S2 Table

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Microsatellite data of Carpathian Umbra stocks (404individuals, 33populations, 8regions) | | | | | | | | | |
| UkrTet1 |  |  |  |  |  |  |  |  |  |
| UkrTet3 |  |  |  |  |  |  |  |  |  |
| UkrTet4 |  |  |  |  |  |  |  |  |  |
| UkrTet5 |  |  |  |  |  |  |  |  |  |
| UkrTet6 |  |  |  |  |  |  |  |  |  |
| UkrTet7 |  |  |  |  |  |  |  |  |  |
| UkrTet8 |  |  |  |  |  |  |  |  |  |
| UkrTet9 |  |  |  |  |  |  |  |  |  |
| Pop |  |  |  |  |  |  |  |  |  |
| A1\_U35 | , | 171171 | 159171 | 129133 | 278286 | 229233 | 232252 | 186206 | 253265 |
| A1\_U36 | , | 131159 | 159215 | 125141 | 274282 | 229233 | 228252 | 186186 | 249249 |
| A1\_U37 | , | 131171 | 171183 | 133145 | 278278 | 229229 | 224228 | 186186 | 253269 |
| A1\_U38 | , | 131179 | 159199 | 133189 | 274278 | 229229 | 224236 | 186194 | 253269 |
| A1\_U39 | , | 167183 | 179203 | 129137 | 274278 | 233233 | 220248 | 186186 | 269269 |
| A1\_U40 | , | 131171 | 187207 | 133133 | 270286 | 229233 | 224232 | 186186 | 249265 |
| A1\_U41 | , | 159171 | 199211 | 133197 | 270278 | 229229 | 220220 | 186206 | 257261 |
| A1\_U42 | , | 159159 | 163211 | 129145 | 278282 | 229233 | 224252 | 210222 | 249269 |
| A1\_U43 | , | 131171 | 159195 | 137189 | 278278 | 229229 | 232252 | 186194 | 249281 |
| A1\_U44 | , | 159163 | 171179 | 129141 | 274278 | 229229 | 256256 | 186194 | 249249 |
| A1\_U45 | , | 131163 | 183199 | 125193 | 270278 | 229229 | 232256 | 186186 | 249249 |
| A1\_U46 | , | 131179 | 159211 | 129185 | 282282 | 229229 | 232236 | 190194 | 265269 |
| A1\_U47 | , | 171179 | 159207 | 125141 | 274282 | 229229 | 220252 | 186194 | 265265 |
| A1\_U48 | , | 159167 | 151183 | 125129 | 282286 | 229233 | 224252 | 186194 | 249253 |
| Pop |  |  |  |  |  |  |  |  |  |
| A2\_U255 | , | 135171 | 151171 | 125137 | 278282 | 229233 | 228252 | 194222 | 249249 |
| A2\_U256 | , | 159163 | 199207 | 125133 | 270286 | 229229 | 228228 | 190194 | 253253 |
| A2\_U257 | , | 167179 | 171191 | 137145 | 270290 | 229229 | 212212 | 210218 | 265269 |
| A2\_U258 | , | 139171 | 187195 | 133145 | 286286 | 229229 | 212252 | 190222 | 261265 |
| A2\_U259 | , | 159171 | 163207 | 125145 | 278286 | 229229 | 228232 | 194194 | 265269 |
| A2\_U260 | , | 139171 | 175187 | 125133 | 270282 | 229229 | 212228 | 186222 | 253269 |
| A2\_U261 | , | 159159 | 151179 | 129145 | 270278 | 229229 | 212228 | 190190 | 249269 |
| A2\_U262 | , | 139167 | 151187 | 133133 | 278282 | 229229 | 228252 | 222222 | 249249 |
| A2\_U263 | , | 135171 | 159203 | 137145 | 278286 | 229229 | 212228 | 222222 | 265269 |
| A2\_U264 | , | 171179 | 171203 | 125145 | 278282 | 229229 | 212212 | 218222 | 249269 |
| A2\_U265 | , | 167171 | 159187 | 133145 | 270278 | 229229 | 212248 | 182194 | 253313 |
| A2\_U266 | , | 171183 | 163207 | 145145 | 270278 | 229229 | 228228 | 186186 | 265269 |
| Pop |  |  |  |  |  |  |  |  |  |
| A3\_P31 | , | 131151 | 171187 | 133141 | 270278 | 229233 | 224228 | 182194 | 257285 |
| A3\_P32 | , | 139147 | 171211 | 141141 | 270278 | 229229 | 220228 | 190194 | 245281 |
| A3\_P33 | , | 131163 | 179211 | 137137 | 278278 | 229233 | 220228 | 182194 | 265293 |
| A3\_P34 | , | 139155 | 171211 | 133137 | 278282 | 229229 | 220220 | 190206 | 253301 |
| A3\_P35 | , | 131151 | 171195 | 137141 | 274278 | 229229 | 212224 | 182194 | 253285 |
| Pop |  |  |  |  |  |  |  |  |  |
| A4\_P40 | , | 147159 | 171195 | 133133 | 270278 | 229229 | 212224 | 182182 | 285301 |
| A4\_P41 | , | 131151 | 195207 | 133137 | 270278 | 229229 | 212216 | 182190 | 245245 |
| A4\_P42 | , | 147151 | 171175 | 133137 | 270274 | 229229 | 212216 | 190206 | 245305 |
| A4\_P43 | , | 131155 | 195203 | 133137 | 270278 | 229229 | 212212 | 182194 | 253309 |
| A4\_P44 | , | 147163 | 171195 | 137137 | 270278 | 229229 | 212220 | 198198 | 249297 |
| A4\_P45 | , | 151155 | 195211 | 133137 | 270270 | 229229 | 216220 | 182182 | 245273 |
| A4\_P46 | , | 135155 | 171195 | 133141 | 270282 | 229233 | 212216 | 182190 | 245285 |
| A4\_P47 | , | 159171 | 195199 | 137141 | 278294 | 229229 | 224224 | 182182 | 281305 |
| A4\_P48 | , | 123131 | 151175 | 149149 | 270282 | 229233 | 220224 | 202206 | 261269 |
| A4\_P49 | , | 147155 | 175199 | 133133 | 270278 | 229233 | 220224 | 182202 | 245301 |
| A4\_P50 | , | 131131 | 191211 | 137137 | 270278 | 229229 | 220224 | 182198 | 245285 |
| A4\_P51 | , | 159175 | 171207 | 145145 | 278278 | 229229 | 224224 | 182198 | 245249 |
| A4\_P52 | , | 151155 | 195199 | 133133 | 274294 | 229233 | 212212 | 202202 | 245301 |
| A4\_P53 | , | 131131 | 151171 | 133141 | 278278 | 229229 | 216228 | 186202 | 265305 |
| A4\_P54 | , | 147151 | 171195 | 133137 | 278278 | 229229 | 212212 | 182190 | 249253 |
