Fig. S1. Scatter plots of drifter velocities (May to July 2015) and CR surface velocities (a) and (b) as well as HF radar velocities (c) and (d) of their u (a) and (c) and v velocity components (b) and (d). Model and HF radar velocities were trilinearly (space and time) interpolated to drifter positions. The dashed line is the diagonal and denotes the optimal dot positions. The black dotted line is the qq-plot. The amount of available HF radar is less than the drifter data; thus the dots are enlarged. Statistics of each plot are shown in Table 1.
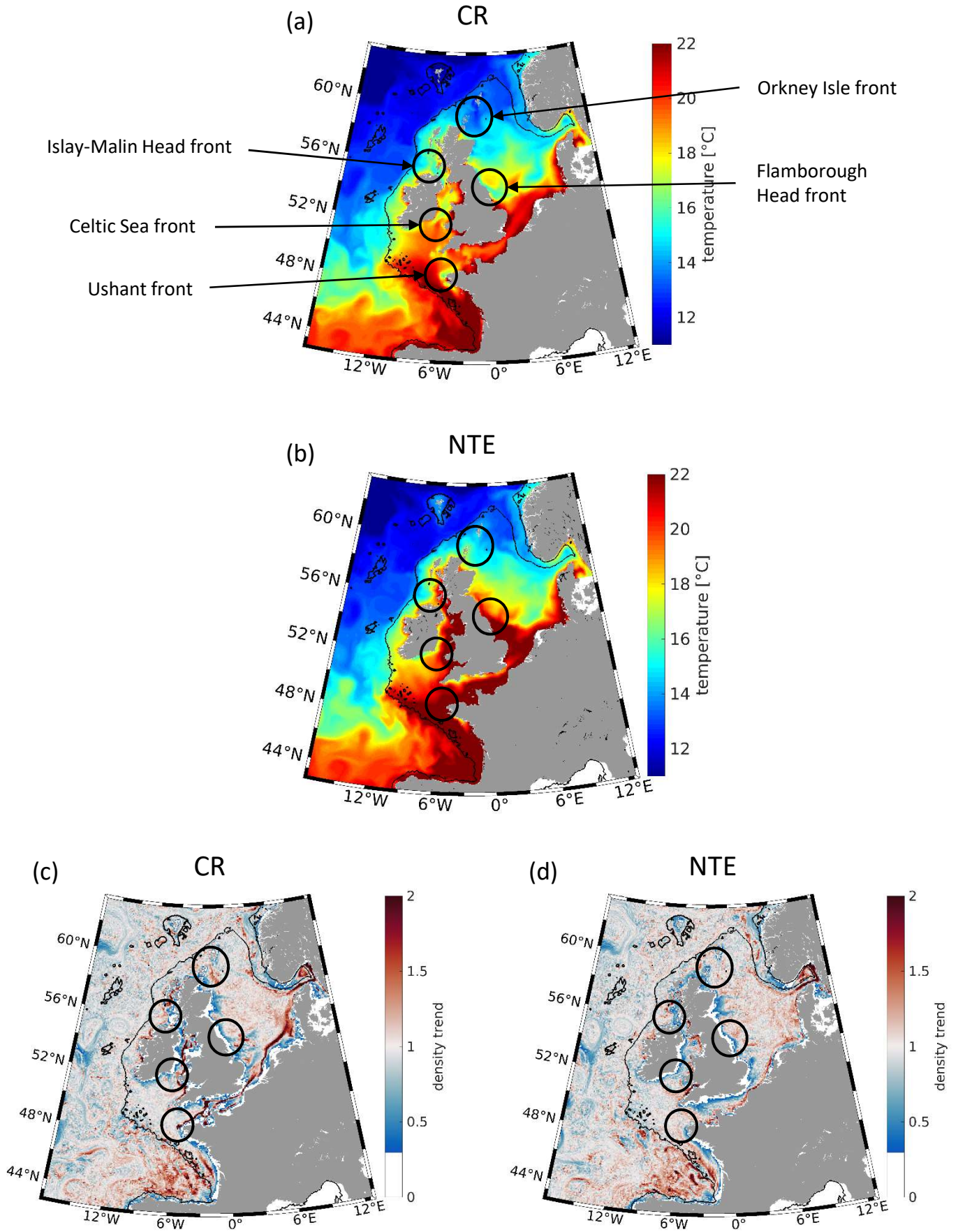
Fig. S2. Typical tidal mixing fronts (black circles) shown as July 2015 averaged SST distribution in the CR (a). For comparison, the result of the NTE for same period is shown in (b). DT for July 2015 in the CR (c) and NTE (d).
