

**Station :** Rasi salai (Ban Klang) **River :** Mun River  
**Station Code :** 050112 **Location :** Tambon Muang kong Amphoe Rasi salai Sri sa khet Province  
**Catchment Area (CA)** 44,600 km<sup>2</sup> **Coordinate :** 15-20-06 N 104-09-42 E  
**Unit :** MCM

Year	Wet Season						Dry Season						Total	Wet Season Total	Dry Season Total	
	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May				
1977-1978	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1978-1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979-1980	536	1,569	690	345	1,431	90	25	15	7	4	4	8	4	4,725	4,661	64
1980-1981	183	745	382	1,224	3,713	2,404	574	73	28	16	10	25	9,378	8,652	727	
1981-1982	109	814	2,261	729	294	186	131	29	10	5	7	5	4,580	4,392	187	
1982-1983	9	10	121	4,532	3,801	663	102	28	12	5	1	10	9,294	9,135	159	
1983-1984	64	236	1,876	1,603	3,233	3,928	830	97	26	13	10	33	11,949	10,940	1,009	
1984-1985	411	374	1,98	1,725	1,360	634	110	37	19	13	9	98	4,987	4,701	286	
1985-1986	233	310	1,144	1,387	1,723	872	339	70	28	10	10	101	6,226	5,669	557	
1986-1987	66	49	706	1,505	660	369	103	33	12	8	4	5	3,519	3,354	165	
mean (1977-1987)	202	513	922	1,631	2,027	1,143	277	48	18	9	7	36	6,832	6,438	394	
1987-1988	17	24	16	1,230	1,442	478	269	62	16	9	2	31	3,598	3,207	391	
1988-1989	639	360	201	102	426	701	314	51	13	8	3	4	2,820	2,428	392	
1989-1990	29	198	532	926	340	225	83	24	6	9	3	14	2,390	2,250	140	
1990-1991	26	100	951	1,588	1,842	1,449	512	61	16	9	3	3	6,559	5,956	604	
1991-1992	12	24	69	1,102	2,966	1,340	84	34	17	8	3	7	5,667	5,514	153	
1992-1993	43	76	523	1,179	753	216	81	23	8	6	6	15	2,929	2,791	138	
1993-1994	64	393	424	596	382	73	11	8	5	7	5	6	1,973	1,931	42	
1994-1995	72	386	192	1,247	1,005	37	4	3	2	3	12	27	2,989	2,939	50	
1995-1996	4	245	1,115	1,250	2,668	1,399	55	10	5	3	5	38	6,798	6,682	116	
1996-1997	192	301	99	779	2,498	2,993	1,259	19	20	14	44	91	8,308	6,862	1,446	
mean (1987-1997)	110	211	412	1,000	1,432	891	267	29	11	8	9	23	4,403	4,056	347	
1997-1998	32	961	1,438	688	1,159	357	16	3	3	3	5	78	4,742	4,634	108	
1998-1999	61	88	90	336	460	209	213	20	16	11	34	142	1,681	1,245	436	
1999-2000	605	895	380	188	1,009	1,415	851	60	9	14	20	148	5,592	4,492	1,101	
2000-2001	948	2,910	2,214	3,891	2,408	1,177	316	36	20	10	17	20	13,988	13,549	439	
2001-2002	83	133	729	1,884	1,691	1,601	249	33	9	5	2	5	6,425	6,122	303	
2002-2003	20	83	473	3,450	4,318	1,686	245	90	20	15	20	32	10,413	10,030	383	
2003-2004	61	25	137	1,484	1,825	477	73	13	5	3	1	4	4,106	4,008	98	
2004-2005	314	529	2,793	1,838	671	77	34	6	3	3	3	5	6,276	6,223	53	
2005-2006	4	17	92	1,166	771	469	272	17	8	4	14	17	2,850	2,519	331	
2006-2007	28	38	425	660	2,986	1,791	47	14	1	4	5	182	6,182	5,929	253	
mean (1997-2007)	216	568	877	1,559	1,730	926	231	25	9	7	12	63	6,223	5,875	348	
Total Mean	174	425	724	1,380	1,708	976	257	33	12	8	9	41	5,747	5,386	361	
Wet Year Mean	175	470	1,027	2,007	2,629	1,670	380	41	16	9	11	45	8,481	7,979	502	
Dry Year Mean	173	391	497	909	1,018	455	165	27	10	7	8	38	3,697	3,442	255	

**Station :** M9 **River :** Mun River  
**Station Code :** M9 **Location :**  
**Catchment Area (CA)** 3,026 km<sup>2</sup> **Coordinate :** 15-07-5.8 N 104-19-6.4 E  
**Unit :** MCM

Year	Wet Season						Dry Season						Total	Wet Season Total	Dry Season Total	
	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May				
1967-1968	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1968-1969	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1969-1970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1970-1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1971-1972	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1972-1973	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1973-1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1974-1975	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1975-1976	8	39	20	192	272	44	8	1	1	1	1	3	590	575	15	
1976-1977	6	46	73	384	505	502	13	3	1	1	0	0	1,534	1,516	18	
mean (1967-1977)	7	43	47	288	389	273	11	2	1	1	0	1	1,052	1,046	17	
1977-1978	2	4	22	182	88	7	2	1	0	2	1	0	5	314	305	9
1978-1979	8	56	182	210	614	42	6	1	1	0	0	2	1,122	1,112	10	
1979-1980	40	146	83	48	172	2	1	0	0	0	0	2	494	491	3	
1980-1981	7	43	13	80	423	269	31	3	1	1	2	11	884	835	49	
1981-1982	16	86	106	22	43	54	15	1	0	0	-	-	-	-	-	-
1982-1983	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1983-1984	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1984-1985	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1985-1986	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1986-1987	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
mean (1977-1987)	15	67	81	108	268	75	11	1	0	0	0	4	704	686	18	
1987-1988	0	1	1	234	80	27	9	1	0	0	0	1	354	343	11	
1988-1989	129	61	11	3	88	74	6	1	1	0	0	3	377	366	11	
1989-1990	11	44	91	108	25	9	2	1	0	1	1	3	296	288	8	
1990-1991	5	29	96	1	371	188	18	5	2	2	0	1	718	690	28	
1991-1992	4	12	7	250	586	120	4	1	0	1	0	0	985	979	6	
1992-1993	4	0	33	206	122	6	0	0	0	0	38	32	441	371	70	
1993-1994	32	40	136	124	20	6	1	0	0	0	2	4	365	358	7	
1994-1995	10	27	31	184	116	11	4	3	2	2	0	2	392	379	13	
1995-1996	3	18	79	160	371	97	4	1	1	1	1	1	737	728	9	
1996-1997	2	9	5	170	519	413	67	4	2	1	1	10	1,203	1,118	85	
mean (1987-1997)	20	24	49	144	230	95	12	2	1	1	4	6	587	562	25	

Station : River : Mun River  
 Station Code : M9 Location :  
 Catchment Area (CA) 3,026 km<sup>2</sup> Coordinate : 15-07-5.8 N 104-19-6.4 E  
 Unit : MCM

