

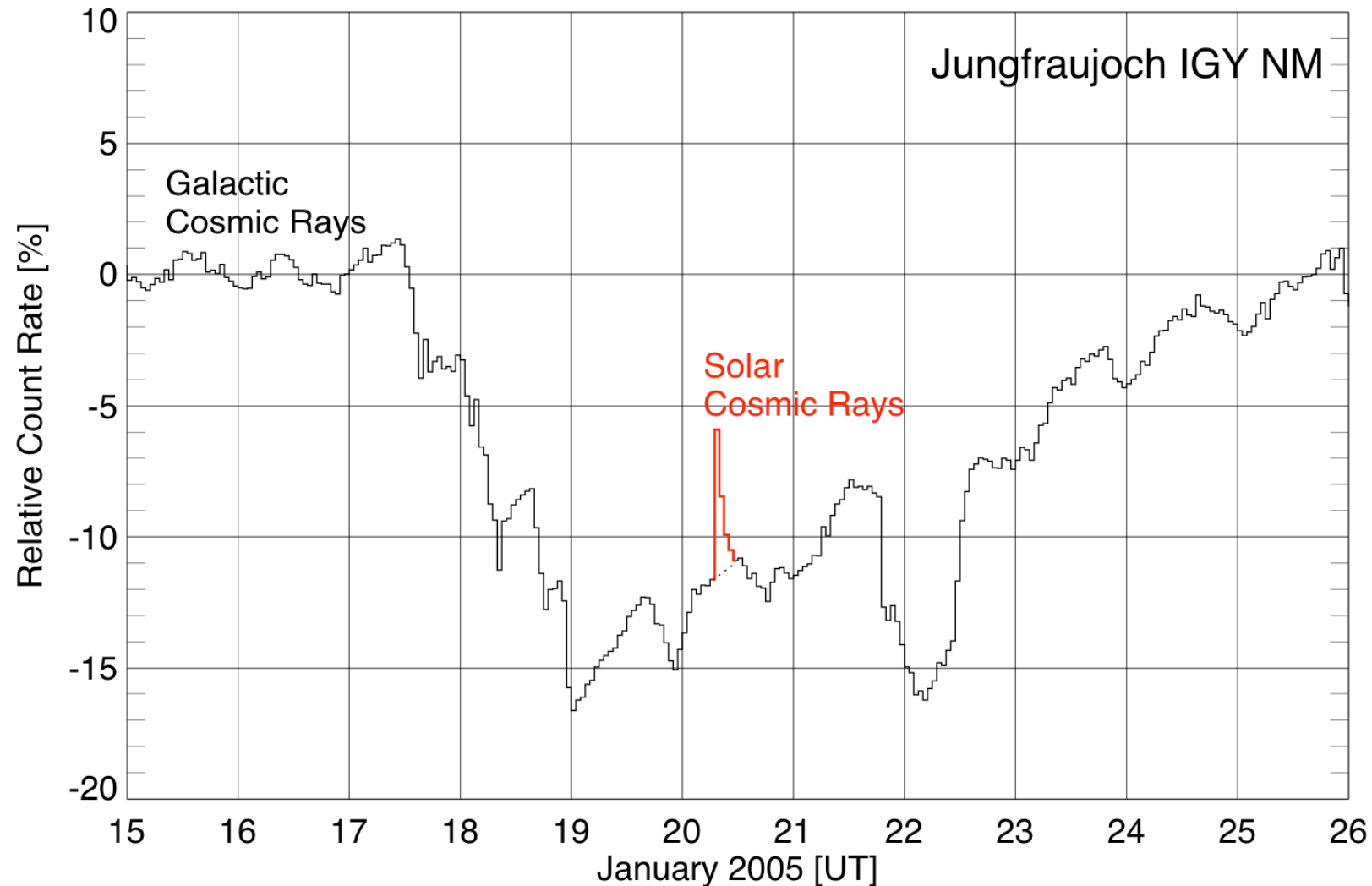
# The Solar Cosmic Ray Ground Level Enhancement on January 20, 2005

