

A SURVEY OF RED STARS IN THE DIRECTION OF THE LARGE MAGELLANIC CLOUD

2 Some Regions Around the Bar

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ABSTRACT

We have continued the survey for red stars in the direction of the Large Magellanic Cloud using the technique of ultra low dispersion spectroscopy. This paper which is the second one in the series lists 706 stars located around the bar region. Finding charts and coordinates on the Hodge-Wright Atlas charts are provided.

Key Words low dispersion spectroscopy—red star survey in external galaxies—Large Magellanic Cloud

This study is an extension of our earlier survey (Bappu, Parthasarathy and Scaria 1977) of red stars in the direction of the Large Magellanic Cloud, and covers seven new fields centred around the bar. The techniques used are identical to those employed previously. The exposure times vary from 60 to 75 minutes.

The presentation of identifications both on charts and in tabular form is also similar to the procedure adopted earlier. Figure 1 indicates the location of our LMC fields and includes those examined in our previous study. Table 1 lists 1950 coordinates of all thirteen fields that we have studied so far. The new fields have numbers 7 to 13 and these are displayed with identifications in Figures 2 to 8. Table 2 lists stars with Kavalur star numbers 299 to 326. The X and Y measures refer to Hodge-Wright Atlas chart 31 V and with the left hand bottom corner as origin. Table 3 lists Kavalur star numbers 327 to 673 with measures on Hodge-Wright chart 39 V while Table 4 lists Kavalur star numbers 674 to 1004 with X, Y measures as read off from Hodge-Wright chart 47 V.

Table 1 Coordinates of LMC fields

| LMC field No | RA (1950) | DEC (1950) |
|--------------|-----------|------------|
| 1 | 05 41 4 | 69 52 0 |
| 2 | 05 34 7 | 69 52 0 |
| 3 | 05 36 5 | -69 10 0 |
| 4 | 05 38 7 | -69 10 0 |
| 5 | 05 40 7 | -69 10 0 |
| 6 | 05 42 3 | 69 10 0 |
| 7 | 05 05 7 | 69 23 8 |
| 8 | 05 13 2 | 69 34 9 |
| 9 | 05 21 3 | 69 36 0 |
| 10 | 05 27 9 | 69 40 9 |
| 11 | 05 25 0 | -69 56 8 |
| 12 | 05 22 7 | -70 08 2 |
| 13 | 05 10 2 | -69 55 1 |

References

Bappu, M K V, Parthasarathy, M, Scaria, K K, 1977, *Kodaikanal Obs Bull Ser A* 2, 85

Table 2 List of red stars in the direction of the Large Cloud The X and Y coordinates refer to the left hand bottom corner of Hodge-Wright Chart 31 V

| Kavalur No | X cms | Y cms | Identification on field |
|------------|-------|-------|-------------------------|
| 299 | 0.40 | 24.45 | 7 |
| 300 | 2.48 | 22.87 | 7 |
| 301 | 2.83 | 22.53 | 7 |
| 302 | 2.45 | 22.53 | 7 |
| 303 | 3.28 | 22.37 | 7 |
| 304 | 2.45 | 22.26 | 7 |
| 305 | 3.89 | 21.30 | 7 |
| 306 | 3.10 | 21.28 | 7 |
| 307 | 2.35 | 21.20 | 7 |
| 308 | 2.78 | 21.15 | 7 |
| 309 | 3.80 | 20.97 | 7 |
| 310 | 2.40 | 20.72 | 7 |
| 311 | 3.28 | 20.69 | 7 |
| 312 | 3.75 | 20.67 | 7 |
| 313 | 2.48 | 20.35 | 7 |
| 314 | 3.18 | 20.02 | 7 |
| 315 | 4.92 | 19.19 | 7 |
| 316 | 4.27 | 19.11 | 7 |
| 317 | 2.60 | 18.80 | 7 |
| 318 | 3.53 | 18.60 | 7 |
| 319 | 3.91 | 17.21 | 7 |
| 320 | 4.76 | 17.20 | 7 |
| 321 | 4.10 | 16.97 | 7 |
| 322 | 4.81 | 16.93 | 7 |
| 323 | 4.22 | 16.91 | 7 |
| 324 | 3.01 | 16.65 | 7 |
| 325 | 2.40 | 16.60 | 7 |
| 326 | 3.40 | 15.93 | 7 |

Table 3 List of red stars in the direction of the large Cloud The X and Y coordinates refer to the left hand bottom corner of Hodge-Wright Chart 39 V

| Kavalur No | X cms | Y cms | Identification on field |
|------------|-------|-------|-------------------------|
| 327 | 22.90 | 26.78 | 7 |
| 328 | 23.28 | 26.74 | 7 |
| 329 | 21.50 | 26.68 | 7 |
| 330 | 22.50 | 26.51 | 7 |
| 331 | 25.53 | 26.47 | 7 |
| 332 | 21.40 | 26.30 | 7 |
| 333 | 22.59 | 26.17 | 7 |
| 334 | 26.03 | 26.09 | 7 |
| 335 | 24.91 | 25.94 | 7 |
| 336 | 24.28 | 25.92 | 7 |
| 337 | 19.83 | 25.85 | 7 |
| 338 | 19.72 | 25.85 | 7 |
| 339 | 20.32 | 25.68 | 7 |
| 340 | 21.32 | 25.60 | 7 |
| 341 | 20.02 | 25.50 | 7 |
| 342 | 21.19 | 25.43 | 7 |
| 343 | 20.78 | 25.10 | 7 |
| 344 | 20.86 | 25.10 | 7 |
| 345 | 19.20 | 25.06 | 7 |
| 346 | 20.56 | 25.00 | 7 |
| 347 | 25.03 | 24.86 | 7 |
| 348 | 24.50 | 24.82 | 7 |
| 349 | 21.39 | 24.80 | 7 |
| 350 | 26.36 | 24.80 | 7 |
| 351 | 25.76 | 24.78 | 7 |
| 352 | 26.53 | 24.67 | 7 |
| 353 | 26.22 | 24.57 | 7 |
| 354 | 25.90 | 24.57 | 7 |
| 355 | 21.88 | 24.51 | 7 |
| 356 | 20.30 | 24.40 | 7 |
| 357 | 20.40 | 24.32 | 7 |
| 358 | 18.48 | 24.17 | 7 |
| 359 | 23.73 | 24.14 | 7 |
| 360 | 24.18 | 24.12 | 7 |
| 361 | 22.12 | 24.12 | 7 |

