

DEPARTEMENT VAN VERVOER.

WEERBURO

JAARVERSLAG 1946

VIR

SUID-WES -AFRIKA

UNIE VAN SUID AFRIKA

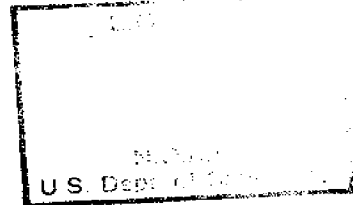


UNION OF SOUTH AFRICA.

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DEPARTMENT OF TRANSPORT

WEATHER BUREAU



ANNUAL REPORT 1946

FOR

SOUTH WEST AFRICA

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National Oceanic and Atmospheric Administration

Environmental Data Rescue Program

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VOORWOORD.

Na die eerste wêreld-oorlog is die weardiens van Suidwes-Afrika, wat voorheen onder beheer van die Deutsche Seewarte gestaan het, deur die Administrasie van die mandaatgebied oorgeneem. Sedert 1 Desember 1939 is dit by die Weerburo van die Unie van Suid-Afrika ingelyf; dog as gevolg van die ontwrigting deur die tweede wêreld-oorlog het die publikasie van weerkundige gegewens sinds 1941 agterweë gebly. Nou het dit egter moontlik geword om weer met publikasie 'n aanvang te maak, en die onderhawige jaarverslag bevat opsommings van weerkundige waarnemings wat by al die weerstasies van Suidwes-Afrika gedurende 1948 gedoen is. Dergelike opsommings vir die jare 1941 tot 1947 is tans in voorbereiding en sal mettertyd beskikbaar gestel word.

Die voorname bestaan om eersdaags 'n bibliografie van die weerkunde van Suidelike Afrika uit te gee, en daarin verskyn 'n min of meer volledige lys van al die publikasies waarin statistiese gegewens vir die gebied gevind kan word. Die belangrikste bronne is die "Deutsche überseeische meteorologische Beobachtungen" vir die jare 1885 tot 1912, "Arbeiten der Farmwirtschafts-Gesellschaft für Südwest-Afrika" wat reënval-gegewens vir die jare 1908 tot 1920 bevat, en "Precipitation in the rainy season", 'n Reeks wat van Julie 1921 tot Junie 1941 strek.

Dear word terdeë besef dat die omvang van die gegewens wat hier aangebied word heeltemal ontoereikend is vir so'n uitgestrekte gebied soos Suidwes, en alle pogings word tans aangewens om die netwerk van stasies so veel as moontlik uit te brei.

T. Schumann.
DIREKTEUR.

FOREWORD.

After the first world war the meteorological service of South-West Africa, which had previously been controlled by the Deutsche Seewarte, was placed in charge of the Administration of the mandated territory. On December 1st, 1939 it was amalgamated with the Weather Bureau of the Union of South Africa; but due to the unsettled conditions during and after the second world war the publication of meteorological data came to an end in 1941. However, it has now become possible to resume publication, and the present annual report contains summaries of meteorological observations taken during 1948 at all weather stations in South-West Africa. Similar summaries for the years 1941 to 1947 are at present being prepared and will be published in due course.

It is contemplated to publish a meteorological bibliography for Southern Africa in the near future, and therein will be found a fairly complete list of all publications containing statistical data for the territory. Amongst these the most important are "Deutsche überseeische meteorologische Beobachtungen" for the years 1885 to 1912, "Arbeiten der Farmwirtschafts-Gesellschaft für Südwest-Afrika" containing rainfall statistics from 1908 to 1920, and "Precipitation in the rainy season", a series extending from July 1921 to June 1941.

One is fully aware of the fact that the scope of the data presented here is totally inadequate for a huge territory such as South-West, and no effort is being spared in an attempt to extend the network of stations as far as possible.

T. Schumann.
DIRECTOR.

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I N L E I D I N G.

Die tabelle van hierdie verslag is op dieselfde lees geskoei as die van die jaarverslae soos uitgegee deur die Weerburo te Pretoria.

Die weerstasies word in drie hoofgroepe gerangskik, naamlik:-

- (1) Eerste en tweede orde stasies, waar tenminste tweekeer per dag, d.w.s. om 8.30 v.m. (0830) en om 3 n.m. (1500) S.A. Standaard Tyd, waarnemings gedoen word. S.A.S. Tyd is 2 uur voor gemiddelde Greenwich-tyd.
- (2) Derde orde stasies waar waarnemings net eenkeer per dag, om 8.30 v.m. uitgevoer word.
- (3) Reënvalstasies waar die meting van die neerslag eenkeer per dag (om 8.30 v.m.) onderneem word.

Die onderskeie tabelle is in die volgende orde gerangskik:-

- (i) Klimatologiese opsommings ten opsigte van 8 eerste en tweede orde stasies.
- (ii) Klimatologiese opsommings van 3 derde orde stasies.
- (iii) Uurlikse gemiddeldes van lugtemperatuur vir elke maand by 1 stasie.
- (iv) Uurlikse gemiddeldes van relatiewe vogtigheid vir elke maand by 1 stasie.
- (v) Uurlikse gemiddeldes van lugdruk vir elke maand by 2 stasies.
- (vi) Reënval en aantal reëndae vir elke maand, vir die kalenderjaar en vir die reënjaar 1945/46 by 169 stasies.

