

KVN+VERA -Galactic center

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KVN+VERA SWG Topics: GC

- SgrA* :
 - long term variability with dense monitor and Multi wave length observations by Akiyama-san
 - Annual parallax
- CND and CMZ : Dynamics by measuring proper motions of H₂O and SiO masers by Kim-san and Oyama
- From bar to bulge : SiO maser proper motions by Matumoto-san

GC Sub WG

Status

- **Member**
 - Japan : Oyama, Matuoto, Akiyama from WG talk , (several persons will join, still un)
 - Korea : Kim Sungsoo, Miyazaki, Sohn Bong Won, Lee Sang-Sung
- have not held face to face meeting.
- Prepare material (the results of progress KJJVC and test observations)
- Summarize past observations with VERA and test observations with KVN+VERA

Topic (GC Sub WG)

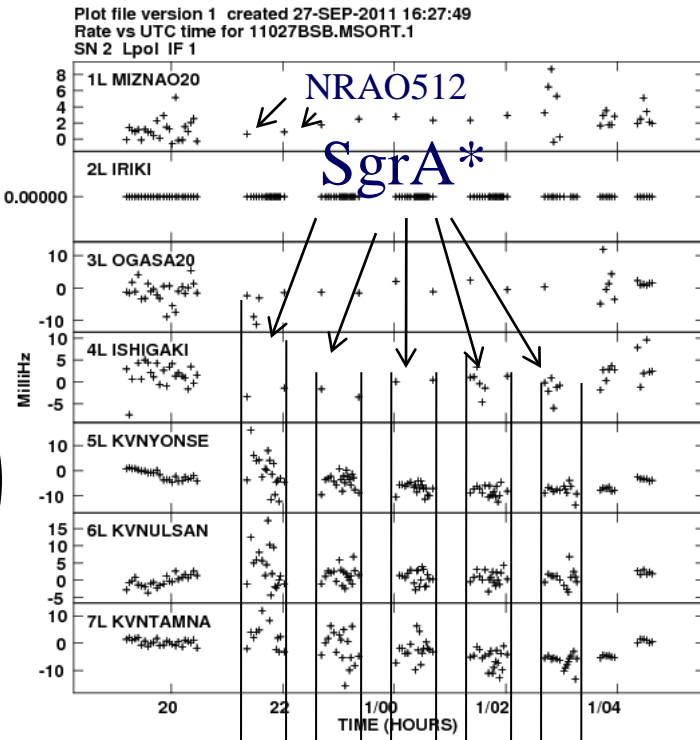
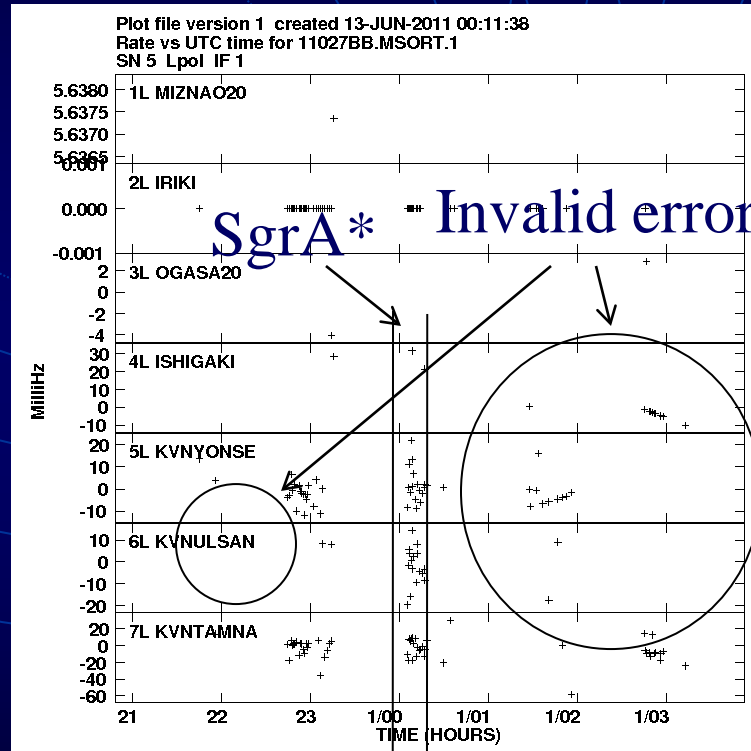
- Efficient scheduling and policy of sharing data (Sgr A* as calibrator and target)
- Definition and Strategy of scientific goals
- Test observations of Sgr A* and calibrator (strongly need to 1Gbps observations)
- Flux monitoring of masers with single dish observations.
- The method and test of simultaneous switching(KVN) and 2beam(VERA) phase referencing observations (astrometry WG)

Sgr A* fringes with KVN+VERA at 1Gbps observatins!

