Recap and OASys

RIKEN/RBRC
Itaru Nakagawa

Scintillator

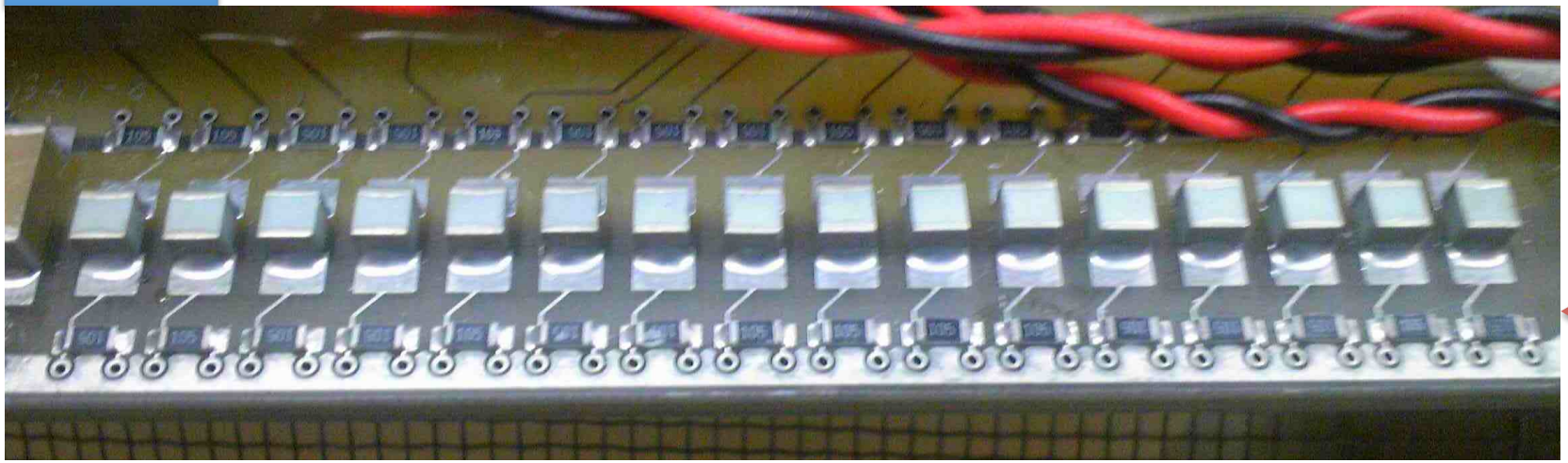
Last Friday
Photomultiplier was broken.

Replaced
Phototube by Yoshimitus.

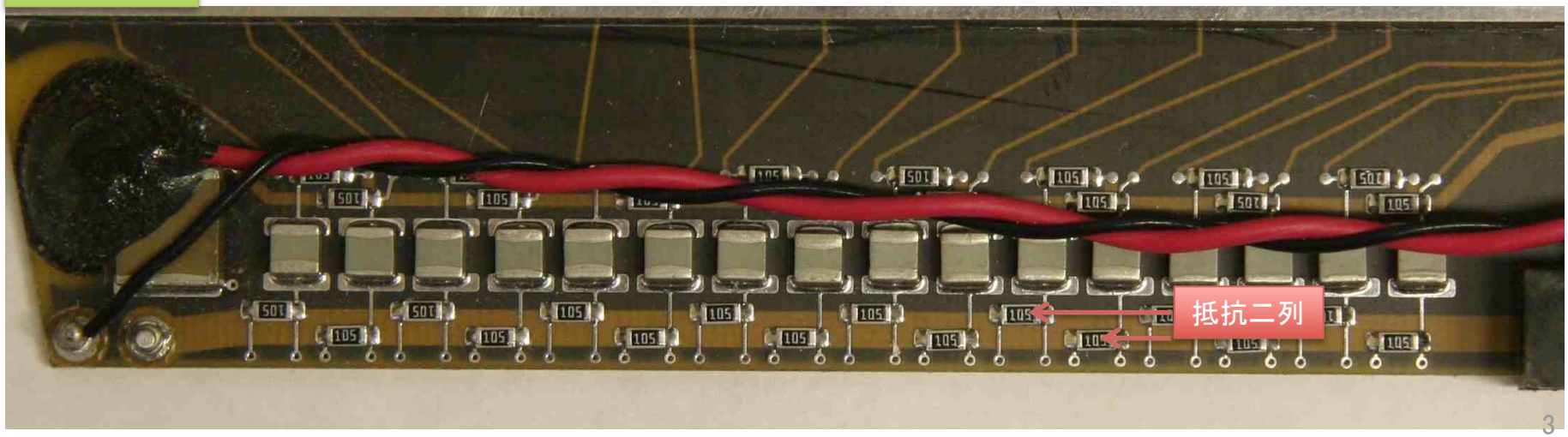
Repaired Scintillator Counter
works fine.

