Infrared dark clouds (IRDCs) were initially discovered by the MSX (Carey et al. 1998, Egan et al. 1998) and ISO (Perault et al. 1998) surveys as dark regions seen against the mid-infrared (MIR) background. The densest IRDCs may eventually form massive stars (e.g. Egan et al. 1998, Carey et al. 1998, 2000). Kinematic calculations have shown that IRDCs are typically at a galactocentric distance of 6 kpc in the fourth quadrant and 5 kpc in the first quadrant of the Galaxy, matching the location of the Scutum-Centaurus arm (Jackson et al. 2008). IRDCs have masses between a few hundred and several thousand solar masses, while masses of cores within IRDCs tend to lie in the range 10–1000 M$_\odot$ (Rathborne et al. 2006, Swift 2009).

Observations of IRDCs and their cores have shown them to have low temperatures (T<25 K; e.g. Egan et al. 1998, Teysier et al. 2002) and high densities (n$_H$>10$^5$ cm$^{-3}$; Egan et al. 1998, Carey et al. 1998, 2000).
Figure 1. G21.753+0.669. Left panel: 8 \( \mu m \). Right panel: 250 \( \mu m \). The position of the candidate IRDC is shown with a cross. This is an example of a Spitzer-dark and Herschel-bright cloud. Note how the same structure that is seen in absorption (black) in the left panel is seen in emission (white) in the right panel. This is believed to be a genuine IRDC.

Peretto & Fuller 2010; Devine et al. 2011; Wilcock et al. 2011; Zhang et al. 2011).

There are currently two published catalogues of candidate IRDCs, namely Simon et al. (2006) and Peretto & Fuller (2009) – hereafter PF09. The former used 8.3-\( \mu m \) MSX data to identify 10931 candidate IRDCs, while the latter used Spitzer 8-\( \mu m \) data to find 11303 candidate IRDCs.

Chambers et al. (2009) use a selection of the Simon et al. (2006) IRDCs to propose a hypothetical evolutionary sequence wherein cores evolve from a quiescent to an active phase and finally into a red core. The quiescent cores contain no MIR activity and are likely to be starless, not yet undergoing any star formation. As the core evolves it enters the active phase and begins to show tracers indicating star formation. These tracers include 24-\( \mu m \) emission, maser emission and extended green objects (EGOs; Cyganowski et al. 2008), which are regions of enhanced 4.5-\( \mu m \) emission thought to be shocked H\(_2\) gas (De Buizer & Vacca 2010) and thus characteristic of an outflow, sometimes called ‘green fuzzies’ (Chambers et al. 2009).

A core is said to be in the final, red, stage when it shows PAH emission and is therefore bright at 8 \( \mu m \). PAH emission is seen in regions with high ultra-violet radiation fields. Hence, red cores may contain hyper-compact or ultra-compact HII regions. Other studies have also used these, or similar, star formation tracers when studying IRDCs (e.g. Jiménez-Serra et al. 2010; Battersby et al. 2011; Devine et al. 2011).

Chambers et al. (2009) had a sample of 190 candidate IRDCs, and they found \(~54\) per cent to be quiescent, \(~25\) per cent to be active and \(~21\) per cent to be red cores. There is some debate over the lifetimes of the different stages of cores in IRDCs. Chambers et al. (2009) use the accretion timescale of high mass star formation and find statistical lifetimes for the quiescent and active phases to be 3.7 and \(2.0 \times 10^5\) years respectively.

Parsons et al. (2009) had a sample of 69 Simon et al. (2006) IRDCs, and found the ratio to be \(~30\) per cent quiescent and \(~70\) per cent to have some form of embedded source (either active or red in the Chambers nomenclature). They use a different estimated lifetime for the embedded YSO phase and find a timescale of about an order of magnitude less than Chambers et al. (2009) for the starless, quiescent phase. These lifetime estimates make the assumption that all starless IRDC cores will eventually begin forming high mass stars (Battersby et al. 2010). They should be viewed as no more than order of magnitude estimates at best.

In this paper, we use data from the Herschel infrared Galactic Plane Survey (Hi-GAL; Molinari et al. 2010a,b) to observe the IRDCs of PF09 at far-infrared (FIR) wavelengths.

2 OBSERVATIONS

2.1 Herschel

The Herschel Space Observatory (Pilbratt et al. 2010) was launched in May 2009, and carries three instruments: the Spectral and Photometric Imaging Receiver (SPIRE, Griffin et al. 2010); the Photodetector Array Camera and Spectrometer (PACS; Poglitsch et al. 2010); and the Heterodyne Instrument for the Far Infrared (HIFI; de Graauw et al. 2010). It is capable of observing in the FIR between 55 and 671 \( \mu m \). The data used in this paper were taken as part of the Herschel infrared Galactic Plane Survey (Hi-GAL), an Open Time Key Project of the Herschel Space Observatory (Molinari et al. 2010a,b). Hi-GAL aims to perform a survey of the Galactic Plane using the PACS and SPIRE instruments. The two are used in parallel mode to map the Milky Way Galaxy simultaneously at five wavelengths (70, 160, 250, 350 and 500 \( \mu m \)), with resolutions up to \(5''\) at 70 \( \mu m \).

\(^1\) Herschel is an ESA space observatory with science instruments provided by European-led Principal Investigator consortia and with participation from NASA.
PACS data reduction at 70 and 160 μm was performed using the Herschel Interactive Pipeline Environment (HIPE; Onishi et al. 2010), with some additions described by Poglitsch et al. (2010). The standard deglitching and crosstalk correction were not used and custom procedures were written for drift removal (Traficante et al. 2011). SPIRE data processing at 250, 350 and 500 μm used the standard processing methods (Griffin et al. 2010), with both standard deglitching and drift removal. In all cases, the ROMAGAL Generalised Least Squares algorithm (Traficante et al. 2011) was used to produce the final maps. A more detailed discussion of the data reduction process is given by Traficante et al. (2011).

2.2 Spitzer

The Spitzer Space Telescope (Werner et al. 2004) was launched in August 2003, and carried three instruments: the Multiband Infrared Photometer for Spitzer (MIPS; Rieke et al. 2004), the Infrared Array Camera (IRAC; Fazio et al. 2004), and the Infrared Spectrograph (IRS; Houck et al. 2004). These instruments are capable of observing in a number of wavebands ranging between 3.6 and 160 μm. As part of its legacy science programme, Spitzer performed two surveys of the Galactic Plane. These were the MIPS Galactic Plane Survey (MIPSGAL; Carey et al. 2009) and the Galactic Legacy Infrared Mid-Plane Survey Extraordinaire (GLIMPSE; Benjamin et al. 2003). Here, we use the mosaics made available by the Spitzer Science Centre to create 8- and 24-μm maps of the region encompassing 300° < l < 330°, and |b| < 1°.

3 RESULTS

3.1 Classifying IRDCs

The PF09 catalogue used Spitzer 8-μm data to find 11303 candidate IRDCs in the regions 10° < |l| < 65° and 295° < l < 350° with |b| < 1°. They identified candidate IRDCs as connected structures with an apparent mean 8-μm opacity greater than 0.35 and an apparent peak above 0.7. This would correspond to a molecular hydrogen column density (N_H) detection threshold of a mean of ~ 10^{22}, and a peak of ~ 2 × 10^{23} cm^{-2}, respectively. Each candidate IRDC had to be at least 4′ in diameter. We refer to these regions as ‘Spitzer-dark’ regions. To find the embedded cores (which PF09 termed fragments), they used apparent opacity contours with a step of 0.35. The number of local peaks between each consecutive level was then the number of fragments extracted.

We present data here on the region from l = 300° to l = 330° with |b| < 1°. This region was chosen as it was the first large contiguous area to be covered in the Hi-GAL survey. It had also been observed in both the GLIMPSE and MIPSGAL surveys and was included in the PF09 survey. The region was therefore used to search for IRDCs and their cores. The PF09 catalogue contained 3171 IRDCs and their cores. The PF09 catalogue included in the Hi-GAL survey. The region was therefore used to search for IRDCs and their cores. The PF09 catalogue contained 3171 IRDCs and their cores. The PF09 catalogue included in the Hi-GAL survey. The region was therefore used to search for IRDCs and their cores. The PF09 catalogue included in the Hi-GAL survey. The region was therefore used to search for IRDCs and their cores. The PF09 catalogue included in the Hi-GAL survey. The region was therefore used to search for IRDCs and their cores. The PF09 catalogue included in the Hi-GAL survey. The region was therefore used to search for IRDCs and their cores.

Figure 2. G308.656+0.760. Left panel: 8 μm. Right panel: 250 μm. The position of the candidate IRDC is shown with a cross. This is an example of a candidate IRDC that is Spitzer-dark but is not Herschel-bright. The same structure that appears dark (black) in the left panel is also dark (black) in the right panel. We refer to such a candidate as Herschel-dark. This is not believed to be a genuine IRDC.

2 Spitzer was operated by the Jet Propulsion Laboratory at the California Institute of Technology under a contract with NASA.
candidate IRDC was viewed in a similar fashion to Figures 1–4 but at all six wavelengths. Any object seen in absorption at 8 µm and seen simultaneously in emission at 250, 350 and 500 µm was classed as both Spitzer-dark and Herschel-bright, and was classified as a genuine IRDC. An example of a Spitzer-dark and Herschel-bright IRDC can be seen in Figure 1. The full list of Herschel-bright IRDCs is given in Appendix A.

At 70 µm a cloud may be expected to be seen in absorption, but less strongly than at 8 µm. Furthermore, the noise in the 70-µm data sometimes tended to make it unclear whether the core was in emission or absorption at 70 µm. Likewise, a source’s appearance at 160 µm depends heavily on the temperature of the cloud. For these reasons, the 70- and 160-µm wavelengths were not used in the initial classification process, and were only used when the other wavelengths left some ambiguity about a source’s status.

Sensitivity limits on Herschel mean that smaller, less dense IRDCs are not likely to show enough emission to be classified as Herschel-bright. We estimate that any IRDC with a major axis less than 26” and a peak column density less than 4x10²² cm⁻² will not be visible in emission at 250, 350 or 500 µm if it is situated in a region with a background greater than 1300 MJy/sr at 250 µm. This accounts for approximately 20 per cent of the PF09 objects. As it cannot be stated whether these objects are emitting in the FIR or not, their true status is unknown and they remain candidate IRDCs. Further details can be found in Appendix A.

In total, of the original 3171 objects in the PF09 catalogue in our search area, we found only 1205 of them to be genuine IRDCs under our simultaneous Spitzer-dark and Herschel-bright definition. These objects are listed in Table A1 of Appendix A. We note that Herschel is insensitive to ~20 per cent of the candidates, see Appendix A.

This method relies upon human interpretation of the data. To estimate the error-bars introduced by this method a second person observed all the candidates in a circular region with a radius of 0.5”’. They classified each candidate as Herschel-bright or Herschel-dark as before. Of the 107 candidate IRDCs in this region, only three were classified differently by the second person.

This implies that all previous catalogues of IRDCs, based solely on MIR data, may have over-estimated the total number of IRDCs in the Galaxy. In this region the number has been over-estimated by up to a factor of ~1.7–2.6. Similar factors might be expected elsewhere. Jackson et al. (2008) carried out a ‘reliability’ test on the IRDC catalogue of Simon et al. (2006), and found values ranging from ~50 per cent to ~100 per cent for the fraction of genuine IRDCs in the catalogue, depending on the contrast level in the MIR. In other words, they found up to a factor of ~2 over-estimate in the number of genuine IRDCs — consistent with our results.

The discovery that only 1205 of the candidate IRDCs, in a catalogue based on MIR data, turn out to be Herschel-bright (see upper part of Table 1) has ramifications for all such catalogues based on MIR data alone. The total number of candidate IRDCs in the catalogues of Simon et al. (2006) and PF09 is ~11000 in each. If our observed ratio is consistent throughout these catalogues, then the total number of genuine IRDCs in each may be as low as ~4000–6000 (c.f. Jackson et al. 2008). This has consequences for calculations of the total number of IRDCs in the Galaxy.

3.2 Cores within IRDCs

Each cloud was examined at 250 µm. Some IRDCs were seen to have relatively simple structures, while others had more complex structures. The 250-µm band was chosen as this had the best resolution of the three wavelengths where the IRDCs were predicted to be seen in emission. Each cloud was examined for evidence that one or more dense cores had formed within the cloud.

A gaussian profile was fitted towards the peak of the intensity map of each core at 250 µm. Our criteria for classification as Herschel-bright specified that a candidate IRDC had to be seen in emission at 250, 350 and 500 µm. The emission from each of our Herschel-bright IRDCs was therefore much greater than its surrounding background. As such, no background subtraction was needed when fitting the gaussian profiles.

The gaussian fitted at 250 µm was used to determine the full-width at half-maximum (FWHM) of each core. Some IRDCs could...
IRDCs (67 per cent) were found to have at least one 8-µm point source within the field of view (see also Lumsden et al. 2002). 653 out of 972 IRDCs contain one or more 8-µm point sources. The presence or lack of an 8-µm point source is available for the majority of these IRDCs, it is possible that the 8-µm point source is not associated with the IRDC itself but are instead foreground stars contaminating the field of view. (Note that some of their associations could be chance alignments). However, be fitted with more than one gaussian, indicating the presence of more than one dense core. A total of 972 IRDCs fell into the category of having one or more dense cores within them.

In the case of 215 IRDCs, cloud emission was seen in the FIR at 250 µm, but there was no discernible 250-µm peak. These IRDCs were deemed not to have any dense cores within them. For 18 IRDCs the data were found to be excessively ‘stripy’ at 250 µm, resulting in no gaussian being able to be fitted. These were discarded. These 233 objects, to which no gaussian could be fitted, were omitted from further consideration. This left us with a ‘clean’ sample of 972 IRDCs that contain one or more dense cores, on which we concentrate for the remainder of the paper.

### 3.3 Protostars within IRDC cores

The 972 IRDCs containing one or more dense cores were studied closely in the 8-µm data for evidence of an 8-µm point source. The presence or lack of an 8-µm point source within a core is most likely to be indicative of the presence or absence of an embedded protostar. Hence, this is an indication of the evolutionary status of the core. More evolved cores, namely those already undergoing star formation, are more likely to have an 8-µm point source within them.

Every core in all of the 972 IRDCs was searched for an embedded 8-µm point source. An 8-µm point source was defined as a compact, roughly circular source with an 8-µm peak of greater than 3σ, where σ is the noise level of the data and was defined as the standard deviation in flux towards the edge of each region. The peak of the point source had to be within a radius from the centre of the core (defined at 250 µm) equal to the FWHM of the core at 250 µm. It should be noted that, as no distance information is available for the majority of these IRDCs, it is possible that the 8-µm point sources noted here are, in some cases, not associated with the IRDC itself but are instead foreground stars contaminating the field of view.

653 out of 972 IRDCs (67 per cent) were found to have at least one 8-µm point source embedded in one or more of their constituent cores. This left 319 IRDCs with no 8-µm point source.

These 319 IRDCs without 8-µm point sources were searched for a 24-µm point source. The search was carried out using the same criteria as when looking for an 8-µm point source. Of the 319 IRDCs, 149 were found to have one or more 24-µm point sources.

In summary, we found a total of 972 IRDCs that contained one or more discernable cores at 250 µm. Of these, 653 have an 8-µm point source. Of the IRDCs with no 8-µm point source, a further 149 have a 24-µm point source. We designate the remaining 170 as starless IRDCs. These objects could be the high-mass equivalents of low-mass starless cores. The total number of IRDCs in each category is summarised in Table I.

### 4 DISCUSSION

#### 4.1 Statistics

The relative numbers of IRDCs with no embedded MIR point sources, compared to those with 8- and 24-µm point sources (see lower part of Table I), can be used for comparison with previous findings. Chambers et al. (2009) labelled IRDCs with no embedded MIR point sources as quiescent, those with a 24-µm point source as active, and those with an 8-µm point source as red cores. They had a sample of 190 candidate IRDCs, and found ~21 per cent to be red, ~25 per cent to be active and ~54 per cent to be quiescent. These percentages can be compared to the last three lines in Table I.

It can be seen that there is a much larger fraction of quiescent IRDCs in the Chambers sample than in ours. This could be due to the effect of some fraction of their initial sample of candidate IRDCs not being genuine, as they had no FIR data. Interestingly, though, because they see 46 per cent of their candidate IRDCs having other star formation tracers, then only a maximum of 54 per cent (±5 per cent) of their candidate IRDCs could be false, compared to up to 62 per cent (±1 per cent) in our full sample (although note that some of their associations could be chance alignments). However,
Table 1. IRDC statistics. The upper part of the Table lists the number and percentage of candidates in the PF09 catalogue that were found to be Herschel-bright. The lower part of the Table refers to the sample of 972 IRDCs that contained one or more dense cores at 250 μm, and lists those with embedded 8-μm sources, those without 8-μm sources that contain 24-μm sources, and those with neither 8-μm nor 24-μm sources.

| Source Type                  | Equivalent Class of Chambers et al. (2009) | Number of IRDCs | Percentage |
|-----------------------------|--------------------------------------------|-----------------|------------|
| PF09 sample                 |                                            | 3171            | 100        |
| Herschel-bright             |                                            | 1205            | 38         |
| IRDCs with cores            |                                            | 972             | 100        |
| IRDCs with 8-μm source      | Red Core                                   | 653             | 67         |
| IRDCs with 24-μm source only| Active Core                                 | 149             | 15         |
| No 8- or 24-μm source       | Quiescent Core                             | 170             | 18         |

Chambers et al. (2009) have a much smaller sample of cores. Additionally, Chambers et al. (2009) use the Simon et al. (2006) catalogue of candidate IRDCs. The Simon et al. (2006) catalogue was based on MSX data and used different criteria to PF09 when finding candidate IRDCs. This makes a detailed comparison between this work and that of Chambers et al. (2009) difficult. The errors quoted in brackets here are simply the poisson (√n) errors, and there may also be systematic effects at work. Hence, these two numbers are roughly consistent.

Parsons et al. (2009) cross-matched the candidate IRDCs of Simon et al. (2006) with SCUBA 850-μm emission, and found that 25 per cent of the candidate IRDCs were not seen in emission at 850 μm. Of those that were detected by SCUBA, which also appeared in the GLIMPSE survey, they found that 70 per cent had embedded 24-μm point sources, and 30 per cent did not. They made no distinction between those 24-μm sources that also had 8-μm point sources and those that did not. Hence their 30 per cent needs to be compared to the last line in Table 1 (18 per cent), and their 70 per cent should be compared to the sum of the two lines above that in Table 1 (82 per cent). Given the very different sizes of the samples (the simple poisson √n errors on their numbers are ~±10 per cent), these are also consistent with the percentages we find.

