

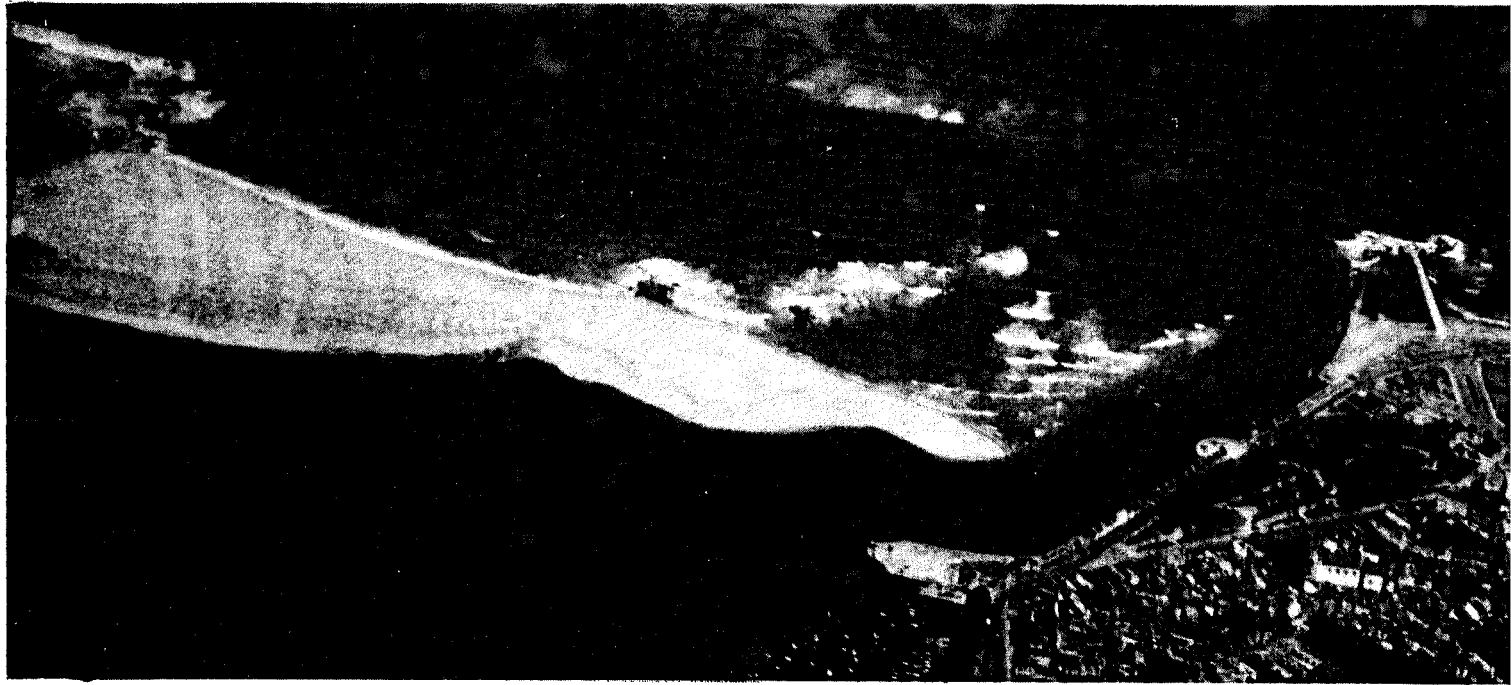
ADMINISTRAÇÃO DOS PORTOS DO DOURO E LEIXÕES

Hydro-morphological study Douro Estua

Part 4

Results of field measurements

Annex



january 1983 / P613

ADMINISTRAÇÃO DOS PORTOS DO DOURO E LEIXÕES

Hydro-morphological study Douro Estuary

Part 4

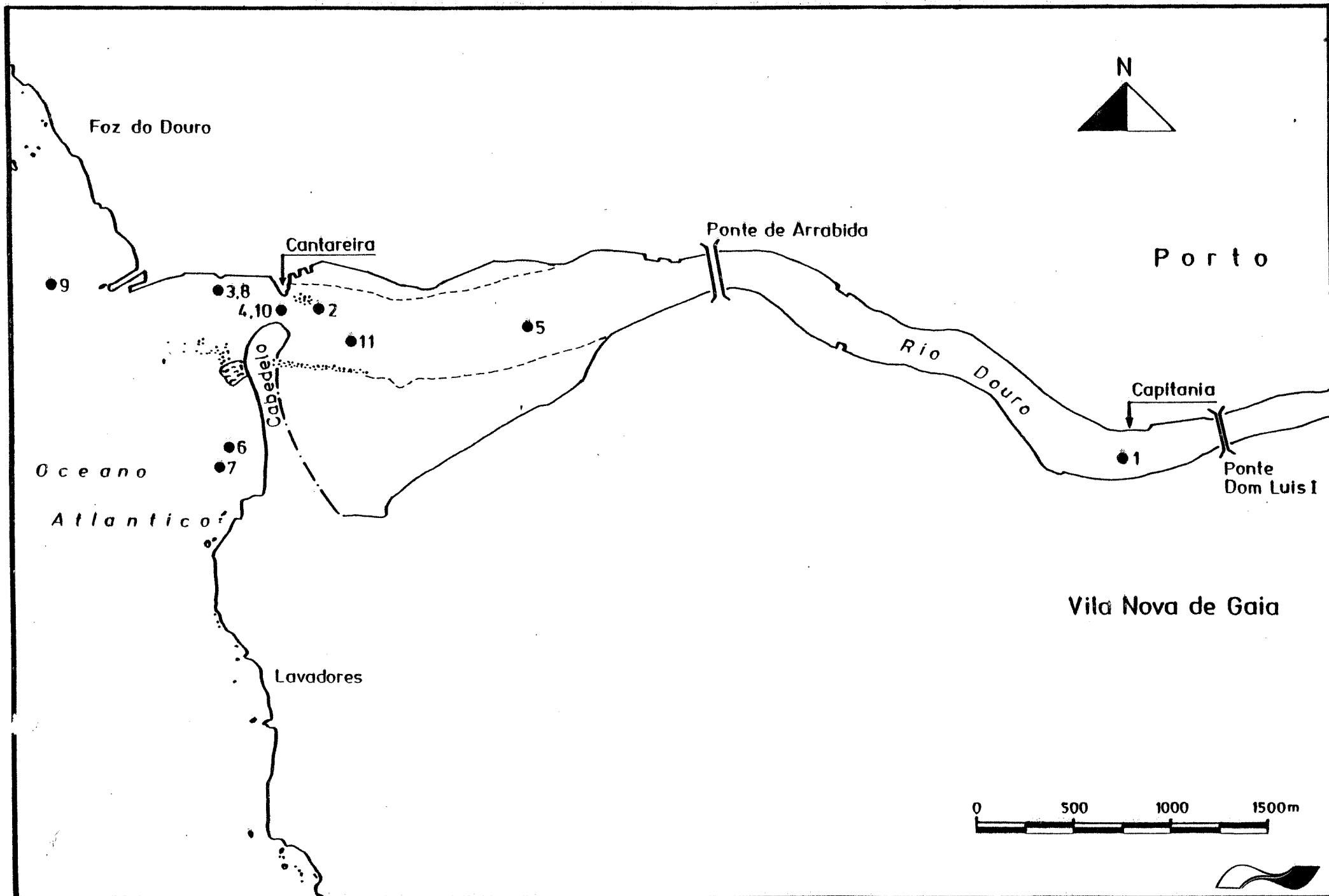
Results of field measurements

Annex

january 1983 / P613

PORT AND WATERWAY ENGINEERS


hydrodynamic^{bv}
sliedrecht holland



LOCATIONS OF THE MEASUREMENTS.

Hydronamic by
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 # APDL # DURO ESTUARY
 datafile: DURO location 06-01
 date: 821109 time: 9.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m ³)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	0	0.010	18	36.0	14	28
0.0									
0.5	+	*	*		*			*****	
1.0									
1.5									
2.0	+	*	*****		*			*****	
2.5									
3.0									
3.5									
4.0									
4.5	+	*	*****		*			*****	
5.0									
5.5									
6.0									
6.5									
7.0	+	*	*****		*			*****	
7.5									
8.0	+	*	*****		*			*****	
8.5									
9.0	+	*	*****		*			*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 9.45 m Average velocity: .03 m/sec Measured bedload: .000000 kg/s m
 Waveperiod: .00 sec Waterlevel: 3.00 m +ZH Average concentration: .0081 kg/m³ Measured susp. load: .002239 kg/s m
 Wave angle: 0 degrees Bottom level: 6.45 m +ZH Average salinity: 0 o/oo Total load: .002239 kg/s m
 Average temperature: 12 centigrade

Hydronamic by
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 * APDL * DUURO ESTUARY
 datafile: DURO location 06-01
 date: 821109 time: 10.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
		0	0.005	0	18	14	28
0.0							
0.5	+****	*****		*		*****	
1.0							
1.5							
2.0	+**	*****		*		*****	
2.5							
3.0							
3.5							
4.0							
4.5	+*	*****		*		*****	
5.0							
5.5							
6.0	+*	*****		*		*****	
6.5							
7.0							
7.5							
8.0	+*	*****		*		*****	
8.5							
9.0	+*	*****		*		*****	
9.5	+*	*****		*		*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 9.65 m Average velocity: .09 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 3.10 m +ZH Average concentration: .0099 kg/m3 Measured susp. load: .008471 kg/s m
 Wave angle: 0 degrees Bottom level: 6.55 m +ZH Average salinity: 0 o/oo Total load: .008471 kg/s m
 Average temperature: 13 centigrade

Hydrodynamic by
 Port & Waterway engineers
 Sliedrecht - Holland

Project: Pol3 * APDL * DUURD. ESTUARY
 datefile: DURO location 06-01
 date: 821109 time: 10.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	36.0
.5	1.0	*****	18	14
1.0	1.0	*****	*****	*****
1.5	1.0	*****	*****	*****
2.0	1.0	*****	*****	*****
2.5	1.0	*****	*****	*****
3.0	1.0	*****	*****	*****
3.5	1.0	*****	*****	*****
4.0	1.0	*****	*****	*****
4.5	1.0	*****	*****	*****
5.0	1.0	*****	*****	*****
5.5	1.0	*****	*****	*****
6.0	1.0	*****	*****	*****
6.5	1.0	*****	*****	*****
7.0	1.0	*****	*****	*****
7.5	1.0	*****	*****	*****
8.0	1.0	*****	*****	*****
8.5	1.0	*****	*****	*****
9.0	1.0	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 9.15 m Average velocity: .13 m/sec
 Waveperiod: .00 sec Waterlevel: 3.04 m +ZH Average concentration: .0091 kg/m³
 Wave angle: 0 degrees Bottom level: 6.11 m +ZH Average salinity: 0 o/oo
 Average temperature: 13 centigrade

Measured bedload: ##### kg/s m
 Measured susp. load: .010172 kg/s m
 Total load: .010172 kg/s m

Hydronamic by
 Port & waterway engineers
 Slidrecht = Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DURO location 06-01
 date: 821109 time: 11.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)					
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
.0												
.5	-	*****			*****		*				*****	
1.0												
1.5												
2.0	-	****			*****		*				*****	
2.5												
3.0												
3.5												
4.0												
4.5	-	**			*****		*				*****	
5.0												
5.5												
6.0												
6.5	-	*			*****		*				*****	
7.0												
7.5	+	*			*****		*				*****	
8.0												
8.5	+	*			*****		*				*****	
9.0	+	*			**		**				*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 9.15 m Average velocity: -.19 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.90 m +ZH Average concentration: .0093 kg/m3 Measured susp. load: -.015930 kg/s m
 Wave angle: 0 degrees Bottom level: 6.25 m +ZH Average salinity: 0 o/oo Total load: -.015930 kg/s m
 Average temperature: 13 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 * APDL * DUURO ESTUARY
 datafile: DURO location 06-01
 date: 821109 time: 11.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
		0	0.005	0	18	14	28
0.0	-----	-----	-----	-----	-----	-----	-----
0.5	*****	*****	*****	*	-----	-----	-----
1.0							
1.5							
2.0	*****	*****	*****	*	-----	-----	-----
2.5							
3.0							
3.5							
4.0							
4.5	****	*****	*****	*	-----	-----	-----
5.0							
5.5							
6.0							
6.5	***	*****	*****	*	-----	-----	-----
7.0							
7.5	*	*****	*****	*	-----	-----	-----
8.0							
8.5	*	*****	*****	*	-----	-----	-----

↑ = flow into the estuary
 ↓ = flow out of the estuary

Waveheight: .00 m waterdepth: 8.95 m Average velocity: = .33 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.75 m +ZH Average concentration: .0090 kg/m³ Measured susp. load: -.027512 kg/s m
 Wave angle: 0 degrees Bottom level: 6.20 m +ZH Average salinity: 0 o/oo Total load: -.027512 kg/s m
 Average temperature: 12 centigrade

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 Port & waterway engineers
 Slidrecht - Holland

project: P613 # APDL # DUURO ESTUARY
 datafile: DURO location 06-01
 date: 821109 time: 12.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
	0	1.0	2.0	0	0	18	36	0
0.0	-----	-----	-----	-----	-----	-----	-----	-----
0.5	- *****		*****		*		*****	
1.0								
1.5								
2.0	- *****		*****		*		*****	
2.5								
3.0								
3.5								
4.0								
4.5	- ****		*****		*		*****	
5.0								
5.5								
6.0								
6.5	- *		*****		*		*****	
7.0								
7.5	- *		*****		*		*****	
8.0								
8.5	- *		*****		*		*****	

| = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.85 m Average velocity: -.28 m/sec Measured bedload: ##### kg/s_m
 Waveperiod: .00 sec Waterlevel: 2.58 m tZH Average concentration: .0081 kg/m3 Measured susp. load: -.019096 kg/s_m
 Wave angle: 0 degrees Bottom level: 6.27 m tZH Average salinity: 0 o/oo Total load: -.019096 kg/s_m
 Average temperature: 12 centigrade

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 Port & waterway engineers
 Sliedrecht - Holland

project: P613 * APDL * DUURO ESTUARY
 datafile: DURU location 06-01
 date: 821109 time: 12.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0.0	----- ----- ----- ----- -----	----- ----- ----- ----- -----	----- ----- ----- ----- -----	----- ----- ----- ----- -----
0.5	- *****	*****	*****	*****
1.0				
1.5				
2.0	- *****	*****	*****	*****
2.5				
3.0				
3.5				
4.0				
4.5	- *****	*****	*****	*****
5.0				
5.5				
6.0				
6.5	- ****	*****	*****	*****
7.0				
7.5	- ****	*****	*****	*****
8.0				
8.5	- *	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.85 m Average velocity: =.42 m/sec Measured bedload: ##### kg/s.m
 Waveperiod: .00 sec Waterlevel: 2.36 m +ZH Average concentration: .0087 kg/m3 Measured susp. load: =.033821 kg/s.m
 Wave angle: 0 degrees Bottom level: 6.49 m +ZH Average salinity: 0 o/oo Total load: =.033821 kg/s.m
 Average temperature: 12 centigrade

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project: P613 * APDL * DOURO ESTUARY
 datafile: DURU location 06-01
 date: 821109 time: 13.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)			
	0	1.0	2.0	.005	.010	0	18	36.0	14	28
0.0										
0.5	-	*****		*****		*		*****		
1.0										
1.5										
2.0	-	*****		*****		*		*****		
2.5										
3.0										
3.5										
4.0										
4.5	-	****		*****		*		*****		
5.0										
5.5										
6.0										
6.5	-	***		*****		*		*****		
7.0										
7.5	-	*		*****		*		*****		
8.0	+	*		*****		*		*****		
8.5	+	**		*****		*		*****		

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.65 m Average velocity: -.31 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.20 m +ZH Average concentration: .0089 kg/m3 Measured susp. load: -.023107 kg/s m
 Wave angle: 0 degrees Bottom level: 6.45 m +ZH Average salinity: 0 o/oo Total load: -.023107 kg/s m
 Average temperature: 13 centigrade

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project: P613 * APDL * DUURO ESTUARY
 datafile: DURU location 06-01
 date: 821109 time: 13.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)					
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	- *****				*****				*****			
1.0												
1.5												
2.0	- *****				*****				*****			
2.5												
3.0												
3.5												
4.0												
4.5	- *****				*****				*****			
5.0												
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6.0												
6.5	- ****				*****				*****			
7.0												
7.5												
8.0	- *				*****				*****			

↑ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.35 m Average velocity: -.40 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.00 m +ZH Average concentration: .0084 kg/m3 Measured susp. load: -.029563 kg/s m
 Wave angle: 0 degrees Bottom level: 6.35 m +ZH Average salinity: 0 o/oo Total load: -.029563 kg/s m
 Average temperature: 12 centigrade

Hydrographic by
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 Slidrecht - Holland

project: Polj * APDL * DUURD ESTUARY
 datafile: DURU location: 06-01
 date: 821109 time: 14.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	0
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****
7.0	*****	*****	*****	*****
7.5	*****	*****	*****	*****
8.0	*****	*****	*****	*****

| = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.15 m Average velocity: -.30 m/sec Measured bedload: .000018 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.85 m tZH Average concentration: .0090 kg/m³ Measured susp. load: -.021676 kg/s m
 Wave angle: 0 degrees Bottom level: 6.30 m tZH Average salinity: 0 o/oo Total load: -.021658 kg/s m
 Average temperature: 13 centigrade

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project: P613 # APDL # DOURO ESTUARY
 datafile: DURO location 06-01
 date: 821109 time: 14.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)		SALINITY (o/oo)	TEMPERATURE (centigrade)
		0	.005		
0					
.5	*****			*	*****
1.0					
1.5					
2.0	*****			*	*****
2.5					
3.0					
3.5					
4.0	***			*	*****
4.5					
5.0					
5.5	*			*	*****
6.0					
6.5	*			*	*****
7.0					
7.5	+			*	*****
8.0	+			*	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.15 m Average velocity: -.22 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.66 m +ZH Average concentration: .0090 kg/m3 Measured susp. load: -.015749 kg/s m
 Wave angle: 0 degrees Bottom level: 6.49 m +ZH Average salinity: 0 o/oo Total load: -.015749 kg/s m
 Average temperature: 14 centigrade

Hydronamic bv
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project: P613 * APDL * DUURD ESTUARY
 datafile: DURO location 06-01
 date: 821109 time: 15.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
	0	1.0	2.0	0	18	36	14	28
0.0								
0.5	- ***		*****	*	*****			
1.0								
1.5								
2.0	- *****		*****	*	*****			
2.5								
3.0								
3.5								
4.0	- **		*****	*	*****			
4.5								
5.0								
5.5	- *		*****	*	*****			
6.0								
6.5	- *		*****	*	*****			
7.0								
7.5	+ **		*****	*	*****			
8.0	+ ***		*****	*	*****			

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.15 m Average velocity: -.17 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.53 m +ZH Average concentration: .0087 kg/m3 Measured susp. load: -.011521 kg/s m
 Wave angle: 0 degrees Bottom level: 6.62 m +ZH Average salinity: 0 o/oo Total load: -.011521 kg/s m
 Average temperature: 14 centigrade

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project: P613 * APDL * DUURO ESTUARY
 datafile: DURO location: 06-01
 date: 821109 time: 15.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)		SALINITY (o/oo)	TEMPERATURE (centigrade)
		0	.005		
0					
.5	- *****	*****	*****	*	*****
1.0					
1.5					
2.0	- ****	*****	*****	*	*****
2.5					
3.0					
3.5					
4.0	- *	*****	*****	*	*****
4.5					
5.0					
5.5	- *	*****	*****	*	*****
6.0					
6.5	+ *	*****	*****	*	*****
7.0	+ *	*****	*****	*	*****
7.5	+ **	*****	*****	*	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 7.65 m Average velocity: -.14 m/sec Measured bedload: .000005 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.43 m +ZH Average concentration: .0088 kg/m3 Measured susp. load: -.008976 kg/s m
 Wave angle: 0 degrees Bottom level: 6.22 m +ZH Average salinity: 0 o/oo Total load: -.008971 kg/s m
 Average temperature: 14 centigrade

Hydrographic by
 Port & waterway engineers
 Slidrecht - Holland

project: P613 #_APDL # DOURO ESTUARY
 datafile: DURU location 06-01
 date: 821109 time: 16.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
		0	2.0	0	18	0	14
0.0	-	0	0	0	18	0	14
0.5	- *****	0	0	0	18	0	14
1.0		0	0	0	18	0	14
1.5		0	0	0	18	0	14
2.0	- **	0	0	0	18	0	14
2.5		0	0	0	18	0	14
3.0		0	0	0	18	0	14
3.5	- *	0	0	0	18	0	14
4.0		0	0	0	18	0	14
4.5		0	0	0	18	0	14
5.0		0	0	0	18	0	14
5.5	- *	0	0	0	18	0	14
6.0		0	0	0	18	0	14
6.5	+ *	0	0	0	18	0	14
7.0		0	0	0	18	0	14

