Major Surveys of NASA Sky View

(Used in the analysis) -

Regime	Typical objects	Suggested Survey	Suggested size (in degrees)
Gamma-ray	Black holes, neutron stars, cosmic ray/gas interaction	EGRET >100MeV	30
X-ray	Pulsars, supernova remnants, clusters of galaxies, stars, quasars	PSPC 2Deg-Int	5
EUV	Young stars, white dwarfs, planetary nebulae	EUVE 83	30
Optical	Stars, galaxies, nebulae	DSS	0.1
IR	Stars, galaxies, interstellar gas	2MASS K, or IRIS 100	0.1 2MASS or 7 IRIS
Radio	interstellar gas, pulsars, quasars	FIRST or 1420MHz	0.1 FIRST, or 360 1420 MHz

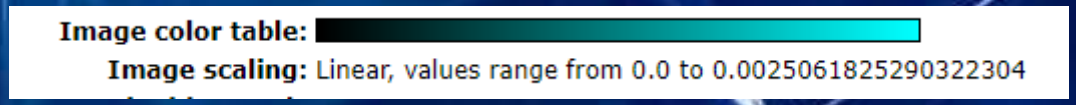
COLOUR

1. **BRIGHTNESS SCALING**:

- a. Logarithmic scale:
- For e.g:

b. Linear scale:

- For e.g:



