

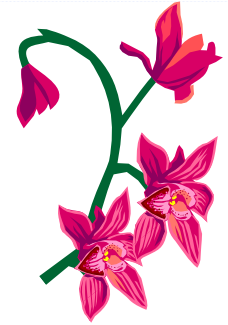
Summary of calibration status and plans: detector reports

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CERN PH/AIP

Alice Offline week
October 7th 2005



Outline



- Condition Database framework:
 - Time scale: see Latchezar Betev's presentation

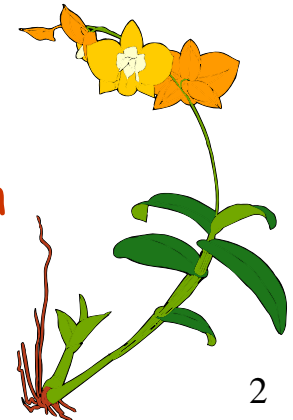
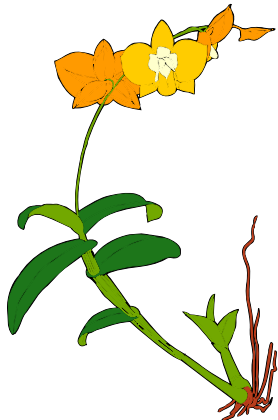
- Detector reports:
 - Updates of user requirements
 - Code status and plans

My understanding of...

- Note:
 - EMCAL: did not report
 - CRT: did not report

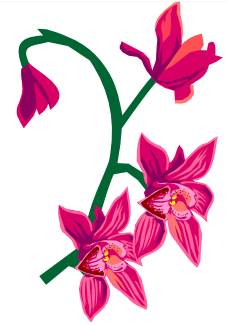


- Note of caution:
 - Pedestals issue: see Latchezar Betev's presentation



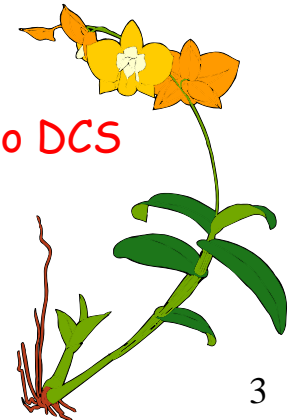
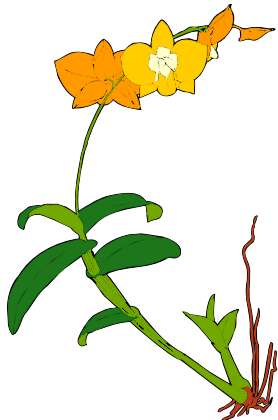


Update of user requirements (I)



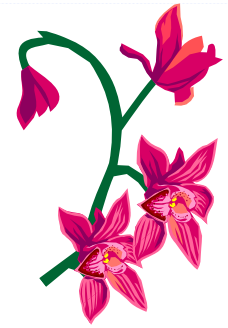
ZDC:

- Calibration objects:
 - More details given
 - Slight changes in size and access frequency
- Access to external data:
 - Need information to:
 - Eliminate runs clearly not good for physics analysis
 - Precisely determine groups of runs with similar conditions
 - Need:
 - Specific ZDC DCS information:
 - HV (to determine mal function of the detector)
 - Non-ZDC information:
 - Currents in the beam line
 - ➡ This kind of machine information should be sent to DCS





Update of user requirements (II)

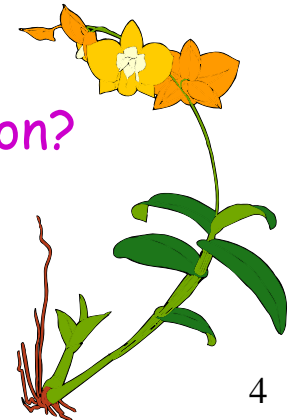
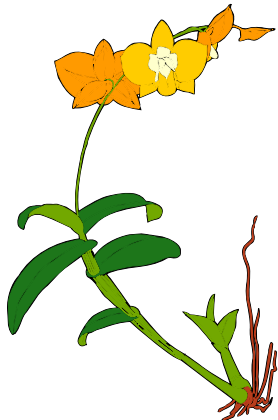


➤ TRD:

- Requirements updated:
 - Calibration/alignment objects known (a few more objects than before)
 - Update frequencies defined
- Still missing: do you need access to extra information? (DCS? Machine?...)

