

Research and development at MIC

Summary of activities in recent years
and
about RIC's poster on TECO-2010



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activities in recent years

2008 : Test of Piezo-resistive Barometers

: Development of Visibility Presumption method
using Video Images at Airport

2009 : Test of Capacitive Hygrometer with Warmed Probe

: Intercomparison of Thermometer Screens/Shields

later

-- at TECO-2010, we will announce the poster session--

2010 : Investigation of Environmental Influence

on the Quality of Meteorological Measurement

: Research for Instruments of the next generation system
on surface measurement.



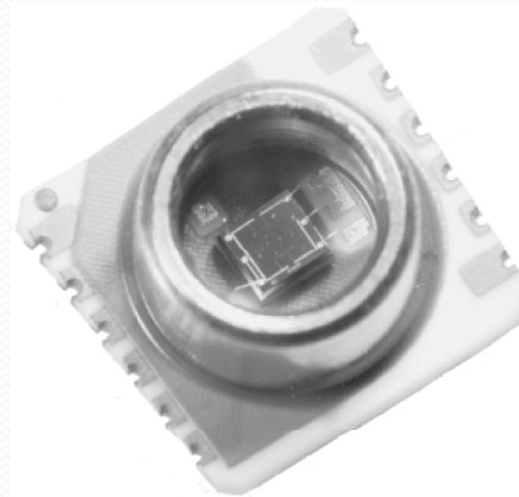
Test of Piezo-resistive Barometers(2008)

