```
1      debug 1:             1 (0.5000000,0.7000000)  0.8602325
2      debug 1:             2 (-0.5000000,0.3000000)  0.5830952
3      debug 1:             3 (0.2000000,0.5000000)  0.5385165
4      debug 1:             4 (0.6000000,0.7500000)  0.9604686
5      debug 2:   There are           0  degenerate poles
6      debug 3:             1 (0.3000000,0.1375000)  0.3300095
7      debug 3:             2 (-0.7000000,-0.2625000)  0.7476003
8      debug 3:             3 (0.0000000E+00,-6.2500000E-02)  6.2500000E-02
9      debug 3:             4 (0.4000000,0.1875000)  0.4417650
10     debug 4:  Horizon   =    0.7476003
11     debug 5:             1 (0.3344033,0.1532682)  0.3678541
12     debug 5:             2 (-0.7802743,-0.2926028)  0.8333333
13     debug 5:             3 (0.0000000E+00,-6.9667347E-02)  6.9667347E-02
14     debug 5:             4 (0.4458711,0.2090020)  0.4924255
15     debug 6:             1          1 (1.694453,-3.3657193E-02)          1
16     debug 6:             2          1 (-0.1711919,-5.1866032E-02)          1
17     debug 6:             3          1 (4.8180968E-02,0.1017171)          1
18     debug 6:             4          1 (-1.571442,-1.6193688E-02)          1
19     s, z(s) =            1 (-0.9995163,-3.1099875E-02)
20     z-p_n ,  theta  =  (-1.333920,-0.1843680)  -3.004248
21     cvr  =  (0.4031264,-5.100573)
22     z-p_n ,  theta  =  (-0.2192420,0.2615030)   2.268513
23     cvr  =  (0.7048408,-5.433160)
24     z-p_n ,  theta  =  (-0.9995163,3.8567472E-02)   3.103026
25     cvr  =  (0.3892227,-5.283627)
26     z-p_n ,  theta  =  (-1.445387,-0.2401019)  -2.976980
27     cvr  =  (-0.2592571,-0.6116619)
28     debug 8:             1 (-0.9995163,-3.1099875E-02) (-0.2415517,-0.5490134)
29     s, z(s) =            2 (-0.9980656,-6.2169813E-02)
30     z-p_n ,  theta  =  (-1.332469,-0.2154380)  -2.981297
31     cvr  =  (0.4078861,-5.061762)
32     z-p_n ,  theta  =  (-0.2177913,0.2304330)   2.327998
33     cvr  =  (0.7252675,-5.400722)
34     z-p_n ,  theta  =  (-0.9980656,7.4975342E-03)   3.134081
35     cvr  =  (0.4063860,-5.249913)
36     z-p_n ,  theta  =  (-1.443937,-0.2711719)  -2.955955
37     cvr  =  (-0.2460215,-0.6110311)
38     debug 8:             2 (-0.9980656,-6.2169813E-02) (-0.2296647,-0.5487261)
39     s, z(s) =            3 (-0.9956493,-9.3179367E-02)
40     z-p_n ,  theta  =  (-1.330053,-0.2464475)  -2.958379
41     cvr  =  (0.4123182,-5.023002)
42     z-p_n ,  theta  =  (-0.2153751,0.1994235)   2.394632
43     cvr  =  (0.7463647,-5.369366)
44     z-p_n ,  theta  =  (-0.9956493,-2.3512021E-02)   3.165203
45     cvr  =  (0.4242129,-5.217279)
46     z-p_n ,  theta  =  (-1.441520,-0.3021814)  -2.934958
47     cvr  =  (-0.2317789,-0.6114330)
48     debug 8:             3 (-0.9956493,-9.3179367E-02) (-0.2168658,-0.5493650)
49     s, z(s) =            4 (-0.9922699,-0.1240988)
50     z-p_n ,  theta  =  (-1.326673,-0.2773669)  -2.935492
51     cvr  =  (0.4164240,-4.984287)
52     z-p_n ,  theta  =  (-0.2119956,0.1685041)   2.470002
53     cvr  =  (0.7681702,-5.339376)
54     z-p_n ,  theta  =  (-0.9922699,-5.4431431E-02)   3.196393
55     cvr  =  (0.4427410,-5.186007)
56     z-p_n ,  theta  =  (-1.438141,-0.3331008)  -2.913987
57     cvr  =  (-0.2164928,-0.6131520)
58     debug 8:             4 (-0.9922699,-0.1240988) (-0.2031219,-0.5511845)
59     s, z(s) =            5 (-0.9879304,-0.1548984)
60     z-p_n ,  theta  =  (-1.322334,-0.3081665)  -2.912632
61     cvr  =  (0.4202038,-4.945612)
62     z-p_n ,  theta  =  (-0.2076561,0.1377045)   2.556038
63     cvr  =  (0.7906699,-5.311110)
64     z-p_n ,  theta  =  (-0.9879304,-8.5231028E-02)   3.227652
65     cvr  =  (0.4619561,-5.156456)
66     z-p_n ,  theta  =  (-1.433801,-0.3639004)  -2.893040
67     cvr  =  (-0.2001783,-0.6165524)
68     debug 8:             5 (-0.9879304,-0.1548984) (-0.1884469,-0.5545114)
69     s, z(s) =            6 (-0.9826352,-0.1855479)
70     z-p_n ,  theta  =  (-1.317039,-0.3388160)  -2.889796
71     cvr  =  (0.4236583,-4.906972)
```



```
72     z-p_n ,  theta  =  (-0.2023609,0.1070550)   2.654992
73     cvr  =  (0.8137541,-5.285017)
74     z-p_n ,  theta  =  (-0.9826352,-0.1158805)   3.258979
75     cvr  =  (0.4817490,-5.129076)
76     z-p_n ,  theta  =  (-1.428506,-0.3945499)  -2.872113
77     cvr  =  (-0.1829459,-0.6220865)
78     debug 8:             6 (-0.9826352,-0.1855479) (-0.1729400,-0.5597511)
79     s, z(s) =            7 (-0.9763894,-0.2160179)
80     z-p_n ,  theta  =  (-1.310793,-0.3692860)  -2.866983
81     cvr  =  (0.4267880,-4.868362)
82     z-p_n ,  theta  =  (-0.1961151,7.6584980E-02)   2.769294
83     cvr  =  (0.8371522,-5.261631)
84     z-p_n ,  theta  =  (-0.9763894,-0.1463505)   3.290375
85     cvr  =  (0.5018489,-5.104398)
86     z-p_n ,  theta  =  (-1.422261,-0.4250199)  -2.851206
87     cvr  =  (-0.1650674,-0.6302896)
88     debug 8:             7 (-0.9763894,-0.2160179) (-0.1568447,-0.5673836)
89     s, z(s) =            8 (-0.9691989,-0.2462791)
90     z-p_n ,  theta  =  (-1.303602,-0.3995473)  -2.844188
91     cvr  =  (0.4295936,-4.829778)
92     z-p_n ,  theta  =  (-0.1889247,4.6323732E-02)   2.901140
93     cvr  =  (0.8603421,-5.241513)
94     z-p_n ,  theta  =  (-0.9691989,-0.1766118)   3.321840
95     cvr  =  (0.5217339,-5.082985)
96     z-p_n ,  theta  =  (-1.415070,-0.4552811)  -2.830314
97     cvr  =  (-0.1470652,-0.6417294)
98     debug 8:             8 (-0.9691989,-0.2462791) (-0.1406300,-0.5779179)
99     s, z(s) =            9 (-0.9610709,-0.2763019)
100    z-p_n ,  theta  =  (-1.295474,-0.4295700)  -2.821409
101    cvr  =  (0.4320752,-4.791214)
102    z-p_n ,  theta  =  (-0.1807966,1.6300976E-02)   3.051674
103    cvr  =  (0.8824639,-5.225135)
104    z-p_n ,  theta  =  (-0.9610709,-0.2066345)   3.353373
105    cvr  =  (0.5405442,-5.065307)
106    z-p_n ,  theta  =  (-1.406942,-0.4853039)  -2.809437
107    cvr  =  (-0.1297994,-0.6568780)
108    debug 8:             9 (-0.9610709,-0.2763019) (-0.1250677,-0.5917774)
109    s, z(s) =           10 (-0.9520131,-0.3060573)
110    z-p_n ,  theta  =  (-1.286416,-0.4593255)  -2.798644
111    cvr  =  (0.4342334,-4.752667)
112    z-p_n ,  theta  =  (-0.1717388,-1.3454467E-02)   3.219776
113    cvr  =  (0.9023091,-5.212648)
114    z-p_n ,  theta  =  (-0.9520131,-0.2363900)   3.384976
115    cvr  =  (0.5570713,-5.051516)
116    z-p_n ,  theta  =  (-1.397884,-0.5150594)  -2.788571
117    cvr  =  (-0.1144798,-0.6758928)
118    debug 8:            10 (-0.9520131,-0.3060573) (-0.1112429,-0.6091030)
119    s, z(s) =           11 (-0.9420342,-0.3355169)
120    z-p_n ,  theta  =  (-1.276438,-0.4887851)  -2.775889
121    cvr  =  (0.4360688,-4.714131)
122    z-p_n ,  theta  =  (-0.1617599,-4.2914063E-02)   3.400914
123    cvr  =  (0.9184892,-5.203622)
124    z-p_n ,  theta  =  (-0.9420342,-0.2658496)   3.416648
