

Reproducible GABA and Glx – Scan time considerations

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Materials/Methods

Subjects:

- 21 male healthy volunteers (age 24-44 years).
- Each subject scanned twice one week apart

MRI protocol:

- 32-channel head coil,
- TE=68 ms and TR=1800 ms for NR=328

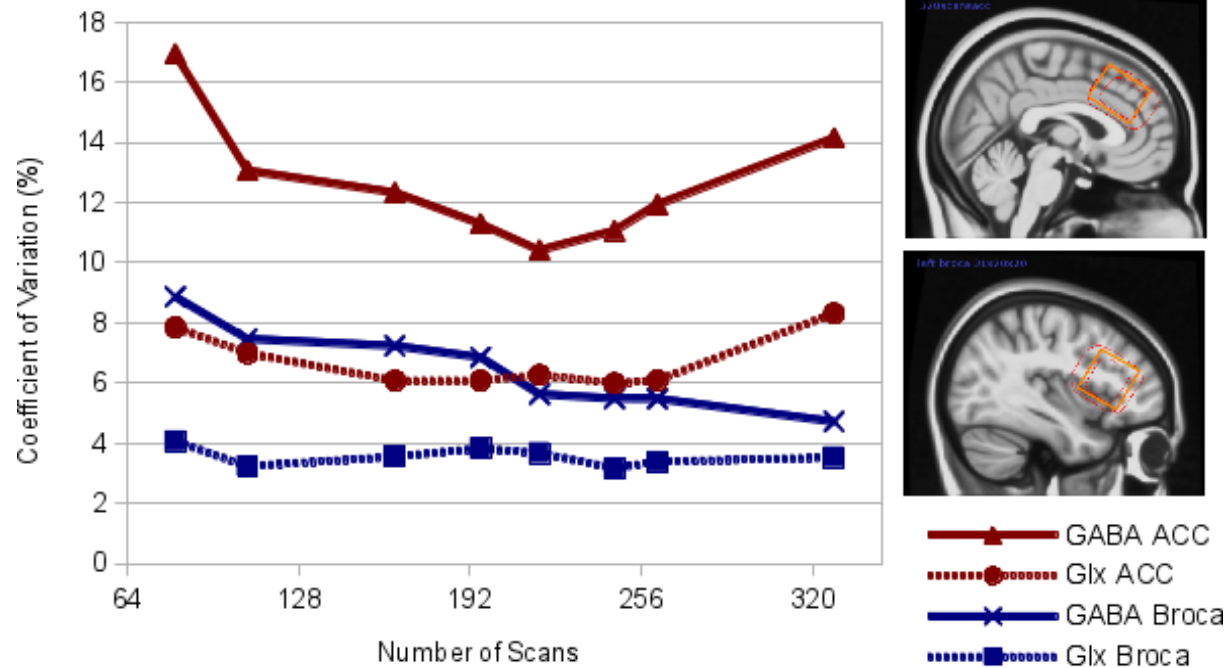
Locations:

- 21ml volume mid anterior cingulate cortex (ACC)
- 12ml volume left Broca's area

Analysis:

- Data partitioned into shorter sections numerically equivalent to scans of progressively increasing duration.
- Quantified with LCModel version 6.3-1H

Results



Region	GABA		Glx	
	Best CV (%)	@ NR=	Best CV (%)	@ NR=
ACC	10.4	218	6.0	246
Broca's	4.7 (5.6 @ 218)	328	3.2	246