Ingesting object data from a CMAR sources

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2023-12-14

Contents

1 Introduction 1

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Members of Centre for Marine Applied Research (CMAS) sent me information on their mooring equipment, in a combination of emails and a csv file. For details of how I processed these, see the work/cmar.R and work/Makefile files.

The results of the processing are as follows, with buoyancy in kg, distance in metres, and area in square metres. All these entries are incorporated into the built-in objects.

Table 1: Contents of the anchors_cmar.csv file.

name	buoyancy	height	area	$^{\mathrm{CD}}$	code	source	originalName
1 rotor	-6.953	0.06350	0.01854	1.3	NA	CMAR	
2 rotor	-13.907	0.07874	0.03708	1.3	NA	CMAR	-
3 rotor	-20.860	0.09398	0.05563	1.3	NA	CMAR	_
4 rotor	-27.814	0.10922	0.07417	1.3	NA	CMAR	-
5 rotor	-34.767	0.12446	0.09271	1.3	NA	CMAR	_
6 rotor	-41.720	0.13970	0.11125	1.3	NA	CMAR	_
7 rotor	-48.674	0.15494	0.12979	1.3	NA	CMAR	_
8 rotor	-55.627	0.17018	0.14834	1.3	NA	CMAR	-
9 rotor	-62.580	0.18542	0.16688	1.3	NA	CMAR	-
10 rotor	-69.534	0.20066	0.18542	1.3	NA	CMAR	

Table 2: Contents of floats_cmar.csv file.

name	buoyancy	height	area	CD	code	source	originalName
14in centre hole tfloat 11in centre hole tfloat 8in centre hole tfloat	18.040 7.770 2.752	0.356 0.279 0.203	0.099315 0.061312 0.032429	0.6 0.6 0.6	NA NA NA	CMAR	14in centre hole tfloat 11in centre hole tfloat 8in centre hole tfloat

Table 3: Contents of instruments_cmar.csv file.

name	buoyancy	height	area	CD	code	source	originalName
Hobo Temp U22	0.0133	0.114	0.003420	1.3	NA	CMAR	Hobo Temp U22
Hobo DO U26	-0.0130	0.267	0.010561	1.3	NA	CMAR	Hobo DO U26
aquaMeasure SAL	-0.3000	0.386	0.024704	1.3	NA	CMAR	aqua Measure SAL
aquaMeasure DOT	-0.1540	0.274	0.013700	1.3	NA	CMAR	aquaMeasure DOT
aquaMeasure CHLA	-0.4000	0.574	0.036736	1.3	NA	CMAR	aquaMeasure CHLA
VR2AR reciever	-0.5000	0.401	0.032481	1.3	NA	CMAR	VR2AR reciever

Table 4: Contents of wires_cmar.csv file. Note that long names are shown in two lines, and that the headers for buoyancyPerMeter and areaPerMeter are mashed together in the PDF version of this README.Rmd file.

name	buoyancyPerMeterareaPerMeter (code	source	originalName
3/8in leaded polypropylene	-0.0177	0.009525	1.3	NA	CMAR	3/8in leaded polypropylene