

Fomalont
Summer Student
Lecture
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US / G B BK /

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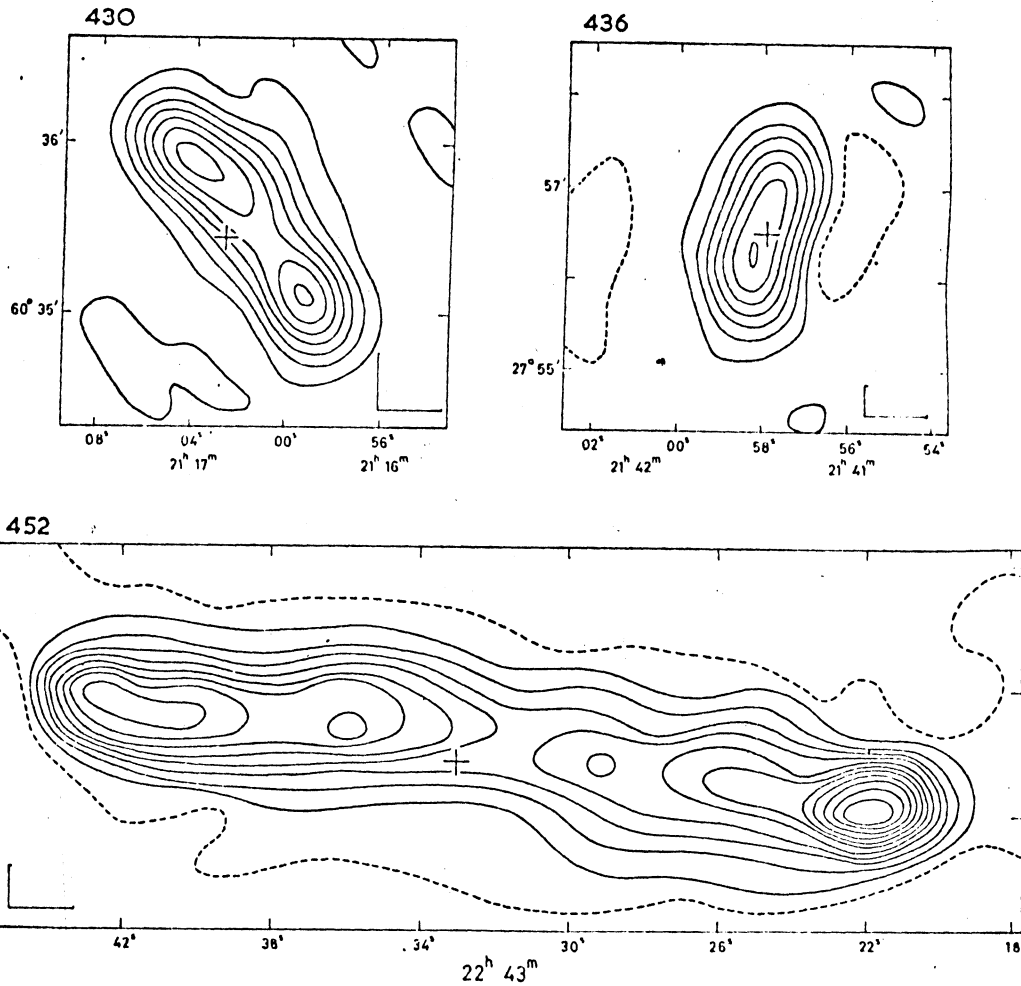


FIG. 29. 3C 430. The optical object marked (V) is a 15^m ED₄ galaxy, the preceding member of a pair of similar galaxies (MMS). There are many red stellar objects nearby ($b_{II} = -8^\circ$).

3C 436. The cross marks a $19^m \cdot 0$ galaxy, identified by Matthews; the redshift is $0 \cdot 2154$ (S).

3C 452. The optical object (V) is a 16^m ED galaxy with a redshift of $0 \cdot 082$ (S).

