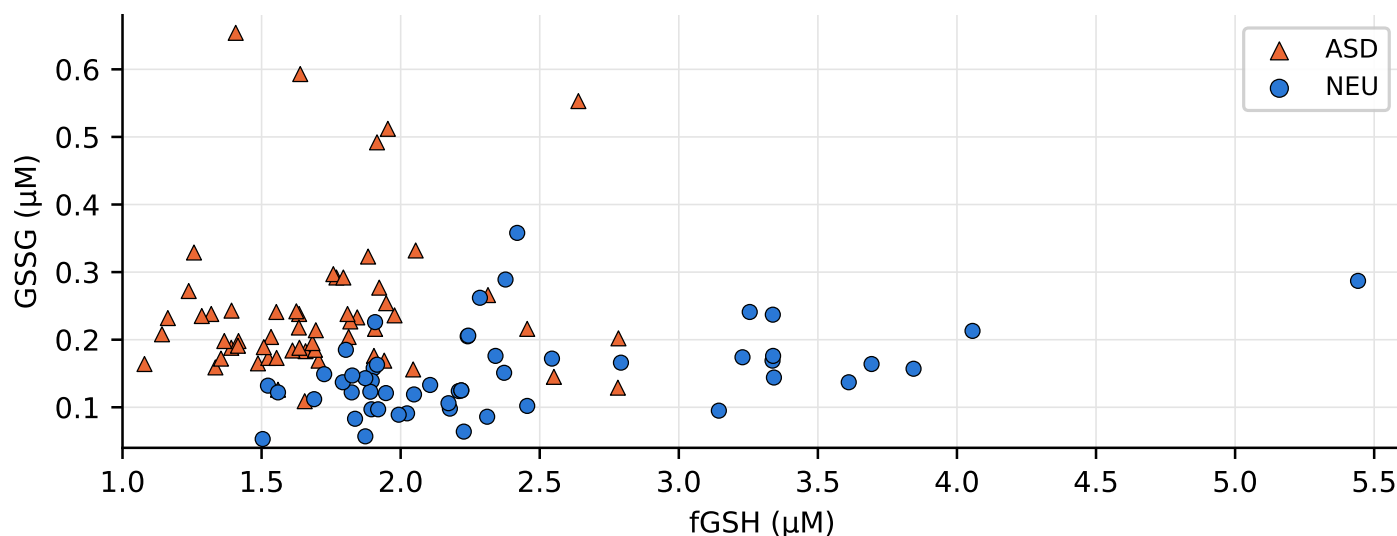


DATA 202 — Decision Trees · Week 7 Monday

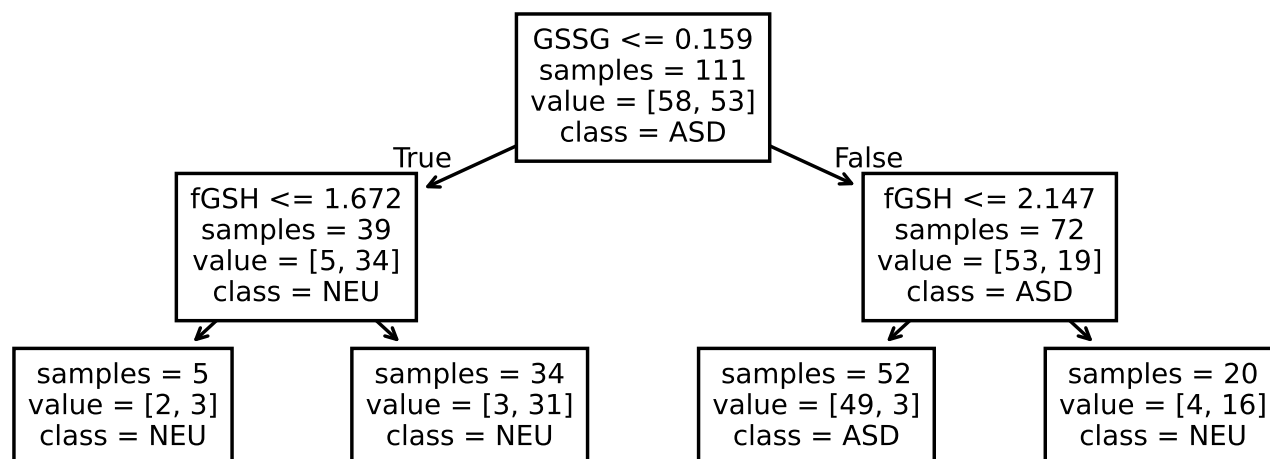
Same children as today's slides: the 111 training children, ASD (triangles) and NEU (circles). Your professor will tell you when to do each part.

