```
>> test_class


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Evaluation Form DIAG Outputs
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Label	Value	Units
Range BS - Near	7.687452E+00	km
Range BS - Mid	7.778619E+00	km
Range BS - Far	7.872770E+00	km
Pulse Range Rez - Near	1.973402E+01	m
Pulse Range Rez - Mid	1.956756E+01	m
Pulse Range Rez - Far	1.940581E+01	m
Pulse Azimuth Rez - Near	6.145707E+01	m
Pulse Azimuth Rez - Mid	6.218590E+01	m
Pulse Azimuth Rez - Far	6.293859E+01	m
Pulse IFOV - Near	1.212795E+03	m^2
Pulse IFOV - Mid	1.216827E+03	m^2
Pulse IFOV - Far	1.221374E+03	m^2
BS Tgt. Xsect. - Near	1.040361E+01	m^2
BS Tgt. Xsect. - Mid	1.042190E+01	m^2
BS Tgt. Xsect. - Far	1.043225E+01	m^2
Clutter Eff. Xsect. - Near	2.220363E+01	m^2
Clutter Eff. Xsect. - Mid	2.184157E+01	m^2
Clutter Eff. Xsect. - Far	2.151010E+01	m^2
T/C - Near	-3.292398	dB
T/C - Mid	-3.213368	dB
T/C - Far	-3.142645	dB
T/N - Near	8.786462	dB
T/N - Mid	8.552822	dB
T/N - Far	8.310468	dB
Cltr/N - Near	12.078860	dB
Cltr/N - Mid	11.766190	dB
Cltr/N - Far	11.453113	dB
T/(C+N) - Near	-3.553481	dB
T/(C+N) - Mid	-3.493326	dB
T/(C+N) - Far	-3.442822	dB
TOT	1.017887E-03	s
POT	305.000000	pulses
P_det 1Look - Near	0.769707	prob
P_det 1Look - Mid	0.791807	prob
P_det 1Look - Far	0.809456	prob
P_det (2 of 4) - Near	0.959584	prob
P_det (2 of 4) - Mid	0.969540	prob
P_det (2 of 4) - Far	0.976282	prob
Doppler Precision W/C - Near	6.343802E+01	Hz
Doppler Precision W/C - Mid	6.516758E+01	Hz
Doppler Precision W/C - Far	6.701149E+01	Hz
Nyquist Reqd. for Doppler Max - Near	7.981142E+04	Hz
Nyquist Reqd. for Doppler Max - Mid	8.049035E+04	Hz

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Nyquist Reqd. for Doppler Max - Far     8.116125E+04              Hz
Ant. FP. Length                         2.419026E+02               m
Ant. Scan Overlap                           0.894356             pct
B_elev                                  1.145123E+00             deg
B_azim                                  4.580491E-01             deg
Radar Xfactor - Near                       23.897732              dB
Radar Xfactor - Mid                        23.861265              dB
Radar Xfactor - Far                        23.823605              dB
Warning: Min Reqd. Spin Rate is +0.487 dB from DrJ value. This calculation and ↙
dependent functions may yield inaccurate results!
> In UAVRadarModel.get.min_spin_rate_supported (line 2093)
In UAVRadarModel/dump_eval_outputs (line 693)
In test_class (line 48)
Warning: DrJ 20240312 Eval returned a T_warn of 0.0sec. Need more input checks to ↙
confirm validity of this function.
