



Republic of the Philippines
Department of Science and Technology



Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)

PAMPANGA RIVER BASIN FLOOD FORECASTING AND WARNING CENTER (PRFFWC)

DMGC DOST Reg.3 Compd, Brgy. Maimpis, CSF, Pampanga 2000

(045) 455-1701

prffwc@gmail.com

<http://prffwc.synthasite.com>

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

Yearbook 2015

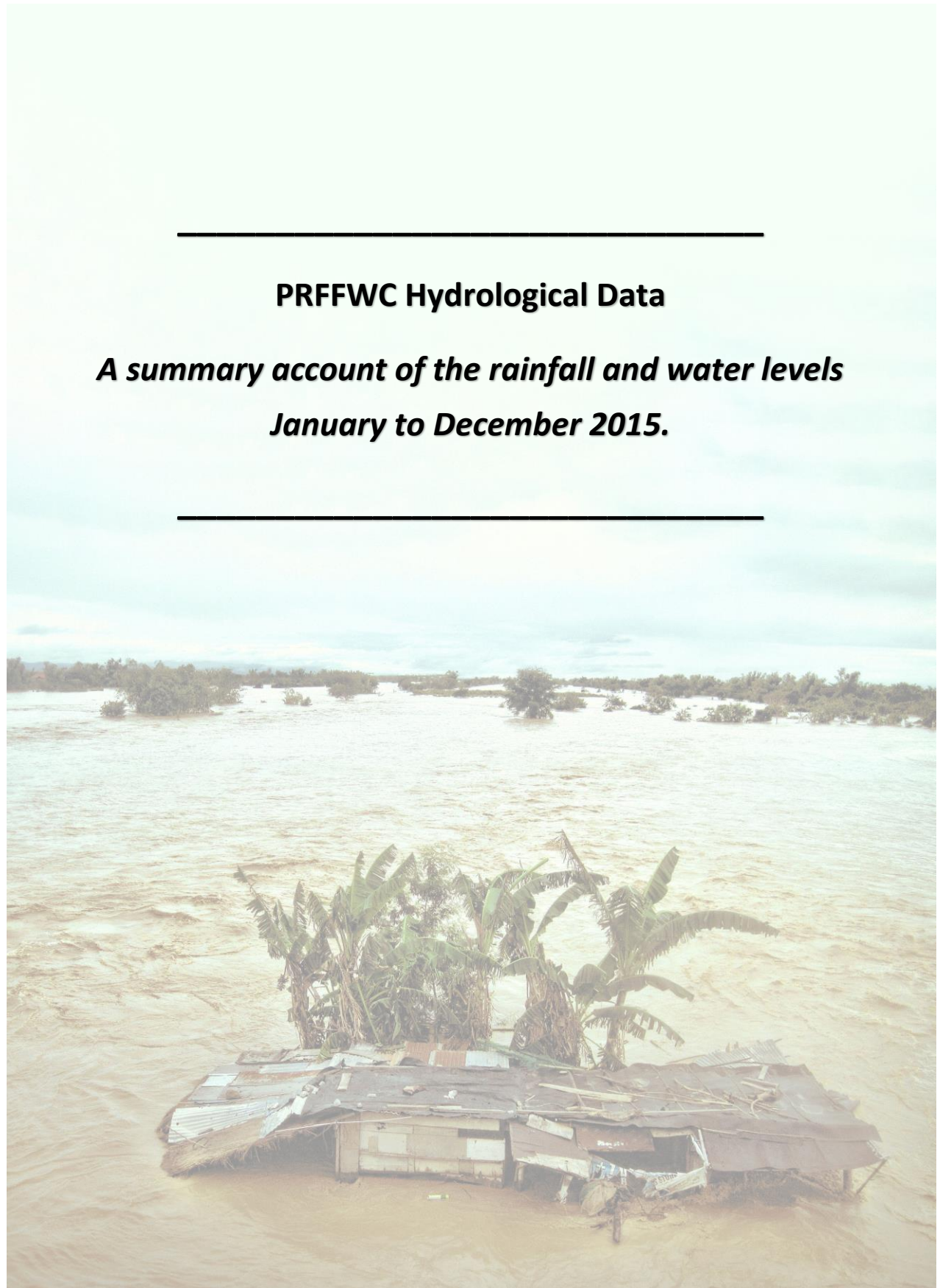
(April 2021)



Front Cover:

Upstream view of the mighty Pampanga River & the San Agustin Bridge in Arayat, Province of Pampanga with the majestic Mt. Arayat in the background. (December 17, 2015)

Photograph: H.Hernando Edited by: M. Joson



PRFFWC Hydrological Data

***A summary account of the rainfall and water levels
January to December 2015.***

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

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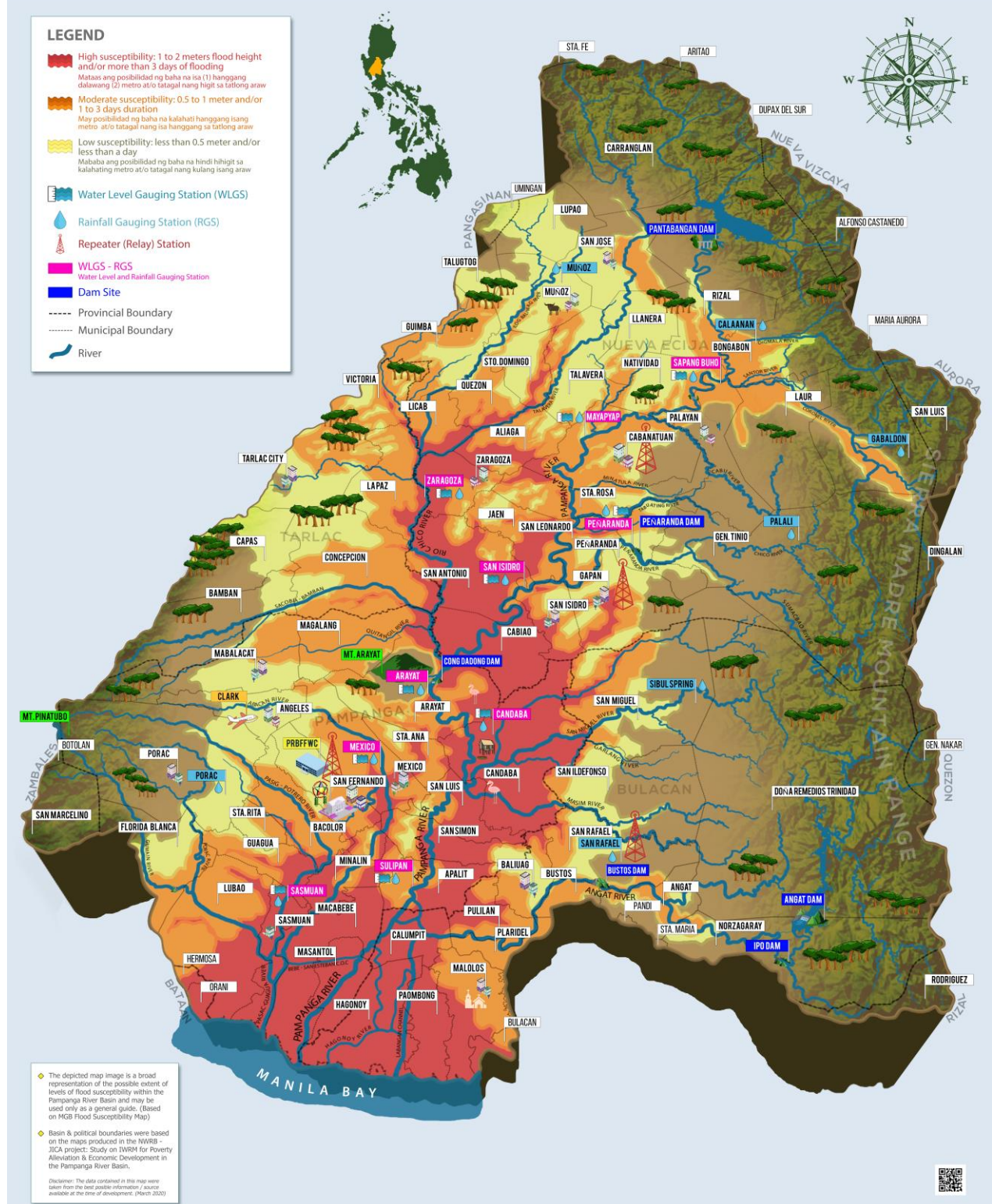
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The PRFFWC Telemetry Tower located in the City of San Fernando, Province of Pampanga.

PAMPANGA RIVER BASIN FLOOD SUSCEPTIBILITY MAP (ANTAS NG PAGBAHA SA PAMPANGA RIVER BASIN)



A geopictorial map of the generalized area flood susceptibility in the Pampanga River Basin with location of the PRFFWC 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 in year 2015.
- The supervisory terminal of the PRFFWC system is the main data series considered for database buildup. This is the immediate real-time data received at the center and the main data reference for operational flood forecasting and warning activities of the PRFFWC.
- The main source for complementing breaks / gaps in the supervisory terminal data series are the telemetry stations' data loggers.
- In most instances, total rainfall shown in the supervisory is (always) equal to the total rainfall in the data logger. However, there were relatively few occasions that they do not agree with one another. Fortunately, differences were not that big, at most it is only 1 to 2 mm difference.
- No attempts were made to fill-in 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 suspected data errors were directly deleted from the data series. However, these were done after doing some data consistency check, reference to field reports, and / or field station instrument validation.
- For further information and clarification on the general buildup of the PRFFWC data series please e-mail us: 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

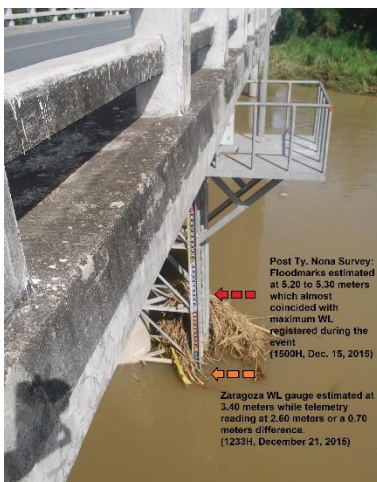
1. This Data Yearbook presents the hydrological data summary of the 18 rainfall stations and 10 water level stations of the PRFFWC for the year 2015.
2. The rainfall and water level dataset in this report covers the period starting from the past 1-hour observation ending at 0900H of January 01, 2015, and will end at 0800H of 01 January 2016.
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 used 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 2015

1. January: Mayapyap, Peñaranda & San Isidro WL are all zero for the whole month; Sasmuan supervisory WL adjusted by +0.59 for the whole month.
2. February: Mayapyap, Peñaranda & San Isidro WL are all zero for the whole month; Sasmuan supervisory WL adjusted by +0.60 for the whole month.
3. March: Mayapyap, Peñaranda, San Isidro, & Mexico WL are all zero for the whole month; Sasmuan supervisory WL adjusted by +0.61 for the whole month.
4. April: Sapang Buho, Mayapyap, Peñaranda & San Isidro WL are all zero for the whole month; Sasmuan supervisory WL adjusted by +0.62 for the whole month.
5. May: Peñaranda & San Isidro WL are all zero for the whole month; Sasmuan supervisory WL adjusted by +0.63 for the whole month. Mayapyap RR & WL out of order (started 2100H, 17) until end of the year
6. June: Peñaranda & San Isidro WL are all zero for the whole month; Sasmuan supervisory WL adjusted by +0.64 for the whole month.
7. July: Sasmuan supervisory WL adjusted by +0.64 for the whole month; some small erratic changes in Candaba WL (1600H-2000H, 22; 1100H-1500H, 25) but was not adjusted; Candaba WL erroneous reading from 5.49 m to 4.59 m (2000H, 23) as it is highly unlikely for WL to change by almost a meter in 1 hour.
8. August: Sasmuan supervisory WL adjusted by +0.64 for the whole month.
9. September: Sasmuan supervisory WL adjusted by +0.65 for the whole month; San Isidro WL is zero for the whole month.
10. October: Sasmuan supervisory WL adjusted by +0.65 for the whole month.
11. November: Sasmuan supervisory WL adjusted by +0.66 for the whole month; Peñaranda & San Isidro WL are all zero for the whole month.
12. December: Sasmuan supervisory WL adjusted by +0.66 for the whole month; Sulipan WL adjusted by +.05 starting 1800H, 31. Zaragoza WL was adjusted by eye-fit method from 1600H, 17 until 1300H, 21 and 0.70 meters was added to telemetry onwards until end of the month based on some validation surveys made after Ty. Nona. SG reading is higher than the telemetry reading by 0.70 meters as validated on 1300H, 21. Further, a peak of 5.22 meters (1500H, 17th) is supported by flood marks from the post-flood surveys made after Ty. Nona (see picture below) The eye-fit approach from 1600H, 17 until 1300H, 21 was forcibly done owing to the idea that the 0.70-meter difference started only on after event Ty. Nona.



A. RAINFALL Data Summary Presentation



Daily Point Rainfall in millimeters (meteorological day)

2015

Station:

Muñoz

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	4	29	111	0	0
2	0	0	0	0	0	0	0	7	8	19	0	0
3	0	0	0	0	4	0	0	0	0	0	0	0
4	0	0	0	0	0	0	9	0	66	1	0	0
5	0	0	0	0	6	0	12	17	0	0	0	1
6	0	0	0	0	46	0	4	0	5	0	0	0
7	0	0	0	0	18	0	6	0	14	0	0	0
8	0	0	0	0	4	0	29	0	0	0	0	0
9	0	0	0	0	0	6	19	0	0	0	0	0
10	0	0	0	0	1	0	22	14	24	0	3	0
11	0	0	0	0	0	0	7	1	0	30	0	1
12	0	0	0	0	0	0	25	2	0	0	0	0
13	0	0	0	0	0	0	14	41	0	0	0	0
14	0	0	0	0	0	0	3	0	10	6	0	0
15	0	0	0	0	0	0	0	22	0	0	0	227
16	0	0	0	0	0	16	30	0	56	0	1	139
17	0	0	0	0	0	3	63	0	2	40	0	0
18	14	0	0	0	0	79	2	2	8	168	0	0
19	0	0	0	0	0	24	0	3	15	26	0	3
20	0	0	0	0	0	1	0	2	87	0	0	26
21	0	0	0	0	0	28	19	60	16	1	0	4
22	0	0	0	0	10	0	6	5	0	0	0	0
23	0	0	0	0	2	0	0	8	1	0	0	0
24	0	0	0	0	0	1	0	10	0	0	0	0
25	0	0	0	0	0	1	0	14	1	0	0	0
26	0	0	0	0	5	21	25	0	2	0	0	0
27	0	0	0	0	48	11	2	0	1	0	0	0
28	0	0	0	0	4	0	2	25	20	0	0	0
29	0		0	0	0	0	16	12	0	0	0	0
30	0		0	0	9	0	0	4	0	0	0	0
31	0		0		0		0	0		0		0

Monthly Total	14	0	0	0	157	191	315	253	365	402	4	401
Average	0.45	0.00	0.00	0.00	5.06	6.37	10.16	8.16	12.17	12.97	0.13	12.94
Max daily rain	14	0	0	0	48	79	63	60	87	168	3	227
Day of Max Daily	18	1	1	1	27	18	17	21	20	18	10	15
No. of Rain days	1	0	0	0	12	11	20	19	18	9	2	7
Max 1-hr rain	3				43	33	22	27	59	58	3	50
Day of max 1-hr	18				27	18	8	13	20	2	10	16

Total rain for the year

2102

Total rain days for the year

99

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Sapang_Buho											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	5	0	13	192	0	0
2	0	0	0	0	0	0	1	0	0	9	0	0
3	0	0	0	0	6	0	0	0	0	0	0	0
4	0	0	0	0	7	0	10	43	48	0	0	0
5	0	0	0	0	0	0	0	13	15	0	0	3
6	0	0	0	0	26	0	6	0	0	0	0	0
7	0	0	0	0	23	0	5	0	62	0	0	0
8	0	0	0	0	0	0	8	0	2	0	0	0
9	0	0	0	0	0	1	16	3	9	0	0	0
10	0	0	0	0	3	0	11	13	24	0	0	0
11	0	0	0	0	0	0	17	0	30	0	0	0
12	0	0	0	0	8	0	26	0	5	0	0	0
13	0	0	0	0	0	0	8	15	0	0	0	0
14	0	0	0	0	0	0	3	16	1	8	0	2
15	0	0	0	0	0	0	0	9	0	0	0	170
16	0	0	0	0	0	0	38	23	13	0	0	198
17	0	0	0	0	0	0	50	0	3	109	0	0
18	26	0	0	0	0	1	2	3	1	203	0	0
19	0	0	0	0	0	11	0	56	0	12	0	10
20	0	0	0	0	0	18	1	7	9	0	0	14
21	0	0	0	0	0	7	0	56	7	3	0	1
22	0	0	0	0	59	0	14	4	0	0	0	0
23	0	0	0	0	7	0	0	17	0	0	0	0
24	0	0	0	0	4	5	0	13	0	0	0	0
25	0	0	0	0	0	0	0	4	1	0	0	0
26	0	0	0	0	19	19	6	2	3	0	0	0
27	0	0	0	0	0	0	1	0	62	0	0	0
28	0	0	0	0	0	0	0	25	19	0	0	0
29	0		0	0	5	53	0	20	0	0	0	0
30	0		0	0	0	11	0	0	0	0	0	0
31	0		0		0		0	0		0		0

