```
ans =
```

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

ans =

"Tracker step 7: demodulated 70 symbols."

```
message_body: '010100110001110011001011101110'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CRC: '0001101111100100010100001'
                                            "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        estimatedDopplerStart: 48.9899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               estimatedDopplerEnd: 61.2836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       estimatedDelay: 0.0282
                                                                                                                                                              "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                  version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACQUISITION_OK: 1
TRACKING_OK: 1
DEMODULATION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACKed: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 isACKmessage: 1
                                                                                                                                                                                                                                                                                 "DEMODULATION RESULT 1"
                                                                                                                                                                                                                                                                                                                                                                                                     struct with fields:
ans =
                                                                                                                  ans =
                                                                                                                                                                                                                                       ans =
                                                                                                                                                                                                                                                                                                                                                           ans =
```

```
estimatedPhase: 1.8461
```

"Results saved in MM_test_5.32_12.6_f1_d100_s10_c5.json"

Elapsed time is 16.220979 seconds.

ans =

"Generation test signal completed."

Elapsed time is 0.881119 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

```
ans =
```

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

```
maxPeak: 0.0087
idStartTime: 281652
idDopplerShift: 50
    mean: 8.1232e-10
meanSquare: 4.8486e-09
phase: 1.8461
```

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

```
"Tracker step 6: demodulated 60 symbols."
                                                                                                                                                   "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                                "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                              "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACQUISITION_OK: 1
TRACKING_OK: 1
DEMODULATION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "DEMODULATION RESULT 1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       struct with fields:
                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ans =
ans =
                                                                                                                                                                                                                         ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans =
                                                                                                             ans =
```

```
"Results saved in MM_test_5.65_12.6_f1_d100_s10_c5.json"
                          message_body: '010100110001110011001011011101
                                                              CRC: '0001101111100100010100001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Acquisition search 10.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Acquisition search 20.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Generation test signal completed."
                                                                                                                                                          estimatedDopplerStart: 48.9899
                                                                                                                                                                                          estimatedDopplerEnd: 61.2836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Elapsed time is 16.580767 seconds.
                                                                                                                                                                                                                       estimatedDelay: 0.0282
message_ID: '0011'
                                                                                                                                                                                                                                                        estimatedPhase: 1.8461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Elapsed time is 0.820815 seconds.
                                                                                                                               isACKmessage: 1
                                                                                              ACKed: 1
                                                                                                                                                                                                                                                                                                                                                            ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ans =
```

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

```
ans =
```

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0069

idStartTime: 281652

idDopplerShift: 50

mean: 4.2067e-09

meanSquare: 3.1055e-09

phase: 1.8461

ans =

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

```
"Tracker step 4: demodulated 40 symbols."
                                                                                                                                                    "Tracker step 5: demodulated 50 symbols."
                                                                                                                                                                                                                                                                                                       "Tracker step 6: demodulated 60 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "DEMODULATION RESULT 1"
                                                                                                                                                                                                                                               ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ans =
                                                                                              ans =
                                                                                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ans =
```

```
message_body: '010100111001110011001011011101
                                                                                                                                                                                                                      CRC: '000110111100100010100001'
                                                                                                                                              SV_ID: '000001'
                                                                                                                                                                                                                                                                                               estimatedDopplerStart: 48.9899
                                                                                                                                                                                                                                                                                                                      estimatedDopplerEnd: 61.2836
                                                                                                                                                                                                                                                                                                                                               estimatedDelay: 0.0282
                                                                                                                                                                       message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                        estimatedPhase: 1.8461
                                                version: "2"
                                                                                                                                                                                                                                                                     isACKmessage: 1
                                                                                                                                                                                                                                              ACKed: 1
                                                                      ACQUISITION_OK: 1
                                                                                              TRACKING_OK: 1
                                                                                                                     DEMODULATION_OK: 1
struct with fields:
```

"Results saved in MM_test_5.98_12.6_f1_d100_s10_c5.json"

Elapsed time is 16.063532 seconds.

ans =

"Generation test signal completed."

Elapsed time is 0.839028 seconds.

ans =

"Acquisition search 10.0% completed."

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

```
"Acquisition search 80.0% completed."
```

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0055

idStartTime: 281652

idDopplerShift: 50 mean: 5.6468e-09

meanSquare: 1.9621e-09

phase: 1.8461

ans =

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

```
ans =
```

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

ans =

"Tracker step 7: demodulated 70 symbols."

ans =

"Tracker step 8: demodulated 80 symbols."

ans =

"Received message analyzed."

```
"Results saved in MM_test_6.31_12.6_f1_d100_s10_c5.json"
                                                                                                                                                                                                                                                                                                                                                                             message_body: '010100111001110011001011101110'
                                                                                                                                                                                                                                                                                                                                                                                                        CRC: '000110111100100010100001'
                                                                                                                                                                                                                                                                                                                               SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     estimatedDopplerStart: 48.9899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             estimatedDopplerEnd: 61.2836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                                                                        message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               estimatedPhase: 1.8461
                                                                                                                                                                                                                             version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                            isACKmessage: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                    ACKed: 1
                                                                                                                                                                                                                                                   ACQUISITION_OK: 1
                                                                                                                                                                                                                                                                              TRACKING_OK: 1
                                                                                                                                                                                                                                                                                                     DEMODULATION_OK: 1
                                               "DEMODULATION RESULT 1"
                                                                                                                                                                           struct with fields:
                                                                                                                           ans =
ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ans =
```

Elapsed time is 16.254088 seconds.

```
"Generation test signal completed."
```

Elapsed time is 0.819346 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

```
ans =
```

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0044

idStartTime: 281652

idDopplerShift: 50 mean: 4.0370e-09

meanSquare: 1.2393e-09

phase: 1.8461

```
"Tracker step 1: demodulated 10 symbols."
```

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

ans =

"Tracker step 7: demodulated 70 symbols."

```
message_body: '0101001100011100110010111011110'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CRC: '000110111100100010100001'
                                          "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    estimatedDopplerStart: 48.9899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          estimatedDopplerEnd: 61.2836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       estimatedPhase: 1.8461
                                                                                                                                                             "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                               version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACKed: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACQUISITION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEMODULATION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            isACKmessage: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TRACKING_OK: 1
                                                                                                                                                                                                                                                                              "DEMODULATION RESULT 1"
                                                                                                                                                                                                                                                                                                                                                                                                 struct with fields:
ans =
                                                                                                                  ans =
                                                                                                                                                                                                                                     ans =
                                                                                                                                                                                                                                                                                                                                                      ans =
```

```
ans =
```

"Results saved in MM_test_6.64_12.6_f1_d100_s10_c5.json"

Elapsed time is 16.089114 seconds.

ans =

"Generation test signal completed."

