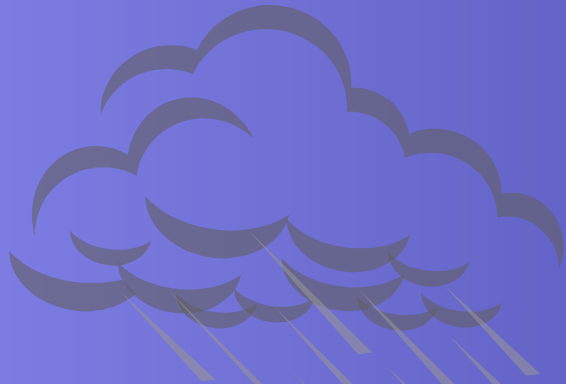




Data Comparison of NASA TRMM and USGS rain gauges

Carlos Rodríguez
Nesmary Hernández
under supervision of
Sandra Cruz-Pol

Data of NOAA

May 21- May 24, 2004

Daily Precipitation (in)

May 21 - 0.33

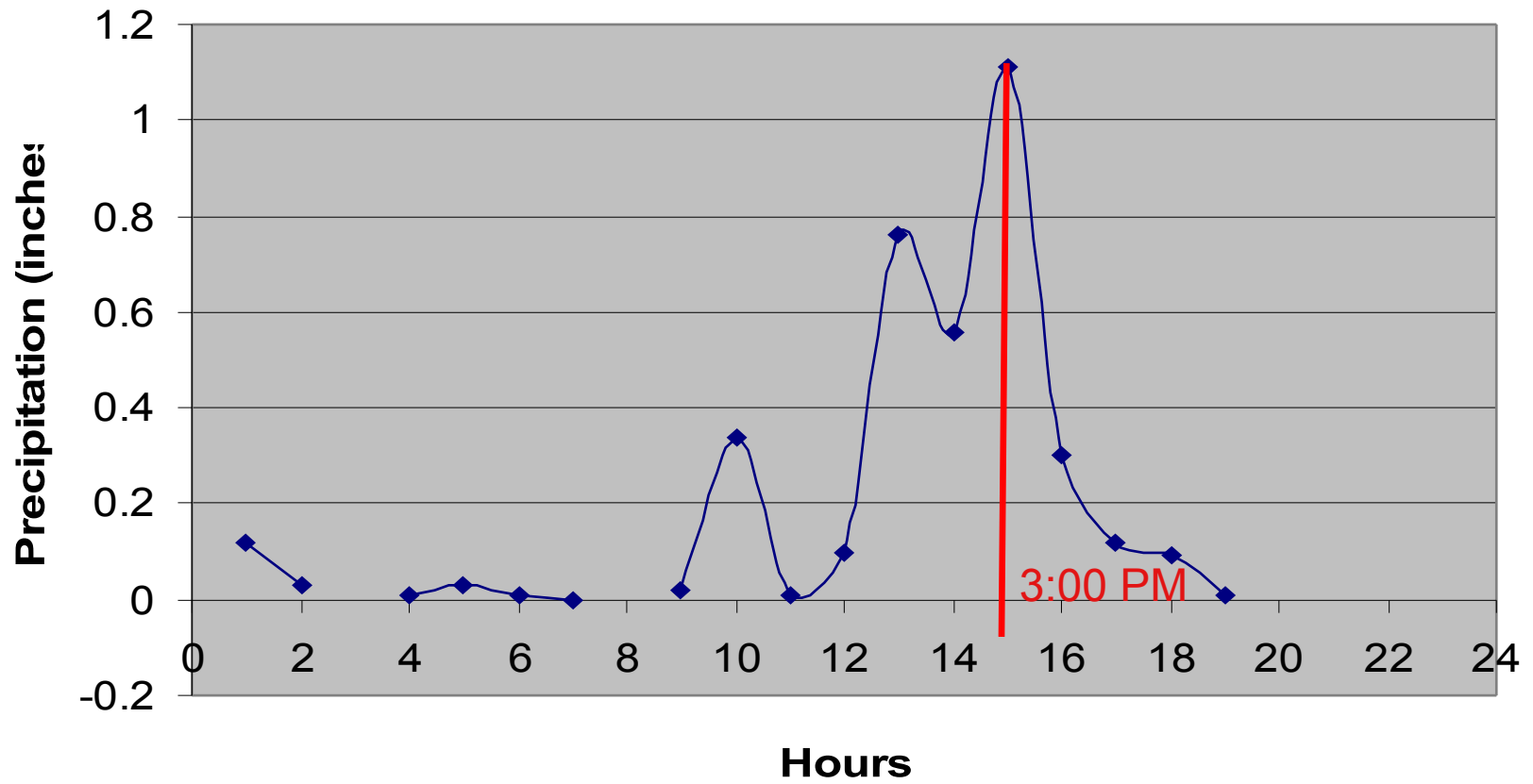
May 22 - 0.16

May 23 - 3.62

May 24 - 0.02

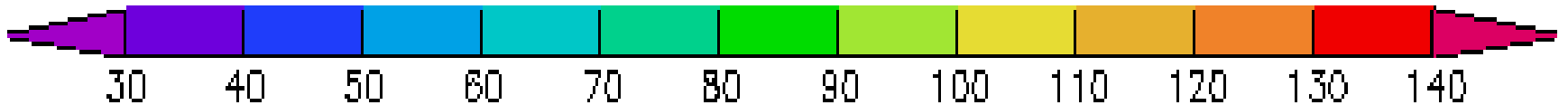
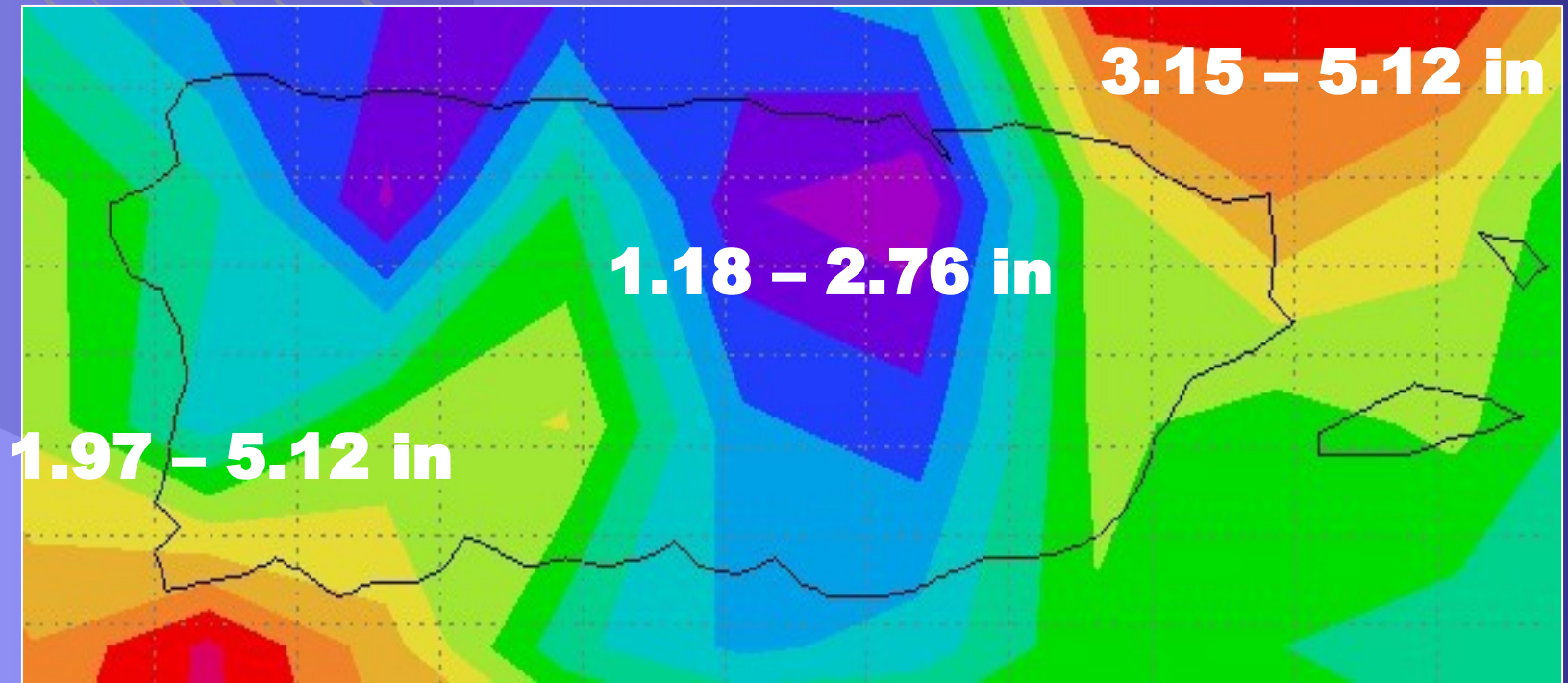
Peak Hour During May 23, 2004

