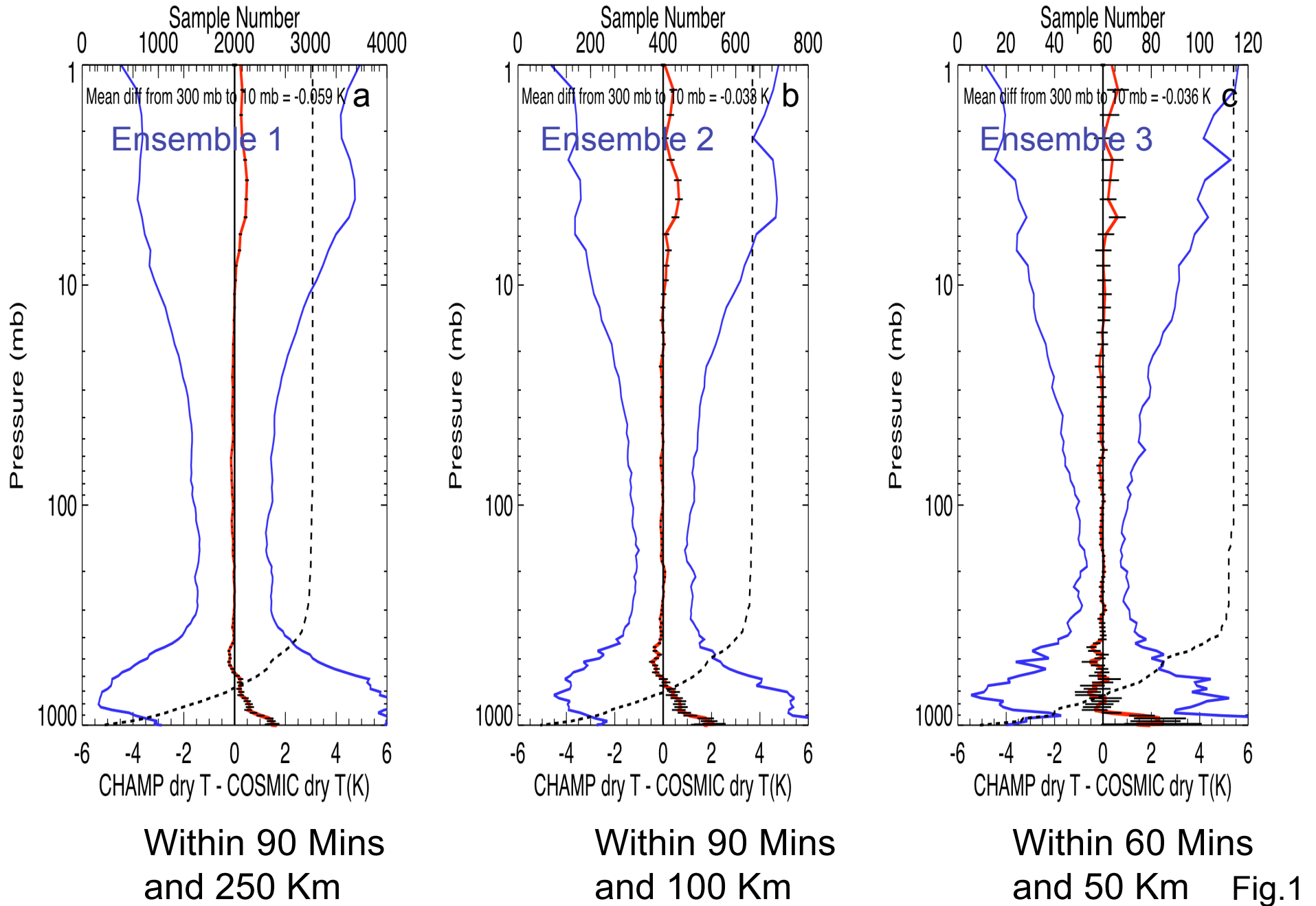
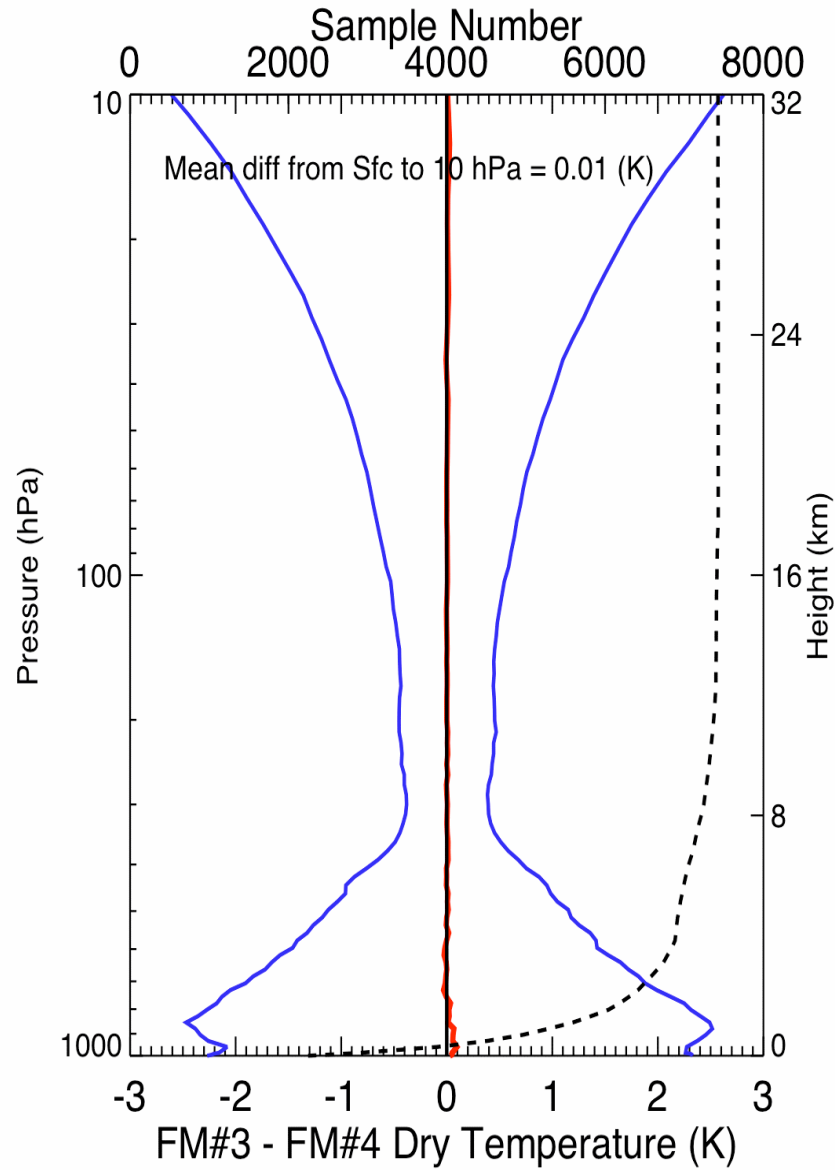