Monthly Total	26	0	0	0	167	126	228	342	327	536	0	398
Average	0.84	0.00	0.00	0.00	5.39	4.20	7.35	11.03	10.90	17.29	0.00	12.84
Max daily rain	26	0	0	0	59	53	50	56	62	203	0	198
Day of Max Daily	18	1	1	1	22	29	17	19	7	18	1	16
No. of Rain days	1	0	0	0	11	9	19	19	19	7	0	7
Max 1-hr rain	6				47	39	15	27	59	64		35
Day of max 1-hr	18				22	29	16	22	7	2		16

Total rain for the year	2150
Total rain days for the year	92

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Gabalдон											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	2	0	0	0	0	0	6	13	210	0	0
2	0	0	0	0	0	0	3	0	0	6	3	0
3	0	0	0	0	5	0	5	0	0	0	3	0
4	0	0	0	1	5	0	56	11	2	3	1	6
5	0	0	0	0	0	1	1	0	1	0	1	37
6	0	0	0	0	1	0	5	0	2	2	1	0
7	0	0	0	0	0	0	2	0	27	0	0	0
8	0	0	0	0	0	0	21	1	29	0	0	1
9	0	0	0	0	0	6	32	13	100	0	0	1
10	0	0	0	0	0	2	22	0	62	0	0	0
11	0	0	0	0	1	1	17	0	7	18	0	0
12	0	1	0	0	2	0	34	4	2	0	1	0
13	0	0	0	0	0	0	0	18	1	0	0	0
14	0	1	0	0	0	0	3	1	0	16	0	10
15	0	0	0	0	0	0	6	0	0	0	1	395
16	0	0	0	0	0	0	14	0	0	8	3	336
17	0	0	0	0	0	8	34	0	2	323	1	3
18	45	0	0	0	0	3	1	1	0	205	6	15
19	1	0	0	0	0	4	0	0	0	19	0	113
20	0	0	0	4	0	12	0	11	3	0	0	100
21	0	0	0	2	12	14	0	30	1	3	0	22
22	0	0	3	0	5	0	30	5	8	1	0	0
23	0	0	2	0	0	12	0	19	0	0	0	0
24	0	0	0	0	44	18	93	24	0	0	0	0
25	0	0	11	1	2	0	10	2	6	0	0	0
26	0	0	5	0	46	4	5	0	8	0	0	0
27	0	0	0	0	9	0	10	2	13	0	0	0
28	0	0	0	0	3	0	0	0	31	0	13	0
29	0		0	0	11	26	0	40	0	2	0	0
30	0		0	0	11	1	0	2	0	0	0	0
31	0		0		0		2	1		3		8

Monthly Total	46	4	21	8	157	112	406	191	318	819	34	1047
Average	1.48	0.14	0.68	0.27	5.06	3.73	13.10	6.16	10.60	26.42	1.13	33.77
Max daily rain	45	2	11	4	46	26	93	40	100	323	13	395
Day of Max Daily	18	1	25	20	26	29	24	29	9	17	28	15
No. of Rain days	2	3	4	4	14	14	22	18	19	14	11	13
Max 1-hr rain	8	1		4	43	24	31	33	67	67	7	56
Day of max 1-hr	18	1		20	26	29	24	29	9	2	28	16

Total rain for the year	3163
Total rain days for the year	138

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Zaragoza											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	0	0	41	0	0
2	0	0	0	0	0	0	0	16	2	15	0	0
3	0	0	0	0	0	0	7	0	7	6	0	0
4	0	0	0	0	101	0	30	21	15	3	0	0
5	0	0	0	0	0	0	7	1	20	0	0	5
6	0	0	0	0	3	0	12	0	3	0	0	0
7	0	0	0	0	55	0	13	0	0	0	0	0
8	0	0	0	0	0	0	8	0	0	0	0	0
9	0	0	0	0	0	0	40	7	0	7	0	0
10	0	0	0	0	0	21	12	5	2	0	0	0
11	0	0	0	0	0	0	1	0	4	0	0	0
12	0	0	0	0	0	0	18	2	0	0	5	0
13	0	0	0	0	0	0	0	26	0	5	0	0
14	0	0	0	0	0	0	1	0	0	0	0	1
15	0	0	0	0	0	0	1	67	0	0	0	130
16	0	0	0	0	0	0	60	0	6	0	0	67
17	0	0	0	0	0	55	125	0	0	48	0	0
18	7	0	0	0	0	4	5	1	0	130	0	0
19	0	0	0	0	0	3	0	0	19	1	0	3
20	0	0	0	0	0	2	0	3	16	0	0	5
21	18	0	0	0	0	24	0	77	1	0	0	1
22	0	0	0	8	0	1	4	8	0	0	0	0
23	0	0	0	0	0	0	0	33	26	0	0	0
24	0	0	0	0	1	0	0	21	0	0	0	0
25	0	0	0	0	0	0	2	12	0	0	0	0
26	0	0	0	0	0	1	37	2	0	0	0	0
27	0	0	0	0	4	0	2	25	64	0	0	0
28	0	0	0	0	4	0	8	0	3	0	0	0
29	0		0	0	4	7	1	1	0	0	0	0
30	0		0	0	0	0	0	55	0	0	0	0
31	0		0		25		0	0		0		0

Monthly Total	25	0	0	8	197	118	394	383	188	256	5	212
Average	0.81	0.00	0.00	0.27	6.35	3.93	12.71	12.35	6.27	8.26	0.17	6.84
Max daily rain	18	0	0	8	101	55	125	77	64	130	5	130
Day of Max Daily	21	1	1	22	4	17	17	21	27	18	12	15
No. of Rain days	2	0	0	1	8	9	21	19	14	9	1	7
Max 1-hr rain	12			7	70	46	31	57	39	22	5	29
Day of max 1-hr	21			22	4	17	26	15	27	18	12	16

Total rain for the year	1786
Total rain days for the year	91

Daily Point Rainfall in millimeters (meteorological day)

2015

Station:

Mayapyap

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

Monthly Total	15	4	0	0	49							
Average	0.484	0.143	0	0	2.882							
Max daily rain	14	4	0	0	20							
Day of Max Daily	18	11	1	1	4							
No. of Rain days	2	1	0	0	7							
Max 1-hr rain	4	3			19							
Day of max 1-hr	18	11			4							

Total rain for the year	68
Total rain days for the year	10

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Peñaranda											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	0	0	73	0	0
2	0	0	0	0	2	0	36	0	0	23	0	0
3	0	0	0	0	0	6	91	0	0	0	0	0
4	0	0	0	0	0	0	24	6	24	0	0	0
5	0	0	0	0	22	0	1	22	8	0	0	9
6	0	0	0	0	57	0	9	0	0	0	0	0
7	0	0	0	0	0	0	2	0	32	0	0	0
8	0	0	0	0	0	7	19	1	0	0	0	0
9	0	0	0	0	27	0	14	8	4	0	0	0
10	0	0	0	0	1	3	9	17	3	0	0	0
11	0	0	0	0	0	0	8	4	42	0	0	0
12	0	0	0	0	6	0	12	28	0	0	0	0
13	0	0	0	0	0	0	0	1	0	0	0	0
14	0	0	0	0	0	0	0	2	0	2	0	0
15	0	1	0	0	0	0	0	0	0	0	0	255
16	0	0	0	0	0	0	36	0	2	0	0	114
17	0	0	0	0	0	0	74	0	0	79	0	1
18	18	0	0	0	0	9	2	0	4	194	6	0
19	0	0	0	15	0	0	0	1	1	6	0	11
20	0	0	0	0	0	2	0	4	11	0	0	13
21	0	0	0	3	0	8	0	52	0	0	0	0
22	0	0	0	0	0	1	13	9	0	0	0	0
23	0	0	0	0	29	0	0	28	2	0	0	0
24	0	0	0	0	0	3	0	22	0	0	0	0
25	0	0	0	0	26	0	31	13	9	0	0	0
26	0	0	2	0	29	1	5	0	16	0	0	0
27	0	0	0	0	2	0	0	45	22	0	0	0
28	0	0	0	0	0	49	0	0	29	0	2	0
29	0		0	0	9	45	0	2	0	0	0	0
30	0		0	1	0	1	0	19	0	0	0	0
31	0		0		0		0	0		0		0

Monthly Total	18	1	2	19	210	135	386	284	209	377	8	403
Average	0.58	0.04	0.06	0.63	6.77	4.50	12.45	9.16	6.97	12.16	0.27	13.00
Max daily rain	18	1	2	15	57	49	91	52	42	194	6	255
Day of Max Daily	18	15	26	19	6	28	3	21	11	18	18	15
No. of Rain days	1	1	1	3	11	12	17	19	15	6	2	6
Max 1-hr rain	7	1		14	55	32	60	28	39	26	4	67
Day of max 1-hr	18	15		19	6	28	3	27	11	18	18	16

Total rain for the year	2052
Total rain days for the year	94

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Calaanan											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	1	0	0	0	0	4	0	18	185	0	0
2	0	0	0	0	0	0	0	0	1	1	2	0
3	0	0	0	0	0	0	2	0	0	0	1	0
4	0	0	0	1	19	0	19	36	73	0	0	0
5	0	0	0	0	0	0	2	17	14	0	0	12
6	0	0	0	0	9	0	6	0	0	0	0	0
7	0	0	0	0	0	0	1	3	35	0	0	0
8	0	0	0	0	0	0	31	0	7	0	0	0
9	0	0	0	0	1	0	21	12	4	0	0	0
10	0	0	0	0	3	0	15	9	34	0	0	0
11	0	0	0	0	0	1	18	0	3	0	0	0
12	0	0	0	0	0	0	29	0	0	0	0	0
13	0	0	0	0	0	0	8	18	0	2	0	0
14	0	0	0	0	0	0	0	6	0	11	0	1
15	0	0	0	0	0	0	0	0	0	0	0	189
16	0	0	0	0	0	0	36	3	0	1	0	253
17	0	0	0	0	0	2	43	0	30	83	0	0
18	30	0	0	0	0	0	2	38	0	255	0	0
19	0	0	0	0	0	0	0	78	4	24	0	32
20	0	0	0	0	0	17	0	7	6	0	0	24
21	0	0	0	0	0	20	0	51	1	5	0	3
22	0	0	0	0	41	0	9	5	11	1	0	0
23	0	0	0	0	17	0	0	9	0	0	0	0
24	0	0	0	0	0	27	0	11	0	0	0	0
25	0	0	1	0	4	0	7	0	2	0	0	0
26	0	0	0	0	32	0	4	0	4	0	0	0
27	0	0	0	0	0	0	26	0	40	0	0	0
28	0	0	0	0	0	14	2	0	37	0	0	0
29	0		0	0	39	9	0	14	0	0	0	0
30	0		0	0	6	19	1	1	0	0	0	0
31	0		0		0		0	5		0		0

Monthly Total	30	1	1	1	171	109	286	323	324	568	3	514
Average	0.97	0.04	0.03	0.03	5.52	3.63	9.23	10.42	10.80	18.32	0.10	16.58
Max daily rain	30	1	1	1	41	27	43	78	73	255	2	253
Day of Max Daily	18	1	25	4	22	24	17	19	4	18	2	16
No. of Rain days	1	1	1	1	10	8	21	18	18	10	2	7
Max 1-hr rain	6	1		1	40	21	25	43	54	57	1	37
Day of max 1-hr	18	1		4	22	24	27	19	4	2	3	16

Total rain for the year	2331
Total rain days for the year	98

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Palali											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	3	0	0	0	0	22	0	16	101	0	0
2	0	0	0	0	0	0	7	0	1	3	0	0
3	0	0	0	0	0	0	58	0	0	0	1	0
4	0	0	0	0	2	0	37	1	23	1	0	0
5	0	0	0	16	14	0	1	41	3	0	4	39
6	0	0	0	0	3	0	10	0	0	0	0	2
7	0	0	0	0	1	0	6	0	0	4	0	0
8	0	0	0	0	0	5	16	0	6	1	0	0
9	0	0	0	0	6	0	20	15	3	0	0	0
10	0	0	0	0	0	0	16	8	42	0	0	0
11	0	0	0	0	0	0	14	2	2	0	0	0
12	0	0	0	0	0	0	13	16	5	0	0	0
13	0	0	0	0	0	0	0	14	0	0	0	0
14	0	0	0	0	0	0	0	1	8	8	0	4
15	0	1	0	0	0	0	0	21	0	0	0	362
16	0	0	0	0	0	0	34	0	3	2	0	287
17	0	0	0	0	0	0	57	0	2	178	0	1
18	32	0	0	0	0	0	1	29	2	231	4	1
19	0	0	0	0	0	0	0	58	0	6	0	14
20	0	0	0	1	0	5	17	30	28	0	0	19
21	0	0	0	0	0	2	0	50	0	2	0	2
22	1	0	0	0	10	0	70	7	11	0	0	0
23	0	0	0	0	7	3	0	29	10	0	0	0
24	0	0	0	0	0	4	0	38	2	0	0	0
25	1	0	1	0	39	0	16	0	0	0	0	0
26	0	0	0	0	0	8	6	0	4	0	0	0
27	0	0	0	0	1	0	0	4	42	0	0	0
28	0	0	0	0	48	25	0	6	37	0	7	0
29	0		0	0	36	1	1	37	0	0	0	0
30	0		0	0	4	31	0	10	0	0	0	0
31	0		0		0		0	0		0		0

Monthly Total	34	4	1	17	171	84	422	417	250	537	16	731
Average	1.10	0.14	0.03	0.57	5.52	2.80	13.61	13.45	8.33	17.32	0.53	23.58
Max daily rain	32	3	1	16	48	31	70	58	42	231	7	362
Day of Max Daily	18	1	25	5	28	30	22	19	10	18	28	15
No. of Rain days	3	2	1	2	12	9	20	20	20	11	4	10
Max 1-hr rain	7	1		16	34	22	33	29	29	38	4	91
Day of max 1-hr	18	1		5	29	30	3	18	10	18	18	16

Total rain for the year	2684
Total rain days for the year	114

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: San Isidro											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	0	0	54	0	0
2	0	0	0	0	0	0	2	0	1	25	0	0
3	0	0	0	0	0	0	14	0	0	3	0	0
4	0	0	0	0	0	0	38	45	26	0	0	0
5	0	0	0	0	0	0	2	5	5	0	0	2
6	0	0	0	0	2	0	9	0	0	0	0	0
7	0	0	0	0	5	0	4	6	25	0	0	0
8	0	0	0	0	0	0	13	3	0	0	0	0
9	0	0	0	0	3	0	17	8	10	0	0	0
10	0	0	0	0	8	0	8	3	5	0	0	0
11	0	0	0	0	0	0	17	1	11	4	0	0
12	0	0	0	0	40	0	5	8	0	0	0	0
13	0	0	0	0	0	0	1	90	0	0	0	0
14	4	0	0	0	0	0	0	23	0	0	0	3
15	0	0	0	0	0	0	0	0	0	0	0	166
16	0	0	0	0	0	0	45	24	1	0	0	68
17	0	0	0	0	0	0	86	0	2	53	0	1
18	13	0	0	0	0	16	4	0	0	168	7	0
19	0	0	0	28	0	0	0	0	0	2	0	7
20	0	0	0	0	0	2	0	10	9	0	0	9
21	0	0	0	0	0	28	0	49	0	0	0	0
22	0	0	0	0	0	0	33	8	16	0	0	0
23	0	0	0	0	0	0	0	31	2	0	0	0
24	0	0	0	0	3	0	0	14	1	0	0	0
25	0	0	0	0	6	0	6	22	4	0	0	0
26	0	0	0	0	4	10	24	0	0	0	0	0
27	0	0	0	0	0	0	1	12	0	0	0	0
28	0	0	0	0	0	22	4	0	27	0	0	0
29	0		0	0	39	32	0	6	0	0	0	0
30	0		0	0	0	0	1	16	0	0	0	0
31	0		0		0		0	6		0		0

Monthly Total	17	0	0	28	110	110	334	390	145	309	7	256
Average	0.55	0.00	0.00	0.93	3.55	3.67	10.77	12.58	4.83	9.97	0.23	8.26
Max daily rain	13	0	0	28	40	32	86	90	27	168	7	166
Day of Max Daily	18	1	1	19	12	29	17	13	28	18	18	15
No. of Rain days	2	0	0	1	9	6	21	21	15	7	1	7
Max 1-hr rain	4			15	37	27	25	59	24	26	7	33
Day of max 1-hr	18			19	29	29	4	14	7	18	18	16

