Stave production monitoring

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

03/07/2019

Monitoring from January 2018 to 03/07/2019

Stave meeting

HS monitoring

HSs of previous week

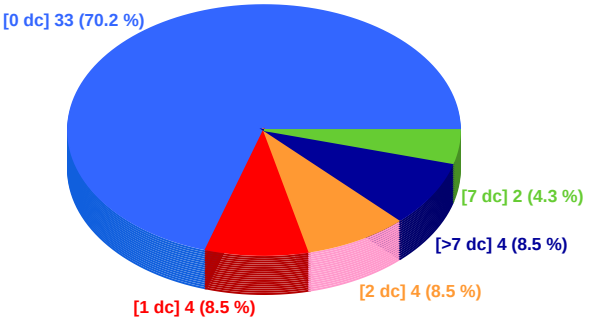
D-OL-HS-L-021: 0 bad chips
A-OL-HS-L-024: 0 bad chips
B-ML-HS-U-055: 0 bad chips
B-ML-HS-U-054: 0 bad chips
B-ML-HS-U-053: 0 bad chips
B-ML-HS-L-054: 0 bad chips
B-ML-HS-L-053: 0 bad chips

HSs of this week

B-ML-HS-L-055: 0 bad chips

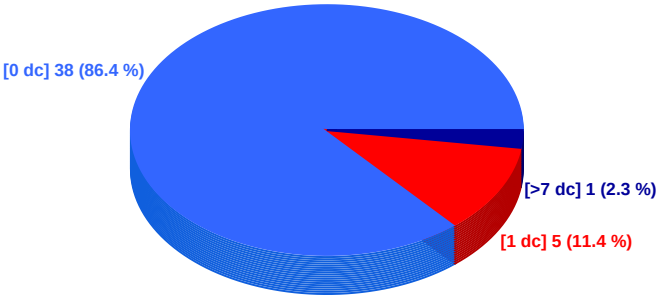
HS - Nikhef

87.23 % ok



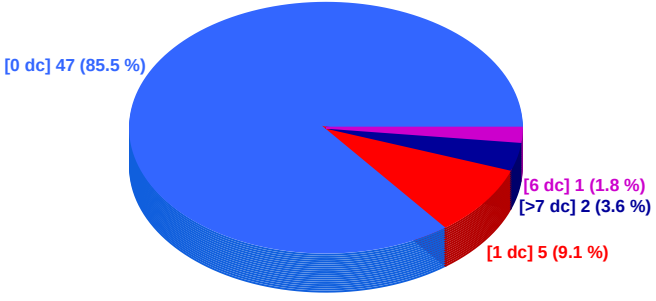
HS - Daresbury

97.73 % ok



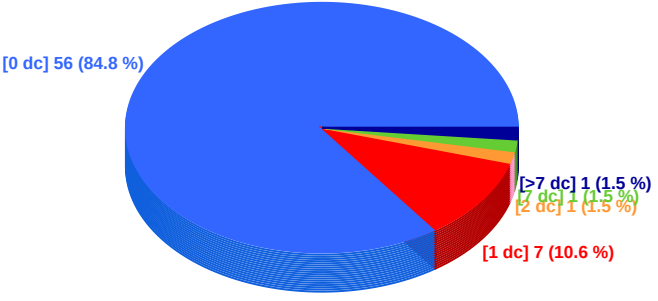