Fig 1

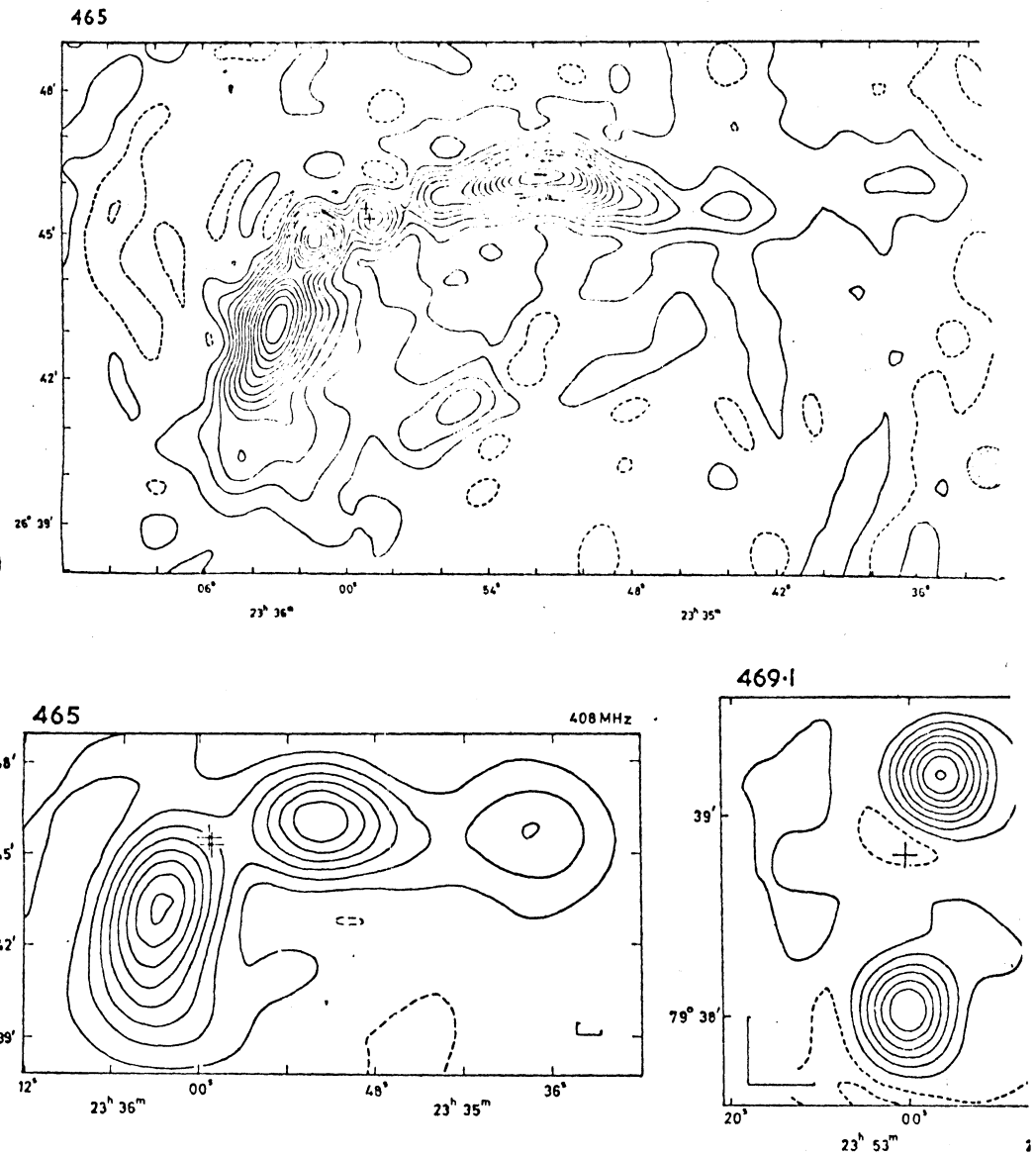


FIG. 30. 3C 465. (i) 1407 MHz map. The half-power beam size is shown by the shaded circle. (ii) 408 MHz map. Half-power beam size shown shaded.