Global COSMIC-CHAMP Comparison from 200607-200707

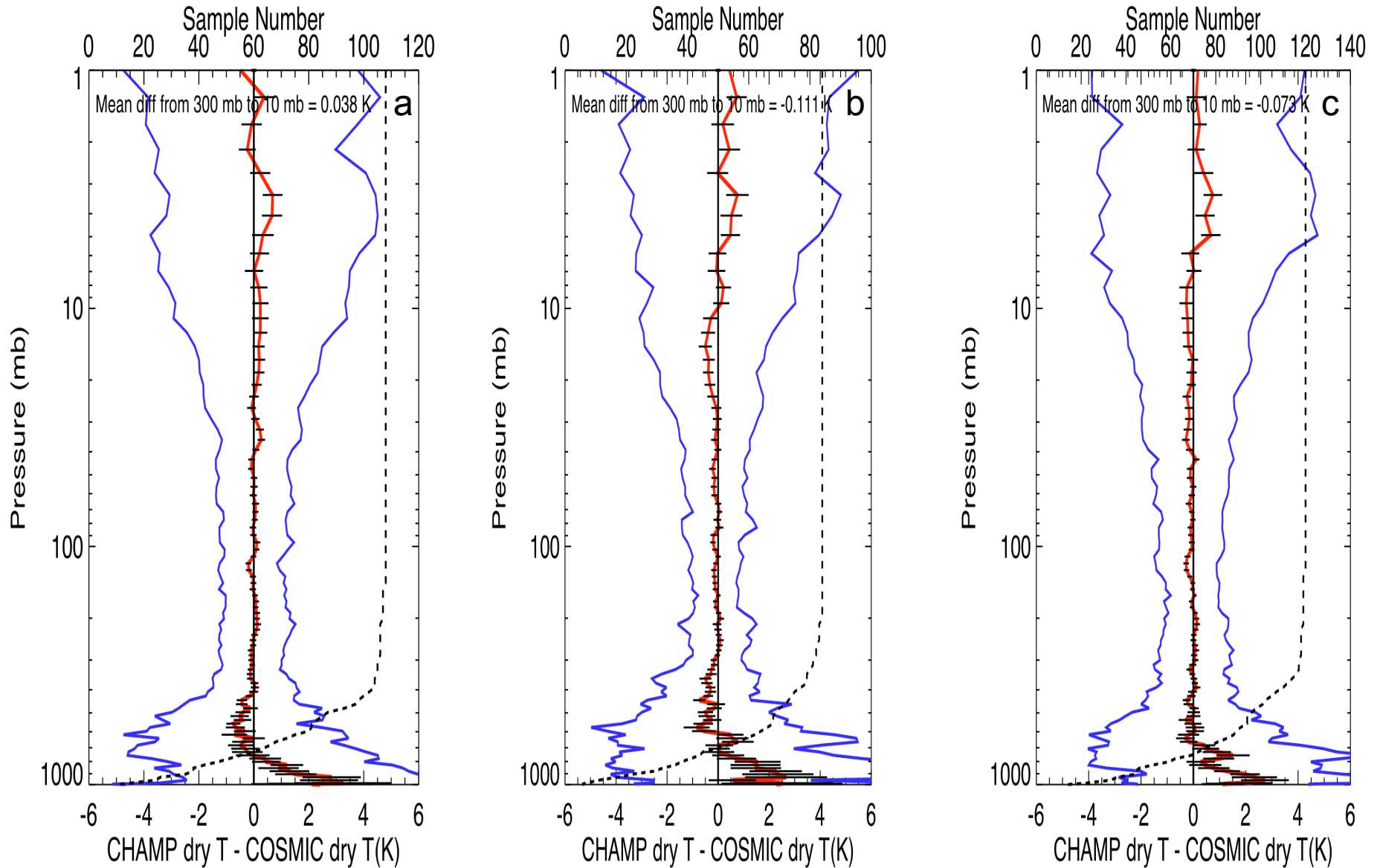




90N-90S FM#3 and FM#4 within 50 km and 60 mins

Fig.2

90N-90S CHAMP-COSMIC - < 90 mins and 100 km



