Stave production monitoring

Ivan Ravasenga, *Bogolyubov Institute for Theo. Phys.*

04/09/2019

Monitoring from January 2018 to 04/09/2019

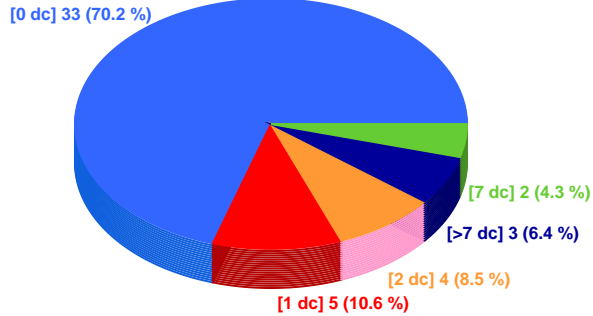Stave meeting

HS monitoring

HSs of previous week

B-ML-HS-U-067: 0 bad chips
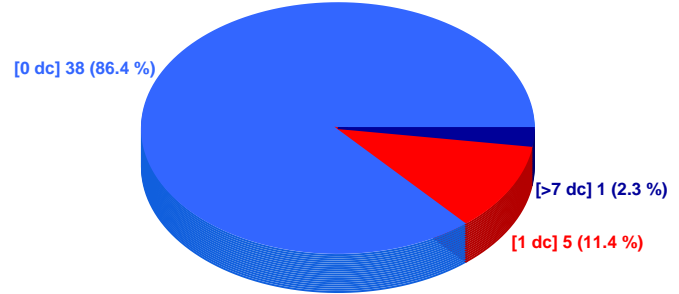**B-ML-HS-L-067: 0 bad chips**
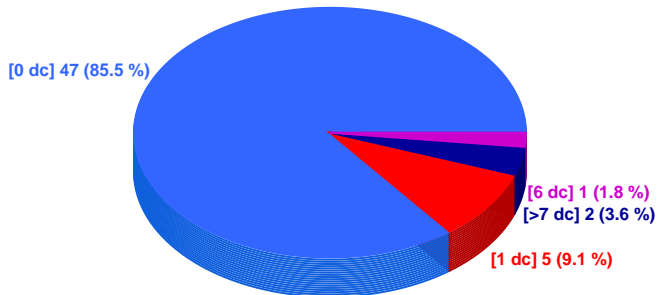
HSs of this week

HS - Nikhef

89.36 % ok
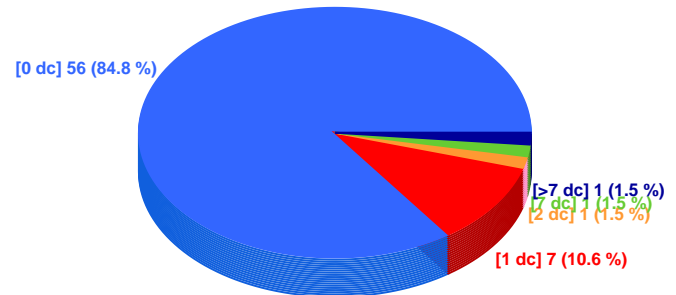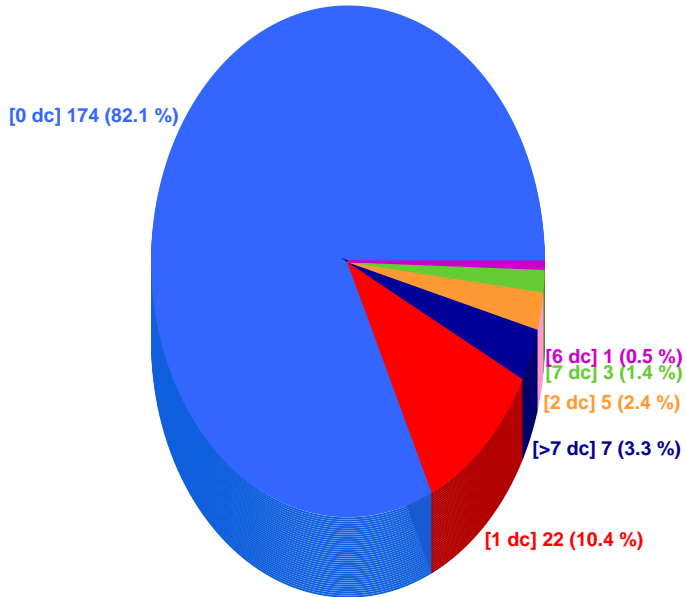
[0 dc] 33 (70.2 %)

[7 dc] 2 (4.3 %)

[>7 dc] 3 (6.4 %)

[2 dc] 4 (8.5 %)

[1 dc] 5 (10.6 %)

HS - Daresbury

97.73 % ok

[0 dc] 38 (86.4 %)

[>7 dc] 1 (2.3 %)

[1 dc] 5 (11.4 %)

HS - Frascati

94.55 % ok

[0 dc] 47 (85.5 %)

[6 dc] 1 (1.8 %)

[>7 dc] 2 (3.6 %)

[1 dc] 5 (9.1 %)

HS - Turin

96.97 % ok

[0 dc] 56 (84.8 %)

[>7 dc] 1 (1.5 %)

[7 dc] 1 (1.5 %)

[2 dc] 1 (1.5 %)

[1 dc] 7 (10.6 %)

HS - OL

94.81 % ok

[0 dc] 174 (82.1 %)

[6 dc] 1 (0.5 %)
[7 dc] 3 (1.4 %)
[2 dc] 5 (2.4 %)
[>7 dc] 7 (3.3 %)

[1 dc] 22 (10.4 %)

HS - ML

99.25 % ok

[0 dc] 126 (94.0 %)

[2 dc] 1 (0.7 %)
[1 dc] 7 (5.2 %)

