Archiving of DCS data (introduction)

What we have now:

3 archive files (internal PVSS format). The files are changed when they are 95% full.

Archive #	# of entries	Content	# of files with 2002 data	Max # of values in a file	Average filling	# of values with ~0 entries to the file	Leader
0	119	Analog measurements: temperatures, LV, Magnetic field, etc…	28	3000	147/3000	~40	pt4w-RICH-8 (2850)
6	84	PLC analog measurements: temperatures, gas flow, etc…	45	5000	292/5000	~30	PLC2_Al_plc_csi_ch4_flow (4750)
7	1076	all HV Vmon	17	2000	1346/3000	0	many

What can be done:

1. **Time based file rotation (better controlled and more suitable for regular backup).**
2. **Regular (and automatic) back-up of archive files.**
3. **Tools to extract data in convenient format (ASCII and Excel should be not very difficult).**
4. **Dead-bands tuning.**
5. **Separation of fast and slow changing values.**

Questions:

1. How many files should be kept on pccompass04? One-year history? All available data? The same questions for pccompass07?

2. Should we convert existing data to the convenient format or just provide a tool? Retrieving of 2001 or even some 2002 can be very time-consuming task. How urgent it is? Where the converted data should be stored?

3. What is reasonable time for files rotation? One day? One week?

4. What are reasonable dead-bands?
   0.1% looks OK for HV Vmon and LV.
   0.1 degrees for temperatures.