

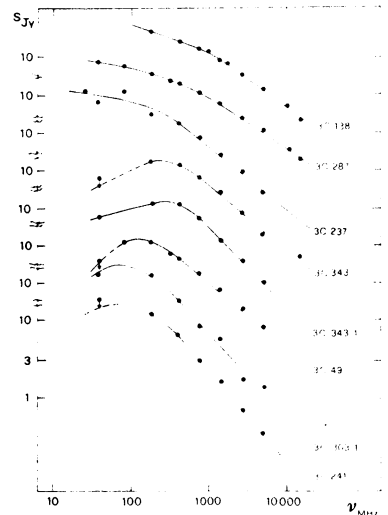
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We consider the compact ($\lesssim 2-4$ asec) radio sources in the 3CR catalogue with normal ($\alpha \gtrsim 0.5$) straight spectrum and low frequency ($\nu_c \lesssim 200$ MHz) turnover. The curvature in the spectrum, if due to synchrotron self-absorption, implies structures of the order of tenths of an arcsec, while its straightness at high frequencies suggests that no dominant very compact (~ 1 mas) feature is present. The radio sources matching the above requirements are listed in the Table. The sample is probably not complete but it is representative of the class.

For a few radiosources VLB data existed. For the remaining we have undertaken an observing program with the European VLB Network (Onsala, Effelsberg, Dwingeloo, Jodrell Bank) at 18 cm. The status of VLB data is given in the Table. Here we present the maps of the 8 radio sources we have observed so far.

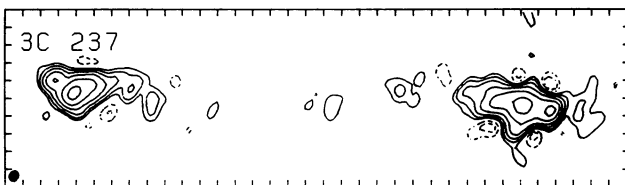
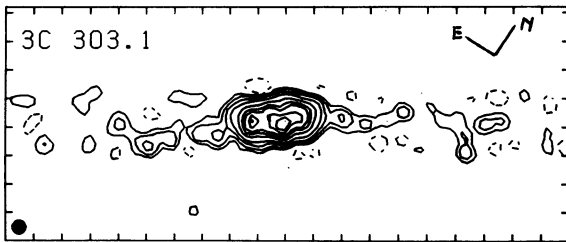
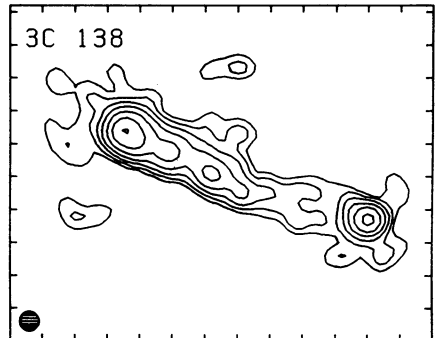
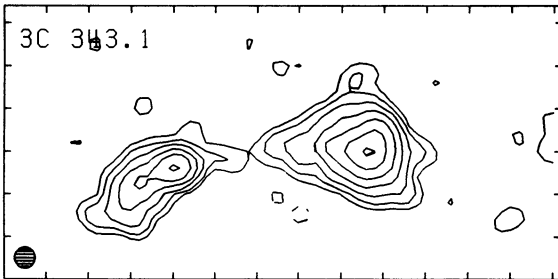
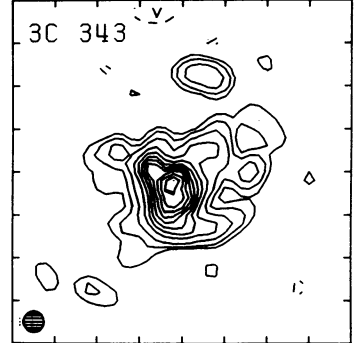
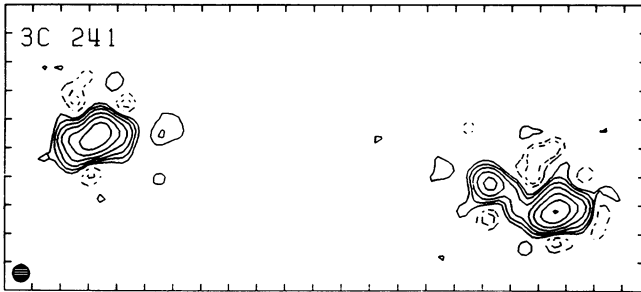
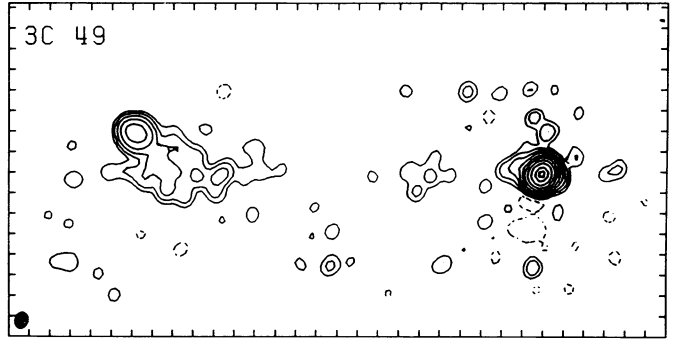
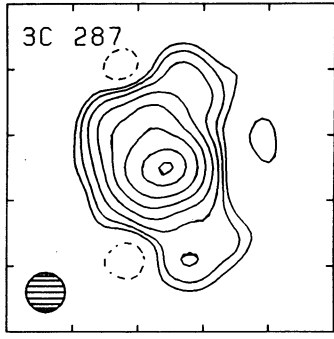
A large variety of structures is present: complex morphologies (3C287, 3C343) with no indication of symmetry at all, and core-jet like features (3C49, 3C138) have been found. Even double sources present sometime complex shapes (3C241, 3C343.1). In a few cases collimation processes seem to be absent or occurring far from the possible core (3C303.1). No segregation in spectrum or morphology seems to be present between QSO's and Galaxies.



3C Id VLB	3C Id VLB	3C Id VLB	3C Id VLB
48 Q 3	147 Q 6	286 Q 4	303.1 G 1
49 G 1	237 G 1	287 Q 1	305.1 G 2
67 G 2	241 G 1	295 G 7	343 Q 1
119 Q 4	266 G 2	298 Q 8	343.1 G 1
138 Q 5	268.3 G 2	299 G 2	

- 1)Present paper; 2)Observations in progress;
- 3)Wilkinson et al, in prep.; 4)Pearson et al, Ap.J 1980, 236, 373;
- 5)Geldzahler et al, in press;
- 6)Readhead & Wilkinson, Ap.J 1980, 235, 11;
- 7)Spencer, in prep.; 8)Graham, this Symp.

+ Discussion on page 425 57



Ticks are 50 mas apart.
N-E is the top left corner
(except for 3C303.1).
Contours are in general
logarithmic.
The map of 3C49 is a comb-
ination of MERLIN (Spencer
et al.) and VLB data.