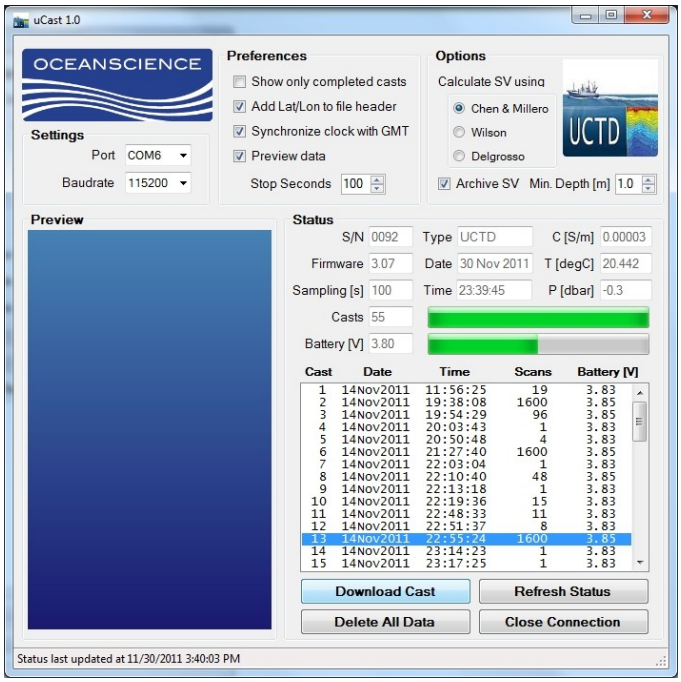
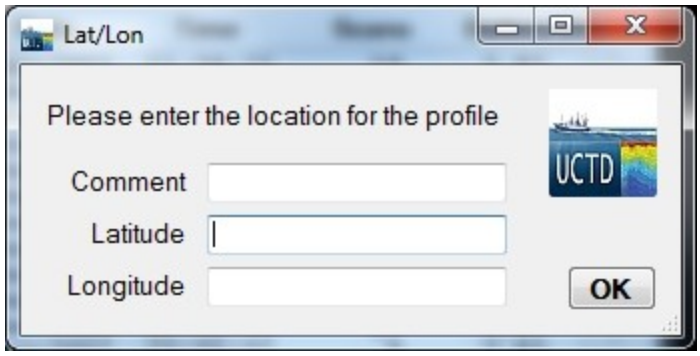
uCast Data Download

Step 1 Select cast and click "Download Cast" button.

