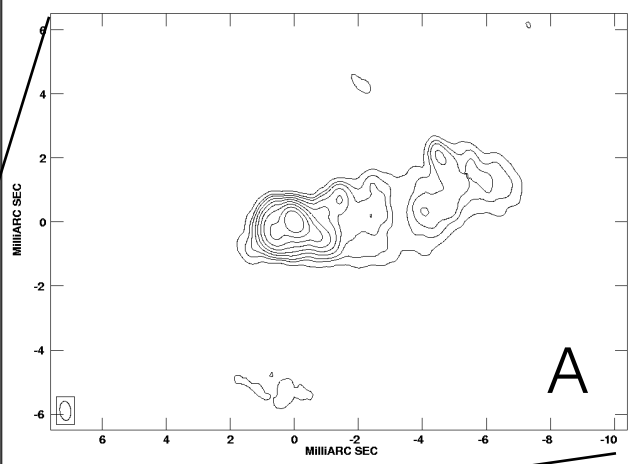
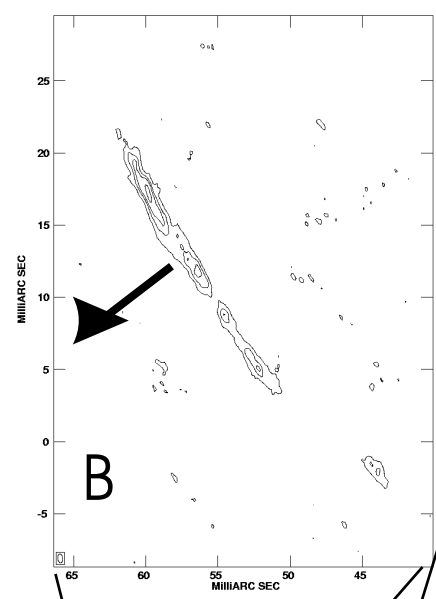


SVS13 H₂O Masers

The water maser distribution associated with SVS13 as it appeared in the fourth epoch of VLBA observations on 14-Nov-1998. The arrows indicate the direction of the measured proper motions of the masers. In field C, the northernmost maser had a proper motion of 30.8 km/s and the southern maser had a proper motion of 42.4 km/s. The arc in field B exhibited a proper motion of 16 km/s. All proper motions were referenced to the bright feature in field A. The direction of motion is roughly at the same position angle of the H-H objects associated with this source. The two northern groups of masers (fields C and D) were present only in the third and fourth epochs and are redshifted by about 6 km/s from the systemic velocity and the southern group is blueshifted by about 2-3 km/s. The overall separation of the two groups is 100 AU given a source distance of roughly 350 pc. It is likely that the maser arc is associated with a shocked region near the working surface of the YSO jet that also powers the observed H-H objects.

Image Scale
0.4 AU/mas



10 AU
Scale for overall distribution

