

Additional data sets for Spearman's Rank practice

1. Total alkalinity and dissolved inorganic carbon

Sample date	Total alkalinity (umol/kg)	Rank	Dissolved inorganic carbon (umol/kg)	Rank	d	d^2
17/03/10	2137		2003			
19/03/10	2114		2000			
21/03/10	2134		2006			
23/03/10	2129		2001			
25/03/10	2123		2001			
27/03/10	2117		2002			
29/03/10	2142		2008			
31/03/10	2109		2002			
02/04/10	2115		2009			
04/04/10	2121		2007			
06/04/10	2121		2013			
08/04/10	2128		2008			
10/04/10	2129		2010			
12/04/10	2155		2010			
14/04/10	2142		2023			
16/04/10	2144		2018			
18/04/10	2138		2029			
20/04/10	2134		2025			
22/04/10	2143		2024			
24/04/10	2140		2025			

Σd^2	
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$$r = 1 - \frac{6 \Sigma d^2}{n^3 - n}$$

2. Temperature and salinity

Sample date	Temperature (°C)	Rank	Salinity (parts per thousand ‰)	Rank	d	d^2
17/03/10	-1.644		29.94			
19/03/10	-1.644		29.94			
21/03/10	-1.644		30.04			
23/03/10	-1.643		30.23			
25/03/10	-1.641		30.46			
27/03/10	-1.640		29.98			
29/03/10	-1.641		29.99			
31/03/10	-1.642		29.97			
02/04/10	-1.647		30.11			
04/04/10	-1.646		30.08			
06/04/10	-1.649		30.30			
08/04/10	-1.649		30.12			
10/04/10	-1.645		30.16			
12/04/10	-1.651		30.16			
14/04/10	-1.652		30.23			
16/04/10	-1.652		30.19			
18/04/10	-1.652		30.26			
20/04/10	-1.654		30.26			
22/04/10	-1.650		30.34			
24/04/10	-1.654		30.28			

Σd^2	
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$$r = 1 - \frac{6 \Sigma d^2}{n^3 - n}$$