HS - Frascati

94.55 % ok



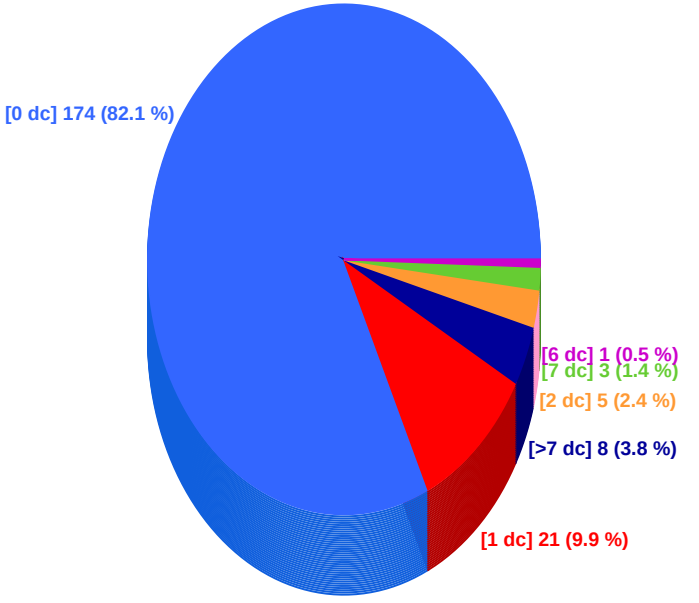
HS - Turin

96.97 % ok



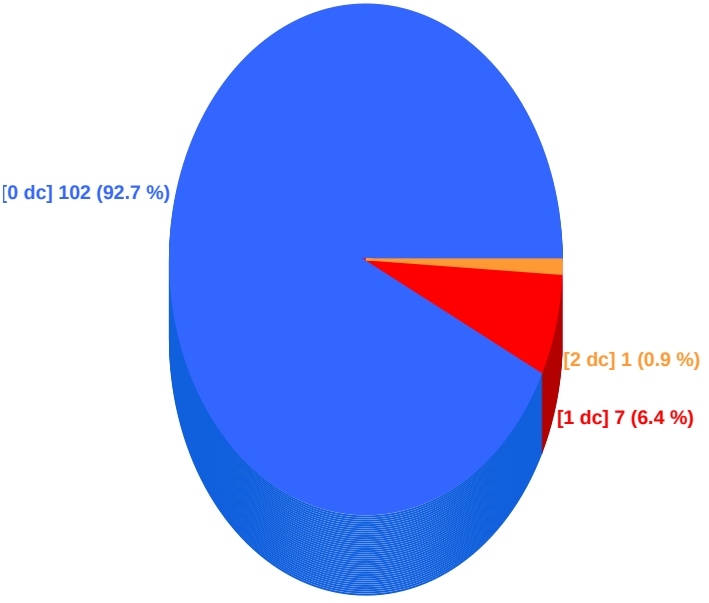
HS - OL

94.34 % ok

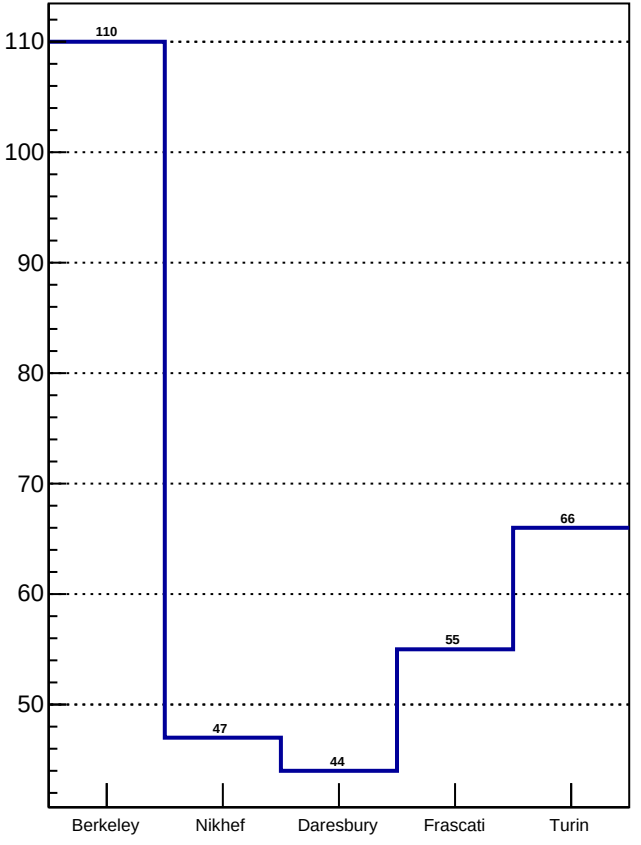


HS - ML

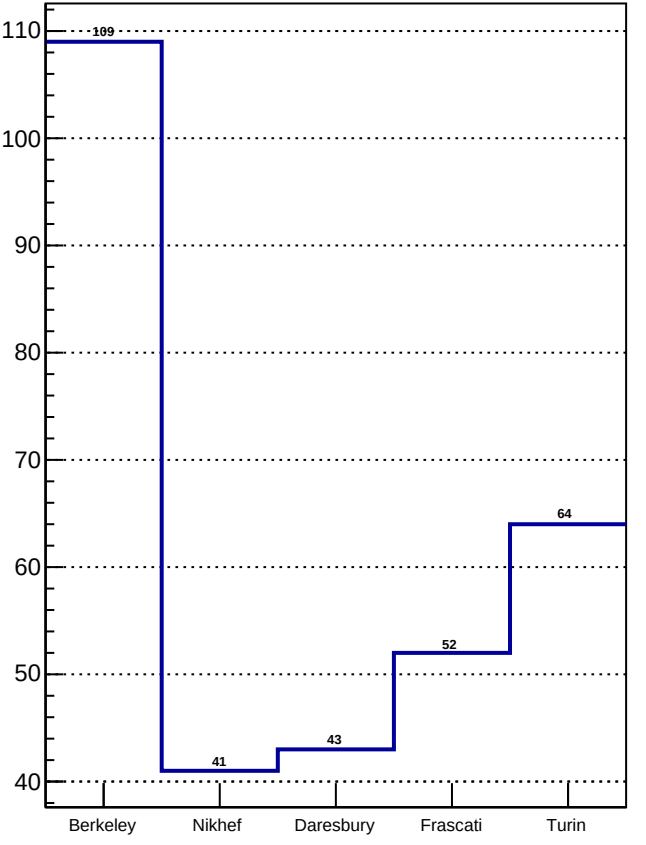
99.09 % ok

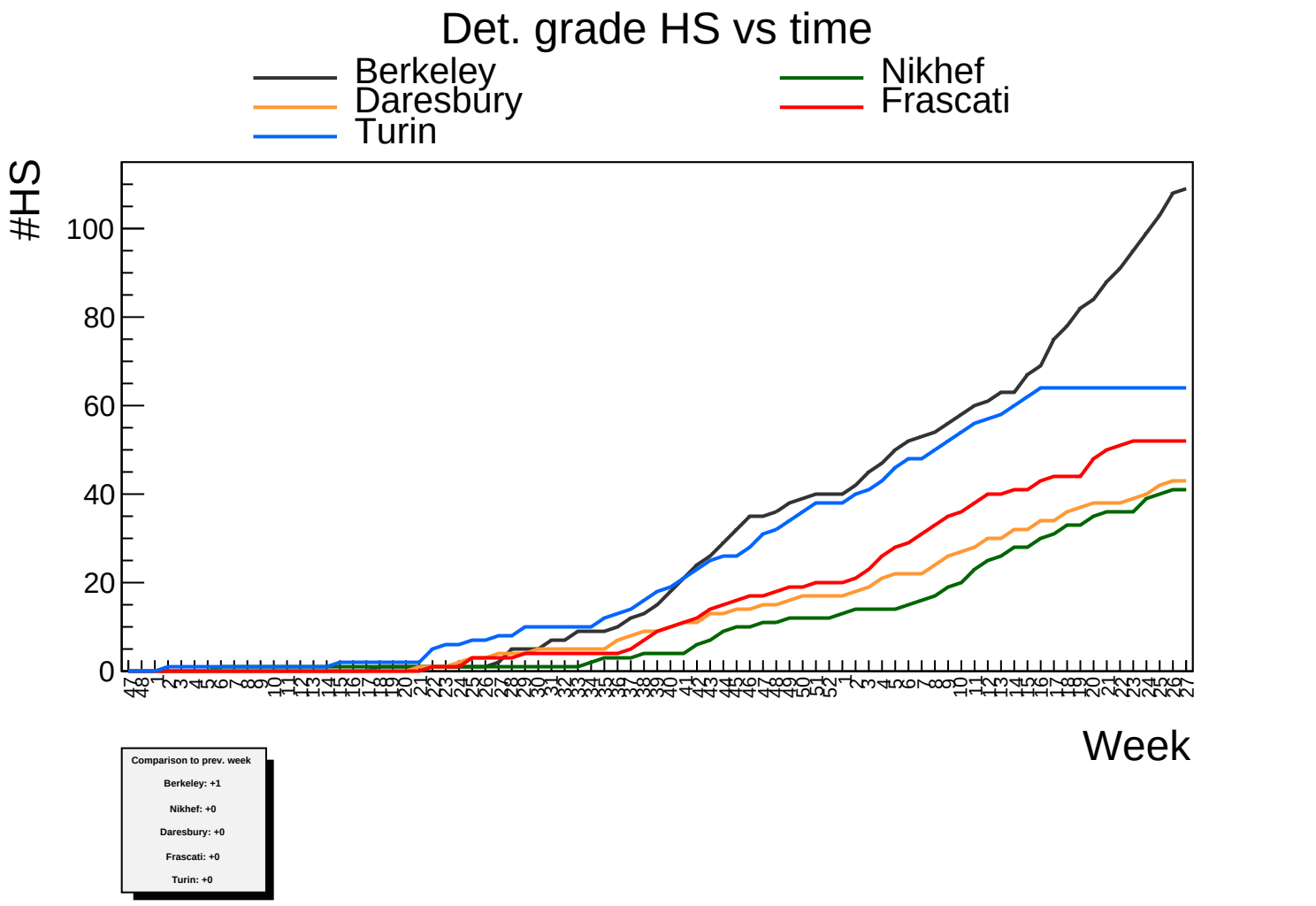


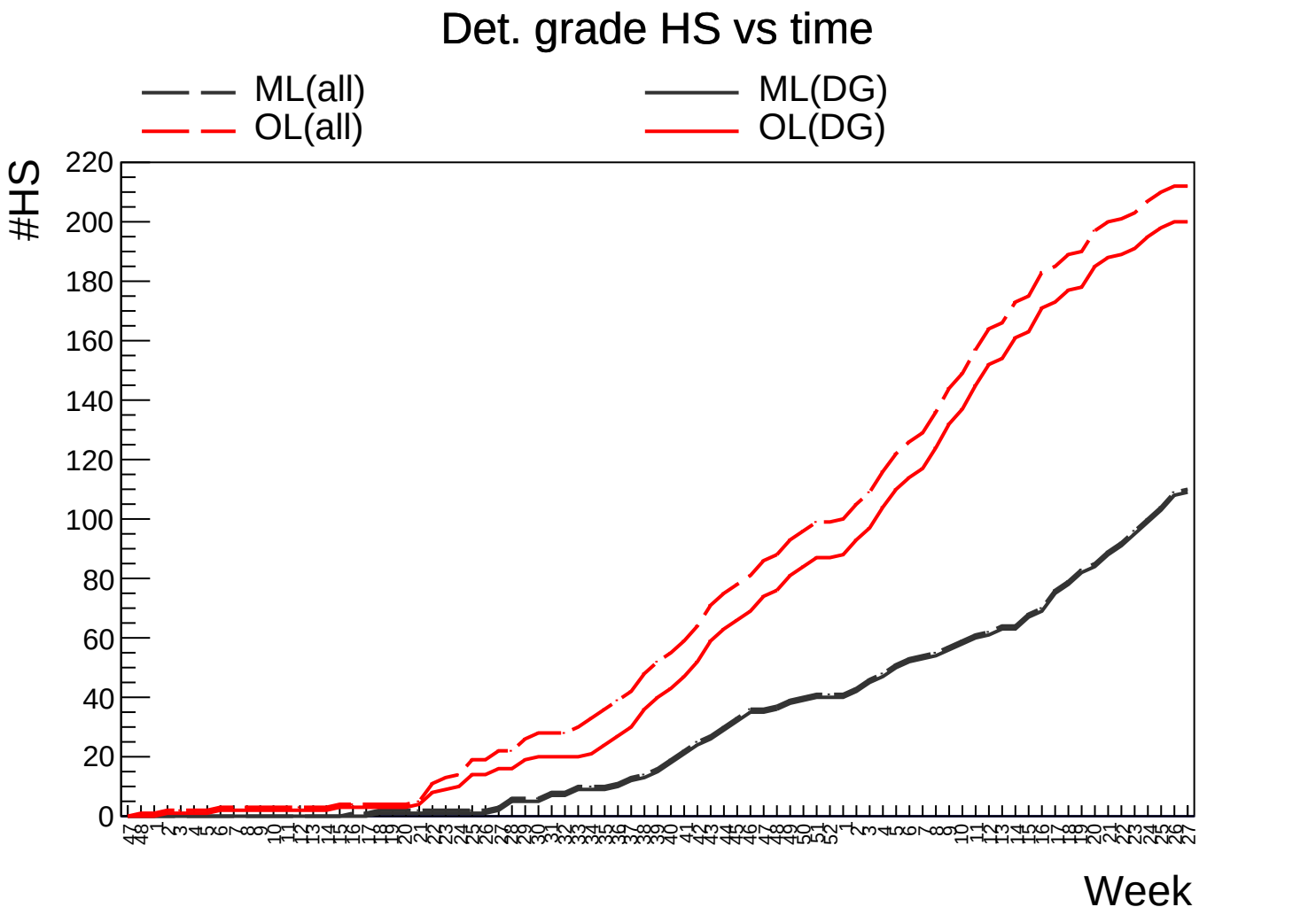
All HS

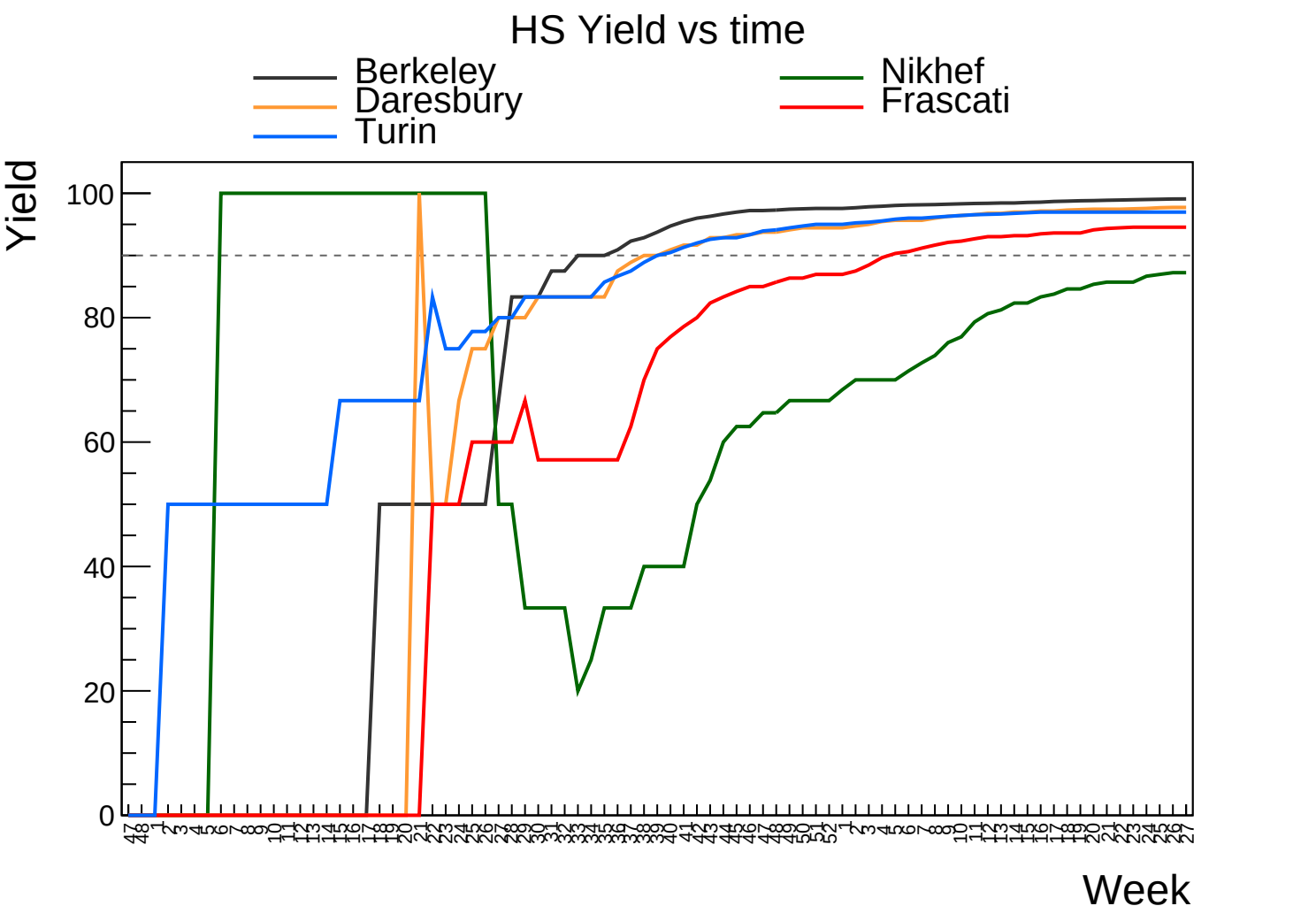


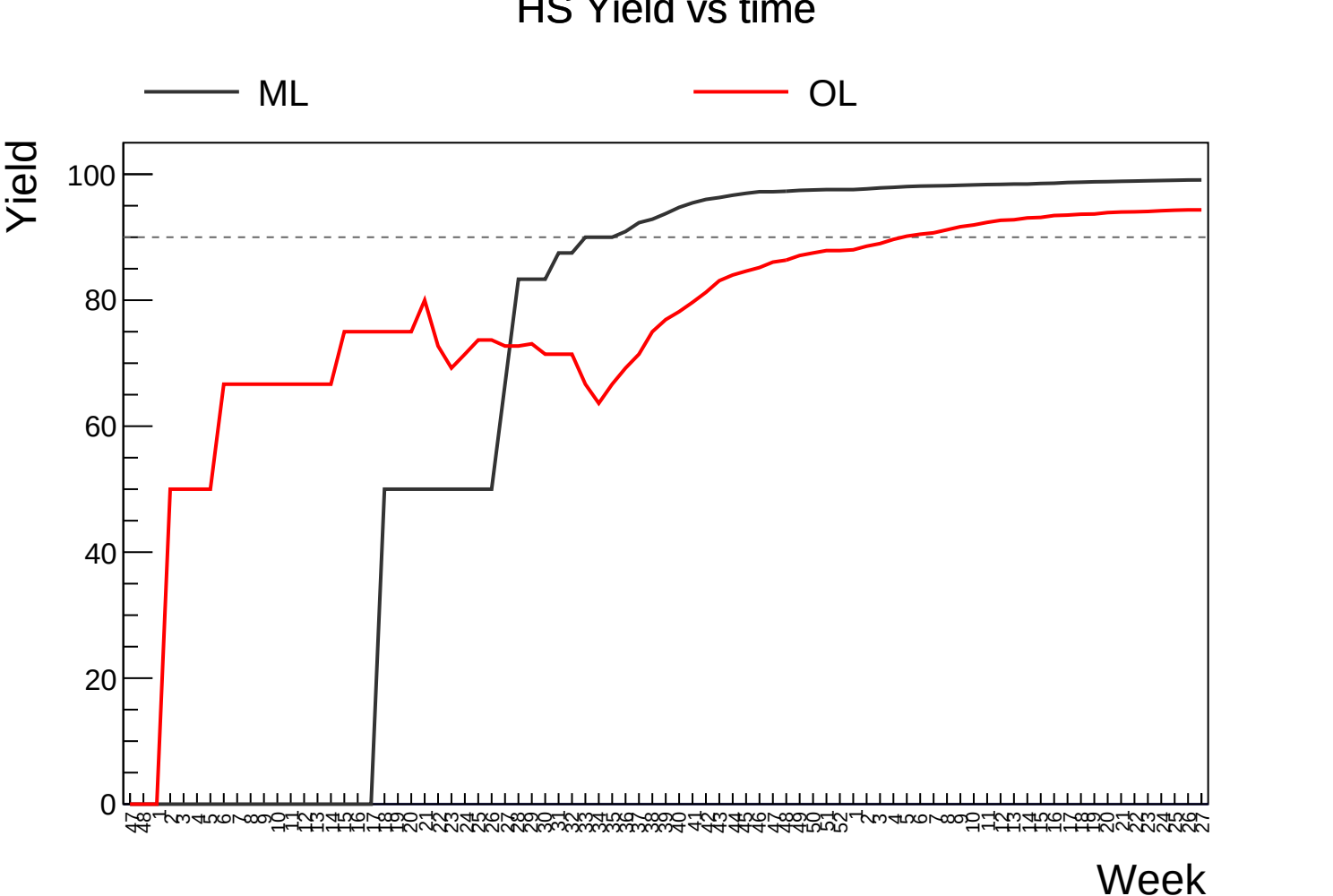
Det. Grade HS




Det. grade HS vs time
Berkeley
Daresbury
Turin
Nikhef
Frascati
#HS
0
20
40
60
80
100
Week
Comparison to prev. week
Berkeley: +1
Nikhef: +0
Daresbury: +0