Total rain for the year	1706
Total rain days for the year	90

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Arayat											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	0	0	39	0	0
2	0	0	0	0	0	0	0	0	0	12	0	0
3	0	0	0	0	0	2	14	0	0	17	0	0
4	0	0	0	0	4	0	35	26	66	0	0	1
5	0	0	0	0	0	0	9	0	5	0	0	24
6	0	0	0	0	0	5	22	22	1	0	0	0
7	0	0	0	0	2	0	12	0	3	0	0	0
8	0	0	0	0	0	13	30	2	0	14	0	0
9	0	0	0	0	26	0	23	10	27	0	0	0
10	0	0	0	0	0	0	11	0	10	0	0	0
11	0	0	0	0	0	0	6	3	0	0	0	0
12	0	0	0	0	0	0	16	0	22	2	0	0
13	0	0	0	0	0	33	0	19	0	0	0	0
14	0	0	0	0	0	0	0	0	2	0	0	6
15	0	0	0	0	0	0	0	0	3	0	0	89
16	0	0	0	14	0	6	38	2	0	0	0	60
17	0	0	0	0	0	6	138	0	0	55	0	0
18	8	0	0	0	0	12	4	0	0	117	0	1
19	0	0	0	0	0	1	0	0	1	2	0	18
20	0	0	0	0	0	15	0	9	44	0	0	1
21	0	0	0	0	0	41	0	61	0	0	0	1
22	0	0	0	0	0	1	23	12	44	0	0	0
23	0	0	0	0	0	1	2	39	0	0	0	0
24	0	0	0	0	0	0	13	18	17	0	0	0
25	0	0	0	0	0	0	0	8	0	0	0	0
26	0	0	0	0	0	4	4	0	9	0	0	0
27	0	0	0	0	0	0	0	37	40	0	0	0
28	0	0	0	0	0	1	0	0	15	0	0	0
29	0		0	0	1	0	0	1	0	0	0	0
30	0		0	0	1	0	0	14	0	0	0	0
31	0		0		0		0	0		0		0

Monthly Total	8	0	0	14	34	141	400	283	309	258	0	201
Average	0.26	0.00	0.00	0.47	1.10	4.70	12.90	9.13	10.30	8.32	0.00	6.48
Max daily rain	8	0	0	14	26	41	138	61	66	117	0	89
Day of Max Daily	18	1	1	16	9	21	17	21	4	18	1	15
No. of Rain days	1	0	0	1	5	14	17	16	16	8	0	9
Max 1-hr rain	3			6	13	33	30	22	62	21		16
Day of max 1-hr	18			16	9	13	4	6	4	18		16

Total rain for the year	1648
Total rain days for the year	87

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Candaba											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	0	0	29	0	0
2	0	0	0	0	0	0	0	0	0	22	0	0
3	0	0	0	0	0	37	11	1	4	6	0	0
4	0	0	0	0	3	0	19	0	31	3	0	5
5	0	0	0	0	0	0	7	1	5	0	0	11
6	0	0	0	0	0	0	28	33	0	0	0	1
7	0	0	0	0	1	0	13	0	13	12	0	0
8	0	0	0	0	0	4	16	0	16	10	0	0
9	0	0	0	0	4	1	12	11	0	0	0	0
10	0	0	0	0	0	8	18	0	2	0	0	0
11	0	0	0	0	0	0	2	4	26	0	0	0
12	0	0	0	0	0	0	14	0	60	0	0	0
13	0	0	0	0	0	1	1	11	0	0	0	0
14	0	0	0	0	0	0	0	0	13	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	101
16	0	0	0	0	0	0	85	1	0	0	0	67
17	0	0	0	0	0	4	91	4	0		1	0
18	12	0	0	0	0	17	2	8	0		1	3
19	0	0	0	0	0	8	0	2	2	0	0	27
20	0	0	0	1	0	7	0	11	8	0	0	2
21	0	0	0	0	0	34	0	60	0	0	0	0
22	0	0	1	0	0	2	96	7	106	0	0	0
23	0	0	0	0	0	0	0	51	0	0	0	0
24	0	0	0	0	0	0	0	27	27	0	0	0
25	0	0	0	0	0	0	1	2	0	0	0	0
26	0	0	0	0	0	43	0	0	31	0	0	0
27	0	0	0	0	0	0	0	0	24	0	0	0
28	0	0	0	0	0	2	0	0	2	0	0	0
29	0		0	0	1	8	0	4	0	0	0	0
30	0		0	0	0	0	0	15	0	0	0	0
31	0		0		0		0	0		2		0

Monthly Total	12	0	1	1	9	176	416	253	370	84	2	217
Average	0.39	0.00	0.03	0.03	0.29	5.87	13.42	8.16	12.33	2.90	0.07	7.00
Max daily rain	12	0	1	1	4	43	96	60	106	29	1	101
Day of Max Daily	18	1	22	20	9	26	22	21	22	1	17	15
No. of Rain days	1	0	1	1	4	14	16	18	16	7	2	8
Max 1-hr rain	3		1	1	4	35	45	33	60	20	1	22
Day of max 1-hr	18		23	21	9	3	22	6	22	1	18	16

Total rain for the year	1541
Total rain days for the year	88

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Sibul_Springs											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	3	0	0	0	0	3	1	2	98	1	0
2	0	0	0	0	15	0	0	0	0	11	2	0
3	0	0	0	0	1	18	9	0	0	1	0	1
4	0	0	0	0	8	0	71	7	7	8	0	3
5	0	0	0	0	6	0	2	19	22	0	5	8
6	0	0	0	0	21	0	16	0	1	1	0	0
7	0	0	0	0	0	0	23	6	40	0	0	0
8	0	0	0	0	0	1	15	3	5	4	0	1
9	0	0	0	0	1	14	24	23	0	0	1	0
10	0	0	0	0	0	0	25	0	6	0	0	0
11	0	0	0	0	0	15	4	26	55	4	0	0
12	0	0	0	0	0	0	17	1	1	2	0	0
13	0	0	0	0	0	0	2	55	0	0	0	0
14	0	0	0	0	0	0	0	1	14	2	0	0
15	0	0	0	0	0	0	0	0	0	0	0	276
16	0	0	0	0	0	0	68	1	3	1	1	98
17	0	0	0	0	0	0	77	36	8	119	1	1
18	22	0	0	0	0	35	1	54	0	154	1	1
19	0	0	0	0	0	0	0	13	16	2	0	25
20	0	0	0	0	0	26	2	17	0	0	1	8
21	0	0	0	7	0	7	0	46	0	0	0	0
22	0	0	0	0	0	15	88	1	31	1	0	0
23	0	0	0	0	0	5	88	52	7	0	0	0
24	0	0	0	0	1	0	31	20	0	0	0	0
25	0	0	0	0	0	0	45	4	0	0	0	0
26	0	0	0	0	38	0	4	0	13	0	0	0
27	0	0	0	0	0	15	2	0	9	0	0	0
28	0	0	0	0	33	20	0	0	15	0	0	0
29	0		0	0	10	3	0	4	2	1	0	0
30	0		0	3	0	0	2	10	0	0	0	0
31	0		0		0		0	2		7		0

Monthly Total	22	3	0	10	134	174	619	402	257	416	13	422
Average	0.71	0.11	0.00	0.33	4.32	5.80	19.97	12.97	8.57	13.42	0.43	13.61
Max daily rain	22	3	0	7	38	35	88	55	55	154	5	276
Day of Max Daily	18	1	1	21	26	18	22	13	11	18	5	15
No. of Rain days	1	1	0	2	10	12	23	23	19	16	8	10
Max 1-hr rain	6	2		7	29	28	42	54	41	21	4	76
Day of max 1-hr	18	1		21	28	18	25	13	11	18	5	16

Total rain for the year	2472
Total rain days for the year	125

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Sasmuan											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2	0	0	0	0	0	0	0	16	55	0	0
2	0	0	0	0	0	0	0	0	12	24	0	0
3	0	0	0	0	0	11	0	28	4	0	0	0
4	0	0	0	0	1	7	1	13	6	4	0	0
5	0	0	0	0	0	53	21	8	6	0	0	0
6	0	0	0	0	0	0	25	24	0	0	0	0
7	0	0	0	0	2	13	5	0	0	0	0	0
8	0	0	0	0	0	40	84	3	0	0	0	0
9	0	0	0	0	2	0	46	10	0	4	0	0
10	0	0	0	0	0	0	21	19	1	0	0	0
11	0	0	0	0	0	0	14	0	0	13	0	0
12	0	0	0	0	0	0	2	1	6	5	0	0
13	0	0	0	0	0	0	3	2	0	0	0	0
14	0	4	0	0	0	0	0	0	0	0	0	0
15	0	2	0	0	0	0	2	0	12	0	0	105
16	0	0	0	6	0	9	27	0	22	0	0	62
17	0	0	0	0	0	17	62	0	0	15	1	0
18	7	0	0	0	0	7	0	0	0	39	2	1
19	0	0	0	0	0	2	0	16	32	5	0	26
20	0	0	0	0	0	9	0	33	0	0	0	1
21	0	0	0	11	0	22	0	97	0	0	0	0
22	0	0	4	0	0	3	14	45	23	0	0	0
23	0	0	0	0	0	0	0	100	0	0	0	0
24	0	0	0	0	0	0	21	11	0	0	0	0
25	0	0	0	0	0	0	1	1	0	2	0	0
26	0	0	0	0	0	0	5	0	1	0	0	0
27	0	0	0	0	0	0	16	0	0	0	0	0
28	0	0	0	0	0	0	0	23	1	0	0	0
29	0		0	0	0	0	0	2	0	0	0	0
30	0		0	0	0	0	0	0	14	0	0	0
31	0		0		1		0	0		0		3

Monthly Total	9	6	4	17	6	193	370	436	156	166	3	198
Average	0.29	0.21	0.13	0.57	0.19	6.43	11.94	14.06	5.20	5.35	0.10	6.39
Max daily rain	7	4	4	11	2	53	84	100	32	55	2	105
Day of Max Daily	18	14	22	21	7	5	8	23	19	1	18	15
No. of Rain days	2	2	1	2	4	12	18	18	14	10	2	6
Max 1-hr rain	2	4	4	11	2	34	30	36	30	12	1	25
Day of max 1-hr	1	15	23	21	7	8	8	24	20	18	18	16

Total rain for the year	1564
Total rain days for the year	91

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Sulipan											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2	0	0	0	0	0	0	0	0	77	0	0
2	0	0	0	0	0	0	0	2	0	15	0	0
3	0	0	0	0	8	6	0	8	3	27	0	0
4	0	0	0	0	0	18	13	30	44	11	0	0
5	0	0	0	0	2	0	13	0	3	0	0	2
6	0	0	0	0	0	49	42	5	0	0	0	0
7	0	0	0	0	0	0	13	0	0	8	1	0
8	0	0	0	0	0	0	47	1	15	0	0	0
9	0	0	0	0	10	1	43	6	0	0	1	0
10	0	0	0	0	0	0	21	10	2	0	0	0
11	0	0	0	0	0	0	5	1	0	30	0	0
12	0	0	0	0	0	0	6	13	15	4	0	0
13	0	0	0	0	0	2	1	5	2	0	0	0
14	0	0	0	0	0	0	0	0	7	0	0	1
15	0	0	0	0	0	0	1	0	1	0	0	111
16	0	0	0	0	0	40	16	1	0	0	0	38
17	0	0	0	0	0	0	72	0	0	32	2	0
18	6	0	0	0	0	8	0	0	0	87	1	3
19	0	0	0	15	0	17	0	43	0	5	0	28
20	0	0	0	0	0	65	0	15	0	0	0	0
21	0	0	0	10	0	19	0	50	6	0	0	1
22	0	0	3	0	0	3	19	28	8	0	0	0
23	0	0	0	0	0	0	0	91	0	0	0	0
24	0	0	0	0	0	0	4	3	0	0	0	0
25	0	0	0	0	0	0	3	0	22	0	0	0
26	0	0	0	0	0	0	5	0	25	0	0	0
27	0	0	0	0	0	0	12	11	1	0	0	0
28	0	0	0	0	0	0	2	9	5	0	0	0
29	0		0	0	0	2	0	2	1	0	0	0
30	0		0	0	0	0	0	0	7	0	0	0
31	0		0		0		0	0		0		3

Monthly Total	8	0	3	25	20	230	338	334	167	296	5	187
Average	0.26	0.00	0.10	0.83	0.65	7.67	10.90	10.77	5.57	9.55	0.17	6.03
Max daily rain	6	0	3	15	10	65	72	91	44	87	2	111
Day of Max Daily	18	1	22	19	9	20	17	23	4	18	17	15
No. of Rain days	2	0	1	2	3	12	19	20	17	10	4	8
Max 1-hr rain	2		2	14	10	40	24	38	28	29	2	20
Day of max 1-hr	1		22	20	9	16	17	19	4	11	18	15

Total rain for the year	1613
Total rain days for the year	98

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Mexico											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	0	2	50	0	0
2	0	0	0	0	0	0	0	0	0	16	0	0
3	0	0	0	0	0	0	5	0	0	1	0	0
4	0	0	0	0	2	0	5	3	17	3	0	1
5	0	0	0	0	0	0	12	31	4	0	0	5
6	0	0	0	0	0	43	36	9	0	0	0	0
7	0	0	0	0	0	0	11	0	0	0	0	0
8	0	0	0	0	0	3	28	0	1	0	0	0
9	0	0	0	0	7	1	31	13	6	0	0	0
10	0	0	0	0	17	0	10	6	42	0	0	0
11	0	0	0	0	0	0	4	1	1	0	0	0
12	0	0	0	0	0	0	11	0	2	8	0	0
13	0	0	0	0	0	0	4	2	1	0	0	0
14	0	0	0	0	0	0	0	0	43	0	0	0
15	0	0	0	0	0	0	1	0	22	0	0	37
16	0	0	0	0	0	1	144	1	10	0	0	30
17	0	0	0	0	0	19	132	0	0	38	1	0
18	11	0	0	0	0	8	3	0	0	104	0	0
19	0	0	0	0	0	3	0	28	1	10	0	25
20	0	0	0	0	0	15	0	9	102	0	0	1
21	0	0	0	0	0	41	0	49	0	0	0	1
22	0	0	0	0	0	1	14	4	13	0	0	0
23	0	0	0	0	0	0	10	90	0	0	0	0
24	0	0	0	0	16	0	25	9	4	0	0	0
25	0	0	0	0	0	0	2	3	10	0	0	0
26	0	0	0	0	0	0	1	0	13	0	0	0
27	0	0	0	0	0	0	5	8	2	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0
29	0		0	0	0	0	0	2	0	0	0	0
30	0		0	0	0	0	0	0	0	0	0	0
31	0		0		0		0	0		0		0

Monthly Total	11	0	0	0	42	135	494	268	296	230	1	100
Average	0.35	0.00	0.00	0.00	1.35	4.50	15.94	8.65	9.87	7.42	0.03	3.23
Max daily rain	11	0	0	0	17	43	144	90	102	104	1	37
Day of Max Daily	18	1	1	1	10	6	16	23	20	18	17	15
No. of Rain days	1	0	0	0	4	10	21	17	19	8	1	7
Max 1-hr rain	4				17	34	48	30	52	17	1	7
Day of max 1-hr	18				10	7	16	24	20	18	18	19

Total rain for the year	1577
Total rain days for the year	88

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: Porac											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0	0	0	0	0	0	0	0	6	46	0	0
2	0	0	0	0	0	0	0	2	0	30	0	0
3	0	0	0	0	0	0	0	0	2	0	0	0
4	0	0	0	0	23	0	2	3	3	0	0	0
5	0	0	0	0	0	0	10	1	3	0	0	1
6	0	0	0	0	0	2	22	1	1	0	0	0
7	0	0	0	0	14	0	18	0	0	0	0	0
8	0	0	0	0	0	1	39	3	0	0	0	0
9	0	0	0	0	1	0	74	16	24	2	0	0
10	0	0	0	0	0	2	48	1	4	0	0	0
11	0	0	0	0	0	0	23	0	0	2	0	0
12	0	0	0	16	0	0	21	0	11	12	0	0
13	0	0	0	0	0	0	1	0	4	0	0	0
14	0	0	0	0	0	0	0	0	1	0	0	0
15	0	0	0	0	0	0	2	0	0	0	0	65
16	0	0	0	0	0	0	40	0	43	0	0	40
17	0	0	0	0	0	4	199	0	8	22	0	0
18	4	0	0	0	0	8	6	0	0	50	0	1
19	0	0	0	0	0	5	0	49	0	2	0	21
20	0	0	0	0	0	5	0	10	4	0	0	3
21	0	0	0	0	0	60	0	45	3	0	0	0
22	0	0	0	0	0	0	25	11	4	0	0	0
23	0	0	0	0	0	0	1	105	16	0	0	0
24	0	0	0	0	21	0	26	42	5	0	0	0
25	0	0	0	0	1	0	6	3	29	0	0	0
26	0	0	0	0	0	0	61	0	19	0	0	0
27	0	0	0	0	0	0	96	8	6	0	0	0
28	0	0	0	0	0	0	0	1	8	0	0	0
29	0		0	0	30	0	23	11	0	0	0	0
30	0		0	0	0	0	0	1	0	0	0	0
31	0		0		0		0	1		0		0

Monthly Total	4	0	0	16	90	87	743	314	204	166	0	131
Average	0.13	0.00	0.00	0.53	2.90	2.90	23.97	10.13	6.80	5.35	0.00	4.23
Max daily rain	4	0	0	16	30	60	199	105	43	50	0	65
Day of Max Daily	18	1	1	12	29	21	17	23	16	18	1	15
No. of Rain days	1	0	0	1	6	8	21	19	21	8	0	6
Max 1-hr rain	1			15	18	23	44	51	27	11		10
Day of max 1-hr	18			12	4	21	27	23	25	2		16

