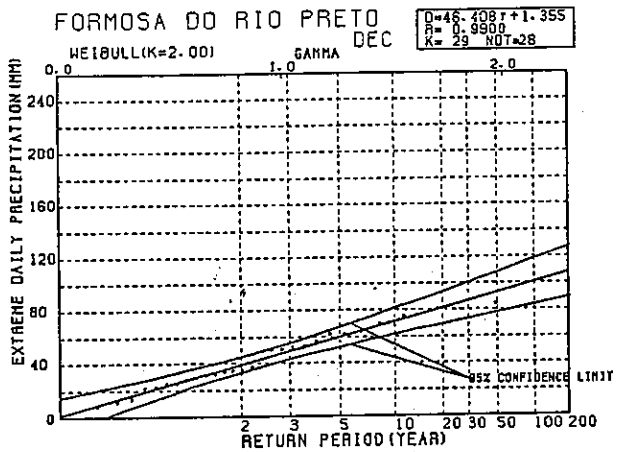
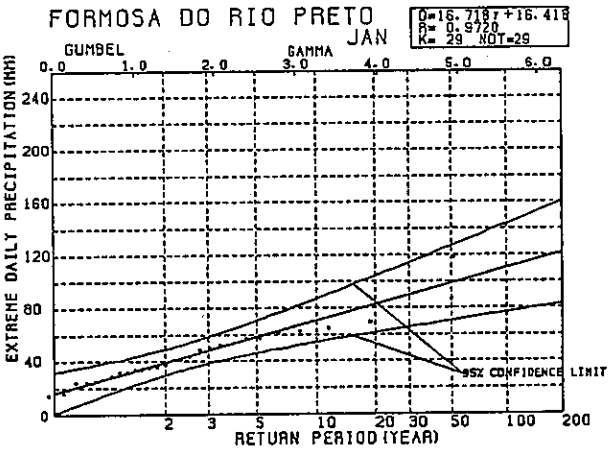


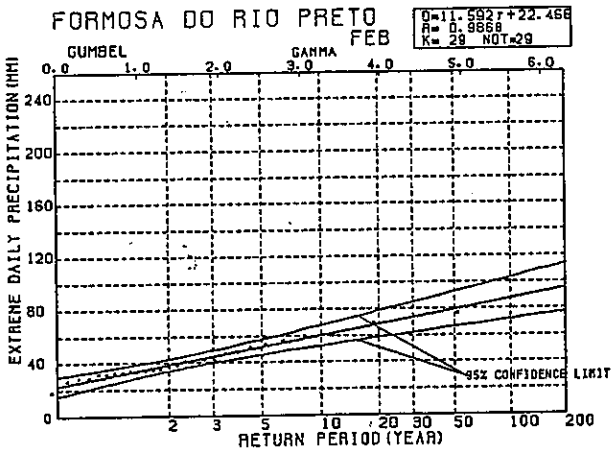
FIG. 4.9 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

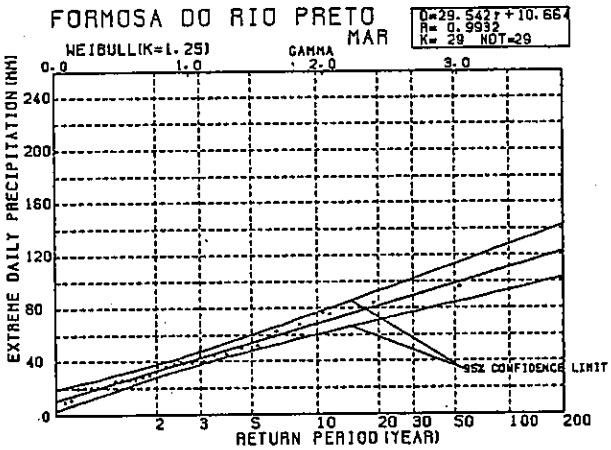












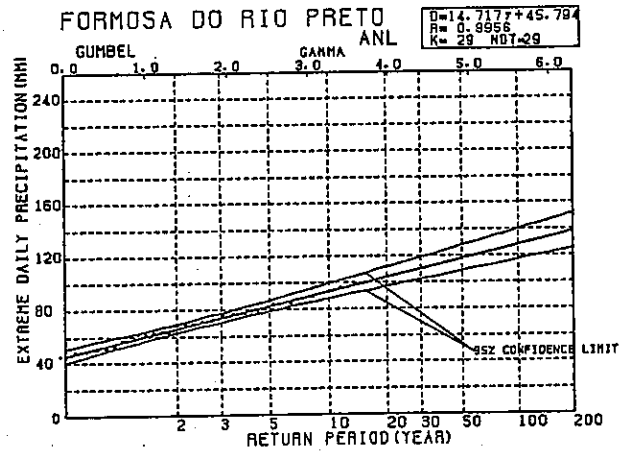
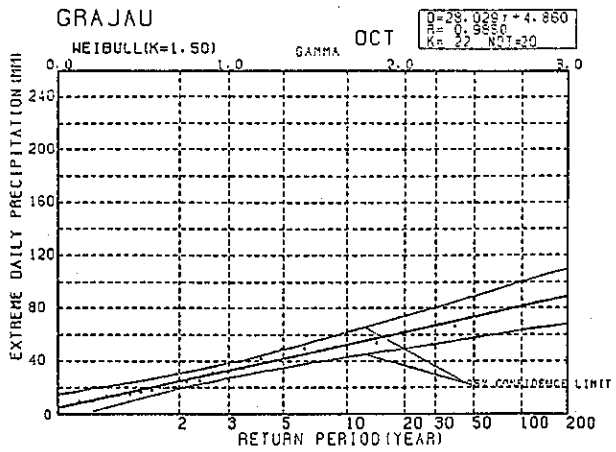
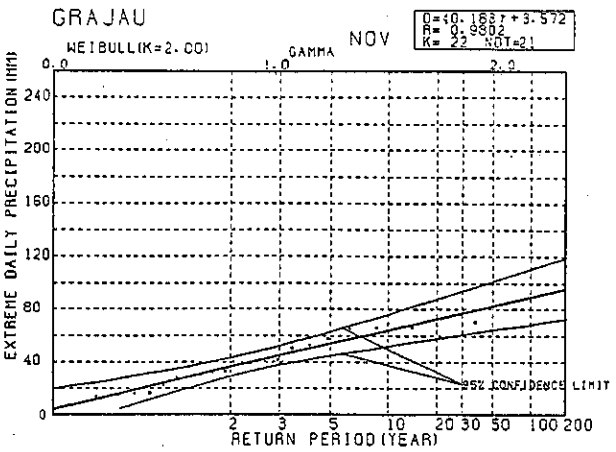
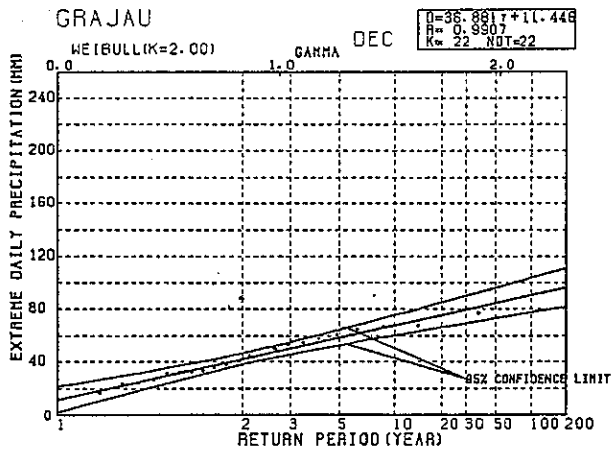
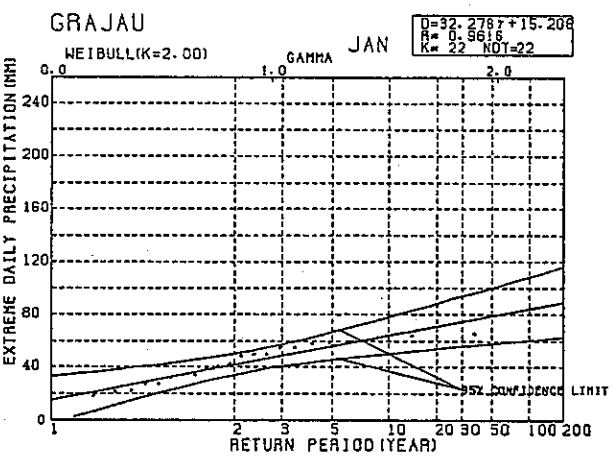


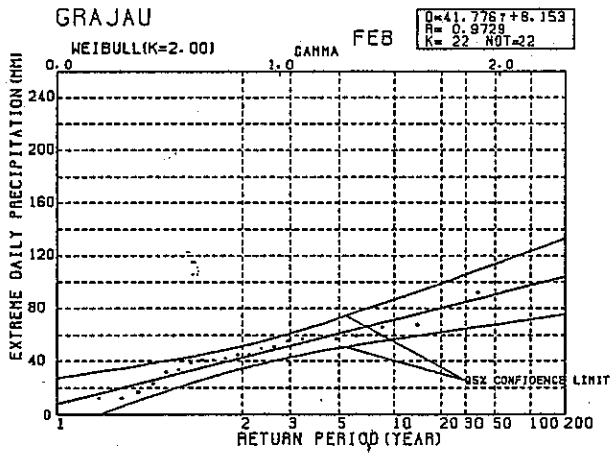
FIG. 4.10 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

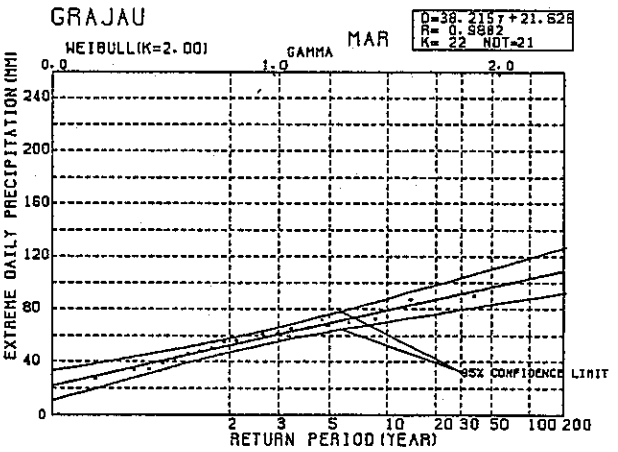












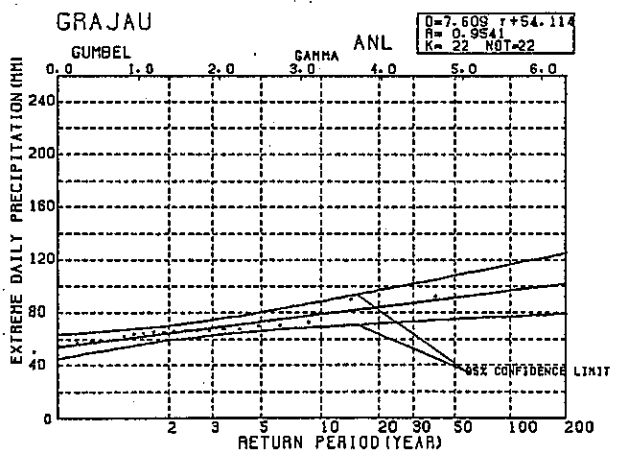
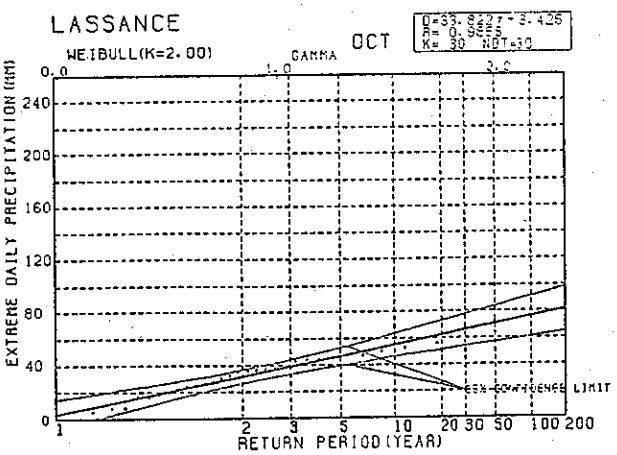
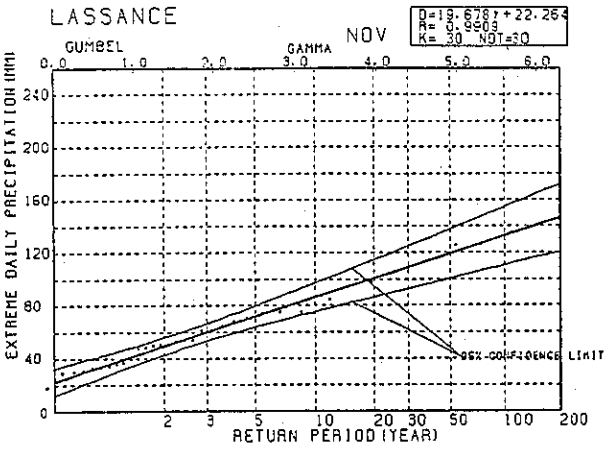
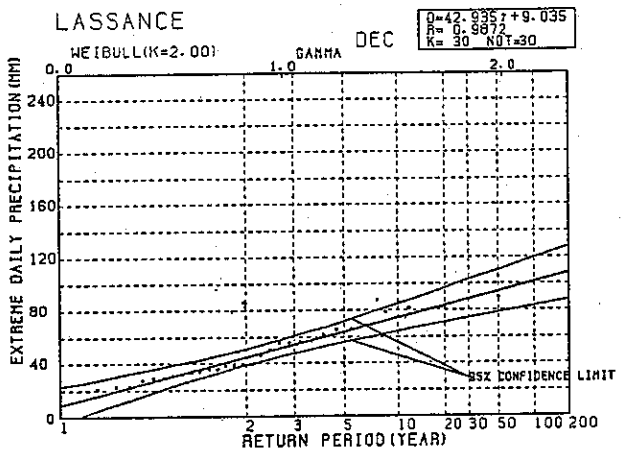
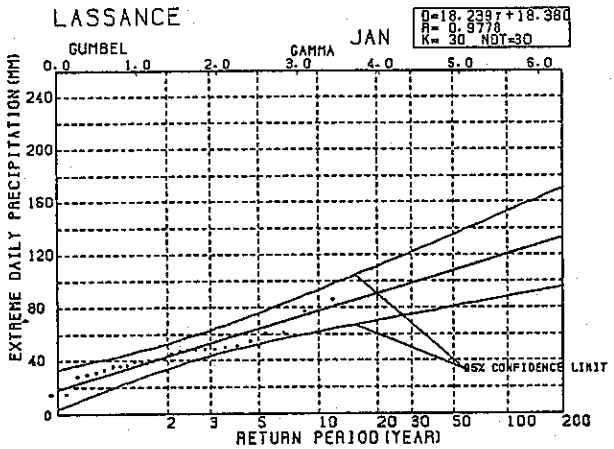


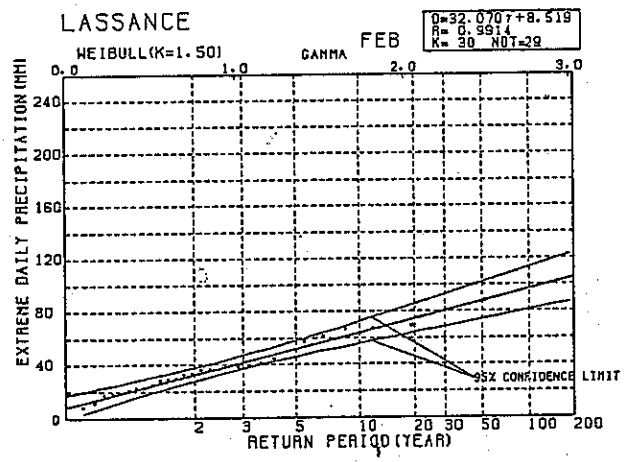
FIG. 4.11 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

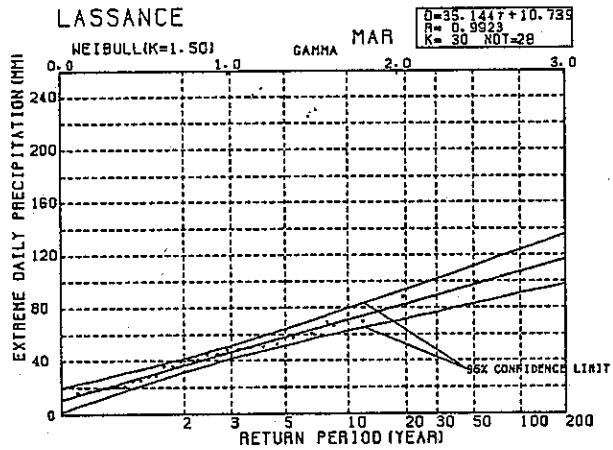












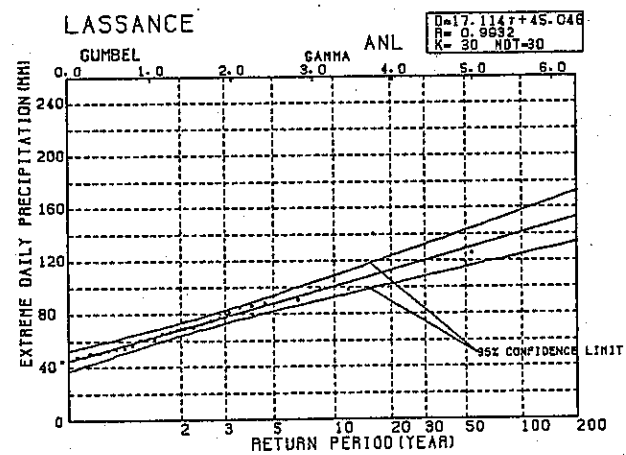


FIG. 4.12 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

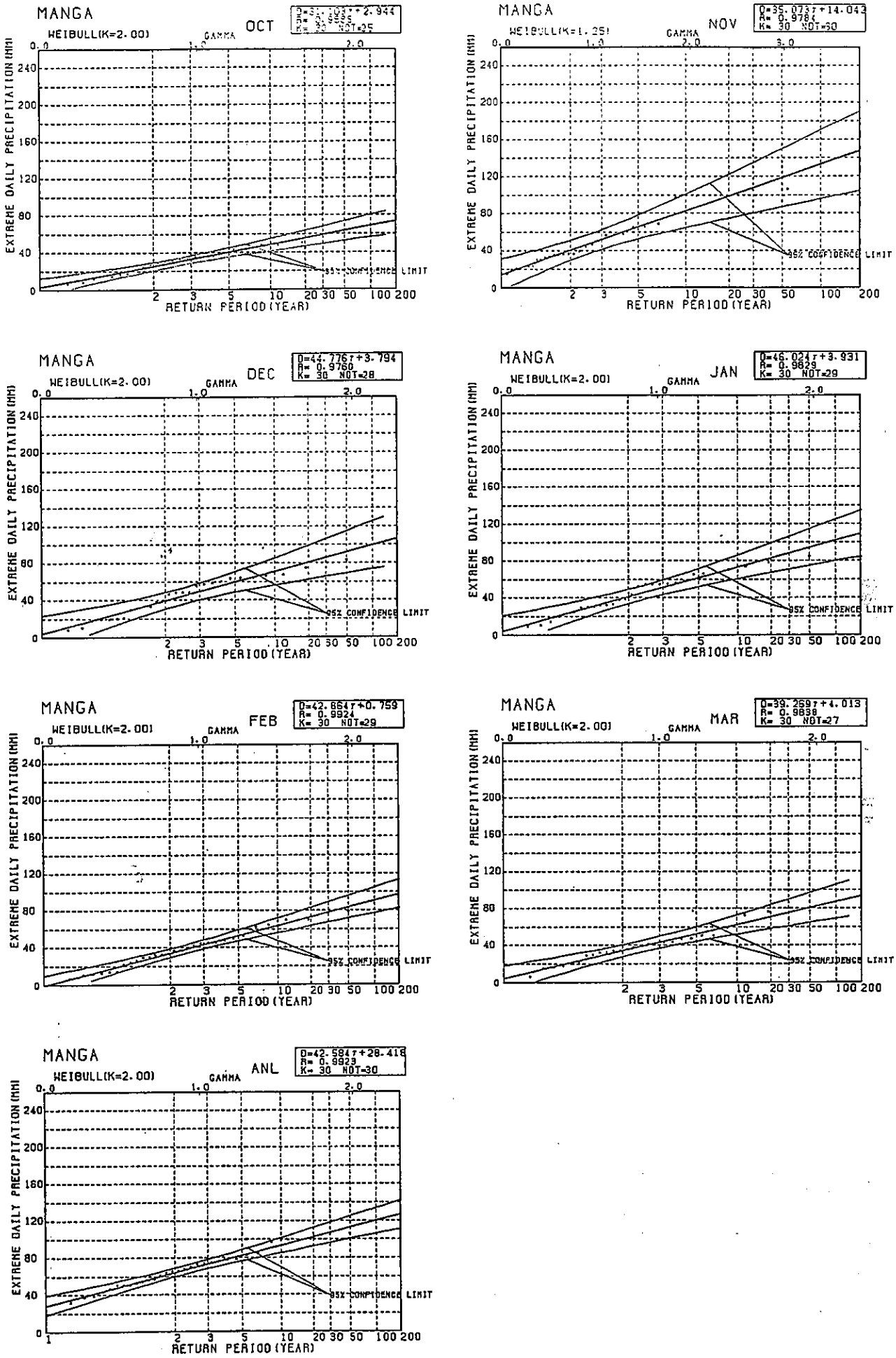
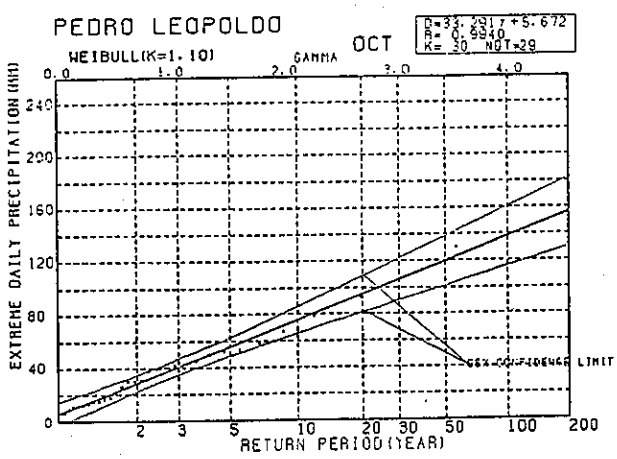
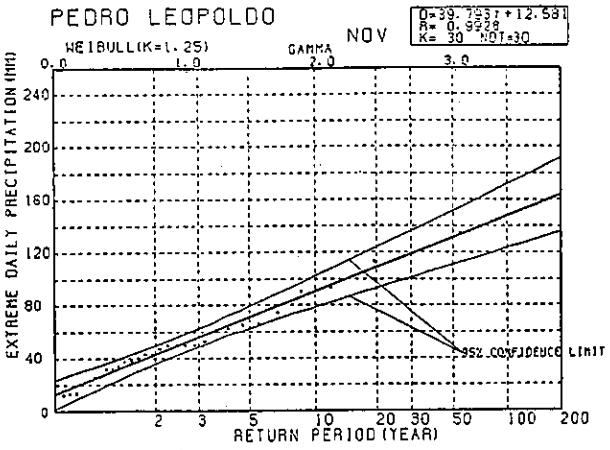
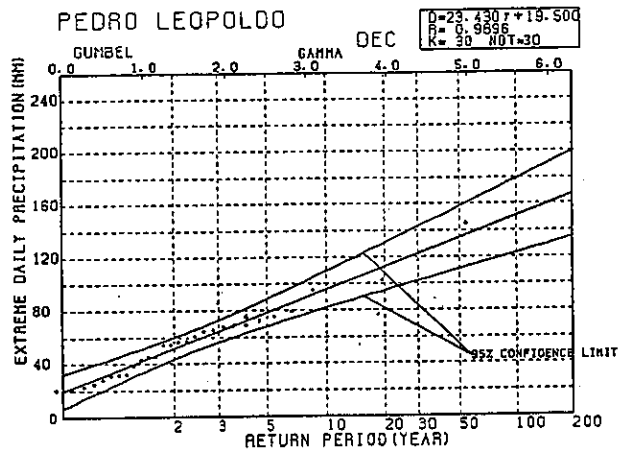
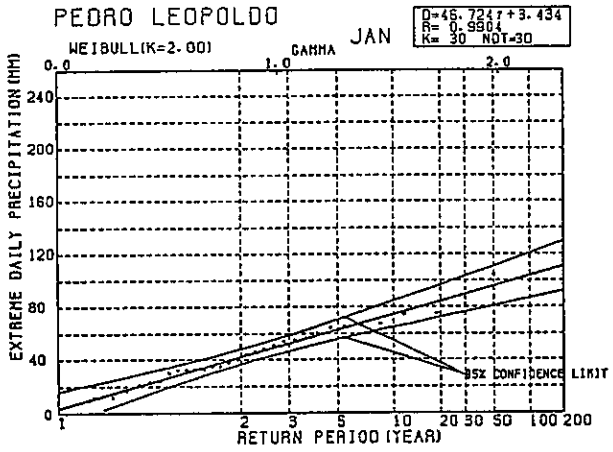


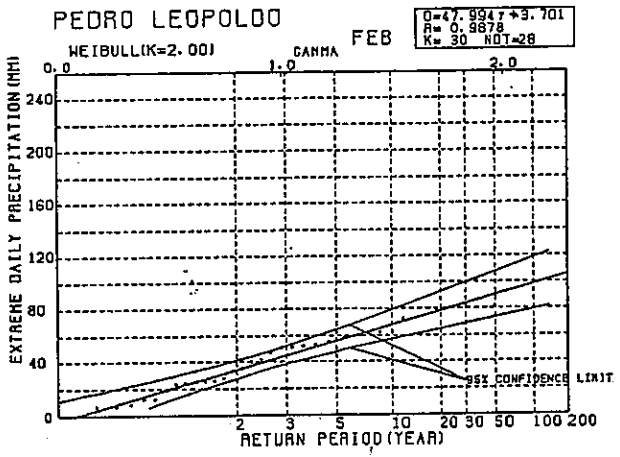
FIG. 4.13 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

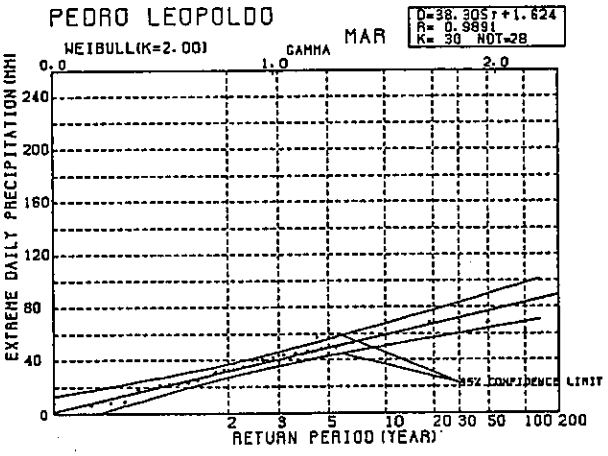












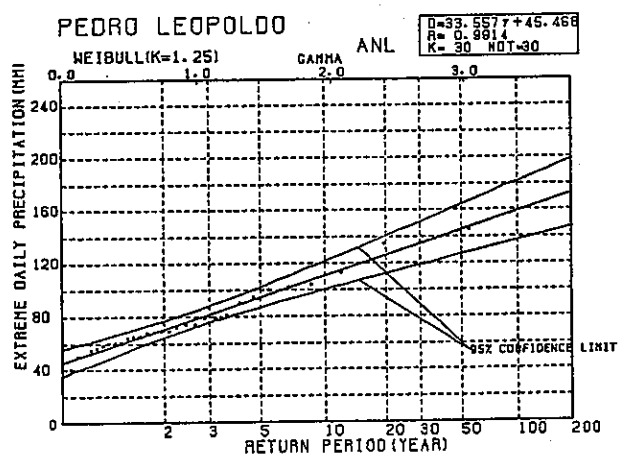
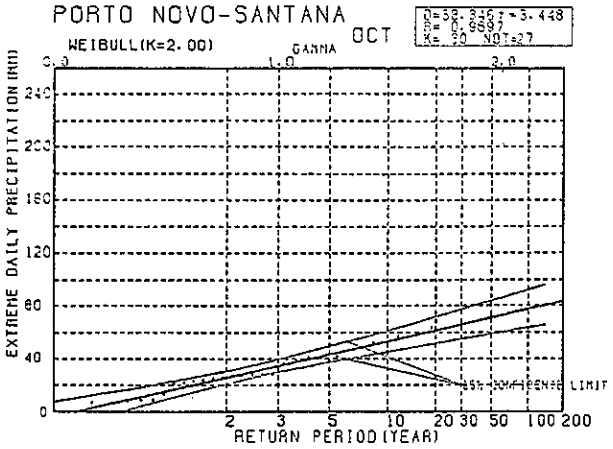
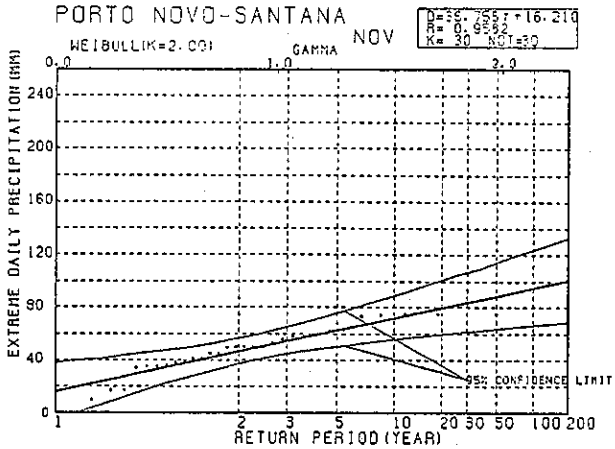
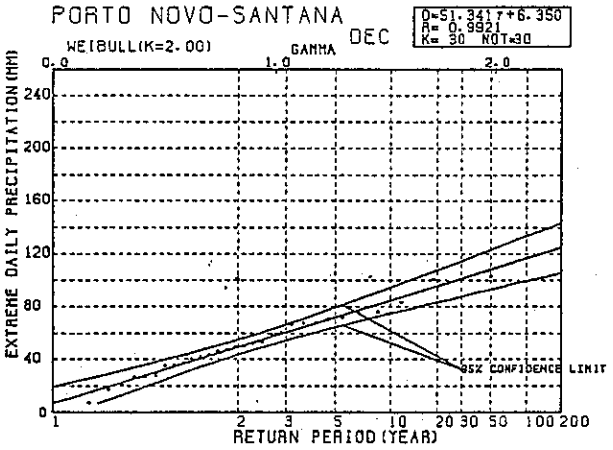
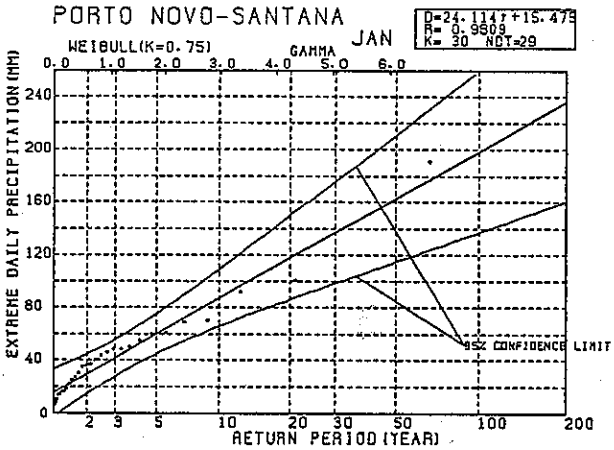


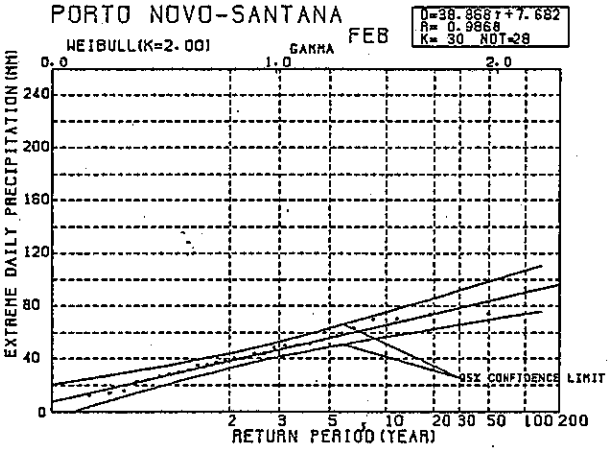
FIG. 4.14 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

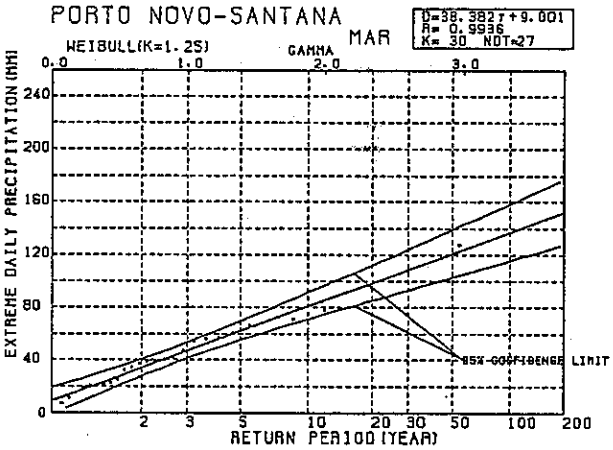












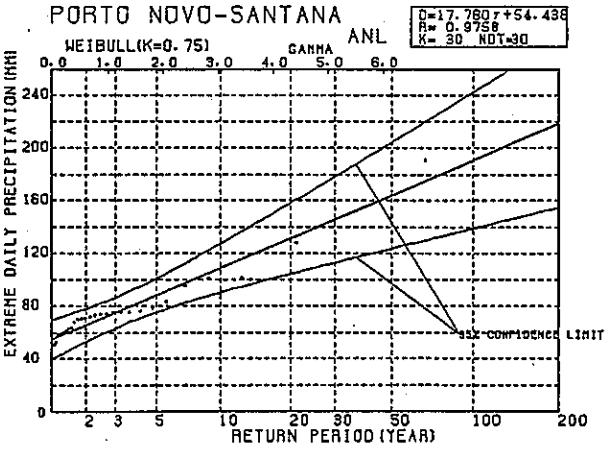
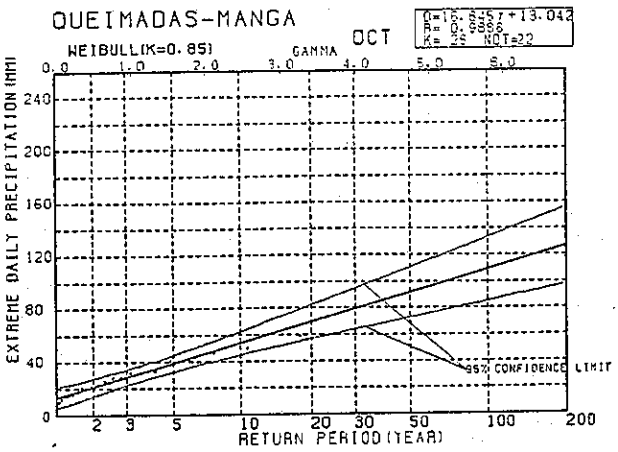
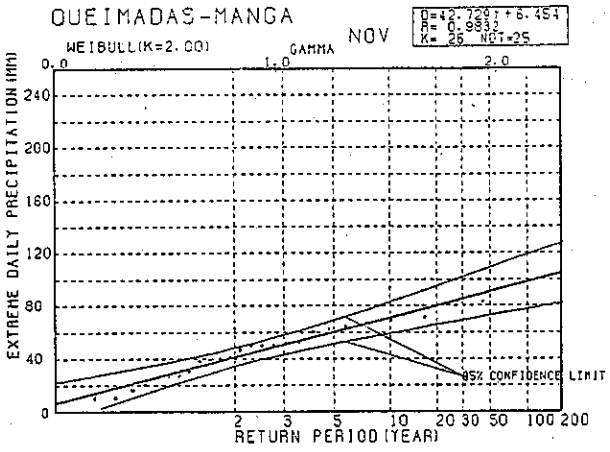
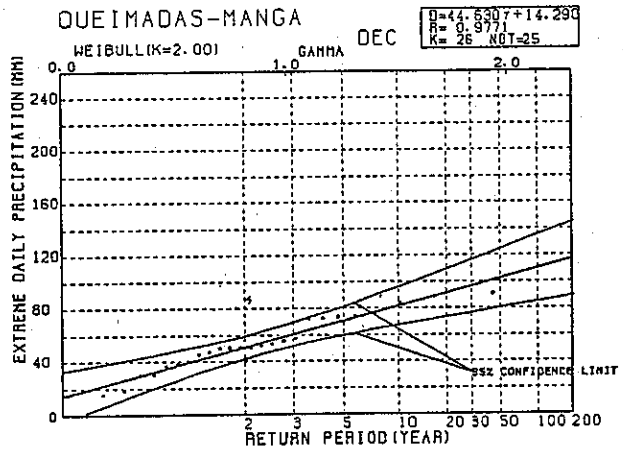
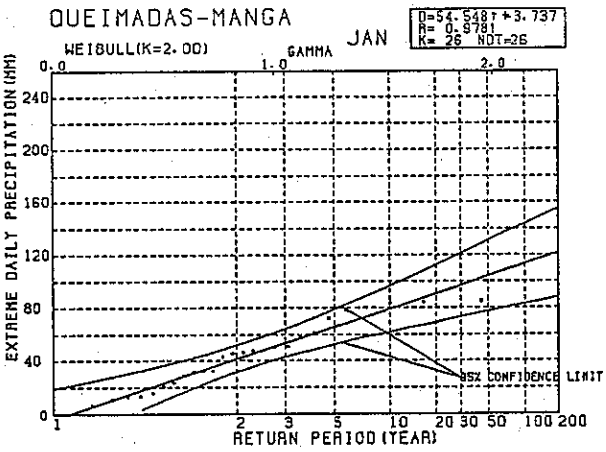


