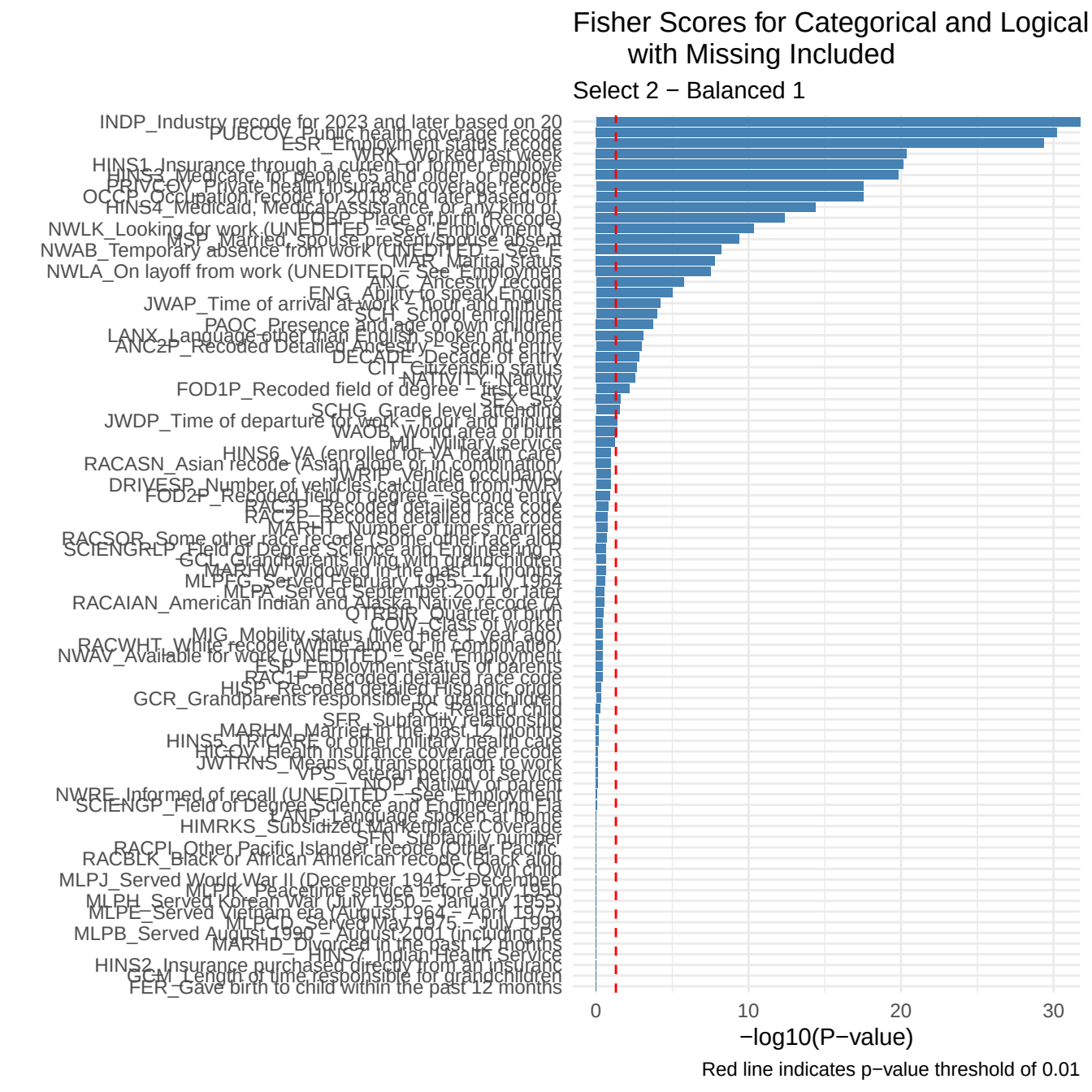
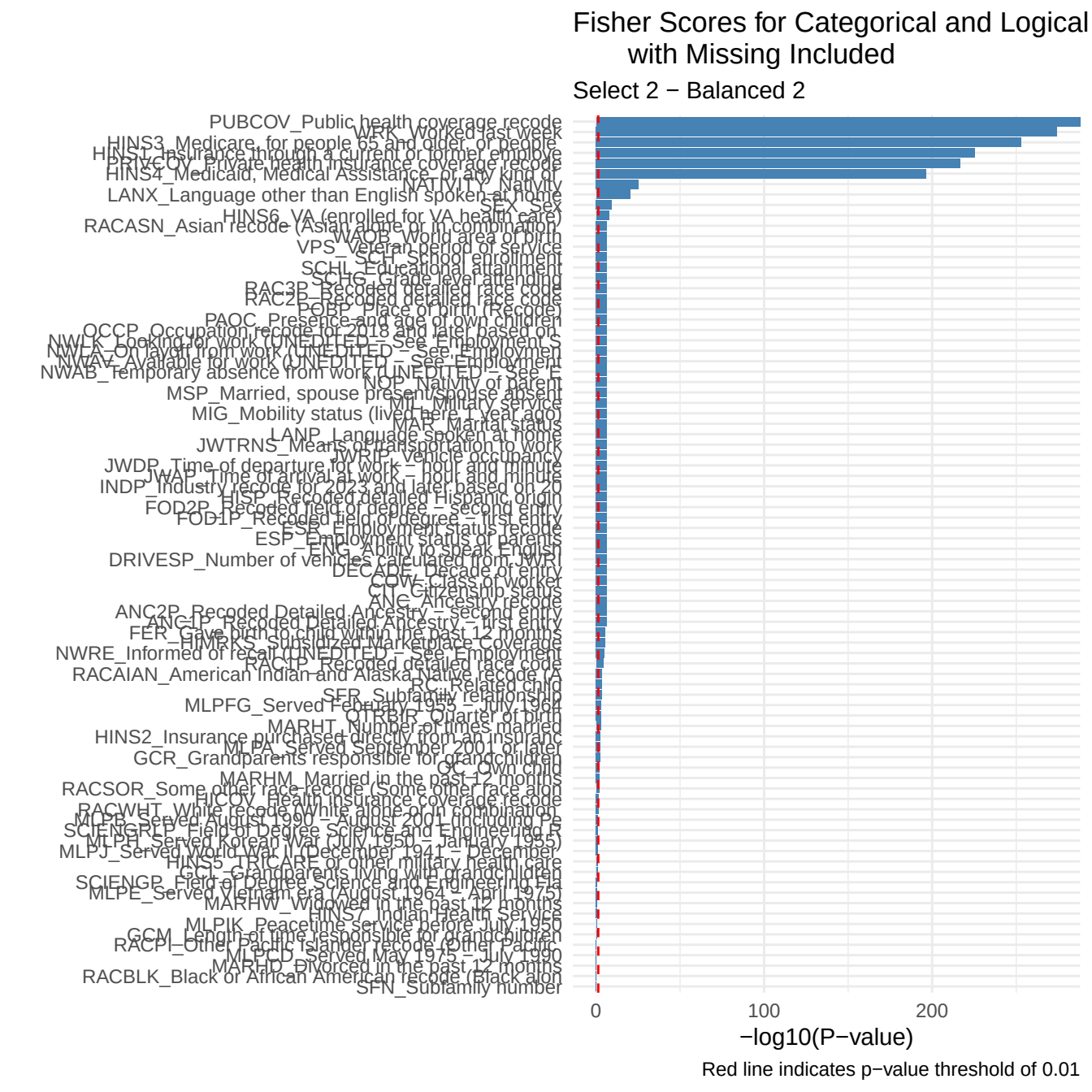
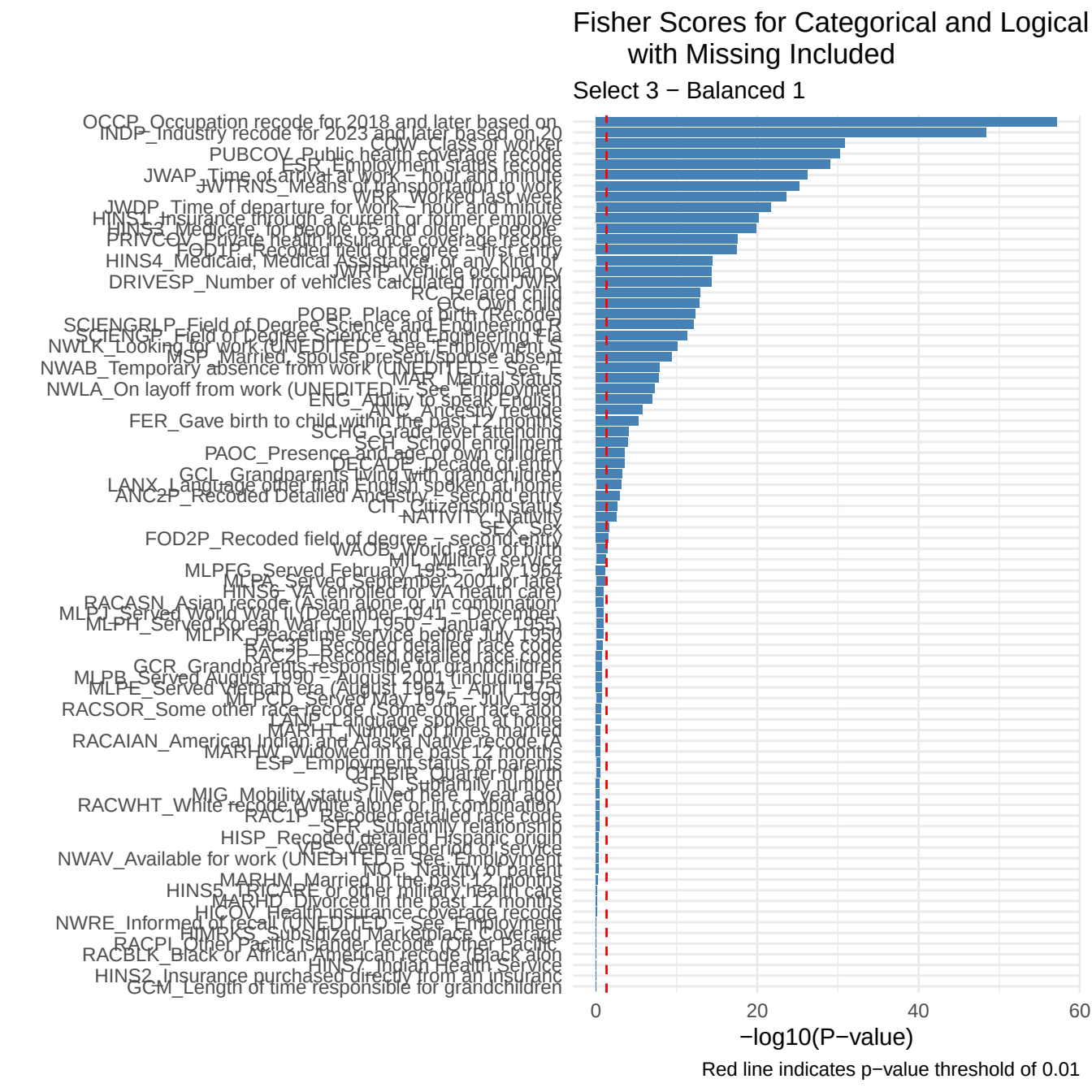

Fisher Scores for Categorical and Logical with Missing Included
Select 2 − Balanced 1
INDP_Industry recode for 2023 and later based on 20
PUBCOV_Public health coverage recode
ESR_Employment status recode
WRK_Worked last week
HINS1_Insurance through a current or former employe
HINS3_Medicare, for people 65 and older, or people
PRIVCOV_Private health insurance coverage recode
OCCP_Occupation recode for 2018 and later based on
HINS4_Medicaid, Medical Assistance, or any kind of
POBP_Place of birth (Recode)
NWLK_Looking for work (UNEDITED – See Employment S
MSP_Married, spouse present/spouse absent
NWAB_Temporary absence from work (UNEDITED – See E
MAR_Marital Status
NWLA_On layoff from work (UNEDITED – See Employmen
ANC_Ancestry recode
ENG_Ability to speak English
JWAP_Time of arrival at work – hour and minute
SCH_School enrollment
PAOC_Presence and age of own children
LANX_Language other than English spoken at home
ANC2P_Recoded Detailed Ancestry – second entry
DECADE_Decade of entry
CIT_Citizenship status
NATIVITY_Nativity
FOD1P_Recoded field of degree – first entry
SEX_Sex
SCHG_Grade level attending
JWDP_Time of departure for work – hour and minute
WAOB_World area of birth
MIL_Military service
HINS6_VA (enrolled for VA health care)
RACASN_Asian recode (Asian alone or in combination
JWRIP_Vehicle occupancy
DRIVESP_Number of vehicles calculated from JWRI
FOD2P_Recoded field of degree – second entry
RAC3P_Recoded detailed race code
RAC2P_Recoded detailed race code
MARHT_Number of times married
RACSOR_Some other race recode (Some other race alon
SCIENGRLP_Field of Degree Science and Engineering R
GCL_Grandparents living with grandchildren
MARHW_Widowed in the past 12 months
MLPFG_Served February 1955 – July 1964
MLPA_Served September 2001 or later
RACAIAN_American Indian and Alaska Native recode (A
QTRBIR_Quarter of birth
COW_Class of worker
MIG_Mobility status (lived here 1 year ago)
RACWHT_White recode (White alone or in combination
NWAV_Available for work (UNEDITED – See Employment
ESP_Employment status of parents
RAC1P_Recoded detailed race code
HISP_Recoded detailed Hispanic origin
GCR_Grandparents responsible for grandchildren
RC_Related child
SFR_Subfamily relationship
MARHM_Married in the past 12 months
HINS5_TRICARE or other military health care
HICOV_Health insurance coverage recode
JWTRNS_Means of transportation (to work
VPS_Veteran period of service
NOP_Nativity of parent
NWRE_Informed of recall (UNEDITED – See Employmen
SCIENGP_Field of Degree Science and Engineering Fla
LANP_Language spoken at home
HIMRKS_Subsidized Marketplace coverage
SFN_Subfamily number
RACPI_Other Pacific Islander recode (Other Pacific
RACBLK_Black or African American recode (Black alon
OC_Own child
MLPJ_Served World War II (December 1941 – December
MLPK_Peacetime service before July 1950
MLPH_Served Korean War (July 1950 – January 1955)
MLPE_Served Vietnam era (August 1964 – April 1975)
MLPD_Served May 1975 – July 1990
MLPB_Served August 1990 – August 2001 (including Pe
MARHD_Divorced in the past 12 months
HINS7_Indian Health Service
HINS2_Insurance purchased directly from an insuran
GCM_Length of time responsible for grandchildren
FER_Gave birth to child within the past 12 months
0
10
20
30
−log10(P−value)
Red line indicates p−value threshold of 0.01

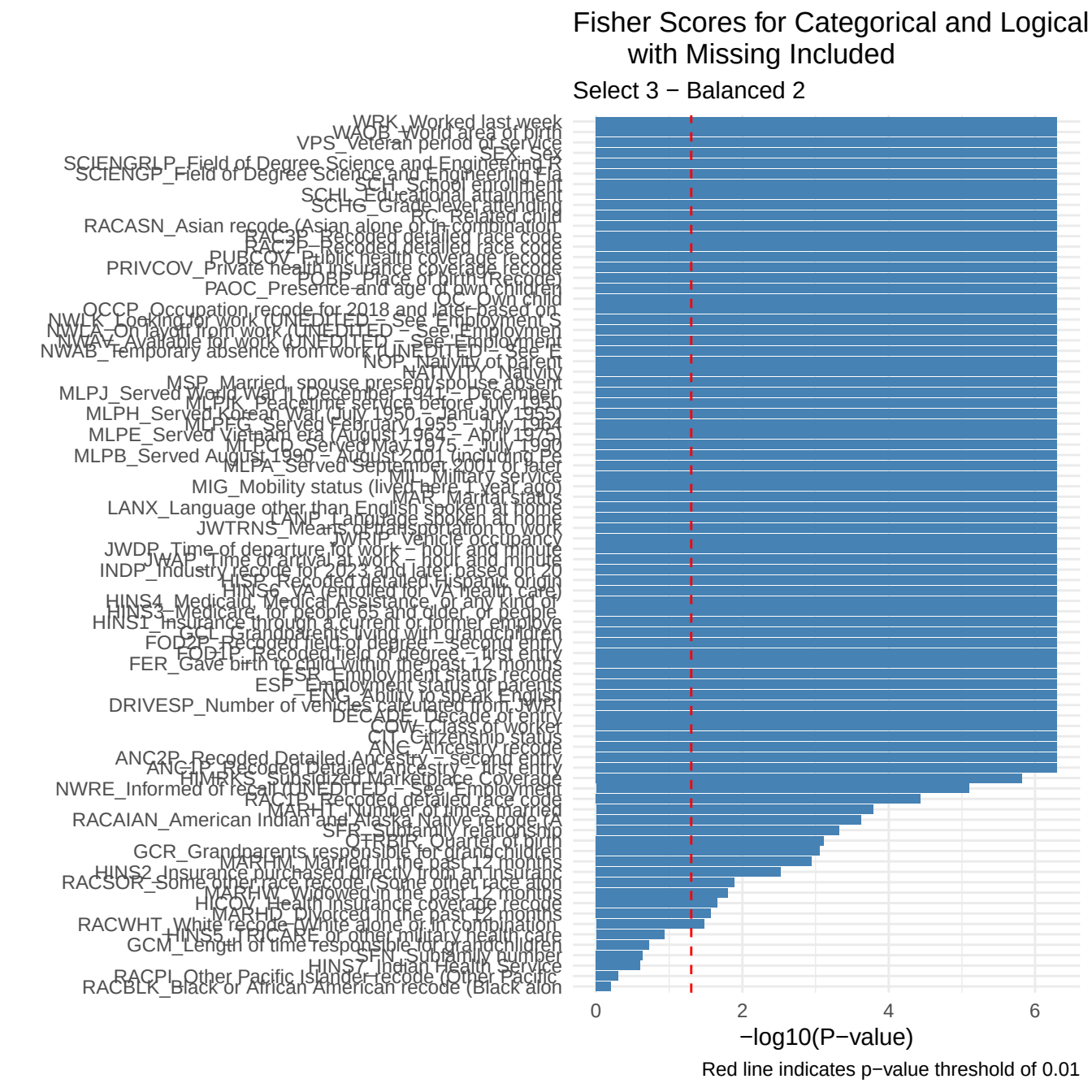
SPORDER
Person number
CITWP
Year of naturalization write−in
INTP
Interest, dividends, and net rental income past 12 months
JWMNP
Travel time to work
MARHYP
Year last married
OIP
Other income past 12 months
PAP
Public assistance income past 12 months (use ADJINC
SEMP
Self−employment income past 12 months (use ADJINC
SSIP
Social Security Income past 12 months (use ADJINC to
WKHP
Usual hours worked per week past 12 months
WKWN
Weeks worked during past 12 months
YOEP
Year of entry
MIGPUMA
Migration PUMA based on 2020 Census definition
MIGSP
Migration recode − State or foreign country code
PERNP
Total person's earnings (use ADJINC to adjust to
POVPIP
Income−to−poverty ratio recode
POWPUMA
Place of work PUMA based on 2020 Census definition
POWSP
Place of work − State or foreign country code


Fisher Scores for Categorical and Logical with Missing Included
Select 2 − Balanced 2
PUBCOV_Public health coverage recode
WRK_Worked last week
HINS3_Medicare, for people 65 and older, or people
HINS1_Insurance through a current or former employe
PRIVCOV_Private health insurance coverage recode
HINS4_Medicaid, Medicaid Assistance, or any kind of
NATIVITY_Nativity
LANX_Language other than English spoken at home
SEX_Sex
HINS6_VA (enrolled for VA health care)
RACASN_Asian recode (Asian alone or in combination)
WAOB_World area of birth
VPS_Veteran period of service
SCH_School enrollment
SCHL_Educational attainment
SCHG_Grade level attending
RAC3P_Recoded detailed race code
RAC2P_Recoded detailed race code
POBP_Place of birth (Recode)
PAOC_Presence and age of own children
OCCP_Occupation recode for 2018 and later based on
NWLK_Looking for work (UNEDITED – See Employment
NWLA_On layoff from work (UNEDITED – See Employm
NWAV_Available for work (UNEDITED – See Employment
NWAB_Temporary absence from work (UNEDITED – See E
NOP_Nativity of parent
MSP_Married, spouse present/spouse absent
MIL_Military service
MIG_Mobility status (lived here 1 year ago)
MAR_Marital status
LANP_Language spoken at home
JWTRNS_Means of transportation to work
JWRIP_Vehicle occupancy
JWDP_Time of departure for work – hour and minute
JWAP_Time of arrival at work – hour and minute
INDP_Industry recode for 2023 and later based on 20
HISP_Recoded detailed Hispanic origin
FOD2P_Recoded field of degree – second entry
FOD1P_Recoded field of degree – first entry
ESR_Employment status recode
ESP_Employment status of parents
ENG_Ability to speak English
DRIVESP_Number of vehicles calculated from JWRI
DECADE_Decade of entry
COW_Class of worker
CIT_Citizenship status
ANC_Ancestry recode
ANC2P_Recoded Detailed Ancestry – second entry
ANC1P_Recoded Detailed Ancestry – first entry
FER_Gave birth to child within the past 12 months
HIMRKS_Subsidized Marketplace Coverage
NWRE_Informed of recall (UNEDITED – See Employment
RAC1P_Recoded detailed race code
RACAIAN_American Indian and Alaska Native recode (A
RC_Related child
SFR_Subfamily relationship
MLPFG_Served February 1955 – July 1964
QTRBIR_Quarter of birth
MARHT_Number of times married
HINS2_Insurance purchased directly from an insuranc
MLPA_Served September 2001 or later
GCR_Grandparents responsible for grandchildren
OC_Own child
MARHM_Married in the past 12 months
RACSOR_Some other race recode (Some other race alon
HICOV_Health insurance coverage recode
RACWHT_White recode (White alone or in combination)
MLPB_Served August 1990 – August 2001 (including Pe
SCIENGRLP_Field of Degree Science and Engineering R
MLPH_Served Korean War (July 1950 – January 1955)
MLPJ_Served World War II (December 1941 – December
HINS5_TRICARE or other military health care
GCL_Grandparents living with grandchildren
SCIENGP_Field of Degree Science and Engineering Fla
MLPE_Served Vietnam era (August 1964 – April 1975)
MARHW_Widowed in the past 12 months
HINS7_Indian Health Service
MLPIK_Peacetime service before July 1950
GCM_Length of time responsible for grandchildren
RACPI_Other Pacific Islander recode (Other Pacific
MLPCD_Served May 1975 – July 1990
MARHD_Divorced in the past 12 months
RACBLK_Black or African American recode (Black alon
SFN_Subfamily number
0
100
200
−log10(P−value)
Red line indicates p−value threshold of 0.01

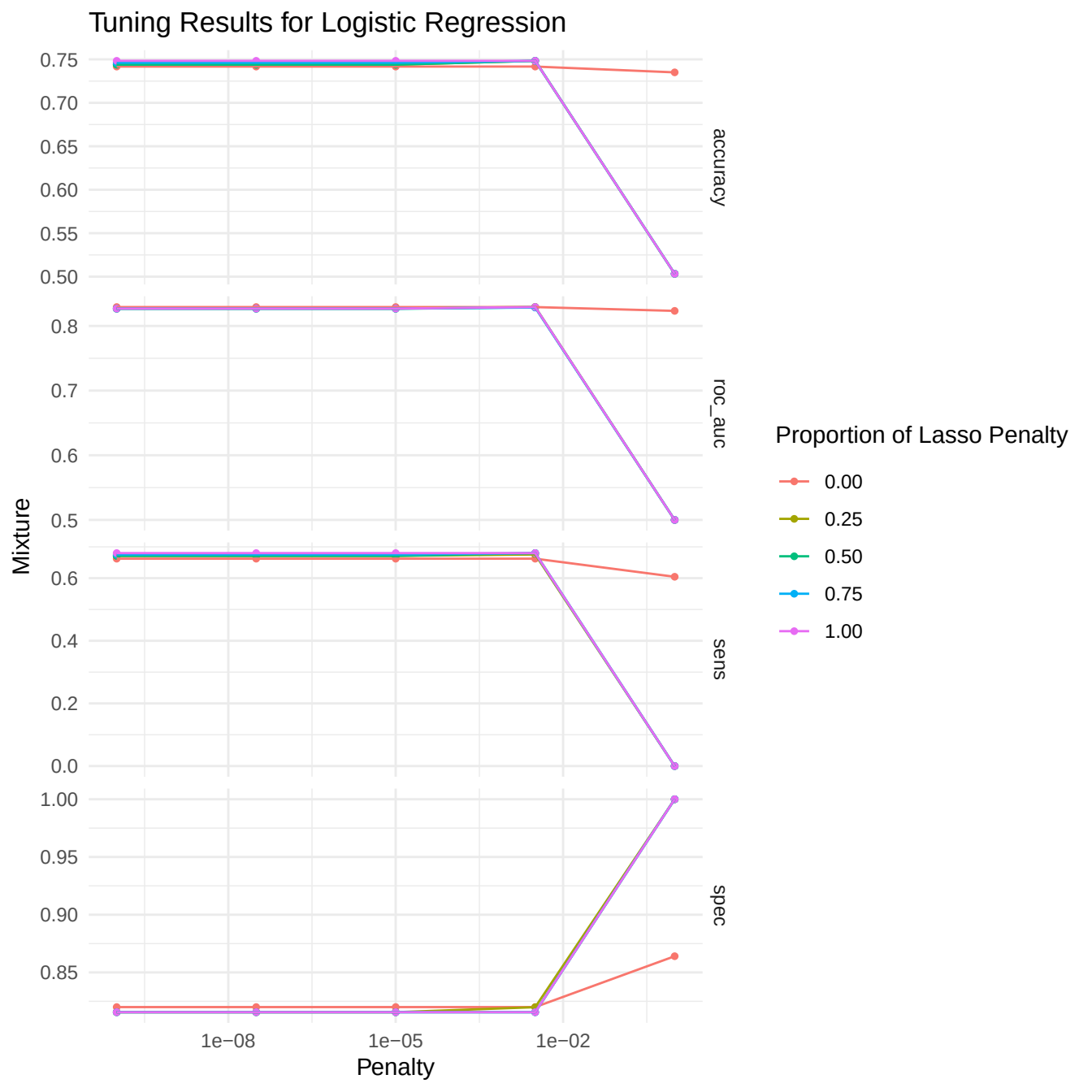
SPORDER
Person number
PUMA
Public use microdata area code (PUMA) based on 2
CITWP
Recoded detailed citizenship write−in
INTP
Interest, dividends, and net rental income past 12
JWMNP
Travel time to work
MARHYP
Year last married
OIP
Other income past 12 months (use ADJINC to a
PAP
Public assistance income past 12 months (use
SEMP
Self−employment income past 12 months (use
WAGP
Wages or salary income past 12 months (use ADJINC
WKHP
Usual hours worked per week past 12 months
WKWN
Weeks worked during past 12 months
YOEP
Year of entry
MIGPUM
Migration PUMA based on 2020 Census definition
MIGSP
Migration recode − State or foreign country
PERNP
Total person's earnings (use ADJINC to adjust
POVPIP
Income−to−poverty ratio recode
POWPUMA
Place of work PUMA based on 2020 Census
POWSP
Place of work − State or foreign country