All HS	Det. Grade HS

Berkeley 134, Nikhef 47, Daresbury 44, Frascati 55, Turin 66

Berkeley 133, Nikhef 42, Daresbury 43, Frascati 52, Turin 64
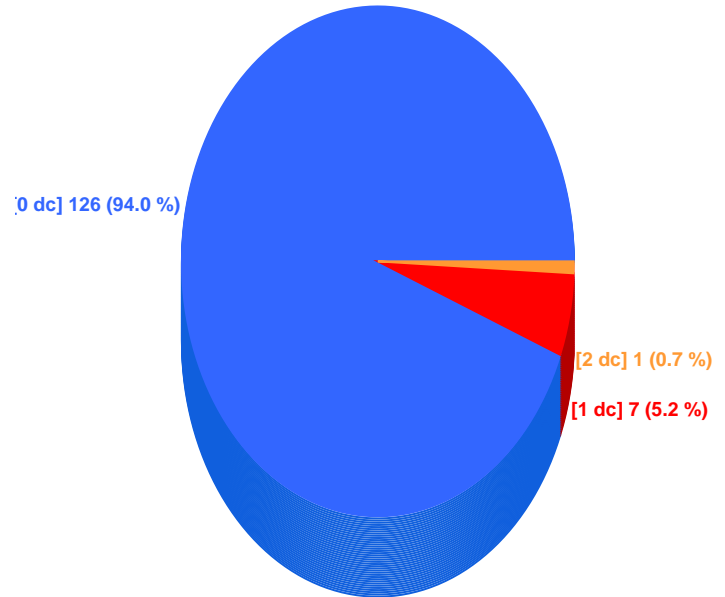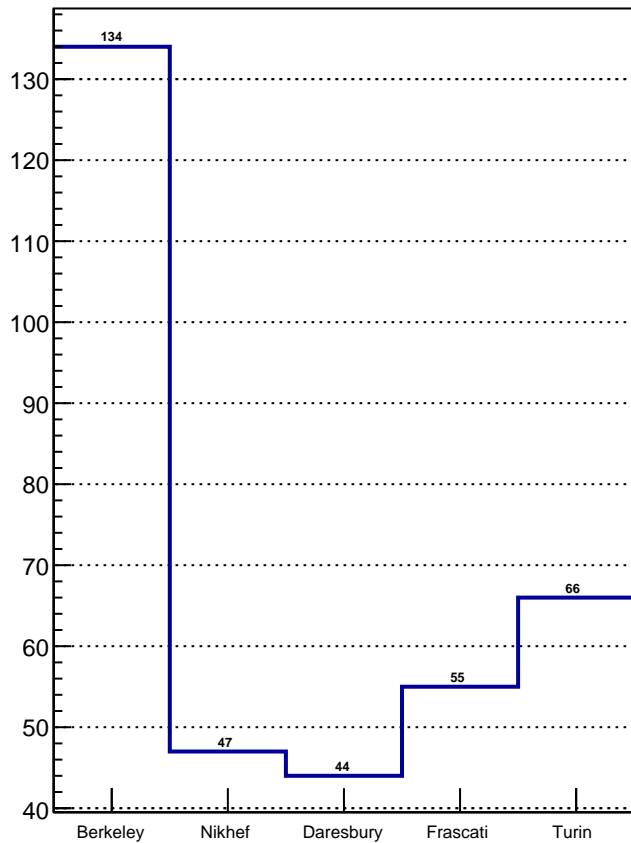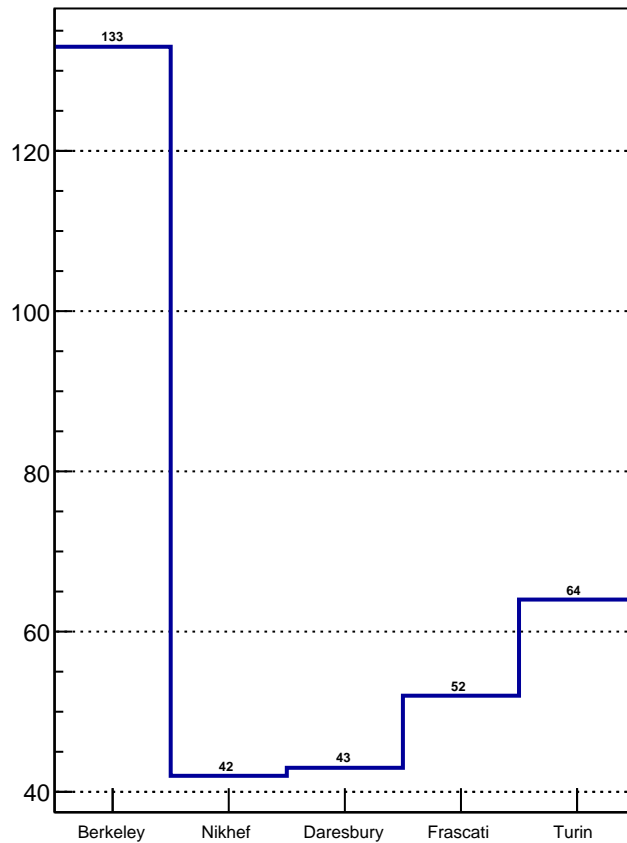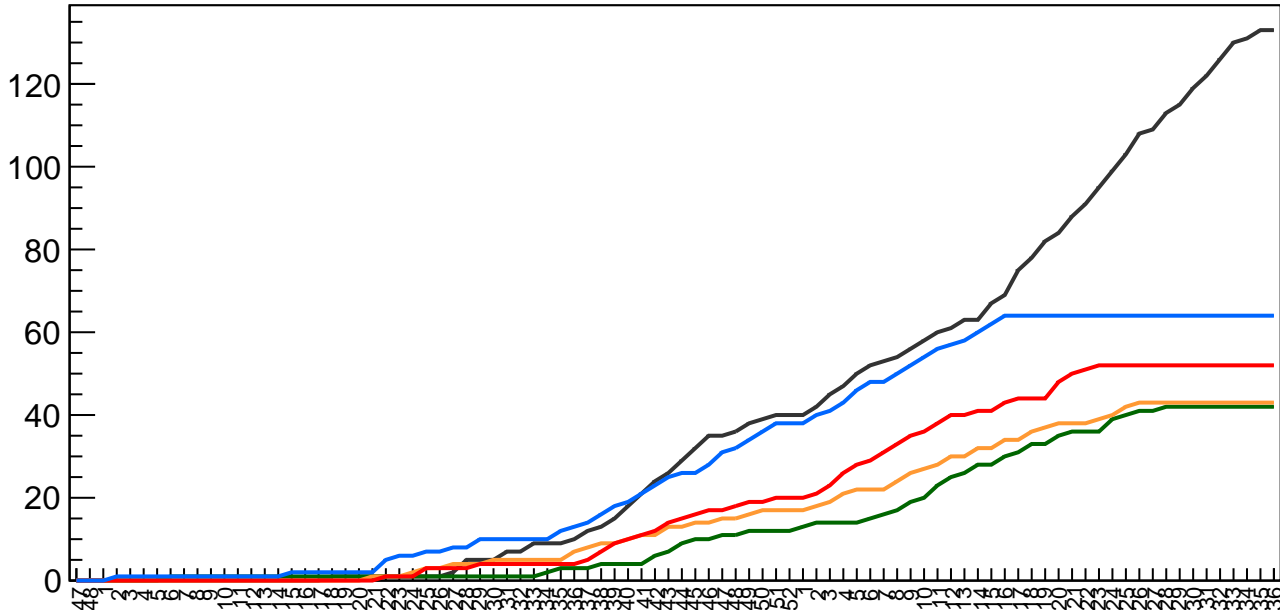
Det. grade HS vs time

