

ALMA-IMF

XVIII. The assembly of a star cluster: Dense N₂H⁺ (1–0) kinematics in the massive G351.77 protocluster (Corrigendum)

N. A. Sandoval-Garrido^{1,*}, A. M. Stutz^{1,2}, R. H. Álvarez-Gutiérrez¹, R. Galván-Madrid³, F. Motte⁴,
A. Ginsburg⁵, N. Cunningham⁶, S. Reyes-Reyes^{1,7}, E. Redaelli^{8,9}, M. Bonfand¹⁰, J. Salinas¹, A. Koley¹,
G. Bernal-Mesina¹, J. Braine¹¹, L. Bronfman¹², G. Busquet^{13,14,15}, T. Csengeri¹⁶, J. Di Francesco¹⁷,
M. Fernández-López¹⁸, P. García^{19,20}, A. Gusdorf^{21,22}, H.-L. Liu²³, and P. Sanhueza^{24,25}

- ¹ Departamento de Astronomía, Universidad de Concepción, Casilla 160-C, Concepción, Chile
² Franco-Chilean Laboratory for Astronomy, IRL 3386, CNRS and Universidad de Chile, Santiago, Chile
³ Instituto de Radioastronomía y Astrofísica, Universidad Nacional Autónoma de México, Morelia, Michoacán 58089, Mexico
⁴ Univ. Grenoble Alpes, CNRS, IPAG, 38000 Grenoble, France
⁵ Department of Astronomy, University of Florida, PO Box 112055, Gainesville, FL 32611, USA
⁶ SKA Observatory, Jodrell Bank, Lower Withington, Macclesfield SK11 9FT, UK
⁷ Max-Planck-Institut für Astronomie, Königstuhl 17, 69117 Heidelberg, Germany
⁸ European Southern Observatory, Karl-Schwarzschild-Strasse 2, 85748 Garching, Germany
⁹ Max-Planck-Institut für Extraterrestrische Physik, Giessenbachstrasse 1, 85748 Garching, Germany
¹⁰ Departments of Astronomy and Chemistry, University of Virginia, Charlottesville, VA 22904, USA
¹¹ Laboratoire d'Astrophysique de Bordeaux, Univ. Bordeaux, CNRS, B18N, allée Geoffroy Saint-Hilaire, 33615 Pessac, France
¹² Astronomy Department, Universidad de Chile, Casilla 36-D, Santiago, Chile
¹³ Departament de Física Quàntica i Astrofísica (FQA), Universitat de Barcelona (UB), Martí i Franquès 1, 08028 Barcelona, Catalonia, Spain
¹⁴ Institut de Ciències del Cosmos (ICCUB), Universitat de Barcelona, Martí i Franquès 1, 08028 Barcelona, Catalonia, Spain
¹⁵ Institut d'Estudis Espacials (IEEC), Esteve Terradas 1, Edifici RDIT, Ofic. 212 Parc Mediterrani de la Tecnologia (PMT) Campus del Baix Llobregat – UPC 08860 Castelldefels (Barcelona), Catalonia, Spain
¹⁶ Laboratoire d'Astrophysique de Bordeaux, Univ. Bordeaux, CNRS, UMR 5804, 33615 Pessac, France
¹⁷ NRC Herzberg Astronomy and Astrophysics Research Centre, 5071 West Saanich Road, Victoria, BC V9E 2E7, Canada
¹⁸ Instituto Argentino de Radioastronomía (CCT-La Plata, CONICET; UNLP; CICPBA), C.C. No. 5, 1894, Villa Elisa, Buenos Aires, Argentina
¹⁹ Chinese Academy of Sciences South America Center for Astronomy, National Astronomical Observatories, CAS, Beijing 100101, China
²⁰ Instituto de Astronomía, Universidad Católica del Norte, Av. Angamos 0610, Antofagasta, Chile
²¹ Laboratoire de Physique de l'École Normale Supérieure, ENS, Université PSL, CNRS, Sorbonne Université, Université Paris Cité, 75005 Paris, France
²² Observatoire de Paris, PSL University, Sorbonne Université, LERMA, 75014 Paris, France
²³ School of Physics and Astronomy, Yunnan University, Kunming 650091, PR China
²⁴ Department of Earth and Planetary Sciences, Institute of Science Tokyo, Meguro, Tokyo 152-8551, Japan
²⁵ National Astronomical Observatory of Japan, National Institutes of Natural Sciences, 2-21-1 Osawa, Mitaka, Tokyo 181-8588, Japan

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In the original version of this paper, at the end of Sect. 3.4 we described Eq. (1).

$$\langle V_{\text{LSR},1} \rangle + X \times \sigma_{V_{\text{LSR},1}} = \langle V_{\text{LSR},2} \rangle - X \times \sigma_{V_{\text{LSR},2}}, \quad (1)$$

as follows: “where $\langle V_{\text{LSR},1} \rangle$ and $\langle V_{\text{LSR},2} \rangle$ are the averaged centroid velocities of the first and second velocity component, respectively, $\sigma_{V_{\text{LSR},1}}$ and $\sigma_{V_{\text{LSR},2}}$ are the standard deviations of the centroid velocities in the first and second velocity component, respectively, and X represents the cut-off value used as the middle point, normalized by the standard deviations of the centroid

velocity distributions. Applying Eq. (1) we obtain a $X=0.025$. This value allows us to separate the centroid velocity distribution of the one-velocity-component fit into two parts and combine the measurements with the first and the second velocity component.”

The corrected text should read:

where $\langle V_{\text{LSR},1} \rangle$ and $\langle V_{\text{LSR},2} \rangle$ are the averaged centroid velocities of the first and second velocity component, respectively, and $\sigma_{V_{\text{LSR},1}}$ and $\sigma_{V_{\text{LSR},2}}$ are the standard deviations of the centroid velocities in the first and second velocity component, respectively. Here, X represents the parameter used to derive the velocity corresponding to the middle point. Applying Eq. (1),

* Corresponding author: nsandovalgarrido@gmail.com

we obtain $X \approx 0.86$, which yields a middle point of 0.025 km s^{-1} . This value allows us to separate the centroid velocity distribution of the one-velocity-component fit into two parts and combine the measurements with the first and the second velocity component.

In addition, the caption of Fig. 3 should be corrected as follows:

Centroid velocity distributions of the one- and two-velocity-components fits. The black histogram represents the centroid

velocity distribution of the spectra fit by the one-velocity-component model. The blue and red histograms show the centroid velocity distributions of the spectra fit with the two-velocity-components model, where blue corresponds to the first velocity component and red to the second. The solid black line represents the middle point located at 0.025 km s^{-1} , measured via Eq. (1) (see text). This divides the black histogram into two velocities, as explained in Sect. 3.4.