Organic matters in decalcified cement concrete

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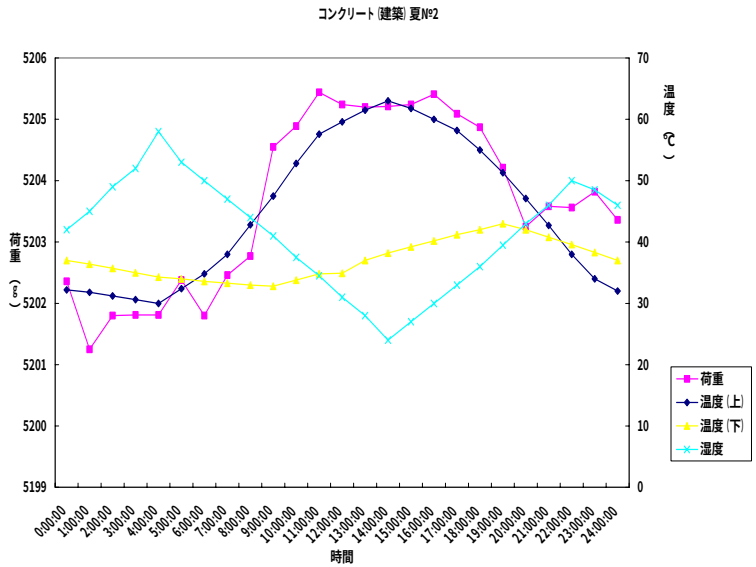
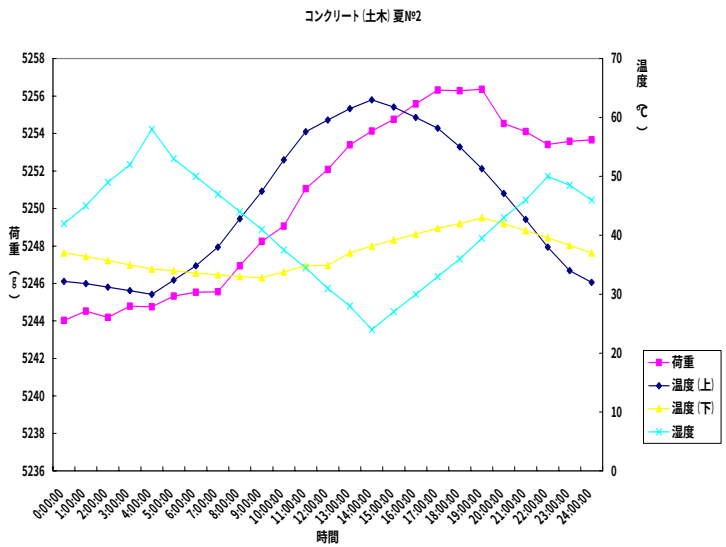
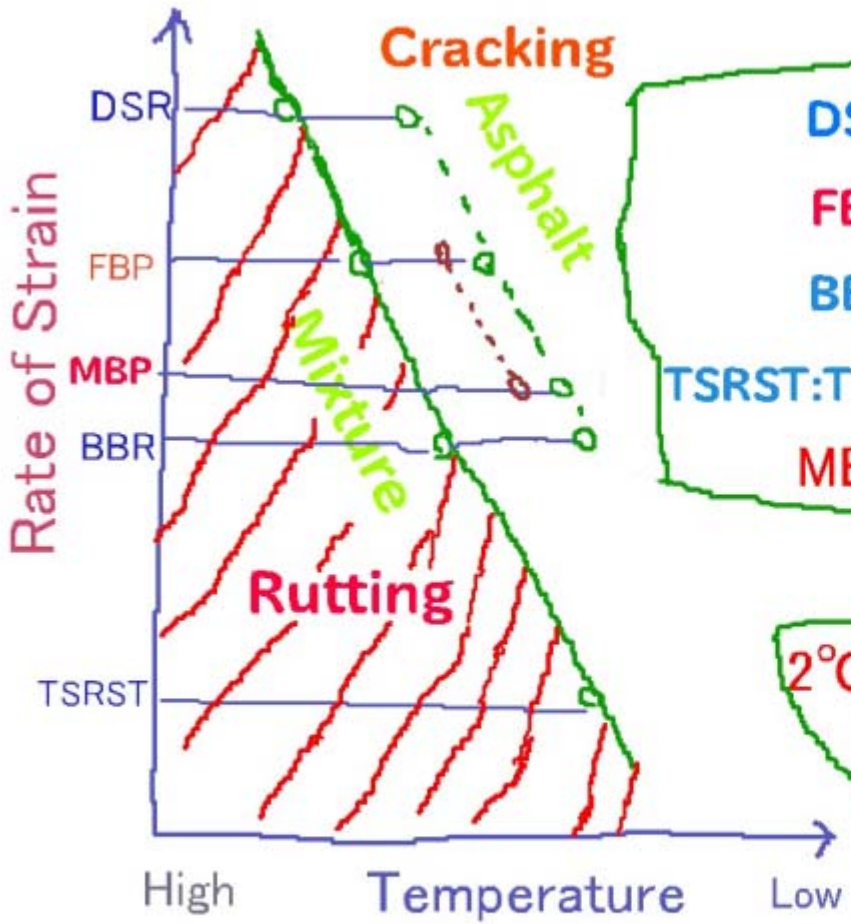