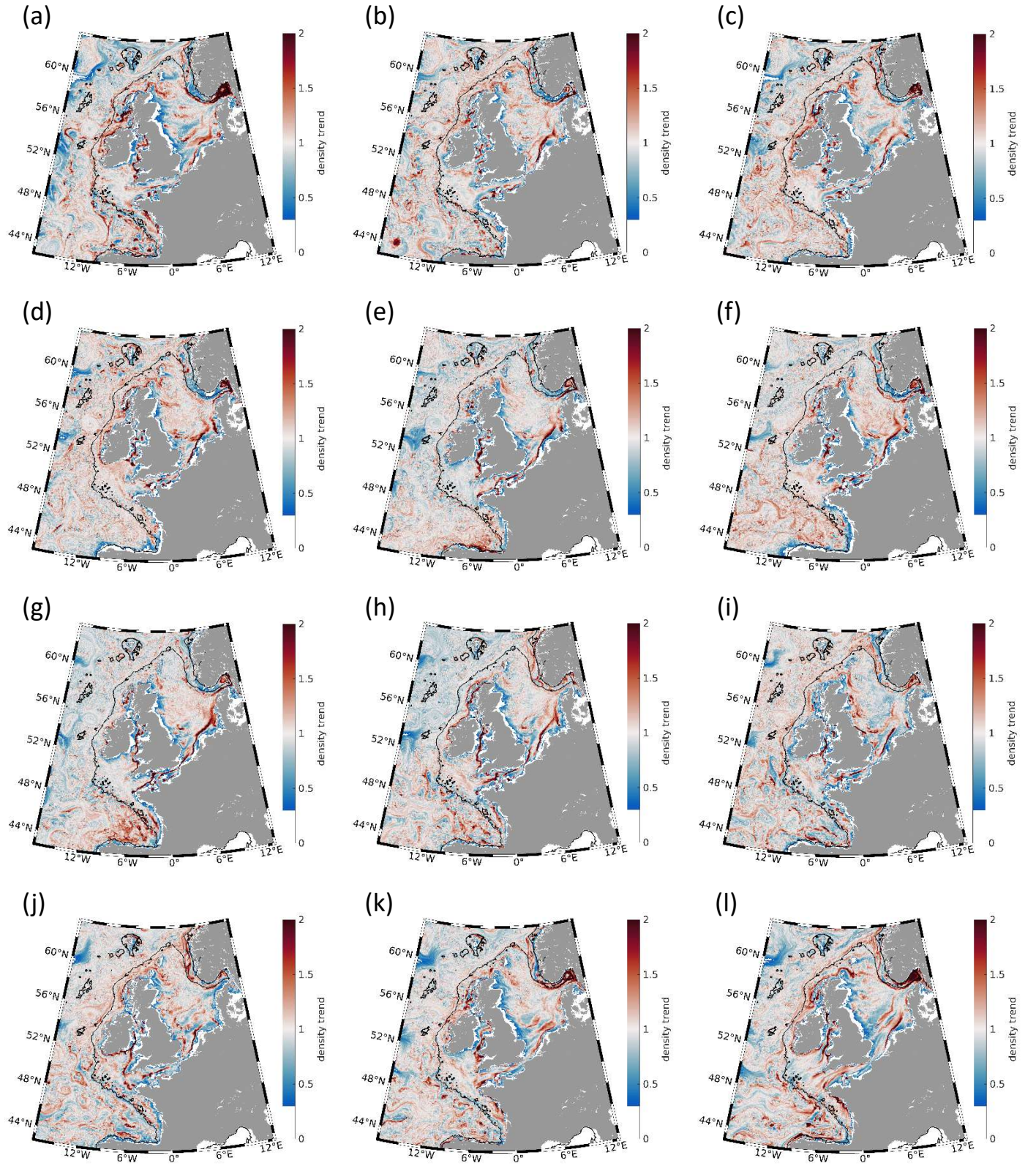
Fig. S3. Tendency of accumulation of surface released particles shown as density trend for every month in 2015; January (a) to December (l) (experiment #1, see Table 2). Note the variability between the single months and compare with its mean in Fig. 5c.
