

## Strømmåling Hjartøy

### Innhold

- Strømmåling på 5 og 15 meter fra 2010. Posisjon: 66°14.169'N, 12°42.594'Ø.
- Strømmåling på 24 meter fra 2009. Posisjon: 66°14.141'N, 12°43.389'Ø

Hjartøy bruker nøter som er 10 meter dype. Anlegget er dypest på sin sørside på ca. 24 meter. Dybden under anleggsrammen er gjennomsnittlig 21 meter. Bunnmåling fra 2009 var tatt på en dybde av ca. 24m.

**Lokaliteten: Hjartøy, Nesna. Strøm på 5 og 15 meter.**

Som avtalt oversender vi resultatene fra våre strømmålinger utført i området ved Hjartøy i Nesna kommune. Vår vurdering av lokaliteten er i hovedsak basert på de viste måledata. Vi anbefaler sterkt at dere studerer de vedlagte data nøye selv. Rådataene finnes oppbevart i vårt arkiv.

**Firmanavn / Lokalitet. Type oppdrett:**

Firma : Tomma Laks Adresse : 8764 Lovund  
Lokalitet : Hjartøy  
Kommune : Nesna Fylke : Nordland  
UTM-koordinater : 66\*14.169'N, 12\*42.594'Ø  
Oppdrettstype : Generelle strømforhold - matfiskanlegg  
Hva er vurdert : Strøm på 5 og 15 meter.

**Måleperioder / frekvenser.**

Se vedlegg.

**Oppsummering fra målingene.**

Se ”Spesifikasjons og resultatoversikt”.

Vedlegg og kopi:

Totalvurdering, resultatoversikt

Statistisk behandling av rådata.

## SPESIFIKASJONS- OG RESULTATOVERSIKT.

**Firma:** Tomma Laks AS

**Lokalitet:** Hjartøy, Nesna kommune.

### Generelle spesifikasjoner, periode, frekvens og resultater.

Tekst	5 meter	15 meter
Tidsrom for registreringer	18.10.2010-23.11.2010	18.10.2010-23.11.2010
Dybde på målestedet. Ca.		
Dybde for registreringer (meter). Ca.	5	15
Måler type - nummer	SD6000 - nr1529	SD6000 - nr655
Type måling	Kontinuerlig	Kontinuerlig
Frekvens – varighet*4	2 min/10 min - 36 døgn	2 min/10 min - 36 døgn
Adresse for arkiv (data)	/66*14.169'N, 12*42.594'Øs	/66*14.169'N, 12*42.594'Øs
% strøm mindre enn 1 cm/sek.(ca)	30.9 %	35.3 %
Gjennomsnittsstrøm	2.8	3.5
Rest strøm	1.9	2.1
Neumanns parameter	0.661	0.597
De 4 hyppigst forekommende retningene strømmen beveger seg mot (grader) *1	195, 210, 225, 180	315, 165, 75, 60
De 4 hyppigst forekommende strømhastighetene (cm /sek) *1	1-3, 0-1, 3-4, 6-8	0-1, 1-3, 6-8, 3-4
Mest vannutskiftning / retning / 15 graders sektor.*2	26485m <sup>3</sup> ved 195-210 grader. 736m <sup>3</sup> /m <sup>2</sup> /døgn	23159m <sup>3</sup> ved 75-90 grader. 643m <sup>3</sup> /m <sup>2</sup> /døgn
Minst vannutskiftning / retning / 15 graders sektor.*2	641m <sup>3</sup> ved 285-300 grader. 18m <sup>3</sup> /m <sup>2</sup> /døgn	10m <sup>3</sup> ved 225-240 grader. 0m <sup>3</sup> /m <sup>2</sup> /døgn
Gjennomsnittlig total vannutskiftning pr.døgn. Alle retninger	2416m <sup>3</sup> /døgn	3041m <sup>3</sup> /døgn
Maksimum strøm – signifikant maksimum strøm (cm/sek) *3	16.4 - 5.7	20.6 - 7.8

\*1: gruppert i synkende rekkefølge \*2: vann som passerer gjennom hver loddrett plassert kvadratmeter.\*3: gjennomsnittet av 1/3 målingene som viser høyest verdi. \*4: måleren måler hvert x minutt, hvert y minutt gir måleren et gjennomsnitt av verdiene for 5 målinger.

