

**SIR Cosine No Immigration**

1.0  
0.8  
0.6  
0.4  
0.2

**SIR Spline No Immigration**

1.0  
0.8  
0.6  
0.4  
0.2

**Color Legend**

Simulation Median  
(MLE)

**Ribbon Legend**

95% Simulation Quantiles  
(all 2 LL combinations)  
95% Simulation Quantiles  
(MLE)  
Simulation Median  
(all 2 LL combinations)

**SEIR Spline No Immigration**

1.0  
0.8  
0.6  
0.4  
0.2

**SEIR Spline Immigration**

1.0  
0.8  
0.6  
0.4  
0.2

Years since Jan 1 1986

1

2

3

4

$\phi | Z$

