

Raw Image Quality Control

Manuela Costantino

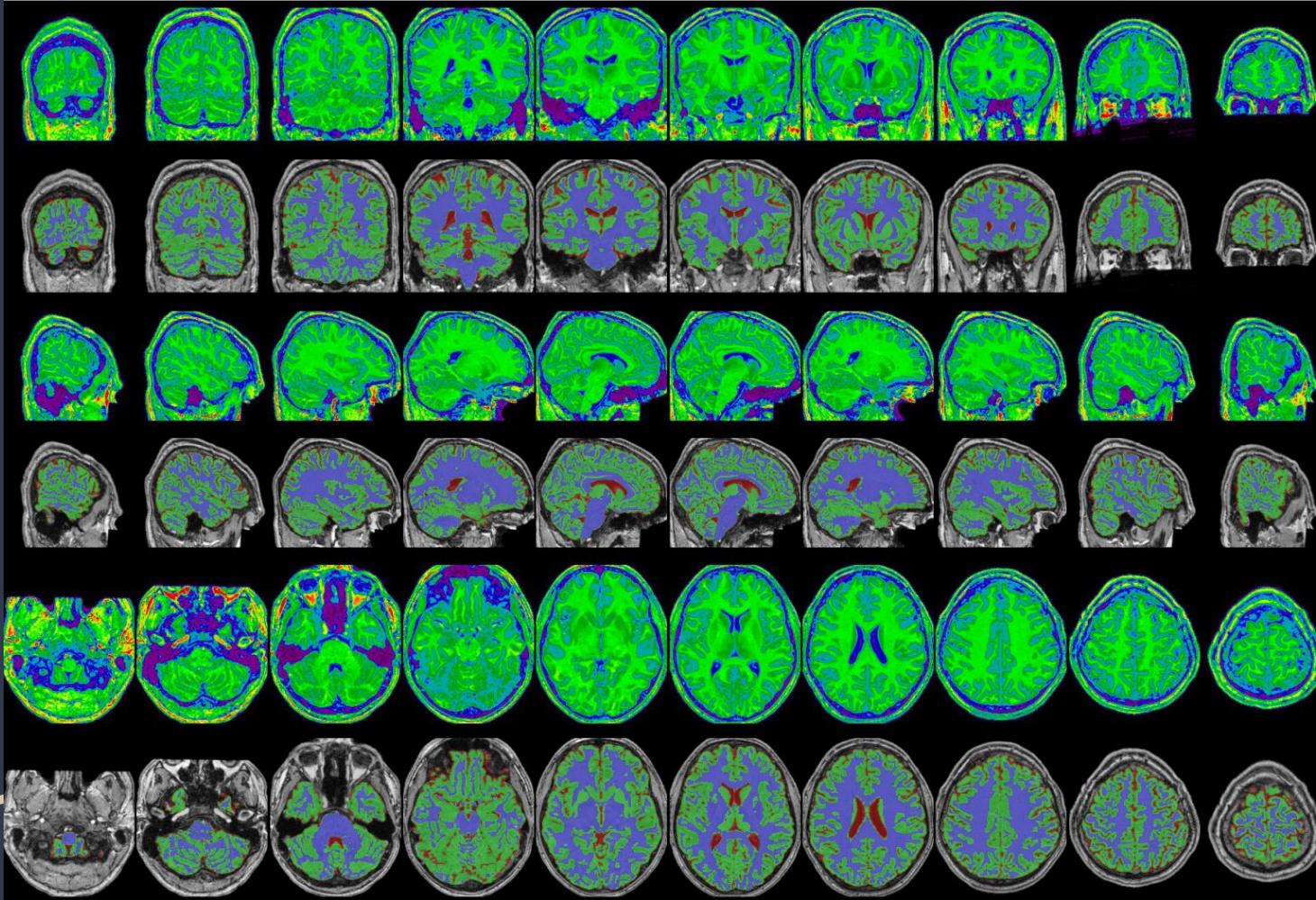
What to look at

- Do we see the whole brain?
- Is the scan noisy?
- Is the scan blurry?
- Is there ringing in any of the images?
- Is the contrast good?
- Is the brain in proper orientation?
- Scale ranges 1(good)-6(bad)

