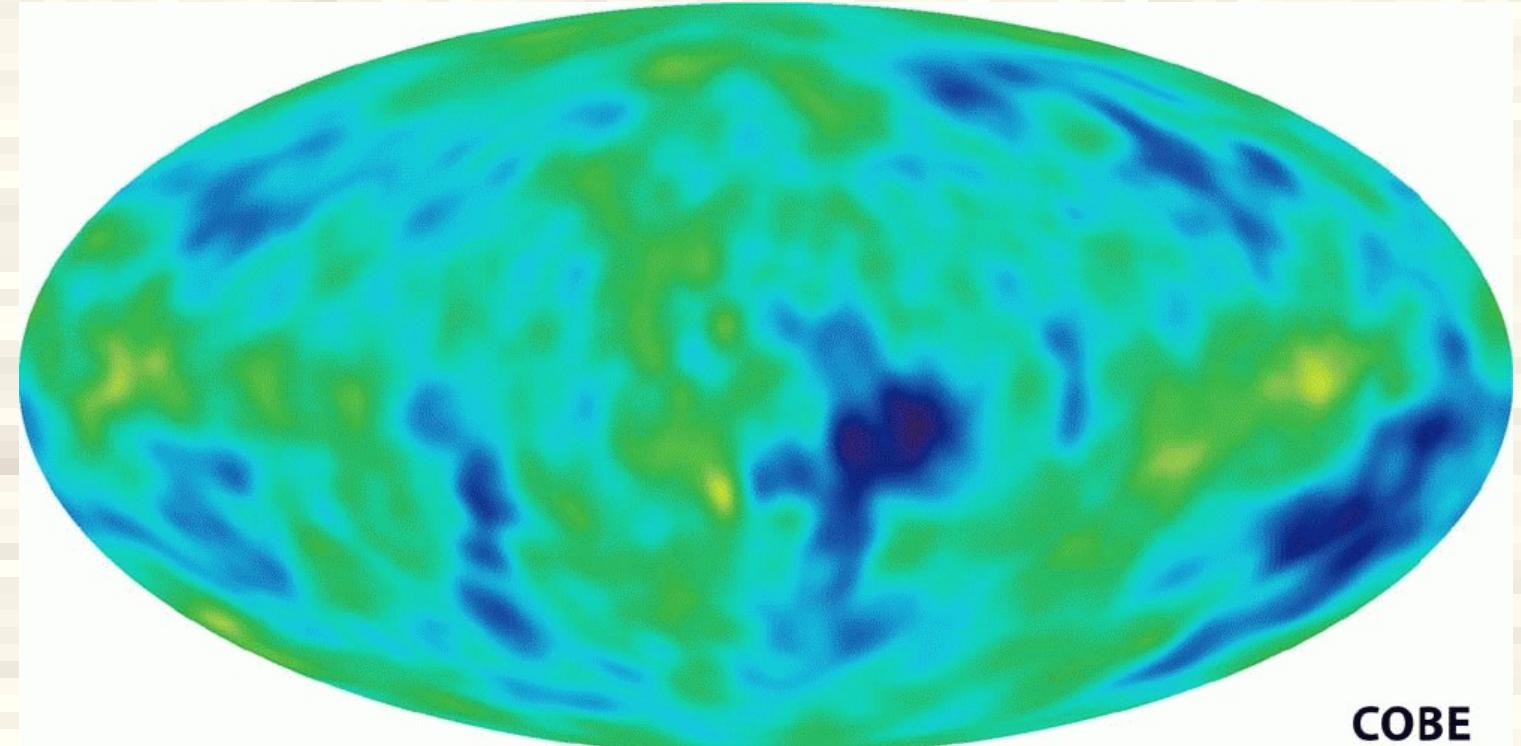


“Нехорошие” пятна в CMB

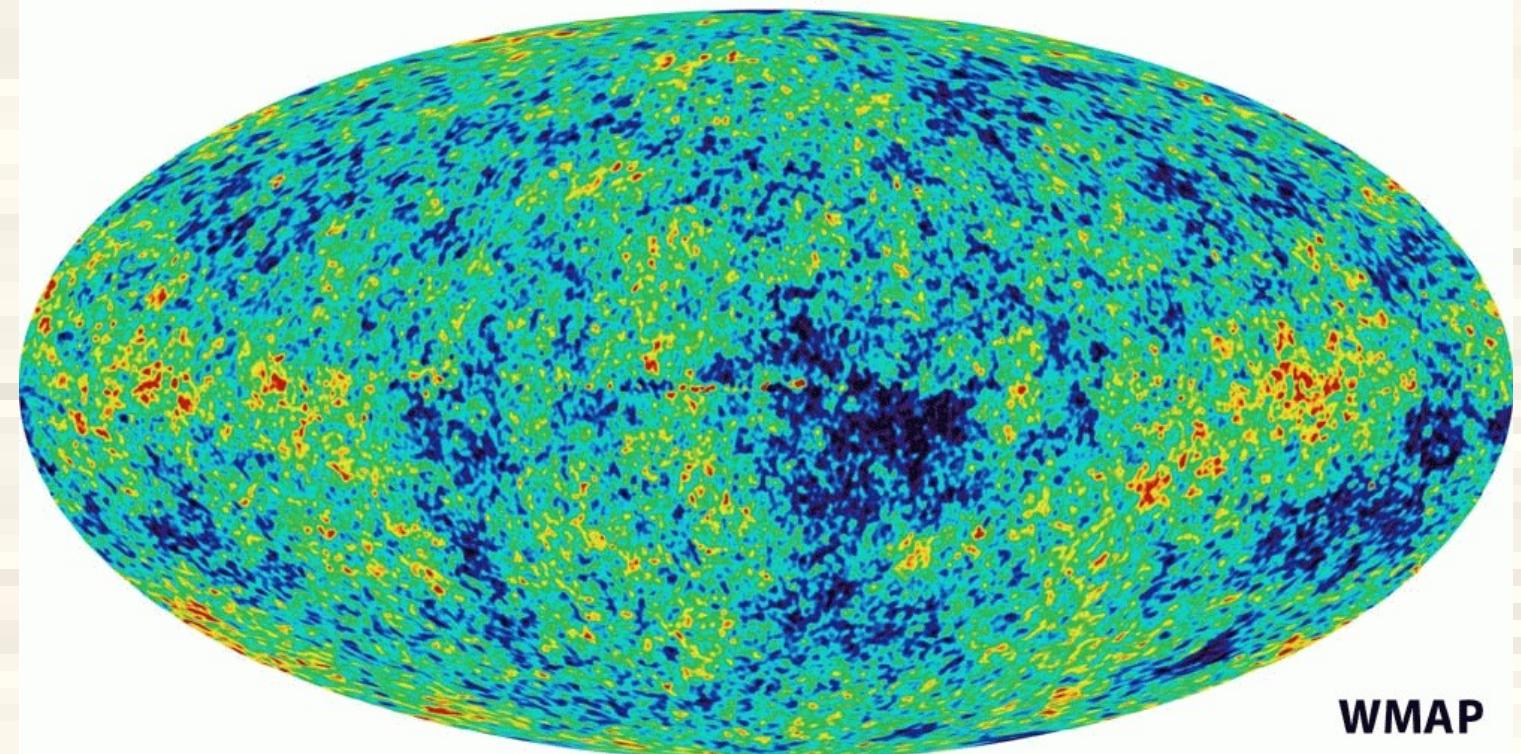
Naselsky et al., 2007, arXiv:0712.1118

Олег Верходанов