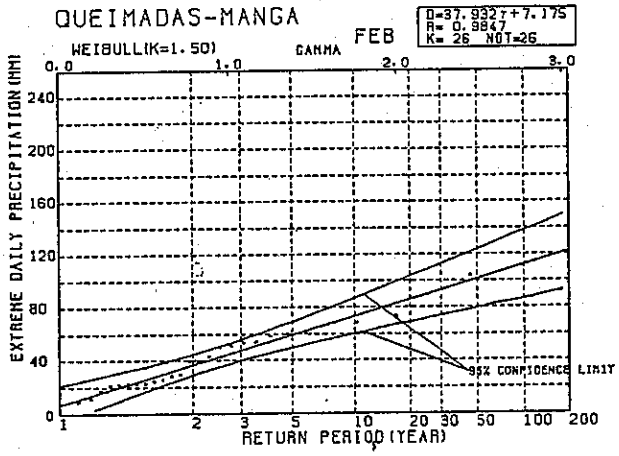
FIG. 4 . 15 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

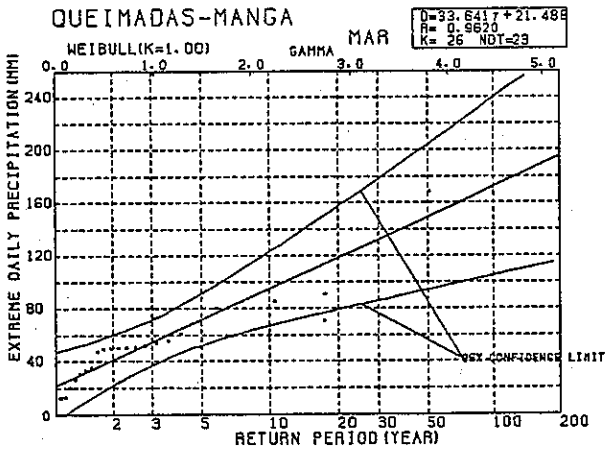












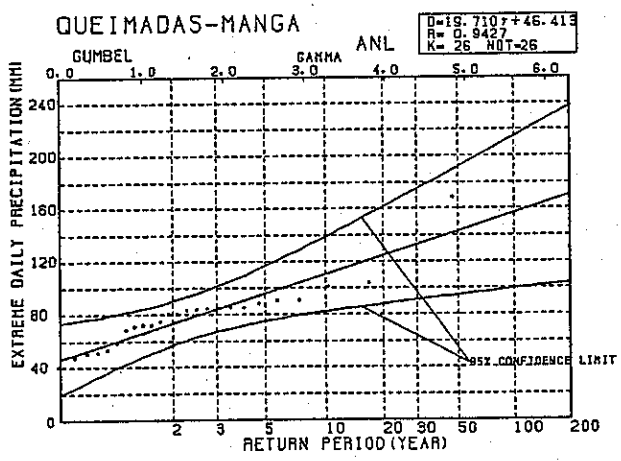
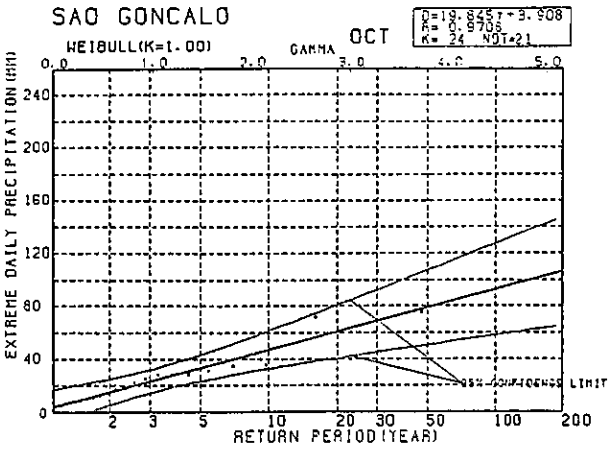
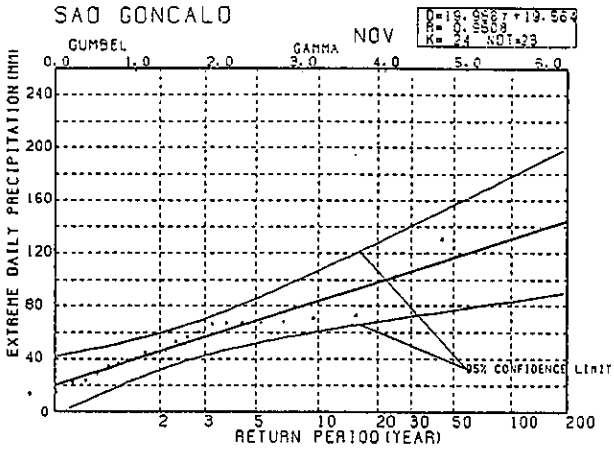
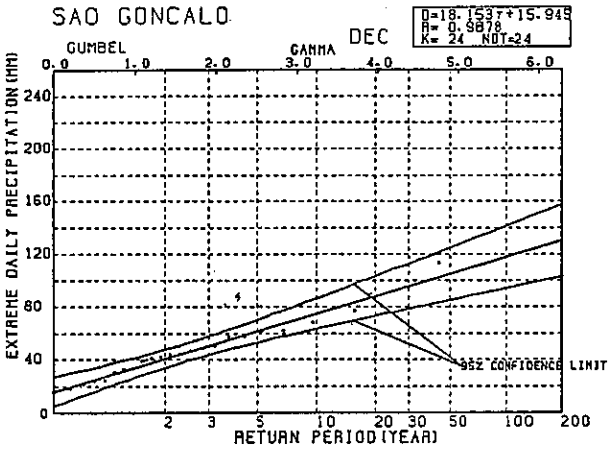
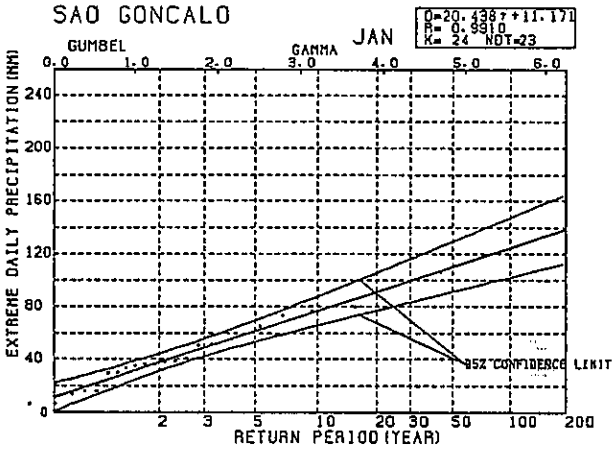


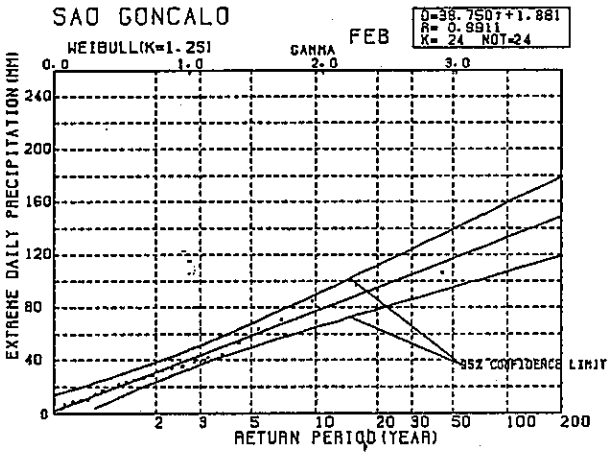
FIG. 4.16 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

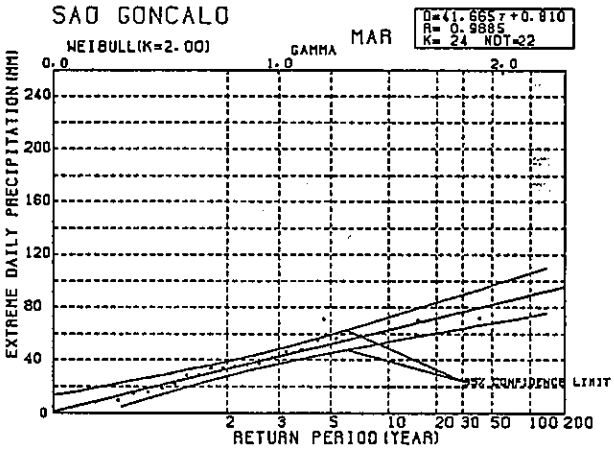












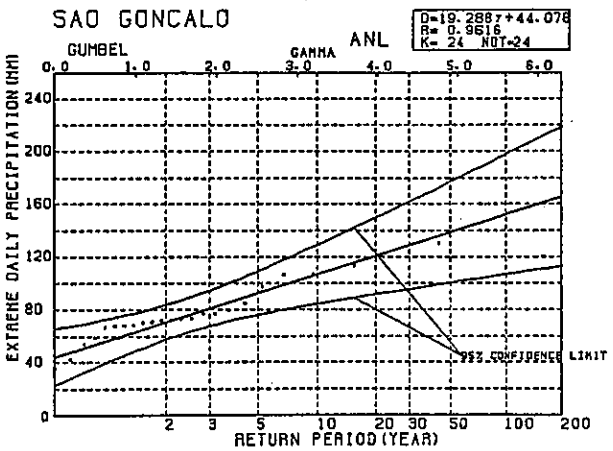
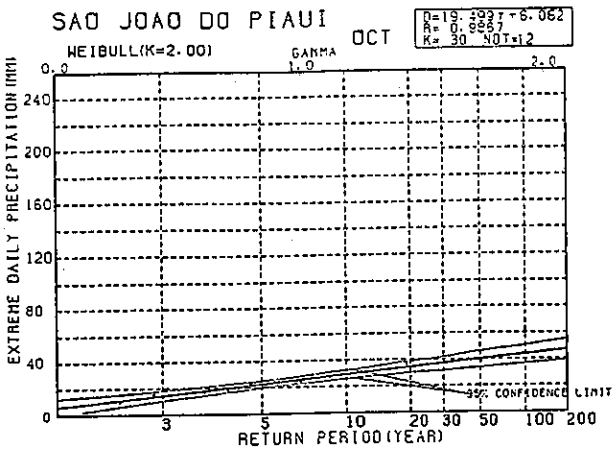
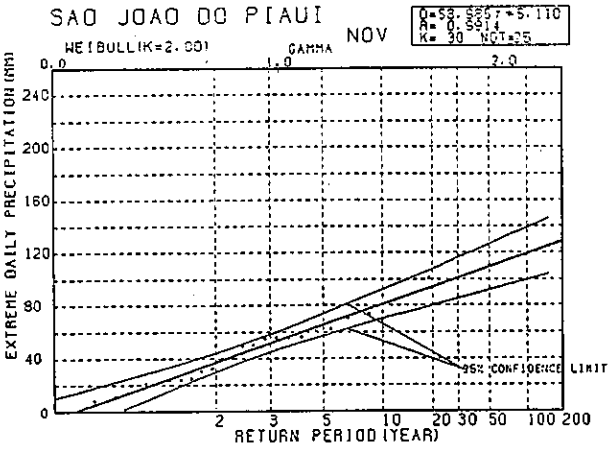
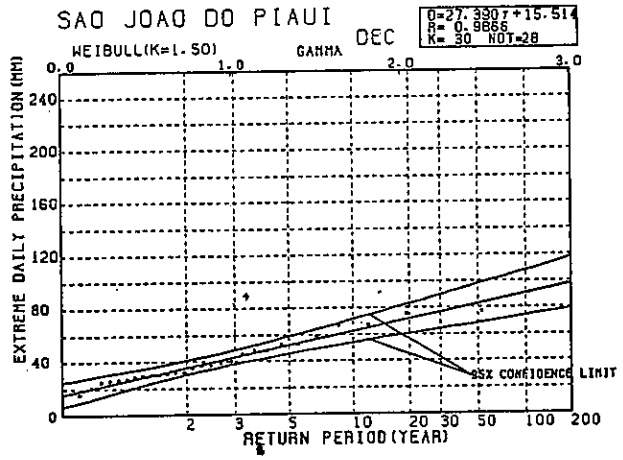
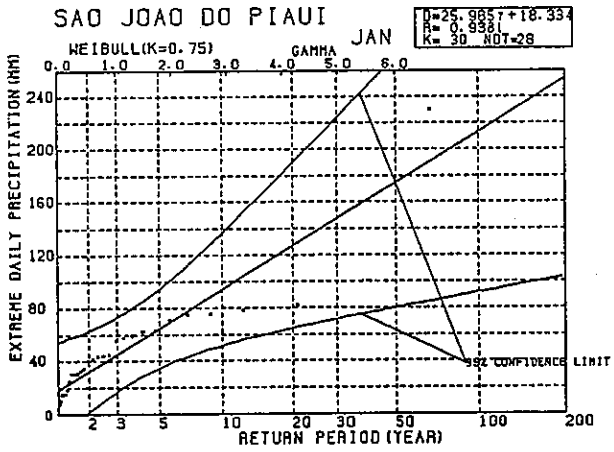


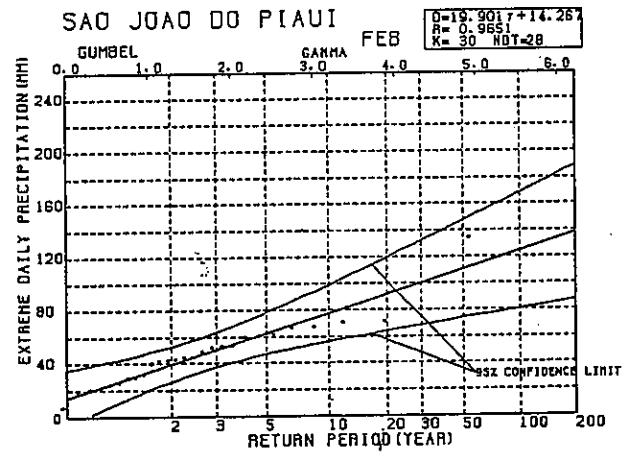
FIG. 4.17 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

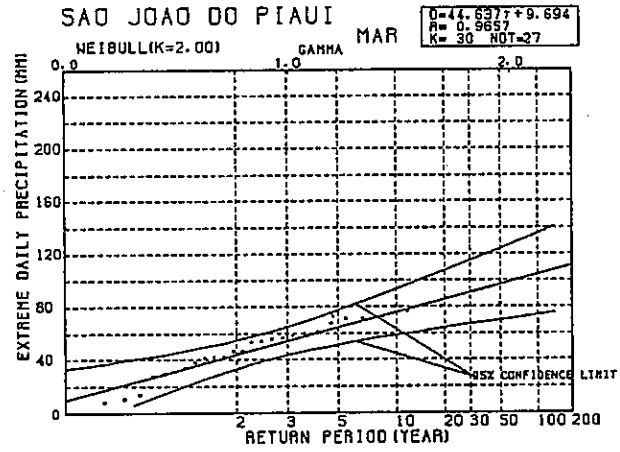












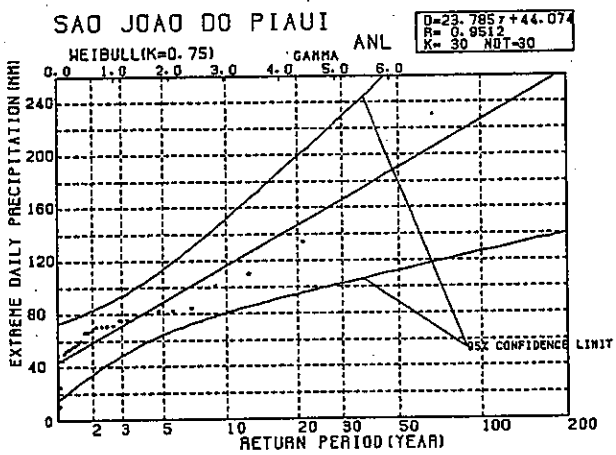


FIG. 4.18 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

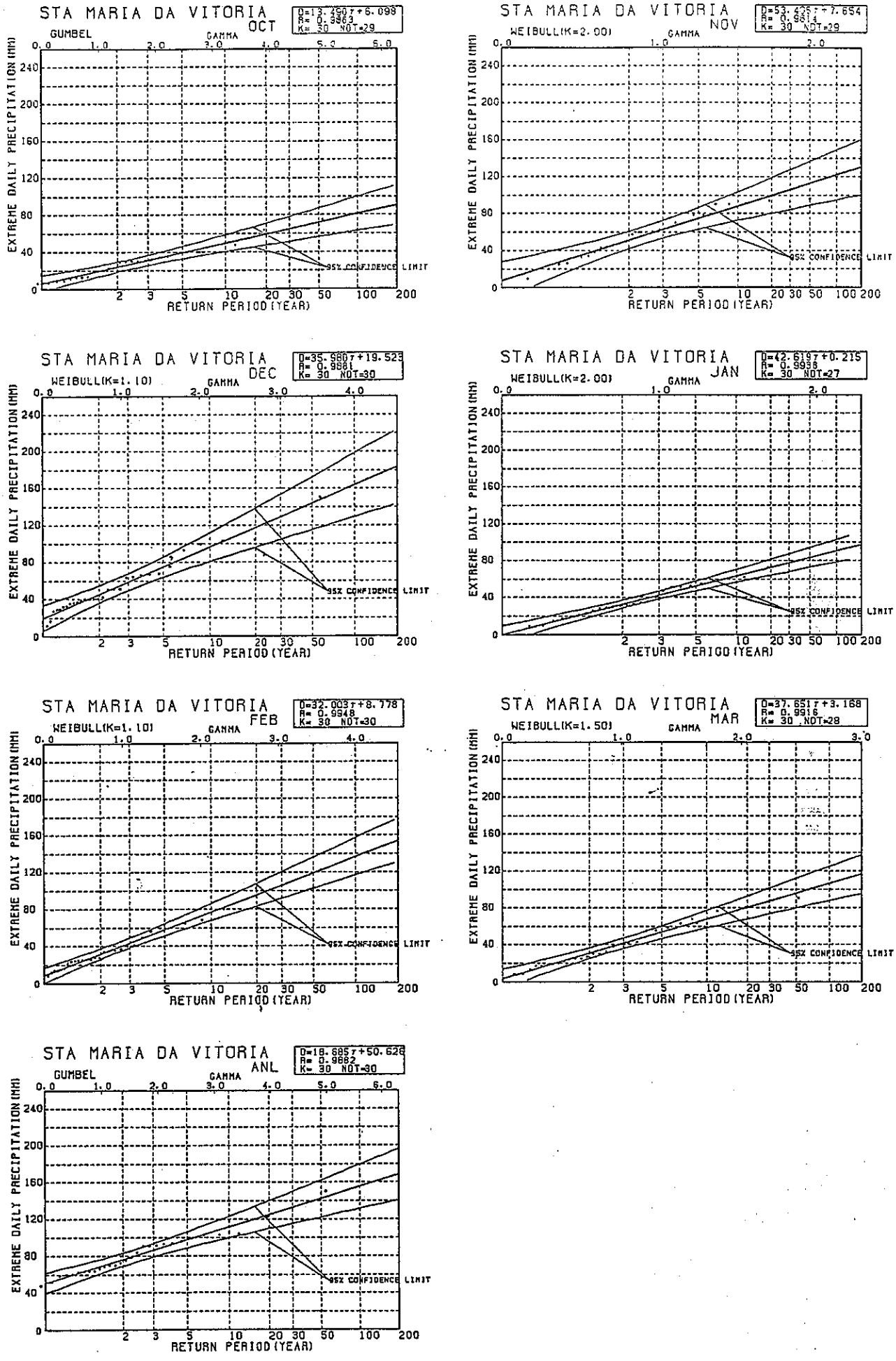
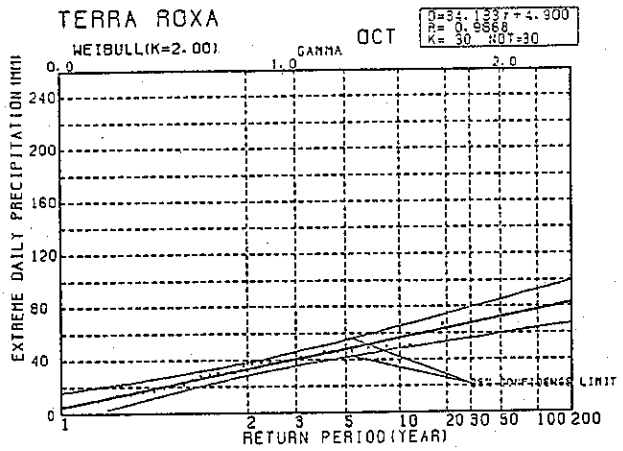
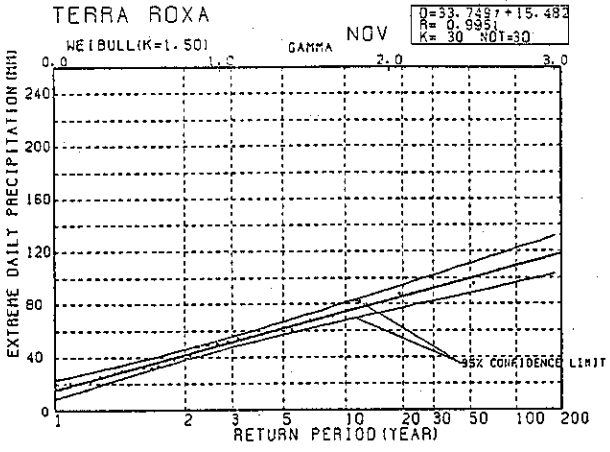
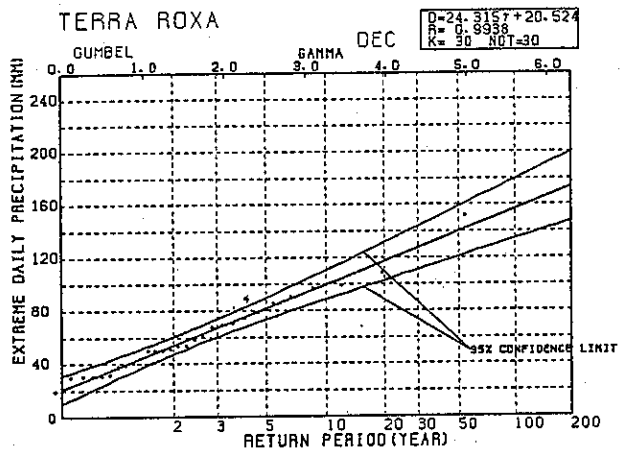
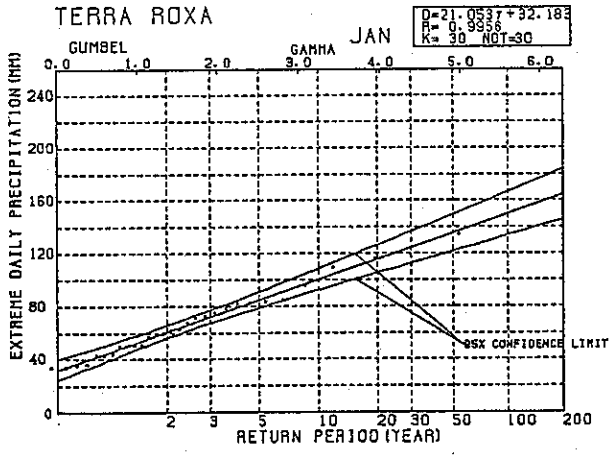


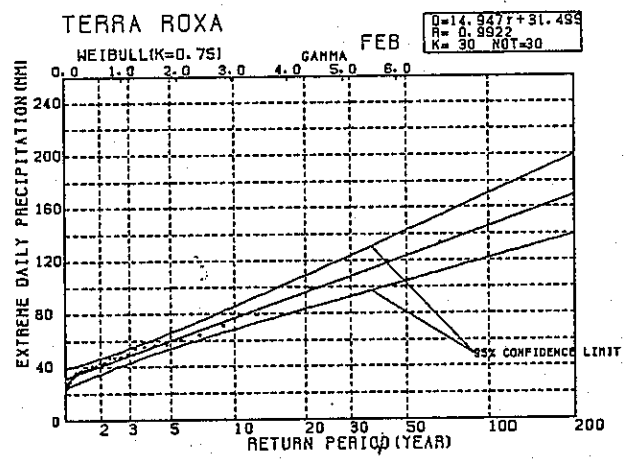
FIG. 4.19 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

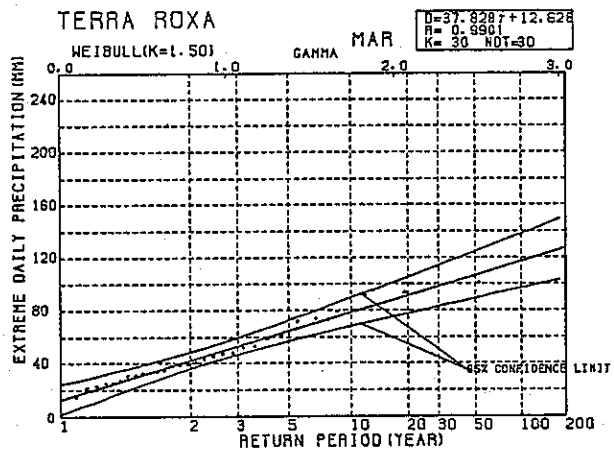












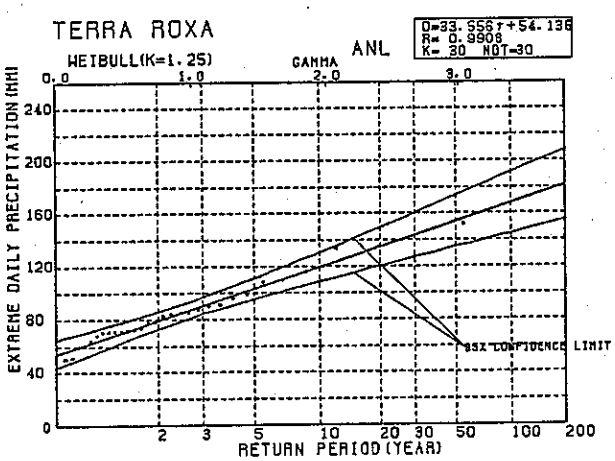
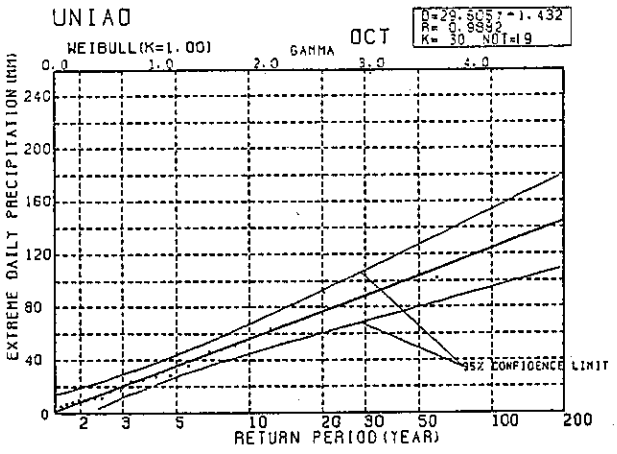
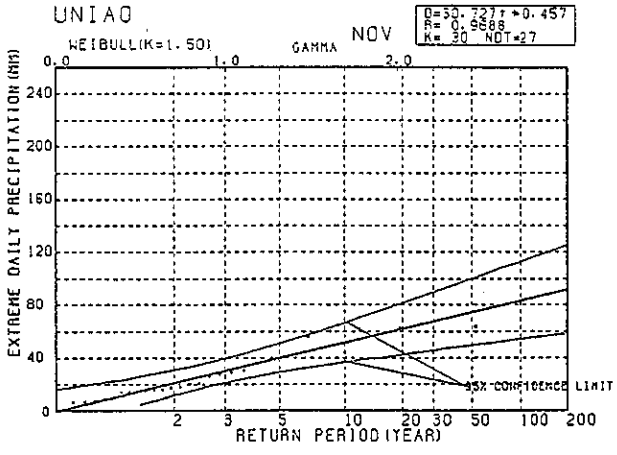
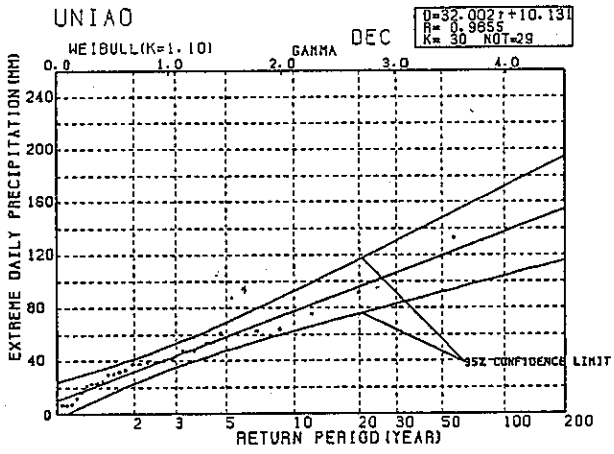
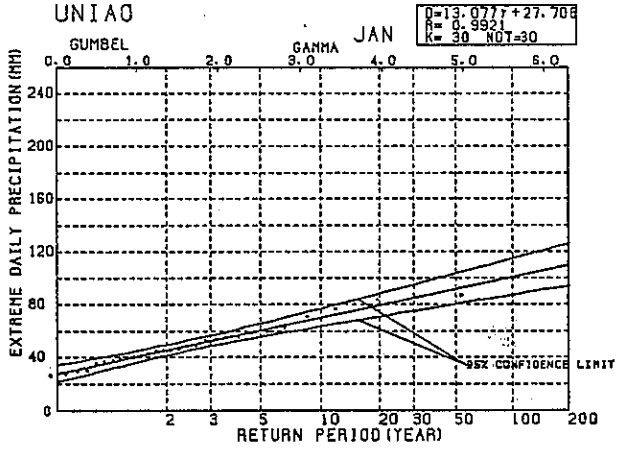


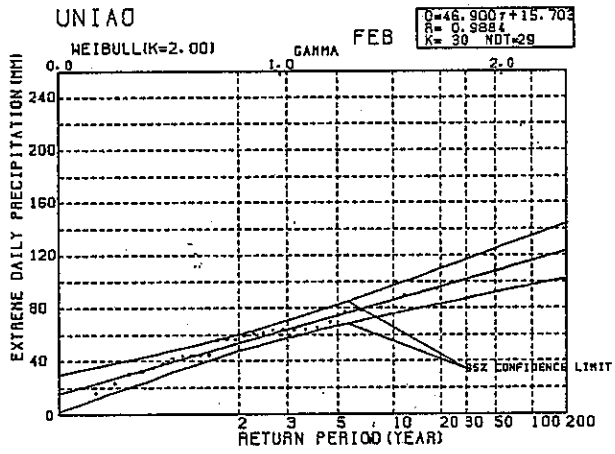
FIG. 4.20 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

