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Status of migration

**Status of the Migration to TDCF in Canada**

*Submitted by* *Yves PELLETIER (Canada)*

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**Summary and Purpose of Document**

This document summarises the status of the Migration to TDCF in Canada.

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**ACTION PROPOSED**

The team are invited to note the progress to table driven codes in Canada.

**DISCUSSION**

SYNOP

Synoptic surface observations are produced by the Meteorological Service of Canada (MSC) in both BUFR and TAC. BUFR is produced by MSC software from a variety of native raw data code forms, mostly from automated observing platforms.

The initial transmission period of SYNOP BUFR on the GTS revealed a few issues which were corrected. Some further improvements could be made to the metadata elements in the BUFR, but the overall quality of the BUFR SYNOP is at least equivalent to the legacy TAC SYNOP. The quality of the metadata is expected to improve gradually as planned software infrastructure and data management upgrades are implemented.

The MSC is able to receive and process BUFR SYNOP from third parties. Reception is dependant on the quality of BUFR encoding by the producer.

No date has been yet decided for Canada to cease TAC SYNOP production.

TEMP

About half of Canada’s network of about 30 upper air stations dual-produce BUFR and TAC. The remainder continue to produce TAC TEMP. The BUFR is encoded at the source and not converted from TAC. The resolution of the BUFR TEMP data is higher than TAC TEMP, but not as high as BUFR TEMP being transmitted by some other WMO members. The MSC is examining whether sounding resolution could be improved further, given communications and infrastructure constraints.

The conversion of aerological stations to allow the production of BUFR TEMP is time-consuming and involves new communications infrastructure and on-site hardware and software upgrades at remote locations.

The MSC is able to receive and process BUFR TEMP from third parties. Reception is dependant on the quality of BUFR encoding by the producer.

No date is available for the end of TAC TEMP transmission by Canada.

CLIMAT

The migration of TAC CLIMAT to BUFR is contingent on planned software and data management upgrades by the MSC. It is estimated that CLIMAT BUFR will be available for most stations around mid 2018.