

RAPPORT

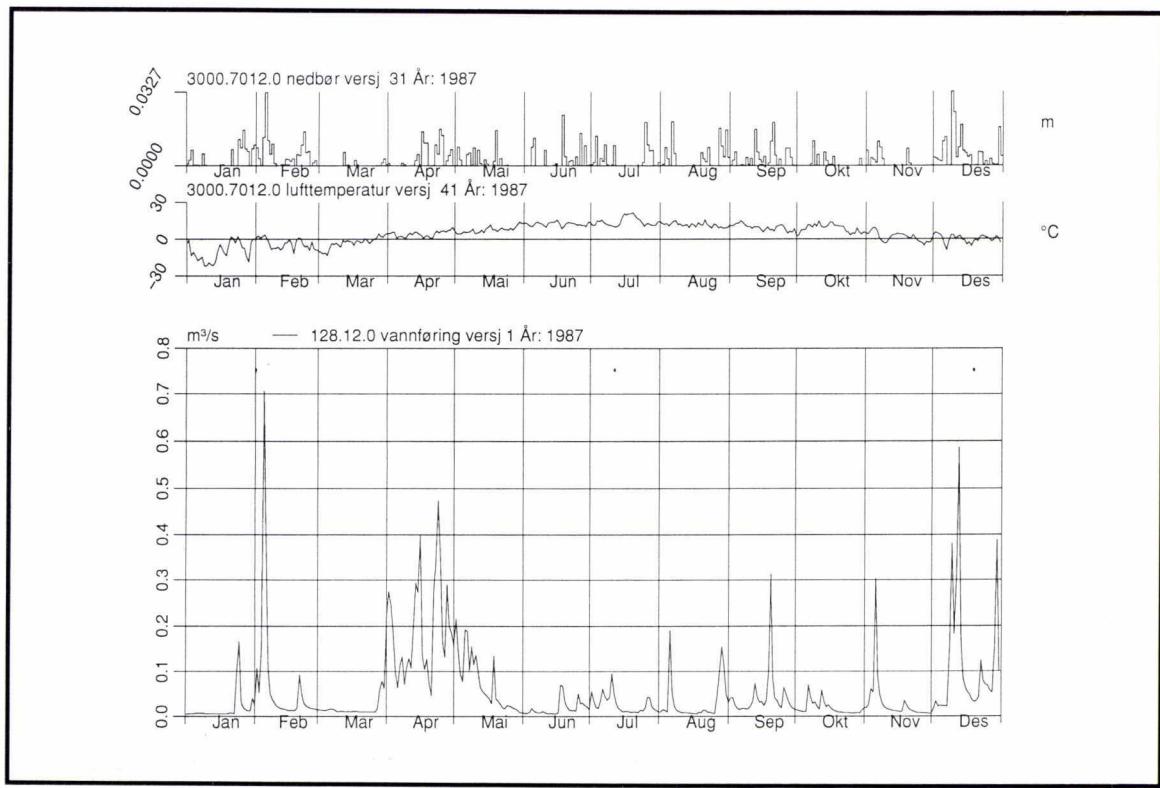
08 1995



NVE
NORGES VASSDRAGS-
OG ENERGIVERK

Leif J. Bogetveit

VANNFØRINGSOBSERVASJONER I HOLOBEKKEN



HYDROLOGISK AVDELING

TITTEL VANNFØRINGSOBSERVASJONER I HOLOBEKKEN, MÅLESTASJON 128.12 - VASSDRAGSNR. 128.3Z	RAPPORT 08-95
SAKSBEHANDLER Leif J. Bogetveit Seksjon hydrometri	DATO 08.02.95 RAPPORTEN ER ÅPEN
OPPDRAVGSGIVER STATENS FORSKNINGSSTASJONER I LANDBRUK KVITHAMAR FORSKNINGSSTASJON 7500 STJØRDAL	OPPLAG 10

SAMMENDRAG

Vannføringsobservasjoner i Holobekken 1985-1993. Data er isredusert, komplettert og kvalitetskontrollert.

Vannføringsdata vedlegges som grafisk fremstilling og som tabellutskrift.

Nedbørs- og lufttemperaturdata samt sammenligningsstasjon vedlegges også.

EMNEORD/SUBJECT TERMS
OPPDRAVGSRAPPOR
VANNFØRINGSOBSERVASJONER
DEL AV FORSKNINGSPROSJEKT

ANSVARLIG UNDERSKRIFT



Arne Tollan
Avd. direktør

MÅLESTASJON 128.12 HOLOBEKKEN - KOMMENTARER TIL VANNFØRINGSDATA VASSDRAGSNUMMER 128.3Z

Registrering av vannføring i Holobekken startet den 25.06.1985 og data er i denne omgang oppdatert ut 1993.

Observasjonene er utført av Kvithamar Forskningsstasjon, Stjørdal. NVE, Hydrologisk avdeling har bistått som konsulent i samband med bygging og drift av vannføringsstasjonen. Vi har bistått med innkjøring av findata med 60 min tidsoppløsning eller finere i vår database. Vi har kvalitetsanalysert data som blant annet omfatter isreduksjon og komplettering av manglende data. Data er ført til vår database for døgndata, HYDAG.

Inspeksjon av målestasjon er utført ca. en gang pr. uke.

Det ble etablert et V-overløp i sommeren 1985 og vannstanden er registrert kontinuerlig ved hjelp av datalogger med limnograf som backup. Crump-overløp ble montert i november 1990.

Stasjonen er etablert i et område med leirjord.

Flere flommer i november /desember 1990 og i 1991 har medført usikre observasjoner på grunn av lekkasjer og erosjon under og på siden av måleprofilet samt setninger under profilet. Problemer vedrørende crumpoverløpet står beskrevet i observasjonsbok. Det som ikke alltid står omtalt i observasjonsboka er om eller når tid feilen er rettet.

De vanskelige forholdene i 1990-91 er imidlertid reparert i flere omganger. Det er bestemt å ikke ta med vannføringsdata for 1991 på grunn av periodevis dårlig datakvalitet og manglende data. 1991 var dessuten et år med mange tiltak i nedbørsfeltet og flere måleparametre ble ikke målt i forskningsprosjektet.

Datagrunnlag for komplettering og retting i data:

Måleserie:	128.12.0.1001.1 Holobekken
UTM-koordinater :	32V.630300.7080950, kartblad 1722-IV
Observasjonsperiode:	25.06.85-31.12.1993
Feltareal:	1.66 km ² (innmark, skog, myr)
Høydenivå:	72 - 175 moh, vestvendt
Spesifikt middelavløp:	Ca. 25 l/s*km ²
Isforhold:	Isoppstuvet enkelte vintre
Måleserie:	128.13.0.1001.1 Musum Midtre
Observasjonsperiode:	26.06.85-04.12.1988
Feltareal:	1.77 km ² (innmark, skog, myr)
Høydenivå:	Ca. 72 - 175 moh, vestvendt
Spesifikt middelavløp:	Ca. 25 l/s*km ²
Isforhold:	Isoppstuvet enkelte vintre

Måleserie:	123.29.0.1001.2 Svartjørnbekken ved Jonsvatn
Observasjonsperiode:	1971-1993
Feltareal:	3.403 km ² (skog, myr)
Høydenivå:	279- 345 moh
Spesifikt middelavløp:	Ca. 29 l/s*km ²
Isforhold:	Isfritt i måleprofil

Ut fra måleserie 123.29.0.1001.2 Svartjørnbekken, har vi laget en kunstig, skalert avløpsserie tilpasset Holobekkens nedbørsfelt som er kalt 128.12.0.1001.2 (Holobekken versjon 2).

Meteorologiske data:

Vi har valgt å bruke klimadata fra Meteorologisk Institutt for målestasjon 7012 Verdal- Stiklestad (1985-1991) og målestasjon 7085 Kjøbli i Snåsa (1992-1993). Verdal- Stiklestad er oppdatert ut 1991. Midlere døgnnedbør og middeltemperatur er fremstilt grafisk og i tabellform.

Samhørende data for Holobekken, Svartjørnbekken og Musum Midtre er benyttet. Holobekken og Musum ligger noen hundre meter fra hverandre og er meget bra korrelert for den felles observasjonsperioden 1985-87). Holobekken og Svartjørnbekken går brukbart sammen for perioden 1987-1989 og noe dårligere for 1990 og 1992-93. På grunn av stasjonenes forskjellige høydenivå er vårfloommen ikke sammenfallende. Høstflommer viser tildels god sammhørighet men med noe forskjellig utslag i flomperioder da de to feltene er noe forskjellig eksponert for nedbør på grunn av forskjellig topografi og innbyrdes avstand.

Fordampning fra Holofeltet anslås til 20-40% om sommeren og 0-10 % om vinteren.

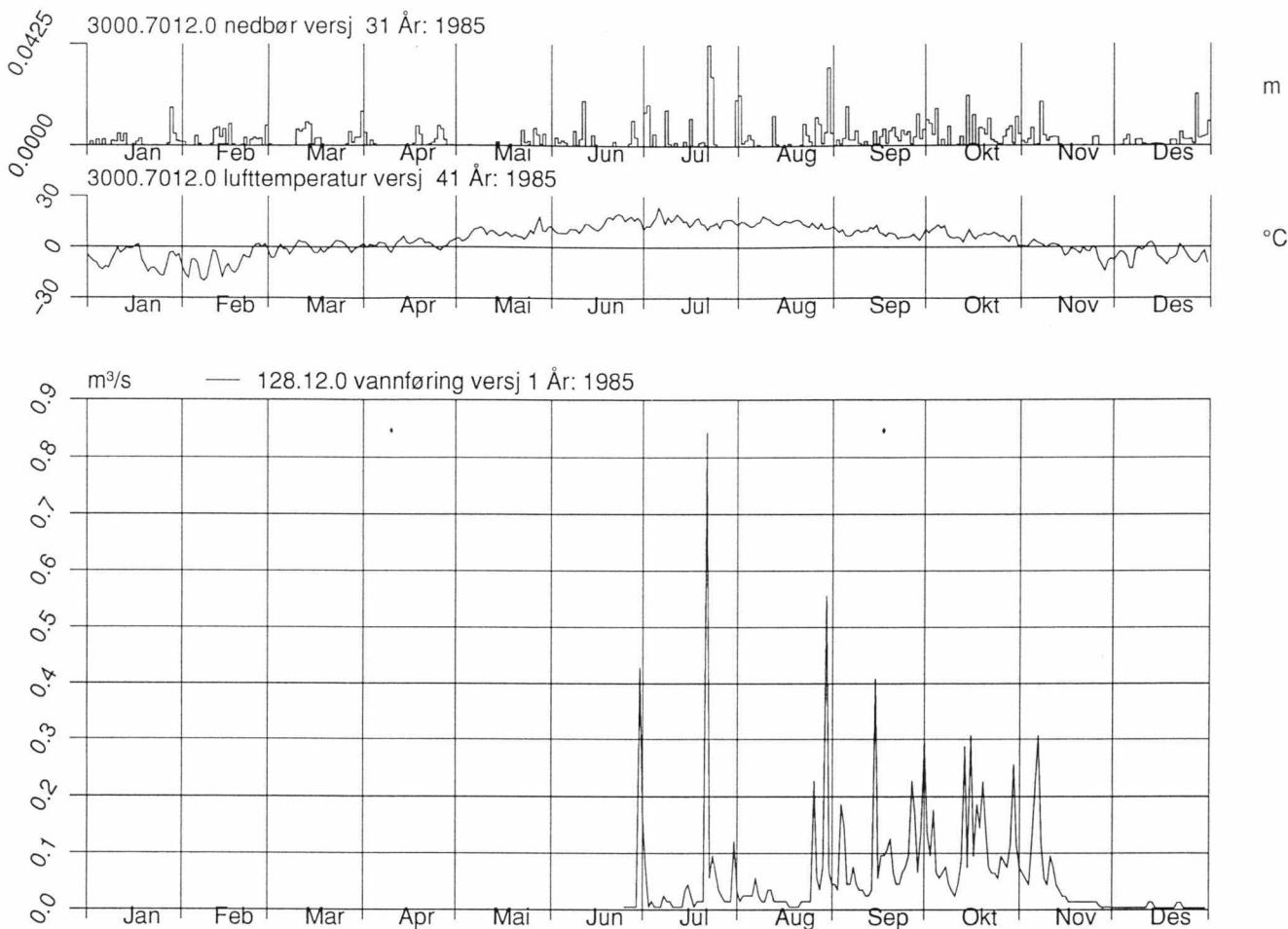
Representativitet mellom nedbørstasjon og arealnedbør for et nedbørsfelt er forøvrig generelt usikker.

PRESENTASJON AV DATA

Følgende vedleggsavsnitt er tatt med i rapporten:

- **Vedlegg A:** Vannføringsdata i m³/s for Holobekken, grafisk og i tabellform. Nedbør og lufttemperatur fra klimastasjon (1985-90 og 1992-93).
- **Vedlegg B:** Vannføringsdata, grafisk, for Holobekken og Musumbekken / Svartjørnbekken fremstilt i samme diagram i enhet m³/s og spesifik vannføring i l/s* km² samt nedbør og lufttemperatur (1985-90 og 1992-93).
- **Vedlegg C:** Tabellutskrift av døgnmiddelnedbør og lufttemperatur for 1985-93 for Verdal-Stiklestad / Kjøbli i Snåsa.

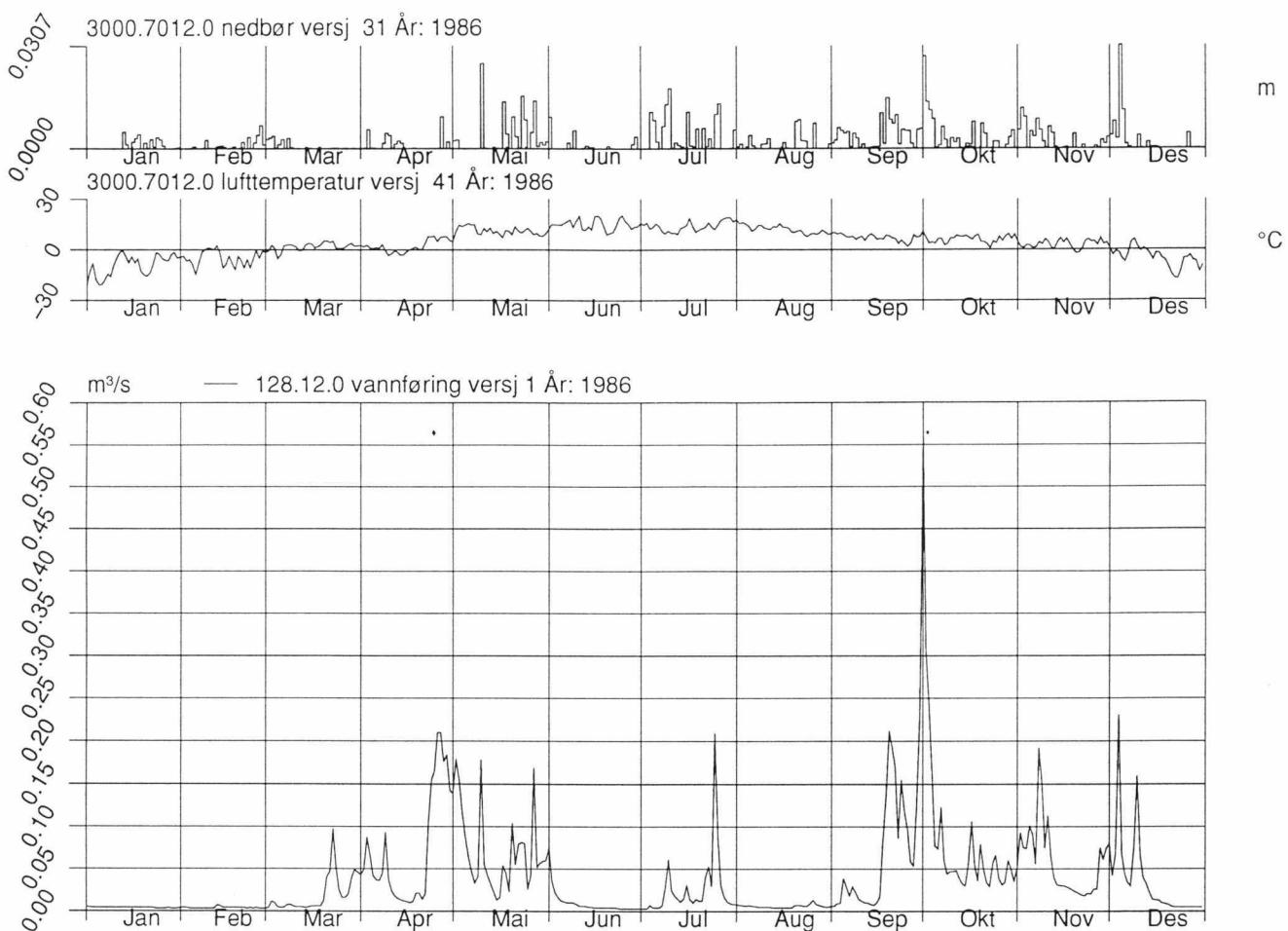
Vedlegg A - 8 sider



HYDROLOGISK AVDELING, NVE.
 Vassdragsområde: 128 Stasjonsnavn: HOLOBEKKEN DATO: 25/1/1995
 Hovednummer: 12 Parameter: 1001 vannføring
 Punktnummer: 0 Versjon: 1 Utm-sone: 32
 Høyde: 0.00 Kartblad: 1722-IV Utm-øst: 630300
 DØGNMIDDEL - HYDAG_POINT Utm-nord: 7080950
 Enhett: m³/s Naturlig nedbørfelt: 1.70 km²

