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Department of Science and Technology



Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)

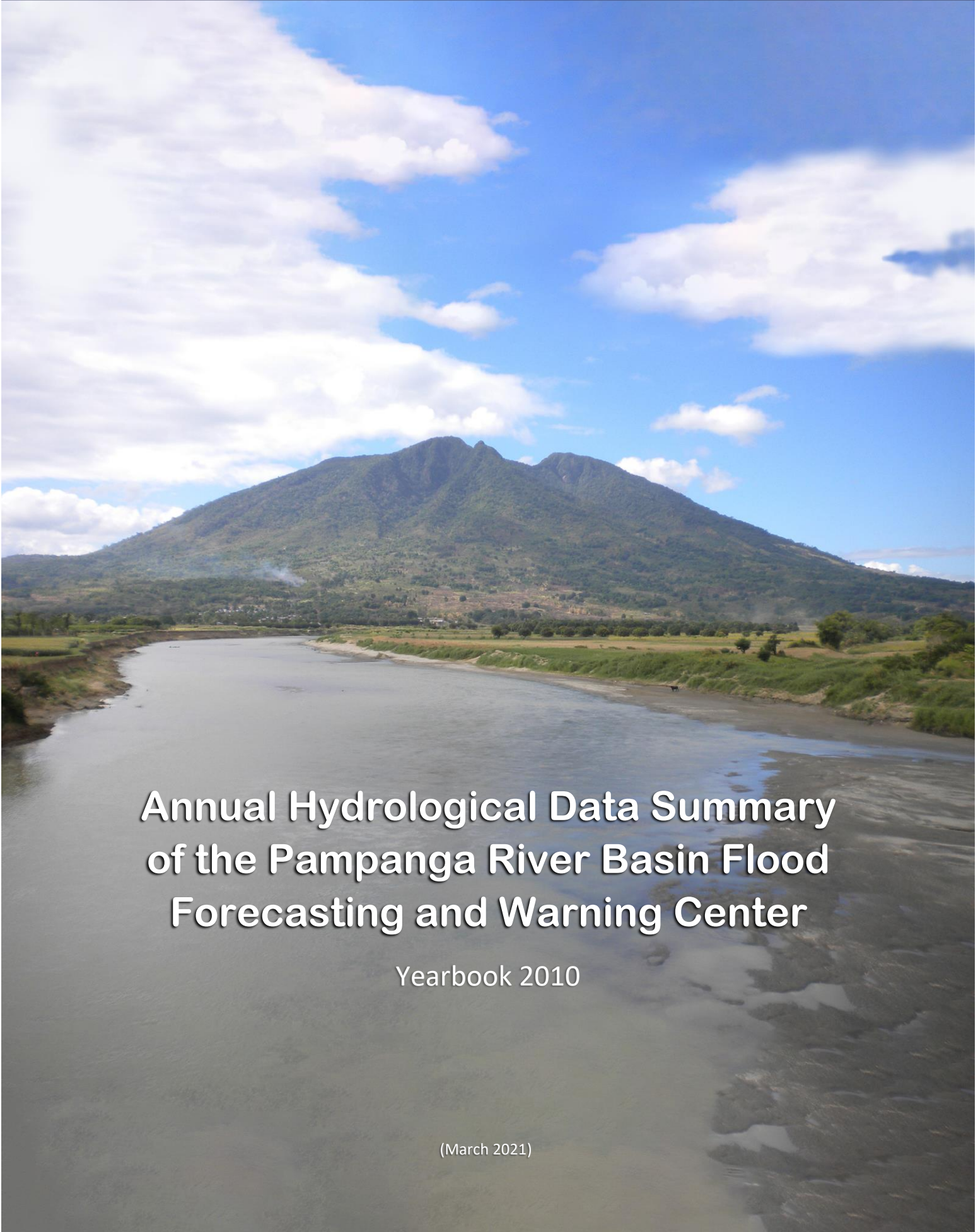
PAMPANGA RIVER BASIN FLOOD FORECASTING AND WARNING CENTER (PRFFWC)

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Annual Hydrological Data Summary of the Pampanga River Basin Flood Forecasting and Warning Center

Yearbook 2010

(March 2021)

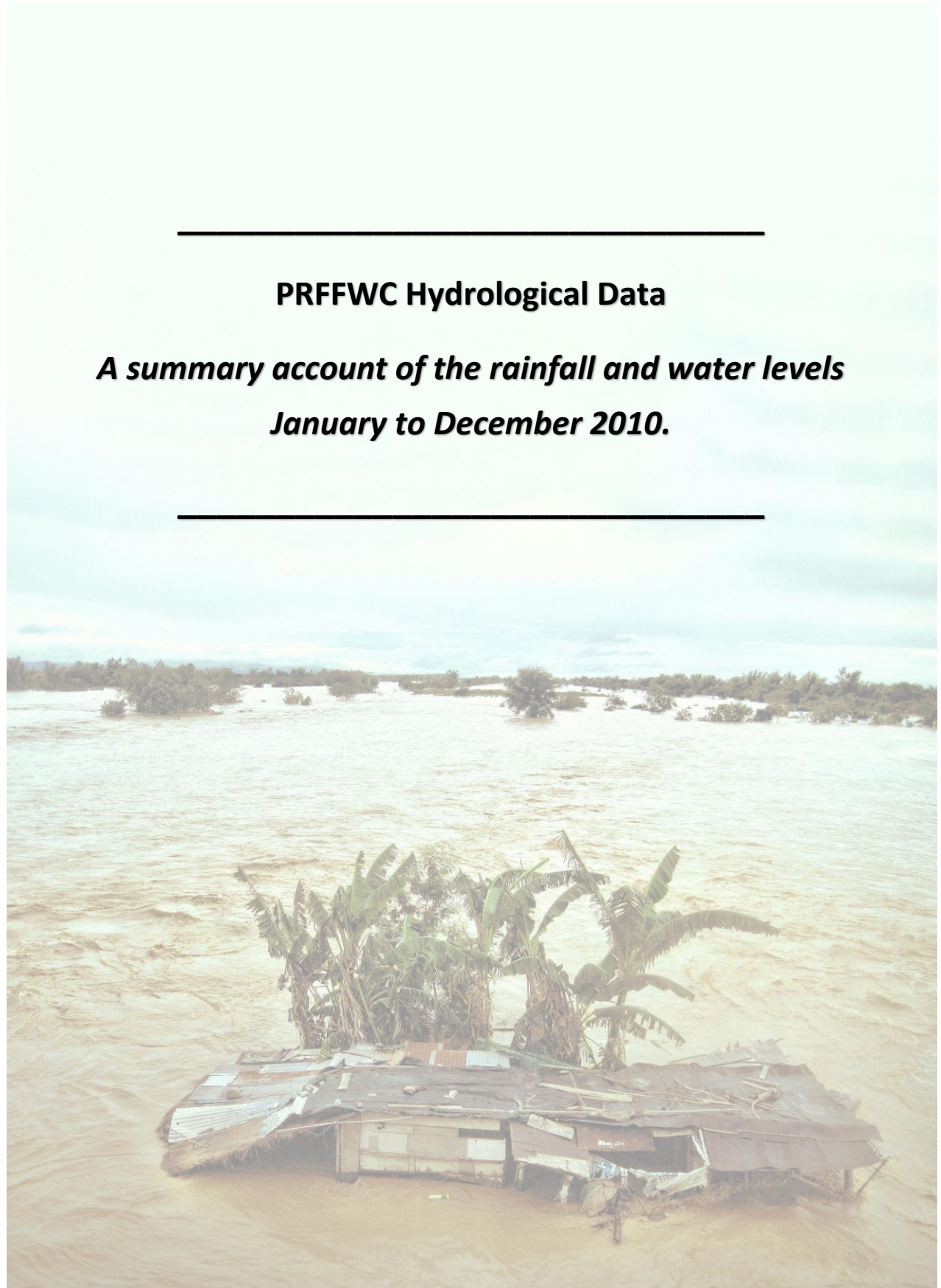


Front / Back Cover:

Upstream view of Pampanga River as seen from San Agustin Bridge in Arayat, Province of Pampanga with the majestic Mt. Arayat in the background.

(front) 13 July 2011 / (Back) September 26, 2010

Photograph: H. Hernando Edited by: M. Joson



PRFFWC Hydrological Data

***A summary account of the rainfall and water levels
January to December 2010.***

Acronyms & Abbreviations:

- CSFP – City of San Fernando, Pampanga
- D/S - downstream
- D/T - downtime
- FFWS – Flood Forecasting & Warning System
- FM – Flood Marker
- HMD – Hydro-Meteorology Division
- HMTS – Hydro-Met Telemetry Section
- LB – Left Bank
- LST – local standard time
- NIA-UPRIIS – National Irrigation Administration – Upper Pampanga River Integrated Irrigation System
- NCR-PRSD – National Capital Region – PAGASA Regional Services Division
- PAGASA – Philippine Atmospheric, Geophysical and Astronomical Services Administration
- PRB – Pampanga River Basin
- PRFFWC – Pampanga River Basin Flood Forecasting & Warning Center
- Q - discharge
- Racc – accumulated rainfall
- RB – Right Bank
- RR – Rainfall
- SG or S.G. – Staff Gauge
- TBM – Temporary benchmark
- U/S - upstream
- WL – Water Level
- X-sect – cross-section

Table of Contents:

	Page
Yearbook Notes	1
Station Profile	2
Scope and Limitations	3
Data series issues of 2010	4
A. Rainfall Data Summary Presentation	
Daily point rainfall of Muñoz Station	6
Daily point rainfall of Sapang Buho Station	7
Daily point rainfall of Gabaldon Station	8
Daily point rainfall of Zaragoza Station	9
Daily point rainfall of Mayapyap Station	10
Daily point rainfall of Peñaranda Station	11
Daily point rainfall of Calaanan Station	12
Daily point rainfall of Palali Station	13
Daily point rainfall of San Isidro Station	14
Daily point rainfall of Arayat Station	15
Daily point rainfall of Candaba Station	16
Daily point rainfall of Sibul Springs Station	17
Daily point rainfall of Sasmuan Station	18
Daily point rainfall of Sulipan Station	19
Daily point rainfall of Mexico Station	20
Daily point rainfall of Porac Station	21
Daily point rainfall of San Rafael Station	22
Daily point rainfall of PRFFWC (CSFP) Station	23
Monthly Rainfall Summary for 2010	24
Isohyets & Rain-Day distribution	24
Monthly rainfall distribution for each station	25
B. Water Level Data Summary Presentation	
Water Level daily average of Sapang Buho Station	27
Water Level daily average of Zaragoza Station	28
Water Level daily average of Peñaranda Station	29
Water Level daily average of San Isidro Station	30
Water Level daily average of Arayat Station	31
Water Level daily average of Candaba Station	32
Water Level daily average of Sasmuan Station	33
Water Level daily average of Sulipan Station	34
Water Level daily average of Mexico Station	35
Monthly Maximum WL per station for the year 2010	36
C. Annex	
Maximum rainfall per station for various sliding time period ...	38
Graph of max RR per station for various sliding time period	39
Present Flood Warning Assessment levels & WL notes	40
Water Level percent duration Curves	41-43

Figures:

Figure 1a	The Isohyet (RR distribution) for the year 2010 in the PRB	24
Figure 1b	Estimated RR days distribution (2010) in the PRB	24
Figure 2.0	Monthly RR distribution (hyetograph) year 2010 for each monitoring stations of PRFFWC in the PRB	25
Figure AA-1	The sliding time period per station graph	39
Figure AA-2	Sapang Buho WL percent duration curve (2010)	41
Figure AA-3	Zaragoza WL percent duration curve (2010)	41
Figure AA-4	Arayat WL percent duration curve (2010)	42
Figure AA-5	Candaba WL percent duration curve (2010)	42
Figure AA-6	Sasmuan WL percent duration curve (2010)	43
Figure AA-7	Sulipan WL percent duration curve (2010)	43

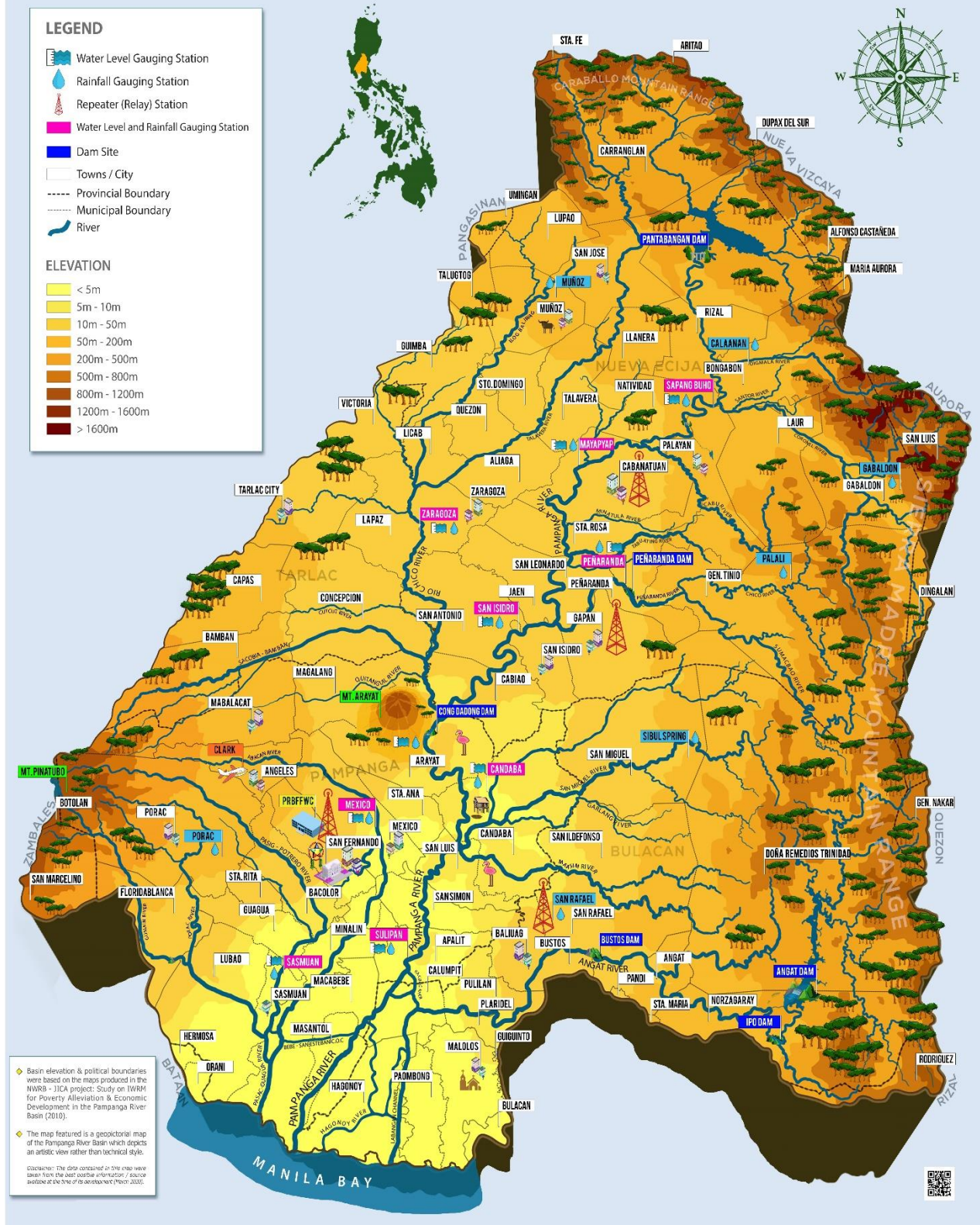
List of Tables:

Table 1.0	Monthly RR Summary for 2010	24
Table 2.0	Monthly Maximum WL recorded per station for the year 2010	36
Table A-1	Maximum RR for a given sliding time period per station for the year 2010	38
Table A-2	PRFFWC existing Flood Warning Assessment Levels (SG in meters)	40
Table A-3	WL station notes	40



The PRFFWC Telemetry Tower within the PRFFWC compound located in DMGC, Bgy. Maimpis, CSFP

PAMPANGA RIVER BASIN ELEVATION MAP



A geopictorial map of the generalized area elevation in the Pampanga River Basin with location of the PRRFFWC telemetry stations (as of Feb 2020).