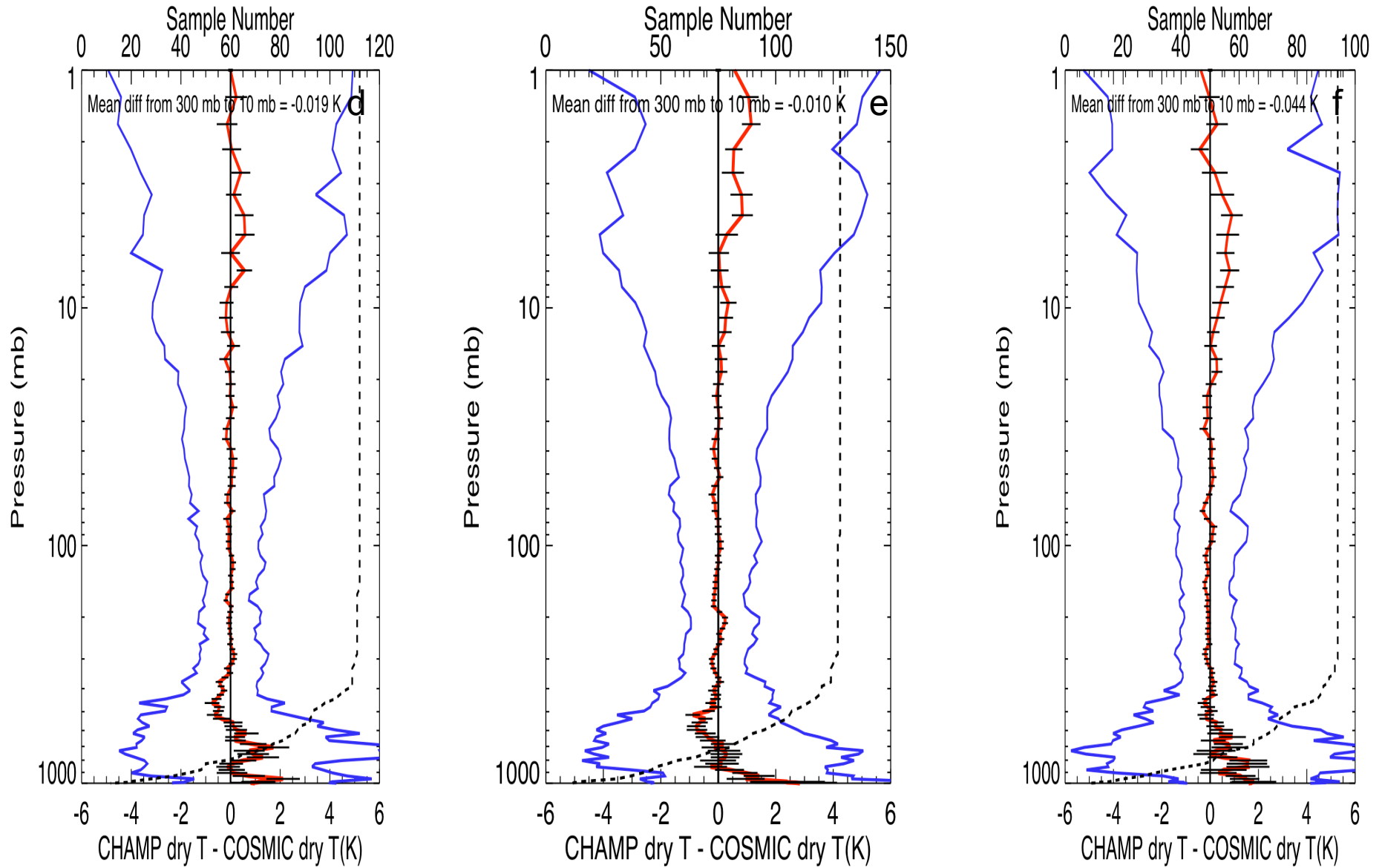
CHAMP-FM1

CHAMP-FM2

CHAMP-FM3

Fig.3

90N-90S CHAMP-COSMIC - < 90 mins and 100 km



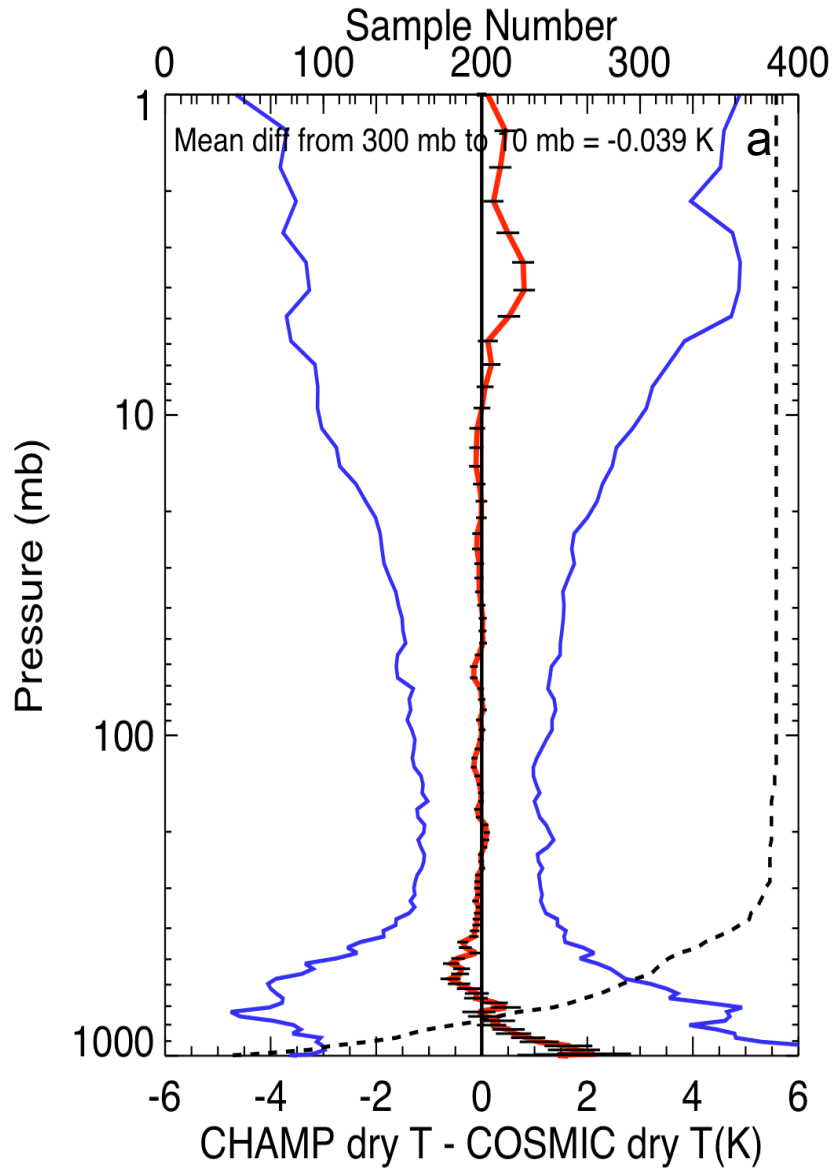
CHAMP-FM4

CHAMP-FM5