# Overflatestrøm - 5 meter

## TEMPERATURE

File name: Hjørtøy s23 5m nov10.SD6

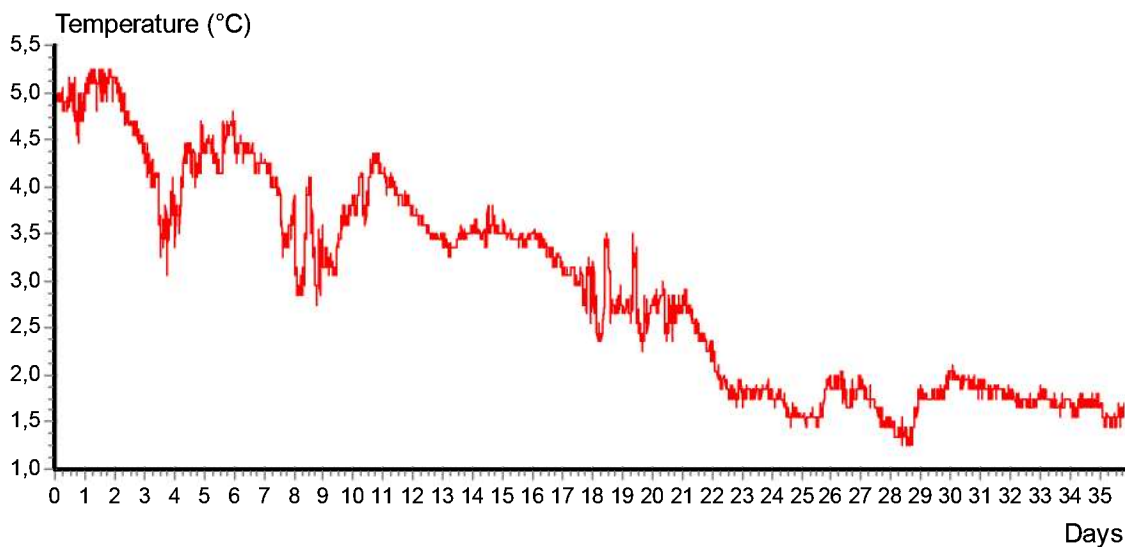
Ref. number: 1529

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 5157

Data displayed from: 16:23 - 18.Oct-10 To: 11:43 - 23.Nov-10



## CURRENT SPEED

File name: Hjørtøy s23 5m nov10.SD6

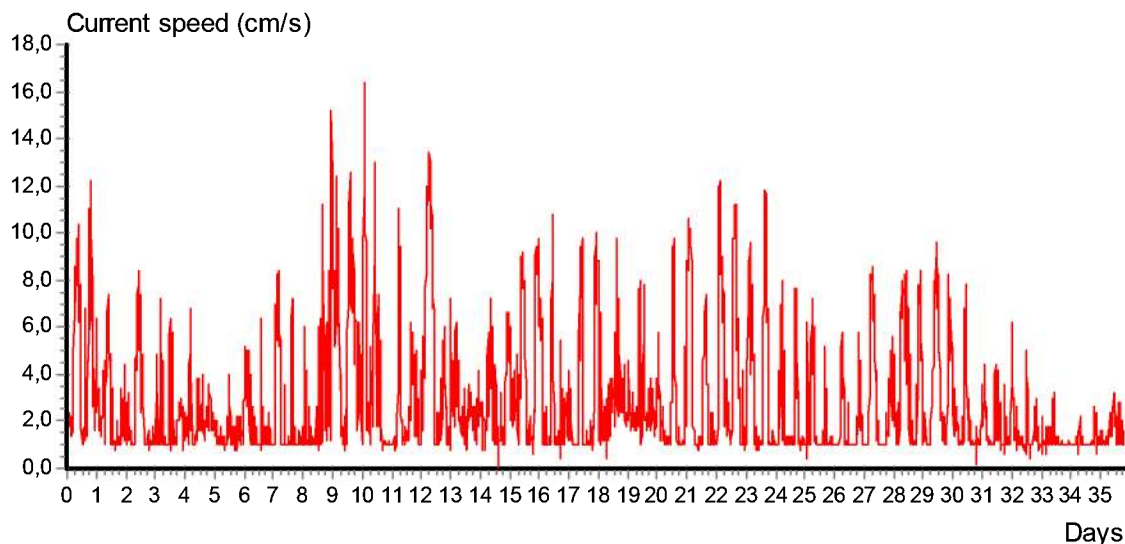
Ref. number: 1529

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 5157

Data displayed from: 16:23 - 18.Oct-10 To: 11:43 - 23.Nov-10



**CURRENT SPEED BAR CHART**

File name: Hjartøy s23 5m nov10.SD6

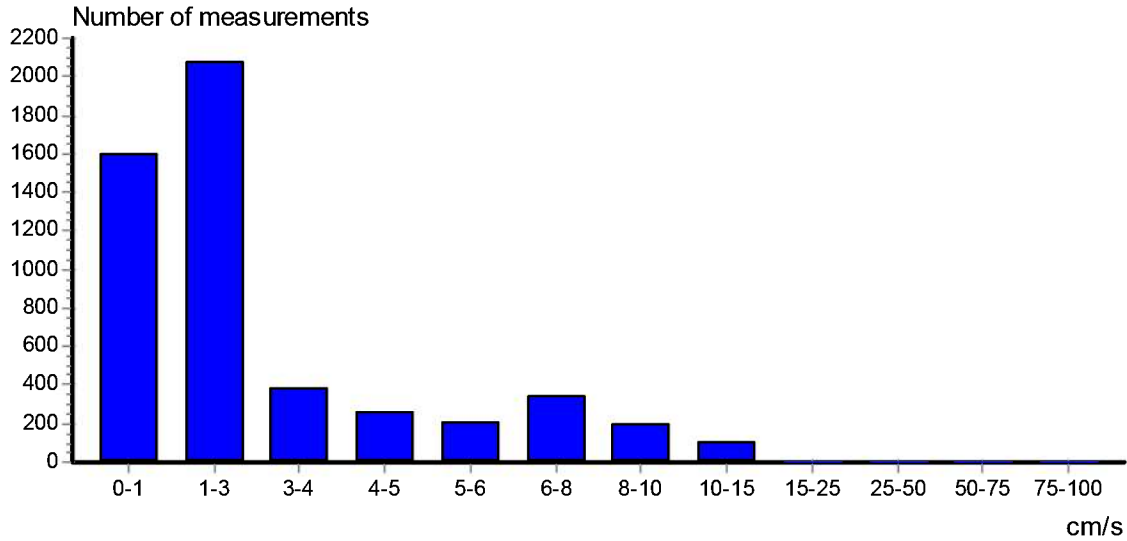
Ref. number: 1529

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 5157

Data displayed from: 16:23 - 18.Oct-10 To: 11:43 - 23.Nov-10



**CURRENT DIRECTION BAR CHART**

File name: Hjartøy s23 5m nov10.SD6

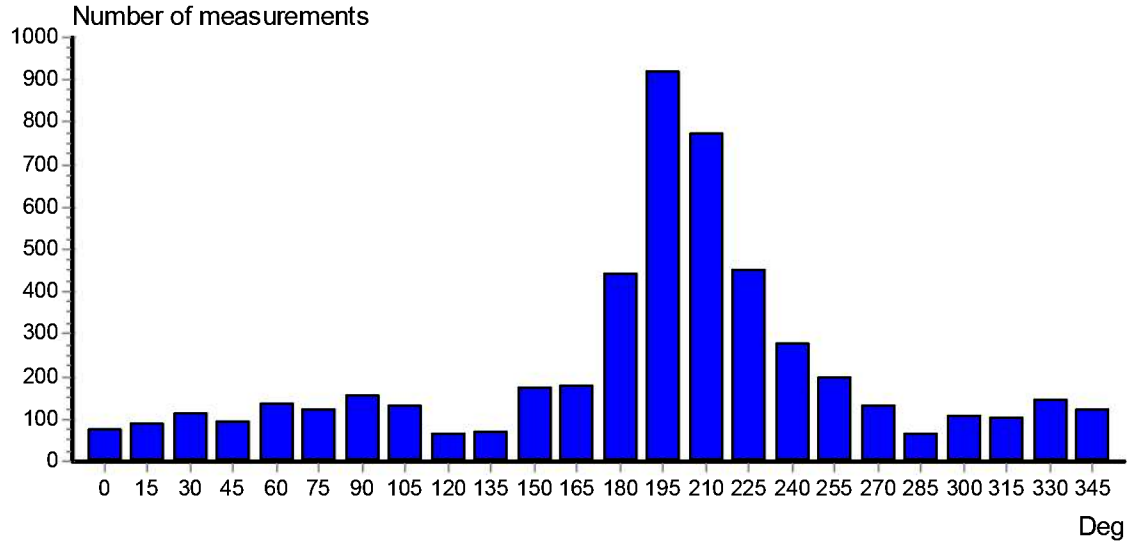
Ref. number: 1529

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 5157

Data displayed from: 16:23 - 18.Oct-10 To: 11:43 - 23.Nov-10



**PROGRESSIVE VECTOR**

File name: Hjartøy s23 5m nov10.SD6

Ref. number: 1529

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 5157

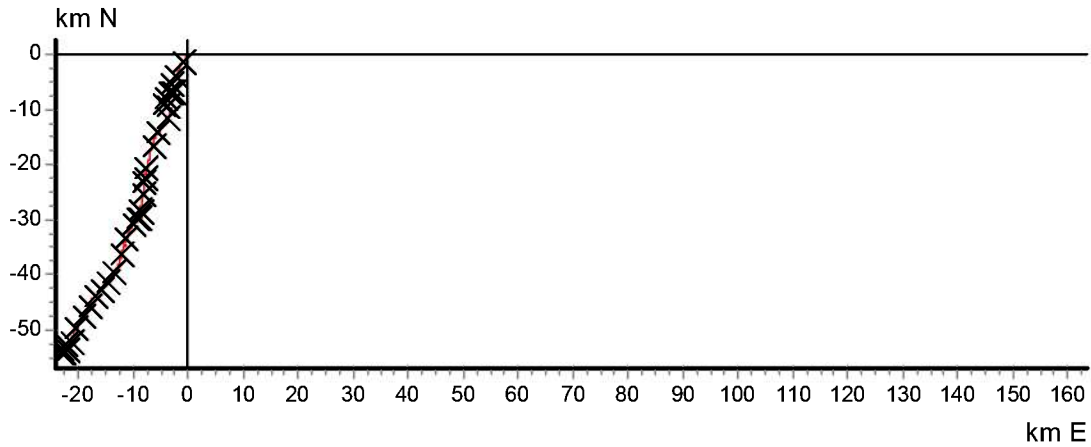
Data displayed from: 16:23 - 18.Oct-10 To: 11:43 - 23.Nov-10

Neumann parameter: 0.661

Rest speed: 1.9 cm/s

Average speed: 2.8 cm/s

Rest direction: 203 deg.



**CURRENT VELOCITY DISTRIBUTION DIAGRAM**

File name: Hjartøy s23 5m nov10.SD6

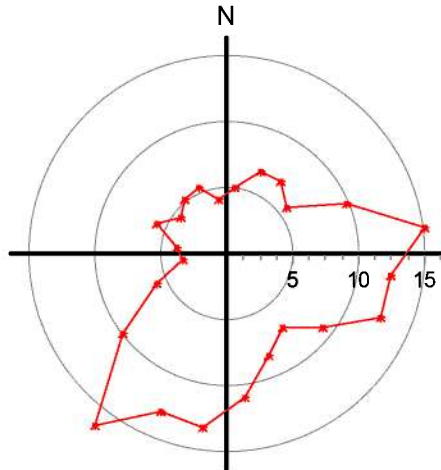
Ref. number: 1529

Series number: 1

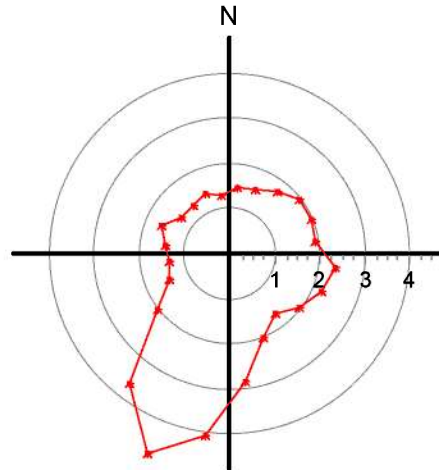
Interval time: 10 Minutes

Number of measurements in data set: 5157

Data displayed from: 16:23 - 18.Oct-10 To: 11:43 - 23.Nov-10



Maximum velocity (cm/s)  
per 15 deg sector



Mean velocity (cm/s)  
per 15 deg sector

**CURRENT VELOCITY DISTRIBUTION DIAGRAM**

File name: Hjartøy s23 5m nov10.SD6

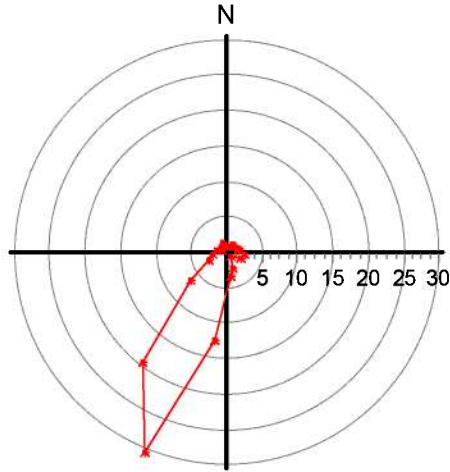
Series number: 1

Number of measurements in data set: 5157

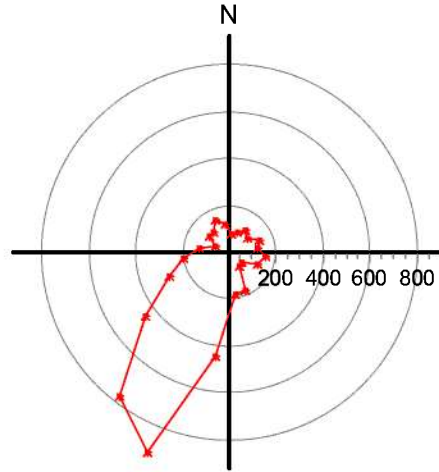
Data displayed from: 16:23 - 18.Oct-10 To: 11:43 - 23.Nov-10