DØGNTABELL - HYDAG_POINT

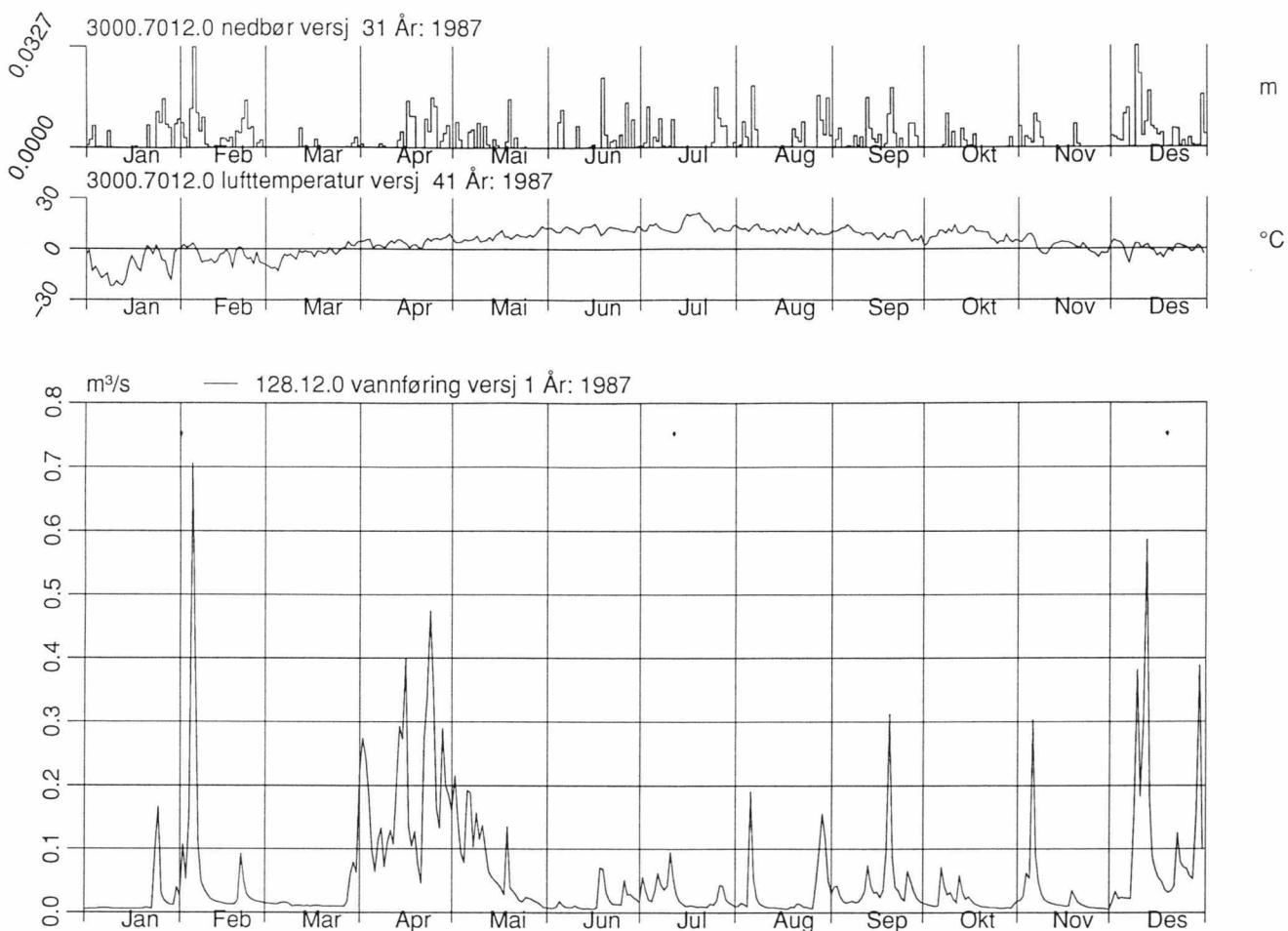
1985	JAN	FEB	MAR	APR	MAI	JUN	JUL	AUG	SEP	OKT	NOV	DES
1	---	---	---	---	---	---	0.167	0.035	0.045	0.298	0.075	0.004
2	---	---	---	---	---	---	0.076	0.015	0.045	0.136	0.065	0.004
3	---	---	---	---	---	---	0.005	0.025	0.035	0.096	0.055	0.004
4	---	---	---	---	---	---	0.015	0.025	0.187	0.177	0.044	0.004
5	---	---	---	---	---	---	0.005	0.025	0.146	0.066	0.125	0.004
6	---	---	---	---	---	---	0.005	0.025	0.045	0.056	0.216	0.004
7	---	---	---	---	---	---	0.005	0.056	0.045	0.066	0.307	0.004
8	---	---	---	---	---	---	0.025	0.025	0.076	0.076	0.115	0.004
9	---	---	---	---	---	---	0.015	0.015	0.045	0.045	0.055	0.004
10	---	---	---	---	---	---	0.015	0.015	0.035	0.034	0.044	0.004
11	---	---	---	---	---	---	0.005	0.035	0.035	0.024	0.095	0.004
12	---	---	---	---	---	---	0.005	0.035	0.025	0.044	0.075	0.004
13	---	---	---	---	---	---	0.005	0.015	0.025	0.085	0.044	0.014
14	---	---	---	---	---	---	0.005	0.015	0.035	0.287	0.034	0.013
15	---	---	---	---	---	---	0.035	0.015	0.409	0.075	0.024	0.003
16	---	---	---	---	---	---	0.045	0.015	0.056	0.307	0.024	0.003
17	---	---	---	---	---	---	0.025	0.015	0.096	0.095	0.014	0.003
18	---	---	---	---	---	---	0.005	0.005	0.096	0.186	0.014	0.003
19	---	---	---	---	---	---	0.015	0.005	0.106	0.145	0.014	0.003
20	---	---	---	---	---	---	0.015	0.005	0.126	0.226	0.014	0.003
21	---	---	---	---	---	---	0.015	0.005	0.066	0.145	0.014	0.003
22	---	---	---	---	---	---	0.843	0.015	0.045	0.075	0.014	0.013
23	---	---	---	---	---	---	0.056	0.015	0.045	0.065	0.014	0.013
24	---	---	---	---	---	---	0.096	0.015	0.066	0.065	0.014	0.003
25	---	---	---	---	---	0.005	0.066	0.015	0.076	0.055	0.014	0.003
26	---	---	---	---	---	0.005	0.035	0.227	0.096	0.095	0.014	0.003
27	---	---	---	---	---	0.005	0.025	0.056	0.227	0.085	0.007	0.003
28	---	---	---	---	---	0.005	0.015	0.035	0.167	0.075	0.004	0.003
29	---	---	---	---	---	0.005	0.015	0.076	0.066	0.115	0.005	0.003
30	---	---	---	---	---	0.429	0.015	0.556	0.136	0.257	0.005	0.003
31	---	---	---	---	---	---	0.121	0.066	—	0.115	—	0.003
MIDDEL	---	---	---	---	---	---	0.058	0.048	0.090	0.118	0.052	0.005
MAX	---	---	---	---	---	---	0.843	0.556	0.409	0.307	0.307	0.014
MIN	---	---	---	---	---	---	0.005	0.005	0.025	0.024	0.004	0.003



HYDROLOGISK AVDELING, NVE.
Vassdragsområde: 128 Stasjonsnavn: HOLOBEKKEN Utm-sone: 32
Hovednummer: 12 Parameter: 1001 vannføring Utm-øst: 630300
Punktnummer: 0 Versjon: 1 Utm-nord: 7080950
Høyde: 0.00 Kartblad: 1722-IV Naturlig nedbørfelt: 1.70 km²
DØGNMIDDEL - HYDAG_POINT Enhet: m³/s

DØGNTABELL - HYDAG_POINT

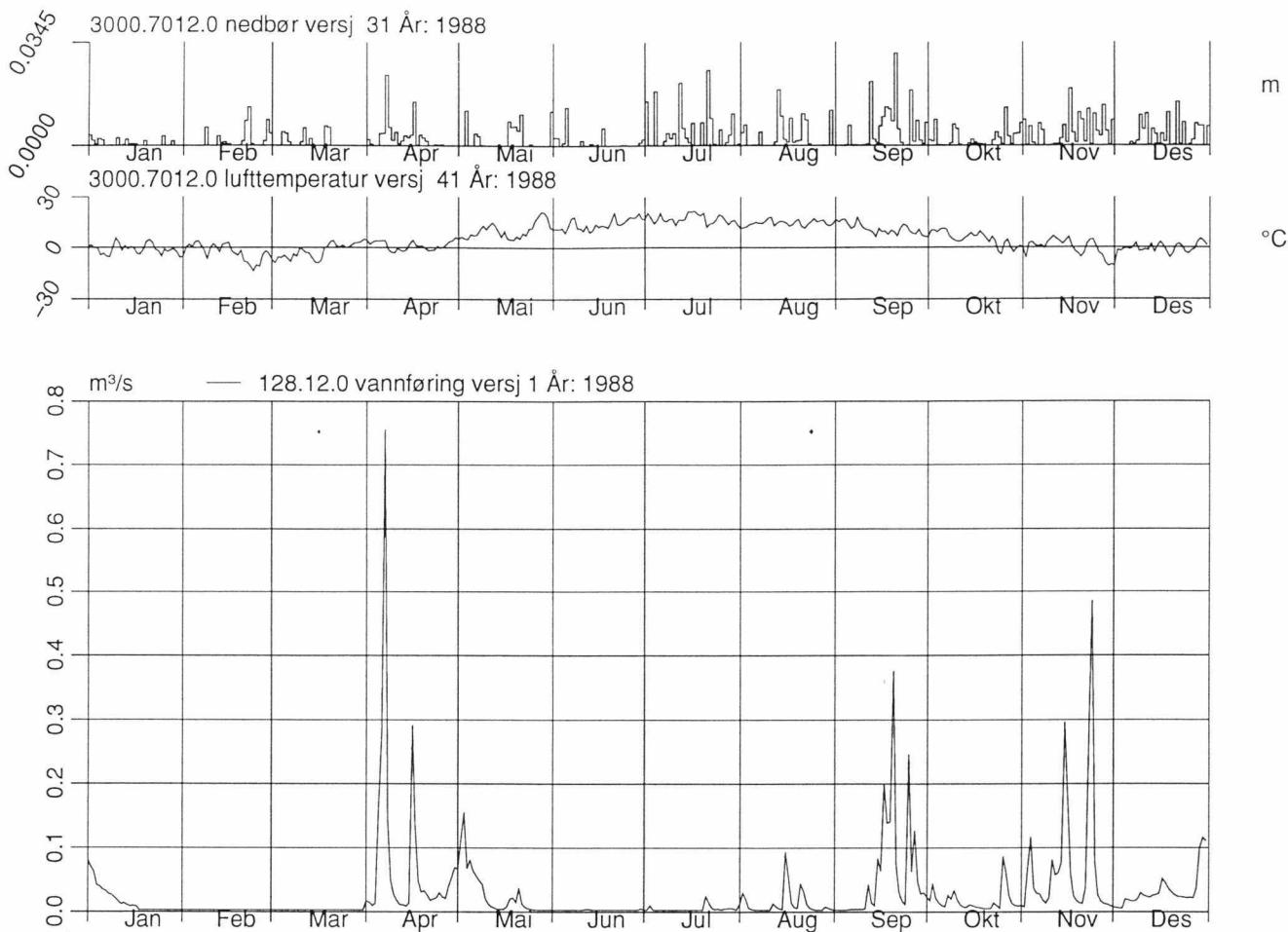
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OKT	NOV	DES
1	0.005	0.004	0.003	0.043	0.139	0.075	0.003	0.008	0.006	0.563	0.051	0.080
2	0.005	0.004	0.004	0.049	0.179	0.035	0.003	0.007	0.006	0.307	0.093	0.042
3	0.004	0.004	0.011	0.087	0.155	0.022	0.003	0.007	0.009	0.245	0.075	0.067
4	0.004	0.003	0.010	0.066	0.116	0.016	0.007	0.006	0.009	0.166	0.074	0.230
5	0.004	0.003	0.005	0.042	0.086	0.012	0.004	0.007	0.039	0.077	0.101	0.068
6	0.004	0.003	0.004	0.037	0.063	0.011	0.004	0.006	0.029	0.074	0.091	0.045
7	0.004	0.003	0.004	0.036	0.046	0.010	0.004	0.006	0.018	0.123	0.056	0.034
8	0.004	0.003	0.007	0.045	0.033	0.010	0.007	0.005	0.029	0.059	0.192	0.030
9	0.004	0.003	0.008	0.093	0.041	0.010	0.029	0.005	0.022	0.044	0.152	0.074
10	0.004	0.003	0.006	0.038	0.178	0.008	0.061	0.005	0.014	0.047	0.075	0.160
11	0.004	0.003	0.005	0.024	0.055	0.006	0.024	0.005	0.012	0.047	0.113	0.067
12	0.004	0.003	0.005	0.018	0.043	0.006	0.018	0.005	0.010	0.048	0.064	0.040
13	0.004	0.007	0.005	0.015	0.033	0.006	0.014	0.004	0.010	0.039	0.040	0.033
14	0.004	0.006	0.004	0.013	0.023	0.005	0.011	0.004	0.008	0.032	0.031	0.022
15	0.004	0.004	0.005	0.012	0.013	0.005	0.015	0.004	0.007	0.030	0.030	0.014
16	0.004	0.004	0.006	0.011	0.016	0.004	0.031	0.004	0.010	0.057	0.030	0.013
17	0.004	0.004	0.006	0.010	0.054	0.004	0.014	0.004	0.017	0.106	0.029	0.013
18	0.004	0.004	0.006	0.011	0.045	0.004	0.010	0.004	0.086	0.055	0.027	0.010
19	0.004	0.004	0.006	0.021	0.023	0.004	0.014	0.004	0.134	0.036	0.025	0.009
20	0.004	0.004	0.012	0.021	0.104	0.004	0.012	0.007	0.212	0.079	0.023	0.008
21	0.004	0.004	0.040	0.014	0.055	0.004	0.012	0.007	0.192	0.051	0.021	0.006
22	0.004	0.004	0.047	0.020	0.079	0.004	0.040	0.007	0.170	0.034	0.019	0.005
23	0.004	0.003	0.097	0.105	0.081	0.004	0.053	0.006	0.086	0.029	0.018	0.005
24	0.003	0.004	0.053	0.155	0.080	0.003	0.029	0.006	0.155	0.057	0.021	0.005
25	0.003	0.003	0.025	0.165	0.026	0.003	0.209	0.009	0.118	0.066	0.020	0.005
26	0.003	0.004	0.016	0.210	0.042	0.003	0.087	0.013	0.098	0.039	0.026	0.005
27	0.003	0.003	0.016	0.210	0.169	0.003	0.030	0.008	0.059	0.031	0.026	0.005
28	0.004	0.003	0.020	0.176	0.052	0.003	0.017	0.007	0.053	0.034	0.075	0.005
29	0.003	0.039	0.184	0.057	0.003	0.011	0.006	0.124	0.060	0.061	0.005	
30	0.003	0.049	0.142	0.059	0.003	0.009	0.005	0.226	0.050	0.074	0.005	
31	0.003		0.046		0.060		0.008	0.005		0.035		0.005
MIDDEL	0.004	0.004	0.018	0.069	0.071	0.010	0.026	0.006	0.066	0.088	0.058	0.036
MAX	0.005	0.007	0.097	0.210	0.179	0.075	0.209	0.013	0.226	0.563	0.192	0.230
MIN	0.003	0.003	0.003	0.010	0.013	0.003	0.003	0.004	0.006	0.029	0.018	0.005