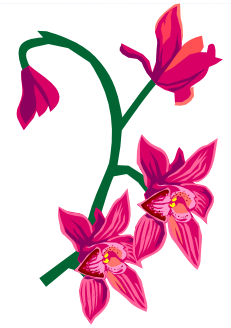
➤ TO:

- Calibration objects needed in reconstruction:
 - For each channel:
 - Time delay
 - Time versus amplitude curve
- Full list of objects still unclear
- Still missing: do you need access to extra information? (DCS? Machine?...)





Update of user requirements (III)

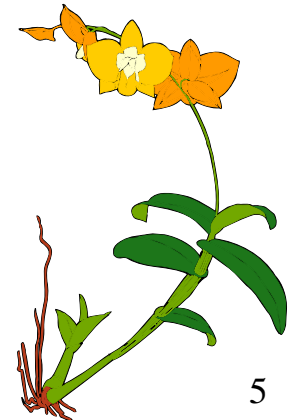
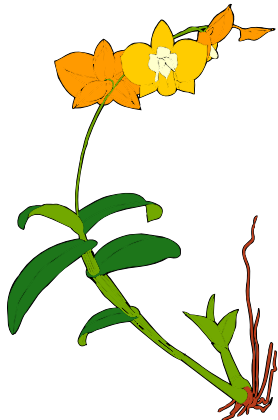


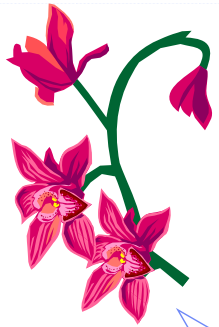
➤ TOF:

- List of calibration objects updated
- External databases:
 - Thought about
 - Preliminary information given
 - ... but detailed requirements to be defined

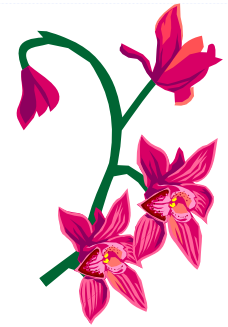
➤ RICH:

- Details about the calibration objects
- List of data to be collected from external databases, including frequencies.



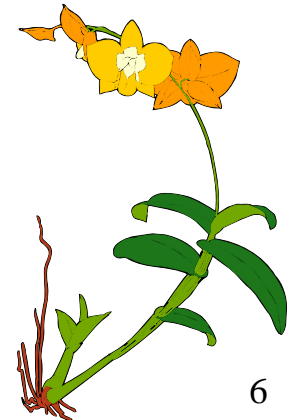
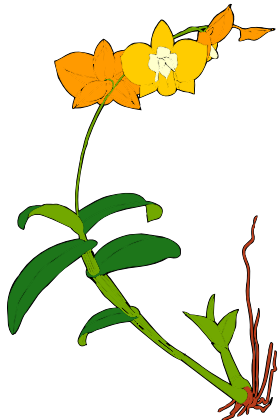


Update of user requirements (IV)



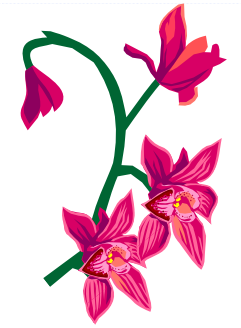
- MUON:
 - No (little) change.
 - External databases:
 - Confusion wrt pedestals (see Latchezar's presentation)
 - ... to be sorted out.
 - Other external database access?

- TPC:
 - More details about
 - The calibration objects
 - Access to external data (DCS)
 - Update frequency





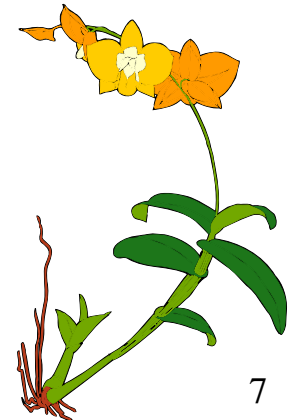
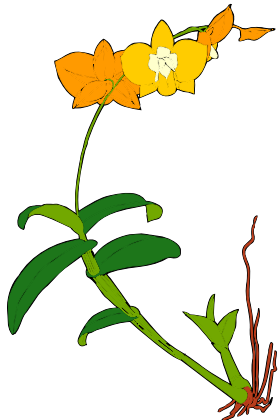
Update of user requirements (V)

