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This bulletin is prepared by the Hydrometeorological Service of Guyana. We welcome feedback, suggestions and comments on this bulletin. Correspondences should be directed to: The Chief Hydrometeorological Officer (Ag), and the Agronomist.



Hydrometeorological Service of Guyana

Farmer's Monthly Weather Bulletin

HIGHLIGHTS

- Northern Guyana is expected to transition into its secondary dry season of 2018 in the month of February. This season would normally run until the month of April.
- Above-normal to normal rainfall predicted for most parts of Guyana for February through April.
- Daytime temperatures are expected to be near normal for February through April.
- Evening temperatures are predicted to be generally cooler than normal for February through April.
- Surface dryness is likely to increase as the dry season progresses.
- The likelihood of dry spells (consecutive days without rain) increases in Northern Guyana for February through April. However, downpours are still expected.
- Dry spells (consecutive days without rain) expected to continue in the Rupununi Region in coming weeks. Generally, dry conditions are expected.
- Weak La Niña conditions expected to continue in the coming weeks.



Rainfall Review for January 2018

For the month of January, generally dry conditions were experienced over most of Guyana. The highest monthly rainfall was recorded at Fort Island Essequibo River, Region 3 with a total of 275.9 mm of rainfall with 22 rain days. The lowest monthly rainfall total was recorded at Karaudarnua, Region 9 with a value of 1.9 mm of rainfall with rain day. Most stations analysed recorded rainfall amounts below their 1 long-term averages (Figure 1).



Table 1: Regional Rainfall Classification for the Month of January 2018

Regions	Regional Average	Average Rain	Classification	Remarks
1	139.0	15 days	Moderately Dry (MD)	Arakaka recorded 186.0mm of rainfall with 16 rain days.
2	139.6	15 days	Moderately Dry (MD)	St. Denny's Mission recorded 195.3 mm of rainfall with 17 rain days.
3	169.3	15 days	Moderately Wet (MW)	Fort Island Essequibo River recorded 275.9mm of rainfall with 22 rain days.
4	120.8	13 days	Moderately Dry (MD)	Land of Canaan recorded 212.4mm of rainfall with 17 rain days.
5	48.9	9 days	Very Dry (VD)	Novar Mahaicony recorded 115.0mm of rainfall with 13 rain days.
6	40.7	7 days	Very Dry (VD)	Mibikuri recorded 90.2mm of rainfall with 7 rain days.
7	95.6	10 days	Dry (D)	Kamarang recorded 142.4mm of rainfall with 18 rain days.
8	-	-	-	-
9	19.1	3 days	Very Dry (VD)	Annai recorded 45.4 mm rainfall with 4 rain days.
10	130.4	12 days	Moderately Dry (MD)	Wisburg recorded 130.4 of rainfall with 9 rain days.

Lethem, Region 9 recorded the highest monthly mean sunshine of 8.5 hours, along with the highest one-day sunshine of 11.2 hours on January 13, 2018. Timehri, Region 4 recorded the lowest mean sunshine of 7.3 hours. All stations recorded mean sunshine hours above their long-term averages. (Figure 3).



Figure 3: Comparison of the mean sunshine hours and the long-term averages of selected stations for January 2018.

Temperature Review for January 2018

For the month of January, the highest one-day maximum temperature was recorded at Lethem, Region 9 with a value of 34.2°C on January 10, 2018. Lethem also recorded the highest mean maximum temperature of 32.5°C for the month. Georgetown, Region 4 and New Amsterdam, Region 6 recorded the highest mean minimum temperature of 23.6°C. Timehri, Region 4 recorded the lowest daily temperature of 16.9°C on January 22, 2018. Apart from Lethem, all stations recorded mean maximum temperatures above their long-term averages (Figures 4 & 5).



Figure 5: Comparison of the long-term averages and mean minimum temperatures of selected stations for January 2018.

Seasonal Rainfall and Temperature Outlook for Guyana (February-April 2018)

Northern Guyana is expected to transition into its secondary dry season of 2018 during the month of February. Based on historical records, this season is expected to conclude in April 2018; while Southern Guyana's dry season is also expected to continue until mid-April 2018. The latest forecast indicates that Guyana is likely to experience above-normal to normal rainfall over most parts of the country. Near-normal daytime temperatures and cooler than normal evening temperatures are also predicted. The likelihood of dry spells (consecutive days without rain) will increase over Northern Guyana during this period. However, downpours are still likely to occur. Generally, dry conditions are expected in the Rupununi Region (Southern Guyana).

