

## MARGINALIZED 1D CONSTRAINTS

 Flat  $\Lambda$ CDM

Probe	$H_0$	$\Omega_m$	$\chi^2(dof)$	$\chi^2_{rid}$
-	[km/s/Mpc]	-	-	-
BAO	$68.24^{+5.05}_{-4.37}$	$0.303^{+0.024}_{-0.022}$	5.4(7)	0.78
CC	$66.49^{+5.51}_{-5.48}$	$0.336^{+0.078}_{-0.064}$	14.5(24)	0.6
SN	$75.73^{+17.12}_{-17.95}$	$0.297^{+0.022}_{-0.021}$	39.3(32)	1.23
GRB	$74.09^{+17.53}_{-16.69}$	$0.516^{+0.273}_{-0.205}$	154.3(154)	1.0
B+C	$68.48^{+3.47}_{-3.37}$	$0.306^{+0.023}_{-0.021}$	20.0(39)	0.51
B+S	$68.76^{+4.88}_{-4.54}$	$0.299^{+0.016}_{-0.015}$	44.8(47)	0.95
B+G	$68.18^{+5.03}_{-4.35}$	$0.305^{+0.025}_{-0.022}$	160.1(169)	0.95
C+S	$69.21^{+3.72}_{-3.48}$	$0.299^{+0.021}_{-0.020}$	54.0(64)	0.84
C+G	$65.93^{+5.23}_{-5.22}$	$0.344^{+0.078}_{-0.060}$	169.0(186)	0.91
S+G	$75.01^{+15.79}_{-15.93}$	$0.298^{+0.021}_{-0.020}$	194.0(194)	1.0
B+C+S	$68.85^{+3.33}_{-3.28}$	$0.301^{+0.016}_{-0.015}$	59.4(79)	0.75
B+C+G	$68.35^{+3.36}_{-3.26}$	$0.308^{+0.023}_{-0.021}$	174.7(201)	0.87
B+S+G	$68.44^{+4.96}_{-4.42}$	$0.300^{+0.016}_{-0.016}$	199.5(209)	0.95
C+S+G	$69.15^{+3.56}_{-3.52}$	$0.301^{+0.019}_{-0.019}$	208.7(226)	0.92
B+C+S+G	$68.86^{+3.21}_{-3.25}$	$0.301^{+0.015}_{-0.014}$	214.1(241)	0.89

