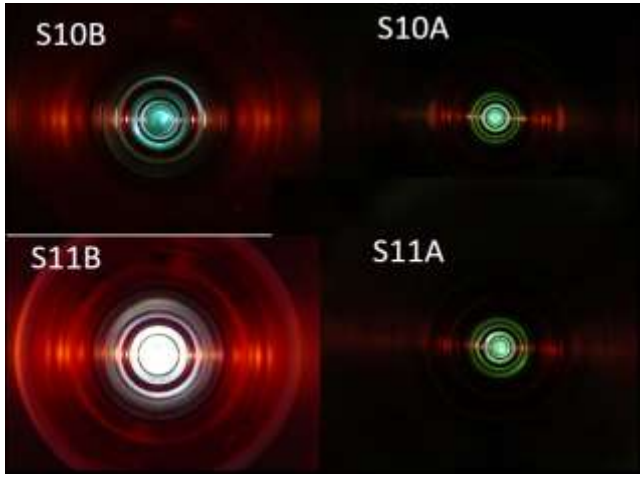
Status after April 4th (Linac #1)

Investigation for the interior of cavity

- Setting camera to measure interior
- In so far, no serious problems were found

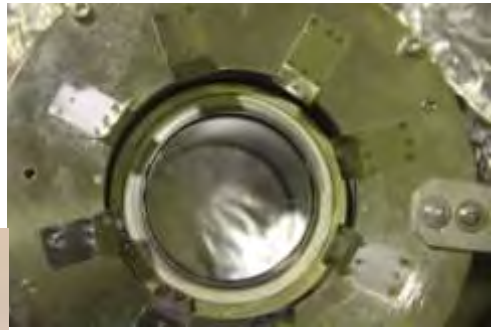
← Measurement

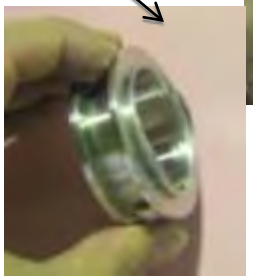
Camera view →



Damage for Monitors

- About 15 current monitors had problems.





Examination of all monitors is not a trivial task. Removal together with quadruple magnet.

Status after April 4th (Linac #2)

- Temporarily installed dryer (Humidity still 70% because of water leak from the floor).

- Vacuum pumps with waters were tested and installed

Vacuum pumps after inspection →

← Pumps with waters inside.

bolts that were dropped.

- Many bolts were dropped from the crane at the top.

