



284.5																			NOR LVK										284.5		
285.0				SWE LCF	SWE LCF	SWE LCF	TUR AN	SWE LCF	SWE LCF	SWE LCF	SWE LCF	SWE LCF	SWE LCF	SWE LCF	SWE LCF	SWE LCF	SWE LCF	UKR N	SWE LCF	SWE LCF	SWE LCF						SWE LCF	SWE LCF	BRA DOU	285.0	
286.0		DEU HFX	DEU HFX	DEU HFX	DEU HFX	RUS W	DEU HFX		RUS W			DEU HFX	DEU HFX					RUS W	RUS R	DEU HFX	DEU HFX						DEU HFX	DEU HFX	286.0		
286.5									FRA TA						FRA TA	FRA TA	FRA TA													286.5	
287.0							RUS AZ		NOR AD									RUS AZ										RUS AZ		287.0	
288.0																													RUS K	288.0	
288.5										FRA AVD												FRA AVD								288.5	
289.0				RUS WR	HRV RI	HRV RI	HRV RI	HRV RI						HRV RI		HRV RI	HRV RI	HRV RI	RUS WR	HRV RI	HRV RI	HRV RI	HRV RI					RUS WR	HRV RI	289.0	
290.0		UKR IF	BEL ONL	BEL ONL	AUT GRZ	RSE XZ	AUT GRZ	BEL ONL	UKR IF	BEL ONL	AUT GRZ	BEL ONL	BEL ONL	AUT GRZ	BEL ONL	BEL ONL	AUT GRZ	POL NO	AUT GRZ	AUT GRZ	UKR IF	AUT GRZ	AUT GRZ	AUT GRZ	AUT GRZ	AUT GRZ	AUT GRZ	AUT GRZ	AUT GRZ	290.0	
291.0		FRA WS	FRA WS	FRA WS	FRA WS	FRA WS	FRA WS																				FRA WS	FRA WS	291.0		
292.0		DEU NKR	DEU NKR	ITA NOV	DEU NKR	TUR CAY	DEU NKR	DEU NKR										TUR CAY		DEU NKR	ITA NOV	ITA NOV				DEU NKR			292.0		
293.0	AUT STE	BEL OB	AUT STE	BEL OB	AUT STE	NGR ARL	BEL OB	BEL OB	BEL OB	BEL OB	BEL OB	BEL OB	BEL OB	BEL OB	BEL OB	BEL OB	AUT STE		NGR ARL	NGR ARL						AUT STE	BEL OB	BEL OB	293.0		
294.0			SRB VRA	SRB VRA		SRB VRA										SRB VRA		RUS GT			SRB VRA						RUS YU		294.0		
295.0		HNG DC	MKD PT	MKD PT	HNG DC	MKD PT	HNG DC		HNG DC			HNG DC	HNG DC		HNG DC	MKD PT	HNG DC		HNG DC	HNG DC						HNG DC	HNG DC	MKD PT	HNG DC	295.0	
296.0		SVN MG	SVN MG	SVN MG	SVN MG	SVN MG	SVN MG	SVN MG	SVN MG	SVN MG	SVN MG	SVN MG	SVN MG	SVN MG	SVN MG	SVN MG	SVN MG		SVN MG								SVN MG	SVN MG	SVN MG	296.0	
297.0		RUS BA	BUL BD	RUS BA	DEU FR	BUL BD	MKD PEP		DEU FR			RUS BA	DEU FR	DEU FR	DEU FR	DEU FR	MKD PEP	RUS BA	MKD PEP	DEU FR	MKD PEP					RUS BA	DEU FR	RUS BA	297.0		
299.0			DEU SL	FRA BO	DEU SL																					FRA BO			299.0		
299.5						NOR KN	NOR KN		NOR KN	NOR KN	NOR KN	NOR KN	NOR KN	NOR KN	NOR KN	NOR KN	NOR KN			NOR KN							NOR KN	NOR KN	NOR KN	299.5	
300.0		SWE SC	SWE SC	SWE SC	CZE KD	SRB PV	SRB PV	SWE SC	SWE SC	SWE SC	SRB PV	SWE SC	SWE SC	SWE SC	SWE SC	SRB PV	SRB PV	SRB PV	CZE KD	SRB PV	SRB PV					SRB PV	SWE SC	SWE SC	SRB PV	300.0	
300.5																						DEU LW								300.5	
301.5			ITA TRE	ITA TRE		ITA TRE	ITA TRE															ITA TRE						ITA TRE		301.5	
302.0		FRA ROM	FRA ROM		FRA ROM	MNE NIK	MNE NIK		FRA ROM	FRA ROM	MNE NIK		MNE NIK		FRA ROM	FRA ROM	MNE NIK		MNE NIK	FRA ROM	MNE NIK						MNE NIK	FRA ROM	MNE NIK	VCT CAI	302.0
303.0	AUT RTT		AUT RTT	AUT RTT	AUT RTT	NOR KPG	NOR KPG	NOR KPG	NOR KPG	NOR KPG	AUT RTT	NOR KPG	NOR KPG	NOR KPG	NOR KPG	NOR KPG	AUT RTT		NOR KPG							NOR KPG	NOR KPG	NOR KPG	NOR KPG	303.0	
304.0						ALG MOK																					RUS DP		CAN ZQM	304.0	
305.0						CAN YQ									CAN LT		CAN YQ					CAN LT						CAN YQ		305.0	
306.5											FRA AV																			306.5	
307.0		LUX DIK	RUS LA	LUX DIK	LUX DIK	GRC THR	LUX DIK	LUX DIK	LUX DIK	LUX DIK	LUX DIK	LUX DIK	LUX DIK	LUX DIK	LUX DIK	LUX DIK	GRC THR	LUX DIK		LUX DIK	LUX DIK	LUX DIK	LUX DIK	LUX DIK	LUX DIK	LUX DIK	LUX DIK	RUS VA	LUX DIK	LUX DIK	307.0
308.0			MNE MOJ	MNE MOJ	MNE MOJ	MNE MOJ	MNE MOJ		MNE MOJ	MNE MOJ	BLR G		BLR G		MNE MOJ	MNE MOJ	MNE MOJ	BLR V	BLR V	MNE MOJ	BLR G	MNE MOJ					BLR G		MNE MOJ	308.0	
309.0		SWE LG	SWE LG		FRA DO	IRN ISR	DEU MW	SWE LG	SWE LG	FRA DO	SWE LG	SWE LG	FRA DO		FRA DO	FRA DO	IRN ISR	SWE LG	SWE LG	SWE LG	DEU MW	FRA DO				SWE LG	SWE LG	FRA DO	CLM GPI	309.0	
309.5				UKR TR																										309.5	
310.0			UKR NO			IRN GGN	UKR NO										IRN GGN											UKR NO		ESP AMN	310.0
311.0		DEU NSN	DEU LMA	DEU LMA	DEU CEL	DEU NSN	DEU CEL	DEU LMA	DEU LMA	DEU LMA	DEU CEL		DEU LMA	DEU LMA	DEU LMA	DEU LMA	DEU CEL		DEU CEL	DEU LMA							DEU LMA	DEU LMA	DEU NSN	311.0	
312.0			SWE KBG	SWE KBG	BOZ	BOZ	BOZ		SWE DJ	BOZ	BUL BOZ	SWE DJ	SWE DJ	BOZ	SWE DJ	SWE DJ	BUL BOZ	SWE DJ	ITA TAQ	BUL BOZ	MNE DAN						SWE KBG		BUL BOZ	312.0	