Rain by NOAA



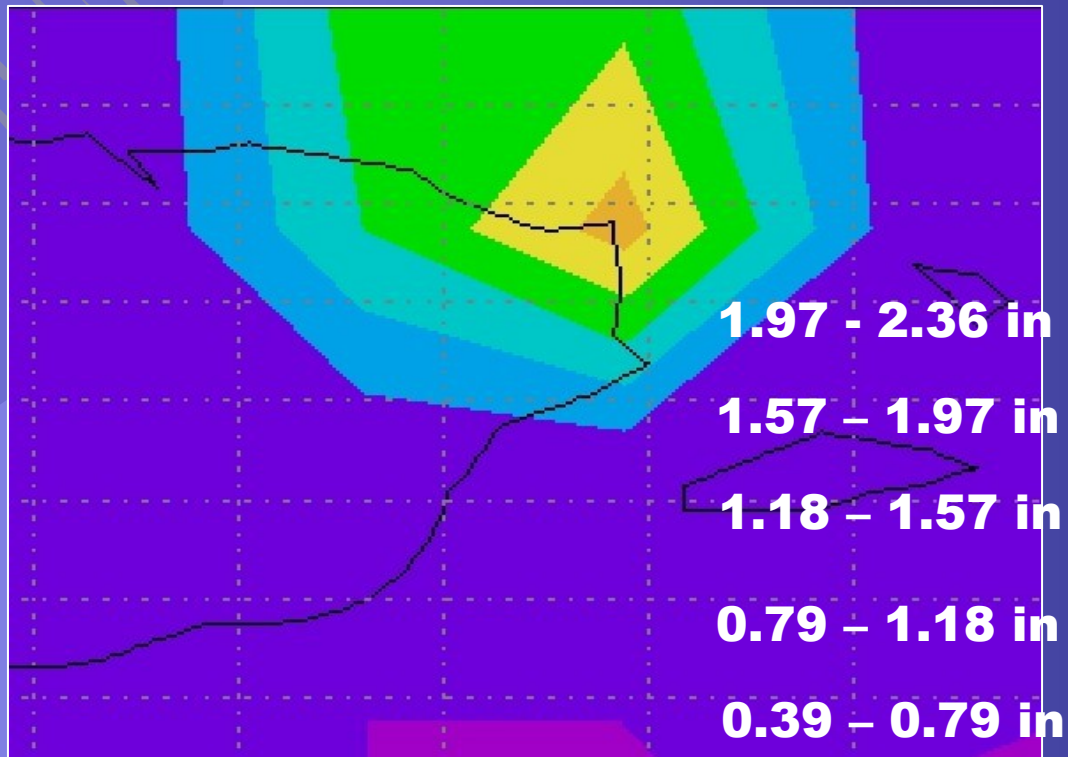
TRMM Accumulated Rainfall

May 21- May 24, 2004



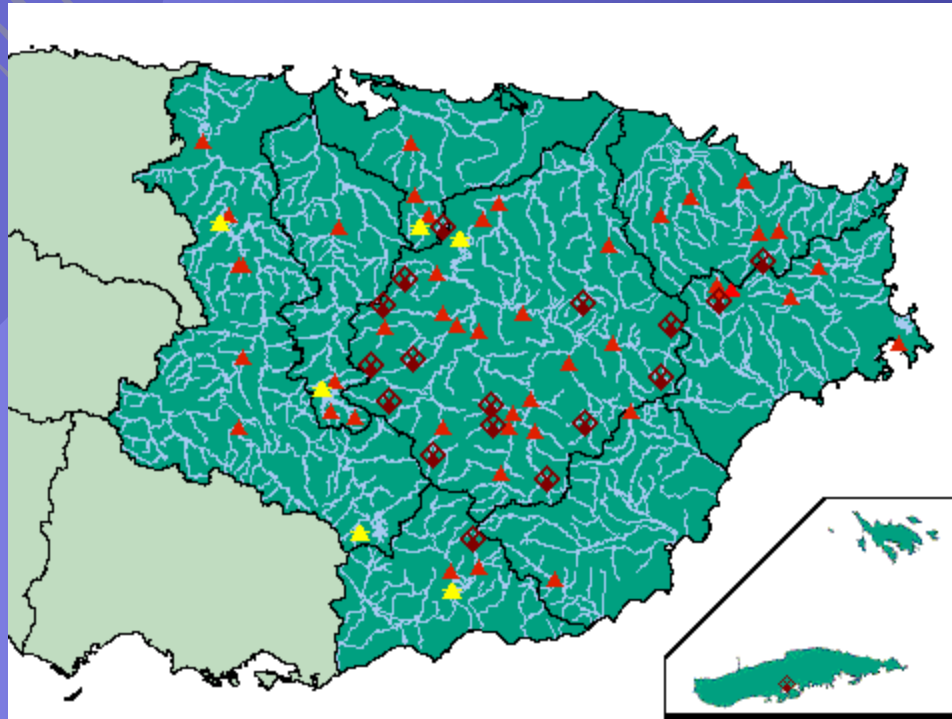
mm

TRMM – Peak Hour 2:00 pm East Area



mm

East Area – USGS Rain gages





TRMM : 1.18 – 1.57 in

USGS : 0.37 in

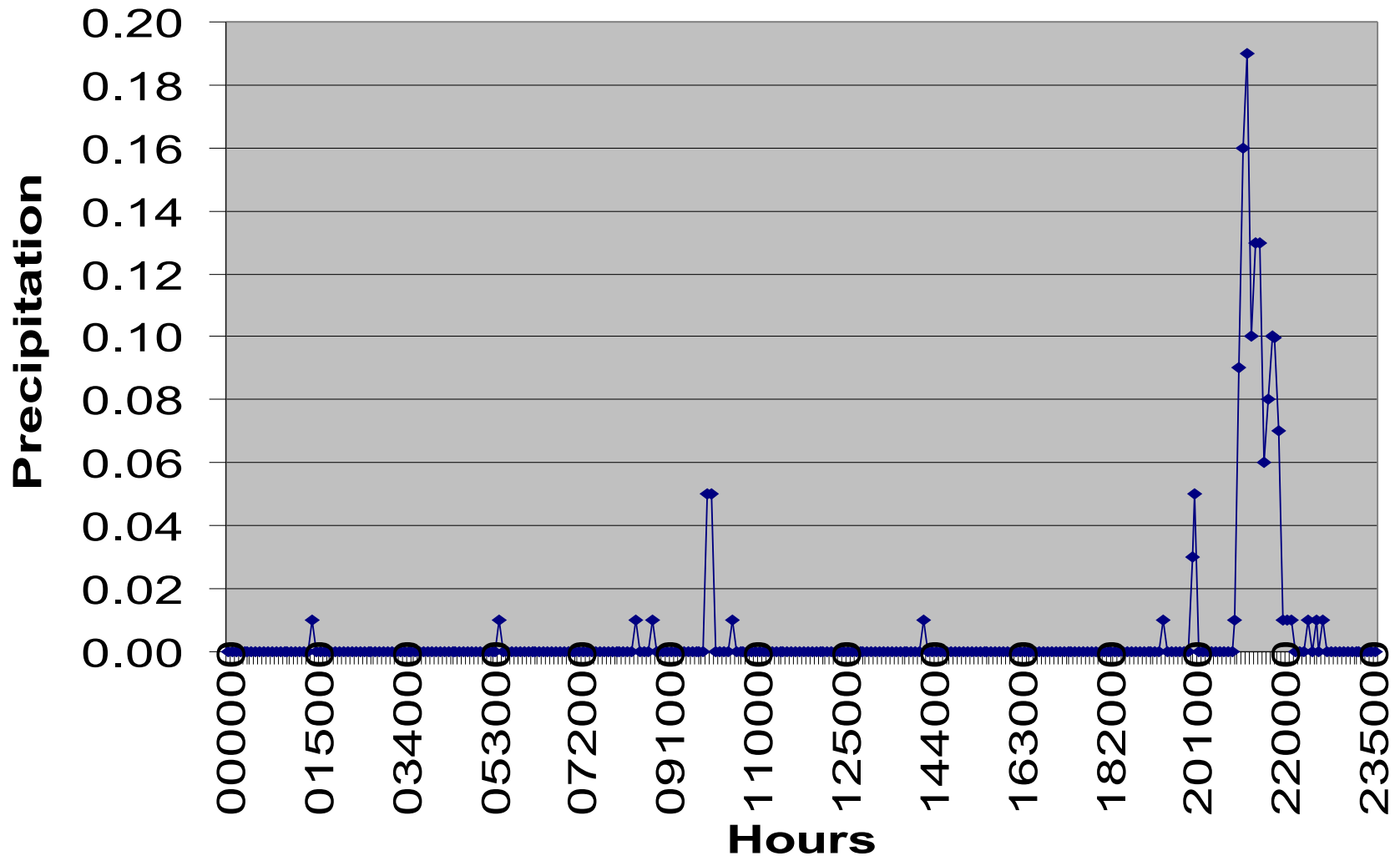
Difference = 115%

Fajardo River, Fajardo

Hours	Precipitation
000000	0.00
000500	0.035
001000	0.00
001500	0.035
002000	0.015
002500	0.005
003000	0.00
003500	0.01
004000	0.00
004500	0.01
005000	0.00
005500	0.035
006000	0.00
006500	0.00
007000	0.045
007500	0.00
008000	0.025
008500	0.00
009000	0.015
009500	0.00
010000	0.035
010500	0.00
011000	0.00
011500	0.00
012000	0.00
012500	0.00
013000	0.00
013500	0.00
014000	0.00
014500	0.00
015000	0.00