Die lugdrukwaardes is ten volle gekorrigeer tot die 100 gdm.-vlak wat naaste aan die stasiehoogte lê, en die ooreenkomstige vlak verskyn bo-aan die betrokke tabel as volg: Pm by ____ gdm.

By al die klimatologiese stasies word die temperatuur in 'n Stevensonse skerm gemeet. Die skerm huisves 'n maksimum- en minimum termometer en 'n droog- en natbol-psigrometer. Die droëbol-termometer is so aangebring dat sy bol 4 vt. bo die grondvlak is. By sekere stasies was ou S.W.A. skermas egter nog in gebruik waarin die termometers 7 voet 6 duim bo die grond-oppervlakte blootgestel was. Gemiddelde waardes vir die natbol-termometer word slegs vir eerste en tweede orde stasies gepubliseer.

Die windfrekwensies, wat in die tabelle vir eerste en tweede orde stasies verskyn, verteenwoordig die totale frekwensie van windrigtings wat om 8.30 v.m. en 3 n.m. waargeneem is.

Uurlikse waardes van temperatuur en relatiewe vogtigheid wat op bladsye 7 en 8 verskyn, is verkry uit die grafieke van Friez termohigrograwe wat in Stevensonse skermas op 'n hoogte van omtrent 4 voet opgestel is. Uurlikse waardes van lugdruk (bladsy 9) is verkry van Short en Mason mikrobarograwe.

Stasiennommers vir klimatologiese stasies in Suidwes-Afrika is ooreenkomstig die volgende skema vasgestel:- Die gebied is vireers in kwartgraad seksies verdeel soos op die seksiekaart, bladsy 10, aangedui. Die seksies is van links na regs genummer en vorm 'n eenvormige nummer-sisteem met die res van Suid-Afrika. Tweedens maak een-minuut-intervalle van lengte en breedtegraad-lyne 900 kruispunte binne elke seksie, en hierdie kruispunte wat met toenemende lengtegraad genummer word, is almal eventuele stasiennommers. In sy geheel is 'n stasiennommer dus tweeledig, d.w.s. die eerste deel het betrekking op die seksienommer en die tweede op sy posisie binne die seksie.

Die ou reënmeters van 113 mm. deursnee wat in Suidwes-Afrika in gebruik was, word geleidelik met standaard 5 duim reënmeters, soos die van die Unie, vervang. Hierdie meters word op staanders gemonteer sodat hulle boonste rand 4 voet bo die grondvlak is. Verdamping van reënwater uit die meter word beperk deur die nou bek van die opvangemmertjie en deur die feit dat laaggenoemde heeltemal binne die voetstuk van die meter ingesluit is. Reënvalhoeveelhede van stasies wat nog in millimeters meet, is na duime herlei.

Die reënvalkaart op bladsy 1 vertoon die distribusie van die totale reën vir die reënjaar van 1/7/45 tot 30/6/46. Die normale jaarlikse reënval (in rooi aangedui) is uit Zelle se normaalkaart vir die 35 jaar, 1901 tot 1936, afgelei.

Die volgende is 'n lys van simbole wat in die tabelle van hierdie publikasie gebruik word:-

Ø	Breedtegraad.
λ	Lengtegraad.
H	Hoogte van stasie bo seespieël.
h_t	Hoogte van droëboltermometer bo die grondvlak.
h_r	Hoogte van reënmeterrand bo die grondvlak.
Σ	Som (totale hoeveelheid neerslag).
-	Geen waarnemings, of geen betroubare waarnemings.
()	Syfers in hakies is bereken uit 'n ontoereikende aantal daaglikse waarnemings.

Die hoogtes van weerstasies in Suidwes-Afrika is van Spoorweg-gegevens en van Heidke se verhandeling „Die Niederschlagsverhältnisse Süd West Afrikas“ verkry.

I N T R O D U C T I O N .

In its tabular matter this report is similar to the Annual meteorological reports of the Union issued by the Weather Bureau, Pretoria.

The meteorological stations are classified in three main groups, namely:-

- (1) First and second order stations where observations are made at least twice daily, i.e. at the main observation hours 8.30 a.m. (0830) and 3 p.m. (1500) S.A. Standard Time which is 2 hours ahead of G.M.T.
- (2) Third order stations where observations are carried out at 8.30 a.m. only.
- (3) Rainfall stations where rainfall measurements are undertaken once daily, (8.30).

The various tables are arranged in the following order:-

- (i) Climatological summaries for 8 first and second order stations.
- (ii) Climatological summaries for 3 third order stations.
- (iii) Hourly means of air temperature for each month at 1 station.
- (iv) Hourly means of relative humidity for each month at 1 station.
- (v) Hourly means of pressure for each month at 2 stations.
- (vi) Monthly, annual and seasonal amounts of precipitation and number of rainfall days at 169 stations.

Pressure values are fully corrected and refer to the 100 gdm. level nearest to the station height, and the appropriate level appears at the head of the respective table, thus: Pm at ___ gdm.