E.O. Flückiger, R. Bütikofer,  
M.R. Moser and L. Desorgher

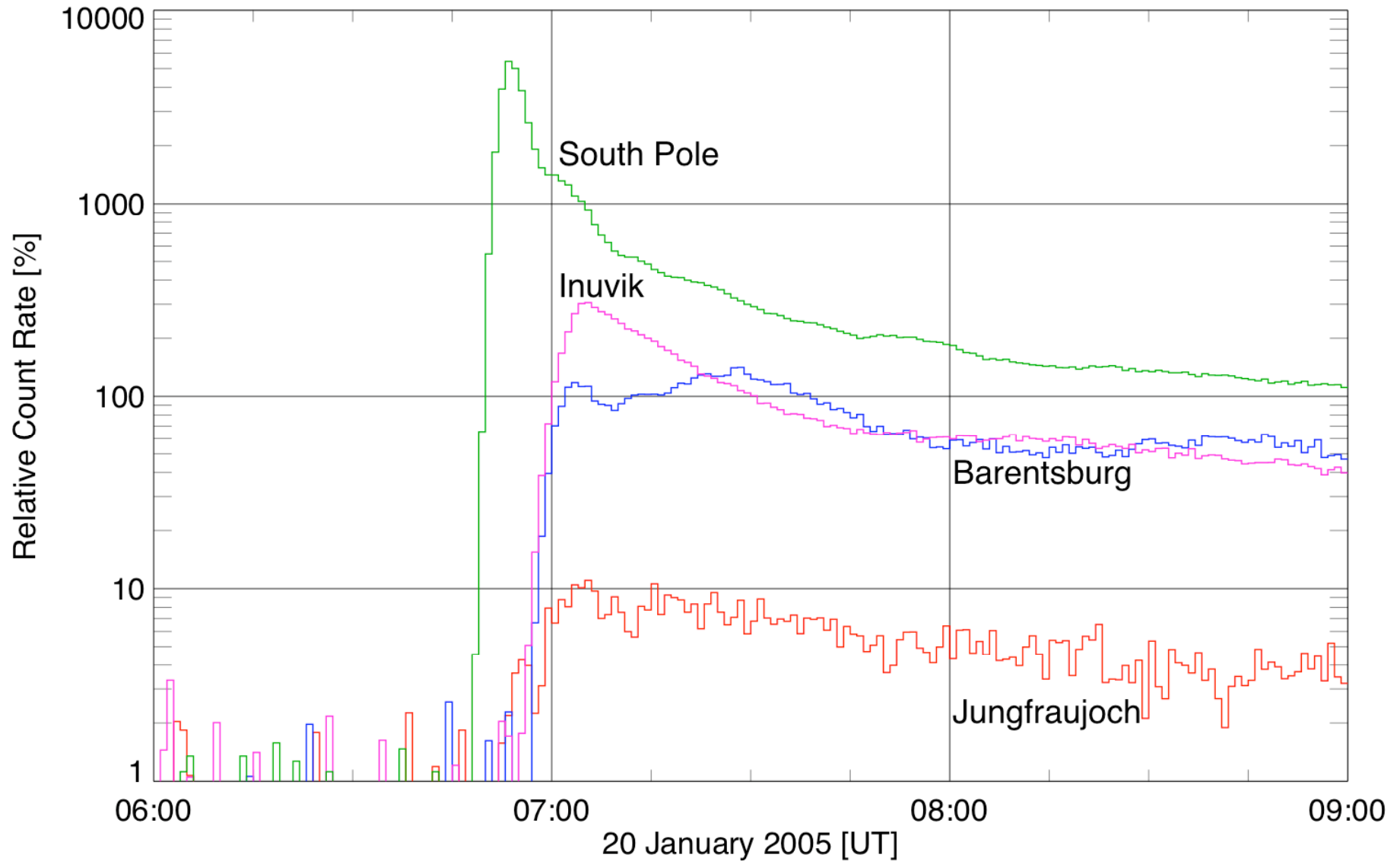
*Physikalisches Institut*