Year	Wet Season						Dry Season						Total	Wet Season Total	Dry Season Total
	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May			
1997 - 1998	3	46	140	44	234	12	2	1	1	1	1	1	486	479	7
1998 - 1999	1	2	2	8	24	14	18	1	1	0	3	3	77	51	26
1999 - 2000	12	21	9	6	85	80	20	2	1	1	3	17	257	213	44
2000 - 2001	147	487	484	563	217	35	4	1	1	1	1	2	1,943	1,933	10
2001 - 2002	12	15	229	218	205	244	23	2	1	1	1	2	953	923	30
2002 - 2003	24	31	123	786	351	49	7	2	1	1	1	1	1,377	1,364	13
2003 - 2004	1	2	8	171	151	11	1	1	1	2	1	6	356	344	12
2004 - 2005	52	28	281	96	36	3	2	1	1	1	0	0	501	496	5
2005 - 2006	2	1	20	164	52	33	10	3	1	1	1	1	289	272	17
2006 - 2007	15	4	75	171	506	26	2	1	1	1	1	2	805	797	8
mean (1997 - 2007)	27	64	137	223	186	51	9	2	1	1	1	4	704	687	17
Total Mean	21	48	87	177	232	88	10	2	1	1	2	4	687	666	20
Wet Year Mean	21	68	124	272	424	180	16	2	1	1	1	3	1,115	1,090	24
Dry Year Mean	20	31	59	118	104	23	6	1	1	1	3	6	373	355	17

Station : Ubon Ratchathani River : Mun River  
 Station Code : 050117 Location : Tambon Naimuang Amphoe Muang Ubon ratchathani Province  
 Catchment Area (CA) 104,000 km<sup>2</sup> Coordinate : 15-13-18 N 104-51-42 E  
 Unit : MCM

Year	Wet Season						Dry Season						Total	Wet Season Total	Dry Season Total	
	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May				
1957 - 1958	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1958 - 1959	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1959 - 1960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1960 - 1961	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1961 - 1962	-	-	-	-	-	-	-	151	68	68	43	254	-	-	-	-
1962 - 1963	1,079	2,633	4,204	5,314	9,977	5,203	555	133	69	59	45	77	29,348	28,411	937	
1963 - 1964	287	532	3,004	4,102	4,425	3,924	1,445	193	81	57	48	368	18,467	16,275	2,192	
1964 - 1965	950	906	1,362	2,602	8,331	5,737	1,492	180	91	67	66	153	21,937	19,888	2,049	
1965 - 1966	1,373	2,396	1,493	2,637	2,492	878	182	86	47	41	91	1,228	12,944	11,269	1,675	
1966 - 1967	3,328	1,776	4,388	9,020	7,530	1,042	367	209	145	145	160	190	28,300	27,084	1,216	
mean (1957 - 1967)	1,404	1,648	2,890	4,735	6,551	3,357	808	159	83	73	76	378	22,199	20,585	1,614	
1967 - 1968	249	435	788	2,805	5,274	672	257	185	149	143	142	267	11,367	10,224	1,143	
1968 - 1969	550	357	1,832	4,950	2,832	511	219	131	110	170	217	280	12,160	11,032	1,128	
1969 - 1970	832	2,327	2,727	3,769	5,751	2,812	486	195	122	156	217	252	19,645	18,217	1,428	
1970 - 1971	824	2,092	3,541	4,371	3,544	1,335	619	371	216	257	254	378	17,803	15,707	2,095	
1971 - 1972	951	3,935	3,533	5,175	4,166	1,517	498	288	257	222	218	287	21,048	19,278	1,770	
1972 - 1973	681	1,671	2,780	3,921	6,595	3,069	676	273	148	130	109	153	20,206	18,717	1,489	
1973 - 1974	326	835	1,117	1,455	2,462	743	225	127	149	233	218	392	8,282	6,938	1,344	
1974 - 1975	715	461	2,187	4,749	2,906	1,142	542	205	190	183	226	303	13,807	12,158	1,649	
1975 - 1976	1,118	2,355	1,933	4,336	6,587	3,333	656	292	239	294	402	534	22,078	19,661	2,417	
1976 - 1977	518	678	3,127	4,503	6,939	5,839	1,989	398	240	255	302	455	25,243	21,604	3,639	
mean (1967 - 1977)	677	1,514	2,356	4,003	4,706	2,097	617	296	182	204	231	330	17,164	15,354	1,810	
1977 - 1978	469	348	982	7,496	4,923	720	319	244	190	192	226	309	16,418	14,939	1,479	
1978 - 1979	507	3,289	5,878	6,824	15,017	4,751	555	323	255	285	261	526	38,471	36,266	2,206	
1979 - 1980	2,185	4,533	4,312	2,207	4,103	425	194	170	154	155	155	222	18,815	17,765	1,049	
1980 - 1981	1,178	3,134	2,450	5,492	9,831	6,985	1,209	400	322	423	531	589	32,544	29,070	3,474	
1981 - 1982	1,220	2,462	5,579	2,716	1,566	896	406	201	181	182	208	233	15,851	14,438	1,413	
1982 - 1983	347	316	524	7,625	8,708	2,858	469	198	182	240	260	360	22,087	20,379	1,709	
1983 - 1984	729	2,219	4,267	4,932	6,167	5,462	1,419	383	194	224	275	576	26,847	23,776	3,071	
1984 - 1985	1,042	1,372	2,692	6,242	4,434	2,364	606	238	174	258	245	598	20,265	18,146	2,120	
1985 - 1986	1,231	1,667	4,538	5,196	3,949	2,129	730	227	205	199	157	706	20,934	18,710	2,224	
1986 - 1987	1,201	1,093	2,755	4,649	2,123	966	327	204	106	167	161	220	13,973	12,787	1,185	
mean (1977 - 1987)	1,011	2,043	3,398	5,338	6,082	2,756	623	259	196	233	248	434	22,621	20,628	1,993	

Station : Ubon Ratchathani River : Mun River  
 Station Code : 050117 Location : Tambon Naimuang Amphoe Muang Ubon ratchathani Province  
 Catchment Area (CA) 104,000 km<sup>2</sup> Coordinate : 15-13-18 N 104-51-42 E  
 Unit : MCM

Year	Wet Season						Dry Season						Total	Wet Season Total	Dry Season Total
	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May			
1987 - 1988	290	951	1,537	5,550	4,679	1,743	608	228	180	174	243	536	16,719	14,750	1,969
1988 - 1989	3,412	1,837	1,591	1,216	2,692	2,350	890	230	157	165	212	313	15,015	13,099	1,916
1989 - 1990	643	1,049	3,058	3,418	1,973	1,038	362	181	151	308	214	290	12,685	11,179	1,506
1990 - 1991	921	1,649	3,658	5,738	6,128	3,845	1,182	398	301	307	250	300	24,677	21,938	2,739
1991 - 1992	398	651	1,519	6,516	8,313	3,718	494	341	248	202	265	287	22,953	21,115	1,837
1992 - 1993	765	957	3,123	5,198	2,640	771	308	221	180	204	209	229	14,803	13,453	1,350
1993 - 1994	442	1,088	1,121	2,385	1,230	360	170	125	103	88	106	139	7,357	6,626	731
1994 - 1995	633	1,139	1,680	4,578	3,523	715	517	138	123	131	126	165	13,467	12,269	1,199
1995 - 1996	207	1,068	3,411	3,981	5,556	2,618	596	231	145	156	177	373	18,519	16,841	1,678
1996 - 1997	710	1,000	872	3,514	7,268	6,017	2,703	331	232	193	332	421	23,594	19,381	4,212
mean (1987 - 1997)	842	1,139	2,157	4,210	4,400	2,318	778	242	182	193	213	305	16,979	15,065	1,914
1997 - 1998	591	2,455	3,947	2,774	2,617	872	399	183	113	136	178	14,400	13,256	1,145	
1998 - 1999	456	869	790	1,726	1,109	548	348	135	100	97	133	467	6,777	5,498	1,279
1999 - 2000	1,322	1,956	1,835	1,852	3,600	2,728	1,235	241	186	263	385	1,631	17,234	13,292	3,942
2000 - 2001	4,117	8,375	7,353	10,528	6,788	2,924	796	278	208	298	310	351	42,325	40,084	2,241
2001 - 2002	787	2,087	4,181	9,501	7,026	4,980	1,485	427	320	267	291	433	31,786	28,563	3,223
2002 - 2003	913	1,487	3,607	9,707	10,599	5,005	1,682	336	280	356	423	381	34,775	31,318	3,457
2003 - 2004	960	710	1,992	6,278	5,614	1,336	651	280	275	214	233	673	19,216	16,890	2,326
2004 - 2005	1,456	1,846	7,981	6,154	2,096	247	180	100	97	92	156	202	20,606	19,780	826
2005 - 2006	242	747	2,059	4,531	3,683	1,513	930	164	110	123	209	308	14,617	12,774	1,843
2006 - 2007	351	749	2,110	3,139	7,671	4,157	698	165	76	140	165	569	19,992	18,177	1,815
mean (1997 - 2007)	1,119	2,128	3,585	5,619	5,080	2,431	840	231	177	198	244	519	22,173	19,963	2,210
Total Mean	967	1,700	2,876	4,786	5,232	2,507	725	233	171	189	213	395	20,008	18,067	1,941
Wet Year Mean	1,110	2,085	3,474	5,999	7,339	3,866	973	282	204	222	249	388	26,191	23,874	2,318
Dry Year Mean	842	1,362	2,352	3,725	3,388	1,317	508	194	147	166	189	406	14,597	12,986	1,611