Yearbook Notes



- This Annual Hydrological Data Summary Yearbook presents a summary of the rainfall and water level data observed and recorded by the telemetry system of the PRFFWC for the year 2010.
- This is the second volume yearbook report published by the PRFFWC. The first was yearbook 2009; completion of the PRFFWC yearbook series is carried-out from year 2009 to 2020 and then to work on previous years 1973 to 2008 afterwards.
- The supervisory terminal of the PRFFWC system is the main data series considered for database buildup.
- The main source for complementing breaks / gaps in the supervisory terminal data series are the telemetry stations' data loggers that is if the data exist.
- No attempts were made to fill-in the gaps and breaks in the data series when there are no data available in the loggers except only those with relatively short gap periods.
- Obvious and / or suspected data errors were directly deleted from the data series. However, these were done after doing some data consistency check, reference to field survey reports, and / or field station instrument validation.
- For further information and clarification on the general buildup of the PRFFWC data series please send message to e-mail address: prffwc@gmail.com

Station Profile

Table of Rainfall and Water Level Stations of the PRFFWC

Station	Station Number	Station Type RR (rainfall) WL (Water Level)	Location	Coordinates (estimated)
	(DEC) 6301 XX			
Muñoz	61	Telemetered RR	Within the compound of the Philippine Carabao Center in the Science City of Muñoz, N.E.	15°44'17"N, 120°57'38"E
Sapang Buho	62	Telemetered RR & WL	@ LB of Pampanga River in Bgy. Sapang Buho, Palayan City, Nueva Ecija	15°35'39"N, 121°07'09"E
Gabalton	63	Telemetered RR	Around 450 meters above the natural ground elevation of Bgy. Malinao, Gabaldon, N.E.	15°29'55"N, 121°21'20"E
Zaragoza	64	Telemetered RR & WL	Along the Zaragoza – La Paz road (RB-D/S of the Rio Chico Bridge)	15°26'36"N, 120°45'03"E
Mayapyap	65	Telemetered RR & WL	@ RB-D/S of Gen. Luna Bridge, (Bgys. Mayapyap & Valdefuente) Cabanatuan City, Nueva Ecija	15°30'52"N, 120°57'20"E
Peñaranda	66	Telemetered RR & WL	@ LB-D/S side of the bridge, around 550 meters D/S of Peñaranda River Irrigation Dam at Bgy. Uno, Poblacion, Peñaranda, N.E.	15°21'14"N, 121°00'20"E
Calaanan	67	Telemetered RR	Inside the Pesa Elementary School compound, Purok 2, Bgy. Pesa, Bongabon, N.E.	15°38'53"N, 121°11'09"E
Palali	68	Telemetered RR	Within Nueva Ecija Stock Farm in Bgy. Nazareth, Gen. Tinio, N.E.	15°22'50"N, 121°9'41"E
San Isidro	71	Telemetered RR & WL	@ the RB-D/S side of the San Isidro-Jaen Bridge, San Isidro, N.E.	15°18'49"N, 120°54'09"E
Arayat	72	Telemetered RR & WL	@ RB-D/S side of San Agustin Bridge, Arayat, Pampanga	15°10'06"N, 120°46'56"E
Candaba	73	Telemetered RR & WL	Along Candaba-San Miguel road (Dukma) at Bgy. Paralaya, Candaba, Pampanga	15°06'56"N, 120°51'01"E
Sibul Spring	74	Telemetered RR	Bgy. Sibul, San Miguel, Bulacan	15°10'05"N, 121°03'33"E
Sasmuan	75	Telemetered RR & WL	Bgy. Sta. Lucia (Poblacion), Sasmuan, Pampanga	14°56'11"N, 120°37'23"E
Sulipan	76	Telemetered RR & WL	@ RB of Pampanga River at Bgy. Sulipan, Apalit, Pampanga	14°56'21"N, 120°45'39"E
Mexico	77	Telemetered RR & WL	LB-D/S of Mexico Bridge No. 2, Bgy. Sto. Rosario, Mexico, Pampanga	15°04'05"N, 120°43'51"E
Porac	78	Telemetered RR	Within the municipal compound property, Bgy. Cangatba, Porac, Pampanga	15°04'48"N, 120°32'43"E
San Rafael	90	Telemetered RR (Repeater)	NIA compound, Bgy. Sabang, Baliwag, Bulacan	14°58'05"N, 120°54'52"E
Cabanatuan	89	Repeater station (no hydrological data reporting)	Within the NIA-UPRIIS Compound, Cabanatuan City	15°28'33"N, 120°57'30"E
PRFFWC (CSFP)		Digital tipping-bucket / manually recorded	PRFFWC area compound besides DOST-3, DMGC, Bgy. Maimpis, CSFP	15°04'04"N, 120°39'22"E

Scope and Limitations

1. This Data Yearbook presents the hydrological data summary of the 18 rainfall stations and 10 water level stations of the PRFFWC for the year 2010.
2. The rainfall and water level dataset in this report covers the period starting from the past 1-hour observation ending at 0900H of January 01, 2010, and will end at 0800H of January 01, 2011.
3. Accordingly, it follows a 24-hour daily total (or average for WL) which starts at (practically) 0801H of the present day and ends at 0800H of the following day (meteorological day); Water level summary values for maximum data are reported as per instantaneous observed value from the dataset but the average value is taken using the same reporting time period as in total rainfall for a met day.
4. The shortest time period considered in this summary report is 1 hour.
5. Units for some of the hydrological elements:
 - a. Rainfall – millimeters (mm)
 - b. Water Level (River Stage) – meters (m)
 - c. Cross-sectional area – square meter (m²)
 - d. River Discharge – cubic meters per second or cumecs (m³/sec)
 - e. Rainfall day – rain-days
6. The minimum rainfall amount for telemetry stations is 1 mm; and for the rainfall observations in PRFFWC in CSFP, the minimum is 0.25 mm;
7. Rain-day is considered as a day with at least 1 mm of rainfall for telemetry stations; and at least 0.25 mm for PRFFWC in CSFP station;
8. The hydrological data summary presented in this yearbook are the daily rainfall observations (met day total), monthly rainfall and average, maximum rainfall total of various periods, and total rain-days per month; the daily water level averages (met day), maximum stage for each month and other regular information that were extracted from the available data series of each station.
9. For the daily rainfall presentation table, yellow shaded cell indicates rainfall values between 1 to 60 mm for telemetry stations (0.25 to 60.0 for PRFFWC-CSFP station); pink shade cells from 61 to 180 mm (60.25 to 180.0 for PRFFWC-CSFP station); light-red shade cells for values greater than 180 mm. Likewise, for water level summary, cell shades are in a graded color scale from a white shade to a regular semi-orange shade that is relative to an increase in water level values. Thus, a “0.00” value (minimum) is white and maximum value within the table will be orange shaded. In the summary below the daily value tables (the daily rainfall and in the average daily water level tables) a green shaded cell indicates the maximum value in their respective rows.

Disclaimer: The dataset summary presented herein have been processed and validated through several steps using the best possible means available to the PRFFWC at the time of processing. However, still it is possible that results may contain inadvertent errors such as typographical in nature, errors resulting from possible misuse of excel formulae, and other similar factors. The summary information in this yearbook report may be revised as new analyses emerge.

Users noting any errors that they may have encountered in this report are requested to inform the PRFFWC. Furthermore, users may use the information contained herein at their own risk.

Data Series Issues of 2010

1. January: Mayapyap and San Isidro WL readings are all zero for the whole month. Sapang Buho WL at 0.01 m readings for several periods may have been “0” but not a big issue for this series.
2. February: All rainfall stations have “0” readings for the whole month. Mayapyap, Peñaranda, San Isidro, and Mexico WL readings are all zero for the whole month.
3. March: There are long periods of 0.01 m WL readings for Sapang Buho; some may be “0” or below zero during the said period. Mayapyap & San Isidro WL are zero for the whole month.
4. April: San Isidro WL is zero for the whole month. Sapang Buho WL is 0.01 m almost for the whole month; may be zero or below zero at some points during the month. Mayapyap WL was down for the whole month. Arayat WL’s gradual rise before noontime of April 11 may be attributed to Cong Dadong Irrigation Dam effects.
5. May: Mayapyap WL was down for the whole month. San Isidro & Mexico WL readings are all zero for the whole month. Peñaranda WL starting at 2200H, 07 until end of the month have been filled-in with “0”.
6. June: San Isidro WL readings are all zero for the whole month. Mayapyap WL started with a zero reading from 1700H, 10 until end of the month.
7. July: Mayapyap WL reading for the whole month is zero (doubtful); a caveat to Mayapyap RR, half of the month is zero (which is unlikely).
8. August: Mayapyap RR and WL are all zero readings for the whole month (very unlikely). Station readings were not included in the data summary output.
9. September: Mayapyap RR & WL readings are all zero (highly unlikely) – was not included in the data summary output. San Isidro WL readings are all zero for the whole month. A caveat to Arayat WL – there were some erratic readings in several points during the month which may be attributed to Cong Dadong Dam but no valid documentation of this.
10. October: Mayapyap RR & WL readings are all zero (highly unlikely) – was not included in the data summary output. Porac and San Rafael RR had no data (1400H, 10 to 0900H, 11)
11. November: Mayapyap RR & WL readings are all zero (highly unlikely) – was not included in the data summary output.
12. December: Mayapyap RR & WL readings are all zero (highly unlikely) – was not included in the data summary output. Mexico and San Isidro WL are all zero for the whole month. Zaragoza RR was zero for the whole month (rather unlikely for the month of Dec) but was still considered for this data series.

A. RAINFALL Data Summary Presentation



Daily Point Rainfall in millimeters (meteorological day)

2010

Station:

Muñoz

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	1	0	7	6	0	0
2	0	0	0	0	0	6	21	0	9	5	32	0
3	0	0	0	0	0	0	0	0	29	1	4	0
4	0	0	0	0	0	3	0	3	34	0	2	0
5	0	0	0	0	0	1	10	8	0	0	5	0
6	0	0	0	0	0	2	3	1	0	0	0	0
7	0	0	0	0	0	0	8	13	0	0	0	29
8	0	0	0	0	0	0	1	11	24	0	0	0
9	0	0	0	0	0	0	12	1	0	3	4	0
10	0	0	0	0	0	6	87	0	2	5	13	0
11	0	0	0	0	0	2	16	12	0	0	36	0
12	0	0	5	0	0	0	8	3	0	0	1	0
13	0	0	0	0	0	0	24	0	3	1	0	0
14	0	0	0	0	0	53	3	29	5	0	1	0
15	0	0	0	0	0	0	0	9	24	23	0	0
16	0	0	0	0	0	0	11	36	0	0	0	0
17	0	0	0	0	0	0	1	0	0	0	0	0
18	0	0	0	0	0	0	62	4	0	81	2	0
19	0	0	0	0	0	3	0	0	2	76	0	0
20	0	0	0	0	21	25	55	2	13	17	0	0
21	0	0	0	0	0	0	20	1	11	2	0	0
22	0	0	0	0	0	0	0	12	0	0	0	0
23	0	0	0	0	66	8	15	38	5	0	0	0
24	0	0	0	0	23	9	8	17	19	0	0	0
25	0	0	0	0	0	5	29	0	0	8	0	0
26	0	0	0	0	0	3	0	8	0	11	0	0
27	0	0	0	0	0	4	0	9	4	0	0	0
28	0	0	0	2	0	6	39	3	0	0	0	0
29	0		0	23	0	1	8	12	0	0	1	0
30	0		0	5	23	0	1	1	5	0	0	0
31	0		0		3		0	4		0		0

Monthly Total	0	0	5	30	136	137	443	237	196	239	101	29
Average	0.00	0.00	0.16	1.00	4.39	4.57	14.29	7.65	6.53	7.71	3.37	0.94
Max daily rain	0	0	5	23	66	53	87	38	34	81	36	29
Day of Max Daily			12	29	23	14	10	23	4	18	11	7
No. of Rain days	0	0	1	3	5	16	23	23	16	13	11	1
Max 1-hr rain	0	0	3	14	43	35	69	27	20	22	33	21
Day of max 1-hr			13	29	23	14	10	23	4	20	11	7

Total rain for the year

1553

Total rain days for the year

112

Daily Point Rainfall in millimeters (meteorological day)

2010	Station: Sapang_Buho											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	3	2	0	19	1	9	0
2	0	0	0	0	2	21	14	52	8	1	11	0
3	0	0	0	0	0	12	5	0	11	0	13	0
4	0	0	0	0	0	15	2	20	6	0	7	0
5	0	0	0	0	0	0	0	2	2	0	3	0
6	0	0	0	0	0	5	0	2	0	0	0	0
7	0	0	0	0	0	17	3	26	7	0	0	0
8	0	0	0	0	0	0	0	39	42	0	0	2
9	0	0	0	0	0	2	0	1	0	6	6	0
10	0	0	0	0	0	3	37	0	0	0	0	0
11	0	0	0	0	0	5	0	3	0	0	7	0
12	0	0	0	0	0	0	0	5	0	0	2	0
13	0	0	0	0	0	69	28	3	7	1	0	0
14	0	0	0	0	0	15	14	0	0	0	0	0
15	0	0	0	0	0	6	1	19	0	3	0	0
16	0	0	0	0	0	0	15	0	0	0	0	0
17	0	0	0	0	0	0	26	0	4	0	0	0
18	0	0	0	0	0	0	50	7	0	62	4	0
19	0	0	0	0	0	0	0	9	0	34	0	0
20	0	0	0	0	0	0	3	14	4	2	0	0
21	0	0	0	0	0	0	1	18	5	2	0	0
22	0	0	0	0	24	0	0	3	1	1	0	0
23	0	0	0	0	0	0	0	8	0	0	1	0
24	0	0	0	0	0	31	2	8	0	0	0	0
25	0	0	0	0	0	18	26	2	0	38	0	0
26	0	0	0	0	0	1	0	1	0	22	0	0
27	0	0	0	0	3	0	0	1	3	0	0	0
28	0	0	0	16	2	0	2	0	0	0	0	0
29	0		0	10	0	0	45	4	0	0	0	0
30	0		0	4	7	0	0	2	6	0	0	0
31	0		0		1		0	7		0		0

Monthly Total	0	0	0	30	39	223	276	256	125	173	63	2
Average	0.00	0.00	0.00	1.00	1.26	7.43	8.90	8.26	4.17	5.58	2.10	0.06
Max daily rain	0	0	0	16	24	69	50	52	42	62	13	2
Day of Max Daily				28	22	13	18	2	8	18	3	8
No. of Rain days	0	0	0	3	6	15	18	24	14	12	10	1
Max 1-hr rain	0	0	0	13	23	67	37	36	31	18	6	2
Day of max 1-hr				28	22	13	29	2	8	25	2	8

Total rain for the year	1187
Total rain days for the year	103

Daily Point Rainfall in millimeters (meteorological day)

2010	Station: Gabaldon											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	14	1	49	30	100	0
2	0	0	0	0	0	25	0	3	6	5	19	0
3	0	0	0	0	3	29	0	0	37	1	22	3
4	0	0	0	0	4	11	0	15	0	0	3	9
5	0	0	0	0	0	7	40	14	0	0	7	0
6	0	0	0	0	0	0	0	2	0	2	0	0
7	0	0	0	0	0	0	0	35	23	0	0	0
8	0	0	0	0	0	1	0	19	11	0	18	0
9	0	0	0	0	0	0	0	0	2	0	33	0
10	0	0	0	0	0	1	14	0	2	0	12	0
11	0	0	0	0	0	0	0	1	17	6	3	0
12	0	0	18	0	0	7	0	5	5	2	17	0
13	0	0	2	0	0	15	104	0	10	5	0	0
14	0	0	0	0	0	7	19	0	0	0	7	0
15	0	0	0	0	0	0	2	18	1	1	8	0
16	0	0	0	0	0	0	9	1	0	2	0	0
17	0	0	0	0	0	0	10	15	1	3	12	0
18	33	0	0	0	0	1	198	33	0	50	6	0
19	8	0	0	0	0	0	0	3	0	19	0	0
20	0	0	0	4	0	1	10	29	0	0	0	0
21	0	0	4	0	0	0	4	8	15	11	0	0
22	0	0	1	0	0	0	0	50	6	10	0	0
23	0	0	0	0	0	4	6	6	1	3	1	0
24	0	0	0	0	0	71	6	9	0	0	4	0
25	0	0	0	0	0	90	67	22	4	49	0	0
26	0	0	0	0	0	0	15	3	0	10	0	0
27	0	0	0	0	0	0	0	2	31	0	0	0
28	0	0	0	8	22	0	8	5	0	0	0	0
29	0		0	8	0	3	1	2	1	0	4	0
30	0		0	9	0	1	1	2	15	0	0	0
31	0		0		16		12	18		0		0

Monthly Total	41	0	25	29	45	274	540	321	237	209	276	12
Average	1.32	0.00	0.81	0.97	1.45	9.13	17.42	10.35	7.90	6.74	9.20	0.39
Max daily rain	33	0	18	9	22	90	198	50	49	50	100	9
Day of Max Daily	18		12	30	28	25	18	22	1	18	1	4
No. of Rain days	2	0	4	4	4	16	19	26	19	17	17	2
Max 1-hr rain	6	0	6	7	21	48	33	28	23	26	24	4
Day of max 1-hr	19		13	29	28	25	18	20	1	25	2	4

Total rain for the year	2009
Total rain days for the year	130

Daily Point Rainfall in millimeters (meteorological day)

2010		Station: Zaragoza										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	8	2	0	20	0	15	0
2	0	0	0	0	0	17	7	0	4	0	10	0
3	0	0	0	0	0	3	16	0	14	0	0	0
4	0	0	0	0	0	0	0	48	6	0	0	0
5	0	0	0	0	0	1	18	0	0	0	0	0
6	0	0	0	0	0	4	0	5	0	0	0	0
7	0	0	0	0	0	8	1	19	35	0	0	0
8	0	0	0	0	0	0	0	19	7	0	0	0
9	0	0	0	0	0	0	20	0	0	2	13	0
10	0	0	0	0	0	0	17	1	0	0	70	0
11	0	0	0	0	0	19	0	2	0	0	1	0
12	0	0	0	0	0	0	26	2	0	0	0	0
13	0	0	0	0	0	12	40	0	1	0	0	0
14	0	0	0	0	0	1	6	11	2	0	0	0
15	0	0	0	0	0	0	0	2	0	0	0	0
16	0	0	0	0	0	0	9	0	0	5	1	0
17	0	0	0	0	0	0	0	0	10	0	0	0
18	0	0	0	0	0	0	22	7	0	62	0	0
19	0	0	0	0	0	1	22	3	11	146	0	0
20	0	0	0	0	23	5	1	7	0	17	0	0
21	0	0	0	0	0	3	2	0	39	2	0	0
22	0	0	0	0	0	0	2	9	0	2	0	0
23	0	0	0	0	0	4	10	4	0	2	0	0
24	0	0	0	0	0	0	4	19	0	7	10	0
25	0	0	0	0	0	7	18	0	0	2	0	0
26	0	0	0	0	0	0	5	5	0	0	0	0
27	0	0	0	0	0	0	0	0	6	2	0	0
28	0	0	0	46	1	11	66	1	0	0	0	0
29	0		0	24	6	1	23	15	0	0	0	0
30	0		0	2	32	0	7	1	4	0	0	0
31	0		0		6		1	4		0		0

Monthly Total	0	0	0	72	68	105	345	184	159	249	120	0
Average	0.00	0.00	0.00	2.40	2.19	3.50	11.13	5.94	5.30	8.03	4.00	0.00
Max daily rain	0	0	0	46	32	19	66	48	39	146	70	0
Day of Max Daily				28	30	11	28	4	21	19	10	1
No. of Rain days	0	0	0	3	5	16	24	20	13	11	7	0
Max 1-hr rain	0	0	0	18	26	12	47	35	32	43	29	0
Day of max 1-hr				28	30	2	28	4	7	20	10	0

Total rain for the year	1302
Total rain days for the year	99

Daily Point Rainfall in millimeters (meteorological day)

2010

Station:

Mayapyap

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	1	14					
2	0	0	0	0	0	11	28					
3	0	0	0	0	2	12	0					
4	0	0	0	0	1	12	0					
5	0	0	0	0	0	0	0					
6	0	0	0	0	0	20	0					
7	0	0	0	0	0	26	0					
8	0	0	0	0	0	0	0					
9	0	0	0	0	0	0	35					
10	0	0	0	0	0	4	23					
11	0	0	0	0	0	0	9					
12	0	0	1	0	0	0	0					
13	0	0	0	2	0	26	38					
14	0	0	0	0	0	1	0					
15	0	0	0	0	0	1	0					
16	0	0	0	0	0	0	0					
17	0	0	0	0	0	0	0					
18	0	0	0	0	0	0	0					
19	0	0	0	0	0	22	0					
20	0	0	0	0	0	2	0					
21	0	0	0	0	0	0	0					
22	0	0	0	0	0	0	0					
23	0	0	0	0	0	0	0					
24	0	0	0	0	0	4	0					
25	0	0	0	0	0	14	0					
26	0	0	0	0	0	0	0					
27	0	0	0	0	0	5	0					
28	0	0	0	37	0	5	0					
29	0		0	7	1	2	0					
30	0		0	9	6	0	0					
31	0		0		0		0					

Monthly Total	0	0	1	55	10	168	147					
Average	0	0	0.032	1.833	0.323	5.6	4.742					
Max daily rain	0	0	1	37	6	26	38					
Day of Max Daily			12	28	30	7	13					
No. of Rain days	0	0	1	4	4	17	6					
Max 1-hr rain	0	0	1	24	6	24	28					
Day of max 1-hr			12	28	30	7	2					

Total rain for the year	381
Total rain days for the year	32

Daily Point Rainfall in millimeters (meteorological day)

2010	Station: Peñaranda											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	3	15	0	14	59	2	25	0
2	0	0	0	0	0	4	11	6	2	2	7	0
3	0	0	0	0	18	40	0	18	22	0	4	0
4	0	0	0	0	0	0	0	3	0	0	4	1
5	0	0	0	0	0	0	13	34	0	0	7	0
6	0	0	0	0	0	5	0	3	0	0	0	0
7	0	0	0	0	0	0	4	35	2	0	0	0
8	0	0	0	0	0	0	0	18	10	0	0	0
9	0	0	0	0	0	0	13	0	0	11	6	0
10	0	0	0	0	0	10	59	0	15	0	0	0
11	0	0	0	0	0	0	0	3	0	0	1	0
12	0	0	2	0	0	2	1	1	0	0	1	0
13	0	0	0	0	0	18	24	7	4	8	0	0
14	0	0	0	0	0	2	5	0	0	0	0	0
15	0	0	0	0	0	41	5	7	0	0	0	0
16	0	0	0	0	0	0	5	0	0	0	0	0
17	0	0	0	0	0	0	26	5	14	0	2	0
18	5	0	0	0	0	0	63	21	1	46	0	0
19	0	0	0	0	0	0	16	1	0	49	0	1
20	0	0	0	0	0	23	10	2	2	10	0	0
21	0	0	0	0	0	0	3	0	5	6	0	0
22	0	0	0	0	0	0	7	34	2	7	0	0
23	0	0	0	0	0	0	1	29	0	0	0	0
24	0	0	0	0	0	3	12	3	6	0	1	0
25	0	0	0	0	0	26	44	0	0	0	0	0
26	0	0	3	0	1	0	1	4	0	14	0	0
27	0	0	0	0	0	1	0	0	0	0	0	0
28	0	0	0	38	0	0	102	0	0	0	0	0
29	0		0	9	0	2	3	0	0	0	0	0
30	0		0	1	6	0	7	0	7	0	0	0
31	0		0		4		4	8		0		0

Monthly Total	5	0	5	48	32	192	439	256	151	155	58	2
Average	0.16	0.00	0.16	1.60	1.03	6.40	14.16	8.26	5.03	5.00	1.93	0.06
Max daily rain	5	0	3	38	18	41	102	35	59	49	25	1
Day of Max Daily	18		26	28	3	15	28	7	1	19	1	4
No. of Rain days	1	0	2	3	5	14	24	21	14	10	10	2
Max 1-hr rain	2	0	3	12	12	39	47	33	28	12	8	1
Day of max 1-hr	19		26	28	4	15	29	5	1	19	2	4

Total rain for the year	1343
Total rain days for the year	106

Daily Point Rainfall in millimeters (meteorological day)

2010		Station: Calaanan										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	8	24	0	13	1	16	0
2	0	0	0	0	24	16	1	11	17	0	45	0
3	0	0	0	0	2	17	5	2	39	0	23	0
4	0	0	0	0	0	8	0	3	3	0	5	5
5	0	0	0	0	0	1	0	1	0	0	4	0
6	0	0	0	0	0	24	0	3	0	0	0	0
7	0	0	0	0	0	0	3	27	16	0	0	0
8	0	0	0	0	0	9	0	47	29	0	0	0
9	0	0	0	0	0	7	0	1	0	1	12	0
10	0	0	0	0	0	2	15	0	0	0	3	0
11	0	0	0	0	0	2	0	0	0	1	1	0
12	0	0	1	0	0	0	1	5	0	1	4	0
13	0	0	0	0	0	10	44	1	8	1	0	0
14	0	0	0	0	0	0	9	0	0	0	0	0
15	0	0	0	0	0	0	1	9	0	4	0	0
16	0	0	0	0	0	0	71	0	47	0	0	0
17	0	0	0	0	0	0	33	2	0	0	0	0
18	2	0	0	0	0	7	75	7	0	73	5	0
19	0	0	0	0	0	3	0	11	0	25	0	0
20	0	0	0	0	0	0	10	26	1	3	0	0
21	0	0	0	0	0	0	1	10	6	3	0	0
22	0	0	0	0	9	0	2	26	0	0	0	0
23	0	0	0	0	3	0	4	21	0	0	1	0
24	0	0	0	0	0	29	10	19	1	0	5	0
25	4	0	0	0	0	15	25	2	0	58	0	0
26	0	0	0	0	12	1	0	4	0	72	0	0
27	0	0	0	0	4	2	0	0	3	0	0	0
28	0	0	0	11	2	0	7	0	0	0	0	0
29	0		0	7	19	1	13	8	0	0	1	0
30	0		0	38	4	0	2	2	3	0	0	0
31	0		0		0		1	7		0		0

Monthly Total	6	0	1	56	79	162	357	255	186	243	125	5
Average	0.19	0.00	0.03	1.87	2.55	5.40	11.52	8.23	6.20	7.84	4.17	0.16
Max daily rain	4	0	1	38	24	29	75	47	47	73	45	5
Day of Max Daily	25		12	30	2	24	18	8	16	18	2	4
No. of Rain days	2	0	1	3	9	18	22	24	13	12	13	1
Max 1-hr rain	1	0	1	33	19	19	40	31	38	52	15	3
Day of max 1-hr	19		14	30	29	6	16	8	16	25	2	4

Total rain for the year	1475
Total rain days for the year	118

Daily Point Rainfall in millimeters (meteorological day)

2010	Station: Palali											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	5	0	3	26	3	41	0
2	0	0	0	0	0	3	10	4	10	1	12	0
3	0	0	0	0	1	53	2	68	73	0	8	0
4	0	0	0	0	0	0	0	7	5	0	5	2
5	0	0	0	0	0	1	3	0	0	1	4	0
6	0	0	0	0	0	0	0	1	6	0	0	0
7	0	0	0	0	0	0	14	28	12	0	0	0
8	0	0	0	0	0	60	1	17	1	0	0	0
9	0	0	0	0	0	0	18	1	0	0	12	0
10	0	0	0	0	0	0	35	0	0	0	0	0
11	0	0	0	0	0	0	0	1	2	12	0	0
12	0	0	9	0	0	0	0	3	4	5	4	0
13	0	0	1	0	0	1	34	11	6	3	0	0
14	0	0	0	0	0	25	2	0	0	0	1	0
15	0	0	0	0	0	6	1	3	1	0	2	0
16	0	0	0	0	0	0	10	0	18	0	0	0
17	0	0	0	0	0	1	30	7	4	1	8	0
18	2	0	0	0	0	0	95	26	13	39	3	0
19	0	0	0	0	0	0	0	1	1	22	0	3
20	0	0	0	4	0	0	17	94	63	4	0	0
21	0	0	2	0	1	0	0	2	8	10	0	0
22	0	0	1	0	0	2	0	26	0	43	0	0
23	0	0	0	0	0	1	9	12	5	0	0	0
24	0	0	0	0	0	59	0	11	0	8	1	0
25	0	0	0	0	0	96	41	0	0	36	0	0
26	0	0	0	0	0	16	3	22	0	24	0	0
27	0	0	0	0	7	0	0	1	1	0	0	0
28	0	0	0	5	24	0	10	1	0	0	0	0
29	0		0	7	0	1	11	1	0	0	0	0
30	0		0	9	13	0	0	0	9	0	0	0
31	0		0		0		5	10		0		0

Monthly Total	2	0	13	25	46	330	351	361	268	212	101	5
Average	0.06	0.00	0.42	0.83	1.48	11.00	11.32	11.65	8.93	6.84	3.37	0.16
Max daily rain	2	0	9	9	24	96	95	94	73	43	41	3
Day of Max Daily	18		12	30	28	25	18	20	3	22	1	19
No. of Rain days	1	0	4	4	5	15	20	25	20	15	12	2
Max 1-hr rain	1	0	6	5	16	50	43	58	37	40	12	3
Day of max 1-hr	18		13	30	28	25	18	20	3	22	2	19

Total rain for the year	1714
Total rain days for the year	123

Daily Point Rainfall in millimeters (meteorological day)

2010		Station: San Isidro										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	9	1	0	18	1	16	0
2	0	0	0	0	0	5	28	51	2	6	6	0
3	0	0	0	0	0	4	0	26	31	0	5	0
4	0	0	0	0	0	7	0	109	0	0	5	0
5	0	0	0	0	0	0	6	3	0	0	7	0
6	0	0	0	0	0	0	0	9	0	0	0	0
7	0	0	0	0	0	3	5	36	4	0	0	0
8	0	0	0	0	0	0	0	12	10	0	3	0
9	0	0	0	0	0	1	10	0	0	0	1	0
10	0	0	0	0	0	0	6	0	0	0	0	0
11	1	0	0	0	0	0	0	2	0	0	2	0
12	0	0	0	0	0	14	0	1	0	0	0	0
13	0	0	0	0	0	5	29	9	1	8	0	0
14	0	0	0	0	0	0	11	0	0	0	0	0
15	0	0	0	0	0	1	1	6	0	0	0	0
16	0	0	0	0	0	0	20	1	0	0	0	0
17	0	0	0	0	0	0	20	4	20	0	1	0
18	4	0	0	0	0	12	27	26	1	68	0	0
19	0	0	0	0	0	0	19	0	0	57	0	1
20	0	0	0	0	0	5	4	4	6	10	0	0
21	0	0	0	0	0	0	1	0	1	6	0	0
22	0	0	0	0	0	4	1	29	2	20	0	0
23	0	0	0	0	0	0	12	15	0	0	0	0
24	0	0	0	0	0	1	0	23	1	2	0	0
25	0	0	0	0	0	14	10	2	0	0	2	0
26	0	0	0	0	0	8	4	4	0	0	0	0
27	0	0	0	0	0	0	2	9	0	0	0	0
28	0	0	0	39	0	0	72	1	0	0	0	0
29	0		0	11	0	4	14	2	0	0	0	0
30	0		0	4	0	0	6	0	4	0	0	0
31	0		0		15		4	6		0		0

Monthly Total	5	0	0	54	15	97	313	390	101	178	48	1
Average	0.16	0.00	0.00	1.80	0.48	3.23	10.10	12.58	3.37	5.74	1.60	0.03
Max daily rain	4	0	0	39	15	14	72	109	31	68	16	1
Day of Max Daily	18		1	28	31	12	28	4	3	18	1	19
No. of Rain days	2	0	0	3	1	16	24	24	13	9	10	1
Max 1-hr rain	2	0	0	30	15	13	32	67	13	25	5	1
Day of max 1-hr	19		0	28	31	12	29	4	3	19	2	19

Total rain for the year	1202
Total rain days for the year	103

Daily Point Rainfall in millimeters (meteorological day)

2010		Station: Arayat										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	14	0	0	31	1	39	0
2	0	0	0	0	20	8	24	6	8	1	6	0
3	0	0	0	0	60	4	0	67	16	0	0	0
4	0	0	0	0	0	1	0	4	0	0	0	0
5	0	0	0	0	0	0	1	2	0	0	4	0
6	0	0	0	0	0	0	0	3	0	0	0	0
7	0	0	0	0	0	22	0	69	13	0	0	0
8	0	0	0	0	0	0	9	15	5	0	0	0
9	0	0	0	0	0	2	0	4	0	0	7	0
10	0	0	0	0	0	0	3	0	0	0	35	0
11	0	0	0	0	0	0	0	0	0	0	1	0
12	0	0	0	0	0	0	13	0	0	1	1	0
13	0	0	0	0	0	1	13	2	0	6	0	0
14	0	0	0	0	0	6	0	2	0	1	0	0
15	0	0	0	0	0	0	27	1	0	0	0	0
16	0	0	0	0	0	0	7	9	15	0	0	1
17	0	0	0	0	0	0	0	4	1	0	4	0
18	8	0	0	0	0	2	12	15	5	64	2	0
19	0	0	0	0	0	3	15	4	0	85	0	0
20	0	0	0	0	41	3	2	1	2	22	0	0
21	0	0	0	0	0	11	1	0	0	3	0	0
22	0	0	0	0	0	1	3	0	22	22	0	0
23	0	0	0	0	0	2	0	3	0	3	0	0
24	0	0	0	0	0	0	23	18	0	4	0	0
25	0	0	0	0	0	18	11	0	0	0	0	0
26	0	0	0	0	0	1	1	18	0	2	0	0
27	0	0	0	0	0	0	4	3	0	0	0	0
28	0	0	0	43	0	30	2	2	0	0	0	0
29	0		0	55	0	1	51	0	0	0	0	0
30	0		0	0	25	0	0	3	5	0	0	0
31	0		0		10		1	10		0		0

Monthly Total	8	0	0	98	156	130	223	265	123	215	99	1
Average	0.26	0.00	0.00	3.27	5.03	4.33	7.19	8.55	4.10	6.94	3.30	0.03
Max daily rain	8	0	0	55	60	30	51	69	31	85	39	1
Day of Max Daily	18			29	3	28	29	7	1	19	1	16
No. of Rain days	1	0	0	2	5	18	20	23	11	13	9	1
Max 1-hr rain	4	0	0	25	59	27	46	41	21	21	23	1
Day of max 1-hr	18		0	29	3	28	29	3	22	19	10	17

Total rain for the year	1318
Total rain days for the year	103

Daily Point Rainfall in millimeters (meteorological day)

2010		Station: Candaba										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	6	0	0	10	5	55	0
2	0	0	0	0	0	7	0	26	17	1	2	0
3	0	0	0	0	1	4	0	18	16	0	1	0
4	0	0	0	0	0	2	0	7	0	0	0	0
5	0	0	0	0	0	0	0	7	0	0	6	0
6	0	0	0	0	0	0	0	7	0	0	0	0
7	0	0	0	0	0	20	0	40	3	0	0	0
8	0	0	0	0	0	0	14	23	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	4	0	1	0	6	0
11	0	0	0	0	0	0	0	0	0	1	0	0
12	0	0	1	0	0	0	0	0	0	3	2	0
13	0	0	0	4	0	1	14	15	0	13	0	0
14	0	0	0	0	0	5	0	5	0	0	1	0
15	0	0	0	0	0	0	26	1	0	0	0	0
16	0	0	0	0	0	0	5	0	2	0	0	0
17	0	0	0	0	0	0	6	3	13	0	5	0
18	5	0	0	0	0	14	24	15	8	80	2	0
19	0	0	0	0	0	27	14	1	0	87	0	1
20	0	0	0	0	2	3	4	1	9	20	0	0
21	0	0	0	0	0	0	0	0	0	5	0	0
22	0	0	0	0	0	3	5	0	3	14	0	0
23	0	0	0	0	0	0	1	15	0	2	0	0
24	0	0	0	0	0	1	1	33	0	5	0	0
25	0	0	0	0	0	6	7	0	0	0	0	0
26	0	0	0	0	3	1	1	69	0	0	0	0
27	0	0	0	0	0	0	0	19	0	0	0	0
28	0	0	0	15	28	13	2	5	0	0	0	0
29	0		0	58	0	1	0	7	0	0	0	0
30	0		0	0	3	4	0	1	16	0	0	0
31	0		0		19		3	13		0		0

Monthly Total	5	0	1	77	56	118	131	331	98	236	80	1
Average	0.16	0.00	0.03	2.57	1.81	3.93	4.23	10.68	3.27	7.61	2.67	0.03
Max daily rain	5	0	1	58	28	27	26	69	17	87	55	1
Day of Max Daily	18		12	29	28	19	15	26	2	19	1	19
No. of Rain days	1	0	1	3	6	17	16	22	11	12	9	1
Max 1-hr rain	3	0	1	38	22	26	22	38	12	39	15	1
Day of max 1-hr	18		12	29	28	19	15	26	3	19	2	19

Total rain for the year	1134
Total rain days for the year	99

Daily Point Rainfall in millimeters (meteorological day)

