The Prediction of Northern Hemisphere Tropical Cyclones Extended Lifecycles by the ECMWF Ensemble and Deterministic Prediction Systems. Part 1: Tropical Cyclone Stage. Supplementary Material

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List of Figures

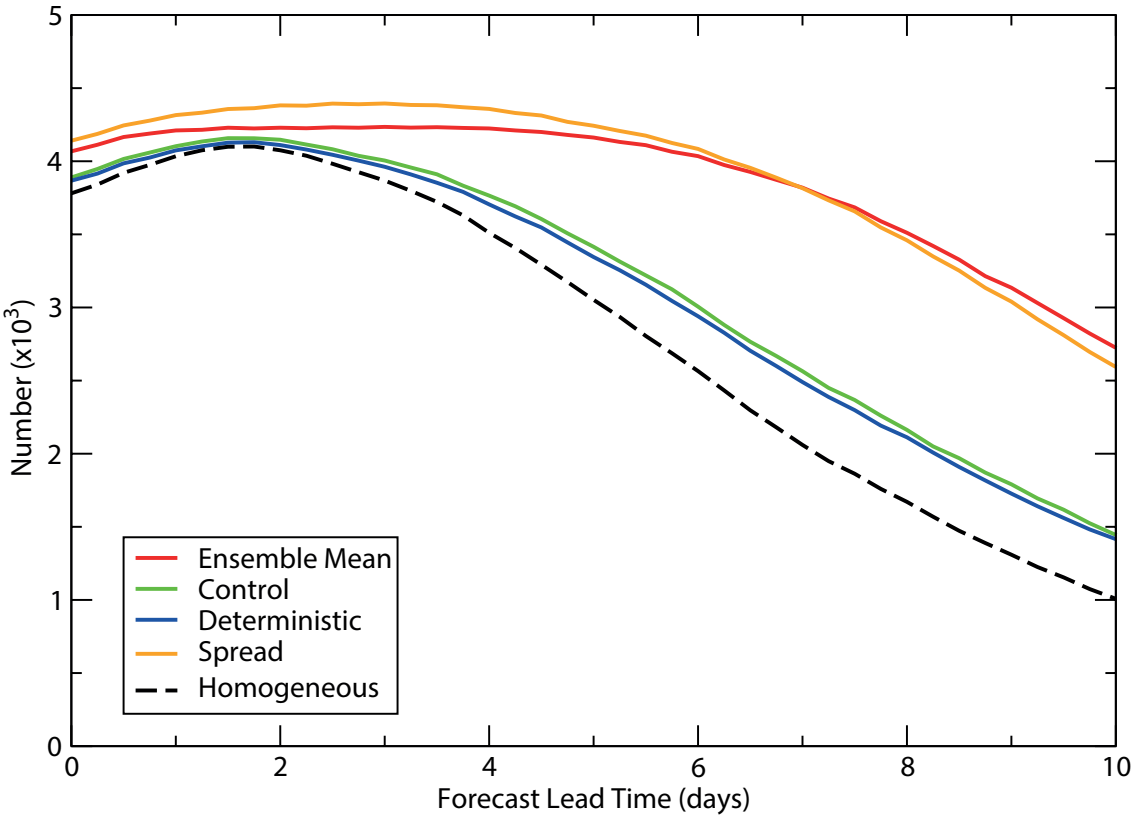


Fig. S1: Number of points available for non-homogeneous samples of the ensemble mean, control and deterministic forecasts and the spread (solid lines) and the number of points for homogeneous samples (dashed line).

