

PAMELA

GLE 70 – 13 12 2006

Flare 2006 12 13  
X3.4, S06W35,  
start 02:14

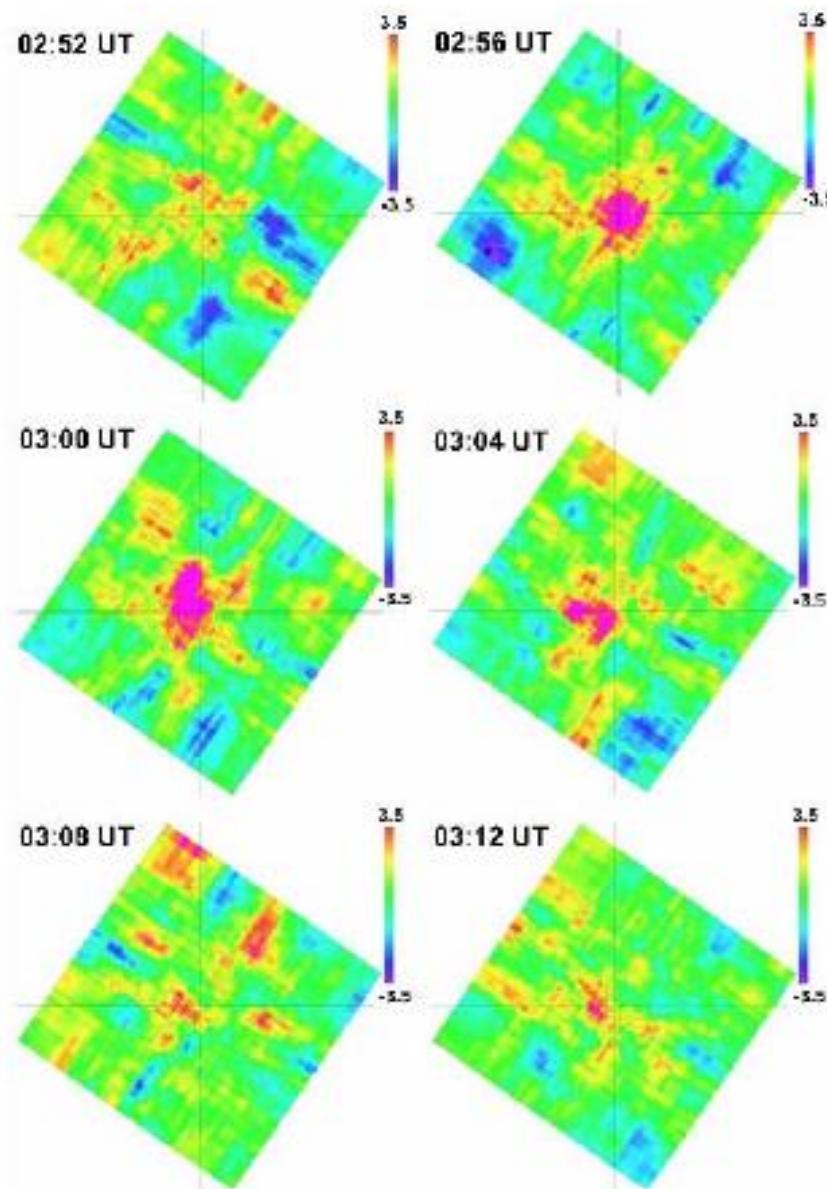
