

Supplementary material for "Dynamic mode decomposition of random pressure fields over bluff bodies", Part 2

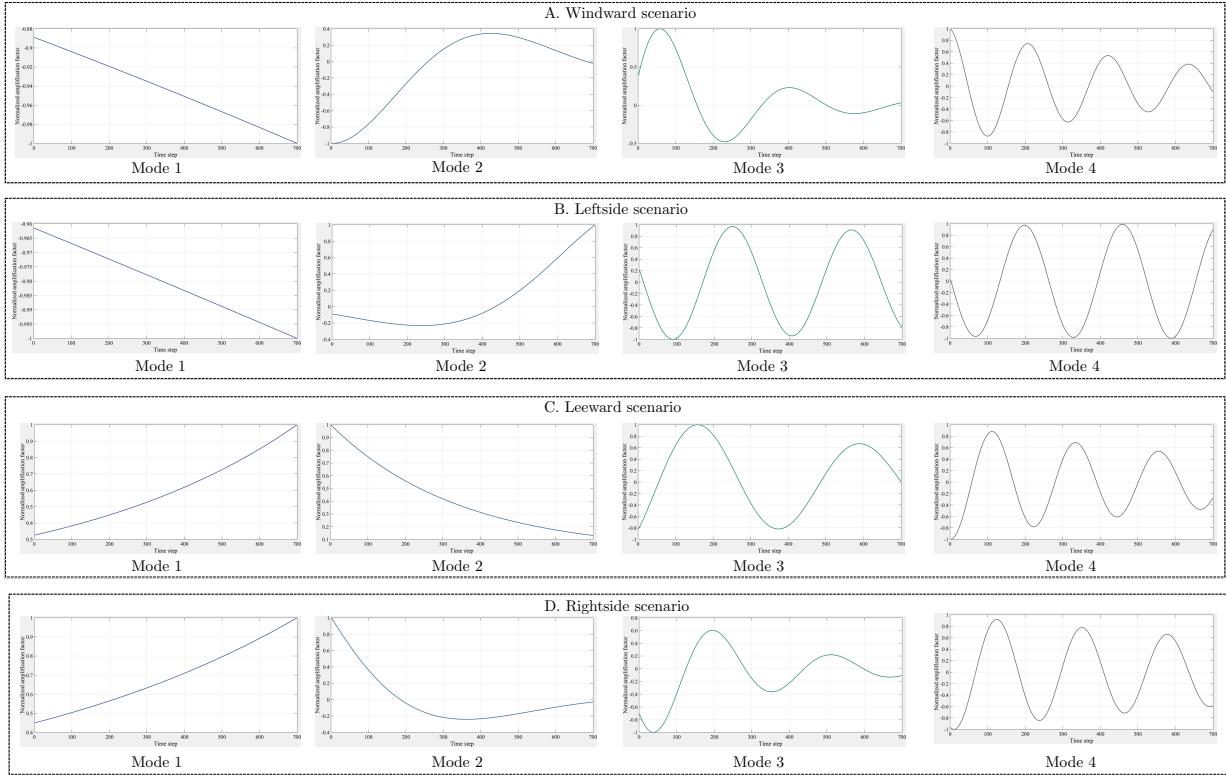


Figure 1: Dynamical evolution of selected macro-scale DMD modes.

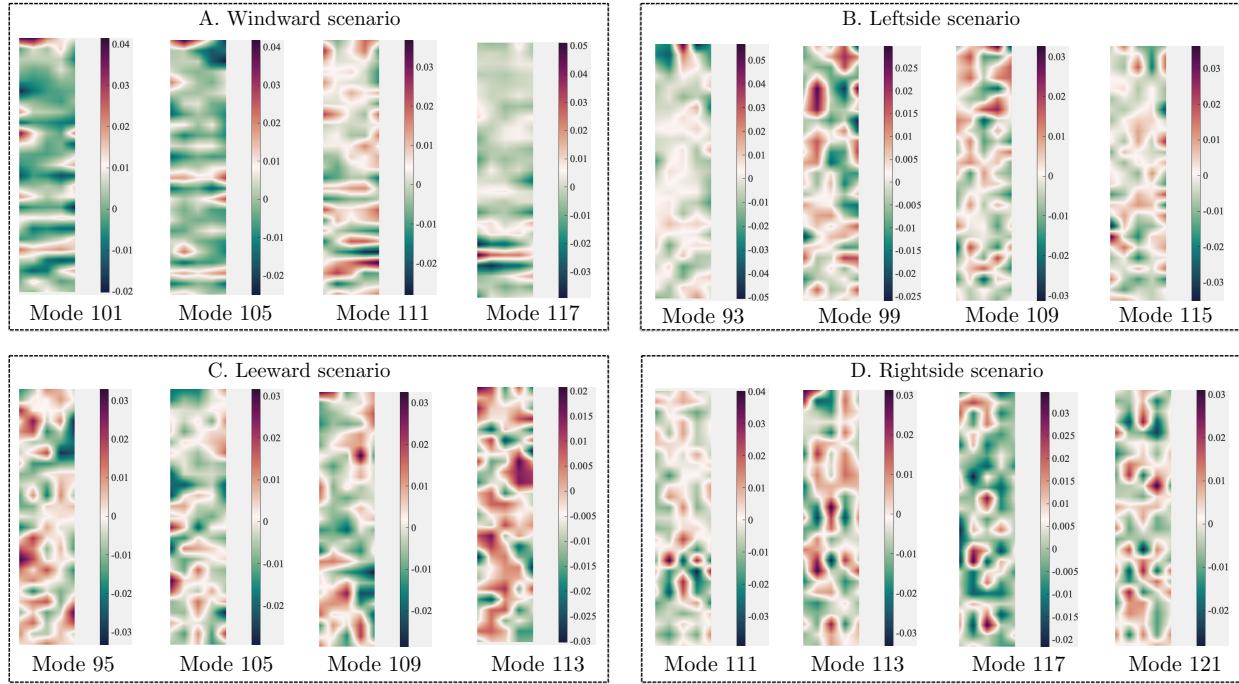


Figure 2: Micro-scale DMD modes.