At all climatological stations temperatures are measured in a Stevenson screen housing a maximum and minimum thermometer and a dry and wet bulb psychrometer. The height of the dry-bulb thermometer is 4 ft. above ground level. At certain stations however old S.W.A. screens were still used, in which thermometers were exposed 7 feet 6 inches above the ground. Means of wet-bulb thermometer readings are only published for 1st and 2nd order stations.

Wind frequencies given in the tables for 1st and 2nd order stations represent the total frequency of wind directions observed at 8.30 a.m. and 3 p.m.

Hourly values of temperature and relative humidity given on pages 7 and 8 are obtained from the traces of Friez thermohygrographs which are exposed in Stevenson screens at a height of about 4 ft. above the ground. Hourly values of pressure (page 9) are derived from Short and Mason microbarographs.

The climatological stations in South West Africa are numbered according to the following scheme:- The territory is in the first instance divided into quarter-degree squares as shown on the section map (page 10). The sections are numbered from left to right and form a continuous number system with the rest of South Africa. Secondly each section has 900 intersections of one-minute intervals of latitude and longitude which, being numbered in progressive longitudinal order, are all potential station numbers. Thus a station number in full consists of two parts, the first referring to the section and the second to its position within the section.

The old raingauges of 113 mm. diameter that are still being used in South-West Africa are gradually being replaced by standard 5 inch gauges as used in the Union. These are mounted on stands so that their rims are 4 ft. above the ground. Evaporation from the standard gauges is reduced by having a small orifice to the collecting bucket and by enclosing it completely inside the outer stand of the gauge. Rainfall amounts from stations still recording in millimetres have been reduced to inches.

The rainfall map on page 1 shows the distribution of rainfall for the season 1/7/45 to 30/6/46. The normal annual isohyets (shown in red) are adapted from Zelle's map of normal isohyets for the 35 year period 1901 to 1936.

The following is a list of symbols used in the tables of this publication:-

ϕ	Latitude.
λ	Longitude.
H	Height of station above M.S.L.
h_t	Height of dry-bulb thermometer above ground.
h_r	Height of raingauge above ground.
Σ	Sum (total amount of precipitation).
-	No observations, or no reliable observations available.
()	Figures in brackets are computed from an insufficient number of daily readings.

The heights of meteorological stations in South-West Africa are taken from railway data and from Heidke's paper "Die Niederschlagsverhältnisse Süd West Afrikas".

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
I	1013.3	1011.8	1011.3	1011.3	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6
II	1013.0	1011.5	1011.0	1011.0	1012.0	1012.0	1012.0	1012.0	1012.0	1012.0	1012.0	1012.0	1012.0
III	1013.9	1012.1	1011.6	1011.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6	1012.6
IV	1014.5	1012.6	1012.1	1012.1	1013.0	1013.0	1013.0	1013.0	1013.0	1013.0	1013.0	1013.0	1013.0
V	1016.8	1015.7	1015.2	1015.2	1016.0	1016.0	1016.0	1016.0	1016.0	1016.0	1016.0	1016.0	1016.0
VI	1020.3	1017.6	1017.1	1017.1	1018.0	1018.0	1018.0	1018.0	1018.0	1018.0	1018.0	1018.0	1018.0
VII	1019.0	1017.7	1017.2	1017.2	1018.0	1018.0	1018.0	1018.0	1018.0	1018.0	1018.0	1018.0	1018.0
VIII	1019.6	1017.4	1016.9	1016.9	1017.8	1017.8	1017.8	1017.8	1017.8	1017.8	1017.8	1017.8	1017.8
IX	1018.1	1016.5	1016.0	1016.0	1017.0	1017.0	1017.0	1017.0	1017.0	1017.0	1017.0	1017.0	1017.0
X	1016.3	1014.4	1013.9	1013.9	1014.8	1014.8	1014.8	1014.8	1014.8	1014.8	1014.8	1014.8	1014.8
XI	1014.5	1012.5	1012.0	1012.0	1013.0	1013.0	1013.0	1013.0	1013.0	1013.0	1013.0	1013.0	1013.0
XII	1013.3	1011.6	1011.1	1011.1	1012.0	1012.0	1012.0	1012.0	1012.0	1012.0	1012.0	1012.0	1012.0
Year	1016.1	1014.2	1013.7	1013.7	1014.6	1014.6	1014.6	1014.6	1014.6	1014.6	1014.6	1014.6	1014.6

λ = 22° 41'S; λ = 11° 31'S; H = 38 vt/ft.; h₁ = 4 vt/ft.; h₂ = 4 vt/ft.

Pa by/at 0 gbm. H = 5,666 vt/ft.; h₁ = 4 vt/ft.; h₂ = 4 vt/ft.

Pa by/at 1,700 gbm. H = 5,666 vt/ft.; h₁ = 4 vt/ft.; h₂ = 4 vt/ft.

