
Table of Contents

| | |
|---|----|
| 1. <i>Fix</i> w_0 , $R_1 = 2$ | 1 |
| 2. <i>Fix</i> w_0 , $R_1 = 19$ | 3 |
| 3. <i>Fix</i> w_0 , $R_1 = 189$ | 5 |
| 4. <i>Fix</i> T_m , $R_1 = 2$ | 7 |
| 5. <i>Fix</i> T_m , $R_1 = 19$ | 9 |
| 6. <i>Fix</i> T_m , $R_1 = 189$ | 11 |

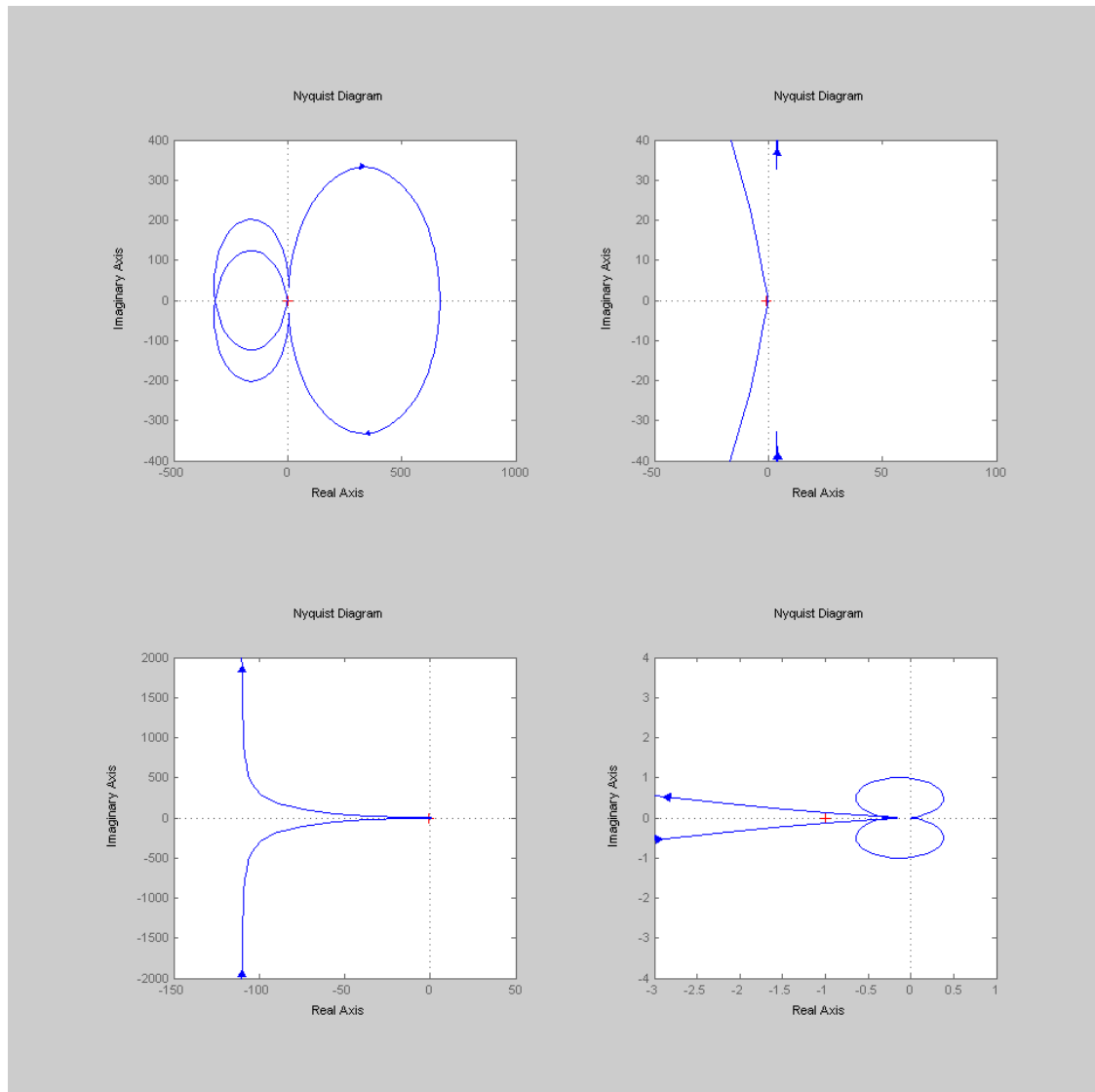
List of Tables

| | |
|--------------|----|
| 1.1. A | 2 |
| 1.2. B | 2 |
| 2.1. A | 4 |
| 2.2. B | 4 |
| 3.1. A | 6 |
| 3.2. B | 6 |
| 4.1. A | 8 |
| 4.2. B | 8 |
| 5.1. A | 10 |
| 5.2. B | 10 |
| 6.1. A | 12 |
| 6.2. B | 12 |

Chapter 1. *Fix* w0, RI =2

Parameters:

Rl = 1.8862
w0 = 314
Tm = 686.7548
id0 = 20.2374
iq0 = 110.8368



G (open loop) eigenvalues:

```
[ -6.239468+320.5939i ;  
  -6.239468-320.5939i ;  
  -6.021063+0i      ]
```

1/s G (closed loop) eigenvalues:

$[-7.726602+446.8972i ;$
 $-7.726602-446.8972i ;$
 $-5.354873+76.27668i ;$
 $-5.354873-76.27668i]$

Table 1.1. A

| | | |
|---------|---------|----------|
| -5.0000 | 314 | 110.8368 |
| -314 | -5.0000 | 607.0354 |
| 0 | -6.9000 | -8.5000 |