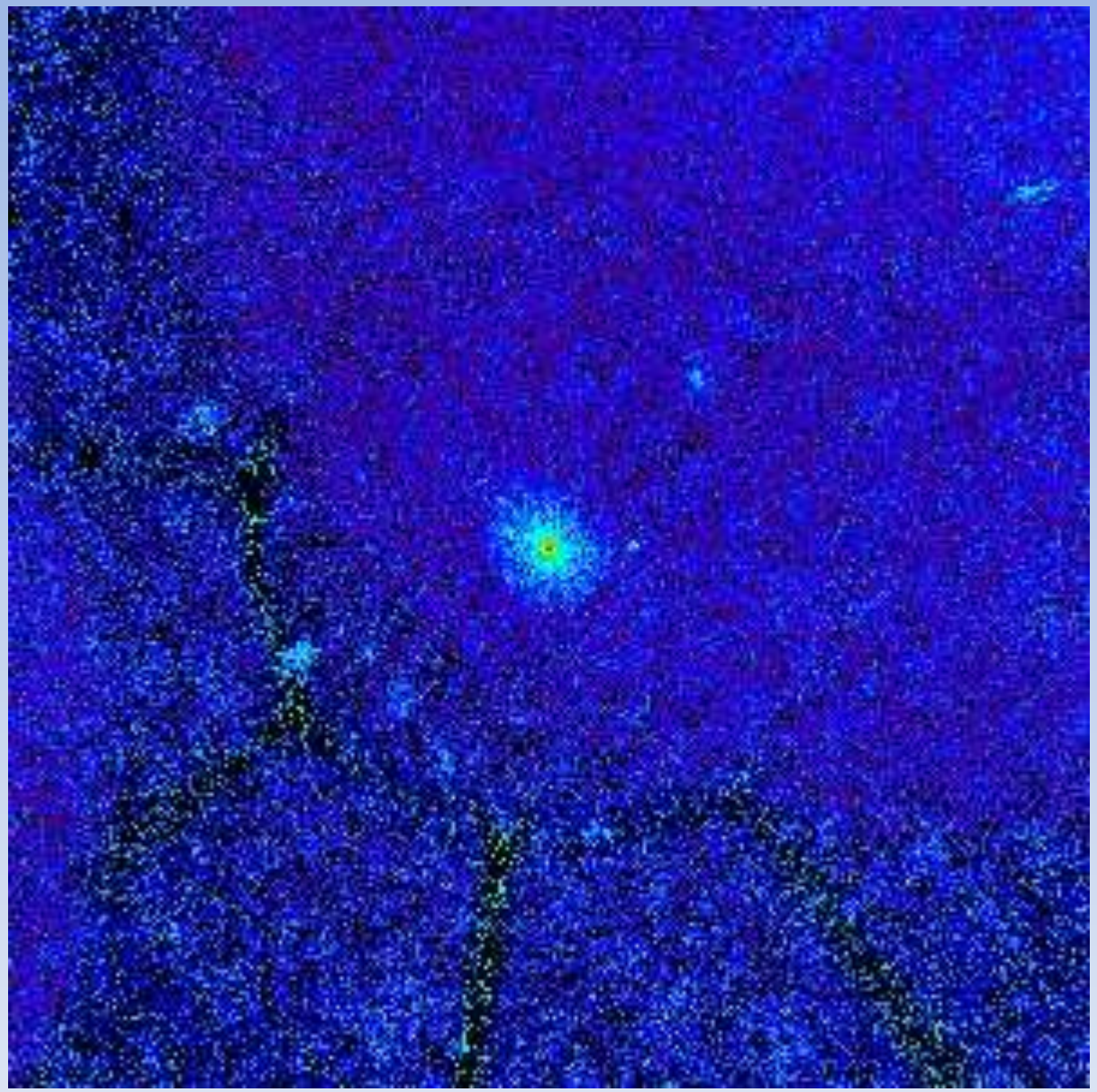
- 2. **COLOR SCALE:**

Rainbow Colour Scale


M58

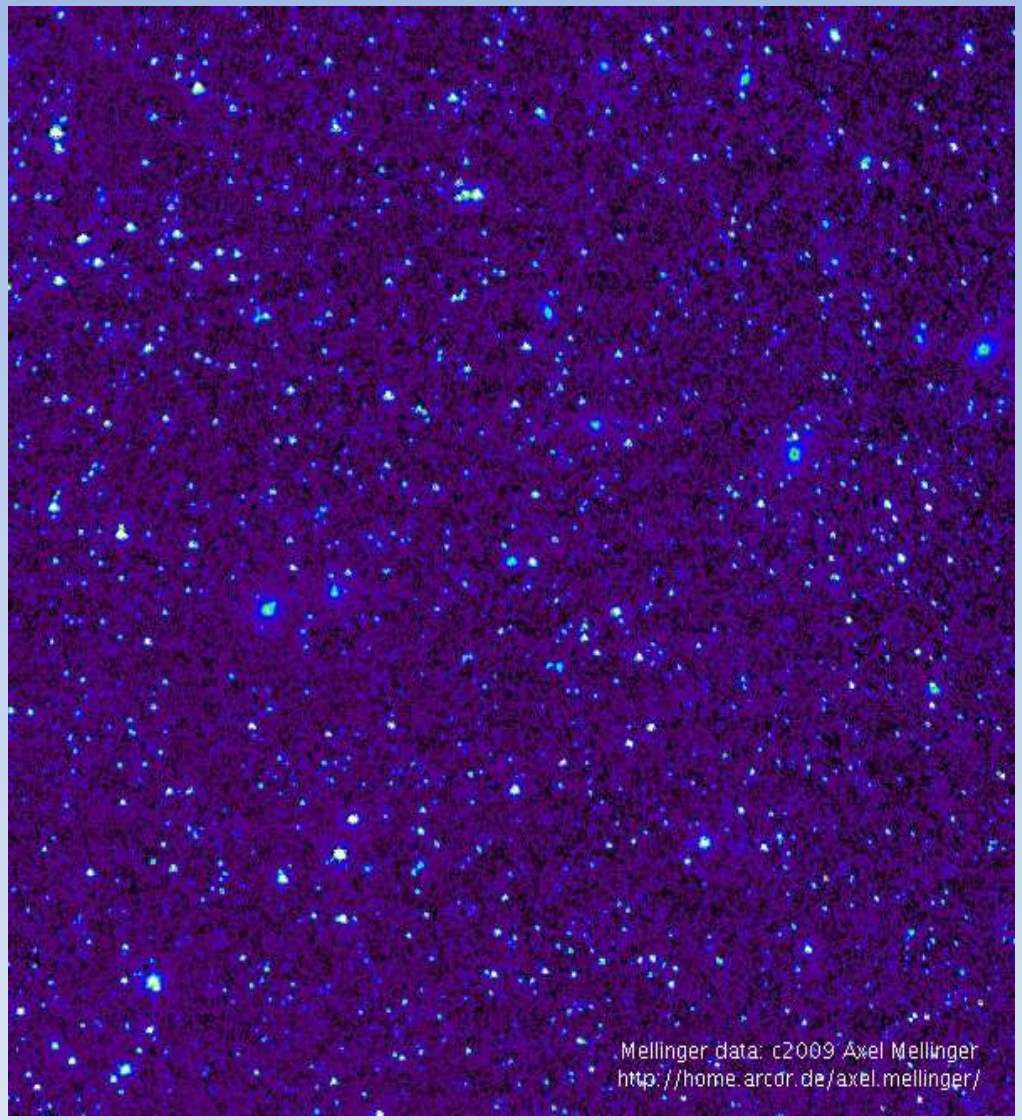
This image has been processed using Digital Sky Survey (DSS).

As this is an optical survey, it shows the actual shape of the galaxy, which is Barred Spiral.