1. Perfect

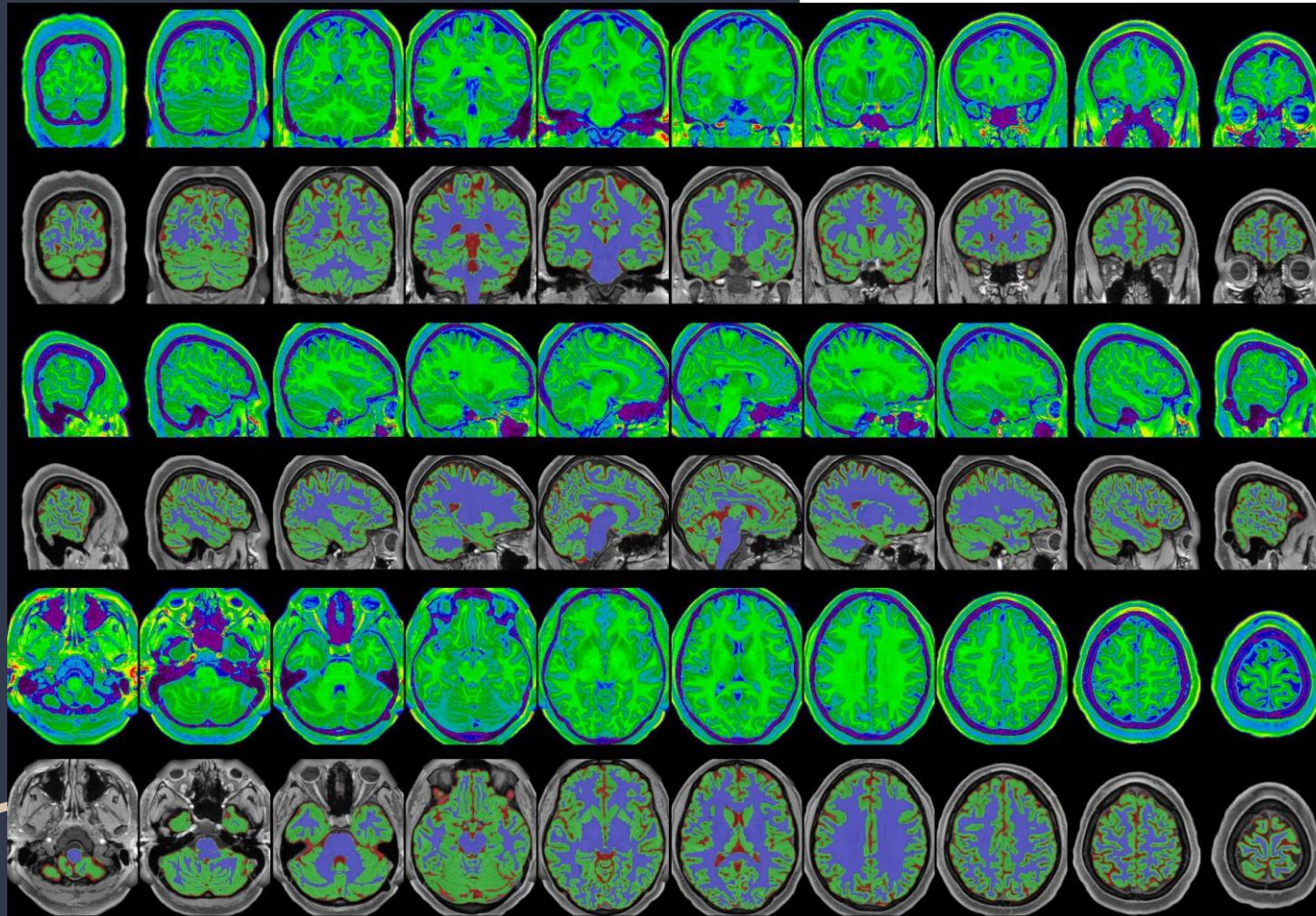
Full brain POV

No motion artifact



ABIDE

sub-0050045_T1w

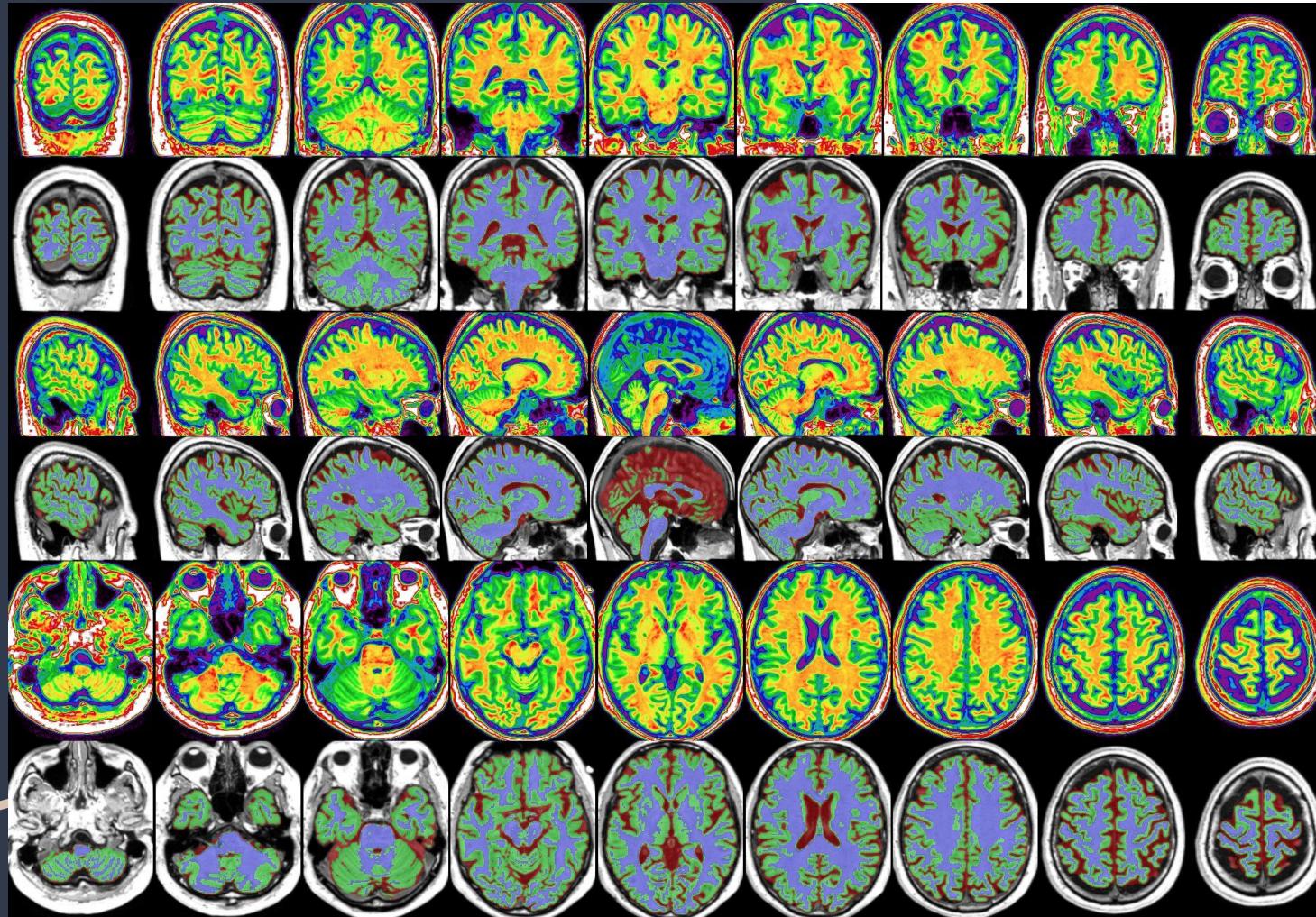


HCP_S1200

127630_T1w_acpc_
dc_restore

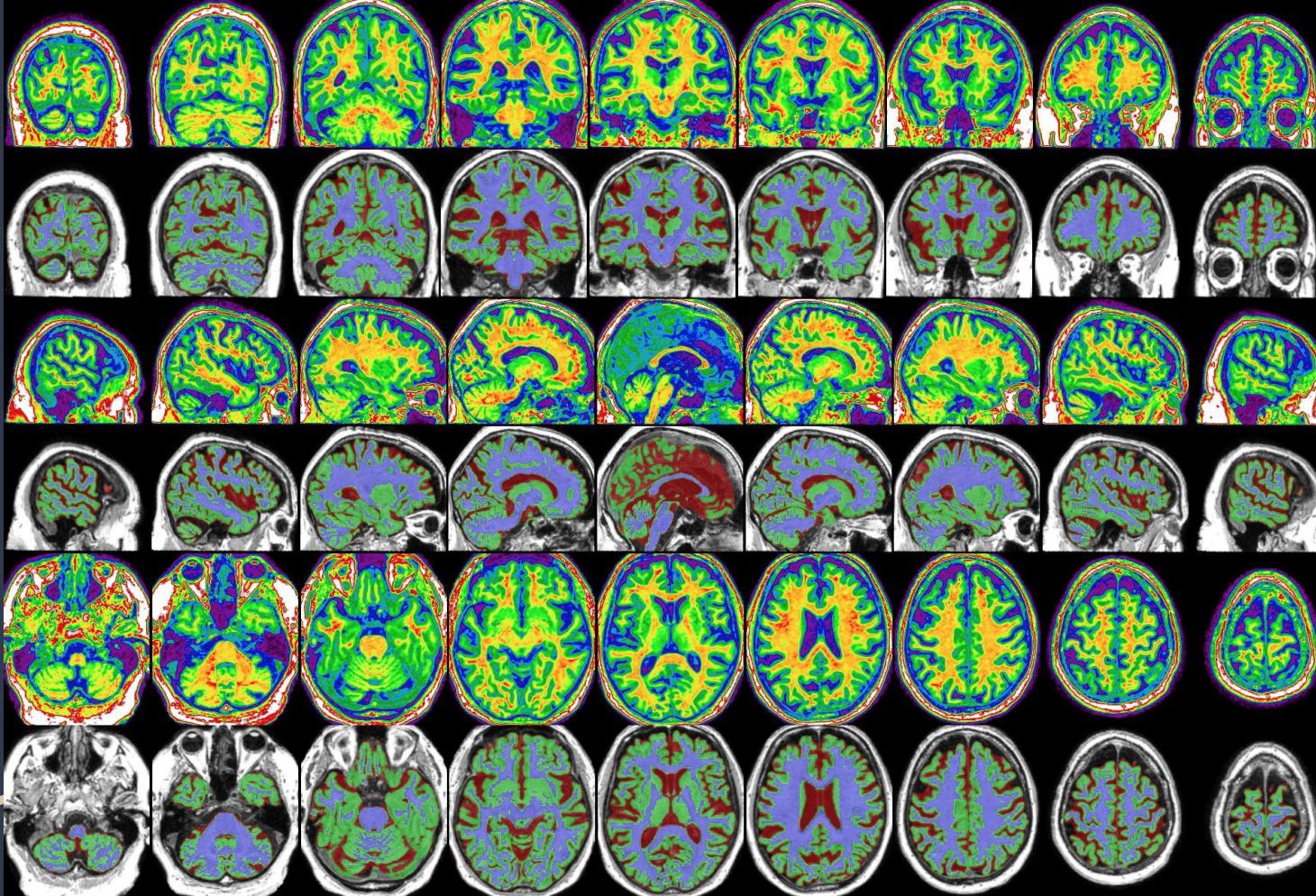
2. Very Good

Lightly noisy and/or blurry
and /or bad contrast
No clear ringing
Full brain POV



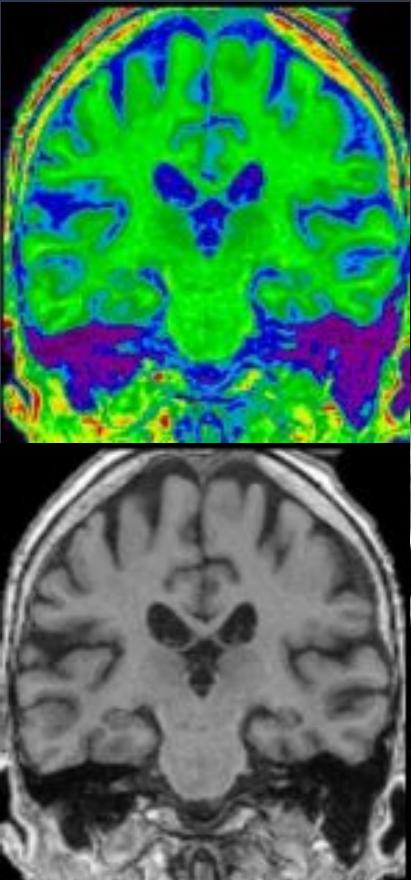
ADNI

80917



AIBL

131141



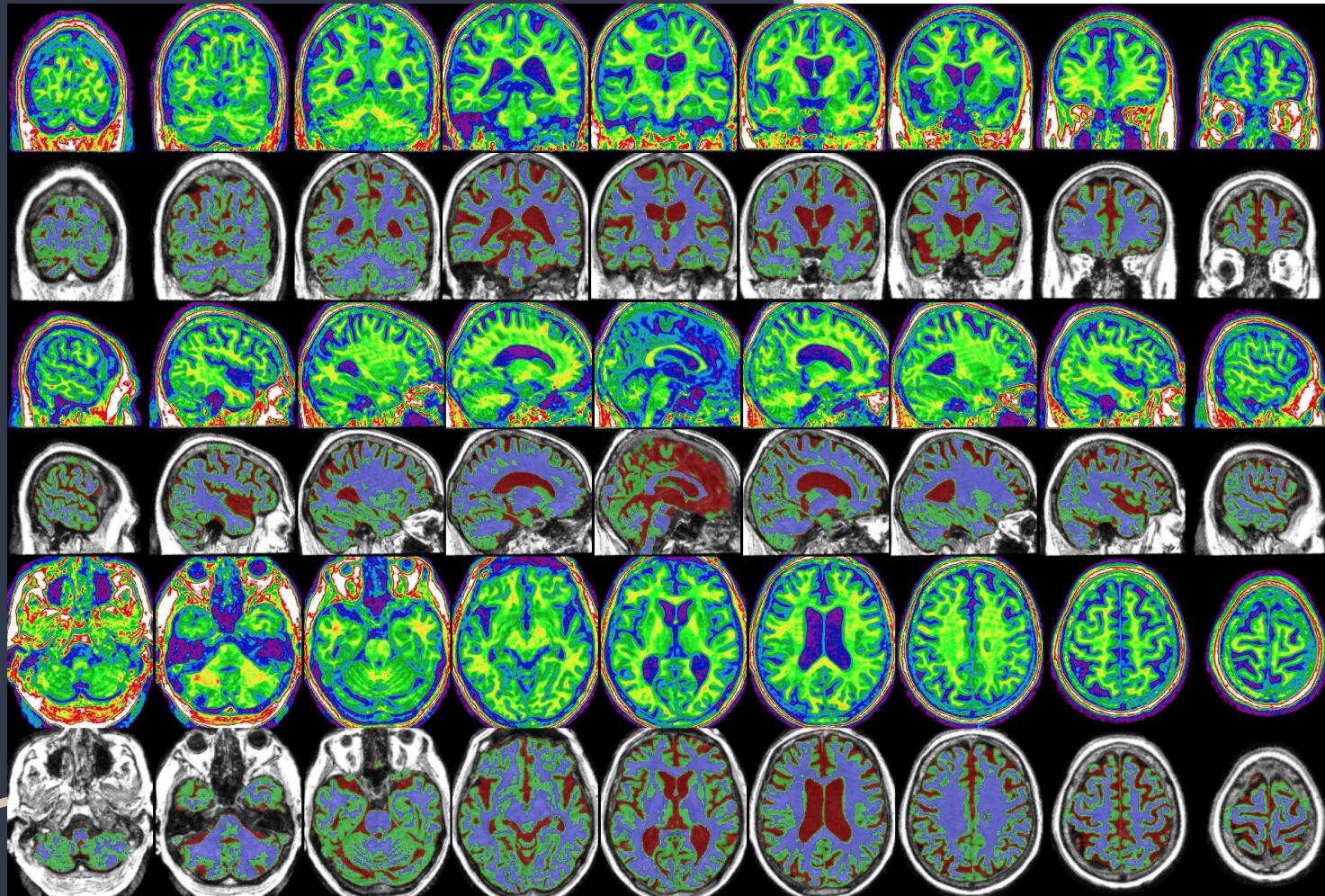
AIBL

16988

Bad contrast