> In UAVRadarModel.get.t_warn (line 1460)
In UAVRadarModel/dump_eval_outputs (line 697)
In test_class (line 48)


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Evaluation Form EVAL Outputs
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Label                                    Value           Units
Swath Width                          2.415084E+01              km
[IN] Tx Pulse Width                  1.000000E-07               s
[IN] Ant Size Azimuth                2.000000E-01               m
[IN] Ant. Size Elevation             5.000000E-01               m
Min. Grazing Angle                   4.057256E+01             deg
Min. Grazing Angle                   4.057256E+01             deg
Max PRF Supported                    8.088622E+05              Hz
[IN] Selected PRF                    3.000000E+05              Hz
T_fa / T_spin                        3.000000E+01        spins/fa
[IN] Ant. Spin Rate                  7.500000E+01             rpm
[IN] Design Scan Qty. on Tgt.        4.000000E+00           scans
Min. Spin Rate Supported             9.706627E+01             rpm
Worst Case T_warn                    6.673437E+01               s
Tx Duty Cycle                        3.000000E-02               1
BS Range Resolution (far?)           1.940581E+01               m
BS Azimuth Resolution (far?)         6.293859E+01               m
P_det - Near                         7.697069E-01               1
P_det - Mid                          7.918072E-01               1
P_det - Far                          8.094560E-01               1
Doppler TOT (incl. design scan qty.) 4.071548E-03               s
Nyquist PRF for Doppler Meas.        8.116125E+04              Hz
Max Reqd. Doppler Freq.              4.058062E+04              Hz
Worst Case Doppler Precision         6.701149E+01              Hz
Warning: Model does not yet account for atmospheric losses or cloud effects.
> In test_class (line 50)
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Requirements Check
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Warning: Couldn't find a spec to eval pulse width against!
> In UAVRadarModel.get.requirements_check (line 2126)
In test_class (line 56)
Warning: Min Reqd. Spin Rate is +0.487 dB from DrJ value. This calculation and ↙
dependent functions may yield inaccurate results!
> In UAVRadarModel.get.min_spin_rate_supported (line 2093)
In UAVRadarModel.get.requirements_check (line 2178)
In test_class (line 56)
Warning: DrJ 20240312 Eval returned a T_warn of 0.0sec. Need more input checks to ↙
confirm validity of this function.
> In UAVRadarModel.get.t_warn (line 1460)
In UAVRadarModel.get.requirements_check (line 2185)
In test_class (line 56)
  dictionary (string ⟼ uint8) with 21 entries:

    "swath_width"                       ⟼ 1
    "ant_dim_azim"                      ⟼ 1
    "ant_dim_elev"                      ⟼ 1
    "ant_bs_grazing_ang_far"            ⟼ 1
    "prf_compat_with_delta_range"       ⟼ 1
    "tfa_tspin_ratio"                   ⟼ 1
    "ant_spin_rate"                     ⟼ 1
    "scan_qty_on_tgt_intent"            ⟼ 1
    "ant_spin_rate_ensures_nomissedtgt" ⟼ 0
    "t_warn"                            ⟼ 1
    "tx_duty_cycle_search"              ⟼ 1
    "tx_duty_cycle_doppler"             ⟼ 1
    "fov_range_gate"                    ⟼ 1
    "fov_azimuth"                       ⟼ 1
    "p_det_for_tot_near"                ⟼ 1
    "p_det_for_tot_mid"                 ⟼ 1
    "p_det_for_tot_far"                 ⟼ 1
    "tx_prf"                            ⟼ 1
    "prf_meets_nyquist_wc"              ⟼ 1
    "doppler_precision"                 ⟼ 1
    "tx_power"                          ⟼ 1

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Goals Check
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Warning: DrJ 20240312 Eval returned a T_warn of 0.0sec. Need more input checks to ↙
confirm validity of this function.
> In UAVRadarModel.get.t_warn (line 1460)
In UAVRadarModel.get.goals_check (line 2325)
In test_class (line 61)
  dictionary (string ⟼ single) with 9 entries:
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    "ant_dim_azim"           ⟼ 0.5600
    "ant_dim_elev"           ⟼ 0.8900
    "scan_qty_on_tgt_intent" ⟼ 0.0100
    "ant_spin_rate"          ⟼ 0.7000
    "t_warn"                 ⟼ 0.2000
    "p_det_nofm_wc"          ⟼ 1
    "doppler_precision"      ⟼ 0.9700
    "tx_power"               ⟼ 0.9700
    "swath_width"            ⟼ 0.1700

>>
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