015500	0.00
016000	0.00
016500	0.00
017000	0.00
017500	0.00
018000	0.00
018500	0.00
019000	0.00
019500	0.00
020000	0.00
020500	0.00
021000	0.00
021500	0.00
022000	0.00
022500	0.00
023000	0.00
023500	0.00
024000	0.00
024500	0.00
025000	0.00
025500	0.00
026000	0.00
026500	0.00
027000	0.00
027500	0.00
028000	0.00
028500	0.00
029000	0.00
029500	0.00
030000	0.00
030500	0.00
031000	0.00
031500	0.00
032000	0.00
032500	0.00
033000	0.00
033500	0.00
034000	0.00
034500	0.00
035000	0.00
035500	0.00
036000	0.00
036500	0.00
037000	0.00
037500	0.00
038000	0.00
038500	0.00
039000	0.00
039500	0.00
040000	0.00
040500	0.00
041000	0.00
041500	0.00
042000	0.00
042500	0.00
043000	0.00
043500	0.00
044000	0.00
044500	0.00
045000	0.00
045500	0.00
046000	0.00
046500	0.00
047000	0.00
047500	0.00
048000	0.00
048500	0.00
049000	0.00
049500	0.00
050000	0.00
050500	0.00
051000	0.00
051500	0.00
052000	0.00
052500	0.00
053000	0.00
053500	0.00
054000	0.00
054500	0.00
055000	0.00
055500	0.00
056000	0.00
056500	0.00
057000	0.00
057500	0.00
058000	0.00
058500	0.00
059000	0.00
059500	0.00
060000	0.00
060500	0.00
061000	0.00
061500	0.00
062000	0.00
062500	0.00
063000	0.00
063500	0.00
064000	0.00
064500	0.00
065000	0.00
065500	0.00
066000	0.00
066500	0.00
067000	0.00
067500	0.00
068000	0.00
068500	0.00
069000	0.00
069500	0.00
070000	0.00
070500	0.00
071000	0.00
071500	0.00
072000	0.00
072500	0.00
073000	0.00
073500	0.00
074000	0.00
074500	0.00
075000	0.00
075500	0.00
076000	0.00
076500	0.00
077000	0.00
077500	0.00
078000	0.00