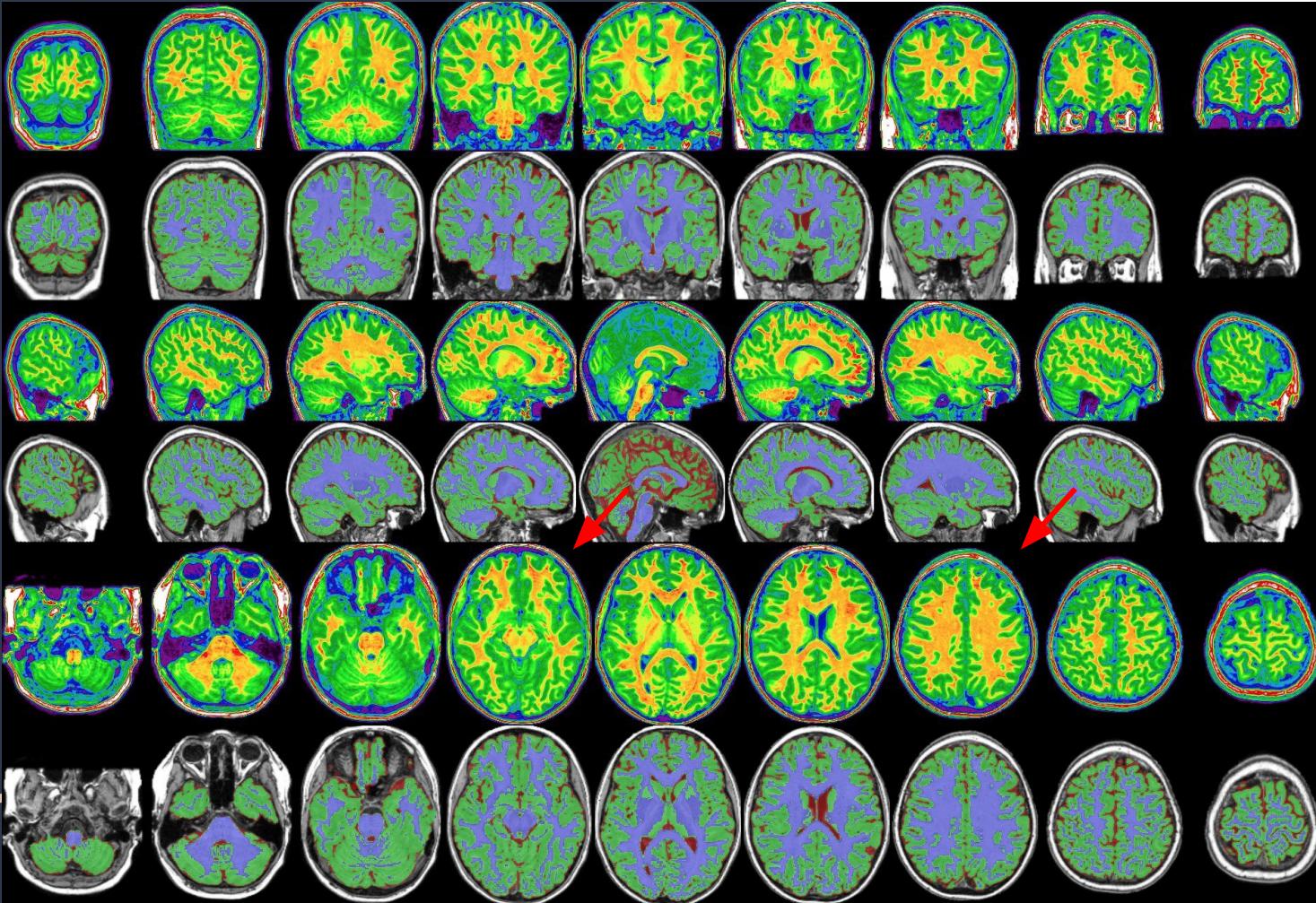
3. Good

Very noisy image
and/or slight ringing/blurring (localized to one region of the brain)
and/or very small part of the brain cut off
And or/ very bad contrast, can barely tell GM from WM



ADNI

388923



ABIDEII

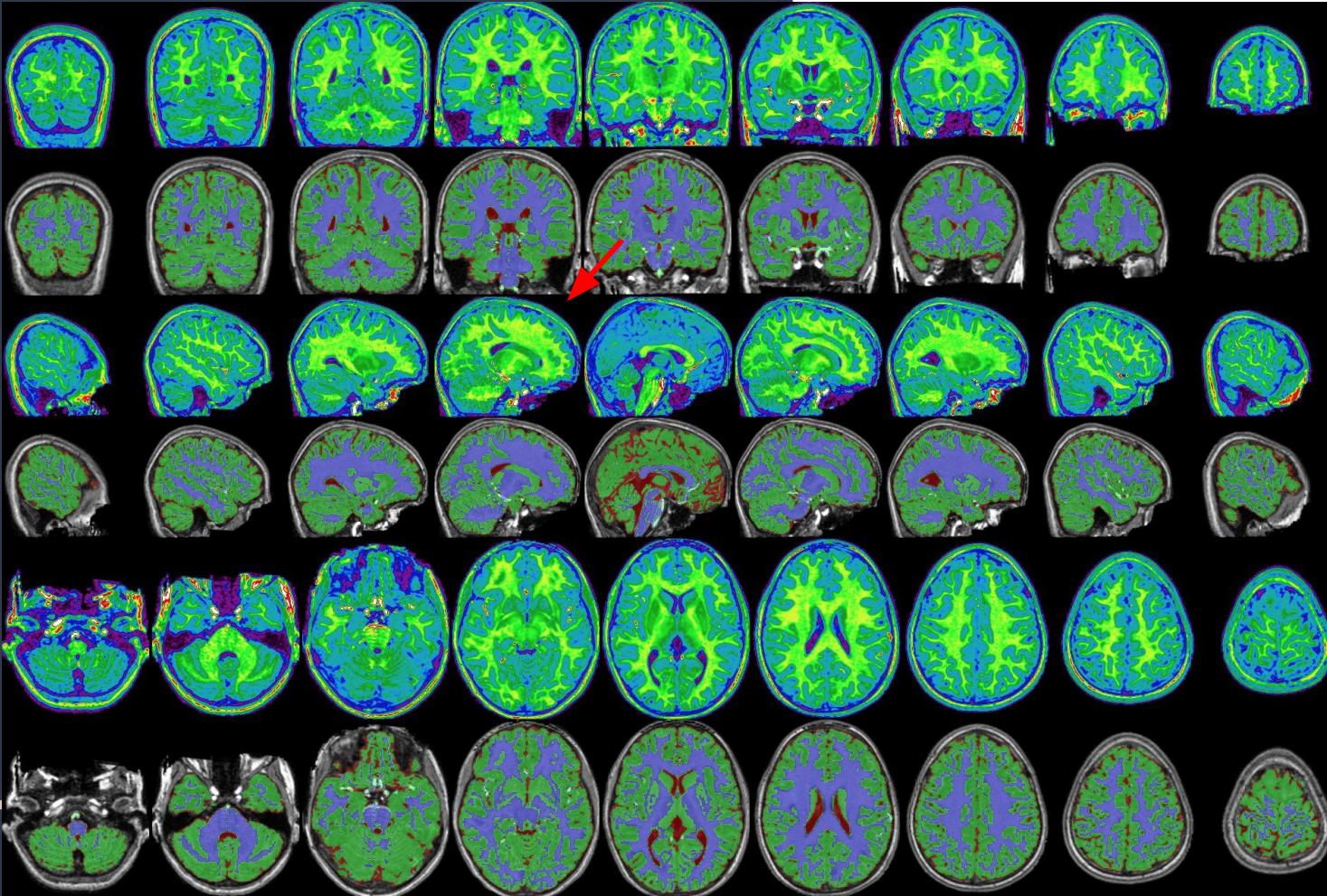
sub-28981_ses-1_ru
n-1_T1w

Slight ringing in
T4-T7

IXI

IXI533-Guys-1066-T
1

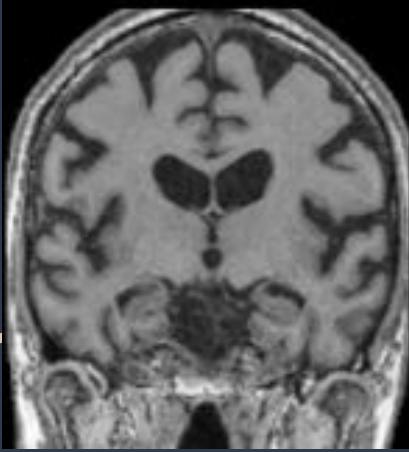
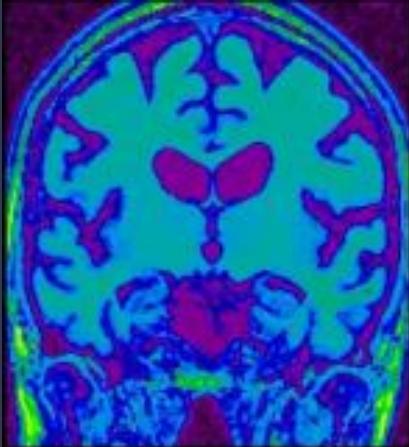
Very spotty image



