## S30cLong Term Variability of Blazar "NRAO512"貴島 政親 (総合研究大学院大学 / 国立天文台 水沢 VERA 観測所)

Blazar's light curves in radio bands have been generated by using the data of monitoring programs and studied by many astronomers. But the observation terms in radio(less than 30yr) are shorter than optical bands(100yr). It has not still unclear whether a flare periodicity exists or not.

NRAO512 is classified into Blazar(FSRQ) which has relativistic jets emanating to a direction closed to line of sight. It is a point-like source. It has been used as a phase-referencing calibrator to investigate jet motions of 3C345 and many experiments. Faint extended structures have been studied in , To derive proper motion of knot, high resolution VLBI observations (over 300 mega-wavelenght) are needed . However, because its compactness (resolution) and variation (timing), it is difficult to obtain significant results.

I discovered NRAO512 started flaring from 2007/06. I compiled Single-Dish measurements and analyzed enormous number of VLBI archival data. I constructed light-curves of total flux densities and high resolution VLBI-images at multi-frequency.