

Datasets y visualización

Importar con readtable y readmatrix

```
%readmatrix
area_mm=readmatrix("../Utils4SP/Datasets/areaMM.txt",'Delimiter',' ');

%readtable
PSD_bands=readtable("../Utils4SP/Datasets/2021.10.04_IntensidadBobinas.xlsx");
```

Funcion custom de Import File

```
%Pasa sonda Cassini
%Cassini=importfile_cassini("../Utils4SP/Datasets/05358_mrdcd_sdfgmc_krtp_ls.asc",88);
```

Importar audio

```
[y,fs]=audioread("../Utils4SP/Datasets/Owl.wav");
%Escuchar
sound(y,fs)
```

Datastore

```
%Le indicamos que una carpeta es un datastore
ds=datastore("../Utils4SP/Datasets/AtmosferaLogger_V2/");
ds.VariableNames=["Fecha" "Hora" "Pres_kpa" "Temp_C" "Hum_perc" "Bat_V"];
ds.TextscanFormats=["%s" "%s" "%f" "%f" "%f" "%f"];

% ds.Delimiter="";
% ds.VariableNames=["FechaHora" "Pres_kpa" "Temp_C" "Hum_perc" "Bat_V"];
% ds.TextscanFormats=["%s" "%f" "%f" "%f" "%f"];

%Leer todas las entradas
atmosfera=readall(ds);
```

Reordenando

```
%Sólo si importa fecha y hora en dos columnas
atmosfera.DateTime=string(atmosfera.Fecha)+" "+string(atmosfera.Hora);
%Pasar de texto a fecha-hora
atmosfera.DateTime=datetime(atmosfera.DateTime,'Format','yyyyMMdd HH:mm:ss');
```

atmosfera = 84572x7 table

	Fecha	Hora	Pres_kpa	Temp_C	Hum_perc	Bat_V	DateTime
1	'210722'	'22:25:18'	78.5700	27.1800	48.4000	4.4800	20210722 2...
2	'210722'	'22:25:23'	78.5800	27.3500	48.5300	4.4900	20210722 2...
3	'210722'	'22:25:28'	78.5800	27.2800	48.4300	4.4600	20210722 2...

	Fecha	Hora	Pres_kpa	Temp_C	Hum_perc	Bat_V	DateTime
4	'210722'	'22:25:33'	78.5800	27.0700	47.9800	4.4500	20210722 2...
5	'210722'	'22:25:38'	78.5800	27.0100	48.2000	4.4500	20210722 2...
6	'210722'	'22:25:43'	78.5900	26.9100	47.8900	4.4900	20210722 2...
7	'210722'	'22:25:48'	78.5800	26.8600	48.7200	4.4700	20210722 2...
8	'210722'	'22:25:53'	78.5800	26.8100	48.0300	4.4500	20210722 2...
9	'210722'	'22:25:58'	78.5800	26.7700	48.4800	4.4800	20210722 2...
10	'210722'	'22:26:03'	78.5800	26.7200	48.3000	4.4700	20210722 2...
11	'210722'	'22:26:08'	78.5800	26.6800	48.5600	4.4300	20210722 2...
12	'210722'	'22:26:13'	78.5700	26.6400	48.7000	4.4500	20210722 2...
13	'210722'	'22:26:18'	78.5700	26.5900	48.4800	4.4500	20210722 2...
14	'210722'	'22:26:23'	78.5800	26.5600	48.7100	4.4900	20210722 2...
15	'210722'	'22:26:28'	78.5800	26.5100	48.4500	4.4400	20210722 2...
16	'210722'	'22:26:33'	78.5700	26.4800	48.5400	4.4500	20210722 2...
17	'210722'	'22:26:38'	78.5800	26.4400	48.3600	4.4800	20210722 2...
18	'210722'	'22:26:43'	78.5800	26.3900	48.4700	4.4700	20210722 2...
19	'210722'	'22:26:48'	78.5800	26.3500	48.8800	4.4500	20210722 2...
20	'210722'	'22:26:53'	78.5800	26.3000	48.9000	4.4300	20210722 2...
21	'210722'	'22:26:58'	78.5800	26.2500	48.0400	4.4600	20210722 2...
22	'210722'	'22:27:03'	78.5800	26.2000	48.8800	4.4500	20210722 2...
23	'210722'	'22:27:08'	78.5900	26.1500	48.7600	4.4800	20210722 2...
24	'210722'	'22:27:13'	78.5900	26.1000	48.9700	4.4900	20210722 2...
25	'210722'	'22:27:18'	78.5800	26.0600	49.1700	4.4800	20210722 2...
26	'210722'	'22:27:23'	78.5800	26.0300	49.4500	4.4500	20210722 2...
27	'210722'	'22:27:28'	78.5900	25.9900	49.4300	4.4300	20210722 2...
28	'210722'	'22:27:33'	78.5900	25.9400	49.3200	4.4500	20210722 2...
29	'210722'	'22:27:38'	78.5800	25.9000	49.3400	4.4500	20210722 2...
30	'210722'	'22:27:43'	78.5900	25.8500	49.3700	4.4500	20210722 2...
31	'210722'	'22:27:48'	78.5900	25.8100	49.1700	4.4500	20210722 2...
32	'210722'	'22:27:53'	78.5900	25.7600	49.5200	4.4800	20210722 2...
33	'210722'	'22:27:58'	78.5900	25.7200	49.9800	4.4700	20210722 2...
34	'210722'	'22:28:03'	78.5900	25.6600	49.1600	4.4300	20210722 2...
35	'210722'	'22:28:08'	78.5900	25.6100	49.9300	4.4500	20210722 2...
36	'210722'	'22:28:13'	78.5900	25.5800	49.7900	4.4500	20210722 2...

