

APPENDIX 9F

**Modelling Results for
HKBCF Sequence B**

Appendix 9F – Part 9F1

Supplementary Information for Sequence B

Assumptions on Dredging and Sediment Loss Rates for the Cumulative Construction Impact Assessment on the Marine Environment

9F1-1 INTRODUCTION

9F1-1.1 Background

9F1-1.1.1 Under the construction Sequence B, all of the construction works items and assumptions would be same as that of Sequence A except the construction sequences of the main reclamation of HKBCF and TMCLKL southern reclamation. Therefore, the details provided in **Appendix 9D5** are still relevant and valid for the works considered in this EIA study and this appendix provide supplementary information where changes to the assumptions and calculation are required under Sequence B.

9F1-2 TUEN MUN CHEK LAP KOK LINK (TMCLKL)

9F1-2.1 Background

9F1-2.1.1 The construction of the TMCLKL will begin in November 2010 and the construction programmes for the Northern and Southern Landfalls are presented in Figure 1a together with other works of HKBCF+HKLR. As indicate in the Figure 1a, the commencement of Southern Landfalls reclamation has to advance from November 2011 under Sequence A to November 2010 under Sequence B to match with the programme of HKBCF. The Southern Landfall will require fully dredged seawalls and a non-dredged reclamation. The dredged and non-dredged area of TMCLKL are shown in Figure 2 and the construction sequence is presented in Figure 3 for both the southern landfall reclamations.

9F1-2.1.2 Under Sequence B, there will be no change in the construction sequence and works items for Northern Landfalls and southern viaduct, while the construction sequence for the Southern Landfalls will be different from that of Sequence A, which the construction works will be started from the southern area (Portion S-C) to the northern area (Portion S-A).

9F1-2.2 Sediment Loss Rates

9F1-2.2.1 Figure 1a presents the dredging and filling programmes. The Southern Landfall involves three dredging operations identified as DS1b-3b and six filling operations identified as FS1b-6b.

9F1-2.2.2 The fill to be used includes, public fill (PF), sand and rock fill. For the Southern Landfall, the seawall filling will be by 50% of sand and rock fill. It has been assumed that the fines content ($<63\mu\text{m}$) in sand typically (dry density of $1,680\text{kg/m}^3$) used should not exceed 5% and the same assumptions will be made. For the main reclamation area, public fill will be used principally when the reclamation level reaches +2.5mPD although some public fill may be used below that level. For the southern reclamation, a mix of sand and PF will be used and the ratio of the two material is about 70% sand and 30% PF. The filling material for Northern Landfalls are the same as Sequence A and **Appendix 9D5** shall be referred.

9F1-2.2.3 When filling above +2.5mPD, zero losses of fine material to the surrounding waters has been assumed. Similarly, when using rock fill for the seawalls, it has

been assumed that any fine material present is insignificant and zero loss of fine material has been assumed. Under Sequence B, the peripheral seawall at the Southern Landfall will be formed first and offering protection against the sediment losses from the main reclamation. The availability of the seawalls protection for reclamation dredging/filling is shown in the anticipated construction sequence drawing (Figure 3). The overall programme (Figure 1a) also indicates when the seawall protection can be assumed based on the anticipated works progress as indicated in the programme.

- 9F1-2.2.4 It is anticipated that the dredging and filling works will proceed for 16 hours each day and that the grab dredging will be continuous throughout each working day. The sand filling will require each barge to make two deliveries per working day, and the pelican barge and dump barge will take 45 minutes and 5 minutes respectively to offload on each trip.
- 9F1-2.2.5 The numbers of dredgers and filling barges for each dredging and filling operation at southern landfall are presented in Tables 1. These tables also present the working rates (in-situ and un-bulked volumes) and expected sediment loss rates for each dredging and filling operation.
- 9F1-2.2.6 In Tables 1, it has been assumed that no mitigation measures, other than integrated advanced seawalls. The generally accepted sediment loss reduction rate by seawalls ranged between 75% - 100% (References 11, 12, 16 and 17 of **Appendix 9D5**). Based on a conservative assessment, it was proposed the reduction factor by a substantially completed seawall (with at least 100-200m leading edge) should be at least 45%. However, for a nearly completed seawall (with only 50-100m access opening), a 80% reduction should be assumed while that for a fully enclosed seawall without opening access, 100% reduction should be assumed. This is also inline with the generally accepted assumptions in the approved EIAs
- 9F1-2.2.7 Based on the construction programme, the plant inventory for the construction works and the daily loss rates presented above, Figure 1a presents the total daily loss rates in kg/day for each month during the construction of the TMCLKL. The daily production rate (bulk volume), daily no of plants trips and number of active plants (dredging and filling) on site are also included Table 1. Figures 1b, 1c and 1d present the overall programmes for the maximum daily production rate (bulk volume), the maximum daily number of plant trips and maximum number of active plants (dredging and filling) for the concurrent HKBCF+HKLR+TMCLKL projects.

Table 1 TM-CLKL Southern Landfall: Summary of Losses of Sediment to Suspension Sediment (Dredging and Filling)

Work Item	Plant	No. of Plant	Working Rate (Note 1)	Loss Rate (kg/m ³)	Reduction Due to Seawalls	Sediment Losses (kg/s) (Note 2)	No. of barge events per day	Total Losses (kg/day) all plant	Material Assumed	No. of Active Plants	Daily No. of Plants Trips	Operation Time (min)	Daily Production Rate (Bulk volume, m ³ /day)
DS1b	grab dredger	9	6,000	20	0%	2.08	-	1,080,000	-	9	9	960	64,800
FS1b	pelican barge	3	769	5% of 5% fines	0%	1.20	2	19,385	Sand	2	6	45	6,000
FS2b	filling barge (behind full seawall)	3	769	-	80%	4.22	2	9,892	-	2	6	32	6,000
	dump barge	1	769	5% of 25% fines	80%	12.18	2	7,308	PF	1	2	5	2,000
	pelican barge	2	769	5% of 5% fines	80%	0.24	2	2,585	Sand	1	4	45	4,000
DS2b	grab dredger	6	6,000	20	0%	2.08	-	720,000	-	6	6	960	43,200
FS3b	pelican barge	3	769	5% of 5% fines	0%	1.20	2	19,385	Sand	2	6	45	6,000
FS4b	filling barge (behind full seawall)	3	769	-	80%	4.22	2	9,892	-	2	6	32	6,000
	dump barge	1	769	5% of 25% fines	80%	12.18	2	7,308	PF	1	2	5	2,000
	pelican barge	2	769	5% of 5% fines	80%	0.24	2	2,585	Sand	1	4	45	4,000
DS3b	grab dredger	4	6,000	20	0%	2.08	-	480,000	-	4	4	960	28,800
FS5b	pelican barge	2	769	5% of 5% fines	0%	1.20	2	12,923	Sand	2	4	45	4,000
FS6b	filling barge (behind full seawall)	3	769	-	80%	4.22	2	9,892	-	2	6	32	6,000
	dump barge	1	769	5% of 25% fines	80%	12.18	2	7,308	PF	1	2	5	2,000
	pelican barge	2	769	5% of 5% fines	80%	0.24	2	2,585	Sand	1	4	45	4,000
	Filling above +2.5mPD (public fill)	-	-	0	-	-	-	-	-	-	-	-	-
P	Piling for Viaducts	15	24	5% of 20	0%	0.0004	-	360	-	15	15	960	432

Notes:

1. All volumes mentioned are in situ volume except production rate which is based on bulked volume. The assumed bulking factor is 1.2 for grab dredging, 1.3 for filling barge and 1.5 for TSHD (if any). The working rate is per grab (m³/day) or per barge/event (m³).
2. The loss rate is per plant per event.
3. All plants assume daily working for 16 hour. Each pelican barge assume unloads in 45 minutes and dump barge assume unload in 5 minutes.
4. Partial Seawall = substantially completed seawall with 100-200m leading edge. Full Seawall = completed seawall with 50-100m opening gap for marine access.
5. When a mixture of 50/50 sand and rock (sand /Rock) are specified, only the portion of sand is included in the above calculation table. When a mixture of public fill and sand fill (PF/Sand) are specified, it is assumed to consist of 30% PF at the most. For calculation purpose, the filling barges for PF and sand is calculated separately using the ratio of 30/70, but rounded up for the PF barges to give a reasonable worst case estimate. The same principle applies to 50/50 sand/Rock fill calculation.
6. Operation time for grab dredgers is the total available time; for other plants is per event time.
7. The grab dredgers are assumed to be worked on site at all times.
8. The max. number of active filling barges is generally estimated as = (operation time x total no. of plant trips / 960) and rounded up to whole number.
9. For infrequent filling activities by pelican barges (sand fill), a minimum of 2 active barges on site is assumed for FS1b, FS3b and FS5b.

9F1-3 HONG KONG BORDER CROSSING FACILITY (HKBCF)

9F1-3.1 Background

9F1-3.1.1 The dredging and filling works for HKBCF will begin in September 2010 as Sequence A but will finish in May 2014 rather than November 2013 as would be in Sequence A. The programme for the reclamation is presented in Figure 1a with other projects. A detailed description and figure showing the reclamation sequence is presented in Figure 3.

9F1-3.1.2 There would be no interim seawalls for Sequence B: As a result, the reclamation extent in order to start construction of the PCB and Government buildings becomes larger than that in the case of Sequence A. Besides that, full-dredging is adopted for the seawalls only and the entire reclamation behind the seawalls will adopt the non-dredge option. The extent of dredged and non-dredged areas in HKBCF is shown in Figure 2.

9F1-3.1.3 The reclamation sequence of HKBCF (Sequence B) and the layout of mitigation measures including temporary steel sheet pile walls and silt curtain are shown in Figure 3. In general, the seawall at the peripheral of HKBCF site is anticipated to be carried out first and the main reclamation dredging and filling will be followed.. Temporary steel sheet pile wall near the northern edge of HKBCF site would be installed to protect silt curtain against strong current. Assuming the reclamation of HKBCF commence in September 2010 (preparation works including sheet piling wall will start earlier in August 2010), the envisaged reclamation sequence is as follows:

- 1) Install the temporary steel sheet pile wall near the northern edge of site and the silt curtain around the site as shown in Stage 1 of Figure 3 (Sheet 1). In order to enable the commencement of reclamation works before the sheet pile wall is installed, the northern side of silt curtain would be installed near to HKBCF Phase 1 where it would not be affected by the current. Moreover, the temporary steel sheet pile wall and silt curtain would also be installed for forming the pits to receive the Mf sediment dredged from the site.
- 2) Portion 1 seawall is to be constructed first by commencing the dredging at the south-east and south-west corners of the site as shown in Figure 3. The dredging for the seawall and reclamation of FSD Rescues Berth at the western side of HKBCF site would be carried out at the same time.
- 3) After installation of sheet pile wall, the northern side of silt curtain would be shifted to the area outside the northern edge of HKBCF site. Dredging would be carried out to form the pits to receive Mf sediment as shown in Stage 2 of Figure 3 (Sheet 1). According to the current ground investigation information, the dredging at northern seawall would involve some Mf sediment and it would be deposited to the pits within the sheet pile wall and silt curtain as shown in Stage 3 of Figure 3 (Sheet 2).

- 4) It is anticipated that the seawall filling for Portion 1 seawall and FSD Rescue Berth would commence in December 2010 and January 2011 respectively. A gap of about 100m at the northern seawall as shown in Stage 4 of Figure 3 (Sheet 2) would be left for the temporary marine access to enable the reclamation works in HKBCF. After completion of the northern seawall, the northern temporary sheet pile wall would then be removed.
- 5) As shown in Stages 4 and 5 of Figure 3 (Sheet 2 and 3), it is anticipated that the dredging and filling of Portion 2 seawall would commence in June 2011 and August 2011 respectively. After substantial length of Portion 2 seawall is completed, the reclamation filling (i.e. sand blanket) at Portion A and Portion C (Phase 1) is anticipated to start in August 2011 and September 2011 respectively.
- 6) Following completion of Portion 2 seawall, the filling of Portion 3 seawall would commence in January 2012. A gap of about 100m at Portion 2 seawall as shown in Stage 5 of Drawing 303A in Appendix 9A2 would be left for the temporary marine access to enable the reclamation works in HKBCF.
- 7) Dredging and filling for the installation of immerse tube tunnel of Automatic People Mover (APM) and underground station are anticipated to be carried out August 2011 to March 2013.
- 8) As shown in Stages 6 and 7 of Figure 3 (Sheet 3 and 4), the reclamation filling of HKBCF Phase 1 is generally in the direction from the east to west except that reclamation filling at Portion A is to be completed earlier in March 2012 so as to allow more time for the construction of Passenger Clearance Building (PCB). In addition, the direction of dredging and filling in Portion D is from the west to east to suit the temporary access at the seawall. The filling at the Mf pits would be carried out within the temporary sheet pile wall and silt curtain at the same time with the reclamation filling outside the pits. After 2m thick sandfill has been placed to protect and cover the Mf sediment within the pits, the sheet piles would be cut and then removed for the reclamation to proceed.
- 9) Construction of seawall is anticipated to be completed in Stage 7 as shown on Figure 3 (Sheet 4) except the temporary openings for marine access mentioned in (4) and (6) above. As the reclamation filling is fully enclosed by the seawall, the silt curtain at the peripheral of HKBCF site is no longer required.
- 10) After completion of HKBCF Phase 1, the reclamation filling would proceed to HKBCF Phase 2 as shown in Stage 8 of Figure 3 (Sheet 4).
- 11) The reclamation of HKBCF is completed after the filling in Phase 2 and completion of remaining section of seawall allowed for the temporary marine access.

9F1-3.1.4 As same as Sequence A, a 10% bigger reclamation and 10% increase in the plant for reclamation works has been assumed for the HKBCF as the worst case situation for the purposes of the water quality assessment and modeling.

9F1-3.2 Sediment Loss Rates

9F1-3.2.1 Figure 1a presents the dredging and filling programme and it can be seen that there are four separate dredging operations identified as (8) to (11) and twelve filling operations identified as (A) to (M).

9F1-3.2.2 The fill to be used includes public fill (PF), sand and rock fill. The characteristics of the fill material is generally similar to those discussed for TMCLKL although the material for seawall filling is generally assumed to be 100% of sand although coarse rock type public fill or rock fill will also be used.

9F1-3.2.3 When filling above +2.5mPD, zero losses of fine material to the surrounding waters has been assumed. Similarly, when using rock fill for the seawalls, it has been assumed that any fine material present is insignificant and zero loss of fine material has been assumed. Under Sequence B, the peripheral seawall at the main reclamation, except Portion D, will formed first and offering protection against the sediment losses from the main reclamation. In all cases where the construction of the seawall begins before any dredging or filling takes place for the reclamation, it has been assumed that any dredging or filling for the reclamation would begin 100-200m from the ends of the seawalls. The potential for fine sediment to escape into the surrounding water would be reduced significantly and, under these circumstances, it has been assumed that only a fraction of the potential loss of fines is released into the receiving waters at the entrance to the reclamation depending on the stage of the completeness of the seawalls (Reference 11, 12, 16 and 17 of **Appendix 9D5**). The availability of the seawalls protection for reclamation dredging/filling is shown in the anticipated construction sequence drawing (Figure 3). The overall programme (Figure 1a) also indicate when the seawall protection can be assumed based on the anticipated works progress as indicated in the programme.

9F1-3.2.4 It is anticipated that the dredging and filling works will proceed for 16 hours each day and that the grab dredging will be continuous throughout each working day. The sand filling will require each barge to make two deliveries per working day, and the pelican barge and dump barge will take 45 minutes and 5 minutes respectively to offload on each trip.

9F1-3.2.5 The numbers of dredgers and filling barges for each dredging and filling operation are presented in Table 2. This table also presents the working rates (in-situ and un-bulked volumes) and expected sediment loss rates for each dredging and filling operation.

Table 2 HKBCF: Summary of Losses of Sediment to Suspension

Work Item	Plant	No. of Plant	Working Rate (Note 1)	Loss Rate (kg/m ³)	Reduction Due to Seawalls	Sediment Losses (kg/s) (Note 2)	No. of barge events per day	Total Losses (kg/day) all plant	Material Assumed	No. of Active Plants	Daily No. of Plants Trips	Operation Time (min)	Daily Production Rate (Bulk volume, m ³ /day)
Dredging													
(8)	grab dredger (11 m ³)	9	6,000	20	0%	2.08	-	1,080,000	-	9	9	960	64,800
(9)	grab dredger (11 m ³)	6	6,000	20	0%	2.08	-	720,000	-	6	6	960	43,200
(10)	grab dredger (11 m ³)	2	6,000	20	0%	2.08	-	240,000	-	2	2	960	14,400
(11)	grab dredger (11 m ³)	1	6,000	20	0%	2.08	-	120,000	-	1	1	960	7,200
Filling													
(A)	filling barge	30	769	5% of 5% fines	0%	1.20	2	193,846	Sand	3	60	45	60,000
	dump barge	0	-	-	-	-	-	-	-	-	-	-	-
	pelican barge	30	769	5% of 5% fines	0%	1.20	2	193,846	Sand	3	60	45	60,000
(B)	filling barge	25	769	5% of 5% fines	0%	1.20	2	161,538	Sand	3	50	45	50,000
	dump barge	0	-	-	-	-	-	-	-	-	-	-	-
	pelican barge	25	769	5% of 5% fines	0%	1.20	2	161,538	Sand	3	50	45	50,000
(C)	filling barge	20	769	5% of 5% fines	0%	1.20	2	129,231	Sand	2	40	45	40,000
	dump barge	0	-	-	-	-	-	-	-	-	-	-	-
	pelican barge	20	769	5% of 5% fines	0%	1.20	2	129,231	Sand	2	40	45	40,000
(D)	filling barge (behind full seawall)	20	769	5% of 5% fines	80%	0.24	2	25,846	Sand	2	40	45	40,000
	dump barge	0	-	-	-	-	-	-	-	-	-	-	-
	pelican barge	20	769	5% of 5% fines	80%	0.24	2	25,846	Sand	2	40	45	40,000
(F)	filling barge (behind full seawall)	20	769	5% of 5% fines	80%	3.82	2	61,938	-	3	40	33	40,000
	dump barge	6	769	5% of 25% fines	80%	12.18	2	43,846	PF	1	12	5	12,000
	pelican barge	14	769	5% of 5% fines	80%	0.24	2	18,092	Sand	2	28	45	28,000
(L)	filling barge (behind full seawall)	30	769	5% of 5% fines	80%	3.82	2	92,908	-	3	60	33	60,000
	dump barge	9	769	5% of 25% fines	80%	12.18	2	65,769	PF	1	18	5	18,000
	pelican barge	21	769	5% of 5% fines	80%	0.24	2	27,138	Sand	2	42	45	42,000
(H)	filling barge (behind full seawall)	40	769	5% of 5% fines	80%	3.82	2	123,877	-	4	80	33	80,000
	dump barge	12	769	5% of 25% fines	80%	12.18	2	87,692	PF	1	24	5	24,000
	pelican barge	28	769	5% of 5% fines	80%	0.24	2	36,185	Sand	3	56	45	56,000

Work Item	Plant	No. of Plant	Working Rate (Note 1)	Loss Rate (kg/m ³)	Reduction Due to Seawalls	Sediment Losses (kg/s) (Note 2)	No. of barge events per day	Total Losses (kg/day) all plant	Material Assumed	No. of Active Plants	Daily No. of Plants Trips	Operation Time (min)	Daily Production Rate (Bulk volume, m ³ /day)
(I)	filling barge (behind full seawall)	15	769	5% of 5% fines	80%	4.22	2	49,462	-	2	30	33	30,000
	dump barge	5	769	5% of 25% fines	80%	12.18	2	36,538	PF	1	10	5	10,000
	pelican barge	10	769	5% of 5% fines	80%	0.24	2	12,923	Sand	1	20	45	20,000
(J)	filling barge	10	769	5% of 5% fines	0%	1.20	2	64,615	-	1	20	32	20,000
	dump barge	0	-	-	-	-	-	-	-	-	-	-	-
	pelican barge	10	769	5% of 5% fines	0%	1.20	2	64,615	Sand	1	20	45	20,000
(K)	filling barge	10	769	5% of 5% fines	0%	19.11	2	154,846	-	2	20	45	20,000
	dump barge	3	769	5% of 25% fines	0%	60.90	2	109,615	PF	1	6	5	6,000
	pelican barge	7	769	5% of 5% fines	0%	1.20	2	45,231	Sand	1	14	45	14,000
(M)	filling barge	5	769	5% of 5% fines	0%	25.08	2	92,462	-	2	10	33	10,000
	dump barge	2	769	5% of 25% fines	0%	60.90	2	73,077	PF	1	4	5	4,000
	pelican barge	3	769	5% of 5% fines	0%	1.20	2	19,385	Sand	1	6	45	6,000

Notes:

1. All volumes mentioned are in situ volume except production rate which is based on bulked volume. The assumed bulking factor is 1.2 for grab dredging, 1.3 for filling barge and 1.5 for TSHD (if any). The working rate is per grab or TSHD (m³/day) or per barge/event (m³).
2. The loss rate is per plant per event.
3. All plants assume daily working for 16 hour, except TSHD in which 24 hour is assumed. Each pelican barge assume unloads in 45 minutes and dump barge assume unload in 5 minutes.
4. Partial Seawall = substantially completed seawall with 100-200m leading edge. Full Seawall = completed seawall with 50-100m opening gap for marine access.
5. When a mixture of sand fill and rock (Sand/Rock) are specified, only the portion of Sand is included in the above calculation table. When a mixture of public fill and sand fill (PF/Sand) are specified, it is assumed to consist of 30% PF at the most. For calculation purpose, the filling barges for PF and sand is calculated separately using the ratio of 30/70, but rounded up for the PF barges to give a reasonable worse case estimate.
6. Operation time for grab dredgers is the total available time; for other plants is per event time.
7. The grab dredgers are assumed to be worked on site at all times.
8. The max. number of active filling barges is generally estimated as = (operation time x total no. of plant trips / 960) and rounded up to whole number.

- 9F1-3.2.6 Based on the calculated loss rates for each dredging and filling operation, Figure 1a also presents the total daily loss rates for each month during the construction programme. The daily production rate (bulk volume), daily no of plants trips and number of active plants (dredging and filling) on site are also included Table 2. Figures 1b, 1c and 1d present the overall programmes for the maximum daily production rate (bulk volume), the maximum daily number of plant trips and maximum number of active plants (dredging and filling) for the concurrent TM-CLKL+HKBCF+HKLR projects.
- 9F1-3.2.7 In Table 2, it has been assumed that no mitigation measures, other than integrated advanced seawalls. The generally accepted sediment loss reduction rate by seawalls ranged between 75% - 100% (References 11, 12, 16 and 17 of **Appendix 9D5**). Based on a conservative assessment, it was proposed the reduction factor by a substantially completed seawall (with at least 100-200m leading edge) should be at least 45%. However, for a nearly completed seawall (with only 50-100m access opening), a 80% reduction should be assumed while that for a fully enclosed seawall without opening access, 100% reduction should be assumed. This is also inline with the generally accepted assumptions in the approved EIAs.

9F1-4 MODELLING SCENARIO

- 9F1-4.1.1 Under Sequence B, the marine works will be on-going for about 4 years which is slightly longer than Sequence A. Sequence B will involve overall less dredging and filling. The monthly sediment loss rate under Sequence B is also lower than Sequence A and the first worse case scenario is also predicted to happen around February/March 2011 (Figure 4). As the identified worse case scenarios of Sequence A are fully modelled for assessment and the fact that potential sediment loss under Sequence B is much lower than Sequence A, it would not be necessary to model the unmitigated scenario under Sequence B for the purpose of impact assessment since Sequence B is not a worse case overall. The water quality modelling, thus focused on the mitigated scenario for the first identified worse case timeframe (i.e, early 2011) under the Sequence B.

9F1-4.2 Proposed Construction Phases to be Simulated in the Model Studies

- 9F1-4.2.1 Based on the anticipated works progress for the TMCLKL and HKBCF as illustrated in Figures 1-3, the tentative plant inventory for each construction activities, the anticipated production rate and the potential sediment loss associated with them have as calculated and shown in Tables 1 and 2. The potential sediment loss for TMCLKL Southern Landfalls and HKLR under Sequence B and same as Sequence A and the relevant calculations are presented in **Appendix 9D5** and not repeated here. The potential sediment loss for these activities are put in the programme timeline as shown in Figure 1a, which also include consideration of the construction activities in relation to the progress of seawalls construction and where application, potential reduction in sediment loss due to the presences of the seawalls are incorporated. With Figure 1a, the total daily loss rate for all three projects can be determined and the monthly total sediment loss rate are presented in Figure 4.

- 9F1-4.2.2 It should be note that there are several built-in conservative mechanisms to ensure the Figures 1 and 4 will not underestimate the potential sediment loss and these are summarised in **Appendix 9D5**.
- 9F1-4.2.3 Based on Figure 4, it can be seen that loss rates peak shortly after the start of construction of the HKBCF in February/March 2011 which is also the worse case to be modelled. This construction scenario is to be simulated for wet and dry season conditions.
- 9F1-4.2.4 For the selected scenario year, not all the construction activities indicated in Tables 1-2 are relevant to the modelling. Those relevant activities and the corresponding daily sediment loss rate can be directly read from Figure 1a. As a summary, the relevant activities and modelling parameters for this scenario year are presented in Tables 3 below.
- 9F1-4.2.5 In setting up the scenarios, it will be necessary to select locations at which it will be assumed the dredgers and sand barges are working. Based on the expected construction programmes for the TMCLKL, HKBCF and HKLR, and the dredging and filling plant to be used for each item of work, Figure 5 present the working locations for each piece of plant in the selected target year.

Table 3 Summary of Relevant Project Works Item and Loss Rate for 2011 Scenario (mitigated)

Works Items	Works Description	Plant	No. of Plant	Working Rate (Note 1)	Loss Rate (kg/m ³) (Note 2)	Reduction due to Seawalls and silt curtain	No. of barge events per day	Total Losses (kg/day) - All Plants	Material	Plant ID	Sediment Loss Rate (kg/s)	Frequency	Duration of Each Operation
BCF (8)	Seawall Dredging (West)	grab dredger (11 m ³)	9	6,000	20	80%	-	216,000	-	BCF8	3.75	continuous	-
BCF (A)	Seawall Filling (West)	pelican barge	30	769	5% of 5% fines	0%	2	193,846	Sand	BCFA	3.37	continuous	-
BCF (M)	Filling with public fill	dump barge	2	769	5% of 25% fines	0%	2	73,077	PF	BCFMd	60.90	4 hour	5 minutes
BCF (M)	Filling with sand	pelican barge	3	769	5% of 5% fines	0%	2	19,385	Sand	BCFMp	1.20	138 minute	45 minutes
TM (FS1b)	Seawall Filling (East)	pelican barge	3	769	5% of 5% fines	23%	2	15,023	Sand	TMFS1b	0.93	138 minute	45 minutes
TM (FS3b)	Seawall Filling (East)	pelican barge	3	769	5% of 5% fines	23%	2	15,023	Sand	TMFS3b	0.93	138 minute	45 minutes
TM (FS5b)	Seawall Filling (East)	pelican barge	2	769	5% of 5% fines	23%	2	10,015	Sand	TMFS5b	0.93	4 hour	45 minutes
LR (1)	Dredging	grab dredger	3	6,000	20	95%	-	18,000	-	LR1	0.31	continuous	-

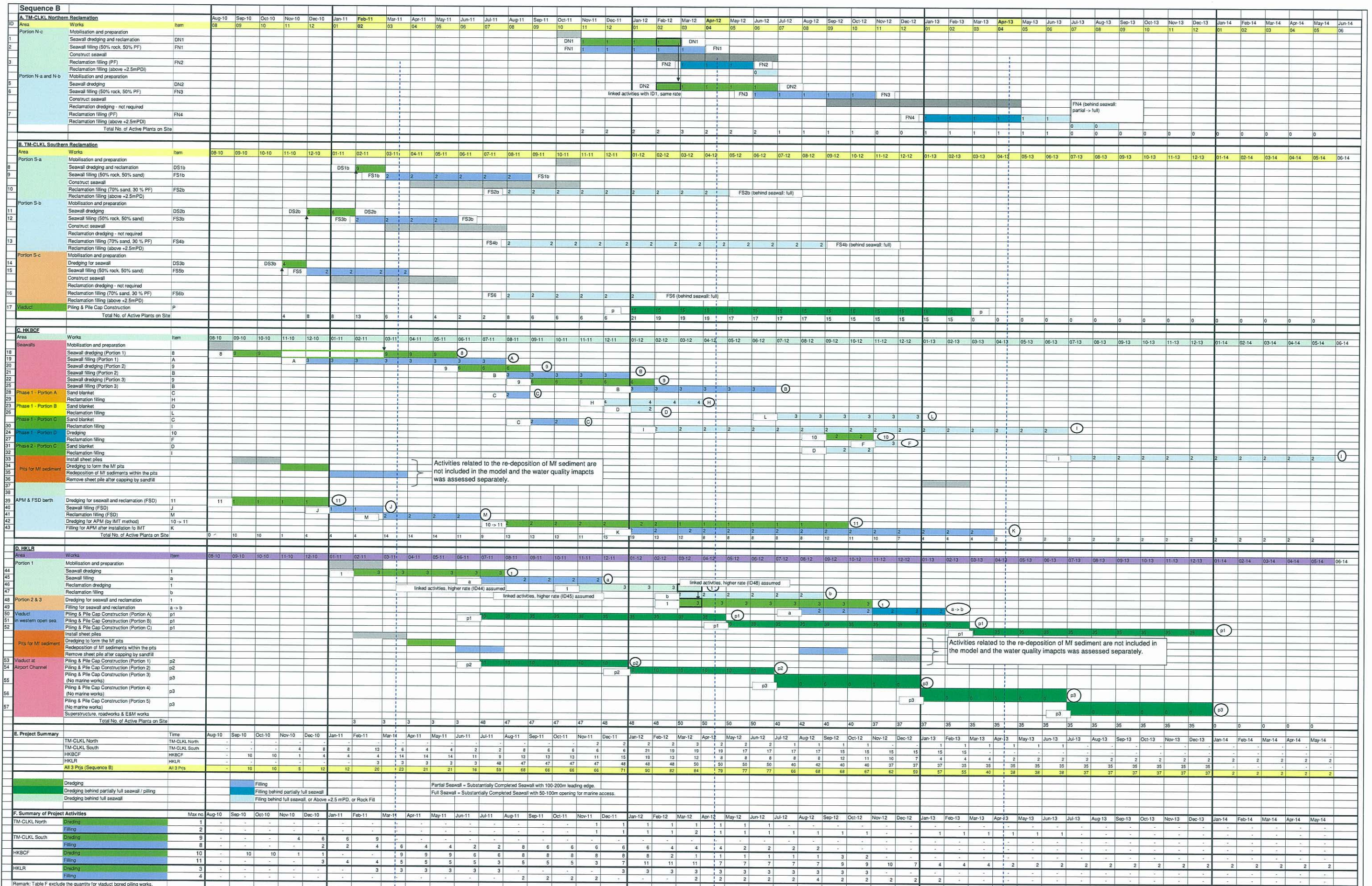
Notes:

1. The working rate is per grab or TSHD (m³/day) or per barge/event (m³).
2. The loss rate is per plant per event.
3. All plants assume daily working for 16 hour, except TSHD in which 24 hour is assumed. Each pelican barge assume unloads in 45 minutes and dump barge assume unload in 5 minutes.
4. The last 4 columns (grey) provided specific details about the model input.

Sequence B			2008												2009												2010												2011												2012												2013												2014											
A. TM-CLKL Northern Reclamation			Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14													
10	Area	Works																																																																																				
11	Portion N-c	Mobilisation and preparation																																																																																				
12		Seawall dredging and reclamation																																																																																				
13		Seawall filling (50% rock, 50% PF)																																																																																				
14		Construct seawall																																																																																				
15		Reclamation filling (PF)																																																																																				
16	Portion N-a and N-b	Reclamation filling (above +2.5mPD)																																																																																				
17		Mobilisation and preparation																																																																																				
18		Seawall dredging																																																																																				
19		Seawall filling (50% rock, 50% PF)																																																																																				
20		Construct seawall																																																																																				
21		Reclamation dredging - not required																																																																																				
22		Reclamation filling (PF)																																																																																				
23		Reclamation filling (above +2.5mPD)																																																																																				
24		Total Daily Production Rate																																																																																				
B. TM-CLKL Southern Reclamation																																																																																						
25	Area	Works																																																																																				
26	Portion S-a	Mobilisation and preparation																																																																																				
27		Seawall dredging and reclamation																																																																																				
28		Seawall filling (50% rock, 50% sand)																																																																																				
29		Construct seawall																																																																																				
30		Reclamation filling (70% sand, 30% PF)																																																																																				
31		Reclamation filling (above +2.5mPD)																																																																																				
32	Portion S-b	Mobilisation and preparation																																																																																				
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36		Reclamation dredging - not required																																																																																				
37		Reclamation filling (70% sand, 30% PF)																																																																																				
38		Reclamation filling (above +2.5mPD)																																																																																				
39	Portion S-c	Mobilisation and preparation																																																																																				
40		Dredging for seawall																																																																																				
41		Seawall filling (50% rock, 50% sand)																																																																																				
42		Construct seawall																																																																																				
43		Reclamation dredging - not required																																																																																				
44		Reclamation filling (70% sand, 30% PF)																																																																																				
45		Reclamation filling (above +2.5mPD)																																																																																				
46	Viaduct	Piling & Pile Cap Construction																																																																																				
47		Total Daily Production Rate																																																																																				
C. HKBCF																																																																																						
48	Area	Works																																																																																				
49	Seawalls	Mobilisation and preparation																																																																																				
50		Seawall dredging (Portion 1)																																																																																				
51		Seawall filling (Portion 1)																																																																																				
52		Seawall dredging (Portion 2)																																																																																				
53		Seawall filling (Portion 2)																																																																																				
54		Seawall dredging (Portion 3)																																																																																				
55		Seawall filling (Portion 3)																																																																																				
56	Phase 1 - Portion A	Sand blanket																																																																																				
57		Reclamation filling																																																																																				
58	Phase 1 - Portion B	Sand blanket																																																																																				
59		Reclamation filling																																																																																				
60	Phase 1 - Portion C	Sand blanket																																																																																				
61		Reclamation filling																																																																																				
62	Phase 1 - Portion D	Dredging																																																																																				
63		Reclamation filling																																																																																				
64	Phase 2 - Portion C	Sand blanket																																																																																				
65		Reclamation filling																																																																																				
66		Install sheet piles																																																																																				
67	Pis for M sediment	Dredging to form the M pits																																																																																				
68		Redeposition of M sediments within the pits																																																																																				
69		Remove sheet pile after capping by sandfill																																																																																				
70	APM & FSD berth	Dredging for seawall and reclamation (FSD)																																																																																				
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72		Reclamation filling (FSD)																																																																																				
73		Dredging for APM (by IMT method)																																																																																				
74		Filling for APM after installation to IMT																																																																																				
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82	Portion 2 & 3	Dredging for seawall and reclamation																																																																																				
83		Filling for seawall and reclamation																																																																																				
84	Viaduct in western open sea	Piling & Pile Cap Construction (Portion A)																																																																																				
85		Piling & Pile Cap Construction (Portion B)																																																																																				
86		Piling & Pile Cap Construction (Portion C)																																																																																				
87		Install sheet piles																																																																																				
88	Pis for M sediment	Dredging to form the M pits																																																																																				
89		Redeposition of M sediments within the pits																																																																																				
90		Remove sheet pile after capping by sandfill																																																																																				
91	Viaduct at Airport Channel	Piling & Pile Cap Construction (Portion 1)																																																																																				
92		Piling & Pile Cap Construction (Portion 2)																																																																																				
93		Piling & Pile Cap Construction (Portion 3)																																																																																				
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95		Piling & Pile Cap Construction (Portion 5)																																																																																				
96		Superstructure, roadworks & E&M works																																																																																				
97		Total Daily Production Rate																																																																																				
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98	Time	Aug-10 <th>Sep-10</th> <th>Oct-10</th> <th>Nov-10</th> <th>Dec-10</th> <th>Jan-11</th> <th>Feb-11</th> <th>Mar-11</th> <th>Apr-11</th> <th>May-11</th> <th>Jun-11</th> <th>Jul-11</th> <th>Aug-11</th> <th>Sep-11</th> <th>Oct-11</th> <th>Nov-11</th> <th>Dec-11</th> <th>Jan-12</th> <th>Feb-12</th> <th>Mar-12</th> <th>Apr-12</th> <th>May-12</th> <th>Jun-12</th> <th>Jul-12</th> <th>Aug-12</th> <th>Sep-12</th> <th>Oct-12</th> <th>Nov-12</th> <th>Dec-12</th> <th>Jan-13</th> <th>Feb-13</th> <th>Mar-13</th> <th>Apr-13</th> <th>May-13</th> <th>Jun-13</th> <th>Jul-13</th> <th>Aug-13</th> <th>Sep-13</th> <th>Oct-13</th> <th>Nov-13</th> <th>Dec-13</th> <th>Jan-14</th> <th>Feb-14</th> <th>Mar-14</th> <th>Apr-14</th> <th>May-14</th>	Sep-10	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14																																							
99	TM-CLKL North																																																																																					
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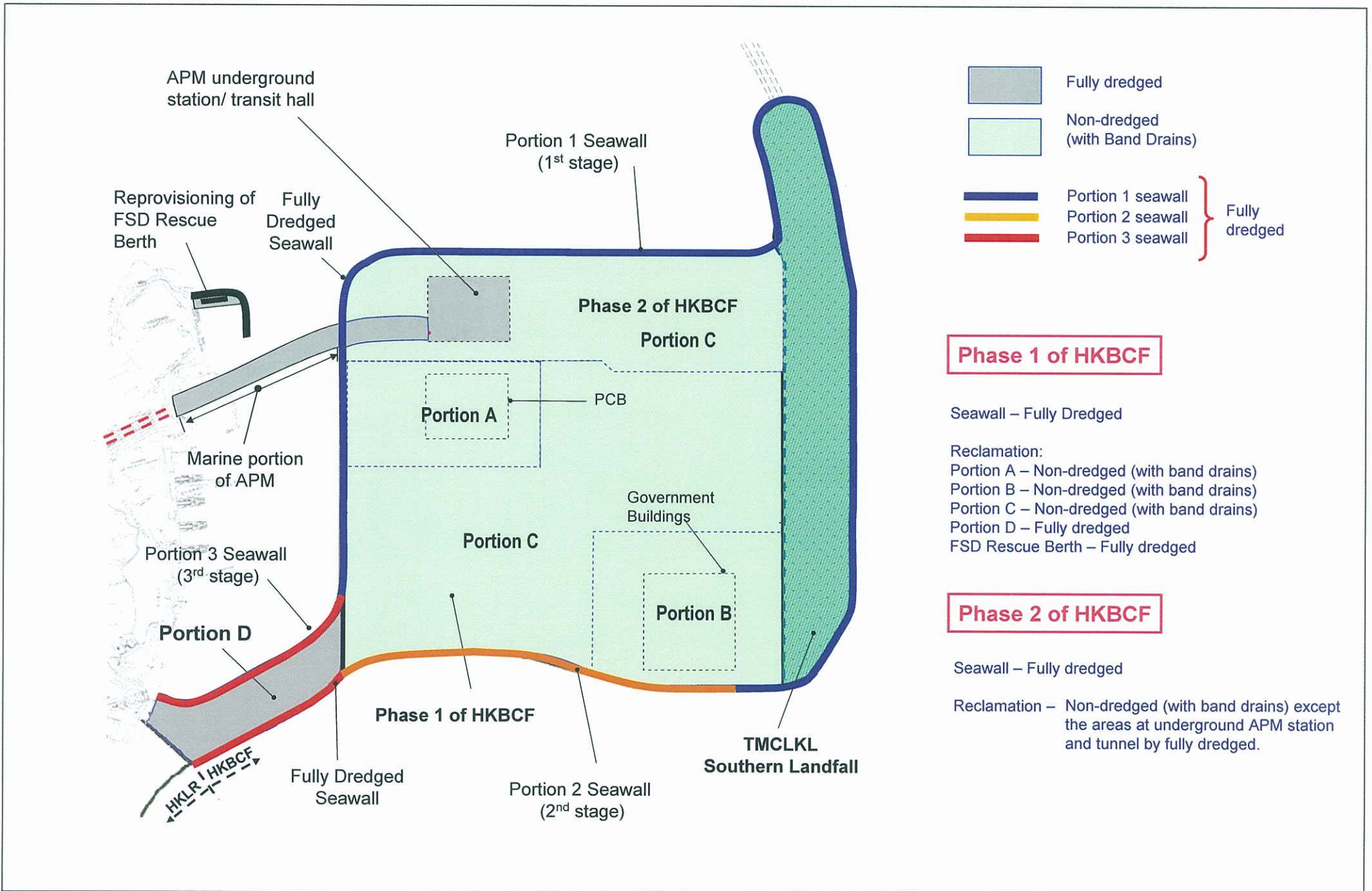
Overall Programme for TM-CLKL + HKBCF + HKLR - Maximum Daily Production Rate (bulked volume, m3/day) (Sequence B)

Figure 1b

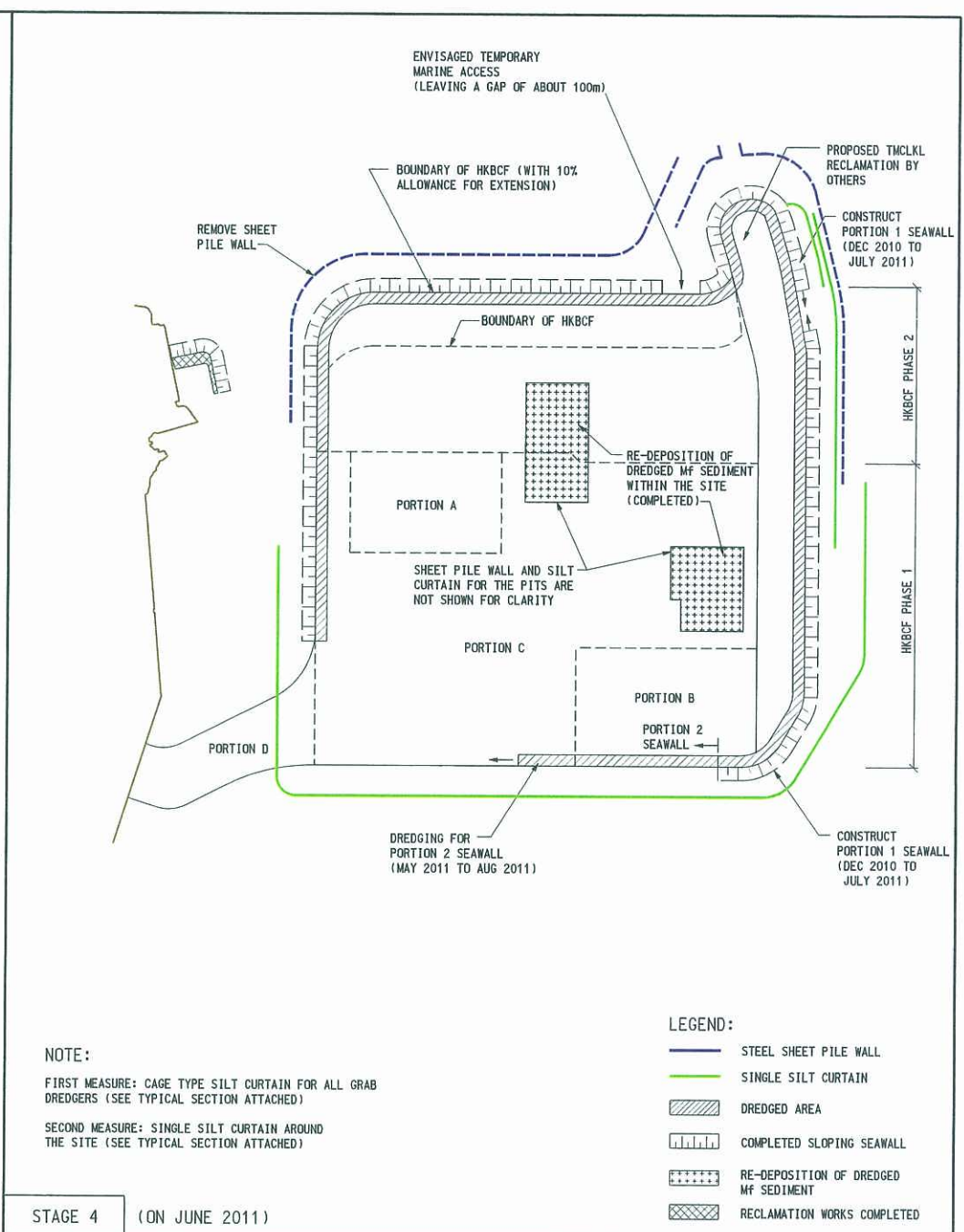
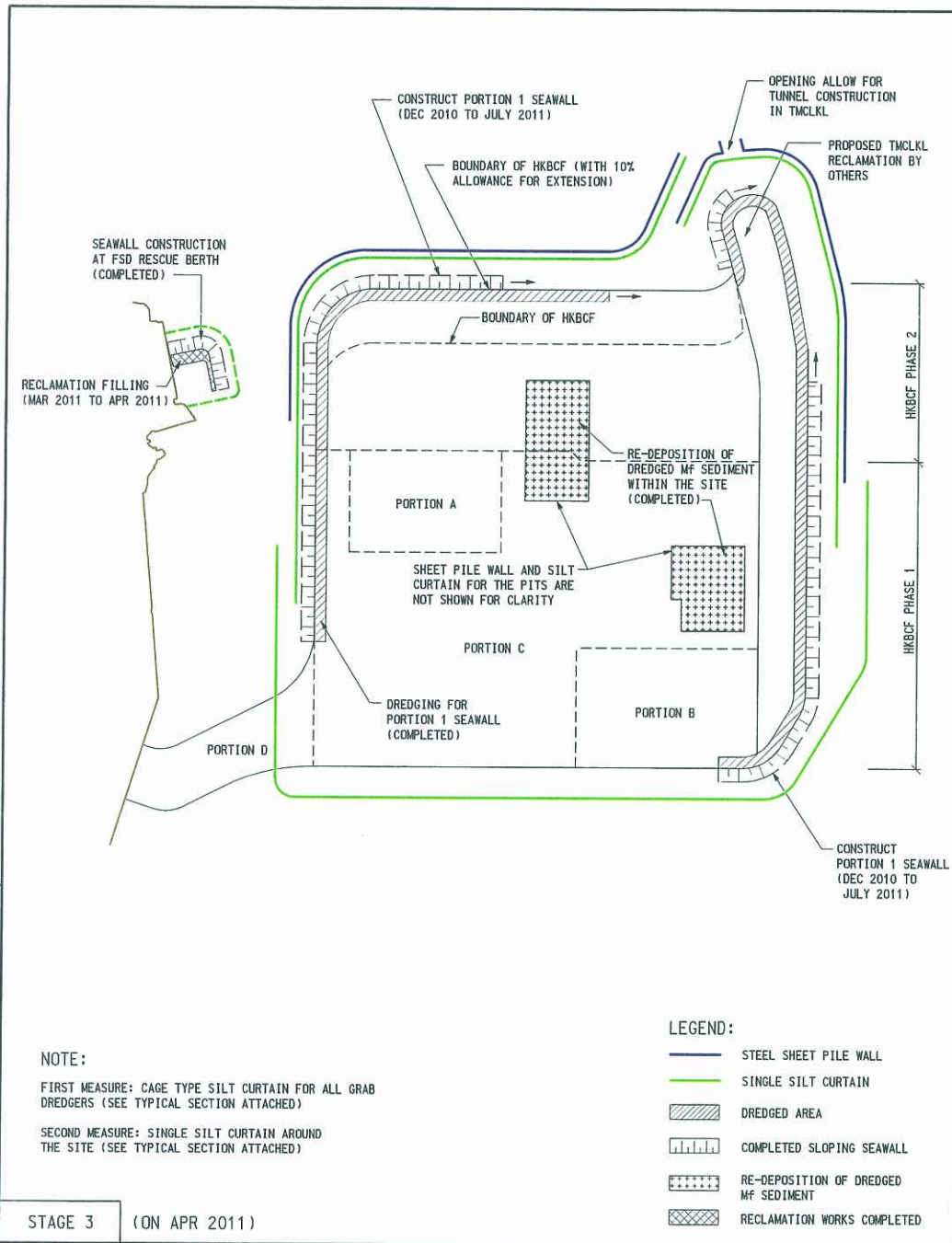


Overall Programme for TM-CLKL + HKBCF + HKLR - No. of Active Dredging/Filling Plants on Site (Sequence B)

Figure 1d



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NOTE:
 FIRST MEASURE: CAGE TYPE SILT CURTAIN FOR ALL GRAB DREDGERS (SEE TYPICAL SECTION ATTACHED)
 SECOND MEASURE: SINGLE SILT CURTAIN AROUND THE SITE (SEE TYPICAL SECTION ATTACHED)

- LEGEND:**
- STEEL SHEET PILE WALL
 - SINGLE SILT CURTAIN
 - DREDGED AREA
 - COMPLETED SLOPING SEAWALL
 - RE-DEPOSITION OF DREDGED MF SEDIMENT
 - RECLAMATION WORKS COMPLETED

NOTE:
 FIRST MEASURE: CAGE TYPE SILT CURTAIN FOR ALL GRAB DREDGERS (SEE TYPICAL SECTION ATTACHED)
 SECOND MEASURE: SINGLE SILT CURTAIN AROUND THE SITE (SEE TYPICAL SECTION ATTACHED)

- LEGEND:**
- STEEL SHEET PILE WALL
 - SINGLE SILT CURTAIN
 - DREDGED AREA
 - COMPLETED SLOPING SEAWALL
 - RE-DEPOSITION OF DREDGED MF SEDIMENT
 - RECLAMATION WORKS COMPLETED

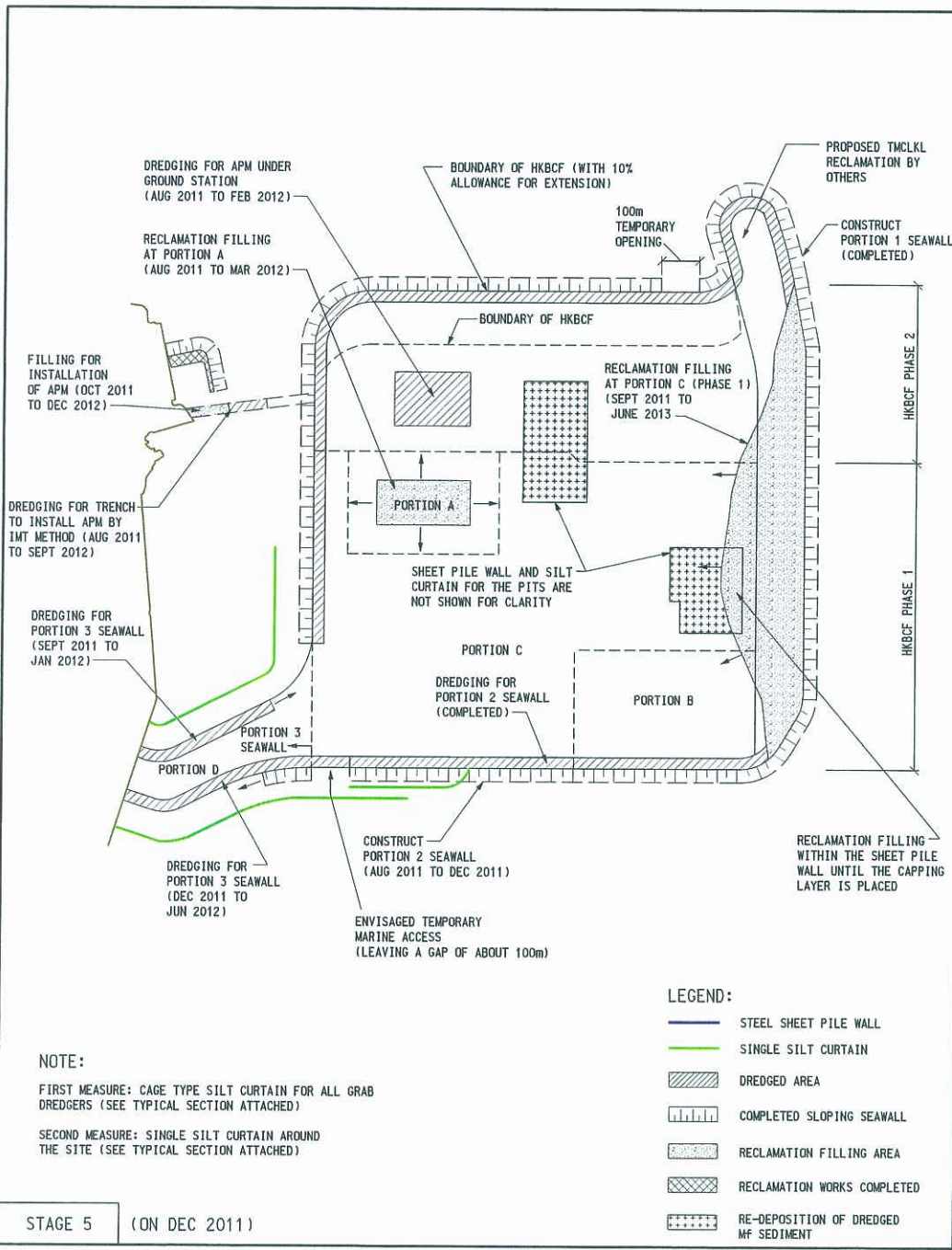


Job Title
Agreement No. CE 14/2008 (CE)
Hong Kong-Zhuhai-Macao Bridge Hong Kong
Boundary Crossing Facilities - Investigation

Drawing Title
ANTICIPATED CONSTRUCTION
SEQUENCE OF HKBCF (SEQUENCE B)

Drawn	CN	Date	02/09	Drawing No.	Figure 9F1-3b		
Checked	SK	Approved	AK	Status		PRELIMINARY	
Rev.	A	DESCRIPTION	02/09	Date	1:12500 on A3	Rev.	A

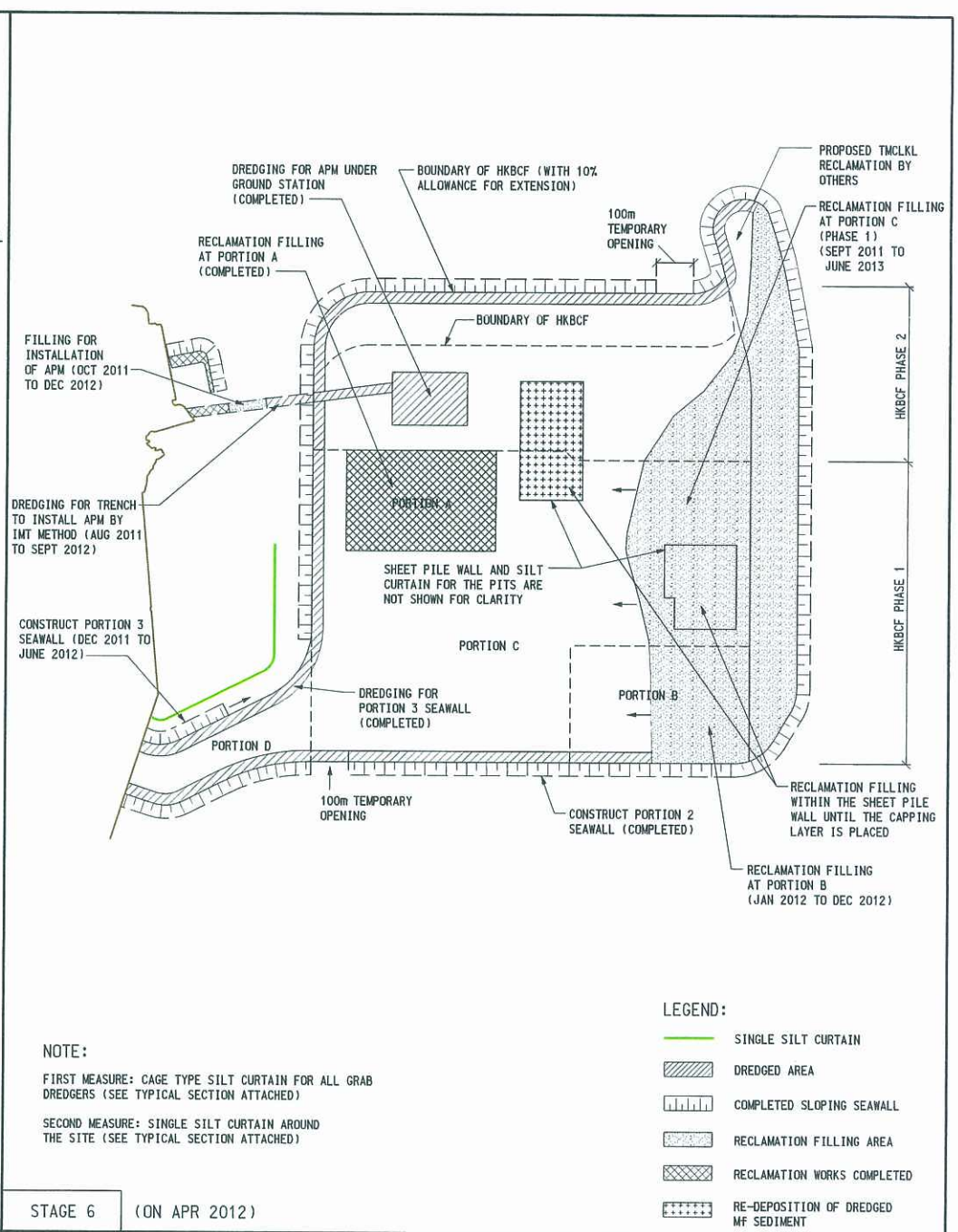
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 Date : 14/10/2012



NOTE:
 FIRST MEASURE: CAGE TYPE SILT CURTAIN FOR ALL GRAB DREDGERS (SEE TYPICAL SECTION ATTACHED)
 SECOND MEASURE: SINGLE SILT CURTAIN AROUND THE SITE (SEE TYPICAL SECTION ATTACHED)

- LEGEND:**
- STEEL SHEET PILE WALL
 - SINGLE SILT CURTAIN
 - DREDGED AREA
 - COMPLETED SLOPING SEAWALL
 - RECLAMATION FILLING AREA
 - RECLAMATION WORKS COMPLETED
 - RE-DEPOSITION OF DREDGED MF SEDIMENT

STAGE 5 (ON DEC 2011)



NOTE:
 FIRST MEASURE: CAGE TYPE SILT CURTAIN FOR ALL GRAB DREDGERS (SEE TYPICAL SECTION ATTACHED)
 SECOND MEASURE: SINGLE SILT CURTAIN AROUND THE SITE (SEE TYPICAL SECTION ATTACHED)

- LEGEND:**
- SINGLE SILT CURTAIN
 - DREDGED AREA
 - COMPLETED SLOPING SEAWALL
 - RECLAMATION FILLING AREA
 - RECLAMATION WORKS COMPLETED
 - RE-DEPOSITION OF DREDGED MF SEDIMENT

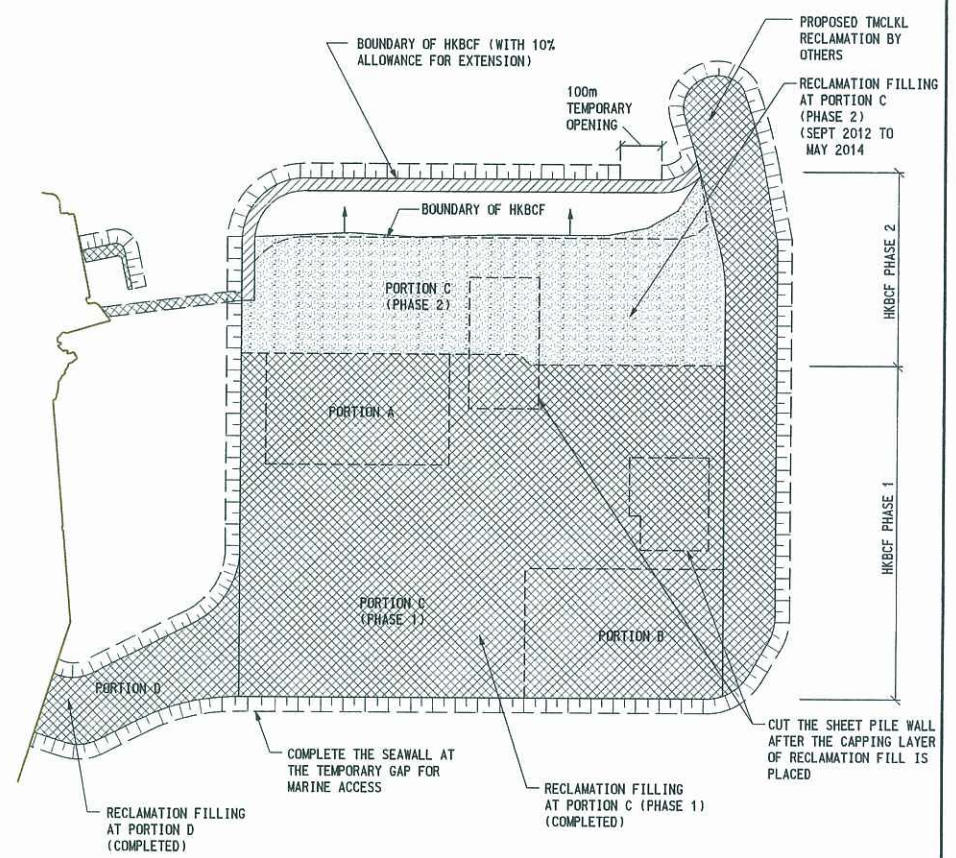
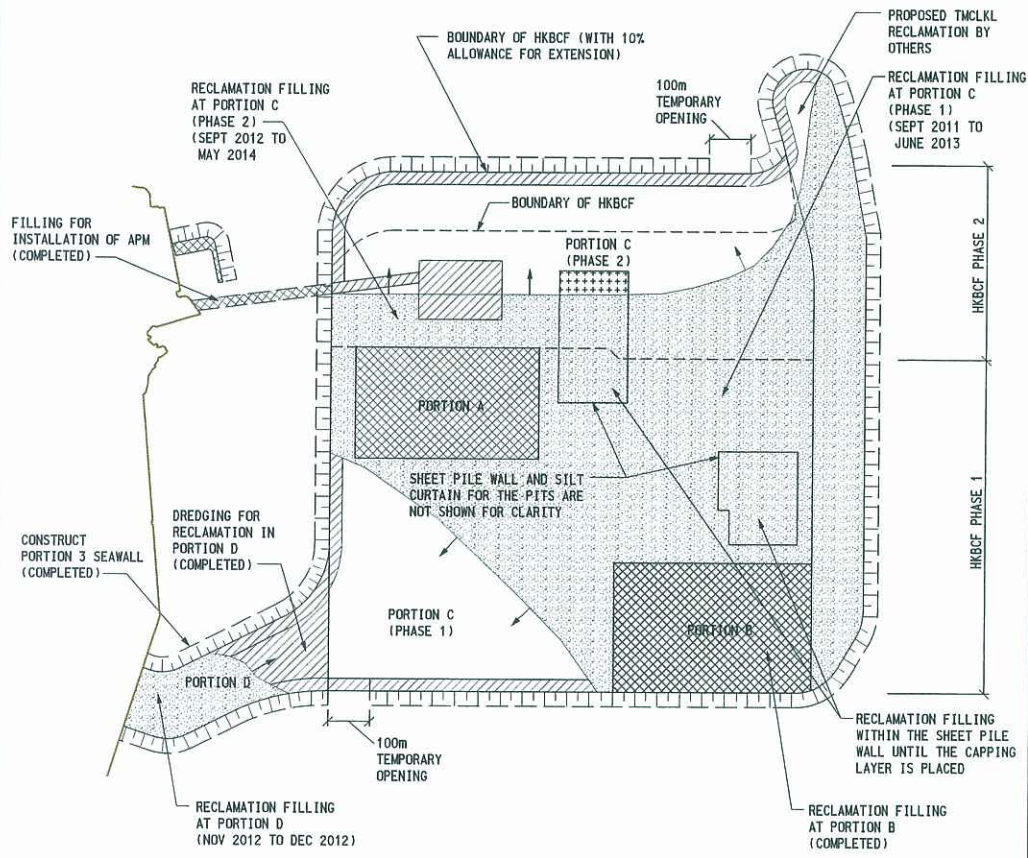
STAGE 6 (ON APR 2012)



Job Title
Agreement No. CE 14/2008 (CE)
Hong Kong-Zhuhai-Macao Bridge Hong Kong
Boundary Crossing Facilities - Investigation

Drawing Title
ANTICIPATED CONSTRUCTION
SEQUENCE OF HKBCF (SEQUENCE B)

Drawn	CN	Date	02/09	Drawing No.	Figure 9F1-3c	
Checked	SK	Approved	AK			
Rev	A	DESCRIPTION	02/09	Scale	1:12500 on A3	Status
						PRELIMINARY
						Rev. A



NOTE:

FIRST MEASURE: CAGE TYPE SILT CURTAIN FOR ALL GRAB DREDGERS (SEE TYPICAL SECTION ATTACHED)

SECOND MEASURE: SINGLE SILT CURTAIN AROUND THE SITE (SEE TYPICAL SECTION ATTACHED)

- LEGEND:**
- DREDGED AREA
 - COMPLETED SLOPING SEAWALL
 - RECLAMATION FILLING AREA
 - RECLAMATION WORKS COMPLETED
 - RE-DEPOSITION OF DREDGED MF SEDIMENT

NOTE:

FIRST MEASURE: CAGE TYPE SILT CURTAIN FOR ALL GRAB DREDGERS (SEE TYPICAL SECTION ATTACHED)

SECOND MEASURE: SINGLE SILT CURTAIN AROUND THE SITE (SEE TYPICAL SECTION ATTACHED)

- LEGEND:**
- DREDGED AREA
 - COMPLETED SLOPING SEAWALL
 - RECLAMATION FILLING AREA
 - RECLAMATION WORKS COMPLETED
 - RE-DEPOSITION OF DREDGED MF SEDIMENT

STAGE 7 (ON DEC 2012)

STAGE 8 (ON DEC 2013)



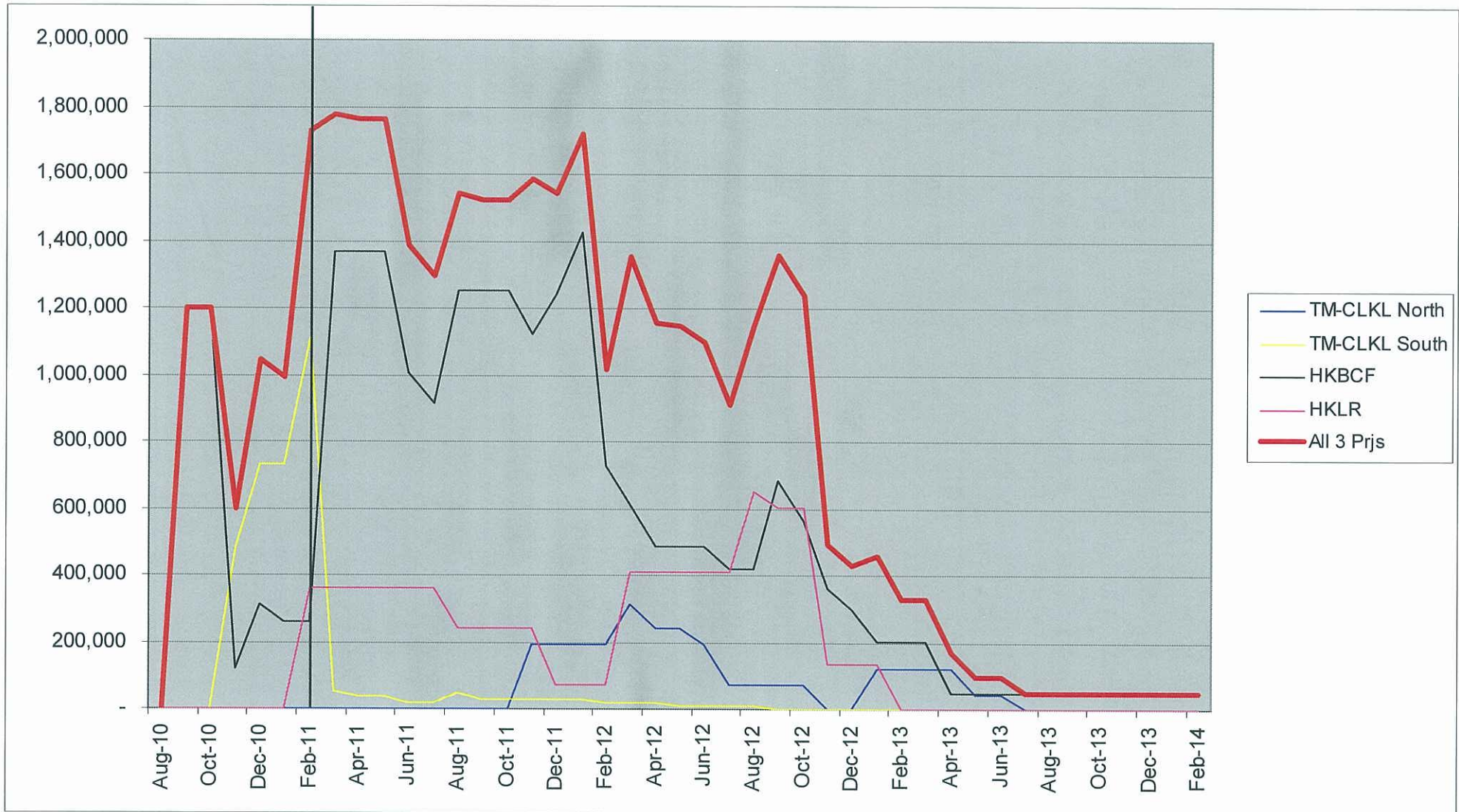
Job Title
Agreement No. CE 14/2008 (CE)
Hong Kong-Zhuhai-Macao Bridge Hong Kong
Boundary Crossing Facilities - Investigation

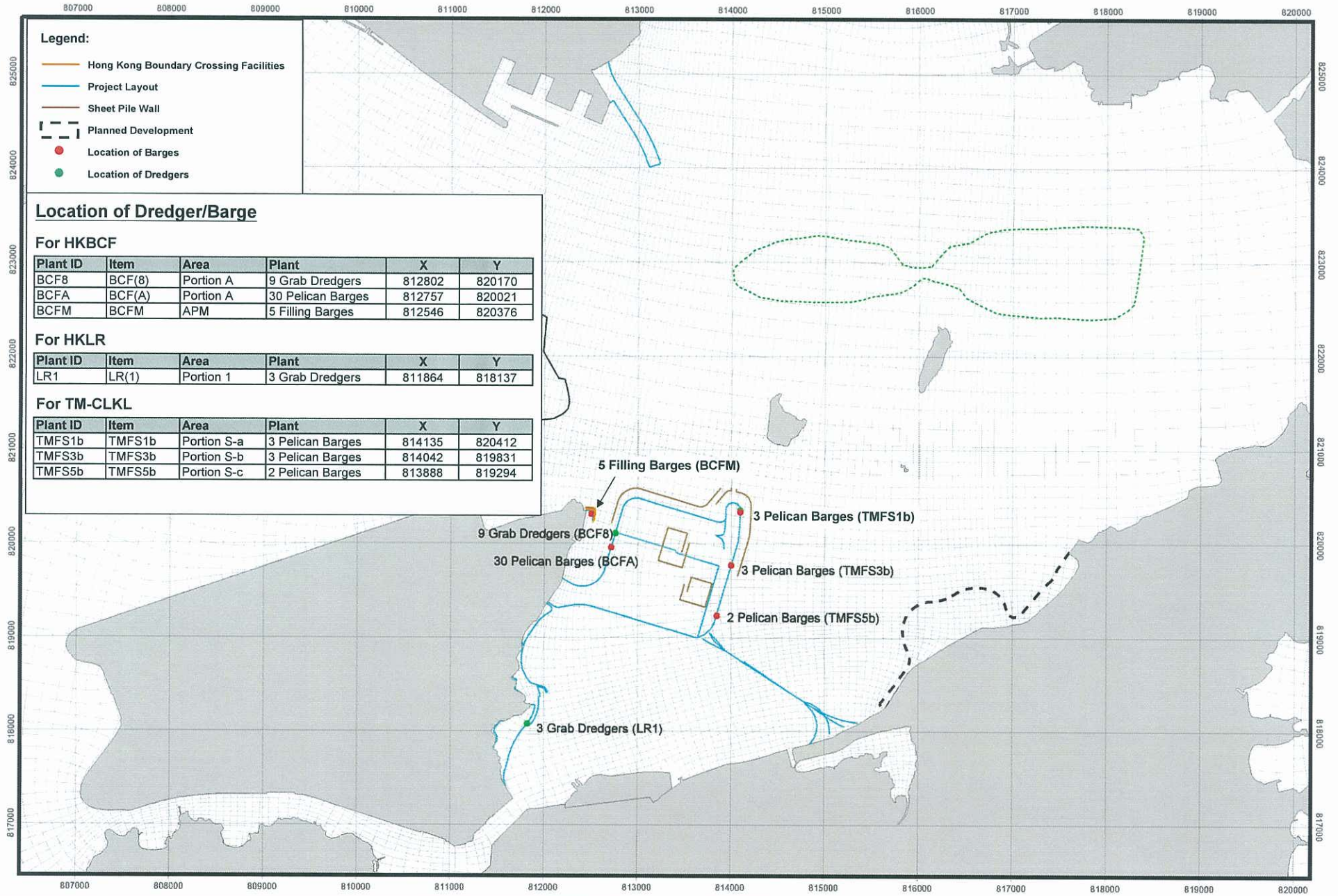
Drawing Title
ANTICIPATED CONSTRUCTION
SEQUENCE OF HKBCF (SEQUENCE B)

Drawn	CN	Date	02/09	Drawing No.	Figure 9F1-3d	
Checked	SK	Approved	AK	Status	PRELIMINARY	Rev. A
Rev.	Description	Date	Scale	1:12500 on A3		
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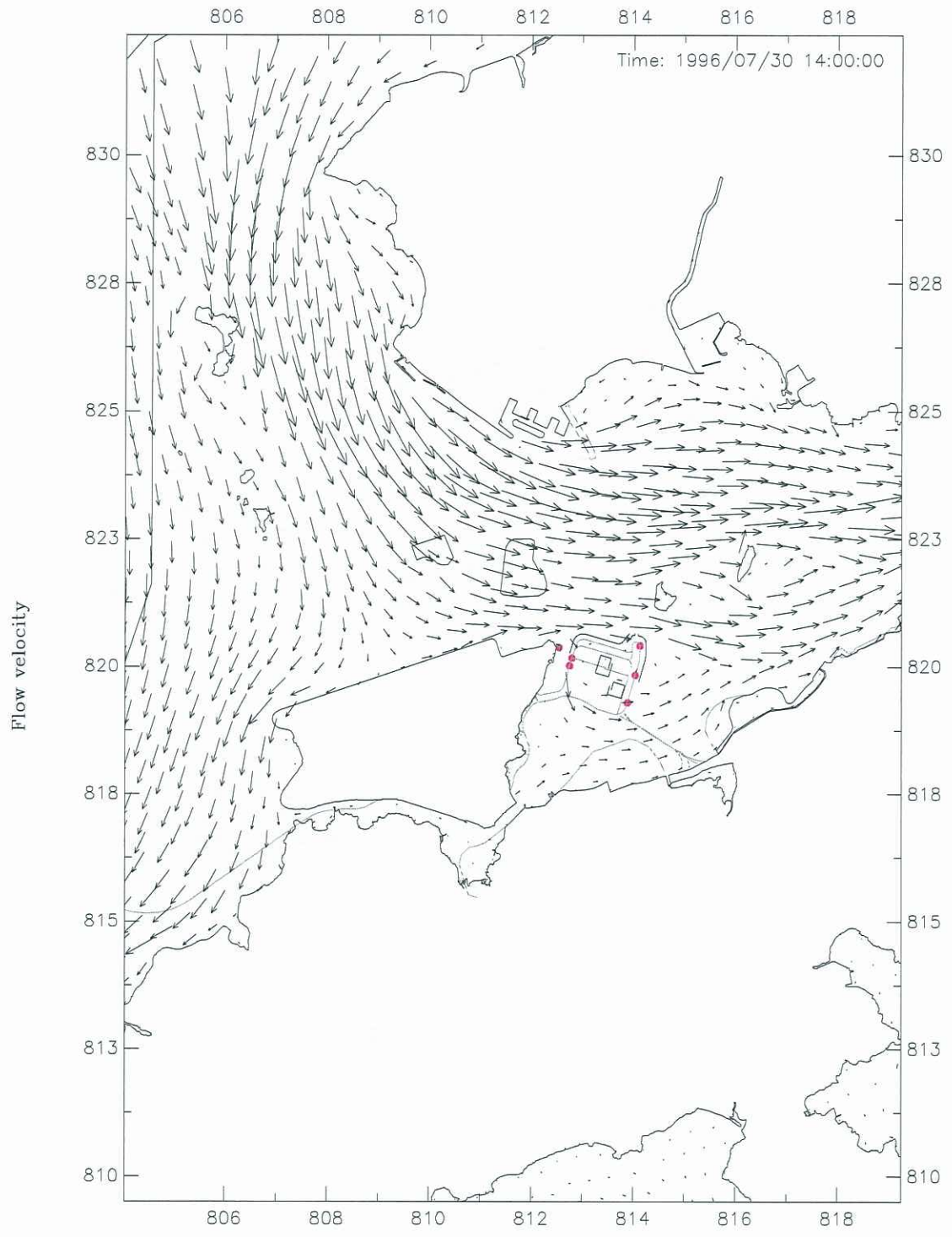
Loss Rate (kg/day)





Appendix 9F – Part 9F2

Annex A

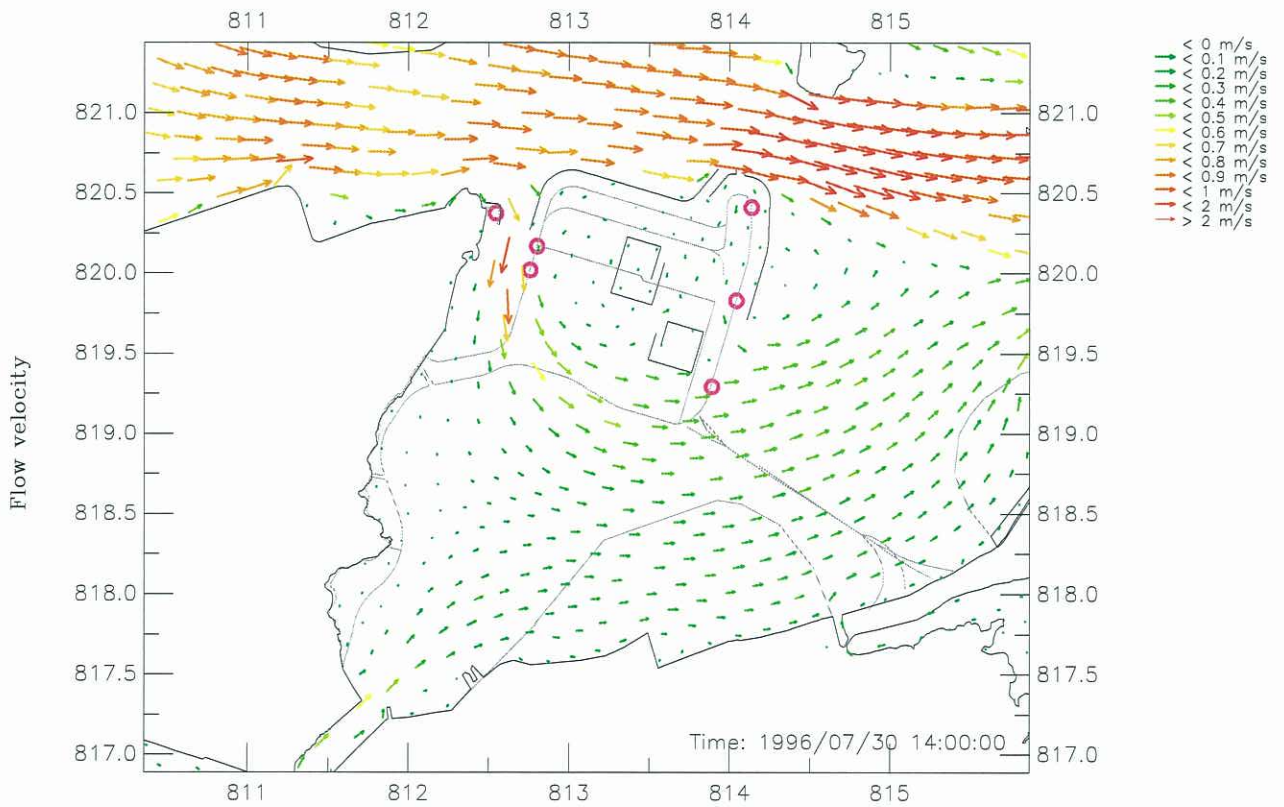
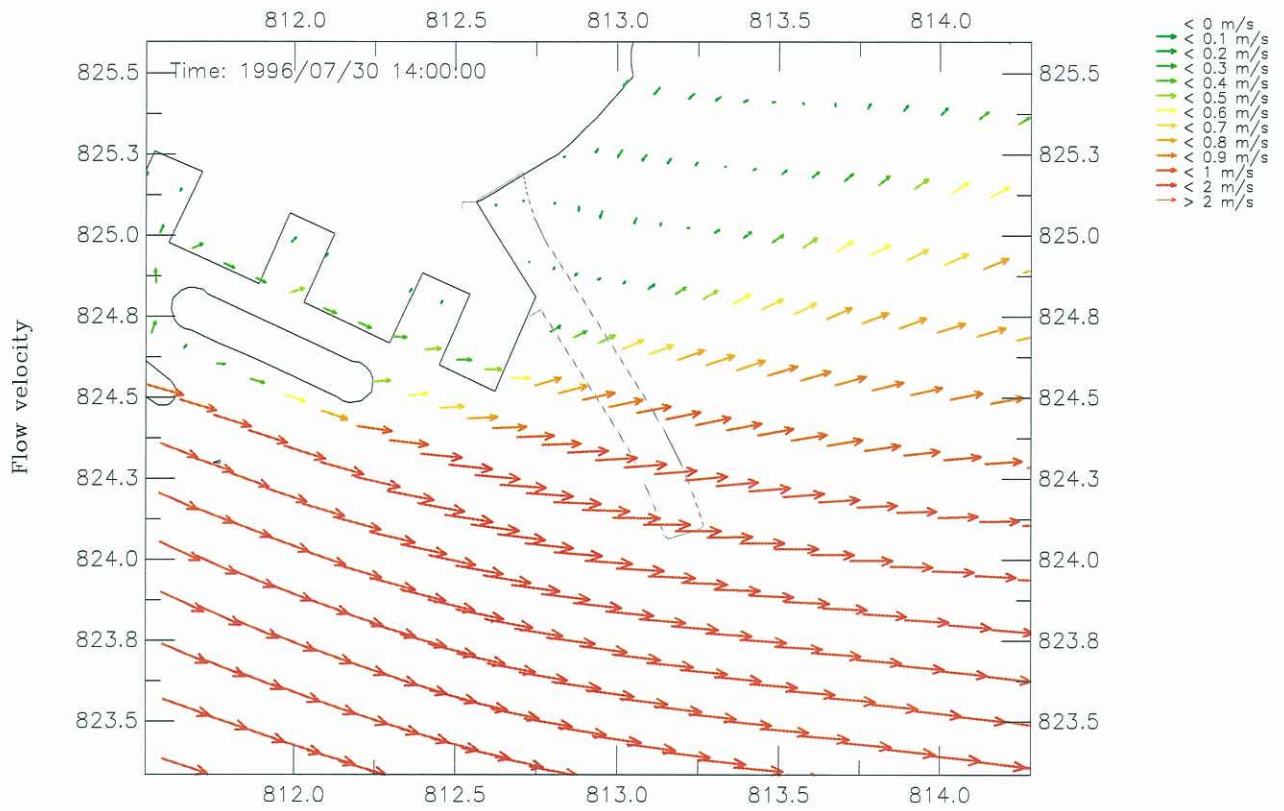