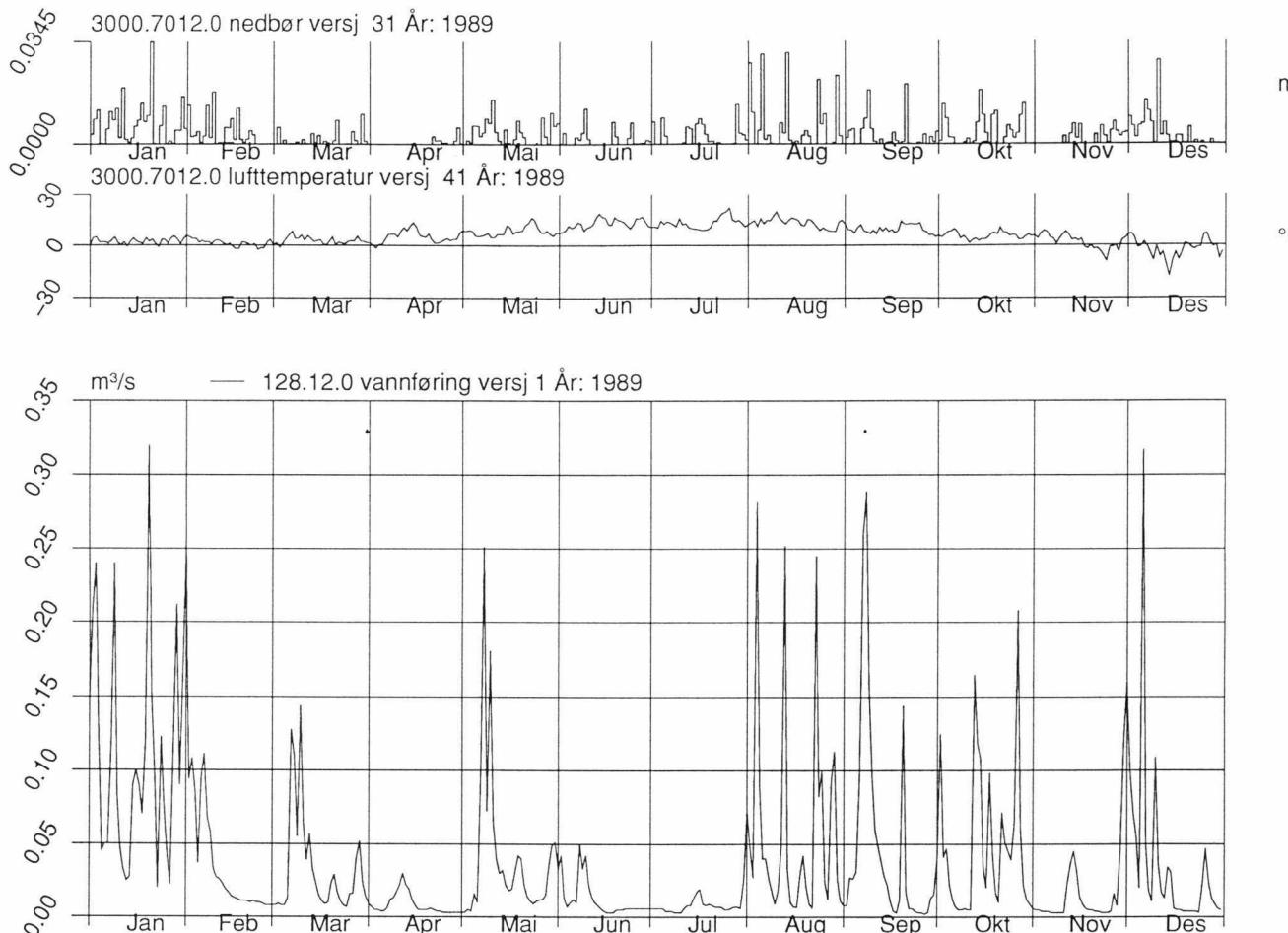
HYDROLOGISK AVDELING, NVE.
 Vassdragsområde: 128 Stasjonsnavn: HOLOBEKKEN Utm-sone: 32
 Hovednummer: 12 Parameter: 1001 vannføring Utm-øst: 630300
 Punktnummer: 0 Versjon: 1 Utm-nord: 7080950
 Høyde: 0.00 Kartblad: 1722-IV Naturlig nedbørfelt: 1.70 km²
 DØGNMIDDEL - HYDAG_POINT Enhet: m³/s

DØGNTABELL - HYDAG_POINT

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DES
1	0.005	0.026	0.015	0.223	0.160	0.008	0.016	0.010	0.031	0.015	0.018	0.006
2	0.005	0.107	0.014	0.275	0.216	0.007	0.056	0.010	0.041	0.014	0.019	0.017
3	0.006	0.052	0.014	0.244	0.144	0.007	0.034	0.015	0.042	0.012	0.025	0.034
4	0.006	0.152	0.013	0.184	0.093	0.009	0.020	0.013	0.026	0.011	0.062	0.022
5	0.006	0.706	0.013	0.097	0.078	0.018	0.018	0.010	0.018	0.010	0.053	0.024
6	0.007	0.377	0.015	0.064	0.192	0.012	0.035	0.191	0.015	0.011	0.303	0.023
7	0.007	0.109	0.016	0.113	0.189	0.009	0.062	0.053	0.017	0.071	0.090	0.023
8	0.007	0.049	0.016	0.133	0.103	0.008	0.044	0.023	0.018	0.042	0.047	0.022
9	0.007	0.037	0.014	0.071	0.157	0.008	0.036	0.014	0.016	0.028	0.029	0.150
10	0.006	0.029	0.010	0.110	0.115	0.011	0.042	0.011	0.017	0.032	0.020	0.381
11	0.006	0.022	0.011	0.129*	0.137	0.008	0.095	0.009	0.023	0.021	0.017	0.183
12	0.006	0.019	0.011	0.107	0.098	0.007	0.052	0.008	0.034	0.016	0.015	0.302
13	0.006	0.017	0.011	0.200	0.064	0.006	0.028	0.008	0.074	0.059	0.014	0.587
14	0.006	0.016	0.010	0.293	0.056	0.007	0.018	0.008	0.043	0.033	0.012	0.180
15	0.006	0.015	0.011	0.273	0.050	0.006	0.014	0.007	0.031	0.021	0.012	0.087
16	0.006	0.013	0.010	0.400	0.045	0.006	0.010	0.007	0.033	0.025	0.011	0.067
17	0.006	0.013	0.011	0.135	0.039	0.008	0.011	0.006	0.024	0.019	0.010	0.054
18	0.006	0.013	0.011	0.104	0.028	0.070	0.011	0.006	0.035	0.014	0.011	0.049
19	0.006	0.013	0.011	0.127	0.135	0.068	0.010	0.009	0.097	0.012	0.035	0.036
20	0.006	0.019	0.010	0.076	0.039	0.031	0.009	0.008	0.313	0.010	0.025	0.032
21	0.008	0.093	0.010	0.046	0.034	0.021	0.010	0.014	0.086	0.009	0.016	0.034
22	0.007	0.050	0.010	0.273	0.027	0.014	0.009	0.013	0.040	0.009	0.013	0.042
23	0.006	0.029	0.010	0.338	0.019	0.013	0.009	0.009	0.035	0.008	0.011	0.125
24	0.102	0.023	0.010	0.474	0.017	0.013	0.014	0.009	0.023	0.008	0.009	0.079
25	0.167	0.020	0.010	0.358	0.024	0.012	0.012	0.007	0.019	0.008	0.008	0.071
26	0.030	0.018	0.010	0.166	0.023	0.051	0.019	0.007	0.065	0.007	0.008	0.069
27	0.019	0.017	0.010	0.132	0.021	0.028	0.043	0.047	0.050	0.007	0.007	0.057
28	0.015	0.016	0.017	0.290	0.018	0.029	0.042	0.097	0.034	0.007	0.007	0.053
29	0.012		0.059	0.200	0.016	0.024	0.021	0.156	0.023	0.008	0.007	0.155
30	0.012		0.079	0.184	0.012	0.021	0.016	0.116	0.018	0.007	0.006	0.389
31	0.040		0.062		0.008		0.013	0.051		0.013		0.102
MIDDEL	0.017	0.074	0.017	0.194	0.076	0.018	0.027	0.031	0.045	0.018	0.031	0.111
MAX	0.167	0.706	0.079	0.474	0.216	0.070	0.095	0.191	0.313	0.071	0.303	0.587
MIN	0.005	0.013	0.010	0.046	0.008	0.006	0.009	0.006	0.015	0.007	0.006	0.006



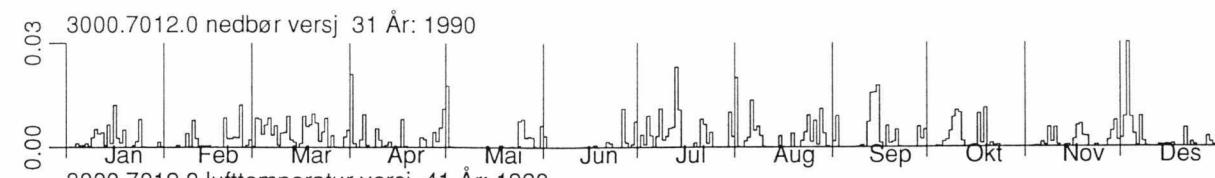
HYDROLOGISK AVDELING, NVE.												DATO: 25/1/1995	
Vassdragsområde:	128	Stasjonsnavn:	HOLOBEKKEN	Utm-sone:	32								
Hovednummer:	12	Parameter:	1001 vannføring	Utm-øst:	630300								
Punktnummer:	0	Versjon:	1	Utm-nord:	7080950								
Høyde:	0.00	Kartblad:	1722-IV	Naturlig nedbørfelt:	1.70	km ²							
DØGNMIDDEL - HYDAG_POINT		Enhet:	m ³ /s										
DØGNTABELL - HYDAG_POINT													
1988	JAN	FEB	MAR	APR	MAI	JUN	JUL	AUG	SEP	OKT	NOV	DES	
1	0.081	0.003	0.003	0.017	0.067	0.003	0.003	0.012	0.003	0.023	0.010	0.008	
2	0.071	0.003	0.003	0.015	0.115	0.003	0.003	0.030	0.003	0.018	0.008	0.007	
3	0.063	0.003	0.003	0.010	0.155	0.003	0.010	0.020	0.003	0.044	0.066	0.006	
4	0.042	0.003	0.003	0.013	0.068	0.003	0.003	0.006	0.003	0.021	0.117	0.006	
5	0.040	0.003	0.003	0.160	0.081	0.003	0.003	0.004	0.003	0.014	0.037	0.020	
6	0.035	0.003	0.003	0.283	0.064	0.003	0.003	0.003	0.004	0.010	0.029	0.019	
7	0.033	0.003	0.003	0.756	0.056	0.003	0.003	0.003	0.004	0.008	0.028	0.017	
8	0.028	0.003	0.003	0.145	0.049	0.003	0.003	0.003	0.004	0.026	0.019	0.017	
9	0.027	0.003	0.003	0.050	0.043	0.003	0.003	0.003	0.004	0.020	0.014	0.020	
10	0.022	0.003	0.003	0.027	0.021	0.003	0.003	0.003	0.004	0.034	0.022	0.030	
11	0.017	0.003	0.003	0.018	0.012	0.003	0.003	0.003	0.005	0.019	0.081	0.026	
12	0.012	0.003	0.003	0.011	0.008	0.004	0.003	0.013	0.043	0.011	0.058	0.024	
13	0.014	0.003	0.003	0.011	0.006	0.004	0.003	0.008	0.014	0.008	0.061	0.023	
14	0.011	0.003	0.003	0.009	0.004	0.003	0.003	0.005	0.010	0.007	0.077	0.026	
15	0.009	0.003	0.003	0.013	0.004	0.003	0.003	0.004	0.083	0.011	0.296	0.027	
16	0.010	0.003	0.003	0.291	0.004	0.003	0.003	0.094	0.064	0.010	0.179	0.029	
17	0.009	0.003	0.003	0.133	0.008	0.003	0.003	0.057	0.201	0.008	0.061	0.052	
18	0.003	0.003	0.003	0.049	0.020	0.003	0.003	0.014	0.139	0.007	0.025	0.046	
19	0.003	0.003	0.003	0.031	0.022	0.003	0.003	0.007	0.140	0.006	0.018	0.037	
20	0.003	0.003	0.003	0.033	0.015	0.003	0.003	0.006	0.376	0.005	0.014	0.031	
21	0.003	0.003	0.003	0.026	0.037	0.003	0.025	0.044	0.074	0.005	0.013	0.027	
22	0.003	0.003	0.003	0.018	0.012	0.003	0.014	0.032	0.031	0.005	0.038	0.024	
23	0.003	0.003	0.003	0.020	0.007	0.003	0.006	0.012	0.017	0.014	0.293	0.024	
24	0.003	0.003	0.003	0.022	0.005	0.003	0.004	0.006	0.011	0.010	0.486	0.023	
25	0.003	0.003	0.003	0.030	0.004	0.003	0.005	0.004	0.246	0.006	0.079	0.022	
26	0.003	0.003	0.003	0.023	0.003	0.003	0.003	0.003	0.063	0.086	0.027	0.023	
27	0.003	0.003	0.003	0.021	0.003	0.003	0.005	0.003	0.127	0.061	0.017	0.022	
28	0.003	0.003	0.003	0.040	0.003	0.003	0.005	0.003	0.047	0.025	0.013	0.038	
29	0.003	0.003	0.003	0.054	0.003	0.003	0.006	0.008	0.028	0.013	0.012	0.100	
30	0.003	0.003	0.003	0.069	0.003	0.005	0.005	0.006	0.030	0.010	0.010	0.116	
31	0.003		0.003		0.003			0.004		0.009		0.111	
MIDDEL	0.018	0.003	0.003	0.078	0.031	0.003	0.005	0.014	0.059	0.019	0.074	0.029	
MAX	0.081	0.003	0.003	0.756	0.155	0.004	0.025	0.094	0.376	0.086	0.486	0.116	
MIN	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.005	0.008	0.006	



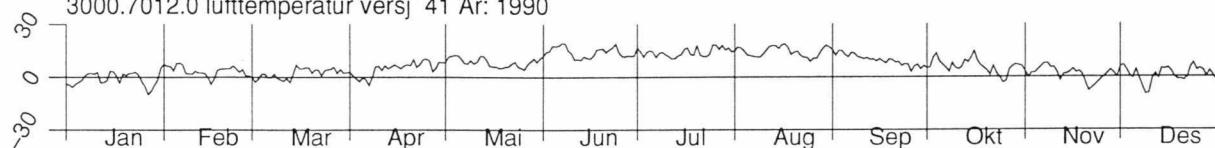
HYDROLOGISK AVDELING, NVE.
 Vassdragsområde: 128 Stasjonsnavn: HOLOBEKKEN DATO: 25/1/1995
 Hovednummer: 12 Parameter: 1001 vannføring Utm-sone: 32
 Punktnummer: 0 Versjon: 1 Utm-øst: 630300
 Høyde: 0.00 Kartblad: 1722-IV Utm-nord: 7080950
 DØGNMIDDEL - HYDAG_POINT Enhet: m³/s Naturlig nedbørfelt: 1.70 km²

