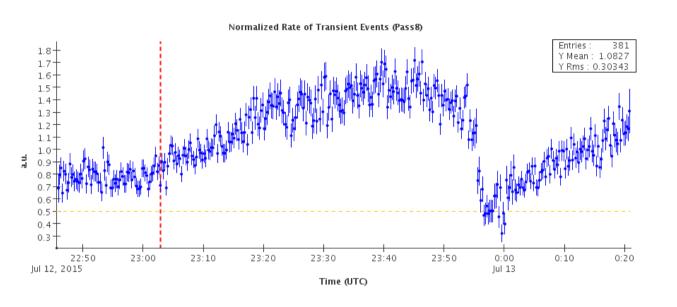
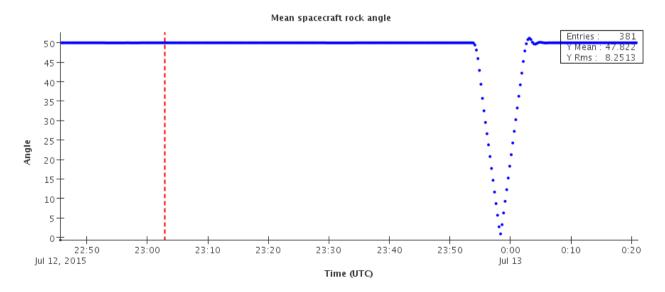
## TransientEvents: example of a "bad" Earth limb correction...

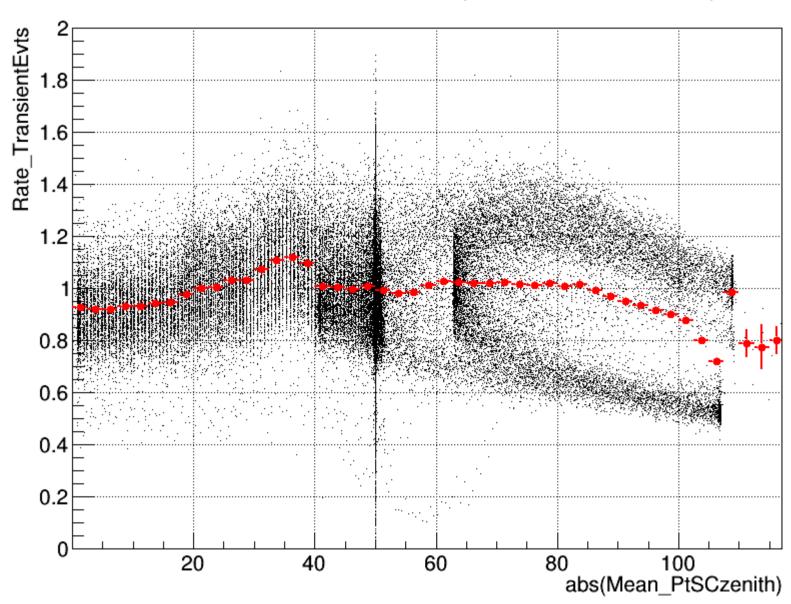


Such jumps in the normalized rate during rock angle changes are present in many runs, event if they usually don't trigger any alarm



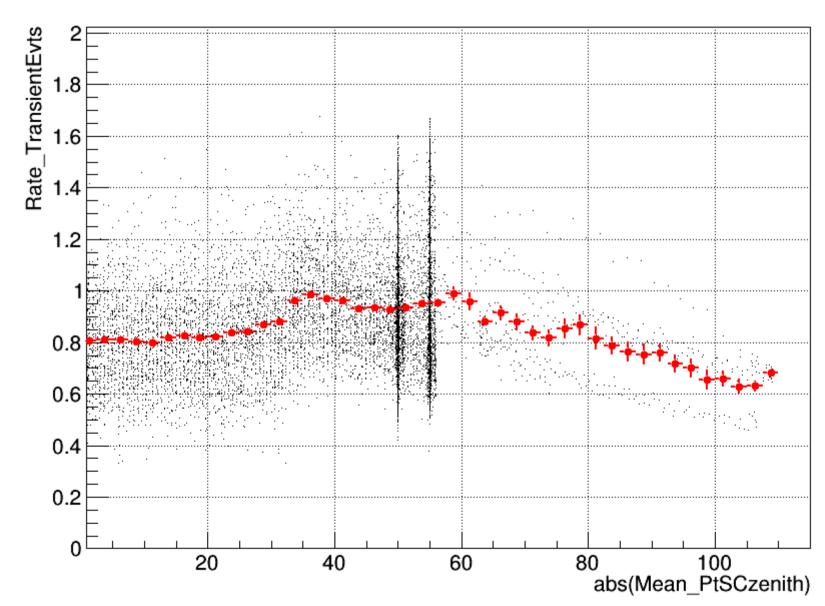
# **TransientEvents: after Earth Limb correction – old (Pass7)**