The two crosses mark the double galaxy NGC 7720 (G), which is coincident with the only unresolved component; the brighter component is a $13^m \cdot 5$ D galaxy (MMS) with a redshift of $0 \cdot 0301$ (S). There are other bright galaxies nearby, all members of Abell cluster A-2634 (33), but none appears to be related to any other radio component.

3C 469.1. The optical object marked is a 14^m stellar object (W). There are some faint ($\sim 20^m$) objects within $10''$ of the southern peak.

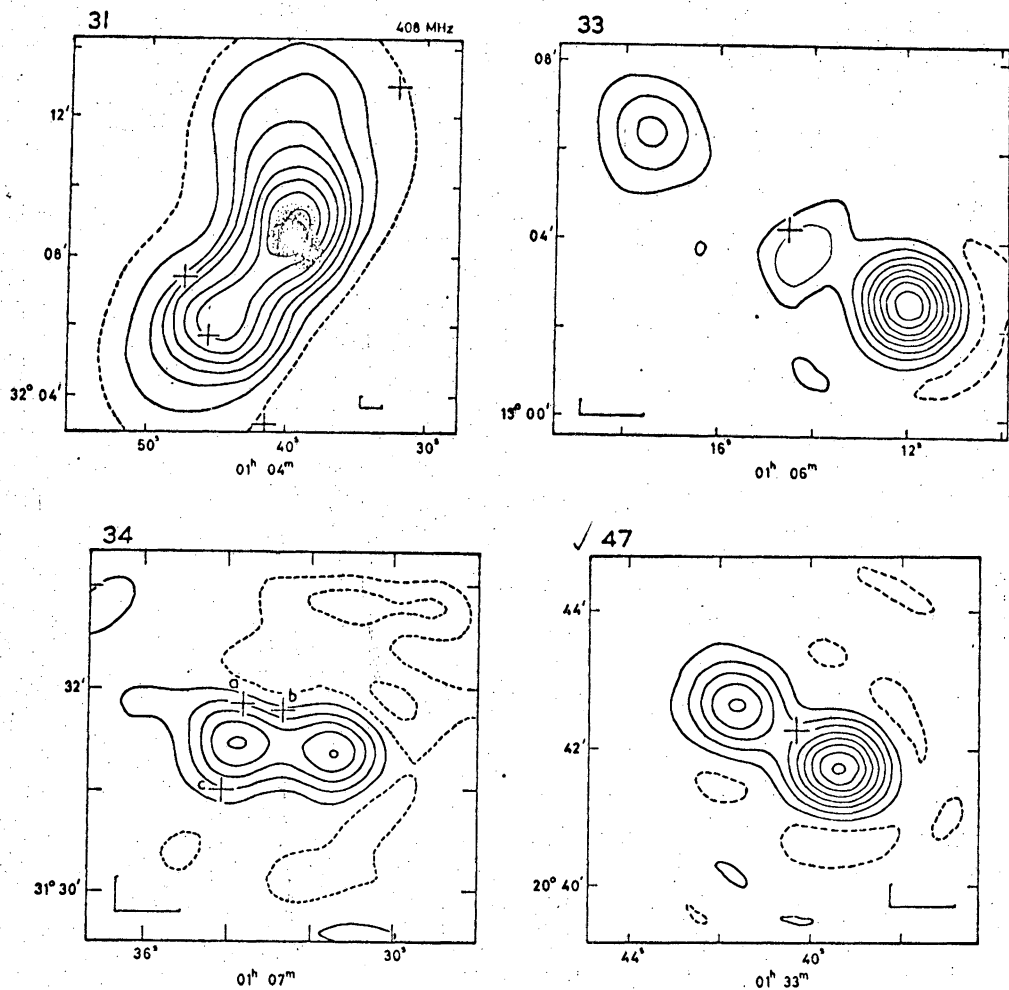


FIG. 3. 3C 31. 408 MHz map. The main peak coincides with a $13^m.0$ galaxy NGC 383, with a companion NGC 382, which are the central pair of a chain of E galaxies (V, 26). Other members of the chain, which runs roughly parallel to the radio axis, are indicated by crosses. The redshift of NGC 383 is 0.017 (27).