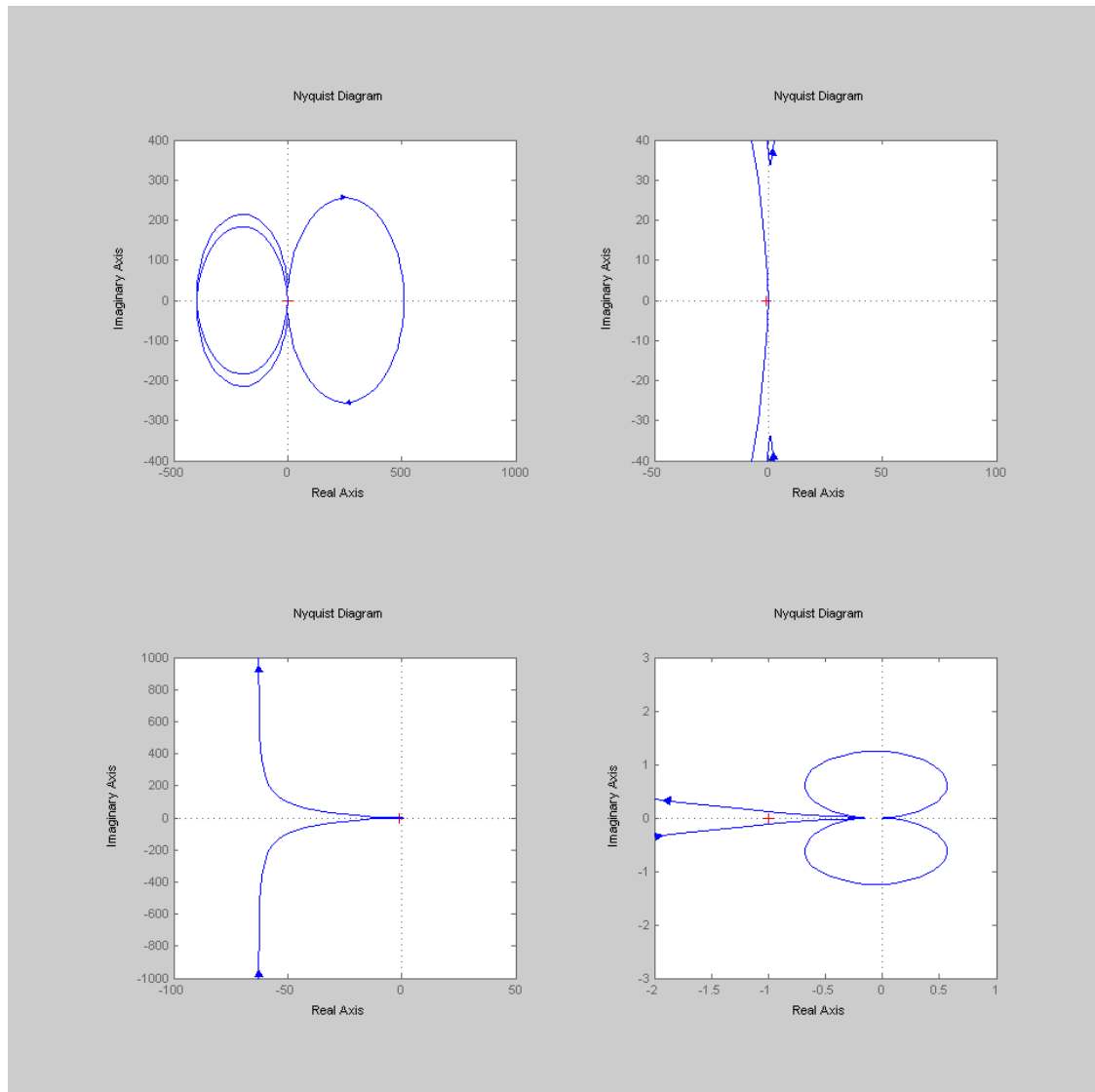
Table 1.2. B

| |
|-------------|
| 1.3439e+05 |
| -2.4538e+04 |
| 0 |

Chapter 2. *Fix* w0, RI =19

Parameters:

Rl = 18.8620
w0 = 314
Tm = 549.6416
id0 = 0.2101
iq0 = 11.4794



G (open loop) eigenvalues:

```
[ -5.194374+320.8138i ;  
  -5.194374-320.8138i ;  
  -8.111252+0i      ]
```

1/s G (closed loop) eigenvalues:

[-7.26782+446.9971i ;
-7.26782-446.9971i ;
-5.813655+77.48203i ;
-5.813655-77.48203i]

Table 2.1. A

| | | |
|---------|---------|----------|
| -5.0000 | 314 | 11.4794 |
| -314 | -5.0000 | 627.0626 |
| 0 | -6.9000 | -8.5000 |

Table 2.2. B

| |
|-------------|
| 1.3919e+05 |
| -2.5480e+03 |
| 0 |

Chapter 3. *Fix* w0, RI =189

Parameters:

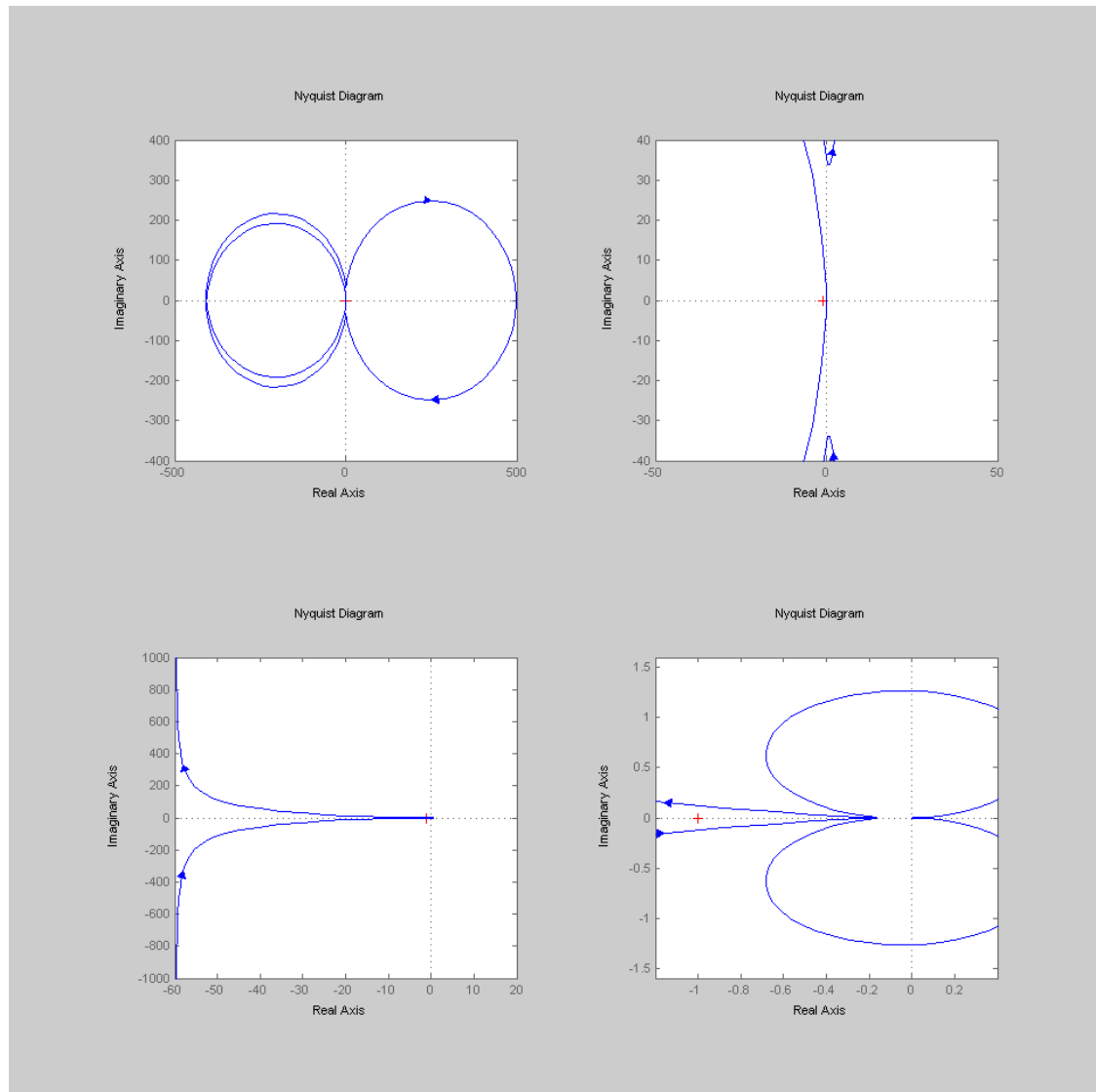
Rl = 188.6200

w0 = 314

Tm = 535.3851

id0 = 0.0021

iq0 = 1.1486



G (open loop) eigenvalues:

```
[-5.085671+320.8171i ;  
 -5.085671-320.8171i ;  
 -8.328657+0i      ]
```

1/s G (closed loop) eigenvalues:

[-7.21999+446.9985i ;
-7.21999-446.9985i ;
-5.861486+77.49123i ;
-5.861486-77.49123i]

Table 3.1. A

| | | |
|---------|---------|----------|
| -5.0000 | 314 | 1.1486 |
| -314 | -5.0000 | 627.2706 |
| 0 | -6.9000 | -8.5000 |