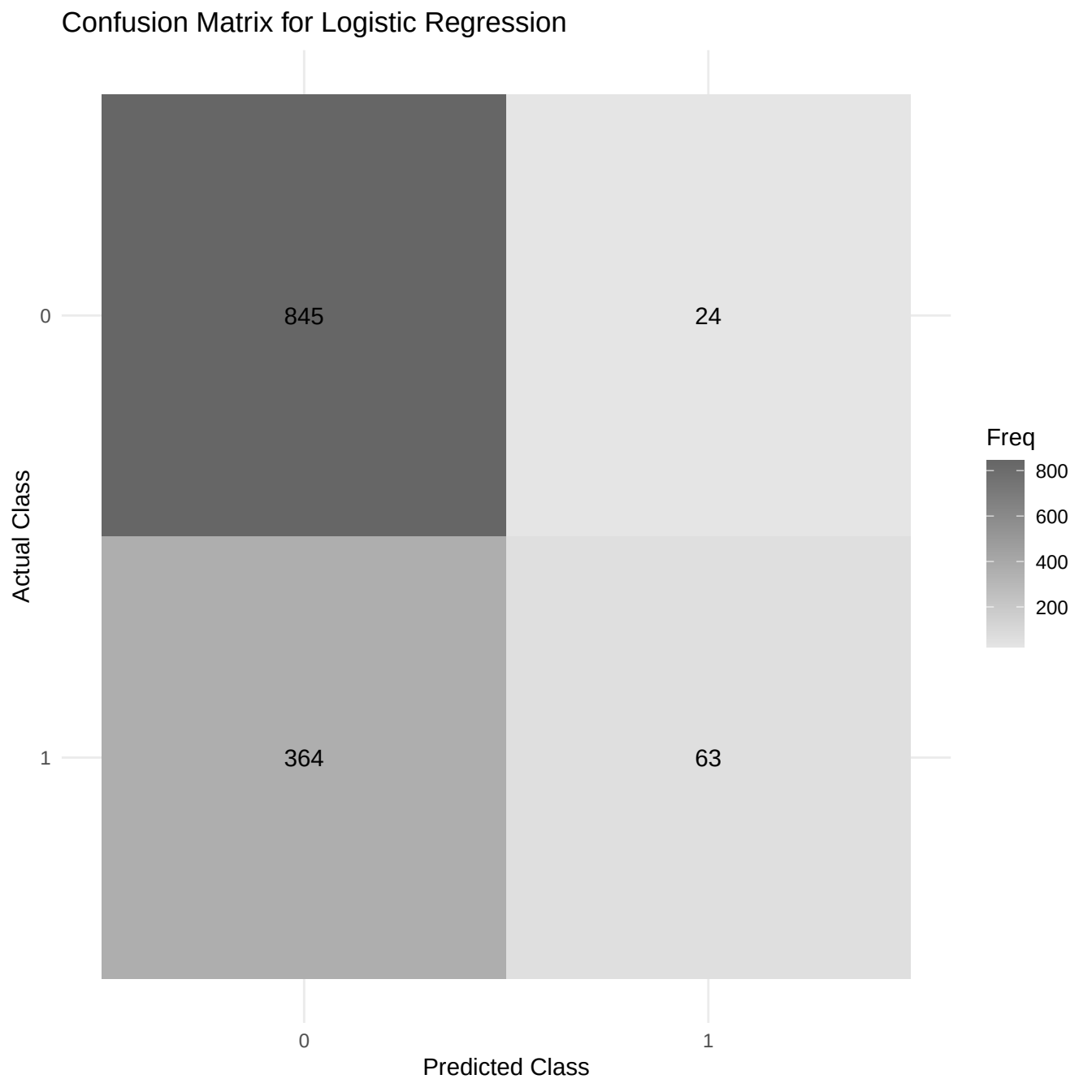

Fisher Scores for Categorical and Logical with Missing Included
Select 3 − Balanced 1
OCCP_Occupation recode for 2018 and later based on
INDP_Industry recode for 2023 and later based on 20
COW_Class of worker
PUBCOV_Public health coverage recode
ESR_Employment status recode
JWAP_Time of arrival at work − hour and minute
JWTRNS_Means of transportation to work
WRK_Worked last week
JWDP_Time of departure for work − hour and minute
HINS1_Insurance through a current or former employe
HINS3_Medicare, for people 65 and older, or people
PRIVCOV_Private health insurance coverage recode
FOD1P_Recoded field of degree − first entry
HINS4_Medicaid, Medicaid Assistance, or any kind of
JWRIP_Vehicle occupancy
DRIVESP_Number of vehicles calculated from JWRI
RC_Related child
OC_Own child
POBP_Place of birth (Recode)
SCIENGRLP_Field of Degree Science and Engineering R
SCIENGP_Field of Degree Science and Engineering Fla
NWLK_Looking for work (UNEDITED − See "Employment S
MSP_Married, spouse present/spouse absent
NWAB_Temporary absence from work (UNEDITED − See "E
MAR_Marital status
NWLA_On layoff from work (UNEDITED − See "Employmen
ENG_Ability to speak English
ANC_Ancestry recode
FER_Gave birth to child within the past 12 months
SCHG_Grade level attending
SCH_School enrollment
PAOC_Presence and age of own children
DECADE_Decade of entry
GCL_Grandparents living with grandchildren
LANX_Language other than English spoken at home
ANC2P_Recoded Detailed Ancestry − second entry
CIT_Citizenship status
NATIVITY_Nativity
SEX_Sex
FOD2P_Recoded field of degree − second entry
WAOB_World area of birth
MIL_Military service
MLPFG_Served February 1955 − July 1964
MLPEX_Served September 2001 or later
HINS6_VA (enrolled for VA health care)
RACASN_Asian recode (Asian alone or in combination
MLPJ_Served World War II (December 1941 − December
MLPH_Served Korean War (July 1950 − January 1955)
MLPIK_Peacetime service before July 1990
RAC3P_Recoded detailed race code
RAC2P_Recoded detailed race code
GCR_Grandparents responsible for grandchildren
MLPB_Served August 1990 − August 2001 (including Pe
MLPE_Served Vietnam era (August 1964 − April 1975)
MLPCD_Served May 1975 − July 1990
RACSOR_Some other race recode (Some other race alon
LANP_Language spoken at home
MARHT_Number of times married
RACAIAN_American Indian and Alaska Native recode (A
MARHW_Widowed in the past 12 months
ESP_Employment status of parents
QTRBIR_Quarter of birth
SFN_Subfamily number
MIG_Mobility status (lived here 1 year ago)
RACWHT_White recode (White alone or in combination)
RAC1P_Recoded detailed race code
SFR_Subfamily relationship
HISP_Recoded detailed Hispanic origin
VPS_Veteran period of service
NWAV_Available for work (UNEDITED − See "Employment
NOP_Nativity of parent
MARHM_Married in the past 12 months
HINS5_TRICARE or other military health care
MARHD_Divorced in the past 12 months
HICOV_Health insurance coverage recode
NWRE_Informed of recall (UNEDITED − See "Employment
HMRKS_Subsidized Marketplace Coverage
RACPI_Other Pacific Islander recode (Other Pacific
RACBLK_Black or African American recode (Black alon
HINS7_Indian Health Service
HINS2_Insurance purchased directly from an insuranc
GCM_Length of time responsible for grandchildren
0
20
40
60
−log10(P−value)
Red line indicates p−value threshold of 0.01

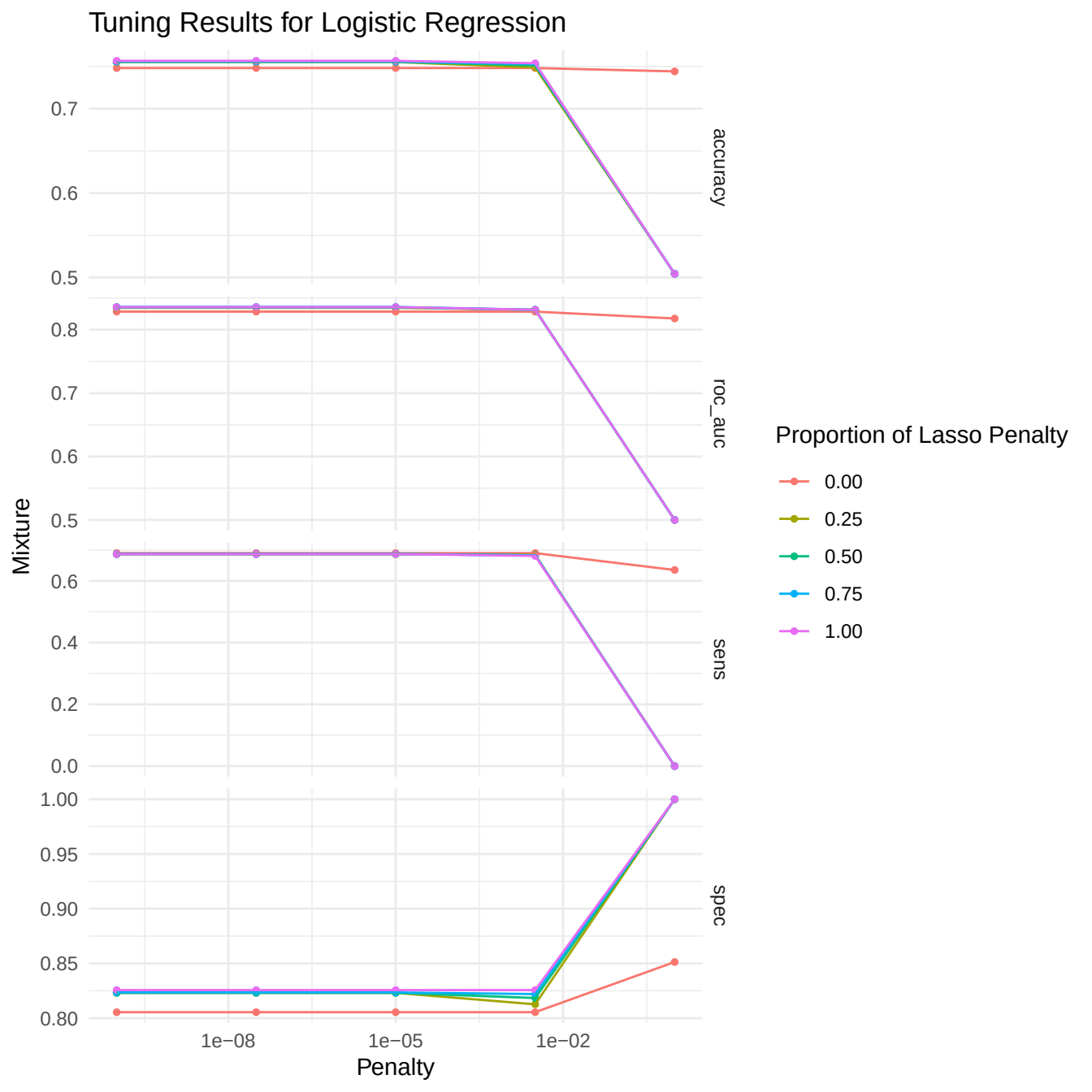
SPORDER
Person number
CITWP
Year of naturalization write−in
INTP
Interest, dividends, and net rental income past 12 months
JWMNP
Travel time to work
MARHYP
Year last married
OIP
Other income past 12 months
PAP
Public assistance income past 12 months (use ADJINC
SEMP
Self−employment income past 12 months (use ADJINC
SSIP
Social Security Income past 12 months (use ADJINC to
WKHP
Usual hours worked per week past 12 months
WKWN
Weeks worked during past 12 months
YOEP
Year of entry
MIGPUMA
Migration PUMA based on 2020 Census definition
MIGSP
Migration recode − State or foreign country code
PERNP
Total person's earnings (use ADJINC to adjust to
POVPIP
Income−to−poverty ratio recode
POWPUMA
Place of work PUMA based on 2020 Census definition
POWSP
Place of work − State or foreign country code

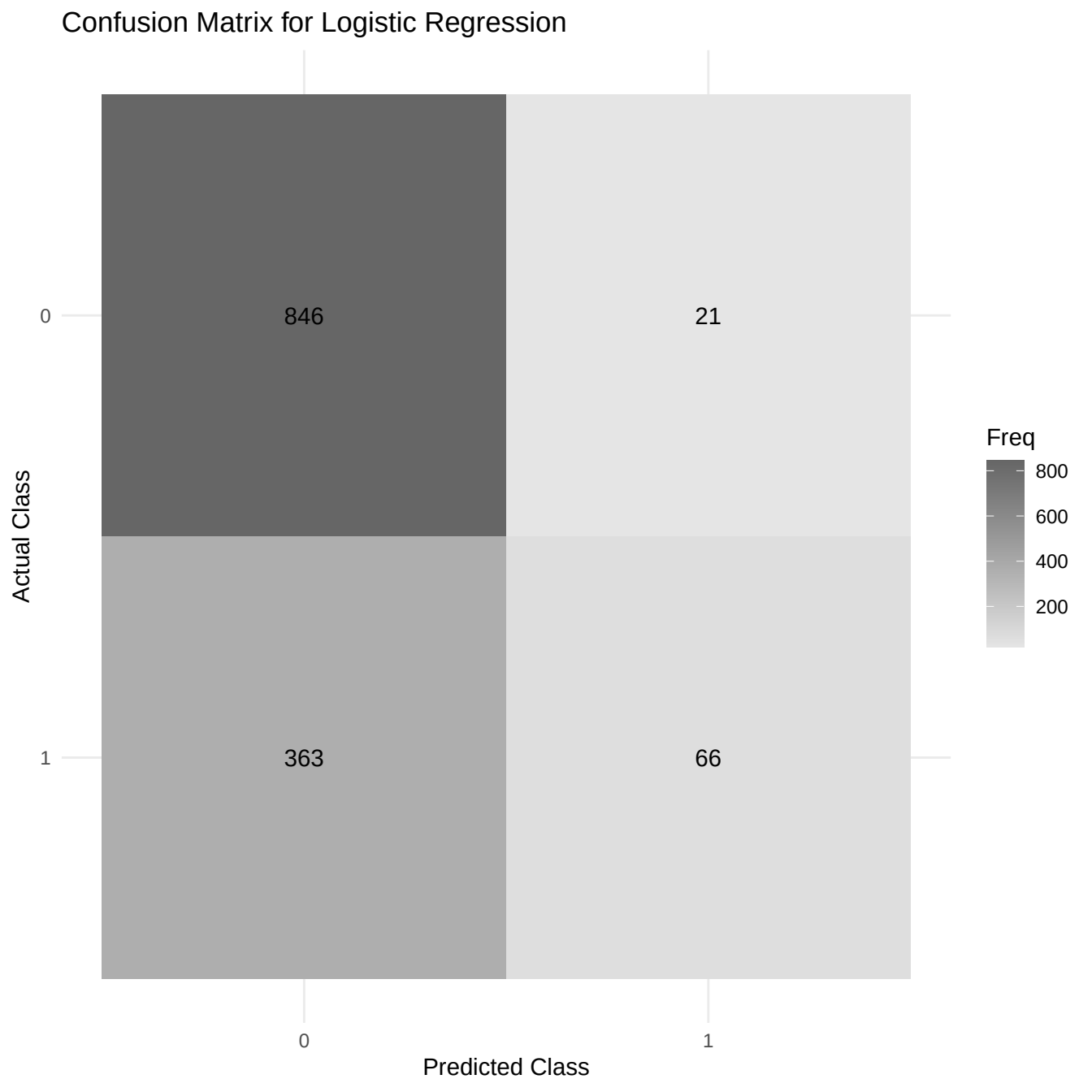

Fisher Scores for Categorical and Logical with Missing Included
Select 3 − Balanced 2
WRK_Worked last week
WAOB_World area of birth
VPS_Veteran period of service
SEX_Sex
SCIENGRLP_Field of Degree Science and Engineering R
SCIENGP_Field of Degree Science and Engineering Fa
SCH_School enrollment
SCHL_Educational attainment
SCHG_Grade level attending
RC_Related child
RACASN_Asian recode (Asian alone or in combination
RAC3P_Recoded detailed race code
RAC2P_Recoded detailed race code
PUBCOV_Public health coverage recode
PRIVCOV_Private health insurance coverage recode
POBP_Place of birth (Recode)
PAOC_Presence and age of own children
OC_Own child
OCCP_Occupation recode for 2018 and later based on
NWLK_Looking for work (UNEDITED – See Employment S
NWLA_On layoff from work (UNEDITED – See Employm
NWAV_Available for work (UNEDITED – See Employme
NWAB_Temporary absence from work (UNEDITED – See E
NOP_Nativity of parent
NATIVITY_Nativity
MSP_Married, spouse present/spouse absent
MLPJ_Served World War II (December 1941 – December
MLPIK_Peacetime service before July 1950
MLPH_Served Korean War (July 1950 – January 1955)
MLPFG_Served February 1955 – July 1964
MLPE_Served Vietnam era (August 1964 – April 1975)
MLPCO_Served May 1975 – July 1990
MLPB_Served August 1990 – August 2001 (including Pe
MLPA_Served September 2001 or later
MIL_Military service
MIG_Mobility status (lived here 1 year ago)
MAR_Marital status
LANX_Language other than English spoken at home
LANP_Language spoken at home
JWTRNS_Means of transportation to work
JWRIP_Vehicle occupancy
JWDP_Time of departure for work – hour and minute
JWAP_Time of arrival at work – hour and minute
INDP_Industry recode for 2023 and later based on 20
HISP_Recoded detailed Hispanic origin
HINS6_VA enrolled for VA health care
HINS4_Medicaid, Medical Assistance, or any kind of
HINS3_Medicare, for people 65 and older, or people
HINS1_Insurance through a current or former employe
GCL_Grandparents living with grandchildren
FOD2P_Recoded field of degree – second entry
FOD1P_Recoded field of degree – first entry
FER_Gave birth to child within the past 12 months
ESR_Employment status recode
ESP_Employment status of parents
ENG_Ability to speak English
DRIVESP_Number of vehicles calculated from JWRI
DECADE_Decade of entry
COW_Class of worker
CIT_Citizenship status
ANC_Ancestry recode
ANC2P_Recoded Detailed Ancestry – second entry
ANC1P_Recoded Detailed Ancestry – first entry
HIMRKS_Subsidized Marketplace Coverage
NWRE_Informed of recall (UNEDITED – See Employment
RAC1P_Recoded detailed race code
MARHT_Number of times married
RACAIAN_American Indian and Alaska Native recode (A
SFR_Subfamily relationship
PAOCRC_Presence and age of own children
GCR_Grandparents responsible for grandchildren
MARHM_Married in the past 12 months
HINS2_Insurance purchased directly from an insuranc
RACSOR_Some other race recode (Some other race alon
MARHW_Widowed in the past 12 months
HICOV_Health insurance coverage recode
MARHD_Divorced in the past 12 months
RACWHT_White recode (White alone or in combination
HINS5_TRICARE or other military health care
GCM_Length of time responsible for grandchildren
SFN_Subfamily number
HINS7_Indian Health Service
RACPI_Other Pacific Islander recode (Other Pacific
RACBLK_Black or African American recode (Black alon
0
2
4
6
−log10(P−value)
Red line indicates p−value threshold of 0.01

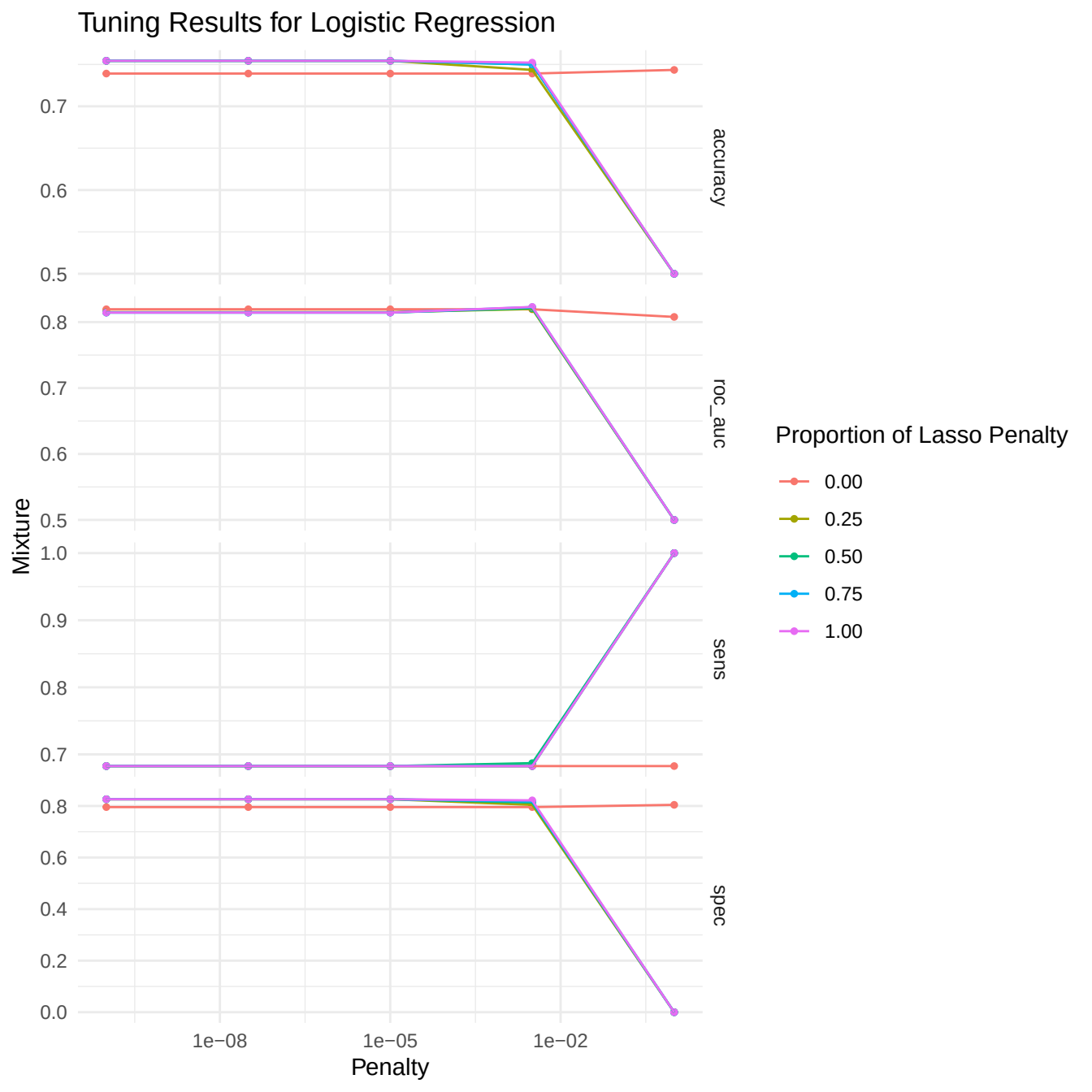
SPORDER
Person number
PUMA
Public use microdata area code (PUMA) based on 2
CITWP
Recoded detailed citizenship write−in
INTP
Interest, dividends, and net rental income past 12
JWMNP
Travel time to work
MARHYP
Year last married
OIP
Other income past 12 months (use ADJINC to a
PAP
Public assistance income past 12 months (use
SEMP
Self−employment income past 12 months (use
WAGP
Wages or salary income past 12 months (use ADJINC
WKHP
Usual hours worked per week past 12 months
WKWN
Weeks worked during past 12 months
YOEP
Year of entry
MIGPUM
Migration PUMA based on 2020 Census definition
MIGSP
Migration recode − State or foreign country
PERNP
Total person's earnings (use ADJINC to adjust
POVPIP
Income−to−poverty ratio recode
POWPUMA
Place of work PUMA based on 2020 Census
POWSP
Place of work − State or foreign country

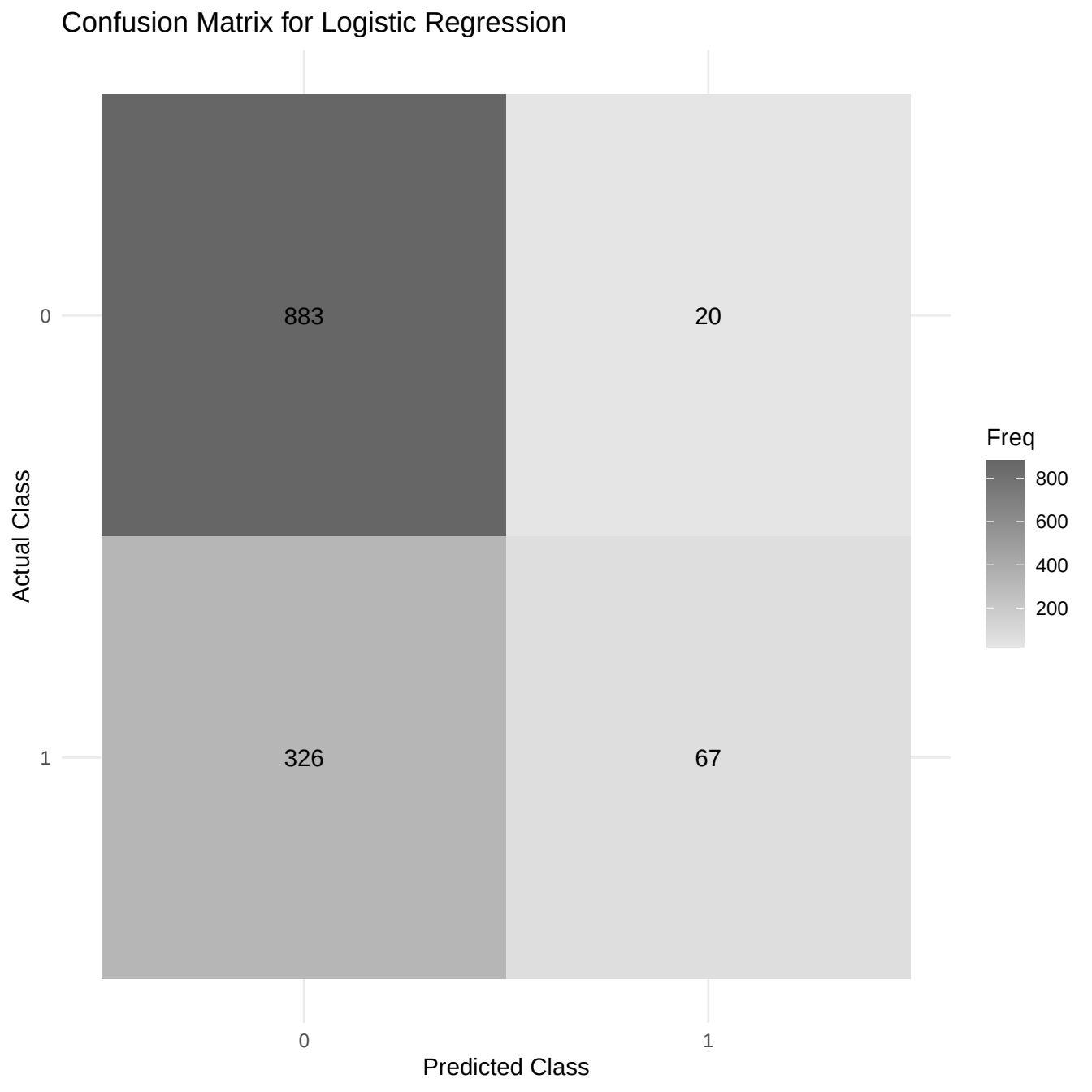

Tuning Results for Logistic Regression
accuracy
roc_auc
sens
spec
Mixture
Penalty
1e−08
1e−05
1e−02
Proportion of Lasso Penalty
0.00
0.25
0.50
0.75
1.00

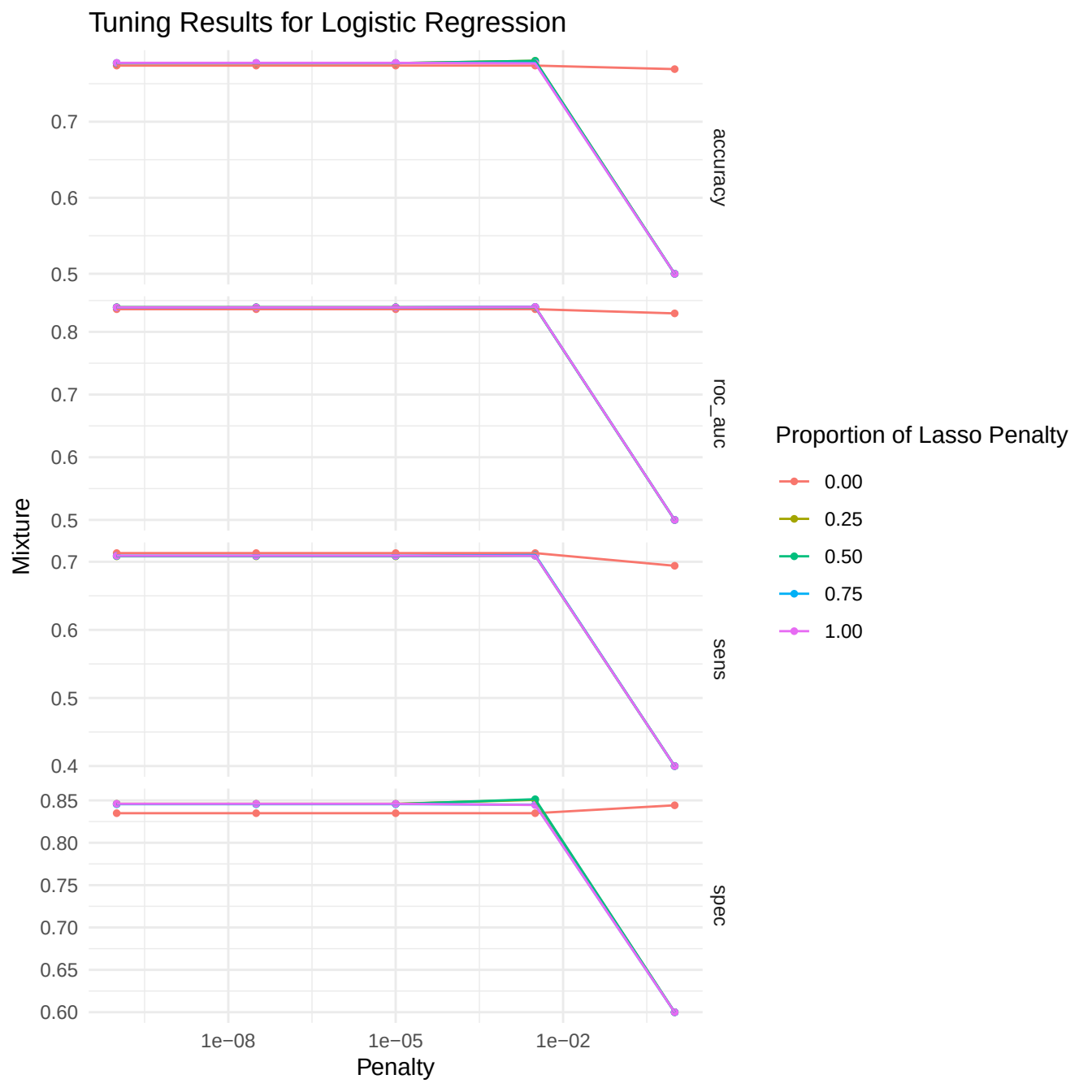

Confusion Matrix for Logistic Regression
845
24
364
63
0
1
Actual Class
0
1
Predicted Class
Freq
800
600
400
200

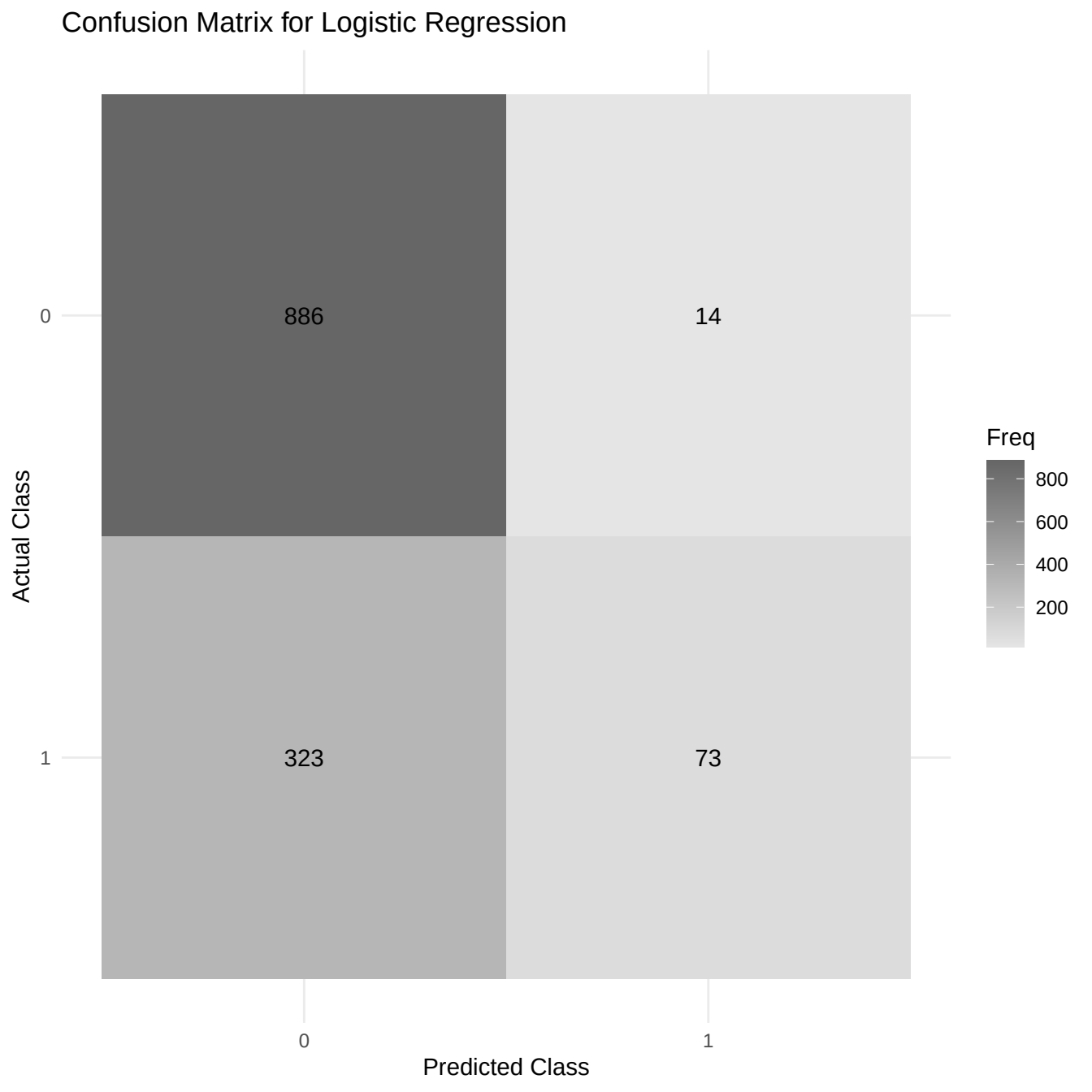

Tuning Results for Logistic Regression
accuracy
roc_auc
sens
spec
Mixture
Penalty
1e−08
1e−05
1e−02
Proportion of Lasso Penalty
0.00
0.25
0.50
0.75
1.00

