# Mekong River Commission

## Regional Flood Management and Mitigation Centre

# Weekly Flood Situation Report for the Mekong River Basin

**Prepared on: 04/10/2010, covering the week from the 27th September to the 3rd October 2010**

## Weather Patterns, General Behaviour of the Mekong River and Flood Situation

### General weather patterns

During the week of the 27th September to the 3rd October 2010, seven weather bulletins were issued by the Department of Meteorology (DOM) of Cambodia and made available to the MRC-RFMMC. The weather patterns of the 27th September to the 3rd October bulletins are shown below:

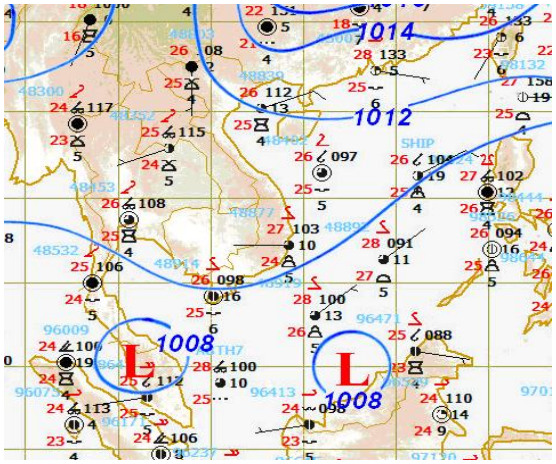



**Figure 1: Weather map of 27 September 2010**

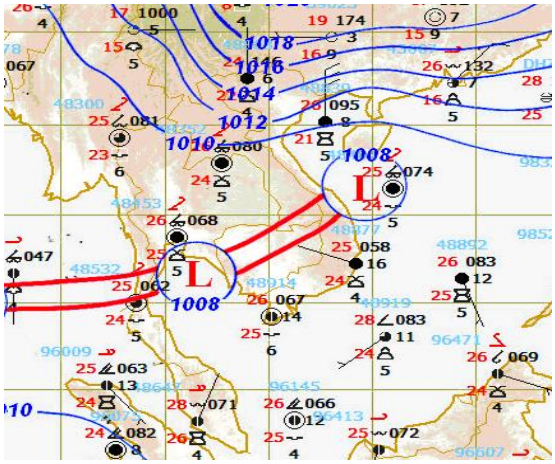



**Figure 2: Weather map of 03 October 2010**

Strong South-West (SW) Monsoon

From the 01st to the 03rd October, active SW monsoon trough laid across Thailand, Lao PDR, Cambodia, Viet Nam and the lower part of LMB at the surface during last week (figure 2).

Inter Tropical Convergence Zone (ITCZ)

ITCZ was observed from the 30th September and laid across lower part of LMB, Cambodia, Thailand, Lao PDR, and Viet Nam (figure 2).

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

No TS or TD was observed in last week.

Other weather phenomena that affect the discharge

No other weather phenomena affecting the discharge were observed.

Overall weather situation

Normal weather situation prevailed during last week. From moderate thundershower to heavy rain occurred in Myanmar, Thailand, Lao PDR, Cambodia, Viet Nam and Lower Mekong Basin (LMB) particularly in the lower part of LMB, the middle and lower parts of Myanmar, Thailand, Viet Nam and Cambodia.

## General behaviour of the Mekong River

Water levels at most stations in the upper and middle reaches of the LMB were somewhat around or over the long-term average while water levels at stations in lower reach were below the long-term average for this time of the year. Water levels at most stations in the upper and lower reaches of the LMB were more-or-less stable while water levels at stations in the middle reach were slightly falling during the reporting period. Regarding to downstream stations at Tan Chau and Chau Doc, water levels at those stations were affected by tide with a little rising trend at the end of the week.

### *For stations from Chiang Saen to Chiang Khan*

Water levels at those stations were more-or-less stable during last week. The stations were recording levels that were somewhat around the long-term average for this time of the year.

### *For stations from Vientiane/ Nong Khai to Savanakhet/Mukdahan*

Water levels show a little falling trend during the reporting period. The stations were recording levels that were somewhat over the long-term average for this time of the year.

### *For stations Khong Chiam to Kampong Cham*

Water levels were slightly falling during last week. Water levels at Khong Chiam and Pakse were somewhat around the long-term average while water levels at Strung Treng, Kratie and Kampong Cham were below the long-term average for this time of the year.

### *For stations from Phnom Penh Bassac/ Phnom Penh Port to Neak Luong/ Koh Khel*

Water levels were more-or-less stable during last week. All stations were recording levels that are below the long-term average for this time of the year.

### *Stations Tan Chau and Chau Doc*

Water levels at these stations have been significantly affected by sea tide. Water levels at these 2 stations were slightly rising at the end of the week. These stations were recording levels that are below the long-term average for this time of the year.

***Note:*** for areas between forecast stations, please refer to the nearest forecast 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 on the mainstream of the Mekong River during the past week. Water levels are still significanlyt below flood levels (as defined by the national agency) at all forecast stations.

- Damage or victims:

No damage or loss of life due to river flooding was recorded anywhere along the Mekong River 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

| 2010 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27/09 | 537.17 | 5.05 | 10.38 | 10.30 | 7.72 | 8.88 | 10.72 | 8.79 | 9.84 | 8.45 | 7.67 | 9.93 | 8.10 | 7.01 | 16.62 | 11.48 | 7.68 | 6.80 | 6.45 | 5.40 | 6.77 | 2.62 | 2.09 |
| 28/09 | 537.46 | 5.30 | 10.47 | 10.53 | 7.88 | 8.91 | 10.53 | 8.56 | 9.63 | 8.24 | 7.46 | 9.68 | 7.92 | 6.86 | 16.45 | 11.34 | 7.67 | 6.79 | 6.43 | 5.40 | 6.78 | 2.62 | 2.09 |
| 29/09 | 537.60 | 5.62 | 10.74 | 10.46 | 7.88 | 8.96 | 10.23 | 8.39 | 9.46 | 8.06 | 7.38 | 9.50 | 7.76 | 6.75 | 16.26 | 11.22 | 7.67 | 6.79 | 6.43 | 5.40 | 6.78 | 2.62 | 2.10 |
| 30/09 | 537.33 | 5.64 | 10.93 | 10.46 | 7.72 | 8.80 | 10.20 | 8.24 | 9.35 | 7.88 | 6.99 | 9.29 | 7.63 | 6.68 | 16.03 | 11.08 | 7.67 | 6.79 | 6.41 | 5.39 | 6.78 | 2.63 | 2.12 |
| 01/10 | 538.41 | 5.47 | 10.95 | 10.51 | 7.68 | 8.70 | 10.15 | 8.12 | 9.25 | 7.73 | 6.90 | 9.12 | 7.43 | 6.57 | 15.86 | 10.95 | 7.69 | 6.82 | 6.44 | 5.42 | 6.79 | 2.66 | 2.16 |
| 02/10 | 537.39 | 5.18 | 10.92 | 10.50 | 7.66 | 8.66 | 10.08 | 7.95 | 9.02 | 7.59 | 6.77 | 8.93 | 7.26 | 6.45 | 15.65 | 10.80 | 7.67 | 6.79 | 6.42 | 5.40 | 6.78 | 2.67 | 2.19 |
| 03/10 | 536.82 | 5.28 | 10.50 | 10.43 | 7.62 | 8.61 | 10.04 | 7.81 | 8.90 | 7.45 | 6.62 | 8.75 | 7.10 | 6.35 | 15.45 | 10.68 | 7.69 | 6.80 | 6.43 | 5.42 | 6.89 | 2.70 | 2.24 |
| 04/10 | 536.82 | 4.58 | 10.26 | 10.18 | 7.48 | 8.46 | 9.88 | 7.89 | 9.00 | 7.43 | 6.51 | 8.58 | | 6.28 | 15.38 | 10.57 | 7.67 | 6.79 | 6.44 | 5.40 | 6.81 | 2.72 | 2.29 |
| | | | | | | | | | | | | | | | | | | | | | | | |
| 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

| 2010 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27/09 | 0.0 | 0.3 | 27.2 | 97.0 | 7.2 | 7.0 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 24.2 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | | 11.4 | 0.0 | 0.0 | 38.7 | 0.0 |
| 28/09 | 27.0 | 18.5 | 0.0 | 4.0 | 0.4 | 2.8 | 5.3 | 0.0 | 0.0 | 57.6 | 0.0 | 16.2 | 0.0 | 0.0 | 13.0 | 0.0 | 0.0 | | 0.0 | 16.4 | 0.0 | 10.0 | 34.0 |
| 29/09 | 5.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.5 | 12.0 | 44.8 | 0.0 | 0.0 | 14.2 | 0.0 | 0.2 | | 5.5 | 0.0 | 0.0 | 59.2 | 0.0 |
| 30/09 | 1.0 | 10.0 | 0.0 | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 | 2.2 | 3.0 | 0.0 | 1.0 | 14.4 | 0.0 | 3.9 | | 18.9 | 55.9 | 4.3 | 25.8 | 12.0 |
| 01/10 | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 19.0 | 6.0 | 0.0 | 6.3 | 20.2 | | 91.0 | 17.4 | 0.0 | 3.1 | 0.0 |
| 02/10 | 0.0 | 0.0 | 0.0 | 2.4 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 7.5 | 0.0 | 0.0 | 0.0 | 7.8 | 0.0 | 17.5 | 1.0 | | 18.5 | 1.2 | 10.2 | 5.0 | 40.0 |
| 03/10 | 0.0 | 0.0 | 0.0 | 19.1 | 0.0 | 1.2 | 3.0 | 17.5 | 20.0 | 2.5 | 3.0 | 0.0 | 2.2 | 12.5 | 16.6 | 23.5 | 74.2 | | 26.0 | 8.9 | 63.3 | 0.0 | 30.0 |
| 04/10 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 2.1 | 41.3 | 41.3 | 15.7 | 17.3 | 0.4 | | 2.0 | 66.2 | 0.2 | 3.1 | | 7.6 | 0.0 | 0.0 | 11.7 | 13.2 |