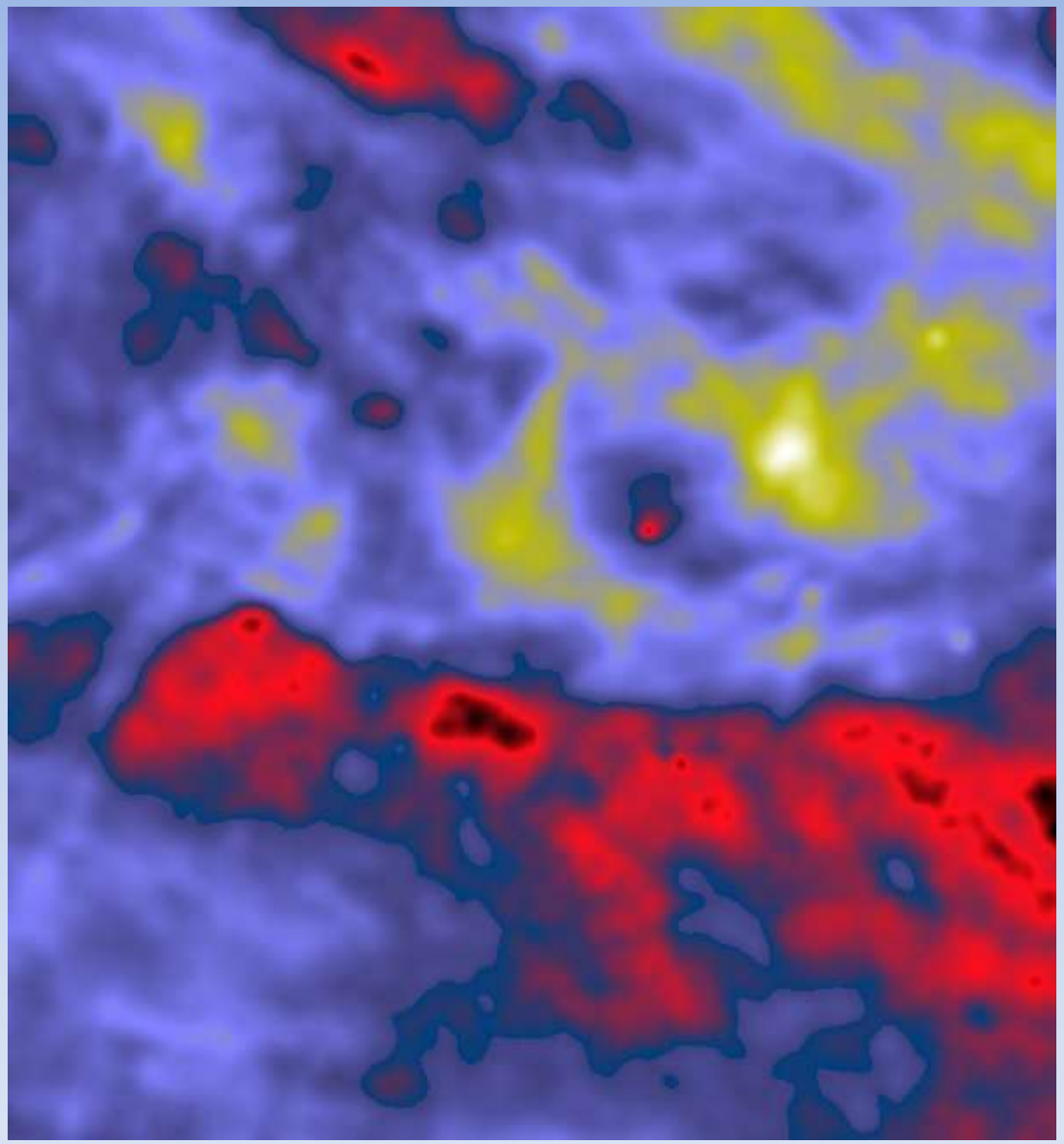
This image has been processed using PSPC 2.0 Deg- int survey.

At the centre of the galaxy there lies an area of unusually high concentrated energy. This area might be the accelerating disc of a black hole.
(It is known that there is a black hole at the centre of every galaxy)



This image has been processed using the Mellinger All Sky Mosaic: Red Survey which uses near infrared optical region of the ElectroMagnetic spectrum.

The blue dots in region signify the presence of cooler, reddish stars which generally do not appear in the visible light view. The galaxy might therefore contain a good number of red dwarfs and red giants.

