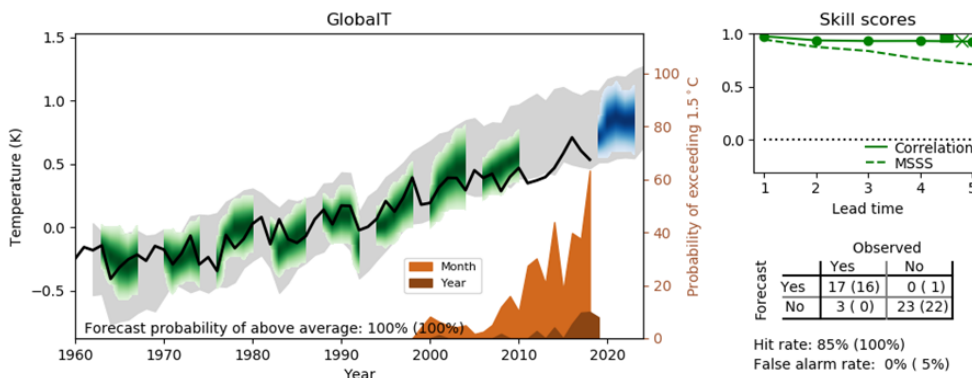


World Climate Research Programme JOINT SCIENTIFIC COMMITTEE (JSC) 41st online session

Grand Challenge on Near Term Climate Prediction, Report (draft 1)

1. Highlights for JSC

- WMO operational decadal predictions have now completed a second year
- The WMO Lead Centre for Annual to Decadal Climate Prediction www site is improved and starting to providing data access to WMO members
- The Global Annual to Decadal Climate Update is being issued this month following 2 years of dry running. Example figure showing risk of 1.5 degree events:



- Comprehensive standards and verification methods are now prepared and are close to publication
- We are working closely across WCRP and WMO: with ET-OPSLs, CORA etc
- Almost delivered our initial outcomes: improved predictions, white paper, operational predictions, standards

2. Primary science issues (looking ahead, 3 to 5 years)

- Need to improve demonstrations of skill and utility of multiyear predictions
- Very large ensembles (100s) are needed to properly identify skill due to severe climate model signal to noise problems which may well apply to longer timescales

3. Issues and challenges, for example:

- Communication across WCRP and WMO is complex – CORA and WMO staff are helping
- Should we continue into decadal prediction climate services?
- If so, we need a new co-chair and membership refresh – plans in development
- Membership to include users from several sectors including finance, agriculture and energy
- How do we stitch together decadal with seasonal and long term projection information? Do we need to?
- We are not badly affected by funding or COVID as all work and meetings are done remotely