Det. grade HS vs time
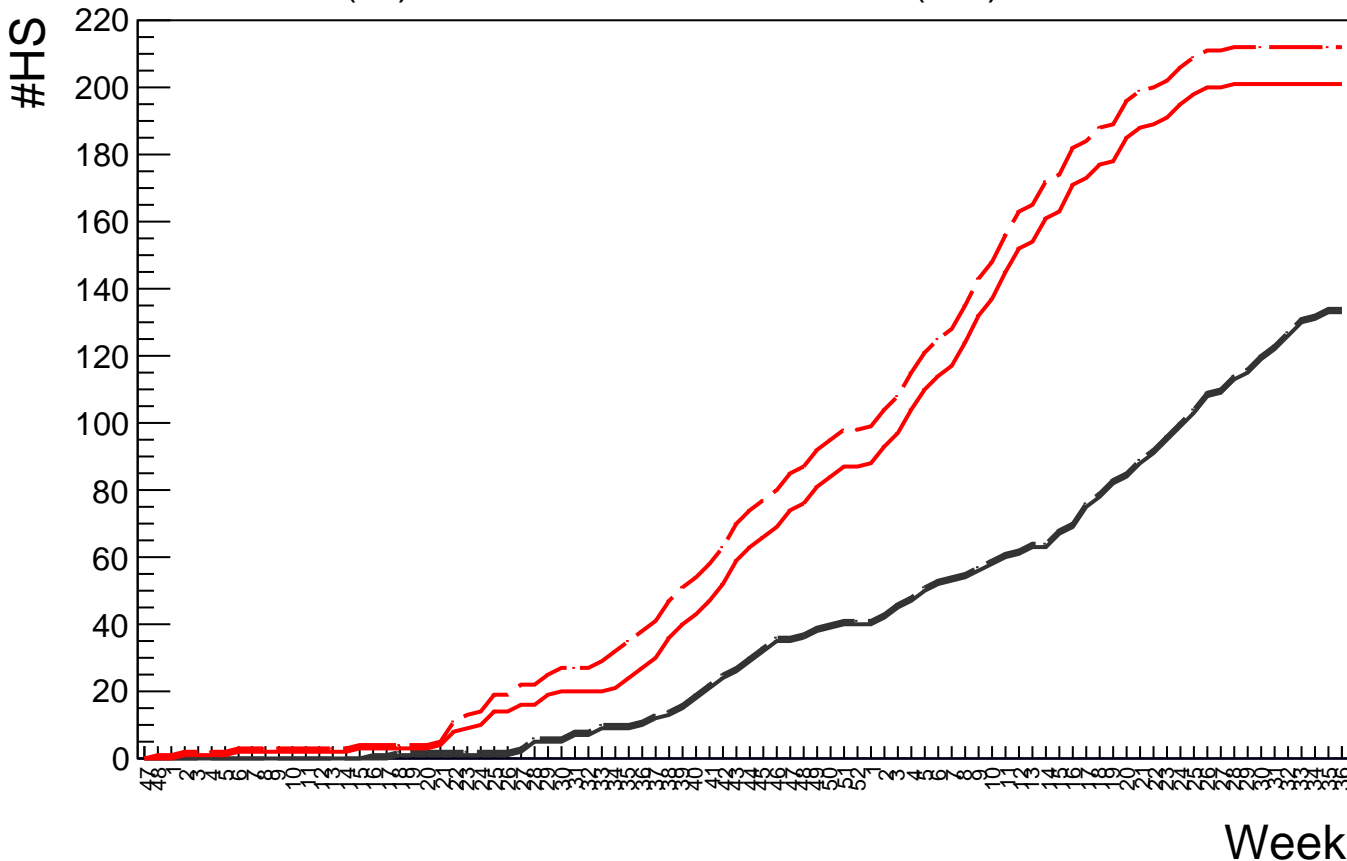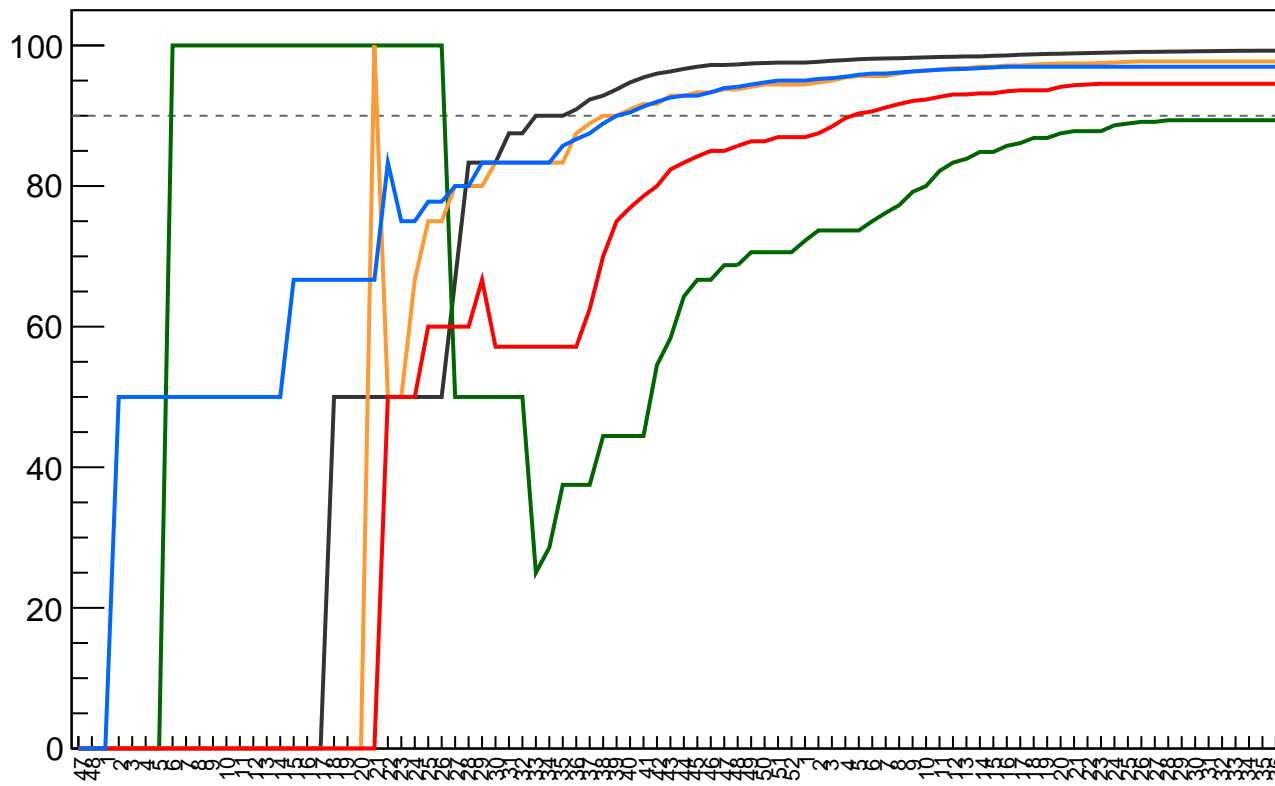
HS Yield vs time

HS Yield vs time

Stave monitoring

Staves of previous week

B-ML-Stave-063: (U,L)=(0, 0) bad chips

Staves of this week

B-ML-Stave-060: (U,L)=(0, 0) bad chips

Stave - Nikhef

89.47 % ok

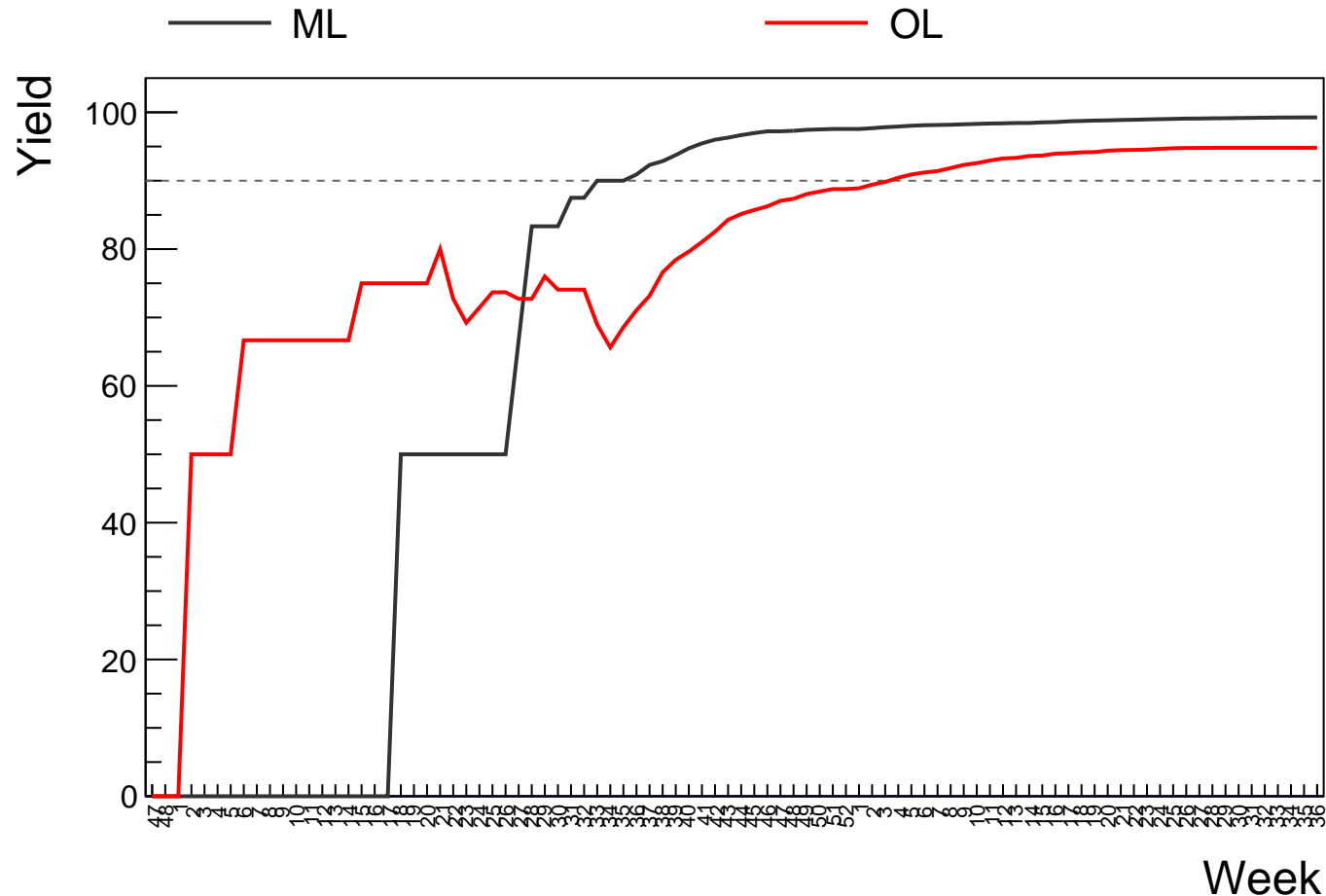[0+0 dc] 10 (52.6 %)
[2+0 dc] 4 (21.1 %)
[1+0 dc] 3 (15.8 %)
[>3+3 dc] 2 (10.5 %)