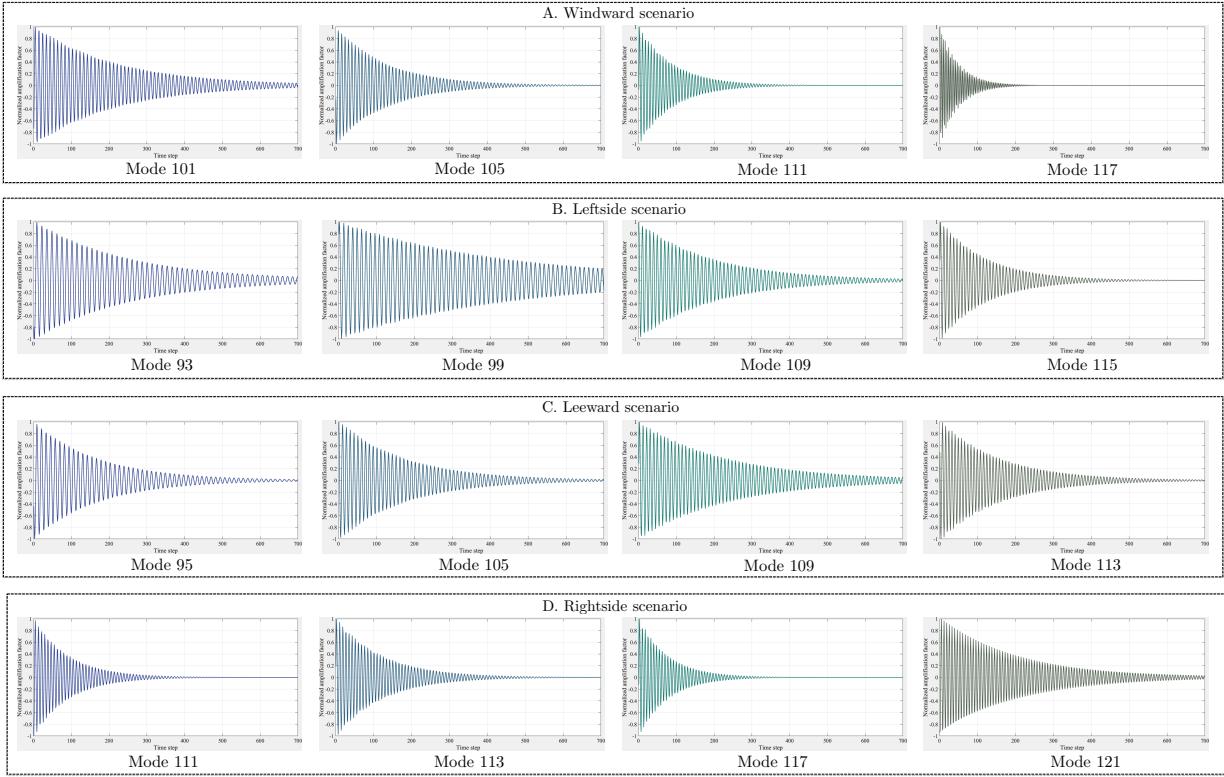


Figure 3: Dynamical evolution of selected micro-scale DMD modes.