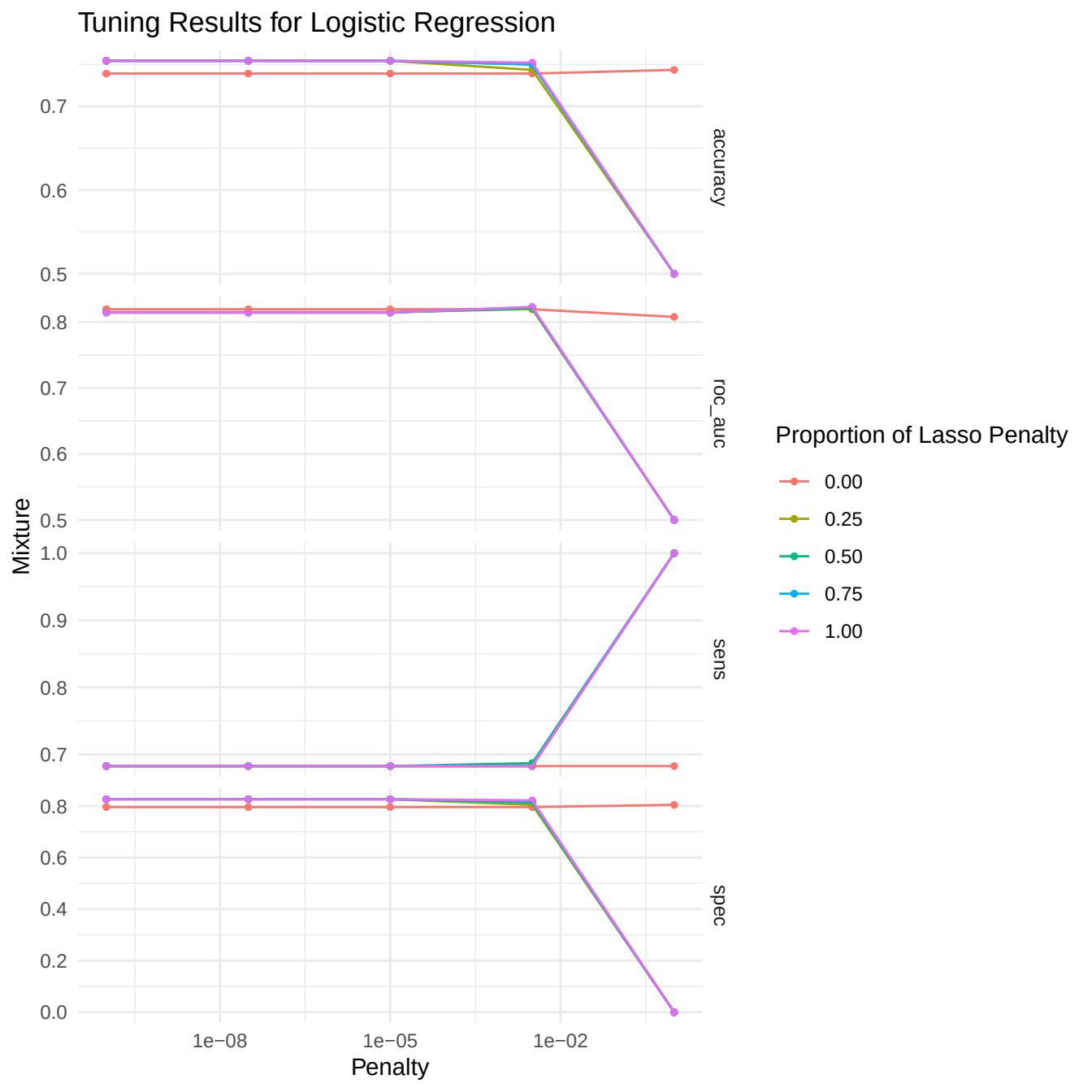

Confusion Matrix for Logistic Regression
846
21
363
66
0
1
Actual Class
0
1
Predicted Class
Freq
800
600
400
200

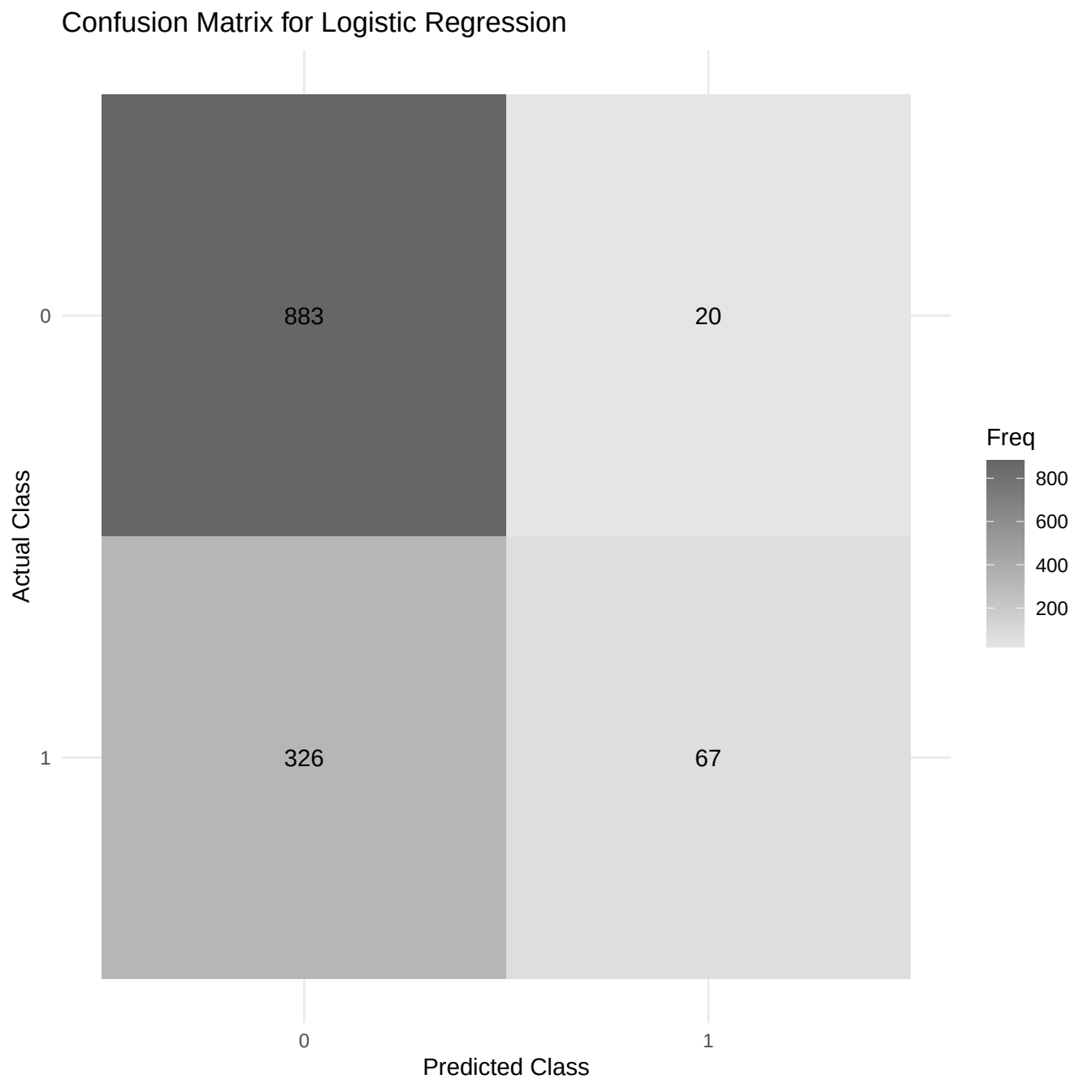

Tuning Results for Logistic Regression
accuracy
roc_auc
sens
spec
Mixture
Penalty
1e−08
1e−05
1e−02
0.0
0.2
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Proportion of Lasso Penalty
0.00
0.25
0.50
0.75
1.00

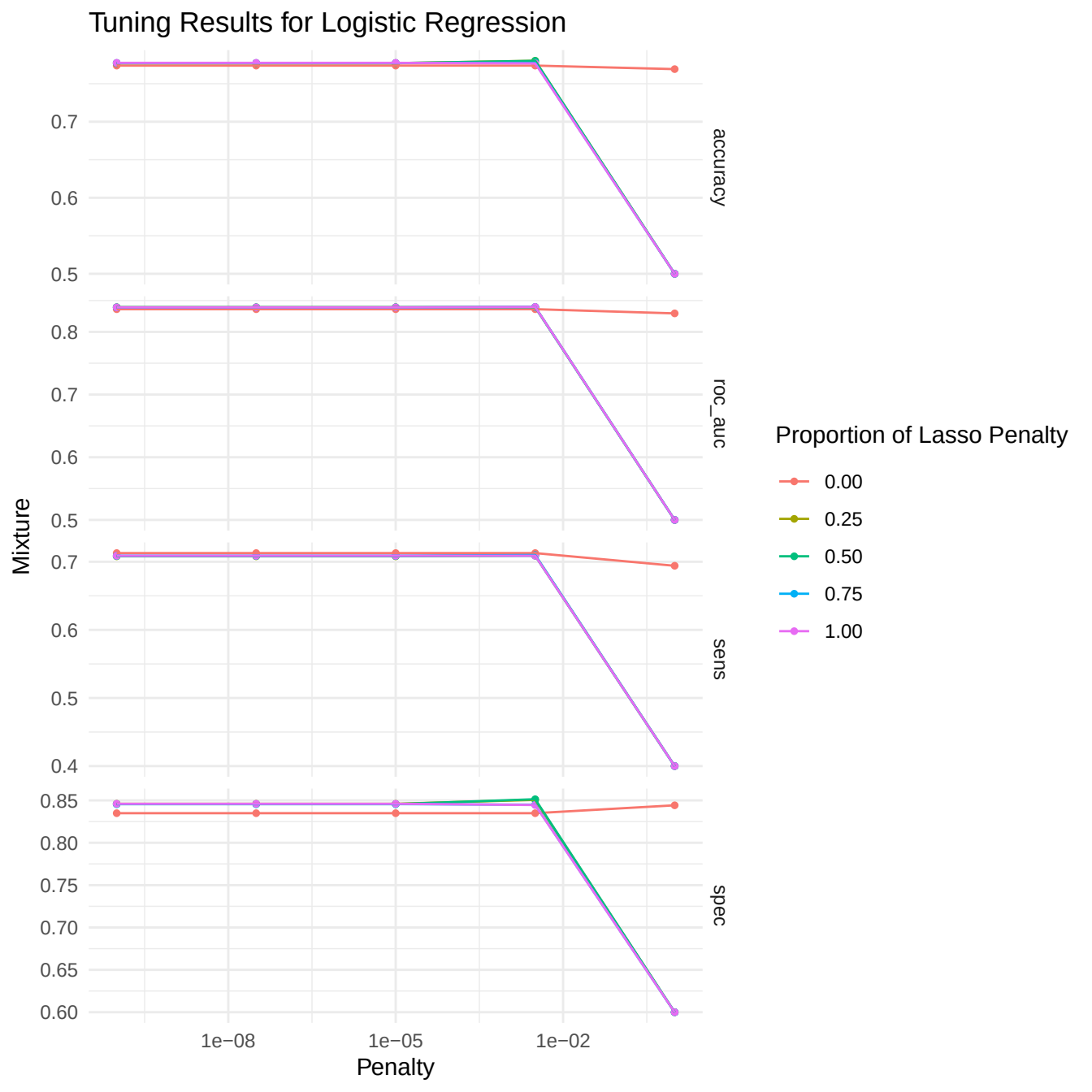

Confusion Matrix for Logistic Regression
883
20
326
67
0
1
Actual Class
0
1
Predicted Class
Freq
800
600
400
200

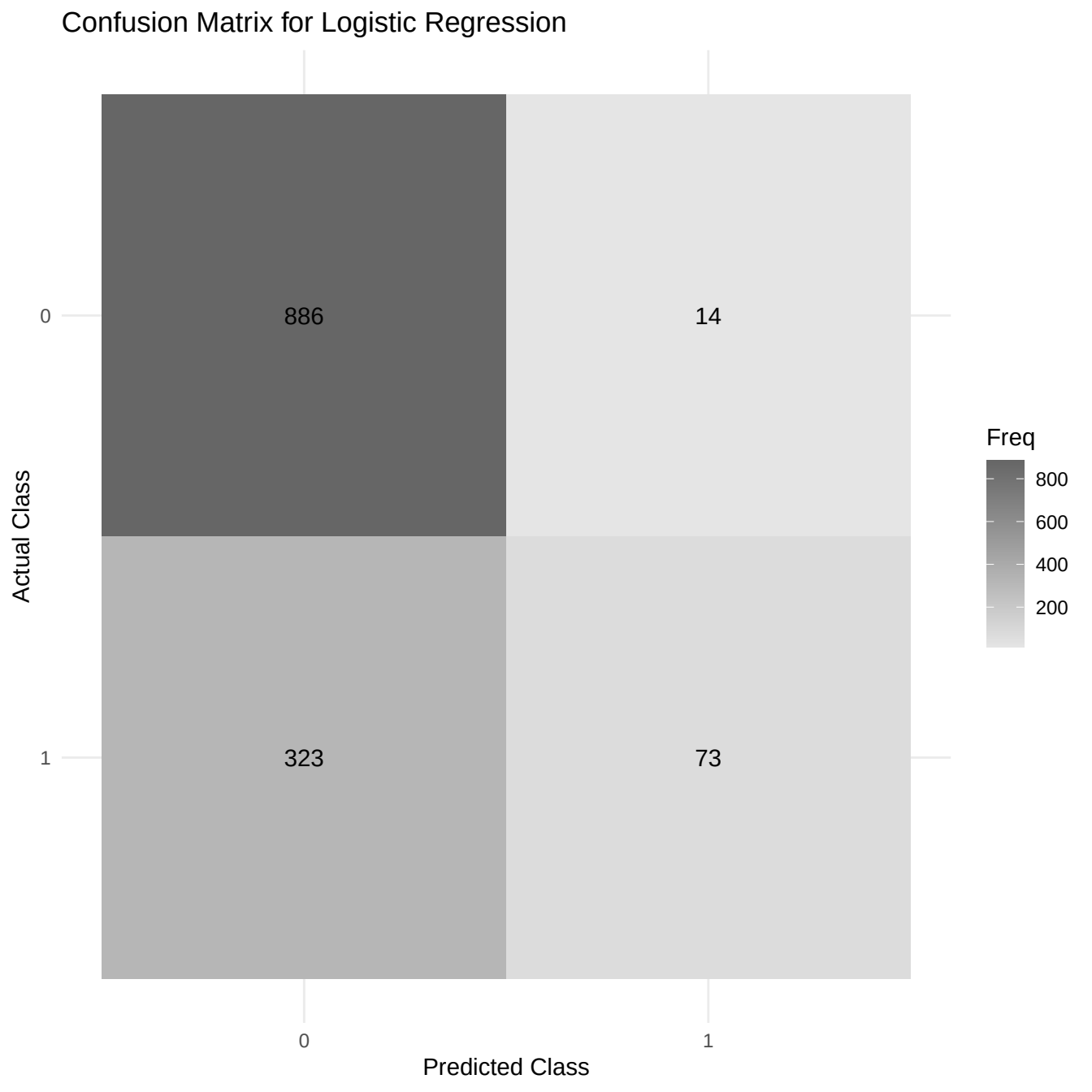

Tuning Results for Logistic Regression
accuracy
roc_auc
sens
spec
Mixture
Penalty
1e−08
1e−05
1e−02
0.7
0.6
0.5
0.8
0.4
0.85
0.80
0.75
0.70
0.65
0.60
Proportion of Lasso Penalty
0.00
0.25
0.50
0.75
1.00

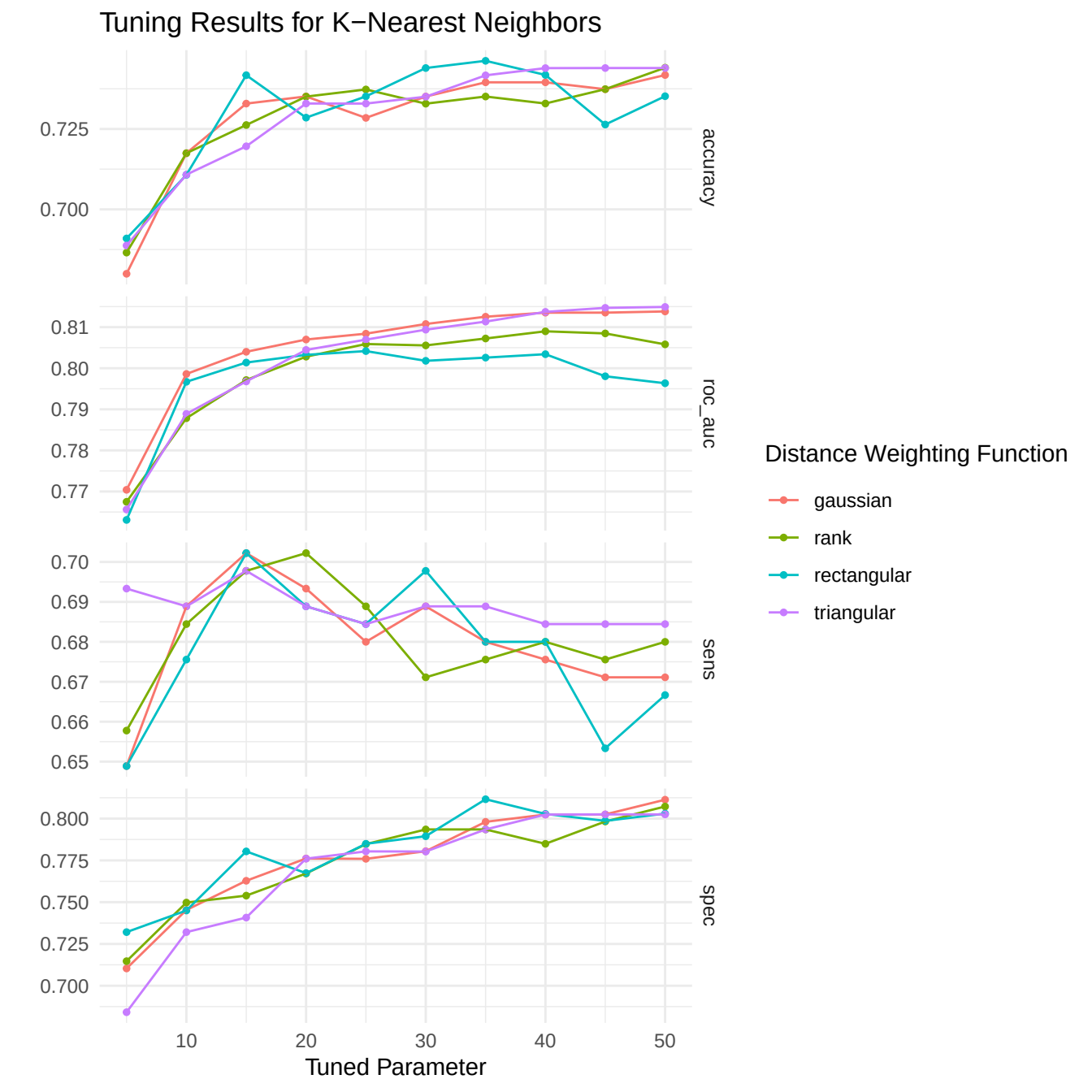

Confusion Matrix for Logistic Regression
886
14
323
73
0
1
Actual Class
0
1
Predicted Class
Freq
800
600
400
200

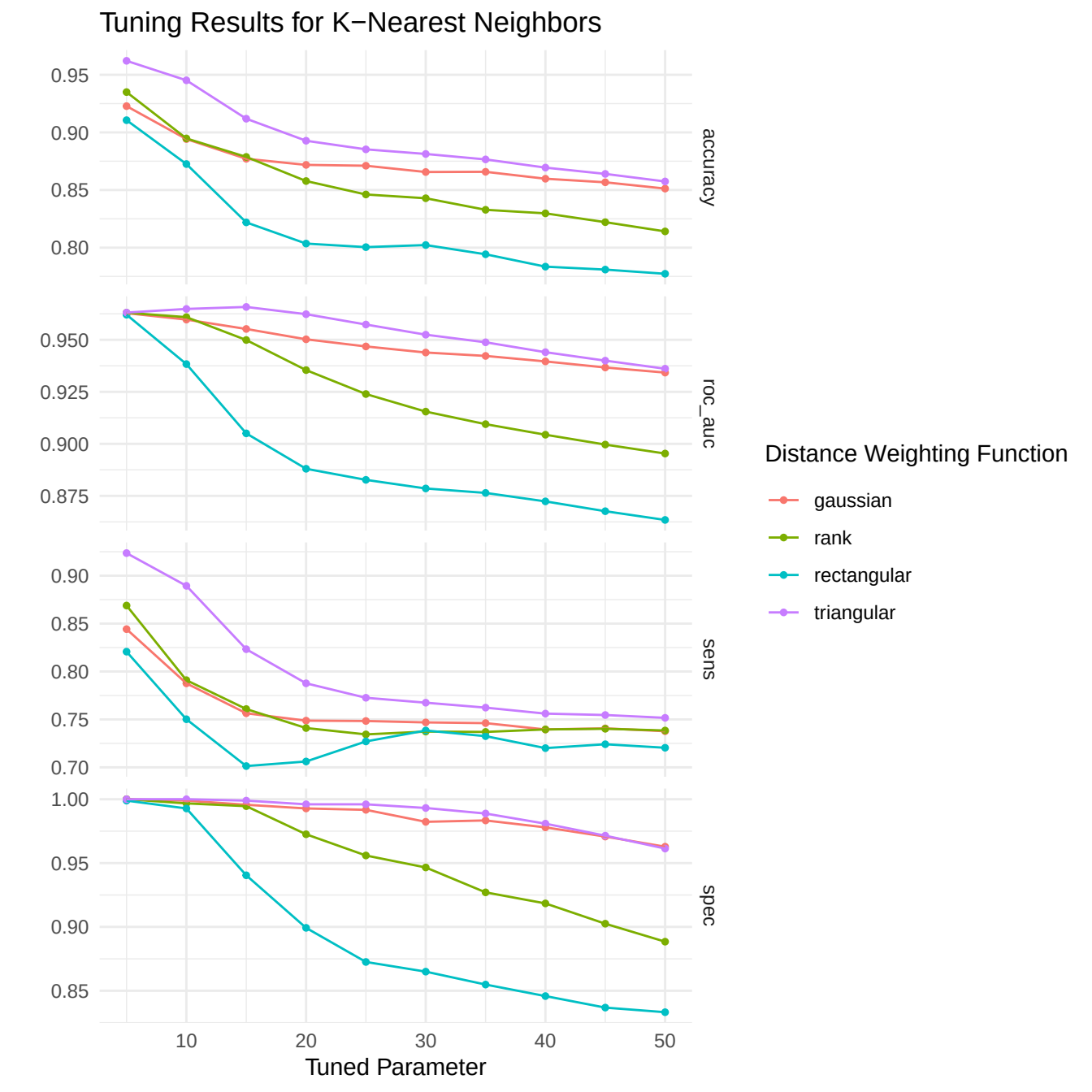

Tuning Results for Logistic Regression
accuracy
roc_auc
sens
spec
Mixture
Penalty
1e−08
1e−05
1e−02
0.0
0.2
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Proportion of Lasso Penalty
0.00
0.25
0.50
0.75
1.00

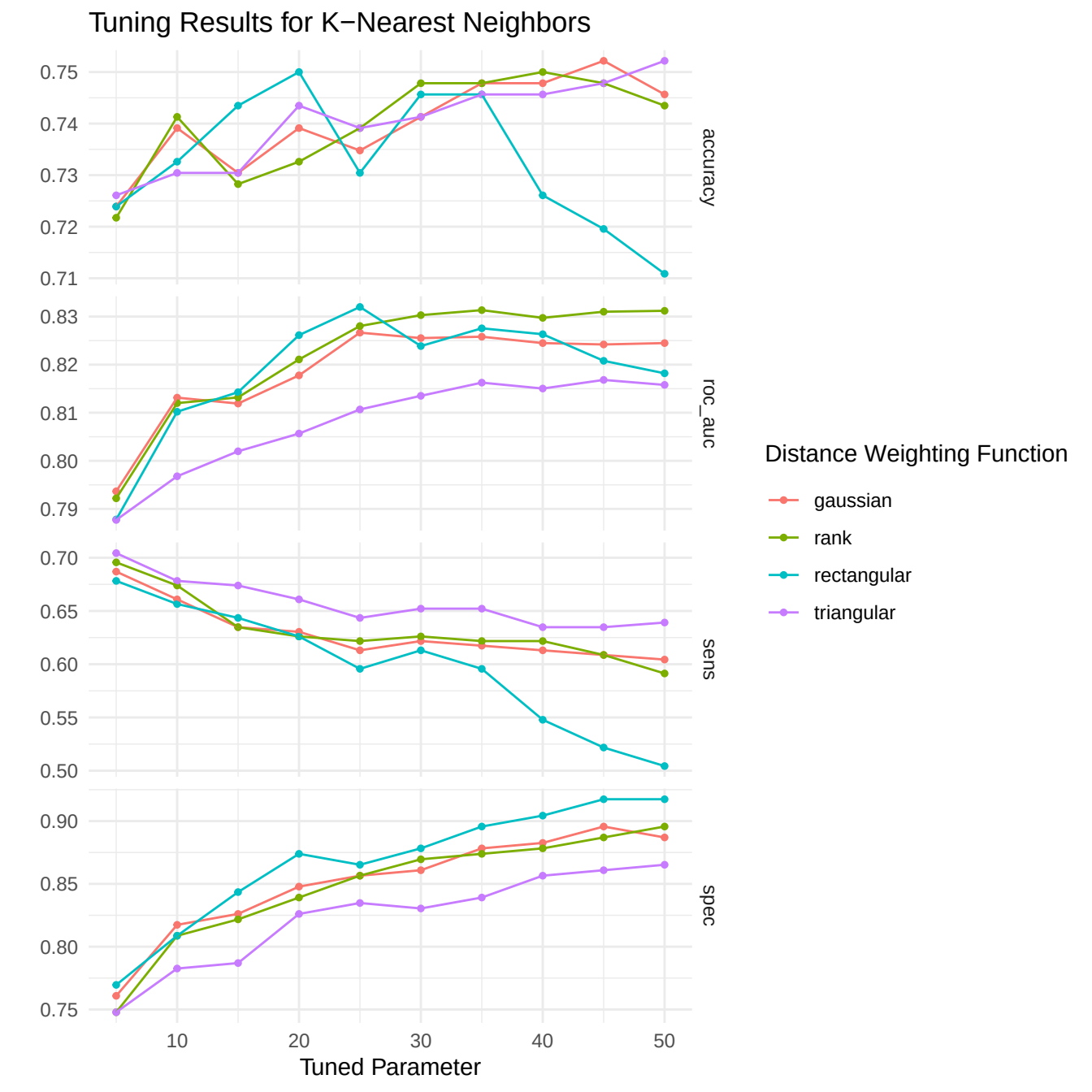

Confusion Matrix for Logistic Regression
883
20
326
67
0
1
Actual Class
0
1
Predicted Class
Freq
800
600
400
200

