

- 2.1) If the data ESA exceeds the largest table ESA_DAC (first row), use the PCEM, SCEM and COIN background values from that first row.
- 2.2) If the data ESA is less than the smallest table ESA_DAC (last row), use the PCEM, SCEM and COIN background values from that last row.
- 3) If step 2 does not complete, interpolate over adjacent rows spanning ESA:
 - 3.1) Locate the two adjacent rows with ESA_DAC values spanning the data ESA
 - 3.2) Use the data ESA value and the row ESA_DAC values to linearly interpolate between the PCEM, SCEM, and COIN background values of those two rows.
 - 3.3) Check data RPA and row RPA_DEC values for zeroes.
 - 3.3.1) If the data RPA value is zero, use zero for all background values. Skip all remaining steps.
 - 3.3.2) If the RPA_DAC value is zero in the row with the higher ESA_DAC, use the PCEM, SCEM, and COIN background values from the row with the lower ESA_DAC. Skip all remaining steps.
 - 3.3.2) If the RPA_DAC value is zero in the row with the lower ESA_DAC, use the PCEM, SCEM, and COIN background values from the row with the higher ESA_DAC. Skip all remaining steps.
- 4) Do not subtract any background *missing "j"* from SWAP data

Refer also to SOC_INST_ICD.* and SWAP_CAL.* documents for further details regarding the use of this file.

```

OBJECT          = COLUMN
NAME            = "ENERGY"
START_BYTE     = 1
BYTES          = 12
COLUMN_NUMBER  = 1
DATA_TYPE      = ASCII_REAL
FORMAT         = "F12.4"
DESCRIPTION    = "Energy for row. Value is not used"
END_OBJECT     = COLUMN
    
```

```

OBJECT          = COLUMN
NAME            = "ESA_DAC"
START_BYTE     = 13
BYTES          = 8
COLUMN_NUMBER  = 2
DATA_TYPE      = ASCII_INTEGER
FORMAT         = "I8"
DESCRIPTION    = "ESA DAC for row; used to select contiguous
                  rows for linear interpolation, and for the
                  calculation of the interpolation."
END_OBJECT     = COLUMN
    
```