| Kavalur No | X cms | Y cms | Identification on field | Kavalur No | X cms | Y cms | Identification on field |
|------------|-------|-------|-------------------------|------------|-------|-------|-------------------------|
| 362 | 22.62 | 24.07 | 7 | 402 | 26.11 | 21.58 | 7 |
| 363 | 21.22 | 23.99 | 7 | 403 | 6.50 | 21.53 | 8 |
| 364 | 22.01 | 23.72 | 7 | 404 | 10.70 | 21.49 | 8 |
| 365 | 21.37 | 23.70 | 7 | 405 | 8.01 | 21.46 | 8 |
| 366 | 22.39 | 23.58 | 7 | 406 | 24.60 | 21.43 | 7 |
| 367 | 21.21 | 23.50 | 7 | 407 | 9.19 | 21.40 | 8 |
| 368 | 9.23 | 23.50 | 8 | 408 | 26.43 | 21.27 | 7 |
| 369 | 7.09 | 23.50 | 8 | 409 | 26.02 | 21.27 | 7 |
| 370 | 9.39 | 23.45 | 8 | 410 | 6.90 | 21.22 | 8 |
| 371 | 23.47 | 23.29 | 7 | 411 | 11.85 | 21.10 | 8 |
| 372 | 10.58 | 23.16 | 8 | 412 | 23.94 | 21.06 | 7 |
| 373 | 24.83 | 23.14 | 7 | 413 | 11.39 | 21.05 | 8 |
| 374 | 8.90 | 23.07 | 8 | 414 | 26.50 | 20.93 | 7 |
| 375 | 10.42 | 22.98 | 8 | 415 | 7.08 | 20.88 | 8 |
| 376 | 9.49 | 22.97 | 8 | 416 | 7.48 | 20.83 | 8 |
| 377 | 8.83 | 22.96 | 8 | 417 | 26.30 | 20.80 | 7 |
| 378 | 23.98 | 22.92 | 7 | 418 | 8.42 | 20.80 | 8 |
| 379 | 8.65 | 22.83 | 8 | 419 | 11.40 | 20.72 | 8 |
| 380 | 8.42 | 22.80 | 8 | 420 | 4.70 | 20.52 | 8 |
| 381 | 10.37 | 22.79 | 8 | 421 | 9.51 | 20.51 | 8 |
| 382 | 24.19 | 22.73 | 7 | 422 | 23.88 | 20.50 | 7 |
| 383 | 23.93 | 22.60 | 7 | 423 | 3.74 | 20.39 | 8 |
| 384 | 26.00 | 22.30 | 7 | 424 | 11.50 | 20.37 | 8 |
| 385 | 23.20 | 22.30 | 7 | 425 | 5.78 | 20.30 | 8 |
| 386 | 7.62 | 22.22 | 8 | 426 | 4.61 | 20.26 | 8 |
| 387 | 11.41 | 22.19 | 8 | 427 | 10.18 | 20.15 | 8 |
| 388 | 8.82 | 22.10 | 8 | 428 | 5.71 | 20.01 | 8 |
| 389 | 4.45 | 22.05 | 8 | 429 | 11.63 | 19.99 | 8 |
| 390 | 8.10 | 22.01 | 8 | 430 | 3.61 | 19.98 | 8 |
| 391 | 23.70 | 22.00 | 7 | 431 | 10.47 | 19.97 | 8 |
| 392 | 10.78 | 22.00 | 8 | 432 | 5.46 | 19.60 | 8 |
| 393 | 7.58 | 21.97 | 8 | 433 | 10.11 | 19.57 | 8 |
| 394 | 23.30 | 21.88 | 7 | 434 | 3.92 | 19.40 | 8 |
| 395 | 11.71 | 21.81 | 8 | 435 | 20.39 | 19.33 | 7 |
| 396 | 26.53 | 21.76 | 7 | 436 | 3.02 | 19.31 | 8 |
| 397 | 22.11 | 21.69 | 7 | 437 | 2.62 | 19.30 | 8 |
| 398 | 7.52 | 21.67 | 8 | 438 | 10.66 | 19.24 | 8 |
| 399 | 10.73 | 21.65 | 8 | 439 | 11.40 | 19.20 | 8 |
| 400 | 10.50 | 21.63 | 8 | 440 | 24.12 | 19.20 | 7 |
| 401 | 10.86 | 21.59 | 8 | 441 | 3.08 | 19.19 | 8 |

