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1 >> ncdisp('HRALBPH_2016-09-15.nc')
2 Source:
3       /Users/hroarty/COOL/01_CODAR/MARAC00S_II/20170207_NC_Template/HRA
4 Format:
5       netcdf4
6 Global Attributes:
7       id = 'HRALBPH_2016-09-15'
8       uuid = 'a66fd498-298e-41b5-8e84-b21d04a2f
9       naming_authority = 'Hudson River Environmental Condit
10      ncei_template_version = 'NCEI_NetCDF_TimeSeries_Orthogonal
11      sea_name = 'Hudson River'
12      cdm_data_type = 'Station'
13      featureType = 'timeSeries'
14      Conventions = 'CF-1.6, ACDD-1.3'
15      Metadata_Conventions = 'Unidata Dataset Discovery v1.0'
16      standard_name_vocabulary = 'CF Standard Name Table v35'
17      project = 'Hudson River Environmental Condit
18      program = 'Hudson River Environmental Condit
19      product_version = '2.0'
20      title = 'Hudson River Environmental Condit
21      institution = 'Hudson River Environmental Condit
22      references = 'http://www.HRECOS.org http://www.l
23      platform = 'In Situ Ocean-based Platforms > 0
24      instrument_vocabulary = 'GCMD Earth Science Keywords. Vers
25      platform_vocabulary = 'GCMD Earth Science Keywords. Vers
26      keywords_vocabulary = 'GCMD Earth Science Keywords. Vers
27      source = 'File generated from python script
28      geospatial_lat_min = 42.6196
29      geospatial_lat_max = 42.6196
30      geospatial_lat_units = 'degrees_north'
31      geospatial_lon_min = -73.7581
32      geospatial_lon_max = -73.7581
33      geospatial_lon_units = 'degrees_east'
34      geospatial_vertical_positive = 'down'
35      geospatial_vertical_units = 'm'
36      geospatial_bounds = 'POINT (-73.7581 42.6196)'
37      geospatial_bounds_crs = 'EPSG:4326'
38      publisher_name = 'RPS ASA on behalf of HRECOS.'
39      publisher_phone = '(401) 789-6224'
40      publisher_email = 'devops@asascience.com'
41      publisher_url = 'http://www.asascience.com/'
42      publisher_type = 'institution'
43      publisher_institution = 'RPS ASA'
44      creator_name = 'HRECOS'
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45     creator_url           = 'http://www.hrecos.org/'
46     creator_email        = 'gavin.lemley@dec.ny.gov'
47     creator_type         = 'institution'
48     creator_institution   = 'HRECOS'
49     processing_level      = 'realtime'
50     acknowledgment       = 'HRECOS is operated by a consortium'
51     time_coverage_start   = '2016-09-15T04:00:00Z'
52     time_coverage_end     = '2016-09-15T12:45:00Z'
53     time_coverage_duration = 'P31500S'
54     time_coverage_resolution = 'P900S'
55     date_created          = '2016-09-15T13:38:00Z'
56     date_issued           = '2016-09-15T13:38:00Z'
57     date_modified         = '2016-09-15T13:38:00Z'
58     date_metadata_modified = '2016-09-15T13:38:00Z'
59     history               = 'Created on 2016-09-15 with HRECOS'
60     comment               = 'Data retrieved using HRECOS database'
61     contributor_name      = 'Gavin Lemley'
62     summary               = UNSUPPORTED DATATYPE
63     contributor_role      = 'HRECOS Coordinator'
64     license               = 'HRECOS requests that attribution be'
65     metadata_link         = 'http://www.hrecos.org/images/Data'
66     keywords              = 'Oceans > Ocean Chemistry > Chlorophyll'
67     instrument            = 'In Situ/Laboratory Instruments > C'
68 Dimensions:
69     name_strlen = 7
70     time        = 36
71 Variables:
72     lat
73     Size:      1x1
74     Dimensions:
75     Datatype:  single
76     Attributes:
77         units           = 'degrees_north'
78         standard_name    = 'latitude'
79         long_name       = 'station latitude'
80         axis            = 'Y'
81         valid_min       = -90
82         valid_max       = 90
83         comment         = 'Station Latitude'
84         _CoordinateAxisType = 'Lat'
85     lon
86     Size:      1x1
87     Dimensions:
88     Datatype:  single

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89         Attributes:
90             units          = 'degrees_east'
91             standard_name   = 'longitude'
92             long_name       = 'station longitude'
93             axis            = 'X'
94             valid_min       = -180
95             valid_max       = 180
96             comment         = 'Station Longitude'
97             _CoordinateAxisType = 'Lon'
98     station_id
99         Size:          7x1
100        Dimensions:   name_strlen
101        Datatype:      char
102        Attributes:
103            cf_role     = 'timeseries_id'
104            short_name   = 'HRALBPH'
105            long_name    = 'Port of Albany NY (Hydrological) '
106    time
107        Size:          36x1
108        Dimensions:    time
109        Datatype:      double
110        Attributes:
111            units          = 'seconds since 1970-01-01T00:00:00'
112            standard_name   = 'time'