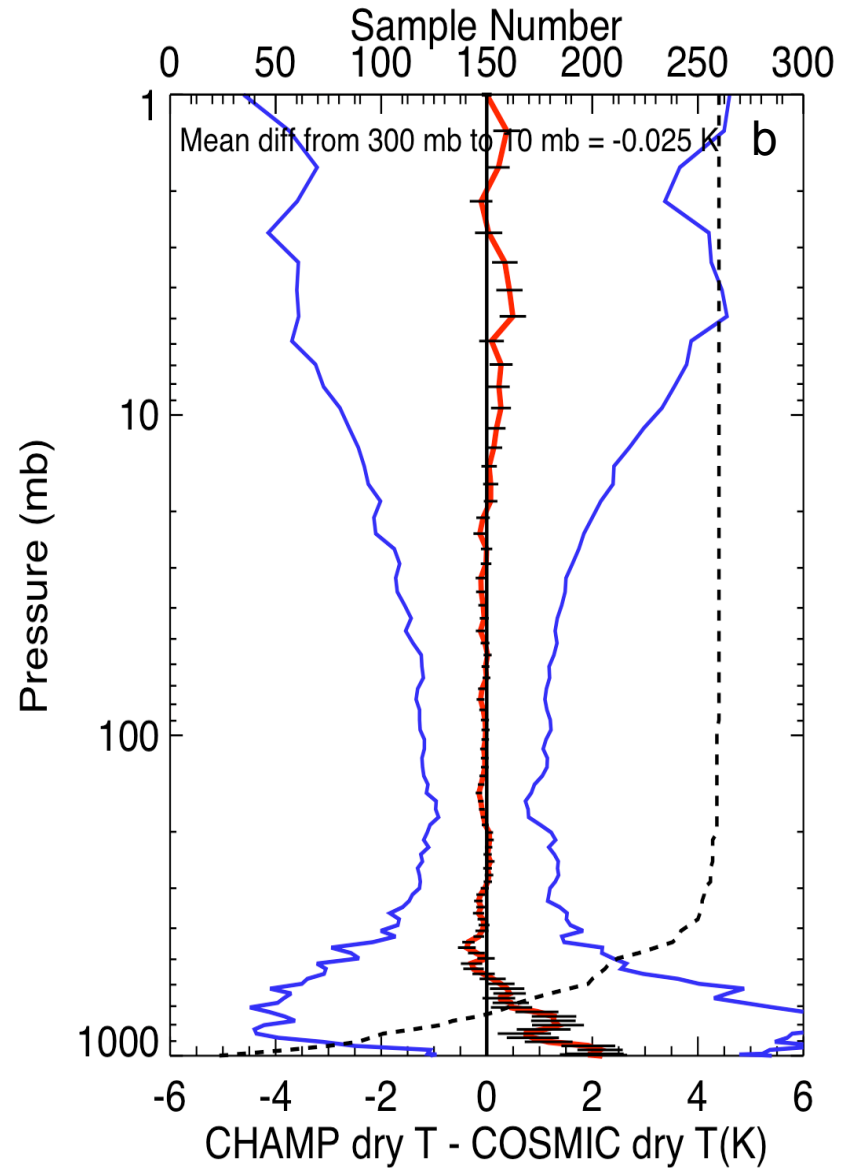
CHAMP-FM6

Fig.3

90N-90S CHAMP-COSMIC - < 90 mins and 100 km



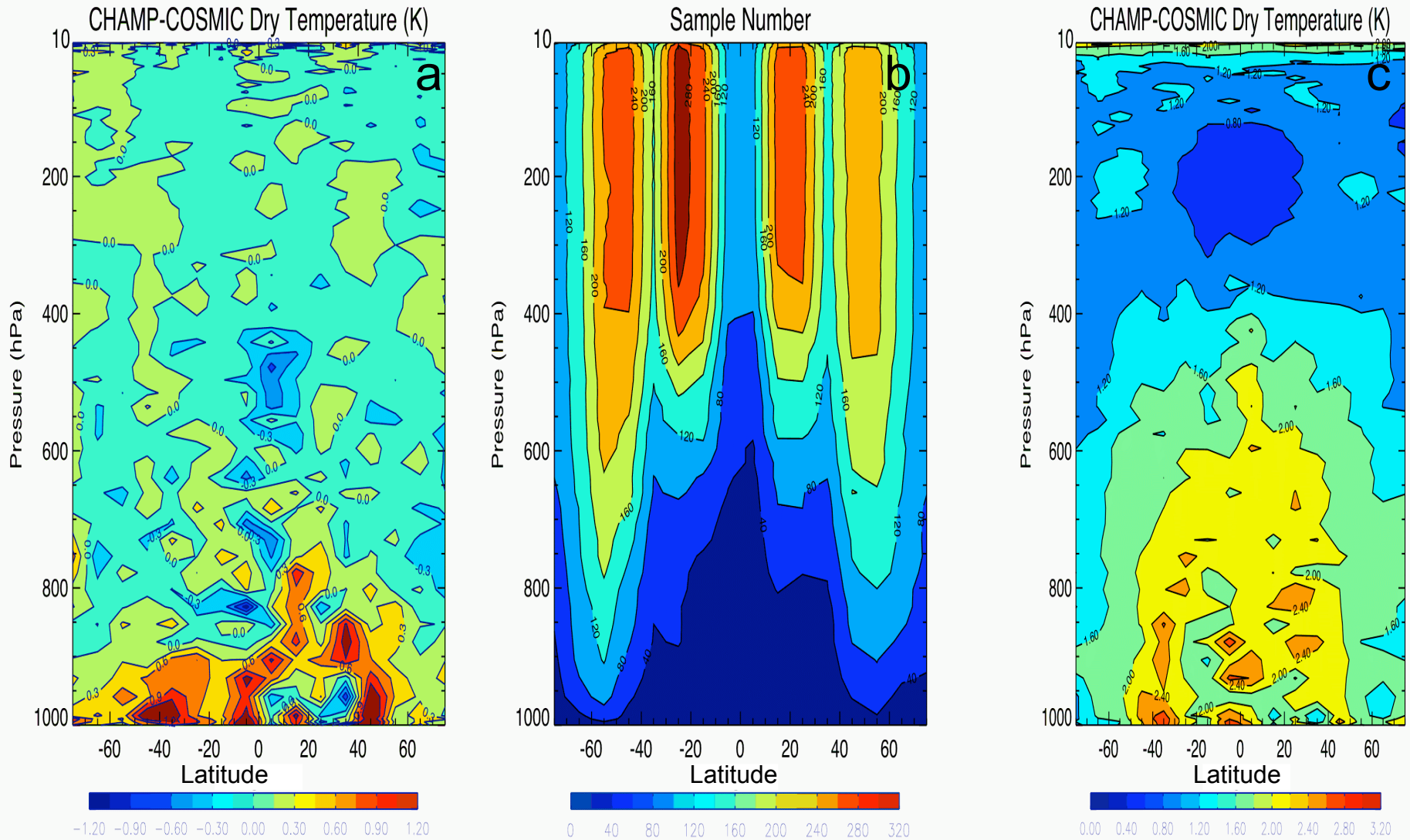
CHAMP-COSMIC rising



CHAMP-COSMIC setting

Fig.4

Global COSMIC-CHAMP Comparison from 200607-200707

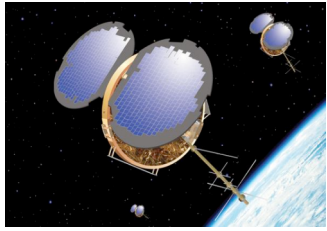


Dry Temperature Difference (K)

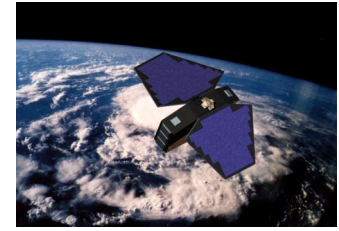
Sample Numbers

Median Absolute Deviation (K)