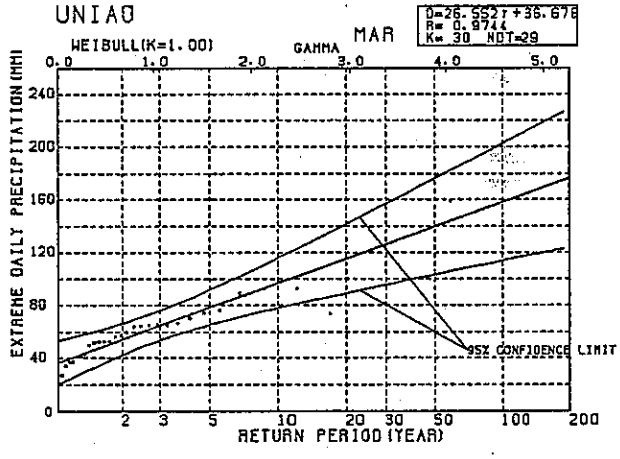












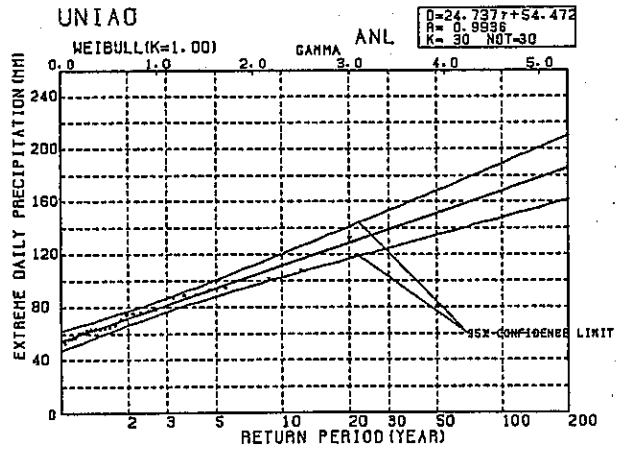
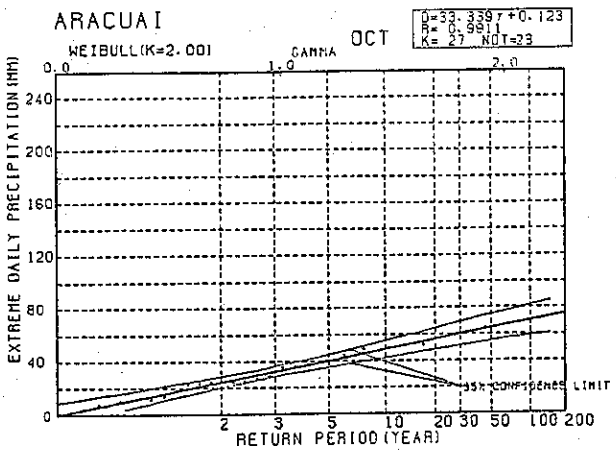
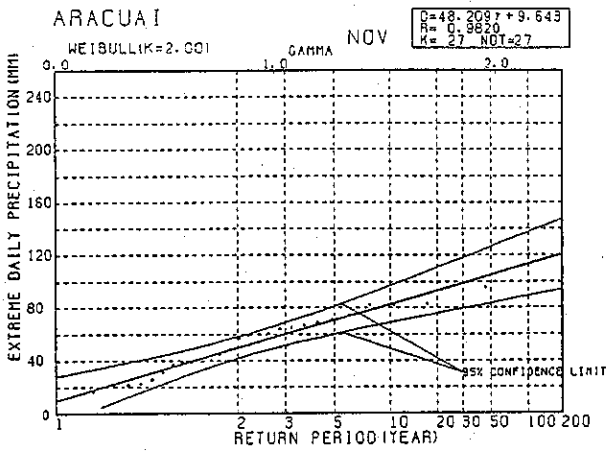
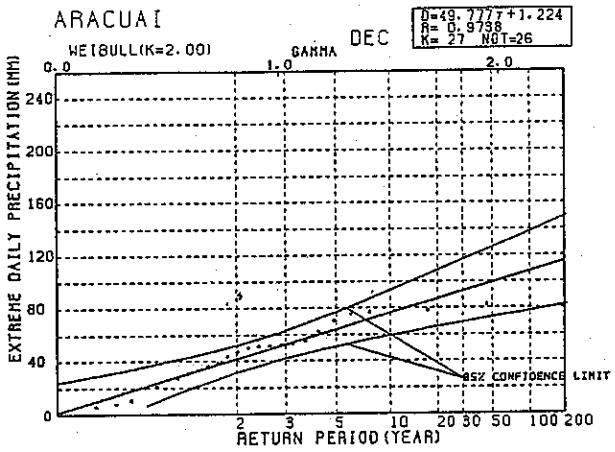
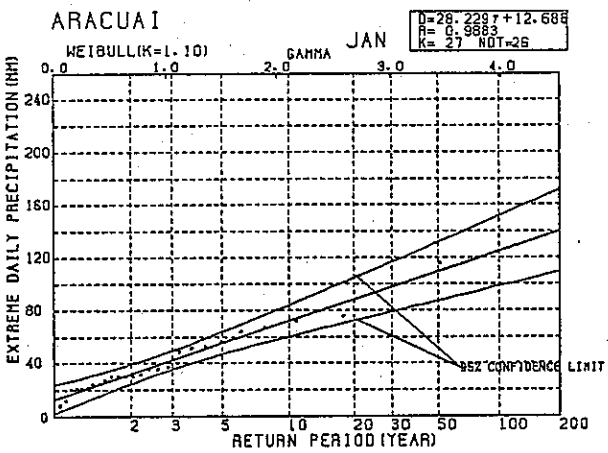


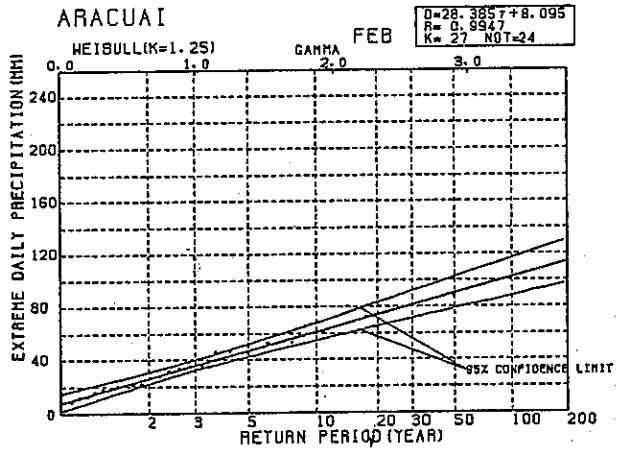
FIG. 4.21 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

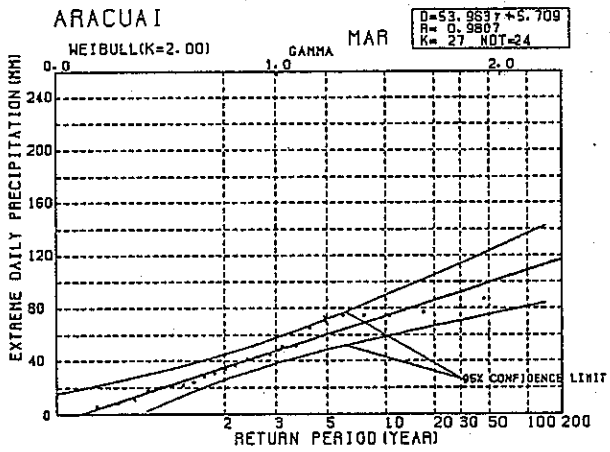












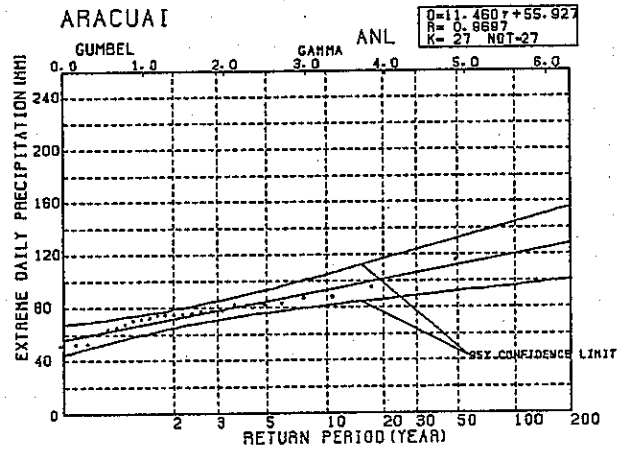
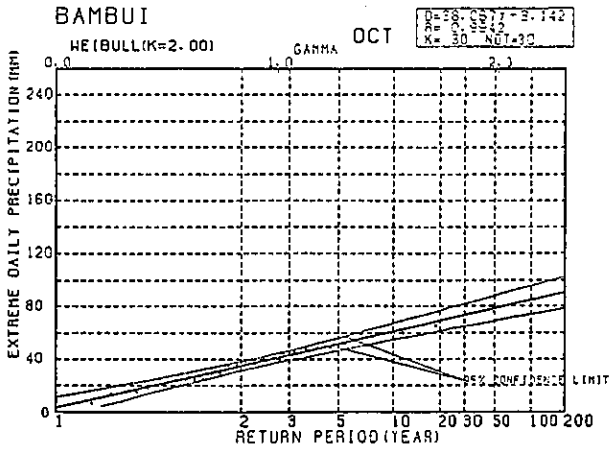
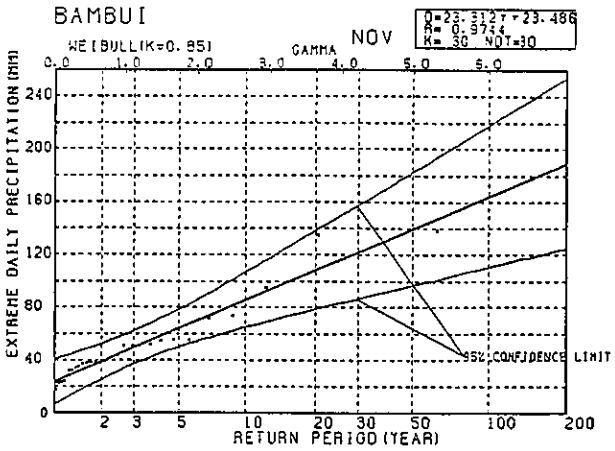
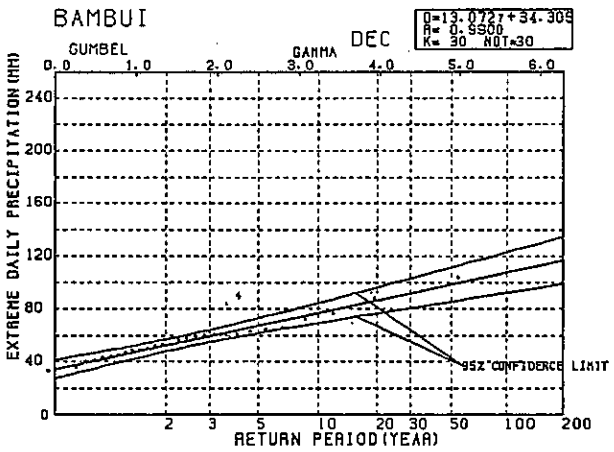
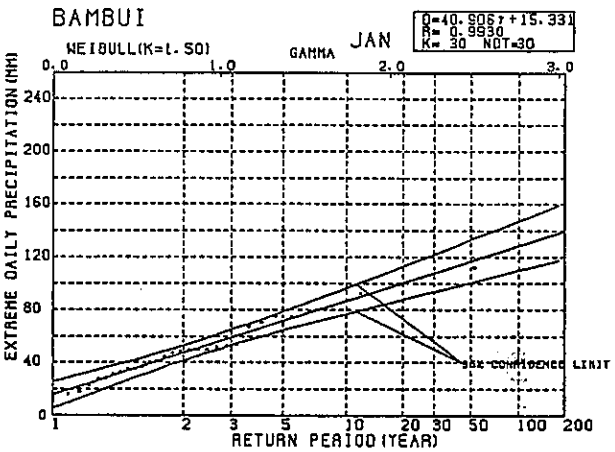


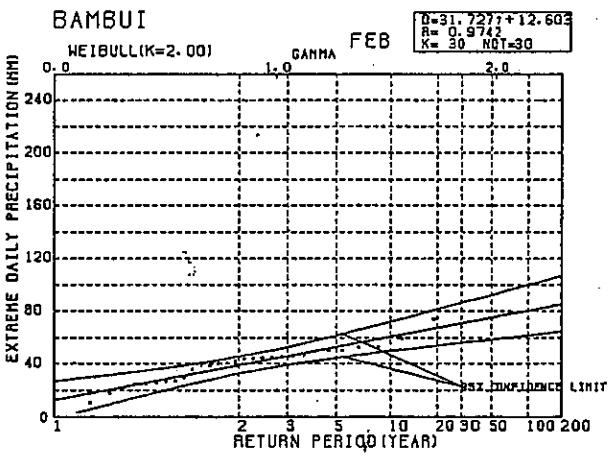
FIG. 4.22 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

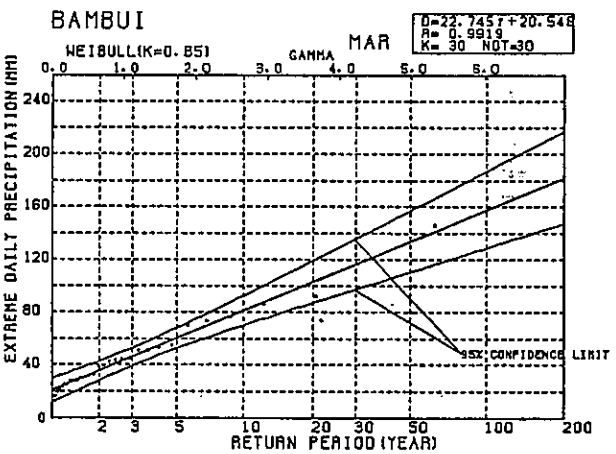












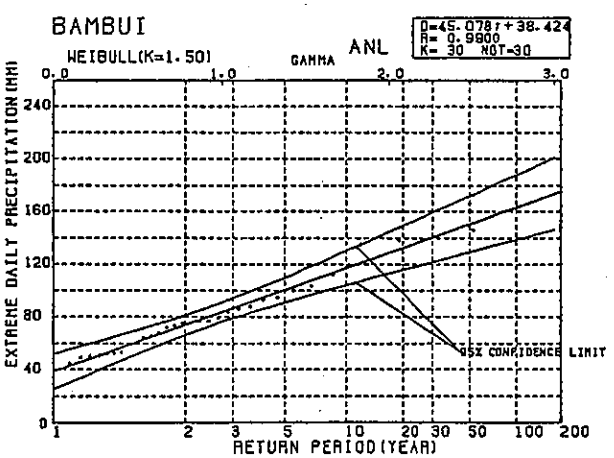
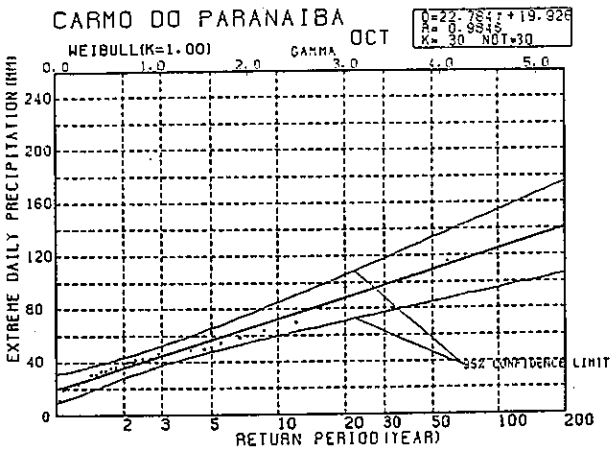
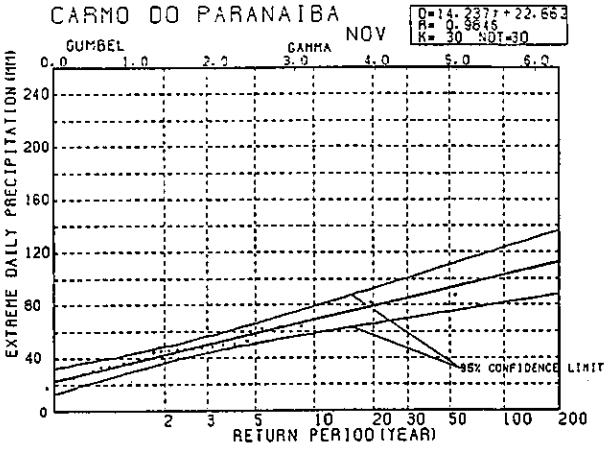
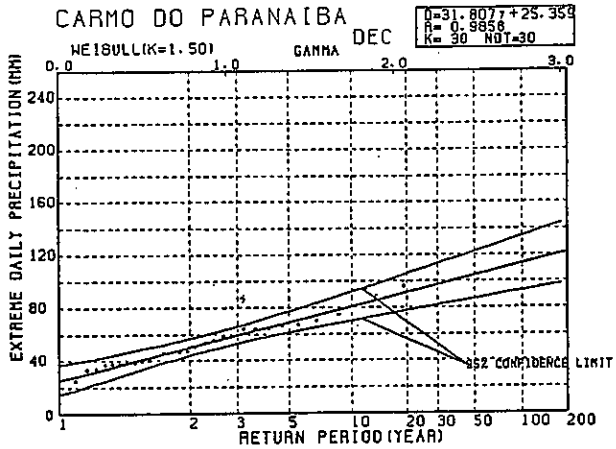
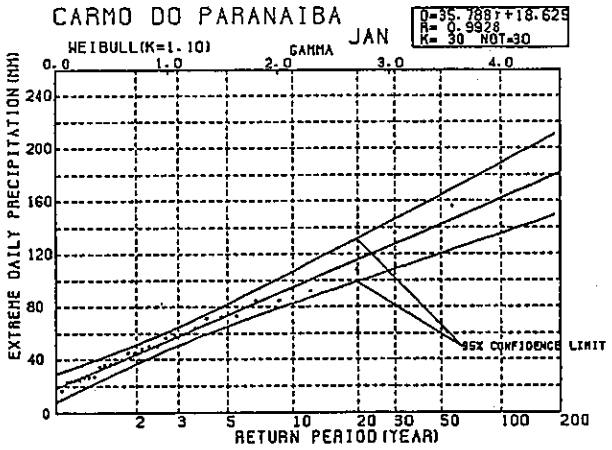


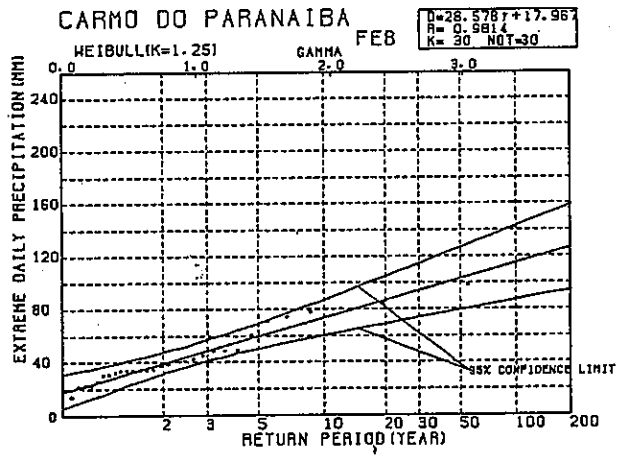
FIG. 4.23 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

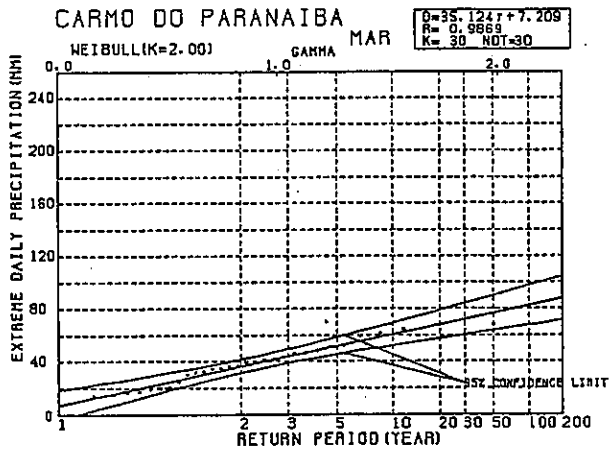












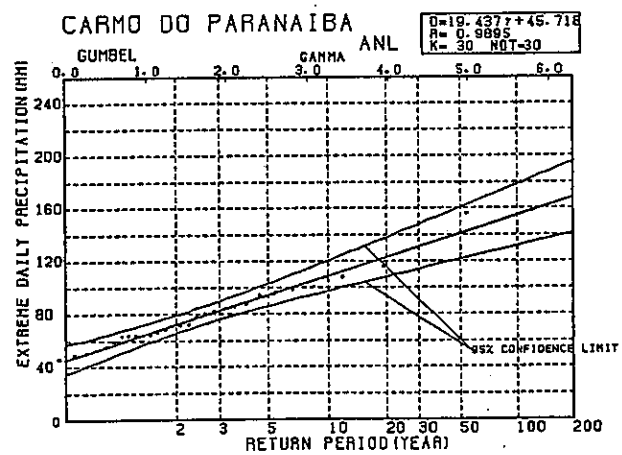


FIG. 4 .24 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

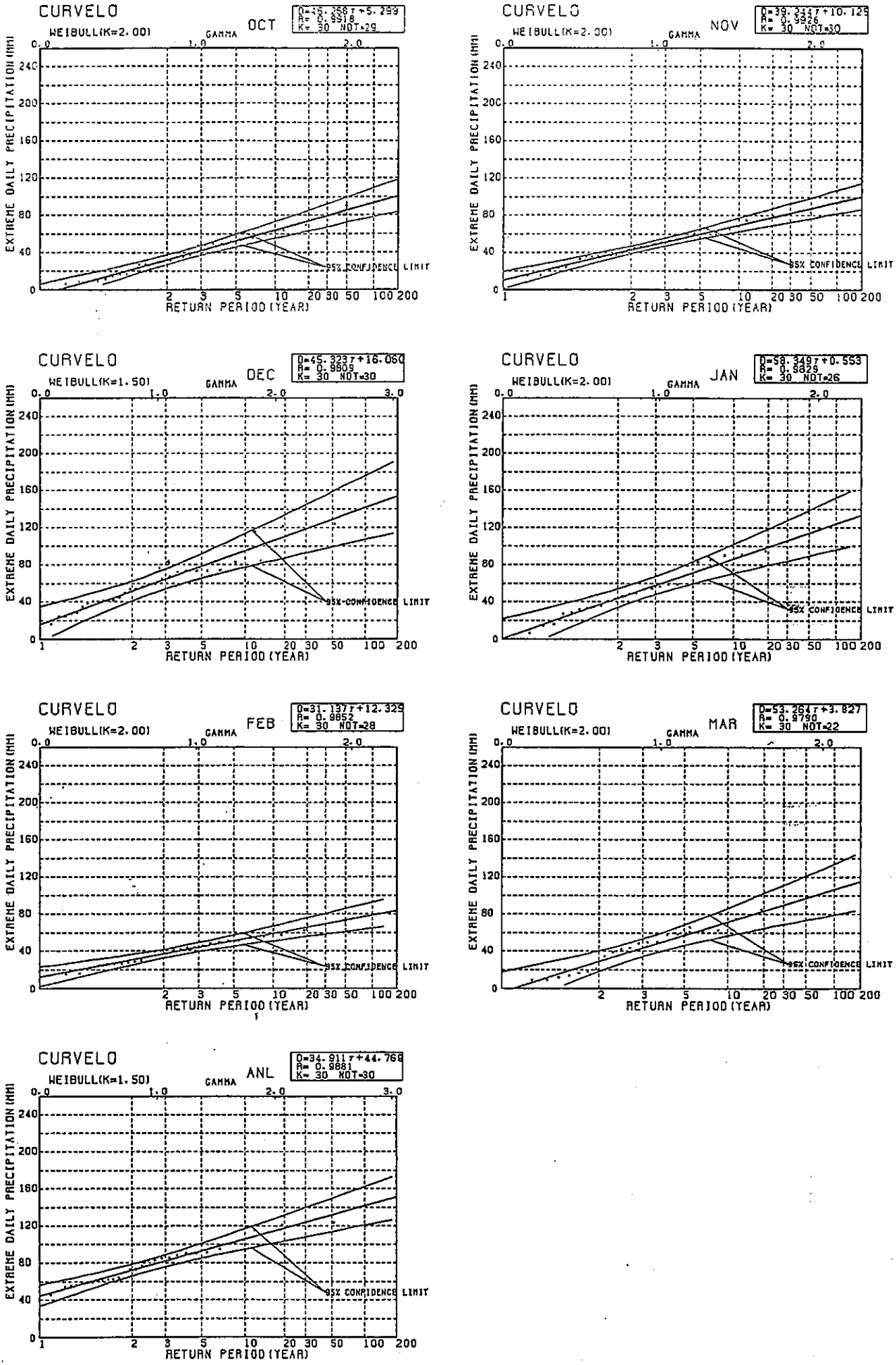


FIG. 4.25 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

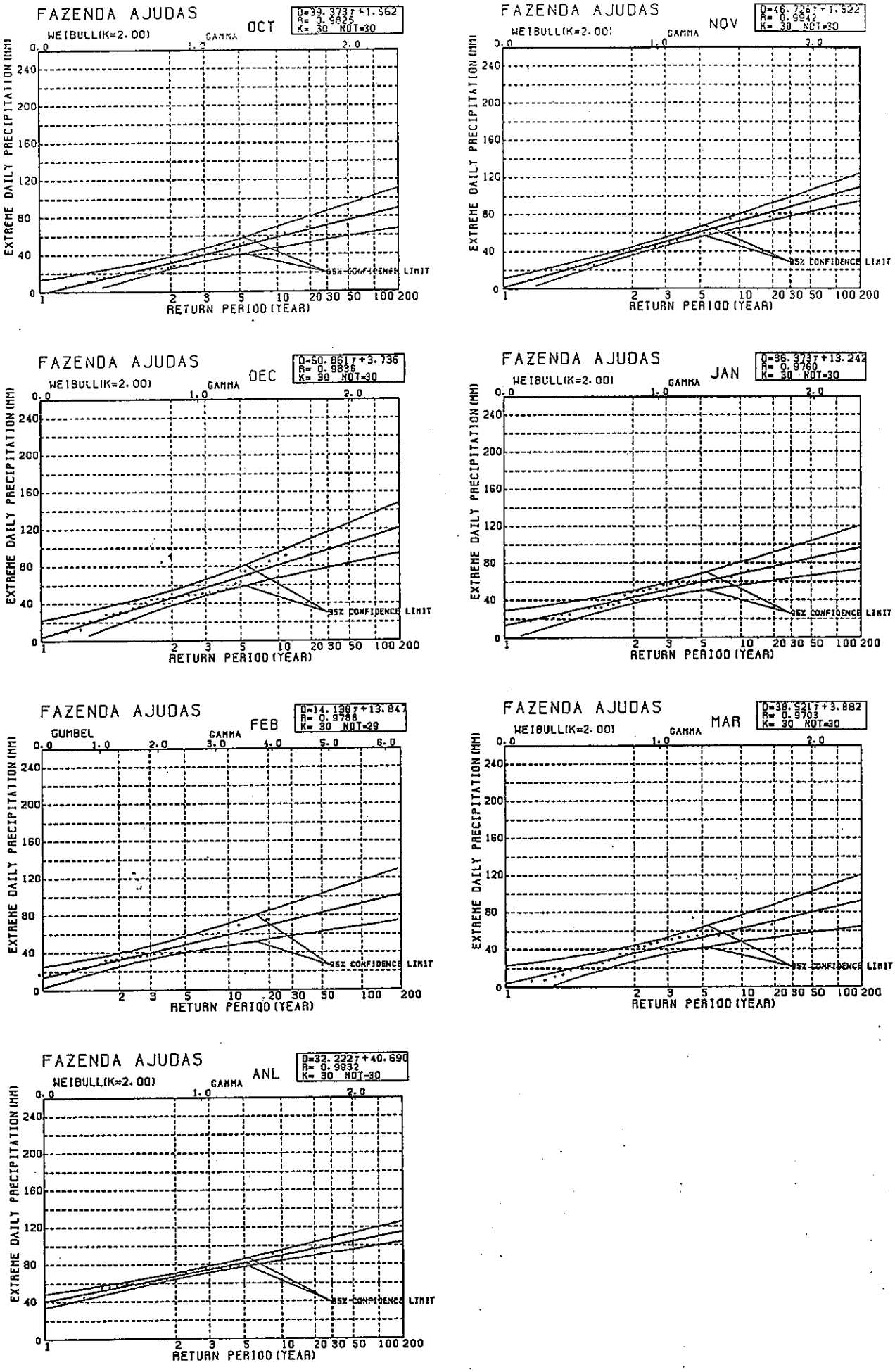


FIG. 4.26 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

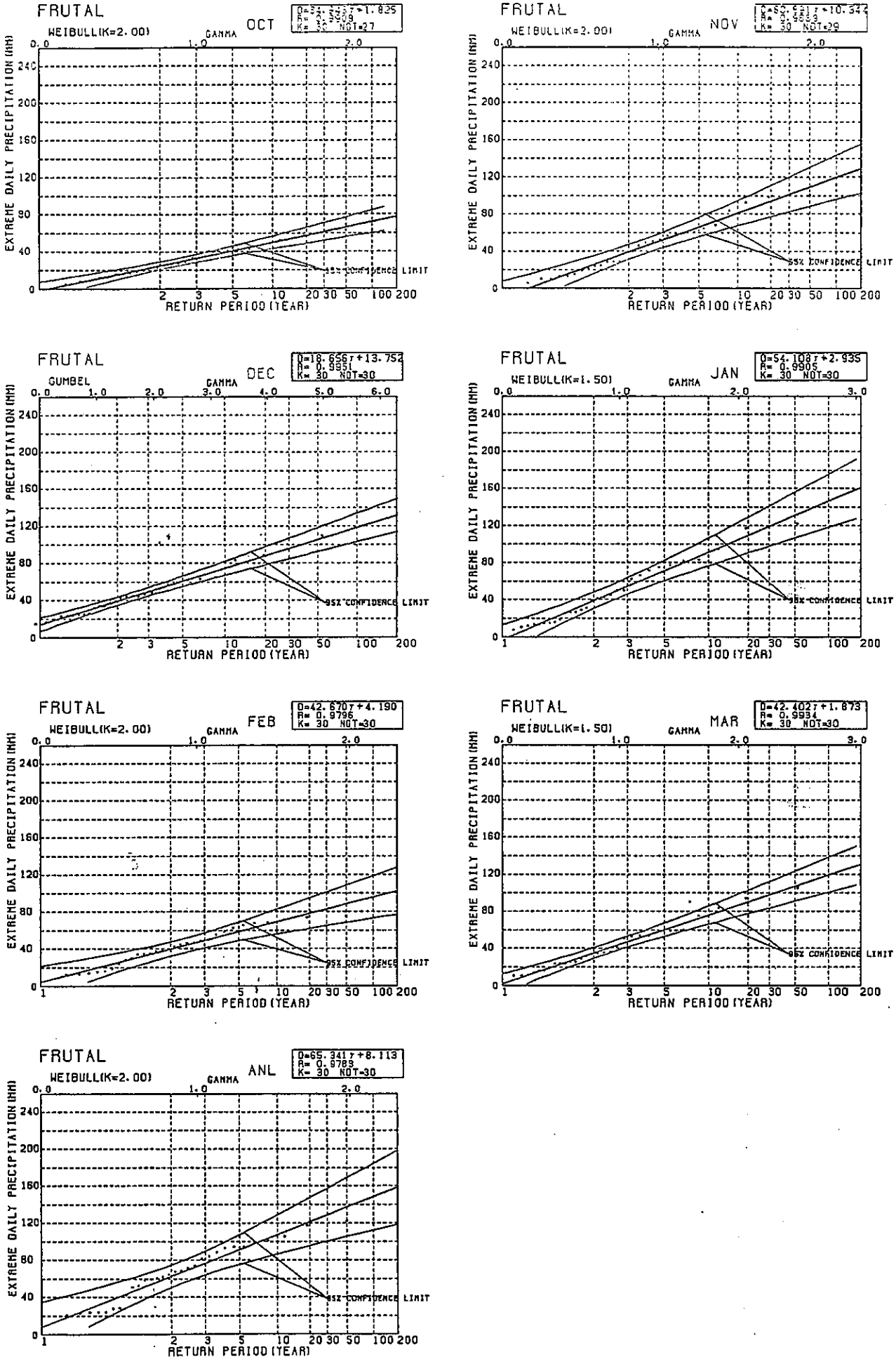
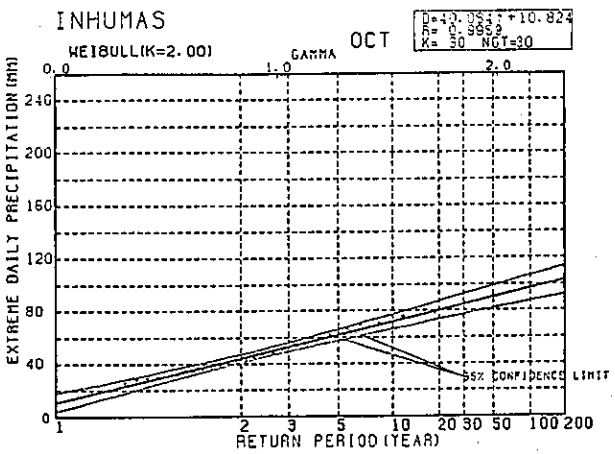
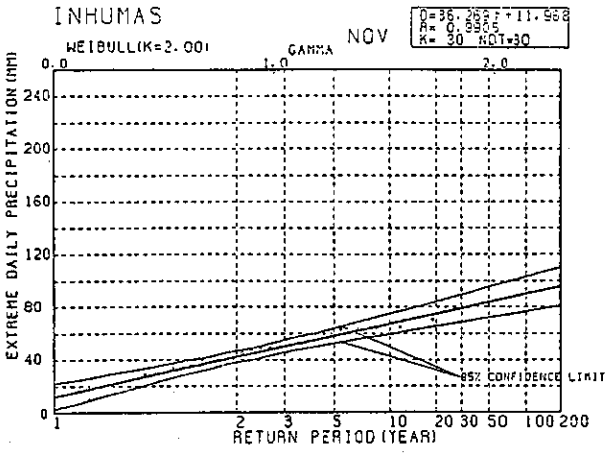
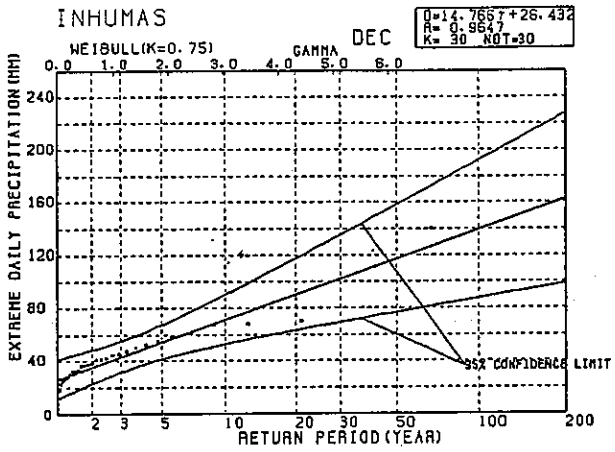
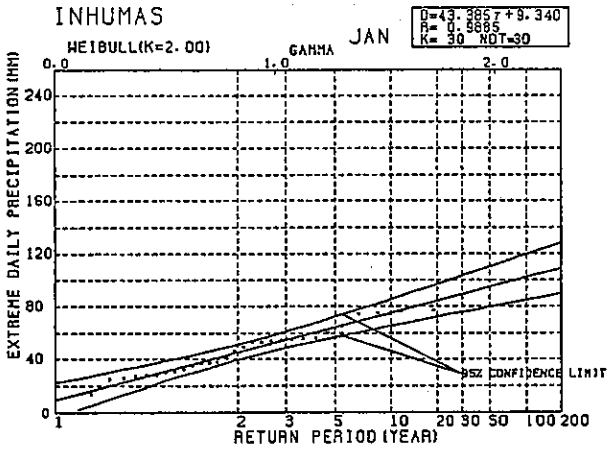


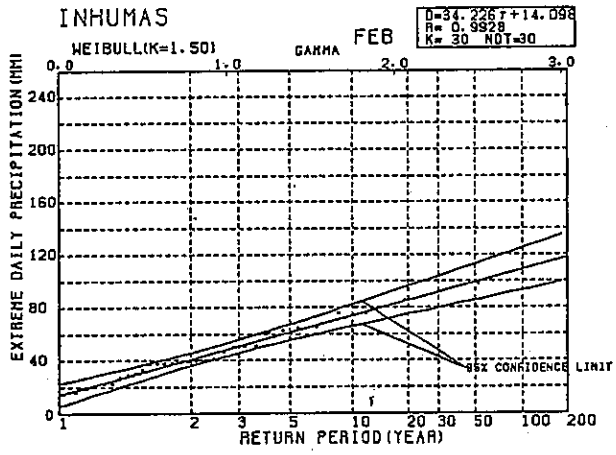
FIG. 4 .27 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