113            long_name       = 'time of measurement'
114            calendar        = 'gregorian'
115            comment         = 'Sample time'
116            _CoordinateAxisType = 'Time'
117    crs
118        Size:          1x1
119        Dimensions:
120        Datatype:      int32
121        Attributes:
122            long_name       = 'http://www.opengis.net/def/crs/OGC/1.3/CRS84'
123            grid_mapping_name = 'latitude_longitude'
124            epsg_code        = 'EPSG:4326'
125            semi_major_axis  = 6378137
126            inverse_flattening = 298.2572
127    HRALBPH
128        Size:          1x1
129        Dimensions:
130        Datatype:      char
131        Attributes:
132            ioos_code       = 'urn:ioos:station:hrecos:HRALBPH'
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133         short_name = 'urn:ioos:station:hrecos:HRALBPH'
134         long_name   = 'Port of Albany NY (Hydrological) '
135         comment     = 'This variable describes the platform t
136         description = 'Port of Albany hydro (DEC)'
137     z
138         Size:      1x1
139         Dimensions:
140         Datatype:  double
141         Attributes:
142             standard_name = 'depth'
143             long_name     = 'average depth of sensor'
144             comment       = 'Derived from mean value of depth var
145             axis         = 'Z'
146             positive      = 'down'
147             valid_min     = 0
148             valid_max     = 9
149             units         = 'm'
150     OTT_Bubbler_Sensor
151         Size:      1x1
152         Dimensions:
153         Datatype:  char
154         Attributes:
155             serial_number = 'unknown'
156             sensor_type   = 'Nitrogen bubbler'
157             make_model    = 'OTT_Bubbler_Sensor'
158             long_name     = 'OTT_Bubbler_Sensor'
159     YSI_6150_R0X
160         Size:      1x1
161         Dimensions:
162         Datatype:  char
163         Attributes:
164             serial_number = 'unknown'
165             sensor_type   = 'Optical'
166             make_model    = 'YSI 6150 R0X'
167             long_name     = 'YSI 6150 R0X'
168     YSI_6025
169         Size:      1x1
170         Dimensions:
171         Datatype:  char
172         Attributes:
173             serial_number = 'unknown'
174             sensor_type   = 'Optical'
175             make_model    = 'YSI 6025'
176             long_name     = 'YSI 6025'
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177     YSI_6589
178         Size:          1x1
179         Dimensions:
180         Datatype:      char
181         Attributes:
182             serial_number = 'unknown'
183             sensor_type   = 'Glass combination electrode'
184             make_model    = 'YSI 6589 Fast-response pH Sensor'
185             long_name     = 'YSI 6589 Fast-response pH Sensor'
186     YSI_6560
187         Size:          1x1
188         Dimensions:
189         Datatype:      char
190         Attributes:
191             serial_number = 'unknown'
192             sensor_type   = 'Nickel electrode, thermistor'
193             make_model    = 'YSI 6560'
194             long_name     = 'YSI 6560'
195     YSI_6136
196         Size:          1x1
197         Dimensions:
198         Datatype:      char
199         Attributes:
200             serial_number = 'unknown'
201             sensor_type   = 'Optical'
202             make_model    = 'YSI 6136'
203             long_name     = 'YSI 6136'
204     mass_concentration_of_chlorophyll_in_sea_water
205         Size:          36x1
206         Dimensions:    time
207         Datatype:      single
208         Attributes:
209             _FillValue      = -999.9
210             coordinates     = 'time lat lon'
211             long_name       = 'mass_concentration_of_chlorophyll_in_sea_water'
212             description     = 'Chlorophyll'
213             grid_mapping    = 'crs'
214             cell_methods    = 'time: point lat: point lon: point'
215             references      = 'http://www.hrecos.org/images'
216             platform       = 'HRALBPH'
217             coverage_content_type = 'physicalMeasurement'
218             missing_value   = -999.9
219             comment        = 'Collected every 15 min with YSI 6025'
220             instrument      = 'YSI_6025'
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221         valid_min           = 0
222         source               = 'Optical fluorescence sensor'
223         standard_name        = 'mass_concentration_of_chlorophyll_a'
224         units                 = 'ug/L'
225         valid_max            = 0.0001
226     mass_concentration_of_oxygen_in_sea_water
227         Size:                 36x1
228         Dimensions: time
229         Datatype: single
230         Attributes:
231             _FillValue        = -999.9
232             coordinates       = 'time lat lon'