Region	Station	Feb	Mar	Apr	Region	Station	Feb	Mar	Apr
1	MABARUMA *	101.6	94.1	144.9	5	BLAIRMONT	94.6	95	160.7
	WAUNA	98.9	76.5	108.4					
	PORT KAITUMA	110.9	82.8	108.3	6	ALBION	85.7	93.5	144.8
2	ANNA REGINA*	133.6	75.3	159.6		SKELDON	97	105.5	147.8
	CHARITY	110.4	122.5	134.9		CRABWOOD CREEK*	70.4	50.5	82.5
	Mc NABB	102.4	109.3	130.8		ROSE HALL	101.4	102.5	169.1
	WAKAPOW	140.7	99.3	150.3		NIGG 58	77.3	91.2	156.1
	ONDERNEEMING	88.4	58.1	141.6		ALBION 33	78.2	77.4	142.1
3	BOERSARIE	140.2	114	194		#73 VILLAGE	110.7	97.5	154.4
	DeKENDEREN BACK	118.7	103.1	188.8		# 54 VILLAGE*	74.4	81.5	147.9
	DeKENDEREN FRONT	104.9	107.5	185.9		MIBIKURI	89	82.3	171.6
	LEONORA FRONT	103	95.6	179.4		MARA LAND DEV. SCHEME*	60.5	91.4	147.6
	LEONORA BACK	124.7	137.1	192.8		NEW AMSTERDAM	97	90.1	147.1
	WALES	130.7	117.6	164.9		APAIKWA	220.5	96.1	159.7
	UITVLUGT BACK	112.3	119.4	181.8	7	MAZARUNI	105.2	208.6	266.3
	La BAGATELLE LEGUAN*	67.3	71.8	131.4		BARTICA DEM. STATION*	98.5	112.7	147.6
4	GEORGETOWN	104.1	111.64	153.4		JAWALLA	107.4	127.7	150.9
	TIMEHRI	118.1	119.8	188.9		KAIETEUR FALLS *	218.1	162.4	***
	CANE GROVE BACK	87.8	73.6	116.5	8	LETHEM	18.8	18.9	89
	CANE GROVE FRONT	110.9	110.2	153.2	9	KARASABAI	8	5.5	35.4
	L.B.I FRONT	88.1	86	140.8		DADANAWA	26.1	42.2	126.4
	OGLE FRONT	73.9	93.9	134.2		GREAT FALLS	125.6	154.6	222
	ENMORE FRONT	95.4	106.6	172.1	10	WISMAR*	92.2	95.4	131.6
	KAIRUNI*	70.8	72.1	116.4		-	-	-	-

Table 2: Historical average rainfall (mm) of selected rainfall stations for the February – April Season

The historical averages for various stations were calculated by the use of rainfall data from the year 1981- 2010 (climatological normal). Stations, where less than 30 years of observations were used, are denoted with *.

Table 3: Average rain days for the months February-April of selected stations

Station Name	February	March	April
Mabaruma	11 days	10 days	11 days
Anna Regina	8 days	7 days	7 days
Leonora	11 days	9 days	12 days
Georgetown Botanical Gardens	11 days	10 days	12 days
Timehri Meteorological Station	12 days	11 days	13 days
Blairmont	11 days	10 days	13 days
New Amsterdam	10 days	10 days	12 days
Kamarang	15 days	13 days	15 days
Lethem	3 days	3 days	9 days
McKenzie	11 days	11 days	13 days
Ebini	12 days	12 days	15 days

Note: A rain day is considered as a day with rainfall ≥ 1 mm.

Table 4: Average wet days for the months February-April of selected stations

Station Name	February	March	April
Mabaruma	6 days	5 days	7 days
Anna Regina	5 days	4 days	5 days
Leonora	5 days	4 days	7 days
Georgetown Botanical Gardens	5 days	5 days	7 days
Timehri Meteorological Station	6 days	6 days	8 days
Blairmont	5 days	5 days	8 days
New Amsterdam	5 days	4 days	8 days
Kamarang	7 days	6 days	8 days
Lethem	1 day	1 day	5 days
McKenzie	6 days	6 days	9 days
Ebini	6 days	6 days	9 days

Note: A wet day is considered as a day with rainfall >= 5mm.