Ref. number: 1529

Interval time: 10 Minutes



Relative water flux (%)  
per 15 deg sector



Number of measurements  
per 15 deg sector

**STICK DIAGRAM**

File name: Hjartøy s23 5m nov10.SD6

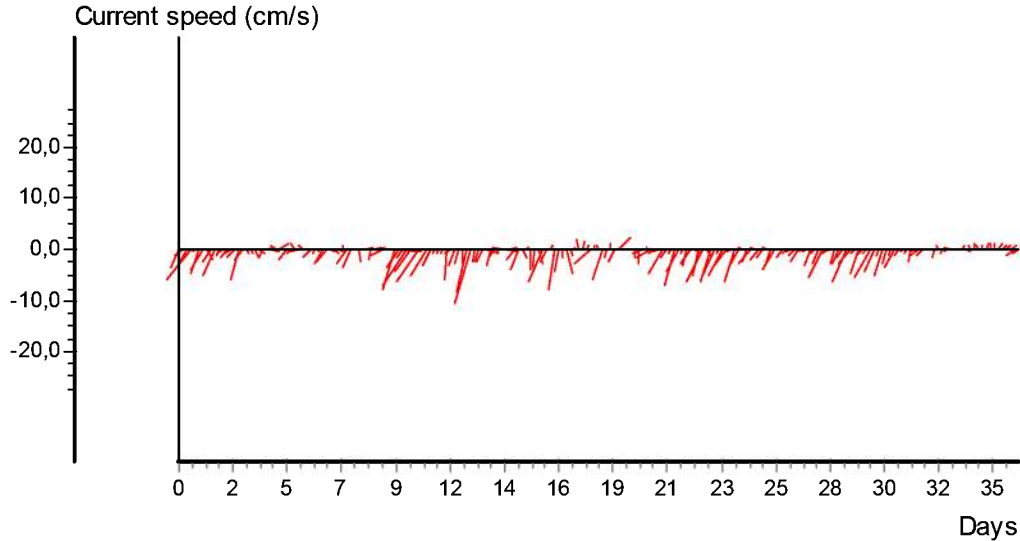
Series number: 1

Number of measurements in data set: 5157

Data displayed from: 16:23 - 18.Oct-10 To: 11:43 - 23.Nov-10

Ref. number: 1529

Interval time: 10 Minutes



**CURRENT SPEED / DIRECTION MATRIX**

File name: Hjartøy s23 5m nov10.SD6

Ref. number: 1529

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 5157

Data displayed from: 16:23 - 18.Oct-10 To: 11:43 - 23.Nov-10

	Current speed groups													Total flow		Max curr
	1	3	4	5	6	8	10	15	25	50	75	100	Sum%	m <sup>3</sup> /m <sup>2</sup>	%	
0	39	28	5	2	0	0	0	0	0	0	0	0	1.4	653	0.8	5.0
15	42	41	4	1	0	1	0	0	0	0	0	0	1.7	810	0.9	6.8
30	43	60	7	1	1	1	0	0	0	0	0	0	2.2	1168	1.3	6.8
45	39	38	6	9	1	0	0	0	0	0	0	0	1.8	1091	1.3	5.8
60	42	75	9	1	2	5	1	0	0	0	0	0	2.6	1590	1.8	9.8
75	44	68	6	0	2	3	0	0	1	0	0	0	2.4	1418	1.6	15.2
90	60	64	9	7	5	5	2	3	0	0	0	0	3.0	2196	2.5	12.6
105	36	77	5	3	4	4	0	2	0	0	0	0	2.5	1739	2.0	12.6
120	25	32	3	1	2	1	1	0	0	0	0	0	1.3	769	0.9	9.2
135	31	35	2	1	1	2	0	0	0	0	0	0	1.4	734	0.8	7.0
150	68	79	10	7	1	6	3	0	0	0	0	0	3.4	2114	2.4	8.4
165	47	76	16	12	5	9	8	4	0	0	0	0	3.4	3062	3.5	11.0
180	76	143	47	38	23	63	35	20	0	0	0	0	8.6	10897	12.5	13.4
195	97	227	115	87	93	150	97	54	0	0	0	0	17.8	26485	30.5	13.0
210	129	294	87	68	50	85	45	16	1	0	0	0	15.0	16933	19.5	16.4
225	140	247	26	17	9	9	4	0	0	0	0	0	8.8	5491	6.3	10.0
240	134	136	4	1	3	0	0	0	0	0	0	0	5.4	2428	2.8	5.8
255	109	86	5	0	0	0	0	0	0	0	0	0	3.9	1633	1.9	3.4
270	76	52	5	0	0	0	0	0	0	0	0	0	2.6	1154	1.3	3.8
285	24	41	0	0	1	0	0	0	0	0	0	0	1.3	641	0.7	5.8
300	68	35	4	1	0	0	0	0	0	0	0	0	2.1	875	1.0	4.4
315	62	41	2	0	1	0	0	0	0	0	0	0	2.1	857	1.0	5.2
330	82	61	2	2	1	0	0	0	0	0	0	0	2.9	1265	1.5	5.4
345	83	39	1	1	0	0	0	0	0	0	0	0	2.4	964	1.1	4.2
Sum%	30.9	40.2	7.4	5.0	4.0	6.7	3.8	1.9	0.0	0.0	0.0	0.0		86968		16.4

**STATISTICAL SUMMARY**

	Total	East / west	North / south
Mean current speed (cm/s)	2,8	1,4	2,2
Variance (cm/s) <sup>2</sup>	6,230	1,609	5,659
Standard deviation (cm/s)	2,496	1,269	2,379
Mean standard deviation	0,888	0,885	1,085
Maximum current velocity	16,4		
Minimum current velocity	0,0		
Significant max velocity	5,7		
Significant min velocity	1,0		



