

For a real-time forecast initialised on a specific calendar day, each model's climatology is estimated for each forecast lead time using its all reforecast members in the period 1995–2010 (1999–2010 for NCEP), within a 31-day time window centered on that day and a 168-hr forecast time window centered on that forecast lead time. Since most reforecasts, except CMC and NCEP are provided only on specific initial dates, in case reforecast members to estimate a climatology for a real-time forecast are unavailable, the climatology is estimated by a linear interpolation of the climatologies for real-time forecasts initialised on the closest two days.

For example, a climatology for the real-time JMA's +96-hr forecast initialised on 20 January 2018 is estimated from its all +24- to +168- hr reforecast members initialised on 10, 20, and 31 January 1995-2010. In this case, the total number of reforecast members used for the estimate of the model climatology is 1680 (= 5 members × 3 days × 16 years × 7 lead times). For the real-time JMA's +96-hr forecast initialised on 26 January 2018 (the JMA reforecast is unavailable on 26 January), the climatology was estimated by a liner interpolation of the climatologies for the real-time JMA's +96-hr forecasts initialised on 20 and 31 January 2018.