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

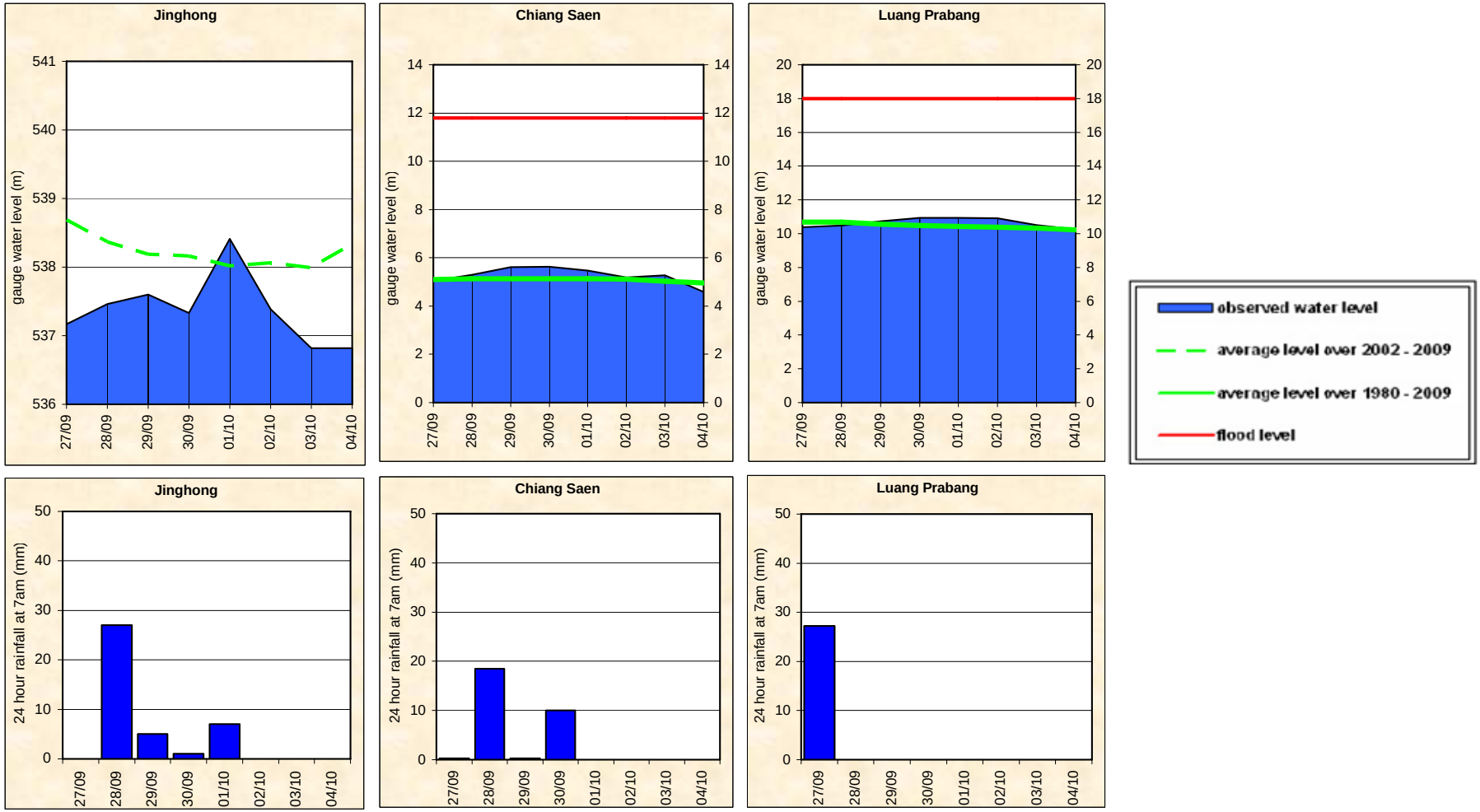


Figure A2: Water level and rainfall for Chiang Khan, Vientiane, Nongkhai, and Paksane

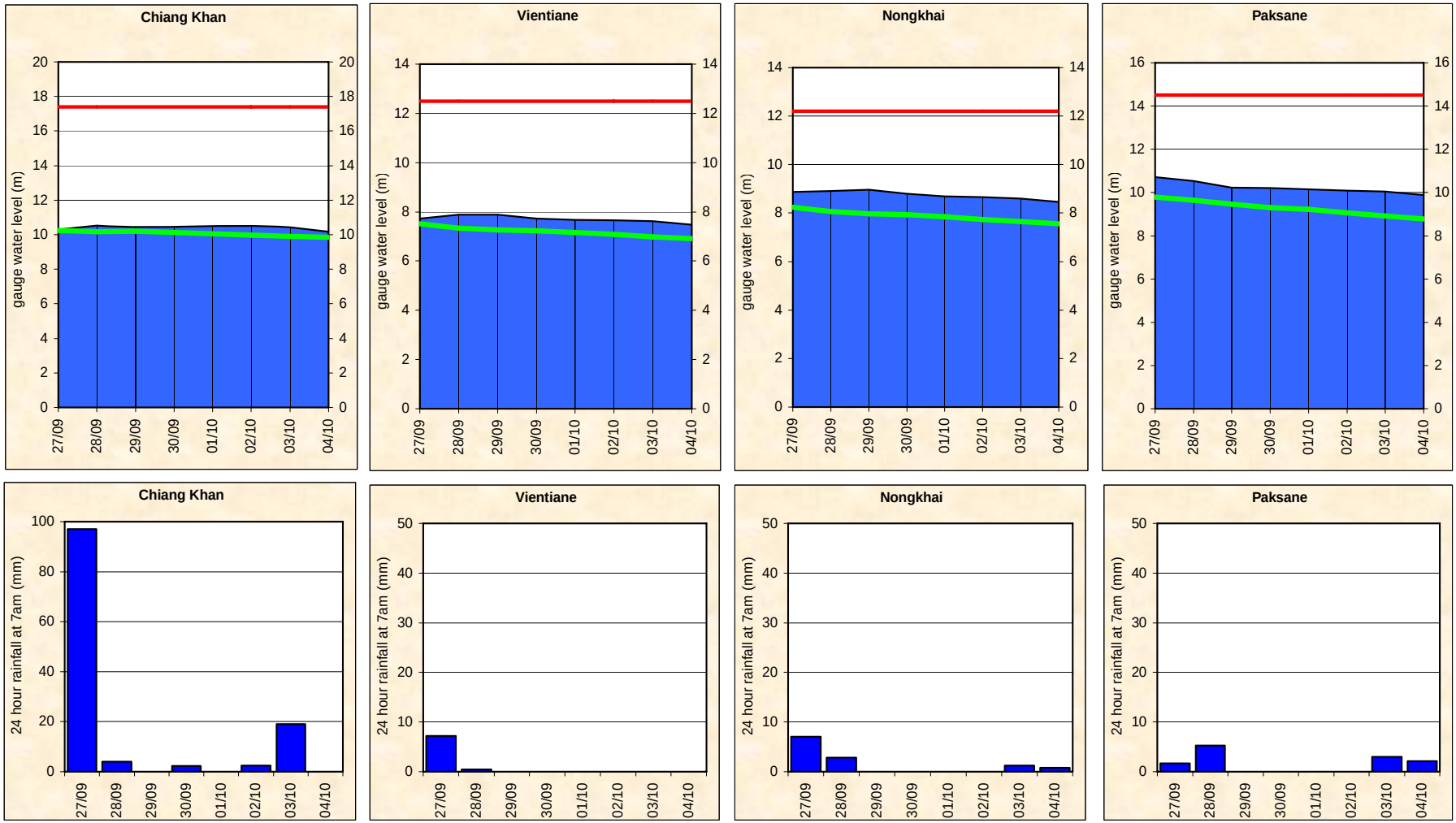


Figure A3: Water level and rainfall for Nakhon Phanom, Thakhek, Mukdahan and Savannakhet

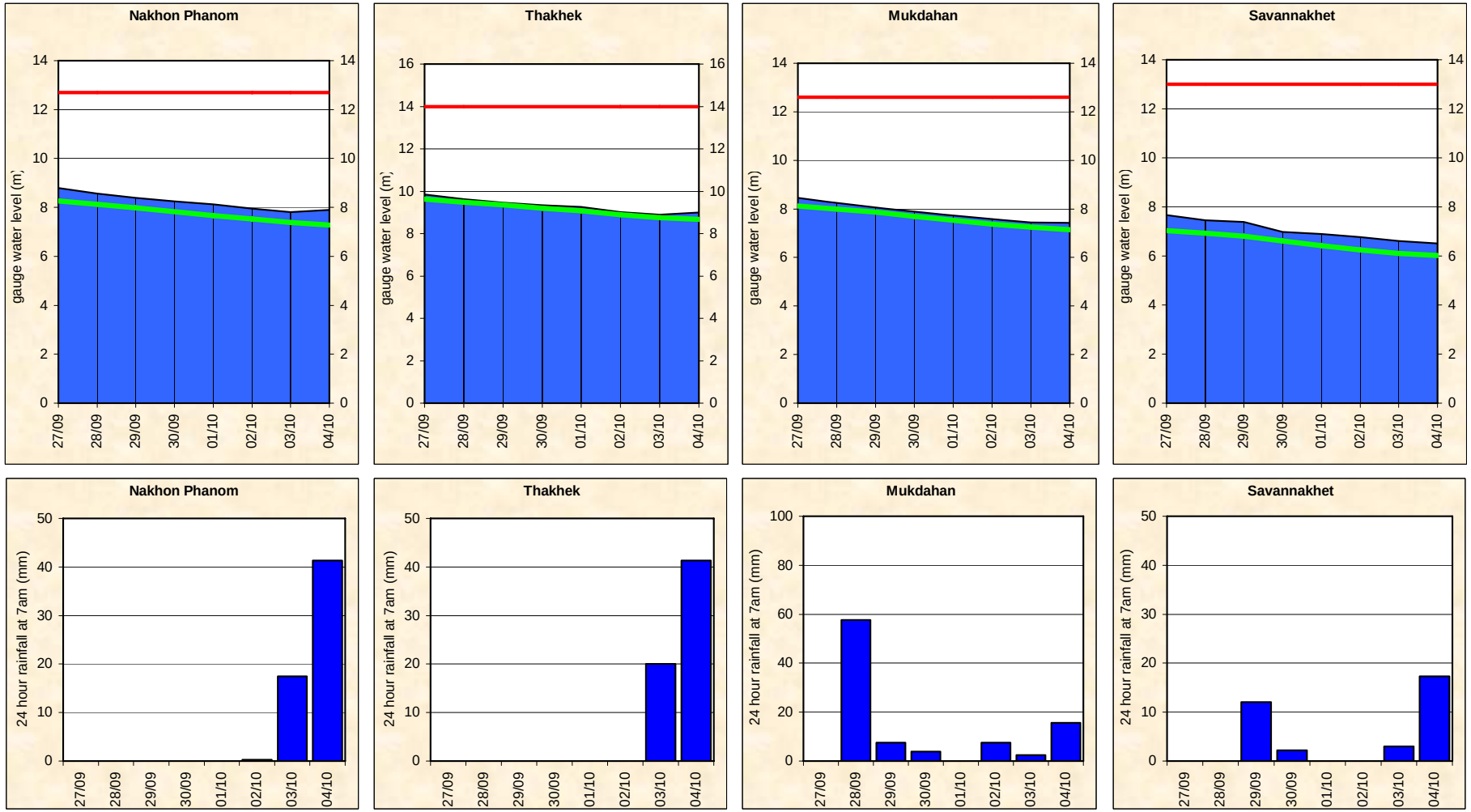


Figure A4: Water level and rainfall for Khong Chiam, Pakse, Stung Treng, and Kratie