*Специальная астрофизическая обсерватория
Нижний Архыз, Россия*

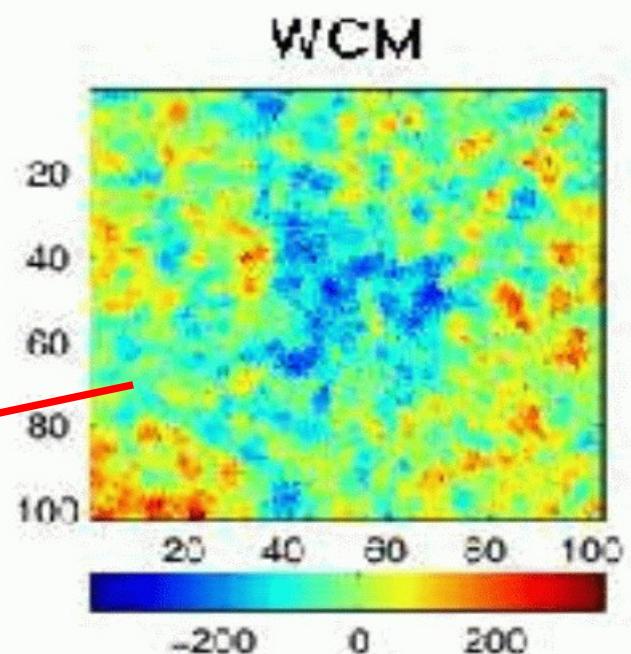
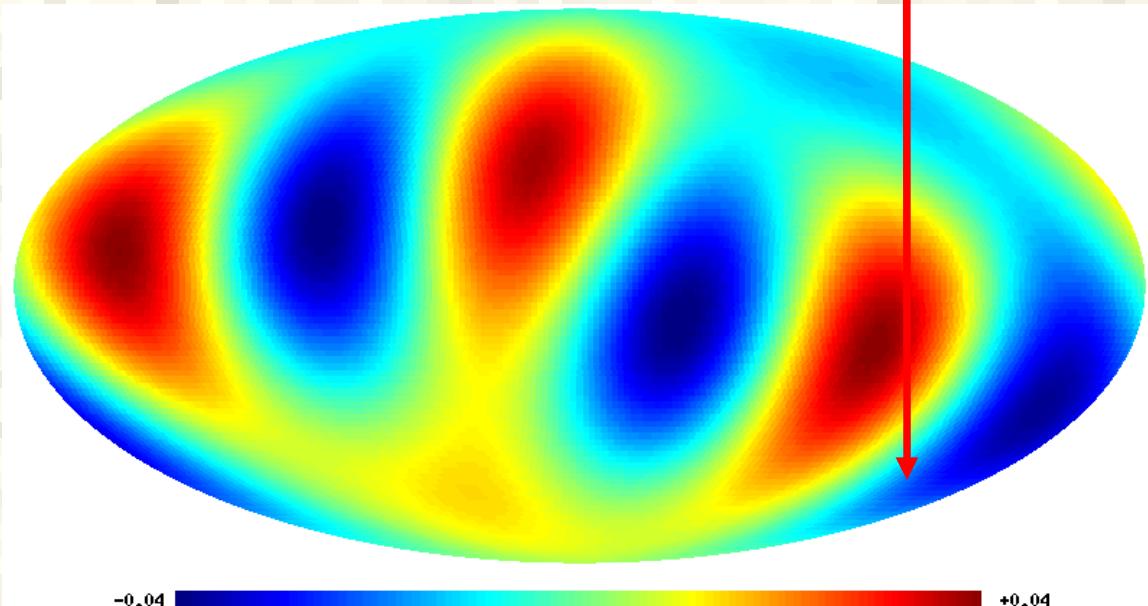
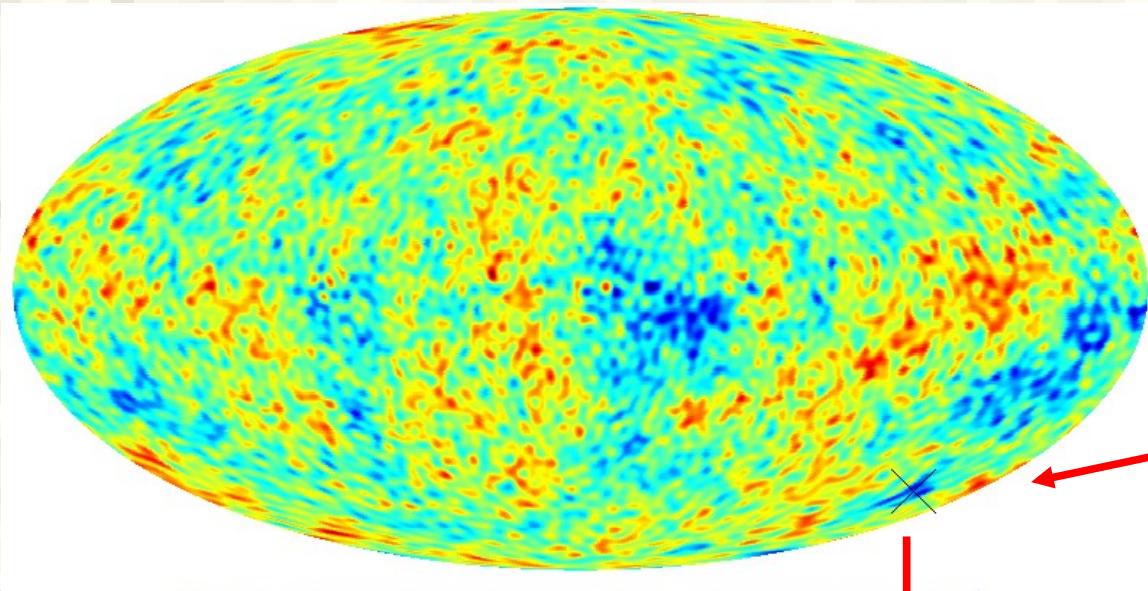