Year 2011 (Sequence B)
 Dry Season Velocity Vector Plot at Ebb Tide – Surface Layer

Jul 2009

Figure 001

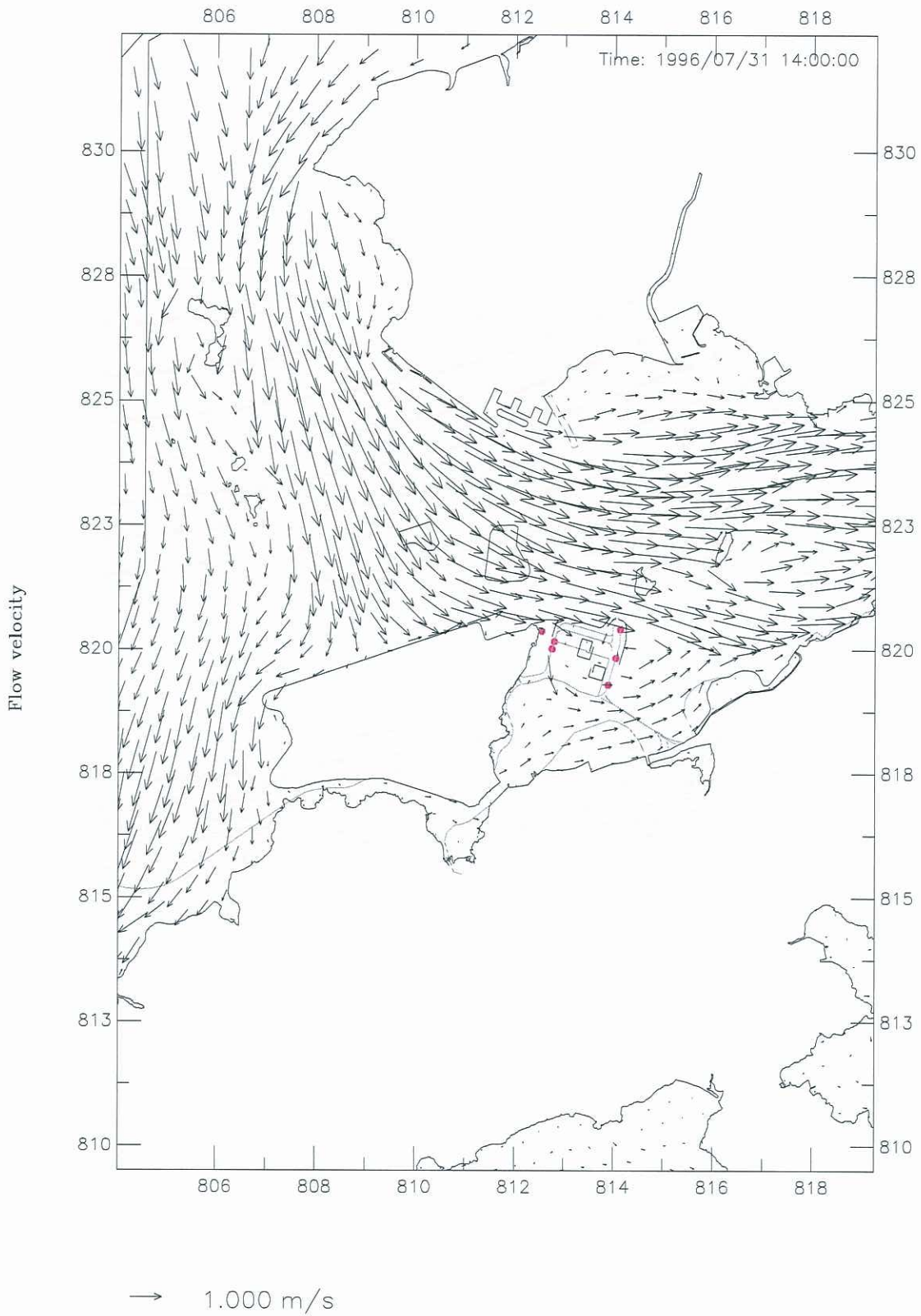
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Year 2011 (Sequence B)
 Dry Season Velocity Vector Plot at Ebb Tide – Surface Layer
 (Top: Northern Reclamation; Bottom: Southern Reclamation)

Jul 2009

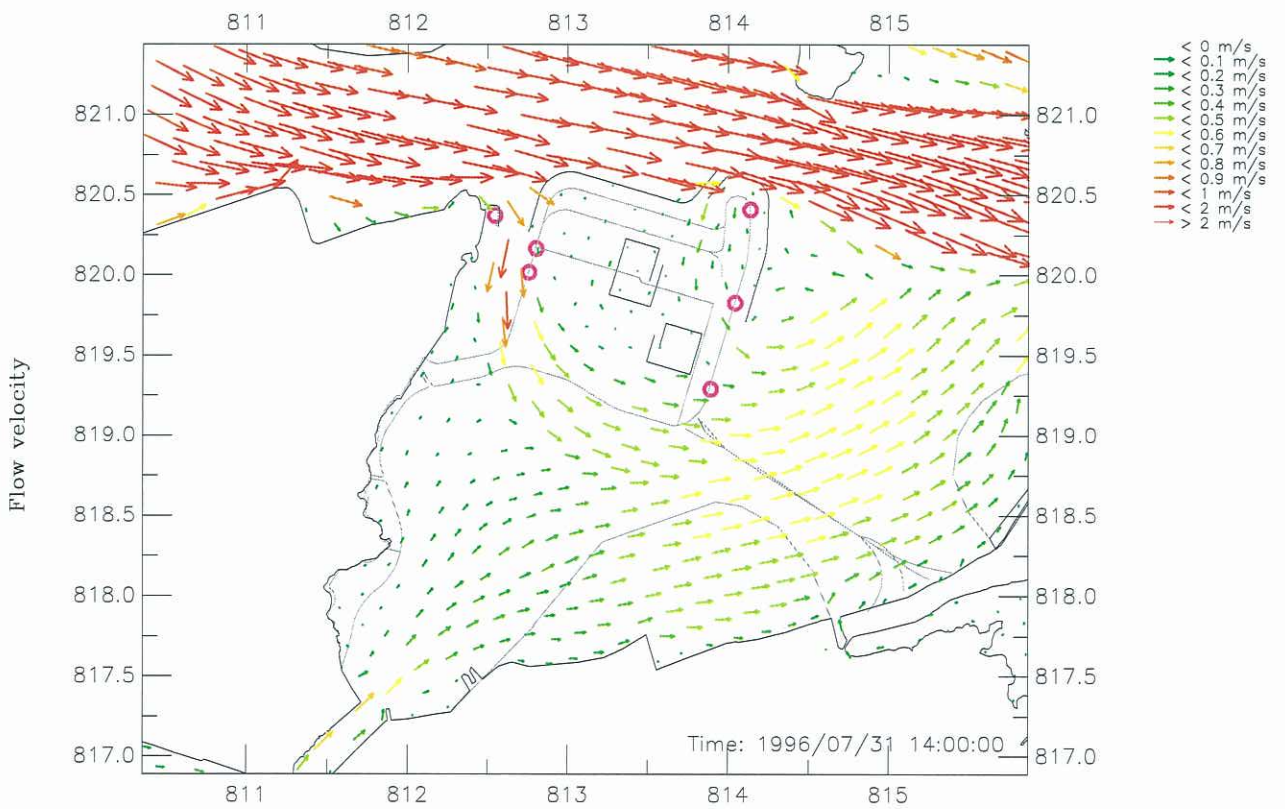
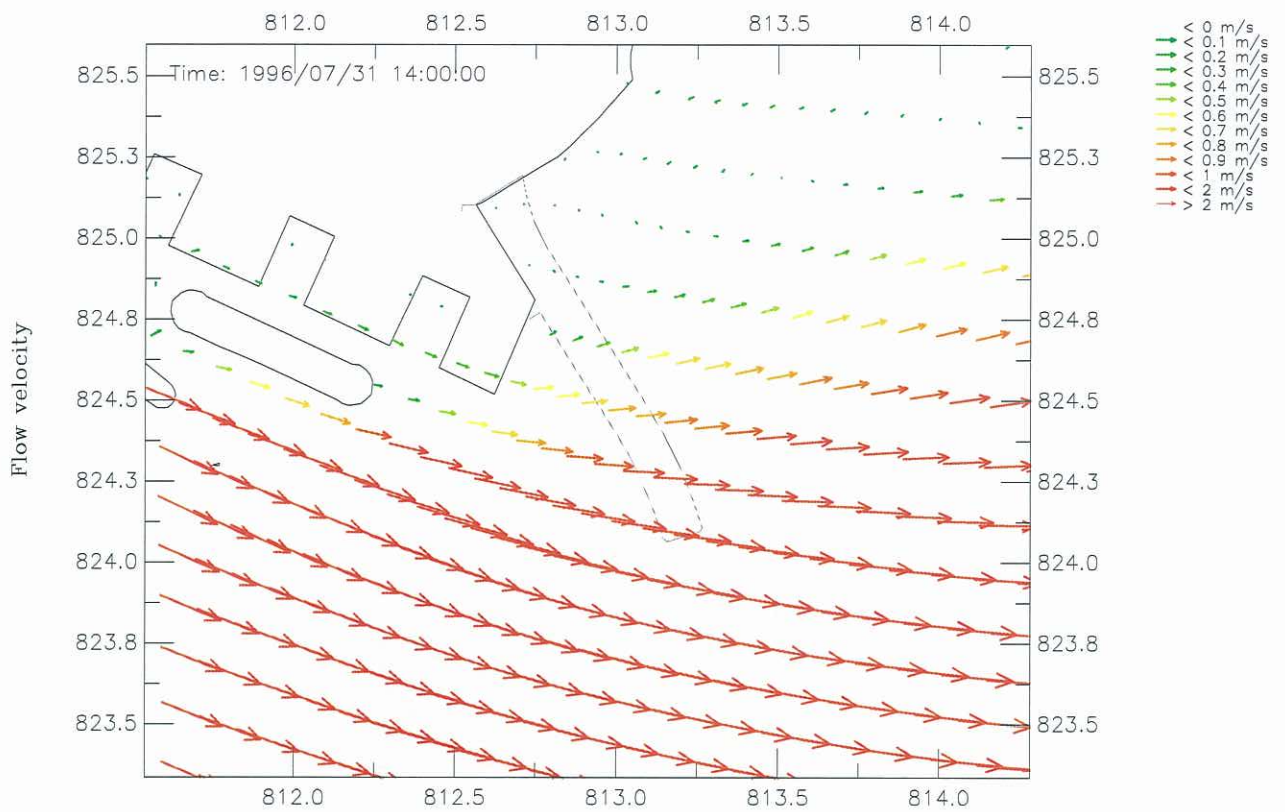
Figure 002



Year 2011 (Sequence B)
 Wet Season Velocity Vector Plot at Ebb Tide – Surface Layer

Jul 2009

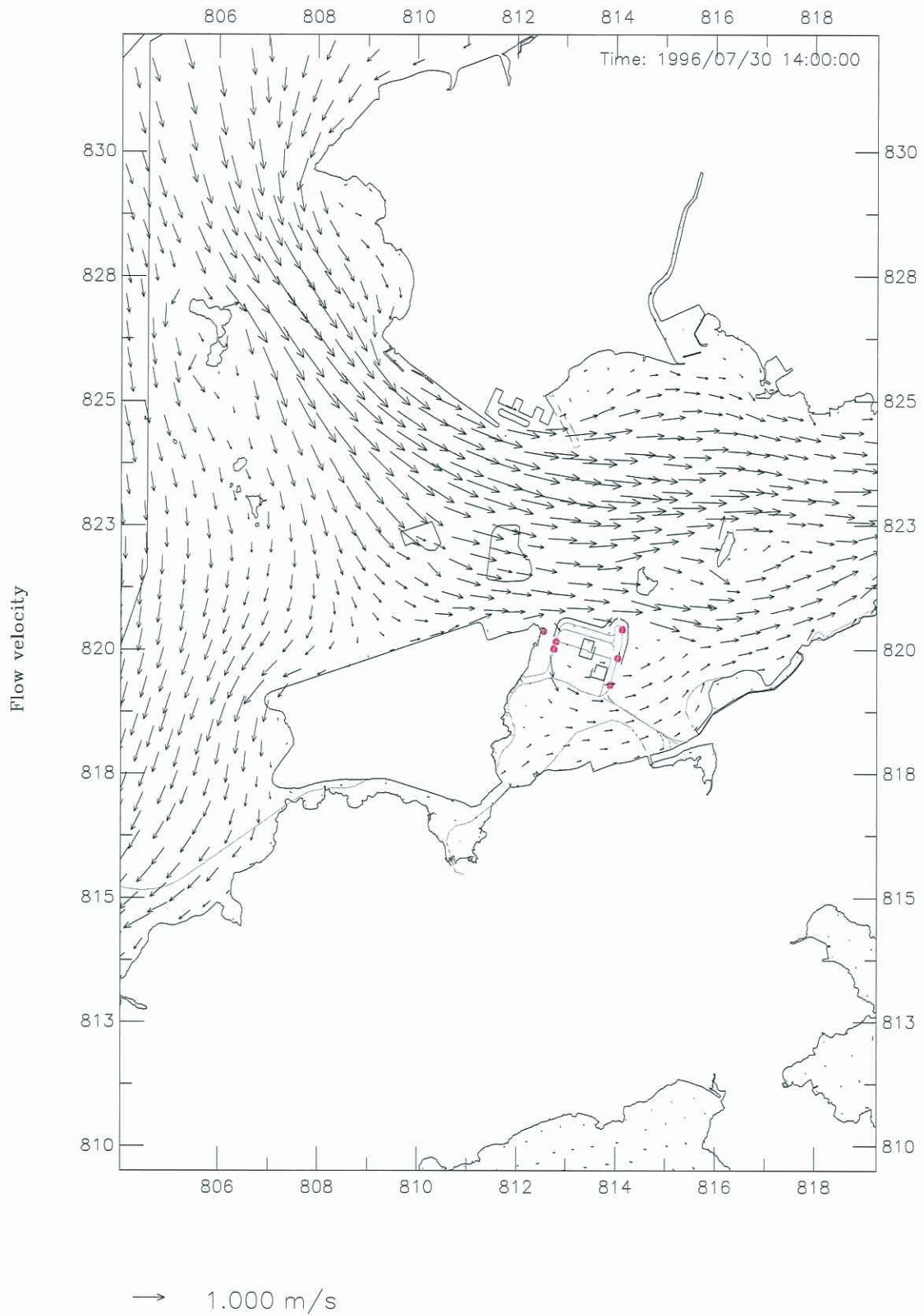
Figure 003



Year 2011 (Sequence B)
 Wet Season Velocity Vector Plot at Ebb Tide – Surface Layer
 (Top: Northern Reclamation; Bottom: Southern Reclamation)

Jul 2009

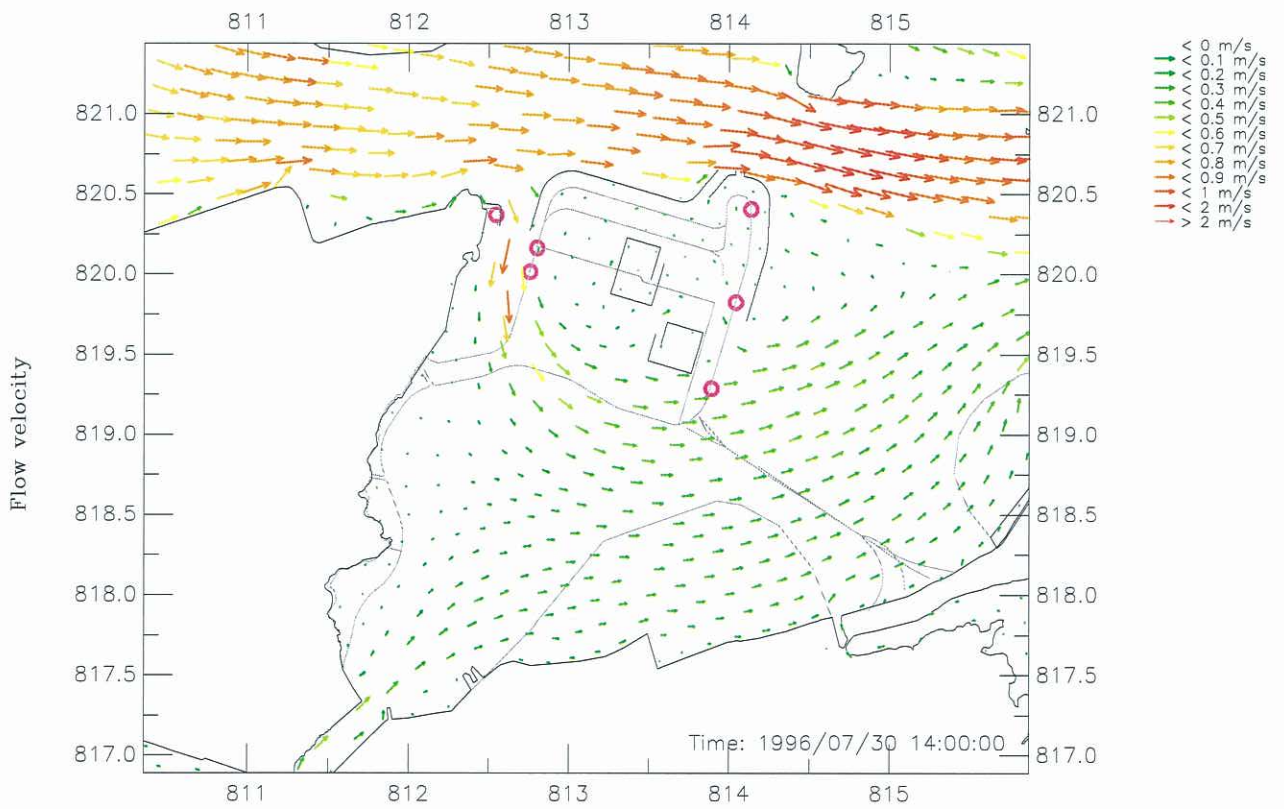
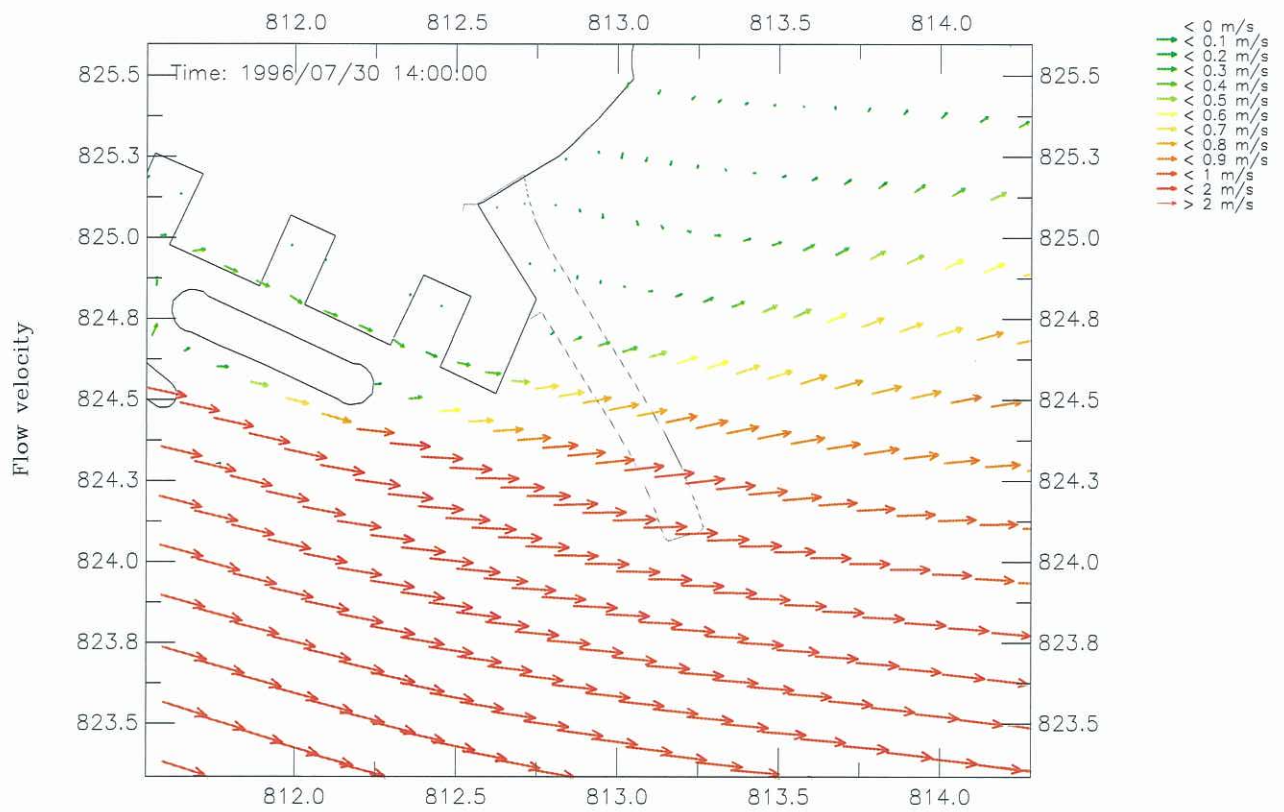
Figure 004



Year 2011 (Sequence B)
 Dry Season Velocity Vector Plot at Ebb Tide – Mid-Depth

Jul 2009

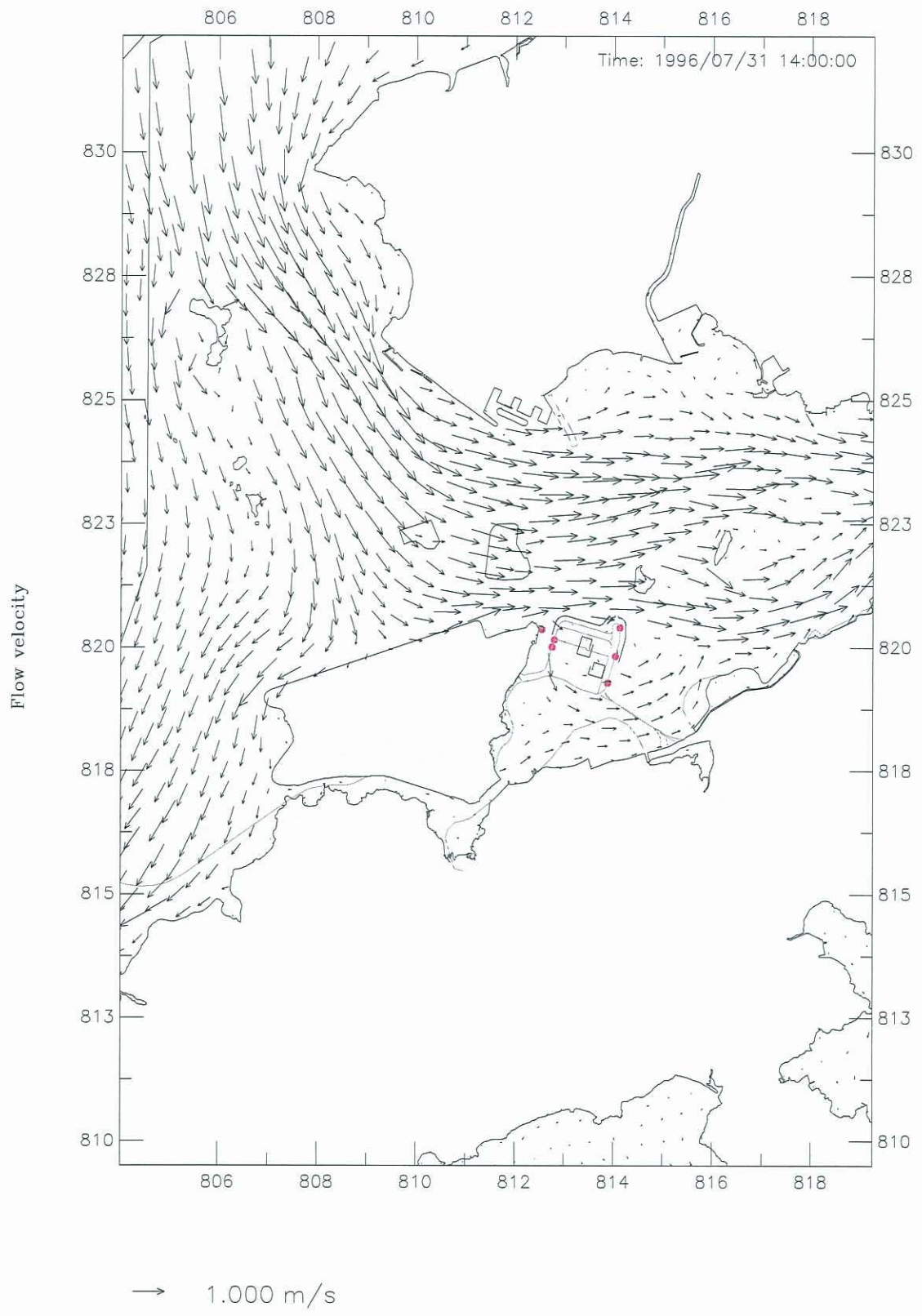
Figure 005



Year 2011 (Sequence B)
 Dry Season Velocity Vector Plot at Ebb Tide – Mid-Depth
 (Top: Northern Reclamation; Bottom: Southern Reclamation)

Jul 2009

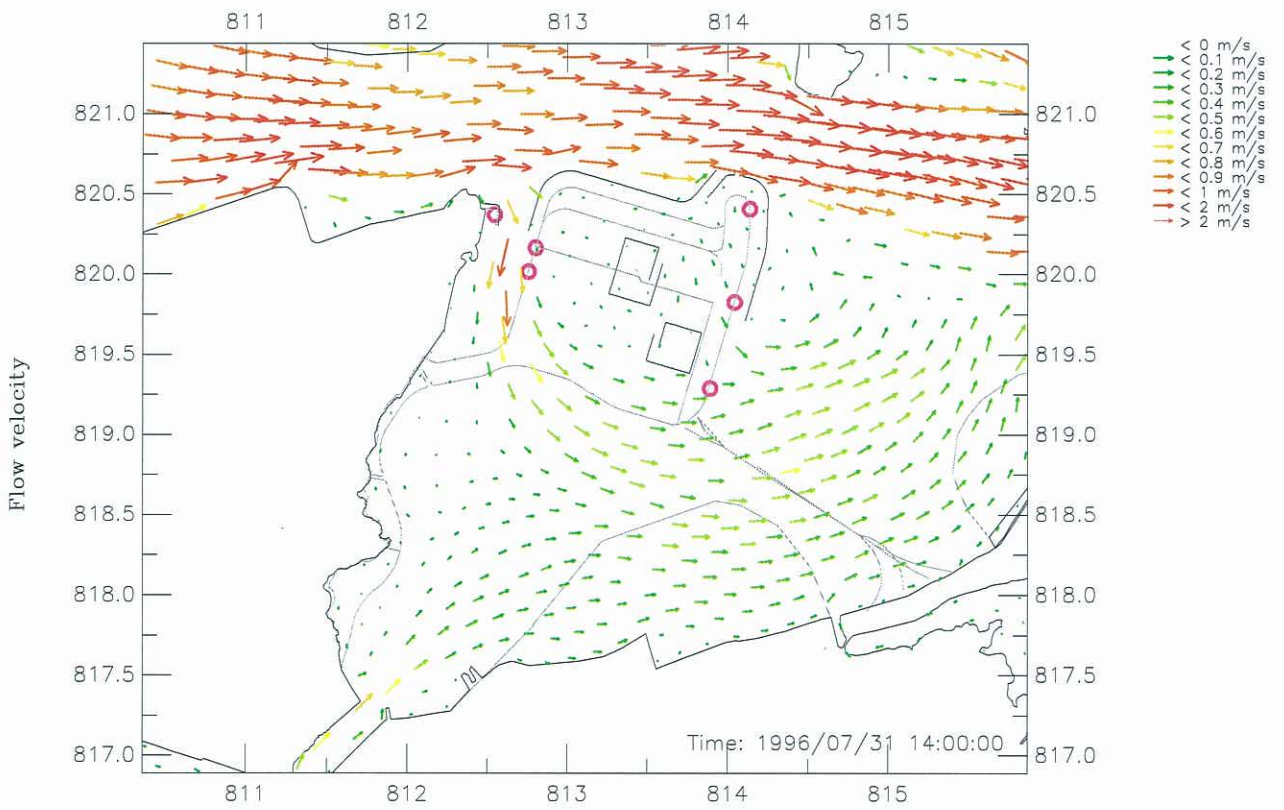
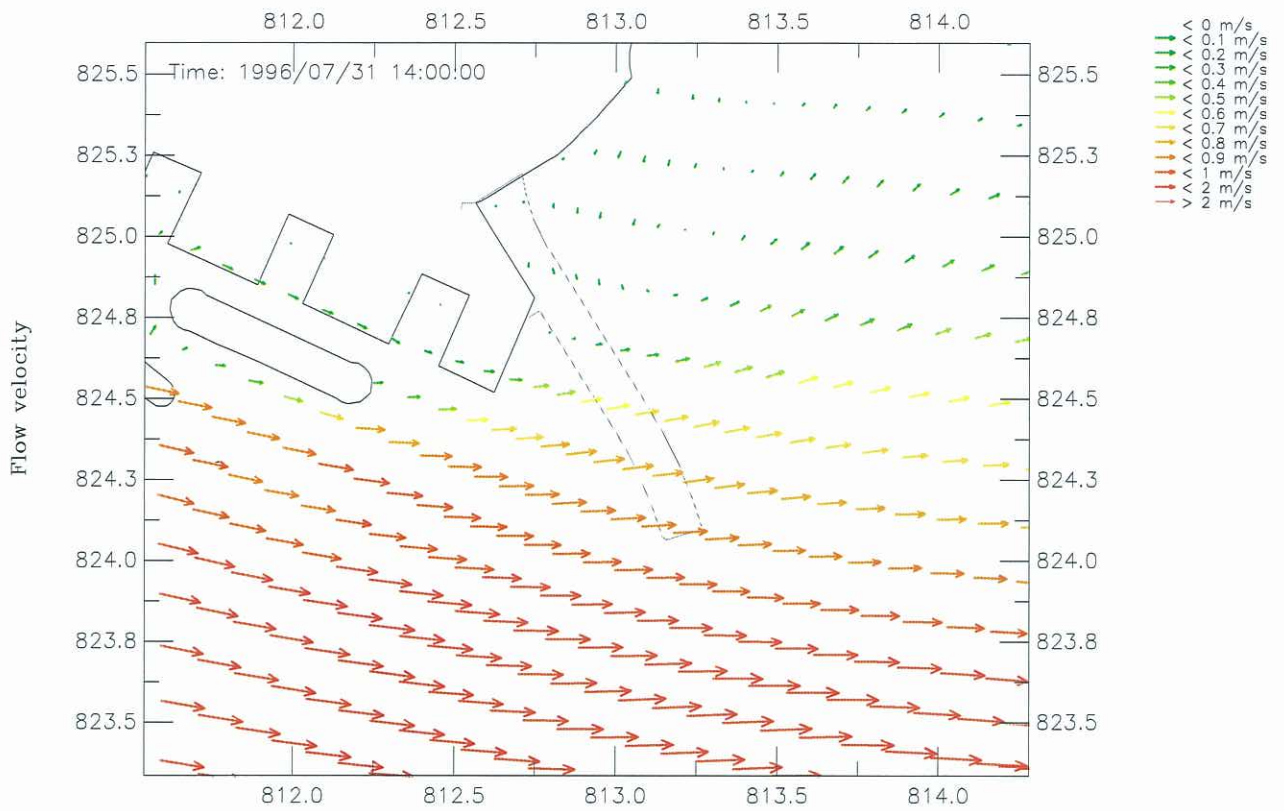
Figure 006



Year 2011 (Sequence B)
 Wet Season Velocity Vector Plot at Ebb Tide – Mid-Depth

Jul 2009

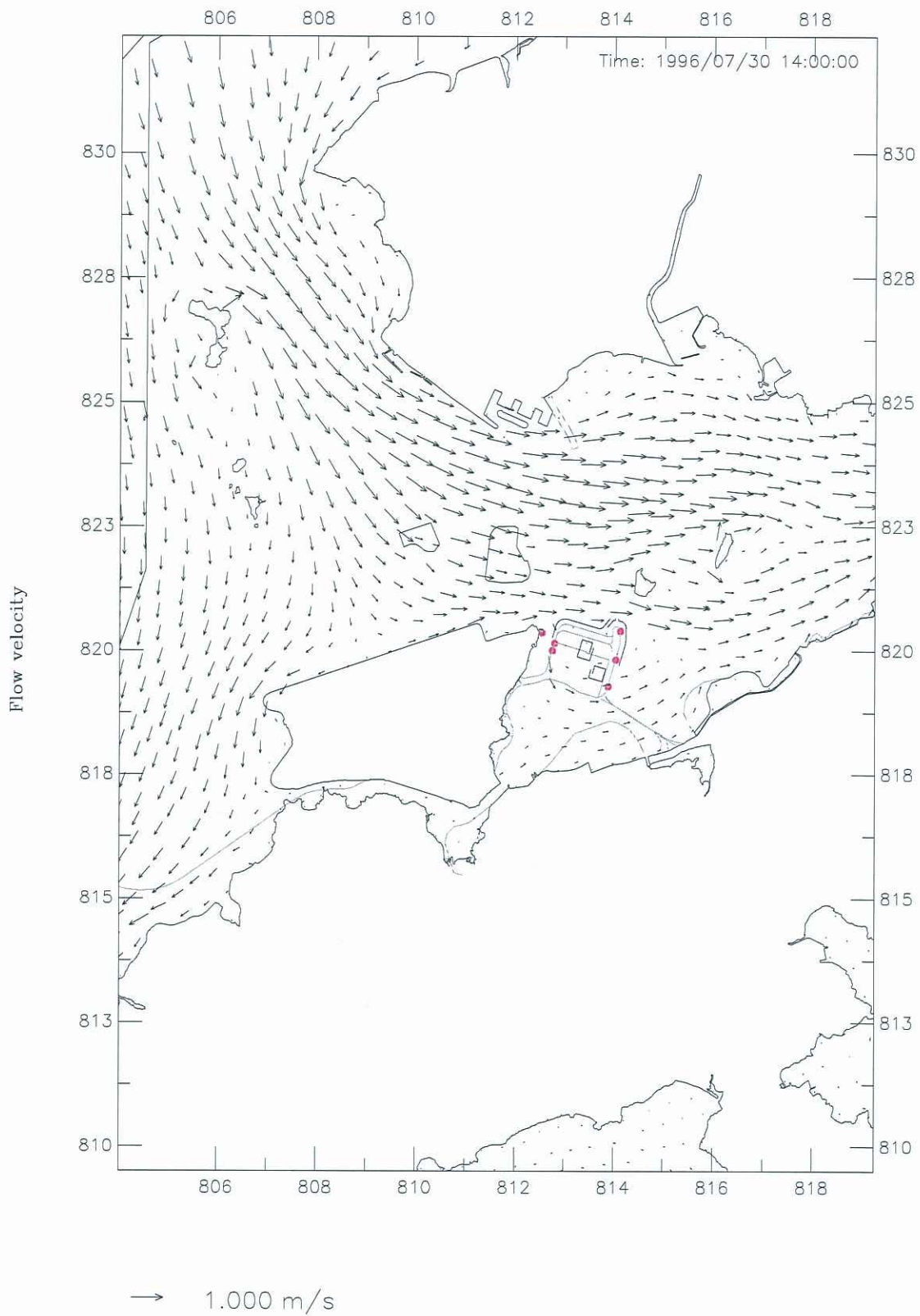
Figure 007



Year 2011 (Sequence B)
Wet Season Velocity Vector Plot at Ebb Tide – Mid-Depth
(Top: Northern Reclamation; Bottom: Southern Reclamation)

Jul 2009

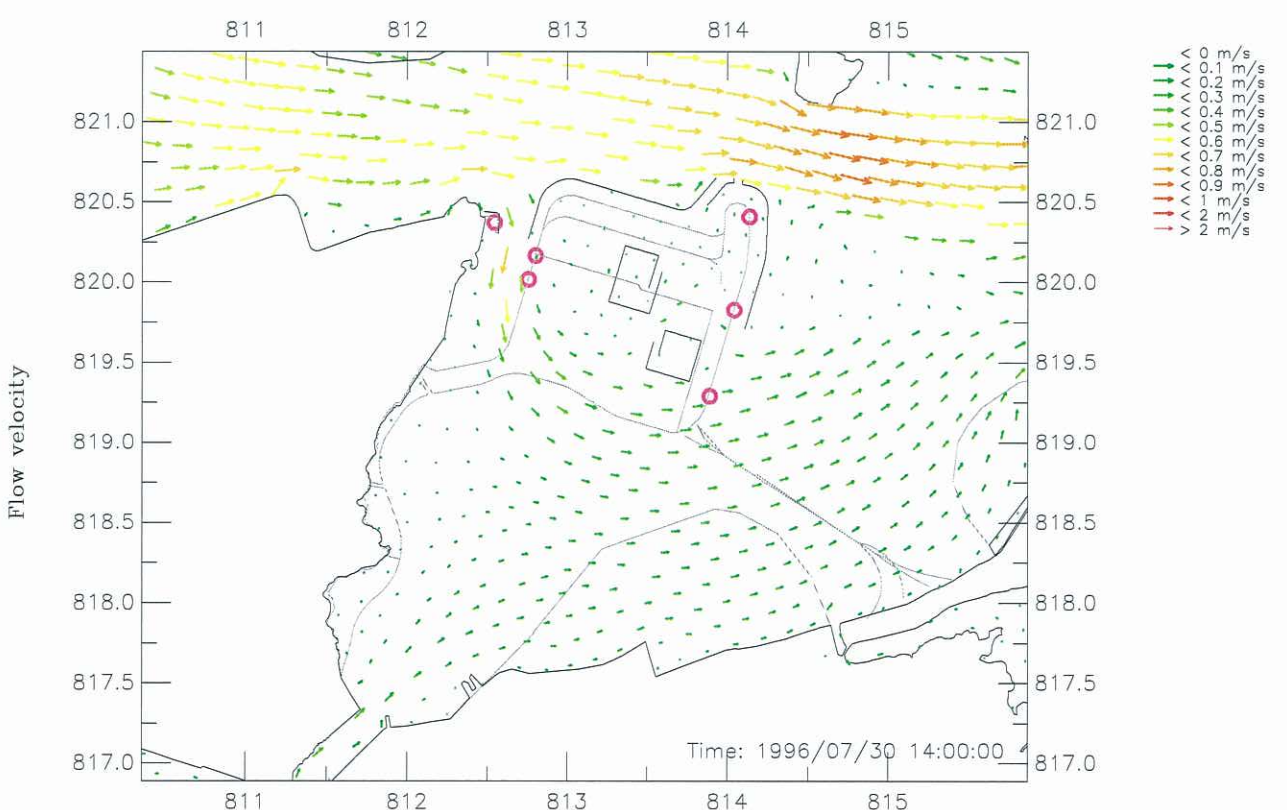
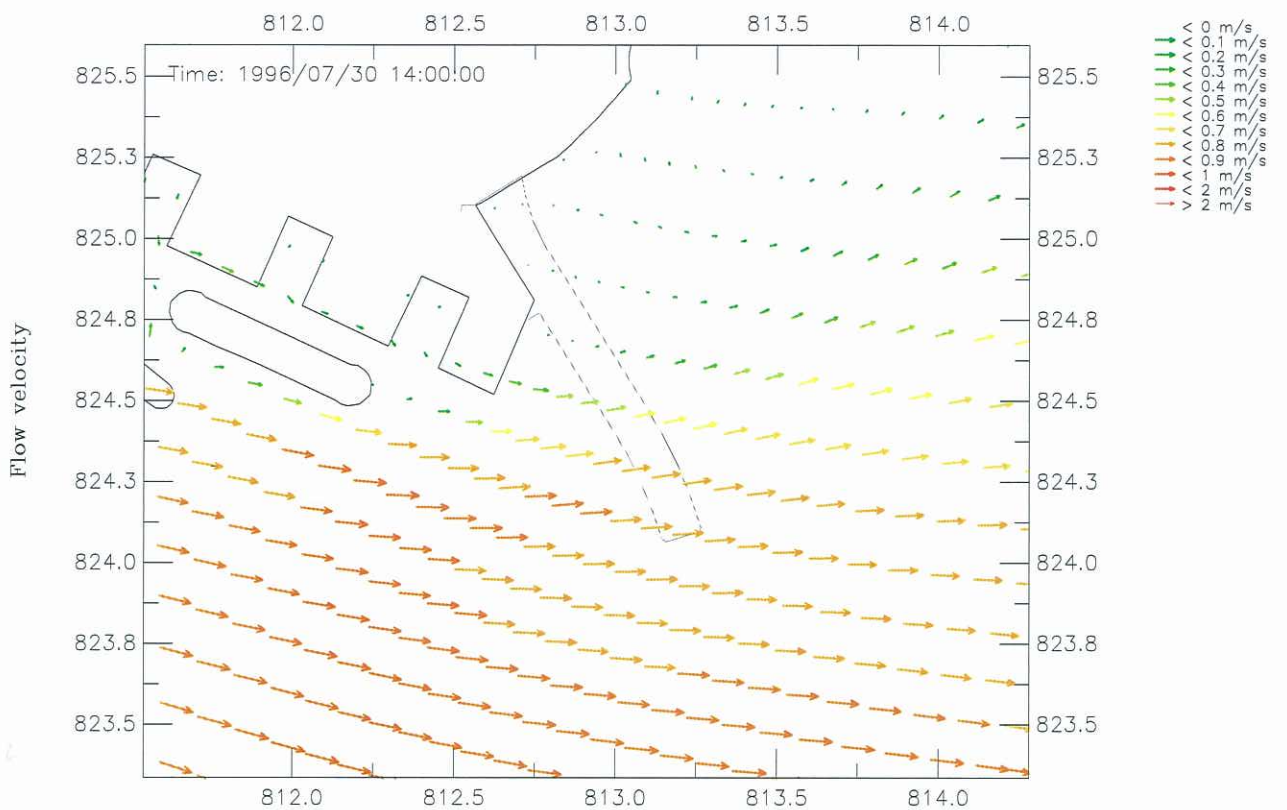
Figure 008



Year 2011 (Sequence B)
 Dry Season Velocity Vector Plot at Ebb Tide – Bottom Layer

Jul 2009

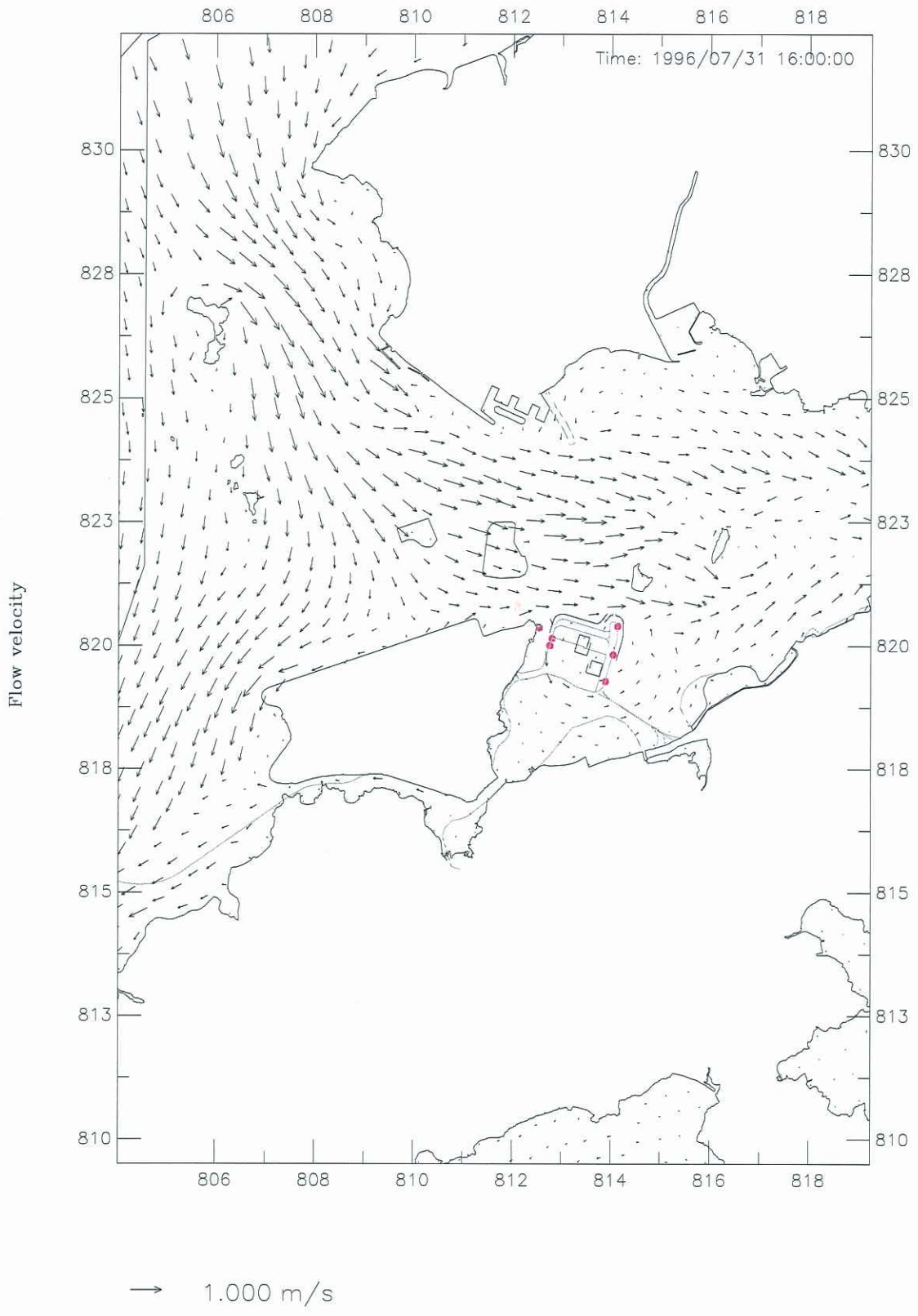
Figure 009



Year 2011 (Sequence B)
 Dry Season Velocity Vector Plot at Ebb Tide – Bottom Layer
 (Top: Northern Reclamation; Bottom: Southern Reclamation)

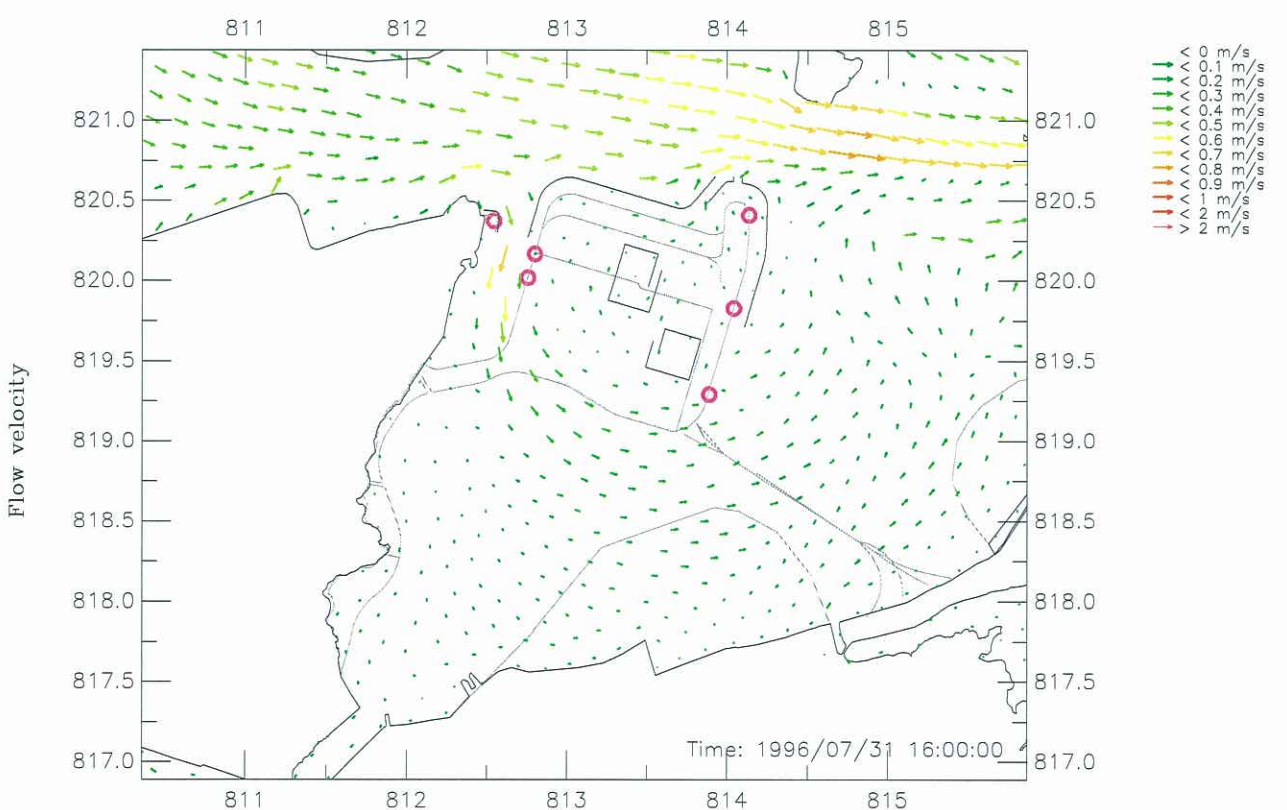
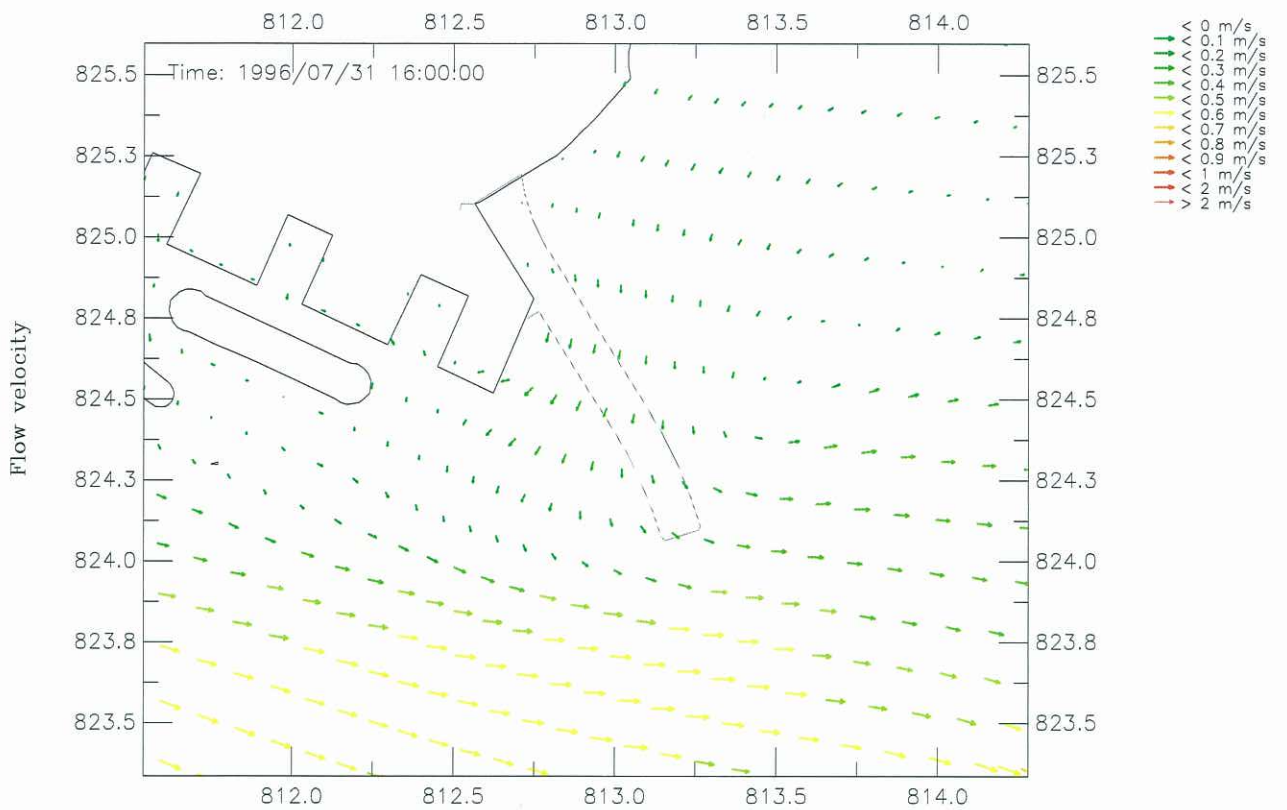
Jul 2009

Figure 010



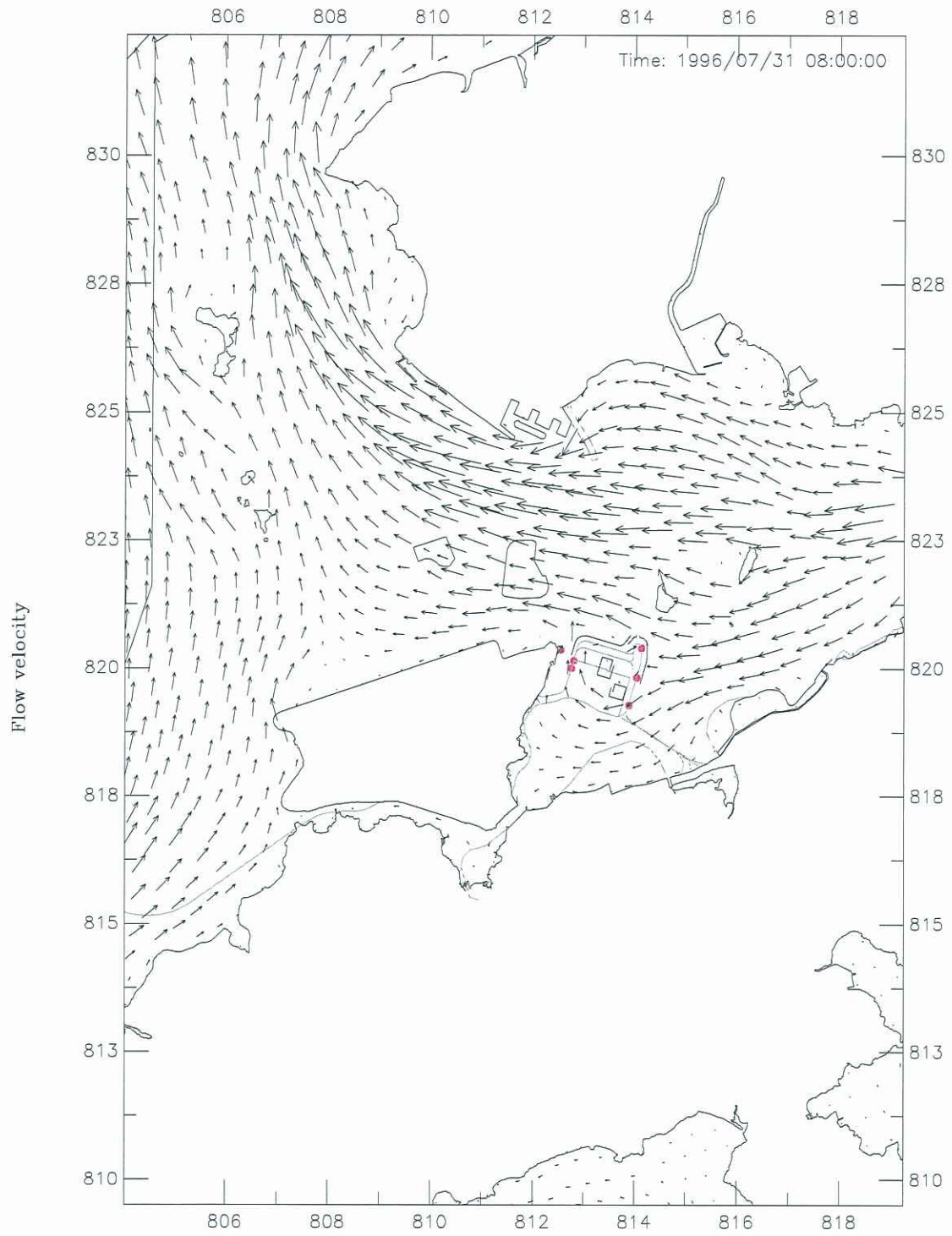
Year 2011 (Sequence B)
 Wet Season Velocity Vector Plot at Ebb Tide – Bottom Layer

Jul 2009 Figure 011



Year 2011 (Sequence B)
 Wet Season Velocity Vector Plot at Ebb Tide – Bottom Layer
 (Top: Northern Reclamation; Bottom: Southern Reclamation)

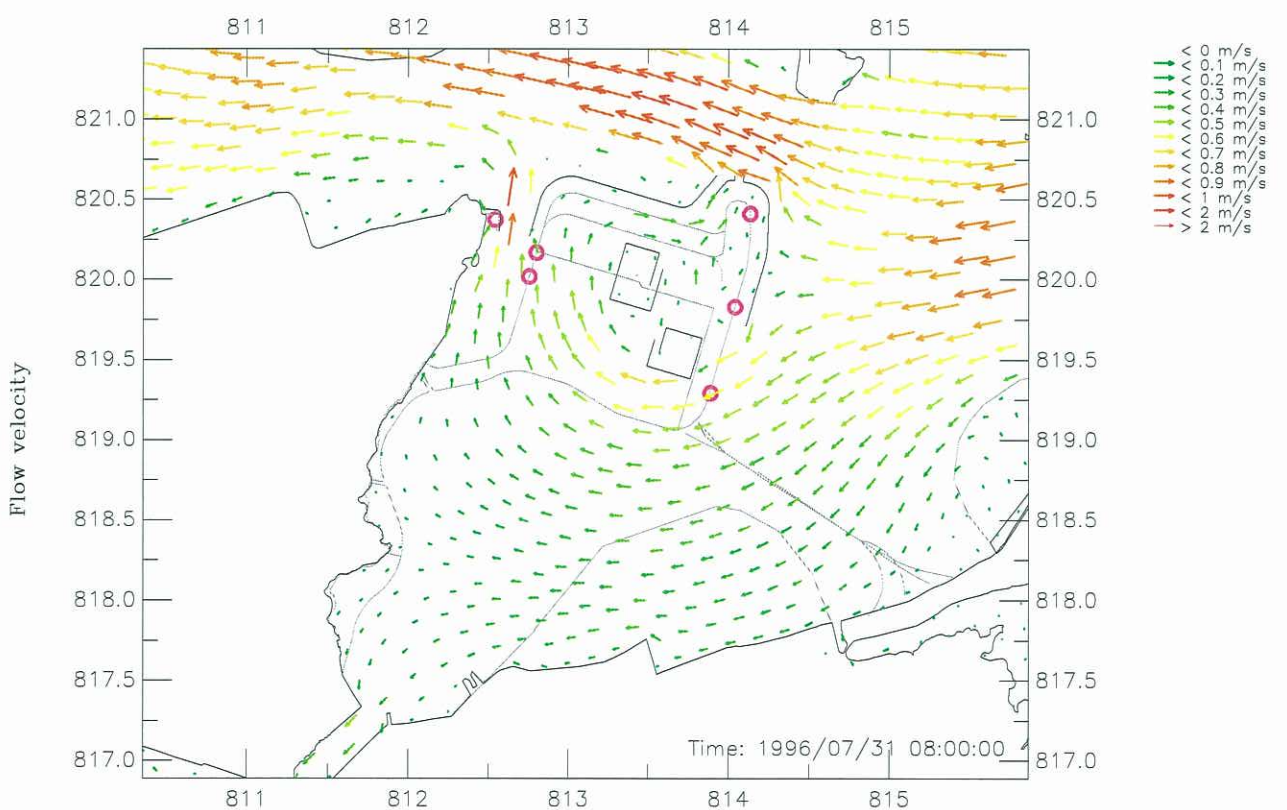
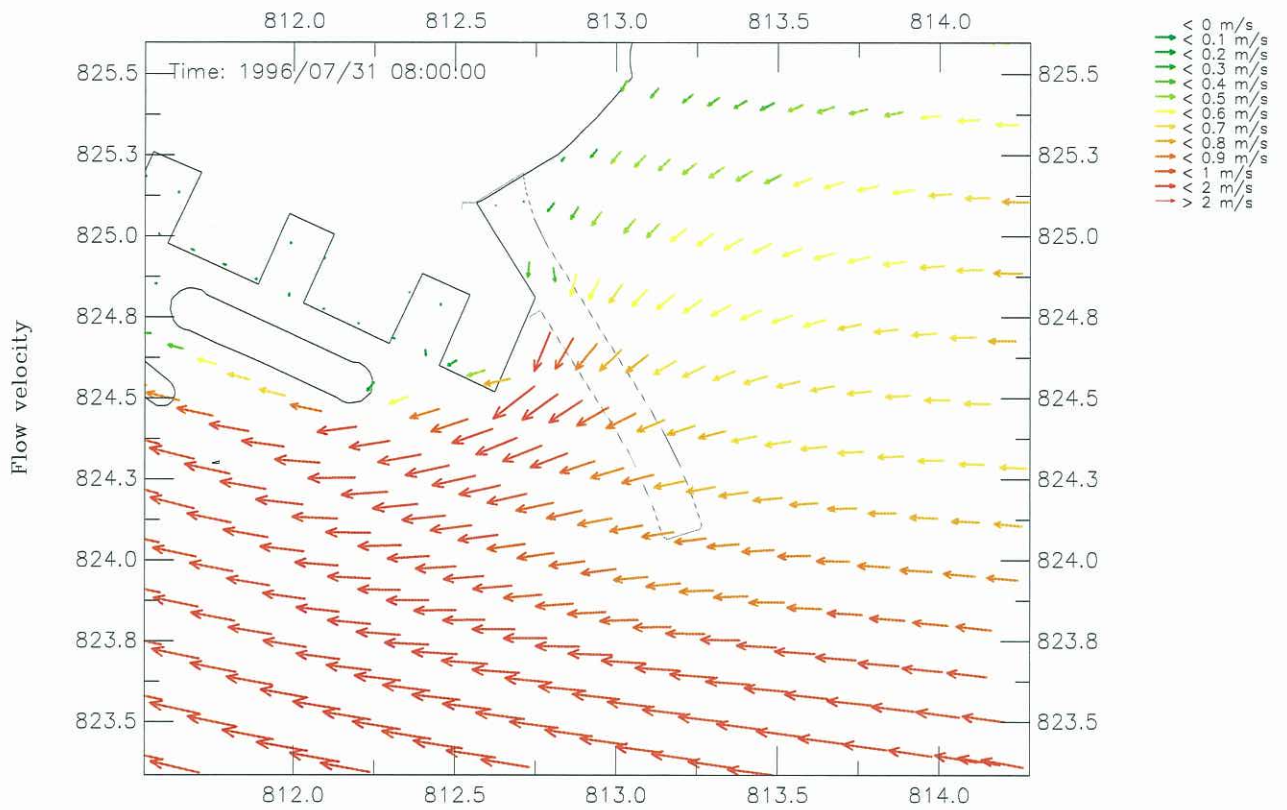
Jul 2009 Figure 012



Year 2011 (Sequence B)
 Dry Season Velocity Vector Plot at Flood Tide – Surface Layer

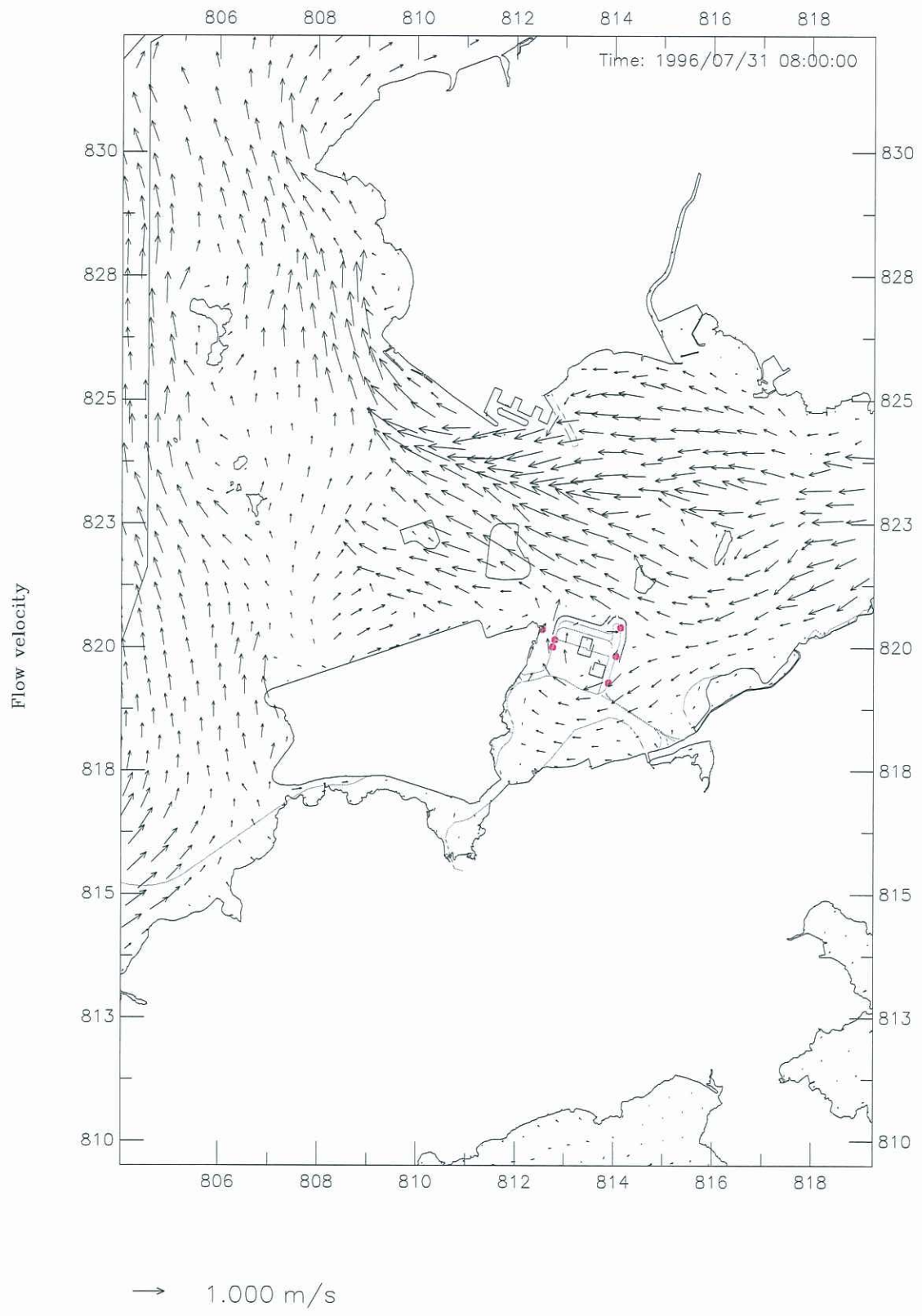
Jul 2009

Figure 013



Year 2011 (Sequence B)
 Dry Season Velocity Vector Plot at Flood Tide – Surface Layer
 (Top: Northern Reclamation; Bottom: Southern Reclamation)

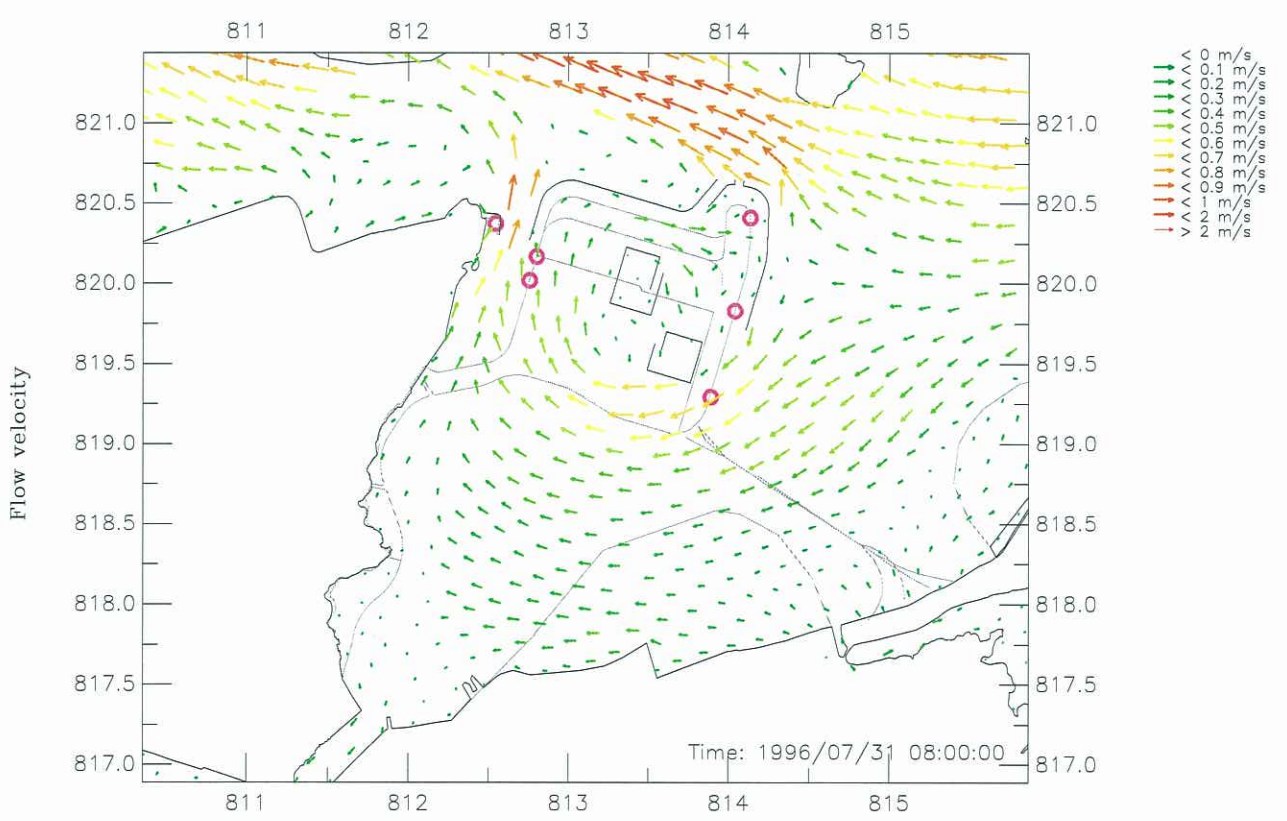
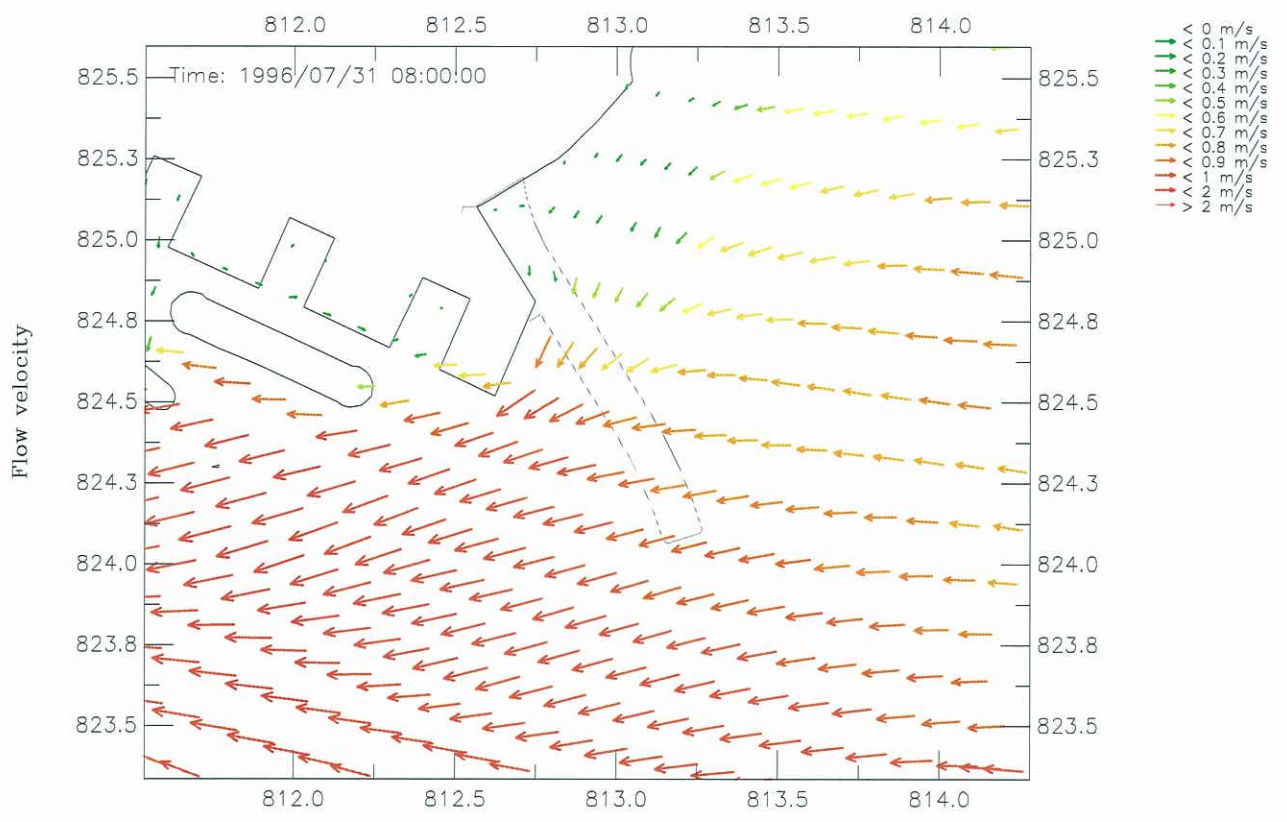
Jul 2009 Figure 014



Year 2011 (Sequence B)
 Wet Season Velocity Vector Plot at Flood Tide – Surface Layer

Jul 2009

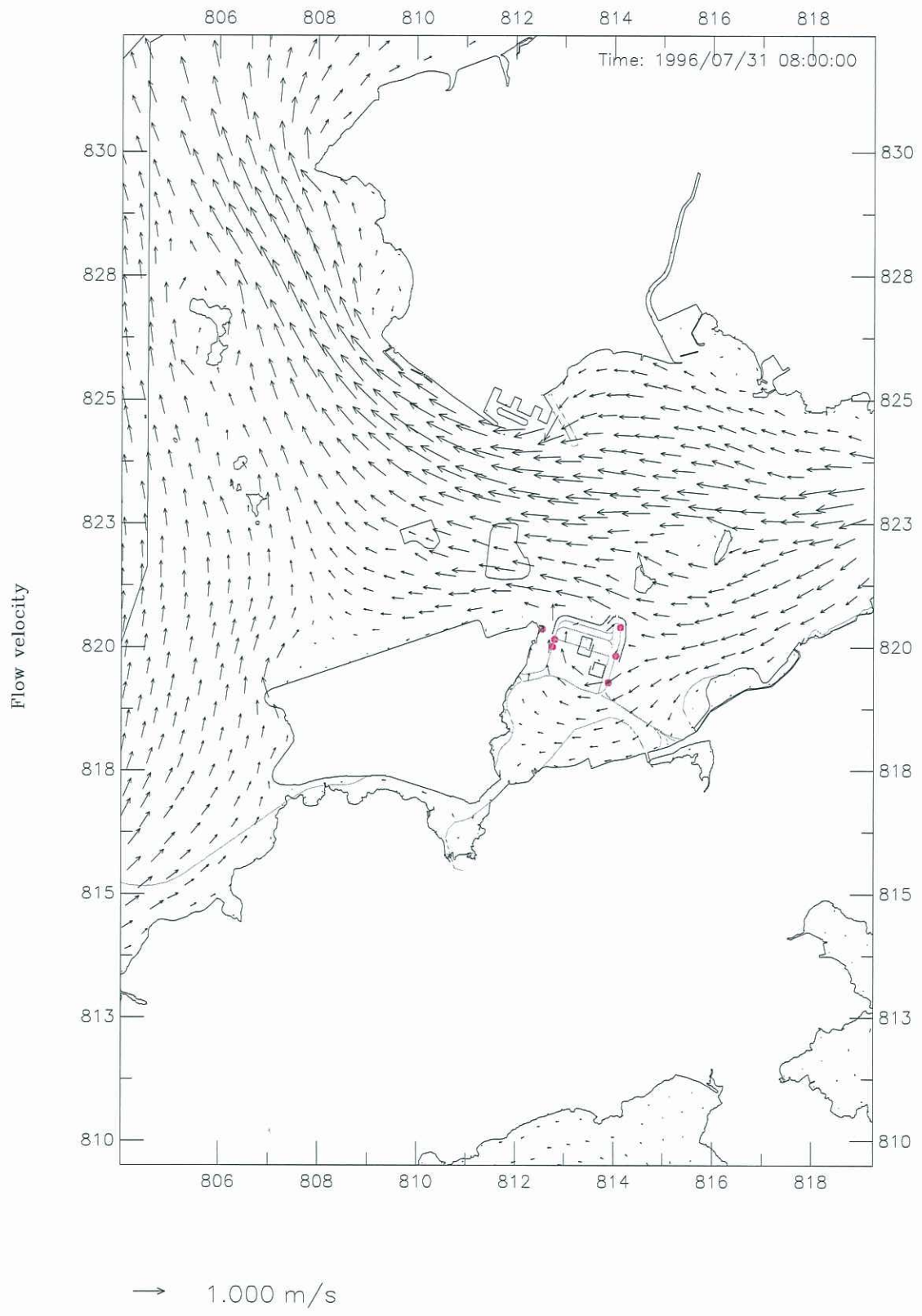
Figure 015



Year 2011 (Sequence B)
 Wet Season Velocity Vector Plot at Flood Tide – Surface Layer
 (Top: Northern Reclamation; Bottom: Southern Reclamation)

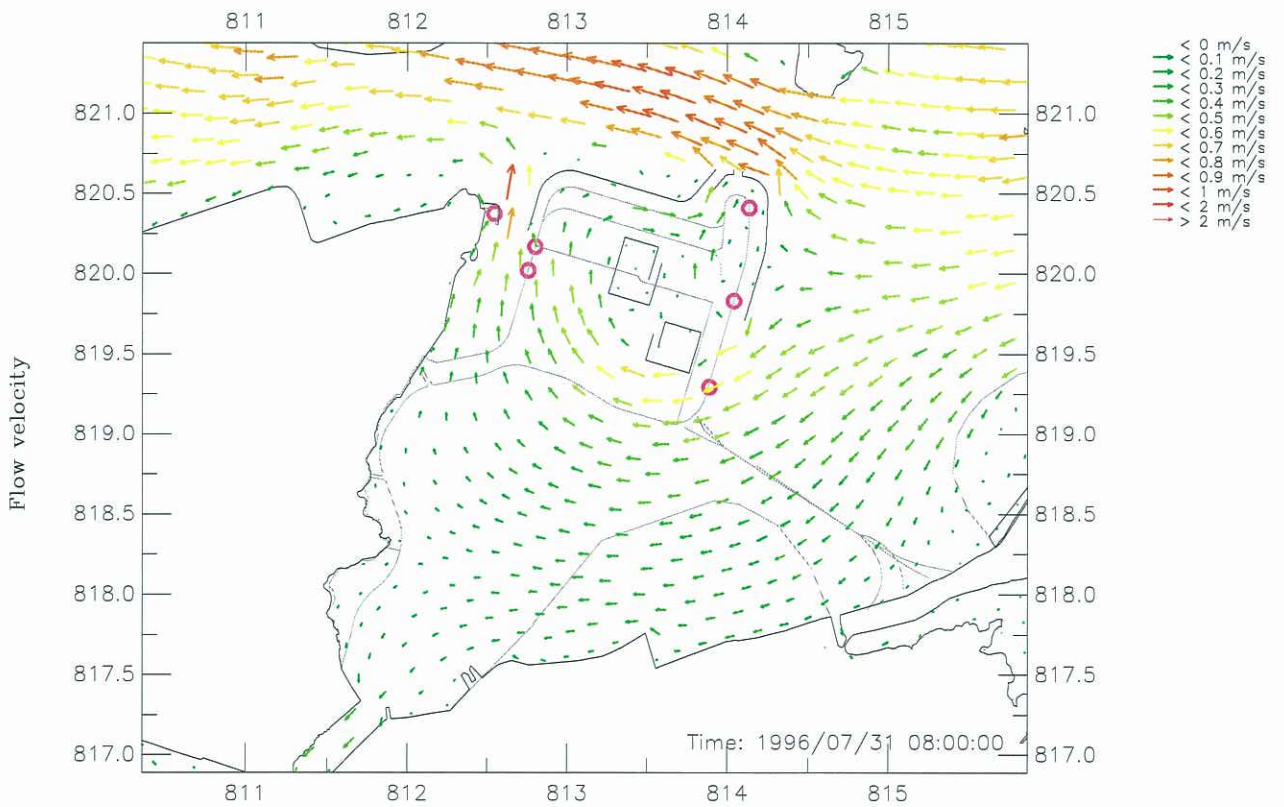
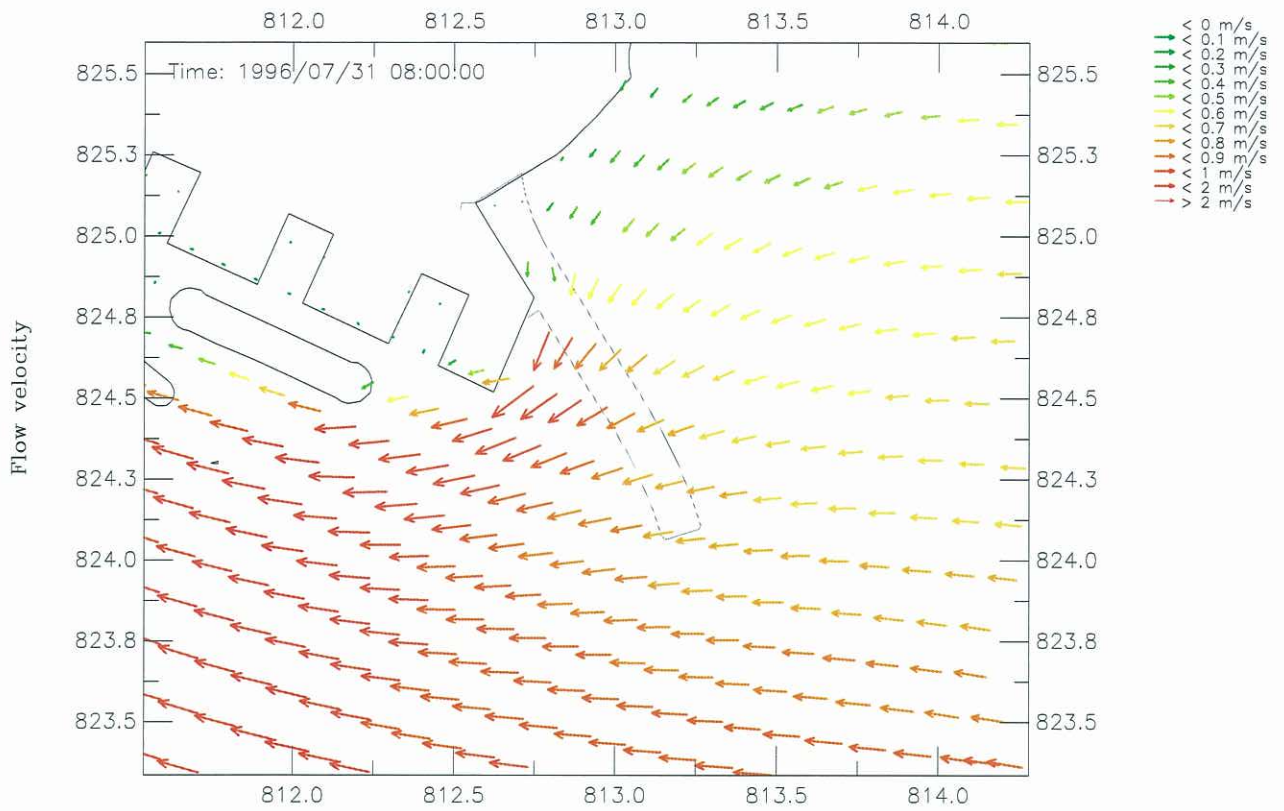
Jul 2009

