

$$F_{3+} \pmod{11}$$

	blocks	defect	matrix
$G :$	1	1	11×10
	2	1	11×10
	3	1	7×5
	4	0	$249458_1 = \chi_4, \varphi_4$
	5	0	$1603525_1 = \chi_6, \varphi_6$
	$6 = \bar{5}$	0	$1603525_2 = \chi_7, \varphi_7$
	7	0	$4864431_1 = \chi_9, \varphi_9$
	8	0	$32715683_1 = \chi_{10}, \varphi_{10}$
	9	0	$35873145_1 = \chi_{11}, \varphi_{11}$
	10	0	$40536925_1 = \chi_{12}, \varphi_{12}$
	11	0	$48893768_1 = \chi_{13}, \varphi_{13}$
	12	0	$74837400_1 = \chi_{14}, \varphi_{14}$
	$13 = \bar{12}$	0	$74837400_2 = \chi_{15}, \varphi_{15}$
	14	0	$79452373_1 = \chi_{16}, \varphi_{16}$
	15	0	$112168056_1 = \chi_{17}, \varphi_{17}$
	16	0	$415098112_1 = \chi_{20}, \varphi_{20}$
	17	0	$635618984_1 = \chi_{21}, \varphi_{21}$
	18	0	$1069551175_1 = \chi_{22}, \varphi_{22}$
	19	0	$1112333222_1 = \chi_{23}, \varphi_{23}$
	20	0	$1540153692_1 = \chi_{26}, \varphi_{26}$
	21	0	$2346900864_1 = \chi_{27}, \varphi_{27}$
	22	0	$3178094920_1 = \chi_{28}, \varphi_{28}$
	23	0	$3208653525_1 = \chi_{29}, \varphi_{29}$
	24	0	$3283490925_1 = \chi_{30}, \varphi_{30}$
	25	0	$5005499499_1 = \chi_{31}, \varphi_{31}$
	26	0	$5775278080_1 = \chi_{32}, \varphi_{33}$
	27	0	$7150713570_1 = \chi_{34}, \varphi_{34}$
	28	0	$8529641472_1 = \chi_{35}, \varphi_{35}$
	29	0	$9441555200_1 = \chi_{37}, \varphi_{37}$
	30	0	$10169903744_1 = \chi_{38}, \varphi_{38}$
	31	0	$10776585600_1 = \chi_{39}, \varphi_{39}$
	32	0	$10776585600_2 = \chi_{40}, \varphi_{40}$
	33	0	$13904165275_1 = \chi_{41}, \varphi_{41}$
	34	0	$13904165275_2 = \chi_{42}, \varphi_{42}$
	35	0	$17161712568_1 = \chi_{45}, \varphi_{45}$
	36	0	$18481844304_1 = \chi_{46}, \varphi_{46}$
	37	0	$18481844304_2 = \chi_{47}, \varphi_{47}$
	38	0	$25027497495_1 = \chi_{48}, \varphi_{48}$
	39	0	$27808330550_1 = \chi_{49}, \varphi_{50}$
	40	0	$29444114700_1 = \chi_{50}, \varphi_{51}$