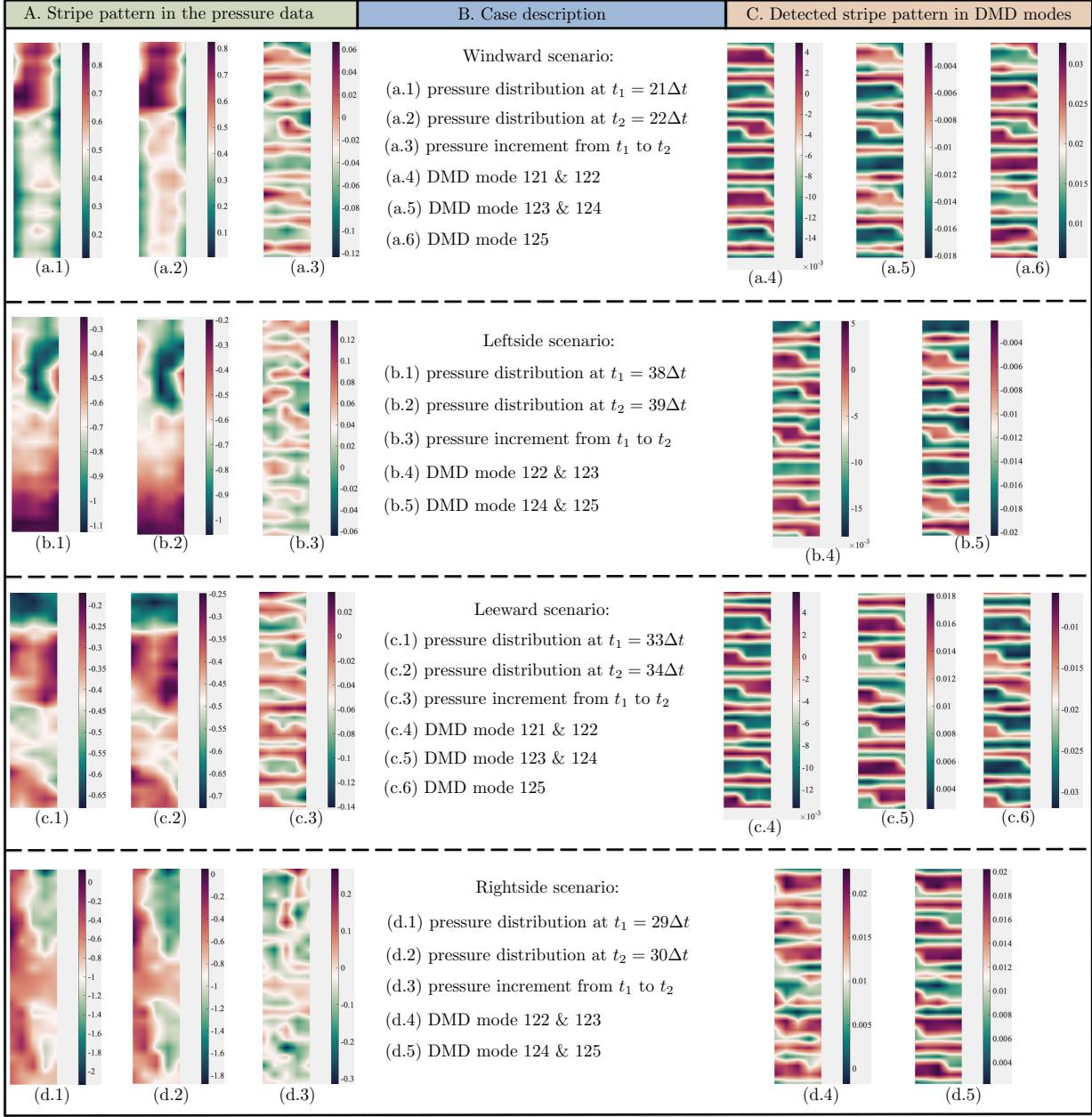


Figure 4: Illustration of the connection between micro-scale DMD modes and instantaneous increment of wind pressures.

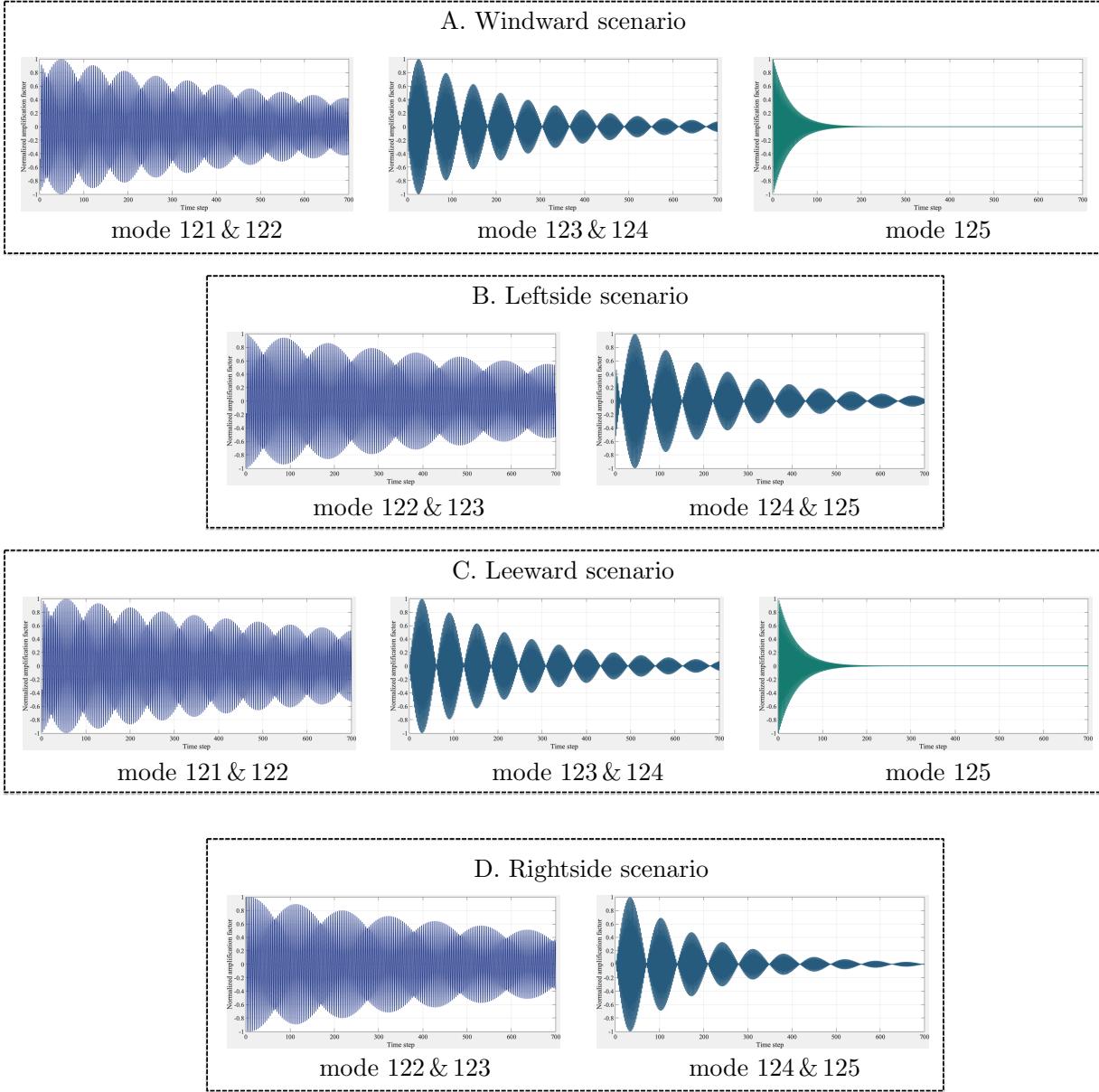
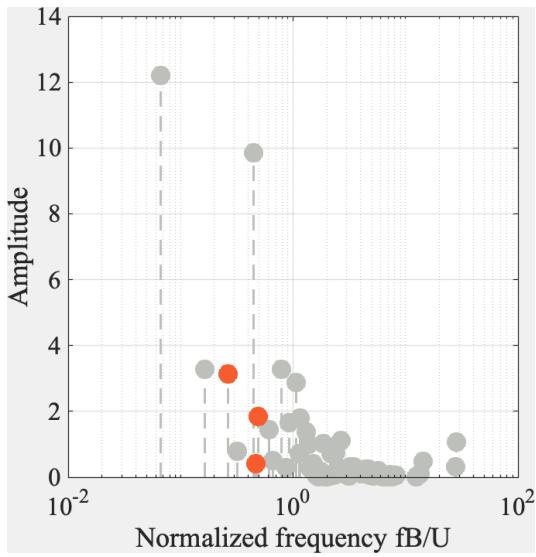
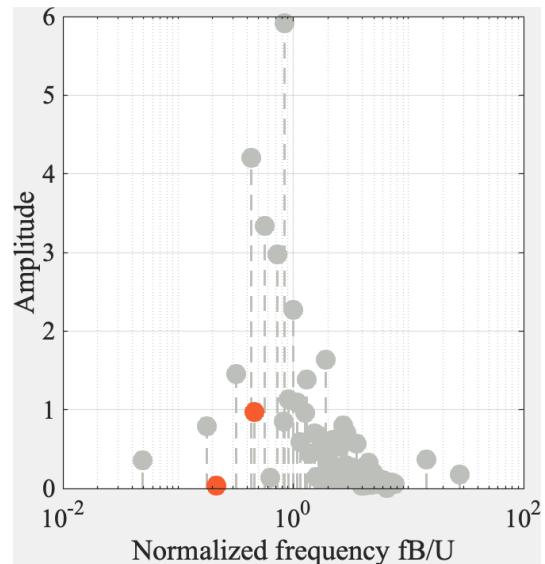