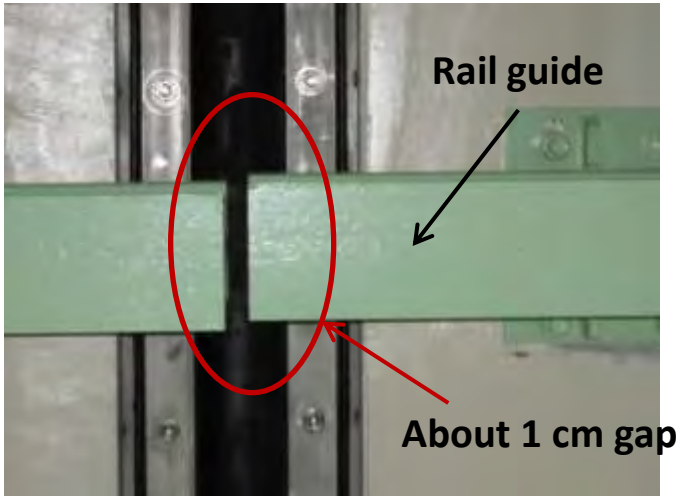
→

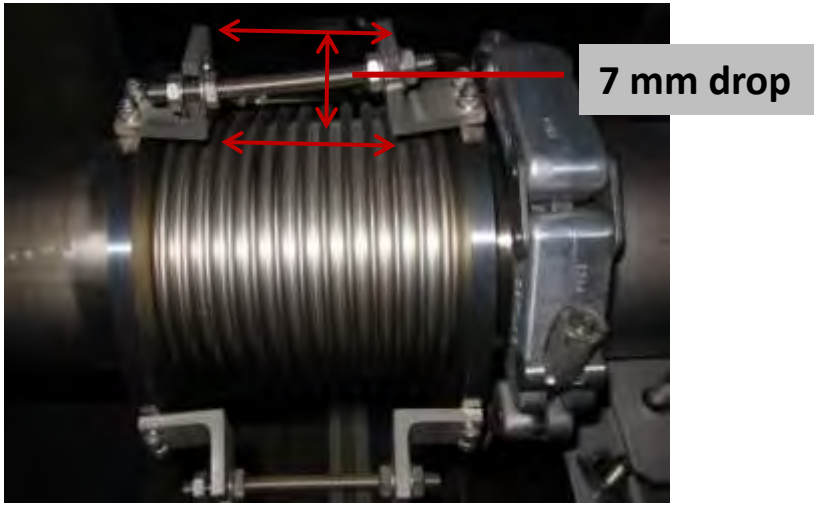
- If this problem remains, the recovery work will be delayed.

Cracks seen on the neck position for the crane →

Status after April 4th (RCS #1)

Main tunnel and sub tunnel at RCS (no serious damage).



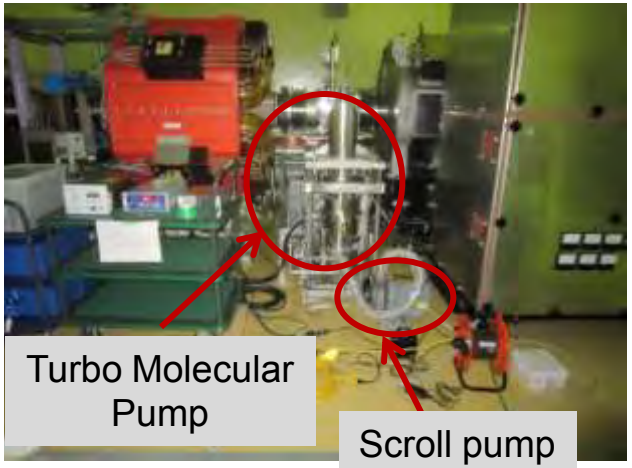


Connection point between RCS and Linac (about 1 cm gap).

Status after April 4th (RCS #2)

- Vacuum test started.
- Impedance measurements.
- Vacuum tube test started.

In so far, no serious problems were found.



↑Examination of Cable Racks

To open the door, some hard work had to be done, like above.

Drain work initiated →

Status after April 4th (Main Ring)

Magnets

- No serious damage.
- Slight movement as seen below.

↑ supporting plate with slight movement.

RF

- Humidity level was decreased. Stated to measure RF impedance.
- Impedance level was decreased. Will examine in more details.

Power, Cooling Walter, Buildings

- Walter pumping completed. Currently more humidity control.
- High voltage supplies: Need substantial effort.
- Cooling water will be available in May.

Vacuum

- At the fast extraction there was a small leakage of vacuum in the septum magnets (～1E-12).
- Using ion pump we continue to study it.
- No other vacuum leakages.

Examination for Monitors

- All BPM monitors were examined.
- 60% of loss monitors were examined.

Alignment and Measurements

① Linac

- Inclined toward west direction.
- in the middle, the maximum inclination is about 3 mrad.
- Floor in the middle was approximately 4 cm smooth drop.
- Using laser tracker, we measure again.

