Status of ATLAS Software
May 5th

- Status of 98_2 release
- MC consolidation

98_2 release

SLUG

- slugfix.corr
  - slextrn load ‘nran’ (dec-unix, linux, NT)
  - slwarn *BKIO ‘RUNT’ (warning if used)

98_2 release

DICE

- no energy deposited in the coil
  - (1) reduced *stepmax* (from 10 cm to 1cm)
  - (2) use a modified version of *geant* routine GTRACK
  - after discussion with ‘geant team’ decide on **solution 1**
- record deposited energy in the ‘coil’
  - Centdig call to CoilDig (if digi)
  - Coildig new routine
- correction for Linux
  - Acqshr
  - Accgap

98_2 release

ATUTIL

- Utcalo
  - calounpk — bug in calo version
  - calorec — adapted to latest geometry
  - coilrec — new routine
- calo ‘ntuple’

98_2 release

ATRECON

- Calorimetry
  - Emreco modulation of em-energy with phi

- Inner DEtector
  - PixlRec seems OK (fixes for run time problems)
  - xKalman
    - new bank ‘hiti’
    - new ntuple
    - bug fix (therea)
  - iPatRec disabled (no more libraries with *gcc*)

98_2 release

ATRECON

- MuonBox (501)
  - take into account multiple scattering
    - new database (with inactive material)
    - check consistency with DICE description
  - speed : some improvements
  - crash : correction added & being tested
  - ‘Geane’
    - Mufit
      - to be implemented

98_2 release

ATRECON

- ATRECON
  - new steering routine Arecon
    - selection of packages (if flags)
    - timing of reconstruction packages
  - new control Ntuple (CaloCtrl)
- Unfortunately
  - that version ‘is looping’
  - the reason is not understood yet

98_2 release

Data files

- /afs/cern.ch/atlas/offline/data
  - amdb_simrec.m2.1
  - BmagAtlas02.data

98_2 release

Installation scripts

- $LHC_ROOT/98_2/ins
  - dice_new.ins
  - atrecon_new.ins
  - Makefile_Atrecon_140
- atrecon_

A	atrig (not available yet)
C	calorimetry
I	iPatRec (not available yet)
X	xKalman
P	PixlRec
M	Muonbox

98_2 release

ATRIG

- Atrig 403
  - to be implemented

Combined reconstruction

- xKalMan & PixlRec
  - B- Physics
  - Vertex b tagging
  - photon identification
  - ...
- MuonBox & iPatRec
- Jet finder library (to be added)

98_2 release

To CVS

- already done
  - event generators
  - genz, genslug, slug
  - atrig
- to de done
  - dice
    - packages to be defined
  - atutil
  - atrecon
    - several packages
  - atlsim

MC Consolidation
Why ?
Unique batch & interactive version
improved quality

Batch

- slug I/O
  - lot of possibilities
- dice geometry
- datacards FFREAD
- pile-up

Interactive

- atlsim
  - its own I/O
- dice geometry
- KUIP
- own pile-up
  - faster

MC Consolidation
but ‘atlsim’

- atgeant ‘actions’
  - ax_component, ax_mixture
  - ‘ags’ (*geant* geometry)
  - ‘agg’
    - aggstep, agghit
- rebank interface to *zebra*
- agetof (geant3) parser
- dzdoc

- Modifications to
  - ‘geant’
  - comis
  - agzio
  - genz
  - hadr
  - …..

MC consolidation

atlsim

- The ‘requirements’ were not clear enough & which one is the best for :
  - pile-up
  - I/O
- we considered to ‘re-write’
  - *rebank* in pure *fortran*
    - but it was still evolving (bug fixes) and we wanted to avoid a non-unique source code
  - same consideration for other parts
- amount of work was not negligible

MC consolidation
‘limited’ consolidation

Batch

- slug/dice
  - atgeant interface to *zebra*
  - rebank interface to *zebra*
  - agetof (geant3) parser
- atlas version of geant
- ffread

Interactive

- atlsim/dice
  - atgeant interface to *zebra*
  - rebank interface to *zebra*
  - agetof (geant3) parser
- **atlas version of geant**
- I/O version of ‘atlsim’
- dzdoc, comis, ...
- kuip