# Strøm 15 meter

## TEMPERATURE

File name: Hjartøy s4 15m nov 10.SD6

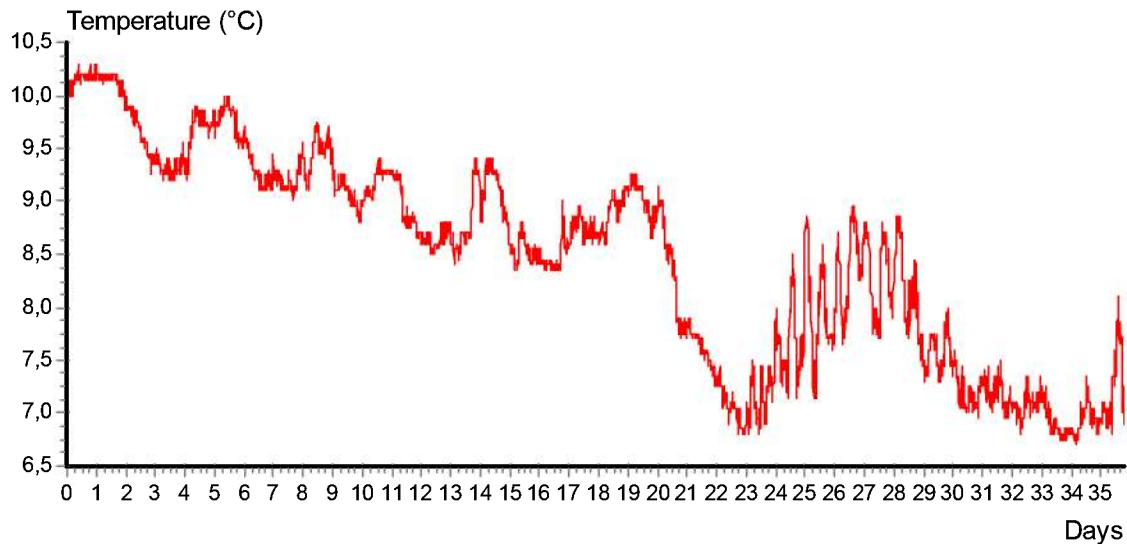
Ref. number: 655

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 5155

Data displayed from: 16:23 - 18.Oct-10 To: 11:23 - 23.Nov-10



## CURRENT SPEED

File name: Hjartøy s4 15m nov 10.SD6

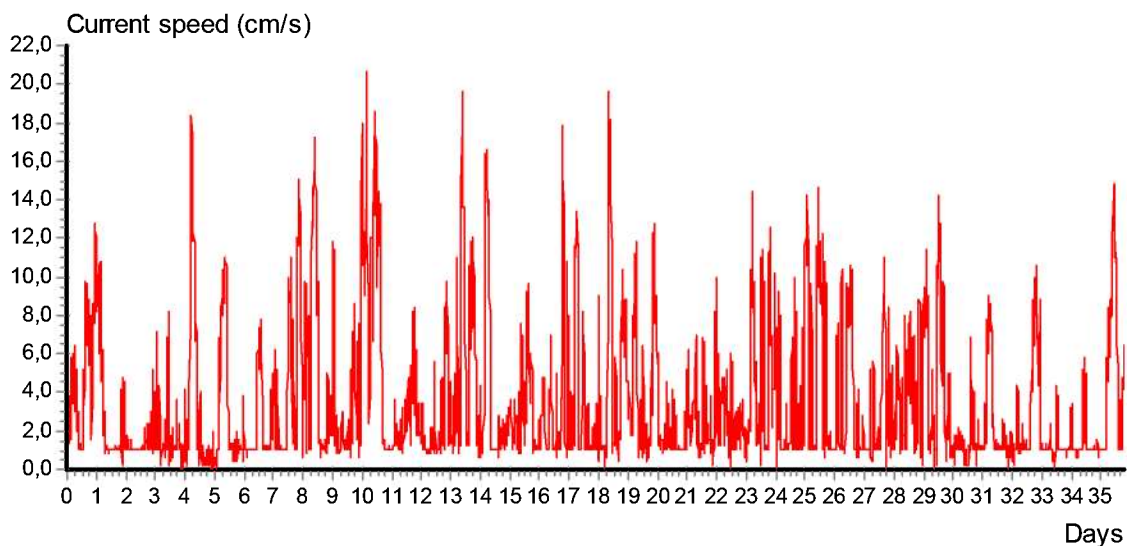
Ref. number: 655

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 5155

Data displayed from: 16:23 - 18.Oct-10 To: 11:23 - 23.Nov-10

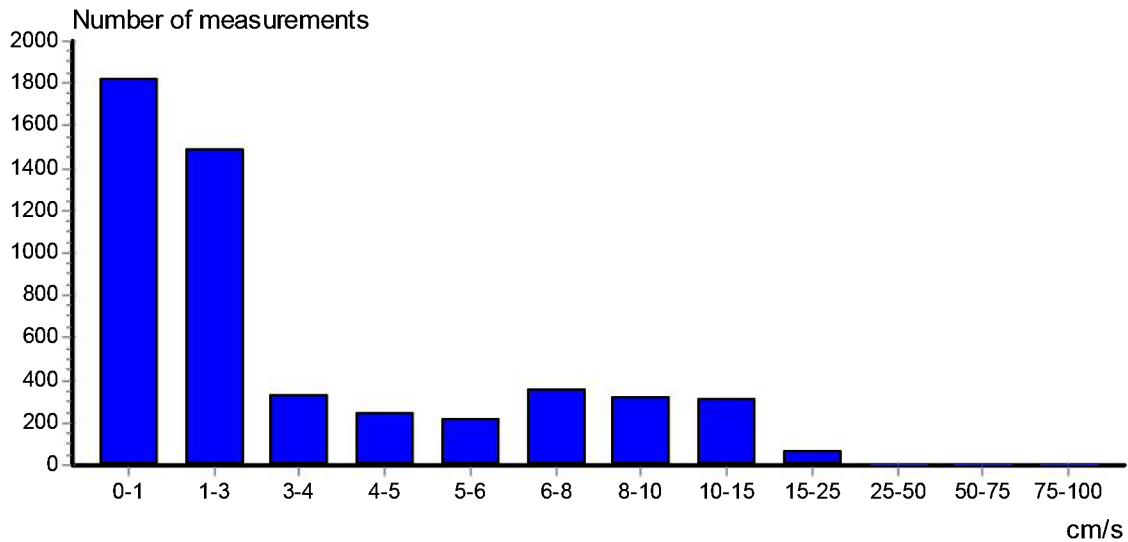


### CURRENT SPEED BAR CHART

File name: Hjartøy s4 15m nov 10.SD6  
Series number: 1

Ref. number: 655  
Interval time: 10 Minutes

Number of measurements in data set: 5155  
Data displayed from: 16:23 - 18.Oct-10 To: 11:23 - 23.Nov-10

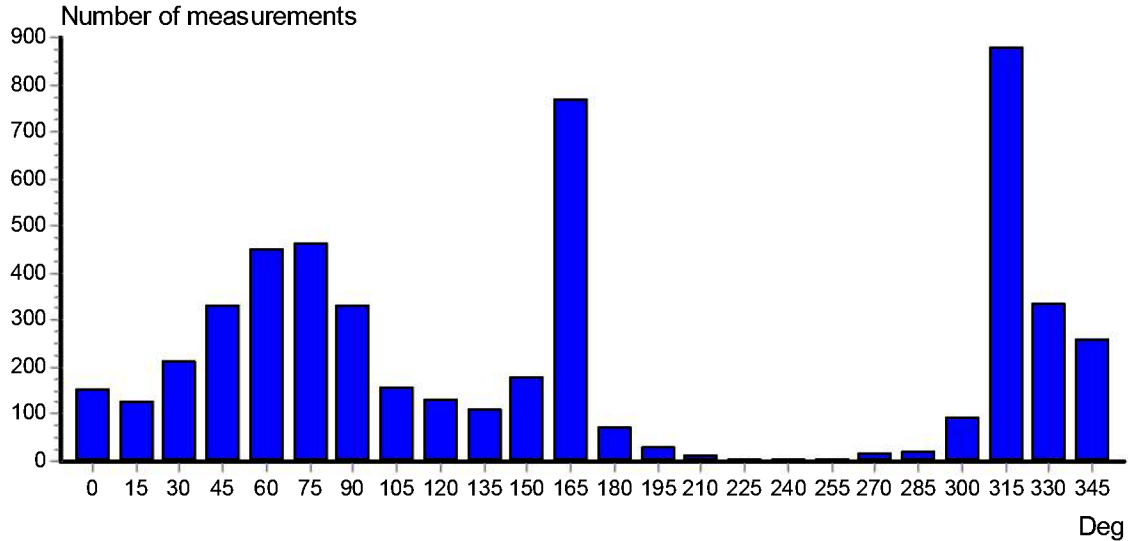


### CURRENT DIRECTION BAR CHART

File name: Hjartøy s4 15m nov 10.SD6  
Series number: 1

Ref. number: 655  
Interval time: 10 Minutes

Number of measurements in data set: 5155  
Data displayed from: 16:23 - 18.Oct-10 To: 11:23 - 23.Nov-10



**PROGRESSIVE VECTOR**

File name: Hjartøy s4 15m nov 10.SD6

Ref. number: 655

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 5155

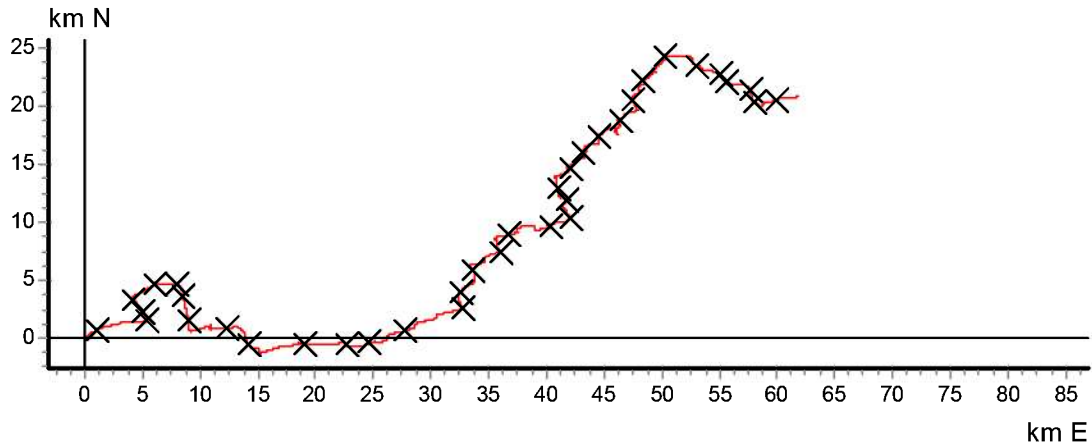
Data displayed from: 16:23 - 18.Oct-10 To: 11:23 - 23.Nov-10

Neumann parameter: 0.597

Rest speed: 2.1 cm/s

Average speed: 3.5 cm/s

Rest direction: 71 deg.