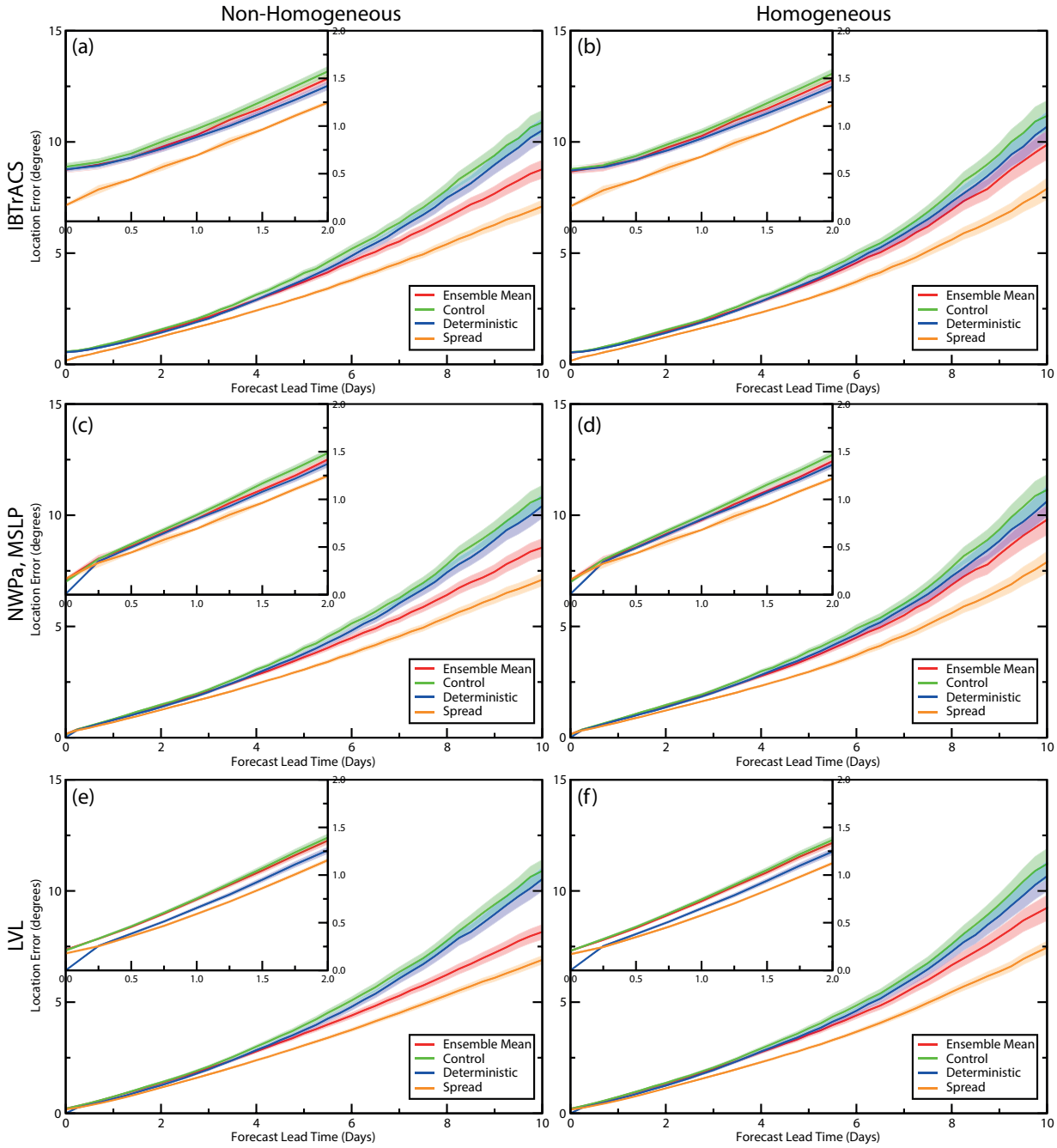


Fig. S2: Location errors for non-homogeneous (left) and homogeneous (right) samples, (a) and (b) using IBTrACS verification, (c) and (d) using full resolution analysis MSLP verification, (e) and (f) using LVL.