コンクリート(建築) 夏№2
荷重（ton）
温度（℃）
時間
荷重
温度(上)
温度(下)
湿度


コンクリート(土木) 夏№2
荷重（ton）
温度（℃）
時間
荷重
温度(上)
温度(下)
湿度

Effect of Rate of Strain on Brittle Temp.



DSR: Dynamic Shear Rheometer

FBP:Fraass Breaking Point

BBR:Bending Beam Rheometer

TSRST:Thermal Stress Restrained Specimen Test

MBP: Moriyoshi Breaking Point

2℃ increased (Normal) for 10 years

↓

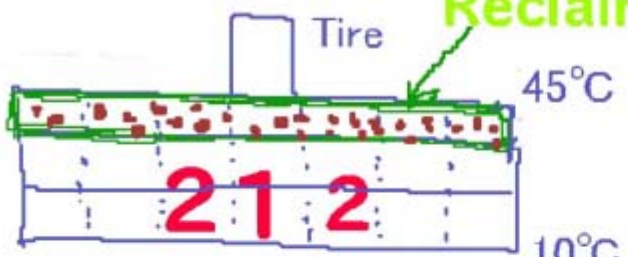
Reclaimed Mixture (30%): Normal＋4℃

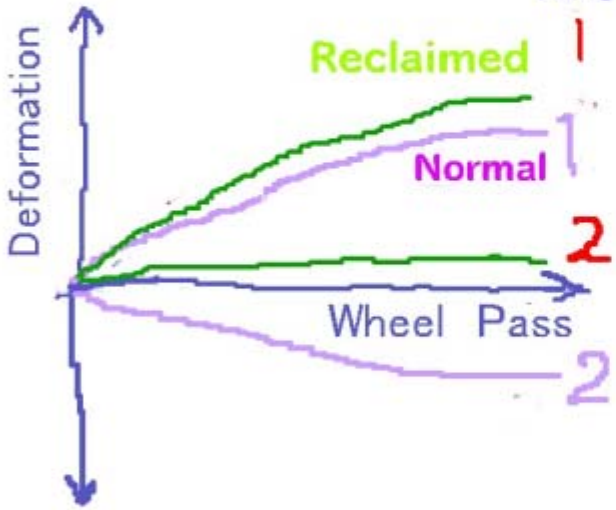
Applicable to Reclaimed Mixture

Rutting: Local Rutting **Cracking**

Cracking: Fatigue,Cracking,Deterioration

Reclaimed asphalt pavement (Cut from Field)





Reclaimed Mixture (30%)

3–4°C higher at brittle point

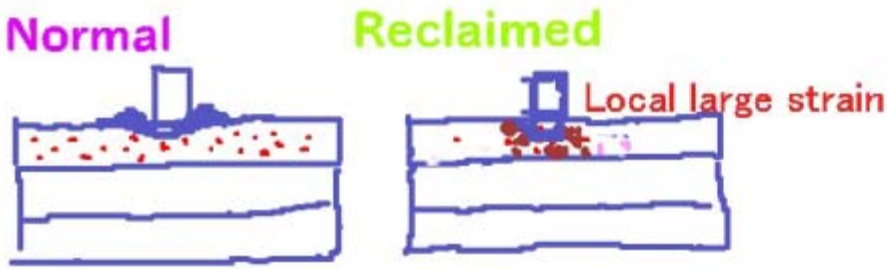
Cracking at Low Temp.