## MARGINALIZED 1D CONSTRAINTS

 Open  $\Lambda$ CDM

Probe	$H_0$	$\Omega_m$	$\Omega_\Lambda$	$\Omega_K$	$\chi^2(dof)$	$\chi^2_{rid}$
-	[km/s/Mpc]	-	-	-	-	-
BAO	$68.35^{+5.15}_{-4.39}$	$0.306^{+0.025}_{-0.023}$	$0.714^{+0.058}_{-0.064}$	$-0.021^{+0.067}_{-0.060}$	5.3(6)	0.89
CC	$65.72^{+5.63}_{-5.54}$	$0.323^{+0.154}_{-0.164}$	$0.621^{+0.254}_{-0.327}$	$0.052^{+0.470}_{-0.379}$	14.5(23)	0.63
SN	$76.50^{+17.16}_{-16.28}$	$0.323^{+0.069}_{-0.075}$	$0.743^{+0.112}_{-0.118}$	$-0.065^{+0.188}_{-0.177}$	39.1(31)	1.26
GRB	$74.75^{+17.26}_{-17.00}$	$0.450^{+0.211}_{-0.159}$	$0.292^{+0.313}_{-0.207}$	$0.202^{+0.249}_{-0.269}$	153.1(153)	1.0
B+C	$68.65^{+3.63}_{-3.47}$	$0.309^{+0.024}_{-0.023}$	$0.708^{+0.055}_{-0.060}$	$-0.017^{+0.063}_{-0.060}$	20.0(38)	0.53
B+S	$68.25^{+5.01}_{-4.16}$	$0.307^{+0.021}_{-0.021}$	$0.720^{+0.043}_{-0.042}$	$-0.028^{+0.053}_{-0.052}$	44.5(46)	0.97
B+G	$68.12^{+5.17}_{-4.33}$	$0.308^{+0.025}_{-0.024}$	$0.705^{+0.059}_{-0.061}$	$-0.012^{+0.062}_{-0.061}$	160.1(168)	0.95
C+S	$69.19^{+3.63}_{-3.67}$	$0.330^{+0.067}_{-0.067}$	$0.750^{+0.108}_{-0.108}$	$-0.080^{+0.170}_{-0.172}$	53.7(63)	0.85
C+G	$64.42^{+5.91}_{-5.61}$	$0.325^{+0.094}_{-0.083}$	$0.567^{+0.179}_{-0.232}$	$0.105^{+0.274}_{-0.223}$	168.9(185)	0.91
S+G	$76.20^{+16.78}_{-17.38}$	$0.293^{+0.044}_{-0.043}$	$0.700^{+0.074}_{-0.081}$	$0.006^{+0.117}_{-0.109}$	194.2(193)	1.01
B+C+S	$68.99^{+3.33}_{-3.25}$	$0.309^{+0.021}_{-0.020}$	$0.720^{+0.042}_{-0.043}$	$-0.029^{+0.054}_{-0.053}$	59.3(78)	0.76
B+C+G	$68.52^{+3.70}_{-3.57}$	$0.308^{+0.023}_{-0.022}$	$0.702^{+0.055}_{-0.061}$	$-0.010^{+0.063}_{-0.059}$	174.7(200)	0.87
B+S+G	$68.67^{+4.96}_{-4.42}$	$0.303^{+0.020}_{-0.019}$	$0.714^{+0.043}_{-0.042}$	$-0.017^{+0.051}_{-0.052}$	199.6(208)	0.96
C+S+G	$69.26^{+3.68}_{-3.62}$	$0.297^{+0.042}_{-0.044}$	$0.698^{+0.076}_{-0.078}$	$0.005^{+0.115}_{-0.110}$	208.9(2589)	0.93
B+C+S+G	$68.97^{+3.27}_{-3.25}$	$0.304^{+0.019}_{-0.019}$	$0.713^{+0.041}_{-0.043}$	$-0.017^{+0.051}_{-0.051}$	214.3(240)	0.89

