

## Planck intermediate results

### XV. A study of anomalous microwave emission in Galactic clouds (Corrigendum)

Planck Collaboration: P. A. R. Ade<sup>77</sup>, N. Aghanim<sup>53</sup>, M. I. R. Alves<sup>53</sup>, M. Arnaud<sup>66</sup>, F. Atrio-Barandela<sup>18</sup>, J. Aumont<sup>53</sup>, C. Baccigalupi<sup>76</sup>, A. J. Banday<sup>82, 10</sup>, R. B. Barreiro<sup>60</sup>, E. Battaner<sup>83</sup>, K. Benabed<sup>54, 80</sup>, A. Benoit-Lévy<sup>24, 54, 80</sup>, J.-P. Bernard<sup>82, 10</sup>, M. Bersanelli<sup>32, 46</sup>, P. Bielewicz<sup>82, 10, 76</sup>, J. Bobin<sup>66</sup>, A. Bonaldi<sup>62</sup>, J. R. Bond<sup>9</sup>, J. Borrill<sup>13, 78</sup>, F. R. Bouchet<sup>54, 80</sup>, F. Boulanger<sup>53</sup>, C. Burigana<sup>45, 30</sup>, J.-F. Cardoso<sup>67, 1, 54</sup>, S. Casassus<sup>81</sup>, A. Catalano<sup>68, 65</sup>, A. Chamballu<sup>66, 15, 53</sup>, X. Chen<sup>52</sup>, H. C. Chiang<sup>26, 7</sup>, L.-Y. Chiang<sup>56</sup>, P. R. Christensen<sup>73, 35</sup>, D. L. Clements<sup>51</sup>, S. Colombi<sup>54, 80</sup>, L. P. L. Colombo<sup>23, 61</sup>, F. Couchot<sup>64</sup>, B. P. Crill<sup>61, 74</sup>, F. Cuttaia<sup>45</sup>, L. Danese<sup>76</sup>, R. D. Davies<sup>62</sup>, R. J. Davis<sup>62</sup>, P. de Bernardis<sup>31</sup>, A. de Rosa<sup>45</sup>, G. de Zotti<sup>41, 76</sup>, J. Delabrouille<sup>1</sup>, F.-X. Désert<sup>50</sup>, C. Dickinson<sup>62, \*</sup>, J. M. Diego<sup>60</sup>, S. Donzelli<sup>46</sup>, O. Doré<sup>61, 11</sup>, X. Dupac<sup>38</sup>, T. A. Enßlin<sup>70</sup>, H. K. Eriksen<sup>58</sup>, F. Finelli<sup>45, 47</sup>, O. Forni<sup>82, 10</sup>, E. Franceschi<sup>45</sup>, S. Galeotta<sup>43</sup>, K. Ganga<sup>1</sup>, R. T. Génova-Santos<sup>59</sup>, T. Ghosh<sup>53</sup>, M. Giard<sup>82, 10</sup>, J. González-Nuevo<sup>60, 76</sup>, K. M. Górski<sup>61, 84</sup>, A. Gregorio<sup>33, 43, 49</sup>, A. Gruppuso<sup>45</sup>, F. K. Hansen<sup>58</sup>, D. L. Harrison<sup>57, 63</sup>, G. Helou<sup>11</sup>, C. Hernández-Monteagudo<sup>12, 70</sup>, S. R. Hildebrandt<sup>11</sup>, E. Hivon<sup>54, 80</sup>, M. Hobson<sup>6</sup>, A. Hornstrup<sup>16</sup>, A. H. Jaffe<sup>51</sup>, T. R. Jaffe<sup>82, 10</sup>, W. C. Jones<sup>26</sup>, E. Keihänen<sup>25</sup>, R. Keskitalo<sup>21, 13</sup>, R. Kneissl<sup>37, 8</sup>, J. Knoche<sup>70</sup>, M. Kunz<sup>17, 53, 3</sup>, H. Kurki-Suonio<sup>25, 40</sup>, A. Lähteenmäki<sup>2, 40</sup>, J.-M. Lamarre<sup>65</sup>, A. Lasenby<sup>6, 63</sup>, C. R. Lawrence<sup>61</sup>, R. Leonardi<sup>38</sup>, M. Liguori<sup>29</sup>, P. B. Lilje<sup>58</sup>, M. Linden-Vørnle<sup>16</sup>, M. López-Caniego<sup>60</sup>, J. F. Macías-Pérez<sup>68</sup>, B. Maffei<sup>62</sup>, D. Maino<sup>32, 46</sup>, N. Mandolcsi<sup>45, 5, 30</sup>, D. J. Marshall<sup>66</sup>, P. G. Martin<sup>9</sup>, E. Martínez-González<sup>60</sup>, S. Masi<sup>31</sup>, M. Massardi<sup>44</sup>, S. Matarrese<sup>29</sup>, P. Mazzotta<sup>34</sup>, P. R. Meinhold<sup>27</sup>, A. Melchiorri<sup>31, 48</sup>, L. Mendes<sup>38</sup>, A. Mennella<sup>32, 46</sup>, M. Migliaccio<sup>57, 63</sup>, M.