



In2p3

LLR

FEV7/DIF testbench at LLR

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DIF

- Proto1
 - In use at cambridge
 - FW under dev. at LLR : try to sync. with Cambridge
- Eudet
 - Being tested at Cambridge

- DIFp for DCC tests
- DIFp DIFe

june	1	1
nov	3	5-6
-----2010		
feb	3	7
May	3	15
oct	3	30

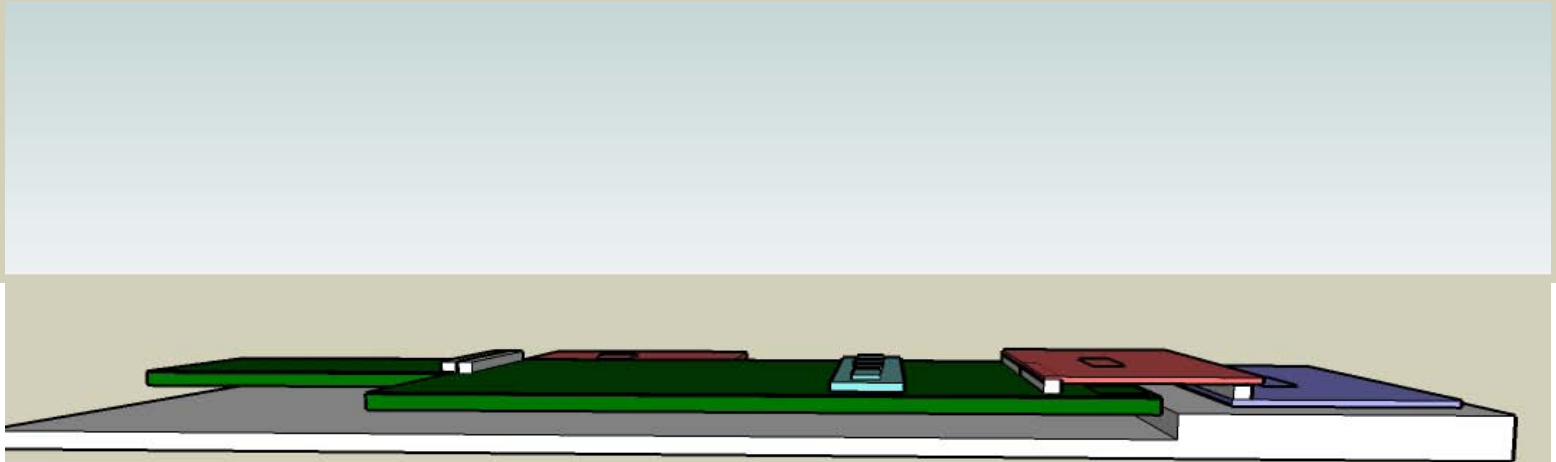
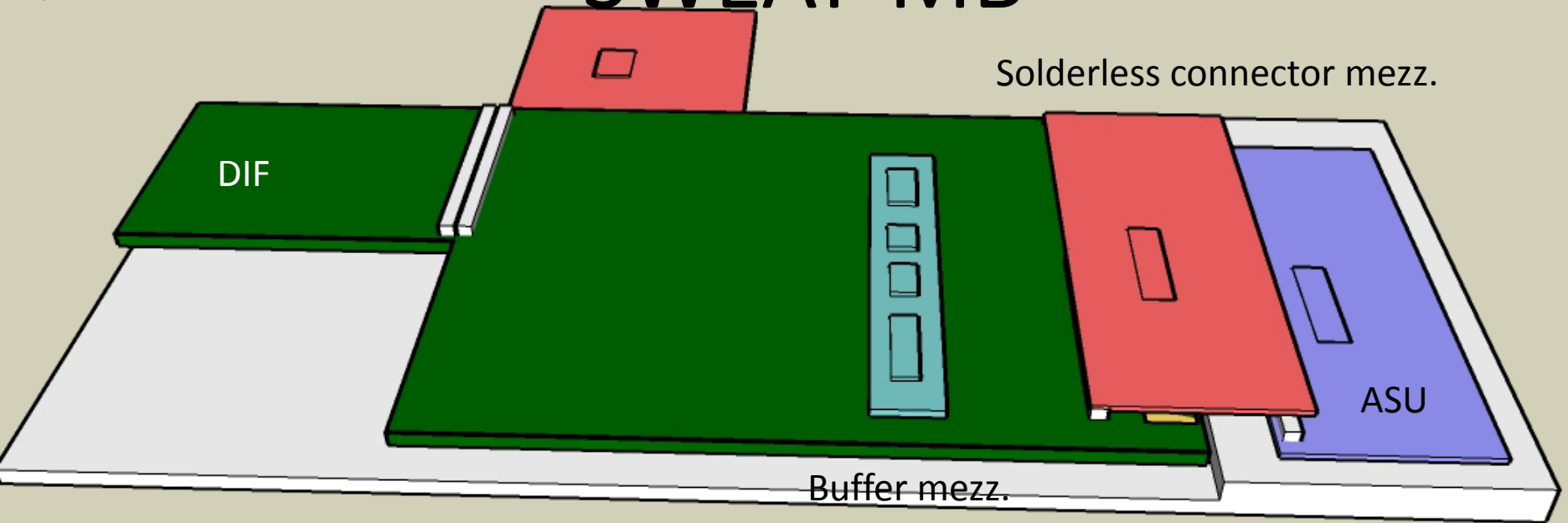
adapter

