

Structural characteristics of flow units in Svalbard valley glaciers and their utility for investigating ice-dynamic changes over centennial timescales

Stephen J. A. Jennings, Michael J. Hambrey, Neil F. Glasser, Bryn Hubbard, Timothy D. James, and Nicholas G. Midgley

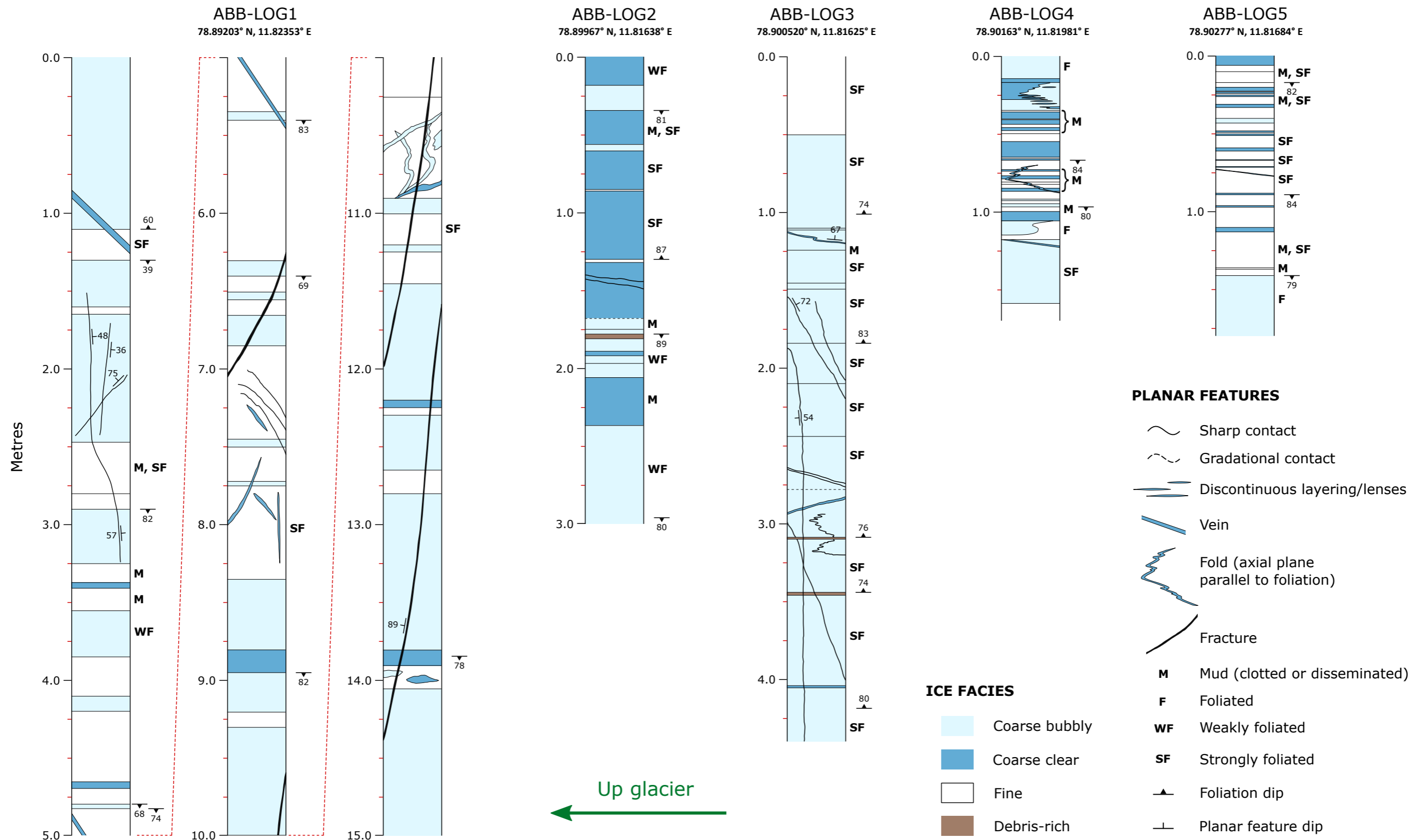


Figure S1. Cryo-lithological logs detailing the structural features, ice facies, sedimentological properties, and 3-D structural information collected at the surface of Austre Brøggerbreen. The exact location of each log is illustrated in Figure 1. Logs are numbered from up-glacier to down-glacier.

