

CREX Table D - List of common sequences

| F | X | CATEGORY OF SEQUENCES |
|---|----|---|
| D | 00 | CREX table entries sequences |
| D | 01 | Location and identification sequences |
| D | 02 | Meteorological sequences common to surface data |
| D | 03 | Meteorological sequences common to vertical soundings data |
| D | 04 | For satellite observations (<i>not to be used in CREX for transmission</i>) |
| D | 05 | Meteorological or hydrological sequences common to hydrological observations |
| D | 06 | Meteorological or oceanographic sequences common to oceanographic observations |
| D | 07 | Surface report sequences (land) |
| D | 08 | Surface report sequences (sea) |
| D | 09 | Vertical sounding sequences (conventional data) |
| D | 10 | Vertical sounding sequences (satellite data) (<i>not to be used in CREX for transmission</i>) |
| D | 11 | Single-level report sequences (conventional data) |
| D | 12 | Single-level report sequences (satellite data) (<i>not to be used in CREX for transmission</i>) |
| D | 13 | Sequences common to image data (<i>not to be used in CREX for transmission</i>) |
| D | 14 | Reserved |
| D | 15 | Oceanographic report sequences |
| D | 16 | Synoptic feature sequences |
| D | 18 | Radiological report sequences |
| D | 21 | Radar report sequences (<i>not to be used in CREX for transmission</i>) |
| D | 22 | Chemical and Aerosol sequences |
| D | 35 | Monitoring information |

Notes:

- (1) From a conceptual point of view, Table D is not necessary:
 - (a) The Data description section can fully and completely describe the data using only element descriptors, operator descriptors and the rules of description;
 - (b) Such a means of defining the data would involve considerable overheads in terms of the length of the Data description section. Table D is a device to reduce these overheads;
 - (c) Each entry within Table D contains a list of descriptors. Each sequence descriptor that references to Table D may be "expanded" by replacing it with the list corresponding to that entry. The process of "expansion" is well defined, provided it results in a set of element descriptors and operator descriptors;
 - (d) Descriptors listed in entries to Table D may themselves refer to Table D, provided no circularity results on repeated expansion;
 - (e) The initial Table D has been limited to lists of descriptors likely to be frequently used. Every attempt has been made not to produce initial tables that are too comprehensive. Minor differences of reporting practice can be accommodated by not endeavouring to reduce each observation type to a single descriptor. Indeed, much more flexibility is retained if the Data description section is envisaged as containing three or four descriptors.
- (2) It should be noted that, initially, effort has been concentrated on the requirements for observational data. Extensions forecast data, time-series data, products, etc., follow logically and can be added at an appropriate future date.
- (3) Underwater soundings are included, with some minor omissions, to illustrate the facility to describe data of slightly different contents.
- (4) Categories 48 to 63 are reserved for local use; all other categories are reserved for future development.
- (5) Entries 192 to 255 within all categories are reserved for local use.

Category 00 - CREX table entries sequences

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|---------------------|-------------------------------------|
| | F X Y | |
| D 00 010 | D 00 003 | Table D descriptor to be defined |
| | R 01 000 | Delayed replication of 1 descriptor |
| | B 00 030 | Descriptor defining sequence |

Category 01 - Location and identification sequences

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|---------------------|--|
| | F X Y | |
| D 01 029 | B 01 018 | (Identification) Short station identifier |
| | B 02 001 | Type of station |
| | D 01 011 | Date |
| D 01 030 | | (Identification - with physical location) |
| | B 01 018 | Short station identifier |
| | B 02 001 | Type of station |
| | D 01 011 | Date |
| D 01 070 | | (Ozone instrumentation - Brewer spectrophotometer) |
| | B 02 143 | Ozone instrument type |
| | B 02 142 | Ozone instrument serial number or identifier |
| D 01 074 | B 02 144 | Light source type for Brewer |
| | | (Ozone instrumentation - Dobson spectrophotometer) |
| | B 02 143 | Ozone instrument type |
| | B 02 142 | Ozone instrument serial number/identification |
| D 01 075 | B 02 145 | Wavelength setting for Dobson instrument |
| | B 02 146 | Source conditions for Dobson instrument |
| | | (Sounding identification) |
| | D 01 001 | WMO block number, WMO station number |
| | B 01 015 | Station or site name |
| D 01 076 | D 01 024 | Latitude, longitude, height of station |
| | B 08 021 | 18 = launch time |
| | D 01 011 | Year, month, day |
| | D 01 012 | Hour, minute |
| | | (Ozone sounding instrumentation) |
| D 01 076 | B 02 011 | Radiosonde type |
| | B 02 143 | Ozone instrument type |
| | B 02 142 | Ozone instrument serial number or identifier |

Category 02 - Meteorological sequences common to surface data

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|---------------------|--|
| | F X Y | |
| D 02 013 | D 02 006 | Pressure and pressure change |
| | D 02 003 | Wind, temperature, humidity, visibility, weather |
| | R 01 000 | Delayed replication of 1 descriptor |
| | D 02 005 | Cloud layer information |

Category 05 - Meteorological or hydrological sequences common to hydrological observations

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|---------------------|---|
| | F X Y | |
| D 05 001 | B 11 001 | (SADC-HYCOS single measurement) Wind direction |
| | B 11 002 | Wind speed |
| | B 13 060 | Total accumulated precipitation |
| | B 13 071 | Upstream water level |
| D 05 002 | | (SADC-HYCOS environmental measurement) |
| | D 01 012 | Hour, minute of environmental measurement |
| | B 12 001 | Air temperature |
| | B 13 003 | Relative humidity |
| | B 14 051 | Direct solar radiation integrated over last hour |
| | B 13 060 | Total accumulated precipitation |
| | B 13 072 | Downstream water level |
| | B 13 080 | pH |
| | B 13 081 | Conductivity |
| | B 13 082 | Water temperature |
| | B 13 083 | Dissolved oxygen |
| | B 13 084 | Turbidity |
| D 05 003 | | (SADC-HYCOS measurement array definition) |
| | D 01 012 | Hour, minute of first single measurement minus increment |
| | B 04 065 | Short time increment - time interval between measurements |
| | R 01 000 | Delayed replication n times of next descriptor |
| | D 05 001 | Single measurement |
| D 05 004 | | (SADC-HYCOS report) |
| | D 01 030 | Identification |
| | D 05 002 | Environmental measurement |
| | D 05 003 | Measurement array |
| D 05 006 | | (MEDHYCOS measurement) |
| | B 13 072 | Downstream water level |
| | B 13 082 | Water temperature |
| | B 13 019 | Precipitation last hour |
| | C 07 005 | Next datum in kelvin |
| | C 01 004 | Next datum over four characters |
| | B 12 001 | Air temperature |
| | B 13 073 | Maximum water height observed |
| | B 13 060 | Total accumulated precipitation |
| D 05 007 | | (MEDHYCOS report) |
| | D 01 029 | Identification |
| | D 01 012 | Hour, minute (time of first measurement) |
| | B 04 065 | Short time increment - time interval between measurements |
| | R 01 000 | Delayed replication n times of next descriptor |
| | D 05 006 | Single measurement |