*University of Bern*

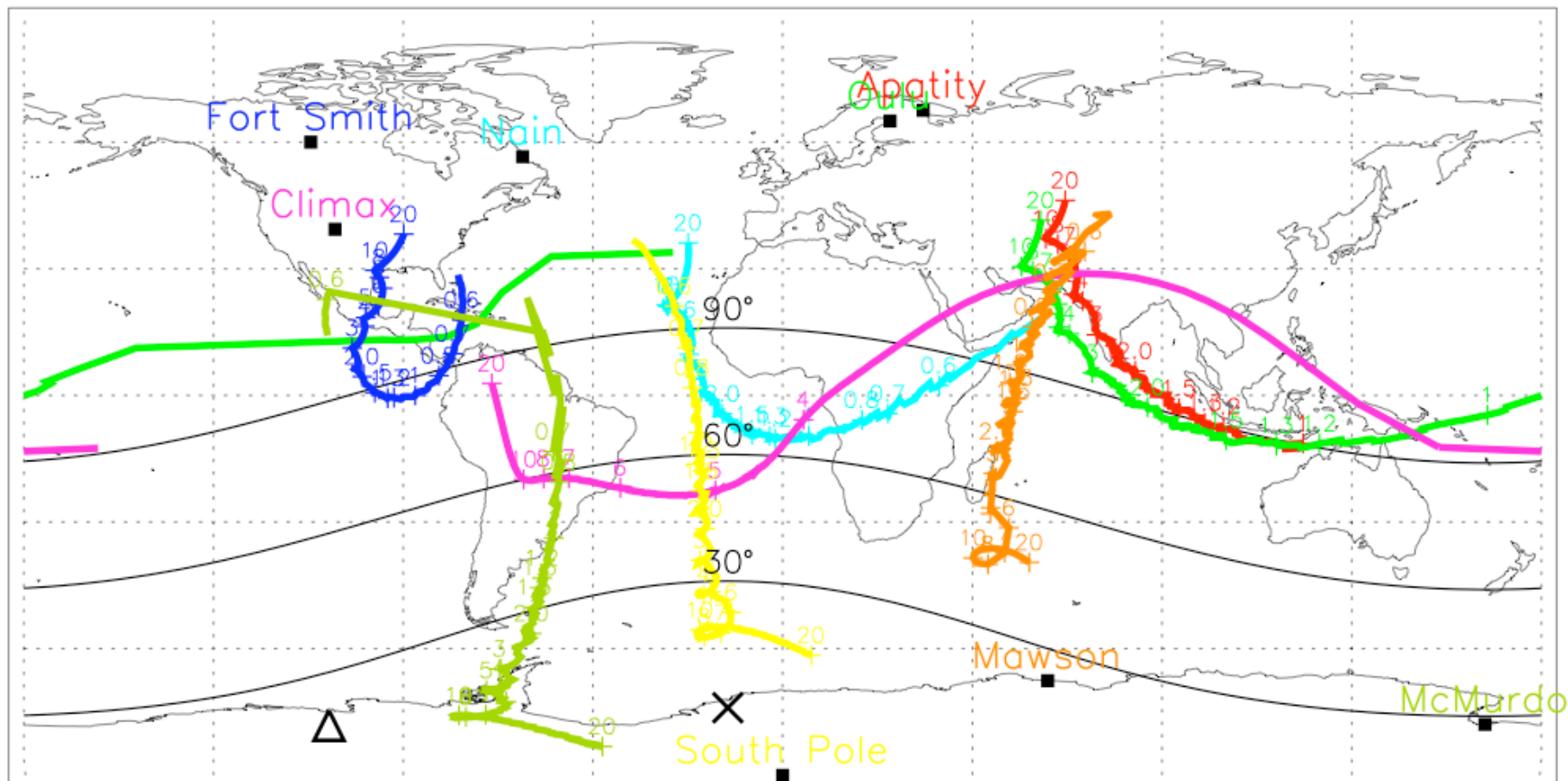
# Hourly IGY NM Count Rate at Jungfrauoch in January 2005