| Kavalur No | X cms | Y cms | Identification on field | Kavalur No | X cms | Y cms | Identification on field |
|------------|-------|-------|-------------------------|------------|-------|-------|-------------------------|
| 442 | 3.82 | 19.15 | 8 | 482 | 3.00 | 17.13 | 8 |
| 443 | 2.10 | 19.11 | 9 | 483 | 12.65 | 17.11 | 8 |
| 444 | 2.30 | 19.11 | 9 | 484 | 4.53 | 17.01 | 8 |
| 445 | 23.90 | 18.99 | 7 | 485 | 7.89 | 17.00 | 8 |
| 446 | 12.30 | 18.97 | 8 | 486 | 3.62 | 16.98 | 8 |
| 447 | 13.61 | 18.93 | 8 | 487 | 7.97 | 16.94 | 8 |
| 448 | 12.23 | 18.92 | 8 | 488 | 5.81 | 16.92 | 8 |
| 449 | 11.02 | 18.89 | 8 | 489 | 12.85 | 16.85 | 8 |
| 450 | 13.76 | 18.84 | 8 | 490 | 5.10 | 16.83 | 8 |
| 451 | 3.05 | 18.79 | 8 | 491 | 8.72 | 16.82 | 8 |
| 452 | 13.17 | 18.74 | 8 | 492 | 5.92 | 16.81 | 8 |
| 453 | 11.98 | 18.72 | 8 | 493 | 6.39 | 16.79 | 8 |
| 454 | 3.50 | 18.62 | 8 | 494 | 25.25 | 16.77 | 7 |
| 455 | 3.00 | 18.62 | 8 | 495 | 6.28 | 16.75 | 8 |
| 456 | 4.45 | 18.58 | 8 | 496 | 11.73 | 16.62 | 8 |
| 457 | 10.92 | 18.53 | 8 | 497 | 5.58 | 16.61 | 8 |
| 458 | 3.03 | 18.50 | 8 | 498 | 5.68 | 16.61 | 8 |
| 459 | 11.90 | 18.40 | 8 | 499 | 5.92 | 16.60 | 8 |
| 460 | 7.31 | 18.38 | 8 | 500 | 8.52 | 16.57 | 8 |
| 461 | 13.49 | 18.36 | 8 | 501 | 14.00 | 16.52 | 8 |
| 462 | 11.79 | 18.22 | 8 | 502 | 12.81 | 16.51 | 8 |
| 463 | 6.96 | 18.19 | 8 | 503 | 8.39 | 16.50 | 8 |
| 464 | 24.29 | 18.14 | 7 | 504 | 11.03 | 16.43 | 8 |
| 465 | 13.53 | 18.10 | 8 | 505 | 6.21 | 16.42 | 8 |
| 466 | 2.56 | 18.02 | 8 | 506 | 7.29 | 16.40 | 8 |
| 467 | 11.30 | 18.01 | 8 | 507 | 14.11 | 16.33 | 13 |
| 468 | 4.30 | 17.82 | 8 | 508 | 5.09 | 16.20 | 8 |
| 469 | 6.55 | 17.81 | 8 | 509 | 4.92 | 16.16 | 8 |
| 470 | 4.13 | 17.77 | 8 | 510 | 8.03 | 16.14 | 8 |
| 471 | 12.60 | 17.73 | 8 | 511 | 4.18 | 16.10 | 8 |
| 472 | 9.30 | 17.70 | 8 | 512 | 22.82 | 16.04 | 7 |
| 473 | 24.13 | 17.61 | 7 | 513 | 11.09 | 16.02 | 8 |
| 474 | 2.88 | 17.55 | 8 | 514 | 4.20 | 15.92 | 8 |
| 475 | 13.02 | 17.50 | 8 | 515 | 8.14 | 15.72 | 8 |
| 476 | 4.99 | 17.50 | 8 | 516 | 8.42 | 15.63 | 8 |
| 477 | 4.23 | 17.47 | 8 | 517 | 11.33 | 15.61 | 8 |
| 478 | 3.93 | 17.42 | 8 | 518 | 6.23 | 15.60 | 8 |
| 479 | 5.45 | 17.42 | 8 | 519 | 10.69 | 15.41 | 8 |
| 480 | 22.42 | 17.29 | 7 | 520 | 12.71 | 15.37 | 8, 13 |
| 481 | 2.67 | 17.16 | 8 | 521 | 12.98 | 15.30 | 8, 13 |

| Kavalur No. | X cms | Y cms | Identification on field | Kavalur No. | X cms | Y cms | Identification on field |
|-------------|-------|-------|-------------------------|-------------|-------|-------|-------------------------|
| 522 | 11.79 | 15.30 | 8, 13 | 562 | 9.08 | 12.94 | 8, 13 |
| 523 | 13.04 | 15.28 | 8, 13 | 563 | 7.52 | 12.90 | 8 |
| 524 | 13.02 | 15.24 | 13 | 564 | 7.30 | 12.90 | 8 |
| 525 | 8.63 | 15.20 | 8, 13 | 565 | 16.99 | 12.86 | 13 |
| 526 | 15.30 | 15.07 | 13 | 566 | 9.61 | 12.82 | 8, 13 |
| 527 | 24.02 | 15.03 | 7, 13 | 567 | 13.02 | 12.77 | 13 |
| 528 | 8.42 | 15.01 | 8 | 568 | 16.83 | 12.77 | 13 |
| 529 | 8.52 | 14.99 | 8 | 569 | 10.38 | 12.63 | 8, 13 |
| 530 | 8.58 | 14.93 | 8 | 570 | 17.80 | 12.55 | 13 |
| 531 | 12.01 | 14.92 | 13 | 571 | 14.73 | 12.43 | 13 |
| 532 | 7.39 | 14.91 | 8, 13 | 572 | 9.86 | 12.39 | 8, 13 |
| 533 | 13.19 | 14.82 | 13 | 573 | 12.68 | 12.31 | 13 |
| 534 | 17.31 | 14.78 | 13 | 574 | 12.29 | 12.11 | 13 |
| 535 | 6.67 | 14.72 | 8 | 575 | 12.22 | 12.07 | 13 |
| 536 | 7.69 | 14.69 | 13 | 576 | 13.69 | 12.00 | 13 |
| 537 | 15.13 | 14.68 | 13 | 577 | 12.10 | 11.99 | 13 |
| 538 | 8.82 | 14.67 | 8 | 578 | 9.29 | 11.49 | 13 |
| 539 | 9.12 | 14.60 | 8, 13 | 579 | 12.22 | 11.41 | 13 |
| 540 | 5.02 | 14.55 | 8, 13 | 580 | 9.82 | 11.32 | 13 |
| 541 | 7.18 | 14.39 | 8 | 581 | 14.63 | 11.24 | 13 |
| 542 | 14.31 | 14.38 | 13 | 582 | 17.88 | 11.15 | 13 |
| 543 | 12.53 | 14.30 | 8, 13 | 583 | 12.58 | 11.13 | 13 |
| 544 | 7.50 | 14.22 | 8 | 584 | 13.02 | 10.92 | 13 |
| 545 | 14.47 | 14.20 | 13 | 585 | 11.93 | 10.51 | 13 |
| 546 | 7.56 | 14.19 | 13 | 586 | 8.61 | 10.50 | 13 |
| 547 | 12.89 | 14.10 | 8, 13 | 587 | 18.11 | 10.42 | 13 |
| 548 | 13.22 | 13.92 | 13 | 588 | 15.42 | 10.39 | 13 |
| 549 | 4.68 | 13.77 | 8, 13 | 589 | 17.73 | 10.37 | 13 |
| 550 | 6.66 | 13.62 | 8 | 590 | 16.31 | 10.32 | 13 |
| 551 | 16.60 | 13.57 | 13 | 591 | 12.42 | 10.23 | 13 |
| 552 | 7.54 | 13.51 | 8, 13 | 592 | 8.43 | 10.20 | 13 |
| 553 | 4.91 | 13.51 | 8 | 593 | 13.42 | 10.12 | 13 |
| 554 | 5.13 | 13.51 | 8 | 594 | 11.70 | 10.03 | 13 |
| 555 | 11.11 | 13.39 | 8, 13 | 595 | 12.13 | 10.00 | 13 |
| 556 | 18.89 | 13.08 | 13 | 596 | 12.60 | 9.97 | 13 |
| 557 | 13.21 | 13.08 | 13 | 597 | 11.49 | 9.93 | 13 |
| 558 | 13.30 | 13.06 | 13 | 598 | 11.00 | 9.73 | 13 |
| 559 | 12.16 | 13.01 | 8, 13 | 599 | 11.25 | 9.73 | 13 |
| 560 | 10.05 | 12.98 | 8, 13 | 600 | 16.82 | 9.63 | 13 |
| 561 | 14.47 | 12.97 | 13 | 601 | 17.98 | 9.62 | 13 |

