HI Profile Search

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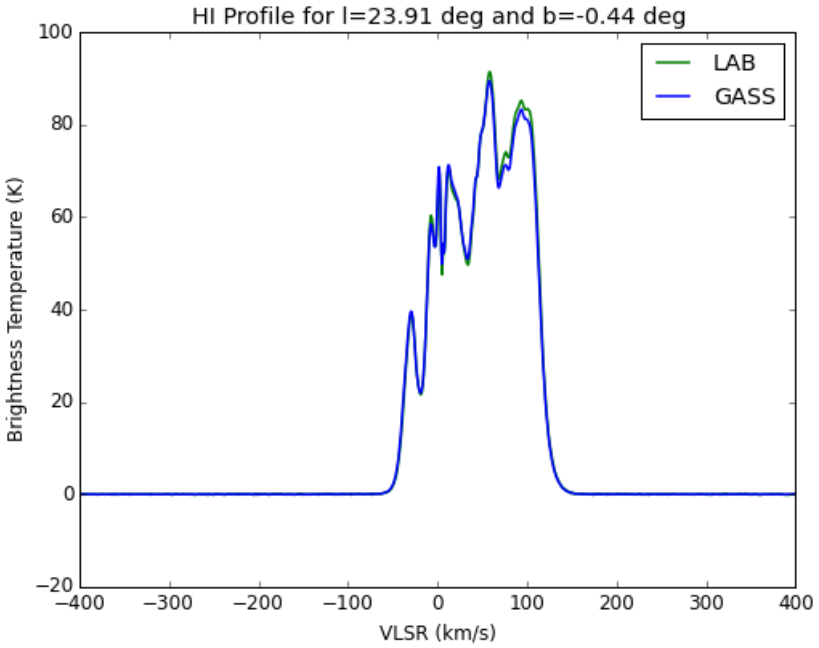
This interface allows you to extract HI profiles from the EBHIS, GASS, and the LAB survey. The profiles are generated on the fly using a weighted interpolation with a Gaussian kernel.

The effective beamsize includes telescope beam and beam smearing due to interpolation. The beam for the GASS is 14.5 arcmin (64m Parkes telescope), for EBHIS it is 10.8 arcmin (100m Effelsberg telescope), while for the LAB it is 36 arcmin for declinations > -27.5 deg (25m Dwingeloo telescope) and 30 arcmin for declinations < -27.5 deg (30m Villa Elisa telescope).

Due to interpolations the minimum effective FWHM beam is 16 arcmin for the GASS, 12 armin for EBHIS, and 40 arcmin for the LAB for declinations > -27 deg and 35 arcmin for declinations < -27 deg. This implies for the profiles a different FWHM beam if you select an effective beamsize < 36 arcmin. If you want to compare the calculated column densities, the FWHM needs to be taken into account. Expected uncertainties are in each case at a 2-3% level (about 1% scale uncertainty and 1% for uncertainties in the correction for stray radiation). Additional contributions may be due to noise, residual baseline errors, and RFI (causing occasionally scale errors for the LAB). Column densities are calculated for -400 < v < 400 km/s.

Search Position		
Coordinate system	Equatorial coordinates (RA, DEC, J2000)	
Center	RA [h m s]/ l [°]	18 36 27
	Dec [±° ' "]/ b [°]	-8.23
Effective beamsize FWHM [°] (must be < 1°)		0.9
Surveys	EBHIS (δ > -4°)	☐
	GASS III (δ < 1°)	☑
	LAB	☑
Search		

Result



Position		
Requested	l [°]	23.91
	b [°]	-0.44
	RA [°]	279.11
	Dec [°]	-8.23
Column Densities		
EBHIS	0.900° Beam	0.00
GASS III	0.900° Beam	0.173E+23
LAB	Interpolated	0.182E+23
	Nearest gridpoint	0.190E+23