4.2 Relative lifetimes

A simple evolutionary picture for a core within an IRDC is given by Chambers et al. (2009). This entails a quiescent, starless phase evolving first into a core with an embedded 24-μm point source. This phase could be equated theoretically with the main accretion phase for massive protostar formation. Subsequently the core would evolve into a core with an embedded 8-μm point source, indicating the beginnings of an HII region starting to form. If each starless IRDC core evolves into a corresponding star-forming core with one or more embedded 24-μm point sources, and each of these evolves into a core with the same number of embedded 8-μm point sources, then we can equate the above statistics with theoretical lifetimes, and produce statistical lifetimes for each of the stages in Table 1.

One clear result that then comes from Table 1 is that only about one-fifth of IRDC cores do not contain embedded point sources. If this corresponds to the ‘starless’ phase of IRDCs, then we would conclude that a typical IRDC core only spends around one-fifth of its lifetime without any seed of a protostar within it. Chambers et al. (2009) assume that the accretion timescale of high mass star formation is equivalent to the amount of time that an IRDC core will exist in the active phase (i.e. has a 24-μm point source, but no 8-μm point source). We can use a canonical value for the accretion timescale of ~2×10⁶ years (Zinnecker & Yorke 2007) as the lifetime for the active phase.

Hence we would calculate, from the similarity of the percentages in the last two lines of Table 1 that the lifetime of the quiescent, or starless, phase of IRDCs is also ~2×10⁶ years. Similarly, the lifetime of the phase with an embedded 8-μm source (the red stage in Chambers’ nomenclature) would then be ~6×10⁵ years and the entire IRDC lifetime (after core formation) would be ~10⁷ years. Chambers et al. (2009) find ~4×10⁵ years for the quiescent phase, also by assuming 2×10⁸ years for the active phase.

The 8-μm emission is believed to arise from very hot, very small grains, known as polycyclic aromatic hydrocarbons (PAHs; Chambers et al. 2009). A typical PAH is so small that a single high-energy photon can interact with a PAH and raise its temperature to a few hundred degrees for a short period of time, before it cools again by re-emitting a photon in the MIR. Such high-energy photons are presumed to ionise the surrounding material and create hyper-compact and ultra-compact HII (HCHII and UCHII) regions. Hence the phase where an IRDC contains an embedded 8-μm point source should roughly correlate with the combined HCHII and UCHII phases. The UCHII lifetime is not well known, although recent estimates put it at several ×10⁵ years (e.g. Kaper et al. 2011), consistent with our estimate. Similarly, McKee & Tan (2002) look at stars in typical regions of high mass star formation and find timescales of a few ×10⁵ years for the combined HCHII and UCHII phases. This is also consistent with our estimated lifetime of the phase in which an IRDC has an embedded 8-μm point source.

5 CONCLUSIONS

3171 candidate IRDCs were catalogued from their MIR absorption in Spitzer data (Spitzer-dark regions). We found 1205 which are Herschel-bright. The other objects may be simply minima in the IR background. This suggests that IRDC searches based solely
on MIR data may over-estimate the total number of IRDCs in the Galaxy by up to a factor of ~2.

972 of the 1205 Herschel-bright IRDCs have one or more discernible peaks at 250 µm, indicating the formation of dense cores within these IRDCs. The Spitzer data were then examined to see whether the IRDCs with cores contained either an 8- or a 24-µm point source. 653 are seen to harbour one or more 8-µm point sources, and of the remainder, a further 149 contained one or more 24-µm point sources.

We equated the presence of a 24-µm point source to the typical accretion timescale for high-mass stars of ~2×10^5 years and hence derived a timescale for the starless IRDC core phase also of ~2×10^5 years. We equated the presence of an 8-µm point source to the combined HCHII and UCHII phase, and derived a timescale of ~6×10^5 years for this stage. A total lifetime for IRDCs with dense cores of ~10^6 years was thus derived.

ACKNOWLEDGEMENTS

LAW acknowledges STFC studentship funding. SPIRE was developed by a consortium of institutes led by Cardiff University (UK) and including Univ. Lethbridge (Canada); NAOC (China); CEA, LAM (France); IFSI, Univ. Padua (Italy); IAC (Spain); Stockholm Observatory (Sweden); Imperial College London, RAL, UCL-MSL, UKATC, Univ. Sussex (UK); and Caltech, JPL, NHSC, Univ. Colorado (USA). This development was supported by national funding agencies: CSA (Canada); NAOC (China); CEA, CNES, CNRS (France); ASI (Italy); MCINN (Spain); SNSB (Sweden); STFC (UK); and NASA (USA). PACS was developed by a consortium of institutes led by MPE (Germany) and including UVIE (Austria); KU Leuven, CSL, IMEC (Belgium); CEA, LAM (France); MPIA (Germany); INAF-IFSI/OAA/OAP/OAT, LENS, SISSA (Italy); IAC (Spain). This development was supported by the funding agencies BMVIT (Austria), ESA-PRODEX (Belgium), CEA/CNES (France), DLR (Germany), ASI/INAF (Italy), and CI-CYT/MCYT (Spain). HIPE is a joint development by the Herschel Science Ground Segment Consortium, consisting of ESA, the NASA Herschel Science Center, and the HIFI, PACS and SPIRE consortia. This work is also based, in part, on observations made with the Spitzer Space Telescope, which is operated by the Jet Propulsion Laboratory, California Institute of Technology under a contract with NASA.

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APPENDIX A: LIST OF HERSCHEL-BRIGHT IRDCS

Table A1: The 1,205 IRDCs which were found to be Herschel-bright. Column 1 states the IRDC name as it appears in PF09. Columns 2 and 3 are the position of the IRDC. Columns 4 and 5 give details on whether the object contains a MIR source. Column 6 gives additional information about the cloud, including whether it contains a visible core and whether it is isolated at 160 and 500 µm.

| IRDC Name   | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8 µm source? | 24 µm source? | Additional comments |
|-------------|-----------------------------|------------------------|--------------|---------------|---------------------|
| 300.35−0.357 | 187.13                      | −63.11                 | Yes          |                |                     |
| 300.35−0.358 | 187.16                      | −63.12                 | Yes          |                |                     |
| 300.59+0.098 | 187.77                      | −62.68                 | Yes          |                |                     |
| 300.74+0.036 | 188.08                      | −62.75                 | Yes          |                |                     |
| 300.74+0.550 | 188.16                      | −62.24                 | Yes          |                |                     |
| 301.13−0.274 | 188.88                      | −63.09                 | Yes          |                |                     |
| 301.20−0.193 | 189.06                      | −63.01                 | No           | No            | Confused at 500 µm  |
| 301.23−0.242 | 189.22                      | −63.07                 | Yes          |                |                     |
| 301.42−0.116 | 189.54                      | −62.95                 | Yes          |                |                     |
| 301.50−0.464 | 189.68                      | −63.30                 | Yes          |                |                     |
| 301.52−0.350 | 189.71                      | −63.19                 | No           | No            | Confused at 500 µm  |
| 301.51−0.467 | 189.71                      | −63.30                 | Yes          |                |                     |
| 301.55−0.121 | 189.82                      | −62.96                 | Yes          |                |                     |
| 301.58−0.380 | 189.81                      | −63.22                 | Yes          |                |                     |
| 301.58−0.107 | 189.92                      | −62.95                 | Yes          |                |                     |
| 301.60−0.118 | 189.94                      | −62.96                 | Yes          |                |                     |
| 301.65−0.367 | 190.04                      | −63.21                 | Yes          |                |                     |
| 301.65+0.245 | 190.09                      | −62.60                 | No           | No            | Confused at 500 µm  |
| 301.67−0.201 | 190.08                      | −63.05                 | Yes          |                |                     |
| 301.69−0.414 | 190.10                      | −63.26                 | Yes          |                |                     |
| 301.78+0.145 | 190.36                      | −62.70                 | Yes          |                |                     |
| 301.86+0.694 | 190.57                      | −62.16                 | No           | Yes           |                     |
| 301.87+0.589 | 190.59                      | −62.26                 | Yes          |                |                     |
| 301.96+0.233 | 191.04                      | −62.63                 | Yes          |                |                     |
| 302.17+0.258 | 191.21                      | −62.60                 | Yes          |                |                     |
| 302.45−0.783 | 191.79                      | −63.65                 | Yes          |                |                     |
| 302.54+0.000 | 192.01                      | −62.87                 | Yes          |                |                     |
| 302.59+0.122 | 192.12                      | −62.75                 | Yes          |                |                     |
| 302.68+0.084 | 192.33                      | −62.79                 | Yes          |                |                     |
| 302.76−0.082 | 192.49                      | −62.95                 | No           | No            | Confused at 500 µm  |
| 302.81−0.034 | 192.60                      | −62.91                 | Yes          |                |                     |
| 302.84+0.235 | 192.67                      | −62.64                 | Yes          |                |                     |
| 302.84−0.049 | 192.67                      | −62.92                 | No           | No            | Confused at 500 µm  |
| 302.88−0.431 | 192.75                      | −63.30                 | Yes          |                |                     |
| 302.93−0.445 | 192.88                      | −63.32                 | Yes          |                |                     |
| 303.04−0.449 | 193.11                      | −63.32                 | No           | Yes           |                     |
| 303.04+0.434 | 193.11                      | −63.31                 | Yes          |                |                     |
| 303.04+0.113 | 193.12                      | −62.76                 | Yes          |                |                     |
| 303.05+0.450 | 193.14                      | −63.32                 | Yes          |                |                     |
| 303.35+0.418 | 193.78                      | −62.45                 | Yes          |                |                     |
| 304.01+0.485 | 195.19                      | −62.37                 | No           | No            | Confused at 500 µm  |
| 304.11+0.279 | 195.43                      | −62.57                 | Yes          |                |                     |
| 304.13−0.384 | 195.53                      | −63.23                 | Yes          |                |                     |
| 304.52−0.037 | 196.36                      | −62.87                 | Yes          |                |                     |
| 304.58+0.333 | 196.44                      | −62.49                 | No           | Yes           |                     |
| 304.60+0.353 | 196.47                      | −62.47                 | No           | No            | Confused at 500 µm  |
| 304.72+0.266 | 196.75                      | −62.55                 | Yes          |                |                     |
| 304.79+0.202 | 196.91                      | −62.61                 | No           | Yes           |                     |
| 304.82+0.222 | 196.95                      | −62.59                 | Yes          |                |                     |
| 304.81+0.431 | 196.93                      | −62.38                 | Yes          |                |                     |
| 304.82+0.324 | 196.96                      | −62.49                 | Yes          |                |                     |

*continued on next page*
### Cores in IRDCs from $l = 300$ to $330 ^\circ$

| IRDC Name          | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8 $\mu$m source? | 24 $\mu$m source? | Additional comments               |
|--------------------|-----------------------------|------------------------|------------------|------------------|----------------------------------|
| 304.831+0.336      | 196.97                      | −62.47                 | Yes              |                  |                                  |
| 304.836+0.578      | 196.95                      | −62.23                 | No               | Yes              |                                  |
| 304.856+0.270      | 197.04                      | −62.54                 | Yes              |                  |                                  |
| 305.022+0.325      | 197.39                      | −62.47                 |                  |                  | No distinct core                 |
| 305.045+0.446      | 197.42                      | −62.35                 | Yes              |                  |                                  |
| 305.049+0.561      | 197.41                      | −62.24                 | Yes              |                  |                                  |
| 305.059−0.170      | 197.54                      | −62.96                 | Yes              |                  |                                  |
| 305.079+0.660      | 197.46                      | −62.13                 | Yes              |                  |                                  |
| 305.083+0.258      | 197.53                      | −62.54                 | No               | Yes              |                                  |
| 305.085−0.166      | 197.60                      | −62.96                 |                  | No distinct core |                                  |
| 305.086+0.548      | 197.49                      | −62.25                 | Yes              |                  |                                  |
| 305.103+0.582      | 197.52                      | −62.21                 | Yes              |                  |                                  |
| 305.131−0.027      | 197.68                      | −62.82                 | No               | Yes              |                                  |
| 305.134+0.067      | 197.67                      | −62.72                 | Yes              |                  |                                  |
| 305.162+0.224      | 197.70                      | −62.56                 | No               | Yes              |                                  |
| 305.162+0.554      | 197.65                      | −62.23                 | Yes              |                  |                                  |
| 305.183+0.464      | 197.71                      | −62.32                 | No               | No               | Confused at 500 $\mu$m            |
| 305.183+0.475      | 197.71                      | −62.31                 | Yes              |                  |                                  |
| 305.200+0.001      | 197.82                      | −62.78                 | Yes              |                  |                                  |
| 305.209+0.205      | 197.81                      | −62.58                 | Yes              |                  |                                  |
| 305.228+0.270      | 197.84                      | −62.51                 | Yes              |                  |                                  |
| 305.307−0.259      | 198.10                      | −63.03                 | No               | No               | Confused at 500 $\mu$m            |
| 305.339−0.254      | 198.17                      | −63.03                 | No               | No               | Confused at 500 $\mu$m            |
| 305.376+0.461      | 198.13                      | −62.31                 | Yes              |                  |                                  |
| 305.412+0.355      | 198.22                      | −62.41                 | Yes              |                  |                                  |
| 305.425+0.436      | 198.24                      | −63.33                 | No               | Yes              |                                  |
| 305.433–0.262      | 198.38                      | −63.03                 | No               | Yes              |                                  |
| 305.440+0.109      | 198.33                      | −62.66                 | Yes              |                  |                                  |
| 305.498+0.180      | 198.44                      | −62.58                 | Yes              |                  |                                  |
| 305.504+0.168      | 198.46                      | −62.59                 | Yes              |                  |                                  |
| 305.523+0.402      | 198.45                      | −62.36                 | Yes              |                  |                                  |
| 305.540+0.434      | 198.48                      | −62.32                 | Yes              |                  |                                  |
| 305.547–0.054      | 198.59                      | −62.81                 | Yes              |                  |                                  |
| 305.575–0.342      | 198.71                      | −63.09                 | Yes              |                  |                                  |
| 305.590+0.333      | 198.61                      | −62.42                 | Yes              |                  |                                  |
| 305.595+0.392      | 198.61                      | −62.36                 | Yes              |                  |                                  |
| 305.595+0.421      | 198.60                      | −62.33                 | Yes              |                  |                                  |
| 305.633–0.043      | 198.78                      | −62.79                 | Yes              |                  |                                  |
| 305.651–0.008      | 198.81                      | −62.75                 | No               | Yes              |                                  |
| 305.688–0.025      | 198.89                      | −62.77                 | Yes              |                  |                                  |
| 305.689+0.423      | 198.80                      | −62.32                 | No distinct core |                  |                                  |
| 305.696–0.147      | 198.94                      | −62.89                 | Yes              |                  |                                  |
| 305.706+0.026      | 198.92                      | −62.71                 | Yes              |                  |                                  |
| 305.741+0.163      | 198.97                      | −62.57                 | Yes              |                  |                                  |
| 305.798–0.097A     | 199.15                      | −62.83                 | No               | No               |                                  |
| 305.798–0.097B     | 199.15                      | −62.83                 | Yes              |                  |                                  |
| 305.801+0.120      | 199.11                      | −62.61                 | No               | Yes              |                                  |
| 305.818–0.073      | 199.18                      | −62.80                 | No               | Yes              |                                  |
| 305.866–0.148      | 199.31                      | −62.87                 | Yes              |                  |                                  |
| 305.898–0.029A     | 199.35                      | −62.75                 | Yes              |                  |                                  |
| 305.898–0.029B     | 199.35                      | −62.75                 | Yes              |                  |                                  |
| 305.898–0.029C     | 199.35                      | −62.75                 | Yes              |                  |                                  |
| 305.923–0.097      | 199.42                      | −62.82                 | No               | Yes              |                                  |
| 305.924+0.034      | 199.39                      | −62.69                 | Yes              |                  |                                  |
| 305.928–0.185      | 199.45                      | −62.90                 | Yes              |                  |                                  |
| 305.984–0.078      | 199.55                      | −62.79                 | Yes              |                  |                                  |
| 306.037–0.120      | 199.67                      | −62.83                 | Yes              |                  |                                  |
| 306.090–0.095      | 199.78                      | −62.80                 | No               | Yes              |                                  |
| 306.188–0.246      | 200.03                      | −62.94                 | Yes              |                  |                                  |

