```
1          OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
68
69
70         *
71         AST 504
72
73         Zainab Akinjobi
74
75         Split plot
76
77         2 sizes  of  eus.
78         2 phases of randomization.
79         2 error terms.
80
81         irrigation  is whole plot trt  (  3 levels  ) .
82         cultivar  is sub plot trt  (  4 levels  ) .
83
84         no blocking ... it is a CRD  in irrigation .
85
86         plant yield,    yld is the response variable
87
88         ================================;
89
90
91
92
93
94         data  mydata  ;
95
96         seed  = 17757 ;
97
98         do irrig  = 1 to 3 ;
99         do plot  =  1 to 3 ;
100        rr  =  .9 * rannor(seed ) ;
101
102        do cult  = 1 to 4 ;
103        yld   =  rr  +  1.4 * irrig  +  1.5*cult  +  1.3*rannor(seed );
104        yld  = round (  yld ,  0.01 ) ;
105        output;
106        end;
107        end;
108        end;
109
110
111
```

```
NOTE: The data set WORK.MYDATA has 36 observations and 6 variables.
NOTE: DATA statement used (Total process time):
      real time           0.00 seconds
      user cpu time       0.00 seconds
      system cpu time     0.00 seconds
      memory              785.28k
      OS Memory           29860.00k
      Timestamp           12/13/2021 03:41:55 AM
      Step Count                        221  Switch Count  2
      Page Faults                       0
      Page Reclaims                     91
      Page Swaps                        0
      Voluntary Context Switches        10
      Involuntary Context Switches      0
      Block Input Operations            0
      Block Output Operations           264
```

```
112        proc glm  data  = mydata  ;
113        class irrig  plot cult ;
114        model  yld  = irrig  plot(irrig )
115                      cult  cult * irrig  / ss3 ;
116
117        test  h  = irrig   e  = plot ( irrig ) ;
118
119        means  irrig  /  lsd lines  e  = plot ( irrig ) ;
120
121        means irrig  cult  irrig*cult  ;
122        title1  '  split plot example  ';
123
124
125
126        OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
136
```