Frascati: +0
Turin: +0


Det. grade HS vs time
ML(all)
OL(all)
ML(DG)
OL(DG)
#HS
0
20
40
60
80
100
120
140
160
180
200
220
Week


HS Yield vs time
Berkeley
Daresbury
Turin
Nikhef
Frascati
Yield
100
80
60
40
20
0
47 48 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
Week


HS Yield vs time
ML
OL
Yield
100
80
60
40
20
0
47 48 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
Week

Stave monitoring

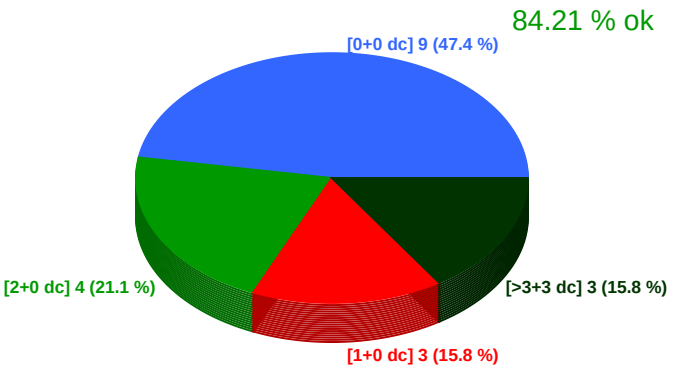
Staves of previous week

R-OL-Stave-002: (U,L)=(2, 0) bad chips
D-OL-Stave-022: (U,L)=(0, 1) bad chips
D-OL-Stave-021: (U,L)=(2, 0) bad chips
B-ML-Stave-049: (U,L)=(0, 0) bad chips

