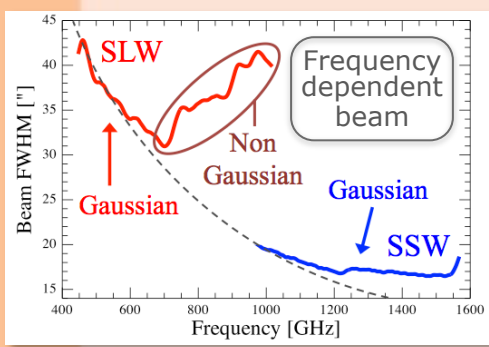


# The SPIRE Fourier Transform Spectrometer



**KEY LITERATURE**  
 SPIRE Handbook,  
 SPIRE Data Reduction Guide  
 Swinyard et al., 2014  
 Hopwood et al., 2015

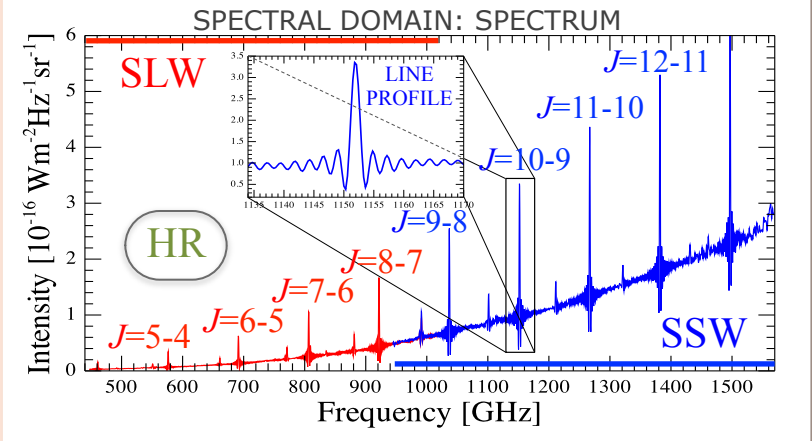
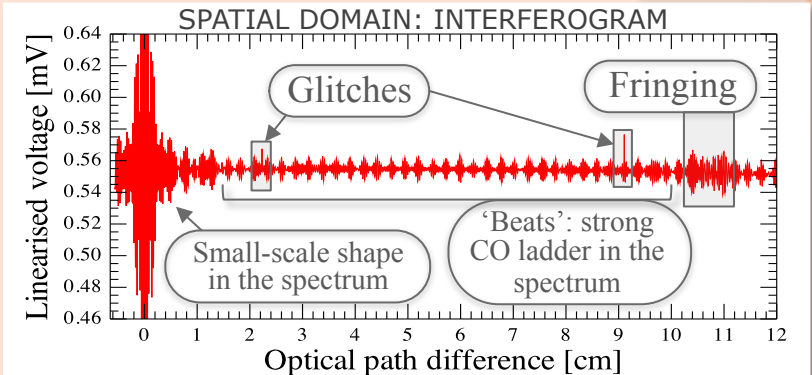
	SLW	SSW
<b>WAVELENGTH COVERAGE</b>	447-1018 GHz 671-294 $\mu\text{m}$	944-1568 GHz 318-191 $\mu\text{m}$
<b>INSTRUMENTAL LINE WIDTH HR</b>	970-440 $\text{kms}^{-1}$ 1.2 GHz	450-280 $\text{kms}^{-1}$ 1.2 GHz



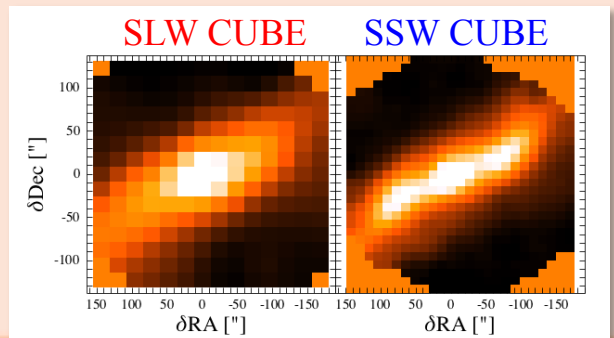
**CALIBRATION ACCURACY**  
 Point-source : 6%  
 Extended-source :

1% sparse mode & 7% mapping mode  
**AVG. CONTINUUM OFFSET (additive):**

	SLW	SSW
Point-source calibration	0.4 Jy	0.3 Jy
Extended calibration	$9.4 \times 10^{-20}$ $\text{Wm}^{-2}\text{Hz}^{-1}\text{sr}^{-1}$	$2.3 \times 10^{-19}$ $\text{Wm}^{-2}\text{Hz}^{-1}\text{sr}^{-1}$



**MAPPING MODES**  
 2.6' FoV  
 Sparse: single pointing  
 Intermediate: 4 point jiggle  
 Full: 16 point jiggle  
**SPARSE OR MAPPING RASTER PATTERN**  
 User defined FoV



**SPECTRAL RESOLUTION**  
 HIGH (HR) 1.2 GHz, LOW (LR) 25 GHz

**Herschel Science Archive Level-2**  
 SPARSE naming example for HR  
 Point-source calibrated Spectra  $\rightarrow$  "HR\_spectrum\_point"  
 Extended calibrated  $\rightarrow$  "HR\_spectrum\_ext"  
 MAPPING naming example for HR SLW  
 Spectral cubes  $\rightarrow$  "HR\_SLW\_cube"/"HR\_SLW\_cube\_convol"  
 spectra  $\rightarrow$  "HR\_SLW\_spectrum2d"