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 7.35 m Average velocity: -.13 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.36 m +ZH Average concentration: .0079 kg/m3 Measured susp. load: -.007895 kg/s m
 Wave angle: 0 degrees Bottom level: 5.99 m +ZH Average salinity: 0 o/oo Total load: -.007895 kg/s m
 Average temperature: 13 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 * APUL * DOURO ESTUARY
 datafile: DURO location 06-01
 date: 821109 time: 16.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)		SALINITY (o/oo)	TEMPERATURE (centigrade)
		0	.005		
0	0	0	0	18	14
0.5	*****	*****	*****	*	*****
1.0					
1.5					
2.0	***	*****	*****	*	*****
2.5					
3.0					
3.5	+ *	*****	*****	*	*****
4.0					
4.5					
5.0					
5.5	+ *	*****	*****	*	*****
6.0					
6.5	+ *	*****	*****	*	*****
7.0					

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 7.35 m Average velocity: -.08 m/sec Measured bedload: .000006 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.34 m +ZH Average concentration: .0076 kg/m3 Measured susp. load: -.004654 kg/s m
 Wave angle: 0 degrees Bottom level: 6.01 m +ZH Average salinity: 0 o/oo Total load: -.004648 kg/s m
 Average temperature: 13 centigrade

Hydronamic bv
 Port & Waterway engineers
 Sliedrecht - Holland

Project: P613 * APDL * DUURD ESTUARY
 datafile: DURO location 06-01
 date: 821109 time: 17.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	****	*****	*****	*****
1.0	1.0	*****	*****	*****
1.5	1.5	*****	*****	*****
2.0	2.0	*****	*****	*****
2.5	2.5	*****	*****	*****
3.0	3.0	*****	*****	*****
3.5	3.5	*****	*****	*****
4.0	4.0	*****	*****	*****
4.5	4.5	*****	*****	*****
5.0	5.0	*****	*****	*****
5.5	5.5	*****	*****	*****
6.0	6.0	*****	*****	*****
6.5	6.5	*****	*****	*****
7.0	7.0	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 7.45 m Average velocity: -.03 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.36 m +ZH Average concentration: .0077 kg/m³ Measured susp. load: -.002027 kg/s m
 Wave angle: 0 degrees Bottom level: 6.09 m +ZH Average salinity: 0 ‰ Total load: -.002027 kg/s m
 Average temperature: 13 centigrade

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Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 # APDL # DOURO ESTUARY
 datafile: DURU location 06-01
 date: 821109 time: 17.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
		0	0.005	0	18	14	28
0							
0.5	-**	*****	*	*****			
1.0							
1.5							
2.0	-*	*****	*	*****			
2.5							
3.0							
3.5	-*	*****	*	*****			
4.0							
4.5							
5.0							
5.5	-*	*****	*	*****			
6.0							
6.5							
7.0	-*	*****	*	*****			
7.5	+*	*****	*	*****			

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 7.65 m Average velocity: -.09 m/sec Measured bedload: .000000 kg/s.m
 Waveperiod: .00 sec Waterlevel: 1.42 m +ZH Average concentration: .0085 kg/m3 Measured susp. load: -.005798 kg/s.m
 Wave angle: 0 degrees Bottom level: 6.23 m +ZH Average salinity: 0 o/oo Total load: -.005798 kg/s.m
 Average temperature: 14 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DURO location 06-01
 date: 821109 time: 18.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)			SALINITY (o/oo)			TEMPERATURE (centigrade)					
		0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0													
0.5	- *												
1.0													
1.5													
2.0	- *												
2.5													
3.0													
3.5													
4.0													
4.5	- *												
5.0													
5.5													
6.0													
6.5	- *												
7.0	- *												
7.5	- *												

| = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 7.65 m Average velocity: -.06 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.50 m +ZH Average concentration: .0082 kg/m3 Measured susp. load: -.003834 kg/s m
 Wave angle: 0 degrees Bottom level: 6.15 m +ZH Average salinity: 0 o/oo Total load: -.003834 kg/s m
 Average temperature: 14 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DUR01 location 06-02
 date: 821110 time: 8.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	18	36.0	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	+ *		*		*			*****	
1.0									
1.5	+ *		*		*			*****	
2.0									
2.5	+ *		*		*			*****	
3.0									
3.5	+ *		*		*****			*****	
4.0									
4.5									
5.0	+ **		*		*****			*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .60 m waterdepth: 5.35 m Average velocity: .07 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 4.00 sec Waterlevel: 2.40 m +ZH Average concentration: .0005 kg/m3 Measured susp. load: .000133 kg/s m
 Wave angle: 0 degrees Bottom level: 2.95 m +ZH Average salinity: 6 o/oo Total load: .000133 kg/s m
 Average temperature: 14 centigrade

Hydronamic by
 Port & waterway engineers
 Sijedrecht = Holland

project: Pajl f APDL f DUNRO ESTUARY
 datafile: DUR01 location 06-02
 date: 821110 time: 8.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)			CONCENTRATION (kg/m3)			SALINITY (o/oo)			TEMPERATURE (centigrade)		
	0	1.0	2.0 0	.005	.010 0	18	36 0	14	28			
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
.5	- *		*								*****	
1.0											*****	
1.5	- *		**								*****	
2.0											*****	
2.5	- *		**								*****	
3.0											*****	
3.5	+ *		**			*****					*****	
4.0											*****	
4.5											*****	
5.0	+ *		*			*****					*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.35 m Average velocity: -.01 m/sec Measured bedload: .000000 kg/s m
 Waveperiod: .00 sec Waterlevel: 2.58 m +ZH Average concentration: .0006 kg/m3 Measured susp. load: -.000039 kg/s m
 Wave angle: 0 degrees Bottom level: 2.77 m +ZH Average salinity: 9 o/oo Total load: -.000039 kg/s m
 Average temperature: 14 centigrade

Hydronamic bv
 Port & waterway engineers
 Slidrecht = Holland

project: P613 * APDL * DUURO ESTUARY
 datafile: DURU1 location 06-02
 date: 821110 time: 9.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	18	14
0.5	+	*	*	*****
1.0				
1.5	+	**	*	*****
2.0				
2.5				
3.0	+	*	****	*****
3.5				
4.0	+	*	*****	*****
4.5				
5.0	+	*	*****	*****
5.5	+	*	*****	*****

| = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.65 m Average velocity: .04 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.76 m +ZH Average concentration: .0005 kg/m3 Measured susp. load: .000143 kg/s m
 Wave angle: 0 degrees Bottom level: 2.89 m +ZH Average salinity: 13 o/oo Total load: .000143 kg/s m
 Average temperature: 15 centigrade

Hydronamic bv
 Port & Waterway engineers
 Slidrecht - Holland

Project: P613 * APDL * DUURK0 ESTUARY
 datefile: DUB01 location: 06-02
 date: 821110 time: 9.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	1.0	*	*	14
1.0	1.5	*	*	14
2.0	2.0	*	*	14
2.5	3.0	*	*	14
3.0	3.5	*	*	14
4.0	4.0	*	*	14
4.5	4.5	*	*	14
5.0	5.0	*	*	14

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 5.85 m Average velocity: .03 m/sec Measured bedload: .000023 kg/s m
 Waveperiod: .00 sec Waterlevel: 2.88 m tZH Average concentration: .0005 kg/m3 Measured susp. load: .000113 kg/s m
 Wave angle: 0 degrees Bottom level: 2.97 m tZH Average salinity: 14 o/oo Total load: .000136 kg/s m
 Average temperature: 14 centigrade

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- 98
- 100

Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DURO1 location: 06-02
 date: 821110 time: 10.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	18	14
0.5	+**	*	*	*****
1.0				
1.5	+*	*	*	*****
2.0				
2.5				
3.0	+*	*	*****	*****
3.5				
4.0				
4.5	+*	*	*****	*****
5.0				
5.5	+*	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.95 m Average velocity: .06 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 3.00 m +ZH Average concentration: .0005 kg/m3 Measured susp. load: .000100 kg/s m
 Wave angle: 0 degrees Bottom level: 2.95 m +ZH Average salinity: 13 o/oo Total load: .000100 kg/s m
 Average temperature: 14 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613. * APDL * DOURO ESTUARY
 datafile: DURU1 location 06-02
 date: 821110 time: 10.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
		0	.005	18	36	14	28
.0							
.5	- ****	*		*			
1.0							
1.5	- **	*		*			
2.0							
2.5							
3.0	- *	**		*			
3.5							
4.0							
4.5	- *	***					
5.0		*					
5.5	- *	*					
6.0	- *	**					

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 6.15 m Average velocity: -.14 m/sec Measured bedload: -.000006 kg/s m
 Waveperiod: .00 sec Waterlevel: 3.06 m +ZH Average concentration: .0007 kg/m³ Measured susp. load: -.000471 kg/s m
 Wave angle: 0 degrees Bottom level: 3.09 m +ZH Average salinity: 10 o/oo Total load: -.000477 kg/s m
 Average temperature: 15 centigrade

Hydronamic bv
 Port & waterway engineers
 Slidrecht - Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DUR01 location: 06-02
 date: 821110 time: 11.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	0	18	36	0	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	- *****		*		*		*****		
1.0									
1.5	- ***		*		*		*****		
2.0									
2.5									
3.0	- *		**		*		*****		
3.5									
4.0									
4.5	- *		**		*		*****		
5.0									
5.5	- *		***		*****		*****		

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.95 m Average velocity: -.18 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec waterlevel: 3.04 m +ZH Average concentration: .0006 kg/m3 Measured susp. load: -.000583 kg/s m
 Wave angle: 0 degrees Bottom level: 2.91 m +ZH Average salinity: 3 o/oo Total load: -.000583 kg/s m
 Average temperature: 14 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 # APDL # DUURO ESTUARY
 datafile: DURD1 location 06-02
 date: 821110 time: 11.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)			SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	*****	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1.5	*****	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.0	****	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4.5	**	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5.5	**	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.95 m Average velocity: -.30 m/sec Measured bedload: -.000046 kg/s m
 Waveperiod: .00 sec Waterlevel: 3.00 m +ZH Average concentration: .0007 kg/m3 Measured susp. load: -.001100 kg/s m
 Wave angle: 0 degrees Bottom level: 2.95 m +ZH Average salinity: 1 o/oo Total load: -.001146 kg/s m
 Average temperature: 13 centigrade

Hydronic dv
 Port & waterway engineers
 Slidrecht - Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DURO1 location 06-02
 date: 821110 time: 12,15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	0	0.010	18	36	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	- *****		*		*			*****	
1.0									
1.5	- *****		*		*			*****	
2.0									
2.5									
3.0	- *****		**		**			*****	
3.5									
4.0									
4.5	- *****		**		***			*****	
5.0	- ***		***		***			*****	
5.5	- **		***		*****			*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.65 m Average velocity: =.57 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec waterlevel: 2.90 m +ZH Average concentration: .0007 kg/m3 Measured susp. load: -.001775 kg/s m
 Wave angle: 0 degrees Bottom level: 2.75 m +ZH Average salinity: 3 o/oo Total load: -.001775 kg/s m
 Average temperature: 14 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DURO1 location 06-02
 date: 821110 time: 12.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)			SALINITY (o/oo)		TEMPERATURE (centigrade)			
	0	1.0	2.0	.005	.010	0	18	36	0	14	28
.0	----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----										
.5	- *****		*****		*		*****				
1.0	*****		*		*		*****				
1.5	- *****		*		*		*****				
2.0	*****		**		*		*****				
2.5	- *****		**		**		*****				
3.0	*****		**		**		*****				
3.5	- *****		**		**		*****				
4.0	*****		**		**		*****				
4.5	*****		**		**		*****				
5.0	- *****		**		**		*****				

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.35 m Average velocity: -.81 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.70 m +ZH Average concentration: .0013 kg/m3 Measured susp. load: -.006060 kg/s m
 Wave angle: 0 degrees Bottom level: 2.65 m +ZH Average salinity: 2 o/oo Total load: -.006060 kg/s m
 Average temperature: 13 centigrade

Hydraulic by
Port & Waterway engineers
Siedrecht - Holland

Project: P613 * ABPL * DURO ESTUARY
datefile: DURO1 location: W6-02
date: 821110 time: 13.15

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	*	*	*	36.0
1.0	*****	*	*	*****
1.5	*****	**	*	*****
2.0	*****	**	*	*****
2.5	*****	**	*	*****
3.0	*****	**	*	*****
3.5	*****	**	*	*****
4.0	*****	**	*	*****
4.5	*****	**	*	*****
5.0	*****	**	*	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Waterdepth: 5.45 m Average velocity: -.62 m/sec Measured bedload: -.000034 kg/s m
 Waveperiod: .00 sec Waterlevel: 2.50 m tZH Average concentration: .0007 kg/m³ Measured susp. load: -.002731 kg/s m
 Wave angle: 0 degrees bottom level: 2.95 m tZH Average salinity: 1 o/oo Total load: -.002766 kg/s m
 Average temperature: 13 centigrade

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Hydrographic by
 Port & waterway engineers
 Slidrecht = Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DUR01 location 06-02
 date: 021110 time: 13.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)			SALINITY (o/oo)		TEMPERATURE (centigrade)	
		0	1.0	2.0	0	18	0	14
.0	-----	-----	-----	-----	-----	-----	-----	-----
.5	-----	-----	-----	-----	-----	-----	-----	-----
1.0	-----	-----	-----	-----	-----	-----	-----	-----
1.5	-----	-----	-----	-----	-----	-----	-----	-----
2.0	-----	-----	-----	-----	-----	-----	-----	-----
2.5	-----	-----	-----	-----	-----	-----	-----	-----
3.0	-----	-----	-----	-----	-----	-----	-----	-----
3.5	-----	-----	-----	-----	-----	-----	-----	-----
4.0	-----	-----	-----	-----	-----	-----	-----	-----
4.5	-----	-----	-----	-----	-----	-----	-----	-----
5.0	-----	-----	-----	-----	-----	-----	-----	-----

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.35 m Average velocity: -.03 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.30 m tZH Average concentration: .0007 kg/m³ Measured susp. load: -.003252 kg/s m
 Wave angle: 0 degrees Bottom level: 3.05 m tZH Average salinity: 2 o/oo Total load: -.003252 kg/s m
 Average temperature: 13 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht = Holland

project: R613 * APDL * DOURO ESTUARY
 datafile: DUR01 location: 06-02
 date: 821110 time: 14.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)			CONCENTRATION (kg/m3)			SALINITY (o/oo)			TEMPERATURE (centigrade)		
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
2.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
2.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
4.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
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+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.15 m Average velocity: -.94 m/sec Measured bedload: -.000069 kg/s m
 Waveperiod: .00 sec waterlevel: 2.13 m +ZH Average concentration: .0009 kg/m3 Measured susp. load: -.003953 kg/s m
 Wave angle: 0 degrees Bottom level: 3.02 m +ZH Average salinity: 3 o/oo Total load: -.004022 kg/s m
 Average temperature: 15 centigrade

Hydronamic by
 Port & waterway engineers
 Slidrecht - Holland

project: P013 + APDL + DOURO ESTUARY
 datafile: DURO1 location 06-02
 date: 821110 time: 14.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
	0	1.0	2.0	0	.005	.010	0	14
.0	-----	-----	-----	-----	-----	-----	-----	-----
.5	-----	-----	-----	-----	-----	-----	-----	-----
1.0	-----	-----	-----	-----	-----	-----	-----	-----
1.5	-----	-----	-----	-----	-----	-----	-----	-----
2.0	-----	-----	-----	-----	-----	-----	-----	-----
2.5	-----	-----	-----	-----	-----	-----	-----	-----
3.0	-----	-----	-----	-----	-----	-----	-----	-----
3.5	-----	-----	-----	-----	-----	-----	-----	-----
4.0	-----	-----	-----	-----	-----	-----	-----	-----
4.5	-----	-----	-----	-----	-----	-----	-----	-----

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.95 m Average velocity: -.93 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.96 m +ZH Average concentration: .0009 kg/m3 Measured susp. load: -.004158 kg/s m
 Wave angle: 0 degrees Bottom level: 2.99 m +ZH Average salinity: 2 o/oo Total load: -.004158 kg/s m
 Average temperature: 14 centigrade

Hydrodynamic by
 Port & waterway engineers
 Slidrecht - Holland

project: P613 + APDL + DOURO ESTUARY
 datafile: DUR01 location 06-02
 date: 821110 time: 15.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)				
0	1.0	2.0	.005	.010	18	36.0	14	28
.0	+	+	+	+	+	+	+	+
.5	+	**	*	+	+	+	+	+
1.0	+	+	+	+	+	+	+	+
1.5	+	***	*	+	+	+	+	+
2.0	+	+	+	+	+	+	+	+
2.5	+	+	+	+	+	+	+	+
3.0	+	***	**	+	+	+	+	+
3.5	+	+	+	+	+	+	+	+
4.0	+	***	**	+	+	+	+	+
4.5	+	+	+	+	+	+	+	+

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.75 m Average velocity: -.86 m/sec Measured bedload: -.000069 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.75 m +ZH Average concentration: .0010 kg/m³ Measured susp. load: -.004382 kg/s m
 Wave angle: 0 degrees Bottom level: 3.00 m +ZH Average salinity: 2 o/oo Total load: -.004450 kg/s m
 Average temperature: 14 centigrade

Hydraulic ov
 Port & waterway engineers
 Sliedrecht = Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DUR01 location 06-02
 date: 821110 time: 15.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	.005	.010	0	18	36	0	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	*****		**		*				*****		
1.0	*****		**		*				*****		
1.5	*****		**		*				*****		
2.0											
2.5											
3.0	*****		****		**				*****		
3.5											
4.0	*****		****		**				*****		
4.5	*****		****		**				*****		

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 + = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.55 m Average velocity: -.90 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.60 m +ZH Average concentration: .0014 kg/m3 Measured susp. load: -.005375 kg/s m
 Wave angle: 0 degrees Bottom level: 2.95 m +ZH Average salinity: 2 o/oo Total load: -.005375 kg/s m
 Average temperature: 15 centigrade

Hydronamic bv
 Port & waterway engineers
 Slidrecht - Holland

project: P613 # APDL # DOURO ESTUARY
 datafile: DUR01 location 06=02
 date: 821110 time: 16.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0	18	14
0.5	+	**	*	*****
1.0	+	**	*	*****
1.5	+	**	*	*****
2.0	+	**	*	*****
2.5	+	**	*	*****
3.0	+	**	**	*****
3.5	+	**	**	*****
4.0	+	**	**	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.45 m Average velocity: -.84 m/sec Measured bedload: -.000115 kg/s m
 Waveperiod: .00 sec waterlevel: 1.48 m ±ZH Average concentration: .0013 kg/m3 Measured susp. load: -.005037 kg/s m
 Wave angle: 0 degrees Bottom level: 2.97 m ±ZH Average salinity: 2 o/oo Total load: -.005152 kg/s m
 Average temperature: 14 centigrade

Hydronamic bv
 Port & waterway engineers
 Slidrecht - Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DURO1 location 06=02
 date: 821110 time: 10.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)			SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	- *****											
1.0												
1.5	- *****											
2.0												
2.5	- *****											
3.0	- *****											
3.5	- *****											
4.0	- *****											

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.15 m Average velocity: -.85 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.38 m tZH Average concentration: .0016 kg/m3 Measured susp. load: -.005547 kg/s m
 Wave angle: 0 degrees Bottom level: 2.77 m tZH Average salinity: 2 o/oo Total load: -.005547 kg/s m
 Average temperature: 15 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 + APOL + DOURO ESTUARY
 datafile: DUR01 location 06-02
 date: 821110 time: 17.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
	0	1.0	2.0	0	0	18	36	0
.0	-----	-----	-----	-----	-----	-----	-----	-----
.5	*****	-----	***	-----	*	-----	-----	*****
1.0	*****	-----	***	-----	*	-----	-----	*****
1.5	*****	-----	***	-----	*	-----	-----	*****
2.0	*****	-----	***	-----	*	-----	-----	*****
2.5	*****	-----	***	-----	*	-----	-----	*****
3.0	*****	-----	***	-----	*	-----	-----	*****
3.5	*****	-----	***	-----	*	-----	-----	*****
4.0	*****	-----	***	-----	*	-----	-----	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.15 m Average velocity: -.79 m/sec Measured bedload: -.000023 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.30 m +ZH Average concentration: .0017 kg/m3 Measured susp. load: -.005466 kg/s m
 Wave angle: 0 degrees Bottom level: 2.85 m +ZH Average salinity: 2 o/oo Total load: -.005489 kg/s m
 Average temperature: 15 centigrade

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project: P613 # APDL # DUORD ESTUARY
 datafile: DURO1 location 06-02
 date: 821110 time: 17.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)			SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	- *****		***		*		*****					
1.0	*****		***		*		*****					
1.5	- *****		***		*		*****					
2.0	*****		***		*		*****					
2.5	- *****		***		*		*****					
3.0	*****		***		*		*****					
3.5	- *****		***		*		*****					
4.0	*****		***		*		*****					

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.15 m Average velocity: -.69 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.28 m +ZH Average concentration: .0017 kg/m3 Measured susp. load: -.004747 kg/s m
 Wave angle: 0 degrees Bottom level: 2.87 m +ZH Average salinity: 2 o/oo Total load: -.004747 kg/s m
 Average temperature: 15 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht = Holland

project: P613 # APDL # DUURD ESTUARY
 datafile: DURO1 location 06-02
 date: 821110 time: 18.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)				
		0	1.0	2.0	0	18	36	0	14	28
.0										
.5	- *****				*					*****
1.0										
1.5	- *****				*					*****
2.0										
2.5	- *****				*					*****
3.0										
3.5	- *****				*					*****
4.0	= *****				*					*****