| Kavalur No | X cms | Y cms | Identification on field | Kavalur No | X cms | Y cms | Identification on field |
|------------|-------|-------|-------------------------|------------|-------|-------|-------------------------|
| 602 | 14.30 | 9.60 | 13 | 642 | 14.90 | 7.36 | 13 |
| 603 | 15.70 | 9.48 | 13 | 643 | 10.70 | 7.35 | 13 |
| 604 | 12.01 | 9.43 | 13 | 644 | 12.66 | 7.29 | 13 |
| 605 | 9.70 | 9.42 | 13 | 645 | 16.90 | 7.29 | 13 |
| 606 | 16.88 | 9.34 | 13 | 646 | 15.19 | 7.28 | 13 |
| 607 | 12.84 | 9.28 | 13 | 647 | 11.95 | 7.20 | 13 |
| 608 | 19.61 | 9.19 | 13 | 648 | 18.79 | 7.18 | 13 |
| 609 | 11.23 | 9.17 | 13 | 649 | 15.08 | 7.10 | 13 |
| 610 | 18.66 | 9.10 | 13 | 650 | 16.43 | 6.97 | 13 |
| 611 | 12.79 | 9.03 | 13 | 651 | 16.30 | 6.90 | 13 |
| 612 | 8.59 | 9.02 | 13 | 652 | 15.42 | 6.83 | 13 |
| 613 | 17.13 | 8.99 | 13 | 653 | 16.90 | 6.83 | 13 |
| 614 | 17.27 | 8.98 | 13 | 654 | 10.89 | 6.80 | 13 |
| 615 | 19.62 | 8.91 | 13 | 655 | 13.80 | 6.70 | 13 |
| 616 | 16.12 | 8.90 | 13 | 656 | 13.05 | 6.70 | 13 |
| 617 | 15.35 | 8.89 | 13 | 657 | 10.02 | 6.66 | 13 |
| 618 | 19.23 | 8.88 | 13 | 658 | 12.72 | 6.63 | 13 |
| 619 | 15.22 | 8.84 | 13 | 659 | 16.55 | 6.50 | 13 |
| 620 | 15.42 | 8.78 | 13 | 660 | 13.48 | 6.50 | 13 |
| 621 | 18.16 | 8.68 | 13 | 661 | 11.13 | 6.40 | 13 |
| 622 | 14.08 | 8.47 | 13 | 662 | 10.63 | 6.40 | 13 |
| 623 | 13.93 | 8.43 | 13 | 663 | 12.09 | 6.38 | 13 |
| 624 | 16.51 | 8.23 | 13 | 664 | 16.50 | 5.88 | 13 |
| 625 | 16.30 | 8.18 | 13 | 665 | 16.55 | 5.79 | 13 |
| 626 | 17.80 | 8.14 | 13 | 666 | 10.71 | 5.69 | 13 |
| 627 | 17.15 | 8.13 | 13 | 667 | 12.08 | 5.62 | 13 |
| 628 | 17.22 | 8.13 | 13 | 668 | 12.20 | 5.51 | 13 |
| 629 | 10.46 | 8.05 | 13 | 669 | 14.86 | 5.50 | 13 |
| 630 | 17.63 | 7.99 | 13 | 670 | 14.63 | 5.36 | 13 |
| 631 | 16.72 | 7.78 | 13 | 671 | 14.49 | 5.11 | 13 |
| 632 | 14.92 | 7.76 | 13 | 672 | 14.33 | 4.53 | 13 |
| 633 | 18.42 | 7.69 | 13 | 673 | 12.99 | 4.45 | 13 |
| 634 | 17.32 | 7.68 | 13 | | | | |
| 635 | 10.11 | 7.67 | 13 | | | | |
| 636 | 15.82 | 7.62 | 13 | | | | |
| 637 | 16.61 | 7.60 | 13 | | | | |
| 638 | 19.10 | 7.60 | 13 | | | | |
| 639 | 15.51 | 7.58 | 13 | | | | |
| 640 | 14.39 | 7.50 | 13 | | | | |
| 641 | 12.59 | 7.47 | 13 | | | | |

Table 4 List of red stars in the direction of the Large Magellanic Cloud. The X and Y coordinates refer to the left and bottom corner of Hodge-Wright Chart 47 V