	Fecha	Hora	Pres_kpa	Temp_C	Hum_perc	Bat_V	DateTime
37	'210722'	'22:28:18'	78.5800	25.5200	49.5900	4.4800	20210722 2...
38	'210722'	'22:28:23'	78.5900	25.4900	49.9600	4.4600	20210722 2...
39	'210722'	'22:28:28'	78.5900	25.4500	50.0400	4.4800	20210722 2...
40	'210722'	'22:28:33'	78.5900	25.4200	50.0900	4.4500	20210722 2...
41	'210722'	'22:28:38'	78.5900	25.3700	50.1700	4.4800	20210722 2...
42	'210722'	'22:28:43'	78.5900	25.3400	49.9100	4.4600	20210722 2...
43	'210722'	'22:28:48'	78.5900	25.3000	49.6700	4.4600	20210722 2...
44	'210722'	'22:28:53'	78.5900	25.2300	50.8700	4.4800	20210722 2...
45	'210722'	'22:28:58'	78.5900	25.2000	50.4600	4.4500	20210722 2...
46	'210722'	'22:29:03'	78.5900	25.1500	50.9800	4.4700	20210722 2...
47	'210722'	'22:29:08'	78.5900	25.1400	50.5900	4.4500	20210722 2...
48	'210722'	'22:29:13'	78.5900	25.0900	50.7900	4.4300	20210722 2...
49	'210722'	'22:29:18'	78.6000	25.0600	50.7000	4.4500	20210722 2...
50	'210722'	'22:29:23'	78.5900	25.0300	50.9100	4.4500	20210722 2...
51	'210722'	'22:29:28'	78.6000	25.0100	50.9700	4.4800	20210722 2...
52	'210722'	'22:29:33'	78.6000	24.9700	51.0600	4.4800	20210722 2...
53	'210722'	'22:29:38'	78.6000	24.9100	51.1600	4.4800	20210722 2...
54	'210722'	'22:29:43'	78.5900	24.8700	52.0100	4.4600	20210722 2...
55	'210722'	'22:29:48'	78.6000	24.8100	51.3300	4.4800	20210722 2...
56	'210722'	'22:29:53'	78.6000	24.7900	51.4600	4.4500	20210722 2...
57	'210722'	'22:29:58'	78.6000	24.7700	51.4800	4.4400	20210722 2...
58	'210722'	'22:30:04'	78.6000	24.7500	51.3400	4.4400	20210722 2...
59	'210722'	'22:30:09'	78.5900	24.7300	51.6300	4.4900	20210722 2...
60	'210722'	'22:30:14'	78.6000	24.6900	51.6100	4.4700	20210722 2...
61	'210722'	'22:30:19'	78.6000	24.6400	51.8100	4.4500	20210722 2...
62	'210722'	'22:30:24'	78.5900	24.6000	51.9400	4.4500	20210722 2...
63	'210722'	'22:30:29'	78.5900	24.5500	51.6100	4.4600	20210722 2...
64	'210722'	'22:30:34'	78.6000	24.5200	52.1700	4.4700	20210722 2...
65	'210722'	'22:30:39'	78.6000	24.4900	51.9800	4.5100	20210722 2...
66	'210722'	'22:30:44'	78.6000	24.4600	52.8800	4.4500	20210722 2...
67	'210722'	'22:30:49'	78.6000	24.4100	52.0100	4.4600	20210722 2...
68	'210722'	'22:30:54'	78.6000	24.3800	52.4300	4.4500	20210722 2...
69	'210722'	'22:30:59'	78.6000	24.3300	52.2700	4.4500	20210722 2...

