

# Stave production monitoring

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

13/06/2019

Monitoring from January 2018 to 13/06/2019

Stave meeting

HS monitoring

### **HSs of previous week**

**F-OL-HS-U-027: 0 bad chips**

**D-OL-HS-U-021: 0 bad chips**

**B-ML-HS-U-049: 0 bad chips**

**B-ML-HS-U-048: 0 bad chips**

**B-ML-HS-U-047: 0 bad chips**

**B-ML-HS-L-047: 0 bad chips**

### **HSs of this week**

**D-OL-HS-L-022: 0 bad chips**

**A-OL-HS-U-022: 0 bad chips**

**A-OL-HS-L-122: 0 bad chips**

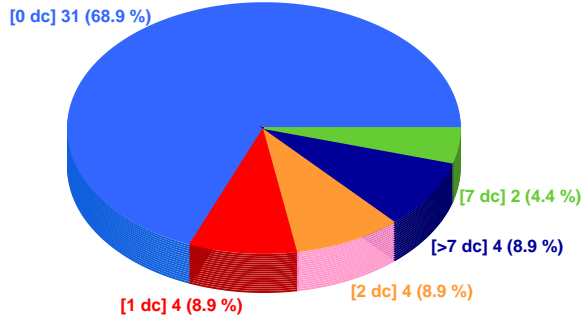
**B-ML-HS-U-050: 0 bad chips**

**B-ML-HS-L-148: 0 bad chips**

**B-ML-HS-L-049: 0 bad chips**

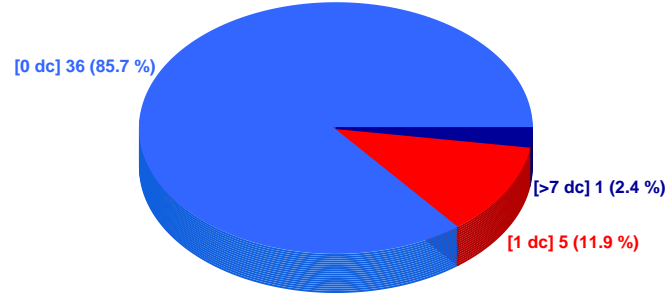
