

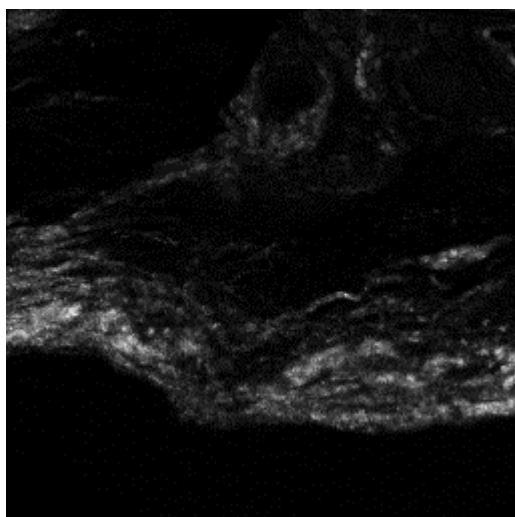
研究報告

B4 小谷

- 80代顔面皮膚切片サンプルのより狭い範囲(120 μ m*120 μ m)をとる
パワー30mW
観測部位のイメージを図1に示す.
各波長の実験結果を図2に示す.



SHG



TPEF

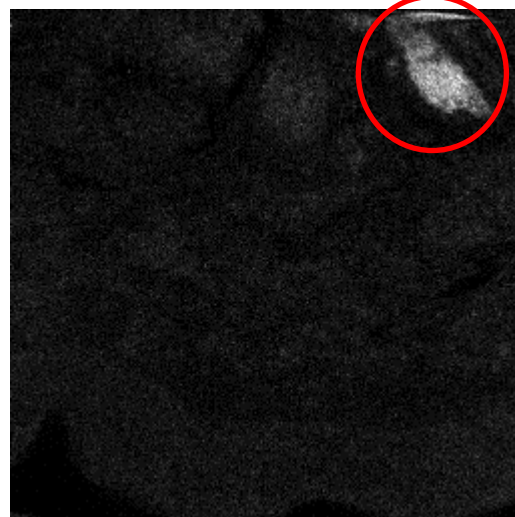
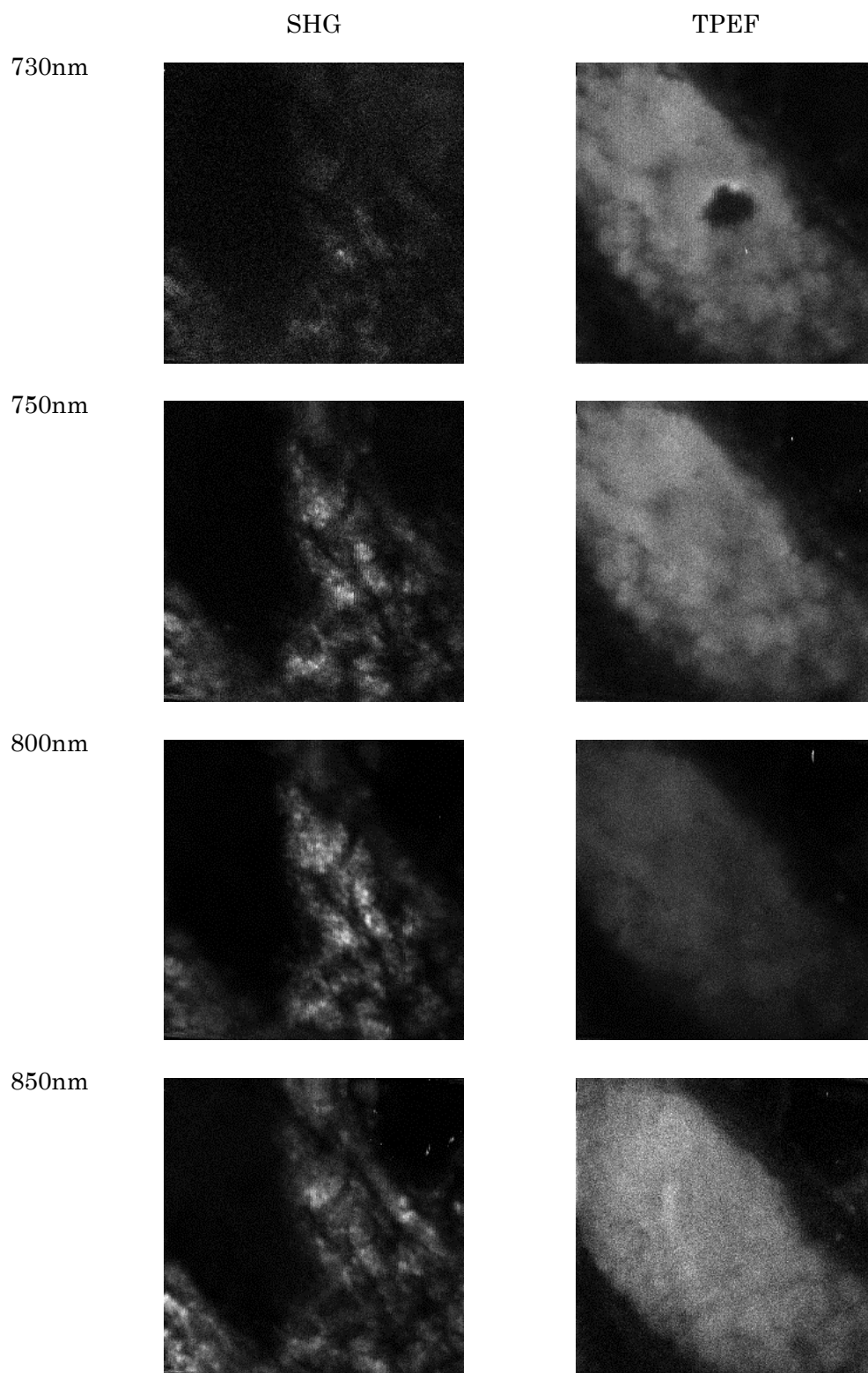
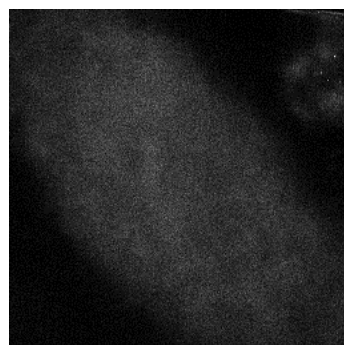
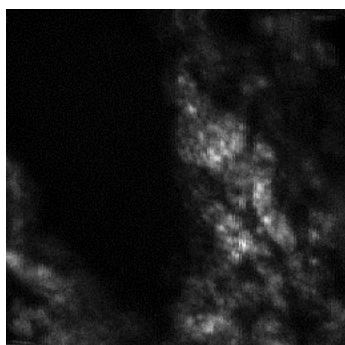