391.0	SVK OKR	SVK OKR	SVK OKR	FRA CC	SVK OKR	PTR DDP	SVK OKR	SVK OKR	FRA BV	FRA BV	PTR DDP	PTR DDP	PTR DDP	PTR DDP	SVK OKR	FRA BV	TUR GAP	SVK OKR	SVK OKR	PTR DDP	FRA BV	SVK OKR	SVK OKR	SVK OKR	FRA CC	PTR DDP	391.0	
392.0		DEU RW	DEU RW	FRA AS	DEU RW	LBY LAB	DEU RW	FRA AS	FRA AS	FRA AS	CAN ML	ISL KF	ISL KF	ISL KF	ISL KF	DEU RW	LBY LAB	DEU RW		CAN ML	FRA AS		DEU RW	LBY LAB	FRA AS	CAN ML	392.0	
392.5	ITA TOP																										392.5	
393.0			NOR TAT	FRA BD	NOR RST	IRN RST	NOR TAT	FRA BD	ENG EMW	ENG EMW	IRN RST	NOR TAT	NOR TAT	ENG EMW	ENG EMW	ENG EMW	IRN RST	SWE AB	NOR TAT	IRN RST				NOR TAT	IRN RST	FRA BD	IRN RST	393.0
394.0		BAL IZA	BAL IZA	BAL IZA	FRA NV	BAL IZA	SWE NB	SCT DND	SCT DND	SCT DND	SWE NB	SWE NB	SCT DND	SCT DND	SCT DND	SCT DND	DEU LYE	DEU LYE	SWE NB	SWE NB	SCT DND	FRA NV	SCT DND	SWE NB	SCT DND	BAL IZA	394.0	
395.0	FRA OB		IRN TBS	MLT MLT	FRA OB	IRN TBS	IRN TBS	HOL OA	SCT LAY	SCT LAY	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	IRN TBS	395.0
396.0		ITA RON	CAN JC	NOR YG	NOR YG	SYR ALE	ITA YG	NOR YG	NOR YG	NOR YG	CAN JC	NOR YG	NOR YG	NOR YG	NOR YG	NOR YG	SYR ALE	NOR YG	NOR YG	CAN JC	ITA RON		NOR YG	NOR YG	NOR YG	ITA RON	396.0	
397.0	FRA EG		HRV CV	EST UM	POL OL	TUR VAN	FRA BLB	FRA BLB	FRA BLB	HOL EHN	TUR VAN	IRL OP	IRL OP	IRL OP	HOL EHN	IRL OP	IRL OP	IRL OP	IRL OP	IRL OP	IRL OP	IRL OP	IRL OP	IRL OP	IRL OP	IRL OP	IRL OP	397.0
398.0			SWE PEO	SWE PEO	ITA PRU	FIN ESS	FRA LRN	FRA LRN	FRA LRN	SWE PEO	ITA PRU	SWE PEO	ITA PRU	ITA PRU	FIN ESS	FRA LRN	IRL OK	ITA PRU	ITA PRU	SWE PEO	FIN ESS	FIN ESS	FRA LRN	SWE PEO	FIN ESS	IRL OK	SWE PEO	398.0
399.0			SWE FM	SWE FM	ESP EAG	JOR MDB		SWE FM	SWE FM			SWE FM	SWE FM	SWE FM	SWE FM		JOR MDB	SWE FM	SWE FM	SWE FM	ESP EAG	JOR MDB		SWE FM	JOR MDB	ESP EAG	399.0	
399.5						BEL ONO			BEL ONO	BEL ONO	BEL ONO	BEL ONO	BEL ONO	BEL ONO	BEL ONO										BEL ONO		399.5	
400.0			FRA AG	FRA AG	HRV BRZ	LBY ZT	SWE EN	FRA AG	SWE EN	FRA AG	HRV BRZ	SWE EN	SWE EN	SWE EN	SWE EN		HNG BC	HNG BC	HRV BRZ	HNG BC	LBY ZT	FRA AG	SWE EN	RUS D	FRA AG		400.0	
400.5	ITA COD	ITA COD											DNK EJ			DNK EJ											ITA COD	400.5
401.0			ITA BPL	BAL PTC	ITA BPL	ESP COA	ITA BPL	FRA LA	SCT BBA	FRA LA	ITA BPL	FRA LA	ITA BPL	NOR RBU	FRA LA	SCT BBA	NOR RBU		NOR RBU	ITA BPL	ITA BPL		SCT BBA	NOR RBU	SCT BBA	ESP COA	401.0	
402.0	SAR CAR		BEL OP	SAR CAR	IRN YZD	SWE LX		FRA DA	BEL OP		SWE LX			SWE LX	BEL OP	BEL OP	YRD	SWE LX		SAR CAR	BEL OP	SAR CAR	SWE LX	SAR CAR	SWE LX	SPM MQ	402.0	
402.5						ENG LBA					ENG LBA	ENG LBA														ENG LBA	402.5	
403.0			SWE OJ	SWE OJ	SUI LPS	CHN JB	SWE OJ	FRA VZ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	SWE OJ	403.0
404.0		ESP LRD	FRA MRV	ESP LRD	LUX LW	FIN Y	ROU BMR	FRA AGO	ESP LRD	FRA CNE	ROU BMR	NOR VNG	FRA MRV	ESP LRD	LUX LW	FRA MRV	ROU BMR	ROU BMR	FIN Y	FIN Y	FRA MRV	ESP LRD	NOR VNG	FIN Y	SCT OBN	ESP LRD	404.0	
405.0	SRB JST	DEU GRW	SRB JST	SRB JST	SRB JST	TUR ME	SRB JST	DEU GRW	SRB JST		SRB JST	SRB JST	ITA GRW	ITA GRW	SRB JST	DEU GRW	DEU GRW	DEU GRW	RUS UM	RUS UM	RUS UM	ITA VIE	DEU GRW	RUS UM	DEU GRW	RUS UM	405.0	
406.0		DEU HOZ	FRA MJ	FRA TW	FRA HOZ	FRA TW		ENG BHX	ENG BHX	ENG BHX	FRA MJ	ENG BHX	ENG BHX	ENG BHX	ENG BHX	ENG BHX	ENG BHX	ENG BHX	ENG BHX	ENG BHX	ENG BHX	ENG BHX	ENG BHX	ENG BHX	ENG BHX	ENG BHX	406.0	
406.5						DEU BOT											DEU BOT								DEU BOT		406.5	
407.0		DEU LUP	SCY CTF	ALG BCR	DEU LUP	TUR KSR	LTU PN	DEU LUP	LTU PN	DEU LUP	LTU PN	LTU PN	LTU PN	LTU PN	ALG BCR	DEU LUP	LTU PN	TUR KSR	LTU PN	LTU PN	CAN ZHU	LTU PN		LTU PN	ALG BCR	ALG BCR	ALG BCR	407.0
408.0	AUT BRK	AUT BRK	ROU TSR	ROU TSR	AUT BRK	IRN SAV	AUT BRK	AUT BRK	AUT BRK	AUT BRK	ROU TSR	AUT BRK	ROU TSR	AUT BRK	AUT BRK	AUT BRK	IRN SAV	AUT BRK	AUT BRK	ROU TSR	AUT BRK	AUT BRK	AUT BRK	AUT BRK	AUT BRK	AUT BRK	AUT BRK	408.0
409.0			SWE SG	SWE SG	SWE SG	MRC IFN	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	SWE SG	MRC IFN	409.0
410.0	AUT SI		RUS SF	RUS SF	AUT SI	RUS SF	RUS SF	FRA ETN	FRA ETN	XOE 3EYH5	ESP C	RUS SF	XOE 9HUJ9	ESP C	ESP 3EYH5	ESP 3EYH5	ESP SI	RUS K	RUS SF	KAL K	KAL K	FRA ETN	RUS SF	RUS SF	ESP C	ESP C	410.0	
411.0						TUR RNA																			TUR RNA		411.0	
412.0	SVK FS	ESP GRN	HNG PP	SCY SIG	HNG PP	RSE KS	SVK FS	FRA SE	FRA SE	FRA SE		ESP SIG	SCY SIG	ESP SIG	ESP SIG	FRA SE	AFG HRT	RSE KS	SVK FS	SCY SIG	SVK FS	ESP GRN	HNG PP	SCY SIG	ESP GRN	ESP GRN	412.0	
413.0	FRA ALM		FRA ALM	FRA ALM	FRA ALM	TUR GEY	FRA ALM	FRA ALM			FRA ALM										FRA ALM	FRA ALM		FRA ALM		FRA ALM	413.0	
413.5		DEU DLS				DEU DLS			DEU DLS		DEU DLS	DEU DLS	DEU DLS	DEU DLS	DEU DLS	DEU DLS	DEU DLS	DEU DLS	DEU DLS	DEU DLS	DEU DLS	DEU DLS	DEU DLS	DEU DLS	DEU DLS	DEU DLS	413.5	
414.0			RUS SB	NOR HD	HRV GR	RUS SB	GR	ENG BRI	ENG BRI	ENG BRI	HRV GR	NOR HD	NOR HD	NOR HD	ENG BRI	ENG BRI	RUS SB		NOR HD	NOR HD	HRV GR		NOR SJA	RUS SB	NOR HD	RUS SB	414.0	
415.0	FRA TOE	FRA TOE	FRA TOE	FRA TOE	SWE TOE	FRA TOE	SWE TOE	FRA TOE	SWE TOE	FRA TOE	FRA TOE	CYM CBC	SWE TOE	SWE TOE	DEU RTB	SWE TOE	DR	SWE TOE	SWE TOE	SWE TOE	FRA TOE		SWE TOE	RUS DR	FRA TOE	CYM CBC	415.0	
416.0		SRB POZ	SWE BCS	SWE BCS	CZE V	ESP SA	SRB POZ	SRB POZ	SRB POZ	SRB POZ	SRB POZ	SWE BCS	CZE V	CZE V	SRB POZ	SRB POZ	SRB POZ	SRB POZ	SRB POZ	SRB POZ	SRB POZ	SRB POZ	SRB POZ	SRB POZ	SRB POZ	SRB POZ	416.0	
417.0	SWE AH	ESP SNO	SWE AH	FRA AX	SWE AH	ESP CVT	SWE AH	FRA AX	ESP CVT	ESP SNO	ESP SNO	SWE AH	ITA VIC	ESP SNO	FRA AX	DEU LI	ITA VIC	DEU LI	SWE AH	ESP CVT	SWE AH	ITA VIC	SWE AH	ESP CVT	SWE AH	ESP CVT	417.0	