-A. Miville-Deschénes<sup>53, 9</sup>, A. Moneti<sup>54</sup>, L. Montier<sup>82, 10</sup>, G. Morgante<sup>45</sup>, D. Mortlock<sup>51</sup>, D. Munshi<sup>77</sup>, P. Naselsky<sup>73, 35</sup>, F. Nati<sup>31</sup>, P. Natoli<sup>30, 4, 45</sup>, H. U. Nørgaard-Nielsen<sup>16</sup>, F. Noviello<sup>62</sup>, D. Novikov<sup>51</sup>, I. Novikov<sup>73</sup>, C. A. Oxborrow<sup>16</sup>, L. Pagano<sup>31, 48</sup>, F. Pajot<sup>53</sup>, R. Paladini<sup>52</sup>, D. Paoletti<sup>45, 47</sup>, G. Patanchon<sup>1</sup>, T. J. Pearson<sup>11, 52</sup>, M. Peel<sup>62</sup>, O. Perdereau<sup>64</sup>, F. Perrotta<sup>76</sup>, F. Piacentini<sup>31</sup>, M. Piat<sup>1</sup>, E. Pierpaoli<sup>23</sup>, D. Pietrobon<sup>61</sup>, S. Plaszczynski<sup>64</sup>, E. Pointecouteau<sup>82, 10</sup>, G. Polenta<sup>4, 42</sup>, N. Ponthieu<sup>53, 50</sup>, L. Popa<sup>55</sup>, G. W. Pratt<sup>66</sup>, S. Prunet<sup>54, 80</sup>, J.-L. Puget<sup>53</sup>, J. P. Rachen<sup>20, 70</sup>, R. Rebolo<sup>59, 14, 36</sup>, W. Reich<sup>71</sup>, M. Reinecke<sup>70</sup>, M. Remazeilles<sup>62, 53, 1</sup>, C. Renault<sup>68</sup>, S. Ricciardi<sup>45</sup>, T. Riller<sup>70</sup>, I. Ristorcelli<sup>82, 10</sup>, G. Rocha<sup>61, 11</sup>, C. Rosset<sup>1</sup>, G. Roudier<sup>1, 65, 61</sup>, J. A. Rubiño-Martín<sup>59, 36</sup>, B. Rusholme<sup>52</sup>, M. Sandri<sup>45</sup>, G. Savini<sup>75</sup>, D. Scott<sup>22</sup>, L. D. Spencer<sup>77</sup>, V. Stolyarov<sup>6, 63, 79</sup>, D. Sutton<sup>57, 63</sup>, A.-S. Suur-Uiski<sup>25, 40</sup>, J.-F. Sygnet<sup>54</sup>, J. A. Tauber<sup>39</sup>, D. Tavagnacco<sup>43, 33</sup>, L. Terenzi<sup>45</sup>, C. T. Tibbs<sup>52</sup>, L. Toffolatti<sup>19, 60</sup>, M. Tomasi<sup>46</sup>, M. Tristram<sup>64</sup>, M. Tucci<sup>17, 64</sup>, L. Valenziano<sup>45</sup>, J. Valiviita<sup>40, 25, 58</sup>, B. Van Tent<sup>69</sup>, J. Varis<sup>72</sup>, L. Verstraete<sup>53</sup>, P. Vielva<sup>60</sup>, F. Villa<sup>45</sup>, B. D. Wandelt<sup>54, 80, 28</sup>, R. Watson<sup>62</sup>, A. Wilkinson<sup>62</sup>, N. Ysard<sup>25</sup>, D. Yvon<sup>15</sup>, A. Zacchei<sup>43</sup>, and A. Zonca<sup>27</sup>

(Affiliations can be found after the references)

A&A 565, A103 (2014), DOI: [10.1051/0004-6361/201322612e](https://doi.org/10.1051/0004-6361/201322612e)

**Key words.** HII regions – radiation mechanisms: general – radio continuum: ISM – submillimeter: ISM – errata, addenda

There is a typographical error in the unit of the  $\tau_{250}$  column of Table 3 of Planck Collaboration XVI (2014), resulting in all  $\tau_{250}$  values listed being a factor of 10 smaller than they should be.