USGS: 0.30 in

STORMWATER STATION AT NSRR CEIBA

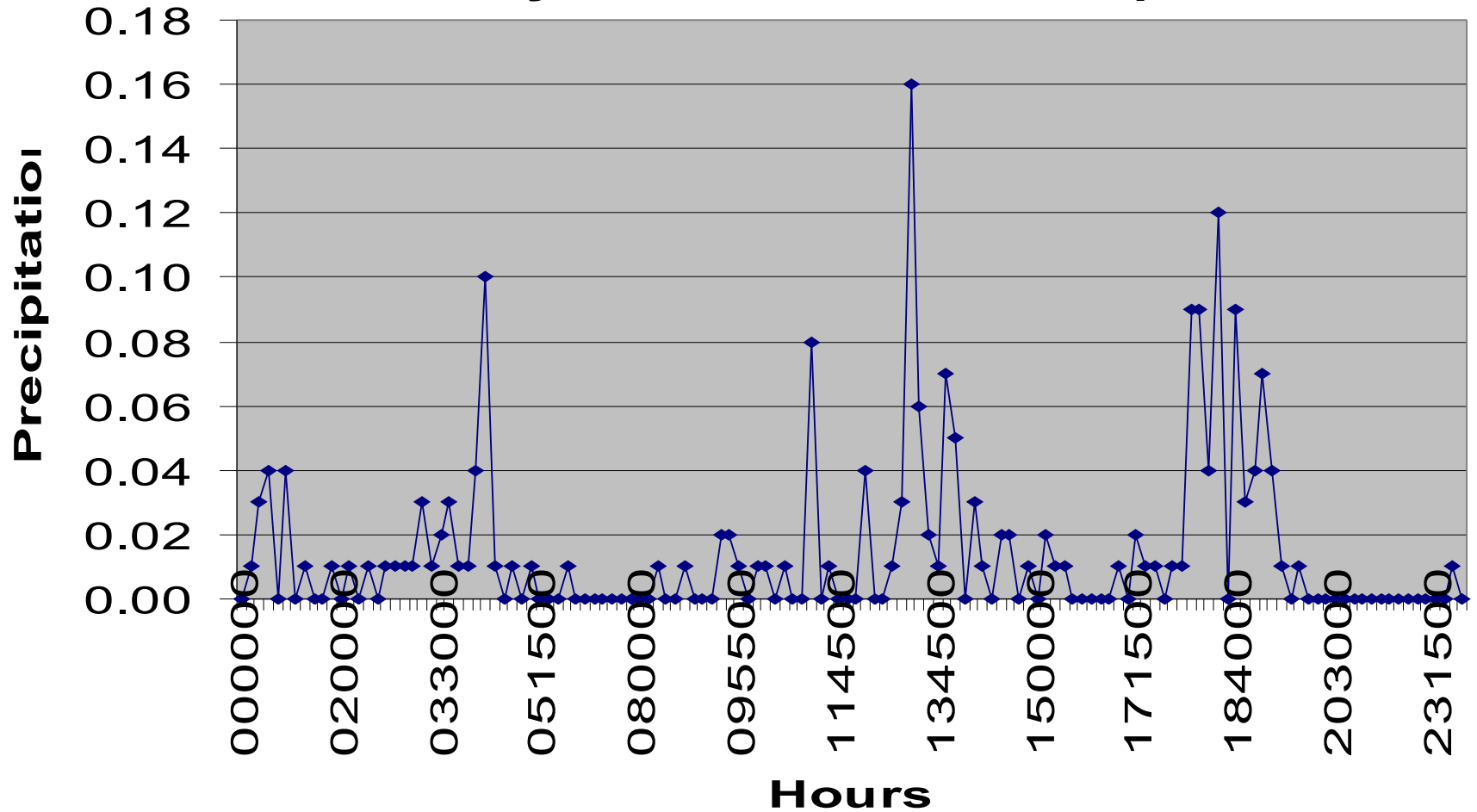


TRMM: 0.79 – 1.18 in

Difference = 195%

USGS: 0.01 in

Mameyes River, Sabanas - Luquillo

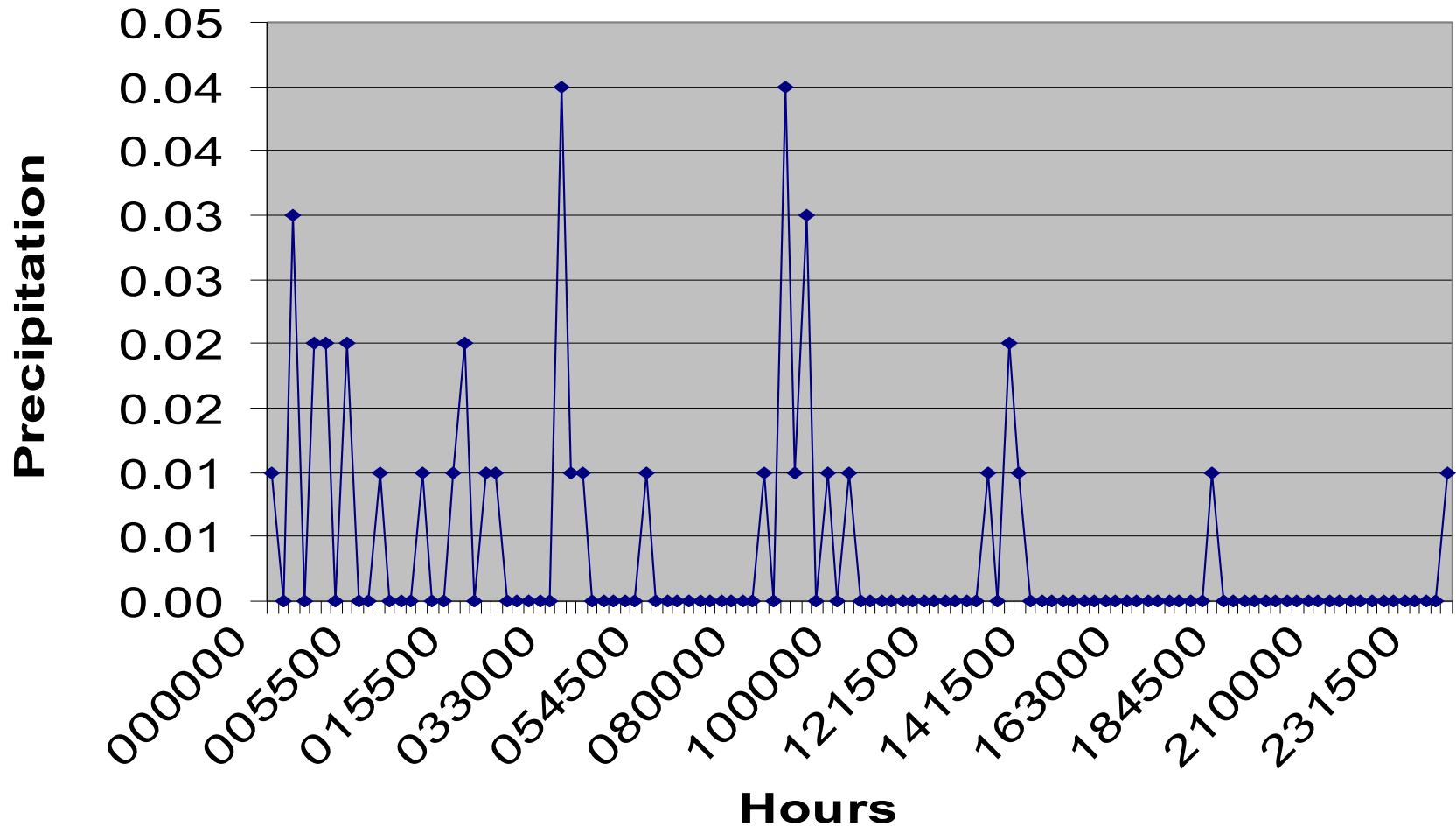


TRMM: 1.57 – 1.97 in

USGS: 0.16 in

Difference = 166%

Icacos River near Naguabo



TRMM: 0.39 – 0.79 in
USGS : 0.02 in

Difference = 186%

The graph displays precipitation data for Río Piedras at Señorial. The x-axis represents time in hours, ranging from 0 to 23,300. The y-axis represents precipitation in inches, ranging from 0.00 to 0.50. The data shows a series of sharp, isolated peaks, indicating intermittent precipitation events. The most significant peak occurs at approximately 14,250 hours, reaching a value of about 0.44 inches. Other notable peaks are observed at approximately 9,150 hours (0.32 inches), 11,500 hours (0.25 inches), and 13,050 hours (0.14 inches). The majority of the time period shows zero precipitation.