125    cvr  =  (0.5699267,-5.041181)
126    z-p_n ,  theta  =  (-1.387905,-0.5445189)  -2.767715
127    cvr  =  (-0.1024950,-0.6983452)
128    debug 8:            11 (-0.9420342,-0.3355169) (-0.1004015,-0.6295097)
129    s, z(s) =           12 (-0.9311440,-0.3646517)
130    z-p_n ,  theta  =  (-1.265547,-0.5179198)  -2.753141
131    cvr  =  (0.4375810,-4.675601)
132    z-p_n ,  theta  =  (-0.1508697,-7.2048813E-02)   3.587125
133    cvr  =  (0.9298283,-5.196919)
134    z-p_n ,  theta  =  (-0.9311440,-0.2949843)   3.448388
135    cvr  =  (0.5779350,-5.033165)
136    z-p_n ,  theta  =  (-1.377015,-0.5736537)  -2.746865
137    cvr  =  (-9.5020592E-02,-0.7231026)
138    debug 8:            12 (-0.9311440,-0.3646517) (-9.3598396E-02,-0.6519814)
139    s, z(s) =           13 (-0.9193530,-0.3934337)
140    z-p_n ,  theta  =  (-1.253756,-0.5467018)  -2.730399
141    cvr  =  (0.4387709,-4.637074)
142    z-p_n ,  theta  =  (-0.1390787,-0.1008308)   3.768895
```

```
143    cvr  =  (0.9358060,-5.190915)
144    z-p_n ,  theta  =  (-0.9193530,-0.3237663)   3.480197
145    cvr  =  (0.5805758,-5.025843)
146    z-p_n ,  theta  =  (-1.365224,-0.6024357)  -2.726020
147    cvr  =  (-9.2577755E-02,-0.7485418)
148    debug 8:           13 (-0.9193530,-0.3934337) (-9.1301098E-02,-0.6750617)
149    s, z(s) =          14 (-0.9066725,-0.4218352)
150    z-p_n ,  theta  =  (-1.241076,-0.5751034)  -2.707659
151    cvr  =  (0.4396382,-4.598544)
152    z-p_n ,  theta  =  (-0.1263982,-0.1292324)   3.938078
153    cvr  =  (0.9367201,-5.183992)
154    z-p_n ,  theta  =  (-0.9066725,-0.3521679)   3.512075
155    cvr  =  (0.5781468,-5.017596)
156    z-p_n ,  theta  =  (-1.352544,-0.6308373)  -2.705178
157    cvr  =  (-9.4868124E-02,-0.7730494)
158    debug 8:           14 (-0.9066725,-0.4218352) (-9.3242072E-02,-0.6973027)
159    s, z(s) =          15 (-0.8931149,-0.4498285)
160    z-p_n ,  theta  =  (-1.227518,-0.6030967)  -2.684918
161    cvr  =  (0.4401834,-4.560007)
162    z-p_n ,  theta  =  (-0.1128407,-0.1572257)   4.089883
163    cvr  =  (0.9334638,-5.174980)
164    z-p_n ,  theta  =  (-0.8931149,-0.3801612)   3.544020
165    cvr  =  (0.5715415,-5.007255)
166    z-p_n ,  theta  =  (-1.338986,-0.6588305)  -2.684336
167    cvr  =  (-0.1009987,-0.7954593)
168    debug 8:           15 (-0.8931149,-0.4498285) (-9.8620310E-02,-0.7176583)
169    s, z(s) =          16 (-0.8786933,-0.4773866)
170    z-p_n ,  theta  =  (-1.213097,-0.6306548)  -2.662174
171    cvr  =  (0.4404062,-4.521457)
172    z-p_n ,  theta  =  (-9.8419070E-02,-0.1847838)   4.222989
173    cvr  =  (0.9271290,-5.163295)
174    z-p_n ,  theta  =  (-0.8786933,-0.4077193)   3.576033
175    cvr  =  (0.5618522,-4.994236)
176    z-p_n ,  theta  =  (-1.324564,-0.6863887)  -2.663492
177    cvr  =  (-0.1098775,-0.8151903)
178    debug 8:           16 (-0.8786933,-0.4773866) (-0.1064563,-0.7356066)
179    s, z(s) =          17 (-0.8634216,-0.5044831)
180    z-p_n ,  theta  =  (-1.197825,-0.6577513)  -2.639424
181    cvr  =  (0.4403068,-4.482891)
182    z-p_n ,  theta  =  (-8.3147287E-02,-0.2118803)   4.338429
183    cvr  =  (0.9187080,-5.148827)
184    z-p_n ,  theta  =  (-0.8634216,-0.4348158)   3.608113
185    cvr  =  (0.5500709,-4.978426)
186    z-p_n ,  theta  =  (-1.309293,-0.7134851)  -2.642643
187    cvr  =  (-0.1205113,-0.8321352)
188    debug 8:           17 (-0.8634216,-0.5044831) (-0.1158591,-0.7510513)
189    s, z(s) =          18 (-0.8473146,-0.5310913)
190    z-p_n ,  theta  =  (-1.181718,-0.6843594)  -2.616666
191    cvr  =  (0.4398851,-4.444304)
192    z-p_n ,  theta  =  (-6.7040324E-02,-0.2384884)   4.438356
193    cvr  =  (0.9089675,-5.131741)
194    z-p_n ,  theta  =  (-0.8473146,-0.4614239)   3.640259
195    cvr  =  (0.5369649,-4.959993)
196    z-p_n ,  theta  =  (-1.293186,-0.7400934)  -2.621788
197    cvr  =  (-0.1321335,-0.8464627)
198    debug 8:           18 (-0.8473146,-0.5310913) (-0.1261411,-0.7641435)
199    s, z(s) =          19 (-0.8303879,-0.5571857)
200    z-p_n ,  theta  =  (-1.164791,-0.7104539)  -2.593896
201    cvr  =  (0.4391410,-4.405692)
202    z-p_n ,  theta  =  (-5.0113678E-02,-0.2645829)   4.525200
203    cvr  =  (0.8984451,-5.112322)
204    z-p_n ,  theta  =  (-0.8303879,-0.4875184)   3.672471
205    cvr  =  (0.5230717,-4.939222)
206    z-p_n ,  theta  =  (-1.276259,-0.7661878)  -2.600924
207    cvr  =  (-0.1442057,-0.8584623)
208    debug 8:           19 (-0.8303879,-0.5571857) (-0.1368195,-0.7751427)
209    s, z(s) =          20 (-0.8126578,-0.5827413)
210    z-p_n ,  theta  =  (-1.147061,-0.7360094)  -2.571111
211    cvr  =  (0.4380743,-4.367048)
212    z-p_n ,  theta  =  (-3.2383502E-02,-0.2901384)   4.601235
213    cvr  =  (0.8874947,-5.090884)
```



```
214    z-p_n ,  theta  =  (-0.8126578,-0.5130739)   3.704747
215    cvr  =  (0.5087456,-4.916425)
216    z-p_n ,  theta  =  (-1.258529,-0.7917433)  -2.580049
217    cvr  =  (-0.1563733,-0.8684506)
218    debug 8:           20 (-0.8126578,-0.5827413) (-0.1475762,-0.7843327)
219    s, z(s) =          21 (-0.7941415,-0.6077328)
220    z-p_n ,  theta  =  (-1.128545,-0.7610010)  -2.548310
221    cvr  =  (0.4366847,-4.328369)
222    z-p_n ,  theta  =  (-1.3867259E-02,-0.3151300)   4.668413
223    cvr  =  (0.8763384,-5.067720)
224    z-p_n ,  theta  =  (-0.7941415,-0.5380655)   3.737088
225    cvr  =  (0.4942087,-4.891895)
226    z-p_n ,  theta  =  (-1.240013,-0.8167349)  -2.559160
227    cvr  =  (-0.1684134,-0.8767238)
228    debug 8:           21 (-0.7941415,-0.6077328) (-0.1582115,-0.7919789)
229    s, z(s) =          22 (-0.7748570,-0.6321365)
230    z-p_n ,  theta  =  (-1.109260,-0.7854047)  -2.525489
231    cvr  =  (0.4349720,-4.289650)
232    z-p_n ,  theta  =  (5.4172277E-03,-0.3395337)   4.728343
233    cvr  =  (0.8651090,-5.043086)
234    z-p_n ,  theta  =  (-0.7748570,-0.5624692)   3.769491
235    cvr  =  (0.4795942,-4.865888)
236    z-p_n ,  theta  =  (-1.220728,-0.8411386)  -2.538256
237    cvr  =  (-0.1801921,-0.8835409)
238    debug 8:           22 (-0.7748570,-0.6321365) (-0.1686054,-0.7983136)
239    s, z(s) =          23 (-0.7548229,-0.6559286)
240    z-p_n ,  theta  =  (-1.089226,-0.8091968)  -2.502645
241    cvr  =  (0.4329360,-4.250887)
242    z-p_n ,  theta  =  (2.5451362E-02,-0.3633258)   4.782326
243    cvr  =  (0.8538814,-5.017197)
244    z-p_n ,  theta  =  (-0.7548229,-0.5862613)   3.801956
245    cvr  =  (0.4649770,-4.838619)
246    z-p_n ,  theta  =  (-1.200694,-0.8649306)  -2.517333
247    cvr  =  (-0.1916338,-0.8891215)
248    debug 8:           23 (-0.7548229,-0.6559286) (-0.1786902,-0.8035336)
249    s, z(s) =          24 (-0.7340586,-0.6790862)
250    z-p_n ,  theta  =  (-1.068462,-0.8323544)  -2.479775
251    cvr  =  (0.4305762,-4.212073)
252    z-p_n ,  theta  =  (4.6215713E-02,-0.3864834)   4.831404
253    cvr  =  (0.8426931,-4.990232)