Fig.5

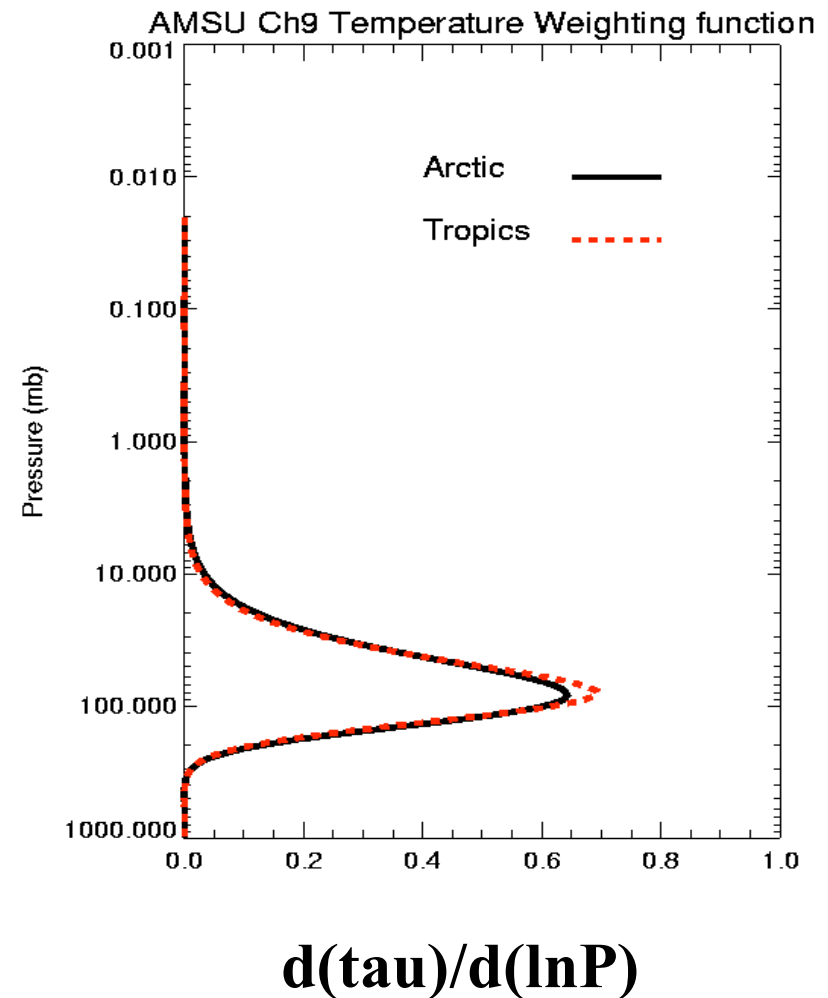


Approach



Approaches:

1. Apply CHAMP and COSMIC soundings to AMSU forward model to simulate AMSU TLS
2. Match simulated GPS RO TLS to NOAA AMSU TLS to find calibration coefficients for different NOAA satellites so that we can