BEL	355.0	ONW	Antwerpen / Deurne							11								02			
BEL	360.5	MAK	Mackel for Brussels Ntl			20				12		00						02			
BEL	375.0	OO	Oostende									11									22
BEL	399.5	ONO	Oostende					20	20	12		19		11							01
BEL	402.0	OP	Brussels National			21				12								02			
BIH	340.0	BLK	Banja Luka	19			23		22			00								23	
BIH	355.0	MA	Mostar																	21	
BIH	357.5	KG	Sarajevo / Butmir / Kobijaca										18								
BIH	370.0	GAC	Gacko						18				19				17			21	
BIH	383.0	NA	Banja Luka				21														
BIH	425.0	DNC	Mostar			17	18		19			00								18	22
BLR	308.0	G	Minsk 2										22								
BLR	308.0	V	Minsk 2														16	20			
BOT	387.0	GZ	Ghanzi																		
BRA	285.0	DOU	Dourados (MS)																		00
BRA	340.0	OIA	Oiapoque (AP)																		23
BRI	316.0	BJO	Bjomoya / Bear Isl																		00
BUL	284.0	GNA	Gorna	19	19	21	21		20	17	01		21	19	00	19	20	23	22		23
BUL	297.0	BD	Pazardjik / Malak Chardak			01					17									00	16
BUL	312.0	BOZ	Bozhurishte						20	17	03				04	19		23			00
BUL	321.0	BU	Burgas				22												22		02
BUL	350.0	DWN	Devnya For Varna				00					23							00		00
CAN, MB	305.0	YQ	Churchill / Eastern Creek																		02
CAN, NB	304.0	ZQM	Riverview (Moncton)																		
CAN, NB	326.0	FC	Fredericton																		23
CAN, NL	280.0	OX	Gander							23	22			23	00	22	05	22	23	22	23
CAN, NL	281.0	CA	Cartwright							21	23			04	02	23	05	02			22
CAN, NL	356.0	AY	St Anthony								23	22					00				00
CAN, NL	358.0	NL	Signal Hill (Saint John's)															02			01
CAN, NL	378.0	HO	Hopedale															00			01
CAN, NL	396.0	JC	Rigolet			02										23					00
CAN, NU	305.0	LT	Alert Bay																		01
CAN, NU	329.0	YEK	Arviat							02											01
CAN, NU	350.0	RB	Resolute Bay															00			01
CAN, NU	362.0	YZS	Coral Harbour															00			01
CAN, NU	372.0	YCO	Coppermine / Kugluktuk														02				01
CAN, NU	378.0	UX	Hall Beach															00			02
CAN, QC	276.0	YHR	Chevery				01				23	23									22
CAN, QC	332.0	YFM	La Grande 4																		01
CAN, QC	340.0	YY	Mont Joli																		23
CAN, QC	344.0	YGV	Havre St Pierre																		01
CAN, QC	360.0	PN	Port-Menier / Ile Anticosti																		01
CAN, QC	392.0	ML	Charlevoix																		23
CAN, QC	407.0	ZHU	Hauts-Bois / St Hubert (Montreal)																		23
CHN	403.0	JB	Zhangzhen																		17
CLM	309.0	GPI	Guapi																		
CNR	365.0	VR	Gran Canaria / Las Palmas																		23
CNR	376.0	HIE	Valverde / El Hierro																		22
CNR	389.0	BX	La Palma																	22	05
CNR	397.0	FV	Fuerteventura																		00
COR	341.0	IS	Ajaccio / Campo del Oro				18				17										01
COR	349.5	SZA	Solenzara	21								19									23
COR	365.0	RB	Ajaccio / Campo del Oro																	22	20
COR	375.0	CV	Calvi / Ste Catherine										21								
COR	387.0	CT	Ajaccio / Campo del Oro				18	02													
CYM	415.0	CBC	West End (Cayman Brac)																		05
CYP	328.0	PHA	Pafos																00		
CYP	343.0	DKA	Dhekelia																		22
CZE	300.0	KD	Kbely / Praha East																		
CZE	345.5	CF	Caslav / Chotusice / Centograf																		14
CZE	365.0	L	Karlovy Vary / Vrata																		20
CZE	372.0	L	Prague / Ruzyně / Liboc			05	05									20					
CZE	386.0	RAK	Rakovnik			05					14										21
CZE	416.0	KUN	Kunovice																	22	17
CZE	416.0	V	Vodochody / Pan Brezany																		02
DEU	284.0	FSB	Fassberg																		22
DEU	286.0	HFX	Hohenfels			19	15	21	01		02					20					20



























