Mekong River Commission

Regional Flood Management and Mitigation Centre

Weekly Flood Situation Report for the Mekong River Basin

Prepared on: Monday, 10/08/2009, covering the week from 3rd August to 10th August 2009

Weather Patterns, General Behavior of the Mekong River and Flood Situation

General weather patterns

During the week of Monday 3rd – Monday 10th August 2009, seven weather bulletins have been issued by the Department of Meteorology (DOM) of Cambodia. The weather chart of the August 10th bulletins is presented in the figure below.

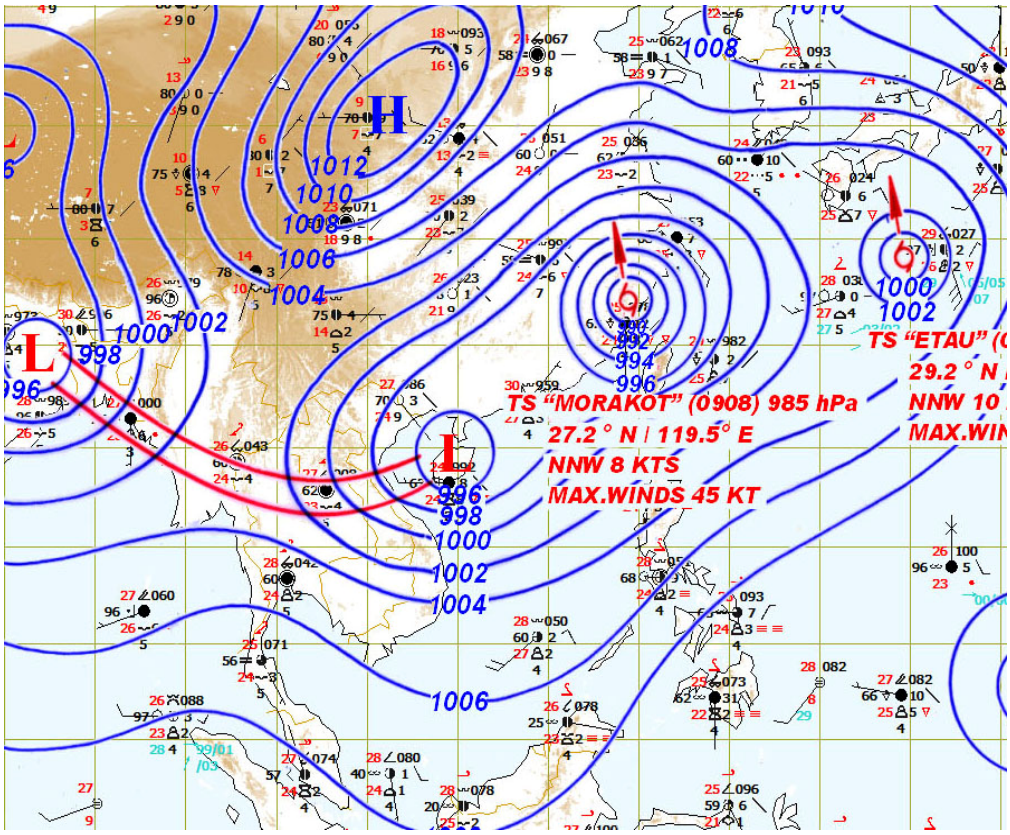


Figure 1: Weather map for 9th August 2009

Critical South-West (SW) Monsoon

During 3rd – August 10th, 2009, the critical SW monsoon prevailed (Figure 1).

ITCZ (Inter Tropical Convergence Zone)

The ITCZ lay across Myanmar, Thailand, Northern Lao PDR and Northern Viet Nam.

Tropical depressions (TD), tropical storms (TS) or typhoons

The TD ***GONI*** located over South China Sea, next to Viet Nam and the TD ***GONI*** trough lies across Viet Nam, Lao PDR, Cambodia and Viet Nam.

The Tropical Storm (TS) "***MORAKOT***" (0908), with central pressure 985 hPa, has been moving NNW, with its speed of 15 km/h, maximum wind speed in the central of TS is 83 km/h, is almost stationary and downgrade on August 10, 2009.

Another Tropical Storm (TS) "***ETAU***" (0909), with central pressure 994 hPa, is located over Japanese Sea, has been moving NNW, with its speed of 19 km/h, maximum wind speed in the central of TS is 65 km/h.

Other weather phenomena that affect the discharge

No other weather phenomena affecting the discharge were observed.

Overall weather situation

Critical SW Monsoon lasted from 3rd to 10th August 2009. There were scattered thunderstorm and heavy rains in Thailand, Lao PDR, Cambodia and Northern Viet Nam.

General behavior of the Mekong River

- There is some inconsistency of water levels along the Mekong River. While water levels in the upper reach of Lower Mekong River are slightly below the long-term average, water levels in the middle reach are about average and in the lower reach water levels are above the long-term average. Water levels at Tan Chau and Chau Doc are rising up towards the alarm levels (as defined by national agency) which are a common situation for this time of the year.

For stations from Chiang Saen to Vientiane/Nong Khai

Water levels were more or less stable till the mid of the week and then rose up towards the end of the week. Most are somewhat slightly below the long-term average for this time of the year.

For stations from Paksane to Pakse

Water levels were dropped till the mid of the week and then rose up towards the end of the week. Most are somewhat moving around the long-term average for this time of the year.

For stations from Stung Treng to Phnom Penh

Water levels were more or less stable, with a falling trend towards the end of the week. Most are somewhat above the long-term average for this time of the year.

Downstream of Phnom Penh

Water levels were more or less stable, with a rising trend towards the end of the week. Most are somewhat above the long-term average for this time of the year except at Tan Chau and Chau Doc where the water levels are at the long-term average for this time of the year. At Tan Chau water level is moving towards the alarm level, which has bee defined by the national agency.

Note: For areas between forecast stations please refer to the nearest station.

Flood Situation

- Flood stage or alarm stage:

No alarm stage (where the forecast is expected to reach flood level within three days) was reported anywhere in the Mekong River Basin during the past week. Water levels at some stations in the Cambodian floodplains and delta are just 1-2 metres below the flood levels.

- Damage or victims:

No damage and no loss of life due to river flooding was recorded anywhere in the Mekong River Basin during the past week

For more details see the following annex:

- tables and graphs for water level and rainfall for the last week in Annex A
- a graph for accuracy in Annex B
- a table of forecast achievement in Annex B
- tables and graphs for performance in Annex B
- the water level graphs showing the observed water level for the season in Annex C

Annex A: Graphs and Tables

Table A1: observed water levels

unit in m

2009	Jinghong	Chiang Saen	Luang Prabang	Chiang Khan	Vientiane	Nongkhai	Paksane	Nakhon Phanom	Thakhek	Mukdahan	Savannakhet	Khong Chiam	Pakse	Stung Treng	Kratie	Kompong Cham	Phnom Penh (Bassac)	Phnom Penh Port	Koh Khel	Neak Luong	Prek Kdam	Tan Chau	Chau Doc
03/08	537.08	4.92	9.05	8.69	5.20	6.12	9.36	9.45	10.54	9.42	8.65	11.44	9.71	9.55	19.54	13.34	8.02	7.06	6.75	5.61	6.76	2.66	2.04
04/08	538.09	4.53	9.18	8.89	5.44	6.38	9.10	9.18	10.27	9.23	8.45	11.41	9.61	9.88	20.07	13.70	8.20	7.24	6.87	5.75	6.91	2.71	2.05
05/08	537.47	4.83	9.15	8.84	5.61	6.60	9.00	8.86	9.93	8.90	8.10	10.99	9.26	9.94	20.44	14.00	8.39	7.42	6.98	5.88	7.05	2.79	2.12
06/08	539.21	5.12	9.00	8.90	5.63	6.58	8.96	8.55	9.64	8.54	7.65	10.48	8.78	9.60	20.45	14.16	8.53	7.55	7.06	5.98	7.18	2.85	2.13
07/08	539.28	6.18	9.70	8.73	5.68	6.62	8.77	8.22	9.30	8.16	7.25	10.00	8.46	8.95	20.07	14.20	8.61	7.63	7.09	6.05	7.27	2.90	2.14
08/08	539.60	6.93	11.10	8.75	5.53	6.46	8.76	8.19	9.28	7.89	6.98	9.52	8.02	8.74	19.67	14.04	8.59	7.61	7.07	6.06	7.29	2.91	2.14
09/08	537.92	6.76	11.87	9.98	5.80	6.54	9.02	8.50	9.61	8.17	7.25	9.31	7.74	8.49	19.36	13.86	8.55	7.57	7.02	6.04	7.31	2.90	2.15
10/08	537.45	6.37	12.34	10.66	7.23	7.78	9.47	9.12	10.22	8.76	7.89	9.71	7.96	8.28	19.03	13.67	8.51	7.52	6.97	6.02	7.32	2.91	2.17
Flood level		11.80	18.00	17.40	12.50	12.20	14.50	12.70	14.00	12.60	13.00	16.20	12.00	12.00	23.00	16.20	12.00	11.00	7.90	8.00	10.00	4.20	3.50

Table A2: observed rainfall

Unit in mm

2009	Jinghong	Chiang Saen	Luang Prabang	Chiang Khan	Vientiane	Nongkhai	Paksane	Nakhon Phanom	Thakhek	Mukdahan	Savannakhet	Khong Chiam	Pakse	Stung Treng	Kratie	Kompong Cham	Phnom Penh (Bassac)	Phnom Penh Port	Koh Khel	Neak Luong	Prek Kdam	Tan Chau	Chau Doc
03/08	3.2	0.5	1.4	0.0	0.0	0.0	39.0	0.0	0.0	0.0	0.0	5.5	11.3	0.0	4.4	0.0	0.3	0.0	0.9	0.0	5.3	0.0	1.0
04/08	0.0	0.0	0.0	0.0	14.2	3.6	6.1	12.5	18.4	0.0	0.0	6.7	10.0	0.0	14.8	4.4	0.0	0.0	0.5	0.0	0.0	0.0	7.0
05/08	5.7	2.7	0.0	0.0	0.0	0.0	0.0	0.1	0.0	2.5	0.8	10.3	39.8	0.0	4.4	0.3	0.0	0.0	2.7	0.6	6.3	3.0	0.5
06/08	77.7	2.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.0	1.0	2.5	0.0	0.3	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
07/08	1.4	216.0	24.4	0.0	0.0	1.1	23.5	30.0	32.8	0.0	1.2	24.7	11.7	0.0	15.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
08/08	8.6	30.4	0.0	2.9	0.0	22.2	0.0	91.4	88.1	4.8	5.3	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
09/08	0.0	0.0	0.0	0.0	8.2	3.5	18.5	21.7	23.1	23.0	23.6	11.8	6.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	3.0	0.4
10/08	0.0	0.0	0.0	0.0	0.0	0.4	1.3	52.8	228.0	19.3	19.2	3.2	0.0	0.0	22.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	2.0

