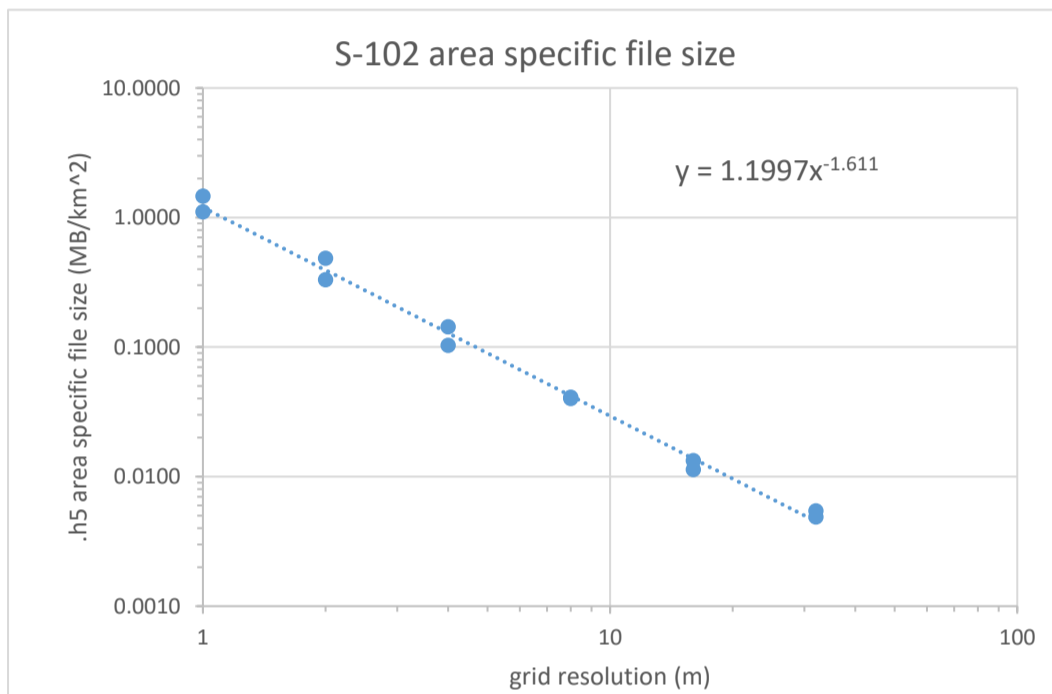


Test area (km²) 9.0045

Multibeam data rendered at 1 m resolution, with arbitrary uncertainty band of uniform value 5.15 m.

Regrid resolution (m)	CSAR0 (MB)	.h5 (MB)	.h5/km ² (MB/km ²)
1	88.76	13.14	1.4593
2	24.8	4.36	0.4842
4	7.26	1.29	0.1433
8	2.2	0.37	0.0411
16	0.66	0.12	0.0133
32	0.17	0.049	0.0054
1	30.381	9.949	1.1049 NZ data
2	23.709	2.983	0.3313 NZ data
4	6.389	0.926	0.1028 NZ data
8	1.637	0.361	0.0401 NZ data
16	0.361	0.102	0.0113 NZ data
32	0.117	0.044	0.0049 NZ data



Aus and NZ data

.h5 file size equation

$.h5 \text{ (MB)} = x * (1.1997 * (y^{-1.611}))$

where

x = S-102 dataset area (km²)