233             long_name         = 'mass_concentration_of_oxygen_in_sea_water'
234             description       = 'Dissolved Oxygen'
235             grid_mapping      = 'crs'
236             cell_methods      = 'time: point lat: point lon: point'
237             references        = 'http://www.hrecos.org/images/stories/HRALBPH.pdf'
238             platform          = 'HRALBPH'
239             coverage_content_type = 'physicalMeasurement'
240             missing_value     = -999.9
241             comment           = 'Calculated every 15 min with YSI_6150_R0X'
242             instrument        = 'YSI_6150_R0X'
243             valid_min         = 0
244             source            = 'Calculated from air saturation'
245             standard_name     = 'mass_concentration_of_oxygen_in_sea_water'
246             units             = 'kg m-3'
247             valid_max         = 0.05
248     fractional_saturation_of_oxygen_in_sea_water
249         Size:                 36x1
250         Dimensions: time
251         Datatype: single
252         Attributes:
253             _FillValue        = -999.9
254             coordinates       = 'time lat lon'
255             long_name         = 'fractional_saturation_of_oxygen_in_sea_water'
256             description       = 'Dissolved Oxygen Percent'
257             grid_mapping      = 'crs'
258             cell_methods      = 'time: point lat: point lon: point'
259             references        = 'http://www.hrecos.org/images/stories/HRALBPH.pdf'
260             platform          = 'HRALBPH'
261             coverage_content_type = 'physicalMeasurement'
262             missing_value     = -999.9
263             comment           = 'Collected every 15 min with YSI_6150_R0X'
264             instrument        = 'YSI_6150_R0X'
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265         valid_min           = 0
266         source                = 'Optical probe with mechanical
267         standard_name         = 'fractional_saturation_of_oxy
268         units                  = 'pct'
269         valid_max              = 500
270     sea_water_ph_reported_on_total_scale
271         Size:                  36x1
272         Dimensions: time
273         Datatype: single
274         Attributes:
275             _FillValue         = -999.9
276             coordinates        = 'time lat lon'
277             long_name           = 'sea_water_ph_reported_on_tot
278             description         = 'Acidity'
279             grid_mapping        = 'crs'
280             cell_methods        = 'time: point lat: point lon: p
281             references          = 'http://www.hrecos.org/images
282             platform            = 'HRALBPH'
283             coverage_content_type = 'physicalMeasurement'
284             missing_value       = -999.9
285             comment             = 'Collected every 15 min with
286             instrument          = 'YSI_6589'
287             valid_min           = 0
288             source              = 'Glass combination electrode'
289             standard_name       = 'sea_water_ph_reported_on_tot
290             units               = 'pH'
291             valid_max           = 14
292     sea_water_salinity
293         Size:                  36x1
294         Dimensions: time
295         Datatype: single
296         Attributes:
297             _FillValue         = -999.9
298             coordinates        = 'time lat lon'
299             long_name           = 'sea_water_salinity'
300             description         = 'Salinity'
301             grid_mapping        = 'crs'
302             cell_methods        = 'time: point lat: point lon: p
303             references          = 'http://www.hrecos.org/images
304             platform            = 'HRALBPH'
305             coverage_content_type = 'physicalMeasurement'
306             missing_value       = -999.9
307             comment             = 'Calculated every 15 minutes v
308             instrument          = 'YSI_6560'
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309         valid_min           = 0
310         source                = 'Calculated from conductivity'
311         standard_name         = 'sea_water_salinity'
312         units                  = 'psu'
313         valid_max             = 70
314     depth
315         Size:                  36x1
316         Dimensions: time
317         Datatype: single
318         Attributes:
319             _FillValue         = -999.9
320             coordinates         = 'time lat lon'
321             long_name           = 'depth'
322             description         = 'Depth'
323             grid_mapping        = 'crs'
324             cell_methods        = 'time: point lat: point lon:'
325             references          = 'http://www.hrecos.org/images'
326             platform            = 'HRALBPH'
327             coverage_content_type = 'physicalMeasurement'