Purpose :performance test
as meteorological instrument

- Pressure Accuracy
- Long-term Stability
- Error over Temperature



Barometer

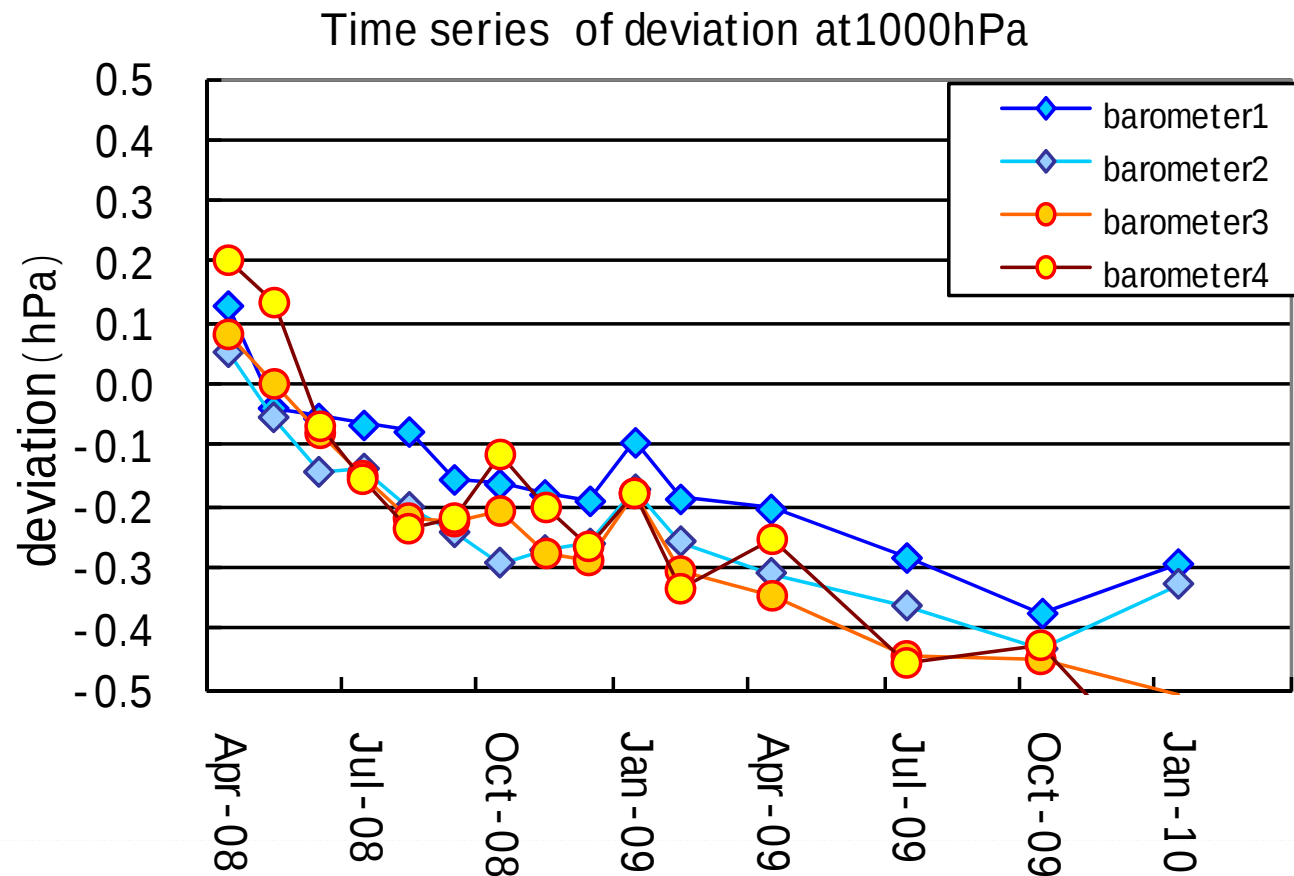


Sensor device



Test of Piezo-resistive Barometers(2008)

Result : Long-term Stability

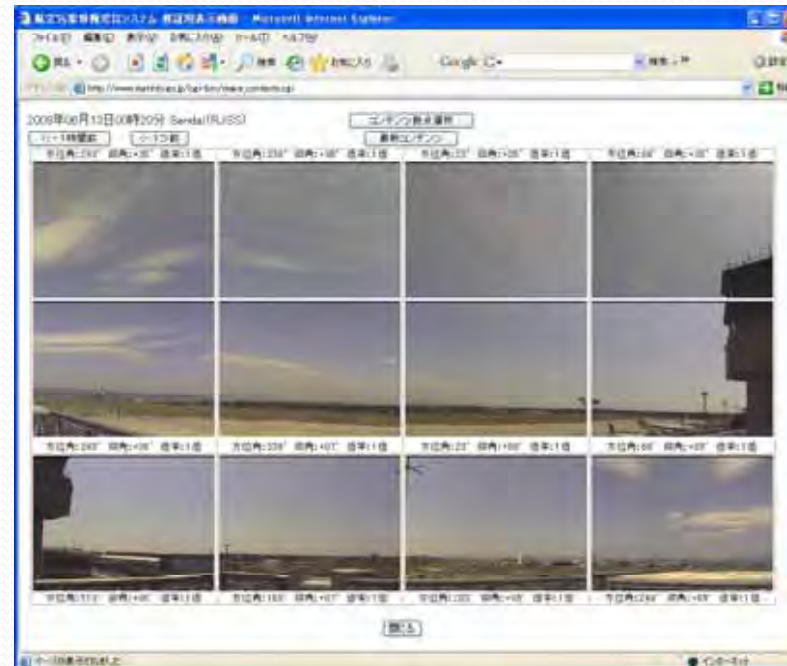