- SWEAT-MB (Si-W Ecal AdapTer-MainBoard)
 - Main board
 - Mezzanine for Power, tx/rx buffers, connector development
 - Expected end of June (no mezzanines)
 - Also for Cosmic test bench
- SWEAT-Eudet
 - Version for eudet
 - Extended size (perpendicular tower)
 - Spring'10

Not to scale

SWEAT-MB

Solderless connector mezz.



Y

- CCC (clk+trig) + DCC/LDA (data) to a single DIF HDMI connector
- Allows to work without LDA or with a DCC (no clk/trigger)
- Use of external generator
- Will have few of them

Plans ?

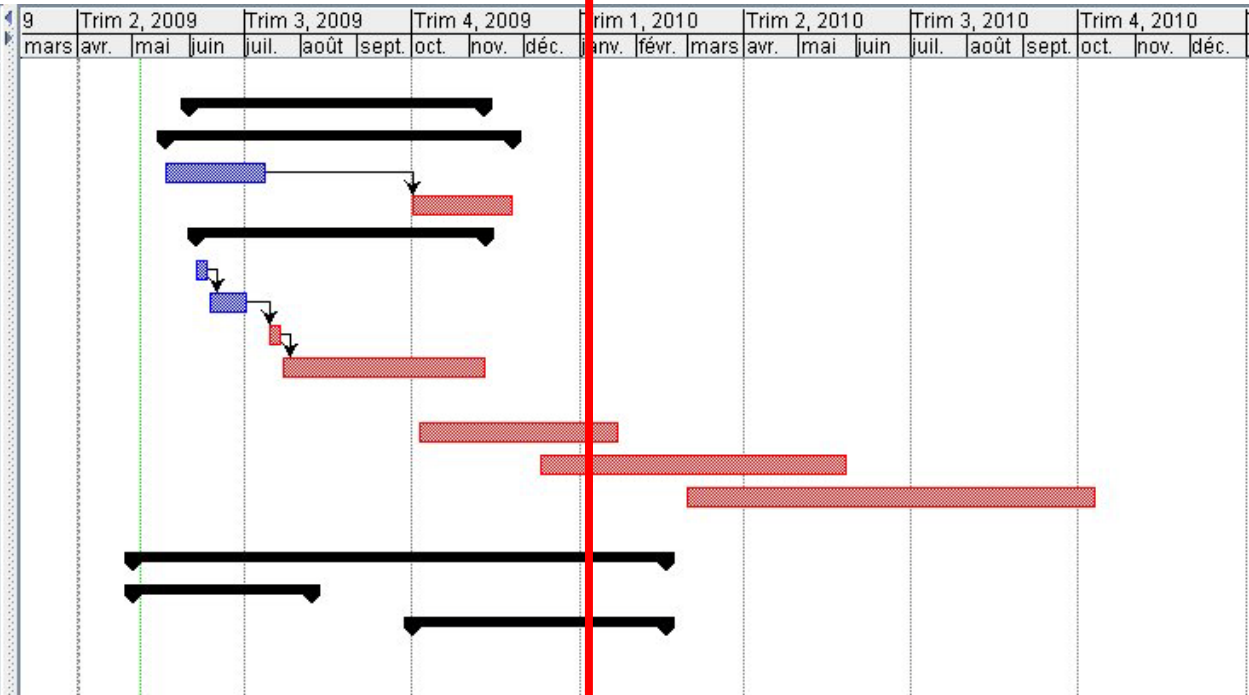
- We expect the FEV7_CIP (Chip In Package) by mid june. We will enable a test bench for this board together with a prototype for the adapter board (doc sent to Bart&Maurice yesterday). It would be better if we could have a eudet DIF (DIFe).

Then we expect the FEV7_COB (Chip On Board, bonded) by October. Most probably the test bench would be duplicated at LAL, so a 2nd DIFe could be useful.