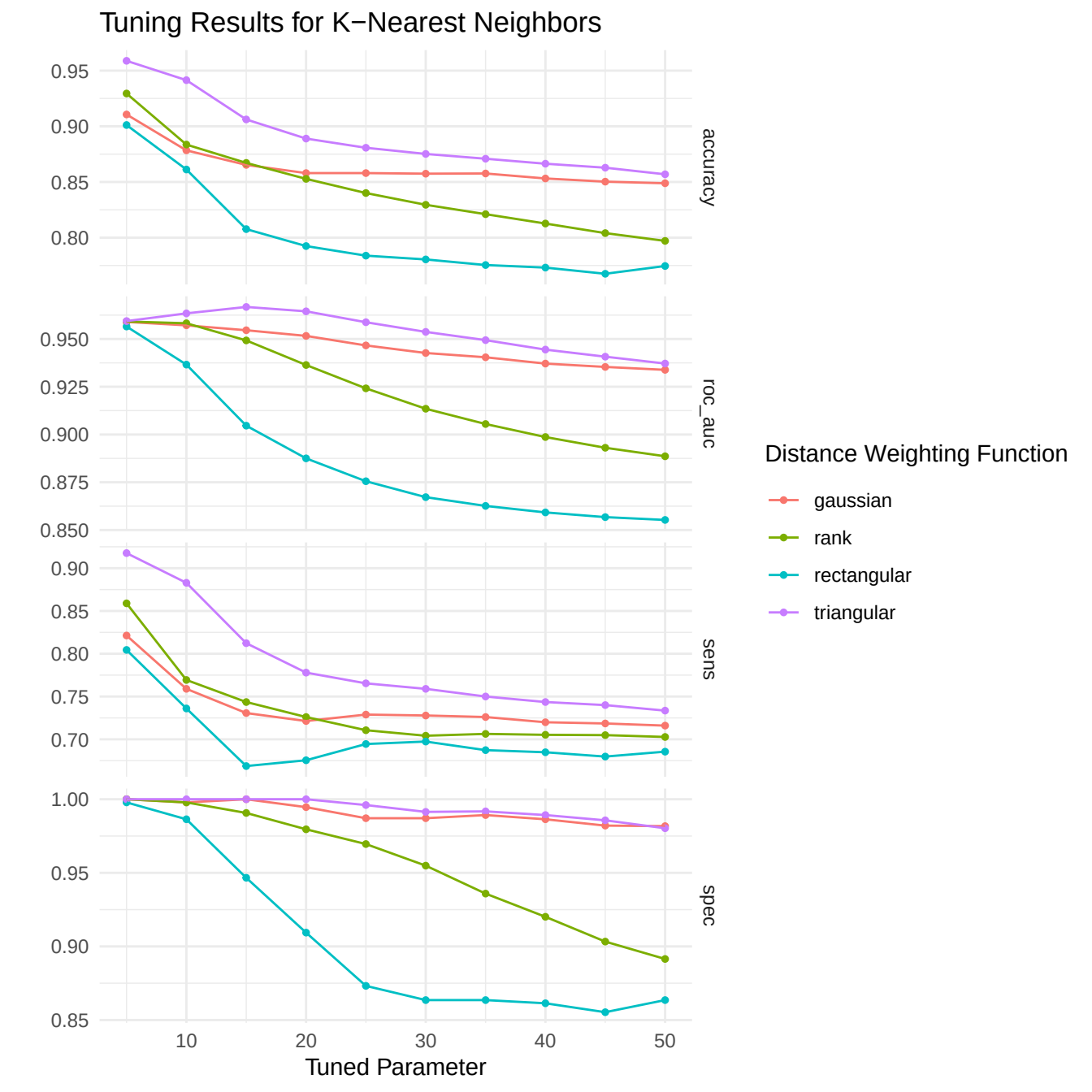

Tuning Results for Logistic Regression
accuracy
roc_auc
sens
spec
Mixture
Penalty
1e−08
1e−05
1e−02
0.7
0.6
0.5
0.8
0.4
0.85
0.80
0.75
0.70
0.65
0.60
Proportion of Lasso Penalty
0.00
0.25
0.50
0.75
1.00

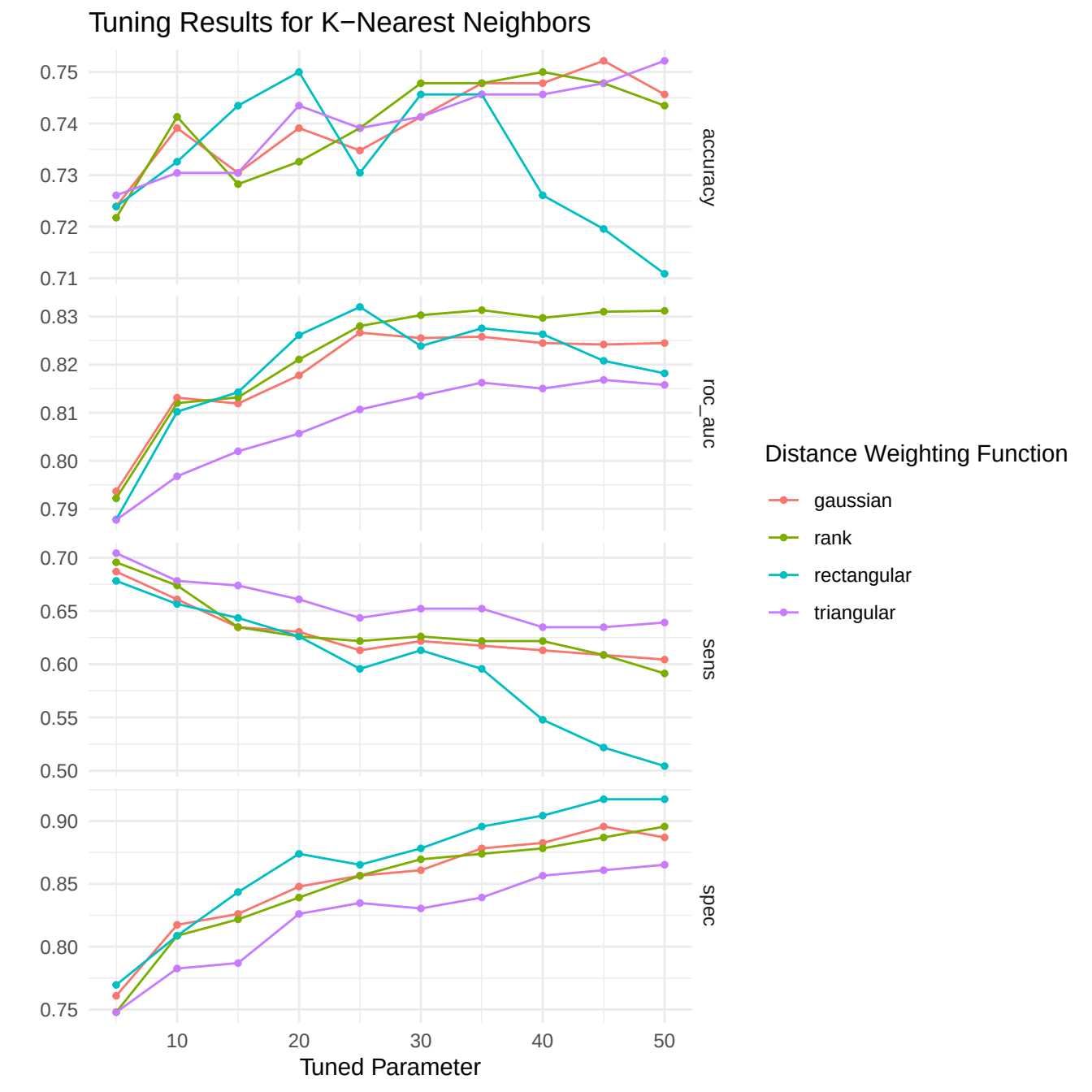

Confusion Matrix for Logistic Regression
886
14
323
73
0
1
Actual Class
0
1
Predicted Class
Freq
800
600
400
200

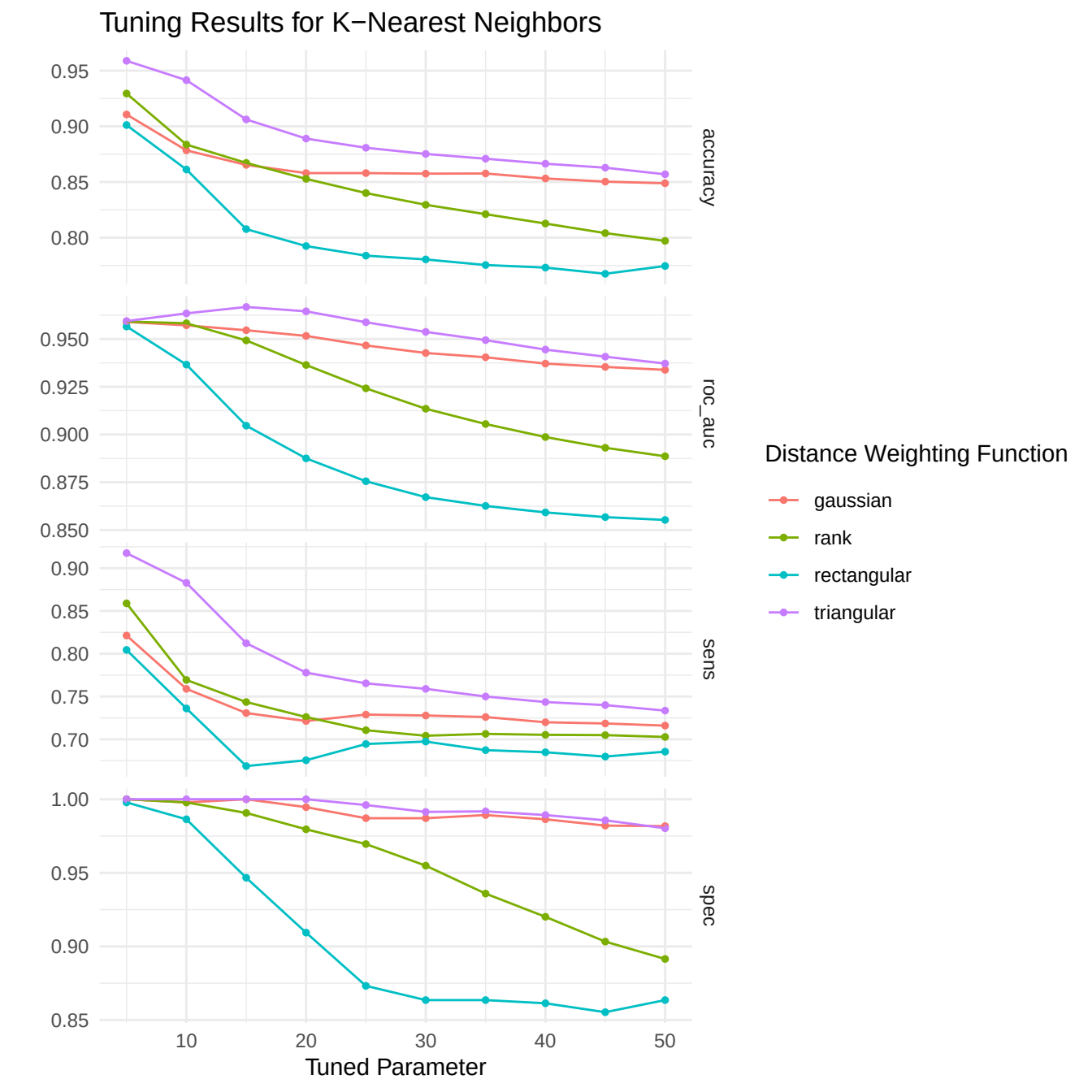

Tuning Results for K−Nearest Neighbors
accuracy
roc_auc
sens
spec
0.725
0.700
0.81
0.80
0.79
0.78
0.77
0.70
0.69
0.68
0.67
0.66
0.65
0.800
0.775
0.750
0.725
0.700
10
20
30
40
50
Tuned Parameter
Distance Weighting Function
gaussian
rank
rectangular
triangular

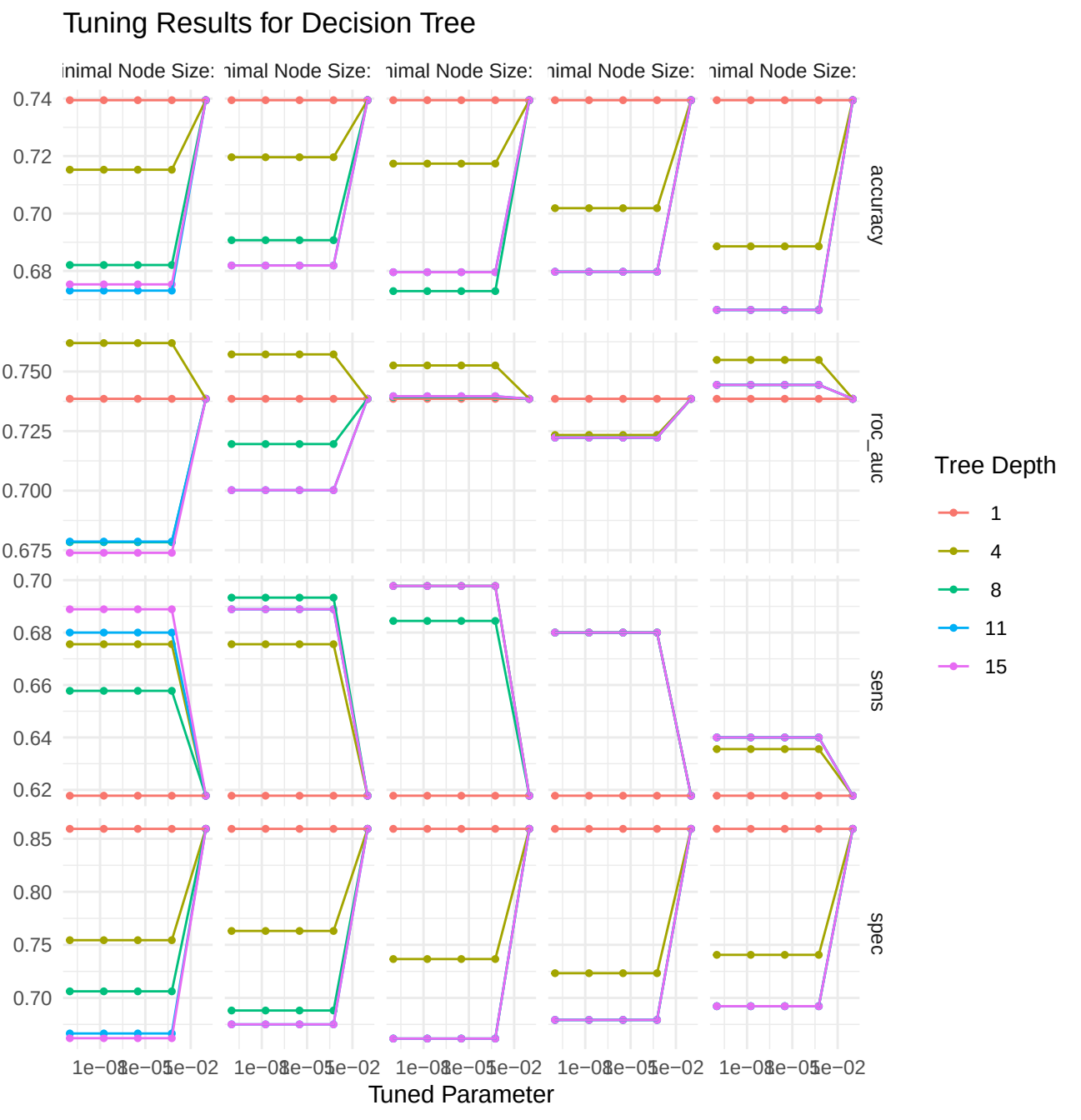

Tuning Results for K−Nearest Neighbors
accuracy
roc_auc
sens
spec
0.95
0.90
0.85
0.80
0.950
0.925
0.900
0.875
0.90
0.85
0.80
0.75
0.70
1.00
0.95
0.90
0.85
10
20
30
40
50
Tuned Parameter
Distance Weighting Function
gaussian
rank
rectangular
triangular

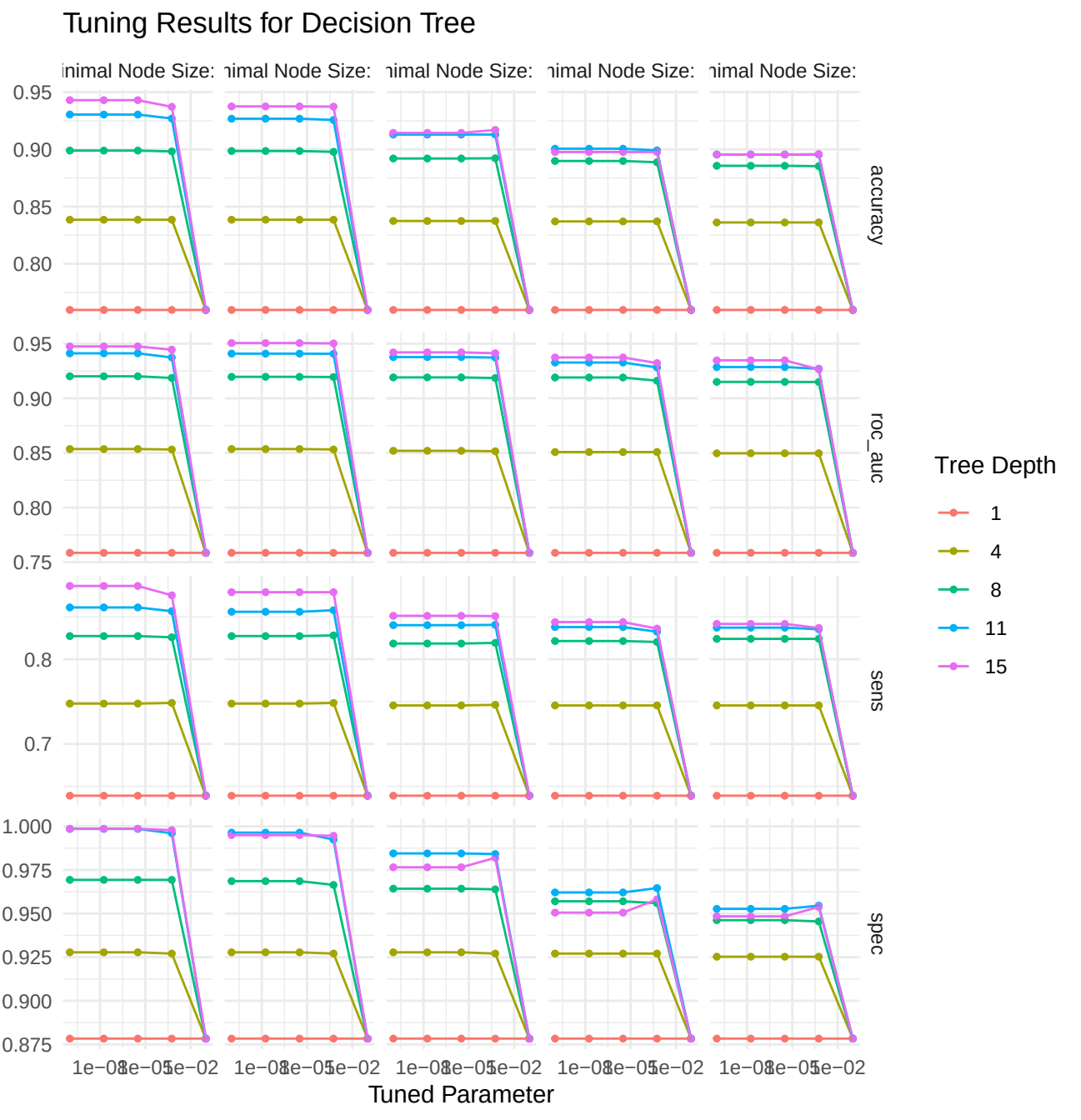

Tuning Results for K−Nearest Neighbors
accuracy
roc_auc
sens
spec
0.75
0.74
0.73
0.72
0.71
0.83
0.82
0.81
0.80
0.79
0.70
0.65
0.60
0.55
0.50
0.90
0.85
0.80
0.75
10
20
30
40
50
Tuned Parameter
Distance Weighting Function
gaussian
rank
rectangular
triangular

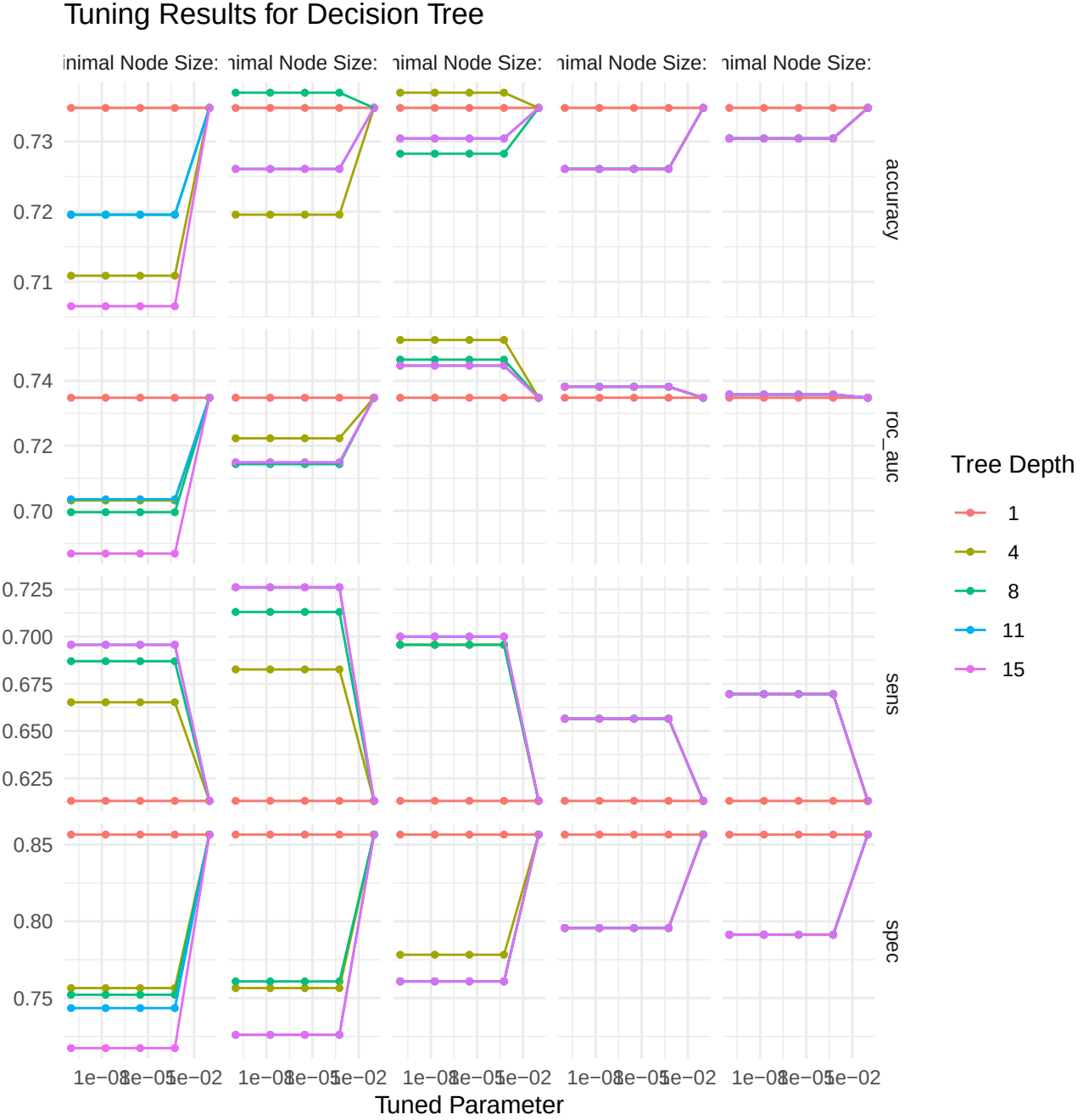

Tuning Results for K−Nearest Neighbors
accuracy
roc_auc
sens
spec
0.95
0.90
0.85
0.80
0.950
0.925
0.900
0.875
0.850
0.90
0.85
0.80
0.75
0.70
1.00
0.95
0.90
0.85
10
20
30
40
50
Tuned Parameter
Distance Weighting Function
gaussian
rank
rectangular
triangular

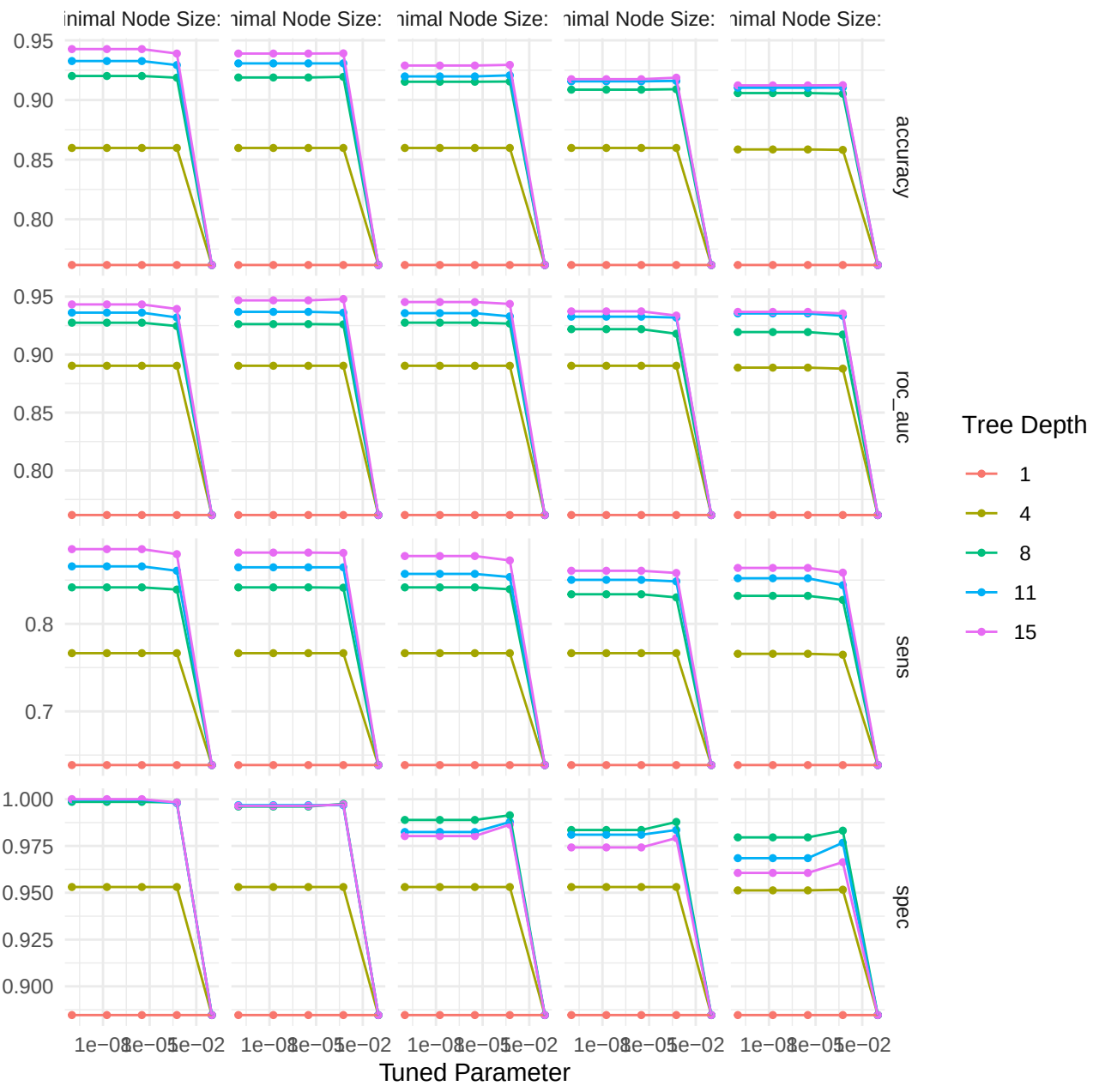

Tuning Results for K−Nearest Neighbors
accuracy
roc_auc
sens
spec
0.75
0.74
0.73
0.72
0.71
0.83
0.82
0.81
0.80
0.79
0.70
0.65
0.60
0.55
0.50
0.90
0.85
0.80
0.75
10
20
30
40
50
Tuned Parameter
Distance Weighting Function
gaussian
rank
rectangular
triangular

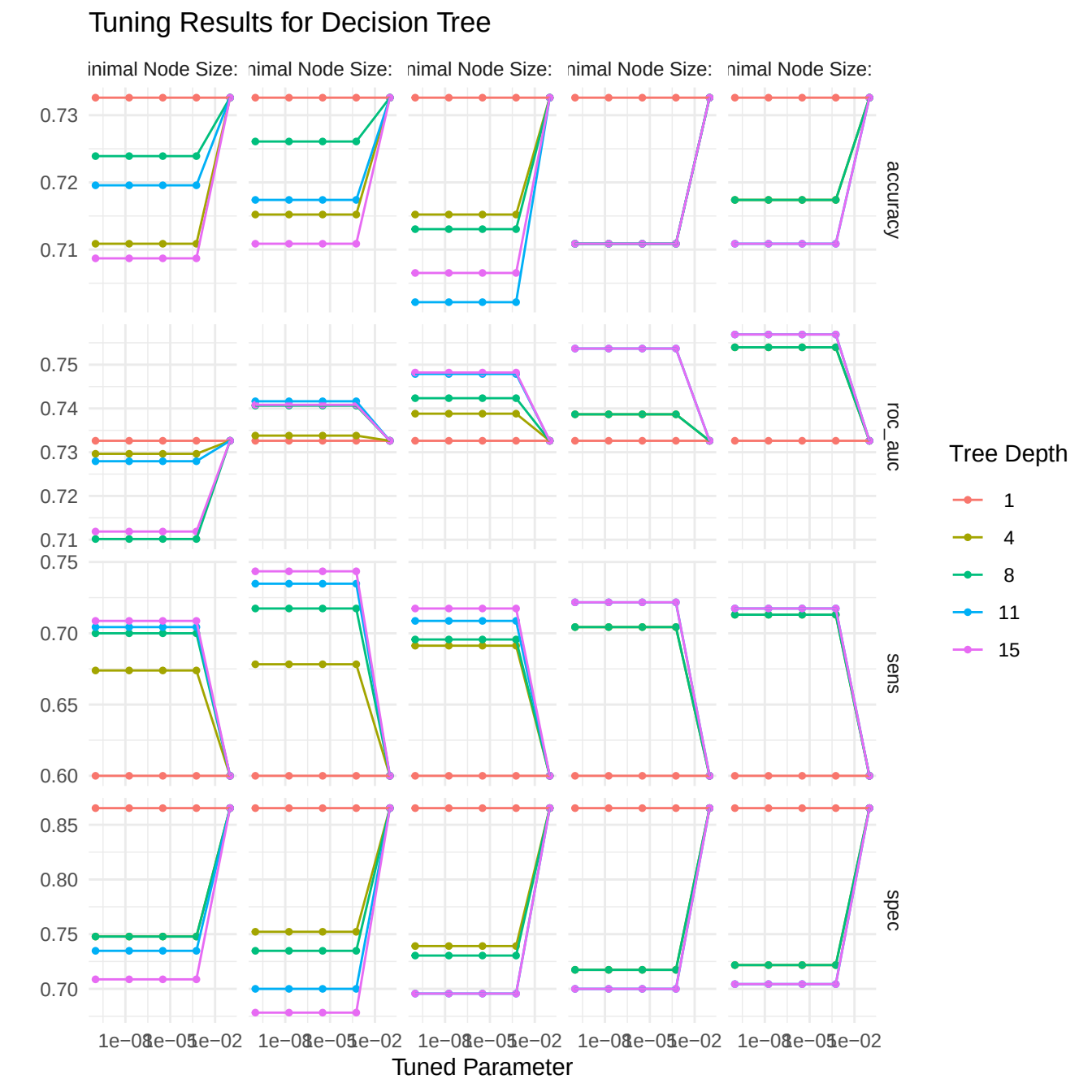

Tuning Results for K−Nearest Neighbors
accuracy
roc_auc
sens
spec
0.95
0.90
0.85
0.80
0.950
0.925
0.900
0.875
0.850
0.90
0.85
0.80
0.75
0.70
1.00
0.95
0.90
0.85
10
20
30
40
50
Tuned Parameter
Distance Weighting Function
gaussian
rank
rectangular
triangular