(Reference : JMA Operational barometer)



Development of Visibility Presumption method using Video Images at Airport(2008-09)

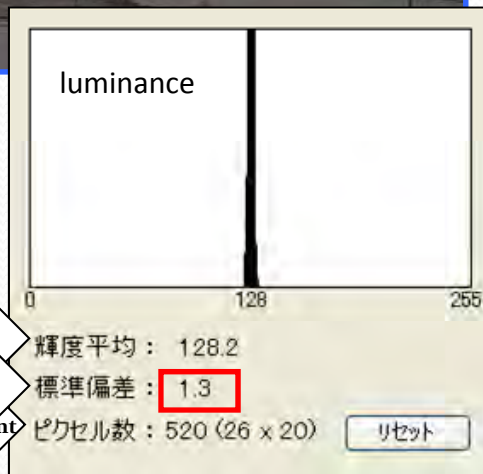
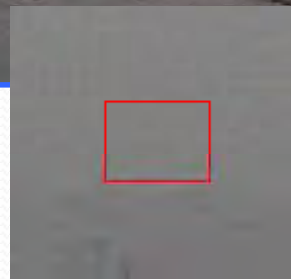
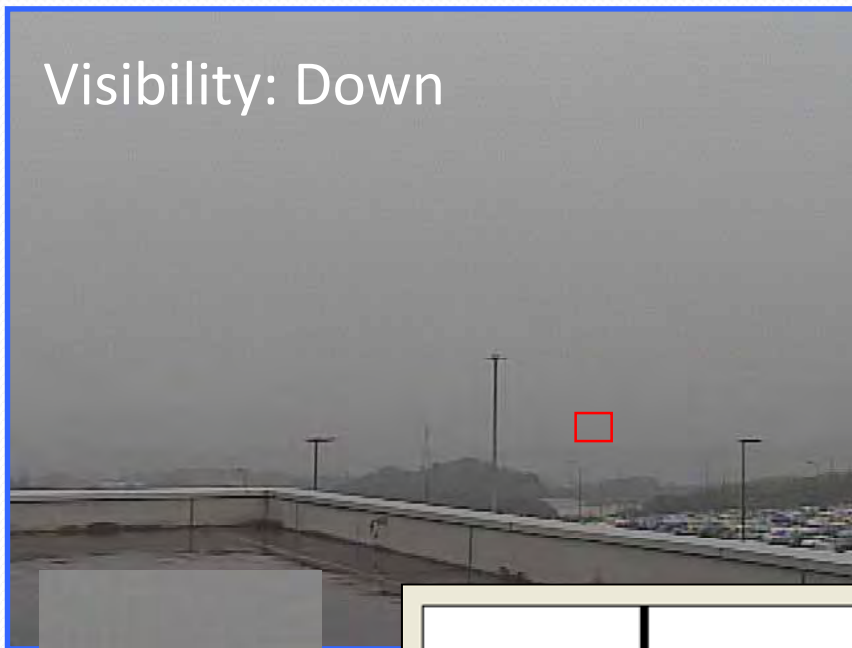
Purpose :
support to make the flight plan
in the early morning—airport not operation