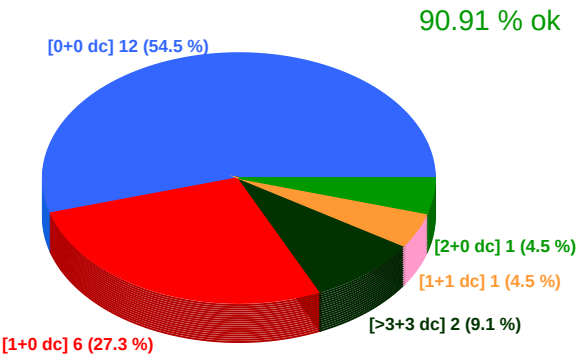
Staves of this week

D-OL-Stave-001: (U,L)=(7, 13) bad chips
B-ML-Stave-050: (U,L)=(0, 0) bad chips

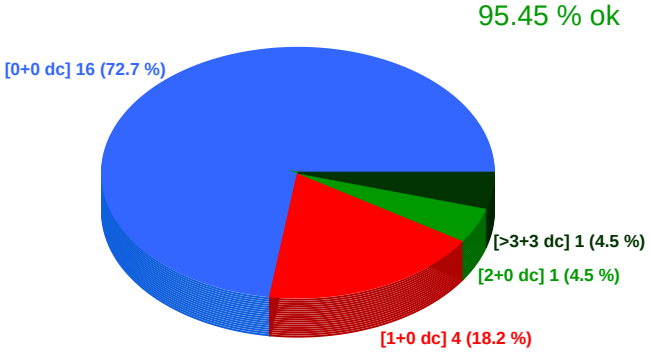
Stave - Nikhef



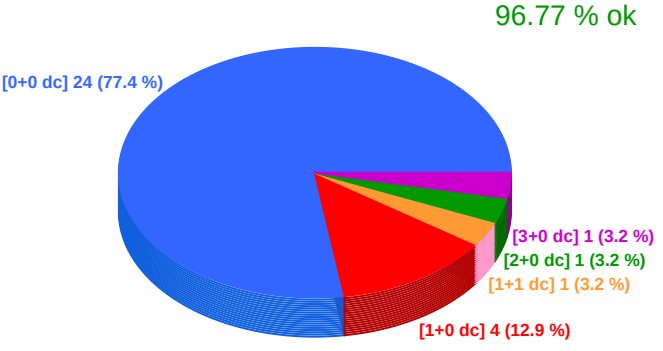
Stave - Daresbury



Stave - Frascati

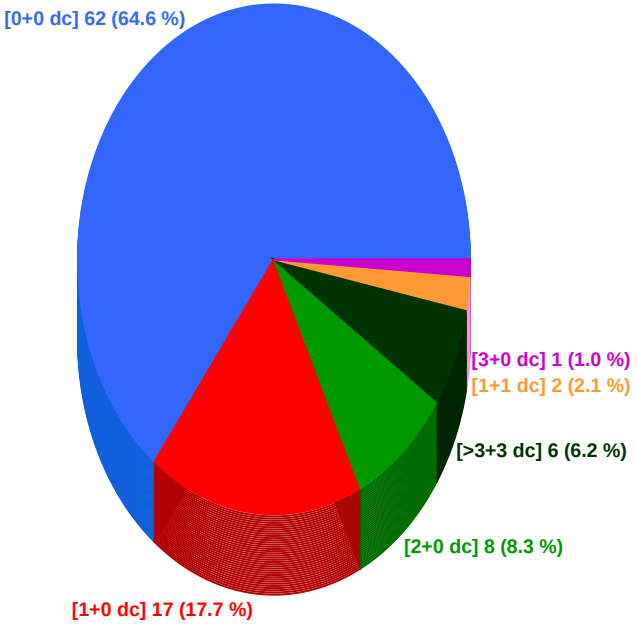


Stave - Turin



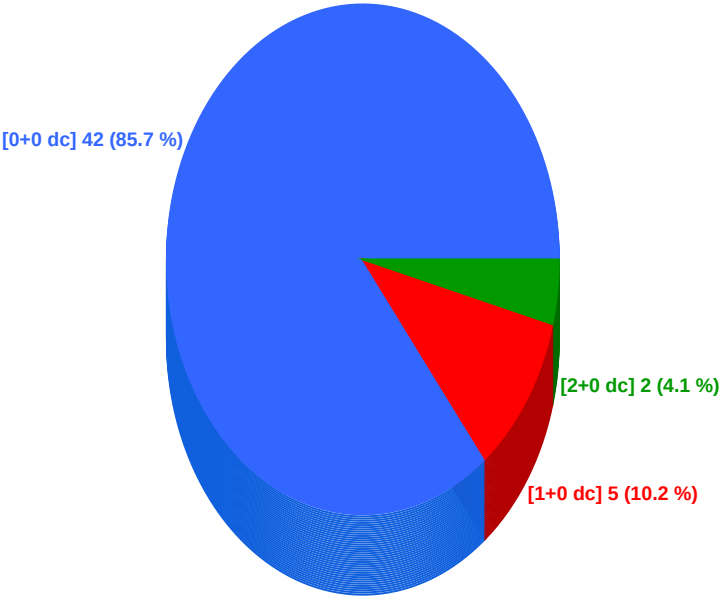
Stave - OL (includes rwk)