DØGNTABELL - HYDAG_POINT

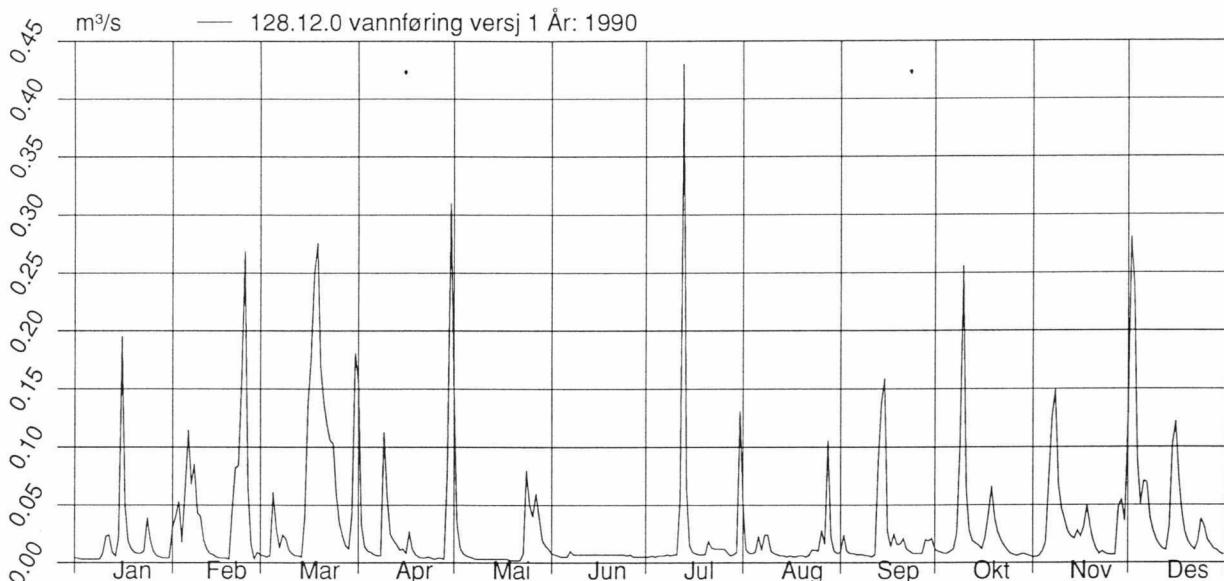
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OKT	NOV	DES
1	0.150	0.254	0.008	0.009	0.003	0.033	0.006	0.073	0.008	0.040	0.006	0.160
2	0.210	0.094	0.008	0.007	0.003	0.042	0.006	0.048	0.008	0.125	0.005	0.100
3	0.240	0.108	0.009	0.005	0.005	0.013	0.006	0.027	0.027	0.041	0.005	0.072
4	0.122	0.086	0.008	0.005	0.004	0.007	0.006	0.282	0.026	0.047	0.004	0.055
5	0.045	0.037	0.008	0.004	0.016	0.010	0.006	0.090	0.031	0.022	0.004	0.020
6	0.050	0.096	0.013	0.004	0.010	0.012	0.004	0.040	0.095	0.012	0.004	0.317
7	0.050	0.111	0.128	0.006	0.105	0.010	0.004	0.040	0.260	0.007	0.003	0.050
8	0.120	0.068	0.110	0.012	0.251	0.050	0.004	0.027	0.289	0.005	0.003	0.018
9	0.240	0.058	0.055	0.013	0.072	0.033	0.003	0.018	0.155	0.005	0.003	0.011
10	0.083	0.033	0.144	0.017	0.181	0.042	0.003	0.009	0.097	0.006	0.003	0.109
11	0.047	0.027	0.065	0.022	0.065	0.022	0.003	0.018	0.059	0.005	0.003	0.036
12	0.033	0.026	0.039	0.030	0.040	0.014	0.006	0.048	0.048	0.005	0.022	0.017
13	0.025	0.023	0.057	0.022	0.030	0.010	0.008	0.252	0.038	0.165	0.036	0.013
14	0.027	0.019	0.033	0.019	0.032	0.008	0.008	0.033	0.028	0.118	0.045	0.034
15	0.090	0.017	0.024	0.012	0.022	0.006	0.013	0.010	0.022	0.108	0.032	0.031
16	0.100	0.014	0.015	0.008	0.018	0.004	0.017	0.007	0.011	0.034	0.014	0.006
17	0.090	0.013	0.011	0.005	0.019	0.003	0.019	0.007	0.004	0.020	0.009	0.005
18	0.070	0.012	0.009	0.005	0.031	0.003	0.009	0.028	0.003	0.098	0.006	0.005
19	0.120	0.011	0.010	0.005	0.042	0.003	0.008	0.042	0.012	0.043	0.005	0.004
20	0.320	0.011	0.023	0.005	0.040	0.005	0.009	0.020	0.144	0.017	0.005	0.004
21	0.150	0.011	0.029	0.006	0.022	0.005	0.008	0.009	0.017	0.010	0.004	0.004
22	0.100	0.010	0.017	0.005	0.014	0.005	0.007	0.006	0.006	0.071	0.004	0.004
23	0.020	0.011	0.011	0.004	0.011	0.006	0.007	0.245	0.006	0.051	0.003	0.004
24	0.123	0.010	0.008	0.004	0.009	0.006	0.007	0.082	0.004	0.045	0.003	0.003
25	0.076	0.010	0.007	0.003	0.011	0.006	0.005	0.099	0.003	0.039	0.003	0.021
26	0.044	0.009	0.016	0.003	0.012	0.006	0.005	0.024	0.003	0.064	0.004	0.047
27	0.022	0.008	0.016	0.003	0.012	0.006	0.006	0.012	0.002	0.208	0.016	0.024
28	0.119	0.008	0.040	0.003	0.015	0.006	0.007	0.093	0.003	0.061	0.008	0.013
29	0.212		0.052	0.003	0.035	0.006	0.007	0.113	0.013	0.021	0.047	0.009
30	0.090		0.024	0.003	0.049	0.006	0.006	0.026	0.015	0.012	0.123	0.006
31	0.165		0.014		0.051		0.025	0.011		0.009		0.005
MIDDEL	0.108	0.043	0.033	0.008	0.040	0.013	0.008	0.059	0.048	0.049	0.014	0.039
MAX	0.320	0.254	0.144	0.030	0.251	0.050	0.025	0.282	0.289	0.208	0.123	0.317
MIN	0.020	0.008	0.007	0.003	0.003	0.003	0.003	0.006	0.002	0.005	0.003	0.003



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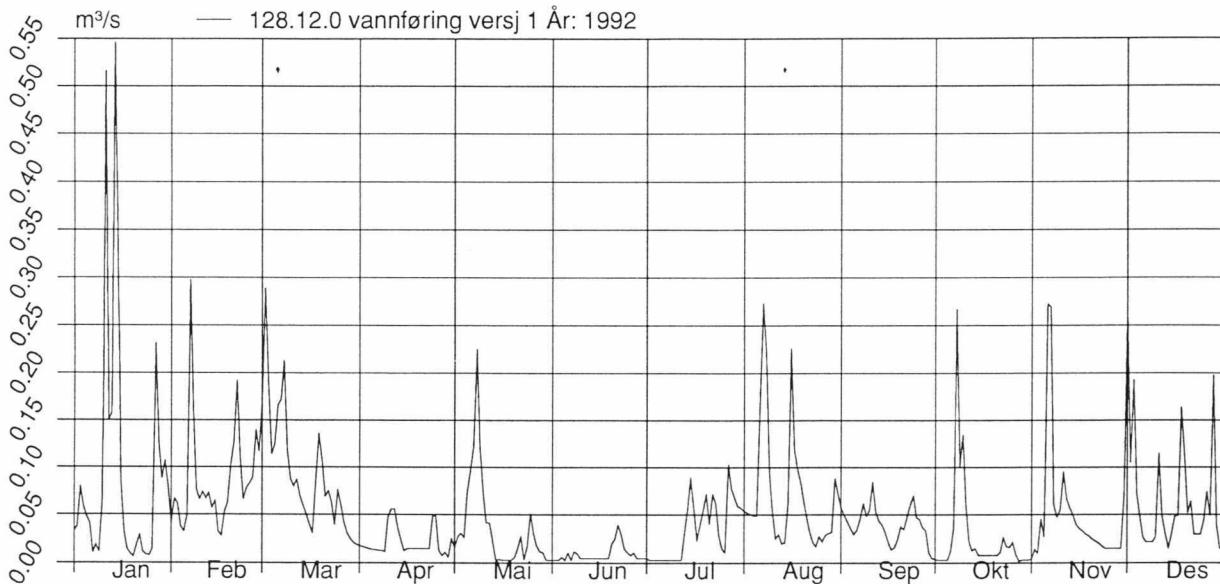
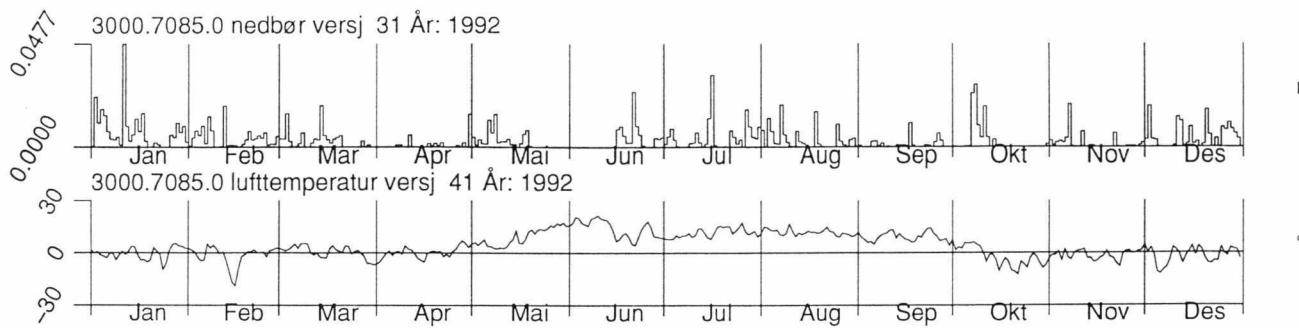
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HYDROLOGISK AVDELING, NVE.
Vassdragsområde: 128 Stasjonsnavn: HOLOBEKKEN DATO: 25/1/1995
Hovednummer: 12 Parameter: 1001 vannføring Utm-sone: 32
Punktnummer: 0 Versjon: 1 Utm-øst: 630300
Høyde: 0.00 Kartblad: 1722-IV Utm-nord: 7080950
DØGNMIDDEL - HYDAG_POINT Naturlig nedbørfelt: 1.70 km²
Enhett: m³/s

DØGNTABELL - HYDAG_POINT

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OKT	NOV	DES
1	0.004	0.030	0.007	0.156	0.151	0.008	0.005	0.052	0.009	0.012	0.005	0.125
2	0.004	0.040	0.006	0.033	0.034	0.007	0.005	0.012	0.024	0.010	0.005	0.281
3	0.003	0.053	0.005	0.014	0.013	0.006	0.006	0.008	0.010	0.009	0.006	0.239
4	0.003	0.018	0.006	0.010	0.008	0.005	0.005	0.008	0.008	0.008	0.010	0.090
5	0.003	0.063	0.061	0.009	0.006	0.005	0.006	0.009	0.008	0.008	0.018	0.051
6	0.003	0.115	0.030	0.007	0.005	0.005	0.006	0.023	0.007	0.010	0.072	0.071
7	0.003	0.068	0.013	0.006	0.004	0.010	0.006	0.011	0.007	0.012	0.126	0.070
8	0.003	0.085	0.024	0.006	0.003	0.007	0.007	0.024	0.007	0.026	0.149	0.040
9	0.003	0.043	0.021	0.113	0.003	0.007	0.006	0.024	0.006	0.105	0.068	0.028
10	0.008	0.040	0.011	0.058	0.003	0.007	0.007	0.010	0.006	0.256	0.047	0.020
11	0.023	0.020	0.008	0.025	0.003	0.007	0.007	0.008	0.005	0.063	0.037	0.015
12	0.024	0.012	0.006	0.020	0.003	0.007	0.056	0.007	0.007	0.028	0.027	0.012
13	0.009	0.008	0.006	0.016	0.003	0.007	0.430	0.006	0.087	0.019	0.023	0.011
14	0.006	0.007	0.005	0.011	0.003	0.007	0.065	0.006	0.138	0.017	0.021	0.031
15	0.022	0.005	0.039	0.012	0.003	0.007	0.015	0.005	0.159	0.015	0.028	0.103
16	0.195	0.004	0.136	0.008	0.003	0.007	0.009	0.006	0.027	0.012	0.023	0.122
17	0.050	0.004	0.176	0.027	0.003	0.007	0.008	0.005	0.014	0.022	0.031	0.073
18	0.019	0.004	0.250	0.012	0.003	0.007	0.007	0.005	0.025	0.041	0.050	0.044
19	0.012	0.003	0.276	0.007	0.002	0.007	0.007	0.006	0.016	0.066	0.032	0.026
20	0.009	0.045	0.170	0.005	0.002	0.007	0.007	0.006	0.016	0.039	0.020	0.018
21	0.008	0.082	0.140	0.004	0.002	0.007	0.019	0.005	0.021	0.027	0.012	0.014
22	0.008	0.084	0.120	0.004	0.002	0.007	0.013	0.006	0.012	0.020	0.008	0.011
23	0.010	0.155	0.106	0.005	0.008	0.007	0.012	0.011	0.010	0.015	0.010	0.019
24	0.039	0.269	0.103	0.004	0.080	0.007	0.012	0.011	0.008	0.011	0.008	0.038
25	0.020	0.065	0.059	0.003	0.050	0.006	0.012	0.010	0.008	0.008	0.007	0.032
26	0.010	0.017	0.034	0.004	0.040	0.007	0.012	0.028	0.008	0.007	0.007	0.020
27	0.006	0.003	0.024	0.004	0.060	0.005	0.009	0.016	0.008	0.006	0.007	0.016
28	0.005	0.009	0.015	0.003	0.040	0.005	0.006	0.106	0.020	0.007	0.048	0.012
29	0.004	0.012	0.081	0.020	0.005	0.007	0.022	0.019	0.008	0.055	0.011	
30	0.004	0.042	0.310	0.015	0.005	0.009	0.010	0.021	0.007	0.036	0.008	
31	0.004		0.181		0.012		0.131	0.008		0.006		0.007
MIDDEL	0.017	0.048	0.067	0.033	0.019	0.007	0.029	0.015	0.024	0.029	0.033	0.053
MAX	0.195	0.269	0.276	0.310	0.151	0.010	0.430	0.106	0.159	0.256	0.149	0.281
MIN	0.003	0.003	0.005	0.003	0.002	0.005	0.005	0.005	0.005	0.006	0.005	0.007



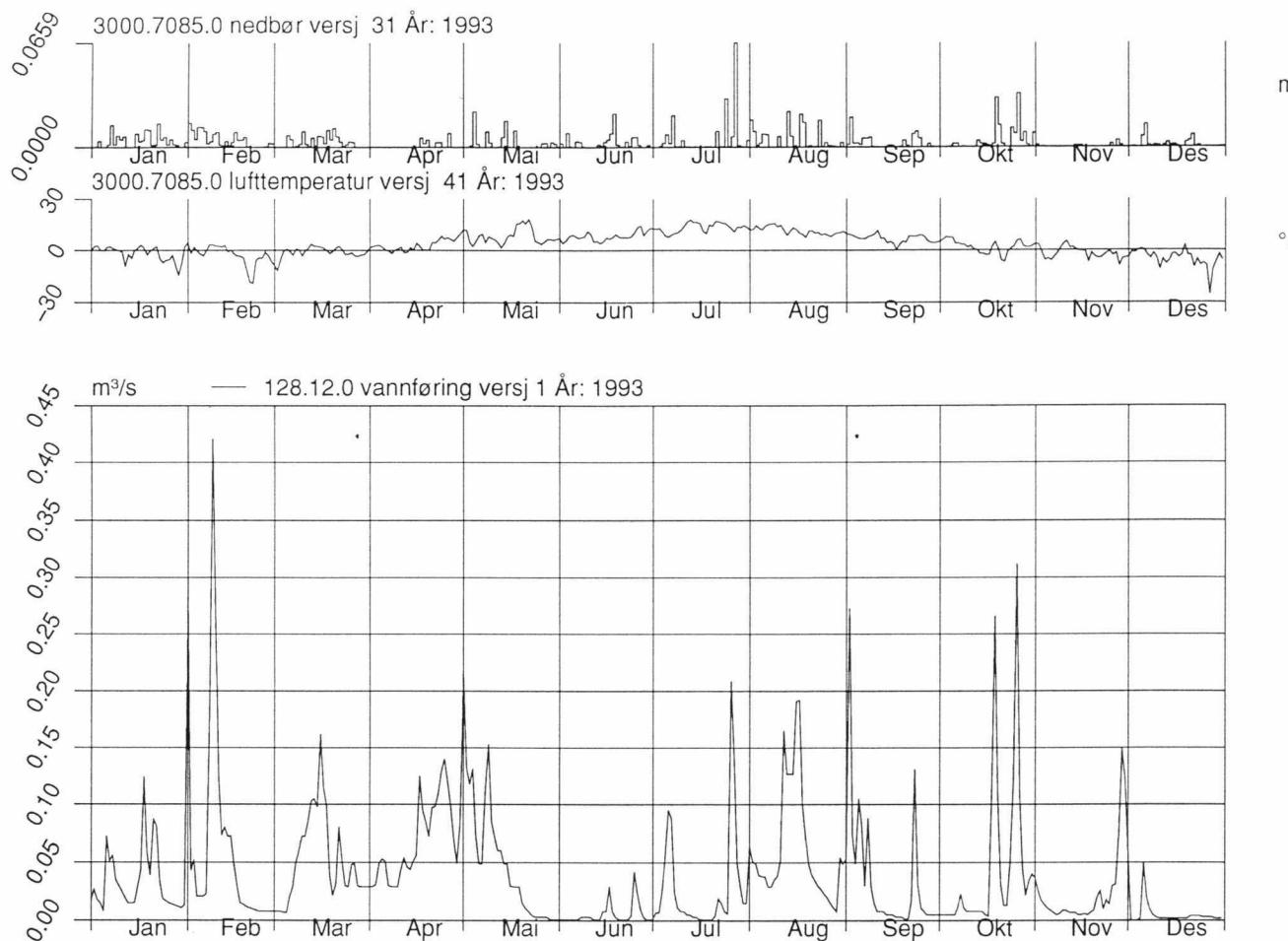
HYDROLOGISK AVDELING, NVE.