## MARGINALIZED 1D CONSTRAINTS

 Flat  $w$ CDM

Probe	$H_0$	$\Omega_m$	$w$	$\chi^2(dof)$	$\chi^2_{rid}$
-	[km/s/Mpc]	-	-	-	-
BAO	$68.76^{+5.13}_{-4.48}$	$0.303^{+0.024}_{-0.023}$	$-1.040^{+0.123}_{-0.146}$	5.4(6)	0.9
CC	$70.25^{+10.86}_{-8.20}$	$0.307^{+0.084}_{-0.071}$	$-1.455^{+0.702}_{-0.963}$	14.3(23)	0.62
SN	$74.75^{+16.23}_{-16.59}$	$0.327^{+0.061}_{-0.082}$	$-1.091^{+0.207}_{-0.224}$	39.2(31)	1.26
GRB	$76.05^{+16.57}_{-17.83}$	$0.502^{+0.283}_{-0.219}$	$-2.276^{+1.529}_{-1.792}$	153.3(153)	1.0
B+C	$69.08^{+3.91}_{-3.73}$	$0.306^{+0.023}_{-0.022}$	$-1.052^{+0.123}_{-0.139}$	20.0(38)	0.53
B+S	$68.04^{+5.12}_{-4.13}$	$0.306^{+0.021}_{-0.020}$	$-1.029^{+0.065}_{-0.071}$	44.7(46)	0.97
B+G	$68.61^{+5.37}_{-4.62}$	$0.306^{+0.025}_{-0.023}$	$-1.038^{+0.128}_{-0.140}$	160.1(168)	0.95
C+S	$68.23^{+3.80}_{-3.56}$	$0.329^{+0.047}_{-0.050}$	$-1.096^{+0.148}_{-0.174}$	53.6(63)	0.85
C+G	$69.12^{+9.85}_{-8.01}$	$0.315^{+0.078}_{-0.072}$	$-1.346^{+0.671}_{-0.932}$	169.0(185)	0.91
S+G	$74.84^{+17.35}_{-17.89}$	$0.322^{+0.053}_{-0.060}$	$-1.073^{+0.166}_{-0.205}$	193.9(193)	1.0
B+C+S	$68.75^{+3.30}_{-3.23}$	$0.307^{+0.020}_{-0.019}$	$-1.035^{+0.065}_{-0.071}$	59.3(78)	0.76
B+C+G	$68.72^{+3.95}_{-3.68}$	$0.307^{+0.022}_{-0.021}$	$-1.040^{+0.119}_{-0.139}$	174.7(200)	0.87
B+S+G	$68.59^{+5.04}_{-4.34}$	$0.305^{+0.020}_{-0.019}$	$-1.031^{+0.066}_{-0.070}$	199.4(208)	0.96
C+S+G	$68.37^{+3.69}_{-3.69}$	$0.325^{+0.043}_{-0.045}$	$-1.090^{+0.140}_{-0.158}$	208.3(2589)	0.93
B+C+S+G	$68.71^{+3.35}_{-3.19}$	$0.307^{+0.020}_{-0.019}$	$-1.032^{+0.065}_{-0.071}$	214.0(240)	0.89

