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[1]: import numpy as np
import matplotlib.pyplot as plt
import matplotlib.colors as colors
import matplotlib.patches as patches
import astropy.io.fits as fits
from astropy import units as u
from collections import defaultdict
```

[ ]:

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[2]: import DPConCFil
from DPConCFil.Clump_Class import *
from DPConCFil.Filament_Class import *
import DPConCFil.Plot_and_Save_Funs as Plot_and_Save_Funs
import DPConCFil.Profile_Funs as Profile_Funs
```

[ ]:

## The reference of the Example data

'Example\_Filaments\_13CO\_1.fits' is the  $^{13}\text{CO}$  ( $J = 1 - 0$ ) emission line of the Milky Way Imag  $0^\circ \leq b \leq 0.8^\circ$  and  $5 \text{ km s}^{-1} \leq v \leq 30 \text{ km s}^{-1}$ .