| Pop |  |  |  |  |  |  |  |  |  |
| B1\_U141 | , | 135183 | 171179 | 141145 | 274282 | 229229 | 240240 | 206218 | 249269 |
| B1\_U142 | , | 135171 | 183187 | 137137 | 270282 | 229229 | 236240 | 186214 | 253261 |
| B1\_U143 | , | 135151 | 175191 | 137173 | 286298 | 229229 | 220228 | 190202 | 261269 |
| B1\_U144 | , | 135159 | 183187 | 121133 | 270278 | 229229 | 224236 | 194194 | 241257 |
| B1\_U145 | , | 151159 | 191207 | 141149 | 278298 | 229229 | 228232 | 182206 | 253293 |
| B1\_U146 | , | 139179 | 183187 | 129137 | 266282 | 229229 | 232232 | 186218 | 269281 |
| B1\_U147 | , | 135163 | 167187 | 129137 | 282282 | 229229 | 212232 | 202210 | 241249 |
| B1\_U148 | , | 135139 | 187191 | 145145 | 278286 | 229229 | 216224 | 186206 | 249261 |
| B1\_U149 | , | 135139 | 187203 | 137137 | 270278 | 229229 | 236244 | 210218 | 249277 |
| B1\_U150 | , | 143163 | 191195 | 133141 | 270294 | 229229 | 232236 | 186190 | 249253 |
| B1\_U151 | , | 139163 | 147183 | 137169 | 278282 | 229229 | 212220 | 182202 | 249269 |
| B1\_U152 | , | 139139 | 147191 | 133137 | 282298 | 229229 | 224244 | 182194 | 269281 |
| B1\_U153 | , | 127131 | 183187 | 129149 | 278286 | 229229 | 224228 | 186190 | 249297 |
| B1\_U154 | , | 139151 | 187191 | 125141 | 278290 | 229233 | 216244 | 198218 | 249253 |
| B1\_U155 | , | 139163 | 187191 | 129129 | 278290 | 229233 | 216244 | 182182 | 253253 |
| Pop |  |  |  |  |  |  |  |  |  |
| B2\_P30 | , | 135159 | 183183 | 129137 | 270298 | 229229 | 236244 | 182194 | 269273 |
| B2\_U157 | , | 163175 | 159175 | 133145 | 278294 | 229229 | 224232 | 194214 | 253261 |
| B2\_U158 | , | 123131 | 159203 | 129149 | 278290 | 229229 | 220224 | 182226 | 253253 |
| B2\_U159 | , | 123171 | 175183 | 145145 | 274286 | 229229 | 220240 | 178206 | 249281 |
| B2\_U160 | , | 131143 | 155171 | 125149 | 266274 | 229229 | 224240 | 190194 | 253289 |
| B2\_U161 | , | 151159 | 167171 | 121149 | 294294 | 229229 | 240240 | 190214 | 253285 |
| B2\_U162 | , | 135171 | 191207 | 137145 | 270274 | 229229 | 220232 | 198214 | 249257 |
| B2\_U163 | , | 139151 | 179187 | 133137 | 274278 | 229229 | 220232 | 182186 | 249249 |
| B2\_U164 | , | 143147 | 191207 | 137137 | 274290 | 229229 | 232248 | 194198 | 273285 |
| B2\_U165 | , | 143179 | 183199 | 145161 | 270270 | 229229 | 224236 | 194222 | 257269 |
| B2\_U166 | , | 163179 | 147175 | 129157 | 286294 | 233233 | 220220 | 186222 | 241261 |
| B2\_U167 | , | 127163 | 191199 | 141141 | 282298 | 229233 | 224228 | 186190 | 249305 |
| B2\_U168 | , | 123171 | 191195 | 133133 | 274278 | 229229 | 216220 | 194194 | 265269 |
| B2\_U169 | , | 151175 | 195195 | 137137 | 274278 | 229229 | 220236 | 186194 | 253257 |
| B2\_U170 | , | 147151 | 147163 | 137137 | 270274 | 229229 | 216244 | 186190 | 253285 |
| Pop |  |  |  |  |  |  |  |  |  |
| B3\_PP1 | , | 147163 | 163167 | 137149 | 274282 | 229229 | 220224 | 190190 | 241265 |
| B3\_PP2 | , | 139143 | 147167 | 125133 | 274278 | 229233 | 216220 | 214218 | 241253 |
| B3\_PP3 | , | 131131 | 187187 | 125141 | 278282 | 229233 | 236244 | 190190 | 253253 |
| B3\_PP4 | , | 155163 | 195199 | 133141 | 278282 | 229229 | 220224 | 186186 | 253301 |
| B3\_PP5 | , | 127163 | 179199 | 133145 | 282282 | 229229 | 224244 | 186214 | 241301 |
| B3\_PP6 | , | 143143 | 147175 | 137141 | 278278 | 229229 | 220244 | 190190 | 245301 |
| B3\_PP7 | , | 167167 | 179199 | 133145 | 274278 | 229229 | 220236 | 174214 | 253301 |
| B3\_PP8 | , | 127127 | 151151 | 133149 | 278282 | 229229 | 216252 | 186206 | 253301 |
| B3\_PP9 | , | 143159 | 147195 | 133137 | 278282 | 229229 | 220232 | 186206 | 253253 |
| B3\_PP10 | , | 131143 | 163199 | 133137 | 274278 | 229229 | 216220 | 190190 | 253265 |
| Pop |  |  |  |  |  |  |  |  |  |
| C1\_T01 | , | 143143 | 207227 | 121145 | 266266 | 229229 | 236236 | 178182 | 277281 |
| C1\_T02 | , | 143151 | 207215 | 121145 | 266270 | 229229 | 228240 | 182186 | 289289 |
| C1\_T03 | , | 143143 | 211223 | 141141 | 266270 | 229229 | 240240 | 182182 | 277289 |
| C1\_T04 | , | 143143 | 207207 | 141145 | 270286 | 229229 | 228240 | 178182 | 277289 |
| C1\_T05 | , | 143143 | 219223 | 141145 | 270286 | 229229 | 236240 | 182182 | 281289 |
| Pop |  |  |  |  |  |  |  |  |  |
| C2\_M01 | , | 143151 | 211211 | 121121 | 266266 | 229229 | 228240 | 182182 | 289289 |
| C2\_M02 | , | 143143 | 207215 | 141145 | 270286 | 229229 | 240240 | 182182 | 277277 |
| C2\_M03 | , | 143159 | 207215 | 141141 | 266286 | 229229 | 236236 | 182182 | 277281 |
| C2\_M04 | , | 143151 | 207211 | 141145 | 266286 | 229229 | 240240 | 182182 | 289289 |
| C2\_M05 | , | 143143 | 207219 | 141141 | 266266 | 229229 | 240240 | 182182 | 281289 |
| C2\_M06 | , | 139159 | 207223 | 141145 | 266266 | 229229 | 236240 | 178182 | 277289 |