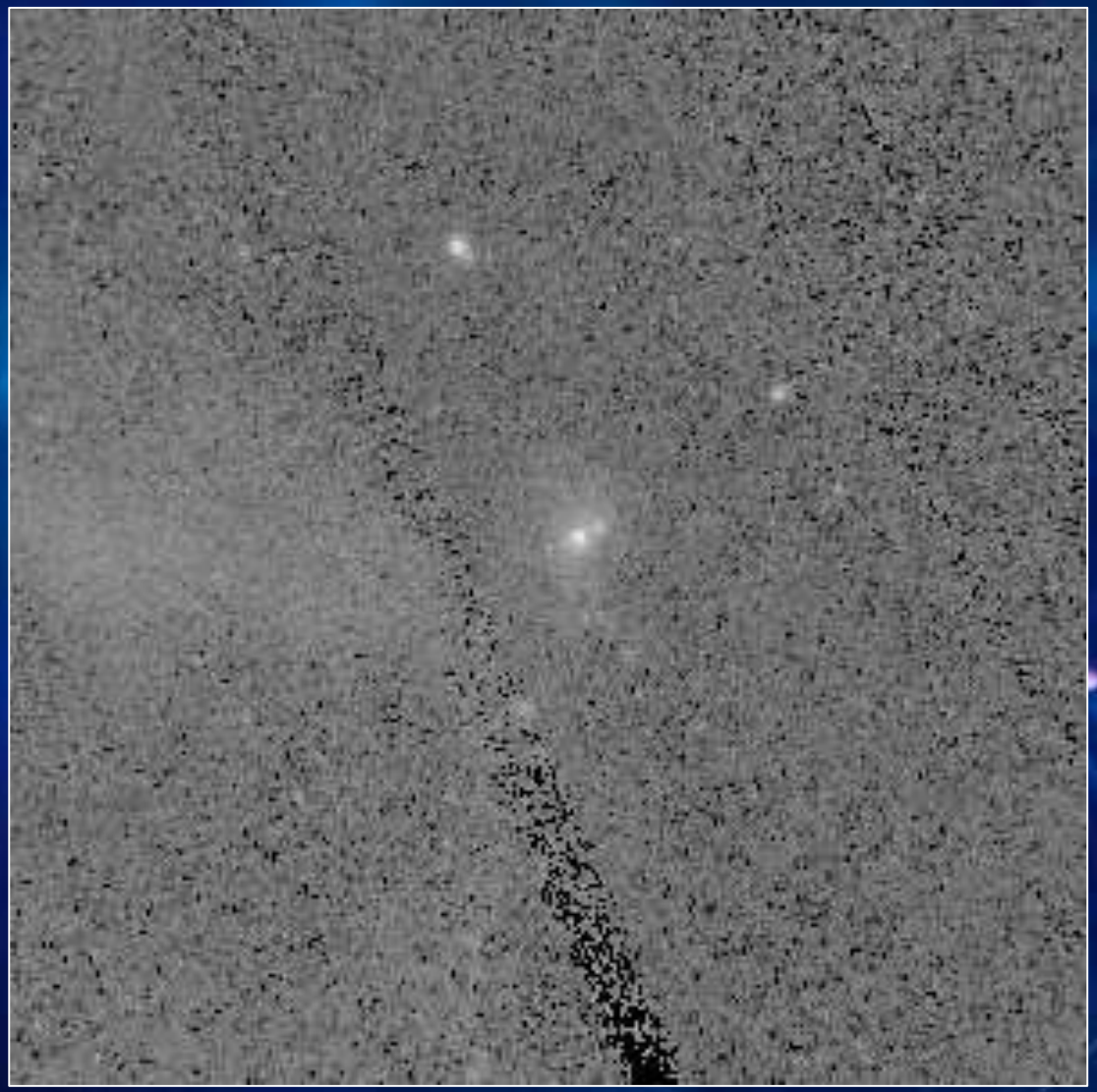


This image has been processed using the infamous HI4PI survey which uses Radio waves for the analysis.

The yellow region accounts for the presence of Neutral Hydrogen. As compared to other galaxies this galaxy has a little amount of Neutral Hydrogen.

This image has been processed using the IRIS 100 Survey which uses the infrared region of the E-M spectrum for analysis.

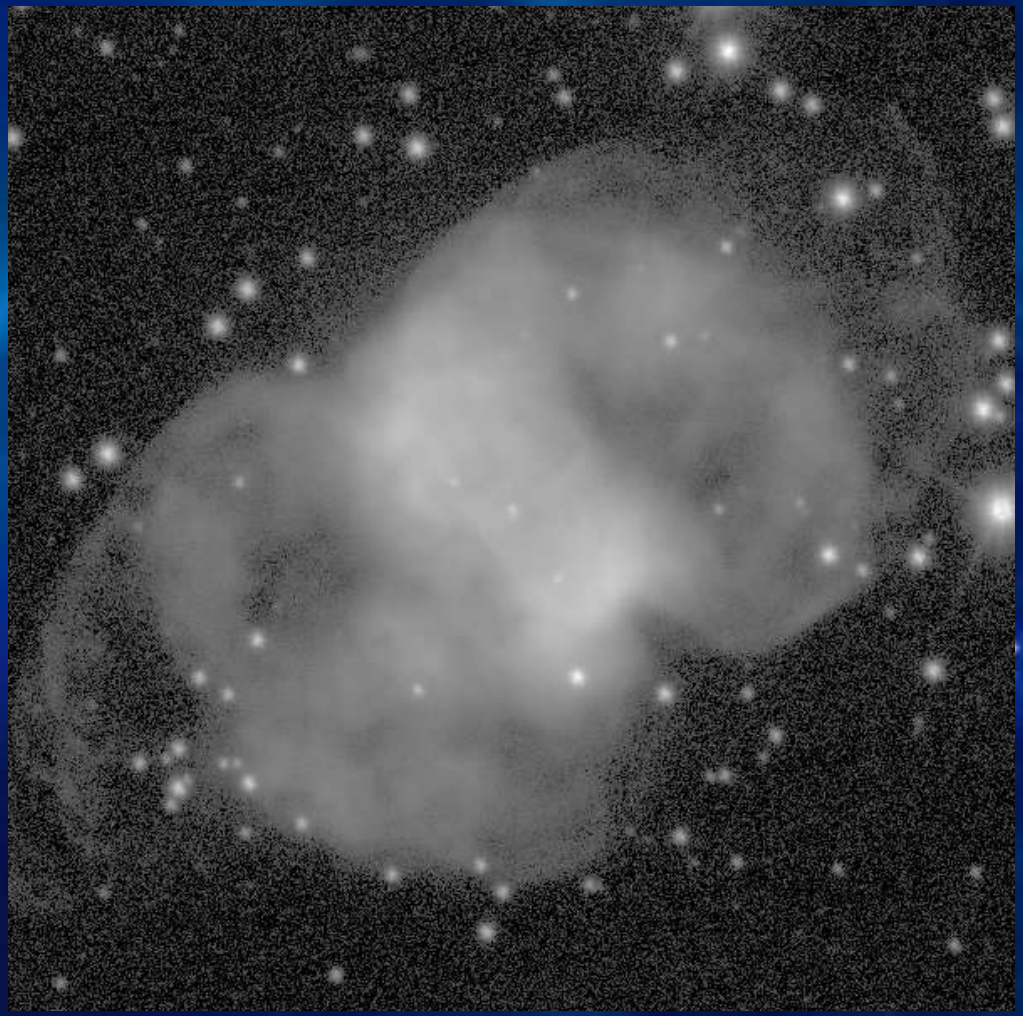
As in the case of Mellinger Red survey the white dots represent cooler stars, whereas the presence of dust clouds around stars is also signified here.



