Supplementary Materials

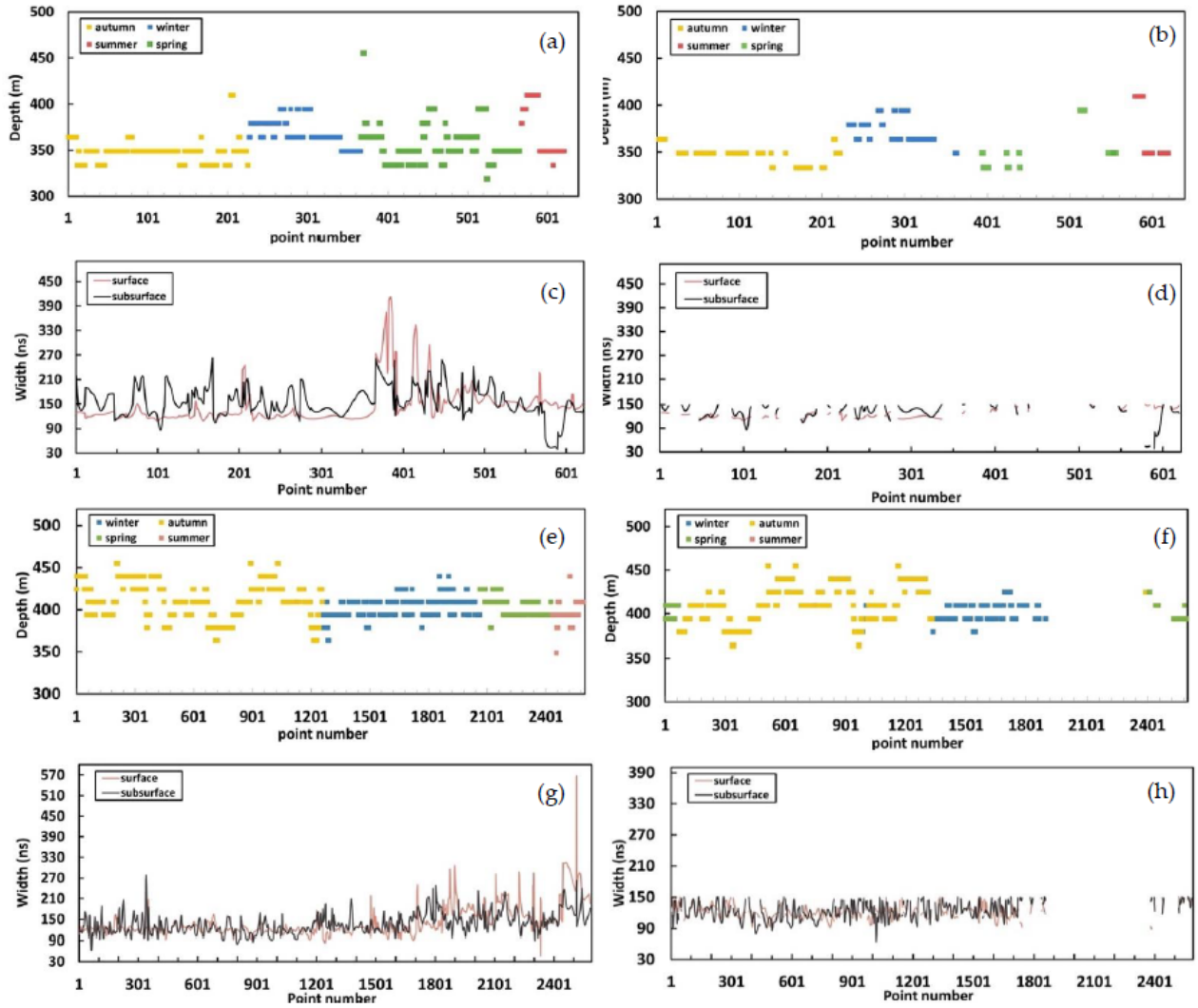
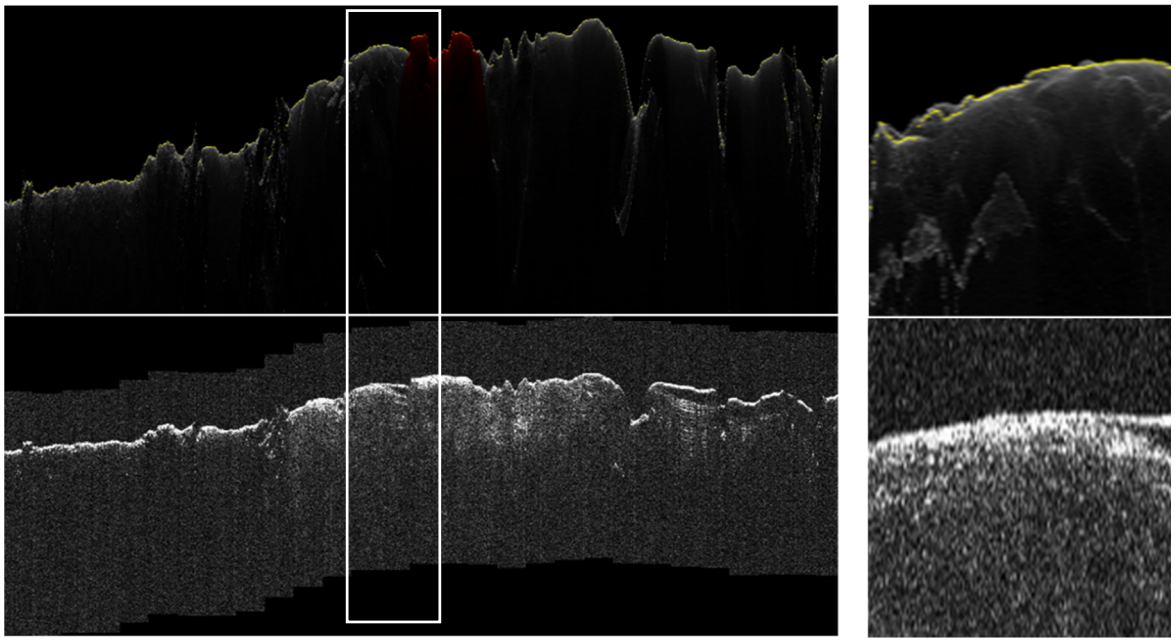