2010		Station: Sibul_Springs										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	2	8	0	0	50	19	96	0
2	0	0	0	0	0	13	3	1	26	34	1	0
3	0	0	0	0	3	6	0	4	15	0	4	1
4	0	0	0	0	0	6	0	8	0	0	4	0
5	0	0	0	0	0	0	0	4	0	0	9	0
6	0	0	0	0	0	0	0	7	0	0	0	0
7	0	0	0	0	0	3	17	52	0	0	0	0
8	0	0	0	0	0	58	23	16	22	0	1	0
9	0	0	0	0	0	33	2	1	0	0	4	0
10	0	0	0	0	0	0	68	0	44	0	18	0
11	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	11	8	1	3	4	0	0
13	0	0	1	3	0	33	47	14	1	10	4	0
14	0	0	0	0	0	0	4	0	0	0	5	0
15	0	0	0	0	0	7	0	3	0	0	0	0
16	0	0	0	0	0	0	4	0	0	0	0	0
17	1	0	0	0	0	0	12	4	42	7	20	0
18	4	0	0	0	0	5	25	48	0	45	6	0
19	1	0	0	0	0	6	38	1	0	24	0	3
20	0	0	0	0	0	23	13	4	16	7	0	0
21	0	0	0	0	0	9	2	3	5	10	0	0
22	0	0	0	0	0	2	29	11	7	6	0	0
23	0	0	0	0	0	5	8	50	0	1	0	0
24	0	0	0	0	0	2	15	26	6	5	0	0
25	0	0	1	0	0	22	42	6	0	0	0	0
26	0	0	0	0	4	10	2	41	0	15	0	0
27	0	0	0	0	0	0	2	1	0	0	0	0
28	0	0	0	80	2	0	54	1	3	0	0	0
29	0		0	23	0	1	9	20	0	0	0	0
30	0		0	32	2	0	3	8	12	1	0	0
31	0		0		0		6	7		0		0

Monthly Total	6	0	2	138	13	263	436	342	252	188	172	4
Average	0.19	0.00	0.06	4.60	0.42	8.77	14.06	11.03	8.40	6.06	5.73	0.13
Max daily rain	4	0	1	80	4	58	68	52	50	45	96	3
Day of Max Daily	18		13	28	26	8	10	7	1	18	1	19
No. of Rain days	3	0	2	4	5	20	24	26	14	14	12	2
Max 1-hr rain	1	0	1	40	3	55	35	43	43	23	23	3
Day of max 1-hr	18		13	28	26	8	10	23	10	2	2	19

Total rain for the year	1816
Total rain days for the year	126

Daily Point Rainfall in millimeters (meteorological day)

2010		Station: Sasmuan										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	7	3	0	0	68	6	54	0
2	0	0	0	0	0	12	1	0	19	13	1	0
3	0	0	0	0	0	2	0	1	14	0	3	5
4	0	0	0	0	0	17	0	12	0	0	0	0
5	0	0	0	0	0	6	0	1	0	0	4	0
6	1	0	0	0	0	0	0	7	0	0	8	0
7	0	0	0	0	0	30	1	50	0	0	0	0
8	0	0	0	0	0	0	0	21	0	1	0	0
9	0	0	0	0	10	0	0	1	0	0	0	0
10	0	0	0	0	0	0	17	0	0	0	54	0
11	0	0	0	0	0	0	0	1	0	0	3	0
12	0	0	3	0	0	0	1	1	0	1	0	0
13	0	0	0	21	0	0	25	3	0	2	0	0
14	0	0	0	0	0	1	6	0	0	0	3	0
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	5	1	0	0	0	0
17	0	0	0	0	0	30	2	5	0	0	4	0
18	1	0	0	0	0	0	1	2	0	75	0	0
19	0	0	0	0	0	1	0	0	0	87	0	2
20	0	0	0	0	0	8	0	3	4	40	0	0
21	0	0	0	0	0	1	5	2	0	6	0	0
22	0	0	0	0	0	18	0	11	5	31	0	0
23	0	0	0	0	0	1	1	2	0	16	1	0
24	0	0	0	0	0	0	60	13	0	0	0	0
25	0	0	0	0	0	7	19	56	0	0	0	0
26	0	0	0	0	0	0	6	4	0	2	0	0
27	0	0	0	0	0	4	45	5	0	0	0	0
28	0	0	0	43	8	1	3	16	0	0	0	0
29	0		0	11	0	1	0	0	0	0	0	0
30	0		0	0	0	0	19	6	1	0	0	0
31	0		0		2		2	55		0		0

Monthly Total	2	0	3	75	27	143	219	279	111	280	135	7
Average	0.06	0.00	0.10	2.50	0.87	4.77	7.06	9.00	3.70	9.03	4.50	0.23
Max daily rain	1	0	3	43	10	30	60	56	68	87	54	5
Day of Max Daily	6		12	28	9	7	24	25	1	19	1	3
No. of Rain days	2	0	1	3	4	17	18	24	6	12	10	2
Max 1-hr rain	1	0	3	26	7	25	31	52	20	37	41	2
Day of max 1-hr	6		12	29	10	7	25	25	1	19	10	4

Total rain for the year	1281
Total rain days for the year	99

Daily Point Rainfall in millimeters (meteorological day)

2010		Station: Sulipan										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	13	10	0	0	28	11	57	0
2	0	0	0	0	0	8	15	3	10	3	2	0
3	0	0	0	0	0	4	0	9	14	0	0	7
4	0	0	0	0	0	1	0	9	0	0	0	0
5	0	0	0	0	0	2	0	17	0	0	8	0
6	0	0	0	0	0	0	0	3	0	0	0	0
7	0	0	0	0	0	5	17	41	0	0	0	0
8	0	0	0	0	0	0	0	25	0	0	1	0
9	0	0	0	0	0	0	0	0	0	7	0	0
10	0	0	0	0	0	0	12	0	0	0	43	0
11	0	0	0	0	0	0	0	3	0	0	0	0
12	0	0	3	0	0	0	0	2	0	2	5	0
13	0	0	0	0	0	0	41	0	0	3	0	0
14	0	0	0	0	0	8	0	0	0	0	8	2
15	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	6	2	0	0	0	20
17	0	0	0	0	0	6	9	0	8	0	5	0
18	2	0	0	0	0	3	5	1	0	83	0	0
19	0	0	0	0	0	1	2	0	0	100	12	7
20	0	0	0	0	6	0	1	21	1	23	2	0
21	0	0	0	0	0	3	8	7	0	7	0	0
22	0	0	0	0	0	5	0	0	0	3	0	0
23	0	0	0	0	0	0	7	4	0	8	0	0
24	0	0	0	0	0	0	4	12	0	0	0	0
25	0	0	0	0	0	8	9	11	0	0	0	0
26	0	0	0	0	15	8	0	33	0	0	0	0
27	0	0	0	0	0	0	3	2	2	0	0	0
28	0	0	0	22	3	12	2	4	0	0	0	0
29	0		0	24	0	1	14	8	0	0	0	0
30	0		0	3	0	0	3	5	5	0	0	0
31	0		0		0		9	13		0		0

Monthly Total	2	0	3	49	37	85	167	235	68	250	143	36
Average	0.06	0.00	0.10	1.63	1.19	2.83	5.39	7.58	2.27	8.06	4.77	1.16
Max daily rain	2	0	3	24	15	12	41	41	28	100	57	20
Day of Max Daily	18		12	29	26	28	13	7	1	19	1	16
No. of Rain days	1	0	1	3	4	16	18	22	7	11	10	4
Max 1-hr rain	1	0	2	16	15	12	28	17	8	38	25	11
Day of max 1-hr	18		12	29	27	28	13	20	17	19	10	16

Total rain for the year	1075
Total rain days for the year	97

Daily Point Rainfall in millimeters (meteorological day)

2010	Station: Mexico											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	5	0	0	38	3	62	0
2	0	0	0	0	0	10	3	1	19	1	4	0
3	0	0	0	0	0	1	0	19	13	0	0	0
4	0	0	0	0	0	5	0	32	4	0	0	0
5	0	0	0	0	0	0	0	11	0	0	5	0
6	0	0	0	0	0	1	0	3	0	0	0	0
7	0	0	0	0	0	29	0	51	20	0	0	0
8	0	0	0	0	0	0	0	18	0	0	0	0
9	0	0	0	0	0	2	8	0	0	4	6	0
10	0	0	0	0	0	2	1	0	0	18	56	0
11	0	0	0	0	0	0	0	21	0	4	0	0
12	0	0	11	0	0	0	3	0	0	2	0	0
13	0	0	0	0	0	0	9	0	0	5	0	0
14	0	0	0	0	0	6	1	0	0	0	0	0
15	0	0	0	0	0	0	12	0	0	2	0	0
16	0	0	0	0	0	2	6	23	2	0	0	1
17	0	0	0	0	0	0	4	1	3	0	6	0
18	2	0	0	0	0	4	14	11	46	68	1	0
19	0	0	0	0	0	1	2	2	0	88	0	1
20	0	0	0	0	0	0	1	16	2	29	0	0
21	0	0	0	0	0	0	4	0	0	3	0	0
22	0	0	0	0	0	3	0	0	6	10	0	0
23	0	0	0	0	0	1	0	3	0	7	0	0
24	0	0	0	0	0	0	12	42	0	0	0	0
25	0	0	0	0	0	4	7	8	0	0	0	0
26	0	0	0	0	18	0	11	6	0	1	0	0
27	0	0	0	0	1	0	5	4	0	0	0	0
28	0	0	0	31	1	0	6	3	0	0	0	0
29	0		0	44	0	3	60	4	0	0	0	0
30	0		0	0	0	0	0	0	9	0	0	0
31	0		0		0		1	15		0		0

Monthly Total	2	0	11	75	20	79	170	294	162	245	140	2
Average	0.06	0.00	0.35	2.50	0.65	2.63	5.48	9.48	5.40	7.90	4.67	0.06
Max daily rain	2	0	11	44	18	29	60	51	46	88	62	1
Day of Max Daily	18		12	29	26	7	29	7	18	19	1	16
No. of Rain days	1	0	1	2	3	16	20	21	11	15	7	2
Max 1-hr rain	1	0	8	27	18	23	35	34	25	25	33	1
Day of max 1-hr	18		12	29	27	7	29	24	18	19	10	16

Total rain for the year	1200
Total rain days for the year	99

Daily Point Rainfall in millimeters (meteorological day)

2010		Station: Porac										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	3	5	0	1	64	4	47	0
2	0	0	0	0	19	30	10	54	7	1	4	0
3	0	0	0	0	1	7	0	11	20	0	0	0
4	0	0	0	0	21	0	3	5	3	0	0	0
5	0	0	0	0	0	3	0	1	0	0	3	0
6	0	0	0	0	0	1	0	8	0	0	0	0
7	0	0	0	0	0	82	0	49	49	0	0	0
8	0	0	0	0	0	0	0	28	1	0	0	0
9	0	0	0	0	0	2	2	5	0	0	4	0
10	0	0	0	0	1	0	6	0	0	0	101	0
11	0	0	0	0	0	0	0	2	0	0	1	0
12	0	0	13	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	31	0	0	4	0	6
14	0	0	0	0	0	0	6	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	1	0	0
16	0	0	0	0	0	0	0	0	0	0	0	4
17	0	0	0	0	0	0	0	0	2	0	4	0
18	2	0	0	0	0	0	8	1	15	69	0	0
19	0	0	0	0	0	1	0	1	0	147	0	1
20	0	0	0	0	0	0	5	5	0	23	0	0
21	0	0	0	0	0	0	1	0	0	23	0	0
22	0	0	0	0	0	1	0	0	0	4	0	0
23	0	0	0	0	0	2	6	1	0	11	0	0
24	0	0	0	16	0	0	1	64	0	5	0	0
25	0	0	0	0	0	43	6	27	0	3	0	0
26	0	0	0	0	0	0	1	1	0	0	0	0
27	0	0	0	0	0	0	40	5	0	28	0	0
28	0	0	0	21	4	12	1	9	0	0	0	0
29	0		0	23	0	1	56	0	0	0	0	0
30	0		0	2	0	0	3	11	2	0	0	2
31	0		0		4		0	34		0		0

Monthly Total	2	0	13	62	53	190	186	323	163	323	164	13
Average	0.06	0.00	0.42	2.07	1.71	6.33	6.00	10.42	5.43	10.42	5.47	0.42
Max daily rain	2	0	13	23	21	82	56	64	64	147	101	6
Day of Max Daily	18		12	29	4	7	29	24	1	19	10	13
No. of Rain days	1	0	1	4	7	13	17	21	9	13	7	4
Max 1-hr rain	1	0	12	16	21	77	33	41	41	29	44	5
Day of max 1-hr	18		12	25	5	7	27	24	7	19	10	13

Total rain for the year	1492
Total rain days for the year	97

Daily Point Rainfall in millimeters (meteorological day)

2010		Station: San_Rafael										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	1	9	0	0	35	16	82	0
2	0	0	0	0	0	33	0	21	11	0	4	0
3	0	0	0	0	0	0	0	1	8	0	1	3
4	0	0	0	0	0	0	0	14	0	0	0	1
5	0	0	0	0	0	0	3	10	0	0	13	0
6	0	0	0	0	0	0	0	27	0	0	0	0
7	0	0	0	0	0	1	1	46	6	0	0	0
8	0	0	0	0	0	0	12	24	6	0	0	0
9	0	0	0	0	0	0	7	4	0	0	1	0
10	0	0	0	0	0	22	2	0	54	0	0	0
11	0	0	0	0	0	1	0	0	0	3	1	0
12	0	0	0	0	0	0	8	1	0	3	12	0
13	0	0	7	0	0	9	23	0	0	7	0	0
14	0	0	0	0	0	1	0	22	0	1	8	0
15	0	0	0	0	0	5	29	20	0	0	0	0
16	0	0	0	0	0	9	7	1	0	0	0	0
17	0	0	0	0	0	8	10	0	0	2	5	0
18	0	0	0	0	0	0	11	14	12	56	0	0
19	0	0	0	0	0	25	0	1	0	120	0	10
20	0	0	0	0	1	11	14	3	3	12	0	0
21	0	0	0	0	16	7	6	19	1	16	0	0
22	0	0	0	0	0	1	0	1	2	4	0	0
23	0	0	0	0	0	0	1	62	0	2	0	0
24	0	0	0	0	0	0	2	10	0	0	1	0
25	0	0	0	0	0	19	11	2	0	0	0	0
26	0	0	0	0	18	17	6	52	0	1	0	0
27	0	0	0	0	1	0	16	10	0	0	0	0
28	0	0	0	15	17	4	11	1	1	0	0	0
29	0		0	46	4	1	1	0	0	0	0	0
30	0		0	1	4	21	0	1	12	1	0	0
31	0		0		1		5	13		0		0

Monthly Total	0	0	7	62	63	204	186	380	151	244	128	14
Average	0.00	0.00	0.23	2.07	2.03	6.80	6.00	12.26	5.03	7.87	4.27	0.45
Max daily rain	0	0	7	46	18	33	29	62	54	120	82	10
Day of Max Daily			13	29	26	2	15	23	10	19	1	19
No. of Rain days	0	0	1	3	9	19	21	25	12	14	10	3
Max 1-hr rain	0	0	7	24	16	22	29	47	53	26	26	4
Day of max 1-hr			13	29	21	2	15	23	10	19	2	19

Total rain for the year	1439
Total rain days for the year	117

Daily Point Rainfall in millimeters (meteorological day)

2010	Station: PRFFWC_(CSFP)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.0	0.0	0.0	0.0	0.0	6.1	0.0	0.3	45.5	3.8	55.9	0.0
2	0.0	0.0	0.0	0.0	0.0	21.3	21.6	3.6	11.4	1.0	4.6	0.0
3	2.3	0.0	0.0	0.0	5.3	0.0	0.3	18.8	18.5	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	9.7	0.0	0.0	30.0	2.8	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	2.0	0.5	2.5	0.0	0.0	4.3	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	60.7	0.0	46.0	13.7	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.2	0.0	0.0	0.5	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	3.6	4.8	0.0	1.3	0.8	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	3.0	73.7	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.6	0.0	1.0	0.0	0.0
12	0.0	0.0	27.7	0.0	0.0	0.8	0.0	0.0	0.0	1.8	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.5	24.1	0.0	0.0	6.1	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.5	2.8	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0	22.9	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.5	0.0	0.0	5.3	0.0
18	3.8	0.0	0.0	0.0	0.0	1.0	5.3	6.6	0.0	59.2	1.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.3	0.3	1.5	0.0	135.1	0.0	2.8
20	0.0	0.0	0.0	0.0	0.0	0.3	0.0	2.5	1.0	15.7	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	9.9	0.5	3.3	0.0	3.3	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	15.5	0.0	0.0	11.7	8.9	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	2.0	0.5	3.0	3.0	5.6	1.3	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	7.4	35.1	0.0	0.0	0.8	0.0
25	0.0	0.0	0.0	0.0	0.0	2.0	12.4	23.4	0.0	30.2	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	1.5	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	35.6	0.0	7.1	1.5	2.3	1.0	0.0	0.0	0.0
29	0.0		0.0	19.3	0.0	3.3	65.5	0.0	0.0	0.0	0.0	0.0
30	0.0		0.0	0.0	0.0	0.0	0.0	1.5	4.8	0.0	0.0	0.0
31	0.0		0.0		0.8		0.0	19.8		0.0		0.3

Monthly Total	6.1	0.0	27.7	54.9	15.7	133.4	158.0	262.9	136.4	277.6	148.1	3.0
Average	0.20	0.00	0.89	1.83	0.51	4.45	5.10	8.48	4.55	8.96	4.94	0.10
Max daily rain	3.8	0.0	27.7	35.6	9.7	60.7	65.5	46.0	45.5	135.1	73.7	2.8
Day of Max Daily	18		12	28	4	7	29	7	1	19	10	19
No. of Rain days	2	0	1	2	3	16	18	23	11	15	10	2
Max 1-hr rain												
Day of max 1-hr												

Total rain for the year	1223.8
Total rain days for the year	103

Table 1.0

Monthly Rainfall Summary for 2010														Total for the year	Number of RR days	Max 24-hr RR (Met day)
PRB Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
Muñoz	0	0	5	30	136	137	443	237	196	239	101	29	1553	112	87	
Sapang Buho	0	0	0	30	39	223	276	256	125	173	63	2	1187	103	69	
Gabaldon	41	0	25	29	45	274	540	321	237	209	276	12	2009	130	198	
Zaragoza	0	0	0	72	68	105	345	184	159	249	120	0	1302	99	146	
Mayapyap	0	0	1	55	10	168	147						381	32	38	
Peñaranda	5	0	5	48	32	192	439	256	151	155	58	2	1343	106	102	
Calaanan	6	0	1	56	79	162	357	255	186	243	125	5	1475	118	75	
Palali	2	0	13	25	46	330	351	361	268	212	101	5	1714	123	96	
San Isidro	5	0	0	54	15	97	313	390	101	178	48	1	1202	103	109	
Arayat	8	0	0	98	156	130	223	265	123	215	99	1	1318	103	85	
Candaba	5	0	1	77	56	118	131	331	98	236	80	1	1134	99	87	
Sibul Spring	6	0	2	138	13	263	436	342	252	188	172	4	1816	126	96	
Sasmuan	2	0	3	75	27	143	219	279	111	280	135	7	1281	99	87	
Sulipan	2	0	3	49	37	85	167	235	68	250	143	36	1075	97	100	
Mexico	2	0	11	75	20	79	170	294	162	245	140	2	1200	99	88	
Porac	2	0	13	62	53	190	186	323	163	323	164	13	1492	97	147	
San Rafael	0	0	7	62	63	204	186	380	151	244	128	14	1439	117	120	
PRFFWC	6.1	0.0	27.7	54.9	15.7	133.4	158.0	262.9	136.4	277.6	148.1	3.0	1223.8	103	135.1	

Mayapyap rainfall station observation was only available until July (partly).