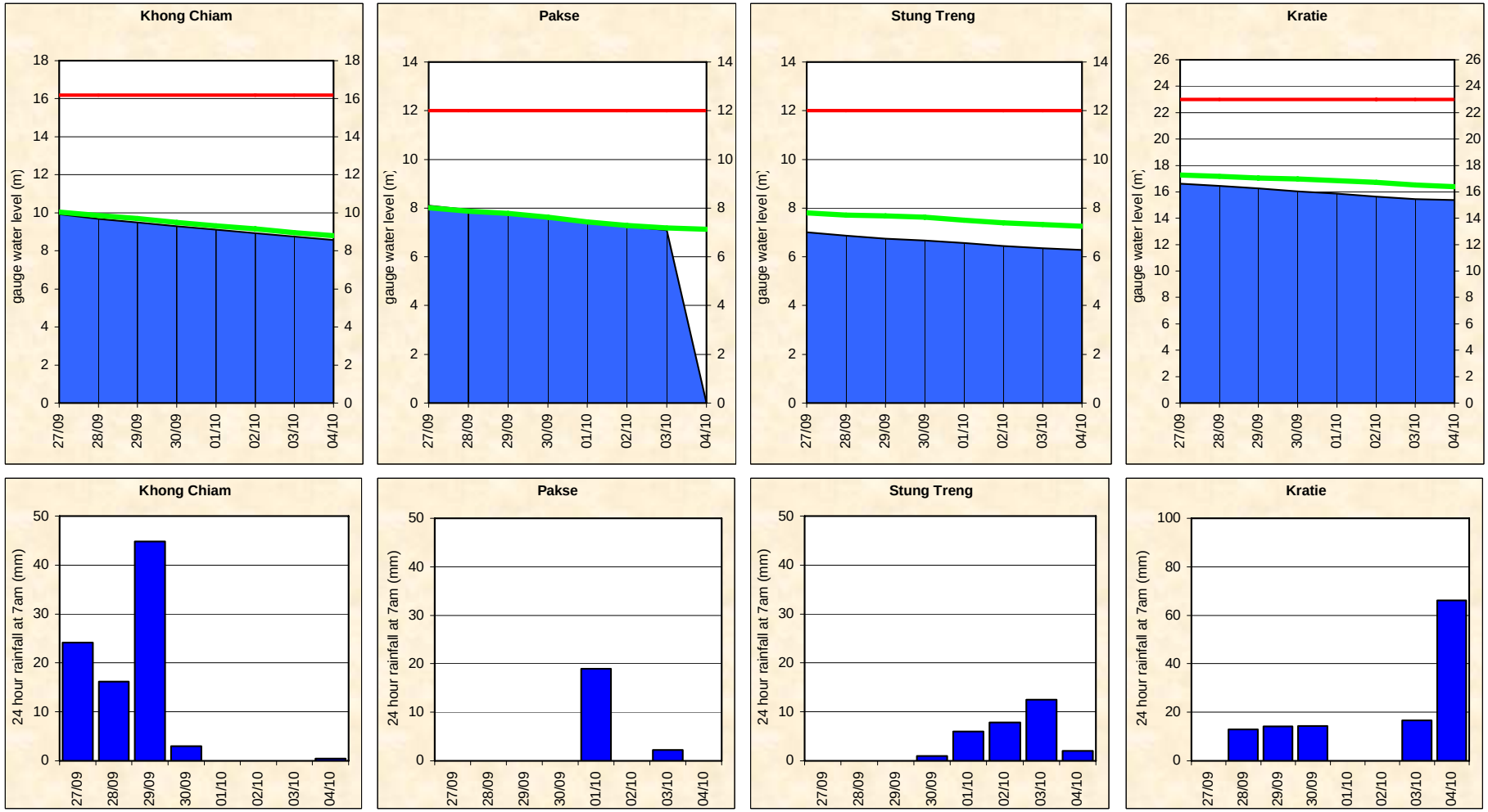


Figure A5: Water level and rainfall for Kampong Cham, Phnom Penh (Bassac and Port), and Koh Khel

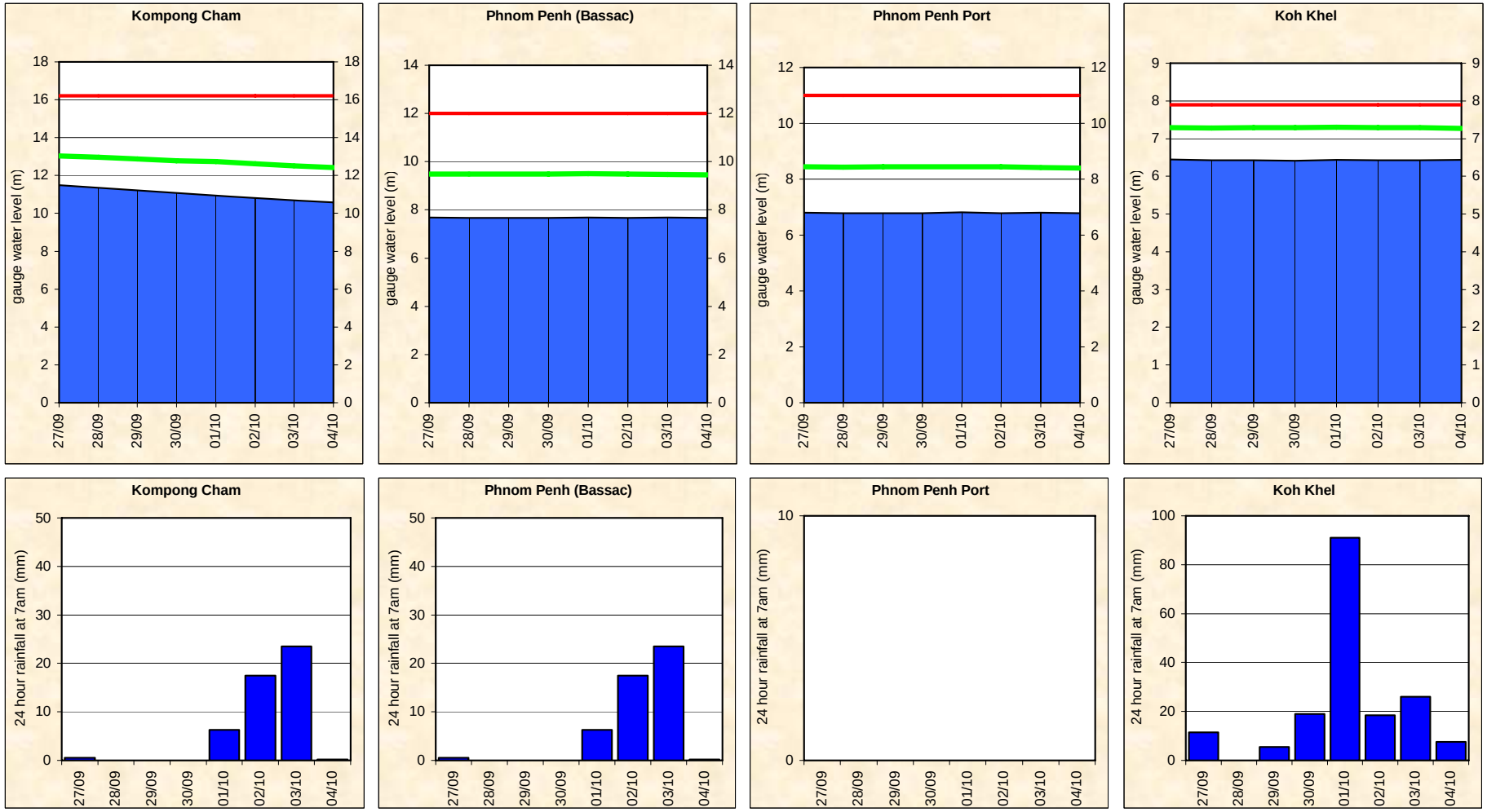
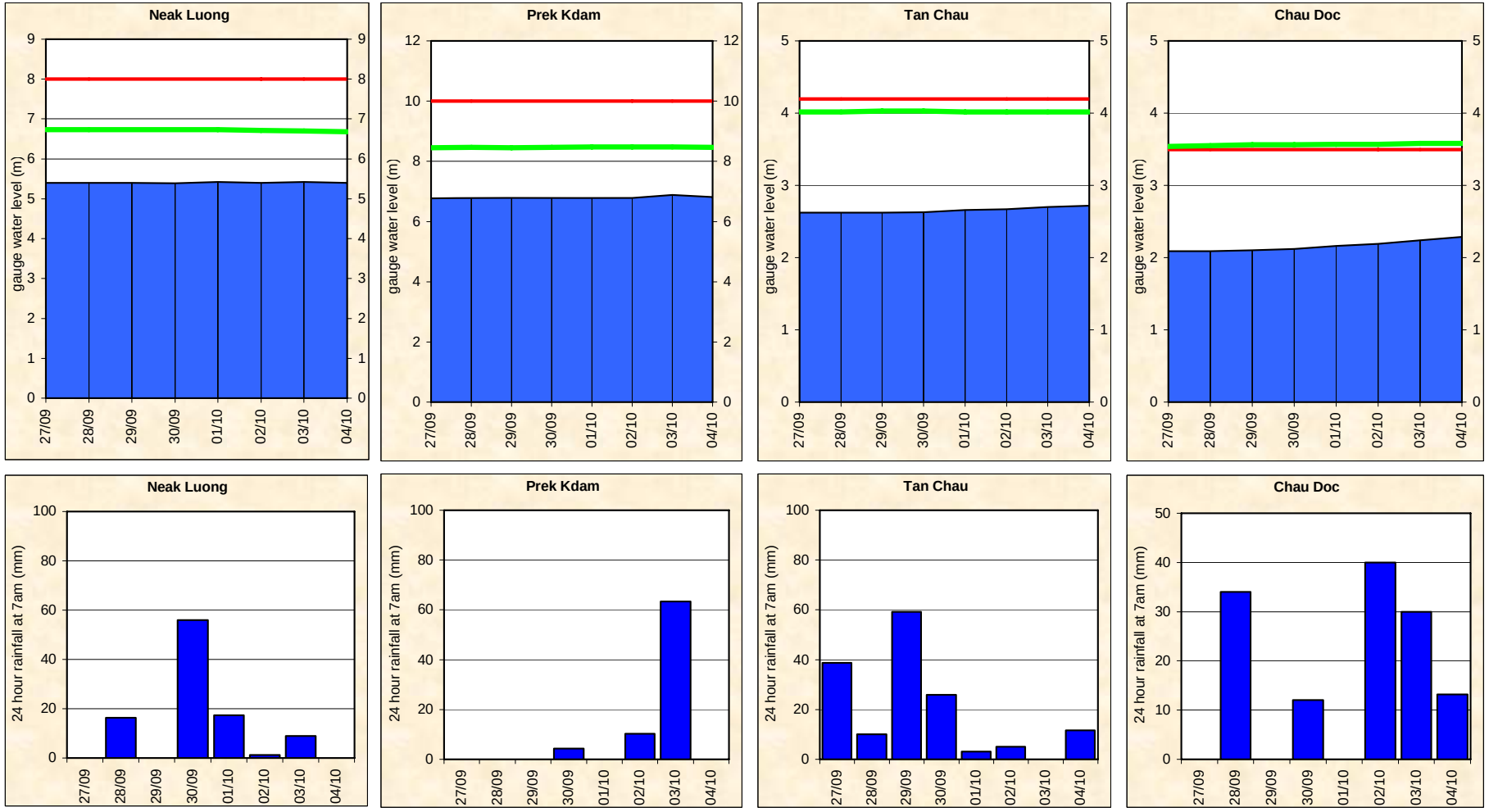