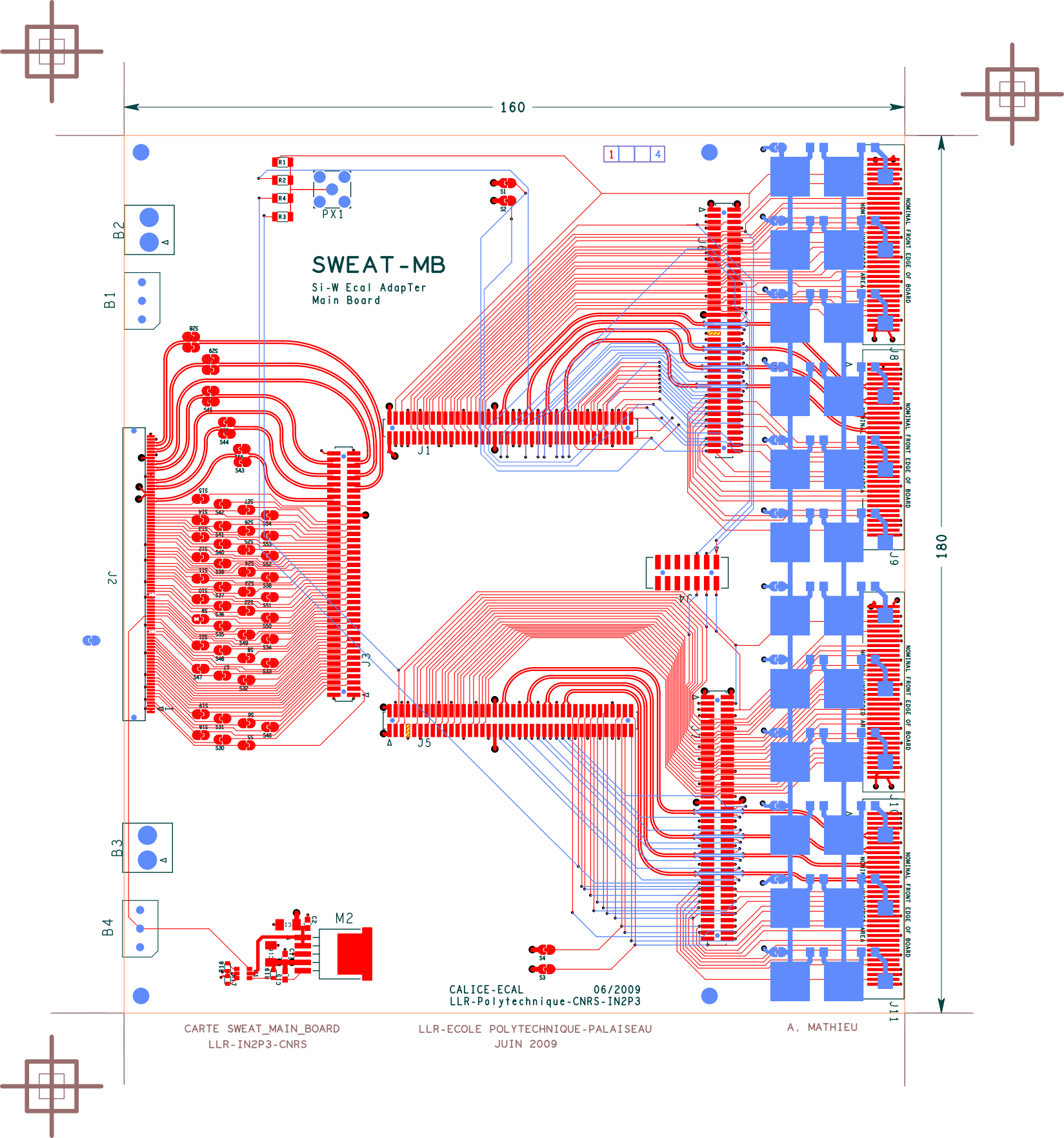
Intermediate fake short slab based on FEV7 could be built with available thinks (no additional DIF required: same test bench).

The first FEV8 with 16 SKIROC2 could be available by the end of the year (time to test the chips, solve bonding issues, etc...). It means that the first short slab is not expected by spring'10. From spring'10 to winter'10 our need of DIFe will increase ie 10 in may, 20 in July, 30 in october following the production of slabs).