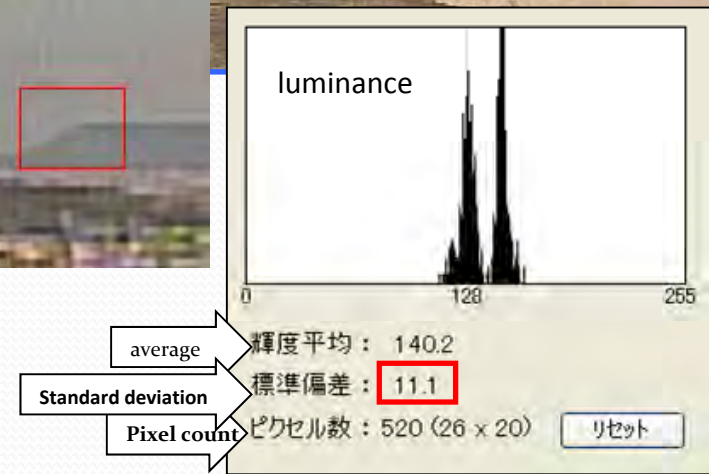
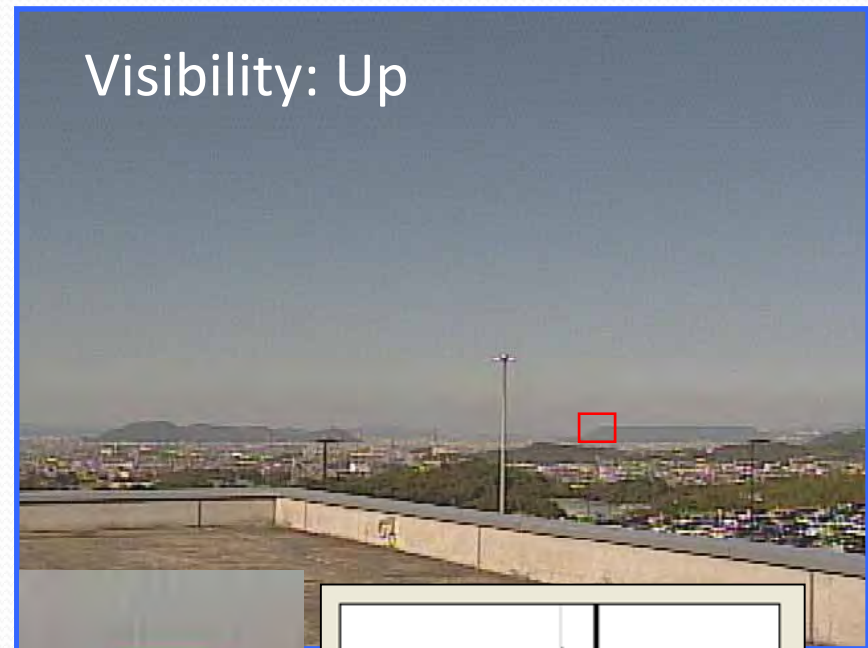


Development of Visibility Presumption method using Video Images at Airport(2008-09)

