

DNMI DET NORSKE METEOROLOGISKE INSTITUTT

klima

SOLSTRALING PÅ ULIKT ORIENTERTE
FLATER PÅ LILLEHAMMER

av Jan A. Olseth og Arvid Skartveit

RAPPORT NR. 37/90



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SOLSTRALING PA ULIKT ORIENTERTE FLATER PA LILLEHAMMER

UTARBEIDET AV

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OPPDRAGSGIVER

DNMI - KLIMAAVDELINGEN

OPPDRAGSNR.

SAMMENDRAG

For dimensjonering av kjøleanlegg til bob-banen som skal byggjast til OL på Lillehammer i 1994, er det berekna midlere innstråling (solstråling ved midlere skydekke) og midlere og ekstrem klarversstråling.

UNDERSKRIFT

Jan Asle Olseth

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SAKSBEHANDLER

Bjørn Aune

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FAGSJEF

SOLSTRÅLING PÅ ULIKT ORIENTERTE FLATER PÅ LILLEHAMMER
Grunnlagsdata for dimensjonering av kjøleanlegg til bob-bane,
OL 1994.

av

Jan Asle Olseth
Arvid Skartveit

Metodar

For dimensjonering av kjøleanlegg til bob-banen som skal byggjast i samband med vinter-OL på Lillehammer 1994 trengs ulike grunnlagsdata, som t.d. data for timevis solinnstråling på ulikt orienterte flater i den aktuelle delen av året. Då der ikkje fins slike målte timevise data for Lillehammer, har vi ved hjelp av ulike modellar estimert dei aktuelle dataene ut frå målte langtidsmiddel av globalstråling (på ei horisontalflate). Dei dataene som er gitt i dette notatet er forutan midlere stråling (strålinga ved midlere skydekke) også midlere og ekstrem klarversstråling.

1. Midlere timevis stråling

Med utgangspunkt i målte langtidsmiddel av døgnvis globalstråling har vi nytta ein modell som på grunnlag av timevis solhøgde fordeler dette langtidsmiddelet utover dei ulike timane gjennom dagen (Skartveit and Olseth, 1986). Desse timevise globalstrålingsverdiar blir så splitta opp i diffus og direkte komponent (Skartveit and Olseth, 1987), og vi estimerer til slutt timevis skråflatestråling ved hjelp av ein anisotrop modell (Skartveit and Olseth, 1986).

2. Midlere timevis klarversstråling

Midlere timevis klarvers globalstråling er estimert ved hjelp av ein klarversrelasjon som er utvikla på grunnlag av data frå Bergen

(Skartveit and Olseth, 1986), men denne relasjonen er representativ også for andre norske stasjonar. Desse verdiane er representative for klarverssituasjonar med midlere turbiditet og vassdamp. For å estimere skråflatestrålinga brukte vi, som under punkt 1, oppsplittingsmodellen (Skartveit and Olseth, 1987) og skråflatemodellen (Skartveit and Olseth, 1986).

3. Ekstrem timevis klarversstråling

I ekstreme situasjonar, med lav turbiditet, lite vassdamp og kanskje med skyer som ikkje dekkjer for sola (gir auka diffus stråling utan å svekke den direkte strålinga) fann vi timeverdiar av globalstråling som var opptil omlag 10% høgre enn midlere klarvers globalstråling (Olseth and Skartveit, 1987). Ekstrem klarvers globalstråling er derfor framkomen ved å multiplisere midlere klarvers globalstråling (d.v.s. total horisontalflatestråling) med 1.1. For å estimere skråflatestrålinga brukte vi, som under punkt 1 og 2, oppsplittingsmodellen (Skartveit and Olseth, 1987) og skråflatemodellen (Skartveit and Olseth, 1986).

Tabellar

Tabellane inneheld timeverdiar (Wm^{-2}) av dei tre ovanfor nemnde strålingsparametrane for fire aktuelle datoar : 28/2, 31/3, 1/10 og 1/11. På kvar linje er verdiane f.o.m. time 1 (00³⁰-01³⁰) t.o.m. time 24 (23³⁰-00³⁰) sann soltid gitt.

OMREKNING AV SANN SOLTID TIL NORMALTID

DATO	SOLTID	NORMALTID
28.02	1200	1231
31.03	1200	1222
01.10	1200	1207
01.11	1200	1202

TIMEVERDIER (SANN SOLTID I TABELLEN)

0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130
0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130	1230
1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	2430
1430	1530	1630	1730	1830	1930	2030	2130	2230	2330	2430	0030

For horisontalflata er globalstrålinga (totalstrålinga) gitt. For flatene mot sør (S), sør-aust (SE), aust (E), nordaust (NE) og nord (N) med helling 30, 60 og 90 grader er både totalstrålinga og den markreflekterte komponenten av denne gitt. Den markreflekterte strålinga er berekna med ein bakkealbedo på 0.5, som vil vere representativ for ein snødekt plan bakke (utan for mykje skog som ikkje er snødekt i området omkring) og der snøen ikkje er heilt fersk men heller ikkje for gammal.

Då den markreflekterte komponenten av totalstrålinga er gitt separat kan denne komponenten enkelt korrigerast ved val av ein annan albedo enn 0.5. Den markreflekterte strålinga er proporsjonal med albedoen og divisjon av denne strålinga med 0.5 og multiplikasjon med den nye albedoen vil såleis gi markreflektert stråling med ny albedo. NB! Den gitte totalstrålinga inkluderer markreflektert stråling, slik at for å få totalstråling med ny albedo så må "gammal" markreflekterte stråling (ved albedo 0.5) trekkiast frå den gitte totalstrålinga og markreflektert stråling ved ny albedo leggast til.

Litteratur

Olseth, J. A. and A. Skartveit 1987, A probability density model for hourly total and beam irradiance on arbitrarily orientated planes. SOLAR ENERGY, 39, 343-351.

