# **Supplementary figures and tables**

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**Figure 1S**. SSHA for August 2017. The red circles and blue diamonds represents the GOMECC-3 and XIXIMI-06 station samples, respectively. Black line represents 200 m isobath. Arrows represent geostrophic velocities. SSHA and velocities from Marine Copernicus.

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**Figure 2S.** Least-squares correlation analysis between Log (Chlorophyll a) obtained by remote sensing and δ15N values of zooplankton from samples collected during XIXIMI-06 and GOMECC-04. F=231.8m, df=90.

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**Figure 3S**. Least-squares correlation analysis between zooplankton biovolume and δ15N values of zooplankton in the 335 – 1000 µm size fraction. Data correspond to samples collected during XIXIMI-06, which covered the deep water region of the central and southern Gulf of Mexico. F=8.065, df=39.

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**Figure 4S**. Least-squares correlation analysis between percent C and δ15N values of zooplankton. F=0.6676, df=90.

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**Figure 5S**. Least-squares correlation analysis between percent N and δ15N values of zooplankton. F=0.3737, df=90.

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**Figure 6S**. Least-squares correlation analysis between C:N ratio of zooplankton and δ15N values of zooplankton. F=0.03022, df=90.

**Table 1S**

Parameters used for kriging model (Figure 2)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Kriging | Nugget | Partial sill | Semivariogram model | RMSEa | RMSSEb |
| δ15N | Ordinary | 0.006436 | 0.345093 | tetraspherical | 0.1096 | 1.064 |
| δ 13C | Ordinary | 0.29670 | 0.7841104 | tetraspherical | 0.854 | 1.173 |

aRoot mean square error and bRoot mean square standardized error

Cross-validation statistics used to choose best fit model between kriging and IDW interpolation in Figure 2.

|  |  |  |
| --- | --- | --- |
| Model | Root mean square error (RMSE) | Mean relative error (MRE) |
| δ15N zoo Ordinary kriging | 0.1096 | 0.084223 |
| δ15N zoo IDW-2 | 0.1317 | 0.099237 |
| δ13C zoo Ordinary kriging | 0.854 | 1.503497 |
| δ13C zoo IDW-2 | 0.8934 | 1.550368 |

**Table 2S**. Stable isotopes values for POM in the Gulf of Mexico collected in the near surface layer.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Literature | Source | | δ13C (‰) | | δ15N (‰) | Study site | Regions |
| Bianchi et al. (2007) | POM | | -25.0 ± 0.8 | | 6.8 ± 1.4 | Mississippi River at Baton Rouge | NGMc and NGMo |
| Wissell and fry (2003) | POM | | -24.9 ± 1.4 | | 7.1 ± 1.4 | Mississippi River at Baton Rouge |  |
| Chanton and Lewis (1999) | Phytoplankton | | -22.4 ± 0.2 | | 6.6 ± 0.7 | NGM Shelf |  |
| Rooker et al. (2006) | POM | | -20.9 ±0.8 | | 7.1 ± 1.1 | North GM |  |
| Macko et al. (1984) | POM | | -21.0 ± 1.4 | | 7.5 ± 0.8 | LATEX Shelf |  |
|  | **Mean** | | **-22.8 ± 1.8** | | **7.0 ± 0.3** |  |  |
| Moncreiff and Sullivan (2001) | Phytoplankton | | -21.8 ± 0.7 | | 9.9 ± 0.9 | NGM shelf | NGMc and NGMo |
| Chanton and Lewis (1999) | Phytoplankton | | -26.8 ± 2.3 | | 9.6 ± 1.2 | Apalachicola Bay |  |
|  | **Mean** | | **-24.3 ± 2.5** | | **9.8 ± 0.2** |  |  |
|  |  | |  | |  |  |  |
| Holl et al. (2007) | POM | | -23.3 ± 1.6 | | -2.3 ± 1.4 | West GoM | All regions |
| Dorado et al. (2012) | POM | | -17.1 ± 0.6 | | 0.5 ± 0.8 | NGM |  |
| Wells and Rooker. (2009) | POM | | -21.5 ± 0.6 | | 2.8 ± 0.7 | NGM |  |
|  | **Mean** | | **-18.1 ± 3.9** | | **-1.2 ± 1.2** |  |  |
|  |  | |  | |  |  |  |
| Dorado et al. (2012) | POM | | -22.1 ± 1.5 | | 4.0 ± 0.3 | NGM | All regions |
|  | **Mean** | | **-22.1 ± 1.15** | | **4.0 ± 0.3‰** |  |  |
|  |  | |  | |  |  |  |
| Radabaugh et al. (2013) | POM | | -23.4 ± 1.1 | | 5.4 ± 1.5 | West Florida shelf | NGMc and NGMo |
| Gu et al. (2001) | POM | | -28.7 ± 4.0 | |  | West Florida shelf |  |
|  | **Mean** | | **-26.1 ± 2.7** | | **5.4 ± 1.5** |  |  |
|  |  | |  | |  |  |  |
| Sepúlveda-Lozada et al. (2015) | | POM | | -24.4 ± 2.8 | 4.6 ± 0.5 | Grijalva-Usumacinta River | SGM |
|  | | **Mean** | | **-24.4 ± 2.8** | **4.6 ± 0.5** |  |  |