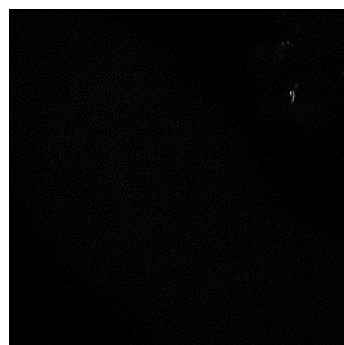
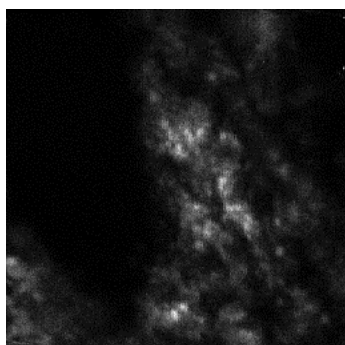
図1 観測部位(赤丸)のイメージ(560 μ m*560 μ m)



900nm



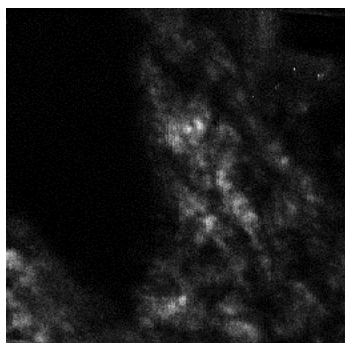
950nm



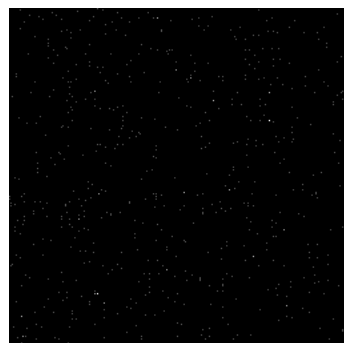
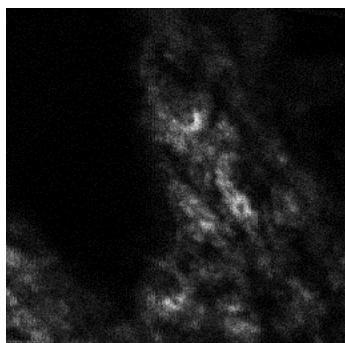
SHG

