MLF Experimental Report

提出日 Date of report

実験装置名/BL番号 Name of Instrument/BLAMATERAS/BL14

実験装置責任者 Name of the person responsible for the instrument: Kenji Nakajima

所属 Affiliation: J-PARC Center

1. 研究成果概要 (a)装置グループ内の成果、(b)ユーザー課題実装時における特筆すべきサポート、(c)ユ ーザー課題の執行状況について、まとめてください。A4 サイズ用紙使用のこと。

Outline of your activities. Following results at your instrument should be reported in A4 size papers: (a) results of your instrument goup, (b) significant user support works, and (c) statistical summary of user experiments.

On March 11, 2011, serious earthquake hit on north-east part of JAPAN. It hit MLF and AMATERAS also. However, we found that AMATERAS has no serious damage from the earthquake, fortunately. After the earthquake, we had investigated the instruments. Some of small cracks were found in the shielding and some of axially devices had damage. On the other hand, beam transport, chopper systems, scattering chambers and other major components looked no problem.

J-PARC restarted from January 2012. Instrumental group beam time was used for on-beam tests of the spectrometer to check that the spectrometer did not have damage from the earthquake. Actually, we confirmed the performance of the spectrometer had not changed.

We had accepted very limited number of user program, i.e. 2 project proposals and 2 general use proposals. Still however 2 scientific papers from AMATERAS were published. And many presentations presenting results from AMATERAS were given at scientific meetings.



Figure 1. AMATERAS, 10 minutes after the earthquake.



Figure 2. A crack in the shield.









Figure 3. Damage investigation of chopper systems, beam-transport, shielding by technithians.