

Summary Propagation Tables for Norway (Oslo)

SSN Ultra High	SSN Very High	SSN High	SSN Medium	SSN Low	SSN Very Low
January	January	January	January	January	January
February	February	February	February	February	February
March	March	March	March	March	March
April	April	April	April	April	April
May	May	May	May	May	May
June	June	June	June	June	June
July	July	July	July	July	July
August	August	August	August	August	August
September	September	September	September	September	September
October	October	October	October	October	October
November	November	November	November	November	November
December	December	December	December	December	December

Each of the month names in the above table is a hyperlink to the corresponding page of this document. Click on the one you want to jump to.

Feb., Norway (Oslo), for SSN = Ultra High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								UTC
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	9+	4	8	9+	9	-	7	9+	8	9	9+	9	2	9	3	6	9	9+	7	3	8	-	-	1	1	-	2	5	-	-	-	-	-	-	-	0				
1	9+	-	8	9+	9	-	8	9+	6	9	9+	9	-	9	1	4	9	9+	5	5	9	-	-	-	1	-	3	6	-	-	-	-	-	-	-	1				
2	9+	-	8	9+	9	-	8	9+	1	9	9+	9	-	9	1*	4	9	6	-	7	9	-	-	-	1	-	2	4	-	-	-	-	-	-	-	2				
3	9+	-	8	9+	8	-	8	9+	1	9	9+	9	1	9	1*	5	9	9	1	8	9+	-	-	-	-	-	1	1	-	-	-	-	-	-	-	3				
4	9+	-	8	9+	3	-	9	9+	1	9	9+	8	2	9	1*	8	8	9	8	8	9	-	1	-	-	-	-	-	-	-	-	-	-	-	-	4				
5	9+	-	8	9+	-	1	9	9+	-	9	9+	6	5	9	2*	8	3	9+	9	8	8	-	6	2*	6	6	5	1*	-	1	-	-	-	-	-	5				
6	9+	-	8	9	-	-	9	9+	-	9	9+	4	6	9	9+	9	1	9+	9	8	8	-	8	5*	8	9+	6	4*	-	6	4*	9	8	6	4*	6				
7	9+	-	5	4	-	-	8	9+	1	8	9	1	4	9	9+	9	9	9+	9	8	8	9	9	5*	9+	9+	8	1*	1	8	5*	9	9	8	2*	7				
8	9	-	2	-	-	-	5	9+	1	7	7	1	3	8	9+	9	9	9+	9	8	9	9+	9+	9	9+	9+	9	1*	9	9	4*	9	9+	9	2*	8				
9	6	-	-	-	-	-	2	9+	1	5	2	1	2	8	9+	9	9	9	9	9	8	9+	9+	9	9+	9+	9	1*	9+	9	5	9+	9+	9	2*	9				
10	5	-	-	-	-	-	1	9+	1	3	1	1	2	7	9+	8	9	9+	9	8	9	9+	9	8	9+	9+	9	-	9+	9	9	9+	9+	9	2*	10				
11	4	-	-	-	-	-	1	9+	2	-	-	1	2	6	9+	8	8	9	9	8	9	9+	9	9	9+	9+	9	5	9+	9	9	9+	9+	9	-	11				
12	5	-	-	-	-	-	-	9+	4	-	-	4	1	6	9+	9	7	9	9	9	9+	9+	9	9	9+	9+	9	9+	9+	9	9	9+	9+	9	-	12				
13	7	-	-	-	-	-	-	9+	4	-	-	6	2	6	9+	9	6	9	9+	9	9	9+	9	9	9+	9+	9	9+	9+	9	9	9+	9+	9	9	13				
14	8	-	-	-	1	-	-	9+	5	-	3	7	4	6	9+	9	3	9+	9+	9	9	9+	9	8	9+	9+	9	9+	9+	9	9	9+	9+	9	9+	14				
15	9	1	-	1	4	1	-	9+	6	-	7	8	5	7	9+	9	1	9+	9+	9	9	9+	9	8	9+	9+	9	9+	9+	9	8	9+	9+	9	9	15				
16	9+	2	-	5	6	2	-	9+	7	-	8	9	7	6	9+	9	2	9+	9+	9	9	9+	9	8	9+	9+	9	9+	9	6	8	9+	6*	6	9	16				
17	9+	5	-	8	8	5	1	9+	7	-	9	9	7	6	9+	9	5	9+	9+	9	9+	9+	5	8	9+	3*	7	9+	-	3*	9	9+	5*	3*	9	17				
18	9+	7	-	9	9	6	1	9+	8	-	9	9	8	6	9+	8	7	9+	9+	8	9+	9	1	9	9+	2*	8	9+	-	2*	9	9+	4*	7*	9	18				
19	9+	7	-	9	9	6	1	9+	8	-	9+	9+	7	8	9+	8	8	9+	1*	7	9+	2*	1*	9	9+	1*	7	9	-	2*	8	7	1*	2*	6	19				
20	9+	7	-	9+	9	6	4	9+	9	2	9+	9	8	8	8	8	9	9+	9	6	9+	1*	1*	9	9	-	6	9	-	1*	6	-	-	1*	5	20				
21	9+	8	-	9+	9	5	6	9+	8	6	9+	9	8	9	7	8	9	9+	9	5	9+	-	2*	8	6	-	4	7	-	-	1	-	-	-	2	21				
22	9+	8	1	9+	9	5	7	9+	8	8	9+	9	8	9	7	8	9	9+	9	7	9	-	1*	6	3	-	1	7	-	-	-	-	-	-	-	22				
23	9+	6	7	9+	9	-	8	9+	8	8	9+	9	6	9	6	8	9	9+	9	7	8	-	1	4	3	-	1	4	-	-	-	-	-	-	-	23				