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(Category 05 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|------------------|---|
| | F X Y | |
| D 05 008 | D 05 006 | (AOCHYCOS-Chad measurement) |
| | C 07 005 | Same as MEDHYCOS type measurement |
| | C 01 004 | Next datum in kelvin |
| | B 12 030 | Next datum over four characters |
| D 05 009 | | Soil temperature at -50 cm |
| | | (AOCHYCOS-Chad report) |
| | D 01 029 | Identification |
| | D 01 012 | Hour, minute (time of first measurement) |
| | B 04 065 | Short time increment - time interval between measurements |
| D 05 010 | R 01 000 | Delayed replication n times of next descriptor |
| | D 05 008 | Single measurement |
| | | (MEDHYCOS-Measurement type 2) |
| D 05 011 | D 05 008 | Same as AOCHYCOS type measurement |
| | B 02 091 | Sensor entry 4/20 mA (no. 1) |
| | B 02 091 | Sensor entry 4/20 mA (no. 2) |
| D 05 016 | | (MEDHYCOS report type 2) |
| | D 01 029 | Identification |
| | D 01 012 | Hour, minute (time of first measurement) |
| | B 04 065 | Short time increment - time interval between measurements |
| | R 01 000 | Delayed replication n times of next descriptor |
| D 05 017 | D 05 010 | Single measurement |
| | | (Meteorological parameters associated with hydrological data) |
| | B 14 021 | Global radiation over period |
| | B 07 004 | Atmospheric pressure |
| | B 13 003 | Relative humidity |
| | B 11 002 | Wind speed |
| | B 11 001 | Wind direction |
| | B 11 041 | Maximum wind speed (gusts) |
| D 05 018 | B 11 043 | Maximum wind gust direction |
| | | (Water quality measurement) |
| | B 13 080 | pH |
| | B 13 081 | Conductivity |
| | B 13 083 | Dissolved oxygen |
| D 05 017 | B 13 085 | Oxidation reduction potential (ORP) |
| | B 13 084 | Turbidity |
| | | (MEDHYCOS report with meteorology and water quality data) |
| | D 01 029 | Identification |
| | D 01 012 | Hour, minute (time) of first measurement |
| | B 04 065 | Hour increment |
| | R 03 000 | Number of replications of next 3 descriptors |
| D 05 018 | D 05 008 | Same as AOCHYCOS type measurement |
| | D 05 016 | Meteorological parameters associated to hydrological data |
| | D 05 017 | Water quality measurement |
| | | |

Category 06 - Meteorological or oceanographic sequences common to oceanographic observations

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|------------------|--|
| | F X Y | |
| D 06 001 | B 02 032 | Indicator for digitization |
| | R 02 000 | Delayed replication of 2 descriptors |
| | B 07 062 | Depth below sea surface |
| | B 22 042 | Subsurface sea temperature |
| D 06 004 | B 02 032 | Indicator for digitization |
| | B 02 033 | Method of salinity/depth measurement |
| | R 03 000 | Delayed replication of 3 descriptors |
| | B 07 062 | Depth below sea surface |
| | B 22 043 | Subsurface sea temperature |
| | B 22 062 | Salinity |
| D 06 005 | B 02 031 | Method of current measurement |
| | R 03 000 | Delayed replication of 3 descriptors |
| | B 07 062 | Depth below sea surface |
| | B 22 004 | Direction of current |
| | B 22 031 | Speed of current |
| D 06 019 | | (Tide report identification, water level checks, time increments) |
| | B 01 075 | Tide station alphanumeric identification |
| | D 01 011 | Year, month, day |
| | D 01 012 | Hour, minute |
| | B 22 042 | Sea/water temperature |
| | B 22 120 | Tide station automated water level check |
| | B 22 121 | Tide station manual water level check |
| | C 01 002 | Change data width to 2 characters |
| | B 04 015 | Time increment |
| D 06 020 | B 04 065 | Short time increment |
| | | (Tide report identification, water level checks, time period or displacement, time increment) (see Note 1) |
| | B 01 075 | Tide station alphanumeric identification |
| | D 01 011 | Year, month, day |
| | D 01 012 | Hour, minute |
| | B 22 042 | Sea/water temperature |
| | B 22 120 | Tide station automated water level check |
| | B 22 121 | Tide station manual water level check |
| | B 04 075 | Short time period or displacement |
| | B 04 065 | Short time increment |

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(Category 06 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|------------------|---|
| | F X Y | |
| D 06 021 | B 01 075 | (Meteorological parameters in tide station) |
| | D 01 011 | Tide station alphanumeric identification |
| | D 01 012 | Year, month, day |
| | B 22 122 | Hour, minute |
| | B 22 123 | Tide station automated meteorological data check |
| | B 12 001 | Tide station manual meteorological data check |
| | D 03 002 | Air temperature |
| D 06 022 | | Pressure, wind direction, wind speed |
| | | (Tidal elevation) |
| | B 01 075 | Tide station identification |
| | D 01 011 | Year, month, day |
| | D 01 012 | Hour, minute |
| D 06 024 | B 22 038 | Tidal elevation with respect to local chart datum |
| | B 22 039 | Meteorological residual tidal elevation (surge or offset) |
| | | (Tide elevation series) (see Note 2) |
| | D 06 020 | Tide report identification, water level checks, time period or displacement, time increment |
| D 06 025 | R 02 006 | Replicate 2 descriptors 6 times |
| | B 22 038 | Tidal elevation with respect to local chart datum |
| | B 22 039 | Meteorological residual tidal elevation (surge or offset) |
| | | (Tide elevation series) |
| | D 06 019 | Tide report identification, water level checks, time increments |
| D 06 025 | R 02 006 | Replicate 2 descriptors 6 times |
| | B 22 038 | Tidal elevation with respect to local chart datum |
| | B 22 039 | Meteorological residual tidal elevation (surge or offset) |

Notes:

- (1) This sequence is deprecated because of incorrect usage of descriptor B 04 075; sequence D 06 019 should be used instead.
- (2) This sequence is deprecated because of incorrect usage of descriptor B 04 075 in sequence D 06 019; sequence D 06 025 should be used instead.