Elapsed time is 0.896625 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

```
"Acquisition search 50.0% completed."
```

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0873

```
idStartTime: 281652
```

idDopplerShift: 52

mean: 2.6432e-08 meanSquare: 4.9444e-07

phase: 1.8561

ans =

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

```
message_body: '010100110001110011001011101110'
"Tracker step 6: demodulated 60 symbols."
                                                                                                                         "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                    "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                             "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACQUISITION_OK: 1 TRACKING_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEMODULATION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "DEMODULATION RESULT 1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                struct with fields:
                                                                                                                                                                                                      ans =
                                                                             ans =
                                                                                                                                                                                                                                                                                                                                 ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
```

```
"Results saved in MM_test_2.32_25.4_f1_d100_s10_c5.json"
CRC: '000110111100100010100001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Acquisition search 10.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Acquisition search 20.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Generation test signal completed."
                                                                                         estimatedDopplerStart: 53.0303
                                                                                                                     estimatedDopplerEnd: 66.6182
                                                                                                                                                                                                                                                                                                                                                                                             Elapsed time is 16.022570 seconds.
                                                                                                                                                    estimatedDelay: 0.0282
                                                                                                                                                                                estimatedPhase: 1.8561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Elapsed time is 0.909902 seconds.
                             ACKed: 1
                                                           isACKmessage: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ans =
                                                                                                                                                                                                                                                                              ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
```

"Acquisition search 30.0% completed."

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

```
"Acquisition search 100.0% completed."
```

struct with fields:

maxPeak: 0.0549

idStartTime: 281652

idDopplerShift: 52

mean: 1.1929e-08

meanSquare: 1.9609e-07

phase: 1.8561

ans =

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

```
ans =
"Tracker step 5: demodulated 50 symbols."

ans =
"Tracker step 6: demodulated 60 symbols."

ans =
"Tracker step 7: demodulated 70 symbols."

ans =
"Tracker step 8: demodulated 80 symbols."

ans =
"Received message analyzed."

ans =
"DEMODULATION RESULT 1."

ans =
struct with fields:
```

```
version: "2"

ACQUISITION_OK: 1

TRACKING_OK: 1

SV_ID: '000001'

message_ID: '0011'

message_Dody: '0101001100111011101110'

CRC: '00011011110010001010001'

ACKed: 1

isACKmessage: 1

estimatedDopplerStart: 53.0303

estimatedDopplerEnd: 66.6182

estimatedDopplerStart: 1.8561
```

```
"Results saved in MM_test_2.99_25.4_f1_d100_s10_c5.json"

Elapsed time is 16.083826 seconds.

ans =
"Generation test signal completed."
```

ans =

Elapsed time is 0.985144 seconds.

"Acquisition search 10.0% completed."

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

```
"Tracker step 1: demodulated 10 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Tracker step 2: demodulated 20 symbols."
                                                                                                                                                                    "Acquisition search 100.0% completed."
                                              "Acquisition search 90.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                mean: 6.3848e-09
                                                                                                                                                                                                                                                                                                                                                                                                                                        meanSquare: 7.7775e-08
                                                                                                                                                                                                                                                                                                                                                                 idStartTime: 281652
                                                                                                                                                                                                                                                                                                                                                                                                                                                              phase: 1.8561
                                                                                                                                                                                                                                                                                                                                         maxPeak: 0.0347
                                                                                                                                                                                                                                                                                                                                                                                     idDopplerShift: 52
                                                                                                                                                                                                                                                                                          struct with fields:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ans =
ans =
                                                                                                                        ans =
                                                                                                                                                                                                                                              ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ans =
```

```
"Tracker step 3: demodulated 30 symbols."
```

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

ans =

"Tracker step 7: demodulated 70 symbols."

ans =

"Tracker step 8: demodulated 80 symbols."

ans =

"Received message analyzed."

```
"Results saved in MM_test_3.65_25.4_f1_d100_s10_c5.json"
                                                                                                                                                                                                                                                                                                                                                                                        message_body: '010100110001110011001011101110'
                                                                                                                                                                                                                                                                                                                                                                                                                    CRC: '000110111100100010100001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Generation test signal completed."
                                                                                                                                                                                                                                                                                                                                        SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  estimatedDopplerStart: 53.0303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           estimatedDopplerEnd: 66.6182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Elapsed time is 16.214749 seconds.
                                                                                                                                                                                                                                                                                                                                                               message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             estimatedPhase: 1.8561
                                                                                                                                                                                                                                  version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                          ACKed: 1
                                                                                                                                                                                                                                                                                 TRACKING_OK: 1 DEMODULATION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       isACKmessage: 1
                                                                                                                                                                                                                                                          ACQUISITION_OK: 1
                                              "DEMODULATION RESULT 1"
                                                                                                                                                                               struct with fields:
ans =
                                                                                                                                ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ans =
```

```
Elapsed time is 0.898735 seconds.
```

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

```
"Acquisition search 70.0% completed."
```

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0218

idStartTime: 281652

idDopplerShift: 52

mean: 1.8105e-08 meanSquare: 3.0979e-08

phase: 1.8561

ans =

"Tracker step 1: demodulated 10 symbols."

```
ans =
```

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

ans =

"Tracker step 7: demodulated 70 symbols."

```
message_body: '010100110001110011001011011101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CRC: '000110111100100010100001'
"Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      estimatedDopplerStart: 53.0303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            estimatedDopplerEnd: 66.6182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             estimatedPhase: 1.8561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 message_ID: '0011'
                                                                                                                     "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                             version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               isACKmessage: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACKed: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEMODULATION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                   ACQUISITION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TRACKING_OK: 1
                                                                                                                                                                                                                                          "DEMODULATION RESULT 1"
                                                                                                                                                                                                                                                                                                                                                             struct with fields:
                                                                                                                                                                                             ans =
                                                                          ans =
                                                                                                                                                                                                                                                                                                                   ans =
```

```
"Results saved in MM_test_4.32_25.4_f1_d100_s10_c5.json"
```

Elapsed time is 15.714516 seconds.

ans =

"Generation test signal completed."

Elapsed time is 0.893306 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

```
ans =
```

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0138

idStartTime: 281652

idDopplerShift: 52

```
mean: 1.2335e-08
meanSquare: 1.2196e-08
```

phase: 1.8561

ans =

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

```
message_body: '010100110001110011001011011101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CRC: '000110111100100010100001'
                                            "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                              "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 message_ID: '0011'
                                                                                                                                                                                                                                                                                 "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACKed: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TRACKING_OK: 1
DEMODULATION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACQUISITION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                  "DEMODULATION RESULT 1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     struct with fields:
                                                                                                                                                                                                                                                                                                                                                        ans =
ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ans =
                                                                                                                    ans =
                                                                                                                                                                                                                                     ans =
```

```
isACKmessage: 1
estimatedDopplerStart: 53.0303
estimatedDopplerEnd: 66.6182
estimatedDelay: 0.0282
estimatedPhase: 1.8561
```

ans =

"Results saved in MM_test_4.98_25.4_f1_d100_s10_c5.json"

Elapsed time is 16.078920 seconds.

ans =

"Generation test signal completed."