NGR	Niger						1														1	1										
NIR	Northern Ireland									1	1	1		1	1	2	1	1					2						2	1	1	
NOR	Norway		1	6	6	6	3	8	7	17	10	5	15	7	10	5	9	6	3	12	8	4							14	11	9	2
ORK	Orkney Islands													1																1		
PAK	Pakistan						1												2													
POL	Poland		1				2	1	1				1	1			1			4	2		1					3				
POR	Portugal						2		2	1	1			2	1	1							1						1	2	2	
PTR	Puerto Rico, PR						1						1	1	1	1							1									
ROU	Romania	1		1	3	2	1	3			1	7		2			1			3	6	1	4	1				1	1	5		
RSE	Russia (Eastern)						3													1		1							1			
RUS	Russia (European)		1	8	4	2	9	4			1		2	1					12	5	10		1					3	25	8		
SAR	Sardinia	1		1	3	1																							1			
SCT	Scotland					1		2	4	5	2			3	8	5	7	6					1		3			6	1	9		
SCY	Sicily			1	1										1								1						1			
SHE	Shetland Islands							1	1																						1	
SPM	St Pierre Et Miquelon																														2	
SRB	Serbia (Yugoslavia)	3	1	6	3	7	3	10	1	2	1	7					2	3	3	3	1	1	1	3			2	3	1	2		
SUI	Switzerland	2		2		1																	2	1	1						1	
SVB	Svalbard						1													2												
SVK	Slovakia	3	1	1		1		2	1				1		1			1		2	2	2		2	1		1	1		1		
SVN	Slovenia	2	1	1	1	3	1	1		1	1		1	1	1		1	1						1			1	1	1	2		
SWE	Sweden	2	8	22	21	15	1	19	14	19	9	15	24	14	19	7	14	6	25	34	12	12					34	22	14	6		
SYR	Syria						1													1												
TKM	Turkmenistan						1													1												
TRD	Trinidad & Tobago						1																								1	
TUR	Turkey						25					1																		1	2	
UKR	Ukraine		2	2	2			1		1		1							3	1	1	1	1					3		2		
VCT	St Vincent																														1	
WLS	Wales							1	2	1	1	1	3	2	1	1															2	
XOE	Int Waters: Europe			2				1		1	2			1	4			2	3			2						2	2	1		
XUU	UNID (No idea where)																			1												
Cou	Cou-Name	AUT lk	CZE jk	CZE my	CZE ze	DEU bd	DEU hw	DEU je	ENG ag	ENG ap	ENG bk	ENG hh	ENG im	ENG me	ENG px	ENG re	ENG yk	FIN jr	FIN ks	FIN ro	HOL rb	ITA ed	ITA wb	NOR gl	RUS iv	SCT ds	SCT lw					