	blocks	defect	matrix
	41	0	$35594663104_1 = \chi_{51}, \varphi_{54}$
	42	0	$40043995992_1 = \chi_{55}, \varphi_{57}$
	43	0	$44493328880_1 = \chi_{56}, \varphi_{58}$
	44	0	$45049495491_1 = \chi_{57}, \varphi_{59}$
	45	0	$46602926370_1 = \chi_{58}, \varphi_{61}$
	46	0	$54481627200_1 = \chi_{60}, \varphi_{62}$
	47	0	$54481627200_2 = \chi_{61}, \varphi_{63}$
	48	0	$55616661100_1 = \chi_{62}, \varphi_{64}$
	49	0	$63831063582_1 = \chi_{63}, \varphi_{65}$
	50	0	$65393917952_1 = \chi_{64}, \varphi_{66}$
	51	0	$65393917952_2 = \chi_{65}, \varphi_{67}$
	52	0	$67331776512_1 = \chi_{66}, \varphi_{68}$
	53	0	$71189326208_1 = \chi_{67}, \varphi_{69}$
	54	0	$77007684600_1 = \chi_{69}, \varphi_{70}$
	55	0	$77007684600_2 = \chi_{70}, \varphi_{71}$
	56	0	$77379702400_1 = \chi_{72}, \varphi_{73}$
	57	0	$111233322200_1 = \chi_{74}, \varphi_{76}$
	58	0	$111233322200_2 = \chi_{75}, \varphi_{77}$
	59	0	$118588933386_1 = \chi_{76}, \varphi_{78}$
	60	0	$132390354096_1 = \chi_{77}, \varphi_{80}$
	61	0	$132390354096_2 = \chi_{78}, \varphi_{81}$
	62	0	$139317477376_1 = \chi_{79}, \varphi_{82}$
	63	0	$140095612800_1 = \chi_{80}, \varphi_{83}$
	64	0	$140095612800_2 = \chi_{81}, \varphi_{84}$
	65	0	$142378652416_1 = \chi_{83}, \varphi_{85}$
	66	0	$150201655296_1 = \chi_{85}, \varphi_{87}$
	67	0	$160313753600_1 = \chi_{90}, \varphi_{88}$
	68	0	$164572397352_1 = \chi_{91}, \varphi_{89}$
	69	0	$164572397352_2 = \chi_{92}, \varphi_{90}$
	70	0	$169598100672_1 = \chi_{93}, \varphi_{91}$
	71	0	$178514751987_1 = \chi_{94}, \varphi_{92}$
	72	0	$190685695200_1 = \chi_{96}, \varphi_{93}$
	73	0	$197813862400_1 = \chi_{97}, \varphi_{94}$
	74	0	$197813862400_2 = \chi_{98}, \varphi_{95}$
	75	0	$200219979960_1 = \chi_{99}, \varphi_{96}$
	76	0	$200219979960_2 = \chi_{100}, \varphi_{97}$
	77	0	$205353825600_1 = \chi_{101}, \varphi_{98}$
	78	0	$205353825600_2 = \chi_{102}, \varphi_{99}$
	79	0	$205940550816_1 = \chi_{103}, \varphi_{100}$
	80	0	$225247477455_1 = \chi_{105}, \varphi_{101}$

	blocks	defect	matrix
	81	0	$250274974950_1 = \chi_{106}, \varphi_{102}$
	82	0	$282049015248_1 = \chi_{107}, \varphi_{103}$
3.G :	83	1	7×5
	84 = 83*		
	85	1	11×10
	86 = 85*		
	87	1	11×10
	88 = 87*		
	89	0	$19034730_1 = \chi_{114}, \varphi_{110}$
	90 = 89*		
	91	0	$25356672_1 = \chi_{115}, \varphi_{111}$
	92 = 91*		
	93	0	$43779879_1 = \chi_{116}, \varphi_{112}$
	94 = 93*		
	95	0	$203843871_1 = \chi_{119}, \varphi_{115}$
	96 = 95*		
	97	0	$330032934_1 = \chi_{122}, \varphi_{118}$
	98 = 97*		
	99	0	$1050717096_1 = \chi_{123}, \varphi_{119}$
	100 = 99*		
	101	0	$1152161010_1 = \chi_{124}, \varphi_{120}$
	102 = 101*		
	103	0	$1152161010_3 = \chi_{125}, \varphi_{121}$
	104 = 103*		
	105	0	$1255560075_1 = \chi_{126}, \varphi_{122}$
	106 = 105*		
	107 = $\overline{106}$	0	$1255560075_3 = \chi_{127}, \varphi_{123}$
	108 = 107*		
	109	0	$1349587008_1 = \chi_{128}, \varphi_{124}$
	110 = 109*		
	111 = $\overline{110}$	0	$1349587008_3 = \chi_{129}, \varphi_{125}$
	112 = 111*		
	113	0	$1553430879_1 = \chi_{130}, \varphi_{126}$
	114 = 113*		
	115	0	$1818548820_1 = \chi_{131}, \varphi_{127}$
	116 = 115*		
	117	0	$2801912256_1 = \chi_{133}, \varphi_{129}$
	118 = 117*		
	119	0	$3264456195_1 = \chi_{134}, \varphi_{130}$
	120 = 119*		