Pa by/at 1,400 gbm. H = 4,741 vt/ft.; h₁ = 4 vt/ft.; h₂ = 4 vt/ft.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
I	827.3	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5	825.5
II	827.7	825.7	825.7	825.7	825.7	825.7	825.7	825.7	825.7	825.7	825.7	825.7	825.7
III	828.9	826.6	826.6	826.6	826.6	826.6	826.6	826.6	826.6	826.6	826.6	826.6	826.6
IV	831.0	829.0	829.0	829.0	829.0	829.0	829.0	829.0	829.0	829.0	829.0	829.0	829.0
V	831.2	829.1	829.1	829.1	829.1	829.1	829.1	829.1	829.1	829.1	829.1	829.1	829.1
VI	834.5	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6	832.6
VII	833.3	831.1	831.1	831.1	831.1	831.1	831.1	831.1	831.1	831.1	831.1	831.1	831.1
VIII	833.4	831.2	831.2	831.2	831.2	831.2	831.2	831.2	831.2	831.2	831.2	831.2	831.2
IX	831.4	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8	828.8
X	829.1	826.7	826.7	826.7	826.7	826.7	826.7	826.7	826.7	826.7	826.7	826.7	826.7
XI	828.3	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8	825.8
XII	828.4	826.5	826.5	826.5	826.5	826.5	826.5	826.5	826.5	826.5	826.5	826.5	826.5
Year	830.4	828.2	828.2	828.2	828.2	828.2	828.2	828.2	828.2	828.2	828.2	828.2	828.2

λ = 17° 06'S; λ = 22° 34'S; H = 5,666 vt/ft.; h₁ = 4 vt/ft.; h₂ = 4 vt/ft.

Pa by/at 1,700 gbm. H = 5,666 vt/ft.; h₁ = 4 vt/ft.; h₂ = 4 vt/ft.

Pa by/at 1,400 gbm. H = 4,741 vt/ft.; h₁ = 4 vt/ft.; h₂ = 4 vt/ft.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
I	857.4	855.0	855.0	855.0	855.0	855.0	855.0	855.0	855.0	855.0	855.0	855.0	855.0
II	857.7	855.5	855.5	855.5	855.5	855.5	855.5	855.5	855.5	855.5	855.5	855.5	855.5
III	859.0	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6	856.6
IV	862.2	859.4	859.4	859.4	859.4	859.4	859.4	859.4	859.4	859.4	859.4	859.4	859.4
V	865.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8	863.8
VI	864.6	862.4	862.4	862.4	862.4	862.4	862.4	862.4	862.4	862.4	862.4	862.4	862.4
VII	864.6	862.0	862.0	862.0	862.0	862.0	862.0	862.0	862.0	862.0	862.0	862.0	862.0
VIII	864.6	862.0	862.0	862.0	862.0	862.0	862.0	862.0	862.0	862.0	862.0	862.0	862.0
IX	859.3	856.3	856.3	856.3	856.3	856.3	856.3	856.3	856.3	856.3	856.3	856.3	856.3
X	858.4	855.7	855.7	855.7	855.7	855.7	855.7	855.7	855.7	855.7	855.7	855.7	855.7
XI	858.4	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9
XII	858.4	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9	855.9
Year	861.1	858.9	858.9	858.9	858.9	858.9	858.9	858.9	858.9	858.9	858.9	858.9	858.9

λ = 18° 38'S; λ = 22° 28'S; H = 4,741 vt/ft.; h₁ = 4 vt/ft.; h₂ = 4 vt/ft.

Pa by/at 1,400 gbm. H = 4,741 vt/ft.; h₁ = 4 vt/ft.; h₂ = 4 vt/ft.

GEMIDDELTE DAILY WAARDES VAN RELATIEVE VOCHTIGHEID (%)

MEAN HOURLY VALUES OF RELATIVE HUMIDITY (%)

No. 419/215 KEETMANSHOOP (Town/hoorp.)