3C 33. The optical object is a $15^m.6$ DE4 galaxy in a D3 envelope which is extended to a diameter of $22''$ in p.a. 163° (28, MMS). Schmidt (22) has shown that the galaxy is rotating about an axis in p.a. 163° which is about 37° from the p.a. of the radio axis (20°); the redshift is 0.060 .

3C 34. There are three optical objects which may be related to the source. (a) $18^m.5$ very blue diffuse object, invisible on the red print. (b) $18^m.0$ very blue diffuse object, invisible on the red print (WP). (c) $19^m.5$ red stellar object (W).

3C 47. The optical object marked (V) has a redshift of 0.425 and was one of the original group of quasi-stellar sources (29).

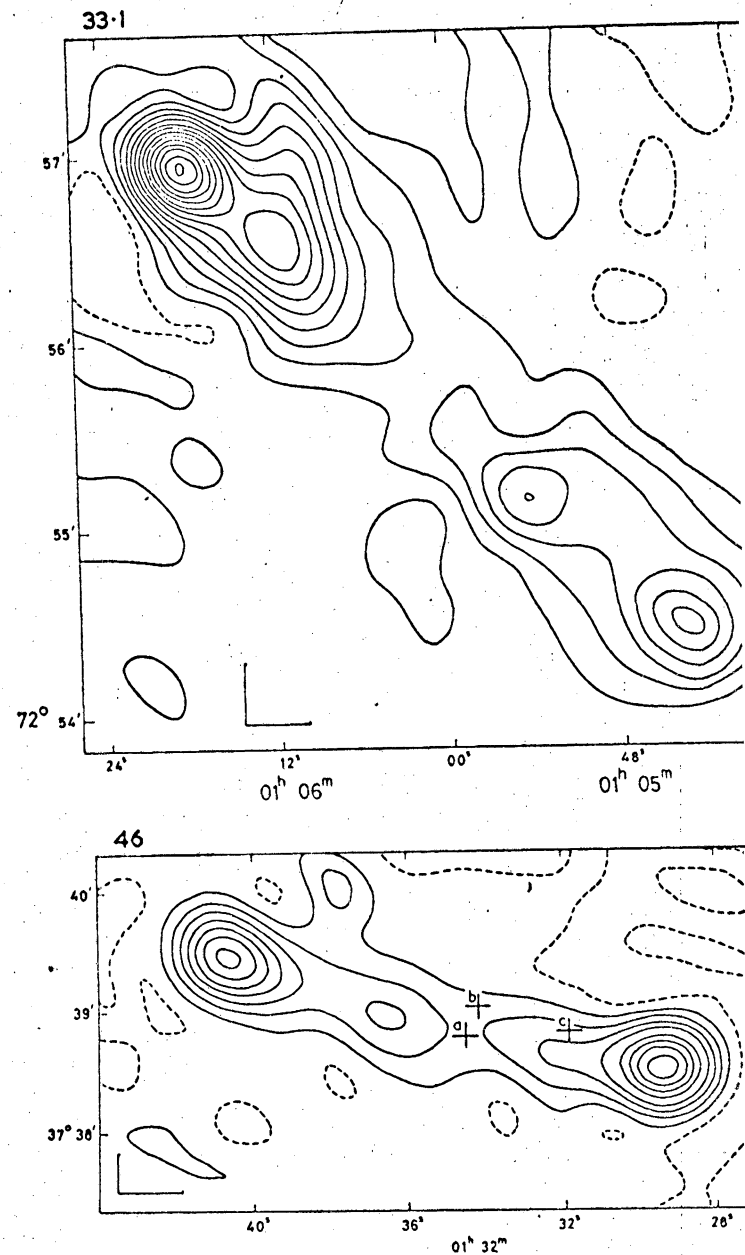
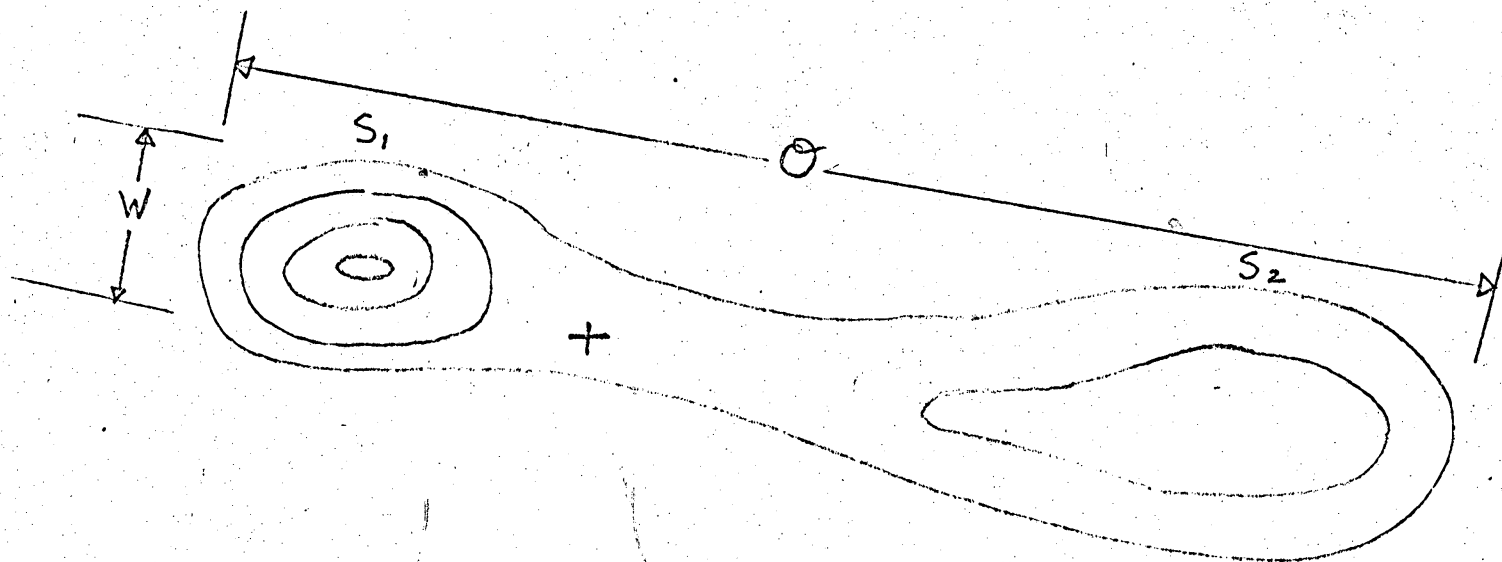


FIG. 4. 3C 33-1. There are a number of optical objects in the region of the source, some of which are stellar in appearance. There is some obscuration ($b_{II} = 10^\circ$).

3C 46. The three nearest optical objects are: (a) $19^m.5$ red galaxy (W). (b) $18^m.5$ red diffuse object. (c) 17^m stellar object.

TYPICAL RADIO SOURCE

+ = IDENTIFICATION



BRIGHT COMP
CLOSER TO ID
SMALLER IN SIZE
FLATTER SPECTRUM

WEAK COMP
FURTHER FROM ID
LARGER IN SIZE
STEEPER SPECTRUM

$$\theta/W \approx 5$$

S_1/S_2 BETWEEN 1 and 3

Fig 3