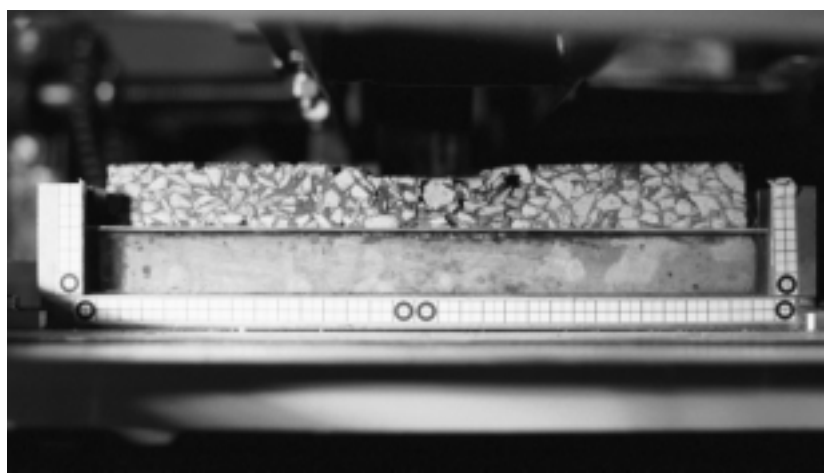
Local deformation

Local large strain

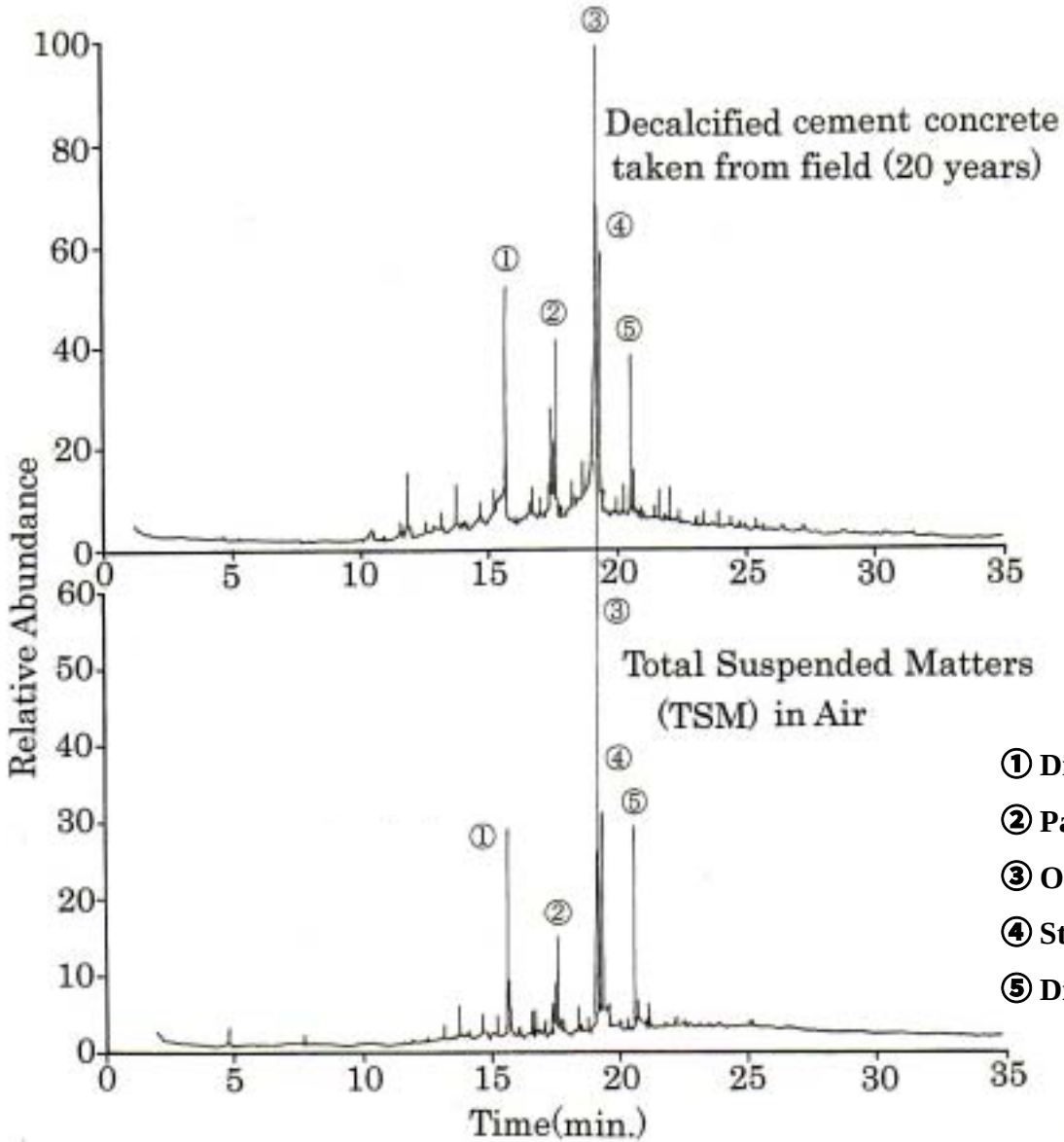
Cracking at high temp.