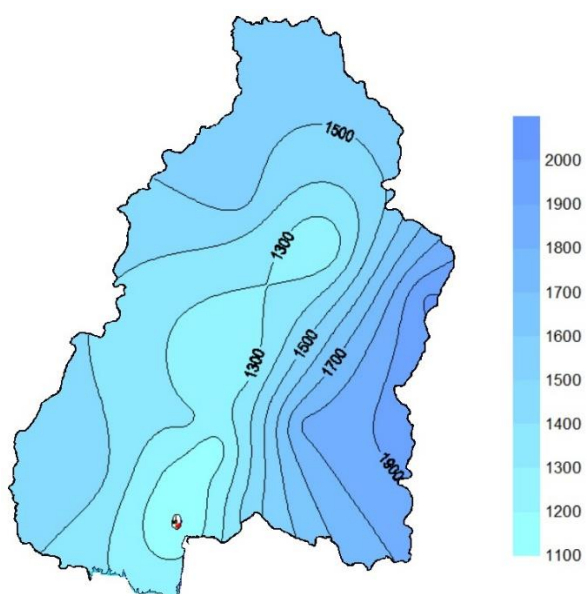


Figure 1a. The Isohyet rainfall distribution for the year 2010 in the Pampanga River Basin

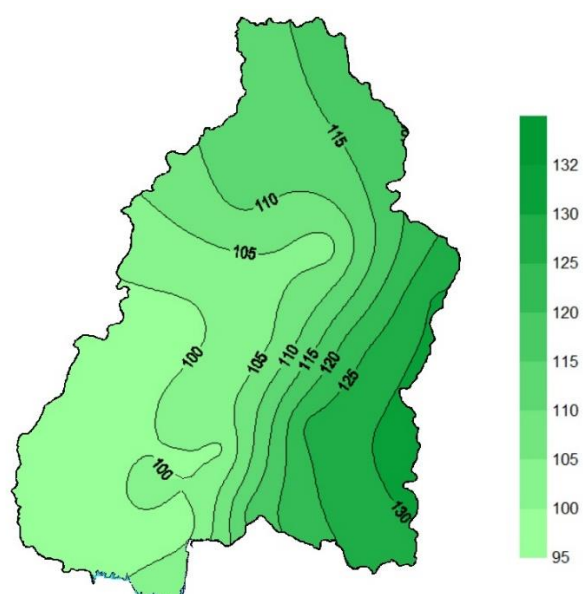


Figure 1b. Estimated rainfall days distribution (2010) in the Pampanga River Basin

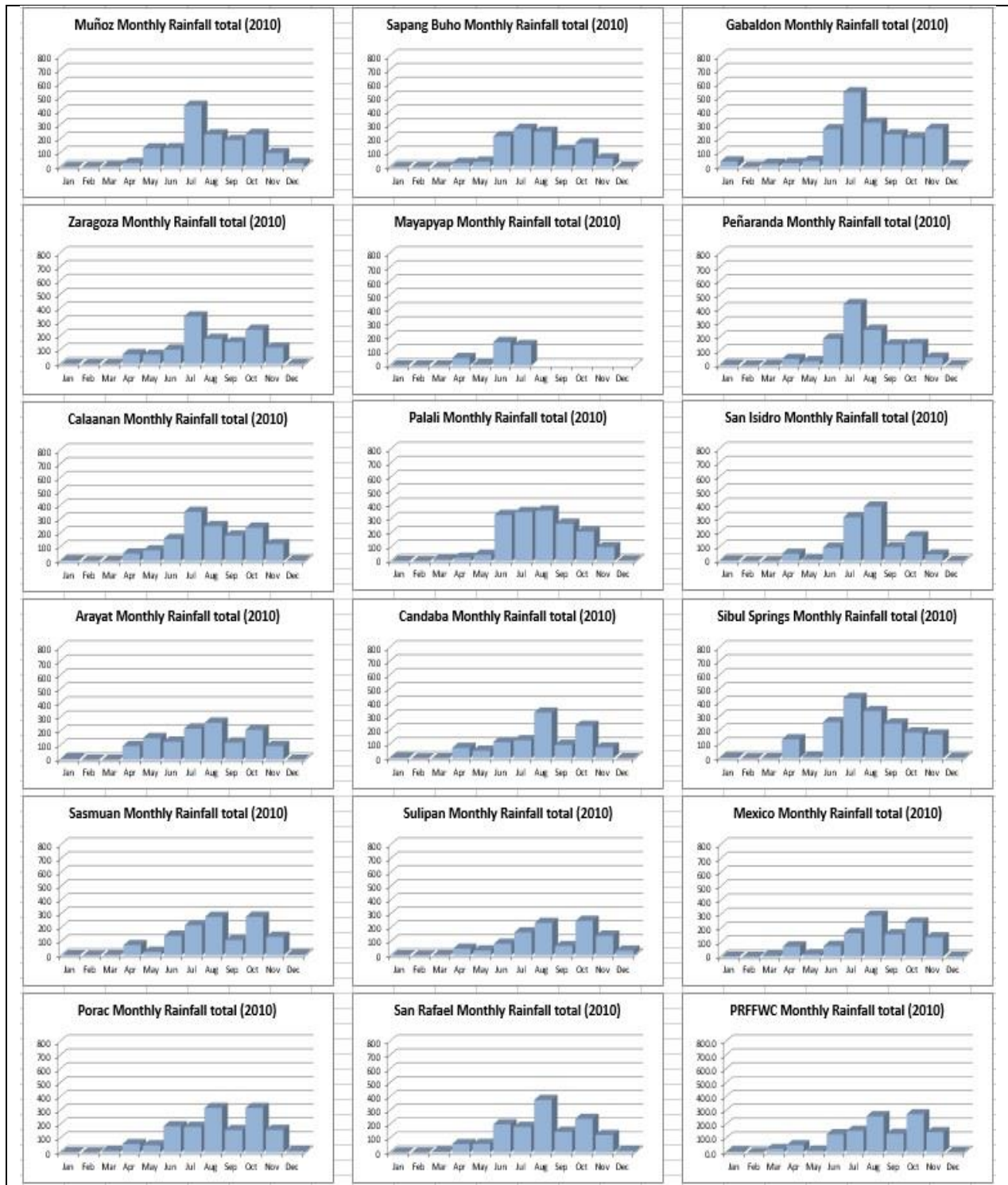
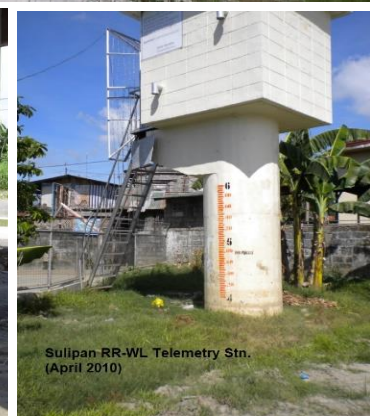
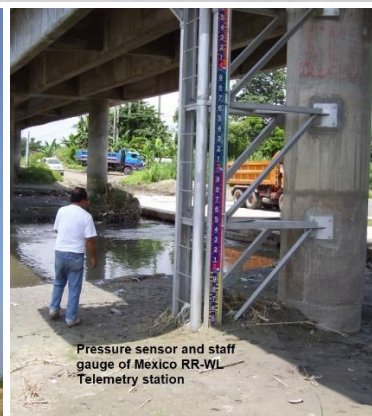
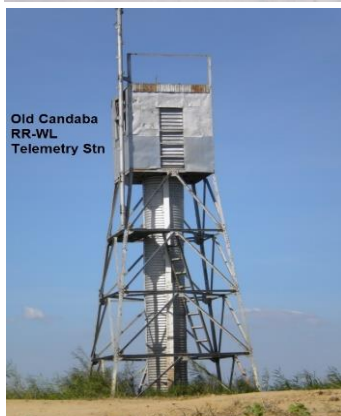


Figure 2. Monthly Rainfall distribution (hyetograph) of all operational RR monitoring stations of PRFFWC within the PRB for the year 2010.

B. WATER LEVEL Data Summary Presentation



Water Level in meters (Daily Average)

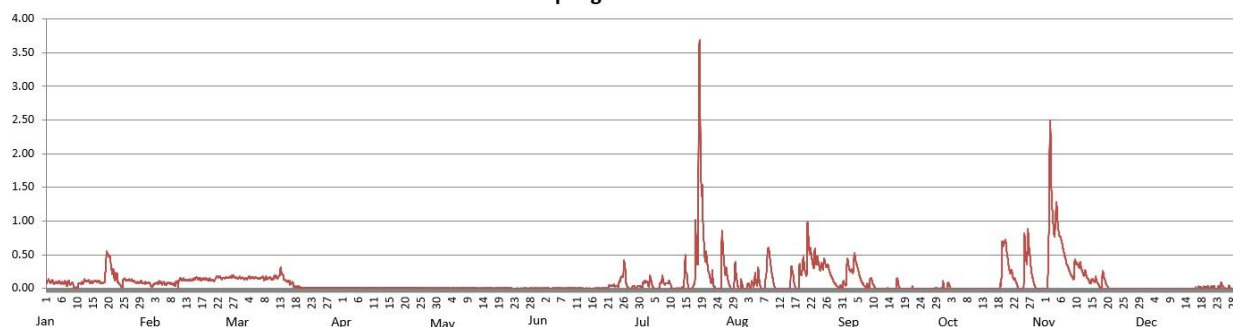
2010

Station: **Sapang_Buho**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.11	0.07	0.16	0.01	0.01	0.00	0.05	0.00	0.22	0.01	0.13	0.00
2	0.10	0.05	0.15	0.01	0.01	0.00	0.09	0.04	0.29	0.06	1.75	0.00
3	0.09	0.08	0.15	0.01	0.01	0.00	0.10	0.05	0.32	0.00	0.94	0.00
4	0.09	0.09	0.16	0.01	0.01	0.00	0.05	0.10	0.38	0.00	1.08	0.00
5	0.09	0.08	0.16	0.01	0.01	0.00	0.02	0.12	0.28	0.00	0.92	0.00
6	0.08	0.07	0.14	0.01	0.01	0.00	0.03	0.02	0.07	0.00	0.57	0.00
7	0.08	0.08	0.16	0.01	0.01	0.00	0.12	0.04	0.03	0.00	0.37	0.00
8	0.07	0.06	0.15	0.01	0.01	0.01	0.07	0.46	0.08	0.00	0.23	0.00
9	0.03	0.08	0.15	0.01	0.01	0.01	0.09	0.34	0.08	0.00	0.20	0.00
10	0.03	0.12	0.14	0.01	0.01	0.01	0.01	0.06	0.00	0.00	0.38	0.00
11	0.08	0.13	0.17	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.33	0.00
12	0.10	0.12	0.16	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00
13	0.11	0.12	0.24	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00
14	0.10	0.13	0.15	0.01	0.00	0.00	0.25	0.00	0.00	0.00	0.10	0.00
15	0.10	0.15	0.10	0.01	0.01	0.00	0.03	0.15	0.00	0.00	0.12	0.00
16	0.11	0.14	0.08	0.01	0.01	0.00	0.01	0.13	0.04	0.00	0.11	0.00
17	0.09	0.14	0.04	0.01	0.00	0.00	0.41	0.00	0.04	0.00	0.02	0.01
18	0.09	0.14	0.02	0.01	0.01	0.00	1.90	0.21	0.00	0.23	0.15	0.01
19	0.45	0.13	0.01	0.01	0.01	0.00	1.49	0.36	0.00	0.68	0.07	0.02
20	0.42	0.12	0.01	0.01	0.01	0.00	0.53	0.56	0.00	0.46	0.00	0.02
21	0.23	0.14	0.01	0.01	0.01	0.03	0.28	0.55	0.00	0.24	0.00	0.02
22	0.17	0.17	0.01	0.01	0.00	0.04	0.13	0.40	0.00	0.15	0.00	0.01
23	0.05	0.15	0.01	0.01	0.00	0.03	0.01	0.43	0.00	0.04	0.00	0.01
24	0.09	0.16	0.01	0.01	0.00	0.10	0.00	0.32	0.00	0.00	0.00	0.05
25	0.13	0.16	0.01	0.01	0.00	0.25	0.38	0.36	0.00	0.36	0.00	0.00
26	0.12	0.17	0.01	0.01	0.00	0.13	0.33	0.34	0.00	0.58	0.00	0.01
27	0.11	0.16	0.01	0.01	0.00	0.00	0.13	0.23	0.00	0.38	0.00	0.00
28	0.09	0.15	0.01	0.01	0.00	0.02	0.01	0.11	0.00	0.09	0.00	0.00
29	0.09		0.01	0.01	0.00	0.01	0.17	0.04	0.00	0.00	0.00	0.00
30	0.08		0.01	0.01	0.00	0.03	0.05	0.02	0.03	0.00	0.00	0.00
31	0.08		0.01		0.00		0.05	0.06		0.00		0.00

Max WL observed	0.56	0.19	0.31	0.01	0.01	0.42	3.69	0.98	0.53	0.88	2.50	0.09
Day of Max WL	19	26	13	1	1	26	19	20	4	27	2	24

Sapang Buho WL 2010



Water Level in meters (Daily Average)

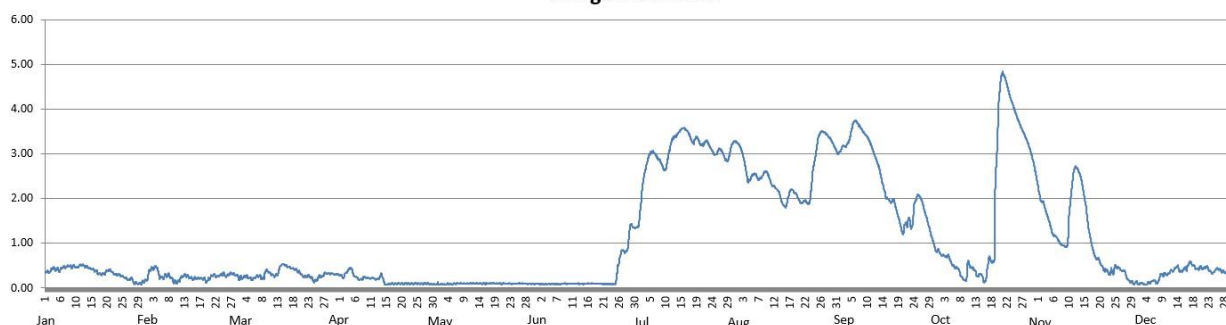
2010

Station: **Zaragoza**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.37	0.25	0.21	0.29	0.09	0.09	1.38	3.20	3.06	0.83	2.10	0.11
2	0.36	0.43	0.23	0.26	0.09	0.09	1.91	3.02	3.17	0.74	1.92	0.11
3	0.44	0.45	0.27	0.36	0.08	0.09	2.52	2.69	3.20	0.72	1.71	0.08
4	0.42	0.41	0.23	0.44	0.09	0.09	2.83	2.42	3.38	0.71	1.48	0.10
5	0.41	0.32	0.21	0.37	0.09	0.09	2.92	2.46	3.53	0.63	1.35	0.11
6	0.46	0.25	0.24	0.23	0.10	0.09	3.02	2.54	3.71	0.48	1.15	0.16
7	0.47	0.28	0.27	0.19	0.10	0.09	2.91	2.45	3.61	0.43	1.04	0.12
8	0.49	0.24	0.22	0.22	0.10	0.09	2.82	2.49	3.49	0.28	0.96	0.27
9	0.48	0.15	0.33	0.23	0.10	0.09	2.67	2.60	3.40	0.18	0.93	0.30
10	0.47	0.13	0.36	0.22	0.10	0.09	2.80	2.52	3.27	0.45	1.48	0.31
11	0.49	0.20	0.30	0.22	0.10	0.09	3.16	2.33	3.07	0.46	2.32	0.37
12	0.51	0.27	0.28	0.20	0.10	0.09	3.36	2.26	2.87	0.41	2.69	0.40
13	0.48	0.27	0.36	0.25	0.10	0.09	3.41	2.17	2.64	0.28	2.61	0.47
14	0.45	0.23	0.52	0.22	0.10	0.09	3.52	1.96	2.33	0.30	2.34	0.38
15	0.42	0.21	0.52	0.08	0.10	0.09	3.56	1.83	2.07	0.17	1.92	0.41
16	0.38	0.22	0.47	0.09	0.10	0.09	3.52	1.99	1.96	0.40	1.37	0.45
17	0.32	0.22	0.44	0.10	0.10	0.10	3.39	2.19	1.96	0.63	0.97	0.57
18	0.31	0.21	0.42	0.09	0.10	0.10	3.26	2.14	1.80	0.90	0.71	0.51
19	0.34	0.15	0.38	0.10	0.10	0.09	3.35	2.03	1.54	3.16	0.64	0.44
20	0.40	0.22	0.31	0.10	0.10	0.09	3.24	1.92	1.27	4.53	0.50	0.45
21	0.36	0.29	0.25	0.10	0.10	0.09	3.20	1.95	1.42	4.76	0.40	0.44
22	0.31	0.27	0.27	0.10	0.09	0.09	3.27	1.90	1.50	4.55	0.35	0.47
23	0.30	0.28	0.24	0.09	0.09	0.09	3.17	2.14	1.43	4.27	0.36	0.40
24	0.26	0.32	0.16	0.10	0.09	0.11	3.04	2.77	1.94	4.06	0.44	0.34
25	0.23	0.27	0.21	0.09	0.09	0.47	2.99	3.23	2.08	3.84	0.45	0.41
26	0.19	0.31	0.25	0.09	0.10	0.79	3.09	3.47	1.94	3.65	0.40	0.42
27	0.21	0.32	0.31	0.10	0.09	0.82	3.02	3.48	1.68	3.49	0.37	0.37
28	0.11	0.29	0.32	0.09	0.09	0.97	2.86	3.42	1.42	3.32	0.20	0.34
29	0.10		0.32	0.09	0.09	1.40	2.94	3.33	1.14	3.11	0.15	0.32
30	0.11		0.31	0.09	0.09	1.35	3.22	3.19	0.90	2.85	0.10	0.33
31	0.15		0.31		0.09		3.27	3.03		2.50		0.42