DATO: 25/1/1995

Vassdragsområde: 128	Stasjonsnavn: HOLOBEKKEN	Utm-sone: 32
Hovednummer: 12	Parameter: 1001 vannføring	Utm-øst: 630300
Punktnummer: 0	Versjon: 1	Utm-nord: 7080950
Høyde: 0.00	Kartblad: 1722-IV	Naturlig nedbørfelt: 1.70 km²
DØGNMIDDEL - HYDAG_POINT	Enhet: m³/s	

DØGNTABELL - HYDAG_POINT

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OKT	NOV	DES
1	0.033	0.042	0.170	0.018	0.016	0.003	0.005	0.054	0.057	0.004	0.004	0.270
2	0.037	0.067	0.289	0.017	0.027	0.003	0.003	0.052	0.049	0.003	0.014	0.105
3	0.080	0.062	0.191	0.016	0.030	0.003	0.003	0.050	0.042	0.003	0.010	0.193
4	0.059	0.037	0.114	0.015	0.026	0.006	0.003	0.049	0.035	0.003	0.045	0.072
5	0.048	0.032	0.125	0.014	0.073	0.003	0.003	0.049	0.029	0.003	0.026	0.049
6	0.041	0.049	0.166	0.014	0.096	0.011	0.003	0.165	0.033	0.012	0.272	0.026
7	0.011	0.298	0.172	0.013	0.123	0.003	0.003	0.273	0.045	0.035	0.269	0.021
8	0.019	0.161	0.213	0.013	0.225	0.012	0.003	0.223	0.062	0.267	0.061	0.021
9	0.012	0.076	0.118	0.012	0.121	0.010	0.003	0.095	0.048	0.101	0.047	0.021
10	0.063	0.066	0.087	0.048	0.075	0.005	0.003	0.054	0.055	0.135	0.055	0.026
11	0.516	0.074	0.080	0.056	0.041	0.005	0.003	0.025	0.084	0.060	0.095	0.115
12	0.151	0.067	0.087	0.056	0.041	0.005	0.003	0.029	0.053	0.022	0.066	0.049
13	0.157	0.073	0.070	0.036	0.023	0.005	0.029	0.020	0.043	0.013	0.057	0.030
14	0.546	0.057	0.060	0.024	0.003	0.005	0.055	0.021	0.039	0.015	0.049	0.015
15	0.320	0.065	0.050	0.013	0.004	0.005	0.089	0.061	0.031	0.008	0.039	0.029
16	0.085	0.032	0.040	0.015	0.003	0.005	0.056	0.226	0.021	0.008	0.035	0.048
17	0.033	0.028	0.030	0.015	0.003	0.005	0.023	0.119	0.014	0.008	0.032	0.049
18	0.015	0.053	0.087	0.015	0.003	0.005	0.038	0.098	0.016	0.008	0.029	0.164
19	0.010	0.063	0.136	0.015	0.003	0.005	0.054	0.085	0.024	0.008	0.027	0.111
20	0.007	0.103	0.106	0.015	0.006	0.020	0.072	0.065	0.037	0.008	0.024	0.052
21	0.019	0.126	0.069	0.015	0.015	0.025	0.040	0.048	0.034	0.008	0.022	0.064
22	0.029	0.192	0.075	0.015	0.027	0.039	0.072	0.032	0.047	0.011	0.020	0.029
23	0.012	0.109	0.063	0.015	0.004	0.029	0.062	0.021	0.060	0.026	0.017	0.029
24	0.009	0.066	0.039	0.048	0.017	0.015	0.028	0.017	0.070	0.017	0.015	0.029
25	0.008	0.078	0.076	0.049	0.051	0.011	0.015	0.027	0.047	0.016	0.015	0.044
26	0.015	0.083	0.059	0.013	0.030	0.008	0.011	0.022	0.045	0.021	0.015	0.074
27	0.231	0.089	0.041	0.008	0.018	0.011	0.103	0.028	0.036	0.009	0.015	0.049
28	0.126	0.140	0.030	0.011	0.012	0.005	0.077	0.030	0.033	0.002	0.015	0.198
29	0.088	0.117	0.025	0.006	0.011	0.005	0.068	0.031	0.011	0.003	0.015	0.039
30	0.107		0.021	0.025	0.003	0.005	0.059	0.088	0.005	0.003	0.070	0.015
31	0.081		0.019		0.003		0.057	0.072		0.003		0.015
MIDDEL	0.096	0.085	0.097	0.021	0.037	0.009	0.032	0.071	0.042	0.027	0.047	0.068
MAX	0.546	0.298	0.289	0.056	0.225	0.039	0.103	0.273	0.084	0.267	0.272	0.270
MIN	0.007	0.028	0.021	0.006	0.003	0.003	0.017	0.011	0.002	0.003	0.015	

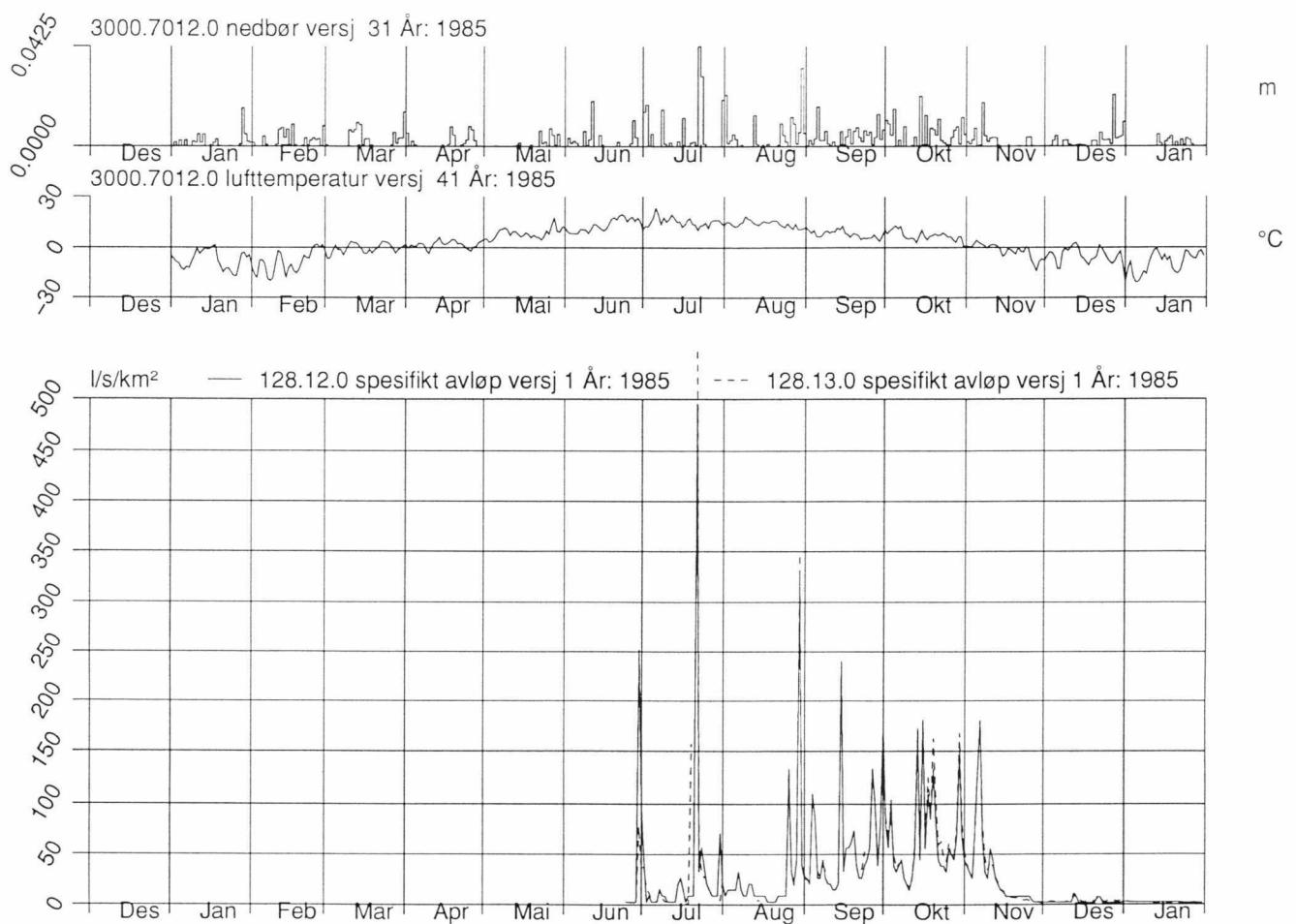
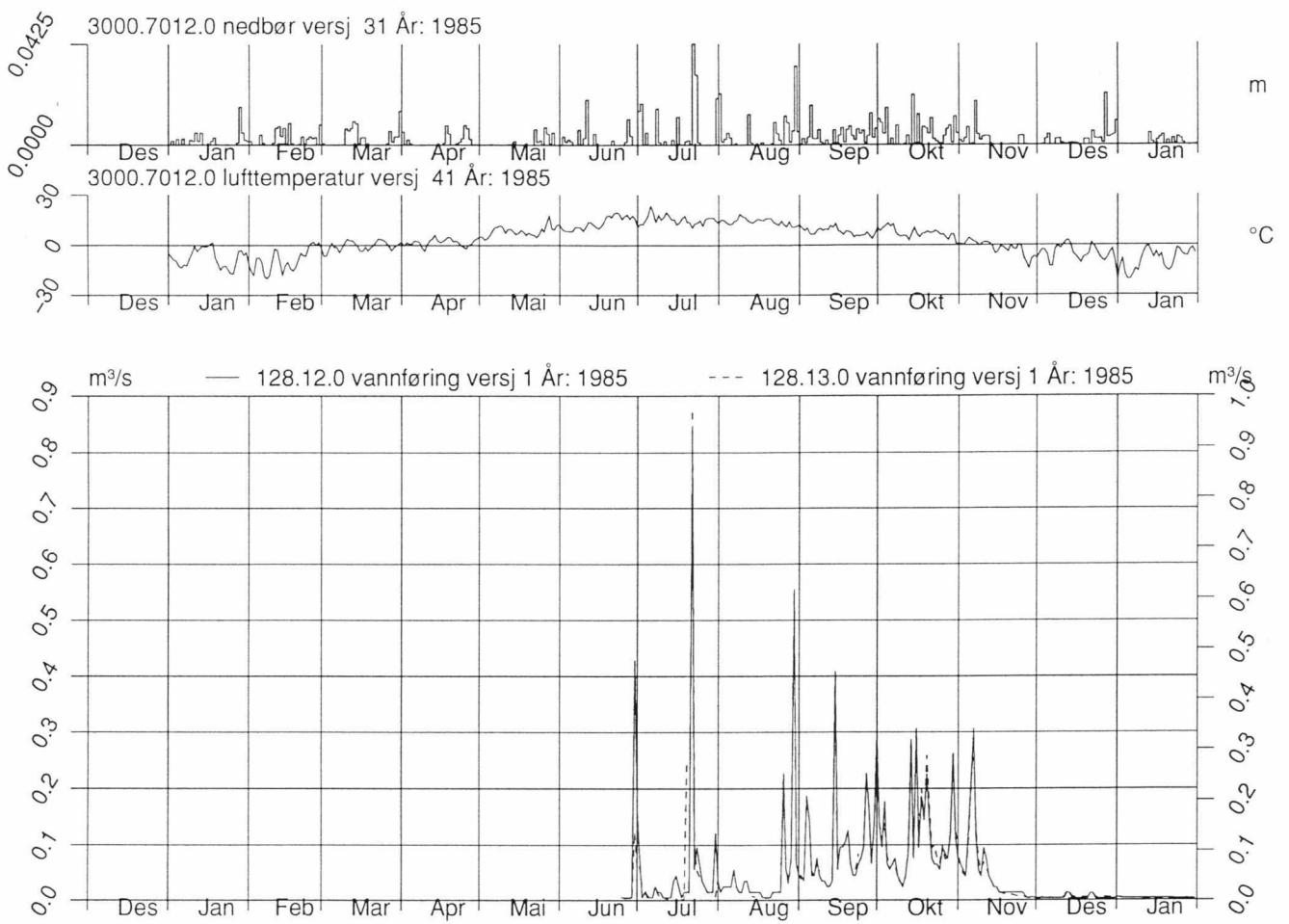


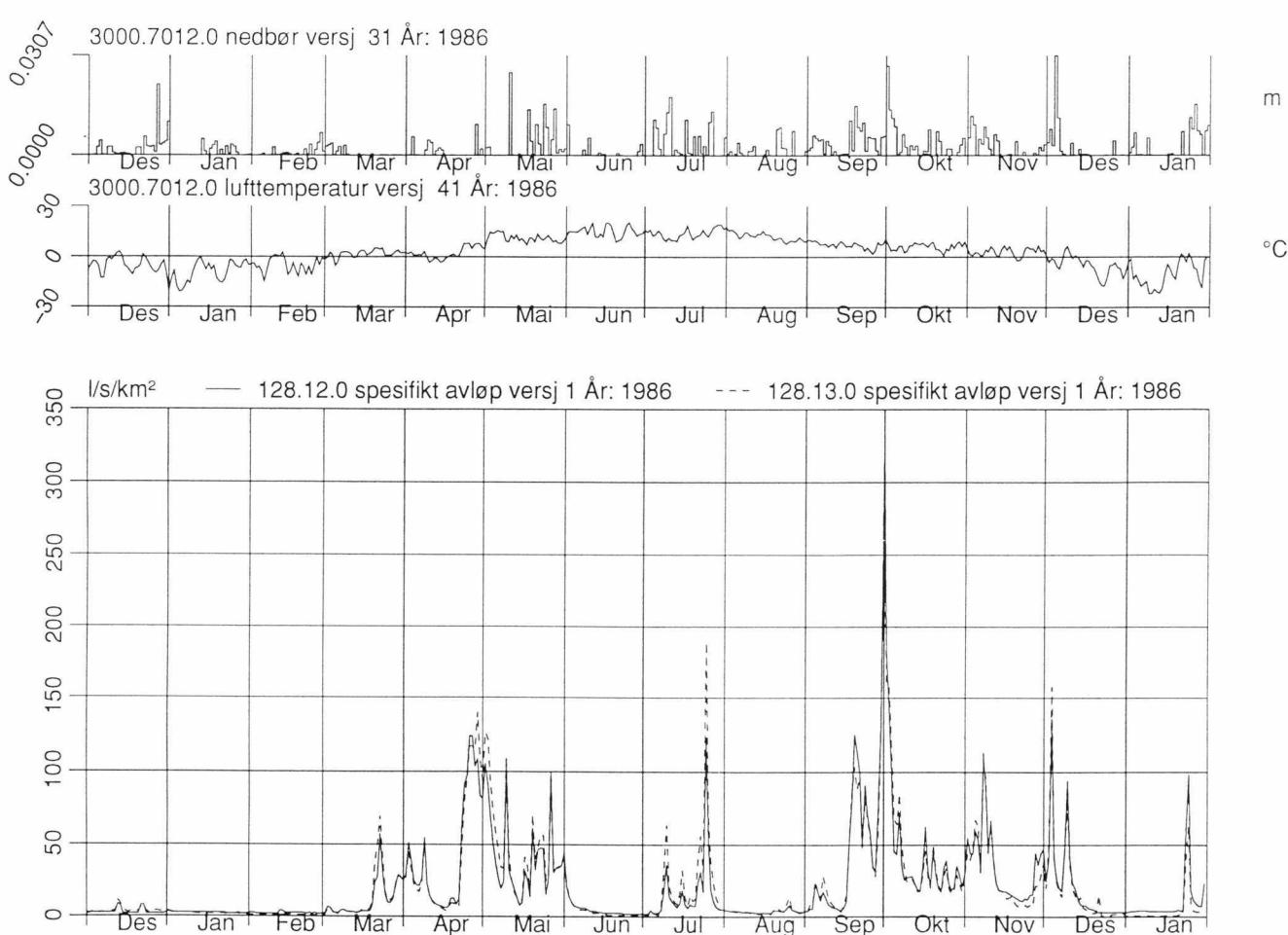
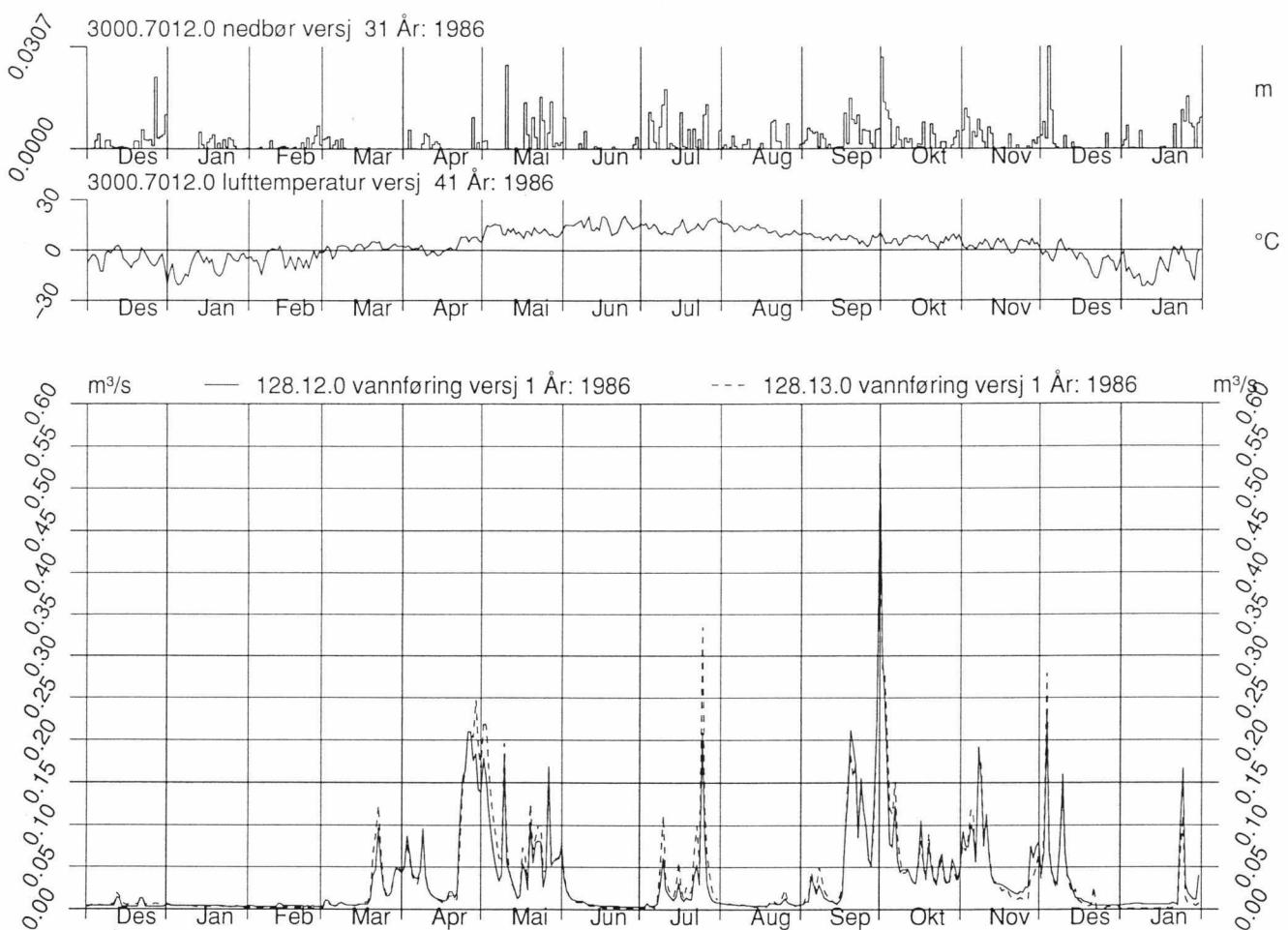
HYDROLOGISK AVDELING, NVE.
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 Hovednummer: 12 Parameter: 1001 vannføring
 Punktnummer: 0 Versjon: 1
 Høyde: 0.00 Kartblad: 1722-IV
 DØGNMIDDEL - HYDAG_POINT Enhet: m³/s