HS - Nikhef

86.67 % ok



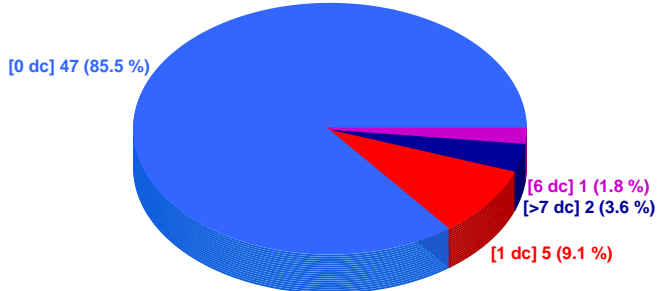
HS - Daresbury

97.62 % ok



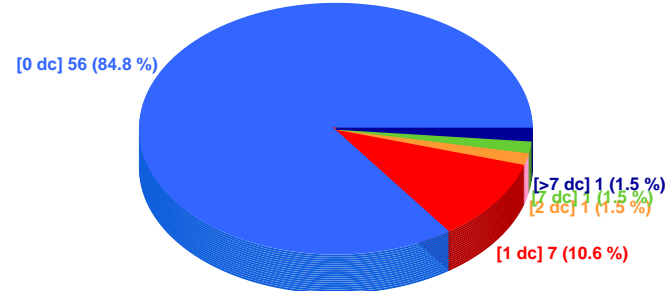
HS - Frascati

94.55 % ok



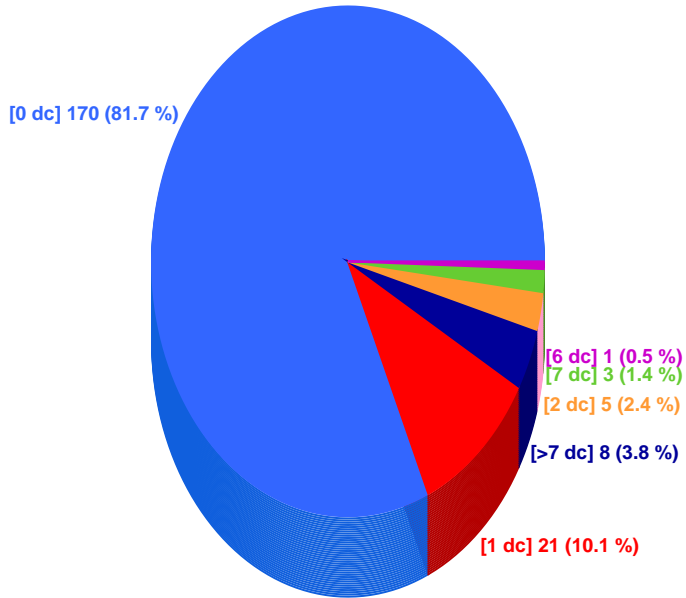
HS - Turin

96.97 % ok



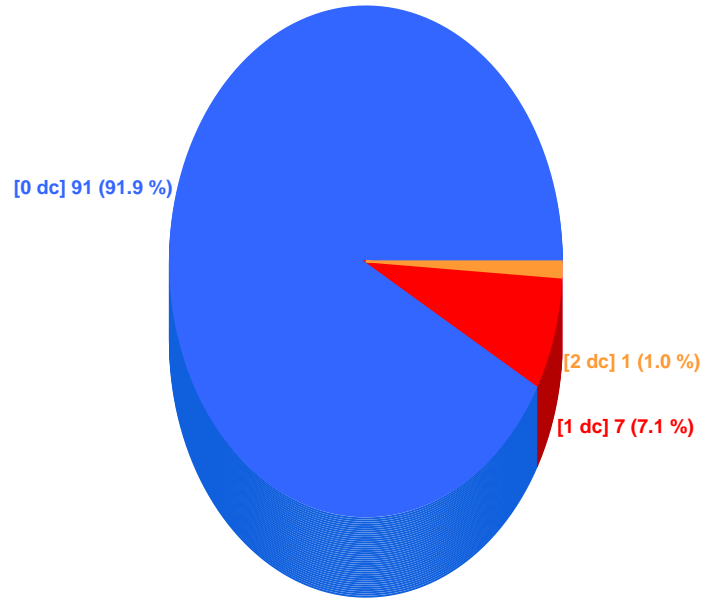
HS - OL

94.23 % ok

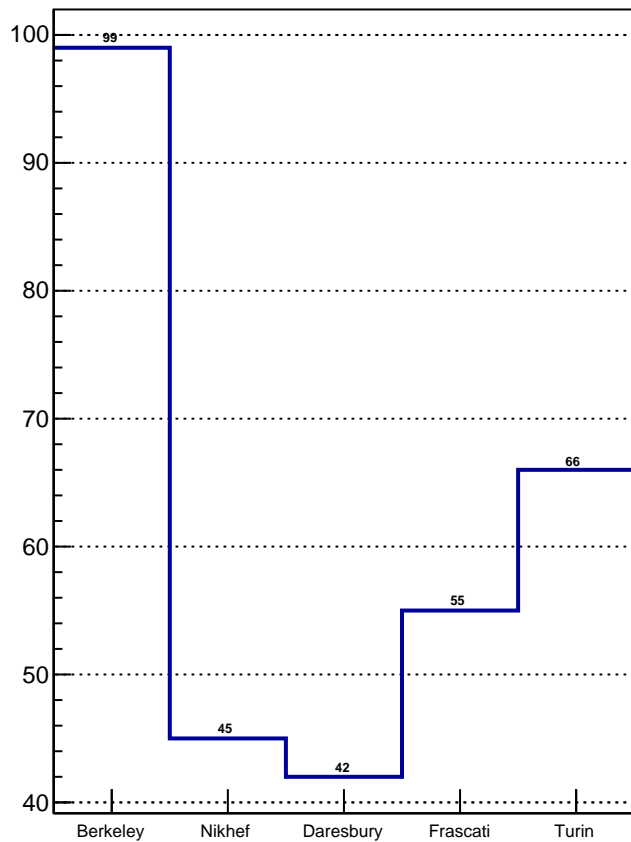


HS - ML

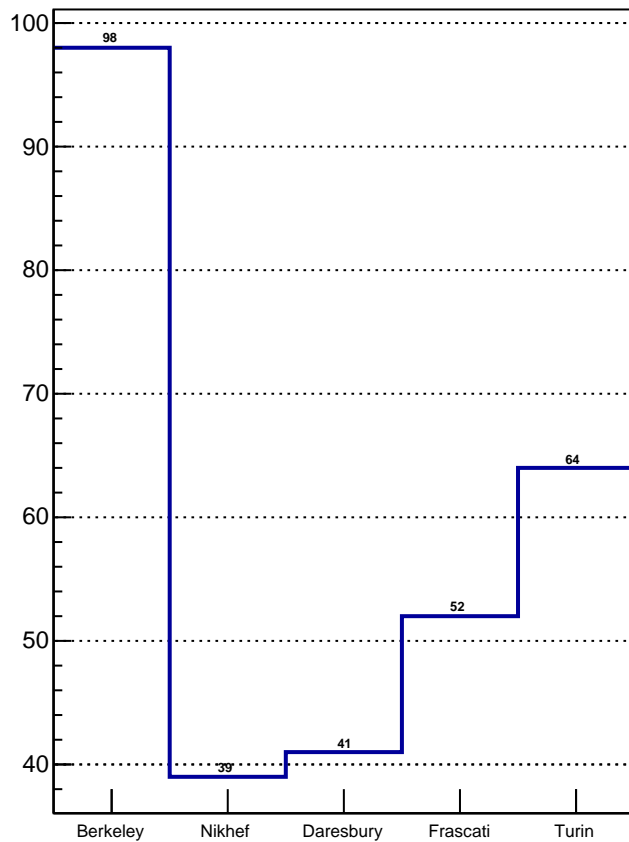
98.99 % ok



All HS



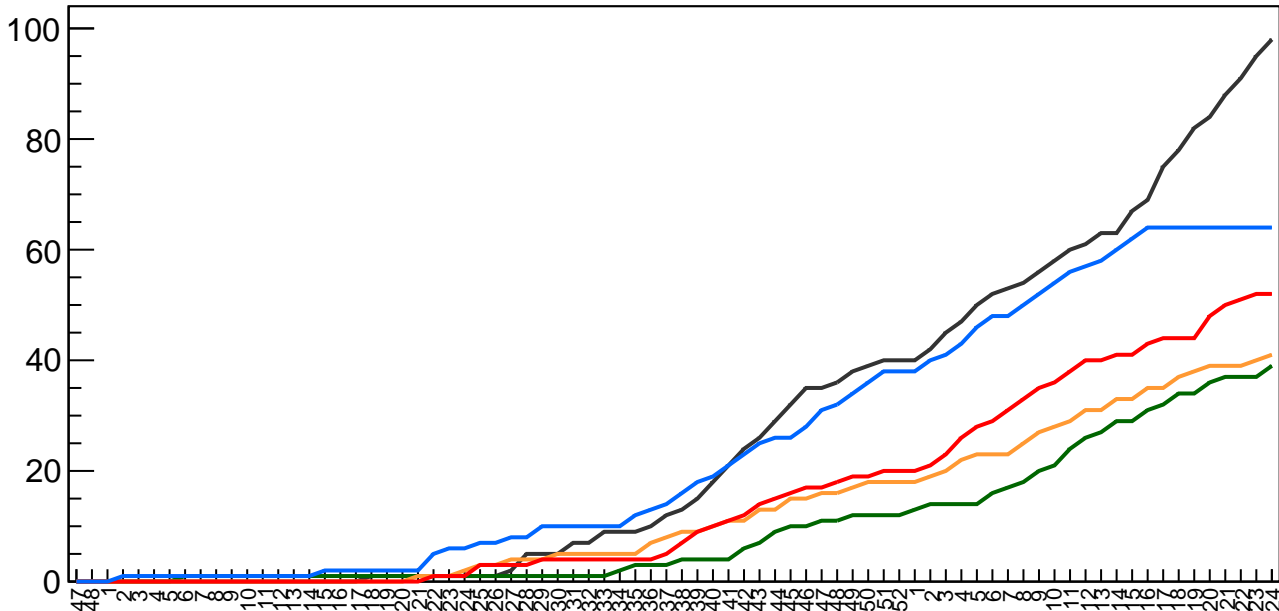
Det. Grade HS



# Det. grade HS vs time

— Berkeley  
— Daresbury  
— Turin  
— Nikhef  
— Frascati

#HS

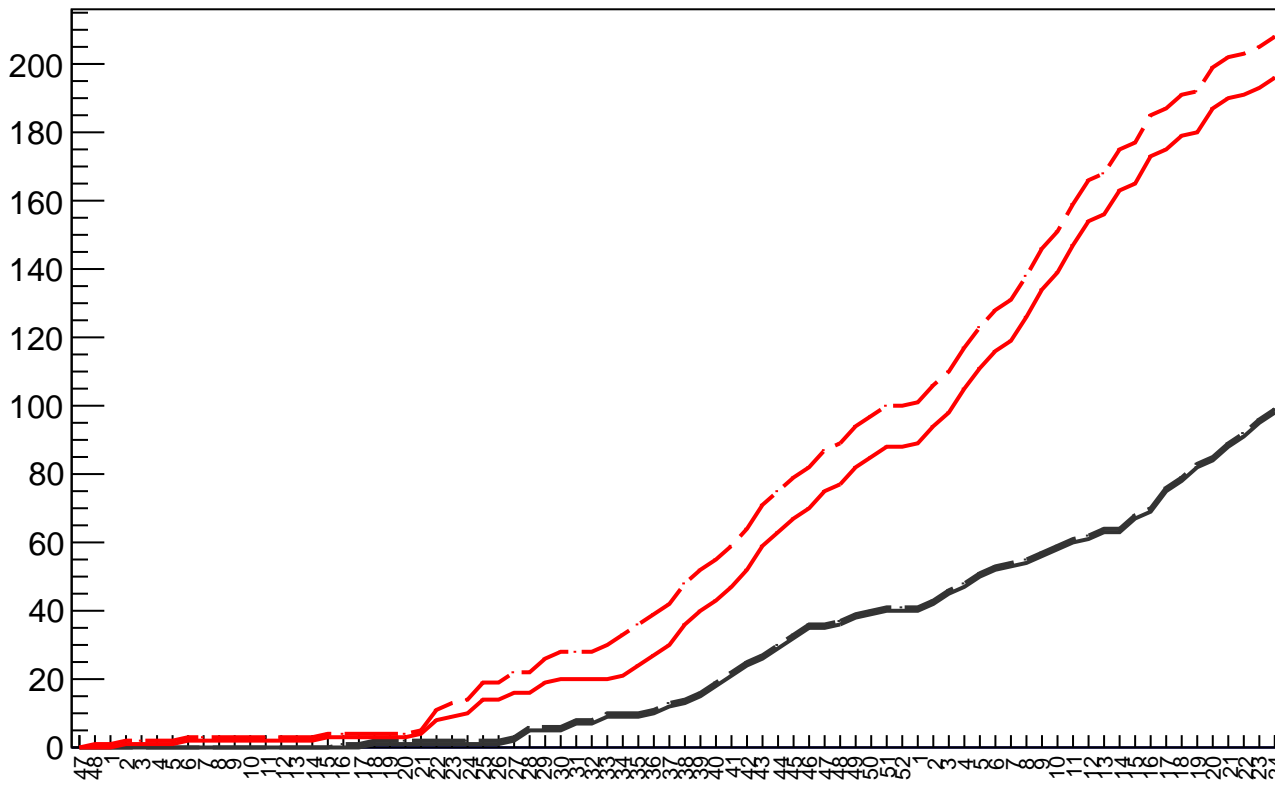


# Det. grade HS vs time

ML(all)  
OL(all)