Stave - Daresbury

95.24 % ok

[0+0 dc] 12 (57.1 %)
[1+0 dc] 6 (28.6 %)
[>3+3 dc] 1 (4.8 %)
[2+0 dc] 1 (4.8 %)
[1+1 dc] 1 (4.8 %)

Stave - Frascati

100.00 % ok

[0+0 dc] 16 (76.2 %)
[2+0 dc] 1 (4.8 %)
[1+0 dc] 4 (19.0 %)

Stave - Turin

93.75 % ok

[0+0 dc] 24 (75.0 %)
[1+0 dc] 4 (12.5 %)
[>3+3 dc] 1 (3.1 %)
[3+0 dc] 1 (3.1 %)
[2+0 dc] 1 (3.1 %)
[1+1 dc] 1 (3.1 %)
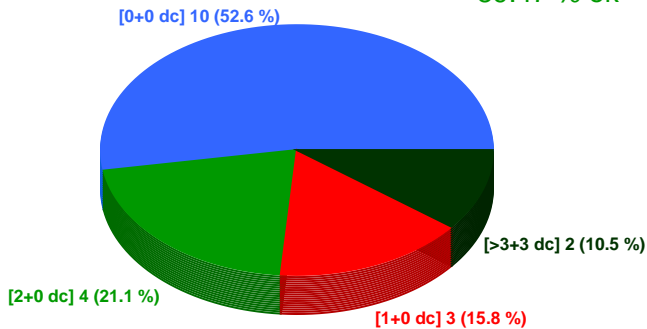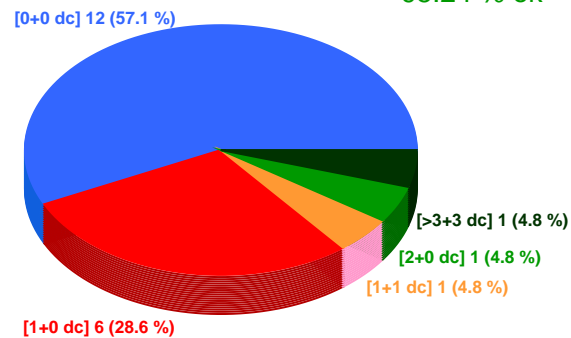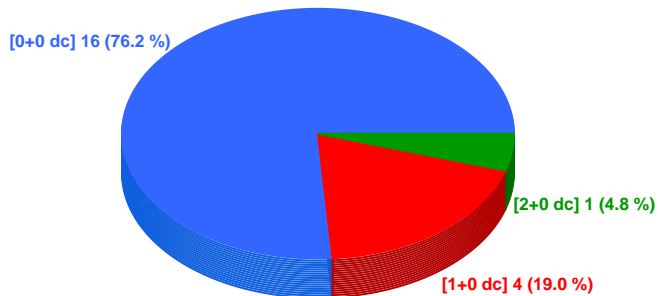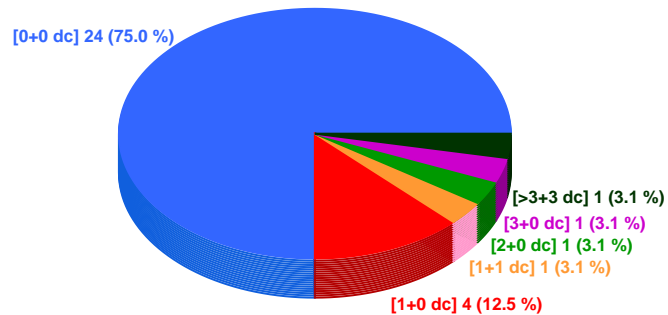
Stave - OL (includes rwk)

94.79 % ok

[0+0 dc] 65 (67.7 %)

[3+0 dc] 1 (1.0 %)
[1+1 dc] 2 (2.1 %)
[>3+3 dc] 4 (4.2 %)
[2+0 dc] 7 (7.3 %)
[1+0 dc] 17 (17.7 %)

Stave - ML

96.72 % ok

[0+0 dc] 54 (88.5 %)
[2+0 dc] 2 (3.3 %)
[1+0 dc] 5 (8.2 %)

All Stave

Berkeley	Nikhef	Daresbury	Frascati	Turin	Reworked
61	19	21	21	32	3

Det. Grade Stave

Berkeley	Nikhef	Daresbury	Frascati	Turin	Reworked
56	17	20	21	31	3
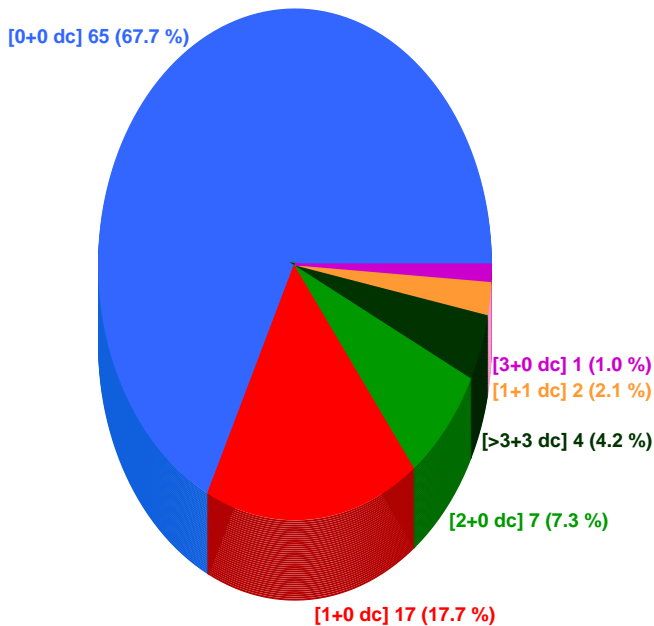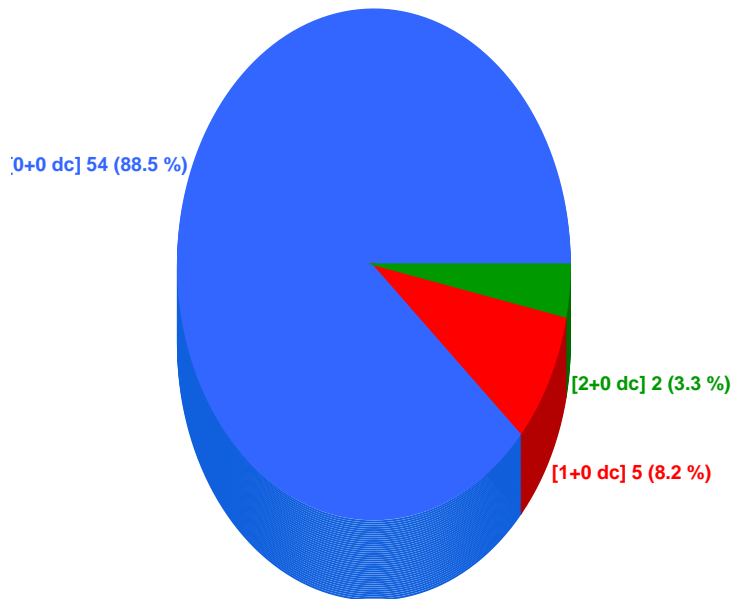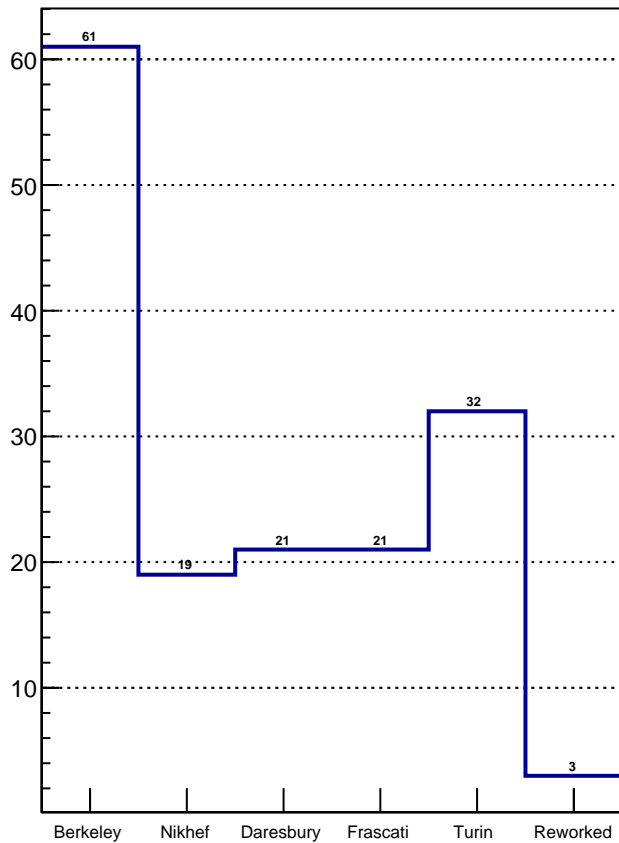
Det. grade Stave vs time

