

Attachment I

EXAMPLES OF TEMPLATES FOR THE TRANSMISSION IN BUFR OR CREX OF OTHER DATA TYPES

These templates, some of which have not yet been validated, can be found on the WMO Web server at <https://community.wmo.int/activity-areas/wmo-codes/manual-codes/volume-i2/template-examples>.

Attachment II

LIST OF ALPHANUMERIC CODE TABLES RELATED TO BUFR AND CREX CODE TABLES AND FLAG TABLES

BUFR/CREX code or flag table	Related code table, regulation or code form in alphanumeric codes	Remarks
0 01 003	A ₁ – Code table 0161	—
0 01 007	I ₆ I ₆ I ₆	Common Code table C–5
0 01 031	F ₁ F ₂ , F ₃ F ₃ F ₃	Common Code table C–1
0 01 032	—	Defined by originating/generating centre
0 01 033	F ₁ F ₂ , F ₃ F ₃ F ₃	Common Code table C–1
0 01 034	F ₁ F ₂ , F ₃ F ₃ F ₃	See Common Code table C–12
0 02 001*	i _x – Code table 1860	—
0 02 002	i _u – Code table 1853	—
0 02 003	a ₄ – Code table 0265	—
0 02 004	i _E – Code table 1806	—
0 02 011	r _a r _a – Code table 3685 (0–89)	Defined in common Code table C–2
0 02 012	—	To be developed
0 02 013	s _r – Code table 3849	—
0 02 014	s _a s _a – Code table 3872	—
0 02 015	r _a r _a – Code table 3685 (91–95)	Defined in common Code table C–2
0 02 016	—	—
0 02 019	—	Common Code table C–8
0 02 021	I ₃	—
0 02 022	I ₄ – Code table 1765	—
0 02 023	w _i – Code table 4639	—
0 02 030	k ₅ – Code table 2266	—
0 02 031	k ₃ – Code table 2264	—
	k ₄ – Code table 2265	
0 02 032	k ₁ – Code table 2262	Numerical variation in each table
0 02 033	k ₂ – Code table 2263	—
0 02 034	X _t X _t – Code table 4780	—
0 02 038	s _s – Code table 3850	—
0 02 039	s _w – Code table 3855	—
0 02 040	k ₆ – Code table 2267	—
0 02 042	i _c – Code table 1833	—
0 02 044	I _m – Code table 1744	—
0 02 045	I _p – Code table 1747	—
0 02 051	i _y – Code table 1857	—
0 02 061	s ₁ – Code table 3866	—
0 02 062	s ₂ – Code table 3867	—
0 02 149	B _t B _t – Code table 0370	Additional entries in Code table 0 02 149
0 02 160	R _w – Code table 3555	—

* See note at the end of this attachment.

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BUFR/CREX code or flag table	Related code table, regulation or code form in alphanumeric codes	Remarks
0 04 059	g – Code table 1400	More flexible than Code table 1400
0 04 080	m _S , m _T , m _C – Code table 2604	—
0 08 001	TEMP/TEMP SHIP – Sections 2 to 6	—
0 08 002	SYNOP/SHIP – Regulation 12.4.10.1	—
0 08 004	AMDAR – Regulation 42.2	—
0 08 009	i _p i _p i _p – AMDAR	—
0 08 011	F _t – Code table 1152	—
0 08 014	METAR/SPECI – Regulation 15.7.6	—
0 08 016	METAR/SPECI – Regulation 15.14	—
0 08 017	METAR/SPECI – Regulation 15.14.3	—
0 08 050	CLIMAT – Qualifier for number of missing values	—
0 08 052	CLIMAT – Condition for which number of days of occurrence	—
0 08 053	CLIMAT – Day of occurrence	—
0 08 054	METAR/SPECI – Regulation 15.5.6	—
0 08 079	METAR/SPECI/TAF – Product status	—
0 10 063	a – Code table 0200	—
0 11 031	i – Code table 1800	—
	B _A – Code table 0302	—
0 13 041	s _p – Code table 3847	—
0 13 051	R _d – Code table 3534	—
0 19 100	t _e – Code table 4035	—
0 19 101	A _C – Code table 0104	—
0 19 102	S _C – Code table 3704	—
0 19 103	W _C – Code table 4504	—
0 19 104	a _C – Code table 0204	—
0 19 105	r _t – Code table 3652	—
0 19 107	t _m – Code table 4044	—
0 19 108	A _t – Code table 0152	—
0 19 109	W _f – Code table 4536	—
0 19 110	a _t – Code table 0252	—
0 20 003*	ww – Code table 4677	—
	w _a w _a – Code table 4680	—
	w ₁ w ₁ – Code table 4687	—
0 20 004	W ₁ – Code table 4561	—
	W _{a1} – Code table 4531	—
0 20 005	W ₂ – Code table 4561	—
	W _{a2} – Code table 4531	—
0 20 009	METAR/SPECI	—
0 20 011	N – Code table 2700	—
0 20 012	C – Code table 0500	—
	C _H – Code table 0509	—
	C _M – Code table 0515	—
	C _L – Code table 0513	—
0 20 017	C _t – Code table 0552	—
0 20 018	METAR/SPECI – Regulation 15.7.4.3	—
0 20 032	R _S – Code table 3551	—
0 20 033	I _S – Code table 1751	—
0 20 034	c _i – Code table 0639	—

* See note at the end of this attachment.