Rutting

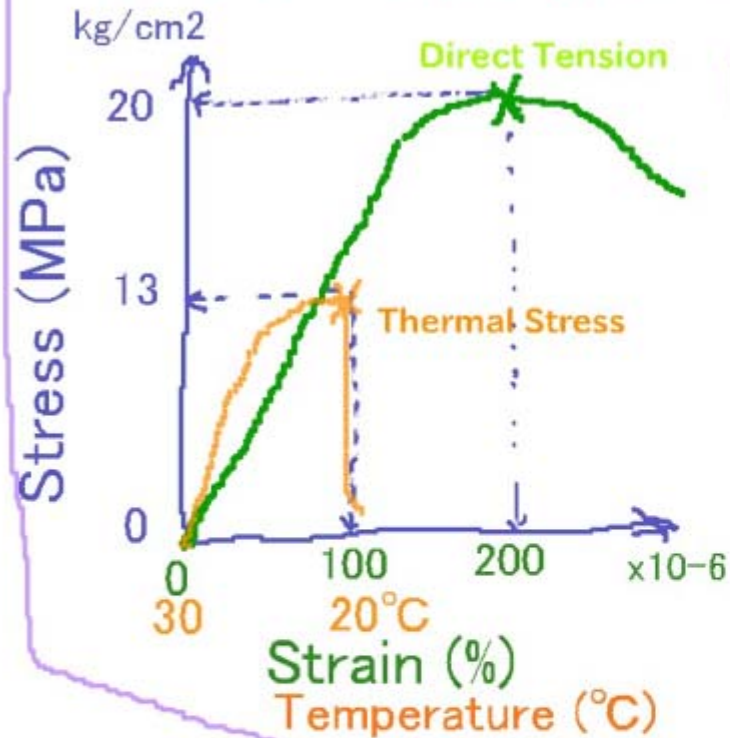




Spectrum of GC-MS



Tensile Property of Decalcified cement concrete



Direct Tension Test

Size of Specimen in Tension: 2.5x2.5x10cm
Rate of Strain: 1x10-4 1/sec
Temperature:20°C

Thermal Stress Restrained Specimen Test

Size of Specimen: 2.5x2.5x10cm
Cooling Rate: 10 °C/hr

X-ray Tomography


X-ray.avi

Decalcification test for cement concrete

Mist of DodecilBenzene Sulfonate Soda
(Soft Type)

Size of Specimen in Decalcified: Dia 10cmx10cm
Temperature:80°C