254    z-p_n ,  theta  =  (-0.7340586,-0.6094189)   3.834482
255    cvr  =  (0.4503950,-4.810266)
256    z-p_n ,  theta  =  (-1.179930,-0.8880882)  -2.496390
257    cvr  =  (-0.2026995,-0.8936470)
258    debug 8:           24 (-0.7340586,-0.6790862) (-0.1884312,-0.8078012)
259    s, z(s) =          25 (-0.7125839,-0.7015869)
260    z-p_n ,  theta  =  (-1.046987,-0.8548551)  -2.456877
261    cvr  =  (0.4278920,-4.173205)
262    z-p_n ,  theta  =  (6.7690372E-02,-0.4089841)   4.876411
263    cvr  =  (0.8315580,-4.962336)
264    z-p_n ,  theta  =  (-0.7125839,-0.6319196)   3.867067
265    cvr  =  (0.4358624,-4.780975)
266    z-p_n ,  theta  =  (-1.158455,-0.9105890)  -2.475424
267    cvr  =  (-0.2133741,-0.8972678)
268    debug 8:           25 (-0.7125839,-0.7015869) (-0.1978150,-0.8112513)
269    s, z(s) =          26 (-0.6904200,-0.7234088)
270    z-p_n ,  theta  =  (-1.024823,-0.8766769)  -2.433948
271    cvr  =  (0.4248832,-4.134276)
272    z-p_n ,  theta  =  (8.9854300E-02,-0.4308059)   4.918014
273    cvr  =  (0.8204764,-4.933628)
274    z-p_n ,  theta  =  (-0.6904200,-0.6537414)   3.899710
275    cvr  =  (0.4213794,-4.750866)
276    z-p_n ,  theta  =  (-1.136291,-0.9324108)  -2.454432
277    cvr  =  (-0.2236561,-0.9001055)
278    debug 8:           26 (-0.6904200,-0.7234088) (-0.2068403,-0.8139929)
279    s, z(s) =          27 (-0.6675882,-0.7445307)
280    z-p_n ,  theta  =  (-1.001992,-0.8977989)  -2.410984
281    cvr  =  (0.4215493,-4.095284)
282    z-p_n ,  theta  =  (0.1126861,-0.4519279)   4.956752
283    cvr  =  (0.8094397,-4.904210)
284    z-p_n ,  theta  =  (-0.6675882,-0.6748634)   3.932410
```

```
285    cvr  =  (0.4069381,-4.720038)
286    z-p_n ,  theta  =  (-1.113459,-0.9535328)  -2.433412
287    cvr  =  (-0.2335525,-0.9022660)
288    debug 8:            27 (-0.6675882,-0.7445307) (-0.2155138,-0.8161206)
289    s, z(s) =           28 (-0.6441103,-0.7649326)
290    z-p_n ,  theta  =  (-0.9785136,-0.9182008)  -2.387982
291    cvr  =  (0.4178894,-4.056221)
292    z-p_n ,  theta  =  (0.1361639,-0.4723298)   4.993061
293    cvr  =  (0.7984335,-4.874160)
294    z-p_n ,  theta  =  (-0.6441103,-0.6952653)   3.965166
295    cvr  =  (0.3925241,-4.688570)
296    z-p_n ,  theta  =  (-1.089981,-0.9739347)  -2.412362
297    cvr  =  (-0.2430757,-0.9038308)
298    debug 8:            28 (-0.6441103,-0.7649326) (-0.2238466,-0.8177074)
299    s, z(s) =           29 (-0.6200093,-0.7845945)
300    z-p_n ,  theta  =  (-0.9544126,-0.9378626)  -2.364940
301    cvr  =  (0.4139031,-4.017083)
302    z-p_n ,  theta  =  (0.1602650,-0.4919916)   5.027297
303    cvr  =  (0.7874418,-4.843543)
304    z-p_n ,  theta  =  (-0.6200093,-0.7149271)   3.997974
305    cvr  =  (0.3781216,-4.656528)
306    z-p_n ,  theta  =  (-1.065880,-0.9935966)  -2.391278
307    cvr  =  (-0.2522405,-0.9048693)
308    debug 8:            29 (-0.6200093,-0.7845945) (-0.2318524,-0.8188155)
309    s, z(s) =           30 (-0.5953088,-0.8034970)
310    z-p_n ,  theta  =  (-0.9297121,-0.9567651)  -2.341855
311    cvr  =  (0.4095895,-3.977865)
312    z-p_n ,  theta  =  (0.1849654,-0.5108941)   5.059752
313    cvr  =  (0.7764473,-4.812414)
314    z-p_n ,  theta  =  (-0.5953088,-0.7338296)   4.030835
315    cvr  =  (0.3637136,-4.623966)
316    z-p_n ,  theta  =  (-1.041180,-1.012499)  -2.370159
317    cvr  =  (-0.2610622,-0.9054410)
318    debug 8:            30 (-0.5953088,-0.8034970) (-0.2395449,-0.8194979)
319    s, z(s) =           31 (-0.5700321,-0.8216224)
320    z-p_n ,  theta  =  (-0.9044354,-0.9748906)  -2.318722
321    cvr  =  (0.4049484,-3.938560)
322    z-p_n ,  theta  =  (0.2102422,-0.5290196)   5.090668
323    cvr  =  (0.7654319,-4.780819)
324    z-p_n ,  theta  =  (-0.5700321,-0.7519551)   4.063745
325    cvr  =  (0.3492824,-4.590930)
326    z-p_n ,  theta  =  (-1.015903,-1.030625)  -2.349001
327    cvr  =  (-0.2695566,-0.9055948)
328    debug 8:            31 (-0.5700321,-0.8216224) (-0.2469386,-0.8197985)
329    s, z(s) =           32 (-0.5442039,-0.8389530)
330    z-p_n ,  theta  =  (-0.8786072,-0.9922211)  -2.295540
331    cvr  =  (0.3999785,-3.899164)
332    z-p_n ,  theta  =  (0.2360703,-0.5463501)   5.120246
333    cvr  =  (0.7543782,-4.748795)
334    z-p_n ,  theta  =  (-0.5442039,-0.7692856)   4.096704
335    cvr  =  (0.3348108,-4.557456)
336    z-p_n ,  theta  =  (-0.9900750,-1.047955)  -2.327802
337    cvr  =  (-0.2777392,-0.9053729)
338    debug 8:            32 (-0.5442039,-0.8389530) (-0.2540477,-0.8197549)
339    s, z(s) =           33 (-0.5178496,-0.8554717)
340    z-p_n ,  theta  =  (-0.8522529,-1.008740)  -2.272304
341    cvr  =  (0.3946792,-3.859671)
342    z-p_n ,  theta  =  (0.2624246,-0.5628688)   5.148655
343    cvr  =  (0.7432691,-4.716372)
344    z-p_n ,  theta  =  (-0.5178496,-0.7858043)   4.129709
345    cvr  =  (0.3202820,-4.523574)
346    z-p_n ,  theta  =  (-0.9637207,-1.064474)  -2.306559
347    cvr  =  (-0.2856249,-0.9048092)
348    debug 8:            33 (-0.5178496,-0.8554717) (-0.2608857,-0.8193974)
349    s, z(s) =           34 (-0.4909939,-0.8711630)
350    z-p_n ,  theta  =  (-0.8253972,-1.024431)  -2.249011
351    cvr  =  (0.3890498,-3.820075)
352    z-p_n ,  theta  =  (0.2892804,-0.5785602)   5.176037
353    cvr  =  (0.7320885,-4.683575)
354    z-p_n ,  theta  =  (-0.4909939,-0.8014957)   4.162759
355    cvr  =  (0.3056802,-4.489311)
```



```
356    z-p_n ,  theta  =  (-0.9368650,-1.080165)  -2.285269
357    cvr  =  (-0.2932271,-0.9039340)
358    debug 8:            34 (-0.4909939,-0.8711630) (-0.2674648,-0.8187531)
359    s, z(s) =           35 (-0.4636632,-0.8860115)
360    z-p_n ,  theta  =  (-0.7980665,-1.039280)  -2.225657
361    cvr  =  (0.3830892,-3.780370)
362    z-p_n ,  theta  =  (0.3166111,-0.5934087)   5.202512
363    cvr  =  (0.7208210,-4.650426)
364    z-p_n ,  theta  =  (-0.4636632,-0.8163442)   4.195850
365    cvr  =  (0.2909902,-4.454686)
366    z-p_n ,  theta  =  (-0.9095343,-1.095014)  -2.263928
367    cvr  =  (-0.3005592,-0.9027727)
368    debug 8:            35 (-0.4636632,-0.8860115) (-0.2737974,-0.8178444)
369    s, z(s) =           36 (-0.4358844,-0.9000027)
370    z-p_n ,  theta  =  (-0.7702876,-1.053271)  -2.202241
371    cvr  =  (0.3767968,-3.740550)
372    z-p_n ,  theta  =  (0.3443899,-0.6073998)   5.228183
373    cvr  =  (0.7094527,-4.616943)
374    z-p_n ,  theta  =  (-0.4358844,-0.8303353)   4.228981
375    cvr  =  (0.2761986,-4.419720)
376    z-p_n ,  theta  =  (-0.8817555,-1.109005)  -2.242534
377    cvr  =  (-0.3076322,-0.9013488)
378    debug 8:            36 (-0.4358844,-0.9000027) (-0.2798936,-0.8166925)
379    s, z(s) =           37 (-0.4076834,-0.9131233)
380    z-p_n ,  theta  =  (-0.7420867,-1.066391)  -2.178756
381    cvr  =  (0.3701714,-3.700609)
382    z-p_n ,  theta  =  (0.3725908,-0.6205205)   5.253139