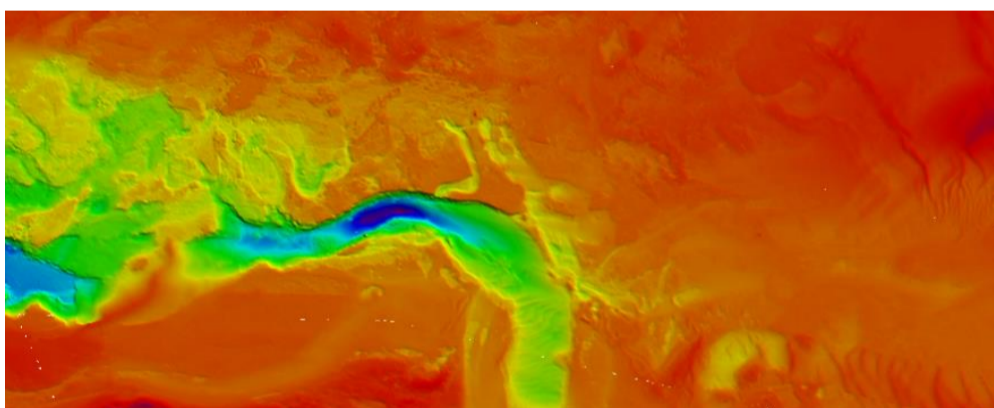
y = grid resolution (m)

Area (km ²)	3.42
Grid resolution (m)	3
.h5 file (MB)	1.146

Aus data

4500 m

2001 m



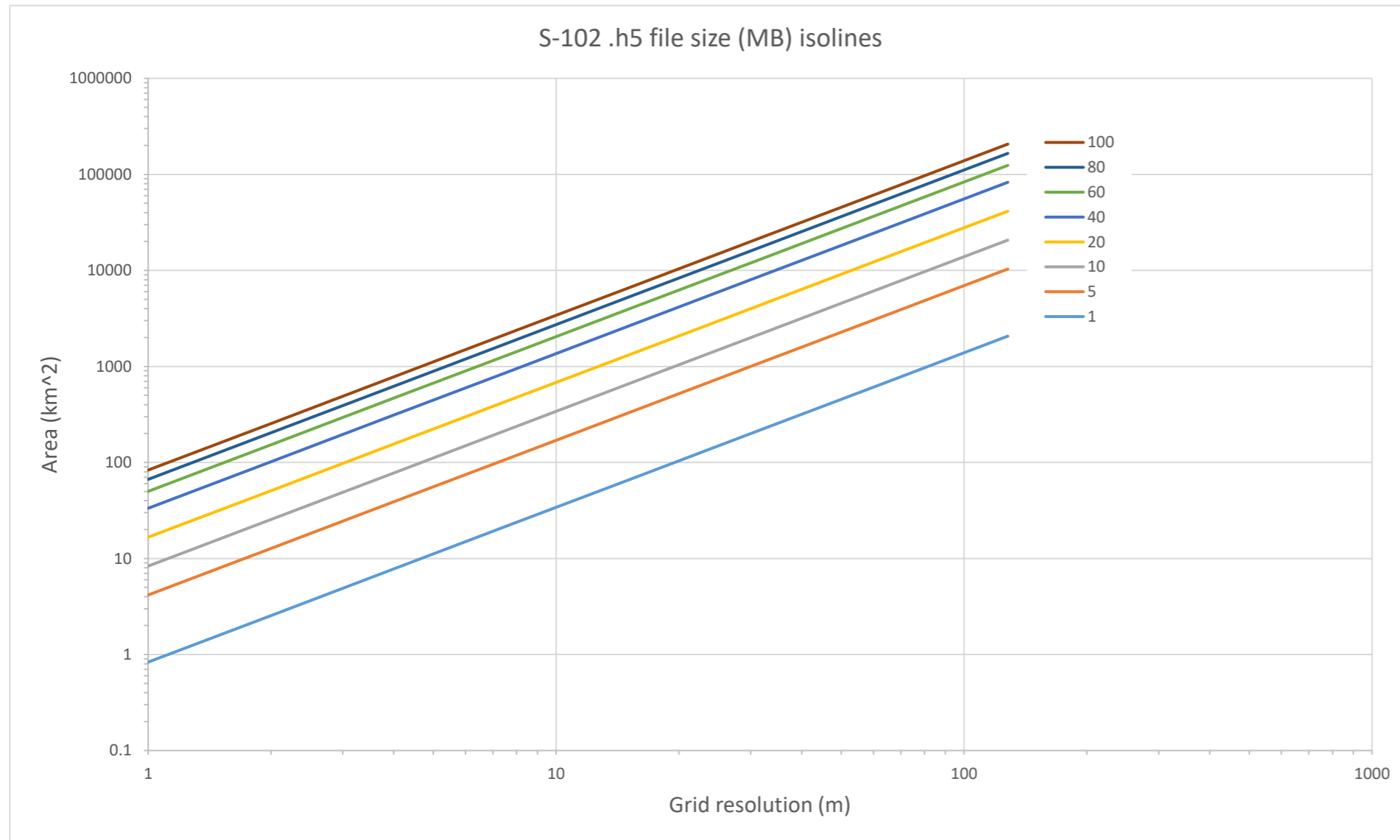
Prepared by Paul Rustomji, Australian Hydrographic Office, Department of Defence