92.71 % ok

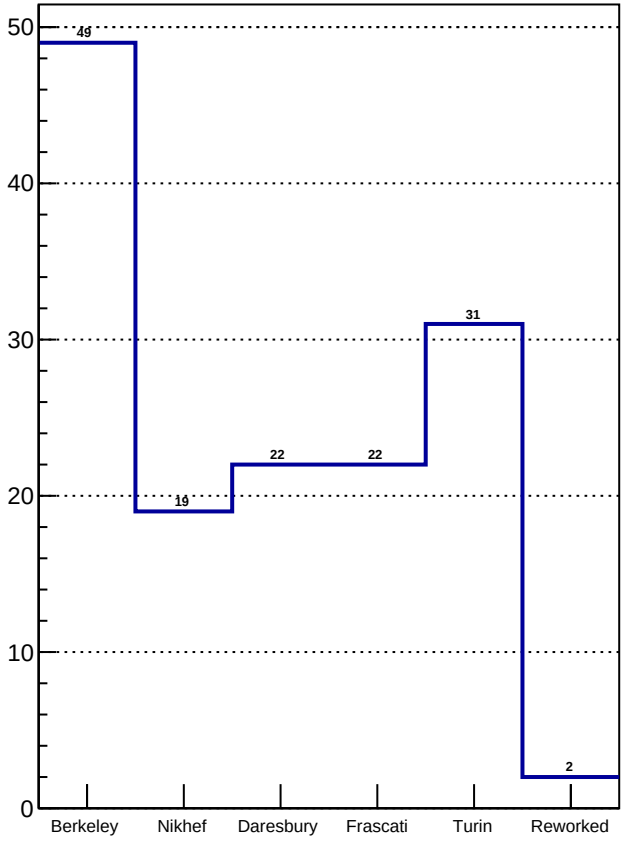


Stave - ML

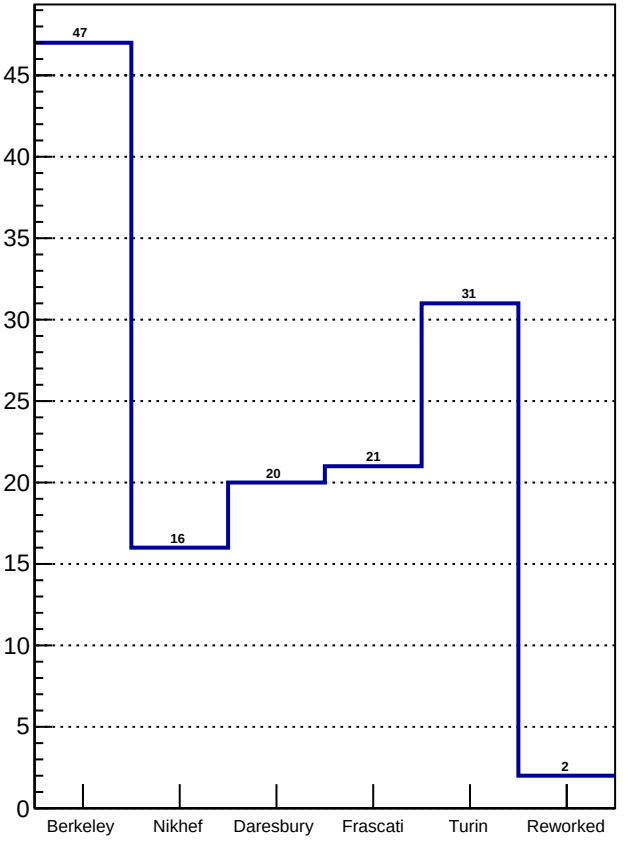
95.92 % ok

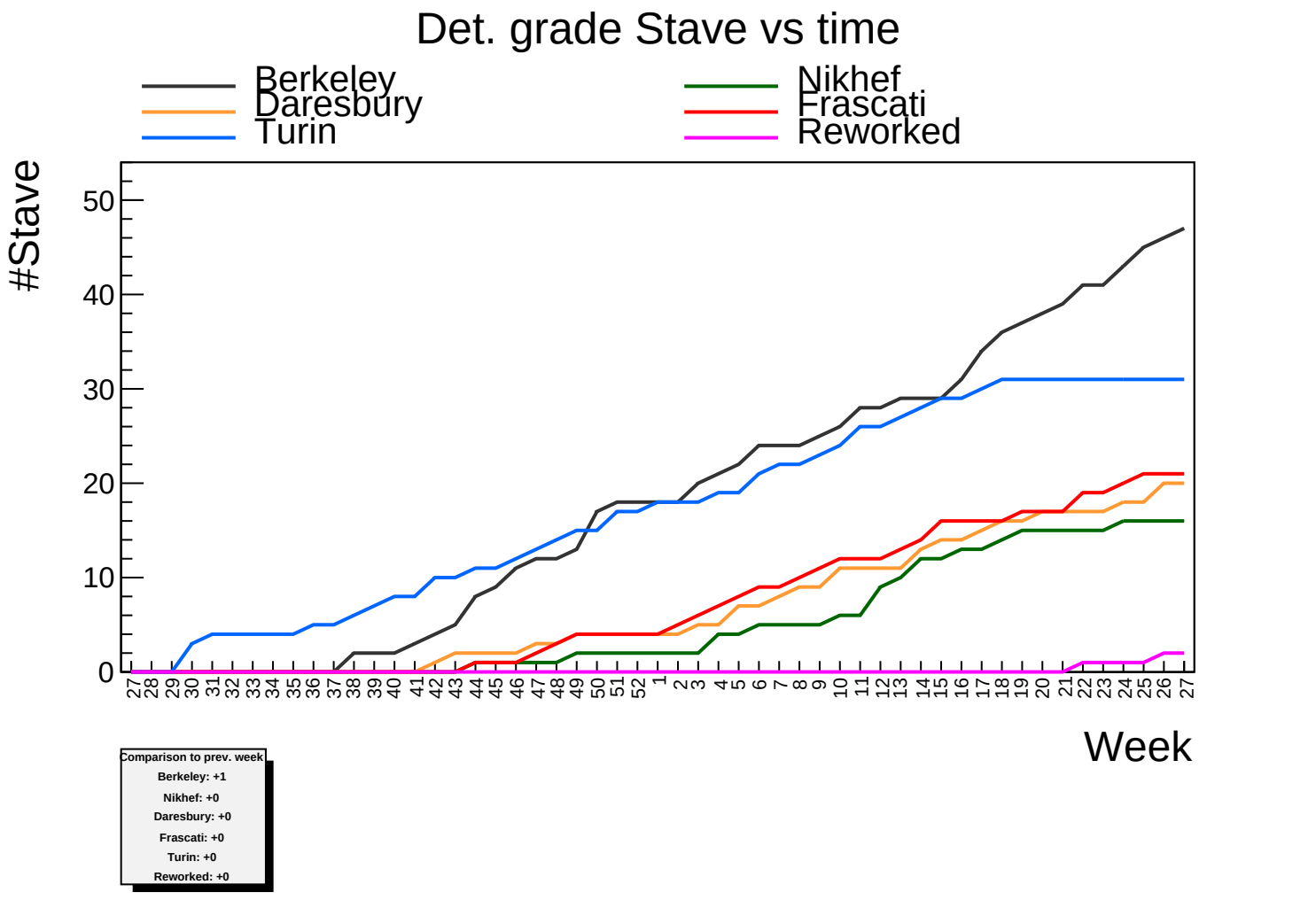


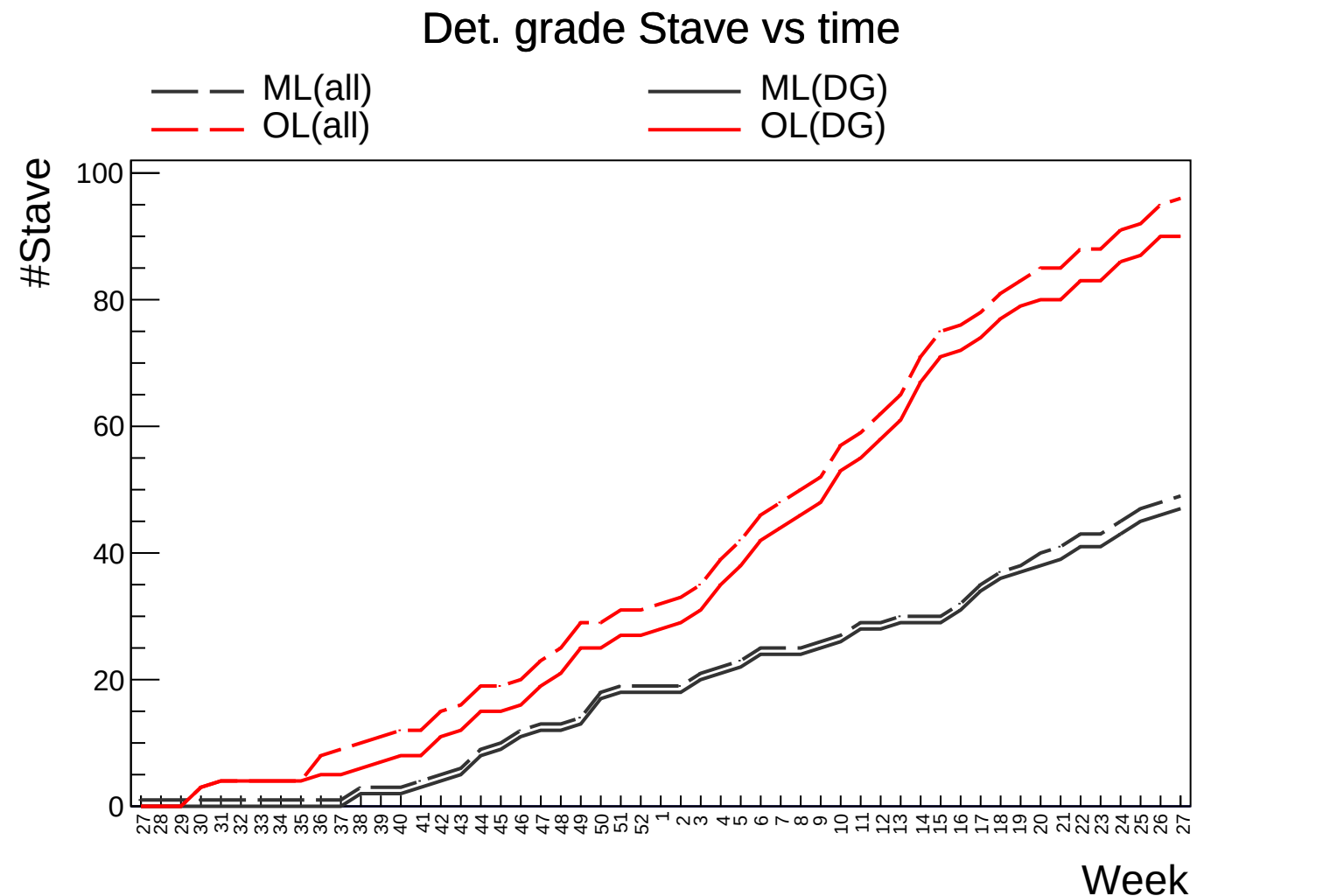
All Stave

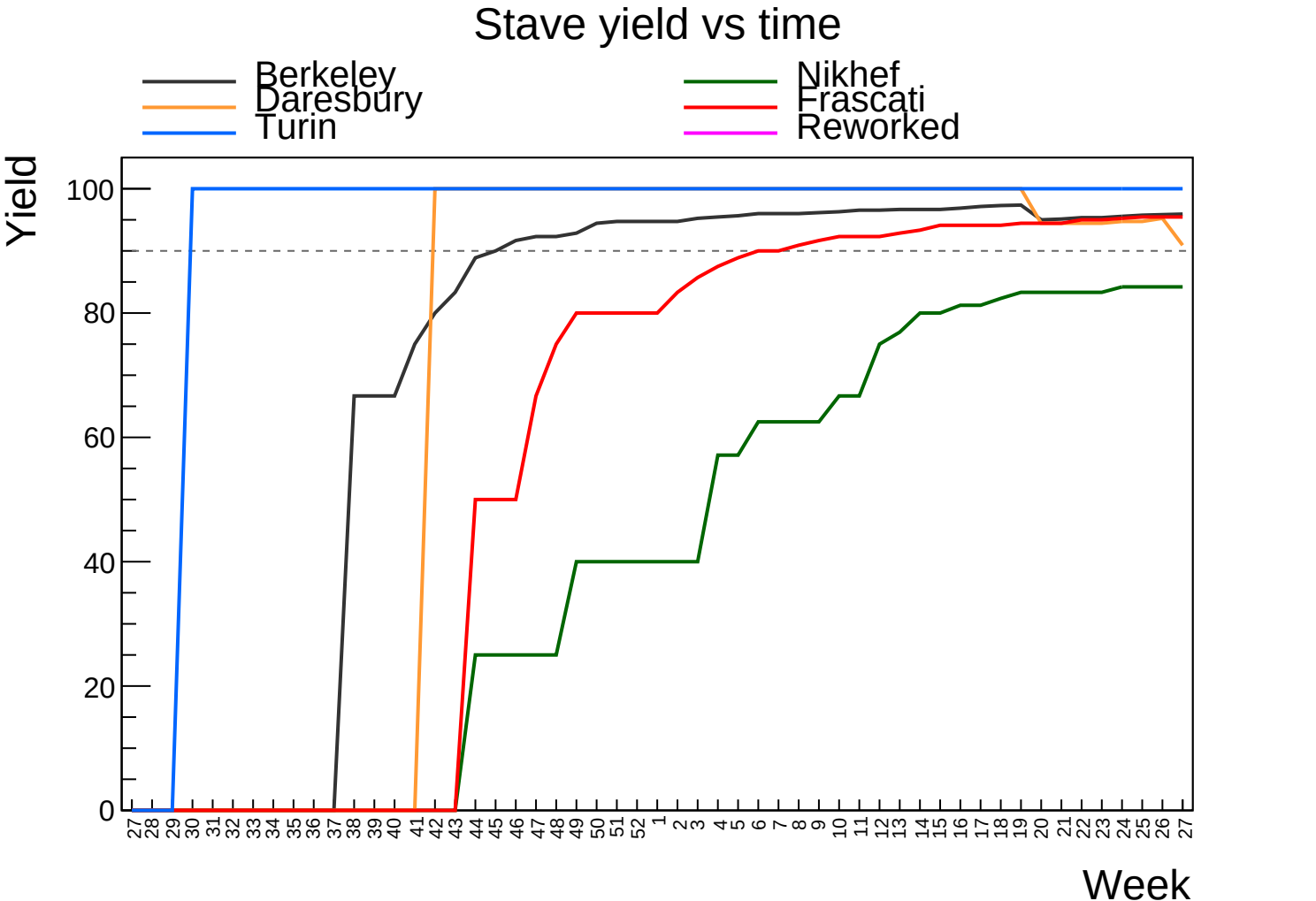


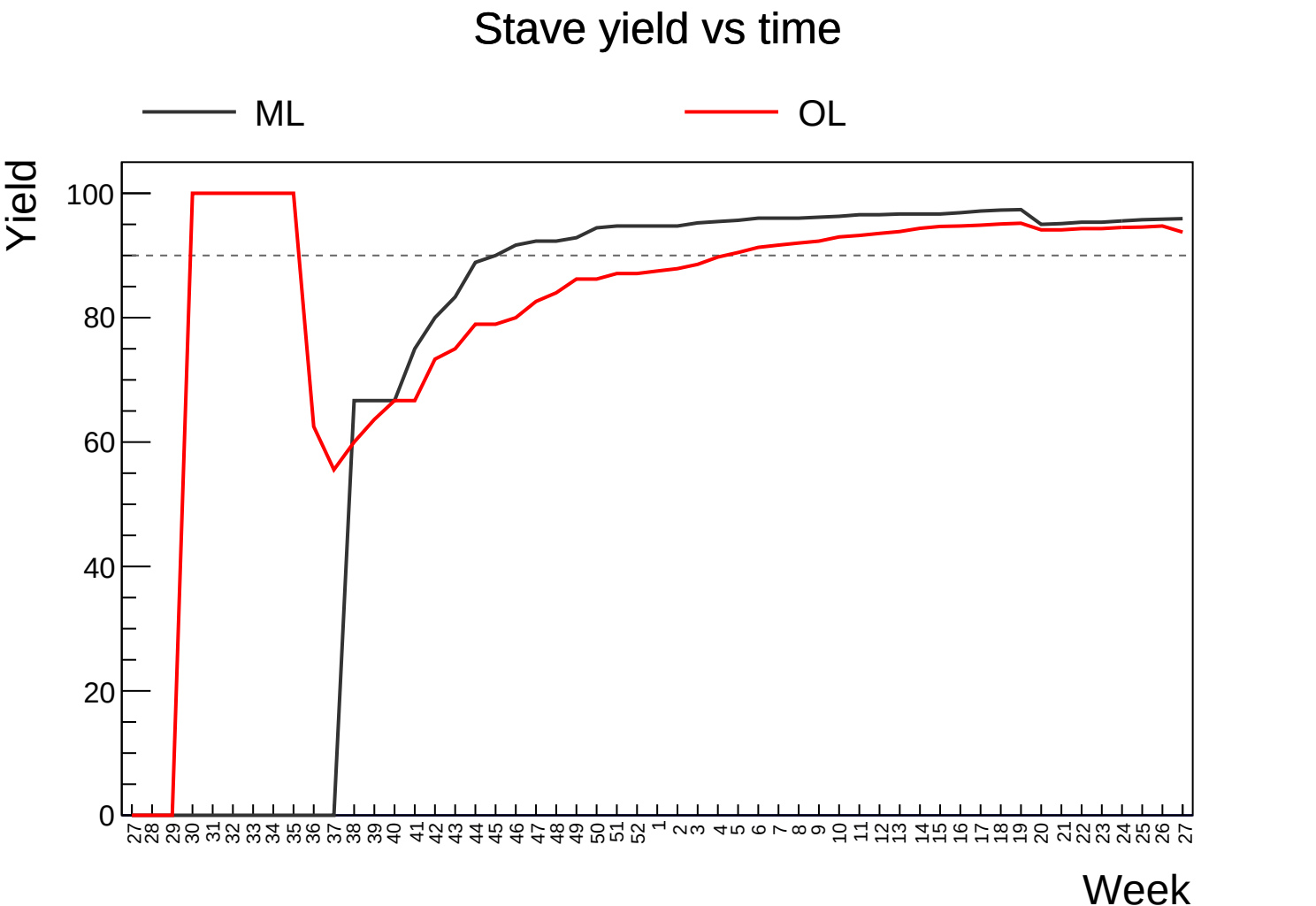
Det. Grade Stave




Det. grade Stave vs time
Berkeley
Daresbury
Turin
Nikhef
Frascati
Reworked
#Stave
0
10
20
30
40
50
27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
Week
Comparison to prev. week
Berkeley: +1
Nikhef: +0
Daresbury: +0
Frascati: +0
Turin: +0
Reworked: +0


Det. grade Stave vs time
ML(all)
OL(all)
ML(DG)
OL(DG)
#Stave
0
20
40
60
80
100
27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
Week


Stave yield vs time
Berkeley
Daresbury
Turin
Nikhef
Frascati
Reworked
Yield
100
80
60
40
20
0
27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
Week


Stave yield vs time
ML
OL
Yield
100
80
60
40
20
0
27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
Week

Production rate (October 2018 - prev. week)**

→ Berkeley: 1.22(all) -- 1.19(DG)

→ Nikhef: 0.43(all) -- 0.43(DG)

→ Daresbury: 0.57(all) -- 0.54(DG)

→ Frascati: 0.57(all) -- 0.57(DG)

→ Turin: 0.79(all) -- 0.79(DG) → Prod. ended

OL: 2.36(all) -- 2.33(DG)

ML: 1.22(all) -- 1.19(DG)

Rework rate (from June 1st, 2019): 0.40(all) -- 0.40(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: 0.60(all) -- 0.40(DG)**
→ **Frascati: 0.60(all) -- 0.60(DG)**
→ **Turin: Production ended**
OL: 1.60(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: 0.75(all) -- 0.75(DG)**
→ **Frascati: 0.50(all) -- 0.50(DG)**
→ **Turin: 0.00(all) -- 0.00(DG)**
OL: 1.50(all) -- 1.50(DG)
ML: 1.25(all) -- 1.25(DG)