328             missing_value       = -999.9
329             comment             = 'Datum: NAVD88. Collected ev'
330             instrument          = 'OTT_Bubbler_Sensor'
331             positive            = 'down'
332             valid_min           = -5
333             source              = ''
334             standard_name       = 'depth'
335             units               = 'm'
336             valid_max           = 9
337     water_surface_height_above_reference_datum
338         Size:                  36x1
339         Dimensions: time
340         Datatype: single
341         Attributes:
342             _FillValue         = -999.9
343             coordinates         = 'time lat lon'
344             long_name           = 'water_surface_height_above_'
345             description         = 'Water Elevation'
346             grid_mapping        = 'crs'
347             cell_methods        = 'time: point lat: point lon:'
348             references          = 'http://www.hrecos.org/images'
349             platform            = 'HRALBPH'
350             coverage_content_type = 'physicalMeasurement'
351             missing_value       = -999.9
352             comment             = 'Datum: NAVD88. Collected ev'
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353         instrument          = 'OTT_Bubbler_Sensor'
354         valid_min            = -5
355         source                = 'Nitrogen bubbler'
356         standard_name         = 'water_surface_height_above_
357         units                  = 'm'
358         valid_max             = 70
359     sea_water_turbidity
360         Size:                  36x1
361         Dimensions: time
362         Datatype: single
363         Attributes:
364             _FillValue         = -999.9
365             coordinates         = 'time lat lon'
366             long_name           = 'sea_water_turbidity'
367             description          = 'Turbidity'
368             grid_mapping         = 'crs'
369             cell_methods         = 'time: point lat: point lon:
370             references           = 'http://www.hrecos.org/images
371             platform            = 'HRALBPH'
372             coverage_content_type = 'physicalMeasurement'
373             missing_value       = -999.9
374             comment              = 'Collected every 15 min with
375             instrument           = 'YSI_6136'
376             valid_min           = 0
377             source               = UNSUPPORTED DATATYPE
378             standard_name        = 'sea_water_turbidity'
379             units                = 'NTU'
380             valid_max            = 1000
381     sea_water_electrical_conductivity
382         Size:                  36x1
383         Dimensions: time
384         Datatype: single
385         Attributes:
386             _FillValue         = -999.9
387             coordinates         = 'time lat lon'
388             long_name           = 'sea_water_electrical_conduc
389             description          = 'Specific Conductivity'
390             grid_mapping         = 'crs'
391             cell_methods         = 'time: point lat: point lon:
392             references           = 'http://www.hrecos.org/images
393             platform            = 'HRALBPH'
394             coverage_content_type = 'physicalMeasurement'
395             missing_value       = -999.9
396             comment              = 'Collected every 15 min with
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397         instrument          = 'YSI_6560'
398         valid_min            = 0
399         source                = 'Nickel electrode'
400         standard_name         = 'sea_water_electrical_conduc
401         units                  = 'S m-1'
402         valid_max             = 10
403     sea_water_temperature
404         Size:                  36x1
405         Dimensions: time
406         Datatype: single
407         Attributes:
408             _FillValue         = -999.9
409             coordinates         = 'time lat lon'
410             long_name           = 'sea_water_temperature'
411             description         = 'Water Temp'
412             grid_mapping        = 'crs'
413             cell_methods        = 'time: point lat: point lon:
414             references          = 'http://www.hrecos.org/images
415             platform            = 'HRALBPH'
416             coverage_content_type = 'physicalMeasurement'
417             missing_value       = -999.9
418             comment             = 'Collected every 15 min from
419             instrument          = 'YSI_6560'
420             valid_min           = -5
421             source              = 'Thermistor'
422             standard_name       = 'sea_water_temperature'
423             units               = 'degrees_C'
424             valid_max           = 45
425 >>
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