RUN I
LEVEL2
OPERATIONS

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ONLINE Errors ONLY

- Releases driven by ONLINE needs but most released CHANGES were to the SIMULATOR.
- No SIMULATOR bugs recorded here.

- No new tool releases included.
- No tool improvements/speedups counted.
- No simple added protection, added/expanded banks.

- No simple compilation/link errors that were discovered in release.
- No ERMSG handling bugs.

ONLINE Bugs

	Problem seen	Error Isolated/fixed
Inspection of CODE or LINK/Release setup		35
Running SIMULATOR (examing rates/output)	11	
Debugging SIMULATOR		19
Inspecting real DATA	12	
SHADOW Tests of released/running code	8	5
ONLINE Rates	4	
ONLINE ERMSGs	3	
ONLINE crashes	19	
EXAMINE plots	5	
ONLINE Edebug (REGULAR nodes)		6
Monitor Stream VERIFICATION	4	

SHADOW Tests

- Edebug known crashes
- Testing Unreleased Code
  - New tools:
    ACOLJETS, ETACUT, KEEP_CD_RAW, L2VERT, MASSCUT, MIN_BIAS, PRESCALE, SUMJET
  - Tool development: MUON, ETACUT
  - CDC Vertexing
  - LEVEL2 Hitfinding
  - Control Code
    - Bank Dropping
    - LUMSET# control
    - Timing Limit (GONG) Code
    - Space Limit Code
- Filter Rate Tests
  - TAU
  - JET_MULTI
  - JET_2_MISS
  - b' studies
  - WJJ studies
- Timing Tests
  - CDC Vertexing
  - LEVEL2 Hitfinding

Hardware Changes affect L2!

- L0 Hardware Changes
  - SOFFSET parameters in L2_VERT obsolete
- AND_OR term changes
  - Hardwired LEVEL1 references obsolete
- LEVEL1.5 Implementation
  - (Simulation Code not ready)
  - Interference with MUON_L15
- CDC Sense Wire Voltages adjusted
  CDC Sense Wire Pedestals reset
  - LEVEL2 track match efficiency impacted
- CALIB RUNS update Dbase entries while L2 STP frozen
  - If L2 hitfinding code operating
    may need to synchronize CALIB runs with STP releases

Additional Comments

- Archiving & Retrieving Run Trigger Info
  - Parameter set number almost indecipherable to users
    - (Need to know trigger setup when run taken)
- Debugging ONLINE crashes
  - Too few experts
  - User Unfriendly
- As long as ONLINE and OFFLINE environments differ may need PLAYBACK
  - Useful when no beam available.
  - Opportunity for training in ONLINE debugging.
- ERMSG
  - Overwhelming volume of messages
  - Scanning tool available, but STILL overwhelming
  - Need to be able to compile ERMSG tallies like ENDRUN summaries