Figure 016



Year 2011 (Sequence B)
 Dry Season Velocity Vector Plot at Flood Tide – Mid-Depth

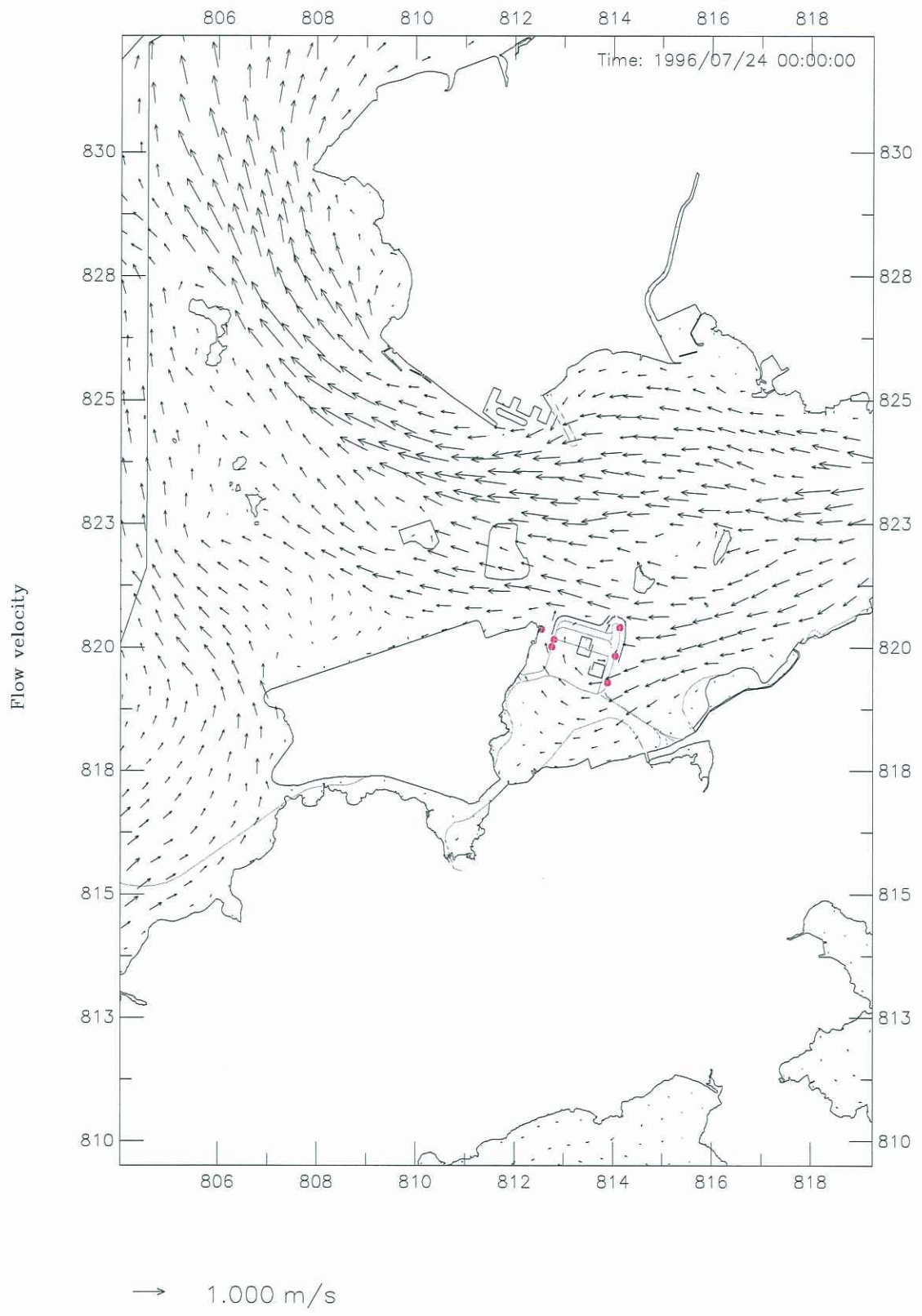
Jul 2009 Figure 017



Year 2011 (Sequence B)
 Dry Season Velocity Vector Plot at Flood Tide – Mid-Depth
 (Top: Northern Reclamation; Bottom: Southern Reclamation)

Jul 2009

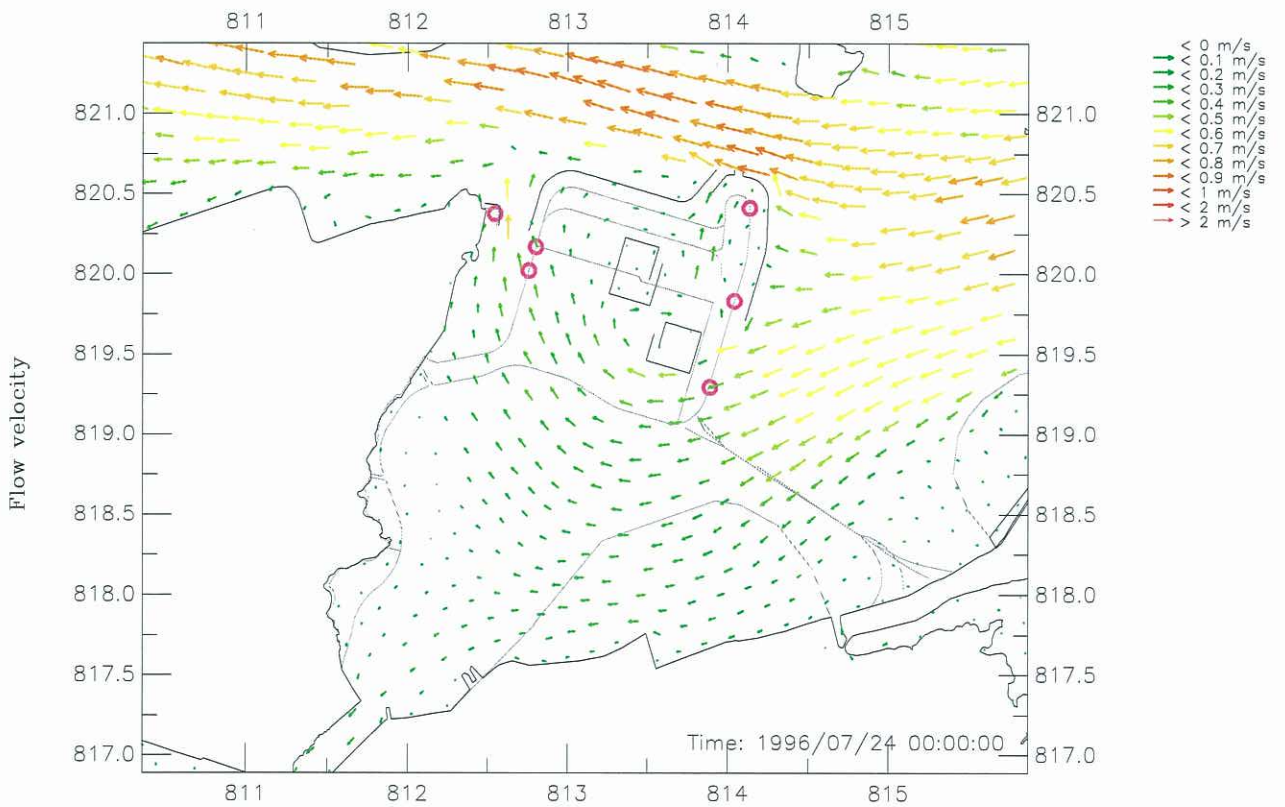
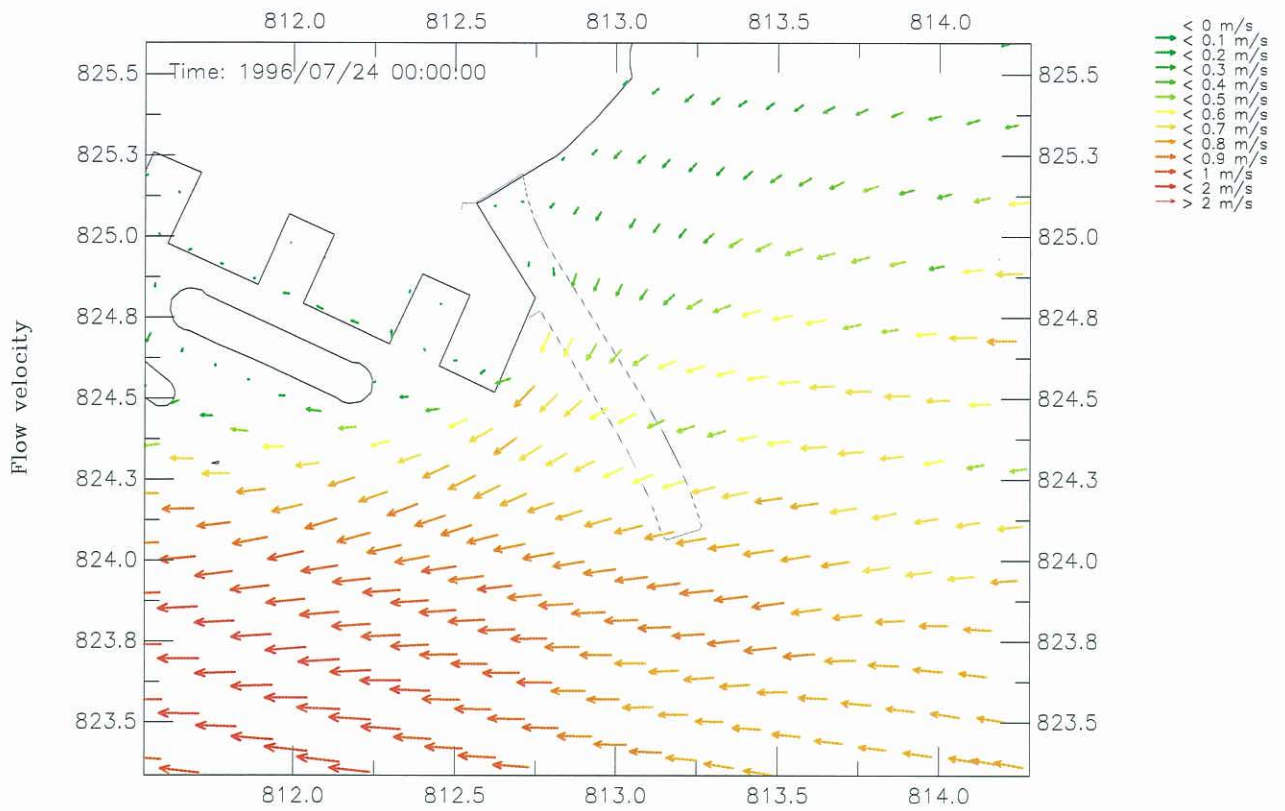
Figure 018



Year 2011 (Sequence B)
 Wet Season Velocity Vector Plot at Flood Tide – Mid-Depth

Jul 2009

Figure 019

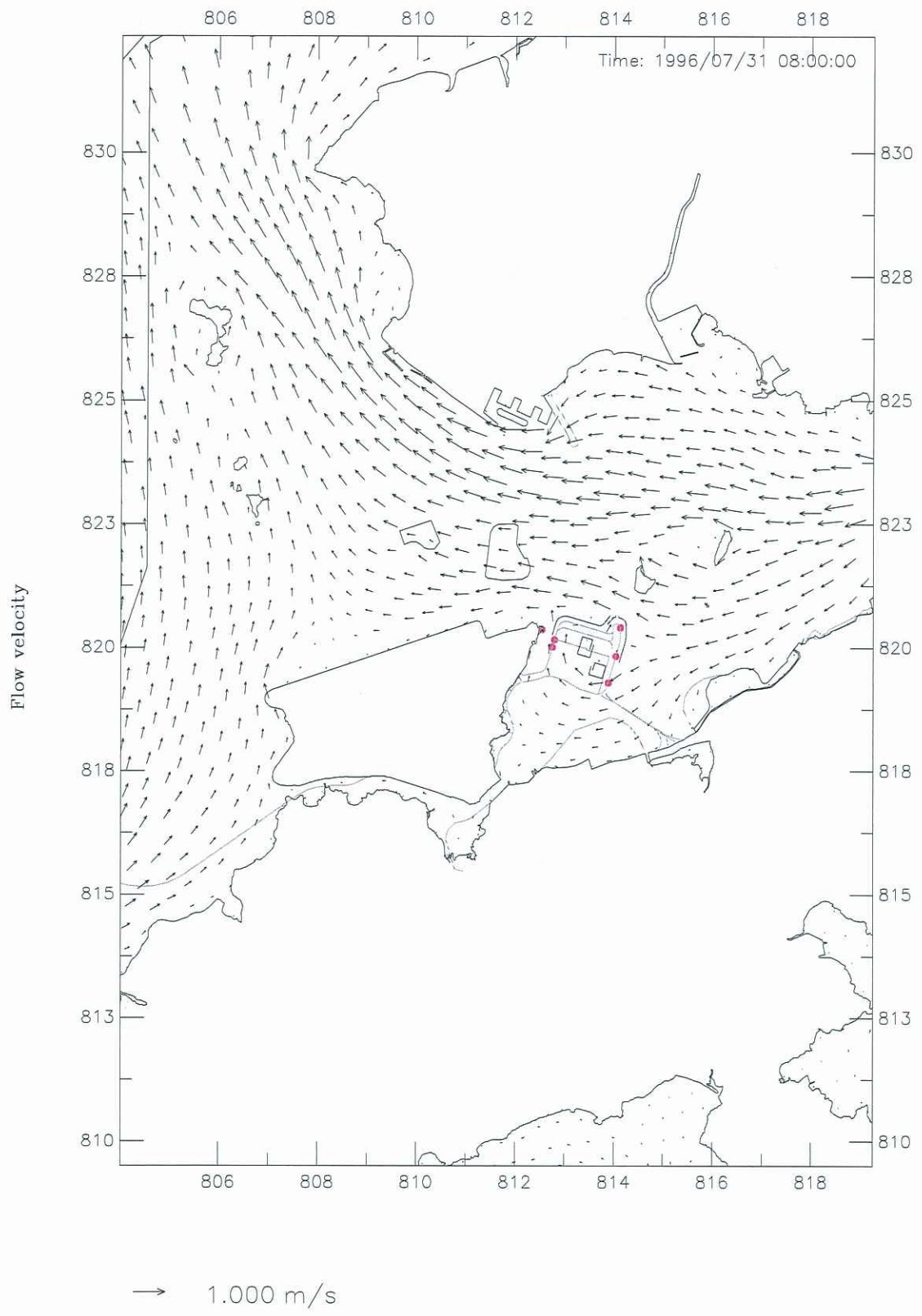


Year 2011 (Sequence B)
 Wet Season Velocity Vector Plot at Flood Tide – Mid-Depth
 (Top: Northern Reclamation; Bottom: Southern Reclamation)

Jul 2009

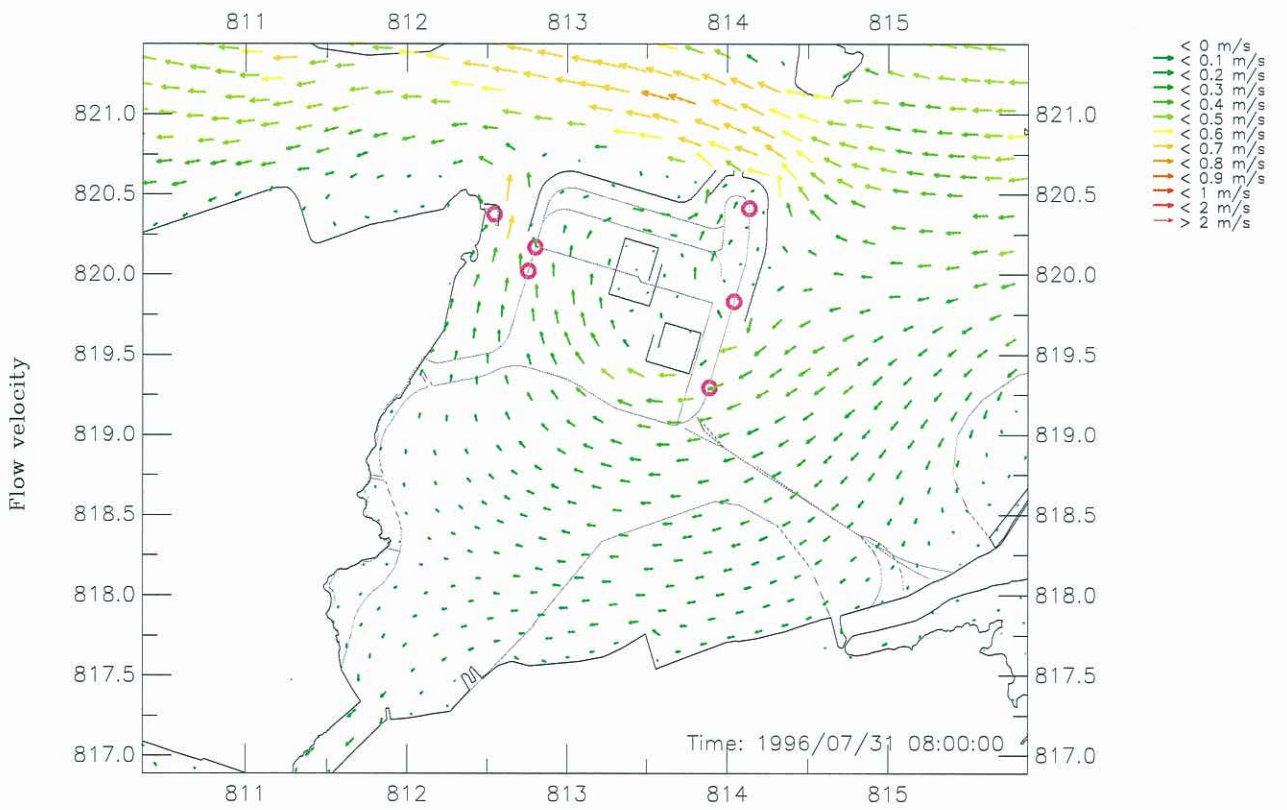
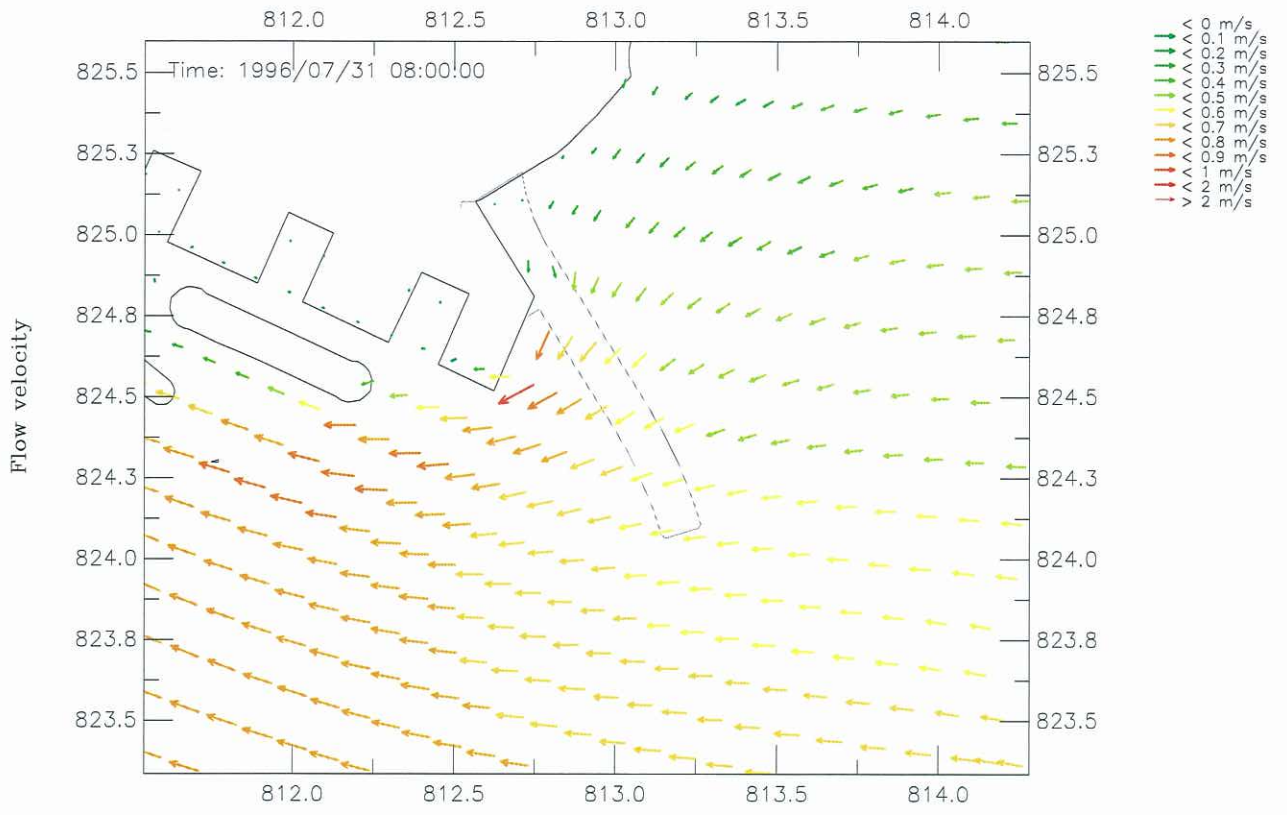
Figure 020

AECOM



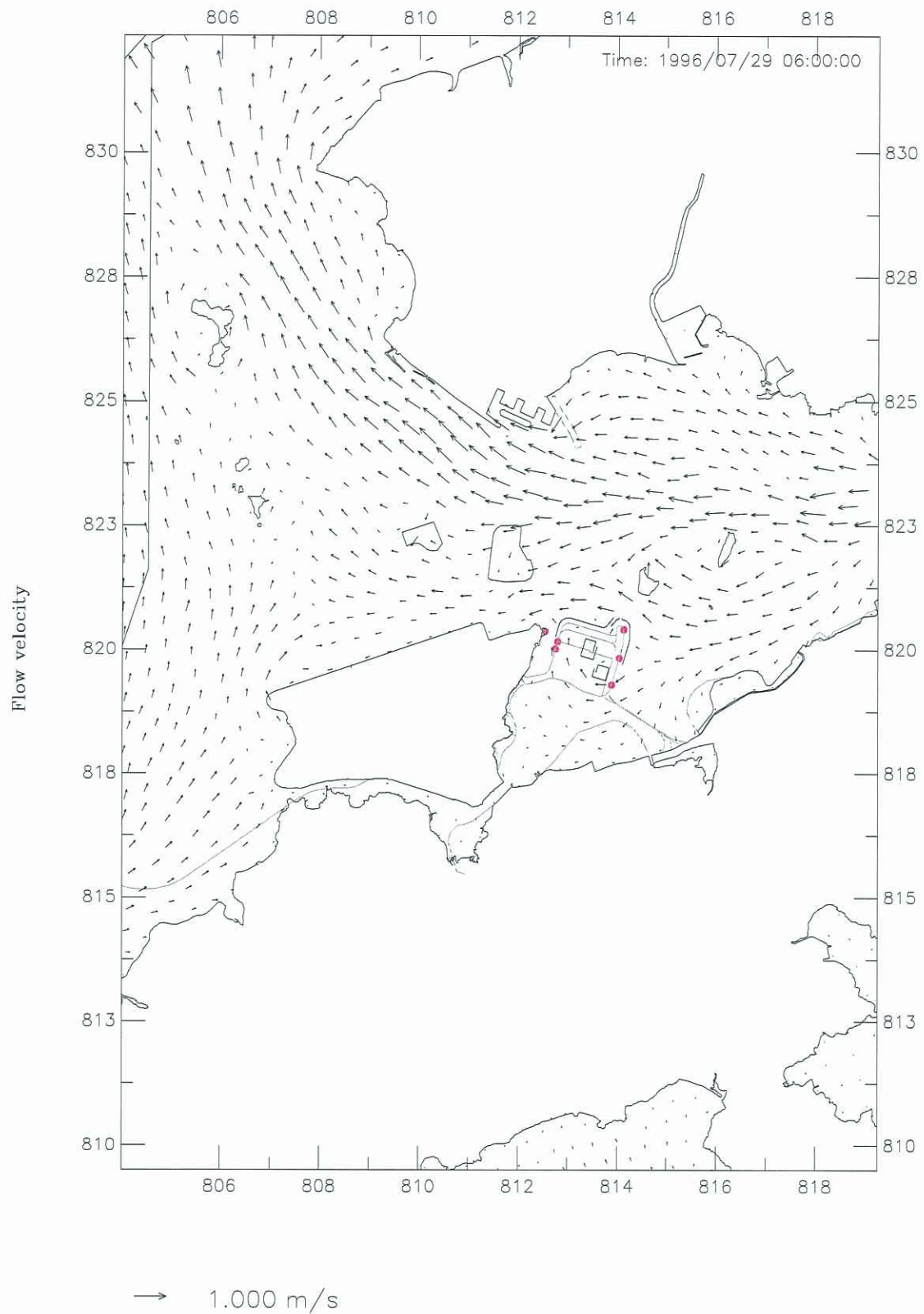
Year 2011 (Sequence B)
 Dry Season Velocity Vector Plot at Flood Tide – Bottom Layer

Jul 2009 Figure 021



Year 2011 (Sequence B)
 Dry Season Velocity Vector Plot at Flood Tide – Bottom Layer
 (Top: Northern Reclamation; Bottom: Southern Reclamation)

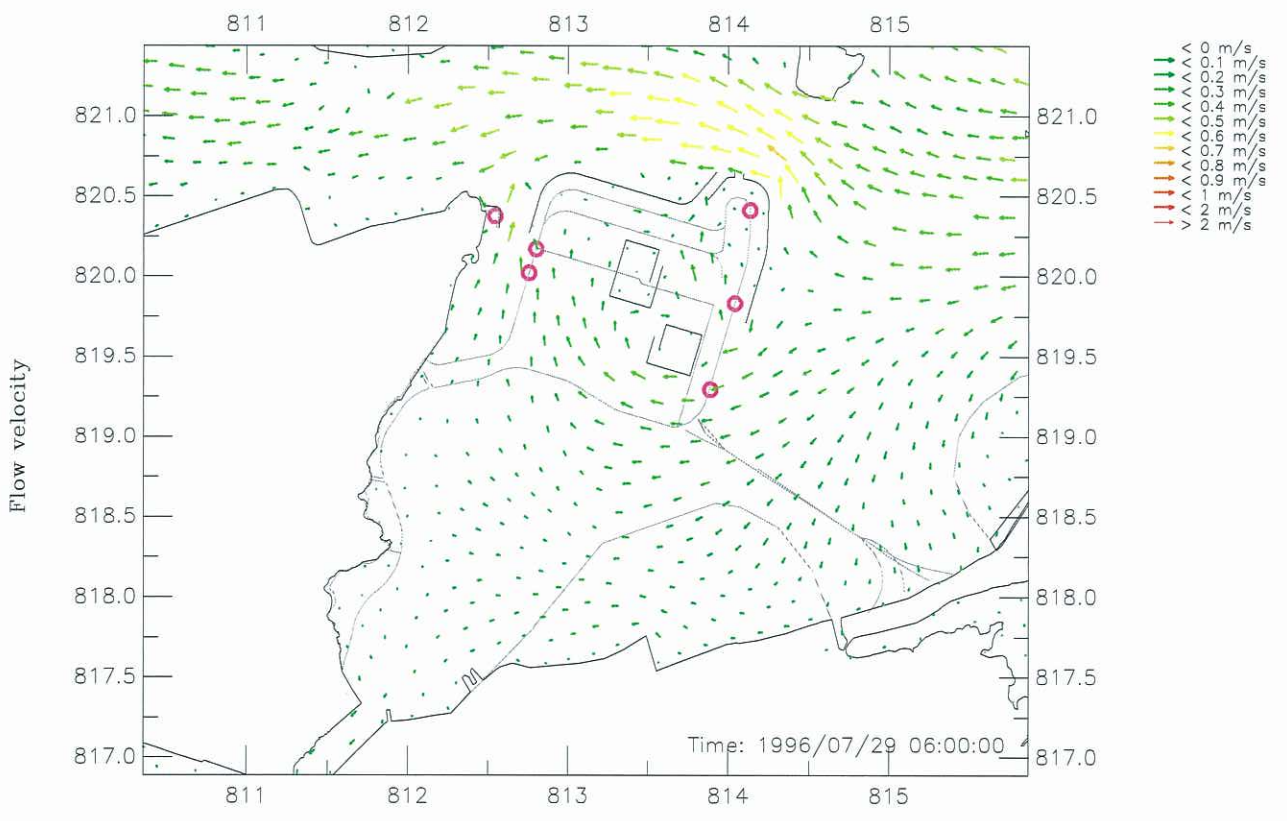
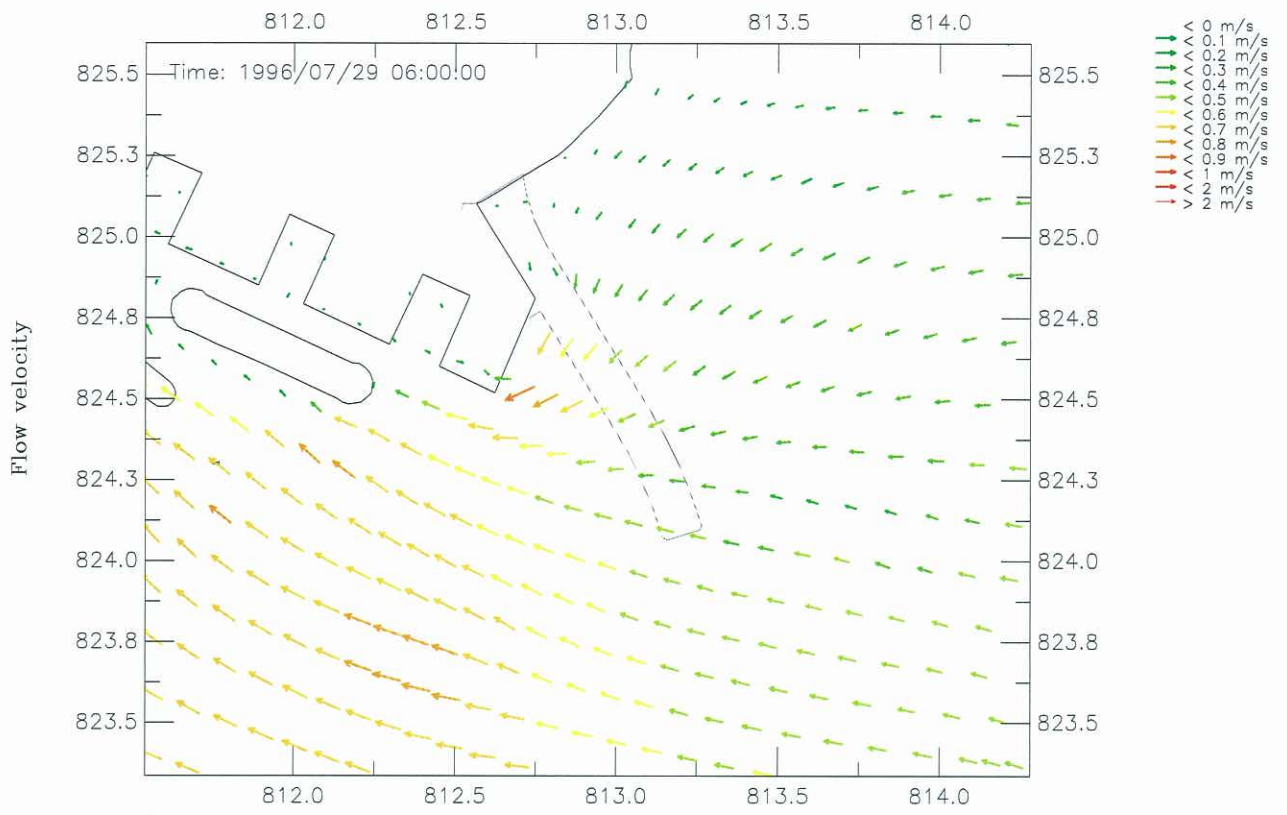
Jul 2009 Figure 022



Year 2011 (Sequence B)
 Wet Season Velocity Vector Plot at Flood Tide – Bottom Layer

Jul 2009

Figure 023



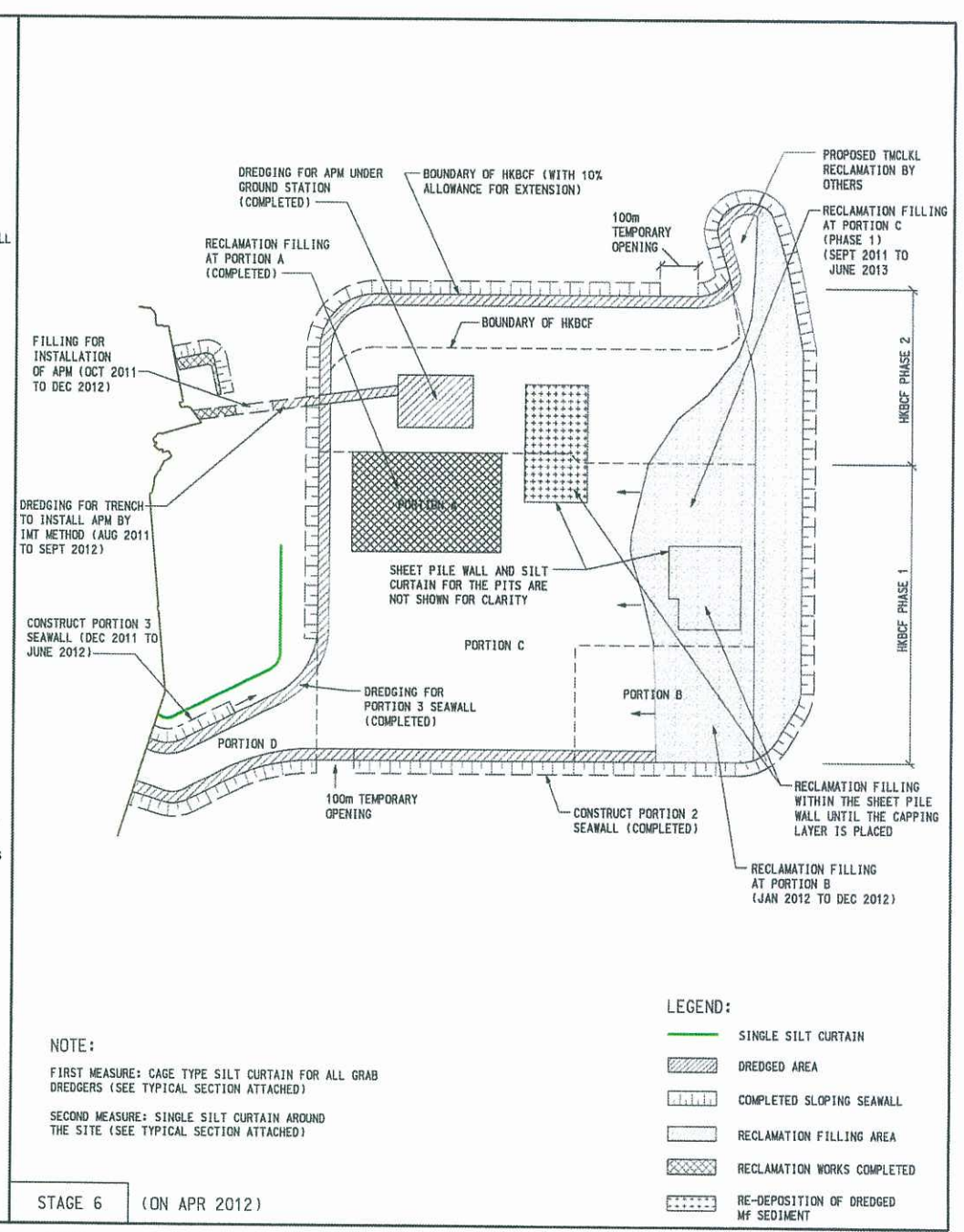
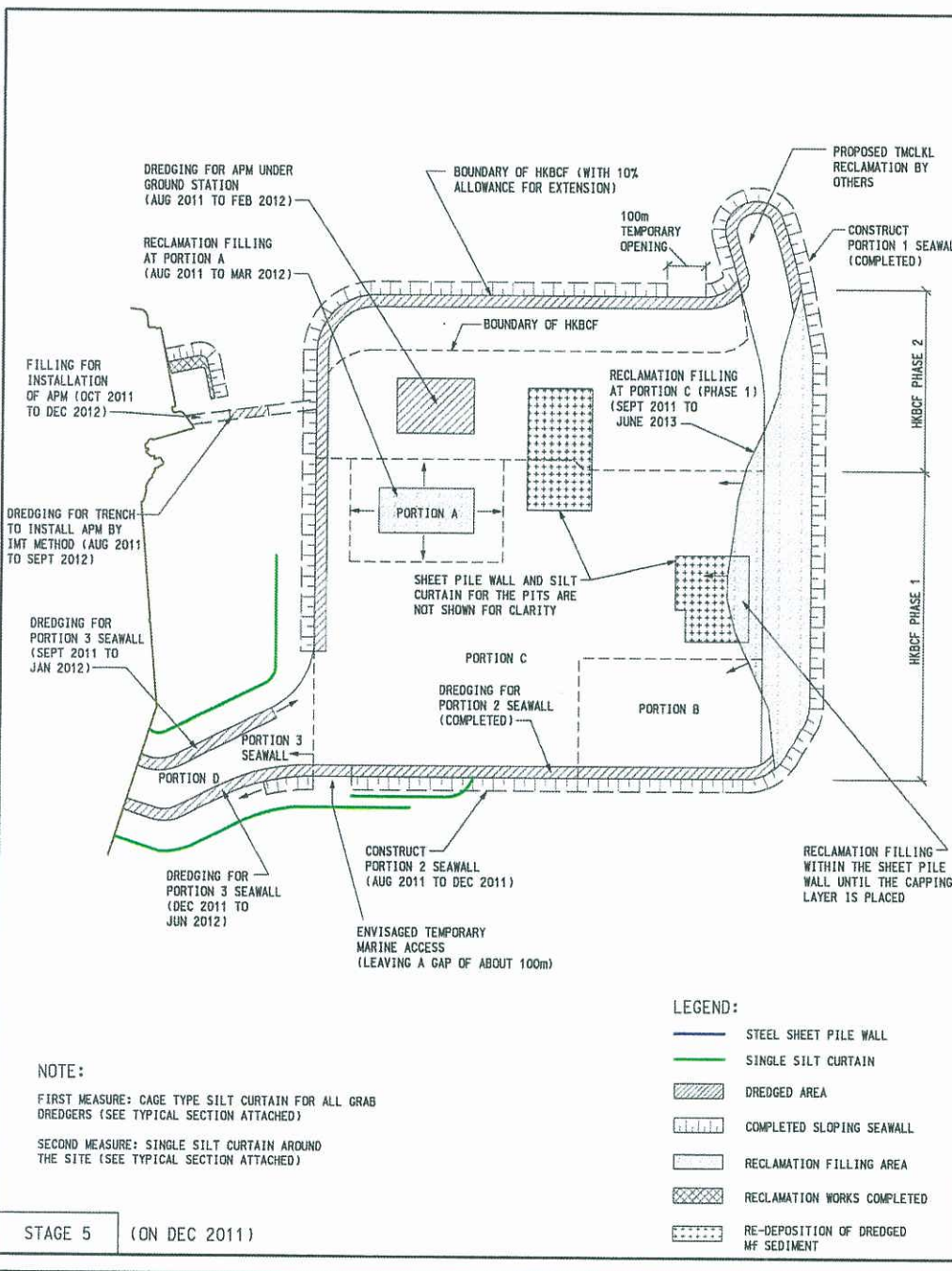
Year 2011 (Sequence B)
 Wet Season Velocity Vector Plot at Flood Tide – Bottom Layer
 (Top: Northern Reclamation; Bottom: Southern Reclamation)

Jul 2009 Figure 024

Appendix 9F – Part 9F2

Annex B

Printed By : 23/12/2011
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路政署 HIGHWAYS DEPARTMENT 港珠澳大橋香港工程管理局 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office	ARUP Ove Arup & Partners Hong Kong Limited	Job Title Agreement No. CE 14/2008 (CE) Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities - Investigation	Drawing Title ANTICIPATED CONSTRUCTION SEQUENCE OF HKBCF (SEQUENCE B)	Drawn	CN	Date	02/09	Drawing No.	25308/041/303A	
				Checked	SK	Approved	AK			
A FIRST ISSUE 02/09 Date				Scale	1:12500 on A3		Status	PRELIMINARY		
Rev. Description Date								Rev.	A	

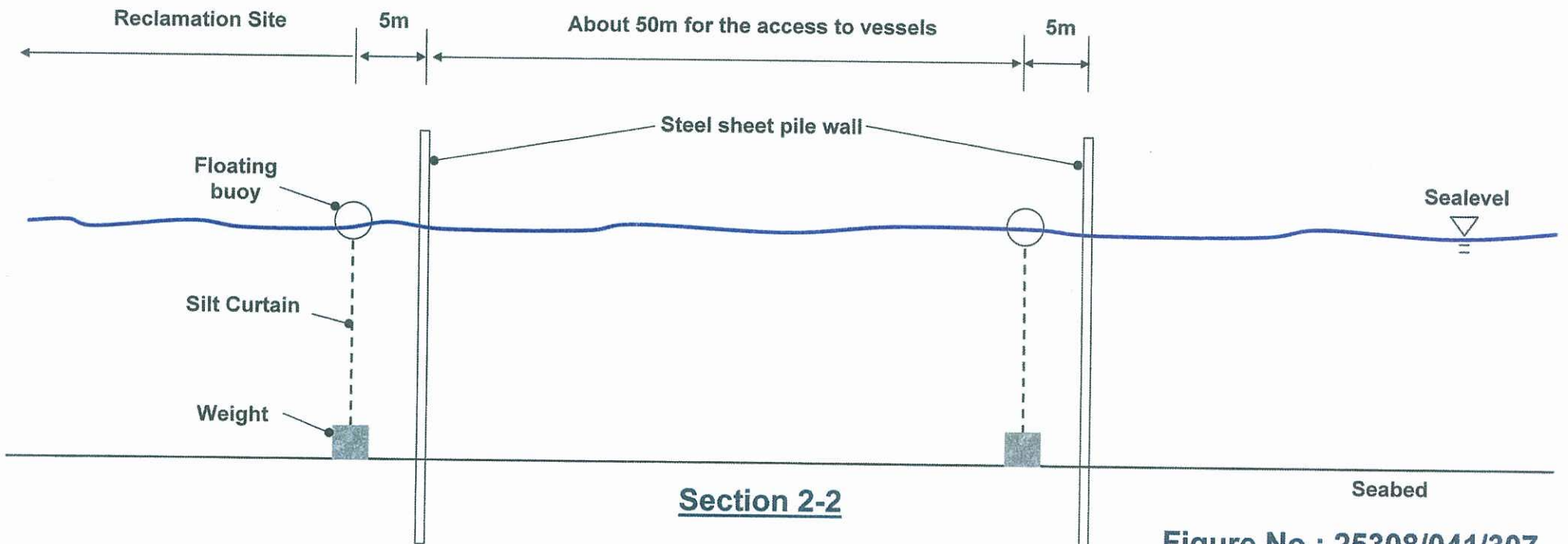
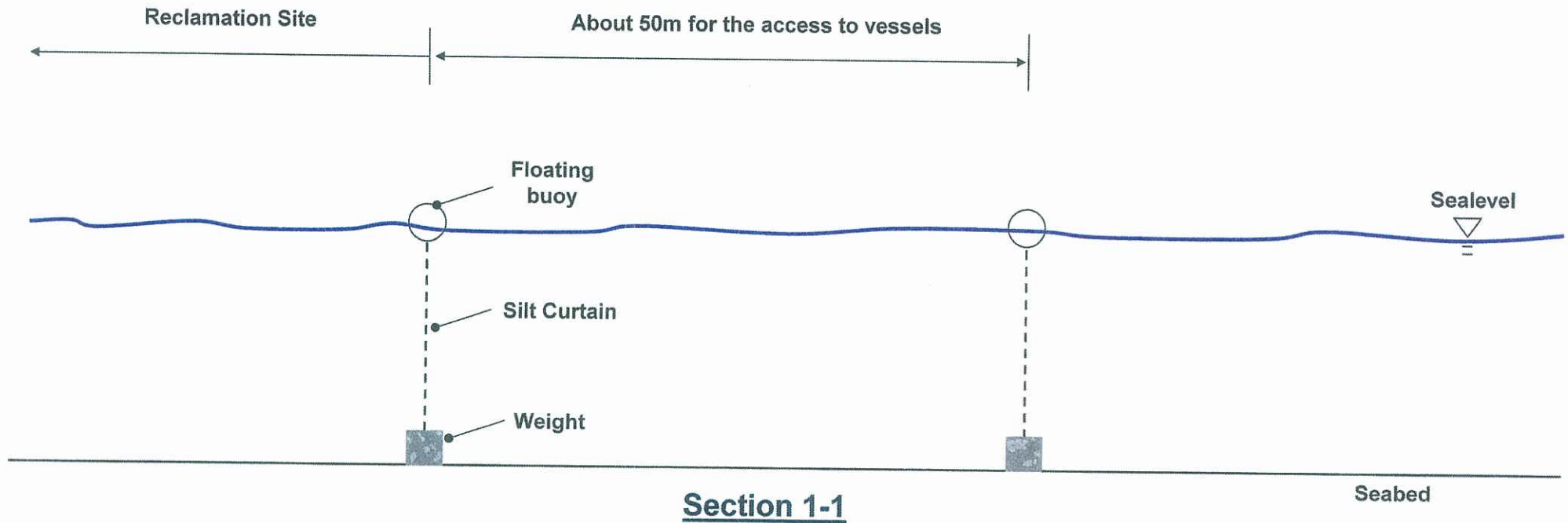
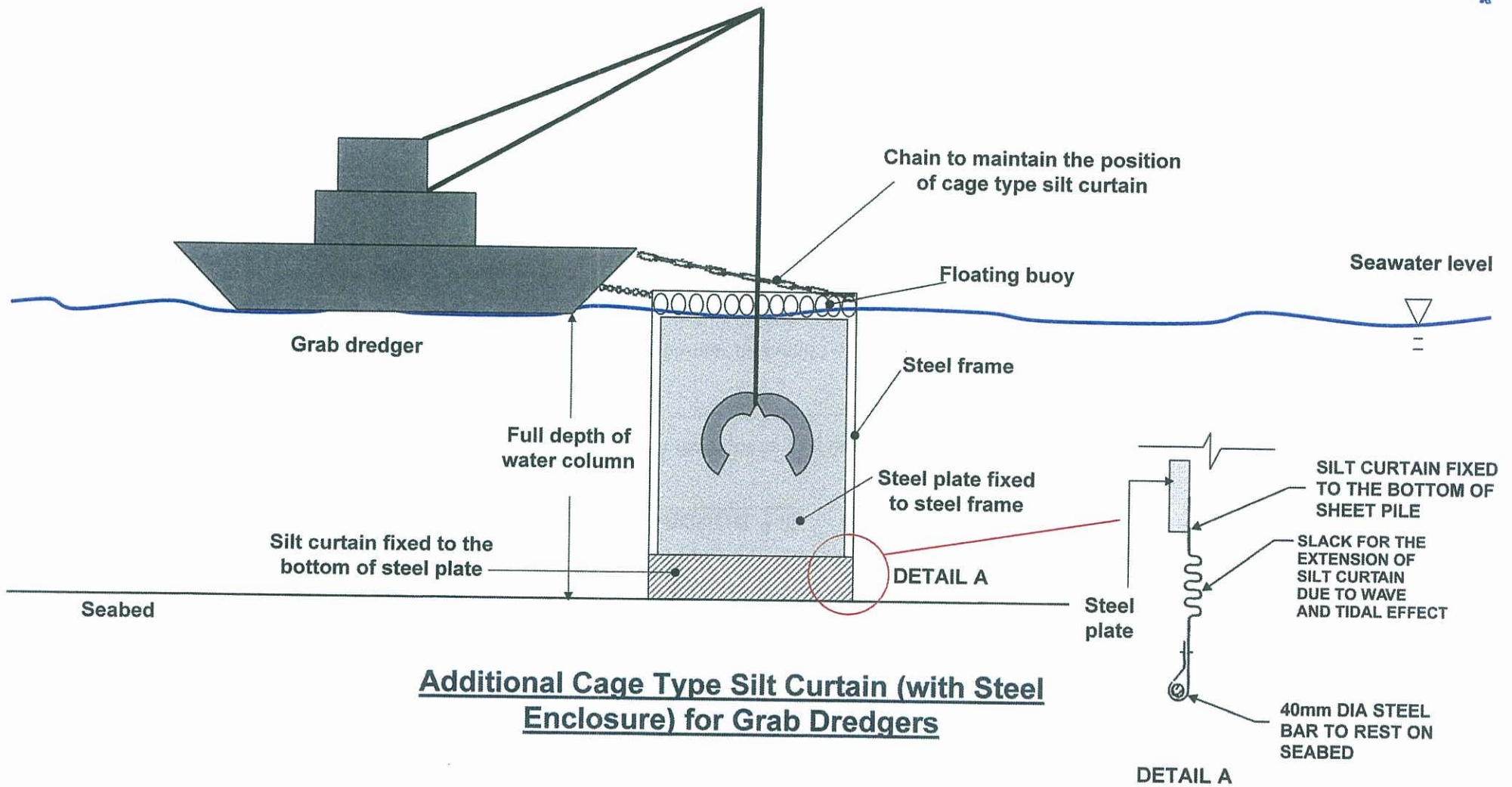


Figure No.: 25308/041/307



Additional Cage Type Silt Curtain (with Steel Enclosure) for Grab Dredgers

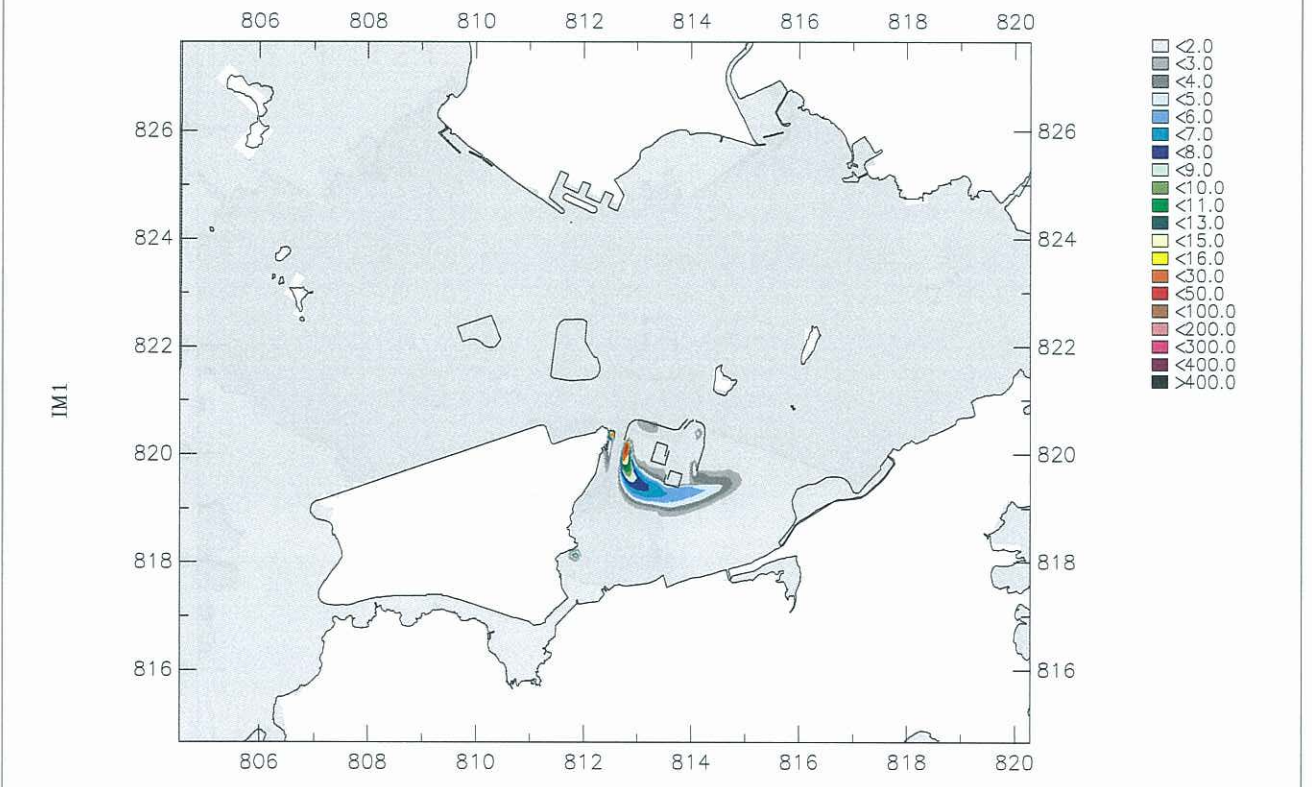
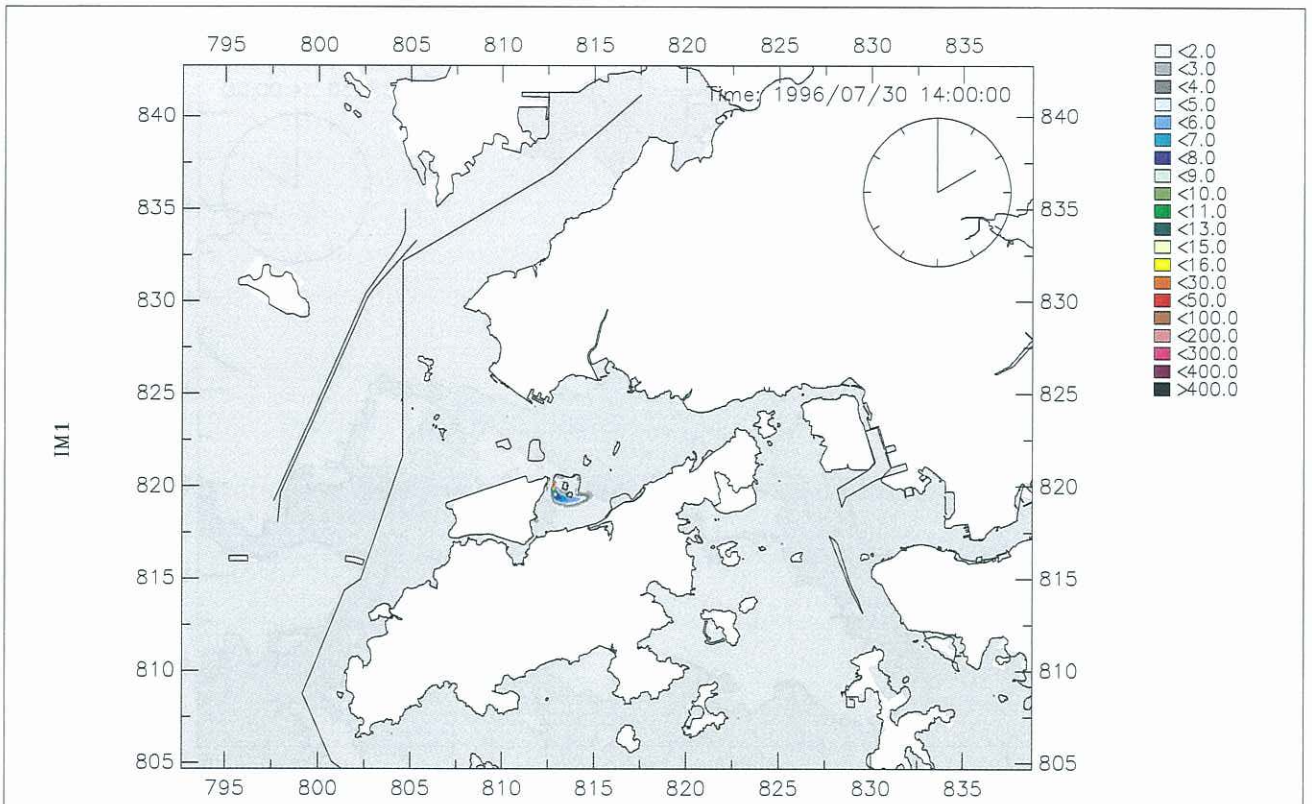
Figure No.: 25308/041/308a

Part 9F3 - Figure List

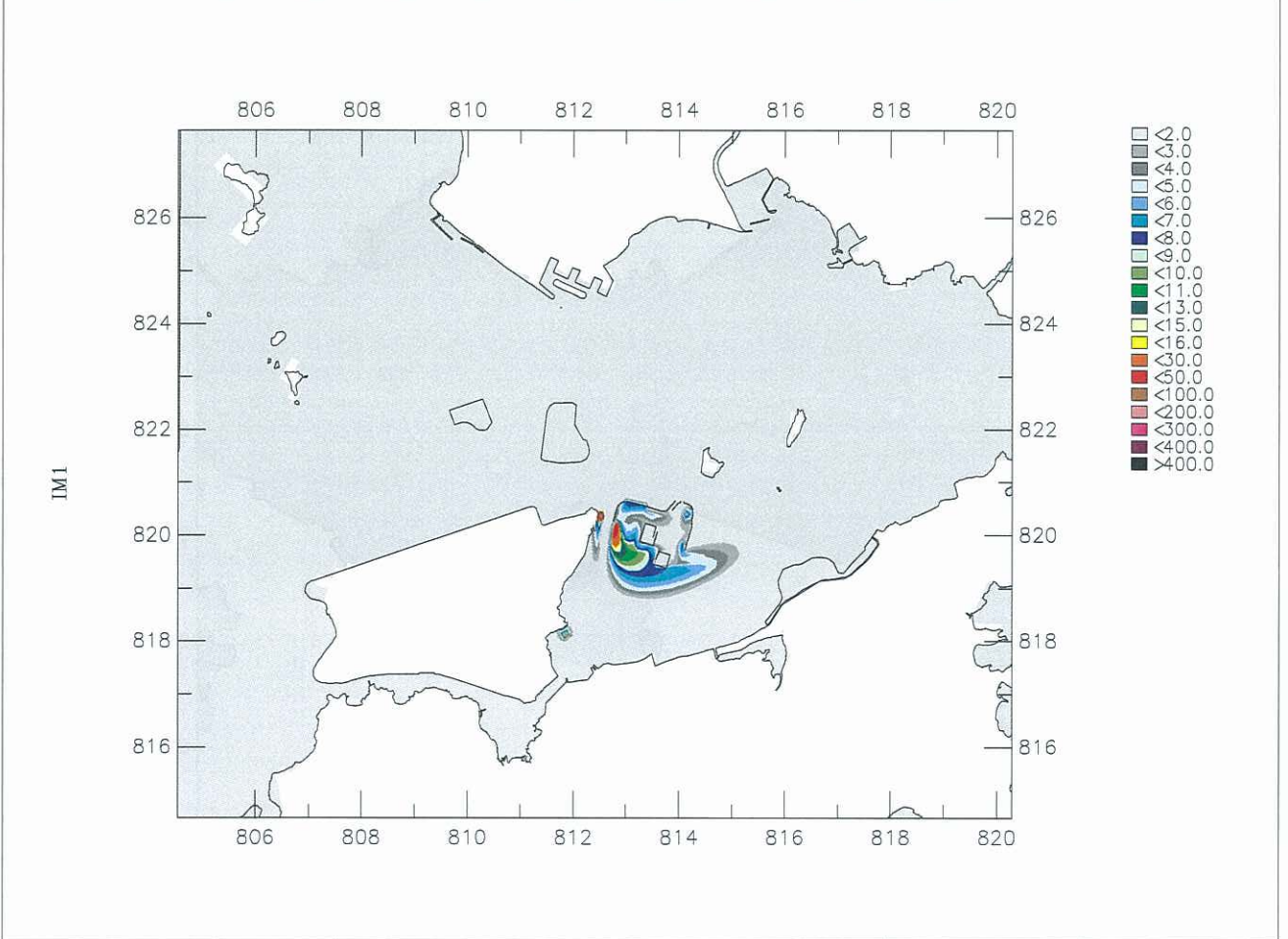
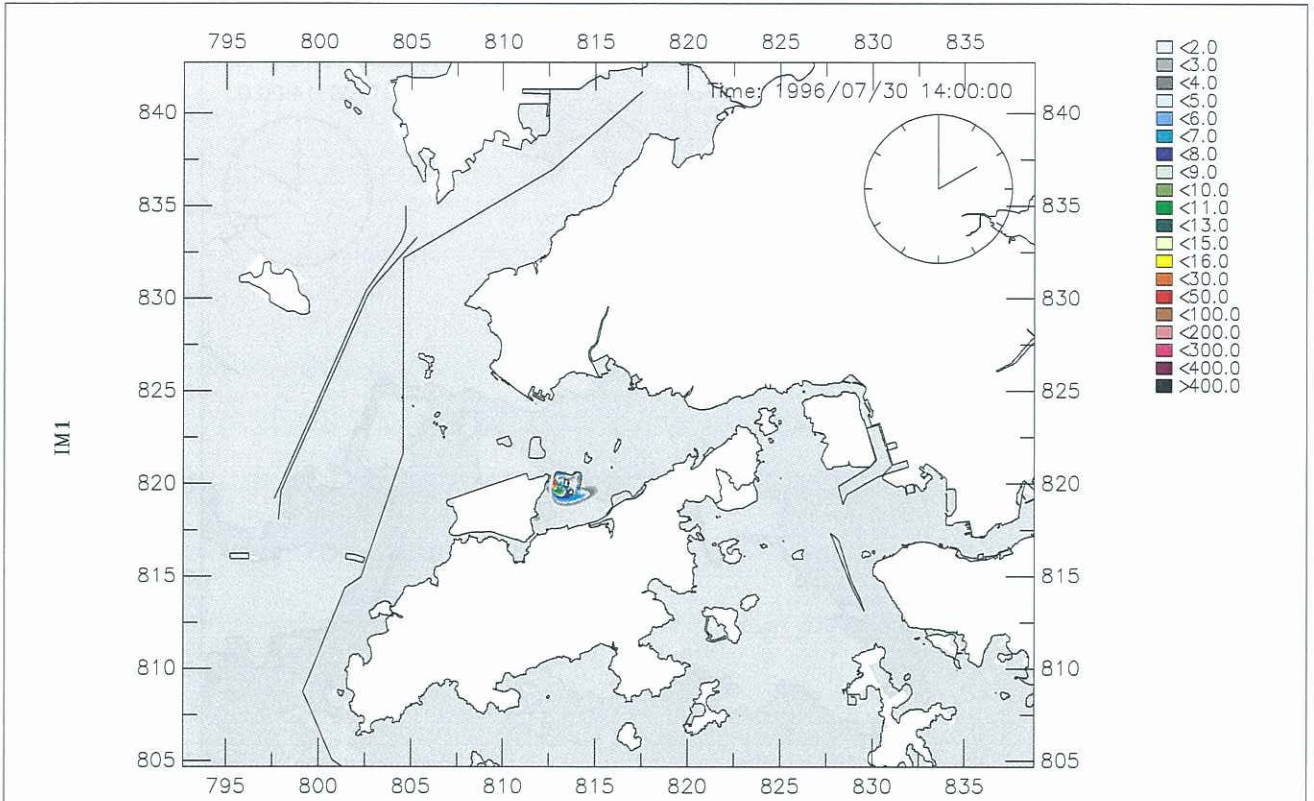
Figure No.	Description
001	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Surface Layer Peak Ebb (Speed) Tide
002	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Mid-Depth Peak Ebb (Speed) Tide
003	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Bottom Layer Peak Ebb (Speed) Tide
004	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Surface Layer Peak Flood (Speed) Tide
005	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Mid-Depth Peak Flood (Speed) Tide
006	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Bottom Layer Peak Flood (Speed) Tide
007	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Surface Layer Peak Ebb (Speed) Tide
008	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Mid-Depth Peak Ebb (Speed) Tide
009	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Bottom Layer Peak Ebb (Speed) Tide
010	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Surface Layer Peak Flood (Speed) Tide
011	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Mid-Depth Peak Flood (Speed) Tide
012	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Bottom Layer Peak Flood (Speed) Tide
013	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Surface Layer Spring Tide, Lowest Low Water Level
014	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Mid-Depth Spring Tide, Lowest Low Water Level
015	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Bottom Layer Spring Tide, Lowest Low Water Level
016	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Surface Layer Spring Tide, Highest High Water Level
017	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Mid-Depth Spring Tide, Highest High Water Level
018	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Bottom Layer Spring Tide, Highest High Water Level
019	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Surface Layer Spring Tide, Lowest Low Water Level
020	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Mid-Depth Spring Tide, Lowest Low Water Level
021	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Bottom Layer Spring Tide, Lowest Low Water Level
022	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Surface Layer Spring Tide, Highest High Water Level

Figure No.	Description
023	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Mid-Depth Spring Tide, Highest High Water Level
024	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Bottom Layer Spring Tide, Highest High Water Level
025	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Surface Layer Neap Tide, Lowest Low Water Level
026	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Mid-Depth Neap Tide, Lowest Low Water Level
027	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Bottom Layer Neap Tide, Lowest Low Water Level
028	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Surface Layer Neap Tide, Highest High Water Level
029	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Mid-Depth Neap Tide, Highest High Water Level
030	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Bottom Layer Neap Tide, Highest High Water Level
031	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Surface Layer Neap Tide, Lowest Low Water Level
032	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Mid-Depth Neap Tide, Lowest Low Water Level
033	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Bottom Layer Neap Tide, Lowest Low Water Level
034	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Surface Layer Neap Tide, Highest High Water Level
035	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Mid-Depth Neap Tide, Highest High Water Level
036	Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Bottom Layer Neap Tide, Highest High Water Level
037	Year 2011 (Sequence B), Mitigated SS (g/m ²) Contour, Dry Season Total Deposition
038	Year 2011 (Sequence B), Mitigated SS (g/m ² /day) Contour, Dry Season Daily Average Deposition
039	Year 2011 (Sequence B), Mitigated SS (g/m ²) Contour, Wet Season Total Deposition
040	Year 2011 (Sequence B), Mitigated SS (g/m ² /day) Contour, Wet Season Daily Average Deposition
041	Year 2011 Time History Plot of SS (mg/L) at WSR9a, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
042	Year 2011 Time History Plot of SS (mg/L) at WSR20, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
043	Year 2011 Time History Plot of SS (mg/L) at WSR22c, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
044	Year 2011 Time History Plot of SS (mg/L) at WSR24, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

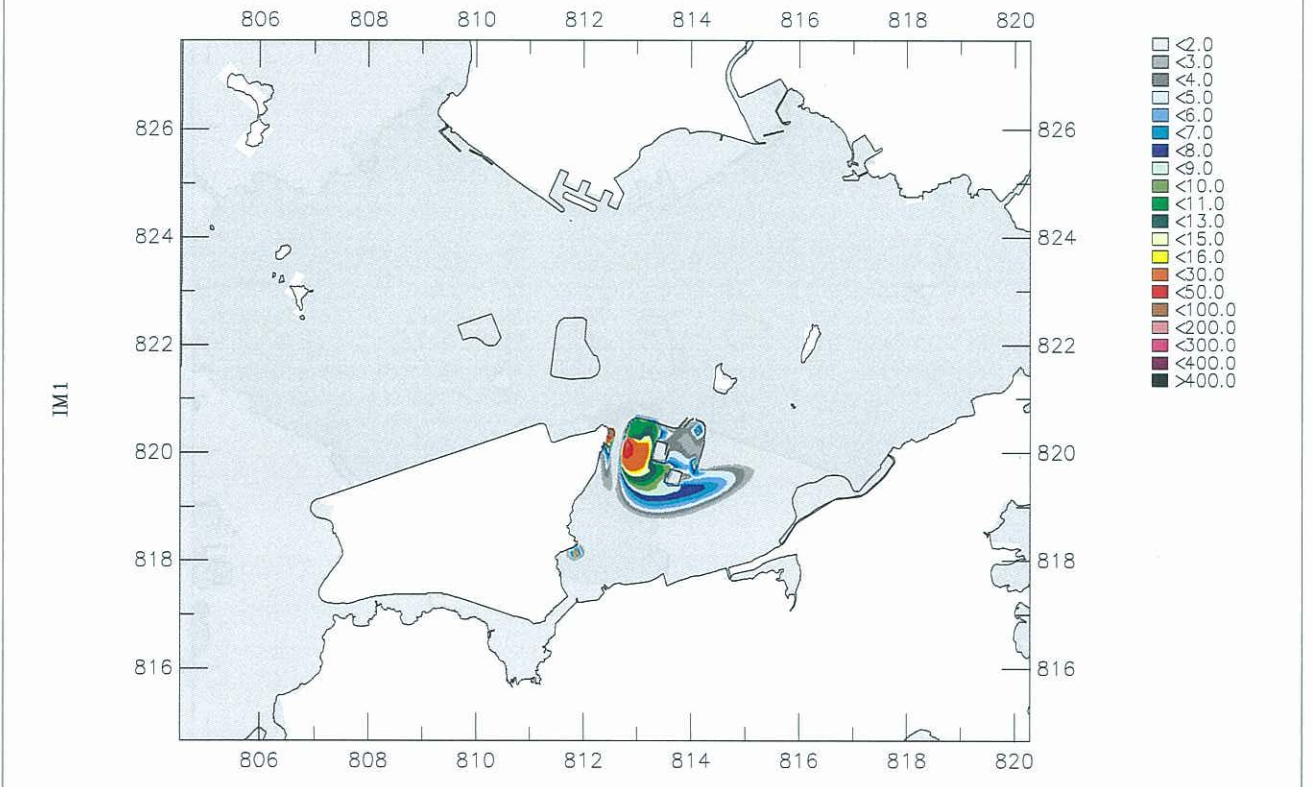
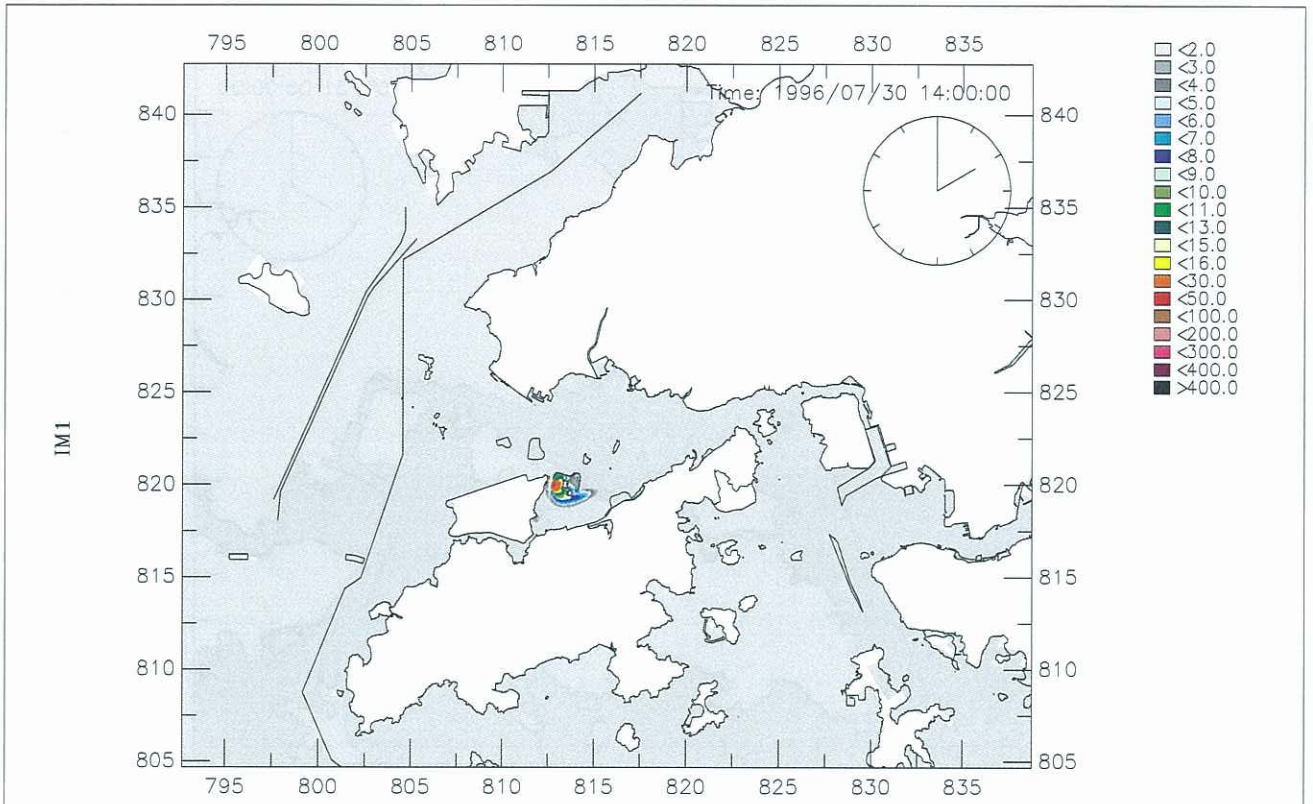
Figure No.	Description
045	Year 2011 Time History Plot of SS (mg/L) at WSR25, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
046	Year 2011 Time History Plot of SS (mg/L) at WSR27, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
047	Year 2011 Time History Plot of SS (mg/L) at WSR41, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
048	Year 2011 Time History Plot of SS (mg/L) at WSR45c, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
049	Year 2011 Time History Plot of SS (mg/L) at WSR46, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
050	Year 2011 Time History Plot of SS (mg/L) at WSR49, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
051	Year 2011 Time History Plot of SS (mg/L) at WSR9a, Wet Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
052	Year 2011 Time History Plot of SS (mg/L) at WSR20, Wet Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
053	Year 2011 Time History Plot of SS (mg/L) at WSR22c, Wet Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
054	Year 2011 Time History Plot of SS (mg/L) at WSR24, Wet Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
055	Year 2011 Time History Plot of SS (mg/L) at WSR25, Wet Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
056	Year 2011 Time History Plot of SS (mg/L) at WSR27, Wet Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
057	Year 2011 Time History Plot of SS (mg/L) at WSR41, Wet Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
058	Year 2011 Time History Plot of SS (mg/L) at WSR45c, Wet Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
059	Year 2011 Time History Plot of SS (mg/L) at WSR46, Wet Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)
060	Year 2011 Time History Plot of SS (mg/L) at WSR49, Wet Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)



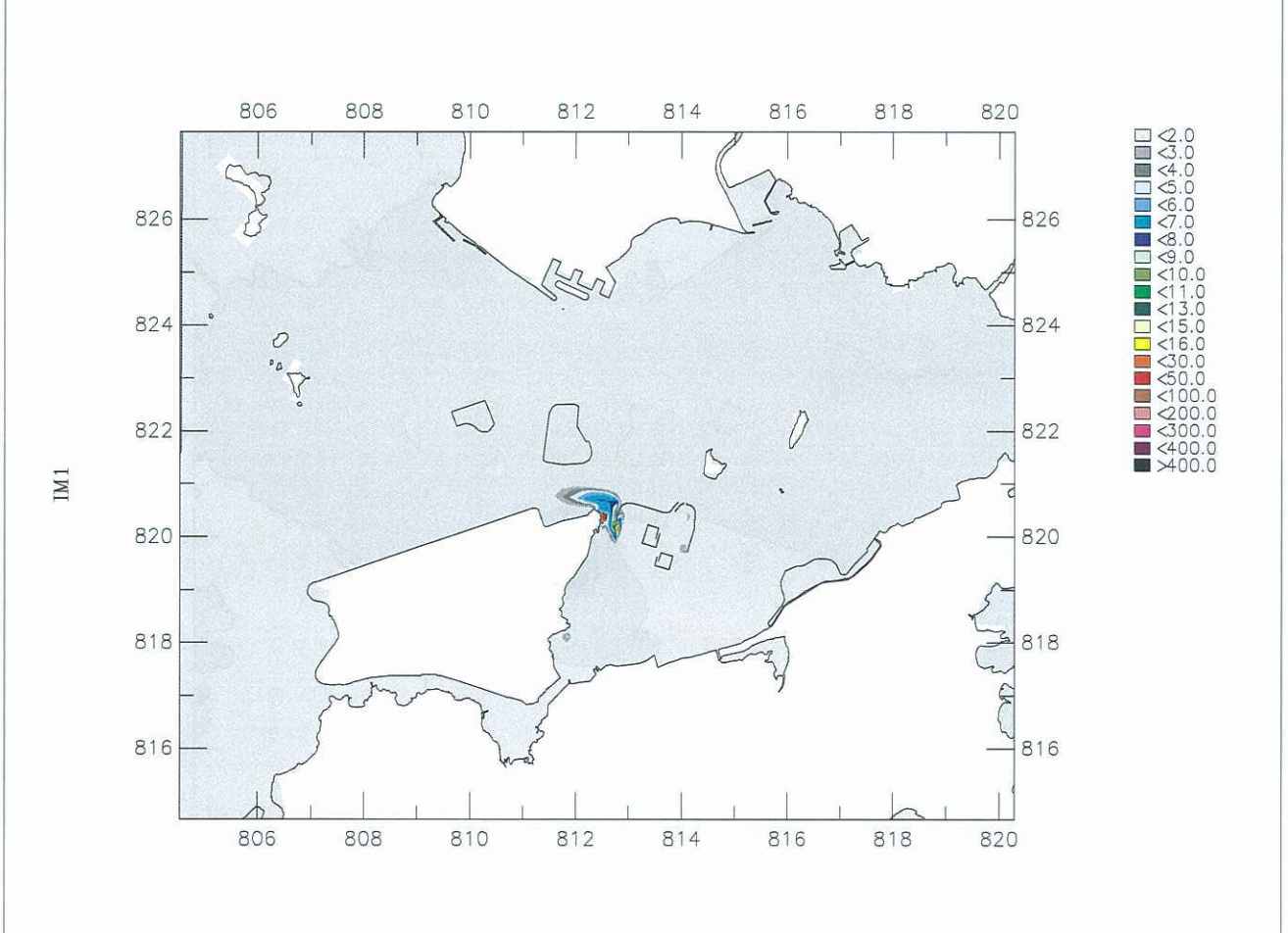
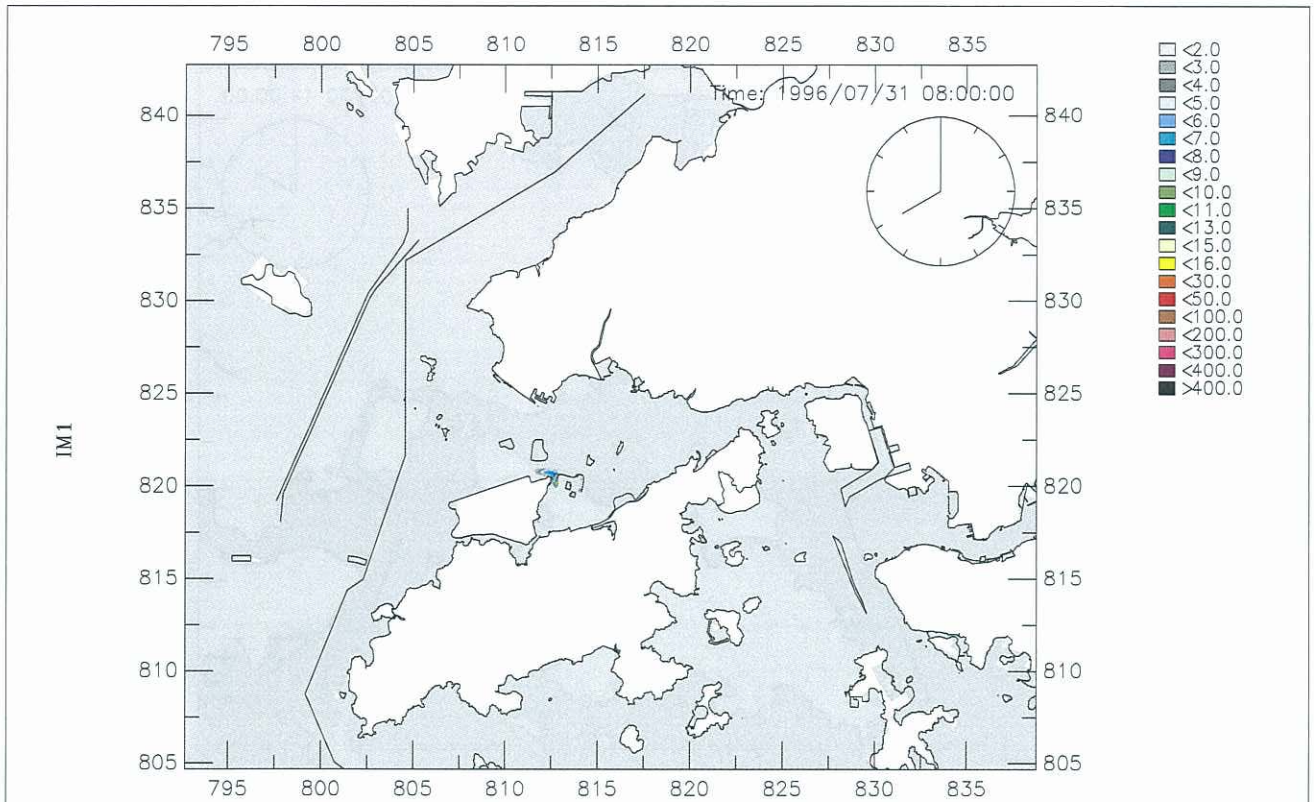
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Surface Layer Peak Ebb	Jul 2009	Figure 001
	2011b-Dry (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Mid-Depth Peak Ebb	Jul 2009	Figure 002
	2011b-Dry (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Bottom Layer Peak Ebb	Jul 2009	Figure 003
	2011b-Dry (POM1-R11f)	
AECOM		