This image has been processed using the Rass Background6 survey of the ROSAT diffuse series.

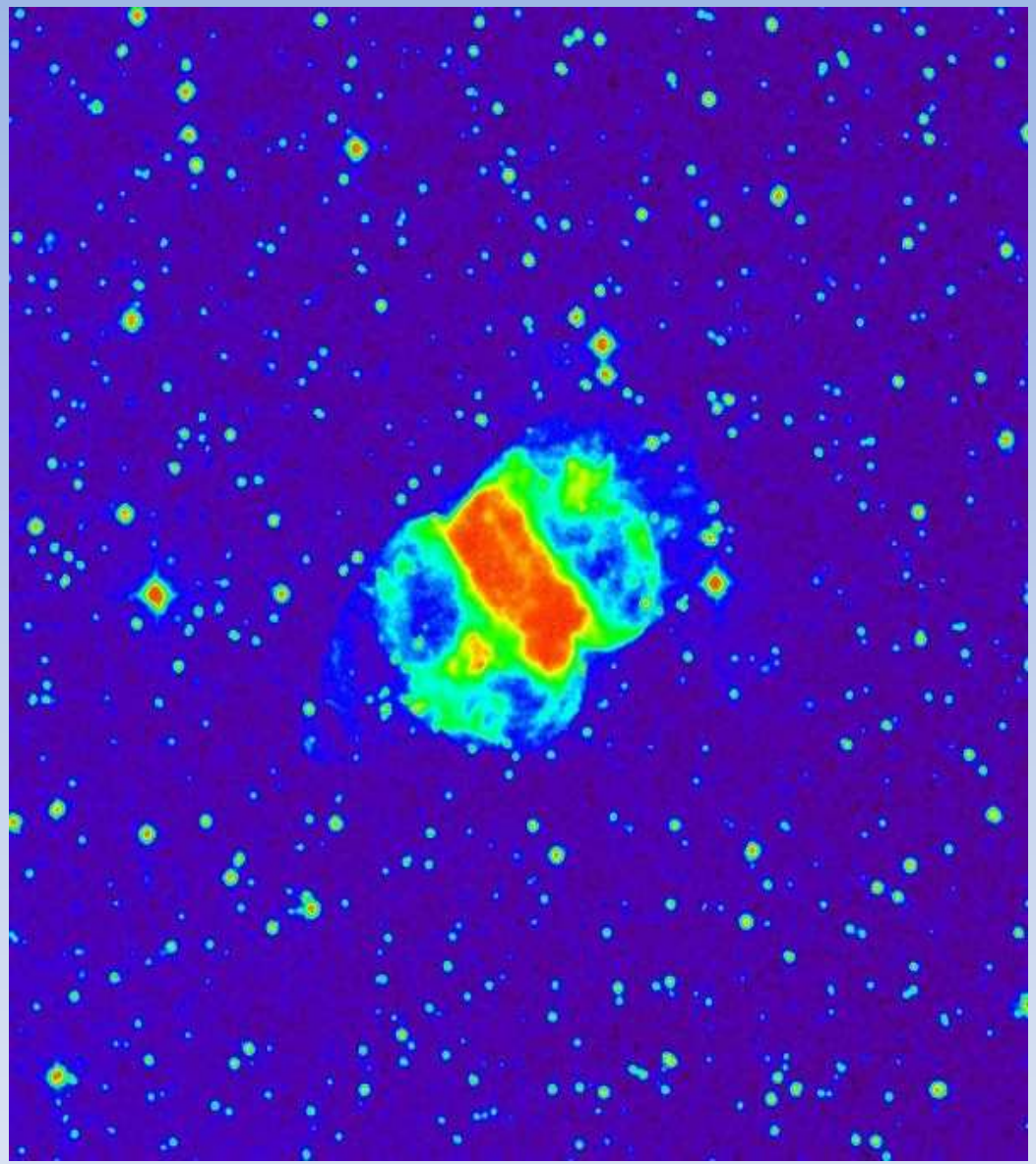
Two bright spots are distinctly visible which indicate presence of bright diffuses.
These might be Remnants of Supernovae with relatively higher magnitudes.