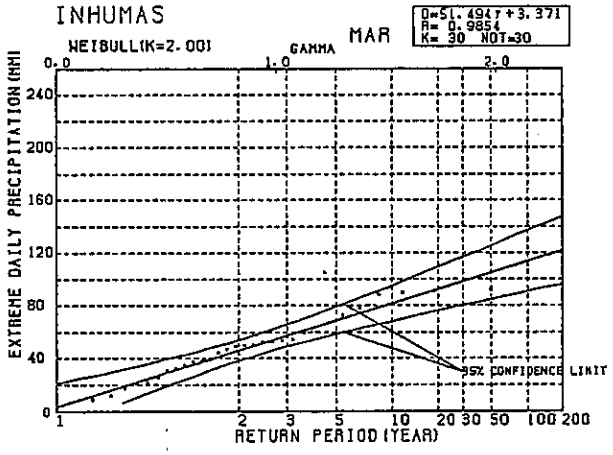












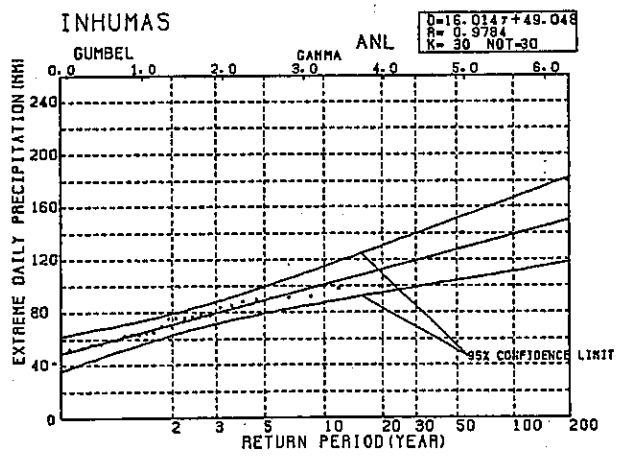
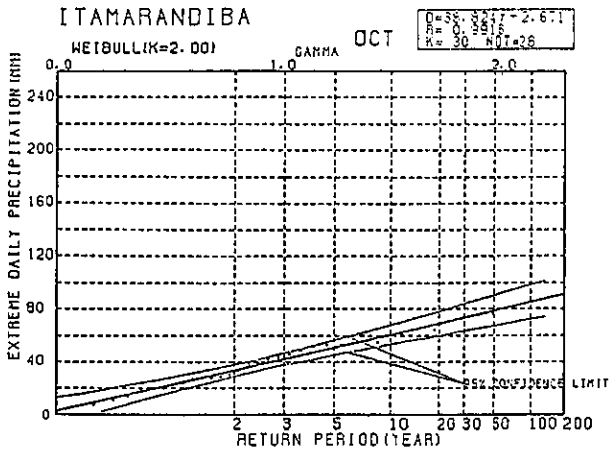
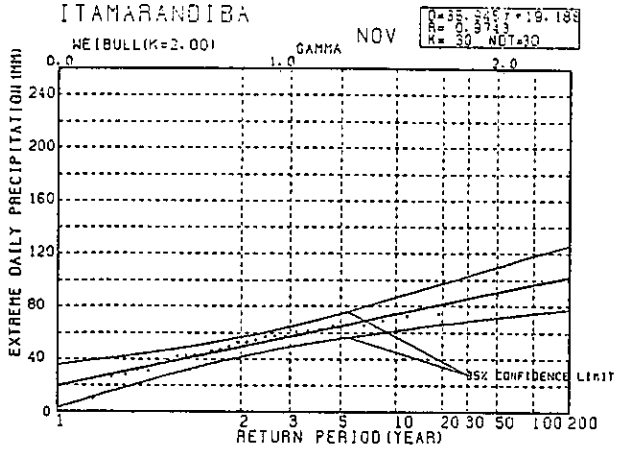
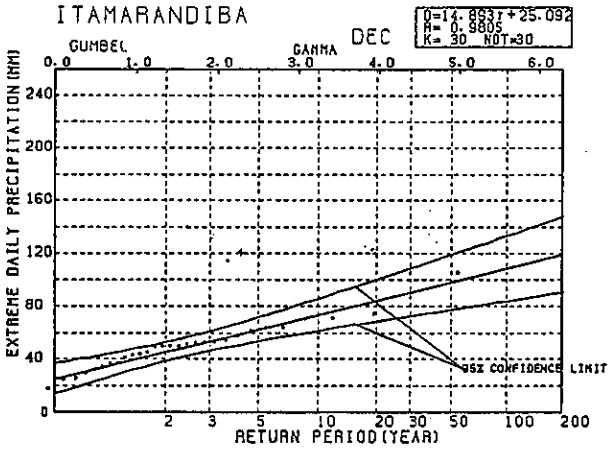
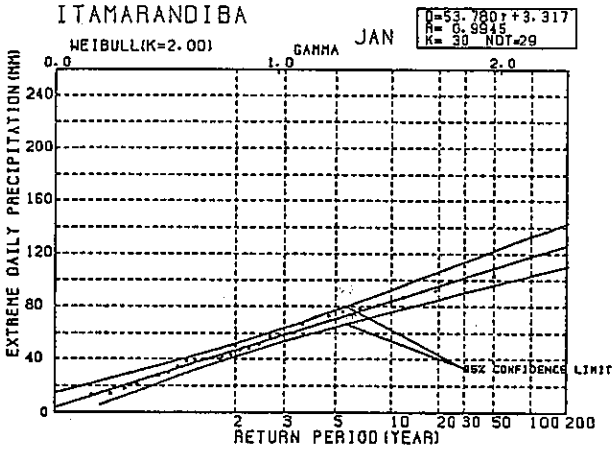


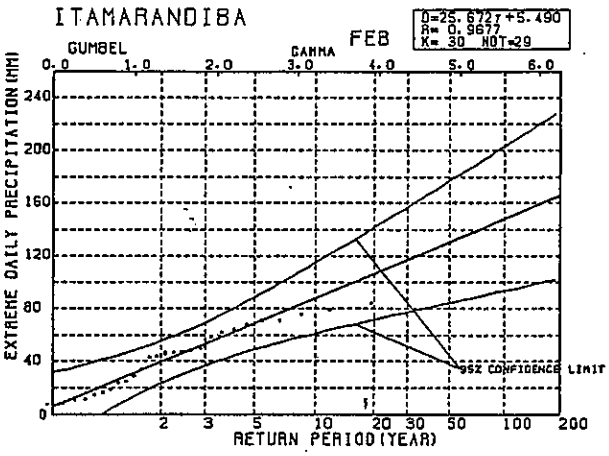
FIG. 4.28 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

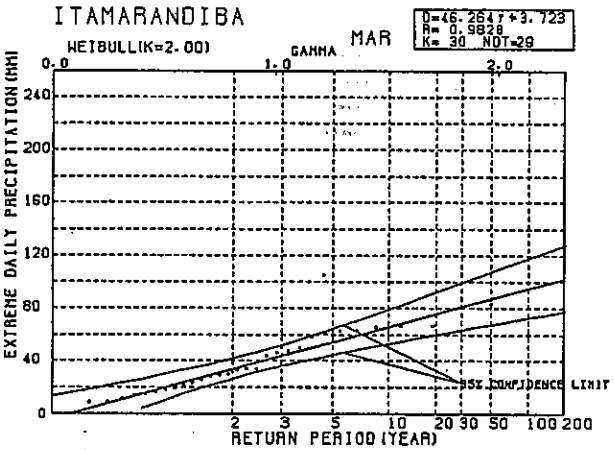












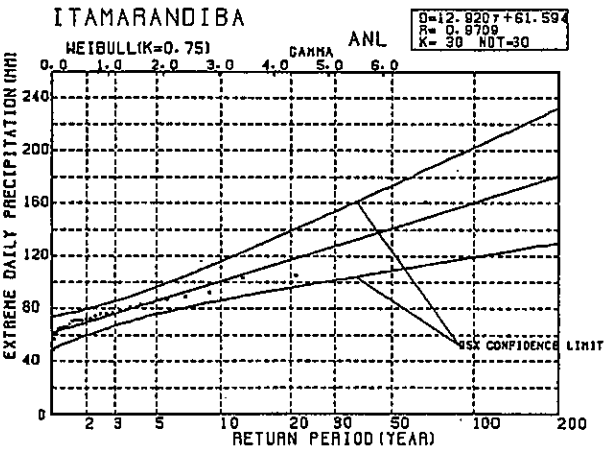


FIG. 4.29 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

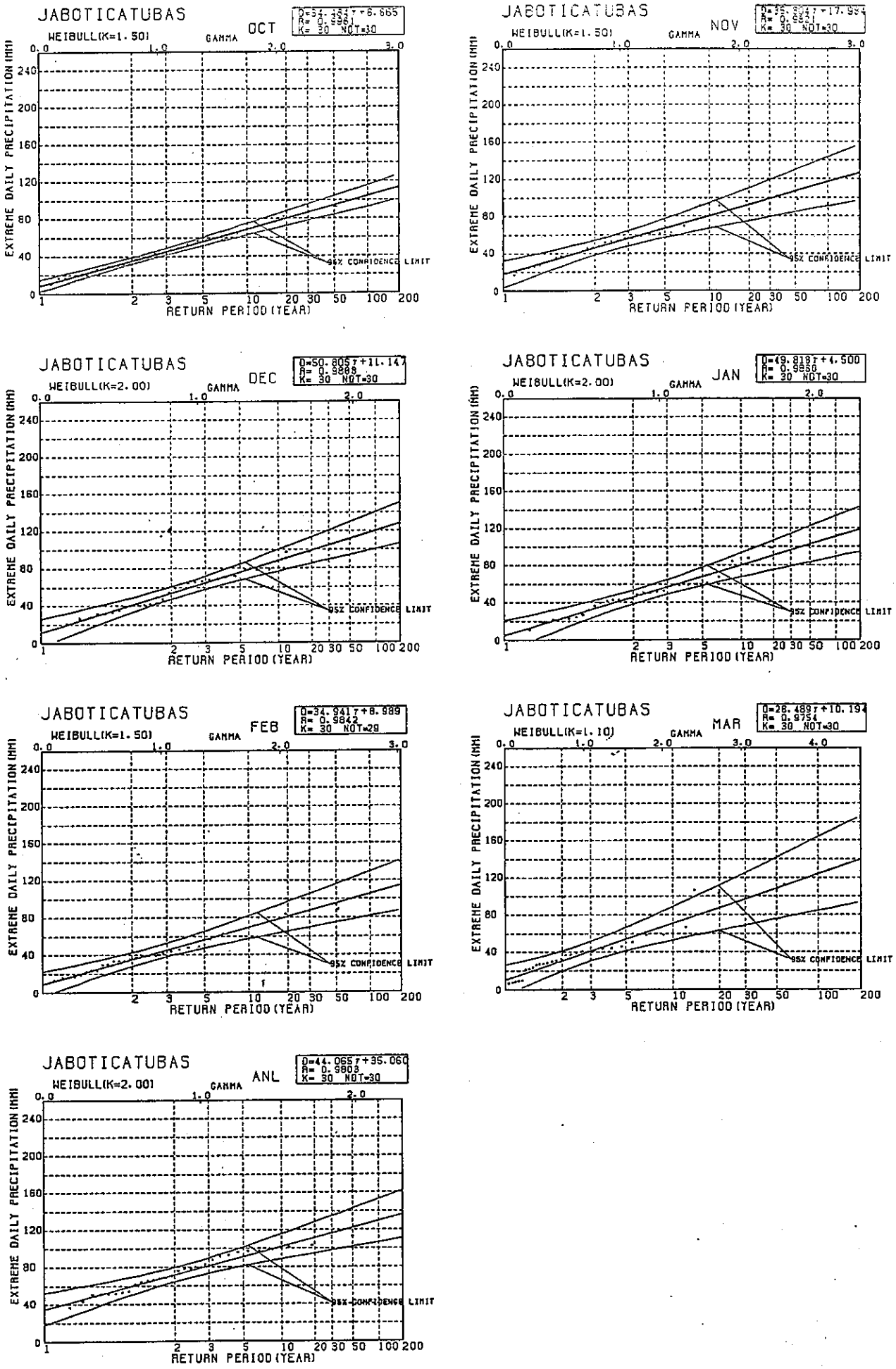
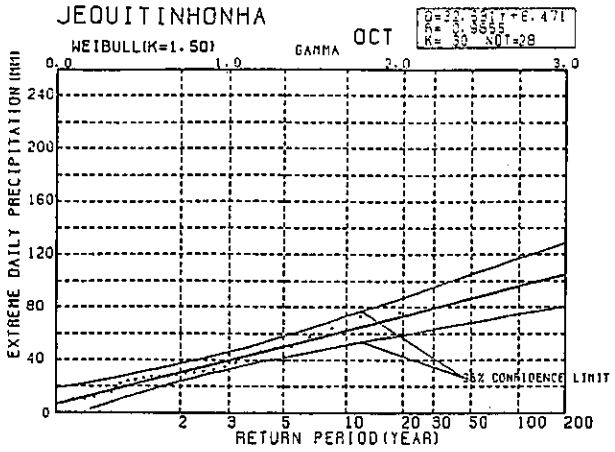
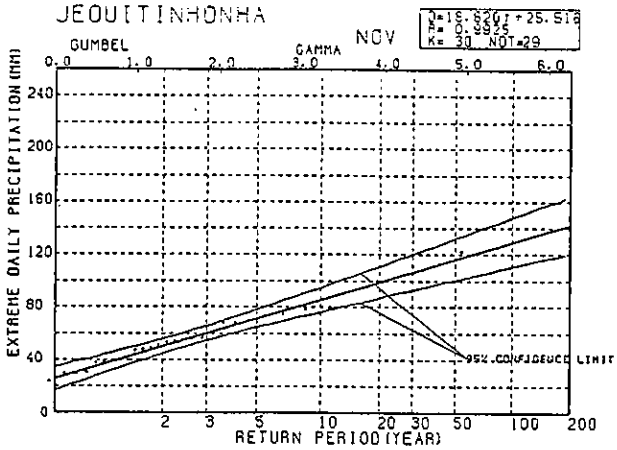
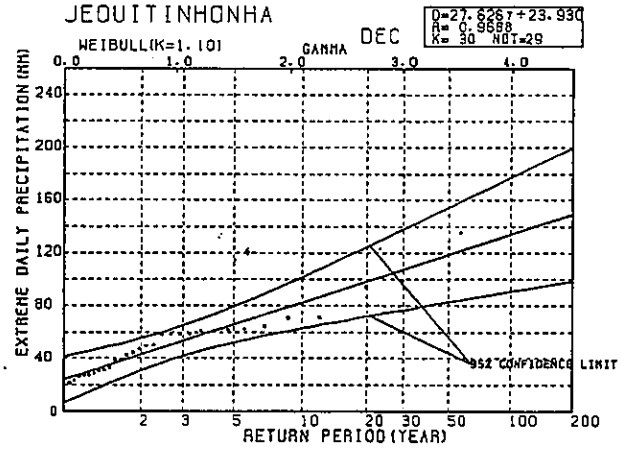
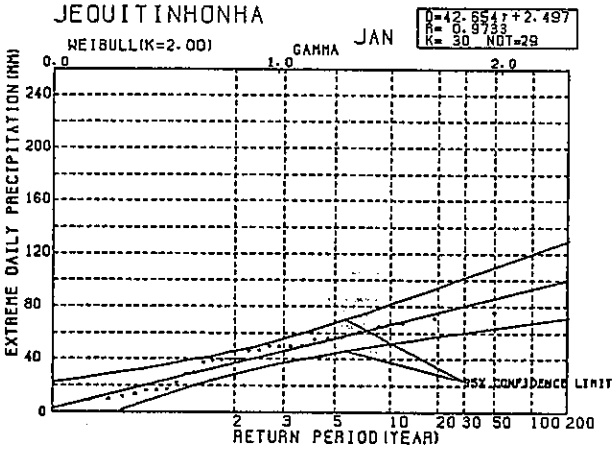


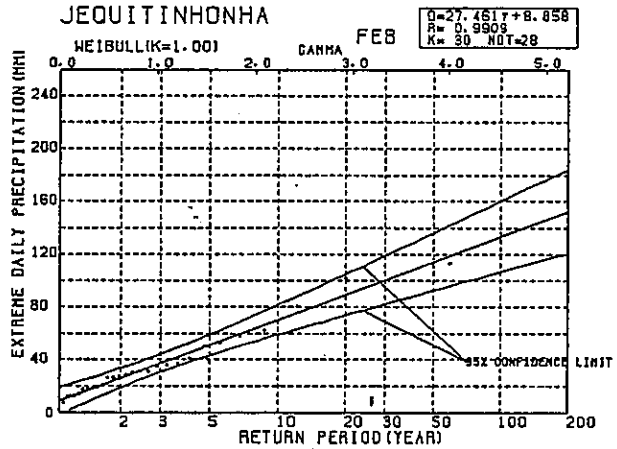
FIG. 4.30 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

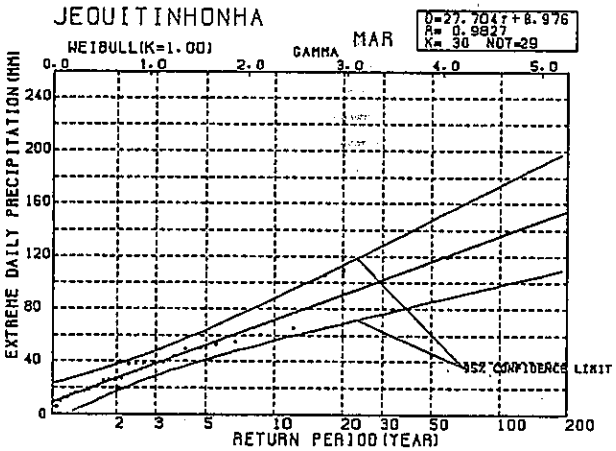












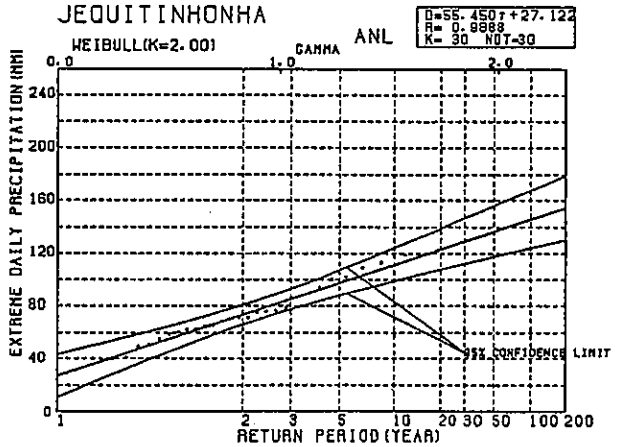
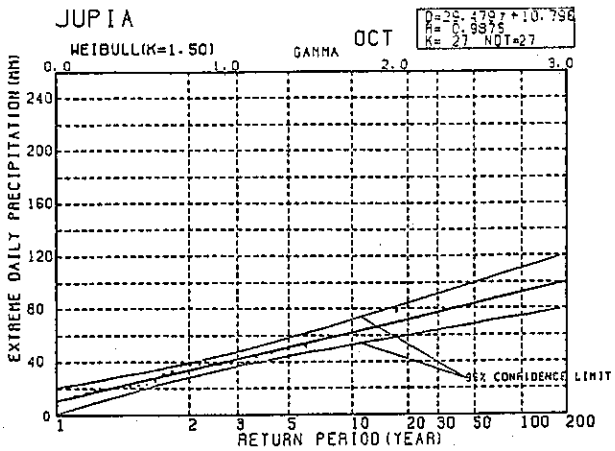
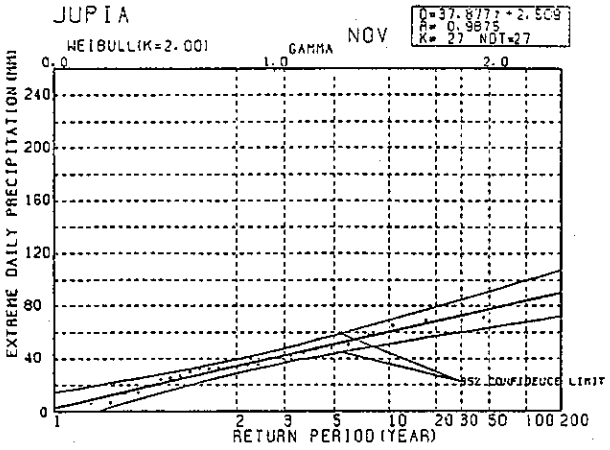
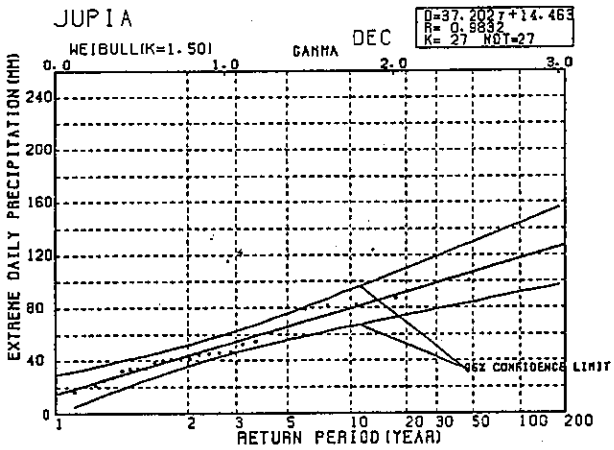
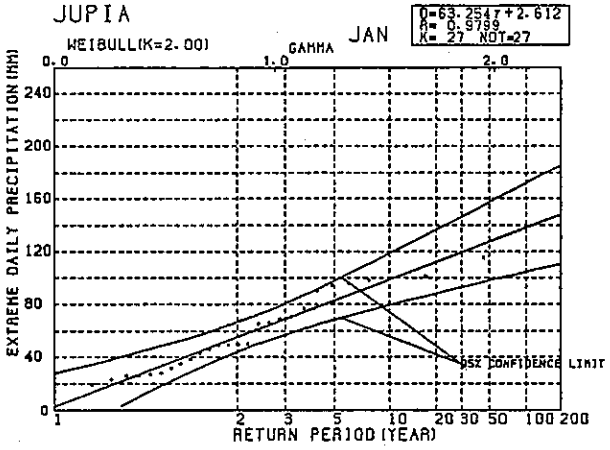


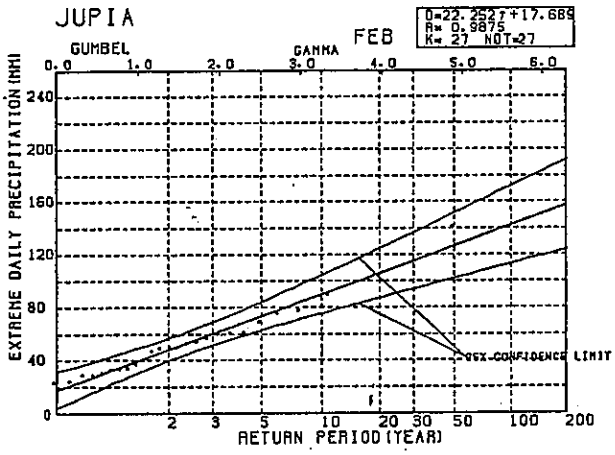
FIG. 4.31 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

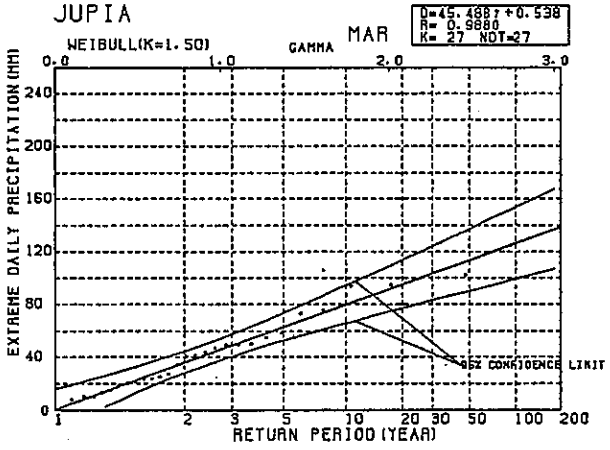












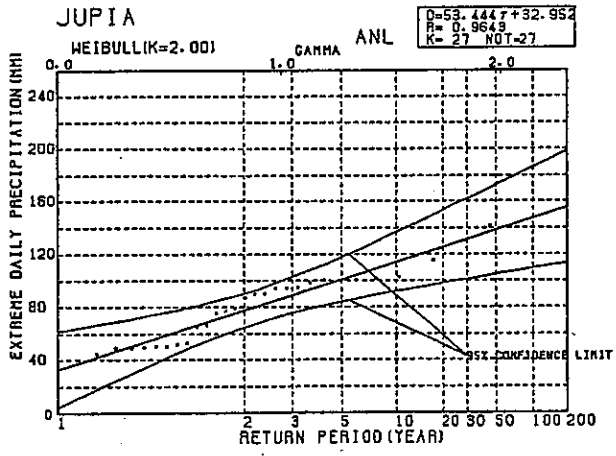
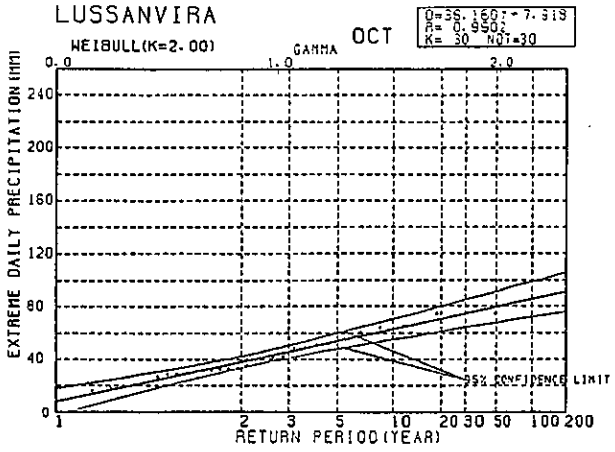
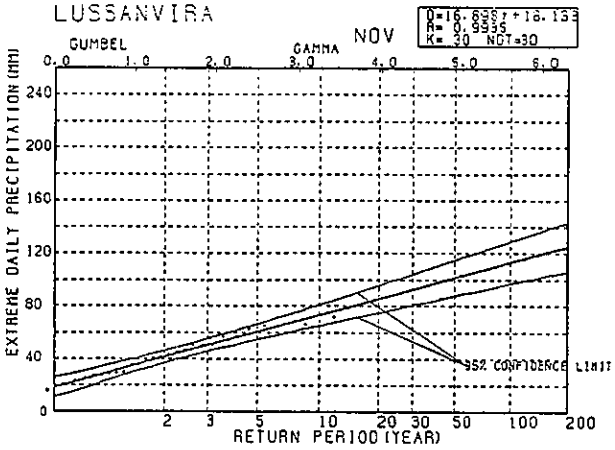
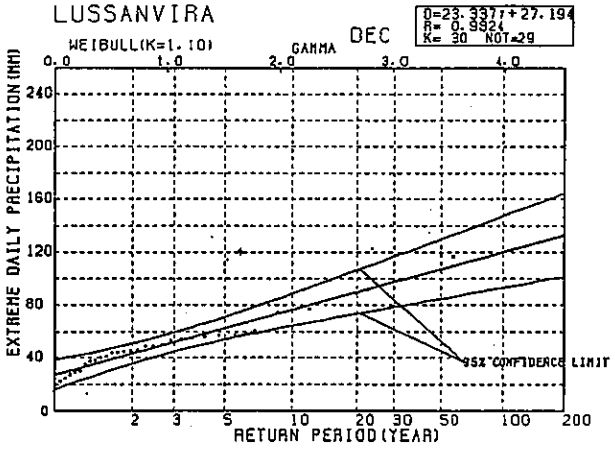
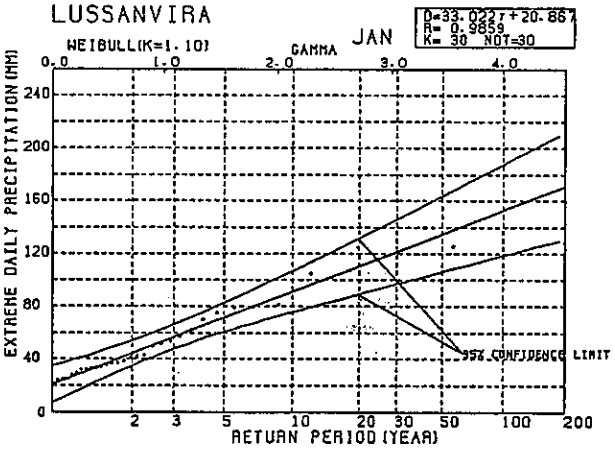


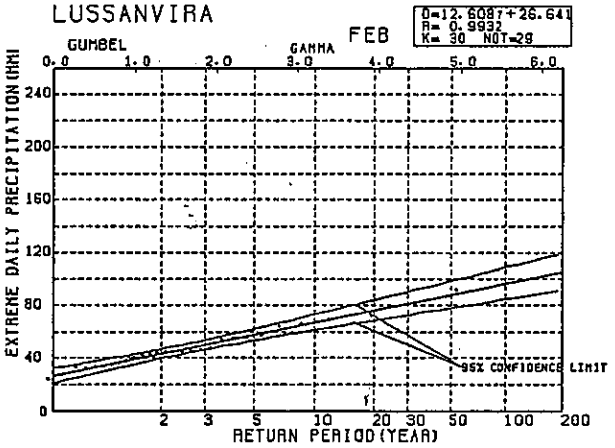
FIG. 4.32 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

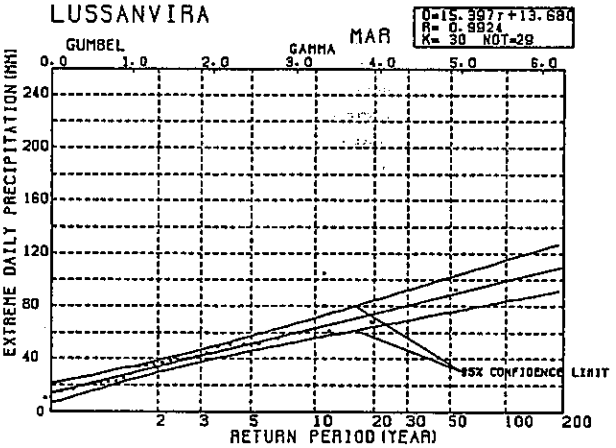












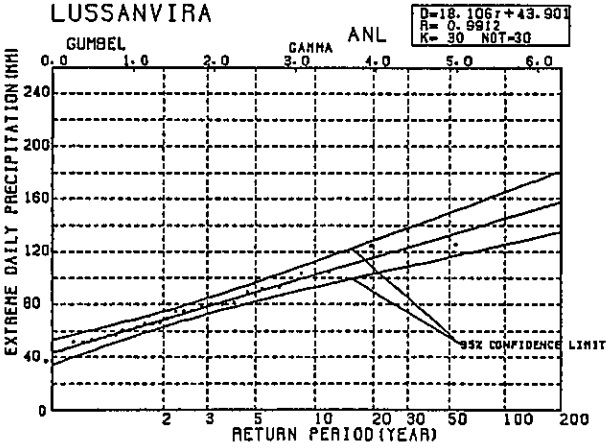
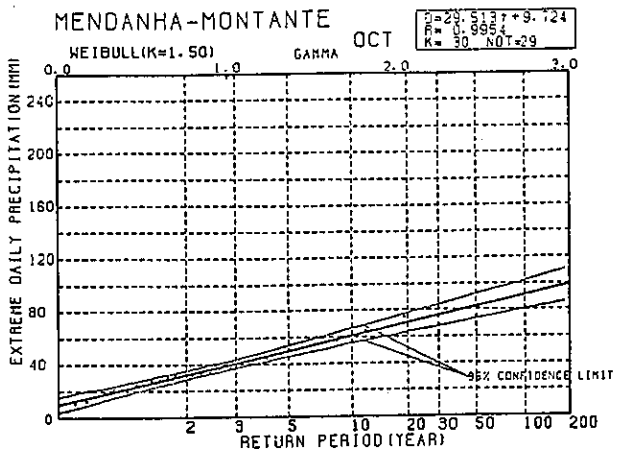
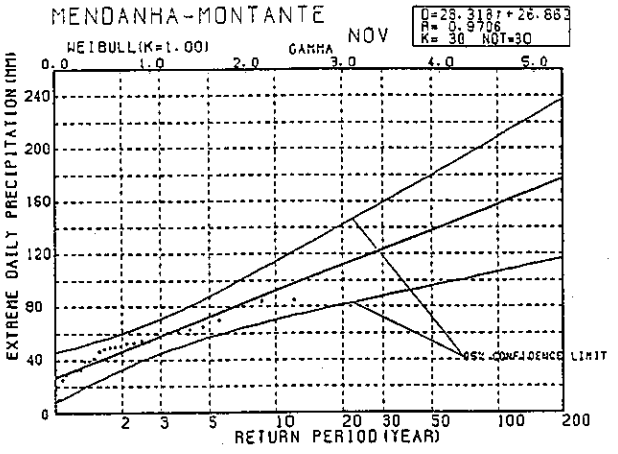
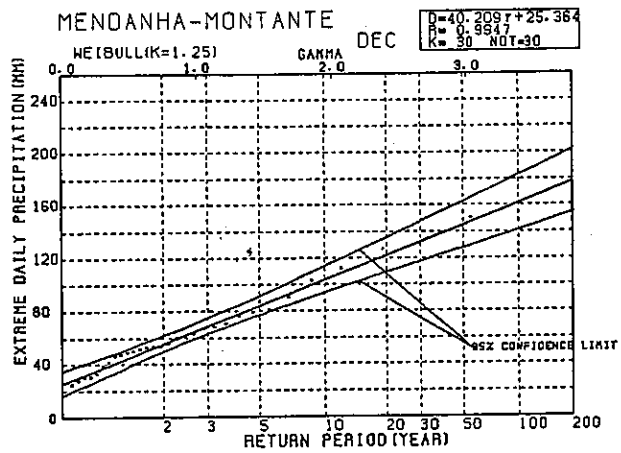
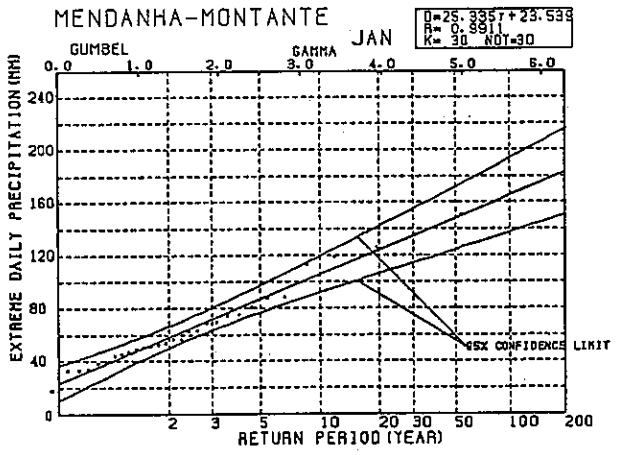