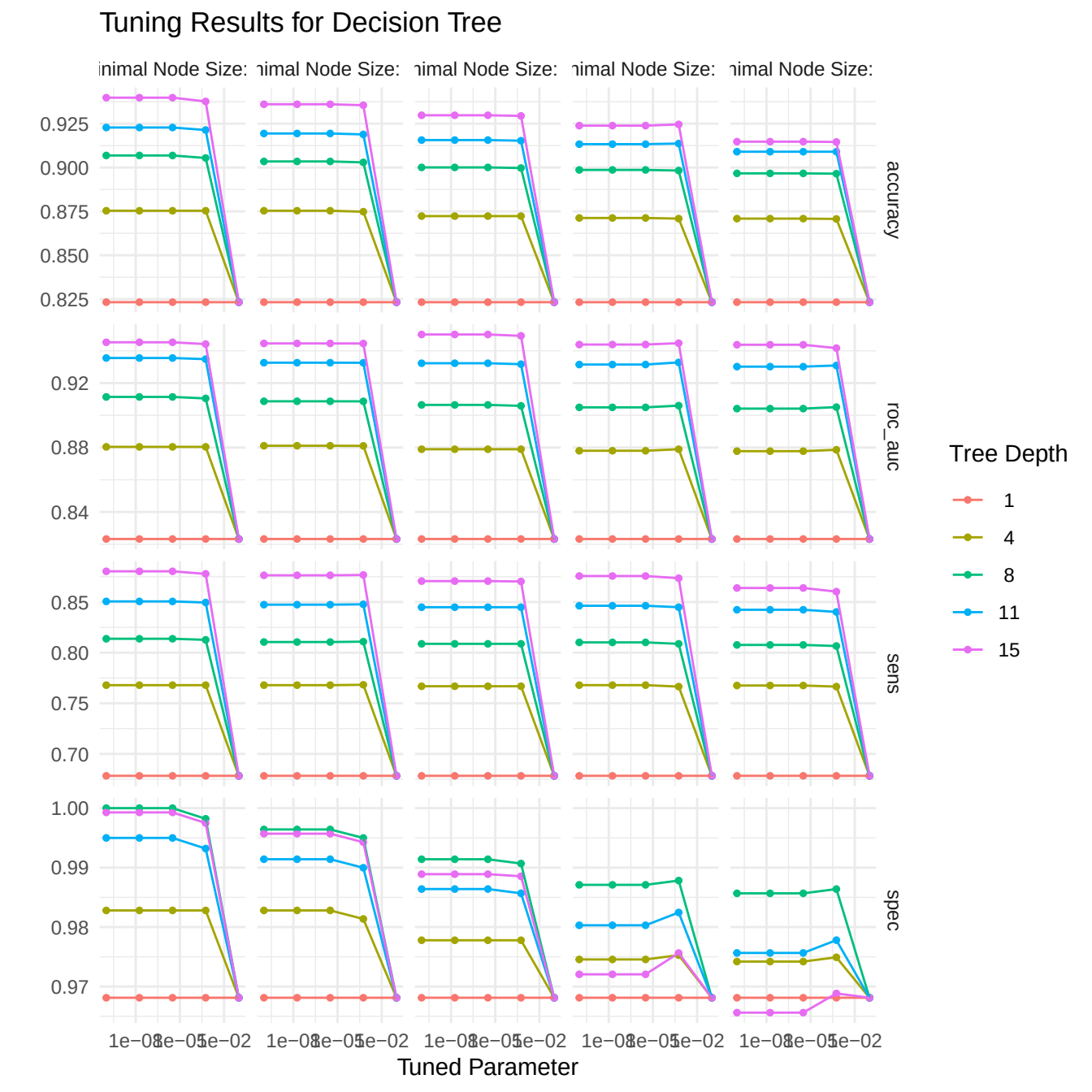

Tuning Results for Decision Tree
inimal Node Size:
nimal Node Size:
nimal Node Size:
nimal Node Size:
nimal Node Size:
accuracy
roc_auc
sens
spec
0.74
0.72
0.70
0.68
0.750
0.725
0.700
0.675
0.70
0.68
0.66
0.64
0.62
0.85
0.80
0.75
0.70
1e−08
1e−05
1e−02
Tuned Parameter
Tree Depth
1
4
8
11
15


Tuning Results for Decision Tree
inimal Node Size:
nimal Node Size:
nimal Node Size:
nimal Node Size:
nimal Node Size:
accuracy
roc_auc
sens
spec
0.95
0.90
0.85
0.80
0.75
0.8
0.7
1.000
0.975
0.950
0.925
0.900
0.875
1e−08
1e−05
1e−02
Tuned Parameter
Tree Depth
1
4
8
11
15

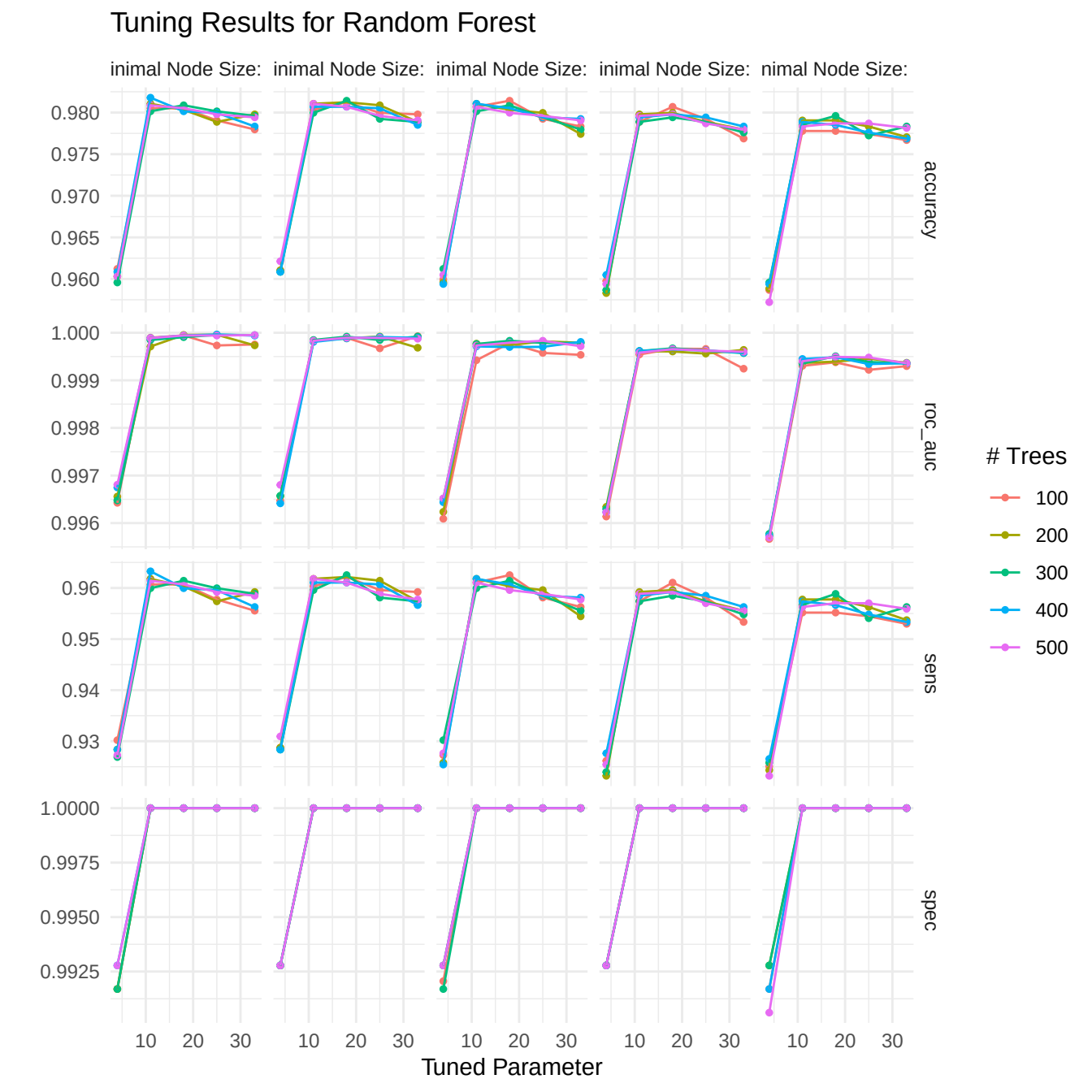

Tuning Results for Decision Tree
inimal Node Size:
nimal Node Size:
nimal Node Size:
nimal Node Size:
nimal Node Size:
accuracy
roc_auc
sens
spec
0.73
0.72
0.71
0.74
0.72
0.70
0.725
0.700
0.675
0.650
0.625
0.85
0.80
0.75
1e−08
1e−05
1e−02
Tuned Parameter
Tree Depth
1
4
8
11
15

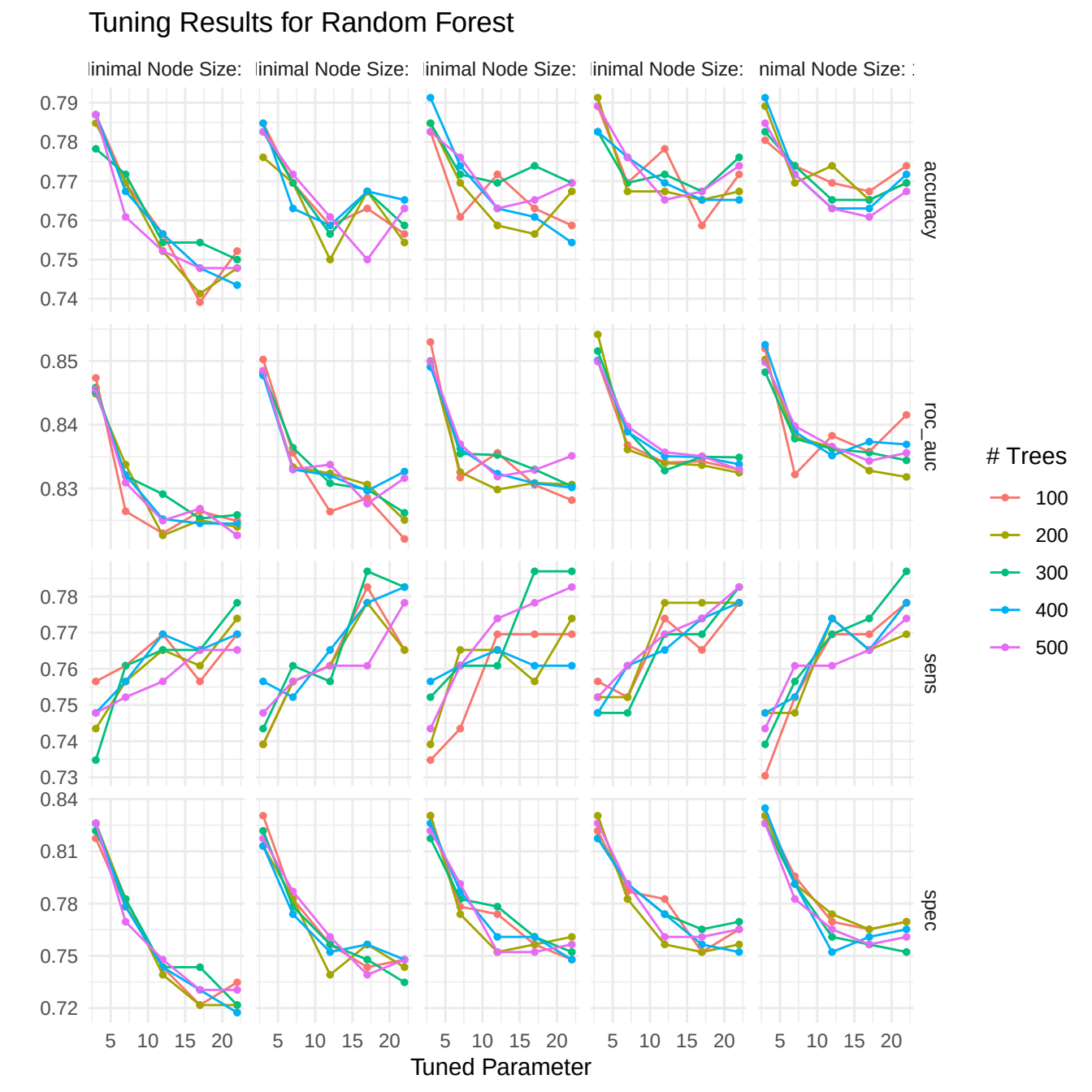

Tuning Results for Decision Tree
inimal Node Size:
nimal Node Size:
nimal Node Size:
nimal Node Size:
nimal Node Size:
accuracy
roc_auc
sens
spec
0.95
0.90
0.85
0.80
0.8
0.7
1.000
0.975
0.950
0.925
0.900
1e−08
1e−05
1e−02
Tuned Parameter
Tree Depth
1
4
8
11
15

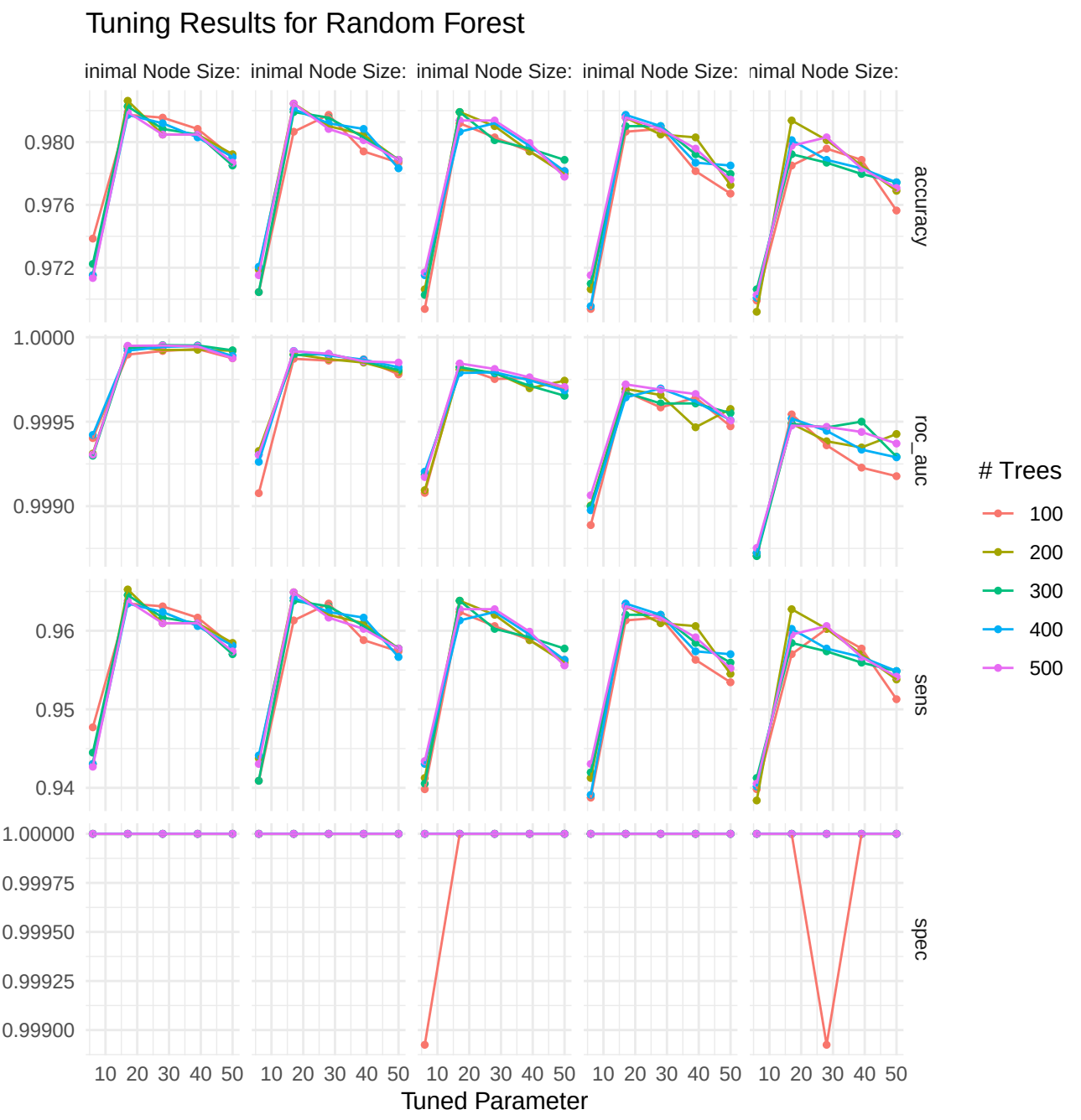

Tuning Results for Decision Tree
inimal Node Size:
nimal Node Size:
nimal Node Size:
nimal Node Size:
nimal Node Size:
accuracy
roc_auc
sens
spec
0.73
0.72
0.71
0.75
0.74
0.73
0.72
0.71
0.75
0.70
0.65
0.60
0.85
0.80
0.75
0.70
1e-08
1e-05
1e-02
Tuned Parameter
Tree Depth
1
4
8
11
15

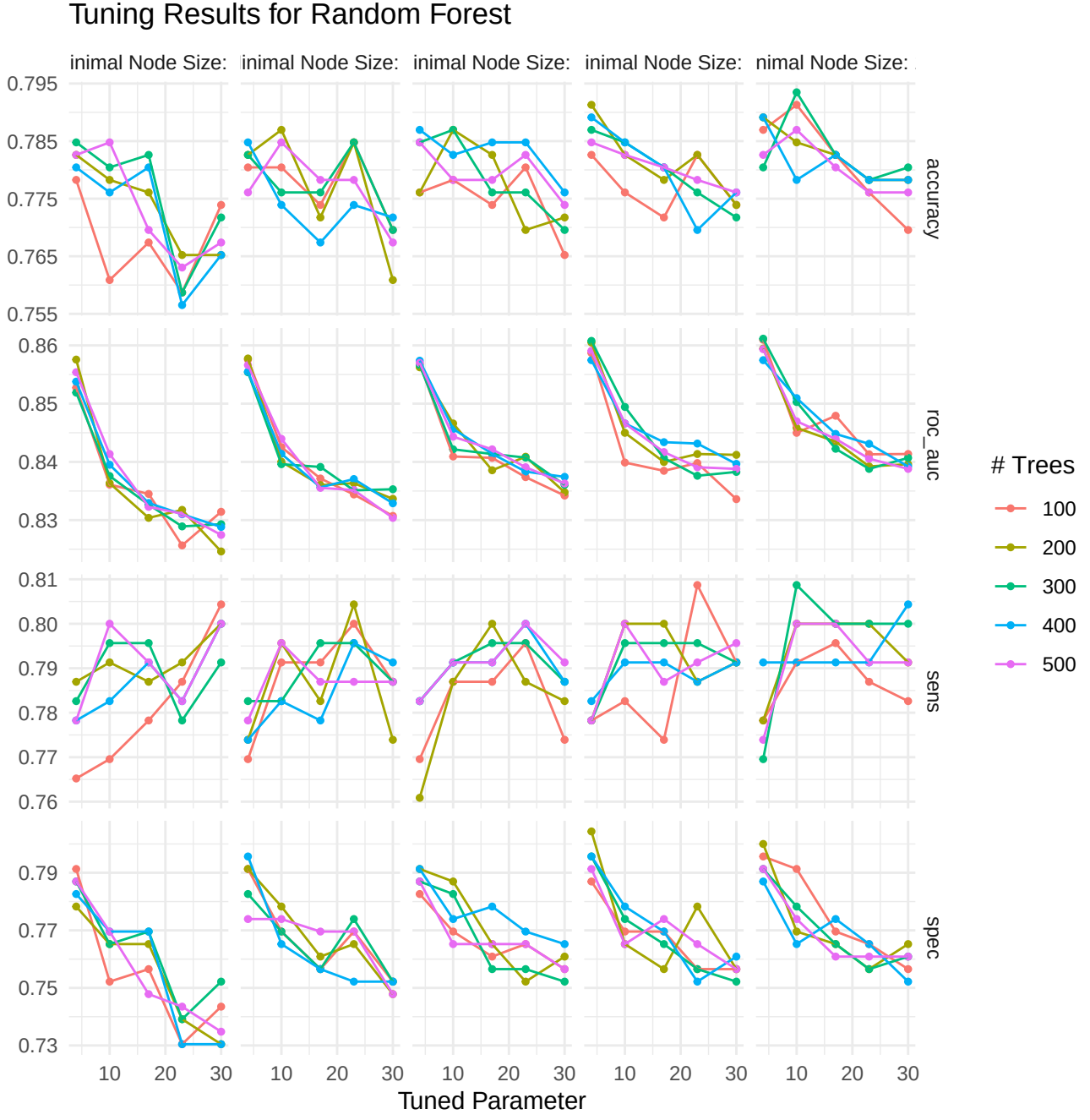

Tuning Results for Decision Tree
inimal Node Size:
nimal Node Size:
nimal Node Size:
nimal Node Size:
nimal Node Size:
accuracy
roc_auc
sens
spec
0.925
0.900
0.875
0.850
0.825
0.92
0.88
0.84
0.85
0.80
0.75
0.70
1.00
0.99
0.98
0.97
1e−08
1e−05
1e−02
Tuned Parameter
Tree Depth
1
4
8
11
15

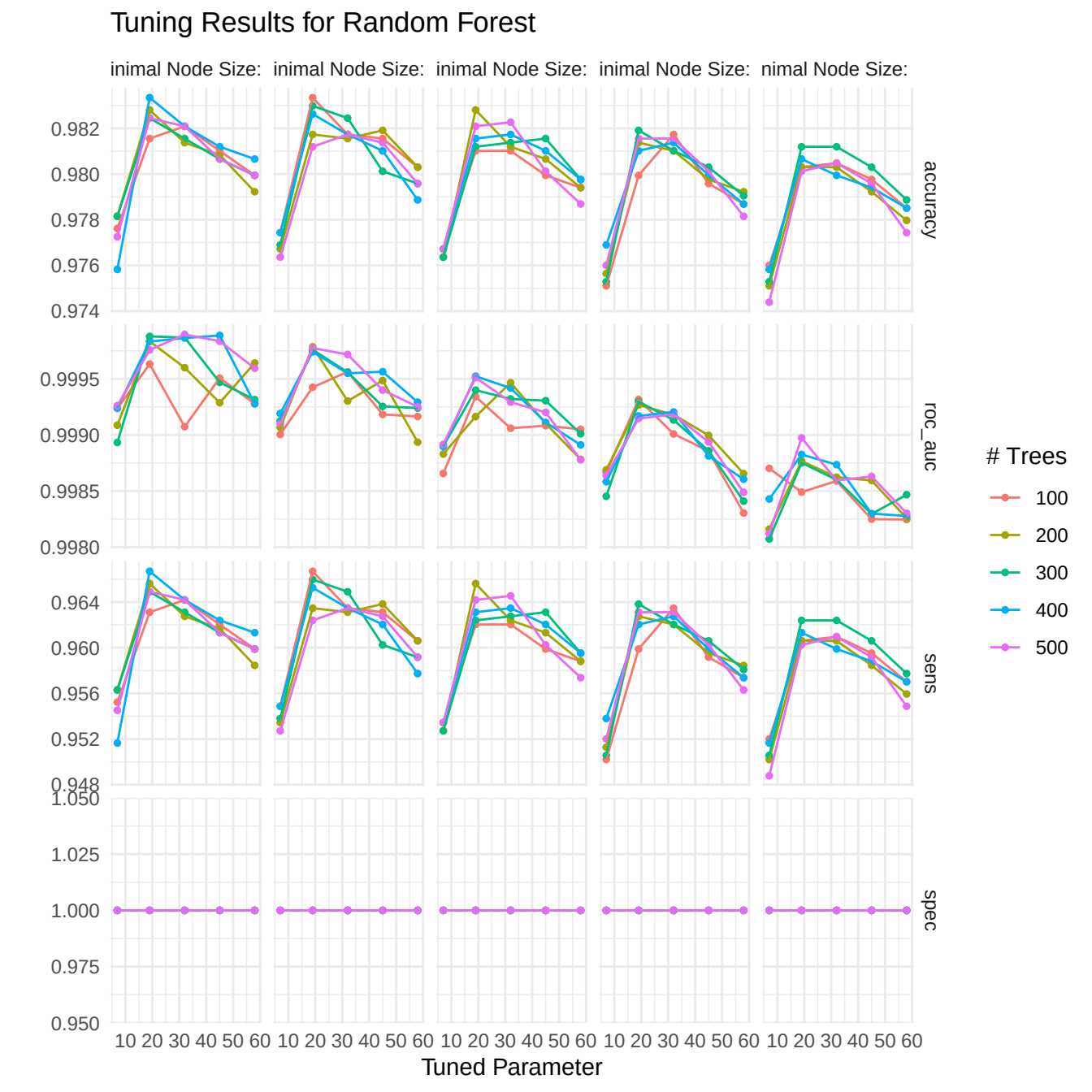

Tuning Results for Random Forest
inimal Node Size:
inimal Node Size:
inimal Node Size:
inimal Node Size:
nimal Node Size:
accuracy
roc_auc
sens
spec
0.79
0.78
0.77
0.76
0.8450
0.8425
0.8400
0.8375
0.8350
0.8325
0.76
0.75
0.74
0.73
0.72
0.850
0.825
0.800
0.775
10
20
30
Tuned Parameter
# Trees
100
200
300
400
500

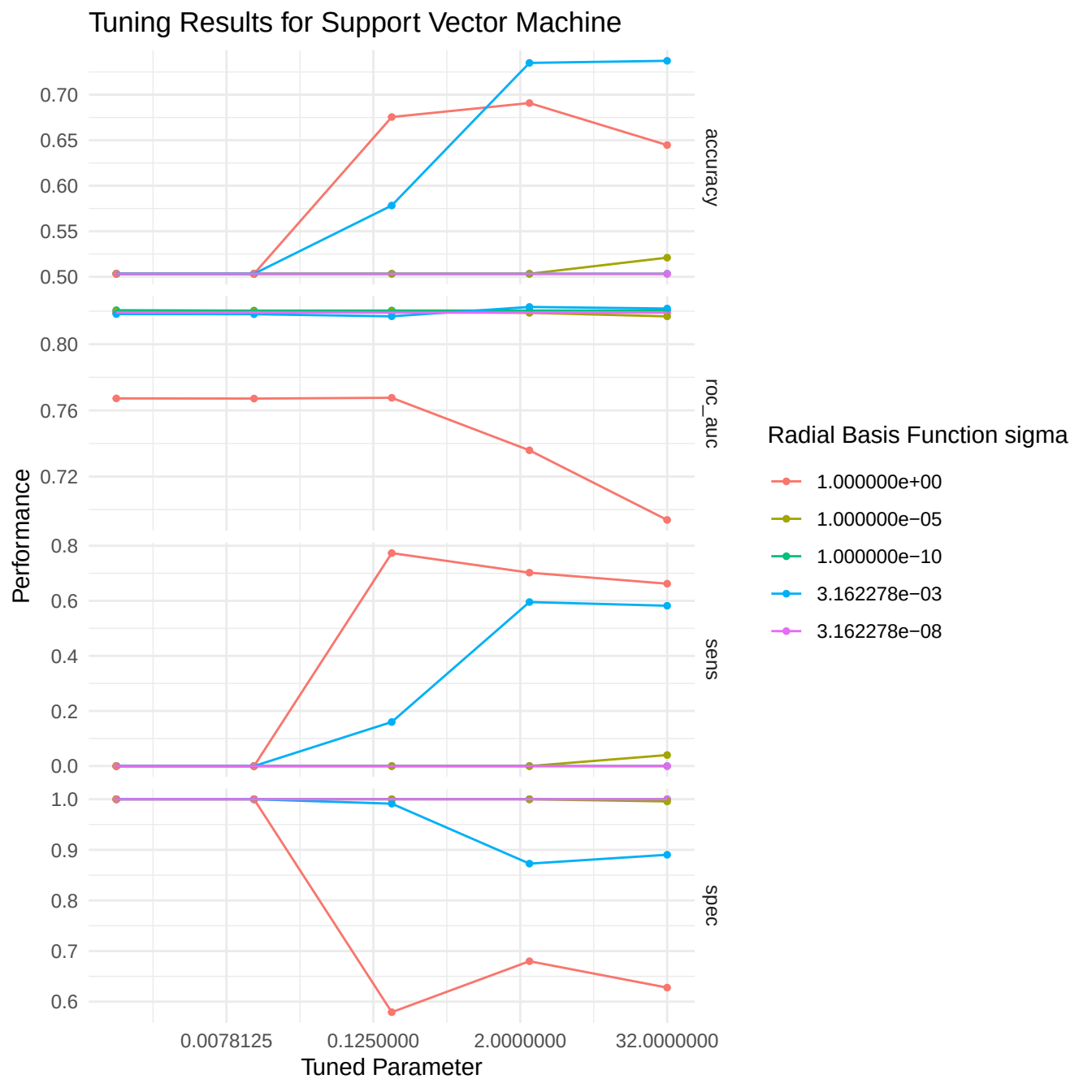

Tuning Results for Random Forest
inimal Node Size:
inimal Node Size:
inimal Node Size:
inimal Node Size:
nimal Node Size:
accuracy
roc_auc
sens
spec
0.980
0.975
0.970
0.965
0.960
1.000
0.999
0.998
0.997
0.996
0.96
0.95
0.94
0.93
1.0000
0.9975
0.9950
0.9925
10
20
30
Tuned Parameter
# Trees
100
200
300
400
500

