JADE Computer Note 59 This is JADEPR.TEXT(NOTE59)

P. Steffen, 82/08/12

Run dependent Event Vertex on Calibration file

The event vertices of the different runs have been determined from Bhabha-events by S. Komamiya. Up to now this has been done for all the 1981 data and for the data from the spring period 1982 up to run 10972.

These run vertices have been included in the calibration files
'F11LH0.AUPDAT1', and
'F11LH0.BUPDAT0' , 'F11LH0.BUPDAT1'.
For the 1979 + 1980 data the old vertices of B. Naroska are used. For the later 1982 data the vertex from spring 1982 is used until the new ones are determined.

The run dependent event vertex can be used in the following way:

```
Use  %MACRO CALIBR of macro library (F11GOD.PATRECSR)
ICALIB(10)       :  Pointer = IPVTX
ACALIB(IPVTX+1)  :  XV
                +2  :  sigma(XV)     = sigma(bhabha-tracks)
                +3  :  YV
                +4  :  sigma(YV)     = sigma(bhabha-tracks)
                +5  :  ZV           (= 0. at present)
                +6  :  sigma(ZV)    (= 0. at present)

C-------------------------------------------------------------------
C            MACRO CALIBR .... JADE CALIBRATION DATA COMMON
C-------------------------------------------------------------------
      COMMON/CALIBR/ ACALIB(1000)
                     DIMENSION HCALIB(100),ICALIB(100)
                     EQUIVALENCE(ACALIB(1),HCALIB(1),ICALIB(1))
C------------------------ END OF MACRO CALIBR ------------------------
```

It should be noted that the run dependent vertices have been determined using the new jet chamber constants and that they are dependend on them.

Differences between old and new vertices are
< 0.4 mm for spring 81 data
< 1.8 mm for summer 81 data
< 0.7 mm for fall 81 data
< 0.3 mm for spring 82 data

In order to obtain improved momentum and space resolution in the r-phi plane it is necessary to fit the tracks again, e.g. by using the subroutine REFITV (see JADE Computer Note 60).