	Fecha	Hora	Pres_kpa	Temp_C	Hum_perc	Bat_V	DateTime
70	'210722'	'22:31:04'	78.6000	24.2900	52.8000	4.4600	20210722 2...
71	'210722'	'22:31:09'	78.6000	24.2500	52.8800	4.4500	20210722 2...
72	'210722'	'22:31:14'	78.5900	24.2200	52.6800	4.4300	20210722 2...
73	'210722'	'22:31:19'	78.6000	24.2200	52.7400	4.4500	20210722 2...
74	'210722'	'22:31:24'	78.6000	24.1800	52.6600	4.4500	20210722 2...
75	'210722'	'22:31:29'	78.6000	24.1500	52.9500	4.4600	20210722 2...
76	'210722'	'22:31:34'	78.6000	24.1200	52.9400	4.4800	20210722 2...
77	'210722'	'22:31:39'	78.6000	24.1000	53.3700	4.4500	20210722 2...
78	'210722'	'22:31:44'	78.6000	24.0800	53.0700	4.4500	20210722 2...
79	'210722'	'22:31:49'	78.6000	24.0800	52.8300	4.4600	20210722 2...
80	'210722'	'22:31:54'	78.5900	24.0500	53.0500	4.4700	20210722 2...
81	'210722'	'22:31:59'	78.5900	24.0400	52.6200	4.4800	20210722 2...
82	'210722'	'22:32:04'	78.6000	24.0200	53.4400	4.4600	20210722 2...
83	'210722'	'22:32:09'	78.6000	24	53.3800	4.4600	20210722 2...
84	'210722'	'22:32:14'	78.6000	23.9800	53.2800	4.4500	20210722 2...
85	'210722'	'22:32:19'	78.6000	23.9600	53.7100	4.4700	20210722 2...
86	'210722'	'22:32:24'	78.6000	23.9300	53.2900	4.4800	20210722 2...
87	'210722'	'22:32:29'	78.5900	23.9000	53.1400	4.4500	20210722 2...
88	'210722'	'22:32:34'	78.5900	23.8700	53.8100	4.4300	20210722 2...
89	'210722'	'22:32:39'	78.6000	23.8500	53.7200	4.4600	20210722 2...
90	'210722'	'22:32:44'	78.6100	23.8200	53.9000	4.4500	20210722 2...
91	'210722'	'22:32:49'	78.6100	23.8000	54.0100	4.4600	20210722 2...
92	'210722'	'22:32:54'	78.6000	23.7900	53.4300	4.4800	20210722 2...
93	'210722'	'22:32:59'	78.6000	23.7600	54.2400	4.4900	20210722 2...
94	'210722'	'22:33:04'	78.6000	23.7500	53.9000	4.4900	20210722 2...
95	'210722'	'22:33:09'	78.6000	23.7500	54.2800	4.4900	20210722 2...
96	'210722'	'22:33:14'	78.6000	23.7500	54	4.4900	20210722 2...
97	'210722'	'22:33:19'	78.6000	23.7200	54.6900	4.4300	20210722 2...
98	'210722'	'22:33:24'	78.5900	23.7100	54.2100	4.4300	20210722 2...
99	'210722'	'22:33:29'	78.6000	23.6700	53.9700	4.4500	20210722 2...
100	'210722'	'22:33:34'	78.6000	23.6400	54.3700	4.4700	20210722 2...

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%Parche por si la tabla ya se importó

```
%atmosfera.Properties.VariableNames=["Fecha" "Hora" "Pres_kpa" "Temp_C" "Hum_perc" "Bat
```

Ploteo