The values have been multiplied by  $10^4$  and *not*  $10^5$  as listed in the previously published version. All the values relating to  $\tau_{250}$  in the main body of text and figures remain correct.

\* Corresponding author: C. Dickinson,  
e-mail: [clive.dickinson@manchester.ac.uk](mailto:clive.dickinson@manchester.ac.uk)

## References

Planck Collaboration XVI. 2014, [A&A, 565, A103](#)

- <sup>1</sup> APC, AstroParticule et Cosmologie, Université Paris Diderot, CNRS/IN2P3, CEA/Irfu, Observatoire de Paris, Sorbonne Paris Cité, 10, rue Alice Domon et Léonie Duquet, 75205 Paris Cedex 13, France
- <sup>2</sup> Aalto University Metsähovi Radio Observatory and Dept of Radio Science and Engineering, PO Box 13000, 00076 Aalto, Finland
- <sup>3</sup> African Institute for Mathematical Sciences, 6-8 Melrose Road, Muizenberg, Cape Town, South Africa
- <sup>4</sup> Agenzia Spaziale Italiana Science Data Center, via del Politecnico snc, 00133 Roma, Italy
- <sup>5</sup> Agenzia Spaziale Italiana, viale Liegi 26, 00198 Roma, Italy
- <sup>6</sup> Astrophysics Group, Cavendish Laboratory, University of Cambridge, J J Thomson Avenue, Cambridge CB3 0HE, UK
- <sup>7</sup> Astrophysics & Cosmology Research Unit, School of Mathematics, Statistics & Computer Science, University of KwaZulu-Natal, Westville Campus, Private Bag X54001, 4000 Durban, South Africa
- <sup>8</sup> Atacama Large Millimeter/submillimeter Array, ALMA Santiago Central Offices, Alonso de Cordova 3107, Vitacura, Casilla 763 0355, Santiago, Chile
- <sup>9</sup> CITA, University of Toronto, 60 St. George St., Toronto, ON M5S 3H8, Canada
- <sup>10</sup> CNRS, IRAP, 9 Av. colonel Roche, BP 44346, 31028 Toulouse Cedex 4, France
- <sup>11</sup> California Institute of Technology, Pasadena, CA 91125, USA
- <sup>12</sup> Centro de Estudios de Física del Cosmos de Aragón (CEFCA), Plaza San Juan, 1, planta 2, 44001 Teruel, Spain
- <sup>13</sup> Computational Cosmology Center, Lawrence Berkeley National Laboratory, Berkeley, California, USA
- <sup>14</sup> Consejo Superior de Investigaciones Científicas (CSIC), 28006 Madrid, Spain
- <sup>15</sup> DSM/Irfu/SPP, CEA-Saclay, 91191 Gif-sur-Yvette Cedex, France
- <sup>16</sup> DTU Space, National Space Institute, Technical University of Denmark, Elektrovej 327, 2800 Kgs. Lyngby, Denmark
- <sup>17</sup> Département de Physique Théorique, Université de Genève, 24, Quai E. Ansermet, 1211 Genève 4, Switzerland
- <sup>18</sup> Departamento de Física Fundamental, Facultad de Ciencias, Universidad de Salamanca, 37008 Salamanca, Spain
- <sup>19</sup> Departamento de Física, Universidad de Oviedo, Avda. Calvo Sotelo s/n, Oviedo, Spain
- <sup>20</sup> Department of Astrophysics/IMAPP, Radboud University Nijmegen, PO Box 9010, 6500 GL Nijmegen, The Netherlands
- <sup>21</sup> Department of Electrical Engineering and Computer Sciences, University of California, Berkeley, California, USA
- <sup>22</sup> Department of Physics & Astronomy, University of British Columbia, 6224 Agricultural Road, Vancouver, British Columbia, Canada
- <sup>23</sup> Department of Physics and Astronomy, Dana and David Dornsife College of Letter, Arts and Sciences, University of Southern California, Los Angeles, CA 90089, USA
- <sup>24</sup> Department of Physics and Astronomy, University College London, London WC1E 6BT, UK
- <sup>25</sup> Department of Physics, Gustaf Hällströmin katu 2a, University of Helsinki, 00014 Helsinki, Finland
- <sup>26</sup> Department of Physics, Princeton University, Princeton, NJ 08544, USA
- <sup>27</sup> Department of Physics, University of California, Santa Barbara, California, CA 93106, USA
- <sup>28</sup> Department of Physics, University of Illinois at Urbana-Champaign, 1110 West Green Street, Urbana, Illinois, USA
- <sup>29</sup> Dipartimento di Fisica e Astronomia G. Galilei, Università degli Studi di Padova, via Marzolo 8, 35131 Padova, Italy
- <sup>30</sup> Dipartimento di Fisica e Scienze della Terra, Università di Ferrara, via Saragat 1, 44122 Ferrara, Italy