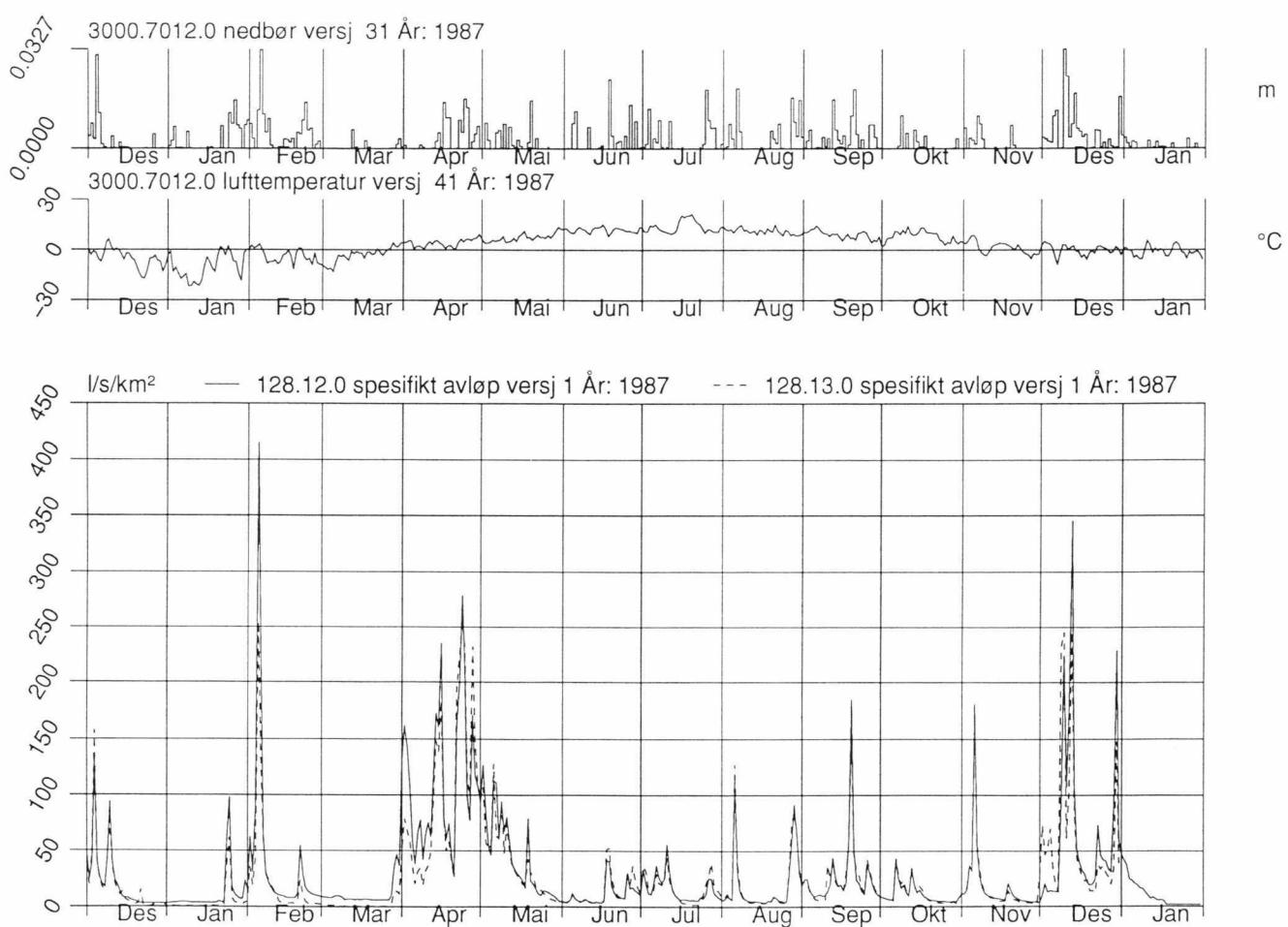
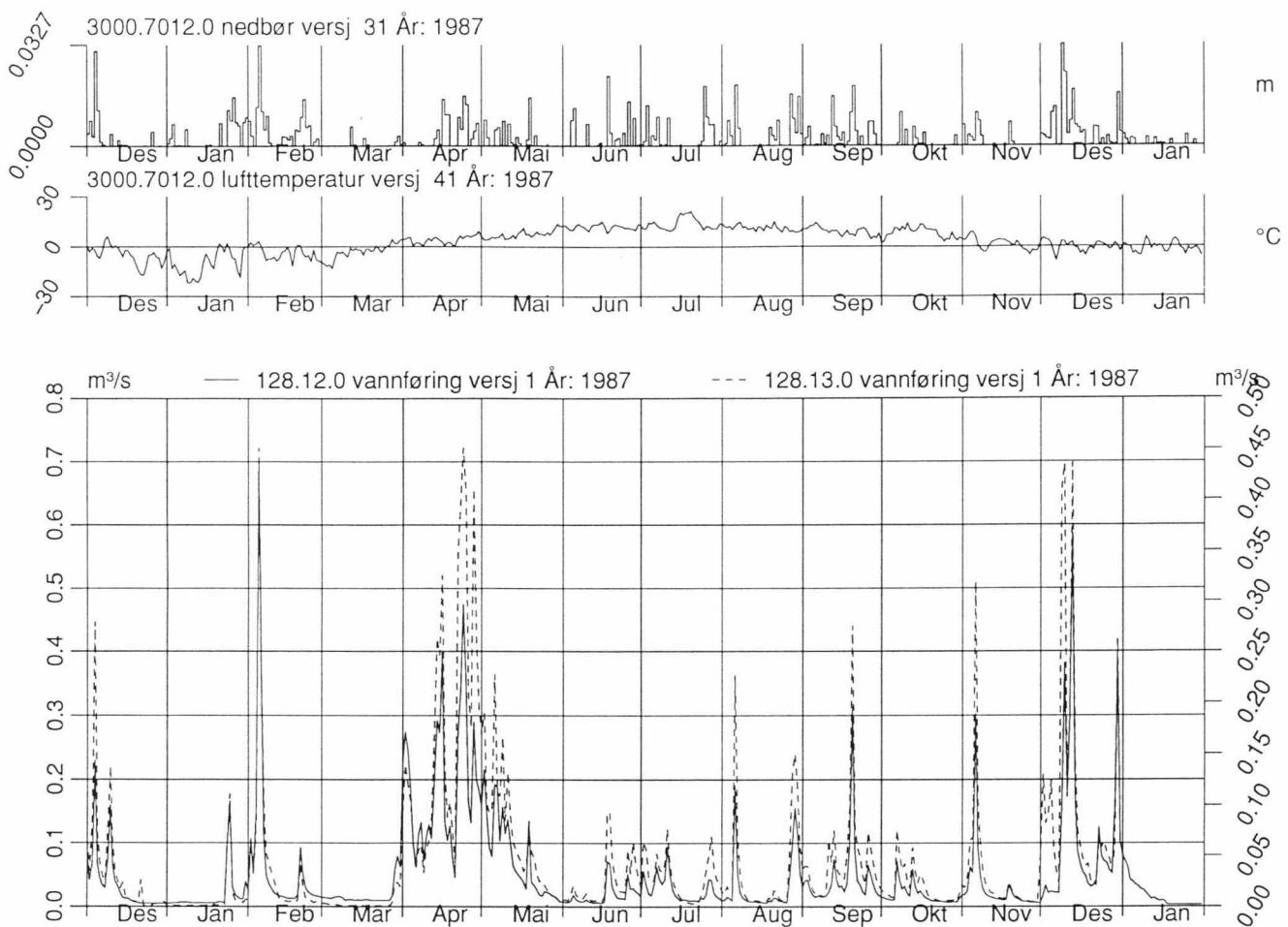
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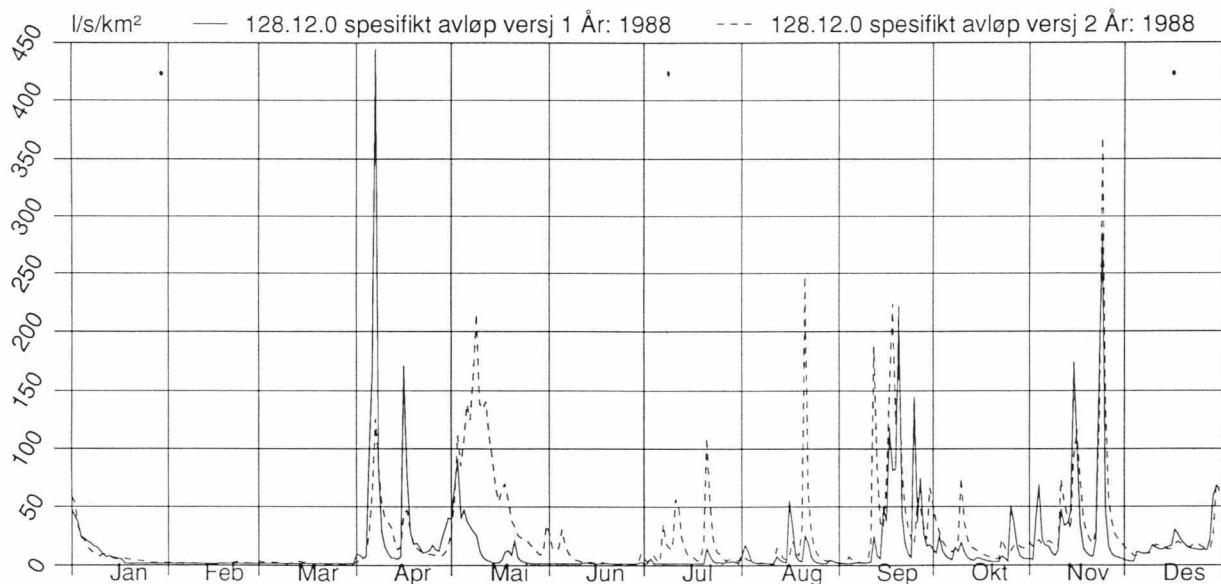
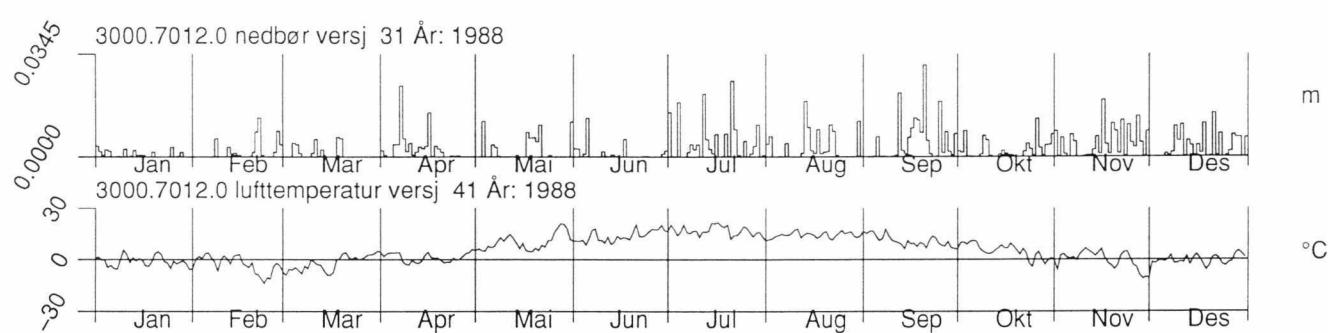
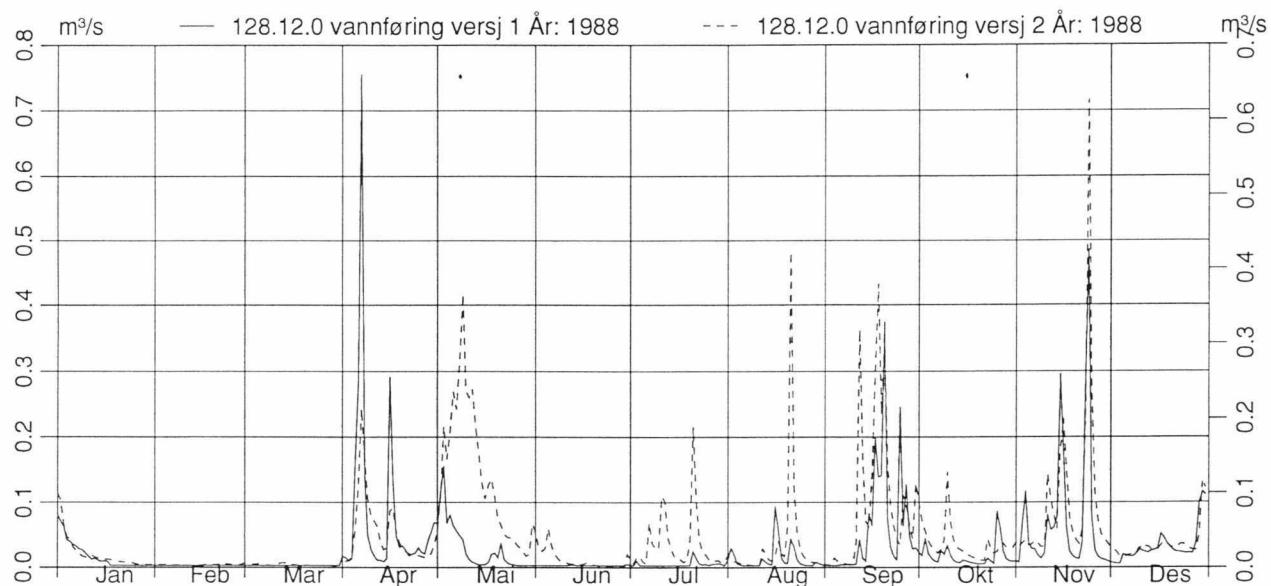
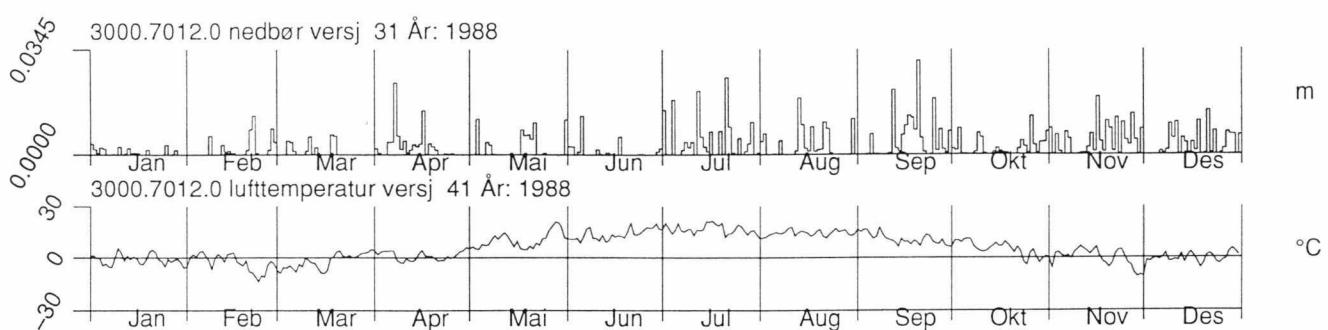
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DES
1	0.018	0.285	0.008	0.029	0.217	0.001	0.001	0.063	0.053	0.005	0.037	0.058
2	0.027	0.043	0.008	0.029	0.132	0.001	0.007	0.051	0.273	0.005	0.026	0.000
3	0.018	0.052	0.008	0.031	0.118	0.001	0.007	0.049	0.072	0.005	0.018	0.000
4	0.015	0.021	0.007	0.049	0.131	0.001	0.025	0.039	0.049	0.005	0.014	0.000
5	0.008	0.021	0.007	0.053	0.073	0.001	0.054	0.038	0.105	0.005	0.011	0.002
6	0.072	0.021	0.021	0.051	0.049	0.001	0.095	0.038	0.082	0.005	0.009	0.050
7	0.051	0.023	0.029	0.030	0.049	0.001	0.088	0.029	0.030	0.012	0.007	0.020
8	0.056	0.182	0.050	0.029	0.112	0.003	0.024	0.029	0.088	0.023	0.005	0.010
9	0.035	0.421	0.060	0.029	0.153	0.003	0.011	0.035	0.029	0.011	0.006	0.005
10	0.030	0.261	0.072	0.029	0.085	0.003	0.008	0.038	0.015	0.008	0.009	0.003
11	0.025	0.121	0.072	0.044	0.072	0.003	0.008	0.052	0.008	0.008	0.009	0.002
12	0.020	0.073	0.085	0.054	0.060	0.001	0.005	0.165	0.008	0.008	0.007	0.002
13	0.015	0.080	0.103	0.046	0.060	0.001	0.005	0.127	0.008	0.008	0.007	0.002
14	0.015	0.072	0.105	0.044	0.049	0.001	0.003	0.127	0.005	0.008	0.007	0.002
15	0.015	0.072	0.098	0.051	0.049	0.008	0.003	0.127	0.005	0.008	0.005	0.002
16	0.029	0.049	0.162	0.056	0.030	0.008	0.001	0.191	0.005	0.005	0.005	0.002
17	0.043	0.030	0.115	0.125	0.029	0.001	0.192	0.003	0.004	0.006	0.002	
18	0.124	0.015	0.099	0.095	0.029	0.008	0.001	0.100	0.003	0.104	0.005	0.002
19	0.058	0.014	0.039	0.085	0.029	0.003	0.001	0.072	0.003	0.266	0.007	0.002
20	0.039	0.012	0.022	0.072	0.015	0.001	0.001	0.049	0.001	0.106	0.009	0.002
21	0.087	0.011	0.031	0.097	0.011	0.001	0.004	0.040	0.002	0.032	0.020	0.004
22	0.081	0.010	0.080	0.098	0.008	0.001	0.019	0.035	0.017	0.013	0.026	0.004
23	0.035	0.009	0.051	0.110	0.005	0.001	0.015	0.030	0.131	0.013	0.010	0.004
24	0.019	0.008	0.030	0.130	0.003	0.004	0.008	0.027	0.031	0.050	0.018	0.004
25	0.017	0.008	0.029	0.140	0.003	0.042	0.006	0.023	0.011	0.117	0.014	0.003
26	0.015	0.008	0.048	0.120	0.003	0.024	0.209	0.020	0.008	0.312	0.030	0.003
27	0.014	0.008	0.049	0.098	0.003	0.010	0.143	0.015	0.005	0.109	0.031	0.003
28	0.013	0.008	0.030	0.070	0.003	0.003	0.049	0.011	0.005	0.045	0.073	0.003
29	0.012		0.029	0.049	0.001	0.001	0.030	0.008	0.005	0.022	0.149	0.002
30	0.011		0.029	0.083	0.001	0.001	0.015	0.054	0.005	0.034	0.123	0.002
31	0.013			0.029		0.001	0.015	0.049		0.040		0.002
MIDDEL	0.033	0.069	0.052	0.068	0.051	0.006	0.028	0.062	0.036	0.045	0.023	0.007
MAX	0.124	0.421	0.162	0.140	0.217	0.042	0.209	0.192	0.273	0.312	0.149	0.058
MIN	0.008	0.008	0.007	0.029	0.001	0.001	0.001	0.008	0.001	0.004	0.005	0.000