| C2\_M07 | , | 143151 | 215223 | 145145 | 286286 | 229229 | 228236 | 178182 | 277289 |
| C2\_M08 | , | 143143 | 215231 | 121141 | 266286 | 229229 | 232236 | 182182 | 289289 |
| C2\_M09 | , | 143143 | 211215 | 141141 | 266286 | 229229 | 236240 | 182182 | 281289 |
| C2\_M10 | , | 143143 | 211215 | 141141 | 266286 | 229229 | 236240 | 182182 | 277281 |
| C2\_M11 | , | 143159 | 211223 | 121141 | 266286 | 229229 | 240240 | 178182 | 277289 |
| C2\_M12 | , | 143143 | 211211 | 141145 | 266266 | 229229 | 236240 | 182182 | 277277 |
| C2\_M13 | , | 143143 | 211215 | 141141 | 266270 | 229229 | 236240 | 182182 | 277289 |
| C2\_M14 | , | 143143 | 203215 | 141141 | 286286 | 229229 | 240240 | 182182 | 277281 |
| C2\_M15 | , | 143151 | 207211 | 121141 | 266286 | 229229 | 228240 | 182182 | 277281 |
| Pop |  |  |  |  |  |  |  |  |  |
| D1\_U1 | , | 167167 | 167171 | 137137 | 294298 | 229229 | 220220 | 194206 | 245245 |
| D1\_U2 | , | 143167 | 167183 | 137137 | 298298 | 229229 | 220220 | 194214 | 289289 |
| D1\_U3 | , | 143167 | 171183 | 133133 | 278302 | 229229 | 224224 | 194206 | 245289 |
| D1\_U4 | , | 143167 | 167183 | 133137 | 294298 | 229229 | 220224 | 194194 | 245289 |
| D1\_U5 | , | 143143 | 167183 | 133133 | 298298 | 229229 | 224224 | 194194 | 245289 |
| D1\_U6 | , | 143143 | 167171 | 133133 | 278298 | 229229 | 216216 | 190194 | 281281 |
| D1\_U7 | , | 143167 | 171171 | 137137 | 278294 | 229229 | 220224 | 206214 | 245289 |
| D1\_U8 | , | 143167 | 183183 | 133137 | 294298 | 229229 | 220224 | 198214 | 245245 |
| D1\_U9 | , | 143167 | 167171 | 133137 | 294318 | 229229 | 220220 | 194194 | 245289 |
| D1\_U10 | , | 167167 | 167167 | 133133 | 278298 | 229229 | 220220 | 194206 | 245289 |
| D1\_U11 | , | 143167 | 167167 | 133133 | 298298 | 229229 | 220220 | 194214 | 245289 |
| D1\_U12 | , | 167167 | 167171 | 133137 | 294294 | 229229 | 220224 | 190206 | 281281 |
| D1\_U13 | , | 143167 | 167167 | 133137 | 278294 | 229229 | 216220 | 190194 | 245289 |
| D1\_U14 | , | 167167 | 183183 | 133137 | 278294 | 229229 | 216220 | 194194 | 245289 |
| D1\_U15 | , | 167167 | 167171 | 137137 | 278294 | 229229 | 220220 | 190194 | 245245 |
| Pop |  |  |  |  |  |  |  |  |  |
| D2\_A1 | , | 179179 | 175175 | 137141 | 278278 | 229229 | 220244 | 186214 | 285285 |
| D2\_A2 | , | 179179 | 175175 | 133137 | 278278 | 229233 | 220224 | 214214 | 285289 |
| D2\_A3 | , | 147147 | 175195 | 137137 | 278282 | 229229 | 220220 | 186214 | 297297 |
| D2\_A4 | , | 155179 | 167175 | 137137 | 278278 | 229229 | 220220 | 210214 | 285289 |
| D2\_A5 | , | 151151 | 175175 | 137141 | 278278 | 229229 | 220220 | 210214 | 293297 |
| D2\_A6 | , | 151151 | 175175 | 137137 | 278278 | 229229 | 220220 | 186214 | 289297 |
| D2\_A7 | , | 151179 | 175175 | 137141 | 278278 | 229229 | 220244 | 210214 | 285285 |
| D2\_A8 | , | 151151 | 167175 | 141145 | 274298 | 229229 | 220220 | 210214 | 285285 |
| D2\_A9 | , | 151167 | 179195 | 137141 | 278278 | 229229 | 220220 | 186210 | 285297 |
| D2\_A10 | , | 151151 | 175175 | 137137 | 278298 | 229229 | 220220 | 210214 | 285293 |
| Pop |  |  |  |  |  |  |  |  |  |
| D3\_K334 | , | 147167 | 167175 | 137137 | 278282 | 229229 | 220224 | 206214 | 285285 |
| D3\_K335 | , | 147175 | 167195 | 137137 | 278278 | 229229 | 220220 | 214214 | 285285 |
| D3\_K336 | , | 171179 | 175175 | 145169 | 278278 | 229229 | 216220 | 186214 | 281285 |
| D3\_K337 | , | 147147 | 175175 | 137137 | 278278 | 229229 | 220220 | 186210 | 285305 |
| D3\_K338 | , | 147179 | 167171 | 141141 | 278278 | 229229 | 220244 | 210214 | 245289 |
| D3\_K339 | , | 147147 | 171171 | 137169 | 278278 | 229229 | 220220 | 186206 | 285305 |
| D3\_K340 | , | 147179 | 171175 | 133145 | 278278 | 229229 | 220220 | 210214 | 285289 |
| D3\_K341 | , | 147151 | 167175 | 137137 | 266274 | 229229 | 220244 | 186206 | 285285 |
| D3\_K342 | , | 147167 | 175175 | 137141 | 278282 | 229229 | 220220 | 214214 | 289293 |
| D3\_K343 | , | 147179 | 171175 | 133137 | 278278 | 229229 | 220220 | 186186 | 293293 |
| Pop |  |  |  |  |  |  |  |  |  |
| D4\_K344 | , | 187207 | 179183 | 133141 | 266282 | 229229 | 248256 | 186186 | 257257 |
| D4\_K345 | , | 187207 | 159175 | 133165 | 270290 | 229229 | 216228 | 190202 | 245297 |
| D4\_K346 | , | 139171 | 171211 | 137149 | 274286 | 229229 | 220224 | 202206 | 269305 |
| D4\_K347 | , | 171187 | 199211 | 161165 | 266278 | 229229 | 248252 | 194202 | 245269 |
| D4\_K348 | , | 135151 | 175199 | 149153 | 266274 | 229229 | 216236 | 186194 | 241253 |
| D4\_K349 | , | 139207 | 179183 | 133141 | 266278 | 225229 | 232248 | 186194 | 245269 |
| D4\_K350 | , | 187207 | 175183 | 141149 | 274290 | 229229 | 216236 | 182194 | 245273 |