Station : M7 River : Mun River  
 Station Code : M7 Location :  
 Catchment Area (CA) 106,673 km<sup>2</sup> Coordinate : 15-13-21.8 N 104-51-26.2 E  
 Unit : MCM

Year	Wet Season						Dry Season						Total	Wet Season Total	Dry Season Total	
	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May				
1967 - 1968	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1968 - 1969	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1969 - 1970	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1970 - 1971	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1971 - 1972	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1972 - 1973	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1973 - 1974	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1974 - 1975	-	-	-	-	-	-	-	-	-	-	223	395	-	-	-	-
1975 - 1976	2234	2004	1832	4417	6709	3379	625	268	215	250	330	490	22,753	20,575	2,178	
1976 - 1977	505	740	2824	4170	6938	5798	1845	318	199	210	263	454	24,264	20,975	3,289	
mean (1967 - 1977)	1,370	1,372	2,328	4,294	6,824	4,589	1,235	293	207	230	272	446	23,509	20,775	2,734	
1977 - 1978	553	421	883	7020	4717	684	367	330	278	312	242	496	16,303	14,278	2,025	
1978 - 1979	744	3379	5863	6699	17722	4542	535	310	253	276	259	585	41,167	38,949	2,218	
1979 - 1980	2310	4581	4238	2249	4019	390	188	173	157	150	158	341	18,954	17,787	1,167	
1980 - 1981	1189	3154	2261	5121	9166	6612	1108	354	296	393	532	710	30,896	27,503	3,393	
1981 - 1982	1293	2318	5251	2520	1496	838	424	272	238	246	-	-	-	-	-	-
1982 - 1983	-	-	-	-	-	-	-	-	-	-	371	500	-	-	-	-
1983 - 1984	937	2223	3572	4185	5860	6338	1640	401	171	212	241	400	26,180	23,115	3,065	
1984 - 1985	770	977	1801	4728	3060	1512	425	204	162	218	242	536	14,635	12,848	1,787	
1985 - 1986	1140	1465	3992	4517	3336	1758	600	194	170	173	151	592	18,088	16,208	1,880	
1986 - 1987	1097	916	2307	3928	1802	809	255	148	79	128	155	266	11,890	10,859	1,031	
mean (1977 - 1987)	1,115	2,159	3,352	4,552	5,686	2,609	616	265	200	234	261	492	22,264	20,193	2,071	
1987 - 1988	340	1093	969	5171	4453	1653	601	209	157	153	274	525	15,598	13,679	1,919	
1988 - 1989	3022	1761	1443	1077	2329	2112	759	279	198	183	175	278	13,616	11,744	1,872	
1989 - 1990	636	966	2903	3235	1774	914	287	133	117	239	241	357	11,802	10,428	1,374	
1990 - 1991	1032	1763	3592	5660	6020	3864	1172	382	275	284	117	175	24,336	21,931	2,405	
1991 - 1992	344	666	1152	5570	7506	3663	474	294	211	160	262	308	20,610	18,901	1,709	
1992 - 1993	913	944	3124	5359	2663	749	270	197	149	178	200	212	14,958	13,752	1,206	
1993 - 1994	450	1029	1016	2137	1131	320	142	66	31	9	1	22	6,354	6,083	271	
1994 - 1995	699	1266	1779	5467	4250	717	290	1	1	2	58	198	14,728	14,178	550	
1995 - 1996	296	1314	3325	3907	5364	2710	317	64	27	29	103	204	17,600	16,916	744	
1996 - 1997	542	970	795	3319	7062	5789	2526	312	121	116	237	411	22,200	18,477	3,723	
mean (1987 - 1997)	827	1,177	2,010	4,090	4,255	2,249	684	194	129	135	167	269	16,186	14,609	1,577	

**Station :** M7  
**Station Code :** M7  
**Catchment Area (CA)** 106,673 km<sup>2</sup>  
**Unit :** MCM  
**River :** Mun River  
**Location :**  
**Coordinate :** 15-13-21.8 N 104-51-26.2 E

Year	Wet Season						Dry Season						Total	Wet Season Total	Dry Season Total
	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May			
1997 - 1998	586	2198	3545	2481	2377	893	548	190	49	86	46	71	13,070	12,080	990
1998 - 1999	466	667	625	1376	792	415	323	31	19	15	119	510	5,358	4,341	1,017
1999 - 2000	1212	1635	1525	1571	2894	2194	976	147	97	167	400	1721	14,539	11,031	3,508
2000 - 2001	4071	7910	6704	10154	6113	2664	795	181	127	187	331	419	39,656	37,616	2,040
2001 - 2002	930	2052	3823	9908	6632	4676	1245	400	315	299	322	457	31,059	28,021	3,038
2002 - 2003	920	1379	2830	10304	11616	4299	1400	384	330	389	383	290	34,524	31,348	3,176
2003 - 2004	830	601	1547	5221	4749	1046	487	167	172	139	176	641	15,776	13,994	1,782
2004 - 2005	1601	1625	7426	5322	1727	192	83	22	105	101	145	228	18,577	17,893	684
2005 - 2006	294	666	2041	4455	3732	1499	894	141	89	110	191	296	14,408	12,687	1,721
2006 - 2007	434	874	1836	2887	7816	4005	562	130	77	101	142	395	19,259	17,852	1,407
mean (1997 - 2007)	1,134	1,961	3,190	5,368	4,845	2,188	731	179	138	159	226	503	20,623	18,686	1,936
Total Mean	1,045	1,728	2,801	4,650	5,027	2,485	715	216	158	178	222	421	19,774	17,868	1,906
Wet Year Mean	1,223	2,385	3,204	6,319	8,304	4,693	1,215	328	228	252	298	427	28,877	26,128	2,749
Dry Year Mean	929	1,316	2,438	3,795	3,315	1,293	441	149	112	131	169	415	14,504	13,066	1,418