*continued on next page*
| IRDC Name    | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | $8\mu m$ source? | $24\mu m$ source? | Additional comments |
|-------------|-----------------------------|-------------------------|-----------------|------------------|-------------------|
| 306.190−0.214 | 200.03 | −62.90 | Yes | | |
| 306.230−0.007 | 200.07 | −62.69 | Yes | | |
| 306.230−0.565 | 200.20 | −63.25 | Yes | | |
| 306.237−0.559 | 200.22 | −63.24 | Yes | | |
| 306.309−0.036 | 200.24 | −62.71 | Yes | | |
| 306.324−0.053 | 200.28 | −62.73 | Yes | | |
| 306.451+0.049 | 200.53 | −62.61 | Yes | | |
| 306.495+0.070 | 200.62 | −62.59 | Yes | | |
| 306.531+0.022 | 200.71 | −62.63 | Yes | | |
| 306.614−0.161 | 200.94 | −62.80 | Yes | | |
| 306.627−0.168 | 200.97 | −62.81 | Yes | | No distinct core |
| 306.664−0.209 | 201.06 | −62.84 | Yes | | |
| 306.780−0.406 | 201.37 | −63.02 | Yes | | |
| 306.841−0.070 | 201.40 | −62.68 | Yes | | |
| 307.150−0.776 | 202.29 | −63.34 | Yes | | |
| 307.495+0.660 | 202.57 | −61.87 | No | No | |
| 307.567−0.689 | 203.18 | −63.19 | Yes | | |
| 307.751−0.838 | 203.64 | −63.31 | Yes | | |
| 307.873+0.079 | 203.57 | −62.38 | Yes | | |
| 308.123−0.332 | 204.25 | −62.74 | Yes | | |
| 308.138−0.454 | 204.33 | −62.86 | Yes | | |
| 308.307−0.027 | 204.53 | −62.41 | Yes | | |
| 308.323+0.078 | 204.52 | −62.30 | Yes | | |
| 308.338+0.082 | 204.55 | −62.30 | Yes | | |
| 308.378+0.190 | 204.60 | −62.18 | Yes | | |
| 308.386+0.211 | 204.60 | −62.16 | Yes | | |
| 308.397−0.175 | 204.78 | −62.54 | Yes | | |
| 308.458+0.025 | 204.83 | −623.33 | Yes | | |
| 308.512+0.025 | 204.94 | −62.32 | No | No | Confused at 500 $\mu m$ |
| 308.588+0.763 | 204.81 | −61.58 | Yes | | |
| 308.641−0.097 | 205.27 | −62.42 | No | Yes | |
| 308.650−0.437 | 205.43 | −62.75 | No | Yes | |
| 308.662−0.065 | 205.30 | −62.38 | No | Yes | |
| 308.781+0.091 | 205.49 | −62.21 | Yes | | |
| 308.792−0.434 | 205.73 | −62.72 | Yes | | |
| 308.891−0.135 | 205.81 | −62.41 | No | | No distinct core |
| 308.943+0.068 | 205.83 | −62.20 | Yes | | |
| 308.949−0.457 | 206.08 | −62.71 | Yes | | |
| 308.968−0.115 | 205.97 | −62.37 | Yes | | |
| 308.969+0.203 | 205.83 | −62.06 | Yes | | |
| 308.972−0.196 | 206.01 | −62.45 | Yes | | |
| 308.972−0.244 | 206.03 | −62.50 | No | | No distinct core |
| 308.985−0.459 | 206.15 | −62.70 | Yes | | |
| 308.993−0.180 | 206.05 | −62.43 | No | No | Confused at 500 $\mu m$ |
| 308.997−0.261 | 206.09 | −62.51 | Yes | | |
| 309.003−0.187 | 206.07 | −62.44 | Yes | | |
| 309.004−0.089 | 206.03 | −62.34 | Yes | | |
| 309.013−0.732 | 206.34 | −62.97 | Yes | | |
| 309.014−0.415 | 206.20 | −62.66 | Yes | | |
| 309.019−0.270 | 206.14 | −62.51 | Yes | | |
| 309.028−0.412 | 206.22 | −62.65 | Yes | | |
| 309.045−0.344 | 206.10 | −62.29 | Yes | | |
| 309.045−0.178 | 206.16 | −62.42 | Yes | | |
| 309.046−0.139 | 206.14 | −62.38 | No | | No distinct core |
| 309.058−0.027 | 206.12 | −62.27 | No | Yes | |
| 309.068−0.244 | 206.23 | −62.48 | Yes | | |
| 309.079−0.208 | 206.24 | −62.44 | No | No | |
| 309.085−0.146 | 206.23 | −62.38 | Yes | | |
| 309.101−0.074 | 206.23 | −62.30 | Yes | | |
| IRDC Name       | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8µm source? | 24µm source? | Additional comments |
|-----------------|--------------------------|------------------------|-------------|--------------|---------------------|
| 309.111–0.298   | 206.35                   | −62.52                 | No          | No           |                     |
| 309.117–0.484   | 206.45                   | −62.70                 | Yes         |              |                     |
| 309.124–0.993   | 206.70                   | −63.20                 | Yes         |              |                     |
| 309.124+0.112   | 206.20                   | −62.12                 | No          | Yes          |                     |
| 309.129–0.144   | 206.32                   | −62.37                 | Yes         |              |                     |
| 309.131–0.191   | 206.34                   | −62.41                 | Yes         |              |                     |
| 309.136–0.165   | 206.34                   | −62.39                 | Yes         |              |                     |
| 309.146–0.491   | 206.51                   | −62.70                 | Yes         |              |                     |
| 309.154–0.550   | 206.56                   | −62.76                 | Yes         |              |                     |
| 309.154+0.122   | 206.25                   | −62.10                 | No          | Yes          |                     |
| 309.157–0.345   | 206.47                   | −62.56                 | Yes         |              |                     |
| 309.160–0.223   | 206.42                   | −62.44                 | Yes         |              |                     |
| 309.171–0.147   | 206.41                   | −62.36                 | Yes         |              |                     |
| 309.176–0.552   | 206.61                   | −62.76                 | Yes         |              |                     |
| 309.219–0.654   | 206.74                   | −62.85                 | No distinct core |              |                     |
| 309.222–0.545   | 206.70                   | −62.74                 | Yes         |              |                     |
| 309.238–0.228   | 206.59                   | −62.43                 | Yes         |              |                     |
| 309.242–0.214   | 206.59                   | −62.41                 | Yes         |              |                     |
| 309.242+0.951   | 206.08                   | −61.27                 | No          | No           | Confused at 500 µm |
| 309.254–0.620   | 206.80                   | −62.81                 | No distinct core |              |                     |
| 309.267–0.557   | 206.80                   | −62.74                 | No          | Yes          |                     |
| 309.292–0.197   | 206.69                   | −62.38                 | Yes         |              |                     |
| 309.304–0.578   | 206.89                   | −62.75                 | No          | Yes          |                     |
| 309.306–0.615   | 206.91                   | −62.79                 | Yes         |              |                     |
| 309.308–0.213   | 206.73                   | −62.40                 | Yes         |              |                     |
| 309.311–0.513   | 206.87                   | −62.69                 | Yes         |              |                     |
| 309.334–0.643   | 206.98                   | −62.81                 | Yes         |              |                     |
| 309.346–0.706   | 207.04                   | −62.87                 | No distinct core |              |                     |
| 309.362–0.628   | 207.04                   | −62.79                 | Yes         |              |                     |
| 309.374–0.093   | 206.81                   | −62.27                 | Yes         |              |                     |
| 309.374–0.622   | 207.06                   | −62.78                 | Yes         |              |                     |
| 309.392–0.410   | 207.00                   | −62.57                 | Yes         |              |                     |
| 309.401+0.465   | 206.61                   | −61.71                 | Yes         |              |                     |
| 309.409–0.574   | 207.11                   | −62.73                 | No          | Yes          |                     |
| 309.418+0.973   | 206.43                   | −61.21                 | No distinct core |              |                     |
| 309.420–0.641   | 207.17                   | −62.79                 | No distinct core |              |                     |
| 309.434–0.661   | 207.21                   | −62.81                 | No distinct core |              |                     |
| 309.440–0.566   | 207.17                   | −62.71                 | Yes         |              |                     |
| 309.444–0.741   | 207.27                   | −62.88                 | Yes         |              |                     |
| 309.452–0.345   | 207.09                   | −62.49                 | Yes         |              |                     |
| 309.488–0.679   | 207.33                   | −62.81                 | Yes         |              |                     |
| 309.509–0.650   | 207.36                   | −62.78                 | Yes         |              |                     |
| 309.651+0.080   | 207.31                   | −62.04                 | Yes         |              |                     |
| 309.666–0.749   | 207.74                   | −62.84                 | No          | No           | Confused at 500 µm |
| 309.671–0.829   | 207.80                   | −62.92                 | Yes         |              |                     |
| 309.759–0.438   | 207.79                   | −62.52                 | Yes         |              |                     |
| 309.759–0.471   | 207.80                   | −62.55                 | Yes         |              |                     |
| 309.781+0.381   | 207.44                   | −61.71                 | Yes         |              |                     |
| 309.894+0.647   | 207.54                   | −61.43                 | Yes         |              |                     |
| 309.903+0.230   | 207.76                   | −61.83                 | Yes         |              |                     |
| 309.915+0.323   | 207.74                   | −61.74                 | Yes         |              |                     |
| 309.916+0.493   | 207.66                   | −61.57                 | Yes         |              |                     |
| 309.950+0.391   | 207.78                   | −61.66                 | Yes         |              |                     |
| 309.967+0.595   | 207.71                   | −61.46                 | Yes         |              |                     |
| 309.975+0.301   | 207.87                   | −61.75                 | Yes         |              |                     |
| 309.990+0.435   | 207.84                   | −61.61                 | Yes         |              |                     |
| 309.994–0.230   | 208.18                   | −62.26                 | No          | Yes          |                     |
| 310.013+0.485   | 207.86                   | −61.56                 | Yes         |              |                     |
| 310.024+0.302   | 207.97                   | −61.73                 | No distinct core |              |                     |

continued on next page
| IRDC Name   | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8μm source? | 24μm source? | Additional comments |
|-------------|-----------------------------|------------------------|-------------|--------------|---------------------|
| 310.037−0.587 | 208.45                     | −62.60                 | Yes         | Yes          |                     |
| 310.064−0.235 | 208.32                     | −62.25                 | No          | Yes          |                     |
| 310.069+0.393 | 208.02                     | −61.63                 | Yes         | No           |                     |
| 310.080+0.296 | 208.09                     | −61.73                 | Yes         | No           |                     |
| 310.087+0.712 | 207.90                     | −61.32                 | Yes         | No           |                     |
| 310.089+0.303 | 208.11                     | −61.72                 | Yes         | No           |                     |
| 310.090−0.283 | 208.40                     | −62.29                 | Yes         | No           |                     |
| 310.091−0.268 | 208.40                     | −62.27                 | Yes         | No           |                     |
| 310.103+0.714 | 207.93                     | −61.31                 | No          | Yes          |                     |
| 310.132+0.379 | 208.16                     | −61.63                 | Yes         | No           |                     |
| 310.136+0.399 | 208.15                     | −61.61                 | No          | Yes          |                     |
| 310.148+0.368 | 208.19                     | −61.64                 | Yes         | No           |                     |
| 310.159+0.703 | 208.05                     | −61.31                 | Yes         | No           |                     |
| 310.166+0.697 | 208.07                     | −61.32                 | Yes         | No           |                     |
| 310.173+0.519 | 208.17                     | −61.49                 | No          | Yes          |                     |
| 310.173+0.719 | 208.07                     | −61.29                 | Yes         | No           |                     |
| 310.183+0.469 | 208.22                     | −61.53                 | Yes         | No           |                     |
| 310.193+0.414 | 208.26                     | −61.59                 | Yes         | No           |                     |
| 310.198+0.320 | 208.32                     | −61.68                 | Yes         | No           |                     |
| 310.199+0.430 | 208.27                     | −61.57                 | Yes         | No           |                     |
| 310.209+0.042 | 208.48                     | −61.94                 | No          | Yes          |                     |
| 310.221−0.586 | 208.83                     | −62.55                 | No          | No           | Confused at 500μm   |
| 310.222+0.076 | 208.49                     | −61.91                 | No          | Yes          |                     |
| 310.228+0.234 | 208.42                     | −61.75                 | Yes         | No           |                     |
| 310.229+0.275 | 208.41                     | −61.71                 | No          | No           | Confused at 500μm   |
| 310.231+0.381 | 208.36                     | −61.61                 | Yes         | No           |                     |
| 310.243+0.403 | 208.37                     | −61.58                 | No          | Yes          |                     |
| 310.248+0.493 | 208.83                     | −61.50                 | Yes         | No           |                     |
| 310.248+0.473 | 208.33                     | −61.51                 | Yes         | No           |                     |
| 310.297+0.705 | 208.33                     | −61.28                 | No          | No           |                     |
| 310.319−0.546 | 209.02                     | −62.49                 | No          | No           | Confused at 500μm   |
| 310.327−0.279 | 208.89                     | −62.23                 | Yes         | No           |                     |
| 310.350−0.506 | 209.06                     | −62.44                 | Yes         | No           |                     |
| 310.355−0.548 | 209.10                     | −62.48                 | No          | Yes          |                     |
| 310.362−0.563 | 209.12                     | −62.49                 | No          | Yes          |                     |
| 310.364−0.578 | 209.13                     | −62.51                 | Yes         | No           |                     |
| 310.398−0.289 | 209.05                     | −62.22                 | No          | Yes          |                     |
| 310.417+0.108 | 208.88                     | −61.83                 | No          | Yes          |                     |
| 310.474−0.460 | 209.30                     | −62.37                 | Yes         | No           |                     |
| 310.482−0.095 | 209.12                     | −62.01                 | No          | Yes          |                     |
| 310.495−0.515 | 209.37                     | −62.41                 | Yes         | No           |                     |
| 310.523−0.036 | 209.17                     | −61.94                 | Yes         | No           |                     |
| 310.526−0.066 | 209.19                     | −61.97                 | Yes         | No           |                     |
| 310.542−0.480 | 209.45                     | −62.37                 | No          | Yes          |                     |
| 310.581−0.070 | 209.31                     | −61.96                 | No          | Yes          |                     |
| 310.598+0.725 | 208.93                     | −61.19                 | Yes         | No           |                     |
| 310.600+0.688 | 208.95                     | −61.22                 | Yes         | No           |                     |
| 310.601−0.599 | 209.64                     | −62.47                 | No          | Yes          |                     |
| 310.604+0.591 | 209.01                     | −61.31                 | No          | Yes          |                     |
| 310.613−0.613 | 209.67                     | −62.48                 | Yes         | No           |                     |
| 310.613+0.765 | 208.94                     | −61.14                 | No          | Yes          |                     |
| 310.619−0.083 | 209.40                     | −61.96                 | Yes         | No           |                     |
| 310.681+0.484 | 209.22                     | −61.40                 | Yes         | No           |                     |
| 310.686+0.466 | 209.24                     | −61.42                 | Yes         | No           |                     |
| 310.696+0.017 | 209.50                     | −61.85                 | Yes         | No           |                     |
| 310.717−0.547 | 209.85                     | −62.39                 | Yes         | No           |                     |
| 310.822+0.770 | 209.35                     | −61.09                 | Yes         | No           |                     |
| 310.868+0.472 | 209.60                     | −61.36                 | Yes         | No           |                     |
| 310.948+0.723 | 209.63                     | −61.10                 | Yes         | No           |                     |
| IRDC Name        | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8μm source? | 24μm source? | Additional comments |
|------------------|----------------------------|------------------------|-------------|-------------|---------------------|
| 310.952−0.691    | 210.43                     | −62.46                 | Yes         |             | No distinct core    |
| 310.974+1.010    | 209.53                     | −60.82                 |             |             |                     |
| 310.982−0.243    | 210.23                     | −62.02                 | No          | Yes         |                     |
| 311.000+0.738    | 209.73                     | −61.07                 | Yes         |             |                     |
| 311.016+0.434    | 209.92                     | −61.36                 | Yes         |             |                     |
| 311.020−0.326    | 210.35                     | −62.09                 | Yes         |             |                     |
| 311.021+0.467    | 209.91                     | −61.33                 | No          | Yes         |                     |
| 311.024+0.895    | 209.69                     | −60.91                 | Yes         |             |                     |
| 311.033−0.291    | 210.36                     | −62.06                 | No          | Yes         |                     |
| 311.042+0.689    | 209.84                     | −61.11                 | Yes         |             |                     |
| 311.046+0.420    | 209.99                     | −61.37                 | Yes         |             |                     |
| 311.051+0.392    | 210.02                     | −61.39                 | No          | Yes         | No distinct core    |
| 311.055+0.859    | 209.77                     | −60.94                 | Yes         |             |                     |
| 311.061+0.425    | 210.02                     | −61.36                 | No          |             | No distinct core    |
| 311.065+0.696    | 209.88                     | −61.10                 | No          | Yes         |                     |
| 311.065+0.816    | 209.81                     | −60.98                 | Yes         |             |                     |
| 311.086+0.370    | 210.10                     | −61.40                 | No          | Yes         |                     |
| 311.088+0.403    | 210.08                     | −61.37                 | No          | Yes         |                     |
| 311.094+0.733    | 209.92                     | −61.05                 | No          | Yes         |                     |
| 311.107+0.411    | 210.12                     | −61.36                 | Yes         |             |                     |
| 311.131+0.790    | 209.96                     | −60.99                 | Yes         |             |                     |
| 311.167+1.000    | 209.92                     | −60.78                 | Yes         |             |                     |
| 311.178+0.155    | 210.40                     | −61.59                 | No          | Yes         |                     |
| 311.181+0.785    | 210.06                     | −60.98                 | Yes         |             |                     |
| 311.191−0.586    | 210.86                     | −62.30                 | Yes         |             |                     |
| 311.202+0.722    | 210.14                     | −61.03                 | Yes         |             |                     |
| 311.209−0.605    | 210.91                     | −62.31                 | Yes         |             |                     |
| 311.246+0.023    | 210.62                     | −61.70                 | Yes         |             |                     |
| 311.285−0.113    | 210.78                     | −61.82                 | No          |             | No distinct core    |
| 311.335−0.349    | 211.01                     | −62.03                 | Yes         |             |                     |
| 311.352+0.356    | 210.64                     | −61.35                 | Yes         |             |                     |
| 311.432−0.473    | 211.29                     | −62.12                 | Yes         |             |                     |
| 311.570−0.208    | 211.41                     | −61.83                 | No          | Yes         |                     |
| 311.641−0.609    | 211.80                     | −62.19                 | No          |             | No distinct core    |
| 311.670−0.687    | 211.91                     | −62.26                 | Yes         |             |                     |
| 311.670+0.278    | 211.32                     | −61.33                 | Yes         |             |                     |
| 311.721−0.335    | 211.79                     | −61.91                 | No          |             | No distinct core    |
| 311.747−0.691    | 212.07                     | −62.24                 | No          | Yes         |                     |
| 311.756−0.673    | 212.08                     | −62.22                 | No          | No          | Confused at 500μm   |
| 311.801+0.029    | 211.73                     | −61.53                 | No          |             | No distinct core    |
| 311.823−0.805    | 212.30                     | −62.33                 | No          | No          | Confused at 500μm   |
| 311.825−0.738    | 212.26                     | −62.26                 | No          | Yes         |                     |
| 311.832−0.761    | 212.29                     | −62.28                 | Yes         |             |                     |
| 311.835−0.699    | 212.25                     | −62.22                 | No          |             | No distinct core    |
| 311.848−0.382    | 212.08                     | −61.92                 | Yes         |             |                     |
| 311.856+0.244    | 211.72                     | −61.31                 | Yes         |             |                     |
| 311.857−0.841    | 212.39                     | −62.35                 | No          | No          | Confused at 500μm   |
| 311.875+0.026    | 211.88                     | −61.52                 | Yes         |             | No distinct core    |
| 311.893+0.375    | 211.71                     | −61.18                 | No          |             |                     |
| 311.903−0.866    | 212.50                     | −62.36                 | Yes         |             |                     |
| 311.903+0.234    | 211.81                     | −61.31                 | Yes         |             | No distinct core    |
| 311.937+0.353    | 211.81                     | −61.19                 | No          |             |                     |
| 311.943+0.137    | 211.95                     | −61.39                 | Yes         |             |                     |
| 311.992−0.544    | 212.48                     | −62.03                 | Yes         |             |                     |
| 311.995−0.168    | 212.24                     | −61.67                 | Yes         |             |                     |
| 312.012−0.590    | 212.55                     | −62.07                 | Yes         |             |                     |
| 312.022−0.219    | 212.33                     | −61.71                 | No          | Yes         |                     |
| 312.028−0.553    | 212.56                     | −62.03                 | Yes         |             |                     |