383    cvr  =  (0.6979697,-4.583138)
384    z-p_n ,  theta  =  (-0.4076834,-0.8434560)   4.262151
385    cvr  =  (0.2612915,-4.384422)
386    z-p_n ,  theta  =  (-0.8535545,-1.122125)  -2.221084
387    cvr  =  (-0.3144574,-0.8996792)
388    debug 8:            37 (-0.4076834,-0.9131233) (-0.2857636,-0.8153124)
389    s, z(s) =           38 (-0.3790885,-0.9253604)
390    z-p_n ,  theta  =  (-0.7134918,-1.078629)  -2.155200
391    cvr  =  (0.3632122,-3.660541)
392    z-p_n ,  theta  =  (0.4011858,-0.6327576)   5.277454
393    cvr  =  (0.6863595,-4.549023)
394    z-p_n ,  theta  =  (-0.3790885,-0.8556931)   4.295356
395    cvr  =  (0.2462570,-4.348806)
396    z-p_n ,  theta  =  (-0.8249596,-1.134362)  -2.199574
397    cvr  =  (-0.3210444,-0.8977809)
398    debug 8:            38 (-0.3790885,-0.9253604) (-0.2914164,-0.8137192)
399    s, z(s) =           39 (-0.3501264,-0.9367024)
400    z-p_n ,  theta  =  (-0.6845297,-1.089971)  -2.131568
401    cvr  =  (0.3559182,-3.620337)
402    z-p_n ,  theta  =  (0.4301479,-0.6440996)   5.301196
403    cvr  =  (0.6746103,-4.514607)
404    z-p_n ,  theta  =  (-0.3501264,-0.8670351)   4.328594
405    cvr  =  (0.2310834,-4.312881)
406    z-p_n ,  theta  =  (-0.7959975,-1.145705)  -2.178001
407    cvr  =  (-0.3274019,-0.8956697)
408    debug 8:            39 (-0.3501264,-0.9367024) (-0.2968600,-0.8119270)
409    s, z(s) =           40 (-0.3208256,-0.9471383)
410    z-p_n ,  theta  =  (-0.6552289,-1.100406)  -2.107858
411    cvr  =  (0.3482883,-3.579994)
412    z-p_n ,  theta  =  (0.4594487,-0.6545355)   5.324420
413    cvr  =  (0.6627108,-4.479897)
414    z-p_n ,  theta  =  (-0.3208256,-0.8774710)   4.361863
415    cvr  =  (0.2157598,-4.276653)
416    z-p_n ,  theta  =  (-0.7666966,-1.156140)  -2.156362
417    cvr  =  (-0.3335383,-0.8933566)
418    debug 8:            40 (-0.3208256,-0.9471383) (-0.3021022,-0.8099453)
419    s, z(s) =           41 (-0.2912144,-0.9566578)
420    z-p_n ,  theta  =  (-0.6256176,-1.109926)  -2.084064
421    cvr  =  (0.3403218,-3.539502)
422    z-p_n ,  theta  =  (0.4890599,-0.6640550)   5.347178
423    cvr  =  (0.6506512,-4.444900)
424    z-p_n ,  theta  =  (-0.2912144,-0.8869905)   4.395160
425    cvr  =  (0.2002766,-4.240129)
426    z-p_n ,  theta  =  (-0.7370855,-1.165660)  -2.134652
```

```
427    cvr  =  (-0.3394600,-0.8908529)
428    debug 8:            41 (-0.2912144,-0.9566578) (-0.3071491,-0.8077847)
429    s, z(s) =           42 (-0.2613219,-0.9652517)
430    z-p_n ,  theta  =  (-0.5957252,-1.118520)  -2.060184
431    cvr  =  (0.3320177,-3.498857)
432    z-p_n ,  theta  =  (0.5189524,-0.6726489)   5.369513
433    cvr  =  (0.6384217,-4.409618)
434    z-p_n ,  theta  =  (-0.2613219,-0.8955844)   4.428482
435    cvr  =  (0.1846246,-4.203311)
436    z-p_n ,  theta  =  (-0.7071929,-1.174254)  -2.112868
437    cvr  =  (-0.3451735,-0.8881688)
438    debug 8:            42 (-0.2613219,-0.9652517) (-0.3120066,-0.8054538)
439    s, z(s) =           43 (-0.2311761,-0.9729119)
440    z-p_n ,  theta  =  (-0.5655794,-1.126180)  -2.036211
441    cvr  =  (0.3233745,-3.458048)
442    z-p_n ,  theta  =  (0.5490981,-0.6803091)   5.391463
443    cvr  =  (0.6260127,-4.374053)
444    z-p_n ,  theta  =  (-0.2311761,-0.9032446)   4.461828
445    cvr  =  (0.1687942,-4.166202)
446    z-p_n ,  theta  =  (-0.6770471,-1.181914)  -2.091006
447    cvr  =  (-0.3506847,-0.8853116)
448    debug 8:            43 (-0.2311761,-0.9729119) (-0.3166803,-0.8029593)
449    s, z(s) =           44 (-0.2008072,-0.9796308)
450    z-p_n ,  theta  =  (-0.5352104,-1.132899)  -2.012142
451    cvr  =  (0.3143917,-3.417071)
452    z-p_n ,  theta  =  (0.5794671,-0.6870279)   5.413063
453    cvr  =  (0.6134166,-4.338207)
454    z-p_n ,  theta  =  (-0.2008072,-0.9099634)   4.495194
455    cvr  =  (0.1527782,-4.128803)
456    z-p_n ,  theta  =  (-0.6466782,-1.188633)  -2.069062
457    cvr  =  (-0.3559980,-0.8822904)
458    debug 8:            44 (-0.2008072,-0.9796308) (-0.3211746,-0.8003092)
459    s, z(s) =           45 (-0.1702435,-0.9854020)
460    z-p_n ,  theta  =  (-0.5046468,-1.138670)  -1.987972
461    cvr  =  (0.3050681,-3.375914)
462    z-p_n ,  theta  =  (0.6100308,-0.6927992)   5.434343
463    cvr  =  (0.6006248,-4.302079)
464    z-p_n ,  theta  =  (-0.1702435,-0.9157347)   4.528578
465    cvr  =  (0.1365684,-4.091114)
466    z-p_n ,  theta  =  (-0.6161146,-1.194404)  -2.047031
467    cvr  =  (-0.3611180,-0.8791103)
468    debug 8:            45 (-0.1702435,-0.9854020) (-0.3254936,-0.7975081)
469    s, z(s) =           46 (-0.1395151,-0.9902200)
470    z-p_n ,  theta  =  (-0.4739184,-1.143488)  -1.963697
471    cvr  =  (0.2954030,-3.334573)
472    z-p_n ,  theta  =  (0.6407592,-0.6976171)   5.455330
473    cvr  =  (0.5876305,-4.265669)
474    z-p_n ,  theta  =  (-0.1395151,-0.9205526)   4.561978
475    cvr  =  (0.1201581,-4.053133)
476    z-p_n ,  theta  =  (-0.5853862,-1.199222)  -2.024910
477    cvr  =  (-0.3660474,-0.8757775)
478    debug 8:            46 (-0.1395151,-0.9902200) (-0.3296403,-0.7945613)
479    s, z(s) =           47 (-0.1086518,-0.9940799)
480    z-p_n ,  theta  =  (-0.4430550,-1.147348)  -1.939311
481    cvr  =  (0.2853950,-3.293037)
482    z-p_n ,  theta  =  (0.6716225,-0.7014771)   5.476048
483    cvr  =  (0.5744262,-4.228974)
484    z-p_n ,  theta  =  (-0.1086518,-0.9244125)   4.595390
485    cvr  =  (0.1035403,-4.014861)
486    z-p_n ,  theta  =  (-0.5545228,-1.203082)  -2.002693
487    cvr  =  (-0.3707904,-0.8722985)
488    debug 8:            47 (-0.1086518,-0.9940799) (-0.3336183,-0.7914749)
489    s, z(s) =           48 (-7.7683769E-02,-0.9969780)
490    z-p_n ,  theta  =  (-0.4120871,-1.150246)  -1.914811
491    cvr  =  (0.2750437,-3.251300)
492    z-p_n ,  theta  =  (0.7025905,-0.7043752)   5.496519
493    cvr  =  (0.5610058,-4.191993)
494    z-p_n ,  theta  =  (-7.7683769E-02,-0.9273107)   4.628811
495    cvr  =  (8.6709201E-02,-3.976293)
496    z-p_n ,  theta  =  (-0.5235548,-1.205980)  -1.980377
497    cvr  =  (-0.3753482,-0.8686767)
```



```
498    debug 8:            48 (-7.7683769E-02,-0.9969780) (-0.3374295,-0.7882516)
499    s, z(s) =           49 (-4.6640147E-02,-0.9989117)
500    z-p_n ,  theta  =  (-0.3810434,-1.152180)  -1.890189
501    cvr  =  (0.2643481,-3.209351)
502    z-p_n ,  theta  =  (0.7336341,-0.7063089)   5.516762
503    cvr  =  (0.5473633,-4.154720)
504    z-p_n ,  theta  =  (-4.6640147E-02,-0.9292444)   4.662240
505    cvr  =  (6.9658846E-02,-3.937425)
506    z-p_n ,  theta  =  (-0.4925112,-1.207914)  -1.957955
507    cvr  =  (-0.3797232,-0.8649166)
508    debug 8:            49 (-4.6640147E-02,-0.9989117) (-0.3410758,-0.7848958)
509    s, z(s) =           50 (-1.5551882E-02,-0.9998791)
510    z-p_n ,  theta  =  (-0.3499552,-1.153147)  -1.865441
511    cvr  =  (0.2533074,-3.167181)