	blocks	defect	matrix
	121	0	$4290428142_1 = \chi_{135}, \varphi_{131}$
	$122 = 121^*$		
	123	0	$4416617205_1 = \chi_{136}, \varphi_{132}$
	$124 = 123^*$		
	125	0	$4620461076_1 = \chi_{137}, \varphi_{133}$
	$126 = 125^*$		
	127	0	$8993909925_1 = \chi_{140}, \varphi_{136}$
	$128 = 127^*$		
	$129 = \overline{128}$	0	$8993909925_3 = \chi_{141}, \varphi_{137}$
	$130 = 129^*$		
	131	0	$9456453864_1 = \chi_{142}, \varphi_{138}$
	$132 = 131^*$		
	133	0	$10726070355_1 = \chi_{143}, \varphi_{139}$
	$134 = 133^*$		
	135	0	$12258366120_1 = \chi_{144}, \varphi_{140}$
	$136 = 135^*$		
	137	0	$15016498497_1 = \chi_{146}, \varphi_{142}$
	$138 = 137^*$		
	139	0	$21014341920_1 = \chi_{147}, \varphi_{143}$
	$140 = 139^*$		
	141	0	$21096751104_1 = \chi_{148}, \varphi_{144}$
	$142 = 141^*$		
	143	0	$21122107776_1 = \chi_{149}, \varphi_{145}$
	$144 = 143^*$		
	145	0	$41785039296_1 = \chi_{153}, \varphi_{149}$
	$146 = 145^*$		
	147	0	$63831063582_2 = \chi_{154}, \varphi_{151}$
	$148 = 147^*$		
	149	0	$78346948680_1 = \chi_{155}, \varphi_{155}$
	$150 = 149^*$		
	151	0	$84057367680_1 = \chi_{158}, \varphi_{156}$
	$152 = 151^*$		
	153	0	$103562058600_1 = \chi_{159}, \varphi_{159}$
	$154 = 153^*$		
	155	0	$115511526900_1 = \chi_{160}, \varphi_{160}$
	$156 = 155^*$		
	157	0	$120131987976_1 = \chi_{161}, \varphi_{161}$
	$158 = 157^*$		
	159	0	$150164984970_1 = \chi_{165}, \varphi_{163}$
	$160 = 159^*$		

	blocks	defect	matrix
	161	0	$154455413112_1 = \chi_{168}, \varphi_{164}$
	162 = 161*		
	163	0	$178514751987_2 = \chi_{170}, \varphi_{166}$
	164 = 163*		
	165	0	$210555861318_1 = \chi_{173}, \varphi_{168}$
	166 = 165*		
	167	0	$259900935525_1 = \chi_{176}, \varphi_{169}$
	168 = 167*		
	169	0	$274587401088_1 = \chi_{177}, \varphi_{170}$
	170 = 169*		
	171	0	$295709508864_1 = \chi_{179}, \varphi_{171}$
	172 = 171*		
	173	0	$358644768768_1 = \chi_{180}, \varphi_{172}$
	174 = 173*		
	175	0	$375412462425_1 = \chi_{181}, \varphi_{173}$
	176 = 175*		
	177	0	$405445459419_1 = \chi_{182}, \varphi_{174}$
	178 = 177*		

Block 1:	φ_1	φ_5	φ_{18}	φ_{19}	φ_{24}	φ_{32}	φ_{36}	φ_{52}	φ_{53}	φ_{60}
$1_1 = \chi_1$	1	.	.	.	.	.	.	.	.	.
$555611_1 = \chi_5$	.	1	.	.	.	.	.	.	.	.
$159402880_1 = \chi_{18}$	.	1	1	.	.	.	.	.	.	.
$281380736_1 = \chi_{19}$	1	.	.	1	.	.	.	.	.	.
$1337276304_1 = \chi_{25}$	.	.	1	.	1	.	.	.	.	.
$6471756928_1 = \chi_{33}$	.	.	.	.	1	1	.	.	.	.
$9100908180_1 = \chi_{36}$	.	.	.	1	.	.	1	.	.	.
$37337059200_1 = \chi_{53}$	.	.	.	.	.	1	.	.	1	.
$38641860608_1 = \chi_{54}$	.	.	.	.	.	.	1	1	.	.
$74887473024_1 = \chi_{68}$	.	.	.	.	.	.	.	1	.	1
$77108871168_1 = \chi_{71}$	.	.	.	.	.	.	.	.	1	1

$$\begin{array}{ll}
\varphi_1 & = 1_1 \\
\varphi_5 & = 555611_1 \\
\varphi_{18} & = 158847269_1 \\
\varphi_{19} & = 281380735_1 \\
\varphi_{24} & = 1178429035_1 \\
\varphi_{32} & = 5293327893_1 \\
\varphi_{36} & = 8819527445_1 \\
\varphi_{52} & = 29822333163_1 \\
\varphi_{53} & = 32043731307_1 \\
\varphi_{60} & = 45065139861_1
\end{array}$$