Max WL observed	0.53	0.49	0.54	0.45	0.13	1.43	3.58	3.50	3.74	4.84	2.72	0.06
Day of Max WL	12	4	14	4	1	29	16	27	6	21	12	17

Zaragoza WL 2010

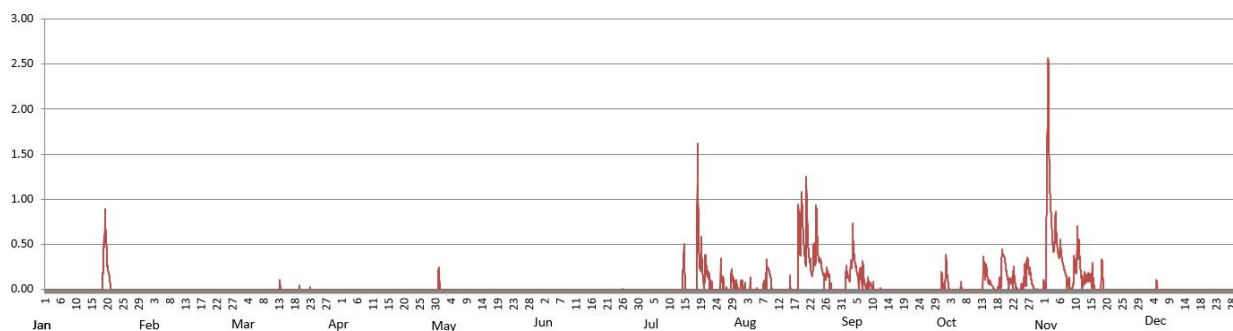


Water Level in meters (Daily Average)

2010		Station: Peñaranda										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.10	0.06	0.71	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.15	1.52	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.41	0.00	0.54	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.60	0.01
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.50	0.01
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.02	0.31	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.00	0.16	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.06	0.00	0.05	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.04	0.00	0.07	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
13	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.18	0.13	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.17	0.12	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.08	0.13	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.20	0.00	0.00	0.00	0.00	0.00	0.63	0.57	0.00	0.07	0.15	0.00
19	0.55	0.00	0.00	0.00	0.00	0.00	0.32	0.73	0.00	0.38	0.00	0.00
20	0.15	0.00	0.00	0.00	0.00	0.00	0.18	0.64	0.00	0.18	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.35	0.00	0.10	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.30	0.00	0.14	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.02	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.01	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.19	0.00	0.07	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.16	0.00	0.21	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.20	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.01	0.00	0.04	0.00	0.00
29	0.00		0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
30	0.00		0.00	0.06	0.00	0.00	0.03	0.00	0.05	0.00	0.00	0.00
31	0.00		0.00		0.00		0.04	0.00		0.04		0.00

Max WL observed	0.89	0.00	0.11	0.25	0.05	0.01	1.62	1.25	0.73	0.44	2.57	0.11
Day of Max WL	19		13	31	1	26	18	20	4	19	2	5

Peñaranda WL 2010

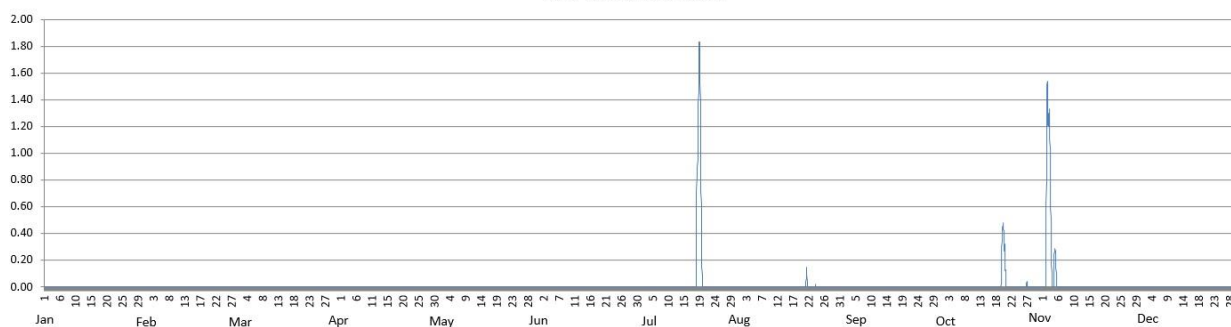


Water Level in meters (Daily Average)

2010		Station: San_Isidro										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.00	0.00	0.25	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.00	0.20	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00		0.00		0.00		0.00	0.00		0.00		0.00

Max WL observed	0.00	0.00	0.00	0.00	0.00	0.00	1.83	0.15	0.00	0.48	1.54	0.00
Day of Max WL							19	21		20	2	

San Isidro WL 2010



Water Level in meters (Daily Average)

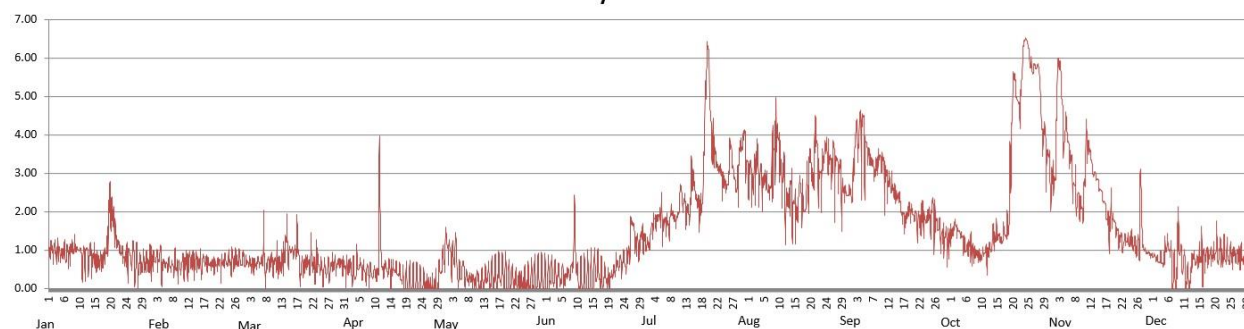
2010

Station: **Arayat**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.00	0.77	0.71	0.56	1.21	0.34	1.15	2.98	2.75	1.46	2.87	0.86
2	1.00	0.76	0.68	0.51	0.92	0.38	1.51	2.91	4.00	1.64	5.55	0.75
3	0.95	0.83	0.63	0.45	0.77	0.32	1.76	3.31	4.12	1.48	5.32	0.74
4	0.92	0.59	0.61	0.61	0.75	0.36	1.85	2.93	4.17	1.29	3.97	0.78
5	0.97	0.61	0.65	0.58	0.56	0.35	1.84	2.88	3.90	1.19	3.92	0.94
6	0.85	0.59	0.72	0.50	0.54	0.27	1.70	2.68	3.44	1.05	3.32	0.99
7	0.96	0.58	0.75	0.39	0.26	0.38	1.67	2.65	3.19	1.06	2.65	0.36
8	1.08	0.70	0.65	0.42	0.24	0.61	1.94	3.42	3.18	0.91	2.26	0.69
9	1.03	0.51	0.69	0.40	0.21	1.13	1.80	4.05	3.38	0.86	2.06	1.06
10	1.00	0.62	0.67	0.46	0.27	0.20	1.95	3.21	3.24	0.85	2.59	0.67
11	0.75	0.74	0.69	1.79	0.11	0.24	2.49	2.93	2.88	0.92	3.83	0.25
12	0.87	0.70	0.66	0.51	0.23	0.28	2.13	2.17	2.77	0.97	3.40	0.27
13	0.88	0.72	0.95	0.45	0.30	0.32	1.95	2.55	2.60	1.22	2.98	0.78
14	0.78	0.73	1.08	0.51	0.25	0.34	2.64	2.07	2.42	1.35	2.80	0.70
15	0.74	0.71	0.99	0.50	0.30	0.47	2.64	1.94	2.33	1.34	2.55	0.85
16	0.73	0.65	0.97	0.45	0.32	0.46	2.24	2.58	1.89	1.26	2.23	0.69
17	0.75	0.68	1.20	0.35	0.41	0.29	2.11	2.15	1.77	1.43	1.79	0.84
18	1.11	0.67	0.49	0.16	0.41	0.35	3.95	2.50	2.05	1.81	1.87	0.84
19	2.12	0.61	0.62	0.18	0.31	0.20	5.98	3.19	1.97	4.18	1.78	0.86
20	1.86	0.59	0.71	0.20	0.27	0.36	4.25	3.09	1.84	5.36	1.45	1.04
21	1.35	0.68	0.79	0.20	0.23	0.57	3.62	3.76	1.76	4.82	1.31	0.92
22	1.06	0.62	0.49	0.22	0.20	0.62	3.18	2.91	1.87	5.40	1.19	0.97
23	0.88	0.70	0.71	0.17	0.16	0.64	3.02	3.38	1.81	6.45	1.23	0.86
24	0.82	0.73	0.54	0.13	0.15	0.67	2.75	3.54	1.85	6.27	1.25	0.86
25	0.87	0.74	0.44	0.10	0.17	0.92	2.76	3.32	2.03	5.72	1.14	0.86
26	0.87	0.77	0.51	0.08	0.19	1.67	3.57	3.34	1.76	5.76	1.09	0.86
27	0.65	0.77	0.58	0.10	0.24	1.31	2.94	3.22	1.58	5.74	2.00	0.77
28	0.56	0.75	0.64	0.12	0.27	1.08	2.67	3.06	1.31	4.46	1.06	0.76
29	0.65		0.63	0.48	0.29	1.32	3.67	2.42	1.33	3.97	0.94	0.73
30	0.68		0.64	0.75	0.30	1.22	3.90	2.46	1.23	3.47	0.89	0.78
31	0.69		0.57		0.30		3.08	2.53		2.78		0.81

Max WL observed	2.79	1.14	2.03	3.96	1.59	2.43	6.42	4.96	4.64	6.52	5.98	2.12
Day of Max WL	19	4	7	11	1	9	19	9	4	24	2	9

Arayat WL 2010

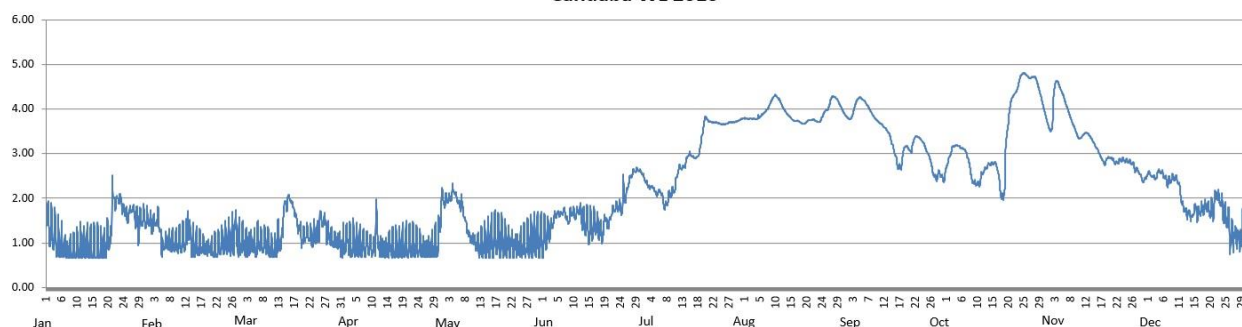


Water Level in meters (Daily Average)

2010		Station: Candaba										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.53	1.48	1.03	0.98	2.02	1.16	2.46	3.79	3.79	2.77	3.56	2.56
2	1.24	1.39	0.95	1.10	1.95	1.24	2.32	3.79	3.84	3.01	3.95	2.50
3	1.19	1.44	0.93	0.92	1.98	1.38	2.25	3.79	4.08	3.17	4.59	2.46
4	1.03	1.39	0.97	0.97	2.14	1.60	2.20	3.78	4.23	3.18	4.51	2.59
5	0.98	1.15	0.93	0.97	2.09	1.63	2.15	3.80	4.23	3.16	4.42	2.58
6	0.87	0.99	1.09	0.97	1.85	1.67	2.13	3.90	4.16	3.10	4.11	2.46
7	0.81	0.99	0.99	0.94	1.80	1.67	1.88	3.97	4.05	2.95	3.89	2.37
8	0.81	0.99	1.00	0.98	1.43	1.50	1.91	4.08	3.92	2.62	3.68	2.43
9	0.84	1.00	0.96	0.91	1.17	1.68	2.09	4.24	3.80	2.36	3.50	2.45
10	0.89	1.02	0.89	0.89	1.08	1.63	2.18	4.29	3.72	2.32	3.36	2.35
11	0.93	1.04	0.87	1.32	0.98	1.70	2.50	4.20	3.66	2.40	3.40	1.98
12	0.92	1.09	1.03	0.88	0.91	1.57	2.69	4.07	3.59	2.60	3.46	1.74
13	0.92	1.33	1.07	0.85	0.92	1.43	2.70	3.94	3.49	2.70	3.42	1.66
14	0.87	0.96	1.83	0.83	0.96	1.34	2.89	3.84	3.28	2.77	3.30	1.60
15	0.88	0.93	1.94	0.94	1.02	1.35	2.98	3.76	3.02	2.78	3.16	1.76
16	0.87	0.91	1.92	0.88	1.04	1.41	2.92	3.73	2.75	2.70	3.02	1.67
17	0.85	0.92	1.69	0.88	1.13	1.33	2.92	3.72	2.75	2.23	2.86	1.74
18	0.87	0.87	1.39	0.87	1.07	1.24	3.14	3.68	3.12	2.09	2.82	1.78
19	1.03	0.88	1.16	0.91	1.09	1.45	3.59	3.69	3.13	3.35	2.91	1.76
20	1.10	0.85	1.13	0.94	1.03	1.43	3.79	3.75	3.08	4.02	2.88	1.72
21	2.01	0.86	1.18	0.95	1.00	1.62	3.72	3.76	3.33	4.29	2.80	1.87
22	1.93	0.93	1.10	0.98	0.97	1.75	3.70	3.75	3.38	4.42	2.83	2.06
23	1.99	1.00	1.15	0.97	0.94	1.79	3.70	3.72	3.31	4.67	2.86	1.92
24	1.78	1.05	1.18	0.91	0.92	1.76	3.68	3.82	3.20	4.79	2.84	1.62
25	1.61	1.08	1.52	0.85	0.93	2.09	3.66	3.96	3.02	4.76	2.83	1.52
26	1.71	1.09	1.49	0.83	0.96	2.23	3.67	4.05	2.80	4.69	2.78	1.17
27	1.74	1.35	1.28	0.85	1.00	2.48	3.71	4.25	2.51	4.72	2.66	1.15
28	1.56	1.04	1.10	0.87	1.03	2.61	3.71	4.25	2.49	4.65	2.59	1.18
29	1.38		1.03	0.94	1.08	2.64	3.73	4.15	2.52	4.38	2.44	1.03
30			1.02	1.37	1.08	2.59	3.75	4.01	2.45	4.09	2.43	1.47
31			0.88		1.10		3.79	3.87		3.80		1.30

Max WL observed	2.52	1.81	2.07	1.97	2.33	2.69	3.84	4.32	4.26	4.81	4.63	2.66
Day of Max WL	21	4	16	11	4	29	20	10	5	25	3	5

Candaba WL 2010

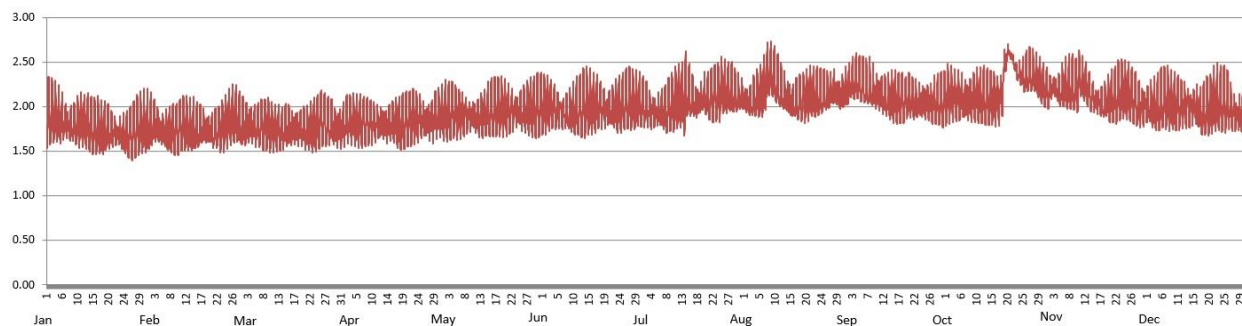


Water Level in meters (Daily Average)