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Scale	Informative Grid Resolution	Grid Res (m)	Resulting Tile Size (nautical miles) @ 10 MB	Product length (nm)	Product Area (km2)	Calculated tile size (MB)	
1:10,000,000	900 metres	900	291 X 291				
1:3,500,000	900 metres	900	291 X 291	291	289820.72	6.05	
1:1,500,000	450 metres	450	145 X 145	145	71958.06	4.59	
1:700,000	210 metres	210	68 X 68	68	15825.64	3.45	
1:350,000	105 metres	105	34 X 34	34	3956.41	2.63	
1:180,000	54 metres	54	17.5 X 17.5	17.5	1048.14	2.04	<- supposedly all approx 10 MB!
1:90,000	27 metres	27	8.7 X 8.7	8.7	259.05	1.54	
1:45,000	13 metres	13	4.2 X 4.2	4.2	60.37	1.16	
1:22,000	6 metres	6	1.9 X 1.9	1.9	12.36	0.83	
1:12,000	3 metres	3	1.0 X 1.0	1	3.42	0.70	
1:8,000	2 metres	2	0.6 X 0.6	0.6	1.23	0.48	
1:4,000	1 metres	1	0.3 X 0.3	0.3	0.31	0.37	
1:3,000	1 metres	1	0.3 X 0.3	0.3	0.31		
1:2,000	1 metres	1	0.3 X 0.3	0.3	0.31		
1:1,000	1 metres	1	0.3 X 0.3	0.3	0.31		

Intercept 1.1997
Exponent -1.611

	File size (MB)												
Resolution	1	5	10	15	20	30	40	50	60	70	80	90	100
1	0.833541719	4.167709	8.335417	12.50313	16.67083	25.00625	33.34167	41.67709	50.0125	58.34792	66.68334	75.01875	83.35417
2	2.546165705	12.73083	25.46166	38.19249	50.92331	76.38497	101.8466	127.3083	152.7699	178.2316	203.6933	229.1549	254.6166
4	7.777606867	38.88803	77.77607	116.6641	155.5521	233.3282	311.1043	388.8803	466.6564	544.4325	622.2085	699.9846	777.7607
8	23.75775012	118.7888	237.5775	356.3663	475.155	712.7325	950.31	1187.888	1425.465	1663.043	1900.62	2138.198	2375.775
16	72.57125494	362.8563	725.7125	1088.569	1451.425	2177.138	2902.85	3628.563	4354.275	5079.988	5805.7	6531.413	7257.125
32	221.678695	1108.393	2216.787	3325.18	4433.574	6650.361	8867.148	11083.93	13300.72	15517.51	17734.3	19951.08	22167.87
64	677.1474997	3385.737	6771.475	10157.21	13542.95	20314.42	27085.9	33857.37	40628.85	47400.32	54171.8	60943.27	67714.75
128	2068.43845	10342.19	20684.38	31026.58	41368.77	62053.15	82737.54	103421.9	124106.3	144790.7	165475.1	186159.5	206843.8



V2 incorporates NZ data

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