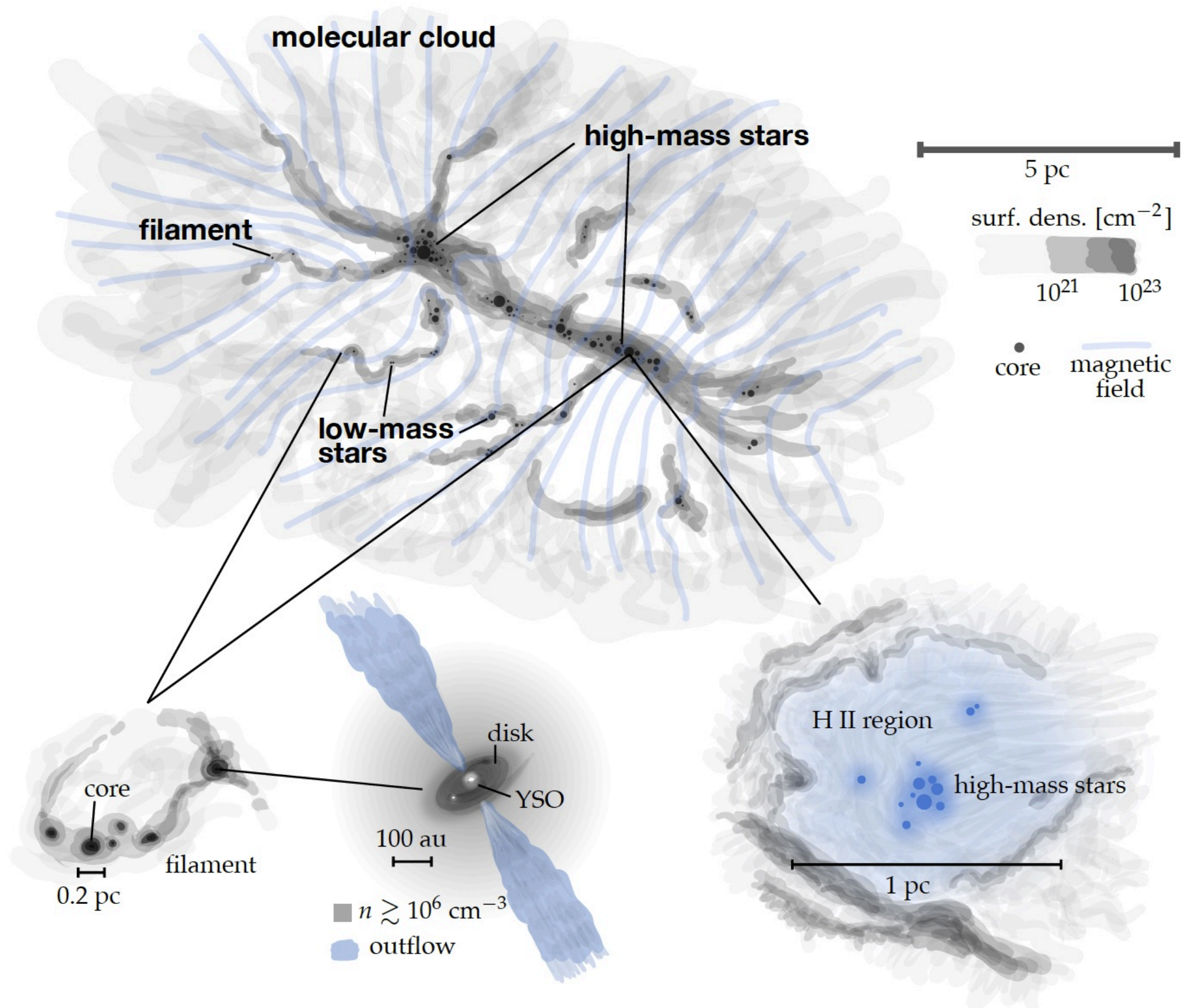


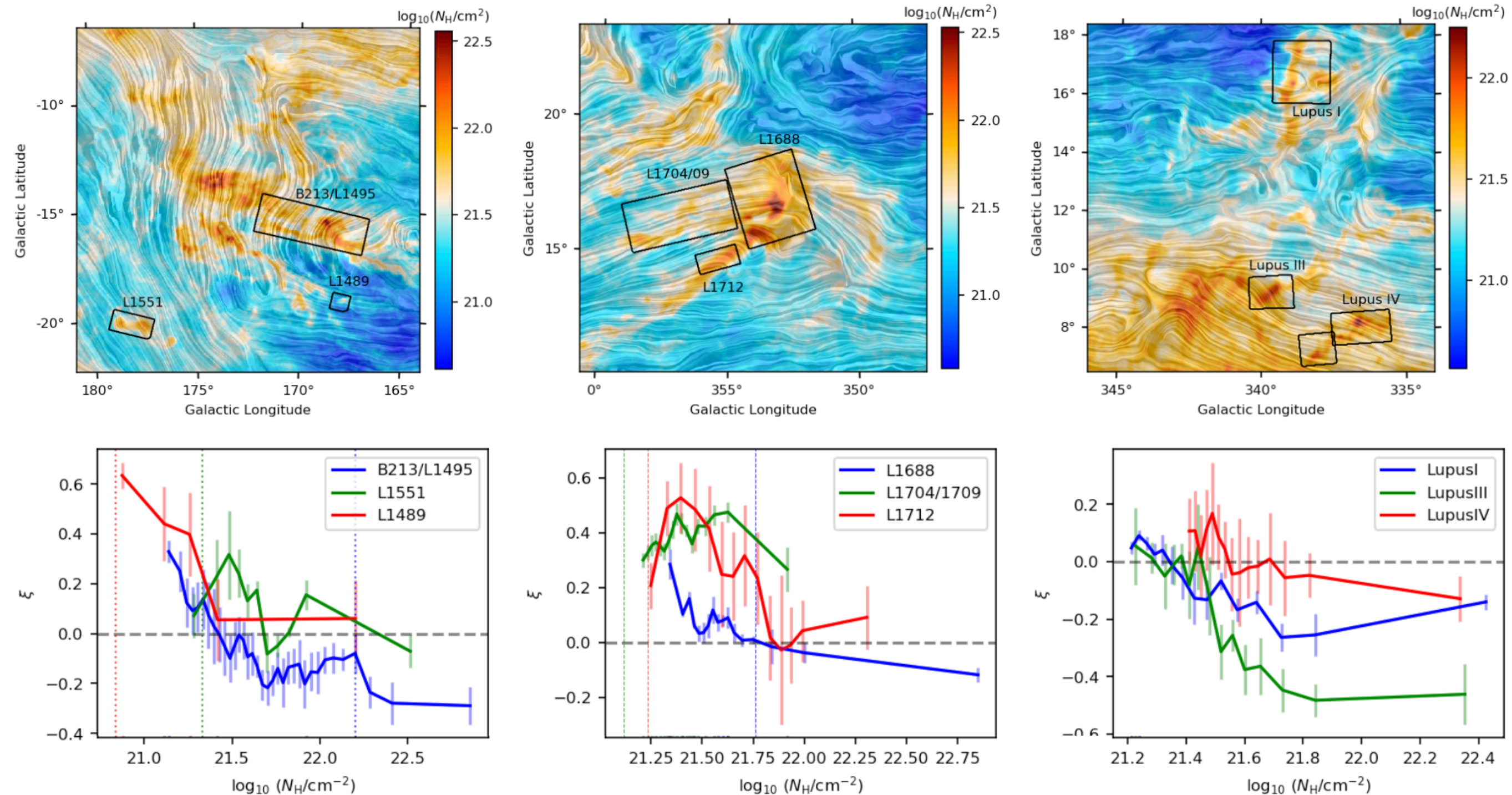
How do magnetic fields and dynamics influence each other?