Figure A1: Water level and rainfall for Jinghong, Chiang Saen, and Luang Prabang

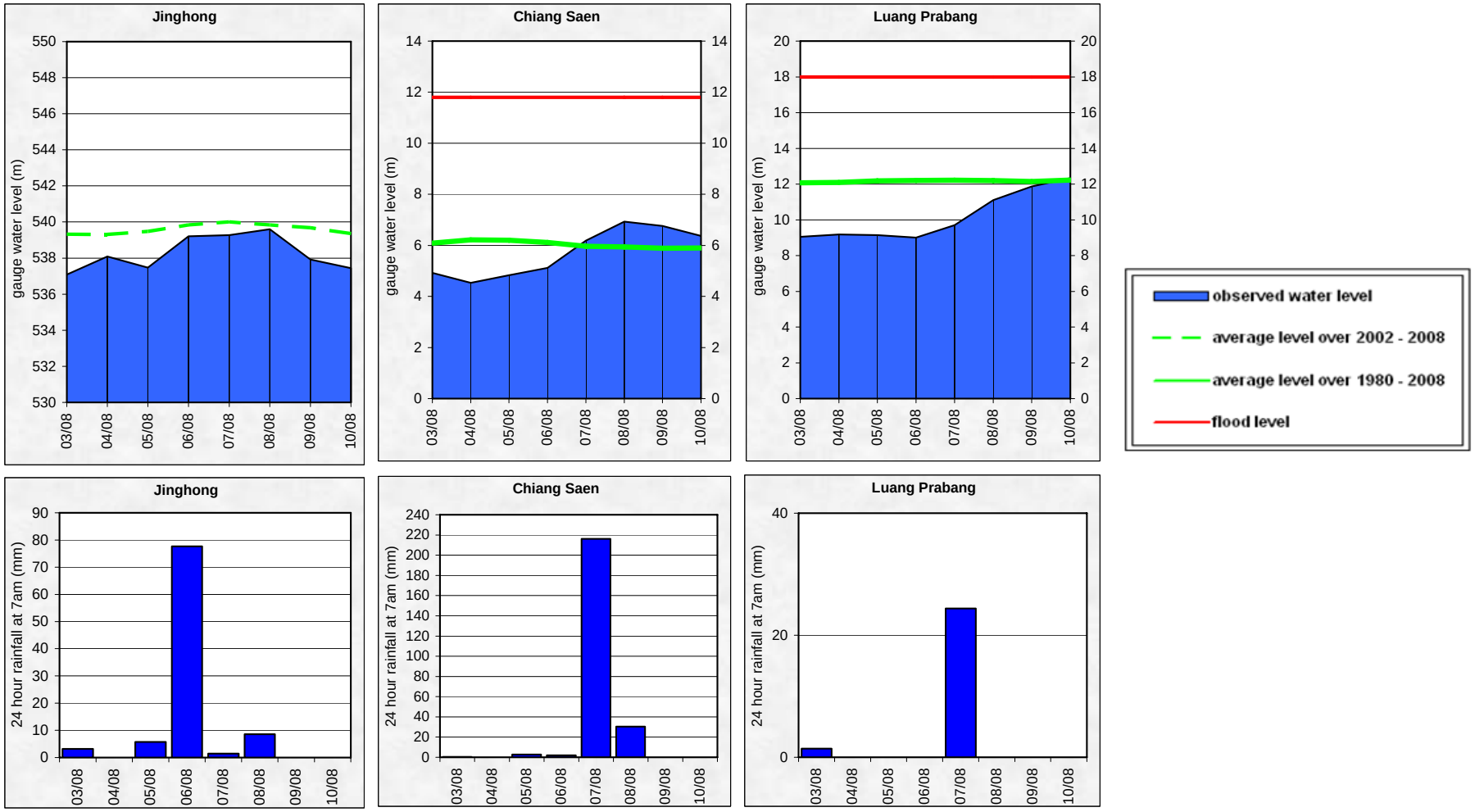

Jinghong
gauge water level (m)
550
548
546
544
542
540
538
536
534
532
530
03/08
04/08
05/08
06/08
07/08
08/08
09/08
10/08
Chiang Saen
gauge water level (m)
14
12
10
8
6
4
2
0
Luang Prabang
gauge water level (m)
20
18
16
14
12
10
8
6
4
2
0
observed water level
average level over 2002 - 2008
average level over 1980 - 2008
flood level
Jinghong
24 hour rainfall at 7am (mm)
90
80
70
60
50
40
30
20
10
0
Chiang Saen
24 hour rainfall at 7am (mm)
240
220
200
180
160
140
120
100
80
60
40
20
0
Luang Prabang
24 hour rainfall at 7am (mm)
40
20
0

Figure A2: Water level and rainfall for Chiang Khan, Vientiane, Nongkhai, and Paksane

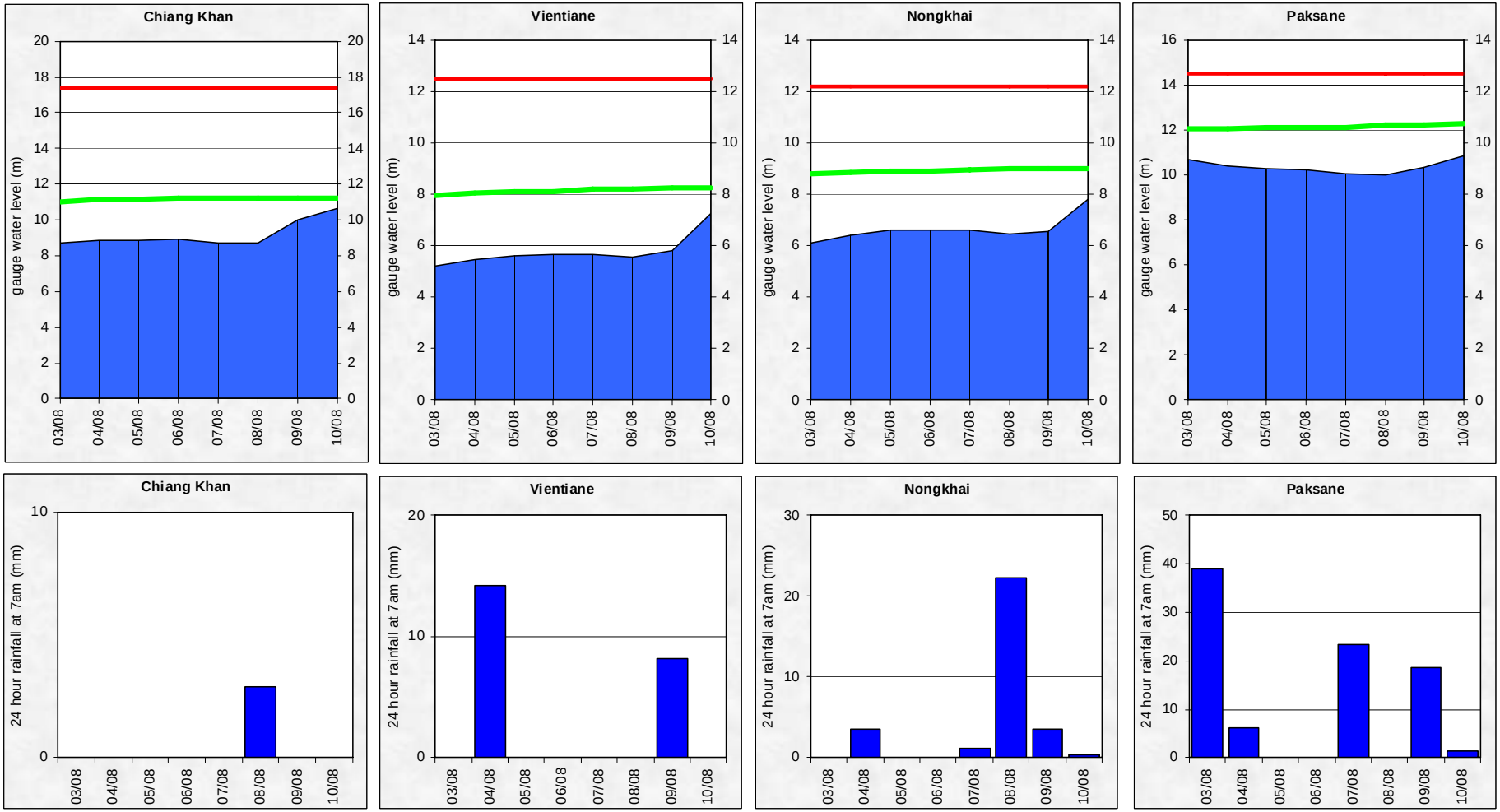


Figure A3: Water level and rainfall for Nakhon Phanom, Thakhek, Mukdahan and Savannakhet