Cores in IRDCs from l = 300 to 330°
| IRDC Name     | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8 μm source? | 24 μm source? | Additional comments |
|--------------|---------------------------|------------------------|--------------|---------------|-------------------|
| 312.034–0.739 | 212.69                    | −62.20                 | Yes          |               | No distinct core  |
| 312.045–0.467 | 212.53                    | −61.94                 | Yes          |               | No distinct core  |
| 312.046–0.576 | 212.61                    | −62.04                 | Yes          |               | No distinct core  |
| 312.050–0.564 | 212.61                    | −62.03                 | Yes          |               | No distinct core  |
| 312.063–0.529 | 212.61                    | −61.99                 | Yes          |               | No distinct core  |
| 312.068–0.529 | 212.62                    | −61.99                 | Yes          |               | No distinct core  |
| 312.070–0.468 | 212.59                    | −61.93                 | Yes          |               | No distinct core  |
| 312.088–0.525 | 212.69                    | −61.98                 | No           | No            | Confused at 500 μm|
| 312.089–0.619 | 212.72                    | −62.07                 | No           | Yes           |                   |
| 312.103–0.523 | 212.69                    | −61.97                 | No           | Yes           | No distinct core  |
| 312.116–0.625 | 212.78                    | −62.07                 | No           | Yes           | Confused at 500 μm|
| 312.122–0.040 | 212.42                    | −61.51                 | Yes          |               |                   |
| 312.120–0.765 | 212.89                    | −62.20                 | Yes          |               |                   |
| 312.155–0.205 | 212.61                    | −61.65                 | Yes          |               |                   |
| 312.168–0.077 | 212.54                    | −61.53                 | Yes          |               |                   |
| 312.174–0.032 | 212.52                    | −61.48                 | Yes          |               |                   |
| 312.197–0.156 | 212.64                    | −61.60                 | Yes          |               |                   |
| 312.214+0.740 | 212.12                    | −60.73                 | Yes          |               |                   |
| 312.216–0.857 | 213.14                    | −62.26                 | No           | Yes           | No distinct core  |
| 312.232–0.103 | 212.68                    | −61.54                 | Yes          |               |                   |
| 312.235–0.788 | 213.13                    | −62.19                 | Yes          |               |                   |
| 312.248+0.040 | 212.62                    | −61.39                 | Yes          |               |                   |
| 312.266+0.759 | 212.21                    | −60.70                 | Yes          |               |                   |
| 312.267+0.049 | 212.65                    | −61.38                 | Yes          |               |                   |
| 312.276–0.802 | 213.22                    | −62.19                 | No           | Yes           | No distinct core  |
| 312.295+0.089 | 212.68                    | −61.33                 | Yes          |               |                   |
| 312.295+0.737 | 212.28                    | −60.71                 | No           | No            | Confused at 500 μm|
| 312.322–0.086 | 212.87                    | −61.49                 | Yes          |               |                   |
| 312.356–0.029 | 212.88                    | −61.43                 | Yes          |               |                   |
| 312.358–0.285 | 213.05                    | −61.67                 | Yes          |               |                   |
| 312.376–0.123 | 212.98                    | −61.51                 | No           | Yes           | No distinct core  |
| 312.377–0.301 | 213.10                    | −61.68                 | No           | Yes           |                   |
| 312.380–0.309 | 213.11                    | −61.69                 | Yes          |               |                   |
| 312.385–0.104 | 212.99                    | −61.49                 | No           | Yes           | No distinct core  |
| 312.393–0.333 | 213.15                    | −61.71                 | Yes          |               |                   |
| 312.396–0.487 | 212.26                    | −61.85                 | Yes          |               |                   |
| 312.397+0.934 | 212.36                    | −60.50                 | No           | No            | Confused at 500 μm|
| 312.476–0.053 | 213.14                    | −61.41                 | Yes          |               |                   |
| 312.505–0.361 | 213.39                    | −61.70                 | Yes          |               |                   |
| 312.508+0.008 | 213.16                    | −61.34                 | No           | Yes           | No distinct core  |
| 312.513–0.017 | 213.19                    | −61.37                 | Yes          |               |                   |
| 312.560+0.149 | 215.12                    | −60.87                 | No           | Yes           |                   |
| 312.613–0.188 | 215.46                    | −61.17                 | Yes          |               |                   |
| 312.627–0.212 | 215.51                    | −61.19                 | No           | Yes           |                   |
| 312.629–0.073 | 215.41                    | −61.06                 | Yes          |               |                   |
| 312.630+0.267 | 215.18                    | −60.74                 | No           | Yes           | No distinct core  |
| 312.637–0.359 | 215.63                    | −61.32                 | No           | No            | Confused at 500 μm|
| 312.637–0.803 | 215.96                    | −61.74                 | Yes          |               |                   |
| 312.693–0.155 | 215.60                    | −61.11                 | No           | Yes           | No distinct core  |
| 312.701–0.531 | 215.88                    | −61.46                 | No           | Yes           |                   |
| 312.726–0.310 | 215.77                    | −61.25                 | No           | Yes           |                   |
| 312.738–0.108 | 215.65                    | −61.05                 | Yes          |               |                   |
| 312.744+0.391 | 215.31                    | −60.58                 | Yes          |               |                   |
| 312.753–0.085 | 215.66                    | −61.03                 | No           | Yes           | No distinct core  |
| 312.759–0.127 | 215.71                    | −61.06                 | Yes          |               |                   |
| 312.760+0.366 | 215.36                    | −60.60                 | No           | No            | Confused at 500 μm|
| 312.765–0.496 | 215.98                    | −61.41                 | Yes          |               |                   |
| 312.765+0.230 | 215.46                    | −60.73                 | No           | No            | Confused at 500 μm|
| 312.768+0.211 | 215.48                    | −60.74                 | No           | Yes           |                   |

continued on next page
| IRDC Name       | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8µm source? | 24µm source? | Additional comments                      |
|-----------------|-----------------------------|------------------------|--------------|--------------|------------------------------------------|
| 313.773+0.254   | 215.46                      | -60.70                 | Yes          |              |                                          |
| 313.778−0.185   | 215.78                      | -60.11                 | Yes          |              |                                          |
| 313.778−0.327   | 215.89                      | -61.24                 | Yes          |              |                                          |
| 313.782+0.208   | 215.51                      | -60.74                 |              |              | No distinct core                         |
| 313.783−0.170   | 215.78                      | -61.10                 |              |              | No distinct core                         |
| 313.790−0.194   | 215.81                      | -61.12                 | Yes          |              |                                          |
| 313.798+0.049   | 215.66                      | -60.88                 | Yes          |              |                                          |
| 313.800+0.202   | 215.55                      | -60.74                 | Yes          |              |                                          |
| 313.806−0.247   | 215.88                      | -61.16                 | Yes          |              |                                          |
| 313.809−0.278   | 215.91                      | -61.19                 | Yes          |              |                                          |
| 313.815+0.359   | 215.47                      | -60.59                 | No           | No           | Confused at 500µm                         |
| 313.817−0.271   | 215.92                      | -61.18                 |              |              | No distinct core                         |
| 313.826−0.293   | 215.95                      | -61.20                 | Yes          |              |                                          |
| 313.828+0.684   | 215.27                      | -60.28                 | Yes          |              |                                          |
| 313.845+0.188   | 215.65                      | -60.74                 | Yes          |              |                                          |
| 313.852−0.226   | 215.96                      | -61.12                 | No           | Yes          |                                          |
| 313.872+0.052   | 215.79                      | -60.86                 | No           | No           | Confused at 160µm                         |
| 313.887+0.151   | 215.75                      | -60.76                 | Yes          |              |                                          |
| 313.935−0.033   | 215.98                      | -60.91                 | No           | Yes          |                                          |
| 313.938+0.064   | 215.91                      | -60.82                 | Yes          |              |                                          |
| 313.946−0.016   | 215.99                      | -60.89                 | No           | Yes          |                                          |
| 313.986+0.037   | 216.03                      | -60.83                 | Yes          |              |                                          |
| 313.994−0.234   | 216.24                      | -61.08                 | Yes          |              |                                          |
| 314.083−0.461   | 216.58                      | -61.26                 | Yes          |              |                                          |
| 314.087−0.113   | 216.33                      | -60.94                 | Yes          |              |                                          |
| 314.087+0.372   | 215.98                      | -60.48                 |              |              | No distinct core                         |
| 314.128−0.068   | 216.38                      | -60.88                 | Yes          |              |                                          |
| 314.146−0.085   | 216.42                      | -60.89                 | Yes          |              |                                          |
| 314.175−0.073   | 216.47                      | -60.87                 | Yes          |              |                                          |
| 314.214−0.309   | 216.72                      | -61.07                 | Yes          |              |                                          |
| 314.271+0.925   | 215.94                      | -59.90                 | No           | No           | Confused at 500µm                         |
| 314.282+0.055   | 216.58                      | -60.71                 | No           | Yes          |                                          |
| 314.296+0.035   | 216.62                      | -60.72                 | Yes          |              |                                          |
| 314.315−0.047   | 216.72                      | -60.79                 | No           | No           | Confused at 500µm                         |
| 314.324−0.393   | 216.99                      | -61.11                 | No           | Yes          |                                          |
| 314.325−0.177   | 216.83                      | -60.91                 | Yes          |              |                                          |
| 314.327−0.044   | 216.74                      | -60.79                 | No           | Yes          |                                          |
| 314.327+0.028   | 216.69                      | -60.72                 | No           | Yes          |                                          |
| 314.340+0.021   | 216.71                      | -60.72                 | No           | Yes          |                                          |
| 314.350−0.025   | 216.77                      | -60.76                 | Yes          |              |                                          |
| 314.372+0.933   | 216.12                      | -59.85                 | No           | No           | Confused at 500µm                         |
| 314.373+0.096   | 216.72                      | -60.64                 | Yes          |              |                                          |
| 314.382−0.084   | 216.87                      | -60.80                 | Yes          |              |                                          |
| 314.383+0.942   | 216.14                      | -59.84                 | No           | No           | Confused at 500µm                         |
| 314.392+0.069   | 216.78                      | -60.66                 | No           | Yes          |                                          |
| 314.393+0.112   | 216.75                      | -60.61                 | Yes          |              |                                          |
| 314.397−0.023   | 216.86                      | -60.74                 | No           | Yes          |                                          |
| 314.400−0.039   | 216.88                      | -60.75                 | Yes          |              |                                          |
| 314.400−0.071   | 216.90                      | -60.78                 | Yes          |              |                                          |
| 314.402+0.049   | 216.81                      | -60.67                 | No           | Yes          |                                          |
| 314.406−0.016   | 216.87                      | -60.73                 | Yes          |              |                                          |
| 314.412+0.138   | 216.77                      | -60.58                 | Yes          |              |                                          |
| 314.430+0.008   | 216.90                      | -60.70                 | No           | Yes          |                                          |
| 314.432+0.153   | 216.79                      | -60.56                 | Yes          |              |                                          |
| 314.436−0.013   | 216.92                      | -60.72                 | No           | No           | Confused at 500µm                         |
| 314.461−0.030   | 216.98                      | -60.72                 | Yes          |              |                                          |
| 314.563+0.185   | 217.02                      | -60.49                 | Yes          |              |                                          |
| 314.582+0.703   | 216.68                      | -60.00                 | No           | No           | Confused at 500µm                         |
| 314.592−0.294   | 217.43                      | -60.92                 | No           | No           | Confused at 500µm                         |

continued on next page
| IRDC Name | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8 μm source? | 24 μm source? | Additional comments |
|-----------|---------------------------|------------------------|--------------|---------------|-------------------|
| 314.597−0.316 | 217.46 | −60.94 | No | No | Confused at 500 μm |
| 314.603−0.011 | 217.24 | −60.65 | Yes | | |
| 314.612−0.326 | 217.49 | −60.94 | Yes | | |
| 314.629+0.068 | 217.23 | −60.57 | No | No | Confused at 500 μm |
| 314.631−0.327 | 217.53 | −60.94 | Yes | | |
| 314.634+0.150 | 217.18 | −60.49 | Yes | | |
| 314.639−0.308 | 217.53 | −60.92 | No distinct core | | |
| 314.644+0.085 | 217.24 | −60.55 | Yes | | |
| 314.649−0.292 | 217.54 | −60.90 | Yes | | |
| 314.663+0.221 | 217.18 | −60.42 | Yes | | |
| 314.673−0.292 | 217.59 | −60.89 | Yes | | |
| 314.697−0.308 | 217.64 | −60.90 | Yes | | |
| 314.701+0.183 | 217.28 | −60.44 | No | No | No distinct core |
| 314.710+0.201 | 217.28 | −60.42 | Yes | | |
| 314.713−0.313 | 217.68 | −60.89 | Yes | | |
| 314.720+0.243 | 217.27 | −60.37 | No distinct core | | |
| 314.723−0.292 | 217.68 | −60.87 | Yes | | |
| 314.730−0.064 | 217.52 | −60.66 | Yes | | |
| 314.737−0.277 | 217.70 | −60.85 | No | No | Confused at 500 μm |
| 314.738−0.322 | 217.73 | −60.89 | Yes | | |
| 314.742−0.186 | 217.64 | −60.76 | Yes | | |
| 314.746−0.171 | 217.63 | −60.75 | Yes | | |
| 314.755−0.373 | 217.81 | −60.93 | No distinct core | | |
| 314.756−0.382 | 217.81 | −60.94 | No distinct core | | |
| 314.758−0.350 | 217.79 | −60.91 | No distinct core | | |
| 314.760−0.368 | 217.81 | −60.93 | No distinct core | | |
| 314.760+0.216 | 217.37 | −60.38 | Yes | | |
| 314.763−0.028 | 217.56 | −60.61 | No | No | Confused at 500 μm |
| 314.768−0.333 | 217.80 | −60.89 | No | No | Confused at 160 μm |
| 314.770+0.212 | 217.39 | −60.38 | No | No | Confused at 500 μm |
| 314.777−0.055 | 217.60 | −60.63 | No distinct core | | |
| 314.784−0.358 | 217.85 | −60.91 | Yes | | |
| 314.800−0.080 | 217.66 | −60.65 | Yes | | |
| 314.801+0.088 | 217.54 | −60.49 | Yes | | |
| 314.806−0.172 | 217.75 | −60.73 | No | Yes | |
| 314.808−0.643 | 218.12 | −61.16 | Yes | | |
| 314.828−0.188 | 217.80 | −60.73 | No distinct core | | |
| 314.848−0.388 | 217.99 | −60.91 | Yes | | |
| 314.869+0.093 | 217.66 | −60.46 | No | No | Confused at 500 μm |
| 314.878−0.143 | 217.86 | −60.67 | Yes | | |
| 314.889−0.149 | 217.89 | −60.68 | No distinct core | | |
| 314.901−0.298 | 218.02 | −60.81 | Yes | | |
| 314.911−0.292 | 218.04 | −60.80 | No distinct core | | |
| 314.916−0.622 | 218.31 | −61.10 | Yes | | |
| 314.935+0.542 | 217.45 | −60.02 | No | No | Confused at 500 μm |
| 314.942−0.508 | 218.27 | −60.99 | Yes | | |
| 314.942−0.605 | 218.34 | −61.08 | No | No | Confused at 500 μm |
| 314.954+0.539 | 217.49 | −60.01 | Yes | | |
| 314.963−0.187 | 218.06 | −60.68 | No distinct core | | |
| 314.970−0.214 | 218.09 | −60.71 | No distinct core | | |
| 314.970−0.324 | 218.18 | −60.81 | No distinct core | | |
| 314.978+0.038 | 217.91 | −60.47 | No | Yes | |
| 314.988−0.232 | 218.14 | −60.72 | Yes | | |
| 315.005−0.076 | 218.05 | −60.56 | No | Yes | |
| 315.010−0.139 | 218.11 | −60.62 | Yes | | |
| 315.015+0.046 | 217.97 | −60.45 | No | Yes | |
| 315.016−0.158 | 218.13 | −60.64 | Yes | | |
| 315.017+0.028 | 217.99 | −60.46 | No distinct core | | |
| 315.036+0.200 | 217.9 | −60.30 | Yes | | |