**CURRENT VELOCITY DISTRIBUTION DIAGRAM**

File name: Hjartøy s4 15m nov 10.SD6

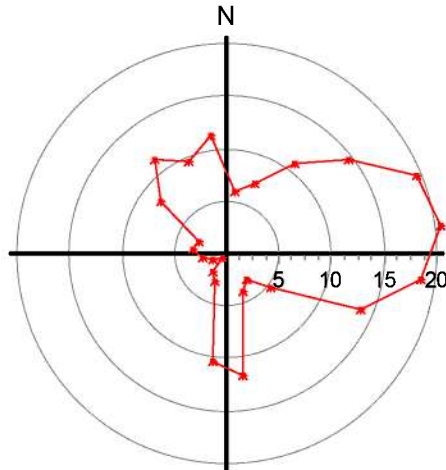
Ref. number: 655

Series number: 1

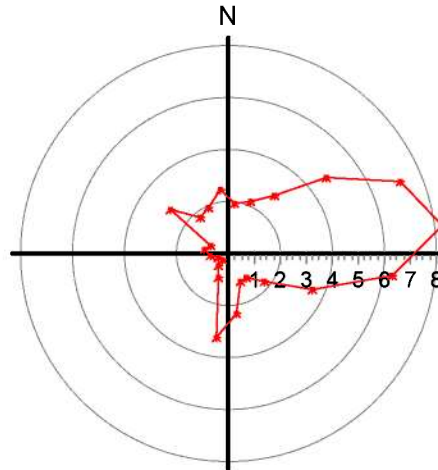
Interval time: 10 Minutes

Number of measurements in data set: 5155

Data displayed from: 16:23 - 18.Oct-10 To: 11:23 - 23.Nov-10



Maximum velocity (cm/s)  
per 15 deg sector



Mean velocity (cm/s)  
per 15 deg sector

### CURRENT VELOCITY DISTRIBUTION DIAGRAM

File name: Hjartøy s4 15m nov 10.SD6

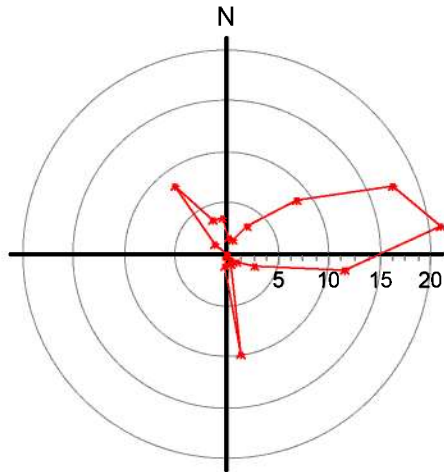
Series number: 1

Number of measurements in data set: 5155

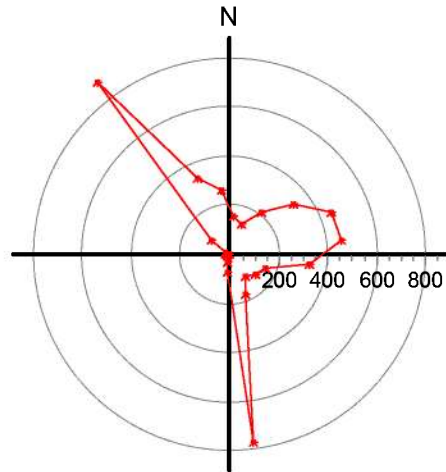
Data displayed from: 16:23 - 18.Oct-10 To: 11:23 - 23.Nov-10

Ref. number: 655

Interval time: 10 Minutes



Relative water flux (%)  
per 15 deg sector



Number of measurements  
per 15 deg sector

### STICK DIAGRAM

File name: Hjartøy s4 15m nov 10.SD6

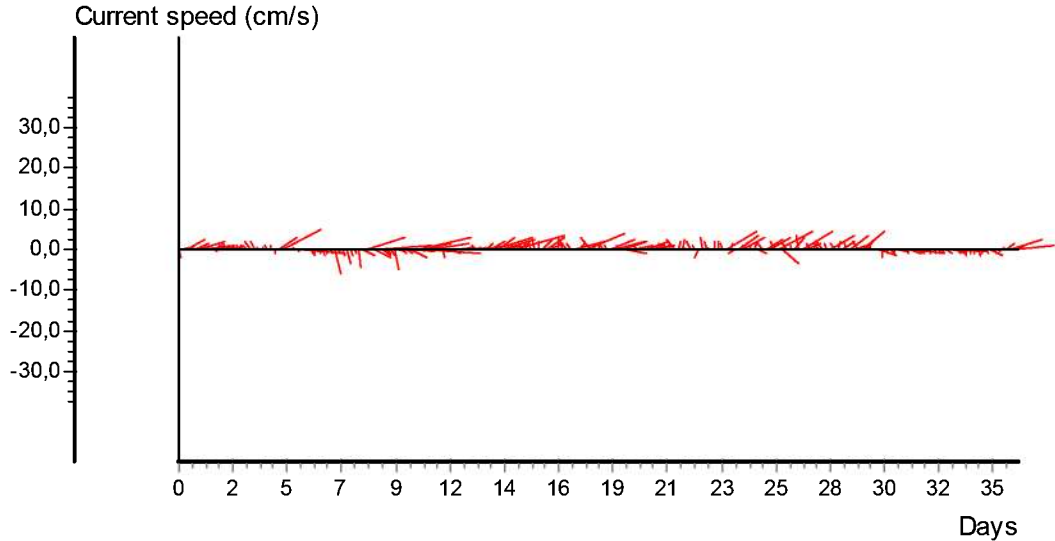
Series number: 1

Number of measurements in data set: 5155

Data displayed from: 16:23 - 18.Oct-10 To: 11:23 - 23.Nov-10

Ref. number: 655

Interval time: 10 Minutes



**CURRENT SPEED / DIRECTION MATRIX**

File name: Hjartøy s4 15m nov 10.SD6

Ref. number: 655

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 5155

Data displayed from: 16:23 - 18.Oct-10 To: 11:23 - 23.Nov-10

	Current speed groups													Total flow		Max curr
	1	3	4	5	6	8	10	15	25	50	75	100	Sum%	m <sup>3</sup> /m <sup>2</sup>	%	
0	62	62	19	10	1	0	0	0	0	0	0	0	3.0	1760	1.6	6.0
15	35	66	19	5	2	2	0	0	0	0	0	0	2.5	1649	1.5	7.2
30	50	92	23	17	8	14	8	2	0	0	0	0	4.2	3666	3.3	10.8
45	45	86	24	31	37	52	31	24	0	0	0	0	6.4	9493	8.7	14.6
60	38	64	24	32	38	71	65	94	23	0	0	0	8.7	19271	17.6	19.6
75	30	57	9	22	36	64	88	118	40	0	0	0	9.0	23159	21.2	20.6
90	39	53	21	23	17	55	71	46	7	0	0	0	6.4	12719	11.6	18.6
105	26	59	23	12	9	17	7	3	0	0	0	0	3.0	3307	3.0	13.8
120	40	76	10	4	1	0	0	0	0	0	0	0	2.5	1367	1.2	5.2
135	69	42	1	0	0	0	0	0	0	0	0	0	2.2	808	0.7	3.2
150	119	54	4	0	0	0	0	0	0	0	0	0	3.4	1266	1.2	4.0
165	428	173	30	35	25	32	28	18	0	0	0	0	14.9	10723	9.8	11.8
180	21	20	8	1	12	3	5	1	0	0	0	0	1.4	1398	1.3	10.4
195	20	11	0	0	0	0	0	0	0	0	0	0	0.6	187	0.2	2.8
210	11	2	0	0	0	0	0	0	0	0	0	0	0.3	48	0.0	2.2
225	5	0	0	0	0	0	0	0	0	0	0	0	0.1	10	0.0	0.6
240	5	1	0	0	0	0	0	0	0	0	0	0	0.1	14	0.0	1.4
255	4	1	0	0	0	0	0	0	0	0	0	0	0.1	22	0.0	2.4
270	12	4	1	0	0	0	0	0	0	0	0	0	0.3	94	0.1	3.2
285	18	3	0	0	0	0	0	0	0	0	0	0	0.4	92	0.1	2.8
300	31	28	13	3	5	14	0	0	0	0	0	0	1.8	1588	1.5	8.0
315	483	281	54	23	20	14	4	1	0	0	0	0	17.1	9139	8.3	11.4
330	139	149	20	8	3	7	8	0	0	0	0	0	6.5	3848	3.5	9.6
345	91	105	23	15	7	9	8	3	0	0	0	0	5.1	3841	3.5	11.4
Sum%	35.3	28.9	6.3	4.7	4.3	6.9	6.3	6.0	1.4	0.0	0.0	0.0		109469		20.6

**STATISTICAL SUMMARY**

	Total	East / west	North / south
Mean current speed (cm/s)	3,5	2,6	1,8
Variance (cm/s) <sup>2</sup>	13,307	12,991	2,925
Standard deviation (cm/s)	3,648	3,604	1,710
Mean standard deviation	1,031	1,389	0,958
Maximum current velocity	20,6		
Minimum current velocity	0,0		
Significant max velocity	7,8		
Significant min velocity	0,9		