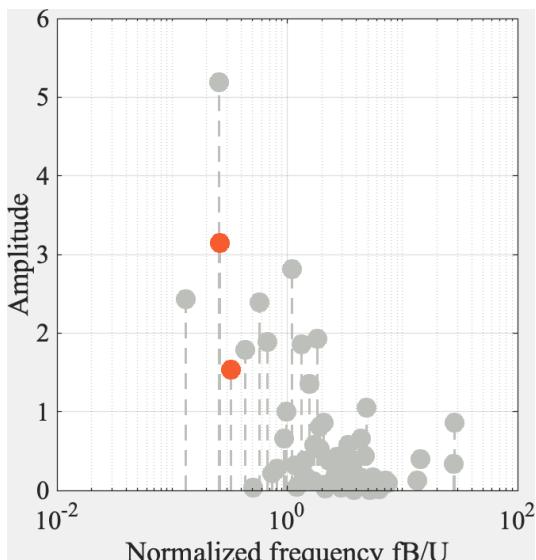
Figure 5: Dynamical evolution of selected micro-scale DMD modes.



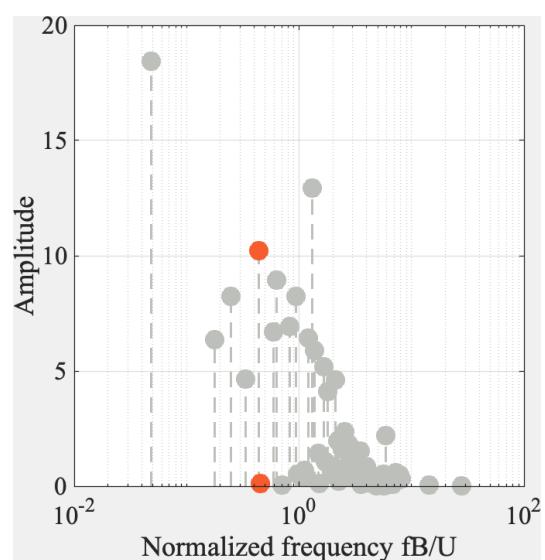
(a) Windward scenario



(b) Leftside scenario



(c) Leeward scenario



(d) Rightside scenario

Figure 6: Spectra properties of DMD results. The red dots denote the beating phenomenon.

