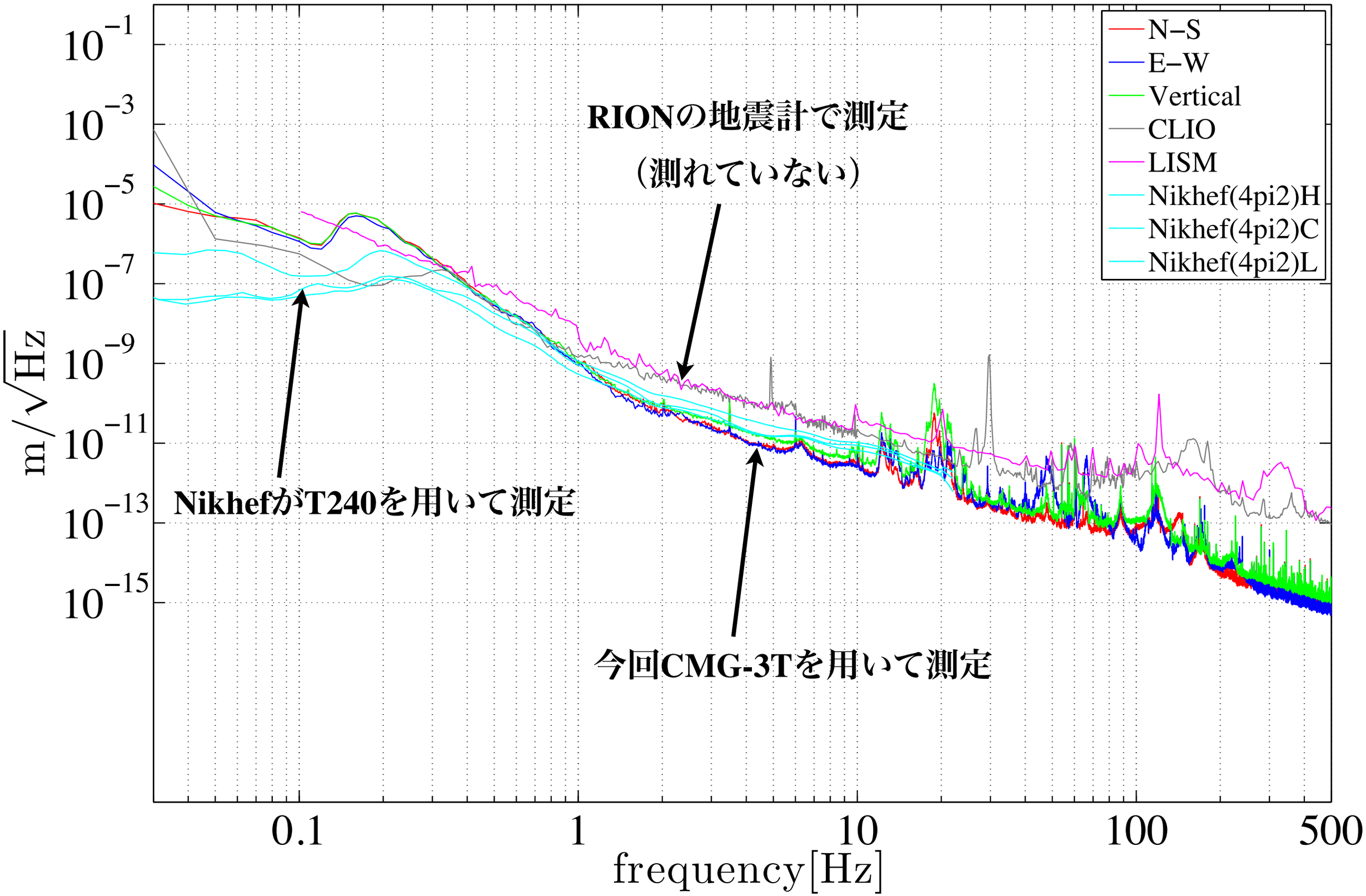
2013-12-10 detchar meeting

磁場・地面振動測定について

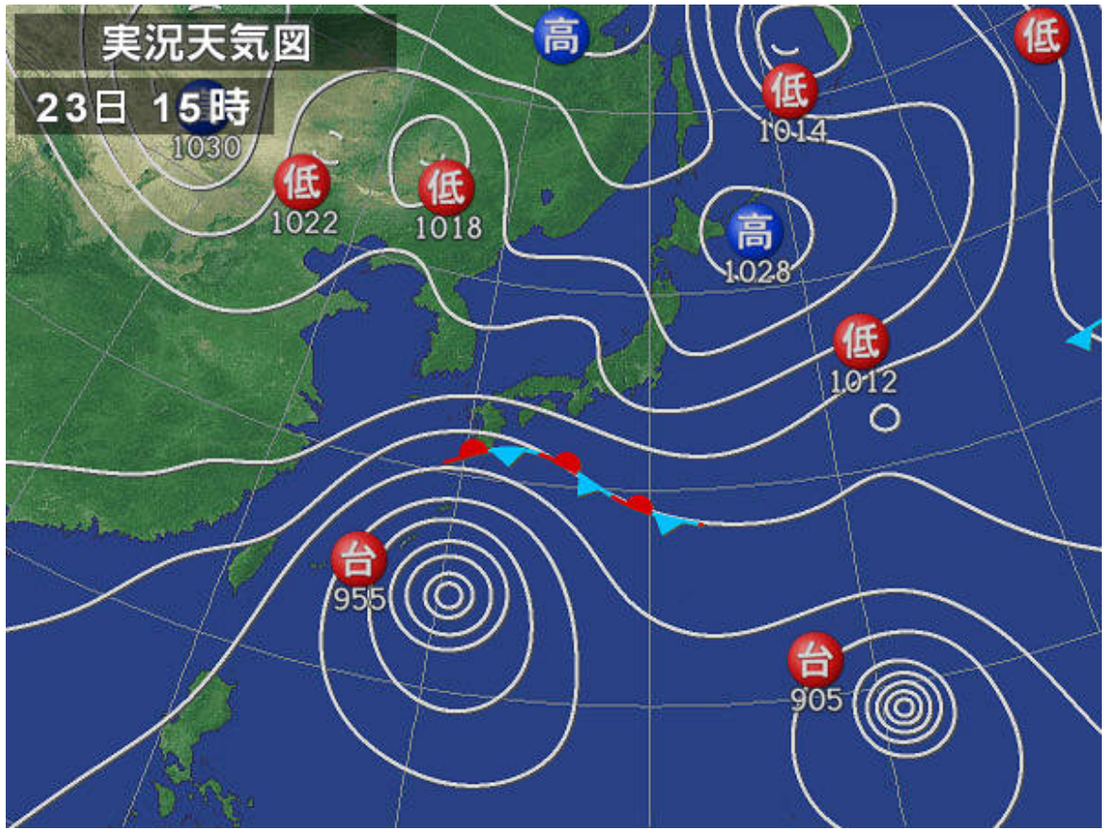
- 磁場
  - データに見られたバーストがKAGRAサイト固有のものなのかどうかを調査するために、柏で測定。
- 地面振動
  - 高周波でNikhefの結果と合わない問題。地震計の特性を調べるために、柏でRIONの地震計と同時測定。