*continued on next page*
| IRDC Name   | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8 μm source? | 24 μm source? | Additional comments               |
|------------|-----------------------------|-------------------------|--------------|---------------|-----------------------------------|
| 315.039−0.173 | 218.19                      | −60.64                  | Yes          |               | No distinct core                  |
| 315.049+0.181 | 217.93                      | −60.31                  | Yes          |               |                                   |
| 315.150−0.319 | 218.51                      | −60.73                  | No           | No            | Confused at 500 μm                |
| 315.151−0.328 | 218.52                      | −60.74                  | Yes          |               |                                   |
| 315.214−0.291 | 218.61                      | −60.68                  | Yes          |               |                                   |
| 315.518−0.920 | 219.70                      | −61.14                  | Yes          |               |                                   |
| 315.686−0.598 | 219.75                      | −60.78                  | Yes          |               |                                   |
| 315.696−0.555 | 219.73                      | −60.74                  | No           | No            | Confused at 500 μm                |
| 315.933−0.659 | 220.26                      | −60.73                  | No           | No            | Confused at 500 μm                |
| 315.967−0.606 | 220.28                      | −60.67                  | No distinct core |               |                                   |
| 315.971−0.599 | 220.28                      | −60.66                  | No distinct core |               |                                   |
| 315.997−0.590 | 220.32                      | −60.65                  | Yes          |               |                                   |
| 316.003−0.769 | 220.48                      | −60.81                  | No distinct core |               |                                   |
| 316.013−0.673 | 220.42                      | −60.71                  | No distinct core |               |                                   |
| 316.040−0.618 | 220.42                      | −60.65                  | No           | No            | Confused at 500 μm                |
| 316.293−0.364 | 220.68                      | −60.32                  | Yes          |               |                                   |
| 316.360−0.330 | 220.67                      | −60.28                  | No           | No            | Confused at 500 μm                |
| 316.313−0.350 | 220.70                      | −60.30                  | No distinct core |               |                                   |
| 316.320−0.391 | 220.75                      | −60.33                  | Yes          |               |                                   |
| 316.347−0.545 | 220.93                      | −60.46                  | Yes          |               |                                   |
| 316.389−0.470 | 220.94                      | −60.37                  | Yes          |               |                                   |
| 316.402−0.463 | 220.96                      | −60.36                  | Yes          |               |                                   |
| 316.402−0.675 | 221.14                      | −60.55                  | No           | No            | Confused at 500 μm                |
| 316.416−0.455 | 220.98                      | −60.35                  | Yes          |               |                                   |
| 316.424−0.478 | 221.01                      | −60.37                  | No           | Yes           |                                   |
| 316.424−0.633 | 221.15                      | −60.51                  | No           | No            | Confused at 500 μm                |
| 316.429−0.492 | 221.04                      | −60.38                  | No distinct core |               |                                   |
| 316.468−0.730 | 221.31                      | −60.58                  | No distinct core |               |                                   |
| 316.471−0.271 | 220.92                      | −60.16                  | Yes          |               |                                   |
| 316.473−0.517 | 221.14                      | −60.38                  | Yes          |               | No distinct core                  |
| 316.482−0.230 | 220.91                      | −60.12                  | No           | Yes           |                                   |
| 316.483+0.273 | 220.50                      | −59.66                  | No           | No            | Confused at 500 μm                |
| 316.506+0.274 | 220.54                      | −59.65                  | No           | No            | Confused at 500 μm                |
| 316.513−0.223 | 220.96                      | −60.10                  | Yes          |               |                                   |
| 316.526−0.252 | 221.01                      | −60.12                  | Yes          |               |                                   |
| 316.536+0.059 | 220.77                      | −59.83                  | Yes          |               |                                   |
| 316.553+0.045 | 220.81                      | −59.84                  | Yes          |               |                                   |
| 316.575+0.067 | 220.83                      | −59.81                  | No           | Yes           |                                   |
| 316.579−0.217 | 221.08                      | −60.06                  | Yes          |               |                                   |
| 316.591+0.068 | 220.86                      | −59.80                  | No distinct core |               |                                   |
| 316.634−0.432 | 221.36                      | −60.24                  | Yes          |               |                                   |
| 316.640−0.408 | 221.35                      | −60.21                  | Yes          |               |                                   |
| 316.647−0.367 | 221.33                      | −60.17                  | No distinct core |               |                                   |
| 316.656−0.268 | 221.26                      | −60.08                  | No           | Yes           |                                   |
| 316.724+0.130 | 221.05                      | −59.69                  | No           | Yes           |                                   |
| 316.804+0.144 | 221.18                      | −59.64                  | Stripy at 250 μm |               |                                   |
| 316.828+0.100 | 221.26                      | −59.67                  | Yes          |               |                                   |
| 316.902+0.174 | 221.33                      | −59.57                  | No           | Yes           |                                   |
| 316.903+0.459 | 221.09                      | −59.31                  | No           | Yes           |                                   |
| 316.920+0.228 | 221.32                      | −59.52                  | No distinct core |               |                                   |
| 316.944−0.014 | 221.56                      | −59.73                  | Yes          |               |                                   |
| 316.950+0.131 | 221.45                      | −59.59                  | No distinct core |               |                                   |
| 317.048+0.432 | 221.37                      | −59.28                  | No distinct core |               | Stripy at 250 μm                  |
| 317.074−0.087 | 221.86                      | −59.74                  | No distinct core |               |                                   |
| 317.397+0.198 | 222.19                      | −59.34                  | No           | Yes           |                                   |
| 317.400−0.161 | 222.50                      | −59.66                  | Yes          |               |                                   |
| 317.430−0.371 | 222.74                      | −59.84                  | No           | Yes           |                                   |
| 317.445−0.059 | 222.49                      | −59.55                  | No           | Yes           |                                   |
| 317.452−0.026 | 222.48                      | −59.52                  | No           | Yes           |                                   |

*continued on next page*
| IRDC Name     | Right Ascension  | Declination | 8 μm source? | 24 μm source? | Additional comments       |
|--------------|------------------|-------------|--------------|---------------|---------------------------|
| 317.461–0.948 | 223.31           | −60.34      | No           | No            | Confused at 500 μm        |
| 317.470–0.211 | 222.67           | −59.67      | Yes          |               |                           |
| 317.480–0.684 | 223.11           | −60.09      | No           | No            | Confused at 500 μm        |
| 317.562+0.099 | 222.56           | −59.35      | No           | Yes           |                           |
| 317.564–0.094 | 222.74           | −59.53      | Yes          |               |                           |
| 317.574–0.824 | 223.41           | −60.18      | No           | No            | Confused at 500 μm        |
| 317.580–0.098 | 222.77           | −59.52      | Yes          |               |                           |
| 317.591–0.835 | 223.44           | −60.18      | No           | No            | Confused at 500 μm        |
| 317.596–0.837 | 223.46           | −60.18      | No           | No            | Confused at 500 μm        |
| 317.614+0.072 | 222.68           | −59.36      | No           | No            | Confused at 500 μm        |
| 317.628–0.820 | 223.50           | −60.15      | No           | No            | Confused at 500 μm        |
| 317.649+0.012 | 222.79           | −59.39      | No           | Yes           |                           |
| 317.657+0.105 | 222.73           | −59.31      | No           | No            | Confused at 500 μm        |
| 317.742+0.120 | 222.86           | −59.26      | No           | Yes           |                           |
| 317.783–0.078 | 223.11           | −59.42      | Yes          |               |                           |
| 317.849+0.485 | 222.73           | −58.88      | Yes          |               |                           |
| 317.866–0.306 | 223.46           | −59.58      | Yes          |               |                           |
| 317.870–0.149 | 223.32           | −59.44      | Yes          |               |                           |
| 317.876–0.175 | 223.36           | −59.46      | No           | No            | Confused at 500 μm        |
| 317.910–0.007 | 223.27           | −59.30      | No           | No            | Confused at 500 μm        |
| 317.942+0.013 | 223.31           | −59.26      | No           | No            | Confused at 500 μm        |
| 318.014+0.052 | 223.40           | −59.19      | Yes          |               |                           |
| 318.015+0.064 | 223.39           | −59.18      | Yes          |               |                           |
| 318.039+0.158 | 223.35           | −59.09      | No           | No            | Confused at 500 μm        |
| 318.058+0.134 | 223.40           | −59.10      | No           | No            | Confused at 500 μm        |
| 318.063+0.174 | 223.37           | −59.06      | No           | Yes           |                           |
| 318.080+0.114 | 223.46           | −59.11      | No           | No            | Confused at 500 μm        |
| 318.086+0.097 | 223.48           | −59.12      | No           | No            | Confused at 500 μm        |
| 318.103+0.107 | 223.50           | −59.10      | No           | Yes           |                           |
| 318.133–0.664 | 224.25           | −59.78      | Yes          |               |                           |
| 318.157–0.335 | 223.99           | −59.47      | No           | Yes           |                           |
| 318.187–0.358 | 224.07           | −59.48      | Yes          |               |                           |
| 318.199+0.076 | 223.70           | −59.09      | No           | No            | Confused at 500 μm        |
| 318.227+0.031 | 223.79           | −59.12      | No           | No            | Confused at 500 μm        |
| 318.228–0.739 | 224.49           | −59.80      | No           | Yes           |                           |
| 318.306–0.131 | 224.07           | −59.23      | Yes          |               |                           |
| 318.306–0.732 | 224.62           | −59.76      | No           | Yes           |                           |
| 318.343+0.309 | 223.74           | −58.82      | No           | No            | Confused at 500 μm        |
| 318.390–0.152 | 224.23           | −59.21      | Yes          |               |                           |
| 318.404+0.394 | 223.77           | −58.71      | Yes          |               |                           |
| 318.419–0.085 | 224.22           | −59.13      | Yes          |               |                           |
| 318.499–0.278 | 224.54           | −59.27      | Yes          |               |                           |
| 318.550–0.274 | 224.62           | −59.24      | No           | No            | Confused at 500 μm        |
| 318.553–0.165 | 224.53           | −59.14      | No           | Yes           |                           |
| 318.563–0.174 | 224.55           | −59.14      | No           | Yes           |                           |
| 318.566–0.184 | 224.57           | −59.15      | No           | No            | Confused at 500 μm        |
| 318.573–0.173 | 224.57           | −59.14      | No           | No            | Confused at 500 μm        |
| 318.573+0.642 | 223.84           | −58.41      | No           | No            | Confused at 500 μm        |
| 318.585–0.206 | 224.62           | −59.16      | Yes          |               |                           |
| 318.614+0.301 | 224.21           | −58.70      | No           | No            | Confused at 500 μm        |
| 318.617–0.342 | 224.80           | −59.27      | Yes          |               |                           |
| 318.655+0.666 | 223.96           | −58.36      | No           | No            | Confused at 500 μm        |
| 318.677+0.652 | 224.01           | −58.36      | No           | No            | Confused at 500 μm        |
| 318.688–0.783 | 225.33           | −59.62      | No           | No            | Confused at 500 μm        |
| 318.689–0.128 | 224.73           | −59.04      | Yes          |               |                           |
| 318.703+0.673 | 224.03           | −58.33      | Yes          |               |                           |
| 318.727–0.687 | 225.31           | −59.52      | Yes          |               |                           |
| 318.738–0.098 | 224.78           | −58.99      | No           | No            | Confused at 500 μm        |
| 318.755–0.011 | 224.73           | −58.91      | No           | No            | Confused at 500 μm        |

continued on next page
| IRDC Name       | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8μm source? | 24μm source? | Additional comments                      |
|-----------------|-----------------------------|------------------------|-------------|--------------|------------------------------------------|
| 318.757−0.002   | 224.73                      | −58.90                 | Yes         |              |                                          |
| 318.763−0.448   | 225.15                      | −59.29                 | No          | Yes          |                                          |
| 318.778−0.175   | 224.92                      | −59.04                 | Yes         |              |                                          |
| 318.785−0.397   | 225.14                      | −59.24                 | Yes         |              |                                          |
| 318.802+0.416   | 224.43                      | −58.51                 | No          | No           |                                          |
| 318.875−0.272   | 225.18                      | −59.08                 | No          | Yes          |                                          |
| 318.895−0.244   | 225.19                      | −59.05                 | No          | No           | Confused at 500 μm                       |
| 318.907−0.239   | 225.20                      | −59.04                 | No          | Yes          |                                          |
| 318.916−0.284   | 225.26                      | −59.07                 | No          | No           |                                          |
| 318.932−0.266   | 225.27                      | −59.05                 | Yes         |              |                                          |
| 318.937−0.043   | 225.07                      | −58.85                 |              |              | Stripy at 250 μm                         |
| 318.997−0.224   | 225.34                      | −58.98                 | No          | No           | Confused at 500 μm                       |
| 319.000+0.164   | 224.99                      | −58.64                 | Yes         |              |                                          |
| 319.094−0.491   | 225.76                      | −59.17                 | No          | No           | Confused at 160 μm                       |
| 319.263+0.851   | 224.81                      | −57.91                 |              |              | No distinct core                         |
| 319.334+0.828   | 224.95                      | −57.90                 | Yes         |              |                                          |
| 319.374+0.897   | 224.96                      | −57.82                 | No          | Yes          |                                          |
| 319.402+0.863   | 225.03                      | −57.83                 | No          | No           | Confused at 500 μm                       |
| 319.420+0.824   | 225.10                      | −57.86                 | No          | No           | Confused at 500 μm                       |
| 319.460+0.835   | 225.15                      | −57.83                 | Yes         |              |                                          |
| 319.644+0.812   | 225.48                      | −57.76                 | Yes         |              |                                          |
| 319.728−0.873   | 227.20                      | −59.19                 | No distinct core |              |                                          |
| 319.740−0.874   | 227.22                      | −59.18                 | Yes         |              |                                          |
| 319.821−0.388   | 226.89                      | −58.72                 | Yes         |              |                                          |
| 319.828+0.670   | 225.91                      | −57.80                 | Yes         |              |                                          |
| 319.904−0.256   | 226.90                      | −58.57                 | Yes         |              |                                          |
| 319.988+0.101   | 226.70                      | −58.21                 | Yes         |              |                                          |
| 319.998+0.706   | 226.15                      | −57.68                 | No distinct core |              |                                          |
| 320.014+0.724   | 226.16                      | −57.66                 | No distinct core |              |                                          |
| 320.022+0.709   | 226.19                      | −57.67                 | No          | No           | Confused at 500 μm                       |
| 320.052+0.700   | 226.25                      | −57.66                 | No          | No           | Confused at 500 μm                       |
| 320.074+0.683   | 226.30                      | −57.67                 | No          | Yes          |                                          |
| 320.146+0.077   | 226.98                      | −58.16                 | Yes         |              |                                          |
| 320.234+0.331   | 226.89                      | −57.89                 | No          | No           | Confused at 500 μm                       |
| 320.235+0.346   | 226.87                      | −57.88                 | No          | Yes          |                                          |
| 320.271+0.249   | 227.02                      | −57.95                 | No distinct core |              |                                          |
| 320.271+0.293   | 226.98                      | −57.91                 | Yes         |              |                                          |
| 320.284+0.270   | 227.03                      | −57.92                 | No distinct core |              |                                          |
| 320.287−0.538   | 227.81                      | −58.62                 | Yes         |              |                                          |
| 320.302+0.217   | 227.10                      | −57.96                 | No distinct core |              |                                          |
| 320.304+0.398   | 226.94                      | −57.80                 | No distinct core |              |                                          |
| 320.317−0.443   | 227.76                      | −58.52                 | Yes         |              |                                          |
| 320.321+0.213   | 227.14                      | −57.95                 | No distinct core |              |                                          |
| 320.328−0.430   | 227.77                      | −58.50                 | Yes         |              |                                          |
| 320.328+0.585   | 226.80                      | −57.63                 | Yes         |              |                                          |
| 320.338+0.907   | 226.52                      | −57.34                 | No          | No           | Confused at 500 μm                       |
| 320.387+0.141   | 227.31                      | −57.98                 | No          | Yes          |                                          |
| 320.389+0.123   | 227.33                      | −58.00                 | Yes         |              |                                          |
| 320.469−0.204   | 227.78                      | −58.24                 | Yes         |              |                                          |
| 320.551−0.206   | 227.92                      | −58.20                 | No          | No           | Confused at 500 μm                       |
| 320.565+0.429   | 227.33                      | −57.64                 | Yes         |              |                                          |
| 320.574−0.187   | 227.93                      | −58.17                 | No          | No           | Confused at 500 μm                       |
| 320.590+0.497   | 227.31                      | −57.57                 | No          | No           | Confused at 500 μm                       |
| 320.605+0.458   | 227.37                      | −57.60                 | No          | No           | Confused at 500 μm                       |
| 320.629−0.521   | 226.35                      | −58.43                 | Yes         |              |                                          |
| 320.639+0.331   | 227.54                      | −57.69                 | Yes         |              |                                          |
| 320.773−0.448   | 228.51                      | −58.29                 | No          | No           | Confused at 500 μm                       |
| 320.786+0.697   | 227.43                      | −57.30                 | No          | No           | Confused at 160 μm                       |
| 320.864−0.362   | 228.58                      | −58.17                 | No          | Yes          |                                          |
| IRDC Name     | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8µm source? | Additional comments |
|--------------|-----------------------------|-------------------------|-------------|---------------------|
| 320.879−0.397 | 228.64                      | −58.19                  | Yes         | No distinct core    |
| 320.884−0.575 | 228.82                      | −58.34                  | No          | No distinct core    |
| 320.993−0.196 | 228.62                      | −57.96                  | Yes         | Confused at 500µm   |
| 321.011−0.477 | 228.93                      | −58.19                  | No, Yes     | No                  |
| 321.213−0.593 | 229.37                      | −58.18                  | No          | Confused at 500µm   |
| 321.313+0.348 | 228.60                      | −57.33                  | No, No      | Confused at 500µm   |
| 321.322−0.372 | 229.32                      | −57.94                  | No          | Confused at 500µm   |
| 321.332+0.881 | 228.13                      | −56.86                  | Yes         | No distinct core    |
| 321.336−0.373 | 229.35                      | −57.93                  | No, No      | Confused at 500µm   |
| 321.336−0.393 | 229.37                      | −57.95                  | No, No      | Confused at 500µm   |
| 321.341−0.381 | 229.36                      | −57.94                  | No, No      | Confused at 500µm   |
| 321.356+0.142 | 228.87                      | −57.48                  | No          | No distinct core    |
| 321.397+0.934 | 228.18                      | −56.78                  | No, No      | Confused at 500µm   |
| 321.409+0.515 | 228.60                      | −57.14                  | Yes         | No distinct core    |
| 321.429+0.107 | 229.02                      | −57.47                  | No          | No distinct core    |
| 321.468+0.774 | 228.44                      | −56.88                  | Yes         | No distinct core    |
| 321.472+0.574 | 228.64                      | −57.05                  | No, No      | Confused at 500µm   |
| 321.557+0.029 | 229.30                      | −57.47                  | No, No      | Confused at 500µm   |
| 321.560+0.116 | 229.22                      | −57.40                  | No, No      | Confused at 500µm   |
| 321.617+0.055 | 229.37                      | −57.42                  | Yes         | No distinct core    |
| 321.619+0.103 | 229.33                      | −57.38                  | Yes         | No distinct core    |
| 321.642+0.078 | 229.39                      | −57.39                  | Yes         | No distinct core    |
| 321.659+0.049 | 229.44                      | −57.40                  | No          | No distinct core    |
| 321.670−0.016 | 229.52                      | −57.45                  | No, No      | Confused at 500µm   |
| 321.672+0.092 | 229.42                      | −57.36                  | Yes         | No distinct core    |
| 321.678+0.965 | 228.59                      | −56.61                  | No, No      | No distinct core    |
| 321.680+0.082 | 229.44                      | −57.36                  | No          | No distinct core    |
| 321.688−0.015 | 229.55                      | −57.44                  | No          | No distinct core    |
| 321.697+0.048 | 229.50                      | −57.38                  | No          | No distinct core    |
| 321.721−0.010 | 229.60                      | −57.42                  | Yes         | No distinct core    |
| 321.725+0.830 | 228.79                      | −56.70                  | No          | No distinct core    |
| 321.729−0.007 | 229.61                      | −57.41                  | No          | No distinct core    |
| 321.736+0.804 | 228.83                      | −56.72                  | No, No      | Confused at 500µm   |
| 321.740+0.830 | 228.81                      | −56.70                  | No, No      | Confused at 500µm   |
| 321.746−0.629 | 230.26                      | −57.93                  | No, No      | Confused at 500µm   |
| 321.753+0.669A | 228.99                     | −56.83                  | Yes         | No distinct core    |
| 321.753+0.669B | 228.99                     | −56.83                  | No          | No distinct core    |
| 321.758+0.033 | 229.61                      | −57.36                  | Yes         | No distinct core    |
| 321.766+0.777 | 228.90                      | −56.73                  | No, No      | Confused at 500µm   |
| 321.818−0.605 | 230.35                      | −57.87                  | Yes         | No distinct core    |
| 321.892−0.059 | 229.92                      | −57.37                  | No          | No distinct core    |
| 321.898−0.012 | 229.88                      | −57.33                  | No, No      | Confused at 500µm   |
| 321.899−0.234 | 230.10                      | −57.51                  | Yes         | No distinct core    |
| 321.950−0.064 | 230.01                      | −57.34                  | Yes         | No distinct core    |
| 321.950−0.092 | 230.04                      | −57.37                  | No          | No distinct core    |
| 322.012−0.112 | 230.16                      | −57.35                  | No          | No distinct core    |
| 322.023+0.851 | 229.23                      | −56.53                  | No          | No distinct core    |
| 322.027−0.256 | 230.32                      | −57.46                  | Yes         | No distinct core    |
| 322.063−0.077 | 230.20                      | −57.29                  | Yes         | No distinct core    |
| 322.084−0.061 | 230.22                      | −57.27                  | Yes         | No distinct core    |
| 322.334+0.561A | 229.99                     | −56.61                  | Yes         | No distinct core    |
| 322.334+0.561B | 229.99                     | −56.61                  | No, No      | No distinct core    |
| 322.413−0.565 | 231.24                      | −57.51                  | Yes         | No distinct core    |
| 322.518+0.404 | 230.42                      | −56.64                  | Yes         | No distinct core    |
| 322.626+0.652 | 230.34                      | −56.37                  | Yes         | No distinct core    |
| 322.632+0.029 | 230.97                      | −56.89                  | No, No      | Confused at 500µm   |
| 322.659+0.053 | 230.99                      | −56.86                  | No, No      | Confused at 500µm   |
| 322.666−0.588 | 231.65                      | −57.39                  | No          | No distinct core    |
| 322.680+0.032 | 231.04                      | −56.86                  | No, No      | Confused at 500µm   |
### Cores in IRDCs from $l = 300$ to $330^\circ$