↑ = flow into the estuary
 = = flow out of the estuary

Waveheight: .00 m waterdepth: 4.15 m Average velocity: -.61 m/sec Measured bedload: -.000023 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.30 m +ZH Average concentration: .0014 kg/m3 Measured susp. load: -.003503 kg/s m
 Wave angle: 0 degrees Bottom level: 2.85 m +ZH Average salinity: 1 o/oo Total load: -.003526 kg/s m
 Average temperature: 15 centigrade

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.05	18	14
0.5	1.0	*	*****	*****
1.0	1.5	***	*****	*****
2.0	2.5	*****	*****	*****
3.0	3.5	*****	*****	*****
4.0	4.0	*****	*****	*****
4.5	4.5	*****	*****	*****
5.0	5.0	*****	*****	*****
5.5	5.5	*****	*****	*****
6.0	6.0	*****	*****	*****
6.5	6.5	*****	*****	*****
7.0	7.0	*****	*****	*****
7.5	7.5	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 7.0 m Waterdepth: 7.65 m Average velocity: 0.3 m/sec Measured bedload: 0.00015 kg/s m
 Waveperiod: 4.00 sec Waterlevel: 1.96 m tZH Average concentration: 0.0007 kg/m³ Measured susp. load: 0.000124 kg/s m
 Wave angle: 45 degrees Bottom level: 5.69 m tZH Average salinity: 26 o/oo Total load: 0.000239 kg/s m
 Average temperature: 16 centigrade

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Hydraulic by
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 Slidrecht - Holland

project: P613 + APDL + OOURO ESTUARY
 datafile: DURO2 location 06-03
 date: 821111 time: 9.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m ³)		SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	.005	.010	0	18	36	0	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1.0	= ***	-----	*	-----	-----	-----	-----	-----	-----	*****	-----
1.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	*****	-----
2.0	= ****	-----	*	-----	-----	-----	-----	-----	-----	*****	-----
2.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	*****	-----
3.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	*****	-----
3.5	= *****	-----	**	-----	-----	-----	-----	-----	-----	*****	-----
4.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	*****	-----
4.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	*****	-----
5.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	*****	-----
5.5	= *****	-----	**	-----	-----	-----	-----	-----	-----	*****	-----
6.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	*****	-----
6.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	*****	-----
7.0	+ ****	-----	**	-----	-----	-----	-----	-----	-----	*****	-----
7.5	+ ****	-----	**	-----	-----	-----	-----	-----	-----	*****	-----

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .70 m waterdepth: 7.65 m Average velocity: -.26 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 4.00 sec waterlevel: 2.20 m +ZH Average concentration: .0007 kg/m³ Measured susp. load: -.001467 kg/s m
 Wave angle: 45 degrees Bottom level: 5.45 m +ZH Average salinity: 26 o/oo Total load: -.001467 kg/s m
 Average temperature: 16 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)			
	0	1.0	2.0	.005	.010	0	18	36.0	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5										
1.0	= *****		*			*****		*****		*****
1.5										
2.0	= *****		*			*****		*****		*****
2.5										
3.0										
3.5	= *****		*			*****		*****		*****
4.0										
4.5										
5.0										
5.5	= *****		**			*****		*****		*****
6.0										
6.5	= *****		**			*****		*****		*****
7.0										
7.5	+ ***		*			*****		*****		*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .70 m waterdepth: 7.85 m Average velocity: -.35 m/sec Measured bedload: .000044 kg/s m
 Waveperiod: 4.00 sec Waterlevel: 2.43 m +ZH Average concentration: .0005 kg/m3 Measured susp. load: -.001417 kg/s m
 Wave angle: 0 degrees Bottom level: 5.42 m +ZH Average salinity: 30 o/oo Total load: -.001373 kg/s m
 Average temperature: 15 centigrade

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	2.0 0	.010 0	18
.5	*****	*****	*****	36 0
1.0	*****	*****	*****	14
1.5	*****	*****	*****	28
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****
7.0	*****	*****	*****	*****
7.5	*****	*****	*****	*****
8.0	*****	*****	*****	*****

1 = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m waterdepth: 8.15 m Average velocity: .51 m/sec Measured bedload: ***** kg/s
 Waveperiod: .00 sec Waterlevel: 2.65 m tZH Average concentration: .0003 kg/m³ Measured susp. load: -.000636 kg/s
 Wave-angle: 0 degrees Bottom level: 5.50 m tZH Average salinity: 32 o/oo Total load: -.000636 kg/s
 Average temperature: 16 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
		0	.005	18	36.0	14	28
0							
0.5							
1.0	=**	*		*****		*****	
1.5				*****		*****	
2.0	=****	*		*****		*****	
2.5							
3.0				*****		*****	
3.5	=*****	*		*****		*****	
4.0							
4.5							
5.0				*****		*****	
5.5	=***	**		*****		*****	
6.0				*****		*****	
6.5	+*****	**		*****		*****	
7.0				*****		*****	
7.5	+**	**		*****		*****	
8.0	+***	**		*****		*****	

+ = flow into the estuary
 = = flow out of the estuary

Waveheight: .70 m waterdepth: 8.15 m Average velocity: -.13 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 4.00 sec Waterlevel: 2.88 m +ZH Average concentration: .0006 kg/m3 Measured susp. load: -.000362 kg/s m
 Wave angle: 45 degrees Bottom level: 5.27 m +ZH Average salinity: 30 o/oo Total load: -.000362 kg/s m
 Average temperature: 17 centigrade

Hydrodynamic by
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 + APDL + DOURO ESTUARY
 datafile: DUR02 location 06-03
 date: 821111 time: 11.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	18	36	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1.0	-	*****	*	*****	*****	*****	*****	*****	*****
1.5	-----	-----	-----	-----	-----	-----	-----	-----	-----
2.0	-	*	*	*****	*****	*****	*****	*****	*****
2.5	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.5	-----	-----	-----	-----	-----	-----	-----	-----	-----
4.0	=	**	**	*****	*****	*****	*****	*****	*****
4.5	-----	-----	-----	-----	-----	-----	-----	-----	-----
5.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
5.5	=	**	*	*****	*****	*****	*****	*****	*****
6.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
6.5	+	*	*	*****	*****	*****	*****	*****	*****
7.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
7.5	+	**	***	*****	*****	*****	*****	*****	*****
8.0	-----	-----	-----	-----	-----	-----	-----	-----	-----

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.00 m waterdepth: 8.25 m Average velocity: -.13 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 5.00 sec Waterlevel: 3.02 m +ZH Average concentration: .0005 kg/m3 Measured susp. load: -.000178 kg/s m
 Wave angle: 45 degrees Bottom level: 5.23 m +ZH Average salinity: 28 o/oo Total load: =.000178 kg/s m
 Average temperature: 16 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.05	0.10	18
0.5	1.0	*	*	*
1.0	1.5	*	*	*
1.5	2.0	*	*	*
2.0	2.5	*	*	*
2.5	3.0	*	*	*
3.0	3.5	*	*	*
3.5	4.0	*	*	*
4.0	4.5	*	*	*
4.5	5.0	*	*	*
5.0	5.5	*	*	*
5.5	6.0	*	*	*
6.0	6.5	*	*	*
6.5	7.0	*	*	*
7.0	7.5	*	*	*
7.5	8.0	*	*	*

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.00 m Waterdepth: 8.35 m Average velocity: -.02 m/sec Measured bedload: .000000 kg/s m
 Waveperiod: 5.00 sec Waterlevel: 3.14 m tZH Average concentration: .0005 kg/m³ Measured susp. load: .000300 kg/s m
 Wave angle: 45 degrees Bottom level: 5.21 m tZH Average salinity: 28 o/oo Total load: .000300 kg/s m
 Average temperature: 16 centigrade

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 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.010	18	14
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****
7.0	*****	*****	*****	*****
7.5	*****	*****	*****	*****
8.0	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Wavelength: 1.00 m Waterdepth: 8.45 m Average velocity: .24 m/sec Measured bedload: ***** kg/s m
 Waveperiod: 5.00 sec Waterlevel: 3.16 m tZH Average concentration: .0006 kg/m³ Measured susp. load: .000573 kg/s m
 Wave angle: 45 degrees Bottom level: 5.29 m tZH Average salinity: 24.0/00 Total load: .000573 kg/s m
 Average temperature: 16 centigrade

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 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	.005	18	14
.5	=====	=====	=====	=====
1.0 =	*****	*	***	*****
1.5 =	*****	*	***	*****
2.0 =	*****	*	***	*****
2.5	=====	=====	=====	=====
3.0	=====	=====	=====	=====
3.5	=====	=====	=====	=====
4.0 =	*****	*	*****	*****
4.5	=====	=====	=====	=====
5.0	=====	=====	=====	=====
5.5 =	***	*	*****	*****
6.0	=====	=====	=====	=====
6.5	=====	=====	=====	=====
7.0 =	**	**	*****	*****
7.5	=====	=====	=====	=====
8.0 +	*	*****	*****	*****
8.5 +	**	*****	*****	*****

+ = flow into the estuary
 = = flow out of the estuary

Waveheight: 1.50 m waterdepth: 8.55 m Average velocity: -.62 m/sec Measured bedload: .000029 kg/s m
 Waveperiod: 6.00 sec Waterlevel: 3.14 m +ZH Average concentration: .0006 kg/m3 Measured susp. load: -.000055 kg/s m
 Wave angle: 45 degrees Bottom level: 5.41 m +ZH Average salinity: 19 o/oo Total load: -.000027 kg/s m
 Average temperature: 17 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/g)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	*****	*****	*****	36
1.0	*****	*****	*****	14
1.5	*****	*****	*****	28
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****
7.0	*****	*****	*****	*****
7.5	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 7.65 m Average velocity: -1.05 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.54 m +ZH Average concentration: .0015 kg/m³ Measured susp. load: -.008950 kg/s m
 Wave angle: 0 degrees Bottom level: 5.11 m +ZH Average salinity: 6.9700 Total load: -.009950 kg/s m
 Average temperature: 16 centigrade

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* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/100g)	TEMPERATURE (centigrade)
0	1.0	2.0	0	36.0
.5	*****	.005	.010	18
1.0	*****	*	**	*****
1.5	*****	*	**	*****
2.0	*****	*	**	*****
2.5	*****	*	**	*****
3.0	*****	*	**	*****
3.5	*****	*	**	*****
4.0	*****	*	**	*****
4.5	*****	*	**	*****
5.0	*****	*	**	*****
5.5	*****	*	**	*****
6.0	*****	*	**	*****
6.5	*****	*	**	*****
7.0	*****	*	**	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Waterdepth: 7.35 m Average velocity: -1.13 m/sec Measured bedload: .000000 kg/s m
 Waveperiod: .00 sec Waterlevel: 2.30 m +ZH Average concentration: .0015 kg/m³ Measured susp. load: -.012625 kg/s m
 Wave angle: 0 degrees Bottom level: 5.05 m +ZH Average salinity: 3.0700 Total load: -.012625 kg/s m
 Average temperature: 15 centigrade

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Hydrodynamic by
 Port & waterway engineers
 Slidrecht = Holland

project: P613 # APDL # DOURO ESTUARY
 datafile: DURO2 location 06-03
 date: 821111 time: 15.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m ³)			SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0.0		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1.0	-	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1.5		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2.0	-	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
2.5		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.0		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.5	-	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
4.0		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4.5		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5.0		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5.5	-	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
6.0		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
6.5	-	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
7.0	-	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 7.15 m Average velocity: -1.22 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.05 m +ZH Average concentration: .0005 kg/m³ Measured susp. load: -.004764 kg/s m
 Wave angle: 0 degrees Bottom level: 5.10 m +ZH Average salinity: 3 o/oo Total load: -.004764 kg/s m
 Average temperature: 16 centigrade

Hydronamic bv
 Port & waterway engineers
 Slidrecht = Holland

project: P013 + APDL + DOURO ESTUARY
 datafile: DOUR2 location: 06-01
 date: 821111 time: 15.55

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m ³)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
	0	1.0	0	.005	18	36	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----
.5	-----	-----	-----	-----	-----	-----	-----	-----
1.0	-----	-----	-----	-----	-----	-----	-----	-----
1.5	-----	-----	-----	-----	-----	-----	-----	-----
2.0	-----	-----	-----	-----	-----	-----	-----	-----
2.5	-----	-----	-----	-----	-----	-----	-----	-----
3.0	-----	-----	-----	-----	-----	-----	-----	-----
3.5	-----	-----	-----	-----	-----	-----	-----	-----
4.0	-----	-----	-----	-----	-----	-----	-----	-----
4.5	-----	-----	-----	-----	-----	-----	-----	-----
5.0	-----	-----	-----	-----	-----	-----	-----	-----
5.5	-----	-----	-----	-----	-----	-----	-----	-----
6.0	-----	-----	-----	-----	-----	-----	-----	-----
6.5	-----	-----	-----	-----	-----	-----	-----	-----

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 6.95 m Average velocity: -1.21 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.86 m +2H Average concentration: .0005 kg/m³ Measured susp. load: -.004241 kg/s m
 Wave angle: 0 degrees Bottom level: 5.09 m +2H Average salinity: 3 o/oo Total load: -.004241 kg/s m
 Average temperature: 15 centigrade

Hydrodynamic by
Port & Waterway engineers
Silledrecht = HOLLAND

Project: P613 + APDL + DOUHO ESTUARY
datafile: DWR02 location 06-03
date: 821111 time: 16.25

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	0.010	18
0.5	*****	*	**	*****
1.0	*****	*	**	*****
1.5	*****	*	**	*****
2.0	*****	*	**	*****
2.5	*****	*	**	*****
3.0	*****	*	**	*****
3.5	*****	*	**	*****
4.0	*****	*	**	*****
4.5	*****	*	**	*****
5.0	*****	*	**	*****
5.5	*****	*	**	*****
6.0	*****	**	**	*****
6.5	*****	*****	*****	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Waterdepth: 6.75 m Average velocity: -1.20 m/sec Measured bedload: ##### kg/s #
 Waveperiod: .00 sec Waterlevel: 1.68 m tZH Average concentration: .0005 kg/m³ Measured susp. load: =.004675 kg/s #
 Wave angle: 0 degrees Bottom level: 5.07 m tZH Average salinity: 3 g/oo Total load: =.004675 kg/s #
 Average temperature: 15 centigrade

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Hydrodynamic by
Port & Waterway engineers
Sitedrecht - Holland

Project: Polj * APUL * DUWARD ESTUARY
datafile: DUARD location 06-01
date: 821111 time: 16.55

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/100)	TEMPERATURE (centigrade)
0	1.0	0.005	0.010	18
0.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Waterdepth: 6.35 m Average velocity: -1.06 m/sec Measured bedload: ***** kg/s m
 Waveperiod: .00 sec Waterlevel: 1.50 m tZH Average concentration: .0007 kg/m³ Measured susp. load: -.005014 kg/s m
 Wave angle: 0 degrees Bottom level: 4.85 m tZH Average salinity: 19.00 Total load: =.005014 kg/s m
 Average temperature: 15 centigrade

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Hydromatic BV
 Port & Waterway engineers
 Slidrecht - Holland

project: E013 + APDL + DOUKO ESTUARY
 datafile: DUKO2 location 06-03
 date: 821111 time: 17.25

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/100)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 6.15 m Average velocity: -1.19 m/sec Measured bedload: ##### kg/s
 Waveperiod: .00 sec Waterlevel: 1.36 m tZH Average concentration: .0006 kg/m³ Measured susp. load: -.00449 kg/s
 Wave angle: 0 degrees Bottom level: 4.79 m tZH Average salinity: 3.0/100 Total load: -.00449 kg/s
 Average temperature: 16 centigrade

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 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0.005	18	14
0.5	*****	*	***	*****
1.0	*****	*	***	*****
1.5	*****	*	***	*****
2.0	*****	*	***	*****
2.5	*****	*	***	*****
3.0	*****	*	***	*****
3.5	*****	*	***	*****
4.0	*****	*	***	*****
4.5	*****	*	***	*****
5.0	*****	*	**	*****
5.5	*****	*	**	*****
6.0	*****	**	**	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 6.15 m Average velocity: -1.44 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.26 m +2H Average concentration: .0005 kg/m³ Measured susp. load: -.004197 kg/s m
 Wave angle: 0 degrees Bottom level: 4.89 m +2H Average salinity: 4 o/oo Total load: -.004197 kg/s m
 Average temperature: 16 centigrade

Hydronamic bv
 Port & waterway engineers
 Slidrecht - Holland

project: P613 + APDL + DOURO ESTUARY
 datafile: DUR02 location 06-03
 date: 821111 time: 18.25

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m ³)		SALINITY (o/oo)		TEMPERATURE (centigrade)					
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
.0												
.5	-	*****		*		*		*****		*		*****
1.0												
1.5	-	*****		*		*		*****		*		*****
2.0												
2.5												
3.0	-	*****		*		*		*****		*		*****
3.5												
4.0												
4.5	-	*****		**		*		*****		*		*****
5.0												
5.5	-	*****		**		*		*****		*		*****

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 |
 + = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.85 m Average velocity: -1.33 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.22 m +ZH Average concentration: .0006 kg/m³ Measured susp. load: -.004845 kg/s m
 Wave angle: 0 degrees Bottom level: 4.63 m +ZH Average salinity: 2 o/oo Total load: -.004845 kg/s m
 Average temperature: 15 centigrade

Hydronamic by
 Port & waterway engineers
 Slidrecht = Holland

project: P611 + APDL + DOORD ESTUARY
 datafile: DORO3 location 06-04
 date: 821112 time: 8.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)					
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0												
0.5	*										*****	
1.0												
1.5												
2.0	**										*****	
2.5												
3.0												
3.5												
4.0	* *										*****	
4.5												
5.0												
5.5												
6.0	* *										*****	
6.5												
7.0	***										*****	
7.5	**										*****	

| = flow into the estuary
 - = flow out of the estuary

Waveheight: .50 m waterdepth: 7.65 m Average velocity: .03 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 5.00 sec Waterlevel: 1.68 m +ZH Average concentration: .0006 kg/m3 Measured susp. load: .000459 kg/s m
 Wave angle: 10 degrees Bottom level: 5.97 m +ZH Average salinity: 5 o/oo Total load: .000459 kg/s m
 Average temperature: 16 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	**	*	***	***
1.0	**	*	***	***
1.5	**	*	***	***
2.0	**	*	***	***
2.5	**	*	***	***
3.0	**	*	***	***
3.5	**	*	***	***
4.0	**	*	***	***
4.5	**	*	***	***
5.0	**	*	***	***
5.5	**	*	***	***
6.0	**	*	***	***
6.5	**	*	***	***
7.0	**	*	***	***
7.5	**	*	***	***
8.0	**	*	***	***

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .50 m Waterdepth: 8.15 m Average velocity: .16 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 5.00 sec Waterlevel: 1.92 m +ZH Average concentration: .0005 kg/m³ Measured susp. load: .001076 kg/s m
 Wave angle: 10 degrees Bottom level: 6.23 m +ZH Average salinity: 11 o/oo Total load: .001076 kg/s m
 Average temperature: 16 centigrade

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Hydrodynamic by
 Port & waterway engineers
 Slidrecht - Holland

project: P013 + APDL + DUURO ESTUARY
 datafile: DUB03 location 06-04
 date: 821112 time: 9.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)					
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0.0												
0.5	-**			*			*****				*****	
1.0												
1.5												
2.0	+****			*			*****				*****	
2.5												
3.0												
3.5												
4.0												
4.5	+*****			*			*****				*****	
5.0												
5.5												
6.0												
6.5	+*****			**			*****				*****	
7.0												
7.5	+**			**			*****				*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .50 m waterdepth: 7.95 m Average velocity: .47 m/sec Measured bedload: .000052 kg/s m
 Waveperiod: 2.00 sec Waterlevel: 2.16 m +ZH Average concentration: .0005 kg/m3 Measured susp. load: .002308 kg/s m
 Wave angle: 0 degrees Bottom level: 5.79 m +ZH Average salinity: 19 o/oo Total load: .002360 kg/s m
 Average temperature: 16 centigrade

Hydrodynamic by
 Port & Waterway engineers
 Sijedrecht - Holland

Project: P013 * APPL * DUURD ESTUARY
 datafile: DUR03 Location 06-04
 date: 821112 time: 10,15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/100)	TEMPERATURE (centigrade)
0	1.0	0.005	0.010	18
0.5	1.0	*	*	*
1.0	1.0	*	*	*
1.5	1.0	*	*	*
2.0	1.0	*	*	*
2.5	1.0	*	*	*
3.0	1.0	*	*	*
3.5	1.0	*	*	*
4.0	1.0	*	*	*
4.5	1.0	*	*	*
5.0	1.0	*	*	*
5.5	1.0	*	*	*
6.0	1.0	*	*	*
6.5	1.0	*	*	*
7.0	1.0	*	*	*
7.5	1.0	*	*	*
8.0	1.0	*	*	*

1 = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 8.15 m Average velocity: .53 m/sec Measured bedload: .000172 kg/s m
 Waveperiod: .00 sec Waterlevel: 2.46 m tZH Average concentration: .0004 kg/m³ Measured susp. load: .002123 kg/s m
 Wave angle: 0 degrees Bottom level: 5.69 m tZH Average salinity: 24 g/100 Total load: .002295 kg/s m
 Average temperature: 17 centigrade