Figure A6: Water level and rainfall for Neak Luong, Prek Kdam, Tan Chau and Chau Doc



# Annex B: Accuracy and performance

## Accuracy

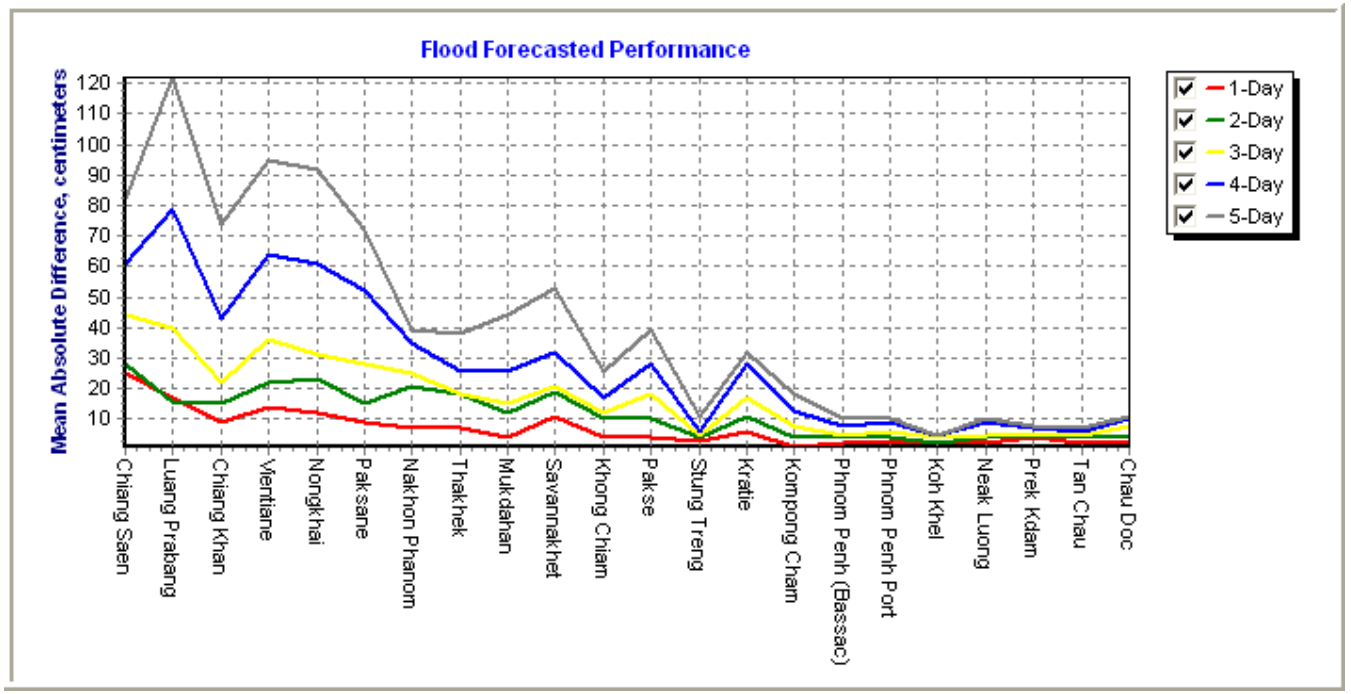
"Accuracy" describes the accuracy of the adjusted and published forecast, based on the results of the MRC Mekong Flood Forecasting System, which are then adjusted by the Flood Forecaster-In-Charge taking into consideration the known biases in input data, the knowledge of model response and the experience with hydrometeorological conditions of the Mekong River Basin. The information presented as a graph below shows the average flood forecasting accuracy along the Mekong mainstream.

The graph of average difference between forecast and actual water levels for the past week shows the normal pattern in which the accuracy is better if the forecast lead time is shorter. The forecast for 4-5 days ahead is always less accuracy than the forecast for 1-2 days ahead.

In overall, the accuracy is good for almost forecasts lead-time at most stations along the Mekong River, however, the accuracies for 4-day and 5-day forecasts at Vientiane and Nong Khai were less than expected.

The above differences perharp caused by internal model functionality in forecasting for those stations for which the parameter adjustment is not possible for stations in the upper part of LMB.

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 | 100.0 | 100.0 | 100.0 | 66.7 | 83.3 | 83.3 | 100.0 | 100.0 | 100.0 | 83.3 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 83.3 | 100.0 | 100.0 | *95.5* |
| 2-day | 100.0 | 100.0 | 80.0 | 60.0 | 60.0 | 80.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 80.0 | 100.0 | 100.0 | *93.6* |
| 3-day | 75.0 | 100.0 | 100.0 | 75.0 | 75.0 | 75.0 | 75.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 75.0 | 100.0 | 100.0 | *93.2* |
| 4-day | 100.0 | 66.7 | 100.0 | 33.3 | 33.3 | 66.7 | 66.7 | 66.7 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 66.7 | *86.4* |
| 5-day | 100.0 | 100.0 | 100.0 | 50.0 | 50.0 | 50.0 | 50.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 50.0 | 100.0 | 100.0 | 50.0 | *86.4* |

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 |

## 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) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2010** | 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* | *10:15* | *0* | *-* | *8* | *08:12* | *08:20* | *07:57* | *05:50* | *08:35* | *08:17* | *07:27* | *0* | *2* | *3* | *49* | *149* | *2* | *69* |
| *month* | *10:18* | *0* | *-* | *30* | *08:13* | *08:25* | *07:55* | *05:57* | *08:35* | *08:09* | *07:31* | *0* | *4* | *6* | *220* | *595* | *10* | *253* |
| *season* | *10:37* | *2* | *-* | *123* | *18:49* | *08:57* | *08:01* | *06:33* | *08:37* | *08:18* | *07:28* | *0* | *26* | *62* | *2113* | *2367* | *65* | *916* |

*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.

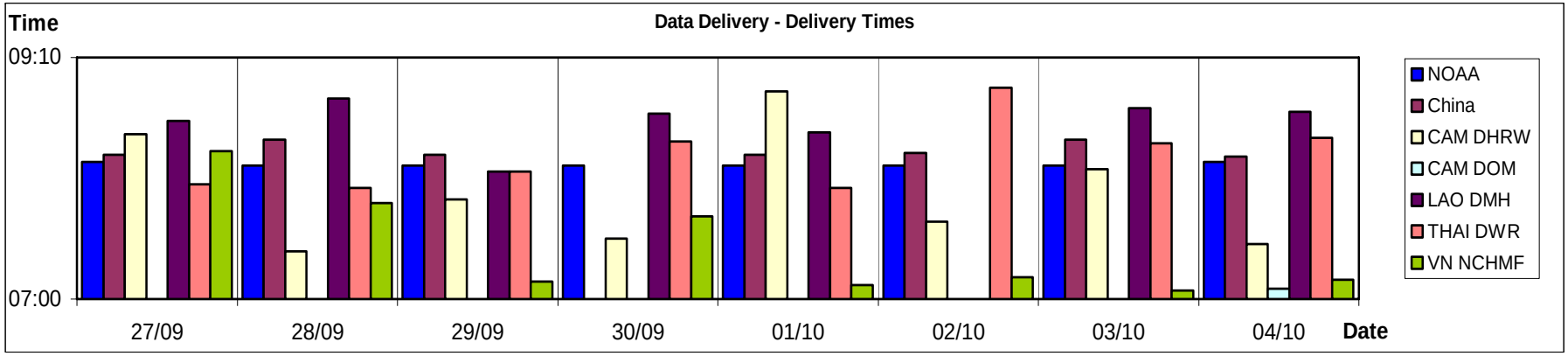


Figure B2: Data delivery times for the past 8 days including the current report date


