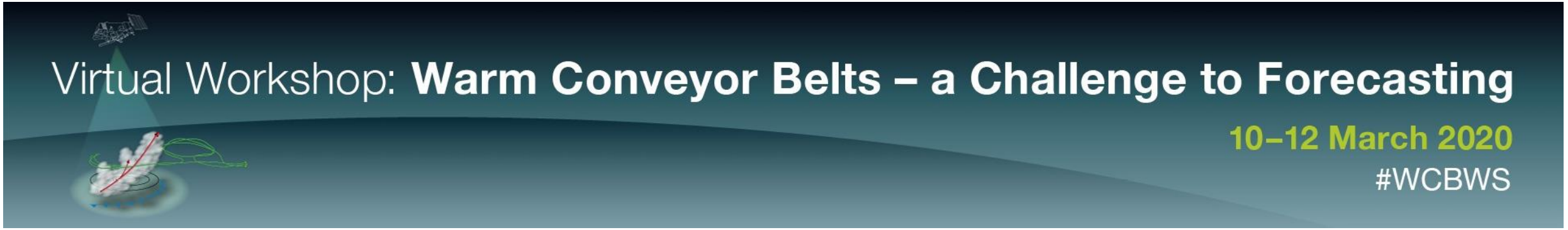

Working Group: WCB Observations

Participants: Andreas Schäfler, Stephen English, David Lavers, Alison Cobb, Anthony Illingworth, Helen Dacre, Irina Gorodetskaya, Josué Gehring, Hanin Binder, Lourdes Bougalho

WCB Workshop: Working Group on Observations

- **Process and DA view**: The group identified the need to consider both local observations for process studies and the DA view of observations, which takes a more global view and captures the impact of non-local observations. Discussion of optimal use of routine and campaign data will be addressed through on-going contact (see Follow-on).
- **Comparison with Cloudsat**: A set of 5000 WCB cases coincident with Cloudsat observations have been identified from the early A-train timeframe. Cases will be identified that occurred during the ECMWF Cloudsat research experiments to see how the structure of the WCB is affected with and without the assimilation of these observations. ECMWF will share the RD experiment data with collaborating parties.
- **WCB impact on polar regions**: Group to define WCB and AR case studies for different regions, including polar regions, and share information on ECMWF YOPP related experiments (from APPLICATE) to identify AR or WCB events during these periods.

WCB Workshop: Working Group on Observations

- **Field Campaigns**: For NAWDEX, YOPP, AR cases with high uncertainty the FSOI statistics will be studied collaboratively between campaign participants and ECMWF (and possibly other NWP centres) to understand the role of observations.
- **Aeolus**: AR campaign participants to see if dropsondes from these campaigns coincide with overpass to help evaluate specific value of Aeolus to AR/WCB analysis.
- **Aeolus**: It is unclear who is looking specifically at the value of Aeolus on middle latitude synoptic systems. ECMWF to raise a question about who is looking at middle latitude dynamics studies using Aeolus at Aeolus Cal/Val workshop, Aeolus MAG or similar events.

WCB Workshop: Working Group on Observations

- **FSOI**: Use of FSOI to study WCBs was shown to be useful by several presenters at the workshop. ECMWF to circulate guidance provided by ECMWF to CGMS to workshop attendees to help with interpretation of FSOI
- **Gaps in WMO Integrated Global Observing System**: A well known observation gap is lack of vertical resolution for moisture and wind and this potentially impacts the representation of WCB and ARs. The requirement is different for different stages of the WCB. Further research into the ability of radar systems to address the gap is still needed.
- **Follow-on**: A follow on teleconference amongst the participants will be organised by the chairs in six months time. As input to this WCB cases will be selected by participants and relevant data shared, to enable all to study with range of metrics and compare analysis by all participants of these cases.