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Hydrodynamic DV
Port & Waterway engineers
Sliedrecht - Holland

Project: P013 + APDL # DDUK0 ESTUARY
Datafile: DUK03 Location 06-04
date: 821112 time: 10.45

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	0.10	18
0.5	***	*	*****	*****
1.0	***	*	*****	*****
1.5	***	*	*****	*****
2.0	***	*	*****	*****
2.5	***	*	*****	*****
3.0	***	*	*****	*****
3.5	***	*	*****	*****
4.0	***	*	*****	*****
4.5	***	*	*****	*****
5.0	***	*	*****	*****
5.5	***	*	*****	*****
6.0	***	*	*****	*****
6.5	***	*	*****	*****
7.0	***	*	*****	*****
7.5	***	*	*****	*****
8.0	***	*	*****	*****

1 = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Waterdepth: 8.45 m Average velocity: .41 m/sec Measured bedload: ##### kg/s m
Waveperiod: .00 sec Waterlevel: 2.74 m tzh Average concentration: .0003 kg/m³ Measured susp. load: .001606 kg/s m
Wave angle: 0 degrees Bottom level: 5.71 m tzh Average salinity: 24 o/oo Total load: .001606 kg/s m
Average temperature: 16 centigrade

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Hydrodynamic by
 Port & Waterway engineers
 Sijedrecht - Holland

Project: P613 * APUL * DUURD ESTUARY
 Datafile: DURD3 Location: 06-04
 date: 821112 time: 11.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	0.010	36.0
0.5	1.0	*	18	14
1.0	1.0	*	18	14
1.5	1.0	*	18	14
2.0	1.0	*	18	14
2.5	1.0	*	18	14
3.0	1.0	*	18	14
3.5	1.0	*	18	14
4.0	1.0	*	18	14
4.5	1.0	*	18	14
5.0	1.0	*	18	14
5.5	1.0	*	18	14
6.0	1.0	*	18	14
6.5	1.0	*	18	14
7.0	1.0	*	18	14
7.5	1.0	*	18	14
8.0	1.0	*	18	14
8.5	1.0	*	18	14

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 8.55 m Average velocity: 40 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.98 m +ZH Average concentration: .0002 kg/m³ Measured susp. load: .001126 kg/s m
 Wave angle: 0 degrees Bottom level: 5.57 m +ZH Average salinity: 22 o/oo Total load: .001126 kg/s m
 Average temperature: 16 centigrade

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Hydronamic bv
 Port & waterway engineers
 Slidrecht = Holland

project: P613 # APDL # DOORD ESTUARY
 datafile: DURQ1 location 06-04
 date: 821112 time: 11.50

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0	18	36
0.5	*****	*	*	*****
1.0				
1.5				
2.0	+ **		*****	*****
2.5				
3.0				
3.5				
4.0				
4.5	+ ****		*	*****
5.0				
5.5				
6.0				
6.5	+ *****		*****	*****
7.0				
7.5	+ **		*****	*****
8.0				
8.5	+ **		*****	*****
9.0	+ **		*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 9.15 m Average velocity: .19 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 3.23 m +ZH Average concentration: .0001 kg/m³ Measured susp. load: -.000056 kg/s m
 Wave angle: 0 degrees Bottom level: 5.92 m +ZH Average salinity: 16 o/oo Total load: -.000056 kg/s m
 Average temperature: 17 centigrade

Hydronamic by
 Port & waterway engineers
 Sliedrecht = Holland

project: Pol3 # APDL # DOURO ESTUARY
 datafile: DUR03 location 06=04
 date: 821112 time: 12.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0	18	14
0.5	*****	*	*	*****
1.0				
1.5				
2.0	*****	*	*	*****
2.5				
3.0				
3.5				
4.0				
4.5	***	*	*****	*****
5.0				
5.5				
6.0				
6.5	+**	*	*****	*****
7.0				
7.5	+**	*	*****	*****
8.0				
8.5	+***	*	*****	*****
9.0	+ *	*	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 9.05 m Average velocity: -.17 m/sec Measured bedload: .000000 kg/s m
 Waveperiod: .00 sec Waterlevel: 3.34 m +2H Average concentration: .0000 kg/m³ Measured susp. load: .000000 kg/s m
 Wave angle: 0 degrees Bottom level: 5.71 m +2H Average salinity: 17 o/oo Total load: .000000 kg/s m
 Average temperature: 16 centigrade

Hydrodynamic by
 Port & waterway engineers
 Slidrecht - Holland

project: P613 # APDL # DOURO ESTUARY
 datafile: DURQ3 location 06-04
 date: 821112 time: 12.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	18	36	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	*****		*		*			*****	
1.0									
1.5									
2.0	*****		*		*			*****	
2.5									
3.0									
3.5									
4.0	*****		*		*****			*****	
4.5									
5.0									
5.5	*		*		*****			*****	
6.0									
6.5	***		*		*****			*****	
7.0									
7.5	**		*		*****			*****	
8.0	*		*		*****			*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.15 m Average velocity: -.27 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec waterlevel: 3.40 m +ZH Average concentration: .0000 kg/m3 Measured susp. load: -.000044 kg/s m
 Wave angle: 0 degrees Bottom level: 4.75 m +ZH Average salinity: 16 o/oo Total load: -.000044 kg/s m
 Average temperature: 16 centigrade

Hydronamic by
 Port & waterway engineers
 Sliedrecht = Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DUR03 location 06=04
 date: 821112 time: 13,15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	18	14
0.5	*****	*	*	*****
1.0				
1.5				
2.0	*****	*	*	*****
2.5				
3.0				
3.5				
4.0	*****	*	*	*****
4.5				
5.0				
5.5	*****	*	*****	*****
6.0				
6.5				
7.0	*****	*	*****	*****
7.5				
8.0	+ *	*	*****	*****
8.5	+ *	*	*****	*****

| = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.65 m Average velocity: -.59 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec waterlevel: 3.35 m +ZH Average concentration: .0001 kg/m3 Measured susp. load: -.000683 kg/s m
 Wave angle: 0 degrees Bottom level: 5.30 m +ZH Average salinity: 13 o/oo Total load: -.000683 kg/s m
 Average temperature: 16 centigrade

Hydrodynamic by
Port & Waterway engineers
Sjledrecht - Hoijland

Project: P013 * Avul * OUDRO ESTUARY
datafile: DUB03 location 06-04
date: B21112 time: 13.45

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/100g)	TEMPERATURE (centigrade)
0	1.0	0.005	0.010	18
.5	*****	*	*	36.0
1.0	*****	*	***	14
1.5	*****	*	***	28
2.0	*****	*	***	*****
2.5	*****	*	***	*****
3.0	*****	*	***	*****
3.5	*****	*	***	*****
4.0	*****	*	***	*****
4.5	*****	*	***	*****
5.0	*****	*	***	*****
5.5	*****	*	***	*****
6.0	*****	*	***	*****
6.5	*****	*	***	*****
7.0	*****	*	***	*****
7.5	*****	*	***	*****
8.0	*****	*	***	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Waterdepth: 8.45 m Average velocity: -1.06 m/sec Measured bedload: -.000029 kg/s #
 Waveperiod: .00 sec Waterlevel: 3.25 m tZH Average concentration: .0003 kg/m³ Measured susp. load: -.002439 kg/s #
 Wave angle: 0 degrees Bottom level: 5.20 m tZH Average salinity: 6 g/100 Total load: -.002467 kg/s #
 Average temperature: 15 centigrade

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* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/g)	TEMPERATURE (centigrade)
0	1.0	0.005	0.10	18
0.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****
7.0	*****	*****	*****	*****
7.5	*****	*****	*****	*****
8.0	*****	*****	*****	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Water depth: 8.15 m Average velocity: -1.17 m/sec Measured bedload: ##### kg/s
 Wave period: .00 sec Water level: 3.07 m tZH Average concentration: .0003 kg/m³ Measured susp. load: -.002634 kg/s
 Wave angle: 0 degrees Bottom level: 5.08 m tZH Average salinity: 5.0700 Total load: -.002634 kg/s
 Average temperature: 16 centigrade

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 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m ³)		SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	.005	.010	0	18	36	0	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
2.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
4.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
6.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
6.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
7.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
7.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 7.65 m Average velocity: -1.40 m/sec Measured bedload: -.000057 kg/s m
 Waveperiod: .00 sec Waterlevel: 2.86 m +ZH Average concentration: .0003 kg/m³ Measured susp. load: -.003061 kg/s m
 Wave angle: 0 degrees Bottom level: 4.79 m +ZH Average salinity: 4 o/oo Total load: -.003118 kg/s m
 Average temperature: 16 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	0	0
0.5	*****	*	*	*****
1.0	*****	*	*	*****
1.5	*****	*	**	*****
2.0	*****	*	**	*****
2.5	*****	*	**	*****
3.0	*****	*	**	*****
3.5	*****	*	**	*****
4.0	*****	*	**	*****
4.5	*****	*	**	*****
5.0	*****	*	**	*****
5.5	*****	*	**	*****
6.0	*****	*	**	*****
6.5	*****	*	**	*****
7.0	*****	*	**	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 7.35 m Average velocity: -1.48 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.64 m +ZH Average concentration: .0002 kg/m³ Measured susp. load: -.002775 kg/s m
 Wave angle: 0 degrees Bottom level: 4.71 m +ZH Average salinity: 2 o/oo Total load: -.002775 kg/s m
 Average temperature: 15 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)					
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
6.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
6.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
7.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

† = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 7.15 m Average velocity: -1.59 m/sec Measured bedload: -.000848 kg/s m
 Waveperiod: .00 sec Waterlevel: 2.38 m †ZH Average concentration: .0001 kg/m3 Measured susp. load: -.003729 kg/s m
 Wave angle: 0 degrees Bottom level: 4.77 m †ZH Average salinity: 5 o/oo Total load: -.004577 kg/s m
 Average temperature: 15 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	18	14
0.5	*****	*	**	*****
1.0	*****	*	**	*****
1.5	*****	*	**	*****
2.0	*****	*	**	*****
2.5	*****	*	**	*****
3.0	*****	*	**	*****
3.5	*****	*	**	*****
4.0	*****	*	**	*****
4.5	*****	*	**	*****
5.0	*****	*	**	*****
5.5	*****	*	**	*****
6.0	*****	*	**	*****
6.5	*****	*	**	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 6.95 m Average velocity: =1.59 m/sec Measured bedload: =.003163 kg/s m
 Waveperiod: .00 sec Waterlevel: 2.12 m +ZH Average concentration: .0005 kg/m3 Measured susp. load: =.005733 kg/s m
 Wave angle: 0 degrees Bottom level: 4.83 m +ZH Average salinity: 5 o/oo Total load: =.008895 kg/s m
 Average temperature: 14 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht = Holland

project: P613 * APDL * DUURO ESTUARY
 datafile: DUR03 location 06-04
 date: #21112 time: 16.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)					
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
.0	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
.5	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1.0	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1.5	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
2.0	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
2.5	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
3.0	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
3.5	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
4.0	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
4.5	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
5.0	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
5.5	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
6.0	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
6.5	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

| = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 6.95 m Average velocity: -1.50 m/sec Measured bedload: -.000286 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.88 m +ZH Average concentration: .0007 kg/m3 Measured susp. load: -.007093 kg/s m
 Wave angle: 0 degrees Bottom level: 5.07 m +ZH Average salinity: 4 o/oo Total load: -.007379 kg/s m
 Average temperature: 14 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	2.0	0.005	0.010
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****

! = flow into the estuary
 = flow out of the estuary

Waveheight: .00 m water depth: 6.75 m Average velocity: -1.58 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.68 m +ZH Average concentration: .0008 kg/cm³ Measured susp. load: =.008830 kg/s m
 Wave angle: 0 degrees Bottom level: 5.07 m +ZH Average salinity: 4 o/oo Total load: =.008830 kg/s m
 Average temperature: 13 centigrade

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 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	2.0	0.005	18
0.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****

1 = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m water depth: 3.15 m Average velocity: .47 m/sec Measured bedload: ##### kg/s m
 Wave period: .00 sec water level: 1.00 m 12H Average concentration: .0006 kg/m³ Measured susp. load: .000961 kg/s m
 Wave angle: 0 degrees Bottom level: 2.15 m 12H Average salinity: 0 o/oo Total load: .000961 kg/s m
 Average temperature: 14 centigrade

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Hydronamic bv
 Port & waterway engineers
 Slidrecht - Holland

project: P613 † APDL † DUURO ESTUARY
 datafile: DURO4 location 06-05
 date: 821115 time: 9.45

 † SEDIMENT TRANSPORT MEASUREMENT †

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
	0 1.0 2.0 0	.005 .010 0	18 36 0	14 28
.0	----- ----- ----- -----	----- ----- ----- -----	----- ----- ----- -----	----- ----- ----- -----
.5	+ ****	****	*	*****
1.0				
1.5	+ ****	*****	*	*****
2.0				
2.5	+ ****	*****	*	*****
3.0	+ ****	*****	*	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 3.15 m Average velocity: .31 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.12 m +ZH Average concentration: .0022 kg/m³ Measured susp. load: .002176 kg/s m
 Wave angle: 0 degrees Bottom level: 2.03 m +ZH Average salinity: 0 o/oo Total load: .002176 kg/s m
 Average temperature: 14 centigrade

Hydrographic by
 Port & waterway engineers
 Slidrecht - Holland

project: P613 # APDL # DUURO ESTUARY
 datafile: DURO4 location 06-05
 date: 821115 time: 10.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	18	14
0.5	+ ***	***	*	*****
1.0				
1.5	+ *	*****	*	*****
2.0				
2.5	+ *	*****	*	*****
3.0	+ *	*****	*	*****

↑ = flow into the estuary
 ↓ = flow out of the estuary

Waveheight: .00 m waterdepth: 3.15 m Average velocity: .15 m/sec Measured bedload: .000011 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.28 m +ZH Average concentration: .0018 kg/m3 Measured susp. load: .000799 kg/s m
 Wave angle: 0 degrees Bottom level: 1.87 m +ZH Average salinity: 0 o/oo Total load: .000810 kg/s m
 Average temperature: 14 centigrade

Hydronamic bv
 Port & waterway engineers
 Slidrecht - Holland

project: P613 + APDL + DOURO ESTUARY
 datafile: DURO4 location: 06-05
 date: 821115 time: 10.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)					
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0												
0.5	+											
1.0												
1.5	+											
2.0												
2.5												
3.0	+											

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 3.35 m Average velocity: .05 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.46 m +ZH Average concentration: .0009 kg/m3 Measured susp. load: .000187 kg/s m
 Wave angle: 0 degrees Bottom level: 1.89 m +ZH Average salinity: 0 o/oo Total load: .000187 kg/s m
 Average temperature: 12 centigrade

Hydronamic by
Port & waterway engineers
Slidrecht = Holland

project: P011 # APDL # DOURO ESTUARY
datafile: DUR04 location: 06-05
date: 821115 time: 11,15

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0		0	18	14
.0				
.5	+ *	***	*	*****
1.0				
1.5	+ *	***	*	*****
2.0				
2.5	+ **	****	*	*****
3.0	+ **	****	*	*****
3.5	+ *	****	*	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m waterdepth: 3.65 m Average velocity: .11 m/sec Measured bedload: .000000 kg/s m
Waveperiod: .00 sec Waterlevel: 1.76 m +ZH Average concentration: .0014 kg/m³ Measured susp. load: .000595 kg/s m
Wave angle: 0 degrees Bottom level: 1.89 m +ZH Average salinity: 0 o/oo Total load: .000595 kg/s m
Average temperature: 14 centigrade

Hydronamic ov
 Port & waterway engineers
 Slidrecht = Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DURO4 location 06-05
 date: 821115 time: 11.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)			SALINITY (o/oo)		TEMPERATURE (centigrade)	
		0	1.0	2.0	0	18	14	28
0	-----	-----	-----	-----	-----	-----	-----	-----
0.5	+ *	***			*	*****		
1.0	+ *	***			*	*****		
1.5	+ *	*****			*	*****		
2.0	+ *	*****			*	*****		
2.5	+ *	*****			*	*****		
3.0	+ *	*****			*	*****		
3.5	+ ***	*****			*	*****		

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 3.95 m Average velocity: .07 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.06 m ±ZH Average concentration: .0017 kg/m3 Measured susp. load: .000673 kg/s m
 Wave angle: 0 degrees Bottom level: 1.89 m ±ZH Average salinity: 1 o/oo Total load: .000673 kg/s m
 Average temperature: 13 centigrade

Hydronamic by
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: D0R04 location 06-05
 date: 821115 time: 12.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	18	14
0.5	+	***	*	*****
1.0	+	***	**	*****
1.5	+	***	*****	*****
2.0	+	*****	*****	*****
2.5	+	*****	*****	*****
3.0	+	*****	*****	*****
3.5	+	*****	*****	*****
4.0	+	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.15 m Average velocity: .15 m/sec Measured bedload: .000011 kg/s m
 Waveperiod: .00 sec waterlevel: 2.36 m +ZH Average concentration: .0035 kg/m3 Measured susp. load: .003220 kg/s m
 Wave angle: 0 degrees Bottom level: 1.79 m +ZH Average salinity: 9 o/oo Total load: .003231 kg/s m
 Average temperature: 15 centigrade

Hydrodynamic by
 Port & Waterway engineers
 Sijedrecht - Holland

Project: Pol3 & Apvl * DUURD. ESTUARY
 datafile: DURD4 Location 06=05
 date: 821115 time: 12.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/100g)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	1.0	*	*	*
1.0	1.5	*	*	*
1.5	2.0	*****	*****	*****
2.0	2.5	*****	*****	*****
2.5	3.0	*****	*****	*****
3.0	4.0	*****	*****	*****
3.5	4.5	*****	*****	*****
4.0				
4.5				

↑ = flow into the estuary
 ↓ = flow out of the estuary

Waveheight: .00 m Waterdepth: 4.65 m Average velocity: .21 m/sec Measured De-load: ##### kg/s
 Waveperiod: .00 sec Waterlevel: 2.68 m tZH Average concentration: .0028 kg/m³ Measured susp. load: .005235 kg/s
 Wave angle: 0 degrees Bottom level: 1.97 m tZH Average salinity: 14 g/100g Total load: .005235 kg/s
 Average temperature: 15 centigrade

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 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/100)	TEMPERATURE (centigrade)
0	1.0	2.0	0.005	18
.5	*****	*	*****	*****
1.0	*****	*	*****	*****
1.5	*****	*	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****

1 = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 5.15 m Average velocity: 25. m/sec Measured bedload: .000859 kg/s m
 Waveperiod: .00 sec Waterlevel: 2.96 m +ZH Average concentration: .0031 kg/m³ Measured susp. load: .006444 kg/s m
 Wave angle: 0 degrees Bottom level: 2.19 m +ZH Average salinity: 16.9/100 Total load: .007303 kg/s m
 Average temperature: 15 centigrade

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Hydrographic by
Port & Waterway engineers
Sliedrecht - Holland

Project: P011 & APUL * DUURD. ESTUARY
datefile: DUR04 location 06-05
date: 821115 time: 13.45

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/oo)	TEMPERATURE (centigrade)
0	1.0	.005	18	14
.5	*****	*****	*****	*****
1.0	1.5	*****	*****	*****
2.0	2.5	*****	*****	*****
3.0	3.5	*****	*****	*****
4.0	4.0	*****	*****	*****
4.5	4.5	*****	*****	*****
5.0	5.0	*****	*****	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Water depth: 5.15 m Average velocity: -.18 m/sec Measured bedload: ***** kg/s m
 Wave period: .00 sec Water level: 3.16 m tZH Average concentration: .0027 kg/m³ Measured susp. load: -.000329 kg/s m
 Wave angle: 0 degrees Bottom level: 1.99 m tZH Average salinity: 19 g/oo Total load: =.000329 kg/s m
 Average temperature: 15 centigrade

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Hydronamic bv
 Port & waterway engineers
 Slidrecht = Holland

project: Polj * APDL * DUURO ESTUARY
 datafile: DUR04 location 06-05
 date: 821115 time: 14.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)			SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0	===== =====	===== =====	===== =====	===== =====	===== =====	===== =====	===== =====	===== =====	===== =====	===== =====	===== =====	===== =====
.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
2.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
2.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
4.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
4.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
5.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.15 m Average velocity: -.21 m/sec Measured bedload: .000103 kg/s m
 Waveperiod: .00 sec Waterlevel: 3.30 m +ZH Average concentration: .0023 kg/m3 Measured susp. load: -.000920 kg/s m
 Wave angle: 0 degrees Bottom level: 1.85 m +ZH Average salinity: 16 o/oo Total load: -.000817 kg/s m
 Average temperature: 16 centigrade

Hydronamic bv
 Port & waterway engineers.
 Sliedrecht = Holland

project: P613 # APDL # DOURO ESTUARY
 datafile: DUR04 location 06-05
 date: 821115 time: 14.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	18	14
0.5	*****	***	†	*****
1.0	*****	***	***	*****
1.5	*****	***	*****	*****
2.0	*****	***	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****

† = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.45 m Average velocity: -.52 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 3.38 m †ZH Average concentration: .0016 kg/m3 Measured susp. load: -.004086 kg/s m
 Wave angle: 0 degrees Bottom level: 2.07 m †ZH Average salinity: 10 o/oo Total load: -.004086 kg/s m
 Average temperature: 14 centigrade