COBE



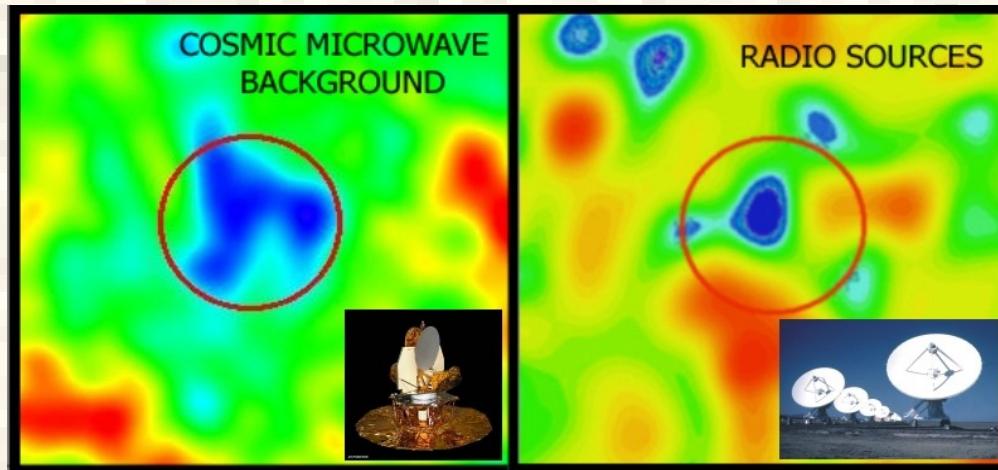
WMAP

О чём речь ?

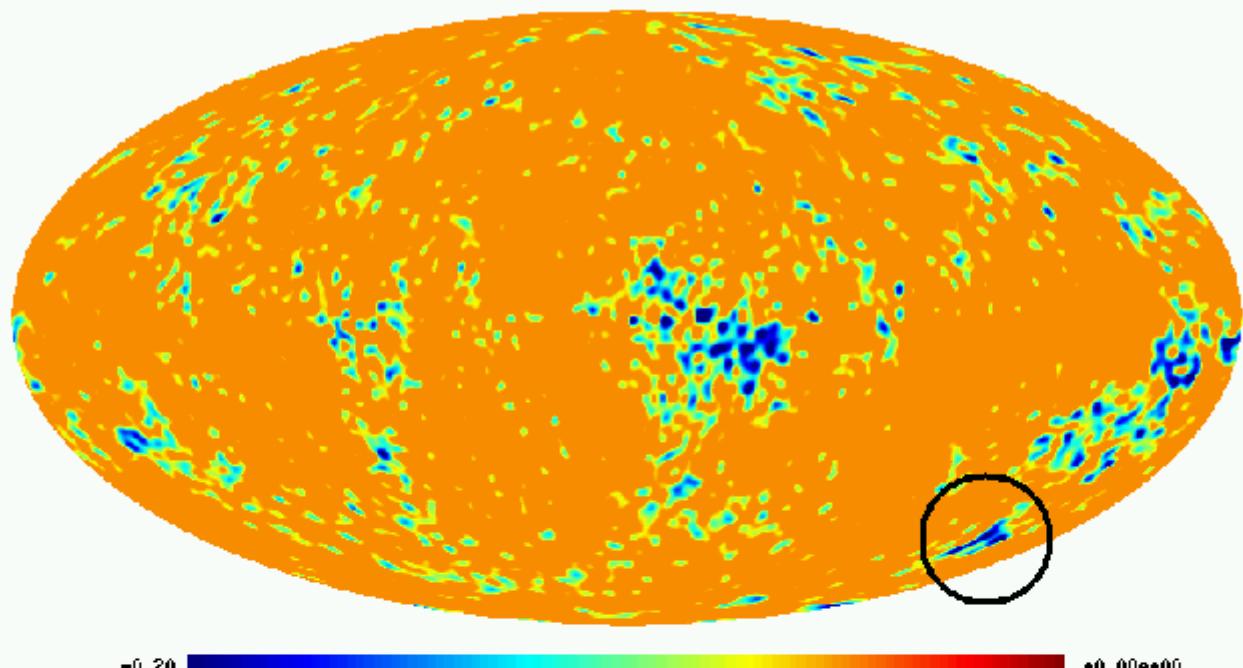


$(b = -57\text{deg}, l = 209\text{deg})$
пятно негауссово
(Vielva et al., 2004)

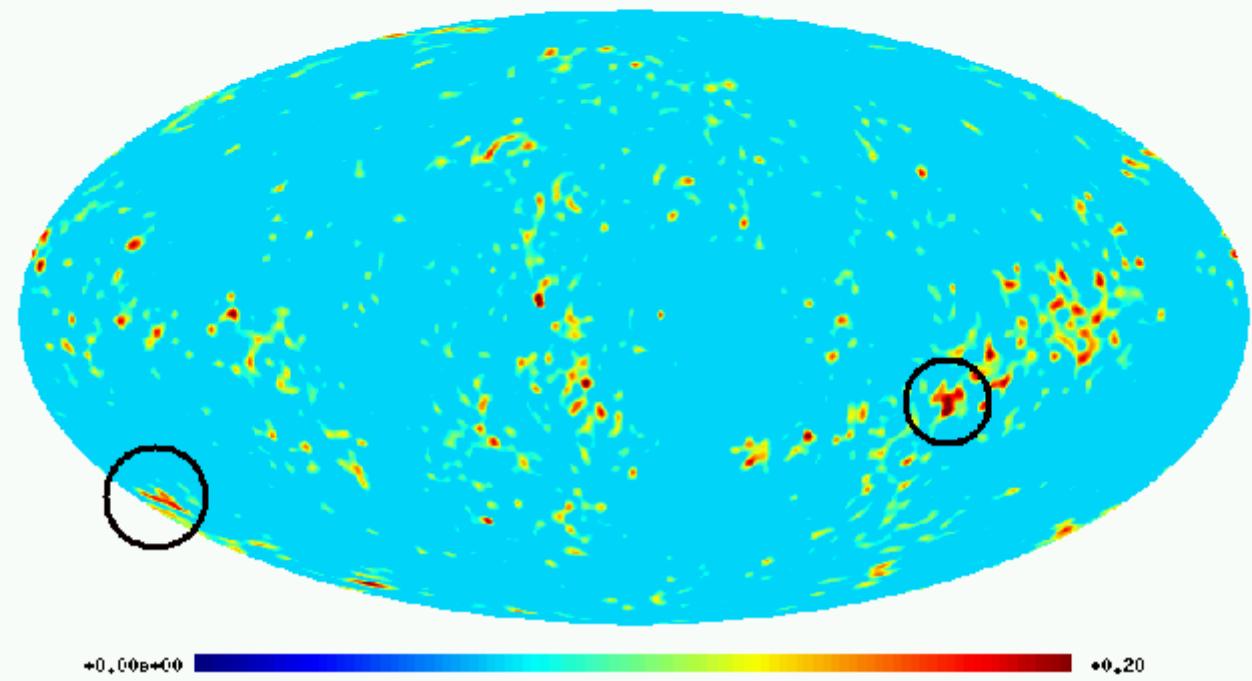
(Rudnick et al., 2007): Sachs-Wolfe effect ?