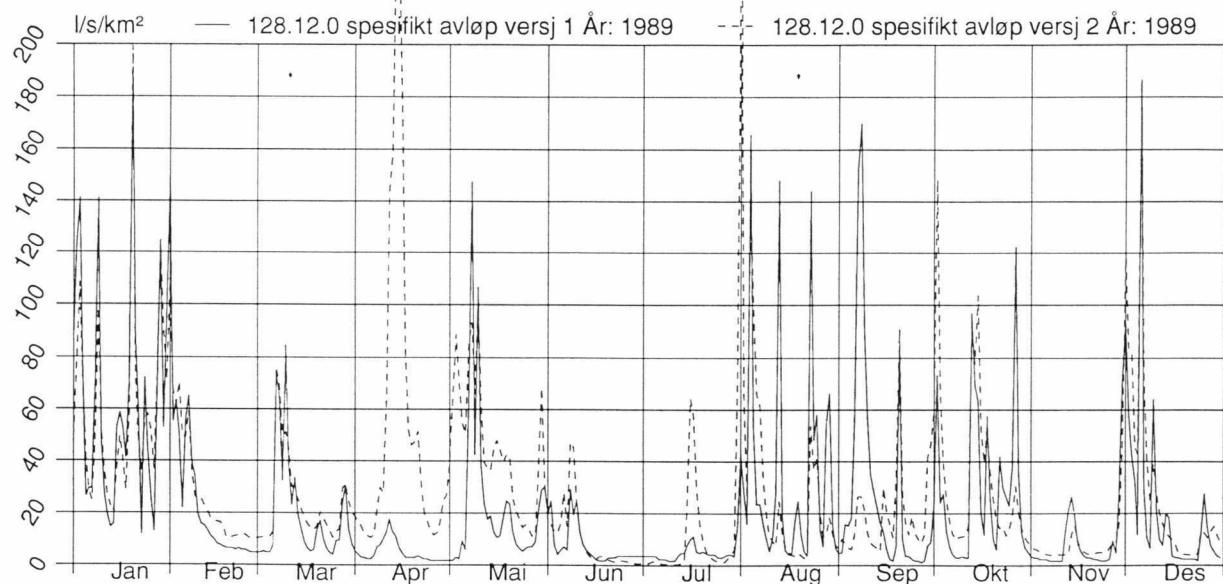
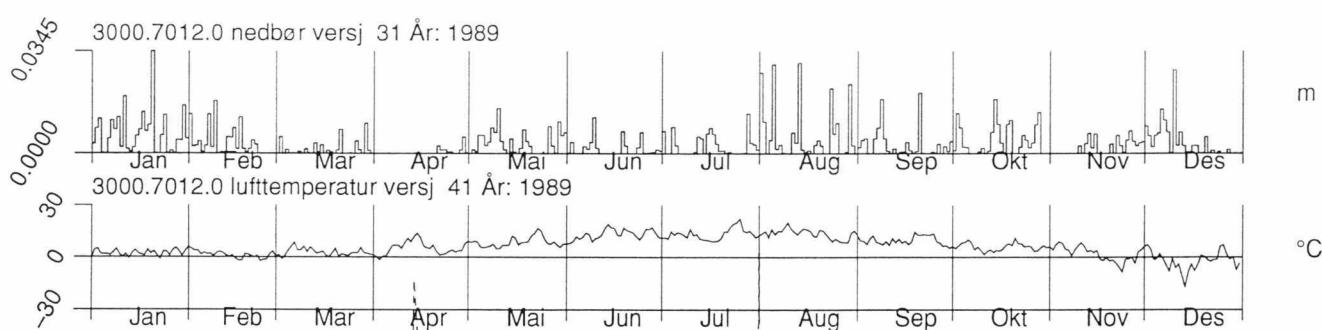
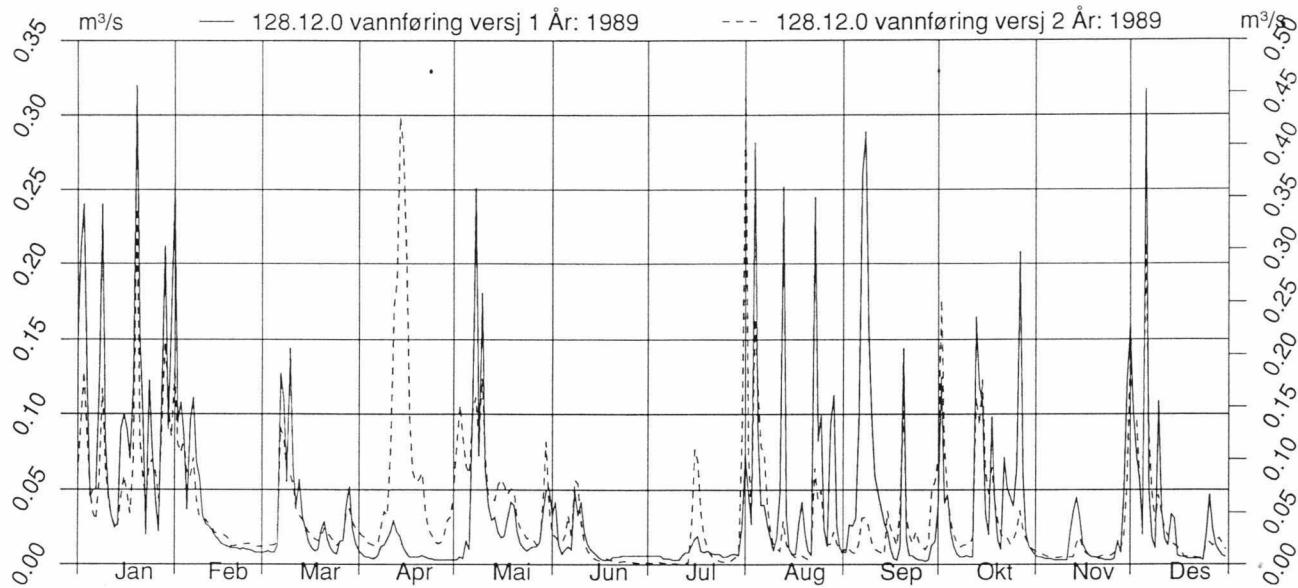
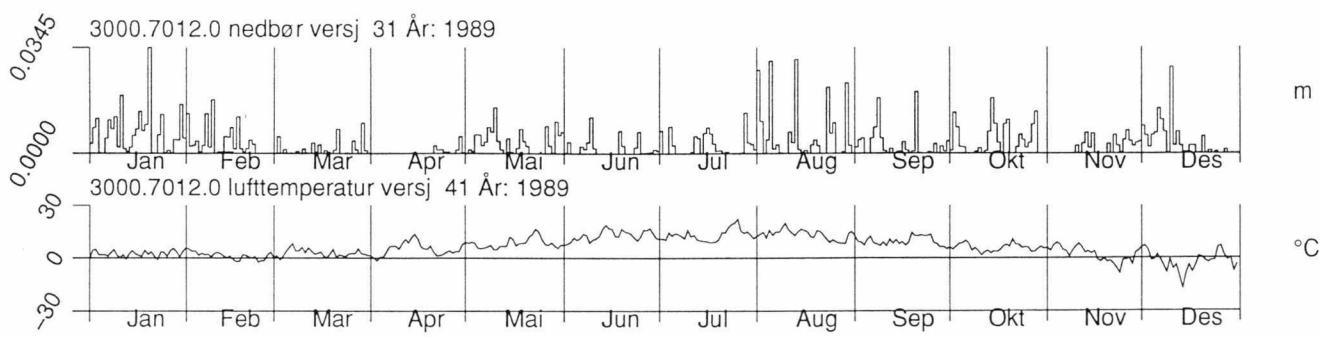
Vedlegg B - 8 sider

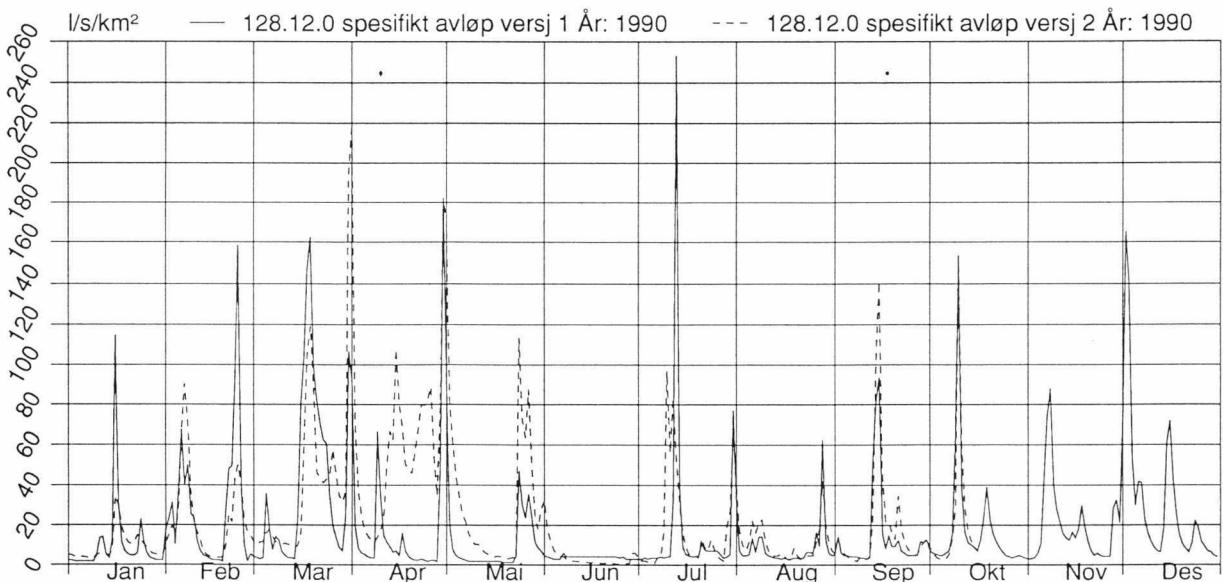
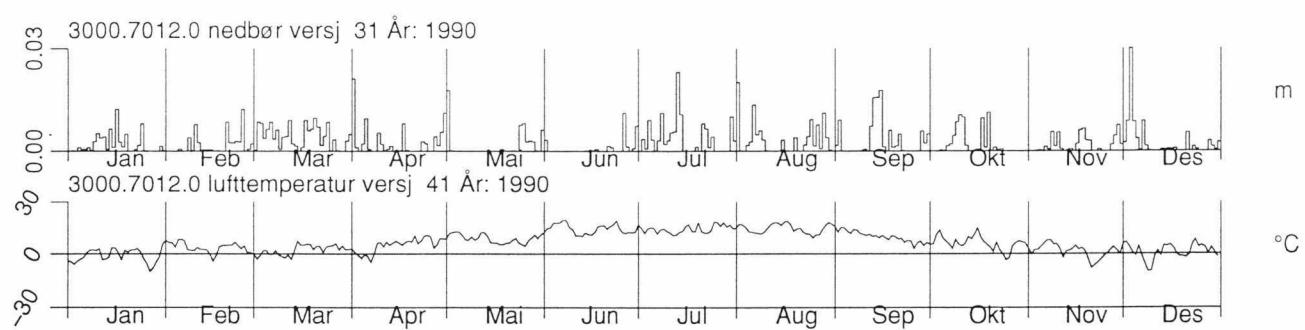
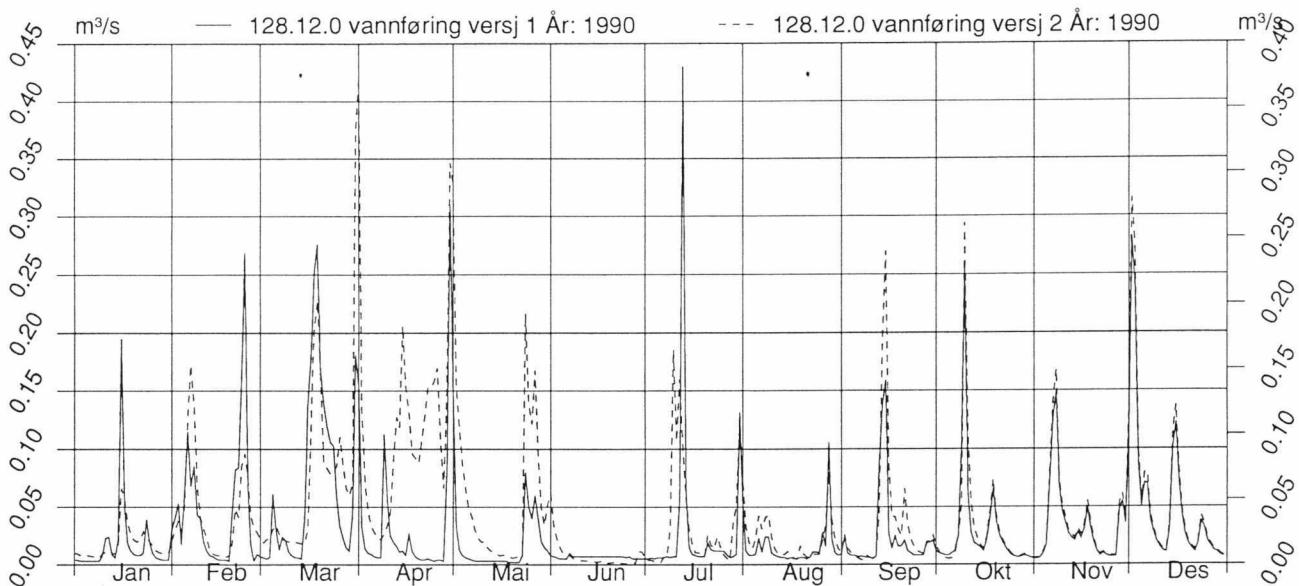
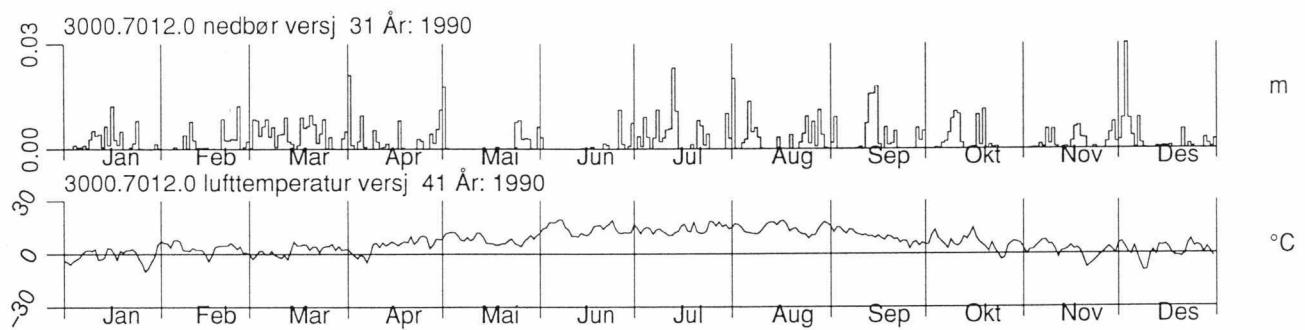