| IRDC Name          | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8 µm source? | 24 µm source? | Additional comments |
|--------------------|-----------------------------|-------------------------|--------------|---------------|----------------------|
| 322.686+0.208      | 230.87                      | −56.71                  | No           | No            | Confused at 500 µm   |
| 322.795−0.569      | 231.83                      | −57.30                  | Yes          |               |                      |
| 322.813+0.801      | 230.48                      | −56.15                  | Yes          |               |                      |
| 322.822−0.780      | 232.09                      | −57.46                  | No           | No            | Confused at 500 µm   |
| 322.895+0.277      | 231.12                      | −56.54                  | Yes          |               |                      |
| 322.901+0.236      | 231.17                      | −56.57                  | No           |               | No distinct core     |
| 322.905+0.223      | 231.19                      | −56.58                  | No           | No            | Confused at 500 µm   |
| 322.914+0.321      | 231.11                      | −56.49                  | No           | No            |                      |
| 322.984+0.211      | 231.32                      | −56.55                  | Yes          |               |                      |
| 323.116−0.652      | 232.41                      | −57.19                  | No           | No            | Confused at 500 µm   |
| 323.122+0.050      | 231.69                      | −56.60                  | Yes          |               |                      |
| 323.142+0.173      | 231.60                      | −56.49                  | No           | No            | Confused at 500 µm   |
| 323.204+0.063      | 231.80                      | −56.55                  | No           |               | No distinct core     |
| 323.212+0.315      | 231.56                      | −56.34                  | No           | No            | Confused at 500 µm   |
| 323.230−0.398      | 232.32                      | −56.92                  | No           |               | No distinct core     |
| 323.238−0.406      | 232.34                      | −56.92                  | No           |               | No distinct core     |
| 323.261−0.011      | 231.97                      | −56.58                  | Yes          |               |                      |
| 323.312−0.392      | 232.44                      | −56.86                  | Yes          |               |                      |
| 323.325−0.375      | 232.44                      | −56.84                  | Yes          |               |                      |
| 323.338−0.053      | 232.12                      | −56.57                  | No           | No            | Confused at 500 µm   |
| 323.424−0.441      | 232.65                      | −56.84                  | Yes          |               |                      |
| 323.479+0.099      | 232.18                      | −56.36                  | Yes          |               |                      |
| 323.483+0.502      | 231.78                      | −56.03                  | No           | No            | Confused at 500 µm   |
| 323.507−0.466      | 232.80                      | −56.81                  | Yes          |               |                      |
| 323.546+0.065      | 232.31                      | −56.35                  | Yes          |               |                      |
| 323.547−0.411      | 232.81                      | −56.75                  | Yes          |               |                      |
| 323.573+0.256      | 232.16                      | −56.18                  | No           | No            | Confused at 500 µm   |
| 323.621+0.275      | 232.21                      | −56.14                  | No           | No            | Confused at 500 µm   |
| 323.824+0.208      | 232.58                      | −56.08                  | Yes          |               |                      |
| 323.839+0.487      | 232.32                      | −55.84                  | No           |               | No distinct core     |
| 323.845+0.052      | 232.77                      | −56.20                  | Yes          |               |                      |
| 323.870−0.250      | 233.12                      | −56.43                  | Stripy at 250 µm |               |                      |
| 323.893−0.516      | 233.43                      | −56.63                  | Yes          |               |                      |
| 323.931−0.287      | 233.25                      | −56.42                  | Yes          |               |                      |
| 323.934+0.410      | 232.54                      | −55.85                  | No           |               | No distinct core     |
| 323.987+0.423      | 232.60                      | −55.81                  | Yes          |               |                      |
| 324.005+0.633      | 232.42                      | −55.63                  | No           | No            | Confused at 500 µm   |
| 324.048−0.425      | 233.57                      | −56.47                  | No           | No            | Confused at 500 µm   |
| 324.056+0.561      | 232.56                      | −55.66                  | No           | No            | Confused at 500 µm   |
| 324.067−0.428      | 233.60                      | −56.46                  | No           | Yes           |                      |
| 324.079+0.447      | 232.71                      | −55.74                  | Yes          |               |                      |
| 324.100−0.576      | 233.80                      | −56.56                  | Yes          |               |                      |
| 324.103+0.167      | 233.03                      | −55.95                  | Yes          |               |                      |
| 324.110−0.425      | 233.66                      | −56.43                  | No           | No            | Confused at 500 µm   |
| 324.243+0.095      | 233.31                      | −55.93                  | Yes          |               |                      |
| 324.320+0.526      | 232.98                      | −55.53                  | Yes          |               |                      |
| 324.330+0.514      | 233.01                      | −55.54                  | Yes          |               |                      |
| 324.338+0.511      | 233.02                      | −55.54                  | No           |               | No distinct core     |
| 324.466−0.462      | 234.22                      | −56.25                  | No           |               | No distinct core     |
| 325.027+0.306      | 234.22                      | −55.30                  | Yes          |               |                      |
| 325.129−0.038      | 234.72                      | −55.52                  | Yes          |               |                      |
| 325.312−0.261      | 235.22                      | −55.59                  | No           |               | No distinct core     |
| 325.434+0.468      | 234.63                      | −54.93                  | No           | No            | Confused at 500 µm   |
| 325.529+0.209      | 235.03                      | −55.08                  | No           | No            | Confused at 500 µm   |
| 325.635+0.459      | 234.92                      | −54.82                  | No           |               | No distinct core     |
| 325.660+0.326      | 235.09                      | −54.91                  | No           | No            | Confused at 500 µm   |
| 325.742+0.530      | 234.99                      | −54.70                  | Yes          |               |                      |
| 325.794−0.228      | 235.86                      | −55.27                  | Yes          |               |                      |
| 325.813+0.469      | 235.15                      | −54.71                  | No           | Yes           |                      |

continued on next page
| IRDC Name  | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8µm source? | 24µm source? | Additional comments |
|-----------|---------------------------|------------------------|-------------|--------------|-------------------|
| 325.838–0.225 | 235.92 | −55.24 | Yes |  | No distinct core |
| 325.873+0.245 | 235.47 | −54.85 |  |  |  |
| 325.884+0.229 | 235.50 | −54.85 | Yes |  |  |
| 325.885–0.153 | 235.91 | −55.16 | No | No | Confused at 500µm |
| 325.908–0.005 | 235.78 | −55.03 | Yes |  |  |
| 325.913–0.084 | 235.87 | −55.09 | No | No | Confused at 500µm |
| 325.940+0.068 | 235.75 | −54.95 | No | No | Confused at 500µm |
| 325.958+0.075 | 235.77 | −54.93 | No | Yes |  |
| 326.057–0.314 | 236.32 | −55.18 | No | Yes |  |
| 326.154–0.511 | 236.67 | −55.28 | No | Yes |  |
| 326.310+0.428 | 235.88 | −54.44 | Yes |  |  |
| 326.311+0.542 | 235.76 | −54.35 | No | Yes |  |
| 326.322+0.458 | 235.87 | −54.41 | No | No | Confused at 500µm |
| 326.334+0.439 | 235.90 | −54.42 | No | No | Confused at 500µm |
| 326.337+0.461 | 235.88 | −54.40 | No | No | Confused at 500µm |
| 326.352+0.458 | 235.91 | −54.39 | No distinct core |  |  |
| 326.356+0.444 | 235.93 | −54.40 | Yes |  |  |
| 326.369–0.200 | 236.63 | −54.90 | Yes |  |  |
| 326.376+0.488 | 235.91 | −54.35 | No | Yes |  |
| 326.382+0.366 | 236.04 | −54.44 | Yes |  |  |
| 326.384–0.197 | 236.64 | −54.89 | Yes |  |  |
| 326.394+0.847 | 235.56 | −54.05 | No | Yes |  |
| 326.400+0.715 | 235.70 | −54.16 | Yes |  |  |
| 326.409+0.594 | 235.84 | −54.25 | No | No | Confused at 500µm |
| 326.413+0.394 | 236.06 | −54.40 | Yes |  |  |
| 326.416+0.042 | 236.43 | −54.68 | Yes |  |  |
| 326.424+0.499 | 235.96 | −54.31 | No | No | Confused at 500µm |
| 326.434–0.149 | 236.66 | −54.82 | Yes |  |  |
| 326.453+0.757 | 235.73 | −54.09 | Yes |  |  |
| 326.458–0.092 | 236.63 | −54.76 | No distinct core |  |  |
| 326.466–0.507 | 237.09 | −55.08 | No | Yes |  |
| 326.478–0.132 | 236.70 | −54.78 | Yes |  |  |
| 326.485–0.172 | 236.75 | −54.81 | Yes |  |  |
| 326.490+0.629 | 235.92 | −54.17 | Yes |  |  |
| 326.491–0.158 | 236.75 | −54.79 | No | Yes |  |
| 326.495+0.581 | 235.97 | −54.20 | No | No |  |
| 326.496+0.355 | 236.21 | −54.38 | Yes |  |  |
| 326.501–0.489 | 237.12 | −55.04 | Yes |  |  |
| 326.503–0.127 | 236.73 | −54.76 | No distinct core |  |  |
| 326.509–0.125 | 236.74 | −54.75 | No distinct core |  |  |
| 326.521+0.582 | 236.01 | −54.19 | Yes |  |  |
| 326.526+0.529 | 236.07 | −54.23 | Yes |  |  |
| 326.529–0.787 | 237.48 | −55.26 | Yes |  |  |
| 326.532–0.751 | 237.45 | −55.23 | Yes |  |  |
| 326.537+0.931 | 235.67 | −53.90 | No | No | Confused at 500µm |
| 326.539+0.942 | 235.66 | −53.89 | No | No | Confused at 500µm |
| 326.546+0.938 | 235.67 | −53.89 | No distinct core |  |  |
| 326.549–0.228 | 236.90 | −54.81 | Yes |  |  |
| 326.557+0.314 | 236.34 | −54.38 | Yes |  |  |
| 326.560+0.924 | 235.71 | −53.89 | No | No | Confused at 500µm |
| 326.560+0.947 | 235.68 | −53.87 | No distinct core |  |  |
| 326.575+0.952 | 235.70 | −53.86 | No | No | Confused at 500µm |
| 326.579+0.945 | 235.71 | −53.86 | No distinct core |  |  |
| 326.590+0.941 | 235.73 | −53.86 | No distinct core |  |  |
| 326.596+0.957 | 235.72 | −53.84 | No | No | Confused at 500µm |
| 326.598+0.835 | 235.85 | −53.94 | No distinct core |  |  |
| 326.598+0.939 | 235.74 | −53.86 | Yes |  |  |
| 326.611+0.811 | 235.89 | −53.95 | Yes |  |  |
| 326.618–0.209 | 236.98 | −54.75 | Yes |  |  |

continued on next page
### Cores in IRDCs from $l = 300$ to $330^\circ$

| IRDC Name       | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | $8\mu$m source? | $24\mu$m source? | Additional comments |
|-----------------|-----------------------------|------------------------|-----------------|-----------------|-------------------|
| 326.620−0.143   | 236.91                      | −54.70                 | No              | No              |                   |
| 326.622+0.372   | 236.36                      | −54.29                 | Yes             |                 |                   |
| 326.622+0.919   | 235.80                      | −53.86                 | No              | No              | No distinct core  |
| 326.632+0.951   | 235.77                      | −53.83                 | No              | No              | No distinct core  |
| 326.634+0.978   | 235.75                      | −53.80                 | No              | No              | No distinct core  |
| 326.635−0.507   | 237.32                      | −54.98                 | No              | No              | No distinct core  |
| 326.635+0.421   | 236.33                      | −54.25                 | No              | No              | No distinct core  |
| 326.637+0.700   | 236.04                      | −54.02                 | Yes             |                 |                   |
| 326.641+0.941   | 235.80                      | −53.83                 | Yes             |                 |                   |
| 326.642+0.966   | 235.77                      | −53.81                 | No              | No              | No distinct core  |
| 326.643+0.917   | 235.83                      | −53.85                 | No              | No              | Confused at 500\(\mu\)m |
| 326.648−0.129   | 236.93                      | −54.67                 | Yes             |                 |                   |
| 326.664+0.342   | 236.45                      | −54.29                 | Yes             |                 |                   |
| 326.666+0.711   | 236.07                      | −54.00                 | Yes             |                 |                   |
| 326.667+0.878   | 235.90                      | −53.86                 | Yes             |                 |                   |
| 326.668+0.035   | 236.78                      | −54.53                 | Yes             |                 |                   |
| 326.673+0.068   | 236.75                      | −54.50                 | Yes             |                 |                   |
| 326.673+0.300   | 236.51                      | −54.32                 | Yes             |                 |                   |
| 326.677+0.892   | 235.90                      | −53.85                 | Yes             |                 |                   |
| 326.686−0.321   | 237.19                      | −54.80                 | Yes             |                 |                   |
| 326.699+0.869   | 235.95                      | −53.85                 | No              | No              | Confused at 500\(\mu\)m |
| 326.701−0.194   | 237.07                      | −54.69                 | No              | No              | No distinct core  |
| 326.704+0.741   | 236.09                      | −53.95                 | No              | Yes             |                   |
| 326.706+0.347   | 236.50                      | −54.26                 | No              | No              | No distinct core  |
| 326.706+0.875   | 235.95                      | −53.84                 | No              | No              | No distinct core  |
| 326.718−0.127   | 237.02                      | −54.63                 | Yes             |                 |                   |
| 326.720+0.032   | 236.86                      | −54.50                 | Yes             |                 |                   |
| 326.724+0.337   | 236.54                      | −54.26                 | Yes             |                 |                   |
| 326.735−0.093   | 237.01                      | −54.59                 | Yes             |                 |                   |
| 326.745−0.147   | 237.08                      | −54.63                 | Yes             |                 |                   |
| 326.750+0.133   | 236.79                      | −54.40                 | No              | No              | No distinct core  |
| 326.758+0.213   | 236.72                      | −54.33                 | Yes             |                 |                   |
| 326.759−0.100   | 237.05                      | −54.58                 | Yes             |                 |                   |
| 326.760−0.169   | 237.13                      | −54.63                 | Yes             |                 |                   |
| 326.763+0.864   | 236.04                      | −53.82                 | Yes             |                 |                   |
| 326.783−0.707   | 237.74                      | −55.04                 | Yes             |                 |                   |
| 326.786−0.757   | 237.80                      | −55.08                 | No              | Yes             |                   |
| 326.787−0.357   | 237.37                      | −54.76                 | Yes             |                 |                   |
| 326.787−0.399   | 237.41                      | −54.80                 | Yes             |                 |                   |
| 326.795−0.045   | 237.04                      | −54.51                 | No              | No              | No distinct core  |
| 326.811+0.511   | 236.47                      | −54.07                 | Yes             |                 |                   |
| 326.811+0.656   | 236.32                      | −53.95                 | No              | No              | No distinct core  |
| 326.812+0.425   | 236.56                      | −54.13                 | Yes             |                 |                   |
| 326.815−0.772   | 237.86                      | −55.07                 | Yes             |                 |                   |
| 326.824+0.466   | 236.54                      | −54.09                 | Yes             |                 |                   |
| 326.826−0.315   | 237.37                      | −54.71                 | Yes             |                 |                   |
| 326.826−0.753   | 237.85                      | −55.05                 | No              | No              | No distinct core  |
| 326.826+0.510   | 236.49                      | −54.06                 | No              | No              | No distinct core  |
| 326.828+0.072   | 236.96                      | −54.40                 | No              | Yes             |                   |
| 326.831+0.549   | 236.46                      | −54.02                 | Stripy at 250 \(\mu\)m |                 |                   |
| 326.834+0.582   | 236.43                      | −54.00                 | Stripy at 250 \(\mu\)m |                 |                   |
| 326.835−0.069   | 237.12                      | −54.51                 | Yes             |                 |                   |
| 326.836+0.068   | 236.97                      | −54.40                 | No              | No              | No distinct core  |
| 326.850+0.641   | 236.39                      | −53.94                 | Yes             |                 |                   |
| 326.851+0.521   | 236.52                      | −54.03                 | No              | No              | Confused at 500\(\mu\)m |
| 326.857−0.311   | 237.41                      | −54.68                 | Yes             |                 |                   |
| 326.857+0.496   | 236.55                      | −54.05                 | Yes             |                 |                   |
| 326.870+0.071   | 237.02                      | −54.38                 | Yes             |                 |                   |
| 326.872+0.410   | 236.66                      | −54.11                 | No              | No              | Confused at 500\(\mu\)m |