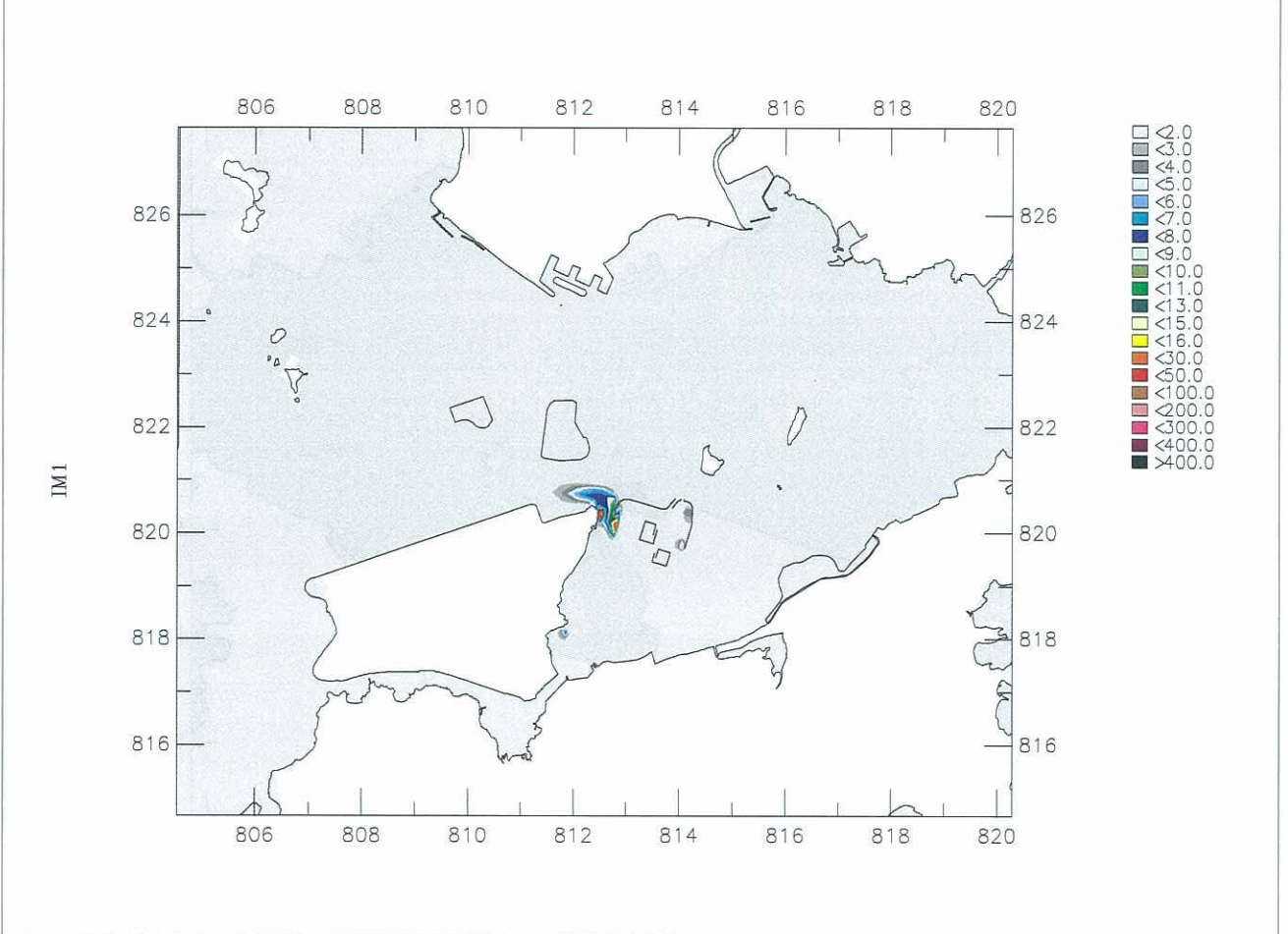
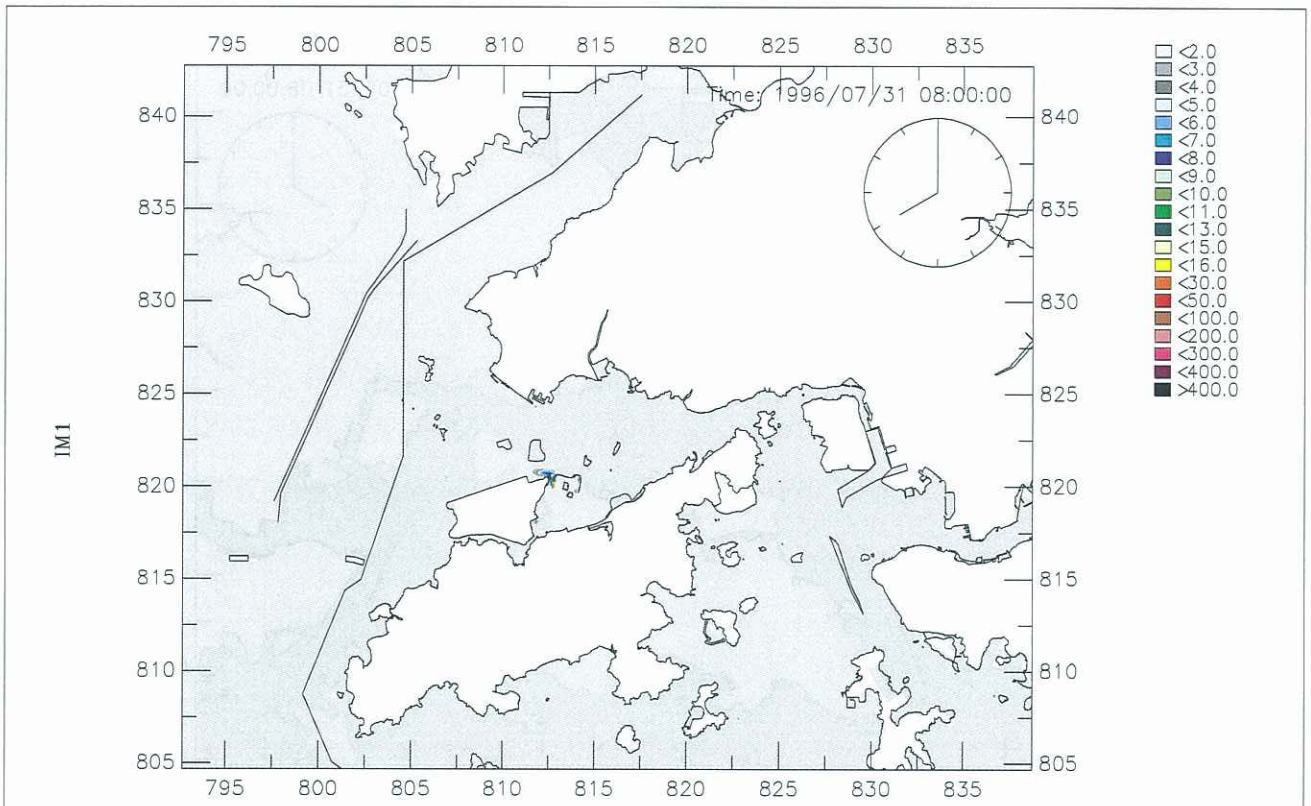
Year 2011 (Sequence B), Mitigated
 SS (mg/L) Contour, Dry Season, Surface Layer
 Peak Flood

Jul 2009

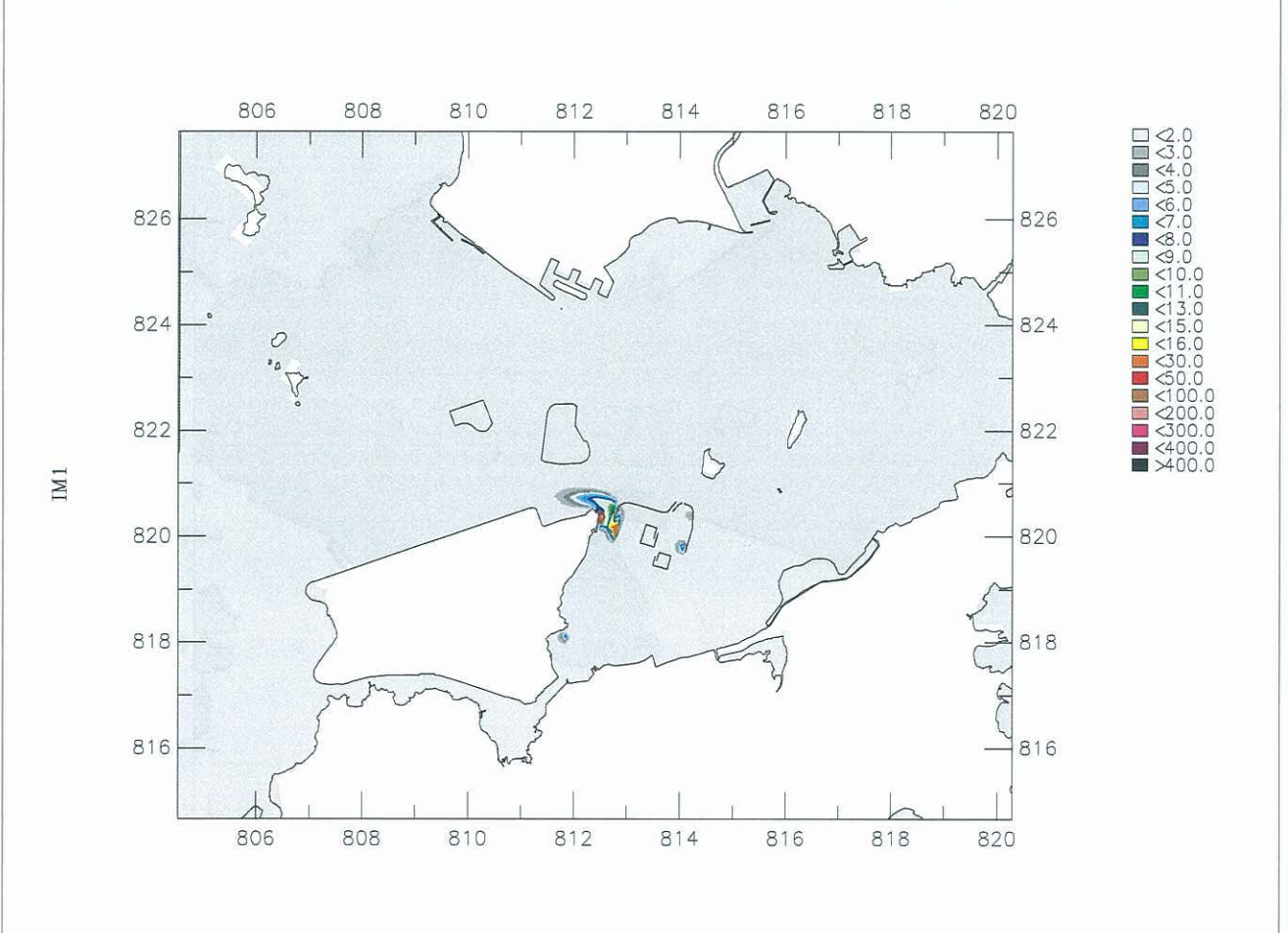
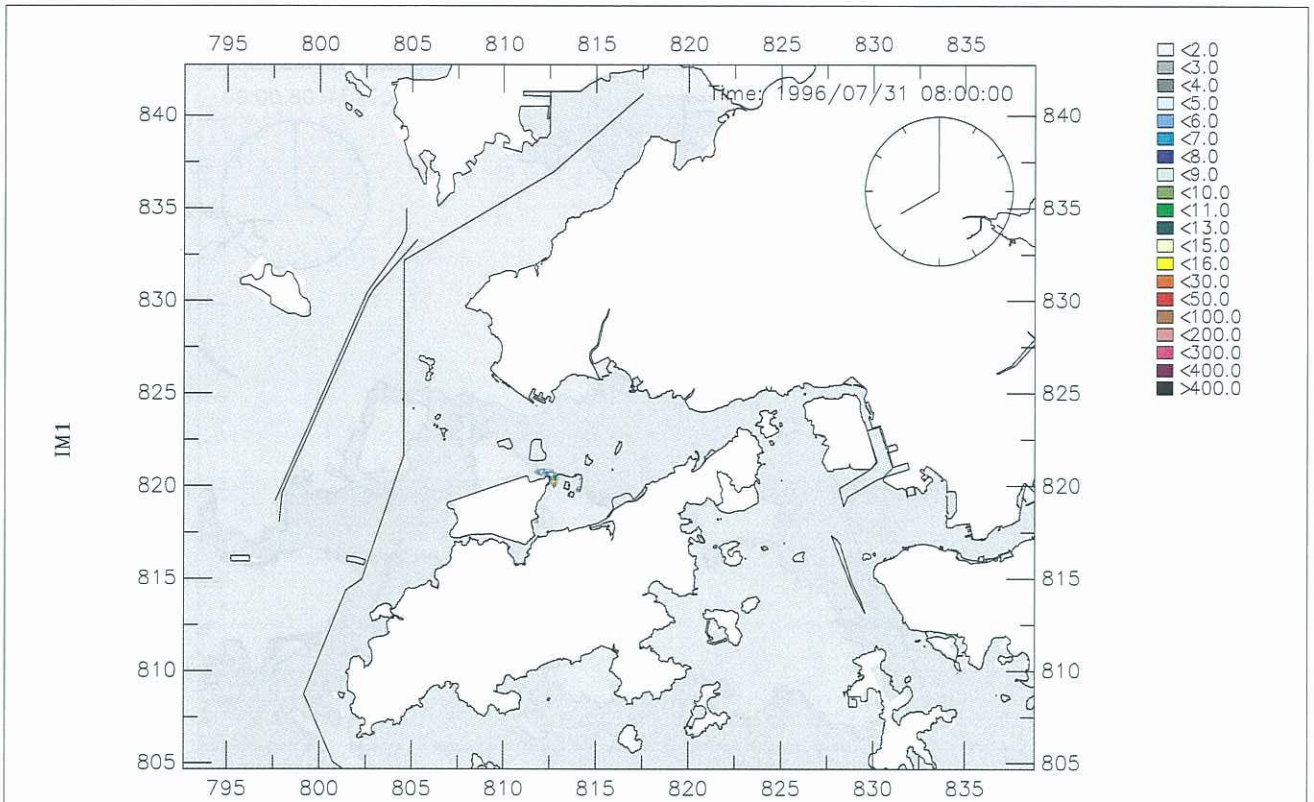
Figure 004

2011b-Dry (POM1-R11f)

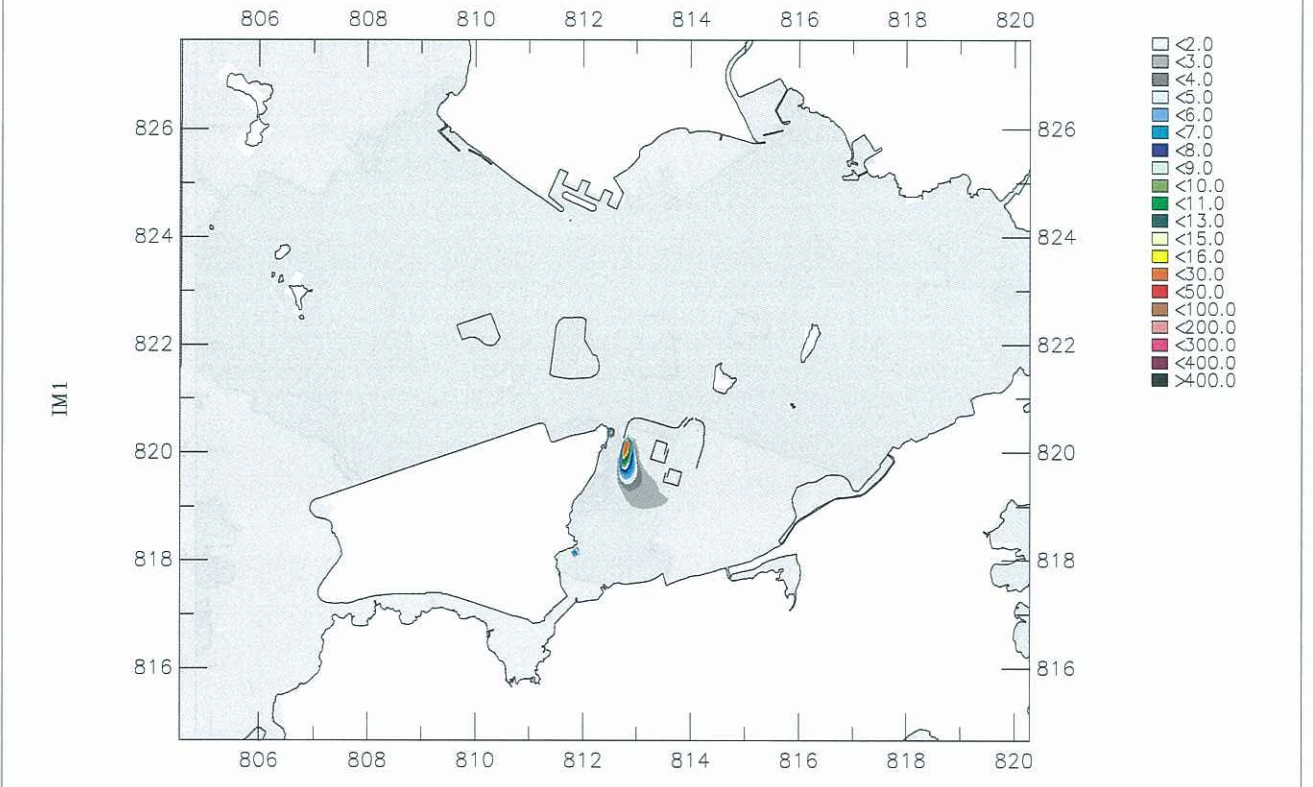
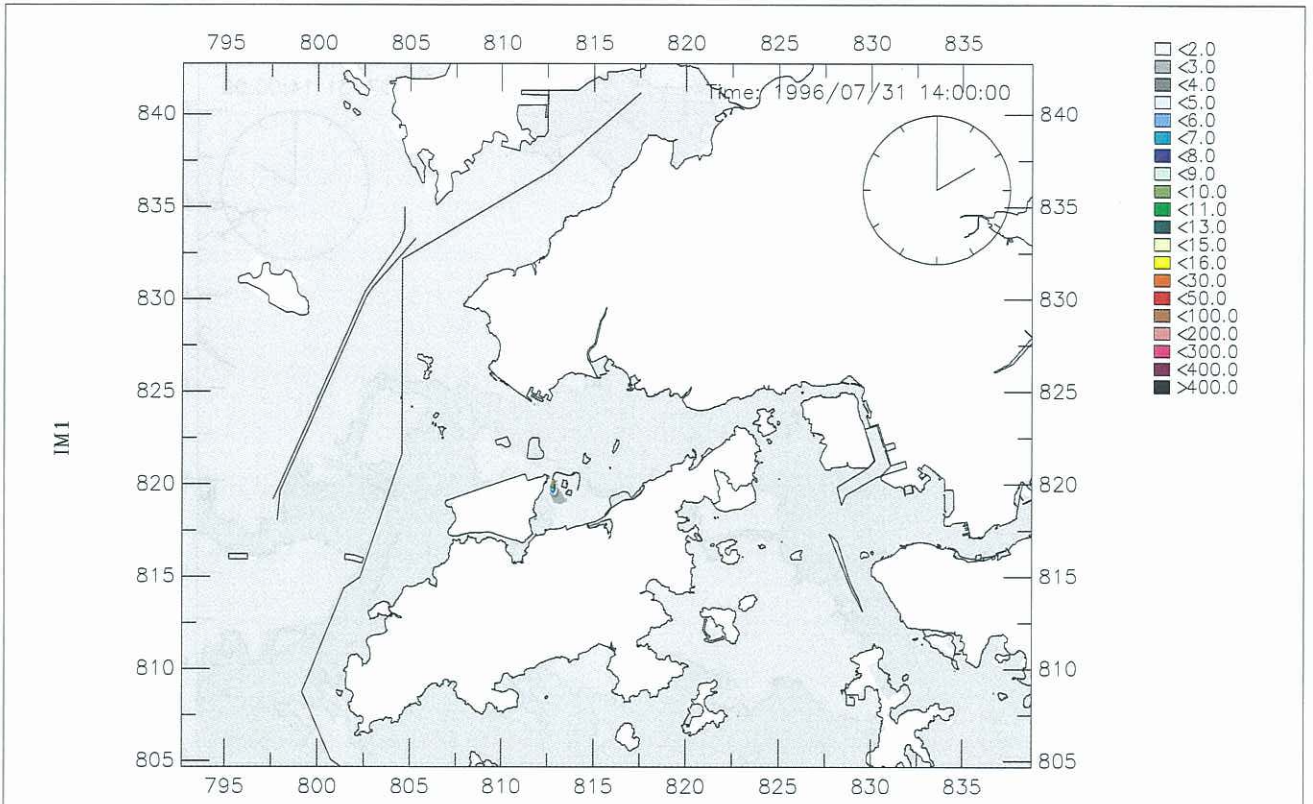
| AECOM



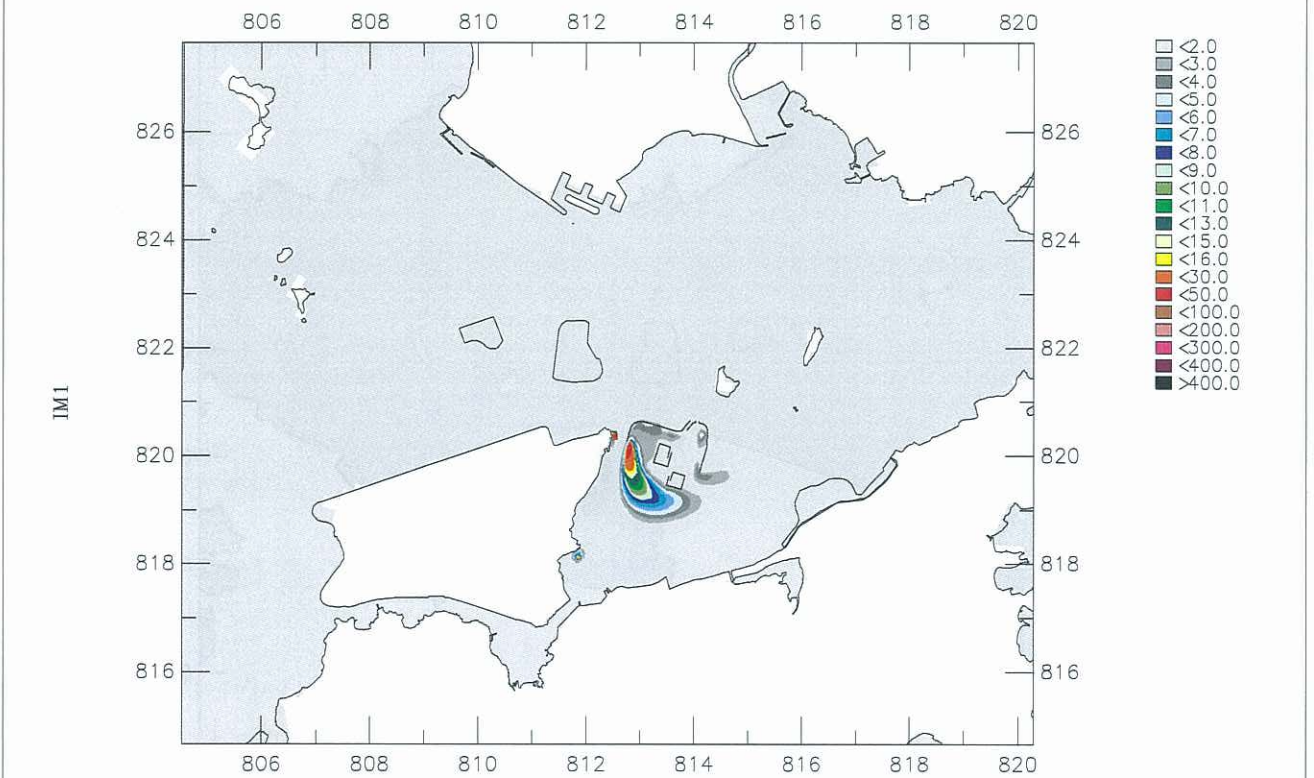
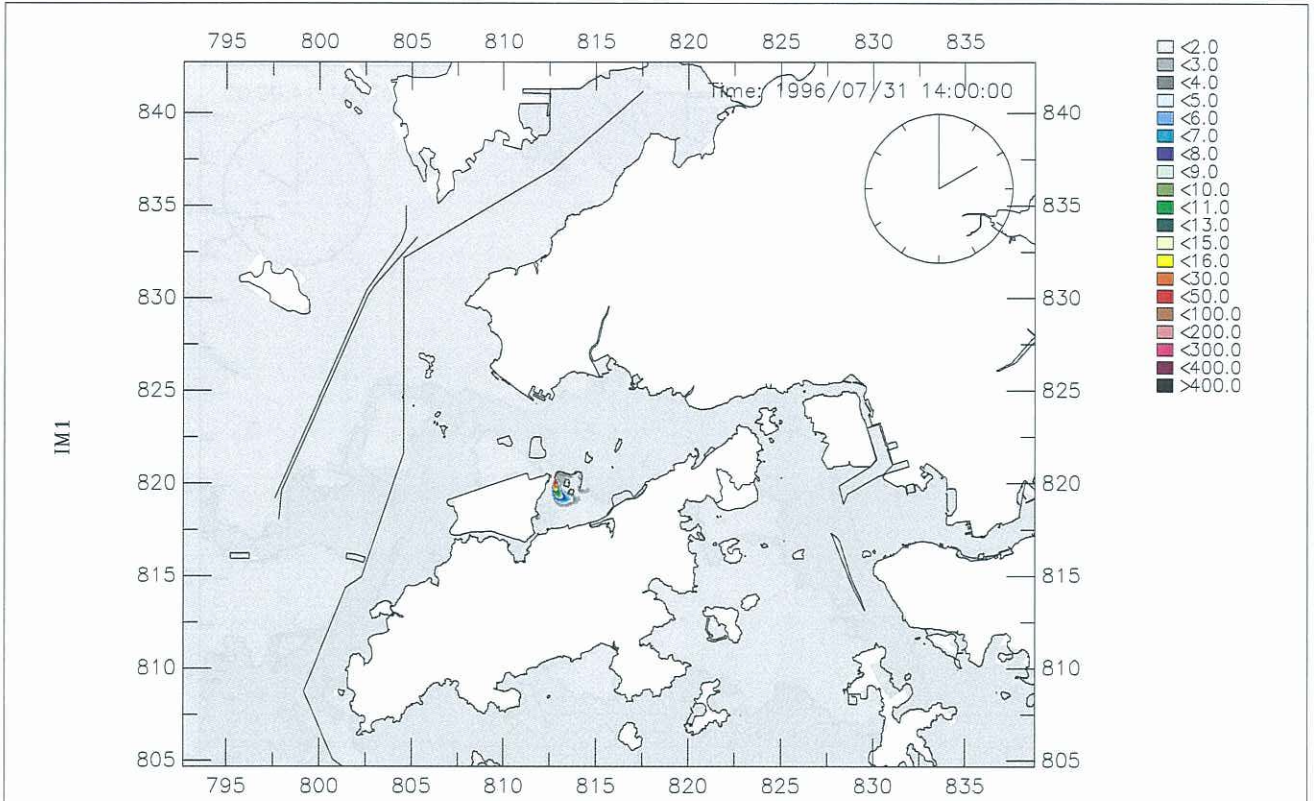
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Mid-Depth Peak Flood	Jul 2009	Figure 005
	2011b-Dry (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Bottom Layer Peak Flood	Jul 2009	Figure 006
	2011b-Dry (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Surface Layer Peak Ebb	Jul 2009	Figure 007
	2011b-Wet (POM1-R11f)	
AECOM		



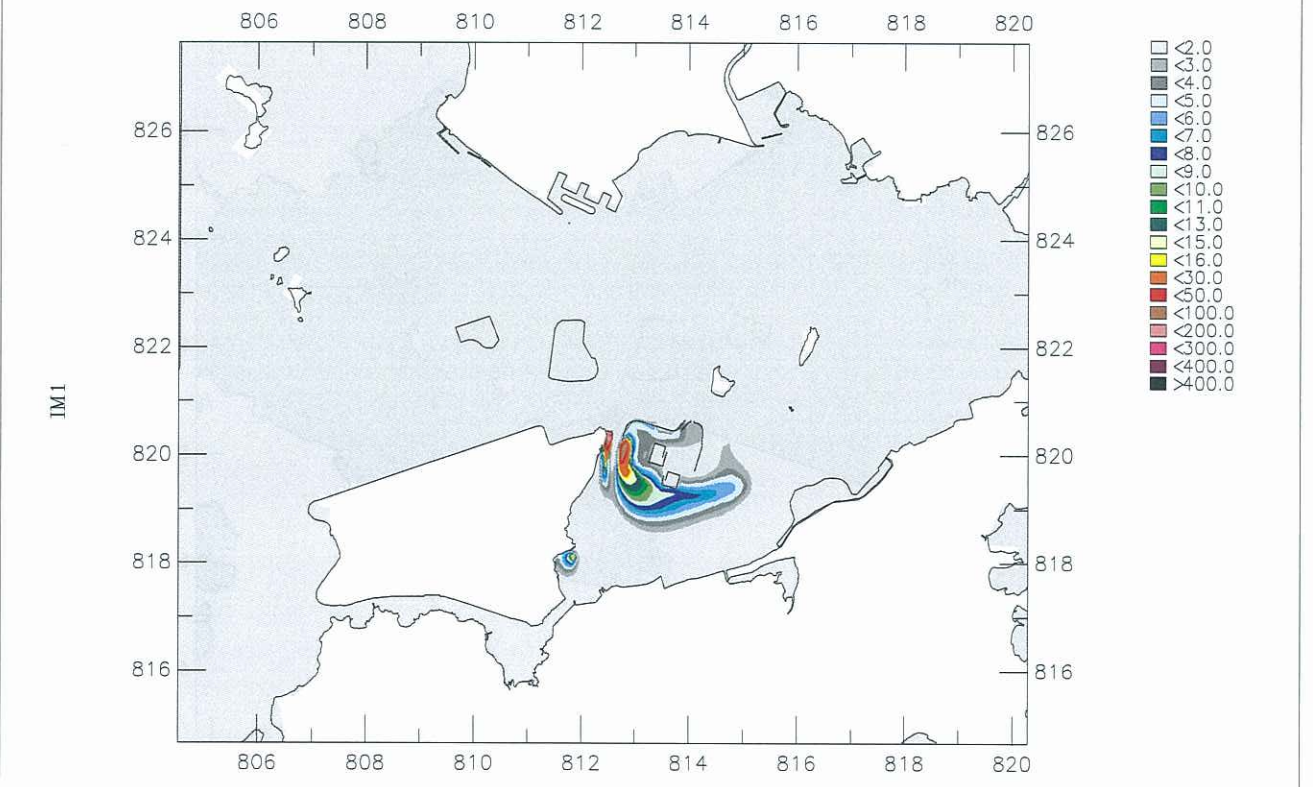
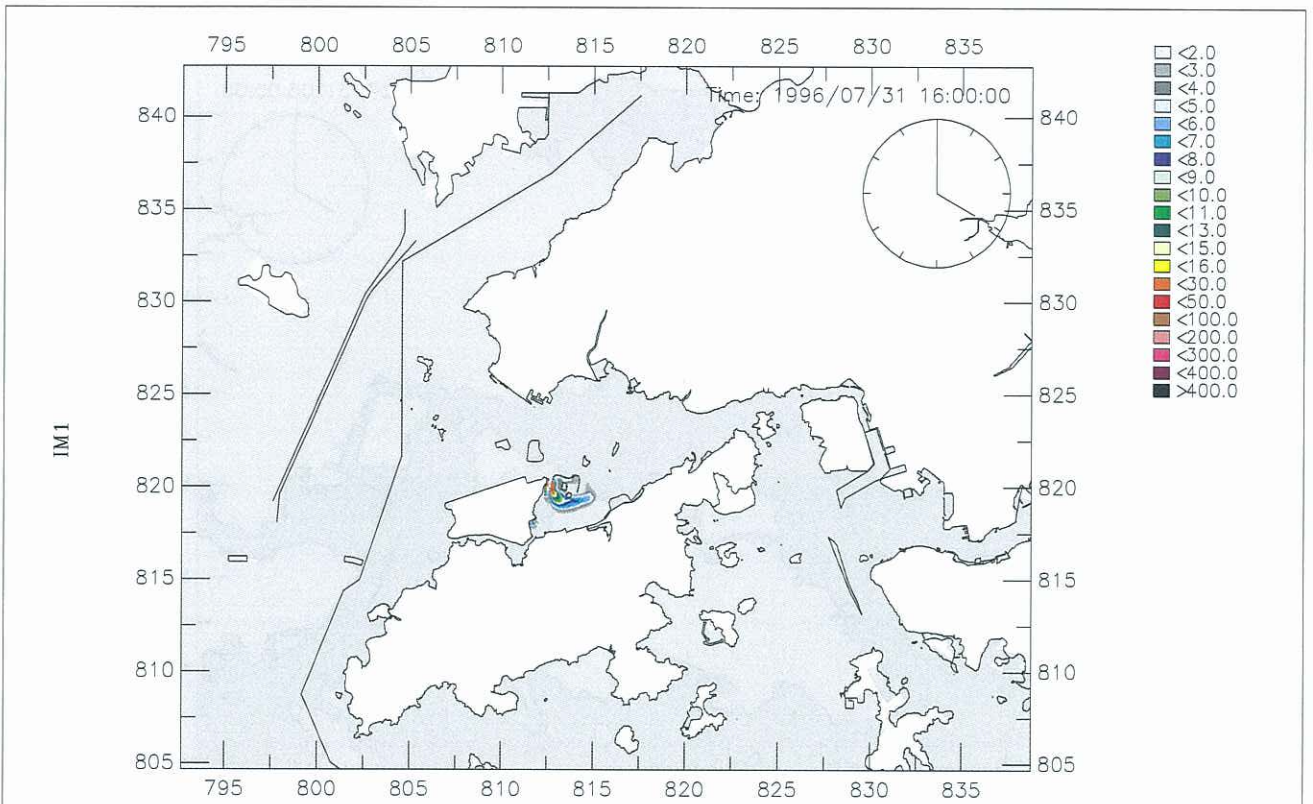
Year 2011 (Sequence B), Mitigated
 SS (mg/L) Contour, Wet Season, Mid-Depth
 Peak Ebb

Jul 2009

Figure 008

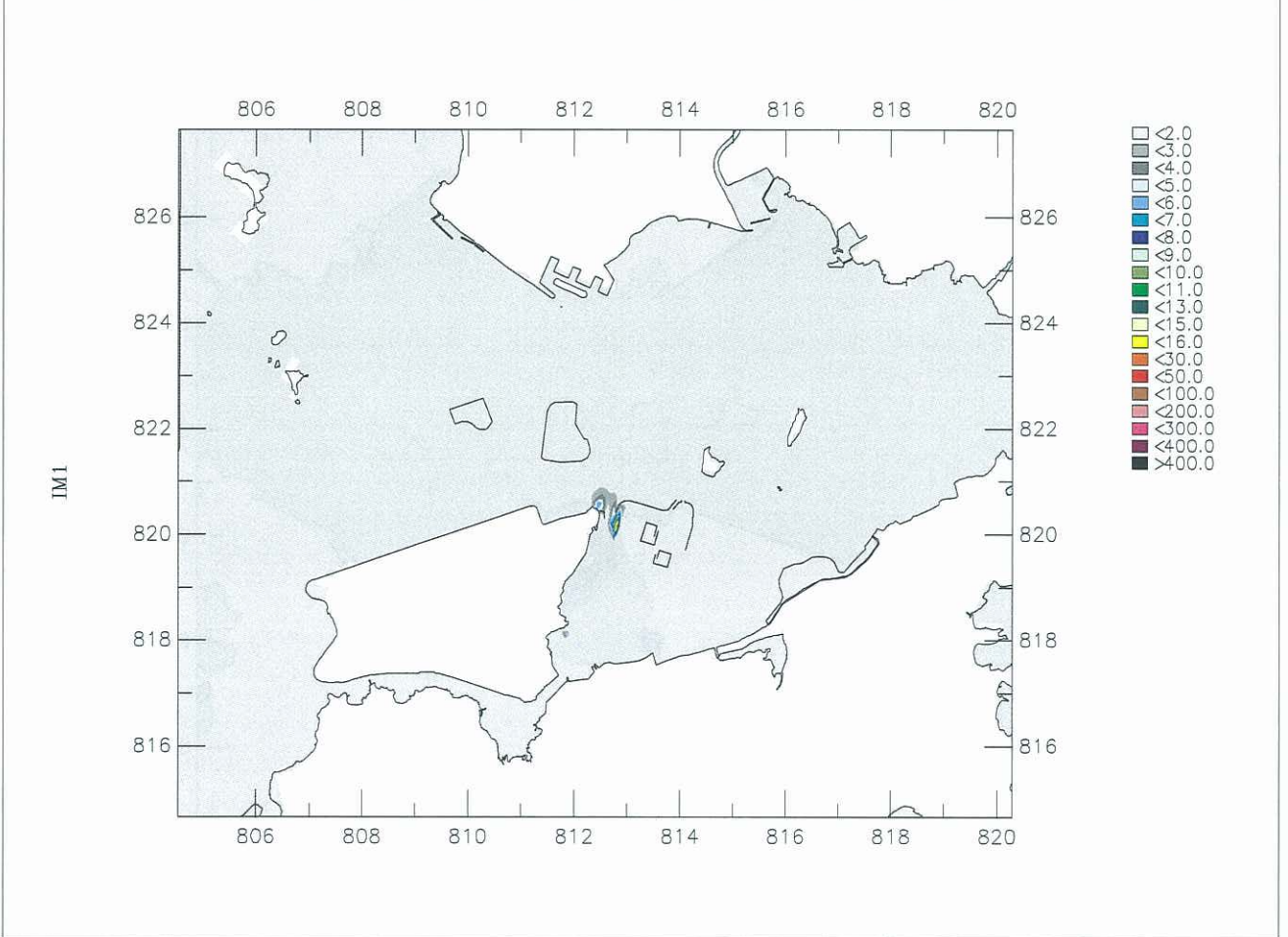
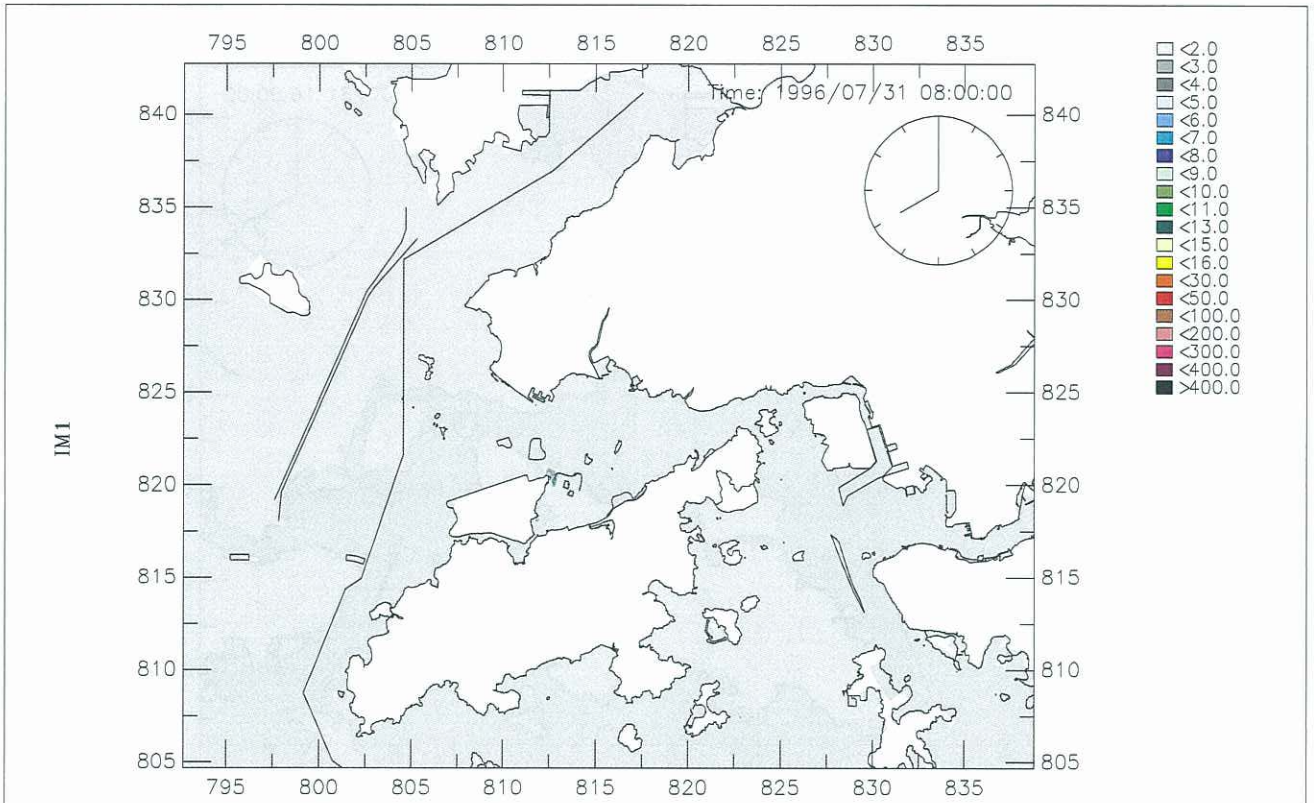
2011b-Wet (POM1-R11f)

AECOM

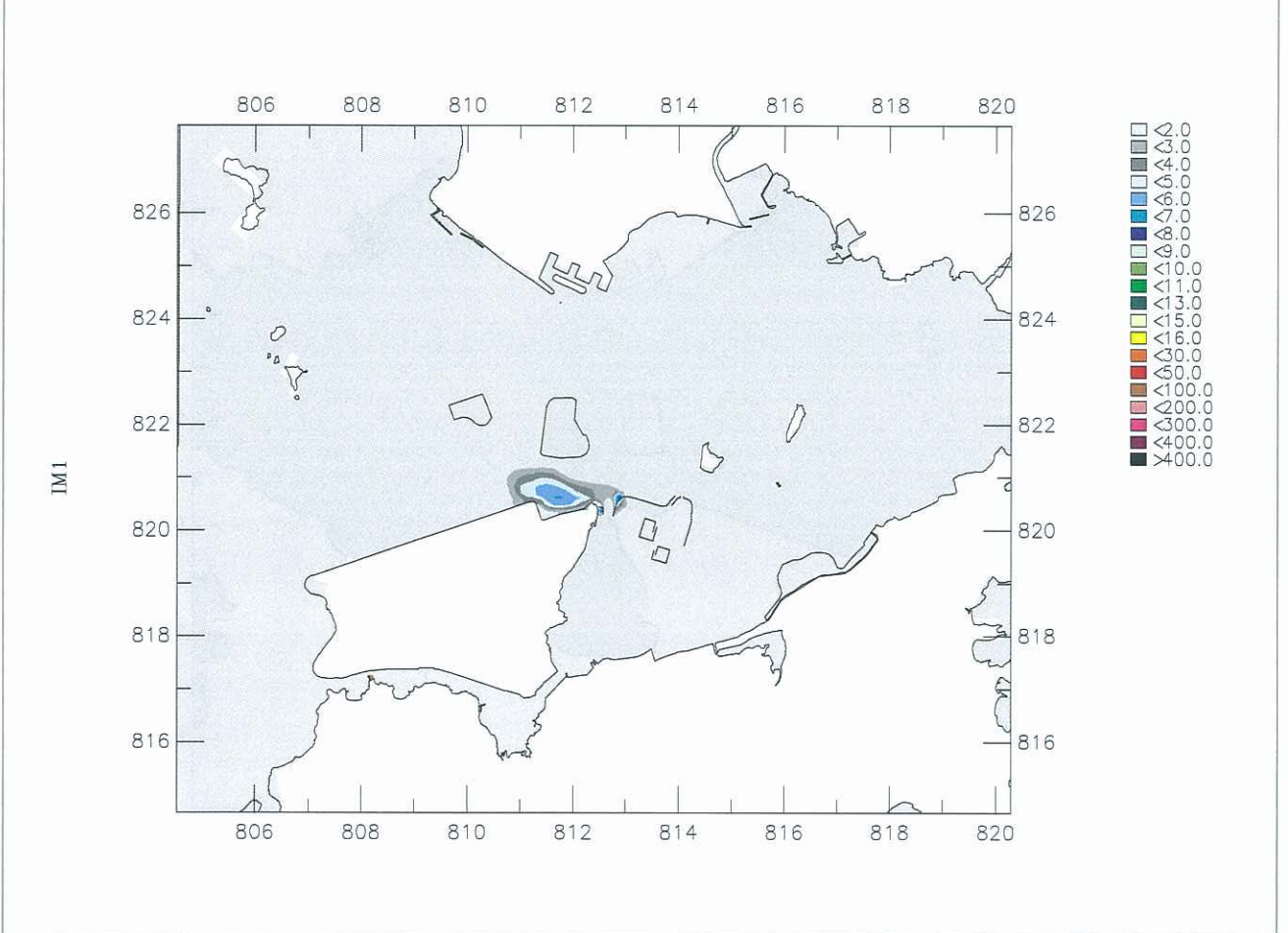
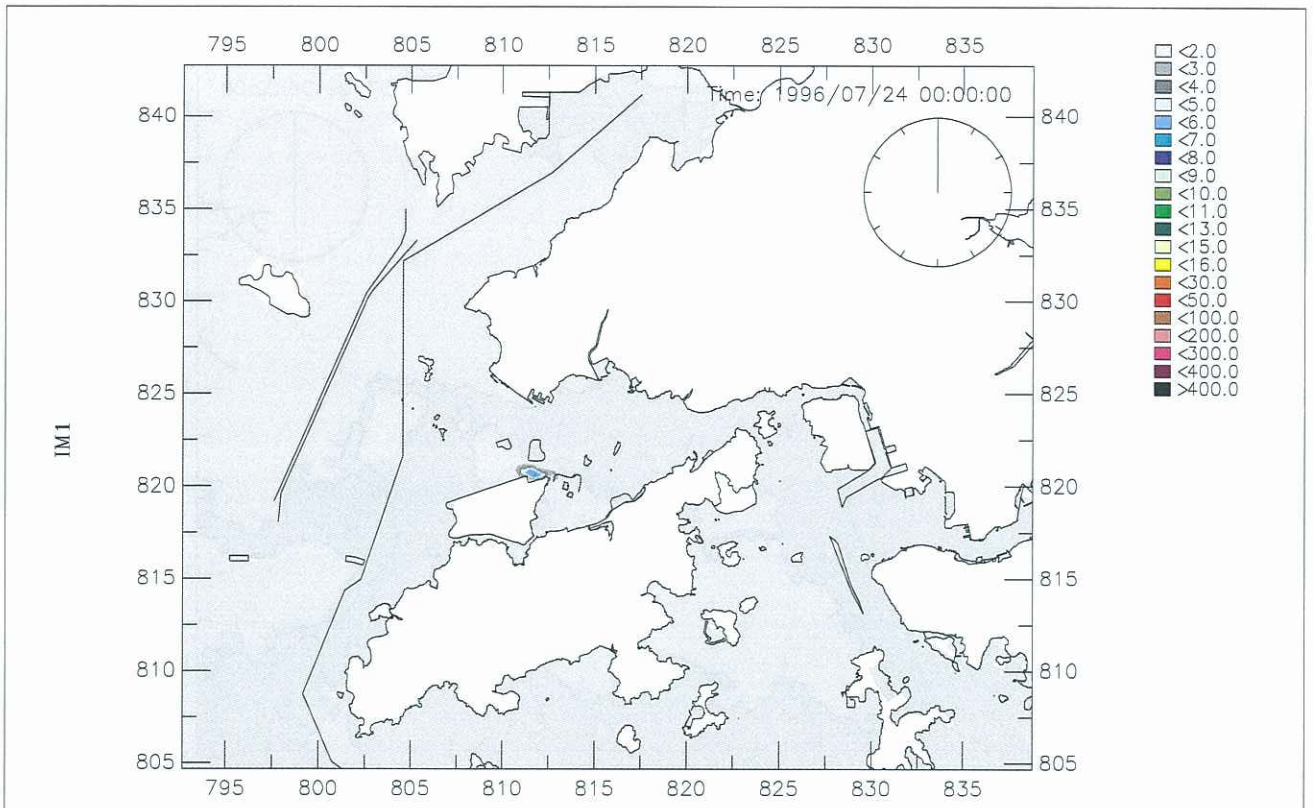


Year 2011 (Sequence B), Mitigated
 SS (mg/L) Contour, Wet Season, Bottom Layer
 Peak Ebb

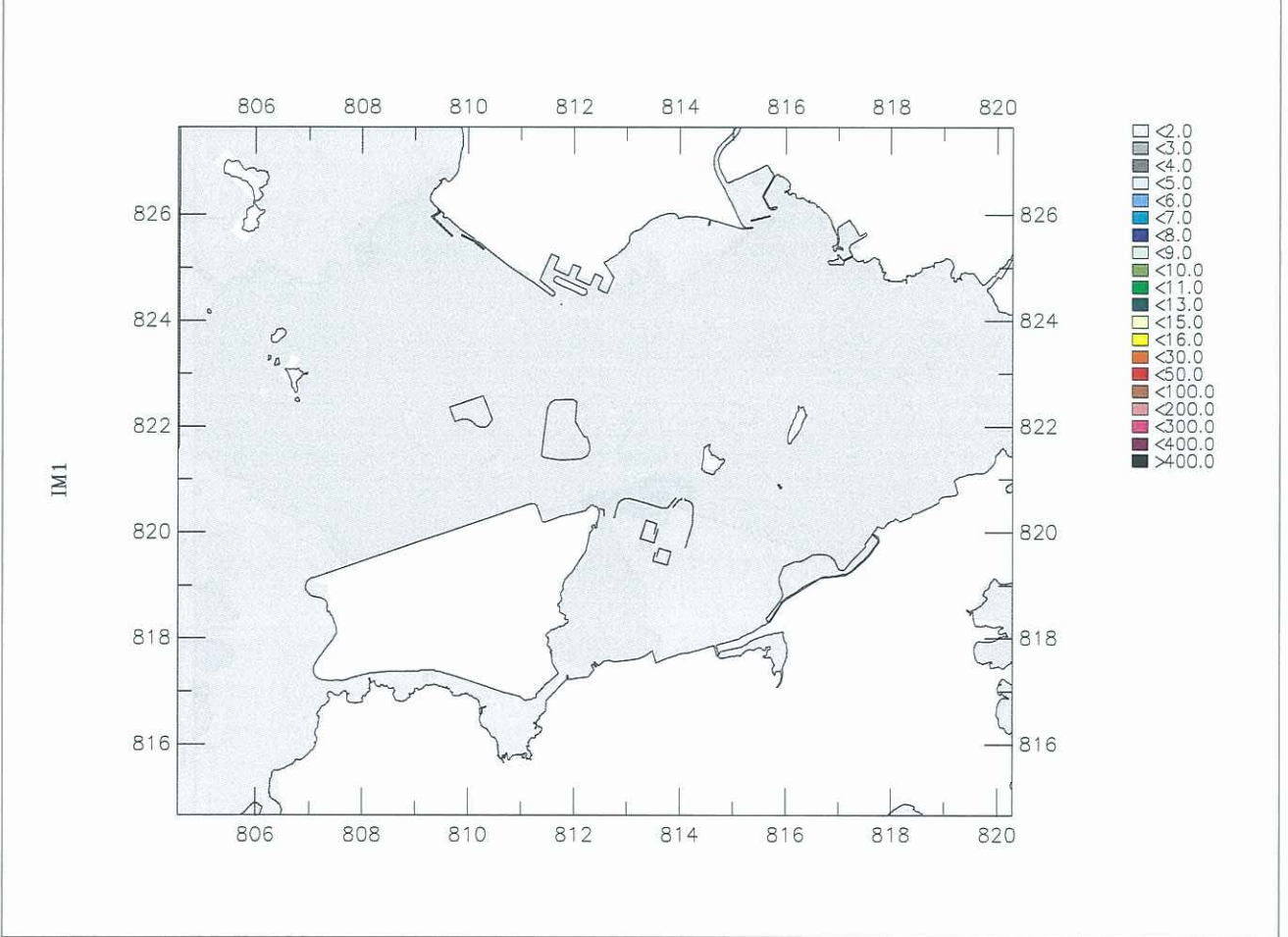
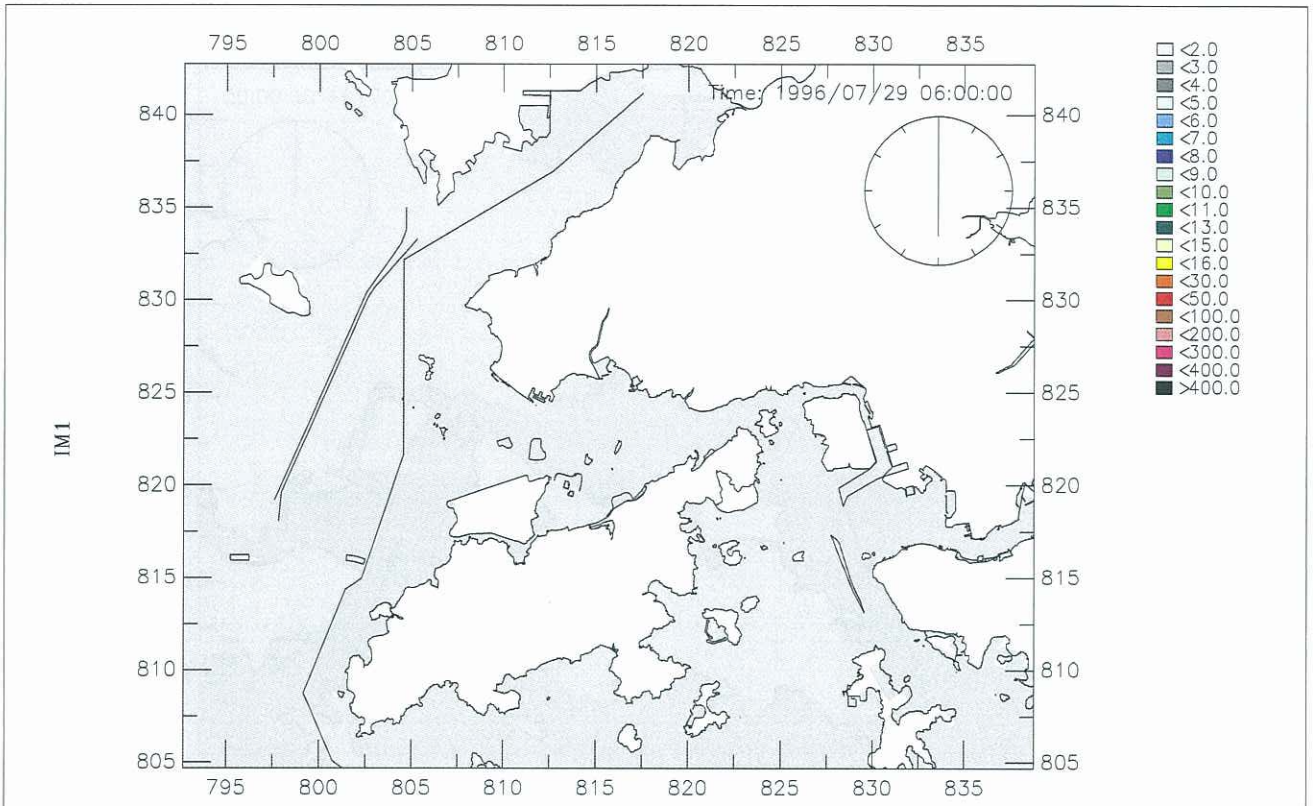
Jul 2009
 Figure 009
 2011b-Wet (POM1-R11f)



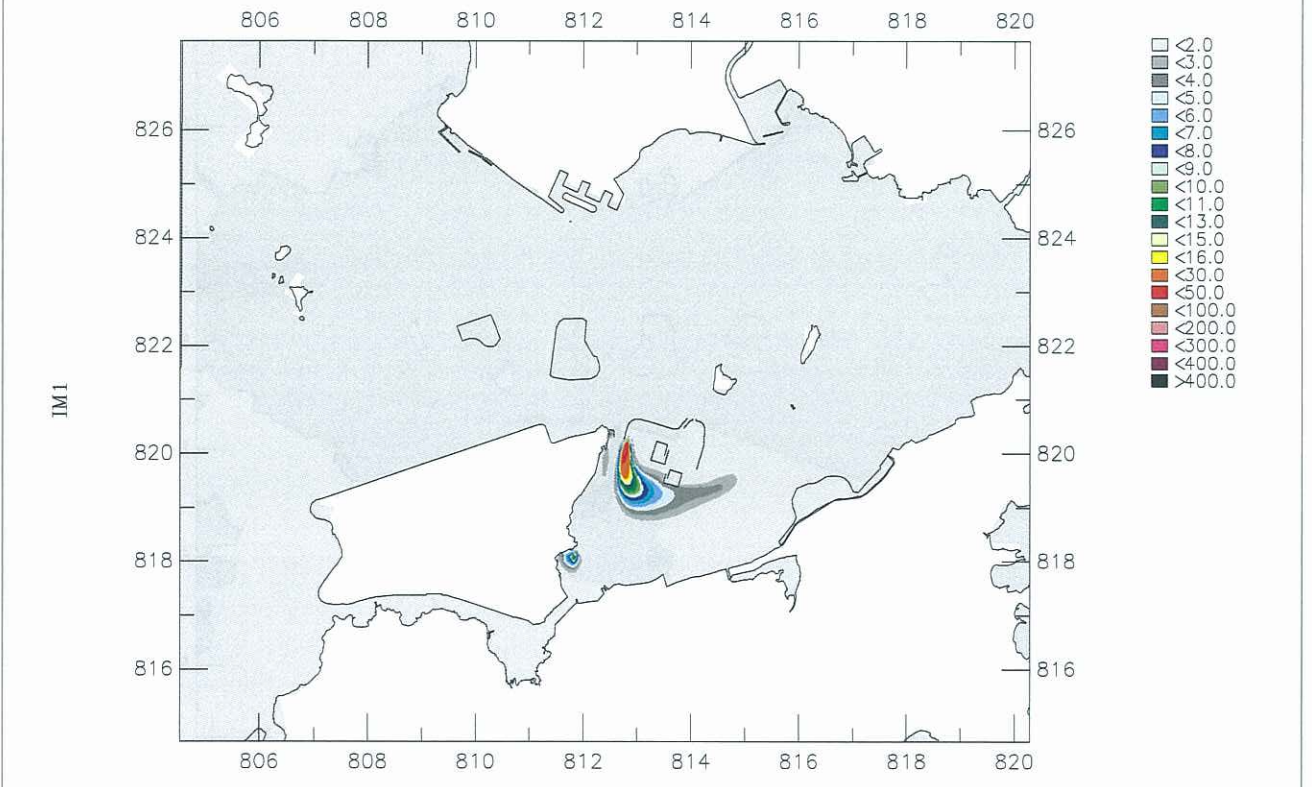
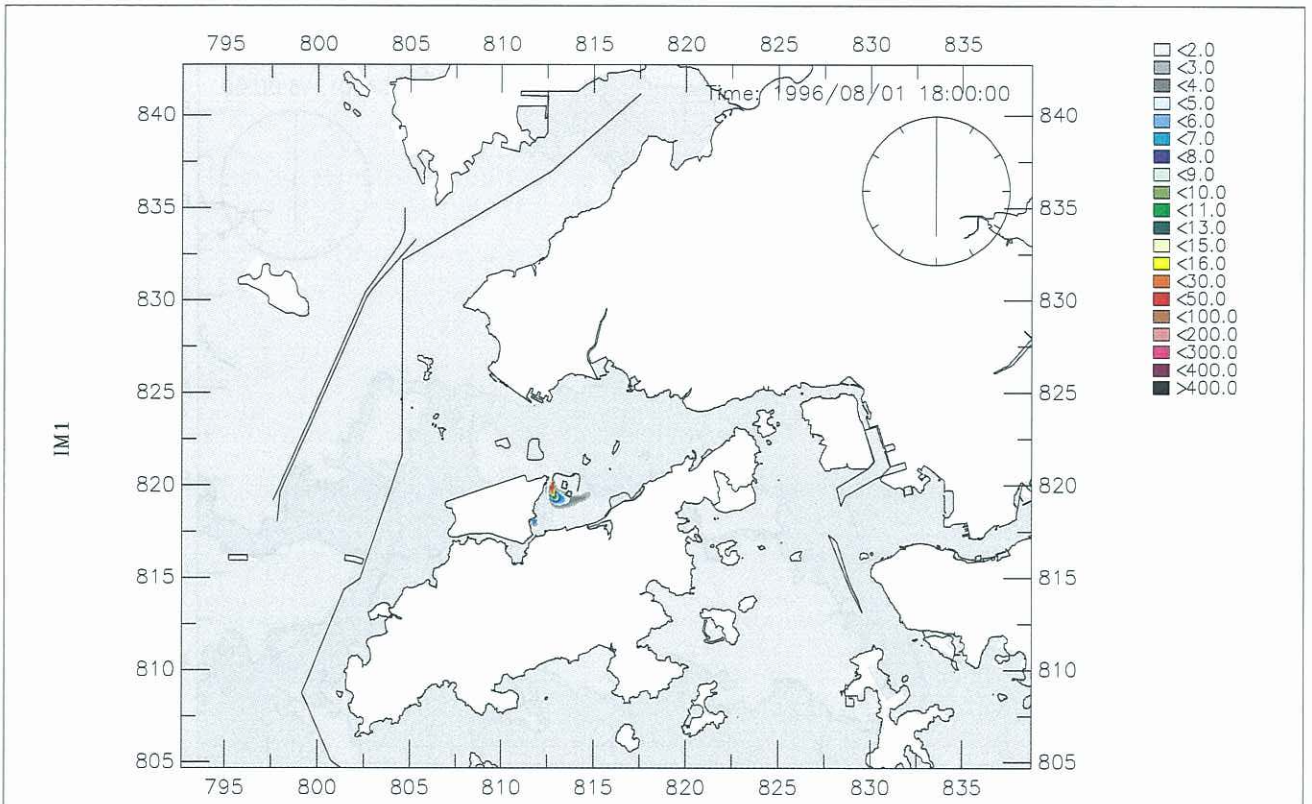
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Surface Layer Peak Flood	Jul 2009	Figure 010
	2011b-Wet (POM1-R11f)	
AECOM		



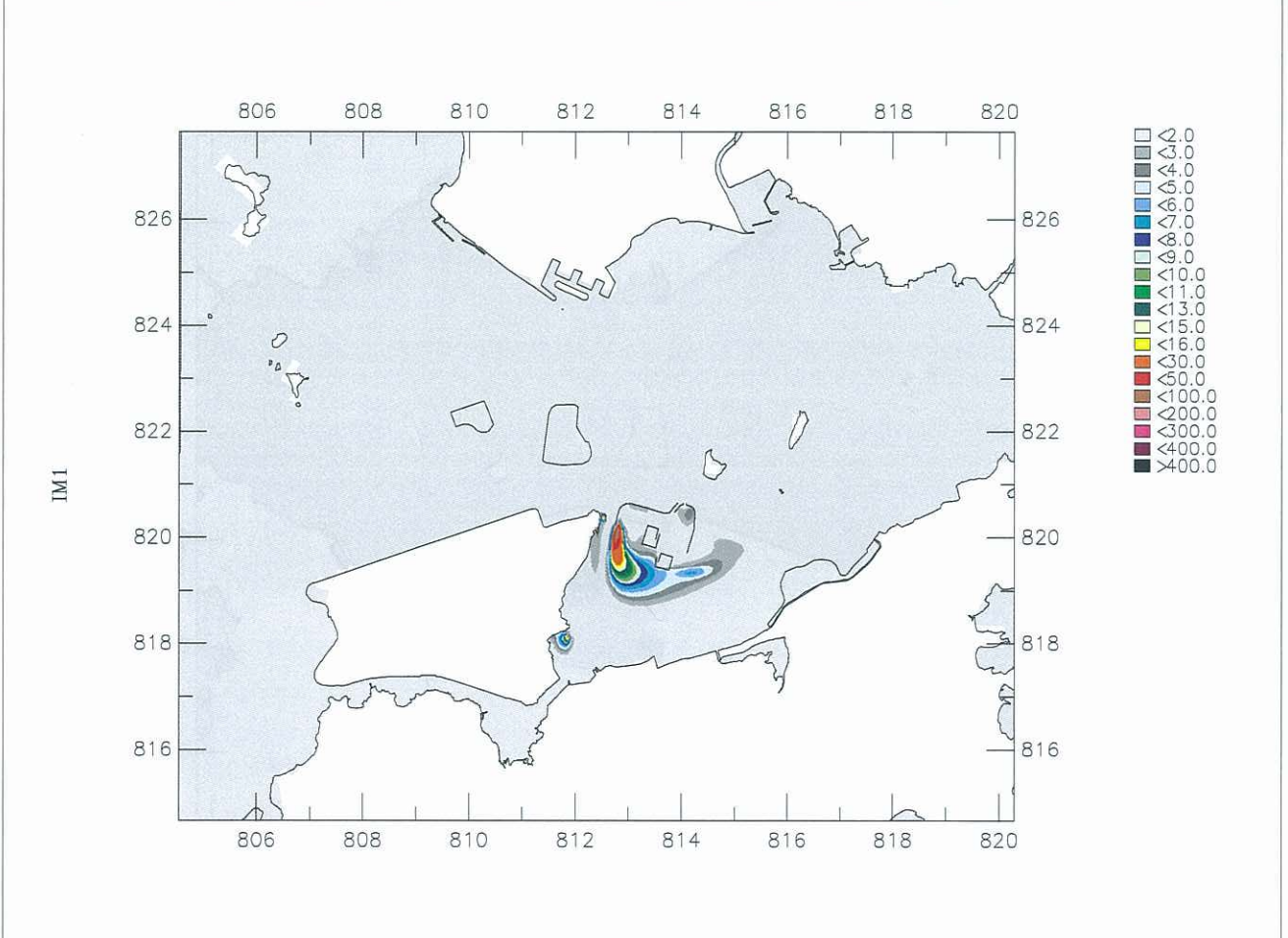
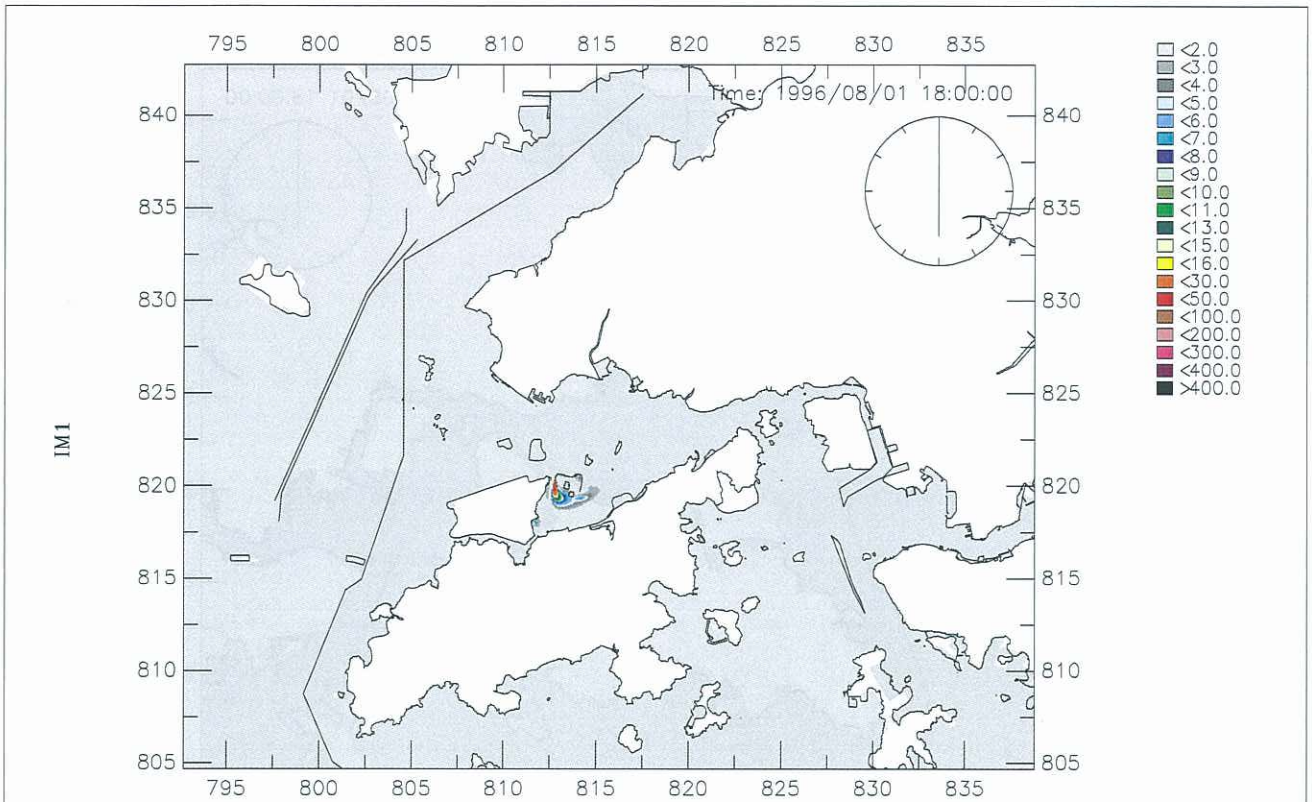
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Mid-Depth Peak Flood	Jul 2009	Figure 011
	2011b-Wet (POM1-R11f)	
AECOM		



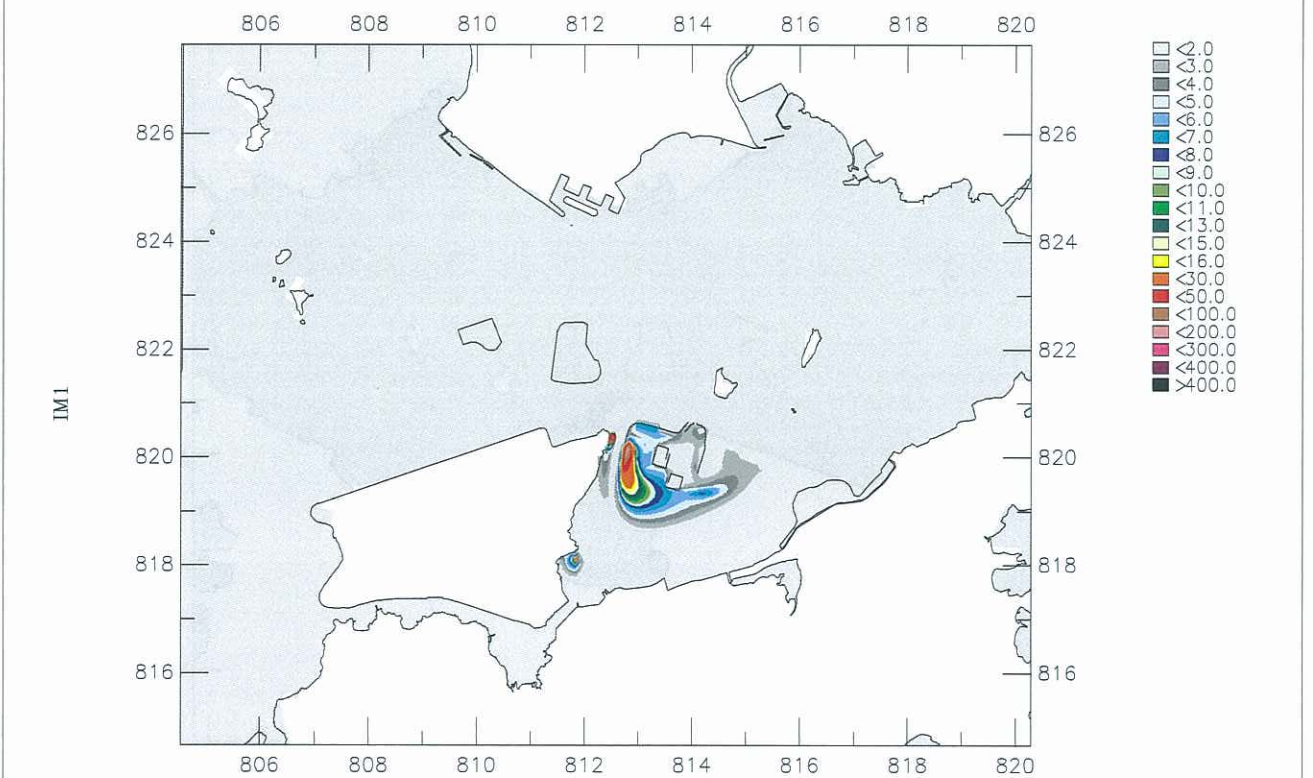
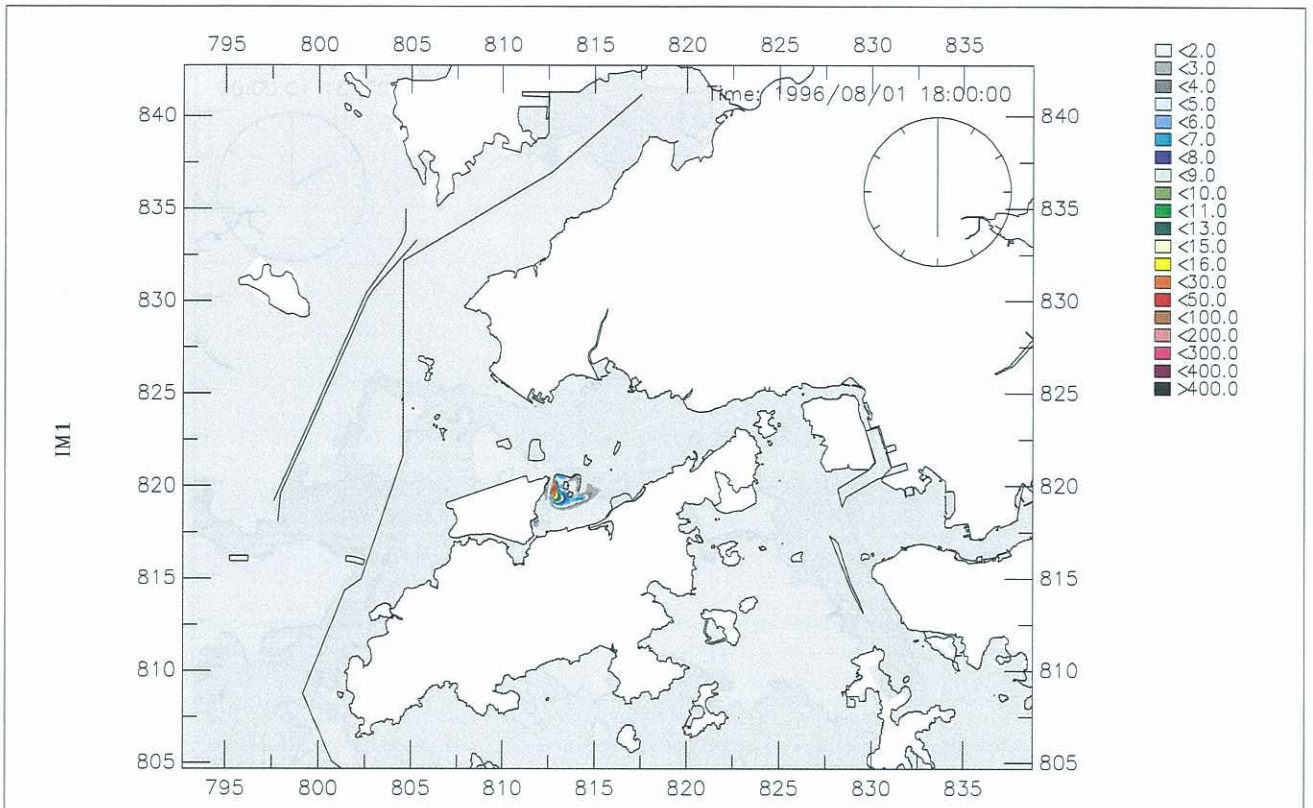
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Bottom Layer Peak Flood	Jul 2009	Figure 012
	2011b-Wet (POM1-R11f)	
AECOM		



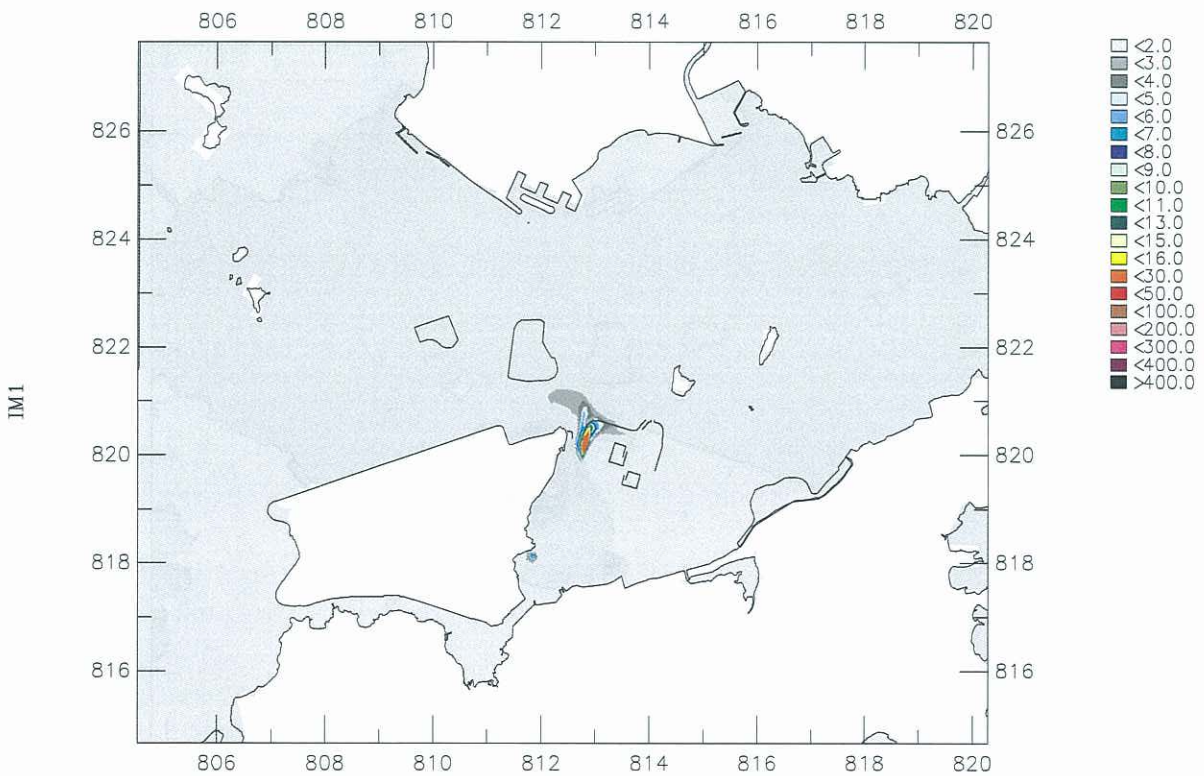
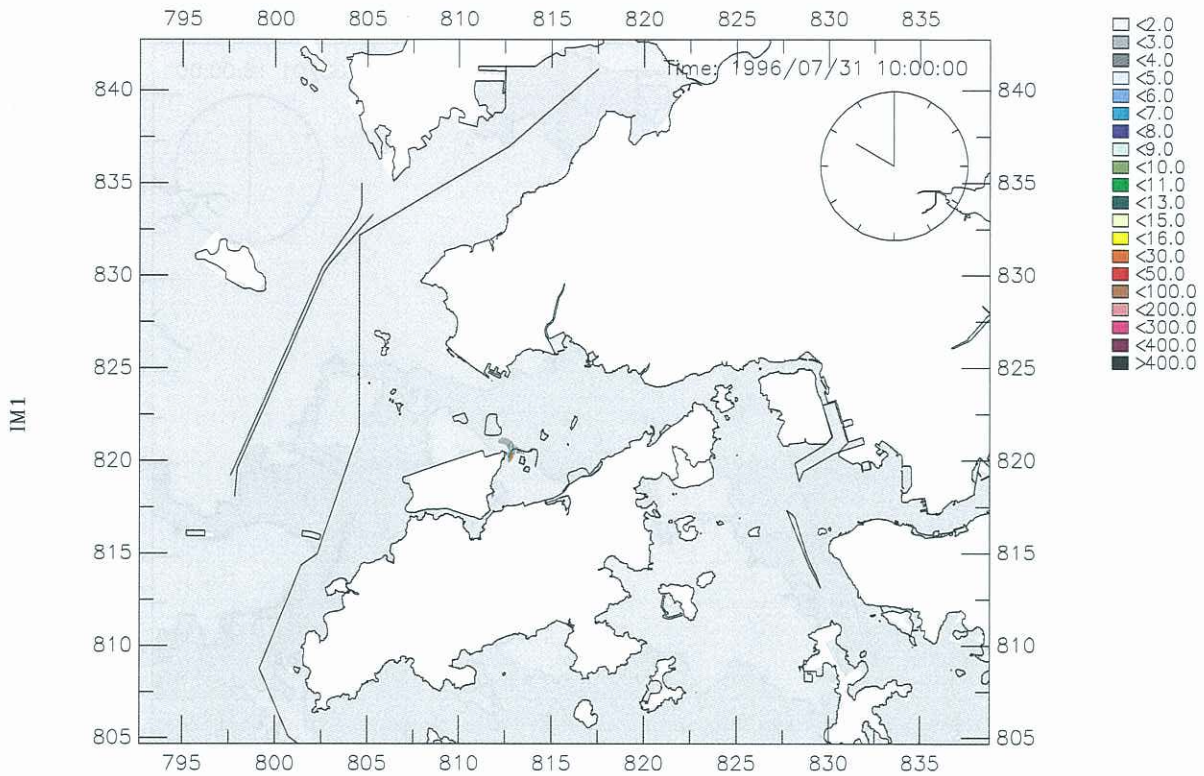
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Surface Layer Spring Tide, Lowest Low	Jul 2009	Figure 013
	2011b-Dry (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Mid-Depth Spring Tide, Lowest Low	Jul 2009	Figure 014
	2011b-Dry (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Bottom Layer Spring Tide, Lowest Low	Jul 2009	Figure 015
	2011b-Dry (POM1-R11f)	
AECOM		