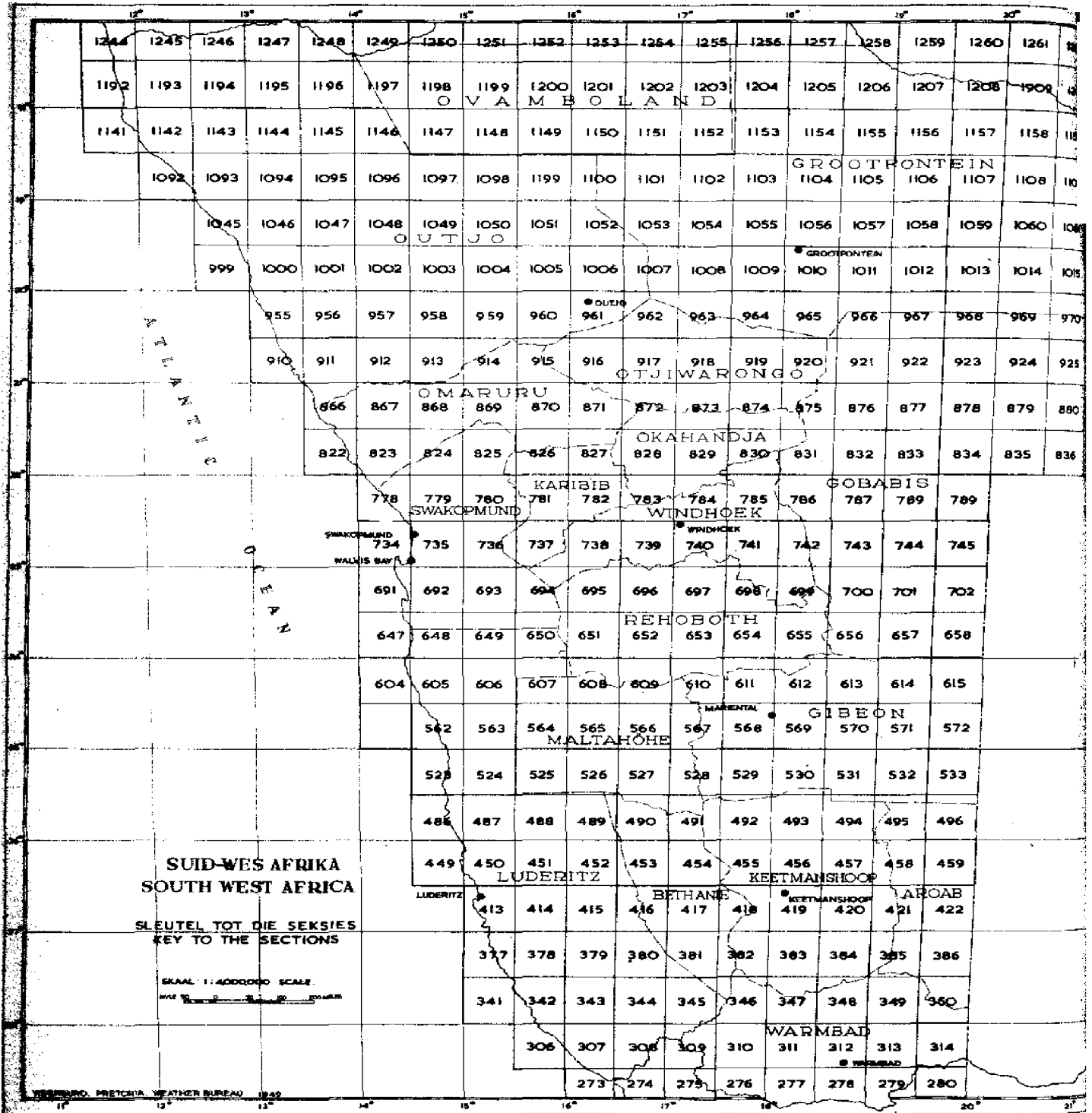
$\lambda = 18^{\circ} 08' E$; $\phi = 26^{\circ} 35' S$; $h = 4$ ft/ft.; $H = 3,295$ ft/ft.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Ma.
January/Januarie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February/Februarie	34	36	38	39	40	42	43	41	36	31	27	24	23	21	20	20	19	19	20	21	23	25	28	31	29
March/Maart	49	51	52	54	56	57	59	55	49	43	39	35	32	30	29	29	29	30	35	38	41	44	46	47	43
April	44	46	47	49	50	52	53	51	44	39	36	35	32	30	29	29	30	31	34	36	39	40	42	43	40
May/Mei	48	49	51	53	54	54	54	52	46	40	37	35	33	32	31	31	31	33	36	40	43	44	46	47	42
June/Junie	51	52	53	54	55	55	57	58	54	49	43	40	37	34	32	31	32	35	38	41	44	46	47	49	45
July/Julie	47	49	51	54	55	58	59	58	52	44	39	35	32	29	28	27	28	29	31	35	40	42	43	45	42
August/Augustus	35	36	38	39	41	42	43	43	41	35	31	27	25	23	21	20	20	22	24	27	30	31	33	31	38
September	43	46	49	51	53	55	57	55	49	41	35	30	28	26	24	23	22	24	26	28	31	34	37	39	38
October/Oktober	34	36	38	40	42	43	43	39	34	28	24	21	18	17	16	16	16	17	18	21	23	25	28	31	28
November	34	35	37	39	42	44	46	39	33	30	25	23	21	19	18	18	18	19	19	21	24	27	30	33	29
December/Desember	40	42	43	45	47	48	47	43	37	32	28	26	24	22	20	20	20	21	23	25	27	30	34	37	33
Year/Jaar	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

No. 746/154 WINNIPEG.