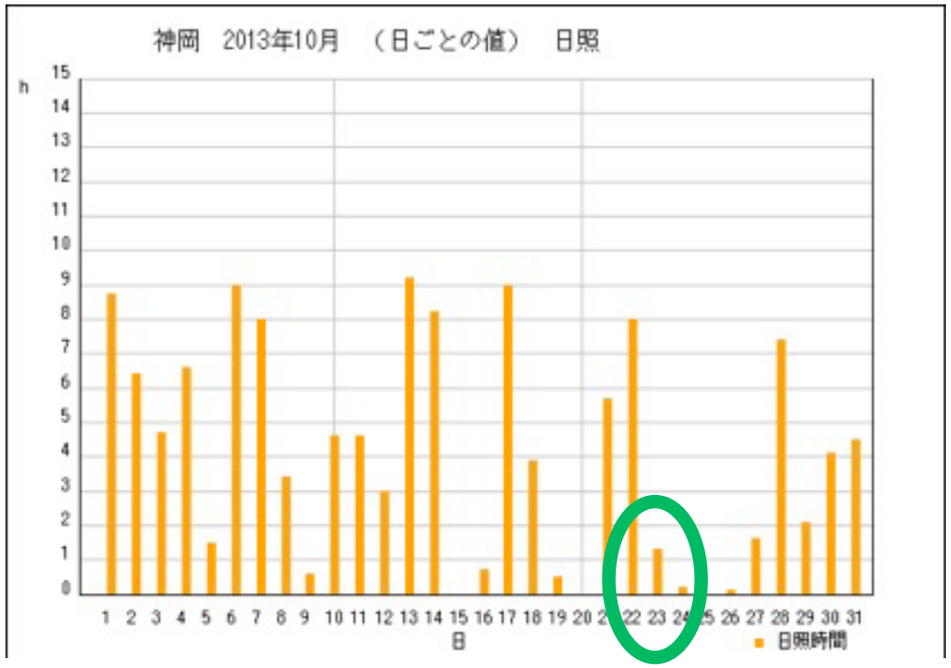

RIONの地震計で測定
（測れていない）
NikhefがT240を用いて測定
今回CMG-3Tを用いて測定
N−S
E−W
Vertical
CLIO
LISM
Nikhef(4pi2)H
Nikhef(4pi2)C
Nikhef(4pi2)L
m/√Hz
frequency[Hz]
10^−1
10^−3
10^−5
10^−7
10^−9
10^−11
10^−13
10^−15
0.1
1
10
100
500