THG

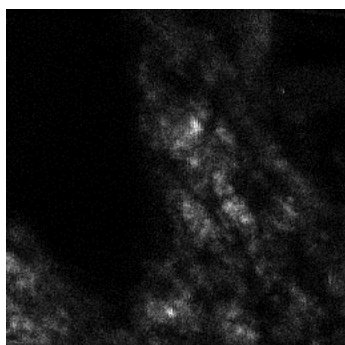
1000nm



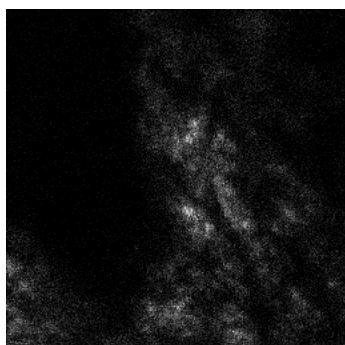
1050nm



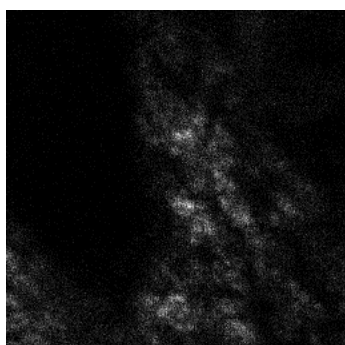
1100nm



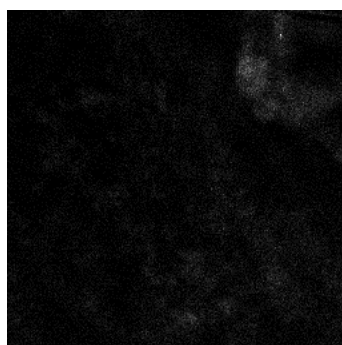