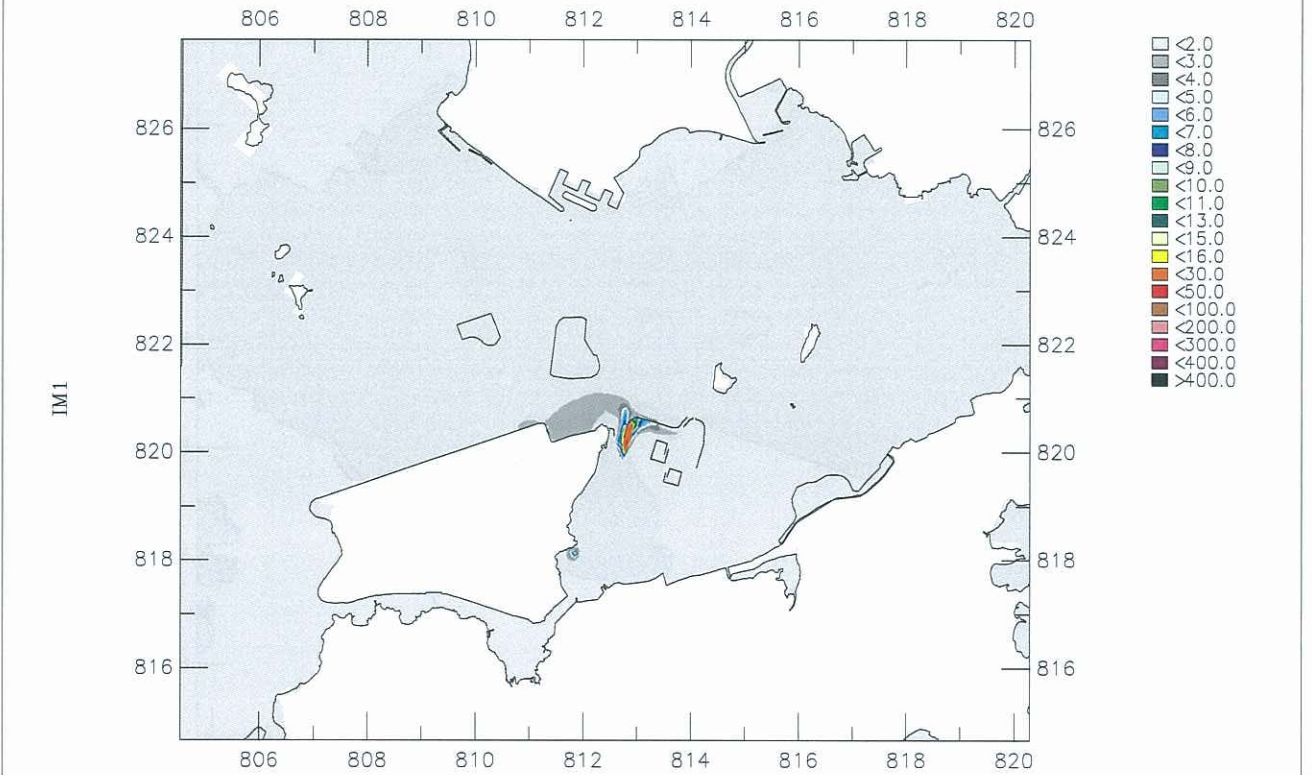
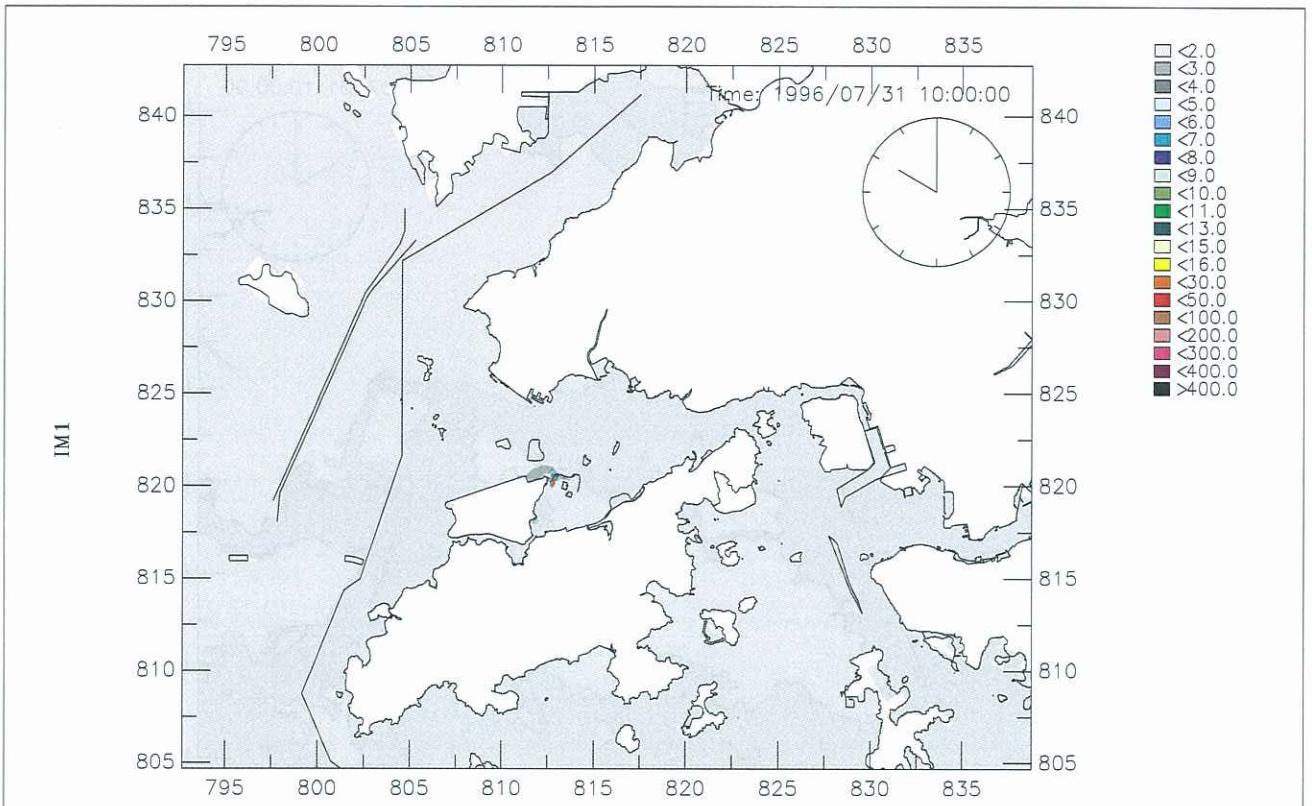
Year 2011 (Sequence B), Mitigated
 SS (mg/L) Contour, Dry Season, Surface Layer
 Spring Tide, Highest High

Jul 2009

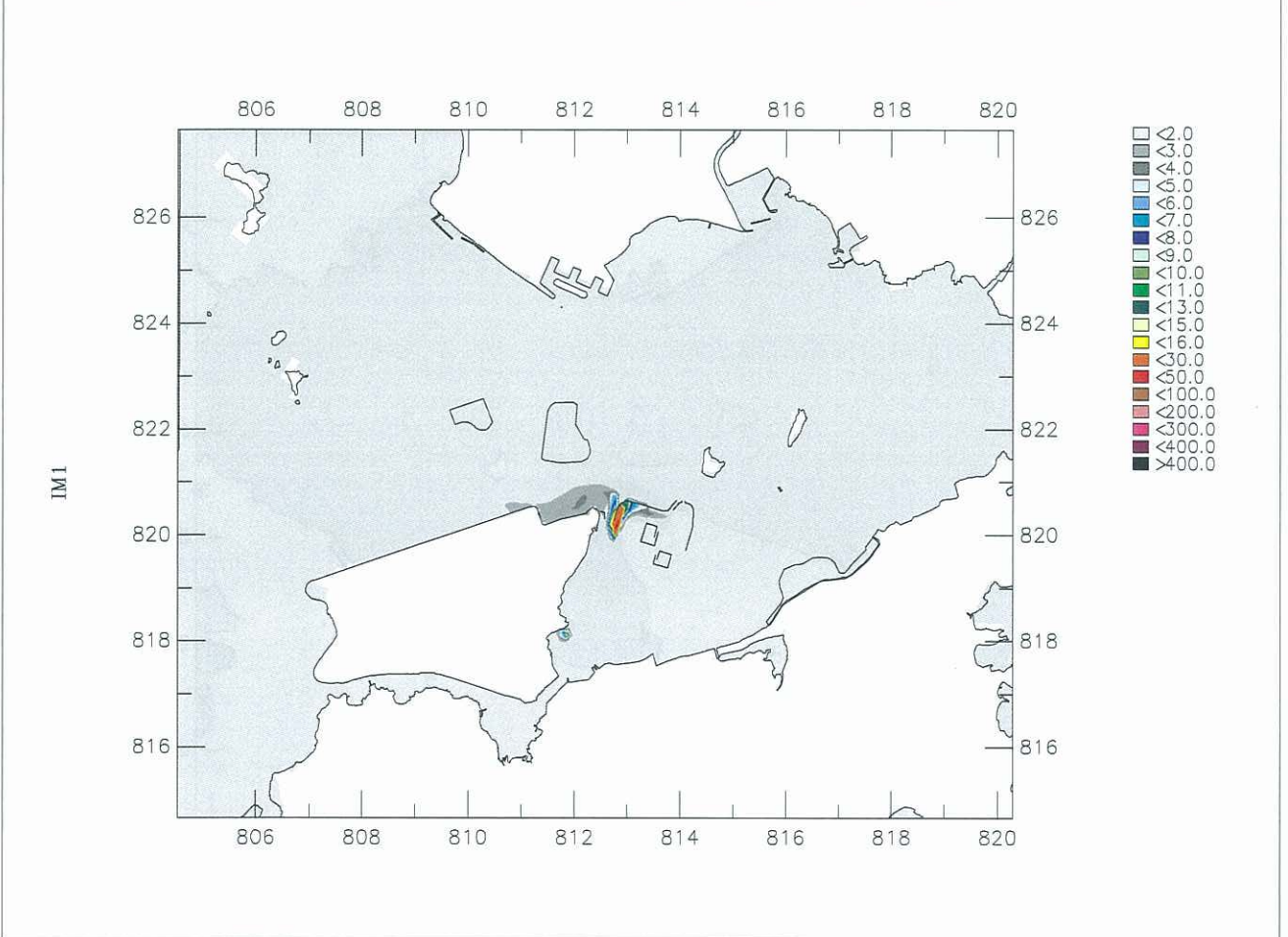
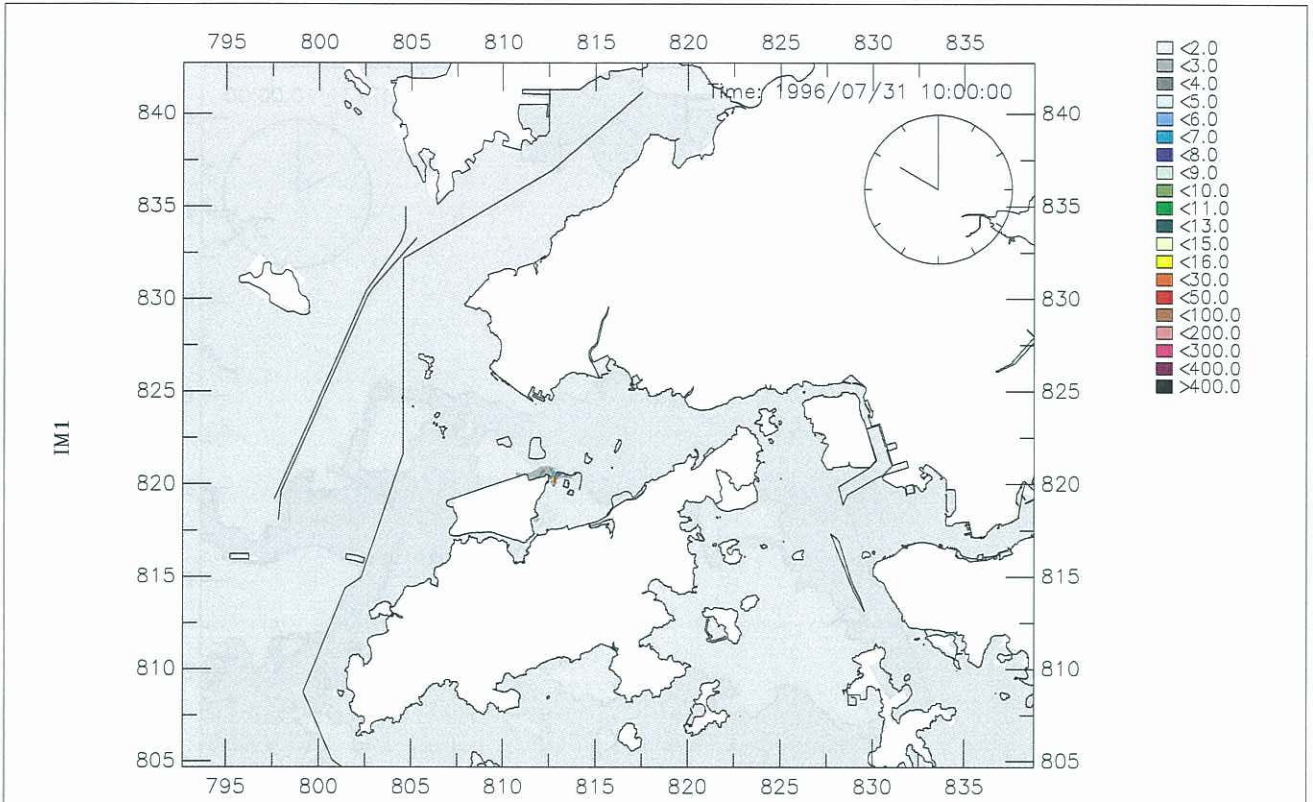
Figure 016

2011b-Dry (P0M1-R11f)

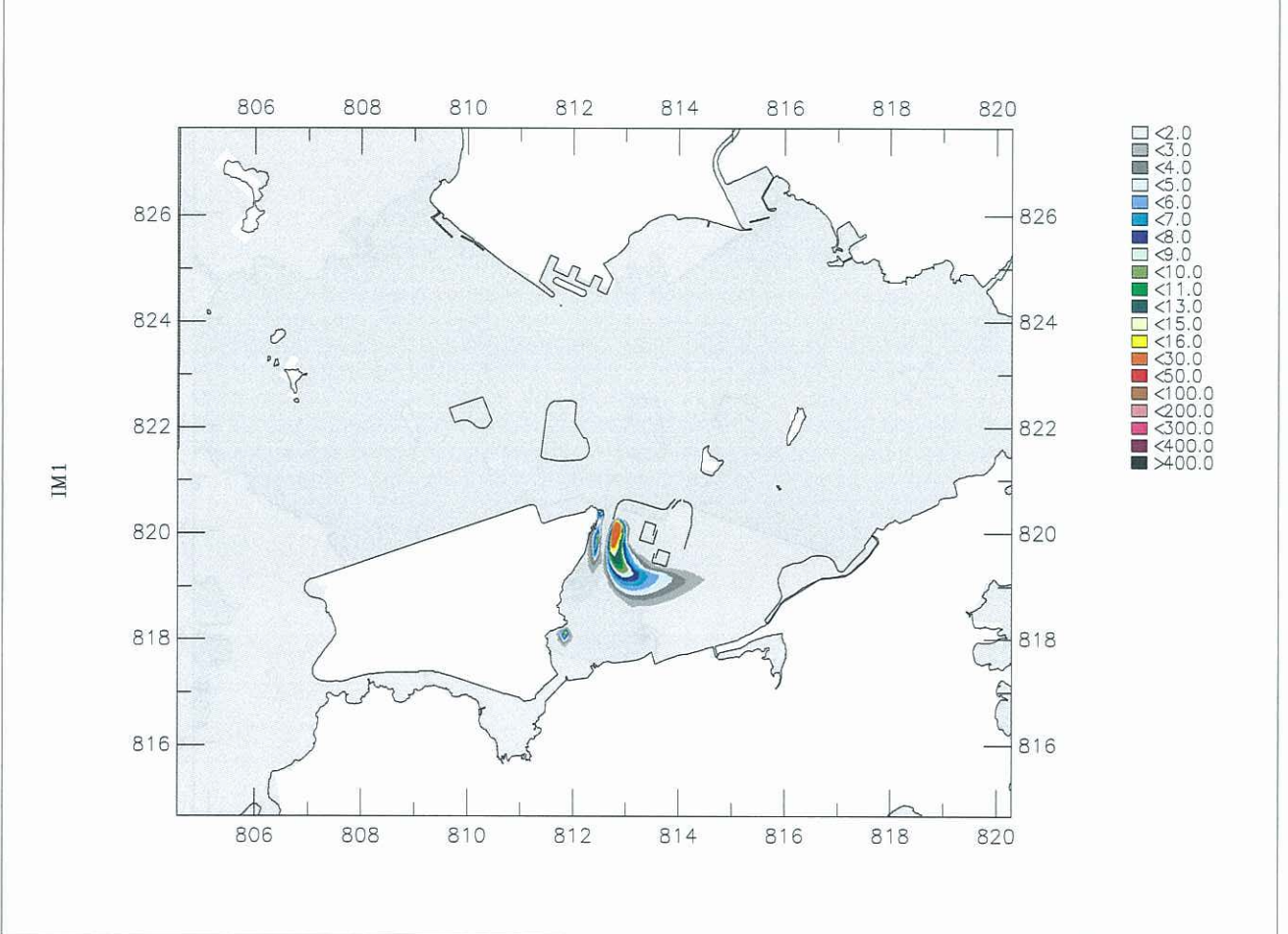
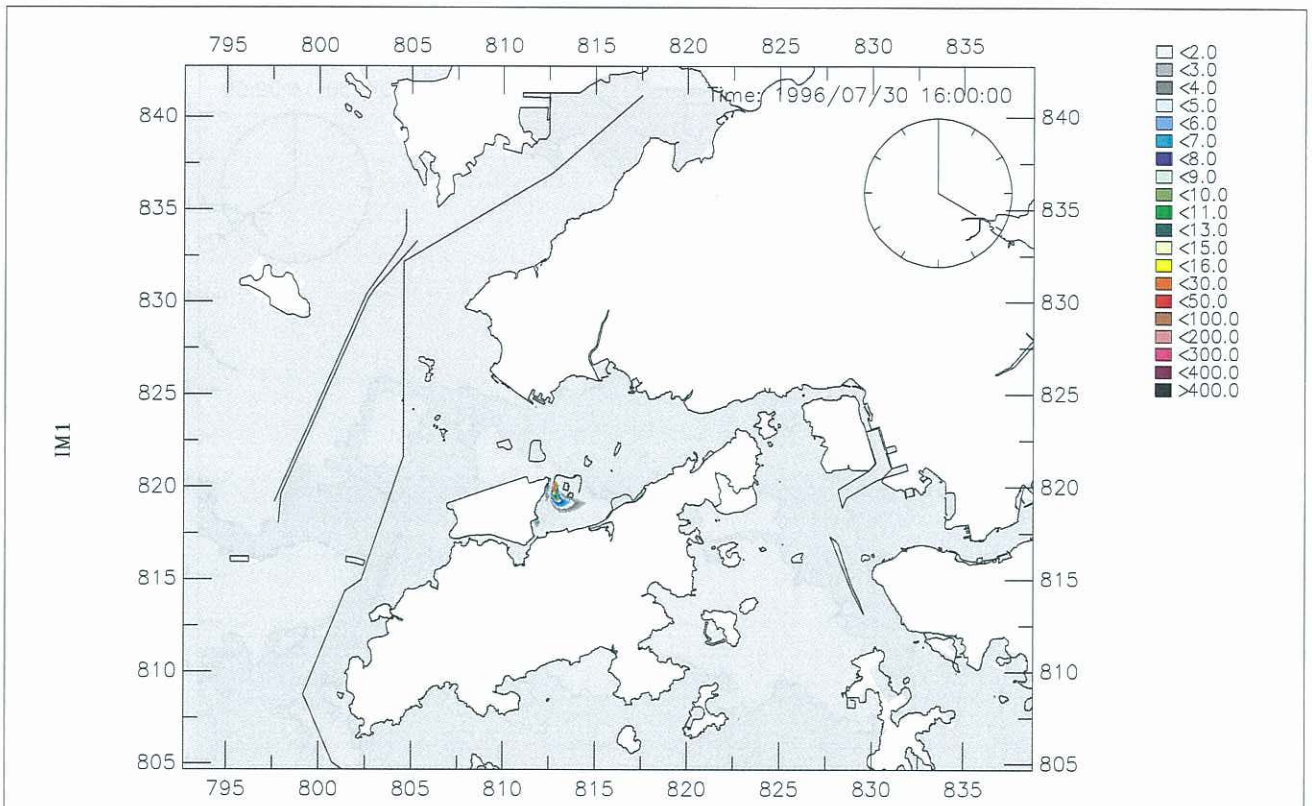
| AECOM



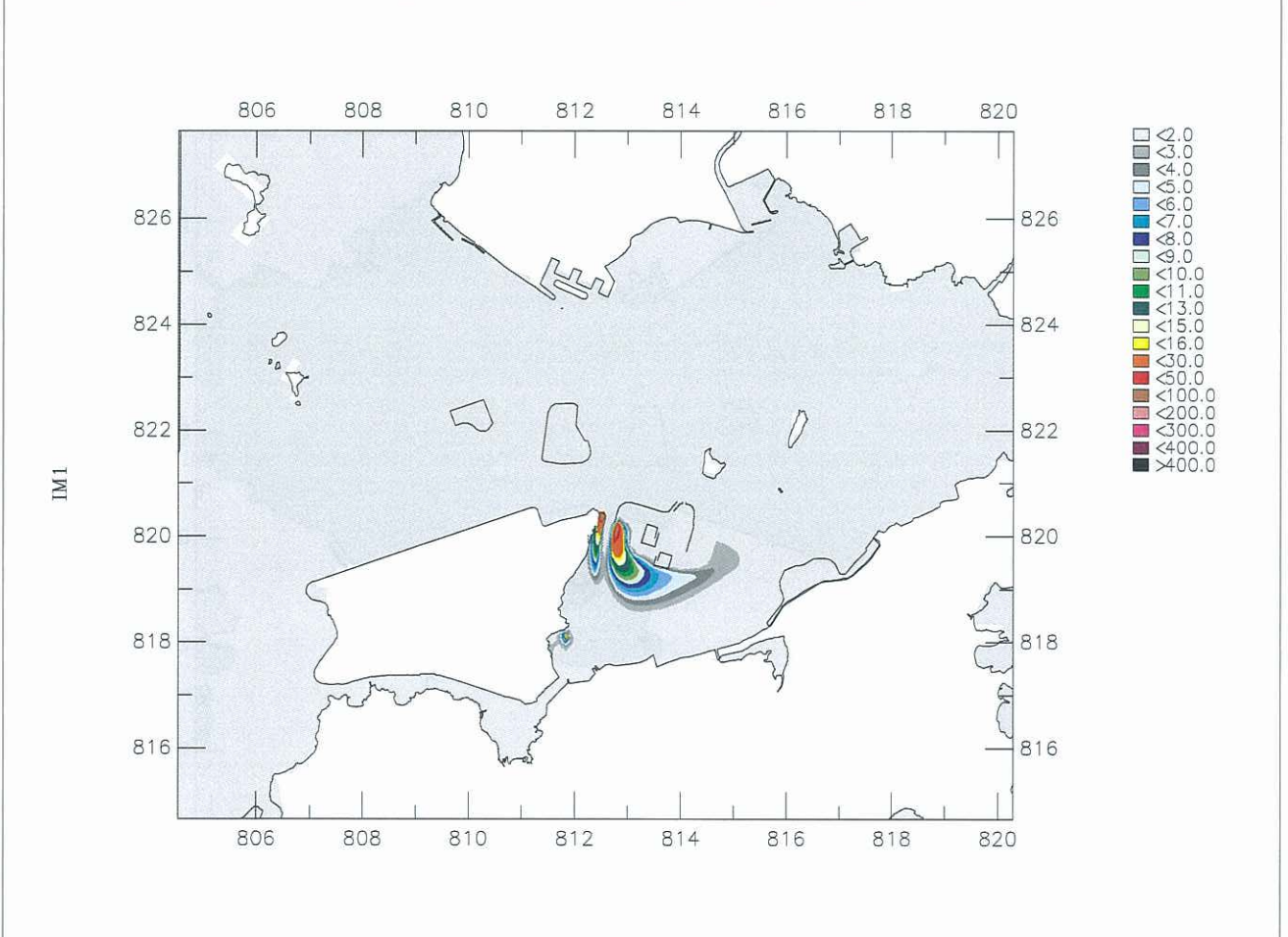
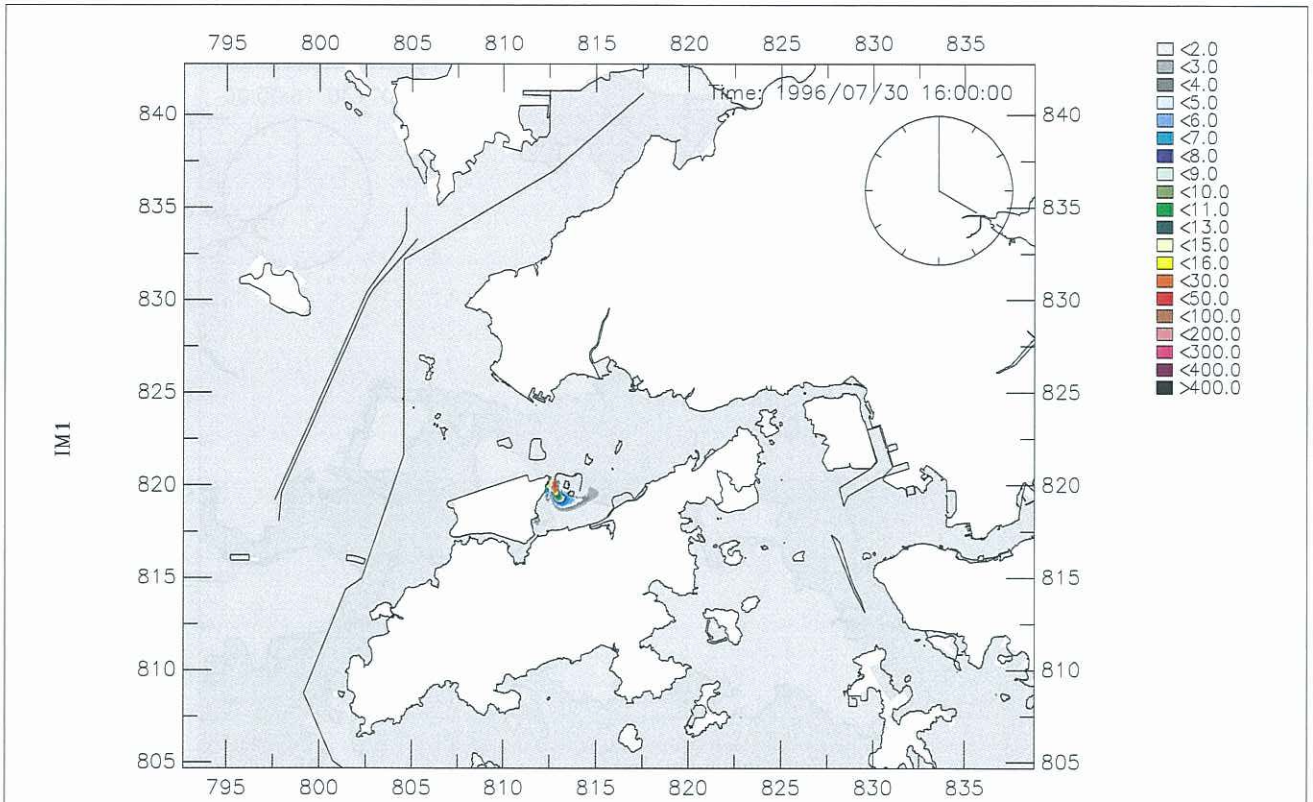
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Mid-Depth Spring Tide, Highest High	Jul 2009	Figure 017
	2011b-Dry (POM1-R11f)	
AECOM		



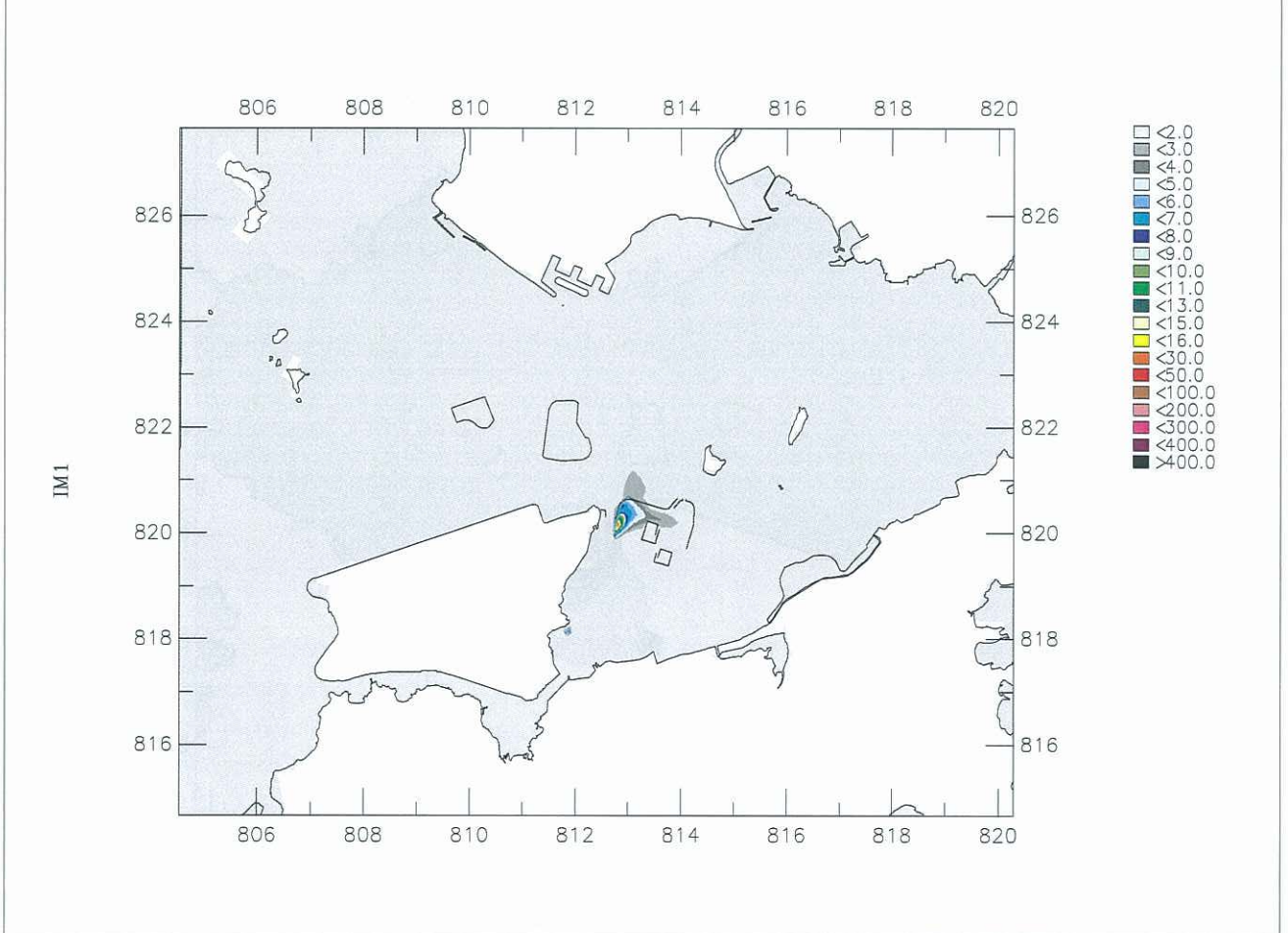
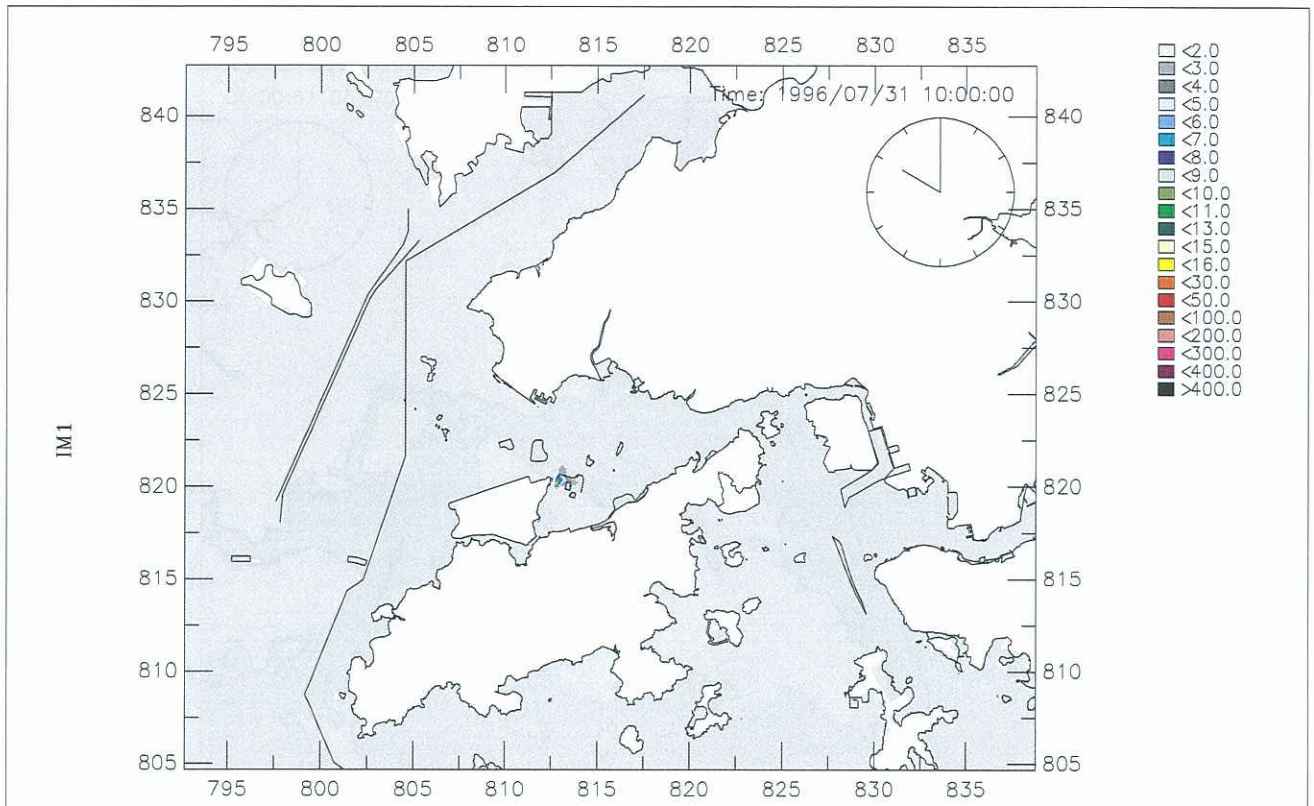
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Bottom Layer Spring Tide, Highest High	Jul 2009	Figure 018
	2011b-Dry (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Surface Layer Spring Tide, Lowest Low	Jul 2009	Figure 019
	2011b-Wet (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Mid-Depth Spring Tide, Lowest Low	Jul 2009	Figure 020
	2011b-Wet (POM1-R11f)	
AECOM		



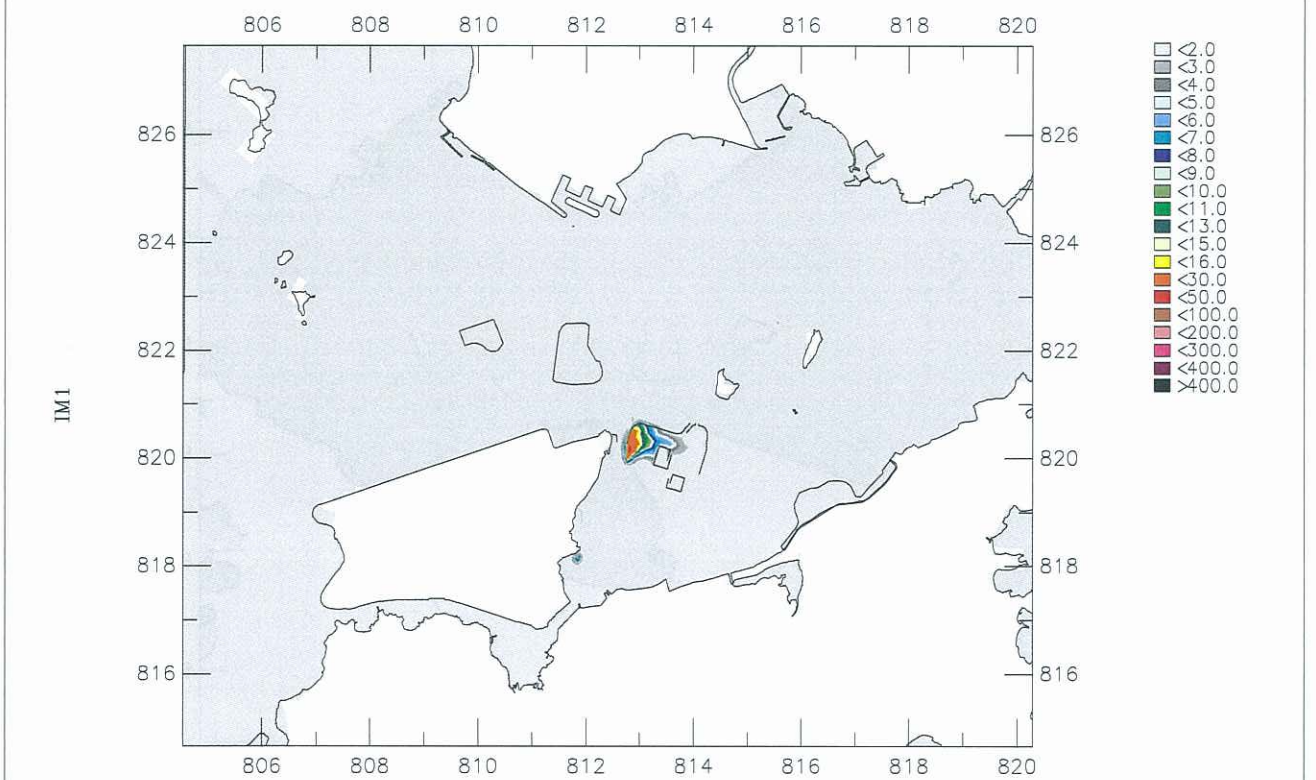
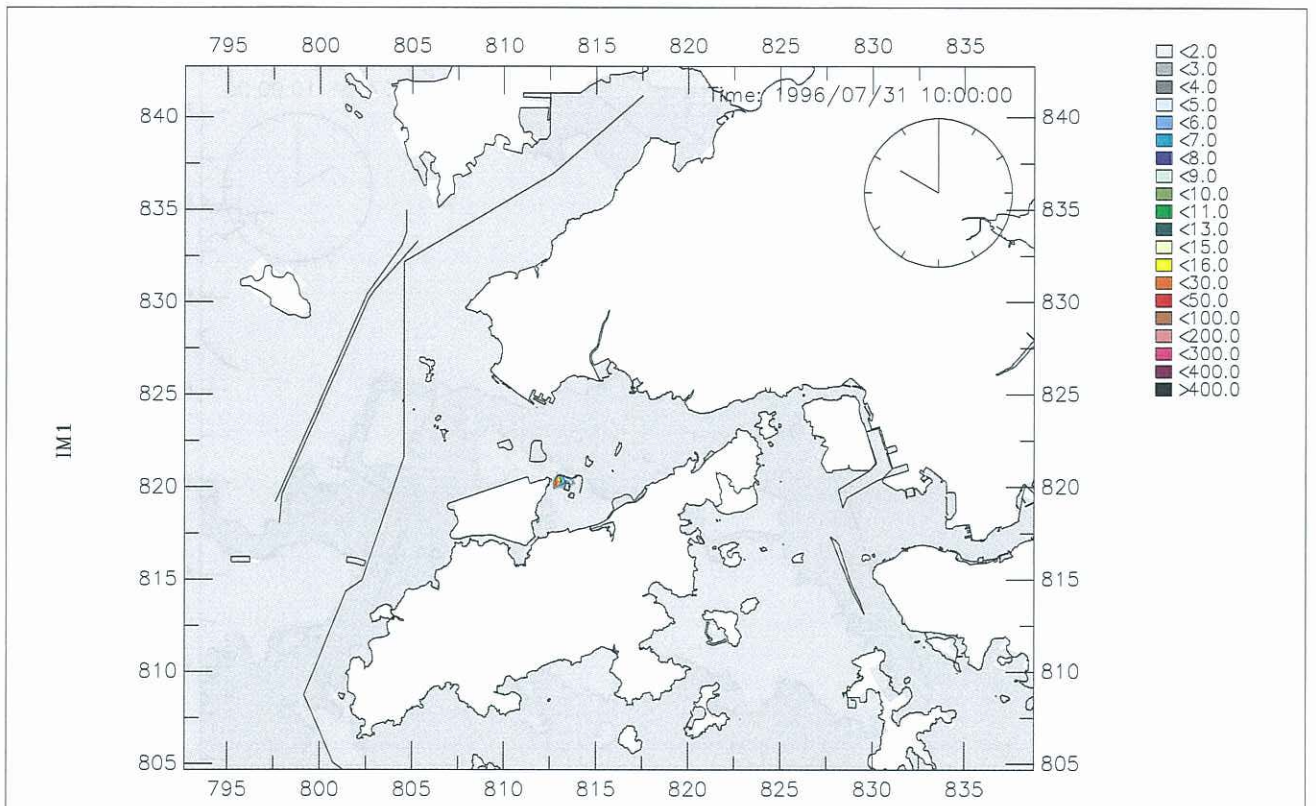
Year 2011 (Sequence B), Mitigated
 SS (mg/L) Contour, Wet Season, Surface Layer
 Spring Tide, Highest High

Jul 2009

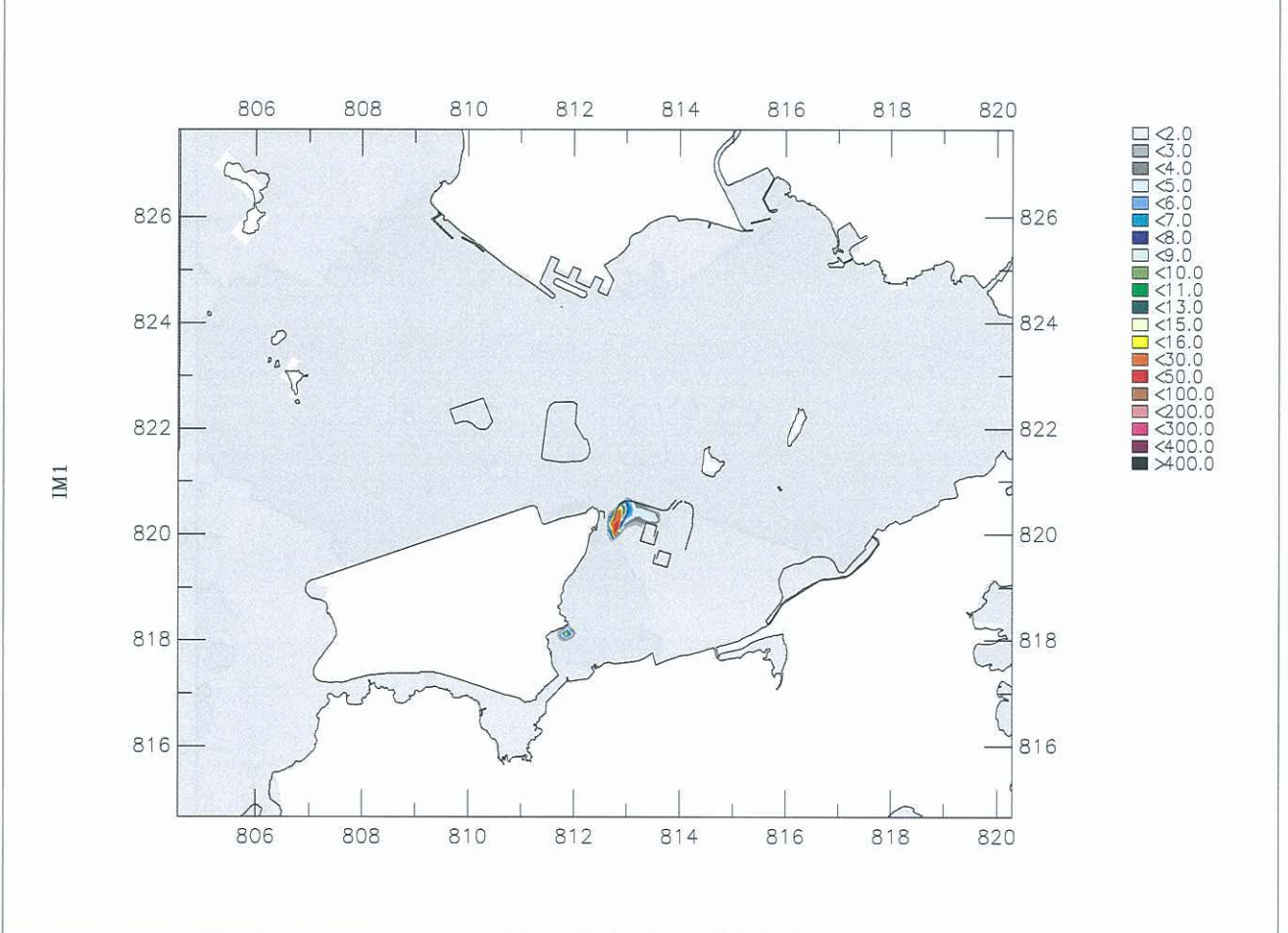
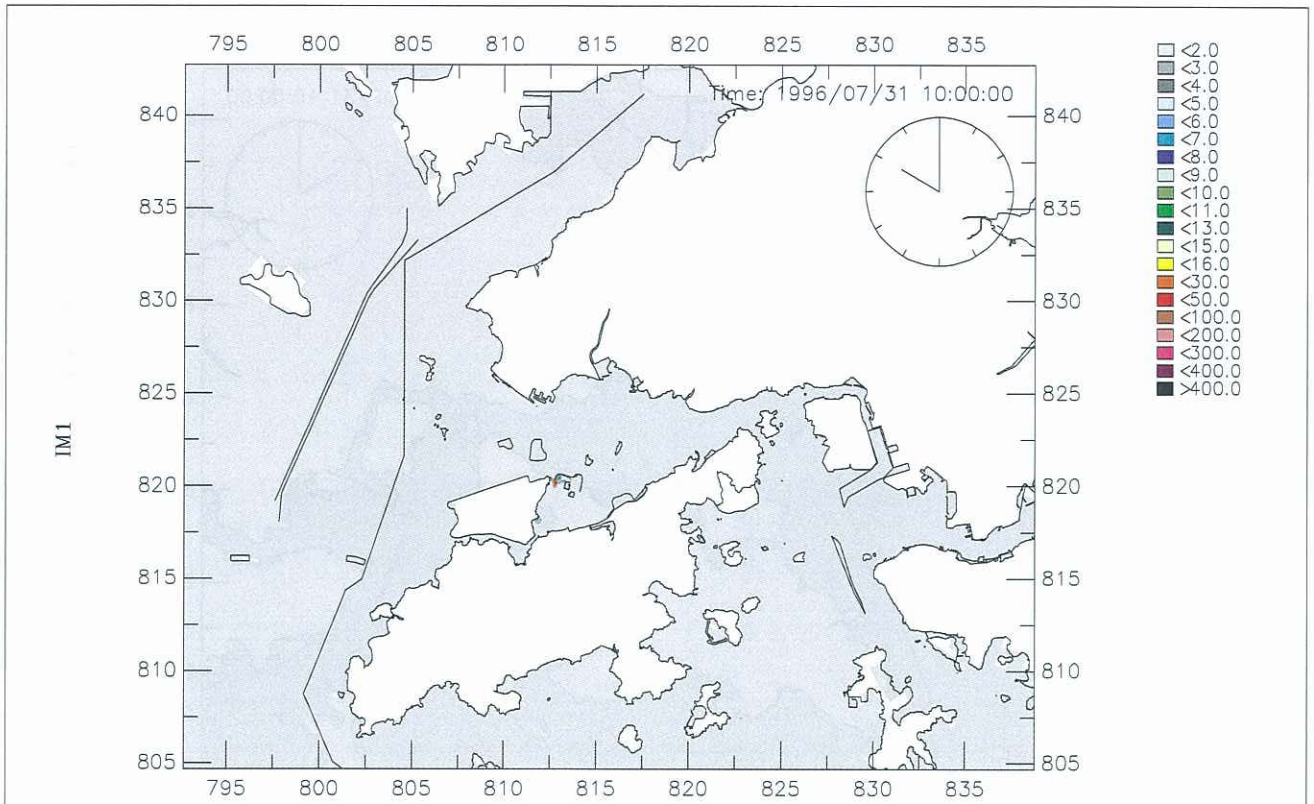
Figure 022

2011b-Wet (POM1-R11f)

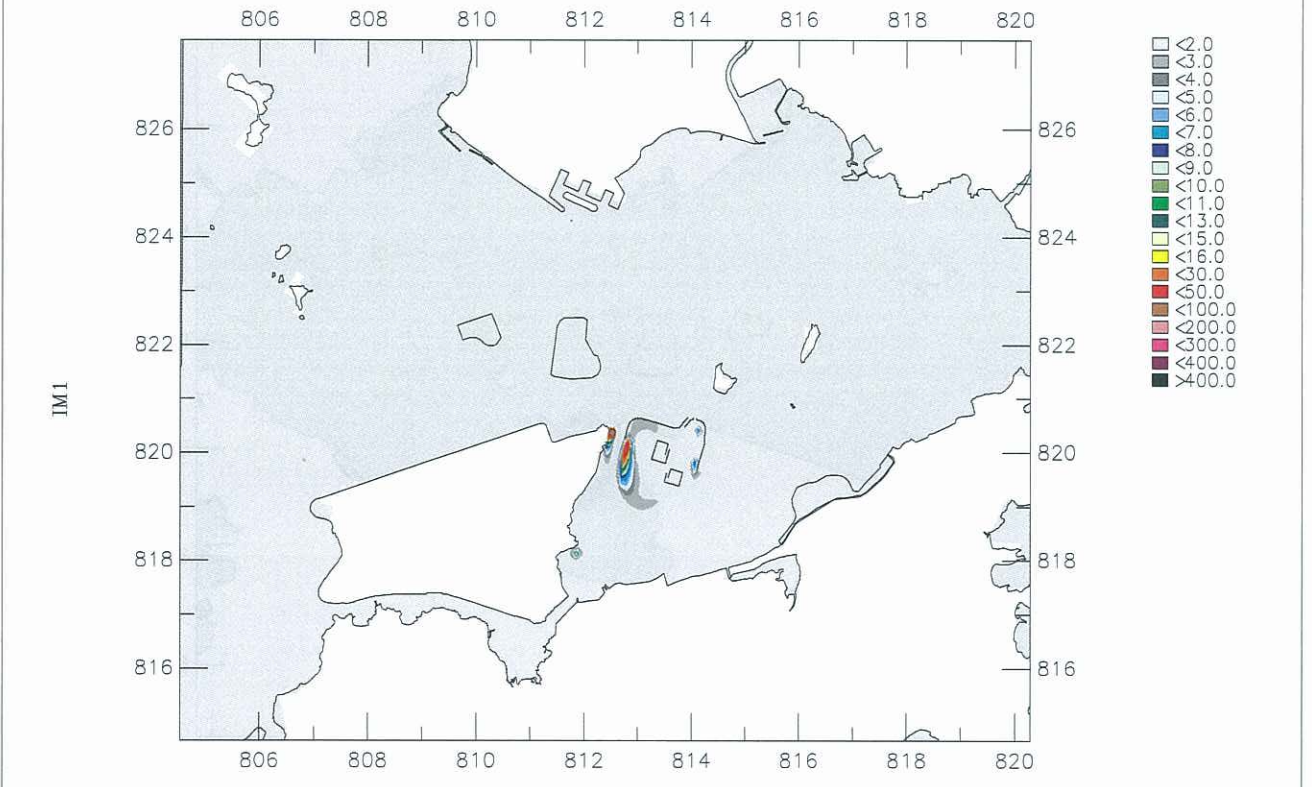
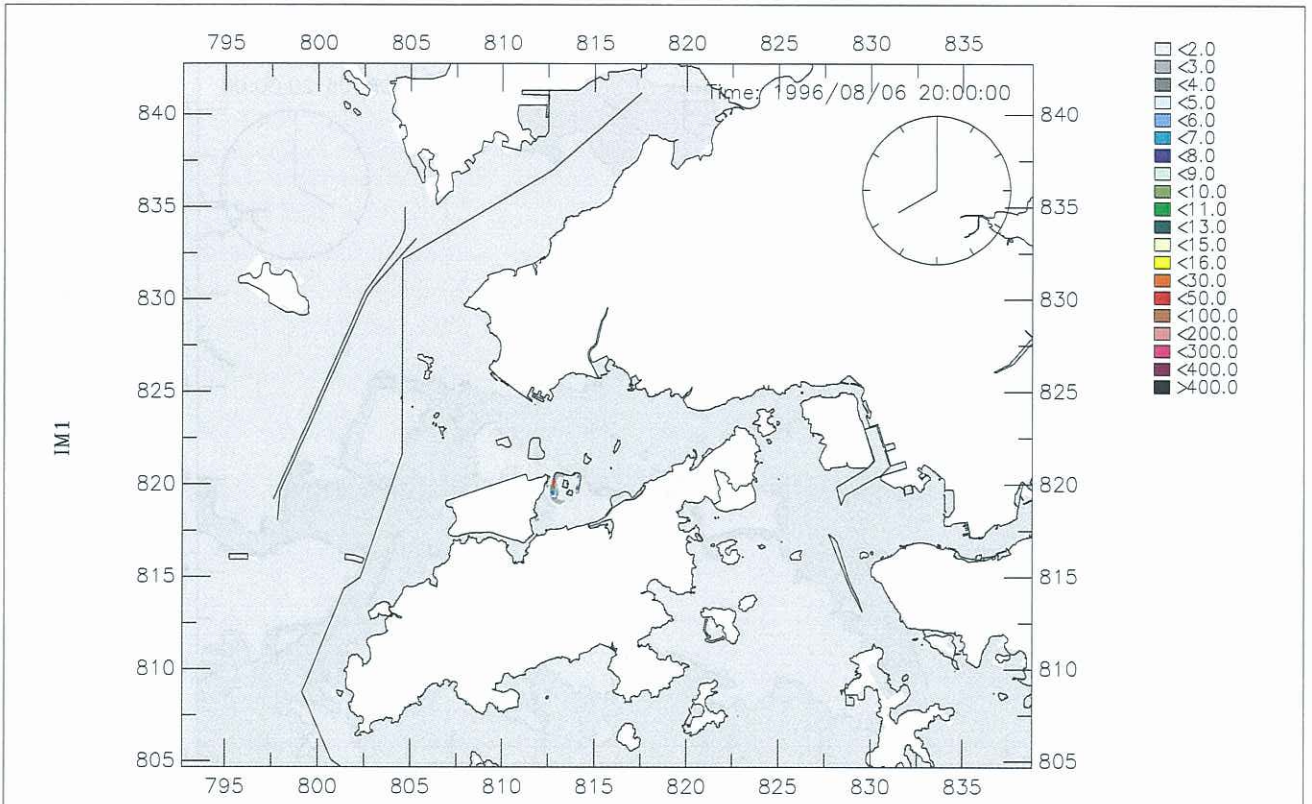
AECOM



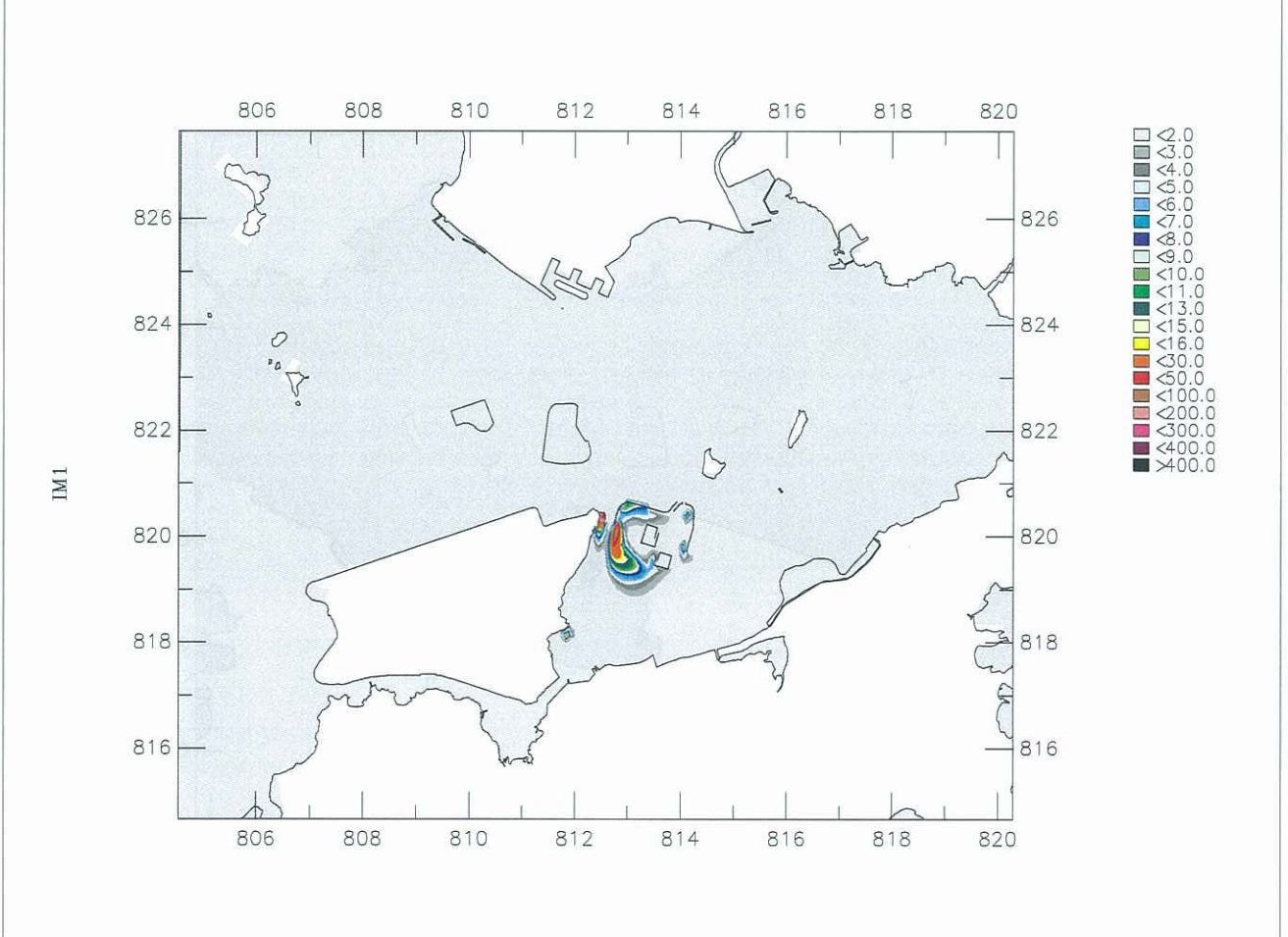
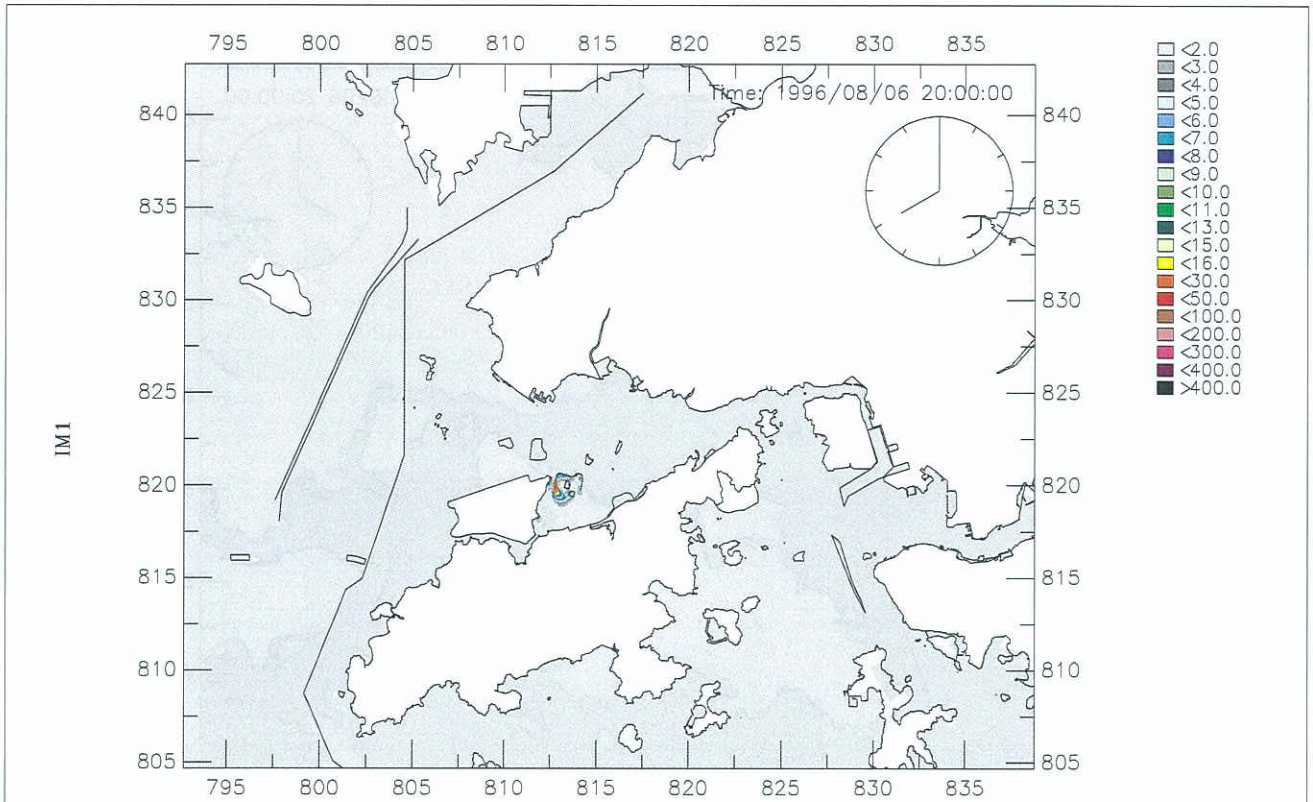
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Mid-Depth Spring Tide, Highest High	Jul 2009	Figure 023
	2011b-Wet (POM1-R11f)	
AECOM		



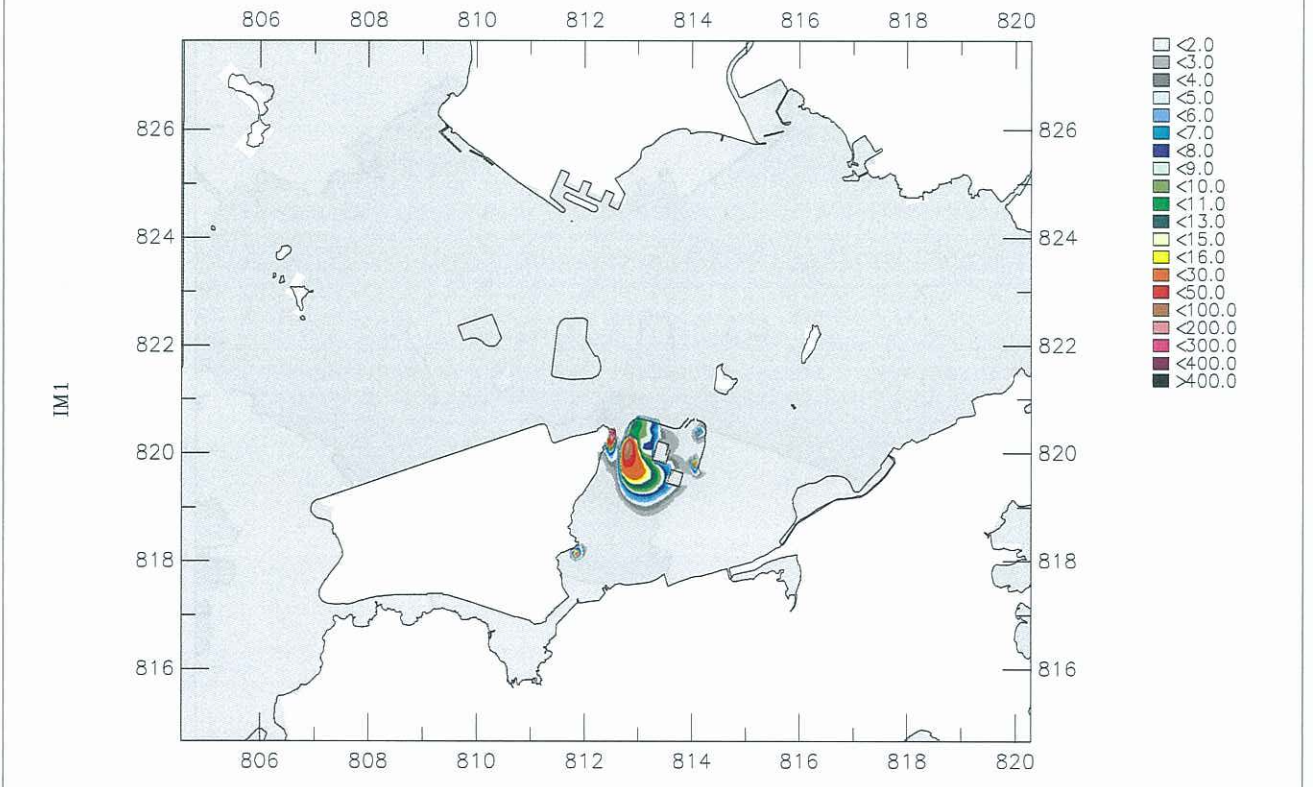
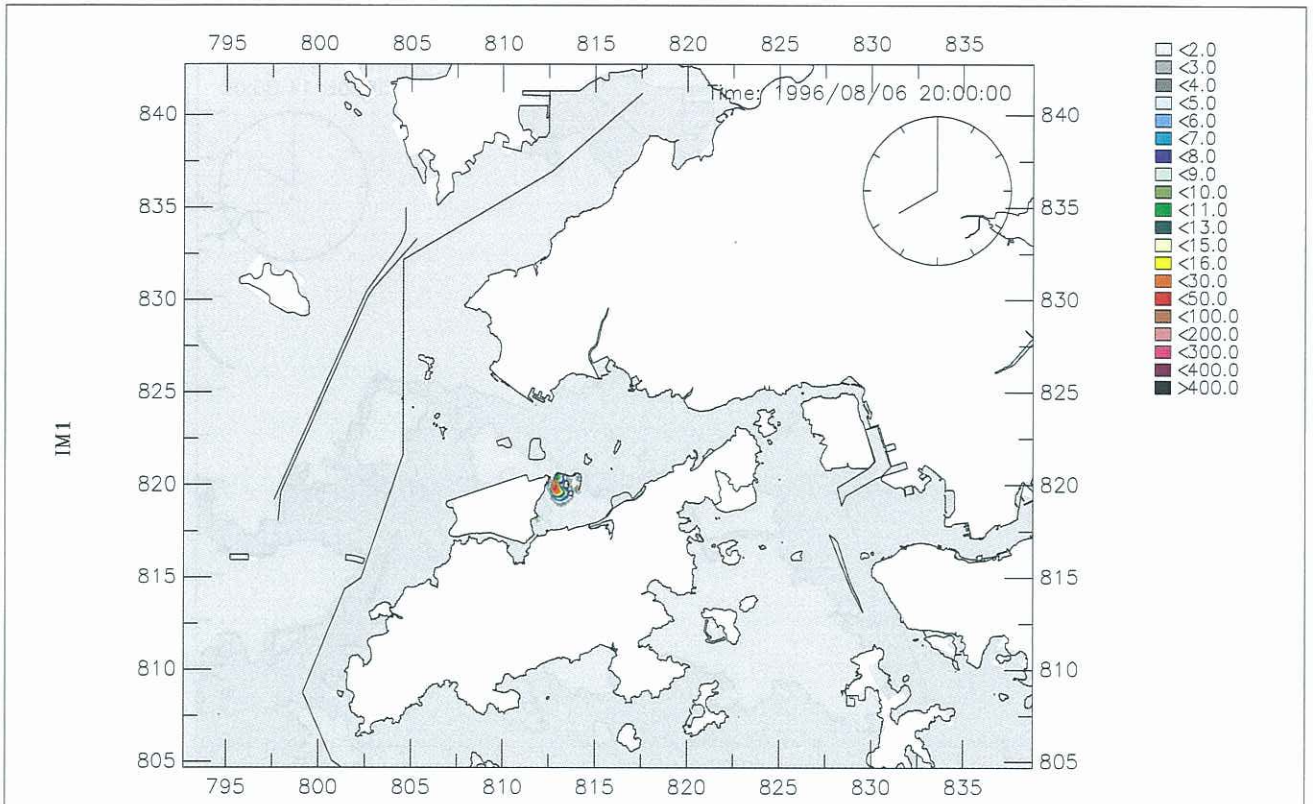
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Bottom Layer Spring Tide, Highest High	Jul 2009	Figure 024
	2011b-Wet (POM1-R11f)	
AECOM		



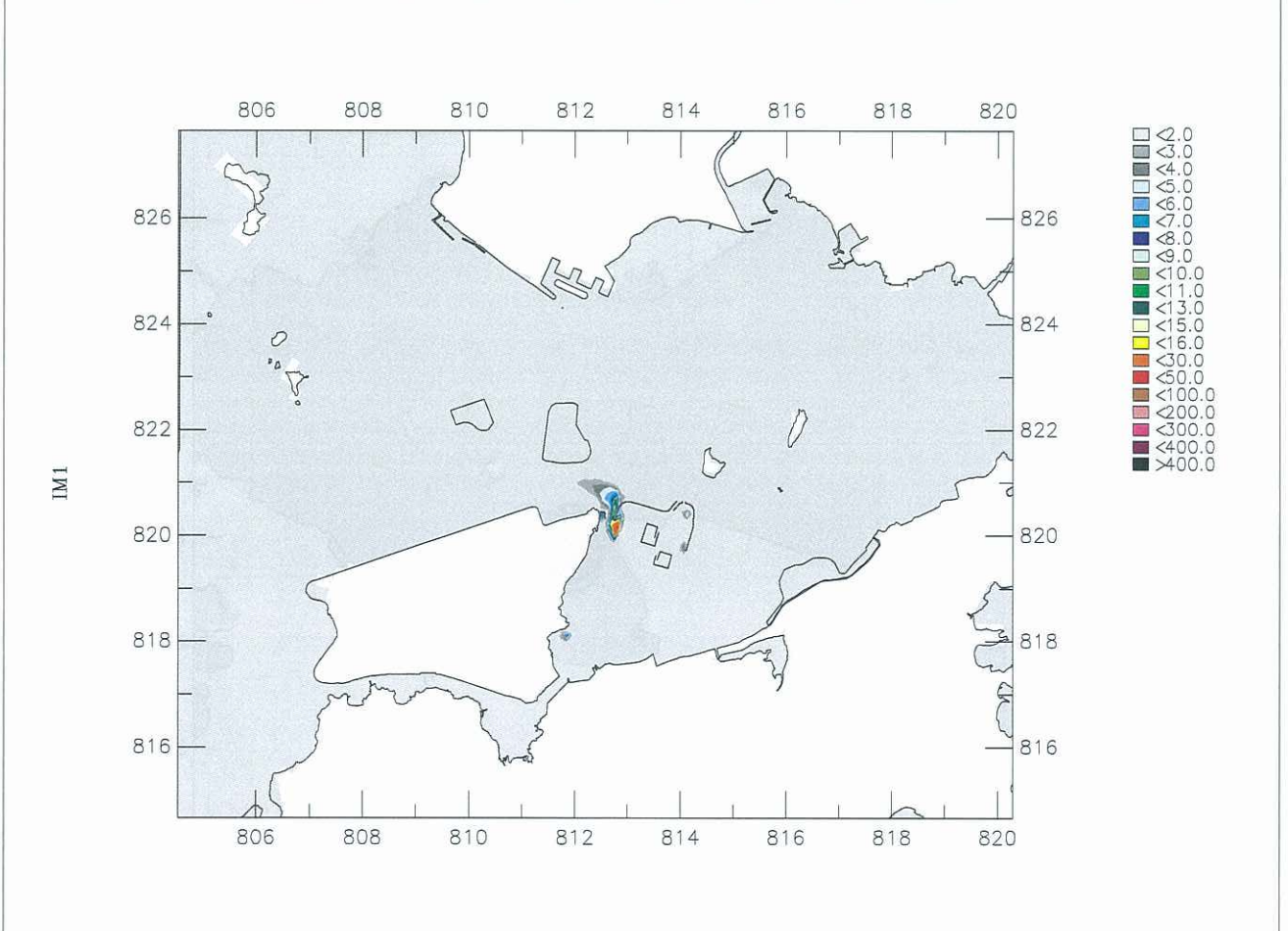
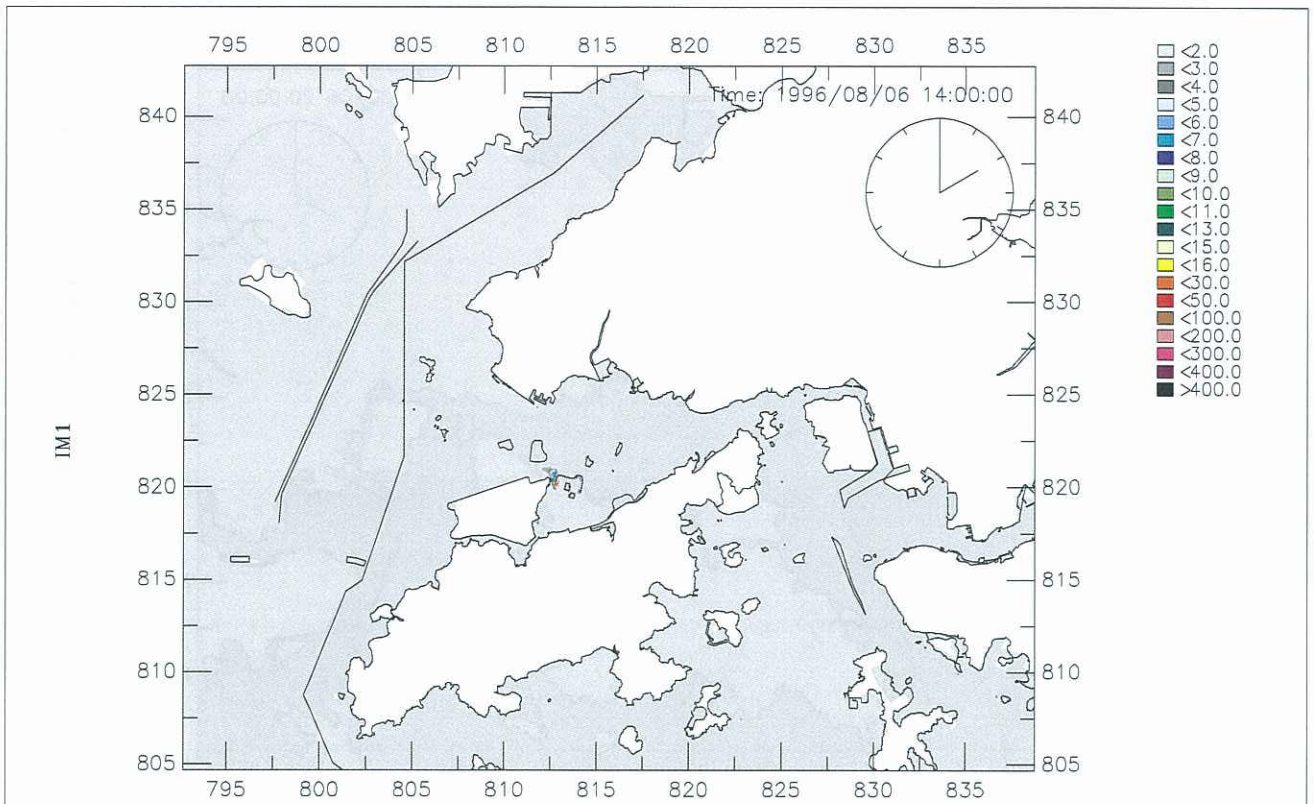
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Surface Layer Neap Tide, Lowest Low	Jul 2009	Figure 025
	2011b-Dry (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Mid-Depth Neap Tide, Lowest Low	Jul 2009	Figure 026
	2011b-Dry (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Bottom Layer Neap Tide, Lowest Low	Jul 2009	Figure 027
	2011b-Dry (POM1-R11f)	
AECOM		



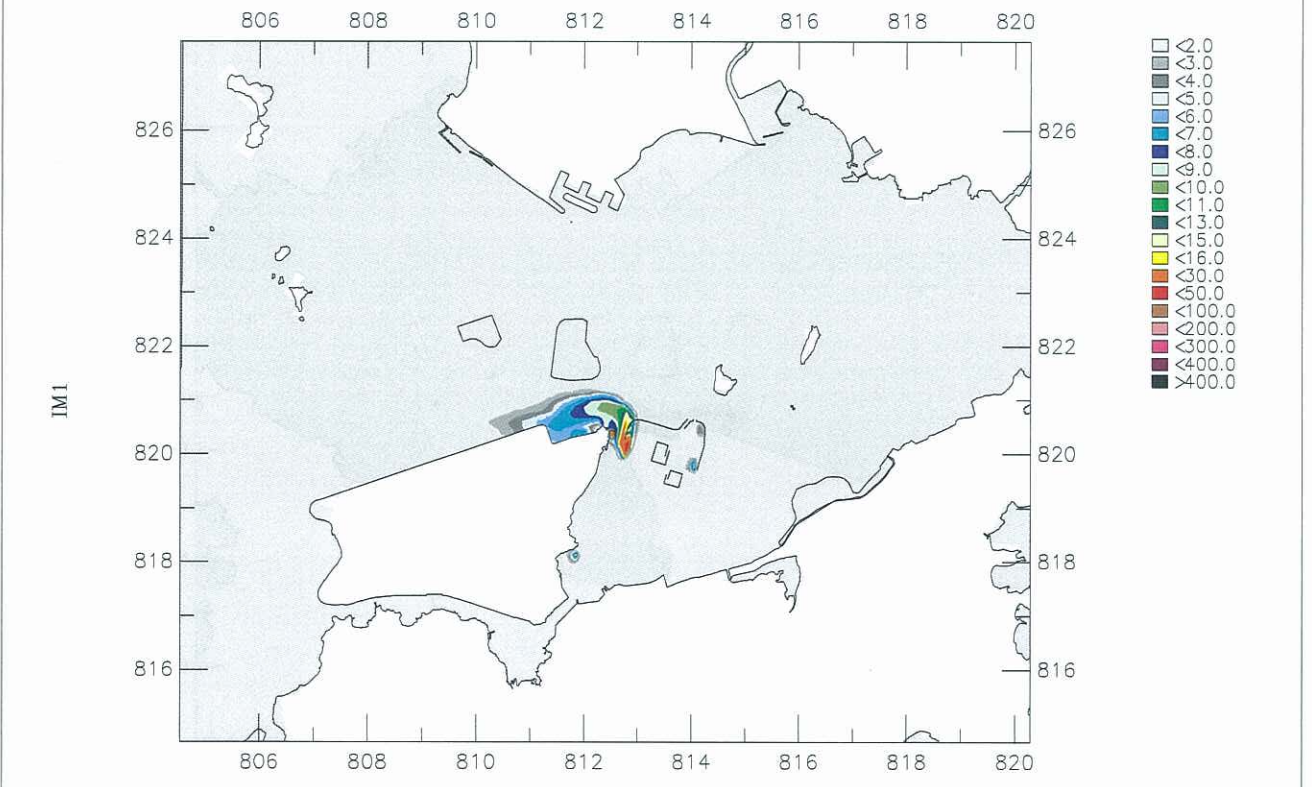
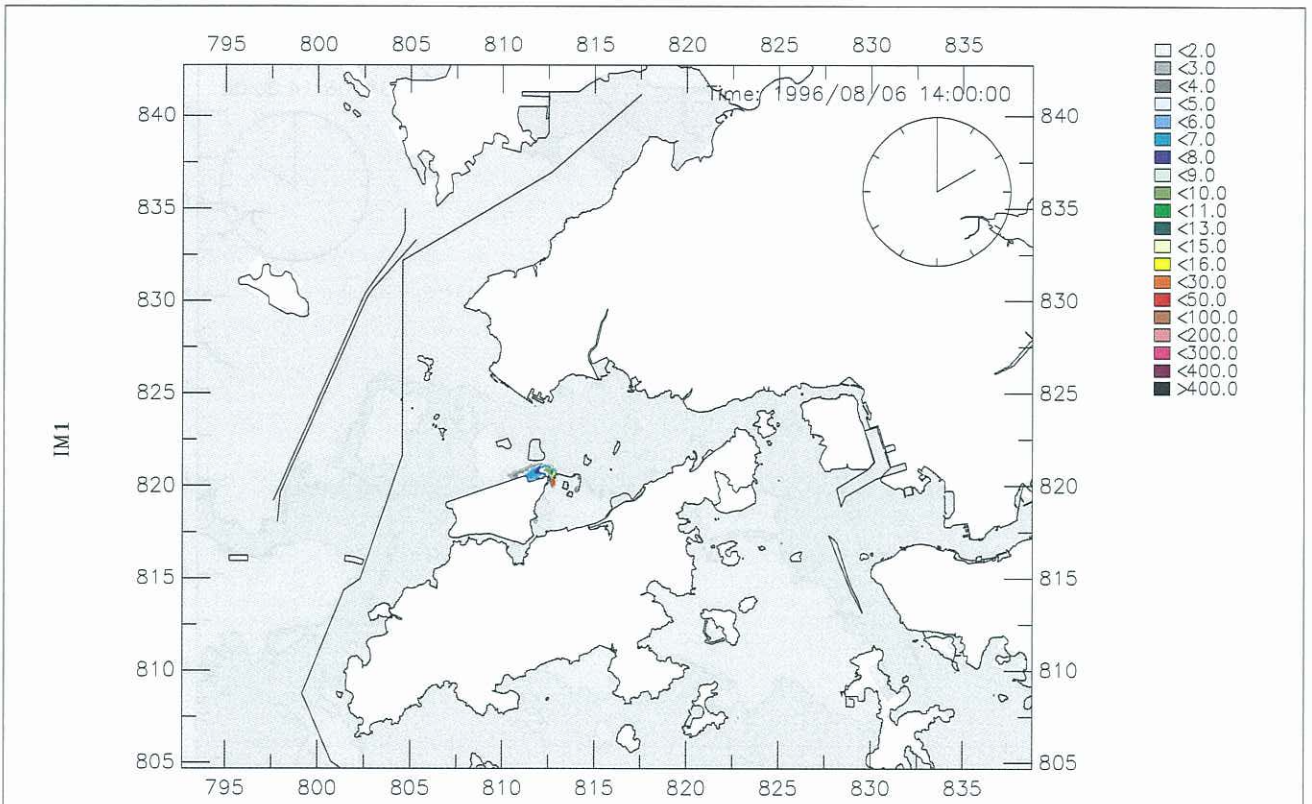
Year 2011 (Sequence B), Mitigated
 SS (mg/L) Contour, Dry Season, Surface Layer
 Neap Tide, Highest High

