

# P58. Search for Time Lag in Intra-day Variability of Sgr A\*

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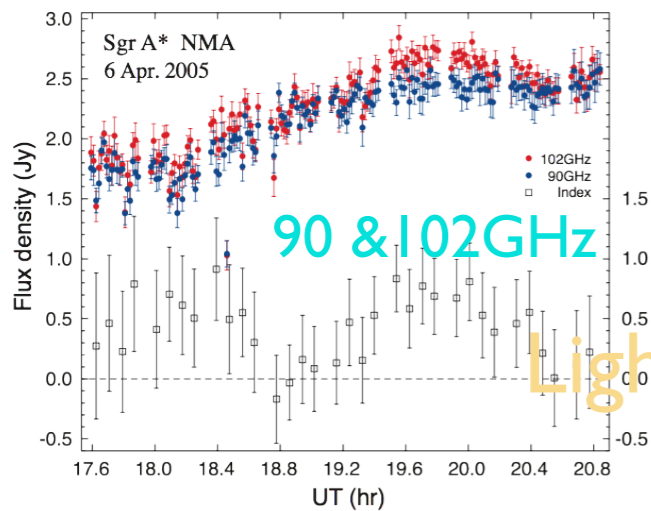
Nobeyama Millimeter Array

(ref. P86 Tsutsumi et al.)

Korean VLBI Network

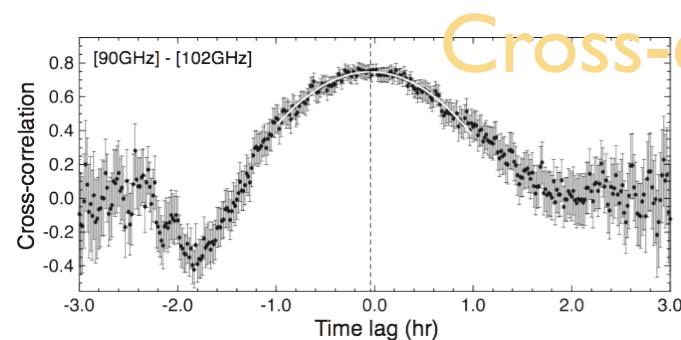


6 Apr 2008



Light curve

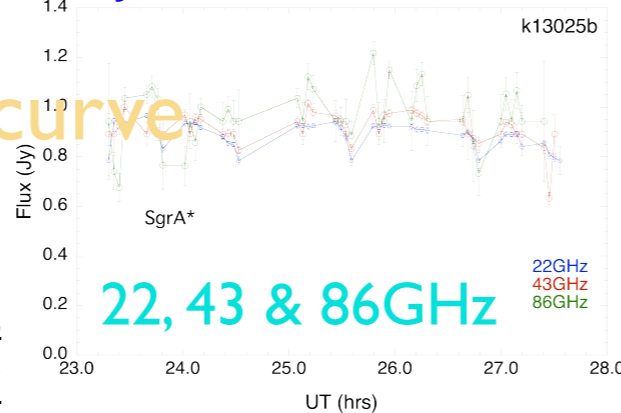
The flare event is very clearly but we found no time lag expected by the expanding plasma model.



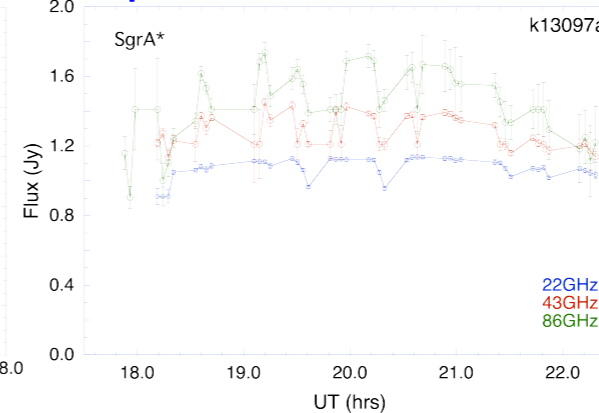
Observed time lag :  $-2.58 \pm 0.91$  min  
=> Expected time lag :  $\sim +3$  min

The KVN is a three-element VLBI network in South Korea (Akiyama-san talked yesterday), and has a receiver system that can simultaneously observe in the four bands of 22, 43, 86, and 129GHz.

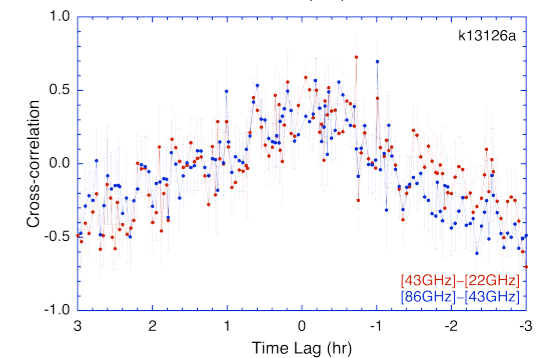
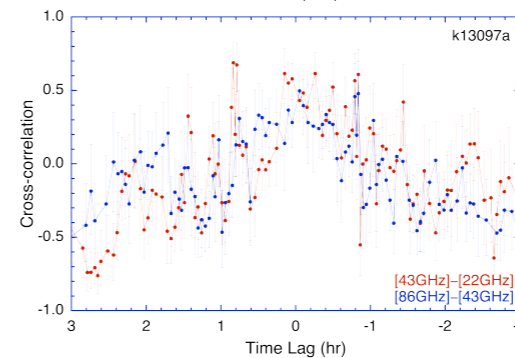
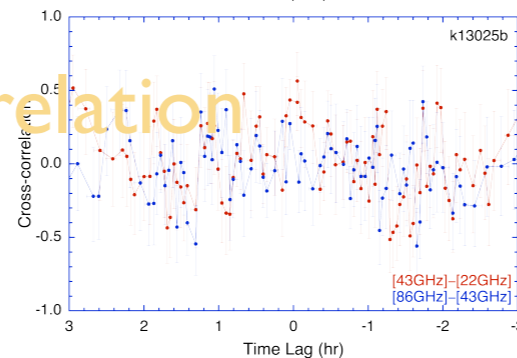
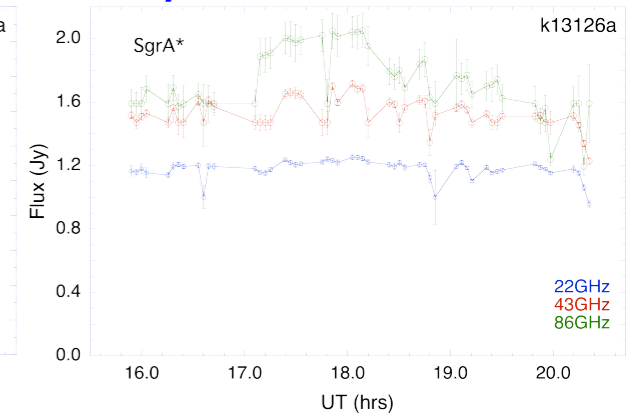
25 Jan 2013



7 Apr 2013



6 May 2013



The observed light curves have no distinct IDV, and the time lag between these light curves are not clear also. We will continuously perform the SgrA\* multi-frequency observation using the KVN.