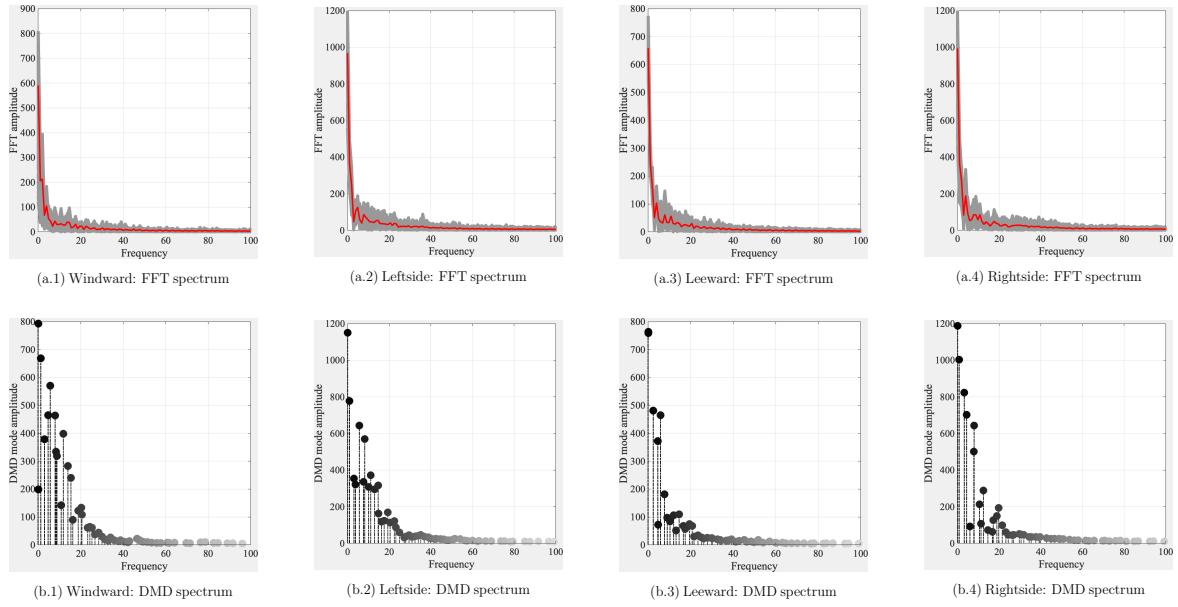
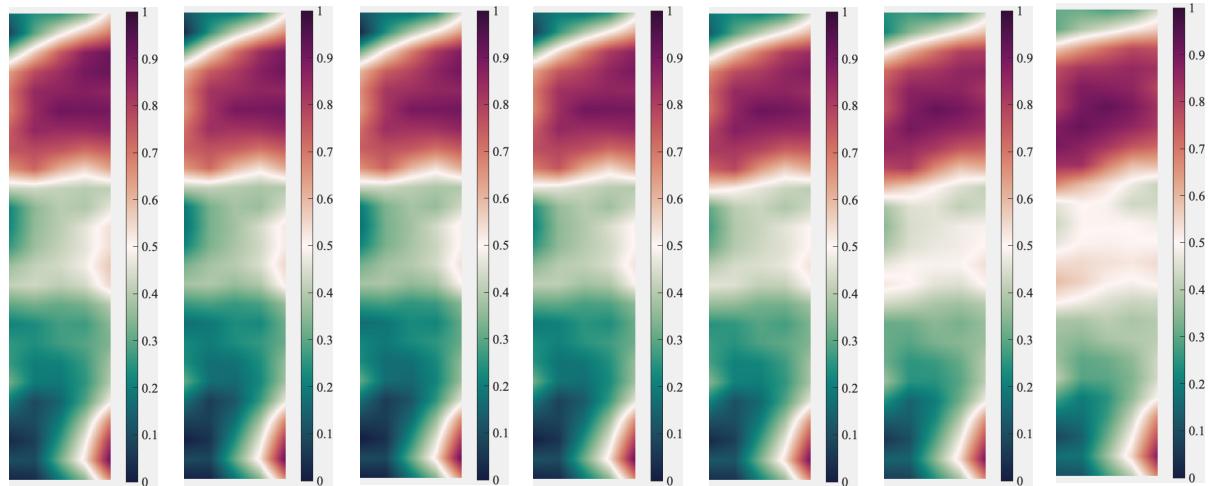
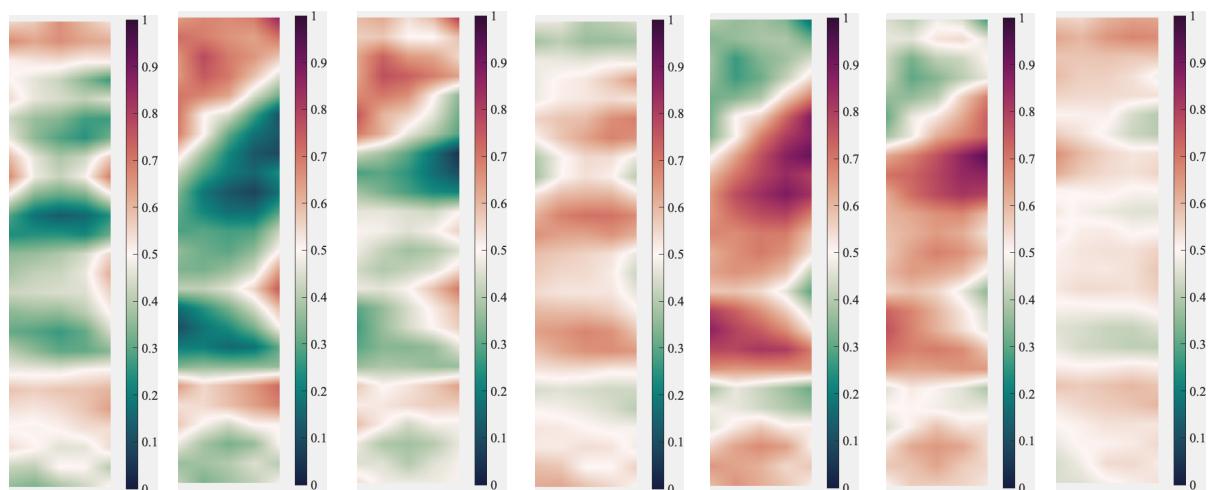


Figure 7: DFT and DMD spectrum. In the DFT spectrum representations, the gray band represent the discrete Fourier transform (DFT) results of 125 time-ordered sequences and the red line denotes their mean.