512    z-p_n ,  theta  =  (0.7647224,-0.7072762)   5.536794
513    cvr  =  (0.5334928,-4.117152)
514    z-p_n ,  theta  =  (-1.5551882E-02,-0.9302117)   4.695672
515    cvr  =  (5.2384019E-02,-3.898254)
516    z-p_n ,  theta  =  (-0.4614230,-1.208881)  -1.935423
517    cvr  =  (-0.3839167,-0.8610220)
518    debug 8:            50 (-1.5551882E-02,-0.9998791) (-0.3445590,-0.7814105)
519    s, z(s) =           51 (1.5551906E-02,-0.9998791)
520    z-p_n ,  theta  =  (-0.3188514,-1.153147)  -1.840562
521    cvr  =  (0.2419209,-3.124781)
522    z-p_n ,  theta  =  (0.7958262,-0.7072762)   5.556631
523    cvr  =  (0.5193893,-4.079282)
524    z-p_n ,  theta  =  (1.5551906E-02,-0.9302117)   4.729106
525    cvr  =  (3.4879625E-02,-3.858774)
526    z-p_n ,  theta  =  (-0.4303192,-1.208881)  -1.912775
527    cvr  =  (-0.3879290,-0.8569961)
528    debug 8:            51 (1.5551906E-02,-0.9998791) (-0.3478795,-0.7777988)
529    s, z(s) =           52 (4.6640649E-02,-0.9989117)
530    z-p_n ,  theta  =  (-0.2877626,-1.152180)  -1.815544
531    cvr  =  (0.2301881,-3.082141)
532    z-p_n ,  theta  =  (0.8269149,-0.7063089)   5.576287
533    cvr  =  (0.5050479,-4.041106)
534    z-p_n ,  theta  =  (4.6640649E-02,-0.9292444)   4.762539
535    cvr  =  (1.7141372E-02,-3.818979)
536    z-p_n ,  theta  =  (-0.3992304,-1.207914)  -1.890006
537    cvr  =  (-0.3917605,-0.8528423)
538    debug 8:            52 (4.6640649E-02,-0.9989117) (-0.3510379,-0.7740637)
539    s, z(s) =           53 (7.7683792E-02,-0.9969780)
540    z-p_n ,  theta  =  (-0.2567195,-1.150246)  -1.790384
541    cvr  =  (0.2181082,-3.039251)
542    z-p_n ,  theta  =  (0.8579581,-0.7043752)   5.595776
543    cvr  =  (0.4904639,-4.002618)
544    z-p_n ,  theta  =  (7.7683792E-02,-0.9273107)   4.795967
545    cvr  =  (-8.3541870E-04,-3.778864)
546    z-p_n ,  theta  =  (-0.3681872,-1.205980)  -1.867110
547    cvr  =  (-0.3954116,-0.8485641)
548    debug 8:            53 (7.7683792E-02,-0.9969780) (-0.3540349,-0.7702083)
549    s, z(s) =           54 (0.1086523,-0.9940798)
550    z-p_n ,  theta  =  (-0.2257510,-1.147348)  -1.765074
551    cvr  =  (0.2056811,-2.996100)
552    z-p_n ,  theta  =  (0.8889265,-0.7014770)   5.615109
553    cvr  =  (0.4756333,-3.963809)
554    z-p_n ,  theta  =  (0.1086523,-0.9244125)   4.829389
555    cvr  =  (-1.9054264E-02,-3.738421)
556    z-p_n ,  theta  =  (-0.3372188,-1.203082)  -1.844079
557    cvr  =  (-0.3988809,-0.8441632)
558    debug 8:            54 (0.1086523,-0.9940798) (-0.3568695,-0.7662341)
559    s, z(s) =           55 (0.1395156,-0.9902199)
560    z-p_n ,  theta  =  (-0.1948877,-1.143488)  -1.739607
561    cvr  =  (0.1929065,-2.952677)
562    z-p_n ,  theta  =  (0.9197899,-0.6976171)   5.634296
563    cvr  =  (0.4605524,-3.924670)
564    z-p_n ,  theta  =  (0.1395156,-0.9205526)   4.862801
565    cvr  =  (-3.7518799E-02,-3.697641)
566    z-p_n ,  theta  =  (-0.3063554,-1.199222)  -1.820909
567    cvr  =  (-0.4021676,-0.8396420)
568    debug 8:            55 (0.1395156,-0.9902199) (-0.3595412,-0.7621435)
```

```
569    s, z(s) =           56 (0.1702435,-0.9854020)
570    z-p_n ,  theta  =  (-0.1641598,-1.138670)  -1.713978
571    cvr  =  (0.1797844,-2.908972)
572    z-p_n ,  theta  =  (0.9505178,-0.6927992)   5.653348
573    cvr  =  (0.4452181,-3.885196)
574    z-p_n ,  theta  =  (0.1702435,-0.9157347)   4.896200
575    cvr  =  (-5.6231707E-02,-3.656519)
576    z-p_n ,  theta  =  (-0.2756276,-1.194404)  -1.797592
577    cvr  =  (-0.4052697,-0.8350041)
578    debug 8:            56 (0.1702435,-0.9854020) (-0.3620485,-0.7579395)
579    s, z(s) =           57 (0.2008072,-0.9796308)
580    z-p_n ,  theta  =  (-0.1335961,-1.132899)  -1.688178
581    cvr  =  (0.1663146,-2.864971)
582    z-p_n ,  theta  =  (0.9810815,-0.6870279)   5.672274
583    cvr  =  (0.4296269,-3.845376)
584    z-p_n ,  theta  =  (0.2008072,-0.9099634)   4.929585
585    cvr  =  (-7.5196415E-02,-3.615043)
586    z-p_n ,  theta  =  (-0.2450639,-1.188633)  -1.774120
587    cvr  =  (-0.4081856,-0.8302510)
588    debug 8:            57 (0.2008072,-0.9796308) (-0.3643901,-0.7536236)
589    s, z(s) =           58 (0.2311766,-0.9729118)
590    z-p_n ,  theta  =  (-0.1032267,-1.126180)  -1.662202
591    cvr  =  (0.1524975,-2.820663)
592    z-p_n ,  theta  =  (1.011451,-0.6803089)   5.691082
593    cvr  =  (0.4137763,-3.805199)
594    z-p_n ,  theta  =  (0.2311766,-0.9032444)   4.962951
595    cvr  =  (-9.4414949E-02,-3.573204)
596    z-p_n ,  theta  =  (-0.2146945,-1.181914)  -1.750487
597    cvr  =  (-0.4109124,-0.8253844)
598    debug 8:            58 (0.2311766,-0.9729118) (-0.3665640,-0.7491974)
599    s, z(s) =           59 (0.2613223,-0.9652516)
600    z-p_n ,  theta  =  (-7.3080927E-02,-1.118520)  -1.636041
601    cvr  =  (0.1383338,-2.776036)
602    z-p_n ,  theta  =  (1.041597,-0.6726487)   5.709778
603    cvr  =  (0.3976642,-3.764657)
604    z-p_n ,  theta  =  (0.2613223,-0.8955842)   4.996297
605    cvr  =  (-0.1138893,-3.530992)
606    z-p_n ,  theta  =  (-0.1845487,-1.174254)  -1.726684
607    cvr  =  (-0.4134472,-0.8204069)
608    debug 8:            59 (0.2613223,-0.9652516) (-0.3685675,-0.7446632)
609    s, z(s) =           60 (0.2912149,-0.9566577)
610    z-p_n ,  theta  =  (-4.3188423E-02,-1.109926)  -1.609688
611    cvr  =  (0.1238242,-2.731076)
612    z-p_n ,  theta  =  (1.071489,-0.6640549)   5.728371
613    cvr  =  (0.3812890,-3.723737)
614    z-p_n ,  theta  =  (0.2912149,-0.8869904)   5.029619
615    cvr  =  (-0.1336209,-3.488397)
616    z-p_n ,  theta  =  (-0.1546562,-1.165660)  -1.702703
617    cvr  =  (-0.4157869,-0.8153214)
618    debug 8:            60 (0.2912149,-0.9566577) (-0.3703984,-0.7400239)
619    s, z(s) =           61 (0.3208261,-0.9471381)
620    z-p_n ,  theta  =  (-1.3577223E-02,-1.100406)  -1.583134
621    cvr  =  (0.1089696,-2.685769)
622    z-p_n ,  theta  =  (1.101100,-0.6545353)   5.746866
623    cvr  =  (0.3646490,-3.682428)
624    z-p_n ,  theta  =  (0.3208261,-0.8774708)   5.062916
625    cvr  =  (-0.1536111,-3.445406)
626    z-p_n ,  theta  =  (-0.1250450,-1.156140)  -1.678535
627    cvr  =  (-0.4179267,-0.8101296)
628    debug 8:            61 (0.3208261,-0.9471381) (-0.3720524,-0.7352808)
629    s, z(s) =           62 (0.3501264,-0.9367024)
630    z-p_n ,  theta  =  (1.5723169E-02,-1.089971)  -1.556372
631    cvr  =  (9.3771458E-02,-2.640102)
632    z-p_n ,  theta  =  (1.130401,-0.6440996)   5.765270
633    cvr  =  (0.3477434,-3.640718)
634    z-p_n ,  theta  =  (0.3501264,-0.8670351)   5.096185
635    cvr  =  (-0.1738606,-3.402009)
636    z-p_n ,  theta  =  (-9.5744610E-02,-1.145705)  -1.654171
637    cvr  =  (-0.4198630,-0.8048341)
638    debug 8:            62 (0.3501264,-0.9367024) (-0.3735267,-0.7304365)
639    s, z(s) =           63 (0.3790886,-0.9253604)
```



```
640    z-p_n ,  theta  =  (4.4685274E-02,-1.078629)  -1.529392