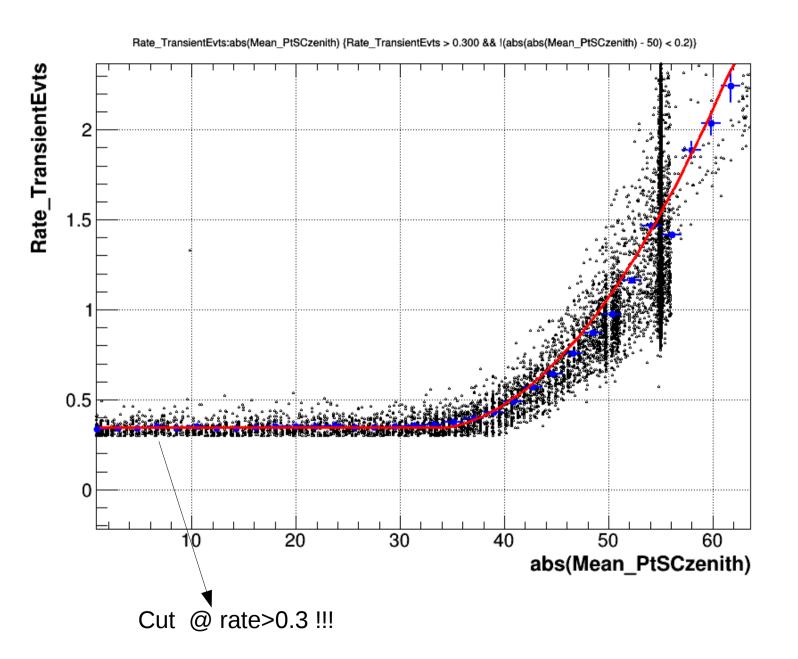
# **TransientEvents: after Earth Limb correction – new (Pass8)**





At low angles the corrected rate is quite far from 1

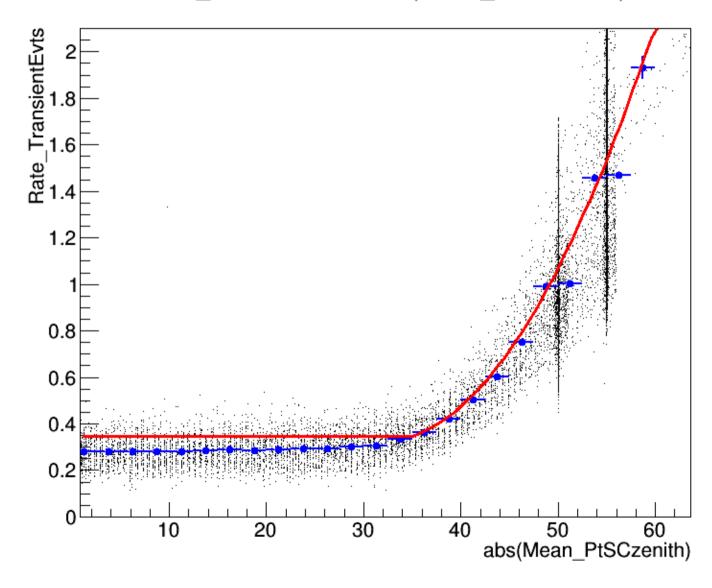
# **TransientEvents:** Earth Limb correction – new (Pass8)



Average biased by a cut on rate>0.3

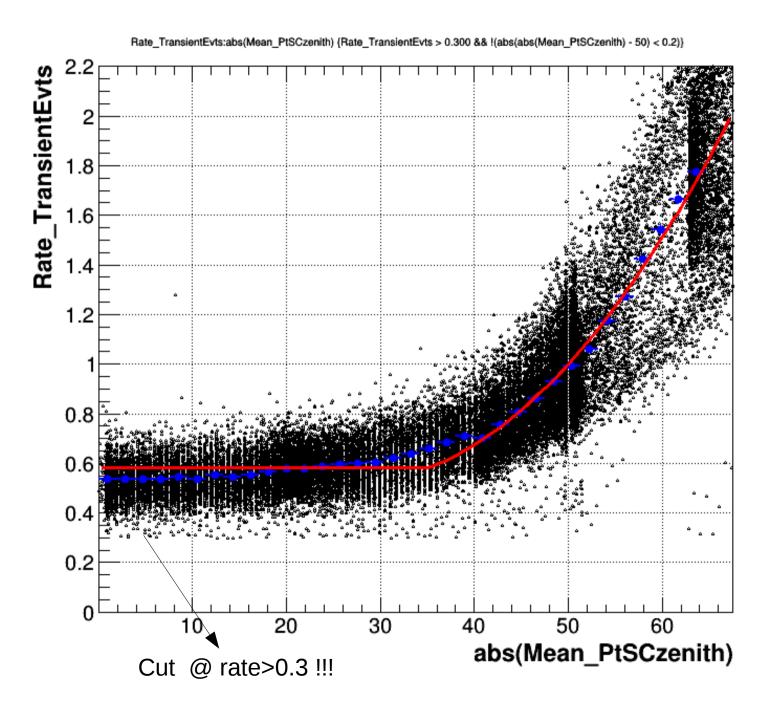
# **TransientEvents:** Earth Limb correction – new (Pass8)





