

1 **Supplement to: Advancing interpretation of incoherent scattering in**
2 **ice penetrating radar data used for ice core site selection**

3
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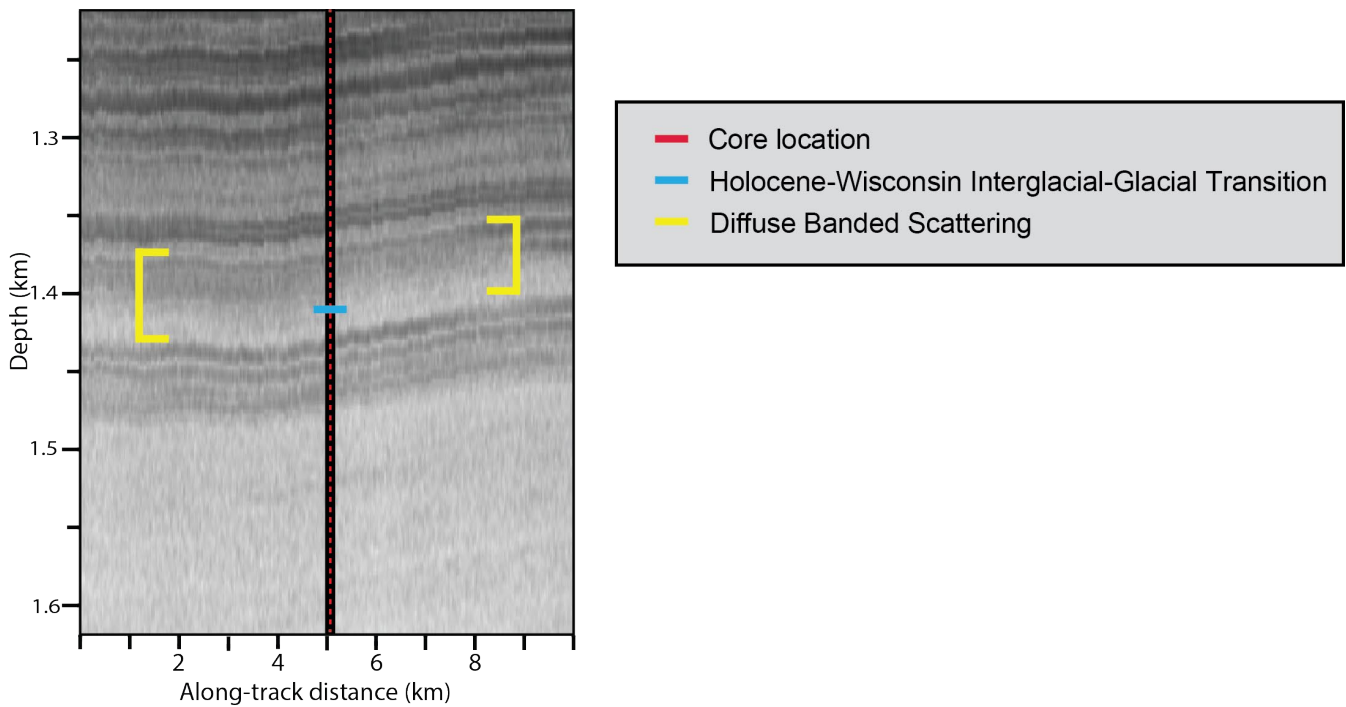
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8 Below, we provide three supplementary figures that provide the broader context that justifies interpretations of the radar data
9 in the main text. Here, we also include the reference list for Supplementary Tables 1 and 2.