| D4\_K351 | , | 159175 | 175175 | 133149 | 274290 | 229229 | 216220 | 186186 | 273273 |
| D4\_K352 | , | 187207 | 171175 | 133145 | 290274 | 229229 | 216216 | 186222 | 273305 |
| D4\_K353 | , | 195195 | 191199 | 137165 | 274274 | 229229 | 220228 | 182186 | 257273 |
| Pop |  |  |  |  |  |  |  |  |  |
| D5\_K354 | , | 187207 | 175187 | 149161 | 274274 | 229229 | 224228 | 186190 | 269301 |
| D5\_K355 | , | 155155 | 171183 | 137149 | 278290 | 229229 | 248248 | 186190 | 241281 |
| D5\_K356 | , | 179183 | 183207 | 137157 | 266274 | 229229 | 220248 | 186218 | 269273 |
| D5\_K357 | , | 175195 | 175183 | 161161 | 278278 | 229229 | 248248 | 198198 | 241273 |
| D5\_K358 | , | 171203 | 171183 | 149161 | 274274 | 229229 | 224228 | 186198 | 273273 |
| Pop |  |  |  |  |  |  |  |  |  |
| E1\_U267 | , | 195195 | 191207 | 133133 | 278298 | 229229 | 208212 | 190198 | 269285 |
| E1\_U268 | , | 195207 | 191203 | 133137 | 298298 | 229229 | 212216 | 186190 | 269269 |
| E1\_U408 | , | 195199 | 163203 | 133145 | 278298 | 229229 | 212216 | 190190 | 281285 |
| E1\_U412 | , | 195195 | 199203 | 137145 | 298298 | 229229 | 216216 | 190190 | 269269 |
| E1\_U413 | , | 199203 | 191203 | 133145 | 298298 | 229229 | 208216 | 190190 | 269269 |
| E1\_U415 | , | 195195 | 191191 | 137137 | 298298 | 229229 | 212224 | 190190 | 269285 |
| E1\_U417 | , | 195195 | 199203 | 133137 | 298298 | 229229 | 212224 | 190190 | 269269 |
| E1\_U419 | , | 203211 | 191195 | 133137 | 298298 | 229229 | 212216 | 190190 | 269285 |
| E1\_U422 | , | 195195 | 203203 | 137145 | 278298 | 229229 | 212212 | 174190 | 269269 |
| E1\_U424 | , | 195195 | 163199 | 133133 | 298298 | 229237 | 216216 | 174190 | 281281 |
| E1\_S01 | , | 199207 | 187223 | 133133 | 298298 | 229229 | 216216 | 190190 | 273281 |
| E1\_S02 | , | 191207 | 215227 | 133145 | 298298 | 229229 | 212212 | 190190 | 269285 |
| E1\_S03 | , | 191191 | 187223 | 133133 | 298298 | 229229 | 216224 | 190190 | 269285 |
| E1\_S04 | , | 191199 | 223223 | 133145 | 278298 | 229229 | 216216 | 186190 | 269281 |
| E1\_S05 | , | 191199 | 191215 | 133133 | 298298 | 229229 | 208224 | 174174 | 269269 |
| E1\_S06 | , | 191199 | 215223 | 137145 | 278298 | 229229 | 208212 | 190198 | 281289 |
| E1\_S07 | , | 191207 | 219227 | 133137 | 298298 | 229229 | 212216 | 190190 | 269285 |
| E1\_S08 | , | 199203 | 187215 | 133137 | 278278 | 229229 | 212216 | 190190 | 269285 |
| E1\_S09 | , | 191199 | 215223 | 133141 | 278298 | 229229 | 216224 | 190190 | 269277 |
| E1\_S10 | , | 203203 | 215223 | 133133 | 298298 | 229229 | 212212 | 174174 | 269285 |
| Pop |  |  |  |  |  |  |  |  |  |
| E2\_P01 | , | 183191 | 167171 | 153153 | 286310 | 237241 | 220240 | 186186 | 273285 |
| E2\_P02 | , | 187187 | 159167 | 137145 | 286286 | 237241 | 224224 | 178186 | 277281 |
| E2\_P03 | , | 179183 | 155163 | 145149 | 286310 | 229233 | 236236 | 174186 | 273277 |
| E2\_P04 | , | 183195 | 183183 | 149149 | 286286 | 233241 | 220224 | 186186 | 285285 |
| E2\_P05 | , | 179191 | 171203 | 149149 | 286286 | 237237 | 220236 | 178186 | 285285 |
| E2\_P06 | , | 191199 | 155199 | 149149 | 286286 | 237241 | 232236 | 174186 | 281285 |
| E2\_P07 | , | 187187 | 179183 | 137149 | 286286 | 237241 | 220236 | 178186 | 273277 |
| E2\_P08 | , | 187191 | 187187 | 149149 | 286310 | 233241 | 220240 | 186186 | 277285 |
| E2\_P09 | , | 187191 | 179179 | 133153 | 286310 | 237237 | 224236 | 174186 | 285285 |
| E2\_P10 | , | 183191 | 175179 | 133145 | 310310 | 241241 | 220220 | 186186 | 273285 |
| Pop |  |  |  |  |  |  |  |  |  |
| E3\_P222 | , | 159183 | 147175 | 145145 | 278278 | 237237 | 220220 | 174178 | 281297 |
| E3\_P223 | , | 159183 | 147207 | 145145 | 286286 | 233237 | 216236 | 174178 | 281281 |
| E3\_P224 | , | 183183 | 175175 | 141149 | 286290 | 229237 | 216232 | 174174 | 285289 |
| E3\_P225 | , | 159171 | 179203 | 141145 | 278278 | 237237 | 216236 | 174174 | 281285 |
| E3\_P226 | , | 159171 | 203207 | 141145 | 286290 | 237237 | 212220 | 174174 | 281297 |
| E3\_P227 | , | 163163 | 183203 | 141145 | 282286 | 237237 | 216220 | 174174 | 277285 |
| E3\_P228 | , | 167167 | 183199 | 145145 | 286290 | 237237 | 232236 | 174174 | 289297 |
| E3\_P229 | , | 171183 | 179187 | 145153 | 286290 | 229237 | 216236 | 174178 | 281293 |
| E3\_P230 | , | 183183 | 151207 | 129141 | 278278 | 237237 | 212236 | 174178 | 281281 |
| E3\_P231 | , | 159159 | 199207 | 145157 | 286290 | 237237 | 212220 | 174174 | 277281 |
| E3\_P232 | , | 179191 | 147211 | 145145 | 278286 | 237237 | 216220 | 174178 | 277277 |
| E3\_P233 | , | 159159 | 207207 | 141141 | 282290 | 233237 | 212220 | 174174 | 285297 |
| E3\_P234 | , | 159159 | 183203 | 141149 | 278290 | 229237 | 236236 | 174178 | 277281 |
| E3\_P235 | , | 171187 | 179187 | 137145 | 278278 | 237237 | 220220 | 174174 | 281285 |
