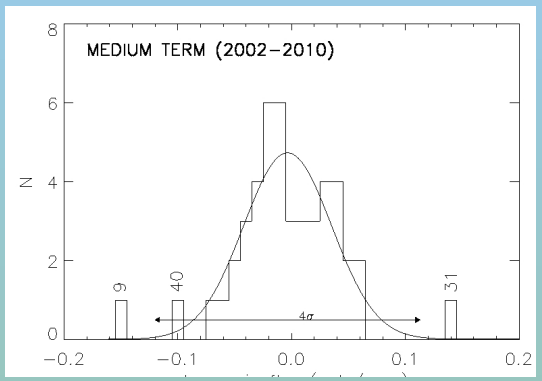
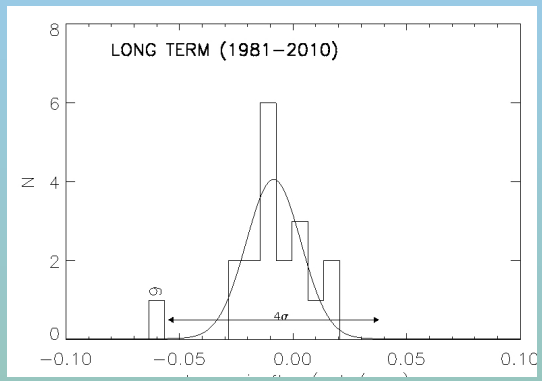
Flux Density Variations of Radio Sources in M82

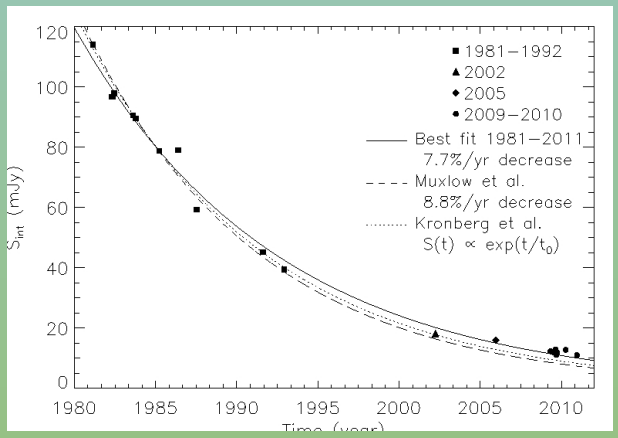
SOURCE VARIABILITY





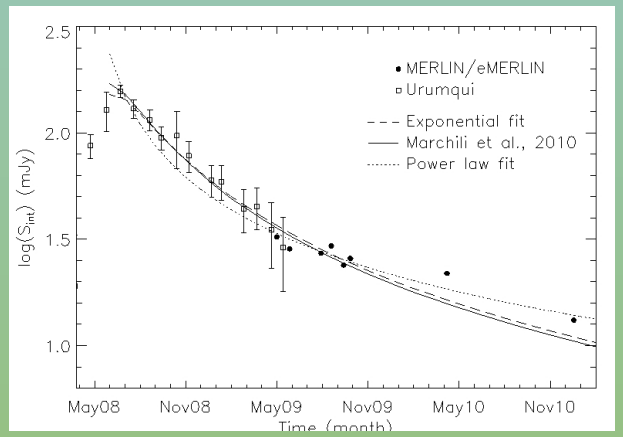
- No visible variation for ~90-95% of source.
- 8 sources show flux density changes (including 41.95+57.5, SN2008iz and the transient source 43.78+59.3)
- 4 of the five other varying sources are the most compact SNR in M82 after 41.95+57.5

41.95+57.5 – KNOWN VARIABLE



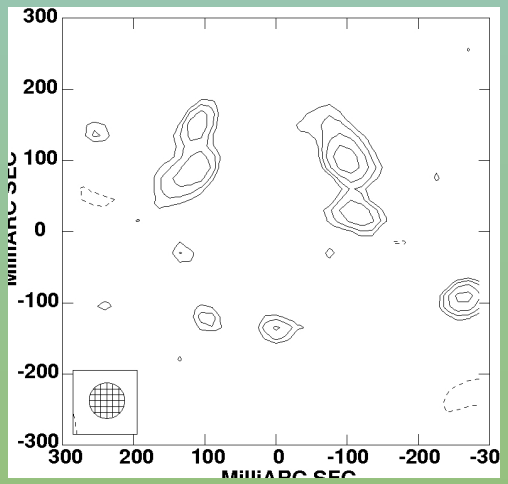
- Rate of change seems to have decreased from 8.8%/yr to closer to 7.5%/yr
- Similarities with unusually luminous radio supernova 1986J

SN2008iz



- Continue monitoring
- Possibly show a small reduction in the rate of its flux density decline

A NEWLY DETECTED SNR SHELL



- S_{peak}=99μJy/beam, S_{int}=305 μJy
- Most likely a supernova remnant.