# 1-Minute GLE Count Rates

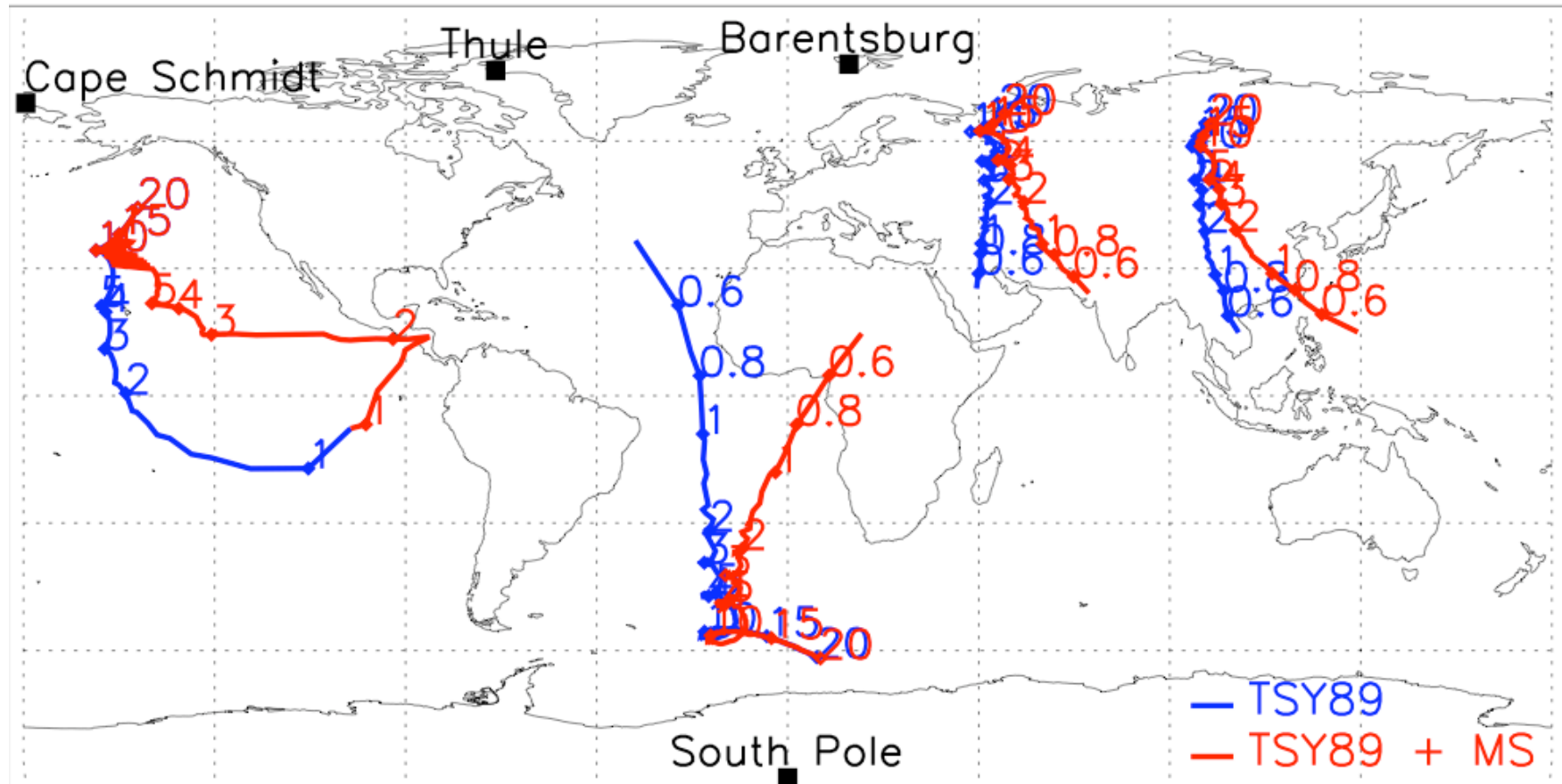


# Asymptotic Directions for Vertical Incidence 0655-0657 