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

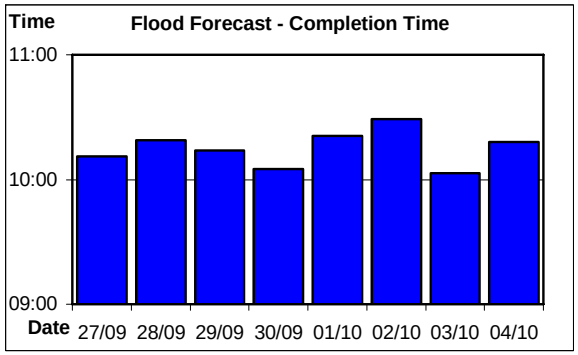



Figure B4: Flood forecast completion time

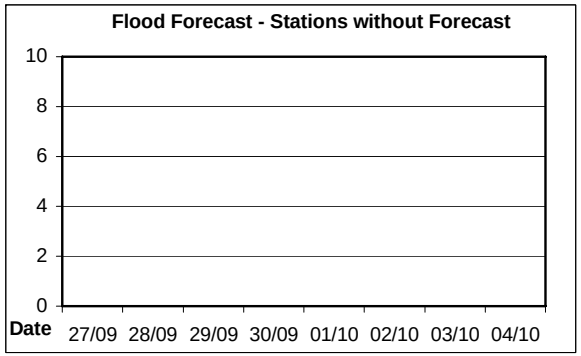



Figure B5: Flood forecast stations without forecast

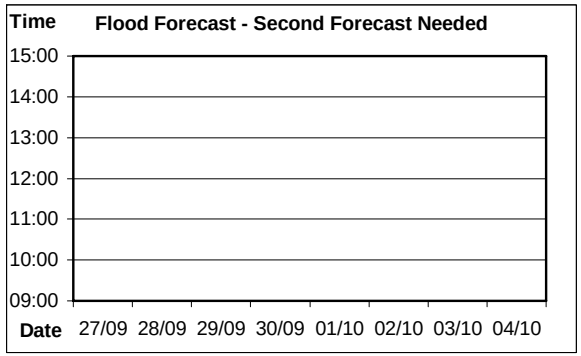


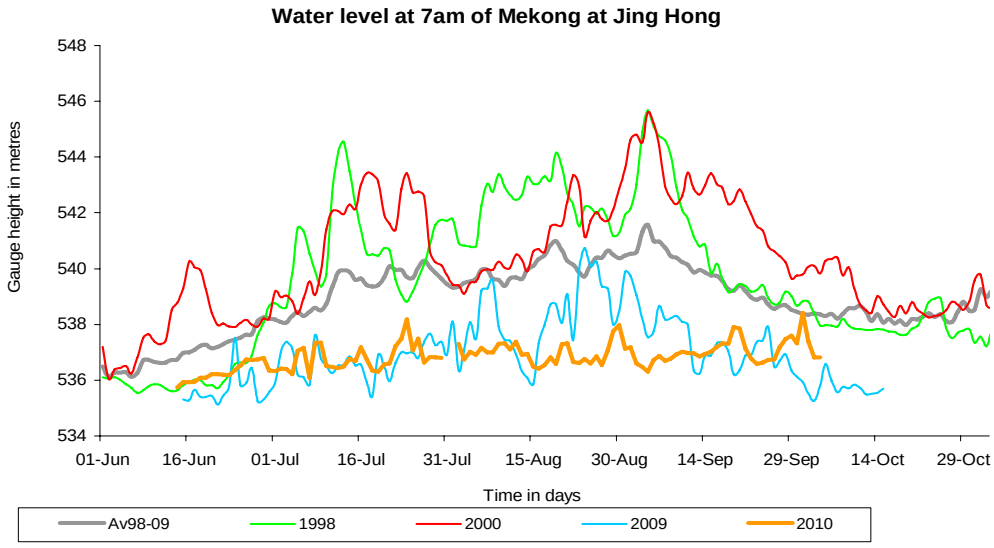

Figure B6: Second forecast needed

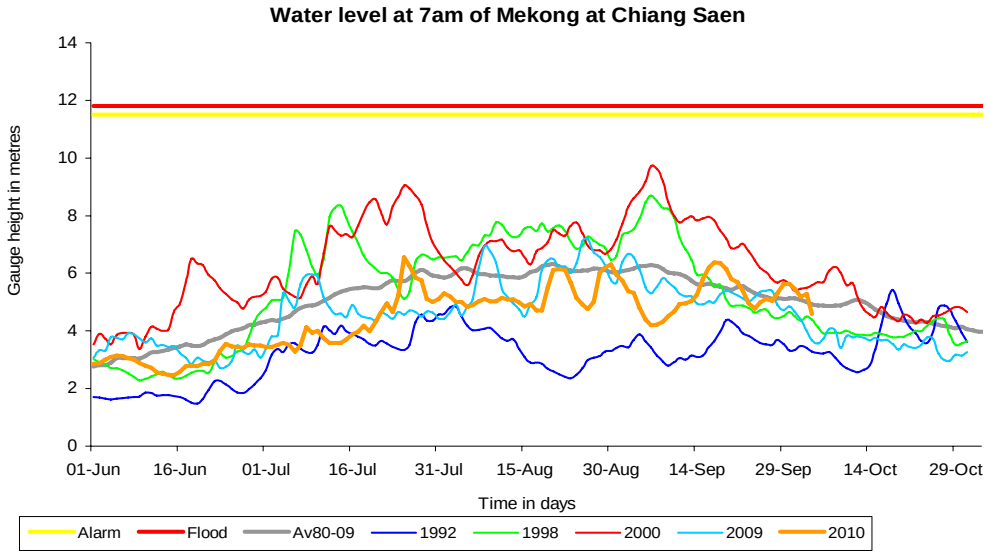
# Annex C: Season Water Level Graphs

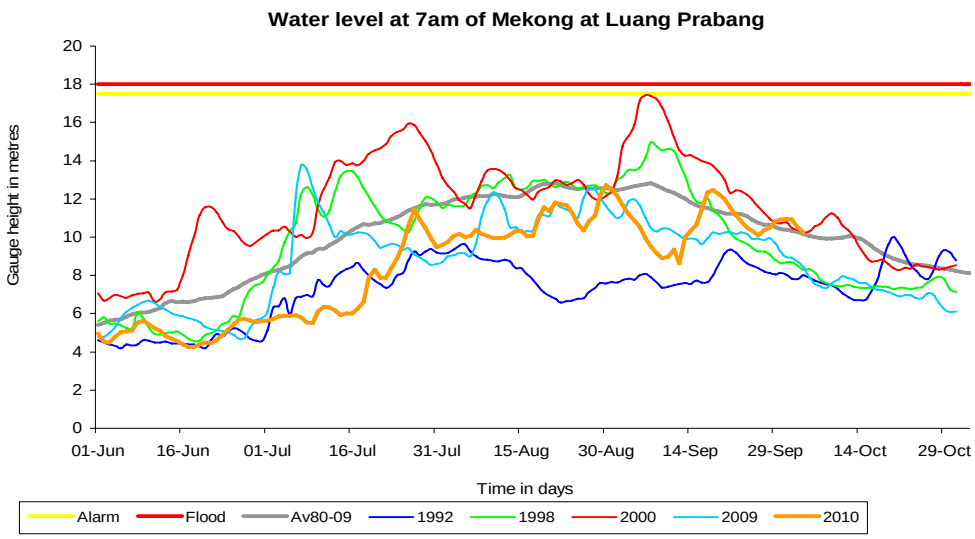
This Annex has the water level graphs of the report date. These graphs are distributed daily by email together with the Flood Bulletins.

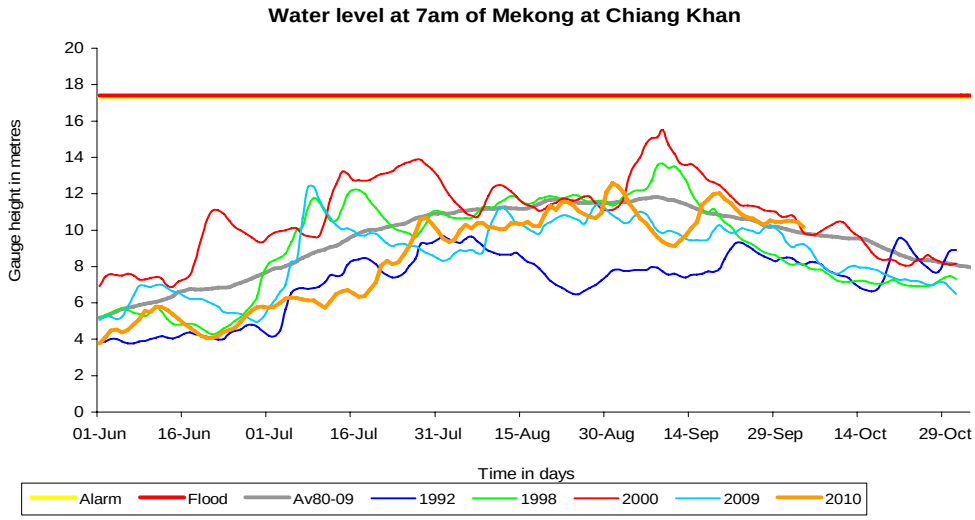
**HYDROGRAPHS OF THE MEKONG AT MAINSTREAM STATIONS**

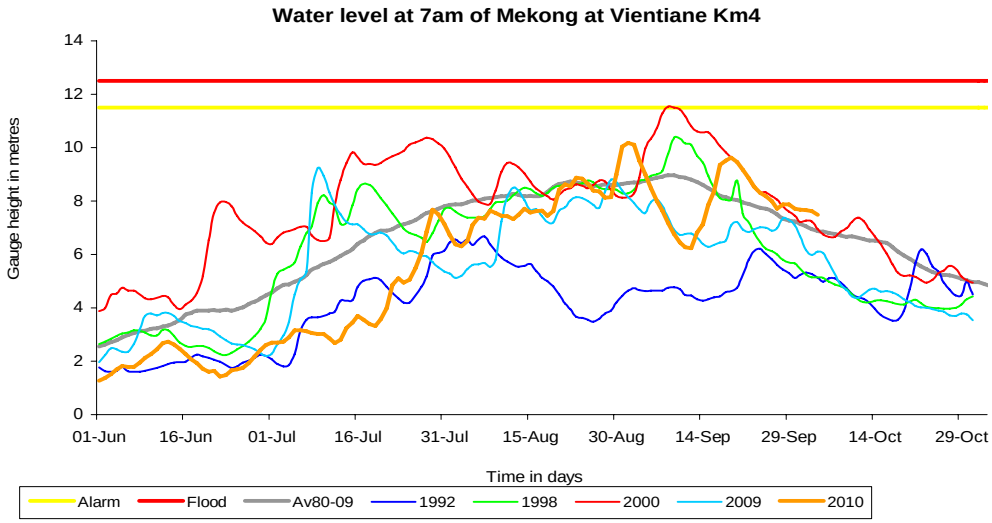
**IN WET SEASON FROM 1 JUNE TO 31 OCTOBER**