Skartveit, A. and J. A. Olseth 1986, Modelling slope irradiance at high latitudes. SOLAR ENERGY, 36, 333-344.

Skartveit, A. and J. A. Olseth 1987, A model for the diffuse fraction of hourly global radiation. SOLAR ENERGY, 38, 271-274.

MIDLERE STRÅLING (WM-2)

** HORIZONTAL **

28/ 2 * GLOBAL	*	0	0	0	0	0	0	0	6	52	120	180	221	235	221	180	120	52	6	0	0	0	0	0	0	0	0
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** S30 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	10	99	214	320	392	416	392	320	214	99	10	0	0	0	0	0	0	0	0
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28/ 2 * MARKREFL.	*	0	0	0	0	0	0	0	2	4	6	7	8	7	6	4	2	0	0	0	0	0	0	0	0	0
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** S60 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	12	126	267	395	484	513	484	395	267	126	12	0	0	0	0	0	0	0	0
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28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	7	15	23	28	29	28	23	15	7	1	0	0	0	0	0	0	0	0
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** S90 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	12	127	263	387	472	500	472	387	263	127	12	0	0	0	0	0	0	0	0
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28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	13	30	45	55	59	55	45	30	13	1	0	0	0	0	0	0	0	0
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** SE30 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	17	144	259	340	375	358	300	210	110	29	4	0	0	0	0	0	0	0	0
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28/ 2 * MARKREFL.	*	0	0	0	0	0	0	0	2	4	6	7	8	7	6	4	2	0	0	0	0	0	0	0	0	0
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** SE60 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	24	205	344	430	454	412	324	205	86	28	3	0	0	0	0	0	0	0	0
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28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	7	15	23	28	29	28	23	15	7	1	0	0	0	0	0	0	0	0
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** SE90 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	26	218	352	427	437	383	287	167	58	27	3	0	0	0	0	0	0	0	0
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28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	13	30	45	55	59	55	45	30	13	1	0	0	0	0	0	0	0	0
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** E30 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	17	134	217	259	257	217	151	75	56	29	4	0	0	0	0	0	0	0	0
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28/ 2 * MARKREFL.	*	0	0	0	0	0	0	0	2	4	6	7	8	7	6	4	2	0	0	0	0	0	0	0	0	0
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** E60 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	25	187	271	290	251	168	89	77	57	28	3	0	0	0	0	0	0	0	0
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28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	7	15	23	28	29	28	23	15	7	1	0	0	0	0	0	0	0	0
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** E90 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	26	197	268	265	203	101	96	81	58	27	3	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	13	30	45	55	59	55	45	30	13	1	0	0	0	0	0	0	0	0

** NE30 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	11	74	113	124	109	87	84	74	56	29	4	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	0	2	4	6	7	8	7	6	4	2	0	0	0	0	0	0	0	0	0

** NE60 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	13	83	92	77	89	93	89	77	57	28	3	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	7	15	23	28	29	28	23	15	7	1	0	0	0	0	0	0	0	0

** NE90 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	13	77	61	81	96	101	96	81	58	27	3	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	13	30	45	55	59	55	45	30	13	1	0	0	0	0	0	0	0	0

** N30 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	4	29	56	74	84	87	84	74	56	29	4	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	0	2	4	6	7	8	7	6	4	2	0	0	0	0	0	0	0	0	0

** N60 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	3	28	57	77	89	93	89	77	57	28	3	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	7	15	23	28	29	28	23	15	7	1	0	0	0	0	0	0	0	0

** N90 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	3	27	58	81	96	101	96	81	58	27	3	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	13	30	45	55	59	55	45	30	13	1	0	0	0	0	0	0	0	0

** HORIZONTAL **

31/ 3 * GLOBAL	*	0	0	0	0	0	26	93	183	267	335	379	394	379	335	267	183	93	26	0	0	0	0	0	0
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** S30 **

31/ 3 * TOTAL	*	0	0	0	0	0	22	110	242	374	483	555	580	555	483	374	242	110	22	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	1	3	6	9	11	13	13	13	11	9	6	3	1	0	0	0	0	0	0

** S60 **

31/ 3 * TOTAL	*	0	0	0	0	0	16	111	258	411	538	622	652	622	538	411	258	111	16	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	3	12	23	33	42	47	49	47	42	33	23	12	3	0	0	0	0	0	0

** S90 **

31/ 3 * TOTAL	*	0	0	0	0	0	13	94	228	368	486	564	591	564	486	368	228	94	13	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	6	23	46	67	84	95	99	95	84	67	46	23	6	0	0	0	0	0	0

** SE30 **

31/ 3 * TOTAL	*	0	0	0	0	0	64	187	330	445	517	541	516	448	347	228	111	48	15	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	1	3	6	9	11	13	13	13	11	9	6	3	1	0	0	0	0	0	0

** SE60 **

31/ 3 * TOTAL	*	0	0	0	0	0	89	244	411	534	596	598	541	438	303	159	79	48	14	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	3	12	23	33	42	47	49	47	42	33	23	12	3	0	0	0	0	0	0

** SE90 **

31/ 3 * TOTAL	*	0	0	0	0	0	94	247	405	510	553	535	463	350	214	114	83	47	13	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	6	23	46	67	84	95	99	95	84	67	46	23	6	0	0	0	0	0	0

** E30 **

31/ 3 * TOTAL	*	0	0	0	0	0	83	205	324	400	428	414	362	283	188	96	76	48	15	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	1	3	6	9	11	13	13	13	11	9	6	3	1	0	0	0	0	0	0

** E60 **

31/ 3 * TOTAL	*	0	0	0	0	0	121	275	401	456	444	378	275	152	121	103	79	48	14	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	3	12	23	33	42	47	49	47	42	33	23	12	3	0	0	0	0	0	0