Elapsed time is 0.957669 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

```
"Tracker step 1: demodulated 10 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Tracker step 2: demodulated 20 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Tracker step 4: demodulated 40 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Tracker step 3: demodulated 30 symbols."
                                                                                                                                                             mean: 5.7109e-09
                                                                                                                                                                                   meanSquare: 7.5519e-09
                                                                                                                                                                                                            phase: 1.8561
                                                                                         maxPeak: 0.0109
                                                                                                              idStartTime: 281652
                                                                                                                                      idDopplerShift: 52
                                             struct with fields:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ans =
ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ans =
                                                                                                                                                                                                                                                                                        ans =
                                                                                                                                                                                                                                                                                                                                                                                                            ans =
```

```
ans =
"Tracker step 5: demodulated 50 symbols."

ans =
"Tracker step 7: demodulated 70 symbols."

ans =
"Tracker step 8: demodulated 80 symbols."

ans =
"Received message analyzed."

ans =
"DEMODULATION RESULT 1"

ans =
struct with fields:
```

version: "2"

```
"Results saved in MM_test_5.32_25.4_f1_d100_s10_c5.json"
                                                                                                                                         message_body: '010100110001110011001011011101
                                                                                                                                                                      CRC: '000110111100100010100001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Generation test signal completed."
                                                                                       SV_ID: '000001'
                                                                                                                                                                                                                                                             estimatedDopplerStart: 53.0303
                                                                                                                                                                                                                                                                                         estimatedDopplerEnd: 66.6182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Elapsed time is 16.931675 seconds.
                                                                                                              message_ID: '0011'
                                                                                                                                                                                                                                                                                                                      estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                                                                 estimatedPhase: 1.8561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Elapsed time is 0.905040 seconds.
                                                                                                                                                                                                     ACKed: 1
                                                                                                                                                                                                                                isACKmessage: 1
ACQUISITION_OK: 1
                              TRACKING_OK: 1
                                                        DEMODULATION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                           ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
```

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

```
"Acquisition search 90.0% completed."
```

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0087

idStartTime: 281652

idDopplerShift: 52

mean: 4.9191e-09

meanSquare: 4.8597e-09

phase: 1.8561

ans =

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

```
ans =
```

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

ans =

"Tracker step 7: demodulated 70 symbols."

ans =

"Tracker step 8: demodulated 80 symbols."

ans =

"Received message analyzed."

```
"DEMODULATION RESULT 1"
```

struct with fields: ans =

version: "2"

TRACKING_OK: 1 ACQUISITION_OK: 1

DEMODULATION_OK: 1

SV_ID: '000001' message_ID: '0011'

message_body: '010100110001110011001011101110'

CRC: '0001101111100100010100001'

ACKed: 1

isACKmessage: 1

estimatedDopplerStart: 53.0303

estimatedDopplerEnd: 66.6182

estimatedDelay: 0.0282

estimatedPhase: 1.8561

ans =

"Results saved in MM_test_5.65_25.4_f1_d100_s10_c5.json"

Elapsed time is 16.183532 seconds.

ans =

"Generation test signal completed."

Elapsed time is 0.898092 seconds.

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

```
ans =
   "Acquisition search 80.0% completed."
ans =
```

"Acquisition search 90.0% completed."

"Acquisition search 100.0% completed."

ans =

maxPeak: 0.0069
idStartTime: 281652
idDopplerShift: 52
mean: 5.4238e-09
meanSquare: 3.1055e-09

phase: 1.8561

ans =

"Tracker step 1: demodulated 10 symbols."

```
ans =
```

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

ans =

"Tracker step 7: demodulated 70 symbols."

ans =

"Tracker step 8: demodulated 80 symbols."

```
message_body: '010100110001110011001011011101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CRC: '000110111100100010100001'
                                                                                                                                                                                                                                                                                                                                                                                                                 SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        estimatedDopplerStart: 53.0303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             estimatedDopplerEnd: 66.6182
                                                                                                                                                                                                                                                                                                                                                                                                                                      message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         estimatedPhase: 1.8561
                                            "Received message analyzed."
                                                                                                                                                                                                                                                                                                                        version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACKed: 1
                                                                                                                                                                                                                                                                                                                                                                  TRACKING_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 isACKmessage: 1
                                                                                                                                                                                                                                                                                                                                                                                         DEMODULATION_OK: 1
                                                                                                                                                                                                                                                                                                                                              ACQUISITION_OK: 1
                                                                                                                                                           "DEMODULATION RESULT 1"
                                                                                                                                                                                                                                                                           struct with fields:
ans =
                                                                                                                  ans =
                                                                                                                                                                                                                                 ans =
```

"Results saved in MM_test_5.98_25.4_f1_d100_s10_c5.json"

```
Elapsed time is 16.345694 seconds.
```

"Generation test signal completed."

Elapsed time is 0.890846 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

```
ans =
```

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0055

idStartTime: 281652

idDopplerShift: 52

mean: 4.6053e-09

meanSquare: 1.9521e-09

phase: 1.8561

ans =

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

```
message_body: '0101001110011110011101111011110'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CRC: '000110111100100010100001'
"Tracker step 7: demodulated 70 symbols."
                                                                                                                      "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             estimatedDopplerStart: 53.0303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     message_ID: '0011'
                                                                                                                                                                                                                                             "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TRACKING_OK: 1
DEMODULATION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        isACKmessage: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACQUISITION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACKed: 1
                                                                                                                                                                                                                                                                                                                                                                 "DEMODULATION RESULT 1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    struct with fields:
                                                                                                                                                                                                ans =
                                                                                                                                                                                                                                                                                                                    ans =
                                                                           ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                          ans =
```

```
estimatedDopplerEnd: 66.6182
    estimatedDelay: 0.0282
    estimatedPhase: 1.8561

ans =
    "Results saved in MM_test_6.31_25.4_f1_d100_s10_c5.json"

Elapsed time is 16.884354 seconds.
    .
    ans =
        "Generation test signal completed."

Elapsed time is 0.874853 seconds.

ans =
    "Acquisition search 10.0% completed."

ans =
    "Acquisition search 10.0% completed."

ans =
    "Acquisition search 10.0% completed."
```

"Acquisition search 20.0% completed."