Total rain for the year	1755
Total rain days for the year	91

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: San_Rafael											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	3	0	0	0	0	3	0	26	0	114	0	0
2	0	0	0	0	0	0	0	0	0	39	0	0
3	0	0	0	0	3	9	7	2	2	12	0	0
4	0	0	0	0	7	0	9	6	3	11	0	0
5	0	0	0	0	0	0	9	7	13	0	3	6
6	0	0	0	0	0	3	27	0	0	0	0	11
7	0	0	0	0	17	0	30	0	2	0	0	0
8	0	0	0	0	0	0	52	4	0	0	0	0
9	0	0	0	0	6	20	45	31	8	0	1	0
10	0	0	0	0	0	0	31	0	8	1	0	0
11	0	0	0	0	0	0	2	0	3	4	0	0
12	0	0	0	0	0	0	6	0	4	2	0	0
13	0	0	0	0	0	1	1	7	0	0	0	0
14	0	0	0	0	0	0	0	0	15	0	0	5
15	0	2	0	0	0	0	0	0	3	0	0	81
16	0	0	0	30	0	0	22	3	7	1	2	64
17	0	0	0	5	0	20	63	2	0	51	2	1
18	17	0	0	0	0	5	1	23	0	98	3	2
19	1	0	0	0	0	22	0	31	16	4	0	22
20	0	0	0	0	0	41	0	7	0	0	0	3
21	0	0	0	6	0	17	0	43	0	0	0	2
22	0	0	0	0	0	8	13	56	7	0	0	0
23	0	0	0	0	0	1	0	102	0	0	0	0
24	0	0	0	0	0	0	39	17	0	0	0	0
25	0	0	0	1	0	0	21	4	0	0	0	0
26	0	0	0	0	0	0	3	0	43	1	0	0
27	0	0	0	0	9	0	31	0	2	0	0	0
28	0	0	0	0	0	13	35	12	23	0	0	0
29	0		0	0	31	25	0	34	1	0	0	0
30	0		0	0	0	0	0	5	0	0	0	0
31	0		0		0		0	4		1		6

Monthly Total	21	2	0	42	73	188	447	426	160	339	11	203
Average	0.68	0.07	0.00	1.40	2.35	6.27	14.42	13.74	5.33	10.94	0.37	6.55
Max daily rain	17	2	0	30	31	41	63	102	43	114	3	81
Day of Max Daily	18	15	1	16	29	20	17	23	26	1	5	15
No. of Rain days	3	1	0	4	6	14	20	21	17	13	5	11
Max 1-hr rain	3	2	1	24	29	24	36	48	42	27	3	19
Day of max 1-hr	18	15	26	16	29	20	24	24	26	1	5	16

Total rain for the year	1912
Total rain days for the year	115

Daily Point Rainfall in millimeters (meteorological day)

2015	Station: PRFFWC_(CSFP)											
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	58.4	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	30.2	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	1.8	4.3	0.0	23.4	1.0	0.0	0.0
4	0.0	0.0	0.0	0.0	38.6	0.0	3.8	3.6	6.6	1.8	0.0	0.5
5	0.0	0.0	0.0	0.0	0.0	3.3	10.4	26.4	5.1	0.0	0.0	1.8
6	0.0	0.0	0.0	0.0	0.0	26.4	27.9	12.7	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	2.5	0.0	15.2	0.0	0.0	1.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	15.7	30.5	4.6	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	14.0	0.3	38.4	13.5	25.4	1.5	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	11.2	24.1	21.3	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	3.8	1.8	0.3	10.2	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	10.2	0.0	1.5	16.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	30.5	4.6	0.3	0.3	0.0	0.0	0.0
14	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0	10.7	0.0	0.0	6.6
15	0.0	0.0	0.0	0.0	0.0	0.0	1.5	0.0	3.8	0.0	0.0	91.9
16	0.0	0.0	0.0	0.0	0.0	6.4	92.7	0.0	40.9	0.0	0.0	57.7
17	0.0	0.0	0.0	0.0	0.0	26.4	180.3	0.0	0.0	30.0	0.5	0.0
18	8.6	0.0	0.0	0.0	0.0	6.9	3.3	1.8	0.0	79.5	0.0	1.0
19	0.0	0.0	0.0	0.0	0.0	13.7	0.0	19.8	0.0	7.1	0.0	25.1
20	0.0	0.0	0.0	0.0	0.0	6.9	0.0	7.9	17.8	0.0	0.0	2.3
21	0.0	0.0	0.0	1.8	0.0	43.9	0.0	52.6	20.3	0.0	0.0	1.0
22	0.0	0.0	0.0	0.0	0.0	9.4	36.8	5.8	4.3	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	25.9	62.7	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	24.9	0.0	24.6	8.1	2.8	0.0	0.0	0.0
25	0.0	0.0	0.1	0.0	0.0	0.0	2.3	0.0	0.3	0.0	0.0	0.0
26	0.0	0.0	0.1	0.0	23.1	0.0	18.0	0.0	15.7	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	42.9	4.8	0.8	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	4.3	0.0	0.0	0.0
29	0.0		0.0	0.0	10.7	0.0	0.8	0.0	0.0	0.0	0.0	0.0
30	0.0		0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0
31	0.0		0.0		0.0		0.0	0.0		0.5		0.0

Monthly Total	8.9	1.8	0.1	1.8	116.3	191.5	589.5	252.0	205.5	237.2	0.5	188.0
Average	0.29	0.06	0.00	0.06	3.75	6.38	19.02	8.13	6.85	7.65	0.02	6.06
Max daily rain	8.6	1.8	0.1	1.8	38.6	43.9	180.3	62.7	40.9	79.5	0.5	91.9
Day of Max Daily	18	14		21	4	21	17	23	16	18	17	15
No. of Rain days	2	1	2	1	7	13	22	18	19	12	1	9
Max 1-hr rain												
Day of max 1-hr												

Total rain for the year	1793.1
Total rain days for the year	107

Table 1.0

Monthly Rainfall Summary for 2015															
PRB Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total for the year	Number of RR days	Max 24-hr RR (Met day)
Muñoz	14	0	0	0	157	191	315	253	365	402	4	401	2102	99	227
Sapang Buho	26	0	0	0	167	126	228	342	327	536	0	398	2150	92	203
Gabaldon	46	4	21	8	157	112	406	191	318	819	34	1047	3163	138	395
Zaragoza	25	0	0	8	197	118	394	383	188	256	5	212	1786	91	130
Mayapyap	15	4	0	0	49								68	10	68
Peñaranda	18	1	2	19	210	135	386	284	209	377	8	403	2052	94	255
Calaanan	30	1	1	1	171	109	286	323	324	568	3	514	2331	98	255
Palali	34	4	1	17	171	84	422	417	250	537	16	731	2684	114	362
San Isidro	17	0	0	28	110	110	334	390	145	309	7	256	1706	90	168
Arayat	8	0	0	14	34	141	400	283	309	258	0	201	1648	87	138
Candaba	12	0	1	1	9	176	416	253	370	84	2	217	1541	88	106
Sibul Spring	22	3	0	10	134	174	619	402	257	416	13	422	2472	125	276
Sasmuan	9	6	4	17	6	193	370	436	156	166	3	198	1564	91	105
Sulipan	8	0	3	25	20	230	338	334	167	296	5	187	1613	98	111
Mexico	11	0	0	0	42	135	494	268	296	230	1	100	1577	88	144
Porac	4	0	0	16	90	87	743	314	204	166	0	131	1755	91	199
San Rafael	21	2	0	42	73	188	447	426	160	339	11	203	1912	115	114
PRFFWC	8.9	1.8	0.1	1.8	116.3	191.5	589.5	252.0	205.5	237.2	0.5	188.0	1793.1	107	180.3

Mayapyap RR - no data from Jun to Dec; incomplete data for May

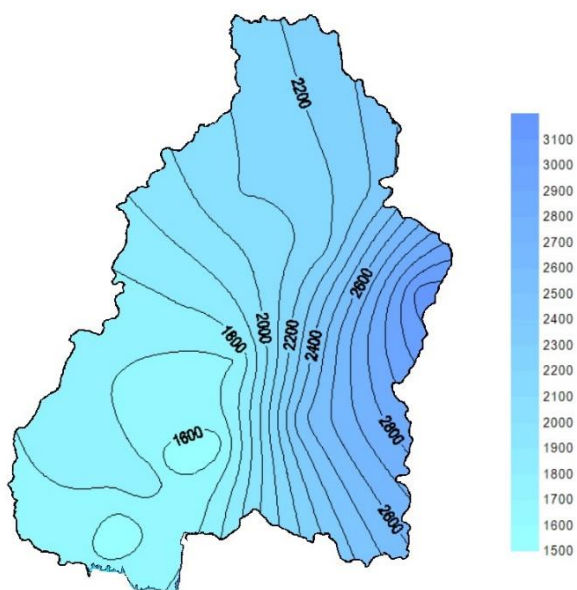


Figure 1a. The estimated Isohyet rainfall distribution for the year 2015 in the Pampanga River Basin

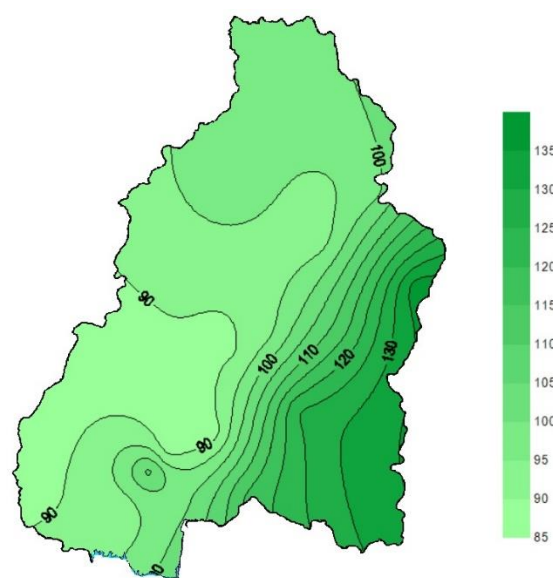


Figure 1b. Estimated rainfall days distribution (2015) in the Pampanga River Basin

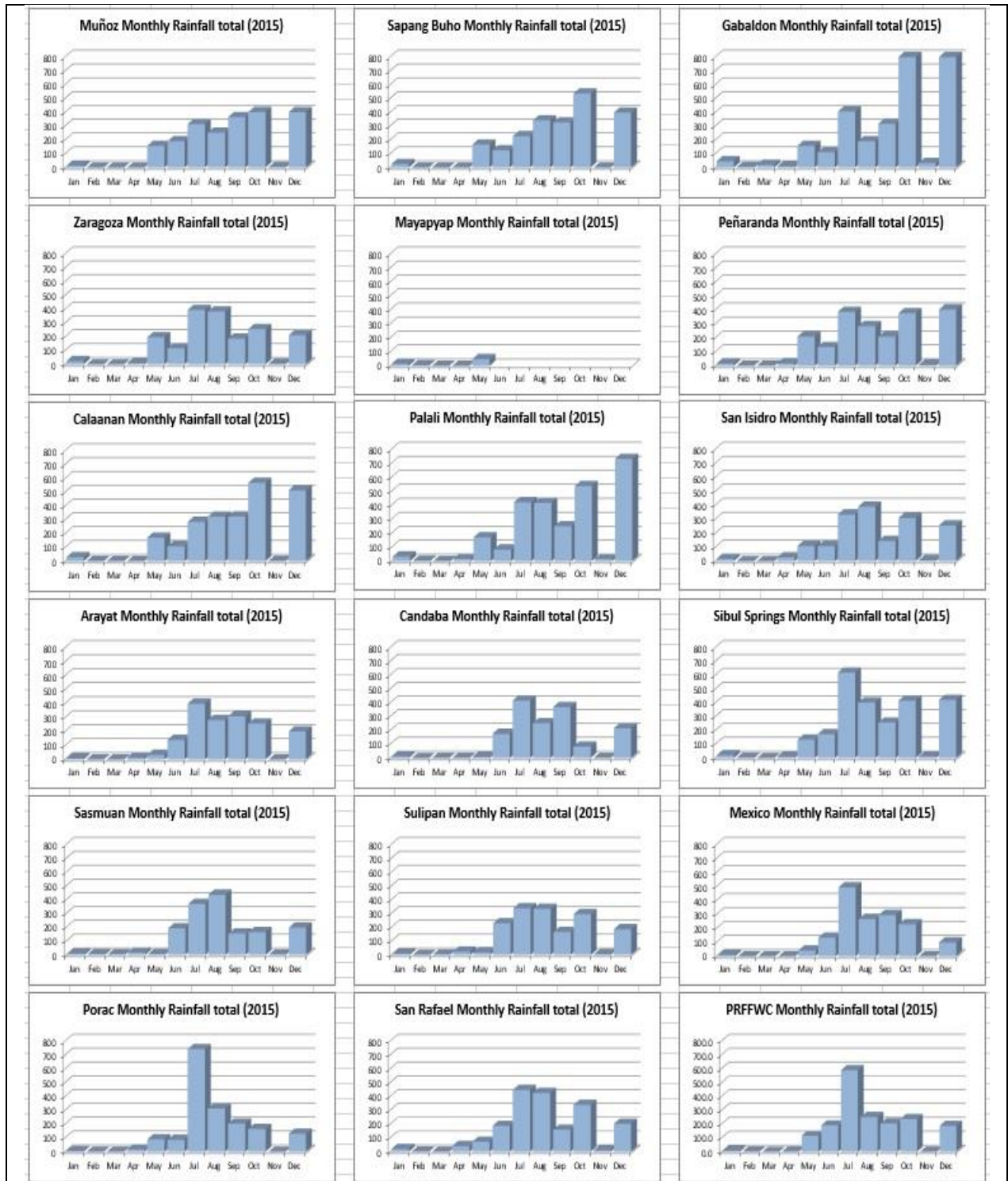


Figure 2. Monthly Rainfall distribution (hyetograph) of all operational RR monitoring stations of PRFFWC within the PRB for the year 2015. Mayayayap hyetograph is only up to May.

B. WATER LEVEL Data Summary Presentation



Water Level in meters (Daily Average)

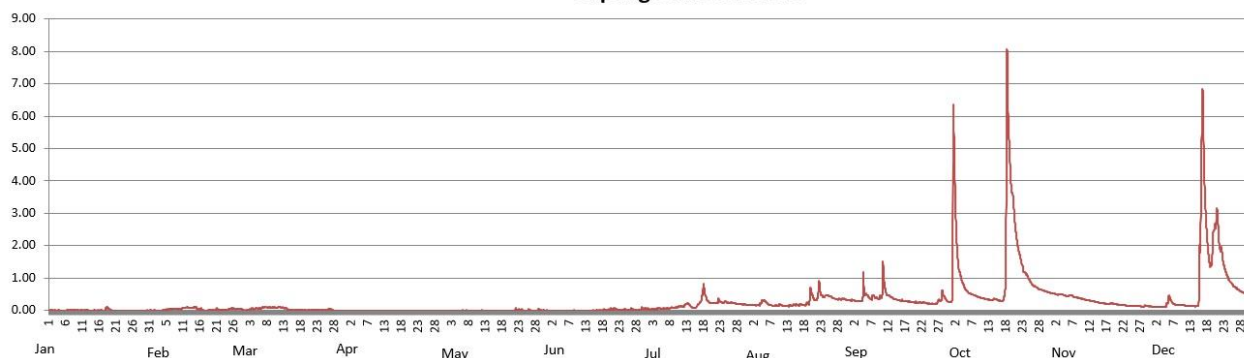
2015

Station: **Sapang_Buho**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.01	0.00	0.01	0.00	0.00	0.00	0.04	0.18	0.32	1.11	0.52	0.12
2	0.00	0.00	0.02	0.00	0.00	0.00	0.03	0.17	0.30	3.94	0.49	0.12
3	0.00	0.00	0.05	0.00	0.00	0.00	0.04	0.17	0.29	1.48	0.49	0.11
4	0.00	0.01	0.05	0.00	0.00	0.00	0.06	0.20	0.51	0.96	0.47	0.11
5	0.00	0.02	0.06	0.00	0.00	0.00	0.06	0.25	0.50	0.83	0.46	0.14
6	0.01	0.04	0.08	0.00	0.00	0.00	0.07	0.23	0.40	0.56	0.47	0.36
7	0.01	0.04	0.10	0.00	0.00	0.00	0.06	0.16	0.41	0.51	0.43	0.23
8	0.01	0.05	0.09	0.00	0.00	0.00	0.07	0.15	0.41	0.46	0.40	0.18
9	0.01	0.05	0.09	0.00	0.00	0.00	0.08	0.16	0.39	0.43	0.37	0.17
10	0.01	0.06	0.09	0.00	0.00	0.00	0.11	0.17	0.78	0.39	0.35	0.16
11	0.01	0.09	0.10	0.00	0.00	0.00	0.13	0.15	0.62	0.37	0.32	0.15
12	0.01	0.09	0.09	0.00	0.00	0.00	0.15	0.14	0.46	0.34	0.30	0.14
13	0.00	0.09	0.08	0.00	0.00	0.00	0.21	0.15	0.39	0.32	0.29	0.13
14	0.00	0.10	0.04	0.00	0.00	0.00	0.13	0.16	0.35	0.35	0.26	0.13
15	0.00	0.04	0.02	0.00	0.00	0.00	0.08	0.17	0.32	0.32	0.23	1.48
16	0.00	0.03	0.02	0.00	0.00	0.00	0.15	0.17	0.30	0.30	0.22	5.44
17	0.00	0.00	0.02	0.00	0.00	0.00	0.30	0.17	0.29	0.81	0.21	2.82
18	0.06	0.01	0.01	0.00	0.00	0.02	0.61	0.20	0.28	6.28	0.21	1.57
19	0.04	0.01	0.01	0.00	0.00	0.01	0.33	0.40	0.26	4.02	0.21	1.94
20	0.00	0.03	0.02	0.00	0.00	0.04	0.24	0.43	0.25	2.92	0.19	2.79
21	0.00	0.03	0.01	0.00	0.00	0.05	0.23	0.34	0.25	2.01	0.18	2.18
22	0.00	0.02	0.01	0.00	0.02	0.02	0.26	0.66	0.25	1.55	0.16	1.65
23	0.00	0.02	0.02	0.00	0.01	0.01	0.28	0.43	0.24	1.21	0.15	1.19
24	0.00	0.03	0.02	0.00	0.00	0.02	0.25	0.46	0.21	1.04	0.14	0.95
25	0.00	0.06	0.01	0.00	0.00	0.02	0.25	0.44	0.21	0.86	0.14	0.80
26	0.00	0.06	0.03	0.00	0.02	0.04	0.24	0.39	0.21	0.75	0.13	0.71
27	0.00	0.05	0.03	0.00	0.00	0.02	0.23	0.35	0.29	0.69	0.13	0.63
28	0.00	0.04	0.00	0.00	0.00	0.02	0.21	0.34	0.43	0.65	0.13	0.56
29	0.00		0.00	0.00	0.01	0.04	0.19	0.36	0.39	0.61	0.14	0.54
30	0.00		0.00	0.00	0.00	0.05	0.19	0.34	0.28	0.58	0.13	0.52
31	0.00		0.00		0.00		0.18	0.31		0.55		0.53