Category 07 - Surface report sequences (land)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME | |
|----------|------------------|--|---|
| | F X Y | | |
| D 07 003 | D 07 001 | (Low altitude station) | |
| | R 01 000 | Location (high accuracy) and basic report | |
| | D 02 005 | Delayed replication of 1 descriptor | |
| D 07 004 | D 07 002 | Cloud layer information | |
| | R 01 000 | (Low altitude station) | |
| | D 02 005 | Location (coarse accuracy) and basic report | |
| D 07 012 | R 03 000 | Delayed replication of 1 descriptor | |
| | B 08 023 | Delayed replication of 3 descriptors (up to 3) | |
| | B 05 021 | First-order statistics | |
| | B 20 001 | Direction of visibility observed | D _v |
| D 07 013 | | Horizontal visibility | VVVV |
| | R 06 000 | (D _R D _R V _R V _R V _R V _R) | |
| | B 01 064 | Delayed replication of 6 descriptors (up to 4) | |
| | B 08 014 | Runway designator | D _R D _R |
| | B 20 061 | Qualification for runway visual range | |
| | B 08 014 | Runway visual range | V _R V _R V _R V _R |
| | B 20 061 | Qualification for runway visual range | |
| D 07 014 | B 20 061 | Runway visual range | V _R V _R V _R V _R |
| | B 20 018 | Tendency of runway visual range | i |
| | | | |
| D 07 015 | R 01 000 | (w'w') | |
| | B 20 019 | Delayed replication of 1 descriptor (up to 3) | |
| D 07 016 | | Significant present weather | w'w' |
| | R 01 000 | (Clouds group(s)) | |
| | D 02 005 | Delayed replication of 1 descriptor | |
| D 07 017 | D 02 005 | (N _s N _s N _s , CC, h _s h _s h _s) | |
| | B 20 002 | Vertical visibility | VVh _s h _s h _s |
| D 07 018 | | (REw'w') | |
| | R 01 000 | Delayed replication of 1 descriptor (up to 3) | |
| | B 20 020 | Significant recent weather phenomena | REw'w' |
| D 07 019 | | (Wind shear on runway(s)) | |
| | R 01 000 | Delayed replication of 1 descriptor | |
| | B 11 070 | Runway designator of the runway affected by wind shear (including ALL) | WS RWYD _R D _R |
| D 07 020 | | (Trend-type landing forecast) | |
| | B 08 016 | Change qualifier of a trend-type forecast or an aerodrome forecast | TTTTT |
| | R 02 000 | Delayed replication of 2 descriptors (up to 2) | |
| | B 08 017 | Qualifier of the time when the forecast change is expected (FM, TL, AT) | TT |
| D 07 021 | D 01 012 | GG, gg | |
| | | | |

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(Category 07 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|-------------------------|------------------|--|
| | F X Y | |
| D 07 018 (continued) | R 04 000 | Delayed replication of 4 descriptors (up to 1) |
| | B 07 006 | Height above station |
| | B 11 001 | Wind direction ddd |
| | B 11 002 | Wind speed ff |
| | B 11 041 | Maximum wind speed (gusts) f _m f _m |
| | B 20 009 | General weather indicator |
| | R 01 000 | Delayed replication of 1 descriptor (up to 1) |
| | B 20 001 | Horizontal visibility VVVV |
| | D 07 014 | w'w' |
| D 07 030 | | (Ozone data - single observation) |
| | B 15 001 | Value of ozone measurement |
| | B 15 002 | Value of the air-mass |
| D 07 031 | | (Ozone data - averaged observations) |
| | B 08 022 | Number of measurements |
| | B 08 023 | First-order statistics = 4: mean value |
| | B 15 001 | Value (average) of ozone measurement |
| | B 08 023 | First-order statistics = 9: best estimate of standard deviation |
| | B 15 001 | Best estimate of standard deviation of the ozone measurement |
| | B 08 023 | First-order statistics = 11: harmonic mean |
| D 07 041 | B 15 002 | Value (harmonic mean) of the air-mass |
| | | (Total ozone measurement from a Brewer ground-based spectrophotometer obtained from a single observation) |
| | D 01 001 | Identification |
| | B 01 015 | Station or site name |
| | D 01 024 | Latitude, longitude, height of station |
| | D 01 011 | Year, month, day (of ozone measurement) |
| | D 01 012 | Hour, minute (of ozone measurement) |
| | D 01 070 | Ozone instrumentation |
| D 07 042 | D 07 030 | Data (single observation) |
| | | (Total ozone measurement from a Brewer ground-based spectrophotometer obtained from averaged observations) |
| | D 01 001 | Identification |
| | B 01 015 | Station or site name |
| | D 01 024 | Latitude, longitude, height of station |
| | D 01 011 | Year, month, day (of ozone measurement) |
| | D 01 012 | Hour, minute (of ozone measurement) |
| | B 08 021 | Time significance = 8: ensemble mean |
| | B 04 025 | Time period (minutes) for the computation of the average |
| | D 01 070 | Ozone instrumentation |
| | D 07 031 | Data (averaged observation) |

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(Category 07 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|------------------|--|
| | F X Y | |
| D 07 043 | D 01 001 | (Total ozone measurement from a Dobson ground-based spectrophotometer obtained from a single observation) |
| | B 01 015 | Identification |
| | D 01 024 | Station or site name |
| | D 01 011 | Latitude, longitude, height of station |
| | D 01 012 | Year, month, day (of ozone measurement) |
| | D 01 074 | Hour, minute (of ozone measurement) |
| | D 07 030 | Ozone instrumentation |
| | | Data (single observation) |
| D 07 044 | D 01 001 | (Total ozone measurement from a Dobson ground-based spectrophotometer obtained from averaged observations) |
| | B 01 015 | Identification |
| | D 01 024 | Station or site name |
| | D 01 011 | Latitude, longitude, height of station |
| | D 01 012 | Year, month, day (of ozone measurement) |
| | B 08 021 | Hour, minute (of ozone measurement) |
| | B 04 025 | Time significance = 8: ensemble mean |
| | D 01 074 | Time period (minutes) for the computation of the average |
| | D 07 031 | Ozone instrumentation |
| D 07 060 | B 07 061 | Data (averaged observation) |
| | B 12 030 | (Soil temperature below land surface) |
| | | Depth below land surface |
| D 07 061 | D 01 031 | Soil temperature |
| | R 01 005 | (Soil temperature data at number of depths not exceeding five - high accuracy position) |
| | D 07 060 | Identification, type, date/time, position (high accuracy), height |
| D 07 062 | D 01 032 | Replicate 1 descriptor 5 times |
| | R 01 005 | Depth below land surface, soil temperature |
| | D 07 060 | (Soil temperature data at number of depths not exceeding five - coarse accuracy position) |
| D 07 063 | B 07 061 | Identification, type, date/time, position (coarse accuracy), height |
| | B 12 130 | Replicate 1 descriptor 5 times |
| | | Depth below land surface, soil temperature |
| D 07 063 | B 07 061 | (Soil temperature with scale of 2 below land surface) |
| | B 12 130 | Depth below land surface |
| | | Soil temperature (with scale of 2) |