ML(DG)  
OL(DG)

#HS

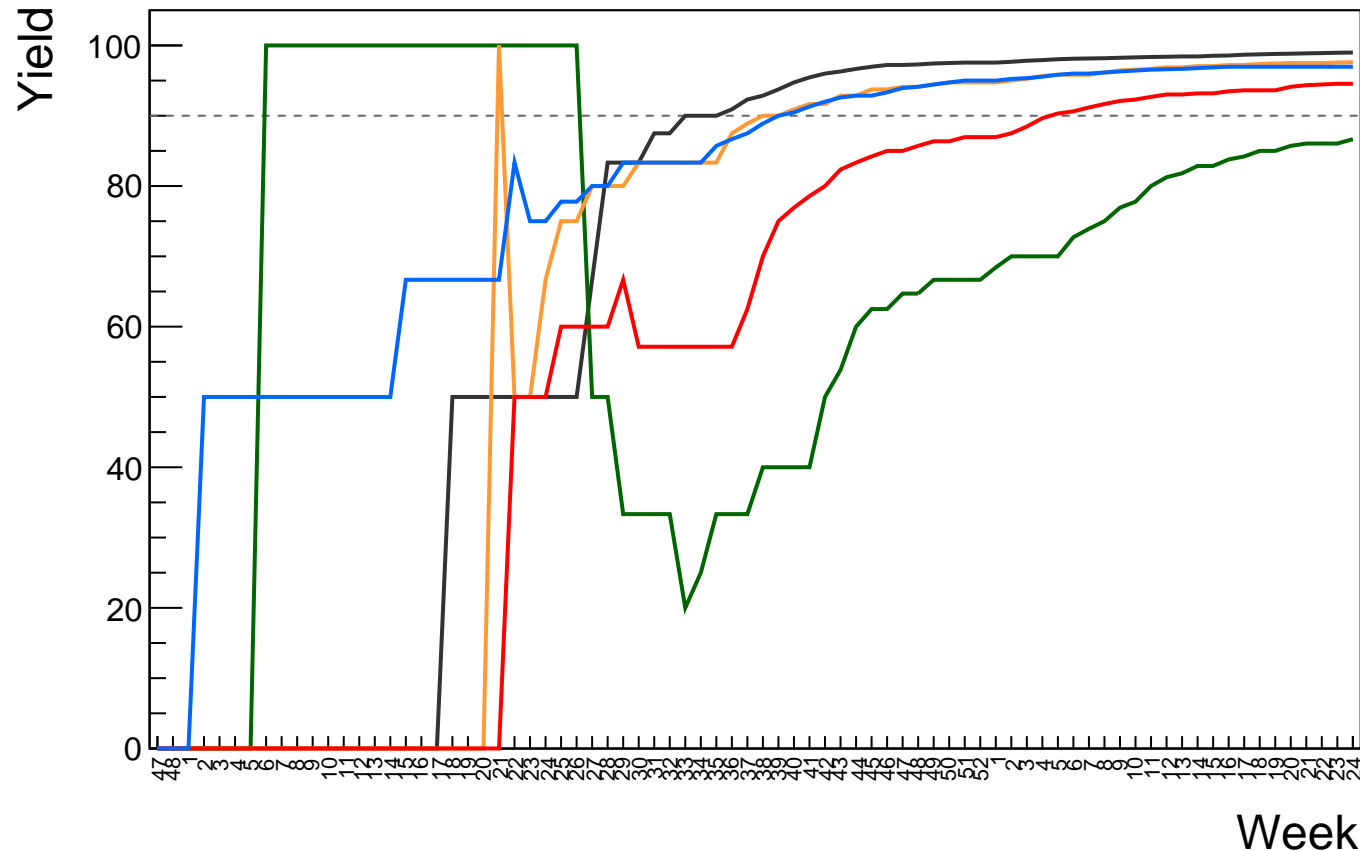


Week

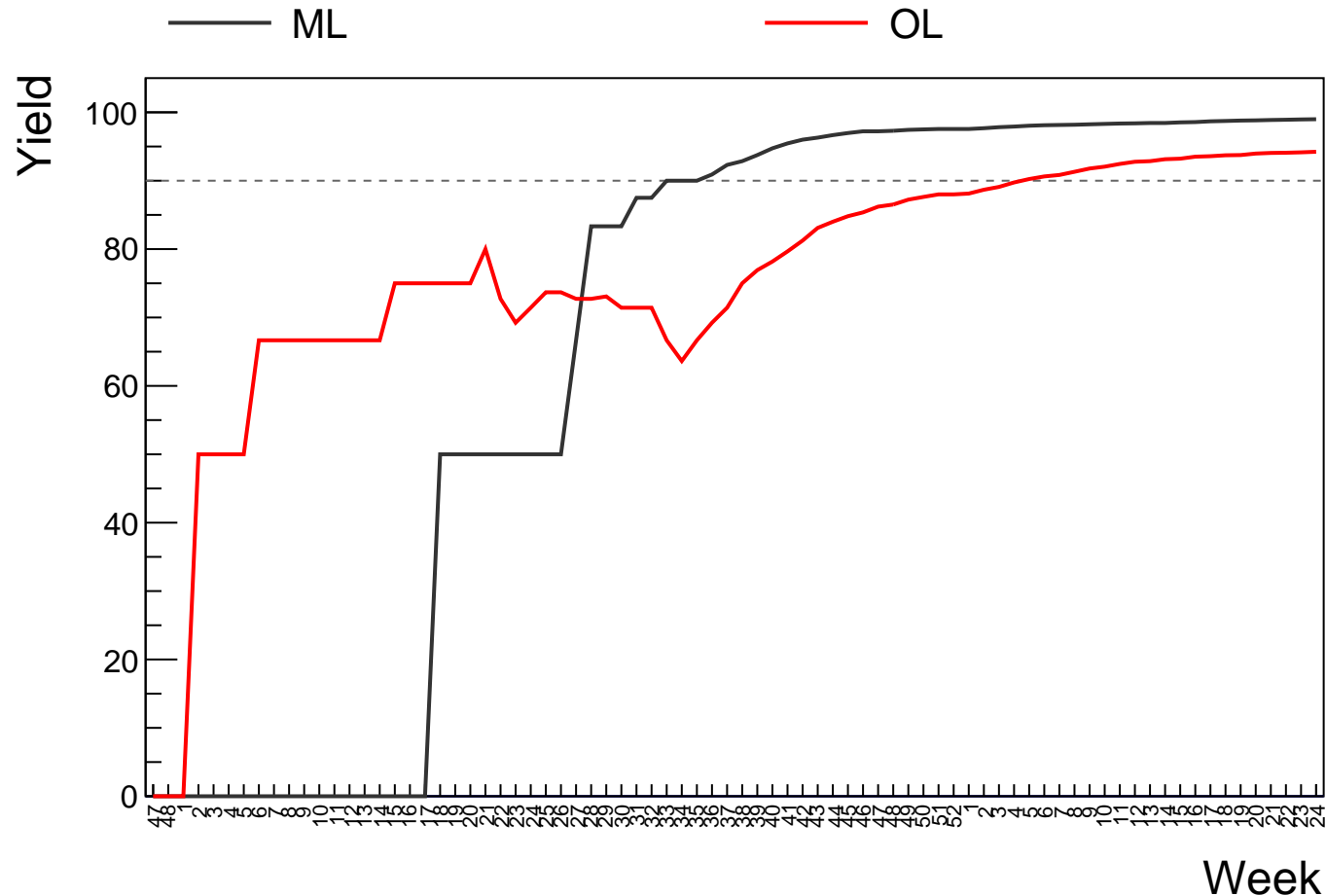


# HS Yield vs time

Berkeley  
 Daresbury  
 Turin  
 Nikhef  
 Frascati



# HS Yield vs time



Stave monitoring

## **Staves of previous week**

## **Staves of this week**

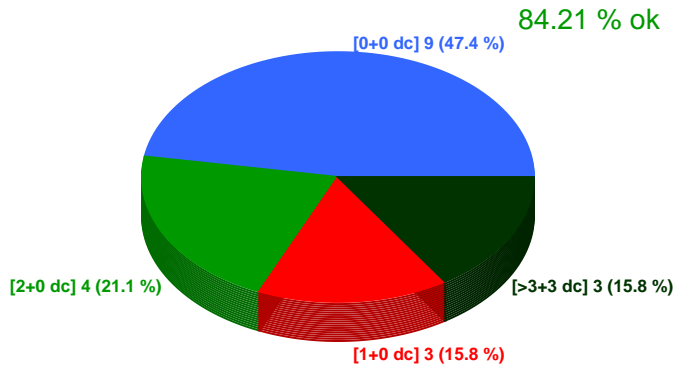
**F-OL-Stave-005:  $(U,L)=(0, 0)$  bad chips**