Max WL observed	0.12	0.12	0.12	0.00	0.07	0.10	0.83	0.93	1.51	8.08	0.54	6.84
Day of Max WL	18	14	12		22	29	18	22	11	18	1	16

Sapang Buho WL 2015



Water Level in meters (Daily Average)

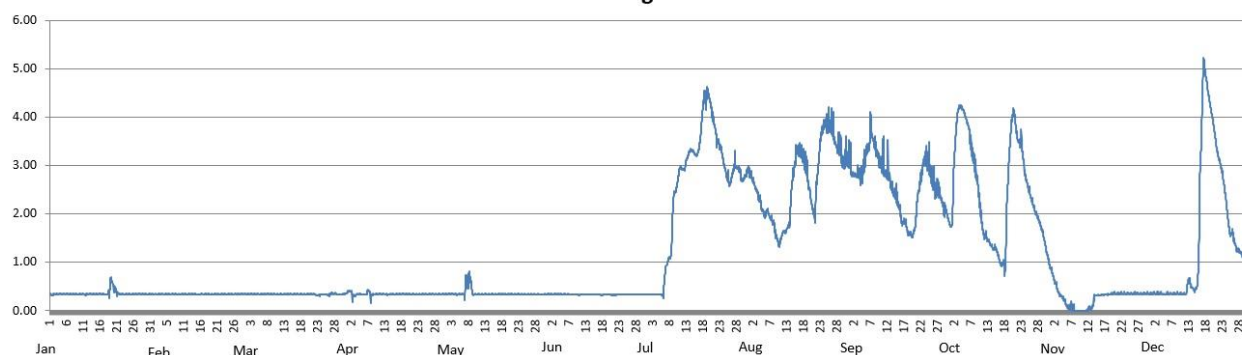
2015

Station: **Zaragoza**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.33	0.34	0.34	0.38	0.35	0.34	0.33	2.86	2.90	1.77	0.75	0.35
2	0.34	0.34	0.34	0.38	0.34	0.34	0.33	2.69	2.79	2.93	0.53	0.36
3	0.34	0.34	0.34	0.31	0.34	0.34	0.33	2.50	2.82	4.00	0.34	0.35
4	0.35	0.34	0.34	0.34	0.34	0.34	0.33	2.29	2.78	4.21	0.26	0.36
5	0.35	0.34	0.34	0.34	0.34	0.34	0.33	2.18	2.94	4.15	0.20	0.35
6	0.35	0.34	0.34	0.34	0.34	0.34	0.54	2.01	3.39	3.89	0.08	0.35
7	0.34	0.34	0.34	0.39	0.56	0.34	0.99	1.97	3.72	3.53	0.08	0.35
8	0.35	0.34	0.34	0.34	0.65	0.33	1.22	1.83	3.41	3.15	0.00	0.35
9	0.34	0.34	0.34	0.33	0.37	0.33	2.31	1.56	3.17	2.69	0.00	0.35
10	0.34	0.34	0.34	0.34	0.34	0.33	2.63	1.40	2.98	2.07	0.00	0.35
11	0.34	0.34	0.34	0.34	0.34	0.33	2.93	1.59	2.86	1.59	0.00	0.34
12	0.34	0.34	0.34	0.34	0.34	0.33	2.92	1.65	2.81	1.52	0.05	0.58
13	0.34	0.34	0.34	0.34	0.34	0.33	3.14	1.88	2.59	1.39	0.10	0.51
14	0.34	0.34	0.34	0.34	0.34	0.33	3.30	2.67	2.38	1.30	0.30	0.43
15	0.35	0.34	0.34	0.34	0.34	0.33	3.27	3.20	2.20	1.23	0.32	0.85
16	0.35	0.34	0.34	0.34	0.34	0.33	3.23	3.30	1.89	1.00	0.33	3.47
17	0.34	0.34	0.34	0.34	0.34	0.33	3.59	3.21	1.83	0.96	0.33	4.99
18	0.34	0.34	0.34	0.34	0.34	0.33	4.32	2.94	1.63	1.97	0.33	4.57
19	0.54	0.34	0.34	0.34	0.34	0.33	4.40	2.57	1.57	3.46	0.34	4.15
20	0.51	0.34	0.34	0.34	0.34	0.33	4.32	2.14	1.70	4.03	0.35	3.71
21	0.38	0.34	0.34	0.34	0.34	0.33	3.92	2.26	2.33	3.68	0.35	3.25
22	0.34	0.34	0.34	0.34	0.34	0.33	3.56	3.15	2.79	3.49	0.35	2.96
23	0.34	0.34	0.32	0.34	0.34	0.33	3.40	3.69	3.12	3.14	0.35	2.57
24	0.34	0.34	0.33	0.34	0.34	0.33	3.10	3.84	3.12	2.70	0.35	2.01
25	0.34	0.34	0.34	0.34	0.34	0.33	2.79	3.83	2.76	2.43	0.35	1.60
26	0.34	0.34	0.33	0.34	0.34	0.33	2.66	3.80	2.59	2.20	0.35	1.47
27	0.34	0.34	0.35	0.34	0.34	0.33	2.90	3.46	2.59	1.99	0.35	1.26
28	0.34	0.34	0.35	0.34	0.34	0.33	2.96	3.38	2.35	1.81	0.35	1.19
29	0.34		0.34	0.34	0.34	0.33	2.88	3.17	2.16	1.58	0.35	1.21
30	0.34		0.34	0.34	0.34	0.33	2.71	3.10	1.96	1.25	0.35	1.29
31	0.34		0.35		0.34		2.82	3.05		0.95		1.30

Max WL observed	0.69	0.35	0.38	0.43	0.81	0.35	4.63	4.21	4.11	4.25	0.89	5.22
Day of Max WL	19	1	28	7	8	1	20	25	7	5	1	17

Zaragoza WL 2015



Water Level in meters (Daily Average)

2015

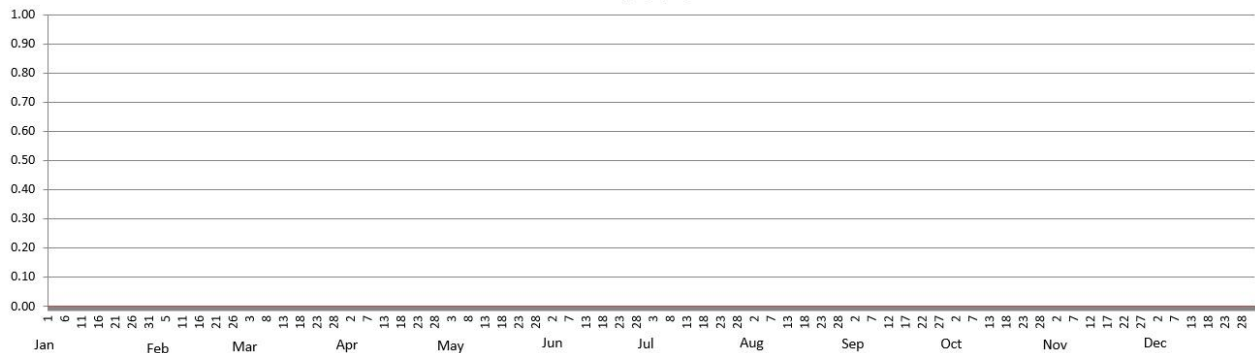
Station:

Mayapyap

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.00	0.00	0.00	0.00	0.00							
2	0.00	0.00	0.00	0.00	0.00							
3	0.00	0.00	0.00	0.00	0.00							
4	0.00	0.00	0.00	0.00	0.00							
5	0.00	0.00	0.00	0.00	0.00							
6	0.00	0.00	0.00	0.00	0.00							
7	0.00	0.00	0.00	0.00	0.00							
8	0.00	0.00	0.00	0.00	0.00							
9	0.00	0.00	0.00	0.00	0.00							
10	0.00	0.00	0.00	0.00	0.00							
11	0.00	0.00	0.00	0.00	0.00							
12	0.00	0.00	0.00	0.00	0.00							
13	0.00	0.00	0.00	0.00	0.00							
14	0.00	0.00	0.00	0.00	0.00							
15	0.00	0.00	0.00	0.00	0.00							
16	0.00	0.00	0.00	0.00	0.00							
17	0.00	0.00	0.00	0.00	0.00							
18	0.00	0.00	0.00	0.00								
19	0.00	0.00	0.00	0.00								
20	0.00	0.00	0.00	0.00								
21	0.00	0.00	0.00	0.00								
22	0.00	0.00	0.00	0.00								
23	0.00	0.00	0.00	0.00								
24	0.00	0.00	0.00	0.00								
25	0.00	0.00	0.00	0.00								
26	0.00	0.00	0.00	0.00								
27	0.00	0.00	0.00	0.00								
28	0.00	0.00	0.00	0.00								
29	0.00		0.00	0.00								
30	0.00		0.00	0.00								
31	0.00		0.00									

Max WL observed												
Day of Max WL												

Mayapyap WL 2015

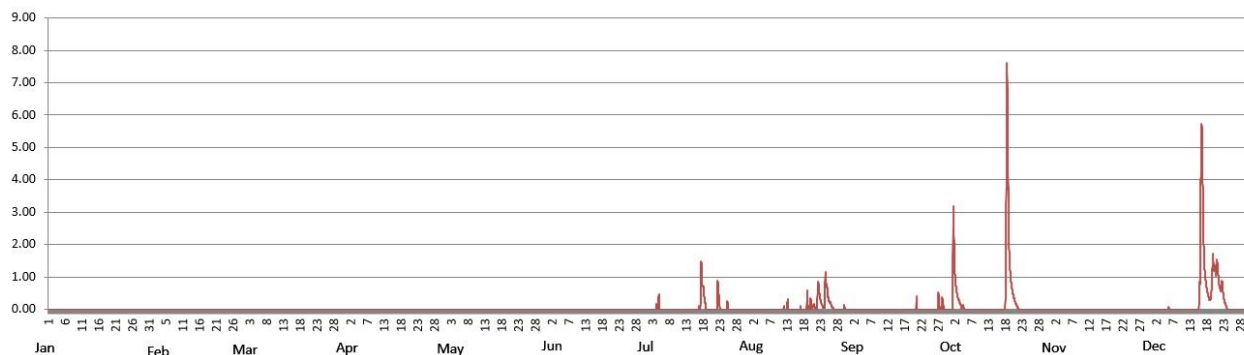


Water Level in meters (Daily Average)

2015		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	0.00	0.00	0.45	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.31	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.12	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.07	0.00	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	0.01
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	0.01	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	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	1.08
16	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	3.60
17	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.00	0.54	0.00	0.83
18	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.11	0.00	4.32	0.00	0.36
19	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.12	0.00	0.86	0.00	1.17
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.07	0.30	0.00	1.31
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.06	0.00	0.81
22	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.50	0.00	0.00	0.00	0.64
23	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.10	0.00	0.00	0.00	0.14
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.26	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	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	0.10	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00
29	0.00		0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
30	0.00		0.00	0.00	0.00	0.00	0.00	0.01	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	1.48	1.16	0.52	7.63	0.00	5.72
Day of Max WL							18	24	27	18		16

Peñaranda WL 2015

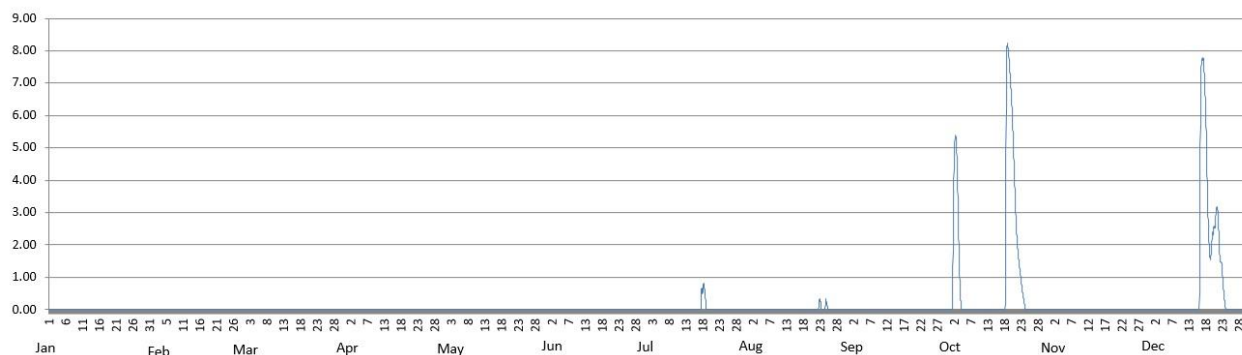


Water Level in meters (Daily Average)

2015		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	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.20	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.63	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	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	0.40
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.20
17	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.04	0.00	6.65
18	0.00	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.00	6.85	0.00	2.90
19	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	7.08	0.00	1.96
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.77	0.00	2.67
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.26	0.00	2.66
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00	1.11	0.00	1.32
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.34	0.00	0.27
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	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	0.00	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	0.81	0.34	0.00	8.24	0.00	7.80
Day of Max WL							18	23		19		17

San Isidro WL 2015



Water Level in meters (Daily Average)