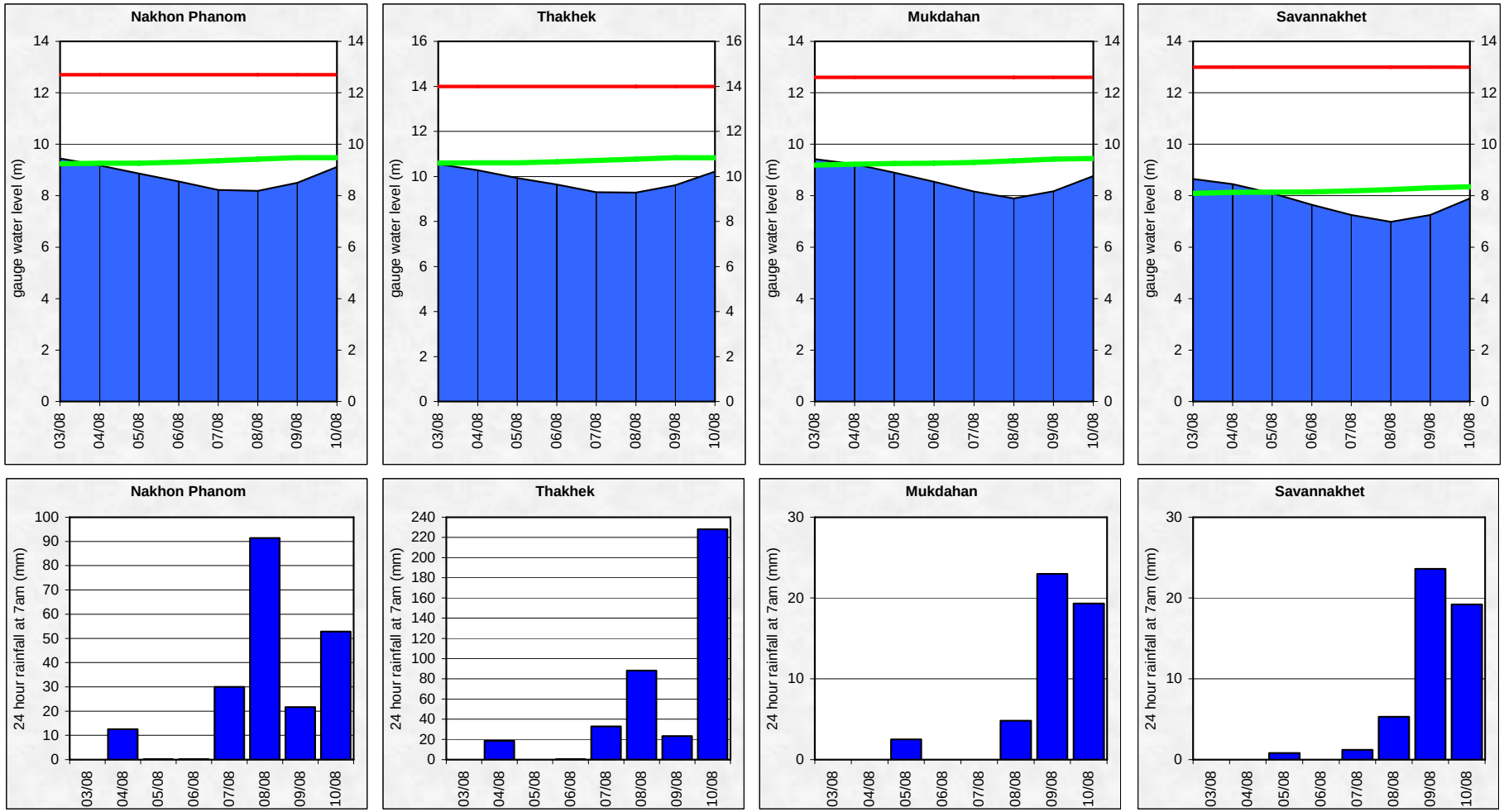


Figure A4: Water level and rainfall for Khong Chiam, Pakse, Stung Treng, and Kratie

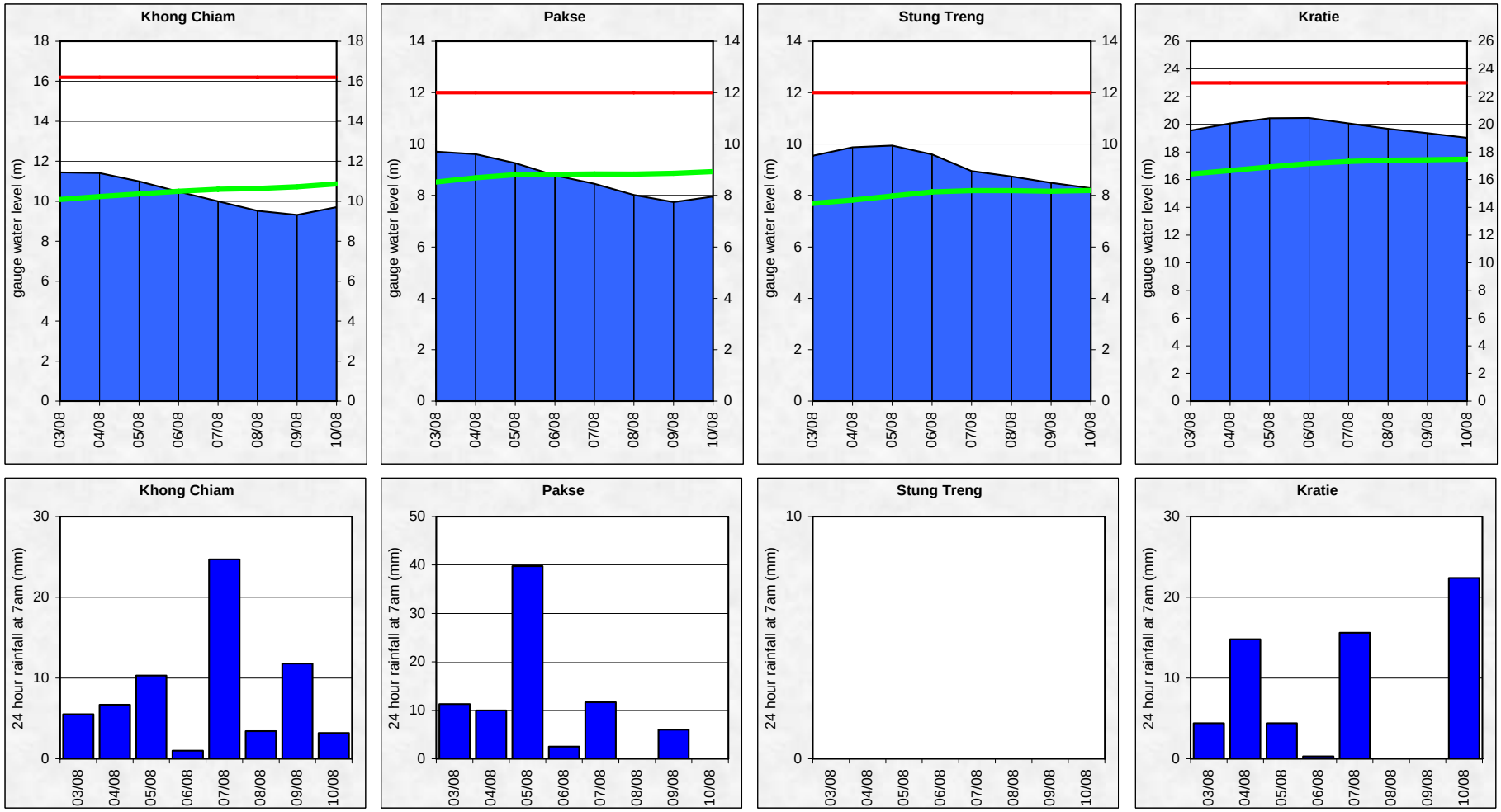


Figure A5: Water level and rainfall for Kampong Cham, Phnom Penh (Bassac and Port), and Koh Khel

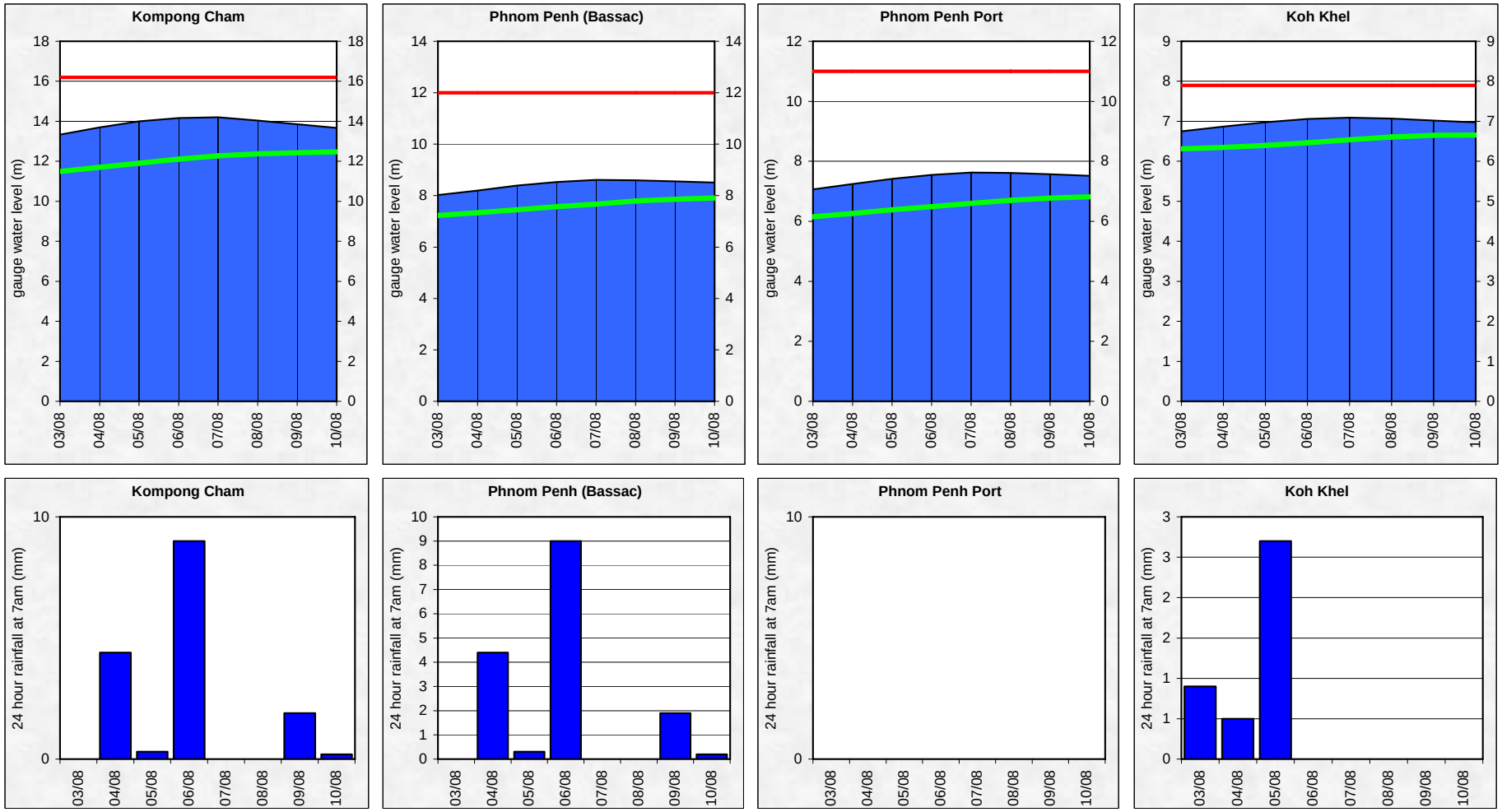
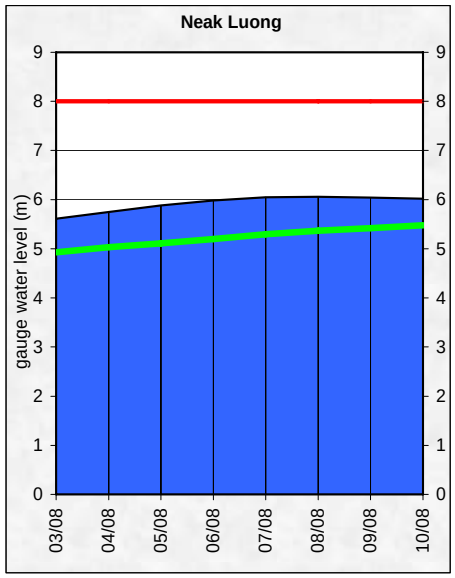
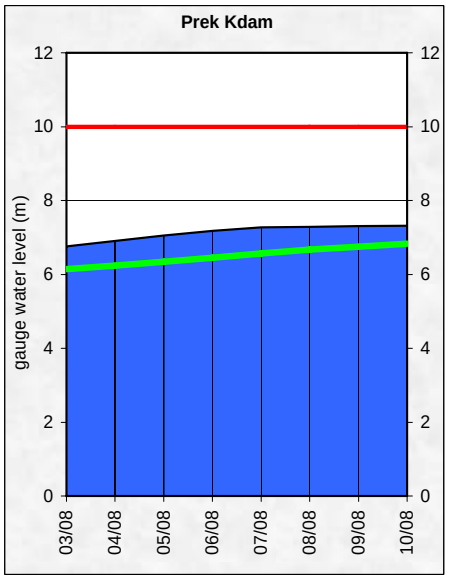
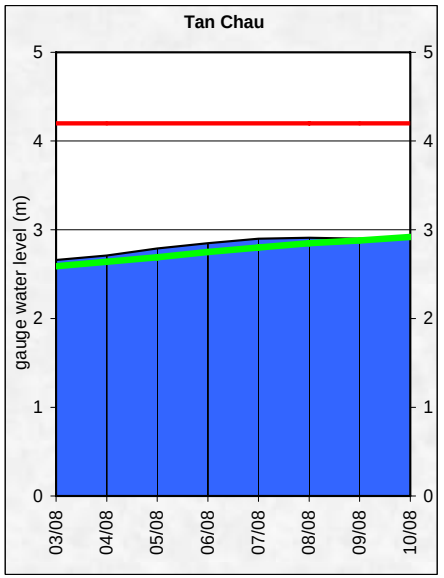
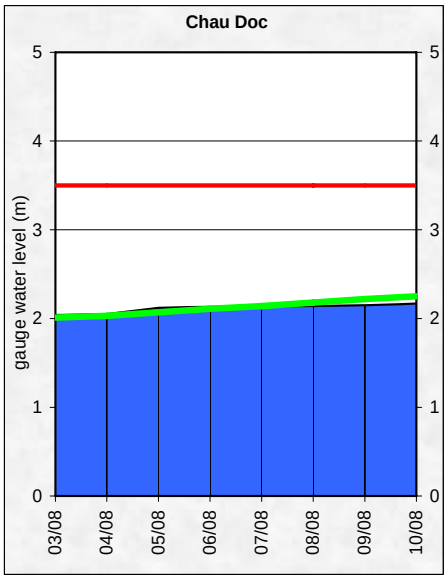