**D-OL-Stave-020:  $(U,L)=(0, 0)$  bad chips**

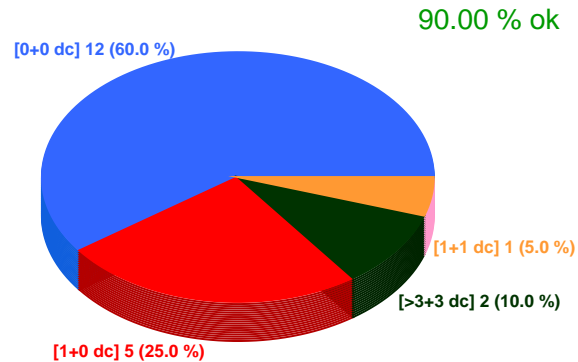
**A-OL-Stave-019:  $(U,L)=(0, 0)$  bad chips**

**B-ML-Stave-045:  $(U,L)=(0, 0)$  bad chips**

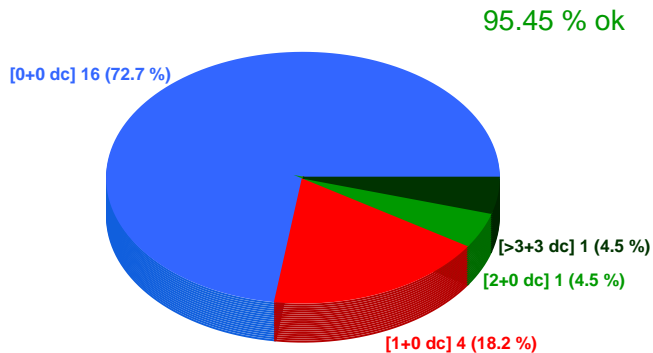
Stave - Nikhef



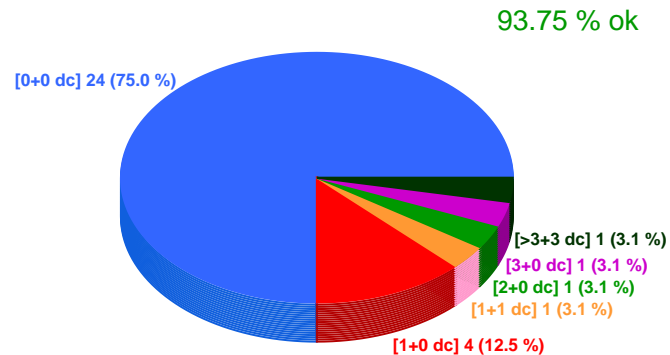
Stave - Daresbury



Stave - Frascati

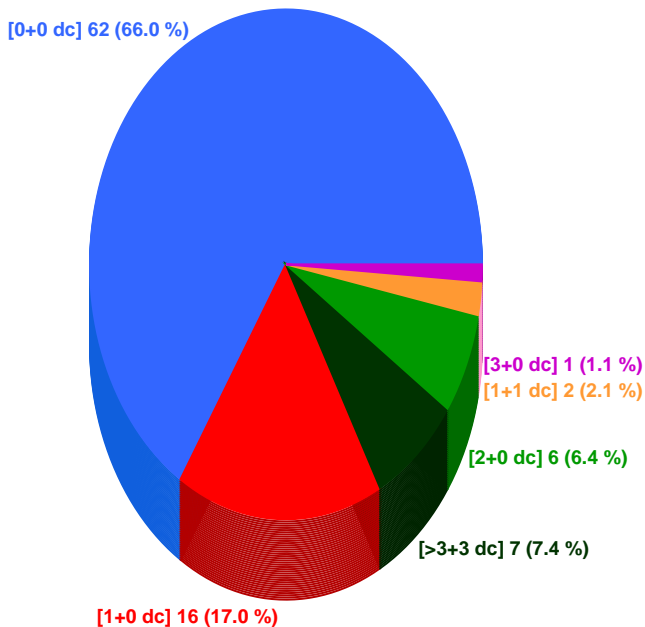


Stave - Turin



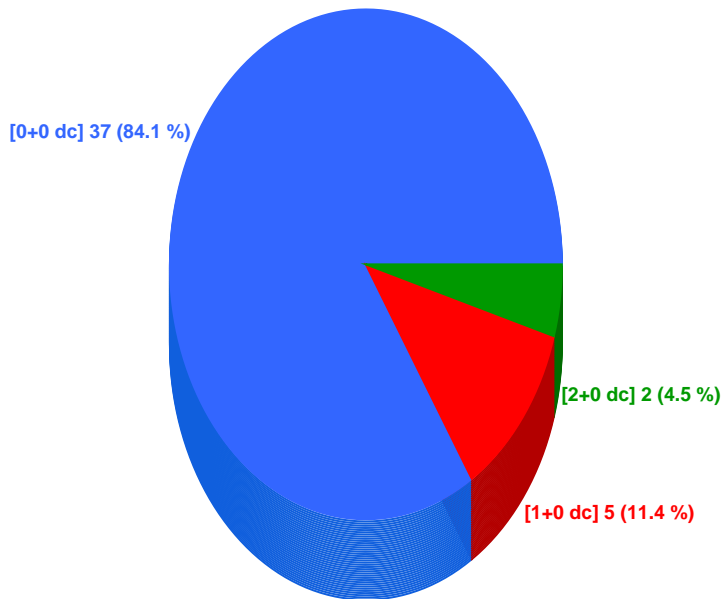
Stave - OL (includes rwk)