M76



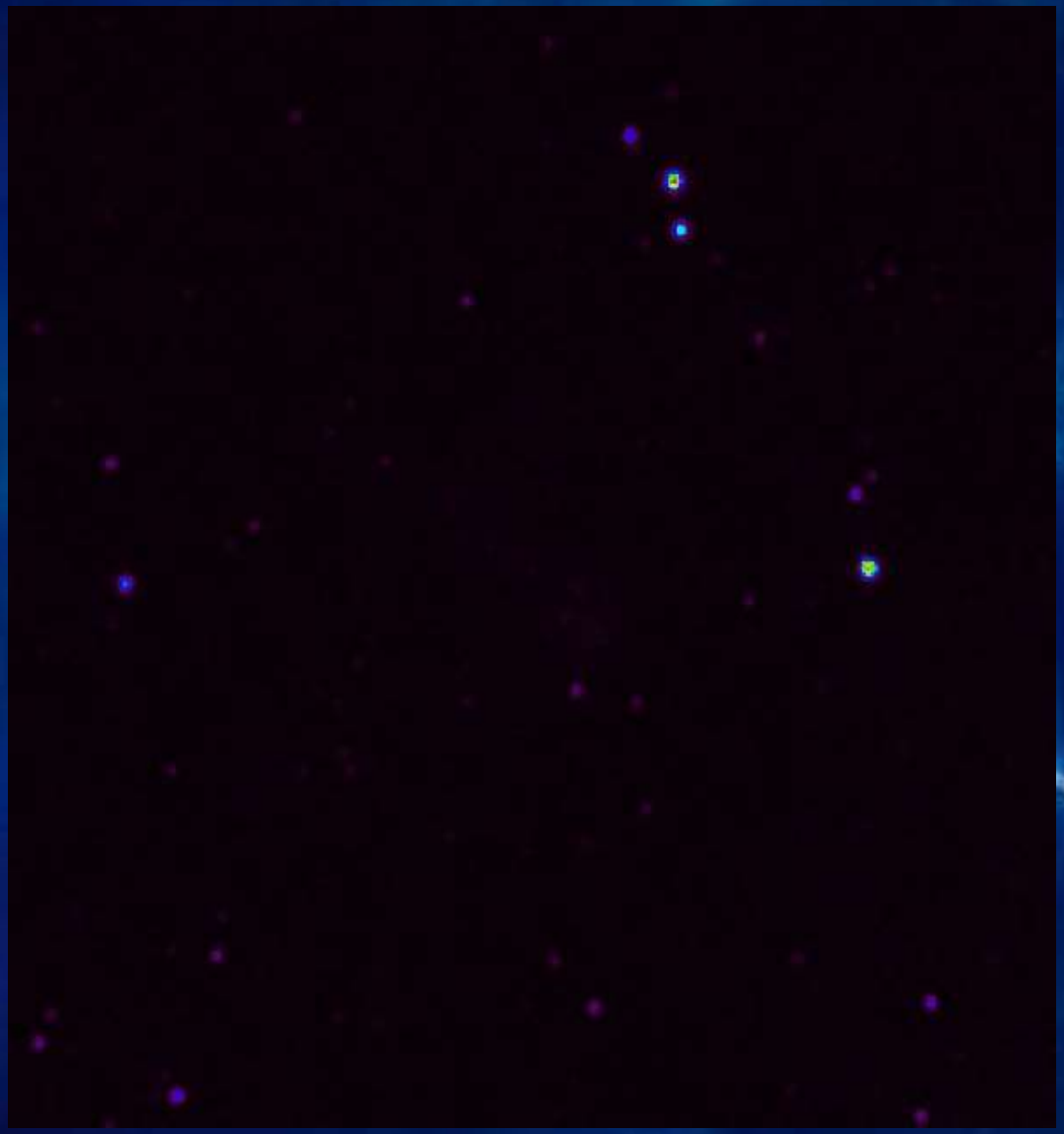
This image has been processed using the Sloan Digital Sky Survey. This survey uses the visible region of EM spectrum for analysis.

Therefore the image depicts the original shape of the Nebula.