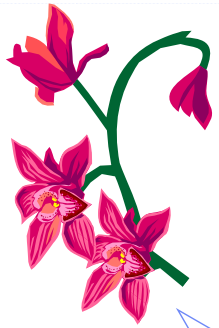


- PHOS:
 - No (little) change

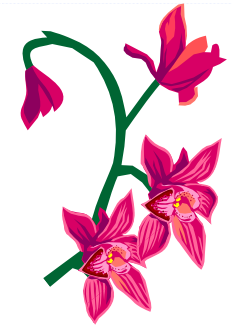
- PMD:
 - No (little) change

- ITS:
 - SDD maps compression ➔ smaller size (possibly)
 - Still unclear to me which external databases need to be accessed, which data need to be retrieved



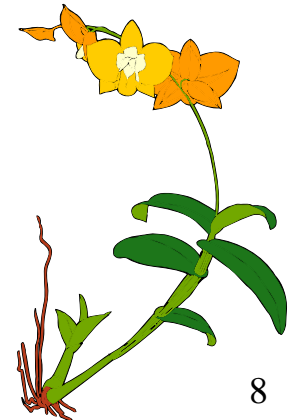
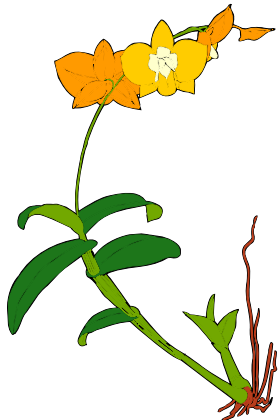


Update of user requirements (VI)

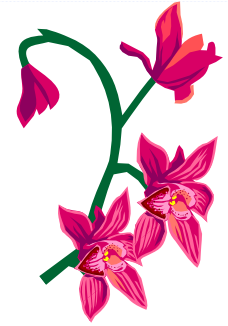
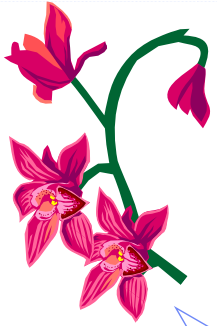


- FMD:
 - No (little) change
 - External database:
 - DCS information required
 - But:
 - Is that really DCS information?
 - Pedestals issue to be sorted out...

- VO:
 - Nothing done



Code Status and Plans (I)



➤ ZDC:

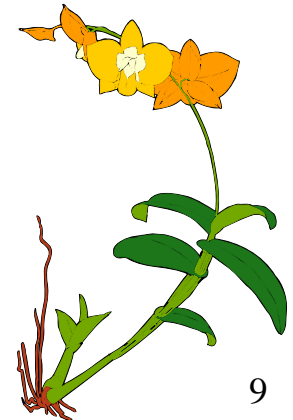
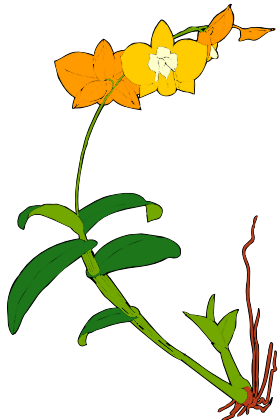


- Simulation: framework ready for testing calibration procedures
- Calibration classes: prototype ready
- To be done:
 - Implement creation of calibration objects
 - Use of the calibration objects in the reconstruction
 - ➡ When????

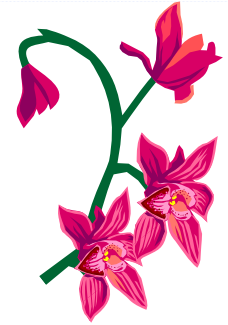
➤ TRD:



- Calibration parameters known
- Procedures known
- Have to start using the official tools!!
- ➡ When????