2010		Station: Sasmuan										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.86	1.76	1.77	1.77	1.89	1.99	2.01	2.07	2.18	2.08	2.13	1.98
2	1.88	1.77	1.76	1.81	1.91	2.01	2.00	2.04	2.25	2.11	2.20	1.99
3	1.87	1.77	1.77	1.81	1.92	2.02	1.96	2.05	2.26	2.09	2.19	2.00
4	1.85	1.73	1.77	1.82	1.93	2.00	1.95	2.07	2.26	2.07	2.15	2.01
5	1.84	1.71	1.76	1.81	1.93	1.99	1.95	2.09	2.24	2.07	2.17	2.02
6	1.81	1.69	1.75	1.82	1.91	1.95	1.93	2.13	2.19	2.06	2.20	2.04
7	1.79	1.71	1.78	1.83	1.91	1.92	1.92	2.23	2.18	2.07	2.21	2.05
8	1.76	1.73	1.79	1.83	1.91	1.90	1.95	2.33	2.18	2.07	2.21	2.03
9	1.76	1.73	1.79	1.82	1.89	1.90	1.97	2.32	2.18	2.10	2.19	2.01
10	1.79	1.77	1.77	1.81	1.89	1.93	1.99	2.25	2.16	2.11	2.22	2.01
11	1.83	1.78	1.74	1.82	1.86	1.94	2.03	2.20	2.13	2.08	2.27	2.00
12	1.82	1.77	1.74	1.81	1.86	1.96	2.05	2.16	2.09	2.08	2.24	2.00
13	1.80	1.73	1.71	1.80	1.87	1.98	2.05	2.13	2.07	2.06	2.17	2.00
14	1.74	1.73	1.74	1.76	1.90	2.00	2.14	2.09	2.07	2.07	2.10	1.98
15	1.72	1.71	1.74	1.79	1.92	2.00	2.11	2.05	2.06	2.07	2.07	1.98
16	1.72	1.73	1.74	1.79	1.94	2.00	2.07	2.04	2.06	2.05	2.05	1.96
17	1.70	1.74	1.74	1.77	1.95	2.02	2.06	2.04	2.05	2.06	2.02	1.92
18	1.70	1.72	1.73	1.77	1.97	2.00	2.05	2.04	2.04	2.21	2.02	1.93
19	1.72	1.72	1.73	1.80	1.97	1.98	2.10	2.07	2.07	2.51	2.05	1.95
20	1.70	1.69	1.71	1.84	1.97	1.97	2.08	2.09	2.06	2.61	2.07	1.97
21	1.72	1.71	1.72	1.85	1.97	1.95	2.07	2.11	2.02	2.54	2.08	2.02
22	1.67	1.72	1.74	1.88	1.97	1.94	2.08	2.09	2.03	2.42	2.12	2.04
23	1.67	1.77	1.78	1.87	1.95	1.96	2.09	2.09	2.04	2.36	2.14	2.03
24	1.66	1.82	1.81	1.88	1.93	1.98	2.11	2.10	2.06	2.33	2.15	2.04
25	1.66	1.86	1.85	1.85	1.92	2.00	2.16	2.12	2.06	2.33	2.13	2.01
26	1.69	1.88	1.85	1.83	1.92	2.02	2.15	2.13	2.04	2.35	2.10	1.97
27	1.71	1.86	1.79	1.82	1.94	2.02	2.14	2.18	2.06	2.34	2.06	1.93
28	1.75	1.80	1.79	1.83	1.94	2.01	2.13	2.19	2.04	2.33	2.01	1.91
29	1.76		1.75	1.87	1.96	2.03	2.11	2.13	2.04	2.27	1.99	1.89
30	1.77		1.73	1.88	1.98	2.02	2.11	2.14	2.03	2.22	1.99	1.90
31	1.76		1.74		1.99		2.12	2.16		2.17		1.92

Max WL observed	2.33	2.25	2.18	2.21	2.38	2.45	2.62	2.73	2.60	2.70	2.63	2.49
Day of Max WL	1	26	25	30	30	14	14	9	4	20	11	23

Sasmuan WL 2010



Water Level in meters (Daily Average)

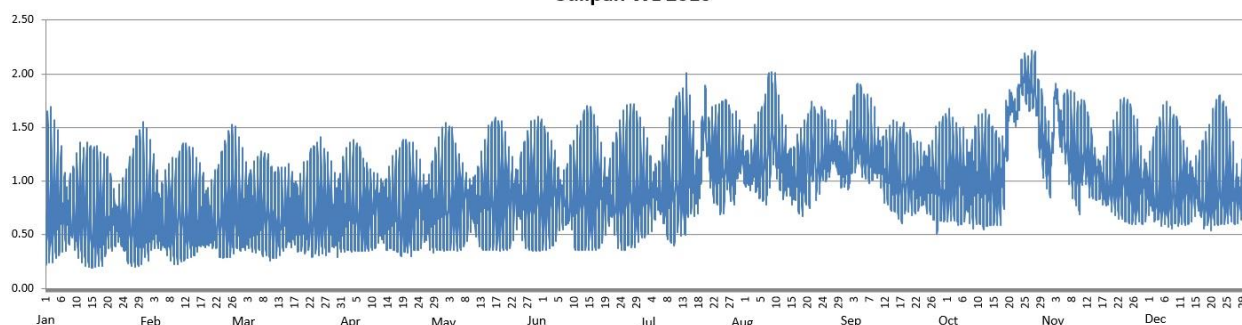
2010

Station: **Sulipan**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.80	0.71	0.71	0.72	0.82	0.89	0.94	1.12	1.21	1.04	1.15	0.92
2	0.82	0.71	0.69	0.75	0.83	0.89	0.93	1.10	1.36	1.06	1.61	0.93
3	0.80	0.69	0.70	0.75	0.84	0.89	0.90	1.17	1.42	1.02	1.74	0.95
4	0.77	0.63	0.68	0.75	0.84	0.89	0.91	1.14	1.43	0.99	1.46	0.97
5	0.75	0.61	0.68	0.75	0.82	0.88	0.91	1.15	1.38	0.99	1.48	1.00
6	0.70	0.60	0.69	0.75	0.80	0.85	0.90	1.19	1.31	0.97	1.41	1.02
7	0.67	0.64	0.71	0.74	0.80	0.83	0.89	1.27	1.27	0.99	1.30	1.01
8	0.66	0.66	0.73	0.74	0.82	0.82	0.91	1.39	1.27	1.00	1.23	0.99
9	0.67	0.66	0.73	0.73	0.81	0.86	0.93	1.48	1.28	1.04	1.17	0.97
10	0.70	0.71	0.69	0.72	0.81	0.82	0.94	1.34	1.24	1.06	1.17	0.96
11	0.76	0.72	0.66	0.80	0.77	0.83	1.03	1.26	1.17	1.03	1.31	0.94
12	0.73	0.71	0.67	0.73	0.78	0.86	1.02	1.14	1.12	1.04	1.27	0.92
13	0.70	0.68	0.66	0.71	0.79	0.90	1.04	1.14	1.09	1.02	1.16	0.93
14	0.64	0.68	0.69	0.68	0.82	0.90	1.16	1.08	1.07	1.01	1.09	0.90
15	0.64	0.65	0.70	0.72	0.85	0.92	1.12	1.03	1.05	1.01	1.04	0.92
16	0.66	0.66	0.68	0.72	0.85	0.92	1.06	1.09	1.02	0.98	1.01	0.90
17	0.62	0.67	0.70	0.70	0.87	0.91	1.03	1.05	1.00	1.00	0.96	0.87
18	0.64	0.63	0.66	0.70	0.88	0.90	1.16	1.06	1.01	1.17	0.96	0.89
19	0.69	0.63	0.67	0.74	0.88	0.89	1.53	1.15	1.04	1.54	1.01	0.92
20	0.67	0.61	0.66	0.77	0.87	0.90	1.39	1.16	1.00	1.73	1.03	0.97
21	0.65	0.64	0.66	0.78	0.88	0.89	1.24	1.29	0.96	1.64	1.04	1.03
22	0.60	0.66	0.68	0.80	0.87	0.86	1.18	1.15	0.99	1.69	1.09	1.05
23	0.61	0.72	0.75	0.79	0.87	0.87	1.17	1.20	1.00	1.92	1.11	1.03
24	0.59	0.78	0.77	0.78	0.85	0.89	1.14	1.27	1.01	1.96	1.10	1.02
25	0.60	0.82	0.80	0.76	0.84	0.91	1.15	1.24	1.03	1.89	1.07	0.99
26	0.64	0.83	0.78	0.73	0.83	0.96	1.25	1.28	1.00	1.90	1.03	0.92
27	0.66	0.82	0.73	0.73	0.85	0.94	1.16	1.33	1.02	1.90	1.03	0.86
28	0.71	0.75	0.72	0.73	0.85	0.93	1.11	1.32	0.99	1.71	0.94	0.84
29	0.73		0.66	0.76	0.88	0.95	1.24	1.18	1.00	1.50	0.92	0.83
30	0.74		0.66	0.79	0.88	0.94	1.28	1.19	1.00	1.34	0.91	0.87
31	0.73		0.67		0.89		1.19	1.21		1.22		0.90

Max WL observed	1.69	1.53	1.41	1.41	1.60	1.72	2.01	2.02	1.91	2.22	1.91	1.80
Day of Max WL	3	26	25	30	30	27	14	9	4	27	3	23

Sulipan WL 2010



Water Level in meters (Daily Average)

2010		Station: Mexico										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00
2	0.00	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.23	0.00	0.40	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.26	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.29	0.00	0.20	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.23	0.00	0.20	0.00
6	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.16	0.00
7	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.08	0.00	0.12	0.00
8	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.39	0.06	0.00	0.10	0.00
9	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.31	0.01	0.00	0.15	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.02	0.00	0.66	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.47	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.30	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.23	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.16	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.14	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	0.12	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.10	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.09	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.07	0.00
23	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.69	0.06	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.05	0.00
25	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.57	0.03	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.47	0.01	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.00	0.00
28	0.00	0.00	0.00	0.05	0.00	0.20	0.00	0.00	0.00	0.42	0.00	0.00
29	0.00		0.00	0.16	0.00	0.00	0.16	0.00	0.00	0.31	0.00	0.00
30	0.00		0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.24	0.00	0.00
31	0.00		0.00		0.00		0.01	0.00		0.20		0.00

Max WL observed	0.06	0.00	0.03	0.41	0.00	1.18	0.71	0.57	0.83	2.61	2.11	0.00
Day of Max WL	7		14	30		29	30	8	3	20	10	

Mexico WL 2010

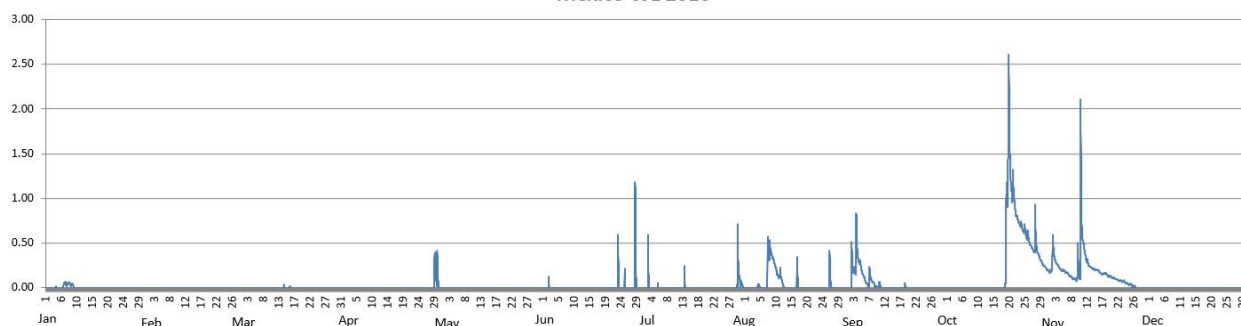


Table 2.0

Maximum WL recorded per station for the year 2010

Station	January	February	March	April	May	June	July	August	September	October	November	December
Sapang Buho	0.56	0.19	0.31	0.01	0.01	0.42	3.69	0.98	0.53	0.88	2.50	0.09
Zaragoza	0.53	0.49	0.54	0.45	0.13	1.43	3.58	3.50	3.74	4.84	2.72	0.06
Mayapyap												
Penaranda	0.89	0.00	0.11	0.25	0.05	0.01	1.62	1.25	0.73	0.44	2.57	0.11
San Isidro	0.00	0.00	0.00	0.00	0.00	0.00	1.83	0.15	0.00	0.48	1.54	0.00
Arayat	2.79	1.14	2.03	3.96	1.59	2.43	6.42	4.96	4.64	6.52	5.98	2.12
Candaba	2.52	1.81	2.07	1.97	2.33	2.69	3.84	4.32	4.26	4.81	4.63	2.66
Sasmuan	2.33	2.25	2.18	2.21	2.38	2.45	2.62	2.73	2.60	2.70	2.63	2.49
Sulipan	1.69	1.53	1.41	1.41	1.60	1.72	2.01	2.02	1.91	2.22	1.91	1.80
Mexico	0.06	0.00	0.03	0.41	0.00	1.18	0.71	0.57	0.83	2.61	2.11	0.00

Note: Shaded cell indicates maximum WL recorded for the station during the year



C. ANNEX

Table A-1.

Maximum Rainfall for a given sliding time period during the year 2010																
Sliding time period (minimum time period of 1 hour)	Rainfall Stations															
	Munoz	Sapang Buho	Gabaldon	Zaragoza	Peñaranda	Calaanan	Palali	San Isidro	Arayat	Candaba	Sibul Spring	Sasmuan	Sulipan	Mexico	Porac	San Rafael
1 hr	69	67	48	47	47	52	58	67	59	39	55	52	38	35	77	53
2 hrs	79	68	80	70	81	69	82	101	66	60	59	59	50	59	81	55
3 hrs	85	68	87	85	95	70	93	108	67	69	67	60	66	60	91	61
4 hrs	86	68	106	88	101	71	93	109	67	75	67	70	78	61	96	61
5 hrs	86	68	114	93	102	71	95	109	67	80	69	82	89	74	101	62
6 hrs	87	69	128	96	102	71	96	109	67	83	73	86	96	79	101	86
7 hrs	87	69	149	99	102	71	96	109	69	85	74	87	99	80	101	86
8 hrs	87	69	168	102	102	71	96	109	71	88	79	91	101	83	101	90
9 hrs	87	69	177	107	102	72	96	109	74	90	79	92	101	85	104	90
10 hrs	87	69	185	110	102	72	96	109	78	92	80	95	103	89	106	90
11 hrs	87	69	192	110	102	73	96	109	80	95	83	96	105	90	108	91
12 hrs	87	69	197	110	102	74	96	109	83	98	87	99	108	93	110	92
18 hrs	87	69	202	135	102	79	96	109	113	130	90	134	159	121	136	125
24 hrs	97	83	203	167	104	99	123	110	129	144	97	147	169	135	186	158
48 hrs (2 days)	157	96	216	210	107	177	171	162	151	168	115	162	184	156	228	179
72 hrs (3 days)	174	98	218	225	116	180	172	189	173	188	135	206	208	185	259	202
96 hrs (4 days)	176	100	222	227	147	185	172	189	194	203	137	234	213	196	263	205
120 hrs (5 days)	186	118	336	232	159	207	174	205	196	206	137	253	219	200	271	209
144 hrs (6 days)	199	137	342	234	162	233	174	237	199	208	148	255	224	205	279	212
240 hrs (10 days)	231	182	357	245	214	249	226	305	210	221	213	257	224	207	313	220
480 hrs (20 days)	397	251	474	293	397	327	336	405	269	283	384	327	291	278	368	314
Meteorological day (8 am to 8 am)	87	69	201	146	102	78	97	109	85	87	96	87	100	88	147	120
Max monthly total	443	276	540	345	439	357	361	390	265	331	436	280	250	294	323	380

The maximum monthly total values for some stations may be smaller than their 480 hours (20 days) of sliding time total. This means that the 20-day total transcends 2 succeeding months. Likewise, the 24-hour unrestricted sliding time period is relatively much larger than the meteorological day (fixed 8am to 8am) total.

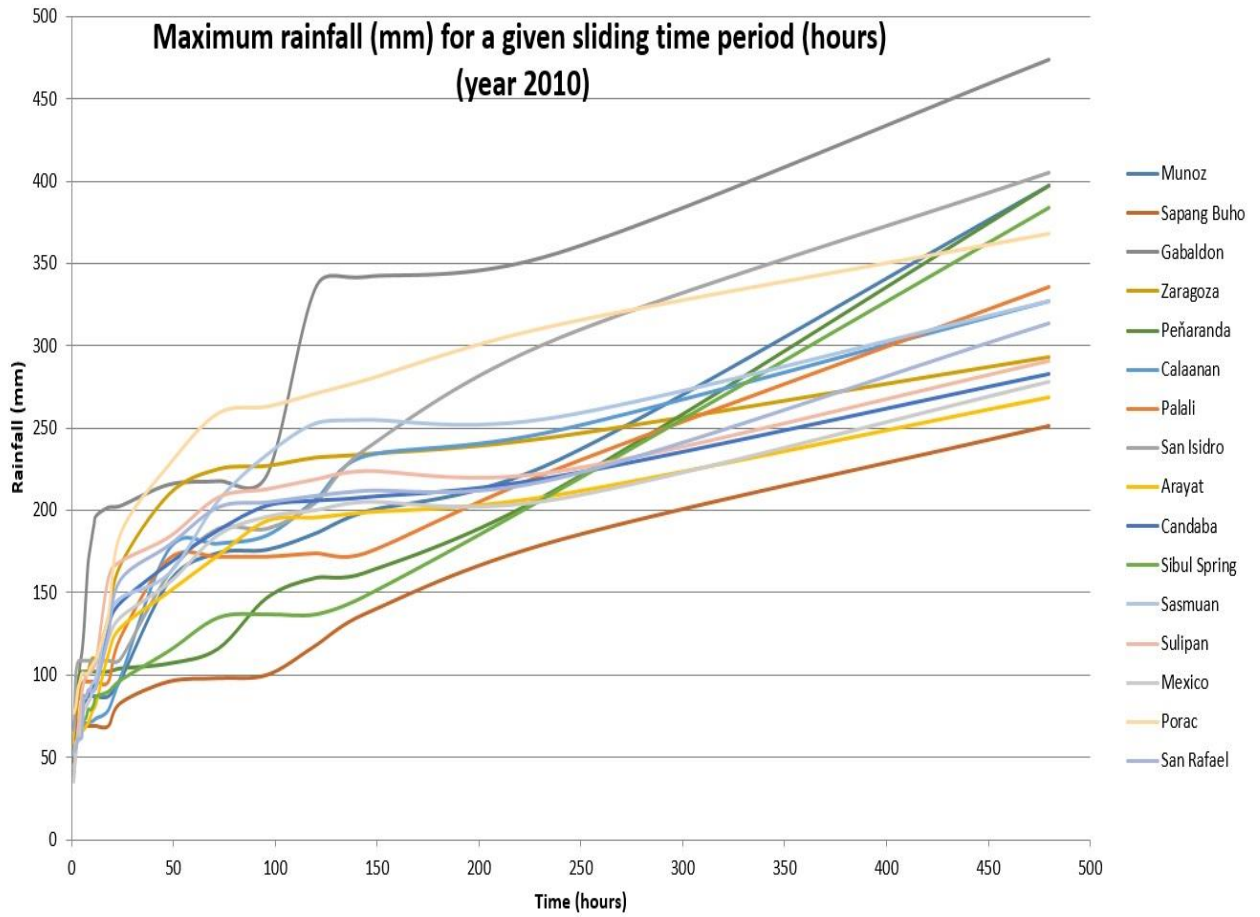


Figure AA-1. The sliding time period per station graph.