Stave reception @CERN

Staves qualified in the previous week

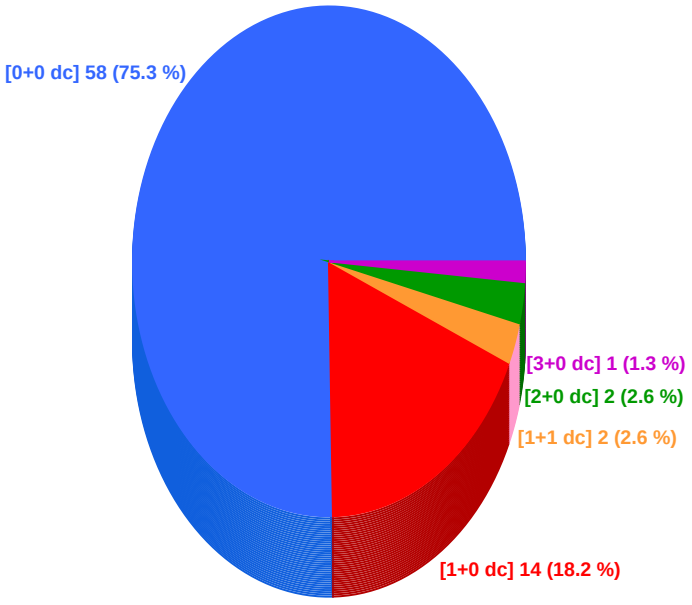
T-OL-Stave-025: (U,L)=(0, 0) bad chips
F-OL-Stave-019: (U,L)=(0, 0) bad chips
F-OL-Stave-016: (U,L)=(0, 0) bad chips
F-OL-Stave-015: (U,L)=(0, 0) bad chips
F-OL-Stave-004: (U,L)=(0, 0) bad chips
D-OL-Stave-012: (U,L)=(0, 0) bad chips
D-OL-Stave-009: (U,L)=(0, 0) bad chips
D-OL-Stave-007: (U,L)=(0, 0) bad chips
D-OL-Stave-003: (U,L)=(1, 1) bad chips
B-ML-Stave-005: (U,L)=(0, 0) bad chips

Staves qualified this week

A-OL-Stave-009: (U,L)=(1, 0)
B-ML-Stave-033: (U,L)=(0, 0)
B-ML-Stave-027: (U,L)=(0, 0)
B-ML-Stave-023: (U,L)=(0, 0)
B-ML-Stave-021: (U,L)=(0, 0)
B-ML-Stave-020: (U,L)=(0, 0)
B-ML-Stave-019: (U,L)=(0, 0)
B-ML-Stave-018: (U,L)=(0, 1)
B-ML-Stave-017: (U,L)=(0, 0)
B-ML-Stave-015: (U,L)=(1, 0)
B-ML-Stave-012: (U,L)=(0, 0)
B-ML-Stave-011: (U,L)=(0, 0)