Design Difference btwn St-1 and St-3

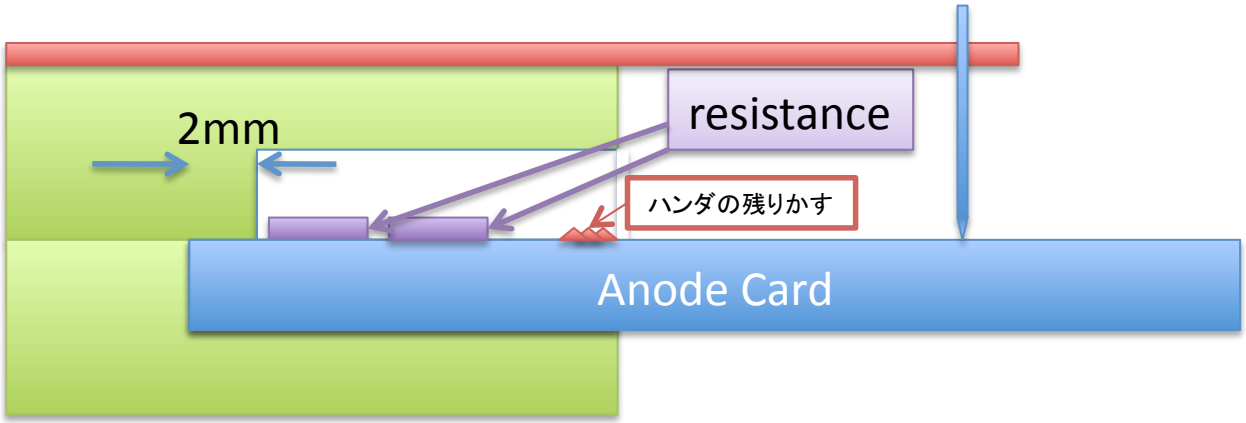
Station-1



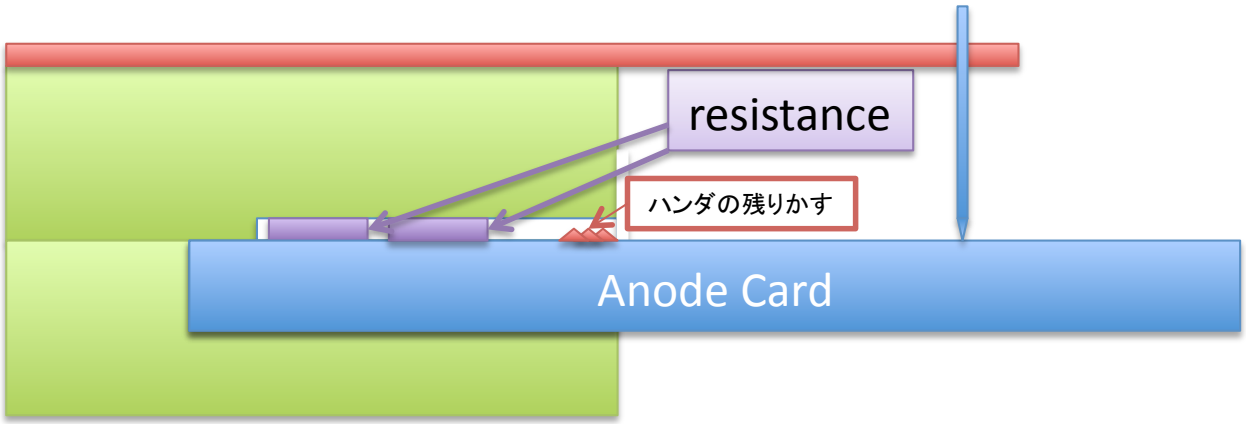
Station-3



コの字形状案

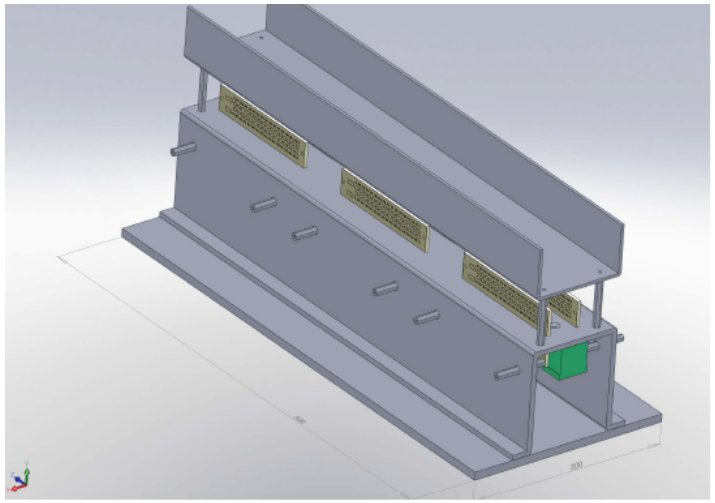


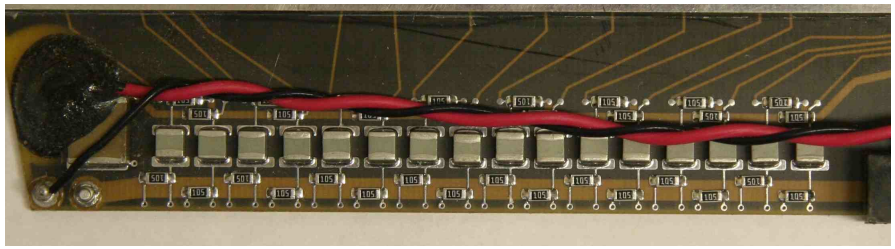
これで安定するか？→テストが必要。



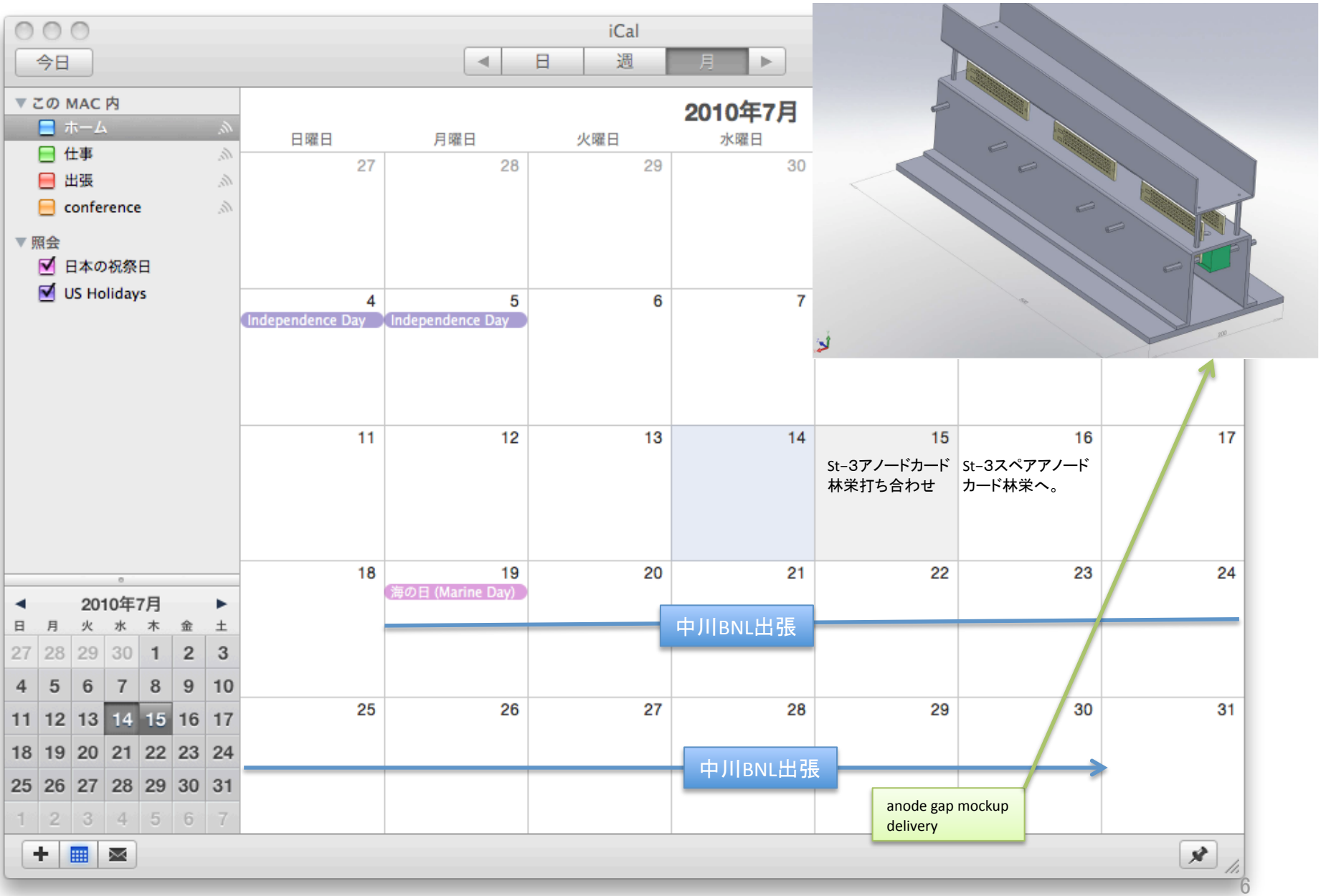
Station-3 Customization