Det. grade Stave vs time
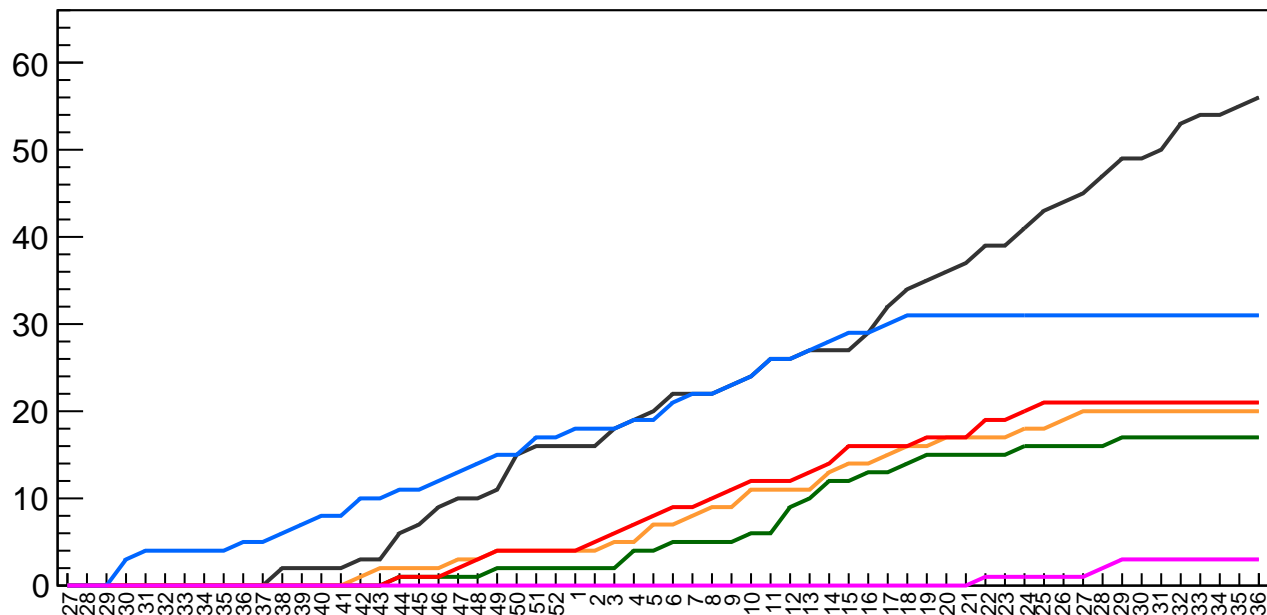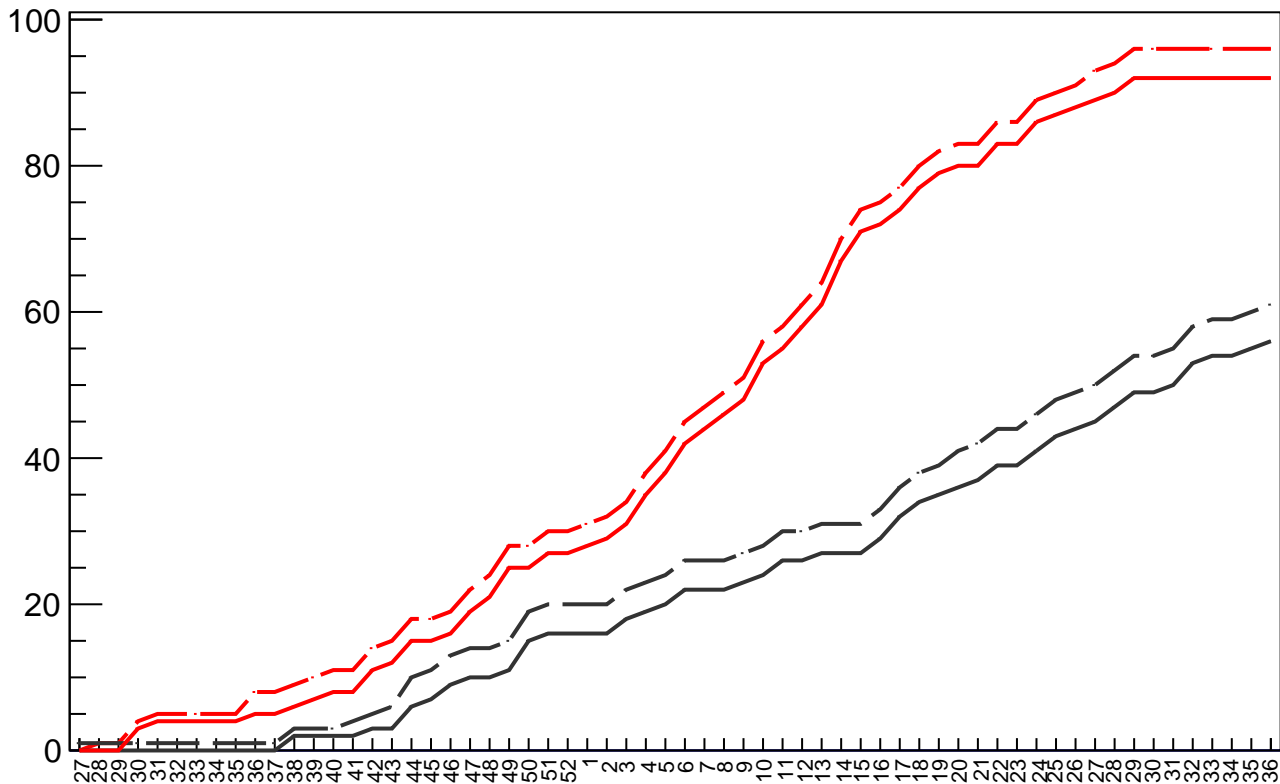
Stave yield vs time
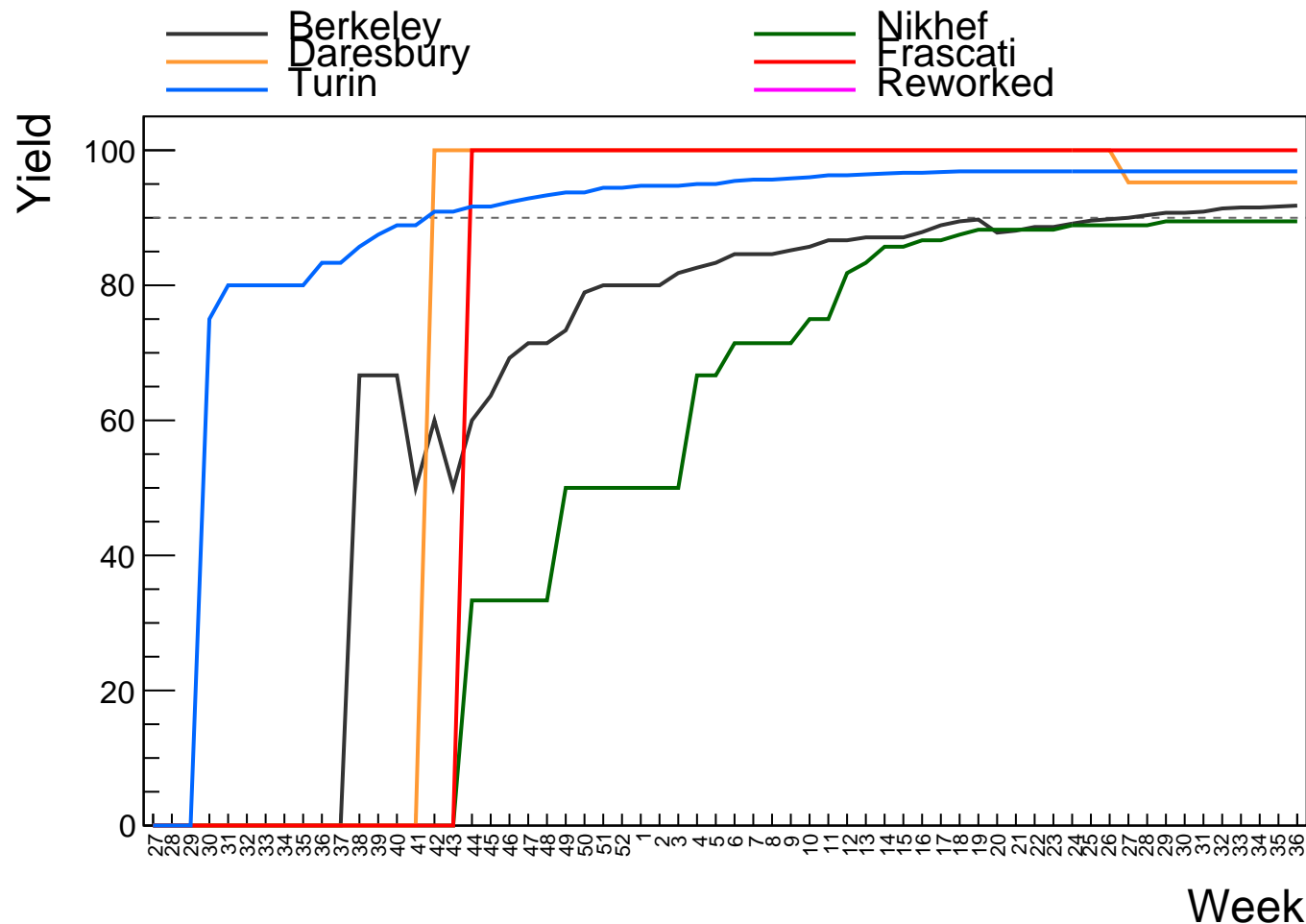
Stave yield vs time
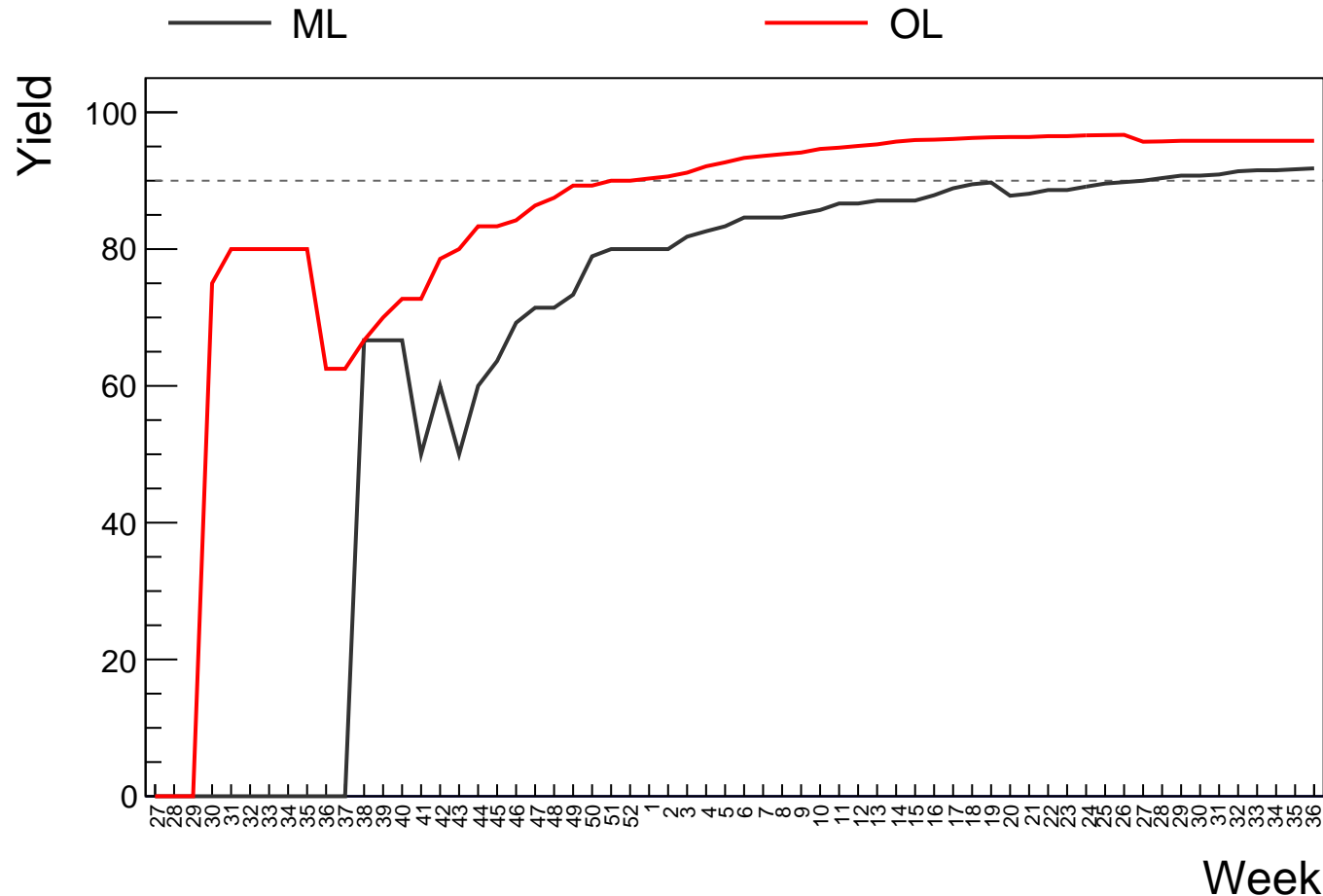
Production rate (October 2018 - prev. week)**
→ **Berkeley: 1.24(all) -- 1.15(DG)**
→ **Nikhef: 0.37(all) -- 0.37(DG)**
→ **Daresbury: 0.46(all) -- 0.43(DG)**
→ **Frascati: 0.46(all) -- 0.46(DG)**
→ **Turin: 0.79(all) -- 0.79(DG)** → **Prod. ended**