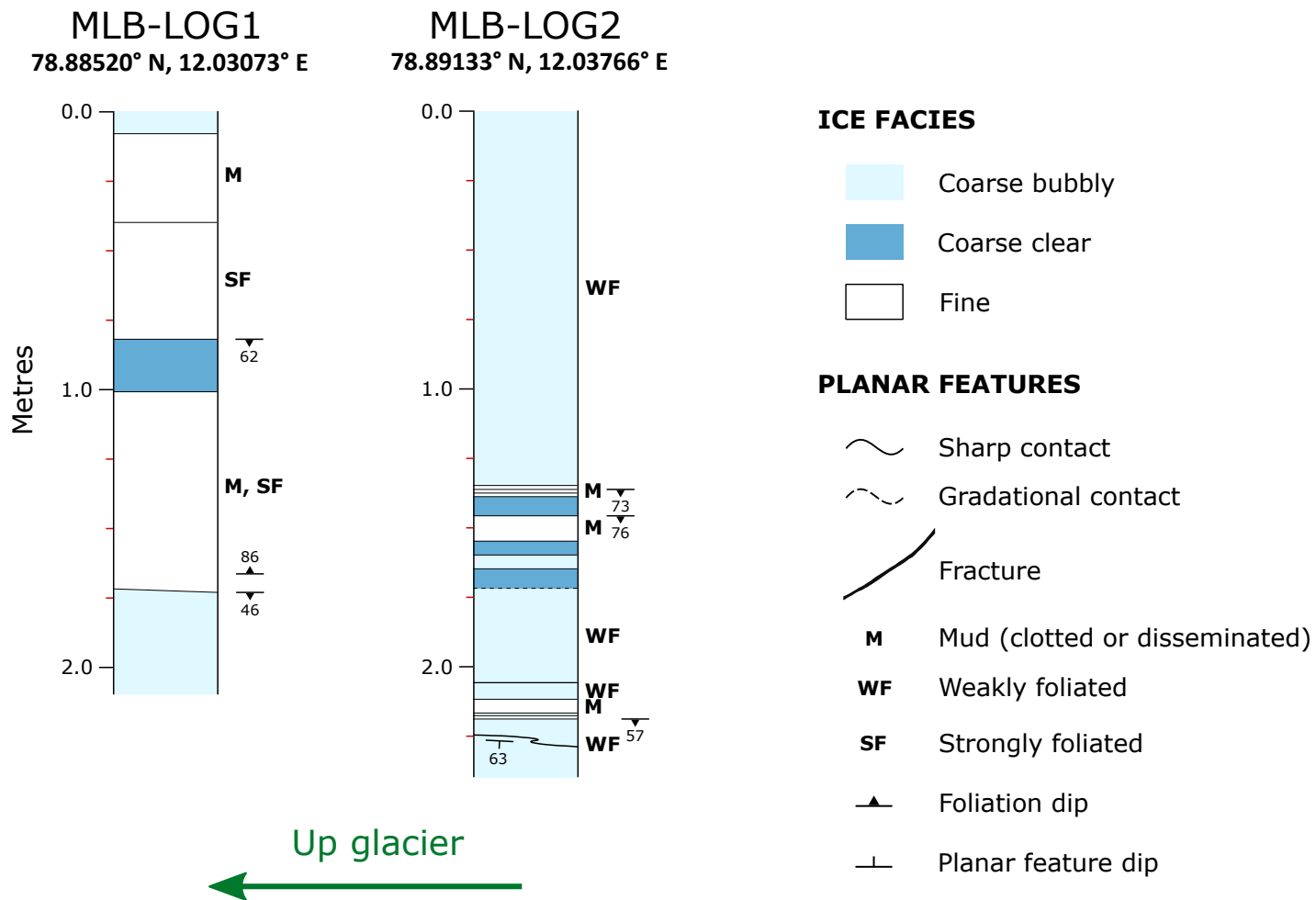


Figure S2. Cryo-lithological logs detailing the structural features, ice facies, sedimentological properties, and 3-D structural information collected at the surface of Midtre Lovénbreen. The exact location of each log is illustrated in Figure 1. Logs are numbered from up-glacier to down-glacier.