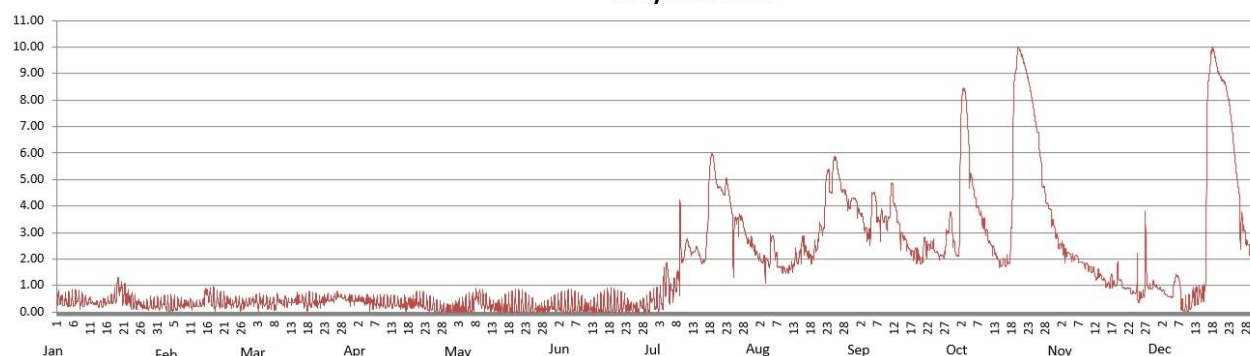
2015

Station: **Arayat**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.49	0.24	0.41	0.43	0.12	0.19	0.35	2.21	3.76	2.22	2.49	0.89
2	0.46	0.36	0.45	0.48	0.14	0.26	0.32	1.99	3.61	6.91	2.42	0.83
3	0.38	0.24	0.34	0.48	0.16	0.22	0.46	1.97	3.09	8.32	2.23	0.68
4	0.41	0.19	0.37	0.39	0.16	0.22	1.05	1.85	2.84	6.97	2.18	0.59
5	0.40	0.20	0.36	0.42	0.17	0.24	1.21	2.04	3.48	6.02	2.10	0.61
6	0.41	0.21	0.28	0.39	0.20	0.26	0.80	2.73	4.20	4.47	2.11	1.26
7	0.49	0.29	0.34	0.33	0.36	0.25	0.93	2.03	3.41	3.98	1.89	1.25
8	0.38	0.25	0.25	0.33	0.60	0.24	1.19	1.69	3.61	3.63	1.85	0.30
9	0.35	0.32	0.44	0.35	0.53	0.21	2.39	1.61	3.49	3.30	1.75	0.18
10	0.37	0.31	0.34	0.30	0.35	0.17	2.21	1.55	3.57	2.92	1.64	0.20
11	0.40	0.24	0.42	0.34	0.32	0.14	2.64	1.61	4.65	2.56	1.58	0.40
12	0.31	0.25	0.36	0.33	0.22	0.13	2.29	1.75	3.96	2.32	1.31	0.66
13	0.27	0.28	0.38	0.37	0.19	0.15	2.29	2.03	3.35	2.03	1.43	0.64
14	0.31	0.35	0.43	0.34	0.18	0.17	2.36	2.11	2.84	1.76	1.25	0.65
15	0.39	0.77	0.44	0.28	0.16	0.20	1.99	2.64	2.73	1.94	1.06	1.85
16	0.39	0.58	0.46	0.33	0.16	0.23	1.94	2.33	2.43	1.84	1.07	8.33
17	0.42	0.48	0.38	0.28	0.20	0.26	3.26	2.13	2.23	2.56	1.18	9.75
18	0.51	0.39	0.39	0.33	0.21	0.27	5.70	2.04	2.22	7.54	1.11	9.65
19	0.94	0.38	0.37	0.35	0.23	0.28	5.57	2.45	2.11	9.62	1.29	9.09
20	0.89	0.40	0.39	0.40	0.26	0.27	4.79	3.06	1.88	9.82	1.01	8.81
21	0.64	0.30	0.36	0.35	0.26	0.28	4.67	3.11	2.60	9.43	0.90	8.63
22	0.53	0.37	0.38	0.31	0.25	0.25	4.49	4.74	2.47	8.96	0.90	8.09
23	0.46	0.28	0.44	0.24	0.24	0.20	4.84	4.89	2.46	8.36	0.72	7.17
24	0.37	0.34	0.49	0.23	0.20	0.17	4.12	5.13	2.36	7.63	0.87	5.87
25	0.29	0.26	0.47	0.21	0.18	0.17	2.92	5.73	2.17	6.92	0.51	4.82
26	0.29	0.33	0.52	0.15	0.12	0.10	3.42	5.12	2.14	5.91	0.63	3.34
27	0.21	0.33	0.62	0.14	0.11	0.28	3.56	4.59	2.32	4.72	1.91	3.04
28	0.21	0.35	0.57	0.11	0.12	0.16	3.24	4.43	3.08	4.13	0.95	2.56
29	0.29		0.52	0.10	0.14	0.21	2.76	3.99	3.51	3.82	0.98	2.19
30	0.24		0.49	0.11	0.19	0.52	2.63	4.28	2.49	3.33	1.01	2.13
31	0.29		0.44		0.24		2.45	4.20		2.83		1.92

Max WL observed	1.30	0.96	0.80	0.79	0.89	0.94	5.99	5.87	4.90	10.00	3.84	9.98
Day of Max WL	20	17	18	20	8	18	19	25	11	20	27	18

Arayat WL 2015

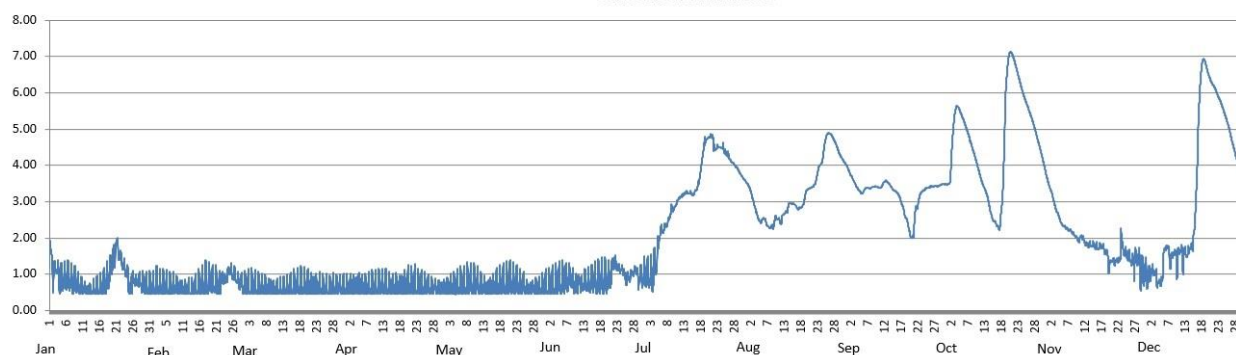


Water Level in meters (Daily Average)

2015		Station: Candaba										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1.59	0.62	0.67	0.62	0.61	0.64	0.93	3.49	3.83	3.48	3.41	0.88
2	1.03	0.74	0.66	0.64	0.61	0.67	0.94	3.29	3.65	4.03	3.12	1.04
3	1.13	0.62	0.65	0.65	0.63	0.70	0.94	2.97	3.47	5.27	2.79	1.03
4	0.78	0.63	0.63	0.65	0.62	0.72	1.23	2.63	3.31	5.61	2.55	0.76
5	0.81	0.63	0.62	0.66	0.64	0.74	1.55	2.54	3.28	5.52	2.45	0.78
6	0.85	0.60	0.60	0.62	0.67	0.79	2.22	2.53	3.36	5.20	2.29	1.61
7	0.81	0.63	0.60	0.61	0.69	0.80	2.30	2.36	3.37	4.94	2.22	1.74
8	0.73	0.61	0.58	0.61	0.73	0.91	2.48	2.29	3.40	4.64	2.14	1.38
9	0.70	0.58	0.59	0.62	0.74	0.72	2.77	2.37	3.42	4.33	2.03	1.59
10	0.64	0.56	0.55	0.63	0.75	0.74	2.87	2.54	3.39	4.01	1.95	1.43
11	0.59	0.54	0.55	0.65	0.72	0.79	3.06	2.45	3.44	3.68	2.01	1.67
12	0.54	0.56	0.56	0.67	0.68	0.70	3.16	2.64	3.56	3.41	1.85	1.47
13	0.52	0.57	0.58	0.68	0.63	0.72	3.22	2.75	3.51	3.16	1.80	1.58
14	0.55	0.61	0.60	0.64	0.60	0.73	3.24	2.96	3.38	2.75	1.80	1.74
15	0.59	0.67	0.62	0.62	0.63	0.77	3.22	2.94	3.29	2.48	1.76	2.23
16	0.62	0.70	0.66	0.63	0.64	0.77	3.25	2.86	3.19	2.36	1.74	4.21
17	0.66	0.74	0.67	0.62	0.69	0.78	3.46	2.82	2.95	2.48	1.76	6.33
18	0.80	0.77	0.67	0.65	0.69	0.80	4.00	2.93	2.62	3.98	1.61	6.90
19	1.04	0.75	0.66	0.68	0.71	0.81	4.56	3.27	2.32	6.45	1.30	6.63
20	1.47	0.73	0.65	0.70	0.74	0.92	4.75	3.37	2.04	7.09	1.37	6.36
21	1.80	0.66	0.64	0.67	0.75	1.17	4.80	3.43	2.52	6.97	1.34	6.18
22	1.47	0.83	0.63	0.69	0.74	1.30	4.52	3.63	2.96	6.64	1.39	5.98
23	1.24	0.85	0.61	0.64	0.73	1.15	4.54	3.98	3.25	6.29	1.85	5.76
24	1.03	1.00	0.60	0.65	0.70	1.10	4.49	4.25	3.34	5.96	1.59	5.50
25	0.65	1.05	0.58	0.64	0.68	0.88	4.41	4.76	3.38	5.71	1.48	5.23
26	0.79	0.93	0.59	0.63	0.62	0.92	4.28	4.88	3.42	5.45	1.37	4.89
27	0.78	0.79	0.61	0.63	0.59	1.04	4.12	4.77	3.42	5.17	1.41	4.52
28	0.79	0.74	0.64	0.60	0.60	1.09	4.02	4.58	3.43	4.84	1.45	4.16
29	0.70		0.64	0.59	0.57	0.89	3.91	4.34	3.47	4.50	1.06	3.78
30			0.63	0.59	0.59	0.87	3.76	4.17	3.48	4.14	1.03	3.47
31			0.61		0.62		3.62	4.02		3.74		3.11

Max WL observed	2.00	1.40	1.23	1.28	1.38	1.51	4.86	4.90	3.94	7.13	3.55	6.94
Day of Max WL	22	17	18	22	21	22	21	26	1	20	1	18

Candaba WL 2015

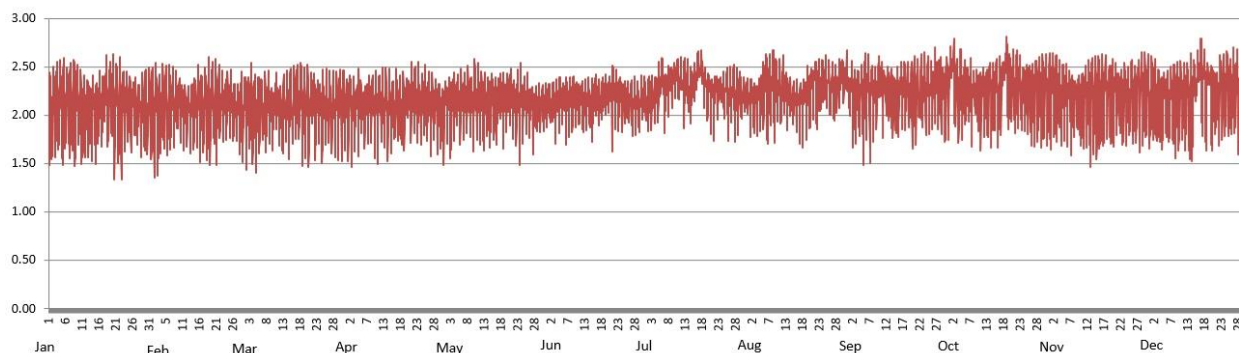


Water Level in meters (Daily Average)

2015		Station: Sasmuan										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	2.06	2.05	2.09	2.11	2.15	2.11	2.16	2.20	2.31	2.32	2.24	2.20
2	2.07	2.07	2.12	2.15	2.16	2.13	2.16	2.18	2.21	2.49	2.25	2.18
3	2.13	2.06	2.13	2.13	2.12	2.11	2.21	2.18	2.22	2.30	2.25	2.17
4	2.13	2.13	2.10	2.12	2.15	2.14	2.24	2.22	2.18	2.32	2.27	2.15
5	2.12	2.13	2.10	2.14	2.15	2.16	2.26	2.23	2.21	2.29	2.25	2.15
6	2.13	2.09	2.10	2.10	2.17	2.16	2.35	2.32	2.27	2.27	2.18	2.16
7	2.14	2.11	2.13	2.14	2.15	2.18	2.27	2.25	2.21	2.28	2.18	2.17
8	2.12	2.11	2.13	2.14	2.17	2.18	2.38	2.30	2.24	2.23	2.16	2.14
9	2.08	2.14	2.09	2.13	2.15	2.20	2.39	2.31	2.27	2.28	2.21	2.19
10	2.08	2.12	2.09	2.12	2.18	2.15	2.43	2.31	2.34	2.22	2.20	2.17
11	2.03	2.08	2.15	2.13	2.16	2.14	2.38	2.25	2.26	2.28	2.20	2.17
12	2.08	2.08	2.05	2.11	2.14	2.13	2.32	2.22	2.29	2.25	2.24	2.17
13	2.07	2.08	2.05	2.12	2.12	2.13	2.32	2.17	2.27	2.28	2.15	2.19
14	2.04	2.06	2.08	2.12	2.13	2.13	2.23	2.18	2.26	2.21	2.22	2.17
15	2.04	2.13	2.11	2.14	2.13	2.15	2.29	2.16	2.22	2.25	2.18	2.34
16	2.10	2.12	2.12	2.13	2.13	2.15	2.35	2.15	2.26	2.23	2.21	2.53
17	2.09	2.13	2.15	2.10	2.18	2.17	2.49	2.18	2.27	2.37	2.21	2.37
18	2.25	2.12	2.15	2.12	2.16	2.20	2.47	2.22	2.25	2.54	2.22	2.20
19	2.16	2.13	2.11	2.16	2.17	2.25	2.31	2.24	2.22	2.35	2.20	2.38
20	2.18	2.13	2.13	2.18	2.20	2.23	2.28	2.29	2.24	2.33	2.21	2.25
21	2.13	2.11	2.10	2.17	2.18	2.25	2.25	2.40	2.22	2.32	2.22	2.25
22	2.11	2.13	2.16	2.17	2.16	2.25	2.24	2.33	2.26	2.29	2.20	2.25
23	2.09	2.12	2.10	2.14	2.18	2.18	2.25	2.36	2.27	2.28	2.15	2.26
24	2.10	2.13	2.12	2.16	2.16	2.17	2.28	2.42	2.25	2.28	2.24	2.26
25	2.09	2.13	2.07	2.13	2.17	2.14	2.26	2.34	2.27	2.25	2.21	2.26
26	2.09	2.09	2.04	2.13	2.12	2.12	2.21	2.28	2.27	2.25	2.19	2.29
27	2.06	2.08	2.08	2.12	2.11	2.13	2.24	2.28	2.34	2.29	2.26	2.26
28	2.08	2.07	2.10	2.10	2.11	2.10	2.20	2.28	2.32	2.30	2.20	2.20
29	2.08		2.11	2.09	2.12	2.13	2.18	2.40	2.31	2.23	2.19	2.22
30	2.06		2.12	2.08	2.09	2.16	2.20	2.35	2.30	2.26	2.19	2.18
31	2.10		2.10		2.11		2.21	2.36		2.22		2.15

Max WL observed	2.63	2.60	2.54	2.55	2.58	2.51	2.67	2.67	2.70	2.81	2.65	2.79
Day of Max WL	21	19	3	21	10	21	18	9	27	19	29	17

Sasmuan WL 2015



Water Level in meters (Daily Average)

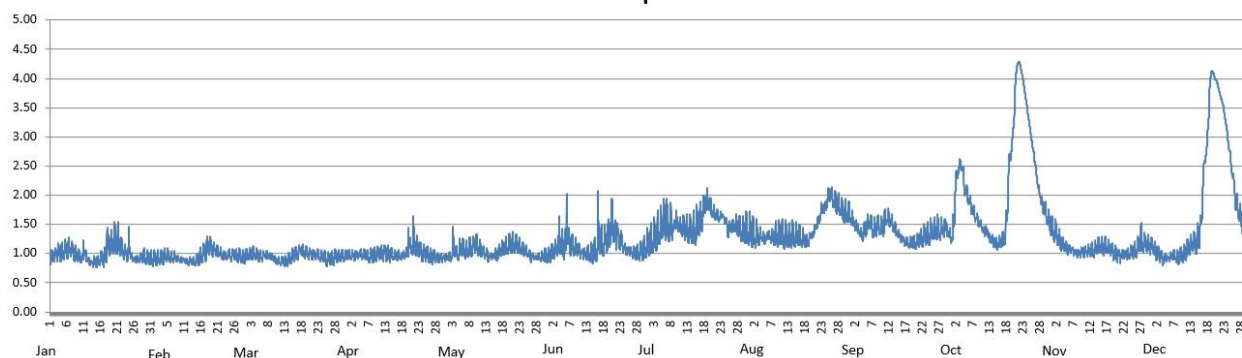
2015

Station: **Sulipan**

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.91	0.89	0.94	0.96	0.94	0.98	1.14	1.35	1.56	1.36	1.35	1.10
2	0.97	0.89	0.98	0.96	0.94	1.03	1.18	1.30	1.47	2.03	1.26	1.02
3	1.01	0.91	0.98	0.96	1.08	1.08	1.24	1.30	1.37	2.45	1.18	0.97
4	1.01	0.93	0.98	0.98	0.98	1.16	1.34	1.28	1.34	2.45	1.13	0.92
5	1.02	0.94	0.96	0.98	1.02	1.14	1.38	1.27	1.38	2.27	1.11	0.93
6	1.07	0.92	0.94	0.97	1.07	1.31	1.50	1.30	1.51	1.92	1.08	0.94
7	1.07	0.92	0.97	0.94	1.04	1.18	1.47	1.28	1.40	1.77	1.04	0.96
8	1.01	0.91	0.95	0.96	1.07	1.12	1.44	1.27	1.44	1.64	1.02	0.95
9	0.96	0.90	0.93	0.98	1.15	1.10	1.51	1.28	1.44	1.54	1.03	0.95
10	0.91	0.88	0.88	0.99	1.13	1.05	1.47	1.29	1.43	1.45	1.03	0.98
11	1.01	0.86	0.86	1.02	1.07	1.00	1.43	1.25	1.59	1.40	1.05	1.03
12	0.90	0.87	0.87	1.02	1.02	0.98	1.41	1.28	1.57	1.32	1.05	1.12
13	0.85	0.86	0.87	1.01	0.98	0.98	1.38	1.26	1.48	1.25	1.05	1.16
14	0.85	0.88	0.90	0.98	0.95	0.99	1.34	1.28	1.39	1.18	1.10	1.18
15	0.87	0.93	0.95	0.96	0.96	1.04	1.37	1.28	1.32	1.17	1.12	1.34
16	0.90	0.99	0.98	0.96	0.97	1.22	1.50	1.26	1.25	1.21	1.10	2.13
17	0.94	1.06	1.02	0.95	1.04	1.16	1.60	1.24	1.20	1.35	1.11	2.80
18	1.14	1.11	1.06	0.97	1.07	1.21	1.81	1.20	1.18	2.19	1.07	3.71
19	1.16	1.06	1.02	1.10	1.10	1.32	1.88	1.28	1.18	2.82	1.02	4.09
20	1.18	1.05	1.00	1.11	1.14	1.42	1.75	1.37	1.18	3.66	0.99	3.96
21	1.19	1.01	0.98	1.15	1.15	1.32	1.68	1.50	1.23	4.26	0.98	3.77
22	1.10	0.96	0.97	1.10	1.14	1.26	1.63	1.63	1.25	4.12	0.99	3.55
23	1.03	0.94	0.96	1.02	1.11	1.19	1.65	1.77	1.28	3.78	0.99	3.20
24	0.99	0.98	0.94	1.00	1.06	1.08	1.59	1.87	1.30	3.38	1.02	2.76
25	1.04	0.97	0.91	0.98	1.03	1.05	1.43	1.99	1.36	2.97	1.04	2.34
26	0.91	0.97	0.90	0.96	0.97	1.02	1.44	1.90	1.37	2.59	1.07	1.91
27	0.90	0.96	0.92	0.95	0.95	1.00	1.46	1.80	1.37	2.18	1.19	1.68
28	0.92	0.93	0.94	0.93	0.95	1.01	1.43	1.77	1.42	1.91	1.15	1.49
29	0.94		0.95	0.93	0.94	1.03	1.37	1.67	1.46	1.74	1.15	1.35
30	0.92		0.96	0.93	0.94	1.08	1.35	1.67	1.34	1.58	1.12	1.25
31	0.90		0.96		0.94		1.36	1.66		1.44		1.17