## SPESIFIKASJONS- OG RESULTATOVERSIKT.

**Firma:** Tomma Laks AS

**Lokalitet:** Hjartøy, Nesna kommune.

### **Generelle spesifikasjoner, periode, frekvens og resultater.**

<b>Tekst</b>	<b>Bunn (26,3 meter)</b>
Tidsrom for registreringer	10.07.2009-11.08.2009
Dybde på målestedet. Ca.	
Dybde for registreringer (meter). Ca.	26
Måler type - nummer	SD6000 - nr913
Type måling	Kontinuerlig
Frekvens – varighet*4	2 min/10 min - 32 døgn
Adresse for arkiv (data)	/66*14.141°N, 12*43.389°Ø
% strøm mindre enn 1 cm/sek.(ca)	84.4 %
Gjennomsnittsstrøm	1.5
Rest strøm	1.3
Neumanns parameter	0.846
De 4 hyppigst forekommende retningene strømmen beveger seg mot (grader) *1	330, 315, 345, 300
De 4 hyppigst forekommende strømshastighetene (cm /sek) *1	0-1, 1-3, 3-4, 8-10
Mest vannutskiftning / retning / 15 graders sektor.*2	13565m <sup>3</sup> ved 330-345 grader. 424m <sup>3</sup> /m <sup>2</sup> /døgn
Minst vannutskiftning / retning / 15 graders sektor.*2	0m <sup>3</sup> ved 75-90 grader. 0m <sup>3</sup> /m <sup>2</sup> /døgn
Gjennomsnittlig total vannutskiftning pr.døgn. Alle retninger	1271m <sup>3</sup> /døgn
Maksimum strøm – signifikant maksimum strøm (cm/sek) *3	16.2 - 2.5

\*1: gruppert i synkende rekkefølge \*2: vann som passerer gjennom hver loddrett plassert kvadratmeter. \*3: gjennomsnittet av 1/3 målingene som viser høyest verdi. \*4: måleren måler hvert x minutt, hvert y minutt gir måleren et gjennomsnitt av verdiene for 5 målinger.