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Mar., Norway (Oslo), for SSN = Ultra High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								UTC
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	9+	-	7	9+	9	-	8	9+	7	8	9+	9	1	9	9	9	9	9+	9+	8	8	-	5	7	8	1*	2	8	-	-	-	-	-	-	1	0				
1	9+	-	8	9+	9	-	8	9+	5	9	9+	9	-	9	8	8	9	9+	9+	5	9	-	1*	7	7	1*	3	8	-	-	-	-	-	-	1	1				
2	9+	-	9+	9+	8	-	9	9+	1	9	9+	9	-	9	7	8	9	9+	5	6	9	1*	1	6	5	-	2	7	-	-	-	-	-	-	-	2				
3	9+	-	9	9+	6	-	9	9+	-	9	9+	9	-	9	4	7	9	9+	8	8	9+	1*	3	4	1*	-	3	5	-	-	-	-	-	-	-	3				
4	9+	-	8	9+	1	-	9	9+	-	9	9+	8	1	9	6	7	9	9+	9	8	9+	4*	6	1	4	4	4	3	-	2	-	-	-	-	-	4				
5	9+	-	8	9	-	-	9	9+	-	9	9+	5	2	9	9	8	9	9+	9	8	9	1*	7	3*	9+	9	4	3*	-	5	2*	5	2	3	1*	5				
6	9+	-	6	7	-	-	8	9+	-	8	9	1	3	9	9+	8	9	9+	9	8	9	7	8	5*	9	9	6	4*	-	6	5*	9+	8	6	4*	6				
7	9	-	2	1	-	-	6	9+	-	7	8	-	2	8	9+	8	9	9+	9	8	9	9+	9	9	9+	9	7	2	5	7	4*	8	9	8	4*	7				
8	7	-	-	-	-	-	3	9+	-	5	5	-	2	8	9+	8	9	9+	8	8	9	9+	9	8	9+	9	8	3	9	8	5	9+	9	8	1*	8				
9	3	-	-	-	-	-	1	9	-	4	1	-	-	6	9+	7	9	9	8	8	8	9+	9	8	9+	9	8	2	9+	8	8	9+	9	8	2*	9				
10	2	-	-	-	-	-	-	9+	-	1	-	-	-	5	9+	7	8	9	8	8	9	9+	9	8	9+	9+	8	1	9+	9	9	9+	9	9	2*	10				
11	1	-	-	-	-	-	-	8	1	-	-	-	-	4	9+	8	7	9	9	8	9	9+	9	9	9+	9+	9	5	9+	9	8	9+	9+	9	1*	11				
12	1	-	-	-	-	-	-	8	1	-	-	1	-	4	9+	9	6	9	9	8	9	9+	9	9	9+	9	9	8	9+	8	9	9+	9	9	1*	12				
13	2	-	-	-	-	-	-	9	1	-	-	3	1	4	9+	9	4	9	9	8	9	9+	9	9	9+	9+	9	9	9+	8	9	9+	9	9	5	13				
14	4	-	-	-	-	-	-	9+	2	-	-	5	2	4	9+	9	2	9	9	9	9	9+	9	8	9+	9+	9	9	9+	8	9	9+	9	9	7	14				
15	8	-	-	-	1	-	-	9+	5	-	4	7	4	4	9+	9	1	9+	9+	9	9	9+	9	7	9+	9+	9	9	9+	9	8	9+	9	9	9	15				
16	9	2	-	2	4	1	-	9+	7	-	8	8	5	4	9+	9	3	9+	9+	9	9	9+	9	7	9+	9+	9	9	9	9	8	9+	5	9	8	16				
17	9+	4	-	7	8	2	-	9+	6	-	9	9	5	4	9+	9	3	9+	9+	9	9	9+	9	8	9+	9+	9	9	9	6	8	9+	4*	7	5	17				
18	9+	5	-	9	9	4	-	9+	7	-	9	9	7	5	9+	9	5	9+	9+	9	9	9+	9	8	9+	8	9	9	5	2*	9	9+	4*	6*	5*	18				
19	9+	7	-	9	9	5	-	9+	7	-	9	9	7	6	9+	9	8	9+	9+	9	9+	9	8	9	9+	8	6	9	-	2*	9	9+	3*	6*	5*	19				
20	9+	7	-	9+	9	5	1	9+	7	2	9+	9	6	8	9+	9	9	9+	9+	9	9+	4	7	9	9+	7	5	9	-	2*	8	7	1*	4*	8	20				
21	9+	5	-	9+	9	3	4	9+	7	5	9+	9	5	8	9+	9	9	9+	9	9	9	1*	6	9	9+	7	7	7	-	1*	5	2	-	1*	4	21				
22	9+	3	1	9+	9	1	6	9+	8	7	9+	9	6	8	9+	9	9	9+	9	9	9	-	6	9	9	6	6	9	-	-	1	-	-	-	2	22				
23	9+	1	6	9+	9	-	7	9+	8	8	9+	9	3	9	9	9	9	9+	8	8	9	-	5	8	9	2	5	8	-	-	1	-	-	-	1	23				

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Jan., Norway (Oslo), for SSN = Very High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								UTC
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	9+	3	8	9+	9+	-	8	9+	8	8	9+	9+	4	8	1	4	4	8	-	5	9	-	-	-	-	-	1	1	-	-	-	-	-	-	-	0				
1	9+	1	8	9+	9+	-	8	9+	7	9	9+	9	2	8	-	1	3	8	-	6	9	-	-	-	-	-	1	1	-	-	-	-	-	-	-	1				
2	9+	-	8	9+	9	-	8	9+	4	9	9+	9	-	8	-	-	2	7	-	8	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2				
3	9+	-	8	9+	9	-	9	9+	2	9	9+	9	2	9	1*	1	2	5	-	8	9	-	-	-	-	-	1	-	-	-	-	-	-	-	-	3				
4	9+	-	8	9+	6	1	9	9+	2	9	9+	9	5	9	1*	2	3	2*	-	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4				
5	9+	-	8	9+	1	2	9	9+	2	9	9+	8	5	9	-	6	1*	9	9	6	5	-	1	-	-	-	-	-	-	-	-	-	-	-	-	5				
6	9+	-	9	9+	-	2	9	9+	2	9	9+	6	5	9	2	8	2*	8	9	5	1*	-	5	3*	9	8	5	2*	-	1	-	-	-	-	-	6				
7	9+	-	8	8	-	1	9	9+	2	9	9	5	7	8	9+	9	4	9+	9	6	2	-	8	6*	9	9+	8	1*	-	7	3*	9	5	6	4*	7				
8	9+	-	4	3	-	-	9	9+	3	8	8	4	5	8	9+	9	8	9+	9	9	3	9+	9	6*	9+	9+	9	1*	1*	8	4*	9	9	8	4*	8				
9	9	-	2	-	-	-	6	9+	4	7	6	4	4	8	9+	9	8	9+	9	8	5	9+	9	9	9+	9+	9	1*	8	9	1*	9+	9	9	1*	9				
10	9	-	-	-	-	-	2	9+	5	5	3	4	4	8	9+	9	9	9+	9+	9	6	9+	9	8	9+	9+	9	2*	9	9	9	9+	9+	9	-	10				
11	8	-	-	-	-	-	1	9+	5	3	1	6	4	6	9+	9	9	9	9+	8	9	9+	9	9	9+	9+	9	-	9	9	9	9+	9	9	-	11				
12	9	-	-	-	1	-	2	9+	6	-	1	7	5	8	9+	9	8	9	9+	9	9+	9+	9	9	9+	9+	9	3	9	9	8	9+	5	8	-	12				
13	9	1	-	-	3	-	2	9+	6	-	4	8	6	8	9+	9	8	9	9+	9	9+	9+	9	9	9+	9+	9	9+	9	9	9	9+	6*	9	-	13				
14	9+	2	-	1	5	1	2	9+	7	-	7	8	5	8	9+	9	5	9+	9+	9	9+	9+	9	9	9+	9+	9	9+	2	6*	8	9+	6*	5*	7	14				
15	9+	5	-	5	7	3	2	9+	8	-	9	9	8	8	9+	9	4	9+	9+	9	9+	9+	2*	8	9+	7	6	9+	-	5*	8	9+	5*	5*	5	15				
16	9+	6	-	8	9	4	2	9+	8	-	9	9	8	8	9+	9	5	9+	9+	9	9+	7	1*	8	9+	5*	5*	9+	-	5*	8	9+	4*	4*	1	16				
17	9+	8	-	9	9	5	3	9+	8	-	9	9+	8	8	9+	5	7	9+	6	8	9+	-	2*	8	9+	4*	6*	9	-	2*	6	1	1*	2*	-	17				
18	9+	7	-	9	9	7	2	9+	8	-	9+	9+	8	8	9	5	8	9+	-	8	9+	-	1*	9	9	1*	5*	3*	-	-	1	-	-	-	-	18				
19	9+	8	-	9	9	6	5	9+	8	2	9+	9+	7	9	5	3	8	9+	-	7	9	-	-	5	5	-	1*	1	-	-	-	-	-	-	-	19				
20	9+	8	-	9	9	7	7	9+	8	5	9+	9	8	9	6	4	8	9	-	6	7	-	-	-	1	-	1	1	-	-	-	-	-	-	-	20				
21	9+	9	1	9+	9	9	8	9+	9	7	9+	9	9	9	6	6	8	9	-	5	8	-	-	-	-	-	1	1	-	-	-	-	-	-	-	21				
22	9+	9	4	9+	9	8	8	9+	9	8	9+	9	9	9	5	5	5	7	-	3	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22				
23	9+	6	6	9+	9+	1	8	9+	8	8	9+	9+	5	9	4	7	4	8	-	3	9	-	-	-	-	-	1	1	-	-	-	-	-	-	-	23				