- <sup>31</sup> Dipartimento di Fisica, Università La Sapienza, P. le A. Moro 2, 00185 Roma, Italy
- <sup>32</sup> Dipartimento di Fisica, Università degli Studi di Milano, via Celoria, 16, 20133 Milano, Italy
- <sup>33</sup> Dipartimento di Fisica, Università degli Studi di Trieste, via A. Valerio 2, 34127 Trieste, Italy
- <sup>34</sup> Dipartimento di Fisica, Università di Roma Tor Vergata, via della Ricerca Scientifica, 1 Roma, Italy
- <sup>35</sup> Discovery Center, Niels Bohr Institute, Blegdamsvej 17, Copenhagen, Denmark
- <sup>36</sup> Dpto. Astrofísica, Universidad de La Laguna (ULL), 38206 La Laguna, Tenerife, Spain
- <sup>37</sup> European Southern Observatory, ESO Vitacura, Alonso de Cordova 3107, Vitacura, Casilla 19001, Santiago, Chile
- <sup>38</sup> European Space Agency, ESAC, Planck Science Office, Camino bajo del Castillo, s/n, Urbanización Villafranca del Castillo, Villanueva de la Cañada, Madrid, Spain
- <sup>39</sup> European Space Agency, ESTEC, Keplerlaan 1, 2201 AZ Noordwijk, The Netherlands
- <sup>40</sup> Helsinki Institute of Physics, Gustaf Hällströmin katu 2, University of Helsinki, Helsinki, Finland
- <sup>41</sup> INAF–Osservatorio Astronomico di Padova, Vicolo dell’Osservatorio 5, 35122 Padova, Italy
- <sup>42</sup> INAF–Osservatorio Astronomico di Roma, via di Frascati 33, Monte Porzio Catone, Italy
- <sup>43</sup> INAF–Osservatorio Astronomico di Trieste, via G.B. Tiepolo 11, Trieste, Italy
- <sup>44</sup> INAF Istituto di Radioastronomia, via P. Gobetti 101, 40129 Bologna, Italy
- <sup>45</sup> INAF/IASF Bologna, via Gobetti 101, Bologna, Italy
- <sup>46</sup> INAF/IASF Milano, via E. Bassini 15, Milano, Italy
- <sup>47</sup> INFN, Sezione di Bologna, via Irnerio 46, 40126 Bologna, Italy
- <sup>48</sup> INFN, Sezione di Roma 1, Università di Roma Sapienza, Piazzale Aldo Moro 2, 00185 Roma, Italy
- <sup>49</sup> INFN/National Institute for Nuclear Physics, via Valerio 2, 34127 Trieste, Italy
- <sup>50</sup> IPAG: Institut de Planétologie et d’Astrophysique de Grenoble, Université Joseph Fourier, Grenoble 1/CNRS-INSU, UMR 5274, 38041 Grenoble, France
- <sup>51</sup> Imperial College London, Astrophysics group, Blackett Laboratory, Prince Consort Road, London, SW7 2AZ, UK
- <sup>52</sup> Infrared Processing and Analysis Center, California Institute of Technology, Pasadena, CA 91125, USA
- <sup>53</sup> Institut d’Astrophysique Spatiale, CNRS (UMR 8617) Université Paris-Sud 11, Bâtiment 121, Orsay, France
- <sup>54</sup> Institut d’Astrophysique de Paris, CNRS (UMR 7095), 98 bis Boulevard Arago, 75014 Paris, France
- <sup>55</sup> Institute for Space Sciences, 077125 Bucharest-Magurale, Romania
- <sup>56</sup> Institute of Astronomy and Astrophysics, Academia Sinica, Taipei, Taiwan
- <sup>57</sup> Institute of Astronomy, University of Cambridge, Madingley Road, Cambridge CB3 0HA, UK
- <sup>58</sup> Institute of Theoretical Astrophysics, University of Oslo, Blindern, 0371 Oslo, Norway
- <sup>59</sup> Instituto de Astrofísica de Canarias, C/Vía Láctea s/n, La Laguna, 38205 Tenerife, Spain
- <sup>60</sup> Instituto de Física de Cantabria (CSIC-Universidad de Cantabria), Avda. de los Castros s/n, 39005 Santander, Spain
- <sup>61</sup> Jet Propulsion Laboratory, California Institute of Technology, 4800 Oak Grove Drive, Pasadena, California, USA
- <sup>62</sup> Jodrell Bank Centre for Astrophysics, Alan Turing Building, School of Physics and Astronomy, The University of Manchester, Oxford Road, Manchester, M13 9PL, UK
- <sup>63</sup> Kavli Institute for Cosmology Cambridge, Madingley Road, Cambridge, CB3 0HA, UK
- <sup>64</sup> LAL, Université Paris-Sud, CNRS/IN2P3, 91898 Orsay, France
- <sup>65</sup> LERMA, CNRS, Observatoire de Paris, 61 Avenue de l’Observatoire, 75014 Paris, France
- <sup>66</sup> Laboratoire AIM, IRFU/Service d’Astrophysique – CEA/DSM – CNRS – Université Paris Diderot, Bât. 709, CEA-Saclay, 91191 Gif-sur-Yvette Cedex, France