| E3\_P236 | , | 151167 | 175183 | 145145 | 278278 | 229237 | 220232 | 174174 | 277289 |
| Pop |  |  |  |  |  |  |  |  |  |
| E4\_U171 | , | 171175 | 179191 | 141153 | 282290 | 237237 | 220220 | 174178 | 297301 |
| E4\_U172 | , | 175191 | 179179 | 141149 | 282286 | 229237 | 236240 | 174178 | 277293 |
| E4\_U173 | , | 167171 | 175207 | 141145 | 282290 | 237237 | 216220 | 174178 | 281305 |
| E4\_U174 | , | 163171 | 179207 | 141161 | 278286 | 237237 | 220220 | 178178 | 277281 |
| E4\_U175 | , | 171179 | 175179 | 145145 | 290290 | 233237 | 212236 | 174178 | 277281 |
| E4\_U176 | , | 187199 | 167195 | 145145 | 278290 | 229237 | 212232 | 178178 | 285289 |
| E4\_U177 | , | 159163 | 155199 | 141145 | 278282 | 233237 | 212220 | 174178 | 277277 |
| E4\_U178 | , | 159171 | 171203 | 149161 | 278290 | 237237 | 220224 | 174178 | 281297 |
| E4\_U179 | , | 171187 | 179203 | 141141 | 278286 | 237237 | 212236 | 178182 | 277277 |
| E4\_U180 | , | 159187 | 179203 | 141157 | 286290 | 237237 | 216220 | 174174 | 273285 |
| E4\_U181 | , | 171171 | 199211 | 145145 | 286290 | 237237 | 212232 | 174178 | 285285 |
| E4\_U182 | , | 187199 | 175203 | 145145 | 290290 | 229237 | 220232 | 178186 | 277289 |
| E4\_U183 | , | 167187 | 203207 | 141149 | 286290 | 237237 | 212224 | 174178 | 277281 |
| E4\_U184 | , | 171183 | 171195 | 145145 | 286310 | 237237 | 212220 | 174178 | 285293 |
| E4\_U185 | , | 159191 | 183195 | 149161 | 278278 | 237237 | 220236 | 174178 | 277289 |
| Pop |  |  |  |  |  |  |  |  |  |
| E5\_P242 | , | 199199 | 179199 | 145149 | 286290 | 233237 | 212228 | 178186 | 273281 |
| E5\_P243 | , | 171191 | 179195 | 145145 | 286286 | 237237 | 212228 | 174174 | 289301 |
| E5\_P244 | , | 195203 | 171179 | 129145 | 286290 | 237241 | 212220 | 174174 | 281285 |
| E5\_P245 | , | 167171 | 199199 | 141145 | 286310 | 237237 | 212224 | 178178 | 281289 |
| E5\_P246 | , | 195203 | 179179 | 145153 | 286290 | 229237 | 212212 | 174178 | 277281 |
| Pop |  |  |  |  |  |  |  |  |  |
| E6\_P192 | , | 175199 | 187199 | 133137 | 282290 | 229237 | 212228 | 186186 | 277281 |
| E6\_P193 | , | 151159 | 183191 | 129133 | 282290 | 229241 | 212224 | 182186 | 277305 |
| E6\_P194 | , | 163163 | 179203 | 129133 | 286290 | 237237 | 212220 | 182186 | 285309 |
| E6\_P195 | , | 171179 | 171191 | 129137 | 290290 | 237237 | 224224 | 174186 | 289293 |
| E6\_P196 | , | 147159 | 167207 | 141149 | 278282 | 237237 | 228240 | 174174 | 265281 |
| E6\_P197 | , | 155163 | 187203 | 133133 | 290314 | 241241 | 236236 | 178186 | 277305 |
| E6\_P198 | , | 163179 | 175187 | 133141 | 282290 | 233237 | 220236 | 174182 | 273305 |
| E6\_P199 | , | 171199 | 191203 | 129137 | 286290 | 237241 | 228236 | 174186 | 277321 |
| E6\_P200 | , | 151179 | 167191 | 133133 | 290318 | 229229 | 212224 | 182186 | 289305 |
| E6\_P201 | , | 171187 | 179199 | 129141 | 286290 | 241241 | 220236 | 174174 | 277277 |
| E6\_P202 | , | 163163 | 179191 | 137149 | 294306 | 241241 | 228228 | 174186 | 273305 |
| E6\_P203 | , | 179191 | 175179 | 129133 | 290290 | 237241 | 212228 | 174178 | 305309 |
| Pop |  |  |  |  |  |  |  |  |  |
| E7\_P176 | , | 175179 | 191207 | 129133 | 278286 | 237237 | 228228 | 178186 | 281305 |
| E7\_P177 | , | 163163 | 199199 | 129137 | 286286 | 229237 | 228232 | 182186 | 305313 |
| E7\_P178 | , | 163175 | 175195 | 129133 | 282286 | 237237 | 224228 | 174186 | 277305 |
| E7\_P179 | , | 175175 | 191199 | 133145 | 286286 | 237241 | 228232 | 174182 | 281293 |
| E7\_P180 | , | 163183 | 183199 | 137157 | 278282 | 229241 | 212232 | 178182 | 277305 |
| E7\_P181 | , | 151155 | 163179 | 133141 | 286294 | 237237 | 224232 | 174182 | 281305 |
| E7\_P182 | , | 171199 | 195199 | 133153 | 290306 | 237241 | 212240 | 178182 | 305305 |
| E7\_P183 | , | 167207 | 203203 | 133157 | 286310 | 237241 | 228236 | 174178 | 265281 |
| E7\_P184 | , | 163171 | 183207 | 129133 | 278278 | 237241 | 228236 | 174174 | 277281 |
| E7\_P185 | , | 175179 | 167199 | 133157 | 286286 | 237237 | 228240 | 174174 | 281285 |
| E7\_P186 | , | 163175 | 183191 | 129137 | 282290 | 237237 | 228236 | 174174 | 265281 |
| E7\_P187 | , | 175199 | 191195 | 129133 | 286310 | 229241 | 236236 | 174174 | 281305 |
| E7\_P188 | , | 179179 | 191199 | 129133 | 278286 | 237237 | 228228 | 174174 | 281305 |
| E7\_P189 | , | 163167 | 191203 | 141157 | 290298 | 237237 | 224232 | 174178 | 277281 |
| E7\_P190 | , | 175179 | 179187 | 141157 | 286290 | 237241 | 212224 | 178186 | 281317 |
| Pop |  |  |  |  |  |  |  |  |  |
| E8\_P248 | , | 187187 | 171171 | 145149 | 286286 | 237241 | 220224 | 186186 | 281285 |
| E8\_P249 | , | 187187 | 171175 | 145145 | 282310 | 237241 | 220224 | 186186 | 281285 |