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Feb., Norway (Oslo), for SSN = Very High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								UTC
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	9+	2	8	9+	9	-	8	9+	6	8	9+	9	2	9	-	5	9	9+	-	4	9	-	-	-	-	-	-	1	-	-	-	-	-	-	-	0				
1	9+	-	8	9+	9	-	8	9+	5	9	9+	9	-	9	1*	1	8	9+	1*	6	9	-	-	-	-	-	1	2	-	-	-	-	-	-	-	1				
2	9+	-	8	9+	9	-	8	9+	2	9	9+	9	-	9	1*	2	8	9	1*	7	9	-	-	-	-	-	-	1	-	-	-	-	-	-	-	2				
3	9+	-	8	9+	8	-	9	9+	1	9	9+	9	1	9	1*	3	9	9	-	8	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3				
4	9+	-	8	9+	5	-	9	9+	1	9	9+	8	3	9	1*	5	7	9	6	7	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4				
5	9+	-	9	9+	-	1	9	9+	1	9	9+	7	5	9	1*	8	2*	9+	9+	6	6	-	4	1*	3	3	3	1*	-	-	-	-	-	-	-	5				
6	9+	-	9	9	-	-	9	9+	1	9	9+	4	5	9	9	9	1*	9+	9	7	7	-	7	5*	8	9+	8	4*	-	5	3*	6	3	4	2*	6				
7	9+	-	6	5	-	-	8	9+	1	8	9	2	4	9	9+	8	9	9+	9	8	6	8	9	6*	9+	9+	8	1*	-	8	4*	8	9	8	2*	7				
8	9	-	3	1	-	-	7	9+	1	7	8	1	4	9	9+	8	8	9+	9	8	5	9+	9+	8	9+	9+	9	1*	5	9	3*	8	9	9	2*	8				
9	8	-	-	-	-	-	3	9+	2	5	4	1	3	8	9+	8	8	9+	9	8	8	9+	9	9	9+	9+	9	1*	9+	9	1*	9+	9+	9	2*	9				
10	7	-	-	-	-	-	1	9+	2	2	1	2	3	7	9+	8	9	9+	9	8	9	9+	9	8	9+	9+	9	1*	9+	9	9	9+	9+	9	1*	10				
11	6	-	-	-	-	-	1	9+	2	1	1	3	3	7	9+	9	9	9+	9	8	9	9+	9	9	9+	9+	9	1	9+	9	9	9+	9+	9	-	11				
12	6	-	-	-	-	-	1	9+	4	-	-	5	2	6	9+	9	8	9	9+	9	9+	9+	9	9	9+	9+	9	8	9+	9	9	9+	9+	9	-	12				
13	8	-	-	-	-	-	-	9+	5	-	1	6	3	6	9+	9	6	9+	9+	9	9+	9+	9	9	9+	9+	9	9+	9+	9	9	9+	9	9	3	13				
14	9	1	-	-	2	-	1	9+	5	-	5	8	5	7	9+	9	4	9+	9+	9	9	9+	9	8	9+	9+	9	9+	9	9	9	9+	9	9	9	14				
15	9+	2	-	2	5	1	1	9+	7	-	8	8	6	7	9+	9	2	9+	9+	9	9	9+	9	8	9+	9+	9	9+	8	6	8	9+	6*	8	9	15				
16	9+	4	-	6	7	2	1	9+	8	-	9	9	8	7	9+	9	4	9+	9+	9	9+	9+	9	8	9+	9+	9	9+	-	5*	8	9+	5*	4*	9	16				
17	9+	5	-	9	8	4	1	9+	8	-	9	9	7	6	9+	9	6	9+	9+	9	9+	9+	2	8	9+	5*	5	9+	-	4*	9	9+	4*	3*	6	17				
18	9+	7	-	9	9	4	1	9+	8	-	9+	9+	8	6	9+	8	8	9+	7	8	9+	7	1*	9	9+	3*	7	9	-	3*	8	9	2*	4*	1*	18				
19	9+	8	-	9	9	7	2	9+	8	1	9+	9+	7	8	9+	7	9	9+	1*	8	9+	1*	1*	9	9+	1*	5	9	-	1*	6	2	1*	1*	2	19				
20	9+	8	-	9	9	8	5	9+	8	3	9+	9+	7	9	6	6	9	9+	-	6	9+	1*	1*	8	7	-	4*	7	-	-	1	-	-	-	1	20				
21	9+	7	-	9+	9	7	6	9+	9	6	9+	9	8	9	4	7	9	9+	-	5*	9	-	1*	5	2	-	2	6	-	-	-	-	-	-	-	21				
22	9+	6	2	9+	9	4	7	9+	9	8	9+	9	8	9	3	8	9	9+	1*	4	8	-	-	2	-	-	-	1	-	-	-	-	-	-	-	22				
23	9+	4	6	9+	9	2	8	9+	8	8	9+	9	7	9	1	7	9	9+	1*	4	8	-	-	-	1	-	-	1	-	-	-	-	-	-	-	23				

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA

Nov., Norway (Oslo), for SSN = Very High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Jan., Norway (Oslo), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Feb., Norway (Oslo), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Mar., Norway (Oslo), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Apr., Norway (Oslo), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

May, Norway (Oslo), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								UTC
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	9+	-	7	9+	8	-	7	9+	4	8	9+	9	1	9	9+	8	9	9+	9	8	8	2*	5	8	9	2*	4*	5	-	-	2	1	-	-	-	0				
1	9+	-	8	9+	8	-	8	9+	2	9	9+	9	-	9	9+	8	9	9+	9	6	8	1*	1*	8	8	1*	4	5	-	-	1	-	-	-	-	1				
2	9+	-	9	9+	5	-	9	9+	-	9	9+	8	-	9	7	7	9	9+	9	6	8	1*	2	6	6	-	1*	1	-	-	-	-	-	-	-	2				
3	9+	-	8	9	1	-	9	9+	-	9	9+	7	-	9	8	7	9	9+	9+	8	9	1*	5	1*	7	-	1	2*	-	-	-	-	-	-	-	3				
4	9+	-	8	9	-	-	8	9+	-	8	9+	4	-	9	9	7	9	9+	9	7	9	1*	6	2*	9	4	5	5*	-	-	-	-	-	-	-	4				
5	9+	-	5	7	-	-	7	9+	-	8	9	1	-	9	9+	7	9	9+	9	8	9	1*	8	2*	9+	9	5*	5*	-	1	1*	2	-	-	1*	5				
6	9+	-	2	2	-	-	4	9+	-	7	8	-	-	8	9+	5	9	9+	9	8	9	2*	8	4	9	9	6	5*	-	2	1*	7	-	1	2*	6				
7	8	-	-	-	-	-	1	9+	-	5	7	-	-	7	9+	5	9	9+	9	8	8	5	8	5	9+	9	8	5*	-	4	1*	8	-	1	3*	7				
8	6	-	-	-	-	-	-	9	-	3	4	-	-	6	9+	7	9	9+	9	8	8	7	9	3	9+	9	8	4*	-	5	-	8	-	2	2*	8				
9	4	-	-	-	-	-	-	9	-	2	1	-	-	4	9+	5	8	9+	8	8	8	8	9	9	9+	9	8	3*	-	5	-	9	-	3	1*	9				
10	3	-	-	-	-	-	-	9	-	-	-	-	-	2	9+	7	8	9	8	7	9	9	9	8	9+	9	8	2*	-	5	2	9	-	3	-	10				
11	2	-	-	-	-	-	-	9	-	-	-	-	-	1	9+	7	7	9	9	7	8	9	8	8	9+	9	8	2*	-	4	2	9	-	3	-	11				
12	2	-	-	-	-	-	-	9	-	-	-	-	-	1	9+	8	8	9	9	8	8	9	8	8	9+	9	8	1*	-	2	2	9	-	4*	-	12				
13	2	-	-	-	-	-	-	9	1	-	-	1	-	1	9+	7	6	9	9	8	8	9	8	9	9+	9	8	4	-	2*	2	7	-	2	1*	13				
14	3	-	-	-	-	-	-	9	1	-	1	4	1	1	9+	8	5	9	9	8	8	6	8	8	9+	8	8	2*	-	1*	2	6	-	1*	1*	14				
15	6	-	-	-	-	-	-	9	2	-	4	6	2	1	9+	8	4	9+	9	8	9	5	8	8	9+	8	8	5	-	1*	1	6	-	-	2*	15				
16	9	-	-	1	1	-	-	9+	4	-	7	8	4	-	9+	9	5	9+	9+	9	9	5	8	8	9+	9	8	6	-	5	1*	7	-	2	4*	16				
17	9+	1	-	5	4	-	-	9+	5	-	8	8	5	-	9+	9	5	9+	9+	9	9	8	9	8	9+	9	8	6	-	5	1*	9	-	1	4*	17				
18	9+	3	-	8	7	2	-	9+	7	-	8	8	6	2	9+	9	6	9+	9+	9	9	9	9	8	9+	8	8	4*	-	4	5	9	1*	5*	2*	18				
19	9+	4	-	8	8	3	-	9+	8	-	9	9	8	4	9+	9	8	9+	9+	9	9	9	9	9	9+	7	8	5	-	2	6	8	1*	4*	1*	19				
20	9+	5	-	9	9	2	-	9+	7	4	9	9	6	6	9+	9	8	9+	9+	9	9	9	8	9	9+	5	7	5	-	2	5	7	-	4*	1*	20				
21	9+	3	-	9	8	2	1	9+	7	6	9+	9	7	6	9+	9	9	9+	9+	9	9	6	8	9	9+	5*	5	5	-	1*	3	7	-	1*	1*	21				
22	9+	1	1	9	8	-	3	9+	7	7	9+	9	5	8	9+	9	9	9+	9+	8	9	6	6	9	9+	5*	7*	5	-	1*	3	4	1*	1*	1*	22				
23	9+	-	5	9	8	-	5	9+	6	8	9+	9	2	8	9+	9	9	9+	9	9	8	3	6	9	9	4*	5*	5	-	1*	2	2	-	1*	-	23				
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA					