The precision of using GPS RO data to inter-calibrate other satellite is about 0.07 K

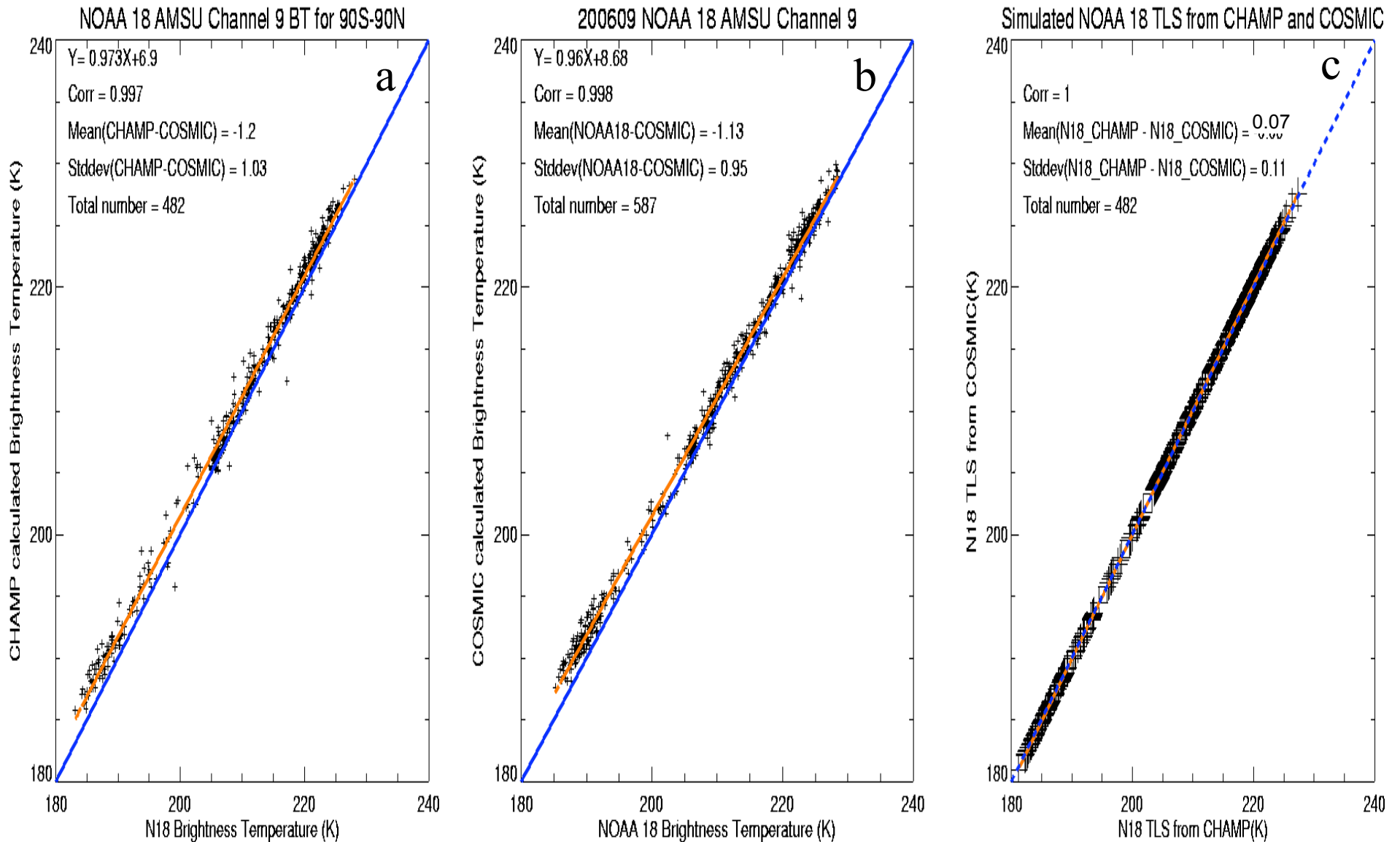


Fig. 7

NOAA 18 AMSU Ch9 Brightness Temperature

The precision of using GPS RO data to inter-calibrate other satellite is about 0.07 K