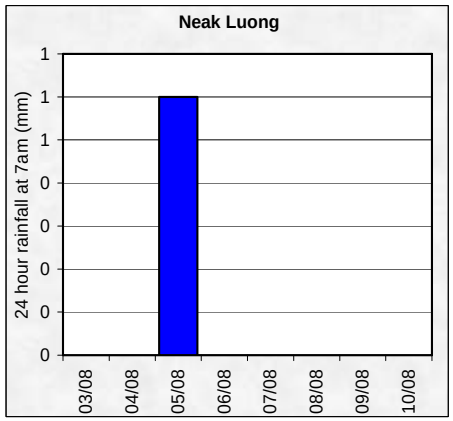
Figure A6: Water level and rainfall for Neak Luong, Prek Kdam, Tan Chau and Chau Doc

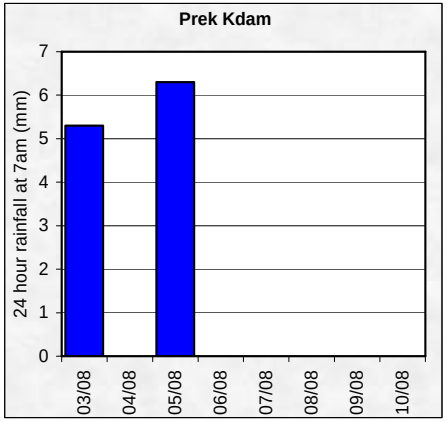

Neak Luong
gauge water level (m)
0 1 2 3 4 5 6 7 8 9
03/08 04/08 05/08 06/08 07/08 08/08 09/08 10/08

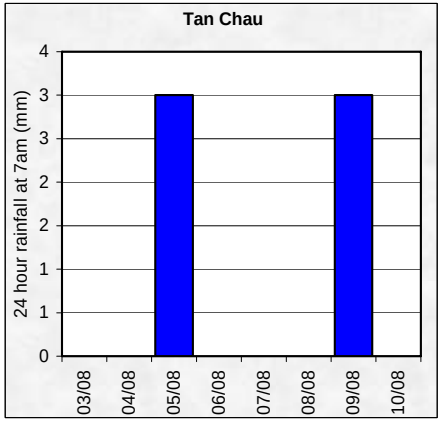

Prek Kdam
gauge water level (m)
0 2 4 6 8 10 12
03/08 04/08 05/08 06/08 07/08 08/08 09/08 10/08

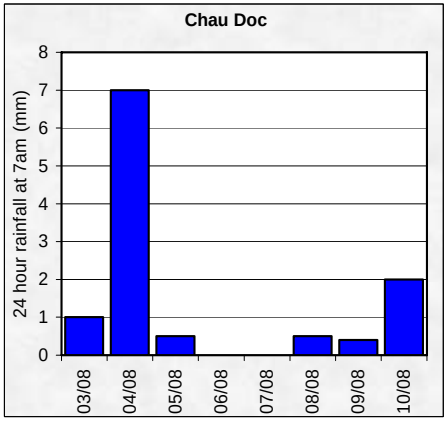

Tan Chau
gauge water level (m)
0 1 2 3 4 5
03/08 04/08 05/08 06/08 07/08 08/08 09/08 10/08


Chau Doc
gauge water level (m)
0 1 2 3 4 5
03/08 04/08 05/08 06/08 07/08 08/08 09/08 10/08


Neak Luong
24 hour rainfall at 7am (mm)
0 1
03/08 04/08 05/08 06/08 07/08 08/08 09/08 10/08


Prek Kdam
24 hour rainfall at 7am (mm)
0 1 2 3 4 5 6 7
03/08 04/08 05/08 06/08 07/08 08/08 09/08 10/08


Tan Chau
24 hour rainfall at 7am (mm)
0 1 2 3 4
03/08 04/08 05/08 06/08 07/08 08/08 09/08 10/08


Chau Doc
24 hour rainfall at 7am (mm)
0 1 2 3 4 5 6 7 8
03/08 04/08 05/08 06/08 07/08 08/08 09/08 10/08

Annex B: Accuracy and performance

Accuracy

"Accuracy" describes the accuracy of the adjusted and published forecast, based on the results of the MRC Mekong Flood Forecasting System, which are then adjusted by the Flood Forecaster in Charge taking into consideration known biases in input data and his/her knowledge of the response of the model system and the hydrology of the Mekong River Basin. The information is presented as a graph below, showing the average flood forecasting accuracy along the Mekong mainstream.

The graph of average difference between forecast and actual levels for the past week generally shows the normal pattern. In general the accuracy is fairly good for 1-day to 2-day forecasts; however the errors for 4-day and 5-day forecasts between Mukdahan and Kratie are quite high which are unusual. This again cautions the forecasting team for more careful adjustment. The other cause is probably due to the incorrect water level data for Paksane station sent by the DMH of Lao PDR for a period from 5th to 8th August 2009.

The peaks at Luang Prabang and Paksane are quite common as a result of poor satellite rainfall estimations in their respective tributaries as well as internal model's functionalities. Since the gauge network in these areas is considerably sparse there is really a need for enhancement.

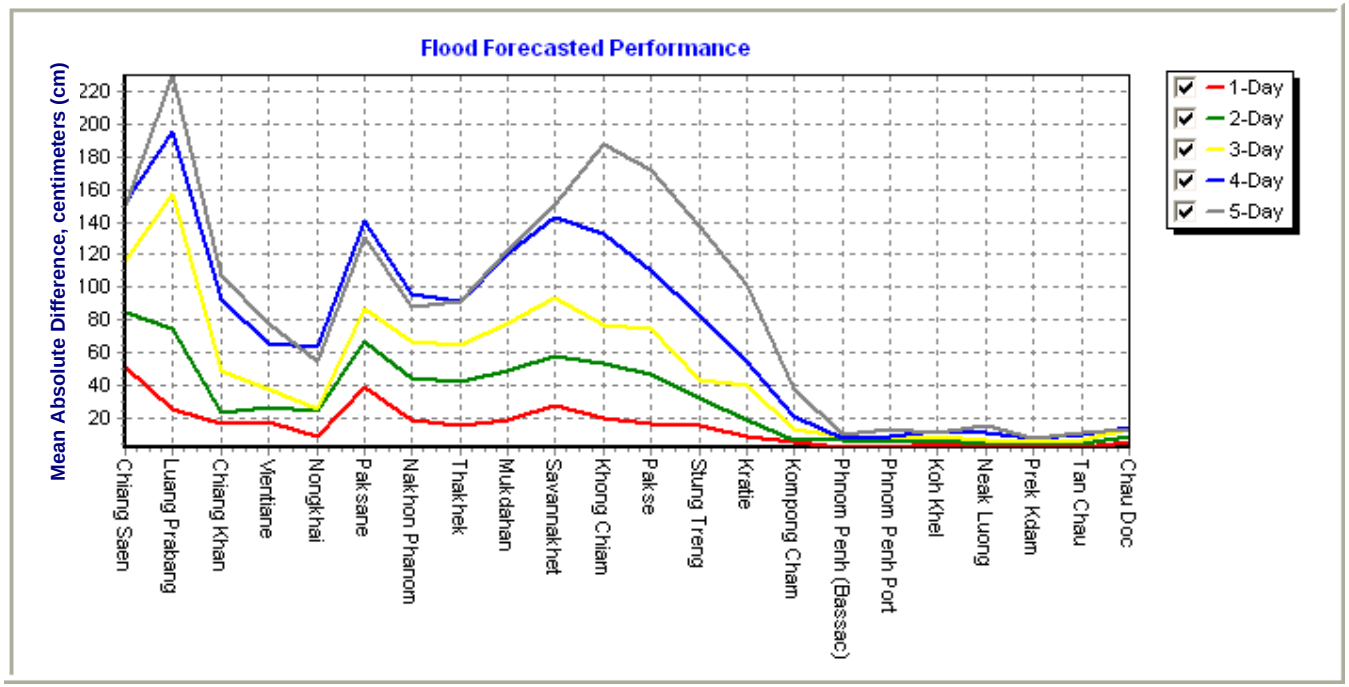


Figure B1: Average flood forecast accuracy along the Mekong mainstream.