| Kavalur No | X cms | Y cms | Identification on field |
|------------|-------|-------|-------------------------|
| 674 | 23.31 | 22.50 | 9 |
| 675 | 24.82 | 22.28 | 9 |
| 676 | 24.25 | 22.21 | 9 |
| 677 | 22.28 | 22.17 | 9 |
| 678 | 19.31 | 21.92 | 9 |
| 679 | 19.92 | 21.90 | 9 |
| 680 | 7.36 | 21.50 | 10 |
| 681 | 18.07 | 21.24 | 9 |
| 682 | 18.10 | 21.22 | 9 |
| 683 | 5.28 | 21.20 | 10 |
| 684 | 17.73 | 21.11 | 9 |
| 685 | 23.85 | 21.10 | 9 |
| 686 | 8.06 | 20.96 | 10 |
| 687 | 23.38 | 20.91 | 9 |
| 688 | 9.63 | 20.88 | 10 |
| 689 | 11.01 | 20.87 | 10 |
| 690 | 16.90 | 20.78 | 9 |
| 691 | 16.20 | 20.66 | 9 |
| 692 | 21.18 | 20.64 | 9 |
| 693 | 4.29 | 20.52 | 10 |
| 694 | 26.49 | 20.36 | 9 |
| 695 | 24.15 | 20.20 | 9 |
| 696 | 10.78 | 20.18 | 10 |
| 697 | 16.21 | 20.10 | 9 |
| 698 | 18.32 | 20.10 | 9 |
| 699 | 17.51 | 20.08 | 9 |
| 700 | 17.37 | 20.01 | 9 |
| 701 | 25.31 | 19.92 | 9 |
| 702 | 9.50 | 19.90 | 10 |
| 703 | 4.90 | 19.89 | 10 |
| 704 | 21.90 | 19.87 | 9 |
| 705 | 17.58 | 19.82 | 9 |
| 706 | 22.09 | 19.80 | 9 |
| 707 | 21.50 | 19.80 | 9 |
| 708 | 15.91 | 19.73 | 9 |
| 709 | 18.21 | 19.70 | 9 |
| 710 | 5.81 | 19.67 | 10 |
| 711 | 21.13 | 19.63 | 9 |
| 712 | 15.90 | 19.60 | 9 |
| 713 | 17.32 | 19.59 | 9 |
| 714 | 23.40 | 19.52 | 9 |
| 715 | 22.91 | 19.50 | 9 |
| 716 | 23.02 | 19.50 | 9 |
| 717 | 3.30 | 19.49 | 10 |
| 718 | 23.10 | 19.48 | 9 |
| 719 | 21.35 | 19.48 | 9 |
| 720 | 20.89 | 19.39 | 9 |
| 721 | 5.41 | 19.37 | 10 |
| 722 | 24.43 | 19.35 | 9 |
| 723 | 6.78 | 19.32 | 10 |
| 724 | 4.30 | 19.31 | 10 |
| 725 | 4.59 | 19.31 | 10 |
| 726 | 23.93 | 19.28 | 9 |
| 727 | 5.51 | 19.28 | 10 |
| 728 | 21.23 | 19.20 | 9 |
| 729 | 6.71 | 19.19 | 10 |
| 730 | 24.93 | 19.10 | 9 |
| 731 | 12.81 | 19.09 | 10 |
| 732 | 3.10 | 19.09 | 10 |
| 733 | 16.53 | 19.07 | 9 |
| 734 | 16.20 | 19.06 | 9 |
| 735 | 18.90 | 18.96 | 9 |
| 736 | 24.42 | 18.86 | 9 |
| 737 | 21.19 | 18.86 | 9 |
| 738 | 16.92 | 18.80 | 9 |
| 739 | 7.33 | 18.76 | 10 |
| 740 | 7.81 | 18.75 | 10 |
| 741 | 24.65 | 18.72 | 9 |
| 742 | 3.68 | 18.69 | 10 |
| 743 | 25.72 | 18.69 | 9 |
| 744 | 21.30 | 18.65 | 9 |
| 745 | 19.80 | 18.65 | 9 |
| 746 | 17.92 | 18.61 | 9 |
| 747 | 16.05 | 18.61 | 9 |
| 748 | 3.92 | 18.60 | 10 |

| Kavalur No | X cms | Y cms | Identification on field | Kavalur No | X cms | Y cms | Identification on field |
|------------|-------|-------|-------------------------|------------|-------|-------|-------------------------|
| 749 | 4.04 | 18.60 | 10 | 789 | 19.54 | 17.43 | 9 |
| 750 | 6.26 | 18.59 | 10 | 790 | 18.98 | 17.42 | 9 |
| 751 | 17.20 | 18.59 | 9 | 791 | 2.69 | 17.40 | 10 |
| 752 | 3.21 | 18.53 | 10 | 792 | 26.52 | 17.40 | 9 |
| 753 | 16.38 | 18.52 | 9 | 793 | 11.00 | 17.31 | 10 |
| 754 | 15.85 | 18.52 | 9 | 794 | 20.39 | 17.22 | 9 |
| 755 | 17.79 | 18.50 | 9 | 795 | 8.56 | 17.22 | 10 |
| 756 | 18.49 | 18.50 | 9 | 796 | 10.39 | 17.20 | 10 |
| 757 | 16.88 | 18.40 | 9 | 797 | 19.98 | 17.17 | 9 |
| 758 | 18.20 | 18.40 | 9 | 798 | 20.70 | 17.16 | 9 |
| 759 | 19.95 | 18.40 | 9 | 799 | 15.49 | 17.15 | 9 |
| 760 | 21.30 | 18.40 | 9 | 800 | 18.75 | 17.16 | 9 |
| 761 | 20.87 | 18.39 | 9 | 801 | 21.13 | 17.07 | 9 |
| 762 | 20.59 | 18.39 | 9 | 802 | 2.39 | 17.04 | 10 |
| 763 | 5.80 | 18.37 | 10 | 803 | 16.69 | 17.02 | 9 |
| 764 | 5.32 | 18.32 | 10 | 804 | 7.08 | 16.97 | 10 |
| 765 | 10.10 | 18.31 | 10 | 805 | 6.62 | 16.90 | 10 |
| 766 | 18.50 | 18.30 | 9 | 806 | 17.35 | 16.89 | 9 |
| 767 | 17.52 | 18.20 | 9 | 807 | 16.26 | 16.88 | 9 |
| 768 | 26.43 | 18.15 | 9 | 808 | 26.28 | 16.80 | 9 |
| 769 | 18.80 | 18.14 | 9 | 809 | 2.09 | 16.75 | 10 |
| 770 | 16.00 | 18.12 | 9 | 810 | 20.20 | 16.70 | 9 |
| 771 | 22.92 | 18.11 | 9 | 811 | 16.40 | 16.70 | 9 |
| 772 | 13.39 | 18.11 | 10 | 812 | 4.26 | 16.70 | 10 |
| 773 | 2.99 | 18.08 | 10 | 813 | 6.60 | 16.69 | 10 |
| 774 | 20.69 | 18.00 | 9 | 814 | 20.38 | 16.68 | 9 |
| 775 | 20.46 | 17.98 | 9 | 815 | 25.02 | 16.68 | 9 |
| 776 | 4.25 | 17.97 | 10 | 816 | 12.00 | 16.66 | 10 |
| 777 | 12.84 | 17.97 | 10 | 817 | 24.36 | 16.61 | 9 |
| 778 | 23.21 | 17.90 | 9 | 818 | 17.95 | 16.57 | 9 |
| 779 | 20.95 | 17.85 | 9 | 819 | 26.62 | 16.52 | 9 |
| 780 | 2.50 | 17.82 | 10 | 820 | 9.31 | 16.50 | 10 |
| 781 | 13.09 | 17.78 | 10 | 821 | 15.98 | 16.48 | 9 |
| 782 | 20.85 | 17.72 | 9 | 822 | 20.48 | 16.39 | 9 |
| 783 | 23.10 | 17.68 | 9 | 823 | 4.95 | 16.30 | 10 |
| 784 | 15.89 | 17.61 | 9 | 824 | 22.30 | 16.28 | 9 |
| 785 | 18.95 | 17.60 | 9 | 825 | 23.56 | 16.23 | 9 |
| 786 | 20.10 | 17.55 | 9 | 826 | 6.23 | 16.14 | 10 |
| 787 | 25.92 | 17.51 | 9 | 827 | 16.62 | 16.14 | 9 |
| 788 | 19.95 | 17.48 | 9 | 828 | 14.00 | 16.13 | 10, 11 |