1150nm



1200nm



1250nm



1300nm

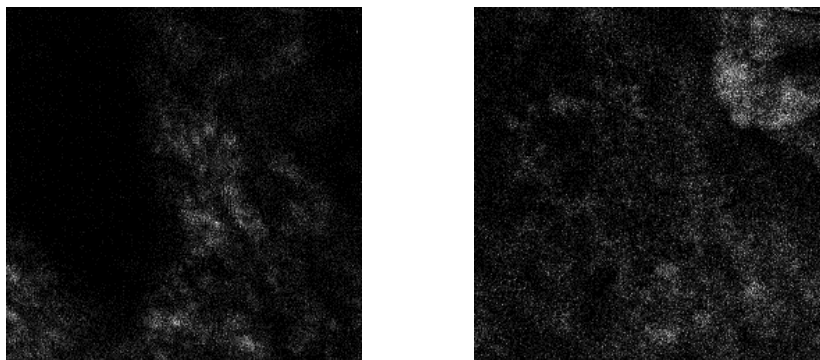


図2 実験結果

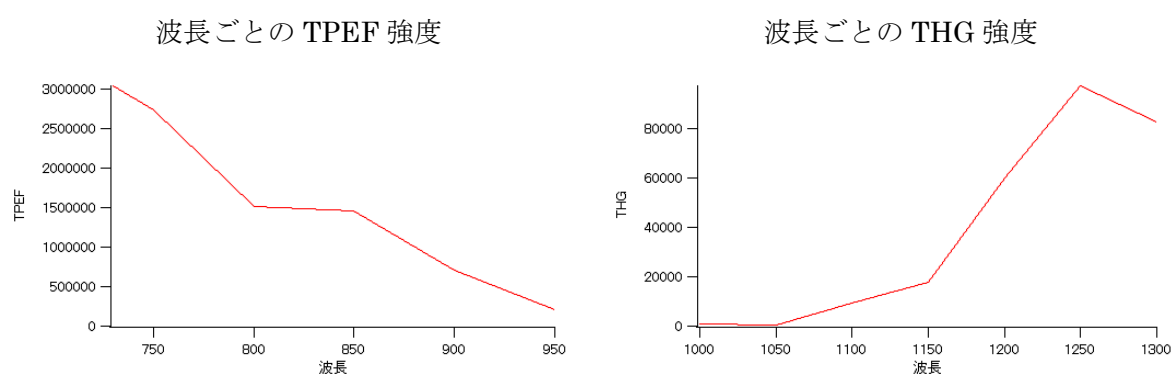
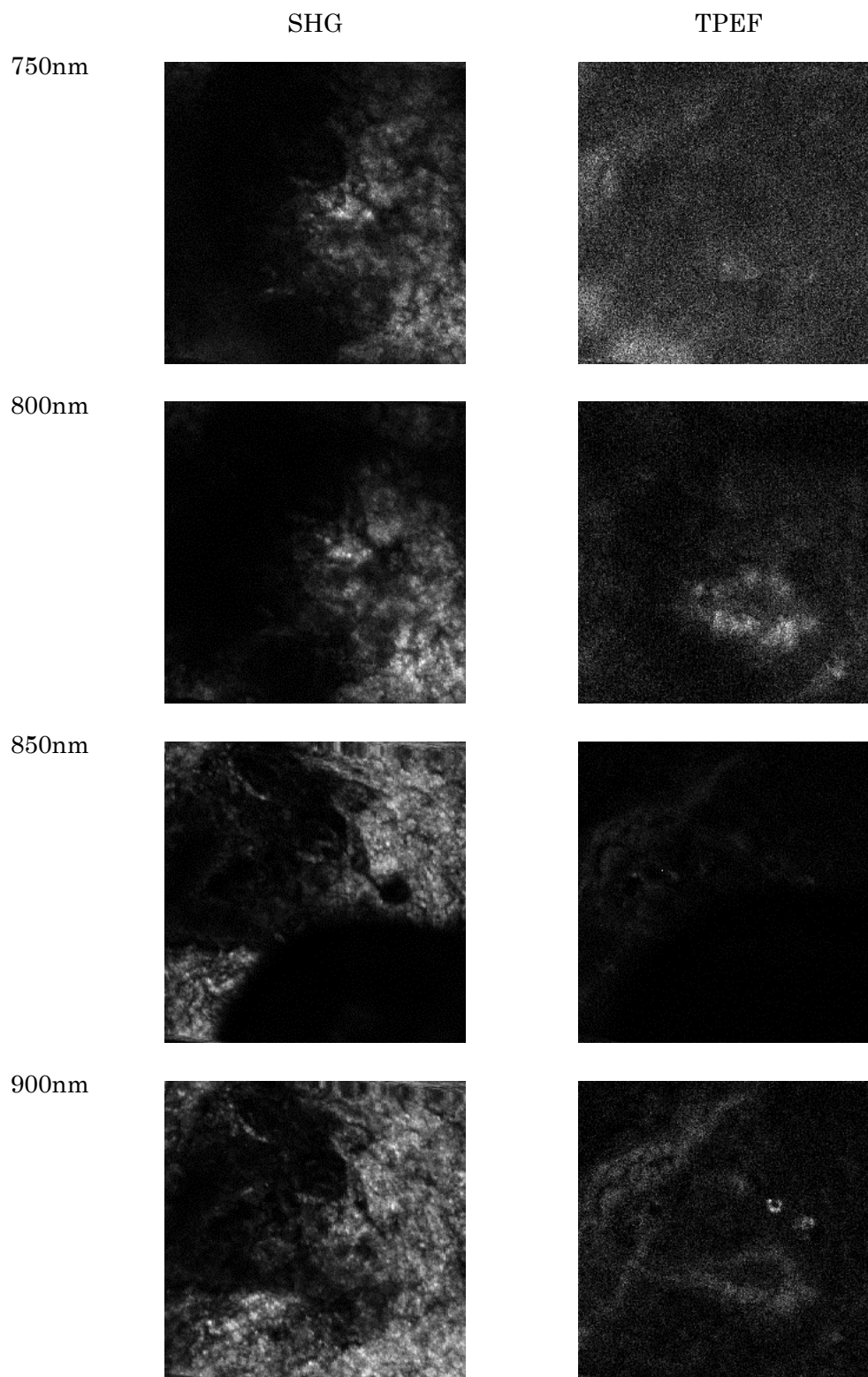