Jun., Norway (Oslo), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Aug., Norway (Oslo), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Sep., Norway (Oslo), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Oct., Norway (Oslo), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Nov., Norway (Oslo), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Dec., Norway (Oslo), for SSN = High, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Jan., Norway (Oslo), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Feb., Norway (Oslo), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								UTC
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	9+	2	8	9+	9	-	9	9+	8	8	9+	9+	5	9	-	1	5	9	-	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
1	9+	1	8	9+	9	-	9	9+	7	9	9+	9	3	9	-	-	5	9	-	4	6	-	-	-	-	-	-	-	-	-	-	-	-	-	1					
2	9+	-	9	9+	9	-	9	9+	4	9	9+	9	-	9	-	-	5	8	-	3	5	-	-	-	-	-	-	-	-	-	-	-	-	-	2					
3	9+	-	9	9+	8	-	9+	9+	3	9	9+	9	2	9+	-	-	6	7	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	3					
4	9+	-	9	9+	6	-	9+	9+	3	9	9+	9	4	9	-	1	2	6	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	4					
5	9+	-	9	9+	1	1	9+	9+	2	9	9+	8	5	9	-	3	1*	9+	9	2	1*	-	1	-	-	-	-	-	-	-	-	-	-	-	5					
6	9+	-	9	9	-	1	9+	9+	1	9	9+	5	6	8	5	8	2*	9+	9	5	2	-	6	2*	9	6	5	2*	-	1	-	-	-	1	-	6				
7	9+	-	8	7	-	1	9	9+	2	9	9	3	6	9	9+	8	8	9+	9	6	-	1	8	2*	9	9+	7	1*	-	5	-	5	1	5	2*	7				
8	9+	-	4	3	-	-	8	9+	2	7	8	3	4	9	9+	9	8	9+	9	8	1	8	8	2	9+	9	9	2*	-	7	-	8	3	7	-	8				
9	9	-	1	-	-	-	5	9+	4	6	6	3	3	8	9+	9	7	9+	9	8	3	9+	9	7	9+	9+	9	1*	-	8	-	8	5	7	-	9				
10	9	-	-	-	-	-	2	9+	3	5	4	4	4	8	9+	9	8	9+	9	9	2	9+	9	9	9+	9+	9	-	-	8	3	8	5	8	-	10				
11	8	-	-	-	-	-	1	9+	4	1	2	6	4	7	9+	9	9	9+	9+	9	7	9+	9	8	9	9+	9	-	-	8	7	9+	3	8	-	11				
12	8	-	-	-	1	-	1	9+	5	-	1	7	4	7	9+	9	8	9	9+	9	9+	9+	9	9	9	9	9	-	-	7	7	9+	-	7	-	12				
13	9	1	-	-	2	-	1	9+	6	-	4	8	4	7	9+	9	8	9	9+	9	9	9+	9	9	9+	9+	9	6	-	5	6	9	1*	5	-	13				
14	9	2	-	1	4	-	1	9+	7	-	7	8	5	7	9+	9	6	9+	9+	9	9	9+	9	8	9+	9+	9	9	-	2*	5	8	1*	2*	1*	14				
15	9+	4	-	5	6	2	1	9+	8	-	8	9	6	8	9+	9	5	9+	9+	9	9+	9+	8	8	9+	7	8	9	-	2*	5	8	1*	2*	-	15				
16	9+	5	-	8	8	5	2	9+	8	-	9	9	8	8	9+	9	6	9+	9+	9	9+	7	4*	8	9+	4*	5	9	-	1*	5	6	-	-	-	16				
17	9+	7	-	9	9	5	2	9+	8	-	9	9	8	8	9+	8	7	9+	8	8	9+	-	3*	8	9+	2*	2*	6	-	-	2	1	-	-	-	17				
18	9+	8	-	9	9	6	2	9+	8	1	9+	9+	8	8	9+	4	8	9+	2	8	9+	-	1*	8	9+	1*	5*	3*	-	-	3	1	-	-	-	18				
19	9+	8	-	9	9	6	4	9+	8	2	9+	9+	8	8	8	1	8	9+	-	7	9	-	1*	8	8	1*	2*	3	-	-	-	-	-	-	-	19				
20	9+	8	-	9+	9	8	6	9+	8	5	9+	9+	8	9	4	2	9	9+	1*	5	8	-	-	4	1	-	1*	1	-	-	-	-	-	-	-	20				
21	9+	8	1	9+	9	7	8	9+	8	6	9+	9+	9	9	1*	2	9	9	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21				
22	9+	8	3	9+	9	4	8	9+	9	8	9+	9+	8	9	-	5	7	9	-	4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22				
23	9+	6	5	9+	9+	1	9	9+	8	8	9+	9+	6	9	-	5	6	9	-	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23				