## MARGINALIZED 1D CONSTRAINTS

 Open  $w$ CDM

Probe	$H_0$	$\Omega_m$	$\Omega_\Lambda$	$\Omega_K$	$w$	$\chi^2(dof)$	$\chi^2_{rid}$
-	[km/s/Mpc]	-	-	-	-	-	-
BAO	$69.63^{+5.77}_{-5.22}$	$0.299^{+0.032}_{-0.034}$	$0.686^{+0.137}_{-0.099}$	$0.013^{+0.130}_{-0.154}$	$-1.065^{+0.245}_{-0.509}$	5.3(5)	1.07
CC	$69.70^{+11.85}_{-8.03}$	$0.178^{+0.158}_{-0.105}$	$0.476^{+0.220}_{-0.261}$	$0.356^{+0.301}_{-0.342}$	$-2.207^{+1.196}_{-1.661}$	14.1(22)	0.64
SN	$74.72^{+16.87}_{-16.08}$	$0.273^{+0.084}_{-0.089}$	$0.457^{+0.289}_{-0.185}$	$0.253^{+0.274}_{-0.330}$	$-1.502^{+0.528}_{-1.173}$	38.9(30)	1.3
GRB	$76.66^{+16.48}_{-18.03}$	$0.435^{+0.216}_{-0.168}$	$0.284^{+0.288}_{-0.202}$	$0.228^{+0.227}_{-0.232}$	$-2.580^{+1.681}_{-1.688}$	153.1(152)	1.01
B+C	$69.34^{+4.43}_{-3.95}$	$0.299^{+0.032}_{-0.033}$	$0.667^{+0.126}_{-0.086}$	$0.035^{+0.114}_{-0.147}$	$-1.108^{+0.261}_{-0.511}$	20.0(37)	0.54
B+S	$68.38^{+5.02}_{-4.33}$	$0.305^{+0.021}_{-0.020}$	$0.71^{+0.103}_{-0.095}$	$-0.015^{+0.099}_{-0.105}$	$-1.007^{+0.110}_{-0.147}$	44.6(45)	0.99
B+G	$69.80^{+5.90}_{-5.35}$	$0.296^{+0.032}_{-0.036}$	$0.657^{+0.120}_{-0.086}$	$0.047^{+0.115}_{-0.139}$	$-1.123^{+0.256}_{-0.703}$	160.1(167)	0.96
C+S	$66.33^{+4.12}_{-3.47}$	$0.284^{+0.079}_{-0.098}$	$0.502^{+0.226}_{-0.216}$	$0.204^{+0.318}_{-0.283}$	$-1.358^{+0.333}_{-0.937}$	53.7(62)	0.87
C+G	$66.68^{+10.42}_{-8.10}$	$0.264^{+0.100}_{-0.088}$	$0.509^{+0.177}_{-0.242}$	$0.237^{+0.237}_{-0.223}$	$-1.855^{+1.003}_{-1.565}$	168.9(184)	0.92
S+G	$77.38^{+15.66}_{-17.99}$	$0.275^{+0.055}_{-0.053}$	$0.468^{+0.236}_{-0.162}$	$0.233^{+0.216}_{-0.229}$	$-1.471^{+0.497}_{-1.024}$	194.0(192)	1.01
B+C+S	$68.81^{+3.41}_{-3.29}$	$0.308^{+0.021}_{-0.020}$	$0.698^{+0.094}_{-0.085}$	$-0.007^{+0.092}_{-0.099}$	$-1.027^{+0.109}_{-0.138}$	59.3(77)	0.77
B+C+G	$69.15^{+4.28}_{-3.81}$	$0.298^{+0.029}_{-0.031}$	$0.654^{+0.111}_{-0.079}$	$0.048^{+0.103}_{-0.130}$	$-1.144^{+0.263}_{-0.468}$	174.8(199)	0.88
B+S+G	$68.40^{+5.26}_{-4.29}$	$0.302^{+0.020}_{-0.019}$	$0.682^{+0.088}_{-0.087}$	$0.016^{+0.088}_{-0.089}$	$-1.046^{+0.111}_{-0.151}$	199.8(207)	0.97
C+S+G	$66.72^{+3.99}_{-3.71}$	$0.283^{+0.050}_{-0.053}$	$0.514^{+0.177}_{-0.156}$	$0.192^{+0.198}_{-0.192}$	$-1.326^{+0.312}_{-0.593}$	208.6(2588)	0.93
B+C+S+G	$68.64^{+3.28}_{-3.21}$	$0.303^{+0.020}_{-0.019}$	$0.671^{+0.083}_{-0.079}$	$0.026^{+0.083}_{-0.088}$	$-1.060^{+0.109}_{-0.142}$	214.6(239)	0.9