** E90 **

31/ 3 * TOTAL	*	0	0	0	0	0	131	283	393	420	377	282	156	151	137	114	83	47	13	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	6	23	46	67	84	95	99	95	84	67	46	23	6	0	0	0	0	0	0

** NE30 **

31/ 3 * TOTAL	*	0	0	0	0	0	67	154	227	265	270	249	209	156	110	96	76	48	15	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	1	3	6	9	11	13	13	13	11	9	6	3	1	0	0	0	0	0	0

** NE60 **

31/ 3 * TOTAL	*	0	0	0	0	0	94	186	234	222	169	132	136	132	121	103	79	48	14	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	3	12	23	33	42	47	49	47	42	33	23	12	3	0	0	0	0	0

** NE90 **

31/ 3 * TOTAL	*	0	0	0	0	0	99	181	199	150	137	151	156	151	137	114	83	47	13	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	6	23	46	67	84	95	99	95	84	67	46	23	6	0	0	0	0	0

** N30 **

31/ 3 * TOTAL	*	0	0	0	0	0	26	63	97	120	134	142	145	142	134	120	97	63	26	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	1	3	6	9	11	13	13	13	11	9	6	3	1	0	0	0	0	0

** N60 **

31/ 3 * TOTAL	*	0	0	0	0	0	23	48	79	103	121	132	136	132	121	103	79	48	23	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	3	12	23	33	42	47	49	47	42	33	23	12	3	0	0	0	0	0

** N90 **

31/ 3 * TOTAL	*	0	0	0	0	0	17	47	83	114	137	151	156	151	137	114	83	47	17	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	6	23	46	67	84	95	99	95	84	67	46	23	6	0	0	0	0	0

** HORIZONTAL **

1/10 * GLOBAL	*	0	0	0	0	0	0	0	26	78	135	184	215	228	215	184	135	78	26	0	0	0	0	0	0	0
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** S30 **

1/10 * TOTAL	*	0	0	0	0	0	0	0	35	107	190	263	311	331	311	263	190	107	35	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	0	1	3	5	6	7	8	7	6	5	3	1	0	0	0	0	0	0	0
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** S60 **

1/10 * TOTAL	*	0	0	0	0	0	0	0	38	119	213	298	352	376	352	298	213	119	38	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	0	3	10	17	23	27	28	27	23	17	10	3	0	0	0	0	0	0	0
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** S90 **

1/10 * TOTAL	*	0	0	0	0	0	0	0	35	109	197	277	328	350	328	277	197	109	35	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	0	6	19	34	46	54	57	54	46	34	19	6	0	0	0	0	0	0	0
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** SE30 **

1/10 * TOTAL	*	0	0	0	0	0	0	0	61	143	221	278	302	296	256	195	122	52	18	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	0	1	3	5	6	7	8	7	6	5	3	1	0	0	0	0	0	0	0
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** SE60 **

1/10 * TOTAL	*	0	0	0	0	0	0	0	83	180	266	323	336	316	257	179	95	45	16	0	0	0	0	0	0	0
--------------	---	---	---	---	---	---	---	---	----	-----	-----	-----	-----	-----	-----	-----	----	----	----	---	---	---	---	---	---	---

1/10 * MARKREFL.	*	0	0	0	0	0	0	0	3	10	17	23	27	28	27	23	17	10	3	0	0	0	0	0	0	0
------------------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	---	---	---	---	---	---	---	---

** SE90 **

1/10 * TOTAL	*	0	0	0	0	0	0	0	87	180	259	306	310	281	218	140	69	41	14	0	0	0	0	0	0	0
--------------	---	---	---	---	---	---	---	---	----	-----	-----	-----	-----	-----	-----	-----	----	----	----	---	---	---	---	---	---	---

1/10 * MARKREFL.	*	0	0	0	0	0	0	0	6	19	34	46	54	57	54	46	34	19	6	0	0	0	0	0	0	0
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** E30 **

1/10 * TOTAL	*	0	0	0	0	0	0	0	65	137	196	230	233	213	168	113	75	48	18	0	0	0	0	0	0	0
--------------	---	---	---	---	---	---	---	---	----	-----	-----	-----	-----	-----	-----	-----	----	----	----	---	---	---	---	---	---	---

1/10 * MARKREFL.	*	0	0	0	0	0	0	0	1	3	5	6	7	8	7	6	5	3	1	0	0	0	0	0	0	0
------------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

** E60 **

1/10 * TOTAL	*	0	0	0	0	0	0	0	91	170	223	240	218	171	109	95	73	45	16	0	0	0	0	0	0	0
--------------	---	---	---	---	---	---	---	---	----	-----	-----	-----	-----	-----	-----	----	----	----	----	---	---	---	---	---	---	---

1/10 * MARKREFL.	*	0	0	0	0	0	0	0	3	10	17	23	27	28	27	23	17	10	3	0	0	0	0	0	0	0
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** E90 **

1/10 * TOTAL	*	0	0	0	0	0	0	0	96	169	209	210	174	114	108	93	69	41	14	0	0	0	0	0	0	0
--------------	---	---	---	---	---	---	---	---	----	-----	-----	-----	-----	-----	-----	----	----	----	----	---	---	---	---	---	---	---

1/10 * MARKREFL.	*	0	0	0	0	0	0	0	6	19	34	46	54	57	54	46	34	19	6	0	0	0	0	0	0	0
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** NE30 **

1/10 * TOTAL	*	0	0	0	0	0	0	46	94	130	148	146	129	109	96	75	48	18	0	0	0	0	0	0	0
1/10 * MARKREFL.	*	0	0	0	0	0	0	1	3	5	6	7	8	7	6	5	3	1	0	0	0	0	0	0	0