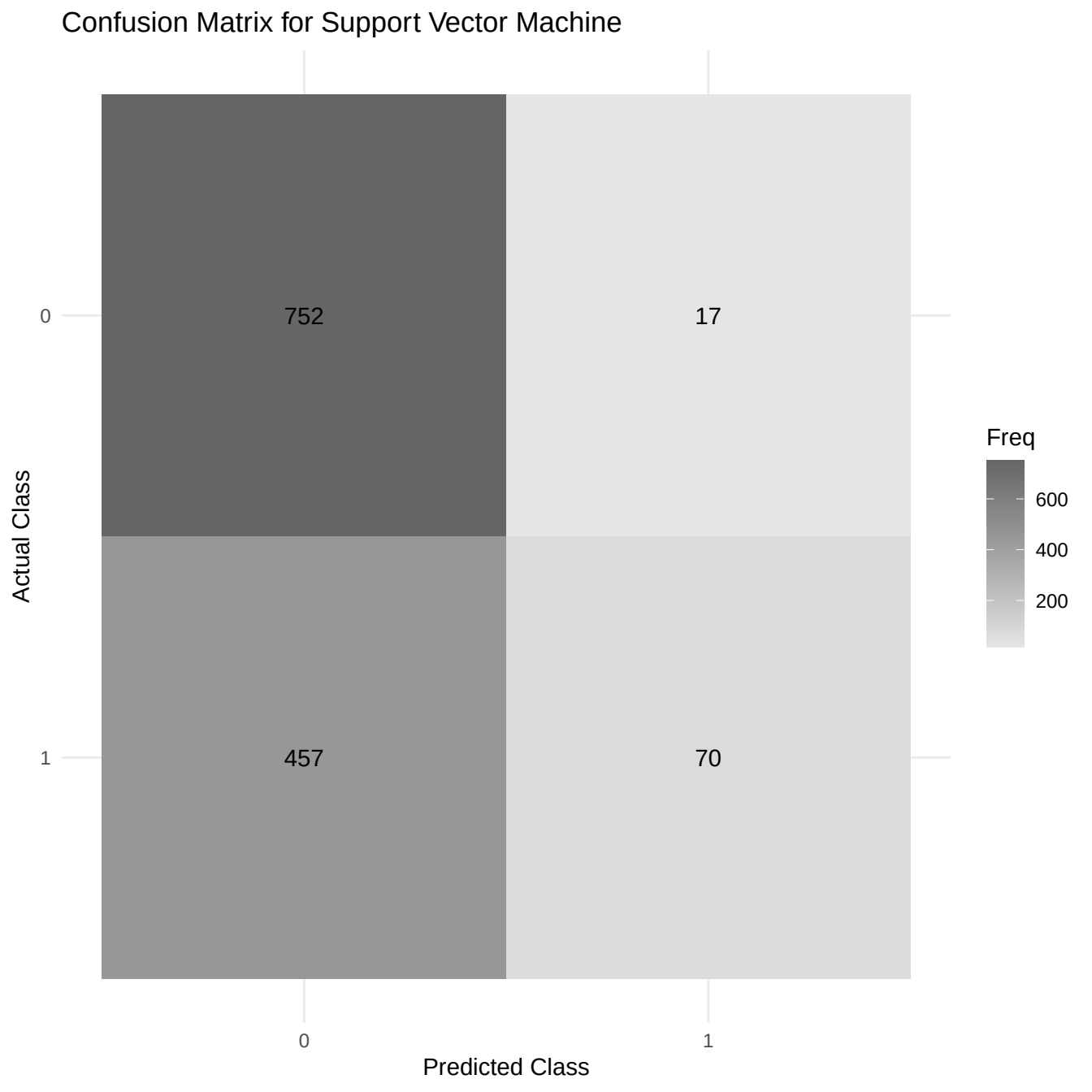

Tuning Results for Random Forest
inimal Node Size:
inimal Node Size:
inimal Node Size:
inimal Node Size:
nimal Node Size:
accuracy
roc_auc
sens
spec
0.79
0.78
0.77
0.76
0.75
0.74
0.85
0.84
0.83
0.78
0.77
0.76
0.75
0.74
0.73
0.84
0.81
0.78
0.75
0.72
5
10
15
20
Tuned Parameter
# Trees
100
200
300
400
500

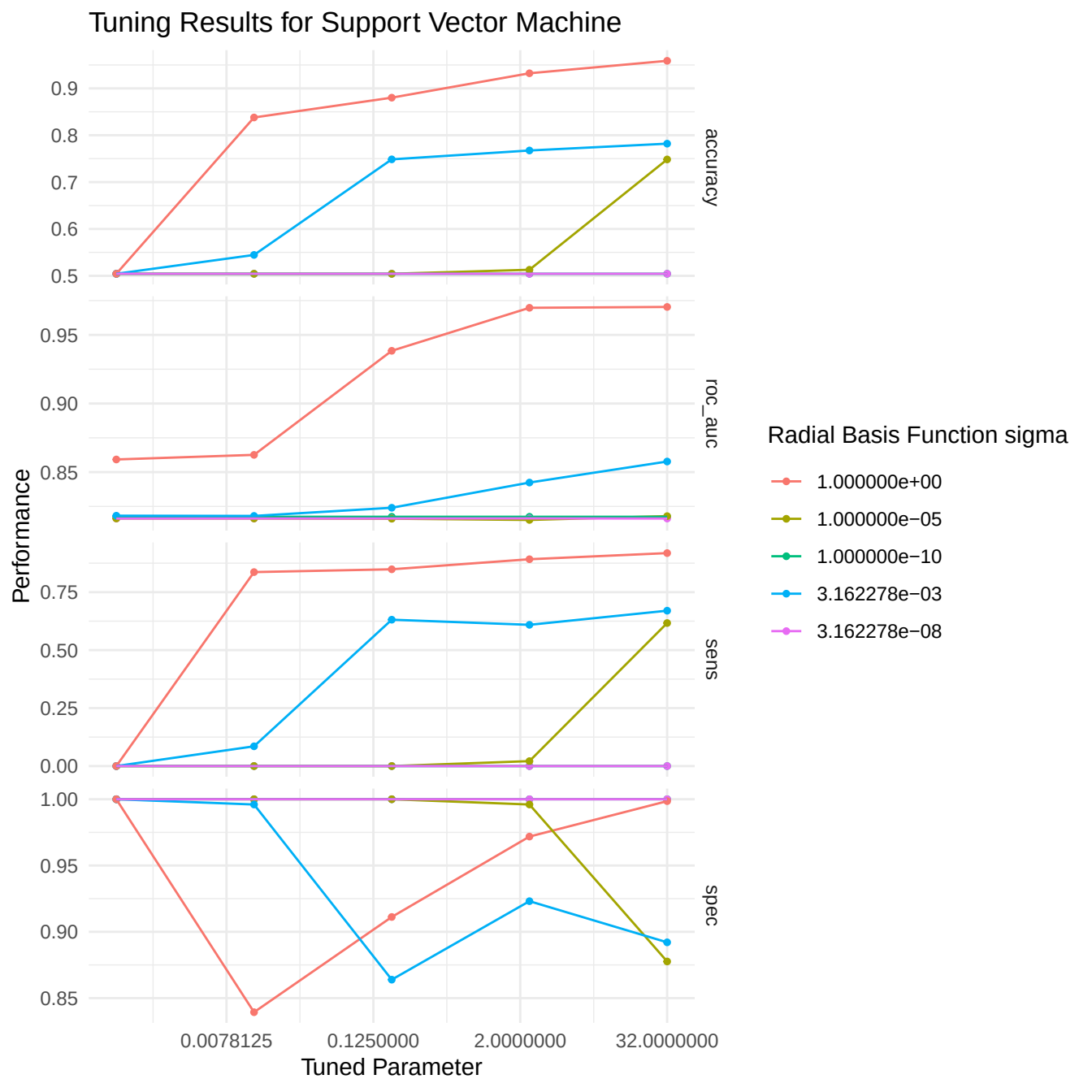

Tuning Results for Random Forest
inimal Node Size:
inimal Node Size:
inimal Node Size:
inimal Node Size:
nimal Node Size:
accuracy
roc_auc
sens
spec
0.980
0.976
0.972
1.0000
0.9995
0.9990
0.96
0.95
0.94
1.00000
0.99975
0.99950
0.99925
0.99900
10 20 30 40 50
Tuned Parameter
# Trees
100
200
300
400
500

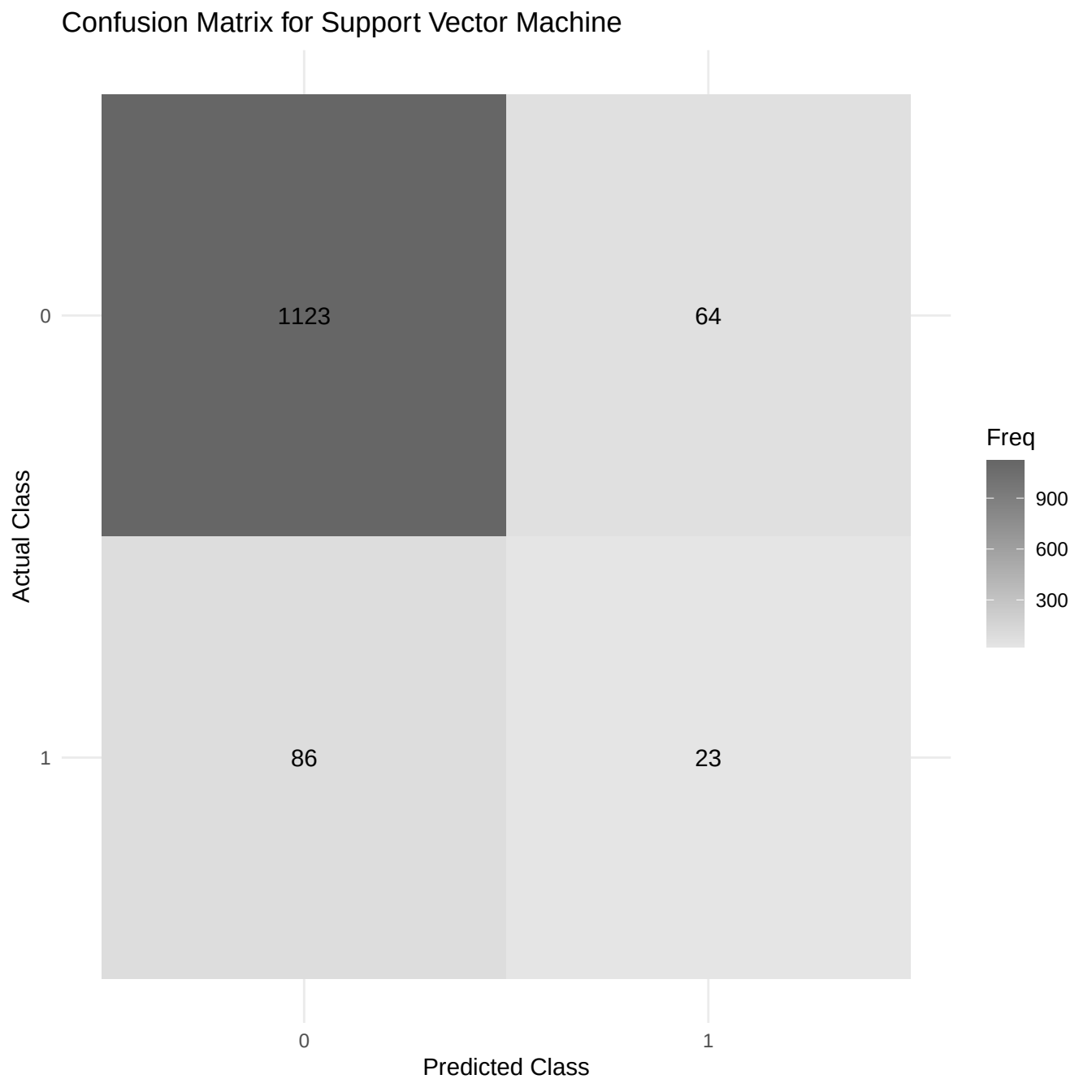

Tuning Results for Random Forest
inimal Node Size:
inimal Node Size:
inimal Node Size:
inimal Node Size:
nimal Node Size:
accuracy
roc_auc
sens
spec
0.795
0.785
0.775
0.765
0.755
0.86
0.85
0.84
0.83
0.81
0.80
0.79
0.78
0.77
0.76
0.79
0.77
0.75
0.73
10
20
30
Tuned Parameter
# Trees
100
200
300
400
500

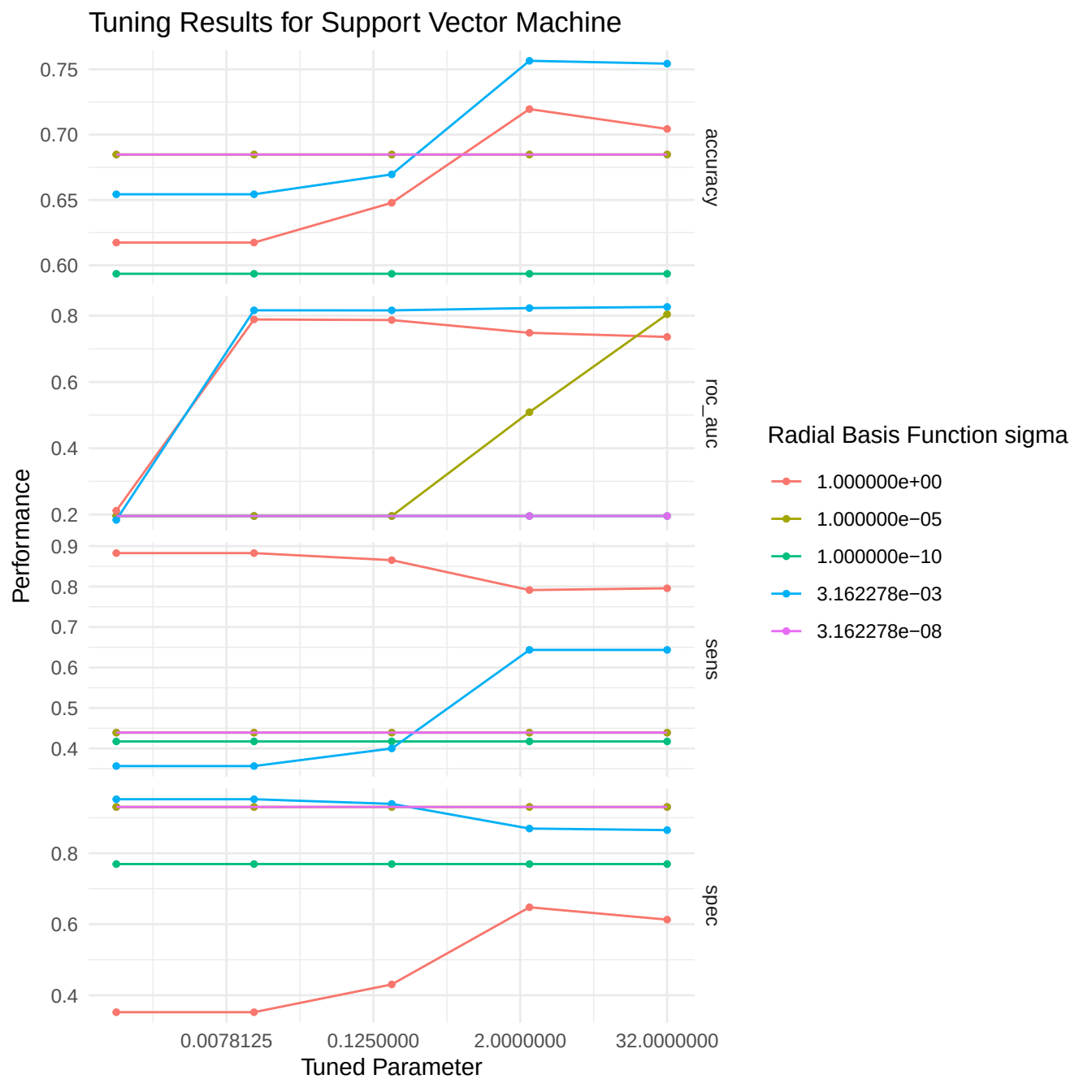

Tuning Results for Random Forest
inimal Node Size:
inimal Node Size:
inimal Node Size:
inimal Node Size:
nimal Node Size:
accuracy
roc_auc
sens
spec
0.982
0.980
0.978
0.976
0.974
0.9995
0.9990
0.9985
0.9980
0.964
0.960
0.956
0.952
0.948
1.050
1.025
1.000
0.975
0.950
10 20 30 40 50 60
Tuned Parameter
# Trees
100
200
300
400
500

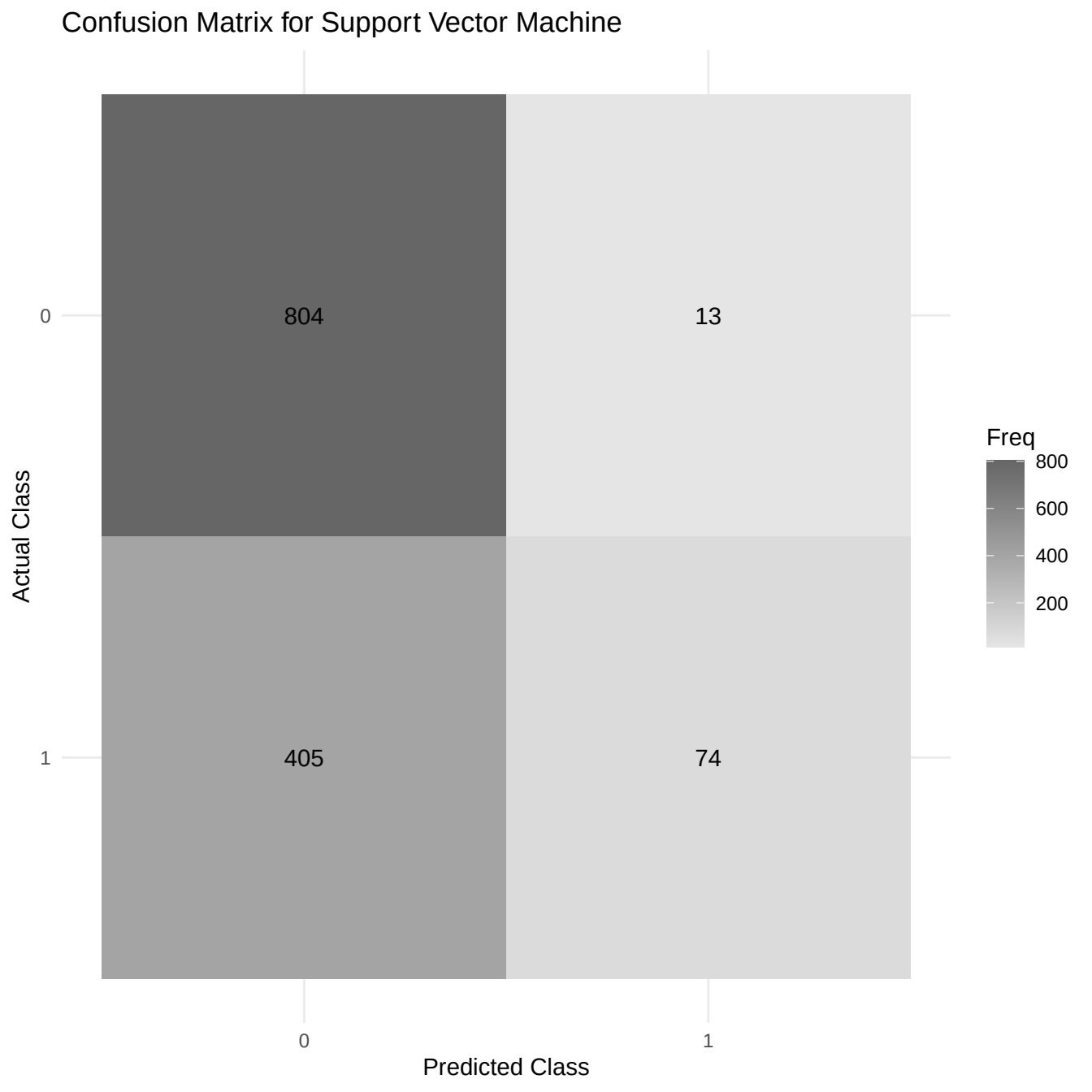

Tuning Results for Support Vector Machine
Performance
accuracy
roc_auc
sens
spec
0.70
0.65
0.60
0.55
0.50
0.80
0.76
0.72
0.8
0.6
0.4
0.2
0.0
1.0
0.9
0.8
0.7
0.6
0.0078125
0.1250000
2.0000000
32.0000000
Tuned Parameter
Radial Basis Function sigma
1.000000e+00
1.000000e−05
1.000000e−10
3.162278e−03
3.162278e−08

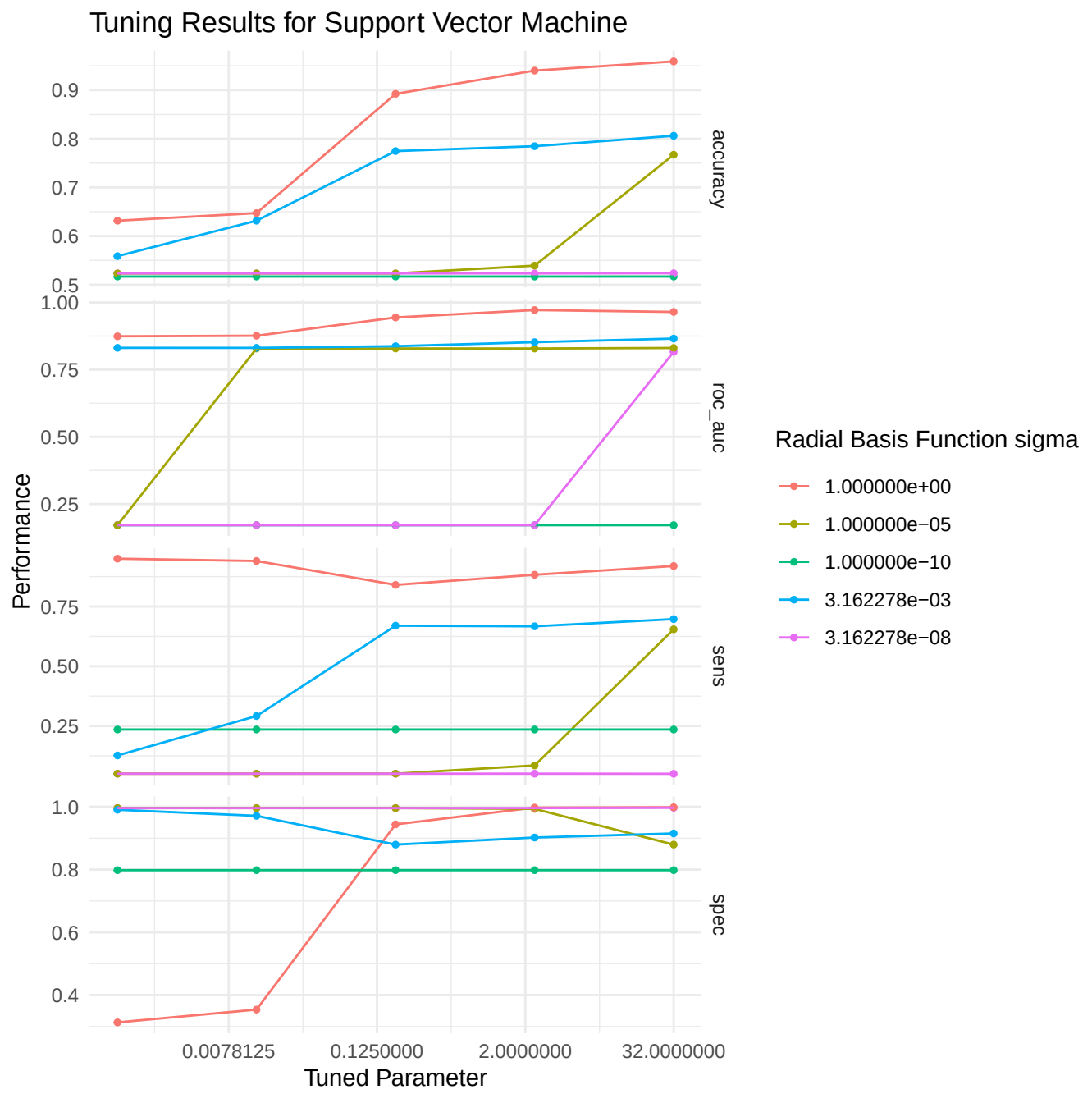

Confusion Matrix for Support Vector Machine
752
17
457
70
0
1
Actual Class
0
1
Predicted Class
Freq
600
400
200

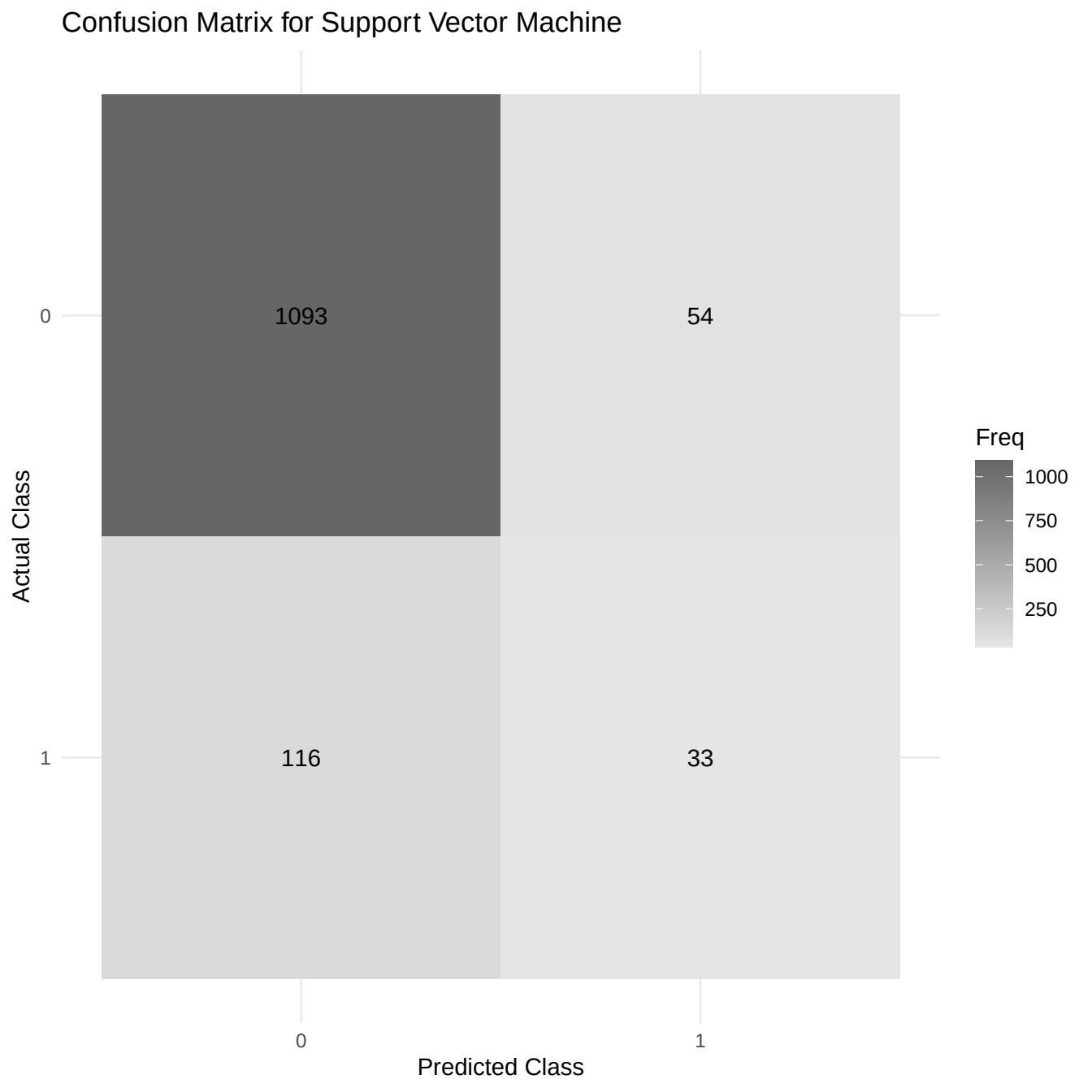

Tuning Results for Support Vector Machine
accuracy
roc_auc
sens
spec
Performance
Tuned Parameter
0.0078125
0.1250000
2.0000000
32.0000000
Radial Basis Function sigma
1.000000e+00
1.000000e−05
1.000000e−10
3.162278e−03
3.162278e−08

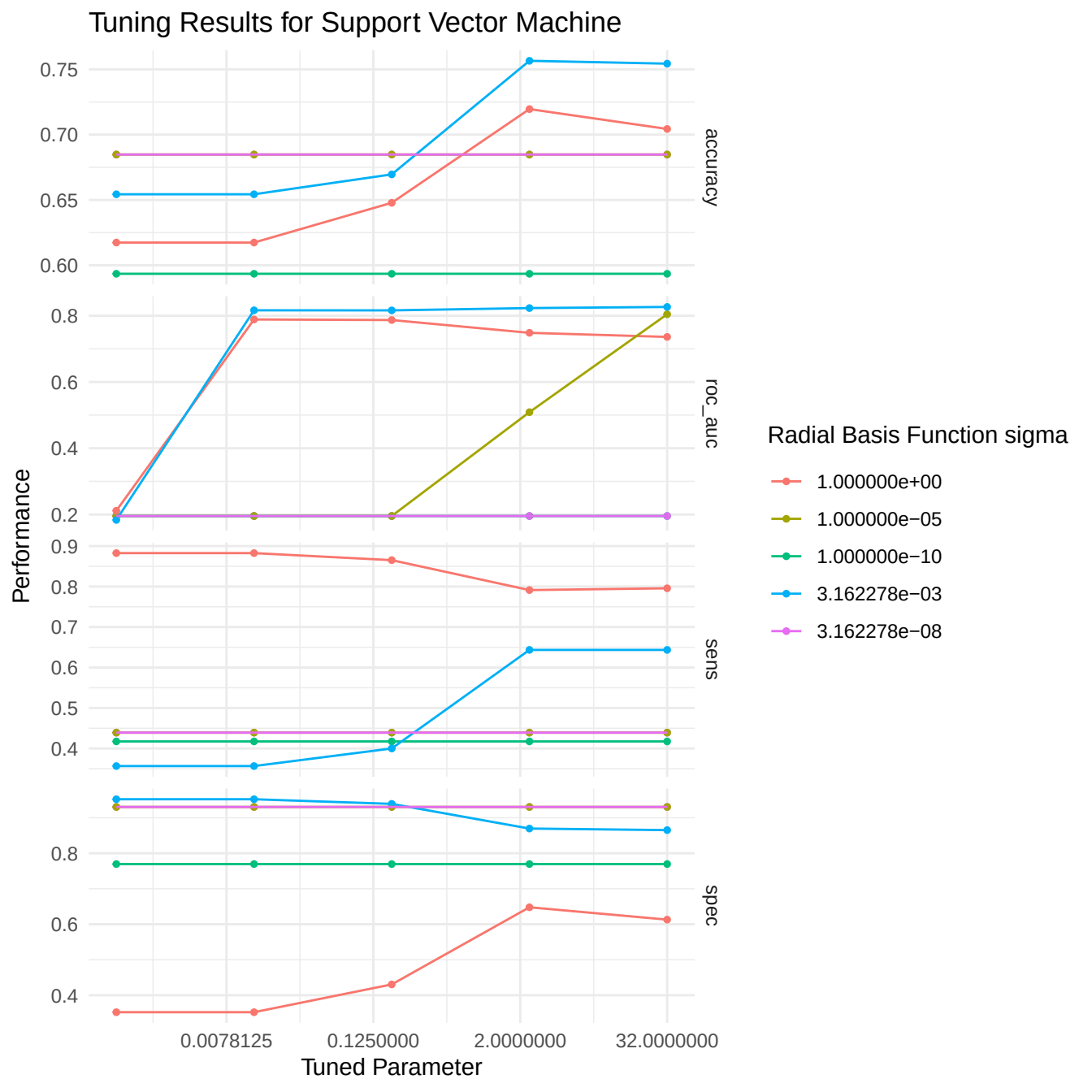

Confusion Matrix for Support Vector Machine
1123
64
86
23
0
1
Actual Class
0
1
Predicted Class
Freq
900
600
300