UT



IGRF + Tsyganenko 89

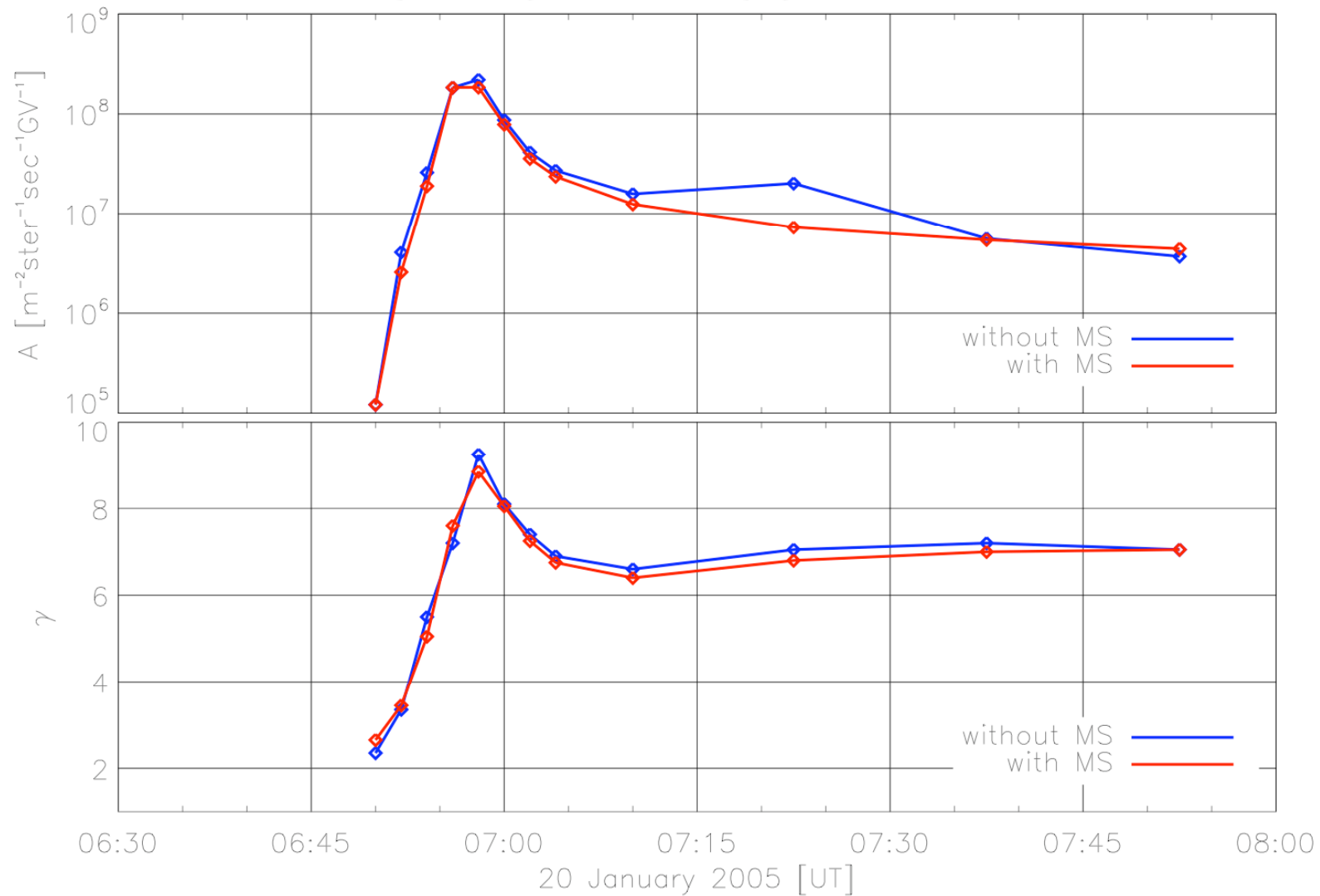
# Asymptotic Directions Considering the Magnetosheath