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

```
struct with fields:
```

maxPeak: 0.0044

idStartTime: 281652

idDopplerShift: 52

mean: 1.8233e-09

meanSquare: 1.2243e-09

phase: 1.8561

ans =

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

```
ans =

"Tracker step 6: demodulated 60 symbols."

ans =

"Tracker step 7: demodulated 70 symbols."

ans =

"Tracker step 8: demodulated 80 symbols."

ans =

"Received message analyzed."

ans =

"DEMODULATION RESULT 1."

ans =

"DEMODULATION RESULT 1."
```

version: "2"
ACQUISITION_OK: 1
TRACKING_OK: 1

struct with fields:

```
"Results saved in MM_test_6.64_25.4_f1_d100_s10_c5.json"
                                                                                   message_body: `0101001100011100110011101111111110
                                                                                                                   CRC: '0001101111100100010100001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Acquisition search 10.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Acquisition search 20.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Generation test signal completed."
                          SV_ID: '000001'
                                                                                                                                                                                                              estimatedDopplerStart: 53.0303
                                                                                                                                                                                                                                            estimatedDopplerEnd: 66.6182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Elapsed time is 16.154107 seconds.
                                                                                                                                                                                                                                                                          estimatedDelay: 0.0282
                                                        message_ID: '0011'
                                                                                                                                                                                                                                                                                                       estimatedPhase: 1.8561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Elapsed time is 0.909451 seconds.
                                                                                                                                                    ACKed: 1
                                                                                                                                                                                isACKmessage: 1
DEMODULATION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                                                      ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ans =
```

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

```
ans =
   "Acquisition search 100.0% completed."

ans =
   struct with fields:
        maxPeak: 0.0865
   idStartTime: 281651
   idDopplerShift: 54
        mean: 1.3182e-08
   meanSquare: 4.9428e-07
```

"Tracker step 1: demodulated 10 symbols."

ans =

phase: 2.3838

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

```
Warning: Error no ack: received CRC 000110110011000011010010 and CRC remainder 000000001111100001110011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Warning: Error. Incorrect received tail 111110.
                                                                               "Tracker step 4: demodulated 40 symbols."
                                                                                                                                                                                                                                                                                                    "Tracker step 5: demodulated 50 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Tracker step 6: demodulated 60 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             II
ans =
                                                                                                                                                                                                                     ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans
```

```
message_body: '010100110001110011001011101110'
                                                                                                                                                                                                                                                                                                                                                                                                                                                         CRC: '000110110011000011010010'
                                                                                                                                                                                                                                                                                                                                                                                     SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  estimatedDopplerStart: 57.0707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      estimatedDopplerEnd: 77.1291
                                                                                                                                                                                                                                                                                                                                                                                                           message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       estimatedPhase: 2.3838
"Received message analyzed."
                                                                                                                                                                                                                                                                                        version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           isACKmessage: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACKed: 0
                                                                                                                                                                                                                                                                                                                                                           DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                              ACQUISITION_OK: 1
                                                                                                                                                                                                                                                                                                                                      TRACKING_OK: 1
                                                                                                                     "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                         struct with fields:
                                                                         ans =
                                                                                                                                                                                              ans =
```

"Results saved in MM_test_2.32_51_f1_d100_s10_c5.json"

```
Elapsed time is 16.185525 seconds.
```

"Generation test signal completed."

Elapsed time is 0.921672 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

```
"Acquisition search 60.0% completed."
```

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0544 idStartTime: 281651

mean: 6.6026e-08 idDopplerShift: 54

meanSquare: 1.9460e-07

phase: 2.3838

```
ans =
```

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

```
Warning: Error no ack: received CRC 00011011001100011010010 and CRC remainder 00000001111100001110011
                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                          Warning: Error. Incorrect received tail 111110.
"Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                    "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                                                                                                                                                                                                                           IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 struct with fields:
                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ans =
```

version: "2"

ACQUISITION_OK: 1 TRACKING_OK: 1

```
message_body: `0101001100011100110011101111111110
                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Results saved in MM_test_2.99_51_f1_d100_s10_c5.json"
                                                                                                                 CRC: '000110110011000011010010'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Acquisition search 10.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Acquisition search 20.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Generation test signal completed."
                          SV_ID: '000001'
                                                                                                                                                                                                            estimatedDopplerStart: 57.0707
                                                                                                                                                                                                                                         estimatedDopplerEnd: 77.1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Elapsed time is 16.415462 seconds.
                                                                                                                                                                                                                                                                     estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                   estimatedPhase: 2.3838
                                                       message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Elapsed time is 0.931893 seconds.
                                                                                                                                               ACKed: 0
                                                                                                                                                                              isACKmessage: 1
DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                                                                                                                 ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
```

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

```
ans =
    "Acquisition search 100.0% completed."

ans =
    struct with fields:
        maxPeak: 0.0344
    idStartTime: 281651
    idDopplerShift: 54
        mean: 1.0075e-08
    meanSquare: 7.8892e-08
    phase: 2.3838
```

ans =

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

```
Warning: Error no ack: received CRC 000110110011000011010010 and CRC remainder 000000001111100001110011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Warning: Error. Incorrect received tail 111110.
                                                                               "Tracker step 4: demodulated 40 symbols."
                                                                                                                                                                                                                                                                                                    "Tracker step 5: demodulated 50 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Tracker step 6: demodulated 60 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             II
ans =
                                                                                                                                                                                                                     ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans
```

```
message_body: '010100110001110011001011101110'
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CRC: '000110110011000011010010'
                                                                                                                                                                                                                                                                                                                                                                                       SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    estimatedDopplerStart: 57.0707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        estimatedDopplerEnd: 77.1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                                                                                                                             message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         estimatedPhase: 2.3838
"Received message analyzed."
                                                                                                                                                                                                                                                                                         version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            isACKmessage: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACKed: 0
                                                                                                                                                                                                                                                                                                                                                            DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                               ACQUISITION_OK: 1
                                                                                                                                                                                                                                                                                                                                       TRACKING_OK: 1
                                                                                                                     "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                         struct with fields:
                                                                         ans =
                                                                                                                                                                                               ans =
```

"Results saved in MM_test_3.65_51_f1_d100_s10_c5.json"

```
Elapsed time is 16.126458 seconds.
```

"Generation test signal completed."