## MARGINALIZED 1D CONSTRAINTS

 Flat  $w_0 w_a$  CDM

Probe	$H_0$	$\Omega_m$	$w_0$	$w_a$	$\chi^2(dof)$	$\chi^2_{rid}$
-	[km/s/Mpc]	-	-	-	-	-
BAO	$69.72^{+5.87}_{-5.33}$	$0.299^{+0.037}_{-0.035}$	$-1.126^{+0.429}_{-0.414}$	$0.26^{+1.42}_{-1.60}$	5.3(5)	1.06
CC	$72.37^{+11.34}_{-8.86}$	$0.309^{+0.100}_{-0.086}$	$-1.626^{+0.809}_{-1.089}$	$-0.45^{+2.75}_{-2.92}$	14.3(22)	0.65
SN	$76.80^{+15.12}_{-17.54}$	$0.366^{+0.066}_{-0.131}$	$-1.058^{+0.201}_{-0.246}$	$-0.80^{+1.75}_{-2.27}$	39.2(30)	1.31
GRB	$75.31^{+17.03}_{-17.41}$	$0.501^{+0.286}_{-0.216}$	$-2.612^{+1.518}_{-1.580}$	$-0.40^{+3.07}_{-3.04}$	153.5(152)	1.01
B+C	$69.86^{+4.59}_{-4.30}$	$0.296^{+0.036}_{-0.032}$	$-1.186^{+0.378}_{-0.361}$	$0.50^{+1.20}_{-1.43}$	19.7(37)	0.53
B+S	$68.68^{+5.10}_{-4.49}$	$0.307^{+0.021}_{-0.021}$	$-1.030^{+0.121}_{-0.122}$	$-0.01^{+0.65}_{-0.74}$	44.7(45)	0.99
B+G	$69.17^{+5.81}_{-5.43}$	$0.303^{+0.039}_{-0.034}$	$-1.094^{+0.437}_{-0.405}$	$0.20^{+1.37}_{-1.67}$	160.0(167)	0.96
C+S	$67.61^{+3.82}_{-3.90}$	$0.355^{+0.051}_{-0.086}$	$-1.055^{+0.153}_{-0.186}$	$-0.69^{+1.55}_{-1.93}$	53.6(62)	0.87
C+G	$70.75^{+10.59}_{-8.22}$	$0.317^{+0.096}_{-0.078}$	$-1.565^{+0.801}_{-0.982}$	$-0.20^{+2.19}_{-2.52}$	168.8(184)	0.92
S+G	$76.47^{+16.02}_{-17.91}$	$0.353^{+0.061}_{-0.110}$	$-1.045^{+0.185}_{-0.218}$	$-0.50^{+1.42}_{-2.26}$	193.9(192)	1.01
B+C+S	$68.66^{+3.31}_{-3.08}$	$0.308^{+0.022}_{-0.021}$	$-1.050^{+0.117}_{-0.114}$	$0.09^{+0.62}_{-0.73}$	59.3(77)	0.77
B+C+G	$69.42^{+4.64}_{-4.18}$	$0.300^{+0.039}_{-0.033}$	$-1.162^{+0.390}_{-0.367}$	$0.45^{+1.18}_{-1.46}$	174.4(199)	0.88
B+S+G	$68.79^{+5.04}_{-4.58}$	$0.307^{+0.022}_{-0.021}$	$-1.034^{+0.117}_{-0.118}$	$0.03^{+0.63}_{-0.71}$	199.3(207)	0.96
C+S+G	$67.46^{+3.93}_{-3.61}$	$0.351^{+0.052}_{-0.108}$	$-1.030^{+0.160}_{-0.176}$	$-0.56^{+1.50}_{-2.04}$	208.3(2588)	0.93
B+C+S+G	$68.65^{+3.26}_{-3.14}$	$0.307^{+0.022}_{-0.021}$	$-1.055^{+0.116}_{-0.109}$	$0.11^{+0.60}_{-0.71}$	213.9(239)	0.89