Hydronamic bv
 Port & waterway engineers
 Slidrecht = Holland

project: P613 # APDL # DUNRO ESTUARY
 datafile: DUNRO4 location 06-05
 date: 821115 time: 15.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	0	0
0.5	*****	***	*	*****
1.0	*****	***	*	*****
1.5	*****	***	*	*****
2.0	*****	***	*	*****
2.5	*****	***	*	*****
3.0	*****	****	**	*****
3.5	*****	****	**	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.65 m Average velocity: =.67 m/sec Measured bedload: -.000006 kg/s m
 Waveperiod: .00 sec Waterlevel: 3.35 m +ZH Average concentration: .0016 kg/m3 Measured susp. load: -.005465 kg/s m
 Wave angle: 0 degrees Bottom level: 2.30 m +ZH Average salinity: 7 o/oo Total load: -.005471 kg/s m
 Average temperature: 16 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m ³)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	18	36	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	*****		***		+			*****	
1.0	*****		***		+			*****	
1.5	*****		***		+			*****	
2.0									
2.5									
3.0	*****		****		***			*****	
3.5									
4.0									
4.5	*****		*****		*****			*****	
5.0									
5.5	**		*****		*****			*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.85 m Average velocity: -.67 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec waterlevel: 3.20 m +ZH Average concentration: .0014 kg/m³ Measured susp. load: -.005634 kg/s m
 Wave angle: 0 degrees Bottom level: 2.65 m +ZH Average salinity: 4 o/oo Total load: -.005634 kg/s m
 Average temperature: 15 centigrade

Hydrodynamic by
Port & Waterway engineers
Sitedrecht - Holland

Project: Pelt & APDL * DUURD ESTUARY
datefile: DUR04 location: 06-05
date: 821115 time: 19:15

SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	18	14
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****

! = flow into the estuary
= flow out of the estuary

Waveheight: .00 m Waterdepth: 5.25 m Average velocity: .86 m/sec Measured bedload: .000000 kg/s m
 Waveperiod: .00 sec Waterlevel: 2.96 m +ZH Average concentration: .0016 kg/m³ Measured susp. load: .007317 kg/s m
 Wave angle: 0 degrees Bottom level: 2.29 m +ZM Average salinity: 5 o/oo Total load: .007317 kg/s m
 Average temperature: 14 centigrade

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Hydronamic by
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 ± APDL ± DUURD ESTUARY
 datafile: DURO4 location 06-05
 date: 821115 time: 10.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	18	36	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	*****	*****	****	*****	*	*****	*****	*****	*****
1.0	*****	*****	****	*****	*	*****	*****	*****	*****
1.5	*****	*****	****	*****	*	*****	*****	*****	*****
2.0	*****	*****	****	*****	*	*****	*****	*****	*****
2.5	*****	*****	****	*****	*	*****	*****	*****	*****
3.0	*****	*****	****	*****	*	*****	*****	*****	*****
3.5	*****	*****	****	*****	*	*****	*****	*****	*****
4.0	*****	*****	****	*****	*	*****	*****	*****	*****
4.5	*****	*****	****	*****	*	*****	*****	*****	*****
5.0	*****	*****	****	*****	*	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.15 m Average velocity: -.85 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.72 m +ZH Average concentration: .0021 kg/m3 Measured susp. load: -.000181 kg/s m
 Wave angle: 0 degrees Bottom level: 2.43 m +ZH Average salinity: 6 o/oo Total load: -.000181 kg/s m
 Average temperature: 16 centigrade

Hydronamic by
 Port & waterway engineers
 Slidrecht = Holland

project: P013 * APDL * DOURO ESTUARY
 datafile: DUR04 location u6=05
 date: 821115 time: 17.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)					
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0.0	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
0.5	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1.0	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
1.5	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
2.0	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
2.5	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
3.0	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
3.5	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
4.0	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
4.5	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.95 m Average velocity: =.96 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.42 m +ZH Average concentration: .0022 kg/m3 Measured susp. load: -.011288 kg/s m
 Wave angle: 0 degrees Bottom level: 2.53 m +ZH Average salinity: 5 o/oo Total load: =.011288 kg/s m
 Average temperature: 14 centigrade

Hydraumatic by
 Port & Waterway engineers
 Sijedrecht - Hoiland

Project: P613 * APOL * DOUW ESTUARY
 datafile: DUR04 Location 06-05
 date: 821115 time: 17.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/100)	TEMPERATURE (centigrade)
0	1.0	0.005	0.010	18
.5	*****	*****	*****	36.0
1.0	*****	*****	*****	14
1.5	*****	*****	*****	28
2.0	*****	*****	*****	
2.5	*****	*****	*****	
3.0	*****	*****	*****	
3.5	*****	*****	*****	
4.0	*****	*****	*****	
4.5	*****	*****	*****	

! = flow into the estuary
 * = flow out of the estuary

Waveheight: .00 m Waterdepth: 4.65 m Average velocity: -.81 m/sec
 Waveperiod: .00 sec Waterlevel: 2.15 m tZH Average concentration: .0025 kg/m³
 Wave angle: 0 degrees Bottom level: 2.50 m tZH Average salinity: 6 g/100
 Average temperature: 15 centigrade

Measured bedload: -.000011 kg/s m
 Measured susp. load: -.008508 kg/s m
 Total load: -.008520 kg/s m

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Hydronamic bv
 Port & waterway engineers
 Slidrecht = Holland

project: P611 # APDL # DOURD ESTUARY
 datafile: DURO4 location 06-05
 date: 821115 time: 18.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	2.0 0	.010 0	18 36 0 14 28
.0	-----	-----	-----	-----
.5	*****	*****	***	*****
1.0	-----	-----	-----	-----
1.5	*****	*****	***	*****
2.0	-----	-----	-----	-----
2.5	*****	*****	*****	*****
3.0	-----	-----	-----	-----
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.15 m Average velocity: -.68 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.82 m +2H Average concentration: .0026 kg/m³ Measured susp. load: -.007251 kg/s m
 Wave angle: 0 degrees Bottom level: 2.33 m +2H Average salinity: 6 o/oo Total load: -.007251 kg/s m
 Average temperature: 15 centigrade

Hydronic bv
 Port & waterway engineers
 Slidrecht - Holland

project: P611 * APDL * DOURO ESTUARY
 datafile: DOUR05 location: 06-06
 date: 821116 time: 15.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	18	14
0.5	+*	*	*****	*****
1.0				
1.5				
2.0	+*	**	*****	*****
2.5				
3.0				
3.5				
4.0				
4.5	=**	****	*****	*****
5.0				
5.5				
6.0				
6.5	=**	*****	*****	*****
7.0				
7.5	=*	*****	*****	*****
8.0				
8.5	=**	*****	*****	*****
9.0	=**	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 2.00 m waterdepth: 9.15 m Average velocity: -.05 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 12.00 sec Waterlevel: 1.20 m +ZH Average concentration: .0016 kg/m3 Measured susp. load: -.001713 kg/s m
 Wave angle: 45 degrees Bottom level: 5.95 m +ZH Average salinity: 34 o/oo Total load: -.001713 kg/s m
 Average temperature: 16 centigrade

 † SEDIMENT TRANSPORT MEASUREMENT †

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m ³)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
	0	1.0	2.0	.005	18	36	14	28
0.0								
0.5								
1.0 = †			***		*****		*****	
1.5								
2.0 = †			****		*****		*****	
2.5								
3.0								
3.5								
4.0								
4.5 = **			*****		*****		*****	
5.0								
5.5								
6.0								
6.5 = †			*****		*****		*****	
7.0								
7.5 = ***			*****		*****		*****	
8.0								
8.5 = **			*****		*****		*****	

↑ = flow into the estuary
 - = flow out of the estuary

Waveheight: 3.00 m waterdepth: 8.85 m Average velocity: -.10 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 12.00 sec Waterlevel: 3.20 m +ZH Average concentration: .0020 kg/m³ Measured susp. load: -.002191 kg/s m
 Wave angle: 30 degrees Bottom level: 5.65 m +ZH Average salinity: 30 o/oo Total load: -.002191 kg/s m
 Average temperature: 16 centigrade

Hydrodynamic by
Port & Waterway engineers
Sliedrecht - Holland

Project: P011 * APUL * DUUKO ESTUARY
datafile: DUB05 location: 06-06
date: 821116 time: 15.55

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	0.010	18
0.5	*	***	*****	*****
1.0	*	***	*****	*****
1.5	*	***	*****	*****
2.0	*	***	*****	*****
2.5	*	***	*****	*****
3.0	*	***	*****	*****
3.5	*	***	*****	*****
4.0	*	***	*****	*****
4.5	*	***	*****	*****
5.0	*	***	*****	*****
5.5	*	***	*****	*****
6.0	*	***	*****	*****
6.5	*	***	*****	*****
7.0	*	***	*****	*****
7.5	*	***	*****	*****
8.0	*	***	*****	*****
8.5	*	***	*****	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: 3.00 m Water depth: 8.85 m Average velocity: 0.05 m/sec Measured bedload: 0.000126 kg/s m
 Waveperiod: 12.00 sec Water level: 3.16 m +ZH Average concentration: 0.0019 kg/m³ Measured susp. load: 0.000596 kg/s m
 Wave angle: 30 degrees Bottom level: 5.69 m +ZH Average salinity: 31 g/oo Total load: 0.000722 kg/s m
 Average temperature: 16 centigrade

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/100)	TEMPERATURE (centigrade)
0	1.0	2.0 0	.005	.010 0
.5	1.0	*****	*****	*****
1.0	1.5	*****	*****	*****
2.0	2.0	*****	*****	*****
2.5	3.0	*****	*****	*****
3.0	3.5	*****	*****	*****
4.0	4.0	*****	*****	*****
4.5	4.5	*****	*****	*****
5.0	5.0	*****	*****	*****
5.5	6.0	*****	*****	*****
6.0	6.5	*****	*****	*****
7.0	7.0	*****	*****	*****
7.5	7.5	*****	*****	*****
8.0	8.0	*****	*****	*****

+ = flow into the estuary
- = flow out of the estuary

Wavelength: 3.00 m Water depth: 8.85 m Average velocity: .12 m/sec Measured bedload: ***** kg/s
 Wave period: 12.00 sec Water level: 3.00 m tZH Average concentration: .0126 kg/m³ Measured susp. load: .010996 kg/s
 Wave angle: 30 degrees Bottom level: 5.85 m tZH Average salinity: 31 g/100 Total load: .010996 kg/s
 Average temperature: 16 centigrade

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Hydraaminc bv
 Port & waterway engineers
 Stiefrecht = Hottland
 date: 821117 time: 10.45
 project: P13 & APDL & DOUHO ESTUARY
 datafile: DUR06 location 06-07

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	2.0	0	36
0.5	0	0	0	14
1.0	0	0	0	14
1.5	0	0	0	14
2.0	0	0	0	14
2.5	0	0	0	14
3.0	0	0	0	14
3.5	0	0	0	14
4.0	0	0	0	14
4.5	0	0	0	14
5.0	0	0	0	14
5.5	0	0	0	14
6.0	0	0	0	14
6.5	0	0	0	14
7.0	0	0	0	14
7.5	0	0	0	14
8.0	0	0	0	14
8.5	0	0	0	14

* = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.00 m
 Waterdepth: 8.65 m
 Average velocity: .12 m/sec
 Measured bedload: .000115 kg/s m
 Waveperiod: 7.00 sec
 Waterlevel: .92 m +ZH
 Average concentration: .0020 kg/m³
 Measured susp. load: .001983 kg/s m
 Wave angle: 30 degrees
 Bottom level: 7.73 m +ZH
 Average salinity: 32 o/oo
 Total load: .002097 kg/s m
 Average temperature: 16 centigrade

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	0.10	18
1.0	1.5	*	*	14
1.5	2.0	*	*	14
2.0	2.5	*	*	14
2.5	3.0	*	*	14
3.0	3.5	*	*	14
4.0	4.0	*	*	14
4.5	4.5	*	*	14
5.0	5.0	*	*	14
5.5	5.5	*	*	14
6.0	6.0	*	*	14
6.5	6.5	*	*	14
7.0	7.0	*	*	14
7.5	7.5	*	*	14
8.0	8.0	*	*	14
8.5	8.5	*	*	14

+ = flow into the estuary
- = flow out of the estuary

Waveheight: 1.00 m Waterdepth: 8.65 m Average velocity: 1.8 m/sec Measured bedload: ##### kg/s
 Waveperiod: 7.00 sec Waterlevel: 1.04 m tZH Average concentration: .0042 kg/m³ Measured susp. load: .004644 kg/s
 Wave angle: 0 degrees Bottom level: 7.61 m tZH Average salinity: 33 o/oo Total load: .004644 kg/s
 Average temperature: 16 centigrade

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Hydrodynamic by
Port & Waterway engineers
Sijedrecht - Holland

Project: P613 + APDL + DOUW ESTUARY
datafile: DURD6 location: 06-07
date: 821117 time: 11.45

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/oo)	TEMPERATURE (centigrade)
0	1.0	2.0	0	18
0.5	1.0	0.005	0	36
1.0	1.5			14
1.5	2.0	*		
2.0	2.5	*		
2.5	3.0			
3.0	3.5			
3.5	4.0	**		
4.0	4.5	**		
4.5	5.0			
5.0	5.5			
5.5	6.0			
6.0	6.5	**		
6.5	7.0	***		
7.0	7.5	***		
7.5	8.0	*****		
8.0	8.5	*****		
8.5	9.0	*****		

+ = flow into the estuary
- = flow out of the estuary

Waveheight: 2.00 m Waterdepth: 9.15 m Average velocity: 1.7 m/sec Measured bedload: .000344 kg/s
 Waveperiod: 8.00 sec Waterlevel: 1.26 m tZH Average concentration: .0031 kg/m³ Measured susp. load: .004343 kg/s
 Wave angle: 30 degrees Bottom level: 7.89 m tZH Average salinity: 34 g/oo Total load: .004686 kg/s
 Average temperature: 16 centigrade

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 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m ³)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	18	36	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1.0	+	-----	*	-----	-----	*****	-----	*****	-----
1.5	-----	-----	-----	-----	-----	*****	-----	*****	-----
2.0	+	-----	*	-----	-----	*****	-----	*****	-----
2.5	-----	-----	-----	-----	-----	*****	-----	*****	-----
3.0	-----	-----	-----	-----	-----	*****	-----	*****	-----
3.5	-----	-----	-----	-----	-----	*****	-----	*****	-----
4.0	-----	-----	-----	-----	-----	*****	-----	*****	-----
4.5	+ **	-----	**	-----	-----	*****	-----	*****	-----
5.0	-----	-----	-----	-----	-----	*****	-----	*****	-----
5.5	-----	-----	-----	-----	-----	*****	-----	*****	-----
6.0	-----	-----	-----	-----	-----	*****	-----	*****	-----
6.5	+ **	-----	**	-----	-----	*****	-----	*****	-----
7.0	-----	-----	-----	-----	-----	*****	-----	*****	-----
7.5	+ **	-----	*****	-----	-----	*****	-----	*****	-----
8.0	-----	-----	-----	-----	-----	*****	-----	*****	-----
8.5	-----	-----	-----	-----	-----	*****	-----	*****	-----
9.0	+ *	-----	*****	-----	-----	*****	-----	*****	-----
9.5	+ **	-----	*****	-----	-----	*****	-----	*****	-----

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.00 m water depth: 9.65 m Average velocity: .16 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 8.00 sec Water level: 1.57 m +2H Average concentration: .0028 kg/m³ Measured susp. load: .004247 kg/s m
 Wave angle: 30 degrees Bottom level: 8.08 m +2H Average salinity: 34 o/oo Total load: .004247 kg/s m
 Average temperature: 16 centigrade

Hydrodynamic by
 Port & waterway engineers
 Slidrecht - Holland

project: P013 + APDL + DOORD ESTUARY
 datafile: DUR06 location 06=07
 date: 821117 time: 12.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	.005	.010	0	18	36.0	14	28
0											
0.5											
1.0	+	*						*****		*****	
1.5			*					*****		*****	
2.0	+	*						*****		*****	
2.5											
3.0											
3.5											
4.0											
4.5	+	*						*****		*****	
5.0											
5.5											
6.0											
6.5	+	**						*****		*****	
7.0			*					*****		*****	
7.5	+	**						*****		*****	
8.0											
8.5											
9.0	+	*						*****		*****	
9.5	+	*						*****		*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.00 m waterdepth: 9.65 m Average velocity: .13 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 7.00 sec Waterlevel: 1.86 m +ZH Average concentration: .0006 kg/m3 Measured susp. load: .000659 kg/s m
 Wave angle: 30 degrees Bottom level: 7.79 m +ZH Average salinity: 34 o/oo Total load: .000659 kg/s m
 Average temperature: 16 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
	0	1.0	2.0	0	0	18	36	0
0								
0.5	+	*	*					
1.0								
1.5								
2.0	+	**	*					
2.5								
3.0								
3.5								
4.0								
4.5	+	*	*					
5.0								
5.5								
6.0								
6.5	+	*	*					
7.0								
7.5	+	*	*					
8.0								
8.5								
9.0	+	**	*****					
9.5								
10.0	+	**	*****					

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.00 m waterdepth: 10.15 m Average velocity: .14 m/sec Measured bedload: .000438 kg/s m
 Waveperiod: 7.00 sec waterlevel: 2.16 m +ZH Average concentration: .0014 kg/m3 Measured susp. load: .002127 kg/s m
 Wave angle: 5 degrees Bottom level: 7.99 m +ZH Average salinity: 34 o/oo Total load: .002564 kg/s m
 Average temperature: 16 centigrade

Hydrodynamic by
Port & Waterway engineers
Slidrecht - Holland

Project: P613 * ABUL * DUNNO ESTUARY
datafile: DUR06 Location 06-07
date: 821117 time: 13.45

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/g)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	***	*	*****	*****
1.0	1.5	*	*****	*****
1.5	2.0	*	*****	*****
2.0	***	*	*****	*****
2.5	3.0	*	*****	*****
3.0	3.5	*	*****	*****
4.0	4.0	*	*****	*****
4.5	4.5	*	*****	*****
5.0	5.0	*	*****	*****
5.5	5.5	*	*****	*****
6.0	6.0	*	*****	*****
6.5	6.5	*	*****	*****
7.0	7.0	*	*****	*****
7.5	7.5	*	*****	*****
8.0	8.0	*	*****	*****
8.5	8.5	*	*****	*****
9.0	9.0	*	*****	*****
9.5	9.5	*	*****	*****
10.0	10.0	*	*****	*****
10.5	10.5	*	*****	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: 1.00 m Waterdepth: 10.65 m Average velocity: .14 m/sec Measured bedload: ##### kg/s m
Waveperiod: 5.00 sec Waterlevel: 2.48 m tZH Average concentration: .0013 kg/m³ Measured susp. load: .002984 kg/s m
Wave angle: 0 degrees Bottom level: 8.17 m tZH Average salinity: 33 g/100 Total load: .002984 kg/s m
Average temperature: 16 centigrade

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Hydraulic by
Port & Waterway engineers.
Siedrecht = Holland

Project: P613 * APDL * DUKKO ESTUARY
datafile: DUK06 Location: 06-07
date: 821117 time: 14.15

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	*	*	*	36.0
1.0	*	*	*	14
1.5	*	*	*	28
2.0	*	*	*	*
2.5	*	*	*	*
3.0	*	*	*	*
3.5	*	*	*	*
4.0	*	*	*	*
4.5	*	*	*	*
5.0	*	*	*	*
5.5	*	*	*	*
6.0	*	*	*	*
6.5	*	*	*	*
7.0	*	*	*	*
7.5	*	*	*	*
8.0	*	*	*	*
8.5	*	*	*	*
9.0	*	*	*	*
9.5	*	*	*	*
10.0	*	*	*	*
10.5	*	*	*	*

+ = flow into the estuary
- = flow out of the estuary

Waveheight: 1.00 m Water depth: 10.95 m Average velocity: 17 m/sec Measured bedload: 000188 kg/s m
 Waveperiod: 5.00 sec Water level: 2.74 m +ZH Average concentration: .0003 kg/m3 Measured susp. load: .000799 kg/s m
 Wave angle: 0 degrees Bottom level: 8.21 m +ZH Average salinity: 31 o/oo Total load: .000987 kg/s m
 Average temperature: 15 centigrade

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4
2

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.05	0.10	18
0.5	*	*	*	36
1.0	*	*	*	14
1.5	*	*	*	28
2.0	*	*	*	*
2.5	*	*	*	*
3.0	*	*	*	*
3.5	*	*	*	*
4.0	*	*	*	*
4.5	*	*	*	*
5.0	*	*	*	*
5.5	*	*	*	*
6.0	*	*	*	*
6.5	*	*	*	*
7.0	*	*	*	*
7.5	*	*	*	*
8.0	*	*	*	*
8.5	*	*	*	*
9.0	*	*	*	*
9.5	*	*	*	*
10.0	*	*	*	*
10.5	*	*	*	*
11.0	*	*	*	*