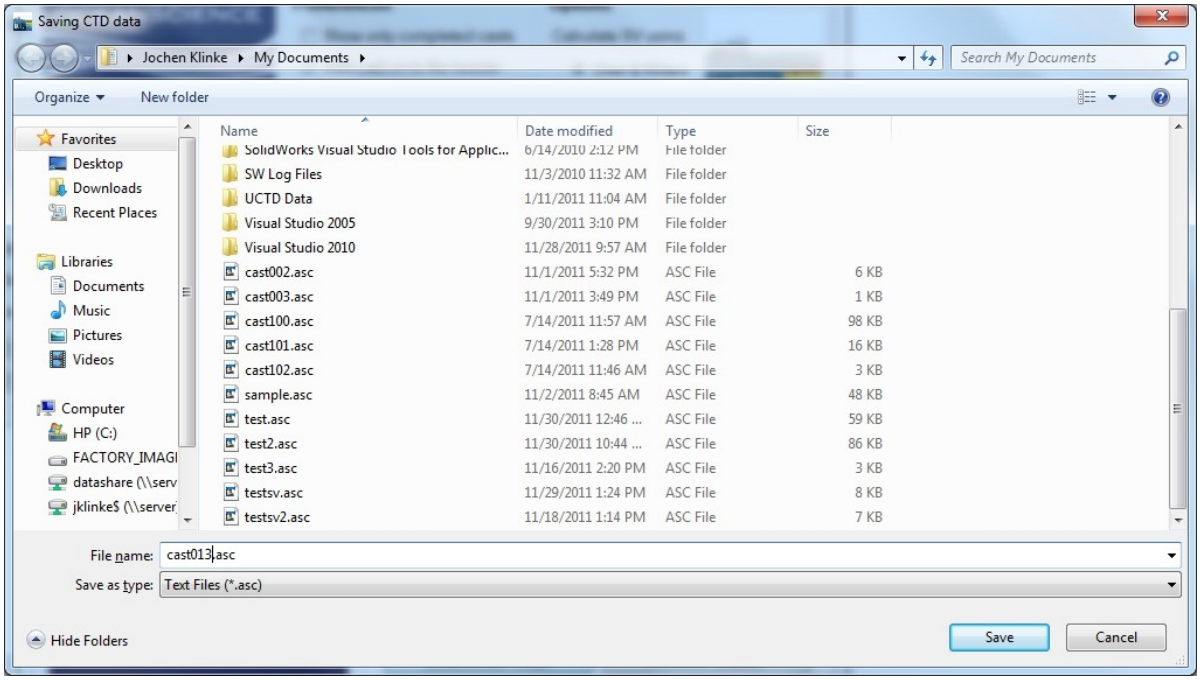


Step 2 If the "Add Lat/Lon to file header" box is checked, a panel will open where the location of the cast and a comment can be entered. This information will be added to the data file header. Filling out the boxes is optional.

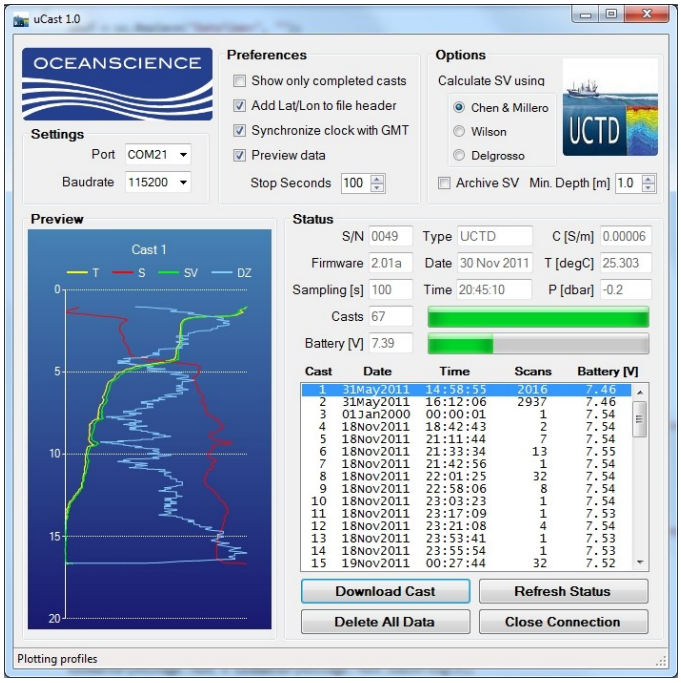


uCast Data Download

Step 3 Select cast and click "Download Cast" button. The ".asc" file extension is added automatically.



Step 4 Upon completion of the download the profiles are shown in the preview area if "Preview data" is checked. Hovering the cursor over a profile will display the corresponding value at that depth. If the downloaded cast does not contain valid profile data, preview will exit without generating a plot.