indi_ADHD200

sub-0010041_ses-1
_run-1_T1w

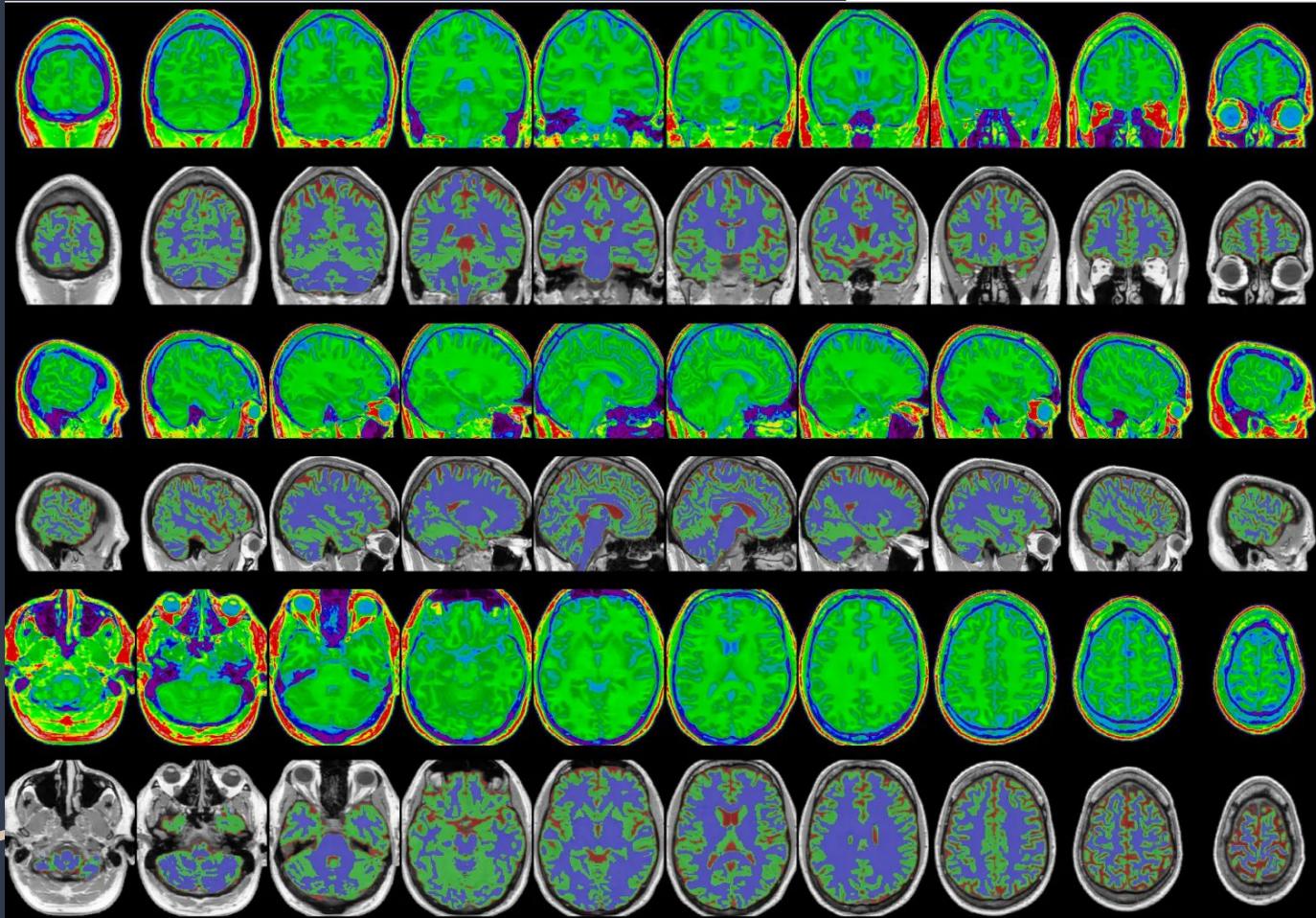
Part of the
cerebellum
missing in S4



AIBL

169858

Very bad contrast



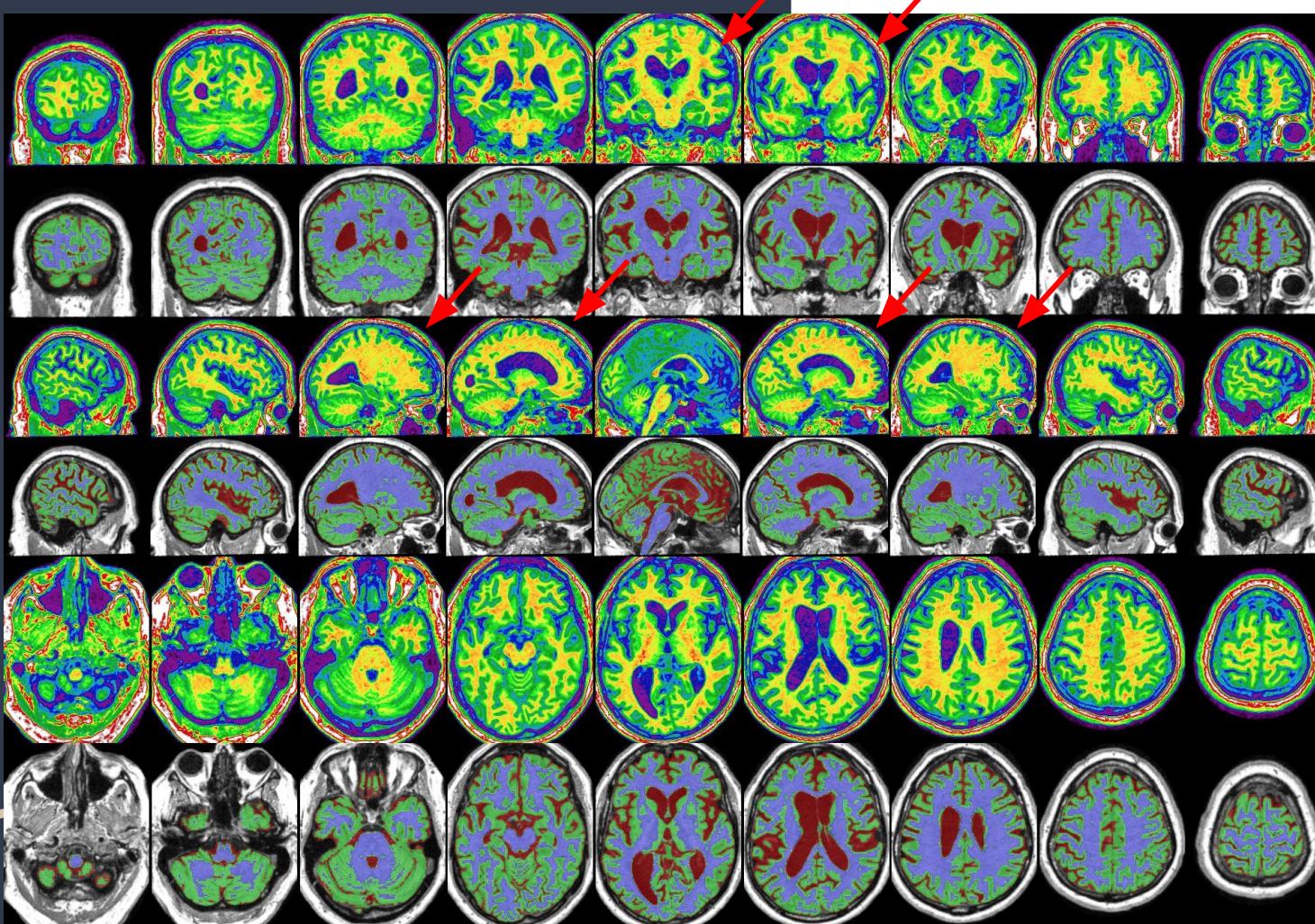
IXI

IXI424-IOP-0991-T1

Blurry

4. Bad

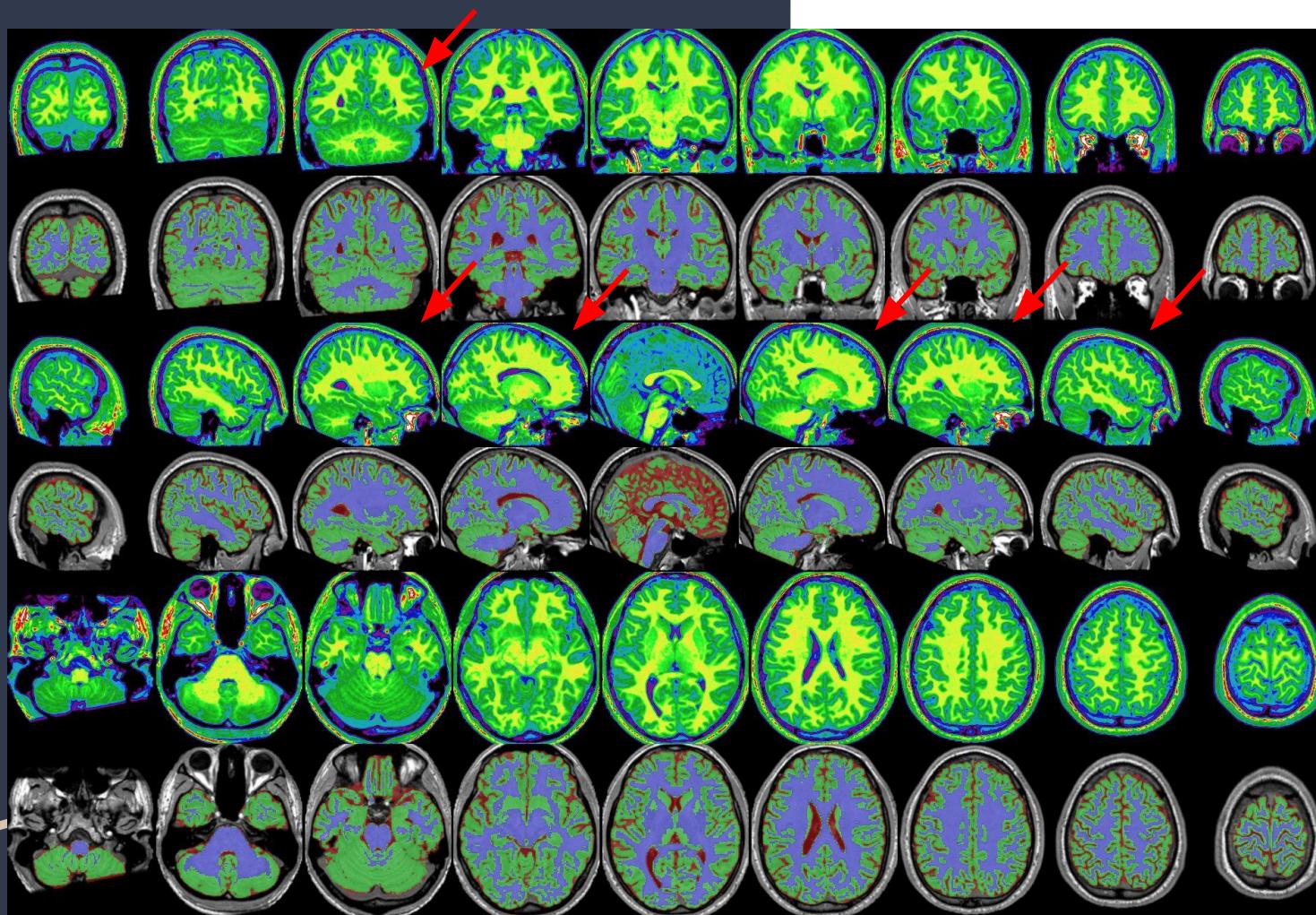
Significant ringing/Blurring/noise
and/or part of the brain has been cut off (e.g. half cerebellum)