Jul 2009

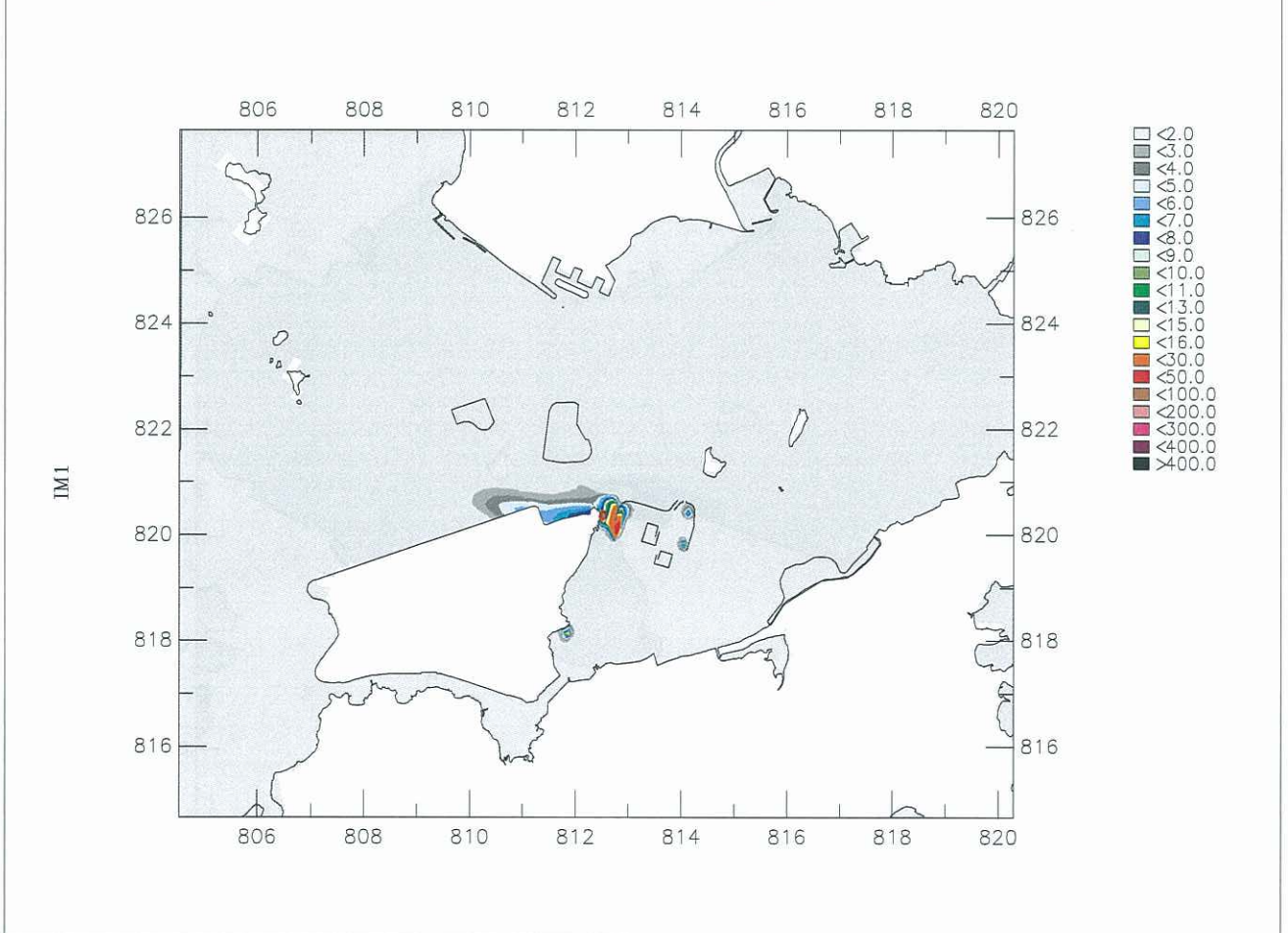
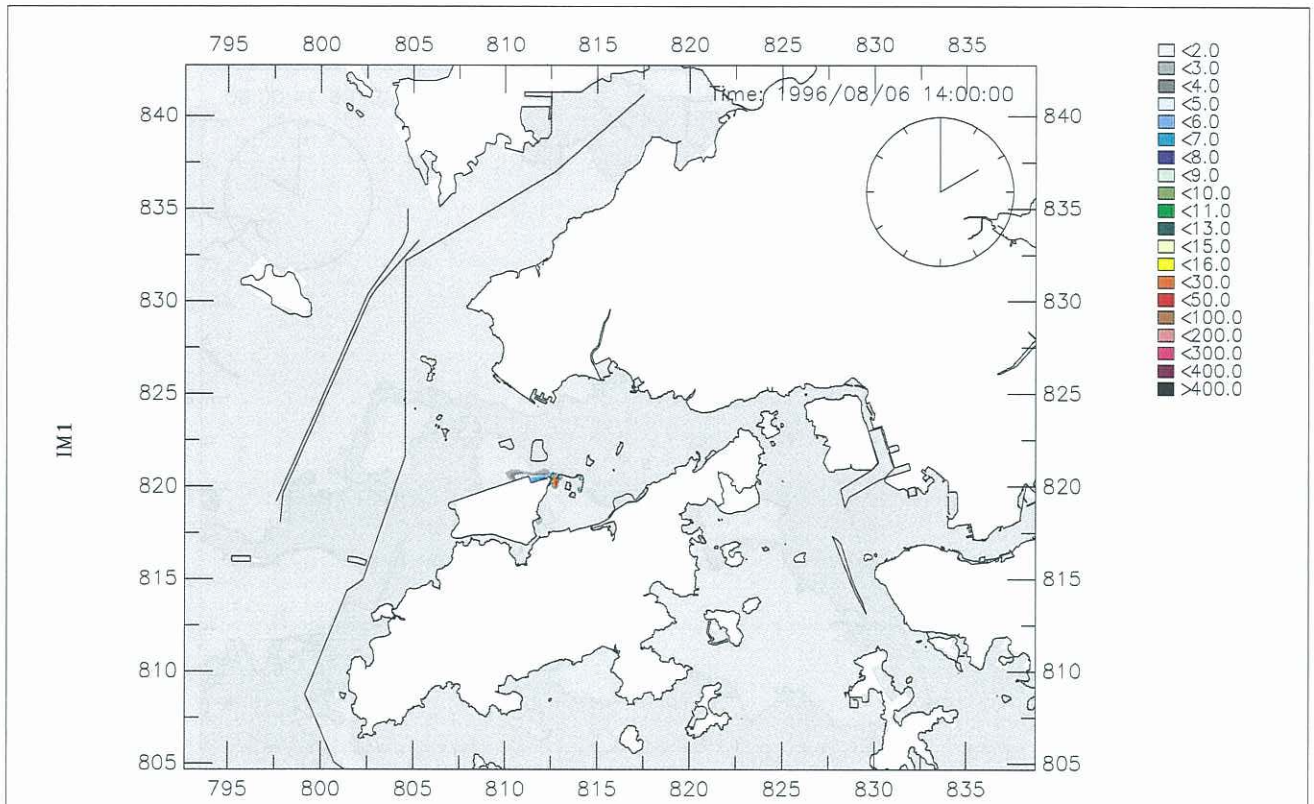
Figure 028

2011b-Dry (POM1-R11f)

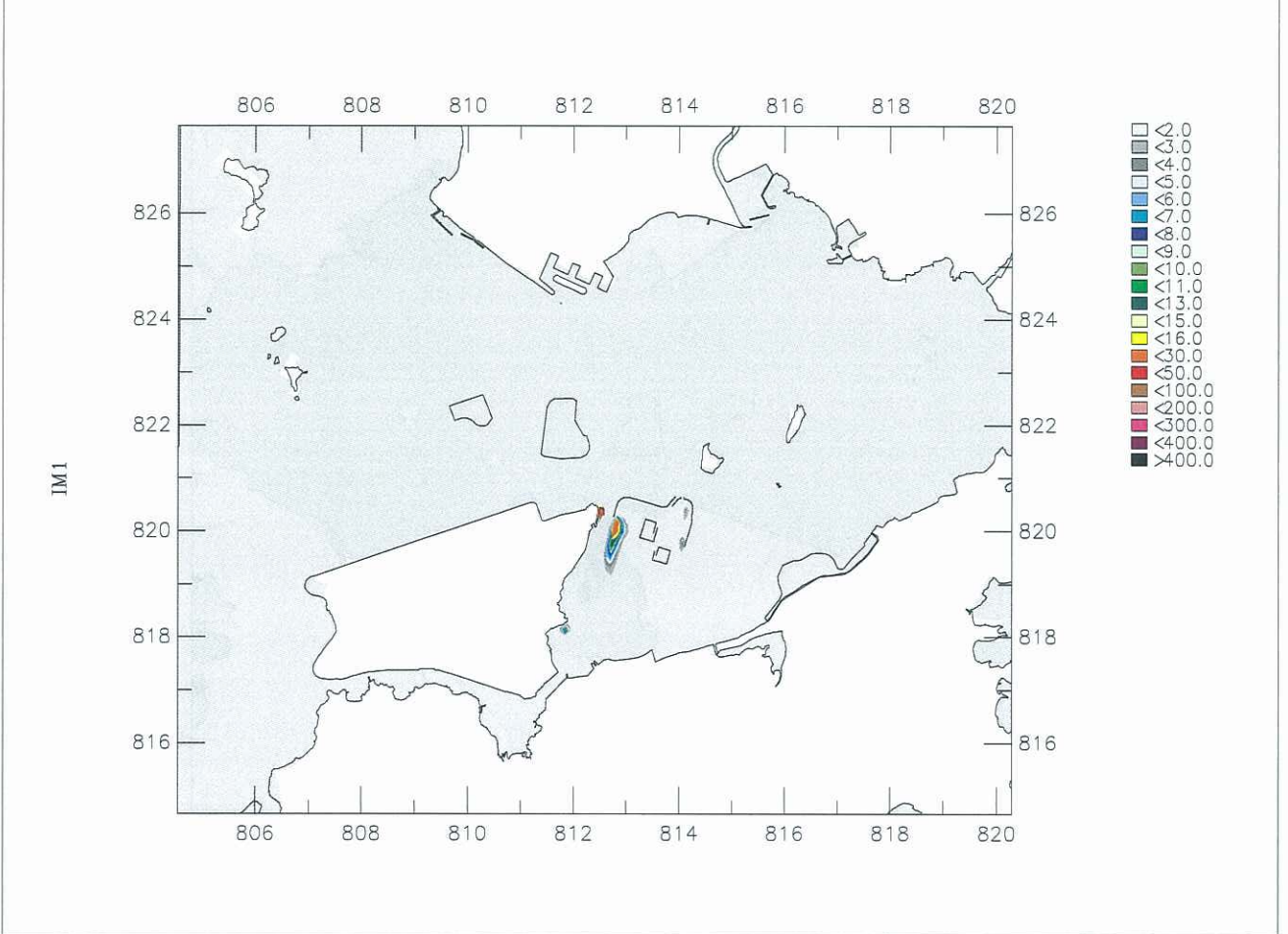
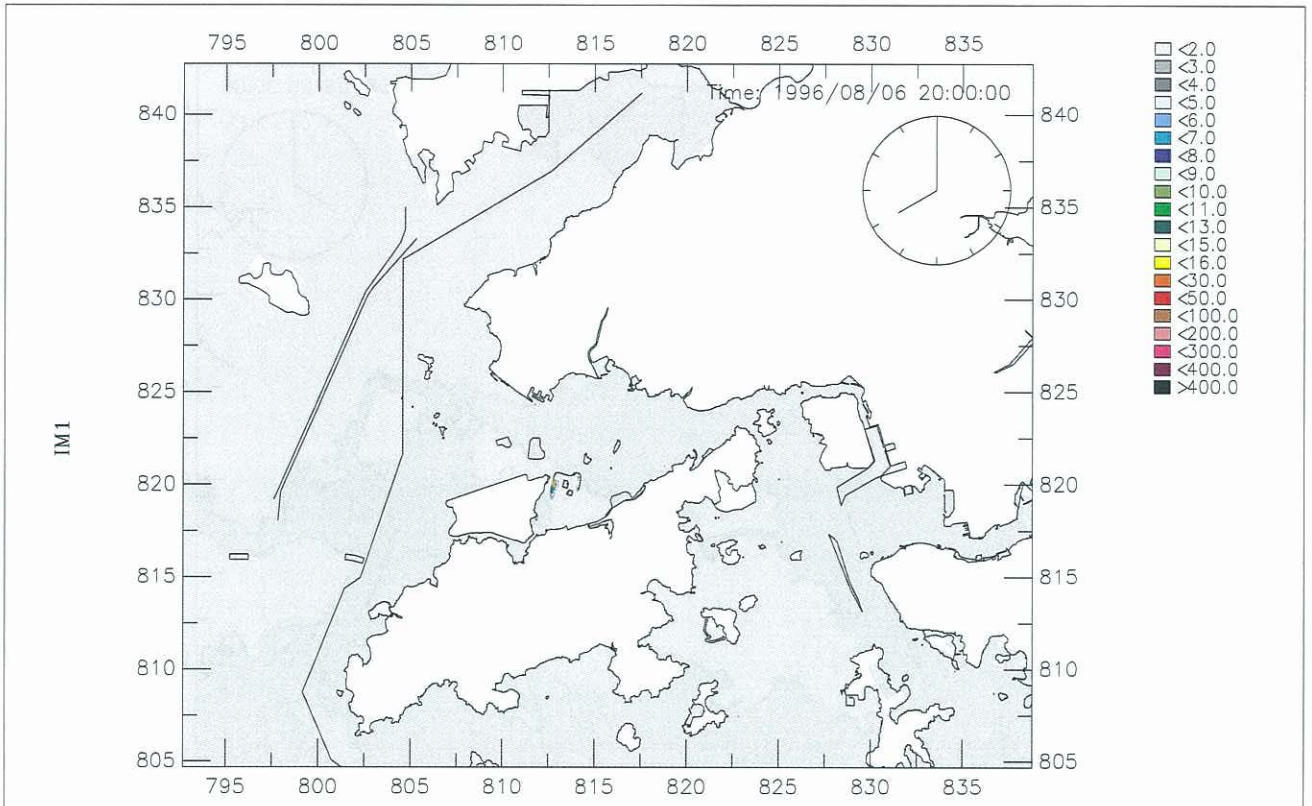
AECOM



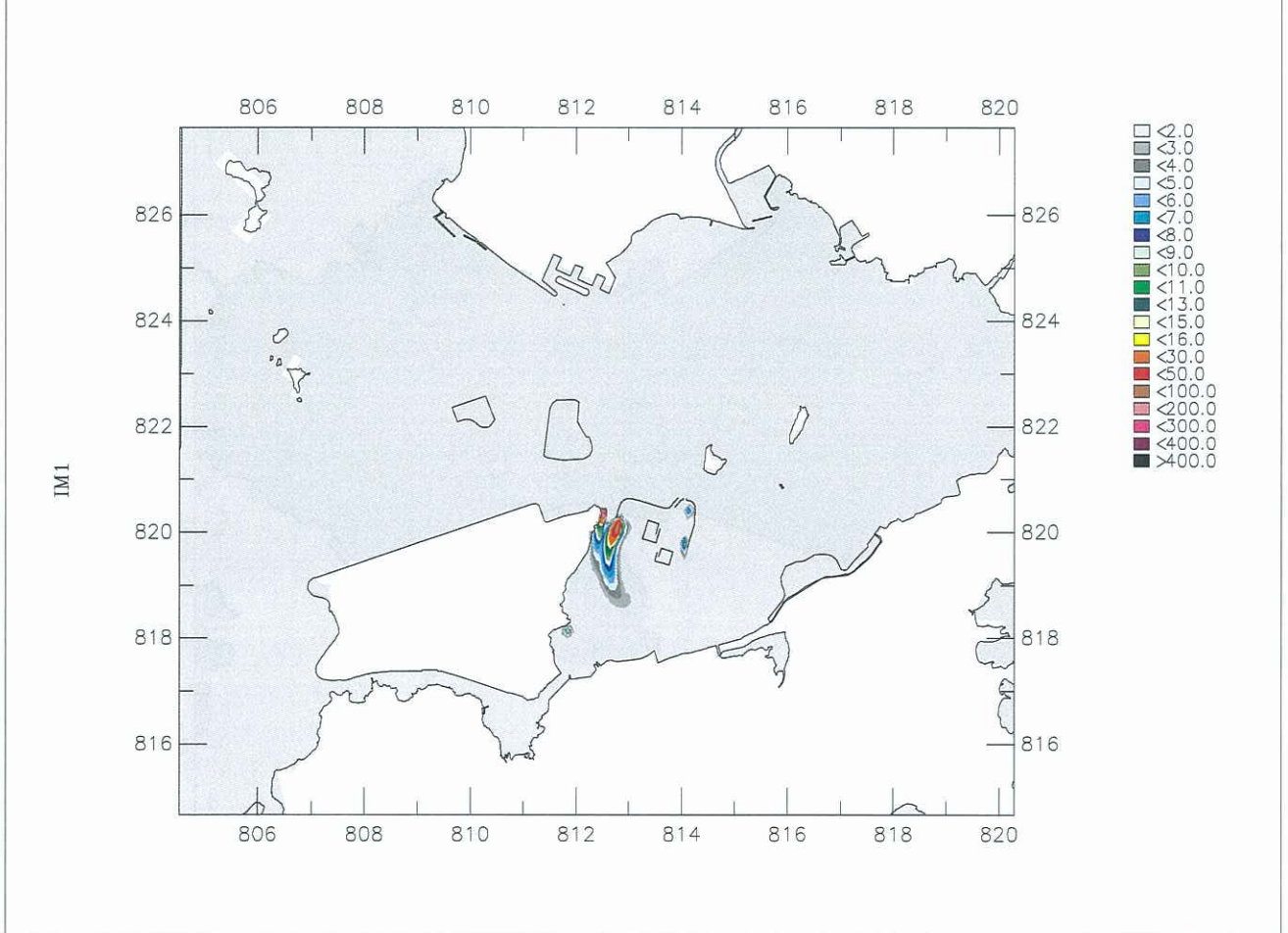
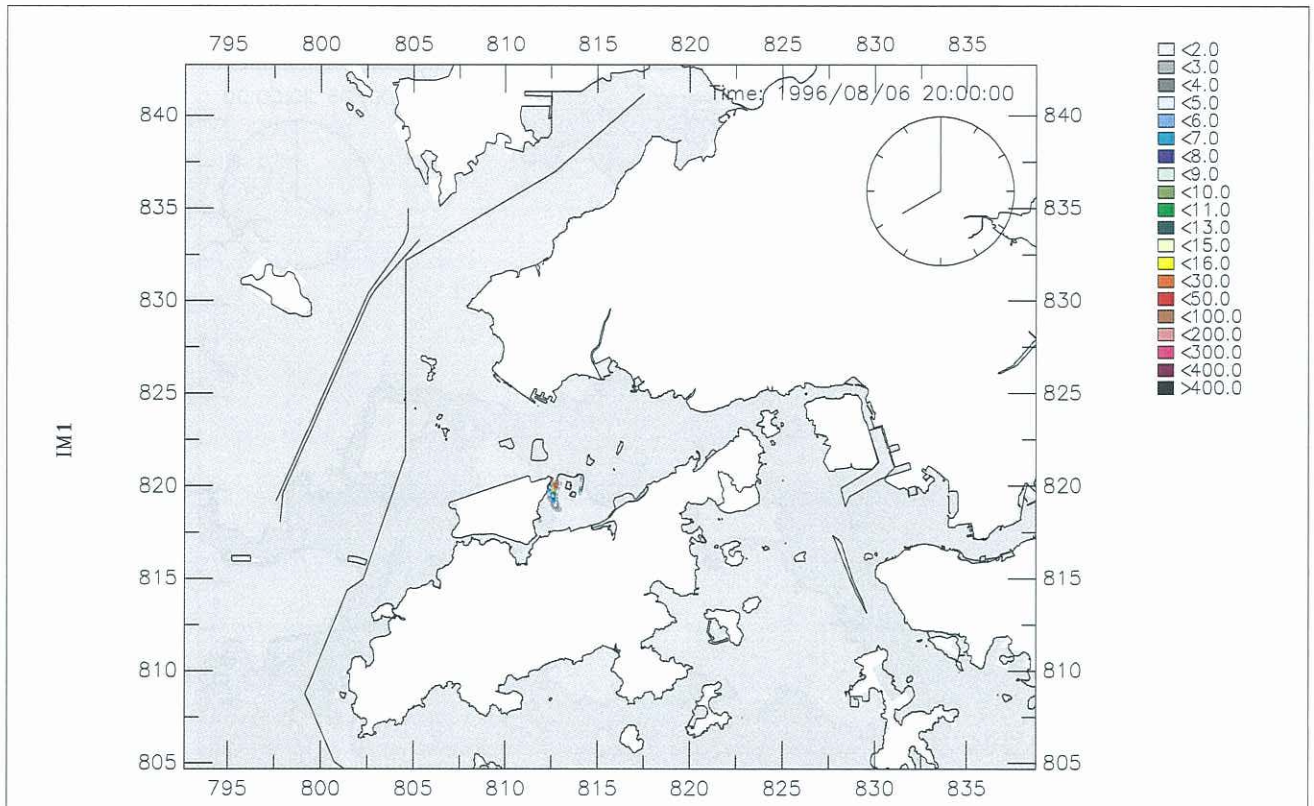
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Mid-Depth Neap Tide, Highest High	Jul 2009	Figure 029
	2011b-Dry (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Dry Season, Bottom Layer Neap Tide, Highest High	Jul 2009	Figure 030
	2011b-Dry (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Surface Layer Neap Tide, Lowest Low	Jul 2009	Figure 031
	2011b-Wet (POM1-R11f)	
AECOM		



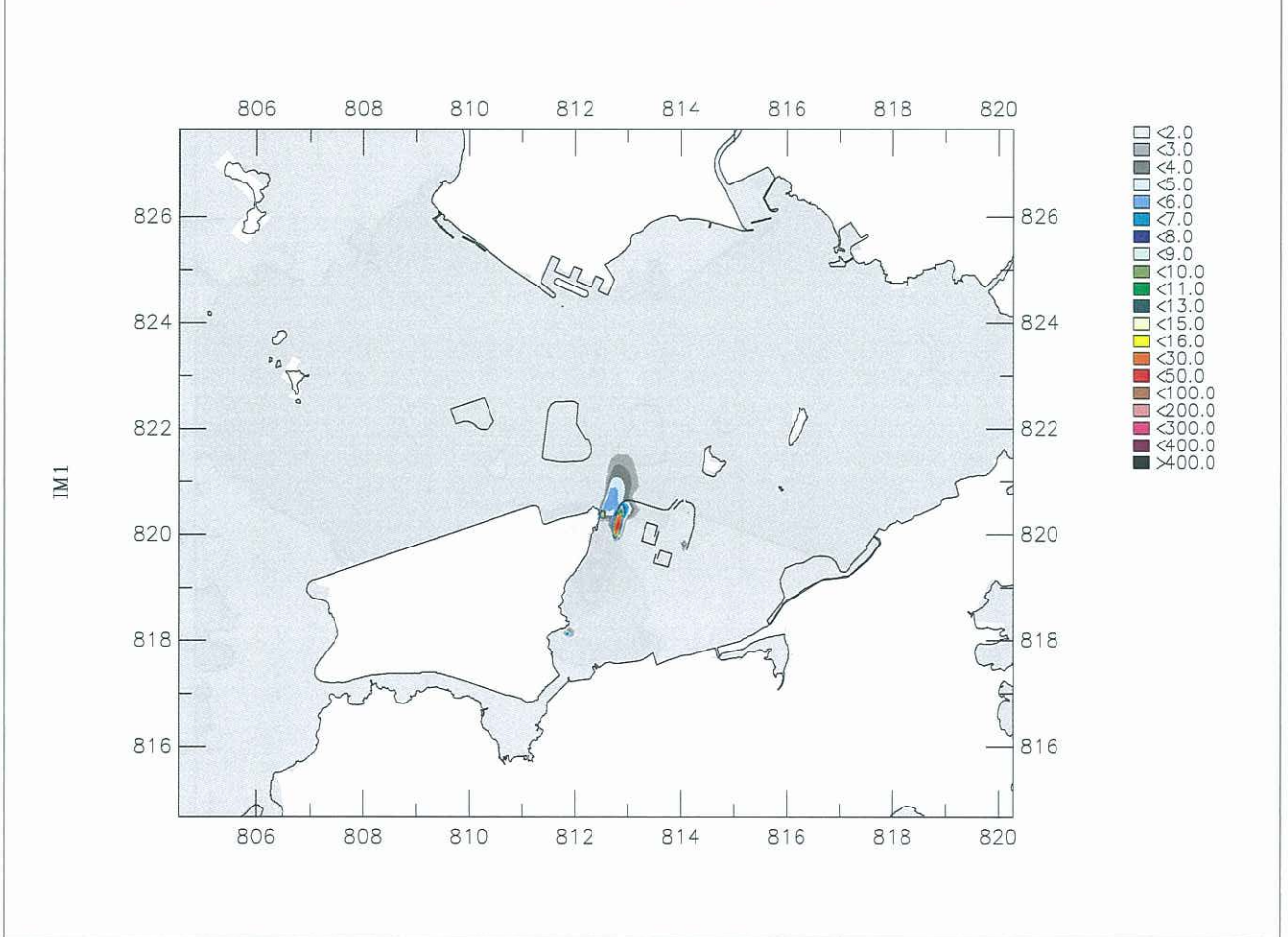
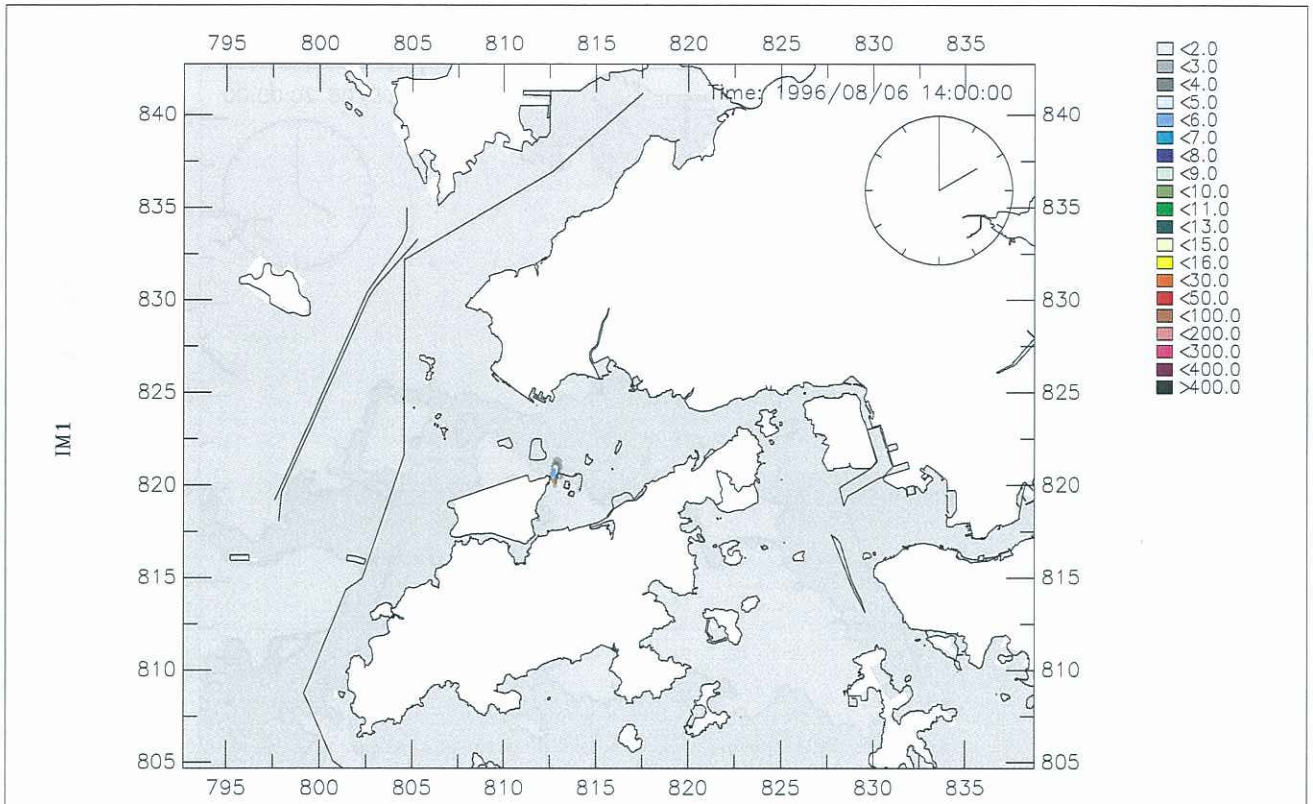
Year 2011 (Sequence B), Mitigated
 SS (mg/L) Contour, Wet Season, Mid-Depth
 Neap Tide, Lowest Low

Jul 2009

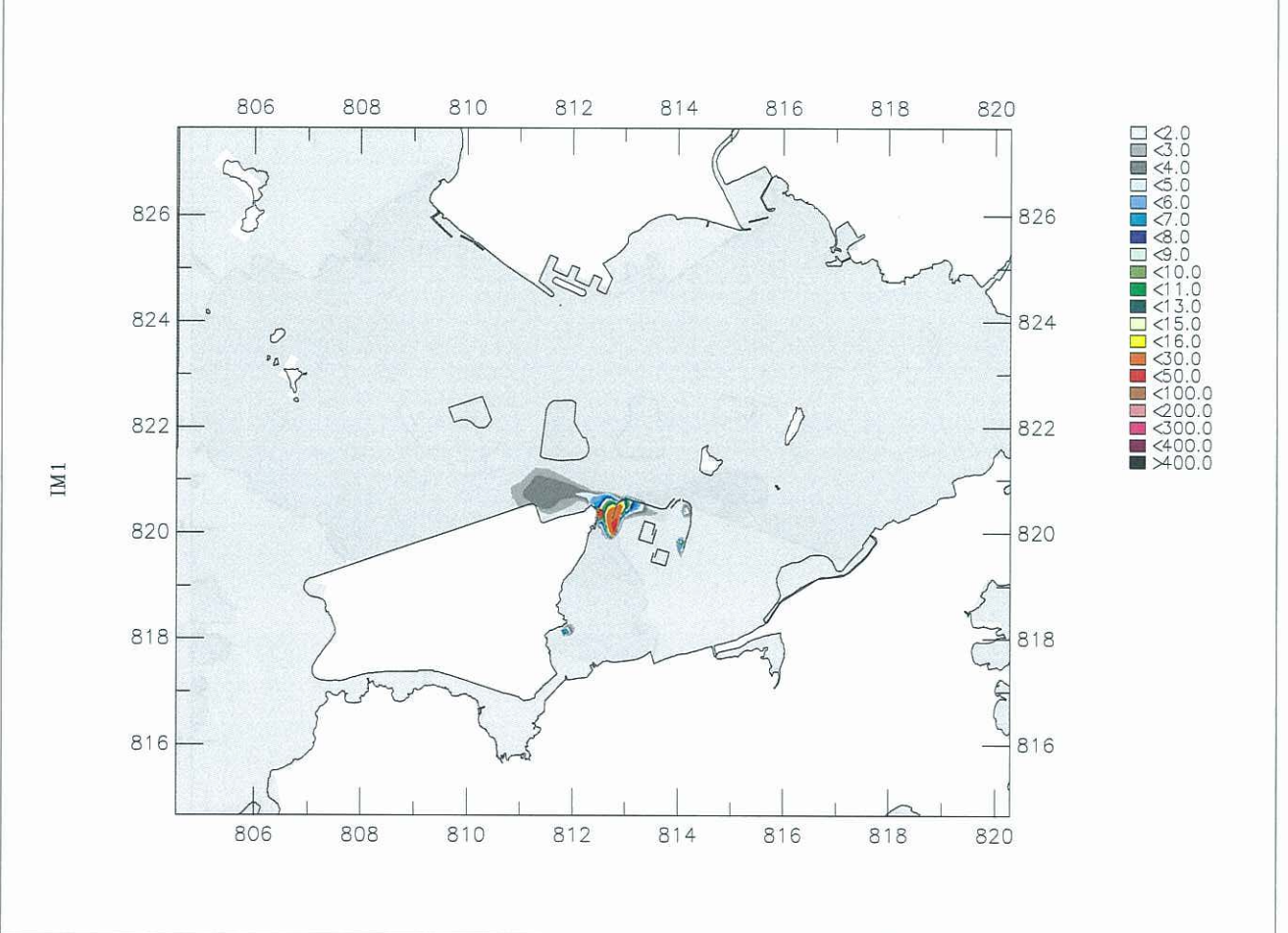
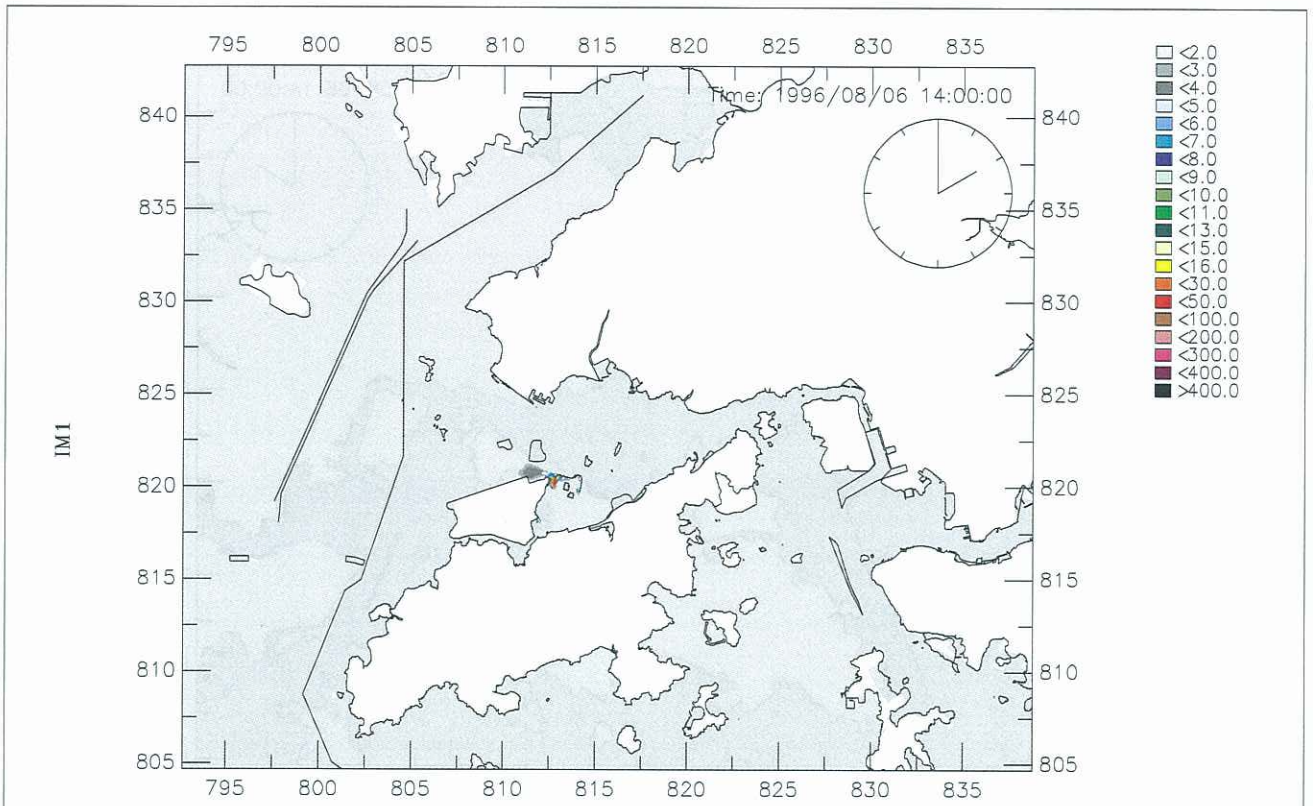
Figure 032

2011b-Wet (POM1-R11f)

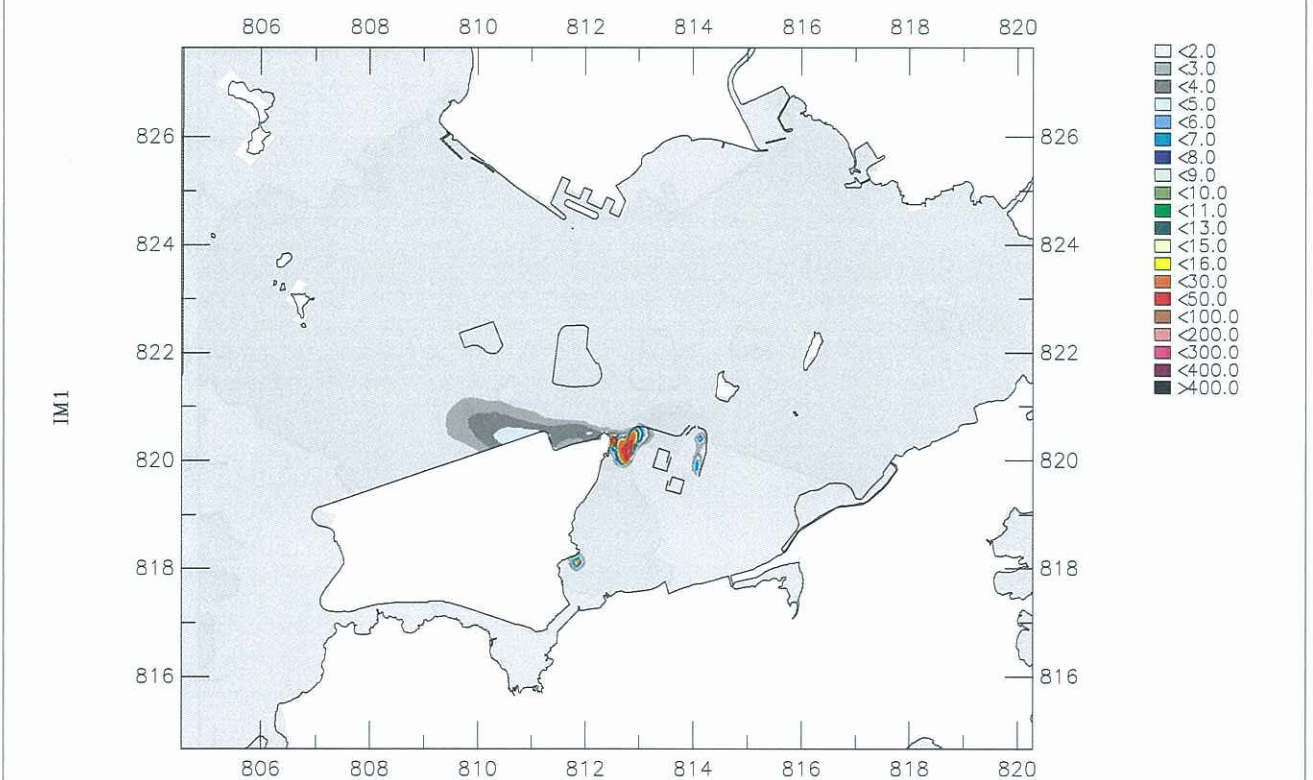
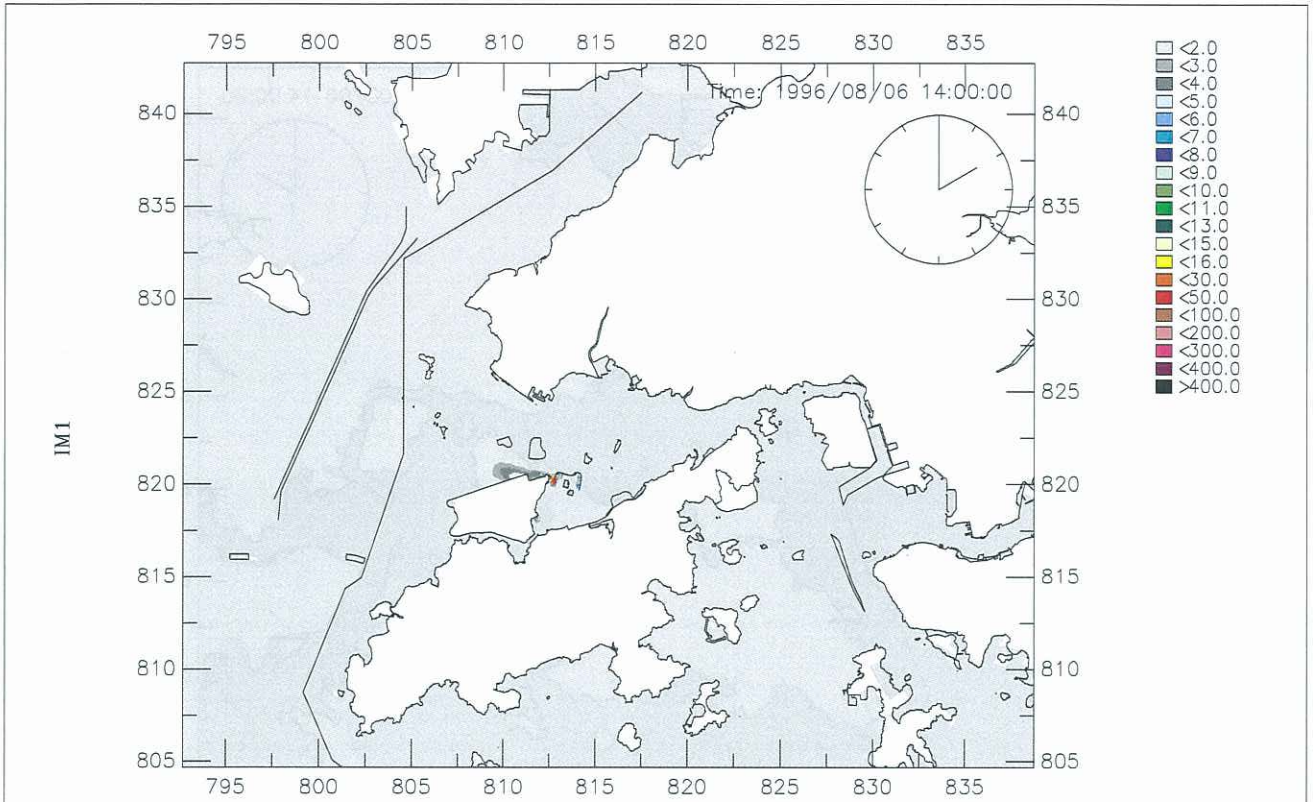
AECOM



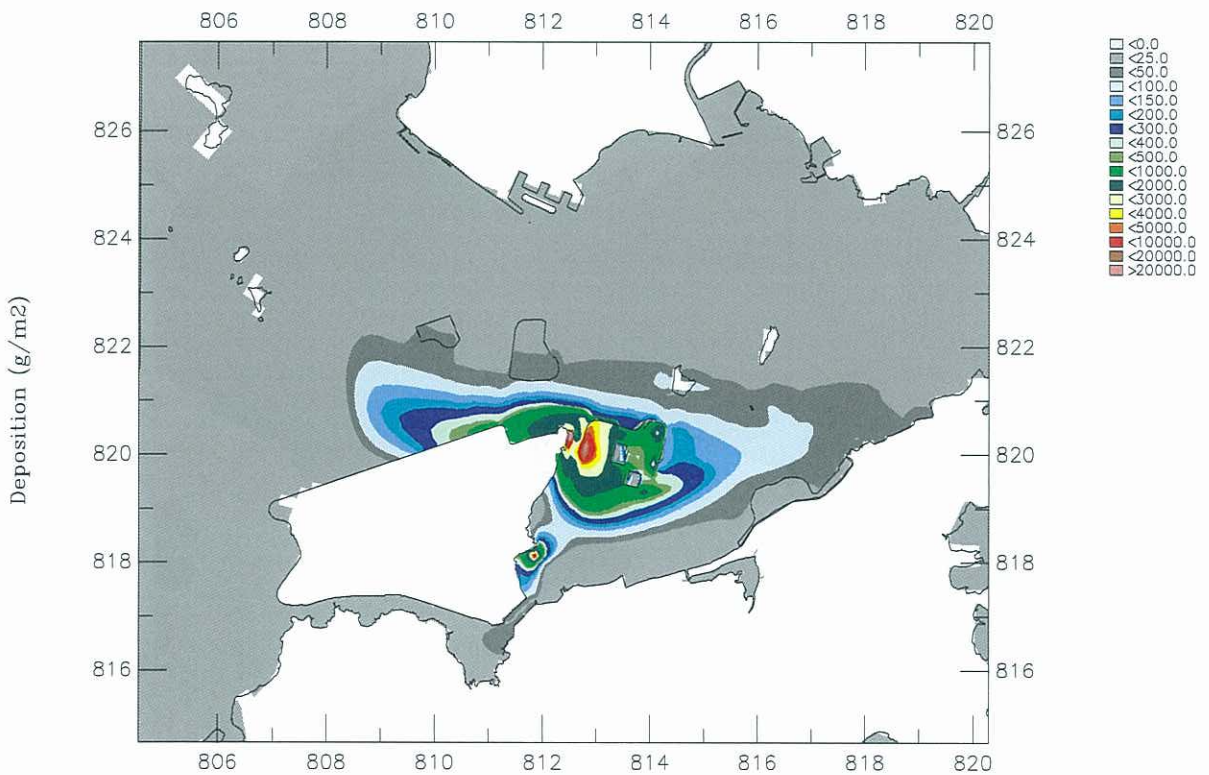
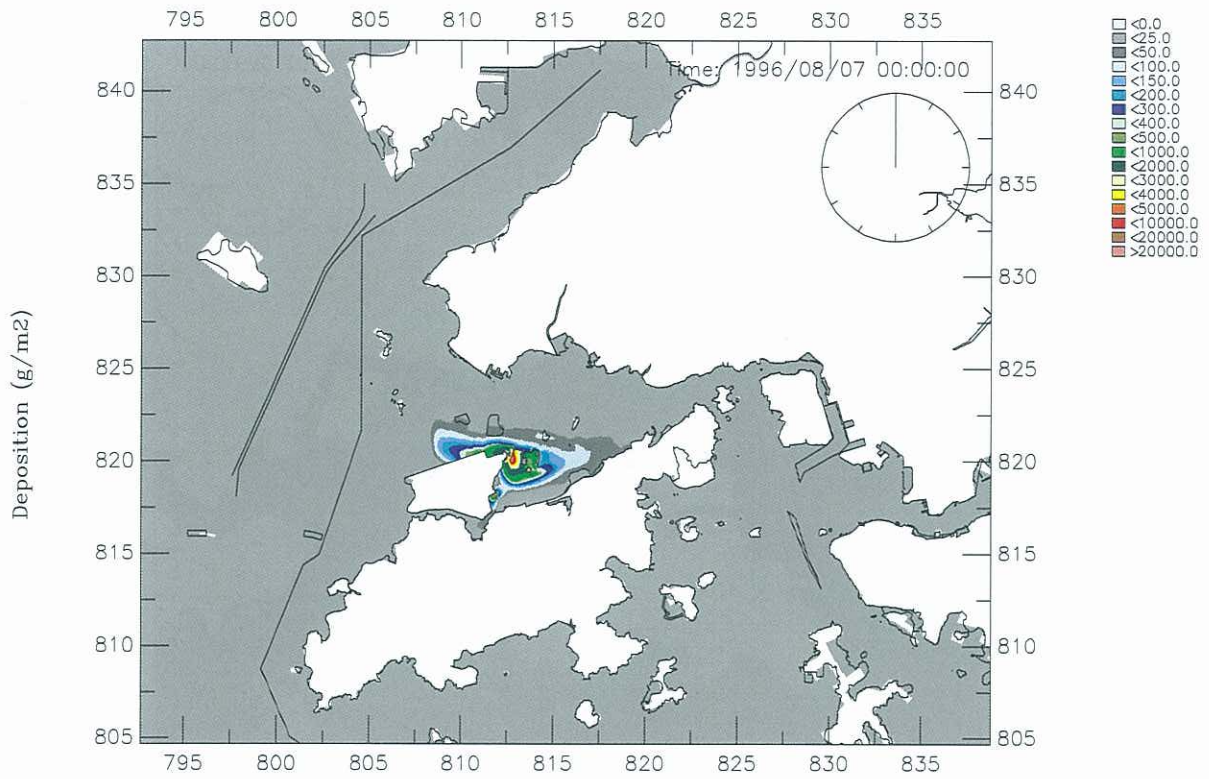
Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Surface Layer Neap Tide, Highest High	Jul 2009	Figure 034
	2011b-Wet (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Mid-Depth Neap Tide, Highest High	Jul 2009	Figure 035
	2011b-Wet (POM1-R11f)	
AECOM		



Year 2011 (Sequence B), Mitigated SS (mg/L) Contour, Wet Season, Bottom Layer Neap Tide, Highest High	Jul 2009	Figure 036
	2011b-Wet (POM1-R11f)	
AECOM		

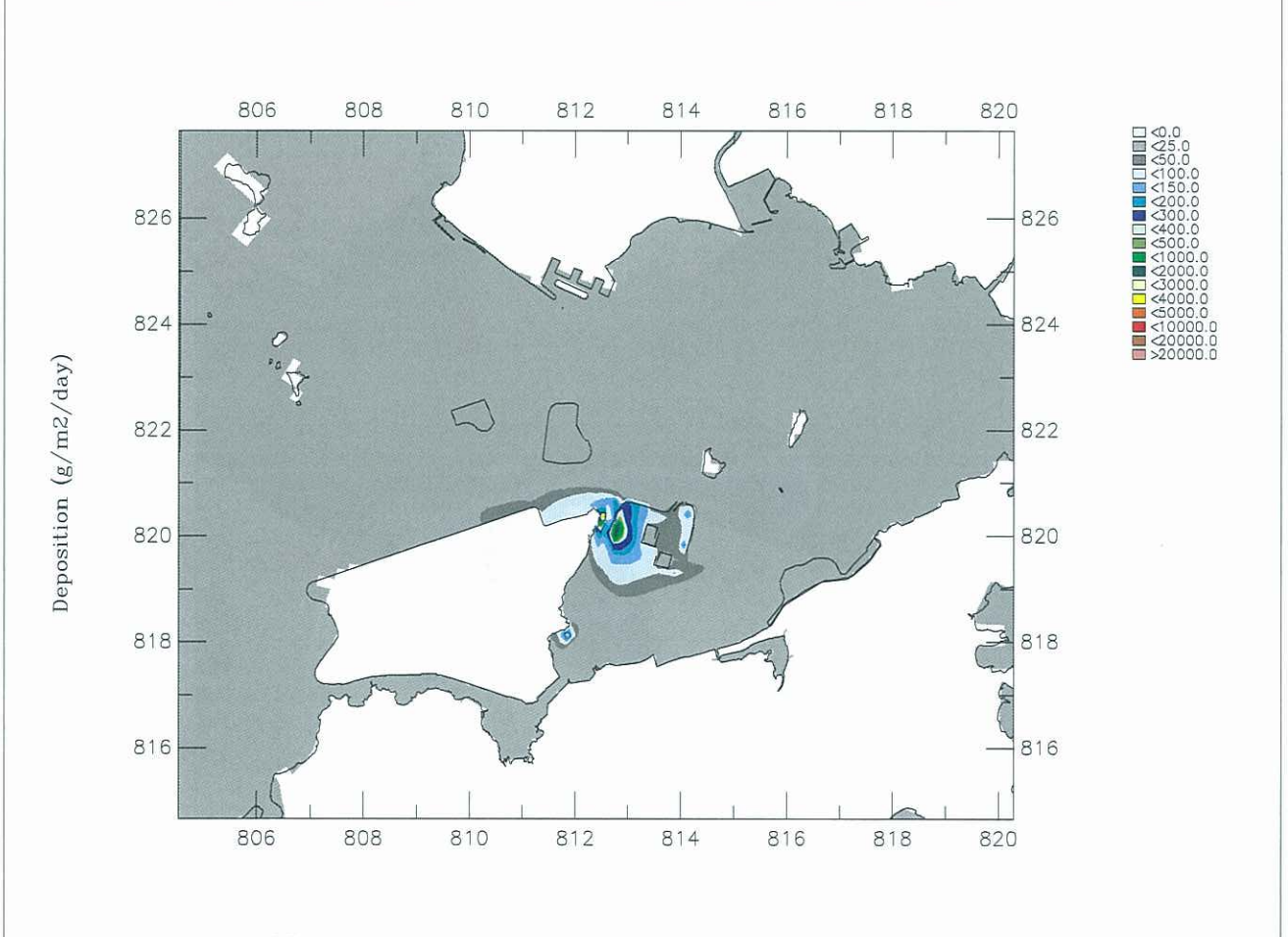
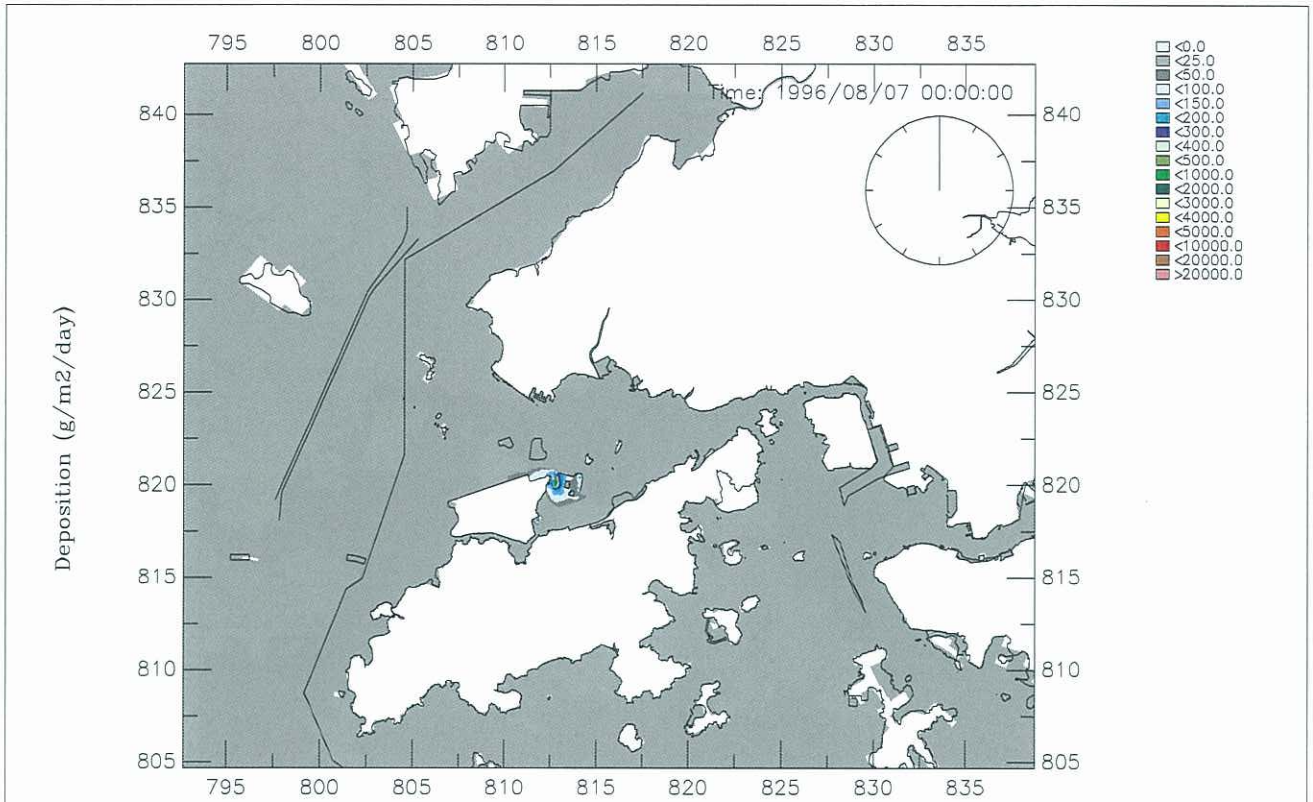


Year 2011 (Sequence B), Mitigated
Total Deposition (g/m²) Contour, Dry Season,

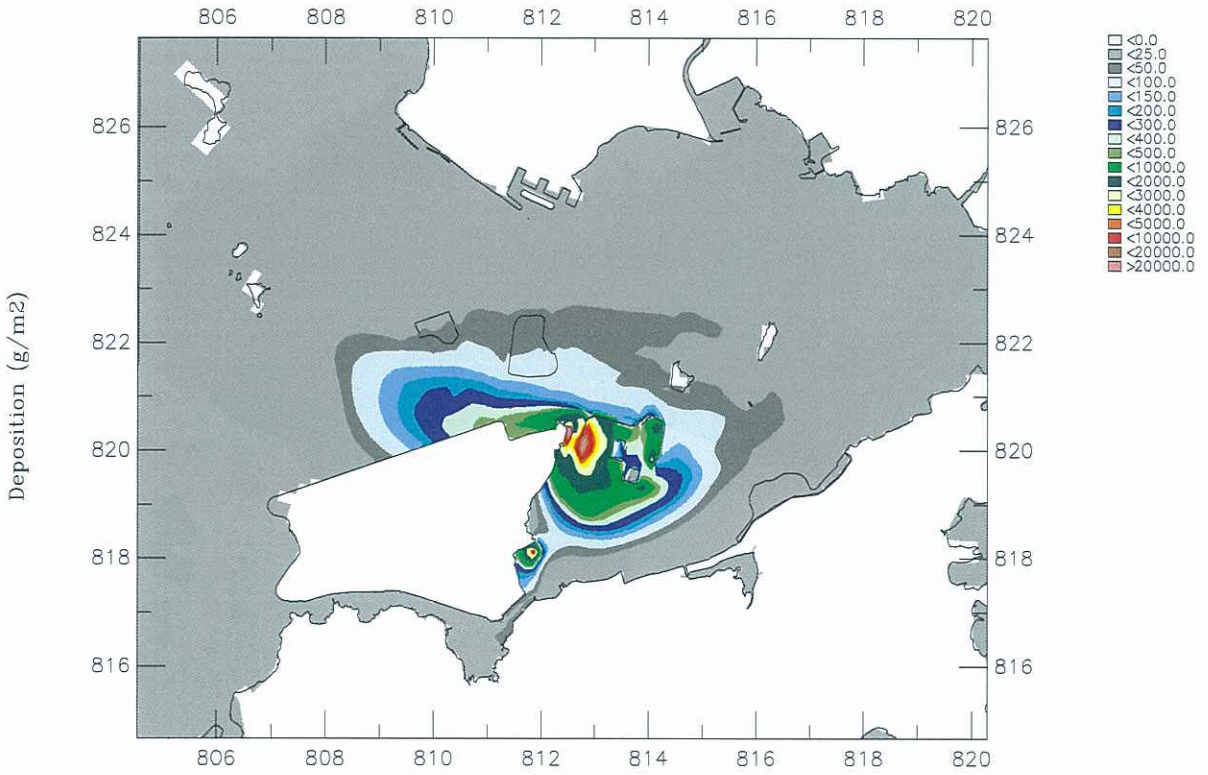
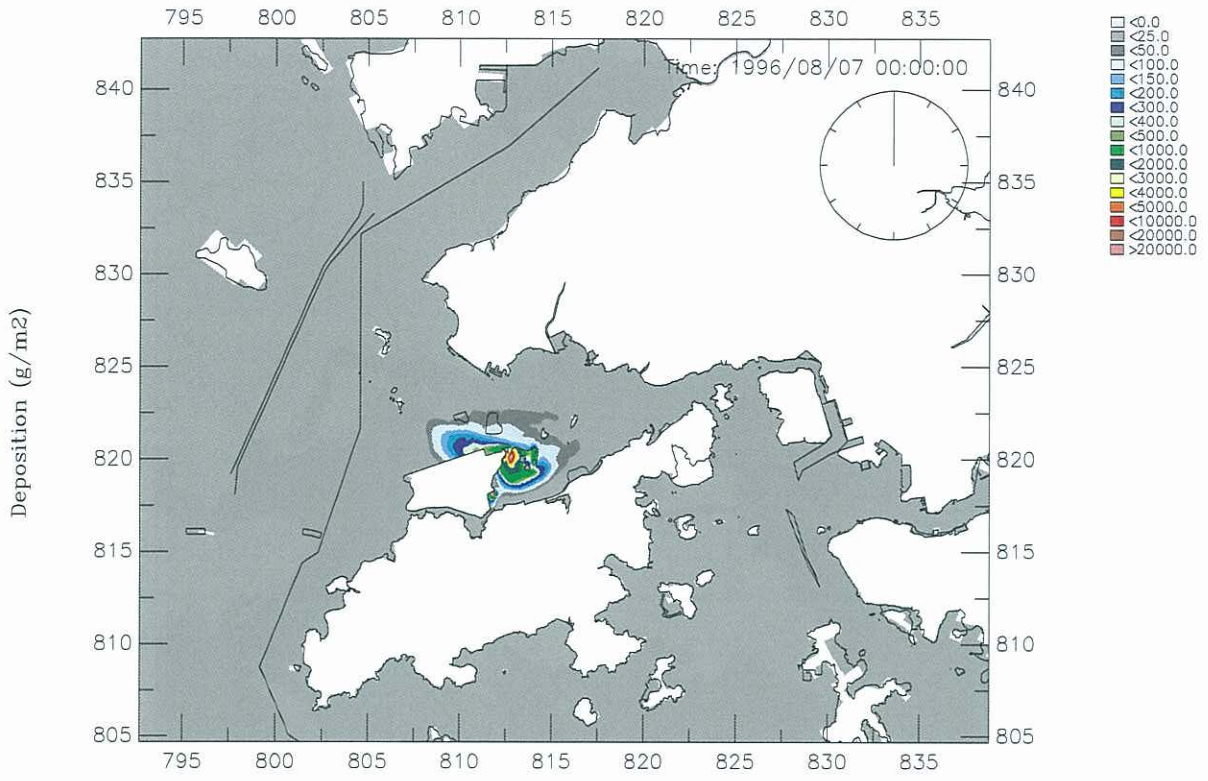
Jul 2009

Figure 037

2011b-Dry (POM1-R11f)



Year 2011 (Sequence B), Mitigated Daily Average Deposition (g/m ² /day) Contour, Dry Season,	Jul 2009	Figure 038
	2011b-Dry (POM1-R11f)	
AECOM		

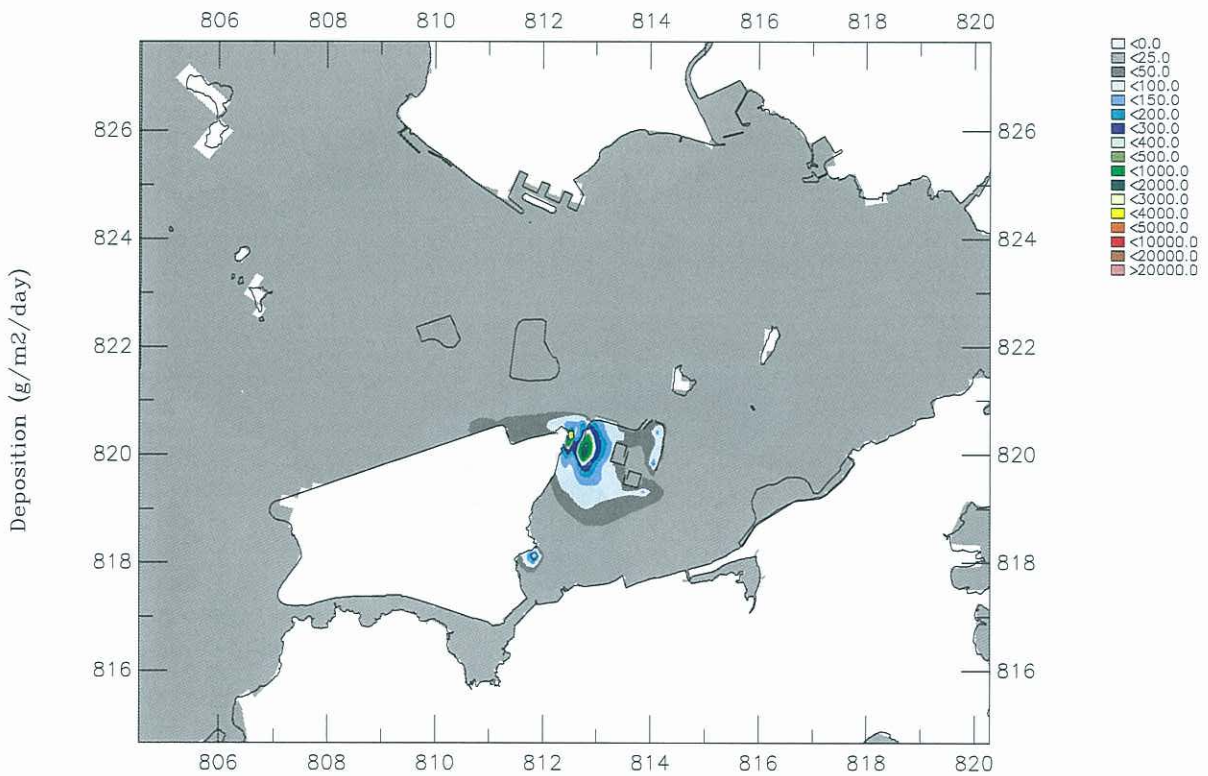
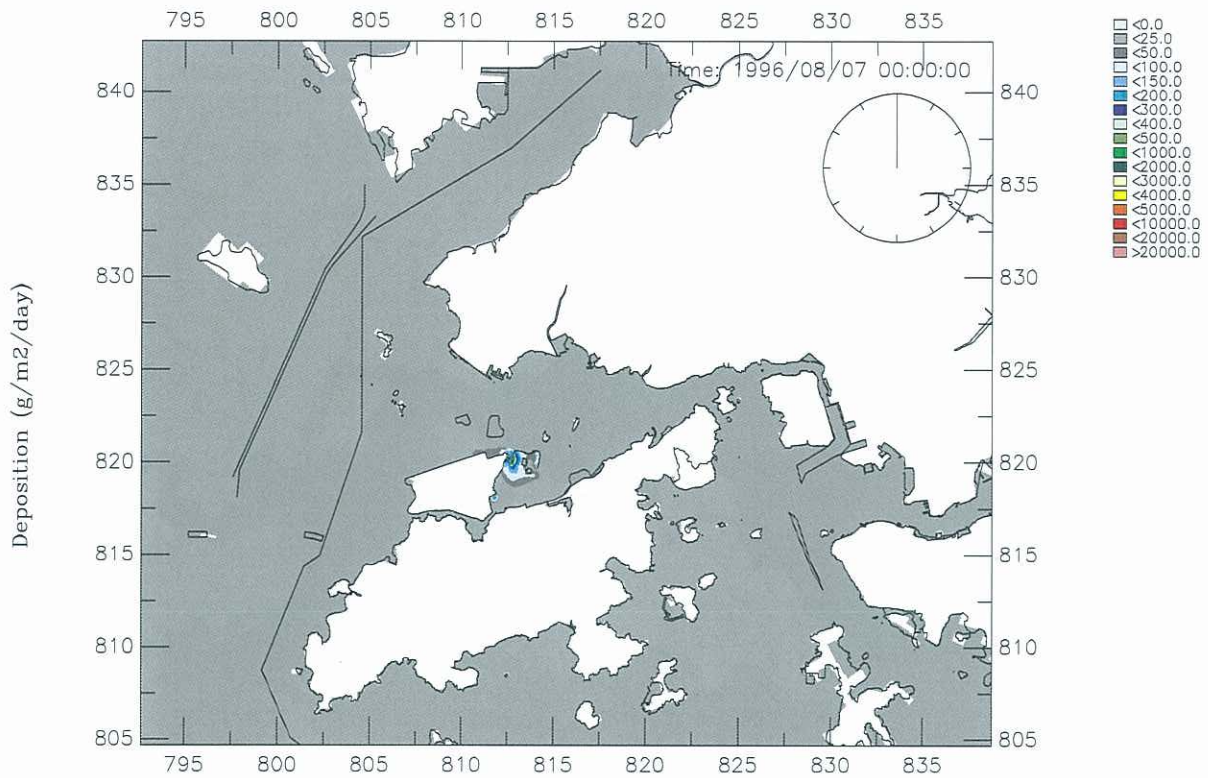


Year 2011 (Sequence B), Mitigated
 Total Deposition (g/m²) Contour, Wet Season,

Jul 2009

Figure 039

2011b-Wet (POM1-R11f)

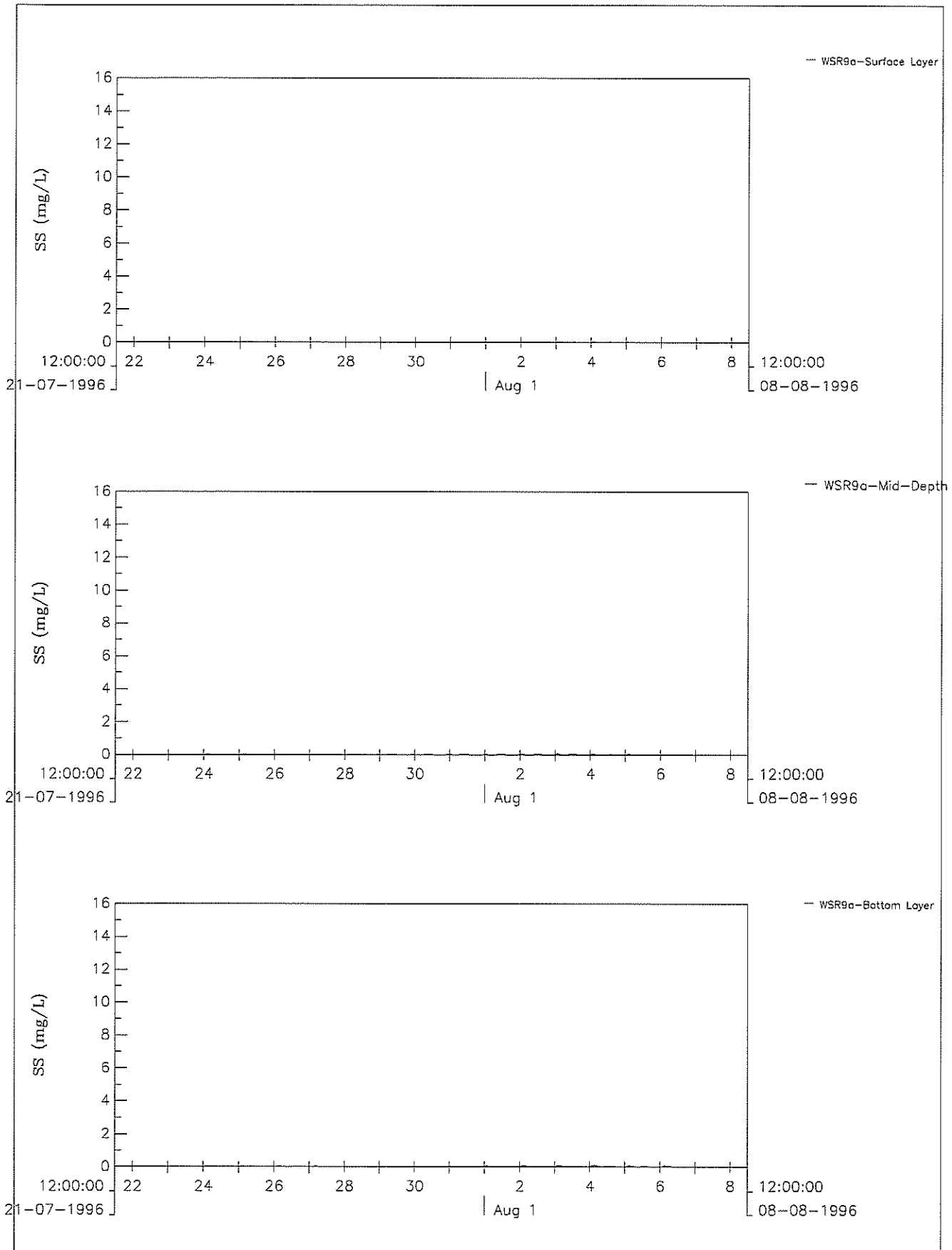


Year 2011 (Sequence B), Mitigated
Daily Average Deposition (g/m²/day) Contour, Wet Season,

Jul 2009

Figure 040

2011b-Wet (POM1-R11f)

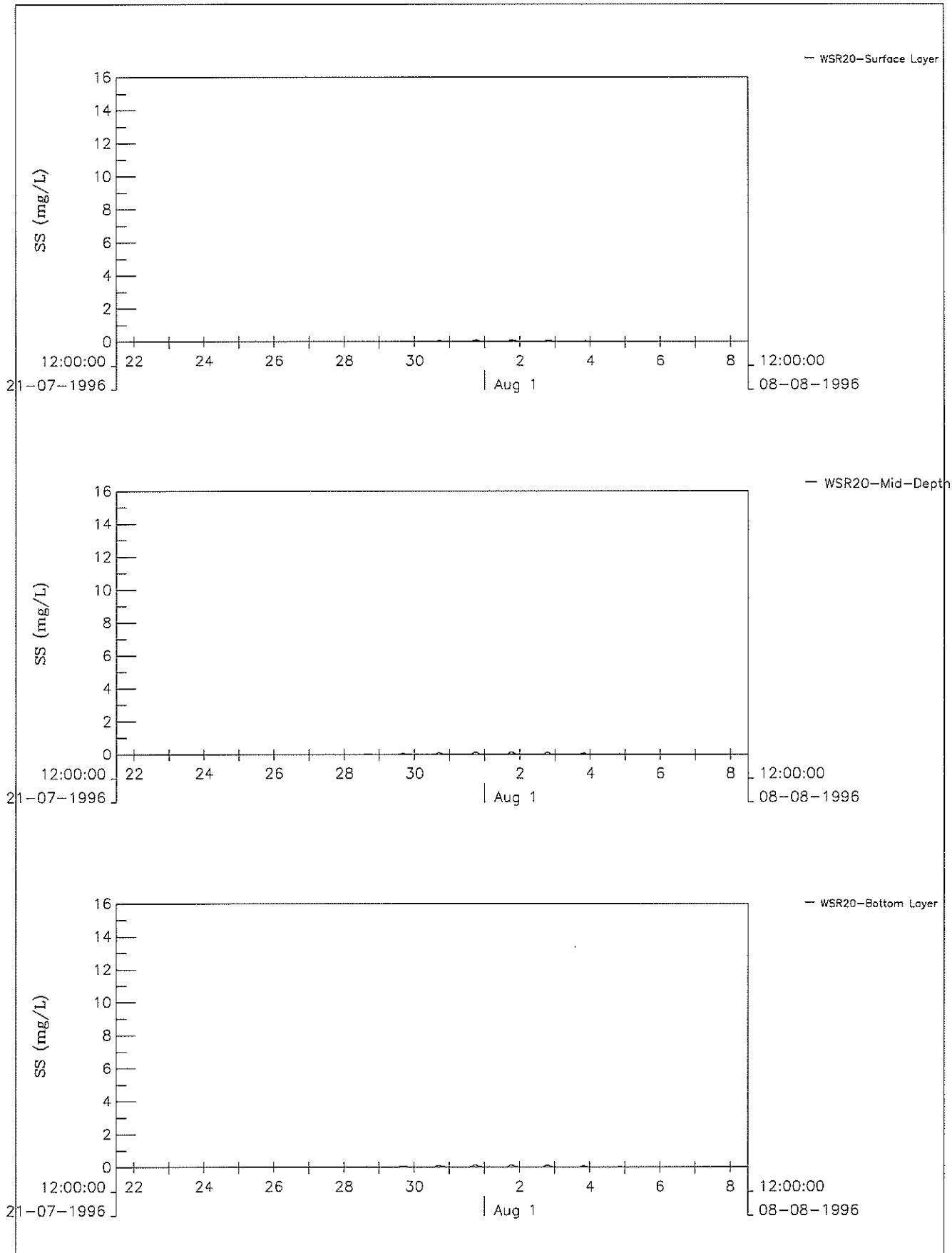


Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR9a, Dry Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009

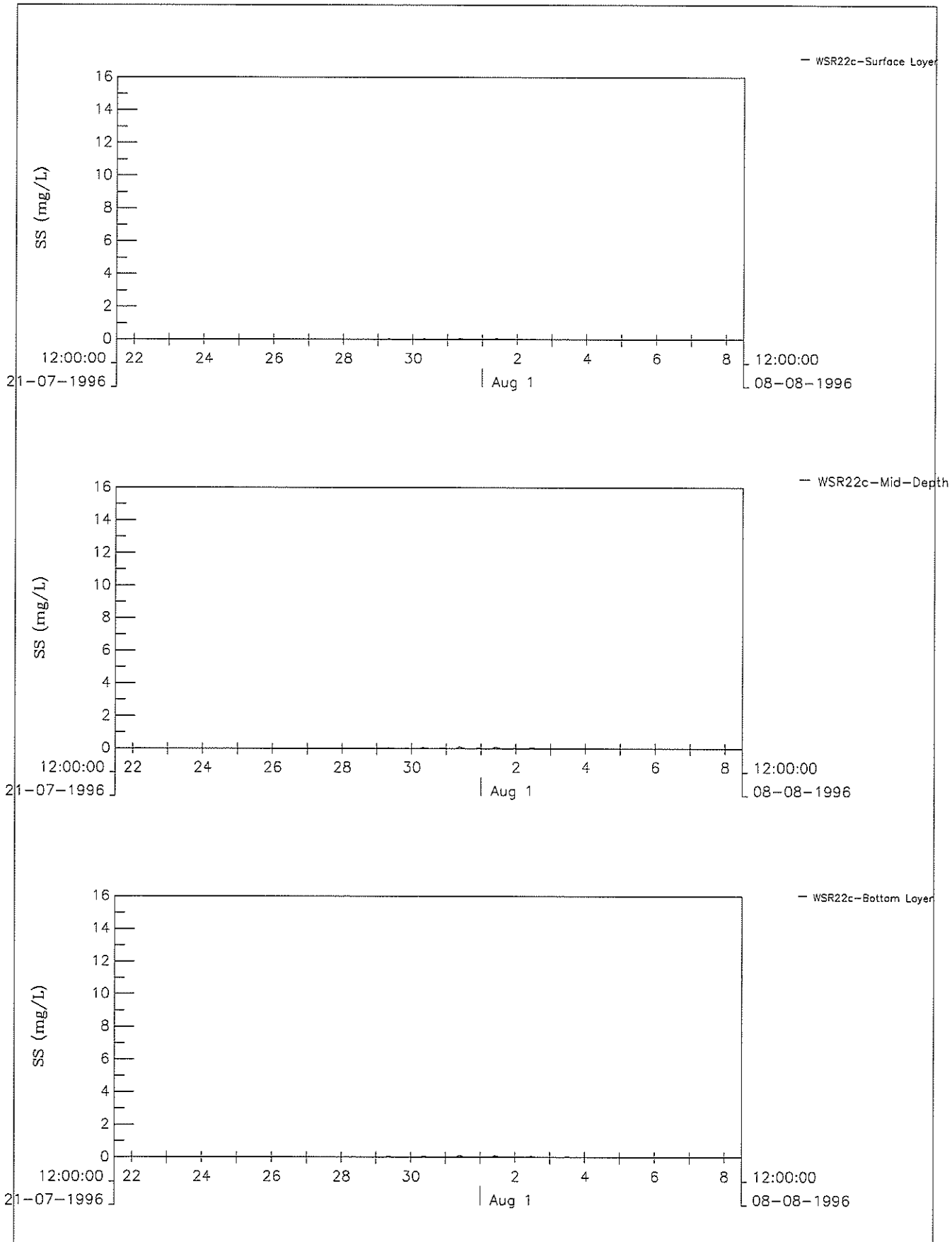
Figure 041

2011b-Dry (POM1-R11f)