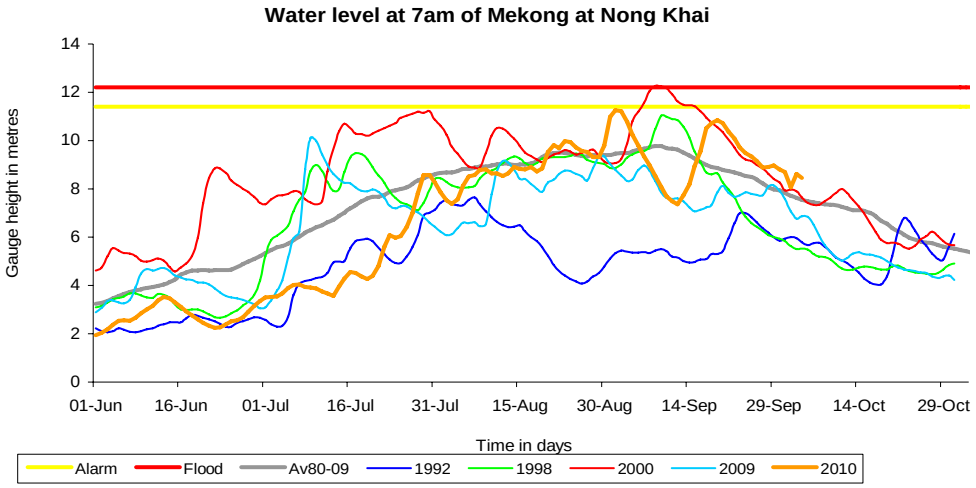


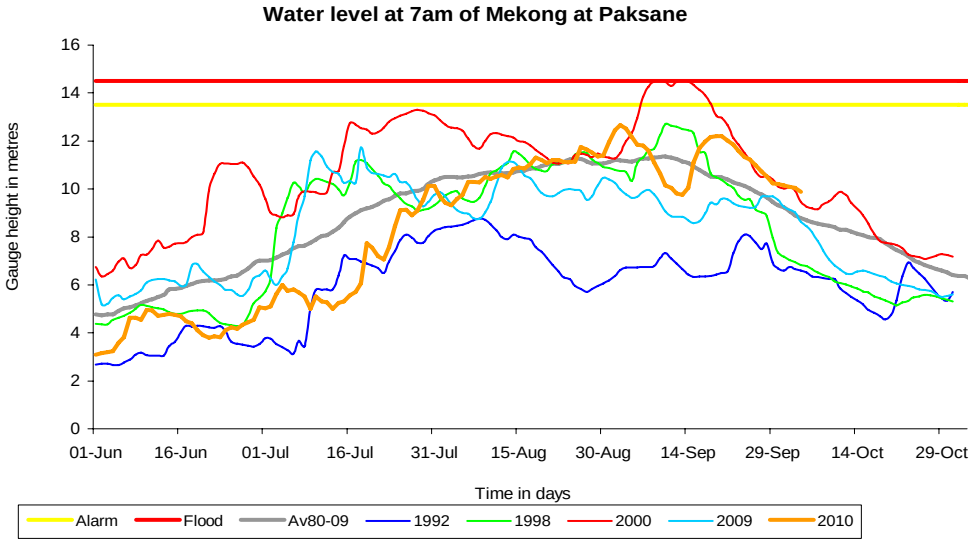



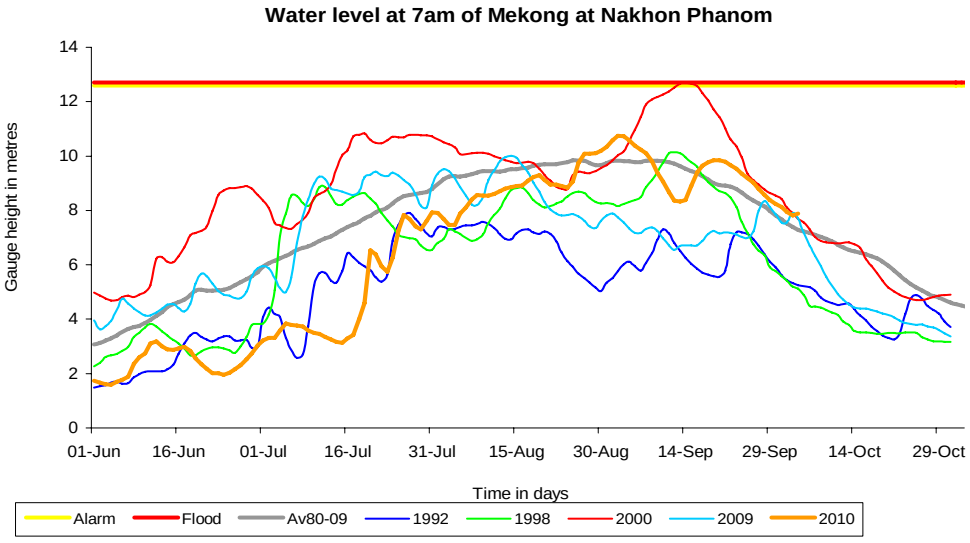

Water level at 7am of Mekong at Luang Prabang
Gauge height in metres
0
2
4
6
8
10
12
14
16
18
20
01-Jun
16-Jun
01-Jul
16-Jul
31-Jul
15-Aug
30-Aug
14-Sep
29-Sep
14-Oct
29-Oct
Time in days
Alarm
Flood
Av80-09
1992
1998
2000
2009
2010

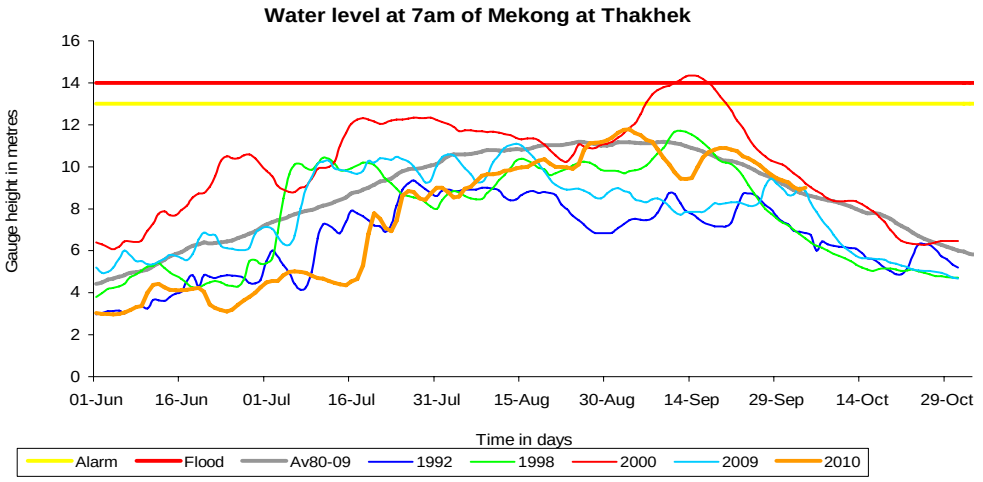

Water level at 7am of Mekong at Chiang Khan
Gauge height in metres
0
2
4
6
8
10
12
14
16
18
20
01-Jun
16-Jun
01-Jul
16-Jul
31-Jul
15-Aug
30-Aug
14-Sep
29-Sep
14-Oct
29-Oct
Time in days
Alarm
Flood
Av80-09
1992
1998
2000
2009
2010

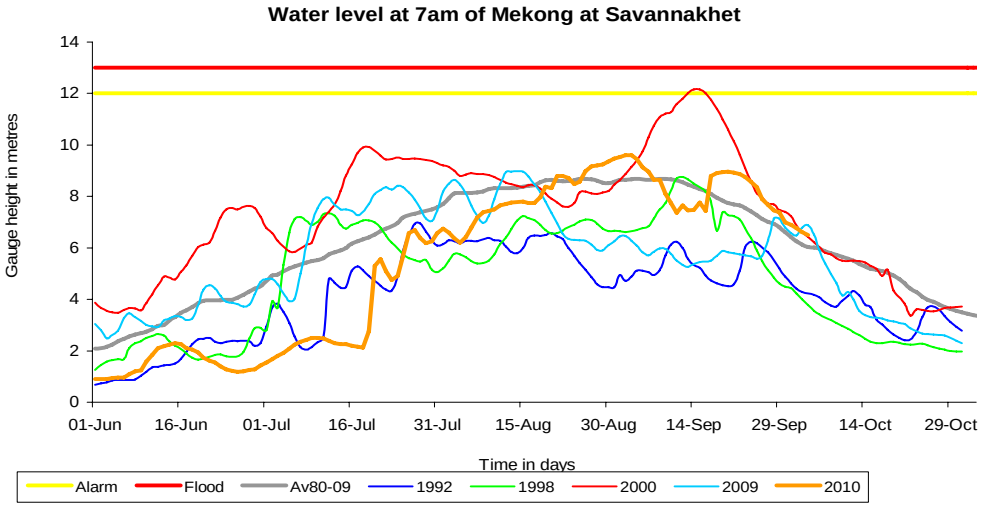

Water level at 7am of Mekong at Vientiane Km4
Gauge height in metres
0
2
4
6
8
10
12
14
01-Jun
16-Jun
01-Jul
16-Jul
31-Jul
15-Aug
30-Aug
14-Sep
29-Sep
14-Oct
29-Oct
Time in days
Alarm
Flood
Av80-09
1992
1998
2000
2009
2010

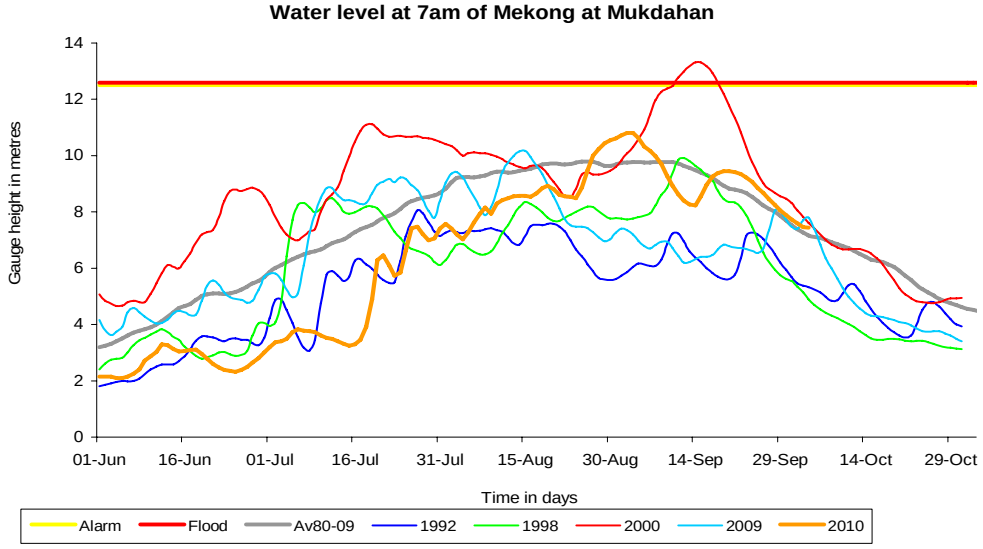

Water level at 7am of Mekong at Nong Khai
Gauge height in metres
0
2
4
6
8
10
12
14
01-Jun
16-Jun
01-Jul
16-Jul
31-Jul
15-Aug
30-Aug
14-Sep
29-Sep
14-Oct
29-Oct
Time in days
Alarm
Flood
Av80-09
1992
1998
2000
2009
2010