**Table 3S**. Mean and SD Isotope ratios of carbon and nitrogen of particulate organic matter collected during XIXIMI-06 cruise at different depths

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Central Gulf of Mexico | | | | |  | Southern Gulf of Mexico | | |  | Loop Current | | |
|  | | Mean (SD) | Range | | | n |  | Mean (SD) | Range | n |  | Mean (SD) | Range | n |
| δ13C-POM | -23.3 ±1.0 | | -25.3 to -22.3 | | | 12 |  | -22.9 ± 0.9 | -24.9 to -21.4 | 19 |  | -23.0 ±1.3 | -24.6 to -21.3 | 3 |
| δ15N-POM | | -0.1 ±19.2 | | -1.8 to 3.0 | | 4 |  | 0.4 ± 1.2 | -1.2 to 3.2 | 12 |  | -0.1 ± 1.2 | -1.4 to 1.0 | 2 |
| δ15N-POM surface | | 2.0 ± 1.9 | | | 0.1 to 5.3 | 7 |  | 1.5 ± 1.6 | -0.7 to 4.8 | 19 |  | 1.2 | 1.2 | 1 |

**Table 4S.**  Mean fractional contribution of each N source at zooplankton sampling stations of the Gulf of Mexico. G3 represents the GOMECC-3 cruise and X6 represents the XIXIMI-06 cruise. Table S4. Mean fractional contribution of each N source at zooplankton sampling stations of the  Gulf of Mexico. G3 represents the GOMECC-3 cruise and X6 represents the XIXIMI-06 cruise.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Station | Region | Latitude | Longitude | N2 fixation | | | Nitrate | | | Mississippi | | | West Florida Shelf | | | Denitrification | | | Grijalva-Usumacinta River system | | |
| G3- E01 | LCZ | 26.0040 | -86.0040 | 79.3 | ± | 11.4 | 20.67 | ± | 11.42 | -- | | | -- | | | -- | | | -- | | |
| G3- E02 | NGMo | 26.6560 | -85.0040 | 68.4 | ± | 10.4 | 9.84 | ± | 8.01 | 7.28 | ± | 5.43 | 8.22 | ± | 6.67 | 6.22 | ± | 4.41 | -- | | |
| G3- E03 | NGMo | 27.3300 | -84.0020 | 46.3 | ± | 14.0 | 18.75 | ± | 14.17 | 11.30 | ± | 8.11 | 14.73 | ± | 12.17 | 8.94 | ± | 6.31 | -- | | |
| G3- E04 | NGMo | 27.7750 | -83.3320 | 46.0 | ± | 14.8 | 21.22 | ± | 16.68 | 11.04 | ± | 8.19 | 12.94 | ± | 11.19 | 8.76 | ± | 6.19 | -- | | |
| G3- E05 | NGMo | 29.3780 | -85.5110 | 24.4 | ± | 14.6 | 34.48 | ± | 21.78 | 14.69 | ± | 10.70 | 15.68 | ± | 12.64 | 10.80 | ± | 7.46 |  | -- |  |
| G3- E06 | NGMo | 29.0270 | -85.7900 | 15.5 | ± | 10.9 | 24.05 | ± | 15.13 | 25.91 | ± | 17.52 | 15.72 | ± | 12.58 | 18.86 | ± | 11.25 |  | -- |  |
| G3- E08 | NGMo | 28.0000 | -86.6350 | 64.0 | ± | 11.3 | 11.65 | ± | 9.37 | 8.19 | ± | 6.00 | 9.31 | ± | 7.28 | 6.81 | ± | 4.77 |  | -- |  |