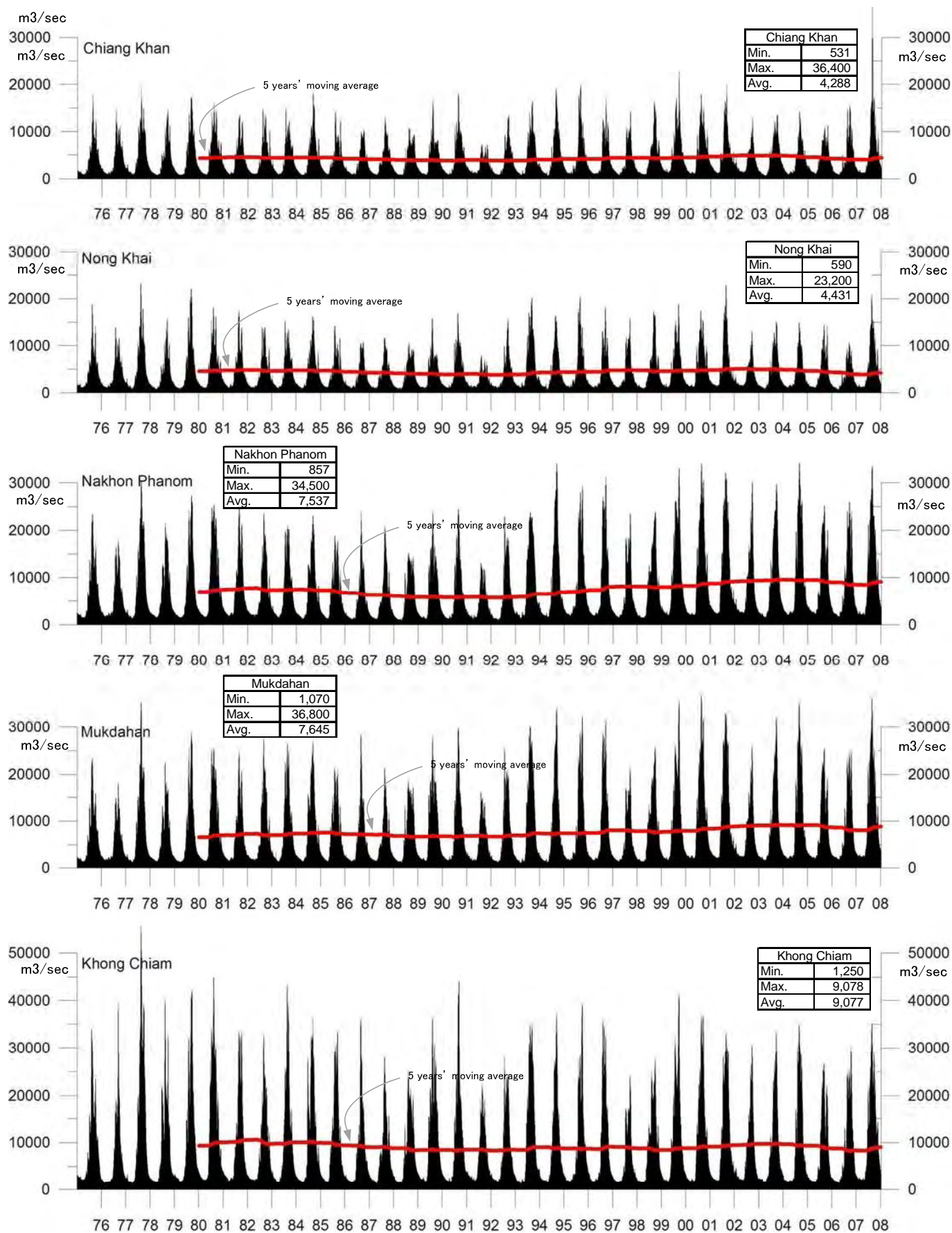
**Station :** Ban pak mun  
**Station Code :** 050127  
**Catchment Area (CA)** 117,000 km<sup>2</sup>  
**Unit :** MCM  
**River :** Mun River  
**Location :** Tambon Khong chiam Amphoe Khong chiam Ubon ratchathani Province  
**Coordinate :** 15-18-30 N 105-29-42 E

Year	Wet Season						Dry Season						Total	Wet Season Total	Dry Season Total	
	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May				
1957 - 1958	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1958 - 1959	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1959 - 1960	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1960 - 1961	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1961 - 1962	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1962 - 1963	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1963 - 1964	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1964 - 1965	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1965 - 1966	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1966 - 1967	-	-	-	-	-	-	-	216	153	150	141	224	-	-	-	-
mean (1957 - 1967)	-	-	-	-	-	-	-	216	153	150	141	224	-	-	-	-
1967 - 1968	618	1,040	2,152	4,577	6,064	814	351	-	-	-	-	-	-	-	-	-
1968 - 1969	-	-	-	-	-	-	-	130	101	140	195	381	-	-	-	-
1969 - 1970	1,394	3,699	3,641	4,172	5,292	2,711	611	224	172	164	172	420	22,672	20,909	1,763	
1970 - 1971	1,767	3,532	6,473	5,918	3,965	1,722	954	404	230	188	160	235	25,550	23,377	2,172	
1971 - 1972	1,040	5,292	4,756	5,994	4,436	1,774	583	419	289	253	243	284	25,363	23,292	2,071	
1972 - 1973	1,441	4,074	4,234	5,105	7,731	2,661	771	288	210	213	209	302	27,238	25,245	1,993	
1973 - 1974	613	1,022	1,390	2,494	2,417	951	418	258	201	215	210	345	10,534	8,887	1,648	
1974 - 1975	934	772	3,708	5,136	2,919	1,102	517	291	213	207	196	268	16,262	14,572	1,690	
1975 - 1976	1,769	3,372	2,690	5,695	7,212	3,550	694	453	320	242	260	553	26,809	24,288	2,521	
1976 - 1977	524	1,056	4,405	4,257	7,210	5,705	1,843	410	142	169	243	306	26,270	23,158	3,112	
mean (1967 - 1977)	1,122	2,651	3,717	4,817	5,250	2,332	749	320	209	199	210	344	22,587	20,466	2,121	
1977 - 1978	550	843	1,924	8,640	4,957	513	137	-	-	-	-	-	-	-	-	-
1978 - 1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1979 - 1980	-	-	-	-	-	-	-	299	193	178	181	369	-	-	-	-
1980 - 1981	1,899	3,810	2,979	6,792	10,441	7,423	1,343	486	394	438	476	664	37,143	33,343	3,801	
1981 - 1982	2,214	4,691	7,522	3,591	2,085	1,062	673	574	343	282	309	379	23,725	21,165	2,560	
1982 - 1983	795	933	1,887	11,205	9,303	2,542	811	447	300	275	286	376	29,159	26,665	2,494	
1983 - 1984	1,207	2,886	6,947	8,101	5,895	3,430	1,339	717	427	291	262	617	32,119	28,466	3,653	
1984 - 1985	1,457	1,478	6,005	7,103	4,196	1,990	787	375	262	243	211	383	24,491	22,229	2,261	
1985 - 1986	2,205	3,169	6,251	5,980	2,799	1,362	847	340	232	204	172	618	24,178	21,766	2,412	
1986 - 1987	1,681	2,660	4,378	5,385	2,743	793	392	289	185	186	177	233	19,100	17,640	1,460	
mean (1977 - 1987)	1,501	2,559	4,737	7,100	5,302	2,389	791	441	292	262	259	455	27,131	24,468	2,663	