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA

Mar., Norway (Oslo), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								UTC
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	9+	2	8	9+	9	-	9	9+	7	9	9+	9+	5	9	2	4	8	9+	-	2	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
1	9+	1	9	9+	9	-	9	9+	6	9	9+	9+	2	9	1	-	7	9	-	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-	1					
2	9+	-	9	9+	9	-	9	9+	4	9	9+	9	-	9	-	-	8	8	-	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	2					
3	9+	-	9	9+	8	-	9+	9+	2	9	9+	9	1	9+	-	2	7	7	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	3					
4	9+	-	9	9+	4	-	9+	9+	1	9	9+	8	2	9+	2*	4	2	9	8	2	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4				
5	9+	-	9	9+	-	-	9+	9+	-	9	9+	6	3	9	1*	7	2*	9	9	5	2	-	5	1*	4	1	1	-	-	-	-	-	-	-	-	5				
6	9+	-	8	9	-	-	9+	9+	-	9	9+	3	6	9	9	8	6	9+	9	7	5	-	6	3*	9+	8	5	3*	-	1	-	1	-	-	-	6				
7	9+	-	5	5	-	-	8	9+	-	8	9	1	4	9	9+	8	8	9+	9	8	3	2	7	3*	8	9	6	1*	-	4	1*	8	-	2	2*	7				
8	9	-	2	1	-	-	6	9+	1	7	7	1	3	9	9+	9	8	9+	9	8	1	8	8	3*	9+	9	7	1*	-	5	-	9	-	4*	2*	8				
9	8	-	-	-	-	-	2	9+	1	5	4	1	3	7	9+	9	7	9+	9	7	2	9+	8	8	9+	9	8	1*	-	6	-	9	1	5	-	9				
10	7	-	-	-	-	-	1	9+	2	2	2	1	2	6	9+	9	8	9	9	7	2	9+	8	8	9+	9	8	1*	-	6	5	9	1	5	-	10				
11	6	-	-	-	-	-	-	9+	1	-	1	3	2	6	9+	8	8	9	9	8	8	9+	9	8	9+	9	8	-	-	7	6	9	1	5	-	11				
12	5	-	-	-	-	-	-	9+	2	-	1	5	2	5	9+	9	7	9	9	9	9	9+	9	8	9+	9	9	-	-	6	6	9	-	6	-	12				
13	7	-	-	-	-	-	-	9+	4	-	1	5	2	6	9+	9	5	9	9	9	9	9+	9	8	9+	9	9	4	-	6	5	9	-	6	1*	13				
14	8	1	-	-	1	-	-	9+	4	-	4	7	4	6	9+	9	5	9	9+	9	8	9+	9	8	9+	9+	9	6	-	4	3	9	-	5	2*	14				
15	9	2	-	1	3	1	-	9+	7	-	7	8	5	6	9+	9	4	9+	9+	9	9	9+	9	7	9+	9	9	6	-	1*	4	9	1*	2	1*	15				
16	9+	2	-	5	7	2	-	9+	7	-	8	9	6	6	9+	9	5	9+	9+	9	9	9	8	8	9+	6	8	5	-	1*	5	7	-	1*	3*	16				
17	9+	5	-	8	8	5	1	9+	8	-	9	9	8	6	9+	9	6	9+	9+	9	9	8	6	8	9+	2*	7	4	-	-	5	7	-	1*	1*	17				
18	9+	7	-	9	9	7	1	9+	8	-	9	9	8	6	9+	9	7	9+	9	8	9	8	2*	8	9+	1*	6*	5*	-	-	6	7	-	1*	1*	18				
19	9+	8	-	9	9	7	2	9+	9	1	9+	9	8	7	9+	8	8	9+	7	8	9	3	1*	9	9+	1*	5*	4	-	-	4	3	-	-	-	19				
20	9+	8	-	9	9	7	5	9+	9	3	9+	9+	8	8	9	6	8	9+	2	7	9	-	1*	8	9	-	2*	3	-	-	-	-	-	-	-	20				
21	9+	8	-	9+	9	3	6	9+	8	6	9+	9+	7	8	8	6	9	9+	1*	6	8	-	1*	5	4	-	1*	1	-	-	-	-	-	-	-	21				
22	9+	7	2	9+	9	2	7	9+	8	8	9+	9	8	9	5	6	9	9+	1*	5	5	-	-	1	2	-	-	-	-	-	-	-	-	-	-	22				
23	9+	5	7	9+	9	1	8	9+	8	8	9+	9+	6	9	3	5	8	9+	1*	4	6	-	-	-	1	-	-	-	-	-	-	-	-	-	-	23				

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA

Apr., Norway (Oslo), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

May, Norway (Oslo), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Jun., Norway (Oslo), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Jul., Norway (Oslo), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Aug., Norway (Oslo), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters							40 Meters							20 Meters							15 Meters							10 Meters							UTC	
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	
0	9+	1	8	9+	8	-	7	9+	5	8	9+	9	2	9	8	3	9	9+	2*	5	7	-	-	-	1	-	-	-	-	-	-	-	-	-	-	0
1	9+	-	8	9+	8	-	8	9+	3	9	9+	9	-	9	8	2	9	9	1*	5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
2	9+	-	8	9+	7	-	9	9+	1	9	9+	9	-	9	7	6	8	9	1*	5	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2	
3	9+	-	8	9	3	-	9	9+	-	9	9+	8	-	9	8	6	6	9+	8	7	4	-	-	-	-	-	-	-	-	-	-	-	-	-	3	
4	9+	-	8	9	-	-	9	9+	-	9	9+	6	1	9	8	6	5	8	9	8	5	-	-	-	2	-	-	-	-	-	-	-	-	-	4	
5	9+	-	7	8	-	-	8	9+	-	8	9	2	2	9	9	8	7	9	9	8	6	-	4	2*	8	-	2	3*	-	-	-	-	-	-	-	5
6	9+	-	4	5	-	-	6	9+	-	8	9	-	2	9	9+	8	7	9+	9	8	8	3	5	3*	9+	2	4*	5*	-	-	-	-	-	-	-	6
7	9+	-	1	1	-	-	4	9+	-	6	8	-	2	8	9+	8	8	9+	9	8	6	8	6	2	9	2	5*	2*	-	-	-	1	-	-	-	7
8	9	-	-	-	-	-	1	9+	-	5	6	-	1	6	9+	8	8	9+	9	8	5	9	7	-	9+	3	5	1*	-	-	-	1	-	-	-	8
9	8	-	-	-	-	-	-	9+	-	2	3	-	1	5	9+	8	8	9	9	9	5	9	7	6	9+	3	6	1*	-	-	-	2	-	-	-	9
10	7	-	-	-	-	-	-	9+	1	1	1	-	1	4	9+	8	8	9	9	9	9	9	7	8	9+	2*	7	-	-	-	-	3	-	-	-	10
11	6	-	-	-	-	-	-	9	1	-	-	1	-	2	9+	8	8	9	9	8	9	9	7	8	9+	2*	6	-	-	-	-	2	-	-	-	11
12	5	-	-	-	-	-	-	9	2	-	-	2	1	3	9+	8	8	9	9	8	9	9	7	6	9+	2*	6	-	-	-	-	1	-	-	-	12
13	5	-	-	-	-	-	-	9	3	-	1	5	2	2	9+	8	8	9	9	8	8	8	7	6	9+	2*	7	2*	-	-	-	-	-	-	-	13
14	7	-	-	-	-	-	-	9+	4	-	3	6	3	2	9+	9	7	9	9	9	8	5	6	5	9+	2*	2	3*	-	-	-	-	-	-	-	14
15	9	-	-	1	1	-	-	9+	5	-	7	8	5	2	9+	9	6	9+	9+	9	8	2	7	5	9+	2*	2	2*	-	-	-	-	-	-	-	15
16	9+	1	-	5	4	1	-	9+	5	-	8	8	5	2	9+	9	6	9+	9+	9	9	1	8	5	9+	2*	2	5*	-	-	-	-	-	-	1*	16
17	9+	3	-	8	7	2	-	9+	7	-	8	8	7	2	9+	9	7	9+	9+	9	9	1	7	6	9+	2*	2*	5*	-	-	-	1	-	-	-	17
18	9+	5	-	9	8	4	-	9+	7	-	9	8	7	5	9+	9	8	9+	9+	9	9	5	7	8	9+	2*	5*	4*	-	-	-	3	-	1*	1*	18
19	9+	5	-	9	7	5	-	9+	8	2	9	9	7	7	9+	9	8	9+	9+	9	9	6	7	9	9+	1*	6*	4*	-	-	-	4	-	1*	-	19
20	9+	7	-	9	8	4	2	9+	8	3	9	9	6	8	9+	9	9	9+	9+	9	9+	4	2	9	9+	-	6*	2*	-	-	-	1	-	1*	-	20
21	9+	5	-	8	8	3	4	9+	7	6	9	9	6	8	9+	9	9	9+	9	8	9	2	5*	9	9	-	3*	2*	-	-	-	-	-	-	-	21
22	9+	4	1	9	8	1	5	9+	7	7	9+	9	5	9	9+	7	9	9+	6	7	9	1	1*	5	5	1*	2*	-	-	-	-	-	-	-	-	22
23	9+	1	7	9	8	-	7	9+	6	8	9+	9	3	9	9	6	9	9+	2*	7	8	-	-	1	1	-	-	-	-	-	-	-	-	-	-	23
	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	