91.49 % ok

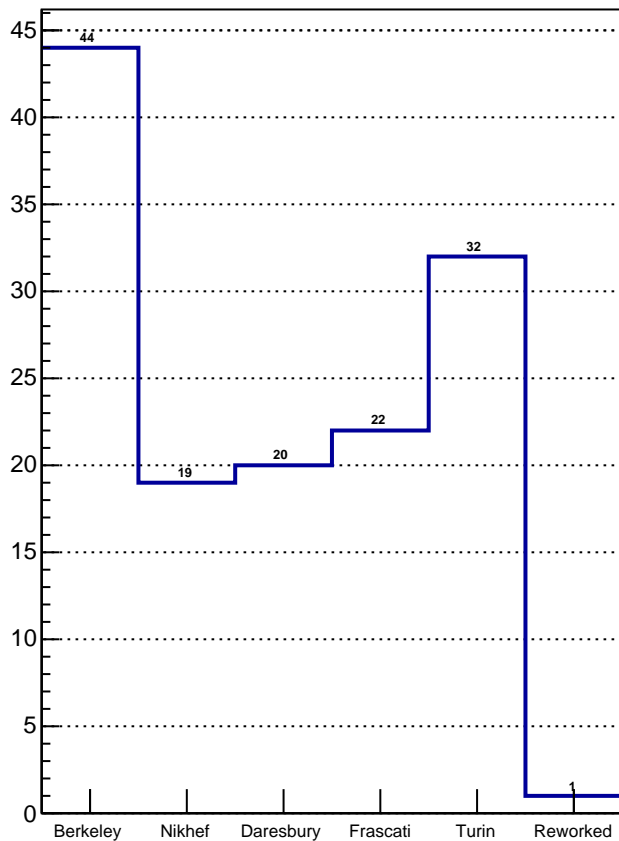


Stave - ML

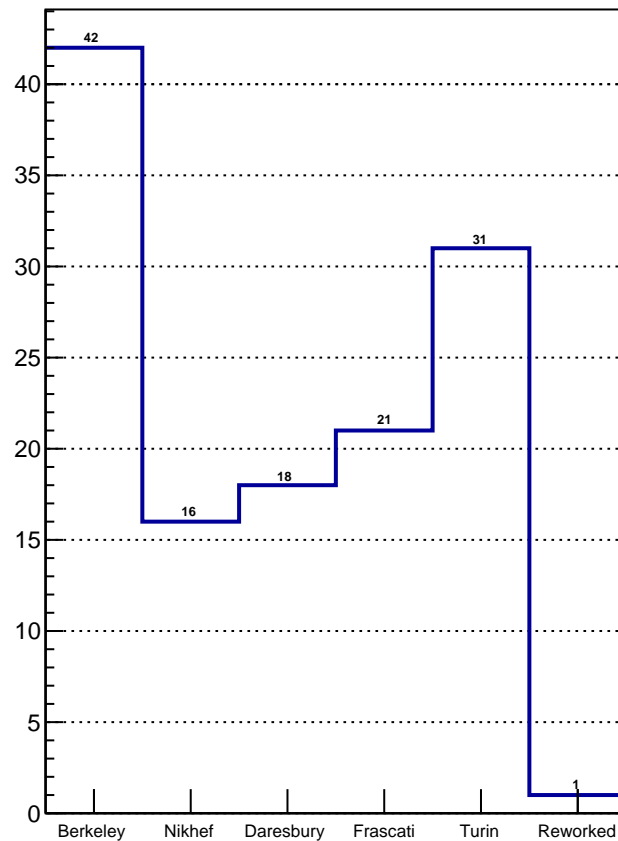
95.45 % ok



# All Stave



# Det. Grade Stave

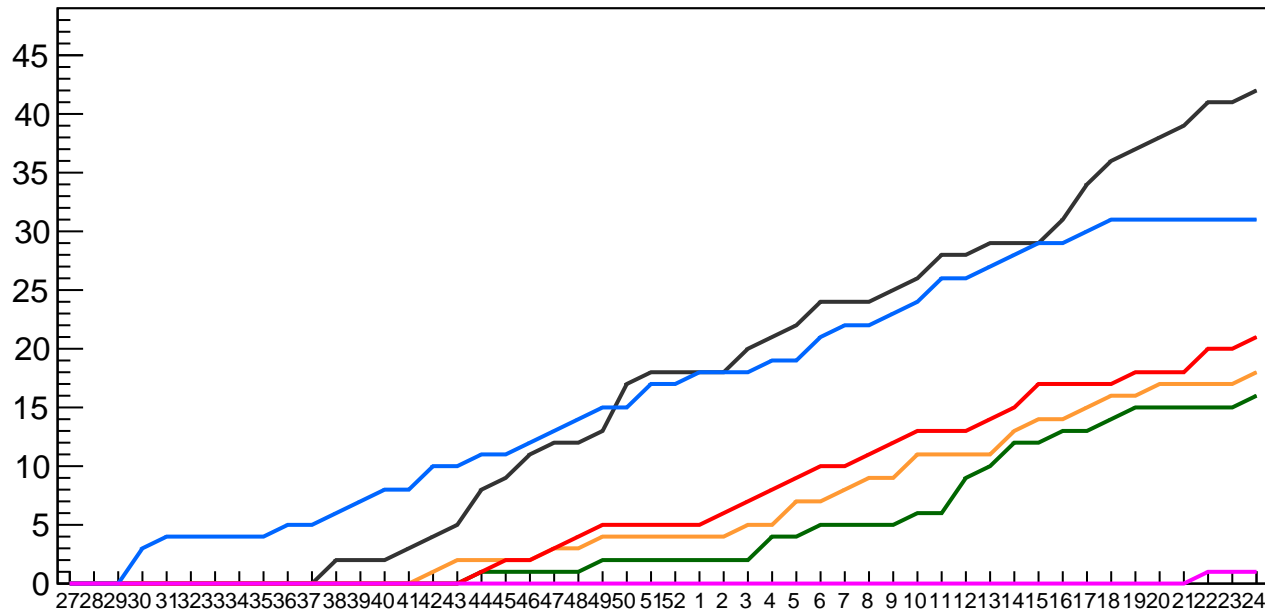


# Det. grade Stave vs time

— Berkeley  
 — Daresbury  
 — Turin

— Nikhef  
 — Frascati  
 — Reworked