Elapsed time is 0.943226 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

```
"Acquisition search 60.0% completed."
```

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0216 idStartTime: 281651

mean: 1.8894e-08 idDopplerShift: 54

meanSquare: 3.0623e-08

phase: 2.3838

```
ans =
```

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

```
Warning: Error no ack: received CRC 00011011001100011010000 and CRC remainder 00000001111100001110001
                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                          Warning: Error. Incorrect received tail 111110.
"Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                    "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                                                                                                                                                                                                                           IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 struct with fields:
                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ans =
```

version: "2"

TRACKING_OK: 1 ACQUISITION_OK: 1

```
message_body: `0101001100011100110011101111111110
                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Results saved in MM_test_4.32_51_f1_d100_s10_c5.json"
                                                                                                                  CRC: '000110110011000011010000'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Acquisition search 10.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Acquisition search 20.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Generation test signal completed."
                          SV_ID: '000001'
                                                                                                                                                                                                             estimatedDopplerStart: 57.0707
                                                                                                                                                                                                                                           estimatedDopplerEnd: 80.3644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Elapsed time is 16.109649 seconds.
                                                                                                                                                                                                                                                                         estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                     estimatedPhase: 2.3838
                                                        message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Elapsed time is 0.912076 seconds.
                                                                                                                                                ACKed: 0
                                                                                                                                                                               isACKmessage: 1
DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                                                                                                                   ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ans =
```

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

```
ans =
   "Acquisition search 100.0% completed."

ans =
   struct with fields:
        maxPeak: 0.0137
   idStartTime: 281651
   idDopplerShift: 54
        mean: 8.4816e-09
   meanSquare: 1.2233e-08
   phase: 2.3838

ans =
   "Tracker step 1: demodulated 10 symbols."
```

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

```
Warning: Error no ack: received CRC 000110110011000011010010 and CRC remainder 000000001111100001110011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Warning: Error. Incorrect received tail 111110.
                                                                               "Tracker step 4: demodulated 40 symbols."
                                                                                                                                                                                                                                                                                                    "Tracker step 5: demodulated 50 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Tracker step 6: demodulated 60 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             II
ans =
                                                                                                                                                                                                                     ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans
```

```
"Received message analyzed."

ans =
"DEMODULATION RESULT 0"

ans =
```

struct with fields:
 version: "2"
 ACQUISITION_OK: 1
 TRACKING_OK: 1
 DEMODULATION_OK: 0
 SV_ID: '000001'
 message_ID: '00011'
 message_LD: '00110'
 ACKed: 0
 isACKmessage: 1
 estimatedDopplerStart: 57.0707
 estimatedDopplerEnd: 77.1291

estimatedDopplerStart: 57.0707
estimatedDopplerEnd: 77.1291
estimatedDelay: 0.0282
estimatedPhase: 2.3838

ans =

"Results saved in MM_test_4.98_51_f1_d100_s10_c5.json"

```
Elapsed time is 16.130142 seconds.
```

"Generation test signal completed."

Elapsed time is 0.924512 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

```
"Acquisition search 60.0% completed."
```

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0108

idStartTime: 281651 idDopplerShift: 54

mean: 8.6097e-09

meanSquare: 7.6091e-09

phase: 2.3838

```
ans =
```

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

```
Warning: Error no ack: received CRC 00011011001100011010000 and CRC remainder 00000001111100001110001
                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                          Warning: Error. Incorrect received tail 111110.
"Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                    "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                                                                                                                                                                                                                           IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 struct with fields:
                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ans =
```

version: "2"

ACQUISITION_OK: 1 TRACKING_OK: 1

```
message_body: `0101001100011100110011101111111110
                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Results saved in MM_test_5.32_51_f1_d100_s10_c5.json"
                                                                                                                  CRC: '000110110011000011010000'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Acquisition search 10.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Acquisition search 20.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Generation test signal completed."
                          SV_ID: '000001'
                                                                                                                                                                                                             estimatedDopplerStart: 57.0707
                                                                                                                                                                                                                                           estimatedDopplerEnd: 80.3644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Elapsed time is 15.956745 seconds.
                                                                                                                                                                                                                                                                         estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                     estimatedPhase: 2.3838
                                                        message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Elapsed time is 0.927489 seconds.
                                                                                                                                                ACKed: 0
                                                                                                                                                                               isACKmessage: 1
DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                                                                                                                   ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ans =
```

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

```
ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0086

idStartTime: 281651

idDopplerShift: 54

mean: 5.7468e-09

meanSquare: 4.8336e-09

phase: 2.3838
```

```
ans =
```

ans =

ans =

"Tracker step 2: demodulated 20 symbols."

"Tracker step 3: demodulated 30 symbols."

```
Warning: Error no ack: received CRC 000110110011000011010010 and CRC remainder 000000001111100001110011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Warning: Error. Incorrect received tail 111110.
                                                                               "Tracker step 4: demodulated 40 symbols."
                                                                                                                                                                                                                                                                                                    "Tracker step 5: demodulated 50 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Tracker step 6: demodulated 60 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             II
ans =
                                                                                                                                                                                                                     ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans
```

```
message_body: '010100110001110011001011101110'
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CRC: '000110110011000011010010'
                                                                                                                                                                                                                                                                                                                                                                                       SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    estimatedDopplerStart: 57.0707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        estimatedDopplerEnd: 77.1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                                                                                                                             message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         estimatedPhase: 2.3838
"Received message analyzed."
                                                                                                                                                                                                                                                                                         version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            isACKmessage: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACKed: 0
                                                                                                                                                                                                                                                                                                                                                            DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                               ACQUISITION_OK: 1
                                                                                                                                                                                                                                                                                                                                       TRACKING_OK: 1
                                                                                                                     "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                         struct with fields:
                                                                         ans =
                                                                                                                                                                                               ans =
```

"Results saved in MM_test_5.65_51_f1_d100_s10_c5.json"

```
Elapsed time is 16.044168 seconds.
```

"Generation test signal completed."

Elapsed time is 0.921549 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

```
"Acquisition search 100.0% completed."
"Acquisition search 60.0% completed."
                                                                                                                          "Acquisition search 70.0% completed."
                                                                                                                                                                                                                                                      "Acquisition search 80.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                    "Acquisition search 90.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mean: 5.4410e-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             meanSquare: 3.0923e-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      phase: 2.3838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   idStartTime: 281651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           maxPeak: 0.0068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           idDopplerShift: 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         struct with fields:
                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ans =
                                                                              ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans =
```

```
ans =
```

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

```
Warning: Error no ack: received CRC 00011011001100011010000 and CRC remainder 00000001111100001110001
                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                          Warning: Error. Incorrect received tail 111110.
"Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                    "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                                                                                                                                                                                                                           IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 struct with fields:
                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ans =
```

version: "2"

ACQUISITION_OK: 1 TRACKING_OK: 1

```
message_body: `0101001100011100110011101111111110
                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Results saved in MM_test_5.98_51_f1_d100_s10_c5.json"
                                                                                                                  CRC: '000110110011000011010000'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Acquisition search 10.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Acquisition search 20.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Generation test signal completed."
                          SV_ID: '000001'
                                                                                                                                                                                                              estimatedDopplerStart: 57.0707
                                                                                                                                                                                                                                            estimatedDopplerEnd: 80.3644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Elapsed time is 16.175068 seconds.
                                                                                                                                                                                                                                                                         estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                      estimatedPhase: 2.3838
                                                        message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Elapsed time is 1.015235 seconds.
                                                                                                                                                ACKed: 0
                                                                                                                                                                                isACKmessage: 1
DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                                                                                                                     ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ans =
```

