Sample header file

```
* Sea-Bird SBE 9 Data File:
* FileName = C:\data\ctd\at2613003.hdr
* Software Version Seasave V 7.21f
* Temperature SN = 4491
* Conductivity SN = 2770
* Number of Bytes Per Scan = 44
* Number of Voltage Words = 5
* Number of Scans Averaged by the Deck Unit = 1
* System UpLoad Time = Apr 02 2014 03:37:12
* NMEA Latitude = 28 51.14 N
* NMEA Longitude = 088 29.52 W
* NMEA UTC (Time) = Apr 02 2014  02:37:02
* Store Lat/Lon Data = Append to Every Scan
** AT2613-003.05
* System UTC = Apr 02 2014 02:37:12
# nquan = 26
# nvalues = 143276
# units = specified
# name 0 = depSM: Depth [salt water, m]
# name 1 = altM: Altimeter [m]
# name 2 = CStarAt0: Beam Attenuation, WET Labs C-Star [1/m]
# name 3 = bpos: Bottle Position in Carousel
# name 4 = bpos: Bottle Position in Carousel
# name 5 = density00: Density [density, kg/m^3]
# name 6 = sigma-t00: Density [sigma-t, kg/m^3 ]
# name 7 = density11: Density, 2 [density, kg/m^3]
# name 8 = sigma-t11: Density, 2 [sigma-t, kg/m^3 ]
```

name 9 = flECO-AFL: Fluorescence, WET Labs ECO-AFL/FL [mg/m^3]
name 10 = latitude: Latitude [deg]
name 11 = longitude: Longitude [deg]
name 12 = sbeox0V: Oxygen raw, SBE 43 [V]
name 13 = sbeox0Mm/Kg: Oxygen, SBE 43 [umol/kg]
name 14 = oxsolMm/Kg: Oxygen Saturation, Garcia & Gordon [umol/kg]
name 15 = potemp090C: Potential Temperature [ITS-90, deg C]
name 16 = potemp190C: Potential Temperature, 2 [ITS-90, deg C]
name 17 = prDM: Pressure, Digiquartz [db]
name 18 = sal00: Salinity, Practical [PSU]
name 19 = sal11: Salinity, Practical, 2 [PSU]
name 20 = scan: Scan Count
name 21 = spar: SPAR/Surface Irradiance
name 22 = t090C: Temperature [ITS-90, deg C]
name 23 = t190C: Temperature, 2 [ITS-90, deg C]
name 24 = timeQ: Time, NMEA [seconds]
name 25 = flag: 0.000e+00
span 0 =   2.554,   884.379
span 1 =   0.00,   100.00
span 2 =   0.2556,   1.3625
span 3 =   0,   24
span 4 =   0,   24
span 5 = 1025.3483, 1031.5973
span 6 =   25.2736,   27.5194
span 7 = 1025.3510, 1031.6010
span 8 =   25.3204,   27.5231
span 9 =   -0.0402,   0.3546
span 10 =   28.85230,   28.85232
span 11 = -88.49208, -88.49204

span 12 =   1.3746,   2.7131
span 13 =   112.717,   217.613
span 14 = 218.09455, 302.40435
span 15 =   5.6444,   21.4085
span 16 =   5.6467,   21.4097
span 17 =   2.571,   892.273
span 18 =   34.8681,   36.5605
span 19 =   34.8853,   36.5621
span 20 =   1,   143276
span 21 = 0.0000e+00, 1.0989e-02
span 22 =   5.7235,   21.4127
span 23 =   5.7258,   21.4140
span 24 = 449721422, 449727392
span 25 = 0.0000e+00, 0.0000e+00
interval = seconds: 0.0416667
start_time = Apr 02 2014 02:37:02 [NMEA time, first data scan]
bad_flag = -9.990e-29
<Sensors count="15" >
<sensor Channel="1" >
<!-- Frequency 0, Temperature -->
<TemperatureSensor SensorID="55" >
<SerialNumber>4491</SerialNumber>
<CalibrationDate>10-Oct-13</CalibrationDate>
<UseG_J>1</UseG_J>
<A>0.00000000e+000</A>
<B>0.00000000e+000</B>
<C>0.00000000e+000</C>
<D>0.00000000e+000</D>
<F0_Old>0.000</F0_Old>

```
