

Figure S1. Land cover classification within the regional upscaling area of 35.8 km<sup>2</sup>.

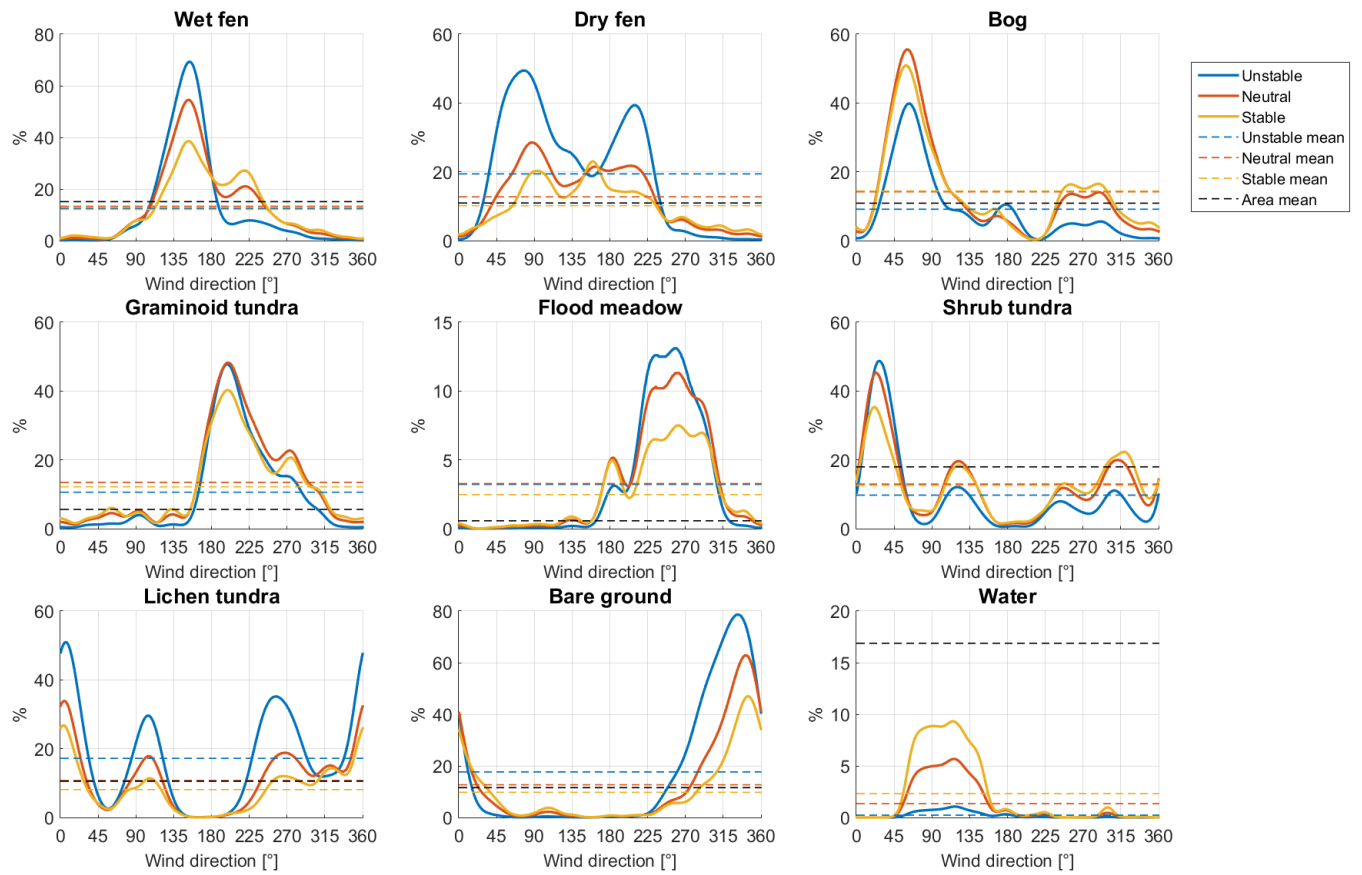


Figure S2. The footprint-weighted and area-averaged proportions of different land cover classes as a function of wind direction for the three flow conditions specified in Table 1.