226403

PPMI

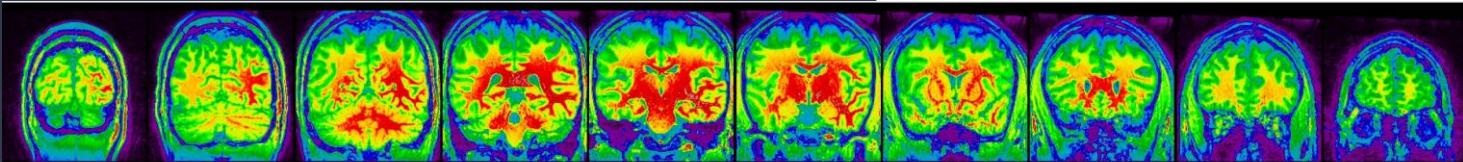
Ringing in C and S



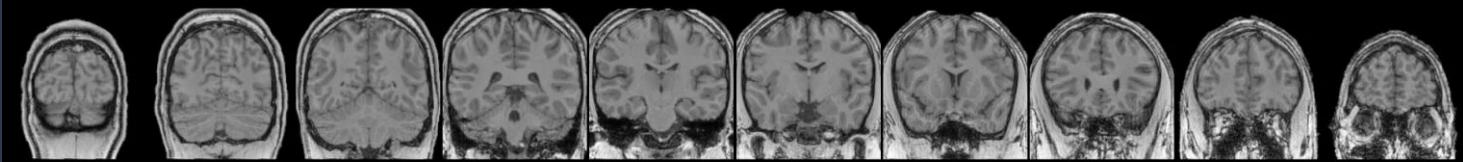
ABIDE

sub-0050645_T1w

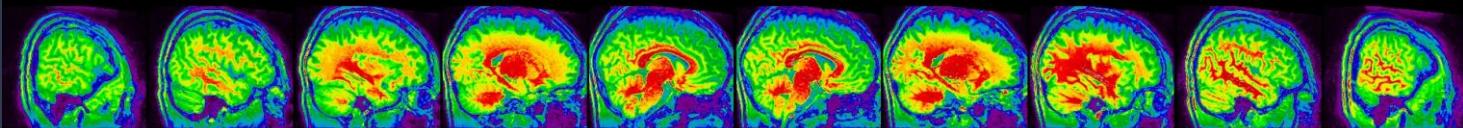
Cerebellum cut off



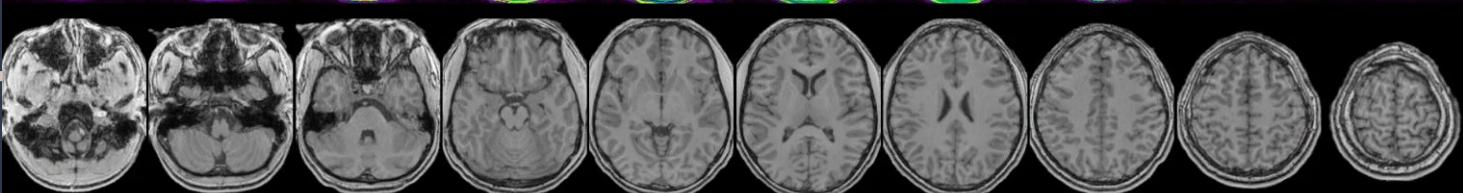
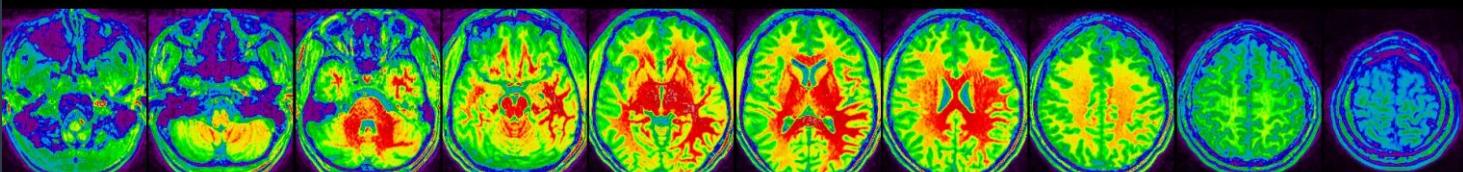
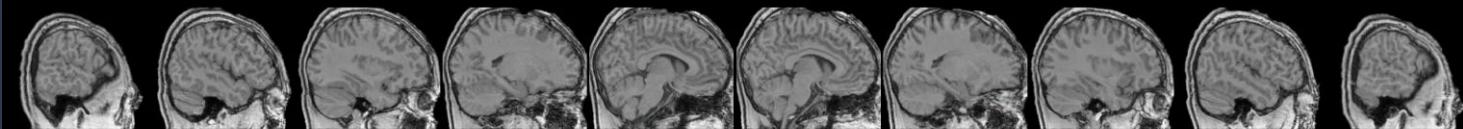
PNC