1. Build Station-3 Anode Mockup
2. Duplicate Station-3 Anode Card
3. Customize Clamp for Station-3





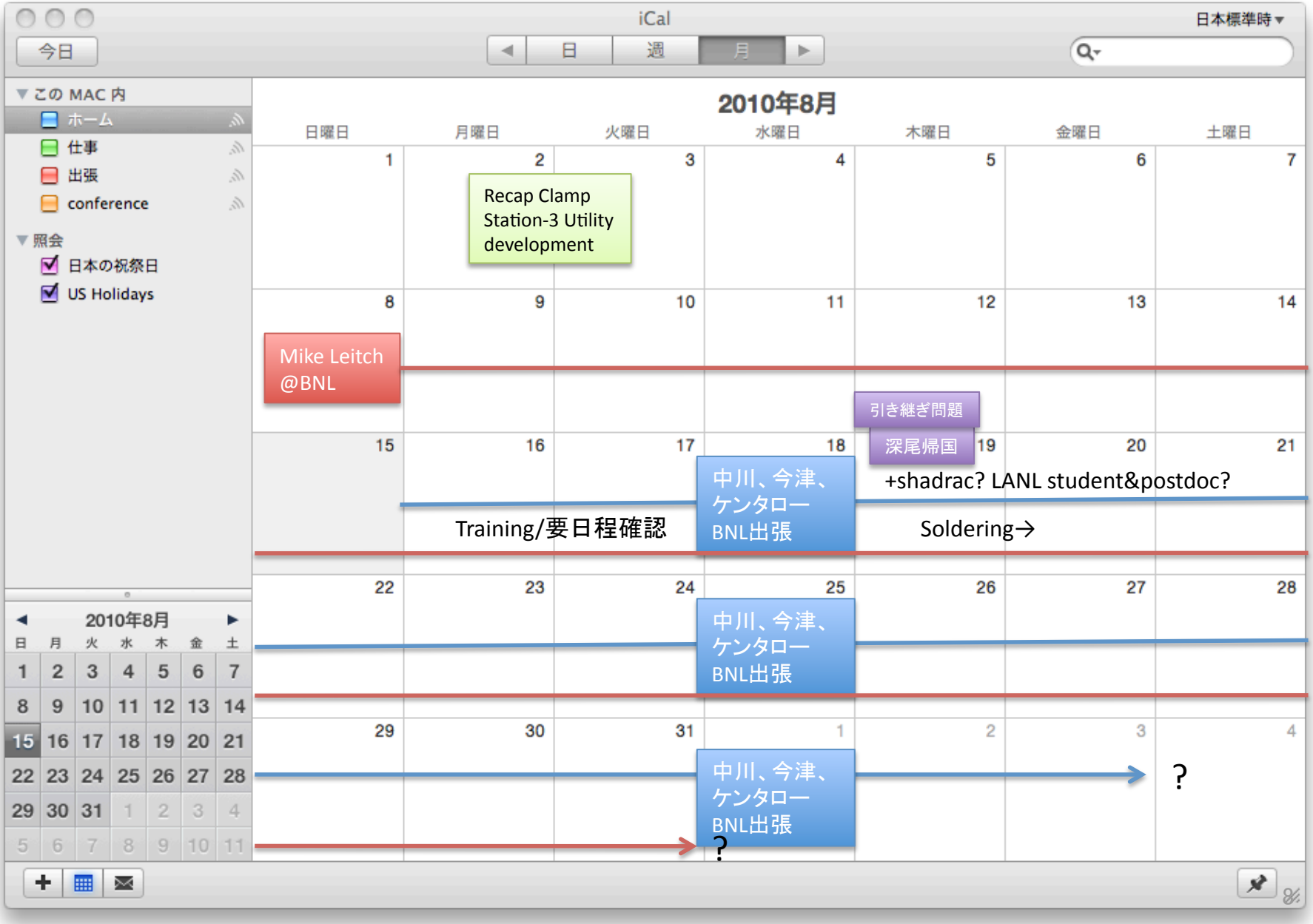
Recap Schedule (July)



To be done in July

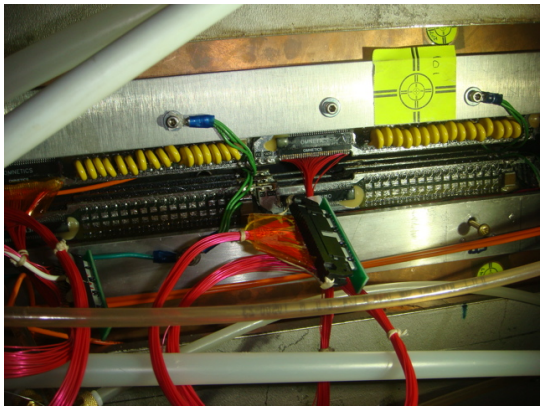
- Itaru
  - Communication with REPIC via e-mail for St-3 anode card duplication and the anode gap mock up.
  - Customize Recap Clamp for Station-3
- Yoshimitsu
  - Optimize Measurement Precision
    - Scintillator Size, Location, w/ and w/o Collimator
    - Cosmic or 22Na or 90Sr
  - Optimization of Capacitor and Resistance combination (need soldering)
    - 10pF, 100pF, 500pF, 1000pF
    - 0Ω, 100Ω, 360Ω, 1MΩ

Recap Schedule (Aug)