** NE60 **

1/10 * TOTAL	*	0	0	0	0	0	0	57	96	110	98	109	113	109	95	73	45	16	0	0	0	0	0	0	0
1/10 * MARKREFL.	*	0	0	0	0	0	0	3	10	17	23	27	28	27	23	17	10	3	0	0	0	0	0	0	0

** NE90 **

1/10 * TOTAL	*	0	0	0	0	0	0	57	83	78	93	108	114	108	93	69	41	14	0	0	0	0	0	0	0
1/10 * MARKREFL.	*	0	0	0	0	0	0	6	19	34	46	54	57	54	46	34	19	6	0	0	0	0	0	0	0

** N30 **

1/10 * TOTAL	*	0	0	0	0	0	0	18	48	75	96	109	113	109	96	75	48	18	0	0	0	0	0	0	0
1/10 * MARKREFL.	*	0	0	0	0	0	0	1	3	5	6	7	8	7	6	5	3	1	0	0	0	0	0	0	0

** N60 **

1/10 * TOTAL	*	0	0	0	0	0	0	16	45	73	95	109	113	109	95	73	45	16	0	0	0	0	0	0	0
1/10 * MARKREFL.	*	0	0	0	0	0	0	3	10	17	23	27	28	27	23	17	10	3	0	0	0	0	0	0	0

** N90 **

1/10 * TOTAL	*	0	0	0	0	0	0	14	41	69	93	108	114	108	93	69	41	14	0	0	0	0	0	0	0
1/10 * MARKREFL.	*	0	0	0	0	0	0	6	19	34	46	54	57	54	46	34	19	6	0	0	0	0	0	0	0

** HORIZONTAL **

1/11 * GLOBAL * 0 0 0 0 0 0 0 0 6 29 56 74 81 74 56 29 6 0 0 0 0 0 0 0 0

** S30 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 10 47 85 112 122 112 85 47 10 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 1 2 2 3 2 2 1 0 0 0 0 0 0 0 0 0

** S60 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 12 57 100 130 141 130 100 57 12 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 1 4 7 9 10 9 7 4 1 0 0 0 0 0 0 0

** S90 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 11 56 96 124 134 124 96 56 11 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 1 7 14 19 20 19 14 7 1 0 0 0 0 0 0 0

** SE30 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 12 55 89 107 108 92 62 28 4 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 1 2 2 3 2 2 1 0 0 0 0 0 0 0 0 0

** SE60 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 16 70 106 122 118 95 60 24 4 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 1 4 7 9 10 9 7 4 1 0 0 0 0 0 0 0

** SE90 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 17 71 103 115 108 83 50 17 3 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 1 7 14 19 20 19 14 7 1 0 0 0 0 0 0 0

** E30 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 11 46 71 81 76 59 40 22 4 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 1 2 2 3 2 2 1 0 0 0 0 0 0 0 0 0

** E60 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 14 55 75 76 62 47 36 19 4 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 1 4 7 9 10 9 7 4 1 0 0 0 0 0 0 0

** E90 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 15 54 67 62 44 40 30 16 3 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 1 7 14 19 20 19 14 7 1 0 0 0 0 0 0 0

MIDLERE KLARVERSTRÅLING (MM-2)

** HORIZONTAL **

28/ 2 * GLOBAL * 0 0 0 0 0 0 0 8 73 170 253 308 328 308 253 170 73 8 0 0 0 0 0 0 0

** S30 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 16 168 362 527 635 673 635 527 362 168 16 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 0 2 6 8 10 11 10 8 6 2 0 0 0 0 0 0 0

** S60 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 21 226 473 682 818 866 818 682 473 226 21 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 1 9 21 32 39 41 39 32 21 9 1 0 0 0 0 0 0 0

** S90 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 21 233 475 677 809 855 809 677 475 233 21 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 2 18 42 63 77 82 77 63 42 18 2 0 0 0 0 0 0 0

** SE30 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 30 259 450 566 602 563 460 314 152 29 4 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 0 2 6 8 10 11 10 8 6 2 0 0 0 0 0 0 0

** SE60 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 46 384 627 750 761 676 515 313 110 30 4 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 1 9 21 32 39 41 39 32 21 9 1 0 0 0 0 0 0 0

** SE90 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 50 415 653 756 743 635 459 252 63 32 4 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 2 18 42 63 77 82 77 63 42 18 2 0 0 0 0 0 0 0

** E30 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 31 238 367 409 381 298 180 53 44 29 4 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 0 2 6 8 10 11 10 8 6 2 0 0 0 0 0 0 0

** E60 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 47 348 482 479 378 216 73 65 52 30 4 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 1 9 21 32 39 41 39 32 21 9 1 0 0 0 0 0 0 0

** E90 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	51	374	485	443	301	105	100	86	63	32	4	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	2	18	42	63	77	82	77	63	42	18	2	0	0	0	0	0	0	0

** NE30 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	18	118	159	148	101	54	53	50	44	29	4	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	0	2	6	8	10	11	10	8	6	2	0	0	0	0	0	0	0	0

** NE60 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	24	139	123	65	73	75	73	65	52	30	4	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	9	21	32	39	41	39	32	21	9	1	0	0	0	0	0	0	0

** NE90 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	25	132	70	86	100	105	100	86	63	32	4	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	2	18	42	63	77	82	77	63	42	18	2	0	0	0	0	0	0	0

** N30 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	4	29	44	50	53	54	53	50	44	29	4	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	0	2	6	8	10	11	10	8	6	2	0	0	0	0	0	0	0	0

** N60 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	4	30	52	65	73	75	73	65	52	30	4	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	9	21	32	39	41	39	32	21	9	1	0	0	0	0	0	0	0

** N90 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	4	32	63	86	100	105	100	86	63	32	4	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	2	18	42	63	77	82	77	63	42	18	2	0	0	0	0	0	0	0