**LISTENING TIMES:**

This table shows the number of NDBs logged by each reporter during the time periods.

UTC (hh)	AUT lk	CZE jk	CZE my	CZE ze	DEU bd	DEU hw	DEU je	ENG ag	ENG ap	ENG bk	ENG hh	ENG im	ENG me	ENG px	ENG re	ENG yk	FIN jr	FIN ks	FIN ro	HOL rb	ITA ed	ITA wb	NOR gl	RUS iv	SCT ds	SCT lw
00:00 - 00:59				13			12			10	2	46	12	2	3	4	81	34		9		13	15	67	17	19
01:00 - 01:59			5	14	3	2	4				2	10				1				29		10	21	1	10	
02:00 - 02:59			7	15		6	2		2	4		17	21			2	5			11	122		22	1	2	4
03:00 - 03:59			11	9	2		16		1	4			3			2			8				10	2		1
04:00 - 04:59		5	9				3		1	1		2							5							5
05:00 - 05:59		28					1					21								1						24
06:00 - 06:59										1																1
07:00 - 07:59																										
08:00 - 08:59																										
09:00 - 09:59															1					1						
10:00 - 10:59	5													11								3				
11:00 - 11:59											41		65	8		80										
12:00 - 12:59										33															24	
13:00 - 13:59																										
14:00 - 14:59					15																					
15:00 - 15:59	2		9																							
16:00 - 16:59	4		4																							
17:00 - 17:59			19		13	43	1					5	2				1	45		1		9	1			
18:00 - 18:59			10	3	30			5										8		3		6	4			
19:00 - 19:59	5	12	23	3	12	1	15	24	127		28	25		10	2	1		8	2	3		7	71		63	
20:00 - 20:59	16	20	32	10	13		22	20		1	29	3	1	14	26	8		8		7		11	4	1		
21:00 - 21:59	7	6	6	29	22	6	18	33		3	10	11	3	23	53	12		8		8		12	8	2	4	5
22:00 - 22:59	9			18	10	10	21	35		15	22	2	4	29	22	13				17		15	7	1	40	15
23:00 - 23:59				19	11	79	22	4	4	19	13	2	24	24	18	10				28		11	12		22	1
UTC (hh)	AUT	CZE	CZE	CZE	DEU	DEU	DEU	ENG	ENG	ENG	ENG	ENG	ENG	ENG	ENG	ENG	FIN	FIN	FIN	HOL	ITA	ITA	NOR	RUS	SCT	SCT