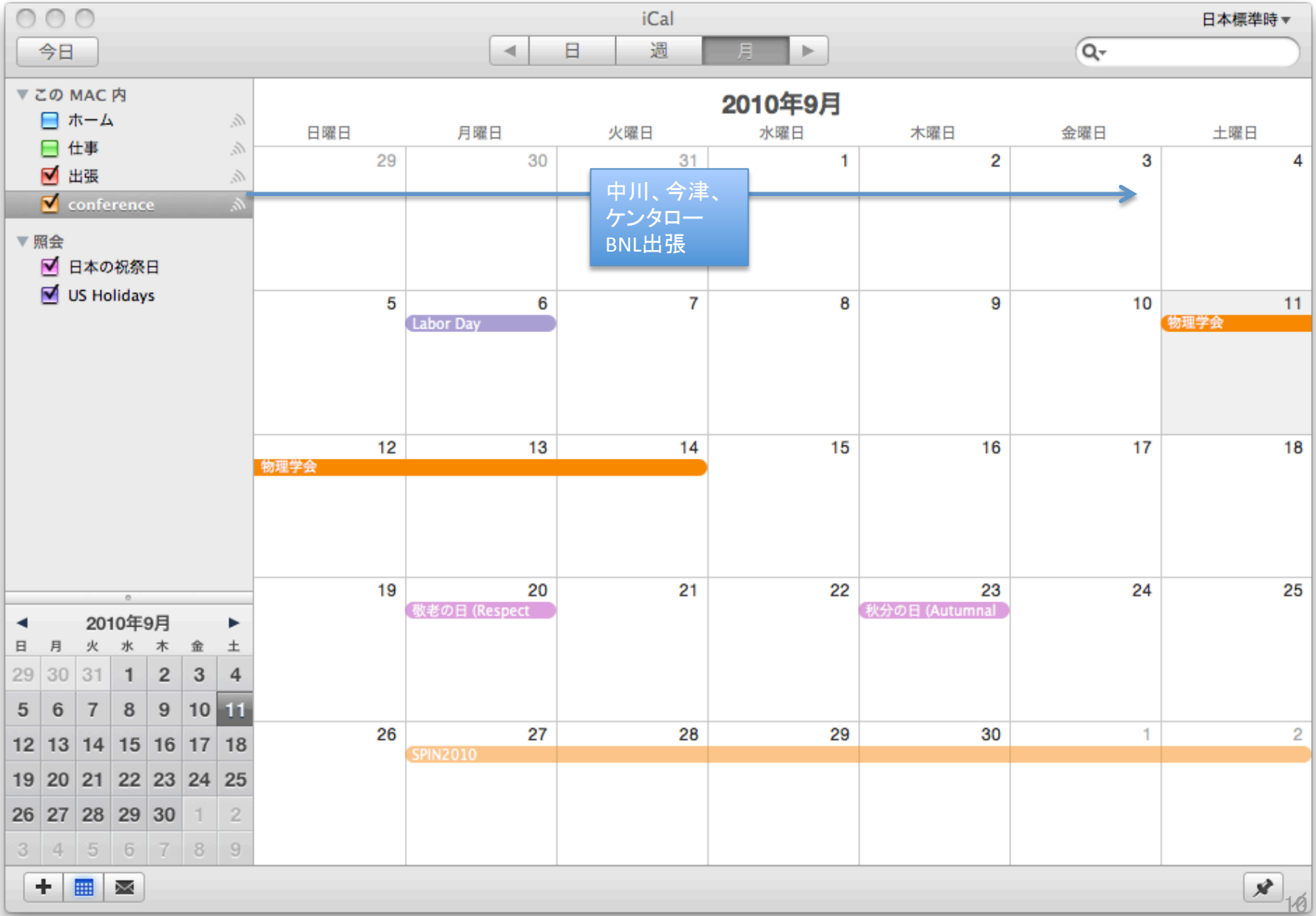


To be done in August

- Development of installation utility of station-3 clip.
- Customize Recap clamp for Station-3
- Soldering rehearsal for Station-1 Recap
  - Special Tools?
  - Anode cardの奥まり具合再現
  - モノ落とし対策→safety net?
- 深尾さんに引き継ぎ可能か？

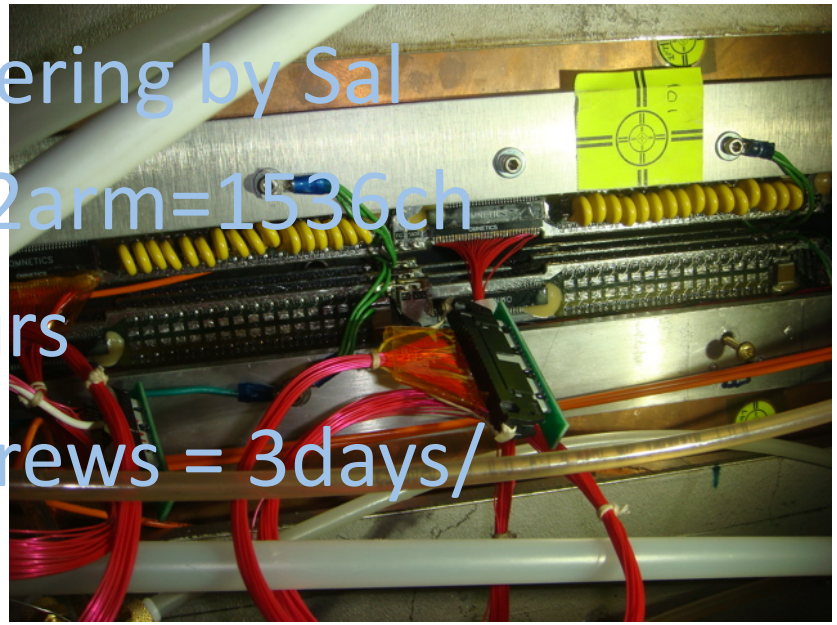


Recap Schedule (Septmeber)