Block 2:	φ_2	φ_8	φ_{43}	φ_{44}	φ_{49}	φ_{56}	φ_{72}	φ_{74}	φ_{75}	φ_{79}
$8671_1 = \chi_2$	1	.	.	.	.	.	.	.	.	.
$1666833_1 = \chi_8$	.	1	.	.	.	.	.	.	.	.
$14507059905_1 = \chi_{43}$	.	1	1	.	.	.	.	.	.	.
$17068369920_1 = \chi_{44}$	1	.	.	1	.	.	.	.	.	.
$54234085491_1 = \chi_{59}$	.	.	.	1	.	1	.	.	.	.
$102385217025_1 = \chi_{73}$	.	.	.	.	1	.	1	.	.	.
$142169187069_1 = \chi_{82}$	.	.	.	.	.	1	.	.	1	.
$145650089984_1 = \chi_{84}$	.	.	1	.	.	.	.	.	.	1
$156321775827_1 = \chi_{88}$	.	.	.	.	1	.	.	.	.	1
$156321775827_2 = \chi_{89}$	.	.	.	.	.	.	1	1	.	.
$184117100544_1 = \chi_{95}$	.	.	.	.	.	.	.	1	1	.

$$\begin{aligned}
\varphi_2 &= 8671_1 & \varphi_{56} &= 37165724242_1 \\
\varphi_8 &= 1666833_1 & \varphi_{72} &= 77208138110_1 \\
\varphi_{43} &= 14505393072_1 & \varphi_{74} &= 79113637717_1 \\
\varphi_{44} &= 17068361249_1 & \varphi_{75} &= 105003462827_1 \\
\varphi_{49} &= 25177078915_1 & \varphi_{79} &= 131144696912_1
\end{aligned}$$

Block 3:	φ_3	φ_{25}	φ_{55}	φ_{86}	φ_{104}
$57477_1 = \chi_3$	1	.	.	.	.
$1264015025_1 = \chi_{24}$	1	1	.	.	.
$36858678129_1 = \chi_{52}$	.	.	1	.	.
$151397207325_1 = \chi_{86}$	.	1	.	1	.
$151397207325_2 = \chi_{87}$	.	1	.	1	.
$222758961152_1 = \chi_{104}$	.	.	1	.	1
$336033532800_1 = \chi_{108}$	.	.	.	1	1

$$\begin{aligned}
\varphi_3 &= 57477_1 \\
\varphi_{25} &= 1263957548_1 \\
\varphi_{55} &= 36858678129_1 \\
\varphi_{86} &= 150133249777_1 \\
\varphi_{104} &= 185900283023_1
\end{aligned}$$

Blocks 83, 84:	φ_{105}	φ_{146}	φ_{150}	φ_{162}	φ_{165}
$783_1 = \chi_{109}$	1	.	.	.	.
$21842179632_1 = \chi_{150}$	1	1	.	.	.
$151397207325_3 = \chi_{166}$	.	1	.	1	.
$151397207325_5 = \chi_{167}$	.	1	.	1	.
$160255122300_1 = \chi_{169}$	.	.	.	.	1
$185161334400_1 = \chi_{171}$	.	.	1	1	.
$215861428224_1 = \chi_{174}$	.	.	1	.	1

$$\begin{aligned}
\varphi_{105} &= 783_1 \\
\varphi_{146} &= 21842178849_1 \\
\varphi_{150} &= 55606305924_1 \\
\varphi_{162} &= 129555028476_1 \\
\varphi_{165} &= 160255122300_1
\end{aligned}$$