641    cvr  =  (7.8231499E-02,-2.594060)
642    z-p_n ,  theta  =  (1.159363,-0.6327575)   5.783587
643    cvr  =  (0.3305717,-3.598594)
644    z-p_n ,  theta  =  (0.3790886,-0.8556930)   5.129423
645    cvr  =  (-0.1943697,-3.358191)
646    z-p_n ,  theta  =  (-6.6782504E-02,-1.134362)  -1.629601
647    cvr  =  (-0.4215904,-0.7994373)
648    debug 8:            63 (0.3790886,-0.9253604) (-0.3748165,-0.7254931)
649    s, z(s) =           64 (0.4076839,-0.9131231)
650    z-p_n ,  theta  =  (7.3280632E-02,-1.066391)  -1.502186
651    cvr  =  (6.2351808E-02,-2.547626)
652    z-p_n ,  theta  =  (1.187958,-0.6205203)   5.801825
653    cvr  =  (0.3131339,-3.556041)
654    z-p_n ,  theta  =  (0.4076839,-0.8434558)   5.162628
655    cvr  =  (-0.2151381,-3.313939)
656    z-p_n ,  theta  =  (-3.8187146E-02,-1.122125)  -1.604814
657    cvr  =  (-0.4231038,-0.7939417)
658    debug 8:            64 (0.4076839,-0.9131231) (-0.3759176,-0.7204532)
659    s, z(s) =           65 (0.4358844,-0.9000027)
660    z-p_n ,  theta  =  (0.1014811,-1.053271)  -1.474744
661    cvr  =  (4.6135526E-02,-2.500787)
662    z-p_n ,  theta  =  (1.216159,-0.6073998)   5.819985
663    cvr  =  (0.2954313,-3.513047)
664    z-p_n ,  theta  =  (0.4358844,-0.8303353)   5.195797
665    cvr  =  (-0.2361644,-3.269241)
666    z-p_n ,  theta  =  (-9.9866390E-03,-1.109005)  -1.579801
667    cvr  =  (-0.4243970,-0.7883513)
668    debug 8:            65 (0.4358844,-0.9000027) (-0.3768248,-0.7153201)
669    s, z(s) =           66 (0.4636637,-0.8860113)
670    z-p_n ,  theta  =  (0.1292604,-1.039279)  -1.447057
671    cvr  =  (2.9584948E-02,-2.453525)
672    z-p_n ,  theta  =  (1.243938,-0.5934085)   5.838074
673    cvr  =  (0.2774644,-3.469594)
674    z-p_n ,  theta  =  (0.4636637,-0.8163440)   5.228929
675    cvr  =  (-0.2574480,-3.224080)
676    z-p_n ,  theta  =  (1.7792612E-02,-1.095013)  -1.554549
677    cvr  =  (-0.4254638,-0.7826679)
678    debug 8:            66 (0.4636637,-0.8860113) (-0.3775327,-0.7100959)
679    s, z(s) =           67 (0.4909939,-0.8711630)
680    z-p_n ,  theta  =  (0.1565907,-1.024431)  -1.419114
681    cvr  =  (1.2704190E-02,-2.405824)
682    z-p_n ,  theta  =  (1.271268,-0.5785601)   5.856095
683    cvr  =  (0.2592356,-3.425670)
684    z-p_n ,  theta  =  (0.4909939,-0.8014956)   5.262020
685    cvr  =  (-0.2789864,-3.178442)
686    z-p_n ,  theta  =  (4.5122892E-02,-1.080165)  -1.529047
687    cvr  =  (-0.4262972,-0.7768965)
688    debug 8:            67 (0.4909939,-0.8711630) (-0.3780352,-0.7047850)
689    s, z(s) =           68 (0.5178496,-0.8554717)
690    z-p_n ,  theta  =  (0.1834463,-1.008740)  -1.390905
691    cvr  =  (-4.5030005E-03,-2.357664)
692    z-p_n ,  theta  =  (1.298124,-0.5628688)   5.874052
693    cvr  =  (0.2407469,-3.381255)
694    z-p_n ,  theta  =  (0.5178496,-0.7858043)   5.295069
695    cvr  =  (-0.3007772,-3.132309)
696    z-p_n ,  theta  =  (7.1978569E-02,-1.064474)  -1.503280
697    cvr  =  (-0.4268898,-0.7710397)
698    debug 8:            68 (0.5178496,-0.8554717) (-0.3783258,-0.6993901)
699    s, z(s) =           69 (0.5442044,-0.8389527)
700    z-p_n ,  theta  =  (0.2098011,-0.9922209)  -1.362420
701    cvr  =  (-2.2031587E-02,-2.309030)
702    z-p_n ,  theta  =  (1.324479,-0.5463499)   5.891948
703    cvr  =  (0.2220018,-3.336334)
704    z-p_n ,  theta  =  (0.5442044,-0.7692854)   5.328074
705    cvr  =  (-0.3228170,-3.085665)
706    z-p_n ,  theta  =  (9.8333299E-02,-1.047955)  -1.477237
707    cvr  =  (-0.4272338,-0.7651026)
708    debug 8:            69 (0.5442044,-0.8389527) (-0.3783979,-0.6939156)
709    s, z(s) =           70 (0.5700325,-0.8216221)
710    z-p_n ,  theta  =  (0.2356293,-0.9748903)  -1.333646
```

```
711    cvr  =  (-3.9875649E-02,-2.259900)
712    z-p_n ,  theta  =  (1.350307,-0.5290193)   5.909788
713    cvr  =  (0.2030049,-3.290888)
714    z-p_n ,  theta  =  (0.5700325,-0.7519548)   5.361033
715    cvr  =  (-0.3451010,-3.038493)
716    z-p_n ,  theta  =  (0.1241615,-1.030624)  -1.450902
717    cvr  =  (-0.4273199,-0.7590899)
718    debug 8:            70 (0.5700325,-0.8216221) (-0.3782435,-0.6883660)
719    s, z(s) =           71 (0.5953093,-0.8034967)
720    z-p_n ,  theta  =  (0.2609060,-0.9567648)  -1.304573
721    cvr  =  (-5.8029205E-02,-2.210258)
722    z-p_n ,  theta  =  (1.375584,-0.5108938)   5.927573
723    cvr  =  (0.1837606,-3.244900)
724    z-p_n ,  theta  =  (0.5953093,-0.7338293)   5.393944
725    cvr  =  (-0.3676246,-2.990776)
726    z-p_n ,  theta  =  (0.1494382,-1.012499)  -1.424261
727    cvr  =  (-0.4271402,-0.7530086)
728    debug 8:            71 (0.5953093,-0.8034967) (-0.3778556,-0.6827477)
729    s, z(s) =           72 (0.6200097,-0.7845941)
730    z-p_n ,  theta  =  (0.2856064,-0.9378623)  -1.275190
731    cvr  =  (-7.6484531E-02,-2.160082)
732    z-p_n ,  theta  =  (1.400284,-0.4919913)   5.945308
733    cvr  =  (0.1642754,-3.198351)
734    z-p_n ,  theta  =  (0.6200097,-0.7149268)   5.426805
735    cvr  =  (-0.3903813,-2.942494)
736    z-p_n ,  theta  =  (0.1741387,-0.9935962)  -1.397297
737    cvr  =  (-0.4266844,-0.7468631)
738    debug 8:            72 (0.6200097,-0.7845941) (-0.3772251,-0.6770649)
739    s, z(s) =           73 (0.6441103,-0.7649326)
740    z-p_n ,  theta  =  (0.3097070,-0.9182008)  -1.245482
741    cvr  =  (-9.5233694E-02,-2.109352)
742    z-p_n ,  theta  =  (1.424385,-0.4723298)   5.962993
743    cvr  =  (0.1445560,-3.151220)
744    z-p_n ,  theta  =  (0.6441103,-0.6952653)   5.459613
745    cvr  =  (-0.4133642,-2.893627)
746    z-p_n ,  theta  =  (0.1982393,-0.9739347)  -1.369995
747    cvr  =  (-0.4259425,-0.7406607)
748    debug 8:            73 (0.6441103,-0.7649326) (-0.3763433,-0.6713241)
749    s, z(s) =           74 (0.6675882,-0.7445307)
750    z-p_n ,  theta  =  (0.3331849,-0.8977989)  -1.215438
751    cvr  =  (-0.1142677,-2.058045)
752    z-p_n ,  theta  =  (1.447862,-0.4519279)   5.980634
753    cvr  =  (0.1246102,-3.103487)
754    z-p_n ,  theta  =  (0.6675882,-0.6748634)   5.492368
755    cvr  =  (-0.4365657,-2.844155)
756    z-p_n ,  theta  =  (0.2217171,-0.9535328)  -1.342334
757    cvr  =  (-0.4249040,-0.7344100)
758    debug 8:            74 (0.6675882,-0.7445307) (-0.3752010,-0.6655336)
759    s, z(s) =           75 (0.6904202,-0.7234086)
760    z-p_n ,  theta  =  (0.3560169,-0.8766767)  -1.185044
761    cvr  =  (-0.1335759,-2.006140)
762    z-p_n ,  theta  =  (1.470694,-0.4308057)   5.998230
763    cvr  =  (0.1044474,-3.055130)
764    z-p_n ,  theta  =  (0.6904202,-0.6537412)   5.525068
765    cvr  =  (-0.4599761,-2.794057)
766    z-p_n ,  theta  =  (0.2445491,-0.9324106)  -1.314297
767    cvr  =  (-0.4235577,-0.7281196)
768    debug 8:            75 (0.6904202,-0.7234086) (-0.3737884,-0.6597008)
769    s, z(s) =           76 (0.7125842,-0.7015866)