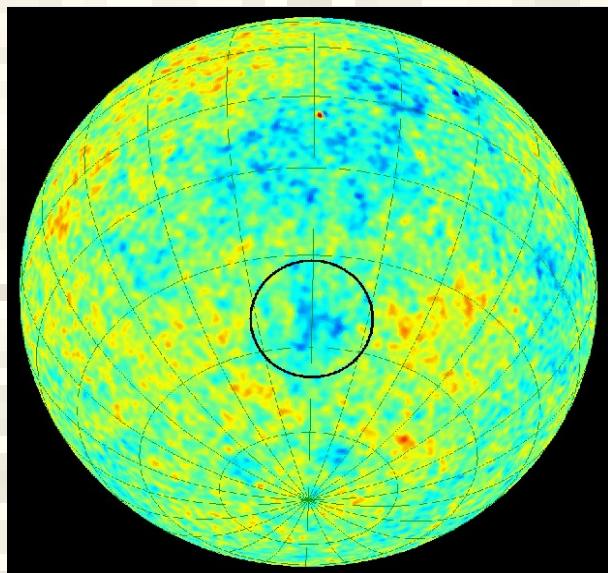
*(Jaffe et al al., 2005, 2006) – Bianchi VIIh anisotropic model ?
(Crus et al., 2007) - cosmic texture ?*