- Red Line: fitted using the cut at rate>0.3
- Black and blue points: No cut on rate

### **TransientEvents:** Earth Limb correction – old (Pass7)

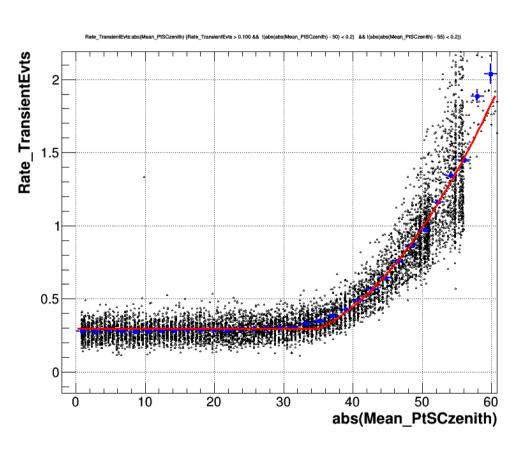


In pass7 transient events this cut was less less important

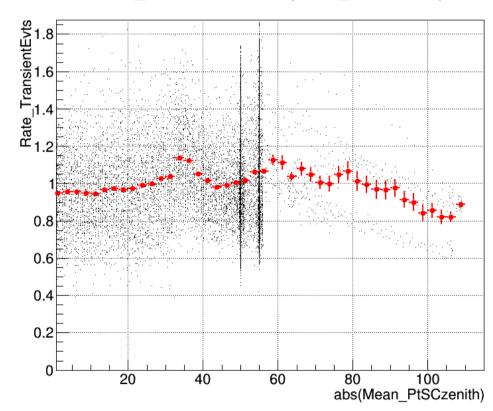
### **TransientEvents: Earth Limb correction fit - new cuts (Pass8)**

#### **Changing cuts:**

MIN\_NORM\_RATE = 0.1 (was 0.3) NOT\_ROCK\_ANGLE\_CUT ==> exclude also 55 deg



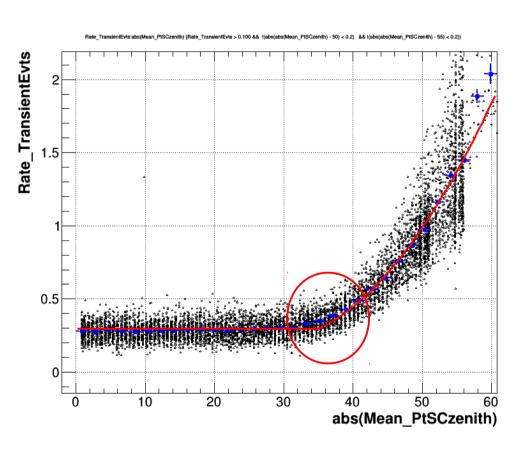
Rate\_TransientEvts:abs(Mean\_PtSCzenith)



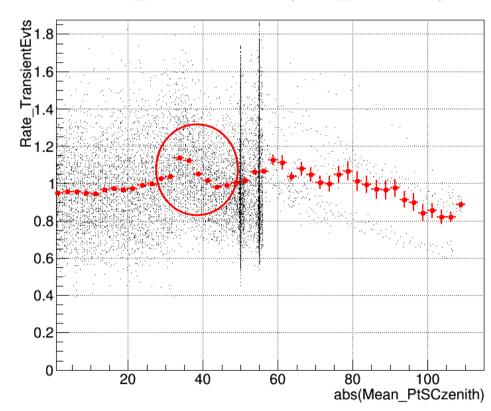
### **TransientEvents: Earth Limb correction fit - new cuts (Pass8)**

#### **Changing cuts:**

MIN\_NORM\_RATE = 0.1 (was 0.3) NOT\_ROCK\_ANGLE\_CUT ==> exclude also 55 deg



Rate\_TransientEvts:abs(Mean\_PtSCzenith)



#### **TransientEvents: Earth Limb correction fit - new cuts (Pass8)**

#### **Changing cuts:**

```
MIN_NORM_RATE = 0.1 (was 0.3)

NOT_ROCK_ANGLE_CUT ==> exclude also 55 deg

LIMB_ROCK_ANGLE = 30 (was 35) parameter [3] (fixed) of limb_fit_formula:

LIMB_FIT_FORMULA = '[0] + [1]*(x>[3])*(x-[3]) + [2]*(x>[3])*(x-[3])**2'
```