# Overflatestrøm - 5 meter

## TEMPERATURE

File name: Hjartøy s6 bunn juli 09.SD6

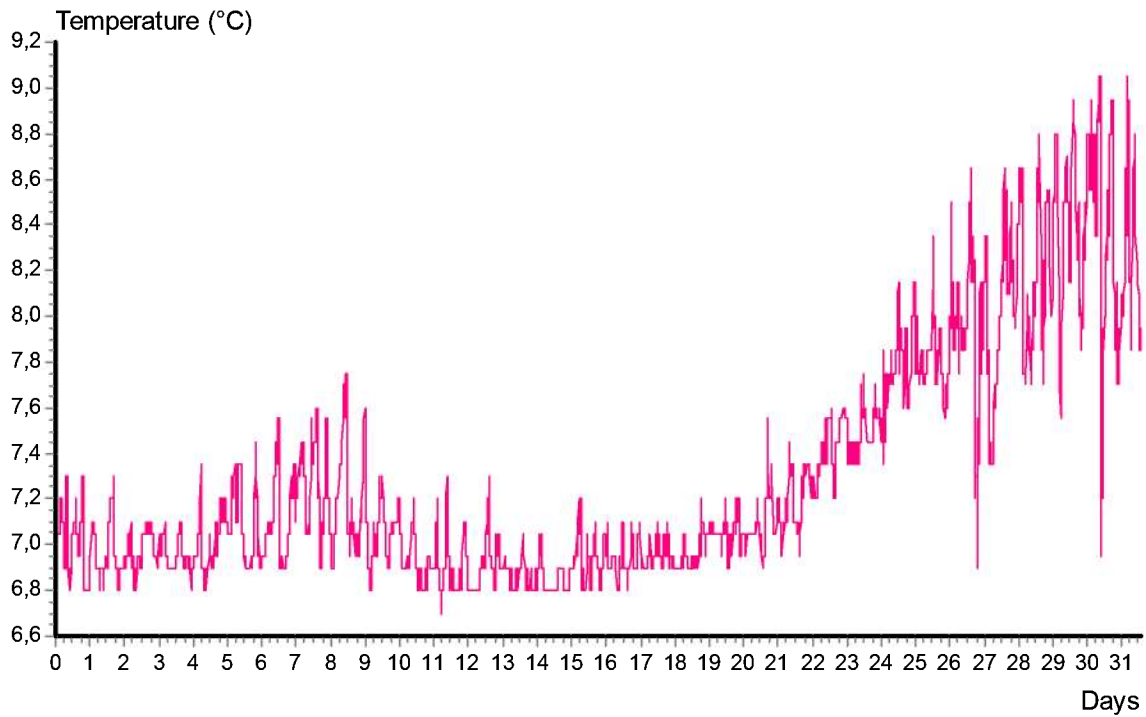
Ref. number: 913

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 4545

Data displayed from: 18:30 - 10.Jul-09 To: 07:50 - 11.Aug-09





### CURRENT SPEED

File name: Hjartøy s6 bunn juli 09.SD6

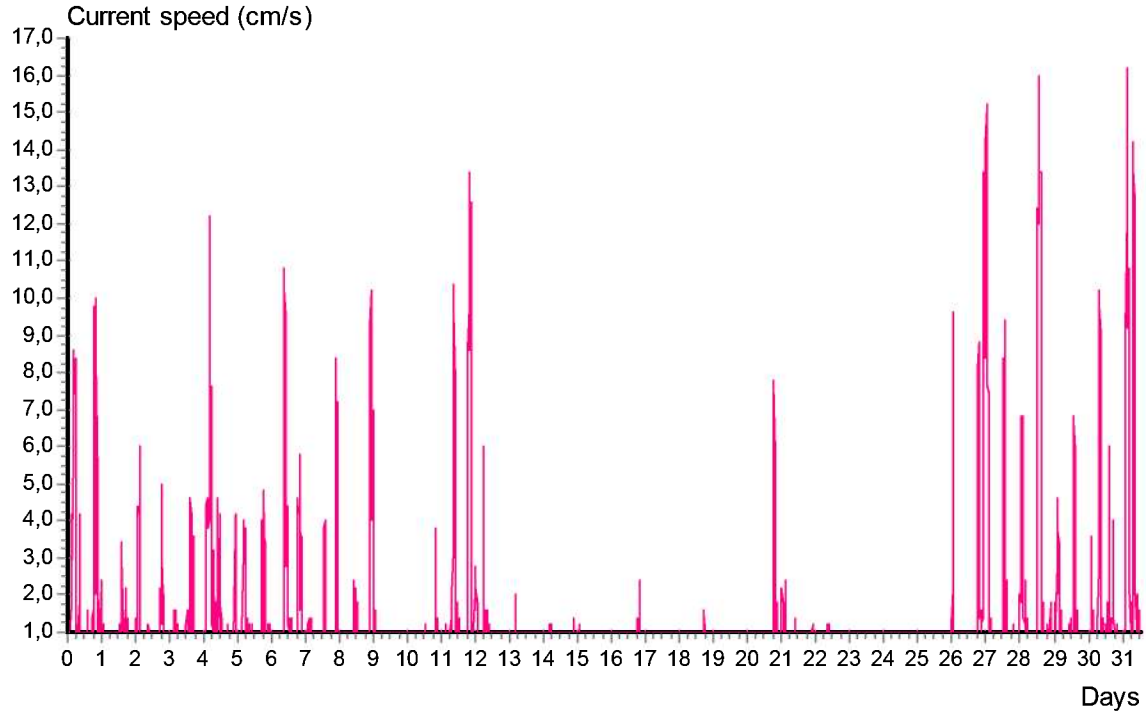
Ref. number: 913

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 4545

Data displayed from: 18:30 - 10.Jul-09 To: 07:50 - 11.Aug-09



### CURRENT SPEED BAR CHART

File name: Hjartøy s6 bunn juli 09.SD6

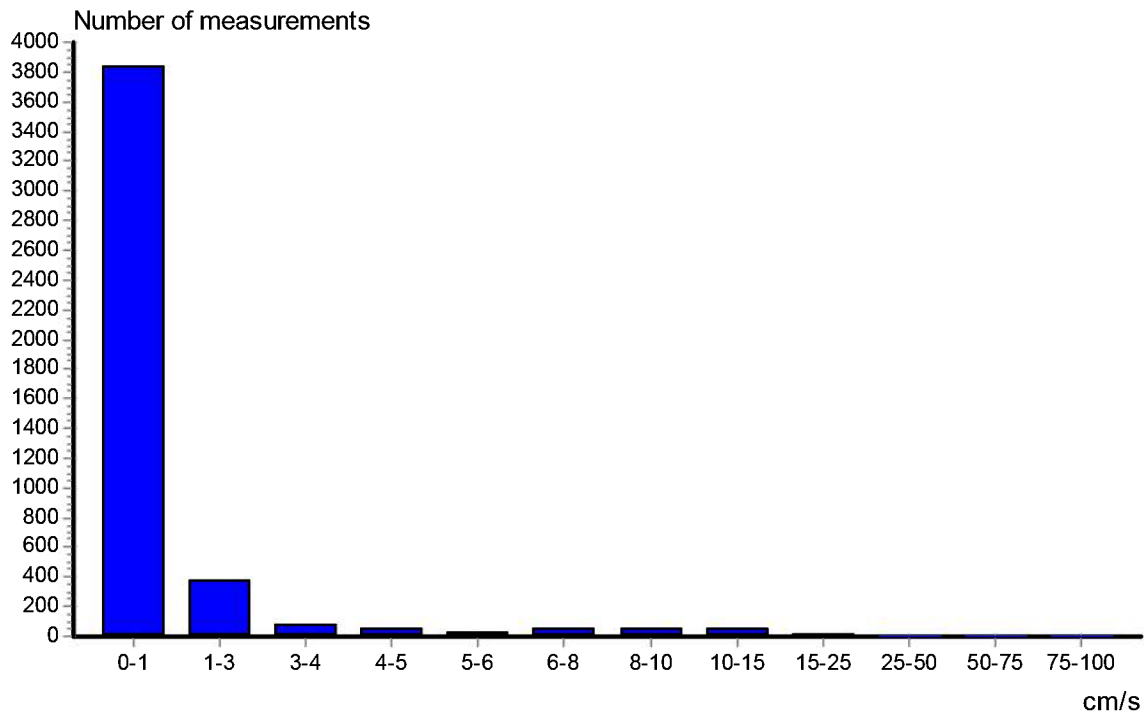
Ref. number: 913

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 4545

Data displayed from: 18:30 - 10.Jul-09 To: 07:50 - 11.Aug-09



### CURRENT DIRECTION BAR CHART

File name: Hjørtøy s6 bunn juli 09.SD6

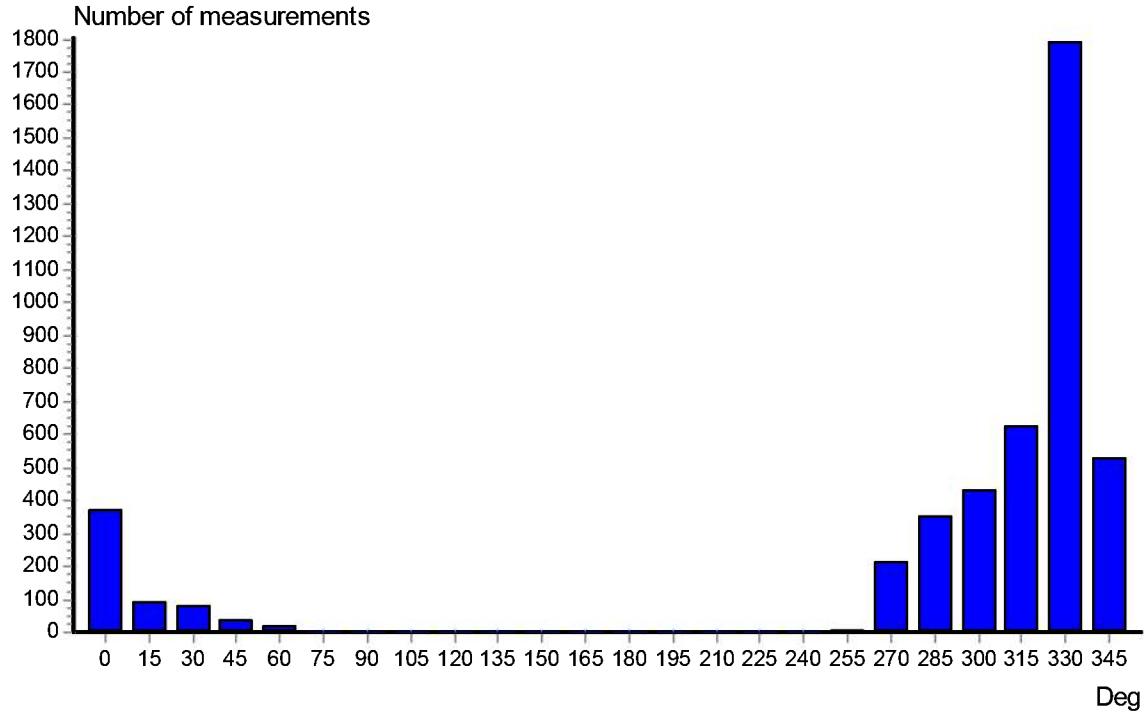
Ref. number: 913

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 4545

Data displayed from: 18:30 - 10.Jul-09 To: 07:50 - 11.Aug-09



### PROGRESSIVE VECTOR

File name: Hjørtøy s6 bunn juli 09.SD6

Ref. number: 913

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 4545

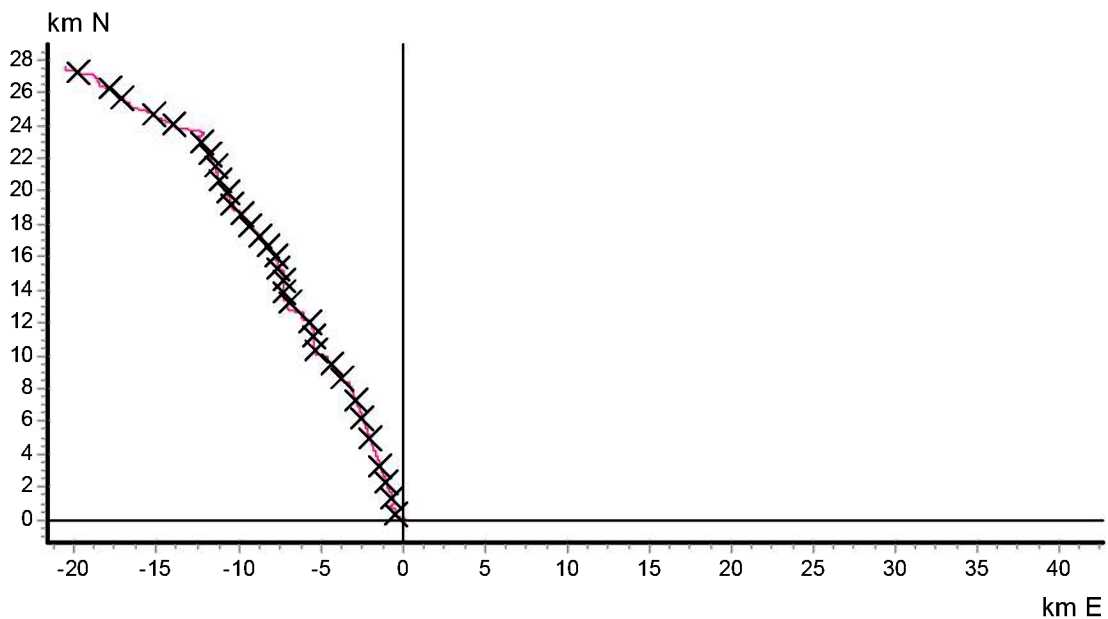
Data displayed from: 18:30 - 10.Jul-09 To: 07:50 - 11.Aug-09

Neumann parameter: 0.846

Rest speed: 1.3 cm/s

Average speed: 1.5 cm/s

Rest direction: 323 deg.



**CURRENT VELOCITY DISTRIBUTION DIAGRAM**

File name: Hjartøy s6 bunn juli 09.SD6

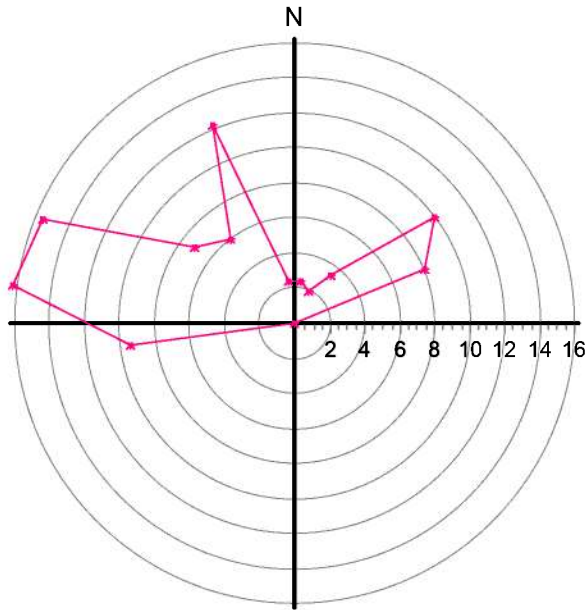
Series number: 1

Number of measurements in data set: 4545

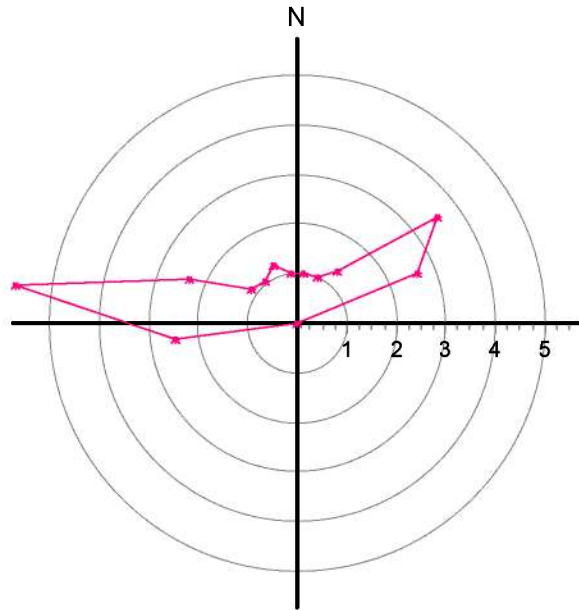
Data displayed from: 18:30 - 10.Jul-09 To: 07:50 - 11.Aug-09