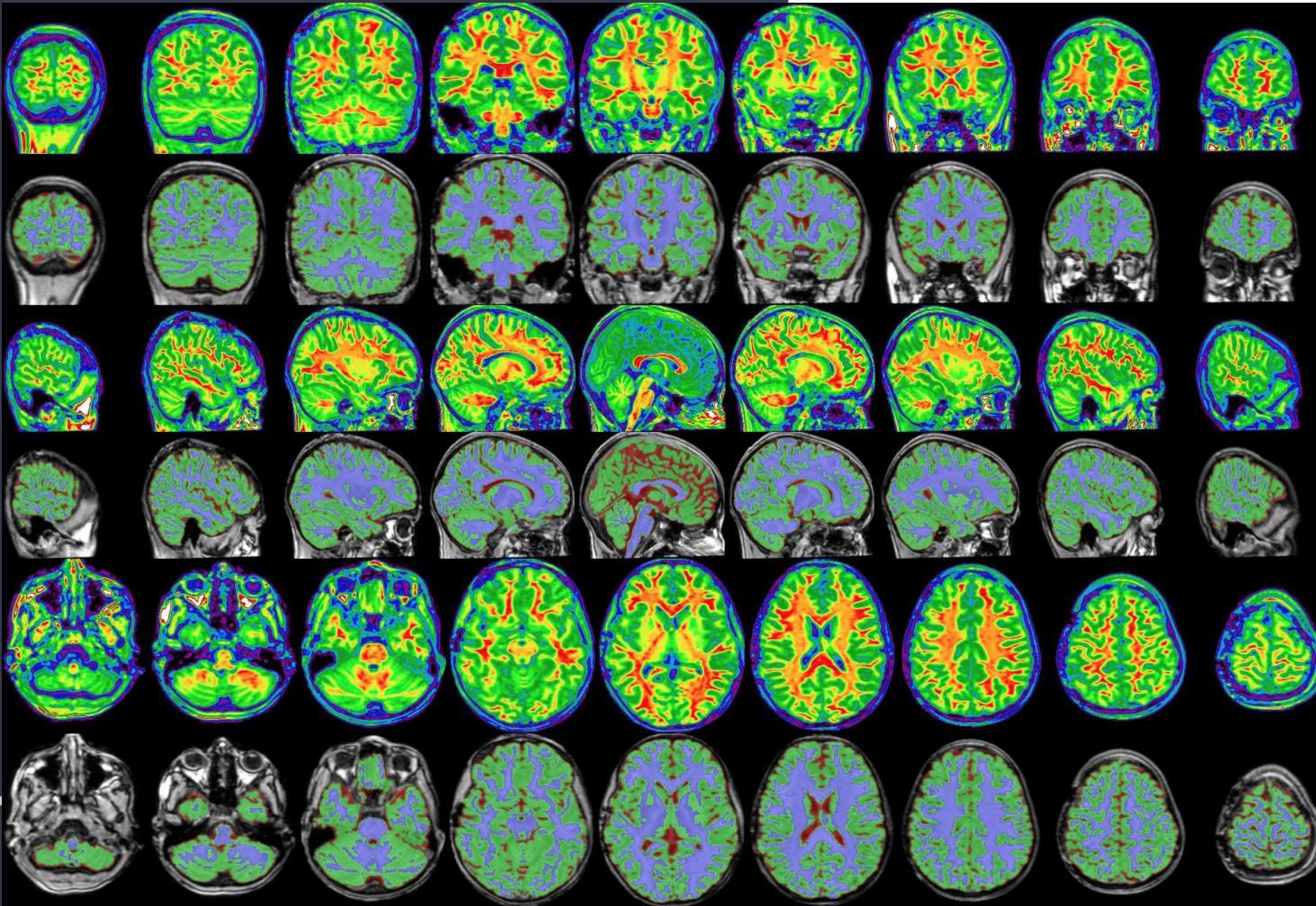


PNC_60275612745
8_t1



Ringing in





ABIDE

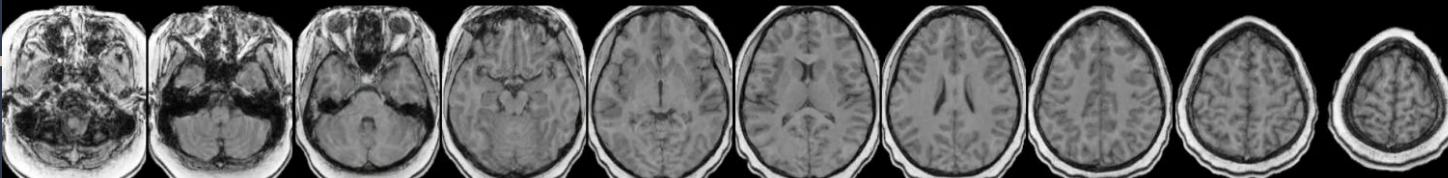
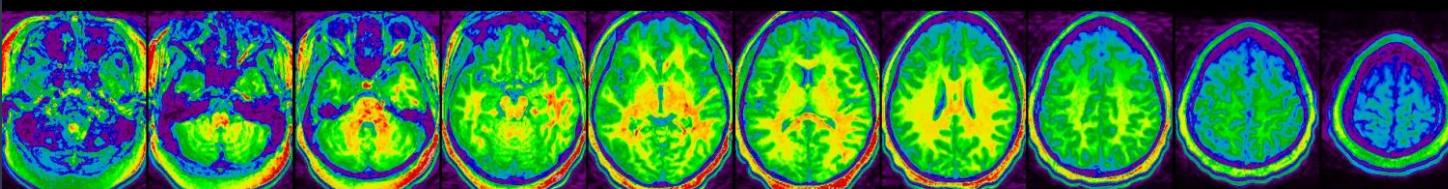
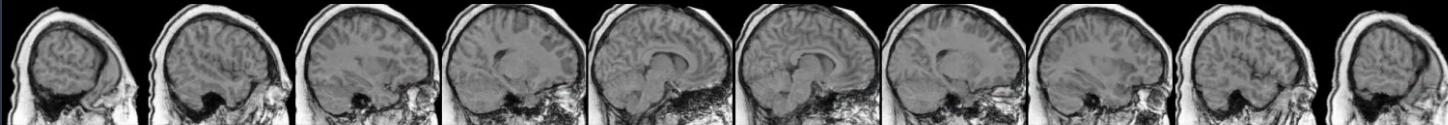
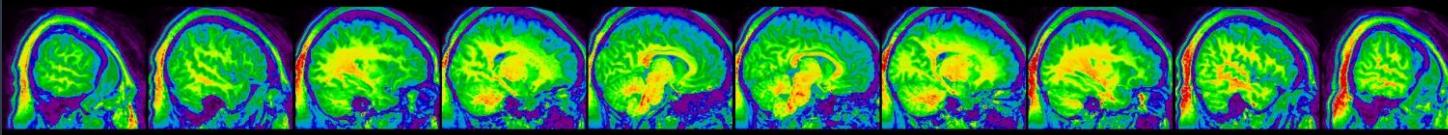
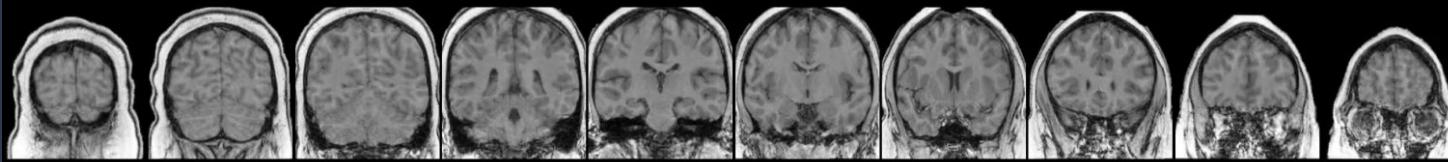
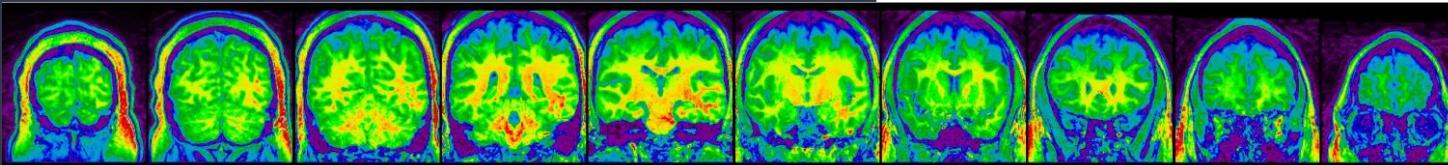
sub-0050554_T1w

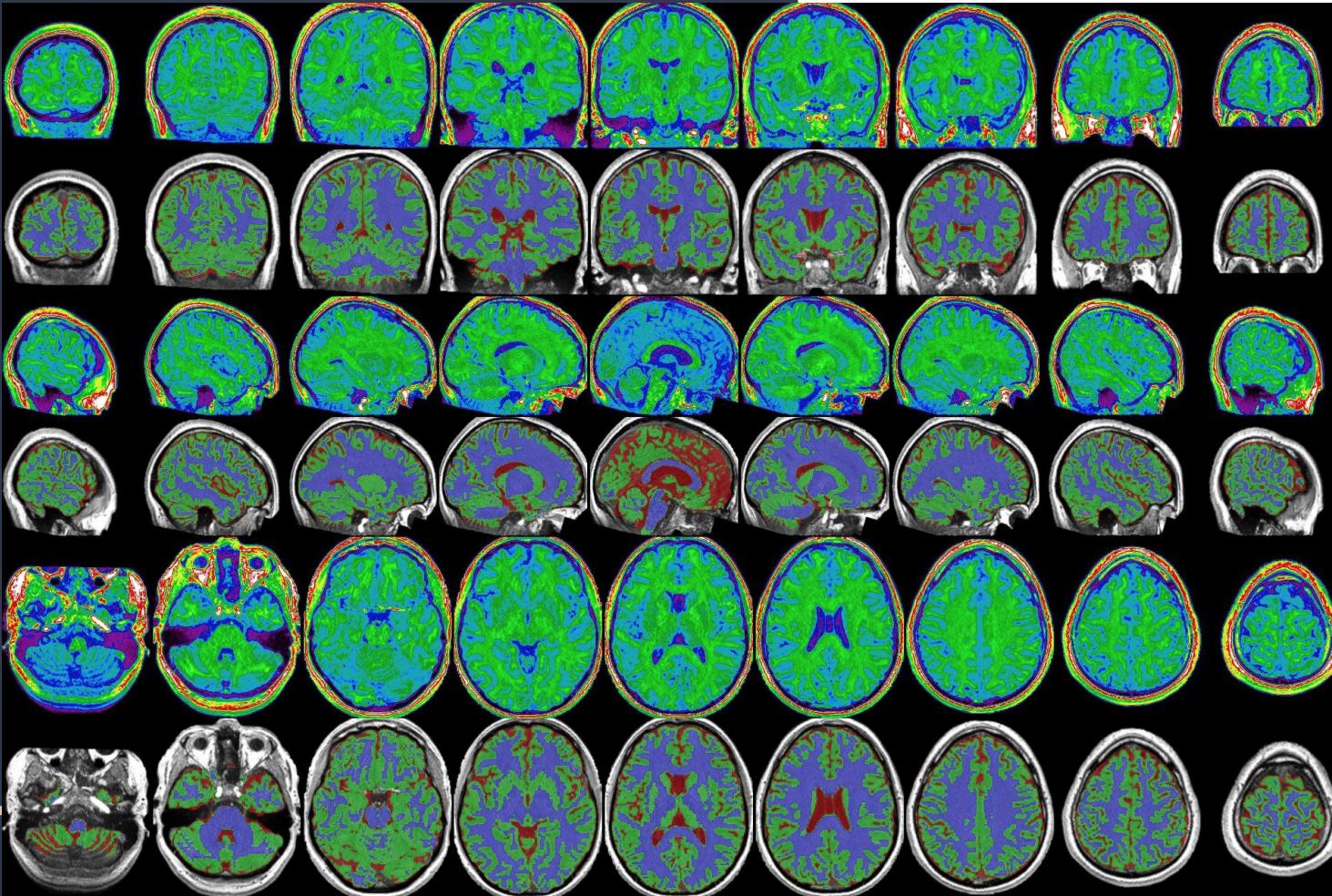
Blurring in T and
C

5. Very Bad

Clear ringing/blurring in the entire brain

Significant part of the brain cut off (e.g. whole cerebellum)