** HORIZONTAL **

31/ 3 * GLOBAL * 0 0 0 0 0 35 135 257 371 463 521 542 521 463 371 257 135 35 0 0 0 0 0 0

** S30 **

31/ 3 * TOTAL * 0 0 0 0 0 29 174 375 573 736 839 877 839 736 573 375 174 29 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 1 5 9 12 16 17 18 17 16 12 9 5 1 0 0 0 0 0 0

** S60 **

31/ 3 * TOTAL * 0 0 0 0 0 19 181 417 652 850 974 1020 974 850 652 417 181 19 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 4 17 32 46 58 65 68 65 58 46 32 17 4 0 0 0 0 0 0

** S90 **

31/ 3 * TOTAL * 0 0 0 0 0 16 154 370 588 773 889 931 889 773 588 370 154 16 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 9 34 64 93 116 130 135 130 116 93 64 34 9 0 0 0 0 0 0

** SE30 **

31/ 3 * TOTAL * 0 0 0 0 0 109 337 547 704 797 814 764 649 489 303 121 41 15 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 1 5 9 12 16 17 18 17 16 12 9 5 1 0 0 0 0 0 0

** SE60 **

31/ 3 * TOTAL * 0 0 0 0 0 159 463 714 880 956 930 824 645 422 185 68 46 16 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 4 17 32 46 58 65 68 65 58 46 32 17 4 0 0 0 0 0 0

** SE90 **

31/ 3 * TOTAL * 0 0 0 0 0 170 479 713 852 895 838 705 508 279 117 88 53 16 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 9 34 64 93 116 130 135 130 116 93 64 34 9 0 0 0 0 0 0

** E30 **

31/ 3 * TOTAL * 0 0 0 0 0 145 375 535 621 637 588 490 355 202 58 53 41 15 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 1 5 9 12 16 17 18 17 16 12 9 5 1 0 0 0 0 0 0

** E60 **

31/ 3 * TOTAL * 0 0 0 0 0 220 528 694 736 678 539 350 135 93 83 68 46 16 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 4 17 32 46 58 65 68 65 58 46 32 17 4 0 0 0 0 0 0

** E90 **

31/ 3 * TOTAL * 0 0 0 0 0 241 555 690 685 575 387 158 153 139 117 88 53 16 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 9 34 64 93 116 130 135 130 116 93 64 34 9 0 0 0 0 0 0

** NE30 **

31/ 3 * TOTAL	*	0	0	0	0	0	114	266	348	371	349	294	217	129	60	58	53	41	15	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	1	5	9	12	16	17	18	17	16	12	9	5	1	0	0	0	0	0	0

** NE60 **

31/ 3 * TOTAL	*	0	0	0	0	0	167	340	368	303	180	100	102	100	93	83	68	46	16	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	4	17	32	46	58	65	68	65	58	46	32	17	4	0	0	0	0	0	0

** NE90 **

31/ 3 * TOTAL	*	0	0	0	0	0	180	337	314	185	139	153	158	153	139	117	88	53	16	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	9	34	64	93	116	130	135	130	116	93	64	34	9	0	0	0	0	0	0

** N30 **

31/ 3 * TOTAL	*	0	0	0	0	0	36	74	93	101	103	104	104	104	103	101	93	74	36	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	1	5	9	12	16	17	18	17	16	12	9	5	1	0	0	0	0	0	0

** N60 **

31/ 3 * TOTAL	*	0	0	0	0	0	32	46	68	83	93	100	102	100	93	83	68	46	32	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	4	17	32	46	58	65	68	65	58	46	32	17	4	0	0	0	0	0	0

** N90 **

31/ 3 * TOTAL	*	0	0	0	0	0	23	53	88	117	139	153	158	153	139	117	88	53	23	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	9	34	64	93	116	130	135	130	116	93	64	34	9	0	0	0	0	0	0