Station-1 Recap Concerns

- Took 32ch/1~2hous for soldering by Sal
- Total 96ch×1gap×8octants×2arm=1536ch
- 1536ch/32ch/hour = 48 hours
- 48 hours / 8 hours/day / 2 crews = 3days/crews
- Practically 1 week to complete by 2 dedicated crews (including coating removal ~ 1hour/octant)

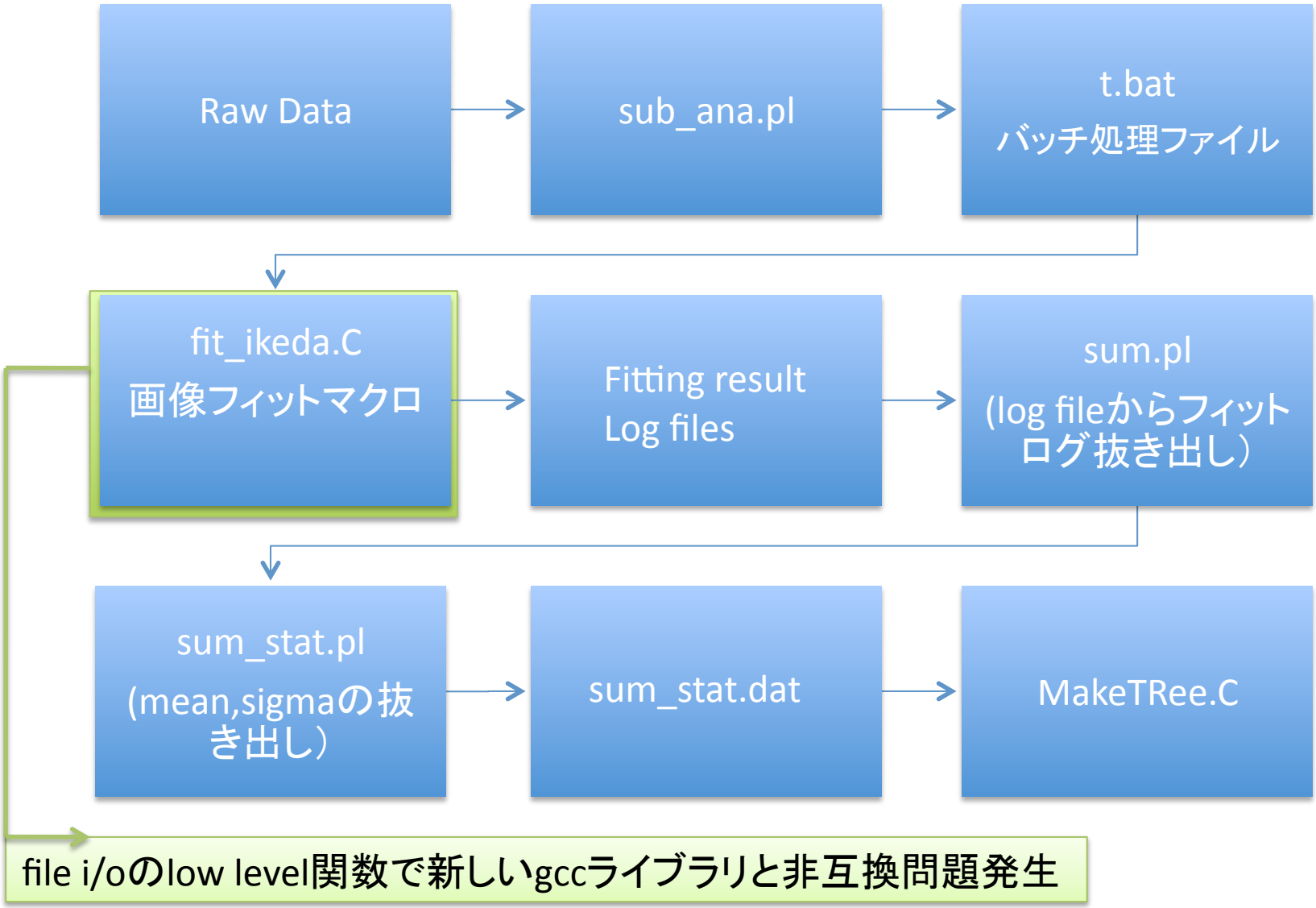


Crews	2	3	4	5
per day	110	73	55	43
total	768	512	384	307

To be done in 7days

OASys

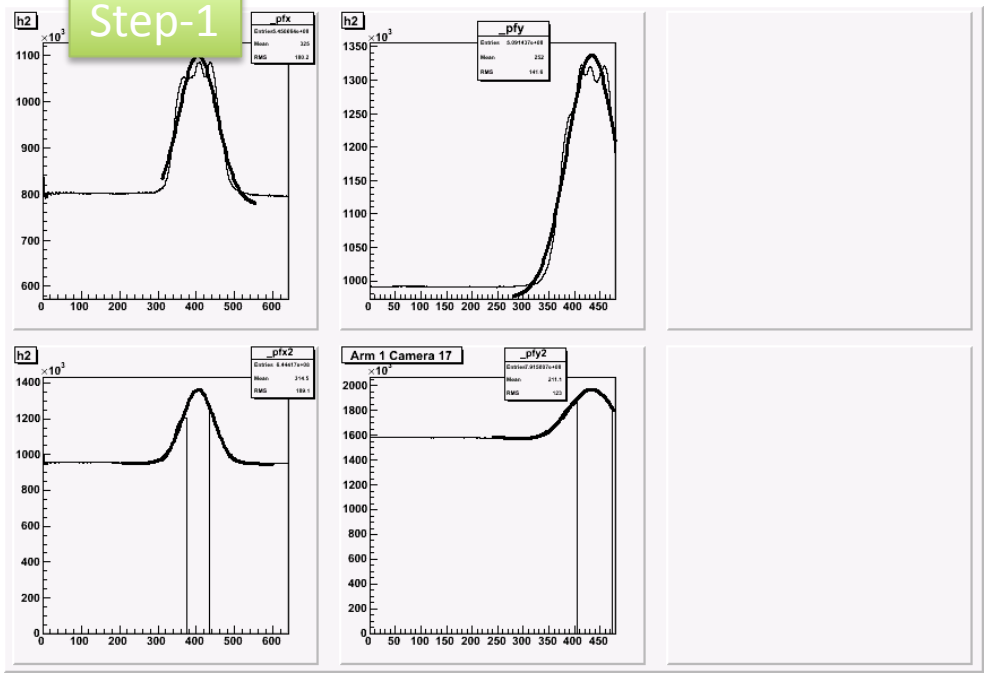
OASys解析の流れ


Raw Data
sub_ana.pl
t.bat
バッチ処理ファイル
fit_ikeda.C
画像フィットマクロ
Fitting result
Log files
sum.pl
(log fileからフィット
ログ抜き出し)
sum_stat.pl
(mean,sigmaの抜
き出し)
sum_stat.dat
MakeTRee.C
file i/oのlow level関数で新しいgccライブラリと非互換問題発生