Hours	Precipitation (inches)
0	0.00
100	0.07
200	0.02
300	0.01
400	0.01
500	0.01
600	0.01
700	0.01
800	0.01
900	0.01
1000	0.01
1100	0.01
1200	0.01
1300	0.01
1400	0.01
1500	0.01
1600	0.01
1700	0.01
1800	0.01
1900	0.01
2000	0.01
2100	0.01
2200	0.01
2300	0.01
2400	0.01
2500	0.01
2600	0.01
2700	0.01
2800	0.01
2900	0.01
3000	0.01
3100	0.01
3200	0.01
3300	0.01
3400	0.01
3500	0.01
3600	0.01
3700	0.01
3800	0.01
3900	0.01
4000	0.01
4100	0.01
4200	0.01
4300	0.01
4400	0.01
4500	0.01
4600	0.01
4700	0.01
4800	0.01
4900	0.01
5000	0.01
5100	0.01
5200	0.01
5300	0.01
5400	0.01
5500	0.01
5600	0.01
5700	0.01
5800	0.01
5900	0.01
6000	0.01
6100	0.01
6200	0.01
6300	0.01
6400	0.01
6500	0.01
6600	0.01
6700	0.01
6800	0.01
6900	0.01
7000	0.01
7100	0.01
7200	0.01
7300	0.01
7400	0.01
7500	0.01
7600	0.01
7700	0.01
7800	0.01
7900	0.01
8000	0.01
8100	0.01
8200	0.01
8300	0.01
8400	0.01
8500	0.01
8600	0.01
8700	0.01
8800	0.01
8900	0.01
9000	0.01