770    z-p_n ,  theta  =  (0.3781809,-0.8548548)  -1.154287
771    cvr  =  (-0.1531466,-1.953615)
772    z-p_n ,  theta  =  (1.492858,-0.4089838)   6.015786
773    cvr  =  (8.4078416E-02,-3.006128)
774    z-p_n ,  theta  =  (0.7125842,-0.6319193)   5.557712
775    cvr  =  (-0.4835846,-2.743311)
776    z-p_n ,  theta  =  (0.2667131,-0.9105886)  -1.285864
777    cvr  =  (-0.4218920,-0.7217994)
778    debug 8:            76 (0.7125842,-0.7015866) (-0.3720952,-0.6538351)
779    s, z(s) =           77 (0.7340586,-0.6790861)
780    z-p_n ,  theta  =  (0.3996553,-0.8323543)  -1.123154
781    cvr  =  (-0.1729665,-1.900447)
```



```
782    z-p_n ,  theta  =  (1.514333,-0.3864833)   6.033303
783    cvr  =  (6.3515335E-02,-2.956459)
784    z-p_n ,  theta  =  (0.7340586,-0.6094188)   5.590297
785    cvr  =  (-0.5073791,-2.691896)
786    z-p_n ,  theta  =  (0.2881875,-0.8880882)  -1.257014
787    cvr  =  (-0.4198950,-0.7154608)
788    debug 8:            77 (0.7340586,-0.6790861) (-0.3701110,-0.6479467)
789    s, z(s) =           78 (0.7548231,-0.6559284)
790    z-p_n ,  theta  =  (0.4204198,-0.8091966)  -1.091630
791    cvr  =  (-0.1930219,-1.846611)
792    z-p_n ,  theta  =  (1.535097,-0.3633256)   6.050783
793    cvr  =  (4.2771041E-02,-2.906099)
794    z-p_n ,  theta  =  (0.7548231,-0.5862611)   5.622822
795    cvr  =  (-0.5313465,-2.639789)
796    z-p_n ,  theta  =  (0.3089520,-0.8649305)  -1.227723
797    cvr  =  (-0.4175541,-0.7091162)
798    debug 8:            78 (0.7548231,-0.6559284) (-0.3678246,-0.6420471)
799    s, z(s) =           79 (0.7748570,-0.6321365)
800    z-p_n ,  theta  =  (0.4404538,-0.7854047)  -1.059700
801    cvr  =  (-0.2132960,-1.792084)
802    z-p_n ,  theta  =  (1.555131,-0.3395337)   6.068227
803    cvr  =  (2.1861479E-02,-2.855025)
804    z-p_n ,  theta  =  (0.7748570,-0.5624692)   5.655287
805    cvr  =  (-0.5554710,-2.586967)
806    z-p_n ,  theta  =  (0.3289860,-0.8411386)  -1.197969
807    cvr  =  (-0.4148566,-0.7027798)
808    debug 8:            79 (0.7748570,-0.6321365) (-0.3652249,-0.6361491)
809    s, z(s) =           80 (0.7941417,-0.6077327)
810    z-p_n ,  theta  =  (0.4597384,-0.7610008)  -1.027350
811    cvr  =  (-0.2337715,-1.736840)
812    z-p_n ,  theta  =  (1.574416,-0.3151298)   6.085639
813    cvr  =  (8.0282986E-04,-2.803212)
814    z-p_n ,  theta  =  (0.7941417,-0.5380653)   5.687691
815    cvr  =  (-0.5797365,-2.533405)
816    z-p_n ,  theta  =  (0.3482707,-0.8167347)  -1.167725
817    cvr  =  (-0.4117894,-0.6964670)
818    debug 8:            80 (0.7941417,-0.6077327) (-0.3623003,-0.6302669)
819    s, z(s) =           81 (0.8126581,-0.5827408)
820    z-p_n ,  theta  =  (0.4782548,-0.7360090) -0.9945654
821    cvr  =  (-0.2544289,-1.680856)
822    z-p_n ,  theta  =  (1.592932,-0.2901380)   6.103020
823    cvr  =  (-2.0386010E-02,-2.750637)
824    z-p_n ,  theta  =  (0.8126581,-0.5130735)   5.720031
825    cvr  =  (-0.6041240,-2.479079)
826    z-p_n ,  theta  =  (0.3667870,-0.7917429)  -1.136966
827    cvr  =  (-0.4083401,-0.6901959)
828    debug 8:            81 (0.8126581,-0.5827408) (-0.3590397,-0.6244168)
829    s, z(s) =           82 (0.8303882,-0.5571853)
830    z-p_n ,  theta  =  (0.4959849,-0.7104535) -0.9613302
831    cvr  =  (-0.2752463,-1.624104)
832    z-p_n ,  theta  =  (1.610662,-0.2645825)   6.120370
833    cvr  =  (-4.1683927E-02,-2.697274)
834    z-p_n ,  theta  =  (0.8303882,-0.4875180)   5.752308
835    cvr  =  (-0.6286122,-2.423966)
836    z-p_n ,  theta  =  (0.3845171,-0.7661873)  -1.105664
837    cvr  =  (-0.4044947,-0.6839855)
838    debug 8:            82 (0.8303882,-0.5571853) (-0.3554309,-0.6186159)
839    s, z(s) =           83 (0.8473148,-0.5310910)
840    z-p_n ,  theta  =  (0.5129115,-0.6843592) -0.9276300
841    cvr  =  (-0.2961996,-1.566562)
842    z-p_n ,  theta  =  (1.627589,-0.2384882)   6.137692
843    cvr  =  (-6.3067734E-02,-2.643100)
844    z-p_n ,  theta  =  (0.8473148,-0.4614237)   5.784519
845    cvr  =  (-0.6531782,-2.368041)
846    z-p_n ,  theta  =  (0.4014437,-0.7400931)  -1.073789
847    cvr  =  (-0.4002410,-0.6778580)
848    debug 8:            83 (0.8473148,-0.5310910) (-0.3514629,-0.6128848)
849    s, z(s) =           84 (0.8634219,-0.5044826)
850    z-p_n ,  theta  =  (0.5290186,-0.6577508) -0.8934485
851    cvr  =  (-0.3172638,-1.508202)
852    z-p_n ,  theta  =  (1.643696,-0.2118798)   6.154988
```

```
853    cvr  =  (-8.4512919E-02,-2.588088)
854    z-p_n ,  theta  =  (0.8634219,-0.4348153)   5.816666
855    cvr  =  (-0.6777974,-2.311277)
856    z-p_n ,  theta  =  (0.4175508,-0.7134846)  -1.041310
857    cvr  =  (-0.3955661,-0.6718371)
858    debug 8:           84 (0.8634219,-0.5044826) (-0.3471245,-0.6072446)
859    s, z(s) =          85 (0.8786933,-0.4773866)
860    z-p_n ,  theta  =  (0.5442901,-0.6306548) -0.8587715
861    cvr  =  (-0.3384095,-1.449000)
862    z-p_n ,  theta  =  (1.658968,-0.1847838)   6.172258
863    cvr  =  (-0.1059910,-2.532215)
864    z-p_n ,  theta  =  (0.8786933,-0.4077193)   5.848745
865    cvr  =  (-0.7024415,-2.253653)
866    z-p_n ,  theta  =  (0.4328223,-0.6863886)  -1.008195
867    cvr  =  (-0.3904584,-0.6659497)
868    debug 8:           85 (0.8786933,-0.4773866) (-0.3424053,-0.6017198)
869    s, z(s) =          86 (0.8931150,-0.4498283)
870    z-p_n ,  theta  =  (0.5587118,-0.6030965) -0.8235827
871    cvr  =  (-0.3596064,-1.388930)
872    z-p_n ,  theta  =  (1.673389,-0.1572255)   6.189504
873    cvr  =  (-0.1274720,-2.475454)
874    z-p_n ,  theta  =  (0.8931150,-0.3801610)   5.880758
875    cvr  =  (-0.7270803,-2.195143)
876    z-p_n ,  theta  =  (0.4472440,-0.6588303) -0.9744096
877    cvr  =  (-0.3849064,-0.6602255)
878    debug 8:           86 (0.8931150,-0.4498283) (-0.3372951,-0.5963373)
879    s, z(s) =          87 (0.9066727,-0.4218348)
880    z-p_n ,  theta  =  (0.5722694,-0.5751029) -0.7878677
881    cvr  =  (-0.3808210,-1.327967)
882    z-p_n ,  theta  =  (1.686947,-0.1292320)   6.206728
883    cvr  =  (-0.1489232,-2.417782)
884    z-p_n ,  theta  =  (0.9066727,-0.3521675)   5.912704
885    cvr  =  (-0.7516814,-2.135721)
886    z-p_n ,  theta  =  (0.4608017,-0.6308368) -0.9399179
887    cvr  =  (-0.3789008,-0.6546965)
888    debug 8:           87 (0.9066727,-0.4218348) (-0.3317857,-0.5911259)
889    s, z(s) =          88 (0.9193532,-0.3934332)
890    z-p_n ,  theta  =  (0.5849499,-0.5467013) -0.7516121
891    cvr  =  (-0.4020163,-1.266088)
892    z-p_n ,  theta  =  (1.699627,-0.1008303)   6.223930
893    cvr  =  (-0.1703082,-2.359176)
894    z-p_n ,  theta  =  (0.9193532,-0.3237658)   5.944582
895    cvr  =  (-0.7762083,-2.075367)
896    z-p_n ,  theta  =  (0.4734821,-0.6024352) -0.9046832
897    cvr  =  (-0.3724329,-0.6493977)
898    debug 8:           88 (0.9193532,-0.3934332) (-0.3258694,-0.5861175)
899    s, z(s) =          89 (0.9311441,-0.3646514)