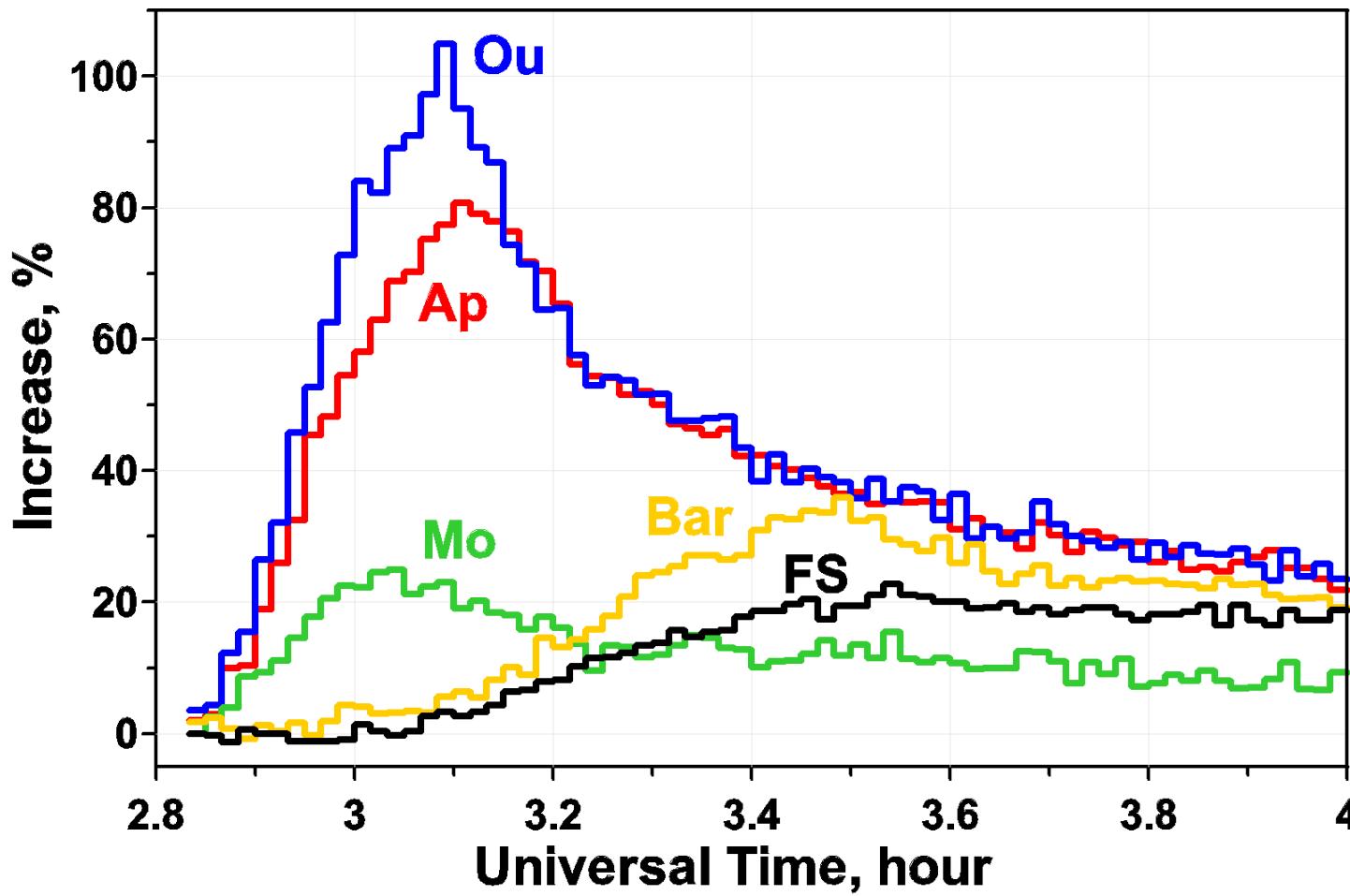
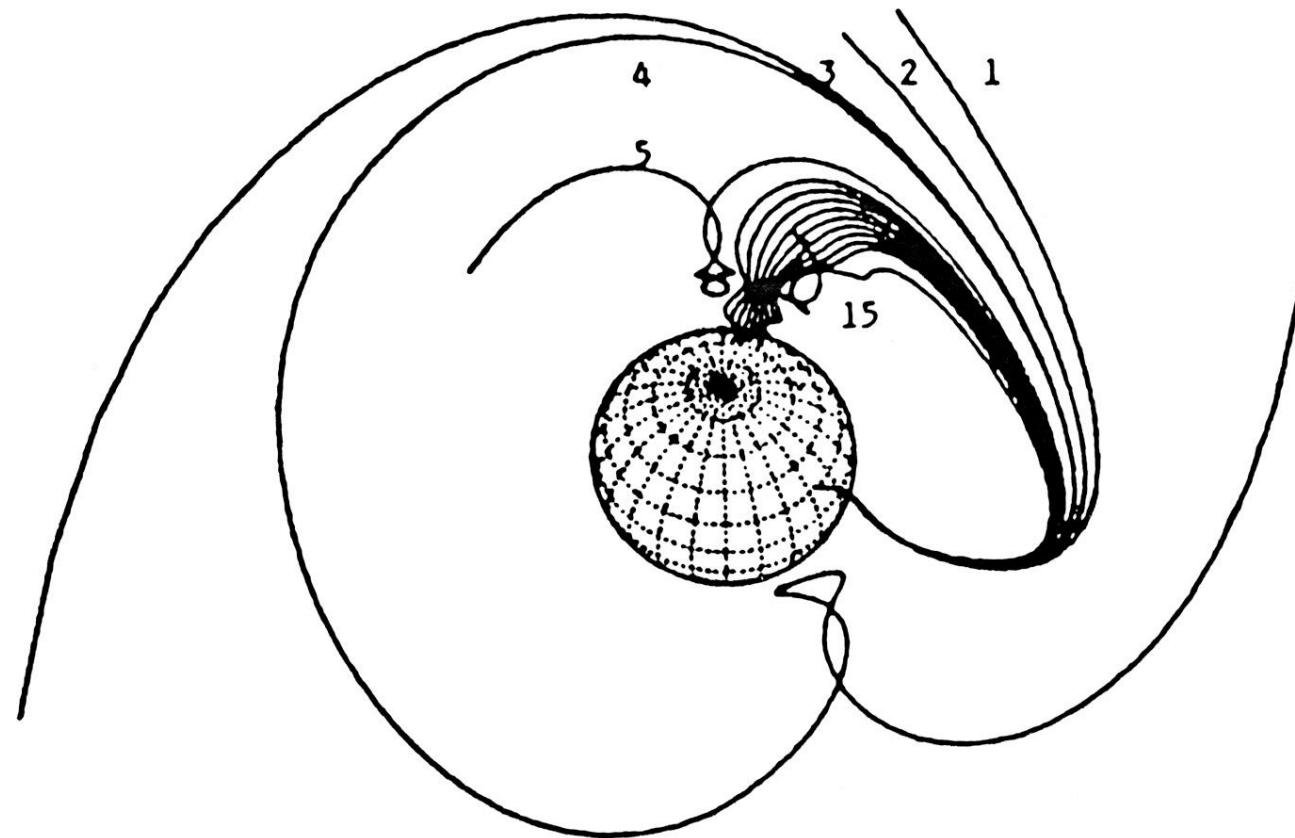