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(Category 07 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|------------------|---|
| | F X Y | |
| D 07 087 | | ("Instantaneous" parameters of sequence D 07 089) <i>Surface station identification, time, horizontal and vertical coordinates</i> |
| | D 01 001 | WMO block number, WMO station number Iiii |
| | B 02 001 | Type of station i _x |
| | D 01 011 | Year, month, day YY |
| | D 01 012 | Hour, minute GG, gg |
| | D 01 023 | Latitude, longitude (course accuracy) |
| | B 07 030 | Height of station ground above msl |
| | B 07 031 | Height of barometer above msl |
| | | <i>Pressure data</i> |
| | D 02 001 | Pressure P ₀ P ₀ P ₀ P ₀ |
| | | Pressure reduced to mean sea level PPPP |
| | | 3-hour pressure change ppp |
| | | Characteristic of pressure tendency a |
| | B 10 062 | 24-hour pressure change P ₂₄ P ₂₄ P ₂₄ |
| | B 07 004 | Pressure (standard level) a ₃ |
| | | = 925, 850, 700, .. hPa |
| | | = missing for lowland stations |
| | B 10 009 | Geopotential height of the standard level hhh |
| | | = missing for lowland stations |
| | | <i>Temperature and humidity</i> |
| | B 07 032 | Height of sensor above local ground (for temperature measurement) |
| | B 12 101 | Temperature/air temperature (sc. 2) s _n TTT |
| | B 12 103 | Dew-point temperature (sc. 2) s _n T _d T _d T _d |
| | B 13 003 | Relative humidity |
| | B 07 032 | Height of sensor above local ground (set to missing to cancel the previous value) |
| | | <i>Visibility</i> |
| | B 20 001 | Horizontal visibility VV |
| | | <i>Cloud data</i> |
| | D 02 004 | Cloud cover (total) N |
| | | If N = 9, then B 20 010 = 113%, if N = /, then B 20 010 = missing. |
| | | Vertical significance |
| | | If C _L are observed, then B 08 002 = 7 (low cloud), if C _L are not observed and C _M are observed, then B 08 002 = 8 (middle cloud), if only C _H are observed, B 08 002 = 0, if N = 9, then B 08 002 = 5, if N = 0, then B 08 002 = 62, if N = /, then B 08 002 = missing. |
| | | Cloud amount (of low or middle clouds) N _h |
| | | If N = 0, then B 20 011 = 0, if N = 9, then B 20 011 = 9, if N = /, then B 20 011 = missing. |

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(Category 07 - continued)

| SEQUENCE | TABLE REFERENCES | | ELEMENT NAME |
|-------------------------|------------------|-----|--|
| | F | X Y | |
| D 07 087 (continued) | | | Height of base of cloud h |
| | | | If N = 0 or /, then B 20 013 = missing. |
| | | | Cloud type (low clouds) C_L |
| | | | B 20 012 = C _L + 30, |
| | | | if N = 0, then B 20 012 = 30, |
| | | | if N = 9 or /, then B 20 012 = 62. |
| | | | Cloud type (middle clouds) C_M |
| | | | B 20 012 = C _M + 20, |
| | | | if N = 0, then B 20 012 = 20, |
| | | | if N = 9 or / or C _M = /, then B 20 012 = 61. |
| | | | Cloud type (high clouds) C_H |
| | | | B 20 012 = C _H + 10, |
| | | | if N = 0, then B 20 012 = 10, |
| | | | if N = 9 or / or C _H = /, then B 20 012 = 60. |
| D 07 088 | R 01 000 | | Delayed replication of the next 1 descriptor |
| | D 02 005 | | Vertical significance |
| | | | In any Cb layer, B 08 002 = 4, else: |
| | | | in the first replication: |
| | | | if N = 9, then B 08 002 = 5, |
| | | | if N = /, then B 08 002 = missing, |
| | | | else B 08 002 = 1; |
| | | | in the other replications B 08 002 = 2, 3, 4. |
| | | | Cloud amount N_s |
| | | | in the first replication: |
| | | | if N = /, then B 20 011 = missing, |
| | | | else B 20 011 = N _s ; |
| | | | in the other replications B 20 011 = N _s . |
| | | | Cloud type C |
| | | | if N = 9 or /, then B 20 012 = missing, |
| | | | else B 20 012 = C. |
| | | | Height of base of cloud h_sh_s |
| | | | ("Period" parameters of sequence D 07 089) |
| | | | <i>Present and past weather</i> |
| | B 20 003 | | Present weather ww |
| | B 04 024 | | Time period |
| | | | At 00, 06, 12, 18 UTC = -6. |
| | | | At 03, 09, 15, 21 UTC = -3. |
| | B 20 004 | | Past weather (1) W₁ |
| | B 20 005 | | Past weather (2) W₂ |
| | | | <i>Evaporation</i> |
| | B 04 024 | | Time period in hours = -24 |
| | B 02 004 | | Type of instrument for evaporation or crop type for evapotranspiration i_E |
| | B 13 033 | | Evaporation /evapotranspiration EEE |

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(Category 07 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|-------------------------|------------------|--|
| | F X Y | |
| D 07 088 (continued) | R 02 002 | <i>Sunshine</i> Replicate next 2 descriptors 2 times |
| | B 04 024 | Time period in hours in the first replication = -24, in the second replication = -1. |
| | B 14 031 | Total sunshine in minutes in the first replication SSS in the second replication SS |
| | R 02 002 | <i>Precipitation</i> Replicate next 2 descriptors 2 times |
| | B 04 024 | Time period in hours t_R |
| | B 13 011 | Total precipitation RRR no precipitation = 0 trace = -0.1 |
| | B 07 032 | <i>Extreme temperature</i> Height of sensor above local ground (for temperature measurement) |
| | B 04 024 | Time period in hours = -12 |
| | B 12 111 | Maximum temperature at height and over period specified $s_n T_x T_x T_x$ |
| | B 04 024 | Time period in hours = -12 |
| | B 12 112 | Minimum temperature at height and over period specified $s_n T_n T_n T_n$ |
| | B 07 032 | <i>Wind data</i> Height of sensor above local ground (for wind measurement) |
| | B 02 002 | Type for instrumentation for wind measurement i_w |
| | B 08 021 | Time significance = 2 (time averaged) |
| | B 04 025 | Time period = -10 (or number of minutes after a significant change of wind, if any) |
| | B 11 001 | Wind direction dd If dd = 00 (calm) or dd = 99 (variable), B 11 001 = 0. |
| | B 11 002 | Wind speed ff |
| | B 08 021 | Time significance (set to missing to cancel the previous value) |
| | | (Sequence for representation of synoptic reports from a fixed land station suitable for SYNOP data manually encoded in CREX) |
| D 07 089 | D 07 087 | "Instantaneous" parameters of sequence D 07 089 |
| | D 07 088 | "Period" parameters of sequence D 07 089 |

Category 08 - Surface report sequences (sea)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|---------------------|--|
| | F X Y | |
| D 08 010 | B 01 011 | (TRACKOB template) |
| | R 13 000 | Ship or mobile land station identifier |
| | D 01 011 | Delayed replication of 13 descriptors |
| | D 01 012 | Date |
| | D 01 021 | Time |
| | D 01 021 | Latitude/longitude (high accuracy) |
| | B 04 080 | Averaging period for following value |
| | B 22 049 | Sea surface temperature |
| | B 04 080 | Averaging period for following value |
| | B 22 059 | Sea surface salinity |
| | B 04 080 | Averaging period for following value |
| | B 22 005 | Direction of sea surface current |
| | B 02 042 | Indicator for sea surface current speed |
| | B 22 032 | Speed of sea surface current |
| | B 02 042 | Indicator for sea surface current speed (cancel) |
| | B 04 080 | Averaging period for following value (cancel) |