Sep., Norway (Oslo), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Oct., Norway (Oslo), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Nov., Norway (Oslo), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Dec., Norway (Oslo), for SSN = Medium, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Jan., Norway (Oslo), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Mar., Norway (Oslo), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Apr., Norway (Oslo), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

May, Norway (Oslo), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Jun., Norway (Oslo), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Jul., Norway (Oslo), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Aug., Norway (Oslo), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Sep., Norway (Oslo), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Oct., Norway (Oslo), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Nov., Norway (Oslo), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Dec., Norway (Oslo), for SSN = Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Jan., Norway (Oslo), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Feb., Norway (Oslo), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Mar., Norway (Oslo), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								UTC
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	9+	5	8	9+	9+	-	9	9+	8	9	9+	9+	5	9	-	-	2	8	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
1	9+	2	9	9+	9+	-	9+	9+	7	9	9+	9+	3	9	-	-	1	7	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1				
2	9+	-	9	9+	9+	-	9+	9+	5	9	9+	9	1	8	-	-	1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2				
3	9+	-	9+	9+	8	-	9+	9+	4	9	9+	9	2	9	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3				
4	9+	-	9+	9+	5	-	9+	9+	2	9	9+	9	5	8	1*	3	1*	5	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4			
5	9+	-	9+	9+	-	-	9+	9+	1	9	9+	7	5	9	-	4	1*	9+	8	2	2*	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	5			
6	9+	-	9	9	-	-	9	9+	1	9	9+	4	6	8	5	7	2*	8	9	4	1*	-	4	1*	6	-	2	1*	-	-	-	-	-	-	-	-	6			
7	9+	-	7	6	-	-	9	9+	1	9	9	2	4	8	9+	8	5	9+	9	6	1*	-	5	3*	8	4	5	3*	-	-	-	-	-	-	-	-	7			
8	9+	-	4	2	-	-	8	9+	1	8	8	2	4	9	9+	8	5	9+	9	8	-	1*	7	-	8	5	6	2*	-	-	-	1	-	-	-	-	8			
9	9	-	-	-	-	-	4	9+	2	6	6	2	4	8	9+	8	8	9+	9	7	-	4	8	1	9	6	8	-	-	-	-	1	-	-	-	-	9			
10	8	-	-	-	-	-	1	9+	2	3	4	3	3	7	9+	9	7	9	9	8	-	4	8	8	9	6	7	-	-	-	-	4	-	-	-	-	10			
11	8	-	-	-	-	-	1	9+	2	1	2	5	3	6	9+	9	8	9	9	8	2	5	8	8	9+	6	7	-	-	-	-	4	-	-	-	-	11			
12	7	-	-	-	-	-	-	9+	2	-	1	6	2	6	9+	9	7	9	9	9	8	6	8	8	9+	5	8	-	-	-	-	4	-	-	-	-	12			
13	8	-	-	-	-	-	-	9+	4	-	3	6	3	6	9+	9	7	9	9	9	8	6	8	6	9+	5	8	1*	-	-	-	2	-	-	-	-	13			
14	9	1	-	-	2	-	-	9+	5	-	5	8	6	6	9+	9	6	9	9+	8	8	2	8	6	9+	3	8	2*	-	-	-	1	-	-	-	-	14			
15	9	2	-	3	5	3	1	9+	7	-	8	8	7	7	9+	9	5	9+	9+	9	9	2	5	6	9	1*	6	2*	-	-	-	-	-	-	-	-	15			
16	9+	4	-	7	8	4	1	9+	8	-	9	9	8	7	9+	9	5	9+	9+	9	8	1	4	7	9	1*	5	4*	-	-	-	-	-	-	-	-	16			
17	9+	5	-	9	9	5	1	9+	8	-	9	9	8	7	9+	8	5	9+	9	9	9	-	1*	8	9	-	2*	1*	-	-	-	1	-	-	-	-	17			
18	9+	6	-	9	9	7	1	9+	8	-	9	9	8	7	9+	7	8	9+	4	8	8	1	1*	8	9	-	3*	3*	-	-	1	1	-	-	-	-	18			
19	9+	8	-	9	9+	8	4	9+	8	1	9+	9+	8	8	9	4	8	9+	1*	5	8	-	-	8	8	-	3*	1*	-	-	-	-	-	-	-	-	19			
20	9+	9	-	9	9+	8	6	9+	8	4	9+	9+	8	8	7	1*	9	9+	-	4	7	-	-	4	3	-	-	-	-	-	-	-	-	-	-	-	20			
21	9+	8	1	9+	9+	7	7	9+	9	7	9+	9+	9	8	2	2*	8	9	-	2*	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21			
22	9+	8	5	9+	9+	3	8	9+	9	8	9+	9	9	9	-	1*	7	8	1*	1*	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22			
23	9+	6	7	9+	9+	1	9	9+	9	8	9+	9+	8	9	-	-	4	8	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23			

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA

Apr., Norway (Oslo), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								UTC
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	9+	3	8	9+	9	-	9	9+	8	8	9+	9+	5	9	-	1	4	8	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
1	9+	-	9	9+	9	-	9	9+	6	9	9+	9+	2	9	-	-	1	7	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1					
2	9+	-	9	9+	9	-	9+	9+	3	9	9+	9	-	8	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2					
3	9+	-	9	9+	6	-	9+	9+	2	9	9+	9	2	9	1*	4	1*	7	2	1	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	3					
4	9+	-	9	9+	1	-	9	9+	1	9	9+	8	3	9	-	4	1*	9+	9	3	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	4					
5	9+	-	9	9	-	-	9	9+	-	9	9+	5	5	9	2	6	1*	8	9	4*	1*	-	2	-	4	-	1	1*	-	-	-	-	-	-	-	5				
6	9+	-	8	8	-	-	9	9+	-	9	9	2	4	8	8	7	7	9	9	5	1*	-	5	2*	8	1	2	2*	-	-	-	-	-	-	-	6				
7	9+	-	4	4	-	-	8	9+	-	8	8	1	3	9	9	8	7	9+	9	7	1	-	5	1*	7	1	3	1*	-	-	-	-	-	-	-	7				
8	9	-	-	1	-	-	5	9+	-	6	8	1	2	8	9+	8	6	9+	9	9	1	-	6	-	9	1	4*	-	-	-	-	-	-	-	8					
9	9	-	-	-	-	-	1	9+	1	5	5	1	1	7	9+	7	8	9+	9	8	1	1	6	6	9+	2	5	-	-	-	-	-	-	-	9					
10	8	-	-	-	-	-	-	9+	1	2	4	1	1	6	9+	8	8	9	9	8	1	-	6	6	9+	2	5	-	-	-	1	-	-	-	10					
11	8	-	-	-	-	-	-	9+	2	-	2	2	1	5	9+	7	8	9	9	7	4	-	6	5	9+	2	6	-	-	-	1	-	-	-	11					
12	8	-	-	-	-	-	-	9+	3	-	1	4	1	5	9+	8	8	9	9	8	8	-	6	4	9+	1	5	-	-	-	-	-	-	-	12					
13	8	-	-	-	-	-	-	9+	3	-	2	5	2	5	9+	8	8	9	9	9	8	-	5	5	9+	1*	3	-	-	-	-	-	-	-	13					
14	8	-	-	-	1	-	-	9+	3	-	5	6	3	5	9+	9	7	9	9	9	8	-	5	5	9+	1*	1	2*	-	-	-	-	-	-	-	14				
15	9	1	-	1	2	-	-	9+	5	-	7	7	5	5	9+	9	6	9+	9+	9	8	-	5	5	9	1*	1*	2*	-	-	-	-	-	-	-	15				
16	9+	2	-	5	6	2	-	9+	7	-	8	8	6	4	9+	9	5	9+	9+	9	8	-	6	5	9+	1	2	4*	-	-	-	-	-	-	1*	16				
17	9+	5	-	8	8	4	-	9+	8	-	9	9	8	4	9+	9	6	9+	9+	9	8	-	5	4	9+	-	4*	3*	-	-	-	2	-	-	-	17				
18	9+	5	-	9	9	5	-	9+	8	-	9	9	8	6	9+	9	8	9+	9+	8	8	5	3	8	9	-	5*	2*	-	-	1	1	-	-	-	18				
19	9+	7	-	9	9	5	1	9+	8	1	9+	9	8	7	9+	8	8	9+	8	8	8	3	-	8	9	1*	6*	2*	-	-	1	1	-	-	-	19				
20	9+	7	-	9	9+	6	4	9+	8	4	9+	9	8	8	9+	7	8	9+	4	7	8	-	-	8	9	-	3*	1*	-	-	-	-	-	-	-	20				
21	9+	6	1	9	9	4	5	9+	8	6	9+	9	7	8	8	1*	9	9+	2*	4*	7	-	1*	5	3	-	-	-	-	-	-	-	-	-	-	21				
22	9+	5	2	9+	9	2	6	9+	8	8	9+	9	7	8	2	2*	8	9	2*	3	5	-	-	1	-	-	-	-	-	-	-	-	-	-	-	22				
23	9+	4	7	9+	9	-	8	9+	8	8	9+	9	7	8	-	1*	6	9	-	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23				