Figure 5: 2D-variations of muon flux during GLE event of December 13, 2006.

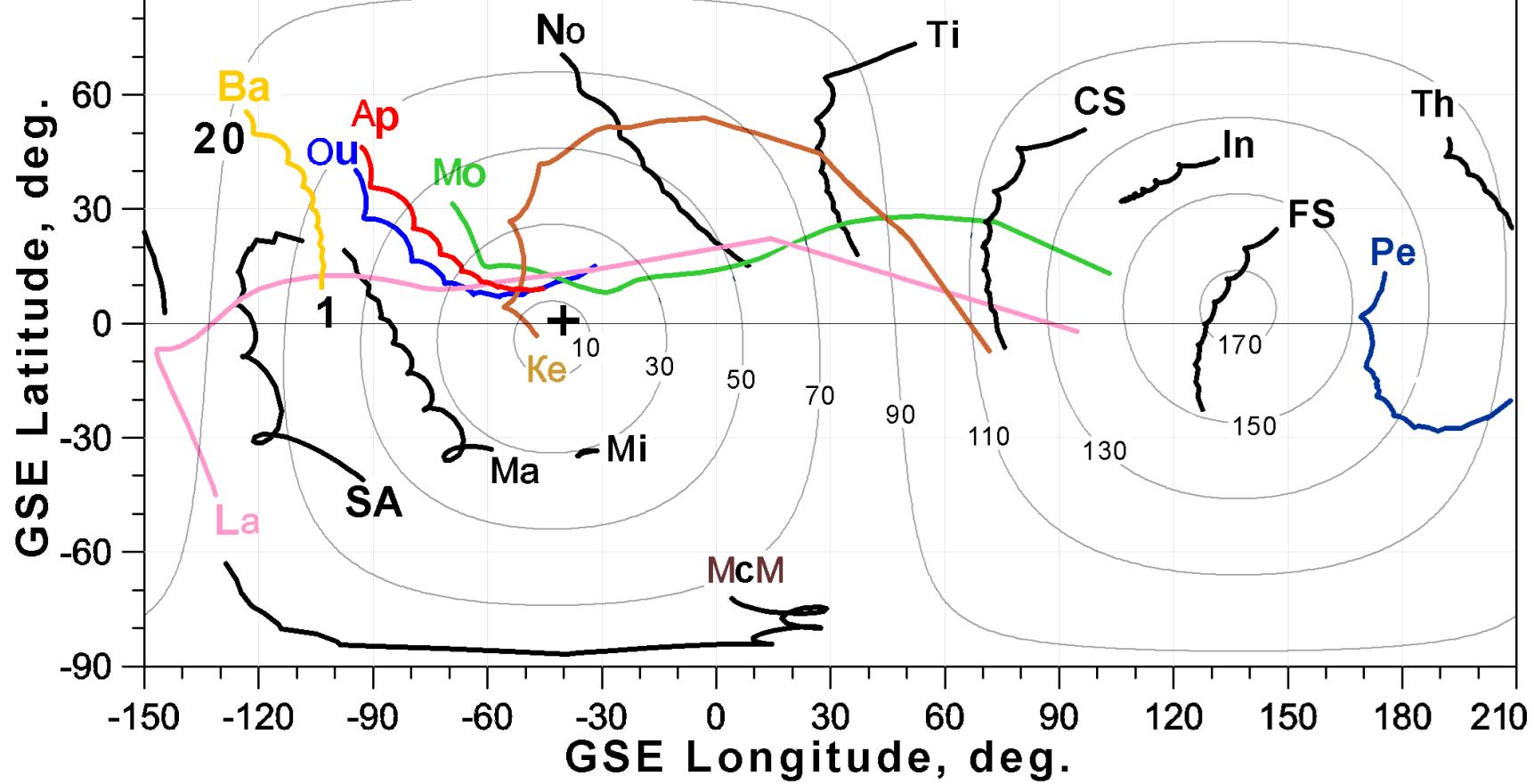
Timashkov et al., 2008  
30TH INTERNATIONAL COSMIC RAY CONFERENCE