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BUFR/CREX code or flag table	Related code table, regulation or code form in alphanumeric codes	Remarks
0 20 035	b _i – Code table 0439	—
0 20 036	z _i – Code table 5239	—
0 20 037	S _i – Code table 3739	—
0 20 040	S' ₈ – Code table 3776	—
0 20 041	I _c – Code table 1733	Additional entries in Code table 0 20 041
0 20 055	C _s – Code table 430 (Vol. II)	—
0 20 062	E – Code table 0901	—
	E' – Code table 0975	—
0 20 063	S _p S _p S _p S _p – Code table 3778	—
	A – Code table 0101	—
	A ₃ – Code table 0163	—
	C _c – Code table 0533	—
	S ₀ – Code table 3761	—
	S _q – Code table 3848	—
	T _w – Code table 3955	—
	Z ₀ – Code table 5161	—
0 20 071	A _i – Code table 0139	—
0 20 085	METAR/SPECI – Regulation 15.13.6.1	—
0 20 086	E _R – Code table 0919	—
0 20 087	C _R – Code table 0519	—
0 20 089	B _R B _R – Code table 0366	—
0 20 090	C _s – Code table 0521	—
0 20 101	L _n – Code table 162 (Vol. II)	—
0 20 102	L _c – Code table 159 (Vol. II)	—
0 20 103	L _d – Code table 160 (Vol. II)	—
0 20 104	L _g – Code table 161 (Vol. II)	—
0 20 105	s _L – Code table 173 (Vol. II)	—
0 20 106	d _L – Code table 139 (Vol. II)	—
0 20 107	D _L – Code table 140 (Vol. II)	—
0 20 108	v _e – Code table 182 (Vol. II)	—
0 20 136	C _a – Code table 0531	—
	C ₀ – Code table 0561	—
	N _m – Code table 2745	—
	N _t – Code table 2752	—
	N _v – Code table 2754	—
0 20 137	n ₃ – Code table 2863	—
0 22 061	S – Code table 3700	—
0 22 067	I _x I _x I _x – Code table 1770	Common Code table C–3
0 22 068	X _R X _R – Code table 4770	Common Code table C–4
0 23 001	A _a – Code table 0131	—
0 23 002	AA – Code table 0177	—
0 23 003	B _T – Code table 0324	—
0 23 004	P _a – Code table 3131	—
0 23 005	A _c – Code table 0133	—
0 23 006	A _e – Code table 0135	—
0 23 007	E _c – Code table 0933	—
0 23 008 } 0 23 009 }	E _s – Code table 0943	—
0 23 016	R _e – Code table 3535	—
0 23 018	E _e – Code table 0935	—
0 23 031	R _p – Code table 3548	—

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0 23 032	I _n – Code table 1743	—
0 24 003	R _c – Code table 3533	—
0 25 041	D _s – Code table 0700	—
0 25 042	v _s – Code table 4451	—
0 25 086	Q _z – Code table 3318	—
0 29 001	g _r g _r – Code table 1487	—
0 33 020	Q _d , Q _{d1} , Q _{d2} , Q _l , Q _t – Code table 3334	—
0 33 021	Q _p , Q _{TW} – Code tables 3315 - 3319	—
0 33 022	Q _N – Code table 3313	—
0 33 023	Q _L – Code table 3311	—
0 33 024	i _m – Code table 1845	—
0 33 027	Q _A – Code table 3302	—

**Note: Encoding/decoding of
SYNOP/SHIP i_x – Code table 1860**

Code figure	Type of station operation	to/from BUFR code tables	
		0 02 001 Type of station	0 20 003 Present weather
1	Manned station (group 7wwW ₁ W ₂ included) (but actually missing)	1 (1)	00–99 (200–299) (510)
2	Manned station (group 7ww W ₁ W ₂ omitted, no significant phenomenon to report)	1	508
3	Manned station (group 7ww W ₁ W ₂ omitted, no observation, data not available)	1	509
4	Automatic station (group 7ww W ₁ W ₂ included, using Code tables 4677 and 4561) (but actually missing)	0 (0)	00–99 (200–299) (510)
5	Automatic station (group 7w _a w _a W _{a1} W _{a2} omitted, no significant phenomenon to report)	0	508
6	Automatic station (group 7 w _a w _a W _{a1} W _{a2} omitted, no observation, data not available)	0	509
7	Automatic station (group 7 w _a w _a W _{a1} W _{a2} included, using Code tables 4680 and 4531) (but actually missing)	0 (0)	100–199 (200–299) (510)