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

```
ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0054

idStartTime: 281651

idDopplerShift: 54

mean: 7.7456e-10

meansquare: 1.9511e-09

phase: 2.3838
```

ans =

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

```
Warning: Error no ack: received CRC 000110110011000011010010 and CRC remainder 000000001111100001110011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Warning: Error. Incorrect received tail 111110.
                                                                               "Tracker step 4: demodulated 40 symbols."
                                                                                                                                                                                                                                                                                                    "Tracker step 5: demodulated 50 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Tracker step 6: demodulated 60 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             II
ans =
                                                                                                                                                                                                                     ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans
```

```
message_body: '010100111001110011001011101110'
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CRC: '000110110011000011010010'
                                                                                                                                                                                                                                                                                                                                                                                       SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    estimatedDopplerStart: 57.0707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        estimatedDopplerEnd: 77.1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                                                                                                                             message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         estimatedPhase: 2.3838
"Received message analyzed."
                                                                                                                                                                                                                                                                                         version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            isACKmessage: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACKed: 0
                                                                                                                                                                                                                                                                                                                                                            DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                               ACQUISITION_OK: 1
                                                                                                                                                                                                                                                                                                                                       TRACKING_OK: 1
                                                                                                                     "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                         struct with fields:
                                                                         ans =
                                                                                                                                                                                               ans =
```

"Results saved in MM_test_6.31_51_f1_d100_s10_c5.json"

```
Elapsed time is 16.491565 seconds.
```

"Generation test signal completed."

Elapsed time is 0.924121 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

```
"Acquisition search 60.0% completed."
```

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

idStartTime: 281651 maxPeak: 0.0043

mean: 3.7105e-09 idDopplerShift: 54

meanSquare: 1.2415e-09

phase: 2.3838

```
ans =
```

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

```
Warning: Error no ack: received CRC 00011011001100011010010 and CRC remainder 00000001111100001110011
                                                                                                                                                                                                                                                                                                                                                                                                                     > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                                                                    Warning: Error. Incorrect received tail 111110.
"Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                              "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IN RECEIVER (line 260)
                                                                                                                                                                     ans =
```

"Received message analyzed."

ans =

"DEMODULATION RESULT 0"

ans =

struct with fields:

version: "2" ACQUISITION_OK: 1

TRACKING_OK: 1

```
message_body: `0101001100011100110011101111111110
                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Results saved in MM_test_6.64_51_f1_d100_s10_c5.json"
                                                                                                                   CRC: '000110110011000011010010'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Acquisition search 10.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Acquisition search 20.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Generation test signal completed."
                          SV_ID: '000001'
                                                                                                                                                                                                              estimatedDopplerStart: 57.0707
                                                                                                                                                                                                                                            estimatedDopplerEnd: 77.1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Elapsed time is 16.020268 seconds.
                                                                                                                                                                                                                                                                          estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                       estimatedPhase: 2.3838
                                                          message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Elapsed time is 0.926289 seconds.
                                                                                                                                                 ACKed: 0
                                                                                                                                                                                isACKmessage: 1
DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                                                                                                                      ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ans =
```

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

```
ans =
   "Acquisition search 100.0% completed."
ans =
   struct with fields:
        maxPeak: 0.0847
   idStartTime: 281651
   idDopplerShift: 61
        mean: 6.9693e-08
   meanSquare: 4.9226e-07
   phase: 2.6891
```

```
"Tracker step 1: demodulated 10 symbols."
```

ans =
 "Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

```
Warning: Error no ack: received CRC 1111010001110110101010111 and CRC remainder 100101110101111101111000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Warning: Error. Incorrect received tail 100001
                                                                               "Tracker step 4: demodulated 40 symbols."
                                                                                                                                                                                                                                                                                                    "Tracker step 5: demodulated 50 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Tracker step 6: demodulated 60 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             II
ans =
                                                                                                                                                                                                                     ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans
```

```
message_body: '010100110001110000100010010000'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CRC: '11110100011101101101010111'
                                                                                                                                                                                                                                                                                                                                                                                                                     SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             estimatedDopplerStart: 71.2121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  estimatedDopplerEnd: 94.5061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                                                                                                                                                           message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                estimatedPhase: 2.6891
                                        "Received message analyzed."
                                                                                                                                                                                                                                                                                                                          version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       isACKmessage: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACKed: 0
                                                                                                                                                                                                                                                                                                                                                                                           DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                                                                ACQUISITION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                       TRACKING_OK: 1
                                                                                                                                                            "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                                                            struct with fields:
ans =
                                                                                                                 ans =
                                                                                                                                                                                                                                   ans =
```

"Results saved in MM_test_2.32_102.6_f1_d100_s10_c5.json"

```
Elapsed time is 15.816107 seconds.
```

"Generation test signal completed."

Elapsed time is 0.927388 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

```
"Acquisition search 60.0% completed."
```

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0532

mean: 6.0945e-08 idStartTime: 281651 idDopplerShift: 61

meanSquare: 1.9454e-07

phase: 2.6891

```
ans =
```

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

```
Warning: Error no ack: received CRC 111101000111011010101011 and CRC remainder 1001011101011111011111000
                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                          Warning: Error. Incorrect received tail 100001
"Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                    "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                               In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                                                                                                                                                                                                                          IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 struct with fields:
                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ans =
```

version: "2"

ACQUISITION_OK: 1 TRACKING_OK: 1

```
"Results saved in MM_test_2.99_102.6_f1_d100_s10_c5.json"
                                                                                 message_body: `010100110001110000100010010000"
                                                                                                                 CRC: '1111010001110110101010111'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Acquisition search 10.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Acquisition search 20.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Generation test signal completed."
                          SV_ID: '000001'
                                                                                                                                                                                                         estimatedDopplerStart: 71.2121
                                                                                                                                                                                                                                        estimatedDopplerEnd: 94.5061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Elapsed time is 16.513250 seconds.
                                                                                                                                                                                                                                                                    estimatedDelay: 0.0282
                                                         message_ID: '0011'
                                                                                                                                                                                                                                                                                                  estimatedPhase: 2.6891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Elapsed time is 0.929430 seconds.
                                                                                                                                              ACKed: 0
                                                                                                                                                                             isACKmessage: 1
DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                                                                                                               ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ans =
```

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

```
ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0337

idStartTime: 281651

idDopplerShift: 61

mean: 1.6749e-08

meanSquare: 7.8086e-08
```

ans =

phase: 2.6891

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

```
Warning: Error no ack: received CRC 1111010001110110101010111 and CRC remainder 100101110101111101111000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Warning: Error. Incorrect received tail 100001
                                                                              "Tracker step 4: demodulated 40 symbols."
                                                                                                                                                                                                                                                                                                   "Tracker step 5: demodulated 50 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Tracker step 6: demodulated 60 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          II
ans =
                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                        ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ans
```