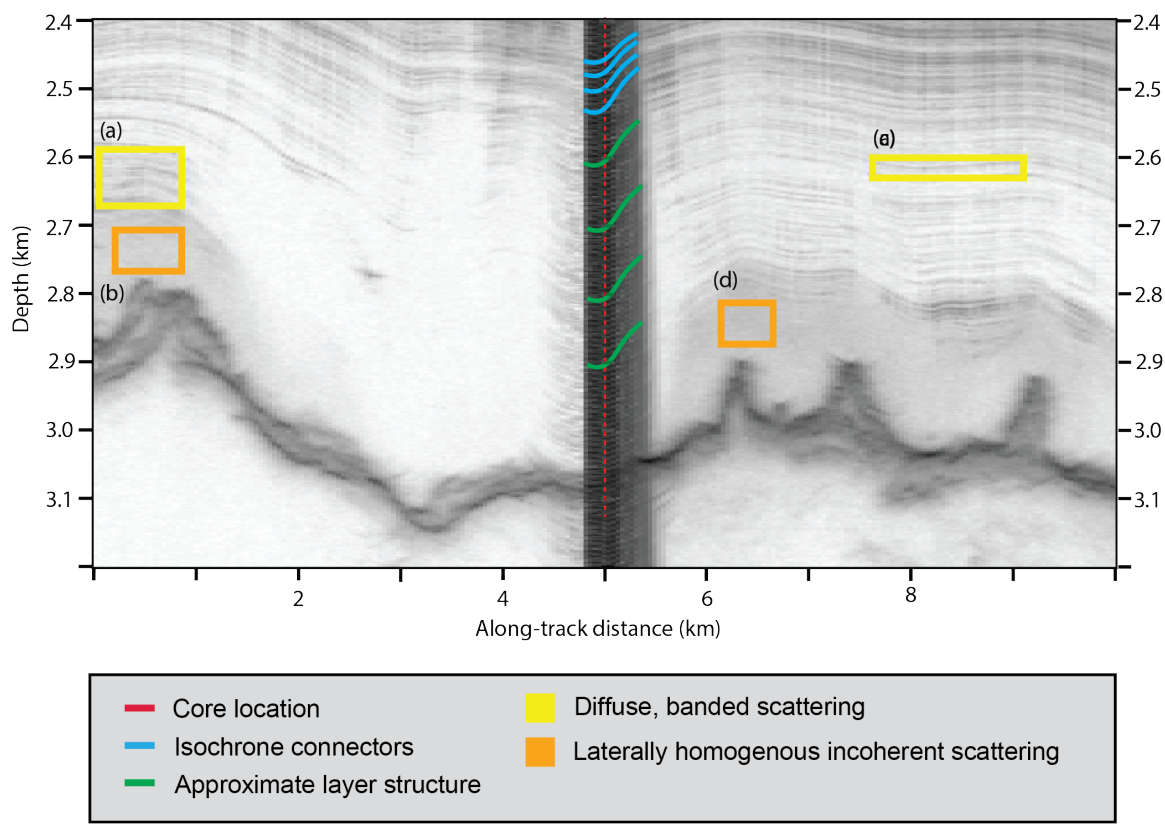
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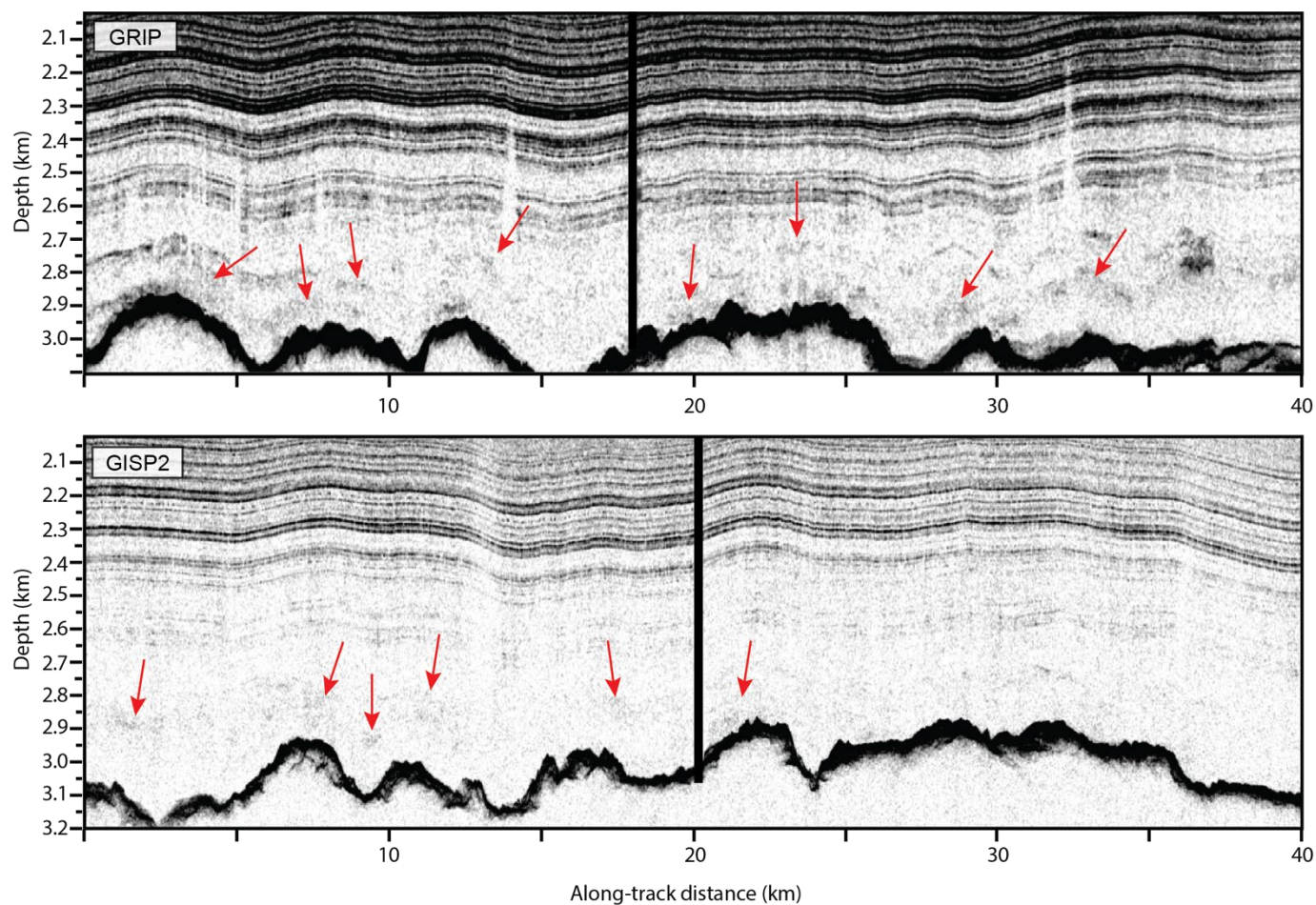
12 **Figure S1: NEEM radargram from depths spanning the Holocene-Wisconsin Interglacial-Glacial transition at 1419 m.**
13 **The climactic transition is coincident with a transition from a weak vertical girdle c-axis fabric to a strong single**
14 **maximum c-axis fabric and is collocated with a band of diffuse scattering in the radargram.**

15



18 **Figure S2: Dome Fuji radargram with layer tracing across borehole (strong scattering at the ice drill core site is caused**
19 **by borehole fluid in the ice core cavity). Examples of diffuse banded scattering (a,c) and laterally homogeneous**
20 **incoherent scattering (b,d). The diffuse banded layer at (c) dips to ~2700 m at the core site and the onset of the**
21 **homogenous incoherent scattering unit at (d) dips to ~2900 m at the core site.**

22



23

24 **Figure S3: 40 km length radar transects from GRIP and GISP2. Examples of strong laterally heterogeneous incoherent**
 25 **scattering indicated with red arrows. Black vertical line depicts location of ice core.**

26

27 **References in Supplementary Material**

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