| G3- E09 | NGMo | 27.5810 | -90.0040 | 61.2 | ± | 12.4 | 13.00 | ± | 12.30 | 8.60 | ± | 7.28 | 10.00 | ± | 0.00 | 7.20 | ± | 5.85 |  | -- |  |
| G3- E10 | NGMo | 27.9230 | -89.9990 | 63.3 | ± | 11.8 | 12.30 | ± | 11.39 | 8.30 | ± | 7.08 | 9.10 | ± | 0.00 | 7.00 | ± | 5.53 |  | -- |  |
| G3- E11 | NGMc | 28.4980 | -90.0010 | 10.7 | ± | 8.6 | 14.40 | ± | 10.66 | 28.40 | ± | 22.20 | 14.50 | ± | 0.00 | 31.90 | ± | 15.78 |  | -- |  |
| G3- E12 | NGMc | 28.9370 | -90.1230 | 3.2 | ± | 2.8 | 3.80 | ± | 3.04 | 5.70 | ± | 5.80 | 5.70 | ± | 0.00 | 81.70 | ± | 6.54 |  | -- |  |
| G3- E13 | NGMo | 27.8130 | -93.8400 | 23.7 | ± | 13.1 | 30.42 | ± | 17.86 | 26.52 | ± | 16.28 |  | -- |  | 19.33 | ± | 10.75 |  | -- |  |
| G3- E14 | NGMo | 27.8090 | -93.8400 | 21.6 | ± | 12.9 | 30.71 | ± | 17.49 | 27.90 | ± | 16.74 |  | -- |  | 19.82 | ± | 11.07 |  | -- |  |
| G3- E15 | NGMo | 27.8150 | -93.8480 | 24.0 | ± | 13.0 | 28.12 | ± | 16.94 | 27.49 | ± | 16.66 |  | -- |  | 20.38 | ± | 11.14 |  | -- |  |
| G3- E16 | NGMo | 27.8130 | -93.8400 | 25.7 | ± | 13.4 | 27.38 | ± | 17.33 | 27.08 | ± | 16.68 |  | -- |  | 19.80 | ± | 11.10 |  | -- |  |
| G3- E17 | NGMo | 28.0900 | -95.0010 | 42.1 | ± | 16.8 | 32.76 | ± | 22.04 | 14.24 | ± | 10.00 |  | -- |  | 10.88 | ± | 7.41 |  | -- |  |
| G3- E18 | NGMo | 28.3350 | -94.9990 | 15.2 | ± | 9.8 | 21.71 | ± | 12.85 | 34.21 | ± | 21.08 |  | -- |  | 28.90 | ± | 14.09 |  | -- |  |
| G3- E19 | NGMc | 28.6690 | -94.9970 | 11.2 | ± | 7.5 | 13.58 | ± | 8.54 | 30.53 | ± | 21.53 |  | -- |  | 44.67 | ± | 16.21 |  | -- |  |
| G3- E20 | NGMc | 29.0020 | -94.9990 | 3.8 | ± | 3.0 | 4.60 | ± | 3.09 | 6.71 | ± | 5.37 |  | -- |  | 84.93 | ± | 6.46 |  | -- |  |
| G3- E21 | NGMo | 25.8780 | -96.8020 | 51.9 | ± | 13.8 | 22.38 | ± | 16.09 | 14.36 | ± | 9.64 |  | -- |  | 11.40 | ± | 7.28 |  | -- |  |
| G3- E22 | NGMo | 25.8800 | -96.3230 | 75.2 | ± | 9.7 | 10.43 | ± | 8.03 | 7.81 | ± | 5.70 |  | -- |  | 6.52 | ± | 4.55 |  | -- |  |
| G3- E23 | NGMo | 25.8810 | -95.8300 | 74.1 | ± | 9.8 | 10.95 | ± | 8.23 | 8.12 | ± | 5.75 |  | -- |  | 6.84 | ± | 4.69 |  | -- |  |
| G3- E24 | NGMo | 25.8780 | -94.6720 | 73.9 | ± | 9.7 | 10.95 | ± | 8.24 | 8.36 | ± | 5.77 |  | -- |  | 6.79 | ± | 4.62 |  | -- |  |