Figure S1. This group of pictures shows the thickness of AA_{3c} and the echo's width of the subsatellite point before and after filtering data in S1 (Figure S1 (**a**–**d**)) and S3 (Figure S1 (**e**–**h**)). Figure S1 (**a**,**c**), respectively, show the thickness of AA_{3c} and the width of the echo at 3dB before filtering the data. In Figure (**a**) the different colors represent different seasons, the red line in Figure (**c**) represents the width of the surface echo, and the black line represents the width of the subsurface echo. The right column, or Figure (**b**) and (**d**), shows the points of FWHM <150 ns in the same area. Figure S1.(**e**–**h**) are the same as above.

(**a**) (**b**)



(**c**) (**d**)

Figure S2. The white box shows the subsurface reflectors in SPLD, the track number is 0564201. (**b**) is the radargram, (**a**) is the clutter simulation. (**c**), (**d**) are the enlarged views in the white box.

Table S1. This is the supplementary material of Table 4. The index corresponds to that in Table 4. The third column CTX_number indicates the source of each DEM. Ls is the solar longitude corresponding to each CTX.

Region	Index	CTX_number	Ls (Degree)
S1	1	K08_056420_0927_XN_87S072W	227
		K08_056459_0926_XN_87S082W	229
	2	D12_031748_0931_XI_86S094W	313
		D12_031972_0931_XN_86S094W	323
	3	D12_031748_0931_XI_86S094W	313
		D12_031972_0931_XN_86S094W	323
S2	1	D06_029427_0924_XI_87S072W	201
		D06_029586_0932_XN_86S106W	208
	2	K08_056420_0927_XN_87S072W	227
		K08_056459_0926_XN_87S082W	229
	3	K11_057660_0929_XN_87S094W	288
		K11_057673_0930_XN_87S093W	288
	4	J10_048772_0932_XI_86S098W	284
		J10_048864_0933_XN_86S101W	289
	5	D12_031748_0931_XI_86S094W	313
		D12_031972_0931_XN_86S094W	323
	6	G12_022781_0930_XI_87S093W	306
		G12_022979_0931_XI_86S093W	315
	7	G13_023124_0931_XI_86S094W	321
		G13_023295_0923_XI_87S078W	329
	8	D12_032038_0930_XI_87S093W	325
		D12_032090_0920_XI_88S076W	328
	9	P12_005787_0869_XN_86S095W	334
		P12_005863_0883_XI_88S040W	337
S3	1	D06_029427_0924_XI_87S072W	201
		D06_029586_0932_XN_86S106W	208
	2	J10_048772_0932_XI_86S098W	284
		J10_048864_0933_XN_86S101W	289
	3	J13_049945_0927_XN_87S093W	337
		J13_049972_0930_XN_87S102W	338