$\lambda = 17^{\circ} 06' E$; $\phi = 22^{\circ} 34' S$; $h = 4$ ft/ft.; $H = 5,666$ ft/ft.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Ma.
January/Januarie	50	51	52	53	52	53	50	46	42	38	35	33	30	29	29	31	31	32	35	41	44	46	49	51	42
February/Februarie	64	66	69	72	69	66	65	61	54	48	40	37	34	32	34	37	37	39	41	46	51	55	58	63	52
March/Maart	65	66	66	66	67	68	66	64	57	51	48	43	40	41	41	40	40	42	45	50	56	59	61	62	54
April	60	61	62	63	62	62	61	59	53	49	47	45	42	40	39	37	37	40	45	49	52	55	56	57	51
May/Mei	42	43	44	46	47	48	50	49	43	38	34	30	28	27	26	26	26	27	30	33	36	38	39	41	37
June/Junie	39	40	41	42	42	43	44	44	40	33	30	27	25	23	22	22	22	23	26	29	31	33	35	37	33
July/Julie	23	25	26	28	30	32	33	33	30	26	22	19	17	15	14	13	13	14	15	16	18	19	20	22	22
August/Augustus	19	20	21	21	22	23	24	24	22	19	16	15	13	13	12	11	11	11	12	14	15	16	17	18	17
September	25	27	28	30	30	31	32	31	28	26	24	22	19	17	16	15	15	16	17	18	20	21	23	24	23
October/Oktober	22	23	24	24	25	25	25	22	19	17	15	14	14	14	13	13	13	13	15	16	17	18	19	20	18
November	25	26	27	28	28	29	29	28	24	21	19	17	15	14	14	14	14	15	16	16	19	22	23	24	21
December/Desember	40	42	42	44	46	47	47	44	38	33	31	29	27	26	26	26	27	27	30	32	35	37	39	39	36
Year/Jaar	40	41	42	43	43	44	44	42	38	33	30	28	25	24	24	24	24	25	28	31	33	35	37	38	34



RAINFALL -1946-- REENVAL

No.	STATION S T A S I E	S. latitude N. longitude Height Feet	Jan.		Feb.		Mar.-Apr.		May-June		July.		Aug.		Sept.		Oct.-Nov.		Year-Total		Season 1/1/45 to/10/46 Total		
			Days	Inches	Days	Inches	Days	Inches	Days	Inches	Days	Inches	Days	Inches	Days	Inches	Days	Inches	Days	Inches			
			0	0.00	0	0.00	1	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00		6	4.42
611/246	Zsamerib Det	24 26	17 25	0	0.00	0	1.26	3	0.98	1	0.22	1	0.00	0	0.00	0	0.00	0	0.00	0	0.00	6	2.50
611/243	Trallight	24 13	17 58	2	0.35	2	0.53	3	0.22	2	0.21	1	0.37	2	0.00	0	0.00	0	0.00	0	0.00	14	2.74
612/265	Onarode Sid	24 25	18 29	3	0.08	2	1.44	4	0.56	3	0.42	4	0.09	0	0.00	0	0.00	0	0.00	0	0.00	24	3.68
613/275	Kusselbana	24 15	18 43	2	0.08	2	1.02	4	0.25	4	0.58	6	0.07	1	0.00	0	0.00	0	0.00	0	0.00	25	4.34
614/2	Habu-Vogelreside	24 02	19 01	2	0.26	2	0.18	2	1.26	5	0.56	4	0.00	0	0.00	2	0.00	0	0.00	0	0.00	20	2.85
651/343	Frends	24 43	17 12	2	0.48	2	0.04	1	0.78	3	0.34	5	0.00	0	0.00	1	0.06	1	1.36	7	3.12	21	5.18
654/262	Bitterwasser	23 52	17 57	1	0.30	1	0.50	3	0.47	1	0.33	5	0.06	0	0.00	0	0.00	0	1.03	5	2.70	17	3.61
654/242	Rhalpafis	23 52	17 59	0	0.00	0	1.57	5	0.78	5	0.32	2	0.00	0	0.00	0	0.00	0	0.92	4	3.59	16	5.15
655/303	Conchunas Det	23 53	18 17	4	0.50	4	0.46	2	0.69	4	0.57	4	0.00	0	0.00	0	0.00	0	2.72	5	5.02	20	6.32
656/543	Prekorus	23 31	18 49	1	0.04	1	1.11	3	0.59	2	0.14	1	0.00	0	0.00	0	0.00	0	0.47	2	2.35	9	4.95
696/183	Hubanda	23 03	16 37	2	0.11	2	0.34	2	0.31	4	0.86	6	0.00	0	0.00	0	0.00	0	2.47	8	4.11	23	7.53
696/492	Mosa	23 12	16 47	0	0.05	2	0.45	2	0.67	4	0.62	4	0.00	0	0.00	0	0.00	0	1.88	8	3.67	20	6.89
697/543	Hertel	23 03	17 19	3	0.12	3	0.13	3	0.26	1	1.55	7	0.00	0	0.00	0	0.00	2	3.23	10	6.10	28	6.17
698/778	Bessbrook	23 27	17 56	0	0.02	1	2.79	5	0.72	1	0.11	3	0.00	0	0.00	0	0.00	0	0.84	3	4.48	13	5.03
699/52	Dernanp enne	23 22	18 02	2	0.12	2	1.08	4	1.07	2	1.39	4	0.00	0	0.00	0	0.00	0	1.81	8	5.54	20	6.63
760/300	Chanamar's	23 20	18 47	4	0.79	4	2.04	6	0.22	2	0.60	4	0.00	0	0.00	0	0.00	4	1.47	7	6.06	27	6.31
734/527	Waivis Bay (Mission)	22 57	14 30	9	0.00	0	0.01	1	0.04	2	0.06	1	0.02	1	0.01	1	0.05	2	0.23	2	0.45	12	0.38
735/31	Swakopmund	22 41	14 31	38	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.14	2	0.14	2	0.22
737/527	Demberhut	23 47	15 48	0	0.00	0	0.26	1	0.13	3	0.19	3	0.00	0	0.00	0	0.00	0	0.62	2	1.20	9	4.73
738/266	Auanis	23 29	16 06	0	0.32	3	0.00	0	0.00	0	0.31	2	0.00	0	0.00	0	0.00	0	0.79	5	1.42	10	9.40
740/224	Windhoek (North)	22 34	17 05	5	0.15	5	0.39	5	1.12	7	1.16	5	0.00	0	0.00	0	0.00	1	2.26	12	5.41	40	8.66
740/1244	Windhoek (Central)	22 34	17 05	3	0.17	5	0.16	3	0.87	4	0.91	4	0.00	0	0.00	0	0.00	2	2.22	9	4.70	32	7.68
740/1248	Windhoek (Waterworks)	22 34	17 05	2	0.02	2	0.63	4	0.93	5	0.74	4	0.00	0	0.00	0	0.00	3	1.63	12	4.30	31	7.58
740/235	Krusnak	22 45	17 05	3	0.41	3	0.20	4	0.35	4	0.60	6	0.00	0	0.00	0	0.00	6	3.16	10	4.99	33	6.15
740/354	Windhoek (Met. Office/Kantoor)	22 37	17 06	7	0.17	7	0.36	6	0.94	8	0.57	7	0.00	0	0.00	1	0.05	1	1.20	12	3.57	46	7.33
740/285	Klein Windhoek (Mission)	22 37	17 07	6	0.14	6	0.38	5	0.97	4	0.66	6	0.00	0	0.00	0	0.18	1	1.16	8	3.70	34	6.63
740/255	Avie Dam	22 35	17 08	3	0.13	3	0.63	5	0.64	5	0.87	4	0.00	0	0.00	0	0.14	1	0.29	1	0.29	31	7.52
740/224	Arks	22 44	17 08	5	0.26	3	0.57	5	0.37	3	1.17	5	0.00	0	0.00	1	0.00	0	2.16	6	5.05	26	6.51
740/687	Stuenbeils	22 47	17 23	6	0.41	6	1.94	6	0.76	5	0.97	7	0.00	0	0.00	0	0.00	2	1.98	11	5.76	37	7.38
740/792	Hohenau	22 42	17 27	4	0.33	4	0.72	5	0.40	4	0.19	4	0.00	0	0.00	0	0.01	1	2.37	7	4.22	27	4.20
740/805	Langbeun	22 55	17 27	2	0.12	2	1.22	6	1.21	7	1.81	7	0.00	0	0.00	0	0.00	2	1.89	10	6.71	36	8.13
741/326	Dordabis	22 56	17 11	3	0.51	3	0.95	5	0.78	5	0.89	5	0.00	0	0.00	0	0.03	1	2.14	7	6.03	31	7.38
741/587	Kleefwurts	22 47	17 54	6	0.40	6	0.41	4	0.30	6	0.48	4	0.00	0	0.00	1	0.05	2	0.99	8	2.73	33	4.09
742/349	Chab	22 50	18 12	0	0.20	0	0.61	0	0.98	0	1.11	0	0.00	0	0.00	0	0.17	0	2.15	0	5.66	0	6.17
743/570	Schnellenberg	22 40	18 43	4	0.29	4	1.52	5	0.79	6	0.61	4	0.00	0	0.00	2	0.23	1	1.60	11	5.48	37	9.92