900    z-p_n ,  theta  =  (0.5967408,-0.5179195) -0.7148024
901    cvr  =  (-0.4231525,-1.203272)
902    z-p_n ,  theta  =  (1.711418,-7.2048575E-02)   6.241112
903    cvr  =  (-0.1915876,-2.299614)
904    z-p_n ,  theta  =  (0.9311441,-0.2949841)   5.976390
905    cvr  =  (-0.8006218,-2.014059)
906    z-p_n ,  theta  =  (0.4852731,-0.5736535) -0.8686674
907    cvr  =  (-0.3654968,-0.6443691)
908    debug 8:           89 (0.9311441,-0.3646514) (-0.3195411,-0.5813481)
909    s, z(s) =          90 (0.9420344,-0.3355164)
910    z-p_n ,  theta  =  (0.6076311,-0.4887846) -0.6774243
911    cvr  =  (-0.4441882,-1.139494)
912    z-p_n ,  theta  =  (1.722309,-4.2913586E-02)   6.258275
913    cvr  =  (-0.2127206,-2.239073)
914    z-p_n ,  theta  =  (0.9420344,-0.2658491)   6.008131
915    cvr  =  (-0.8248811,-1.951772)
916    z-p_n ,  theta  =  (0.4961633,-0.5445185) -0.8318297
917    cvr  =  (-0.3580886,-0.6396509)
918    debug 8:           90 (0.9420344,-0.3355164) (-0.3127974,-0.5768539)
919    s, z(s) =          91 (0.9520131,-0.3060573)
920    z-p_n ,  theta  =  (0.6176098,-0.4593254) -0.6394663
921    cvr  =  (-0.4650767,-1.074735)
922    z-p_n ,  theta  =  (1.732287,-1.3454437E-02)   6.275419
923    cvr  =  (-0.2336609,-2.177535)
```



```
924    z-p_n ,  theta  =  (0.9520131,-0.2363899)   6.039803
925    cvr  =  (-0.8489399,-1.888491)
926    z-p_n ,  theta  =  (0.5061420,-0.5150594) -0.7941301
927    cvr  =  (-0.3502078,-0.6352891)
928    debug 8:           91 (0.9520131,-0.3060573) (-0.3056379,-0.5726765)
929    s, z(s) =          92 (0.9610710,-0.2763016)
930    z-p_n ,  theta  =  (0.6266677,-0.4295698) -0.6009161
931    cvr  =  (-0.4857700,-1.008977)
932    z-p_n ,  theta  =  (1.741345,1.6301244E-02)   6.292546
933    cvr  =  (-0.2543610,-2.114980)
934    z-p_n ,  theta  =  (0.9610710,-0.2066343)   6.071405
935    cvr  =  (-0.8727510,-1.824194)
936    z-p_n ,  theta  =  (0.5151999,-0.4853036) -0.7555258
937    cvr  =  (-0.3418578,-0.6313322)
938    debug 8:           92 (0.9610710,-0.2763016) (-0.2980656,-0.5688598)
939    s, z(s) =          93 (0.9691991,-0.2462786)
940    z-p_n ,  theta  =  (0.6347958,-0.3995468) -0.5617642
941    cvr  =  (-0.5062157,-0.9422037)
942    z-p_n ,  theta  =  (1.749473,4.6324223E-02)   6.309658
943    cvr  =  (-0.2747689,-2.051393)
944    z-p_n ,  theta  =  (0.9691991,-0.1766113)   6.102939
945    cvr  =  (-0.8962623,-1.758869)
946    z-p_n ,  theta  =  (0.5233280,-0.4552807) -0.7159751
947    cvr  =  (-0.3330461,-0.6278318)
948    debug 8:           93 (0.9691991,-0.2462786) (-0.2900876,-0.5654502)
949    s, z(s) =          94 (0.9763895,-0.2160174)
950    z-p_n ,  theta  =  (0.6419863,-0.3692855) -0.5220022
951    cvr  =  (-0.5263582,-0.8744020)
952    z-p_n ,  theta  =  (1.756664,7.6585457E-02)   6.326755
953    cvr  =  (-0.2948294,-1.986762)
954    z-p_n ,  theta  =  (0.9763895,-0.1463500)   6.134404
955    cvr  =  (-0.9194189,-1.692501)
956    z-p_n ,  theta  =  (0.5305185,-0.4250194) -0.6754355
957    cvr  =  (-0.3237858,-0.6248426)
958    debug 8:           94 (0.9763895,-0.2160174) (-0.2817155,-0.5624970)
959    s, z(s) =          95 (0.9826354,-0.1855471)
960    z-p_n ,  theta  =  (0.6482321,-0.3388153) -0.4816233
961    cvr  =  (-0.5461395,-0.8055621)
962    z-p_n ,  theta  =  (1.762910,0.1070557)   6.343838
963    cvr  =  (-0.3144848,-1.921077)
964    z-p_n ,  theta  =  (0.9826354,-0.1158798)   6.165800
965    cvr  =  (-0.9421632,-1.625082)
966    z-p_n ,  theta  =  (0.5367643,-0.3945492) -0.6338649
967    cvr  =  (-0.3140962,-0.6224221)
968    debug 8:           95 (0.9826354,-0.1855471) (-0.2729667,-0.5600522)
969    s, z(s) =          96 (0.9879304,-0.1548983)
970    z-p_n ,  theta  =  (0.6535271,-0.3081665) -0.4406244
971    cvr  =  (-0.5654973,-0.7356794)
972    z-p_n ,  theta  =  (1.768205,0.1377045)   6.360907
973    cvr  =  (-0.3336732,-1.854333)
974    z-p_n ,  theta  =  (0.9879304,-8.5230999E-02)   6.197126
975    cvr  =  (-0.9644332,-1.556608)
976    z-p_n ,  theta  =  (0.5420594,-0.3639004) -0.5912237
977    cvr  =  (-0.3040034,-0.6206296)
978    debug 8:           96 (0.9879304,-0.1548983) (-0.2638647,-0.5581691)
979    s, z(s) =          97 (0.9922699,-0.1240988)
980    z-p_n ,  theta  =  (0.6578666,-0.2773669) -0.3990006
981    cvr  =  (-0.5843685,-0.6647472)
982    z-p_n ,  theta  =  (1.772544,0.1685041)   6.377964
983    cvr  =  (-0.3523318,-1.786525)
984    z-p_n ,  theta  =  (0.9922699,-5.4431409E-02)   6.228385
985    cvr  =  (-0.9861663,-1.487072)
986    z-p_n ,  theta  =  (0.5463988,-0.3331008) -0.5474699
987    cvr  =  (-0.2935407,-0.6195258)
988    debug 8:           97 (0.9922699,-0.1240988) (-0.2544394,-0.5569026)
989    s, z(s) =          98 (0.9956493,-9.3179107E-02)
990    z-p_n ,  theta  =  (0.6612461,-0.2464473) -0.3567539
991    cvr  =  (-0.6026854,-0.5927699)
992    z-p_n ,  theta  =  (1.775924,0.1994237)   6.395010
993    cvr  =  (-0.3703932,-1.717656)
994    z-p_n ,  theta  =  (0.9956493,-2.3511760E-02)   6.259575
```

```
995    cvr  =  (-1.007295,-1.416479)
996    z-p_n ,  theta  =  (0.5497783,-0.3021812) -0.5025682
997    cvr  =  (-0.2827511,-0.6191720)
998    debug 8:            98 (0.9956493,-9.3179107E-02) (-0.2447297,-0.5563077)
999    s, z(s) =           99 (0.9980656,-6.2169313E-02)
1000   z-p_n ,  theta  =  (0.6636623,-0.2154375) -0.3138874
1001   cvr  =  (-0.6203784,-0.5197545)
1002   z-p_n ,  theta  =  (1.778340,0.2304335)   6.412045
1003   cvr  =  (-0.3877881,-1.647735)
1004   z-p_n ,  theta  =  (0.9980656,7.4980333E-03)   6.290698
1005   cvr  =  (-1.027751,-1.344837)
1006   z-p_n ,  theta  =  (0.5521945,-0.2711714) -0.4564857
1007   cvr  =  (-0.2716863,-0.6196285)
1008   debug 8:            99 (0.9980656,-6.2169313E-02) (-0.2347815,-0.5564391)
1009   s, z(s) =          100 (0.9995163,-3.1099375E-02)
1010   z-p_n ,  theta  =  (0.6651130,-0.1843675) -0.2704079
1011   cvr  =  (-0.6373767,-0.4457139)
1012   z-p_n ,  theta  =  (1.779791,0.2615035)   6.429071
1013   cvr  =  (-0.4044458,-1.576773)
1014   z-p_n ,  theta  =  (0.9995163,3.8567971E-02)   6.321753
1015   cvr  =  (-1.047463,-1.272158)
1016   z-p_n ,  theta  =  (0.5536453,-0.2401014) -0.4091944
1017   cvr  =  (-0.2604096,-0.6209540)
1018   debug 8:           100 (0.9995163,-3.1099375E-02) (-0.2246519,-0.5573496)
1019   s, z(s) =          101 (1.000000,1.7484555E-07)
1020   z-p_n ,  theta  =  (0.6655967,-0.1532680) -0.2263263
1021   cvr  =  (-0.6536072,-0.3706679)
1022   z-p_n ,  theta  =  (1.780274,0.2926030)   6.446087
1023   cvr  =  (-0.4202937,-1.504791)
1024   z-p_n ,  theta  =  (1.000000,6.9667518E-02)   6.352741
1025   cvr  =  (-1.066359,-1.198464)
1026   z-p_n ,  theta  =  (0.5541289,-0.2090019) -0.3606735
1027   cvr  =  (-0.2489935,-0.6232035)
1028   debug 8:           101 (1.000000,1.7484555E-07) (-0.2144059,-0.5590885)
```