Category 09 - Vertical sounding sequences (conventional data)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|--|--|
| | F X Y | |
| D 09 001 | D 01 037 R 01 000 D 03 011 | (Vertical wind profile) Identification, etc. (land station, high accuracy position) Delayed replication of 1 descriptor Winds at heights |
| D 09 002 | D 01 038 R 01 000 D 03 011 | (Vertical wind profile) Identification, etc. (land station, coarse accuracy position) Delayed replication of 1 descriptor Winds at heights |
| D 09 003 | D 01 037 R 01 000 D 03 012 | (Vertical wind profile) Identification, etc. (land station, high accuracy position) Delayed replication of 1 descriptor Winds at pressure levels |
| D 09 004 | D 01 038 R 01 000 D 03 012 | (Vertical wind profile) Identification, etc. (land station, coarse accuracy position) Delayed replication of 1 descriptor Winds at pressure levels |
| D 09 005 | D 01 037 D 02 004 R 01 000 D 03 013 | (Vertical sounding with relative humidity) Identification, etc. (land station, high accuracy position) Significant cloud information Delayed replication of 1 descriptor Pressure, geopotential, temperature and wind data |
| D 09 006 | D 01 038 D 02 004 R 01 000 D 03 013 | (Vertical sounding with relative humidity) Identification, etc. (land station, coarse accuracy position) Significant cloud information Delayed replication of 1 descriptor Pressure, geopotential, temperature and wind data |
| D 09 007 | D 01 037 D 02 004 R 01 000 D 03 014 | (Vertical sounding with dew-point data) Identification, etc. (land station, high accuracy position) Significant cloud information Delayed replication of 1 descriptor Pressure, geopotential, temperature and wind data |
| D 09 008 | D 01 038 D 02 004 R 01 000 D 03 014 | (Vertical sounding with dew-point data) Identification, etc. (land station, coarse accuracy position) Significant cloud information Delayed replication of 1 descriptor Pressure, geopotential, temperature and wind data |
| D 09 011 | D 01 039 R 01 000 D 03 011 | (Vertical wind profile) Ship's identification, etc. Delayed replication of 1 descriptor Winds at heights |

(continued)

(Category 09 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|--|--|
| | F X Y | |
| D 09 012 | D 01 039 R 01 000 D 03 012 | (Vertical wind profile) Ship's identification, etc. Delayed replication of 1 descriptor Winds at pressure levels |
| D 09 013 | D 01 039 D 02 004 R 01 000 D 03 013 | (Vertical sounding with relative humidity) Ship's identification, etc. Significant cloud information Delayed replication of 1 descriptor Pressure, geopotential, temperature and wind data |
| D 09 014 | D 01 039 D 02 004 R 01 000 D 03 014 | (Vertical sounding with dew-point data) Ship's identification, etc. Significant cloud information Delayed replication of 1 descriptor Pressure, geopotential, temperature and wind data |
| D 09 015 | D 01 040 R 01 000 D 03 011 | (Vertical wind profile) Ship's identification, etc. Delayed replication of 1 descriptor Winds at heights |
| D 09 016 | D 01 040 R 01 000 D 03 012 | (Vertical wind profile) Ship's identification, etc. Delayed replication of 1 descriptor Winds at pressure levels |
| D 09 017 | D 01 040 D 02 004 R 01 000 D 03 013 | (Vertical sounding with relative humidity) Ship's identification, etc. Significant cloud information Delayed replication of 1 descriptor Pressure, geopotential, temperature and wind data |
| D 09 018 | D 01 040 D 02 004 R 01 000 D 03 014 | (Vertical sounding with dew-point data) Ship's identification, etc. Significant cloud information Delayed replication of 1 descriptor Pressure, geopotential, temperature and wind data |
| D 09 019 | D 01 031 B 02 003 R 01 000 D 03 011 | (Wind profiler - wind data sounding) Identification, etc. Type of measuring equipment used Delayed replication of 1 descriptor Winds at heights |
| D 09 020 | D 01 031 B 02 003 R 04 000 B 07 003 B 11 003 B 11 004 B 11 005 | (Wind profiler - Cartesian coordinates) Identification, etc. Type of measuring equipment used Delayed replication of 4 descriptors Geopotential u-component v-component w-component |

(continued)

(Category 09 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|---------------------|---|
| | F X Y | |
| D 09 030 | B 15 004 | (Ozone sonde flight data) (see Note 1) |
| | B 15 005 | Ozone sounding correction factor |
| | R 04 000 | Ozone p |
| | B 04 015 | Delayed replication |
| | B 08 006 | Time increment since launch time, if needed; in minutes |
| | B 07 004 | Ozone vertical sounding significance |
| | B 15 003 | Pressure |
| D 09 031 | B 15 004 | Measured ozone partial pressure |
| | B 15 005 | (Ozone sonde flight data) |
| | R 04 000 | Ozone sounding correction factor |
| | B 04 025 | Ozone p |
| | B 08 006 | Delayed replication |
| | B 07 004 | Time displacement (since launch time) in minutes |
| | B 15 003 | Ozone vertical sounding significance |
| D 09 040 | D 01 075 | Pressure |
| | D 01 076 | (Ozone sounding not coupled to a ground-based spectrophotometer) (see Note 2) |
| | D 09 030 | Identification |
| | | Instrumentation |
| D 09 041 | D 07 041 | Ozone flight data |
| | D 01 075 | (Ozone sounding coupled to measurements from a Brewer ground-based spectrophotometer; the total ozone obtained from the Brewer is a single value) (see Note 2) |
| | D 01 076 | Description of the ground-based part |
| | D 09 030 | Identification of the ozone sounding part |
| D 09 042 | D 07 042 | Instrumentation of sounding |
| | D 01 075 | Ozone flight data |
| | D 01 076 | (Ozone sounding coupled to measurements from a Brewer ground-based spectrophotometer; the total ozone obtained from the Brewer is an averaged value) (see Note 2) |
| | D 09 030 | Description of the ground-based part |
| D 09 043 | D 07 043 | Identification of the ozone sounding part |
| | D 01 075 | Instrumentation of sounding |
| | D 01 076 | Ozone flight data |
| | D 09 030 | (Ozone sounding coupled to measurements from a Dobson ground-based spectrophotometer; the total ozone obtained from the Dobson is a single value) (see Note 2) |

(continued)

(Category 09 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|---------------------|---|
| | F X Y | |
| D 09 044 | D 07 044 | (Ozone sounding coupled to measurements from a Dobson ground-based spectrophotometer; the total ozone obtained from the Dobson is an averaged value) (see Note 2) |
| | D 01 075 | Description of the ground-based part |
| | D 01 076 | Identification of the ozone sounding part |
| | D 09 030 | Instrumentation of sounding Ozone flight data |
| D 09 045 | D 01 075 | (Ozone sounding not coupled to a ground-based spectrophotometer) |
| | D 01 076 | Identification |
| | D 09 031 | Instrumentation Ozone flight data |
| D 09 046 | D 07 041 | (Ozone sounding coupled to measurements from a Brewer ground-based spectrophotometer; the total ozone obtained from the Brewer is a single value) |
| | D 01 075 | Description of the ground-based part |
| | D 01 076 | Identification of the ozone sounding part |
| | D 09 031 | Instrumentation of sounding Ozone flight data |
| D 09 047 | D 07 042 | (Ozone sounding coupled to measurements from a Brewer ground-based spectrophotometer; the total ozone obtained from the Brewer is an averaged value) |
| | D 01 075 | Description of the ground-based part |
| | D 01 076 | Identification of the ozone sounding part |
| | D 09 031 | Instrumentation of sounding Ozone flight data |
| D 09 048 | D 07 043 | (Ozone sounding coupled to measurements from a Dobson ground-based spectrophotometer; the total ozone obtained from the Dobson is a single value) |
| | D 01 075 | Description of the ground-based part |
| | D 01 076 | Identification of the ozone sounding part |
| | D 09 031 | Instrumentation of sounding Ozone flight data |
| D 09 049 | D 07 044 | (Ozone sounding coupled to measurements from a Dobson ground-based spectrophotometer; the total ozone obtained from the Dobson is an averaged value) |
| | D 01 075 | Description of the ground-based part |
| | D 01 076 | Identification of the ozone sounding part |
| | D 09 031 | Instrumentation of sounding Ozone flight data |