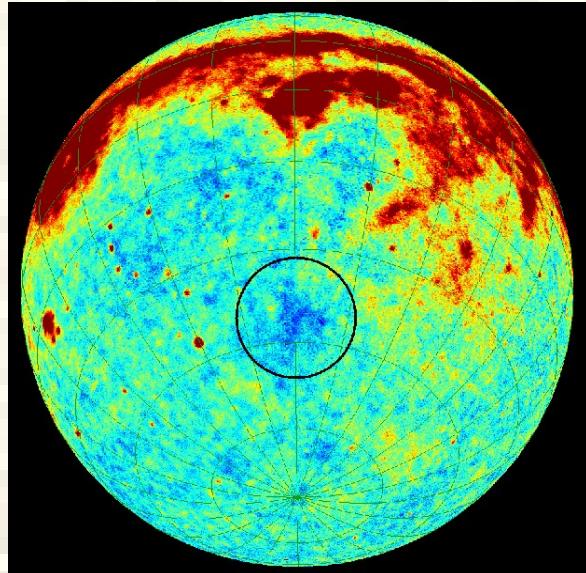
Обрезание
 $-0.2 < dT < -0.05$



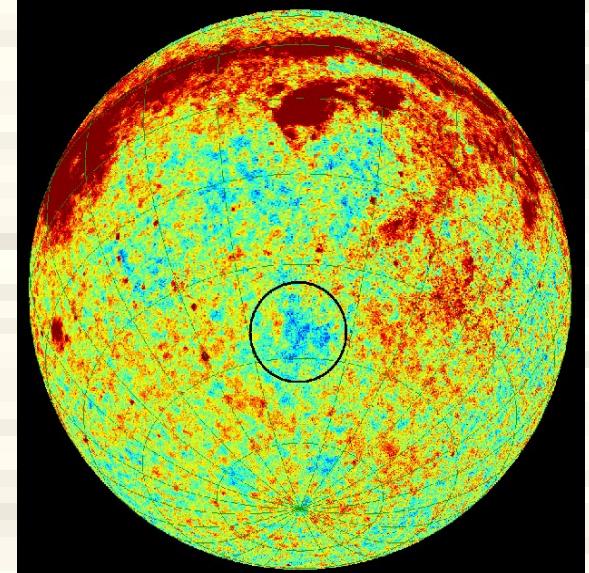
$0.05 < dT < 0.2$



ILC

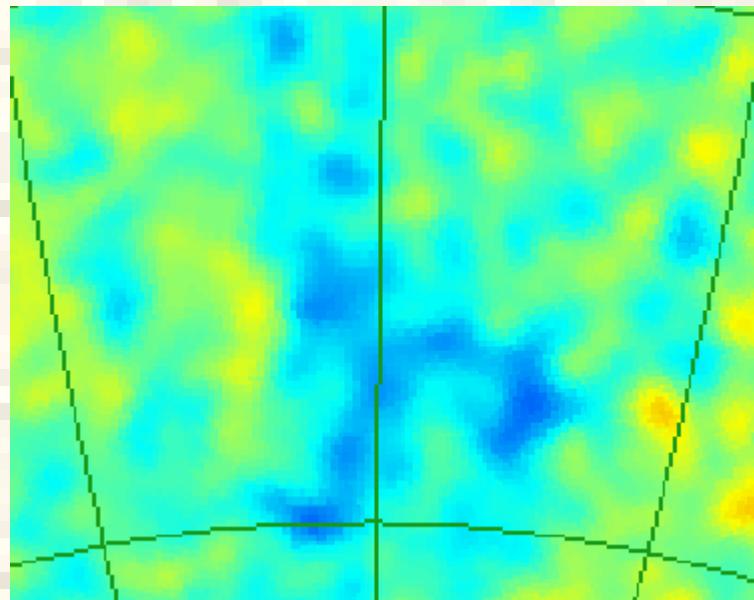


K - band

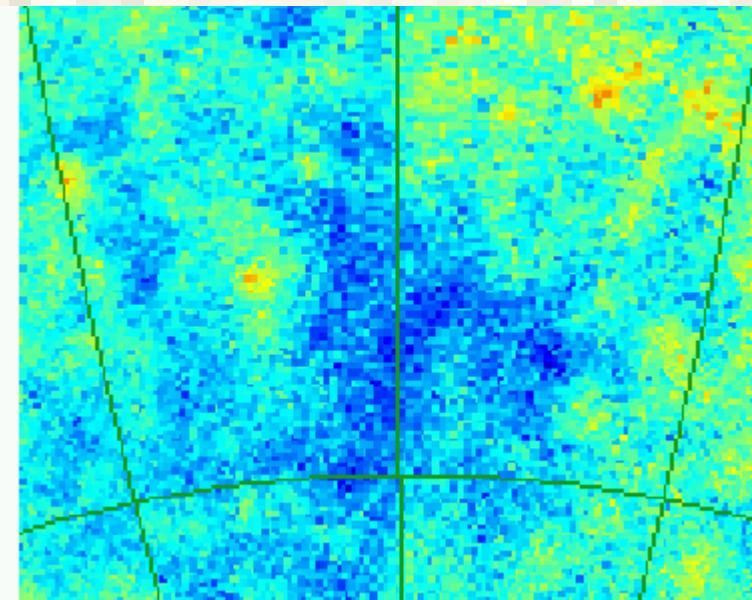


Ka - band

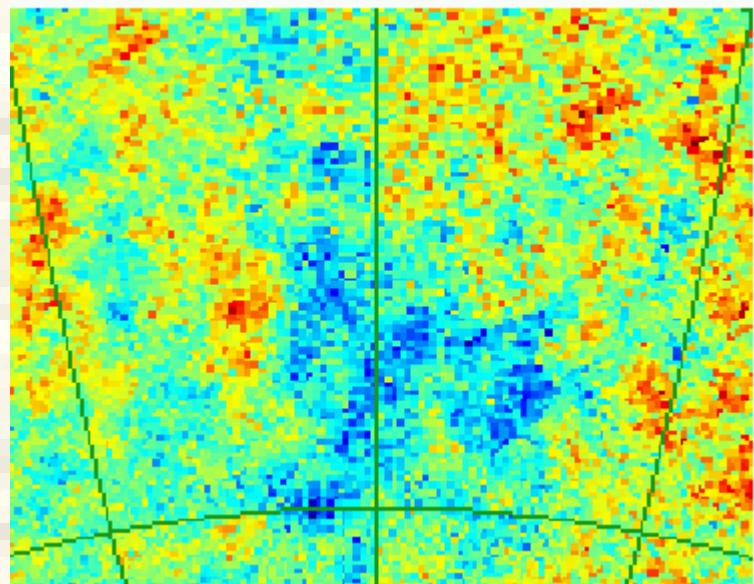
ILC



