

### 1.0 Station history of The Gambia Meteorological Network & rainfall stations

The Gambia Meteorological Services used to operate fifteen (15) Weather Observing stations covering all the regions in the country, but these were reduced to ten (10) in 2008. As of now, the department operates ten (10) Synoptic weather stations, one (1) Marine Automatic Weather Station and 25 rainfall measuring stations.

#### 1.1 Network of Meteorological Stations.

Figure 1 shows Network of Meteorological stations in black symbols, 24 hour stations in blue symbols and red symbols for stations which were closed in 2008. The green symbols are the proposed new stations.

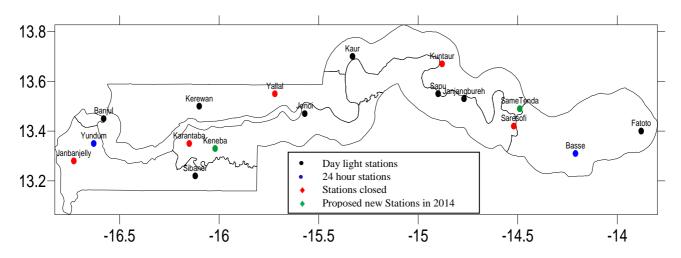


Figure 1 : Network of Meteorological station

# 1.2 Part 1:

Station	R_tot	Normal_1981-2010	R_Max	R_Max_date	R_Min	R_Min_date
Banjul	68.2	66.5	35.6	21 <sup>st</sup> October	1.3	20th October
Yundum	55.6	57.3	22.9	22 <sup>nd</sup> October	0.4	15th October
Airport						
Kerewan	92.2	71.4	49.0	02 <sup>nd</sup> October	1.5	24th October
Sibanor	128.2	57.1	26.8	22 <sup>nd</sup> October	0.8	03rd November
Kaur	75.5	58.2	26.8	22 <sup>nd</sup> October	1.6	07th October
Jenoi	88.5	57.0	56.6	22 <sup>nd</sup> October	1.2	15th October
Sapu	101.0	74.4	54.0	06 <sup>th</sup> October	0.5	21st October
Janjanbureh	114.0	57.7	33.5	06 <sup>th</sup> October	1.0	21st October
Basse	39.2	21.2	28.4	06 <sup>th</sup> October	1.3	14th October
Fatoto	161.0	61.6	48.9	06 <sup>th</sup> October	5.1	26th October
Kuntaur		55.8				
Somita		45.5				
Bakendik		56.0				
Kuntair	88.0	58.8	54.0	22 <sup>nd</sup> October	4.0	25 <sup>th</sup> October
Ngain-Sanjal	174.0	62.7	55.0	22 <sup>nd</sup> October	2.0	11 <sup>th</sup> October
Njabakunda	74.4	72.8	40.0	05 <sup>th</sup> October	3.9	01 <sup>st</sup> November
Jambanjelly		59.0				
Pirang		66.9				
Karantaba		67.7				
Kwinella		62.1				
Yalla		64.0				
N'jau		50.5				
Dankunku		54.4				
Gibanak		47.4				
Jahkunda		66.0				
Bansang		20.6				
Saresofi	113.1	52.1	35.1	07 <sup>th</sup> October	4.0	10 <sup>th</sup> October
Mankamang	91.9	67.4	30.4	11 <sup>th</sup> October	10.2	14 <sup>th</sup> October
Girobakunda		61.3				
Jali		43.2				
Kanjibat	62.7	45.3	34.0	22 <sup>nd</sup> October	3.4	14 <sup>th</sup> October
Serrekunda	76.7	61.9	38.2	02 <sup>nd</sup> November	5.3	15 <sup>th</sup> October
Sutukoba		51.9				
Naude		64.5				

 Table 1: Recorded Rainfall in millimetres (mm) for October-November-December 2015

### 1.2.1 Rainfall distribution

Figure 2 indicates significant rainfall amounts for the period October-November-December with values ranging between 100 to about 175 mm over the greater part of the country. In Table 2, the highest record of 174mm prevailed at Ngain Sanjal at the north bank and the lowest value of 39.2 was observed at Basse the eastern part of the country. The country average seasonal rainfall during this period stood at 94.4mm, which is 65% above the long term mean (57.1mm) of 1981-2010 and a surplus 37.3mm.