(continued)

(Category 09 - continued)

Notes:

- (1) Sequence D 09 030 is deprecated because of incorrect usage of descriptor B 04 015; sequence D 09 031 should be used instead.
- (2) This sequence is deprecated because it includes deprecated sequence D 09 030; sequence D 09 045, D 09 046, D 09 047, D 09 048 and D 09 049 should be used instead of respectively D 09 040, D 09 041, D 09 042, D 09 043 and D 09 044.

Category 11 - Single-level report sequences (conventional data)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|---------------------|---|
| | F X Y | |
| D 11 004 | R 01 000 | (ACARS supplementary reported variables) Delayed replication of 1 descriptor |
| | B 11 034 | Vertical gust velocity |
| | R 01 000 | Delayed replication of 1 descriptor |
| | B 11 035 | Vertical gust acceleration |
| | R 01 000 | Delayed replication of 1 descriptor |
| | B 11 075 | Mean turbulence intensity (eddy dissipation rate) |
| | R 01 000 | Delayed replication of 1 descriptor |
| | B 11 076 | Peak turbulence intensity (eddy dissipation rate) |
| | R 01 000 | Delayed replication of 1 descriptor |
| | B 33 025 | ACARS interpolated values indicator |
| | R 01 000 | Delayed replication of 1 descriptor |
| | B 33 026 | Moisture quality |
| D 11 005 | | (Standard AMDAR reports) |
| | B 01 008 | Aircraft identification |
| | B 01 023 | Sequence number |
| | D 01 021 | Latitude and longitude |
| | D 01 011 | Year, month, day |
| | D 01 013 | Hour, minute, second |
| | B 07 010 | Flight level |
| | B 08 009 | Detailed phase of flight |
| | B 11 001 | Wind direction |
| | B 11 002 | Wind speed |
| | B 11 031 | Degree of turbulence |
| | B 11 036 | Derived equivalent vertical gust speed |
| | B 12 101 | Temperature/air temperature |
| | B 33 025 | ACARS interpolated values indicator |
| D 11 006 | | (AMDAR data or aircraft data for one level without latitude/longitude) |
| | B 07 010 | Flight level |
| | B 11 001 | Wind direction |
| | B 11 002 | Wind speed |
| | B 02 064 | Aircraft roll angle quality |
| | B 12 101 | Temperature/air temperature |
| D 11 007 | B 12 103 | Dew-point temperature |
| | | (Aircraft data for one level with latitude/longitude indicated) |
| | B 07 010 | Flight level |
| | D 01 021 | Latitude, longitude |
| | B 11 001 | Wind direction |
| | B 11 002 | Wind speed |
| | B 02 064 | Aircraft roll angle quality |
| | B 12 101 | Temperature/air temperature |
| | B 12 103 | Dew-point temperature |

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(Category 11 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|---------------------|---|
| | F X Y | |
| D 11 008 | B 01 008 | (Aircraft ascent/descent profile without latitude/longitude indicated at each level) Aircraft identification |
| | D 01 011 | Year, month, day |
| | D 01 013 | Hour, minute, second |
| | D 01 021 | Latitude, longitude |
| | B 08 004 | Phase of flight |
| | R 01 000 | Delayed replication of 1 descriptor |
| | D 11 006 | Aircraft data for one level without latitude/longitude |
| | | |
| D 11 009 | | (Aircraft ascent/descent profile with latitude/longitude given for each level) |
| | B 01 008 | Aircraft identification |
| | D 01 011 | Year, month, day |
| | D 01 013 | Hour, minute, second |
| | D 01 021 | Latitude, longitude |
| | B 08 004 | Phase of flight |
| | R 01 000 | Delayed replication of 1 descriptor |
| | D 11 007 | Aircraft data for one level with latitude/longitude indicated |

Category 16 - Synoptic feature sequences

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|------------------|--|
| | F X Y | |
| D 16 003 | R 09 000 | (Jet stream) Delayed replication of 9 descriptors |
| | B 08 011 | Meteorological feature (jet stream value) |
| | B 08 007 | Dimensional significance (value for line) |
| | R 04 000 | Delayed replication of 4 descriptors |
| | B 05 002 | Latitude (coarse) |
| | B 06 002 | Longitude (coarse) |
| | B 10 002 | Flight level (altitude) |
| | B 11 002 | Wind speed |
| | B 08 007 | Dimensional significance (cancel) |
| | B 08 011 | Meteorological feature (cancel/end of object) |
| D 16 004 | R 10 000 | (Turbulence) Delayed replication of 10 descriptors |
| | B 08 011 | Meteorological feature (value for turbulence) |
| | B 08 007 | Dimensional significance (value for area) |
| | B 07 002 | Flight level (altitude) (base of layer) |
| | B 07 002 | Flight level (altitude) (top of layer) |
| | R 02 000 | Delayed replication of 2 descriptors |
| | B 05 002 | Latitude (coarse) |
| | B 06 002 | Longitude (coarse) |
| | B 11 031 | Degree of turbulence |
| | B 08 007 | Dimensional significance (cancel) |
| | B 08 011 | Meteorological feature (cancel/end of object) |
| D 16 005 | R 08 000 | (Storm) Delayed replication of 8 descriptors |
| | B 08 005 | Meteorological attribute significance (storm centre) |
| | B 08 007 | Dimensional significance (value for point) |
| | B 05 002 | Latitude (coarse) |
| | B 06 002 | Longitude (coarse) |
| | B 01 026 | WMO storm name (use "UNKNOWN" for a sandstorm) |
| | B 19 001 | Synoptic features (value for type of storm) |
| | B 08 007 | Dimensional significance (cancel) |
| | B 08 005 | Meteorological attribute significance (cancel/end of object) |
| D 16 006 | R 11 000 | (Cloud) Delayed replication of 11 descriptors |
| | B 08 011 | Meteorological feature (value for cloud) |
| | B 08 007 | Dimensional significance (value for area) |
| | B 07 002 | Flight level (altitude) (base of layer) |
| | B 07 002 | Flight level (altitude) (top of layer) |
| | R 02 000 | Delayed replication of 2 descriptors |
| | B 05 002 | Latitude (coarse) |
| | B 06 002 | Longitude (coarse) |
| | B 20 011 | Cloud amount |

(continued)