OL: 2.08(all) -- 2.05(DG)
ML: 1.24(all) -- 1.15(DG)
Rework rate (from June 1st, 2019): 0.21(all) -- 0.21(DG)

**Christmas holiday excluded (2 weeks)

Production rate 2019 (month by month)**

January
→ **Berkeley: 1.00(all) -- 1.00(DG)**
→ **Nikhef: 0.50(all) -- 0.50(DG)**
→ **Daresbury: 0.75(all) -- 0.75(DG)**
→ **Frascati: 1.00(all) -- 1.00(DG)**
→ **Turin: 0.25(all) -- 0.25(DG)**
   OL: 2.50(all) -- 2.50(DG)
   ML: 1.00(all) -- 1.00(DG)

February
→ **Berkeley: 0.80(all) -- 0.80(DG)**
→ **Nikhef: 0.20(all) -- 0.20(DG)**
→ **Daresbury: 0.80(all) -- 0.80(DG)**
→ **Frascati: 0.80(all) -- 0.80(DG)**
→ **Turin: 0.80(all) -- 0.80(DG)**
   OL: 2.60(all) -- 2.60(DG)
   ML: 0.80(all) -- 0.80(DG)

March
→ **Berkeley: 1.00(all) -- 1.00(DG)**
→ **Nikhef: 1.00(all) -- 1.00(DG)**
→ **Daresbury: 0.40(all) -- 0.40(DG)**
→ **Frascati: 0.60(all) -- 0.60(DG)**
→ **Turin: 1.00(all) -- 1.00(DG)**
   OL: 3.00(all) -- 3.00(DG)
   ML: 1.00(all) -- 1.00(DG)

April
→ **Berkeley: 1.40(all) -- 1.40(DG)**
→ **Nikhef: 0.80(all) -- 0.80(DG)**
→ **Daresbury: 1.00(all) -- 1.00(DG)**
→ **Frascati: 0.60(all) -- 0.60(DG)**
→ **Turin: 0.80(all) -- 0.80(DG)**
   OL: 3.20(all) -- 3.20(DG)
   ML: 1.40(all) -- 1.40(DG)

