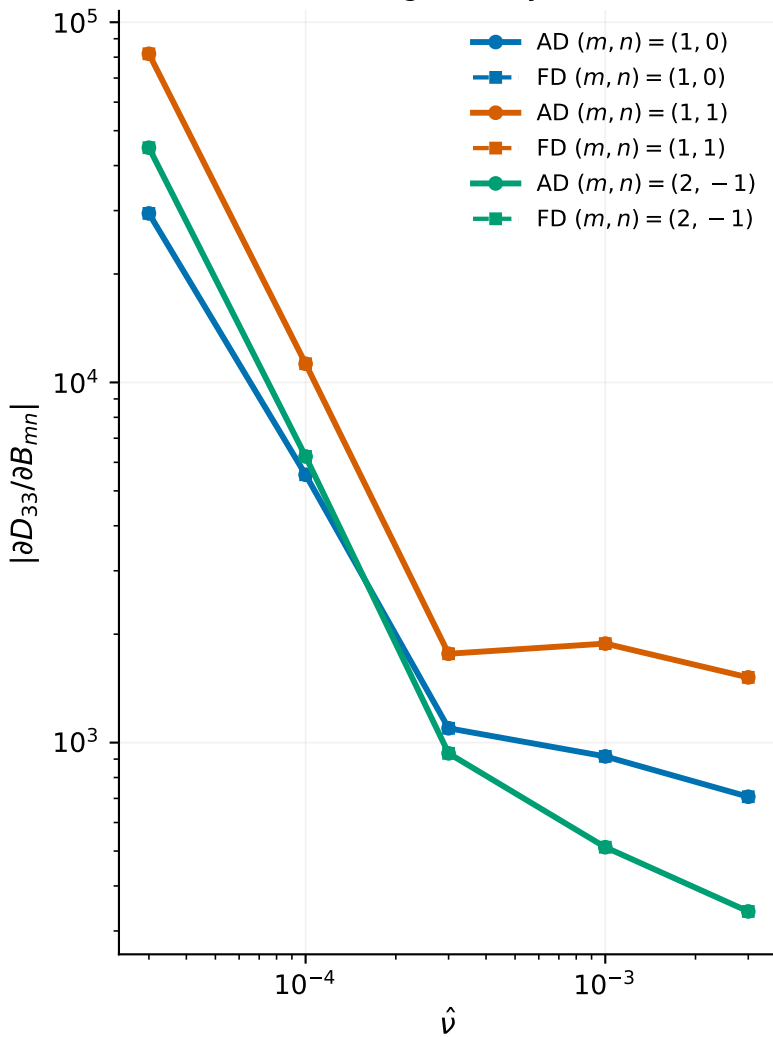
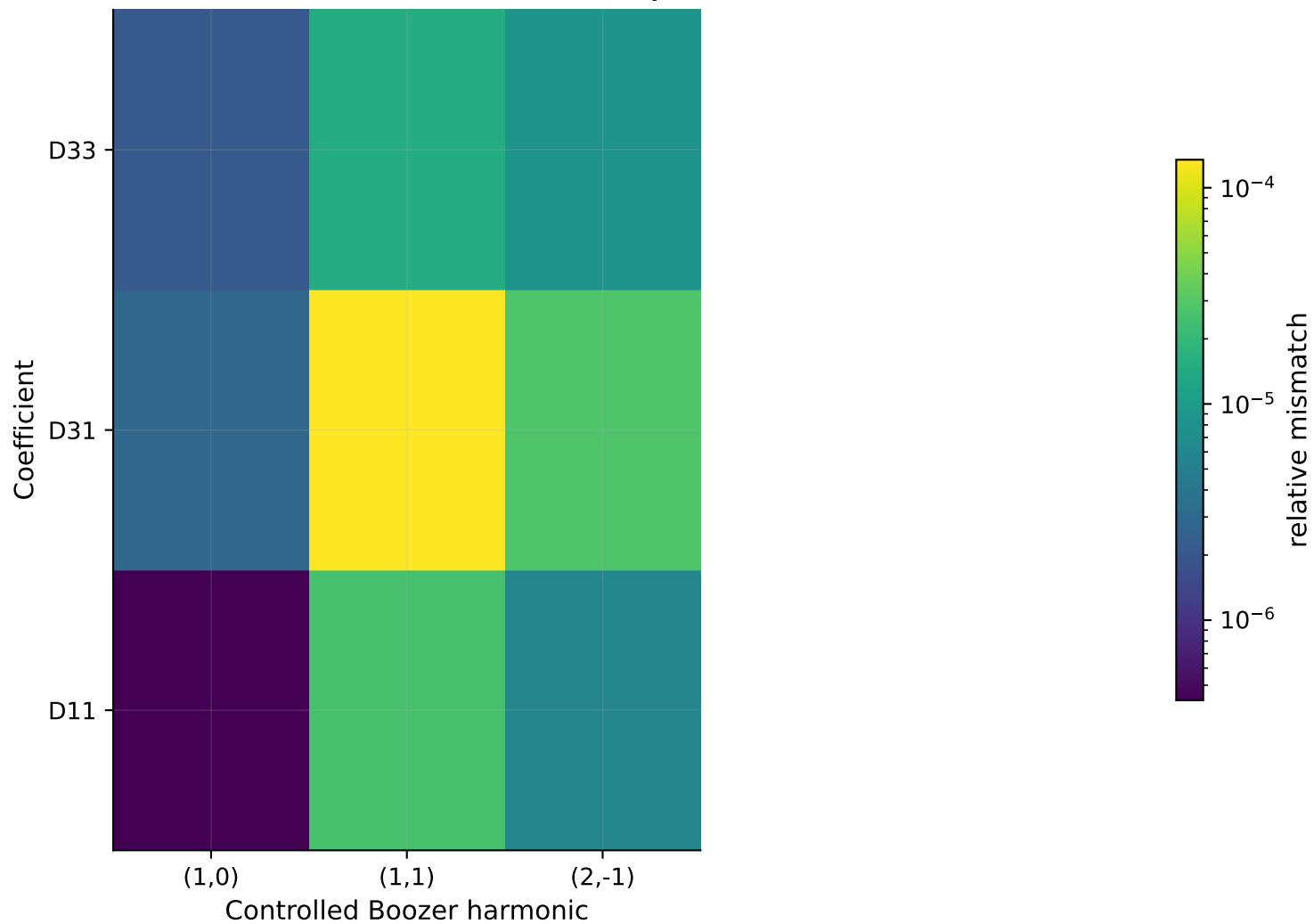


Three-control geometry derivative



Max AD/FD mismatch over collisionality



Stress benchmark: owned three-harmonic surface; large VMEC/Boozer controls remain a planned lane.