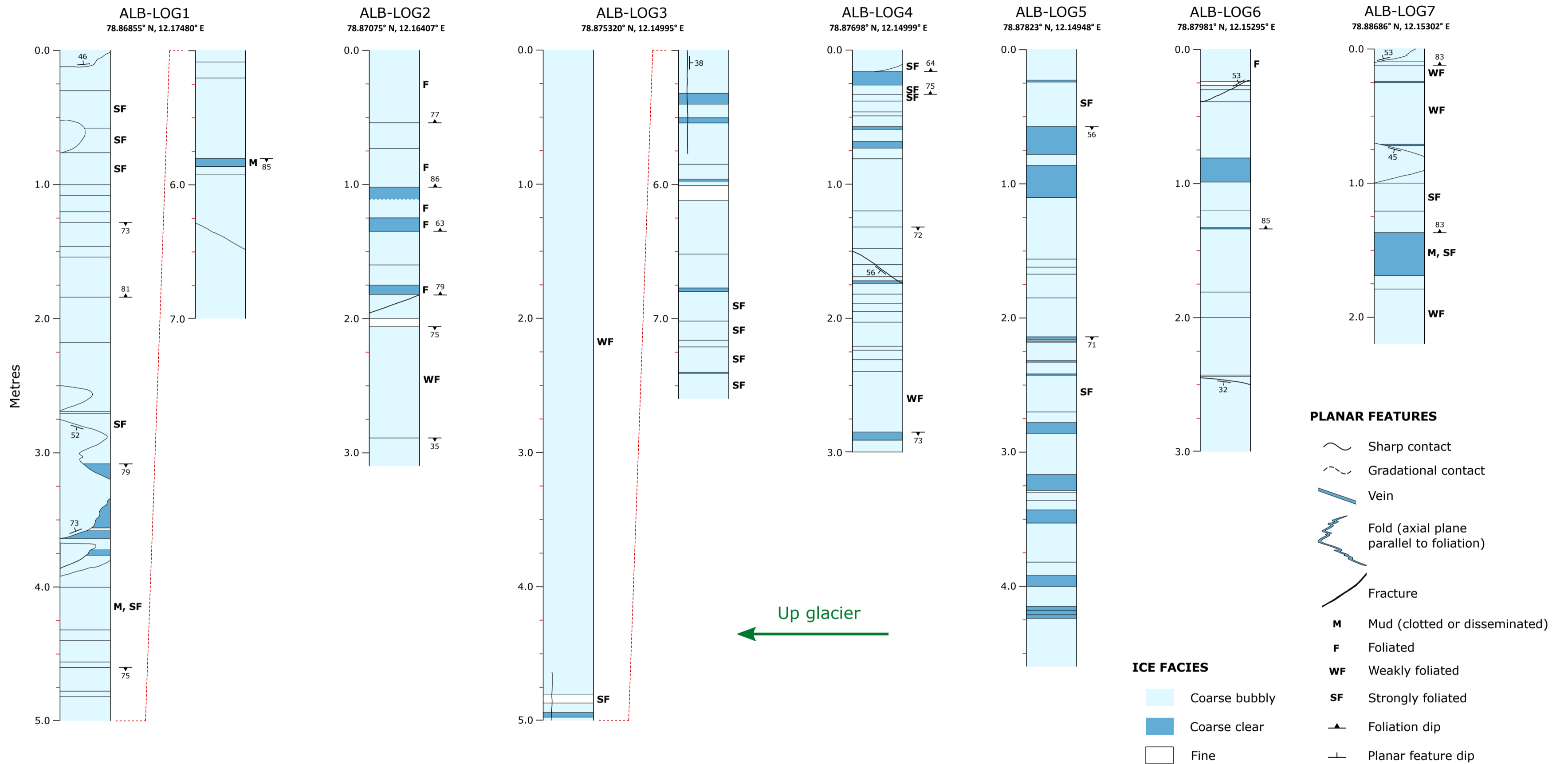


Figure S3. Cryo-lithological logs detailing the structural features, ice facies, sedimentological properties, and 3-D structural information collected at the surface of Austre Lovénbreen. The exact location of each log is illustrated in Figure 1. Logs are numbered from up-glacier to down-glacier.