Max WL observed	1.55	1.29	1.16	1.65	1.46	2.08	2.12	2.14	1.77	4.29	1.59	4.13
Day of Max WL	21	18	19	21	3	16	19	26	12	21	2	19

Sulipan WL 2015



Water Level in meters (Daily Average)

2015		Station: Mexico										
Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	0.21	0.04	0.00	0.00	0.00	0.16	0.00	0.00	0.10	0.40	0.00	0.12
2	0.20	0.07	0.00	0.00	0.00	0.13	0.00	0.00	0.01	0.55	0.00	0.13
3	0.18	0.08	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.38	0.00	0.12
4	0.16	0.07	0.00	0.00	0.24	0.02	0.00	0.18	0.02	0.34	0.00	0.10
5	0.15	0.07	0.00	0.00	0.30	0.01	0.00	0.26	0.01	0.31	0.00	0.12
6	0.14	0.06	0.00	0.00	0.28	0.11	0.12	0.16	0.00	0.19	0.00	0.17
7	0.14	0.05	0.00	0.00	0.35	0.30	0.12	0.00	0.00	0.05	0.00	0.15
8	0.14	0.01	0.00	0.00	0.38	0.10	0.34	0.00	0.00	0.00	0.00	0.12
9	0.14	0.00	0.00	0.00	0.35	0.06	0.42	0.00	0.00	0.02	0.00	0.11
10	0.14	0.00	0.00	0.00	0.42	0.00	0.53	0.00	0.37	0.00	0.06	0.10
11	0.14	0.00	0.00	0.00	0.35	0.00	0.25	0.00	0.18	0.05	0.21	0.07
12	0.13	0.00	0.00	0.02	0.31	0.00	0.16	0.00	0.03	0.03	0.24	0.00
13	0.12	0.00	0.00	0.23	0.27	0.00	0.14	0.00	0.01	0.00	0.24	0.00
14	0.11	0.00	0.00	0.16	0.23	0.00	0.06	0.00	0.18	0.00	0.24	0.00
15	0.09	0.00	0.00	0.11	0.19	0.00	0.00	0.00	0.30	0.00	0.24	0.34
16	0.10	0.00	0.00	0.16	0.15	0.00	0.30	0.00	0.25	0.00	0.24	1.07
17	0.10	0.00	0.00	0.35	0.16	0.00	1.00	0.00	0.05	0.03	0.23	0.61
18	0.13	0.00	0.00	0.28	0.13	0.00	1.20	0.00	0.04	0.95	0.24	0.46
19	0.15	0.00	0.00	0.25	0.11	0.00	0.46	0.00	0.03	0.57	0.22	0.58
20	0.15	0.00	0.00	0.24	0.07	0.00	0.37	0.00	0.18	0.44	0.22	0.49
21	0.15	0.00	0.00	0.22	0.08	0.10	0.29	0.27	0.29	0.36	0.23	0.39
22	0.13	0.00	0.00	0.21	0.16	0.19	0.31	0.47	0.18	0.28	0.22	0.34
23	0.11	0.00	0.00	0.15	0.13	0.10	0.29	0.46	0.04	0.22	0.21	0.29
24	0.10	0.00	0.00	0.12	0.19	0.02	0.35	0.82	0.16	0.18	0.20	0.24
25	0.07	0.00	0.00	0.10	0.20	0.00	0.32	0.48	0.19	0.07	0.18	0.18
26	0.05	0.00	0.00	0.08	0.17	0.00	0.21	0.36	0.28	0.01	0.17	0.11
27	0.02	0.00	0.00	0.04	0.14	0.00	0.46	0.30	0.29	0.00	0.16	0.03
28	0.00	0.00	0.00	0.00	0.12	0.00	0.29	0.21	0.17	0.00	0.15	0.00
29	0.00		0.00	0.00	0.12	0.00	0.09	0.35	0.02	0.00	0.14	0.00
30	0.00		0.00	0.00	0.16	0.00	0.01	0.35	0.00	0.00	0.12	0.00
31	0.00		0.00		0.15		0.00	0.20		0.00		0.00

Max WL observed	0.22	0.09	0.00	0.48	0.87	0.50	3.03	1.39	0.76	1.57	0.27	1.62
Day of Max WL	2	4		17	5	7	18	24	10	18	21	16

Mexico WL 2015

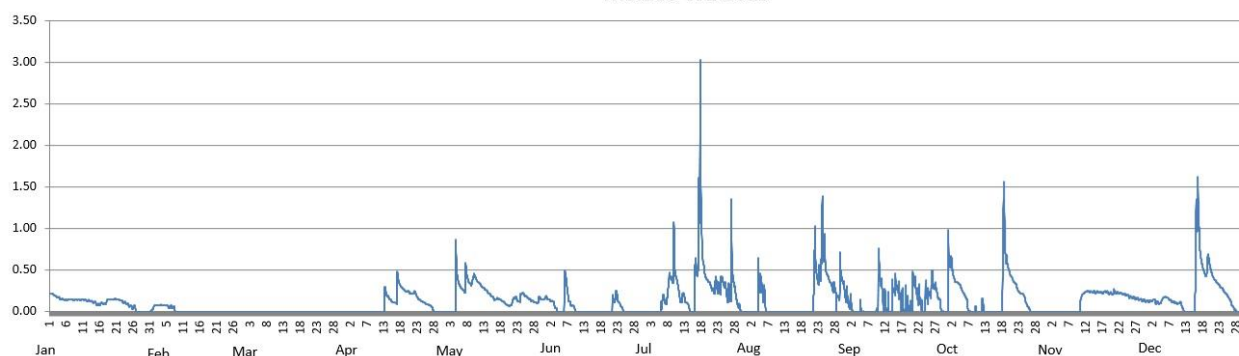


Table 2.0

Maximum WL recorded per station for the year 2015

Station	January	February	March	April	May	June	July	August	September	October	November	December
Sapang Buho	0.12	0.12	0.12	0.00	0.07	0.10	0.83	0.93	1.51	8.08	0.54	6.84
Zaragoza	0.69	0.35	0.38	0.43	0.81	0.35	4.63	4.21	4.11	4.25	0.89	5.22
Mayapyap												
Penaranda	0.00	0.00	0.00	0.00	0.00	0.00	1.48	1.16	0.52	7.63	0.00	5.72
San Isidro	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.34	0.00	8.24	0.00	7.80
Arayat	1.30	0.96	0.80	0.79	0.89	0.94	5.99	5.87	4.90	10.00	3.84	9.98
Candaba	2.00	1.40	1.23	1.28	1.38	1.51	4.86	4.90	3.94	7.13	3.55	6.94
Sasmuan	2.63	2.60	2.54	2.55	2.58	2.51	2.67	2.67	2.70	2.81	2.65	2.79
Sulipan	1.55	1.29	1.16	1.65	1.46	2.08	2.12	2.14	1.77	4.29	1.59	4.13
Mexico	0.22	0.09	0.00	0.48	0.87	0.50	3.03	1.39	0.76	1.57	0.27	1.62



C. ANNEX

Table A-1.

Maximum Rainfall for a given sliding time period during the year 2015																
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	59	64	67	70	67	57	91	59	62	60	76	36	40	52	51	48
2 hrs	91	113	129	95	96	80	153	76	65	88	129	53	52	87	88	57
3 hrs	118	141	152	97	118	117	212	89	66	104	150	56	56	106	90	73
4 hrs	129	158	165	100	138	138	263	96	66	104	169	62	60	117	95	75
5 hrs	149	168	176	101	167	157	307	101	69	104	176	68	64	126	95	83
6 hrs	166	175	188	101	187	169	332	120	74	104	197	90	73	135	96	85
7 hrs	175	179	214	115	199	200	357	138	89	104	216	96	80	136	96	92
8 hrs	182	184	231	119	219	226	394	143	94	104	220	98	88	139	96	95
9 hrs	190	187	250	120	230	235	438	144	105	105	224	99	92	140	100	101
10 hrs	195	190	276	122	231	255	463	149	115	105	225	101	96	141	112	106
11 hrs	204	196	290	123	234	269	481	156	125	105	226	102	99	143	123	111
12 hrs	219	201	303	123	234	282	493	163	133	106	227	103	100	143	136	115
18 hrs	287	280	441	149	256	336	572	190	152	106	247	122	108	144	191	130
24 hrs	322	305	531	180	333	353	600	203	161	117	311	142	125	197	204	151
48 hrs (2 days)	366	368	732	197	369	442	649	234	180	178	374	167	150	279	244	173
72 hrs (3 days)	366	370	743	198	370	443	654	238	180	178	375	242	171	280	247	208
96 hrs (4 days)	366	370	749	198	370	443	654	238	180	178	376	278	186	280	247	223
120 hrs (5 days)	369	378	862	200	381	474	665	242	180	198	401	301	229	282	247	249
144 hrs (6 days)	395	392	962	206	394	498	684	251	194	231	409	302	230	295	264	274
240 hrs (10 days)	400	395	994	270	394	502	690	254	263	275	409	326	250	366	449	299
480 hrs (20 days)	401	533	1039	347	432	562	731	320	383	415	528	381	312	480	676	361
Meteorological day (8 am to 8 am)	227	225	395	139	255	273	362	175	138	106	276	105	111	144	199	114
Max monthly total	402	536	1047	394	403	568	731	390	400	416	619	436	338	494	743	447

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.

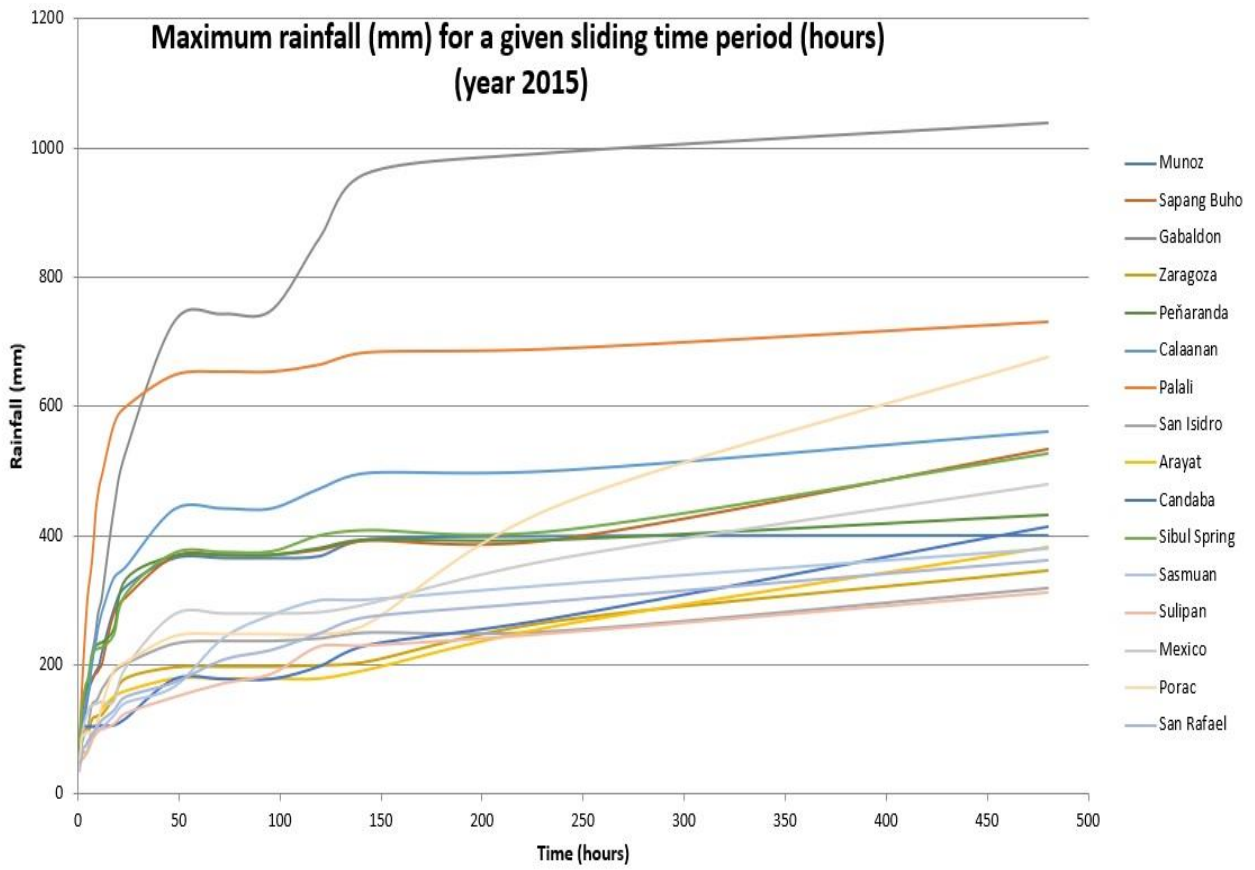


Figure AA-1. The sliding time period per station graph.

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	$Q = 4.015 (H - (-2.94))^2$	$0 < H \leq 3.4$
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 regularly.

