

5.3 Model Climates

- [Model Climates](#)
 - [Additional Sources of Information](#)
- [Re-forecasts](#)
- [M-climate, the ENS Model Climate](#)
- [ER-M-climate, the Extended Range Model Climate](#)
- [S-M-climate, the Seasonal Model Climate](#)

Model Climates

The discontinuous and patchy global coverage of conventional climate data (almost totally absent over the oceans and some land areas) means it is unsatisfactory to use conventional climate data to compare with forecast parameters. It is preferable to have system that provides a benchmark to identify extreme or anomalous forecasts events at any chosen location, at any time of year, and at any forecast lead time, and which at the same time can combat any biases and drifts in the IFS models. To this end, a series of [re-forecasts](#) are made with resolutions appropriate to each model. These are:

- [M-climate](#) for Ensemble 1-15day forecast period,
- [ER-M-climate](#) for Extended Range Ensemble, primarily for the 16-45 day forecast period,
- [S-M-climate](#), primarily for the Seasonal 2-13month forecast period.

The model climates:

- provide a uniform global coverage,
- capture the extremities of "past conditions" in the relevant period of the forecast,
- are based on precisely the same up-to-date model structure.

In addition, the re-forecasts are used to:

- circumvent local conditions that are not covered by the model grid.
- account for systematic errors in the model.
- account for model drift (change in systematic error with lead time).

Additional Sources of Information

(Note: In older material there may be references to issues that have subsequently been addressed)

- Watch a webinar on [model climate and re-forecasts](#) (10sec delay before start).