- <sup>67</sup> Laboratoire Traitement et Communication de l'Information, CNRS (UMR 5141) and Télécom ParisTech, 46 rue Barrault, 75634 Paris Cedex 13, France
- <sup>68</sup> Laboratoire de Physique Subatomique et de Cosmologie, Université Joseph Fourier Grenoble I, CNRS/IN2P3, Institut National Polytechnique de Grenoble, 53 rue des Martyrs, 38026 Grenoble Cedex, France
- <sup>69</sup> Laboratoire de Physique Théorique, Université Paris-Sud 11 & CNRS, Bâtiment 210, 91405 Orsay, France
- <sup>70</sup> Max-Planck-Institut für Astrophysik, Karl-Schwarzschild-Str. 1, 85741 Garching, Germany
- <sup>71</sup> Max-Planck-Institut für Radioastronomie, Auf dem Hügel 69, 53121 Bonn, Germany
- <sup>72</sup> MilliLab, VTT Technical Research Centre of Finland, Tietotie 3, Espoo, Finland
- <sup>73</sup> Niels Bohr Institute, Blegdamsvej 17, Copenhagen, Denmark
- <sup>74</sup> Observational Cosmology, Mail Stop 367-17, California Institute of Technology, Pasadena, CA 91125, USA
- <sup>75</sup> Optical Science Laboratory, University College London, Gower Street, London, UK
- <sup>76</sup> SISSA, Astrophysics Sector, via Bonomea 265, 34136 Trieste, Italy
- <sup>77</sup> School of Physics and Astronomy, Cardiff University, Queens Buildings, The Parade, Cardiff, CF24 3AA, UK
- <sup>78</sup> Space Sciences Laboratory, University of California, Berkeley, California, USA
- <sup>79</sup> Special Astrophysical Observatory, Russian Academy of Sciences, Nizhnij Arkhyz, Zelenchukskiy region, Karachai-Cherkessian Republic 369167, Russia
- <sup>80</sup> UPMC Univ. Paris 06, UMR 7095, 98 bis Boulevard Arago, 75014 Paris, France
- <sup>81</sup> Universidad de Chile, Casilla 36-D, Santiago, Chile
- <sup>82</sup> Université de Toulouse, UPS-OMP, IRAP, 31028 Toulouse Cedex 4, France
- <sup>83</sup> University of Granada, Departamento de Física Teórica y del Cosmos, Facultad de Ciencias, Granada, Spain
- <sup>84</sup> Warsaw University Observatory, Aleje Ujazdowskie 4, 00-478 Warszawa, Poland