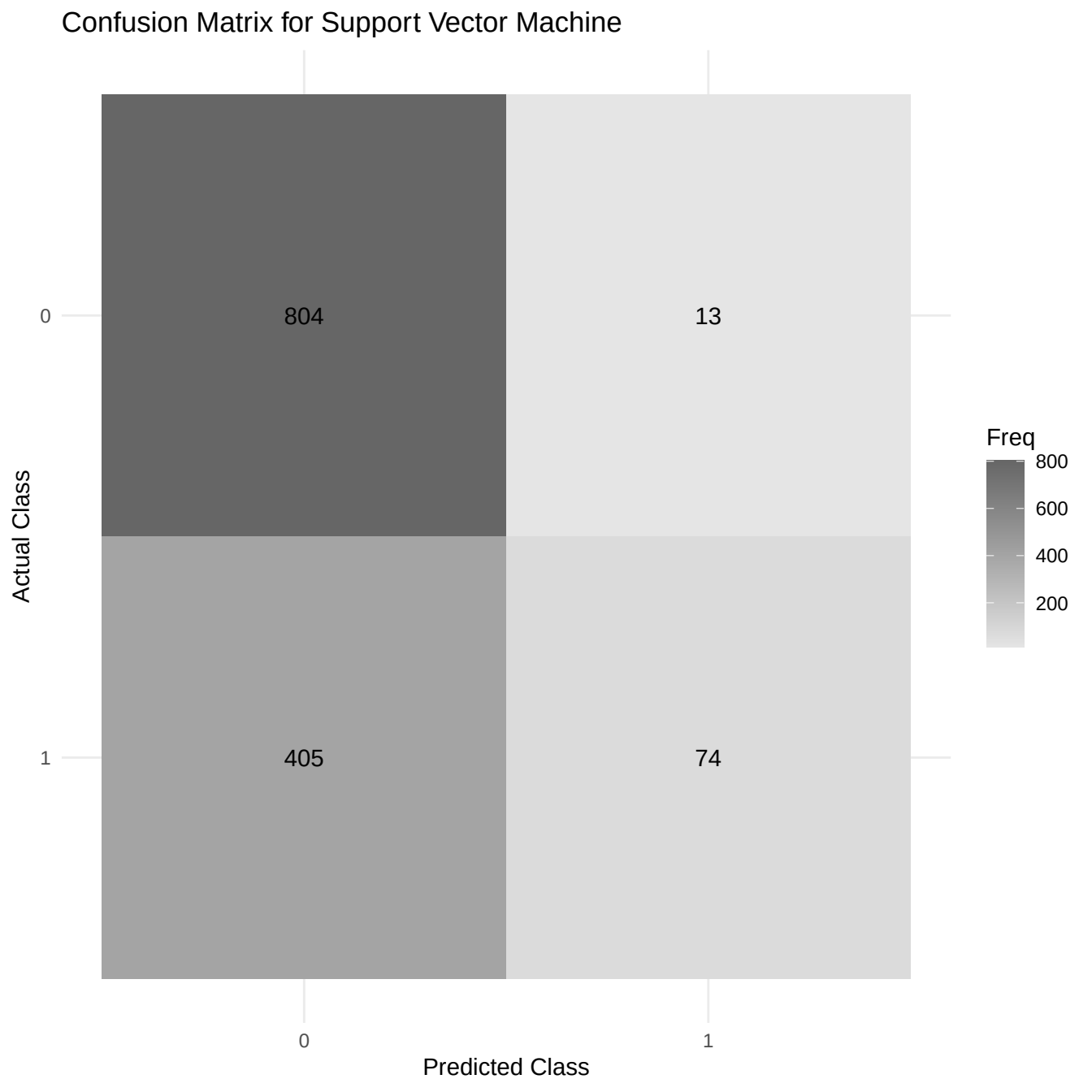

Tuning Results for Support Vector Machine
Performance
Tuned Parameter
accuracy
roc_auc
sens
spec
0.75
0.70
0.65
0.60
0.8
0.6
0.4
0.2
0.9
0.8
0.7
0.6
0.5
0.4
0.8
0.6
0.4
0.0078125
0.1250000
2.0000000
32.0000000
Radial Basis Function sigma
1.000000e+00
1.000000e−05
1.000000e−10
3.162278e−03
3.162278e−08

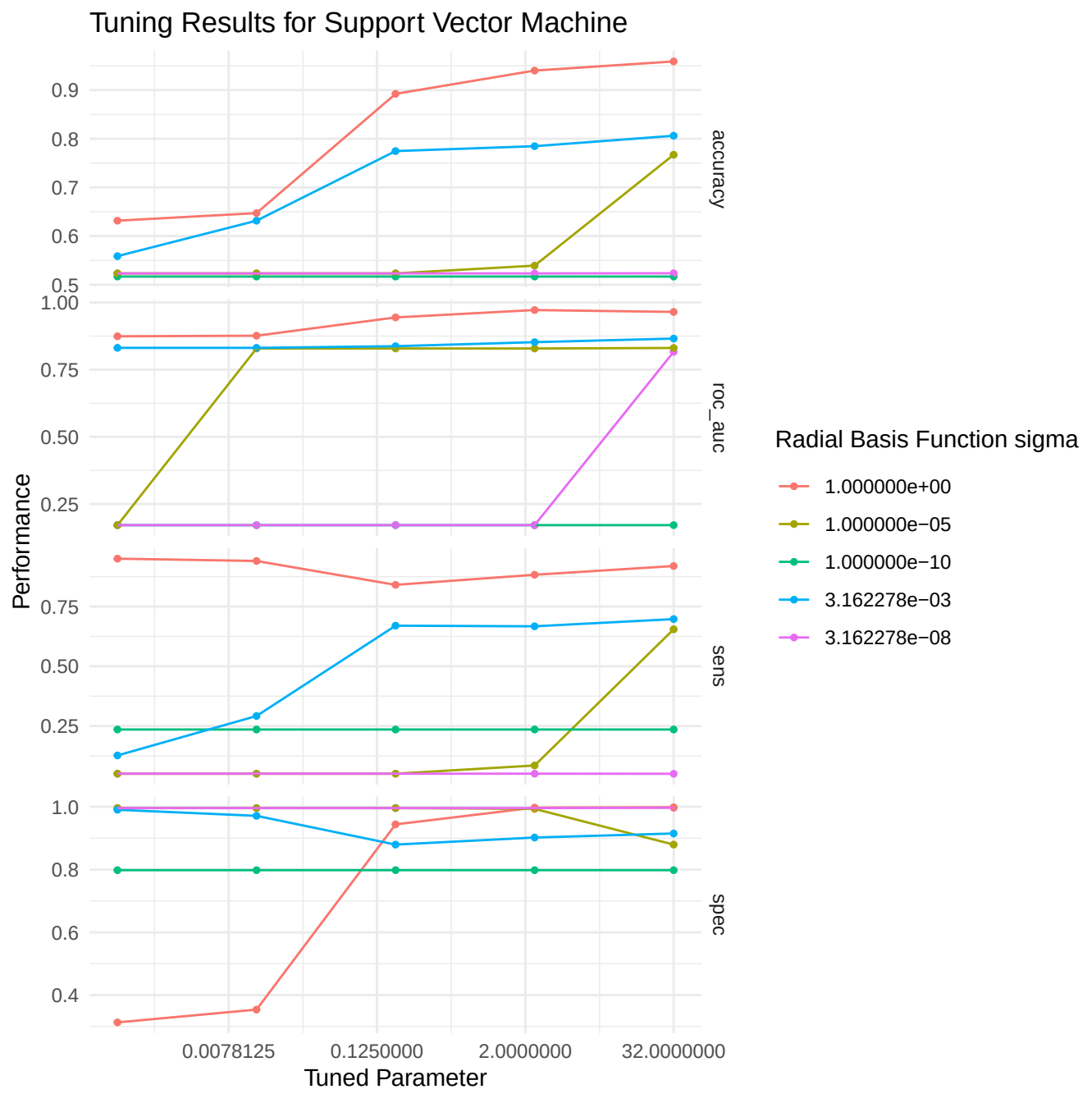

Confusion Matrix for Support Vector Machine
804
13
405
74
0
1
Actual Class
0
1
Predicted Class
Freq
800
600
400
200

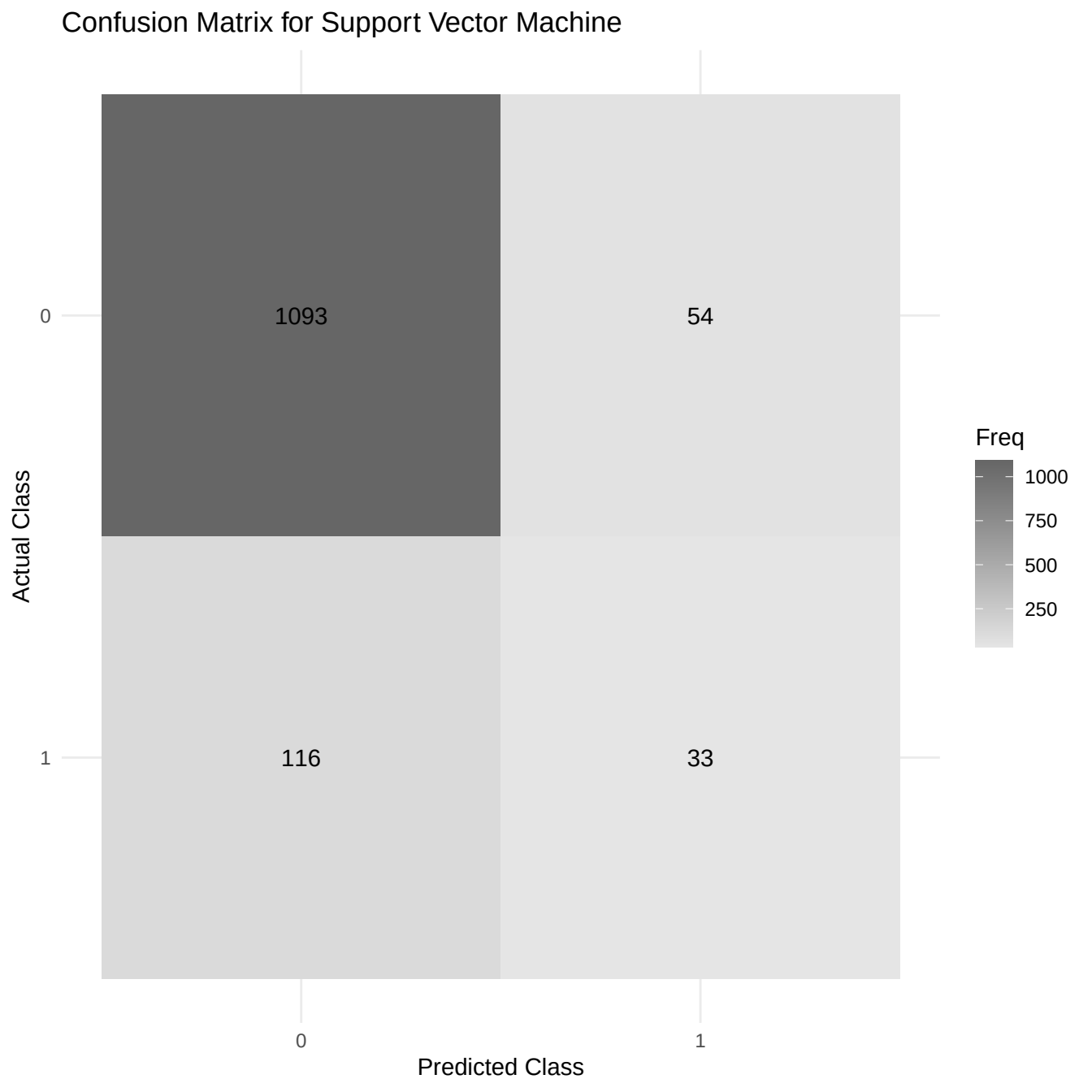

Tuning Results for Support Vector Machine
Performance
Tuned Parameter
0.0078125
0.1250000
2.0000000
32.0000000
accuracy
roc_auc
sens
spec
Radial Basis Function sigma
1.000000e+00
1.000000e−05
1.000000e−10
3.162278e−03
3.162278e−08

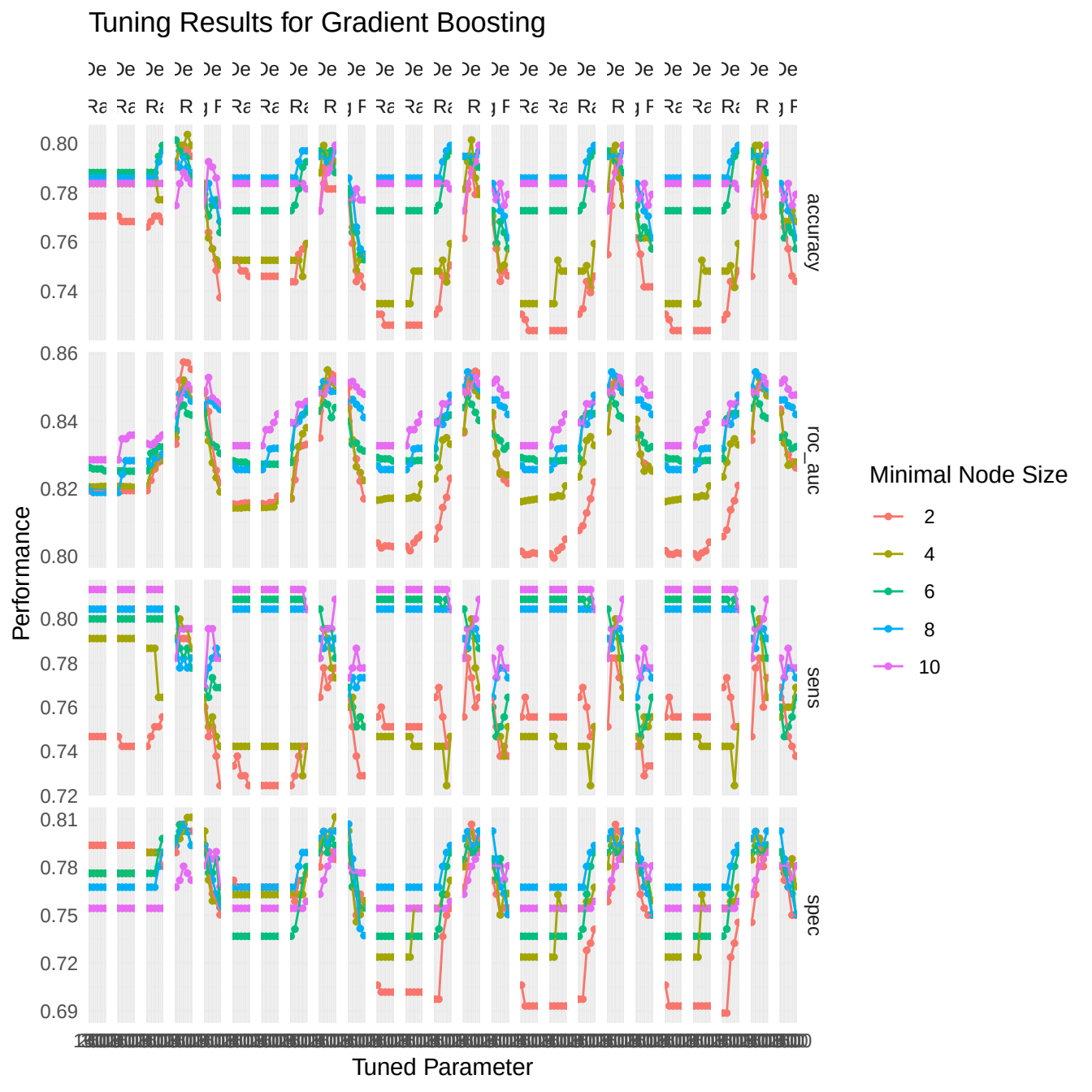

Confusion Matrix for Support Vector Machine
1093
54
116
33
0
1
Actual Class
0
1
Predicted Class
Freq
1000
750
500
250

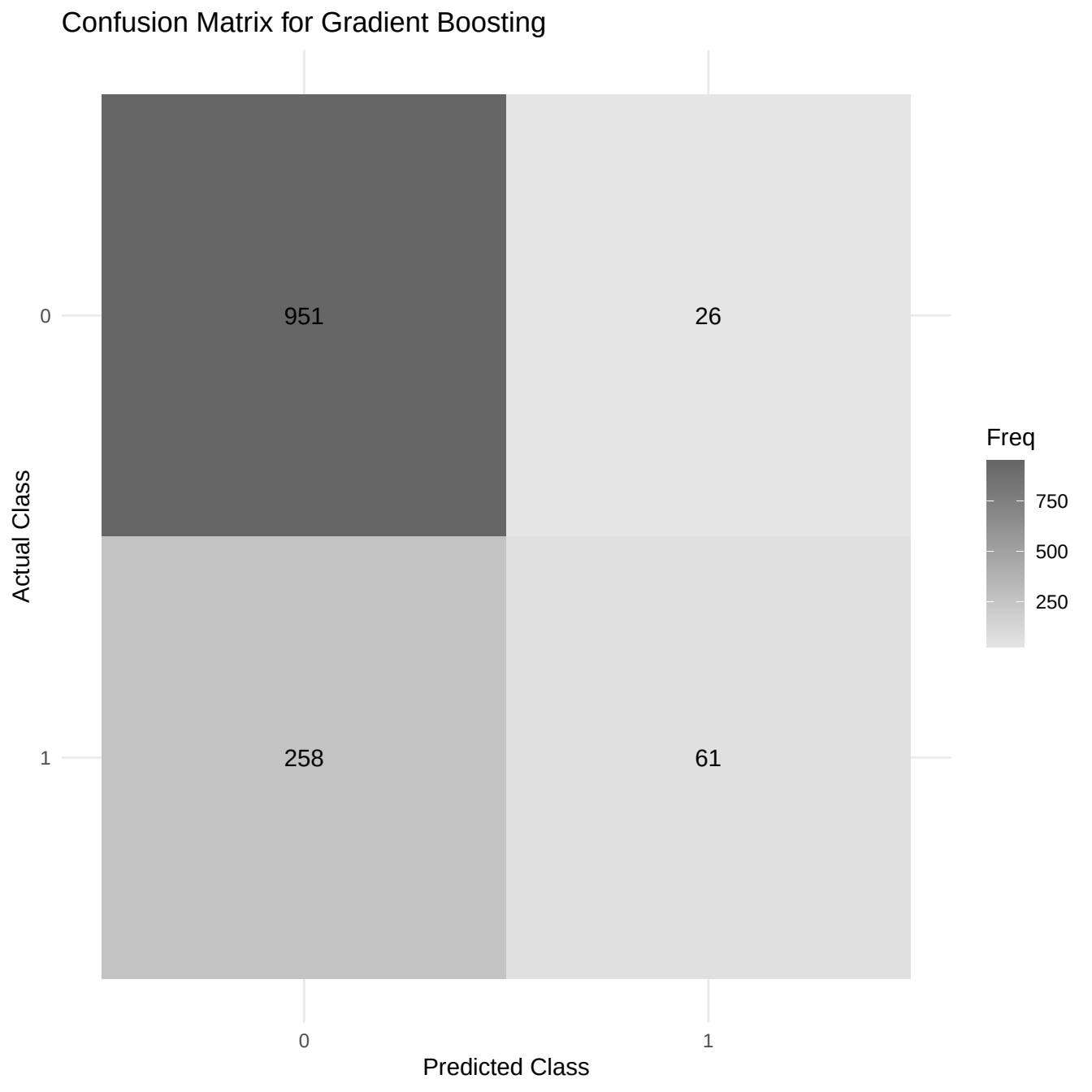

Tuning Results for Support Vector Machine
Performance
Tuned Parameter
accuracy
roc_auc
sens
spec
0.75
0.70
0.65
0.60
0.8
0.6
0.4
0.2
0.9
0.8
0.7
0.6
0.5
0.4
0.8
0.6
0.4
0.0078125
0.1250000
2.0000000
32.0000000
Radial Basis Function sigma
1.000000e+00
1.000000e−05
1.000000e−10
3.162278e−03
3.162278e−08

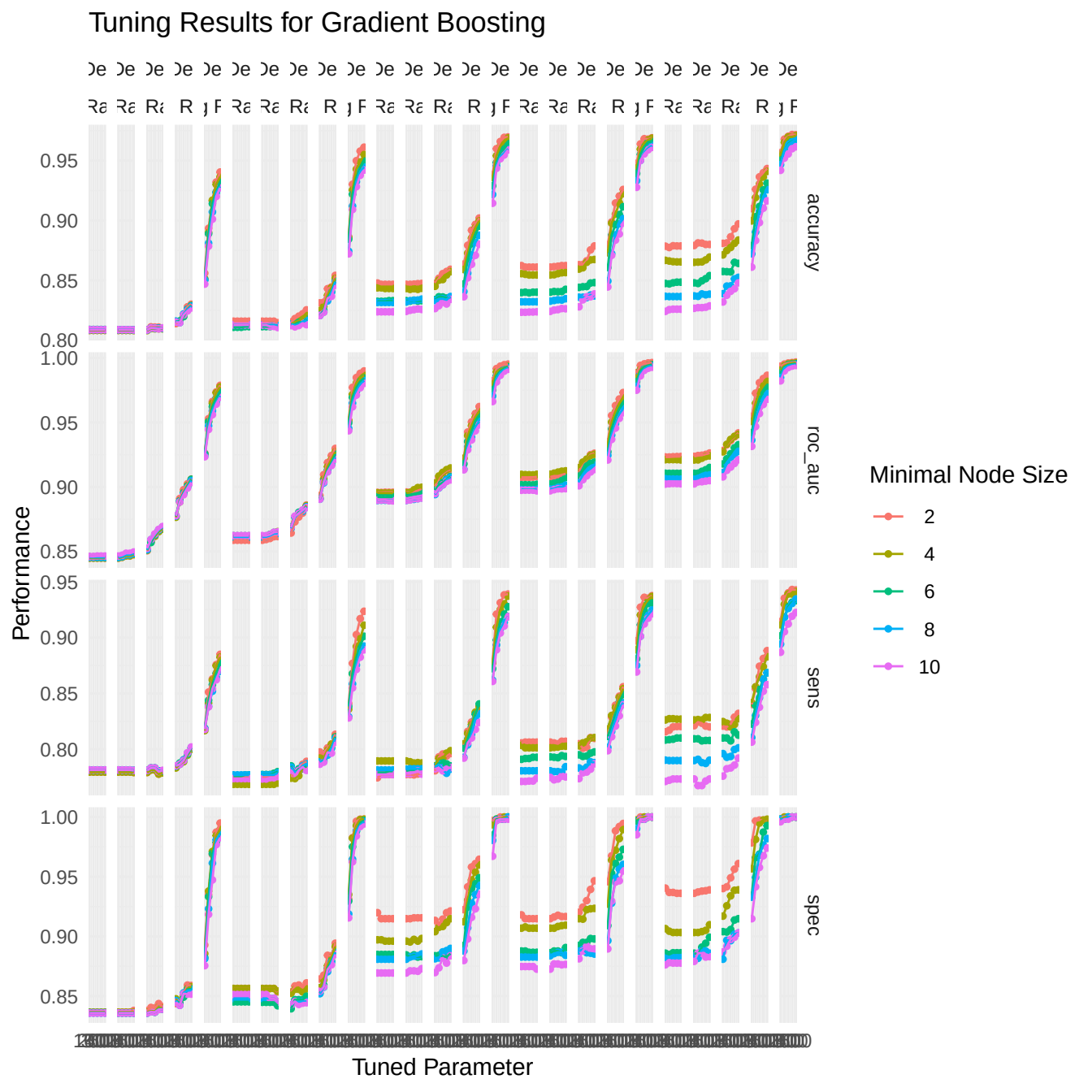

Confusion Matrix for Support Vector Machine
804
13
405
74
0
1
Actual Class
0
1
Predicted Class
Freq
800
600
400
200

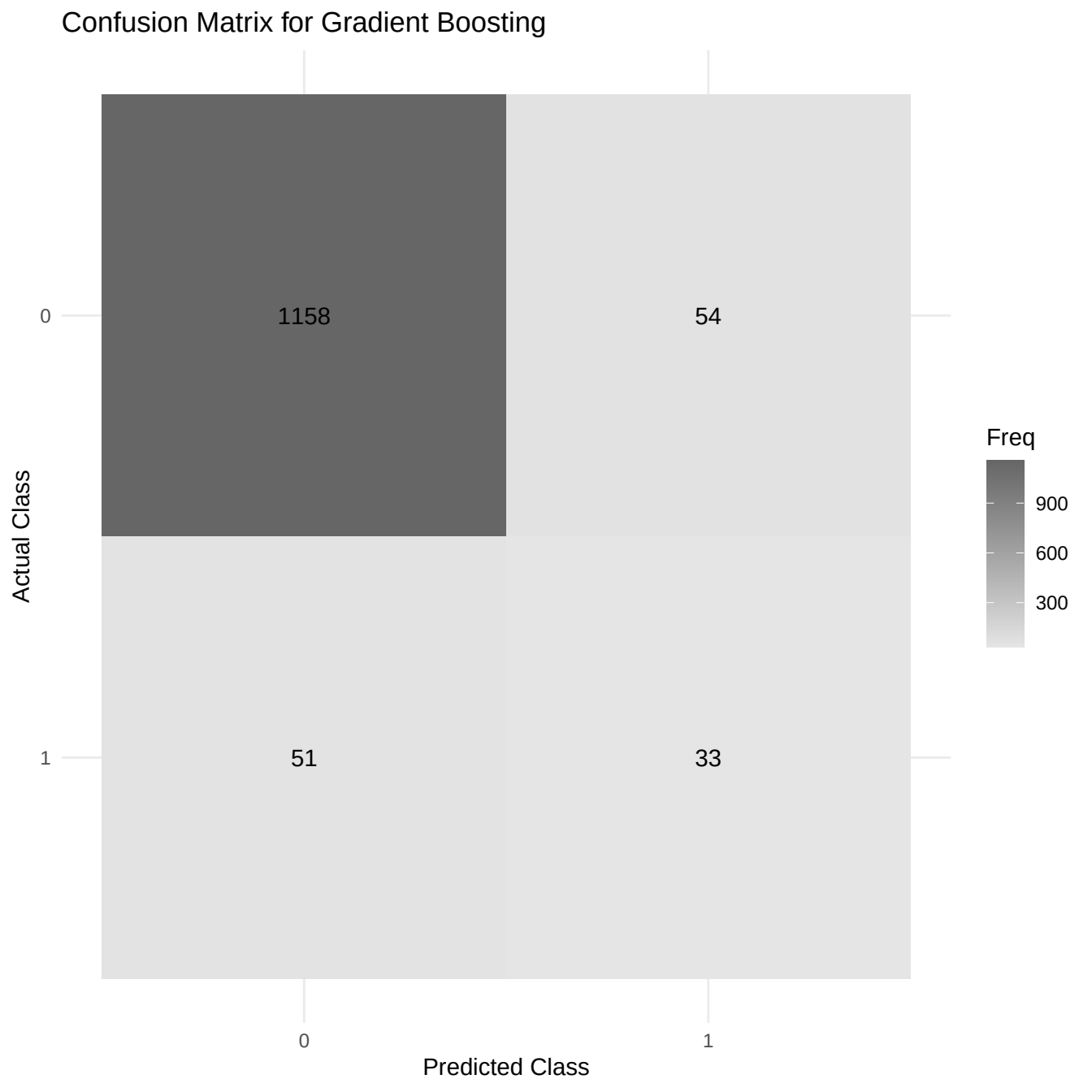

Tuning Results for Support Vector Machine
Performance
Tuned Parameter
0.0078125
0.1250000
2.0000000
32.0000000
accuracy
roc_auc
sens
spec
Radial Basis Function sigma
1.000000e+00
1.000000e−05
1.000000e−10
3.162278e−03
3.162278e−08