② RCS (3 GeV Synchrotron)

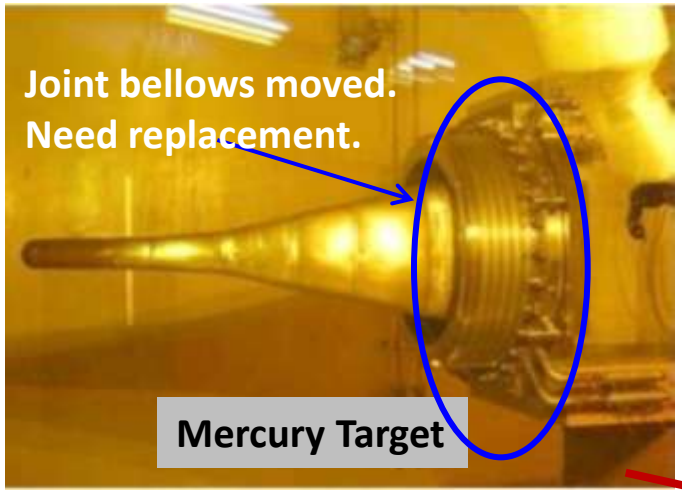
- Measurement was done using floor gauge.
- RCS floor is inclined toward the center of the RF (the maximum of 0.3mm/m)
- From extraction point to RF area, the is slight drop.

③ MR (50 GeV Synchrotron)

- Using MAR096 point as a standard zero, measurements were performed.
- There is a tendency that inclination toward the center of MR is observed.
- Between SDA61 and QFX61 there is a crack. The maximum of 0.3 mm drop was observed.
- From injection to extraction, there is small drop.

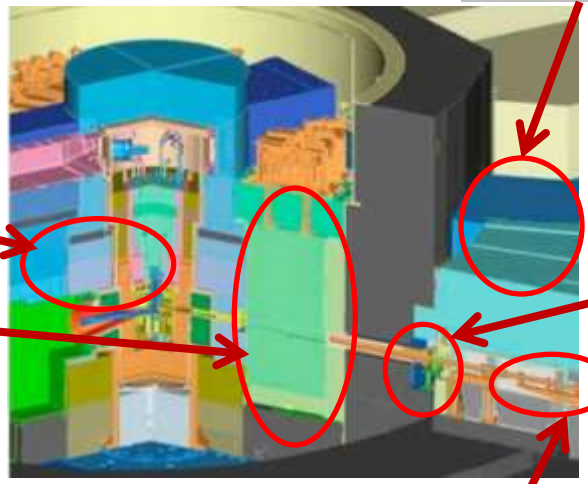
Status after April 4th (MLF #1)

- Mercury Target: Movement of 30 cm.
  Confirmed after detailed examination.



- Shield walls were moved significantly.

Neutron Source



Neutron Shutter

- Vacuum leakage is observed.
- Bolts were either removed or unfastened.

- This part is healthy.

Muon Facility

- Vacuum system is OK
- Small damage for cables.

- Partially destroyed but recoverable.

Status after April 4th (MLF #2)

↑ Started to work for Shield wall. →

↑ Disk chopper was examined.

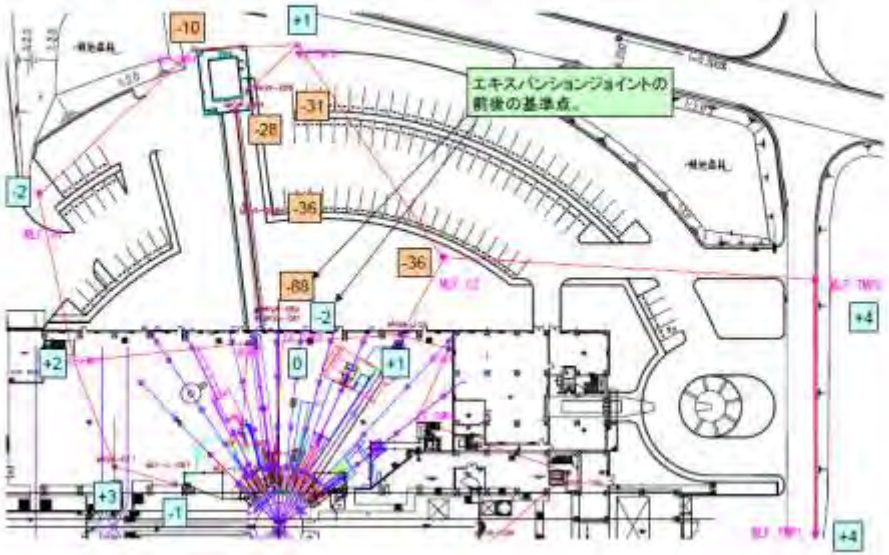
↑ Removal of Pb shield wall.

