$$1 \quad 1 - (t-s)^T \Sigma (t-s) + o(\|t-s\|^2)$$

$$\det = 1 - \left(1 - (t-s)^T \Sigma (t-s)\right)^2$$

$$= 2(t-s)^T \Sigma (t-s) + o(\|t-s\|^2)$$

$$= 2\|t-s\|^2 \, e_{t,s}^T \Sigma e_{t,s} + o(\|t-s\|^2)$$

$$\begin{pmatrix} 1 & & \\ & 1 & \\ & & 1 \end{pmatrix}$$

$$R(t,s) = 1 - t^T \Sigma s + \cdots$$

$o(\|t\|+\|s\|^2)$

$$r(t,s) = \sum$$

$\text{cov}(f(t), f(s)) = r(t,s)$

$$1 + a(t-s) + b(t-s)^2$$

Taylor expand around (t_0, t_0)?

get =

first prime for stationary case

Write up results / ideas for non-stat.