| Kavalur No | X cms | Y cms | Identification on field | Kavalur No | X cms | Y cms | Identification on field |
|------------|-------|-------|-------------------------|------------|-------|-------|-------------------------|
| 829 | 19.40 | 16.12 | 9 | 869 | 16.45 | 14.61 | 9, 11 |
| 830 | 4.70 | 16.11 | 10 | 870 | 12.52 | 14.60 | 10, 11 |
| 831 | 16.40 | 16.05 | 9 | 871 | 13.59 | 14.55 | 10, 11 |
| 832 | 3.20 | 16.00 | 10 | 872 | 14.20 | 14.51 | 11 |
| 833 | 23.67 | 16.00 | 9 | 873 | 7.81 | 14.50 | 10 |
| 834 | 1.90 | 15.90 | 10 | 874 | 9.10 | 14.48 | 10, 11 |
| 835 | 20.29 | 15.86 | 9 | 875 | 17.82 | 14.41 | 9 |
| 836 | 12.89 | 15.80 | 10, 11 | 876 | 22.73 | 14.41 | 9 |
| 837 | 6.76 | 15.80 | 10 | 877 | 23.29 | 14.41 | 9 |
| 838 | 17.23 | 15.79 | 9 | 878 | 2.92 | 14.33 | 10 |
| 839 | 20.90 | 15.72 | 9 | 879 | 6.62 | 14.23 | 10 |
| 840 | 18.29 | 15.70 | 9 | 880 | 16.90 | 14.20 | 9, 11 |
| 841 | 18.46 | 15.70 | 9 | 881 | 15.01 | 14.10 | 11 |
| 842 | 19.68 | 15.60 | 9 | 882 | 17.49 | 14.01 | 9 |
| 843 | 21.88 | 15.52 | 9 | 883 | 17.99 | 13.80 | 9 |
| 844 | 17.02 | 15.50 | 9 | 884 | 3.89 | 13.72 | 10 |
| 845 | 19.75 | 15.48 | 9 | 885 | 2.81 | 13.71 | 10 |
| 846 | 19.67 | 15.40 | 9 | 886 | 7.31 | 13.70 | 10 |
| 847 | 21.65 | 15.37 | 9 | 887 | 21.45 | 13.57 | 9 |
| 848 | 19.76 | 15.32 | 9 | 888 | 24.15 | 13.50 | 9 |
| 849 | 22.25 | 15.22 | 9 | 889 | 16.83 | 13.49 | 11 |
| 850 | 22.59 | 15.21 | 9 | 890 | 16.30 | 13.48 | 11 |
| 851 | 13.70 | 15.20 | 10, 11 | 891 | 21.20 | 13.41 | 9 |
| 852 | 4.65 | 15.16 | 10 | 892 | 22.19 | 13.30 | 9 |
| 853 | 13.08 | 15.16 | 10, 11 | 893 | 23.59 | 13.26 | 9 |
| 854 | 2.61 | 15.15 | 10 | 894 | 23.91 | 13.10 | 9 |
| 855 | 7.42 | 15.12 | 10 | 895 | 23.70 | 13.10 | 9 |
| 856 | 16.53 | 15.10 | 9 | 896 | 23.31 | 13.10 | 9 |
| 857 | 6.98 | 15.09 | 10 | 897 | 16.69 | 13.10 | 11 |
| 858 | 22.61 | 15.07 | 9 | 898 | 13.05 | 13.08 | 10, 11 |
| 859 | 11.17 | 15.01 | 10, 11 | 899 | 11.29 | 13.02 | 10, 11 |
| 860 | 16.43 | 14.95 | 9, 11 | 900 | 7.21 | 13.00 | 10, 11 |
| 861 | 19.72 | 14.93 | 9 | 901 | 9.31 | 12.99 | 10, 11 |
| 862 | 11.11 | 14.85 | 10, 11 | 902 | 10.97 | 12.99 | 10, 11 |
| 863 | 24.52 | 14.84 | 9 | 903 | 18.36 | 12.93 | 9 |
| 864 | 26.25 | 14.81 | 9 | 904 | 7.09 | 12.92 | 10 |
| 865 | 20.41 | 14.75 | 9 | 905 | 19.29 | 12.91 | 9 |
| 866 | 15.60 | 14.70 | 11 | 906 | 6.50 | 12.90 | 10 |
| 867 | 17.00 | 14.62 | 9 | 907 | 10.29 | 12.90 | 11 |
| 868 | 17.10 | 14.62 | 9 | 908 | 9.69 | 12.89 | 10, 11 |