Blocks 85, 86:	φ_{106}	φ_{109}	φ_{128}	φ_{134}	φ_{135}	φ_{141}	φ_{152}	φ_{153}	φ_{154}
$64584_1 = \chi_{110}$	1	.	.	.	.	.	.	.	.
$6724809_1 = \chi_{113}$	.	1	.	.	.	.	.	.	.
$2400239520_1 = \chi_{132}$	.	1	1	.	.	.	.	.	.
$8250621525_1 = \chi_{138}$	.	.	.	1	.	.	.	.	.
$8250621525_3 = \chi_{139}$	.	.	.	.	1	.	.	.	.
$14507059905_2 = \chi_{145}$	1	.	.	.	.	1	.	.	.
$80256172032_1 = \chi_{156}$	.	.	1	.	.	.	.	.	1
$80256172032_3 = \chi_{157}$	.	.	.	.	.	1	1	.	.
$142169187069_2 = \chi_{164}$	.	.	.	.	.	.	1	1	.
$256966819200_1 = \chi_{175}$	.	.	.	.	.	.	.	1	.
$274910709213_1 = \chi_{178}$	.	.	.	1	1	.	.	.	1

(Blocks 85, 86:)	φ_{167}	
$64584_1 = \chi_{110}$	.	$\varphi_{106} = 64584_1$
$6724809_1 = \chi_{113}$	.	$\varphi_{109} = 6724809_1$
$2400239520_1 = \chi_{132}$	.	$\varphi_{128} = 2393514711_1$
$8250621525_1 = \chi_{138}$	.	$\varphi_{134} = 8250621525_1$
$8250621525_3 = \chi_{139}$	.	$\varphi_{135} = 8250621525_3$
$14507059905_2 = \chi_{145}$	.	$\varphi_{141} = 14506995321_1$
$80256172032_1 = \chi_{156}$	.	$\varphi_{152} = 65749176711_1$
$80256172032_3 = \chi_{157}$	.	$\varphi_{153} = 76420010358_1$
$142169187069_2 = \chi_{164}$	.	$\varphi_{154} = 77862657321_1$
$256966819200_1 = \chi_{175}$	1	$\varphi_{167} = 180546808842_1$
$274910709213_1 = \chi_{178}$	1	

Blocks 87, 88:	φ_{107}	φ_{108}	φ_{113}	φ_{114}	φ_{116}	φ_{117}	φ_{147}	φ_{148}	φ_{157}
$306153_1 = \chi_{111}$	1	.	.	.	.	.	.	.	.
$306153_3 = \chi_{112}$	.	1	.	.	.	.	.	.	.
$195019461_1 = \chi_{117}$	1	.	1	.	.	.	.	.	.
$195019461_3 = \chi_{118}$	.	1	.	1	.	.	.	.	.
$216154575_1 = \chi_{120}$	.	.	.	.	1	.	.	.	.
$216154575_3 = \chi_{121}$	.	.	.	.	.	1	.	.	.
$34128405675_1 = \chi_{151}$	.	.	1	.	.	.	1	.	.
$34128405675_3 = \chi_{152}$	.	.	.	1	.	.	.	1	.
$135605256192_1 = \chi_{162}$	.	.	.	.	.	.	1	.	1
$135605256192_3 = \chi_{163}$	.	.	.	.	.	.	.	1	.
$203775436800_1 = \chi_{172}$	.	.	.	.	1	1	.	.	1

(Blocks 87, 88:)	φ_{158}		
$306153_1 = \chi_{111}$	.	$\varphi_{107} =$	306153_1
$306153_3 = \chi_{112}$	.	$\varphi_{108} =$	306153_3
$195019461_1 = \chi_{117}$	.	$\varphi_{113} =$	194713308_1
$195019461_3 = \chi_{118}$	.	$\varphi_{114} =$	194713308_3
$216154575_1 = \chi_{120}$	.	$\varphi_{116} =$	216154575_1
$216154575_3 = \chi_{121}$	.	$\varphi_{117} =$	216154575_3
$34128405675_1 = \chi_{151}$	.	$\varphi_{147} =$	33933692367_1
$34128405675_3 = \chi_{152}$	.	$\varphi_{148} =$	33933692367_3
$135605256192_1 = \chi_{162}$	.	$\varphi_{157} =$	101671563825_1
$135605256192_3 = \chi_{163}$	1	$\varphi_{158} =$	101671563825_3
$203775436800_1 = \chi_{172}$	1		