uCast Data Download

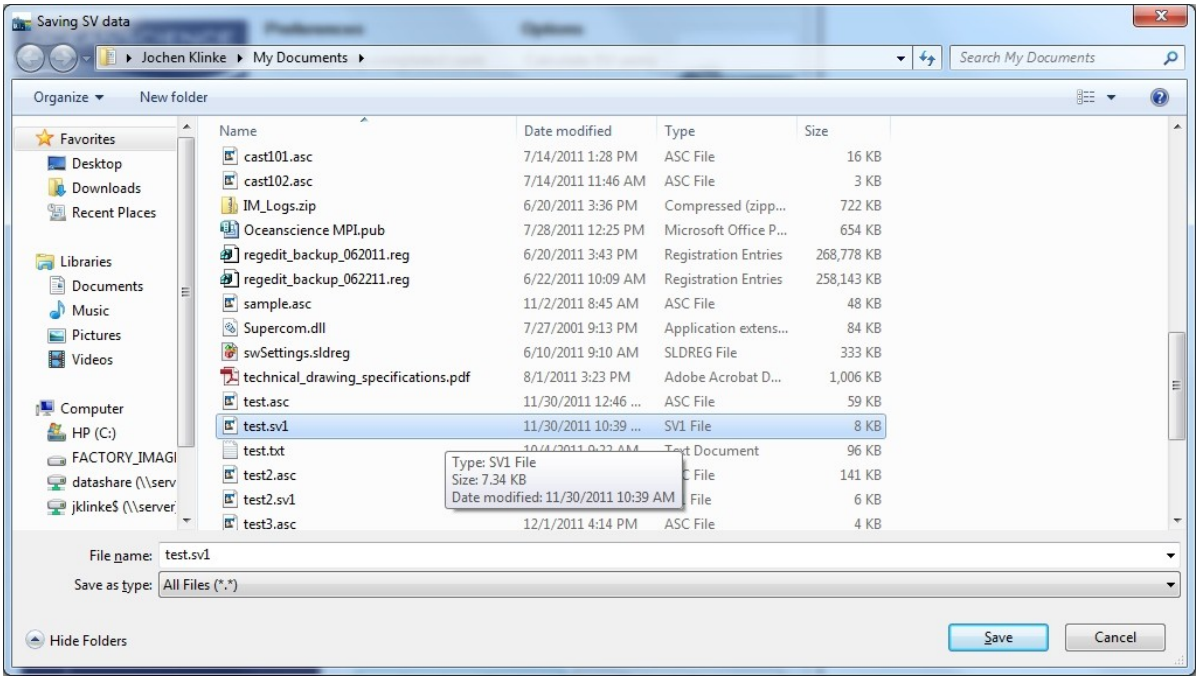
Step 5 Below an excerpt of the archived data header is shown. The header contains information about the location, date, and time of the profile, followed by details about the sensor and its calibration data.

```
*
*Lat
*Lon
*Cast 1 31 May 2011 14:58:55 2016 7.46 received stop
*ConfigurationData:
*DeviceType=90560 UCTD
*Version=CTD
*SerialNumber=70200049
*Settings:
*ReplyFormat=plain text
*BlueToothBaudRate=9600
*CalibrationCoefficients:
*Temperature:
*CalDate=18-Feb-11
*Coefficients:
*A0=9.017785e-04
*A1=2.776607e-04
*A2=-2.017536e-06
*A3=1.901960e-07
*Conductivity:
*CalDate=18-Feb-11
*Coefficients:
*G=-1.033868e+00
*H=1.545183e-01
*I=-3.102756e-04
```

Step 6 The data follows below the header information and is arranged in four columns. The first column contains the scan number, the second column conductivity in Siemens/meter, the third column temperature in degree Celsius, and the fourth column pressure in decibars. All data are recorded with a sampling frequency of 16 Hz.

```
1  0.00000 21.699    0.188
2  0.00000 21.693    0.156
3  0.00000 21.691    0.156
4  0.00000 21.689    0.188
5  0.00000 21.687    0.156
6  0.00000 21.687    0.156
7  0.00000 21.688    0.156
8  0.00000 21.689    0.156
9  0.00000 21.689    0.156
10  0.00000 21.689    0.156
11  0.00000 21.690    0.156
12  0.00000 21.689    0.156
13  0.00000 21.686    0.156
14  0.00000 21.684    0.156
15  0.00000 21.684    0.156
16  0.00000 21.685    0.188
17  0.00000 21.685    0.156
18  0.00000 21.683    0.156
19  0.00000 21.682    0.156
20  0.00000 21.683    0.156
21  0.00000 21.684    0.156
22  0.00000 21.683    0.156
23  0.00000 21.682    0.188
```

Step 5 If "Archive SV" is selected and the downloaded contains a valid profile data, a sound velocity profile will be calculated according to the selected equation (Chen-Millero, DelGrosso, or Wilson). By choosing "All Files (*.*)" in the "Save as type" menu, the user can choose any extension for the file.



Step 6 Below an excerpt of the archived data is shown. It contains a header with information about the location, date, and time of the profile, followed by the S/N of the sensor. The data are arranged in two columns with depth in the first and sound velocity in the second.

```
*
*Latitude
*Longitude
*Cast 1 31 May 2011 14:58:55 2016 7.46 received stop
*UCTD S/N 0049
*P[dbar]  SV[m/s]
1.03  1494.40
1.06  1494.31
1.06  1494.23
1.13  1494.17
1.16  1494.05
1.19  1493.81
1.22  1493.69
1.25  1493.58
1.31  1493.54
1.34  1493.64
1.38  1493.66
1.41  1493.52
1.44  1493.40
1.47  1493.26
1.53  1493.08
1.59  1492.47
```