Forecast Achievement

The forecast achievement indicates the % of days that the forecast at a particular station for a lead-time is successful against a respective benchmark (Table B2).

Table B1: Achievement of daily forecast against benchmarks unit in %

	Chiang Saen	Luang Prabang	Chiang Khan	Vientiane	Nongkhai	Paksane	Nakhon Phanom	Thakhek	Mukdahan	Savannakhet	Khong Chiam	Pakse	Stung Treng	Kratie	Kompong Cham	Phnom Penh (Bassac)	Phnom Penh Port	Koh Khel	Neak Luong	Prek Kdam	Tan Chau	Chau Doc	*Average*
1-day	28.6	85.7	85.7	85.7	100.0	57.1	71.4	85.7	71.4	57.1	85.7	71.4	28.6	71.4	85.7	100.0	100.0	100.0	100.0	100.0	100.0	85.7	*79.9*
2-day	50.0	66.7	66.7	66.7	66.7	16.7	66.7	50.0	50.0	50.0	50.0	66.7	50.0	66.7	100.0	83.3	100.0	100.0	100.0	100.0	100.0	50.0	*68.9*
3-day	40.0	20.0	60.0	80.0	100.0	20.0	40.0	40.0	20.0	40.0	60.0	60.0	60.0	80.0	100.0	80.0	80.0	60.0	80.0	100.0	80.0	40.0	*60.9*
4-day	25.0	25.0	50.0	50.0	75.0	0.0	25.0	25.0	0.0	0.0	25.0	50.0	25.0	50.0	100.0	100.0	100.0	100.0	50.0	100.0	75.0	50.0	*50.0*
5-day	0.0	33.3	33.3	33.3	66.7	33.3	33.3	33.3	33.3	0.0	0.0	0.0	0.0	33.3	33.3	100.0	100.0	100.0	33.3	100.0	66.7	33.3	*40.9*

Table B2: Benchmarks of success (Indicator of accuracy in mean absolute error) Unit in cm

	Chiang Saen	Luang Prabang	Chiang Khan	Vientiane	Nongkhai	Paksane	Nakhon Phanom	Thakhek	Mukdahan	Savannakhet	Khong Chiam	Pakse	Stung Treng	Kratie	Kompong Cham	Phnom Penh (Bassac)	Phnom Penh Port	Koh Khel	Neak Luong	Prek Kdam	Tan Chau	Chau Doc
1-day	50	50	25	25	25	25	25	25	25	25	25	25	10	10	10	10	10	10	10	10	10	10
2-day	75	75	25	25	25	25	50	50	50	50	50	50	25	25	25	10	10	10	10	10	10	10
3-day	75	100	50	50	50	50	50	50	50	50	75	75	50	50	25	10	10	10	10	10	10	10
4-day	100	*125*	75	50	50	50	50	50	75	75	75	75	50	50	50	25	25	25	10	25	10	10
5-day	100	*150*	75	75	75	75	75	75	75	75	75	75	50	50	50	25	25	25	10	25	10	10

Note: *An indication of the accuracy given in the Table B2 is based on the performance of the forecast made in 2008 from the new flood forecasting system and the configuration for the 2009 flood season and is published on the website of MRC (http://ffw.mrcmekong.org/accuracy.htm).*

In the future these indicators will be adjusted against a set of performance indicators that is established by combining international standards and the specific circumstances in the Mekong River Basin. An expert mission to establish these performance indicators is planned for the fourth quarter of 2009.

Performance

Performance is assessed by evaluating a number of performance indicators, see table and graphs below:

Table B3: Overview of performance indicators for the past 8 days including the current report date

	Flood Forecast: time sent				Arrival time of input data (average)							Missing data (number)						
2009	FF completed and sent (time)	stations without forecast	FF2 completed and sent (time)	Weather information available (number)	NOAA data	China	Cambodia - DHRW	Cambodia - DOM	Lao PDR - DMH	Thailand - DWR	Viet Nam - NCHMF	NOAA data	China	Cambodia - DHRW	Cambodia - DOM	Lao PDR - DMH	Thailand - DWR	Viet Nam - NCHMF
week	*10:24*	*0*	*-*	*8*	*08:20*	*08:21*	*07:54*	*08:43*	*08:29*	*08:07*	*08:01*	*0*	*0*	*3*	*128*	*83*	*8*	*75*
month	*10:31*	*1*	*11:38*	*25*	*08:26*	*08:28*	*08:05*	*08:33*	*08:40*	*08:18*	*08:07*	*0*	*2*	*60*	*433*	*292*	*38*	*261*
season	*10:41*	*26*	*12:39*	*44*	*08:23*	*08:25*	*08:09*	*08:20*	*08:44*	*08:25*	*07:50*	*0*	*2*	*228*	*1049*	*667*	*83*	*464*

Week is the week for which this report is made; *Month* is actually the last 30 days (or less if the flood season has just begun); *Season* is the current flood season up to the date of this report.

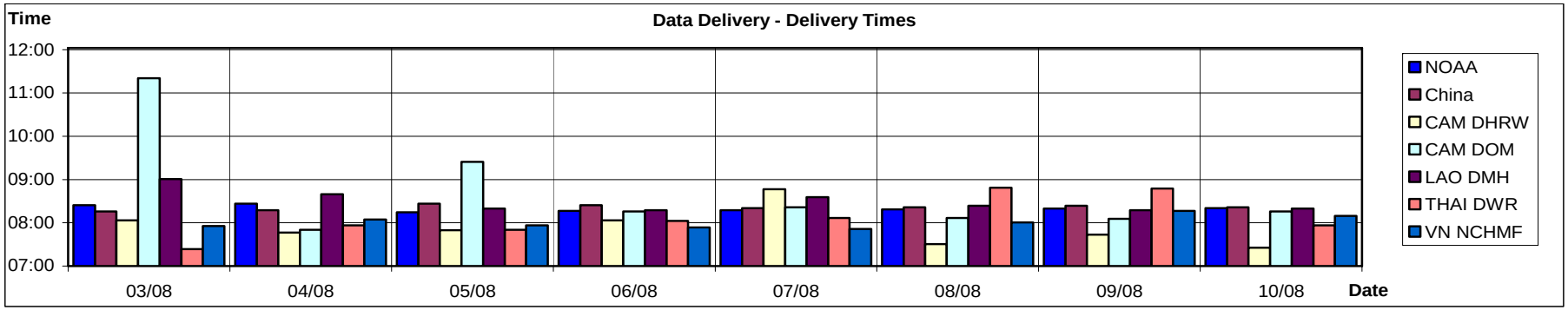


Figure B2: Data delivery times for the past 8 days including the current report date