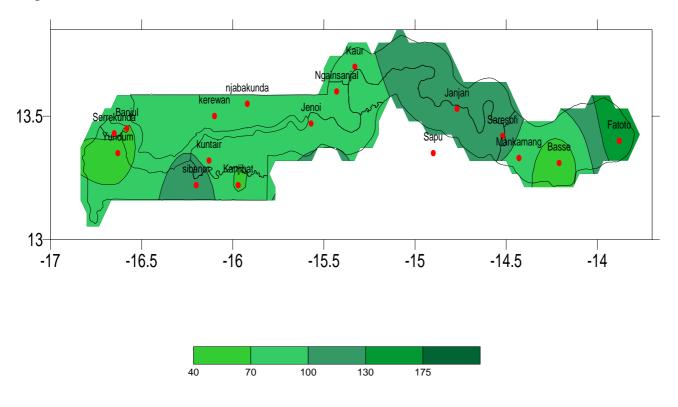


Figure 2: Rainfall (mm) for OND 2015

### **1.2.2 Temperature variations**

The graph in figure 3 illustrates temperature variations over the country with the highest absolute temperature of  $36.7^{\circ}$ C over Basse at the eastern sector and a lowest absolute minimum of  $13.1^{\circ}$ C over Fatoto. Janjanbureh observed the highest maximum temperature of  $34.8^{\circ}$ C, whilst Fatoto recorded the lowest minimum value of  $16.4^{\circ}$ C.

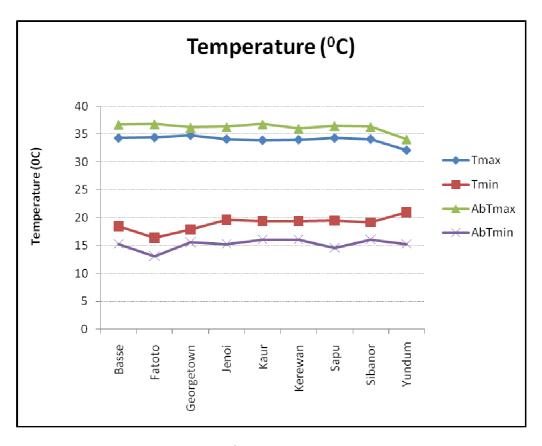


Figure 3: Mean temperature (<sup>0</sup>C) variations for OND

1.3 Part II :	
Table 2: Temperature in degrees Celsius ( <sup>0</sup> C) for	October-November-December 2015.

Tuble 21 Temperature in degrees constas													
				Normal 1981-2010	MeanTmax- 2015	Normal Tmax	MeanTmin- 2015	Normal Tmin	AbTmax- _2015	Normal Hig max T	AbTmin_ 2015	Normal Low min T	
WMO	National	Name											
61711	15003000	Banjul Halfdie/Marina	*	28.0	*	33.3	*	22.8	*	33.9	*	20.4	
61731	15001200	Basse	26.5	27.1	34.3	35.3	18.5	18.9	36.7	36.3	15.3	15.1	
61733	15006600	Fatoto disp./met.	25.4	27.2	34.4	35.6	16.4	19.2	36.8	36.5	13.1	15.5	
61721	15003900	Georgetown	26.3	27.1	34.8	35.4	17.9	18.7	36.2	36.6	15.6	15.5	
61707	15004900	Jenoi	27.0	26.8	34.1	34.9	19.6	18.7	36.3	35.8	15.3	15.0	
61717	15000600	Kaur	26.6	27.6	33.9	35.3	19.4	20.0	36.8	36.4	16.1	17.5	
61712	15003300	Kerewan	26.8	27.3	34.0	34.5	19.4	20.0	36.0	35.4	16.1	17.2	
61722	15006200	Sapu	26.9	26.6	34.3	35.1	19.5	18.4	36.5	36.0	14.6	14.4	
61705	15005900	Sibanor	26.7	26.6	34.1	34.4	19.2	19.0	36.3	34.9	16.1	15.2	
61701	15005400	Yundum Airport	26.2	26.7	32.1	33.1	21.0	20.2	34.1	33.7	15.3	20.0	

# 1.4 Part III:

Table 3: Relative Humidity in percentage (%) and Wind in metres per second (m/s) f	for
October-November-December 2015.	