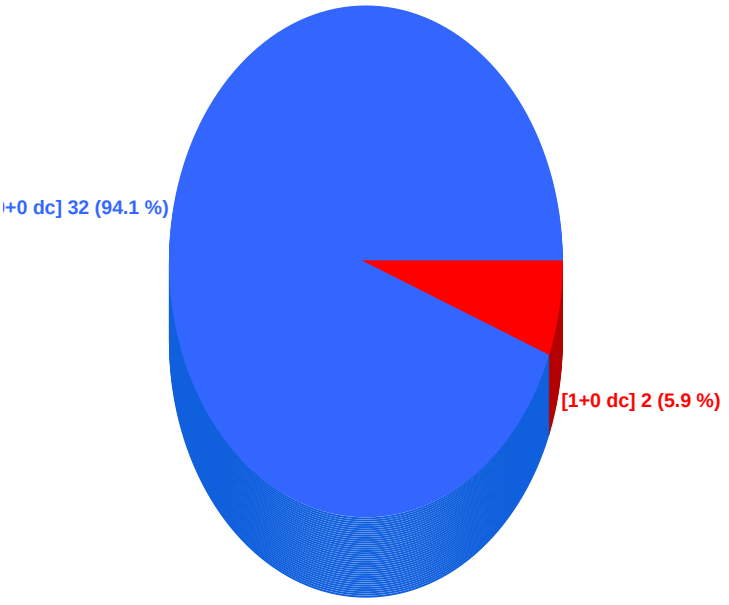
Stave - OL @CERN

98.70 % ok

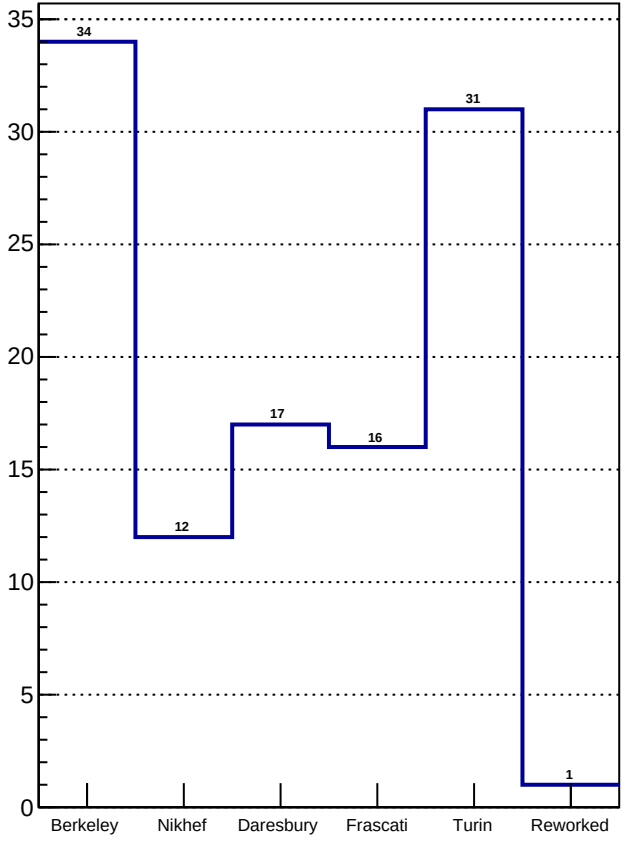


Stave - ML @CERN

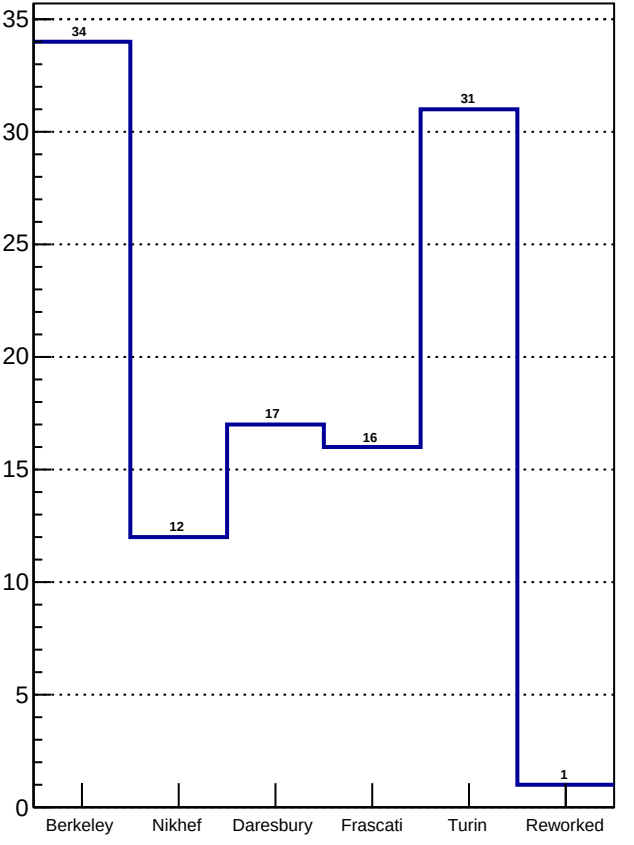
100.00 % ok

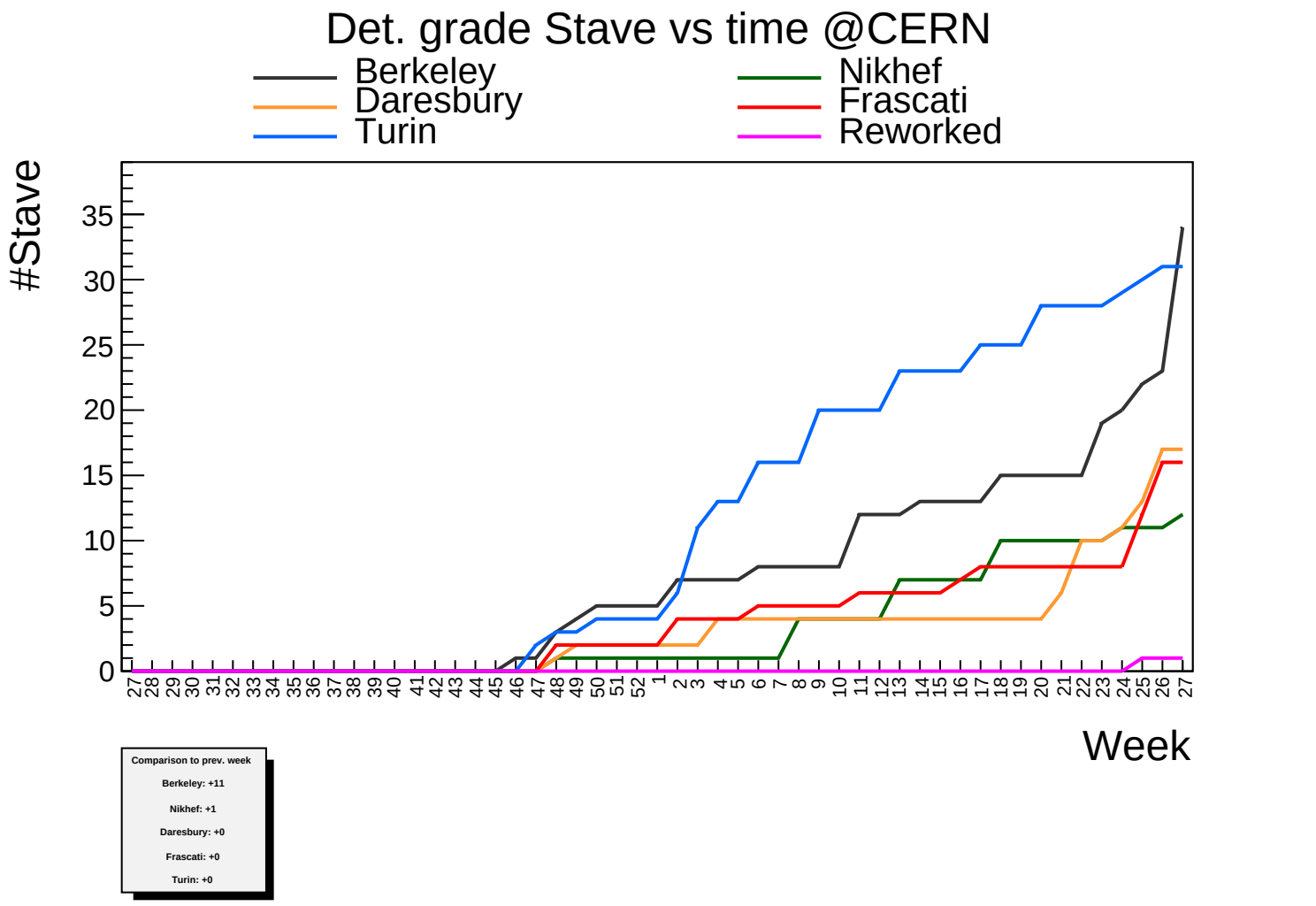


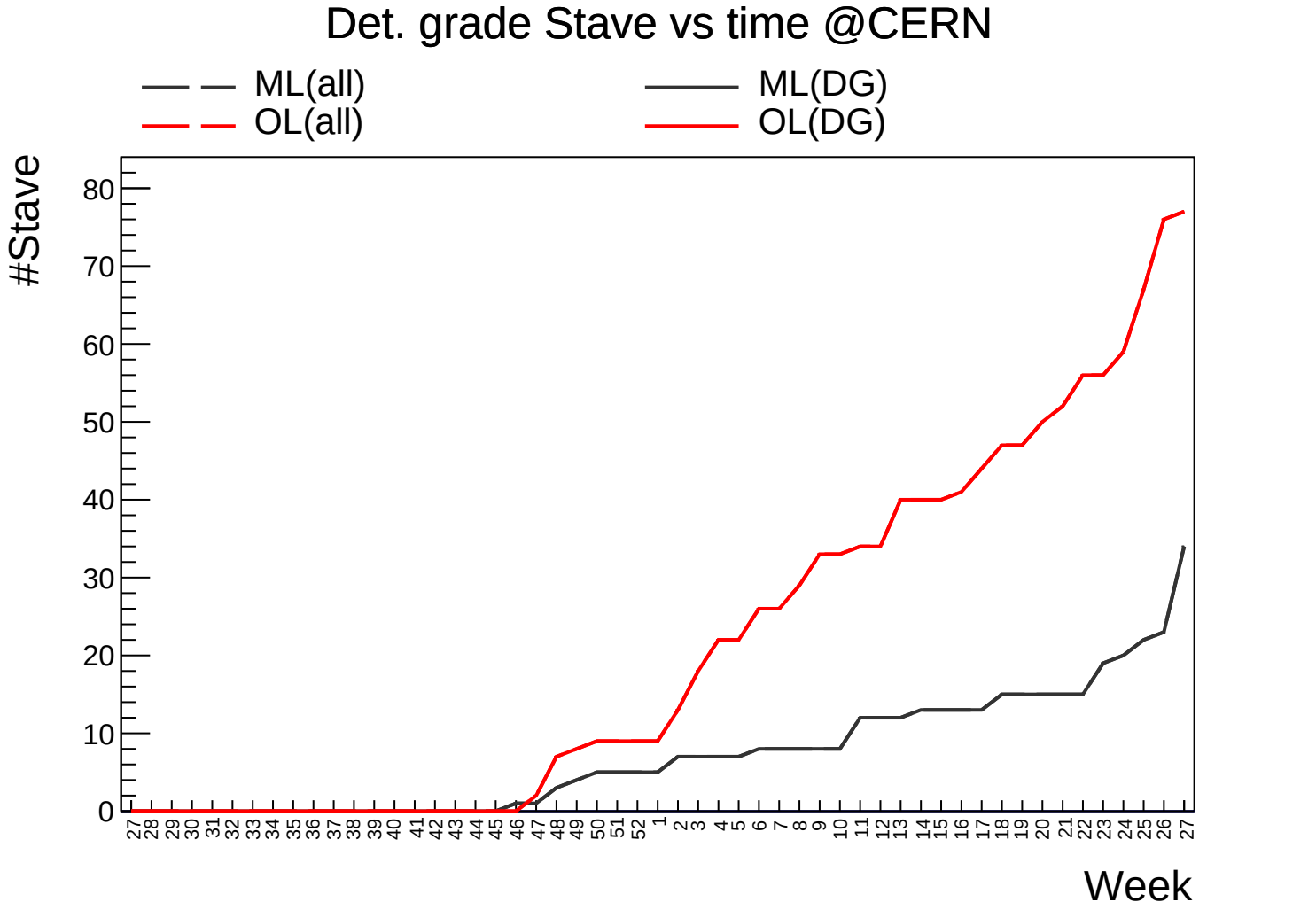
All Stave @CERN



Det. Grade Stave @CERN




Det. grade Stave vs time @CERN
Berkeley
Daresbury
Turin
Nikhef
Frascati
Reworked
#Stave
0
5
10
15
20
25
30
35
27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
Week
Comparison to prev. week
Berkeley: +11
Nikhef: +1
Daresbury: +0
Frascati: +0
Turin: +0


Det. grade Stave vs time @CERN
ML(all)
OL(all)
ML(DG)
OL(DG)
#Stave
0
10
20
30
40
50
60
70
80
27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
Week

Qualification rate (December 2018 - prev. week)**

Berkeley: 0.71(all) -- 0.71(DG)

Nikhef: 0.36(all) -- 0.36(DG)

Daresbury: 0.57(all) -- 0.57(DG)

Frascati: 0.50(all) -- 0.50(DG)

Turin: 1.00(all) -- 1.00(DG)

OL: 2.43(all) -- 2.43(DG)

ML: 0.71(all) -- 0.71(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
D-OL-HS-L-108: 0 bad chips
A-OL-HS-U-120: 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
A-OL-HS-L-021: 0 bad chips
B-ML-HS-U-055: 0 bad chips
B-ML-HS-U-054: 0 bad chips
B-ML-HS-U-053: 0 bad chips
B-ML-HS-U-052: 0 bad chips
B-ML-HS-U-051: 0 bad chips
B-ML-HS-U-014: 0 bad chips
B-ML-HS-L-055: 0 bad chips
B-ML-HS-L-054: 0 bad chips
B-ML-HS-L-053: 0 bad chips
B-ML-HS-L-052: 0 bad chips
B-ML-HS-L-051: 0 bad chips
B-ML-HS-L-014: 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

D-OL-Stave-008: (U,L) = (0, 14) bad chips
A-OL-Stave-001: (U,L) = (2, 14) bad chips
A-OL-Stave-002: (U,L) = (7, 49) bad chips
A-OL-Stave-003: (U,L) = (0, 28) 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
F-OL-Stave-001: (U,L) = (43, 14) bad chips
B-ML-Stave-001: (U,L) = (2, 0) bad chips