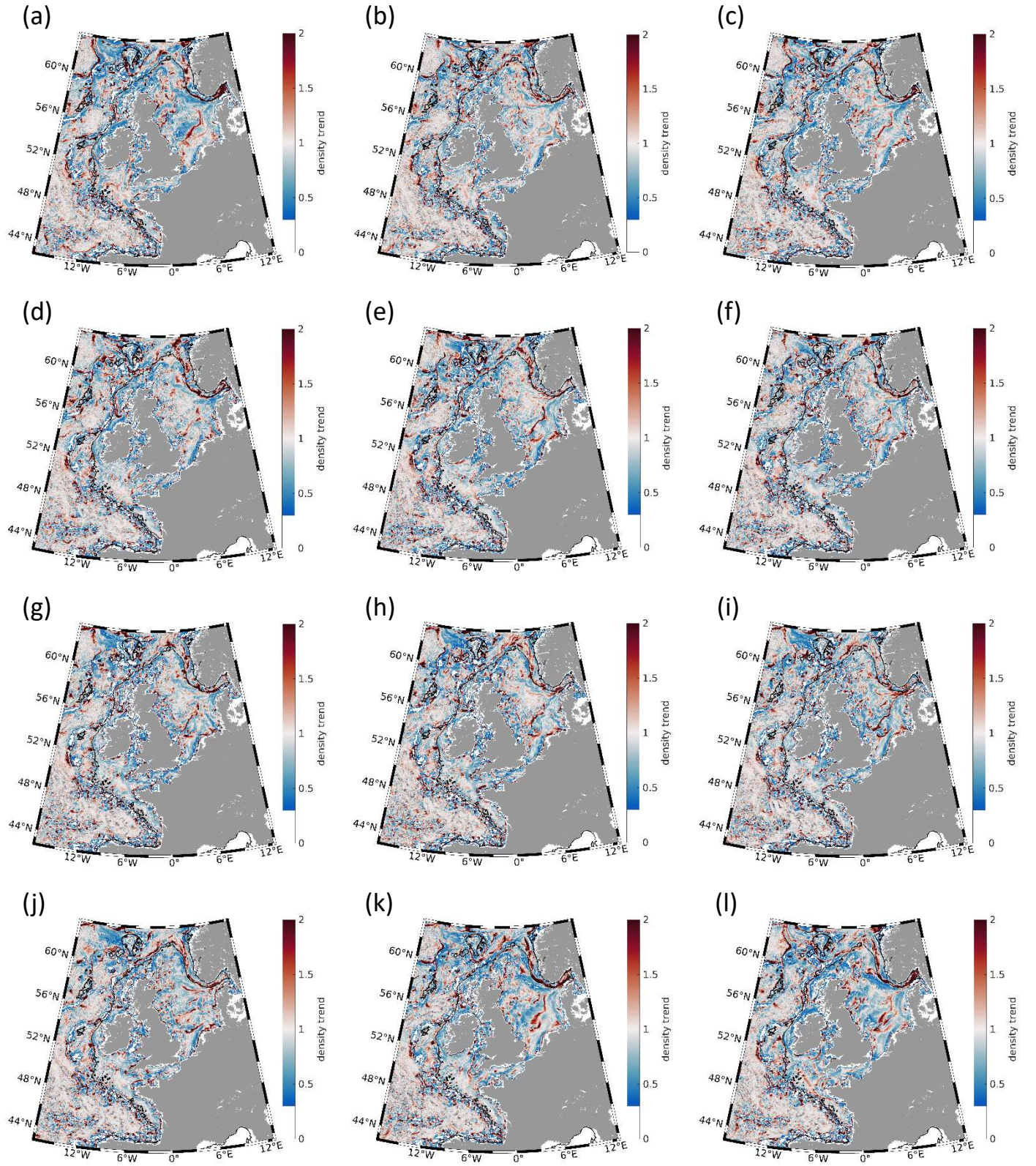
Fig. S4. Tendency of accumulation of bottom released particles shown as density trend for every month in 2015; January (a) to December (l) (experiment #1, see Table 2). Note the variability between the single months and compare with its mean in Fig. 5d.