Table 5: Average maximum temperatures for the months February-April of selected stations

Station Name	February	March	April
Georgetown Botanical Gardens	29.4°C	29.8°C	30.2°C
Timehri Meteorological Station	30.4°C	31.0°C	31.3°C
New Amsterdam	30.4°C	30.8°C	31.0°C
Kamarang	29.0°C	29.5°C	29.8°C
Lethem	33.0°C	33.6 °C	33.1°C

Table 6: Average minimum temperatures for the months February-April of selected stations

Station Name	February	March	April
Georgetown Botanical Gardens	24.1°C	24.4°C	24.6°C
Timehri Meteorological Station	21.1°C	21.6°C	22.3°C
New Amsterdam	22.9°C	23.3℃	23.6°C
Kamarang	19.4°C	19.4°C	20.2°C
Lethem	23.8°C	24.1°C	24.3°C

Agricultural Review for January 2018

During the month of January generally, dry conditions were experienced over most of the administrative regions. Some agricultural areas did not record as much rainfall as expected, thus farmers were forced to irrigate their crops. Several cash crop farmers have reported that the rainfall received over the period under review was sufficient for their crops while others have reported that the rainfall was insufficient. The Rupununi area continued to be the driest region. However, no severe effect of the weather on agricultural production was reported.

Weather Outlook and Advice for February 2018

For the month of February, farmers are asked to take heed of the advisories from their regional agriculturists or extension officers. Additionally, they are encouraged to follow the Hydrometeorological Service's daily and threeday forecasts via the radio on **56.0 AM** and on our website at **www.hydromet.gov.gy**.

Northern Guyana is expected to be transitioning into its secondary dry season of 2018. Therefore;

- An increase in dry spells (consecutive days without rainfall) is likely. However, downpours are still expected.
- Surface dryness is likely to increase as the dry season progresses.

Farmers in the Rupununi Region should note that they are still in their secondary dry season thus, water conservation exercises such as mulching, and watering in the early morning or evening is recommended. Generally, dry conditions are expected along with periods of consecutive days without rainfall (dry spells).

Advice for Crop Farmers

- Change the timing of farm operations- adjust sowing and harvesting period to avoid negative effects of dry spells.
- Cultivate shrubs and trees around the fields as part of a crop farming system- this practice assists with the restoration of soil fertility, and at the same time creates a micro-climate to reduce high temperatures in dry periods.
- Cultivate seedlings under a shaded area.
- Water crops early in the morning and late in the evening to avoid the effects of evaporation.

Advice for Livestock Farmers

- Construct water troughs where possible to provide water for livestock during dry periods.
- Monitor livestock for pests and diseases- this is an early intervention practice since climate change can increase the incidence of uncertain types of pest and diseases that affect livestock.
- Provide shades areas to decrease the effects of heat stress on animals.

A few recommended crops for the February to April season are as follows:

- Corilla
- Bora
- Boulanger(Eggplant)
- Pepper
- Corn
- Cantaloupe
- Cabbage
- Shallot
- Cucumber
- Tomato
- Sweet Potato
- Squash
- Lettuce

Table 7: SPRINGTIDE TABLE FOR FEBRUARY 2018

FEBRUARY HIGH TIDE ≥ 2.74m				
DATE	TIME	HEIGHT (m)		
2/1/2018	4:50	3.15		
	16:39	3.28		
2/2/2018	5:33	3.16		
	17:25	3.24		
2/3/2018	6:15	3.10		
	18:09	3.13		
2/4/2018	6:57	2.97		
	18:53	2.96		
2/5/2018	7:40	2.80		
	19:37	2.75		
2/13/2018	15:01	2.78		
2/14/2018	15:36	2.87		
	3:57	2.77		
2/15/2018	16:12	2.95		
2/16/2018	4:27	2.85		
	16:47	2.99		
2/17/2018	4:57	2.92		
	17:22	3.00		
2/18/2018	5:27	2.94		
	17:59	2.97		
2/19/2018	6:00	2.93		
	18:37	2.89		
2/20/2018	6:33	2.88		
	19:18	2.76		
2/21/2018	7:12	2.79		
2/26/2018	12:59	2.78		
2/27/2018	2:15	2.78		
	13:58	2.95		
2/28/2018	3:03	2.97		
	14:51	3.10		

Tide Tables are provided by the Maritime Administration Department



Lunar calendar for February 2018

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El Niño and La Niña Update

ENSO Alert System Status: La Niña Advisory

- La Niña conditions are present.* Equatorial sea surface temperatures • (SSTs) are below average across the central and eastern Pacific Ocean.
- La Niña is likely (~85-95%) through Northern Hemisphere winter, with • a transition to ENSO-neutral expected during the spring.*

Early-Jan CPC/IRI Official Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly Neutral ENSO: -0.5 °C to 0.5 °C