#Stave



Week

Comparison to prev. week

Berkeley: +1

Nikhef: +1

Daresbury: +1

Frascati: +1

Turin: +0

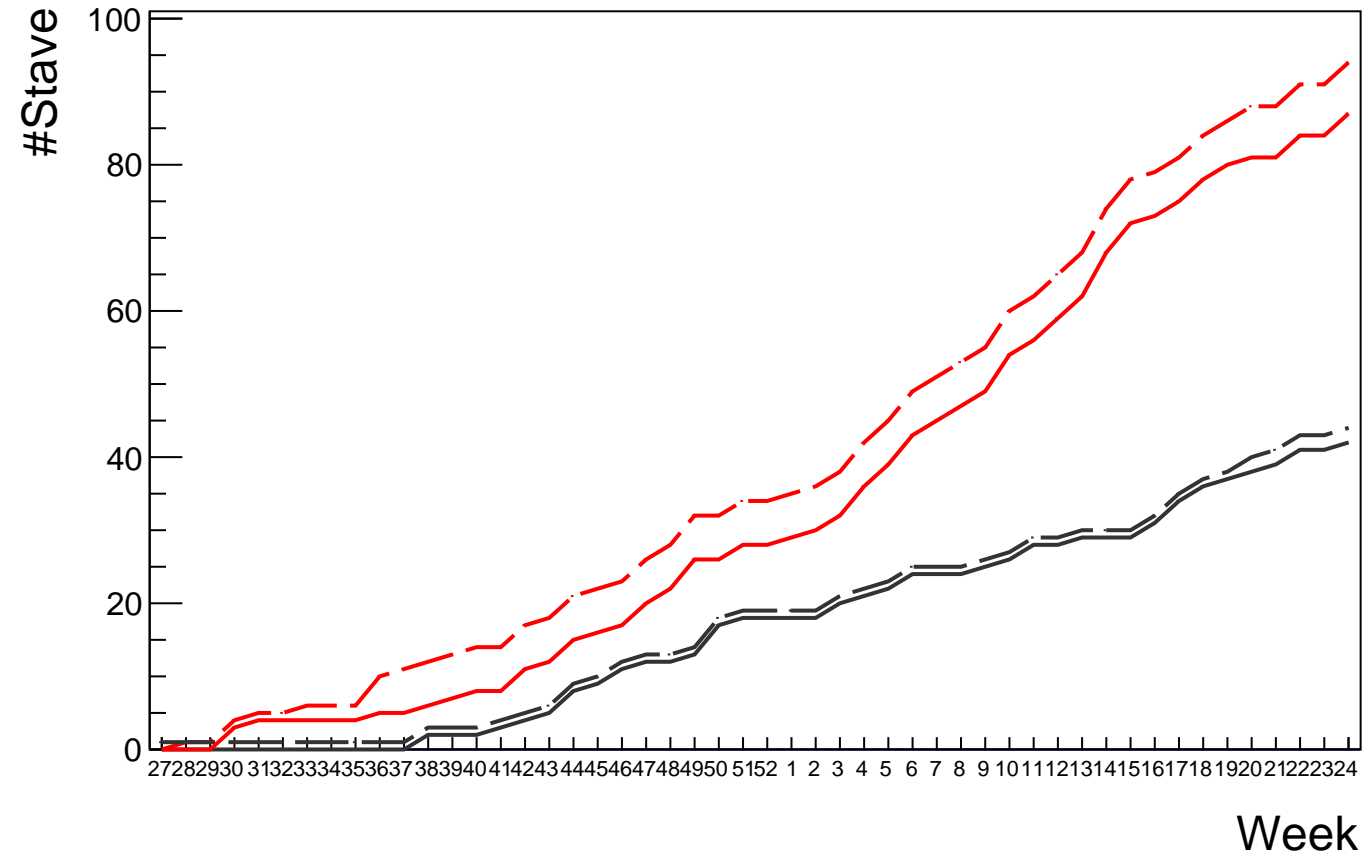
Reworked: +0



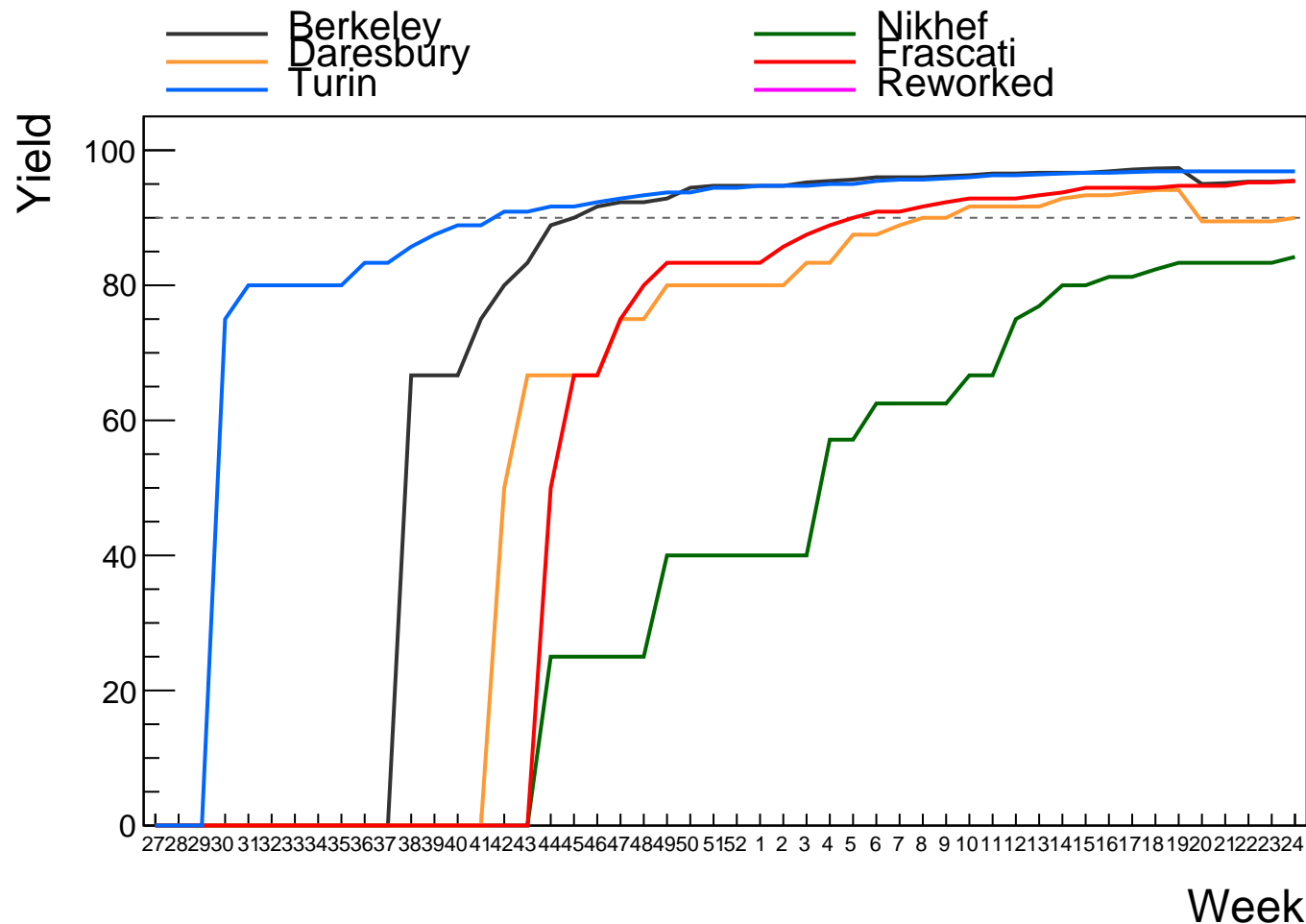
# Det. grade Stave vs time

ML(all)  
OL(all)

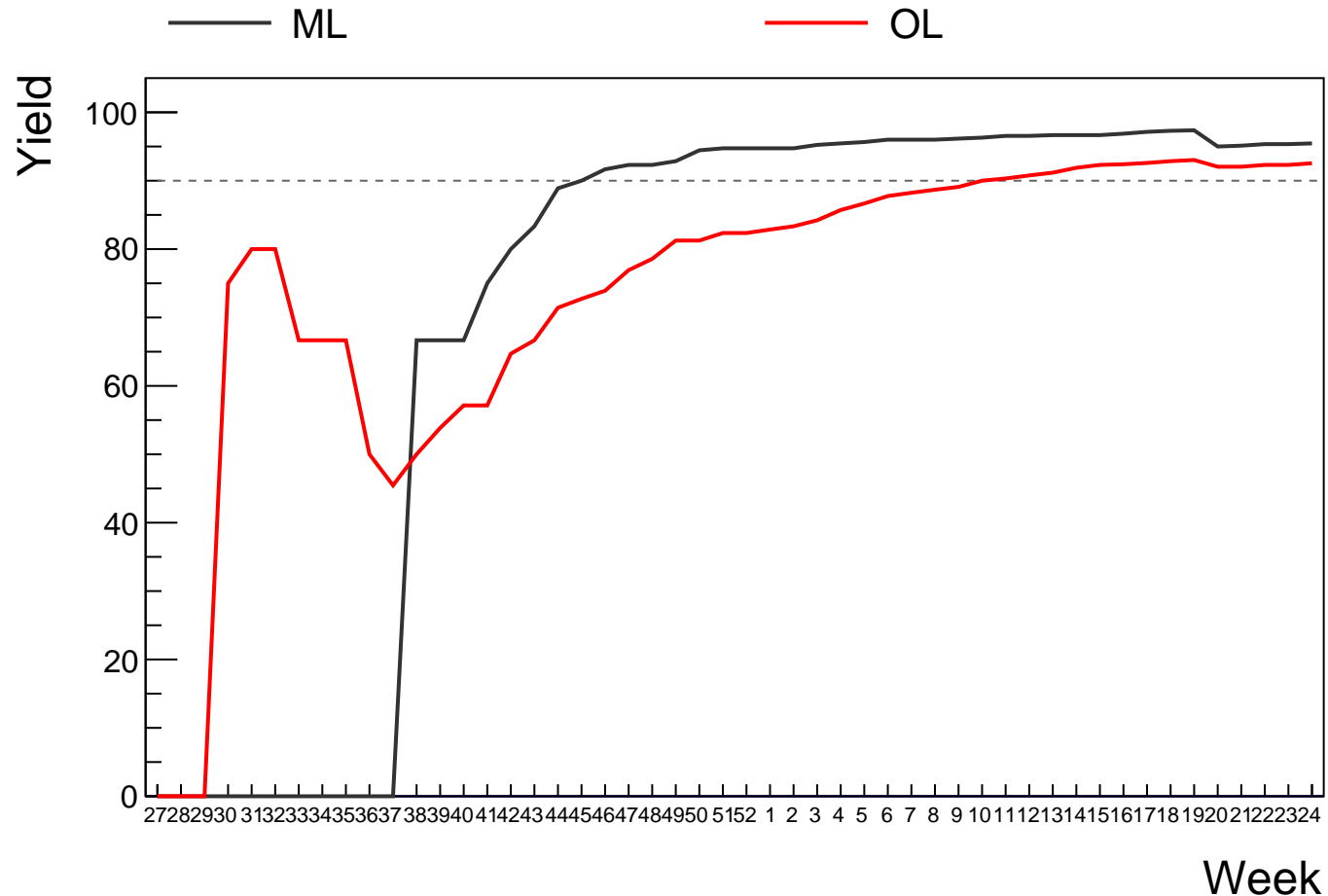
ML(DG)  
OL(DG)



