

**Table 1.** Subglacial lakes depth, based on the Dowdeswell and Siegert (1999) approach; length, based on radar information (this work); area, assuming a circular body; and volumes.

Subglacial Lake	Latitude (EPSG:3031)	Longitude (EPSG:3031)	Depth (m)	Length (km)	Circular volume (km <sup>3</sup> )	Elliptical volume a (km <sup>3</sup> )	Elliptical volume b (km <sup>3</sup> )
SL1	-79.592	-93.789	45	1.77	0.11	0.44	0.03
SL2	-80.365	-92.854	100	0.48	0.02	0.07	0.00
SL3	-80.401	-92.805	200	0.61	0.06	0.23	0.01
SL4	-80.467	-92.719	200	2.92	1.34	5.36	0.34
SL5*	-80.617	-95.002	220	3.59	2.23	8.93	0.56
SL6	-80.424	-101.453	160	5.82	4.26	17.03	1.06
SL7	-79.851	-91.833	190	2.54	0.96	3.86	0.24
SL8	-80.280	-90.689	200	1.26	0.25	1.00	0.06
SL9	-80.232	-90.269	120	0.82	0.06	0.25	0.02
SL10	-80.160	-90.447	100	1.24	0.12	0.48	0.03
SL11	-80.342	-95.497	200	1.20	0.23	0.90	0.06
SL12	-80.408	-98.230	50	1.56	0.09	0.38	0.02
SL13*	-80.474	-103.378	220	5.15	4.58	18.32	1.15
SL14	-80.168	-101.199	80	2.86	0.51	2.05	0.13
SL15	-78.902	-91.483	210	5.19	4.44	17.78	1.11
SL16	-79.247	-91.032	70	10.93	6.57	26.26	1.64
SL17	-79.653	-90.022	200	4.18	2.75	10.99	0.69
SL18	-78.940	-88.355	50	0.74	0.02	0.08	0.01
SL19	-79.012	-91.183	50	0.36	0.01	0.02	0.00
SL20	-79.254	-90.111	50	1.24	0.06	0.24	0.02
SL21	-79.361	-89.257	120	1.07	0.11	0.43	0.03
SL22	-79.208	-89.507	150	1.16	0.16	0.63	0.04
SL23	-78.136	-90.967	50	1.22	0.06	0.23	0.01
SL24	-77.975	-91.163	35	1.14	0.04	0.14	0.01
SL25	-77.279	-91.952	25	2.56	0.13	0.52	0.03
SL26	-77.117	-92.124	25	2.71	0.14	0.58	0.04
SL27	-77.069	-92.174	30	1.20	0.03	0.14	0.01
SL28	-76.589	-95.580	100	1.51	0.18	0.72	0.04
SL29	-76.610	-96.132	50	2.50	0.25	0.98	0.06
SL30	-78.544	-90.011	130	0.42	0.02	0.07	0.00
SL31	-79.020	-100.812	100	1.77	0.24	0.98	0.06
SL32	-78.689	-90.607	220	1.49	0.38	1.54	0.10
SL33	-78.612	-89.176	50	0.42	0.01	0.03	0.00
SL34	-79.753	-95.192	200	1.37	0.29	1.17	0.07
SL35	-79.192	-91.115	100	0.63	0.03	0.12	0.01
SL36	-79.173	-89.676	100	1.32	0.14	0.55	0.03
SL37	-79.228	-89.796	80	1.03	0.07	0.27	0.02
<b>Total ***</b>					<b>30.95</b>	<b>123.79</b>	<b>7.74</b>

\* Water depth estimation is deeper than 220

\*\* Subglacial lake previously identified in other radar line

\*\*\* Total volume excluding SLE and repeated subglacial lakes

**Table 2.** Subglacial lakes physical details. The table shows which flight line host each subglacial lakes, the Bed Reflection Power (BRP) calculation and the specularity of the surface of each water body ( $\sigma$ BRP). Additionally, we calculated the ice and water surface slope (degrees) and classify each subglacial lake according our confidence.

Subglacial Lake #	Flight line	Avg. BRPr	Max. BRPr	Min. BRPr	Avg. $\sigma$ BRP	Avg. Water surf. Slope ( $^{\circ}$ )	Avg. Ice surf. slope ( $^{\circ}$ )	Classification
SL1	B01	34.14	41.72	26.63	0.33	3.56	1.92	Definite
SL2	B01	52.80	73.10	34.10	1.64	1.54	4.03	Dim
SL3	B01	42.80	57.70	25.30	1.32	3.30	2.60	Dim
SL4	B01	33.50	46.90	21.60	0.65	0.12	0.88	Dim
SL5	B01	30.00	42.00	24.00	0.78	0.80	0.05	Definite
SL6	B01	25.40	30.10	22.41	0.34	4.40	0.15	Dim
SL7	B02	38.24	47.47	25.70	0.75	2.29	0.60	Definite
SL8	B02	38.65	47.45	30.70	0.78	2.85	0.15	Definite
SL9	B02	41.31	56.57	28.50	0.87	4.23	0.37	Definite
SL10	B02	52.48	59.85	36.25	0.80	9.52	0.46	Definite
SL11	B02	25.61	28.93	22.93	0.27	2.27	0.08	Dim
SL12	B02	39.72	56.67	28.73	1.11	10.30	0.14	Fuzzy
SL13	B02	25.23	31.29	21.64	0.41	0.74	0.15	Dim
SL14	B02	32.41	44.83	25.02	0.92	1.75	0.06	Fuzzy
SL15	B03	38.64	51.04	29.08	0.65	1.27	0.09	Definite
SL16	B03	40.06	52.52	27.33	0.78	1.12	0.06	Fuzzy
SL17	B03	43.67	58.65	27.11	1.04	2.34	0.34	Dim
SL18	B05	38.39	44.62	30.29	0.73	2.66	0.31	Indistinct
SL19	B05	40.92	49.18	32.89	0.94	6.00	0.35	Definite
SL20	B05	30.75	35.01	25.73	0.33	0.32	0.09	Dim
SL21	B05	46.90	57.13	29.84	0.88	0.94	0.21	Dim
SL22	B05	34.35	41.94	26.51	0.58	1.08	0.12	Dim
SL23	B08	63.86	77.95	39.81	0.90	1.73	0.19	Definite
SL24	B08	69.58	80.19	61.55	0.83	1.98	0.37	Dim
SL25	B08	44.57	56.13	29.14	0.81	0.43	0.19	Definite
SL26	B08	44.01	54.21	30.08	0.70	0.38	0.12	Dim
SL27	B08	55.59	67.08	47.22	0.75	3.39	0.51	Dim
SL28	B08	42.06	54.22	27.85	0.97	1.76	0.17	Definite
SL29	B08	54.66	65.56	39.25	0.84	1.07	0.42	Dim
SL30	B08	61.70	65.50	55.41	0.70	10.46	0.19	Indistinct
SL31	B09	38.22	46.40	27.11	0.77	1.43	0.17	Definite
SL32	B09	42.63	53.03	36.44	1.03	10.89	0.17	Fuzzy
SL33	B09	47.76	55.40	44.00	0.82	1.32	0.34	Dim
SL34	B22	32.62	35.60	26.11	0.34	11.64	0.10	Dim
SL35	T04	26.97	30.82	21.09	0.27	12.34	0.40	Dim
SL36	T04	29.15	32.64	23.79	0.44	4.83	0.05	Definite
SL37	T04	30.69	32.61	25.75	0.31	1.43	0.09	Dim