**Station :** Ban pak mun      **River :** Mun River  
**Station Code :** 050127      **Location :** Tambon Khong chiam    Amphoe Khong chiam      Ubon ratchathani Province  
**Catchment Area (CA)** 117,000    km<sup>2</sup>      **Coordinate :** 15-18-30    N    105-29-42    E  
**Unit :** MCM

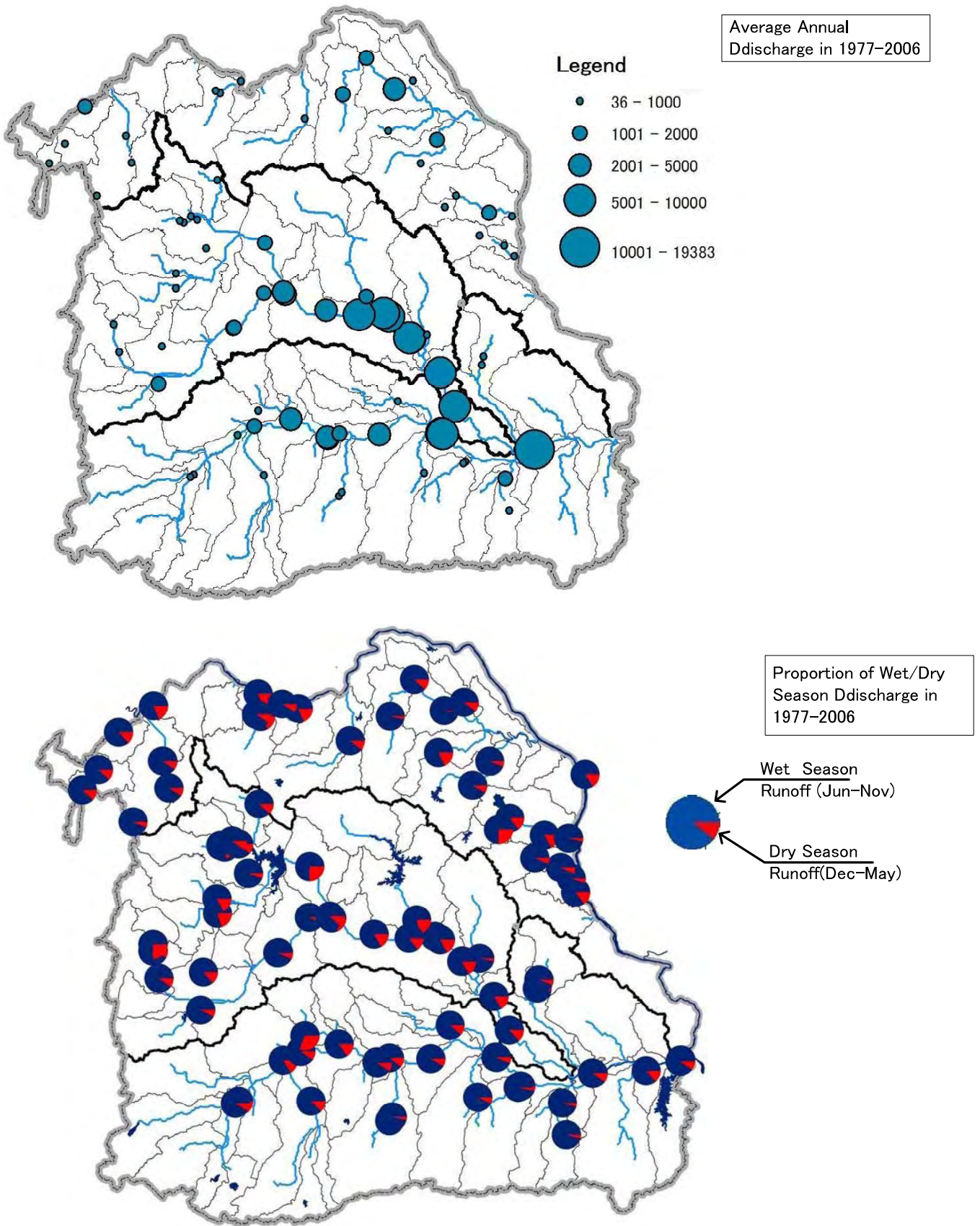
Year	Wet Season						Dry Season						Total	Wet Season Total	Dry Season Total
	Jun	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May			
1987 - 1988	662	2,093	6,096	6,415	3,341	1,024	546	358	200	172	147	759	21,812	19,631	2,181
1988 - 1989	3,600	1,904	3,235	2,121	1,459	2,457	767	255	184	186	188	291	16,646	14,776	1,870
1989 - 1990	1,167	2,065	4,989	3,840	3,114	947	322	266	216	242	213	285	17,664	16,121	1,544
1990 - 1991	1,884	3,269	4,361	8,205	6,587	3,302	1,352	471	238	178	191	310	30,348	27,608	2,740
1991 - 1992	773	1,548	5,117	7,789	8,378	3,232	956	389	270	251	231	270	29,207	26,838	2,369
1992 - 1993	828	2,792	5,750	5,151	2,524	958	403	330	146	166	178	243	19,470	18,003	1,467
1993 - 1994	409	2,371	2,935	3,219	989	414	238	159	122	103	134	154	11,246	10,337	909
1994 - 1995	1,350	3,483	5,737	4,864	1,751	358	257	184	155	169	161	185	18,656	17,543	1,112
1995 - 1996	395	1,490	3,758	4,606	4,835	1,970	257	350	197	188	195	479	18,719	17,053	1,666
1996 - 1997	710	2,367	1,367	4,969	7,034	5,856	2,478								
mean (1987 - 1997)	1,178	2,338	4,334	5,118	4,001	2,052	758	307	192	184	182	331	20,419	18,657	1,762
1997 - 1998	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1998 - 1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1999 - 2000	-	-	-	-	-	-	-	271	145	151	169	1,908	-	-	-
2000 - 2001	1,865	9,608	9,356	1,865	5,010	1,865	549	304	180	231	206	596	31,634	29,568	2,065
2001 - 2002	340	2,399	5,991	340	5,953	340	1,169	351	259	242	220	417	18,022	15,364	2,658
2002 - 2003	419	2,721	3,640	419	7,367	419	1,762	-	-	-	-	-	-	-	-
2003 - 2004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2004 - 2005	-	-	-	-	-	-	-	260	215	229	237	253	-	-	-
2005 - 2006	174	1,352	2,873	174	3,561	174	735	284	250	261	250	173	10,259	8,307	1,953
2006 - 2007	129	1,696	3,403	129	2,429	129	295	561	432	408	405	787	10,805	7,916	2,888
mean (1997 - 2007)	585	3,555	5,053	585	4,864	585	902	338	247	254	248	689	17,680	15,289	2,391
Total Mean	1,150	2,671	4,373	4,820	4,812	1,986	786	346	230	219	219	426	22,325	20,145	2,180
Wet Year Mean	1,488	3,480	5,213	6,257	6,089	2,973	964	434	274	247	247	421	28,088	25,500	2,587
Dry Year Mean	977	2,128	4,135	3,432	3,095	1,023	495	297	209	208	203	360	16,562	14,790	1,772