# Stave yield vs time



# Stave yield vs time



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

- **Berkeley: 1.18(all) -- 1.15(DG)**
- **Nikhef: 0.44(all) -- 0.44(DG)**
- **Daresbury: 0.53(all) -- 0.50(DG)**
- **Frascati: 0.59(all) -- 0.59(DG)**
- **Turin: 0.79(all) -- 0.79(DG) → Prod. ended**

**OL: 2.35(all) -- 2.32(DG)**

**ML: 1.18(all) -- 1.15(DG)**

**Rework rate (from June 1st, 2019): 0.50(all) -- 0.50(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)

Stave reception @CERN

### **Staves qualified in the previous week**

**B-ML-Stave-040: (U,L)=(0, 0) bad chips**

**B-ML-Stave-038: (U,L)=(0, 0) bad chips**

**B-ML-Stave-037: (U,L)=(0, 0) bad chips**

**B-ML-Stave-036: (U,L)=(0, 0) bad chips**

### **Staves qualified this week**

**R-OL-Stave-001: (U,L)=(0, 0)**

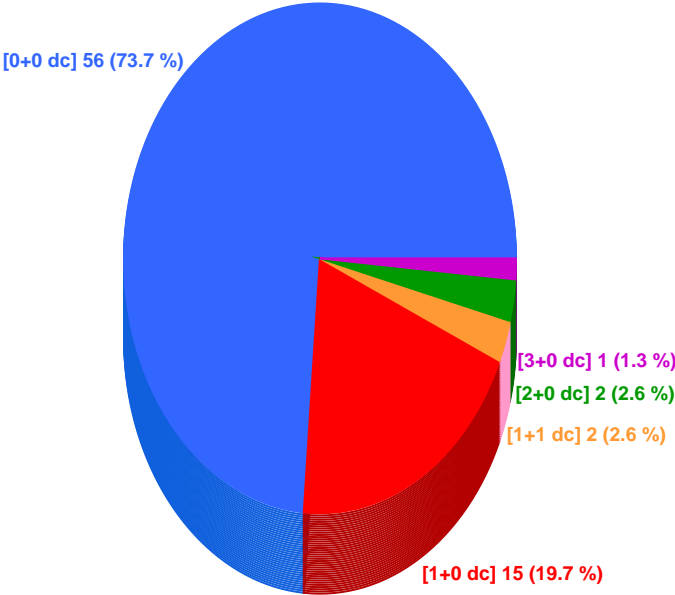
**D-OL-Stave-013: (U,L)=(0, 0)**

**A-OL-Stave-010: (U,L)=(0, 1)**

**B-ML-Stave-030: (U,L)=(0, 0)**

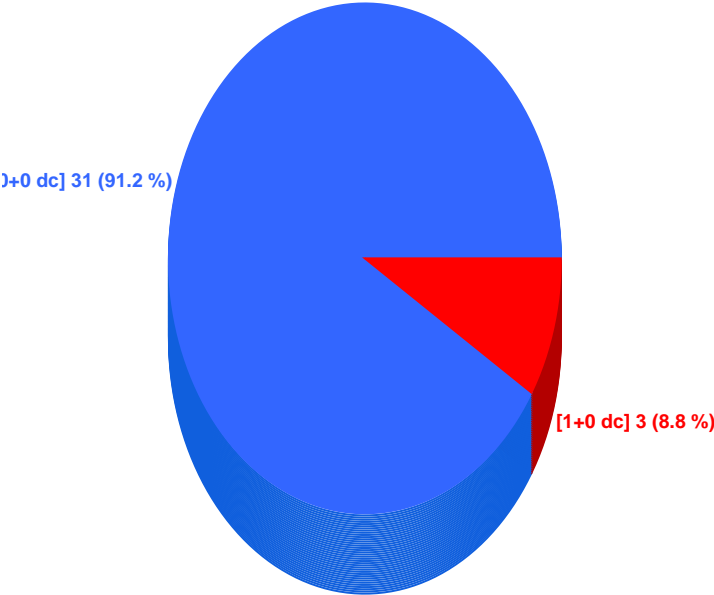
Stave - OL @CERN

98.68 % ok



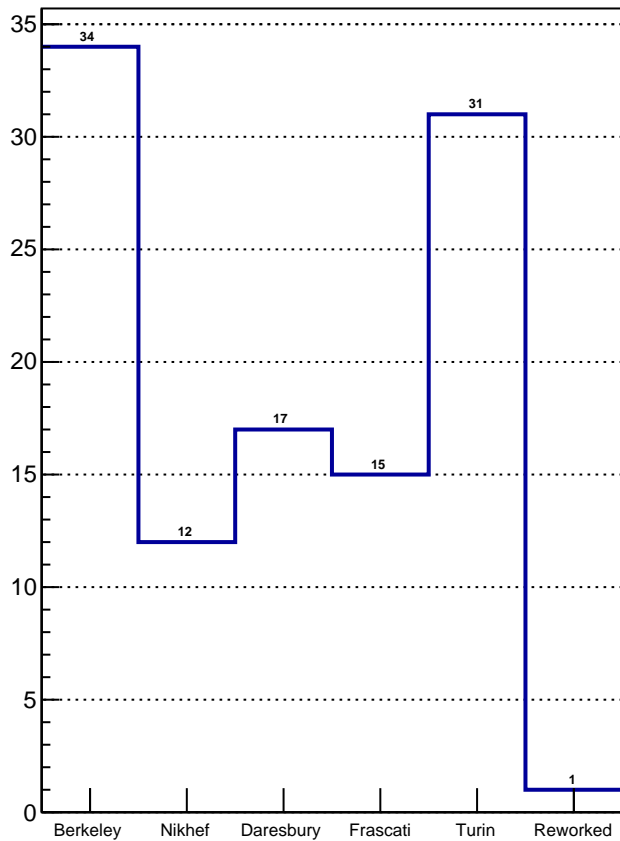
Stave - ML @CERN

100.00 % ok

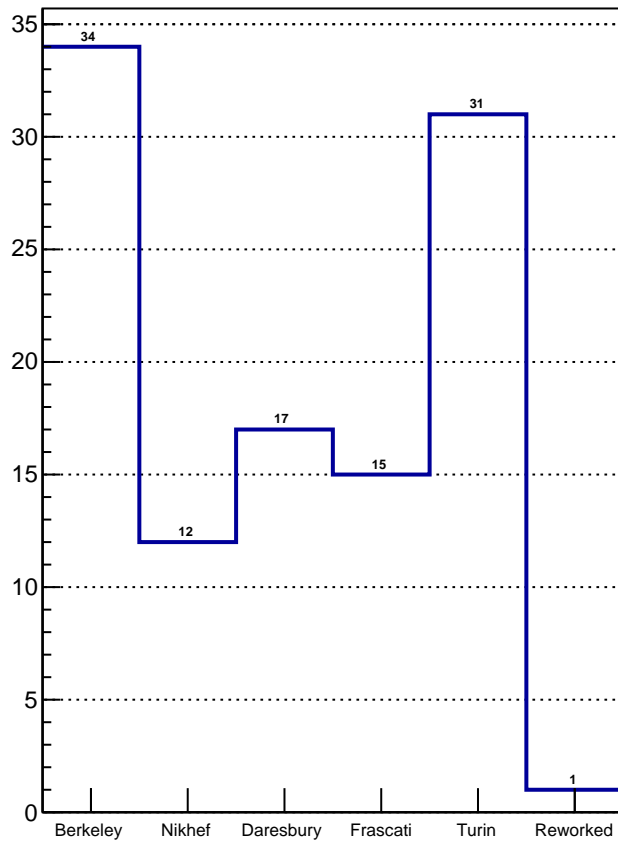




All Stave @CERN



Det. Grade Stave @CERN

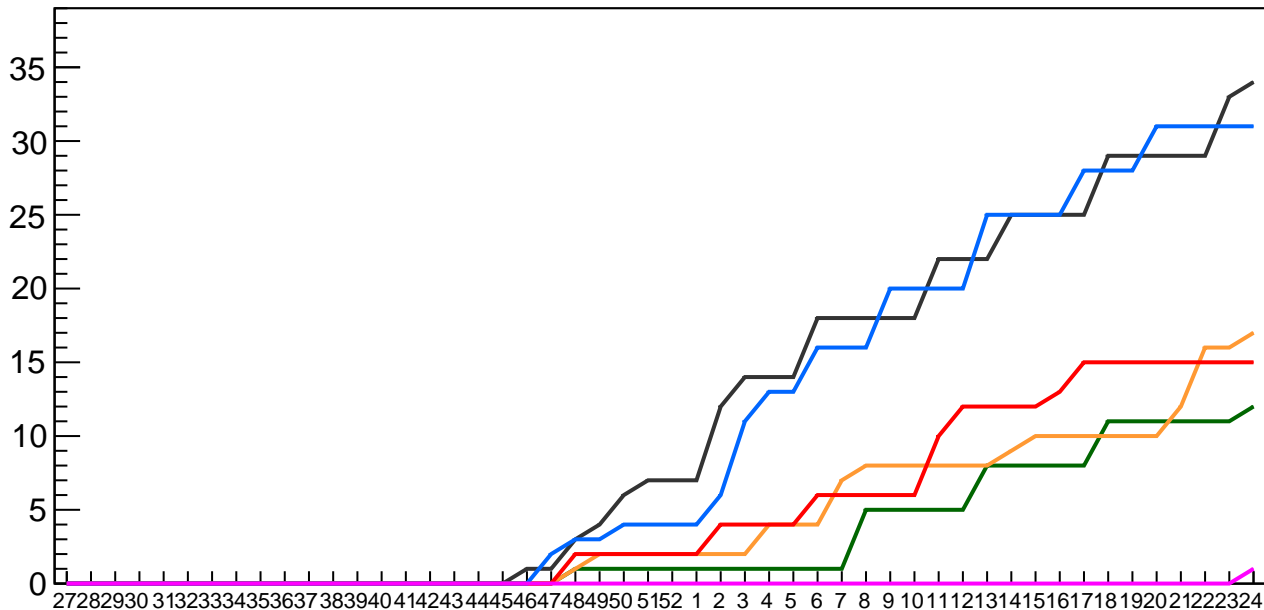


# Det. grade Stave vs time @CERN

Berkeley  
Daresbury  
Turin

Nikhef  