Code Status and Plans (II)



TO:

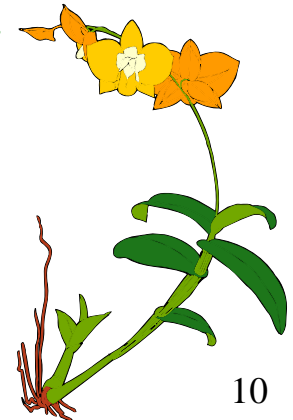
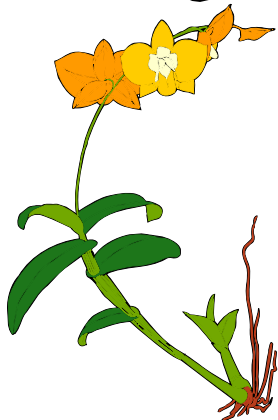


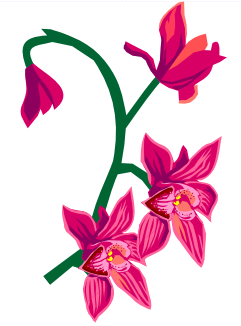
- First implementation of calibration classes done
- Need to include calibration procedures in reconstruction code
- Calibration/Decalibration: to be done in November

TOF:



- Calibration algorithms currently being developed
- Condition DB framework not used yet.
- We will have technical discussions early next week...
 - About the framework itself
 - About external databases
- Framework will be tried soon after.





Code Status and Plans (III)

➤ RICH:

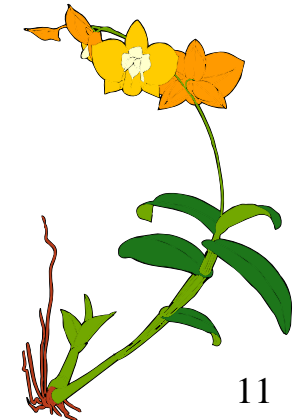
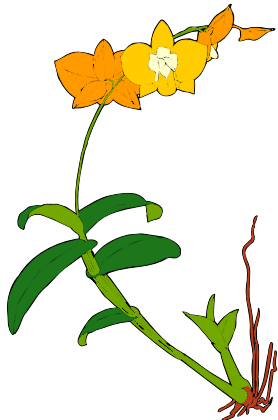


➤ Some calibration classes:

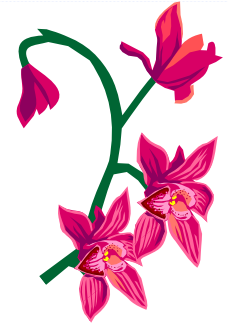
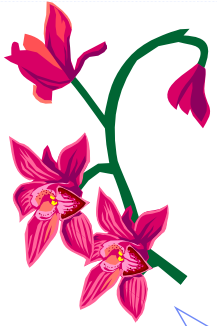
- Some are implemented
- Some to be implemented still
 - When????

➤ For some: need access to external databases to continue work

- How to access DCS?
- How to access DCDB?



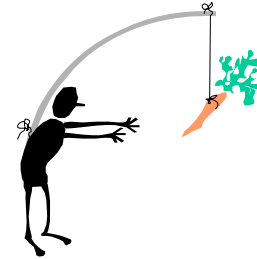
Code Status and Plans (IV)



MUON:



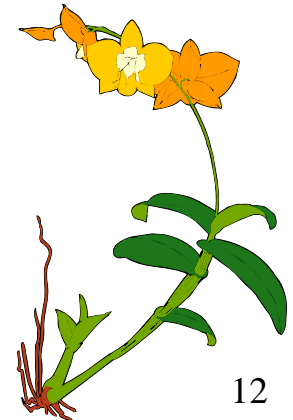
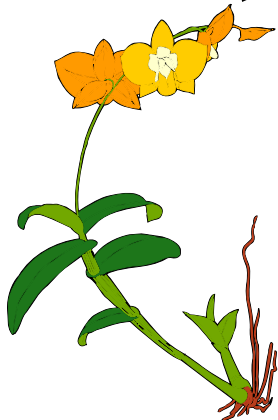
- Needs for calibration DB defined
- Implementation to be done
 - Within the next few weeks (?)



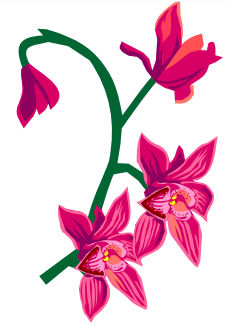
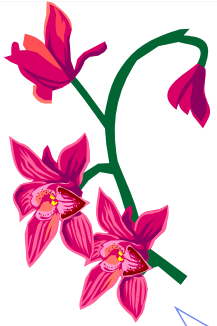
TPC:



- Some calibration/decalibration procedures known (Vdrift), some still unknown (ExB)
- What about
 - Implementation of the calibration classes?
 - Use of the CDB framework?
- Time scale????



