

## How to use the CrIS Gap filling coefficients

<u>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'.</u>

## There are 3 datasets inside the H5 file

- **P0**: is gap-filling coefficient matrix with a dimension of  $1158(col) \times 2211(row)$
- 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.



A Full-CrIS spectrum has 3369 channels, including a total of 2211 measured channels and 1158 predicted gap channels covering from 650 to 2755 cm-1 with a equal spectral interval of 0.625 cm-1. Due to the solar reflectivity and sun glint in the SW band, only nighttime data are used in deriving the gap-filling coefficients of the SW gap channels.