1 · One line



1. Draw **one** straight line, either **vertical** or **horizontal**, that best separates ASD from NEU.
2. Count the children on the wrong side of your line: _____

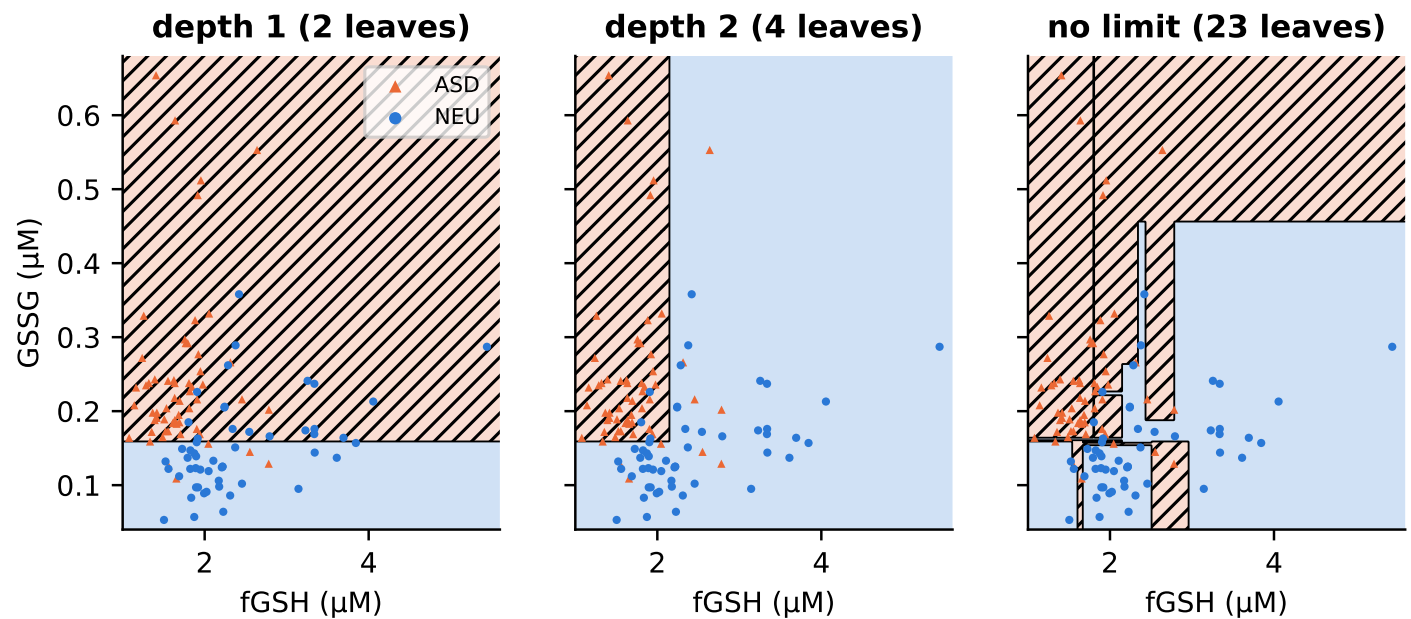
2 · Follow the tree



In each box, value = [ASD, NEU]. Send each test child down the tree. Start at the top; *True* goes left.

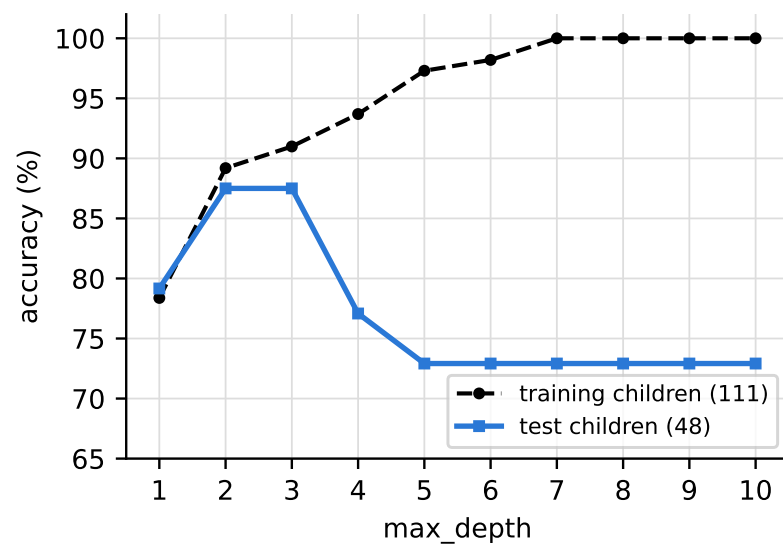
child	fGSH	GSSG	tree predicts	true group	right?
1	1.931	0.209	_____	ASD	_____
2	2.537	0.288	_____	NEU	_____
3	1.318	0.105	_____	ASD	_____

3 · Three maps



1. The background shows what each tree predicts at every spot.
2. In the “no limit” map, **circle** a rectangle that exists for a single child.
3. Under each map, write *too simple*, *about right* or *too wiggly*.

4 · Which depth?



1. Each tree’s accuracy on the training children and on the test children.
2. **Circle** the best depth for the test children.
3. **Label** the underfitting zone and the overfitting zone.
4. With no limit (depth 7): training _____ %, test _____ %.