↑ = flow into the estuary
↓ = flow out of the estuary

Waveheight: 1.00 m waterdepth: 11.15 m Average velocity: .15 m/sec Measured bedload: .001760 kg/s m
 Waveperiod: 5.00 sec Waterlevel: 2.98 m tZH Average concentration: .0016 kg/m³ Measured susp. load: .003490 kg/s m
 Wave angle: 0 degrees Bottom level: 8.17 m tZH Average salinity: 33 o/oo Total load: .005250 kg/s m
 Average temperature: 16 centigrade

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- 62
- 64

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0.005	18	14
0.5				
1.0	+ *	*	*****	*****
1.5				
2.0	+ **	*	*****	*****
2.5				
3.0				
3.5				
4.0				
4.5				
5.0	+ *	*	*****	*****
5.5				
6.0				
6.5				
7.0				
7.5	+ **	*	*****	*****
8.0				
8.5	+ **	*****	*****	*****
9.0				
9.5				
10.0	+ *	*****	*****	*****
10.5				
11.0				

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.00 m waterdepth: 11.35 m Average velocity: .14 m/sec Measured bedload: .000248 kg/s m
 Waveperiod: 5.00 sec Waterlevel: 3.08 m +ZH Average concentration: .0008 kg/m3 Measured susp. load: .001346 kg/s m
 Wave angle: 0 degrees Bottom level: 8.27 m +ZH Average salinity: 31 o/oo Total load: .001594 kg/s m
 Average temperature: 15 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	18	36	14	28
0.0									
0.5									
1.0	+*		*			*****		*****	
1.5									
2.0	+*		*			*****		*****	
2.5									
3.0									
3.5									
4.0									
4.5									
5.0									
5.5	+**		*			*****		*****	
6.0									
6.5									
7.0									
7.5									
8.0									
8.5	+*		****			*****		*****	
9.0									
9.5	+*		****			*****		*****	
10.0									
10.5	+**		*****			*****		*****	
11.0									
11.5	+*		*****			*****		*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.00 m waterdepth: 11.65 m Average velocity: .14 m/sec Measured bedload: .000248 kg/s m
 Waveperiod: 8.00 sec Waterlevel: 3.14 m +ZH Average concentration: .0014 kg/m3 Measured susp. load: .001658 kg/s m
 Wave angle: 30 degrees Bottom level: 8.51 m +ZH Average salinity: 34 o/oo Total load: .001906 kg/s m
 Average temperature: 16 centigrade

Hydrodynamic by
Port K. Waterway engineers
Site depth = Holland

Project: Polj # Avul # DUKRO ESTUARY
datafile: DUKRO6 Location 06=07
date: 821117 time: 16.15

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	18	14
0.5	1.0	*	*****	*****
1.0	1.5	*	*****	*****
1.5	2.0	*	*****	*****
2.0	2.5	*	*****	*****
2.5	3.0	*	*****	*****
3.0	3.5	*	*****	*****
3.5	4.0	*	*****	*****
4.0	4.5	*	*****	*****
4.5	5.0	*	*****	*****
5.0	5.5	**	*****	*****
5.5	6.0	*	*****	*****
6.0	6.5	*	*****	*****
6.5	7.0	*	*****	*****
7.0	7.5	*	*****	*****
7.5	8.0	*	*****	*****
8.0	8.5	*	*****	*****
8.5	9.0	*****	*****	*****
9.0	9.5	*****	*****	*****
9.5	10.0	*****	*****	*****
10.0	10.5	*****	*****	*****
10.5	11.0	*****	*****	*****
11.0		*****	*****	*****

1 = flow into the estuary
- = flow out of the estuary

Waveheight: 1.00 m Water depth: 11.15 m Average velocity: .29 m/sec Measured bedload: -.001169 kg/s m
Wave period: 7.00 sec Water level: 3.14 m ±2H Average concentration: .0008 kg/m³ Measured susp. load: .002592 kg/s m
Wave angle: 30 degrees Bottom level: 8.01 m ±2H Average salinity: 33 o/oo Total load: .003760 kg/s m
Average temperature: 16 centigrade

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 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/100)	TEMPERATURE (centigrade)
0	1.0	2.0	0.005	0.010
0.5	1.0	*	*	*
1.0	1.5	*	*	*
1.5	2.0	*	*	*
2.0	2.5	*	*	*
2.5	3.0	*	*	*
3.0	3.5	*	*	*
3.5	4.0	*	*	*
4.0	4.5	*	*	*
4.5	5.0	**	*	*
5.0	5.5	*	*	*
5.5	6.0	*	*	*
6.0	6.5	*	*	*
6.5	7.0	*	*	*
7.0	7.5	*	*	*
7.5	8.0	*	*	*
8.0	8.5	*	*	*
8.5	9.0	*	*	*
9.0	9.5	*	*	*
9.5	10.0	*	*	*
10.0	10.5	*	*	*

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.00 m Water depth: 10.85 m Average velocity: .21 m/sec Measured bedload: .002337 kg/s m
 Waveperiod: 8.00 sec Water level: 3.04 m +ZH Average concentration: .0010 kg/m³ Measured susp. load: .002348 kg/s m
 Wave angle: 30 degrees Bottom level: 7.81 m +ZH Average salinity: 31 g/100 Total load: .004686 kg/s m
 Average temperature: 15 centigrade

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 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
		0	2.0 0	0	36 0	14	28
0.0							
0.5							
1.0	+ ****	*		*****		*****	
1.5							
2.0	+ ***	*		*****		*****	
2.5							
3.0							
3.5							
4.0							
4.5							
5.0	+ ***	**		*****		*****	
5.5							
6.0							
6.5							
7.0							
7.5	+ ****	***		*****		*****	
8.0							
8.5	+ ****	****		*****		*****	
9.0							
9.5	+ *****	*****		*****		*****	
10.0							
10.5	+ ***	*****		*****		*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 2.00 m waterdepth: 10.85 m Average velocity: .29 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 8.00 sec Waterlevel: 2.82 m +ZH Average concentration: .0010 kg/m³ Measured susp. load: .003286 kg/s m
 Wave angle: 30 degrees Bottom level: 8.03 m +ZH Average salinity: 31 o/oo Total load: .003286 kg/s m
 Average temperature: 15 centigrade

Hydronamic by
 Port & waterway engineers
 Slidrecht - Holland

project: P613 * APDL * DOORD ESTUARY
 datafile: DURO7 location 06-0H
 date: 821119 time: 8.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m ³)		SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0.005	0.010	0	18	36	0	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	+	+	+	+	+	+	+	+	+	+	+
1.0	+	+	+	+	+	+	+	+	+	+	+
1.5	+	+	+	+	+	+	+	+	+	+	+
2.0	+	+	+	+	+	+	+	+	+	+	+
2.5	+	+	+	+	+	+	+	+	+	+	+
3.0	+	+	+	+	+	+	+	+	+	+	+
3.5	+	+	+	+	+	+	+	+	+	+	+
4.0	+	+	+	+	+	+	+	+	+	+	+
4.5	+	+	+	+	+	+	+	+	+	+	+
5.0	+	+	+	+	+	+	+	+	+	+	+
5.5	+	+	+	+	+	+	+	+	+	+	+
6.0	+	+	+	+	+	+	+	+	+	+	+

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 6.15 m Average velocity: -1.36 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec waterlevel: 1.76 m +ZH Average concentration: .0006 kg/m³ Measured susp. load: -.005447 kg/s m
 Wave angle: 0 degrees Bottom level: 4.39 m +ZH Average salinity: 3 o/oo Total load: -.005447 kg/s m
 Average temperature: 13 centigrade

Hydrodynamic by
 Port & Waterway engineers
 Sijedrecht - HOLLAND

Project: P613 * ABUL * DUJUKO ESTUARY
 datafile: DUROZ location: 06-08
 date: 821119 time: 9.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/100)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****
7.0	*****	*****	*****	*****
7.5	*****	*****	*****	*****
8.0	*****	*****	*****	*****

1 = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.15 m Average velocity: -1.19 m/sec Measured bedload: .000000 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.56 m tZH Average concentration: .0005 kg/m³ Measured susp. load: -.005068 kg/s m
 Wave angle: 0 degrees Bottom level: 6.59 m tZH Average salinity: 3 g/100 Total load: -.005068 kg/s m
 Average temperature: 14 centigrade

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Hydronic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: Pull # APUL # DUURD ESTUARY
 datafile: DURO7 location 06-08
 date: 821119 time: 9.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	0	.010	18	36	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	-----	-----	-----	-----	-----	-----	-----	-----	-----
1.0	=	*****	*		**			*****	
1.5		-----	-----	-----	-----	-----	-----	-----	-----
2.0	=	*****	*		**			*****	
2.5		-----	-----	-----	-----	-----	-----	-----	-----
3.0	=	*****	*		**			*****	
3.5		-----	-----	-----	-----	-----	-----	-----	-----
4.0	=	*****	*		**			*****	
4.5		-----	-----	-----	-----	-----	-----	-----	-----
5.0	=	*****	*		**			*****	
5.5		-----	-----	-----	-----	-----	-----	-----	-----
6.0	=	*****	*		**			*****	
6.5		-----	-----	-----	-----	-----	-----	-----	-----
7.0	=	*****	**		**			*****	
7.5	=	*	**		**			*****	

+ = flow into the estuary
 = = flow out of the estuary

Waveheight: .00 m waterdepth: 7.65 m Average velocity: -1.09 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.36 m +ZH Average concentration: .0007 kg/m3 Measured susp. load: -.005358 kg/s m
 Wave angle: 0 degrees Bottom level: 6.29 m +ZH Average salinity: 3 o/oo Total load: -.005358 kg/s m
 Average temperature: 13 centigrade

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	18	36
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****
7.0	*****	*****	*****	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Waterdepth: 7.15 m Average velocity: -.27 m/sec Measured bedload: .00006 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.21 m tZH Average concentration: .0007 kg/m³ Measured susp. load: -.004214 kg/s m
 Wave angle: 0 degrees Bottom level: 5.94 m tZH Average salinity: 3 o/oo Total load: -.004208 kg/s m
 Average temperature: 13 centigrade

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Hydrodynamic by
Port A. Waterway engineers
Stedrecht - Holland

Project: P613 * APUL * DUNKO ESTUARY
datafile: DUB07 location: 06-08
date: 821119 time: 10.30

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****

↑ = flow into the estuary
↓ = flow out of the estuary

Waveheight: .00 m water depth: 6.95 m Average velocity: .92 m/sec Measured bedload: ***** kg/s m
 Waveperiod: .00 sec Waterlevel: 1.08 m +ZH Average concentration: .0006 kg/m³ Measured susp. load: .004145 kg/s m
 Wave angle: 0 degrees Bottom level: 5.87 m +ZH Average salinity: 2 o/oo Total load: .004145 kg/s m
 Average temperature: 12 centigrade

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Hydromanic by
 Port & waterway engineers
 Slidrecht - Holland

project: P013 + APDL + DOURO ESTUARY
 datafile: DUR07 location 06:08
 date: 821119 time: 11.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)			CONCENTRATION (kg/m3)			SALINITY (o/oo)			TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	0	18	36	0	14	28	
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
.5	- *****		*		*					*****		
1.0												
1.5	- *****		*		*					*****		
2.0												
2.5	- *****		**		*					*****		
3.0												
3.5												
4.0	- *****		**		*					*****		
4.5												
5.0	+ **		**		*					*****		
5.5	+ ***		**		*					*****		

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.65 m Average velocity: -.59 m/sec Measured bedload: .000000 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.00 m +ZH Average concentration: .0007 kg/m3 Measured susp. load: -.002281 kg/s m
 Wave angle: 0 degrees Bottom level: 4.65 m +ZH Average salinity: 2 o/oo Total load: -.002281 kg/s m
 Average temperature: 13 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	0	0	18	36	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	*****		*		*		*****		
1.0									
1.5									
2.0	*****		**		*		*****		
2.5									
3.0	*****		**		*		*****		
3.5									
4.0									
4.5	*****		**		*		*****		
5.0									
5.5	+****		**		*		*****		
6.0	+ *		**		*		*****		

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 6.15 m Average velocity: -.54 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.02 m +ZH Average concentration: .0008 kg/m3 Measured susp. load: -.002323 kg/s m
 Wave angle: 0 degrees Bottom level: 5.13 m +ZH Average salinity: 2 o/oo Total load: -.002323 kg/s m
 Average temperature: 13 centigrade

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	2.0	0.005	18
0.5	*****	*	*	*****
1.0	*****	*	*	*****
1.5	*****	*	*	*****
2.0	*****	*	*	*****
2.5	*****	*	*	*****
3.0	*****	*	*	*****
3.5	*****	*	*	*****
4.0	*****	*	*	*****
4.5	*****	*	*	*****
5.0	*****	*	*	*****
5.5	*****	*	*	*****
6.0	*****	*	*	*****
6.5	*****	*	*	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Waterdepth: 6.65 m Average velocity: .12 m/sec Measured bedload: .000034 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.12 m +ZH Average concentration: .0008 kg/m³ Measured susp. load: .000913 kg/s m
 Wave angle: 0 degrees Bottom level: 5.53 m +ZH Average salinity: 1 o/oo Total load: .000947 kg/s m
 Average temperature: 14 centigrade

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Hydrodynamic by
Port & Waterway engineers
Slidrecht - Holland

Project: P013 & ABUL & DURGO ESTUARY
datefile: DUR07 Location: 06-08
date: 821119 time: 12,30

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (g/100g)	TEMPERATURE (centigrade)
0	1.0	0.005	0.10	18
0.5	*****	*	*	*****
1.0	*****	*	*	*****
1.5	*****	*	*	*****
2.0	*****	*	*	*****
2.5	*****	*	*	*****
3.0	*****	*	*	*****
3.5	*****	*	*	*****
4.0	*****	*	*	*****
4.5	*****	*	*	*****
5.0	*****	*	*	*****
5.5	*****	*	*	*****
6.0	*****	*	*	*****
6.5	*****	*	*	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Waterdepth: 6.65 m Average velocity: .14 m/sec Measured bedload: ***** kg/s m
 Waveperiod: .00 sec Waterlevel: 1.25 m tZH Average concentration: .0011 kg/m³ Measured susp. load: -.000310 kg/s m
 Wave angle: 0 degrees Bottom level: 5.40 m tZH Average salinity: 12.0700 Total load: -.000310 kg/s m
 Average temperature: 15 centigrade

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 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)					
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0.0												
0.5	-***			*			*				*****	
1.0												
1.5												
2.0	-**			**			*				*****	
2.5												
3.0												
3.5	-****			**			*****				*****	
4.0												
4.5												
5.0												
5.5	-****			***			*****				*****	
6.0												
6.5	+*			***			*****				*****	
7.0	+***			**			*****				*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 7.15 m Average velocity: -.20 m/sec Measured bedload: .000017 kg/s m
 Waveperiod: .00 sec waterlevel: 1.45 m +ZH Average concentration: .0008 kg/m3 Measured susp. load: -.001184 kg/s m
 Wave angle: 0 degrees Bottom level: 5.70 m +ZH Average salinity: 19 o/oo Total load: -.001167 kg/s m
 Average temperature: 15 centigrade

Hydrodynamic by
 Port & waterway engineers
 Sliedrecht - Holland

project: R613 # APDL # DOURO ESTUARY
 datafile: DURO7 location 06-08
 date: 821119 time: 13.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)				
		0	1.0	2.0	0	18	36	0	14	28
0										
0.5	***			**		*****		*****		
1.0										
1.5										
2.0	****			***		*****		*****		
2.5										
3.0										
3.5	*****			***		*****		*****		
4.0										
4.5										
5.0										
5.5	*****			*****		*****		*****		
6.0										
6.5	+****			*****		*****		*****		
7.0	+****			*****		*****		*****		
7.5	+**			*****		*****		*****		

| = flow into the estuary
 + = flow out of the estuary

Waveheight: .00 m waterdepth: 7.65 m Average velocity: .28 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec waterlevel: 1.66 m +ZH Average concentration: .0019 kg/m3 Measured susp. load: -.003242 kg/s m
 Wave angle: 0 degrees Bottom level: 5.99 m +ZH Average salinity: 27 o/oo Total load: -.003242 kg/s m
 Average temperature: 17 centigrade

Hydrographic by
Port & Waterway engineers
Sijedrecht = Holland

Project: P613 F APPL F DUBROU ESTUARY
datefile: DUB07 location 06-08
date: 821119 time: 14.00

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	18	14
0.5	1.0	0.010	18	14
1.0	1.0	0.010	18	14
1.5	1.0	0.010	18	14
2.0	1.0	0.010	18	14
2.5	1.0	0.010	18	14
3.0	1.0	0.010	18	14
3.5	1.0	0.010	18	14
4.0	1.0	0.010	18	14
4.5	1.0	0.010	18	14
5.0	1.0	0.010	18	14
5.5	1.0	0.010	18	14
6.0	1.0	0.010	18	14
6.5	1.0	0.010	18	14
7.0	1.0	0.010	18	14
7.5	1.0	0.010	18	14
8.0	1.0	0.010	18	14

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Waterdepth: 8.15 m Average velocity: .32 m/sec Measured bedload: .00000 kg/s m
 Waveperiod: .00 sec Waterlevel: 1.88 m tZH Average concentration: .0013 kg/m³ Measured susp. load: .003835 kg/s m
 Wave angle: 0 degrees Bottom level: 6.27 m tZH Average salinity: 26 o/oo Total load: .003835 kg/s m
 Average temperature: 17 centigrade

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Hydrodynamic by
 Port & waterway engineers
 Slidrecht = Holland

project: P613 # APOL # OOURO ESTUARY
 datafile: OOURO7 location 06-08
 date: 821119 time: 14.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	.005	.010	0	18	36.0	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	+*		*				*****		*****		
1.0											
1.5											
2.0	+****		***				*****		*****		
2.5											
3.0											
3.5											
4.0	+*****		****				*****		*****		
4.5											
5.0											
5.5	+*****		*****				*****		*****		
6.0											
6.5	+*****		*****				*****		*****		
7.0											
7.5	+*****		*****				*****		*****		
8.0	+***		*****				*****		*****		

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.15 m Average velocity: .36 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec waterlevel: 2.16 m +ZH Average concentration: .0017 kg/m3 Measured susp. load: .005886 kg/s m
 Wave angle: 0 degrees Bottom level: 5.99 m +ZH Average salinity: 27 o/oo Total load: .005886 kg/s m
 Average temperature: 17 centigrade

 + SEDIMENT TRANSPORT MEASUREMENT +

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	18	36	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	- ***		*			*****		*****	
1.0									
1.5									
2.0	+ ***		**			*****		*****	
2.5									
3.0									
3.5									
4.0	+ *****		***			*****		*****	
4.5									
5.0									
5.5	+ *****		***			*****		*****	
6.0									
6.5	+ *****		****			*****		*****	
7.0									
7.5	+ ****		*****			*****		*****	
8.0	+ *		*****			*****		*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.15 m Average velocity: .30 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec waterlevel: 2.38 m +ZH Average concentration: .0012 kg/m3 Measured susp. load: .003442 kg/s m
 Wave angle: 0 degrees Bottom level: 5.77 m +ZH Average salinity: 27 o/oo Total load: .003442 kg/s m
 Average temperature: 17 centigrade

Hydronamic by
 Port & waterway engineers
 Sliedrecht - Holland

project: P611 # APDL # DOURO ESTUARY
 datafile: D0R07 location 06-08
 date: 821119 time: 15.30

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/Sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	18	14
0.5	***	*	*****	*****
1.0				
1.5				
2.0	+ **	**	*****	*****
2.5				
3.0				
3.5				
4.0	+ ****	***	*****	*****
4.5				
5.0				
5.5	+ *****	***	*****	*****
6.0				
6.5	+ *****	***	*****	*****
7.0				
7.5	+ *****	****	*****	*****
8.0	+ ***	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 8.15 m Average velocity: .23 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.58 m +ZH Average concentration: .0011 kg/m3 Measured susp. load: .002711 kg/s m
 Wave angle: 0 degrees Bottom level: 5.57 m +ZH Average salinity: 26 o/oo Total load: .002711 kg/s m
 Average temperature: 17 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (0/00)	TEMPERATURE (centigrade)
0	1.0	2.0 0	.010 0	18 36 0
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****
7.0	*****	*****	*****	*****
7.5	*****	*****	*****	*****
8.0	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

40 Waveheight: .00 m waterdepth: 8.15 m Average velocity: .02 m/sec Measured bedload: .000295 kg/s m
 42 Waveperiod: .00 sec Waterlevel: 2.76 m tZH Average concentration: .0013 kg/m³ Measured susp. load: .000859 kg/s m
 Wave angle: 0 degrees Bottom level: 5.39 m tZH Average salinity: 25 g/00 Total load: .001153 kg/s m
 Average temperature: 17 centigrade

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Hydroamic BV
 Port & Waterway engineers
 Sijedrecht - Holland

 * SEDIMENT TRANSPORT MEASUREMENT *

Project: P613 * APUL * DUURD ESTUARIJ
 datafile: DUB07 Location 06-08
 date: 821119 time: 16.10

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (0/00)	TEMPERATURE (centigrade)
0	1.0	.005	18	36.0
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****
7.0	*****	*****	*****	*****
7.5	*****	*****	*****	*****
8.0	*****	*****	*****	*****

1 = flow into the estuary
 2 = flow out of the estuary

Waveheight: .00 m Waterdepth: 8.15 m Average velocity: -.06 m/sec Measured bedload: ***** kg/s m
 Waveperiod: .00 sec Waterlevel: 2.86 m +ZH Average concentration: .0011 kg/m³ Measured susp. load: .000544 kg/s m
 Wave angle: 0 degrees Bottom level: 5.29 m +ZH Average salinity: 25 0/00 Total load: .000544 kg/s m
 Average temperature: 17 centigrade