STASIE STATION	DISTRIK DISTRICT	BLADSY PAGE	STASIE STATION	DISTRIK DISTRICT	BLADSY PAGE
Achterfontein	Gibeon	11	Kalidona	Otjiwarongo	14
Andara	Okavango	15	Kalkfeld	Otjiwarongo	14
Annenhof	Grootfontein	14	Kamanjab	Outjo	14
Ariamsvlei	Warmbad	11	Kameelbaum	Gibeon	12
Aris	Windhoek	12	Kanus	Warmbad	11
Aruab	Bethanie	11	Karasburg	Warmbad	11
Arusis	Rehoboth	11	Karibib	Karibib	13
Asgard	Okahandja	13	Karlsruh	Gobabis	13
Aus	Luderitz	11	Keetmanshoop	Keetmanshoop	11
Auanis	Windhoek	12	Kleeforte	Windhoek	12
Avis Dam	Windhoek	12	Klein Windhoek (Mission)	Windhoek	12
Awagobibtal	Grootfontein	15	Kranzplatz	Gibeon	11
Beenbreck	Rehoboth	12	Krumtuk	Windhoek	12
Bergveld	Outjo	14	Kub	Rehoboth	11
Bethanie	Bethanie	11	Kudubis	Swakopmund	13
Binsenheim	Windhoek	12	Kunemus	Gobabis	13
Bitterwasser	Rehoboth	12	Kurikaub Nord	Karibib	13
Blinkoog	Warmbad	11	Kuring Kuru	Okavango	15
Boxhagen	Gobabis	13	Lahnstein	Maltahöhe	11
Chab	Gobabis	12	Langbeen	Windhoek	12
Chamasaris	Gobabis	12	Lievenberg	Karibib	13
Donkerhuk	Karibib	12	Louwsvley	Aroab	11
Dordabis	Windhoek	12	Luderitz Bay	Luderitz	11
Dornenpfanne	Windhoek	12	Mahonda	Rehoboth	12
Dreihuk	Warmbad	11	Malta	Outjo	14
Eheratengua	Omaruru	13	Maltahöhe	Maltahöhe	11
Engurawsu	Okahandja	14	Marienbrunn	Outjo	14
Epukiro	Gobabis	13	Meyerton	Outjo	14
Epukiro Reserve	Gobabis	13	Miltiades	Outjo	14
Eremutua	Omaruru	14	Nabus Vogelweide	Gibeon	12
Eremutua (NE)	Omaruru	14	Nageib	Grootfontein	14
Erorra Ost	Karibib	13	Namutoni	Grootfontein	15
Erundu	Otjiwarongo	14	Naos	Rehoboth	12
Etendero	Omaruru	13	Njangana	Okavango	15
Excelsior	Windhoek	13	Noachabeb	Keetmanshoop	11
Faalgras	Gibeon	11	Ncelles Farm	Otjiwarongo	14
Fairview	Grootfontein	15	Nuragas	Grootfontein	15
Fransfontein	Outjo	14	Odimbo	Amboland	15
Friedland	Maltahöhe	11	Okahandja	Okahandja	13
Gabasis	Grootfontein	15	Okahua	Windhoek	13
Gai Kaisa	Grootfontein	15	Okakango	Okahandja	13
Gaub	Grootfontein	15	Okakarara	Otjiwarongo	14
Gaus	Gobabis	13	Okakuya	Okahandja	14
Gibeon	Gibeon	11	Okamita	Okahandja	13
Goanab	Outjo	14	Okatana	Amboland	15
Gobabis	Gobabis	13	Okatombaka	Gobabis	14
Gomchanas Ost	Rehoboth	12	Okaukueyo	Outjo	15
Grabstein	Aroab	11	Okaundua	Okahandja	13
Grootfontein	Grootfontein	15	Okosongomingo	Otjiwarongo	14
Hamrivier	Warmbad	11	Olukonda	Amboland	15
Haruchas	Gibeon	11	Omaruru	Omaruru	13
Heirachabis	Warmbad	11	Omateva	Gobabis	13
Hohenau	Windhoek	12	Ombalantu	Amboland	15
Hohensee	Otjiwarongo	14	Ombona	Otjiwarongo	14
Kakatswa Ongwati	Outjo	14	Onajena	Amboland	15
			Ondangua	Amboland	15
			Ondekaremba	Windhoek	13
			Ondekaremba Nord	Otjiwarongo	14