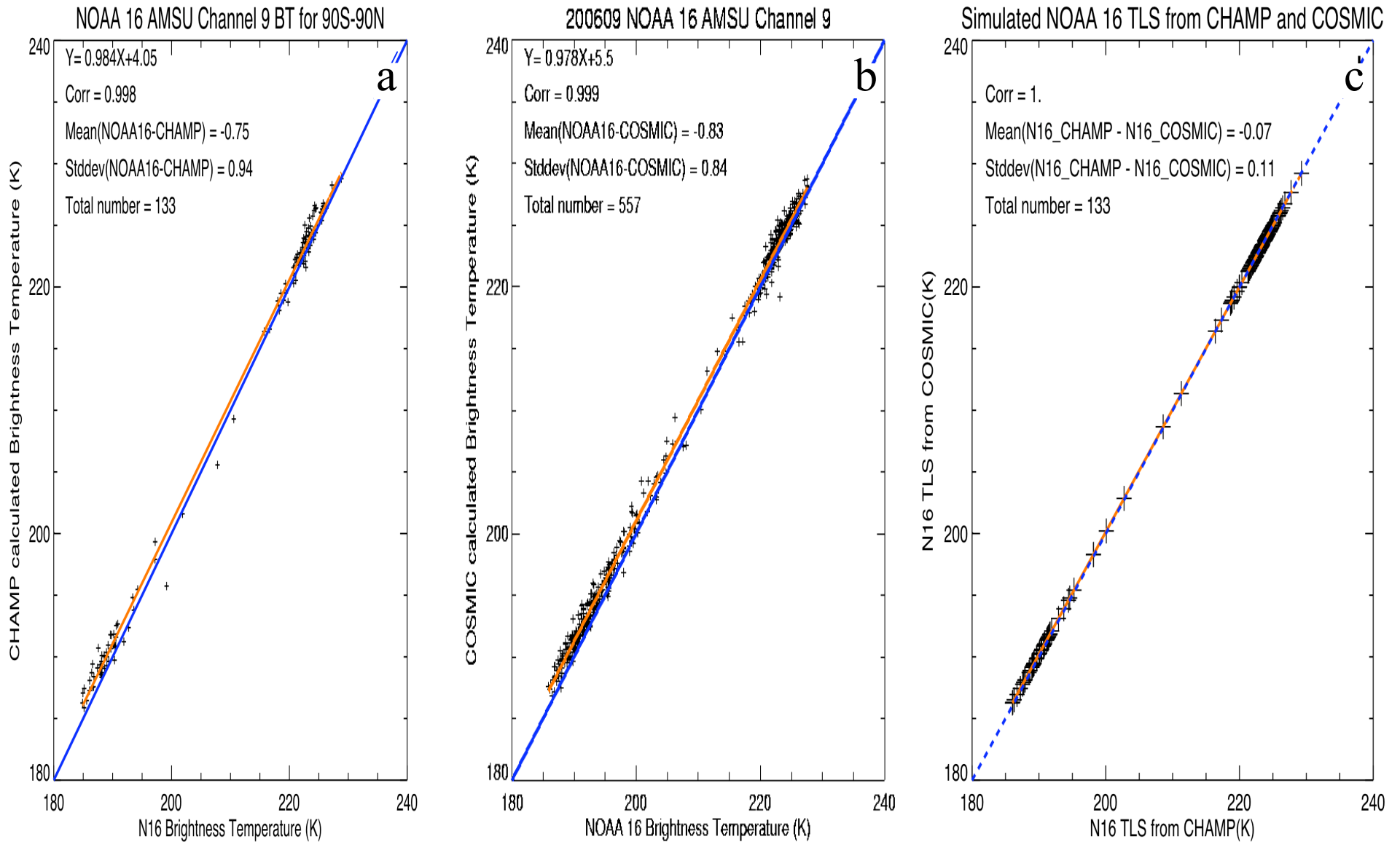


Fig. 8

(Ho et al. TAO, 2007)

Shu-peng Ben Ho, UCAR/COSMIC