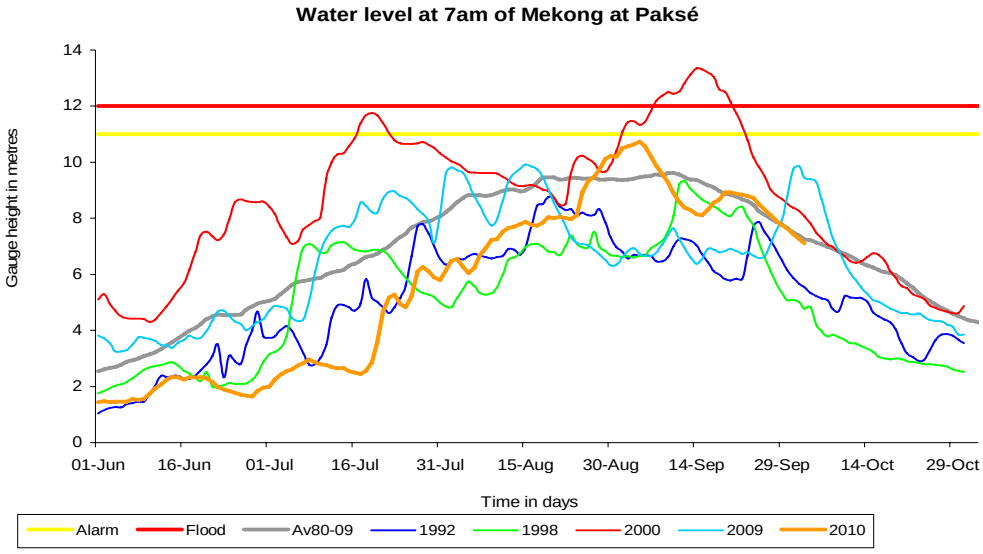

Water level at 7am of Mekong at Paksane
Gauge height in metres
0
2
4
6
8
10
12
14
16
01-Jun
16-Jun
01-Jul
16-Jul
31-Jul
15-Aug
30-Aug
14-Sep
29-Sep
14-Oct
29-Oct
Time in days
Alarm
Flood
Av80-09
1992
1998
2000
2009
2010

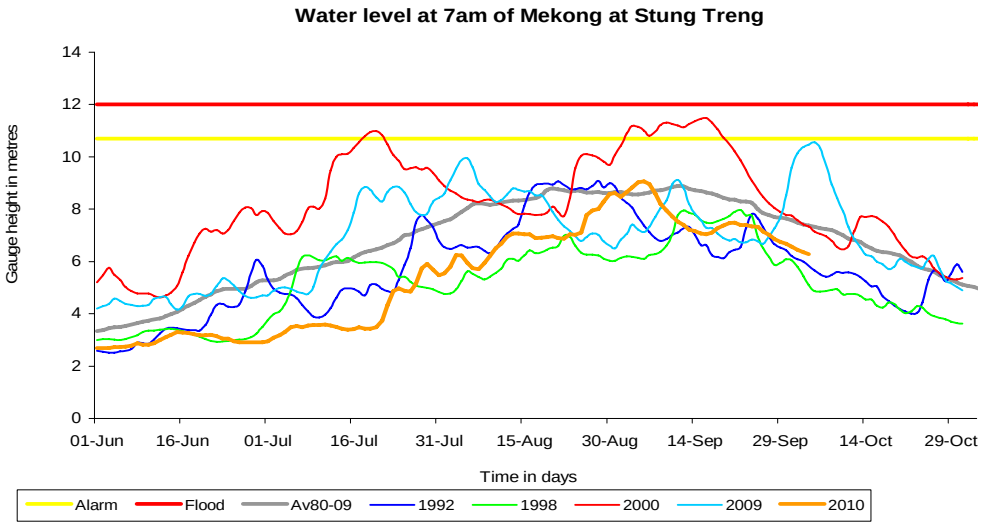

Water level at 7am of Mekong at Nakhon Phanom
Gauge height in metres
0
2
4
6
8
10
12
14
01-Jun
16-Jun
01-Jul
16-Jul
31-Jul
15-Aug
30-Aug
14-Sep
29-Sep
14-Oct
29-Oct
Time in days
Alarm
Flood
Av80-09
1992
1998
2000
2009
2010

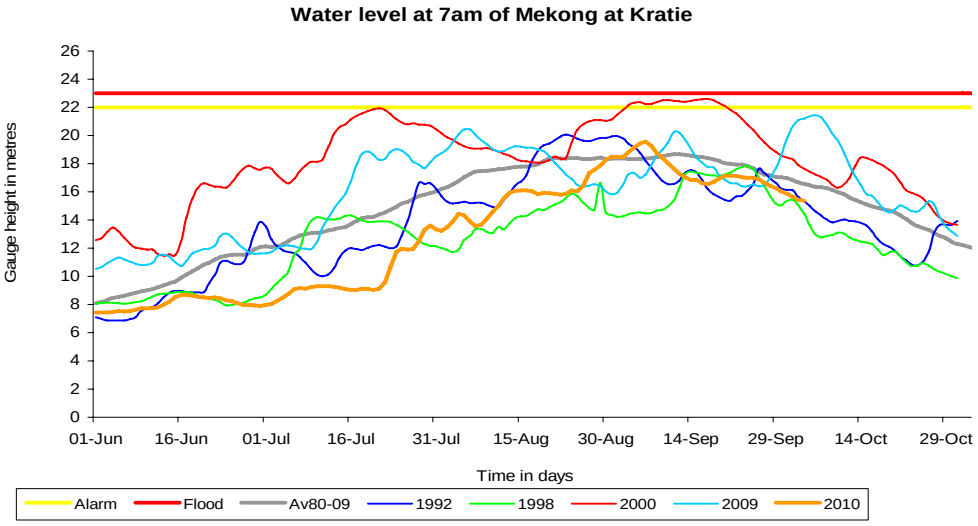

Water level at 7am of Mekong at Thakhek
Gauge height in metres
0
2
4
6
8
10
12
14
16
01-Jun
16-Jun
01-Jul
16-Jul
31-Jul
15-Aug
30-Aug
14-Sep
29-Sep
14-Oct
29-Oct
Time in days
Alarm
Flood
Av80-09
1992
1998
2000
2009
2010


Water level at 7am of Mekong at Savannakhet
Gauge height in metres
0
2
4
6
8
10
12
14
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
Av80-09
1992
1998
2000
2009
2010

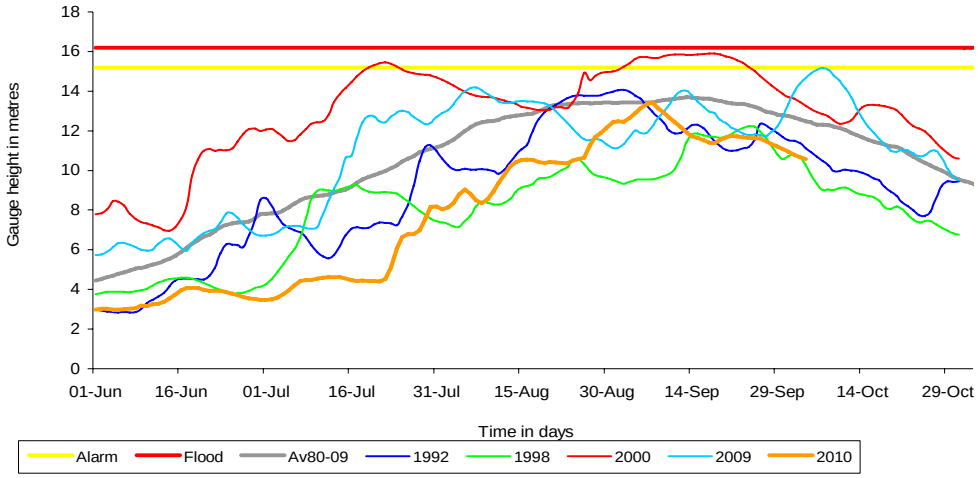

Water level at 7am of Mekong at Mukdahan
Gauge height in metres
0
2
4
6
8
10
12
14
01-Jun
16-Jun
01-Jul
16-Jul
31-Jul
15-Aug
30-Aug
14-Sep
29-Sep
14-Oct
29-Oct
Time in days
Alarm
Flood
Av80-09
1992
1998
2000
2009
2010


Water level at 7am of Mekong at Paksé
Gauge height in metres
0
2
4
6
8
10
12
14
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
Av80-09
1992
1998
2000
2009
2010

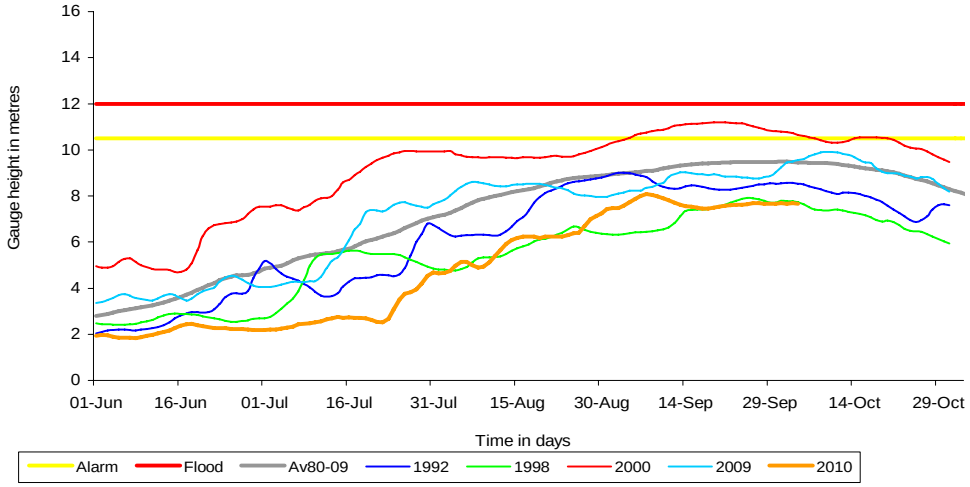

Water level at 7am of Mekong at Stung Treng
Gauge height in metres
0
2
4
6
8
10
12
14
01-Jun
16-Jun
01-Jul
16-Jul
31-Jul
15-Aug
30-Aug
14-Sep
29-Sep
14-Oct
29-Oct
Time in days
Alarm
Flood
Av80-09
1992
1998
2000
2009
2010


Water level at 7am of Mekong at Kratie
Gauge height in metres
0
2
4
6
8
10
12
14
16
18
20
22
24
26
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
Av80-09
1992
1998
2000
2009
2010

