TABLE 1

CHEMICAL ABUNDANCE OF *d*S GALAXIES

Galaxy	12+log(O/H)	Method & (Ref.)[a]
UGC 191	8.14	R_{23} (1)
UGC 11820	7.9 or 8.2	R_{23} (1)
UGC 891	8.2	R_{23} (1)
UGC 5716	8.3	R_{23} (1)
UGC 5675	7.7 or 8.4	R_{23} (2)
NGC 3985	7.2 or 8.9	R_{23} (3)
NGC 2188	7.7 or 8.4	R_{23} (4)
DDO 204	7.9 to 8.1	R_{23} (4)
UGC 5242	7.9 to 8.3	R_{23} (5)
UGC 5296	7.4 to 8.9	R_{23} (5)
UGC 6205	7.7 to 8.7	R_{23} (5)
UGC 9597*	8.96	R_{23} (6)
UGC 7780*	9.04	R_{23} (6)
UGC 7861*	9.18	R_{23} (6)
UGC 8285*	8.91	R_{23} (6)
UGC 6377	7.9	T_e (5)
UGC 9018*	8.03	T_e (6)
UGCA 294*	7.68	T_e (6)

[a]References: (1) van Zee et al. (1997); (2) McGaugh (1994); (3) Gallagher & Hunter (1989); (4) Hidalgo-Gámez (2004); (5) Hidalgo-Gámez et al. (2011a); (6) Moranchel-Basurto (2011).

TABLE 2

ABUNDANCE GRADIENTS FOR *d*S GALAXIES

Galaxy	Accepted gradient
UGC 6205	-0.3 ± 0.03
UGC 6377	-0.2 ± 0.02
UGC 5296	-0.4 ± 0.1
UGC 5242	-0.17 ± 0.06

See Hidalgo-Gámez et al. (2011b) for a detailed discussion on the gradient determination.

abundances than solar. In particular for the SDSS galaxies, the abundances are quite large. If the low-metallicity branch were used instead, an abundance lower than 7.3 is obtained.

2.1. *Abundance gradients*

Edmunds & Roy (1993) obtained that the gradient dismisses as the absolute magnitude decreases while Zaritsky et al. (1994) obtained the stronger abundance gradients for Sc and Sd galaxies. Consequently, it might be expected that the gradients for dS galaxies were very shallow, if any. To check this, the gradient were be determined for four of the galaxies in Table 1 for which the galactocentric distances of the H II regions were measured (Hidalgo-Gámez et al. 2011b). The results obtained are opposite to this trend: the slopes are between −0.17 and −0.5 dex/kpc. There is no differences in the slope between the internal part of the galaxies and the external ones, as observed in another galaxies as M33 (Vílchez et al. 1988).

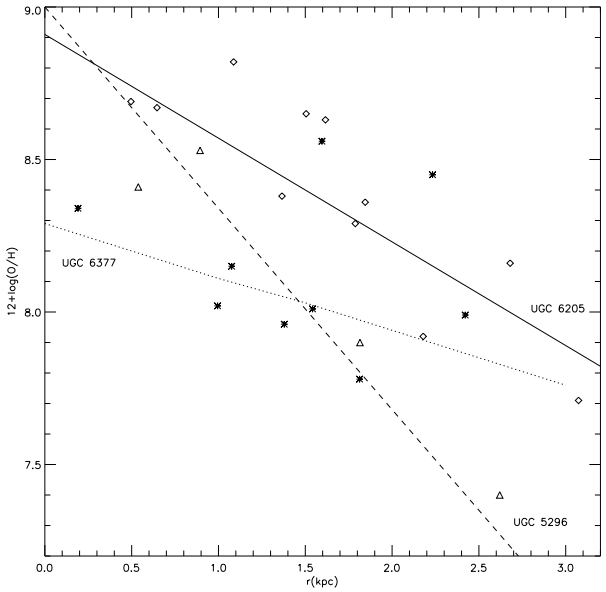

Fig. 1. Abundance gradients for the non-barred galaxies of Table 2. Triangles and the dashed line stand for the data-points of UGC 5296, diamonds and the dotted line for those of UGC 6205 and stars and the solid line for UGC 6377.

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