#      <G>4.42709996e-003</G>
#      <H>6.47603306e-004</H>
#      <I>2.33647780e-005</I>
#      <J>2.10710225e-006</J>
#      <F0>1000.000</F0>
#      <Slope>1.00000000</Slope>
#      <Offset>0.0000</Offset>
#    </TemperatureSensor>
#  </sensor>
#  <sensor Channel="2" >
#    <!-- Frequency 1, Conductivity -->
#    <ConductivitySensor SensorID="3" >
#      <SerialNumber>2770</SerialNumber>
#      <CalibrationDate>09-Oct-13</CalibrationDate>
#      <UseG_J>1</UseG_J>
#      <!-- Cell const and series R are applicable only for wide range sensors. -->
#      <SeriesR>0.0000</SeriesR>
#      <CellConst>2000.0000</CellConst>
#      <ConductivityType>0</ConductivityType>
#      <Coefficients equation="0" >
#        <A>0.00000000e+000</A>
#        <B>0.00000000e+000</B>
#        <C>0.00000000e+000</C>
#        <D>0.00000000e+000</D>
#        <M>0.0</M>
#        <CPcor>-9.57000000e-008</CPcor>
#      </Coefficients>
#      <Coefficients equation="1" >
#        <G>-1.00864791e+001</G>
```

```
#       <H>1.48273562e+000</H>
#       <I>-3.88449247e-003</I>
#       <J>3.50115052e-004</J>
#       <CPcor>-9.57000000e-008</CPcor>
#       <CTcor>3.2500e-006</CTcor>
#       <!-- WBOTC not applicable unless ConductivityType = 1. -->
#       <WBOTC>0.00000000e+000</WBOTC>
#     </Coefficients>
#     <Slope>1.00000000</Slope>
#     <Offset>0.00000</Offset>
#   </ConductivitySensor>
# </sensor>
# <sensor Channel="3" >
#   <!-- Frequency 2, Pressure, Digiquartz with TC -->
#   <PressureSensor SensorID="45" >
#     <SerialNumber>58939-0383</SerialNumber>
#     <CalibrationDate>28-Dec-10</CalibrationDate>
#     <C1>-4.928049e+004</C1>
#     <C2>-5.591409e-001</C2>
#     <C3>1.510530e-002</C3>
#     <D1>3.944700e-002</D1>
#     <D2>0.000000e+000</D2>
#     <T1>3.017493e+001</T1>
#     <T2>-4.671701e-004</T2>
#     <T3>3.967900e-006</T3>
#     <T4>3.098920e-009</T4>
#     <Slope>0.99998000</Slope>
#     <Offset>2.55200</Offset>
#     <T5>0.000000e+000</T5>
```

```
#      <AD590M>1.135000e-002</AD590M>
#      <AD590B>-8.132450e+000</AD590B>
#    </PressureSensor>
#  </sensor>
#  <sensor Channel="4" >
#    <!-- Frequency 3, Temperature, 2 -->
#    <TemperatureSensor SensorID="55" >
#      <SerialNumber>4507</SerialNumber>
#      <CalibrationDate>10-Oct-13</CalibrationDate>
#      <UseG_J>1</UseG_J>
#      <A>0.00000000e+000</A>
#      <B>0.00000000e+000</B>
#      <C>0.00000000e+000</C>
#      <D>0.00000000e+000</D>
#      <F0_Old>0.000</F0_Old>
#      <G>4.40164760e-003</G>
#      <H>6.41380494e-004</H>
#      <I>2.20989371e-005</I>
#      <J>1.98137521e-006</J>
#      <F0>1000.000</F0>
#      <Slope>1.00000000</Slope>
#      <Offset>0.0000</Offset>
#    </TemperatureSensor>
#  </sensor>
#  <sensor Channel="5" >
#    <!-- Frequency 4, Conductivity, 2 -->
#    <ConductivitySensor SensorID="3" >
#      <SerialNumber>2880</SerialNumber>
#      <CalibrationDate>09-Oct-13</CalibrationDate>
```

```
#      <UseG_J>1</UseG_J>
#      <!-- Cell const and series R are applicable only for wide range sensors. -->
#      <SeriesR>0.0000</SeriesR>
#      <CellConst>2000.0000</CellConst>
#      <ConductivityType>0</ConductivityType>
#      <Coefficients equation="0" >
#        <A>0.00000000e+000</A>
#        <B>0.00000000e+000</B>
#        <C>0.00000000e+000</C>
#        <D>0.00000000e+000</D>
#        <M>0.0</M>
#        <CPcor>-9.57000000e-008</CPcor>
#      </Coefficients>
#      <Coefficients equation="1" >
#        <G>-1.06605805e+001</G>
#        <H>1.44135452e+000</H>
#        <I>2.85532696e-004</I>
#        <J>5.63145310e-005</J>
#        <CPcor>-9.57000000e-008</CPcor>
#        <CTcor>3.2500e-006</CTcor>
#        <!-- WBOTC not applicable unless ConductivityType = 1. -->
#        <WBOTC>0.00000000e+000</WBOTC>
#      </Coefficients>
#      <Slope>1.00000000</Slope>
#      <Offset>0.00000</Offset>
#    </ConductivitySensor>
#  </sensor>
#  <sensor Channel="6" >
#    <!-- A/D voltage 0, Oxygen, SBE 43 -->
```

```