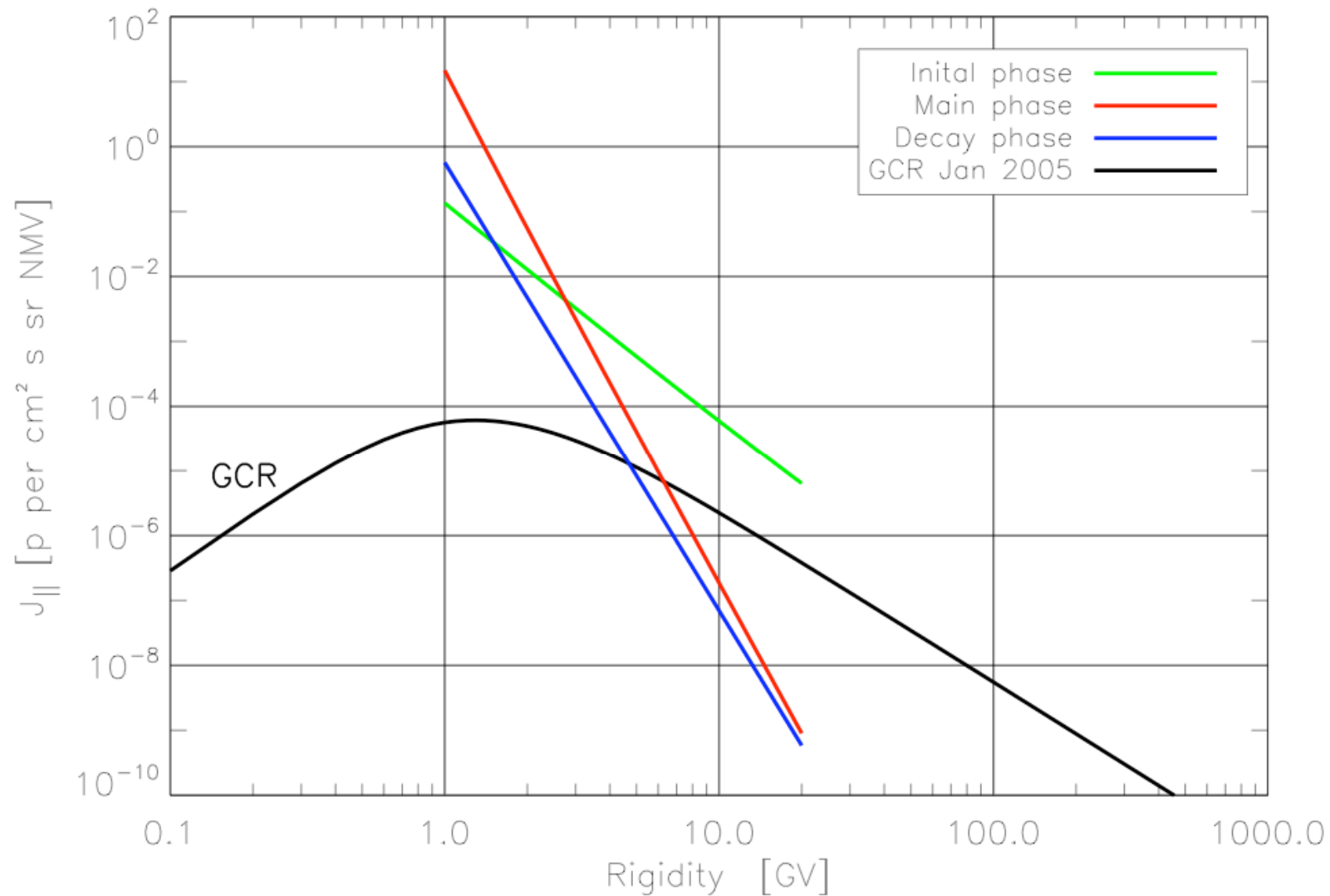
IGRF + Tsyganenko 89 (+ Kobel-Flückiger Magnetosheath Model)