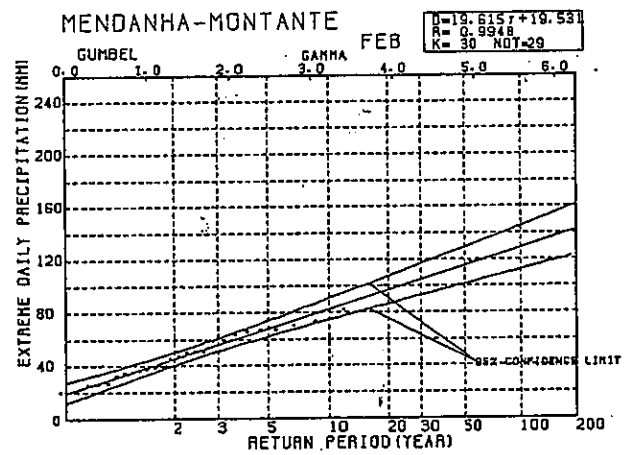
FIG. 4.33 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

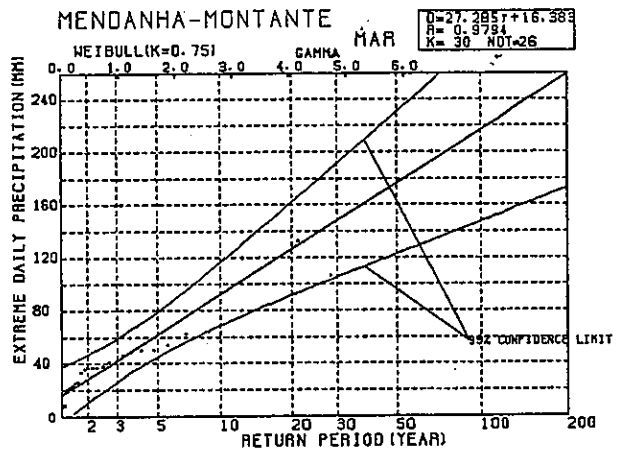












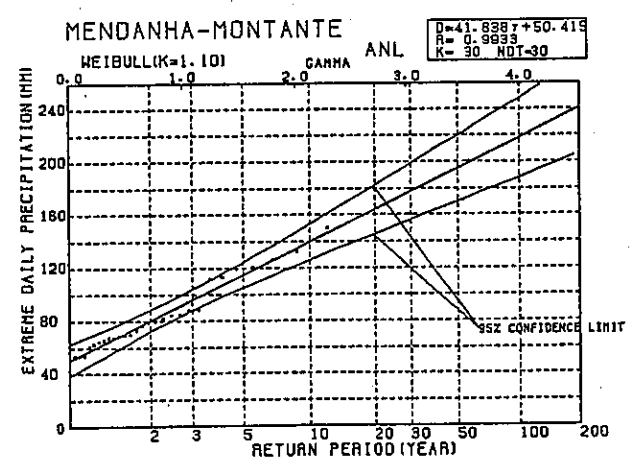
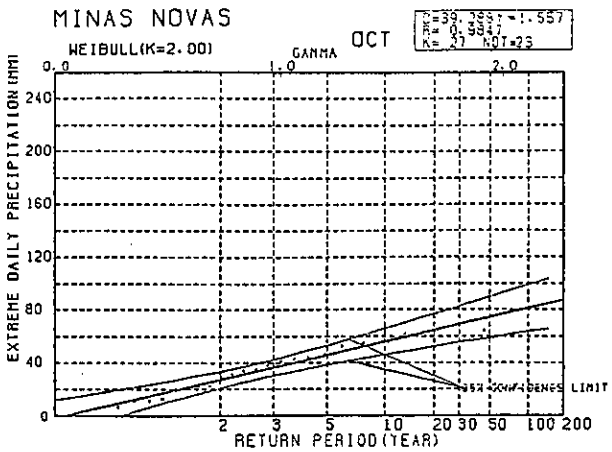
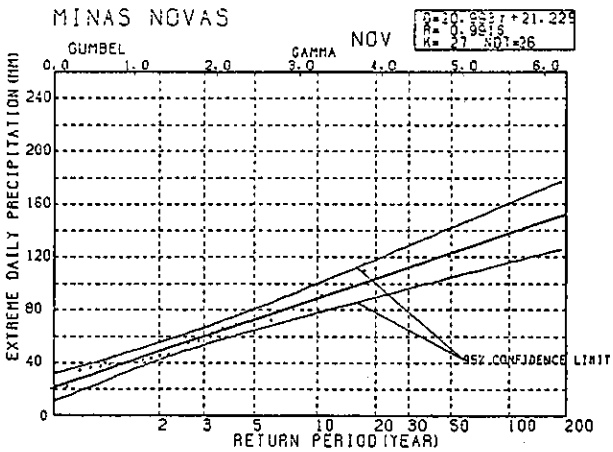
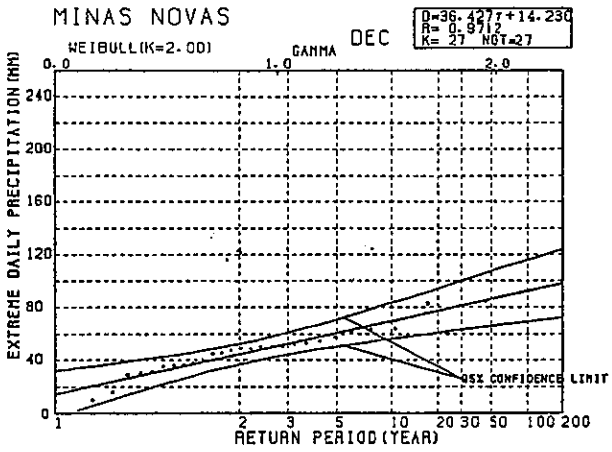
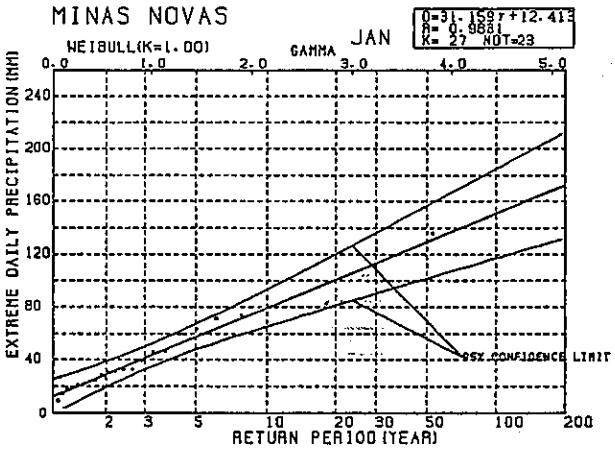


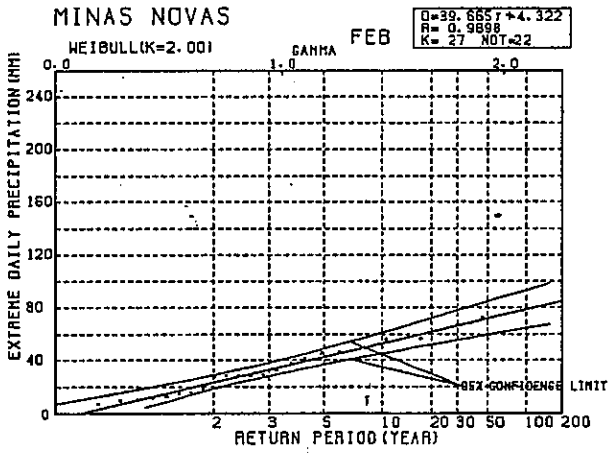
FIG. 4.34 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

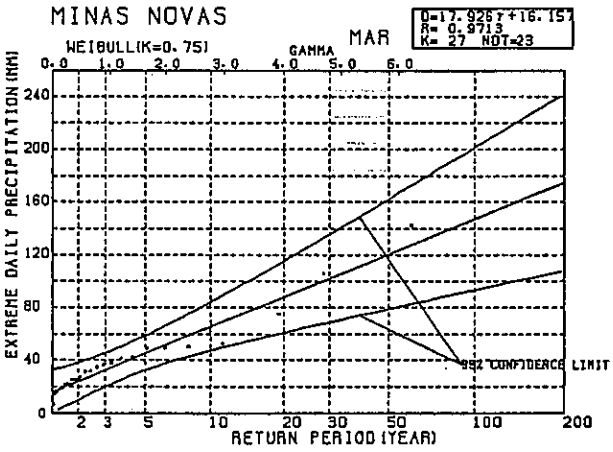












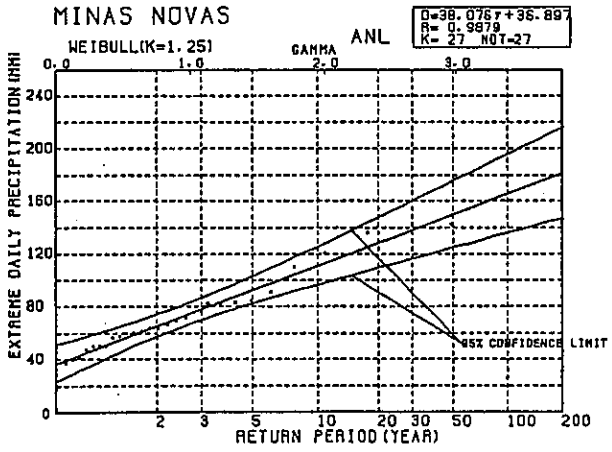


FIG. 4.35 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

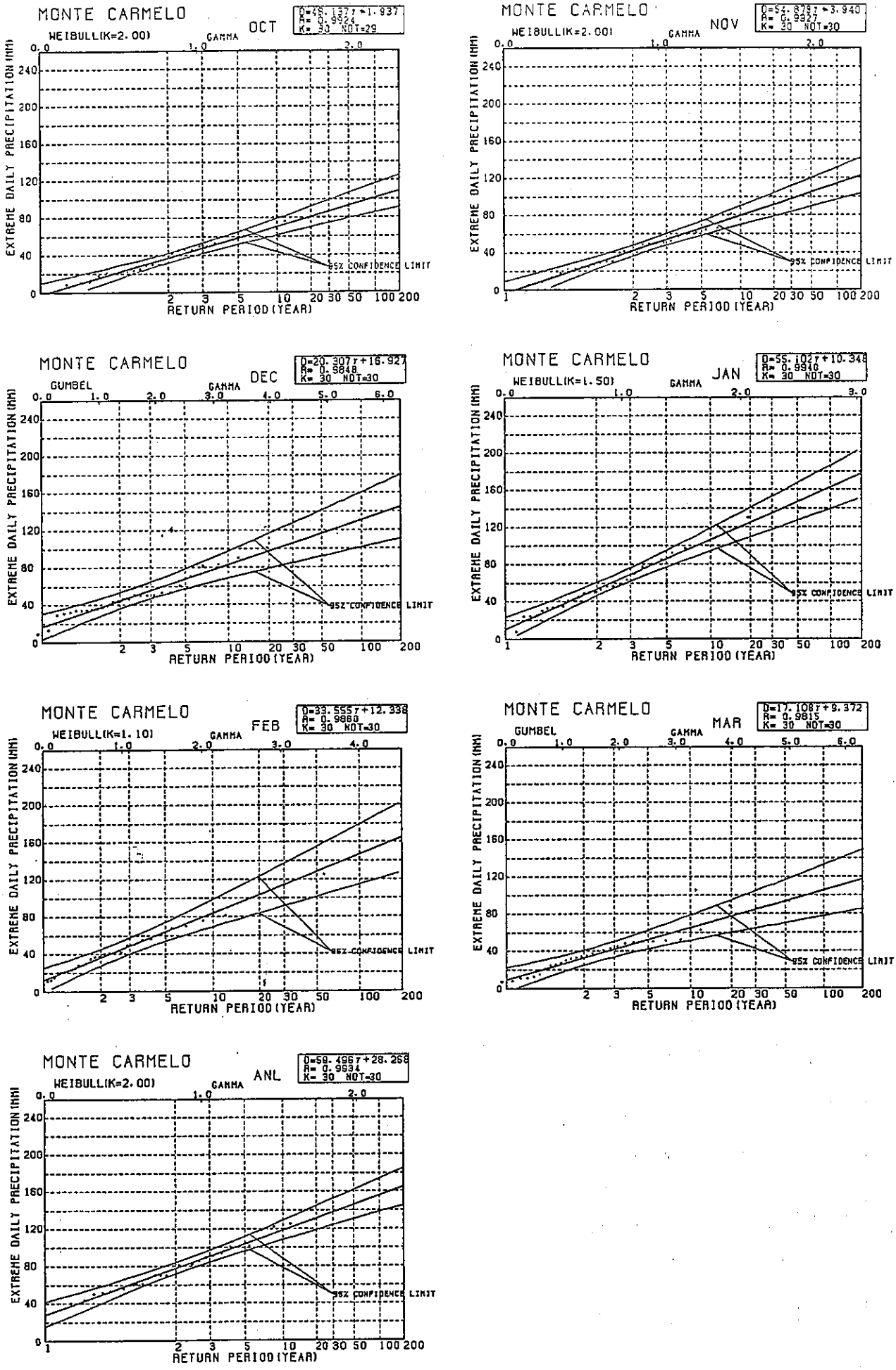
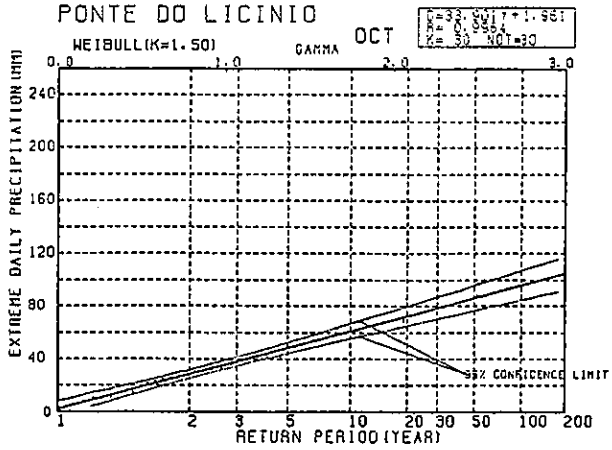
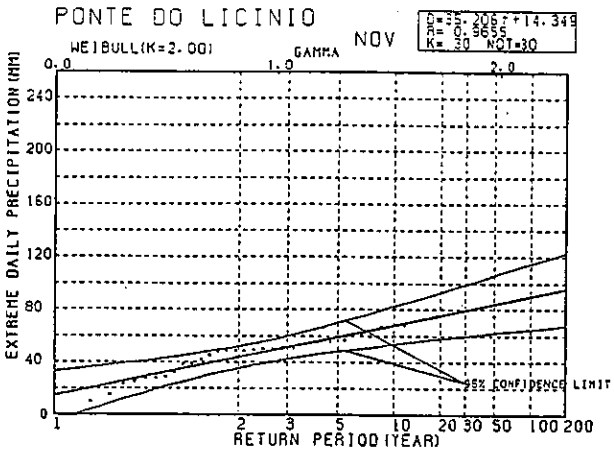
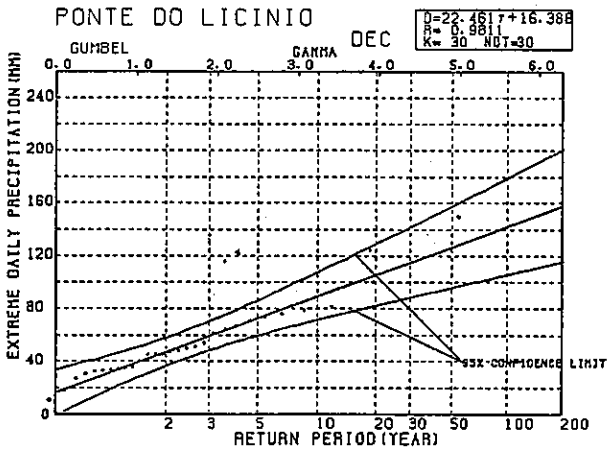
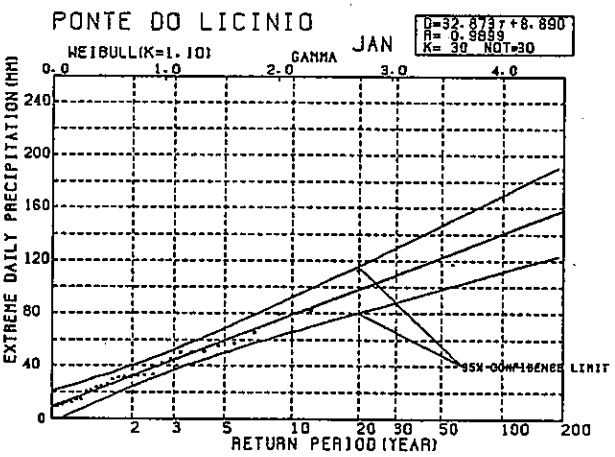


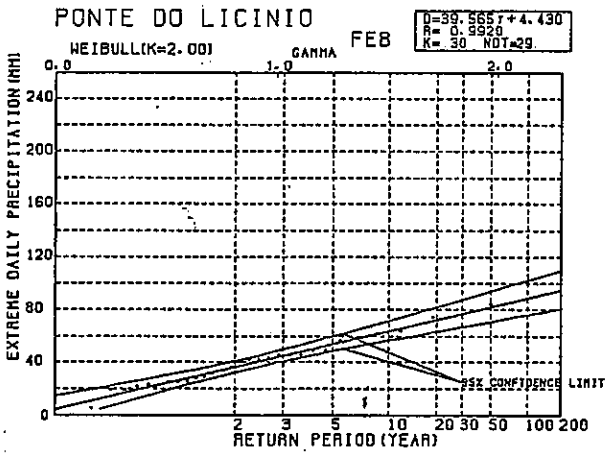
FIG. 4 . 36 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

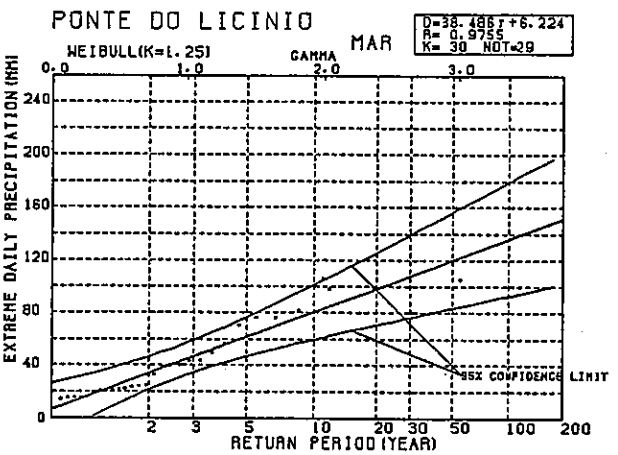












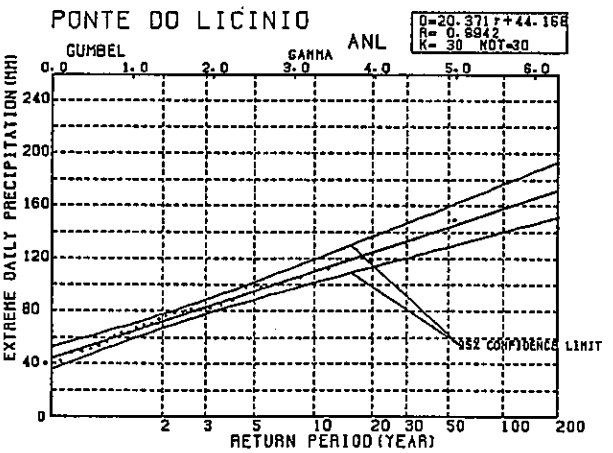
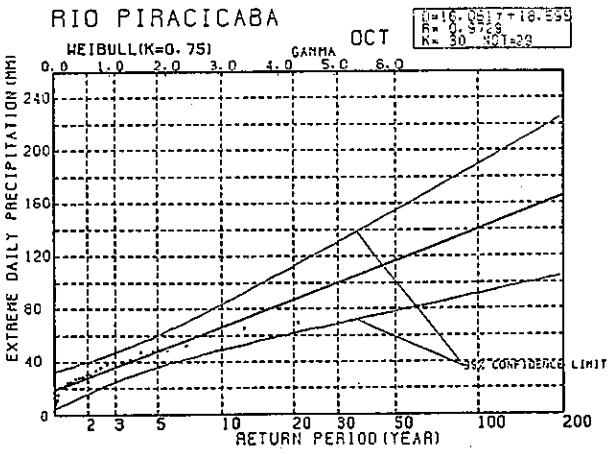
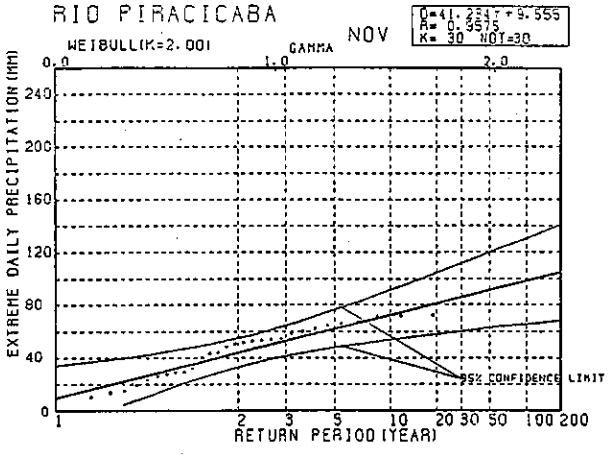
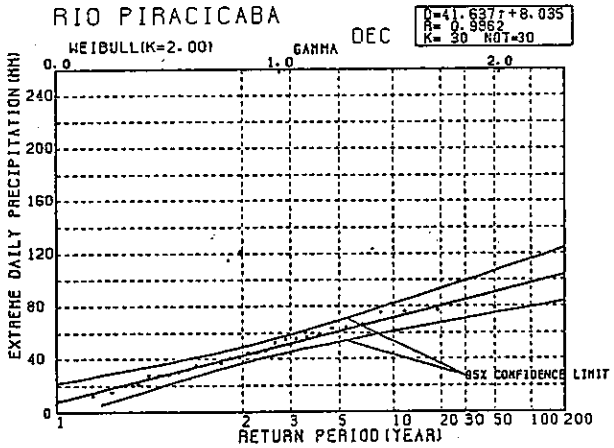
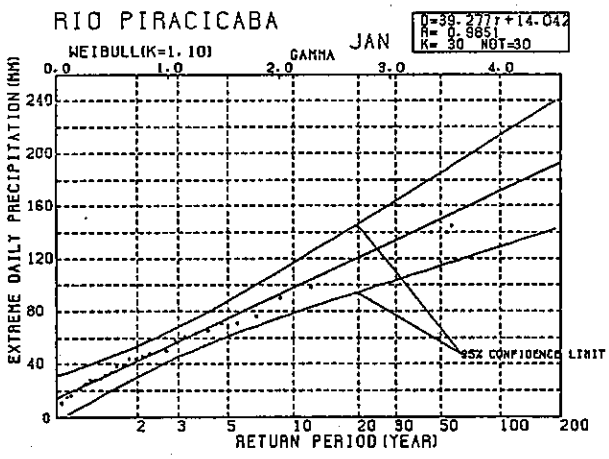


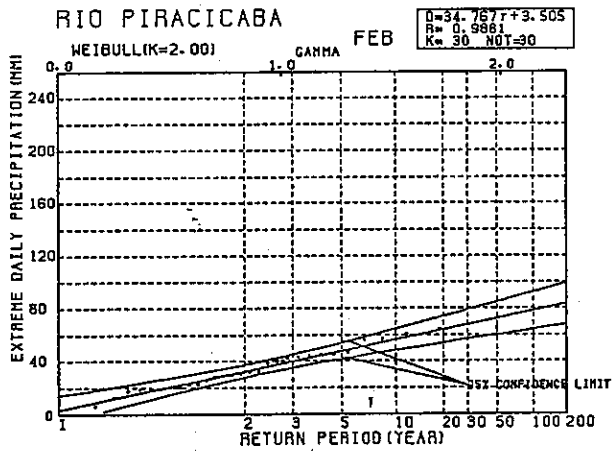
FIG. 4.37 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

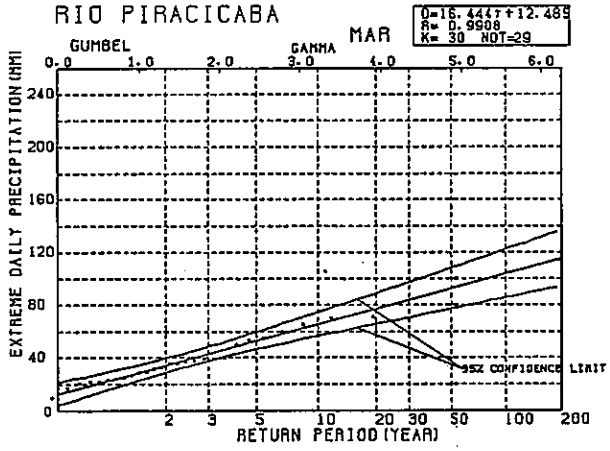












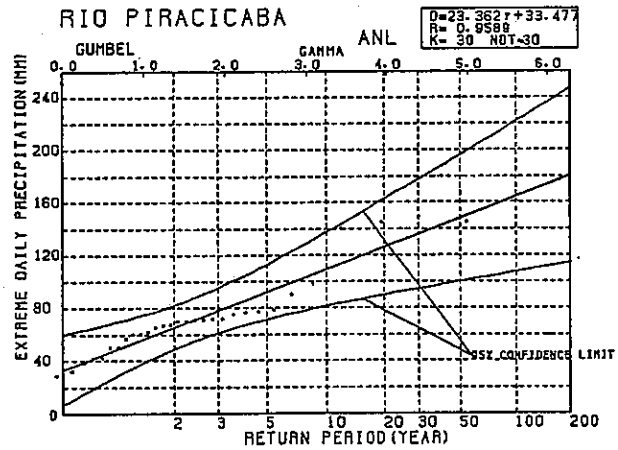
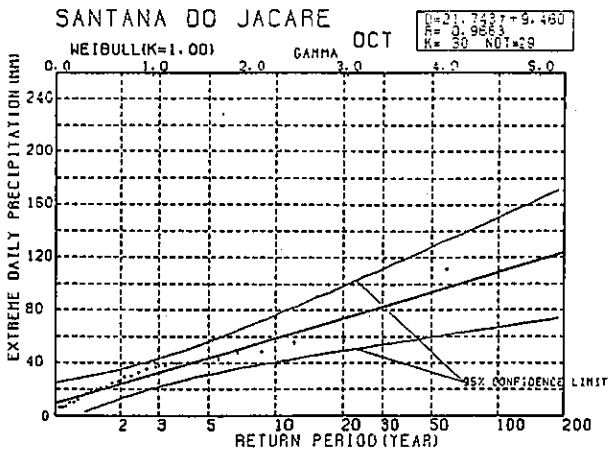
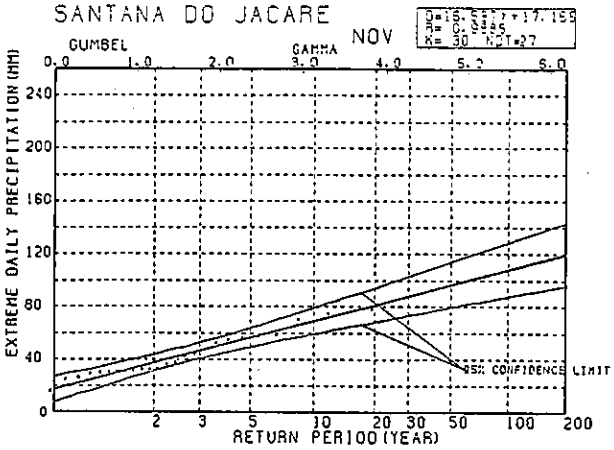
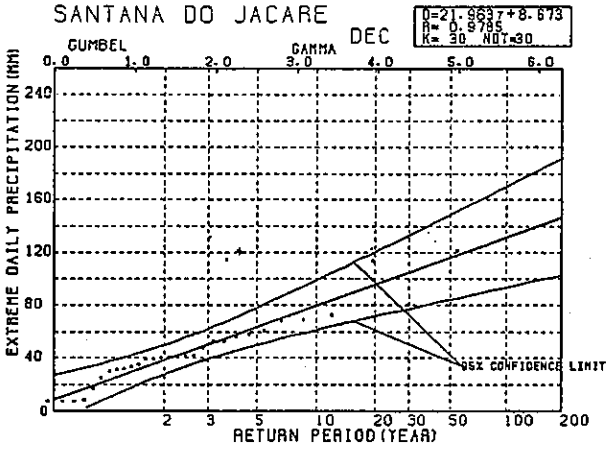
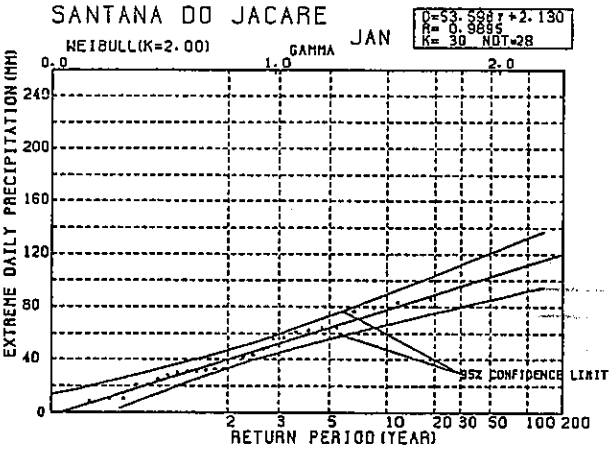


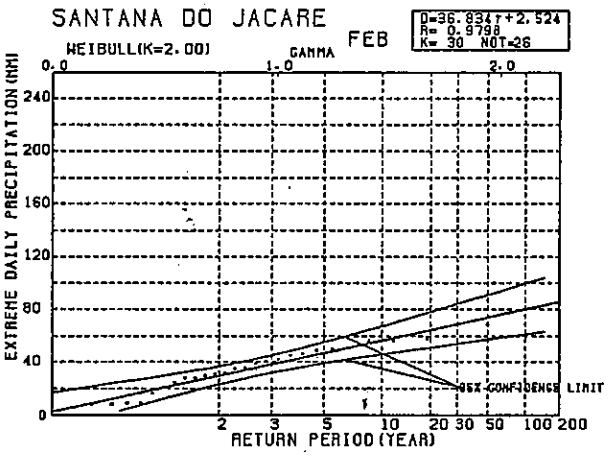
FIG. 4.38 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

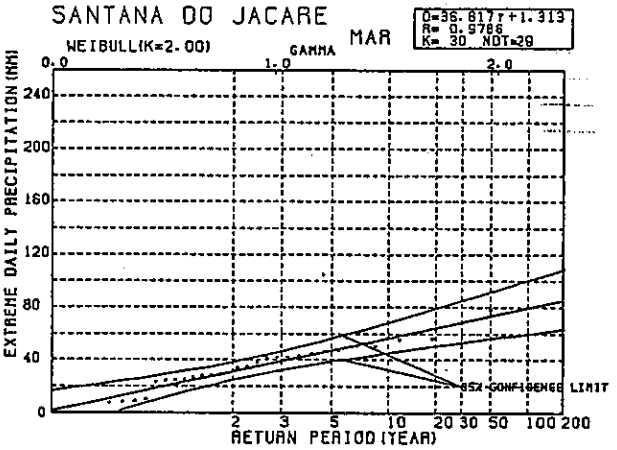












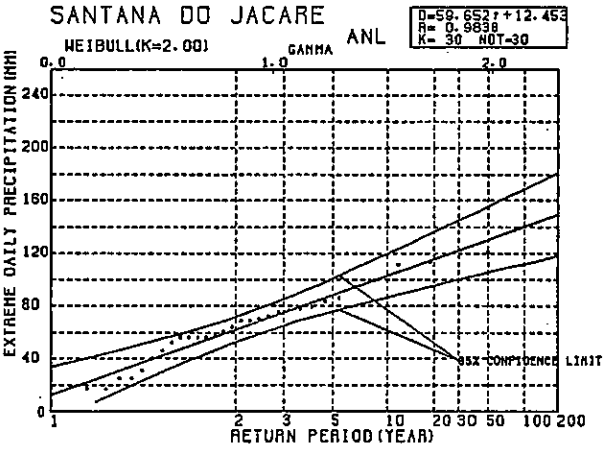


FIG. 4.39 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

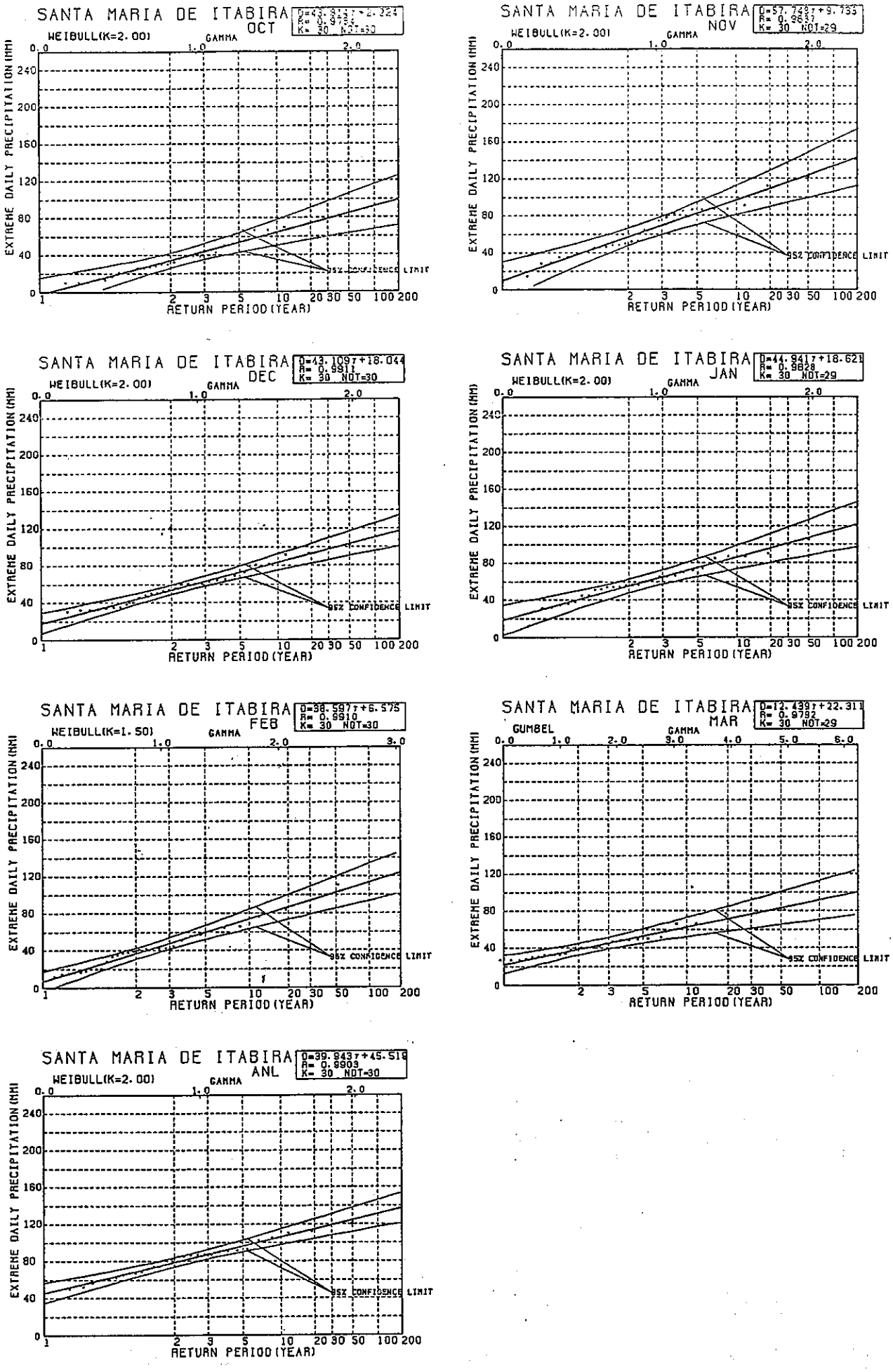
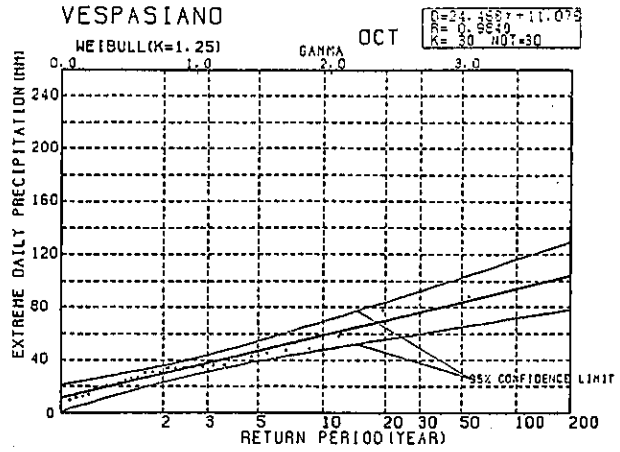
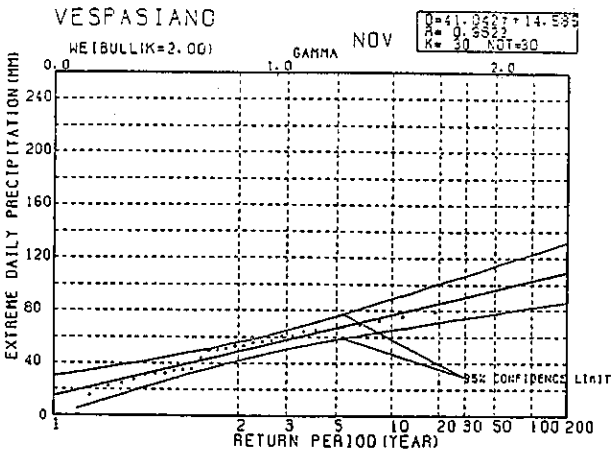
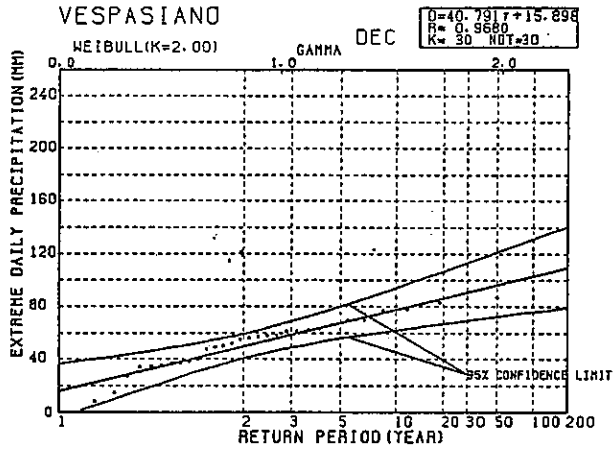
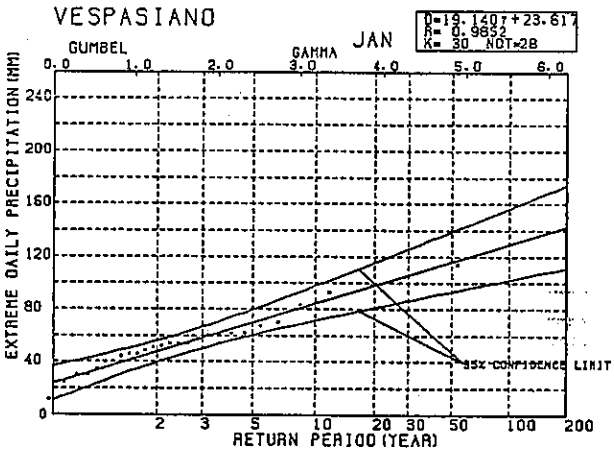