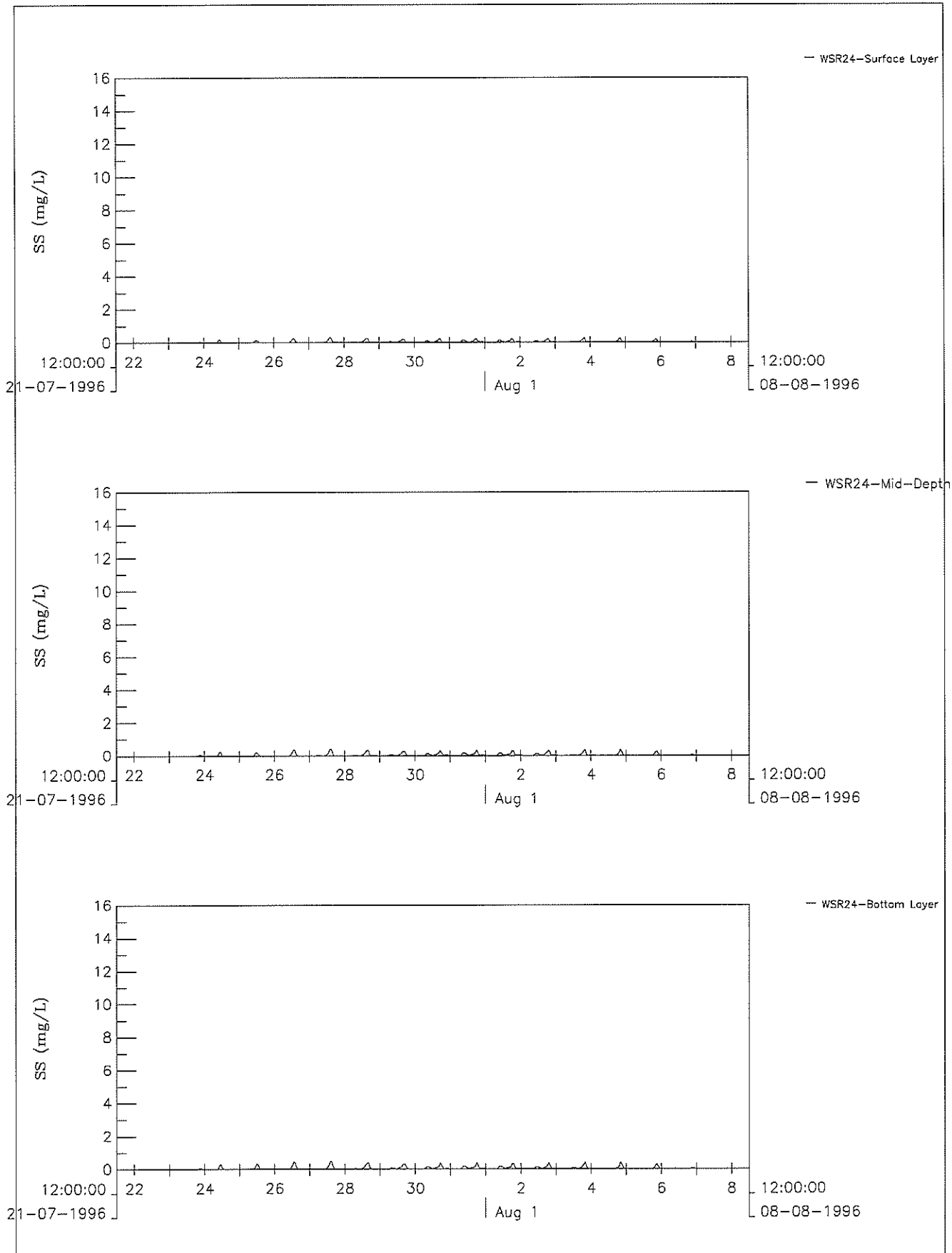


Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR20, Dry Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009	Figure 042
2011b-Dry (POM1-R11f)	

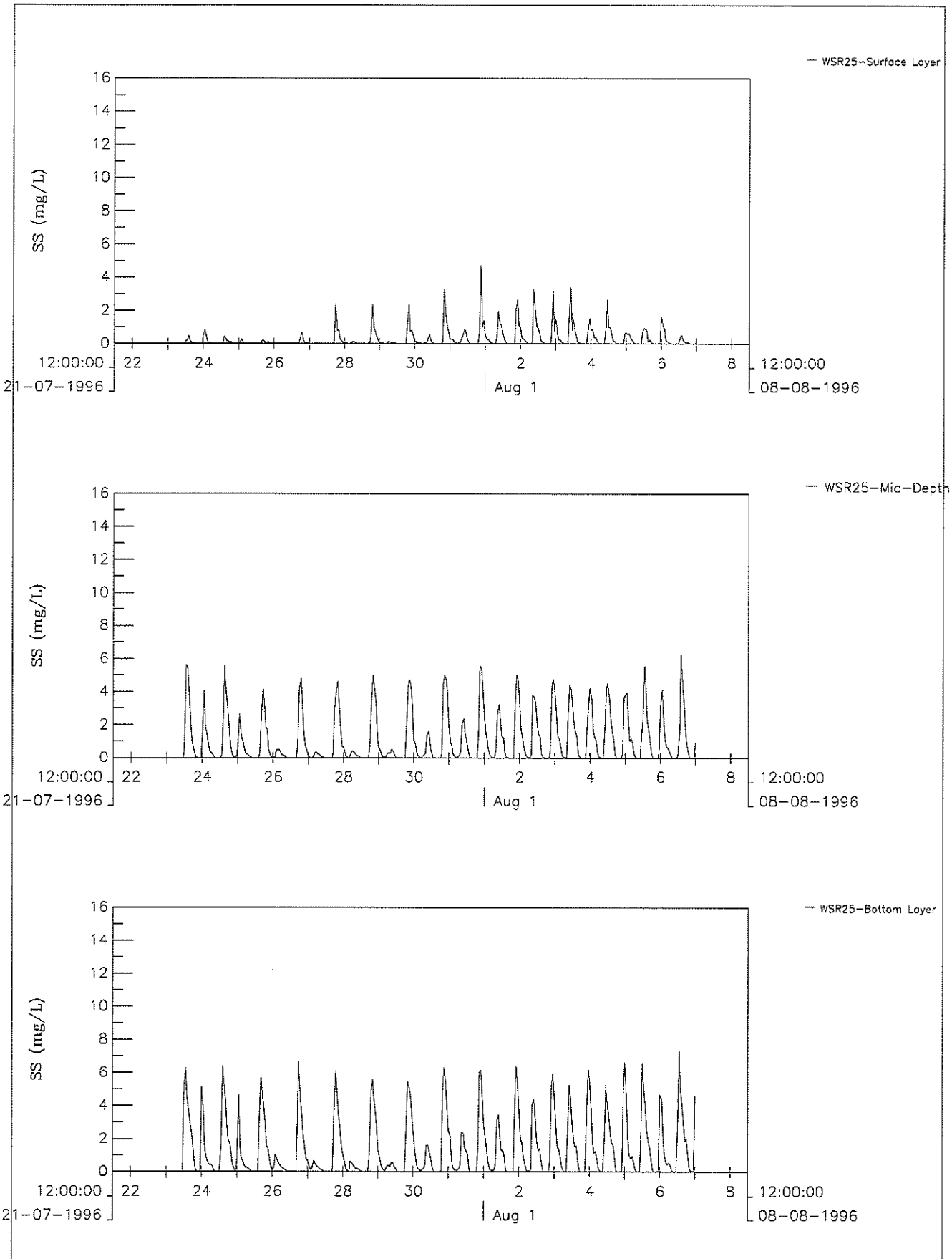


Year 2011 (Sequence B), Mitigated Time History Plots of the SS (mg/L) at WSR22c, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)	Jul 2009	Figure 043
	2011b-Dry (POM1-R11f)	
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Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR24, Dry Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009 Figure 044
 2011b-Dry (POM1-R11f)

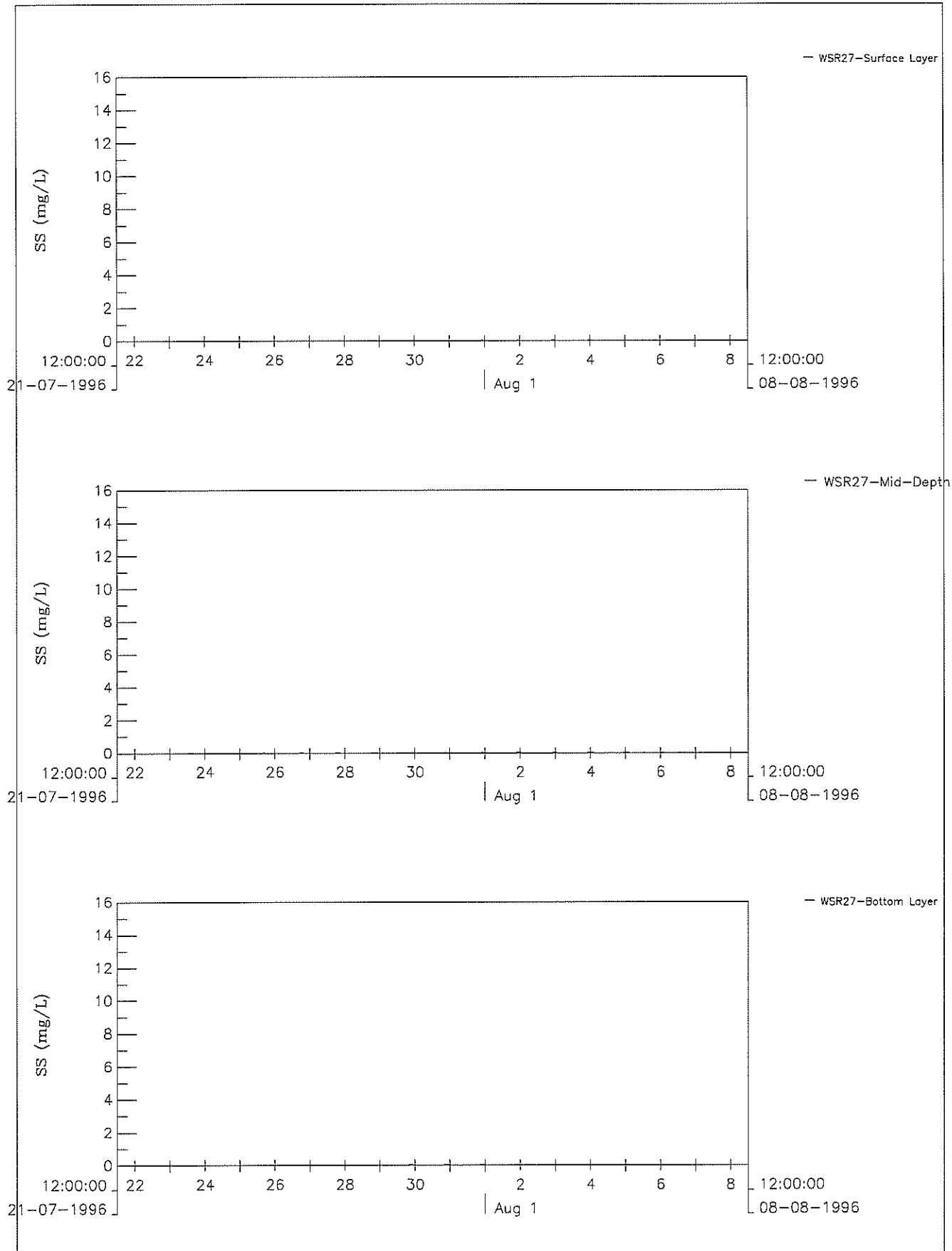


Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR25, Dry Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009

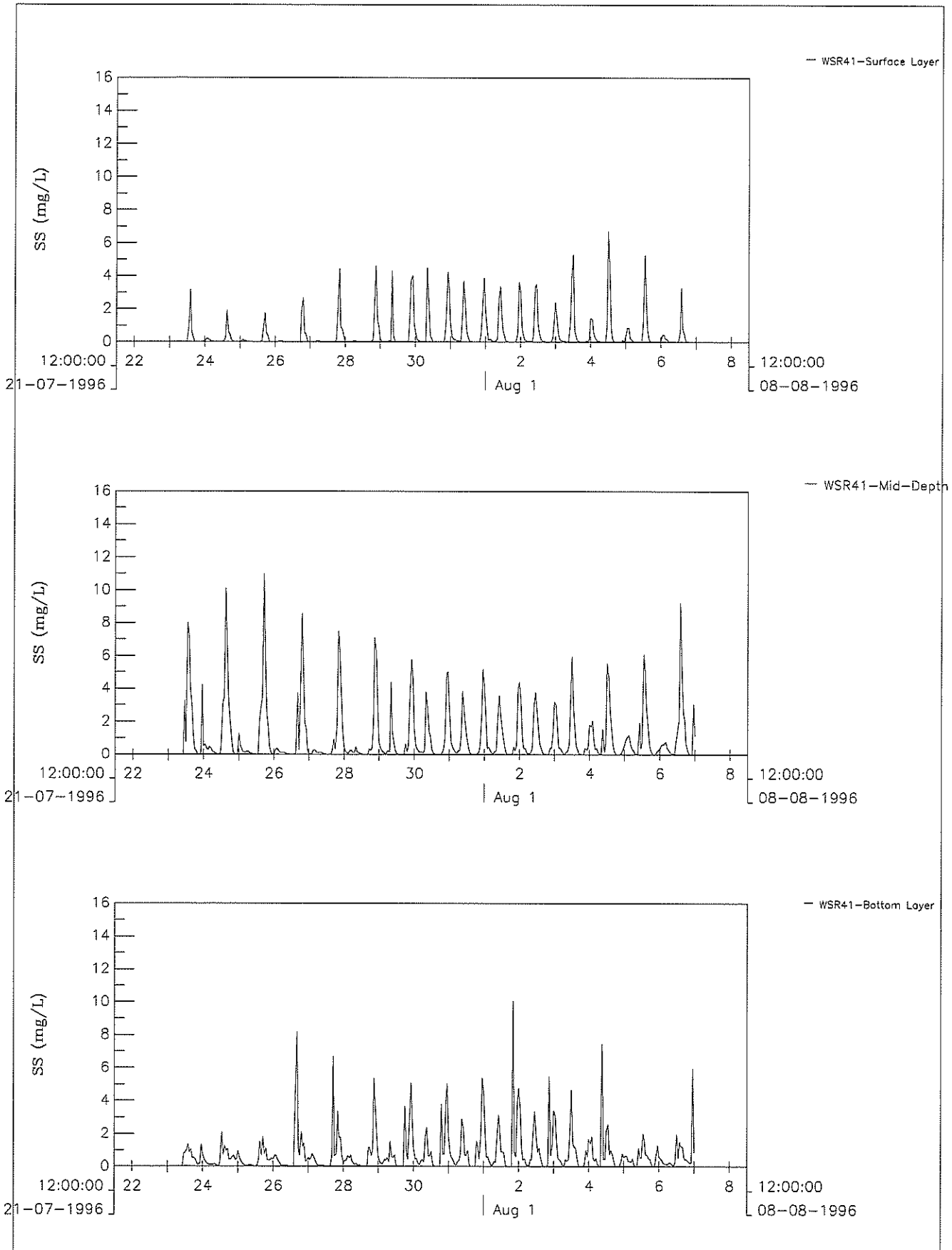
Figure 045

2011b-Dry (P0M1-R11f)

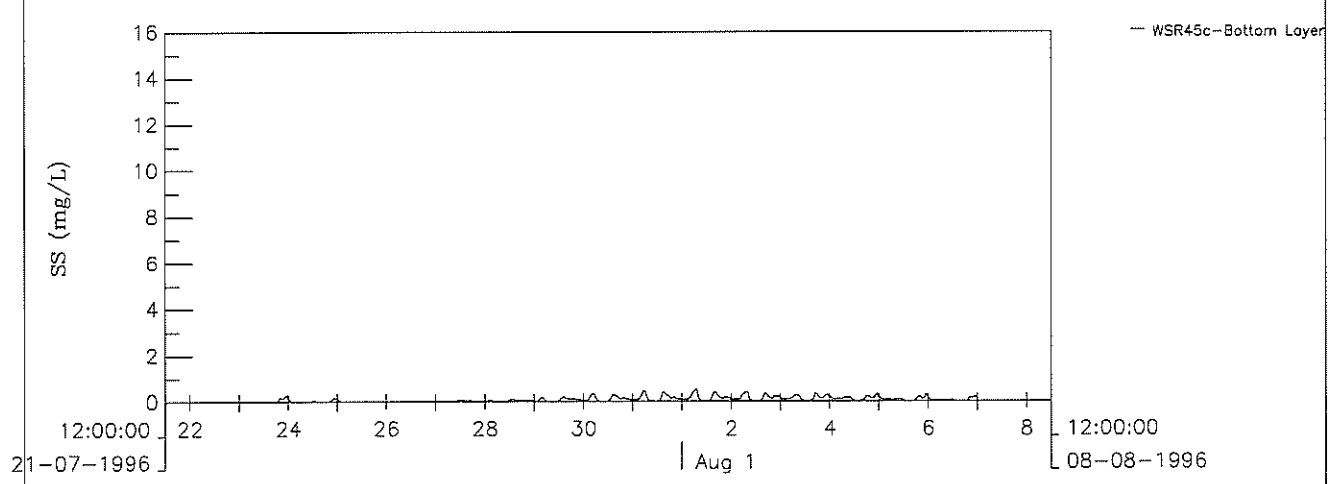
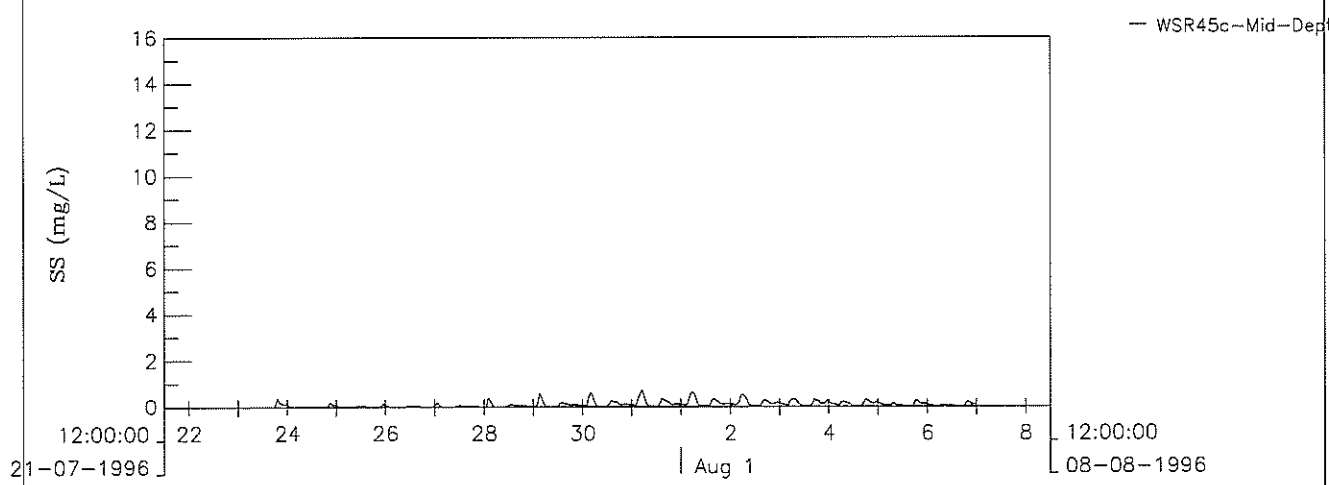
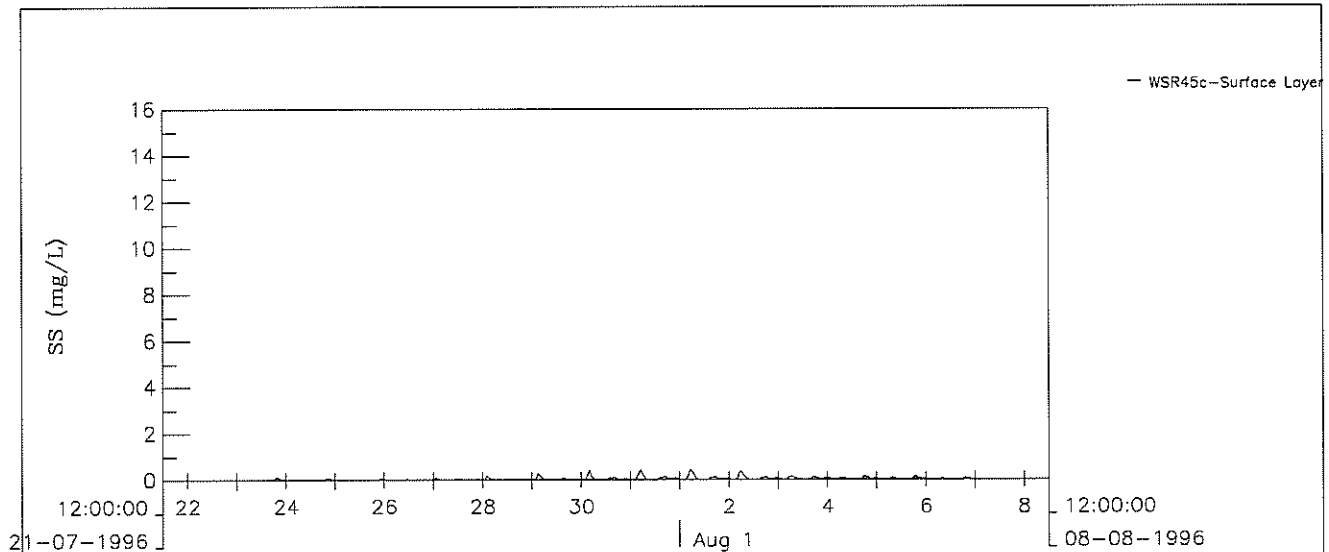


Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR27, Dry Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009	Figure 046
2011b-Dry (POM1-R11f)	



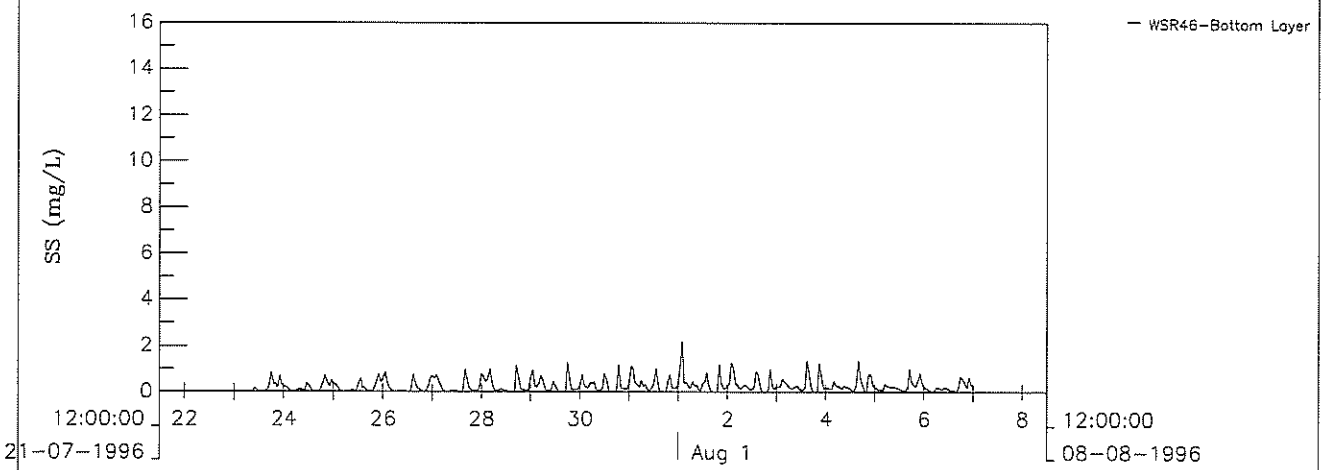
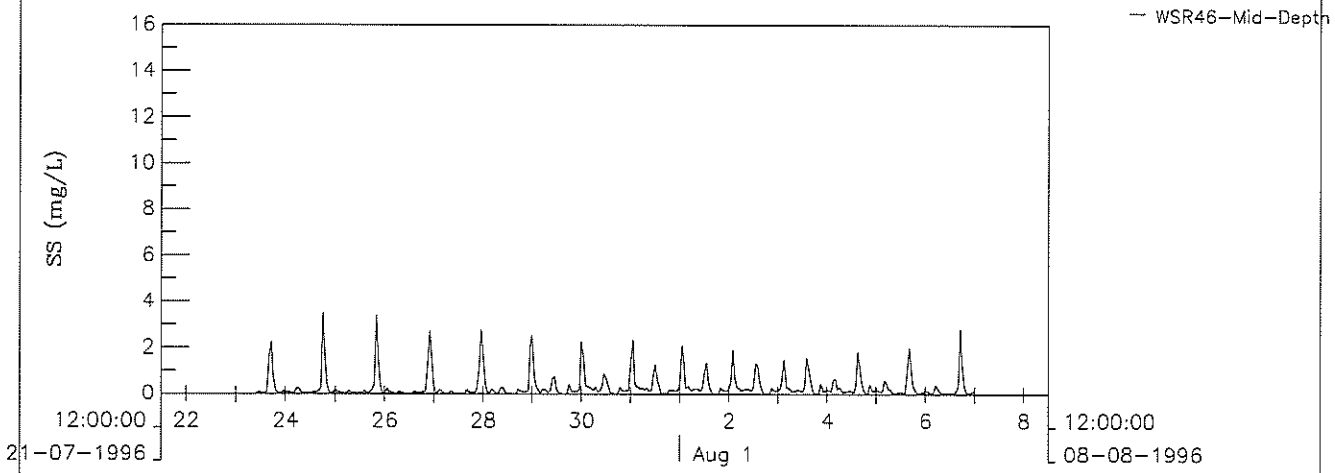
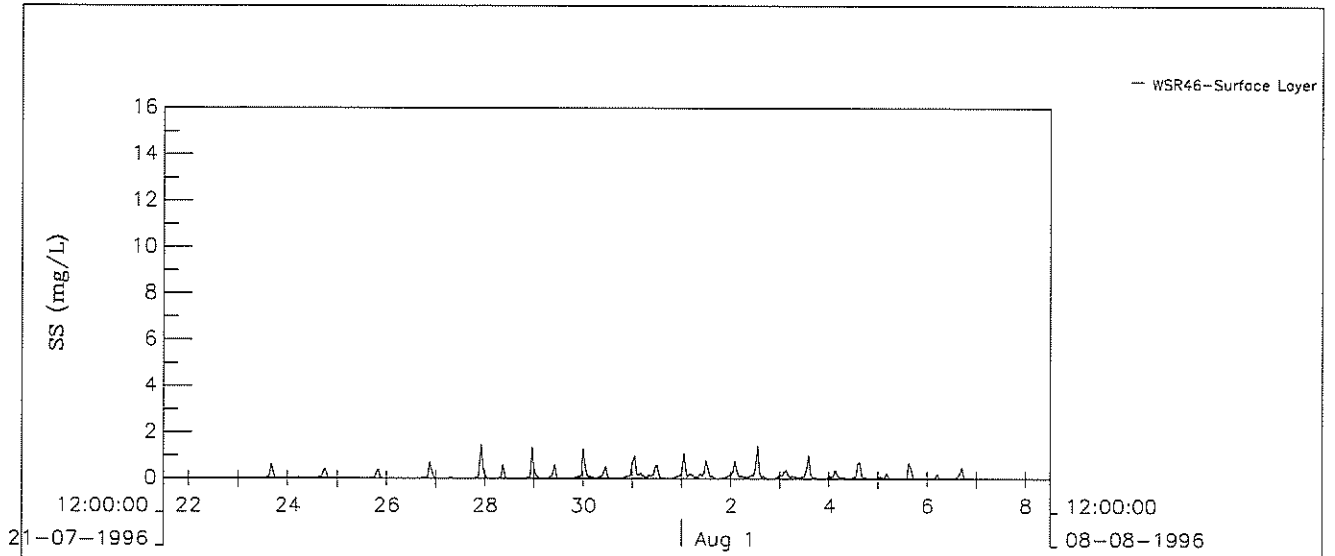
Year 2011 (Sequence B), Mitigated Time History Plots of the SS (mg/L) at WSR41, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)	Jul 2009	Figure 047
	2011b-Dry (POM1-R11f)	
MAUNSELL AECOM		



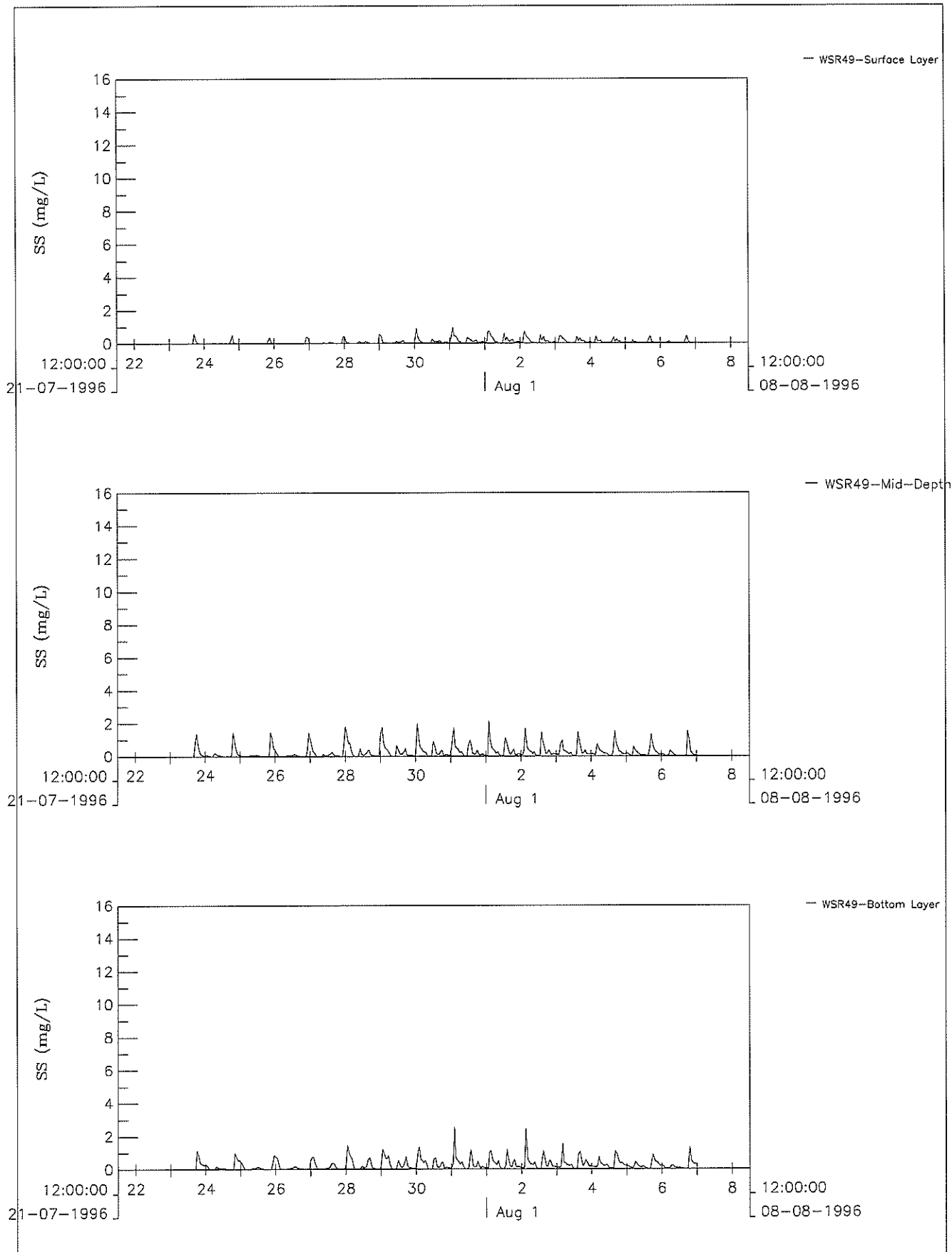
Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR45c, Dry Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009 | Figure 048

2011b-Dry (POM1-R11f)



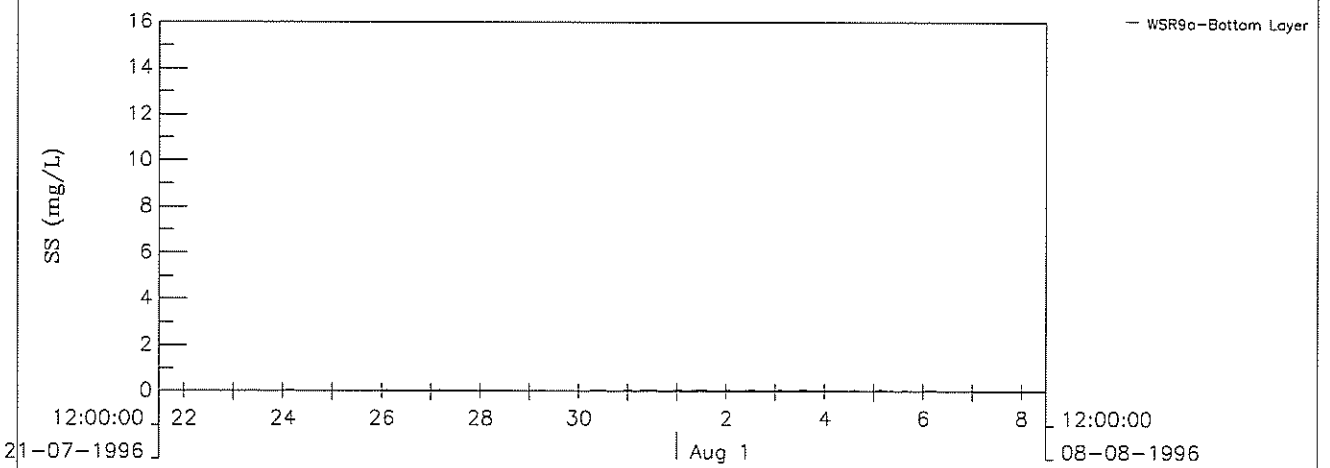
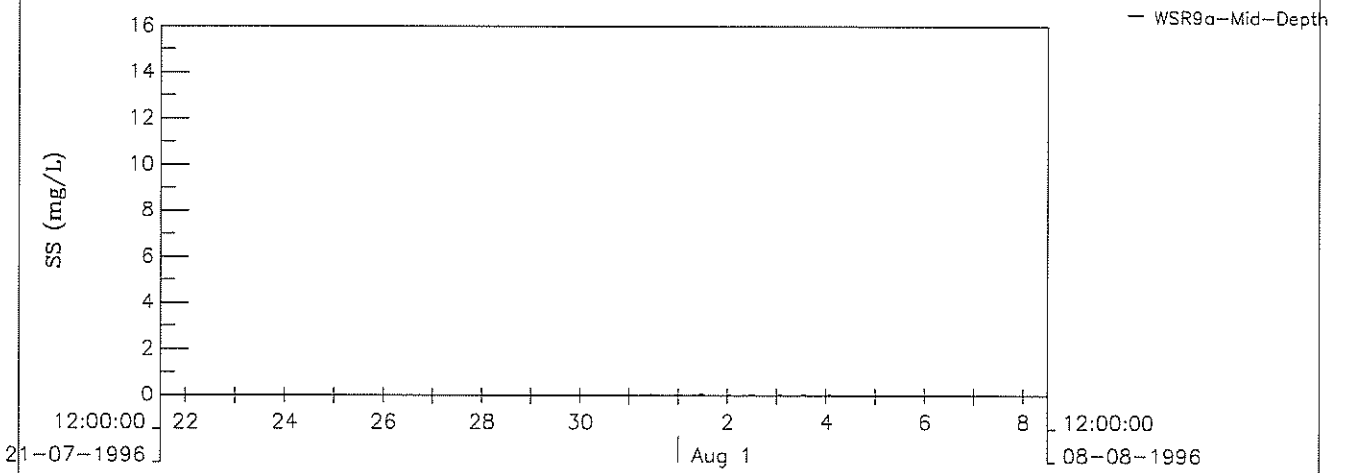
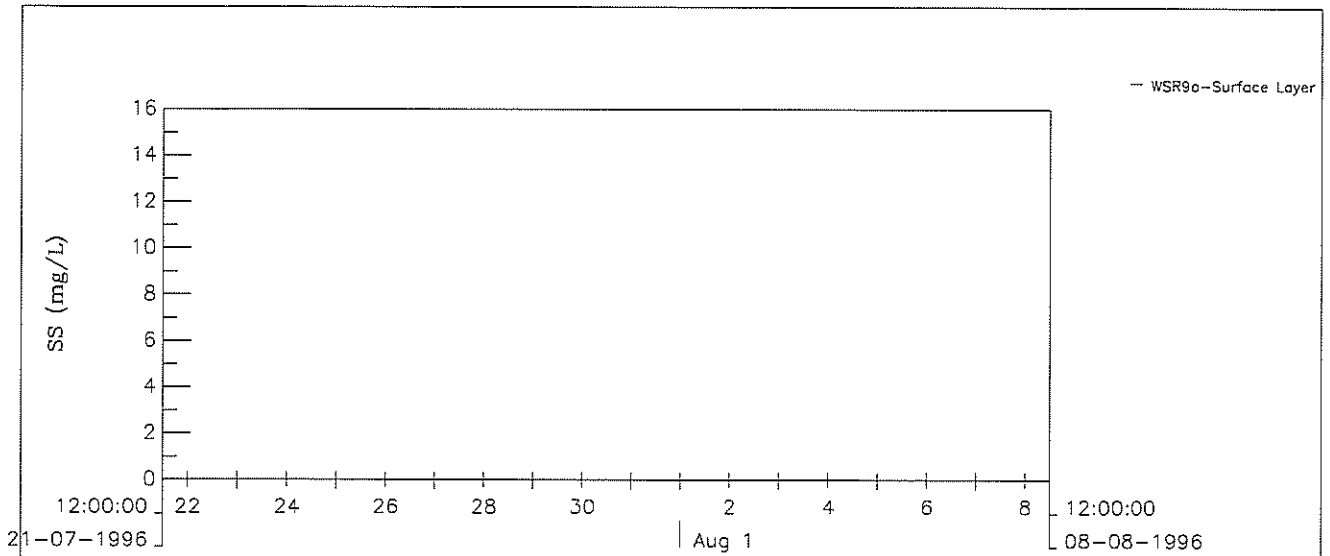
Year 2011 (Sequence B), Mitigated Time History Plots of the SS (mg/L) at WSR46, Dry Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)	Jul 2009	Figure 049
	2011b-Dry (POM1-R11f)	
MAUNSELL AECOM		



Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR49, Dry Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009 Figure 050

2011b-Dry (POM1-R11f)



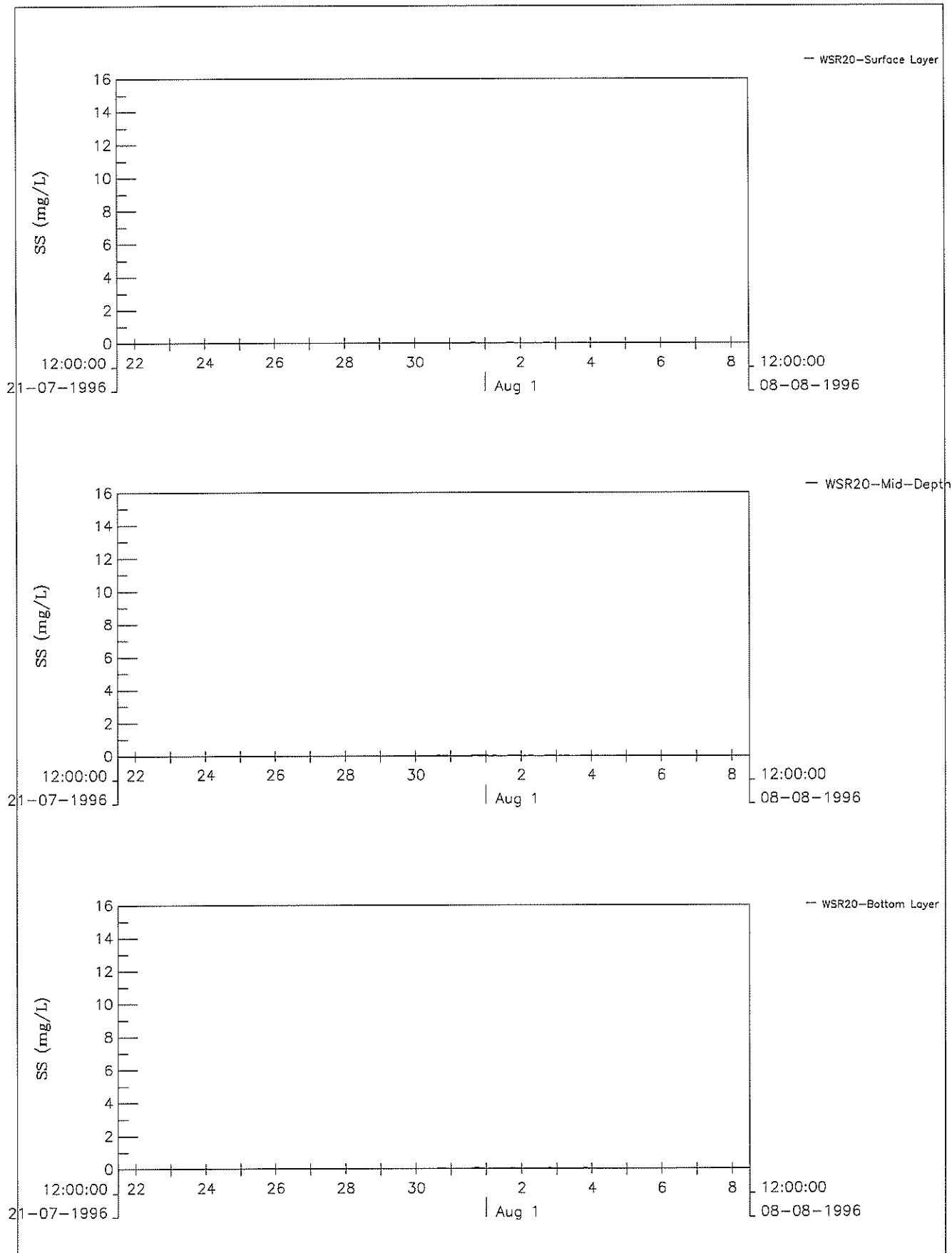
Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR9a, Wet Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009

Figure 051

2011b-Wet (PDM1-R11f)

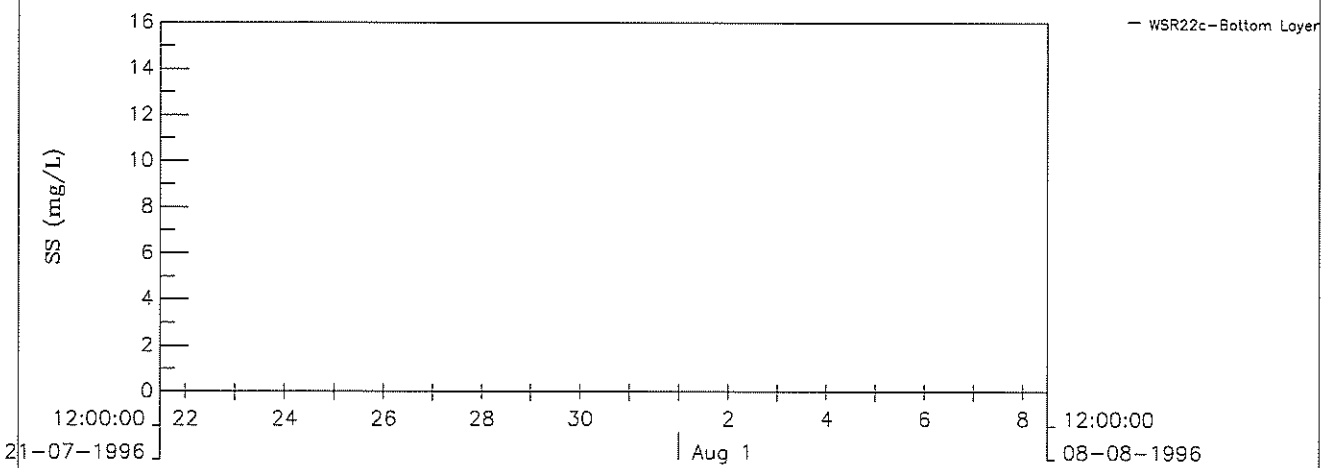
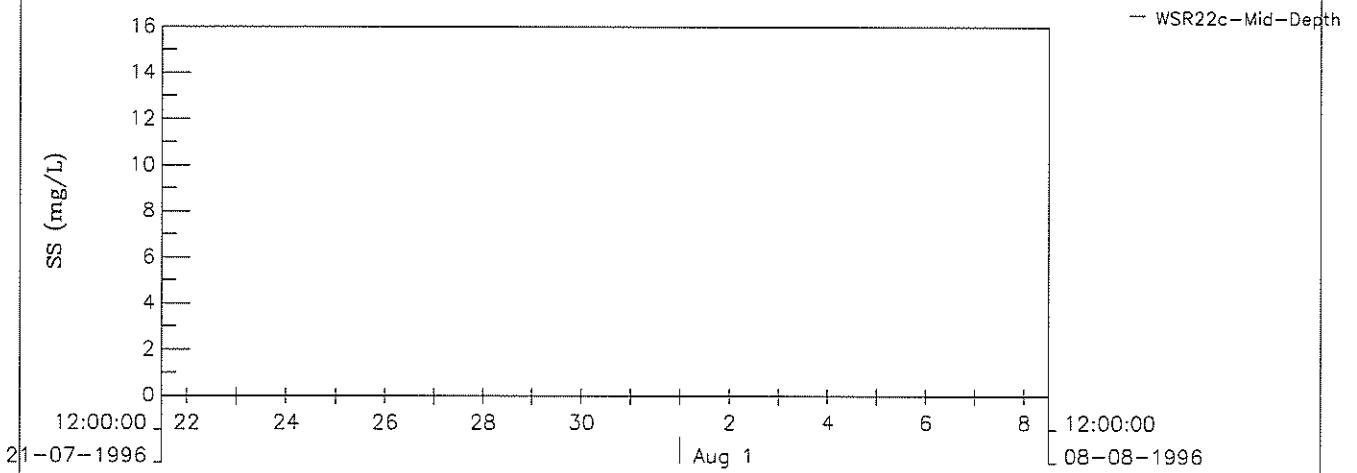
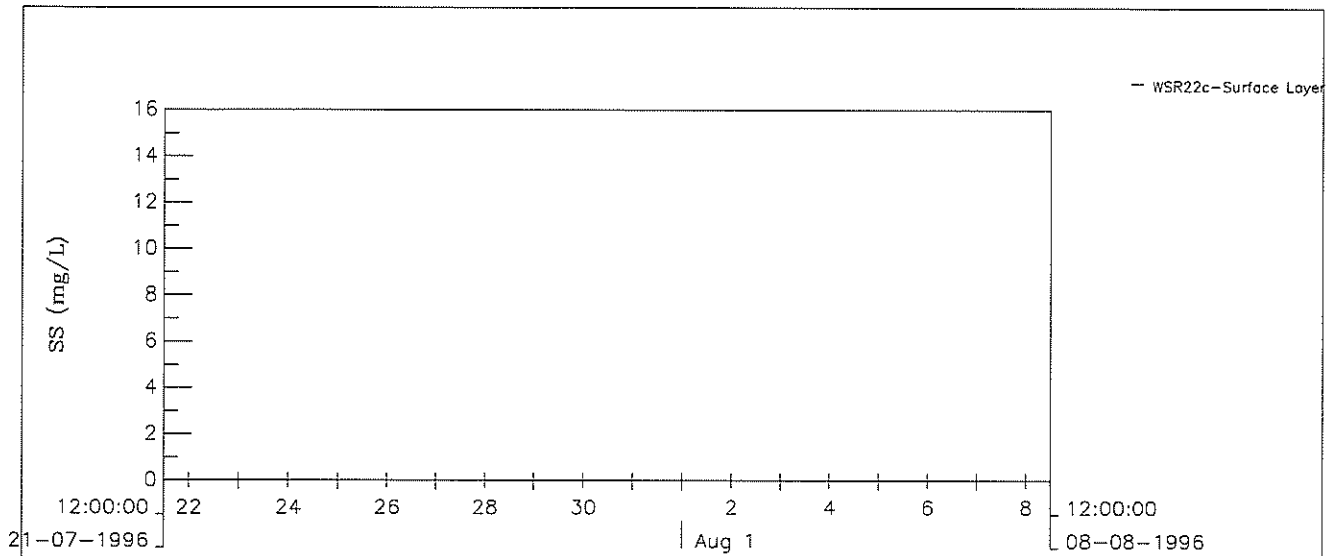
MAUNSELL | AECOM



Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR20, Wet Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009 | Figure 052

2011b-Wet (PDM1-R11f)



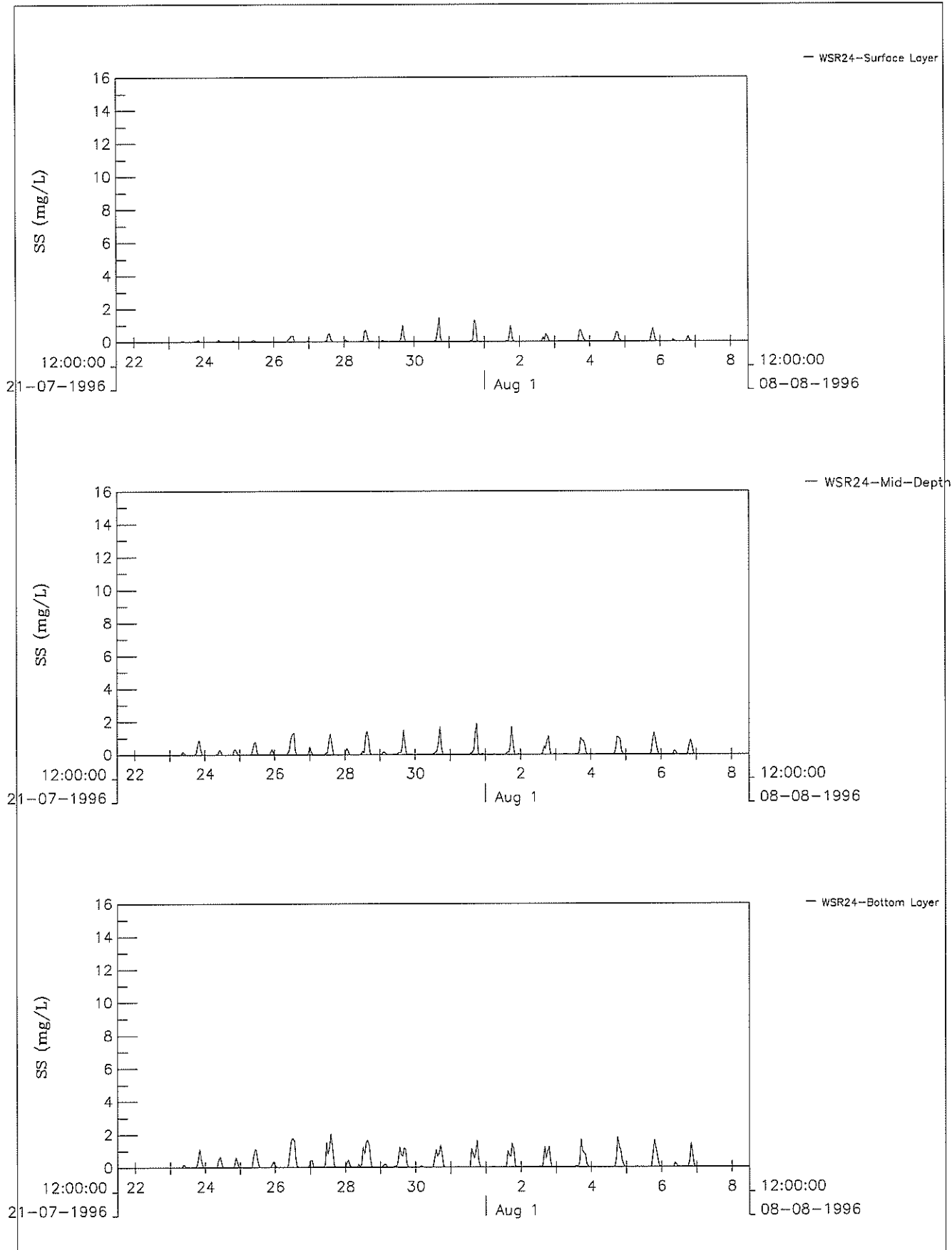
Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR22c, Wet Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009

Figure 053

2011b-Wet (POM1-R11f)

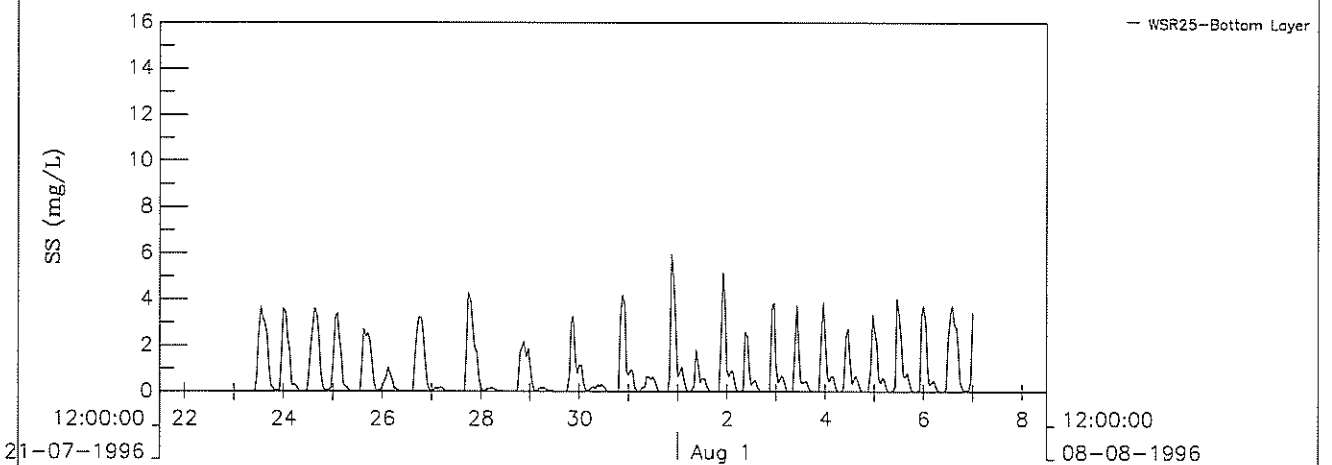
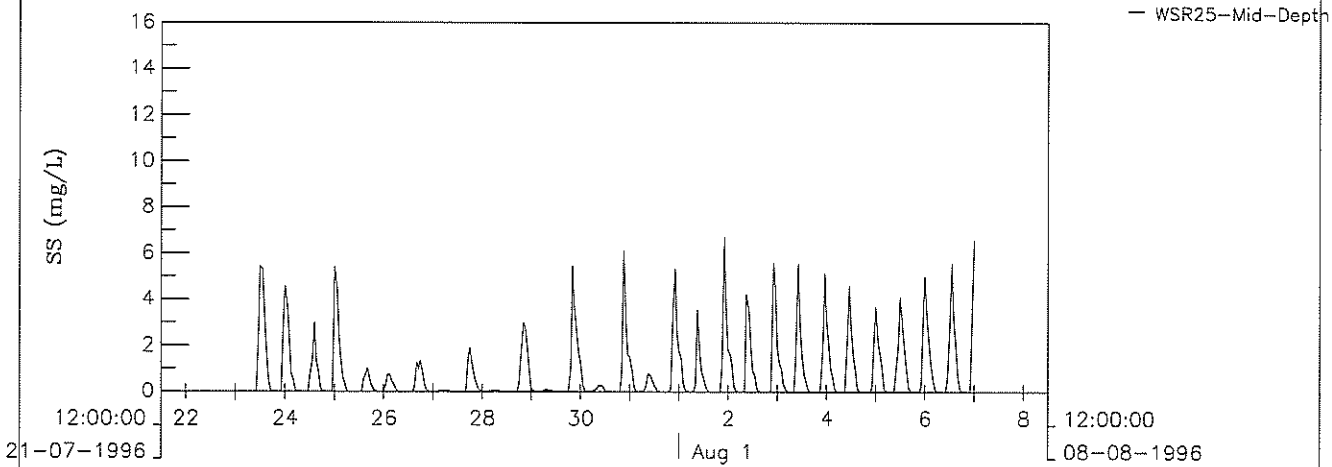
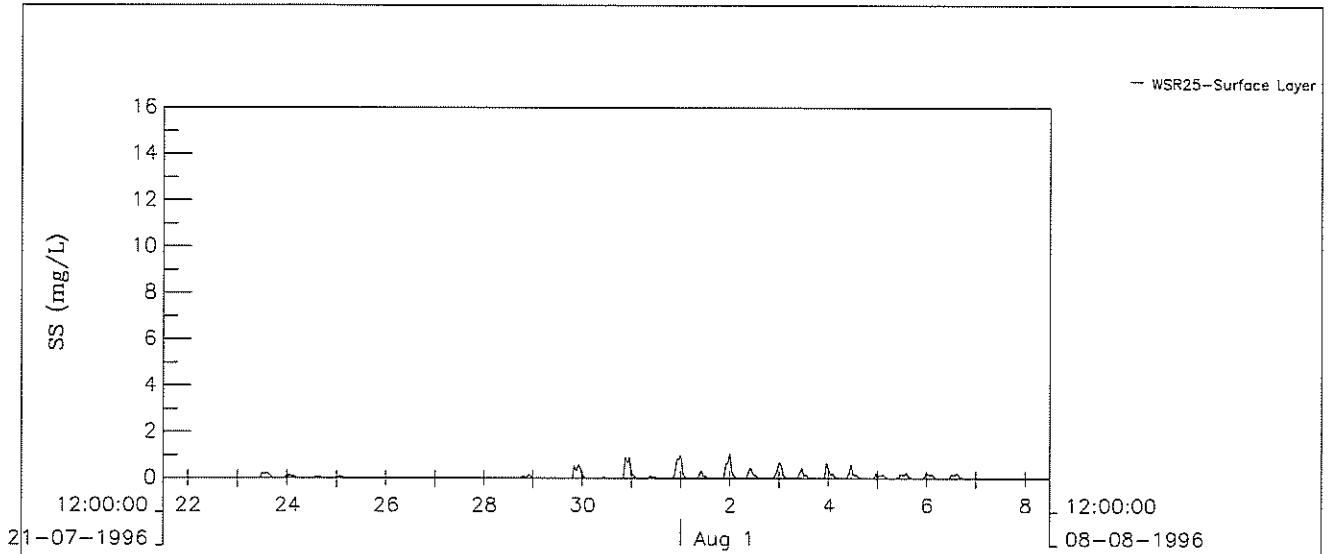
MAUNSELL | AECOM



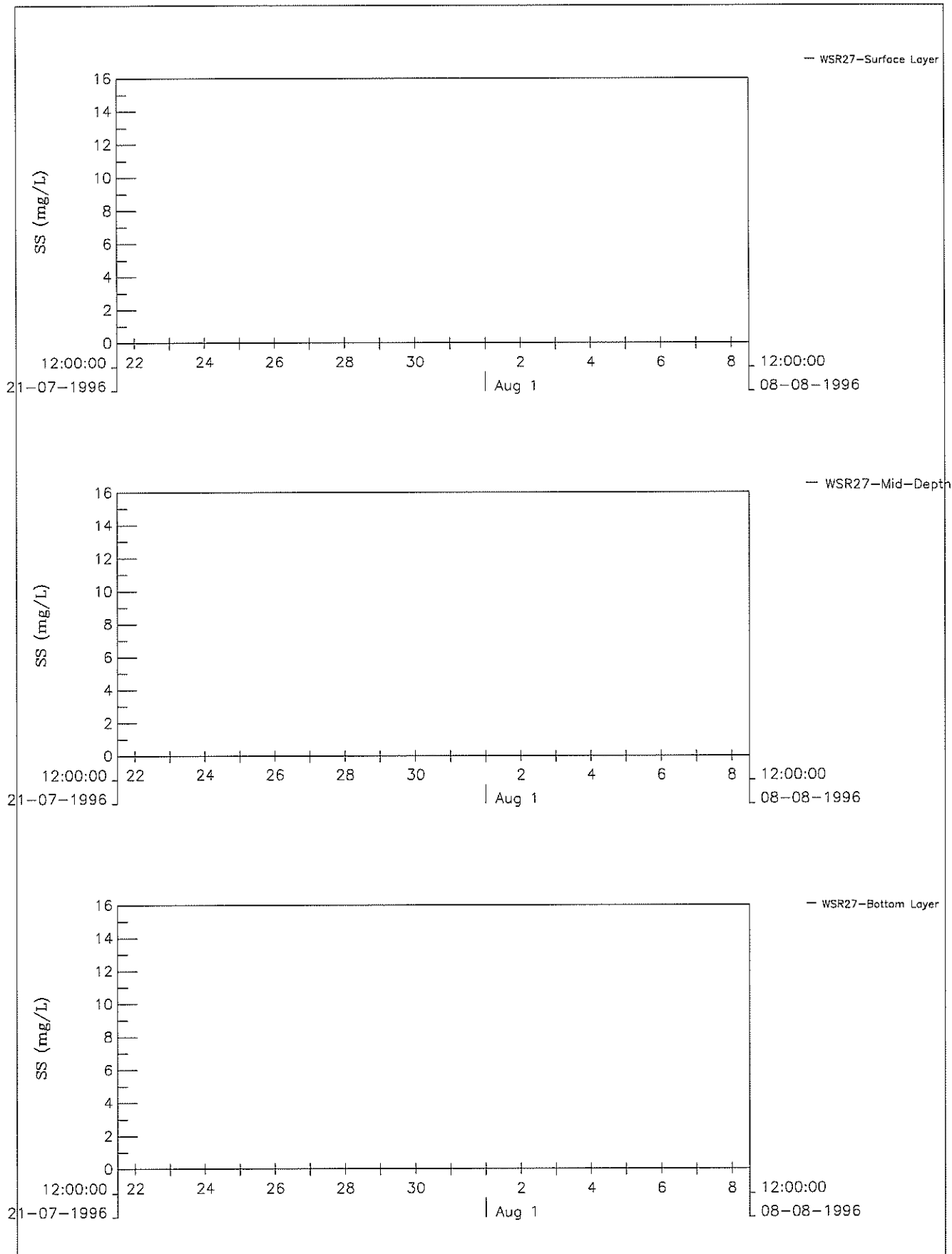
Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR24, Wet Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009 Figure 054

2011b-Wet (POM1-R11f)



Year 2011 (Sequence B), Mitigated Time History Plots of the SS (mg/L) at WSR25, Wet Season (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)	Jul 2009	Figure 055
	2011b-Wet (P0M1-R11f)	
MAUNSELL AECOM		

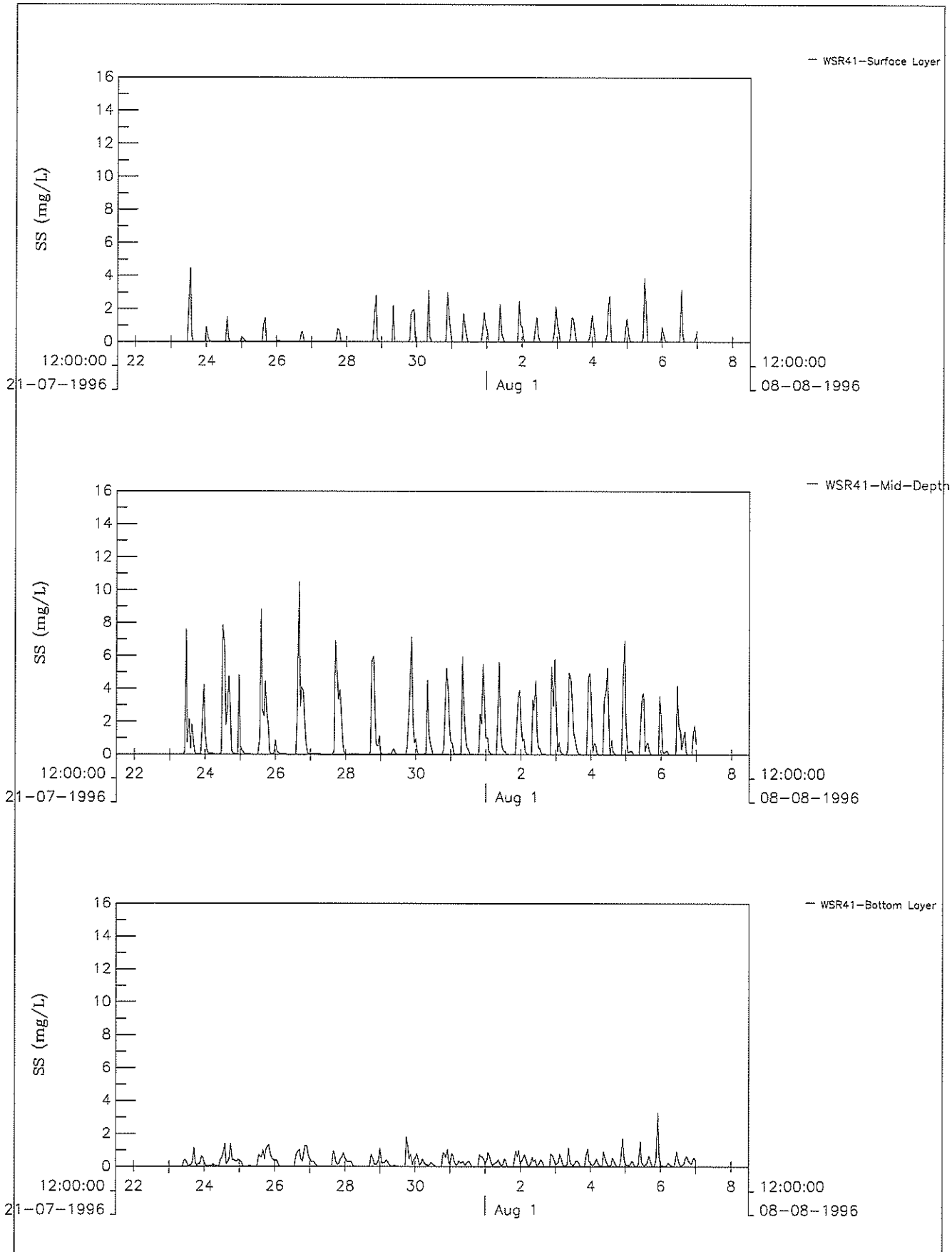


Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR27, Wet Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009

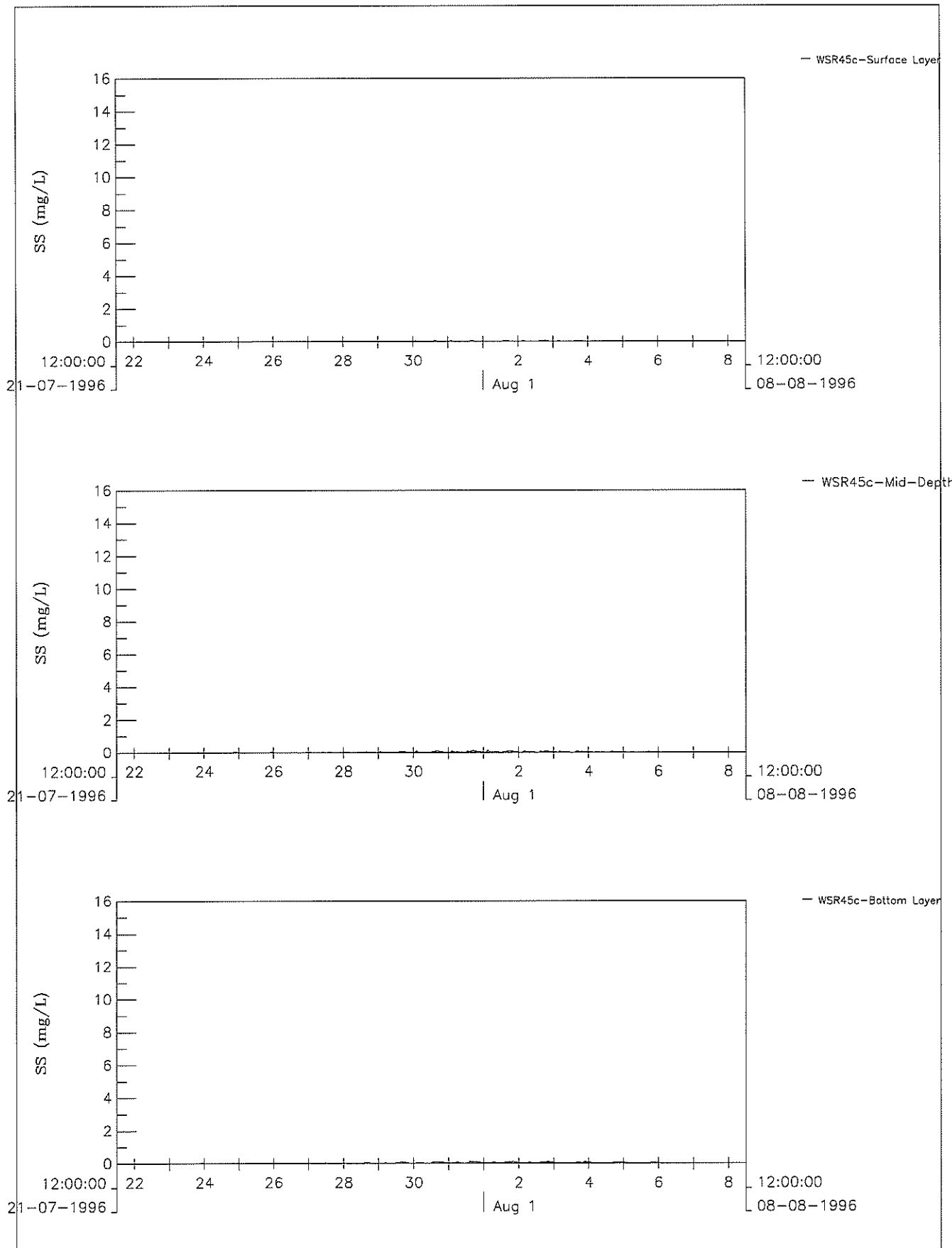
Figure 056

2011b-Wet (POM1-R11f)



Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR41, Wet Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009	Figure 057
2011b-Wet (P0M1-R11f)	

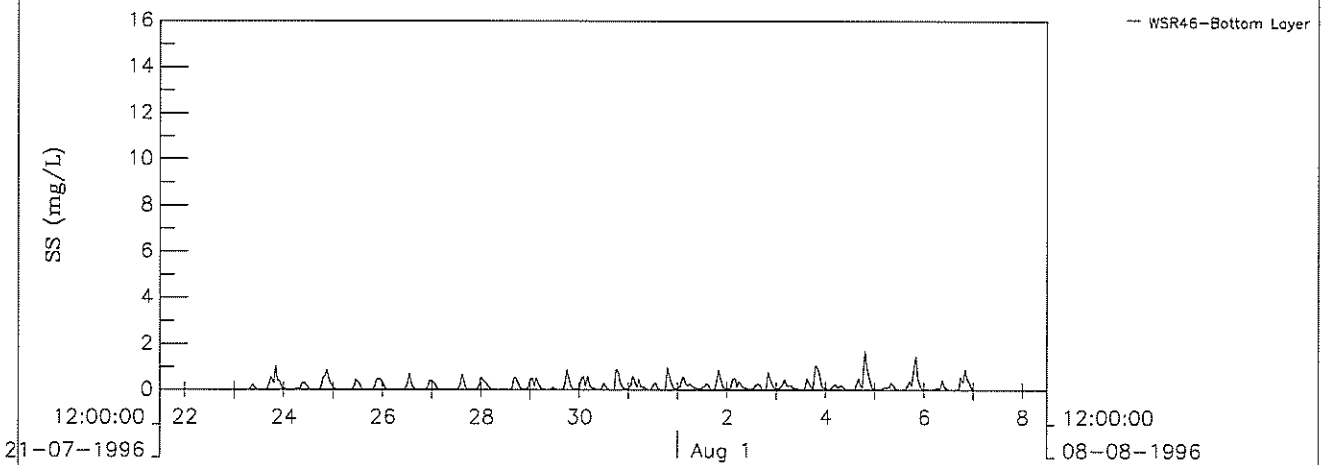
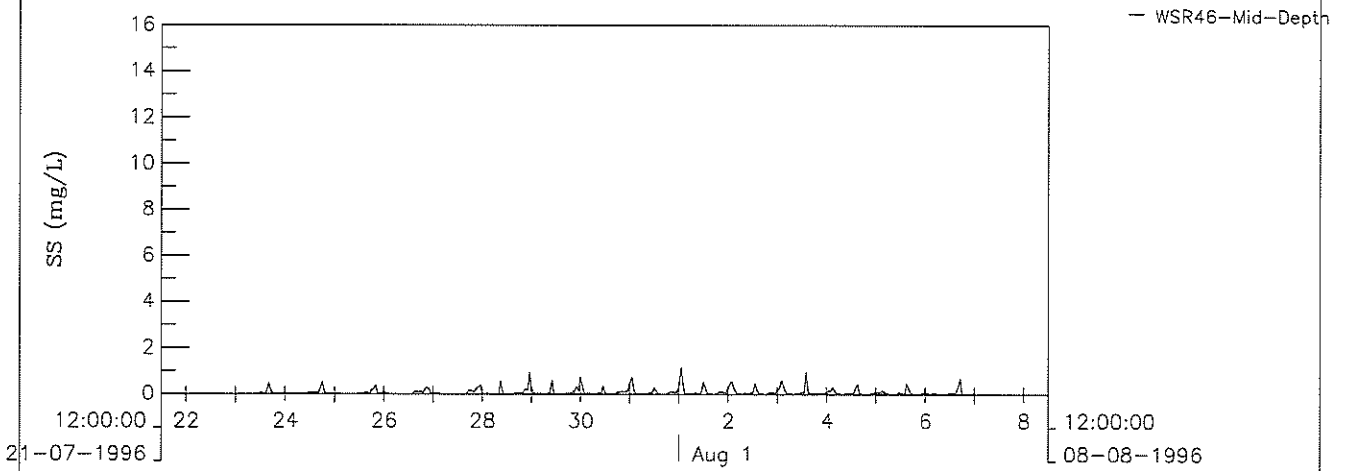
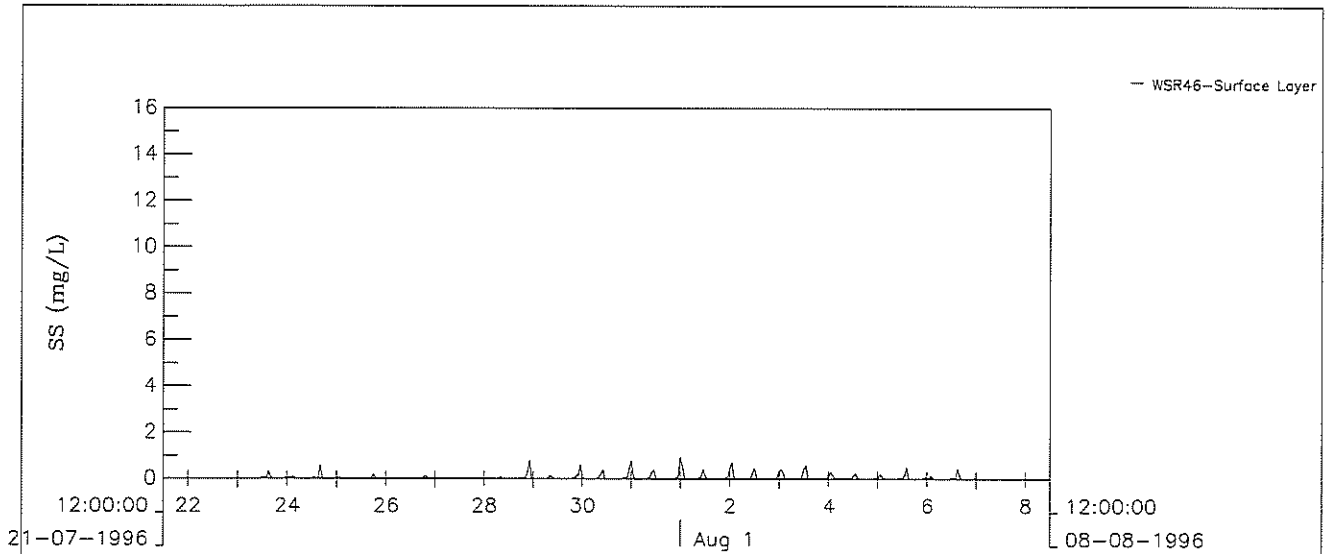


Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR45c, Wet Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009

Figure 058

2011b-Wet (POM1-R11f)



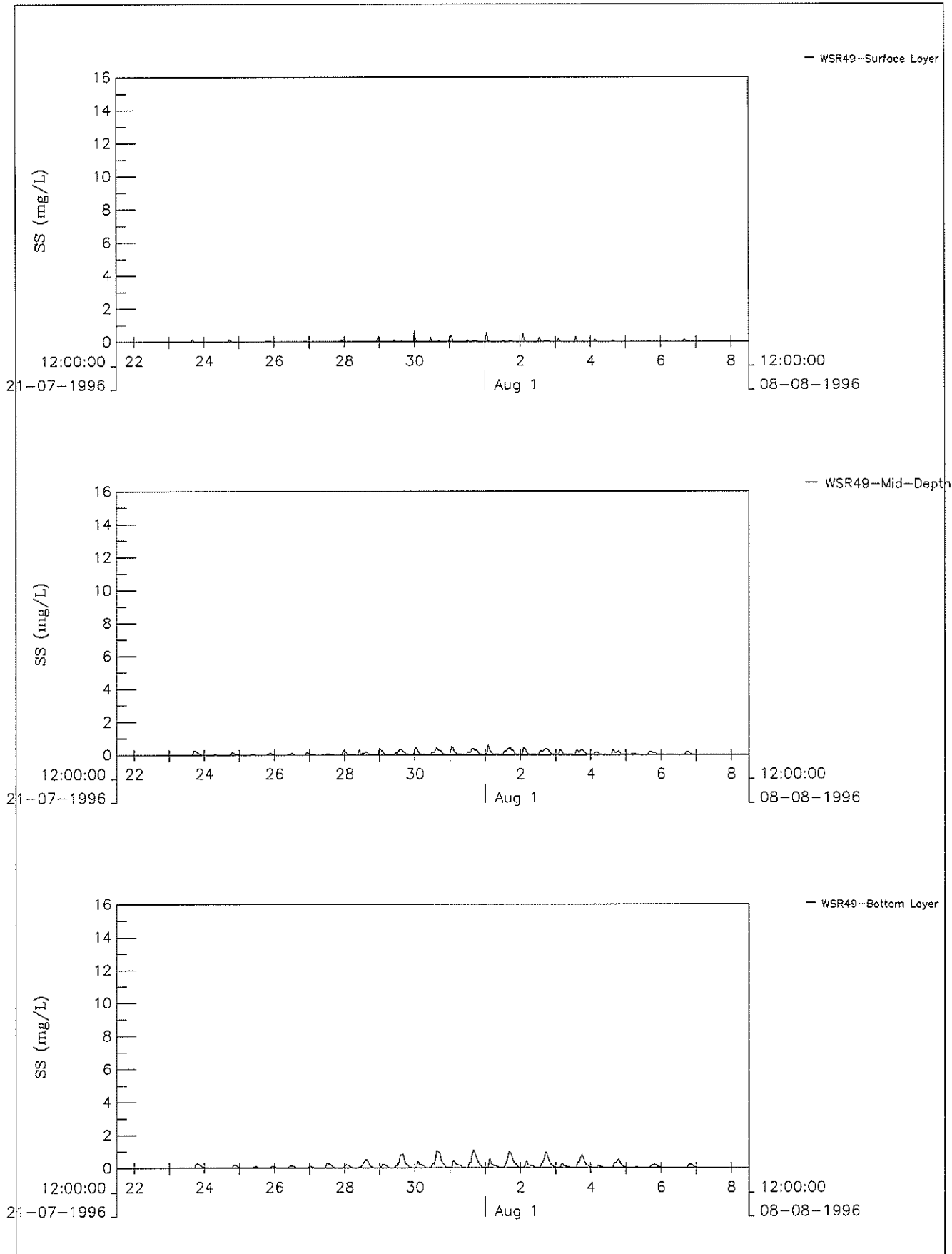
Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR46, Wet Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009

Figure 059

2011b-Wet (POM1-R11f)

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Year 2011 (Sequence B), Mitigated
 Time History Plots of the SS (mg/L) at WSR49, Wet Season
 (Top: Surface Layer; Middle: Mid-Depth; Bottom: Bottom Layer)

Jul 2009	Figure 060
2011b-Wet (POM1-R11f)	

Appendix 9F – Part 9F4

Supplementary Information for Sequence B

Results of Additional Modelling

Table 1 Predicted Maximum SS (mg/l) Elevations at Selected Observation Points for the Scenario Year 2011-Sequence B (Mitigated)

Observation Points	Point SR	Name	Associated EPD Station	Maximum SS (mg/L)								Percentage of Time Exceedances Predicted								WQO / WQC							
				Dry Season				Wet Season				Dry Season				Wet Season				Dry Season				Wet Season			
				S	M	B	DA	S	M	B	DA	S	M	B	DA	S	M	B	DA	S	M	B	DA	S	M	B	DA
WSR 09a	No	Urmston Road (Main Channel)	NM5,6,8	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0%	0%	0%	0%	0%	0%	0%	0%	5.7	7.7	11.8	8.3	3.0	3.6	10.3	5.6
WSR 20	Yes	Ma Wan Fish Culture Zone (Note 2)	-	0.1	0.1	0.2	0.1	0.0	0.1	0.1	0.0	0%	0%	0%	0%	0%	0%	0%	0%	39.1	39.1	39.1	39.1	43.0	43.0	43.0	43.0
WSR 22c	Yes	Tai Ho Wan Outlet (outside) / Near coral site	NM1,2,3	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0%	0%	0%	0%	0%	0%	0%	0%	3.6	5.1	8.1	5.5	2.3	3.3	6.0	3.7
WSR 24	No	Tung Chung Fairway	NM1,2,3	0.3	0.4	0.5	0.4	1.5	1.9	2.1	1.5	0%	0%	0%	0%	0%	0%	0%	0%	3.6	5.1	8.1	5.5	2.3	3.3	6.0	3.7
WSR 25	Yes	Airport Cooling Water Intake (NE)	NM1,2,3	4.8	6.3	7.3	5.5	1.1	6.7	6.0	4.2	0%	2%	0%	0%	0%	7%	0%	1%	3.6	5.1	8.1	5.5	2.3	3.3	6.0	3.7
WSR 27	Yes	San Tau Beach SSSI	NM5,6,8	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0%	0%	0%	0%	0%	0%	0%	0%	5.7	7.7	11.8	8.3	3.0	3.6	10.3	5.6
WSR 41	Yes	Artificial Reef at NE Airport	NM1,2,3	6.7	11.0	10.1	5.7	4.5	10.5	3.3	3.8	4%	5%	1%	0%	2%	12%	0%	0%	3.6	5.1	8.1	5.5	2.3	3.3	6.0	3.7
WSR 45c	No	Sham Shui Kok (CWD habitat range)	NM1,2,3	0.5	0.7	0.6	0.5	0.1	0.2	0.1	0.1	0%	0%	0%	0%	0%	0%	0%	0%	3.6	5.1	8.1	5.5	2.3	3.3	6.0	3.7
WSR 46	No	Tai Mo To (near coral / CWD habitat range)	NM1,2,3	1.5	3.5	2.2	1.5	0.9	1.2	1.7	0.6	0%	0%	0%	0%	0%	0%	0%	0%	3.6	5.1	8.1	5.5	2.3	3.3	6.0	3.7
WSR 49	No	Tai Mo To (Deep Channel / CWD habitat range)	NM1,2,3	1.0	2.2	2.5	1.7	0.6	0.6	1.1	0.5	0%	0%	0%	0%	0%	0%	0%	0%	3.6	5.1	8.1	5.5	2.3	3.3	6.0	3.7

Note:

WQO = Water Quality Objective; WQC = Water Quality Criteria; S = Surface level; M = Mid-depth; B = Bottom level; DA=Depth-averaged.