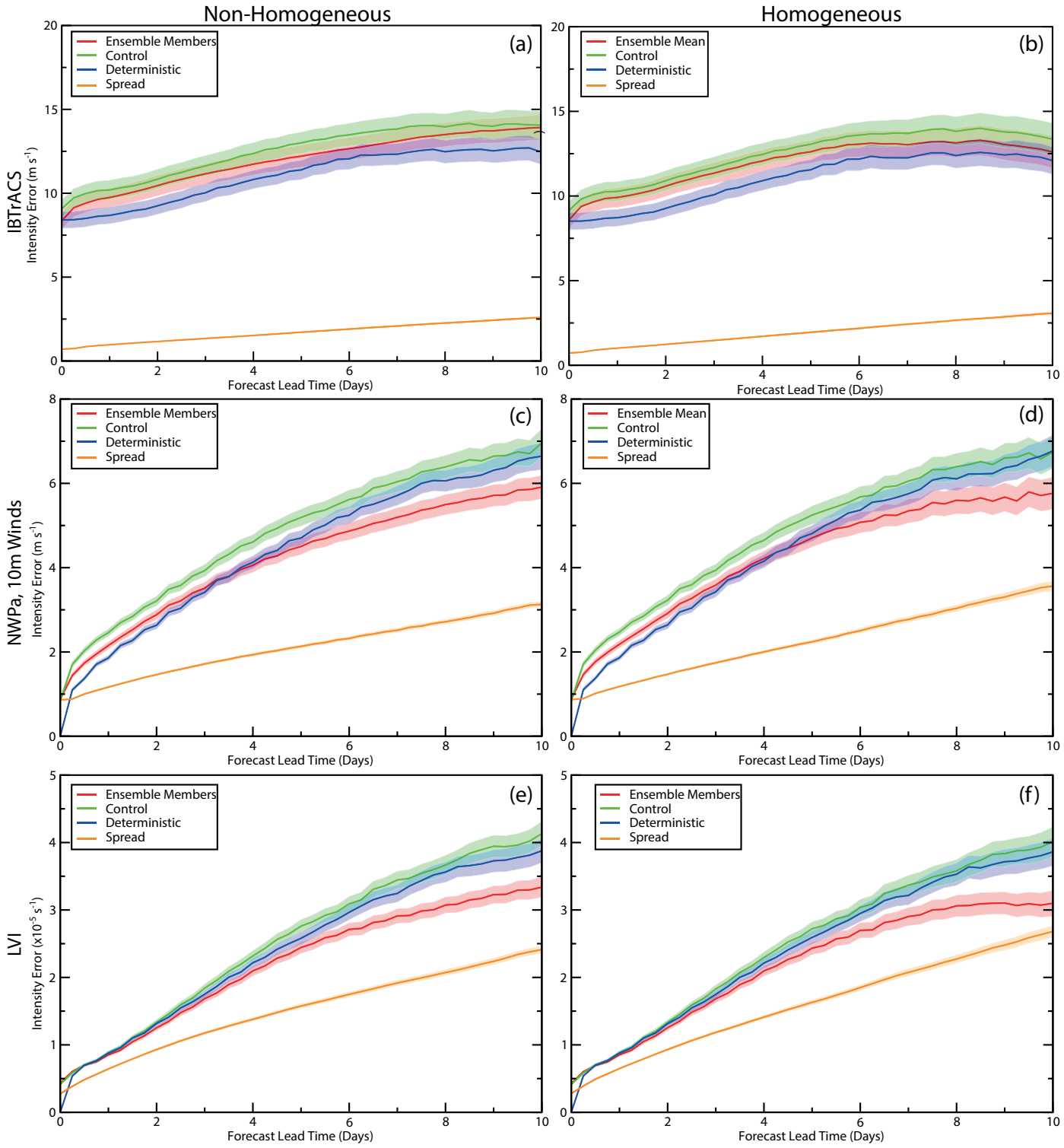


Fig. S3: Intensity errors for non-homogeneous (left) and homogeneous (right) samples, (a) and (b) using IBTrACS winds verification, (c) and (d) using full resolution analysis winds verification, (e) and (f) using LVI.