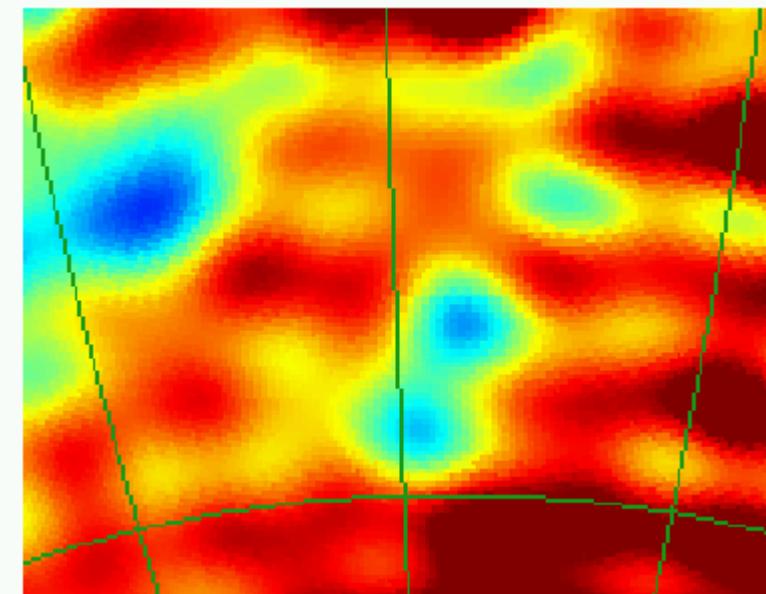
K

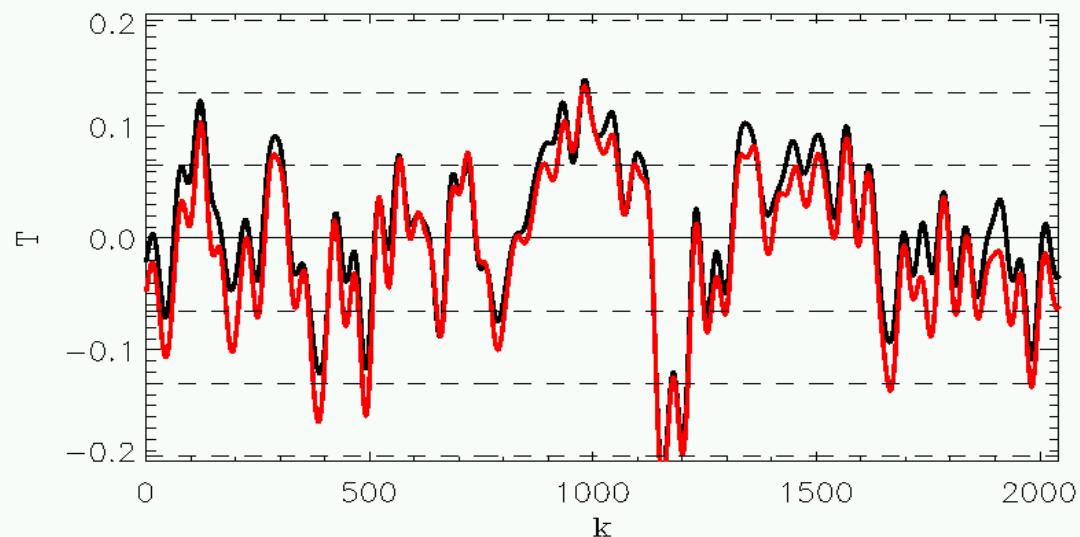


Ka

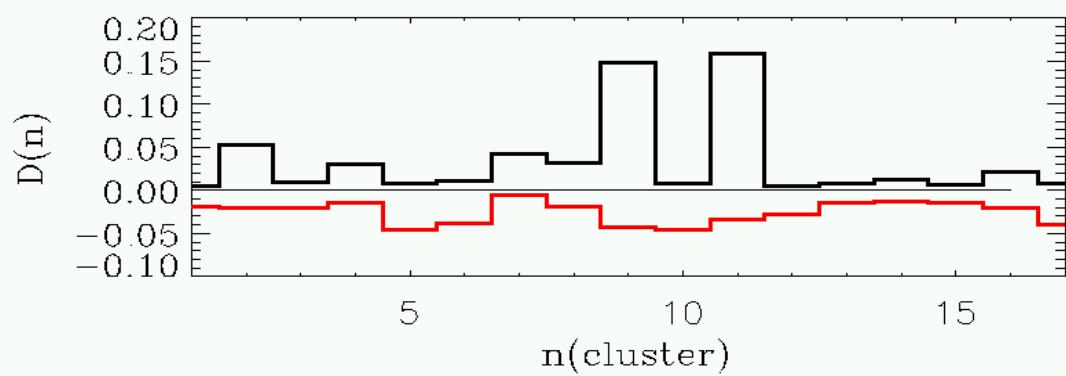


Haslam
et al.

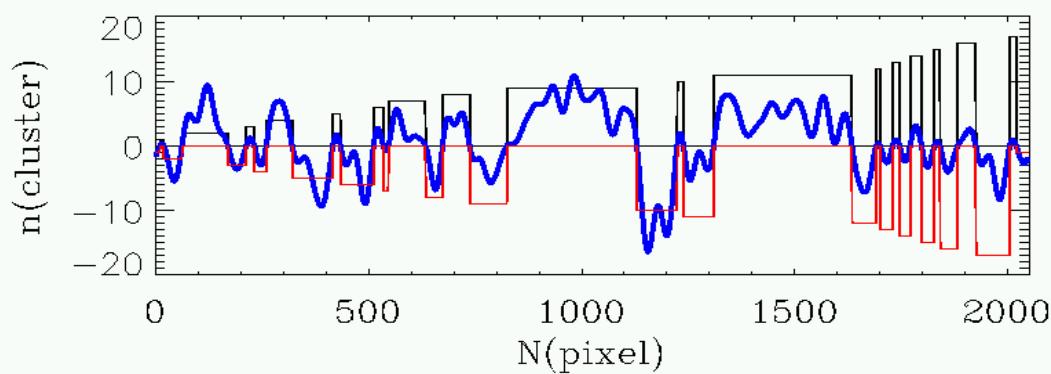


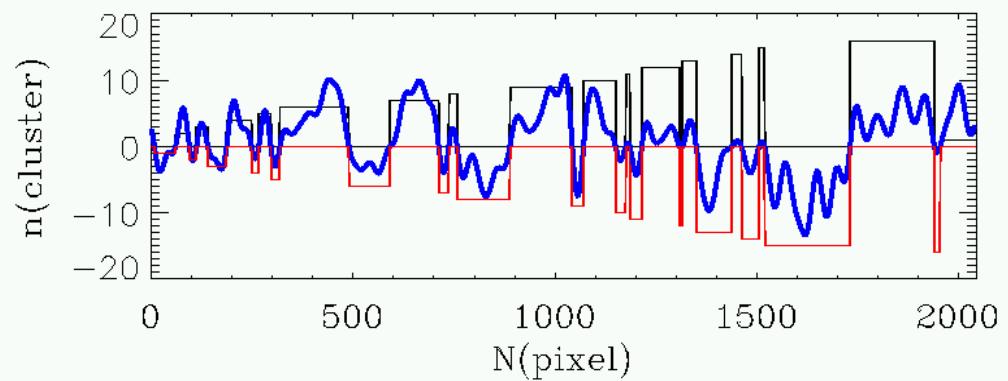
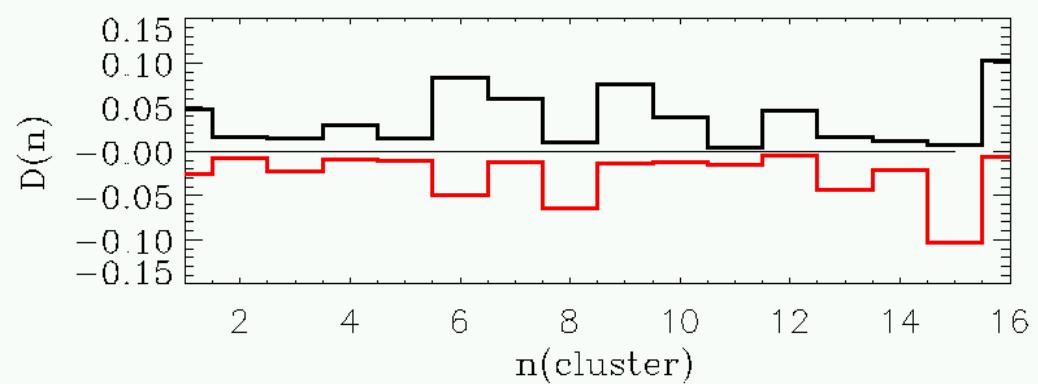
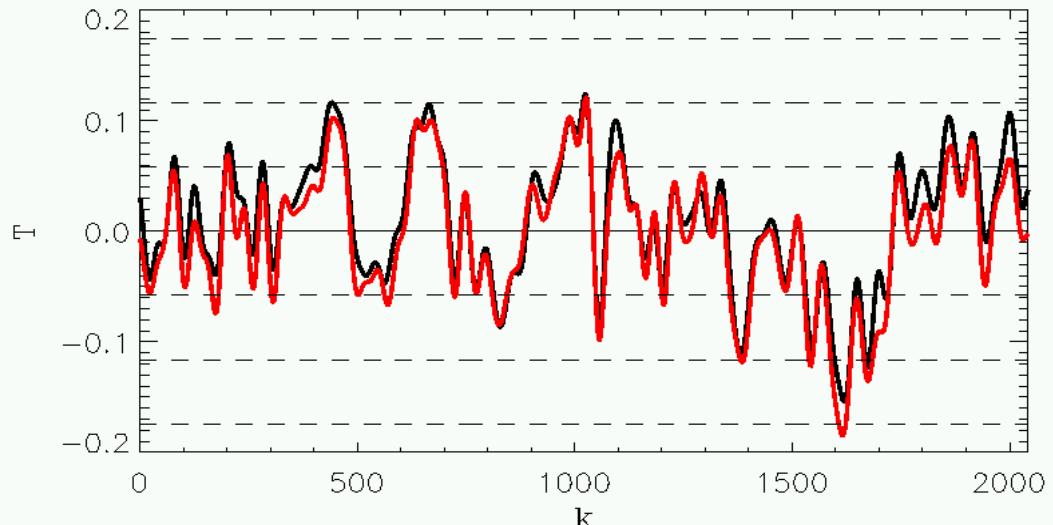