Puzzles of Star Formation II
Ringberg castle
May 4-7, 2025

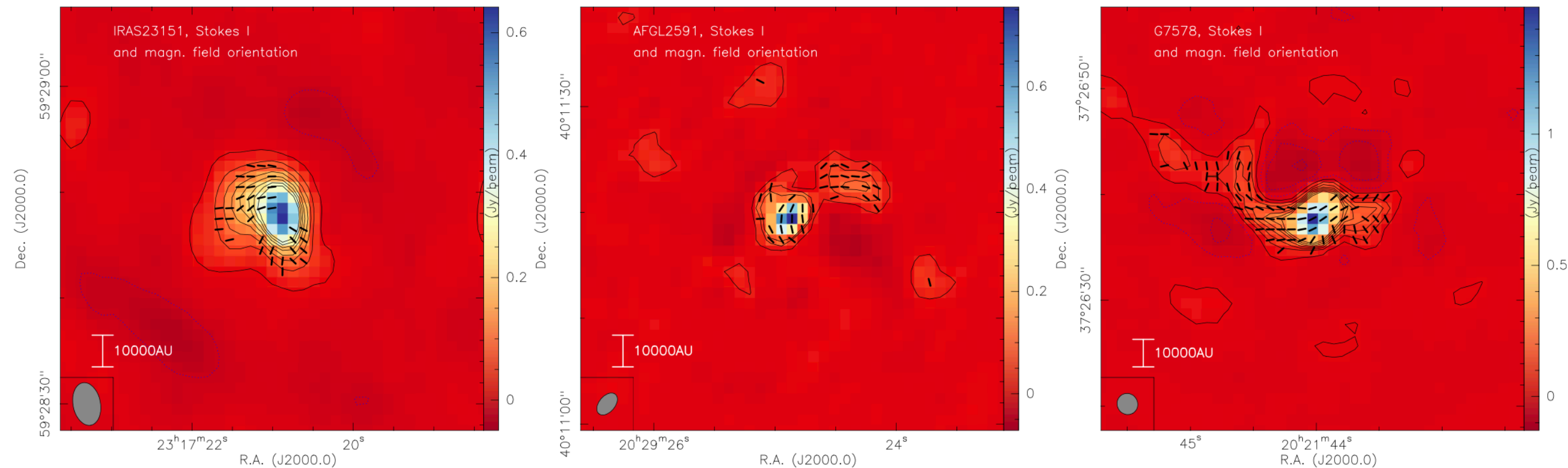
Star Formation



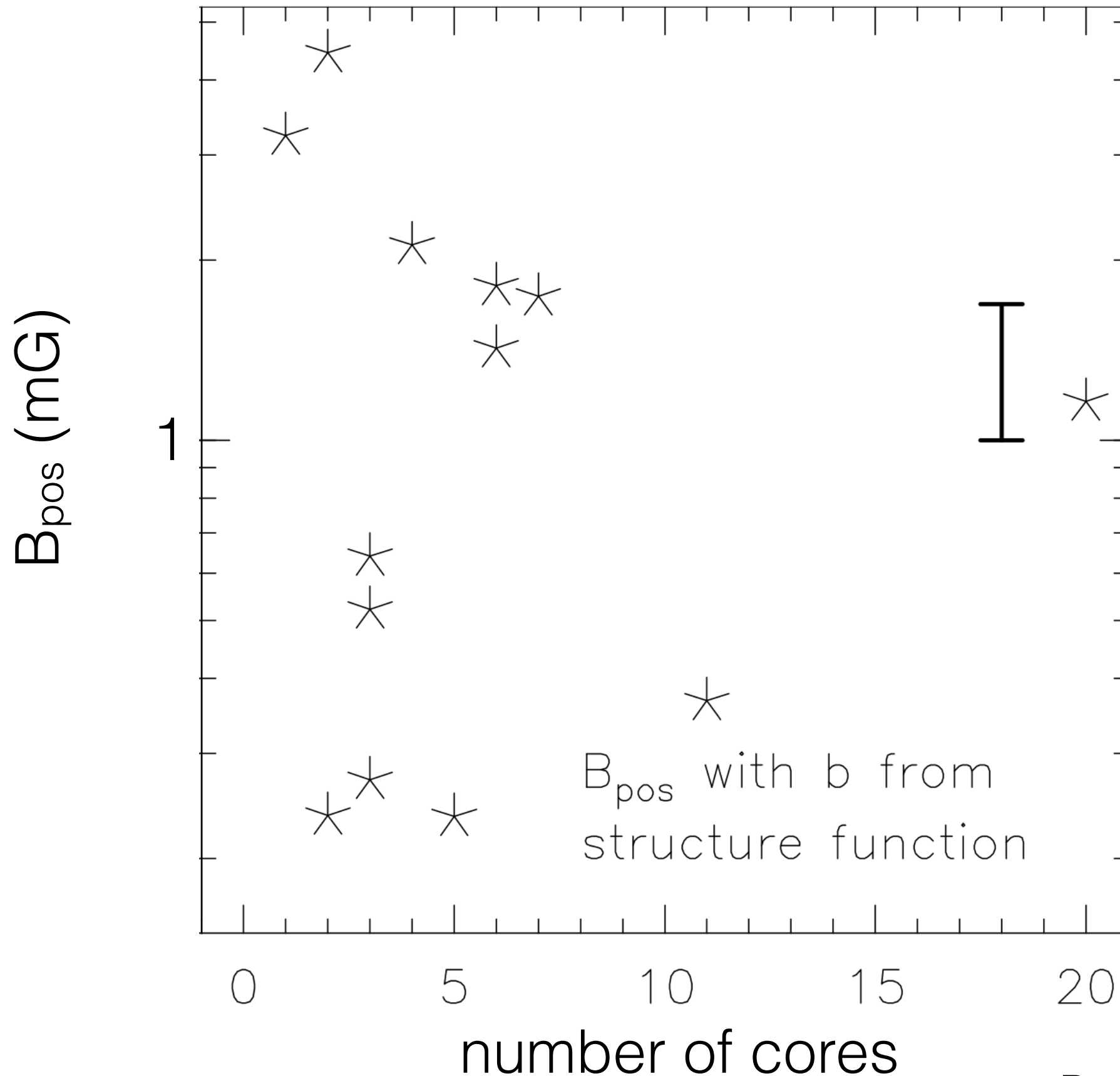
Transition from parallel to perpendicular