### Appendix 3.6.4 Daily Runoff of Mekong River



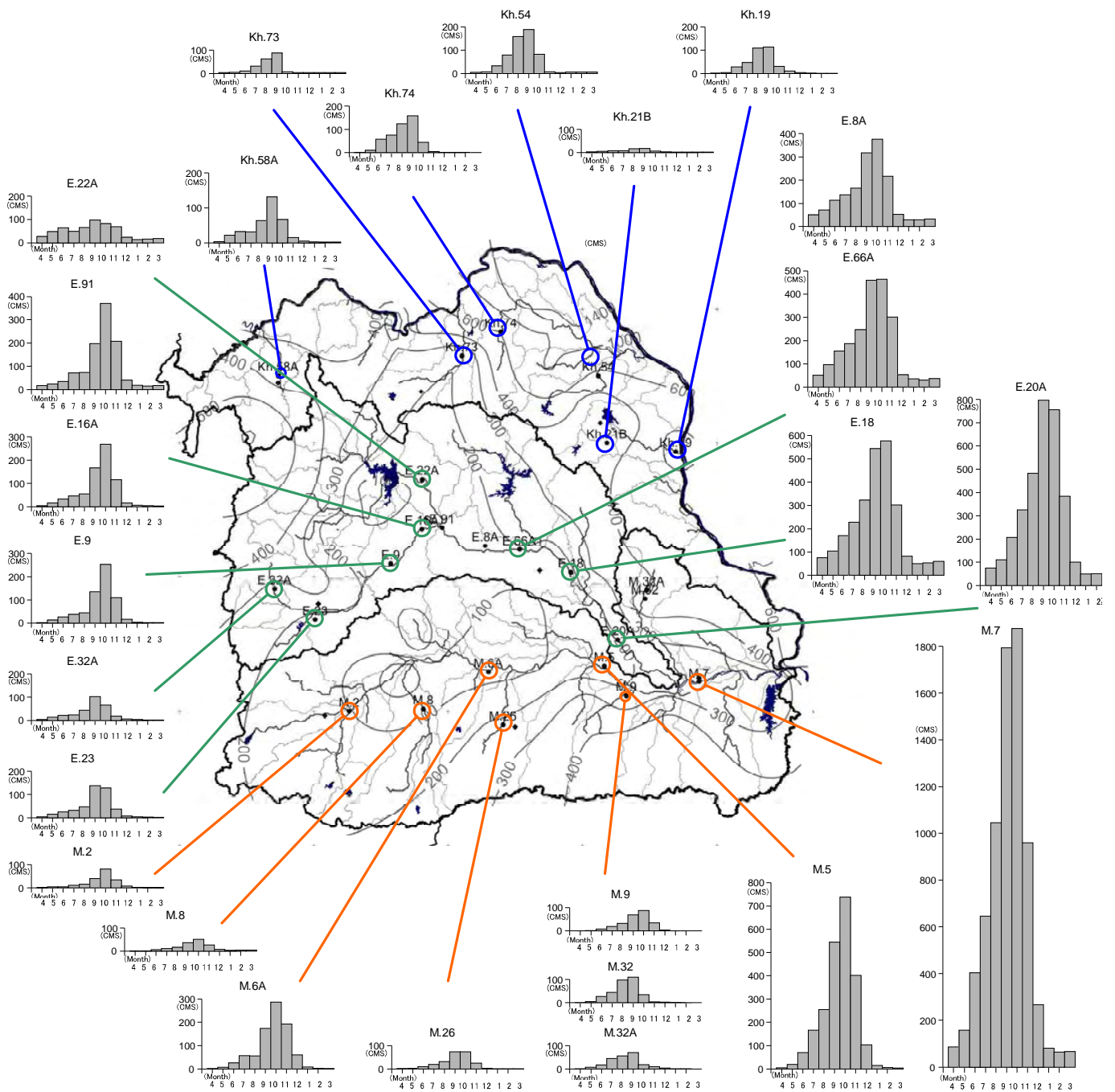
Daily Discharge of Mekong River (unit: m<sup>3</sup>/sec)

Appendix 3.6.5 Mean Wet/Dry Season Runoff of Major Station



Proportion of Wet / Dry Season Discharge (1977-2006, unit :cms)

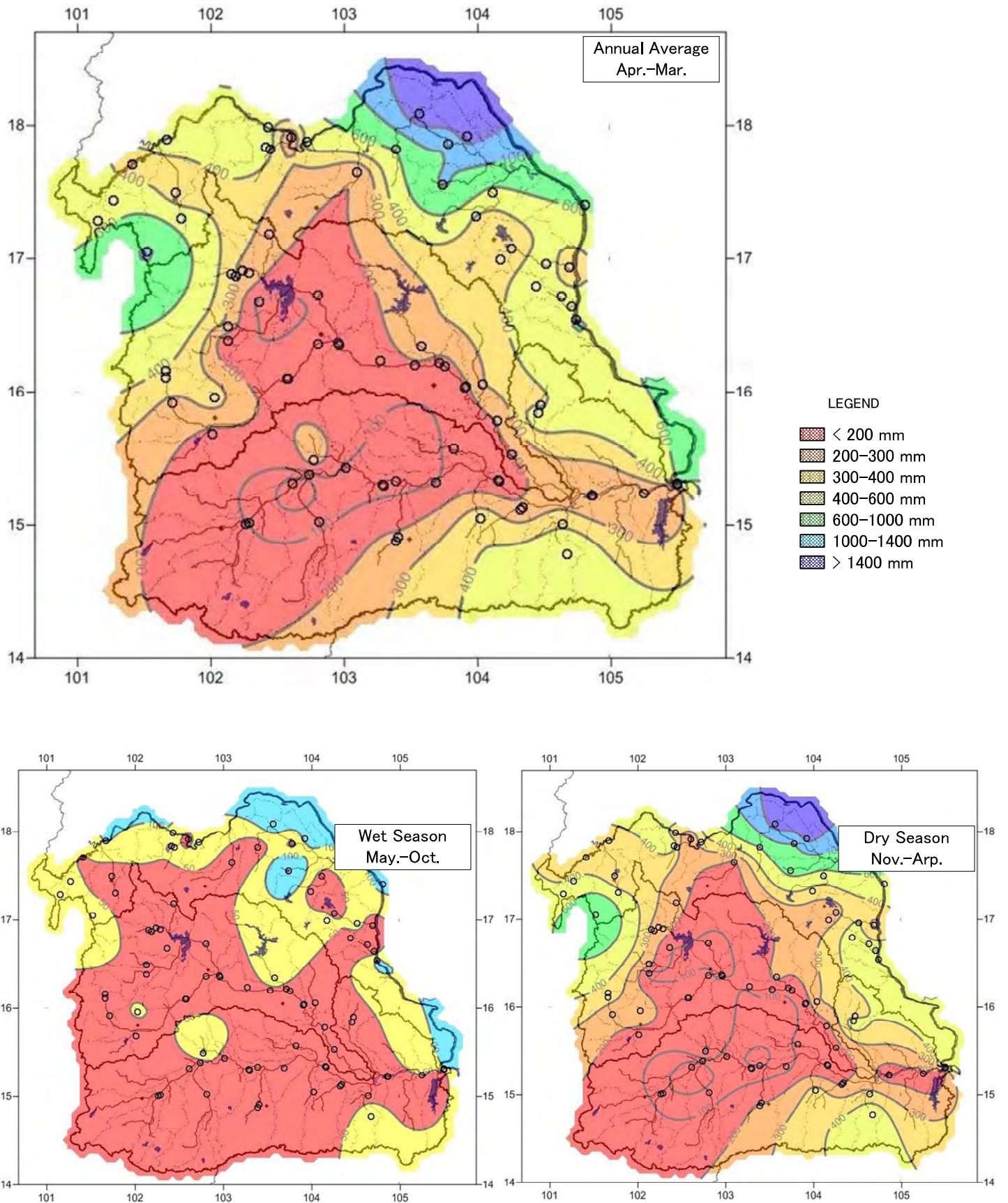
# Appendix 3.6.6 Mean Monthly Runoff of Major Station