ring
 $b = -57 \deg$



Длина кластера
vs номер кластера

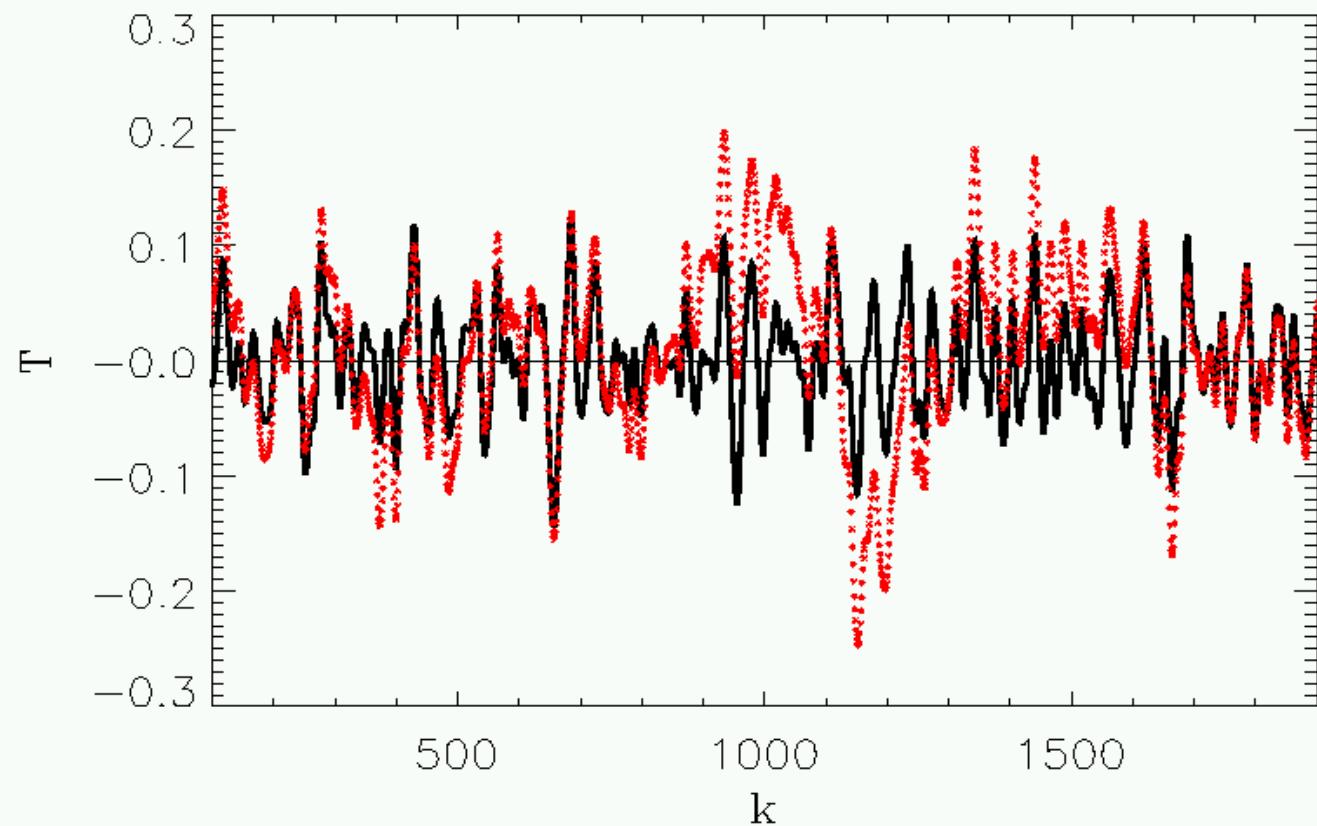


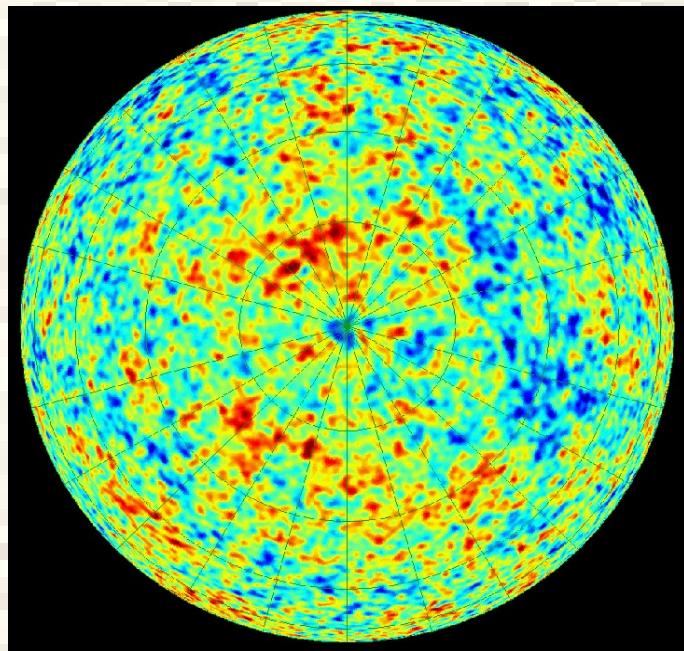


ring
 $b = 57 \deg$

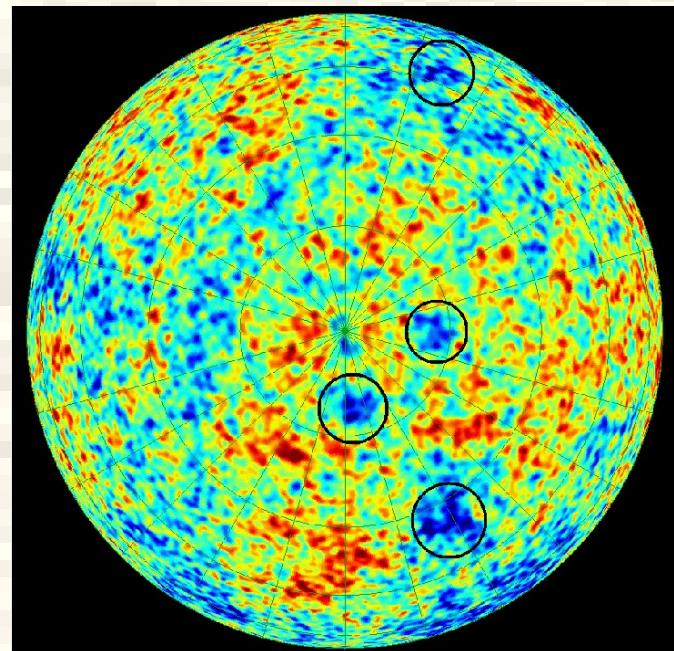
Длина кластера
vs номер кластера

“Де-кластеризация”