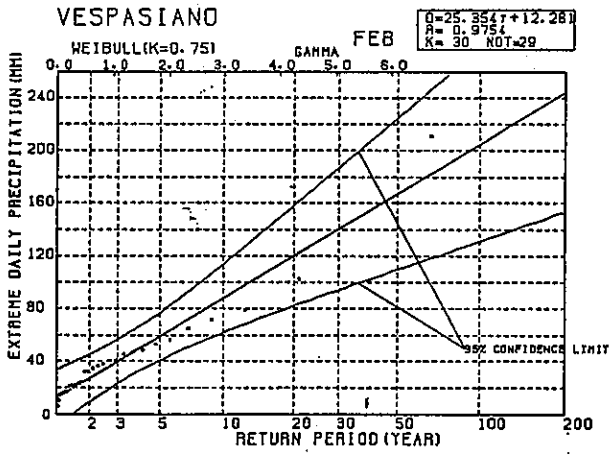
FIG. 4.40 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

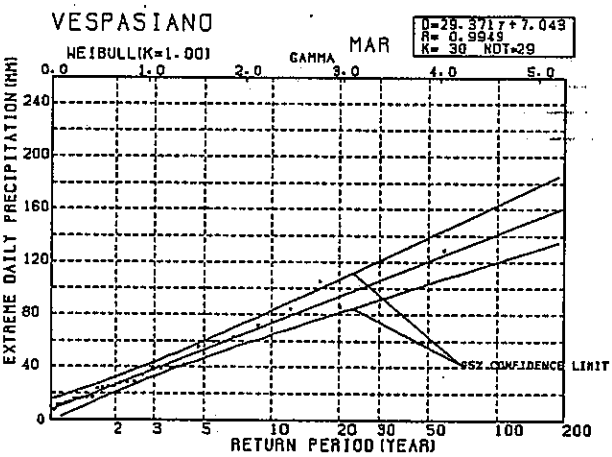












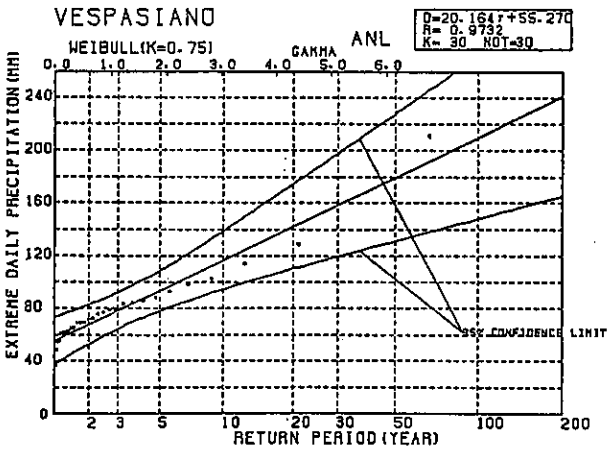


FIG. 4.4/ RETURN PERIOD OF EXTREME DAILY PRECIPITATION

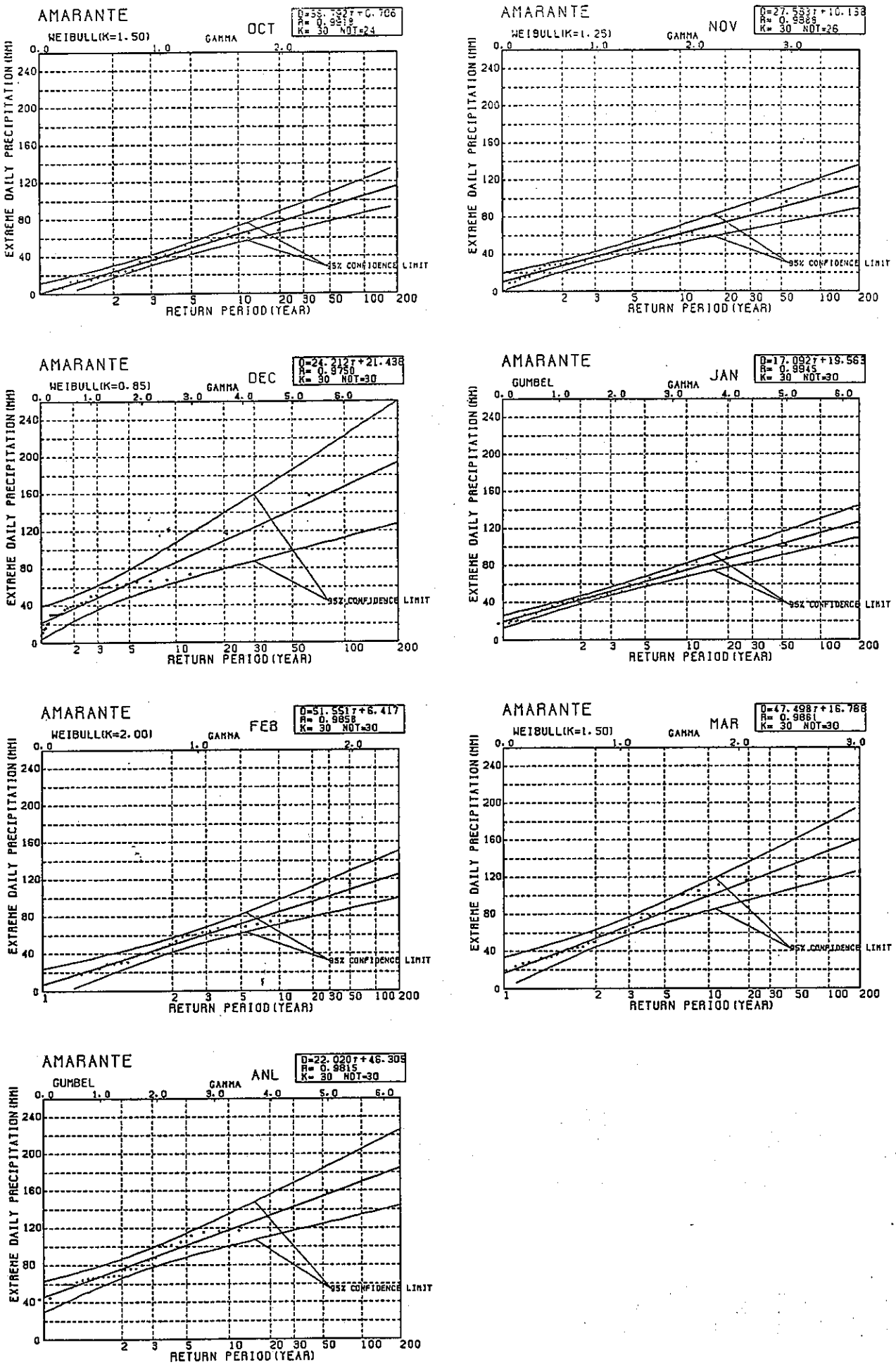
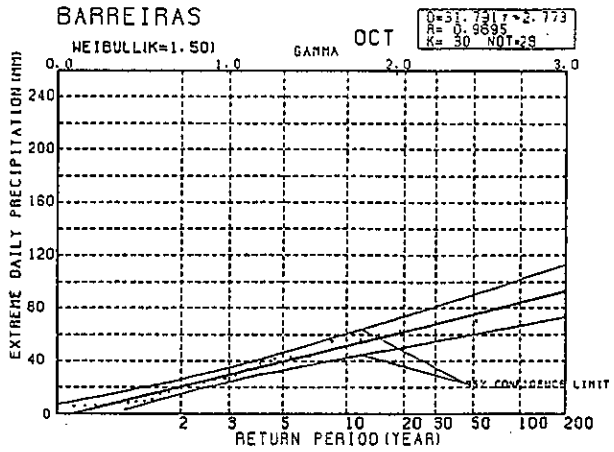
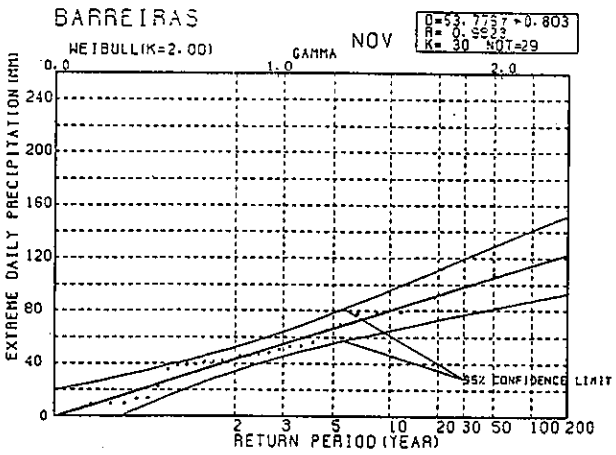
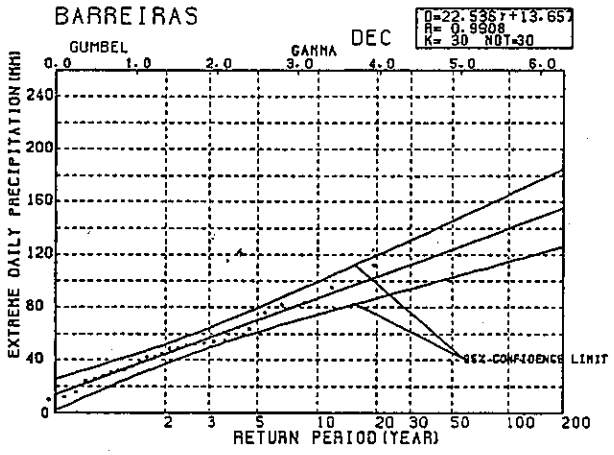
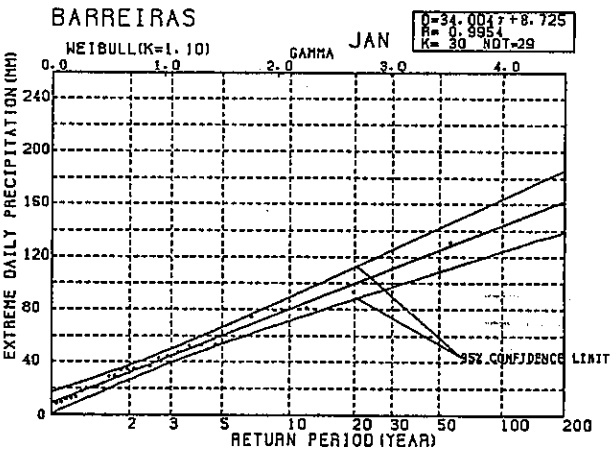


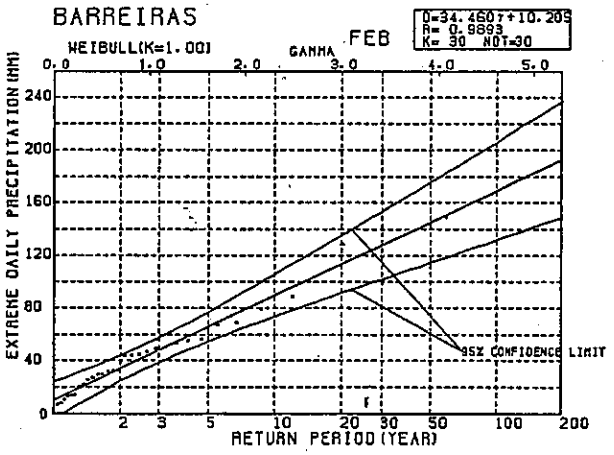
FIG. 4.42 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

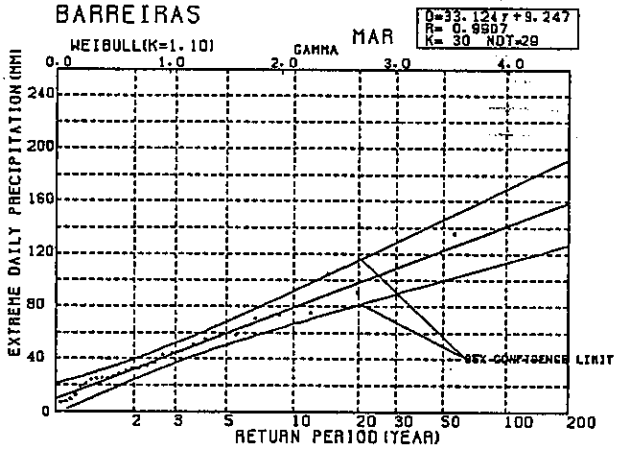












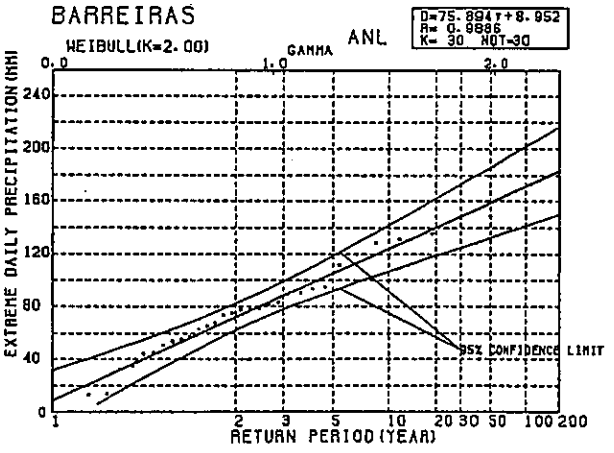
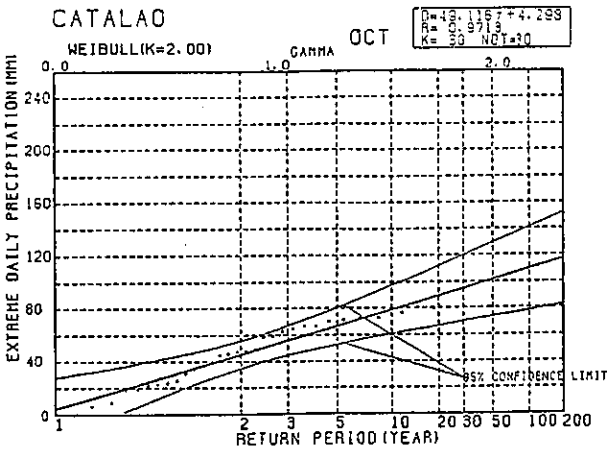
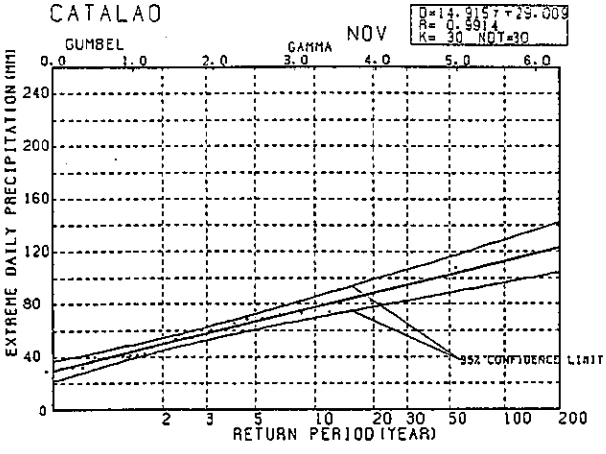
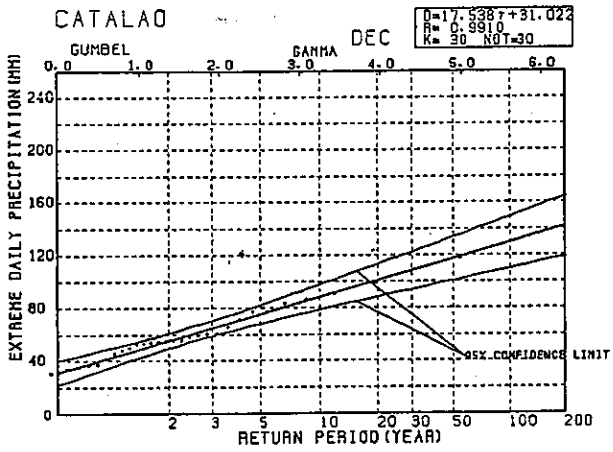
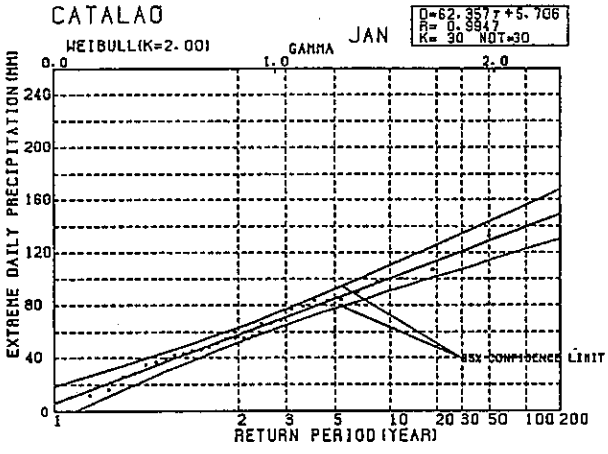


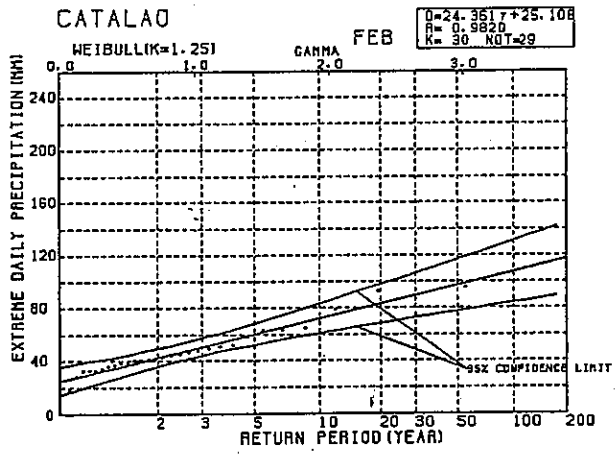
FIG. 4.43 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

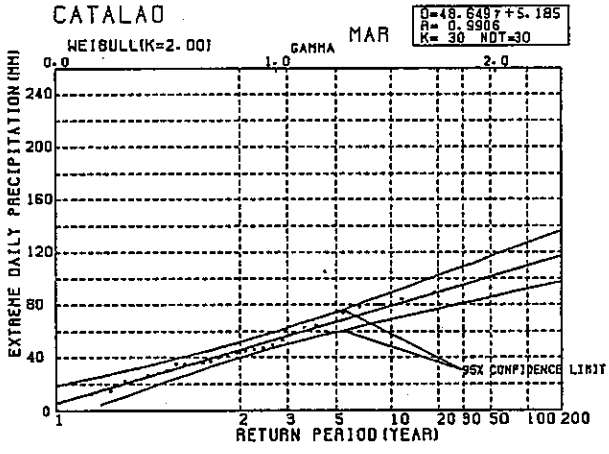












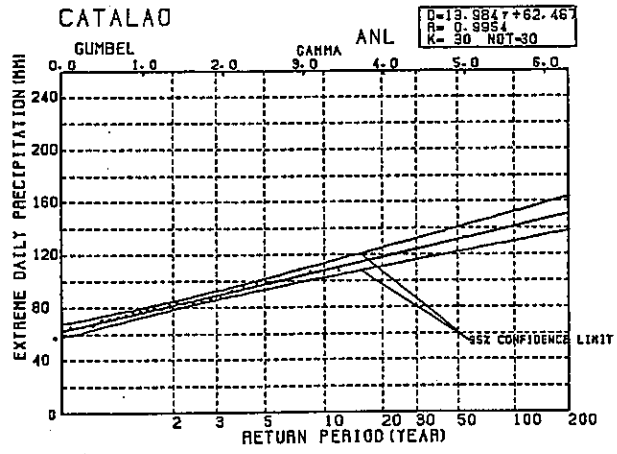
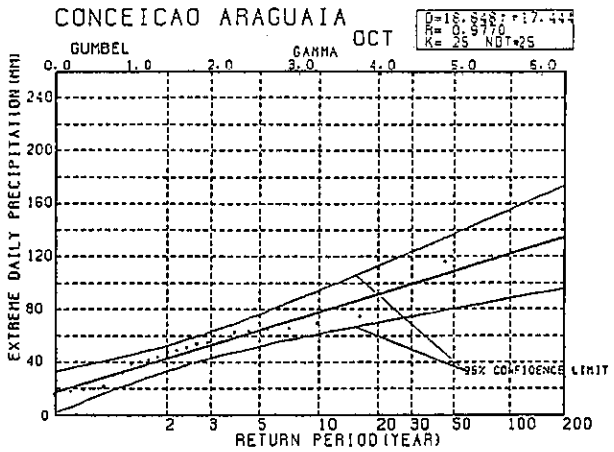
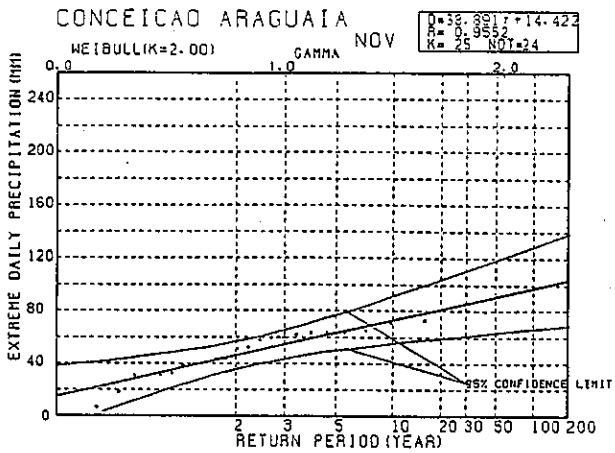
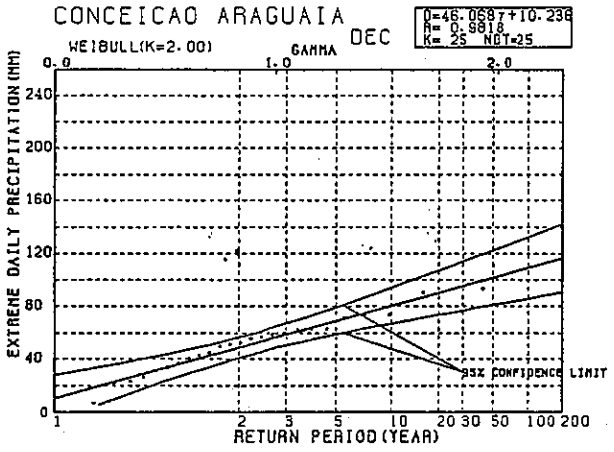
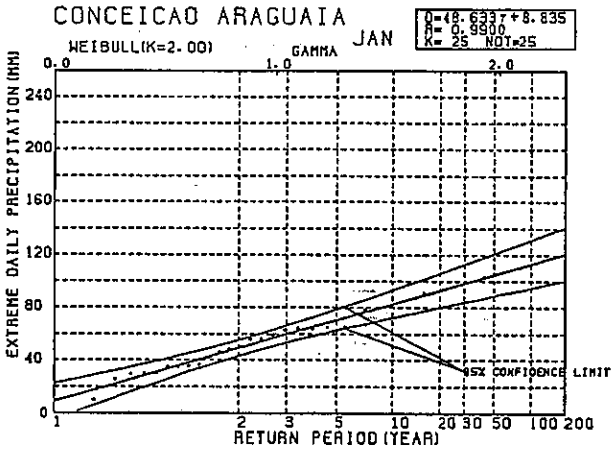


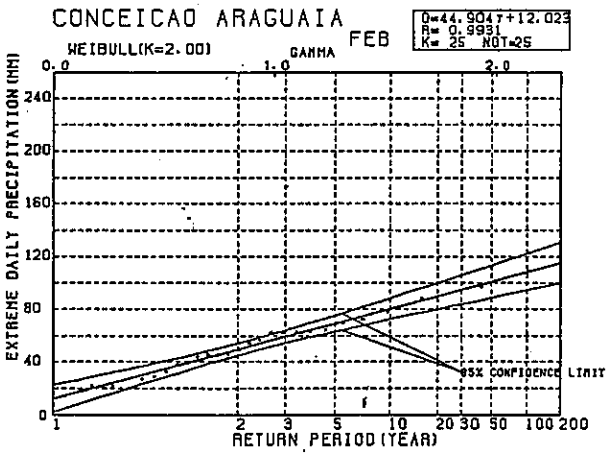
FIG. 4.44 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

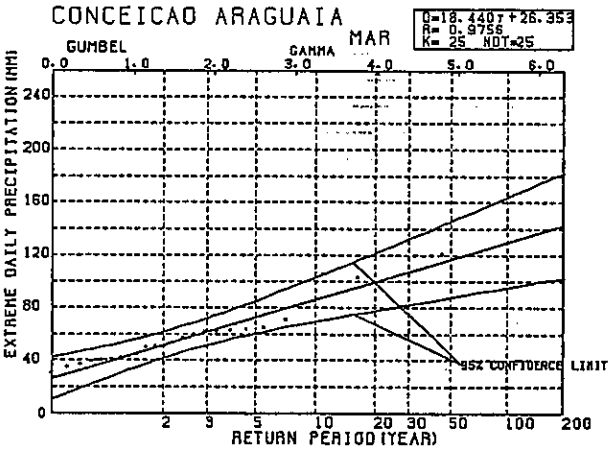












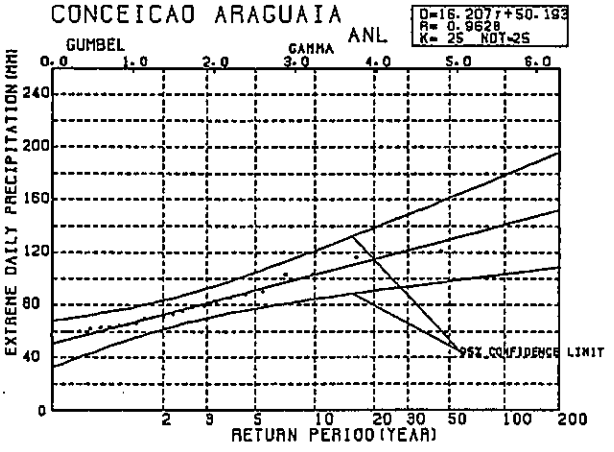


FIG. 4.45 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

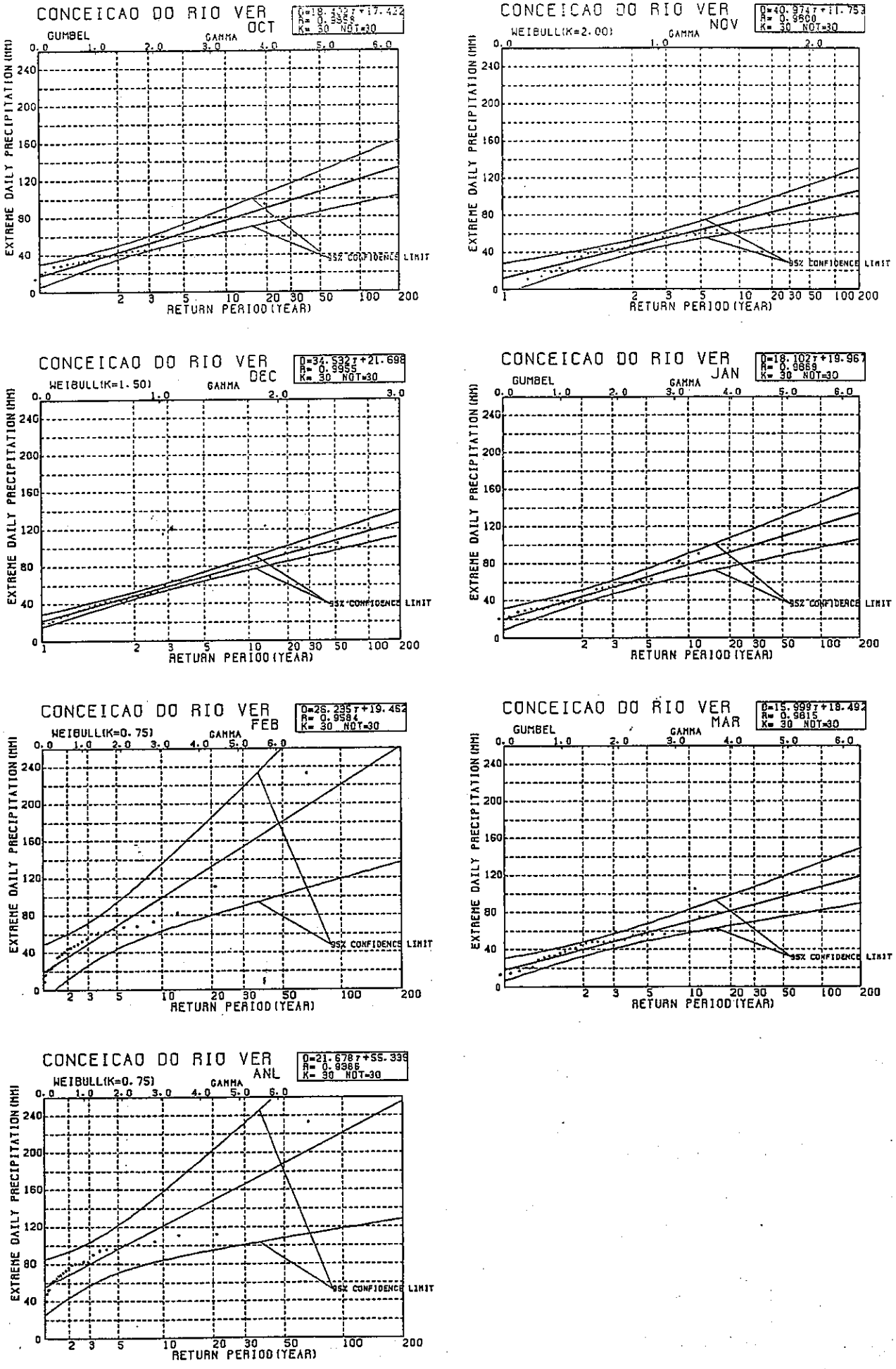
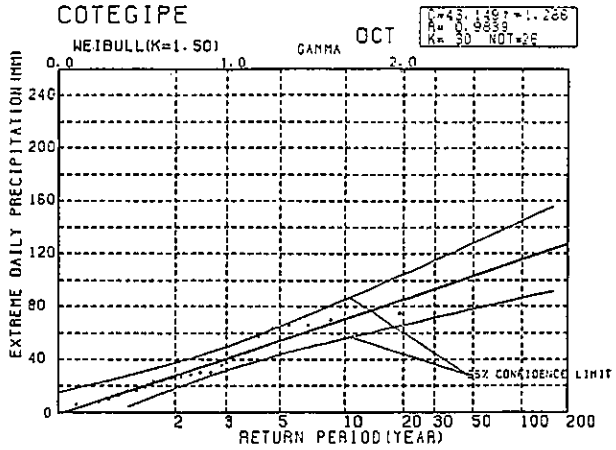
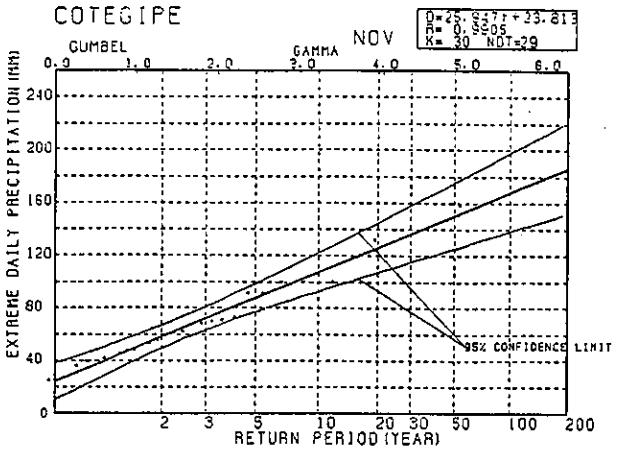
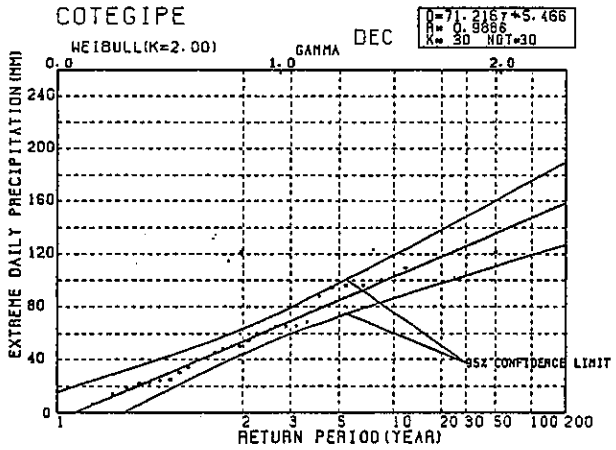
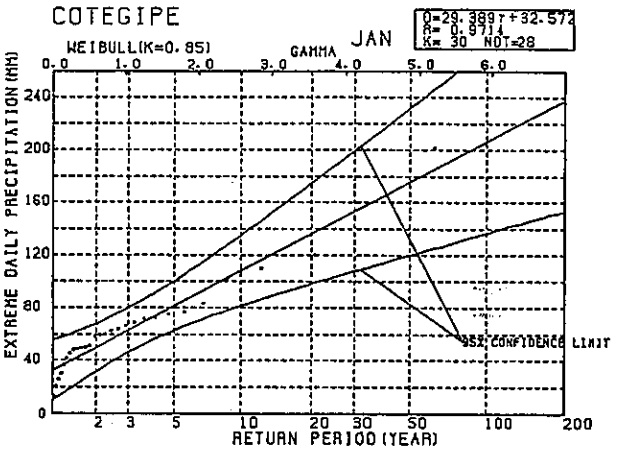