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA

May, Norway (Oslo), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Jun., Norway (Oslo), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								UTC
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	9+	-	6	9	8	-	6	9+	4	8	9+	9	2	8	9	7	9	9+	2	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
1	9+	-	8	9+	8	-	8	9+	2	9	9+	9	-	9	9	7	9	9	2	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-	1					
2	9+	-	8	9	5	-	9	9+	-	9	9+	8	-	9	9	7	7	9	8	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	2					
3	9+	-	8	9	1	-	7	9+	-	9	9+	7	-	9	9	7	4	9	9	8	8	-	-	-	-	-	-	-	-	-	-	-	-	-	3					
4	9+	-	7	8	-	-	7	9+	-	9	9	4	-	9	9	7	5	9	9	7	8	1	1	-	2	-	1	1*	-	-	-	-	-	-	-	4				
5	9+	-	5	7	-	-	6	9+	-	8	8	1	-	9	9+	7	6	9	9	7	8	6	2	-	8	-	1	2*	-	-	-	-	-	-	-	5				
6	9+	-	-	4	-	-	4	9+	-	7	8	-	-	8	9+	7	5	9+	9	8	8	9	2	-	9	-	3*	4*	-	-	-	-	-	-	-	6				
7	9+	-	-	1	-	-	1	9+	-	6	7	-	1	7	9+	7	8	9+	9	8	8	9	4	-	9+	-	5*	4*	1	-	-	-	-	-	-	7				
8	9	-	-	-	-	-	-	9+	-	3	6	-	1	5	9+	8	6	9+	9	8	8	9+	5	-	9+	-	4	3*	3	-	-	-	-	-	-	8				
9	8	-	-	-	-	-	-	9+	-	1	4	-	1	3	9+	8	7	9	9	8	8	9+	5	-	9+	1*	4	2*	4	-	-	-	-	-	-	9				
10	8	-	-	-	-	-	-	9+	-	-	2	-	1	2	9+	8	8	9	9	9	8	9+	5	6	9+	1*	6	1*	4	-	-	-	-	-	-	10				
11	8	-	-	-	-	-	-	9+	-	-	1	-	-	1	9+	8	9	9	9	8	9	9	4	6	9	-	2	-	1	-	-	-	-	-	-	11				
12	8	-	-	-	-	-	-	9+	1	-	1	1	-	1	9+	8	9	8	9	8	9	9	1*	5	9	1*	-	-	-	-	-	-	-	-	-	12				
13	8	-	-	-	-	-	-	9+	1	-	1	3	1	1	9+	8	8	8	9	9	8	9	1*	4	7	1*	-	-	-	-	-	-	-	-	-	13				
14	8	-	-	-	-	-	-	9+	2	-	3	5	2	1	9+	9	7	8	9	9	8	9	1*	2	6	-	-	-	-	-	-	-	-	-	-	14				
15	8	-	-	-	-	-	-	9+	4	-	6	7	4	1	9+	9	7	8	9	9	8	9	1	1	8	-	-	1*	-	-	-	-	-	-	-	15				
16	9	-	-	2	1	-	-	9+	5	-	8	8	5	1	9+	9	7	9+	9+	9	8	9	1	1	9	-	-	4*	-	-	-	-	-	-	-	16				
17	9+	1	-	6	5	1	-	9+	6	-	8	9	6	1	9+	9	7	9+	9+	9	8	9	1	2	9+	-	1	4*	1	-	-	-	-	-	1*	17				
18	9+	3	-	8	7	2	-	9+	7	-	9	9	6	2	9+	9	9	9+	9+	9	8	9	1	6	9+	-	4*	4*	2	-	-	-	-	-	1*	18				
19	9+	5	-	9	8	2	-	9+	8	-	9	8	7	5	9+	9	8	9+	9+	9	8	9	-	8	9+	-	6*	3*	2	-	-	-	-	2*	1*	19				
20	9+	5	-	9	9	2	-	9+	8	4	9	8	6	6	9+	9	9	9+	9+	9	9	9	-	9	9+	-	5*	3*	1	-	-	-	-	1*	-	20				
21	9+	4	-	9	7	2	1	9+	7	6	9	9	6	7	9+	9	9	9+	9+	8	9	8	2*	9	9+	-	6*	2*	-	-	-	-	-	-	-	21				
22	9+	3	2	8	8	1	2	9+	8	7	9	9	5	8	9+	8	9	9+	8	9	9	6	2*	8	8	1*	5*	1*	-	-	-	-	-	-	-	22				
23	9+	1	5	9	8	-	5	9+	7	8	9	9	4	8	9	7	9	9+	4	8	8	2	-	2	1	-	3*	-	-	-	-	-	-	-	-	23				