** HORIZONTAL **

1/10 * GLOBAL * 0 0 0 0 0 1 45 141 242 326 379 399 379 326 242 141 45 1 0 0 0 0 0 0

** S30 **

1/10 * TOTAL * 0 0 0 0 0 2 78 245 428 582 680 716 680 582 428 245 78 2 0 0 0 0 0 0

1/10 * MARKREFL. * 0 0 0 0 0 0 2 5 8 11 13 13 13 11 8 5 2 0 0 0 0 0 0

** S60 **

1/10 * TOTAL * 0 0 0 0 0 2 96 299 523 712 831 875 831 712 523 299 96 2 0 0 0 0 0 0

1/10 * MARKREFL. * 0 0 0 0 0 0 6 18 30 41 47 50 47 41 30 18 6 0 0 0 0 0 0

** S90 **

1/10 * TOTAL * 0 0 0 0 0 2 93 288 501 680 793 834 793 680 501 288 93 2 0 0 0 0 0 0

1/10 * MARKREFL. * 0 0 0 0 0 0 11 35 60 81 95 100 95 81 60 35 11 0 0 0 0 0 0

** SE30 **

1/10 * TOTAL * 0 0 0 0 0 5 165 365 528 627 652 612 511 370 207 58 21 0 0 0 0 0 0 0

1/10 * MARKREFL. * 0 0 0 0 0 0 2 5 8 11 13 13 13 11 8 5 2 0 0 0 0 0 0

** SE60 **

1/10 * TOTAL * 0 0 0 0 0 7 247 506 696 790 783 696 540 344 140 49 21 0 0 0 0 0 0 0

1/10 * MARKREFL. * 0 0 0 0 0 0 6 18 30 41 47 50 47 41 30 18 6 0 0 0 0 0 0

** SE90 **

1/10 * TOTAL * 0 0 0 0 0 7 268 527 700 770 737 627 456 255 86 56 22 0 0 0 0 0 0 0

1/10 * MARKREFL. * 0 0 0 0 0 0 11 35 60 81 95 100 95 81 60 35 11 0 0 0 0 0 0

** E30 **

1/10 * TOTAL * 0 0 0 0 0 5 180 346 448 478 444 362 245 115 56 44 21 0 0 0 0 0 0 0

1/10 * MARKREFL. * 0 0 0 0 0 0 2 5 8 11 13 13 13 11 8 5 2 0 0 0 0 0 0

** E60 **

1/10 * TOTAL * 0 0 0 0 0 8 273 474 557 532 423 263 89 82 69 49 21 0 0 0 0 0 0 0

1/10 * MARKREFL. * 0 0 0 0 0 0 6 18 30 41 47 50 47 41 30 18 6 0 0 0 0 0 0

** E90 **

1/10 * TOTAL * 0 0 0 0 0 9 298 490 540 473 321 128 123 109 86 56 22 0 0 0 0 0 0 0

1/10 * MARKREFL. * 0 0 0 0 0 0 11 35 60 81 95 100 95 81 60 35 11 0 0 0 0 0 0 0

** NE30 **

1/10 * TOTAL *	0	0	0	0	0	4	114	201	235	223	178	113	65	62	56	44	21	0	0	0	0	0	0	0
1/10 * MARKREFL. *	0	0	0	0	0	0	2	5	8	11	13	13	13	11	8	5	2	0	0	0	0	0	0	0

** NE60 **

1/10 * TOTAL *	0	0	0	0	0	5	159	222	188	90	89	92	89	82	69	49	21	0	0	0	0	0	0	0
1/10 * MARKREFL. *	0	0	0	0	0	0	6	18	30	41	47	50	47	41	30	18	6	0	0	0	0	0	0	0

** NE90 **

1/10 * TOTAL *	0	0	0	0	0	6	166	199	114	109	123	128	123	109	86	56	22	0	0	0	0	0	0	0
1/10 * MARKREFL. *	0	0	0	0	0	0	11	35	60	81	95	100	95	81	60	35	11	0	0	0	0	0	0	0

** N30 **

1/10 * TOTAL *	0	0	0	0	0	1	21	44	56	62	65	65	65	62	56	44	21	1	0	0	0	0	0	0
1/10 * MARKREFL. *	0	0	0	0	0	0	2	5	8	11	13	13	13	11	8	5	2	0	0	0	0	0	0	0

** N60 **

1/10 * TOTAL *	0	0	0	0	0	0	21	49	69	82	89	92	89	82	69	49	21	0	0	0	0	0	0	0
1/10 * MARKREFL. *	0	0	0	0	0	0	6	18	30	41	47	50	47	41	30	18	6	0	0	0	0	0	0	0

** N90 **

1/10 * TOTAL *	0	0	0	0	0	0	22	56	86	109	123	128	123	109	86	56	22	0	0	0	0	0	0	0
1/10 * MARKREFL. *	0	0	0	0	0	0	11	35	60	81	95	100	95	81	60	35	11	0	0	0	0	0	0	0

** HORIZONTAL **

1/11 * GLOBAL * 0 0 0 0 0 0 0 0 14 72 140 187 205 187 140 72 14 0 0 0 0 0 0 0

** S30 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 39 202 350 454 490 454 350 202 39 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 2 5 6 7 6 5 2 0 0 0 0 0 0 0 0

** S60 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 55 287 482 617 664 617 482 287 55 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 2 9 17 23 26 23 17 9 2 0 0 0 0 0 0 0

** S90 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 58 304 500 634 680 634 500 304 58 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 3 18 35 47 51 47 35 18 3 0 0 0 0 0 0 0

** SE30 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 57 254 374 424 401 318 196 71 6 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 2 5 6 7 6 5 2 0 0 0 0 0 0 0 0

** SE60 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 87 376 524 566 510 382 215 60 6 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 2 9 17 23 26 23 17 9 2 0 0 0 0 0 0 0

** SE90 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 95 407 548 575 503 363 191 42 7 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 3 18 35 47 51 47 35 18 3 0 0 0 0 0 0 0

** E30 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 50 196 254 247 187 96 43 29 6 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 2 5 6 7 6 5 2 0 0 0 0 0 0 0 0

** E60 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 74 276 316 259 140 58 48 31 6 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 2 9 17 23 26 23 17 9 2 0 0 0 0 0 0 0

** E90 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 80 291 308 220 75 70 55 32 7 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 3 18 35 47 51 47 35 18 3 0 0 0 0 0 0 0

EKSTREM KLARVERSTRÅLING (WM-2)

** HORIZONTAL **

28/ 2 * GLOBAL * 0 0 0 0 0 0 0 9 81 186 278 338 360 338 278 186 81 9 0 0 0 0 0 0 0

** S30 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 20 198 414 600 722 766 722 600 414 198 20 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 0 3 6 9 11 12 11 9 6 3 0 0 0 0 0 0 0

** S60 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 27 271 548 784 939 995 939 784 548 271 27 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 1 10 23 35 42 45 42 35 23 10 1 0 0 0 0 0 0

** S90 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 27 280 552 781 932 985 932 781 552 280 27 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 2 20 47 69 85 90 85 69 47 20 2 0 0 0 0 0 0

** SE30 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 39 311 519 646 684 637 517 350 165 27 4 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 0 3 6 9 11 12 11 9 6 3 0 0 0 0 0 0 0

** SE60 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 59 466 730 864 873 772 584 351 117 30 4 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 1 10 23 35 42 45 42 35 23 10 1 0 0 0 0 0 0

** SE90 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 64 506 763 874 854 727 522 281 63 33 4 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 2 20 47 69 85 90 85 69 47 20 2 0 0 0 0 0 0

** E30 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 40 285 420 462 424 326 189 42 38 27 4 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 0 3 6 9 11 12 11 9 6 3 0 0 0 0 0 0 0

