

S15c **5-GHz VLBI imaging observations of 7 equatorial extragalactic radio sources**

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Since 1993, we have been conducting a 5-GHz VLBI imaging survey of a complete sample of 36 southern and equatorial (of declination between -45 and $+10$ degrees) extragalactic radio sources which are flat bright (of total flux density greater than 1.0 Jy at 5-GHz), compact (of correlated flux density stronger than 0.6 Jy at both 2.3 and 8.4-GHz on the baseline of 10,000 km) sources. The first epoch observations were carried out in three sessions in November 1992, May 1993 and November 1997 respectively.

Here, we will first present the results of the imaging and model fitting of the 3rd session, during which 7 equatorial radio sources were observed using the European VLBI Network (EVN). Then we will present some statistical results of the whole 36 source sample. The milliarcsecond morphology shows a core-jet structure for 28 sources and a single compact core for the remaining 8 sources. No compact double was found. A comparison with earlier images (if available) and the temporal variability of the radio flux density showed evidence for superluminal motion in 9 sources of which 7 are newly detected. There are at least 9 sources showing a sharp bending (of larger than 90 degrees) of the jets between arcsecond (kiloparsec) and milliarcsecond (parsec) scales. The misalignment seems to be a common feature.

Totally 10 sources in our sample were high-energy (>100 MeV) EGRET sources. It showed a dominance of highly polarized quasars(HPQs) among the detected γ -ray sources, suggesting a γ -ray beaming is at work too. This follows the similar distribution of brightness temperature between EGRET-detected sources and others.