In RECEIVERTest/globalTest (line 115)

```
message_body: '010100110001110000100010010000'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CRC: '11110100011101101101010111'
                                                                                                                                                                                                                                                                                                                                                                                                                 SV_ID: '000001'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        estimatedDopplerStart: 71.2121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             estimatedDopplerEnd: 94.5061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    estimatedDelay: 0.0282
                                                                                                                                                                                                                                                                                                                                                                                                                                       message_ID: '0011'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           estimatedPhase: 2.6891
                                        "Received message analyzed."
                                                                                                                                                                                                                                                                                                                       version: "2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  isACKmessage: 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACKed: 0
                                                                                                                                                                                                                                                                                                                                                                                     DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                                                             ACQUISITION_OK: 1
                                                                                                                                                                                                                                                                                                                                                                    TRACKING_OK: 1
                                                                                                                                                          "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                                                          struct with fields:
ans =
                                                                                                                ans =
                                                                                                                                                                                                                                 ans =
```

"Results saved in MM_test_3.65_102.6_f1_d100_s10_c5.json"

Elapsed time is 15.825589 seconds.

30/05/22 6.52

ans =

"Generation test signal completed."

Elapsed time is 0.901949 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

```
"Acquisition search 60.0% completed."
```

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

idStartTime: 281651 maxPeak: 0.0212

mean: 3.0108e-08 idDopplerShift: 61

meanSquare: 3.0533e-08

phase: 2.6891

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

```
Warning: Error no ack: received CRC 111101000111011010101011 and CRC remainder 1001011101011111011111000
                                                                                                                                                                                                                                                                                                                                                          > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                 Warning: Error. Incorrect received tail 100001
"Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                         "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                         In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                                                                                                                                                                                                                                    IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IN RECEIVER (line 260)
                                                                                                                                             ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans =
```

version: "2"

struct with fields:

ACQUISITION_OK: 1 TRACKING_OK: 1

```
"Results saved in MM_test_4.32_102.6_f1_d100_s10_c5.json"
                                                                                   message_body: `010100110001110000100010010000"
                                                                                                                  CRC: '1111010001110110101010111'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Acquisition search 10.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Acquisition search 20.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Generation test signal completed."
                          SV_ID: '000001'
                                                                                                                                                                                                            estimatedDopplerStart: 71.2121
                                                                                                                                                                                                                                           estimatedDopplerEnd: 94.5061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Elapsed time is 15.751599 seconds.
                                                                                                                                                                                                                                                                        estimatedDelay: 0.0282
                                                          message_ID: '0011'
                                                                                                                                                                                                                                                                                                     estimatedPhase: 2.6891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Elapsed time is 0.921863 seconds.
                                                                                                                                                   ACKed: 0
                                                                                                                                                                                isACKmessage: 1
DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ans =
```

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

```
ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0134

idStartTime: 281651

idDopplerShift: 61

mean: 1.1684e-08

meanSquare: 1.2358e-08

phase: 2.6891
```

ans =

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

```
Warning: Error no ack: received CRC 1111010001110110101010111 and CRC remainder 100101110101111101111000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Warning: Error. Incorrect received tail 100001
                                                                              "Tracker step 4: demodulated 40 symbols."
                                                                                                                                                                                                                                                                                                   "Tracker step 5: demodulated 50 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Tracker step 6: demodulated 60 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          II
ans =
                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                        ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ans
```

```
"Received message analyzed."

ans =
"DEMODULATION RESULT 0"

ans =
struct with fields:
```

ans =

estimatedDelay: 0.0282

estimatedPhase: 2.6891

[&]quot;Results saved in MM_test_4.98_102.6_f1_d100_s10_c5.json"

```
Elapsed time is 16.403817 seconds.
```

"Generation test signal completed."

Elapsed time is 0.921098 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

```
"Acquisition search 60.0% completed."
```

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0106 idStartTime: 281651

idDopplerShift: 61

mean: 7.8670e-10

meanSquare: 7.7117e-09

phase: 2.6891

```
ans =
```

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

```
Warning: Error no ack: received CRC 111101000111011010101011 and CRC remainder 1001011101011111011111000
                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                          Warning: Error. Incorrect received tail 100001
"Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                    "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                               In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                                                                                                                                                                                                                          IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 struct with fields:
                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ans =
```

version: "2"

ACQUISITION_OK: 1 TRACKING_OK: 1

```
"Results saved in MM_test_5.32_102.6_f1_d100_s10_c5.json"
                                                                                  message_body: `010100110001110000100010010000"
                                                                                                                 CRC: '1111010001110110101010111'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Acquisition search 10.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Acquisition search 20.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       "Generation test signal completed."
                          SV_ID: '000001'
                                                                                                                                                                                                          estimatedDopplerStart: 71.2121
                                                                                                                                                                                                                                         estimatedDopplerEnd: 94.5061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Elapsed time is 16.140527 seconds.
                                                                                                                                                                                                                                                                     estimatedDelay: 0.0282
                                                         message_ID: '0011'
                                                                                                                                                                                                                                                                                                   estimatedPhase: 2.6891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Elapsed time is 0.929799 seconds.
                                                                                                                                               ACKed: 0
                                                                                                                                                                              isACKmessage: 1
DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                                                                                                                ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ans =
```

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

```
ans =
   "Acquisition search 100.0% completed."

ans =
   struct with fields:
        maxPeak: 0.0084
   idStartTime: 281651
   idDopplerShift: 61
        mean: 9.7245e-09
   meanSquare: 4.8692e-09
```

ans =

phase: 2.6891

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

```
Warning: Error no ack: received CRC 1111010001110110101010111 and CRC remainder 100101110101111101111000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Warning: Error. Incorrect received tail 100001
                                                                              "Tracker step 4: demodulated 40 symbols."
                                                                                                                                                                                                                                                                                                   "Tracker step 5: demodulated 50 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Tracker step 6: demodulated 60 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          II
ans =
                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                        ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ans
```

```
"Received message analyzed."

ans =

"DEMODULATION RESULT 0"

ans =

struct with fields:
```

version: "2"

ACQUISITION_OK: 1

TRACKING_OK: 1

DEMODULATION_OK: 0

SV_ID: '000001'

message_ID: '0110'

CRC: '111101000111010101011'

ACKed: 0

isACKmessage: 1

estimatedDopplerStart: 71.2121

estimatedDopplerEnd: 94.5061

estimatedDelay: 0.0282

estimatedPhase: 2.6891

ans =

"Results saved in MM_test_5.65_102.6_f1_d100_s10_c5.json"

```
Elapsed time is 15.877613 seconds.
```

"Generation test signal completed."