** E60 **

28/ 2 * TOTAL * 0 0 0 0 0 0 0 60 422 558 545 423 233 65 59 48 30 4 0 0 0 0 0 0 0

28/ 2 * MARKREFL. * 0 0 0 0 0 0 0 1 10 23 35 42 45 42 35 23 10 1 0 0 0 0 0 0 0

** E90 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	66	454	564	505	335	105	100	86	63	33	4	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	2	20	47	69	85	90	85	69	47	20	2	0	0	0	0	0	0	0	0

** NE30 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	22	136	174	155	96	40	40	40	38	27	4	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	0	3	6	9	11	12	11	9	6	3	0	0	0	0	0	0	0	0	0

** NE60 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	31	164	132	59	65	67	65	59	48	30	4	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	10	23	35	42	45	42	35	23	10	1	0	0	0	0	0	0	0	0

** NE90 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	32	156	72	86	100	105	100	86	63	33	4	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	2	20	47	69	85	90	85	69	47	20	2	0	0	0	0	0	0	0	0

** N30 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	4	27	38	40	40	40	40	40	38	27	4	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	0	3	6	9	11	12	11	9	6	3	0	0	0	0	0	0	0	0	0

** N60 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	4	30	48	59	65	67	65	59	48	30	4	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	1	10	23	35	42	45	42	35	23	10	1	0	0	0	0	0	0	0	0

** N90 **

28/ 2 * TOTAL	*	0	0	0	0	0	0	4	33	63	86	100	105	100	86	63	33	4	0	0	0	0	0	0	0	0
28/ 2 * MARKREFL.	*	0	0	0	0	0	0	2	20	47	69	85	90	85	69	47	20	2	0	0	0	0	0	0	0	0

** HORIZONTAL **

31/ 3 * GLOBAL * 0 0 0 0 0 38 149 283 408 509 573 595 573 509 408 283 149 38 0 0 0 0 0 0

** S30 **

31/ 3 * TOTAL * 0 0 0 0 0 31 197 423 646 829 944 984 944 829 646 423 197 31 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 1 5 9 14 17 19 20 19 17 14 9 5 1 0 0 0 0 0 0

** S60 **

31/ 3 * TOTAL * 0 0 0 0 0 20 206 474 741 964110311521103 964 741 474 206 20 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 5 19 35 51 64 72 74 72 64 51 35 19 5 0 0 0 0 0 0

** S90 **

31/ 3 * TOTAL * 0 0 0 0 0 17 175 422 670 878100810541008 878 670 422 175 17 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 10 37 71 102 127 143 149 143 127 102 71 37 10 0 0 0 0 0 0

** SE30 **

31/ 3 * TOTAL * 0 0 0 0 0 129 393 626 800 900 915 853 723 541 329 123 36 15 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 1 5 9 14 17 19 20 19 17 14 9 5 1 0 0 0 0 0 0

** SE60 **

31/ 3 * TOTAL * 0 0 0 0 0 189 546 826100910871052 925 721 466 193 61 44 16 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 5 19 35 51 64 72 74 72 64 51 35 19 5 0 0 0 0 0 0

** SE90 **

31/ 3 * TOTAL * 0 0 0 0 0 204 567 828 9791020 950 792 567 303 117 88 54 17 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 10 37 71 102 127 143 149 143 127 102 71 37 10 0 0 0 0 0 0

** E30 **

31/ 3 * TOTAL * 0 0 0 0 0 172 439 613 702 713 653 537 382 206 42 42 36 15 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 1 5 9 14 17 19 20 19 17 14 9 5 1 0 0 0 0 0 0

** E60 **

31/ 3 * TOTAL * 0 0 0 0 0 264 626 802 839 764 598 377 129 82 74 61 44 16 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 5 19 35 51 64 72 74 72 64 51 35 19 5 0 0 0 0 0 0

** E90 **

31/ 3 * TOTAL * 0 0 0 0 0 289 659 800 783 647 425 159 154 140 117 88 54 17 0 0 0 0 0 0

31/ 3 * MARKREFL. * 0 0 0 0 0 10 37 71 102 127 143 149 143 127 102 71 37 10 0 0 0 0 0 0

** NE30 **

31/ 3 * TOTAL	*	0	0	0	0	0	135	307	390	409	378	311	221	120	40	42	42	36	15	0	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	1	5	9	14	17	19	20	19	17	14	9	5	1	0	0	0	0	0	0

** NE60 **

31/ 3 * TOTAL	*	0	0	0	0	0	200	398	417	332	183	88	90	88	82	74	61	44	16	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	5	19	35	51	64	72	74	72	64	51	35	19	5	0	0	0	0	0

** NE90 **

31/ 3 * TOTAL	*	0	0	0	0	0	216	396	356	197	140	154	159	154	140	117	88	54	17	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	10	37	71	102	127	143	149	143	127	102	71	37	10	0	0	0	0	0

** N30 **

31/ 3 * TOTAL	*	0	0	0	0	0	40	76	90	93	91	90	90	90	91	93	90	76	40	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	1	5	9	14	17	19	20	19	17	14	9	5	1	0	0	0	0	0

** N60 **

31/ 3 * TOTAL	*	0	0	0	0	0	35	44	61	74	82	88	90	88	82	74	61	44	35	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	5	19	35	51	64	72	74	72	64	51	35	19	5	0	0	0	0	0

** N90 **

31/ 3 * TOTAL	*	0	0	0	0	0	25	54	88	117	140	154	159	154	140	117	88	54	25	0	0	0	0	0
31/ 3 * MARKREFL.	*	0	0	0	0	0	10	37	71	102	127	143	149	143	127	102	71	37	10	0	0	0	0	0

** HORIZONTAL **

1/10 * GLOBAL	*	0	0	0	0	0	1	50	155	266	358	417	438	417	358	266	155	50	1	0	0	0	0	0	0	0
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** S30 **

1/10 * TOTAL	*	0	0	0	0	0	2	90	281	489	662	773	811	773	662	489	281	90	2	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	2	5	9	12	14	15	14	12	9	5	2	0	0	0	0	0	0	0	0
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** S60 **