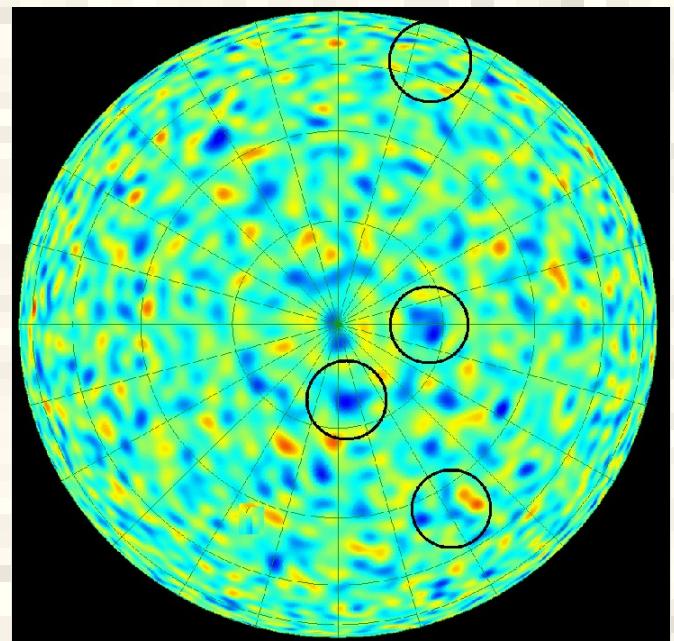




North

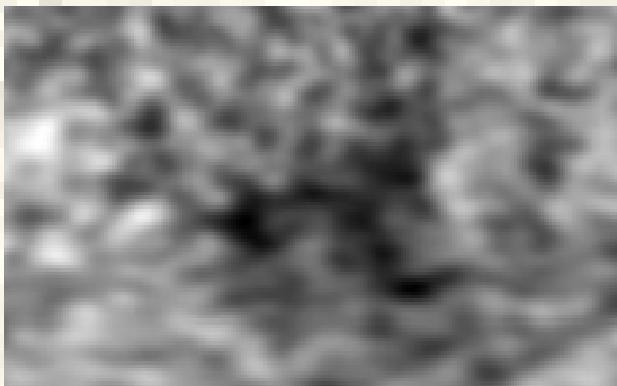


South



Вычет первых
20 мультиполей

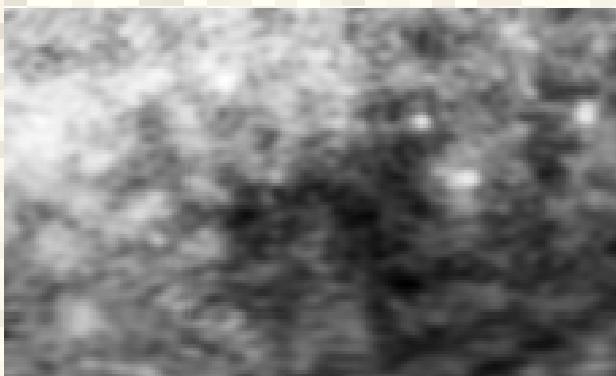




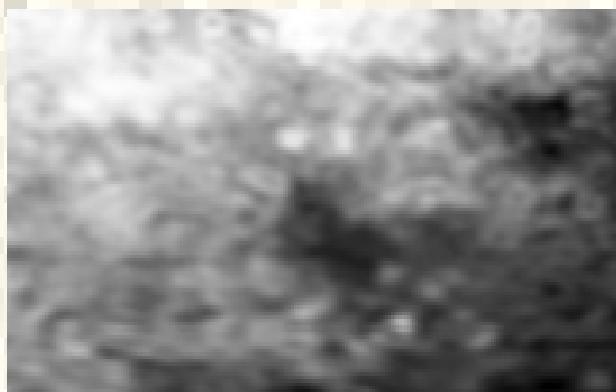
ILC



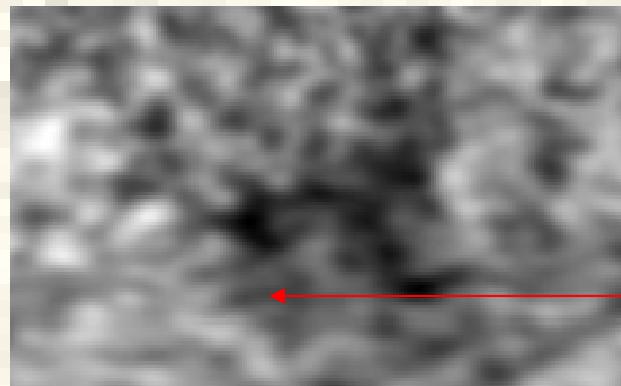
2MASS



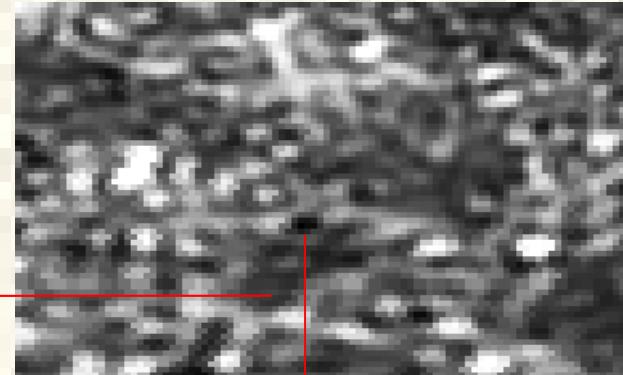
K-channel, 23 GHz



Haslam et al: 408 MHz



ILC



2MASS