| E8\_P250 | , | 175187 | 171171 | 145149 | 282286 | 237241 | 220224 | 186186 | 273281 |
| E8\_P251 | , | 187187 | 171175 | 145145 | 282310 | 237241 | 220224 | 186186 | 281285 |
| E8\_P252 | , | 187187 | 171175 | 145145 | 282286 | 237241 | 220236 | 178186 | 273281 |
| E8\_P253 | , | 175187 | 171175 | 145145 | 286310 | 237241 | 220236 | 178186 | 281285 |
| E8\_P254 | , | 175187 | 171171 | 145149 | 282310 | 237241 | 220224 | 186186 | 273281 |
| E8\_P255 | , | 175187 | 171171 | 145145 | 282310 | 237241 | 220224 | 186186 | 273281 |
| E8\_P256 | , | 175187 | 171175 | 145145 | 286310 | 237241 | 220236 | 186186 | 281285 |
| E8\_P257 | , | 183183 | 175175 | 145145 | 282286 | 237241 | 220236 | 174186 | 277281 |
| Pop |  |  |  |  |  |  |  |  |  |
| F1\_P101 | , | 175179 | 179187 | 137141 | 282286 | 229237 | 220220 | 174174 | 281289 |
| F1\_P102 | , | 187187 | 163179 | 133145 | 282282 | 229237 | 220220 | 166174 | 265289 |
| F1\_P103 | , | 179195 | 167199 | 133133 | 282294 | 229229 | 228236 | 174174 | 277285 |
| F1\_P104 | , | 159187 | 167183 | 133133 | 298302 | 229237 | 220228 | 166178 | 289305 |
| F1\_P105 | , | 167167 | 175195 | 133133 | 278286 | 237237 | 220232 | 166174 | 289293 |
| F1\_P106 | , | 167171 | 167179 | 129141 | 278278 | 237237 | 220232 | 174174 | 273289 |
| F1\_P107 | , | 171171 | 179195 | 125141 | 282286 | 229241 | 220228 | 174174 | 265273 |
| F1\_P108 | , | 171175 | 163183 | 133141 | 282302 | 237237 | 212228 | 174178 | 277305 |
| F1\_P109 | , | 187195 | 159191 | 133141 | 278286 | 237237 | 220220 | 174174 | 285289 |
| F1\_P110 | , | 195195 | 159163 | 125133 | 286286 | 237237 | 220228 | 166174 | 289289 |
| F1\_P111 | , | 175175 | 167191 | 133145 | 278278 | 237237 | 212220 | 166174 | 269289 |
| F1\_P112 | , | 191195 | 151207 | 133137 | 282290 | 237241 | 228228 | 166174 | 285305 |
| F1\_P113 | , | 195195 | 179199 | 129141 | 282282 | 229237 | 212220 | 174174 | 273281 |
| F1\_P114 | , | 167187 | 179191 | 125149 | 282286 | 237237 | 212220 | 166174 | 289289 |
| F1\_P115 | , | 183183 | 175207 | 133133 | 282286 | 229237 | 212220 | 174174 | 265293 |
| Pop |  |  |  |  |  |  |  |  |  |
| F2\_P131 | , | 159187 | 187191 | 137141 | 282302 | 237241 | 220232 | 178186 | 285289 |
| F2\_P132 | , | 183191 | 163167 | 133137 | 282302 | 237237 | 220228 | 166174 | 281289 |
| F2\_P133 | , | 175187 | 163191 | 133137 | 278282 | 229237 | 220232 | 174178 | 265285 |
| F2\_P134 | , | 167187 | 187191 | 133145 | 282294 | 229229 | 220220 | 174178 | 277293 |
| F2\_P135 | , | 187187 | 191195 | 133145 | 278282 | 241241 | 220220 | 166178 | 269289 |
| Pop |  |  |  |  |  |  |  |  |  |
| F3\_P141 | , | 183183 | 187191 | 133137 | 282286 | 229237 | 236236 | 174186 | 265293 |
| F3\_P142 | , | 151203 | 191211 | 133153 | 278282 | 229229 | 212228 | 178178 | 269273 |
| F3\_P143 | , | 183183 | 175207 | 129137 | 278298 | 229237 | 216228 | 174174 | 281321 |
| F3\_P144 | , | 179203 | 195211 | 133133 | 282282 | 229229 | 220228 | 182186 | 261285 |
| F3\_P145 | , | 163195 | 187187 | 133145 | 282286 | 229237 | 212212 | 174178 | 289297 |
| F3\_P146 | , | 183195 | 167171 | 137145 | 278286 | 229237 | 212236 | 174190 | 277293 |
| F3\_P147 | , | 179223 | 167207 | 125137 | 282282 | 229237 | 212228 | 174178 | 261293 |
| F3\_P148 | , | 167207 | 167171 | 129133 | 278278 | 237237 | 212216 | 174182 | 257273 |
| F3\_P149 | , | 175187 | 187191 | 129153 | 274278 | 229237 | 212216 | 174182 | 277281 |
| F3\_P150 | , | 199199 | 167203 | 125133 | 278286 | 229229 | 212220 | 174182 | 265289 |
| F3\_P151 | , | 191199 | 167171 | 129137 | 282282 | 229237 | 212216 | 174174 | 265293 |
| F3\_P152 | , | 183207 | 159175 | 121153 | 278286 | 229229 | 216216 | 174178 | 273277 |
| F3\_P153 | , | 191207 | 183191 | 129133 | 282282 | 229237 | 212212 | 174182 | 285293 |
| F3\_P154 | , | 175191 | 179199 | 133145 | 282290 | 229237 | 216236 | 174186 | 265277 |
| F3\_P155 | , | 171179 | 147183 | 125153 | 278290 | 229237 | 212236 | 178182 | 265313 |
| Pop |  |  |  |  |  |  |  |  |  |
| F4\_P161 | , | 187199 | 147179 | 133137 | 278282 | 229237 | 216232 | 174178 | 285293 |
| F4\_P162 | , | 179191 | 147187 | 129133 | 278282 | 229233 | 212232 | 174182 | 265281 |
| F4\_P163 | , | 167179 | 187191 | 133137 | 282282 | 233237 | 224232 | 174174 | 269281 |
| F4\_P164 | , | 175199 | 163171 | 133161 | 278278 | 229229 | 212220 | 174186 | 289289 |
| F4\_P165 | , | 167179 | 171187 | 133137 | 278278 | 233237 | 212216 | 174182 | 281297 |
| F4\_P166 | , | 175199 | 163171 | 129133 | 282290 | 229237 | 216232 | 174178 | 281297 |
| F4\_P167 | , | 179195 | 159171 | 129129 | 282282 | 233237 | 212236 | 178182 | 261285 |
| F4\_P168 | , | 167187 | 171191 | 133145 | 278286 | 229229 | 212220 | 174182 | 273281 |