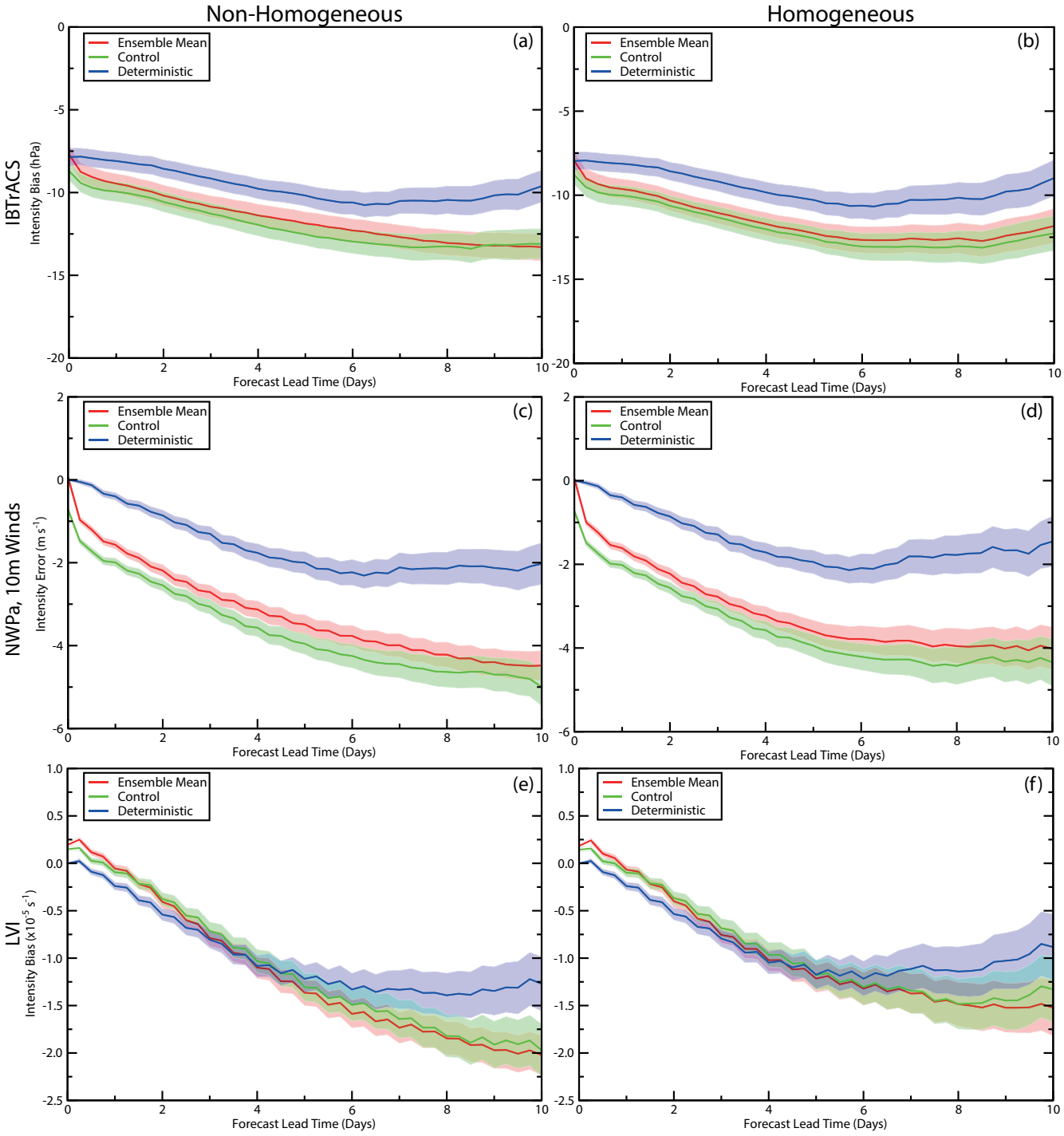


Fig. S4: Intensity biases for non-homogeneous (left) and homogeneous (right) samples, (a) and (b) using IBTrACS winds verification, (c) and (d) using full resolution analysis winds verification, (e) and (f) using LVI.