# Best Fit Rigidity Spectrum

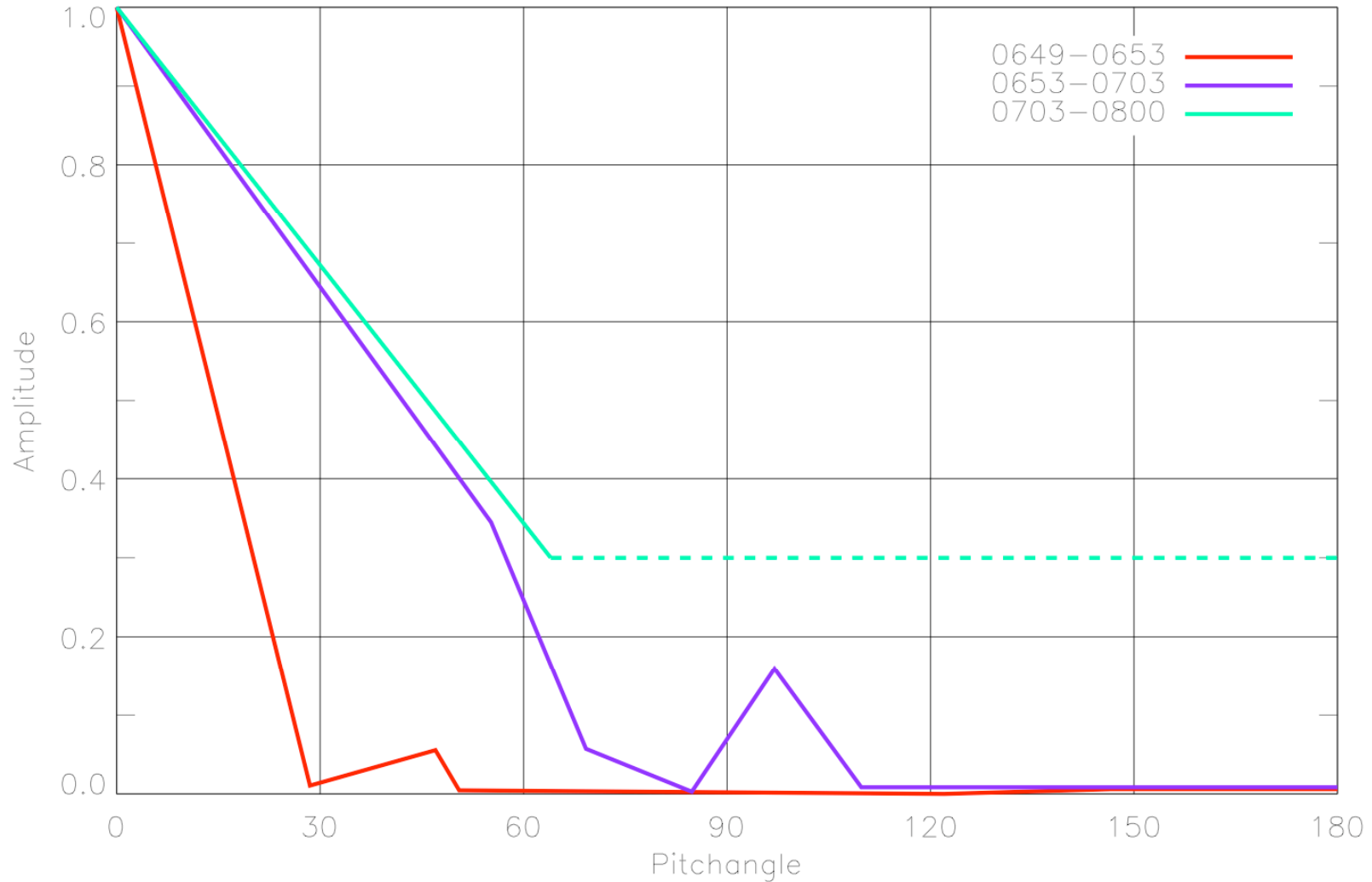
$$J(P, t) = A(t) P^{-\gamma(t)}$$



# Solar Proton Spectra for Different GLE Phases



# Pitch Angle Distribution Including Magnetosheat





# Apparent Source Position and Heliospheric Magnetic Field