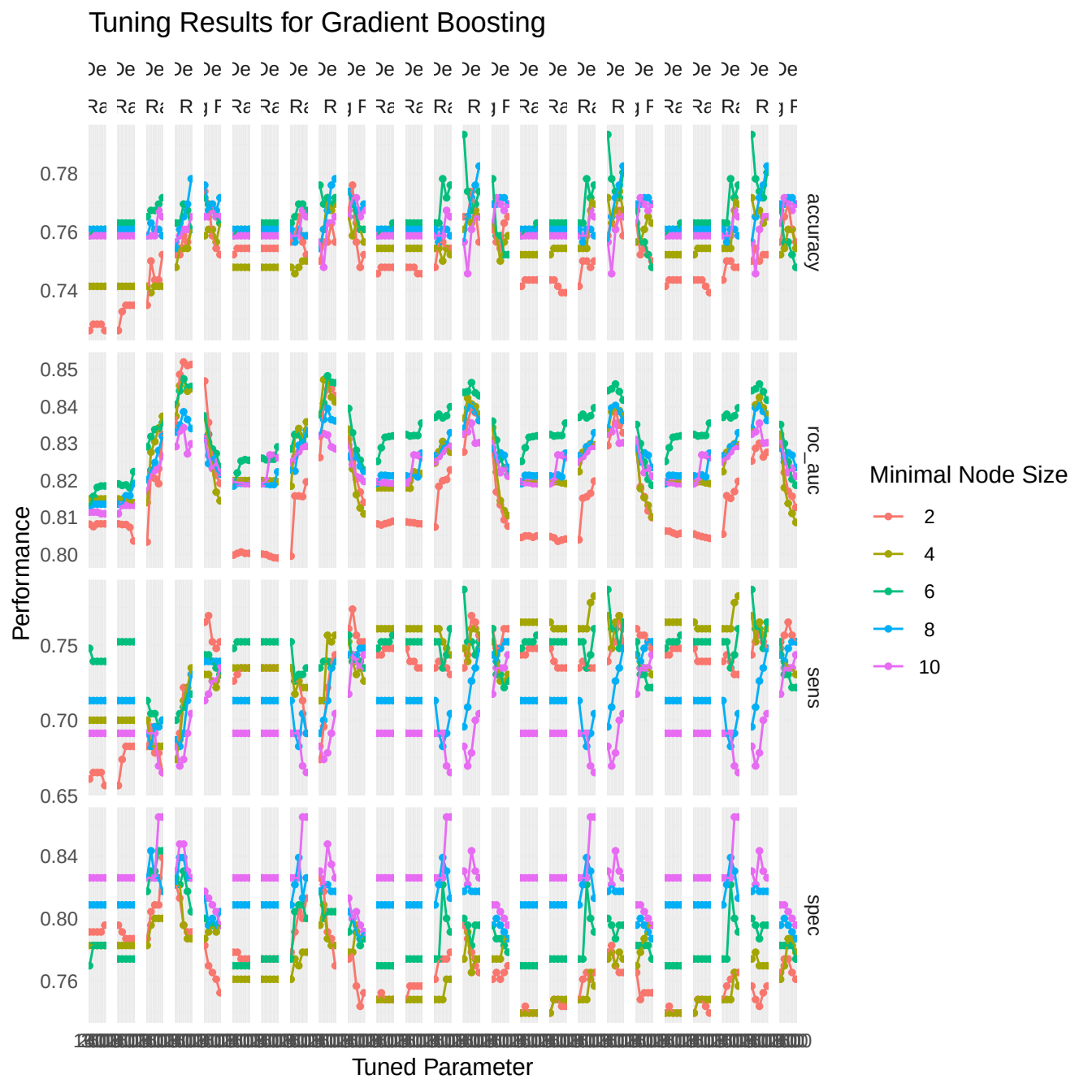

Confusion Matrix for Support Vector Machine
1093
54
116
33
0
1
Actual Class
0
1
Predicted Class
Freq
1000
750
500
250

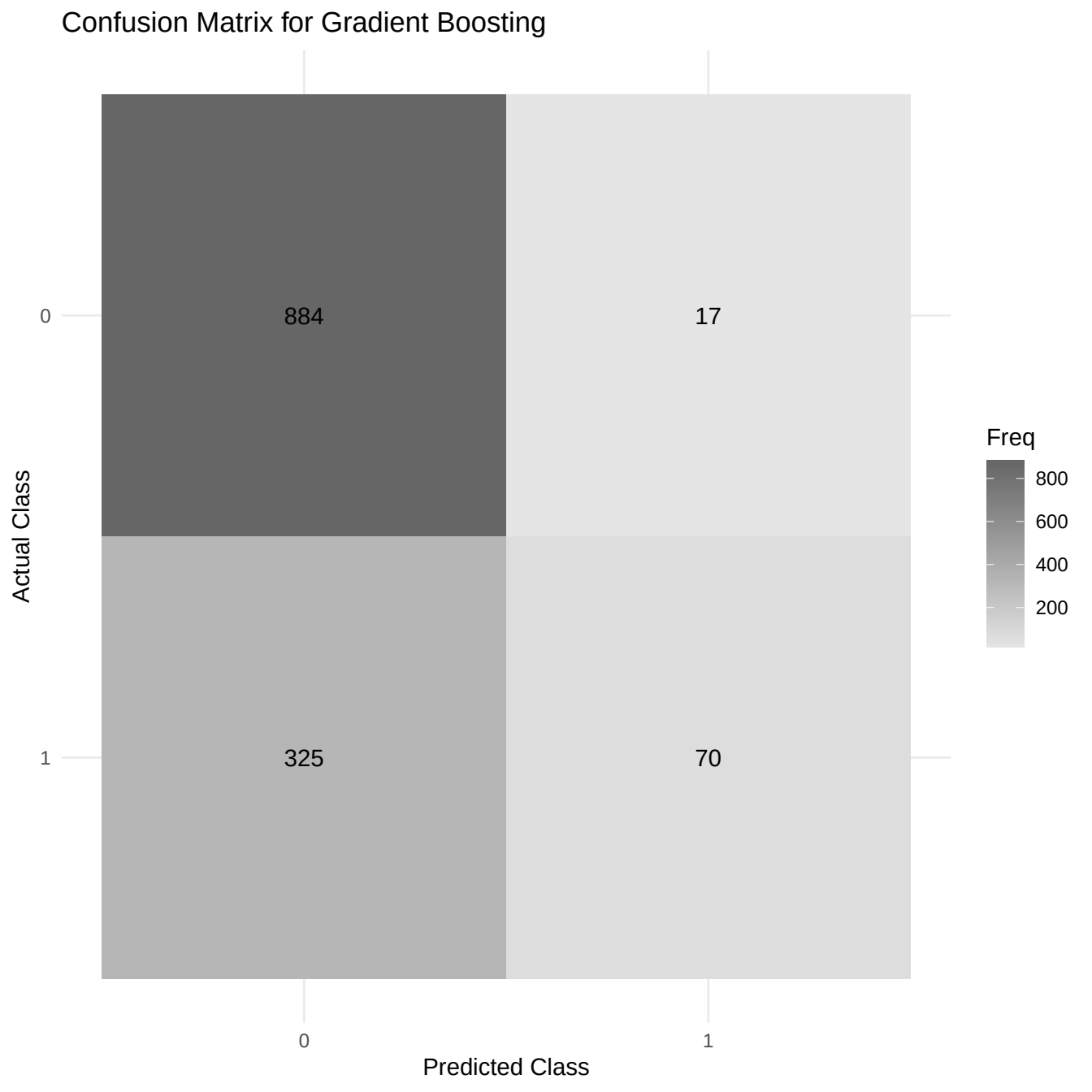

Tuning Results for Gradient Boosting
Performance
accuracy
roc_auc
sens
spec
Tuned Parameter
Minimal Node Size
2
4
6
8
10

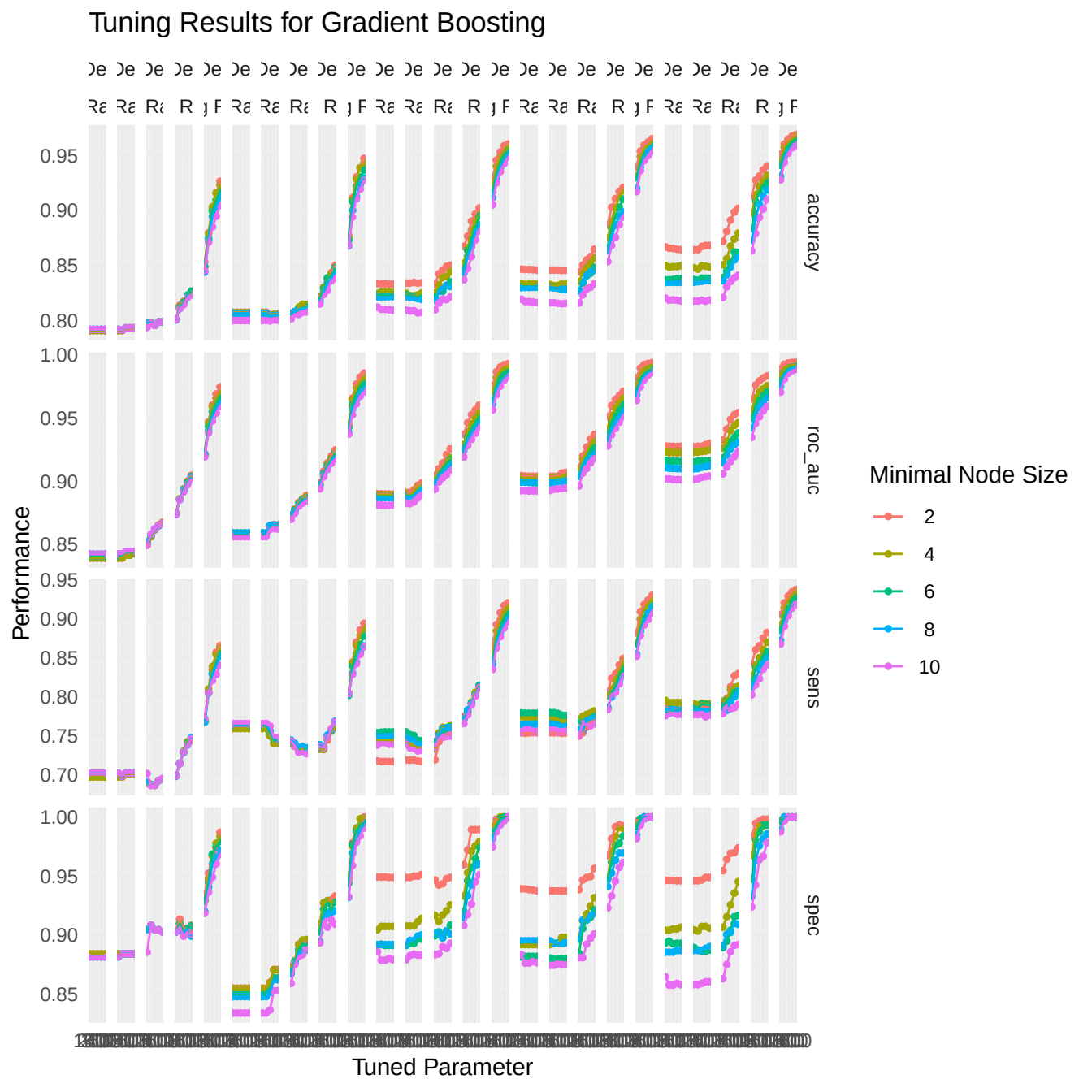

Confusion Matrix for Gradient Boosting
951
26
258
61
0
1
Actual Class
0
1
Predicted Class
Freq
750
500
250

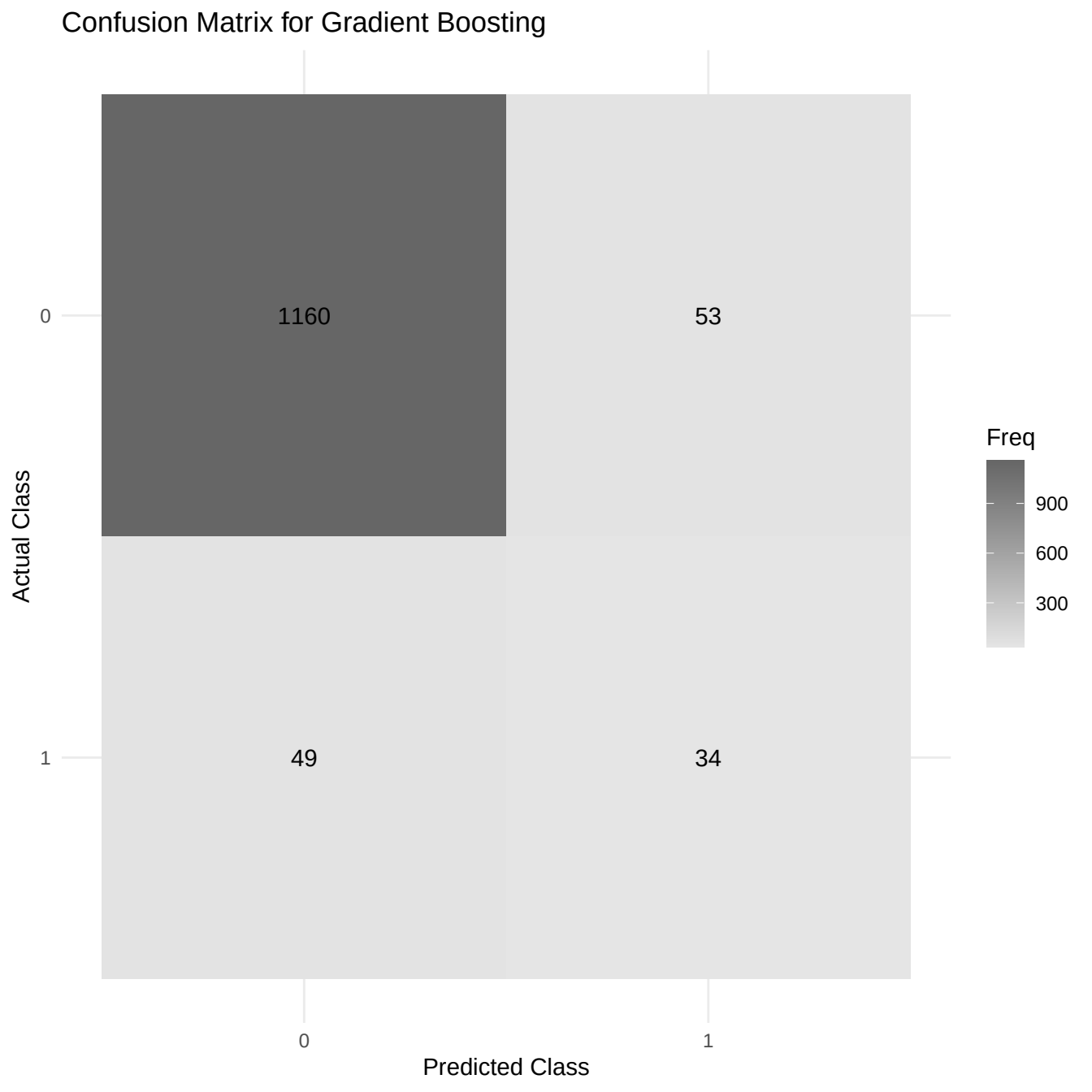

Tuning Results for Gradient Boosting
Performance
Tuned Parameter
accuracy
roc_auc
sens
spec
0.80
0.85
0.90
0.95
1.00
Minimal Node Size
2
4
6
8
10

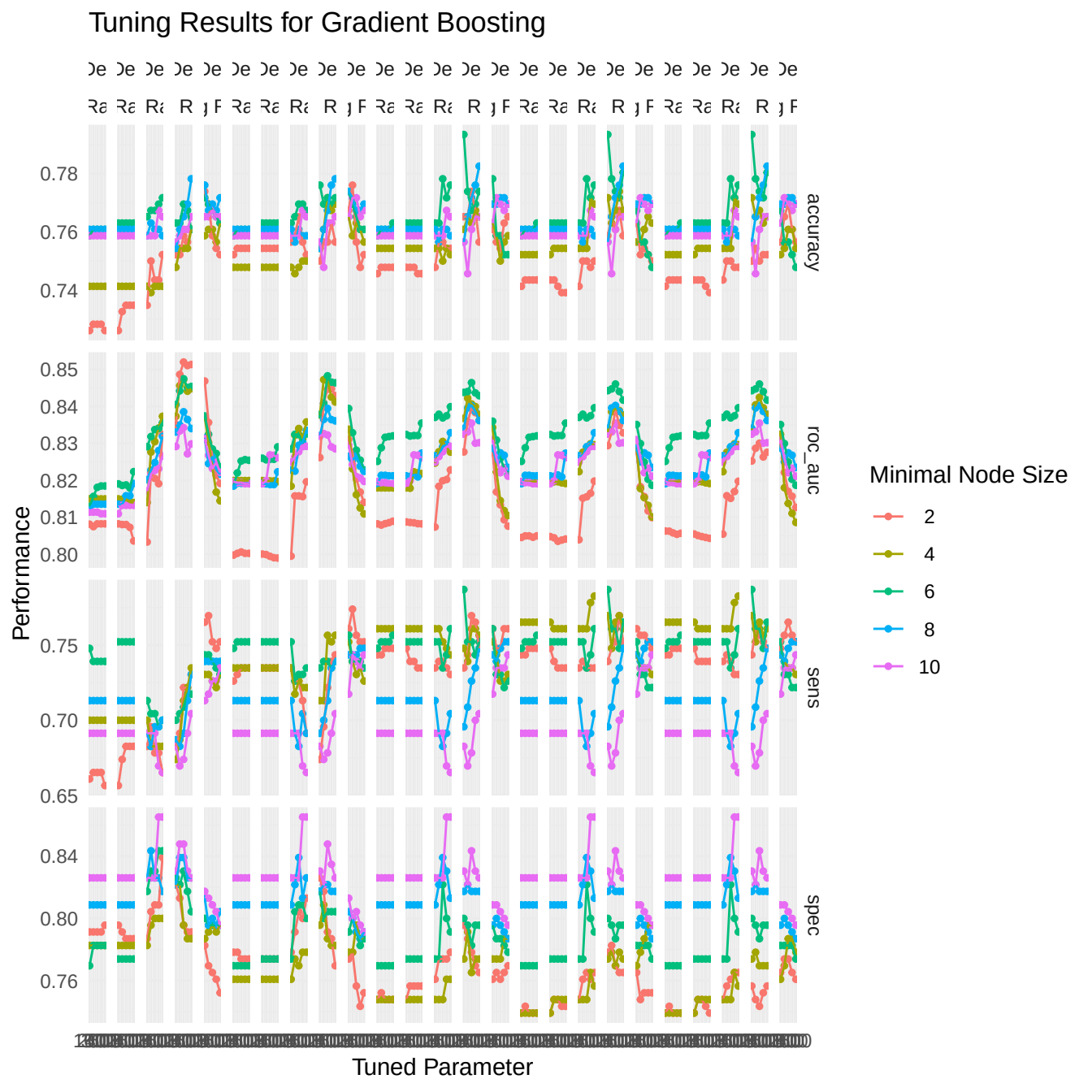

Confusion Matrix for Gradient Boosting
1158
54
51
33
0
1
Actual Class
0
1
Predicted Class
Freq
900
600
300

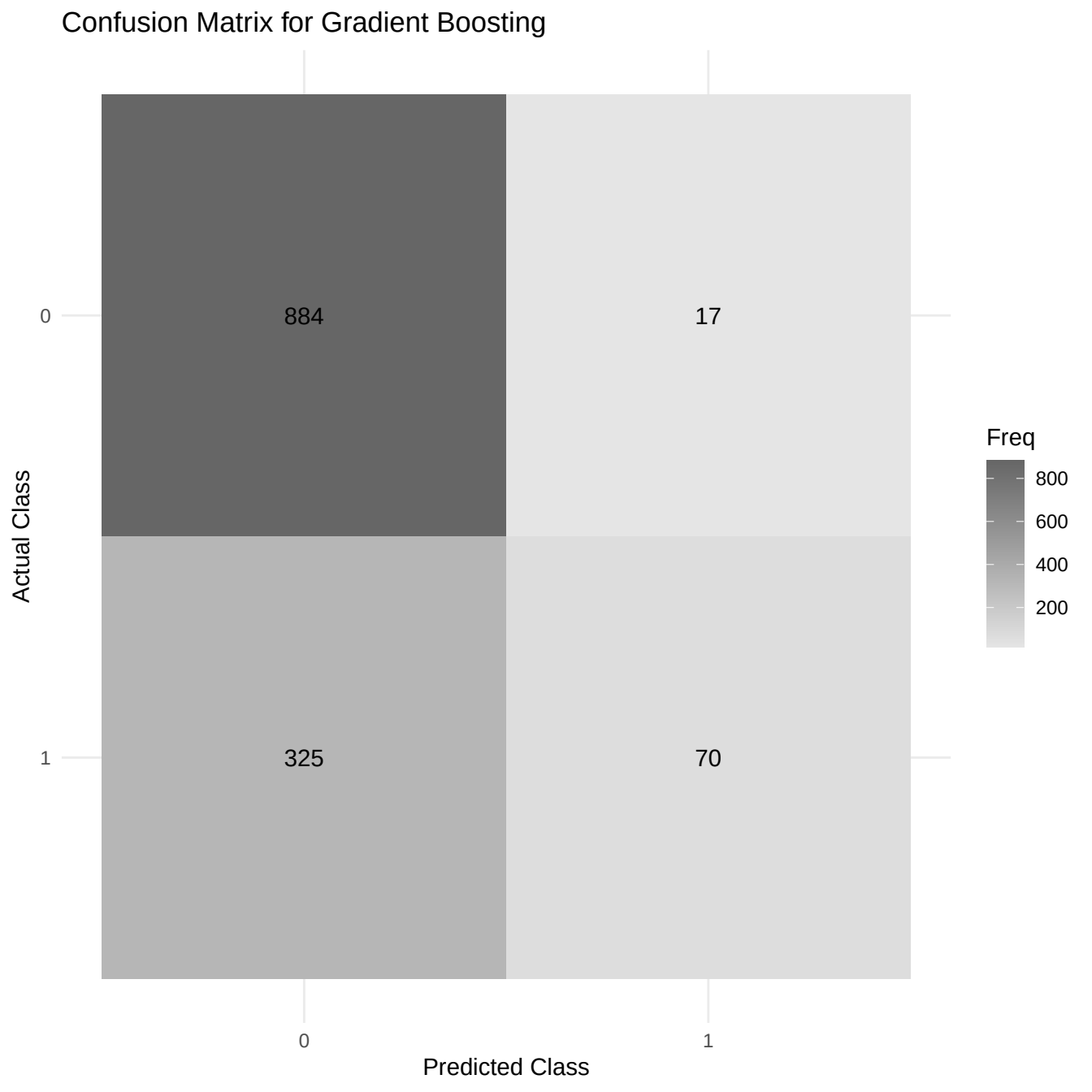

Tuning Results for Gradient Boosting
accuracy
roc_auc
sens
spec
Performance
Tuned Parameter
Minimal Node Size
2
4
6
8
10

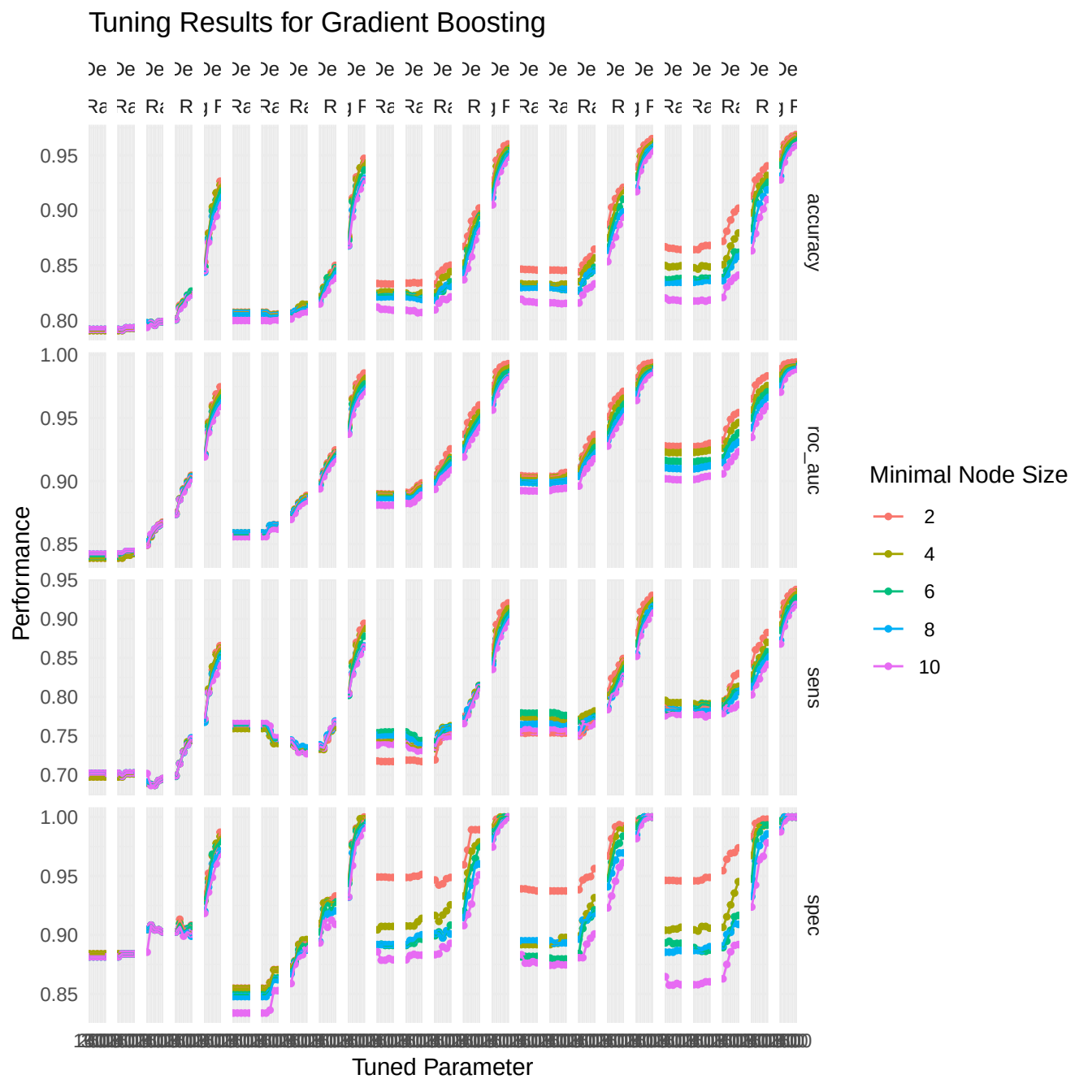

Confusion Matrix for Gradient Boosting
884
17
325
70
0
1
Actual Class
0
1
Predicted Class
Freq
800
600
400
200

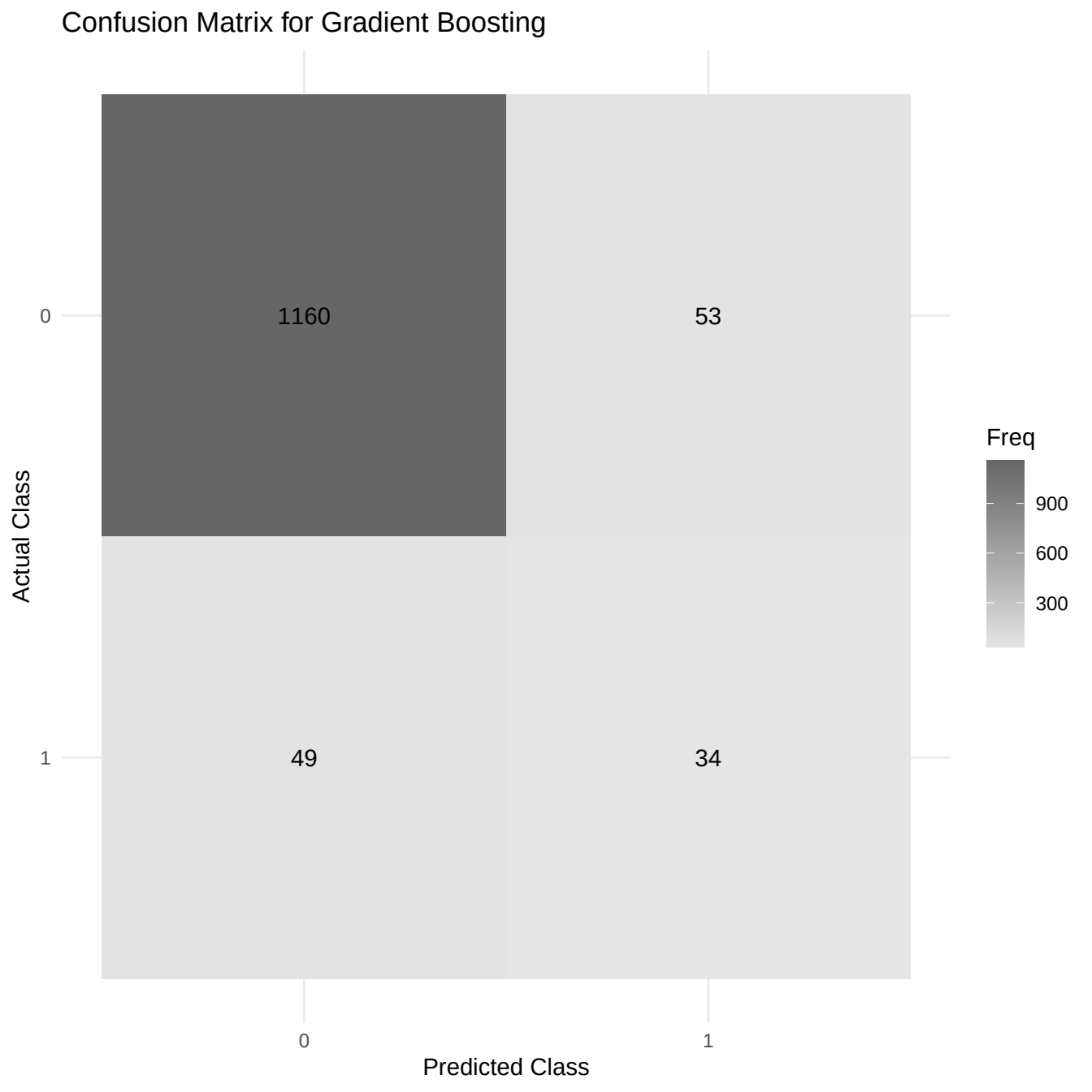

Tuning Results for Gradient Boosting
accuracy
roc_auc
sens
spec
Performance
Tuned Parameter
Minimal Node Size
2
4
6
8
10


Confusion Matrix for Gradient Boosting
1160
53
49
34
0
1
Actual Class
0
1
Predicted Class
Freq
900
600
300


Tuning Results for Gradient Boosting
accuracy
roc_auc
sens
spec
Performance
Tuned Parameter
Minimal Node Size
2
4
6
8
10


Confusion Matrix for Gradient Boosting
884
17
325
70
0
1
Actual Class
0
1
Predicted Class
Freq
800
600
400
200


Tuning Results for Gradient Boosting
accuracy
roc_auc
sens
spec
Performance
Tuned Parameter
Minimal Node Size
2
4
6
8
10


Confusion Matrix for Gradient Boosting
1160
53
49
34
0
1
Actual Class
0
1
Predicted Class
Freq
900
600
300