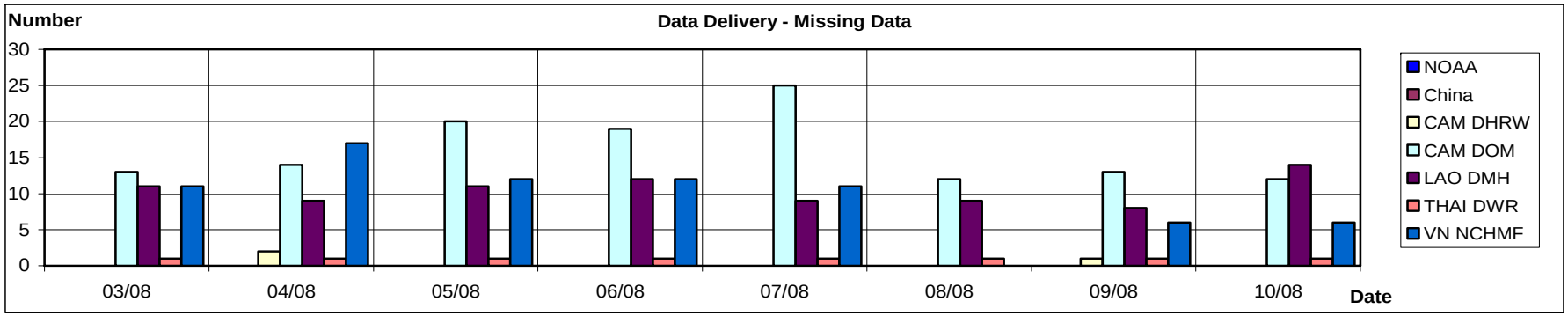


Figure B3: Missing data for the past 8 days including the current report date

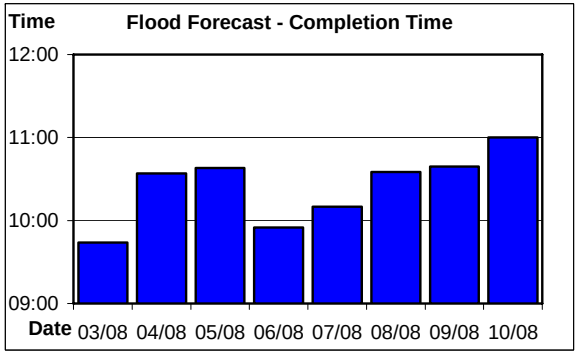


Figure B4: Flood forecast completion time

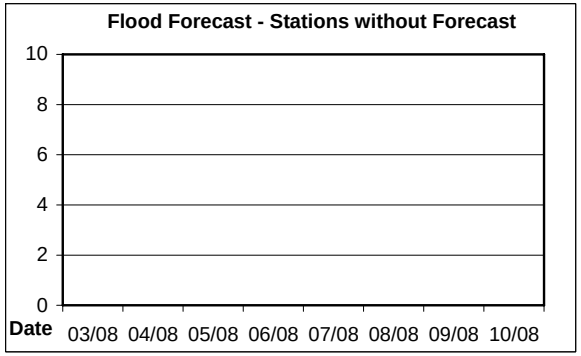


Figure B5: Flood forecast stations without forecast

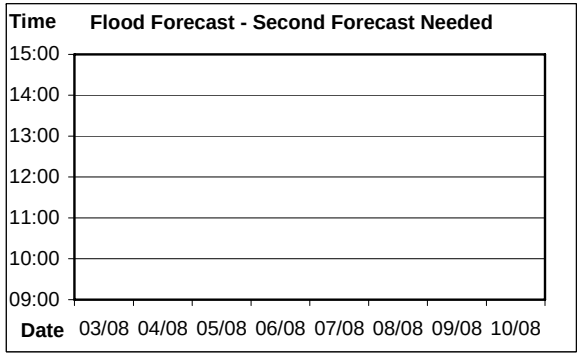


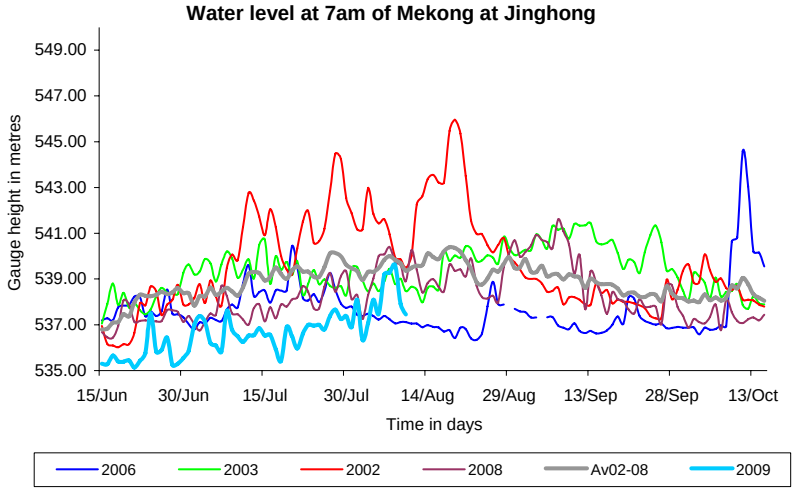
Figure B6: Second forecast needed

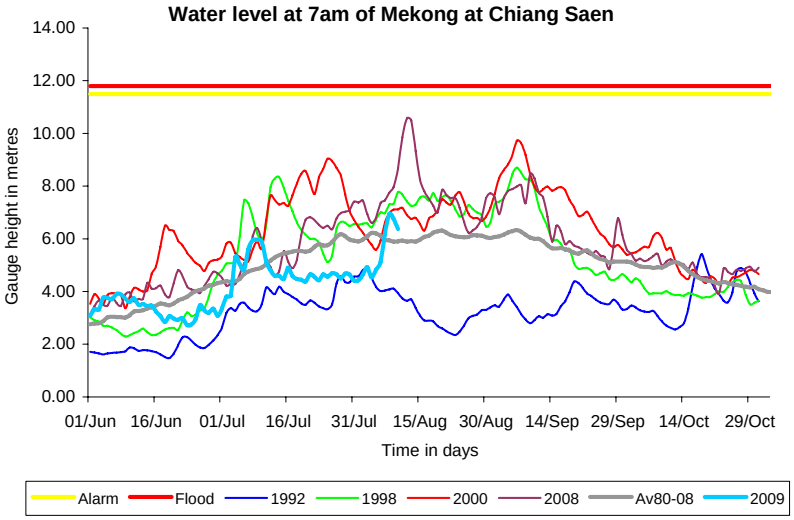
Annex C: Season Water Level Graphs

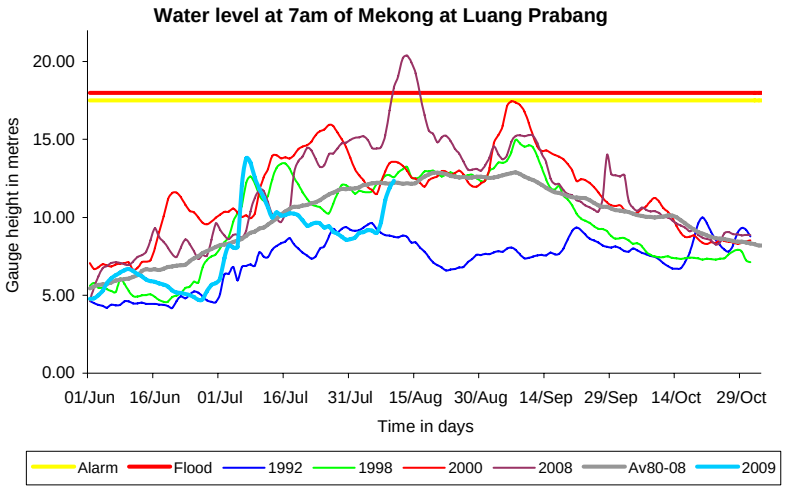
This Annex has the water level graphs of the report date. These graphs are distributed daily by email together with the Flood Bulletins.

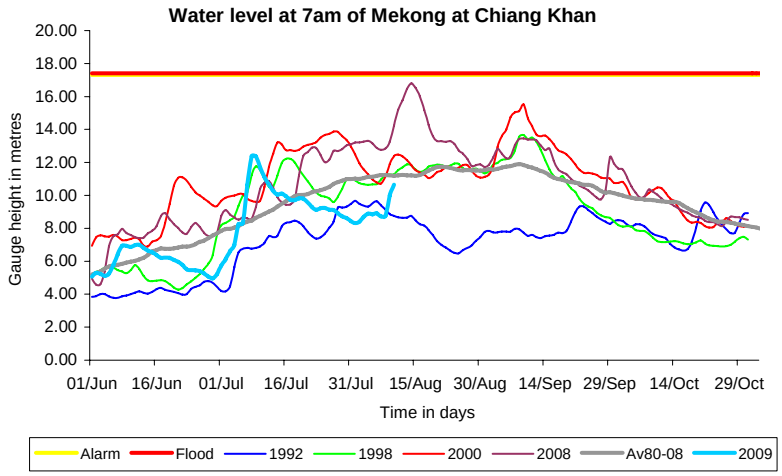
HYDROGRAPHS OF THE MEKONG AT MAINSTREAM STATIONS

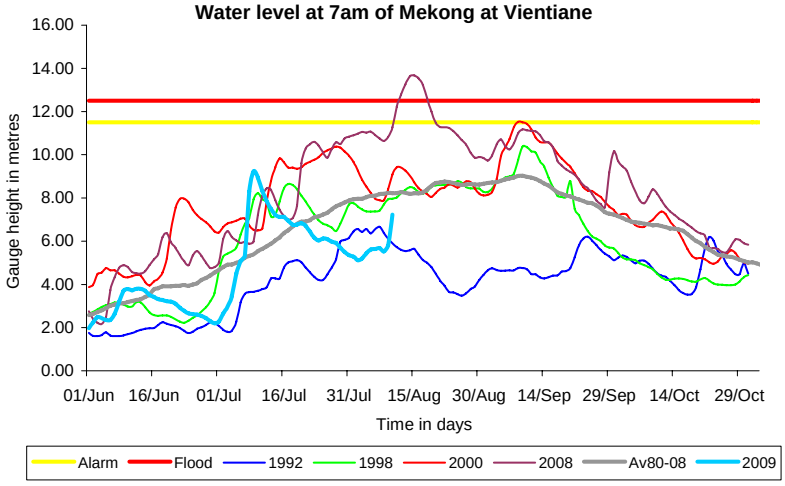
IN WET SEASON FROM 1 JUNE TO 31 OCTOBER

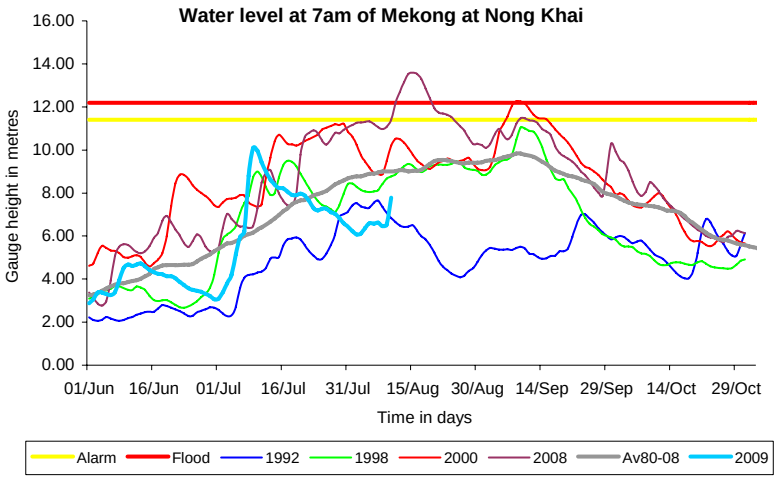


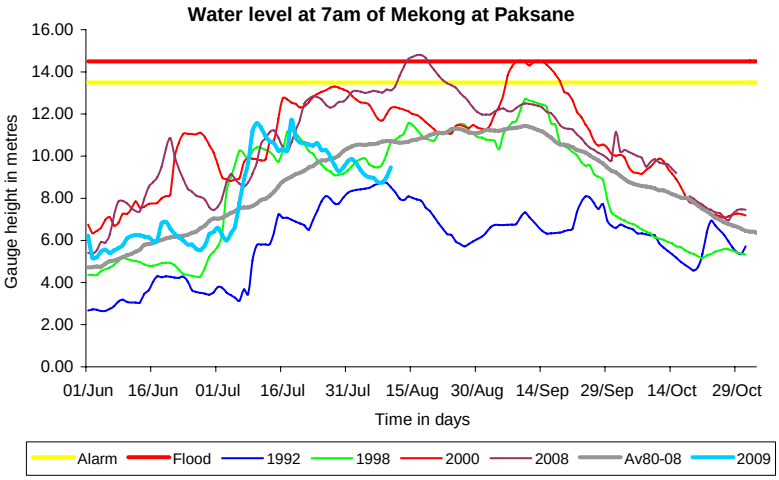


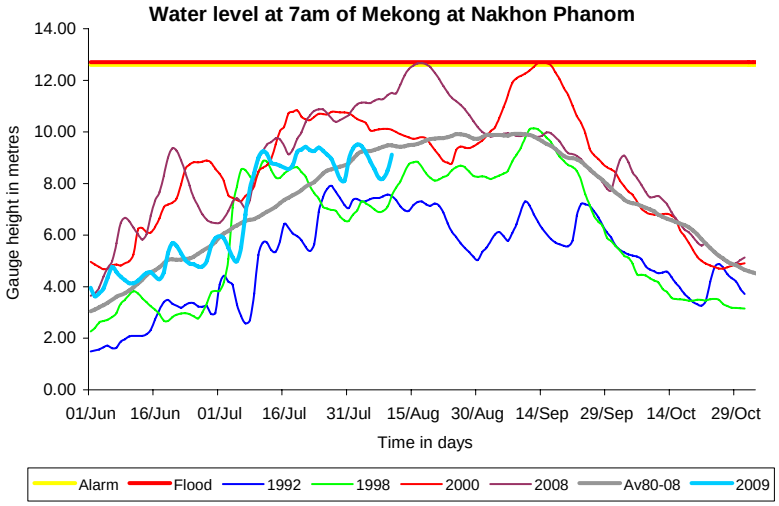

Water level at 7am of Mekong at Luang Prabang
Gauge height in metres
20.00
15.00
10.00
5.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009