May
→ **Berkeley: 1.60(all) -- 1.40(DG)**
→ **Nikhef: 0.40(all) -- 0.40(DG)**
→ **Daresbury: 0.40(all) -- 0.40(DG)**
→ **Frascati: 0.60(all) -- 0.60(DG)**
→ **Turin: Production ended**
   OL: 1.40(all) -- 1.40(DG)
   ML: 1.60(all) -- 1.40(DG)

June
→ **Berkeley: 1.25(all) -- 1.25(DG)**
→ **Nikhef: 0.25(all) -- 0.25(DG)**
→ **Daresbury: 0.50(all) -- 0.50(DG)**
→ **Frascati: 0.50(all) -- 0.50(DG)**
→ **Turin: 0.00(all) -- 0.00(DG)**
   OL: 1.25(all) -- 1.25(DG)
   ML: 1.25(all) -- 1.25(DG)

Stave reception @CERN

Staves qualified in the previous week
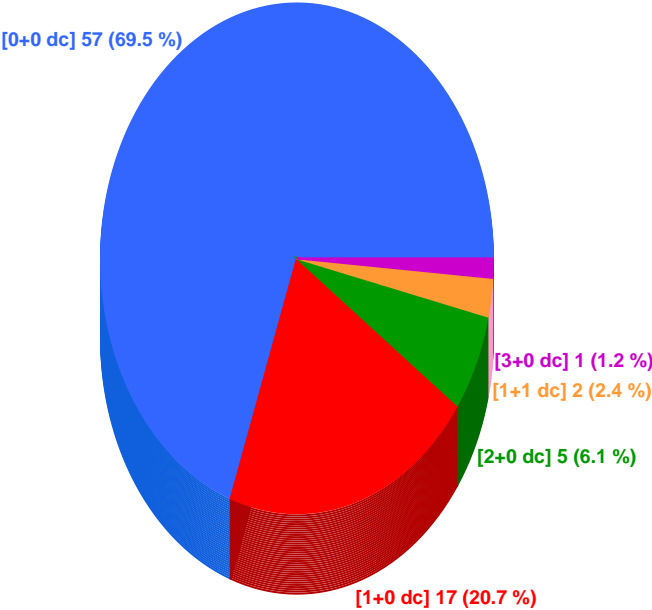
B-ML-Stave-051: (U,L)=(0, 0) bad chips
B-ML-Stave-050: (U,L)=(0, 0) bad chips
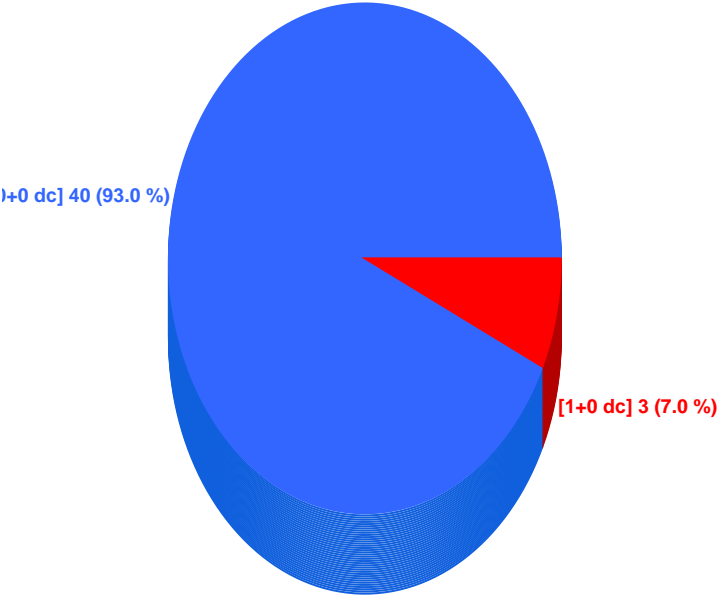**B-ML-Stave-049: (U,L)=(0, 0) bad chips**

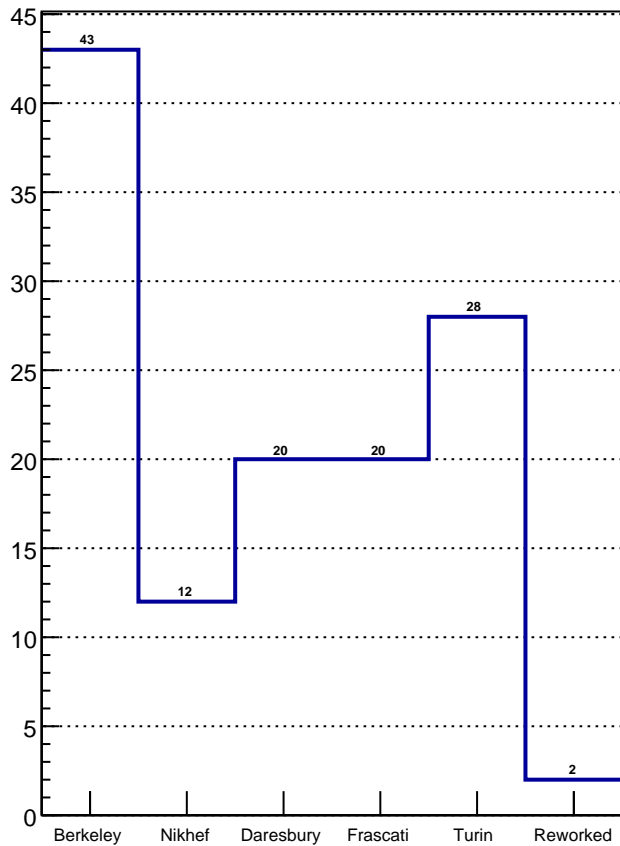**Staves qualified this week**

Stave - OL @CERN

98.78 % ok

[0+0 dc] 57 (69.5 %)

[3+0 dc] 1 (1.2 %)
[1+1 dc] 2 (2.4 %)
[2+0 dc] 5 (6.1 %)

[1+0 dc] 17 (20.7 %)

Stave - ML @CERN

100.00 % ok

[0+0 dc] 40 (93.0 %)

[1+0 dc] 3 (7.0 %)