Visibility: Down



Visibility: Up



RJOT

標準

方位

過去時間

72h

48h

24h

6h

3h

1h

最新

2010/07/26 0730Z

10分前

連続表示

10分後



103° 方向



148° 方向



193° 方向



238° 方向



283° 方向



328° 方向



13° 方向



58° 方向

手動FTP

時間選択

FTP 開始



0710Z
5000m以上



0720Z
5000m以上



今回 0730Z
5000m以上



0740Z
5000m以上



0910Z : FTP OK

終了



Test of Capacitive Hygrometer with Warmed Probe(2009)

Purpose :performance test on field and chamber

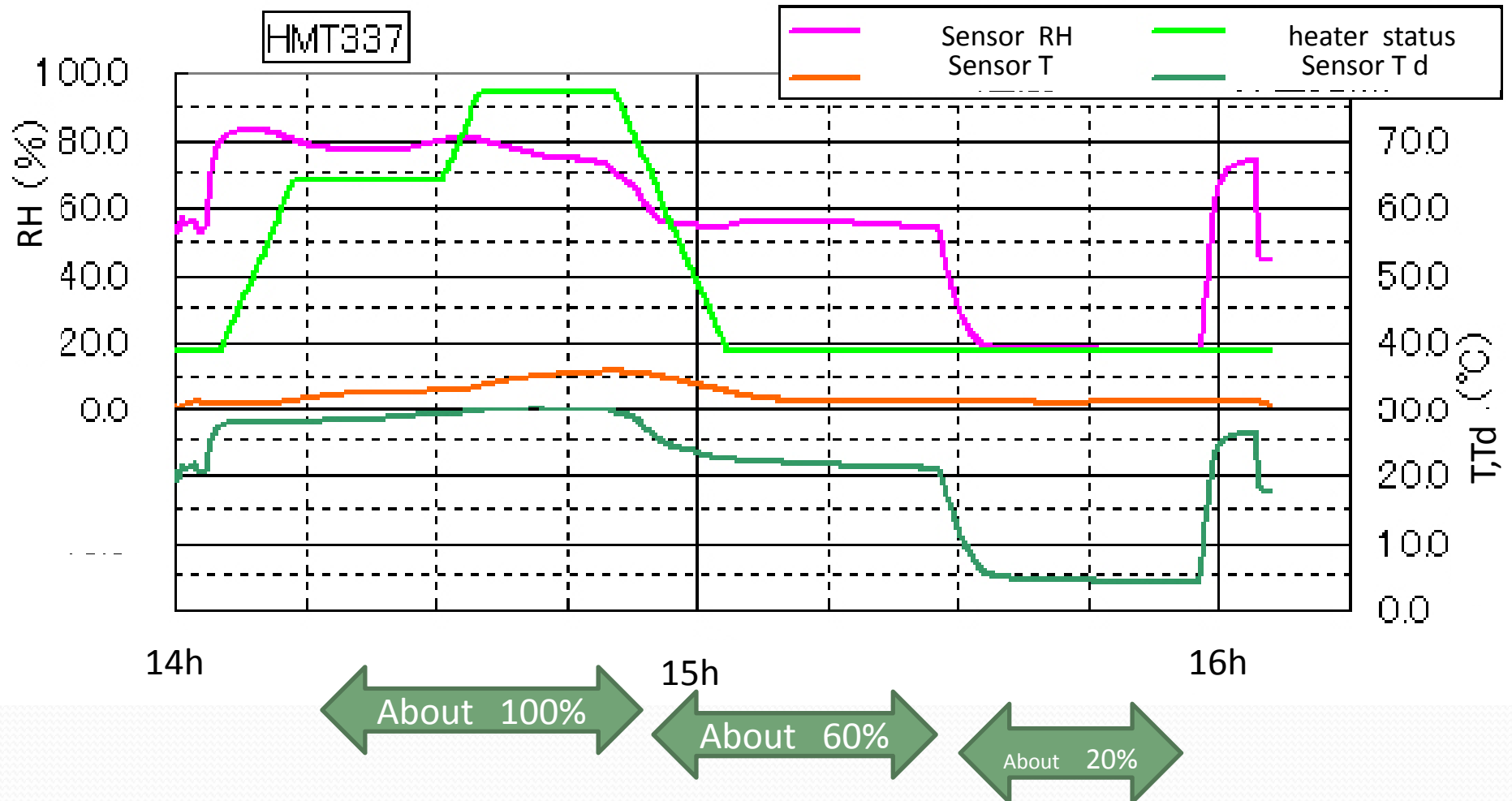


Heater included



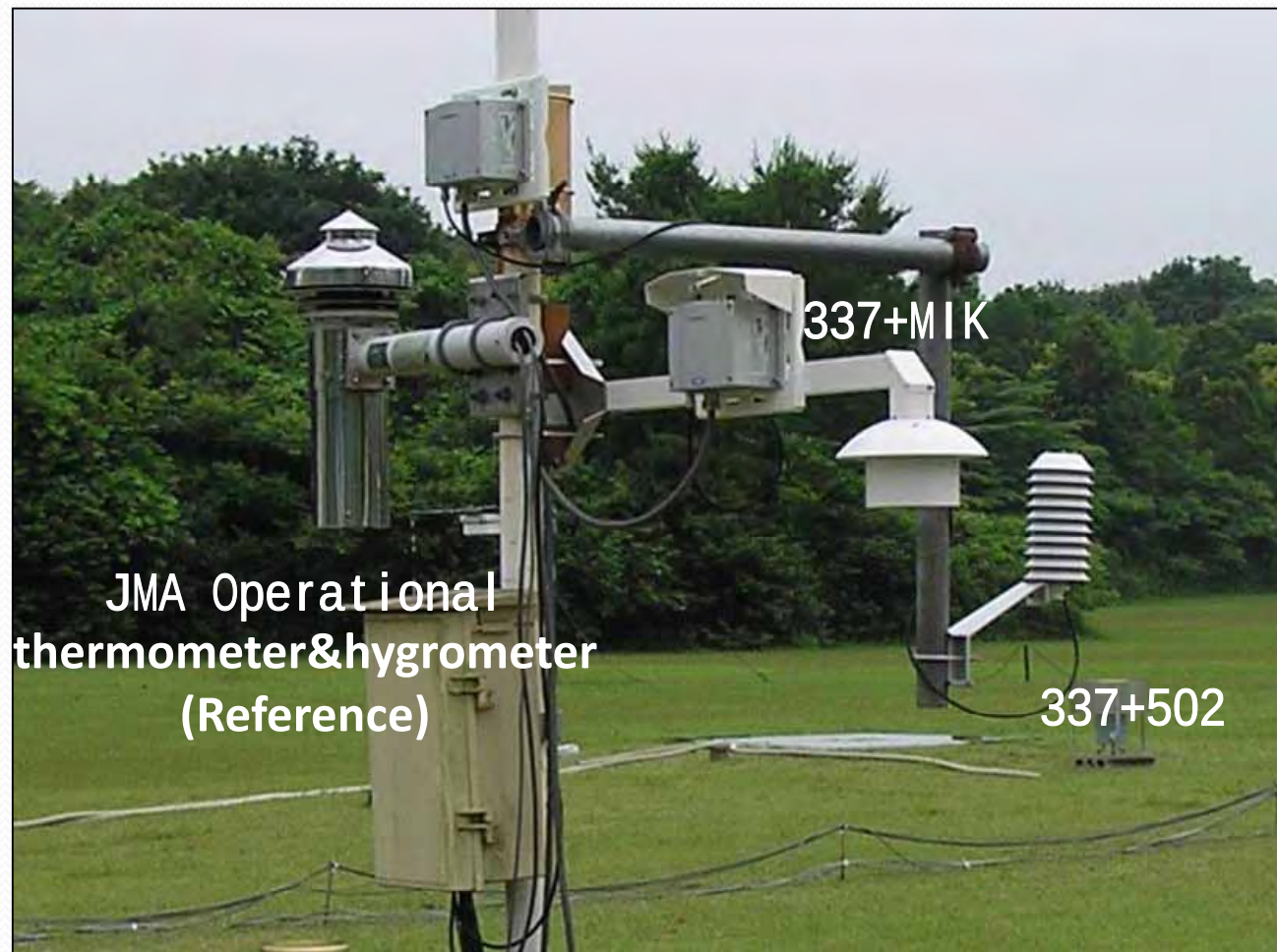
Test of Capacitive Hygrometer with Warmed Probe(2009)