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Hydronamic bv
 Port & waterway engineers
 Sliedrecht = Holland

project: P013 + APDL + DUURD ESTUARY
 datafile: DURO7 location 06-08
 date: 821112 time: 17.00

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	0	0.010	18	36	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	= *****				*****			*****	
1.0									
1.5									
2.0	= *****				*****			*****	
2.5									
3.0									
3.5									
4.0	= ***				*****			*****	
4.5									
5.0									
5.5	+ ***				*****			*****	
6.0									
6.5	+ *				*****			*****	
7.0									
7.5	+ ***				*****			*****	
8.0	+ *				*****			*****	

+ = flow into the estuary
 = = flow out of the estuary

Waveheight: .00 m waterdepth: 8.15 m Average velocity: -.14 m/sec Measured bedload: ##### kg/s @
 Waveperiod: .00 sec Waterlevel: 2.90 m +ZH Average concentration: .0009 kg/m3 Measured susp. load: -.000679 kg/s @
 Wave angle: 0 degrees Bottom level: 5.25 m +ZH Average salinity: 25 o/oo Total load: =.000679 kg/s @
 Average temperature: 16 centigrade

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	18	36.0
0.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****
7.0	*****	*****	*****	*****
7.5	*****	*****	*****	*****
8.0	*****	*****	*****	*****

1 = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 8.15 m Average velocity: -.19 m/sec Measured bedload: .000000 kg/s m
 Waveperiod: .00 sec Waterlevel: 2.88 m +ZH Average concentration: .0008 kg/m³ Measured susp. load: -.001037 kg/s m
 Wave angle: 0 degrees Bottom level: 5.27 m +ZH Average salinity: 25 o/oo Total load: -.001037 kg/s m
 Average temperature: 17 centigrade

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Hydrodynamic by
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 * APDL * NOORD ESTUARY
 datafile: DUR08 location 06-09
 date: 821122 time: 8.35

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	0.005	0	18	36	0	14	28
0.0											
0.5											
1.0	=	***		*			*****		*****		
1.5											
2.0	=	***		*			*****		*****		
2.5											
3.0											
3.5											
4.0											
4.5											
5.0											
5.5											
6.0	=	***		*			*****		*****		
6.5											
7.0											
7.5											
8.0	=	**		*			*****		*****		
8.5											
9.0											
9.5	=	*		*			*****		*****		
10.0											
10.5	=	*		*			*****		*****		
11.0	=	**		*			*****		*****		
11.5											
12.0	=	*		*			*****		*****		

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 + = flow into the estuary
 = = flow out of the estuary

Waveheight: 1.50 m waterdepth: 12.15 m Average velocity: -0.19 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 12.00 sec Waterlevel: 2.58 m +ZH Average concentration: .0002 kg/m3 Measured susp. load: -.000441 kg/s m
 Wave angle: 0 degrees Bottom level: 9.57 m +ZH Average salinity: 31 o/oo Total load: -.000441 kg/s m
 Average temperature: 18 centigrade

Hydrodynamic bv
 Port & waterway engineers
 Slidrecht - Holland

Project: P613 * APDL * OOHNO ESTUARY
 datafile: DUR08 location 06-09
 date: 821122 time: 9.05

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	****	*	*****	*****
1.5	****	*	*****	*****
2.5	****	*	*****	*****
3.0	****	*	*****	*****
3.5	****	*	*****	*****
4.0	****	*	*****	*****
4.5	****	*	*****	*****
5.0	****	*	*****	*****
5.5	****	*	*****	*****
6.0	****	*	*****	*****
6.5	****	*	*****	*****
7.0	****	*	*****	*****
7.5	****	*	*****	*****
8.0	****	*	*****	*****
8.5	****	*	*****	*****
9.0	****	*	*****	*****
9.5	****	*	*****	*****
10.0	****	*	*****	*****
10.5	****	*	*****	*****
11.0	****	*	*****	*****
11.5	****	*	*****	*****
12.0	****	*	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Wavelength: 1.50 m Water depth: 12.15 m Average velocity: 2.21 m/sec Measured bedload: ##### kg/s
 Wave period: 12.00 sec Water level: 2.40 m +ZH Average concentration: .0002 kg/m³ Measured susp. load: -.000483 kg/s
 Wave angle: 0 degrees Bottom level: 9.75 m +ZH Average salinity: 31 o/oo Total load: -.000483 kg/s
 Average temperature: 18 centigrade

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Hydronamic bv
 Port & waterway engineers
 Slidrecht - Holland

project: P613 * APDL * DUURO ESTUARY
 datafile: DUR08 location 06-09
 date: 821122 time: 9.35

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	0.005	0	18	36	0	14	28
0											
0.5											
1.0	-	*****	*				*****			*****	
1.5											
2.0	-	***	*				*****			*****	
2.5											
3.0											
3.5											
4.0											
4.5											
5.0											
5.5	-	**	*				*****			*****	
6.0											
6.5											
7.0											
7.5											
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8.5	-	**	*				*****			*****	
9.0											
9.5	-	**	*				*****			*****	
10.0											
10.5	-	**	*				*****			*****	
11.0	-	**	*				*****			*****	
11.5	-	*	*				*****			*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.50 m waterdepth: 11.65 m Average velocity: - .21 m/sec Measured bedload: - .000229 kg/s m
 Waveperiod: 12.00 sec Waterlevel: 2.24 m +ZH Average concentration: .0001 kg/m3 Measured susp. load: = .000337 kg/s m
 Wave angle: 0 degrees Bottom level: 9.41 m +ZH Average salinity: 30 o/oo Total load: - .000566 kg/s m
 Average temperature: 18 centigrade

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project: P613 * APDL * DUURQ ESTUARY
 datafile: DURO8 location 06-09
 date: B21122 time: 10.05

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	18	36	14	28
0.0									
0.5									
1.0	-	*****	*			*****		*****	
1.5									
2.0	-	**	*			*****		*****	
2.5									
3.0									
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5.5	-	**	*			*****		*****	
6.0									
6.5									
7.0									
7.5									
8.0									
8.5	-	**	*			*****		*****	
9.0									
9.5	-	**	*			*****		*****	
10.0									
10.5	+	**	*			*****		*****	
11.0	+	**	*			*****		*****	
11.5									
12.0	+	*	*			*****		*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.00 m waterdepth: 12.15 m Average velocity: -.16 m/sec Measured bedload: .000642 kg/s m
 Waveperiod: 12.00 sec Waterlevel: 2.08 m +ZH Average concentration: .0002 kg/m3 Measured susp. load: -.000263 kg/s m
 Wave angle: 0 degrees Bottom level: 10.07 m +ZH Average salinity: 30 o/oo Total load: .000379 kg/s m
 Average temperature: 18 centigrade

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project: P613 # APDL # DOURO ESTUARY
 datafile: DURO8 location 06-09
 date: 821122 time: 10.35

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
		.005	.010	18	36	14	28
0.0							
0.5							
1.0	- **	*		*****		*****	
1.5							
2.0	- ***	*		*****		*****	
2.5							
3.0							
3.5							
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4.5							
5.0							
5.5	- **	*		*****		*****	
6.0							
6.5							
7.0							
7.5							
8.0							
8.5	- *	*		*****		*****	
9.0							
9.5	+ **	*		*****		*****	
10.0							
10.5							
11.0	+ **	*		*****		*****	
11.5	+ **	*		*****		*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.00 m waterdepth: 11.65 m Average velocity: -.09 m/sec Measured bedload: .000086 kg/s.m
 Waveperiod: .00 sec Waterlevel: 1.90 m +ZH Average concentration: .0002 kg/m3 Measured susp. load: -.000102 kg/s.m
 Wave angle: 0 degrees Bottom level: 9.75 m +ZH Average salinity: 30 o/oo Total load: -.000016 kg/s.m
 Average temperature: 18 centigrade

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Project: P613 * APDL * DUINKO ESTUARY
 datafile: DUK08 Location 06-09
 date: 821122 time: 11.05

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
0.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****
7.0	*****	*****	*****	*****
7.5	*****	*****	*****	*****
8.0	*****	*****	*****	*****
8.5	*****	*****	*****	*****
9.0	*****	*****	*****	*****
9.5	*****	*****	*****	*****
10.0	*****	*****	*****	*****
10.5	*****	*****	*****	*****
11.0	*****	*****	*****	*****
11.5	*****	*****	*****	*****
12.0	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Wavelength: 1.00 m Water depth: 12.15 m Average velocity: 1.10 m/sec Measured bedload: .001948 kg/s m
 Wave period: 12.00 sec Water level: 1.76 m tZH Average concentration: .0025 kg/m³ Measured susp. load: .001461 kg/s m
 Wave angle: 0 degrees Bottom level: 10.39 m tZH Average salinity: 30.9/00 Total load: .000487 kg/s m
 Average temperature: 18 centigrade

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Project: P613 * APDL * DUJKO ESTUARY
datafile: DURG8 location 06-09
date: 821122 time: 11.35

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0.0	1.0	0.005	18.0	36.0
0.5	1.5	*	*	*
1.0	2.0	*	*	*
2.0	3.0	*	*	*
2.5	3.5	*	*	*
3.0	4.0	*	*	*
3.5	4.5	*	*	*
4.0	5.0	*	*	*
4.5	5.5	*	*	*
5.0	6.0	*	*	*
5.5	6.5	*	*	*
6.0	7.0	*	*	*
6.5	7.5	*	*	*
7.0	8.0	*	*	*
7.5	8.5	*	*	*
8.0	9.0	*	*	*
8.5	9.5	*	*	*
9.0	10.0	*	*	*
9.5	10.5	*	*	*
10.0	11.0	*	*	*
10.5	11.5	*	*	*
11.0	12.0	*	*	*
11.5	*	*	*	*
12.0	*	*	*	*

* = flow into the estuary
- = flow out of the estuary

Waveheight: 1.00 m Waterdepth: 12.15 m Average velocity: .12 m/sec Measured bedload: -.000080 Kg/s m
Waveperiod: 13.00 sec Waterlevel: 1.50 m +ZH Average concentration: .0025 Kg/m3 Measured susp. load: .002073 Kg/s m
Wave angle: 0 degrees Bottom level: 10.55 m +ZH Average salinity: 30.0/oo Total load: .001993 Kg/s m
Average temperature: 18 centigrade

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project: P613 * APDI * DOURO ESTUARY
 datafile: DURO8 location 06-09
 date: 821122 time: 12.05

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	18	36	14	28
0.0									
0.5									
1.0	- *		*			*****		*****	
1.5									
2.0	- ***		*			*****		*****	
2.5									
3.0									
3.5									
4.0									
4.5									
5.0									
5.5									
6.0	- **		*			*****		*****	
6.5									
7.0									
7.5									
8.0	- ***		*			*****		*****	
8.5									
9.0									
9.5	+ **		**			*****		*****	
10.0									
10.5	+ **		*****			*****		*****	
11.0	+ *		*****			*****		*****	
11.5									
12.0	+ *		*****			*****		*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: 1.00 m waterdepth: 12.15 m Average velocity: = .10 m/sec Measured bedload: .000539 kg/s m
 Waveperiod: 12.00 sec Waterlevel: 1.50 m +ZH Average concentration: .0037 kg/m3 Measured susp. load: .005779 kg/s m
 Wave angle: 0 degrees Bottom level: 10.65 m +ZH Average salinity: 31 o/oo Total load: .006317 kg/s m
 Average temperature: 18 centigrade

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project: P613 * APDL * DUURO ESTUARY
 datafile: DURO9 location 06-10
 date: 821123 time: 8.10

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	0	0
.5	*****	*	*	*****
1.0				
1.5				
2.0	*****	*	*	*****
2.5				
3.0				
3.5	*****	*	*****	*****
4.0				
4.5				
5.0				
5.5	***	*	*****	*****
6.0				
6.5	**	*	*****	*****
7.0	*	*	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .90 m waterdepth: 7.15 m Average velocity: =.69 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 6.00 sec Waterlevel: 2.80 m +ZH Average concentration: .0001 kg/m³ Measured susp. load: -.000601 kg/s m
 Wave angle: 0 degrees Bottom level: 4.35 m +ZH Average salinity: 16 o/oo Total load: -.000601 kg/s m
 Average temperature: 17 centigrade

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Project: P613 & APDL & DOUHO ESTUARY
datafile: DUB09 Location 06-10
date: 821123 time: 8.40

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	2.0 0	.005	.010 0
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****
6.5	*****	*****	*****	*****
7.0	*****	*****	*****	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: 1.00 m waterdepth: 7.15 m Average velocity: -.82 m/sec Measured bedload: ##### kg/s m
Waveperiod: 6.00 sec Waterlevel: 2.78 m +ZH Average concentration: .0003 kg/m³ Measured susp. load: -.001607 kg/s m
Wave angle: 0 degrees Bottom level: 4.37 m +ZH Average salinity: 11 o/oo Total load: -.001607 kg/s m
Average temperature: 16 centigrade

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project: P613 * APDL * DUURO ESTUARY
 datafile: DUR09 location 06-10
 date: 821123 time: 9.10

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	0	0	0	0
.5	*****	*	*	*****
1.0				
1.5				
2.0	*****	*	*	*****
2.5				
3.0				
3.5	*****	*	*	*****
4.0				
4.5				
5.0				
5.5	*****	*	*****	*****
6.0				
6.5	*****	*	*****	*****
7.0	*****	**	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .80 m waterdepth: 7.15 m Average velocity: -.93 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 6.00 sec Waterlevel: 2.70 m +ZH Average concentration: .0004 kg/m³ Measured susp. load: -.001850 kg/s m
 Wave angle: 0 degrees Bottom level: 4.45 m +ZH Average salinity: 8 o/oo Total load: -.001850 kg/s m
 Average temperature: 15 centigrade

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project: P613 * APDL * DOURO ESTUARY
 datafile: DURO9 location 06-10
 date: 821123 time: 9.40

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0	18	36
0.5	*****	*	*	*****
1.0	*****	*	*	*****
1.5	*****	*	*	*****
2.0	*****	*	*	*****
2.5	*****	*	*	*****
3.0	*****	*	*	*****
3.5	*****	*	*	*****
4.0	*****	*	*	*****
4.5	*****	*	*	*****
5.0	*****	*	***	*****
5.5	*****	*	*****	*****
6.0	*****	*	*****	*****
6.5	*****	*	*****	*****
7.0	*****	*	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .70 m waterdepth: 7.15 m Average velocity: -1.09 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 5.00 sec Waterlevel: 2.60 m +ZH Average concentration: .0004 kg/m3 Measured susp. load: -.002647 kg/s m
 Wave angle: 0 degrees Bottom level: 4.55 m +ZH Average salinity: 4 o/oo Total load: -.002647 kg/s m
 Average temperature: 15 centigrade

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 Sijderecht - Holland

Project: P613 * APDL * DOURD ESTUARY
 datefile: DUR09 location 06-10
 date: 821122 time: 10.10

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	*****	*	*	36
1.0	*****	*	*	14
1.5	*****	*	*	*****
2.0	*****	*	*	*****
2.5	*****	*	*	*****
3.0	*****	*	*	*****
3.5	*****	*	*	*****
4.0	*****	*	*	*****
4.5	*****	*	*	*****
5.0	*****	*	*	*****
5.5	*****	*	*	*****
6.0	*****	*	*	*****
6.5	*****	*	*	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .70 m water depth: 6.65 m Average velocity: -1.17 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 4.00 sec Waterlevel: 2.48 m tZH Average concentration: .0003 kg/m3 Measured susp. load: -.002316 kg/s m
 Wave angle: 0 degrees Bottom level: 4.17 m tZH Average salinity: 2 o/oo Total load: -.002316 kg/s m
 Average temperature: 14 centigrade

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project: P613 † APDL † DOURO ESTUARY
 datafile: DUR09 location 06-10
 date: 821123 time: 10.40

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)			SALINITY (o/oo)			TEMPERATURE (centigrade)					
		0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
2.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
4.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
5.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
5.5	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
6.0	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .70 m waterdepth: 6.15 m Average velocity: -1.04 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 4.00 sec waterlevel: 2.36 m †ZH Average concentration: .0004 kg/m3 Measured susp. load: -.002098 kg/s m
 Wave angle: 0 degrees Bottom level: 3.79 m †ZH Average salinity: 4 o/oo Total load: -.002098 kg/s m
 Average temperature: 14 centigrade

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 Sliedrecht - Holland

project: P613 * APDL * DUURO ESTUARY
 datafile: DURO9 location 06-10
 date: 821123 time: 11.10

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)	
	0	1.0	2.0	.005	.010	0	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----
.5	*****		+		+		*****	
1.0	*****		+		+		*****	
1.5	*****		+		+		*****	
2.0	*****		+		+		*****	
2.5	*****		+		+		*****	
3.0	*****		+		+		*****	
3.5	*****		+		+		*****	
4.0	*****		+		+		*****	
4.5	*****		+		+		*****	
5.0	*****		+		+		*****	
5.5	*****		+		+		*****	
6.0	****		+		+		*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .70 m waterdepth: 6.15 m Average velocity: -1.13 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 3.00 sec Waterlevel: 2.20 m +ZH Average concentration: .0004 kg/m3 Measured susp. load: -.002535 kg/s m
 Wave angle: 0 degrees Bottom level: 3.95 m +ZH Average salinity: 2 o/oo Total load: -.002535 kg/s m
 Average temperature: 14 centigrade

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Project: P613 * APDL * DDIRK ESTUARY
 datafile: DUR09 Location 06-10
 date: 821123 time: 11.40

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m water depth: 5.65 m Average velocity: -1.21 m/sec Measured bedload: ##### Kg/s m
 Waveperiod: .00 sec water level: 2.08 m +ZH Average concentration: .0004 kg/m3 Measured susp. load: -.002195 Kg/s m
 Wave angle: 0 degrees Bottom level: 3.57 m +ZH Average salinity: 2 o/oo Total load: -.002195 Kg/s m
 Average temperature: 14 centigrade

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Project: P613 * APDL * DOURO ESTUARY
 datafile: DUR09 location 06-10
 date: 821123 time: 12.10

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	18	36 0
.0	*****	*****	*****	*****
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****
5.5	*****	*****	*****	*****
6.0	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 6.15 m Average velocity: -.99 m/sec Measured De-load: ***** kg/s
 Waveperiod: .00 sec Waterlevel: 1.96 m tZH Average concentration: .0005 kg/m³ Measured susp. load: -.002968 kg/s
 Wave angle: 0 degrees Bottom level: 4.19 m tZH Average salinity: 1 0/oo Total load: -.002968 kg/s
 Average temperature: 14 centigrade

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project: P613 * APDL * DUURO ESTUARY
 datafile: DURO9 location 06-10
 date: 821123 time: 14.10

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)					
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	- *****		*		*		*		*****		*****	
1.0												
1.5												
2.0	- *****		*		*		*		*****		*****	
2.5												
3.0												
3.5	+ *****		*		*		*		*****		*****	
4.0												
4.5												
5.0												
5.5	+ *****		*		*		*		*****		*****	
6.0												
6.5	+ *****		*		*		*		*****		*****	
7.0	+ ***		*		*		*		*****		*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .40 m waterdepth: 7.15 m Average velocity: .22 m/sec Measured bedload: ***** kg/s m
 Waveperiod: 2.00 sec Waterlevel: 1.68 m +2H Average concentration: .0005 kg/m3 Measured susp. load: .000945 kg/s m
 Wave angle: 0 degrees Bottom level: 5.47 m +ZH Average salinity: 1 o/oo Total load: .000945 kg/s m
 Average temperature: 14 centigrade

Hydronic bv
 Port & waterway engineers
 Slidrecht - Holland

project: P613 * APOL * DUURO ESTUARY
 datafile: DURO9 location 06-10
 date: 821123 time: 14.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	18	36	14	28
.0									
.5	- *****		*		*			*****	
1.0									
1.5									
2.0	= *****		*		*			*****	
2.5									
3.0									
3.5	+ *****		*		*			*****	
4.0									
4.5									
5.0									
5.5	+ *****		*		*			*****	
6.0									
6.5	+ *****		*		*			*****	
7.0	+ ***		*		*			*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .40 m waterdepth: 7.15 m Average velocity: .22 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 2.00 sec Waterlevel: 1.68 m +ZH Average concentration: .0004 kg/m3 Measured susp. load: .000707 kg/s m
 Wave angle: 0 degrees Bottom level: 5.47 m +ZH Average salinity: 1 o/oo Total load: .000707 kg/s m
 Average temperature: 14 centigrade

Hydronic by
 Port & waterway engineers
 Slidrecht - Holland

project: P613 # APDL # DOURO ESTUARY
 datafile: DURO9 location 06-10
 date: 821123 time: 15.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)			SALINITY (o/oo)			TEMPERATURE (centigrade)				
		0	1.0	2.0	0.005	0.010	0	18	36	0	14	28
0.0												
0.5	-*****			*			*					*****
1.0												
1.5												
2.0	-*****			*			*					*****
2.5												
3.0												
3.5	-*****			**			*					*****
4.0												
4.5												
5.0												
5.5	-*****			**			*					*****
6.0												
6.5	+ *			**			*					*****
7.0	+ **			**			*					*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 7.15 m Average velocity: -.35 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.70 m +ZH Average concentration: .0007 kg/m3 Measured susp. load: -.001667 kg/s m
 Wave angle: 0 degrees Bottom level: 5.45 m +ZH Average salinity: 1 o/oo Total load: -.001667 kg/s m
 Average temperature: 14 centigrade