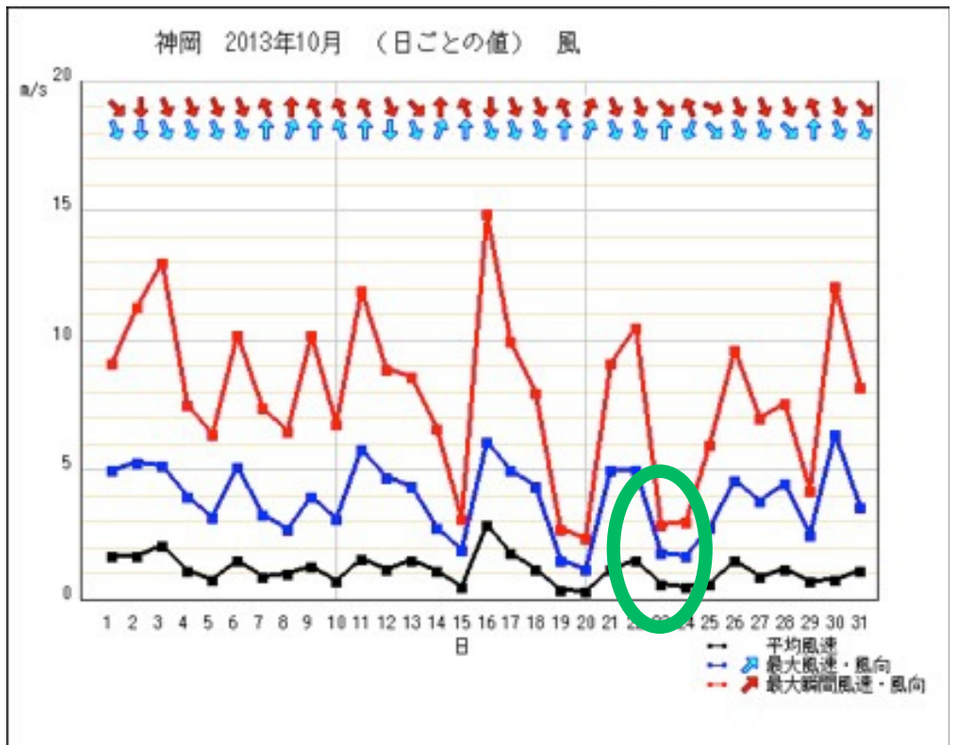
2013年10月23日の天候

神岡　2013年10月23日

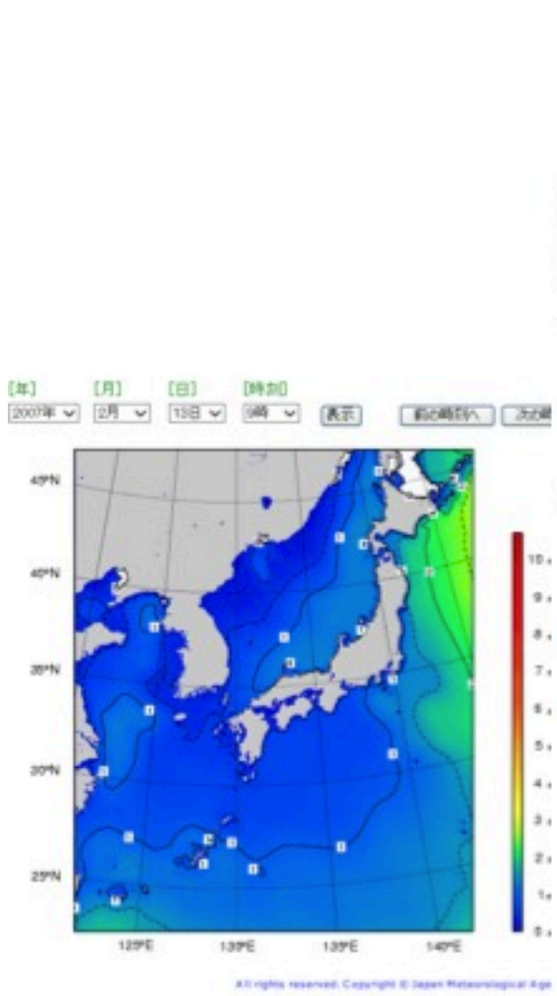
時	降水量(mm)	気温(℃)	風向・風速(m/s)		日照時間(h)	雪(cm)	
			風速	風向		降雪	積雪
18	0.0	15.7	0.3	北北東	0.0	///	///
19	0.0	15.4	1.2	南		///	///

