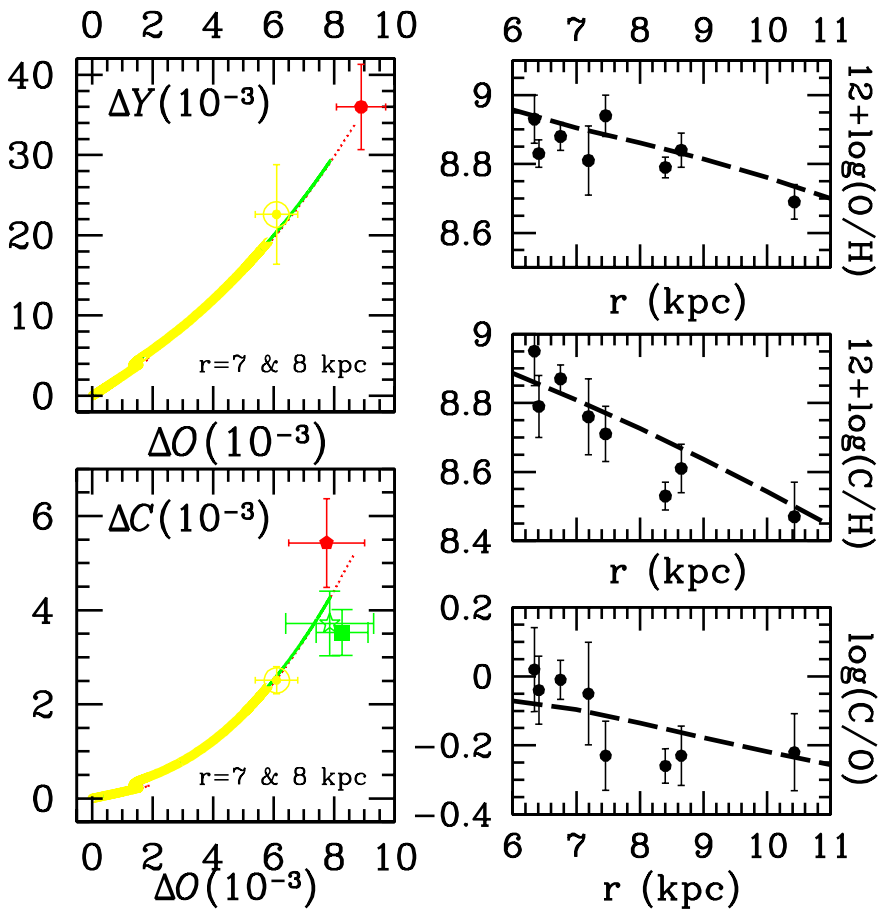

Fig. 7. Chemical evolution model assuming IWY=(HWY+LWY)/2.0. The left panels show the 0–13 Gyr evolution of ΔY vs ΔO and of ΔC vs ΔO for $r = 7$ kpc (dotted red lines) and $r = 8$ kpc (thin solid green line), data as in Figures 4 and 5; the thick yellow lines show the evolution from 0 to 8.5 Gyr for $r = 8$ kpc, data as in Figure 3. The right panels show the present-day ISM abundance ratios as a function of Galactocentric distance, data as in Figure 1. The color figure can be viewed online.

TABLE 1

EXTRAGALACTIC H II REGIONS

Host Galaxy	Type of Galaxy	Object	r (kpc)	12+log(O/H)[a]	12+log(C/H)[a]	log(C/O)[a]
M 101	ScdI	H1013	5.50	8.85 ± 0.09	8.67 ± 0.12	−0.08± 0.15
		NGC 5461	9.84	8.61 ± 0.06	8.30 ± 0.20	−0.21± 0.22
		NGC 5447	16.21	8.64 ± 0.06	8.20 ± 0.12	−0.34± 0.14
		NGC 5471	23.45	8.35 ± 0.15	7.79 ± 0.19	−0.46± 0.24
M 33	ScdII-III	NGC 595	2.87	8.81 ± 0.05	8.63 ± 0.12	−0.18± 0.13
		NGC 604	4.11	8.72 ± 0.03	8.40 ± 0.11	−0.22± 0.12
M 31	SbI-II	K932	16.0	8.74 ± 0.03	8.49 ± 0.13	−0.18± 0.14
NGC 2403	ScdIII	VS44	2.77	8.73 ± 0.04	8.32 ± 0.18	−0.31± 0.19

[a]Gaseous value plus dust correction.