A. Temporal evolution of selected macro-scale DMD modes



B. Temporal evolution of selected meso-scale DMD modes



C. Temporal evolution of selected micro-scale DMD modes

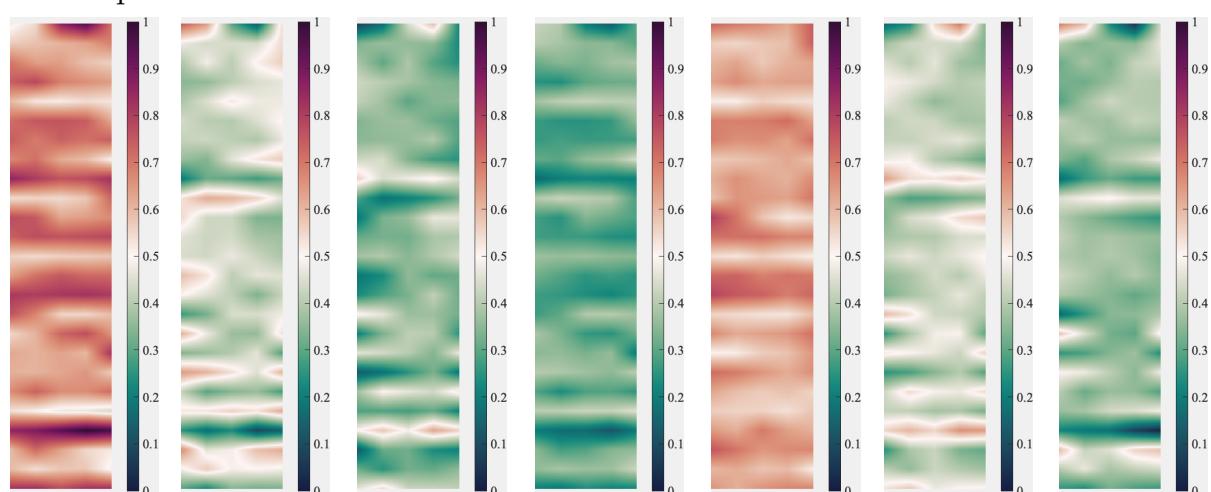
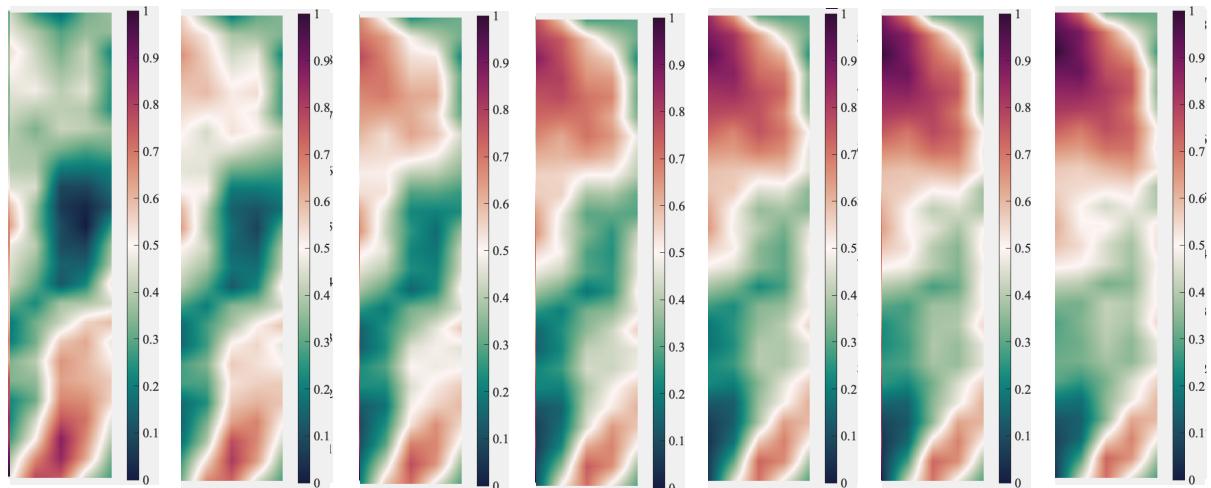
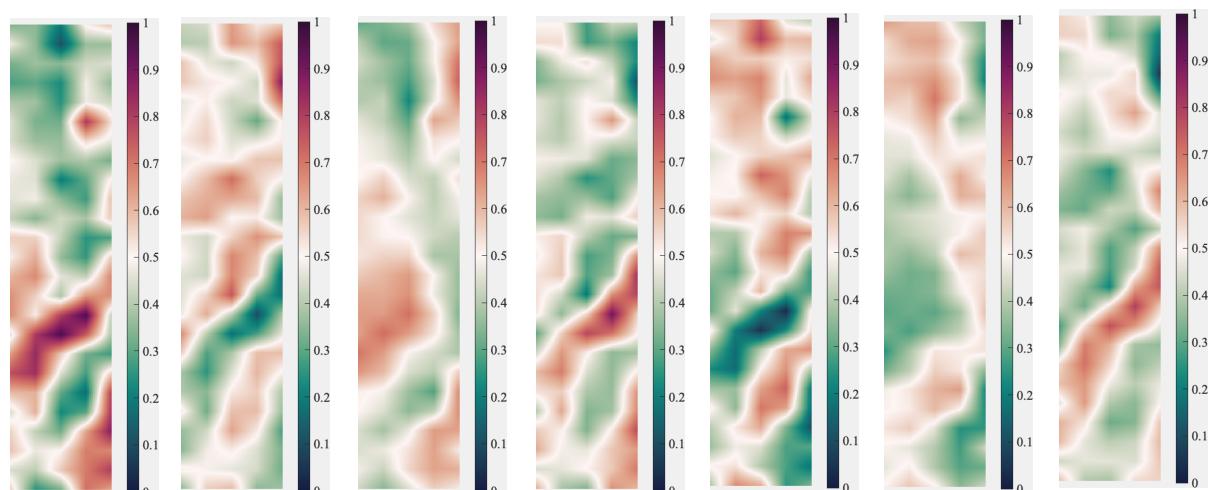


