TABLE 2 (CONTINUED)

KN	NAME	R.A. (2000)	DEC (2000)	F (65 μm)	F (90 μm)	F (140 μm)	F (160 μm)	QUAL	DIAM	F (1.4 GHz)	F(5 GHz)	DIST	DIAM
		H:M:S	D:M:S)	Jy	Jy	Jy	Jy		arcsec	mJy	mJy	kpc	pc
1282	We 1-9	20 09 04.958	+26 26 54.13	0.99	2.131	1.816	2.896	1311	–	9.9	–	–	–
1287	WhMe 1	19 14 59.755	+17 22 46.01	6.393	5.811	1.662	3.378	3311	–	–	–	–	–
1288	Wray 16-120	12 45 54.930	−60 20 17.45	1.296	1.393	0.901	1.815	1311	–	–	–	–	–
1289	Wray 16-121	12 48 30.564	−63 50 01.79	0.016	3.465	3.108	3.314	1311	–	–	–	–	–
1290	Wray 16-122	13 00 41.215	−56 53 40.19	0.147	0.809	–	2.081	1311	–	–	–	–	–
1291	Wray 16-128	13 24 21.922	−57 31 19.29	1.399	1.924	2.794	0.051	1311	–	–	–	–	–
1292	Wray 16-189	15 51 19.819	−48 26 06.93	0.808	1.757	0.916	1.617	1311	–	–	–	–	–
1293	Wray 16-199	16 00 22.002	−48 15 35.29	2.151	2.989	–	–	1311	–	–	–	–	–
1296	Wray 16-266	17 22 36.947	−52 46 34.45	0.491	0.823	0.737	2.13	1311	–	–	–	–	–
1301	Wray 16-411	18 26 41.781	−40 29 52.52	1.512	0.884	0.772	1.506	1311	–	–	–	–	–
1303	Wray 16-93	11 30 48.339	−59 17 04.63	0.487	0.94	0.995	–	1311	–	–	–	–	–
1306	Wray 17-18	08 23 53.825	−45 31 10.70	0.69	1.462	2.112	0	1311	–	–	–	–	–
1308	Wray 17-31	09 31 20.485	−56 17 39.39	0.343	0.881	0.225	–	1311	–	–	–	–	–
1309	Wray 17-40	10 06 59.570	−64 21 49.99	0.157	1.65	0.365	1.062	1311	–	–	–	–	–
1310	Wray 17-59	13 19 29.925	−66 09 07.25	0.381	1.348	–	0.099	1311	–	–	–	–	–
1311	Y-C 2-5	08 10 41.628	−20 31 32.16	0.287	0.541	–	–	1311	–	7.1	4.5	–	–

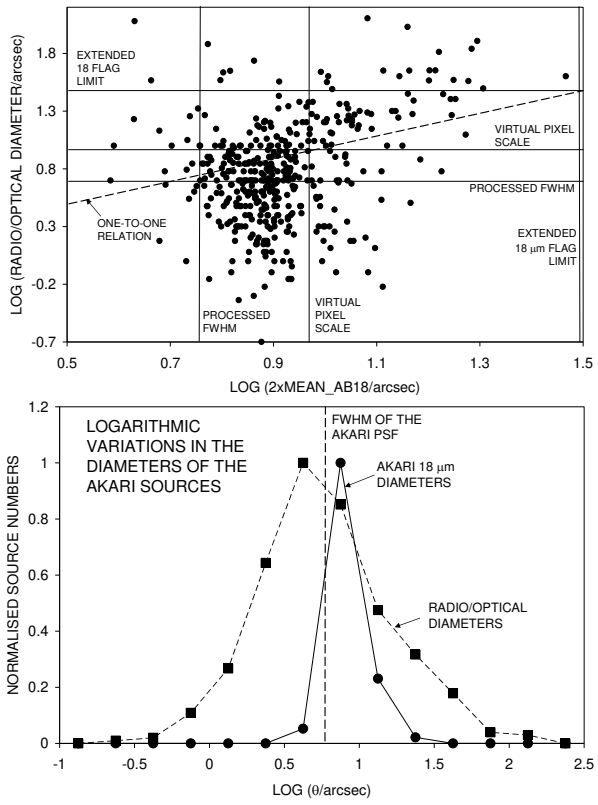

Fig. 2. Comparison between source diameters determined from radio and optical observations, and those determined through AKARI 18 μm observations (upper panel). We also indicate the diameter at which AKARI flags the sources as being extended ("Extended 18 μm Flag Limit"); the size of the virtual pixel scale; and the FWHM of the PSF (identified as the "Processed FWHM"). Although mean AKARI diameters are comparable to those for the optical/radio regime, it is clear that the range in θ is significantly smaller. This is illustrated in the lower panel, where we show distributions for the optical/radio and AKARI results.

cluding glitches, noise, residuals in the responsivity corrections and other anomalies. For the brighter AKARI sources, the absolute uncertainties are of order ∼15%, whilst relative errors are ∼10%, leading to total errors of ∼20% in all of the longer wave bands.

Of the sources listed in Tables 1 and 2, 415 PNe are common to both of the listings. Similarly, a total number of 857 PNe has been measured in this survey, corresponding to 79% of the sources listed in Kerber et al. (2003).

2.3. *Source Sizes in the AKARI Catalog*

We have noted, in § 2, that although virtual pixel sizes for the IRC results are of the order of 9-10 arcsec, the FWHM of the PSFs are ∼5.5–5.7 arcsec. Given that many PNe have dimensions exceeding these limits, it follows that AKARI should permit us to determine the angular dimensions for many of the detected PNe.

The AKARI IRC catalogue includes the flags EXTENDED09 and EXTENDED18, which are triggered when sources have radii >15.6 arcsec. None of the PNe in the present sample are flagged as being extended, even though a reasonable proportion (of order 13%) have radio/optical radii which are greater than these limits. The AKARI catalogue also provides mean radii of the sources at 9 and 18 μm, indicated by the parameters MEAN_AB09 and MEAN_AB18, although here again, the values appear quite different from those in previous studies. This disparity is most clearly to be seen in Figure 2, where we plot the AKARI parameter 2×MEAN_AB18 against the radio/optical diameters from Table 1. It is clear that there is little correlation between the two sets of parameters.

To understand what is happening more clearly, we first concentrate on the distribution of results with respect to the horizontal axis. It is apparent