Average Monthly Discharge (1977–2006, unit :cms)



Appendix 3.6.7 Isoline Map of Runoff Yield



Isohyetal Map of Surface Run-off in Average Annual Runoff 1977-2006 (unit :mm)

Appendix 3.6.8 Estimation of Runoff Yield in Khong, Chi and Mun Basin

(1) Wet Season

Basin	Rain (Wet) (mm.)	Land Use Rate (%)						Rain Water Use by Land (mm.)						Runoff Yield (mm)
		Forest	Paddy	Field crop	Tree crop	Other	Total	Forest 900	Paddy 1260	Field 720	Tree 900	Other 540 360	Total	
		←----- (%) -----→						←----- x above value -----→						=-
1. Khong														
Upper	1,201	22	19	12	8	39	100	198	239	86	72	211	806	395
Lower	1,431	17	30	4	7	42	100	153	378	29	63	227	850	581
<b>Subtotal</b>	<b>1,329</b>	<b>20</b>	<b>25</b>	<b>8</b>	<b>7</b>	<b>40</b>	<b>100</b>	<b>180</b>	<b>315</b>	<b>58</b>	<b>63</b>	<b>216</b>	<b>832</b>	<b>497</b>
2. Chi														
Upper	914	27	21	16	3	33	100	243	265	115	27	119	769	145
Middle	997	7	45	10	4	34	100	63	567	72	36	122	860	137
Lower	1,185	9	37	11	4	38	100	81	466	79	36	137	799	386
<b>Subtotal</b>	<b>1,031</b>	<b>13</b>	<b>36</b>	<b>12</b>	<b>4</b>	<b>35</b>	<b>100</b>	<b>117</b>	<b>454</b>	<b>86</b>	<b>36</b>	<b>126</b>	<b>819</b>	<b>212</b>
3. Mun														
Upper	882	12	36	18	3	31	100	108	454	130	27	112	831	51
Middle	1,132	9	55	5	5	26	100	81	693	36	45	94	949	183
Lower	1,342	15	36	3	4	42	100	135	454	22	36	151	798	544
<b>Subtotal</b>	<b>1,076</b>	<b>12</b>	<b>42</b>	<b>10</b>	<b>4</b>	<b>32</b>	<b>100</b>	<b>108</b>	<b>529</b>	<b>72</b>	<b>36</b>	<b>115</b>	<b>860</b>	<b>216</b>
<b>Total</b>	<b>1,134</b>	<b>15</b>	<b>35</b>	<b>10</b>	<b>5</b>	<b>35</b>	<b>100</b>	<b>135</b>	<b>441</b>	<b>72</b>	<b>45</b>	<b>126</b>	<b>819</b>	<b>315</b>

Unit water use in other land is 540 mm. for Khong due to wetland but 360 mm. in Chi and Mun.

(2) Dry Season

Basin	Rain (Dry) (mm.)	Land Use Rate (%)						Rain Water Use by Land (mm.)						Runoff Yield (mm)
		Forest	Paddy	Field crop	Tree crop	Other	Total	Forest 270	Paddy 90	Field 220	Tree 270	Other 270	Total	
		←----- (%) -----→						←----- x above value -----→						=-
1. Khong														
Upper	241	22	19	12	8	39	100	59	17	26	22	105	229	12
Lower	281	17	30	4	7	42	100	46	27	9	19	113	214	67
<b>Subtotal</b>	<b>264</b>	<b>20</b>	<b>25</b>	<b>8</b>	<b>7</b>	<b>40</b>	<b>100</b>	<b>54</b>	<b>23</b>	<b>18</b>	<b>22</b>	<b>108</b>	<b>225</b>	<b>39</b>
2. Chi														
Upper	212	27	21	16	3	33	100	73	19	35	8	89	224	-12
Middle	260	7	45	10	4	34	100	19	41	22	11	92	185	75
Lower	263	9	37	11	4	38	100	24	33	24	11	103	195	68
<b>Subtotal</b>	<b>246</b>	<b>13</b>	<b>36</b>	<b>12</b>	<b>4</b>	<b>35</b>	<b>100</b>	<b>35</b>	<b>32</b>	<b>26</b>	<b>11</b>	<b>95</b>	<b>199</b>	<b>47</b>
3. Mun														
Upper	228	12	36	18	3	31	100	32	32	40	8	84	196	32
Middle	237	9	55	5	5	26	100	24	50	11	14	70	169	68
Lower	259	15	36	3	4	42	100	41	32	7	11	113	204	55
<b>Subtotal</b>	<b>238</b>	<b>12</b>	<b>42</b>	<b>10</b>	<b>4</b>	<b>32</b>	<b>100</b>	<b>32</b>	<b>38</b>	<b>22</b>	<b>11</b>	<b>86</b>	<b>189</b>	<b>49</b>
<b>Total</b>	<b>247</b>	<b>15</b>	<b>35</b>	<b>10</b>	<b>5</b>	<b>35</b>	<b>100</b>	<b>41</b>	<b>32</b>	<b>22</b>	<b>14</b>	<b>95</b>	<b>204</b>	<b>43</b>

Appendix 3.6.9 Estimation of Potential Water and Rain Water Use in Khong, Chi and Mun Basin

**(1) Wet Season**

Bsin	Basin area (km <sup>2</sup> )	Rain (wet) (mm.)	Total rain water (MCM)	Runoff yield (mm.)	Potential water (MCM)	Runoff Coefficient (%)	Rain water use	
							Unit (mm.)	Volume (MCM)
1. Khong								
Upper	20,500	1,201	24,620	395	8,100	33	806	16,520
Lower	25,960	1,431	37,150	581	15,100	41	850	22,070
<b>Subtotal</b>	<b>46,460</b>	<b>1,329</b>	<b>61,770</b>	<b>500</b>	<b>23,200</b>	<b>37</b>	<b>832</b>	<b>38,590</b>
2. Chi								
Upper	13,550	914	12,380	145	1,960	16	769	10,420
Middle	21,030	997	20,970	137	2,880	14	860	18,090
Lower	14,900	1,185	17,660	386	5,750	33	799	11,910
<b>Subtotal</b>	<b>49,480</b>	<b>1,031</b>	<b>51,010</b>	<b>214</b>	<b>10,590</b>	<b>21</b>	<b>819</b>	<b>40,420</b>
3. Mun								
Upper	29,170	882	25,730	51	1,490	6	831	24,240
Middle	24,390	1,132	27,610	183	4,460	16	949	23,150
Lower	16,140	1,342	21,660	544	8,780	41	798	12,880
<b>Subtotal</b>	<b>69,700</b>	<b>1,076</b>	<b>75,000</b>	<b>211</b>	<b>14,730</b>	<b>20</b>	<b>860</b>	<b>60,270</b>
<b>Total</b>	<b>165,640</b>	<b>1,134</b>	<b>187,780</b>	<b>293</b>	<b>48,520</b>	<b>28</b>	<b>819</b>	<b>139,280</b>