result : chamber test





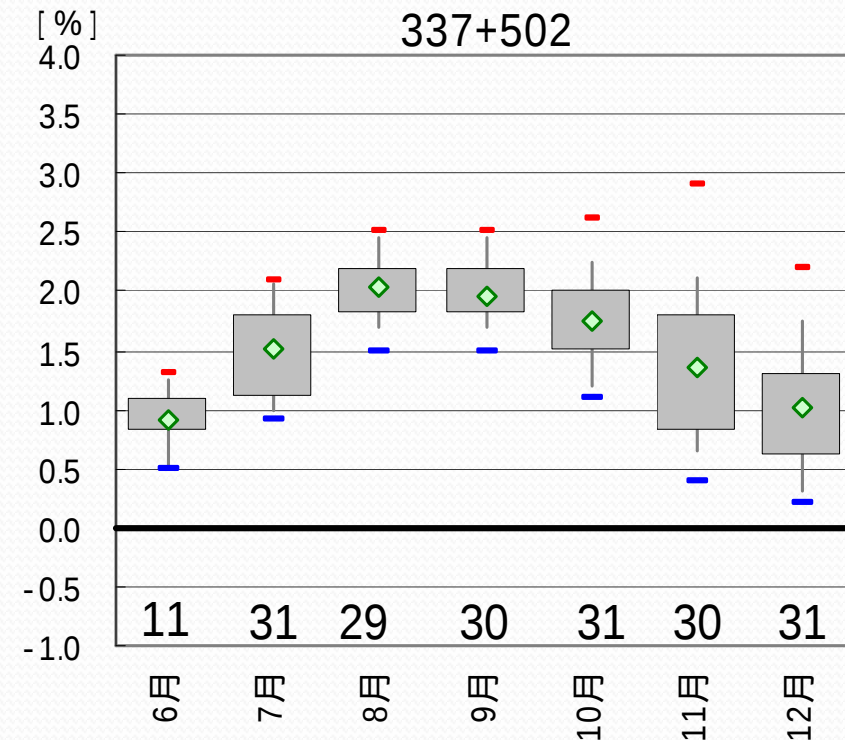
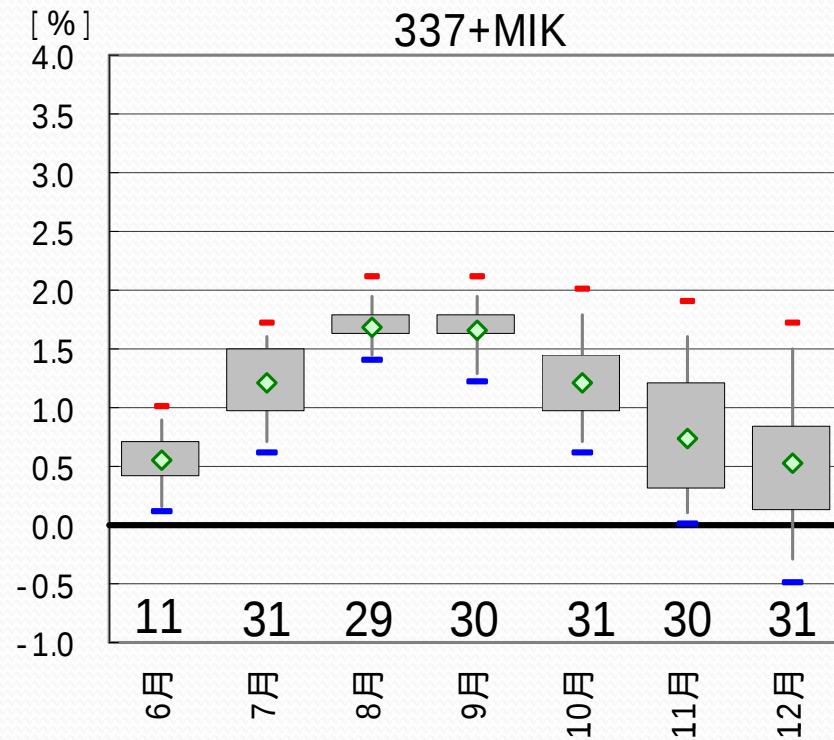
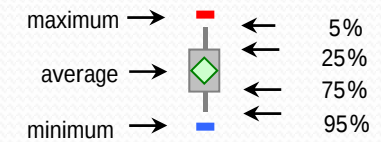
Test of Capacitive Hygrometer with Warmed Probe(2009)





Test of Capacitive Hygrometer with Warmed Probe(2009)