STASIE STATION	DISTRIK DISTRICT	BLADSY PAGE	STASIE STATION	DISTRIK DISTRICT	BLADSY PAGE
Ongorussengo	Otjiwarongo	14	Tränental Cos	Aroab	11
Onguma	Grootfontein	15	Tschaunaug	Bethanie	11
Onlipa	Amboland	15	Tses	Kaetmanshoop	11
Oshigambo	Amboland	15	Tshikuku	Amboland	15
Osterode Süd	Gibeon	12	Tsintsabis	Grootfontein	15
Otjikondo	Outjo	14	Tsumeb	Grootfontein	15
Otjikururume	Otjiwarongo	14	Tsumis	Rehoboth	12
Otjirukaku	Grootfontein	15	Twilight	Gibeon	12
Otjiruze	Okahandja	13			
Otjituo	Grootfontein	15	Urieis Ekango	Outjo	14
Otjiwarongo	Otjiwarongo	14	Urusis	Maltahöhe	11
Otjomali	Okahandja	13			
Otjoronjati	Okahandja	13	Voigtsgrund	Gibeon	11
Outjo	Outjo	14			
			Waaihoek	Okahandja	13
Persip	Gibeon	11	Waldfriede	Okahandja	13
Phanton	Otjiwarongo	14	Walvis Bay		
Pretorius	Gobabis	12	(Mission)	Swakopmund	12
			Warmbad	Warmbad	11
Randfeld	Windhoek	13	Waterberg	Otjiwarongo	14
Rheingfaly	Rehoboth	12	Weissenfels	Omaruru	13
Rietfontein	Grootfontein	14	Westfalenhöf	Karibib	13
Rosenbeck	Okahandja	14	Windhoek		
Runtu	Okavango	15	(Convent)	Windhoek	12
			Windhoek		
Salstel	Aroab	11	(Met. Office)	Windhoek	12
Sandhof	Maltahöhe	11	Windhoek		
Schellenberg	Gobabis	12	(North)	Windhoek	12
Schlesier Farm	Gobabis	13	Windhoek		
Sinclair	Luderitz	11	(Waterworks)	Windhoek	12
Sissekab	Grootfontein	15	Witvlei	Gobabis	13
Seavis	Grootfontein	15	Wortel	Rehoboth	12
Steinhausen	Gobabis	13			
Swakopmund	Swakopmund	12	Zammarib Ost	Gibeon	12