(Category 16 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|-------------------------|---------------------|---|
| | F X Y | |
| D 16 006 (continued) | B 20 012 | Cloud type |
| | B 08 007 | Dimensional significance (cancel) |
| | B 08 011 | Meteorological feature (cancel/end of object) |
| D 16 007 | | (Front) |
| | R 09 000 | Delayed replication of 9 descriptors |
| | B 08 011 | Meteorological feature (value for type of front) |
| | B 08 007 | Dimensional significance (value for line) |
| | R 04 000 | Delayed replication of 4 descriptors |
| | B 05 002 | Latitude (coarse) |
| | B 06 002 | Longitude (coarse) |
| | B 19 005 | Direction of feature |
| | B 19 006 | Speed of feature |
| | B 08 007 | Dimensional significance (cancel) |
| | B 08 011 | Meteorological feature (cancel/end of object) |
| D 16 008 | | (Tropopause) |
| | R 10 000 | Delayed replication of 10 descriptors |
| | B 08 001 | Vertical significance (bit 3 set for tropopause) |
| | B 08 007 | Dimensional significance (value for point) |
| | B 08 023 | Statistic (type of tropopause value) |
| | R 03 000 | Delayed replication of 3 descriptors |
| | B 05 002 | Latitude (coarse) |
| | B 06 002 | Longitude (coarse) |
| | B 10 002 | Height/altitude |
| | B 08 023 | Statistic (cancel) |
| | B 08 007 | Dimensional significance (cancel) |
| | B 08 001 | Vertical significance (cancel/end of object) |
| D 16 009 | | (Airframe icing area) |
| | R 10 000 | Delayed replication of 10 descriptors |
| | B 08 011 | Meteorological feature (value for airframe icing) |
| | B 08 007 | Dimensional significance (value for area) |
| | B 07 002 | Flight level (altitude) (base of layer) |
| | B 07 002 | Flight level (altitude) (top of layer) |
| | R 02 000 | Delayed replication of 2 descriptors |
| | B 05 002 | Latitude (coarse) |
| | B 06 002 | Longitude (coarse) |
| | B 20 041 | Airframe icing (type of airframe icing) |
| | B 08 007 | Dimensional significance (cancel) |
| | B 08 011 | Meteorological feature (cancel/end of object) |
| D 16 010 | | (Name of feature) |
| | R 07 000 | Delayed replication of 7 descriptors |
| | B 08 011 | Meteorological feature |
| | B 08 007 | Dimensional significance (value for point) |
| | B 01 022 | Name of feature |
| | B 05 002 | Latitude (coarse) |

(continued)

(Category 16 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|-------------------------|---------------------|--|
| | F X Y | |
| D 16 010 (continued) | B 06 002 | Longitude (coarse) |
| | B 08 007 | Dimensional significance (cancel) |
| | B 08 011 | Meteorological feature (cancel/end of object) |
| D 16 011 | | (Volcano erupting) |
| | R 16 000 | Delayed replication of 16 descriptors |
| | B 08 011 | Meteorological feature (value for special clouds) |
| | B 01 022 | Name of feature (volcano name) |
| | B 08 007 | Dimensional significance (value for point) |
| | R 02 000 | Delayed replication of 2 descriptors |
| | B 05 002 | Latitude (coarse) |
| | B 06 002 | Longitude (coarse) |
| | B 08 021 | Time significance (eruption starting time) |
| | B 04 001 | Year |
| | B 04 002 | Month |
| | B 04 003 | Day |
| | B 04 004 | Hour |
| | B 04 005 | Minute |
| | B 20 090 | Special clouds (clouds from volcanic eruptions) |
| | B 08 021 | Time significance (cancel) |
| | B 08 007 | Dimensional significance (cancel) |
| | B 08 011 | Meteorological feature (cancel/end of object) |
| D 16 020 | | (Tropical storm identification) |
| | B 01 033 | Identification of originating/generating centre |
| | B 01 025 | Storm identifier |
| | B 01 027 | WMO storm name |
| | D 01 011 | Year, month, day |
| D 16 021 | D 01 012 | Hour, minute |
| | | (Analysis data) |
| | D 01 023 | Latitude (coarse accuracy), longitude (coarse accuracy) |
| | B 02 041 | Method for estimating reports related to synoptic features |
| | B 19 001 | Type of synoptic feature |
| | B 19 007 | Effective radius of feature |
| | B 19 005 | Direction of motion of feature |
| | B 19 006 | Speed of motion of feature |
| | B 19 008 | Vertical extent of feature |
| | B 08 005 | Surface synoptic feature significance (value=1 for storm centre) |
| | B 10 004 | Pressure (of storm centre by virtue of preceding significance qualifier) |
| | B 08 005 | Value = 2 for outer limit or edge of feature |
| | B 10 004 | Pressure (at outer limit) |
| | B 19 007 | Radius (of outer limit) |
| | B 08 005 | Value = 3 for location of maximum wind |
| | B 08 021 | Time significance (time averaged) |
| | B 04 075 | Time period (minutes) |

(continued)

(Category 16 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|-------------------------|------------------|---|
| | F X Y | |
| D 16 021 (continued) | B 11 040 | Maximum wind speed (mean wind) |
| | B 19 007 | Radius of feature (maximum wind) |
| | R 05 004 | (4 times replication of following 5 descriptors) |
| | B 05 021 | Starting bearing or azimuth |
| | B 05 021 | Ending bearing or azimuth |
| | R 02 002 | (2 times replication of following 2 descriptors) |
| | B 19 003 | Wind speed threshold |
| | B 19 004 | Effective radius with respect to wind speed above threshold |
| D 16 022 | | (Forecast data) |
| | B 01 032 | Generating application (NWP model name, etc. code table defined by originating/generating centre) |
| | B 02 041 | Method for estimating reports related to synoptic features |
| | B 19 001 | Type of synoptic feature |
| | B 19 010 | Method for tracing of the centre of synoptic feature |
| | R 18 000 | (NN times replication of following 18 descriptors - delayed replication) |
| | B 08 021 | Time significance (forecast) |
| | B 04 014 | Time increment (hour) |
| | B 08 005 | Surface synoptic feature significance |
| | D 01 023 | Latitude (coarse accuracy), longitude (coarse accuracy) |
| | B 19 005 | Direction of motion of feature |
| | B 19 006 | Speed of motion of feature |
| | B 10 004 | Pressure |
| | B 11 041 | Maximum wind speed (gusts: e.g. used in US) |
| | B 08 021 | Time significance (forecast time averaged) |
| | B 04 075 | Time period (minutes) |
| | B 11 040 | Maximum wind speed (mean wind) |
| | B 19 008 | Vertical extent of feature |
| | R 05 004 | (4 times replication of following 5 descriptors) |
| | B 05 021 | Starting bearing or azimuth |
| | B 05 021 | Ending bearing or azimuth |
| | R 02 002 | (2 times replication of following 2 descriptors) |
| | B 19 003 | Wind speed threshold |
| | B 19 004 | Effective radius with respect to wind speed above threshold |
| D 16 026 | | (Tropical storm analysis information) |
| | D 16 020 | Tropical storm identification |
| | D 16 021 | Analysis data |
| D 16 027 | | (Tropical storm forecast information) |
| | D 16 020 | Tropical storm identification |
| | D 16 022 | Forecast data |
| D 16 052 | | (SAREP template - Part A: Information on tropical cyclone) |
| | D 01 005 | Originating centre/sub-centre |
| | D 01 011 | Date |
| | D 01 012 | Time |