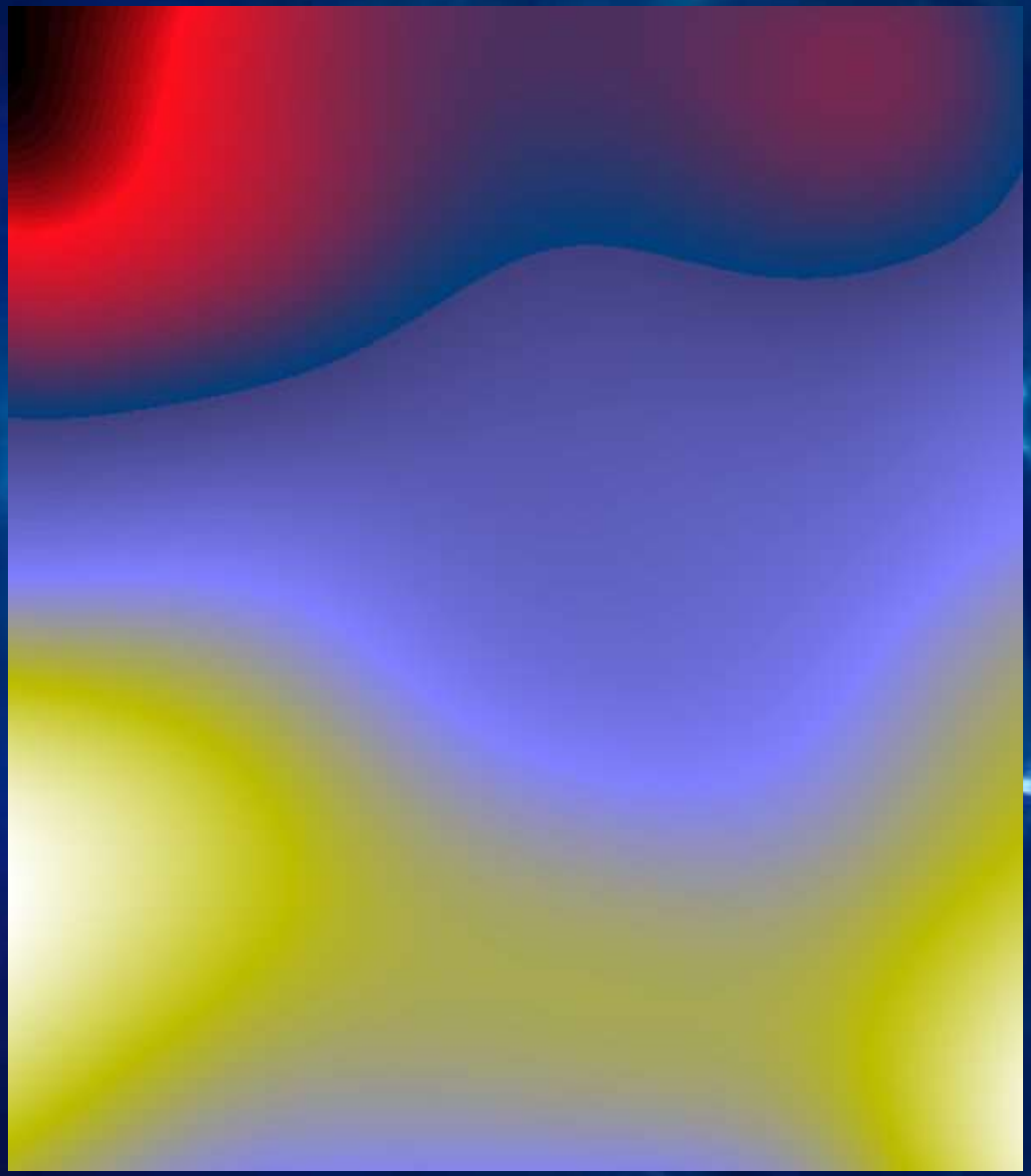
This image has been processed using the Digital Sky 2 Red Survey.

As the survey uses Optical region of the E-M Spectrum, The given image displays the distribution of mass (objects) in the nebula. The majority of mass is concentrated in the central region.



This image has been processed using the 2MASS-K: Two Micron All Sky Survey (K-Band)

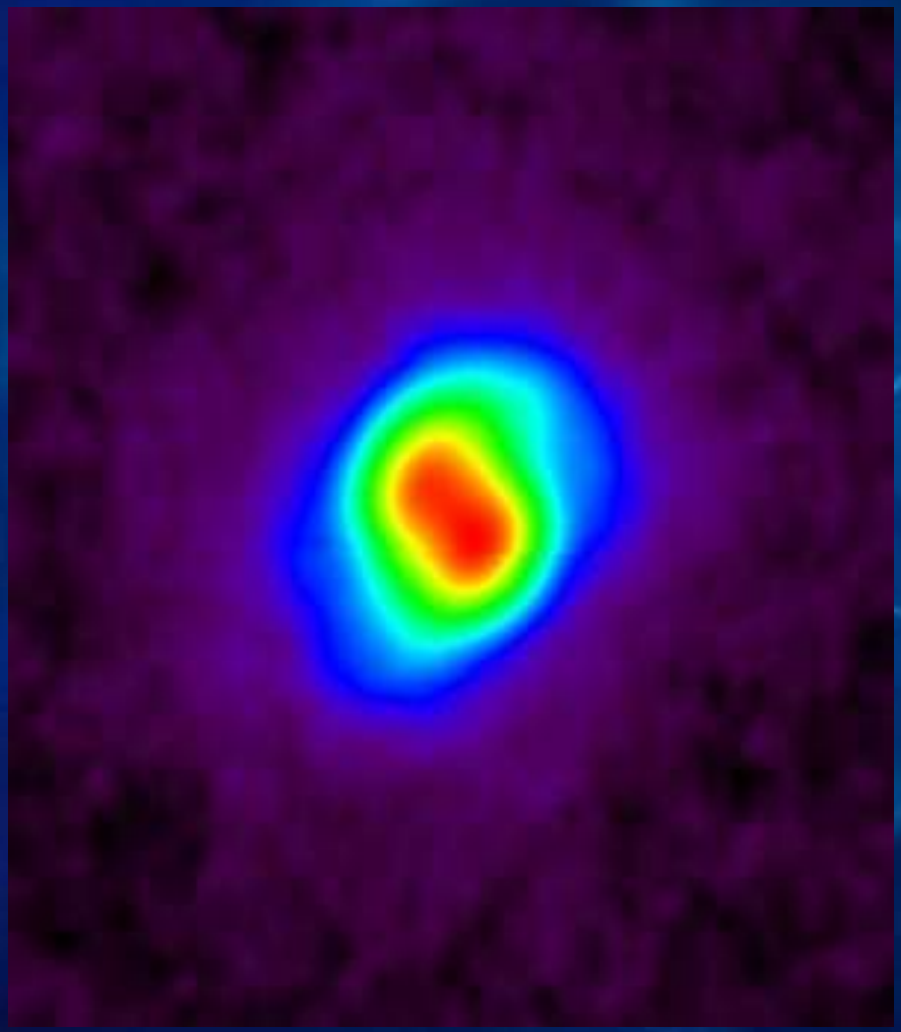
The bright blue spots are likely to be Low Mass Stars or Brown Dwarfs near the Nebula. (Characteristics of the survey)



This image has been processed using **HI4PI: The HI 4-PI Survey**).