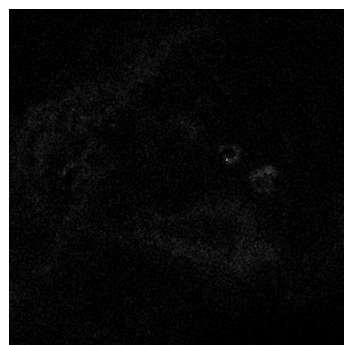
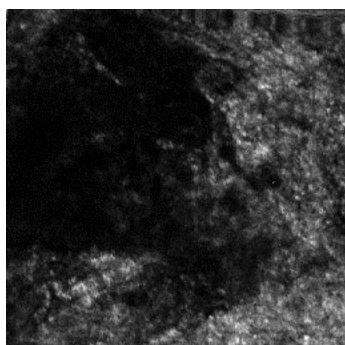
図3 図2のエラスチンから生じた TPEF および THG 強度のグラフ

エラスチンの塊を観測したものと思われる。切片サンプルでは TPEF では 730nm, THG では 1250nm が最も効率がいいとわかった。

- 30代女性臀部皮膚切片サンプルを観測
パワー30mW, 視野 200 μ m*200 μ m
図4に観測結果を示す.



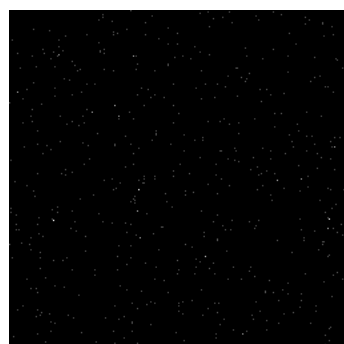
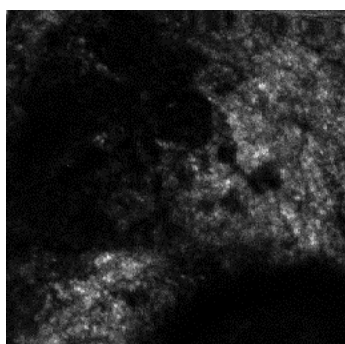
950nm



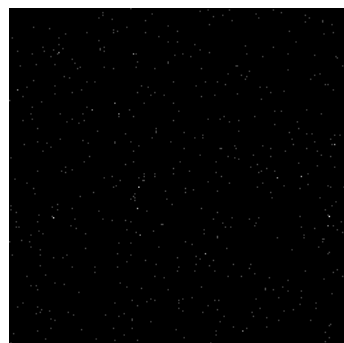
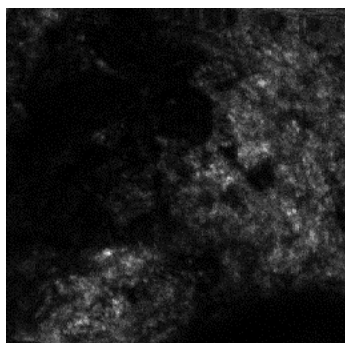
SHG