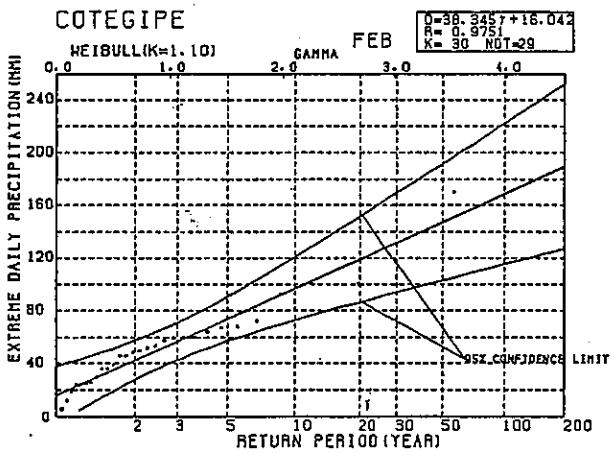
FIG. 4 . 46. RETURN PERIOD OF EXTREME DAILY PRECIPITATION

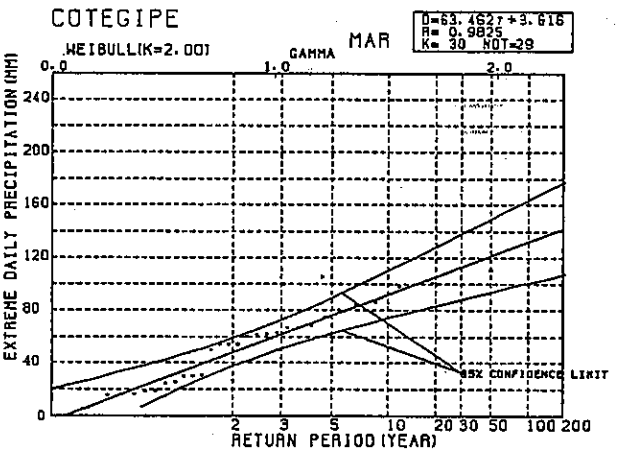












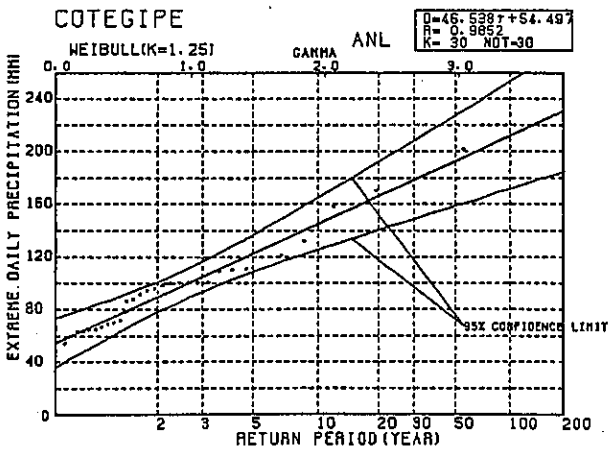
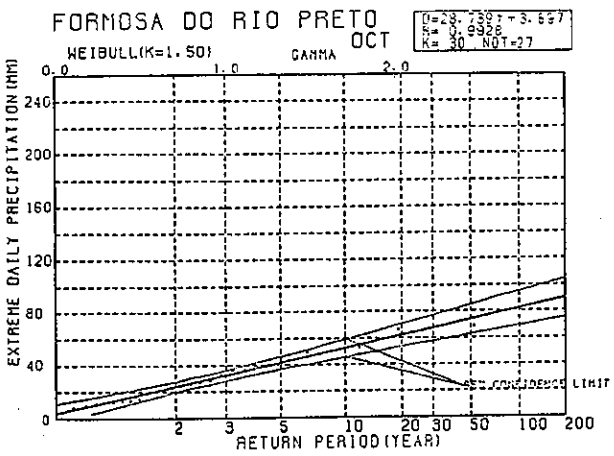
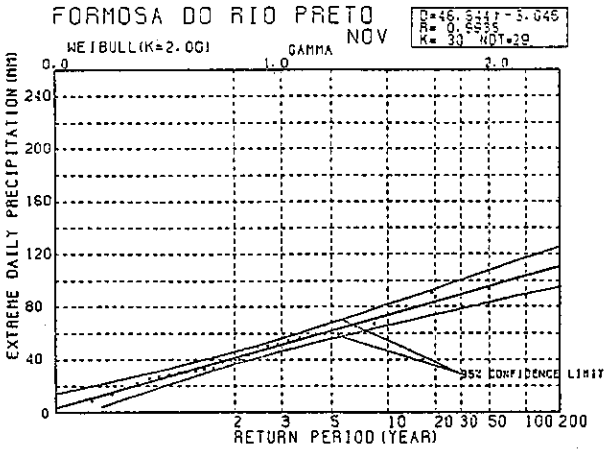
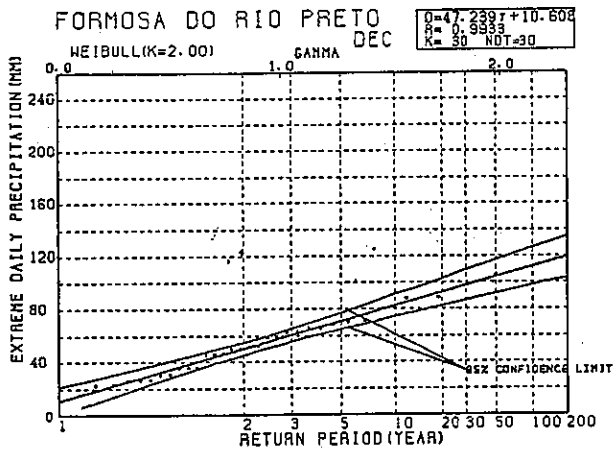
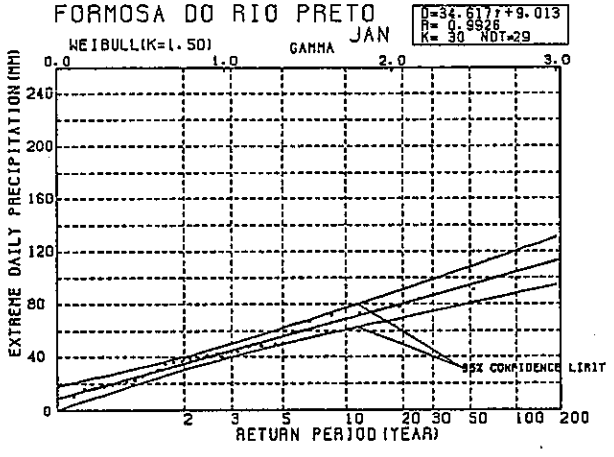


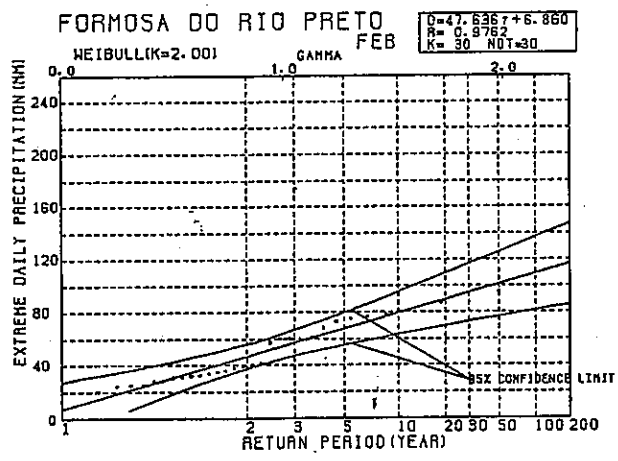
FIG. 4.47 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

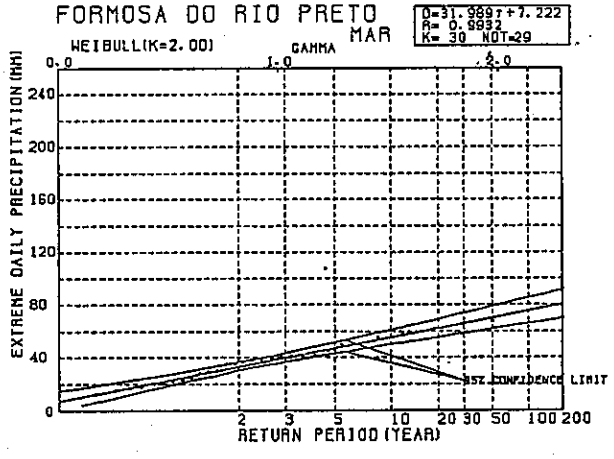












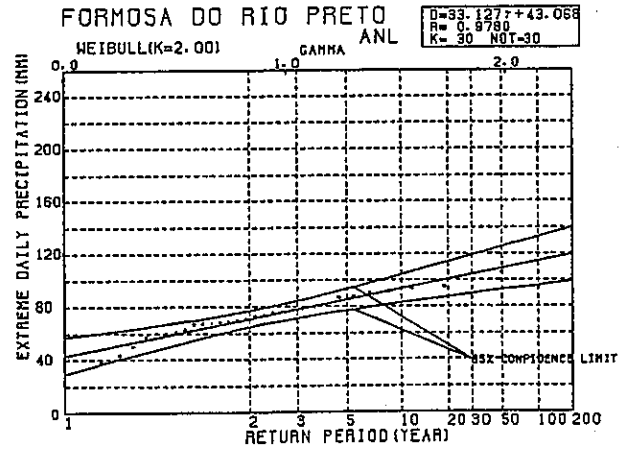
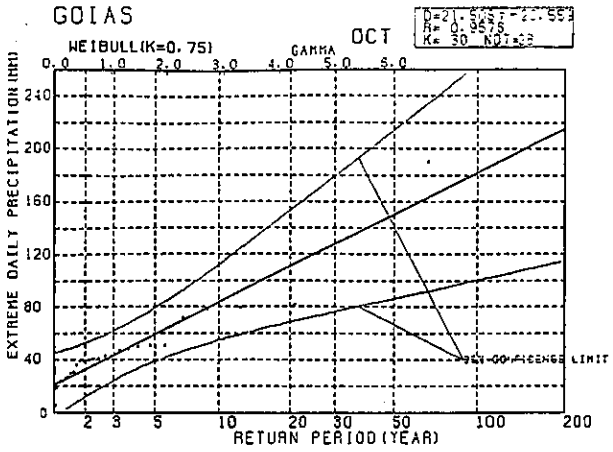
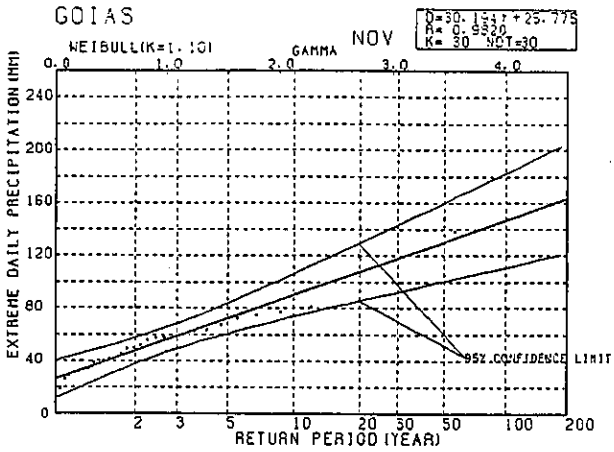
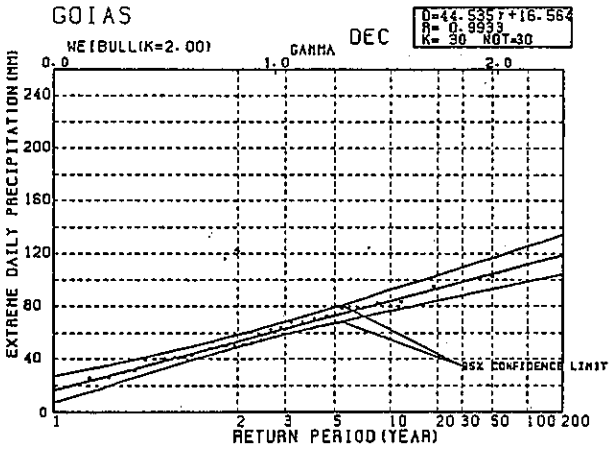
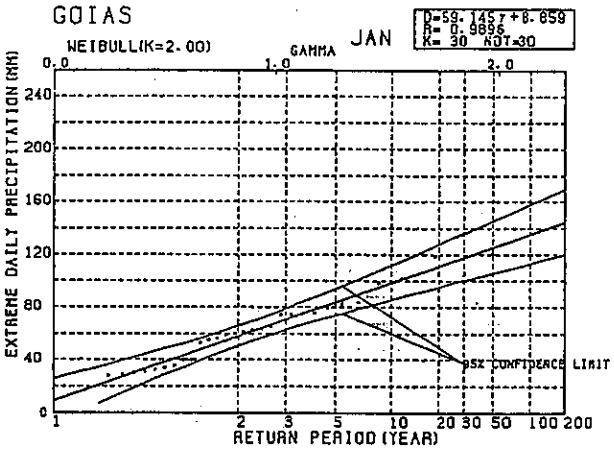


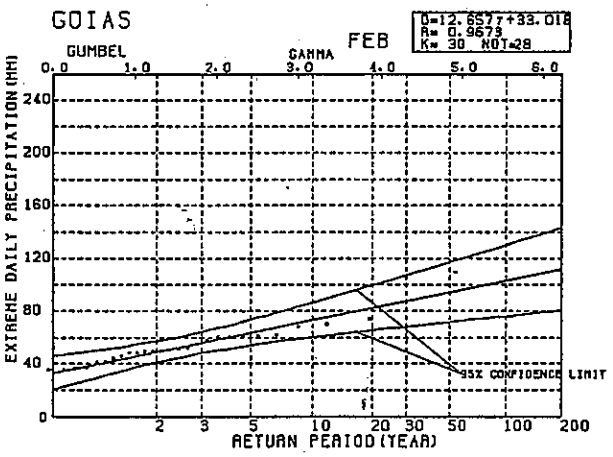
FIG. 4.48 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

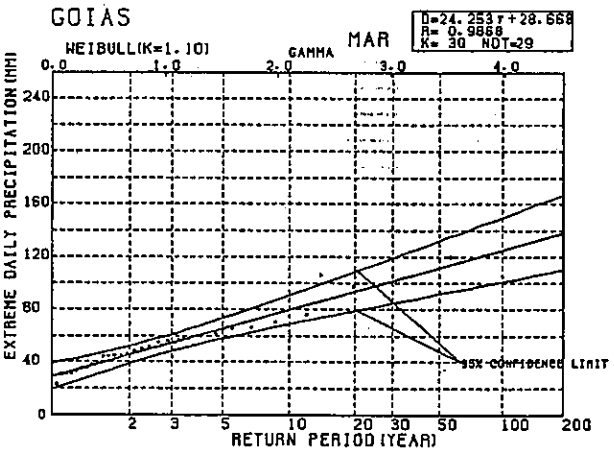












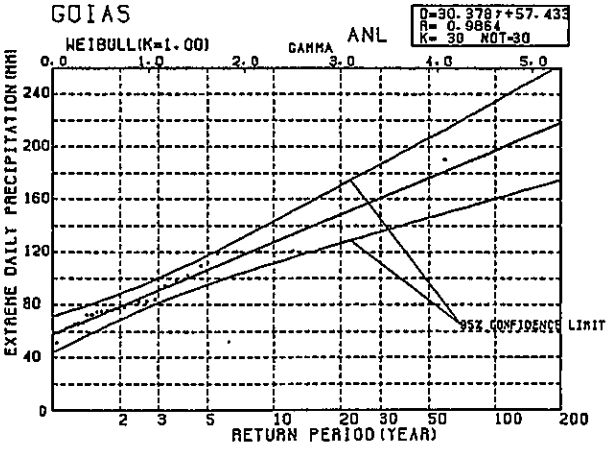
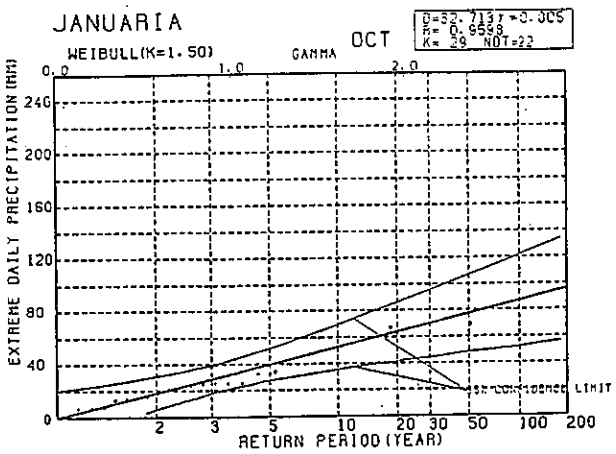
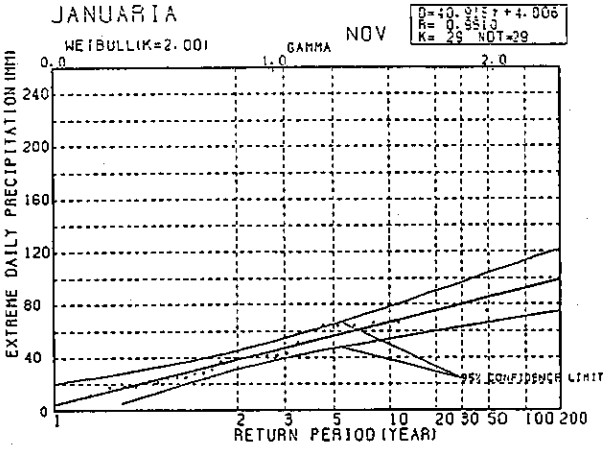
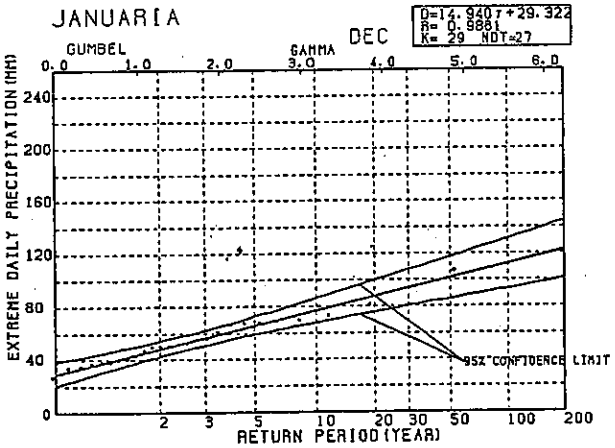
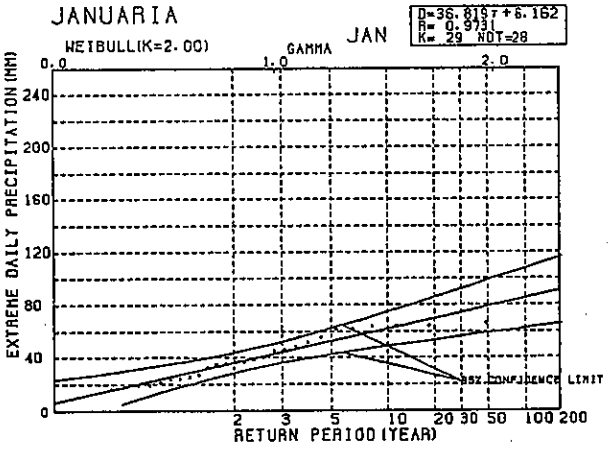


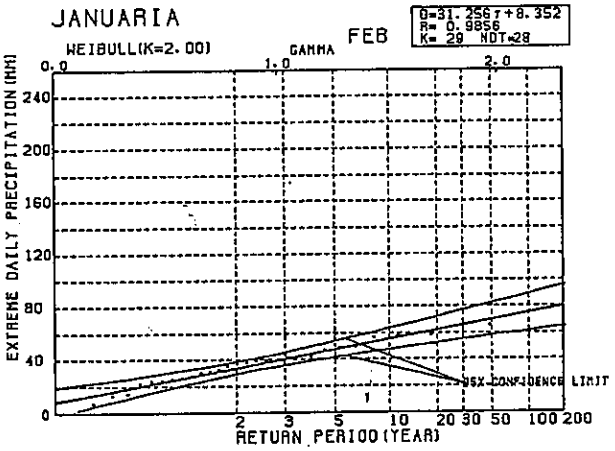
FIG. 4.49 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

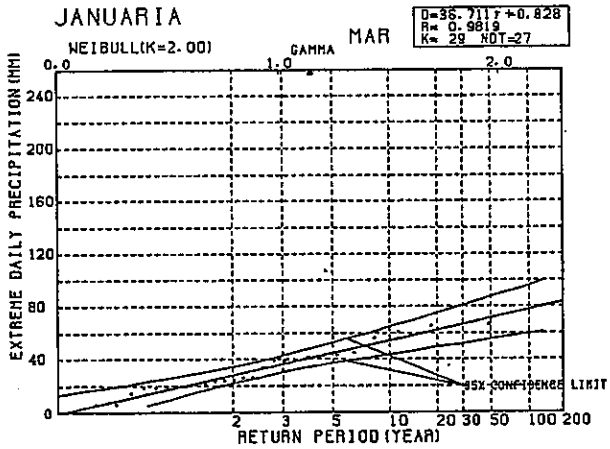












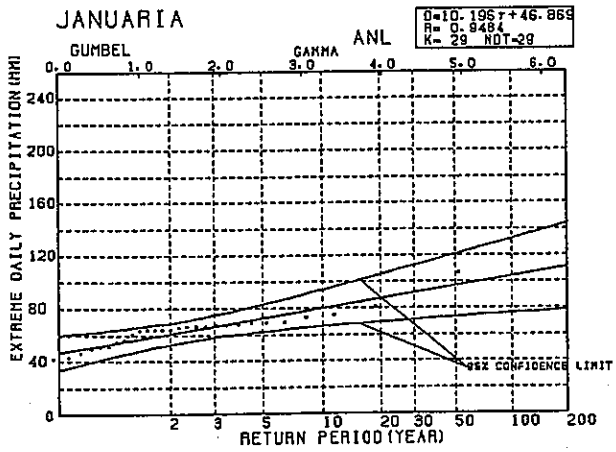
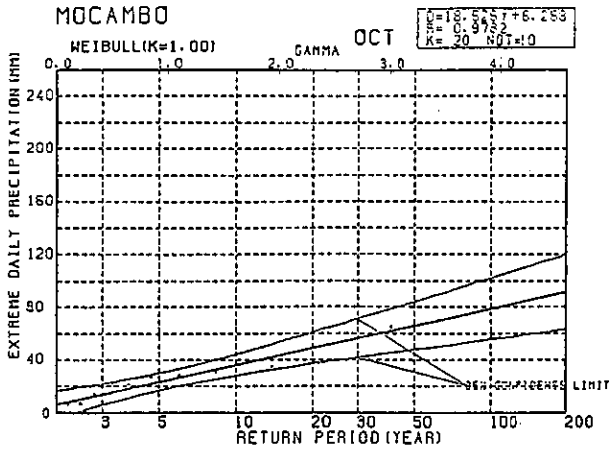
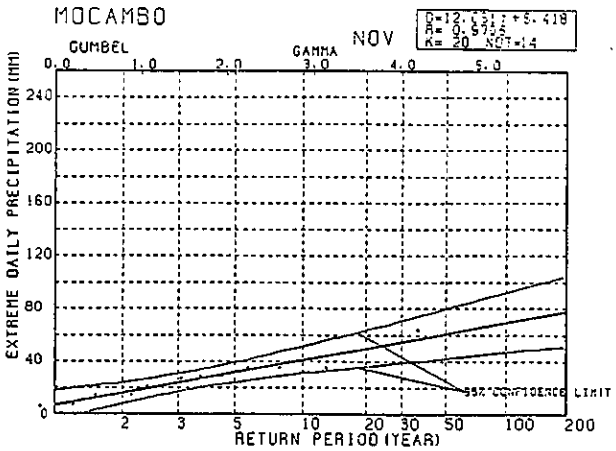
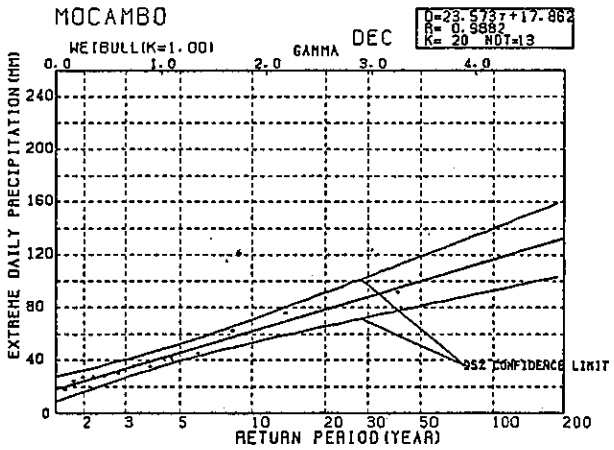
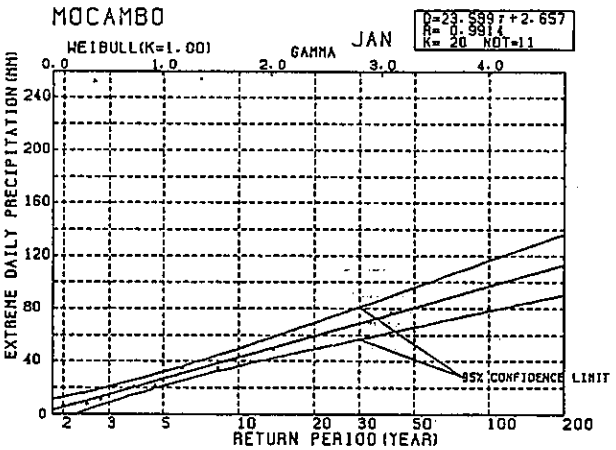


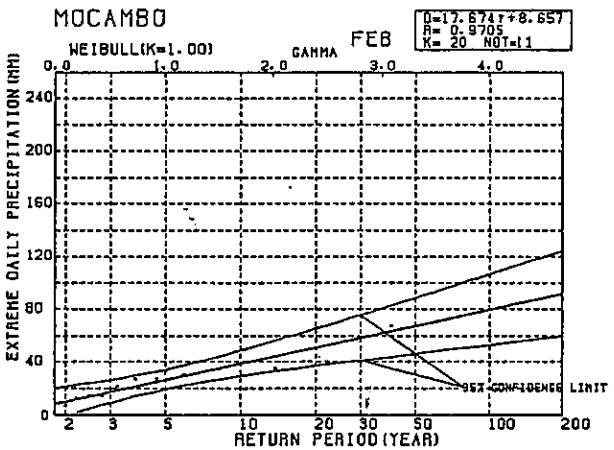
FIG. 4.50 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

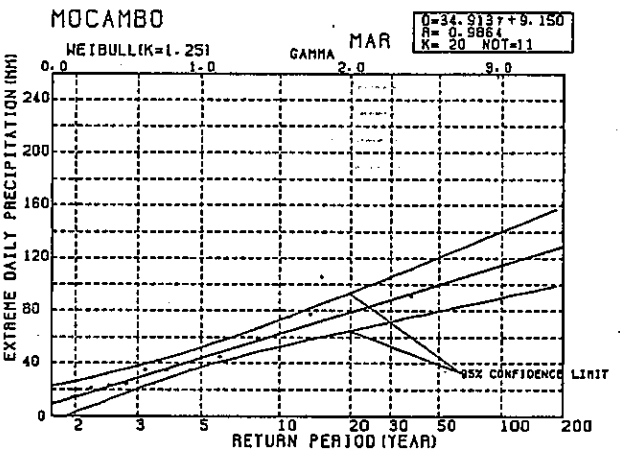












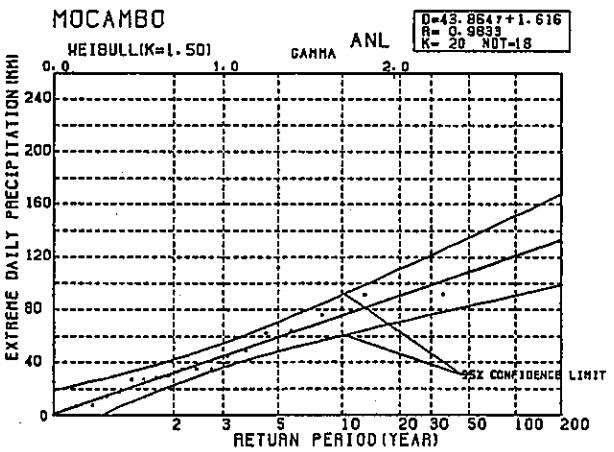
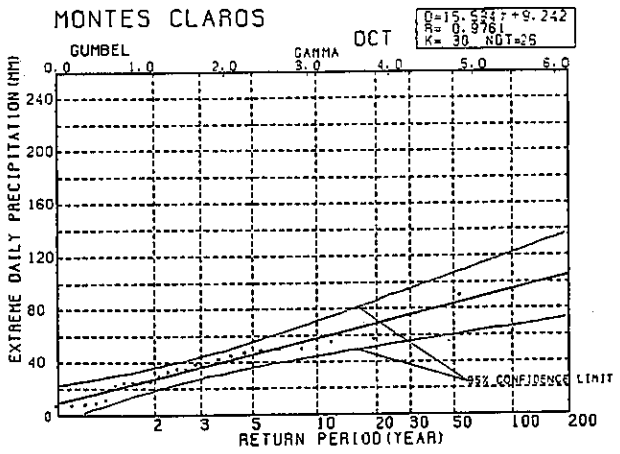
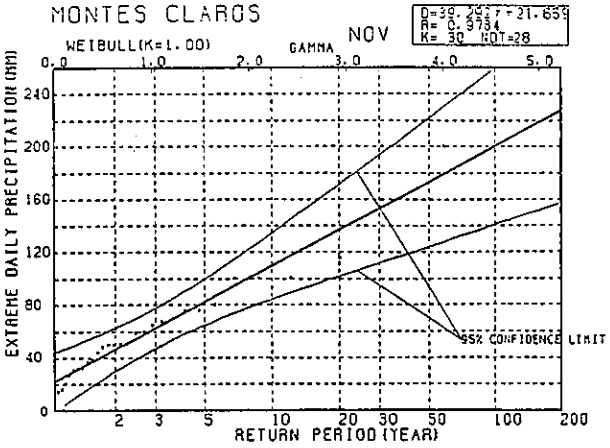
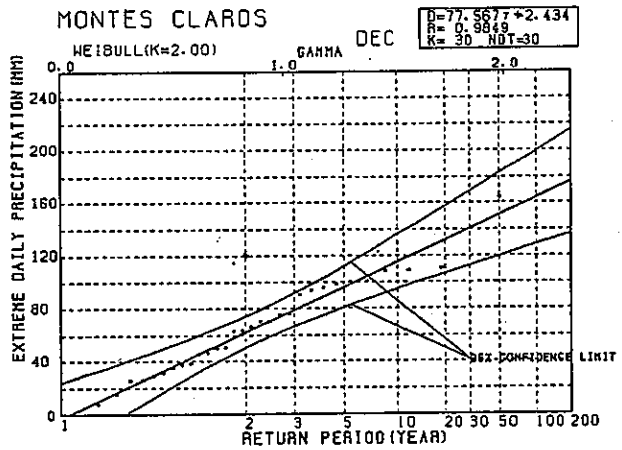
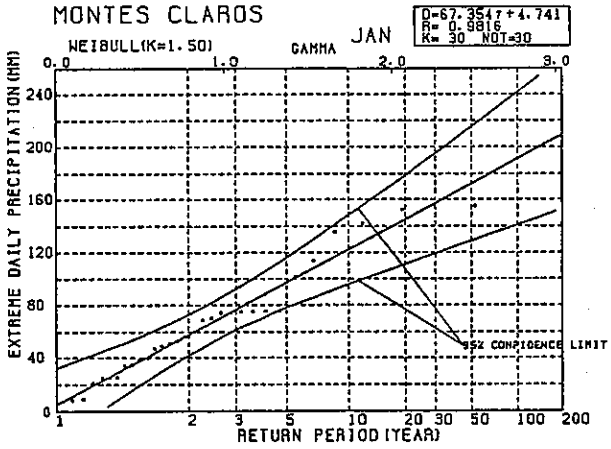


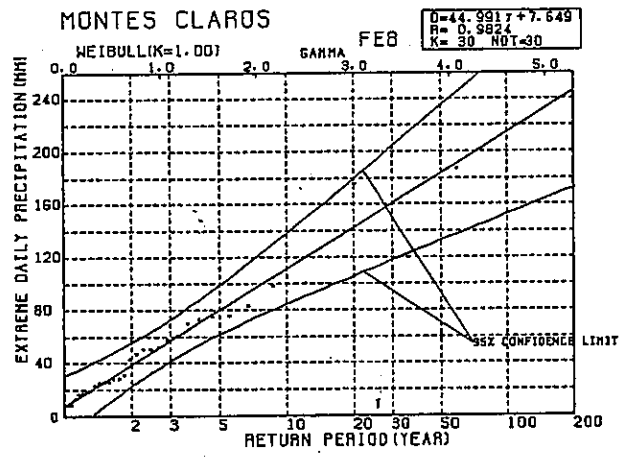
FIG. 4.5/ RETURN PERIOD OF EXTREME DAILY PRECIPITATION