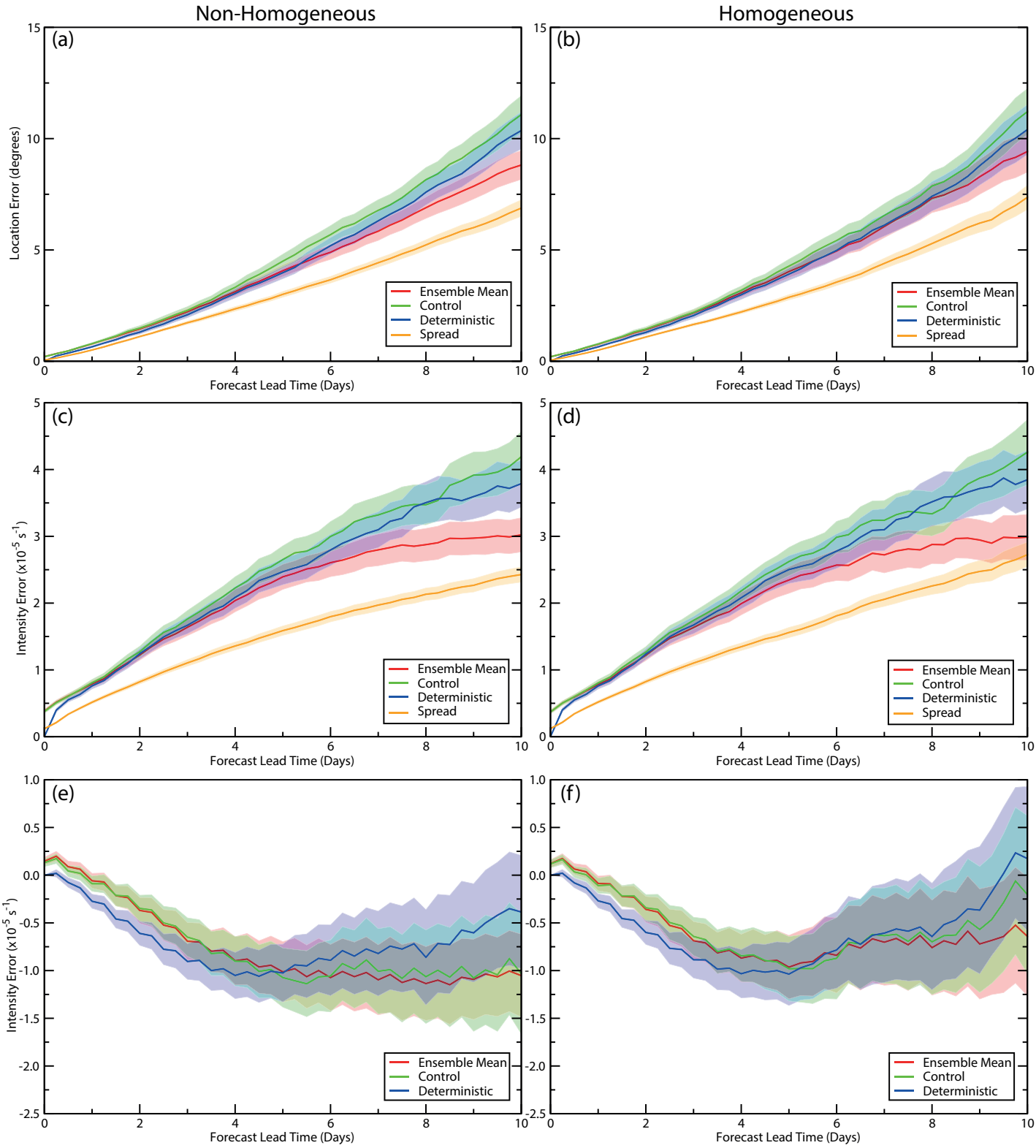


Fig. S5: Non-homogeneous (left) and homogeneous (right) statistics for LVL and LVI for 2008, (a) and (b) LVL, (c) and (d) LVI, (e) and (f)LVI biases.