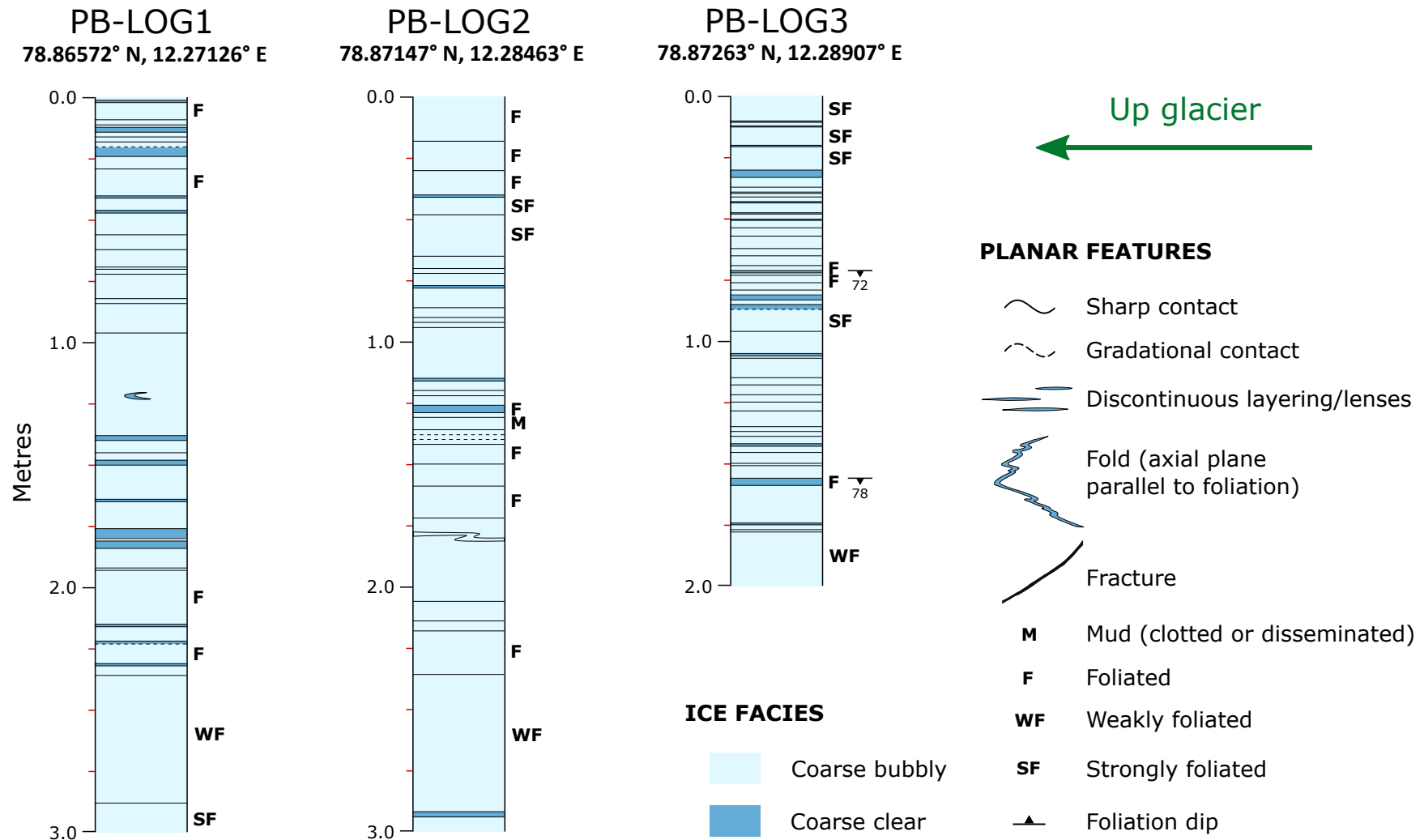


Figure S4. Cryo-lithological logs detailing the structural features, ice facies, sedimentological properties, and 3-D structural information collected at the surface of Pedersenbreen. Logs are located along the flow-unit boundary between Flow Units 1 and 2a. The exact location of each log is illustrated in Figure 1. Logs are numbered from up-glacier to down-glacier.