Grey cell = Values with WQO/WQC Exceedances

1 WQC based on the specific requirement for the Black Point / Castle Peak Power Station intake and the SS should be maintained at below 764 mg/L (ERM, 2006)

2 WQC based on general water quality protection guideline for FCZ (CityU, 2001)

3 The "Point SR" column indicate if the site is considered as specific stationary sensitive receiver by the nature of its use (e.g., beaches, existing intakes, SSSI or habitats for less mobile species).

Table 6

Predicted Daily Sedimentation Rate (g/m2) at Selected Observation Points for the Scenario Year
2011-Sequence B Dry Season (Mitigated)

Time / WSR	9a	20	22c*	24	25	27	41	45c	46*	49
1996/07/24 00:00:00	0.0	0.0	0.0	0.3	50.4	0.1	11.6	1.3	3.9	3.7
1996/07/24 01:00:00	0.0	0.0	0.0	0.3	58.5	0.1	11.8	1.4	3.9	4.0
1996/07/24 02:00:00	0.0	0.0	0.0	0.3	62.4	0.2	11.9	1.4	3.9	4.1
1996/07/24 03:00:00	0.0	0.0	0.0	0.3	64.5	0.2	12.1	1.4	3.9	4.2
1996/07/24 04:00:00	0.1	0.0	0.0	0.3	65.8	0.2	12.3	1.4	3.9	4.2
1996/07/24 05:00:00	0.1	0.0	0.0	0.4	66.8	0.2	12.5	1.5	4.0	4.2
1996/07/24 06:00:00	0.2	0.0	0.0	0.4	67.6	0.2	12.7	1.5	4.0	4.2
1996/07/24 07:00:00	0.2	0.0	0.1	0.4	68.3	0.2	12.8	1.5	4.1	4.4
1996/07/24 08:00:00	0.2	0.0	0.1	0.4	68.8	0.2	13.1	1.5	4.2	4.4
1996/07/24 09:00:00	0.2	0.0	0.1	0.4	68.9	0.2	13.4	1.5	4.4	4.5
1996/07/24 10:00:00	0.3	0.0	0.1	0.5	69.0	0.2	13.5	1.5	4.3	4.7
1996/07/24 11:00:00	0.3	0.0	0.1	1.1	69.0	0.2	13.3	1.5	4.6	4.8
1996/07/24 12:00:00	0.3	0.0	0.1	1.4	65.9	0.2	12.4	1.6	4.9	4.8
1996/07/24 13:00:00	0.3	0.0	0.1	1.4	56.8	0.2	13.0	1.6	5.0	4.9
1996/07/24 14:00:00	0.3	0.0	0.1	1.4	54.3	0.2	13.5	1.7	5.0	5.0
1996/07/24 15:00:00	0.3	0.0	0.1	1.4	57.5	0.2	13.0	1.7	5.0	5.0
1996/07/24 16:00:00	0.3	0.0	0.1	1.4	60.1	0.2	12.5	1.7	4.9	5.0
1996/07/24 17:00:00	0.3	0.0	0.1	1.4	61.6	0.2	13.7	1.7	4.7	5.0
1996/07/24 18:00:00	0.3	0.0	0.1	1.4	61.6	0.3	13.7	1.7	4.1	4.4
1996/07/24 19:00:00	0.3	0.0	0.1	1.4	63.4	0.3	13.6	1.7	4.0	4.1
1996/07/24 20:00:00	0.3	0.0	0.1	1.4	65.7	0.3	13.9	1.5	4.3	4.0
1996/07/24 21:00:00	0.3	0.0	0.1	1.3	66.8	0.3	14.8	1.3	4.9	4.6
1996/07/24 22:00:00	0.3	0.0	0.1	1.2	67.2	0.3	15.5	1.1	4.7	5.1
1996/07/24 23:00:00	0.4	0.0	0.1	1.2	67.4	0.3	15.3	1.0	5.0	5.7
1996/07/25 00:00:00	0.4	0.0	0.1	1.2	64.0	0.3	14.9	1.0	5.0	6.1
1996/07/25 01:00:00	0.4	0.0	0.1	1.1	61.3	0.2	14.9	1.0	5.0	6.2
1996/07/25 02:00:00	0.4	0.0	0.0	1.1	61.8	0.2	14.8	1.0	5.0	6.3
1996/07/25 03:00:00	0.3	0.0	0.0	1.1	61.6	0.2	14.6	1.0	5.0	6.3
1996/07/25 04:00:00	0.3	0.0	0.0	1.1	61.6	0.2	14.5	1.0	4.9	6.3
1996/07/25 05:00:00	0.2	0.0	0.1	1.1	61.5	0.2	14.5	1.0	4.9	6.3
1996/07/25 06:00:00	0.2	0.0	0.1	1.1	61.2	0.2	14.4	0.9	4.9	6.2
1996/07/25 07:00:00	0.2	0.0	0.1	1.1	60.9	0.2	14.4	0.9	4.8	6.1
1996/07/25 08:00:00	0.2	0.0	0.1	1.1	60.8	0.2	14.2	0.9	4.7	6.1
1996/07/25 09:00:00	0.2	0.0	0.1	1.1	60.9	0.2	14.1	0.9	4.6	6.0
1996/07/25 10:00:00	0.2	0.0	0.1	1.0	61.0	0.2	14.0	0.9	4.6	5.9
1996/07/25 11:00:00	0.2	0.0	0.1	0.6	61.0	0.2	13.9	0.9	4.3	6.0
1996/07/25 12:00:00	0.2	0.0	0.1	0.8	61.0	0.2	13.8	0.9	4.3	6.1
1996/07/25 13:00:00	0.2	0.0	0.1	1.2	60.3	0.2	12.6	0.9	4.9	6.3
1996/07/25 14:00:00	0.2	0.0	0.1	1.4	53.4	0.2	11.3	0.9	5.2	6.4
1996/07/25 15:00:00	0.2	0.0	0.1	1.4	44.4	0.2	11.6	0.9	5.3	6.5
1996/07/25 16:00:00	0.2	0.0	0.1	1.4	43.2	0.2	11.5	0.9	5.3	6.5
1996/07/25 17:00:00	0.2	0.0	0.1	1.4	46.1	0.2	10.9	0.9	5.3	6.5
1996/07/25 18:00:00	0.2	0.0	0.1	1.4	49.8	0.2	11.8	0.9	5.2	6.5
1996/07/25 19:00:00	0.2	0.0	0.1	1.4	52.6	0.2	12.9	0.9	4.8	6.5
1996/07/25 20:00:00	0.2	0.0	0.1	1.4	53.6	0.2	12.9	0.9	4.1	5.8
1996/07/25 21:00:00	0.2	0.0	0.1	1.4	55.2	0.2	12.4	0.9	3.6	4.5
1996/07/25 22:00:00	0.2	0.0	0.1	1.4	56.9	0.2	12.3	0.7	4.1	3.6
1996/07/25 23:00:00	0.2	0.0	0.1	1.4	57.6	0.2	12.7	0.5	4.8	3.9
1996/07/26 00:00:00	0.2	0.0	0.1	1.4	57.5	0.2	12.7	0.3	5.5	4.6
1996/07/26 01:00:00	0.2	0.0	0.1	1.4	52.3	0.2	13.0	0.3	5.8	5.3
1996/07/26 02:00:00	0.2	0.0	0.1	1.4	49.1	0.2	13.4	0.2	5.8	5.7
1996/07/26 03:00:00	0.2	0.0	0.1	1.4	48.7	0.2	13.4	0.2	5.8	5.8
1996/07/26 04:00:00	0.2	0.0	0.1	1.4	48.4	0.2	13.3	0.2	5.8	5.8
1996/07/26 05:00:00	0.1	0.0	0.0	1.4	48.4	0.2	13.2	0.2	5.8	5.8
1996/07/26 06:00:00	0.1	0.0	0.1	1.4	48.5	0.2	13.2	0.2	5.8	5.8
1996/07/26 07:00:00	0.1	0.0	0.1	1.4	48.4	0.2	13.2	0.2	5.8	5.8
1996/07/26 08:00:00	0.1	0.0	0.1	1.4	48.3	0.2	13.2	0.2	5.8	5.8
1996/07/26 09:00:00	0.1	0.0	0.1	1.4	48.4	0.2	13.1	0.2	5.8	5.8
1996/07/26 10:00:00	0.1	0.0	0.1	1.4	48.4	0.2	13.1	0.2	5.7	5.7
1996/07/26 11:00:00	0.1	0.0	0.1	1.2	48.4	0.2	13.1	0.2	5.6	5.6
1996/07/26 12:00:00	0.1	0.0	0.1	1.0	48.4	0.2	13.1	0.3	5.3	5.4
1996/07/26 13:00:00	0.1	0.0	0.1	1.0	48.4	0.2	13.1	0.3	4.6	5.5
1996/07/26 14:00:00	0.1	0.0	0.1	1.6	48.4	0.2	12.8	0.3	4.5	5.6
1996/07/26 15:00:00	0.1	0.0	0.1	2.0	46.9	0.1	12.7	0.3	5.3	5.8
1996/07/26 16:00:00	0.1	0.0	0.1	2.1	39.6	0.1	18.8	0.4	5.8	5.9
1996/07/26 17:00:00	0.1	0.0	0.1	2.1	32.1	0.1	22.4	0.4	5.9	5.9
1996/07/26 18:00:00	0.1	0.0	0.1	2.1	34.3	0.1	21.5	0.4	5.9	5.9
1996/07/26 19:00:00	0.1	0.0	0.1	2.1	37.1	0.1	21.2	0.4	5.9	5.9
1996/07/26 20:00:00	0.1	0.0	0.1	2.1	40.2	0.1	22.5	0.4	5.8	6.0
1996/07/26 21:00:00	0.1	0.0	0.1	2.1	42.3	0.1	24.3	0.4	5.2	6.0
1996/07/26 22:00:00	0.1	0.0	0.1	2.1	43.2	0.2	24.5	0.4	4.3	5.7
1996/07/26 23:00:00	0.1	0.0	0.1	2.1	44.2	0.2	24.3	0.4	3.8	4.5
1996/07/27 00:00:00	0.1	0.0	0.1	2.1	45.4	0.2	24.4	0.4	4.2	3.5
1996/07/27 01:00:00	0.1	0.0	0.1	2.1	46.0	0.2	24.7	0.4	5.1	3.6
1996/07/27 02:00:00	0.1	0.0	0.1	2.1	45.1	0.2	25.0	0.4	5.8	4.1
1996/07/27 03:00:00	0.1	0.0	0.1	2.1	43.9	0.2	25.3	0.4	5.8	4.6
1996/07/27 04:00:00	0.1	0.0	0.1	2.1	43.6	0.1	25.4	0.4	5.8	4.7
1996/07/27 05:00:00	0.1	0.0	0.1	2.1	43.7	0.1	25.3	0.4	5.8	4.7
1996/07/27 06:00:00	0.1	0.0	0.1	2.1	43.9	0.1	25.2	0.4	5.8	4.7
1996/07/27 07:00:00	0.1	0.0	0.1	2.1	44.0	0.1	25.3	0.4	5.8	4.7
1996/07/27 08:00:00	0.1	0.0	0.1	2.2	44.1	0.1	25.3	0.4	5.8	4.7
1996/07/27 09:00:00	0.1	0.0	0.1	2.2	44.1	0.1	25.3	0.4	5.8	4.7
1996/07/27 10:00:00	0.1	0.0	0.1	2.2	44.1	0.1	25.3	0.5	5.8	4.7
1996/07/27 11:00:00	0.1	0.0	0.1	2.1	44.3	0.1	25.3	0.4	5.8	4.7
1996/07/27 12:00:00	0.1	0.0	0.1	2.1	44.3	0.1	25.3	0.4	5.8	4.6
1996/07/27 13:00:00	0.1	0.0	0.1	1.8	44.3	0.1	25.3	0.4	5.8	4.4
1996/07/27 14:00:00	0.1	0.0	0.1	1.5	44.3	0.1	25.3	0.4	5.6	4.5
1996/07/27 15:00:00	0.1	0.0	0.1	2.0	44.3	0.1	24.2	0.5	4.7	4.9
1996/07/27 16:00:00	0.1	0.0	0.1	2.4	44.3	0.1	17.0	0.5	5.1	5.4
1996/07/27 17:00:00	0.1	0.0	0.1	2.5	42.5	0.1	18.7	0.5	5.8	5.7
1996/07/27 18:00:00	0.1	0.0	0.1	2.5	35.6	0.1	19.5	0.5	5.7	5.8
1996/07/27 19:00:00	0.1	0.0	0.1	2.5	35.8	0.1	18.4	0.6	5.7	5.8
1996/07/27 20:00:00	0.1	0.0	0.2	2.5	38.0	0.1	18.4	0.6	5.7	5.8
1996/07/27 21:00:00	0.1	0.0	0.2	2.5	40.1	0.1	18.8	0.6	5.7	5.8
1996/07/27 22:00:00	0.1	0.0	0.2	2.5	42.1	0.1	21.3	0.6	5.6	5.9
1996/07/27 23:00:00	0.1	0.0	0.2	2.5	43.4	0.2	22.8	0.6	5.1	5.9
1996/07/28 00:00:00	0.1	0.0	0.2	2.5	44.3	0.2	22.6	0.6	4.7	5.7
1996/07/28 01:00:00	0.1	0.0	0.2	2.5	45.0	0.2	22.3	0.6	4.8	6.0
1996/07/28 02:00:00	0.1	0.0	0.2	2.5	45.5	0.2	22.4	0.6	5.2	7.2
1996/07/28 03:00:00	0.1	0.0	0.2	2.5	45.5	0.2	22.6	0.7	6.0	8.1
1996/07/28 04:00:00	0.1	0.0	0.2	2.5	44.8	0.2	23.0	0.8	6.0	8.7
1996/07/28 05:00:00	0.1	0.1	0.2	2.5	44.5	0.2	23.0	0.8	6.0	9.0
1996/07/28 06:00:00	0.1	0.1	0.2	2.5	44.7	0.2	23.0	0.8	6.0	9.1
1996/07/28 07:00:00	0.1	0.1	0.2	2.5	44.9	0.2	23.0	0.8	6.0	9.1
1996/07/28 08:00:00	0.1	0.1	0.2	2.6	45.1	0.2	23.0	0.8	5.9	9.1
1996/07/28 09:00:00	0.1	0.1	0.2	2.6	45.2	0.2	23.2	0.8	6.0	9.1
1996/07/28 10:00:00	0.1	0.1	0.2	2.6	45.3	0.2	23.3	0.8	6.1	9.1
1996/07/28 11:00:00	0.1	0.1	0.2	2.6	45.5	0.2	23.3	0.8	6.1	9.1
1996/07/28 12:00:00	0.1	0.1	0.2	2.6	45.7	0.2	23.3	0.8	6.1	9.1
1996/07/28 13:00:00	0.1	0.1	0.2							

Time / WSR	9a	20	22c*	24	25	27	41	45c	46*	49
1996/07/28 22:00:00	0.1	0.2	0.3	2.5	42.9	0.2	16.9	1.1	5.7	10.2
1996/07/28 23:00:00	0.1	0.2	0.3	2.5	44.4	0.2	18.9	1.1	5.6	10.2
1996/07/29 00:00:00	0.1	0.2	0.3	2.5	45.1	0.2	20.1	1.2	5.3	10.0
1996/07/29 01:00:00	0.1	0.2	0.3	2.5	45.5	0.2	20.0	1.2	5.2	9.5
1996/07/29 02:00:00	0.1	0.2	0.3	2.5	46.0	0.2	19.8	1.2	4.9	8.7
1996/07/29 03:00:00	0.1	0.2	0.3	2.5	46.3	0.2	19.4	1.2	4.5	8.6
1996/07/29 04:00:00	0.1	0.2	0.3	2.5	46.4	0.2	19.4	1.4	5.0	8.9
1996/07/29 05:00:00	0.1	0.2	0.3	2.5	45.9	0.2	19.6	1.6	5.0	9.3
1996/07/29 06:00:00	0.1	0.2	0.2	2.5	45.4	0.2	19.6	1.6	5.0	9.6
1996/07/29 07:00:00	0.1	0.2	0.3	2.5	45.2	0.2	19.6	1.6	5.0	9.6
1996/07/29 08:00:00	0.1	0.2	0.3	2.5	45.3	0.2	19.5	1.6	5.0	9.6
1996/07/29 09:00:00	0.1	0.2	0.3	2.6	45.5	0.2	20.0	1.6	4.9	9.6
1996/07/29 10:00:00	0.1	0.2	0.4	2.6	46.2	0.2	20.8	1.6	4.9	9.6
1996/07/29 11:00:00	0.1	0.2	0.4	2.7	46.7	0.2	21.7	1.6	5.1	9.7
1996/07/29 12:00:00	0.1	0.2	0.4	2.6	47.0	0.2	21.8	1.6	5.1	9.7
1996/07/29 13:00:00	0.1	0.2	0.4	2.6	47.1	0.2	21.8	1.5	5.1	9.7
1996/07/29 14:00:00	0.1	0.2	0.4	2.5	47.1	0.2	21.8	1.5	5.1	9.7
1996/07/29 15:00:00	0.1	0.2	0.4	2.2	47.1	0.2	21.8	1.6	5.1	9.2
1996/07/29 16:00:00	0.1	0.2	0.4	2.0	47.1	0.2	21.8	1.6	5.1	8.3
1996/07/29 17:00:00	0.1	0.3	0.4	2.1	47.1	0.2	21.4	1.7	4.3	8.2
1996/07/29 18:00:00	0.1	0.3	0.4	2.4	46.8	0.2	21.7	1.8	4.4	8.6
1996/07/29 19:00:00	0.1	0.4	0.4	2.4	42.8	0.2	22.1	1.8	4.4	8.7
1996/07/29 20:00:00	0.1	0.4	0.4	2.4	41.7	0.2	21.6	1.8	4.4	8.7
1996/07/29 21:00:00	0.1	0.4	0.4	2.4	41.8	0.2	18.9	1.9	4.4	8.7
1996/07/29 22:00:00	0.1	0.4	0.4	2.4	43.3	0.2	17.7	2.0	4.3	8.7
1996/07/29 23:00:00	0.1	0.4	0.4	2.5	45.3	0.2	19.1	2.0	4.4	8.8
1996/07/30 00:00:00	0.1	0.5	0.4	2.5	46.7	0.2	20.5	2.1	4.2	8.8
1996/07/30 01:00:00	0.2	0.5	0.4	2.5	47.7	0.3	21.1	2.2	3.7	8.3
1996/07/30 02:00:00	0.2	0.5	0.4	2.5	48.1	0.3	21.2	2.2	3.4	7.5
1996/07/30 03:00:00	0.2	0.5	0.4	2.5	48.3	0.3	21.2	2.2	3.3	6.7
1996/07/30 04:00:00	0.2	0.5	0.4	2.5	48.4	0.3	21.1	2.3	3.2	6.6
1996/07/30 05:00:00	0.2	0.5	0.4	2.5	48.5	0.3	21.1	2.8	3.5	6.7
1996/07/30 06:00:00	0.2	0.5	0.4	2.5	48.2	0.3	21.2	2.9	3.5	6.7
1996/07/30 07:00:00	0.2	0.5	0.4	2.5	47.9	0.3	21.2	2.9	3.5	6.8
1996/07/30 08:00:00	0.2	0.5	0.4	2.5	47.7	0.3	21.1	3.0	3.5	6.8
1996/07/30 09:00:00	0.2	0.5	0.5	2.6	48.8	0.3	21.0	3.0	3.5	6.8
1996/07/30 10:00:00	0.2	0.5	0.5	2.7	50.5	0.3	21.7	3.0	3.4	6.8
1996/07/30 11:00:00	0.2	0.5	0.6	2.8	51.9	0.3	21.9	3.0	3.4	6.7
1996/07/30 12:00:00	0.2	0.5	0.6	2.8	53.3	0.3	22.4	3.0	3.5	7.0
1996/07/30 13:00:00	0.2	0.5	0.6	2.8	54.0	0.3	22.4	3.0	3.5	7.0
1996/07/30 14:00:00	0.2	0.5	0.6	2.7	54.0	0.3	22.4	2.9	3.5	7.0
1996/07/30 15:00:00	0.2	0.5	0.6	2.6	54.0	0.3	22.4	2.9	3.5	7.0
1996/07/30 16:00:00	0.2	0.5	0.6	2.4	54.0	0.3	22.4	2.8	3.5	6.8
1996/07/30 17:00:00	0.2	0.5	0.6	2.2	54.0	0.3	22.4	3.0	3.5	6.0
1996/07/30 18:00:00	0.2	0.5	0.6	2.5	54.0	0.3	21.1	3.0	2.9	5.8
1996/07/30 19:00:00	0.2	0.6	0.6	2.6	52.8	0.2	22.4	3.1	3.4	6.1
1996/07/30 20:00:00	0.2	0.6	0.6	2.6	48.3	0.2	22.4	3.2	3.4	6.0
1996/07/30 21:00:00	0.2	0.6	0.6	2.6	49.2	0.2	21.4	3.1	3.4	6.0
1996/07/30 22:00:00	0.2	0.7	0.6	2.6	50.9	0.3	19.3	3.1	3.4	6.0
1996/07/30 23:00:00	0.2	0.7	0.7	2.7	52.1	0.3	19.9	3.2	3.4	6.0
1996/07/31 00:00:00	0.2	0.7	0.7	2.7	52.9	0.3	22.2	3.2	3.4	6.0
1996/07/31 01:00:00	0.2	0.7	0.7	2.7	53.4	0.3	23.0	3.2	4.0	5.6
1996/07/31 02:00:00	0.3	0.7	0.7	2.7	54.1	0.3	23.0	3.3	4.3	6.4
1996/07/31 03:00:00	0.3	0.7	0.7	2.7	54.3	0.3	22.9	3.2	4.0	5.8
1996/07/31 04:00:00	0.3	0.7	0.7	2.7	54.3	0.3	22.9	3.0	3.9	5.1
1996/07/31 05:00:00	0.3	0.7	0.7	2.7	54.3	0.3	22.8	3.0	4.0	5.2
1996/07/31 06:00:00	0.3	0.7	0.7	2.7	54.4	0.3	23.0	3.6	4.4	5.4
1996/07/31 07:00:00	0.3	0.7	0.7	2.7	54.2	0.3	23.0	3.6	4.4	5.4
1996/07/31 08:00:00	0.3	0.7	0.6	2.6	54.2	0.3	23.0	3.7	4.4	5.4
1996/07/31 09:00:00	0.3	0.7	0.6	2.6	54.9	0.3	22.3	3.7	4.4	5.4
1996/07/31 10:00:00	0.3	0.7	0.7	2.7	56.5	0.3	22.4	3.7	4.4	5.4
1996/07/31 11:00:00	0.3	0.7	0.8	2.9	57.1	0.3	23.2	3.7	4.3	5.4
1996/07/31 12:00:00	0.3	0.7	0.9	2.9	57.2	0.3	23.7	3.7	4.6	5.1
1996/07/31 13:00:00	0.4	0.7	0.9	3.0	58.7	0.3	24.0	3.7	4.6	5.1
1996/07/31 14:00:00	0.4	0.7	0.9	2.9	59.1	0.3	24.0	3.7	4.6	5.1
1996/07/31 15:00:00	0.4	0.7	0.9	2.9	59.1	0.3	24.0	3.7	4.6	5.1
1996/07/31 16:00:00	0.4	0.7	0.9	2.8	59.1	0.3	24.0	3.6	4.6	5.1
1996/07/31 17:00:00	0.4	0.6	0.9	2.6	59.1	0.3	24.0	3.5	4.6	4.9
1996/07/31 18:00:00	0.4	0.7	0.9	2.6	59.1	0.3	24.0	3.6	4.6	4.6
1996/07/31 19:00:00	0.4	0.7	0.9	2.9	59.1	0.3	22.5	3.6	4.3	4.9
1996/07/31 20:00:00	0.4	0.8	0.9	2.9	56.1	0.3	23.6	3.7	4.3	4.9
1996/07/31 21:00:00	0.4	0.8	0.9	2.9	52.5	0.3	23.6	3.7	4.3	4.9
1996/07/31 22:00:00	0.4	0.8	0.9	2.9	52.9	0.3	22.0	3.7	4.3	4.9
1996/07/31 23:00:00	0.4	0.8	0.9	2.9	54.2	0.3	19.4	3.7	4.3	4.9
1996/08/01 00:00:00	0.3	0.8	0.9	2.9	55.3	0.3	21.8	3.7	4.2	4.9
1996/08/01 01:00:00	0.4	0.8	0.9	3.0	55.1	0.3	24.9	3.7	4.2	4.9
1996/08/01 02:00:00	0.4	0.9	0.9	3.0	55.5	0.3	25.6	3.8	4.9	4.1
1996/08/01 03:00:00	0.4	0.9	0.9	3.0	56.3	0.3	25.7	3.8	4.9	4.1
1996/08/01 04:00:00	0.4	0.8	0.9	3.0	56.5	0.3	25.6	3.7	4.6	3.7
1996/08/01 05:00:00	0.4	0.8	0.9	3.0	56.5	0.3	25.5	3.5	4.4	3.2
1996/08/01 06:00:00	0.4	0.9	0.9	3.0	56.5	0.3	25.5	3.5	4.4	3.4
1996/08/01 07:00:00	0.5	0.9	0.9	3.0	56.5	0.3	25.6	4.0	4.6	3.7
1996/08/01 08:00:00	0.5	0.9	0.8	2.9	56.3	0.3	25.6	4.1	4.6	3.8
1996/08/01 09:00:00	0.5	0.9	0.8	2.8	56.9	0.3	25.6	4.1	4.6	3.8
1996/08/01 10:00:00	0.5	0.9	0.7	2.7	58.7	0.3	23.9	4.1	4.6	3.8
1996/08/01 11:00:00	0.4	0.9	0.7	2.8	60.5	0.3	24.5	4.1	4.4	3.8
1996/08/01 12:00:00	0.4	0.9	0.8	2.8	60.8	0.3	25.8	4.2	4.2	3.7
1996/08/01 13:00:00	0.5	0.9	0.8	2.9	60.7	0.3	26.5	4.2	4.8	3.9
1996/08/01 14:00:00	0.5	0.9	0.8	2.9	62.5	0.3	26.5	4.2	4.8	3.9
1996/08/01 15:00:00	0.5	0.9	0.8	2.9	62.7	0.3	26.5	4.2	4.8	3.9
1996/08/01 16:00:00	0.5	0.9	0.8	2.8	62.7	0.3	26.5	4.2	4.8	3.9
1996/08/01 17:00:00	0.5	0.9	0.8	2.8	62.7	0.3	26.5	4.1	4.8	3.9
1996/08/01 18:00:00	0.5	0.8	0.8	2.6	62.7	0.3	26.4	4.0	4.8	3.5
1996/08/01 19:00:00	0.5	0.8	0.8	2.7	62.7	0.3	26.0	4.0	4.5	3.7
1996/08/01 20:00:00	0.5	0.8	0.8	2.9	62.4	0.3	28.4	4.0	5.0	4.2
1996/08/01 21:00:00	0.5	0.9	0.8	2.9	57.5	0.3	28.8	4.1	5.0	4.2
1996/08/01 22:00:00	0.5	0.9	0.8	2.9	56.1	0.3	28.4	4.1	5.0	4.2
1996/08/01 23:00:00	0.5	0.9	0.8	2.9	57.0	0.3	26.4	4.1	5.0	4.2
1996/08/02 00:00:00	0.5	0.9	0.8	2.9	58.6	0.3	23.9	4.1	4.8	4.1
1996/08/02 01:00:00	0.5	0.9	0.8	2.9	59.9	0.3	26.3	4.2	3.9	4.2
1996/08/02 02:00:00	0.5	0.9	0.8	2.9	59.8	0.3	27.9	4.2	3.9	3.8
1996/08/02 03:00:00	0.5	0.9	0.8	2.9	60.4	0.3	28.1	4.2	3.9	5.0
1996/08/02 04:00:00	0.6	0.9	0.8	2.9	61.1	0.3	28.2	4.2	3.9	5.0
1996/08/02 05:00:00	0.6	0.9	0.8	2.9	61.2	0.3	28.1	4.0	3.6	4.6
1996/08/02 06:00:00	0.6	0.9	0.8	2.9	61.2	0.3	28.1	3.7	3.5	4.4
1996/08/02 07:00:00	0.6	0.9	0.8	2.9	61.2	0.3	28.0	3.7	3.7	4.5
1996/08/02 08:00:00	0.6	0.9	0.8	2.9	61.1	0.3	28.1	4.0	3.7	4.7
1996/08/02 09:00:00	0.6	0.9	0.8	2.9	60.9	0.3	28.1	4.0	3.7	4.8
1996/08/02 10:00:00	0.6	0.9	0.6	2.7	62.4	0.3	28.1	4.0	3.7	4.8
1996/08/02 11:00:00	0.6	0.9	0.6	2.6	64.5	0.3	25.6	4.0	3.7	4.8
1996/08/02 12:00:00										

Time / WSR	9a	20	22c*	24	25	27	41	45c	46*	49
1996/08/03 01:00:00	0.5	0.8	0.6	2.6	64.6	0.3	20.9	4.1	3.2	5.5
1996/08/03 02:00:00	0.5	0.8	0.6	2.6	65.2	0.3	21.8	4.1	2.2	5.6
1996/08/03 03:00:00	0.5	0.8	0.6	2.6	65.1	0.3	22.3	4.2	2.8	4.6
1996/08/03 04:00:00	0.6	0.8	0.6	2.6	66.0	0.3	22.4	4.2	2.8	5.1
1996/08/03 05:00:00	0.6	0.8	0.6	2.6	66.7	0.3	22.4	4.1	2.8	5.1
1996/08/03 06:00:00	0.6	0.8	0.6	2.6	66.8	0.3	22.4	3.9	2.6	4.9
1996/08/03 07:00:00	0.6	0.8	0.6	2.6	66.8	0.3	22.3	3.6	2.6	4.8
1996/08/03 08:00:00	0.6	0.8	0.6	2.6	66.8	0.3	22.4	3.7	2.8	4.9
1996/08/03 09:00:00	0.6	0.8	0.6	2.6	64.6	0.3	22.5	3.8	2.8	5.1
1996/08/03 10:00:00	0.6	0.8	0.5	2.6	64.2	0.3	22.5	3.9	2.8	5.1
1996/08/03 11:00:00	0.6	0.8	0.4	2.4	65.8	0.3	22.6	3.9	2.8	5.1
1996/08/03 12:00:00	0.6	0.8	0.3	2.3	68.1	0.3	21.4	3.9	2.8	5.1
1996/08/03 13:00:00	0.6	0.8	0.3	2.2	69.7	0.3	22.8	3.9	2.7	5.2
1996/08/03 14:00:00	0.6	0.8	0.3	2.2	70.1	0.3	23.8	3.9	2.4	4.9
1996/08/03 15:00:00	0.7	0.8	0.3	2.2	70.9	0.3	25.0	3.9	2.8	5.4
1996/08/03 16:00:00	0.7	0.8	0.3	2.2	72.7	0.3	25.0	3.9	2.8	5.4
1996/08/03 17:00:00	0.7	0.8	0.3	2.1	72.9	0.3	25.0	3.9	2.8	5.4
1996/08/03 18:00:00	0.7	0.8	0.3	2.0	72.9	0.3	25.0	4.0	2.8	5.4
1996/08/03 19:00:00	0.7	0.7	0.3	1.9	72.9	0.3	25.0	3.9	2.8	5.0
1996/08/03 20:00:00	0.7	0.7	0.3	2.0	72.9	0.3	25.0	3.9	2.8	4.9
1996/08/03 21:00:00	0.7	0.7	0.3	2.3	72.8	0.3	21.9	3.9	3.2	5.3
1996/08/03 22:00:00	0.7	0.7	0.3	2.3	70.2	0.3	22.1	4.0	3.2	5.5
1996/08/03 23:00:00	0.7	0.6	0.3	2.3	70.1	0.3	22.1	4.1	3.2	5.5
1996/08/04 00:00:00	0.7	0.6	0.3	2.3	71.6	0.3	20.4	4.2	3.2	5.5
1996/08/04 01:00:00	0.7	0.6	0.3	2.3	73.5	0.3	17.1	4.2	3.1	5.5
1996/08/04 02:00:00	0.6	0.6	0.3	2.3	74.8	0.3	16.1	4.2	3.0	5.6
1996/08/04 03:00:00	0.6	0.6	0.3	2.3	74.6	0.3	16.5	4.2	2.6	5.6
1996/08/04 04:00:00	0.6	0.6	0.3	2.3	74.6	0.3	16.8	4.2	2.9	5.3
1996/08/04 05:00:00	0.7	0.6	0.3	2.3	75.4	0.3	17.0	4.3	3.0	5.3
1996/08/04 06:00:00	0.7	0.6	0.3	2.3	75.9	0.3	17.0	4.1	3.0	5.1
1996/08/04 07:00:00	0.7	0.6	0.3	2.2	76.0	0.3	17.0	3.9	3.0	4.9
1996/08/04 08:00:00	0.7	0.6	0.3	2.3	76.0	0.3	16.9	3.8	3.1	5.0
1996/08/04 09:00:00	0.7	0.6	0.3	2.3	75.3	0.3	19.5	3.9	3.3	5.1
1996/08/04 10:00:00	0.7	0.6	0.3	2.3	68.8	0.3	20.3	3.9	3.3	5.3
1996/08/04 11:00:00	0.7	0.6	0.3	2.2	68.1	0.3	20.3	4.0	3.3	5.3
1996/08/04 12:00:00	0.7	0.6	0.2	2.2	69.7	0.3	18.9	4.0	3.3	5.4
1996/08/04 13:00:00	0.7	0.6	0.2	2.1	72.4	0.3	17.5	4.0	3.3	5.4
1996/08/04 14:00:00	0.6	0.6	0.2	2.0	74.3	0.3	17.4	4.0	3.1	5.4
1996/08/04 15:00:00	0.7	0.6	0.2	2.0	74.8	0.3	17.6	4.0	3.1	5.0
1996/08/04 16:00:00	0.7	0.6	0.2	2.0	76.0	0.3	18.6	4.0	3.5	5.6
1996/08/04 17:00:00	0.7	0.6	0.2	2.0	78.2	0.3	19.0	3.9	3.5	5.6
1996/08/04 18:00:00	0.7	0.6	0.2	1.9	78.4	0.3	19.0	3.8	3.5	5.6
1996/08/04 19:00:00	0.7	0.5	0.2	1.7	78.5	0.3	19.0	3.9	3.5	6.0
1996/08/04 20:00:00	0.7	0.4	0.2	1.5	78.5	0.3	18.9	3.9	3.5	5.8
1996/08/04 21:00:00	0.7	0.4	0.2	1.8	78.5	0.3	18.9	3.9	3.3	5.6
1996/08/04 22:00:00	0.7	0.4	0.2	1.9	76.7	0.3	18.8	3.9	4.1	5.8
1996/08/04 23:00:00	0.7	0.3	0.1	1.9	70.5	0.3	19.1	4.0	4.1	5.9
1996/08/05 00:00:00	0.7	0.3	0.1	1.9	70.7	0.2	18.6	4.0	4.1	6.0
1996/08/05 01:00:00	0.7	0.3	0.1	1.9	72.2	0.2	17.7	4.0	4.1	5.9
1996/08/05 02:00:00	0.7	0.3	0.1	1.9	73.3	0.2	15.6	3.9	3.9	5.9
1996/08/05 03:00:00	0.6	0.3	0.1	1.9	73.8	0.2	14.8	3.9	3.9	5.9
1996/08/05 04:00:00	0.6	0.3	0.1	1.9	73.1	0.2	14.8	3.9	3.6	5.8
1996/08/05 05:00:00	0.6	0.3	0.1	1.9	72.7	0.2	14.8	3.9	3.8	6.0
1996/08/05 06:00:00	0.6	0.3	0.1	1.9	73.5	0.2	15.3	3.8	3.8	6.0
1996/08/05 07:00:00	0.6	0.3	0.1	1.9	74.0	0.2	15.4	3.7	3.8	5.8
1996/08/05 08:00:00	0.6	0.3	0.1	1.8	74.1	0.2	15.4	3.5	3.9	5.7
1996/08/05 09:00:00	0.6	0.3	0.1	1.8	74.1	0.2	12.8	3.4	4.0	5.7
1996/08/05 10:00:00	0.6	0.3	0.1	1.8	73.4	0.2	12.4	3.3	4.2	5.7
1996/08/05 11:00:00	0.6	0.3	0.1	1.8	66.6	0.2	12.9	3.4	4.3	5.7
1996/08/05 12:00:00	0.6	0.3	0.1	1.8	67.1	0.2	12.9	3.4	4.3	5.8
1996/08/05 13:00:00	0.6	0.2	0.1	1.8	69.8	0.2	11.6	3.4	4.3	5.9
1996/08/05 14:00:00	0.6	0.2	0.1	1.8	72.5	0.2	11.4	3.4	4.2	5.9
1996/08/05 15:00:00	0.6	0.2	0.1	1.8	74.7	0.3	11.6	3.4	4.0	5.9
1996/08/05 16:00:00	0.6	0.2	0.1	1.7	75.2	0.3	11.8	3.4	3.7	5.3
1996/08/05 17:00:00	0.6	0.2	0.1	1.7	75.9	0.3	12.2	3.4	4.3	5.6
1996/08/05 18:00:00	0.6	0.2	0.1	1.7	77.8	0.3	13.0	3.3	4.6	5.6
1996/08/05 19:00:00	0.6	0.2	0.1	1.5	78.4	0.3	13.2	3.1	5.0	5.4
1996/08/05 20:00:00	0.6	0.2	0.1	1.3	78.5	0.3	13.2	3.1	5.4	5.6
1996/08/05 21:00:00	0.6	0.2	0.1	1.2	78.5	0.3	13.2	3.1	5.3	5.7
1996/08/05 22:00:00	0.6	0.2	0.1	1.3	78.5	0.3	13.3	3.1	5.6	5.8
1996/08/05 23:00:00	0.6	0.1	0.1	1.4	75.0	0.3	13.8	3.1	5.9	6.0
1996/08/06 00:00:00	0.6	0.1	0.1	1.4	68.3	0.2	14.3	3.1	5.9	6.1
1996/08/06 01:00:00	0.6	0.1	0.1	1.4	67.5	0.2	14.1	2.9	5.9	6.2
1996/08/06 02:00:00	0.6	0.1	0.1	1.3	67.3	0.2	13.9	2.8	5.8	6.1
1996/08/06 03:00:00	0.6	0.1	0.0	1.3	67.6	0.2	13.5	2.8	5.7	6.0
1996/08/06 04:00:00	0.5	0.1	0.0	1.3	67.6	0.2	13.3	2.7	5.6	5.9
1996/08/06 05:00:00	0.5	0.1	0.0	1.3	66.9	0.2	13.2	2.6	5.5	5.8
1996/08/06 06:00:00	0.6	0.1	0.0	1.3	66.2	0.2	12.8	2.6	5.4	5.9
1996/08/06 07:00:00	0.6	0.1	0.0	1.3	66.5	0.2	12.9	2.6	5.3	5.7
1996/08/06 08:00:00	0.6	0.1	0.0	1.3	66.8	0.2	13.3	2.5	5.2	5.6
1996/08/06 09:00:00	0.6	0.1	0.0	1.3	66.8	0.2	13.6	2.4	5.1	5.5
1996/08/06 10:00:00	0.6	0.1	0.0	1.3	66.8	0.2	13.3	2.3	5.1	5.5
1996/08/06 11:00:00	0.6	0.1	0.0	1.4	66.1	0.2	12.8	2.3	5.3	5.4
1996/08/06 12:00:00	0.6	0.1	0.0	1.4	58.7	0.2	13.8	2.3	5.4	5.3
1996/08/06 13:00:00	0.6	0.1	0.0	1.4	57.7	0.2	14.0	2.3	5.4	5.3
1996/08/06 14:00:00	0.6	0.1	0.0	1.4	60.9	0.2	13.2	2.3	5.3	5.3
1996/08/06 15:00:00	0.6	0.1	0.0	1.4	63.5	0.2	13.1	2.2	5.3	5.3
1996/08/06 16:00:00	0.5	0.1	0.0	1.4	66.0	0.2	14.2	2.2	5.2	5.3
1996/08/06 17:00:00	0.5	0.1	0.0	1.4	66.7	0.2	14.5	2.2	4.8	4.9
1996/08/06 18:00:00	0.5	0.1	0.0	1.4	68.0	0.2	14.5	2.2	5.0	5.0
1996/08/06 19:00:00	0.5	0.1	0.0	1.3	70.3	0.2	15.0	2.1	5.5	5.8
1996/08/06 20:00:00	0.5	0.1	0.0	1.1	71.0	0.2	15.7	2.0	5.7	5.7
1996/08/06 21:00:00	0.5	0.1	0.0	0.7	71.2	0.2	16.2	1.9	5.6	5.7
1996/08/06 22:00:00	0.5	0.1	0.0	0.4	71.3	0.2	16.3	2.0	5.3	5.8
1996/08/06 23:00:00	0.5	0.1	0.0	0.4	71.3	0.2	18.0	2.0	5.3	6.0
1996/08/07 00:00:00	0.5	0.0	0.0	0.4	70.2	0.2	19.7	2.0	5.3	6.1
Maximum Sediment Rate	0.7	0.9	0.9	3.0	78.5	0.3	28.8	4.3	6.1	10.2

Grey cell = value exceed 200 g/m2 criterion for coral protection.

* Known coral site

** Known coral site but proposed to be transplanted

Table 7

Predicted Daily Sedimentation Rate (g/m2) at Selected Observation Points for the Scenario Year
2011-Sequence B Wet Season (Mitigated)

Time / WSR	9a	20	22c*	24	25	27	41	45c	46*	49
1996/07/24 00:00:00	0.0	0.0	0.0	4.7	35.9	0.0	7.6	0.2	4.7	2.0
1996/07/24 01:00:00	0.0	0.0	0.0	4.7	42.7	0.0	7.7	0.2	4.7	2.0
1996/07/24 02:00:00	0.0	0.0	0.0	4.7	47.8	0.0	7.8	0.2	4.7	2.0
1996/07/24 03:00:00	0.0	0.0	0.0	4.7	51.5	0.0	7.8	0.3	4.7	2.0
1996/07/24 04:00:00	0.1	0.0	0.0	4.7	52.8	0.0	7.9	0.3	4.7	2.0
1996/07/24 05:00:00	0.1	0.0	0.0	4.7	53.4	0.0	8.0	0.3	4.7	2.0
1996/07/24 06:00:00	0.2	0.0	0.0	4.7	54.0	0.0	8.2	0.3	4.8	2.0
1996/07/24 07:00:00	0.2	0.0	0.0	4.7	54.3	0.0	8.4	0.3	4.8	2.0
1996/07/24 08:00:00	0.2	0.0	0.0	4.7	54.4	0.0	8.5	0.3	4.9	2.1
1996/07/24 09:00:00	0.2	0.0	0.0	4.9	54.4	0.0	8.6	0.3	4.8	2.1
1996/07/24 10:00:00	0.2	0.0	0.0	5.6	54.4	0.0	8.4	0.3	5.3	2.2
1996/07/24 11:00:00	0.2	0.0	0.0	6.4	54.0	0.0	8.0	0.3	5.5	2.2
1996/07/24 12:00:00	0.2	0.0	0.0	6.6	51.9	0.0	8.1	0.3	5.6	2.2
1996/07/24 13:00:00	0.2	0.0	0.0	6.6	48.1	0.0	9.3	0.3	5.6	2.2
1996/07/24 14:00:00	0.2	0.0	0.0	6.6	46.1	0.0	11.7	0.3	5.6	2.2
1996/07/24 15:00:00	0.2	0.0	0.0	6.6	46.6	0.0	12.3	0.3	5.6	2.2
1996/07/24 16:00:00	0.3	0.0	0.0	6.6	48.0	0.0	12.3	0.3	5.6	2.2
1996/07/24 17:00:00	0.3	0.0	0.0	6.5	49.9	0.0	11.7	0.3	5.3	2.2
1996/07/24 18:00:00	0.3	0.0	0.0	6.5	51.7	0.0	12.7	0.3	4.6	2.1
1996/07/24 19:00:00	0.3	0.0	0.0	6.1	52.2	0.0	14.1	0.3	4.3	1.6
1996/07/24 20:00:00	0.3	0.0	0.0	4.5	52.3	0.0	14.5	0.3	4.3	1.3
1996/07/24 21:00:00	0.3	0.0	0.0	3.7	52.3	0.0	14.9	0.3	4.5	1.3
1996/07/24 22:00:00	0.3	0.0	0.0	4.0	52.4	0.0	15.0	0.2	5.0	1.3
1996/07/24 23:00:00	0.3	0.0	0.0	4.2	51.4	0.0	14.5	0.2	5.4	1.4
1996/07/25 00:00:00	0.3	0.0	0.0	4.2	47.3	0.0	14.7	0.2	5.5	1.5
1996/07/25 01:00:00	0.3	0.0	0.0	4.2	44.8	0.0	15.1	0.2	5.5	1.5
1996/07/25 02:00:00	0.3	0.0	0.0	4.2	46.0	0.0	15.2	0.2	5.5	1.5
1996/07/25 03:00:00	0.3	0.0	0.0	4.2	47.7	0.0	15.2	0.2	5.5	1.5
1996/07/25 04:00:00	0.3	0.0	0.0	4.2	50.1	0.0	15.2	0.2	5.5	1.5
1996/07/25 05:00:00	0.2	0.0	0.0	4.2	50.8	0.0	15.1	0.2	5.5	1.5
1996/07/25 06:00:00	0.2	0.0	0.0	4.2	50.6	0.0	15.0	0.2	5.5	1.5
1996/07/25 07:00:00	0.2	0.0	0.0	4.2	50.8	0.0	14.8	0.2	5.4	1.5
1996/07/25 08:00:00	0.2	0.0	0.0	4.2	50.9	0.0	14.8	0.2	5.4	1.4
1996/07/25 09:00:00	0.2	0.0	0.0	4.2	50.9	0.0	14.8	0.2	5.1	1.4
1996/07/25 10:00:00	0.2	0.0	0.0	4.7	50.9	0.0	14.8	0.2	4.8	1.5
1996/07/25 11:00:00	0.2	0.0	0.0	5.7	50.9	0.0	14.6	0.2	5.0	1.6
1996/07/25 12:00:00	0.2	0.0	0.0	7.1	50.5	0.0	13.8	0.2	5.4	1.8
1996/07/25 13:00:00	0.2	0.0	0.0	7.4	48.7	0.0	13.0	0.2	5.7	1.9
1996/07/25 14:00:00	0.2	0.0	0.0	7.5	45.4	0.0	11.6	0.2	5.7	1.9
1996/07/25 15:00:00	0.2	0.0	0.0	7.5	42.8	0.0	12.1	0.2	5.6	1.9
1996/07/25 16:00:00	0.2	0.0	0.0	7.5	41.2	0.0	13.5	0.2	5.6	1.9
1996/07/25 17:00:00	0.1	0.0	0.0	7.5	40.5	0.0	13.9	0.2	5.6	2.0
1996/07/25 18:00:00	0.1	0.0	0.0	7.5	41.9	0.0	13.3	0.2	5.6	1.9
1996/07/25 19:00:00	0.1	0.0	0.0	7.5	44.2	0.0	13.5	0.2	5.2	1.9
1996/07/25 20:00:00	0.1	0.0	0.0	7.4	45.2	0.0	15.1	0.2	4.2	1.7
1996/07/25 21:00:00	0.1	0.0	0.0	6.6	45.5	0.0	16.3	0.2	3.5	1.4
1996/07/25 22:00:00	0.1	0.0	0.0	5.9	45.5	0.0	16.9	0.1	3.3	1.2
1996/07/25 23:00:00	0.1	0.0	0.0	6.3	45.3	0.0	17.2	0.1	3.7	1.2
1996/07/26 00:00:00	0.2	0.0	0.0	6.6	44.9	0.0	17.1	0.1	4.1	1.3
1996/07/26 01:00:00	0.1	0.0	0.0	6.7	41.1	0.0	17.3	0.1	4.3	1.4
1996/07/26 02:00:00	0.2	0.0	0.0	6.7	35.7	0.0	17.6	0.1	4.3	1.4
1996/07/26 03:00:00	0.2	0.0	0.0	6.7	31.9	0.0	17.8	0.1	4.3	1.4
1996/07/26 04:00:00	0.2	0.0	0.0	6.7	29.9	0.0	17.8	0.1	4.3	1.4
1996/07/26 05:00:00	0.2	0.0	0.0	6.7	29.7	0.0	17.8	0.1	4.3	1.4
1996/07/26 06:00:00	0.2	0.0	0.0	6.7	29.7	0.0	17.8	0.1	4.3	1.4
1996/07/26 07:00:00	0.2	0.0	0.0	6.7	29.5	0.0	17.7	0.1	4.3	1.4
1996/07/26 08:00:00	0.2	0.0	0.0	6.7	29.5	0.0	17.6	0.1	4.3	1.4
1996/07/26 09:00:00	0.2	0.0	0.0	6.5	29.5	0.0	17.6	0.1	4.2	1.4
1996/07/26 10:00:00	0.2	0.0	0.0	6.0	29.5	0.0	17.5	0.1	4.0	1.3
1996/07/26 11:00:00	0.2	0.0	0.0	6.0	29.5	0.0	17.5	0.1	3.7	1.4
1996/07/26 12:00:00	0.2	0.0	0.0	6.7	29.5	0.0	17.5	0.2	3.4	1.5
1996/07/26 13:00:00	0.2	0.0	0.0	9.2	29.5	0.0	16.9	0.2	3.9	1.6
1996/07/26 14:00:00	0.2	0.0	0.0	11.1	28.6	0.0	15.8	0.2	4.2	1.7
1996/07/26 15:00:00	0.2	0.0	0.0	11.6	25.2	0.0	15.5	0.2	4.2	1.8
1996/07/26 16:00:00	0.2	0.0	0.0	11.6	21.8	0.0	15.6	0.2	4.2	1.8
1996/07/26 17:00:00	0.2	0.0	0.0	11.6	21.3	0.0	16.5	0.2	4.2	1.8
1996/07/26 18:00:00	0.2	0.0	0.0	11.6	22.6	0.0	16.4	0.2	4.2	1.8
1996/07/26 19:00:00	0.2	0.0	0.0	11.6	25.2	0.0	15.3	0.2	4.2	1.8
1996/07/26 20:00:00	0.2	0.0	0.0	11.6	29.2	0.0	14.0	0.2	4.1	1.8
1996/07/26 21:00:00	0.1	0.0	0.0	11.6	32.5	0.0	13.7	0.2	3.7	1.8
1996/07/26 22:00:00	0.1	0.0	0.0	11.5	33.8	0.0	15.0	0.2	3.0	1.7
1996/07/26 23:00:00	0.1	0.0	0.0	10.9	34.0	0.0	15.9	0.2	2.8	1.5
1996/07/27 00:00:00	0.1	0.0	0.0	10.9	33.9	0.0	16.2	0.2	2.9	1.5
1996/07/27 01:00:00	0.1	0.0	0.0	11.7	33.6	0.0	16.1	0.2	3.2	1.6
1996/07/27 02:00:00	0.1	0.0	0.0	12.0	32.9	0.0	16.0	0.2	3.4	1.7
1996/07/27 03:00:00	0.1	0.0	0.0	12.1	31.5	0.0	16.4	0.2	3.4	1.8
1996/07/27 04:00:00	0.1	0.0	0.0	12.1	30.2	0.0	16.6	0.2	3.4	1.8
1996/07/27 05:00:00	0.1	0.0	0.0	12.1	29.4	0.0	16.6	0.2	3.4	1.8
1996/07/27 06:00:00	0.1	0.0	0.0	12.1	29.1	0.0	16.6	0.2	3.4	1.8
1996/07/27 07:00:00	0.1	0.0	0.0	12.1	29.0	0.0	16.6	0.2	3.4	1.8
1996/07/27 08:00:00	0.1	0.0	0.0	12.1	29.0	0.0	16.5	0.2	3.4	1.8
1996/07/27 09:00:00	0.1	0.0	0.0	12.0	28.9	0.0	16.5	0.2	3.4	1.8
1996/07/27 10:00:00	0.1	0.0	0.0	11.2	29.0	0.0	16.5	0.2	3.4	1.7
1996/07/27 11:00:00	0.1	0.0	0.0	10.7	29.0	0.0	16.5	0.2	3.3	1.5
1996/07/27 12:00:00	0.1	0.0	0.0	10.3	29.0	0.0	16.5	0.2	3.1	1.5
1996/07/27 13:00:00	0.1	0.0	0.0	8.7	29.0	0.0	16.5	0.2	2.5	1.7
1996/07/27 14:00:00	0.1	0.0	0.0	9.5	29.0	0.0	16.4	0.2	2.5	2.0
1996/07/27 15:00:00	0.1	0.0	0.0	12.2	28.9	0.0	15.5	0.3	3.2	2.3
1996/07/27 16:00:00	0.1	0.0	0.0	13.2	27.7	0.0	14.1	0.3	3.6	2.4
1996/07/27 17:00:00	0.1	0.0	0.0	13.3	24.7	0.0	13.0	0.3	3.6	2.5
1996/07/27 18:00:00	0.1	0.0	0.0	13.3	23.9	0.0	12.5	0.3	3.6	2.5
1996/07/27 19:00:00	0.1	0.0	0.0	13.3	25.8	0.0	12.2	0.3	3.6	2.5
1996/07/27 20:00:00	0.1	0.0	0.0	13.3	26.6	0.0	11.5	0.3	3.6	2.5
1996/07/27 21:00:00	0.1	0.0	0.0	13.3	27.2	0.0	10.6	0.3	3.6	2.5
1996/07/27 22:00:00	0.1	0.0	0.0	13.3	29.2	0.0	8.9	0.3	3.5	2.5
1996/07/27 23:00:00	0.1	0.0	0.0	13.3	31.0	0.0	8.6	0.3	3.2	2.5
1996/07/28 00:00:00	0.1	0.0	0.0	13.1	31.5	0.0	8.9	0.3	3.4	2.4
1996/07/28 01:00:00	0.1	0.0	0.0	12.3	31.6	0.0	9.1	0.3	3.8	2.5
1996/07/28 02:00:00	0.1	0.0	0.0	12.8	31.4	0.0	9.1	0.3	4.1	2.7
1996/07/28 03:00:00	0.1	0.0	0.0	13.2	31.2	0.0	8.9	0.3	4.4	2.8
1996/07/28 04:00:00	0.1	0.0	0.0	13.2	31.2	0.0	9.2	0.3	4.4	2.9
1996/07/28 05:00:00	0.1	0.0	0.0	13.2	31.1	0.0	9.4	0.3	4.4	3.0
1996/07/28 06:00:00	0.1	0.0	0.0	13.2	31.1	0.0	9.4	0.3	4.4	3.0
1996/07/28 07:00:00	0.1	0.0	0.0	13.2	31.2	0.0	9.4	0.3	4.4	3.0
1996/07/28 08:00:00	0.1	0.0	0.0	13.2	31.3	0.0	9.4	0.3	4.4	3.0
1996/07/28 09:00:00	0.1	0.0	0.0	13.4	31.3	0.0	9.4	0.3	4.4	3.0
1996/07/28 10:00:00	0.1	0.0	0.0	13.5	31.3	0.0	9.5	0.3	4.4	3.0
1996/07/28 11:00:00	0.1	0.0	0.0	12.2	31.3	0.0	9.5	0.3	4.5	3.0
1996/07/28 12:00:00	0.1	0.0	0.0	11.6	31.4	0.0	9.5	0.3	4.5	2.8
1996/07/28 13:00:00	0.1									

Time / WSR	9a	20	22c*	24	25	27	41	45c	46*	49
1996/07/28 22:00:00	0.1	0.1	0.0	13.6	15.9	0.1	7.2	0.5	4.6	4.7
1996/07/28 23:00:00	0.1	0.1	0.0	13.6	17.0	0.1	6.3	0.5	4.5	4.7
1996/07/29 00:00:00	0.1	0.1	0.0	13.5	19.4	0.1	6.4	0.5	4.3	4.7
1996/07/29 01:00:00	0.1	0.1	0.0	13.4	20.5	0.1	6.5	0.5	4.2	4.4
1996/07/29 02:00:00	0.1	0.1	0.0	12.7	20.7	0.1	6.5	0.5	4.1	4.4
1996/07/29 03:00:00	0.1	0.1	0.0	12.7	20.7	0.1	6.6	0.5	4.5	4.6
1996/07/29 04:00:00	0.1	0.1	0.0	12.9	20.5	0.1	6.4	0.5	4.6	4.8
1996/07/29 05:00:00	0.1	0.1	0.0	12.9	20.5	0.1	6.5	0.5	4.6	4.9
1996/07/29 06:00:00	0.1	0.1	0.0	12.9	20.5	0.1	6.4	0.5	4.6	5.0
1996/07/29 07:00:00	0.1	0.1	0.0	12.9	20.6	0.1	6.4	0.6	4.6	5.0
1996/07/29 08:00:00	0.1	0.1	0.0	12.9	20.7	0.1	6.4	0.6	4.6	5.0
1996/07/29 09:00:00	0.1	0.1	0.0	12.8	20.8	0.1	6.5	0.6	4.6	5.0
1996/07/29 10:00:00	0.1	0.1	0.1	12.7	20.8	0.1	6.6	0.6	4.5	5.0
1996/07/29 11:00:00	0.1	0.1	0.1	12.7	20.8	0.1	6.7	0.6	4.6	5.0
1996/07/29 12:00:00	0.1	0.1	0.1	11.8	20.9	0.1	6.7	0.6	4.7	5.0
1996/07/29 13:00:00	0.1	0.1	0.1	11.6	20.9	0.1	6.7	0.5	4.7	4.8
1996/07/29 14:00:00	0.1	0.1	0.1	11.5	20.9	0.1	6.7	0.5	4.7	5.1
1996/07/29 15:00:00	0.1	0.1	0.1	9.8	20.9	0.1	6.7	0.5	4.7	5.5
1996/07/29 16:00:00	0.1	0.1	0.1	8.5	20.9	0.1	6.7	0.6	4.2	6.1
1996/07/29 17:00:00	0.1	0.2	0.1	9.0	20.9	0.1	6.7	0.6	3.7	6.7
1996/07/29 18:00:00	0.1	0.2	0.1	9.7	20.9	0.1	6.8	0.7	4.3	7.1
1996/07/29 19:00:00	0.1	0.2	0.1	9.8	19.6	0.0	7.2	0.8	4.6	7.4
1996/07/29 20:00:00	0.1	0.2	0.1	9.8	20.1	0.1	7.4	0.8	4.6	7.4
1996/07/29 21:00:00	0.1	0.2	0.1	9.8	21.6	0.1	7.4	0.8	4.6	7.4
1996/07/29 22:00:00	0.1	0.2	0.1	9.8	22.3	0.1	7.7	0.8	4.6	7.5
1996/07/29 23:00:00	0.1	0.2	0.1	9.8	20.9	0.1	7.8	0.8	4.5	7.5
1996/07/30 00:00:00	0.2	0.2	0.1	9.8	19.5	0.1	6.8	0.9	4.1	7.5
1996/07/30 01:00:00	0.2	0.2	0.1	9.8	20.3	0.1	7.4	0.9	3.7	7.4
1996/07/30 02:00:00	0.2	0.3	0.1	9.7	21.4	0.1	8.1	0.9	4.1	7.5
1996/07/30 03:00:00	0.2	0.3	0.1	9.4	21.6	0.1	8.2	0.9	4.2	7.7
1996/07/30 04:00:00	0.2	0.3	0.1	9.2	21.6	0.1	8.1	0.9	4.7	7.8
1996/07/30 05:00:00	0.2	0.3	0.1	9.3	21.4	0.1	8.0	0.9	4.7	8.0
1996/07/30 06:00:00	0.2	0.3	0.1	9.3	21.3	0.1	8.1	1.0	4.7	8.1
1996/07/30 07:00:00	0.2	0.3	0.1	9.3	21.4	0.1	8.1	1.0	4.7	8.1
1996/07/30 08:00:00	0.2	0.3	0.1	9.3	21.5	0.1	8.1	1.0	4.7	8.1
1996/07/30 09:00:00	0.2	0.3	0.1	9.2	21.7	0.1	8.1	1.0	4.7	8.1
1996/07/30 10:00:00	0.2	0.3	0.1	9.1	22.1	0.1	8.2	1.0	4.7	8.1
1996/07/30 11:00:00	0.3	0.3	0.1	9.1	22.5	0.1	8.4	1.0	4.6	8.1
1996/07/30 12:00:00	0.3	0.3	0.1	8.9	22.9	0.1	8.7	1.0	4.6	8.1
1996/07/30 13:00:00	0.3	0.3	0.1	7.9	23.1	0.1	8.9	1.0	4.9	8.0
1996/07/30 14:00:00	0.3	0.3	0.1	7.8	23.1	0.1	8.9	1.0	4.9	7.4
1996/07/30 15:00:00	0.3	0.3	0.1	8.0	23.1	0.1	8.9	0.9	4.9	7.4
1996/07/30 16:00:00	0.3	0.3	0.1	7.5	23.1	0.1	8.9	0.9	4.9	7.7
1996/07/30 17:00:00	0.3	0.3	0.1	5.2	23.1	0.1	8.9	0.9	4.5	8.2
1996/07/30 18:00:00	0.3	0.4	0.1	6.4	23.2	0.1	8.4	0.9	4.3	8.9
1996/07/30 19:00:00	0.3	0.4	0.1	6.9	22.9	0.1	7.7	0.9	5.2	9.1
1996/07/30 20:00:00	0.3	0.4	0.1	7.0	21.3	0.1	7.9	1.0	5.2	9.4
1996/07/30 21:00:00	0.3	0.4	0.1	7.0	22.8	0.1	8.1	1.0	5.2	9.4
1996/07/30 22:00:00	0.3	0.4	0.1	7.0	26.3	0.1	7.9	1.0	5.2	9.5
1996/07/30 23:00:00	0.3	0.4	0.1	7.0	27.7	0.1	8.5	1.1	5.2	9.5
1996/07/31 00:00:00	0.3	0.4	0.1	7.0	27.3	0.1	8.3	1.1	5.2	9.5
1996/07/31 01:00:00	0.4	0.5	0.2	7.0	26.7	0.1	7.6	1.1	5.0	9.5
1996/07/31 02:00:00	0.4	0.5	0.2	7.0	27.1	0.1	7.7	1.1	4.6	9.4
1996/07/31 03:00:00	0.4	0.5	0.2	7.0	27.6	0.1	8.1	1.1	4.8	9.3
1996/07/31 04:00:00	0.4	0.5	0.2	6.9	27.7	0.1	8.2	1.1	4.6	9.4
1996/07/31 05:00:00	0.5	0.5	0.2	6.8	27.7	0.1	8.1	1.1	5.1	9.5
1996/07/31 06:00:00	0.5	0.5	0.2	6.9	27.5	0.1	8.2	1.2	5.1	9.6
1996/07/31 07:00:00	0.5	0.5	0.2	6.9	27.4	0.1	8.2	1.2	5.1	9.8
1996/07/31 08:00:00	0.5	0.5	0.1	6.9	27.4	0.1	8.2	1.2	5.1	9.8
1996/07/31 09:00:00	0.5	0.5	0.1	6.9	27.8	0.1	8.1	1.3	5.1	9.8
1996/07/31 10:00:00	0.4	0.5	0.2	6.9	28.4	0.1	8.0	1.3	5.1	9.8
1996/07/31 11:00:00	0.4	0.5	0.2	6.8	28.8	0.1	7.9	1.3	5.1	9.8
1996/07/31 12:00:00	0.5	0.5	0.2	6.8	29.4	0.1	7.8	1.3	5.0	9.8
1996/07/31 13:00:00	0.6	0.5	0.2	6.5	30.0	0.1	8.1	1.3	5.0	9.8
1996/07/31 14:00:00	0.6	0.5	0.2	5.8	30.3	0.1	8.4	1.3	5.3	9.4
1996/07/31 15:00:00	0.6	0.5	0.2	6.0	30.4	0.1	8.4	1.3	5.3	8.7
1996/07/31 16:00:00	0.6	0.5	0.2	5.9	30.4	0.1	8.4	1.3	5.3	8.6
1996/07/31 17:00:00	0.6	0.5	0.2	6.6	30.4	0.1	8.4	1.3	5.3	8.8
1996/07/31 18:00:00	0.6	0.5	0.2	5.9	30.4	0.1	8.4	1.2	4.6	8.8
1996/07/31 19:00:00	0.6	0.5	0.2	7.1	30.4	0.1	8.2	1.3	4.2	9.1
1996/07/31 20:00:00	0.6	0.6	0.2	7.3	28.4	0.1	7.6	1.3	5.1	9.3
1996/07/31 21:00:00	0.6	0.6	0.2	7.3	27.4	0.1	7.8	1.3	5.1	9.3
1996/07/31 22:00:00	0.6	0.6	0.2	7.3	29.7	0.1	7.6	1.3	5.1	9.3
1996/07/31 23:00:00	0.5	0.6	0.2	7.3	33.5	0.1	7.0	1.3	5.1	9.3
1996/08/01 00:00:00	0.5	0.6	0.2	7.3	34.2	0.1	7.4	1.4	5.1	9.3
1996/08/01 01:00:00	0.5	0.6	0.2	7.3	34.1	0.1	7.1	1.4	5.1	9.3
1996/08/01 02:00:00	0.6	0.6	0.2	7.3	34.0	0.1	6.7	1.4	4.8	9.1
1996/08/01 03:00:00	0.6	0.6	0.2	7.3	34.7	0.1	7.3	1.4	4.7	9.0
1996/08/01 04:00:00	0.6	0.6	0.2	7.3	35.1	0.1	7.7	1.4	4.9	9.0
1996/08/01 05:00:00	0.6	0.6	0.2	7.3	35.2	0.1	7.8	1.4	4.8	9.0
1996/08/01 06:00:00	0.6	0.6	0.2	7.3	35.1	0.1	7.8	1.3	5.2	9.0
1996/08/01 07:00:00	0.6	0.6	0.2	7.3	35.0	0.1	7.8	1.4	5.2	9.1
1996/08/01 08:00:00	0.6	0.6	0.2	7.3	34.9	0.1	7.9	1.4	5.2	9.2
1996/08/01 09:00:00	0.6	0.6	0.2	7.3	36.0	0.1	7.9	1.4	5.2	9.1
1996/08/01 10:00:00	0.6	0.6	0.2	7.3	37.4	0.1	7.7	1.4	5.2	9.1
1996/08/01 11:00:00	0.6	0.6	0.2	7.3	37.4	0.1	7.7	1.4	5.2	9.2
1996/08/01 12:00:00	0.5	0.6	0.2	7.3	37.2	0.1	7.6	1.4	5.1	9.2
1996/08/01 13:00:00	0.6	0.6	0.2	7.3	37.3	0.1	7.4	1.5	5.0	9.2
1996/08/01 14:00:00	0.6	0.6	0.2	6.8	37.8	0.1	7.8	1.5	5.0	9.2
1996/08/01 15:00:00	0.6	0.6	0.2	6.0	38.1	0.1	7.8	1.5	5.3	8.8
1996/08/01 16:00:00	0.6	0.6	0.2	6.2	38.1	0.1	7.8	1.4	5.3	8.3
1996/08/01 17:00:00	0.6	0.6	0.2	6.3	38.1	0.1	7.8	1.4	5.3	8.4
1996/08/01 18:00:00	0.6	0.6	0.2	6.7	38.1	0.1	7.8	1.4	5.3	8.6
1996/08/01 19:00:00	0.6	0.6	0.2	7.2	38.1	0.1	7.8	1.4	4.9	8.7
1996/08/01 20:00:00	0.6	0.6	0.2	7.8	38.0	0.1	7.8	1.4	4.8	8.8
1996/08/01 21:00:00	0.6	0.6	0.2	7.8	33.0	0.1	7.7	1.4	5.1	9.0
1996/08/01 22:00:00	0.6	0.6	0.2	7.8	30.4	0.1	7.9	1.4	5.1	9.0
1996/08/01 23:00:00	0.6	0.6	0.2	7.8	32.0	0.1	7.7	1.4	5.1	9.1
1996/08/02 00:00:00	0.6	0.6	0.2	7.8	33.2	0.1	7.7	1.4	5.0	9.1
1996/08/02 01:00:00	0.6	0.6	0.2	7.9	33.2	0.2	7.7	1.4	4.9	9.1
1996/08/02 02:00:00	0.6	0.6	0.2	7.9	32.8	0.2	7.2	1.5	4.8	9.1
1996/08/02 03:00:00	0.6	0.6	0.2	7.9	32.9	0.2	7.1	1.5	4.4	8.8
1996/08/02 04:00:00	0.6	0.6	0.2	7.9	33.3	0.2	7.4	1.4	4.6	8.5
1996/08/02 05:00:00	0.6	0.6	0.2	7.8	33.4	0.2	7.6	1.4	4.6	8.7
1996/08/02 06:00:00	0.6	0.6	0.2	7.8	33.4	0.2	7.6	1.4	4.7	8.7
1996/08/02 07:00:00	0.6	0.6	0.2	7.8	33.4	0.2	7.6	1.4	4.9	8.8
1996/08/02 08:00:00	0.6	0.6	0.2	7.8	33.3	0.2	7.6	1.4	4.9	8.9
1996/08/02 09:00:00	0.6	0.6	0.2	7.8	33.5	0.2	7.6	1.4	4.9	8.9
1996/08/02 10:00:00	0.6	0.6	0.2	7.8	35.5	0.2	7.6	1.4	4.9	8.9
1996/08/02 11:00:00	0.6	0.6	0.2	7.8	36.9	0.2	7.5	1.4	4.9	8.9
1996/08/02 12:00:00	0.6	0.6	0.2	7.8	37.0	0.2	7.6	1.4	4.8	8.9
1996/08/0										

Time / WSR	9a	20	22c*	24	25	27	41	45c	46*	49
1996/08/03 01:00:00	0.6	0.6	0.2	7.0	30.9	0.2	6.9	1.3	4.4	8.3
1996/08/03 02:00:00	0.6	0.6	0.2	7.0	30.4	0.2	6.7	1.3	4.4	8.3
1996/08/03 03:00:00	0.6	0.6	0.2	7.0	29.8	0.2	6.4	1.3	4.3	8.3
1996/08/03 04:00:00	0.6	0.6	0.2	7.0	29.9	0.2	6.5	1.3	3.9	8.1
1996/08/03 05:00:00	0.7	0.6	0.2	7.0	30.0	0.2	6.6	1.3	4.0	7.8
1996/08/03 06:00:00	0.7	0.6	0.2	7.0	30.1	0.2	6.6	1.3	3.9	7.8
1996/08/03 07:00:00	0.7	0.6	0.2	7.0	30.1	0.2	6.6	1.2	4.1	7.8
1996/08/03 08:00:00	0.7	0.6	0.2	7.0	30.0	0.2	6.6	1.2	4.1	7.7
1996/08/03 09:00:00	0.7	0.6	0.2	7.0	28.5	0.2	6.8	1.2	4.1	7.8
1996/08/03 10:00:00	0.7	0.6	0.2	7.0	29.2	0.2	6.8	1.2	4.1	7.8
1996/08/03 11:00:00	0.7	0.6	0.2	7.0	31.6	0.2	6.6	1.2	4.1	7.8
1996/08/03 12:00:00	0.6	0.6	0.1	7.0	32.2	0.2	6.6	1.2	4.1	7.8
1996/08/03 13:00:00	0.6	0.6	0.1	6.9	32.3	0.2	6.5	1.2	4.0	7.7
1996/08/03 14:00:00	0.6	0.6	0.1	7.0	32.0	0.2	6.3	1.2	4.0	7.7
1996/08/03 15:00:00	0.6	0.6	0.1	7.0	32.2	0.2	6.4	1.2	3.9	7.8
1996/08/03 16:00:00	0.7	0.6	0.1	6.3	32.5	0.2	6.8	1.2	4.2	7.5
1996/08/03 17:00:00	0.7	0.6	0.1	6.3	32.6	0.2	6.8	1.2	4.4	6.7
1996/08/03 18:00:00	0.7	0.5	0.1	7.3	32.6	0.2	6.8	1.2	4.5	6.3
1996/08/03 19:00:00	0.7	0.5	0.1	6.9	32.6	0.2	6.8	1.1	5.7	6.3
1996/08/03 20:00:00	0.7	0.5	0.1	6.9	32.6	0.2	6.8	1.1	6.7	6.4
1996/08/03 21:00:00	0.7	0.5	0.1	7.4	32.6	0.2	6.8	1.1	7.2	6.4
1996/08/03 22:00:00	0.7	0.5	0.1	7.5	31.2	0.2	7.0	1.1	7.2	6.5
1996/08/03 23:00:00	0.7	0.5	0.1	7.5	30.3	0.2	7.2	1.1	7.2	6.5
1996/08/04 00:00:00	0.7	0.5	0.1	7.5	32.1	0.2	7.1	1.1	7.2	6.5
1996/08/04 01:00:00	0.7	0.5	0.1	7.5	33.2	0.2	6.8	1.1	7.2	6.5
1996/08/04 02:00:00	0.6	0.5	0.1	7.5	33.3	0.2	6.6	1.1	7.1	6.5
1996/08/04 03:00:00	0.6	0.5	0.1	7.5	33.1	0.2	6.0	1.1	6.9	6.5
1996/08/04 04:00:00	0.6	0.5	0.1	7.5	33.3	0.2	5.5	1.2	6.7	6.3
1996/08/04 05:00:00	0.6	0.5	0.1	7.5	33.7	0.2	5.6	1.2	6.5	6.2
1996/08/04 06:00:00	0.7	0.5	0.1	7.5	33.8	0.2	5.7	1.2	6.4	6.2
1996/08/04 07:00:00	0.7	0.5	0.1	7.5	33.8	0.2	5.7	1.1	6.3	6.1
1996/08/04 08:00:00	0.7	0.5	0.1	7.5	33.8	0.2	5.8	1.1	6.5	6.1
1996/08/04 09:00:00	0.7	0.5	0.1	7.5	33.3	0.2	5.9	1.1	6.5	6.1
1996/08/04 10:00:00	0.7	0.5	0.1	7.5	30.4	0.2	6.3	1.1	6.5	6.1
1996/08/04 11:00:00	0.7	0.5	0.1	7.5	30.3	0.3	6.3	1.1	6.5	6.1
1996/08/04 12:00:00	0.7	0.5	0.1	7.5	32.7	0.3	6.2	1.1	6.5	6.1
1996/08/04 13:00:00	0.6	0.5	0.1	7.5	33.3	0.3	6.2	1.0	6.5	6.1
1996/08/04 14:00:00	0.6	0.5	0.1	7.3	33.4	0.3	6.0	1.0	6.4	6.1
1996/08/04 15:00:00	0.6	0.5	0.1	7.3	33.7	0.3	5.8	1.0	6.3	5.9
1996/08/04 16:00:00	0.7	0.5	0.1	7.2	34.3	0.3	6.2	1.0	6.3	6.1
1996/08/04 17:00:00	0.7	0.5	0.1	6.3	34.5	0.3	6.6	1.0	6.5	5.6
1996/08/04 18:00:00	0.7	0.4	0.1	6.3	34.6	0.3	6.7	1.1	6.6	4.9
1996/08/04 19:00:00	0.7	0.4	0.1	7.0	34.6	0.3	6.7	1.1	7.2	4.5
1996/08/04 20:00:00	0.7	0.3	0.1	7.5	34.6	0.3	6.7	1.1	7.6	4.5
1996/08/04 21:00:00	0.7	0.3	0.1	8.1	34.6	0.2	6.8	1.1	7.6	4.5
1996/08/04 22:00:00	0.7	0.3	0.1	8.4	33.8	0.2	7.1	1.1	7.6	4.5
1996/08/04 23:00:00	0.7	0.3	0.1	8.4	31.9	0.2	7.4	1.1	7.6	4.5
1996/08/05 00:00:00	0.7	0.3	0.0	8.4	31.6	0.2	7.5	1.1	7.6	4.5
1996/08/05 01:00:00	0.7	0.3	0.0	8.4	33.7	0.2	7.4	1.1	7.6	4.5
1996/08/05 02:00:00	0.7	0.3	0.0	8.4	35.0	0.2	7.4	1.1	7.6	4.4
1996/08/05 03:00:00	0.7	0.3	0.0	8.4	34.8	0.2	7.3	1.1	7.5	4.4
1996/08/05 04:00:00	0.8	0.3	0.0	8.4	34.4	0.2	6.9	1.1	7.4	4.4
1996/08/05 05:00:00	0.8	0.3	0.0	8.4	34.8	0.2	6.9	1.1	7.3	4.3
1996/08/05 06:00:00	0.8	0.3	0.0	8.4	35.1	0.2	6.9	1.1	7.1	4.1
1996/08/05 07:00:00	0.8	0.3	0.0	8.4	35.2	0.2	6.9	1.1	7.1	4.1
1996/08/05 08:00:00	0.8	0.3	0.0	8.4	35.2	0.2	6.9	1.1	7.2	4.0
1996/08/05 09:00:00	0.8	0.3	0.0	8.4	35.2	0.2	6.7	1.1	7.4	4.0
1996/08/05 10:00:00	0.8	0.3	0.0	8.4	33.1	0.2	7.4	1.1	7.5	4.0
1996/08/05 11:00:00	0.8	0.3	0.0	8.4	31.8	0.2	8.2	1.1	7.5	4.0
1996/08/05 12:00:00	0.8	0.3	0.0	8.4	34.6	0.2	8.2	1.0	7.5	4.0
1996/08/05 13:00:00	0.8	0.3	0.0	8.4	38.4	0.2	8.1	1.0	7.5	4.0
1996/08/05 14:00:00	0.8	0.2	0.0	8.4	39.8	0.2	8.2	1.0	7.4	4.0
1996/08/05 15:00:00	0.7	0.2	0.0	8.4	39.7	0.2	8.1	1.0	7.3	4.0
1996/08/05 16:00:00	0.7	0.2	0.0	8.3	40.0	0.2	8.2	1.0	7.1	3.8
1996/08/05 17:00:00	0.7	0.2	0.0	8.1	40.8	0.2	8.6	1.0	7.1	3.8
1996/08/05 18:00:00	0.7	0.2	0.0	6.6	41.1	0.2	8.9	1.0	7.2	3.6
1996/08/05 19:00:00	0.7	0.2	0.0	6.4	41.2	0.2	9.0	1.0	6.1	3.0
1996/08/05 20:00:00	0.7	0.2	0.0	6.7	41.2	0.2	9.1	1.0	6.2	2.5
1996/08/05 21:00:00	0.7	0.1	0.0	7.1	41.2	0.2	9.1	0.9	5.8	2.5
1996/08/05 22:00:00	0.7	0.1	0.0	7.5	41.0	0.2	9.8	0.9	6.0	2.5
1996/08/05 23:00:00	0.7	0.1	0.0	7.5	39.2	0.1	11.1	0.9	6.0	2.4
1996/08/06 00:00:00	0.7	0.1	0.0	7.5	40.0	0.1	11.1	0.9	6.0	2.4
1996/08/06 01:00:00	0.7	0.1	0.0	7.5	41.7	0.1	11.1	0.8	6.0	2.4
1996/08/06 02:00:00	0.7	0.1	0.0	7.5	42.6	0.1	11.0	0.7	6.0	2.4
1996/08/06 03:00:00	0.6	0.1	0.0	7.5	42.8	0.1	10.9	0.7	5.9	2.3
1996/08/06 04:00:00	0.6	0.1	0.0	7.5	42.4	0.1	10.7	0.7	5.9	2.3
1996/08/06 05:00:00	0.6	0.1	0.0	7.5	42.2	0.1	10.3	0.7	5.7	2.3
1996/08/06 06:00:00	0.6	0.1	0.0	7.5	42.4	0.1	10.5	0.7	5.6	2.3
1996/08/06 07:00:00	0.6	0.1	0.0	7.5	42.5	0.1	10.6	0.7	5.5	2.2
1996/08/06 08:00:00	0.6	0.1	0.0	7.4	42.5	0.1	10.6	0.7	5.4	2.2
1996/08/06 09:00:00	0.6	0.1	0.0	7.6	42.5	0.1	10.6	0.6	5.6	2.2
1996/08/06 10:00:00	0.6	0.1	0.0	8.0	42.4	0.1	9.7	0.6	5.8	2.2
1996/08/06 11:00:00	0.6	0.1	0.0	8.1	39.0	0.1	9.9	0.6	5.9	2.2
1996/08/06 12:00:00	0.6	0.1	0.0	8.1	33.9	0.1	11.1	0.6	5.9	2.2
1996/08/06 13:00:00	0.6	0.1	0.0	8.1	33.7	0.0	11.3	0.6	5.9	2.2
1996/08/06 14:00:00	0.6	0.1	0.0	8.1	38.2	0.0	11.2	0.6	5.9	2.2
1996/08/06 15:00:00	0.5	0.1	0.0	8.1	43.2	0.0	11.0	0.6	5.8	2.2
1996/08/06 16:00:00	0.5	0.1	0.0	8.1	47.0	0.0	10.5	0.6	5.7	2.1
1996/08/06 17:00:00	0.5	0.1	0.0	8.1	49.9	0.0	10.2	0.6	5.3	2.1
1996/08/06 18:00:00	0.5	0.1	0.0	7.7	51.1	0.0	11.0	0.6	5.5	1.8
1996/08/06 19:00:00	0.5	0.1	0.0	5.9	51.4	0.0	11.8	0.5	5.5	1.7
1996/08/06 20:00:00	0.5	0.1	0.0	5.3	51.5	0.0	12.2	0.5	4.5	1.8
1996/08/06 21:00:00	0.5	0.0	0.0	5.6	51.6	0.0	12.3	0.4	4.9	1.8
1996/08/06 22:00:00	0.5	0.0	0.0	5.7	51.6	0.0	10.8	0.4	5.3	1.8
1996/08/06 23:00:00	0.5	0.0	0.0	5.8	49.4	0.0	9.8	0.4	5.5	1.9
1996/08/07 00:00:00	0.5	0.0	0.0	5.7	46.7	0.0	10.5	0.4	5.5	1.9
Maximum Sediment Rate	0.8	0.6	0.2	13.6	54.4	0.3	17.8	1.5	7.6	9.8

Grey cell = value exceed 200 g/m2 criterion for coral protection.

* Known coral site

** Known coral site but proposed to be transplanted