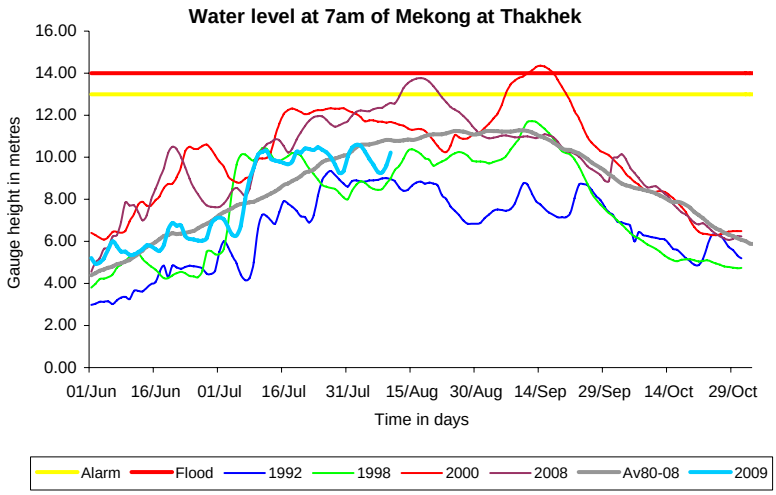

Water level at 7am of Mekong at Chiang Khan
Gauge height in metres
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009

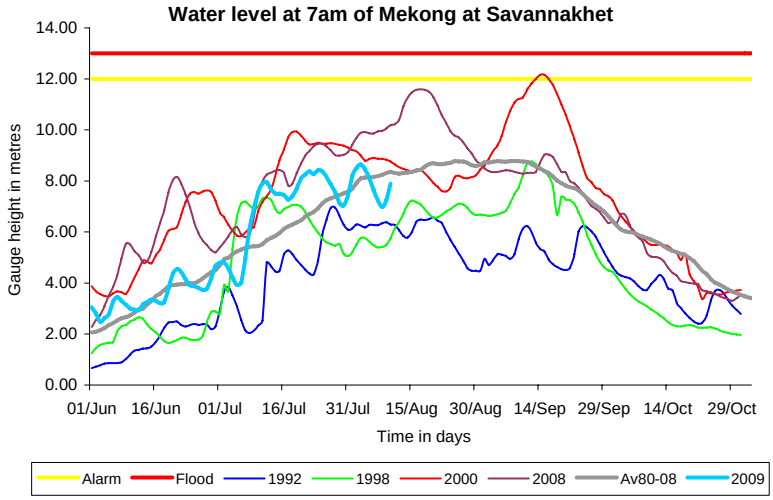

Water level at 7am of Mekong at Vientiane
Gauge height in metres
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009

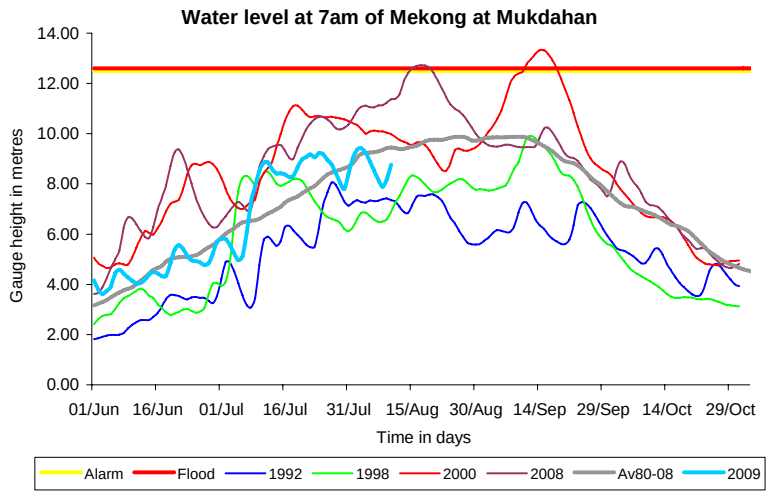

Water level at 7am of Mekong at Nong Khai
Gauge height in metres
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009

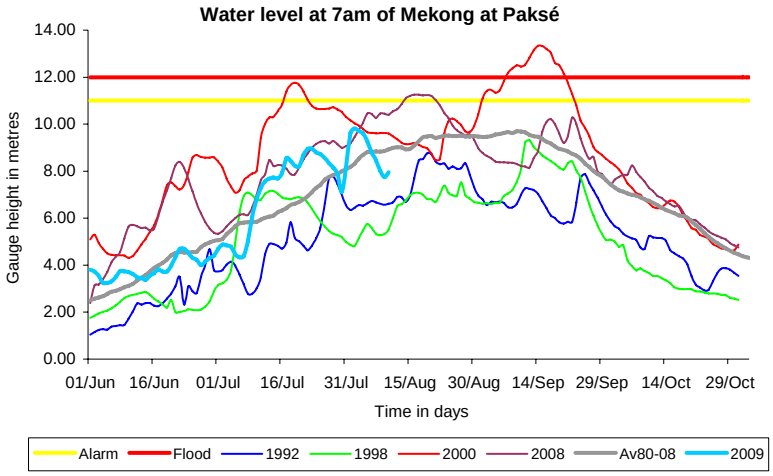

Water level at 7am of Mekong at Paksane
Gauge height in metres
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009

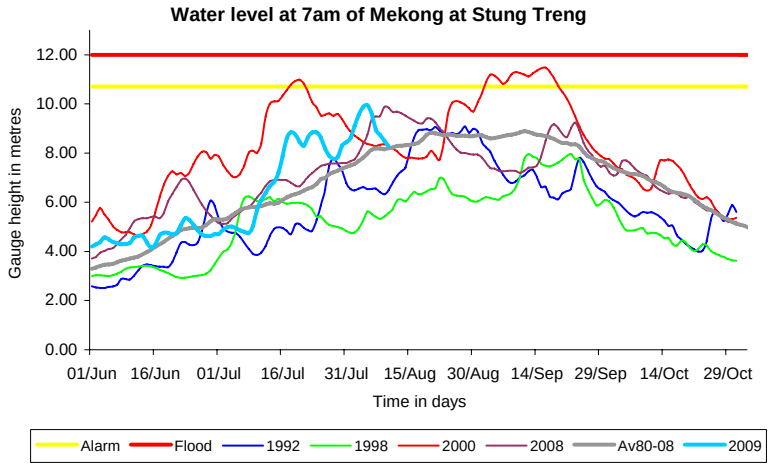

Water level at 7am of Mekong at Nakhon Phanom
Gauge height in metres
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009

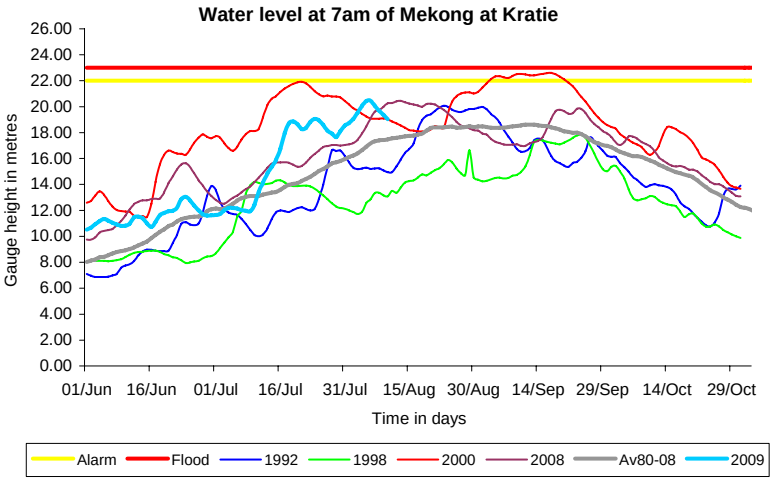

Water level at 7am of Mekong at Thakhek
Gauge height in metres
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009

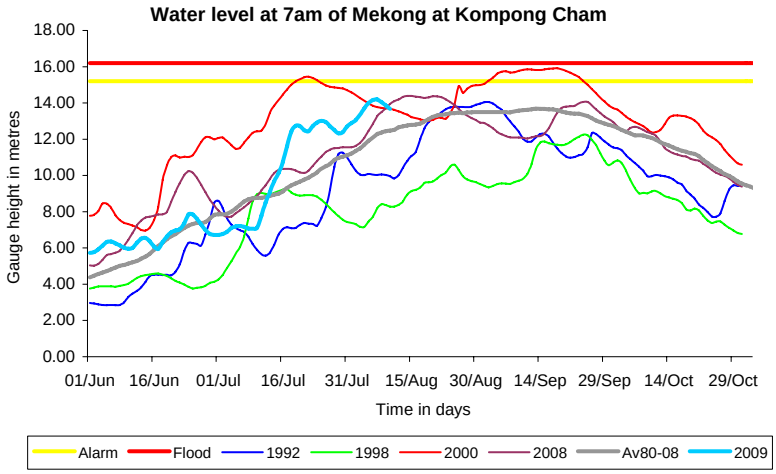

Water level at 7am of Mekong at Savannakhet
Gauge height in metres
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009

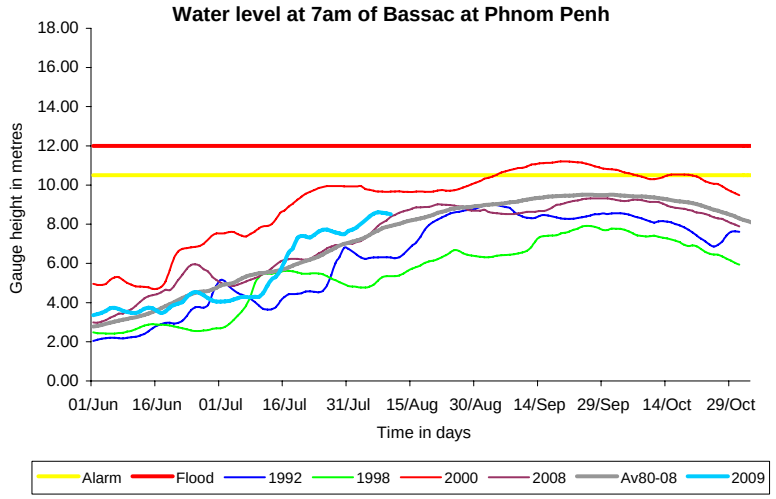

Water level at 7am of Mekong at Mukdahan
Gauge height in metres
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009