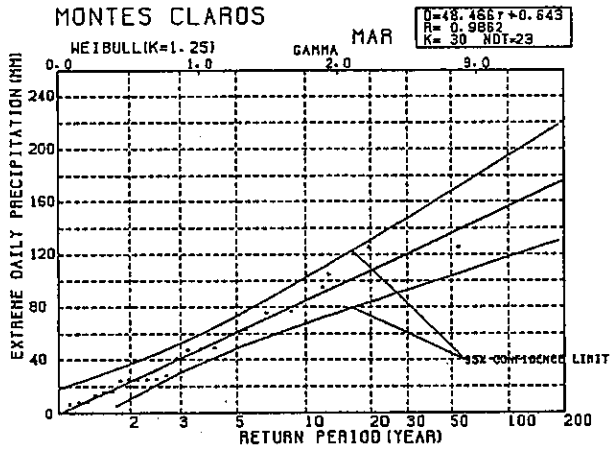












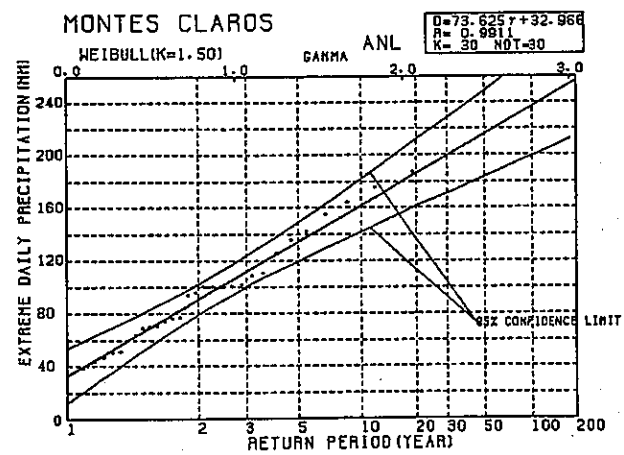


FIG. 4 .52 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

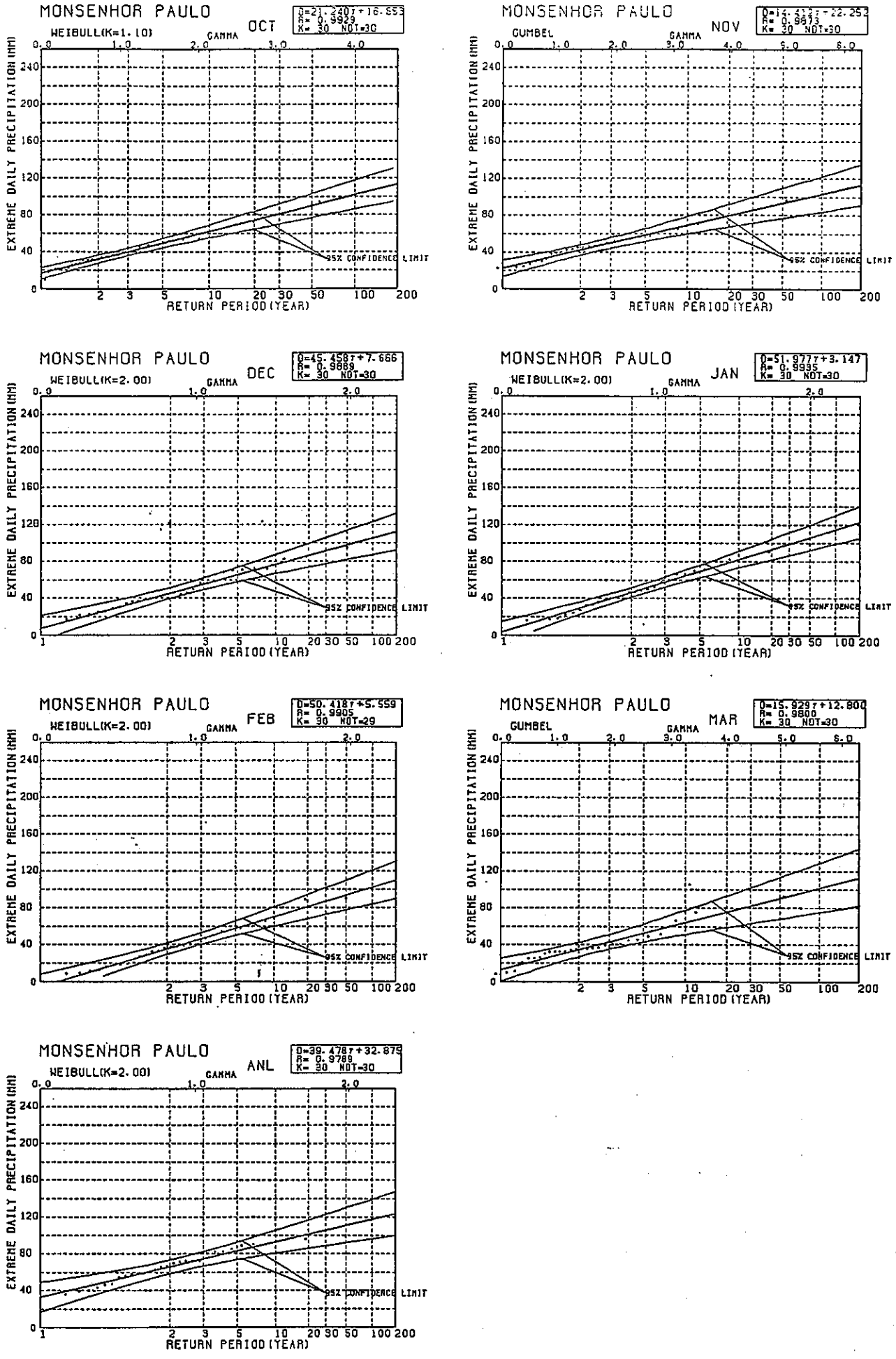


FIG. 4.53 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

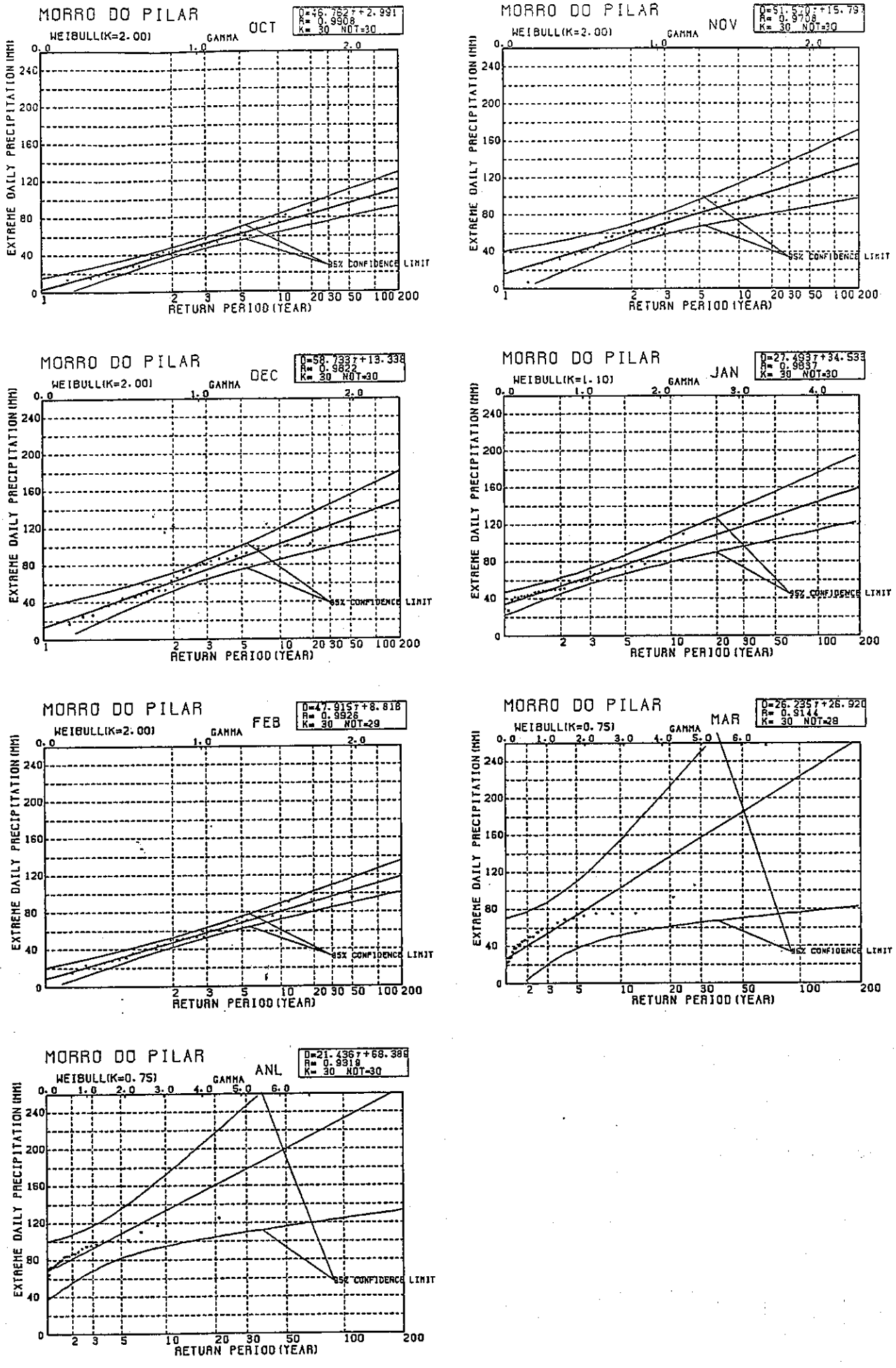
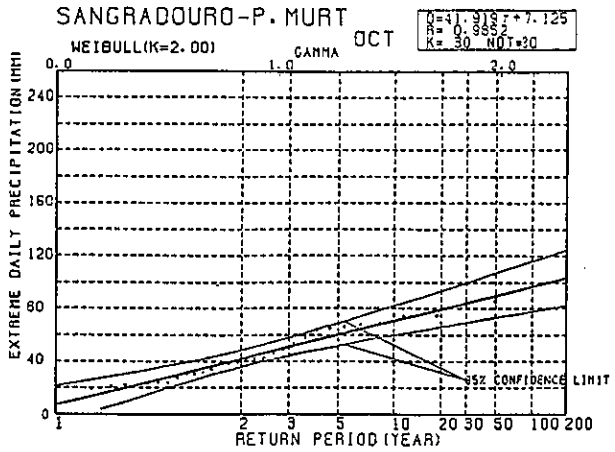
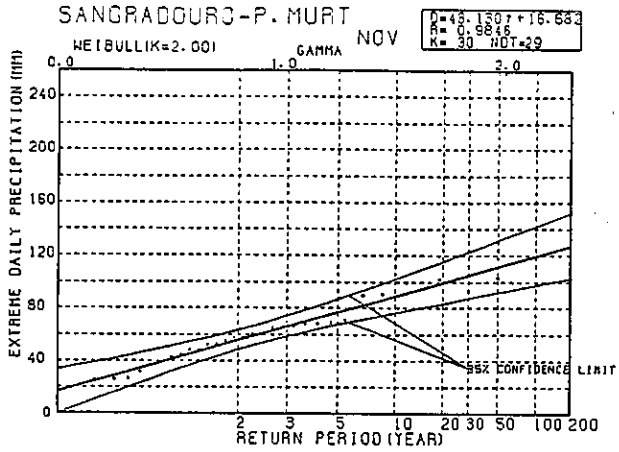
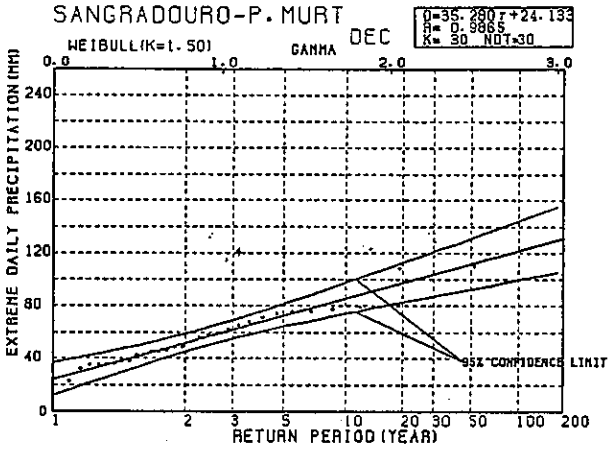
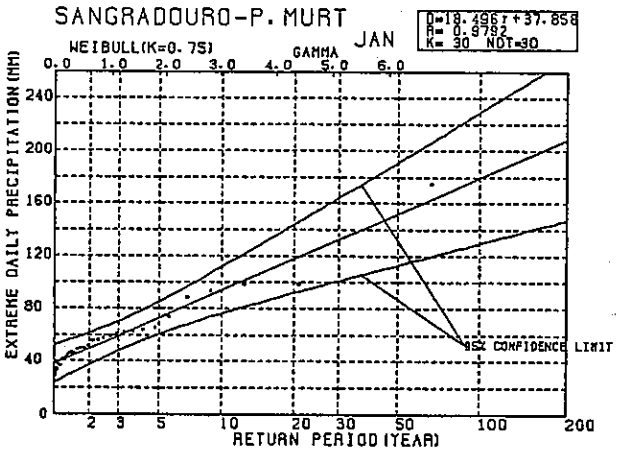


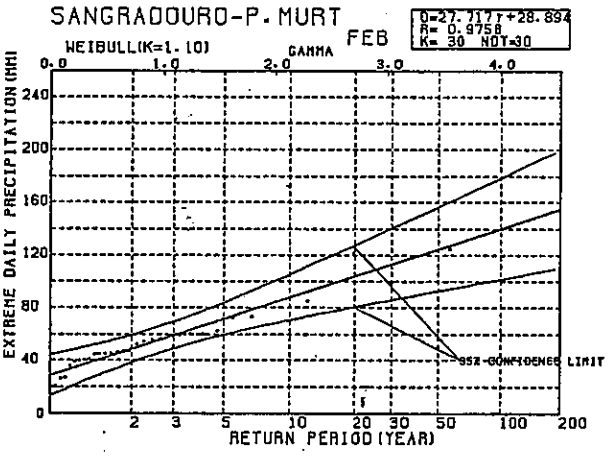
FIG. 4.54 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

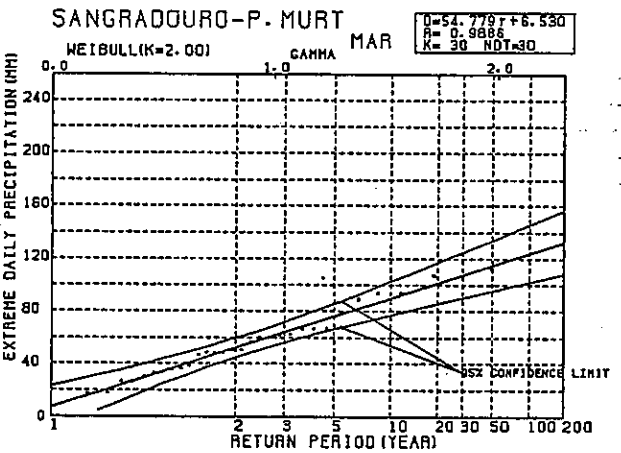












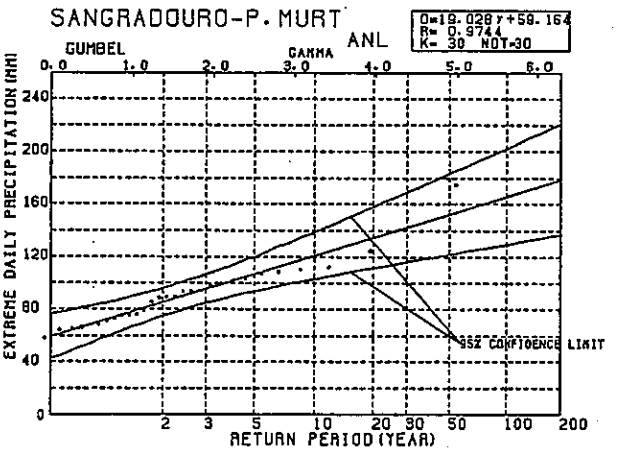
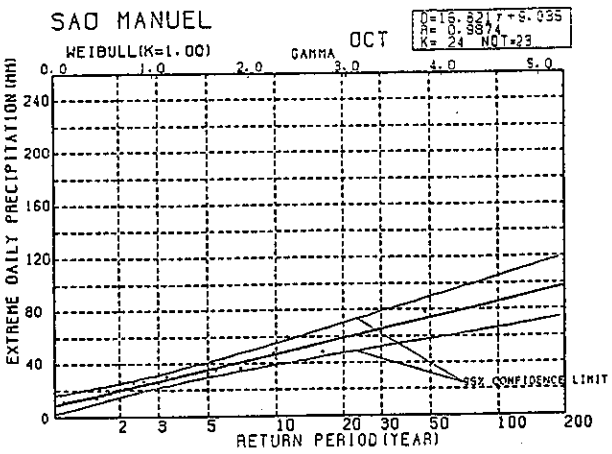
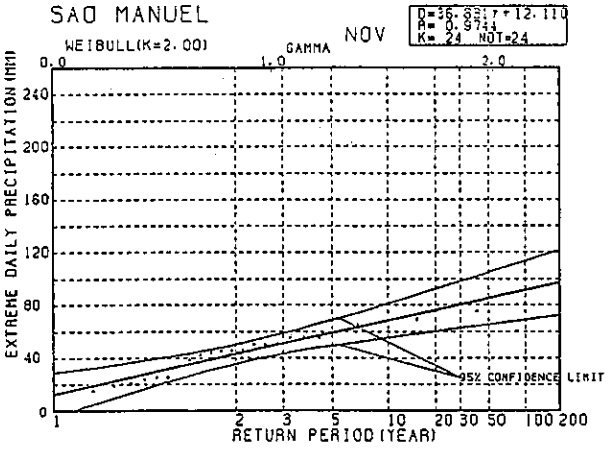
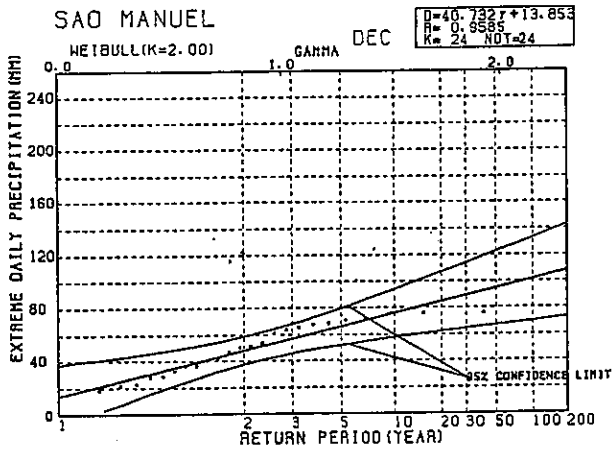
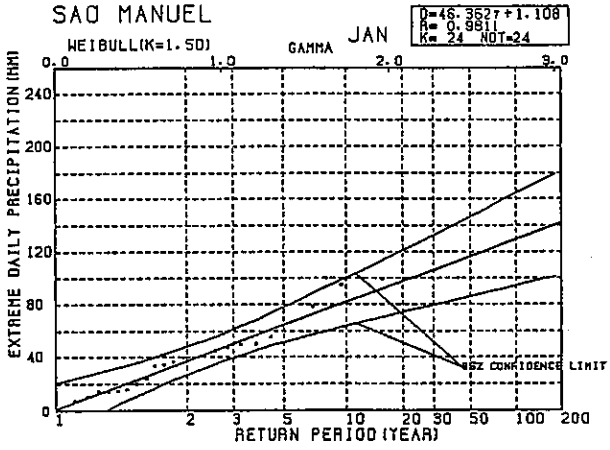


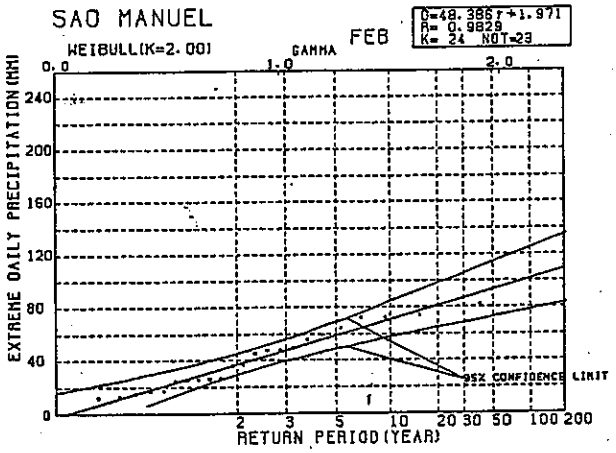
FIG. 4 .55 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

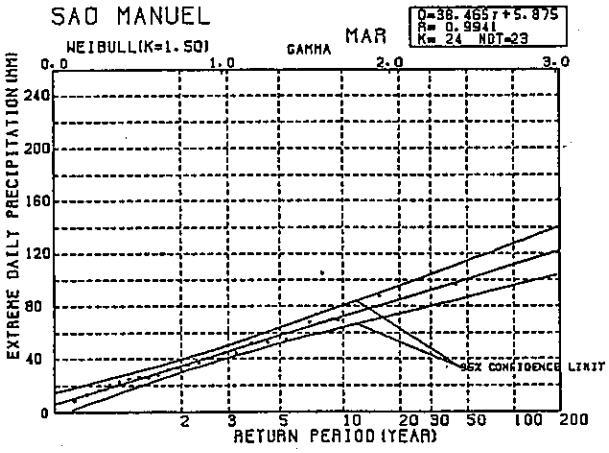












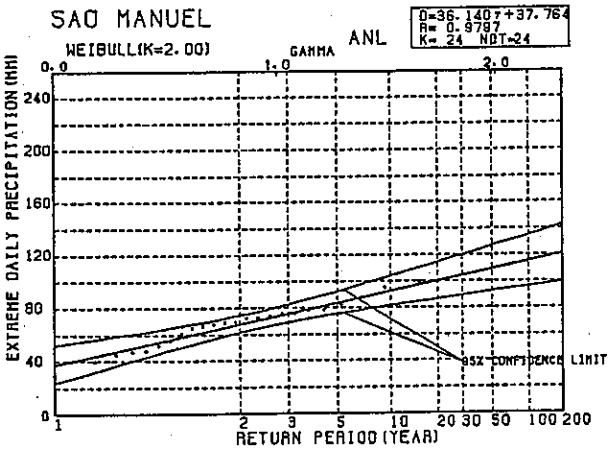
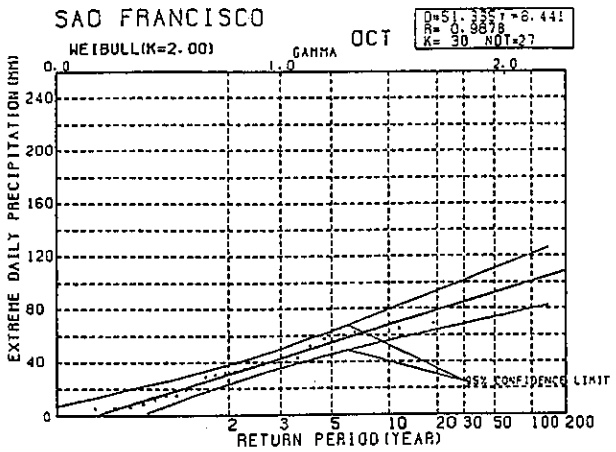
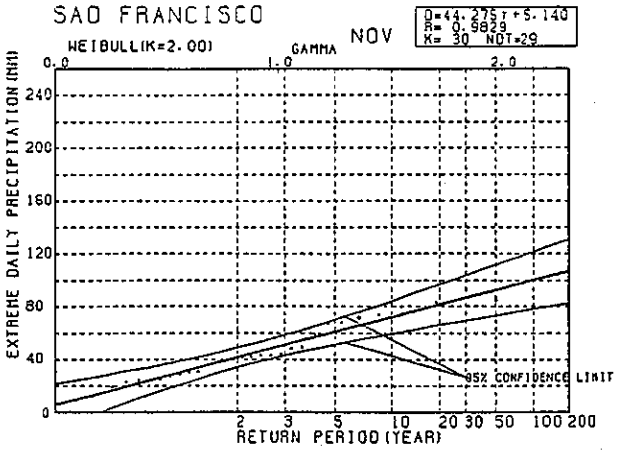
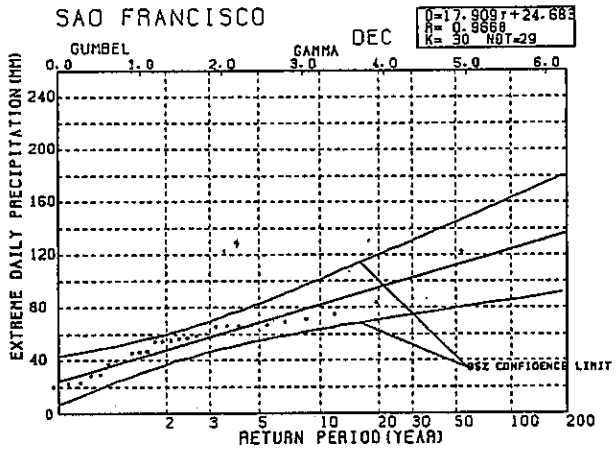
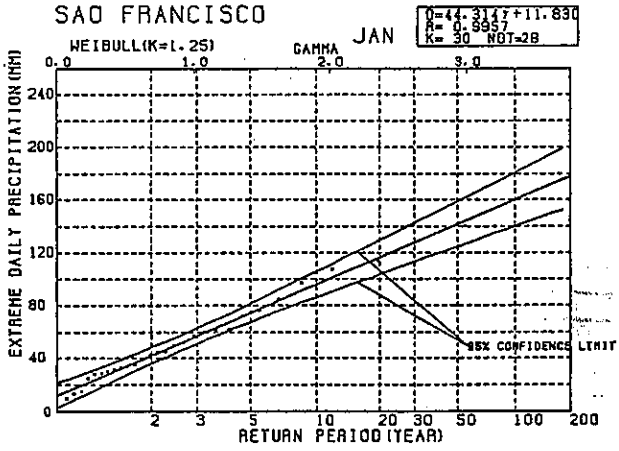


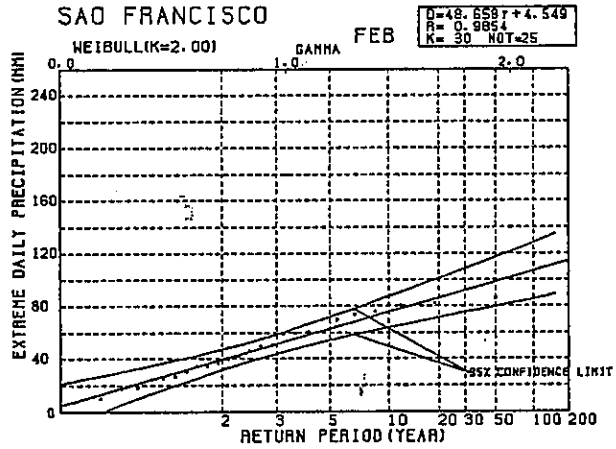
FIG. 4 . 56 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

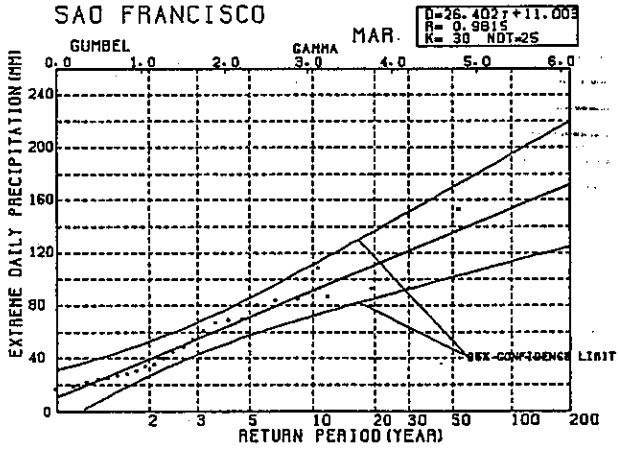












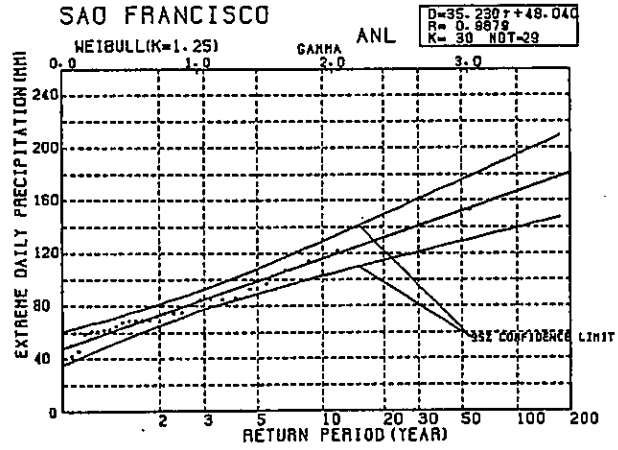
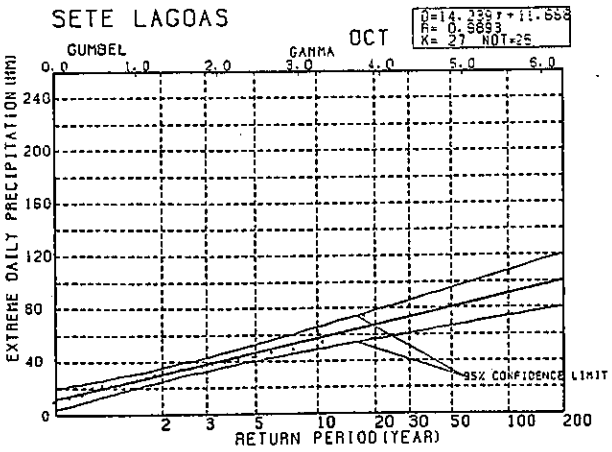
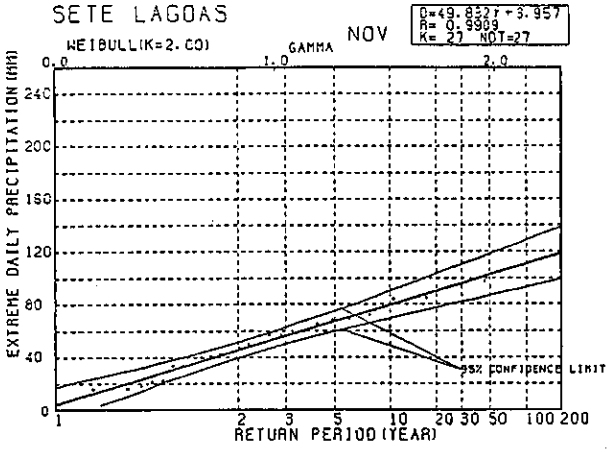
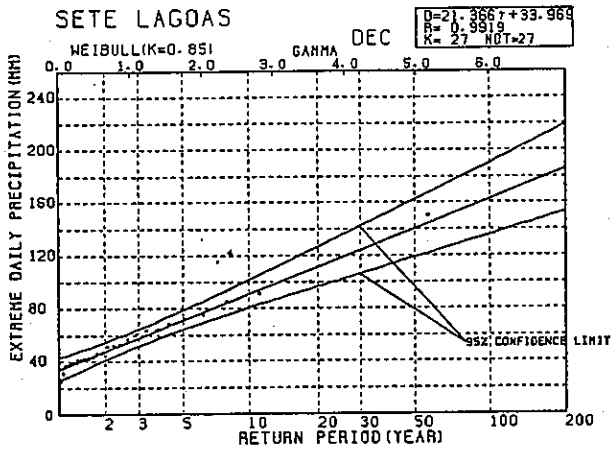
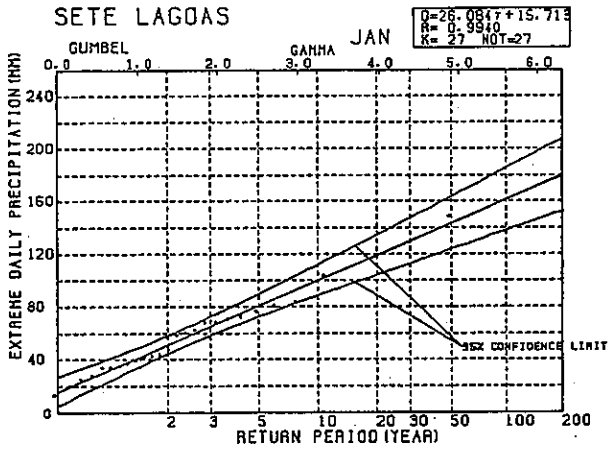


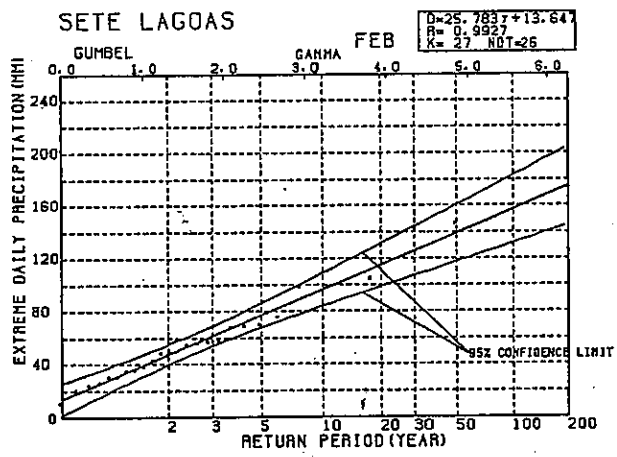
FIG. 4.57 RETURN PERIOD OF EXTREME DAILY PRECIPITATION

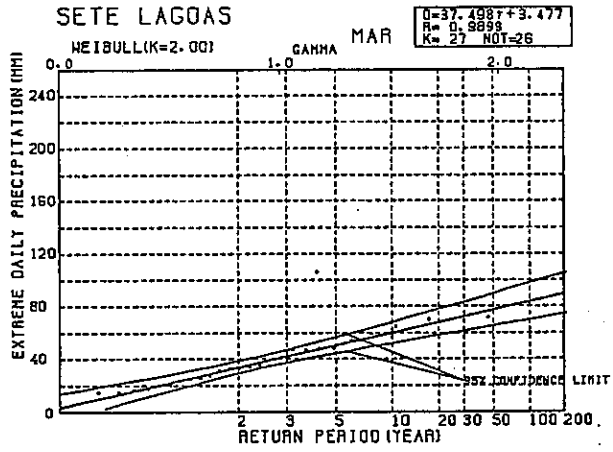












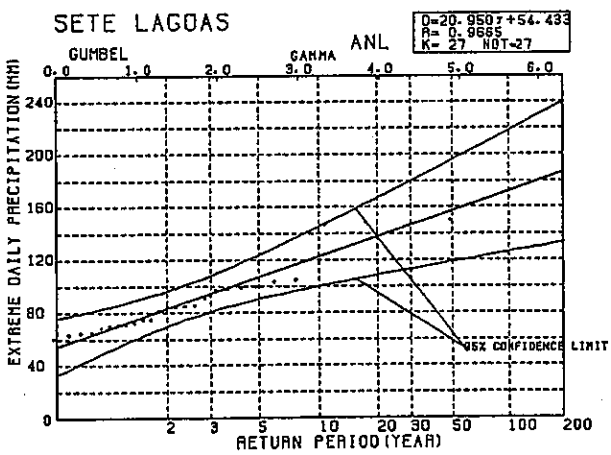


FIG. 4.58 RETURN PERIOD OF EXTREME DAILY PRECIPITATION