THG

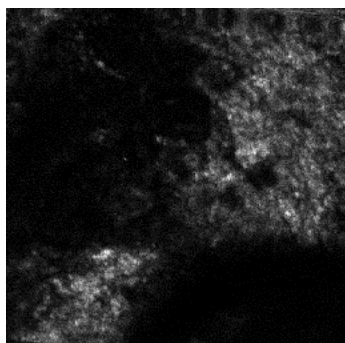
1000nm



1050nm



1100nm



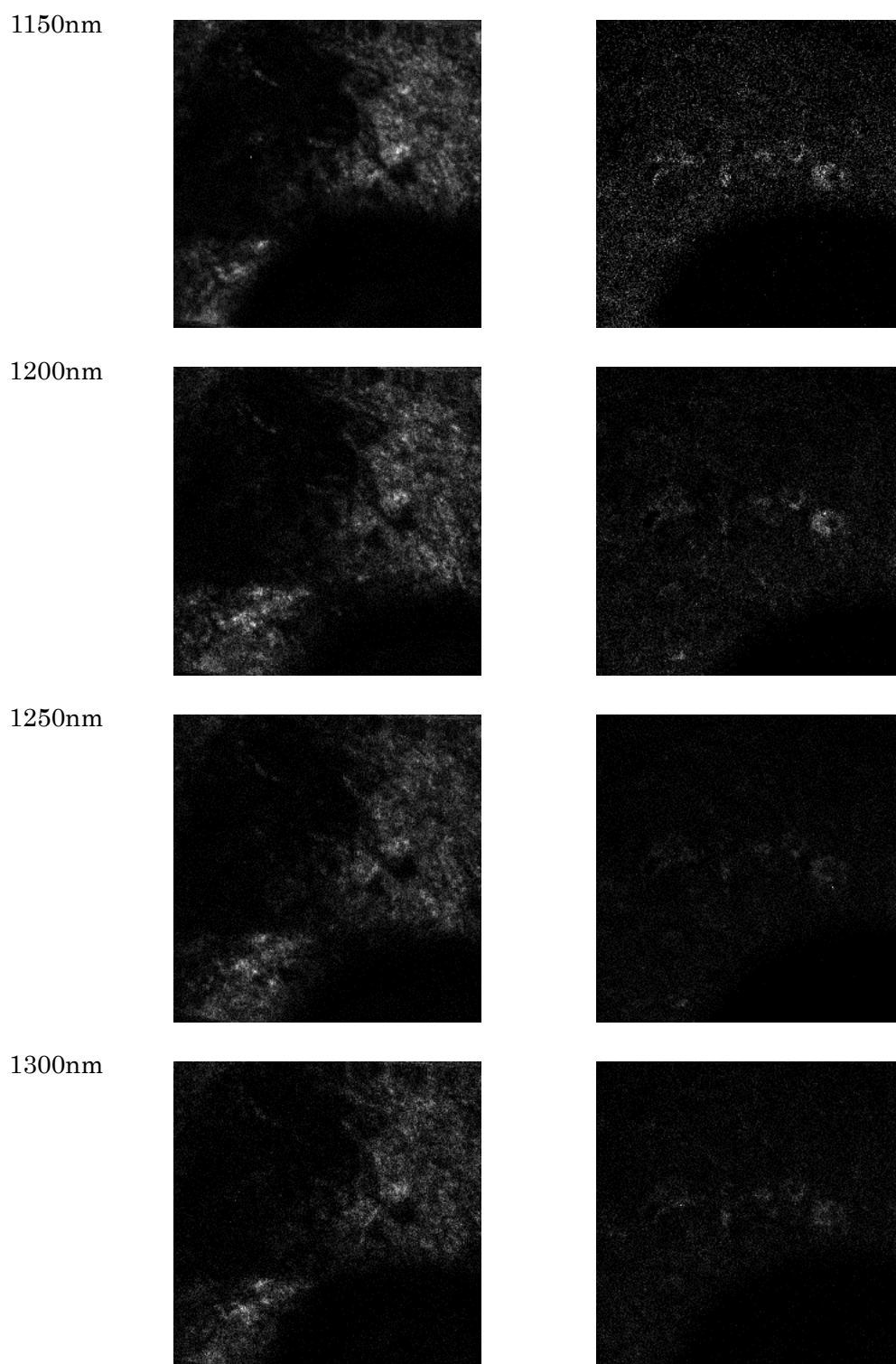


図4 観測結果

900nm→1300nm→850nm→730nm の順番で計測した. 徐々に燃えてきて, 800nm を観測するときには何も見えなかったのでデータとしては不十分.