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA

Jul., Norway (Oslo), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								UTC
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	9+	-	7	9+	8	-	7	9+	5	8	9+	9	2	9	9	2	9	9	1*	5	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
1	9+	-	8	9+	8	-	8	9+	2	9	9+	9	-	9	9	2	8	8	1*	5	6	-	-	-	-	-	-	-	-	-	-	-	-	-	1					
2	9+	-	8	9+	6	-	8	9+	-	9	9+	8	-	9	9	5	3	7	-	6	4	-	-	-	-	-	-	-	-	-	-	-	-	-	2					
3	9+	-	8	9	2	-	8	9+	-	9	9+	7	-	9	9+	5	1*	9	5	6	4*	1	-	-	-	-	-	-	-	-	-	-	-	-	3					
4	9+	-	7	9	-	-	8	9+	-	9	9	6	-	9	9+	6	1*	9+	9	7	3	4	-	-	-	-	-	-	-	-	-	-	-	-	4					
5	9+	-	6	8	-	-	7	9+	-	8	9	2	-	9	9+	7	7	9	9	7	5	7	-	-	2	-	-	-	-	-	-	-	-	-	5					
6	9+	-	2	6	-	-	5	9+	-	7	9	-	1	8	9+	7	6	9+	9	8	6	9	-	-	9	-	1*	2*	-	-	-	-	-	-	6					
7	9+	-	-	2	-	-	3	9+	-	7	8	-	1	8	9+	9	7	9	9	8	3	9	1	-	9	-	2*	2*	-	-	-	-	-	-	7					
8	9	-	-	-	-	-	1	9+	-	4	7	-	1	6	9+	8	5	9+	9	8	2	9	1*	-	9	-	2*	2*	1	-	-	-	-	-	8					
9	9	-	-	-	-	-	-	9+	-	2	5	-	1	4	9+	9	7	8	9	8	2	9+	2	-	9	-	1	1*	1	-	-	-	-	-	9					
10	9	-	-	-	-	-	-	9+	1	-	3	1	1	4	9+	8	8	9	8	9	3	9	2*	5	9	1*	1	-	-	-	-	-	-	-	10					
11	8	-	-	-	-	-	-	9+	1	-	1	1	1	2	9+	9	9	8	8	8	8	9	1*	5	9	-	2	-	-	-	-	-	-	-	11					
12	8	-	-	-	-	-	-	9+	2	-	1	3	1	2	9+	8	8	8	9	9	8	9	1*	4	8	-	-	-	-	-	-	-	-	-	12					
13	8	-	-	-	-	-	-	9+	3	-	2	5	2	1	9+	8	8	8	9	9	8	8	-	1	7	-	-	-	-	-	-	-	-	-	13					
14	8	-	-	-	-	-	-	9+	4	-	4	7	4	2	9+	9	8	8	9	9	8	8	-	1	6	-	-	-	-	-	-	-	-	-	14					
15	9	-	-	1	1	-	-	9+	5	-	7	8	5	1	9+	9	7	9+	9	9	8	8	-	-	6	-	-	-	-	-	-	-	-	-	15					
16	9+	1	-	5	4	-	-	9+	6	-	8	9	6	1	9+	9	7	9+	9+	9	9	8	-	-	6	-	-	2*	-	-	-	-	-	-	16					
17	9+	3	-	8	7	3	-	9+	6	-	8	9	6	2	9+	9	8	9+	9+	9	9	9	-	-	9	1*	-	2*	-	-	-	-	-	-	17					
18	9+	4	-	9	8	3	-	9+	8	-	9	8	7	4	9+	9	9	9+	9+	9	8	8	-	2	9	-	4*	4*	-	-	-	-	-	-	18					
19	9+	5	-	9	9	5	-	9+	8	1	9	8	6	7	9+	9	8	9+	9+	9	9	8	-	7	9+	-	5*	3*	-	-	-	-	1*	-	19					
20	9+	7	-	9	8	4	1	9+	7	3	9	9	7	8	9+	9	9	9+	9+	8	9	7	-	8	9	-	4*	2*	-	-	-	-	-	-	20					
21	9+	5	-	9	8	4	2	9+	8	6	9	9	6	8	9+	8	9	9+	9	7	9	5	1*	7	8	-	4*	1*	-	-	-	-	-	-	21					
22	9+	4	2	9	8	2	4	9+	8	8	9+	9	6	8	9+	5	9	9+	3	6	9	2	-	3	2	-	-	-	-	-	-	-	-	-	22					
23	9+	3	6	9	8	-	6	9+	7	8	9+	9	3	8	9	4*	9	9+	3*	5	8	-	-	1	-	-	-	-	-	-	-	-	-	-	23					

EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA EU FE SA AF AS OC NA

Aug., Norway (Oslo), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

80 Meters								40 Meters								20 Meters								15 Meters								10 Meters								UTC
UTC	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	EU	FE	SA	AF	AS	OC	NA	UTC				
0	9+	1	8	9+	8	-	8	9+	6	9	9+	9	2	9	9	1*	8	7	1*	3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0				
1	9+	-	8	9+	8	-	9	9+	5	9	9+	9	1	9	8	-	4	5	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1					
2	9+	-	9	9+	8	-	9	9+	1	9	9+	9	-	9	7	-	-	4	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2					
3	9+	-	9	9+	4	-	9+	9+	1	9	9+	8	1	9+	8	4	1*	8	1	4	1*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3				
4	9+	-	9	9	1	-	9	9+	-	9	9+	6	4	9	9	5	1*	9+	8	5	2*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4				
5	9+	-	8	9	-	-	8	9+	-	9	9	3	4	9	9	6	5	8	9	6	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	5				
6	9+	-	6	6	-	-	7	9+	-	8	9	1	3	9	9	7	6	9	9	8	4	1	1	-	7	-	1	-	-	-	-	-	-	-	-	6				
7	9+	-	2	3	-	-	5	9+	-	7	8	1	3	8	9+	8	5	9+	9	7	1	6	2	-	6	-	2	1*	-	-	-	-	-	-	-	7				
8	9+	-	-	1	-	-	2	9+	-	6	7	1	2	7	9+	8	4	9+	9	8	1	8	3	-	9	-	2	1*	-	-	-	-	-	-	-	8				
9	9	-	-	-	-	-	1	9+	1	3	5	1	1	6	9+	8	8	9	9	8	1	9	4	-	9	1*	4	-	-	-	-	-	-	-	-	9				
10	9	-	-	-	-	-	-	9+	1	1	4	1	1	5	9+	8	8	9	9	9	2	9	4	6	9	1*	2	-	-	-	-	-	-	-	-	10				
11	8	-	-	-	-	-	-	9+	2	-	2	2	1	4	9+	8	8	9	9	8	7	9	4	5	9	1*	2	-	-	-	-	-	-	-	-	11				
12	8	-	-	-	-	-	-	9+	3	-	1	4	2	3	9+	8	8	8	9	8	8	8	2	5	9	1*	4	-	-	-	-	-	-	-	-	12				
13	8	-	-	-	-	-	-	9+	4	-	2	6	3	4	9+	9	8	8	9	9	8	6	1	3	8	-	1*	-	-	-	-	-	-	-	-	13				
14	9	-	-	-	-	-	-	9+	5	-	5	7	4	4	9+	9	7	8	9	9	8	4	-	1	6	-	-	-	-	-	-	-	-	-	-	14				
15	9+	-	-	2	2	-	-	9+	5	-	8	8	5	3	9+	9	7	9+	9+	9	8	1	-	-	4	-	-	1*	-	-	-	-	-	-	-	15				
16	9+	2	-	6	6	2	-	9+	6	-	9	8	6	4	9	9	7	9+	9+	9	8	1	2	-	7	-	-	3*	-	-	-	-	-	-	-	16				
17	9+	4	-	8	8	3	-	9+	7	-	9	8	8	4	9+	9	7	9+	9+	9	8	1	-	-	9	-	1*	4*	-	-	-	-	-	-	-	17				
18	9+	5	-	9	8	5	-	9+	7	-	9	8	7	6	9+	9	8	9+	9+	9	9	1	-	4	9+	-	5*	2*	-	-	-	-	-	-	-	18				
19	9+	7	-	9	7	4	1	9+	8	2	9	9	7	8	9+	9	8	9+	9+	9	8	2	-	8	9+	-	6*	2*	-	-	-	-	-	-	-	19				
20	9+	8	-	9	8	5	4	9+	8	4	9	9	8	9	9+	8	9	9+	9	6	9	1	-	9	9+	-	3*	1*	-	-	-	-	-	-	-	20				
21	9+	7	-	9	8	4	5	9+	8	6	9	9	7	8	9+	5	9	9+	4	6	9	1	2*	6	7	-	3*	1*	-	-	-	-	-	-	-	21				
22	9+	6	1	9	9	2	6	9+	8	7	9+	9	6	9	9	3*	9	9+	2*	4*	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22				
23	9+	2	6	9+	8	-	7	9+	7	8	9+	9	4	9	9	4	9	9	2*	4*	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23				

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Sep., Norway (Oslo), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

Oct., Norway (Oslo), for SSN = Very Low, Sigs in S-Units. (c) 2010 Dean Straw, N6BV

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