1/10 * TOTAL	*	0	0	0	0	0	2	112	347	604	817	954	1001	954	817	604	347	112	2	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	6	19	33	45	52	55	52	45	33	19	6	0	0	0	0	0	0	0	0
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** S90 **

1/10 * TOTAL	*	0	0	0	0	0	2	110	335	580	783	913	956	913	783	580	335	110	2	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	12	39	67	90	104	110	104	90	67	39	12	0	0	0	0	0	0	0	0
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** SE30 **

1/10 * TOTAL	*	0	0	0	0	0	5	197	424	608	715	740	690	575	411	226	56	20	0	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	2	5	9	12	14	15	14	12	9	5	2	0	0	0	0	0	0	0	0
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** SE60 **

1/10 * TOTAL	*	0	0	0	0	0	7	296	595	810	910	897	791	611	383	148	47	21	0	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	6	19	33	45	52	55	52	45	33	19	6	0	0	0	0	0	0	0	0
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** SE90 **

1/10 * TOTAL	*	0	0	0	0	0	7	323	622	818	889	847	714	516	282	86	57	22	0	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	12	39	67	90	104	110	104	90	67	39	12	0	0	0	0	0	0	0	0
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** E30 **

1/10 * TOTAL	*	0	0	0	0	0	5	215	402	512	540	495	397	261	110	46	39	20	0	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	2	5	9	12	14	15	14	12	9	5	2	0	0	0	0	0	0	0	0
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** E60 **

1/10 * TOTAL	*	0	0	0	0	0	8	328	557	645	606	473	283	80	73	63	47	21	0	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	6	19	33	45	52	55	52	45	33	19	6	0	0	0	0	0	0	0	0
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** E90 **

1/10 * TOTAL	*	0	0	0	0	0	9	359	578	627	538	357	128	123	109	86	57	22	0	0	0	0	0	0	0	0
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1/10 * MARKREFL.	*	0	0	0	0	0	0	12	39	67	90	104	110	104	90	67	39	12	0	0	0	0	0	0	0	0
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** NE30 **

1/10 * TOTAL *	0	0	0	0	0	4	134	227	259	238	181	104	48	48	46	39	20	0	0	0	0	0	0	0	0
1/10 * MARKREFL. *	0	0	0	0	0	0	2	5	9	12	14	15	14	12	9	5	2	0	0	0	0	0	0	0	0

** NE60 **

1/10 * TOTAL *	0	0	0	0	0	5	189	254	205	84	80	82	80	73	63	47	21	0	0	0	0	0	0	0	0
1/10 * MARKREFL. *	0	0	0	0	0	0	6	19	33	45	52	55	52	45	33	19	6	0	0	0	0	0	0	0	0

** NE90 **

1/10 * TOTAL *	0	0	0	0	0	6	199	229	120	109	123	128	123	109	86	57	22	0	0	0	0	0	0	0	0
1/10 * MARKREFL. *	0	0	0	0	0	0	12	39	67	90	104	110	104	90	67	39	12	0	0	0	0	0	0	0	0

** N30 **

1/10 * TOTAL *	0	0	0	0	0	1	20	39	46	48	48	48	48	46	39	20	1	0	0	0	0	0	0	0	0
1/10 * MARKREFL. *	0	0	0	0	0	0	2	5	9	12	14	15	14	12	9	5	2	0	0	0	0	0	0	0	0

** N60 **

1/10 * TOTAL *	0	0	0	0	0	0	21	47	63	73	80	82	80	73	63	47	21	0	0	0	0	0	0	0	0
1/10 * MARKREFL. *	0	0	0	0	0	0	6	19	33	45	52	55	52	45	33	19	6	0	0	0	0	0	0	0	0

** N90 **

1/10 * TOTAL *	0	0	0	0	0	0	22	57	86	109	123	128	123	109	86	57	22	0	0	0	0	0	0	0	0
1/10 * MARKREFL. *	0	0	0	0	0	0	12	39	67	90	104	110	104	90	67	39	12	0	0	0	0	0	0	0	0

** HORIZONTAL **

1/11 * GLOBAL * 0 0 0 0 0 0 0 0 15 79 153 206 226 206 153 79 15 0 0 0 0 0 0 0 0

** S30 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 44 236 407 524 568 524 407 236 44 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 1 3 5 7 8 7 5 3 1 0 0 0 0 0 0 0 0

** S60 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 64 339 567 721 778 721 567 339 64 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 2 10 19 26 28 26 19 10 2 0 0 0 0 0 0 0 0

** S90 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 68 360 589 744 799 744 589 360 68 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 4 20 38 51 56 51 38 20 4 0 0 0 0 0 0 0 0

** SE30 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 66 298 436 489 461 362 222 78 6 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 1 3 5 7 8 7 5 3 1 0 0 0 0 0 0 0 0

** SE60 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 101 446 617 660 594 441 246 66 6 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 2 10 19 26 28 26 19 10 2 0 0 0 0 0 0 0 0

** SE90 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 111 484 647 673 587 420 219 44 7 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 4 20 38 51 56 51 38 20 4 0 0 0 0 0 0 0 0

** E30 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 57 228 292 277 205 98 38 28 6 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 1 3 5 7 8 7 5 3 1 0 0 0 0 0 0 0 0

** E60 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 86 325 367 293 150 54 46 30 6 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 2 10 19 26 28 26 19 10 2 0 0 0 0 0 0 0 0

** E90 **

1/11 * TOTAL * 0 0 0 0 0 0 0 0 93 344 359 249 75 70 56 33 7 0 0 0 0 0 0 0 0

1/11 * MARKREFL. * 0 0 0 0 0 0 0 0 4 20 38 51 56 51 38 20 4 0 0 0 0 0 0 0 0