Intensity-time profiles during the GLE 13.12.2006 at the  
neutron monitor stations: Ou-Oulu, Ap-Apatity, Mo-Moscow,  
Bar- Barentsburg, F.S- Fort Smith. (Vashenyuk et al., 2008)

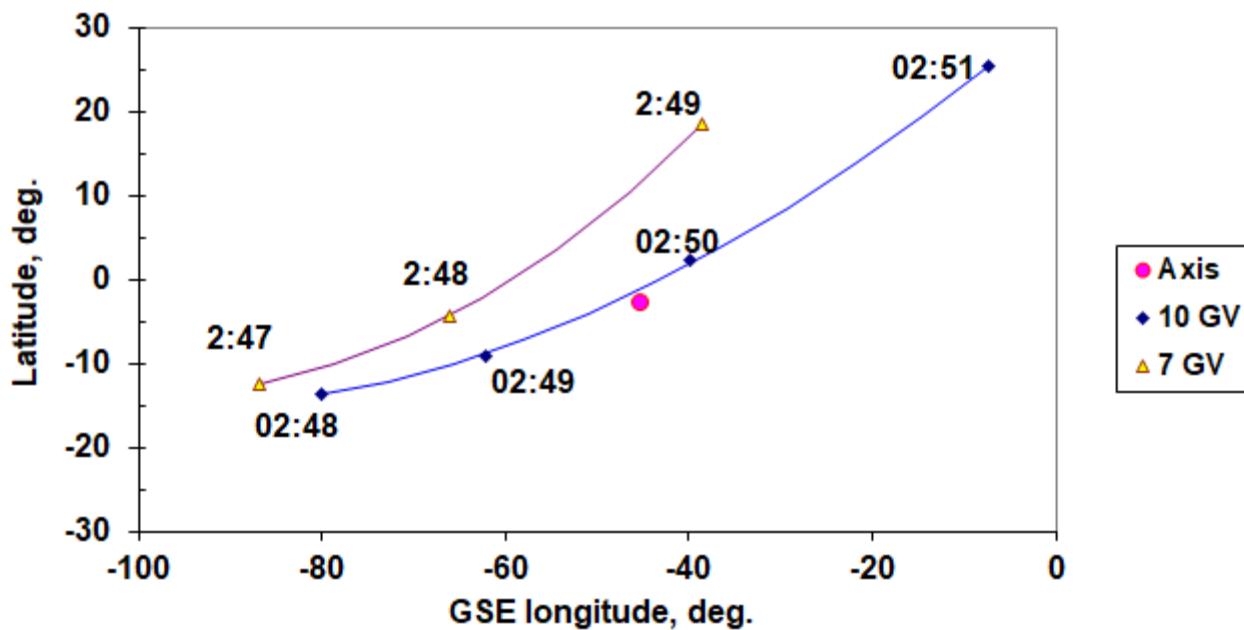


Shea



The derived anisotropy axis and pitch angle grid lines for solar proton flux at 03.00 UT. IMF direction (ACE data) is indicated by cross. The asymptotic cones (1-20 GV), the title is placed at the 20 GV end, are shown for the following NM stations: Th-Thule, Bar-Barentsburg, McM-McMurdo, Sa-SANAE, Ma-Mawson, Ou-Oulu, Ap-Apatity, Mo-Moscow, Mi-Mirny, No-Norilsk, Ti-Tixie, CS-Cape Schmidt, In-Inuvik, FS-Fort Smith, Pe-Pewanuk, Th-Thule. (Vashenyuk et al., 2008)

### Time dependence of the PAMELA 10 GV viewing direction



**Asymptotic directions**  
**13.12.2006**