BL-08: Guide Mirrors were partially damaged, in particular, near the joint region between buildings.

← Guide Mirrors.

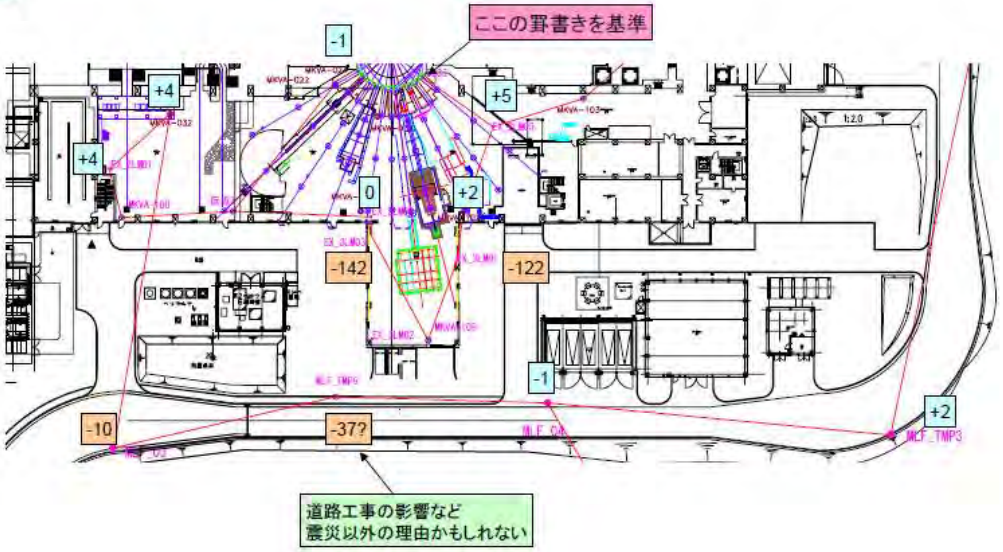
Extended Buildings for MLF

The First Experimental Hall



- For an extended part, like BL-08 a large gap is observed vertically. At this joint position about 9 cm drop is observed and the guide mirrors were damaged.

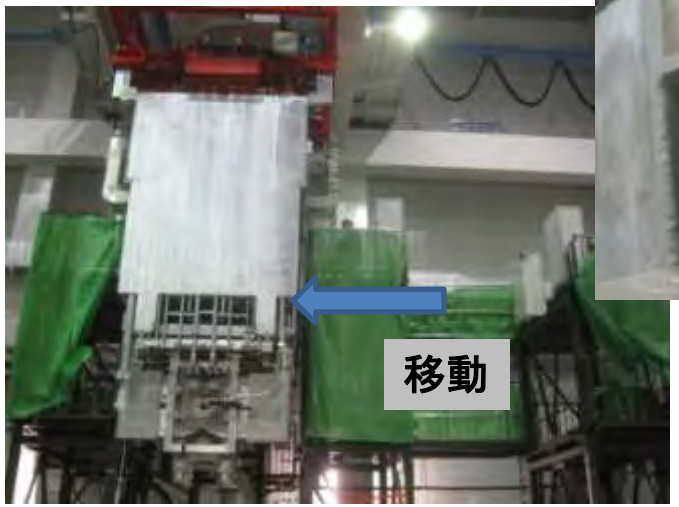
The Second Experimental Hall



- A large drop (say , BL-19) for about 14 cm for the extended part.
- Discussion on how to repair the entire extended halls.