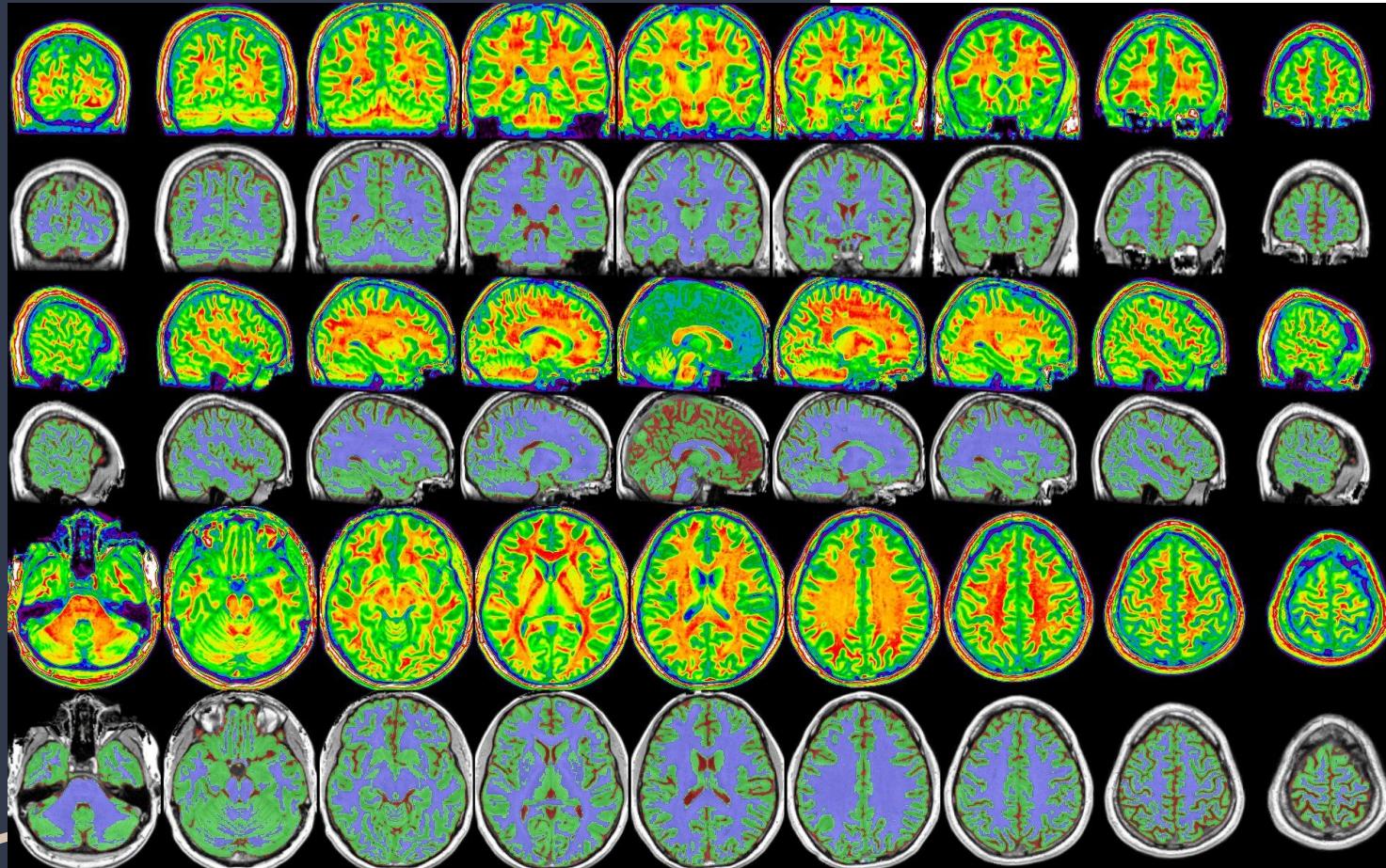




ABIDEII

sub-28689_ses-1_ru
n-1_T1w

Blurring



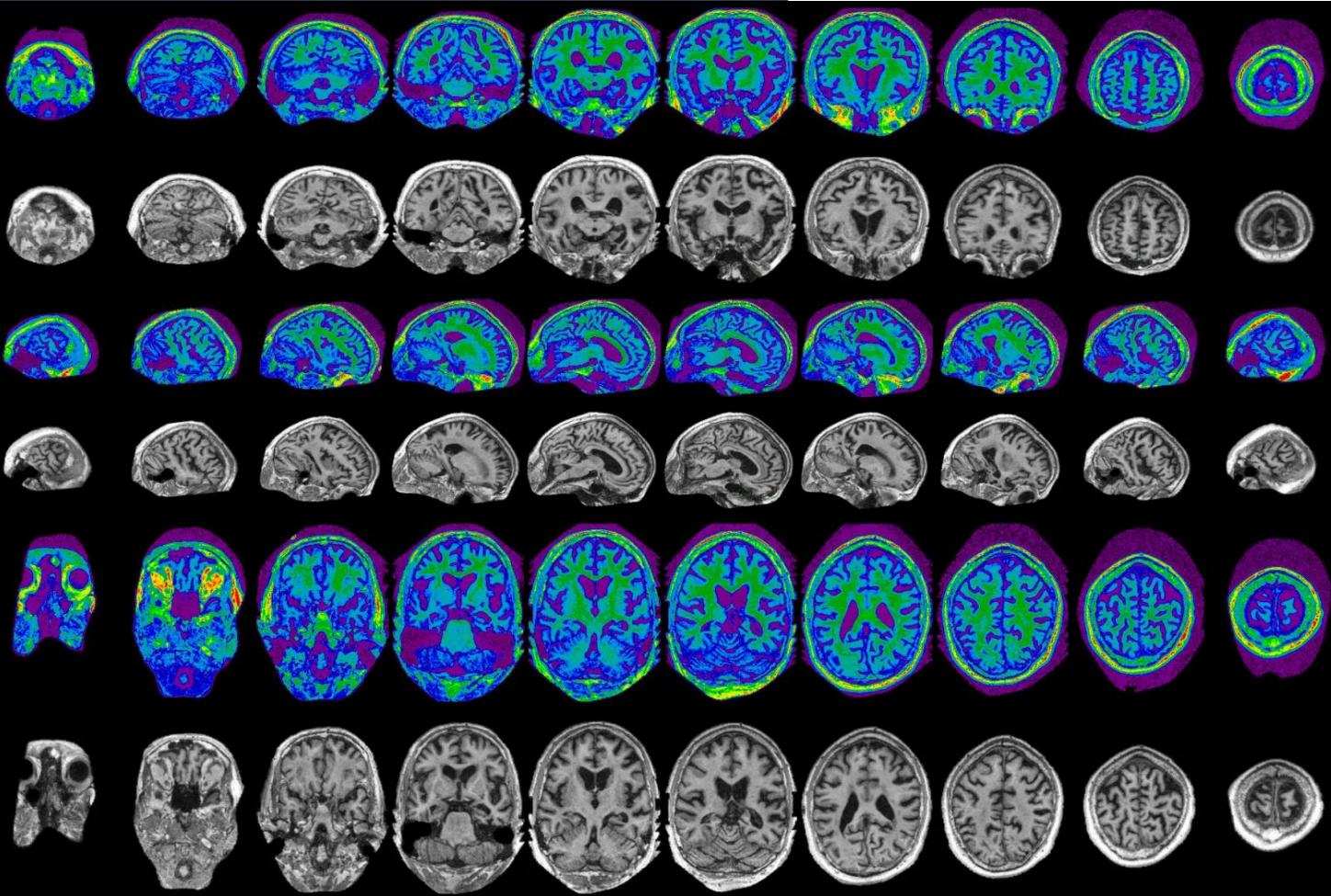
indi_ACPI

sub-0028663_ses-1
_run-1_T1w

Cerebellum cut off

6. Terrible

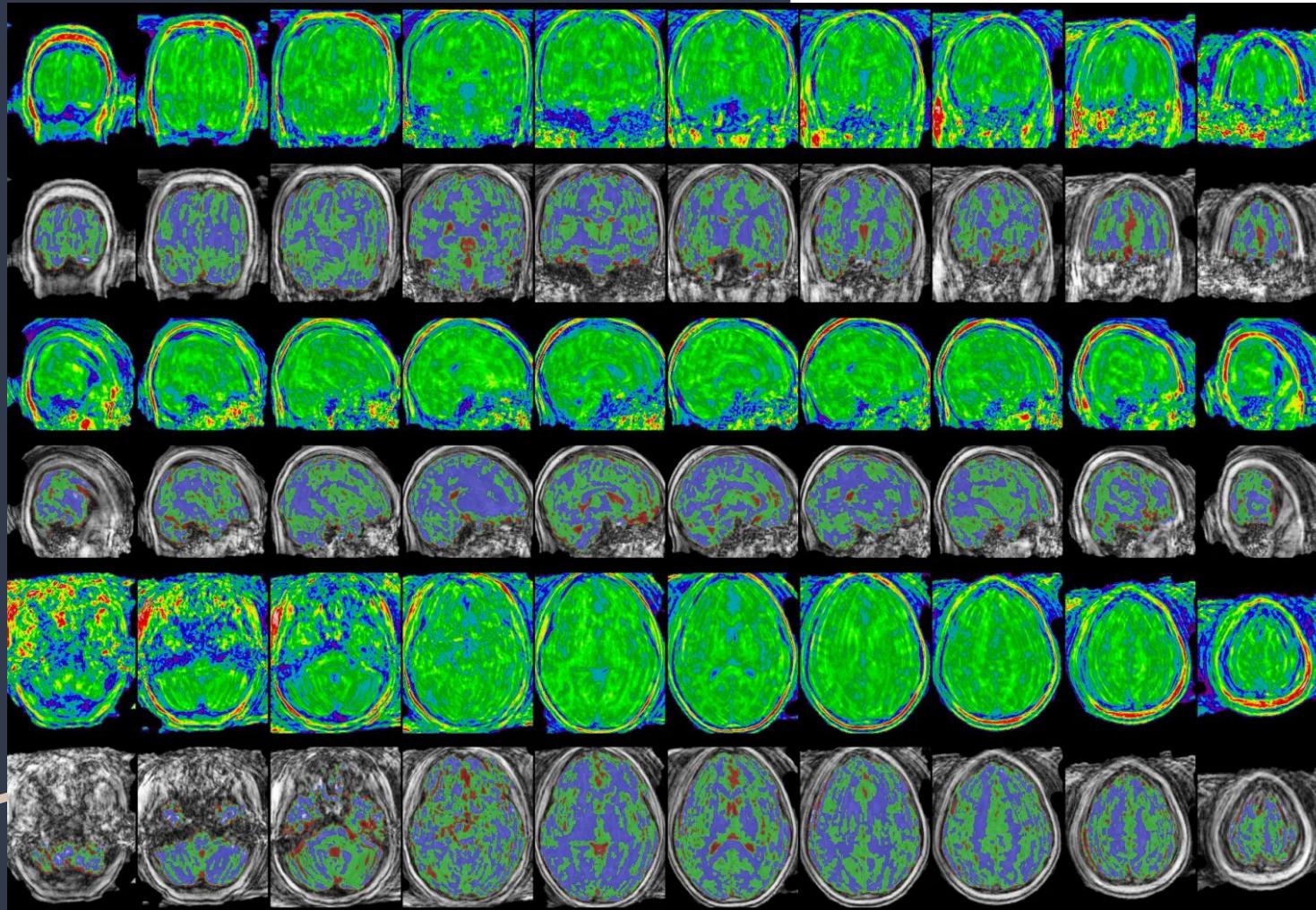
