



**Astronomy and Space Science**

# **ATCA H I survey of Fornax**

**Paolo Serra**



We want to detect:

$$N(\text{HI}) \sim 3 \times 10^{19} \text{ cm}^{-2}$$

$$M(\text{HI}) \sim 10^7 M_{\odot}$$

over  $\sim 13 \text{ deg}^2$

with

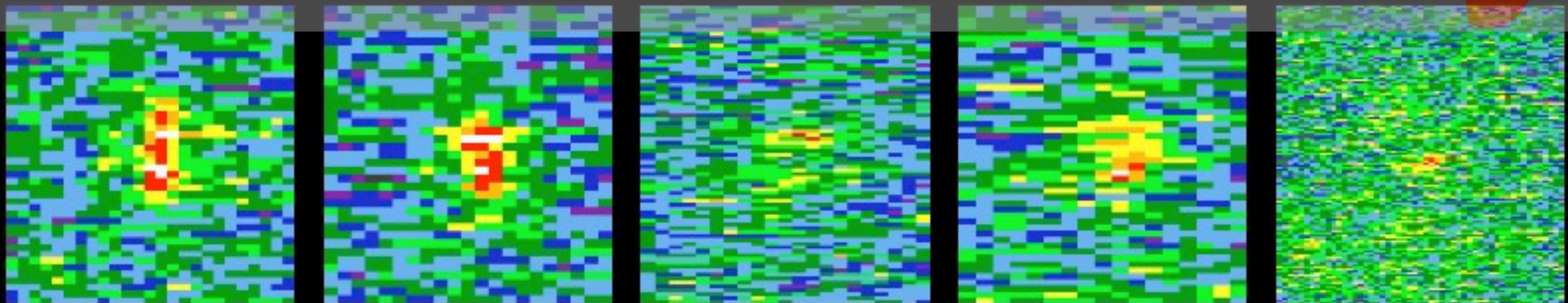
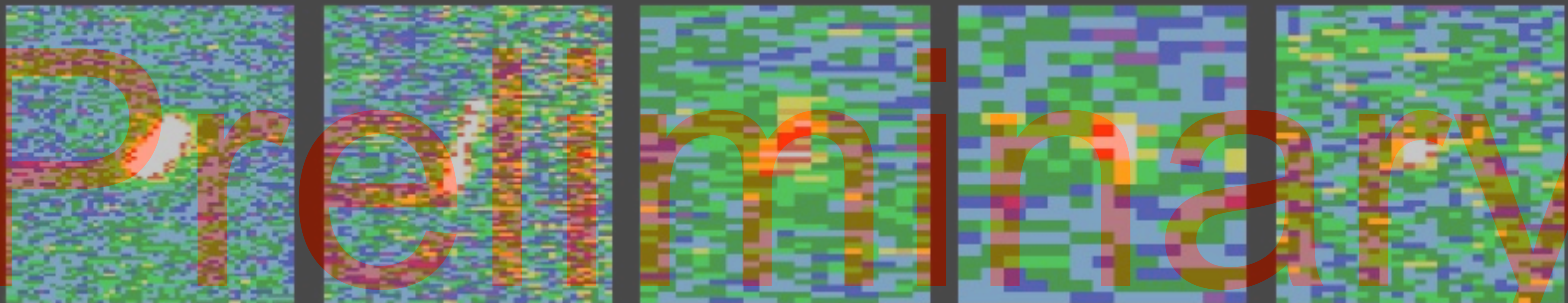
Catinella, Cortese (Swinburne),  
Davis, Fuller, Keenan, Smith  
(Cardiff), Herzog, Koribalski (CASS),  
Popping (ICRAR)