| F4\_P169 | , | 191203 | 167175 | 129145 | 278278 | 233237 | 216220 | 174182 | 265269 |
| F4\_P170 | , | 167179 | 175183 | 133145 | 282306 | 237245 | 212216 | 182182 | 273289 |
| F4\_P171 | , | 195203 | 175207 | 137137 | 278294 | 237237 | 212232 | 174174 | 269285 |
| F4\_P172 | , | 191191 | 171171 | 125137 | 278294 | 229229 | 212216 | 182182 | 281285 |
| F4\_P173 | , | 167199 | 163171 | 145145 | 278278 | 229229 | 212220 | 174178 | 269281 |
| F4\_P174 | , | 167179 | 171171 | 129137 | 282306 | 237245 | 212216 | 182182 | 273289 |
| F4\_P175 | , | 171199 | 163187 | 133145 | 298298 | 237237 | 216220 | 174178 | 281297 |
| Pop |  |  |  |  |  |  |  |  |  |
| G1\_U238 | , | 155171 | 179195 | 129129 | 282282 | 229229 | 208228 | 182182 | 277285 |
| G1\_U239 | , | 187191 | 187195 | 129169 | 282290 | 229229 | 224228 | 182186 | 273277 |
| G1\_U240 | , | 163175 | 167187 | 133161 | 290290 | 229229 | 224228 | 182186 | 277277 |
| G1\_U241 | , | 175175 | 179199 | 129169 | 282282 | 229229 | 220228 | 182186 | 281301 |
| G1\_U242 | , | 167191 | 167179 | 161161 | 282302 | 229229 | 220224 | 178186 | 273277 |
| G1\_U243 | , | 167223 | 187195 | 129129 | 282290 | 229229 | 220224 | 182198 | 277285 |
| G1\_U244 | , | 155175 | 187187 | 129149 | 286286 | 229229 | 224228 | 182182 | 277285 |
| G1\_U245 | , | 223223 | 175183 | 149161 | 282290 | 229229 | 224228 | 190198 | 285297 |
| G1\_U246 | , | 191191 | 179199 | 129129 | 282302 | 229229 | 224228 | 182186 | 273285 |
| G1\_U247 | , | 171175 | 179195 | 129157 | 282282 | 229229 | 224228 | 186186 | 289293 |
| G1\_U248 | , | 155191 | 179195 | 129145 | 290290 | 229229 | 228228 | 182186 | 277297 |
| G1\_U249 | , | 151167 | 183187 | 129149 | 282302 | 229229 | 224228 | 186190 | 285289 |
| G1\_U250 | , | 175191 | 179187 | 129149 | 282286 | 229229 | 224228 | 182186 | 289297 |
| G1\_U251 | , | 175223 | 191195 | 133149 | 290302 | 229229 | 208224 | 186194 | 297297 |
| G1\_U252 | , | 175183 | 187195 | 149161 | 282282 | 229229 | 220224 | 186190 | 277277 |
| Pop |  |  |  |  |  |  |  |  |  |
| G2\_U121 | , | 187195 | 151199 | 149149 | 282290 | 229229 | 208208 | 182182 | 273273 |
| G2\_U122 | , | 195195 | 151199 | 149125 | 282290 | 229229 | 208208 | 182186 | 273273 |
| G2\_U123 | , | 183187 | 171203 | 149149 | 278282 | 229229 | 208208 | 174182 | 273273 |
| G2\_U124 | , | 187187 | 159159 | 133157 | 282282 | 229229 | 208208 | 182190 | 277289 |
| G2\_U125 | , | 195195 | 171199 | 133157 | 278278 | 229229 | 208208 | 174182 | 289297 |
| G2\_U126 | , | 183183 | 171195 | 149149 | 282290 | 229229 | 208208 | 182190 | 289289 |
| G2\_U127 | , | 167183 | 171171 | 149157 | 282290 | 229229 | 224228 | 174182 | 273277 |
| G2\_U128 | , | 167179 | 151203 | 149157 | 282282 | 229229 | 208208 | 174182 | 273273 |
| G2\_U129 | , | 183187 | 171199 | 129149 | 282290 | 229229 | 208208 | 174190 | 273273 |
| G2\_U130 | , | 167187 | 151203 | 133133 | 282290 | 229229 | 208208 | 174182 | 273273 |
| G2\_U131 | , | 167175 | 167199 | 149157 | 282282 | 229229 | 208208 | 174182 | 273277 |
| G2\_U132 | , | 183183 | 171199 | 125133 | 290290 | 229229 | 224228 | 182182 | 273273 |
| G2\_U133 | , | 179195 | 151199 | 129133 | 282290 | 229229 | 208224 | 182182 | 273285 |
| G2\_U134 | , | 183183 | 195203 | 129149 | 282290 | 229229 | 208208 | 182190 | 273293 |
| G2\_U135 | , | 183195 | 151203 | 149149 | 282290 | 229229 | 208208 | 182182 | 273273 |
| Pop |  |  |  |  |  |  |  |  |  |
| G3\_U100 | , | 179187 | 171175 | 129153 | 278286 | 229229 | 220224 | 182182 | 273289 |
| G3\_U101 | , | 175183 | 175215 | 121129 | 274278 | 229229 | 220232 | 178178 | 285293 |
| G3\_U102 | , | 159187 | 163195 | 129129 | 278278 | 229229 | 220228 | 178182 | 277285 |
| G3\_U103 | , | 183195 | 163211 | 125133 | 278286 | 229229 | 220220 | 178178 | 277277 |
| G3\_U104 | , | 143155 | 175195 | 125129 | 282286 | 229229 | 212220 | 178190 | 273277 |
| G3\_U105 | , | 183199 | 175175 | 129137 | 278282 | 229229 | 224232 | 178186 | 277285 |
| G3\_U106 | , | 167183 | 179211 | 129145 | 282290 | 229229 | 232232 | 178178 | 277277 |
| G3\_U107 | , | 183187 | 175219 | 121133 | 278278 | 229229 | 208220 | 178182 | 273277 |
| G3\_U108 | , | 147183 | 199211 | 125169 | 286286 | 229229 | 224224 | 182186 | 289293 |
| G3\_U109 | , | 171183 | 207207 | 149169 | 278286 | 229229 | 220228 | 182182 | 277285 |
| G3\_U110 | , | 143183 | 167175 | 129169 | 278278 | 229229 | 220220 | 178178 | 273277 |
| G3\_U111 | , | 175195 | 175187 | 129149 | 274294 | 229229 | 208220 | 182186 | 265265 |
| G3\_U112 | , | 159167 | 175195 | 129137 | 278286 | 229229 | 220228 | 178178 | 273289 |
| G3\_U113 | , | 171179 | 167207 | 121129 | 286290 | 229229 | 216228 | 174178 | 277277 |
| G3\_U114 | , | 183183 | 211211 | 121137 | 278290 | 229229 | 224228 | 178182 | 285289 |