Water Level Percent Duration Curves of some stations

Sapang Buho WL % duration (2015)

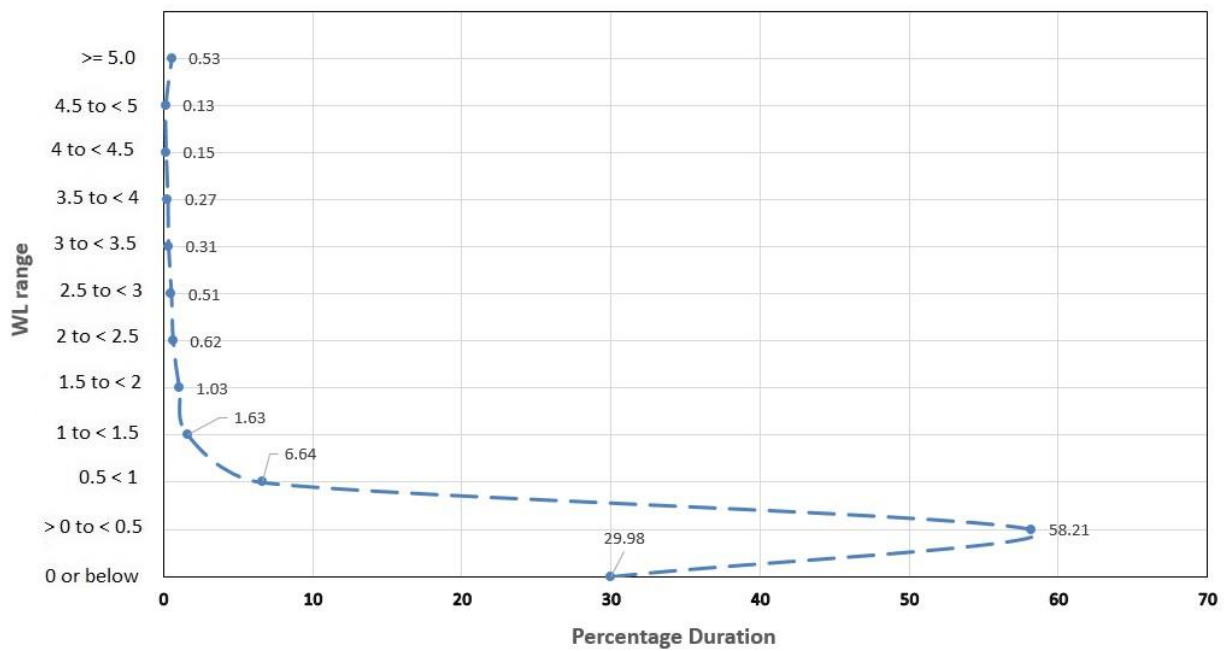


Figure AA-2. Sapang Buho WL percent duration curve (2015)

Zaragoza WL % duration (2015)

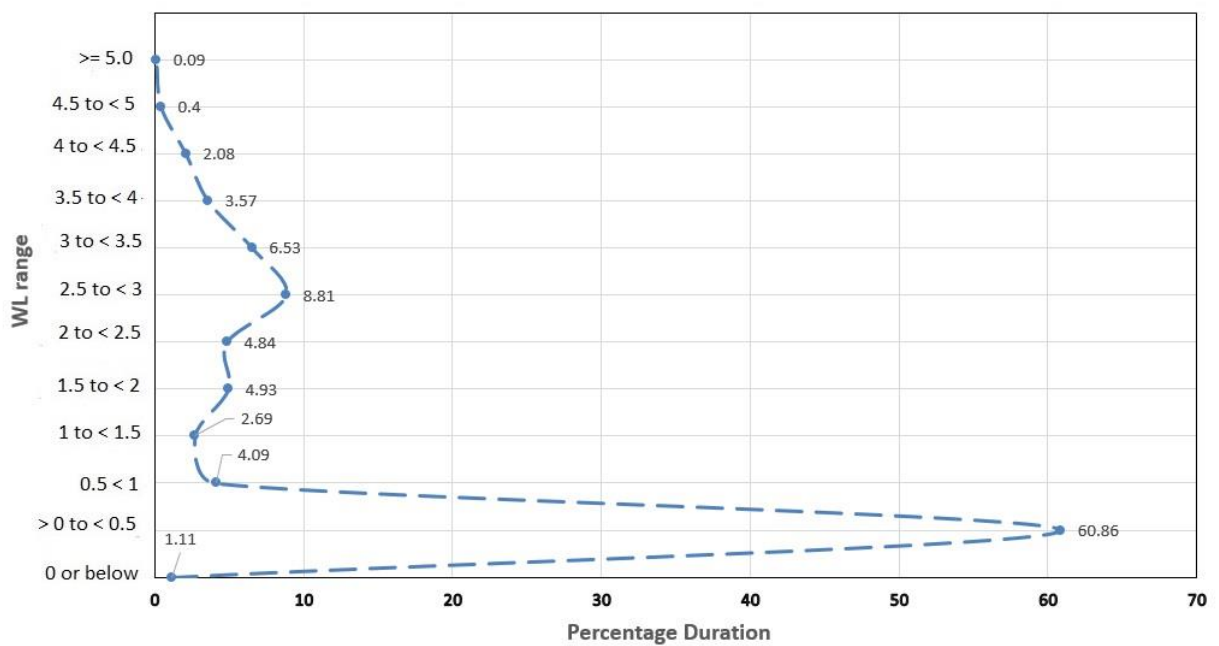


Figure AA-3. Zaragoza WL percent duration curve (2015)

Arayat WL % duration (2015)

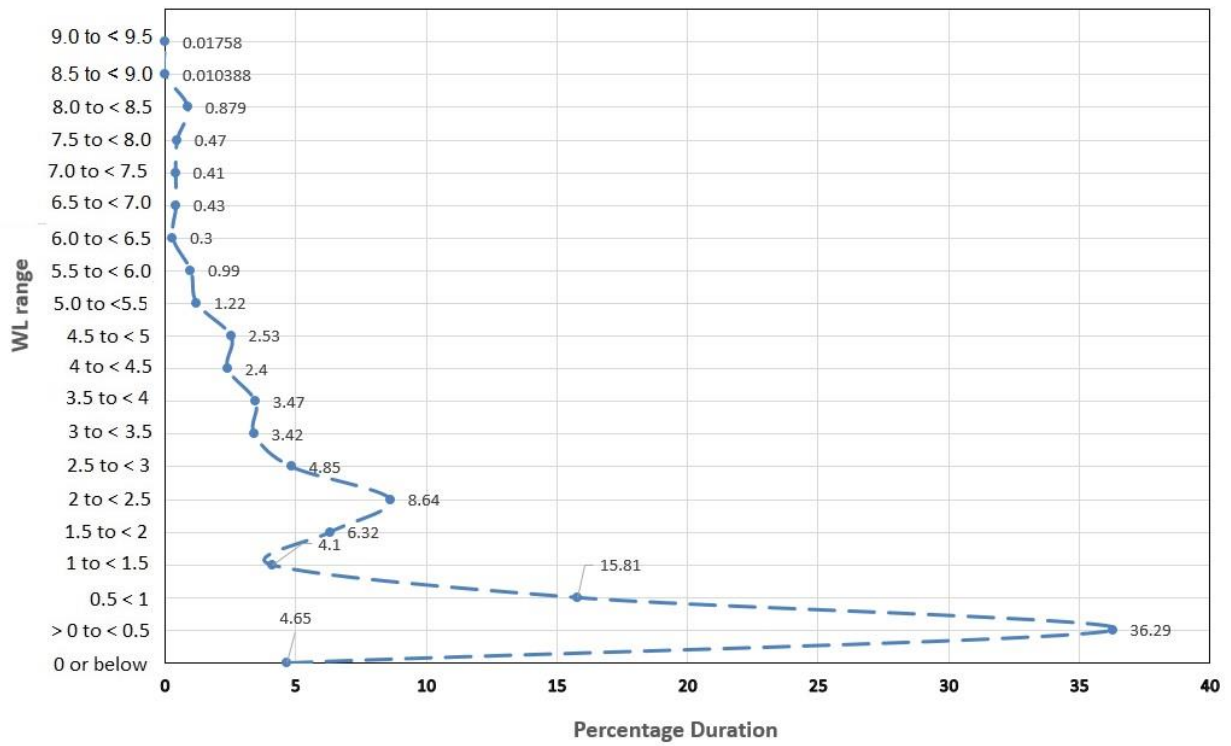


Figure AA-4. Arayat WL percent duration curve (2015)

Candaba WL % duration (2015)

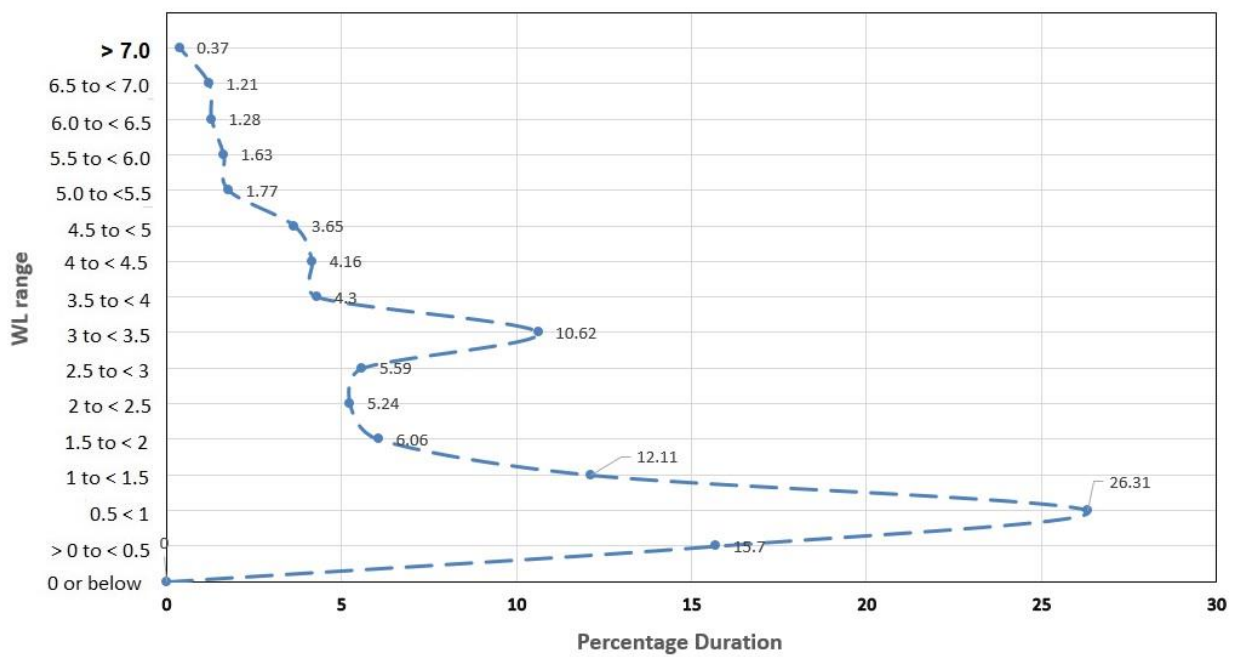


Figure AA-5. Candaba WL percent duration curve (2015)

Sasmuan WL % duration (2015)

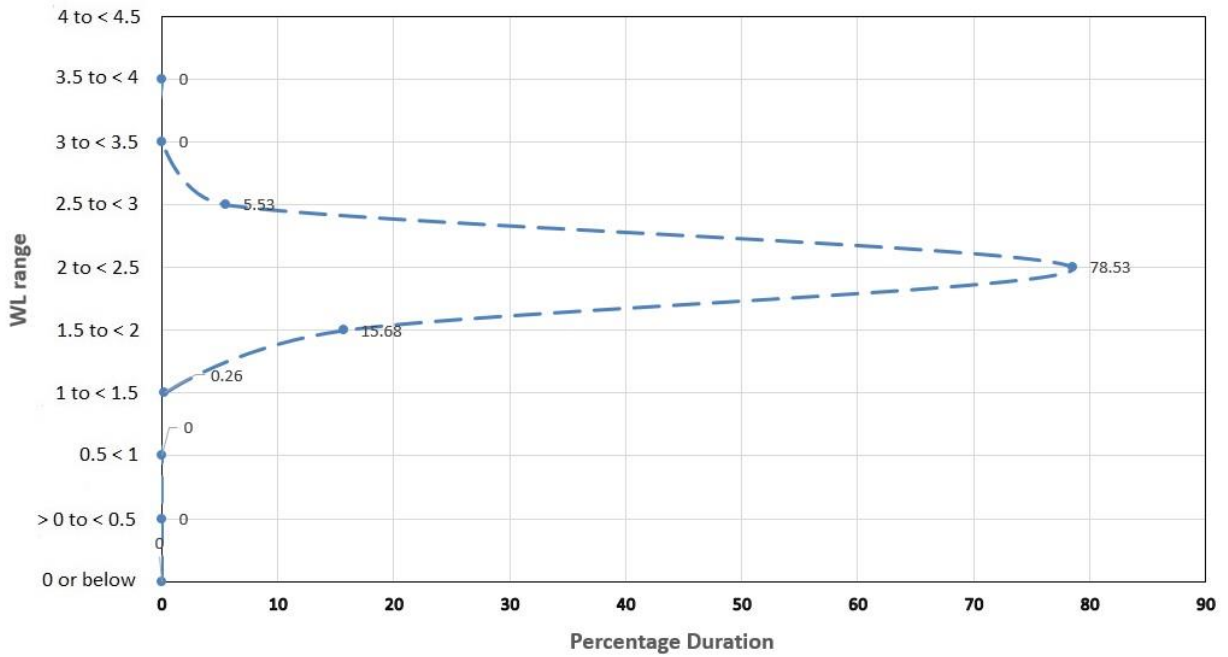


Figure AA-6. Sasmuan WL percent duration curve (2015)

Sulipan WL % duration (2015)

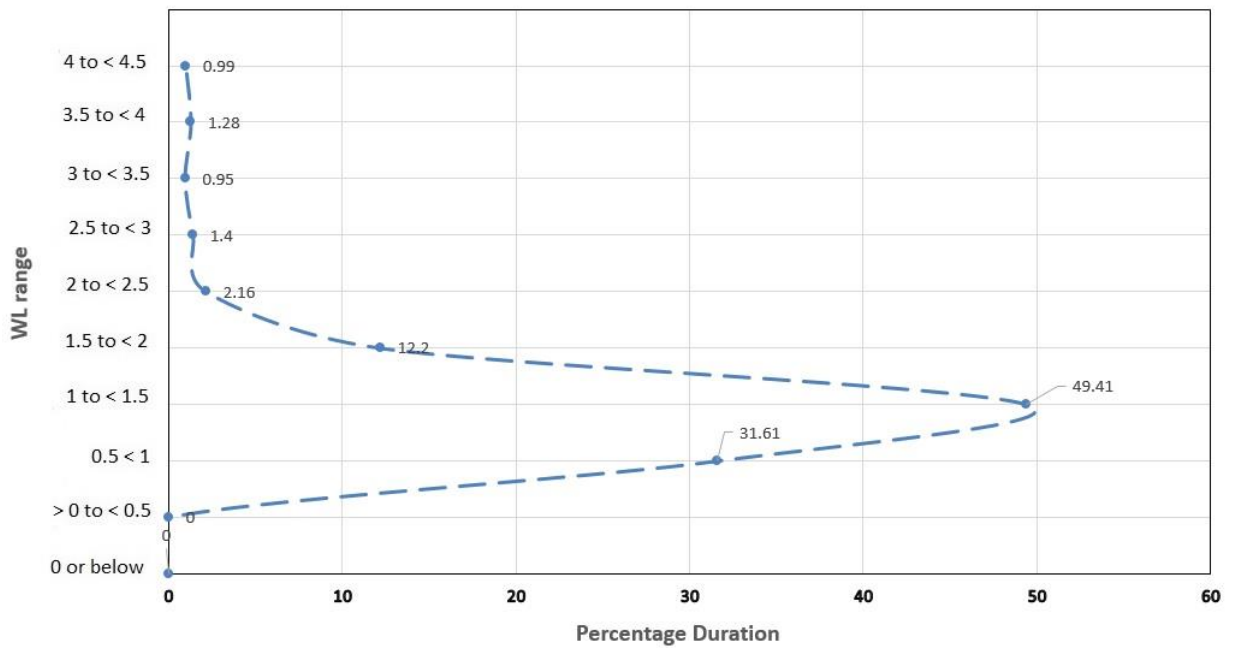


Figure AA-7. Sulipan WL percent duration curve (2015)

Mexico WL % duration (2015)

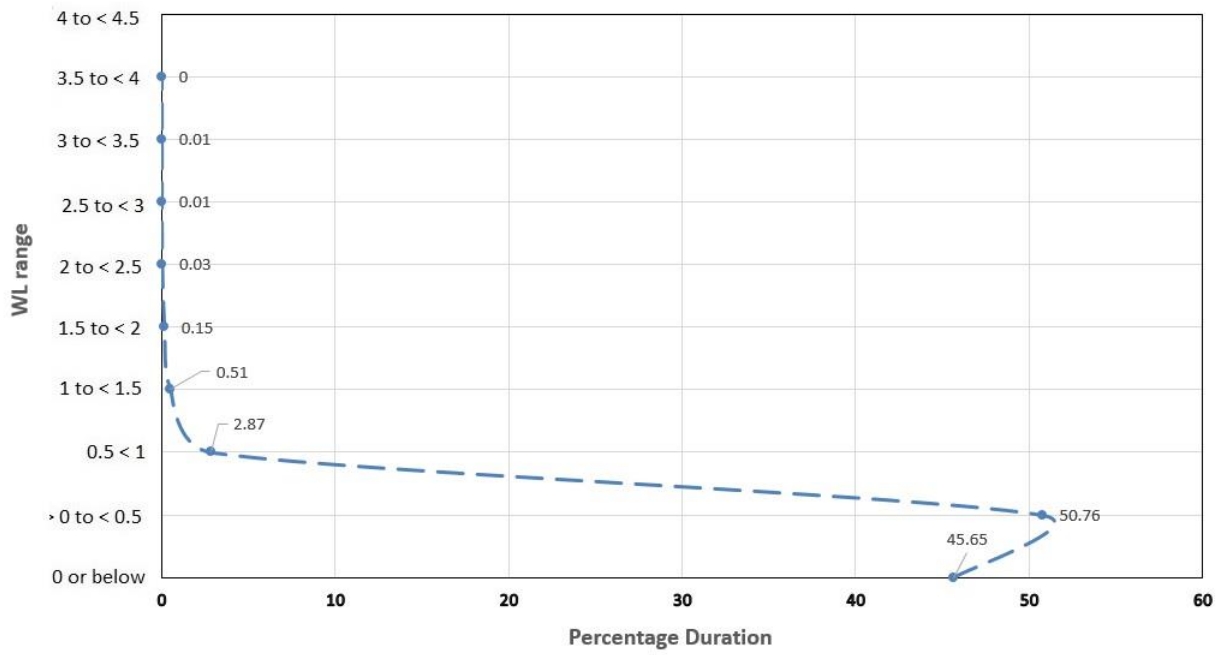


Figure AA-8. Mexico WL percent duration curve (2015)

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



PRFFWC report 2021

PRFFWC Contact details:

Cell phone: (0999) 336 6416

E-mail: prffwc@gmail.com

Facebook: [Prffwc Pagasa](#) (or just search for PRFFWC)

Twitter: [@PRFFWC](#)

Website: www.prffwc.synthasite.com

Back cover: A swollen Pampanga River with the majestic Mt. Arayat in the background, just a day after Ty. Nona affected the PRB. (December 17, 2015)

Photograph: H. Hernando Edited by: M. Josen