Figure 8: Temporal evolution of selected DMD modes: windward scenario

A. Temporal evolution of selected macro-scale DMD modes



B. Temporal evolution of selected meso-scale DMD modes



C. Temporal evolution of selected micro-scale DMD modes

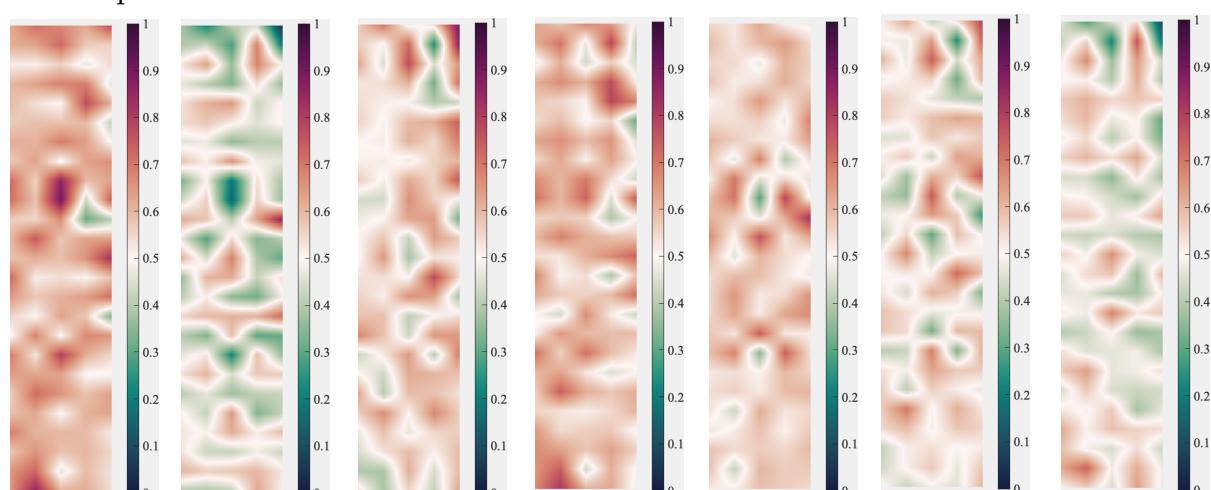
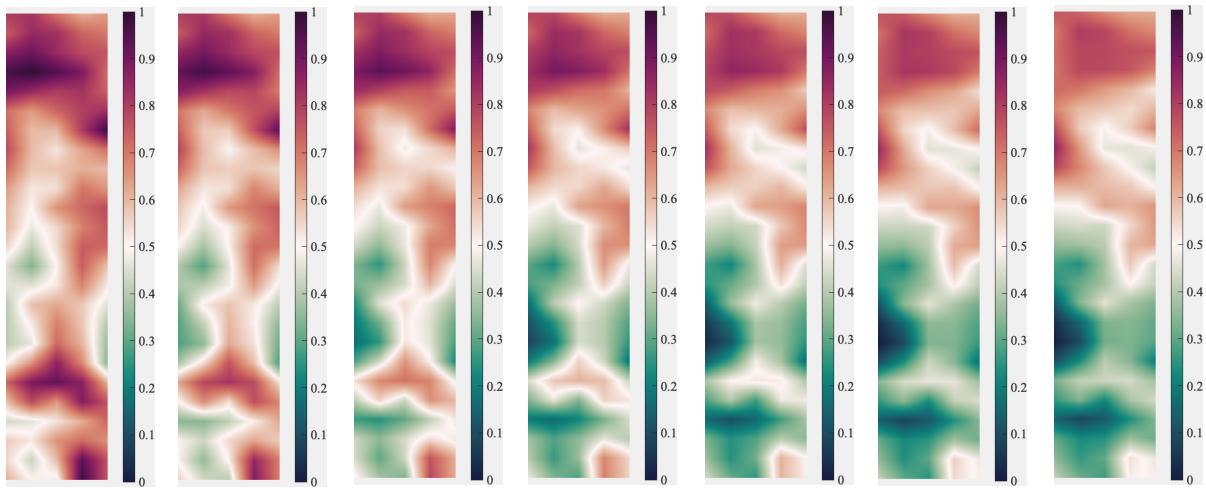
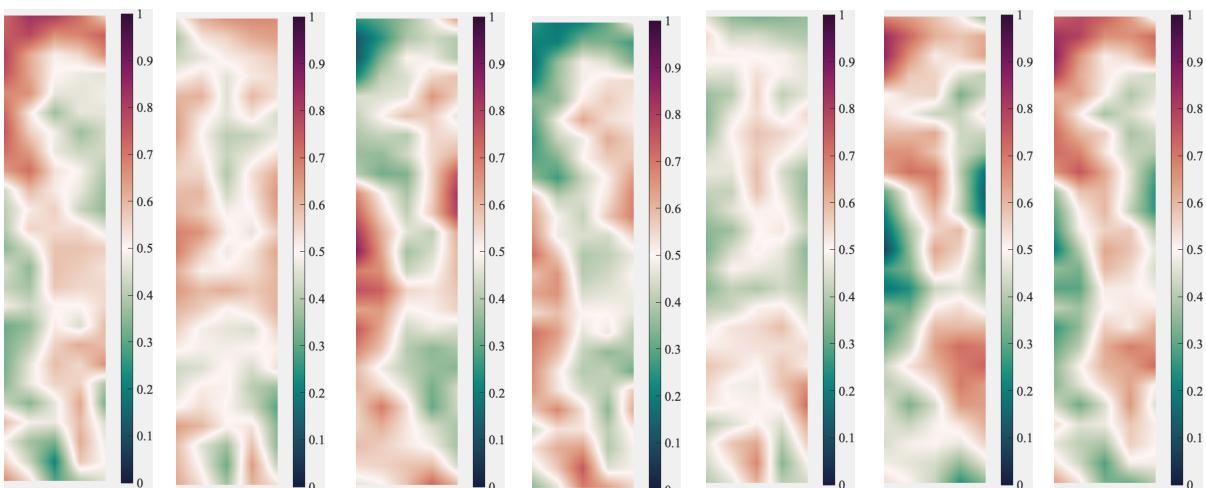