(Occasionally an entry may be the result of an incorrectly received ident)

QRG	ID	Name	SP	ITU	Rptr	UTC
370.0	CUL	Culdrose RNAS		ENG	ag	2109
380.0	RQ	Quimper / Pluguffan		FRA	ag	2111
398.0	MT	St Nazaire / Montoir		FRA	ag	2131
404.0	AGO	Angouleme / Brie Champniers		FRA	ag	2122
345.0	STM	Strommen / Mo I Rana		NOR	ap	1906
348.0	VG	Vagar		FRO	ap	1906
369.0	RCH	Rochester		ENG	ap	1906
370.0	L	Lycksele		SWE	ap	1906
402.0	DA	Ales / Deaux		FRA	ap	1906
356.0	CVU	Castres / Mazamet		FRA	bd	2104
359.0	RK	Cerklje		SVN	bd	1816
375.0	CV	Calvi / Ste Catherine		COR	bd	2112
339.0	GI	Amiens / Glisy		FRA	bk	1137
341.0	AMB	Amboise		FRA	bk	1139
348.0	FOS	Fairoaks		ENG	bk	1146
404.0	CNE	Caen / Carpiquet		FRA	bk	1246
358.0	LF4H	Heimdal Platform		XOE	ds	2234
364.0	KNK	Connaught		IRL	ds	1220
375.0	BRG	Bourges		FRA	ds	0012
404.0	OBN	N. Connell / Oban		SCT	ds	1228
300.5	LW	Koln / Bonn		DEU	ed	0202
340.0	ZIG	Leipzig		DEU	ed	0202
341.0	ALG	Memmingen / Allgau		DEU	ed	0202
390.0	OV	Nafloora M4		LBY	ed	0202
418.0	PW	Poprad / Tatry West		SVK	ed	0202
280.0	ND	Swidwin		POL	gl	2346
369.0	STG	Stegen		NOR	gl	0214
382.0	IJ	Ilmajoki		FIN	gl	0029
390.0	SS	Skovde		SWE	gl	2336
414.0	SJA	Bardufoss / Senja		NOR	gl	2105
306.5	AV	Avord		FRA	hh	2112
320.0	VL	Pula / Valtura		HRV	hh	2037
350.0	SK	Zagreb / Pleso / S. Kraljevec		HRV	hh	1948
352.5	DD	Oostende		BEL	hh	1843
357.5	KG	Sarajevo / Butmir / Kobiljaca		BIH	hh	1849
378.0	TA	Timisoara / Giarmata		ROU	hh	2229
385.0	BO	Zadar / Bokanjac		HRV	hh	2225
283.0	BIS	Biskra		ALG	hw	2134
285.0	AN	Ankara / Esenboga		TUR	hw	1900
288.0	AD	Sandane Anda		NOR	hw	2330
290.0	XZ	Tyumen / Roshchino		RSE	hw	2300
304.0	MOK	Bordj Mokhtar		ALG	hw	2330
317.0	KFR	Kufra		LBY	hw	2300
318.0	OTR	Bucuresti / Otopeni		ROU	hw	1730
319.0	MUS	Mus		TUR	hw	2250
324.0	RF	Ladozhskaya		RUS	hw	1730
330.0	OA	Samah / Warehouse 59		LBY	hw	2311
335.0	VA	Egilsstadir / Vad		ISL	hw	0230
349.0	IPT	Isparta / Suleyman Demirel		TUR	hw	2300
350.0	ORI	Ordu-Giresun		TUR	hw	2250
351.0	ALP	Alexandropoulis		GRC	hw	2342
353.0	BT	Ali		GEO	hw	1730
362.0	DNZ	Dasht-e-Naz / Sari		IRN	hw	1730
368.0	EDR	Edremit / Korzef		TUR	hw	2342
387.0	GZ	Ghanzi		BOT	hw	0218
390.0	RS	Risalpur		PAK	hw	1730
403.0	JB	Zangangzhen		CHN	hw	1730
405.0	ME	Izmir / Adnan Menderes		TUR	hw	1730
413.0	GEY	Antalya		TUR	hw	2300
416.0	SA	Santander		ESP	hw	2300
419.0	LRO	Leros		GRC	hw	2342
422.0	CNK	Canakkale		TUR	hw	1730
395.0	FOY	Foynes for Shannon		IRL	im	0028
288.0	K	Pushkin		RUS	iv	0354