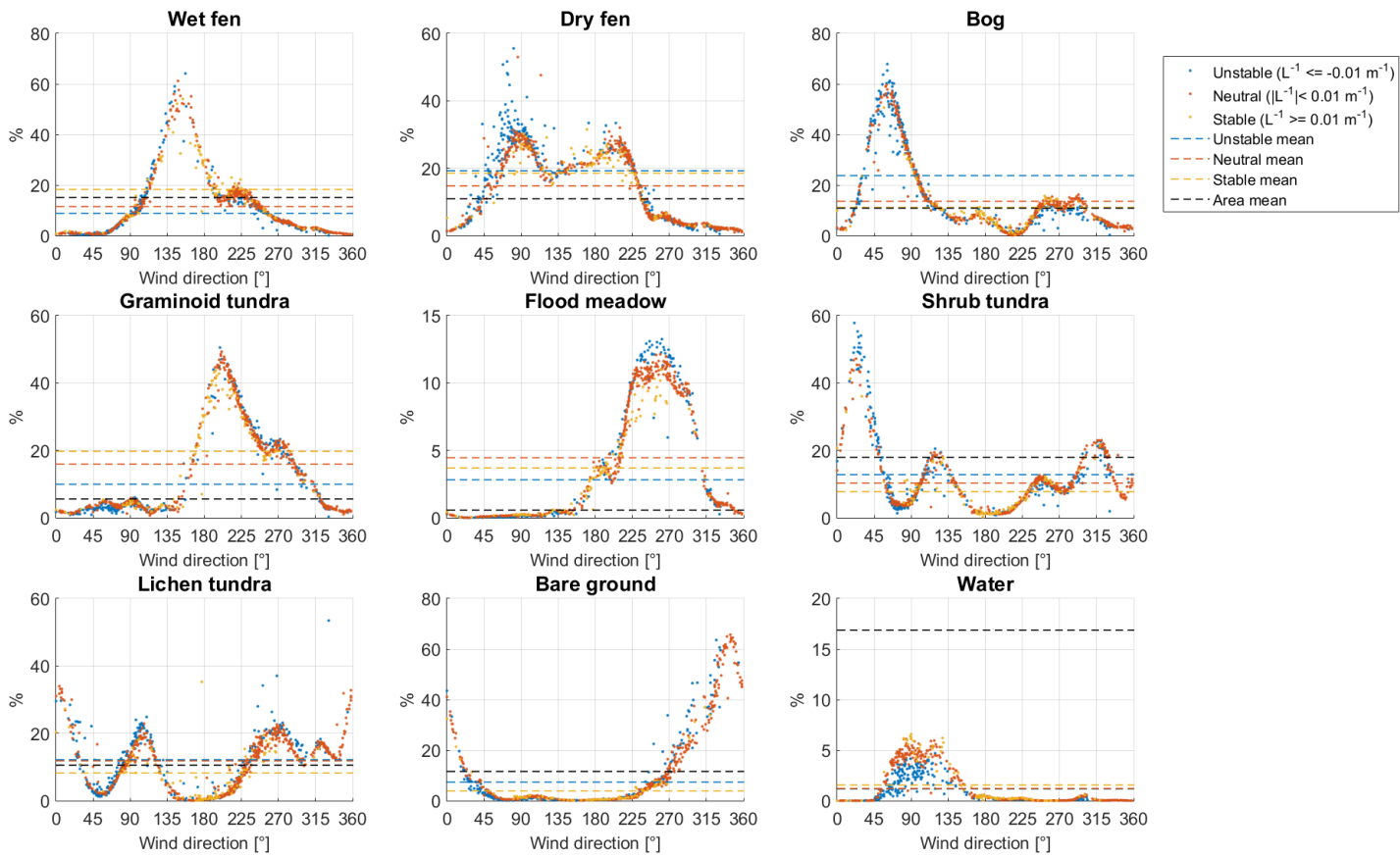


Figure S3. The footprint-weighted and area-averaged proportions of different land cover classes as a function of wind direction during the growing season of 2014.