Short Term Plan

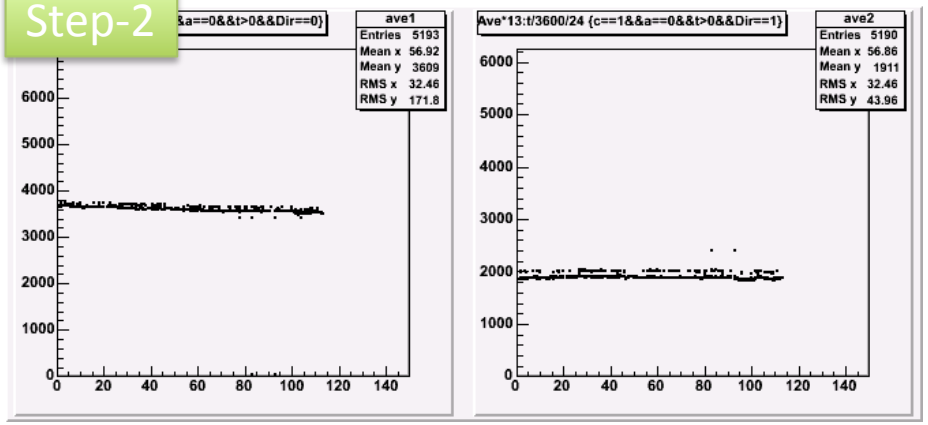
Tree構造に。

Step-1



Fitが適切におこわなわれているか確認。

Step-2

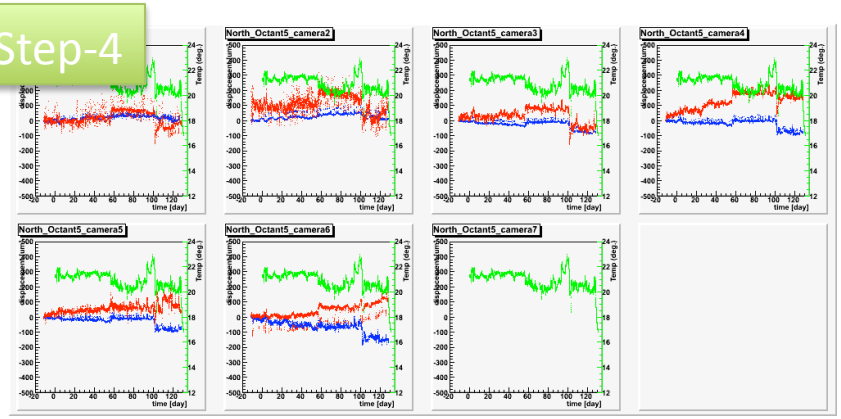


Step-3

NMT4ADAMSlot2AI00	MUTRIG N ADTX T0	2010-07-14	04:00:41	-0.001	-0.001
NMT4ADAMSlot2AI01	MUTRIG N ADTX T1	2010-07-14	04:00:41	0	0
NMT4ADAMSlot2AI02	MUTRIG N ADTX T2	2010-07-14	04:00:41	0	0
NMT4ADAMSlot2AI03	MUTRIG N ADTX T3	2010-07-14	04:00:41	0	0
NMT4ADAMSlot2AI04	MUTRIG N ADTX T4	2010-07-14	04:00:41	0	0
NMT4ADAMSlot2AI05	MUTRIG N ADTX T5	2010-07-14	04:00:41	0	0
NMT4ADAMSlot2AI06	MUTRIG N ADTX T6	2010-07-14	04:00:41	0	0
NMT4ADAMSlot2AI07	MUTRIG N ADTX T7	2010-07-14	04:00:41	0	0
NMT4ADAMSlot0AI06	MUTRIG N Air Temperature	2010-07-14	04:00:41	16.82	16.82
NMT4ADAMSlot0AI00	MUTRIG N Inlet Water Temperature	2010-07-14	04:00:40	13.08	13.08
NMT4ADAMSlot4AI00	MUTRIG N Magnet T1	2010-07-14	04:00:42	16.34	16.34
NMT4ADAMSlot4AI01	MUTRIG N Magnet T2	2010-07-14	04:00:42	16.52	16.52
NMT4ADAMSlot4AI02	MUTRIG N Magnet T3	2010-07-14	04:00:42	15.77	15.77
NMT4ADAMSlot4AI03	MUTRIG N Magnet T4	2010-07-14	04:00:42	15.98	15.98
NMT4ADAMSlot4AI04	MUTRIG N Magnet T5	2010-07-14	04:00:42	15.98	15.98
NMT4ADAMSlot0AI01	MUTRIG N Outlet Water Temperature A	2010-07-14	04:00:40	13.44	13.44
NMT4ADAMSlot0AI02	MUTRIG N Outlet Water Temperature B	2010-07-14	04:00:40	13.44	13.44
NMT4ADAMSlot0AI03	MUTRIG N Outlet Water Temperature C	2010-07-14	04:00:40	13.92	13.92