294.0	YU	Shaykovka	RUS	iv	1958	
304.0	DP	Ukhta	RUS	iv	1929	
307.0	VA	Dobrinskoye	RUS	iv	1958	
329.0	WU	Umea	SWE	iv	1958	
334.0	A	Arkhangelsk / Talagi	RUS	iv	1958	
338.0	A	Moscow / Sheremetyevo	RUS	iv	1958	
345.0	PW	Syktvykar	RUS	iv	1958	
350.0	A	Belgorod	RUS	iv	1958	
380.0	BW	Moscow / Sheremetyevo	RUS	iv	1958	
400.0	D	Lipetsk	RUS	iv	1958	
408.0	O	Ilmajoki	FIN	iv	1958	
330.0	ABU	Altenburg / Nobitz	DEU	je	1920	
351.5	PLA	Pula	HRV	je	2304	
376.5	ORI	Orio al Serio (BG)	ITA	je	1908	
330.0	SRN	Saronno (VA)	ITA	jk	0439	
340.0	PND	Valencia / Pinedo	ESP	jk	0455	
370.0	PSA	Spessart	DEU	jk	0531	
372.0	L	Prague / Ruzyně / Liboc	CZE	jk	0532	
378.0	UX	Hall Beach	NU	CAN	jr	0021
275.0	PG	Banak / Porsang	NOR	jr	1719	
285.0	N	Simferopol	UKR	jr	2338	
294.0	GT	Moscow / Vnukovo	RUS	jr	0021	
315.0	G	Astrakhan / Narimanovo	RUS	jr	2338	
317.0	PPD	Poprad / Tatry	SVK	jr	0021	
326.0	ADV	Svalbard / Longyear / Advent.	SVB	jr	2338	
335.0	DP	Dnipopetrovsk	UKR	jr	0021	
345.0	THS	Thessaloniki / Makedonia	GRC	jr	0006	
356.0	ANK	Ankara / Esenboga	TUR	jr	2232	
358.0	ALA	Alta	NOR	jr	0210	
364.0	B	Kittilä / Pahtajanka	FIN	jr	0021	
365.0	AJ	Aghajari	IRN	jr	0006	
369.0	MH	Minhas Air Base	PAK	jr	0021	
372.0	ESR	Eskisehir / Anadolu	TUR	jr	2232	
380.0	TOL	Ivalo / Tolo	FIN	jr	0021	
387.0	MT	Multan	PAK	jr	0021	
391.0	GAP	Sanliurfa / Gap	TUR	jr	2232	
412.0	HRT	Herat	AFG	jr	2338	
420.0	YKV	Hakkari-Yuksekovä	TUR	jr	2232	
290.0	NO	Oksywie	POL	ks	1657	
335.0	NAK	Stockholm / Bromma / Nacka	SWE	ks	0000	
339.0	SD	Sindal	DNK	ks	0000	
393.0	AB	Hagfors	SWE	ks	1751	
403.0	TEST	UNID - M-403 (HNG) ???	XUU	ks	1733	
423.0	M	Cewice	POL	ks	1742	
320.0	RUM	Innsbruck / Rum	AUT	lk	1555	
345.0	TZO	Trezzo sull'Adda (MI)	ITA	lk	1950	
358.0	MSE	Munchen	DEU	lk	2005	
392.5	TOP	Torino / Poirino (TO)	ITA	lk	2155	
304.0	ZQM	Riverview (Moncton)	NB	CAN	lw	0037
285.0	DOU	Dourados (MS)	BRA	lw	0051	
302.0	CAI	Canouan Island	VCT	lw	0321	
309.0	GPI	Guapi	CLM	lw	1050	
310.0	AMN	Almeria	ESP	lw	0400	
329.0	FOF	Fort De France	MRT	lw	0551	
337.0	UP	Zenzeli	RUS	lw	2151	
340.0	OIA	Oiapoque (AP)	BRA	lw	2351	
353.0	BN	Basle / Mulhouse / Habsheim	FRA	lw	1951	
371.0	STR	Sintra	POR	lw	0521	
385.0	PTP	Pointe a Pitre	GDL	lw	0551	
386.0	SP	St. Pierre	SPM	lw	0551	
390.5	ITR	Istres / Le Tube	FRA	lw	2251	
397.0	FV	Fuerteventura	CNR	lw	0000	
402.0	MQ	Miquelon (Grande Miquelon)	SPM	lw	0551	
425.0	BUK	Ankara / Cubuk	TUR	lw	2151	
354.0	BHM	Bleo Holm	XOE	me	1119	
410.0	9HUJ9	Apache II	XOE	me	1144	
307.0	LA	Lazarevskoye	RUS	my	0246	