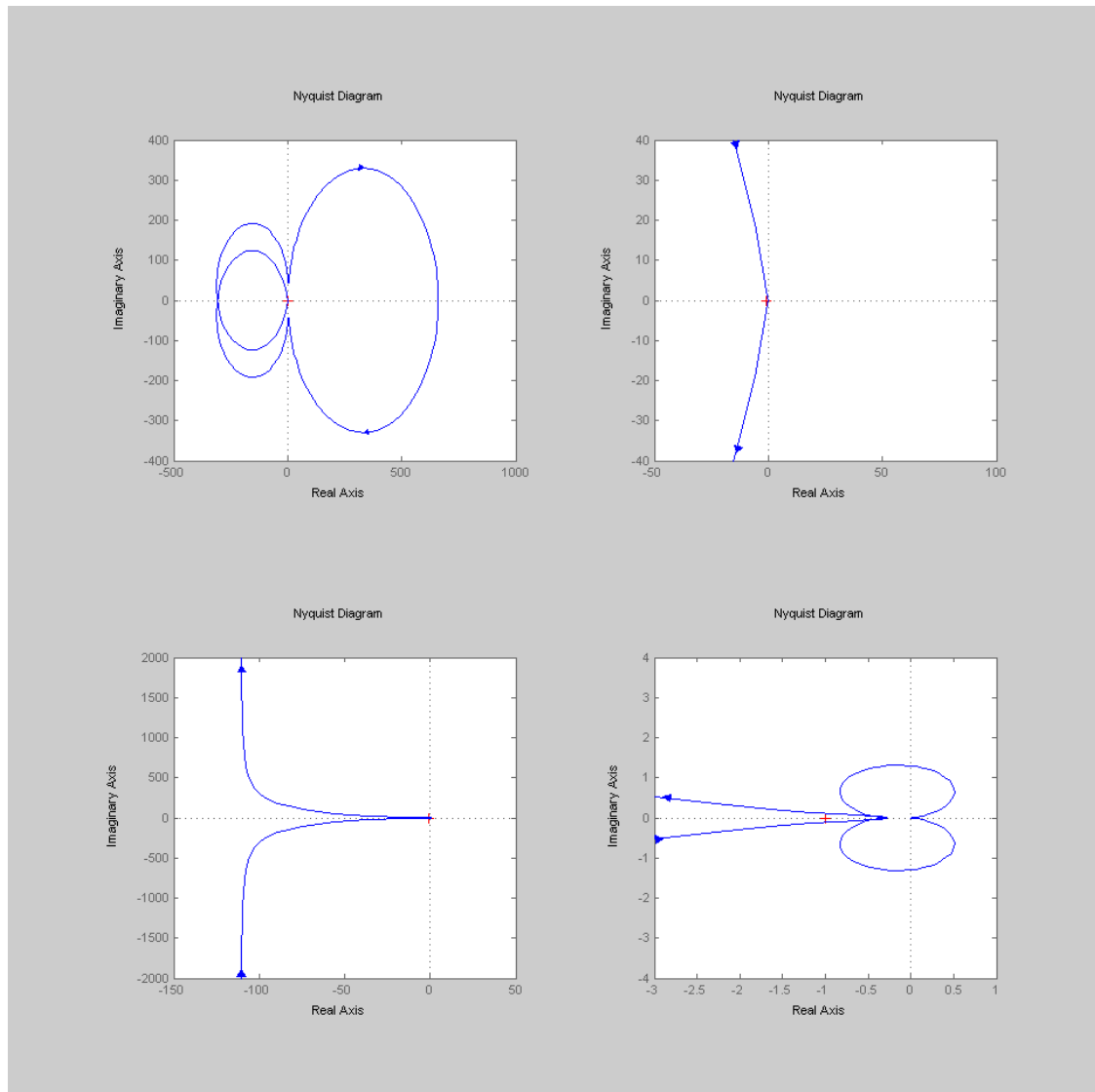
Table 3.2. B

| |
|------------|
| 1.3927e+05 |
| -255.0227 |
| 0 |

Chapter 4. *Fix* T_m, R_I = 2

Parameters:

R_I = 1.8862
w₀ = 227.8241
T_m = 500
id₀ = 10.8188
iq₀ = 81.6659



G (open loop) eigenvalues:

```
[ -6.275547+236.9669i ;  
  -6.275547-236.9669i ;  
  -5.948905+0i      ]
```

1/s G (closed loop) eigenvalues:

[-7.87446+326.2605i ;
 -7.87446-326.2605i ;
 -5.207015+76.39199i ;
 -5.207015-76.39199i]

Table 4.1. A

| | | |
|-----------|----------|----------|
| -5.0000 | 227.8241 | 81.6659 |
| -227.8241 | -5.0000 | 616.4539 |
| 0 | -6.9000 | -8.5000 |

