

- 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 from SWAP data

*spelling missing a "d"*

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
```