9100	0.01
9200	0.01
9300	0.01
9400	0.01
9500	0.01
9600	0.01
9700	0.01
9800	0.01
9900	0.01
10000	0.01
10100	0.01
10200	0.01
10300	0.01
10400	0.01
10500	0.01
10600	0.01
10700	0.01
10800	0.01
10900	0.01
11000	0.01
11100	0.01
11200	0.01
11300	0.01
11400	0.01
11500	0.01
11600	0.01
11700	0.01
11800	0.01
11900	0.01
12000	0.01
12100	0.01
12200	0.01
12300	0.01
12400	0.01
12500	0.01
12600	0.01
12700	0.01
12800	0.01
12900	0.01
13000	0.01
13100	0.01
13200	0.01
13300	0.01
13400	0.01
13500	0.01
13600	0.01
13700	0.01
13800	0.01
13900	0.01
14000	0.01
14100	0.01
14200	0.01
14300	0.01
14400	0.01
14500	0.01
14600	0.01
14700	0.01
14800	0.01
14900	0.01
15000	0.01
15100	0.01
15200	0.01
15300	0.01
15400	0.01
15500	0.01
15600	0.01
15700	0.01
15800	0.01
15900	0.01
16000	0.01
16100	0.01
16200	0.01
16300	0.01
16400	0.01
16500	0.01
16600	0.01
16700	0.01
16800	0.01
16900	0.01
17000	0.01

USGS: 0.43 in



TRMM: 0.79 – 1.18 in

USGS: 1.55 in

Difference = 44%



