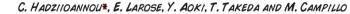
AMBIENT SEISMIC NOISE MONITORING IN CHUETSU. JAPAN AND THE AREA AFFECTED BY WAVE SPEED VARIATIONS







*HADZII@GEOPHYSIK.UNI-MUENCHEN.DE



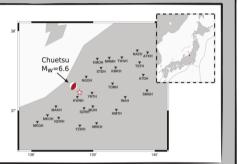


DATA USED :

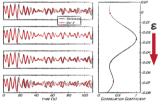
HI-NET BOREHOLE TILTMETERS: 24 STATIONS - 276 STATION PAIRS WHITENING : [O.1 O.3] HZ DAILY XCORRS: 2004 AND 2005

REFERENCE GF : STACK OF 2 YEARS

OCTOBER 23. 2004: MW 6.6 CHUETSU EQ.

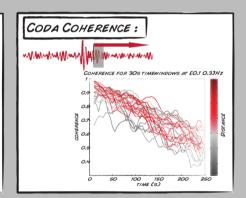


STRETCHING :

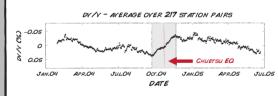


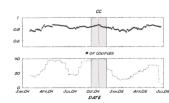
STRETCH REFERENCE SIGNAL: TIME -> T(1+E) COMPARE TO DAY SIGNAL: CORRELATION COEFFICIENT (CC)

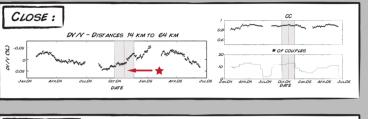
E AT MAXIMUM CC CORRESPONDS TO DV/V

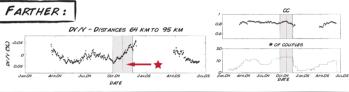


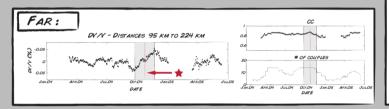
RESULTS:







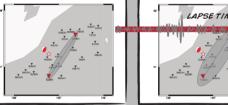


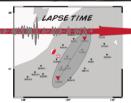


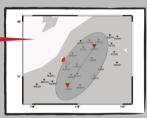
SCATTERING HALO:

$$d_{halo} = \sqrt{Dt}$$

$$D = \frac{vl}{2}$$







DISTANCE

EPICENTER

CONCLUSIONS:

- OSEISMIC WAVE SPEED CHANGE SAME AMLITUDE FOR ALL EPICENTRAL DISTANCES; SPATIALLY EXENDED CHANGE?
- REGIONALISATION PROVES DIFFICULT: CODA WAYES SAMPLE A LARGE 3D YOLUME

REFERENCES:

- HI-NET : OKADA ET AL., EARTH PLANETS SPACE 56. 2004
- * TILTMETER XCORRS: NISHIDA ET AL. JGR 133, 2008
- MONITORING CHUETSU: WEGLER ET AL., JGR 114, 2009

TO BE CONTINUED ...

AMBIENT SEISMIC NOISE MONITORING IN CHUETSU, JAPAN AND THE AREA AFFECTED BY WAVE SPEED VARIATIONS

CLOSE:

DVN - DISTANCES 14 KM TO 64 KM

EPICENTER DISTANCE 70

Service Services

DATE

C. HADZIIOANNOU*, E. LAROSE, Y. AOKI, T. TAKEDA AND M. CAMPILLO

*HADZII@GEOPHYSIK.UNI-MUENCHEN.DE







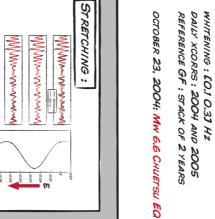
FARTHER:

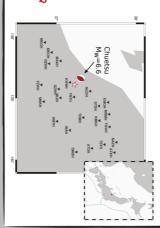
DV N - DISTANCES 64 KM TO 95 KM

A. C.

DATE





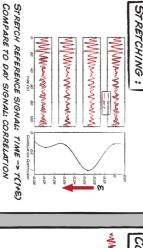


FAR:

DV/V - DISTANCES 95 KM TO 224 KM

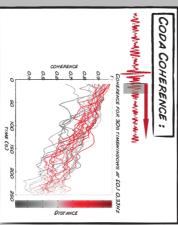
HI-NET BOREHOLE TILTMETERS:
24 STATIONS - 276 STATION PAIRS

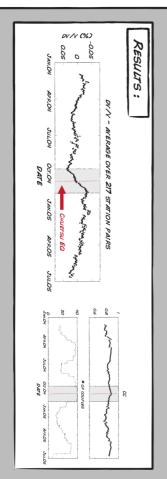
DATA USED:

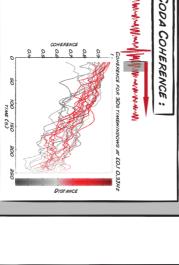


E AT MAXIMUM CC CORRESPONDS TO DV/V

COEFFICIENT (CC)





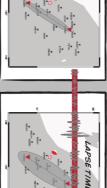


SCATTERING HALO:

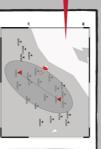
 $d_{halo} = \sqrt{Dt}$

D = V_{λ} 2

JULON









 REGIONALISATION PROVES DIFFICULT: SPATIALLY EXENDED CHANGE? COSE/SM/C WAVE SPEED CHANGE SAME

AMLITUDE FOR ALL EPICENTRAL DISTANCES;

CODA WAYES SAMPLE A LARGE 3D YOLUME

REFERENCES:

- ★ Hi-NET: OKADA ET AL., EARTH PLANETS
 SPACE 56, 2004
- ➤ TIMMETER XCORRS: NISHIDA ET AL.,
 JGR 133, 2008
- WEGLER ET AL., JGR 114, 2009

* MONITORING CHUETSU:

TO BE CONTINUED ...