

# Supporting Information for ”Morphology of the Auroral Tail of Io, Europa and Ganymede from JIRAM L-band imager”

A. Moirano<sup>1</sup>, A. Mura<sup>1</sup>, A. Adriani<sup>1</sup>, V. Dols<sup>2</sup>, B. Bonfond<sup>3</sup>, J. H. Waite

Jr<sup>4,5</sup>, V. Hue<sup>4</sup>, J. R. Szalay<sup>6</sup>, A. H. Sulaiman<sup>7</sup>, B. M. Dinelli<sup>8</sup>, F. Tosi<sup>1</sup>, F.

Altieri<sup>1</sup>, A. Cicchetti<sup>1</sup>, G. Filacchione<sup>1</sup>, D. Grassi<sup>1</sup>, A. Migliorini<sup>1</sup>, M.

Moriconi<sup>8</sup>, R. Noschese<sup>1</sup>, G. Piccioni<sup>1</sup>, R. Sordini<sup>1</sup>, D. Turrini<sup>1</sup>, C. Plainaki<sup>9</sup>,

G. Sindoni<sup>9</sup>, S. Massetti<sup>1</sup>, R. L. Lysak<sup>10</sup>, S. L. Ivanovski<sup>11</sup>, S. J. Bolton<sup>4</sup>

<sup>1</sup>Institute for Space Astrophysics and Planetology, National Institute for Astrophysics (INAF - IAPS), Rome, Italy

<sup>2</sup>Laboratory for Atmospheric and Space Physics, University of Colorado Boulder, Boulder, CO, USA

<sup>3</sup>Space sciences, Technologies and Astrophysics Research Institute, LPAP, Universit de Lige, Lige, Belgium

<sup>4</sup>Southwest Research Institute, San Antonio, TX, USA

<sup>5</sup>Department of Physics and Astronomy, University of Texas at San Antonio, San Antonio, TX, USA

<sup>6</sup>Department of Astrophysical Sciences, Princeton University, Princeton, NJ, USA

<sup>7</sup>Department of Physics and Astronomy, University of Iowa, Iowa City, IA, USA

<sup>8</sup>Institute of Atmospheric Sciences and Climate, National Research Council (CNR - ISAC), Bologna, Italy

<sup>9</sup>Italian Space Agency (ASI), Rome, Italy

<sup>10</sup>School of Physics and Astronomy, University of Minnesota, Minneapolis, MN, USA

<sup>11</sup>National Institute for Astrophysics, Astronomical Observatory of Trieste (INAF - OAT), Trieste, Italy

**Contents of this file Additional Supporting Information (Files uploaded separately)**

1. Captions for Movies S1

**Introduction** The sequence of images of the IFP taken by JIRAM during the southern overflight of PJ 13 is reported in this supplementary material in a single gif file. The images used for the movie are the same as reported in Figure 3 of the manuscript and they span the period from UTC 07:10:57 to 07:18:33 of May 24<sup>th</sup> 2018.

**Movie S1.** The sequence of images of the IFP taken by JIRAM during the southern overflight of PJ 13 reported in a single gif file. The images used for the movie are the same as reported in Figure 3 of the manuscript and they span the period from UTC 07:10:57 to 07:18:33 of May 24<sup>th</sup> 2018.