NMT4ADAMSlot0AI04	MUTRIG N S1 LDO A	2010-07-14	04:00:40	16.67	16.67
NMT4ADAMSlot0AI05	MUTRIG N S1 LDO B	2010-07-14	04:00:40	16.58	16.58
NMT43Slot2AI00	MUTRIG N S1Q1 I	2010-06-30	17:21:33	0.007	0.007
NMT43Slot0AI00	MUTRIG N S1Q1 V	2010-06-30	17:21:32	7.703	7.703
NMT43Slot2AI01	MUTRIG N S1Q2 I	2010-06-30	17:21:33	0.002	0.002
NMT43Slot0AI01	MUTRIG N S1Q2 V	2010-06-30	17:21:32	7.706	7.706
NMT43Slot2AI02	MUTRIG N S1Q3 I	2010-06-30	17:21:33	1.27	1.27
NMT43Slot0AI02	MUTRIG N S1Q3 V	2010-06-30	17:21:32	7.796	7.796
NMT43Slot2AI03	MUTRIG N S1Q4 I	2010-06-30	17:21:33	0.015	0.015
NMT43Slot0AI03	MUTRIG N S1Q4 V	2010-06-30	17:21:32	7.782	7.782
NMT43Slot2AI04	MUTRIG N S2O1/2 I	2010-06-30	17:21:33	0.023	0.023
NMT43Slot0AI04	MUTRIG N S2O1/2 V	2010-06-30	17:21:32	8.179	8.179
NMT4ADAMSlot3AI00	MUTRIG N S2O3 LDO A	2010-07-14	04:00:41	16.16	16.16
NMT4ADAMSlot3AI02	MUTRIG N S2O3 LDO B	2010-07-14	04:00:41	16.97	16.97
NMT43Slot2AI05	MUTRIG N S2O3/4 I	2010-06-30	17:21:33	0.023	0.023
NMT43Slot0AI05	MUTRIG N S2O3/4 V	2010-06-30	17:21:32	7.782	7.782
NMT43Slot2AI06	MUTRIG N S2O5/6 I	2010-06-30	17:21:33	0.025	0.025
NMT43Slot0AI06	MUTRIG N S2O5/6 V	2010-06-30	17:21:32	8.191	8.191
NMT43Slot2AI07	MUTRIG N S2O7/8 I	2010-06-30	17:21:33	0.02	0.02
NMT43Slot0AI07	MUTRIG N S2O7/8 V	2010-06-30	17:21:32	8.285	8.285
NMT43Slot3AI00	MUTRIG N S3O1 I	2010-06-30	17:21:33	0.014	0.014

温度、湿度情報を取得

Step-4



Run10湿度、温度とのコリレーション

二宮、(今津)さんに技術的アシスト期待