## MARGINALIZED 1D CONSTRAINTS

 Open  $w_0 w_a$  CDM

Probe	$H_0$	$\Omega_m$	$\Omega_\Lambda$	$\Omega_K$	$w_0$	$w_a$	$\chi^2(dof)$	$\chi^2_{rid}$
-	[km/s/Mpc]	-	-	-	-	-	-	-
BAO	$70.84^{+7.42}_{-6.29}$	$0.288^{+0.042}_{-0.044}$	$0.645^{+0.128}_{-0.088}$	$0.069^{+0.107}_{-0.146}$	$-1.233^{+0.486}_{-0.943}$	$-0.10^{+1.75}_{-2.14}$	5.0(4)	1.26
CC	$70.34^{+12.21}_{-8.35}$	$0.166^{+0.148}_{-0.099}$	$0.459^{+0.205}_{-0.242}$	$0.38^{+0.273}_{-0.298}$	$-2.519^{+1.295}_{-1.480}$	$-0.34^{+3.19}_{-3.15}$	14.0(21)	0.67
SN	$77.56^{+15.93}_{-17.82}$	$0.244^{+0.123}_{-0.126}$	$0.424^{+0.258}_{-0.162}$	$0.332^{+0.232}_{-0.331}$	$-1.585^{+0.591}_{-1.185}$	$-0.12^{+3.04}_{-2.78}$	38.5(29)	1.33
GRB	$74.88^{+16.88}_{-16.82}$	$0.428^{+0.206}_{-0.161}$	$0.272^{+0.281}_{-0.195}$	$0.244^{+0.235}_{-0.232}$	$-2.867^{+1.608}_{-1.419}$	$-0.43^{+3.25}_{-3.08}$	153.1(151)	1.01
B+C	$70.33^{+5.45}_{-4.43}$	$0.284^{+0.040}_{-0.040}$	$0.639^{+0.127}_{-0.087}$	$0.083^{+0.094}_{-0.150}$	$-1.291^{+0.449}_{-0.741}$	$0.15^{+1.53}_{-2.27}$	19.6(36)	0.55
B+S	$68.40^{+5.21}_{-4.31}$	$0.305^{+0.021}_{-0.021}$	$0.694^{+0.119}_{-0.116}$	$0.000^{+0.117}_{-0.117}$	$-1.030^{+0.129}_{-0.163}$	$0.01^{+0.67}_{-0.99}$	44.5(44)	1.01
B+G	$71.56^{+6.95}_{-5.96}$	$0.283^{+0.042}_{-0.044}$	$0.630^{+0.104}_{-0.084}$	$0.095^{+0.091}_{-0.134}$	$-1.381^{+0.545}_{-1.012}$	$0.16^{+1.65}_{-2.20}$	160.0(166)	0.96
C+S	$65.61^{+3.53}_{-3.37}$	$0.249^{+0.110}_{-0.097}$	$0.403^{+0.177}_{-0.142}$	$0.343^{+0.231}_{-0.268}$	$-1.569^{+0.486}_{-0.977}$	$-0.62^{+2.54}_{-2.17}$	53.7(61)	0.88
C+G	$66.68^{+10.62}_{-8.13}$	$0.265^{+0.108}_{-0.089}$	$0.485^{+0.192}_{-0.239}$	$0.245^{+0.244}_{-0.203}$	$-1.858^{+1.016}_{-1.402}$	$-0.37^{+2.53}_{-2.51}$	168.7(183)	0.92
S+G	$75.50^{+17.46}_{-17.83}$	$0.253^{+0.063}_{-0.061}$	$0.368^{+0.176}_{-0.095}$	$0.369^{+0.141}_{-0.204}$	$-1.829^{+0.658}_{-1.046}$	$-0.29^{+2.60}_{-3.11}$	194.5(191)	1.02
B+C+S	$68.27^{+3.44}_{-3.18}$	$0.305^{+0.022}_{-0.021}$	$0.684^{+0.129}_{-0.114}$	$0.010^{+0.116}_{-0.128}$	$-1.036^{+0.118}_{-0.152}$	$0.08^{+0.63}_{-1.18}$	59.1(76)	0.78
B+C+G	$70.29^{+5.35}_{-4.52}$	$0.283^{+0.040}_{-0.039}$	$0.626^{+0.112}_{-0.075}$	$0.092^{+0.084}_{-0.124}$	$-1.343^{+0.474}_{-0.779}$	$0.16^{+1.55}_{-2.11}$	174.5(198)	0.88
B+S+G	$68.49^{+4.99}_{-4.39}$	$0.302^{+0.021}_{-0.020}$	$0.638^{+0.101}_{-0.092}$	$0.059^{+0.093}_{-0.101}$	$-1.051^{+0.142}_{-0.168}$	$-0.27^{+0.74}_{-1.13}$	200.5(206)	0.97
C+S+G	$65.56^{+3.74}_{-3.60}$	$0.265^{+0.063}_{-0.072}$	$0.431^{+0.163}_{-0.117}$	$0.295^{+0.167}_{-0.182}$	$-1.457^{+0.410}_{-0.774}$	$-0.46^{+2.29}_{-2.72}$	209.0(2587)	0.94
B+C+S+G	$68.20^{+3.36}_{-3.29}$	$0.303^{+0.022}_{-0.021}$	$0.633^{+0.097}_{-0.093}$	$0.062^{+0.094}_{-0.095}$	$-1.067^{+0.137}_{-0.168}$	$-0.24^{+0.78}_{-1.26}$	215.2(238)	0.9