Elapsed time is 0.919160 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

```
"Acquisition search 100.0% completed."
"Acquisition search 60.0% completed."
                                                                                                                             "Acquisition search 70.0% completed."
                                                                                                                                                                                                                                                           "Acquisition search 80.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                          "Acquisition search 90.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mean: 5.9410e-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        meanSquare: 3.0036e-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             idStartTime: 281651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 phase: 2.6891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     maxPeak: 0.0067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      idDopplerShift: 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    struct with fields:
                                                                                                                                                                                                                                                                                                                                          ans =
                                                                                                                                                                                                              ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ans =
                                                                                ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ans =
```

```
ans =
```

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

```
Warning: Error no ack: received CRC 111101000111011010010100 and CRC remainder 1001011101011111101000111
                                                                                                                                                                                                                                                                                                                                                                                             > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                                                Warning: Error. Incorrect received tail 011110.
"Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                               "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                                                                 In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IN RECEIVER (line 260)
                                                                                                                                                            ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ans =
```

"DEMODULATION RESULT 0"

ans =

ans =

struct with fields:

version: "2"

ACQUISITION_OK: 1 TRACKING_OK: 1

```
"Results saved in MM_test_5.98_102.6_f1_d100_s10_c5.json"
                                                                                  message_body: `010100110001110000100010010000"
                                                                                                                  CRC: '111101000111011010010100'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Acquisition search 10.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Acquisition search 20.0% completed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Generation test signal completed."
                          SV_ID: '000001'
                                                                                                                                                                                                         estimatedDopplerStart: 71.2121
                                                                                                                                                                                                                                         estimatedDopplerEnd: 94.5061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Elapsed time is 16.203366 seconds.
                                                                                                                                                                                                                                                                     estimatedDelay: 0.0282
                                                         message_ID: '0011'
                                                                                                                                                                                                                                                                                                  estimatedPhase: 2.6891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Elapsed time is 0.927618 seconds.
                                                                                                                                              ACKed: 0
                                                                                                                                                                              isACKmessage: 1
DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                                                                                                                ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ans =
```

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

ans =

"Acquisition search 60.0% completed."

ans =

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

```
ans =
    "Acquisition search 100.0% completed."

ans =
    struct with fields:
        maxPeak: 0.0053
    idStartTime: 281651
    idDopplerShift: 61
        mean: 3.2201e-09
    meanSquare: 1.9237e-09
    phase: 2.6891
```

ans =

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

```
Warning: Error no ack: received CRC 000010111000100101010100 and CRC remainder 011010110100010010011011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Warning: Error. Incorrect received tail 011110.
                                                                               "Tracker step 4: demodulated 40 symbols."
                                                                                                                                                                                                                                                                                                    "Tracker step 5: demodulated 50 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      "Tracker step 6: demodulated 60 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                In RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             II
ans =
                                                                                                                                                                                                                     ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans
```

```
"Received message analyzed."
```

```
"DEMODULATION RESULT 0"
```

ans =

ans =

struct with fields:

```
version: "2"
                                                DEMODULATION_OK: 0
                ACQUISITION_OK: 1
                                TRACKING_OK: 1
```

message_body: '0101001100011100010111011011111 CRC: '0000101110001001010101000' message_ID: '0011'

SV_ID: '000001'

ACKed: 0

isACKmessage: 1

estimatedDopplerStart: 71.2121 estimatedDopplerEnd: 94.5061 estimatedDelay: 0.0282

estimatedPhase: 2.6891

[&]quot;Results saved in MM_test_6.31_102.6_f1_d100_s10_c5.json"

```
Elapsed time is 15.761018 seconds.
```

"Generation test signal completed."

Elapsed time is 0.946805 seconds.

ans =

"Acquisition search 10.0% completed."

ans =

"Acquisition search 20.0% completed."

ans =

"Acquisition search 30.0% completed."

ans =

"Acquisition search 40.0% completed."

ans =

"Acquisition search 50.0% completed."

```
"Acquisition search 60.0% completed."
```

"Acquisition search 70.0% completed."

ans =

"Acquisition search 80.0% completed."

ans =

"Acquisition search 90.0% completed."

ans =

"Acquisition search 100.0% completed."

ans =

struct with fields:

maxPeak: 0.0042
idStartTime: 281651

idDopplerShift: 61

mean: 3.0459e-09

meanSquare: 1.2269e-09

phase: 2.6891

"Tracker step 1: demodulated 10 symbols."

ans =

"Tracker step 2: demodulated 20 symbols."

ans =

"Tracker step 3: demodulated 30 symbols."

ans =

"Tracker step 4: demodulated 40 symbols."

ans =

"Tracker step 5: demodulated 50 symbols."

ans =

"Tracker step 6: demodulated 60 symbols."

```
Warning: Error no ack: received CRC 111101000111011010010100 and CRC remainder 1001011101011111101000111
                                                                                                                                                                                                                                                                                                                                                   > In MessageAnalyzer/validateAndSplitMessage (line 110)
                                                                                                                                                                                                                                                                                                          Warning: Error. Incorrect received tail 011110.
"Tracker step 7: demodulated 70 symbols."
                                                                                                                                                                                                                    "Tracker step 8: demodulated 80 symbols."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          > In MessageAnalyzer/analyzeMessage (line 85)
                                                                                                                                                                                                                                                                                                                                                                                                In MessageAnalyzer/analyzeMessage (line 71)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                In RECEIVERTest/globalTest (line 115)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            "Received message analyzed."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "DEMODULATION RESULT 0"
                                                                                                                                                                                                                                                                                                                                                                                                                                           IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IN RECEIVER (line 260)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   struct with fields:
                                                                                                                                          ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ans =
```

version: "2"

ACQUISITION_OK: 1 TRACKING_OK: 1

```
"Results saved in MM_test_6.64_102.6_f1_d100_s10_c5.json"
                                                                    \verb|message_body|: |01010011000111000010010010010000|
                                                                                              CRC: '111101000111011010010100'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1x1200 TestResult array with properties:
                     SV_ID: '000001'
                                                                                                                                                                       estimatedDopplerStart: 71.2121
                                                                                                                                                                                               estimatedDopplerEnd: 94.5061
                                                                                                                                                                                                                                                                                                                                                                                                                        Elapsed time is 16.070764 seconds.
                                                                                                                                                                                                                      estimatedDelay: 0.0282
                                               message_ID: '0011'
                                                                                                                                                                                                                                               estimatedPhase: 2.6891
                                                                                                                     ACKed: 0
                                                                                                                                               isACKmessage: 1
DEMODULATION_OK: 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Done RECEIVERTest
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Incomplete
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Duration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Details
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Passed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Failed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Name
                                                                                                                                                                                                                                                                                                                            ans =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ans =
```

Totals:

1200 Passed, 0 Failed, 0 Incomplete. 23370.7833 seconds testing time.

٨