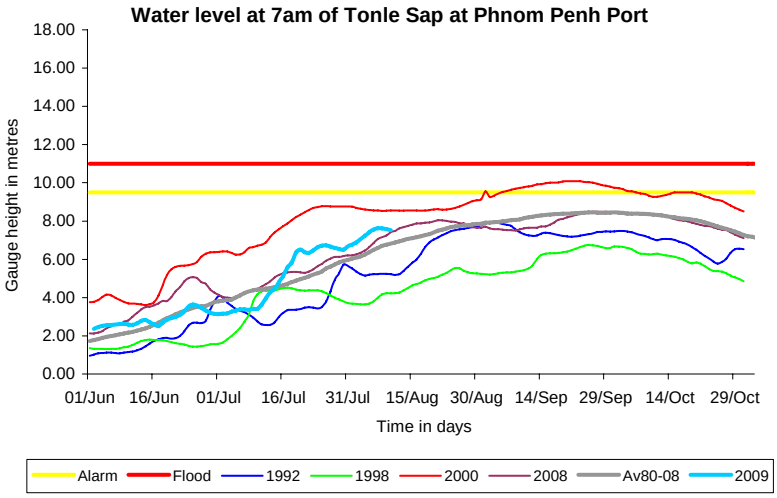

Water level at 7am of Mekong at Paksé
Gauge height in metres
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009

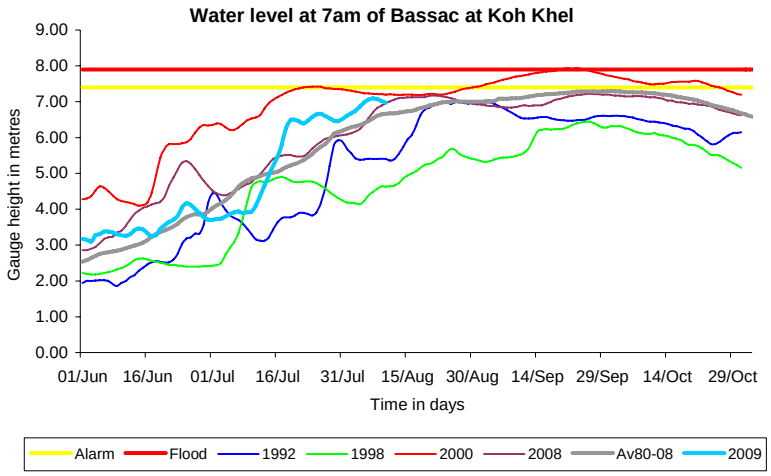

Water level at 7am of Mekong at Stung Treng
Gauge height in metres
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009

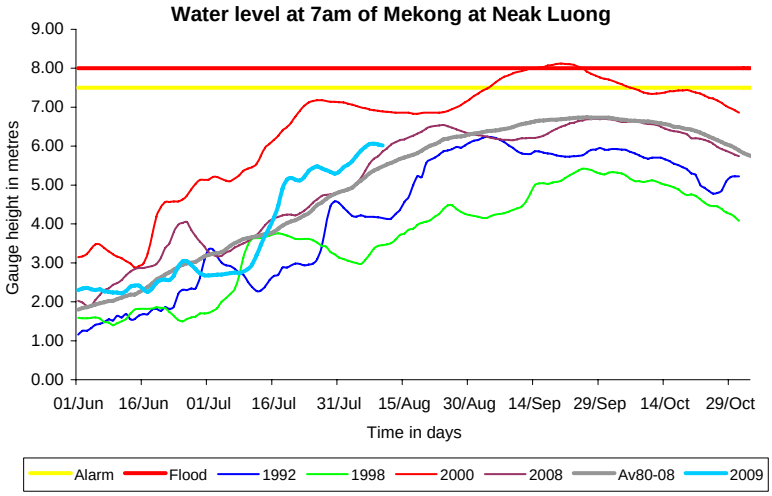

Water level at 7am of Mekong at Kratie
Gauge height in metres
26.00
24.00
22.00
20.00
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009

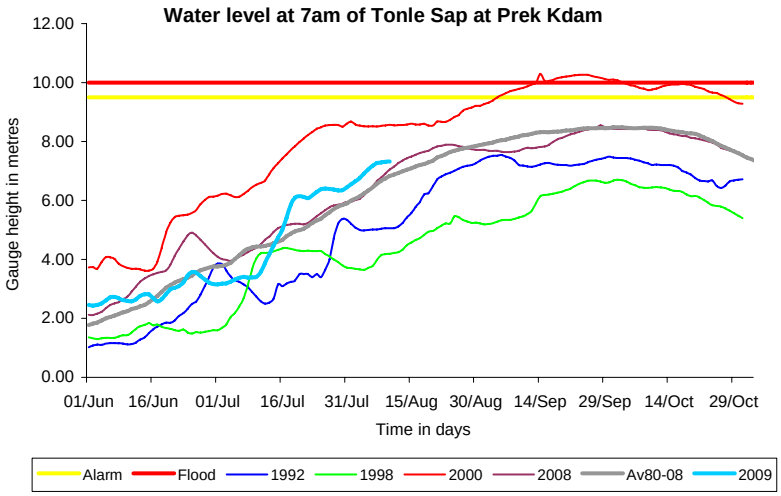

Water level at 7am of Mekong at Kompong Cham
Gauge height in metres
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun 16/Jun 01/Jul 16/Jul 31/Jul 15/Aug 30/Aug 14/Sep 29/Sep 14/Oct 29/Oct
Time in days
Alarm Flood 1992 1998 2000 2008 Av80-08 2009

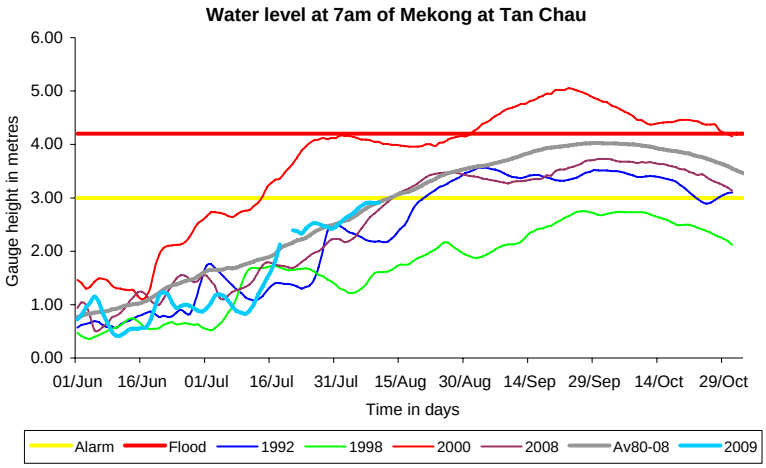

Water level at 7am of Bassac at Phnom Penh
Gauge height in metres
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun 16/Jun 01/Jul 16/Jul 31/Jul 15/Aug 30/Aug 14/Sep 29/Sep 14/Oct 29/Oct
Time in days
Alarm Flood 1992 1998 2000 2008 Av80-08 2009

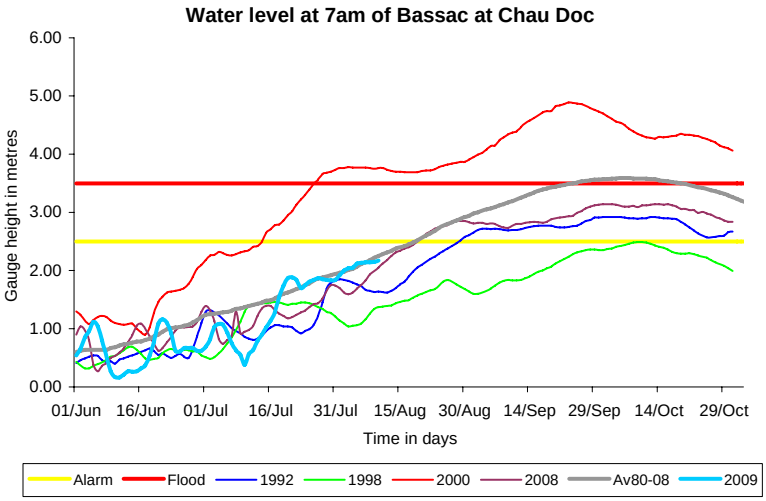

Water level at 7am of Tonle Sap at Phnom Penh Port
Gauge height in metres
18.00
16.00
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun 16/Jun 01/Jul 16/Jul 31/Jul 15/Aug 30/Aug 14/Sep 29/Sep 14/Oct 29/Oct
Time in days
Alarm Flood 1992 1998 2000 2008 Av80-08 2009


Water level at 7am of Bassac at Koh Khel
Gauge height in metres
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
01/Jun 16/Jun 01/Jul 16/Jul 31/Jul 15/Aug 30/Aug 14/Sep 29/Sep 14/Oct 29/Oct
Time in days
Alarm Flood 1992 1998 2000 2008 Av80-08 2009


Water level at 7am of Mekong at Neak Luong
Gauge height in metres
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
01/Jun 16/Jun 01/Jul 16/Jul 31/Jul 15/Aug 30/Aug 14/Sep 29/Sep 14/Oct 29/Oct
Time in days
Alarm Flood 1992 1998 2000 2008 Av80-08 2009


Water level at 7am of Tonle Sap at Prek Kdam
Gauge height in metres
12.00
10.00
8.00
6.00
4.00
2.00
0.00
01/Jun 16/Jun 01/Jul 16/Jul 31/Jul 15/Aug 30/Aug 14/Sep 29/Sep 14/Oct 29/Oct
Time in days
Alarm Flood 1992 1998 2000 2008 Av80-08 2009


Water level at 7am of Mekong at Tan Chau
Gauge height in metres
6.00
5.00
4.00
3.00
2.00
1.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009


Water level at 7am of Bassac at Chau Doc
Gauge height in metres
6.00
5.00
4.00
3.00
2.00
1.00
0.00
01/Jun
16/Jun
01/Jul
16/Jul
31/Jul
15/Aug
30/Aug
14/Sep
29/Sep
14/Oct
29/Oct
Time in days
Alarm
Flood
1992
1998
2000
2008
Av80-08
2009