All Stave @CERN

Det. Grade Stave @CERN
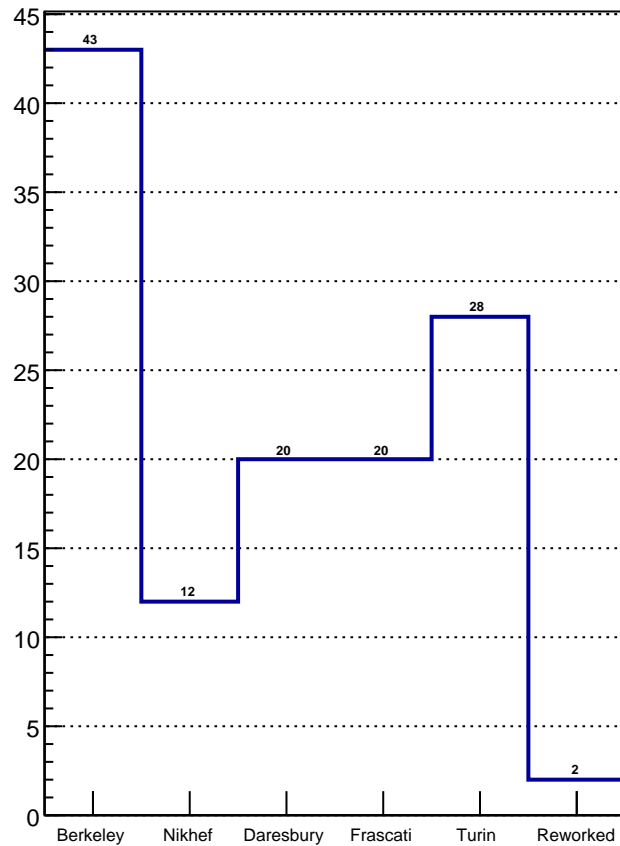
Berkeley	Nikhef	Daresbury	Frascati	Turin	Reworked
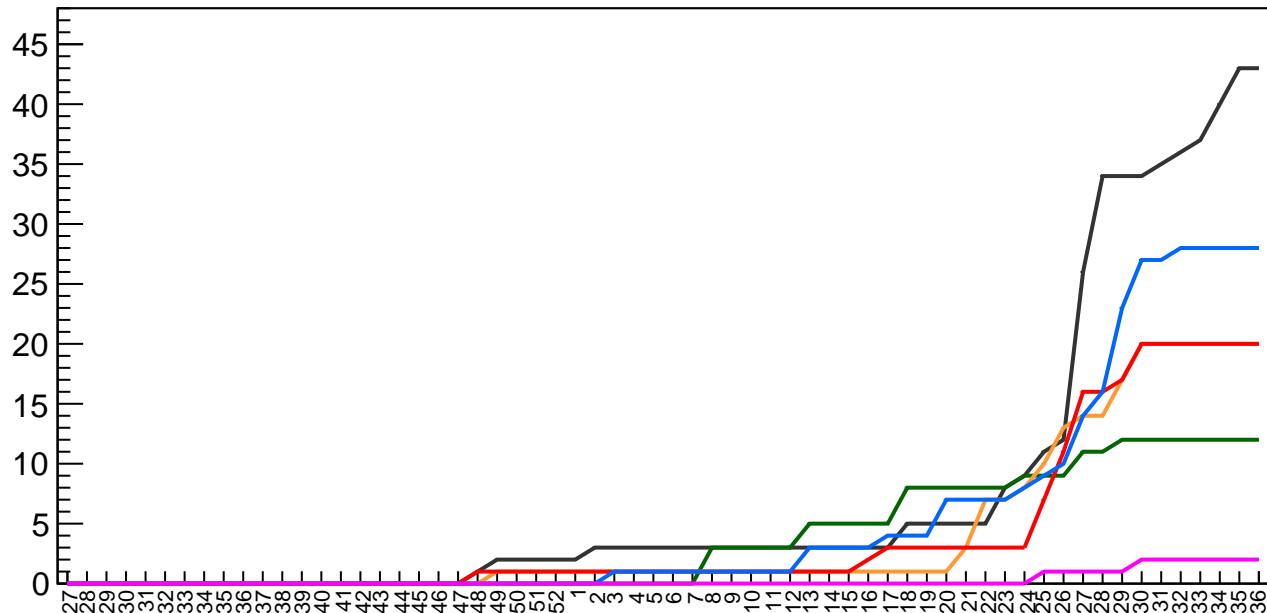
Det. grade Stave vs time @CERN

Det. grade Stave vs time @CERN
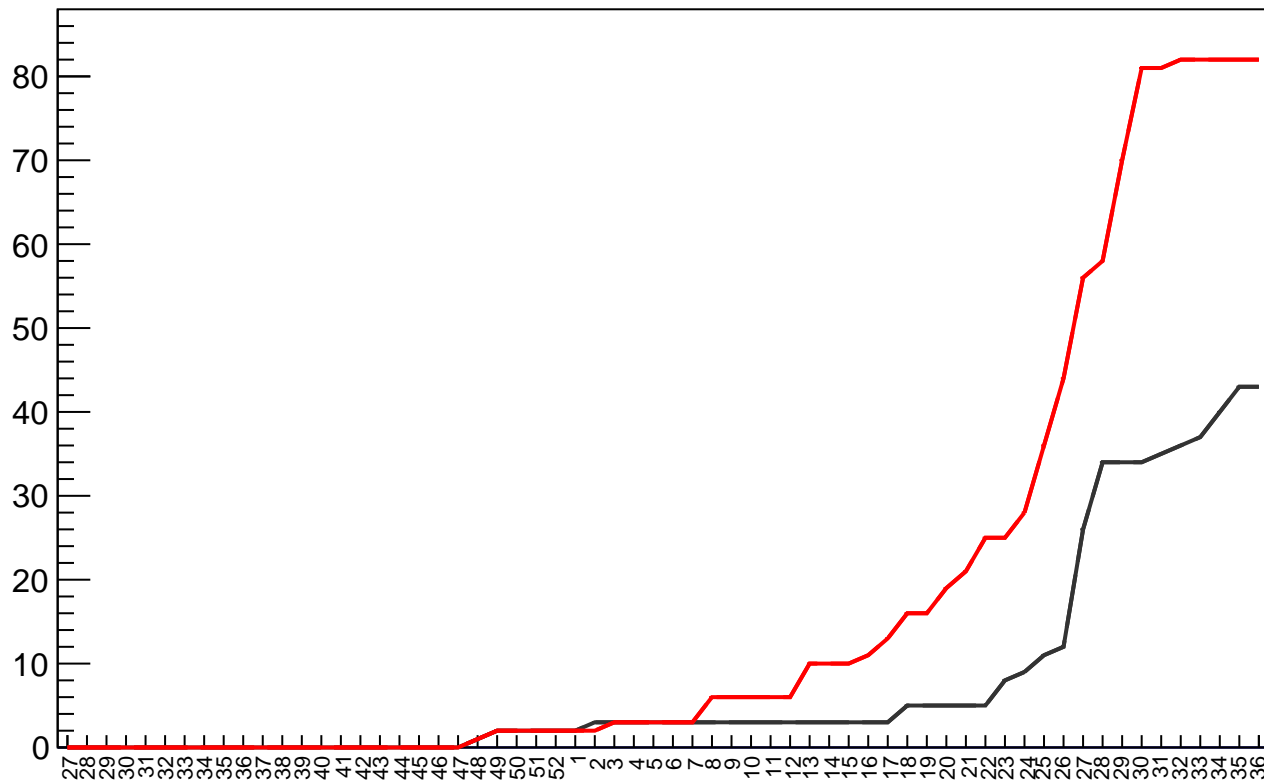
Qualification rate (December 2018 - prev. week)**
Berkeley: 1.14(all) -- 1.14(DG)
Nikhef: 0.32(all) -- 0.32(DG)
Daresbury: 0.54(all) -- 0.54(DG)
Frascati: 0.51(all) -- 0.51(DG)
Turin: 0.76(all) -- 0.76(DG)

OL: 2.14(all) -- 2.14(DG)
ML: 1.14(all) -- 1.14(DG)

**Christmas holiday excluded (2 weeks)

HS without a Stave

HSs (DG) not yet tested as Stave

A-OL-HS-U-009: 2 bad chips
F-OL-HS-U-027: 0 bad chips
F-OL-HS-U-026: 0 bad chips
F-OL-HS-U-025: 0 bad chips
F-OL-HS-U-024: 0 bad chips
F-OL-HS-L-027: 0 bad chips
F-OL-HS-L-026: 0 bad chips
F-OL-HS-L-025: 0 bad chips
F-OL-HS-L-024: 0 bad chips
A-OL-HS-U-023: 0 bad chips
A-OL-HS-U-022: 0 bad chips
A-OL-HS-U-021: 0 bad chips
A-OL-HS-L-122: 0 bad chips
A-OL-HS-L-024: 0 bad chips
A-OL-HS-L-023: 0 bad chips
B-ML-HS-U-067: 0 bad chips
B-ML-HS-U-066: 0 bad chips
B-ML-HS-U-065: 0 bad chips
B-ML-HS-U-064: 0 bad chips
B-ML-HS-U-062: 0 bad chips
B-ML-HS-U-061: 0 bad chips
B-ML-HS-L-067: 0 bad chips
B-ML-HS-L-066: 0 bad chips
B-ML-HS-L-065: 0 bad chips
B-ML-HS-L-064: 0 bad chips
B-ML-HS-L-062: 0 bad chips
B-ML-HS-L-061: 0 bad chips

HSs (non-DG) not yet tested as Stave

A-OL-HS-L-004: 14 bad chips -> rework(?)

F-OL-HS-U-002: 8 bad chips -> rework(?)

Stave not DG

Staves not DG - reworkable

A-OL-Stave-001: (U,L) = (2, 14) bad chips
A-OL-Stave-002: (U,L) = (7, 49) bad chips
T-OL-Stave-003: (U,L) = (6, 2) bad chips
D-OL-Stave-001: (U,L) = (7, 13) bad chips

Staves not DG - not reworkable

B-ML-Stave-039: (U,L) = (0, 2) bad chips
B-ML-Stave-001: (U,L) = (2, 0) bad chips