Figure 9: Temporal evolution of selected DMD modes: leftside scenario

A. Temporal evolution of selected macro-scale DMD modes



B. Temporal evolution of selected meso-scale DMD modes



C. Temporal evolution of selected micro-scale DMD modes

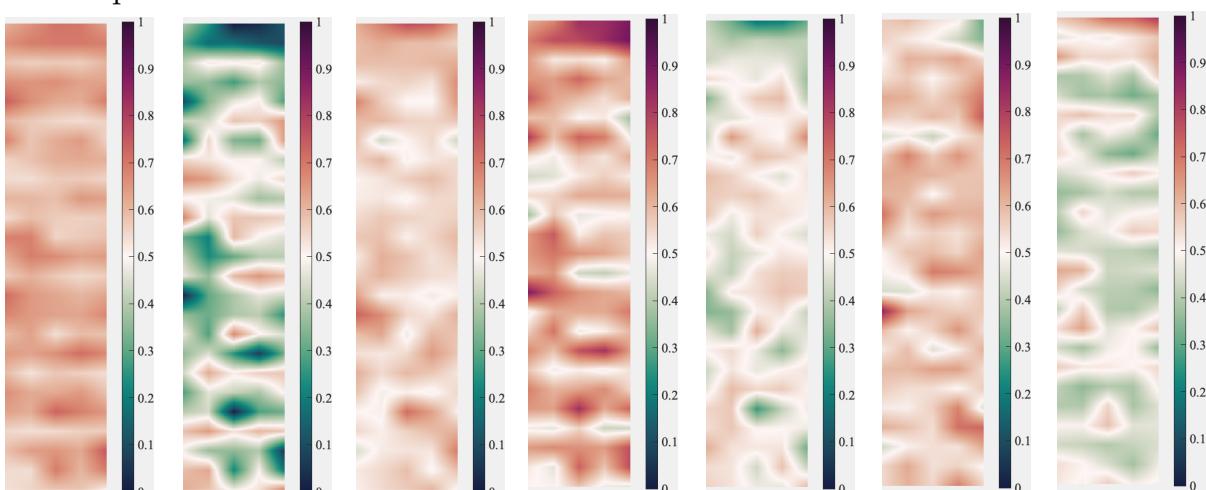
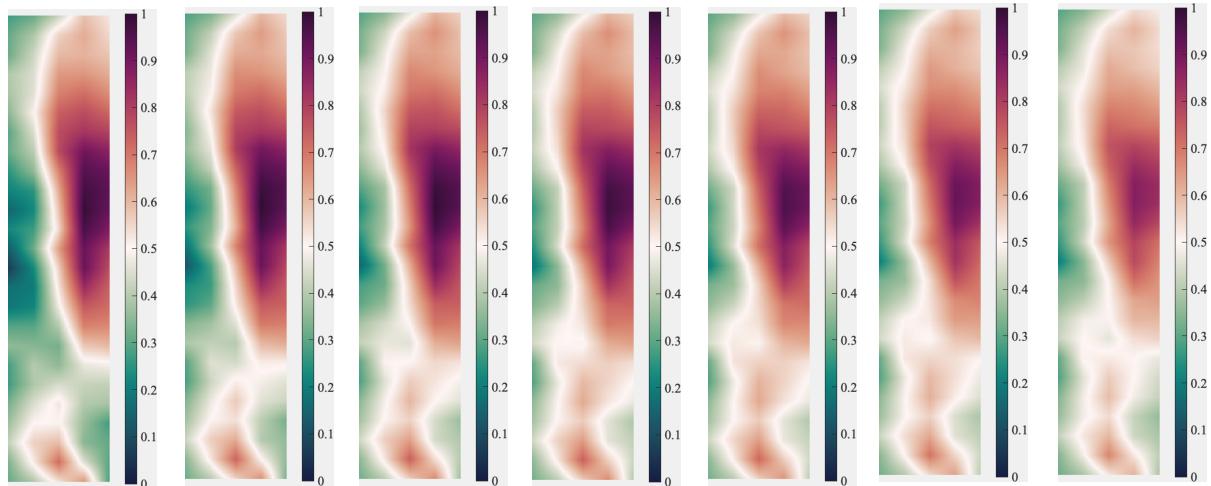
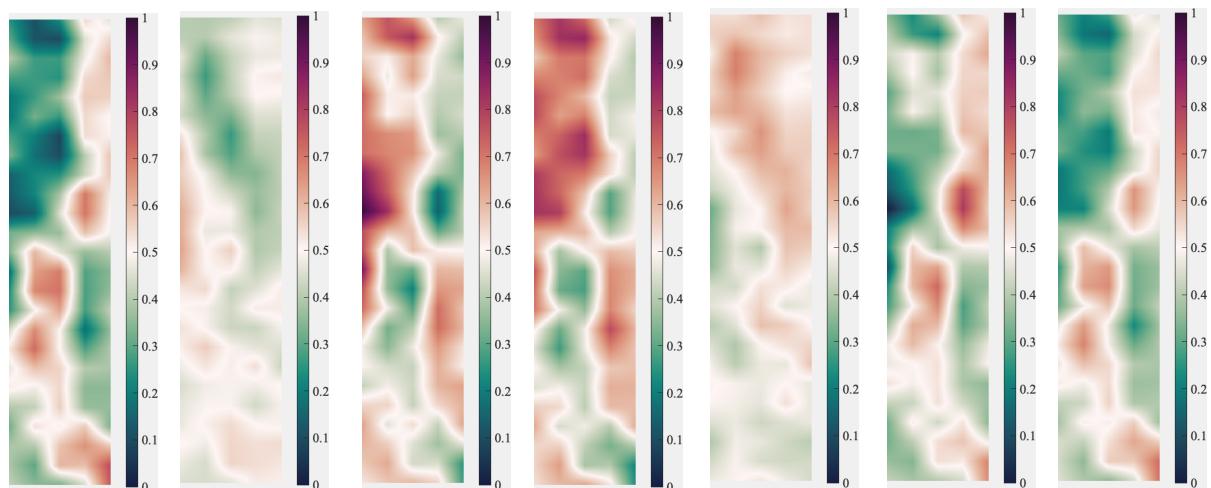


Figure 10: Temporal evolution of selected DMD modes: leeward scenario

A. Temporal evolution of selected macro-scale DMD modes



B. Temporal evolution of selected meso-scale DMD modes



C. Temporal evolution of selected micro-scale DMD modes

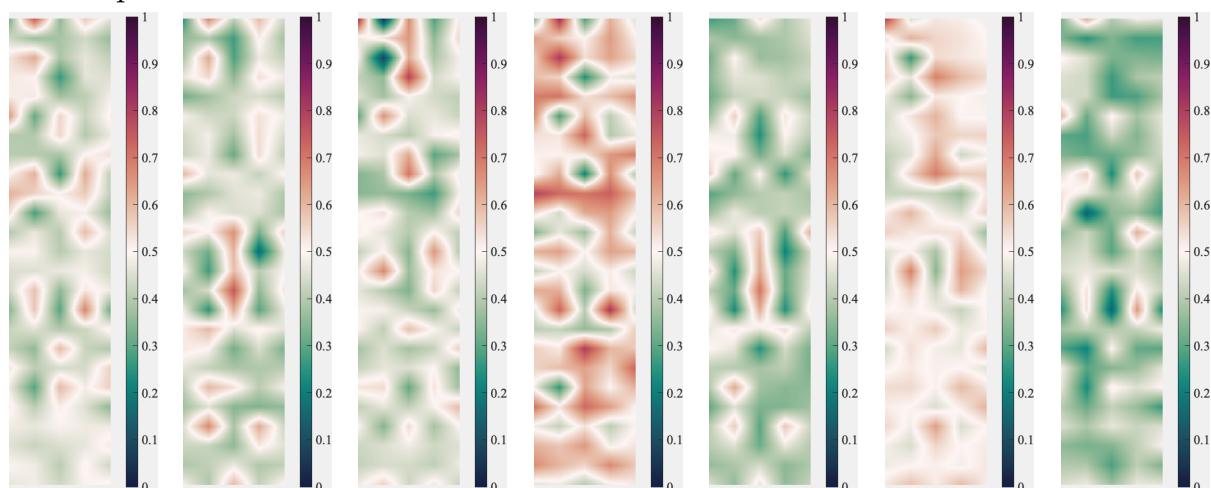


Figure 11: Temporal evolution of selected DMD modes: rightside scenario