Table A-2. PRFFWC Existing Flood Warning Assessment Levels (SG in meters)

Color code	YELLOW	ORANGE	RED
STATION	ALERT	ALARM	CRITICAL
Sapang Buho	3.70	4.50	6.50
Mayapyap	3.00	3.50	4.50
Zaragoza ++	11.00	12.50	14.50
Penaranda			
San Isidro +	3.20	4.50	6.00
Arayat	5.00	6.00	8.50
Candaba	3.00	4.50	5.00
Mexico			
Sasmuan +			2.90 *
Sulipan +	3.60 (2.50)	4.20 (3.00)	5.00 (3.50)

* Based on past observations from various flood events (for validation)

+ for updating of assessment levels (Sulipan values in parenthesis are proposed assessment levels)

++ assessment values are in MSL

Table A-3. Water Level Station notes

Water Level Station	Elevation of "0" of Staff Gauge (m) (as of Aug. 2009)	Rating Curve (RC) Equation as of April 2009	RC range of applicability
Sapang Buho	50.212	$Q = 4.015 (H - (-2.94))^2 \cdot 2.961^*$	$0 < H \leq 3.4$
Zaragoza	10.213	$Q = 12.111 (H - 0.0)^2$	(for validation)
Peñaranda	22.498**	$Q = 2.30 (H - (-1.20))^2$	$0 < H \leq 4.0$
San Isidro	9.585	$Q = 15.2 (H - (-1.70))^2$	$0 < H \leq 8.0$
Arayat	0.077	$Q = 9.106 (H - (-0.39))^2$	$0 < H \leq 9.0$
Candaba	-0.157	$Q = 1.80 (H - (-1.30))^2$	$0 < H \leq 2.0$
Sasmuan	-1.147	$Q = 1.50 (H - (-2.0))^2$	$0 < H \leq 2.0$
Sulipan	-0.062	$Q = 9.50 (H - (-0.4))^2$	$0 < H \leq 3.0$
Mexico	5.933**	$Q = 11.0 (H - (-0.50))^2$	$0 < H \leq 3.0$

Notes: RC equations by JICA Consultants

* - based on x-section of March 2000 (by PRFFWC)

** - based on temporary markers (TBM)

Above table are still the latest information for PRFFWC streamgaging sites. Rating curve equations remains the latest available for now. The RCs should be updated on a regular basis.

Water Level Percent Duration Curves of some stations

Sapang Buho WL % duration (2010)

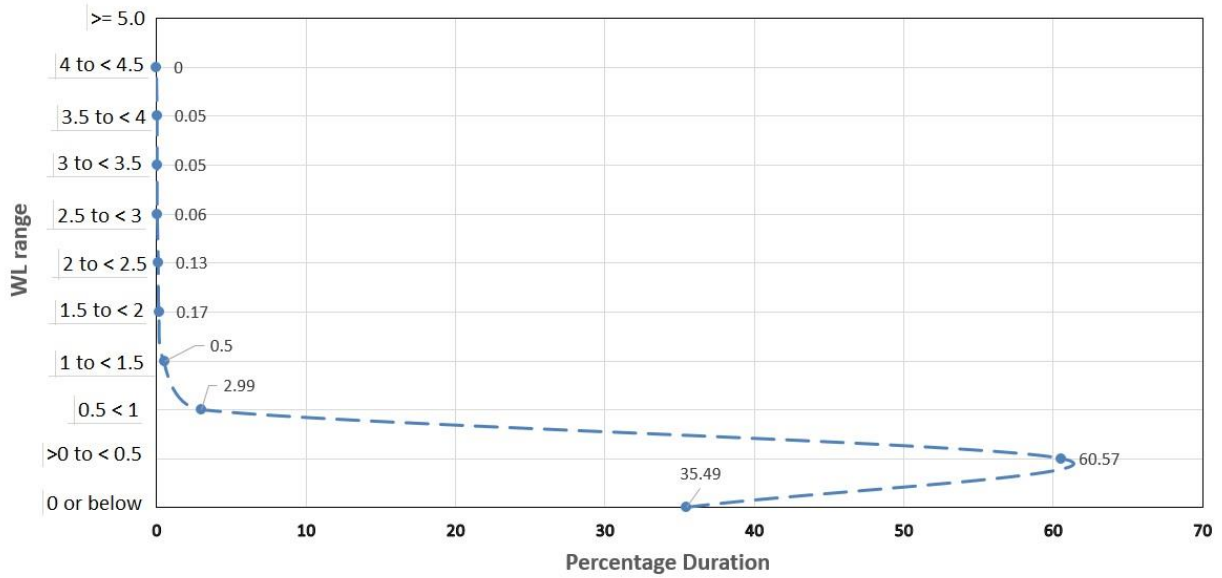


Figure AA-2. Sapang Buho WL percent duration curve (2010)

Zaragoza WL % duration (2010)

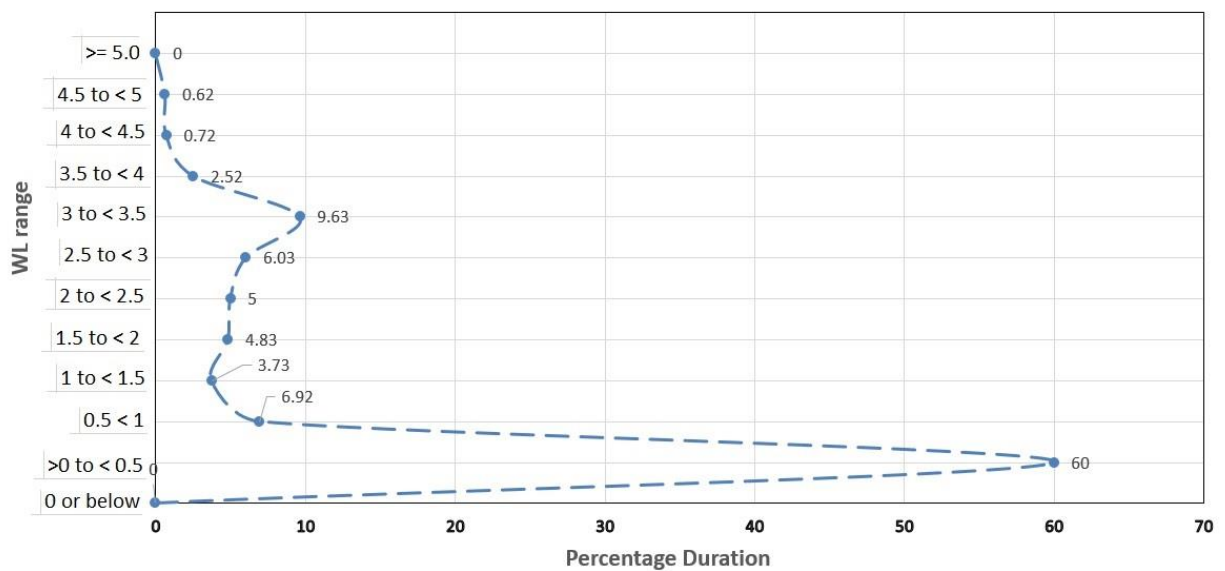


Figure AA-3. Zaragoza WL percent duration curve (2010)

Arayat WL % duration (2010)

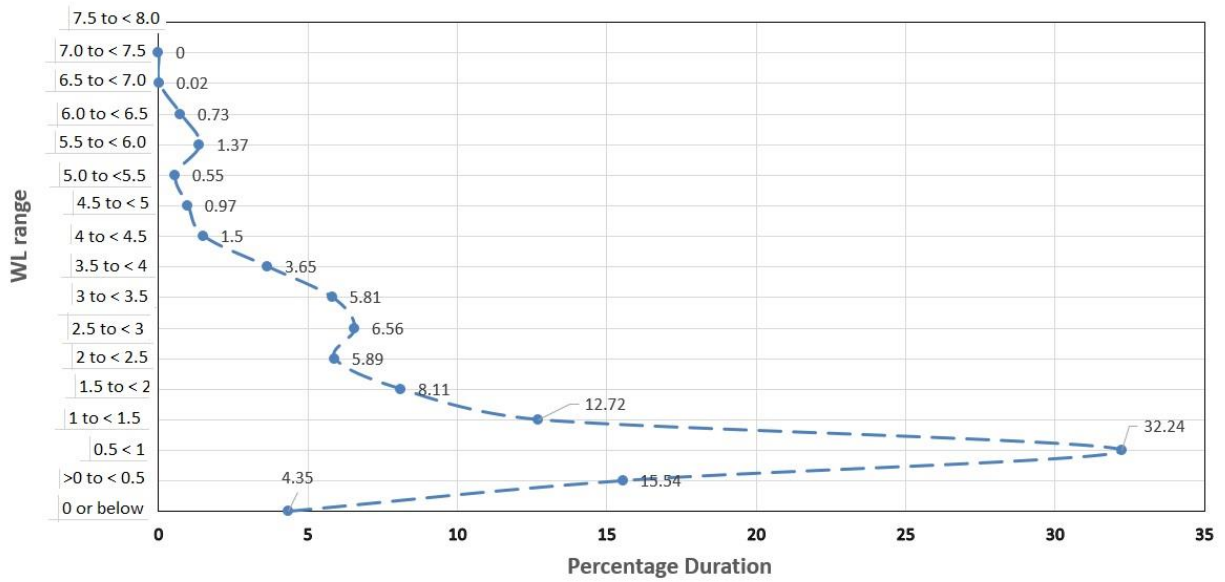


Figure AA-4. Arayat WL percent duration curve (2010)

Candaba WL % duration (2010)

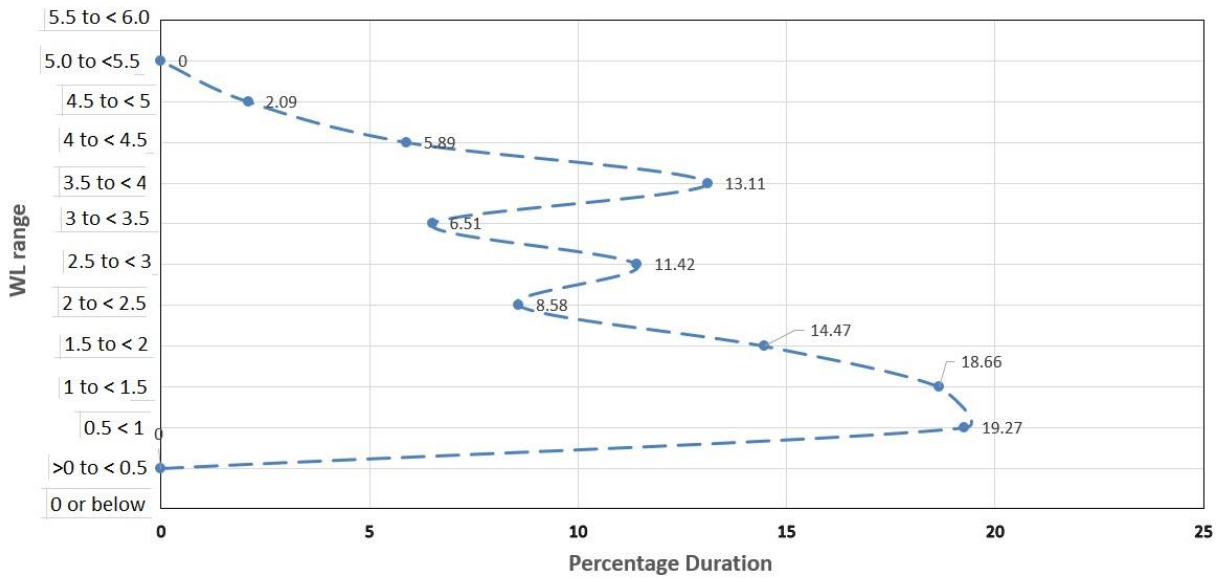


Figure AA-5. Candaba WL percent duration curve (2010)

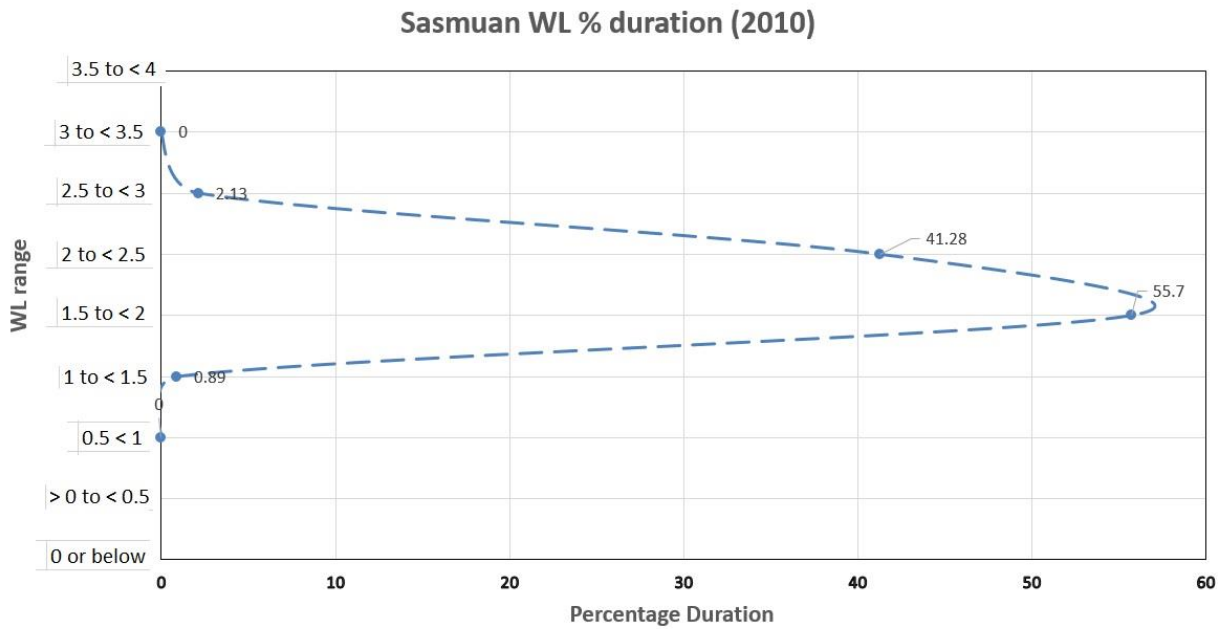


Figure AA-6. Sasmuan WL percent duration curve (2010)

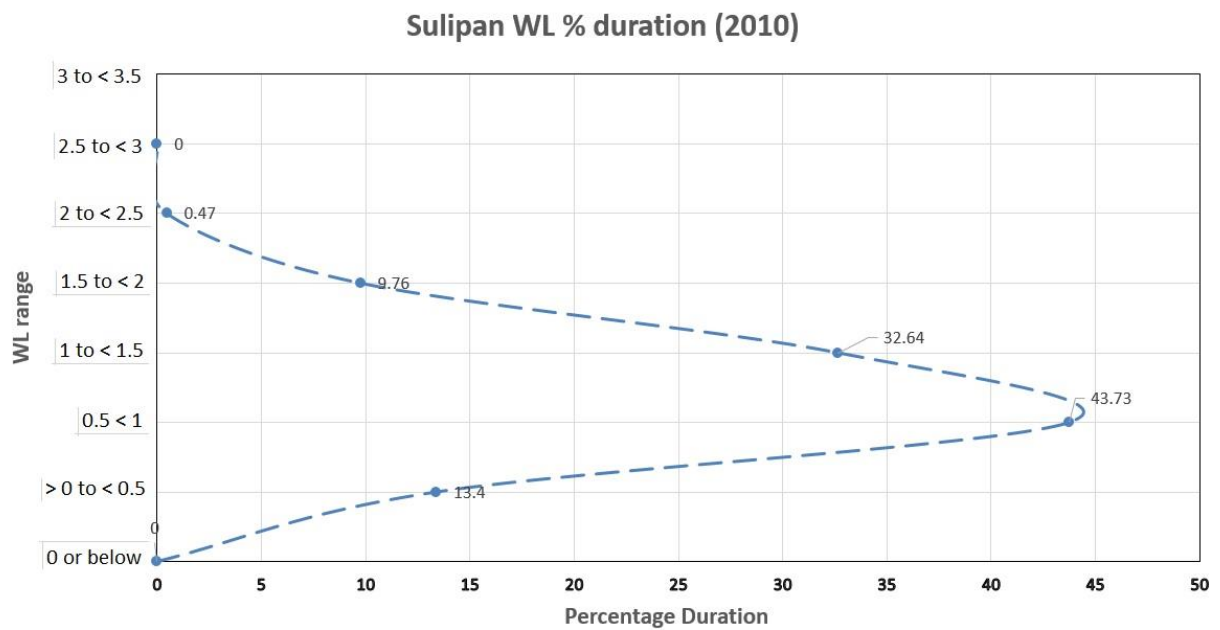


Figure AA-7. Sulipan WL percent duration curve (2010)

Note: The other WL stations were not included in WL percent duration curves as most of their observations are either erroneous, and / or zero such as for San Isidro, Peñaranda and Mayapyap stations.

PRFFWC report 2021

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