| G3- E25 | CGM | 22.2740 | -97.5460 | 64.1 | ± | 16.4 | 35.85 | ± | 16.45 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E26 | CGM | 22.2690 | -97.3580 | 69.7 | ± | 14.8 | 30.25 | ± | 14.81 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E27 | CGM | 22.2670 | -96.7630 | 76.4 | ± | 12.7 | 23.61 | ± | 12.73 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E28 | CGM | 22.2680 | -94.9930 | 72.6 | ± | 14.1 | 27.45 | ± | 14.08 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E29 | CGM | 25.0460 | -88.0110 | 73.0 | ± | 14.0 | 27.03 | ± | 13.99 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E30 | CGM | 24.3940 | -87.9900 | 73.9 | ± | 13.6 | 26.05 | ± | 13.57 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E31 | YS | 23.7720 | -87.9970 | 69.8 | ± | 15.2 | 30.23 | ± | 15.21 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E32 | YS | 22.5400 | -88.0010 | 53.9 | ± | 19.0 | 46.09 | ± | 18.98 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E33 | YS | 21.4500 | -91.5640 | 49.1 | ± | 19.8 | 50.90 | ± | 19.82 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E34 | YS | 21.7360 | -92.3150 | 63.0 | ± | 17.1 | 37.01 | ± | 17.07 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E35 | SGM | 21.9950 | -92.9130 | 63.6 | ± | 16.9 | 36.36 | ± | 16.86 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E36 | SGM | 20.7350 | -94.7500 | 59.4 | ± | 14.0 | 22.75 | ± | 13.95 |  | -- |  |  | -- |  |  | -- |  | 17.87 | ± | 11.43 |
| G3- E37 | SGM | 20.0190 | -93.7620 | 48.7 | ± | 16.0 | 30.32 | ± | 17.60 |  | -- |  |  | -- |  |  | -- |  | 21.03 | ± | 13.51 |
| G3- E38 | SGM | 19.1730 | -93.2990 | 42.8 | ± | 16.3 | 29.73 | ± | 17.46 |  | -- |  |  | -- |  |  | -- |  | 27.43 | ± | 15.70 |
| G3- E39 | SGM | 18.8340 | -93.0650 | 30.1 | ± | 16.4 | 41.82 | ± | 21.76 |  | -- |  |  | -- |  |  | -- |  | 28.07 | ± | 17.54 |
| G3- E40 | YS | 21.5900 | -86.4970 | 36.7 | ± | 21.2 | 63.27 | ± | 21.20 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E41 | LCZ | 21.6360 | -86.2320 | 62.9 | ± | 16.9 | 37.09 | ± | 16.90 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| G3- E43 | LCZ | 21.8330 | -84.9820 | 78.5 | ± | 11.7 | 21.48 | ± | 11.70 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- A01 | CGM | 24.8810 | -95.5145 | 77.2 | ± | 12.2 | 22.78 | ± | 12.23 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- A02 | CGM | 24.8828 | -94.9847 | 77.3 | ± | 12.3 | 22.70 | ± | 12.32 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- A10 | LCZ | 24.9370 | -87.0682 | 78.0 | ± | 11.9 | 22.03 | ± | 11.91 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- B11 | CGM | 24.0072 | -96.0117 | 77.1 | ± | 12.5 | 22.87 | ± | 12.49 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- B12 | CGM | 23.9963 | -95.0857 | 77.0 | ± | 12.4 | 22.98 | ± | 12.45 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- B13 | CGM | 23.9760 | -93.7111 | 73.0 | ± | 13.9 | 27.04 | ± | 13.95 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- B14 | CGM | 24.0563 | -92.3180 | 80.6 | ± | 11.2 | 19.43 | ± | 11.17 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- B15 | CGM | 23.9916 | -90.9953 | 72.4 | ± | 14.4 | 27.63 | ± | 14.37 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- B17 | CGM | 24.0095 | -89.0083 | 68.8 | ± | 15.2 | 31.25 | ± | 15.19 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- B18 | LCZ | 24.0214 | -86.8358 | 75.9 | ± | 12.9 | 24.07 | ± | 12.85 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- C21 | CGM | 22.9986 | -95.4995 | 81.1 | ± | 10.7 | 18.90 | ± | 10.67 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- C22 | CGM | 23.0056 | -94.5002 | 72.7 | ± | 13.8 | 27.26 | ± | 13.79 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- C23 | CGM | 22.9767 | -93.0243 | 77.3 | ± | 12.5 | 22.73 | ± | 12.47 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- C24 | CGM | 22.5118 | -92.0082 | 77.5 | ± | 12.2 | 22.49 | ± | 12.20 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- C25 | CGM | 22.9969 | -91.0211 | 65.1 | ± | 16.2 | 34.93 | ± | 16.18 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- D26 | SGM | 22.0200 | -97.1470 | 35.2 | ± | 18.7 | 40.95 | ± | 22.92 |  | -- |  |  | -- |  |  | -- |  | 23.81 | ± | 17.54 |
| X6- D27 | SGM | 22.0004 | -96.0014 | 67.0 | ± | 12.8 | 17.98 | ± | 11.47 |  | -- |  |  | -- |  |  | -- |  | 15.06 | ± | 9.46 |
| X6- D28 | SGM | 22.0039 | -95.0104 | 70.5 | ± | 12.0 | 16.13 | ± | 10.47 |  | -- |  |  | -- |  |  | -- |  | 13.34 | ± | 8.69 |
| X6- D29 | SGM | 22.0094 | -94.0257 | 66.7 | ± | 12.9 | 18.22 | ± | 11.52 |  | -- |  |  | -- |  |  | -- |  | 15.09 | ± | 9.78 |
| X6- D30 | SGM | 21.9978 | -93.0125 | 55.0 | ± | 15.0 | 25.53 | ± | 15.46 |  | -- |  |  | -- |  |  | -- |  | 19.51 | ± | 12.27 |
| X6- E32 | SGM | 21.5085 | -95.6021 | 64.3 | ± | 13.0 | 19.78 | ± | 12.15 |  | -- |  |  | -- |  |  | -- |  | 15.94 | ± | 10.25 |
| X6- E33 | SGM | 21.4959 | -94.5015 | 64.7 | ± | 13.2 | 19.17 | ± | 11.98 |  | -- |  |  | -- |  |  | -- |  | 16.09 | ± | 10.36 |