Something went very wrong



OASIS -1

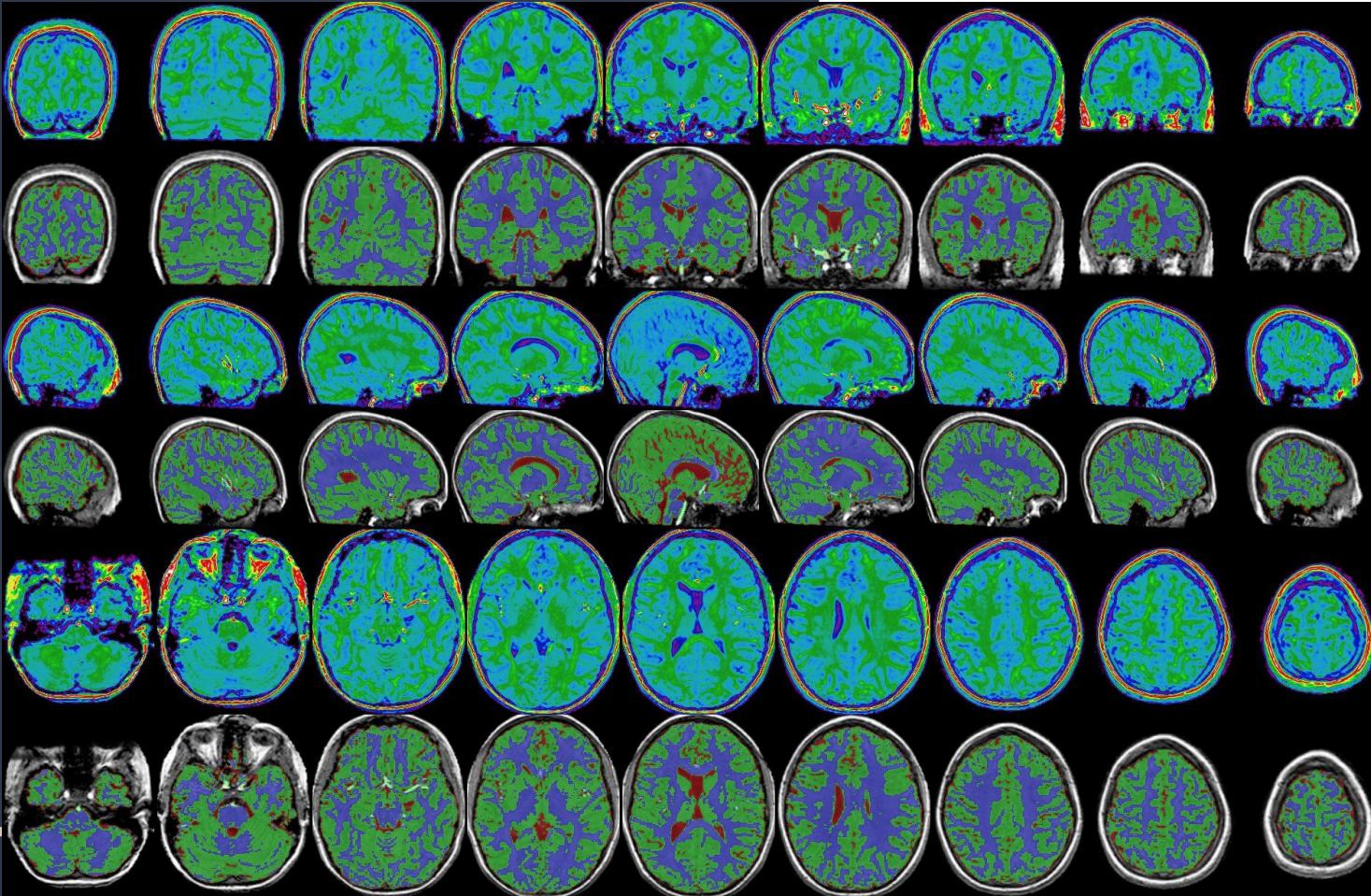
OAS1_0399_MR1_mpr-4
_anon

Brain in the wrong
orientation



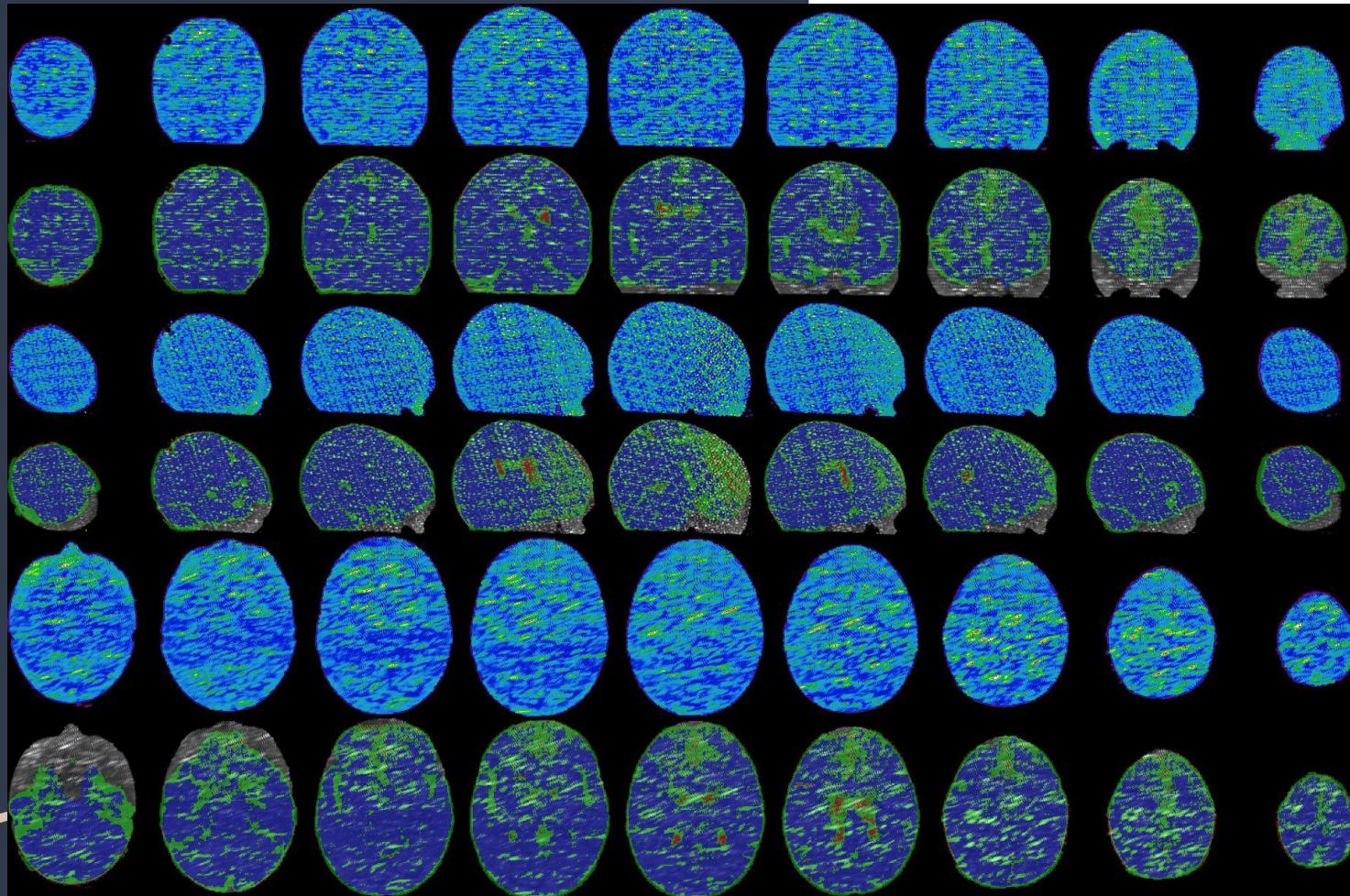
PNC

PNC_60273764230
0_t1



ABIDE

sub-0050306_T1w



PING

PING_P0342_t1