

24-hr Rainfall Estimates (mm) for Various Return Periods

		Recurrence intervals in years							
Station	Best-Fit Model	5	10	20	50	100	200	500	1000
VCBIA	Fatigue Life (3P)	127.9	165.1	202.8	253.2	291.7	330.5	382.1	421.5
	Second Best-Fit Model								
	Inv. Gaussian (3P)	127.1	164.6	203.2	256.0	297.1	339.2	396.0	439.5
	Best-Fit Model								
Jolly Hill	Gen. Pareto	143.3	181.5	214.6	251.5	275.2	295.7	318.6	333.2
	Second Best-Fit Model								
	Johnson SB	137.4	175.8	213.7	263.1	299.7	335.5	381.2	414.3
	Best-Fit Model								
CCross	Johnson SB	182.5	203.7	215.2	223.2	226.6	–	–	–
	Second Best-Fit Model								
	Error	182.2	201.3	211.3	218.4	221.8	–	–	–

6-hr Rainfall Estimates (mm) for Various Return Periods

		Recurrence intervals in years							
Station	Best-Fit Model	5	10	20	50	100	200	500	1000
VCBIA	Generalized Pareto	104.1	127.0	145.0	163.0	173.3	181.3	189.4	194.0
	Second Best-Fit Model								
	Johnson SB	102.0	125.3	145.0	166.3	179.5	190.5	202.4	209.7
1-hr Rainfall Estimates (mm) for Various Return Periods									
		Recurrence intervals in years							
	Best-Fit Model	5	10	20	50	100	200	500	1000
	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-min Rainfall Estimates (mm) for Various Return Periods									
		Recurrence intervals in years							
	Best-Fit Model	5	10	20	50	100	200	500	1000
VCBIA	Mixed*	5.0	6.6	8.5	12.4	–	–	–	–
CCross	Mixed*	7.1	8.1	9.0	10.9	–	–	–	–

VCBIA = V. C. Bird International Airport, St. George, Antigua; [17.1353N 61.7912W](#); 45 years – 1971 to 2015

Jolly Hill = Jolly Hill, Bolans, St Mary, Antigua (formerly Radio Lighthouse; 17.07N 61.87W; 24 years – 1993 to 2016

25 years return period are 224.2 mm and 225.8 for Best-Fit and Second Best-Fit Models respectively

CCross = Cobbs Cross, St. Paul, Antigua; 21 years of data – 1995 to 2015

24-hr estimates are based on measured totals for the period 8 am to 8 am

6-hr estimates are based on measured totals for the periods 8 am to 2 pm, 2-8 pm, 8 pm to 2 am and 2-8 am

*Estimated using a disaggregation method as described by [D M Lumbroso, S Boyce, H Bast and N Walmsley](#)

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