Latest results of KJJVC test observation (r11027b)

k-band

- KJJVC evaluation test observation (compare mitaka-FX and KJJVC)
- Sgr B2, Sgr A*, J1745-
- Correlation: Mitaka-FX
- K-band
- IRK+KVN
- First good fringes of Sgr A*!
- Bug fix (Mark5 header error) (RVDB bus error)



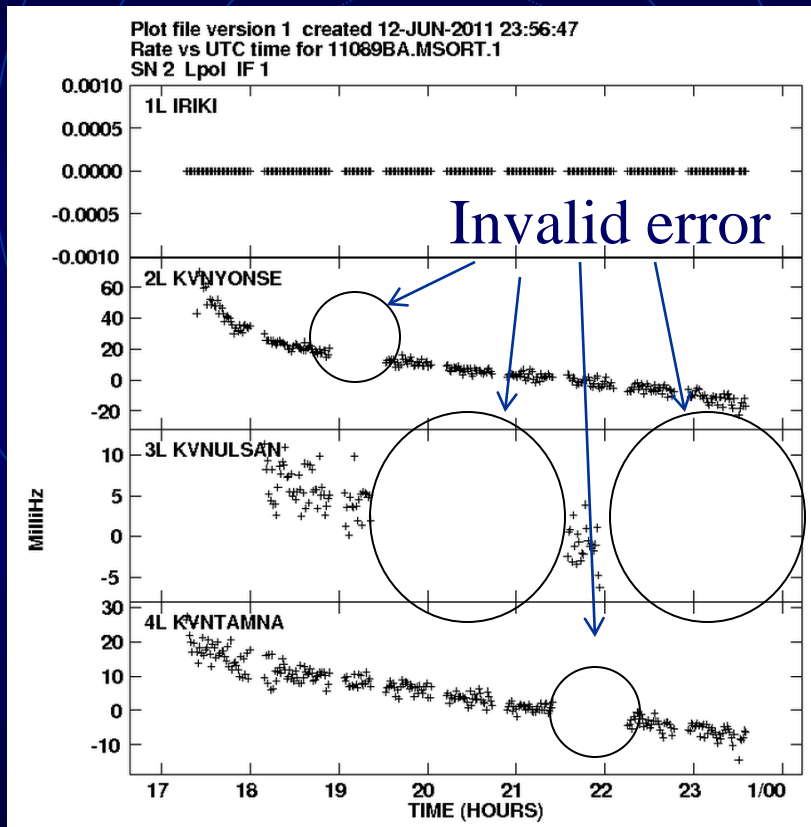
We can use this data to compare Mitaka-FX and KJJVC now!

Reported 2011/6 SWG

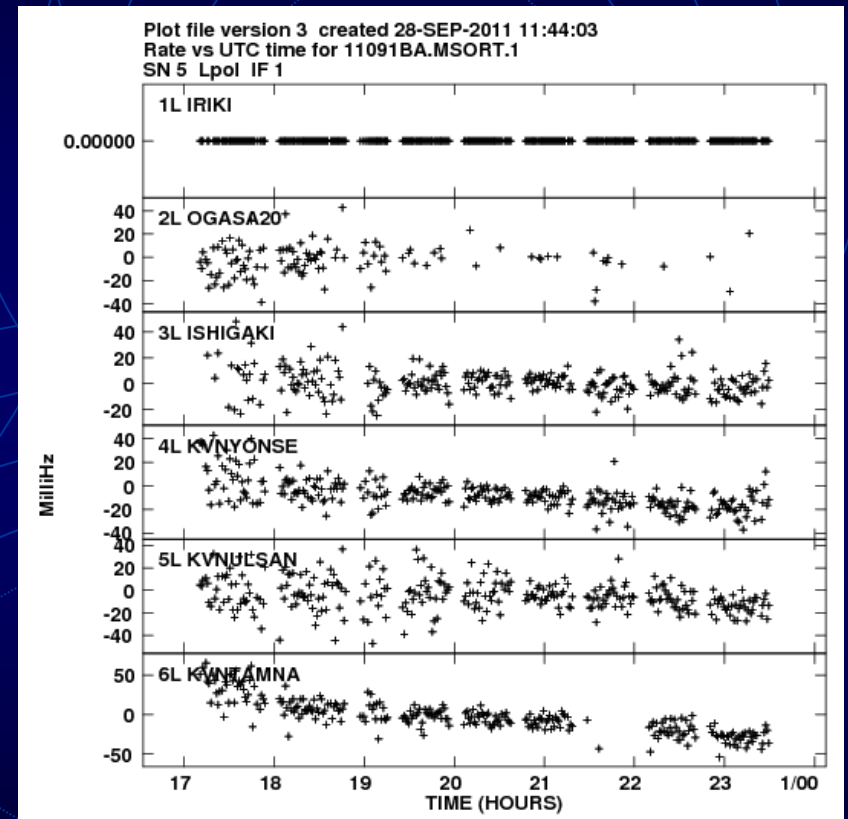
Latest results

Sgr A* fringes with KVN+VERA at 1Gbps observatins!