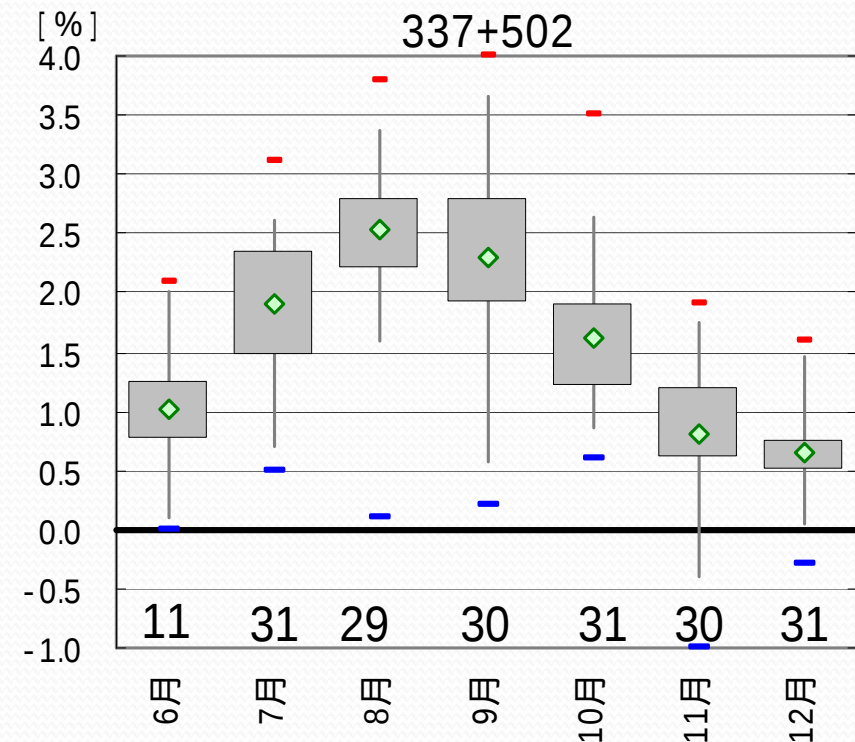
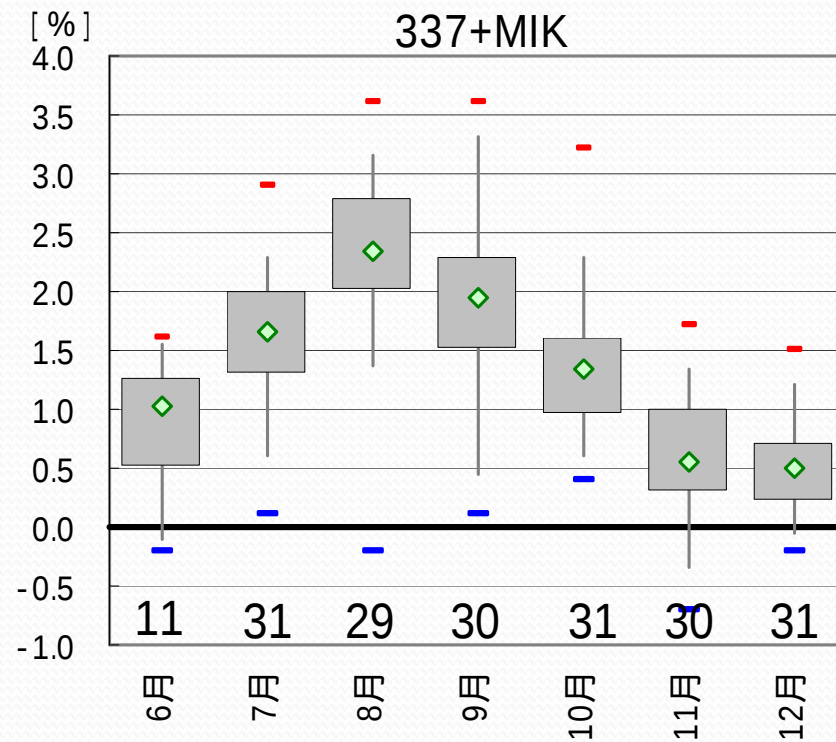
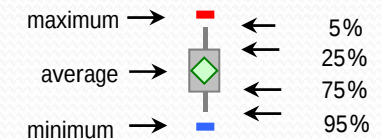
result : daily average RH





Test of Capacitive Hygrometer with Warmed Probe(2009)