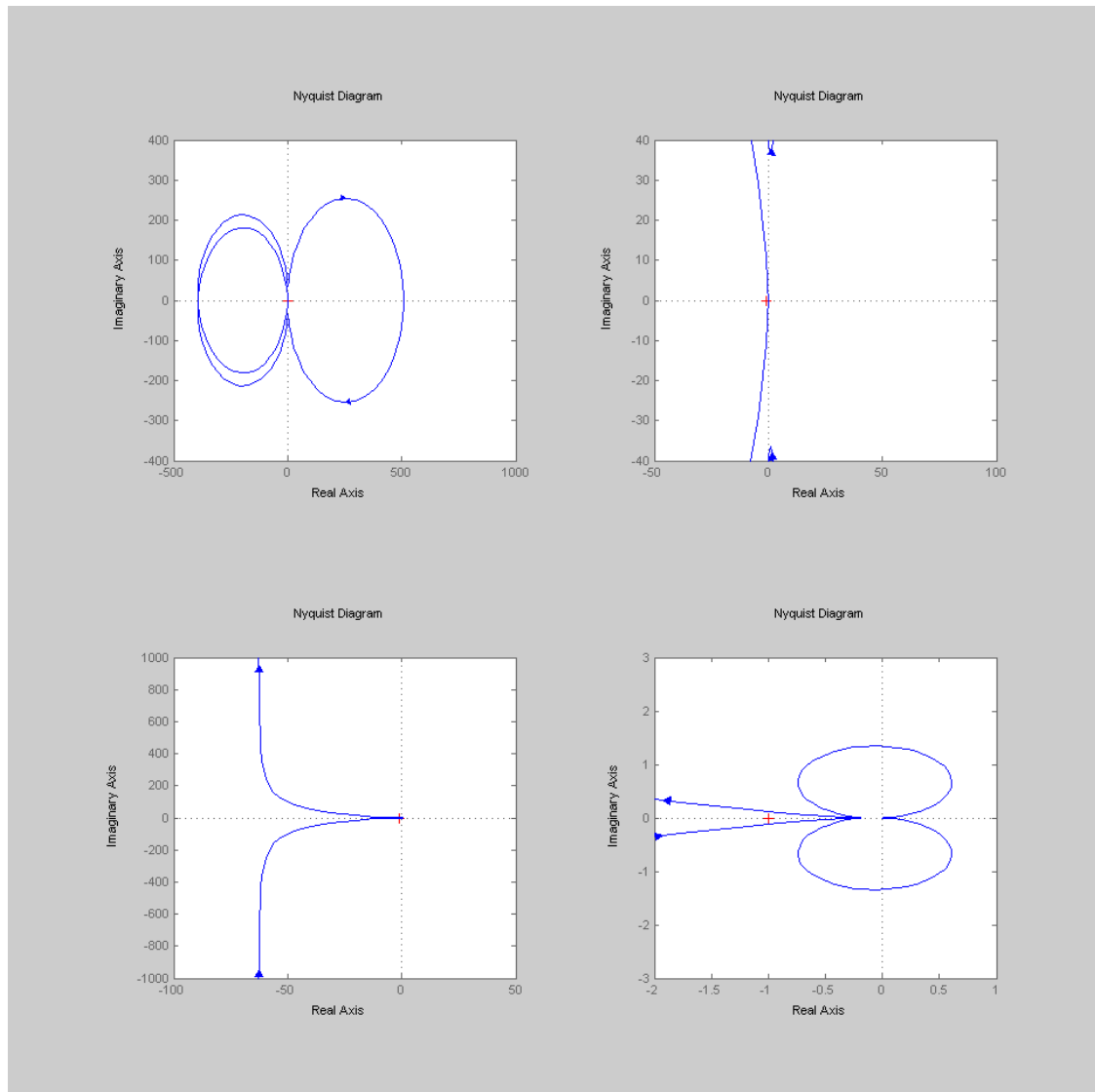
Table 4.2. B

| |
|-------------|
| 9.9020e+04 |
| -1.3118e+04 |
| 0 |

Chapter 5. *Fix* Tm, RI =19

Parameters:

Rl = 18.8620
w0 = 285.6402
Tm = 500
id0 = 0.1739
iq0 = 10.4432



G (open loop) eigenvalues:

```
[ -5.207893+293.1143i ;  
  -5.207893-293.1143i ;  
  -8.084215+0i      ]
```

1/s G (closed loop) eigenvalues:

[-7.298422+407.2006i ;
 -7.298422-407.2006i ;
 -5.783053+77.37427i ;
 -5.783053-77.37427i]

Table 5.1. A

| | | |
|-----------|----------|----------|
| -5.0000 | 285.6402 | 10.4432 |
| -285.6402 | -5.0000 | 627.0988 |
| 0 | -6.9000 | -8.5000 |

Table 5.2. B

| |
|-------------|
| 1.2662e+05 |
| -2.1087e+03 |
| 0 |

Chapter 6. *Fix* Tm, RI =189

Parameters:

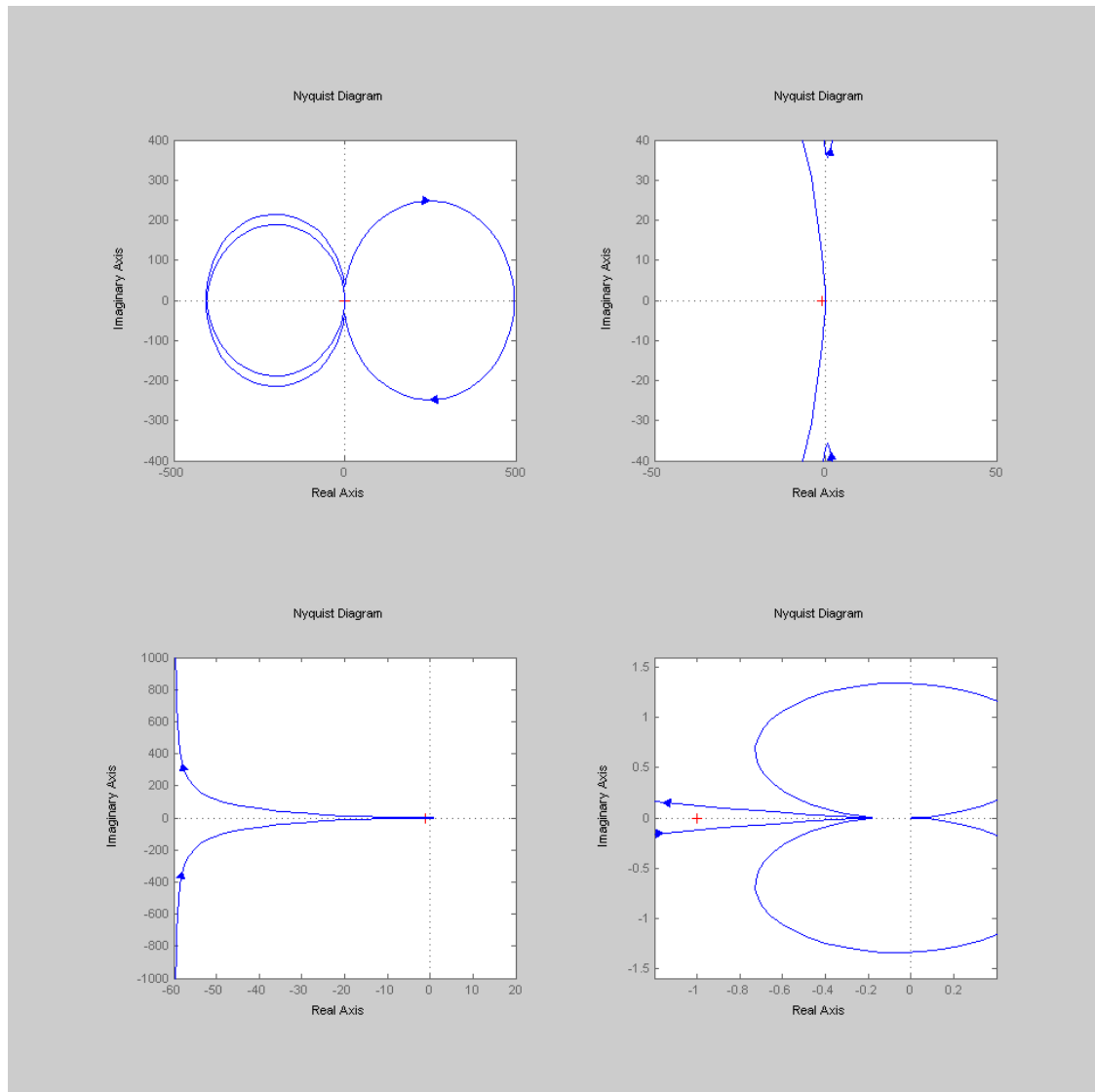
Rl = 188.6200

w0 = 293.2469

Tm = 500

id0 = 0.0018

iq0 = 1.0727



G (open loop) eigenvalues:

```
[ -5.095863+300.5349i ;  
  -5.095863-300.5349i ;  
  -8.308274+0i      ]
```

1/s G (closed loop) eigenvalues:

[-7.241372+417.8698i ;
 -7.241372-417.8698i ;
 -5.840104+77.414i ;
 -5.840104-77.414i]

Table 6.1. A

| | | |
|-----------|----------|----------|
| -5.0000 | 293.2469 | 1.0727 |
| -293.2469 | -5.0000 | 627.2709 |
| 0 | -6.9000 | -8.5000 |

Table 6.2. B

| |
|------------|
| 1.3007e+05 |
| -222.4265 |
| 0 |