

How to use the CrIS Gap filling coefficients

All the CrIS-FS (Full-Resolution with equal interval of 0.625 cm⁻¹ in all the LW, MW and SW bands) gap filling coefficients have been put into a H5 file - 'cris_fs.GapCoeff.h5'.

There are 3 datasets inside the H5 file

- **P0**: is gap-filling coefficient matrix with a dimension of 1158(col) × 2211(row)
- **C0**: is gap-filling constant vector with a length of 1158
- **GAP_NUM**: has 3 values which are 183, 647 and 328 representing the number of gap channels (totally are 1158=183+647+328) in LW[1095.625~1209.375], MW [1750.625~2154.375] and SW [2550.625~2755] spectral regions respectively.

The use of the H5 file

$$R_{GAP}(\sigma) = \sum_{i=0}^n R_{MEASURE}(i) \times P_0(\sigma, i) + C_0(\sigma)$$