Code Status and Plans (V)



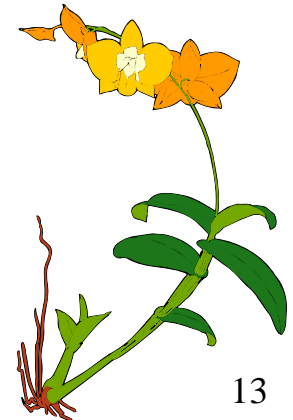
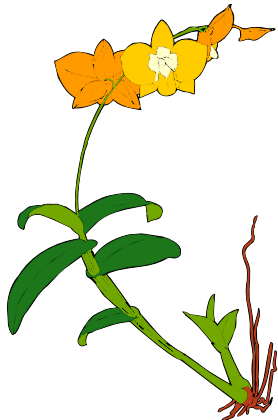
➤ PHOS:



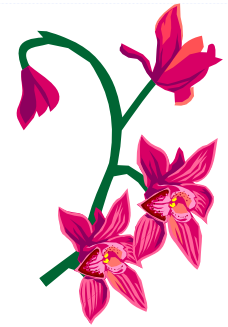
- Calibration procedure is implemented within CDB framework
- Move to new version of CDB framework as soon as possible
- Part of Data Challenge 2005 (?)

➤ PMD:

- Calibration procedures known and tested
- ... but not in the AliRoot framework
- Foreseen by next Offline week.



Code Status and Plans (VI)



ITS:

➤ SPD:

- Storage and retrieval from CDB works well
- Preprocessor class for noisy channels calculation ready

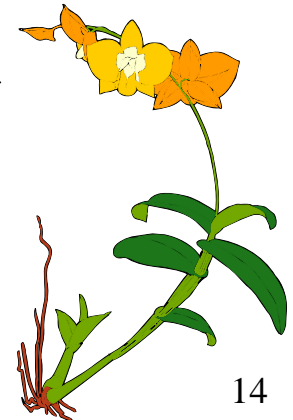
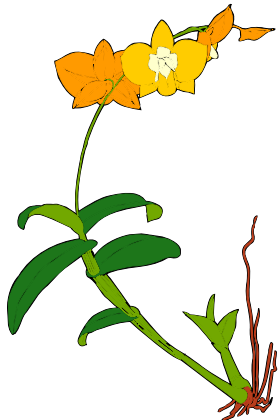
➤ SDD and SSD:

- Preprocessor classes to be written
- Calibration data to be used in reconstruction
- When????



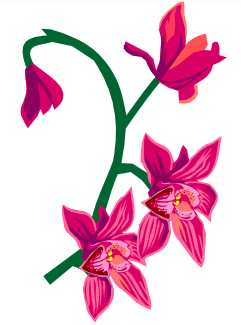
➤ FMD:

- Need to fetch data from DCS
- Need to implement all calibration procedures
- Need to exercise system of calibration procedures
- When????





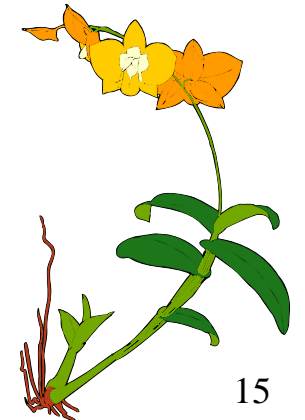
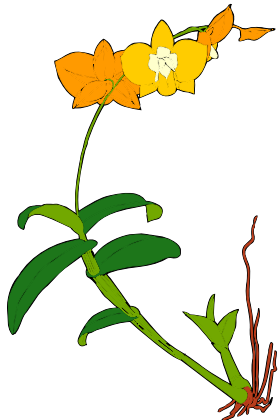
Code Status and Plans (VII)

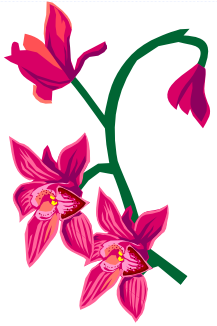


V0:

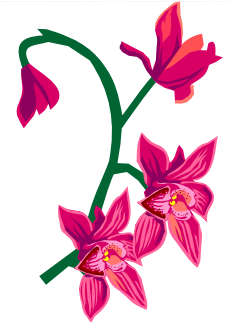


- Nothing done yet
- Calibration implementation planned before the end of the year.





Conclusion



- We had very useful discussions during the whole week
- A lot of work to be done
- Let's try and meet the deadlines