| Pop |  |  |  |  |  |  |  |  |  |
| G4\_U60 | , | 167187 | 175203 | 133145 | 282290 | 229229 | 224224 | 178182 | 281293 |
| G4\_U61 | , | 191215 | 179199 | 133153 | 282286 | 229229 | 204232 | 182182 | 281285 |
| G4\_U62 | , | 167195 | 199211 | 149149 | 278286 | 229229 | 212228 | 174182 | 281281 |
| G4\_U63 | , | 191195 | 203207 | 129149 | 286290 | 229237 | 220232 | 178186 | 289329 |
| G4\_U64 | , | 167187 | 163211 | 125153 | 274282 | 237237 | 220236 | 186186 | 289289 |
| G4\_U65 | , | 151187 | 203215 | 125129 | 286290 | 229237 | 216224 | 178182 | 281289 |
| G4\_U66 | , | 143163 | 175199 | 133149 | 278282 | 229229 | 220228 | 182186 | 289293 |
| G4\_U67 | , | 151195 | 175215 | 129129 | 286290 | 229237 | 224232 | 182186 | 285293 |
| G4\_U68 | , | 151159 | 175175 | 129153 | 282290 | 229229 | 224228 | 178178 | 285289 |
| G4\_U69 | , | 151179 | 163175 | 125129 | 282282 | 229237 | 216224 | 178182 | 281281 |
| G4\_U70 | , | 143195 | 151211 | 121121 | 278282 | 229237 | 208208 | 182194 | 277285 |
| G4\_U71 | , | 179191 | 175199 | 129169 | 282290 | 229229 | 216220 | 182186 | 289293 |
| G4\_U72 | , | 183187 | 191199 | 165169 | 278282 | 229229 | 232232 | 182186 | 285285 |
| G4\_U73 | , | 159163 | 179207 | 133133 | 290298 | 237237 | 228232 | 178182 | 281285 |
| G4\_U74 | , | 183187 | 199203 | 125129 | 278286 | 229237 | 216224 | 178182 | 277289 |
| Pop |  |  |  |  |  |  |  |  |  |
| G5\_U49 | , | 163187 | 155207 | 137153 | 278286 | 229237 | 220228 | 178186 | 281285 |
| G5\_U50 | , | 187187 | 199203 | 133145 | 282282 | 229237 | 216236 | 178182 | 285289 |
| G5\_U51 | , | 183183 | 175175 | 129149 | 282286 | 229237 | 216216 | 186194 | 281281 |
| G5\_U52 | , | 131147 | 175187 | 149161 | 286290 | 229229 | 216220 | 186186 | 285285 |
| G5\_U53 | , | 191215 | 171203 | 121149 | 298298 | 229237 | 216224 | 182186 | 277329 |
| G5\_U54 | , | 183195 | 151183 | 129161 | 282290 | 229229 | 216224 | 178182 | 289289 |
| G5\_U55 | , | 187195 | 175207 | 133169 | 282282 | 229229 | 208224 | 178182 | 277289 |
| G5\_U56 | , | 187187 | 203215 | 125133 | 290298 | 229237 | 228232 | 182182 | 289289 |
| G5\_U57 | , | 127143 | 191203 | 121153 | 278290 | 229237 | 216224 | 178182 | 281285 |
| G5\_U58 | , | 187191 | 195203 | 133169 | 278278 | 229229 | 224236 | 178186 | 277277 |
| G5\_U59 | , | 187195 | 175215 | 129141 | 278282 | 229229 | 212224 | 178182 | 285289 |
| Pop |  |  |  |  |  |  |  |  |  |
| H1\_P258 | , | 163167 | 155183 | 141141 | 282302 | 229229 | 208232 | 174174 | 281281 |
| H1\_P259 | , | 167199 | 155207 | 129141 | 294302 | 229229 | 208208 | 174174 | 281297 |
| H1\_P260 | , | 203203 | 187203 | 129141 | 294294 | 229229 | 208208 | 174174 | 297297 |
| H1\_P261 | , | 199203 | 203211 | 129141 | 294294 | 229229 | 208208 | 178178 | 281281 |
| H1\_P262 | , | 199199 | 207207 | 141141 | 294294 | 229229 | 208208 | 174178 | 281281 |
| H1\_P263 | , | 167203 | 195203 | 129141 | 282302 | 229229 | 208208 | 174174 | 281293 |
| H1\_P264 | , | 167199 | 183207 | 141141 | 294306 | 229229 | 208232 | 174174 | 281281 |
| H1\_P265 | , | 163167 | 159207 | 129141 | 294302 | 229229 | 208208 | 174174 | 281281 |
| H1\_P266 | , | 171203 | 207207 | 129129 | 294294 | 229229 | 208208 | 174178 | 281293 |
| H1\_P267 | , | 159171 | 155207 | 133141 | 294306 | 229229 | 232232 | 174178 | 281293 |
| H1\_P268 | , | 163163 | 155207 | 129141 | 282294 | 229229 | 232232 | 174174 | 293293 |
| H1\_P269 | , | 171203 | 155203 | 141141 | 294302 | 229229 | 208212 | 174174 | 293293 |
| H1\_P270 | , | 163167 | 155163 | 129141 | 294298 | 229229 | 208212 | 178178 | 281297 |
| H1\_P271 | , | 163199 | 155187 | 141141 | 282294 | 229229 | 208216 | 174174 | 281297 |
| H1\_P272 | , | 167167 | 155171 | 133141 | 294294 | 229229 | 208208 | 174178 | 281293 |
| Pop |  |  |  |  |  |  |  |  |  |
| H2\_P277 | , | 183183 | 195199 | 137141 | 294294 | 229229 | 224224 | 178186 | 297309 |
| H2\_P278 | , | 171175 | 199207 | 133133 | 298302 | 229229 | 216224 | 174178 | 273293 |
| H2\_P279 | , | 175179 | 195199 | 137141 | 298298 | 229229 | 220224 | 178186 | 273305 |
| H2\_P280 | , | 175195 | 191199 | 141145 | 298298 | 229229 | 212224 | 178186 | 305309 |
| H2\_P281 | , | 171175 | 195199 | 133141 | 294298 | 229229 | 220224 | 178178 | 269309 |
| H2\_P282 | , | 167175 | 163203 | 133137 | 298302 | 229229 | 212224 | 178186 | 285305 |
| H2\_P283 | , | 155175 | 195207 | 129145 | 290298 | 229229 | 224224 | 174186 | 269269 |
| H2\_P284 | , | 171175 | 191191 | 141141 | 290302 | 229229 | 224224 | 186186 | 305305 |
| H2\_P285 | , | 167171 | 199199 | 129141 | 298298 | 229229 | 216224 | 178186 | 277289 |
| H2\_P286 | , | 175183 | 183191 | 141141 | 298298 | 229229 | 224224 | 186186 | 273309 |