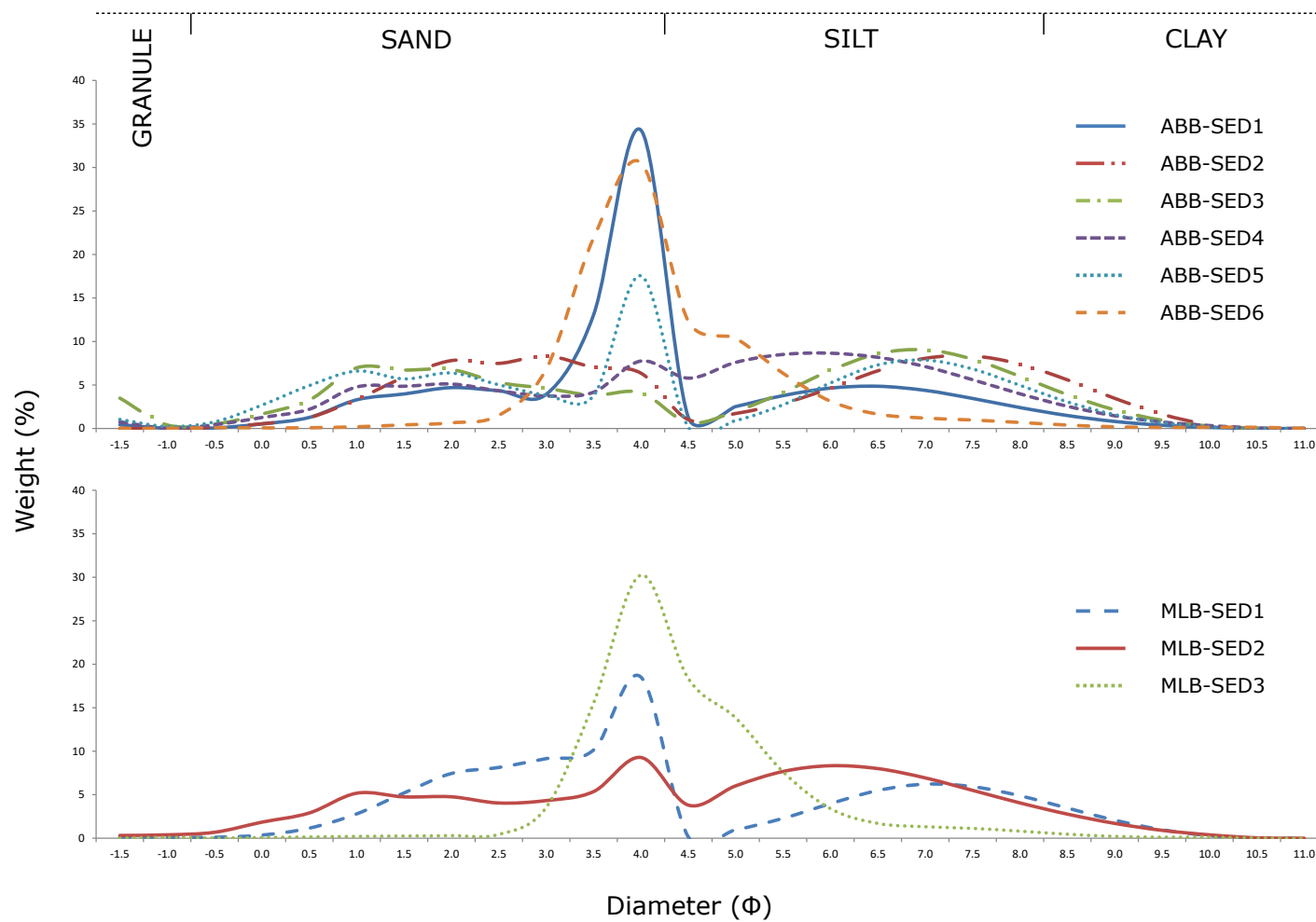


Figure S5. Particle grain size distributions for sediment samples collected at the surface of Austre Brøggerbreen (top) and Midtre Lovénbreen (bottom). Note the bimodal and polymodal distributions, and the prominent peak around the 4 Φ [0.063 mm] particle size.