Mapping A High-Velocity Cloud With Arecibo

Destry R. Saul (Columbia University)
Matthew Stevenson (Caltech)
Anja Weyant (University of Pittsburgh)

Basic data:

**HVC 018+47-145** -- Cloud of unknown nature

<table>
<thead>
<tr>
<th>Other object types:</th>
<th><strong>HVC</strong> ([BB99],[DBB2002]) , <strong>cld</strong> (WV)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ICRS</strong> coord. (ep=2000) :</td>
<td>15 39.7 +10 18 ( ~ ) [ ~ ~ ~ ] D 1999</td>
</tr>
<tr>
<td><strong>FK5</strong> coord. (ep=2000 eq=2000) :</td>
<td>15 39.7 +10 18 ( ~ ) [ ~ ~ ~ ] D 1999</td>
</tr>
<tr>
<td><strong>FK4</strong> coord. (ep=1950 eq=1950) :</td>
<td>15 37.3 +10 28 ( ~ ) [ ~ ~ ~ ] D 1999</td>
</tr>
<tr>
<td><strong>Gal</strong> coord. (ep=2000) :</td>
<td>018.15 +47.02 ( ~ ) [ ~ ~ ~ ] D 1999A</td>
</tr>
<tr>
<td>Radial velocity / Redshift / cz :</td>
<td>km/s -147 [-] / z -0.000490 [-] / cz</td>
</tr>
</tbody>
</table>

SDSS5 Arecibo Observatory
July 16, 2009
Leiden/Argentine/Bonn Survey
HVC 018+47-145

Leiden/Argentine/Bonn Survey

$\ell = 18.1^\circ$, $b = 47^\circ$
HVC 018+47-145

The diagram shows a contour plot of HVC 018+47-145, with labels indicating different regions. The plot includes a histogram at the bottom, with the x-axis labeled v(km/s) ranging from -500 to 500.
**HVC 018+47-145**

![Graph showing HVC 018+47-145](image-url)

The graph illustrates the velocity distribution of gas in the HVC 018+47-145 region, with contours indicating different density levels. The lower panel shows a velocity profile across the region.