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| IRDC Name     | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8μm source? | 24μm source? | Additional comments          |
|--------------|-----------------------------|------------------------|-------------|--------------|-----------------------------|
| 326.875+0.704 | 236.36                      | -53.87                 | No          | No           | Confused at 500μm           |
| 326.876+0.639 | 236.43                      | -53.93                 | No          | No           | No distinct core            |
| 326.877–0.214 | 237.33                      | -54.60                 | Yes         |              |                              |
| 326.884+0.448 | 236.64                      | -54.07                 | Yes         |              | No distinct core            |
| 326.885+0.142 | 236.96                      | -54.31                 | Yes         |              |                              |
| 326.886+0.307 | 236.79                      | -54.18                 | Yes         |              |                              |
| 326.889+0.294 | 236.81                      | -54.19                 | No          | Yes          |                              |
| 326.890–0.350 | 237.50                      | -54.69                 | Yes         |              |                              |
| 326.898+0.155 | 236.96                      | -54.29                 | Yes         |              |                              |
| 326.900+0.568 | 236.53                      | -53.97                 | Yes         |              | Stripy at 250μm             |
| 326.902+0.839 | 236.25                      | -53.75                 | No          | No           | Confused at 160μm           |
| 326.908+0.457 | 236.66                      | -54.05                 | Yes         |              | No distinct core            |
| 326.910+0.561 | 236.55                      | -53.97                 | Yes         |              | Stripy at 250μm             |
| 326.911+0.442 | 236.68                      | -54.06                 | No          | No           | Confused at 500μm           |
| 326.917–0.038 | 237.20                      | -54.43                 | No          | Yes          | No distinct core            |
| 326.923+0.452 | 236.68                      | -54.04                 | No          | No           | Confused at 500μm           |
| 326.924+0.716 | 236.41                      | -53.84                 | Yes         |              | No distinct core            |
| 326.926+0.736 | 236.39                      | -53.82                 | No          | No           | Confused at 500μm           |
| 326.928+0.427 | 236.72                      | -54.06                 | No          |              | No distinct core            |
| 326.929+0.538 | 236.60                      | -53.97                 | Yes         |              | Stripy at 250μm             |
| 326.938+0.561 | 236.59                      | -53.95                 | Yes         |              | No distinct core            |
| 326.944+0.350 | 236.82                      | -54.11                 | No          |              | No distinct core            |
| 326.950–0.164 | 237.38                      | -54.51                 | Yes         |              | No distinct core            |
| 326.951+0.325 | 236.86                      | -54.13                 | Yes         |              | No distinct core            |
| 326.952–0.003 | 237.21                      | -54.38                 | Yes         |              | No distinct core            |
| 326.956–0.007 | 237.22                      | -54.38                 | Yes         |              | No distinct core            |
| 326.956+0.497 | 236.68                      | -53.99                 | Yes         |              | No distinct core            |
| 326.956+0.517 | 236.66                      | -53.97                 | Yes         |              | No distinct core            |
| 326.959+0.463 | 236.72                      | -54.01                 | No          | No           | Confused at 500μm           |
| 326.962+0.451 | 236.74                      | -54.02                 | Yes         |              | No distinct core            |
| 326.970–0.033 | 237.26                      | -54.40                 | Yes         |              | No distinct core            |
| 326.992+0.007 | 236.25                      | -54.35                 | No          |              | No distinct core            |
| 326.995–0.183 | 237.46                      | -54.50                 | Yes         |              | No distinct core            |
| 327.002–0.174 | 237.46                      | -54.49                 | No          | Yes          | No distinct core            |
| 327.004+0.079 | 237.36                      | -54.41                 | Yes         |              | No distinct core            |
| 327.010+0.032 | 237.32                      | -54.37                 | No          | Yes          | No distinct core            |
| 327.019+0.008 | 237.29                      | -54.33                 | Yes         |              | No distinct core            |
| 327.021–0.162 | 237.47                      | -54.47                 | No          | Yes          | No distinct core            |
| 327.023+0.477 | 236.79                      | -53.96                 | Yes         |              | No distinct core            |
| 327.025–0.045 | 237.35                      | -54.37                 | No          | Yes          | No distinct core            |
| 327.027–0.296 | 237.62                      | -54.57                 | No          | Yes          | No distinct core            |
| 327.034–0.110 | 237.43                      | -54.42                 | No          | Yes          | No distinct core            |
| 327.043–0.290 | 237.64                      | -54.55                 | No          | Yes          | No distinct core            |
| 327.044+0.019 | 237.31                      | -54.31                 | Yes         |              | No distinct core            |
| 327.049–0.302 | 237.66                      | -54.56                 | No          | Yes          | No distinct core            |
| 327.069–0.288 | 237.67                      | -54.53                 | Yes         |              | No distinct core            |
| 327.074–0.012 | 237.38                      | -54.32                 | No          | Yes          | No distinct core            |
| 327.076–0.104 | 237.48                      | -54.39                 | Yes         |              | No distinct core            |
| 327.086+0.007 | 237.38                      | -54.29                 | No          | Yes          | No distinct core            |
| 327.090–0.250 | 237.66                      | -54.49                 | Yes         |              | No distinct core            |
| 327.093–0.350 | 237.77                      | -54.57                 | Yes         |              | No distinct core            |
| 327.098+0.234 | 237.15                      | -54.11                 | Yes         |              | No distinct core            |
| 327.112–0.291 | 237.73                      | -54.51                 | Yes         |              | No distinct core            |
| 327.123+0.723 | 236.67                      | -53.71                 | No          | No           | Confused at 500μm           |
| 327.129–0.461 | 237.94                      | -54.63                 | No          | Yes          | No distinct core            |
| 327.134–0.335 | 237.82                      | -54.52                 | Yes         |              | No distinct core            |
| 327.144–0.303 | 237.79                      | -54.50                 | Yes         |              | No distinct core            |
| 327.162–0.337 | 237.85                      | -54.51                 | Yes         |              | No distinct core            |
| 327.167–0.300 | 237.81                      | -54.48                 | Yes         |              | No distinct core            |

*continued on next page*
### Cores in IRDCs from \( l = 300 \) to \( 330^\circ \)

| IRDC Name     | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8 \( \mu \)m source? | 24 \( \mu \)m source? | Additional comments |
|---------------|-----------------------------|------------------------|----------------------|----------------------|---------------------|
| 327.224+0.225 | 237.33                      | −54.04                 | No                   | Yes                  | No distinct core    |
| 327.237+0.231 | 237.34                      | −54.02                 | No                   | Yes                  | No distinct core    |
| 327.238+0.241 | 237.33                      | −54.01                 | No                   | Yes                  | No distinct core    |
| 327.251−0.134 | 237.75                      | −54.30                 | Yes                  |                      |                     |
| 327.252−0.093 | 237.71                      | −54.27                 | No                   | Yes                  | No distinct core    |
| 327.277+0.224 | 237.40                      | −54.00                 | Yes                  |                      |                     |
| 327.391−0.387 | 238.21                      | −54.41                 | No                   | No                   | Confused at 500 \( \mu \)m |
| 327.402−0.416 | 238.25                      | −54.42                 | No                   | Yes                  |                     |
| 327.429−0.397 | 238.27                      | −54.39                 | Yes                  |                      |                     |
| 327.457−0.694 | 238.63                      | −54.60                 | Yes                  |                      |                     |
| 327.485+0.761 | 237.11                      | −53.45                 | Yes                  |                      |                     |
| 327.486−0.694 | 238.67                      | −54.58                 | Yes                  |                      |                     |
| 327.491−0.311 | 238.26                      | −54.29                 | Yes                  |                      |                     |
| 327.535−0.534 | 238.56                      | −54.43                 | No                   | Yes                  |                     |
| 327.572+0.326 | 237.68                      | −53.74                 | Yes                  |                      |                     |
| 327.610+0.802 | 237.23                      | −53.34                 | Yes                  |                      |                     |
| 327.653−0.605 | 238.79                      | −54.41                 | No                   | Yes                  |                     |
| 327.659+0.609 | 237.50                      | −53.46                 | No                   | Yes                  |                     |
| 327.676−0.566 | 238.78                      | −54.36                 | Yes                  |                      |                     |
| 327.683−0.543 | 238.76                      | −54.34                 | Yes                  |                      |                     |
| 327.695−0.552 | 238.79                      | −54.34                 | No                   | Yes                  |                     |
| 327.723−0.535 | 238.81                      | −54.31                 | Yes                  |                      |                     |
| 327.725+0.894 | 237.28                      | −53.20                 | No                   | No                   | Confused at 500 \( \mu \)m |
| 327.727−0.566 | 238.85                      | −53.33                 | Yes                  |                      |                     |
| 327.729−0.051 | 238.29                      | −53.93                 | No                   | Yes                  |                     |
| 327.746+0.925 | 237.28                      | −53.16                 | No                   | Yes                  |                     |
| 327.753−0.090 | 238.37                      | −53.95                 | Yes                  |                      |                     |
| 327.763−0.513 | 238.84                      | −54.27                 | No                   | Yes                  |                     |
| 327.765−0.490 | 238.82                      | −54.25                 | No                   | Yes                  |                     |
| 327.778−0.091 | 238.40                      | −53.93                 | Yes                  |                      |                     |
| 327.787−0.491 | 238.85                      | −54.24                 | Yes                  |                      |                     |
| 327.795−0.466 | 238.83                      | −54.21                 | No                   | Yes                  |                     |
| 327.804+0.064 | 238.26                      | −53.80                 | Yes                  |                      |                     |
| 327.808+0.495 | 237.81                      | −53.46                 | Yes                  |                      |                     |
| 327.811−0.288 | 238.66                      | −54.06                 | No                   | Yes                  |                     |
| 327.815−0.560 | 238.96                      | −54.27                 | Yes                  |                      |                     |
| 327.815+0.488 | 237.83                      | −53.46                 | Yes                  |                      |                     |
| 327.816−0.451 | 238.84                      | −54.19                 | Yes                  |                      |                     |
| 327.848−0.479 | 238.91                      | −54.19                 | No                   | Yes                  |                     |
| 327.852+0.503 | 237.86                      | −53.43                 | Yes                  |                      |                     |
| 327.863+0.470 | 237.91                      | −53.44                 | Yes                  |                      |                     |
| 327.880−0.461 | 238.94                      | −54.15                 | Yes                  |                      |                     |
| 327.887−0.474 | 238.96                      | −54.16                 | No                   | Yes                  |                     |
| 327.893+0.435 | 237.99                      | −53.45                 | No                   | Yes                  |                     |
| 327.914−0.611 | 239.14                      | −54.25                 | Yes                  |                      |                     |
| 327.917−0.397 | 238.91                      | −54.08                 | No                   | Yes                  |                     |
| 327.923+0.566 | 237.89                      | −53.33                 | No                   | Yes                  |                     |
| 327.924−0.536 | 239.07                      | −54.18                 | No                   | Yes                  |                     |
| 327.929+0.430 | 238.04                      | −53.43                 | No                   | Yes                  |                     |
| 327.936+0.511 | 237.96                      | −53.37                 | No                   | Yes                  | Confused at 500 \( \mu \)m |
| 327.937−0.538 | 239.09                      | −54.18                 | No                   | Yes                  |                     |
| 327.950−0.723 | 239.31                      | −54.31                 | Yes                  |                      |                     |
| 327.952+0.520 | 237.97                      | −53.35                 | Yes                  |                      |                     |
| 327.964+0.388 | 238.13                      | −53.44                 | Yes                  |                      |                     |
| 327.974+0.371 | 238.16                      | −53.45                 | Yes                  |                      |                     |
| 327.980−0.490 | 239.10                      | −54.11                 | Yes                  |                      |                     |
| 327.988−0.711 | 239.35                      | −54.27                 | No                   | Yes                  |                     |
| 327.990+0.506 | 238.04                      | −53.34                 | Yes                  |                      |                     |
| 328.004−0.509 | 239.15                      | −54.11                 | No                   | Yes                  |                     |

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| IRDC Name   | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8 μm source? | 24 μm source? | Additional comments          |
|------------|--------------------------|------------------------|--------------|---------------|-----------------------------|
| 328.007+0.416 | 238.15                   | −53.40                 | Yes          |               | No distinct core            |
| 328.022+0.382 | 238.21                   | −53.41                 | Yes          |               |                             |
| 328.035+0.615 | 237.98                   | −53.22                 | Yes          |               |                             |
| 328.036+0.395 | 238.21                   | −53.39                 | Yes          |               |                             |
| 328.044−0.391 | 239.07                   | −53.99                 | No           | Yes           |                             |
| 328.050−0.538 | 239.24                   | −54.10                 | Yes          |               |                             |
| 328.054−0.026 | 238.69                   | −53.71                 | Yes          |               |                             |
| 328.057−0.293 | 239.98                   | −53.91                 | No           | Yes           | No distinct core            |
| 328.061−0.278 | 239.97                   | −53.90                 | No           | Yes           | No distinct core            |
| 328.068−0.284 | 239.99                   | −53.90                 | No           | Yes           |                             |
| 328.068+0.513 | 238.13                   | −53.28                 | Yes          |               |                             |
| 328.073−0.128 | 238.82                   | −53.77                 | No           | Yes           | No distinct core            |
| 328.077+0.528 | 238.13                   | −53.26                 | No           | Yes           | No distinct core            |
| 328.086−0.102 | 238.81                   | −53.75                 | No           | Yes           | No distinct core            |
| 328.094+0.567 | 239.05                   | −53.91                 | Yes          |               |                             |
| 328.100−0.542 | 239.31                   | −54.07                 | No           | Yes           | No distinct core            |
| 328.101+0.626 | 238.05                   | −53.17                 | Yes          |               |                             |
| 328.102+0.368 | 238.33                   | −53.37                 | Yes          |               |                             |
| 328.103−0.445 | 239.21                   | −54.00                 | Yes          |               |                             |
| 328.103+0.602 | 239.08                   | −53.19                 | No           | Yes           |                             |
| 328.108−0.175 | 239.92                   | −53.79                 | No           | Yes           | No distinct core            |
| 328.108−0.383 | 239.15                   | −53.95                 | No           | Yes           | No distinct core            |
| 328.119+0.358 | 238.36                   | −53.37                 | No           | Yes           | No distinct core            |
| 328.136−0.282 | 238.11                   | −53.42                 | Yes          |               |                             |
| 328.167+0.021 | 238.78                   | −53.60                 | No           | Yes           | No distinct core            |
| 328.175+0.310 | 238.48                   | −53.37                 | Yes          |               |                             |
| 328.176−0.671 | 239.55                   | −54.12                 | No           | Yes           | Stripy at 250 μm            |
| 328.178+0.285 | 238.51                   | −53.39                 | No           | Yes           |                             |
| 328.196−0.672 | 239.58                   | −54.11                 | Yes          |               |                             |
| 328.220−0.392 | 239.30                   | −53.88                 | No           | Yes           | Stripy at 250 μm            |
| 328.222−0.094 | 238.77                   | −53.51                 | Yes          |               |                             |
| 328.227−0.378 | 239.29                   | −53.87                 | No           | Yes           | No distinct core            |
| 328.232−0.367 | 239.29                   | −53.86                 | Yes          |               |                             |
| 328.251−0.301 | 239.24                   | −53.79                 | No           | Yes           | No distinct core            |
| 328.255−0.412 | 239.37                   | −53.87                 | Yes          |               |                             |
| 328.258−0.255 | 239.20                   | −53.75                 | Yes          |               |                             |
| 328.264−0.302 | 239.26                   | −53.78                 | Yes          |               |                             |
| 328.273−0.193 | 239.15                   | −53.70                 | Yes          |               |                             |
| 328.274+0.596 | 238.31                   | −53.09                 | No           | Yes           | No distinct core            |
| 328.282−0.046 | 238.01                   | −53.58                 | Yes          |               |                             |
| 328.303−0.106 | 239.10                   | −53.61                 | No           | Yes           |                             |
| 328.303−0.302 | 239.31                   | −53.76                 | No           | Yes           |                             |
| 328.304−0.012 | 239.00                   | −53.54                 | Yes          |               |                             |
| 328.309+0.237 | 238.74                   | −53.34                 | No           | Yes           | No distinct core            |
| 328.311−0.549 | 239.59                   | −53.94                 | Yes          |               |                             |
| 328.320−0.521 | 239.57                   | −53.92                 | No           | Yes           | No distinct core            |
| 328.348−0.246 | 239.31                   | −53.69                 | No           | Yes           | No distinct core            |
| 328.386−0.308 | 239.43                   | −53.71                 | Yes          |               |                             |
| 328.397−0.336 | 239.47                   | −53.72                 | Yes          |               |                             |
| 328.400−0.495 | 239.65                   | −53.84                 | No           | Yes           | Stripy at 250 μm            |
| 328.406−0.085 | 239.21                   | −53.53                 | No           | Yes           |                             |
| 328.409−0.109 | 239.24                   | −53.54                 | Yes          |               |                             |
| 328.424+0.070 | 239.06                   | −53.40                 | Yes          |               |                             |
| 328.432−0.522 | 239.72                   | −53.84                 | No           | No            |                             |
| 328.433+0.594 | 238.51                   | −52.99                 | Yes          |               |                             |
| 328.514+0.276 | 238.96                   | −53.18                 | No           | Yes           | No distinct core            |
| 328.584+0.645 | 238.65                   | −52.85                 | No           | Yes           | Confused at 500 μm          |
| 328.624+0.274 | 239.10                   | −53.11                 | Yes          |               |                             |