| Kavalur No | X cms | Y cms | Identification on field | Kavalur No. | X cms | Y cms | Identification on field |
|------------|-------|-------|-------------------------|-------------|-------|-------|-------------------------|
| 909 | 7.32 | 12.89 | 10, 11 | 949 | 9.91 | 10.12 | 11 |
| 910 | 10.41 | 12.88 | 10, 11 | 950 | 20.20 | 10.07 | 12 |
| 911 | 15.59 | 12.81 | 11 | 951 | 14.73 | 9.98 | 11, 12 |
| 912 | 7.31 | 12.70 | 10, 11 | 952 | 21.69 | 9.79 | 12 |
| 913 | 5.57 | 12.60 | 10 | 953 | 6.99 | 9.65 | 11 |
| 914 | 8.41 | 12.59 | 10, 11 | 954 | 10.40 | 9.59 | 11 |
| 915 | 4.90 | 12.55 | 10 | 955 | 9.90 | 9.50 | 11 |
| 916 | 3.81 | 12.51 | 10 | 956 | 14.73 | 9.49 | 11, 12 |
| 917 | 16.28 | 12.50 | 11 | 957 | 13.72 | 9.45 | 11, 12 |
| 918 | 12.23 | 12.45 | 11 | 958 | 16.50 | 9.32 | 11, 12 |
| 919 | 8.50 | 12.42 | 10, 11 | 959 | 12.31 | 9.19 | 11 |
| 920 | 19.55 | 12.36 | 9, 12 | 960 | 17.50 | 8.99 | 11, 12 |
| 921 | 16.51 | 12.30 | 11 | 961 | 13.50 | 8.83 | 11, 12 |
| 922 | 9.82 | 12.30 | 11 | 962 | 20.48 | 8.80 | 12 |
| 923 | 9.50 | 12.28 | 11 | 963 | 15.13 | 8.79 | 11 |
| 924 | 8.36 | 12.27 | 10, 11 | 964 | 20.21 | 8.43 | 12 |
| 925 | 13.95 | 12.26 | 11 | 965 | 12.99 | 8.36 | 11, 12 |
| 926 | 16.20 | 12.17 | 11 | 966 | 12.02 | 8.30 | 11 |
| 927 | 12.48 | 12.17 | 10, 11 | 967 | 20.55 | 8.10 | 12 |
| 928 | 14.15 | 11.92 | 11 | 968 | 13.90 | 8.00 | 11, 12 |
| 929 | 11.80 | 11.90 | 10, 11 | 969 | 16.00 | 7.91 | 11, 12 |
| 930 | 16.20 | 11.83 | 11, 12 | 970 | 11.09 | 7.80 | 11 |
| 931 | 8.97 | 11.80 | 11 | 971 | 19.01 | 7.70 | 12 |
| 932 | 13.17 | 11.68 | 11 | 972 | 11.52 | 7.45 | 11 |
| 933 | 11.01 | 11.60 | 10, 11 | 973 | 19.69 | 7.10 | 12 |
| 934 | 6.10 | 11.59 | 10 | 974 | 12.50 | 6.82 | 11 |
| 935 | 5.22 | 11.58 | 10 | 975 | 14.86 | 6.79 | 11, 12 |
| 936 | 13.28 | 11.50 | 11 | 976 | 15.25 | 6.68 | 11, 12 |
| 937 | 16.26 | 11.45 | 11, 12 | 977 | 11.29 | 6.45 | 11 |
| 938 | 8.71 | 11.42 | 11 | 978 | 20.02 | 6.39 | 12 |
| 939 | 17.12 | 11.30 | 11, 12 | 979 | 10.12 | 6.18 | 11 |
| 940 | 14.11 | 11.28 | 11 | 980 | 21.80 | 6.02 | 12 |
| 941 | 11.80 | 11.05 | 11, 12 | 981 | 14.90 | 6.00 | 11, 12 |
| 942 | 10.10 | 10.82 | 10, 11 | 982 | 14.18 | 5.98 | 11, 12 |
| 943 | 15.00 | 10.62 | 11, 12 | 983 | 19.26 | 5.90 | 12 |
| 944 | 8.96 | 10.50 | 10, 11 | 984 | 23.80 | 5.89 | 12 |
| 945 | 16.51 | 10.49 | 11, 12 | 985 | 14.58 | 5.88 | 11, 12 |
| 946 | 6.61 | 10.35 | 10 | 986 | 11.82 | 5.79 | 11 |
| 947 | 10.60 | 10.22 | 11 | 987 | 13.30 | 5.52 | 11, 12 |
| 948 | 16.83 | 10.20 | 11, 12 | 988 | 15.42 | 5.50 | 11, 12 |

| Kavalur No | X cms | Y cms | Identification on field |
|---------------|-------|-------|----------------------------|
| 989 | 9.30 | 5.49 | 11 |
| 990 | 10.71 | 5.45 | 11 |
| 991 | 18.65 | 5.38 | 12 |
| 992 | 11.29 | 5.04 | 11 |
| 993 | 16.12 | 4.88 | 12 |
| 994 | 16.30 | 4.75 | 12 |
| 995 | 10.95 | 4.64 | 11 |
| 996 | 17.92 | 4.61 | 12 |
| 997 | 18.71 | 4.59 | 12 |
| 998 | 11.85 | 4.50 | 11 |
| 999 | 18.71 | 4.09 | 12 |
| 1000 | 22.10 | 3.90 | 12 |
| 1001 | 13.61 | 2.70 | 12 |
| 1002 | 18.45 | 2.03 | 12 |
| 1003 | 21.40 | 1.51 | 12 |
| 1004 | 17.41 | 1.15 | 12 |