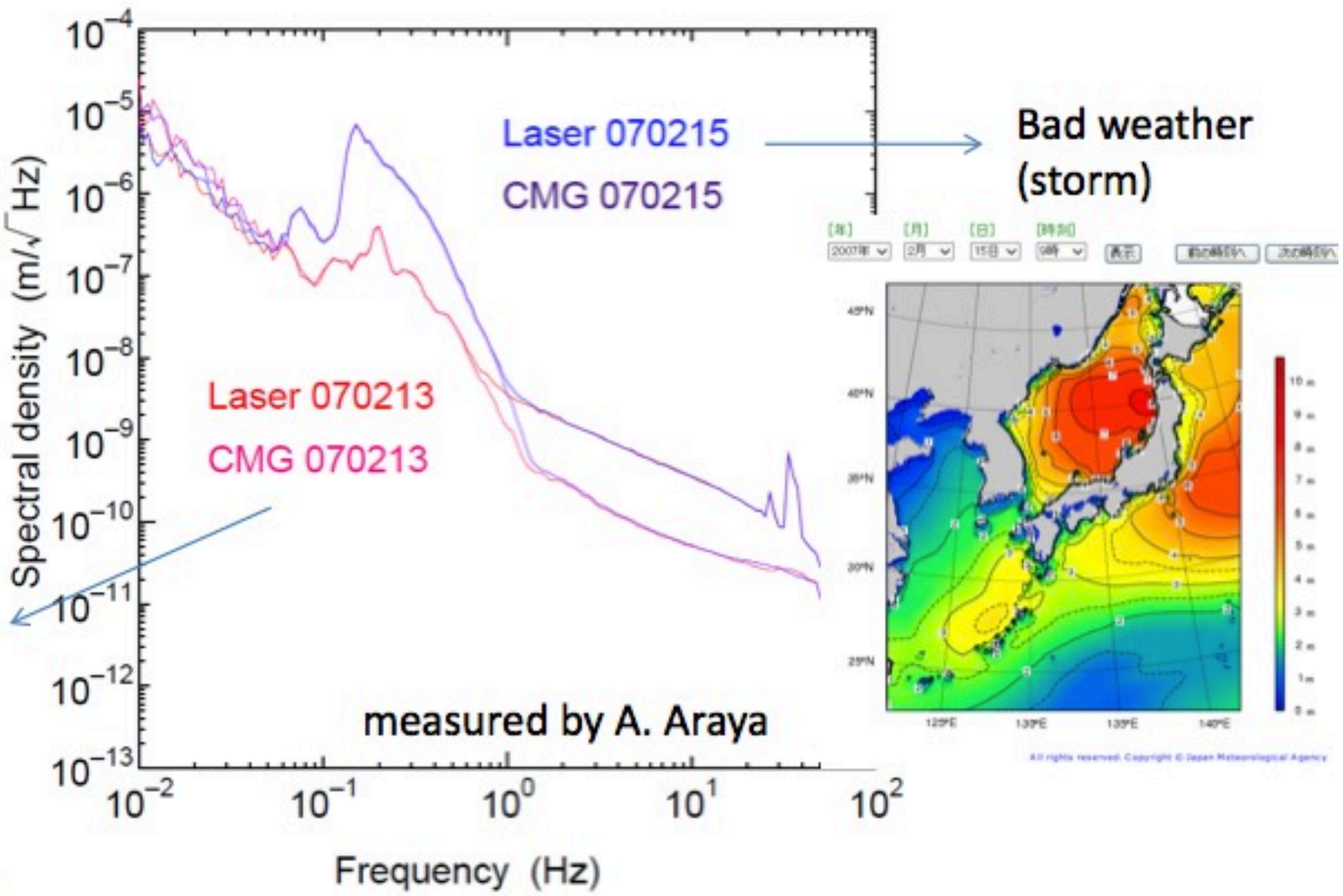






Micro seismic peak in bad weather





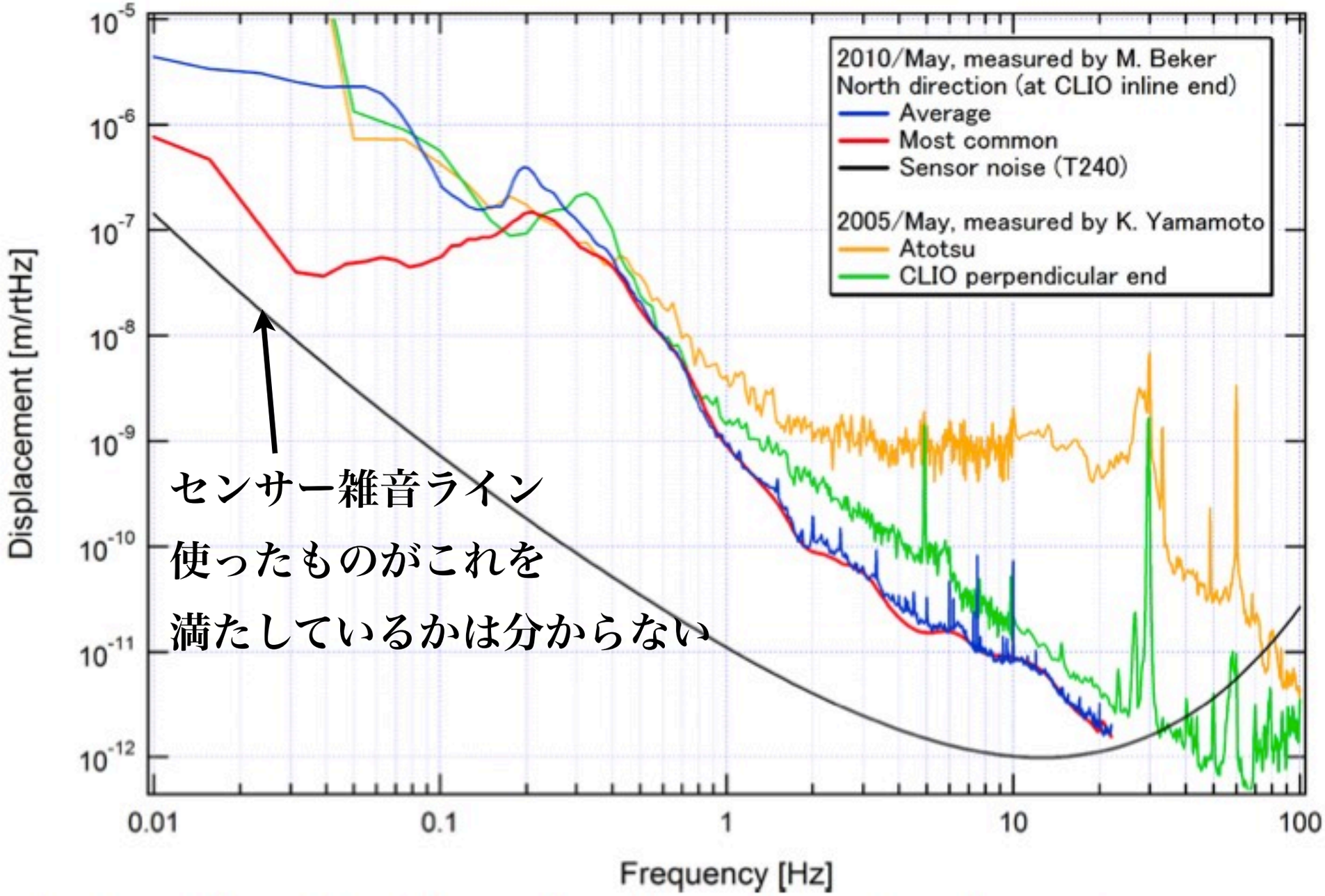
Bad weather
(storm)

c.f. http://iopscience.iop.org/1742-6596/122/1/012002

Micro seismic peak can be large over one decade

http://gwdoc.icrr.u-tokyo.ac.jp/cgi-bin/private/DocDB/ShowDocument?docid=1847

Displacement of seismic motion



The region from 1 Hz to 20 Hz is better than what we have referred to so far.
There are 2 peaks (0.2Hz and 0.35Hz) in micro-seismic region => pacific ocean and sea of Japan?

日韓共同研究について

- 教師あり多変量解析
  - ANNを利用して、補助チャンネルのデータから雑音源を特定するプロジェクト
  - KAGRA環境データ利用
- EMDを用いたETGパイプライン(CLIOデータ利用)

We are potentially going to study a possibility of making new Trigger generation method comparing to KW or other stuffs (e.g. X-pipeline etc).

We simply get a clue that EMD process in HHT can amplify the magnitude of trigger candidates, which means that the algorithm can generate much more glitch triggers within a given threshold, comparing to the KW method.

So firstly I am considering :

1) EMD-KW combined analysis
2) EMD only method
3) Trigger Generation GUI toolbox (long-term)

This may be helpful for the plan.

Best regards,
JJOh

Virgoとの共同研究について

.....
Initially, I wanted to propose Dec 20th but I will not be available on this date.
So, I would like to propose January 17th 2014. Would it be ok for you?
I will see with the other people of Virgo detchar
if we can do the telecon around 9h or 10h CET (17h or 18h in Japan) so that
it is a better time for you.
.....

Cheers,
Didier

モニタの開発状況

- ??