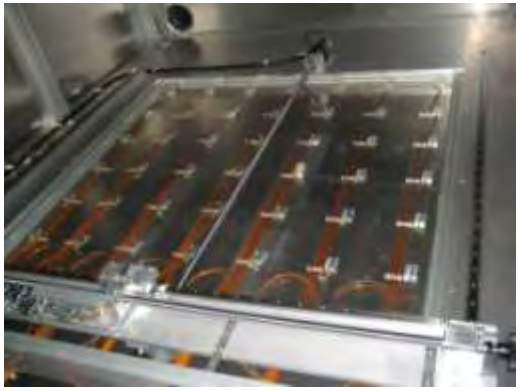
Status after April 4th (Neutrino)

- Reasonably healthy.
- Humidity is now decreased.



With crane many elements are now returned back to normal.

Superconducting beam line.
Will return to normal temperature and test it.



Muon monitor looks OK.

Status after April 4th (Hadron)

- Cooling water has significant problem.

← Entrance for the Hall. About 1 m gap.

↑ Disconnected pipes
Distortion of bellows →

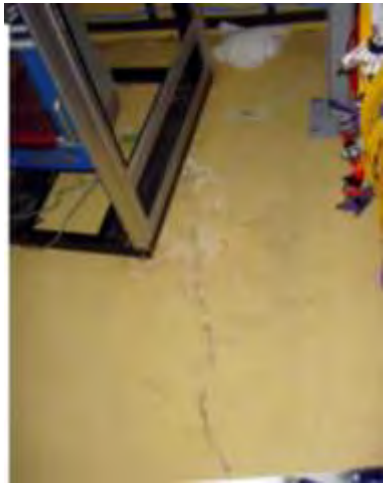
- Experimental Halls are reasonably OK.

- No serious leakage for vacuum.

← Switch Yard

Beam dump area.

Slight displacement is observed for experimental apparatus.

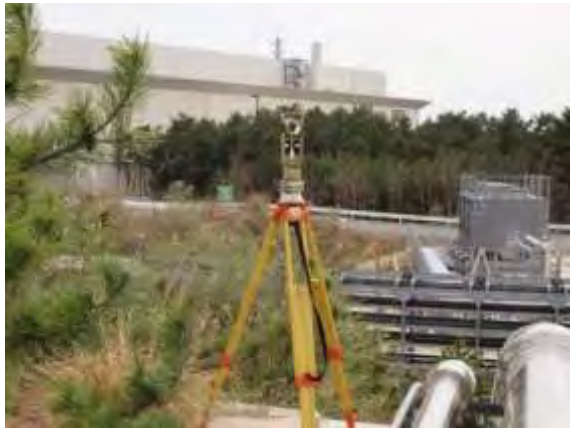


Crack observed on the floor. Water leakage is observed.

Alignment Work

- For the entire J-PARC
  - ① Measurement of GPS
  - ② Standard point
  - ③ Detailed measurement with Laser trackers

  All measurements will be completed by the summer.
- After that, further detailed measurement will be planned.



GPS Measurement

Electric Power and Cooling Water

- Electric Power: Except 3 GeV powers are now recovered (some Linac is not yet available.).
- Cooling Water: Not yet available for the entire facilities.

Future Plans

- We will try to resume J-PARC activity including accelerator complex, MLF, Hadron and Neutrino by December, 2011.
- Within JFY2011 (until March 2012) we set a goal to have at least 2 cycle operation for users.
- Based on this, both KEK and JAEA submitted the supplemental budget on April 22.
- Scheduling, in particular, for construction and repairs for buildings and roads are currently being negotiated both within JAEA and KEK.