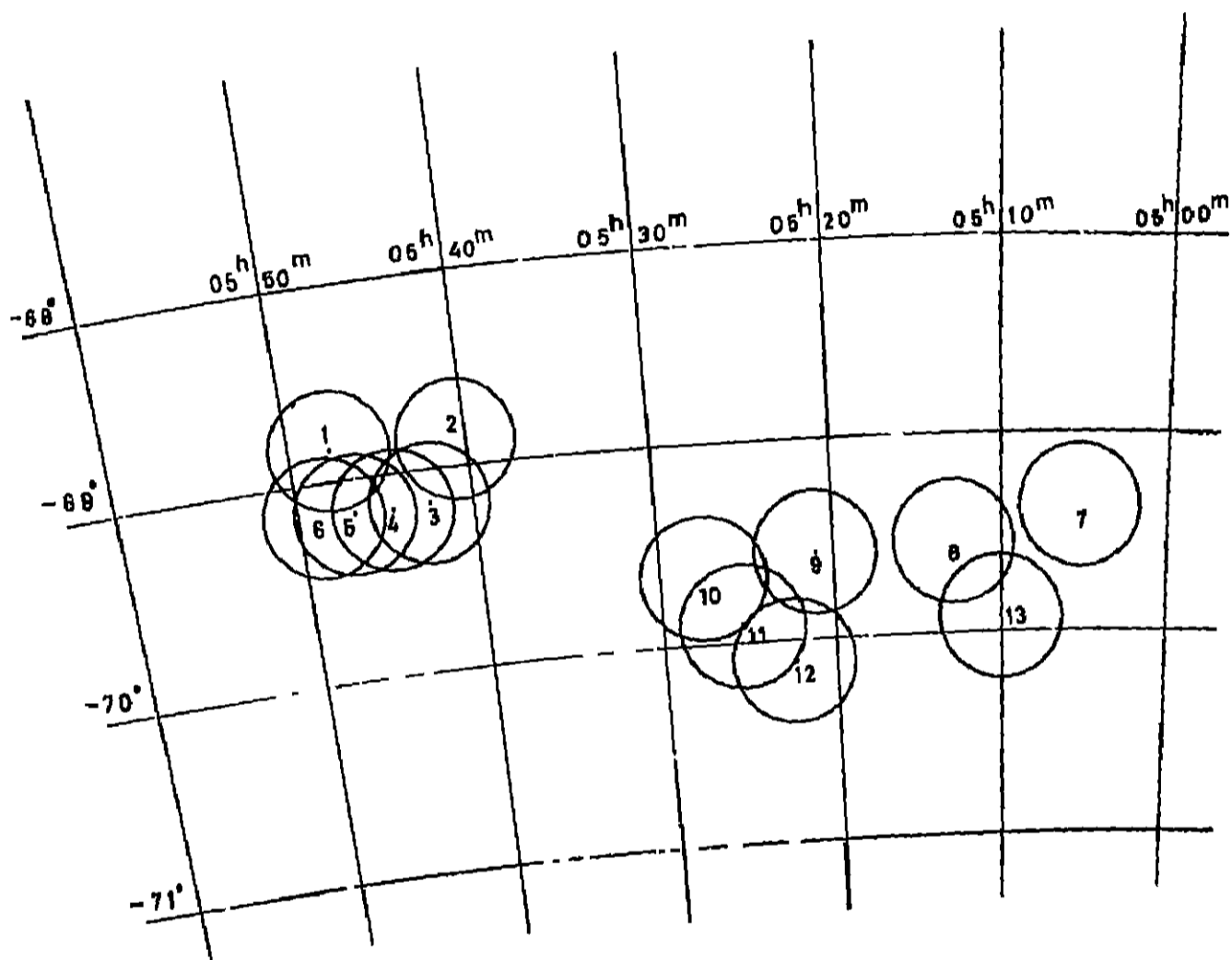


FIG 1 LMC fields 1 to 13 and their equatorial co ordinates
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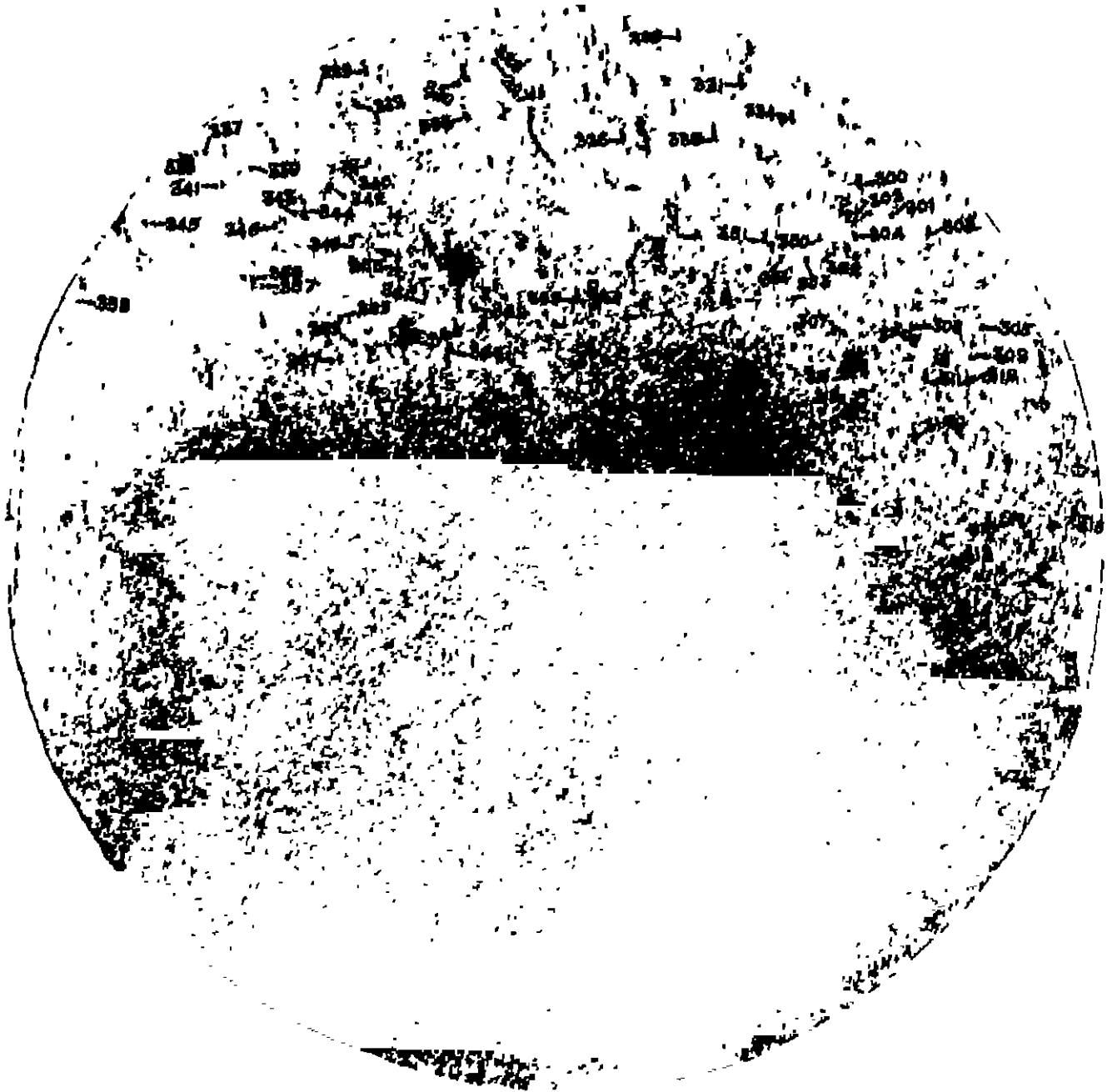


Fig 2 Red stars in the direction of LMC field 7. North is at the top and east towards the left.

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Fig 3. Red stars in the direction of LMC field B North is at the top and east towards the left.

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