(continued)

(Category 16 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|-------------------------|---------------------|---|
| | F X Y | |
| D 16 052 (continued) | B 01 007 | Satellite identifier |
| | B 25 150 | Method of tropical cyclone intensity analysis using satellite data |
| | R 22 000 | Delayed replication of 22 descriptors |
| | B 01 027 | WMO long storm name |
| | B 19 150 | Typhoon International Common Number (Typhoon Committee) |
| | B 19 106 | Identification number of tropical cyclone |
| | B 08 005 | Meteorological attribute significance (=1) |
| | B 05 002 | Latitude (coarse accuracy) |
| | B 06 002 | Longitude (coarse accuracy) |
| | B 08 005 | Cancel Meteorological attribute significance |
| | B 19 107 | Time interval of the tropical cyclone analysis |
| | B 19 005 | Direction of motion of feature |
| | B 19 006 | Speed of motion of feature |
| | B 19 108 | Accuracy of geographical position of the tropical cyclone |
| | B 19 109 | Mean diameter of the overcast cloud of the tropical cyclone |
| | B 19 110 | Apparent 24-hour change in intensity of the tropical cyclone |
| | B 19 111 | Current Intensity (CI) number of the tropical cyclone |
| | B 19 112 | Data Tropical (DT) number of the tropical cyclone |
| | B 19 113 | Cloud pattern type of the DT-number |
| | B 19 114 | Model Expected Tropical (MET) number of the tropical cyclone |
| | B 19 115 | Trend of the past 24-hour change (+: Developed, -: Weakened) |
| | B 19 116 | Pattern Tropical (PT) number of the tropical cyclone |
| | B 19 117 | Cloud picture type of the PT-number |
| | B 19 118 | Final Tropical (T) number of the tropical cyclone |
| | B 19 119 | Type of the final T-number |
| D 16 060 | | (Definition of squall line (by 3 points: Centre, North, South) and forecasted trajectory and evolution) |
| | D 01 011 | Date |
| | D 01 012 | Time |
| | | <i>Position of squall line centre</i> |
| | B 05 002 | Latitude |
| | B 06 002 | Longitude |
| | B 19 005 | Direction of moving feature |
| | B 19 006 | Speed of moving feature |
| | | <i>Amplitude of feature from most external points to centre point</i> |
| | | <i>North point</i> |
| | B 05 002 | Latitude |
| | B 06 002 | Longitude |
| | | <i>South point</i> |
| | B 05 002 | Latitude |
| | B 06 002 | Longitude |
| | | <i>Evolution</i> |
| | B 04 074 | Period of validity |
| | B 20 048 | Evolution of feature |
| | B 11 041 | Maximum burst expected |
| | B 13 055 | Intensity of rain expected |

(continued)

(Category 16 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|---------------------|---|
| | F X Y | |
| D 16 061 | | (Definition of squall line (by centre and several points: North points and South points) and forecasted trajectory and evolution) |
| | D 01 011 | Date |
| | D 01 012 | Time |
| | | <i>Position of squall line centre</i> |
| | B 05 002 | Latitude |
| | B 06 002 | Longitude |
| | B 19 005 | Direction of moving feature |
| | B 19 006 | Speed of moving feature |
| | | <i>Amplitude of feature from most external points to centre point</i> |
| | | <i>North points</i> |
| | R 02 000 | Define delayed replication of next 2 descriptors |
| | B 05 002 | Latitude |
| | B 06 002 | Longitude |
| | | <i>South points</i> |
| | R 02 000 | Define delayed replication of next 2 descriptors |
| | B 05 002 | Latitude |
| | B 06 002 | Longitude |
| | | <i>Evolution</i> |
| | B 04 074 | Period of validity |
| | B 20 048 | Evolution of feature |
| | B 11 041 | Maximum burst expected |
| | B 13 055 | Intensity of rain expected |

Category 35 - Monitoring information

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|---------------------|--|
| | F X Y | |
| D 35 001 | B 08 035 | (Specify monitoring station) |
| | B 35 001 | Type of monitoring exercise |
| | B 08 036 | Time frame for monitoring |
| | D 01 001 | Type of centre or station performing monitoring |
| D 35 002 | B 08 035 | WMO block and station number |
| | B 35 001 | (Specify monitoring centre) |
| | B 08 036 | Type of monitoring exercise |
| | B 01 033 | Time frame for monitoring |
| D 35 003 | B 08 021 | Type of centre or station performing monitoring |
| | B 04 001 | Identification of originating/generating centre |
| | B 04 002 | (Specify monitoring period) |
| | B 04 003 | (23) Monitoring period |
| | B 04 004 | Year |
| | B 04 073 | Month |
| D 35 004 | B 04 002 | Day |
| | B 04 004 | Hour |
| | B 04 073 | Short period or displacement |
| | B 08 021 | (Specify report type and single station being monitored) |
| | B 04 004 | (24) Agreed time limit for report reception |
| | B 08 021 | Hour |
| | B 04 004 | (25) Nominal reporting time |
| D 35 005 | B 04 004 | Hour |
| | B 35 000 | FM and Regional code number |
| | D 01 001 | (WMO station identifier) |
| | B 35 011 | Number of reports actually received |
| | B 08 021 | (Specify report type and WMO block being monitored) |
| | B 04 004 | (24) Agreed time limit for report reception |
| | B 08 021 | Hour |
| D 35 006 | B 04 004 | (25) Nominal reporting time |
| | B 04 004 | Hour |
| | B 35 000 | FM and Regional code number |
| | B 01 001 | WMO block number |
| | B 35 011 | Number of reports actually received |
| | B 08 021 | (Specify report type and WMO Region being monitored) |
| | B 04 004 | (24) Agreed time limit for report reception |
| D 35 006 | B 08 021 | Hour |
| | B 04 004 | (25) Nominal reporting time |
| | B 04 004 | Hour |
| | B 35 000 | FM and Regional code number |
| | B 01 003 | WMO Region/geographical area |
| D 35 006 | B 35 011 | Number of reports actually received |

(continued)

(Category 35 - continued)

| SEQUENCE | TABLE REFERENCES | ELEMENT NAME |
|----------|---------------------|--|
| | F X Y | |
| D 35 007 | B 08 021 | (Report type and multiple stations from one block being monitored) |
| | B 04 004 | (24) Agreed time limit for report reception |
| | B 08 021 | Hour |
| | B 04 004 | (25) Nominal reporting time |
| | B 08 021 | Hour |
| | B 35 000 | FM and Regional code number |
| | B 01 001 | WMO block number |
| | R 02 000 | Delayed replication (2 descriptors) - count of stations |
| | B 01 002 | WMO station number |
| D 35 010 | B 35 011 | Number of reports actually received |
| | | (Monitoring a report type from multiple stations) |
| | D 35 002 | (Specify monitoring centre) |
| | D 35 003 | (Specify monitoring period) |
| | D 35 007 | (Specify report type and multiple stations being monitored) |