#    <OxygenSensor SensorID="38" >
#      <SerialNumber>0072</SerialNumber>
#      <CalibrationDate>26-Feb-14</CalibrationDate>
#      <Use2007Equation>1</Use2007Equation>
#      <CalibrationCoefficients equation="0" >
#        <!-- Coefficients for Owens-Millard equation. -->
#        <Boc>0.0000</Boc>
#        <Soc>0.0000e+000</Soc>
#        <offset>0.0000</offset>
#        <Pcor>0.00e+000</Pcor>
#        <Tcor>0.0000</Tcor>
#        <Tau>0.0</Tau>
#      </CalibrationCoefficients>
#      <CalibrationCoefficients equation="1" >
#        <!-- Coefficients for Sea-Bird equation - SBE calibration in 2007 and later. -->
#        <Soc>4.5865e-001</Soc>
#        <offset>-0.5285</offset>
#        <A>-3.9583e-003</A>
#        <B> 2.4693e-004</B>
#        <C>-3.6629e-006</C>
#        <D0> 2.5826e+000</D0>
#        <D1> 1.92634e-004</D1>
#        <D2>-4.64803e-002</D2>
#        <E> 3.6000e-002</E>
#        <Tau20> 1.9400</Tau20>
#        <H1>-3.3000e-002</H1>
#        <H2> 5.0000e+003</H2>
#        <H3> 1.4500e+003</H3>
#      </CalibrationCoefficients>
```

```
#    </OxygenSensor>
#   </sensor>
#   <sensor Channel="7" >
#    <!-- A/D voltage 1, Free -->
#   </sensor>
#   <sensor Channel="8" >
#    <!-- A/D voltage 2, Fluorometer, WET Labs ECO-AFL/FL -->
#    <FluoroWetlabECO_AFL_FL_Sensor SensorID="20" >
#     <SerialNumber>FLNTURTD-149</SerialNumber>
#     <CalibrationDate>6-May-2010</CalibrationDate>
#     <ScaleFactor>1.54000000e+001</ScaleFactor>
#     <!-- Dark output -->
#     <Vblank>0.0600</Vblank>
#    </FluoroWetlabECO_AFL_FL_Sensor>
#   </sensor>
#   <sensor Channel="9" >
#    <!-- A/D voltage 3, User Polynomial -->
#    <UserPolynomialSensor SensorID="61" >
#     <SerialNumber>FLNTURTD-149</SerialNumber>
#     <CalibrationDate>1-Nov-2004</CalibrationDate>
#     <SensorName>Turbidity</SensorName>
#     <A0>-0.74000000</A0>
#     <A1>5.00000000</A1>
#     <A2>0.00000000</A2>
#     <A3>0.00000000</A3>
#    </UserPolynomialSensor>
#   </sensor>
#   <sensor Channel="10" >
#    <!-- A/D voltage 4, Altimeter -->
```

```
#    <AltimeterSensor SensorID="0" >
#      <SerialNumber>383</SerialNumber>
#      <CalibrationDate></CalibrationDate>
#      <ScaleFactor>15.000</ScaleFactor>
#      <Offset>0.000</Offset>
#    </AltimeterSensor>
#  </sensor>
#  <sensor Channel="11" >
#    <!-- A/D voltage 5, Free -->
#  </sensor>
#  <sensor Channel="12" >
#    <!-- A/D voltage 6, Free -->
#  </sensor>
#  <sensor Channel="13" >
#    <!-- A/D voltage 7, Transmissometer, WET Labs C-Star -->
#    <WET_LabsCStar SensorID="71" >
#      <SerialNumber>CST854DR</SerialNumber>
#      <CalibrationDate>11-Jan-10</CalibrationDate>
#      <M>20.3874</M>
#      <B>-1.1825</B>
#      <PathLength>0.250</PathLength>
#    </WET_LabsCStar>
#  </sensor>
#  <sensor Channel="14" >
#    <!-- SPAR voltage, Unavailable -->
#  </sensor>
#  <sensor Channel="15" >
#    <!-- SPAR voltage, SPAR/Surface Irradiance -->
#    <SPAR_Sensor SensorID="51" >
```

```
#       <SerialNumber>not one</SerialNumber>
#       <CalibrationDate></CalibrationDate>
#       <ConversionFactor>1.00000000</ConversionFactor>
#       <RatioMultiplier>1.00000000</RatioMultiplier>
#     </SPAR_Sensor>
#   </sensor>
# </Sensors>
# datcnv_date = Jul 07 2014 15:41:52, 7.23.2 [datcnv_vars = 25]
# datcnv_in = Z:\Desktop\CTDProc\raw\at2613003.hex Z:\Desktop\CTDProc\raw\at2613003.XMLCON
# datcnv_skipover = 0
# datcnv_ox_hysteresis_correction = yes
# datcnv_ox_tau_correction = yes
# file_type = ascii
*END*
```