Nom	Durée	Début
☑ DAQ&DCC tests	116 jours?	01/06/09 08:00
☐ Adapter board	137 jours?	19/05/09 08:00
SWEAT-MB	40 jours?	19/05/09 08:00
SWEAT-V1	40 jours?	01/10/09 08:00
☐ FEV7_COB_tests	113 jours?	05/06/09 08:00
Connectivity	5 jours?	05/06/09 08:00
Basic chip op (LAL)	15 jours?	12/06/09 08:00
Glued on adapter tests with DIF	80 jours?	22/07/09 08:00
FEV7_CIP_tests	80 jours	05/10/09 08:00
FEV8 + cosmics	120 jours	10/12/09 09:00
Short slab test	160 jours?	01/03/10 09:00
☐ DIF firmware	209 jours?	01/05/09 08:00
☑ Basic	71 jours?	01/05/09 08:00
☑ Core	100 jours?	01/10/09 08:00



2010



SWEAT - MB
Si-W Ecal Adapter
Main Board

160

180

B2

B1

B3

B4

CARTE SWEAT_MAIN_BOARD
LLR-IN2P3-CNRS

LLR-ECOLE POLYTECHNIQUE-PALaiseAU
JUN 2009

A. MATHIEU

CALICE-ECAL 06/2009
LLR-Polytechnique-CNRS-IN2P3

NOMINAL FRONT EDGE OF BOARD

NOMINAL FRONT EDGE OF BOARD

NOMINAL FRONT EDGE OF BOARD

NOMINAL FRONT EDGE OF BOARD

J11

J1

J4

J8

J9

J1

J5

J3

M2

R1

R2

R4

R3

PX1

S4

S3

1

4

R25

R25

R25

R25

R25

R25

R25

R25

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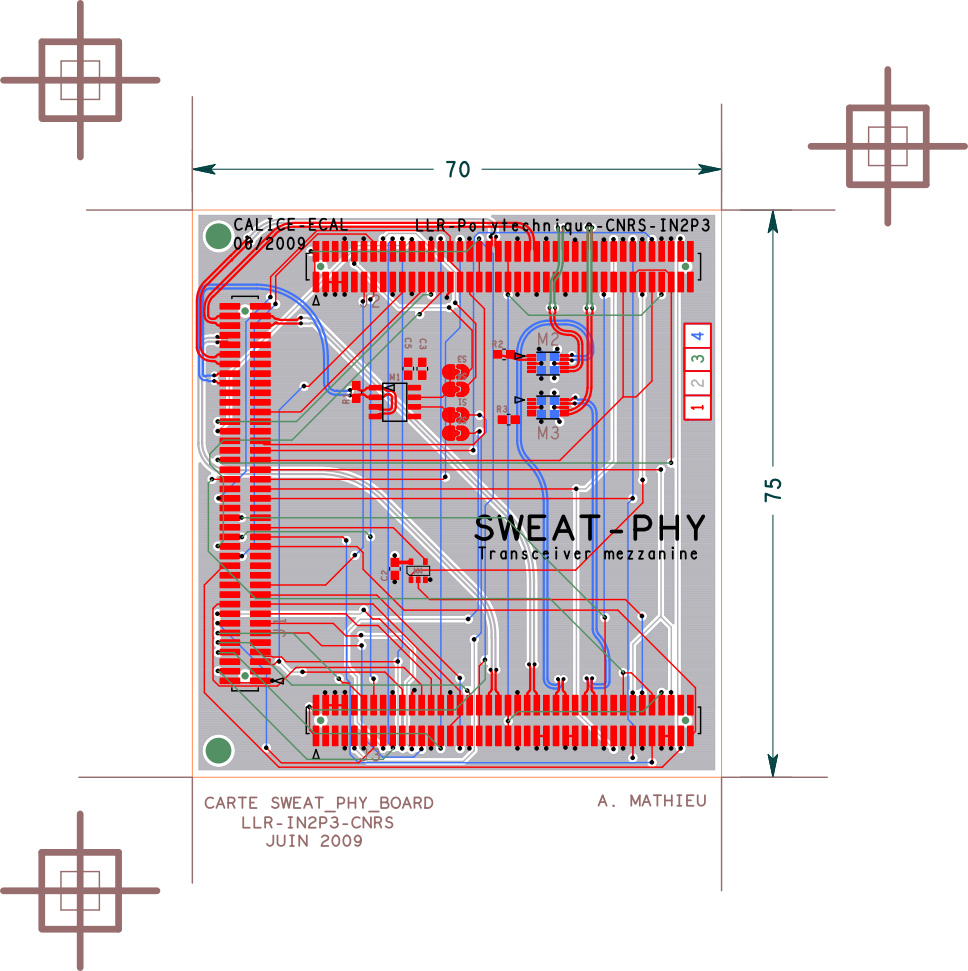
R25

R25

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R25



CALICE-ECAL LLR-Polytechnique-CNRS-IN2P3
08/2009

1 2 3 4

SWEAT-PHY
Transceiver mezzanine

CARTE SWEAT_PHY_BOARD
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JUN 2009

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