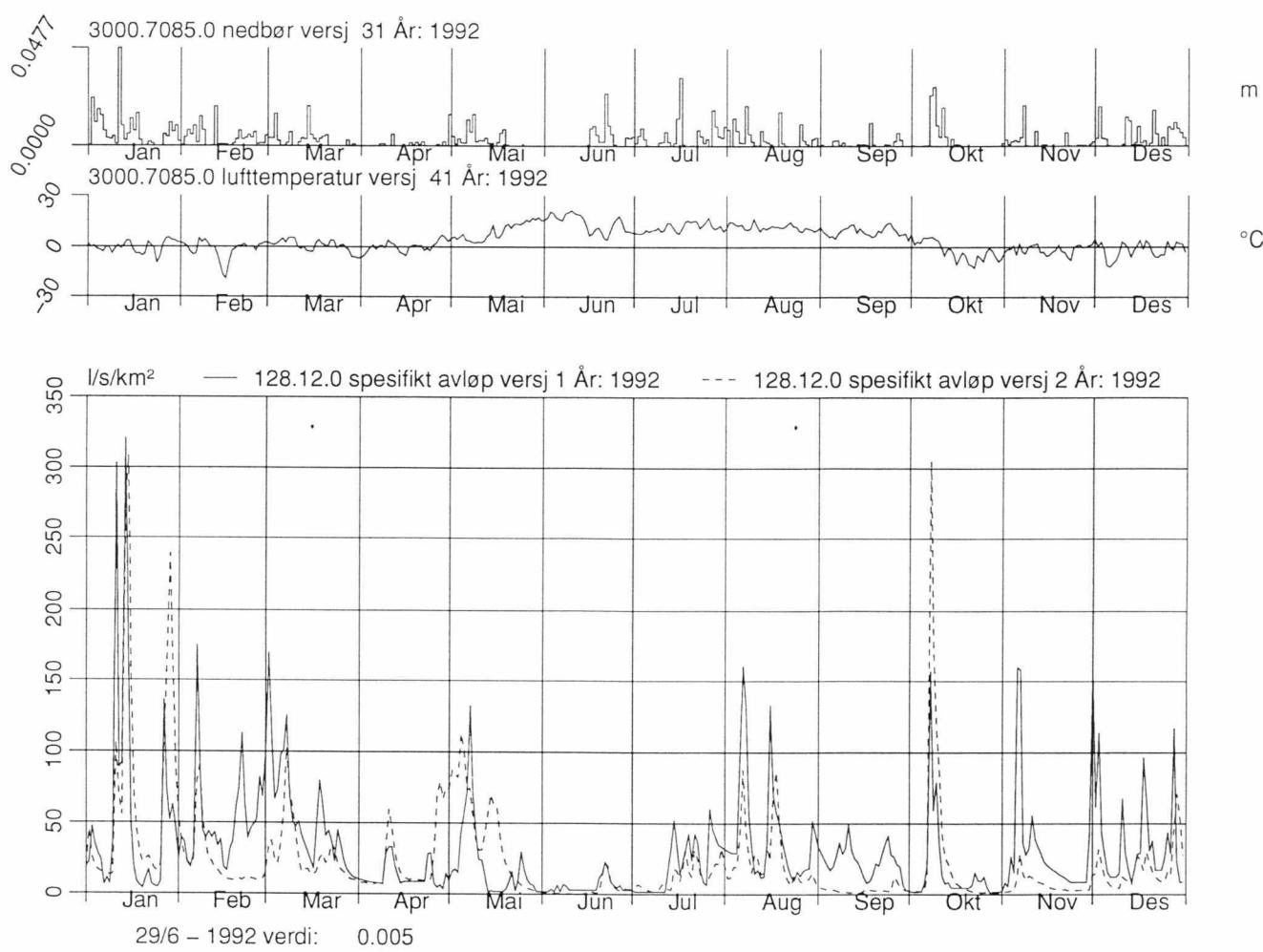
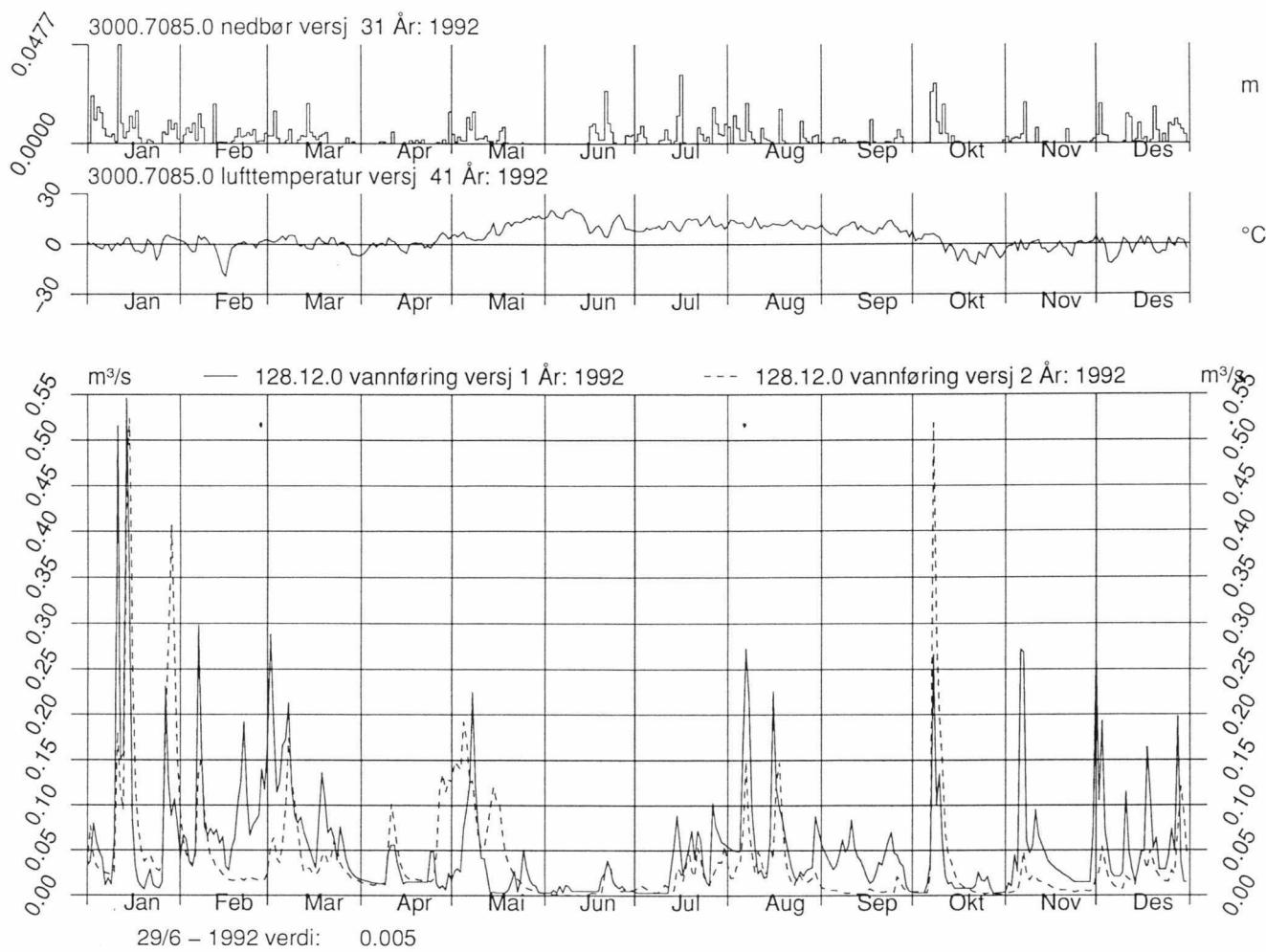


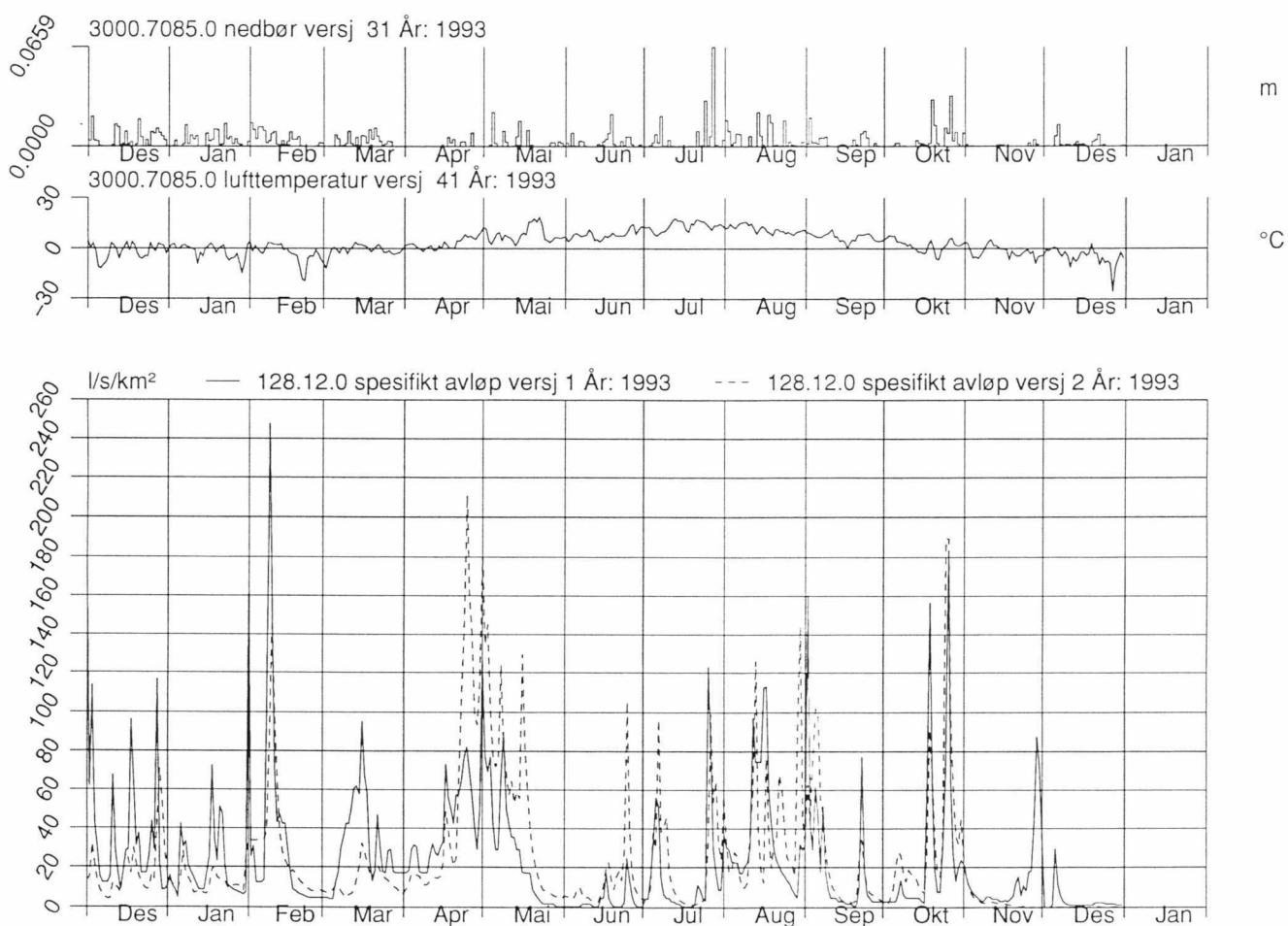
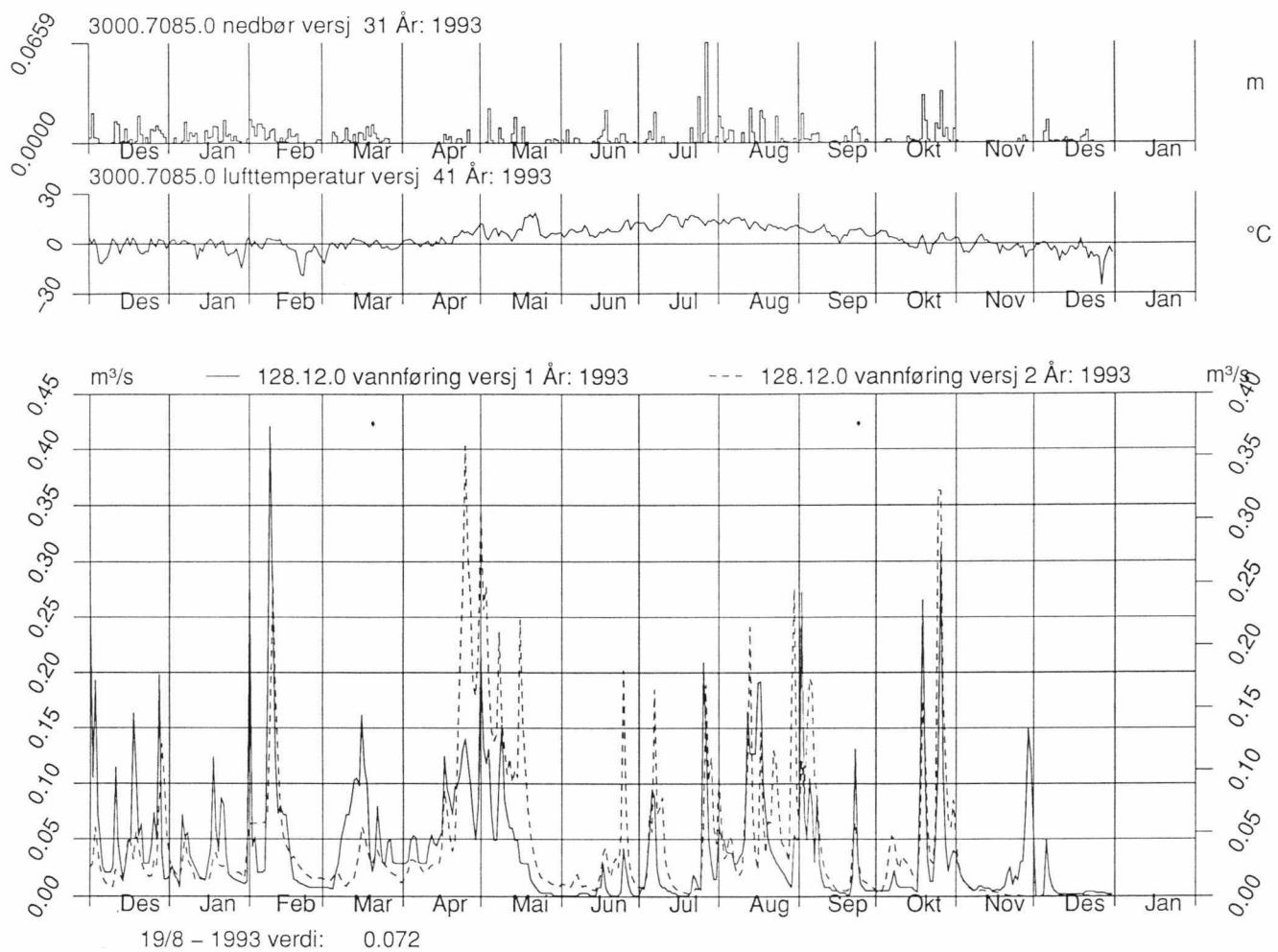












Vedlegg C - 9 sider:

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