Ref. number: 913

Interval time: 10 Minutes



Maximum velocity (cm/s)  
per 15 deg sector



Mean velocity (cm/s)  
per 15 deg sector

**CURRENT VELOCITY DISTRIBUTION DIAGRAM**

File name: Hjartøy s6 bunn juli 09.SD6

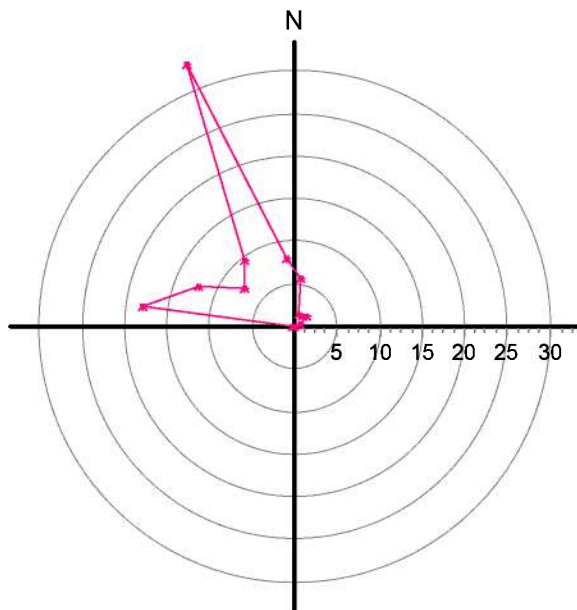
Series number: 1

Number of measurements in data set: 4545

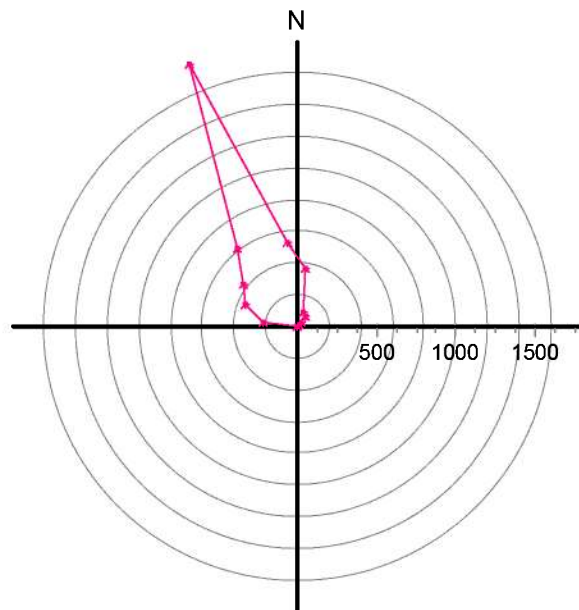
Data displayed from: 18:30 - 10.Jul-09 To: 07:50 - 11.Aug-09

Ref. number: 913

Interval time: 10 Minutes



Relative water flux (%)  
per 15 deg sector



Number of measurements  
per 15 deg sector

**STICK DIAGRAM**

File name: Hjartøy s6 bunn juli 09.SD6

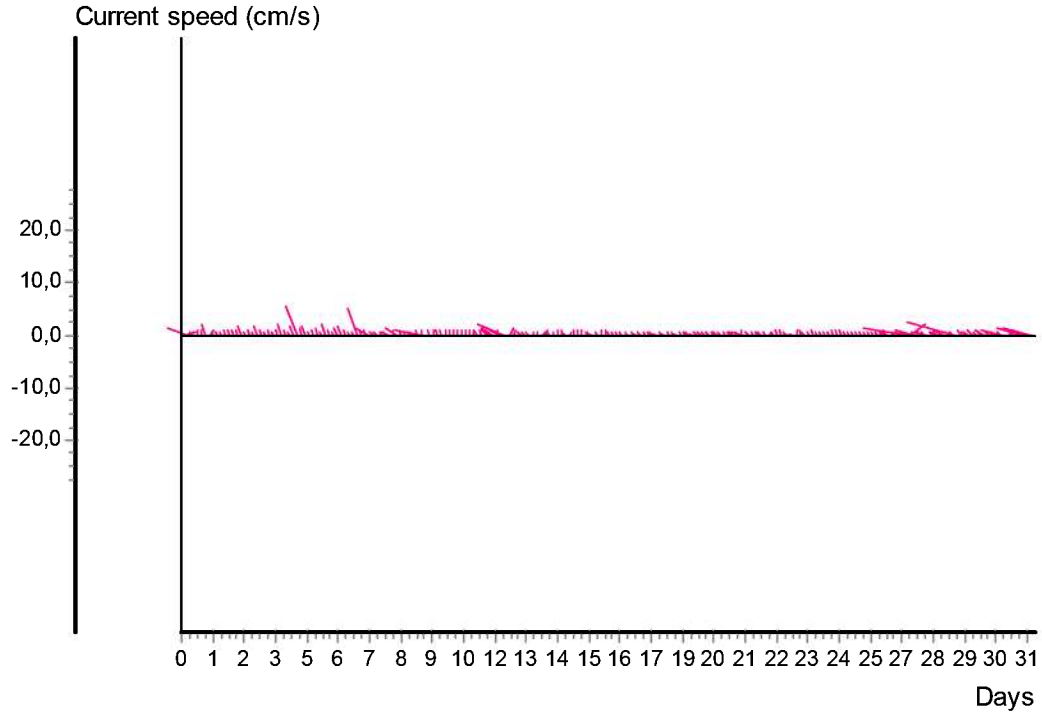
Ref. number: 913

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 4545

Data displayed from: 18:30 - 10.Jul-09 To: 07:50 - 11.Aug-09



**CURRENT SPEED / DIRECTION MATRIX**

File name: Hjartøy s6 bunn juli 09.SD6

Ref. number: 913

Series number: 1

Interval time: 10 Minutes

Number of measurements in data set: 4545

Data displayed from: 18:30 - 10.Jul-09 To: 07:50 - 11.Aug-09

	Current speed groups													Total flow	
	1	3	4	5	6	8	10	15	25	50	75	100	Sum%	m <sup>3</sup> /m <sup>2</sup>	%
0	354	18	0	0	0	0	0	0	0	0	0	0	8.2	2274	5.6
15	88	5	0	0	0	0	0	0	0	0	0	0	2.0	572	1.4
30	52	26	1	0	0	0	0	0	0	0	0	0	1.7	617	1.5
45	13	5	4	2	3	3	4	0	0	0	0	0	0.7	721	1.8
60	11	3	1	0	0	4	0	0	0	0	0	0	0.4	301	0.7
75	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
90	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
105	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
120	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
135	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
150	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
165	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
180	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
195	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
210	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
225	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
240	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0
255	4	1	0	0	0	0	1	0	0	0	0	0	0.1	89	0.2
270	63	29	14	5	7	22	32	34	7	0	0	0	4.7	7322	18.0
285	220	56	16	10	10	15	14	8	1	0	0	0	7.7	4972	12.2
300	389	33	2	2	0	5	0	0	0	0	0	0	9.5	2978	7.3
315	583	37	5	0	1	0	0	0	0	0	0	0	13.8	3996	9.8
330	1554	142	42	34	2	4	5	8	0	0	0	0	39.4	13565	33.4
345	507	24	0	0	0	0	0	0	0	0	0	0	11.7	3262	8.0
Sum%	84.4	8.3	1.9	1.2	0.5	1.2	1.2	1.1	0.2	0.0	0.0	0.0			

**STATISTICAL SUMMARY**

	Total	East / west	North / south
Mean current speed (cm/s)	1,5	0,9	1,0
Variance (cm/s) <sup>2</sup>	3,254	3,122	0,576
Standard deviation (cm/s)	1,804	1,767	0,759
Mean standard deviation	1,210	2,028	0,751
Maximum current velocity	16,2		
Minimum current velocity	1,0		
Significant max velocity	2,5		
Significant min velocity	1,0		