Latest results of SgrA* camp observation (r11091b) Q-band

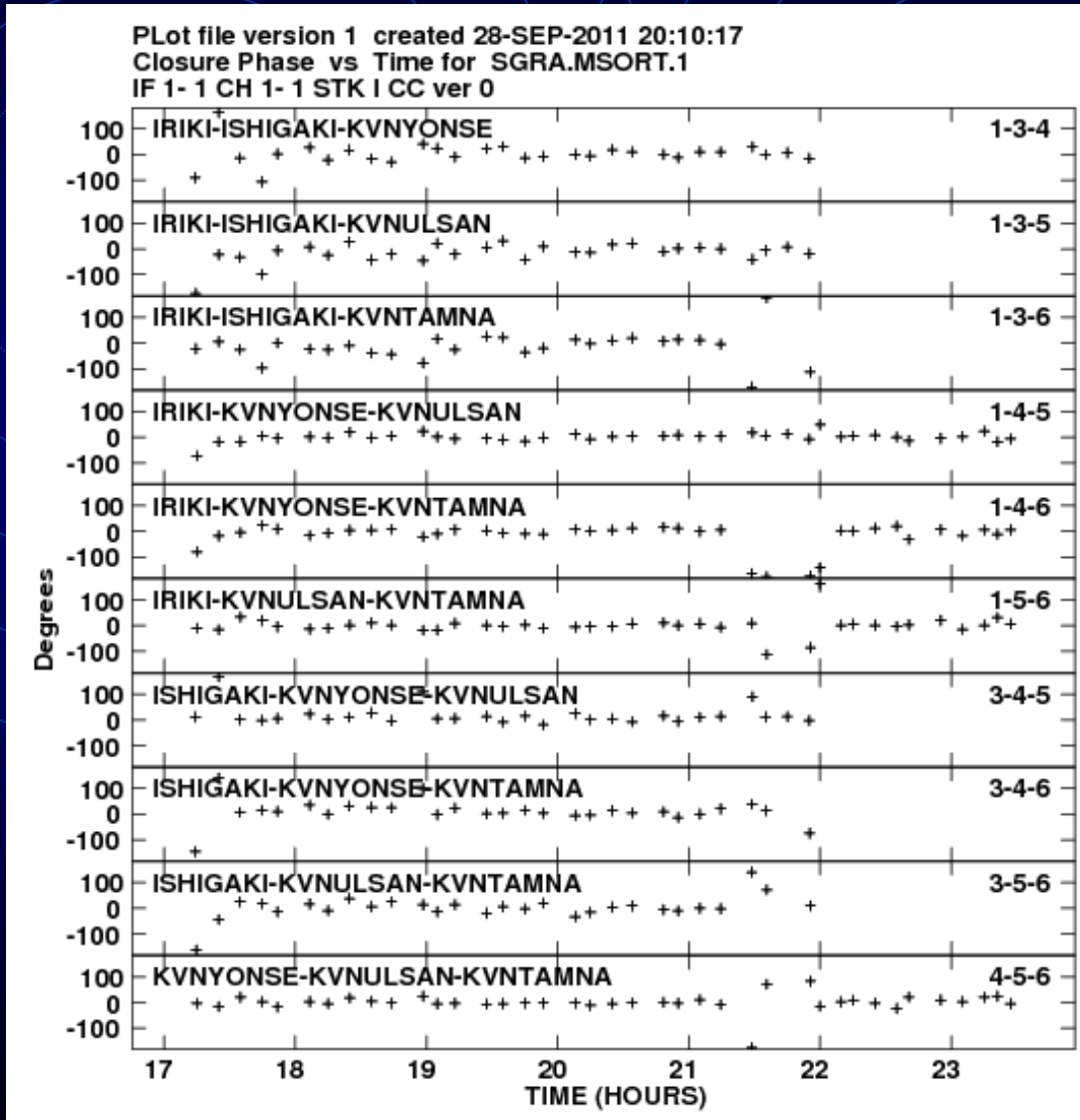


Reported 2011/6 SWG

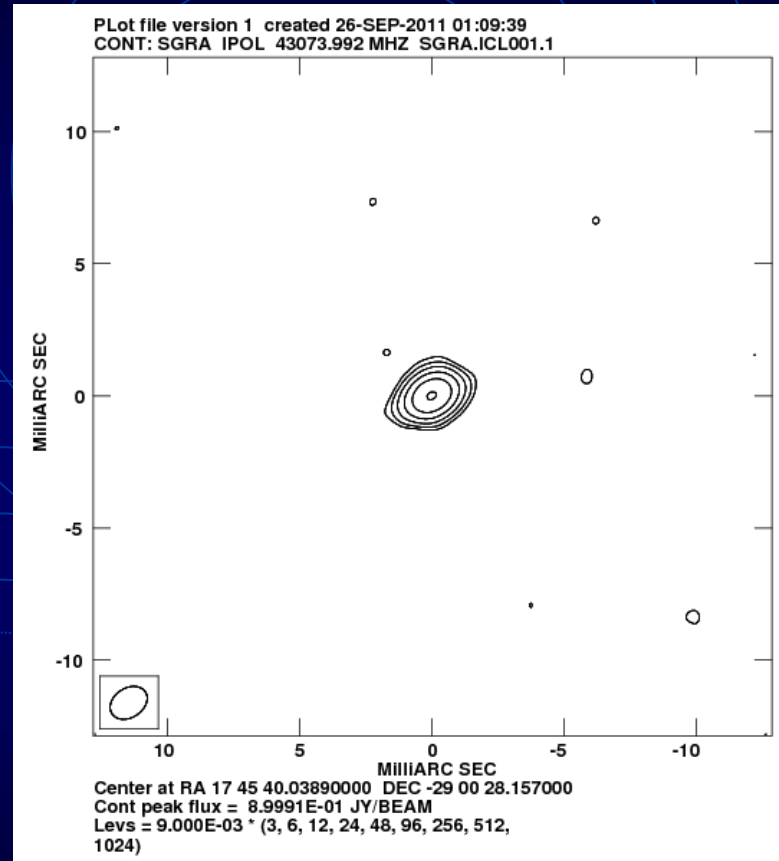
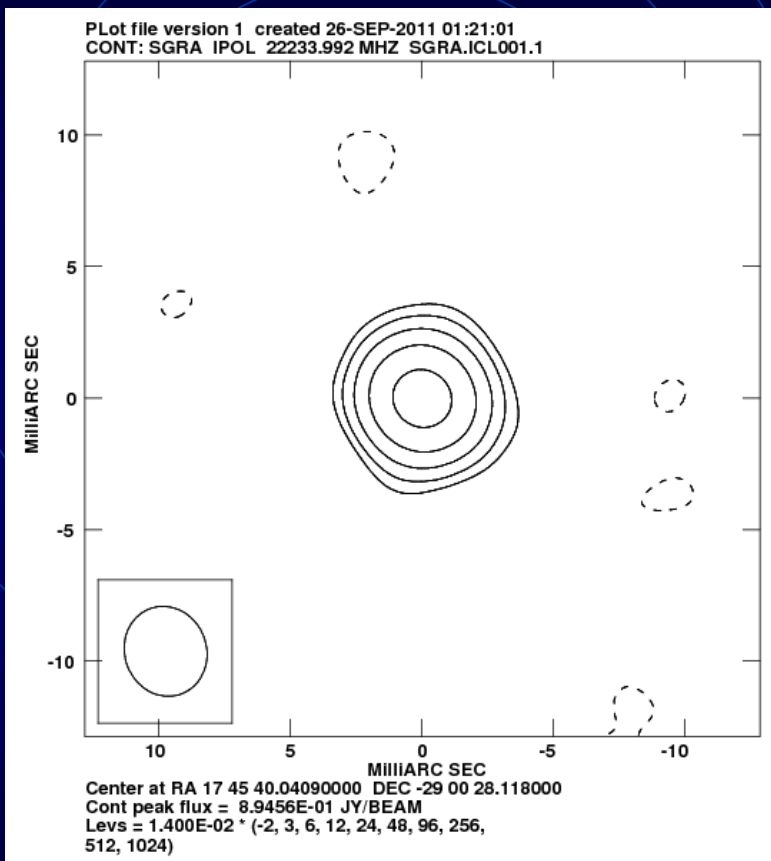


Latest results

Closure phase of Sgr A* Q-band



Images of Sgr A* , K and Q band with KVN+VEAR



K-band(KJVC test obs r11027b)

Q-band (SgrA* camp r11091b)

- Sgr A* is a good source for demonstration of performance of KVN+VERA

Summary

- start meeting ASAP
with the results of test observations and past
VERA and VLBI observations.
- GC sub WG hope to observe at 1Gbps and
use KJJVC regularly!