Hydronamic bv
 Port & waterway engineers
 Slidrecht - Holland

project: P613 * APDL * DUURD ESTUARY
 datafile: DURO9 location 06-10
 date: 821123 time: 15.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)			SALINITY (o/oo)			TEMPERATURE (centigrade)					
		0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0.0	-												
0.5	- ****			*			*						
1.0													
1.5													
2.0	- ***			**			*						
2.5													
3.0													
3.5	+ ****			**			*						
4.0													
4.5													
5.0													
5.5	+ ****			**			*						
6.0													
6.5	+ ****			**			*						
7.0	+ *			**			*						

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .40 m waterdepth: 7.15 m Average velocity: .08 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 3.00 sec Waterlevel: 1.76 m +ZH Average concentration: .0007 kg/m3 Measured susp. load: .000500 kg/s m
 Wave angle: 0 degrees Bottom level: 5.39 m +ZH Average salinity: 1 o/oo Total load: .000500 kg/s m
 Average temperature: 14 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 + APDL + DUURO ESTUARY
 datafile: DURO9 location 06-10
 date: 821123 time: 16.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)			SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
.0	-	-	-	-	-	-	-	-	-	-	-	-
.5	-	**	-	*	-	*	-	-	-	-	*****	-
1.0	-	-	-	-	-	-	-	-	-	-	-	-
1.5	-	-	-	-	-	-	-	-	-	-	-	-
2.0	+	*****	-	*	-	*	-	-	-	-	*****	-
2.5	-	-	-	-	-	-	-	-	-	-	-	-
3.0	-	-	-	-	-	-	-	-	-	-	-	-
3.5	+	*****	-	**	-	*	-	-	-	-	*****	-
4.0	-	-	-	-	-	-	-	-	-	-	-	-
4.5	-	-	-	-	-	-	-	-	-	-	-	-
5.0	-	-	-	-	-	-	-	-	-	-	-	-
5.5	+	****	-	**	-	*	-	-	-	-	*****	-
6.0	-	-	-	-	-	-	-	-	-	-	-	-
6.5	+	***	-	**	-	*	-	-	-	-	*****	-
7.0	+	**	-	**	-	*	-	-	-	-	*****	-

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .50 m waterdepth: 7.15 m Average velocity: .26 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 3.00 sec Waterlevel: 1.84 m +ZH Average concentration: .0007 kg/m3 Measured susp. load: .001398 kg/s m
 Wave angle: 0 degrees Bottom level: 5.31 m +ZH Average salinity: 1 o/oo Total load: .001398 kg/s m
 Average temperature: 14 centigrade

Hydroamic bv
 Port & Waterway engineers
 Sijedrecht - Holland

Project: P613 * APDL * DOORD ESTUARY
 Datafile: DUR09 Location 06-10
 date: 821123 Time: 16.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.5	****	*	*	36
1.0	****	*	*	14
1.5	****	*	*	*****
2.0	****	*	*	*****
2.5	****	*	*	*****
3.0	****	*	*	*****
4.0	****	*	*	*****
4.5	****	*	*	*****
5.0	****	*	*	*****
5.5	****	*	*	*****
6.0	****	*	*	*****
6.5	****	*	*	*****
7.0	****	*	*	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .50 m Waterdepth: 7.35 m Average velocity: .03 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 2.00 sec Water level: 1.96 m tZH Average concentration: .0006 kg/m3 Measured susp. load: .000146 kg/s m
 Wave angle: 0 degrees Bottom level: 5.39 m tZH Average salinity: 1 o/oo Total load: .000146 kg/s m
 Average temperature: 13 centigrade

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Hydrodynamic bv
 Part & waterway engineers
 Sijedrecht - Holland

project: P613 + AEDL + DUURD ESTUARY
 datafile: DURE09 location 06-10
 date: 821123 time: 17.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	18	14
.5	*****	*	*	*****
1.0	1.5	*	*	*****
1.5	2.0	*	*	*****
2.0	2.5	*	*	*****
2.5	3.0	*	*	*****
3.0	3.5	*	*	*****
3.5	4.0	*	*	*****
4.0	4.5	*	*	*****
4.5	5.0	*	*	*****
5.0	5.5	*	*	*****
5.5	6.0	*	*	*****
6.0	6.5	*	*	*****
6.5	7.0	*	*	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .50 m Waterdepth: 7.35 m Average velocity: .12 m/sec Measured bedload: ##### kg/s m
 Waveperiod: 2.00 sec Waterlevel: 2.08 m +ZH Average concentration: .0006 kg/m³ Measured susp. load: .000700 kg/s m
 Wave angle: 0 degrees Bottom level: 5.27 m +ZH Average salinity: 18/00 Total load: .000700 kg/s m
 Average temperature: 13 centigrade

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 Slidrecht = Holland

project: Pw13 * APDL * DOURO ESTUARY
 datafile: DUR010 location 06-11
 date: 821125 time: 8.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	.005	.010	0	18	36.0	14	28
.0											
.5	- *		*			*					
1.0											
1.5	- *		*			*					
2.0											
2.5											
3.0	+ **		**			*					
3.5											
4.0											
4.5	+ *		**			**					
5.0	+ *		***			***					
5.5	+ *		*****			*****					

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.65 m Average velocity: .04 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec waterlevel: 2.65 m +ZH Average concentration: .0010 kg/m3 Measured susp. load: .000400 kg/s m
 Wave angle: 0 degrees bottom level: 3.00 m +ZH Average salinity: 2 o/oo Total load: .000400 kg/s m
 Average temperature: 14 centigrade

Hydrodynamic by
Port & Waterway engineers
Slidrecht - Holland

Project: P613 * APUL * DUURD ESTUARY
datefile: DUR010 location: 06-11
date: 821125 time: 8.45

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (KG/M3)	SALINITY (0/00)	TEMPERATURE (centigrade)
0	1.0	0.005	18	36 0
.5	1.0	*	*	*****
1.0	1.5	*	*	*****
2.0	2.0	*	*	*****
2.5	3.0	*	*	*****
3.0	3.5	*	*	*****
4.0	4.0	**	*	*****
4.5	4.5	**	*	*****
5.0	5.0	***	**	*****
5.5	5.5	***	**	*****
6.0	6.0	***	*****	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m water depth: 6.15 m Average velocity: .04 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.76 m +ZH Average concentration: .0008 kg/m3 Measured susp. load: .000267 kg/s m
 Wave angle: 0 degrees Bottom level: 3.39 m +ZH Average salinity: 19/00 Total load: .000267 kg/s m
 Average temperature: 14 centigrade

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Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 # APDL # DOORD ESTUARY
 datafile: DURU10 location 06-11
 date: 821125 time: 9.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)			CONCENTRATION (kg/m3)			SALINITY (o/oo)			TEMPERATURE (centigrade)		
	0	1.0	2.0	0	.005	.010	0	18	36.0	0	14	28
0.0												
0.5	- **			*			*				*****	
1.0												
1.5	- ***			**			*				*****	
2.0												
2.5												
3.0	- **			**			*				*****	
3.5												
4.0												
4.5	- **			**			*				*****	
5.0												
5.5	- *			**			***				*****	
6.0	+ *			*****			*****				*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 6.15 m Average velocity: -.15 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec waterlevel: 2.84 m +ZH Average concentration: .0009 kg/m3 Measured susp. load: -.000589 kg/s m
 Wave angle: 0 degrees Bottom level: 3.31 m +ZH Average salinity: 2 o/oo Total load: -.000589 kg/s m
 Average temperature: 13 centigrade

Hydronamic bv
 Port & waterway engineers
 Sliedrecht - Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DUR010 location 06-11
 date: 821125 time: 9.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)			CONCENTRATION (kg/m ³)			SALINITY (o/oo)			TEMPERATURE (centigrade)		
	0	1.0	2.0	0	.005	.010	0	10	36	0	14	28
.0												
.5	- **			*			†				*****	
1.0												
1.5	- *			*			†				*****	
2.0												
2.5												
3.0	- *			*			†				*****	
3.5												
4.0												
4.5	- *			**			†				*****	
5.0	+ *			**			†				*****	
5.5	+ **			***			†				*****	

↑ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.65 m Average velocity: -.08 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.88 m +ZH Average concentration: .0007 kg/m³ Measured susp. load: -.000213 kg/s m
 Wave angle: 0 degrees Bottom level: 2.77 m +ZH Average salinity: 0 o/oo Total load: -.000213 kg/s m
 Average temperature: 13 centigrade

Hydronamic bv
 Port & waterway engineers
 Slidrecht - Holland

project: P613 + APDL + DUURD ESTUARY
 datafile: DUR010 location Q6-11
 date: 821125 time: 10.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)			CONCENTRATION (kg/m3)			SALINITY (o/oo)			TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	0	18	36	0	14	28	
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
.5	- ***		*			*			*****			
1.0												
1.5	- ***		*			*			*****			
2.0												
2.5												
3.0	- **		**			*			*****			
3.5												
4.0												
4.5	- ****		*****			*			*****			
5.0	- ***		*****			*			*****			
5.5	- **		*****			*			*****			

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.65 m Average velocity: -.25 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.90 m +ZH Average concentration: .0011 kg/m3 Measured susp. load: -.001588 kg/s m
 Wave angle: 0 degrees Bottom level: 2.75 m +ZH Average salinity: 0 o/oo Total load: -.001588 kg/s m
 Average temperature: 13 centigrade

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 Slidrecht - Holland

Project: P613 * APULI * DURRO ESTUARY
 datafile: DUR010 location 06-11
 date: 821125 time: 10.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	0.010	18
0.5	*****	*	*	36
1.0	*****	*	*	14
1.5	*****	*	*	28
2.0	*****	**	*	*****
2.5	*****	**	*	*****
3.0	*****	***	*	*****
3.5	*****	*****	*	*****
4.0	*****	*****	*	*****
4.5	*****	*****	*	*****
5.0	*****	*****	*	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.15 m Average velocity: .28 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.86 m tZH Average concentration: .0012 kg/m³ Measured susp. load: -.001503 kg/s m
 Wave angle: 0 degrees Bottom level: 2.29 m tZH Average salinity: 0 o/oo Total load: -.001503 kg/s m
 Average temperature: 13 centigrade

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Hydroamic bv
 Port & waterway engineers
 Slidrecht - Holland

Project: P013 * APDL † DUNED ESTUARY
 datafile: DUK10 location: 06-11
 date: 821125 time: 11:15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (cm/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	0.10	18
.5	*****	*	*	*****
1.0	*****	***	*	*****
1.5	*****	***	*	*****
2.0	*****	***	*	*****
2.5	*****	***	*	*****
3.0	*****	***	*	*****
3.5	*****	***	*	*****
4.0	*****	***	*	*****
4.5	*****	***	*	*****
5.0	*****	***	*	*****

† = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 5.15 m Average velocity: -.30 m/sec Measured bedload: ##### kg/s #
 Waveperiod: .00 sec Waterlevel: 2.82 m †ZH Average concentration: .0012 kg/m³ Measured susp. load: -.001821 kg/s #
 Wave angle: 0 degrees Bottom level: 2.33 m †ZH Average salinity: 0 o/oo Total load: -.001821 kg/s #
 Average temperature: 13 centigrade

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Hydrodynamic bv
 Port & Waterway engineers
 Slidrecht - Holland

Project: P613 * ABPL * DOUWID ESTUARY
 datafile: DUR010 Location 06-11
 date: 821125 time: 11.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	18	36 0 14 28
.5	*****	**	*	*****
1.0	*****	**	*	*****
1.5	*****	**	*	*****
2.0	*****	**	*	*****
2.5	*****	**	*	*****
3.0	*****	**	*	*****
3.5	*****	**	*	*****
4.0	*****	**	*	*****
4.5	*****	**	*	*****
5.0	*****	**	*	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 5.15 m Average velocity: -.46 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.72 m +ZH Average concentration: .0010 kg/m3 Measured susp. load: -.002265 kg/s m
 Wave angle: 0 degrees Bottom level: 2.43 m +ZH Average salinity: 0 o/oo Total load: -.002265 kg/s m
 Average temperature: 13 centigrade

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Hydronamic bv
 Port & waterway engineers
 Slidrecht - Holland

project: P613 + APDL + DOURO ESTUARY
 datafile: DURU10 location Q6-11
 date: 821125 time: 12.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)					
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
.0												
.5	- *****		**		*			*****				
1.0												
1.5	- *****		**		*			*****				
2.0												
2.5												
3.0	- *****		**		*			*****				
3.5	- *****		***		*			*****				
4.0												
4.5	- *****		***		*			*****				
5.0	- ***		***		*			*****				

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.15 m Average velocity: -.48 m/sec Measured bedload: ##### kg/s.m
 Waveperiod: .00 sec Waterlevel: 2.56 m +ZH Average concentration: .0010 kg/m3 Measured susp. load: -.002407 kg/s.m
 Wave angle: 0 degrees Bottom level: 2.59 m +ZH Average salinity: 0 o/oo Total load: -.002407 kg/s.m
 Average temperature: 13 centigrade

Hydronic bv
 Port & waterway engineers
 Sliedrecht = Holland

project: P613 * APDL * DOURO ESTUARY
 datafile: DURO10 location_06-11
 date: 821125 time: 12.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)		
	0	1.0	2.0 0	.005	.010 0	18	36 0	14	28
.0	----- ----- ----- ----- ----- ----- ----- ----- -----								
.5	- *****		**		*			*****	
1.0									
1.5	- *****		***		*			*****	
2.0									
2.5	- *****		***		*			*****	
3.0									
3.5	- *****		***		*			*****	
4.0									
4.5	- ****		***		*			*****	
5.0	- ***		****		*			*****	

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 5.15 m Average velocity: -.52 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.42 m +ZH Average concentration: .0011 kg/m3 Measured susp. load: -.002914 kg/s m
 Wave angle: 0 degrees Bottom level: 2.73 m +ZH Average salinity: 0 o/oo Total load: -.002914 kg/s m
 Average temperature: 13 centigrade

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Port & Waterway engineers
Slidrecht - Holland

Project: P613 * APDL * DUURK ESTUARY
datefile: DURU10 Location 06-11
date: 821125 Time: 13.15

* SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m3)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	18	14
.0	*****	*****	*****	*****
.5	*****	*****	*****	*****
1.0	*****	*****	*****	*****
1.5	*****	*****	*****	*****
2.0	*****	*****	*****	*****
2.5	*****	*****	*****	*****
3.0	*****	*****	*****	*****
3.5	*****	*****	*****	*****
4.0	*****	*****	*****	*****
4.5	*****	*****	*****	*****
5.0	*****	*****	*****	*****

+ = flow into the estuary
- = flow out of the estuary

Waveheight: .00 m Waterdepth: 5.15 m Average velocity: -.56 m/sec Measured bedload: ##### Kg/s m
 Waveperiod: .00 sec Waterlevel: 2.28 m tZH Average concentration: .0015 kg/m3 Measured susp. load: -.0041/1 Kg/s m
 Wave angle: 0 degrees Bottom level: 2.87 m tZII Average salinity: 0 o/oo Total load: -.0041/1 Kg/s m
 Average temperature: 13 centigrade

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 * SEDIMENT TRANSPORT MEASUREMENT *

Project: P013 * APDL * DUURD ESTUARY
 datafile: DURO10 location 06-11
 date: 821125 time: 13.45

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	.005	.010	18
.0	*****	**	*	*****
1.0	*****	***	*	*****
1.5	*****	***	*	*****
2.0	*****	***	*	*****
2.5	*****	***	*	*****
3.0	*****	***	*	*****
3.5	*****	*****	*	*****
4.0	*****	*****	*	*****
4.5	*****	*****	*	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m water depth: 4.65 m Average velocity: -.64 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 2.12 m tZH Average concentration: .0016 kg/m³ Measured susp. load: -.004558 kg/s m
 Wave angle: 0 degrees Bottom level: 2.53 m tZH Average salinity: 0 o/oo Total load: -.004558 kg/s m
 Average temperature: 13 centigrade

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Project: P013 + APUL + DUROD ESTUARY
 datafile: DUR010 location 06-11
 date: 821125 time: 14.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)	CONCENTRATION (kg/m ³)	SALINITY (o/oo)	TEMPERATURE (centigrade)
0	1.0	0.005	0.010	18
.0	*****	***	*	*****
.5	*****	***	*	*****
1.0	*****	***	*	*****
1.5	*****	***	*	*****
2.0	*****	***	*	*****
2.5	*****	***	*	*****
3.0	*****	***	*	*****
3.5	*****	***	*	*****
4.0	*****	***	*	*****
4.5	*****	***	*	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m water depth: 4.65 m Average velocity: .64 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Water level: 1.96 m +ZH Average concentration: .0016 kg/m³ Measured susp. load: .004510 kg/s m
 Wave angle: 0 degrees Bottom level: 2.69 m +ZH Average salinity: 0 o/oo Total load: .004510 kg/s m
 Average temperature: 13 centigrade

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- 60
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- 64

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project: P613 * APDL * DOURO ESTUARY
 datafile: DUR010 location 06-11
 date: 821125 time: 15.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)			CONCENTRATION (kg/m3)		SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
0.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
0.5	*****	-----	-----	****	-----	-----	*	-----	-----	-----	-----	-----
1.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
1.5	*****	-----	-----	*****	-----	-----	*	-----	-----	-----	-----	-----
2.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
2.5	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
3.5	*****	-----	-----	*****	-----	-----	*	-----	-----	-----	-----	-----
4.0	*****	-----	-----	*****	-----	-----	*	-----	-----	-----	-----	-----
4.5	*****	-----	-----	*****	-----	-----	*	-----	-----	-----	-----	-----

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.65 m Average velocity: -.64 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.70 m ±ZH Average concentration: .0019 kg/m3 Measured susp. load: -.005562 kg/s m
 Wave angle: 0 degrees Bottom level: 2.95 m ±ZH Average salinity: 0 o/oo Total load: -.005562 kg/s m
 Average temperature: 13 centigrade

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project: P613 * APDL * DOURO ESTUARY
 datafile: DURO10 location 06-11
 date: 821125 time: 15.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m ³)			SALINITY (o/oo)			TEMPERATURE (centigrade)		
	0	1.0	2.0	.005	.010	0	18	36	0	14	28
.0	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
.5	- *****		***		*		*****				
1.0											
1.5	- *****		****		*		*****				
2.0											
2.5											
3.0											
3.5	- *****		*****		*		*****				
4.0	- *****		*****		*		*****				
4.5	- ***		*****		*		*****				

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.65 m Average velocity: -.61 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.64 m +ZH Average concentration: .0017 kg/m³ Measured susp. load: -.004708 kg/s m
 Wave angle: 0 degrees Bottom level: 3.01 m +ZH Average salinity: 0 o/oo Total load: -.004708 kg/s m
 Average temperature: 13 centigrade

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project: P613 * APDL * DOURO ESTUARY
 datafile: DURO10 location 06-11
 date: 821125 time: 16.15

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)		CONCENTRATION (kg/m3)			SALINITY (o/oo)		TEMPERATURE (centigrade)				
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
.0												
.5	- *****											
1.0												
1.5	- *****											
2.0												
2.5	- *****											
3.0	- *****											
3.5	- *****											
4.0	- ****											

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m waterdepth: 4.15 m Average velocity: -.56 m/sec Measured bedload: ##### kg/s m
 Waveperiod: .00 sec Waterlevel: 1.60 m +ZH Average concentration: .0017 kg/m3 Measured susp. load: -.003811 kg/s m
 Wave angle: 0 degrees Bottom level: 2.55 m +ZH Average salinity: 0 o/oo Total load: -.003811 kg/s m
 Average temperature: 13 centigrade

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project: P013 * APDL * DOUKO ESTUARY
 datafile: DUR010 location 06-11
 date: 821125 time: 16.45

 * SEDIMENT TRANSPORT MEASUREMENT *

DEPTH (m)	VELOCITY (m/sec)			CONCENTRATION (kg/m3)			SALINITY (o/oo)			TEMPERATURE (centigrade)		
	0	1.0	2.0	0	.005	.010	0	18	36	0	14	28
.0	- ----- ----- -----	----- ----- -----	----- ----- -----	----- ----- -----	----- ----- -----	----- ----- -----	----- ----- -----	----- ----- -----	----- ----- -----	----- ----- -----	----- ----- -----	----- ----- -----
.5	- *****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1.0	- *****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
1.5	- *****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
2.0	- *****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
2.5	- *****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3.0	- *****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
3.5	- *****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
4.0	- *****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****

+ = flow into the estuary
 - = flow out of the estuary

Waveheight: .00 m Waterdepth: 4.15 m Average velocity: -.56 m/sec Measured bedload: ##### Kg/s m
 Waveperiod: .00 sec Waterlevel: 1.58 m +ZH Average concentration: .0017 kg/m3 Measured susp. load: -.003819 kg/s m
 Wave angle: 0 degrees Bottom level: 2.57 m +ZH Average salinity: 0 o/oo Total load: -.003819 kg/s m
 Average temperature: 13 centigrade