Station Codes				Relative	Windspeed (m/s)_2015				
WMO	National	Name	MeanRH_2015	1981-2010	MaxRH_2015	MinRH_2015	Mean	Highest	
61711	15003000	Banjul Halfdie/Marina	*	63	*	*	*	*	
61731	15001200	Basse	65	64	94	25	2.1	15	
61733	15006600	Fatoto disp./met.	56	57	97	25	5.5	11	
61721	15003900	Georgetown	56	60	97	26	3.1	20	
61707	15004900	Jenoi	60	57	95	30	3.6	9	
61717	15000600	Kaur	54	52	95	24	2.9	19	
61712	15003300	Kerewan	67	59	91	32	6.8	12	
61722	15006200	Sapu	55	58	98	24	4.4	19	
61705	15005900	Sibanor	72	63	99	38	1.5	17	
61701	15005400	Yundum Airport	64	70	97	35	3.7	21	

1.5 Part IV: Table 4: Sunshine (hours) and Evaporation (mm) for October-November-December 2015.

Station_codes				Sunshine 2015	Evaporation Class A (mm) 2015			
WMO	National	Name	Total	Normal_1981-2010	Max	Min	Total	Mean
61711	15003000	Banjul Halfdie/Marina	*	*	*	*	*	*
61731	15001200	Basse	202.5	192.2	10.3	0.6	103.8	4.3
61733	16006600	Fatoto disp/met.	162.5	86.7	10.6	4.7	159.3	5.2
61721	15003900	Georgetown	227.3	147.1	10.2	1.7	122.6	4.0
61707	15004900	Jenoi	199.5	181.5	9.8	1.5	119.6	3.9
61717	15000600	Kaur	227.2	99.7	10.4	2.6	121.0	4.4
61712	15003300	Kerewan	220.9	201.8	10.2	1.1	*	*
61722	16006200	Sapu	140.9	125.9	8.7	6.1	137.1	4.0
61705	15005900	Sibanor	212.8	116.5	10.2	0.9	88.7	2.9
61701	15005400	Yundum Airport	175.0	218.5	10.3	2.7	123.6	4.0

## 2.0 Part V: Climate Report explanations

## PREFACE

Selected climatologically data of general importance from weather stations in The Gambia has been compiled in this report. Blank spaces indicate either missing or delayed records. If data are missing for one day or several days for one station within the selected period, the station concern it is marked with an as terix (\*). Observed values (OBS) and the normals (NORM) of these data values from the long period averages are given for the following elements:

- Average air temperature
- Rainfall
- Relative Humidity
- Sunshine
- Interpolated map for rainfall is included.

## **EXPLANATION OF TABLES**

- Rainfall (mm) amount is measured every six hours using a standard rain gauge placed 80cm above ground level. The Total rainfall amount for any given day is the cumulative or accumulated six hourly rainfall amounts. A Rainy day is defined as a day with a total rainfall amount equal or more than 1mm.
- Air Temperature (°C) observations are made from thermometers exposed in Stevenson Screens, 1.25 metres above the ground. The Maximum and Minimum Temperature (°C) observed/ obtained, indicates the highest and lowest temperatures during the specified period.
- Relative Humidity is derived from the readings of the dry and wet bulb thermometers and expressed in Percentage (%).
- Sunshine Duration is measured using a Campbell-Stokes Tropical Sunshine Recorder and is recorded in hours.
- Actual Evaporation is determined from a Class A Pan and measured in millimetres (mm).
- Wind speed is read from a Cup Counter Anemometer mounted 10 metres above the ground and read in knots. It can also be converted to metres per second (m/s) or kilometre per hour (km/h).

## Abbreviations :

- MeanT : Mean Temperature
- Mean Tmax : Mean Maximum Temperature
- Mean Tmin : Mean Minimum Temperature
- Highest M T: Highest Maximum Temperature
- Lowest M T : Lowest Minimum Temperature

Published by: Climate Unit Department of Water Resources 7 Marina Parade Banjul, The Gambia Telephone: 00 (220) 422-7631/4222-872/422-4122 Fax: 00 (220) 422-5009 http://www.mofwrnam.gov.gm E-mail: info@mofwrnam.gov.gm; infoclimate@gmail.com