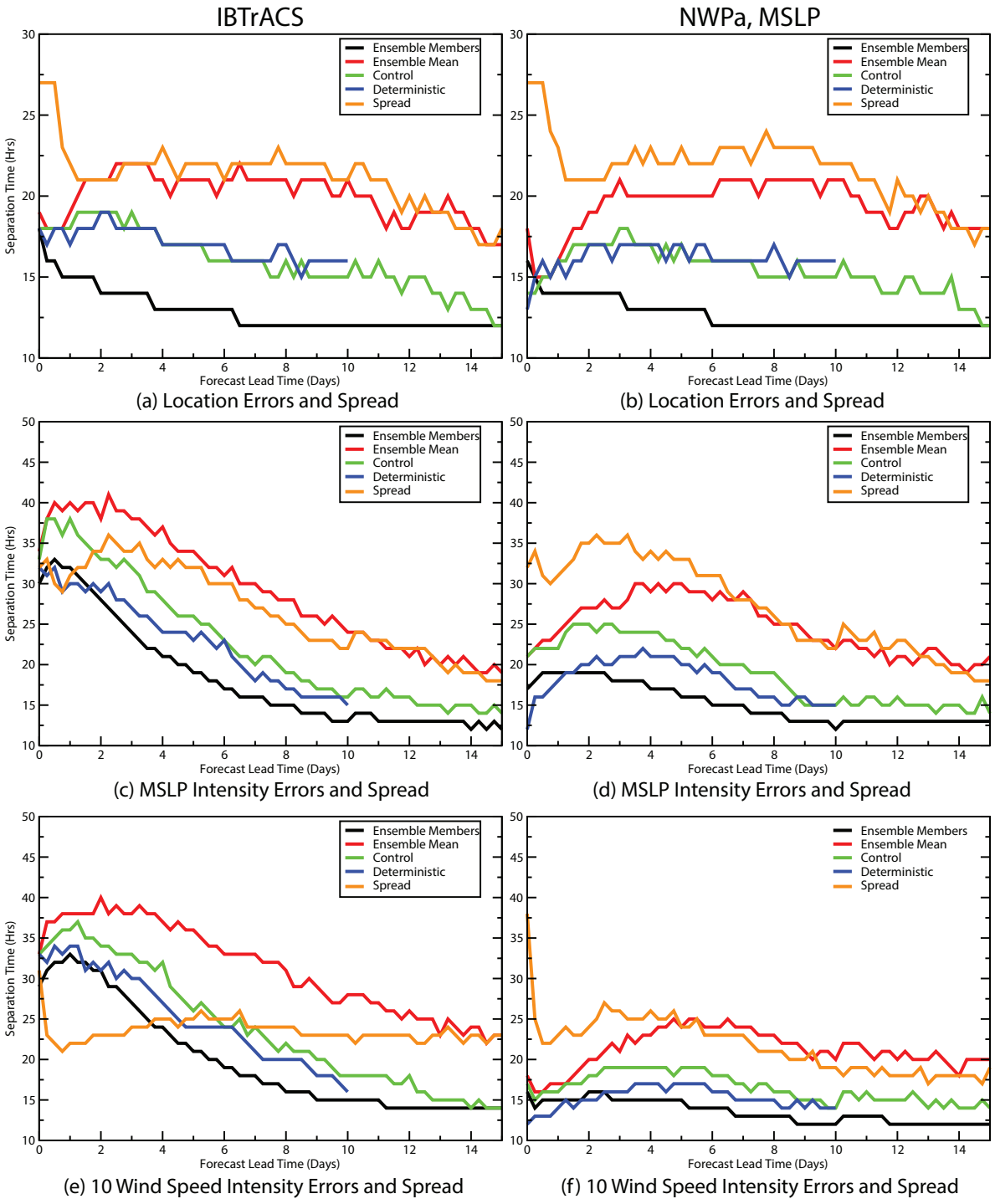
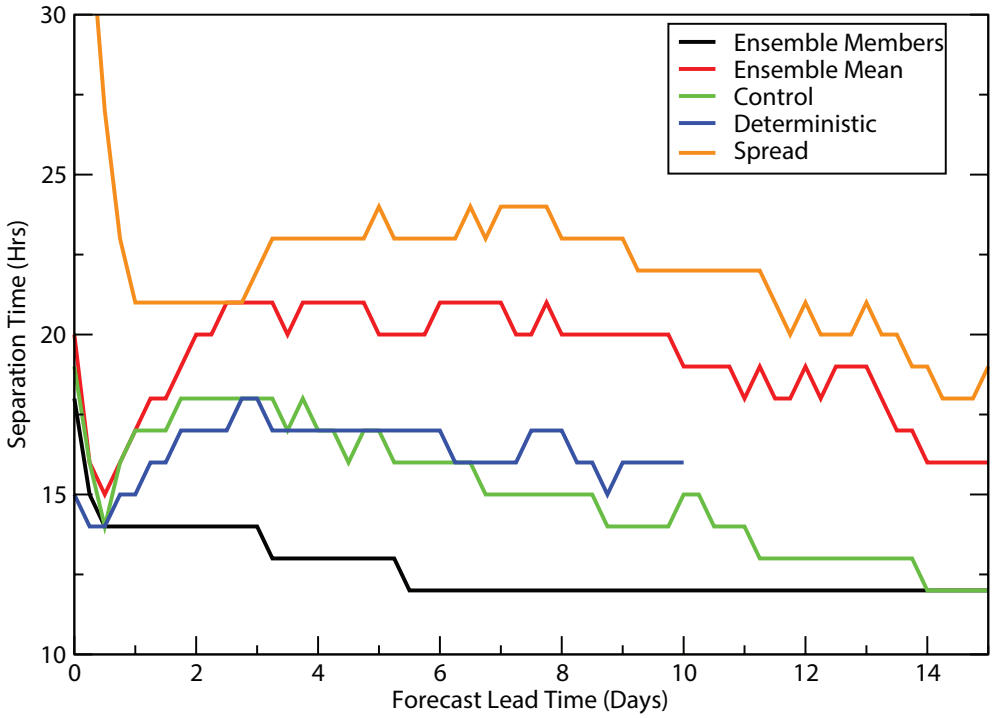
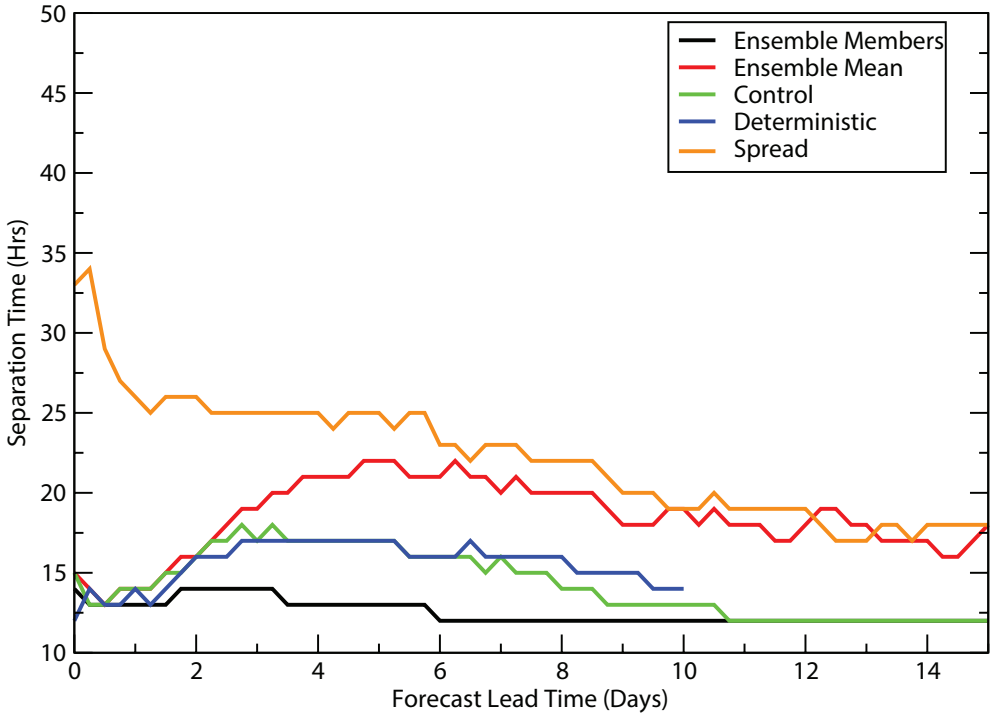


Fig. S6: Separation times (hours) for the different forecast types for verification using IBTrACS (left column) and NWPa, MSLP (right column), (a) and (b) MSLP location errors and spread, (c) and (d) MSLP errors and spread, (e) and (f) 10m wind speed errors and spread.



(a) LVL errors and spread



(b) LVI errors and spread

Fig. S7: Separation times (hours) for the different forecast types for verification using NWPa, LVL and LVI, (a) LVL errors and spread, (b) LVI errors and spread.