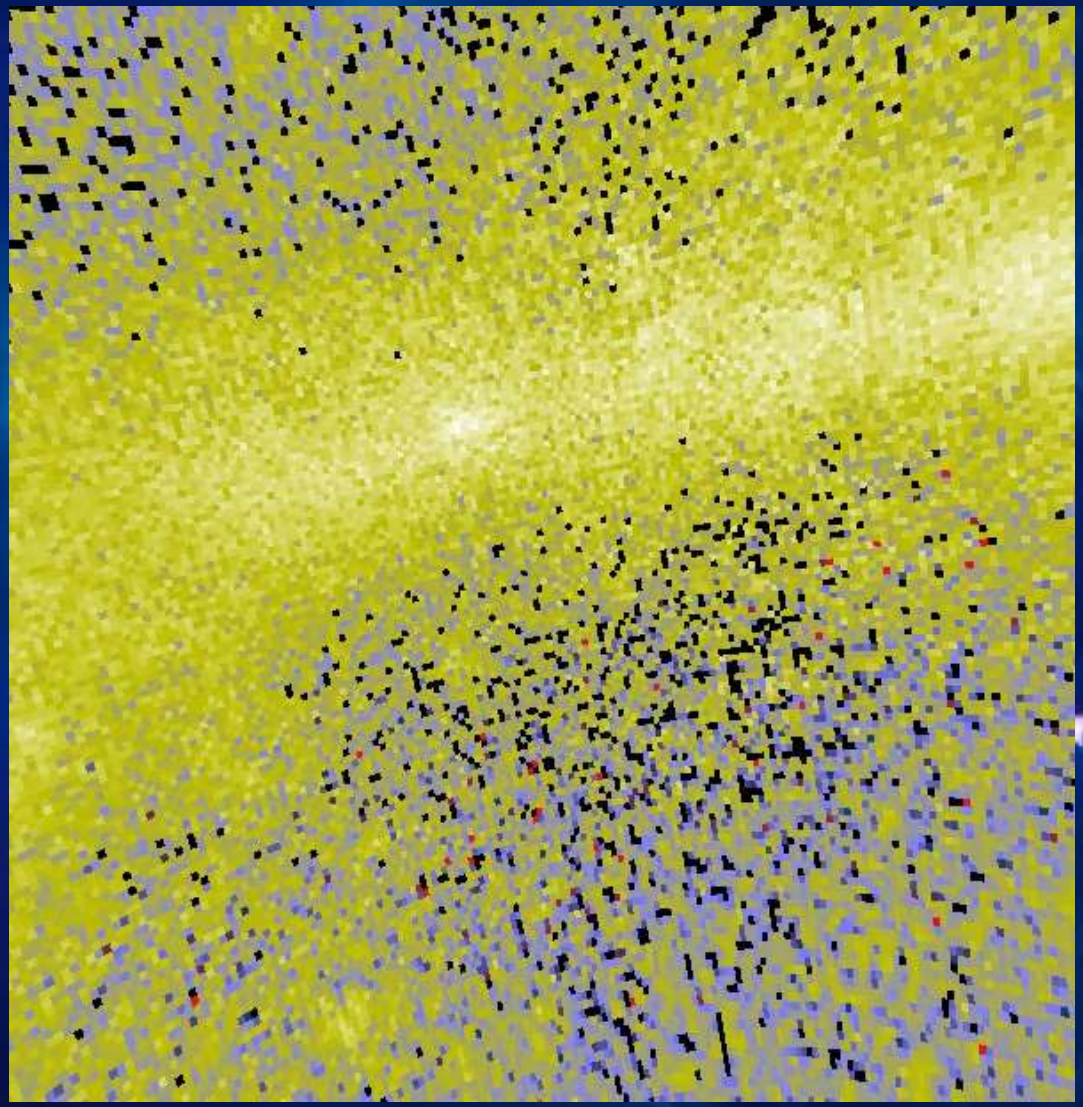
The intensity of yellow light is directly proportional to the hydrogen abundance in that region.

The core region of the nebula is devoid of any Neutral Hydrogen.



This image has been produced using the **WISE 22 Micron All-Sky Survey,** which uses IR region of the E-M spectrum.

The different colours represent the temperature distribution for the nebula. The temperature increases as we move outside from the centre of the displayed region.



This image has been processed using EGRET >100 MeV: Energetic Gamma-Ray Event Telescope: Hard

The bright yellow region depicts the concentrated cosmic and interstellar gas.