Magnetic field structure

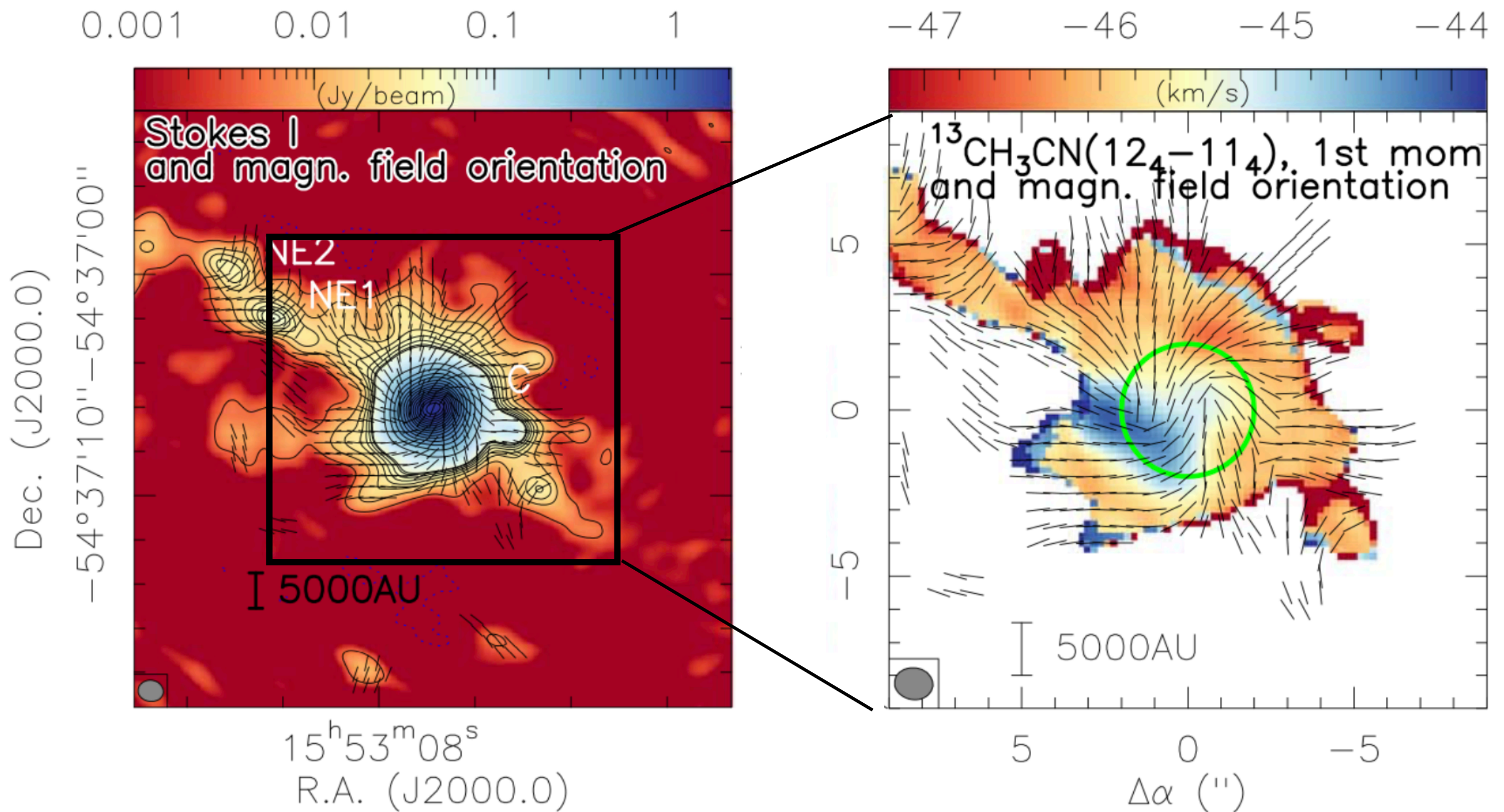


Relation to fragmentation

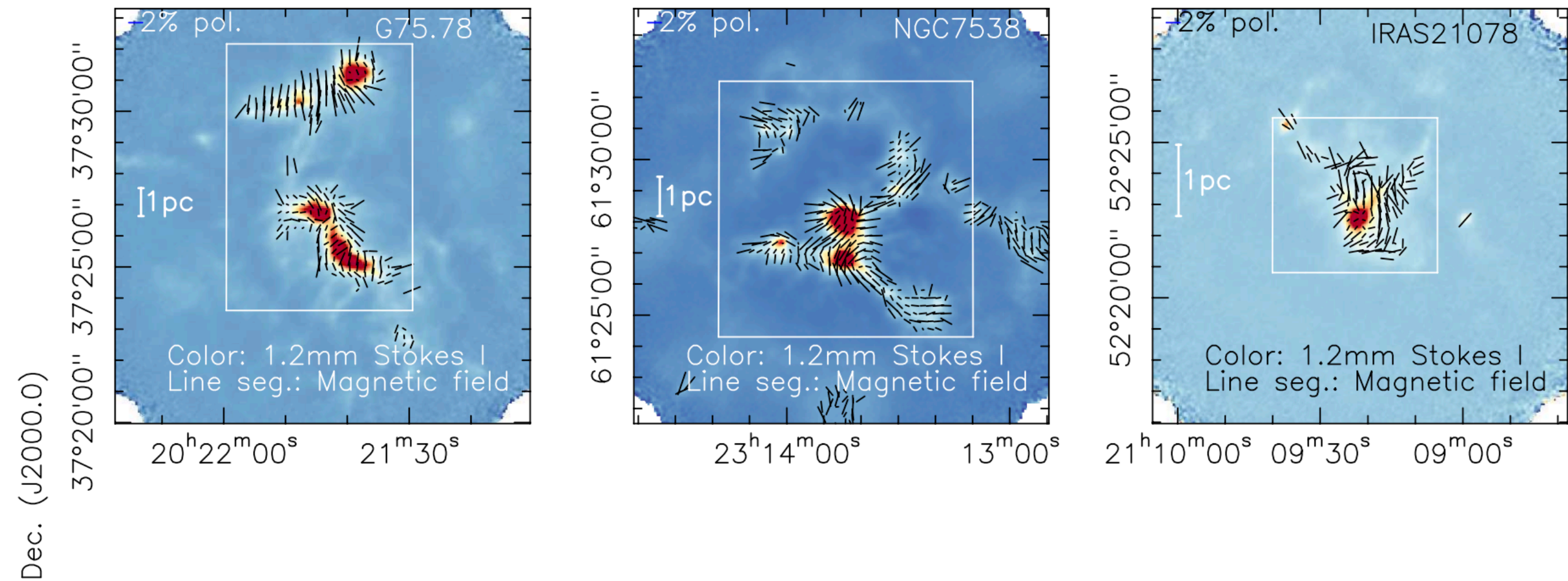


Gravity and rotational drag

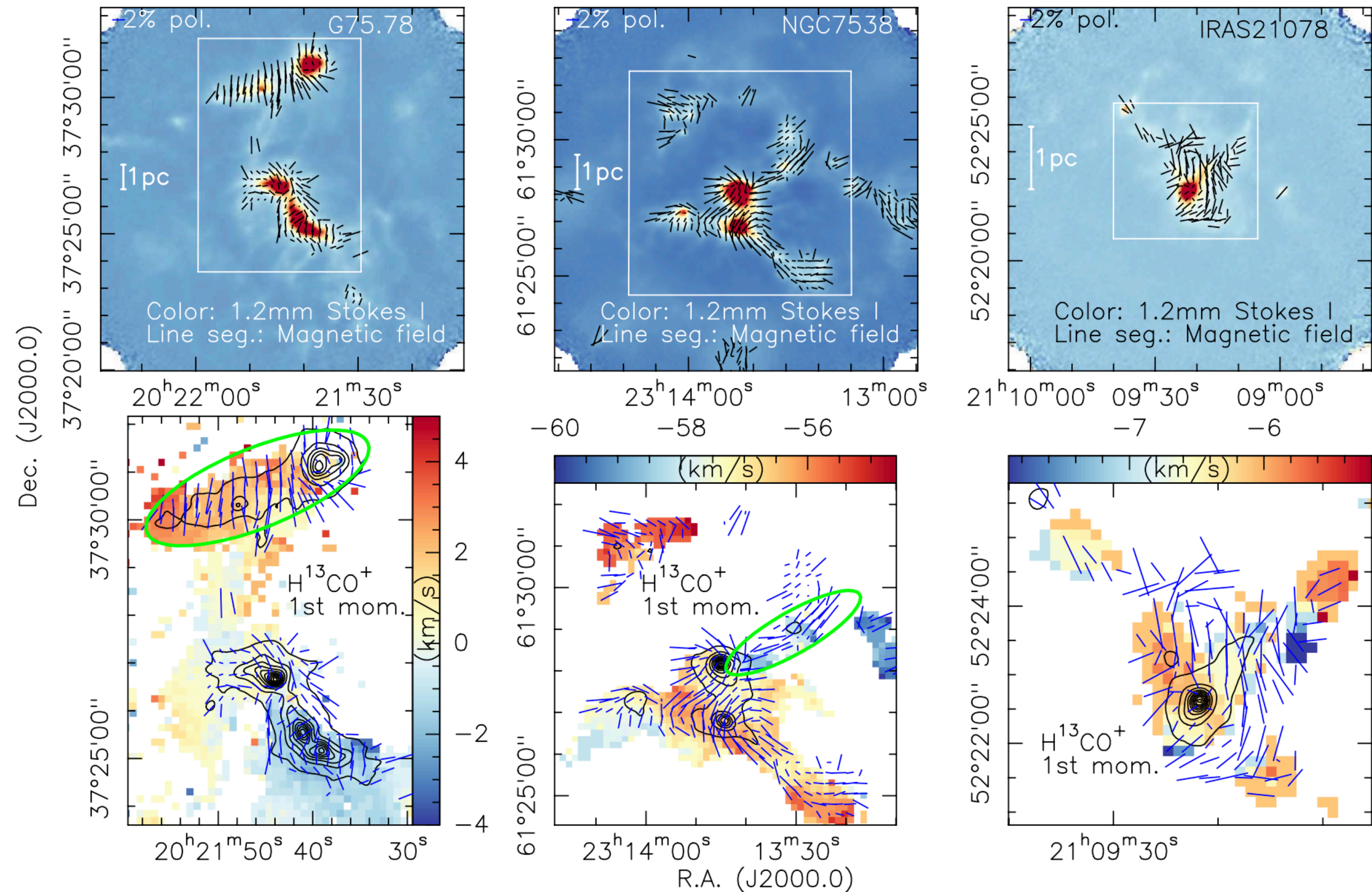
G327 hot core region



Magnetic fields and dynamics



Magnetic fields and dynamics



Questions or puzzles

What causes the transition from magnetic-field to gravity dominated regimes?

Is there a specific scale associated with that transition?

How important is the magnetic field for the fragmentation processes?

How well can we determine the actual magnetic field strength? (Methods)

How well do we understand the magnetic field strength change with density?

...