Frascati  
Reworked

#Stave



Week

Comparison to prev. week

Berkeley: +1

Nikhef: +1

Daresbury: +1

Frascati: +0

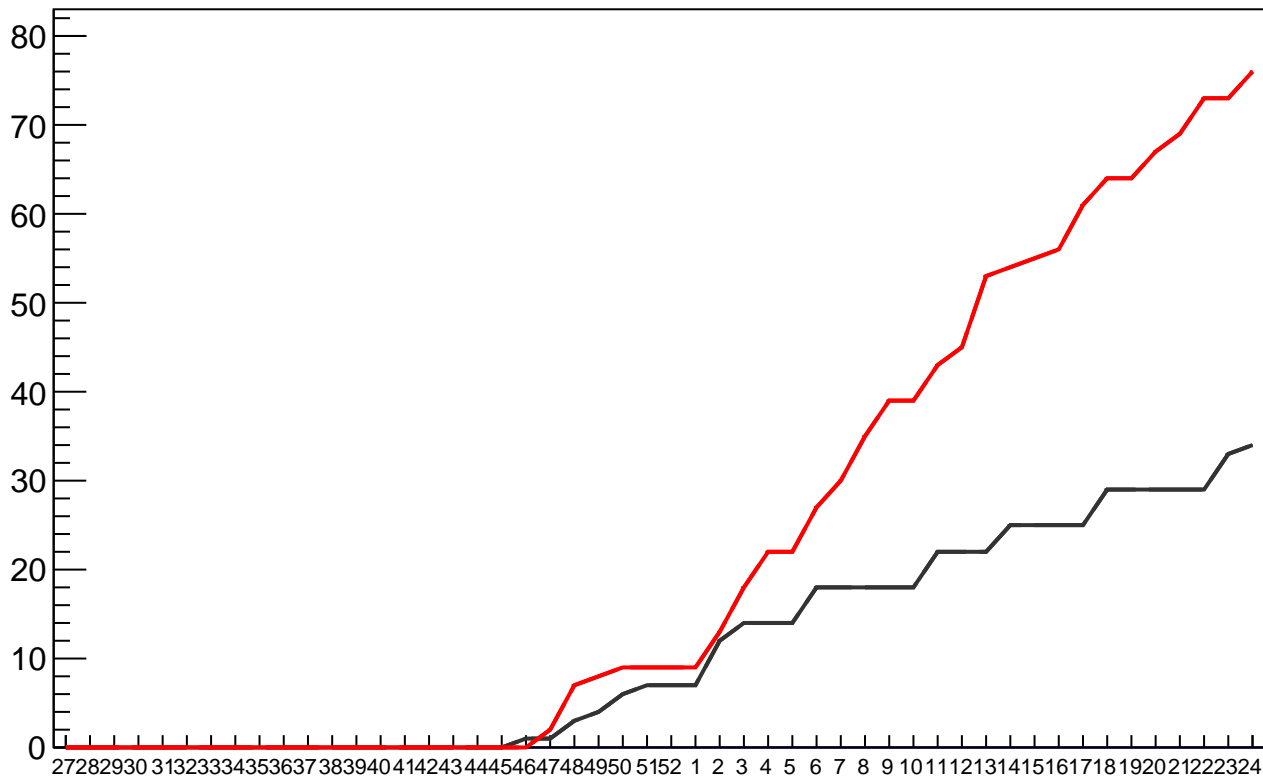
Turin: +0

# Det. grade Stave vs time @CERN

— ML(all)  
— OL(all)

— ML(DG)  
— OL(DG)

#Stave



Week

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

**Berkeley: 1.20(all) -- 1.20(DG)**

**Nikhef: 0.40(all) -- 0.40(DG)**

**Daresbury: 0.60(all) -- 0.60(DG)**

**Frascati: 0.52(all) -- 0.52(DG)**

**Turin: 1.12(all) -- 1.12(DG)**

**OL: 2.64(all) -- 2.64(DG)**

**ML: 1.20(all) -- 1.20(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-U-021: 0 bad chips**  
**D-OL-HS-L-022: 0 bad chips**  
**A-OL-HS-U-120: 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-021: 0 bad chips**  
**A-OL-HS-L-013: 0 bad chips**  
**B-ML-HS-U-050: 0 bad chips**  
**B-ML-HS-U-049: 0 bad chips**  
**B-ML-HS-U-048: 0 bad chips**  
**B-ML-HS-U-047: 0 bad chips**  
**B-ML-HS-U-046: 0 bad chips**  
**B-ML-HS-U-014: 0 bad chips**  
**B-ML-HS-L-148: 0 bad chips**  
**B-ML-HS-L-049: 0 bad chips**  
**B-ML-HS-L-047: 0 bad chips**  
**B-ML-HS-L-046: 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**

**T-OL-Stave-003: (U,L) = (6, 2) bad chips**

**D-OL-Stave-001: (U,L) = (0, 15) 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**