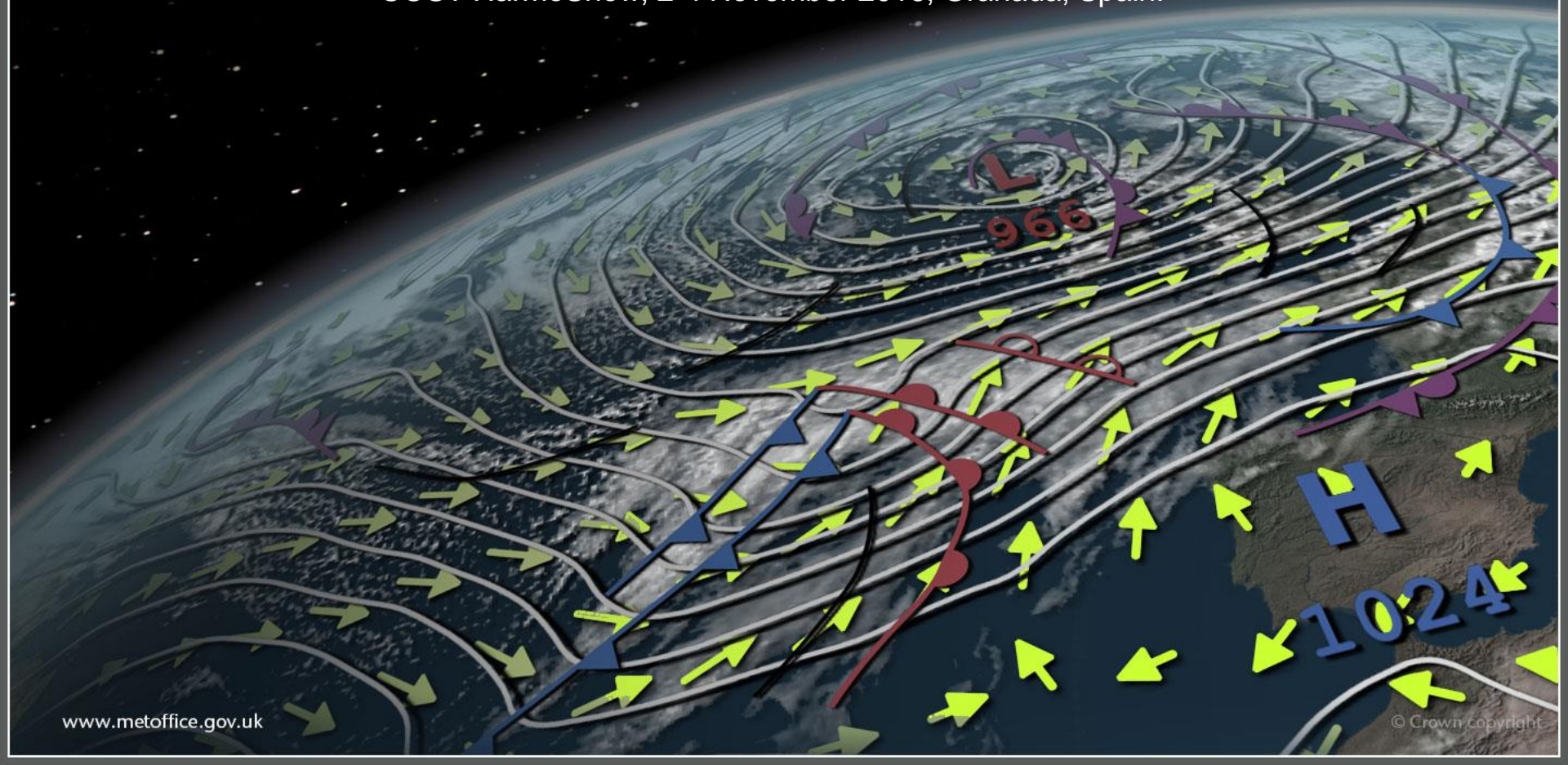


# Recommendation on International Exchange of Snow Data, for the WMO CBS-16 session

Samantha Pullen (for GCW Snow Watch Team)

COST HarmoSnow, 2-4 November 2016, Granada, Spain.





# Progress towards new snow reporting guidance

- BUFR template 3 07 101 for snow observations, developed by ECMWF (adopted by CBS Ext. 2014) – facilitates exchange of national network snow depth reports
- Reporting zero snow depth in TAC – CBS Ext. 2014 recommendation for use of entry 000 (officially “not used”) in FM 12 SYNOP to enable reporting of zero snow depth. Member states often use TAC to collect observations, then convert TAC entries to TCDF for exchange
- GCW Snow Watch Team meeting, June 2016 – discussion of best formulation of reporting guidelines to:
  - avoid ambiguity and inconsistencies
  - give valuable data to the user community
  - to enable observers from Member States to follow reporting practice (how to ask for as much as you want and reasonably expect observers to provide it routinely and consistently!)

.....preparation of recommendation to WMO CBS-16 on International Exchange of Snow Data



# Draft Recommendation 4.1(1)/1 (CBS-16) INTERNATIONAL EXCHANGE OF SNOW DATA

World Meteorological Organization  
Commission for Basic Systems  
Sixteenth Session  
Guangzhou, China 23-29 November 2016

Prepared by Miroslav Ondras, input from GCW Snow Watch Team

THE COMMISSION FOR BASIC SYSTEMS,

**Noting....** various resolutions, decisions and supporting evidence.....

**Recommends** that snow cover and snow depth data shall be reported by **all stations** in cold and high mountain regions, and **any regions that experience snow**, capable of doing so **four times a day**, namely 00, 06, 12, 18 UTC;

**Recommends further** that snow depth, **including values of zero snow depth (0 cm)** when snow is not present, shall be reported by all stations in regions that experience snow, for **the entire period during which snow can be expected**. These periods shall be defined by Regions;

**Requests** OPAG-ISS to review and harmonize practices for reporting snow cover and snow depth;

**Urges Members** to **exchange in situ snow measurements in real-time in BUFR through GTS/WIS**;



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**Requests**  
snow dept

**Urges Me**  
**GTS/WIS;**

## In Summary

All stations that experience snow are expected to report snow depth 4 times a day, whether snow is present or not, and should exchange these data in BUFR format in near-real-time on the GTS

nd

ough



Met Office

## Next steps...

### Changes to regional guidelines:

Inconsistent with CBS (and each other!), e.g. Manual on Codes Volume II states for Europe (Region VI) that snow depth and state of ground “**shall be included only if snow or ice cover is observed on the ground**”

- > Work with WMO to propose guideline changes at RA Sessions

### Promote changed guidance:

Work with NMS observing sections to raise awareness of new guidelines, encourage adoption of recommended reporting practice – it’s a cultural change

### Provide evidence of value:

Use new observations - Impact studies to show value of additional snow depth obs when they become available e.g. ECMWF assimilation experiment using Bulgarian national network obs

leverage