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### Cores in IRDCs from $l = 300$ to $330^\circ$

| IRDC Name         | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | $8\mu$m source? | $24\mu$m source? | Additional comments                      |
|-------------------|----------------------------|------------------------|-----------------|------------------|------------------------------------------|
| 328.641−0.303     | 239.75                     | −53.54                 |                 |                  | No distinct core                          |
| 328.657−0.422     | 239.90                     | −53.62                 | Yes             |                  |                                          |
| 328.665+0.502     | 238.91                     | −52.91                 | Yes             |                  |                                          |
| 328.684+0.018     | 239.45                     | −53.27                 | Yes             |                  |                                          |
| 328.690−0.310     | 239.82                     | −53.51                 | Yes             |                  |                                          |
| 328.693+0.255     | 239.21                     | −53.08                 |                 |                  | No distinct core                          |
| 328.741+0.614     | 238.89                     | −52.78                 | No              | Yes              |                                          |
| 328.755+0.606     | 239.91                     | −52.77                 | No              | Yes              |                                          |
| 328.762+0.354     | 239.19                     | −52.96                 | Yes             |                  |                                          |
| 328.765+0.716     | 238.81                     | −52.68                 | Yes             |                  |                                          |
| 328.768+0.664     | 238.87                     | −52.72                 | Yes             |                  |                                          |
| 328.771−0.570     | 240.21                     | −53.66                 | Stripy at 250 $\mu$m |                  |                                          |
| 328.816+0.745     | 238.84                     | −52.63                 | Stripy at 250 $\mu$m |                  |                                          |
| 328.822+0.468     | 239.15                     | −52.94                 | No distinct core |                  |                                          |
| 328.822+0.753     | 238.84                     | −52.62                 | Stripy at 250 $\mu$m |                  |                                          |
| 328.834+0.457     | 239.17                     | −52.84                 | No distinct core |                  |                                          |
| 328.854+0.752     | 238.88                     | −52.60                 | Stripy at 250 $\mu$m |                  |                                          |
| 328.859+0.277     | 239.40                     | −52.96                 | Yes             |                  |                                          |
| 328.865+0.752     | 238.90                     | −52.59                 | Stripy at 250 $\mu$m |                  |                                          |
| 328.869+0.257     | 239.43                     | −52.97                 | Yes             |                  |                                          |
| 328.899+0.750     | 239.94                     | −52.57                 | Yes             |                  |                                          |
| 329.804−0.101     | 239.86                     | −53.22                 | No distinct core |                  |                                          |
| 329.913−0.099     | 239.87                     | −53.21                 | No distinct core |                  |                                          |
| 329.923+0.284     | 239.47                     | −52.91                 | Yes             |                  |                                          |
| 329.947+0.369     | 239.41                     | −52.83                 | No              | Yes              |                                          |
| 329.951+0.816     | 239.94                     | −52.49                 | No              | No               | Confused at 500 $\mu$m                    |
| 329.992+0.786     | 239.02                     | −52.48                 | No              | No               | Confused at 500 $\mu$m                    |
| 329.021−0.166     | 240.08                     | −53.19                 | No distinct core |                  |                                          |
| 329.028−0.202     | 240.13                     | −53.21                 | Yes             |                  |                                          |
| 329.039−0.119     | 240.05                     | −53.14                 | Yes             |                  |                                          |
| 329.039−0.140     | 240.08                     | −53.16                 | No              | Yes              |                                          |
| 329.042−0.177     | 240.12                     | −53.18                 | No distinct core |                  |                                          |
| 329.042−0.281     | 240.23                     | −53.26                 | Yes             |                  |                                          |
| 329.058−0.289     | 240.26                     | −53.26                 | Yes             |                  |                                          |
| 329.067−0.112     | 240.08                     | −53.12                 | No distinct core |                  |                                          |
| 329.077+0.415     | 239.52                     | −52.71                 | No              | Yes              |                                          |
| 329.088−0.399     | 240.42                     | −53.32                 | Yes             |                  |                                          |
| 329.101−0.394     | 240.43                     | −53.31                 | Yes             |                  |                                          |
| 329.114−0.379     | 240.43                     | −53.29                 | No              | No               | Confused at 500 $\mu$m                    |
| 329.169−0.745     | 240.91                     | −53.53                 | Yes             |                  |                                          |
| 329.178−0.602     | 240.76                     | −53.42                 | Yes             |                  |                                          |
| 329.179+0.446     | 239.62                     | −52.62                 | Yes             |                  |                                          |
| 329.201+0.559     | 239.53                     | −52.52                 | Yes             |                  |                                          |
| 329.208−0.742     | 240.95                     | −53.50                 | No distinct core |                  |                                          |
| 329.213−0.757     | 240.97                     | −53.51                 | Yes             |                  |                                          |
| 329.227+0.482     | 239.64                     | −52.56                 | Yes             |                  |                                          |
| 329.247−0.233     | 240.44                     | −53.09                 | No              | Yes              |                                          |
| 329.251−0.267     | 240.48                     | −53.12                 | No              | No               | Confused at 500 $\mu$m                    |
| 329.265−0.339     | 240.58                     | −53.16                 | Stripy at 250 $\mu$m |                  |                                          |
| 329.276−0.258     | 240.50                     | −53.09                 | Yes             |                  | Stripy at 250 $\mu$m                      |
| 329.278−0.341     | 240.60                     | −53.15                 | Stripy at 250 $\mu$m |                  |                                          |
| 329.313−0.302     | 240.60                     | −53.10                 | Yes             |                  |                                          |
| 329.374−0.284     | 240.65                     | −53.05                 | Yes             |                  |                                          |
| 329.389−0.659     | 241.09                     | −53.32                 | Yes             |                  |                                          |
| 329.403−0.736A    | 241.19                     | −53.37                 | Yes             |                  |                                          |
| 329.403−0.736B    | 241.19                     | −53.37                 | No              | No               |                                          |
| 329.413−0.226     | 240.64                     | −52.98                 | Yes             |                  |                                          |
| 329.424+0.475     | 239.89                     | −52.44                 | No              | Yes              |                                          |
| 329.437+0.853     | 239.51                     | −52.14                 | Yes             |                  |                                          |

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| IRDC Name       | Right Ascension 2000.0 (°) | Declination 2000.0 (°) | 8μm source? | 24μm source? | Additional comments |
|-----------------|-----------------------------|------------------------|--------------|--------------|-------------------|
| 329.441+0.518  | 239.87                      | −52.40                  | Yes          |              |                   |
| 329.444−0.765  | 241.27                      | −53.36                  | Yes          |              |                   |
| 329.463−0.770  | 241.30                      | −53.35                  | Yes          |              |                   |
| 329.463+0.517  | 239.90                      | −52.38                  | Yes          |              |                   |
| 329.489+0.404  | 240.05                      | −52.45                  | Yes          |              |                   |
| 329.494+0.106  | 240.38                      | −52.67                  | Yes          |              |                   |
| 329.557−0.362  | 240.97                      | −52.99                  | Yes          |              |                   |
| 329.568−0.354  | 240.97                      | −52.97                  | Yes          |              |                   |
| 329.568−0.392  | 241.01                      | −53.00                  | Yes          |              |                   |
| 329.589+0.045  | 240.56                      | −52.66                  | Yes          |              |                   |
| 329.621−0.407  | 241.10                      | −52.98                  | No           | No           | Confused at 500μm |
| 329.627+0.855  | 239.74                      | −52.02                  | No           | No           |                   |
| 329.633−0.387  | 241.09                      | −52.95                  | No           | Yes          |                   |
| 329.638+0.836  | 239.78                      | −52.03                  | Yes          |              |                   |
| 329.642+0.908  | 239.70                      | −51.97                  | Yes          |              |                   |
| 329.648+0.857  | 239.76                      | −52.00                  | Yes          |              |                   |
| 329.648+0.957  | 239.66                      | −51.93                  | Yes          |              |                   |
| 329.652+0.073  | 240.61                      | −52.59                  | No           | Yes          |                   |
| 329.655+0.852  | 239.78                      | −52.00                  | No           | Yes          |                   |
| 329.684+0.819  | 239.85                      | −52.01                  | Yes          |              |                   |
| 329.684+0.875  | 239.79                      | −51.97                  | No           | No           | Confused at 500μm |
| 329.691−0.353  | 241.12                      | −52.89                  | No           | No           | No distinct core  |
| 329.726+0.848  | 239.87                      | −51.96                  | No           | No           | No distinct core  |
| 329.745−0.038  | 240.85                      | −52.62                  | Yes          |              |                   |
| 329.748+0.855  | 239.89                      | −51.94                  | No           | No           | Confused at 500μm |
| 329.749+0.868  | 239.88                      | −51.93                  | No           | Yes          |                   |
| 329.863+0.456  | 240.46                      | −52.17                  | Yes          |              |                   |
| 329.875+0.121  | 240.83                      | −52.41                  | Yes          |              |                   |
| 329.902+0.969  | 239.96                      | −51.75                  | No           | No           | No distinct core  |
| 329.904+0.417  | 240.55                      | −52.17                  | Yes          |              |                   |
| 329.938−0.113  | 241.16                      | −52.55                  | Yes          |              |                   |
| 329.989−0.396  | 241.54                      | −52.72                  | Yes          |              |                   |
APPENDIX B: TESTING THE CATALOGUE COMPLETENESS

In the main body of this paper, we search for IRDCs within the area $l = 300 - 330^\circ, |b| < 1^\circ$ using the catalogue of PF09. They used Spitzer 8-µm data to identify 11303 candidate IRDCs in the Galactic Plane. 3171 of these lie in our search area. To ascertain how many IRDCs may have been missed due to sensitivity limits we modelled several IRDCs and placed them in the Hi-GAL data in regions with differing backgrounds. The modelled IRDCs were observed in the same manner as the original candidates. The dimensions and flux levels of the smallest visible IRDC were determined.

To model the IRDCs we used PHAETHON (Stamatellos & Whitworth 2003, 2005, Stamatellos et al. 2010). PHAETHON is a 3D Monte Carlo radiative transfer code and has been used previously to model IRDCs (Stamatellos et al. 2010; Wilcock et al. 2011). The code uses luminosity packets to represent the ambient radiation field in the system. These packets are injected into the system where they interact (are absorbed, re-emitted or scattered) with it stochastically. The ambient radiation field is taken to be a multiple of a modified version of the Black (1994) interstellar radiation field (ISRF), which gives a good approximation to the radiation field in the solar neighbourhood. The input variables of the code are the density profile, the strength of the ambient radiation field, the dust properties of the system, the size of the core and its geometry.

IRDCs were created with three different radii (0.2, 0.4 and 0.7 pc) and two different peak column densities (the detection threshold of PF09, $2 \times 10^{22}$ cm$^{-2}$, and $4 \times 10^{22}$ cm$^{-2}$). Using the mean parameters of IRDCs modelled by Wilcock et al. (2012), we place our model IRDCs at a distance of 3.1 kpc and use a surrounding ISRF of 3.2 times the Black (1994) interstellar radiation field. As most IRDCs do not appear spherical, they were modelled with a flattened geometry which has a density profile given by:

$$n(r, \theta) = n_0(H_2) \left[ \frac{1 + A \left( \frac{r}{R_0} \right)^2 \sin(\theta)^2}{1 + \left( \frac{r}{R_0} \right)^2} \right],$$

where $r$ is the radial distance, $\theta$ is the polar angle and $R_0$ is the flattening radius (i.e. the radial distance for which the central density is approximately constant). $n_0(H_2)$ is the central density, which is controlled as an input variable. $A$ is a factor that controls the equatorial to polar optical depth ratio and determines how flattened the core is. This was set at 2.5 and corresponds to an aspect ratio of $\sim 1:7$. $R_0$ was one tenth of the maximum radius. The dust opacity at 500 µm used was 0.03 cm$^2$ g$^{-1}$ (Ossenkopf & Henning 1994).

Each of the six IRDCs was convolved with the telescope beam at each wavelength and placed into the Hi-GAL data in four positions. The locations selected were typical areas within the Hi-GAL field that did not contain any candidate IRDCs and were chosen to cover a range of different background levels. These were: Position A ($l = 327.829^\circ, b = +0.17^\circ$), a confused region near the centre of the Galactic Plane which has the highest background level at 2600 MJy sr$^{-1}$ at 250 µm; Position B ($l = 328.427^\circ, b = +0.04^\circ$), an unconfused area, also near the centre of the Galactic Plane, with a background of 1300 MJy sr$^{-1}$ at 250 µm; Position C ($l = 328.141^\circ, b = -0.89^\circ$), a confused area near the edge of the Hi-GAL data with a background level of 450 MJy sr$^{-1}$ at 250 µm; and Position D ($l = 327.973^\circ, b = -0.99^\circ$), an unconfused area with the lowest background at 65 MJy sr$^{-1}$ at 250 µm. We define a confused region as one with many nearby sources. Figures B11-B14 show these four regions as they appear in the observations.

Synthetic observations were created of the model IRDCs in each position at Spitzer 8-µm and Herschel 70, 160, 250, 350 and 500 µm. As with the original candidates, if the IRDC was seen in emission at the three longest wavelengths it was then classed as Spitzer-dark and Herschel-bright and thus a genuine IRDC. If there was no clear emission then it was classed as Spitzer-dark and Herschel-dark and so dismissed. As PHAETHON only models the emission of the IRDC, the 8 and 70 µm maps with the added IRDCs appears no different from the original data and so are not necessarily Spitzer-dark.

The smallest modelled IRDC (0.2 pc, $2 \times 10^{22}$ cm$^{-2}$) can clearly be seen in emission in Positions B, C and D but not in Position A. This can be seen in Figures B5-B8. A small amount of emission can be seen from the 0.2 pc IRDC with a peak column density of $4 \times 10^{22}$ cm$^{-2}$ and the 0.4 pc, $2 \times 10^{22}$ cm$^{-2}$ IRDC (Figures B9 and B10 respectively) in Position A, although it can not be stated with absolute certainty that these objects would have been classed as Herschel-bright. The smallest IRDC that can clearly be seen in emission at the highest background levels is 0.4 pc in radius with a peak column density of $4 \times 10^{22}$ cm$^{-2}$, shown in Figure B11.

We therefore conclude that any IRDC whose major axis is $< 26^\circ$ (corresponding to 0.4 pc at a distance of 3.1 kpc) with a peak column density less than $4 \times 10^{22}$ cm$^{-2}$ in an area where the background level is greater than 1300 MJy sr$^{-1}$ at 250 µm may not be found to be Herschel-bright, regardless of whether it is a genuine IRDC or not (although some were). A quantitative analysis of Herschel-bright IRDC detections as a function of their physical parameters will be addressed in Lenfestey et al. (2012).

We then attempted to estimate what percentage of the PF09 catalogue falls below our sensitivity limits. We focussed on a 2 degree-square region centred on $l = 327^\circ, b = 0^\circ$. This area was chosen as it is typical of the $l = 300 - 330^\circ$ region and contains many candidate IRDCs.

The background levels ranged from approximately 390 to 2900 MJy sr$^{-1}$ (equivalent to Positions C and A respectively), with an average of 1400 MJy sr$^{-1}$ (equivalent to Position B). The background levels were defined using an aperture close to the position of each candidate IRDC. Using axis size and peak opacities from PF09 we isolated those candidates that fall below our completeness criteria. The column density of each was calculated using:

$$N_{H_2} = \tau_{8\mu m} \times 3[\pm 1] \times 10^{22} \text{ cm}^{-2},$$

(PF09), where $N_{H_2}$ is the peak column density of the IRDC and $\tau_{8\mu m}$ is the peak 8 µm opacity taken from PF09.

This region contains 690 IRDC candidates. 141 of these are Herschel-dark with a radius less than 26$^\circ$, a peak column density lower than $4 \times 10^{22}$ cm$^{-2}$ and a background level above 1300 MJy sr$^{-1}$. For these 141 objects we can not state their true status. Therefore, the unknown objects comprise 141/690, or approximately 20%, of the PF09 IRDC candidates in the $2 \times 2^\circ$ area.

We therefore surmise that, if this pattern is typical of the whole Galactic Plane, then $\sim 20\%$ are unlikely to be seen in emission by Herschel regardless of their true status, $\sim 40\%$ of the PF09 candidate IRDCs are Herschel-bright, and $\sim 40\%$ are Herschel-dark.
Figure B1. Position A, shown without the addition of any modelled IRDCs, at 8\,\mu m (left) and 250\,\mu m (right). A cross marks the point where the IRDCs are added.

Figure B2. Position B, shown without the addition of any modelled IRDCs, at 8\,\mu m (left) and 250\,\mu m (right). A cross marks the point where the IRDCs are added.

Figure B3. Position C, shown without the addition of any modelled IRDCs, at 8\,\mu m (left) and 250\,\mu m (right). A cross marks the point where the IRDCs are added.
Figure B4. Position D, shown without the addition of any modelled IRDCs, at 8 µm (left) and 250 µm (right). A cross marks the point where the IRDCs are added.

Figure B5. A core with radius 0.2 pc and a peak column density of $2 \times 10^{22} \text{cm}^{-2}$ placed in Position A. The IRDC is shown at 8 µm (left) and 250 µm (right). A cross marks the position of the IRDC.

Figure B6. A core with radius 0.2 pc and a peak column density of $2 \times 10^{22} \text{cm}^{-2}$ placed in Position B. The IRDC is shown at 8 µm (left) and 250 µm (right). A cross marks the position of the IRDC.
Figure B7. A core with radius 0.2 pc and a peak column density of $2 \times 10^{22}$ cm$^{-2}$ placed in Position C. The IRDC is shown at 8 µm (left) and 250 µm (right). A cross marks the position of the IRDC.

Figure B8. A core with radius 0.2 pc and a peak column density of $2 \times 10^{22}$ cm$^{-2}$ placed in Position D. The IRDC is shown at 8 µm (left) and 250 µm (right). A cross marks the position of the IRDC.

Figure B9. A core with radius 0.2 pc and a peak column density of $4 \times 10^{22}$ cm$^{-2}$ placed in Position A. The IRDC is shown at 8 µm (left) and 250 µm (right). A cross marks the position of the IRDC.
Figure B10. A core with radius 0.4 pc and a peak column density of $2 \times 10^{22}$ cm$^{-2}$ placed in Position A. The IRDC is shown at 8 µm (left) and 250 µm (right). A cross marks the position of the IRDC.

Figure B11. A core with radius 0.4 pc and a peak column density of $4 \times 10^{22}$ cm$^{-2}$ placed in Position A. The IRDC is shown at 8 µm (left) and 250 µm (right). A cross marks the position of the IRDC.