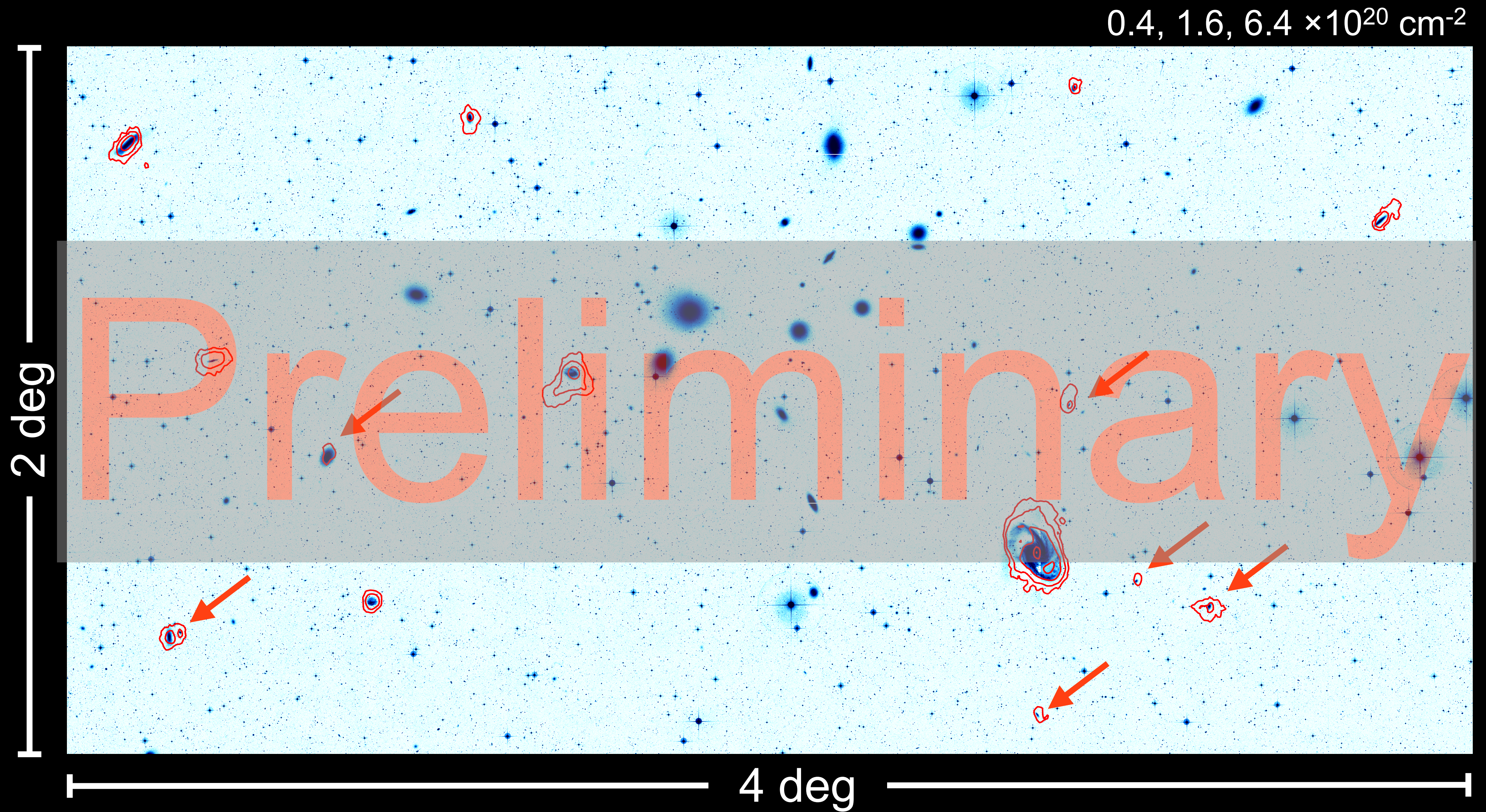


velocity



RA

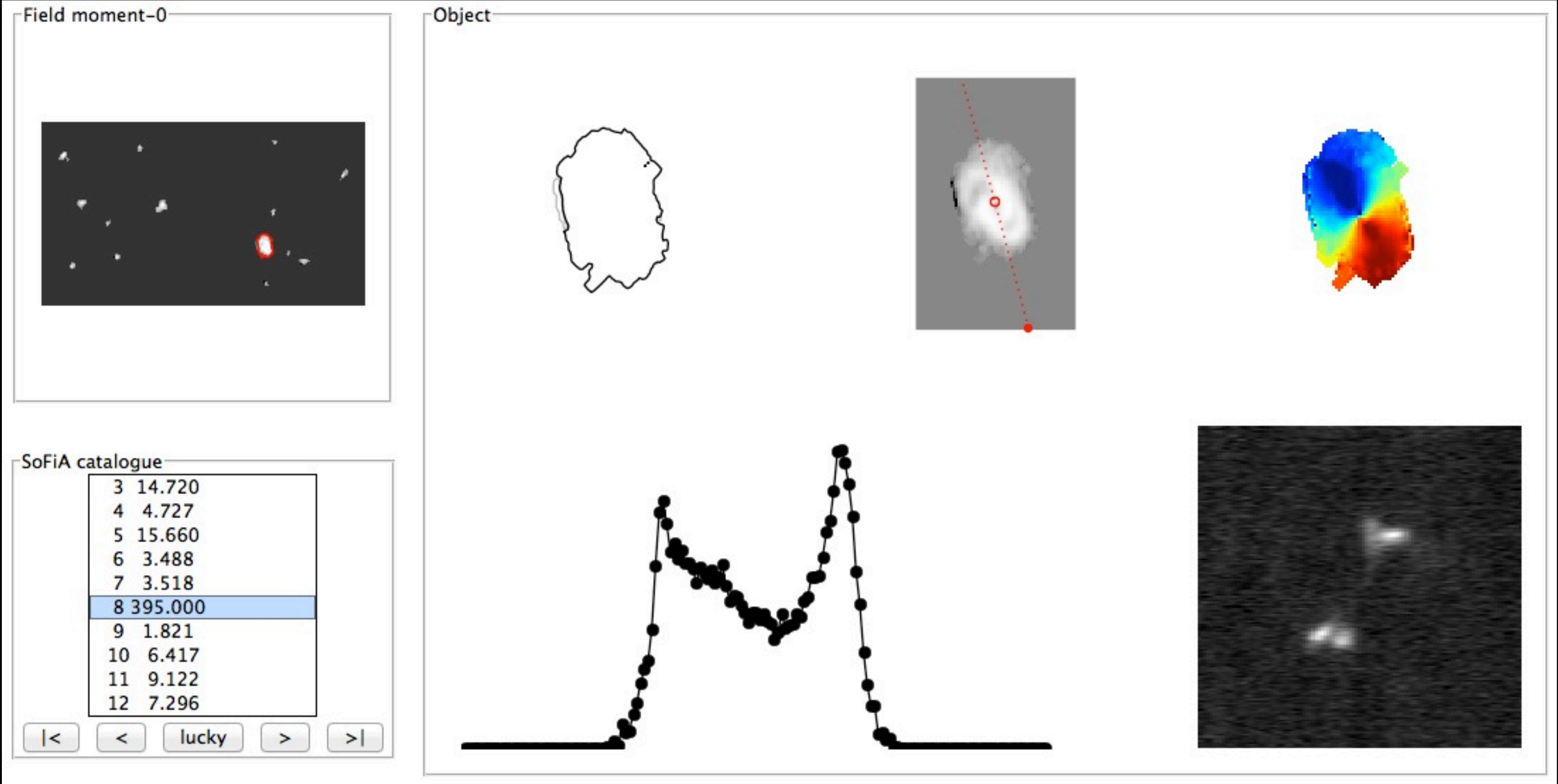




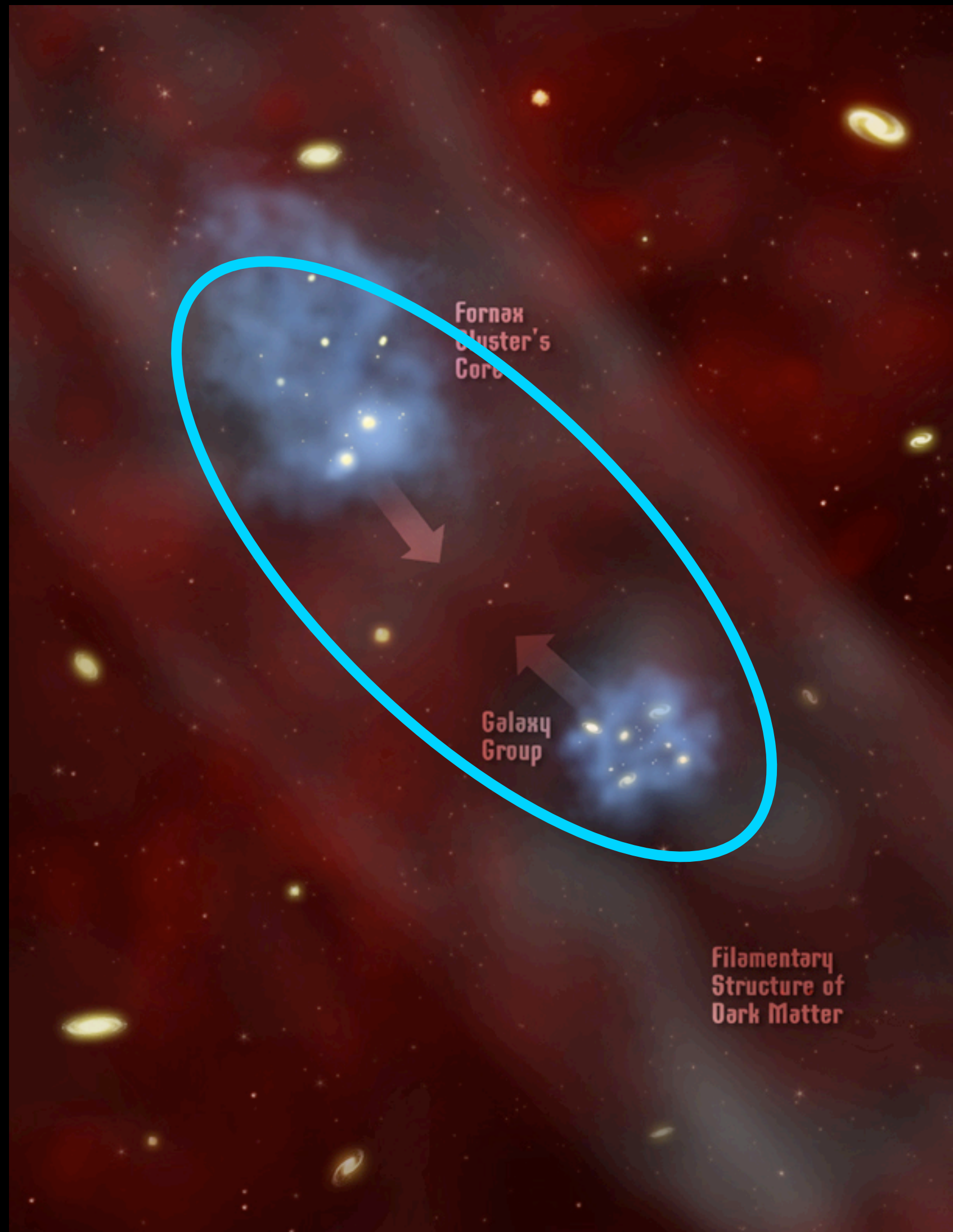












~2,500 h total

~11 deg<sup>2</sup>

Sensitivity:

$$N(\text{HI}) = 10^{18} \text{ cm}^{-2}$$

$$M(\text{HI}) = 10^5 M_{\odot}$$

with

Bryan, van Gorkom (Columbia), Kraan-Korteweg (UCT), Peletier, Trager, Verheijen (Kapteyn), de Blok, Frank, Jozsa, Oosterloo, Pizzo (ASTRON)