**(2) Dry Season**

1. Khong								
Upper	20,500	241	4,940	12	250	5	229	4,690
Lower	25,960	281	7,290	67	1,740	24	214	5,560
<b>Subtotal</b>	<b>46,460</b>	<b>264</b>	<b>12,230</b>	<b>39</b>	<b>1,990</b>	<b>15</b>	<b>225</b>	<b>10,250</b>
2. Chi								
Upper	13,550	212	2,870	-12	-160	-	224	3,040
Middle	21,030	260	5,470	75	1,580	29	185	3,890
Lower	14,900	263	3,920	68	1,010	26	195	2,910
<b>Subtotal</b>	<b>49,480</b>	<b>246</b>	<b>12,260</b>	<b>47</b>	<b>2,430</b>		<b>199</b>	<b>9,840</b>
3. Mun								
Upper	29,170	228	6,650	32	930	14	196	5,720
Middle	24,390	237	5,780	68	1,670	29	169	4,120
Lower	16,140	259	4,180	55	890	21	204	3,290
<b>Subtotal</b>	<b>69,700</b>	<b>238</b>	<b>16,610</b>	<b>49</b>	<b>3,490</b>	<b>21</b>	<b>189</b>	<b>13,130</b>
<b>Total</b>	<b>165,640</b>	<b>247</b>	<b>41,100</b>	<b>43</b>	<b>7,910</b>	<b>17</b>	<b>204</b>	<b>33,220</b>

Note (1) Basin Area and Rainfall area refer to Appendix 3.5.1

(2) Runoff Yield is refer to Appendix 3.5.8

(3) Unit Rain Water Use is refer to Appendix 3.4.2



Station Code	Min/ Max/ Dif.	Year																																				Min/ Max/ Dif.
		75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09		
		Max	Min	DIF	Max	Min	DIF	Max	Min	DIF	Max	Min	DIF	Max	Min	DIF	Max	Min	DIF	Max	Min	DIF	Max	Min	DIF	Max	Min	DIF	Max	Min	DIF	Max	Min	DIF	Max	Min	DIF	
KHEMARAT	Max	22	18	23	21	22	21	20	21	20	18	21	19	17	21	22	15	19	21	23	24	21	18	19	23	22	22	19	22	19	22	19	23	19	22	18	24	
	Min	1	2	2	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	DIF	21	16	21	20	17	18	18	15	18	16	14	18	14	11	14	16	10	12	17	18	21	18	16	17	21	19	16	19	16	17	20	15	22	15	22		
KHONG CHIAM	Max	13	14	18	14	15	13	14	15	14	13	14	14	11	14	16	10	12	14	15	16	15	11	12	16	15	11	15	13	15	15	13	13	14	12	18		
	Min	2	1	1	1	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	
	DIF	11	13	17	13	13	14	11	12	14	12	11	13	11	10	13	14	9	11	13	14	14	13	10	11	15	14	13	11	13	11	13	11	12	10	17		
M.2	Max	166	166	166	322	323	320	324	325	321	323	324	322	324	164	166	165	164	163	164	165	167															167	
	Min	159	160	159	317	317	317	317	317	317	317	317	317	317	159	159	160	159	159	159	159	160														159		
	DIF	7	5	6	5	6	3	6	8	5	6	7	5	7	5	7	6	5	4	4	5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	
M.5	Max	118	120	120	117	120	118	121	121	118	117	116	117	115	114	117	120	116	114	117	119	120	118	114	116	121	118	122	118	119	116	120	119	120	119	122		
	Min	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110		
	DIF	9	9	12	7	10	8	11	11	8	7	6	7	5	5	7	10	6	4	7	9	10	8	4	6	11	8	12	8	10	6	10	9	12	12			
M.6A	Max	129	130		255	254	253	263	263	253	253	253	249	249	248	248	248	248	248	248	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249		
	Min	124	124		248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248	248		
	DIF	6	0	7	4	6	4	7	6	3	5	4	5	4	2	5	6	3	3	5	6	6	4	6	6	4	6	6	6	6	6	6	6	6	6	6	6	
M.7	Max	113	113	114	118	218	219	218		218	218	212	216	217	216	211	112	113	112	109	112	112	113	111	109	111	115	115	116	113	113	111	113	111	113	113		
	Min	107	107	107	107	212	212	212		212	212	212	212	212	212	212	107	107	107	107	107	107	107	106	106	106	106	106	106	106	106	106	106	106	106	106		
	DIF	6	7	11	6	7	6	0	6	6	5	5	6	4	4	6	7	5	3	5	5	5	7	5	3	4	8	8	9	6	7	5	7	5	7	6	12	
M.9	Max	118	121	118	231	118	229	225																														
	Min	109	109	109	218	109	218	218																														
	DIF	12	9	13	9	11	7																															
M26	Max	133	136	135	264	137	263	261	265	265	263	263	263	263	263	263	136	137	136	137	136	137	137	137	137	137	137	137	137	137	137	137	137	137	137	137		
	Min	127	127	127	254	127	254	254	254	254	254	254	254	254	254	254	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127		
	DIF	9	8	10	9	9	6	11	10	8	8	9	6	6	6	6	9	7	10	8	5	8	10	10	9	6	7	10	7	10	7	10	7	10	7	10		
M32	Max	126	127	127	247	246	246																															
	Min	120	120	120	239	239	239																															
	DIF	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7		
M8	Max	154	157	156																																		
	Min	150	150	150																																		
	DIF	7	6	6																																		
MUKDAHAN	Max	11	10	14	11	13	12	12	11	11	11	10	12	11	9	12	13	8	11	12	14	13	12	10	11	13	13	12	11	12	13	11	12	13	11	10		
	Min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	DIF	10	8	13	10	12	11	10	10	11	10	9	11	10	8	11	11	7	10	11	13	12	11	9	10	12	12	11	9	12	12	10	12	9	9	12	9	
NAKHON PHANOM	Max	11	10	13	11	12	12	12	11	11	11	10	12	11	9	12	12	8	11	12	13	12	12	10	11	13	13	12	11	12	13	11	12	13	11	10		
	Min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	DIF	11	9	13	10	12	11	11	10	10	10	9	11	10	8	11	11	6	10	11	12	11	11	9	10	12	12	11	10	11	12	10	10	10	10	13		
NONG KHAI	Max	11	10	13	11	12	12	12	11	11	11	10	12	11	9	12	12	8	11	12	13	12	12	10	11	13	13	12	11	12	13	11	12	13	11	10		
	Min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	DIF	11	9	12	10	11	11	11	10	10	10	9	11	10	8	11	11	6	10	11	12	11	11	9	10	12	12	11	10	11	12	10	10	10	10	13		
PA MONG DAM SITE	Max	12	10	13	11	13	12	11	11	11	11	10	12	11	9	10	10	8	11	12	13	12	12	10	11	13	13	12	11	12	13	11	12	13	11	10		
	Min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	DIF	11	9	12	10	12	10	10	10	10	10	9	10	10	8	9	9	6	10	11	12	11	11	9	10	12	12	11	10	11	12	10	10	10	10	13		
PHON PHISAI	Max	12	11	13	11	13	12	12	11	11	11	10	12	11	9	12	12	8	11	12	13	12	12	10	11	13	13	12	11	12	13	11	12	13	11	10		
	Min	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	DIF	11	9	13	10	12	11	11	10	10	10	9	11	10	8	11	11	6	10	11	12	11	11	9	10	12	12	11	10	11	12	10	10	10	10	13		
THA BO	Max	10	11	11	10	8	9	12	12	10	12	12	12	12	10	12	12	8	11	12	14	11	12	14	11	12	14	11	12	14	11	14	11	14	11	10		
	Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	DIF	10	11	11	10	8	9	11	11	11	11	11	11	11	10	11	11	7	10	11	13	11	12	14	11	12	14	11	12	14	11	14	11	14	11	10		
THAT																																						