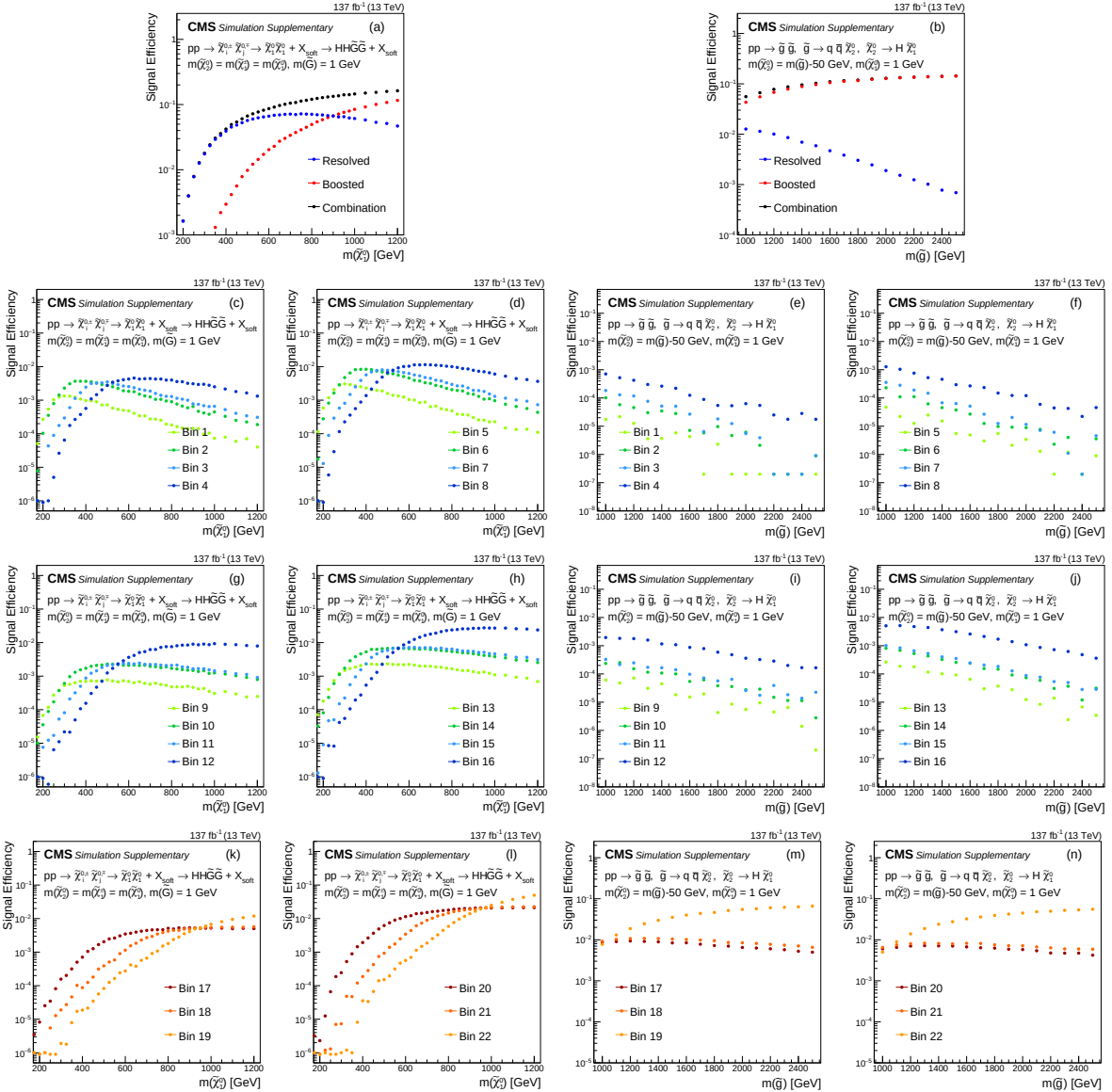
137 fb^{-1} (13 TeV)
CMS Simulation Supplementary
(a)
$pp \to \tilde{\chi}_1^{0,\pm}\tilde{\chi}_1^{0,\mp} \to \tilde{\chi}_1^0\tilde{\chi}_1^0 + X_{soft} \to HH\tilde{G}\tilde{G} + X_{soft}$
$m(\tilde{\chi}_1^0) = m(\tilde{\chi}_1^\pm)$, $m(\tilde{G}) = 1$ GeV
Resolved
Boosted
Combination
Signal Efficiency
$m(\tilde{\chi}_1^0)$ [GeV]
(b)
$pp \to \tilde{g}\tilde{g},\ \tilde{g} \to q\bar{q}\tilde{\chi}_2^0,\ \tilde{\chi}_2^0 \to H\tilde{\chi}_1^0$
$m(\tilde{\chi}_2^0) = m(\tilde{g})$-50 GeV, $m(\tilde{\chi}_1^0) = 1$ GeV
$m(\tilde{g})$ [GeV]
(c)
$pp \to \tilde{\chi}_1^{0,\pm}\tilde{\chi}_1^{0,\mp} \to \tilde{\chi}_1^0\tilde{\chi}_1^0 + X_{soft} \to HH\tilde{G}\tilde{G} + X_{soft}$
$m(\tilde{\chi}_2^0) = m(\tilde{\chi}_1^\pm) = m(\tilde{\chi}_1^0)$, $m(\tilde{G}) = 1$ GeV
Bin 1
Bin 2
Bin 3
Bin 4
(d)
Bin 5
Bin 6
Bin 7
Bin 8
(e)
$pp \to \tilde{g}\tilde{g},\ \tilde{g} \to q\bar{q}\tilde{\chi}_2^0,\ \tilde{\chi}_2^0 \to H\tilde{\chi}_1^0$
$m(\tilde{\chi}_2^0) = m(\tilde{g})$-50 GeV, $m(\tilde{\chi}_1^0) = 1$ GeV
(f)
$m(\tilde{\chi}_2^0) = m(\tilde{g})$-50 GeV, $m(\tilde{\chi}_2^0) = 1$ GeV
(g)
Bin 9
Bin 10
Bin 11
Bin 12
(h)
Bin 13
Bin 14
Bin 15
Bin 16
(i)
(j)
(k)
Bin 17
Bin 18
Bin 19
(l)
Bin 20
Bin 21
Bin 22
(m)
(n)