315.0	CK	Kusshevskaya		RUS	my	0252
330.0	ML	Kraljevo		SRB	my	1744
342.0	OA	Algiers / Houari Boumedienne		ALG	my	1940
384.0	PMR	Pamiers / Les Pujols		FRA	my	1822
407.0	CTF	Catania (CT)		SCY	my	1944
420.0	SHF	Michurinsk		RUS	my	1719
360.0	SR	Saarbrücken / Ensheim		DEU	px	1902
373.0	NW	Maastricht / Beek		HOL	px	2017
332.0	YFM	La Grande 4	QC	CAN	rb	0207
407.0	ZHU	Hauts-Bois / St Hubert (Montreal)	QC	CAN	rb	1009
312.0	TAQ	Tarquinia (VT)		ITA	rb	2052
344.0	VAR	Varazdin		HRV	rb	0121
351.0	PD	Ponta Delgada		AZR	rb	0447
373.0	TN	Thorshofn		ISL	rb	0006
382.0	SF	Sondroström / Kangerlussuaq		GRL	rb	0010
284.0	FSB	Fassberg		DEU	re	2020
320.0	LSU	Limoges / Bellegarde		FRA	re	2301
322.0	ORS	Orleans / St Denis De L'Hotel		FRA	re	2045
333.0	GFC	Statoil Gullfaks C Platform		XOE	re	2342
342.0	VA	Vannes / Meucon		FRA	re	2107
415.0	RTB	Nürnberg / Rothenbach		DEU	re	2318
284.5	LVK	Namsos / Leirvika		NOR	ro	2027
286.0	R	Penza		RUS	ro	2235
353.0	OBA	Oseberg A platform		XOE	ro	2207
366.0	UP	Uppsala		SWE	ro	0300
378.0	HTK	Sorkjosen / Hestvik		NOR	ro	0315
390.0	PAJ	Pajala		SWE	ro	0108
406.0	NV	Wilhelmina		SWE	ro	0156
420.0	GO	Podgorica		MNE	ro	0232
312.0	DAN	Danilovgrad For Podgorica		MNE	wb	0046
318.0	BE	Bordeaux / Merignac		FRA	wb	0033
321.0	TL	Tarbes / Ossun / Lourdes		FRA	wb	0030
343.0	AR	Aurillac		FRA	wb	2252
345.0	CS	Carcassonne / Salvaza		FRA	wb	2231
350.0	BLA	Cerrione (BI)		ITA	wb	2210
355.0	MA	Mostar		BIH	wb	2147
365.0	RB	Ajaccio / Campo del Oro		COR	wb	2055
378.0	TRI	Split / Trogir		HRV	wb	1756
384.0	AT	Annecy / Meythet		FRA	wb	1735
418.0	SVC	Aosta		ITA	wb	1042
420.0	ABN	Albenga (SV)		ITA	wb	1040
340.0	LSH	Lashenden / Headcorn		ENG	yk	1102
357.0	VZ	Eelde / Groningen		HOL	yk	1102
397.0	LZD	Lydd		ENG	yk	1102
309.5	TR	Mys Tarkhankutskiy Lt.		UKR	ze	2210
330.0	G	Gerona / Costa Brava		ESP	ze	2310
356.0	SGO	Sagunto		ESP	ze	0237
372.0	PY	Le Puy / Loudes		FRA	ze	0124
378.0	LU	Le Luc / Le Cannet		FRA	ze	0149
401.0	PTC	Porto Colom for Palma De Mallorca		BAL	ze	2125

## FREQUENCIES REVISITED - Progress Statistics

(Please see the explanation below)

THEN CLE231 - 275-425 kHz - 27.04.2018 - 30.04.2018  
NOW CLE248 - 275-425 kHz - 27.09.2019 - 30.09.2019

Listener	Av km		Total km x 1000		NDBs		Max km	
	THEN	NOW	THEN	NOW	THEN	NOW	THEN	NOW
AUT ik	539	558	32	27	60	48	1175	1336
CZE my	862	1100	116	149	135	135	2058	5020
CZE ze	853	1061	115	141	135	133	2942	3107



DEU hw	1284	2684	185	395	144	147	4680	8303
DEU je	785	970	104	134	133	138	3222	4593
ENG bk	550	749	63	99	114	132	2152	4055
ENG hh	1291	1656	164	217	127	131	2989	6712
ENG me	799	1029	98	137	123	133	2246	6749
ENG px	544	1031	44	131	80	127	1985	6728
ENG yk	891	795	111	106	125	133	2593	3905
HOL rb	1652	1949	238	269	144	138	6837	7041
ITA ed	254	1437	5	175	20	122	641	3455
ITA wb	412	548	22	49	53	90	1838	1361
SCT ds	872	1083	101	129	116	119	2238	3590
<b>Averages:</b>	<b>828</b>	<b>1189</b>	<b>100</b>	<b>154</b>	<b>108</b>	<b>123</b>	<b>2685</b>	<b>4711</b>
<b>%Increase:</b>		<b>44</b>		<b>54</b>		<b>14</b>		<b>75</b>

Listener	Av km		Total km x		NDBs		Max km	
	THEN	NOW	1000	1000	THEN	NOW	THEN	NOW
CZE jk		729		52		71		1786
DEU bd		733		96		131		1753
ENG ag		789		95		121		2550
ENG ap		1002		135		135		3913
ENG im		1330		161		121		9321
ENG re		894		111		124		3918
FIN jr		2412		328		136		5417
FIN ks		1117		102		91		2193
FIN ro		1025		101		99		3867
NOR gl		781		87		111		2113
RUS iv		1485		217		146		6101
SCT lw		2597		358		138		9901
<b>Averages:</b>		<b>1241</b>		<b>154</b>		<b>119</b>		<b>4403</b>
<b>%Increase:</b>								

Av. km = Average distance from listener to NDB for all their loggings  
Total km = Sum of distances from listener to NDBs for all their loggings  
NDBs = Number of NDBs logged  
Max km = Maximum distance from listener to an NDB logged  
(UNIDs are not included)

Explanation:

We ENJOY Listening Events, but their real value is to encourage us to improve our knowledge of our hobby, our listening techniques, our receivers and aerials, etc. Many of our CLEs re-use the same narrow range of frequencies after a year or so. This can provide each of us with an excellent way of measuring our personal progress by comparing our results THEN with our corresponding results NOW.

The upper table shows statistics for listeners who took part in both the events. The bottom lines compare the general conditions found during the two events.

Each listener's own results also depend, of course, on many other things, such as changes in receivers or aerials, time available for listening, use of recording equipment and maybe a move of QTH, as well as progress made through listening practice.

Comparing the results between individual listeners is not very meaningful - we each have so many unavoidable things that affect our ability to hear NDBs; where we and they happen to be, whether we are in a city or in wide open spaces or by the sea, our spending limit, how long we are able to devote to listening, etc.