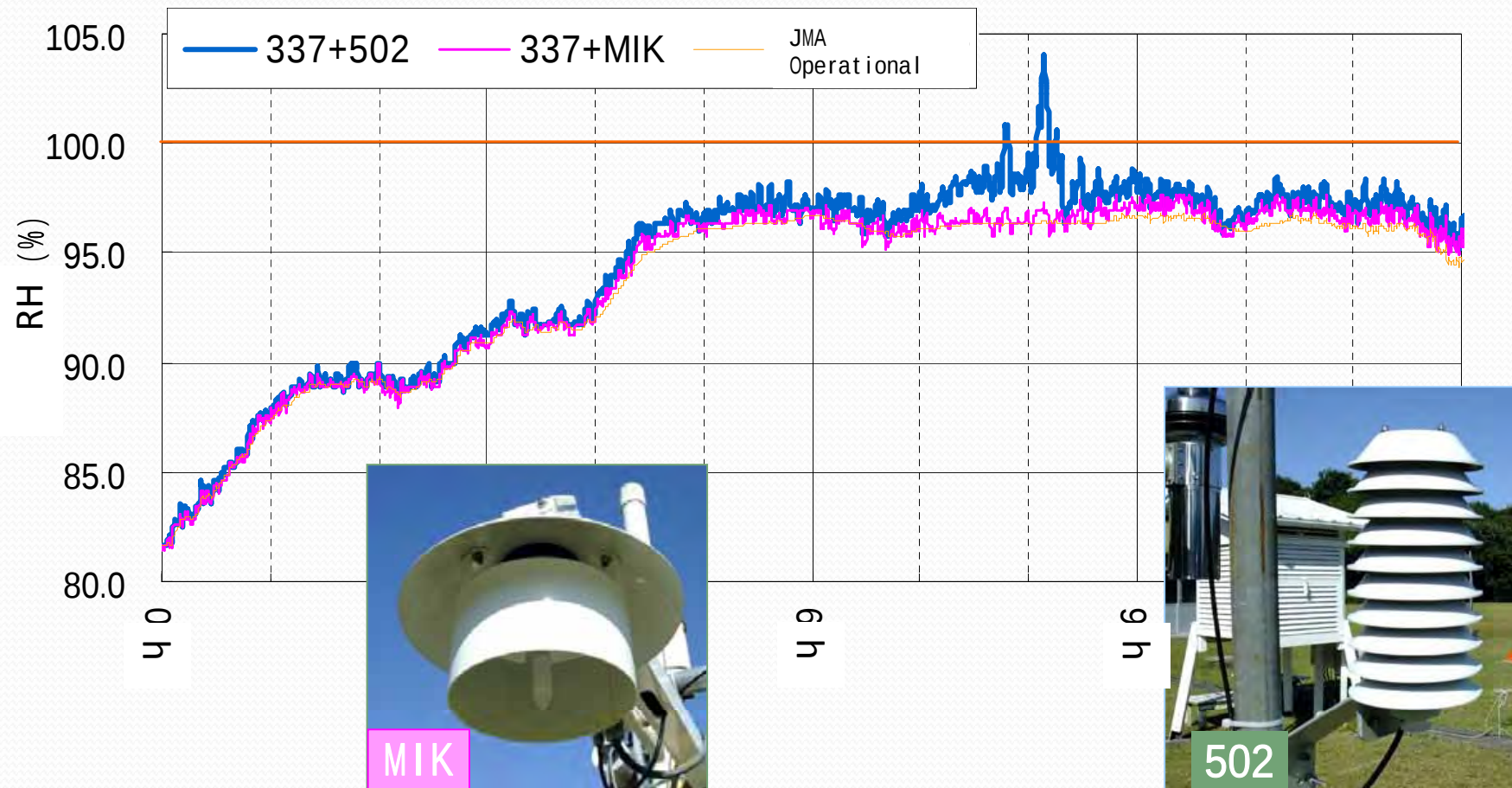
result : daily minimum RH





Test of Capacitive Hygrometer with Warmed Probe(2009)

result : 100% RH over case





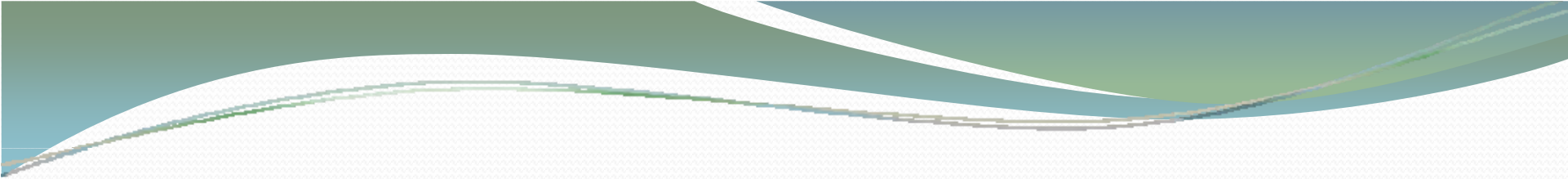
And this year

Investigation of Environmental Influence on the Quality of Meteorological Measurement



Res

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- Thank for your attention.