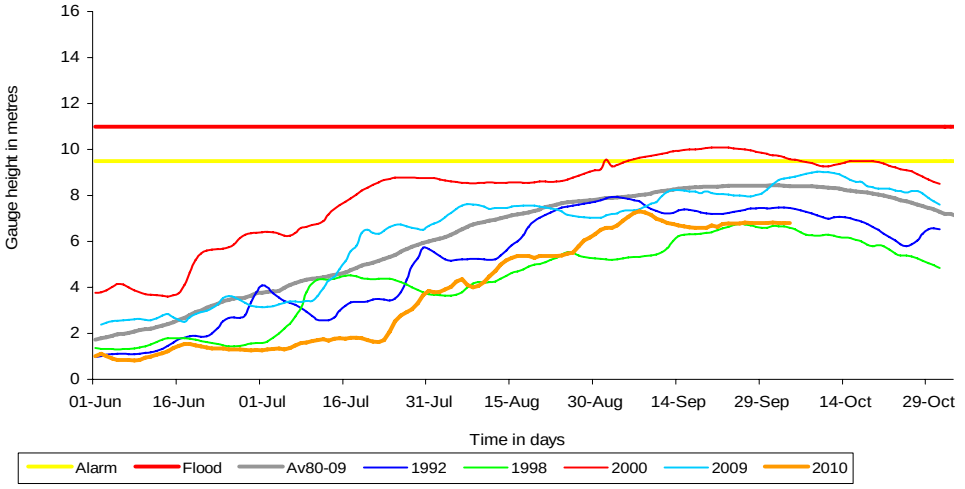
**Water level at 7am of Mekong at Kompong Cham**

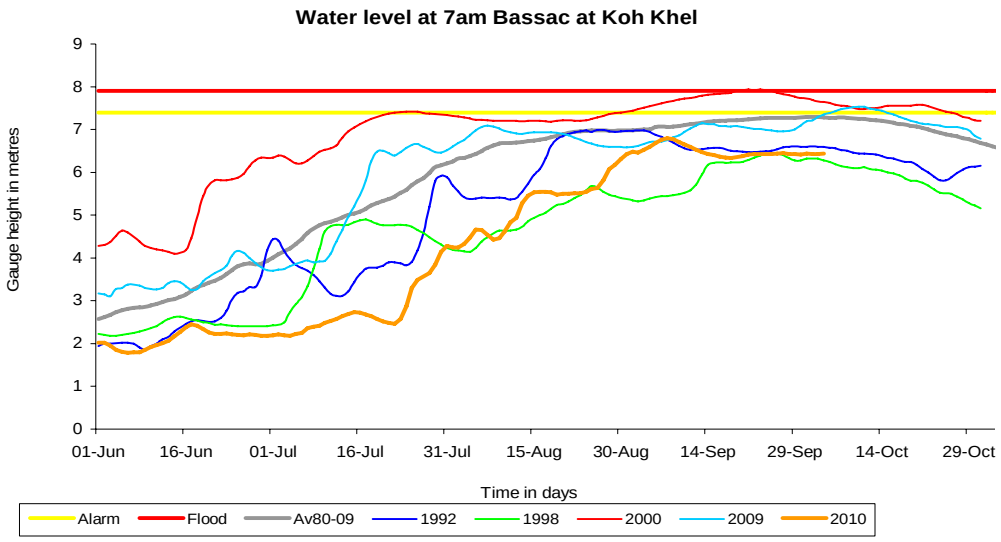


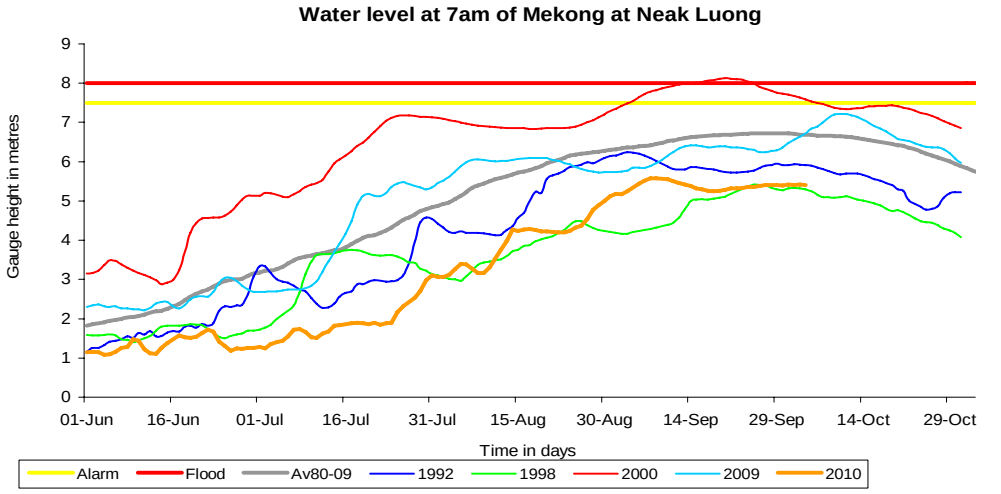

**Water level at 7am of Bassac at Phnom Penh**

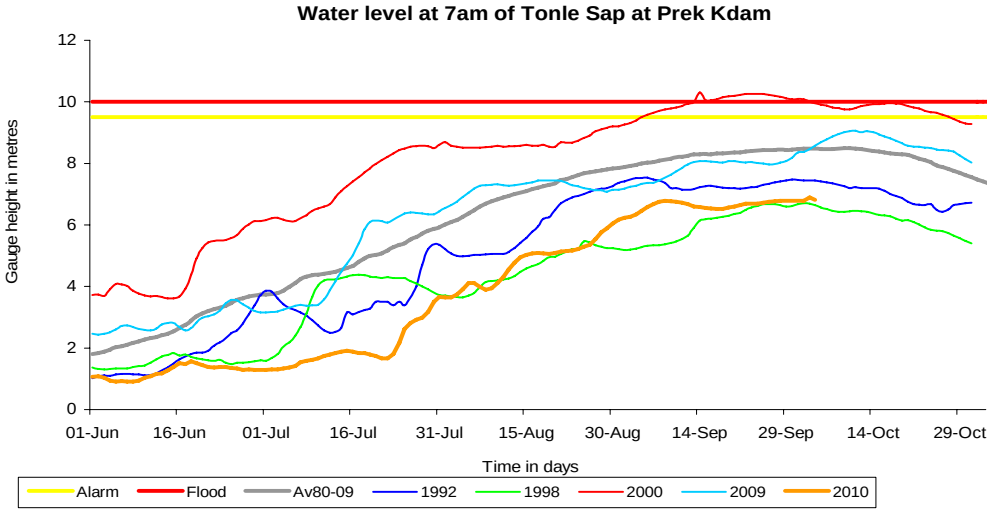


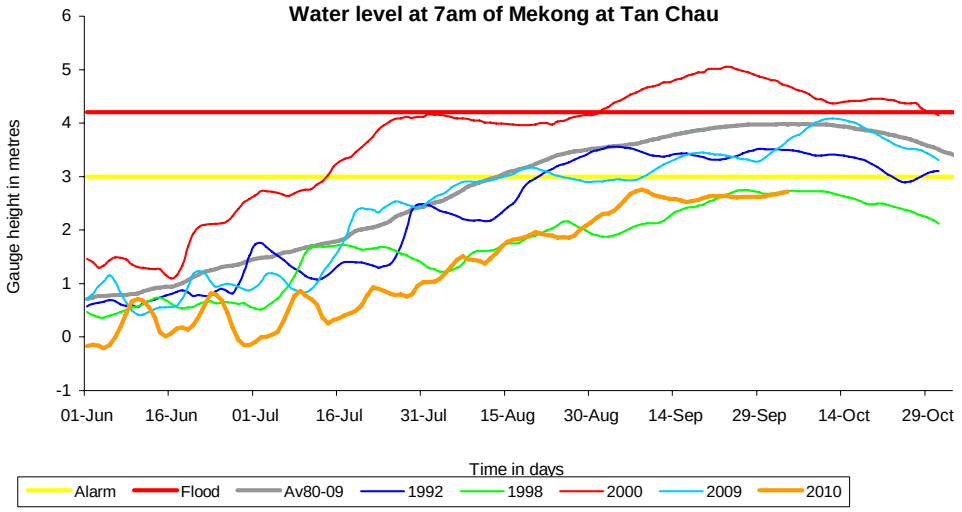

**Water level of Tonle Sap at Phnom Penh Port**

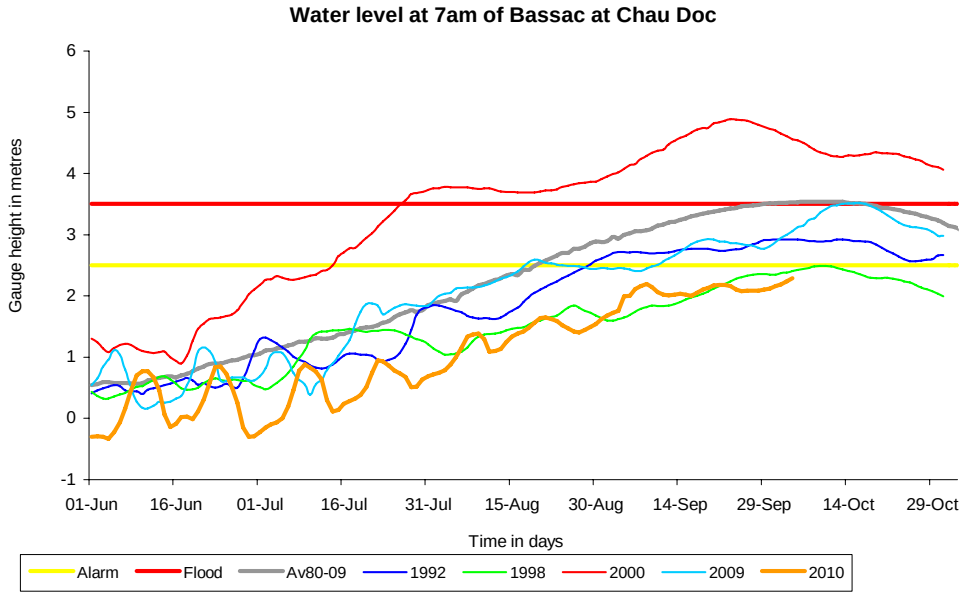



Water level at 7am Bassac at Koh Khel
Gauge height in metres
0
1
2
3
4
5
6
7
8
9
01-Jun
16-Jun
01-Jul
16-Jul
31-Jul
15-Aug
30-Aug
14-Sep
29-Sep
14-Oct
29-Oct
Time in days
Alarm
Flood
Av80-09
1992
1998
2000
2009
2010


Water level at 7am of Mekong at Neak Luong
Gauge height in metres
0
1
2
3
4
5
6
7
8
9
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
Av80-09
1992
1998
2000
2009
2010


Water level at 7am of Tonle Sap at Prek Kdam
Gauge height in metres
0
2
4
6
8
10
12
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
Av80-09
1992
1998
2000
2009
2010


Water level at 7am of Mekong at Tan Chau
Gauge height in metres
6
5
4
3
2
1
0
-1
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
Av80-09
1992
1998
2000
2009
2010


Water level at 7am of Bassac at Chau Doc
Gauge height in metres
6
5
4
3
2
1
0
-1
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
Av80-09
1992
1998
2000
2009
2010