| X6- E35 | SGM | 21.5017 | -92.5406 | 68.9 | ± | 12.1 | 16.71 | ± | 10.78 |  | -- |  |  | -- |  |  | -- |  | 14.40 | ± | 9.32 |
| X6- F37 | SGM | 21.0064 | -95.0002 | 58.8 | ± | 14.2 | 21.52 | ± | 13.23 |  | -- |  |  | -- |  |  | -- |  | 19.68 | ± | 12.18 |
| X6- F38 | SGM | 21.0082 | -93.9967 | 69.4 | ± | 12.2 | 16.70 | ± | 10.86 |  | -- |  |  | -- |  |  | -- |  | 13.89 | ± | 8.77 |
| X6- F39 | SGM | 21.0026 | -92.9904 | 59.6 | ± | 14.2 | 22.61 | ± | 13.91 |  | -- |  |  | -- |  |  | -- |  | 17.82 | ± | 11.43 |
| X6- G40 | SGM | 20.5026 | -96.0070 | 57.3 | ± | 14.4 | 23.64 | ± | 14.12 |  | -- |  |  | -- |  |  | -- |  | 19.04 | ± | 11.61 |
| X6- G42 | SGM | 20.5116 | -94.5018 | 61.6 | ± | 13.6 | 20.90 | ± | 12.72 |  | -- |  |  | -- |  |  | -- |  | 17.49 | ± | 10.73 |
| X6- G43 | SGM | 20.5108 | -93.5095 | 59.2 | ± | 14.3 | 21.63 | ± | 13.45 |  | -- |  |  | -- |  |  | -- |  | 19.14 | ± | 11.82 |
| X6- G44 | SGM | 20.5166 | -92.4996 | 52.1 | ± | 15.4 | 27.75 | ± | 16.41 |  | -- |  |  | -- |  |  | -- |  | 20.15 | ± | 12.83 |
| X6- H45 | SGM | 19.9887 | -95.6260 | 61.8 | ± | 13.5 | 20.82 | ± | 12.82 |  | -- |  |  | -- |  |  | -- |  | 17.34 | ± | 10.84 |
| X6- H46 | SGM | 20.0023 | -94.9982 | 58.8 | ± | 14.0 | 22.85 | ± | 13.65 |  | -- |  |  | -- |  |  | -- |  | 18.32 | ± | 11.35 |
| X6- H47 | SGM | 20.0012 | -93.9957 | 60.4 | ± | 14.0 | 21.74 | ± | 13.23 |  | -- |  |  | -- |  |  | -- |  | 17.85 | ± | 11.11 |
| X6- H48 | SGM | 20.0118 | -93.0109 | 55.0 | ± | 15.1 | 25.79 | ± | 15.35 |  | -- |  |  | -- |  |  | -- |  | 19.24 | ± | 12.19 |
| X6- J49 | SGM | 19.5034 | -94.9991 | 24.5 | ± | 15.7 | 43.30 | ± | 22.38 |  | -- |  |  | -- |  |  | -- |  | 32.20 | ± | 19.37 |
| X6- Y2A | LCZ | 21.6021 | -86.3480 | 68.6 | ± | 15.5 | 31.39 | ± | 15.51 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- Y2B | LCZ | 21.6099 | -86.3560 | 69.2 | ± | 15.2 | 30.81 | ± | 15.16 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- Y3A | LCZ | 21.6617 | -86.2448 | 70.2 | ± | 15.1 | 29.78 | ± | 15.12 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- Y3B | LCZ | 21.6767 | -86.2232 | 65.6 | ± | 16.0 | 34.41 | ± | 15.98 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- Y6A | LCZ | 21.6762 | -86.0587 | 71.3 | ± | 14.5 | 28.65 | ± | 14.53 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- Y6B | LCZ | 21.6948 | -86.0555 | 73.8 | ± | 13.6 | 26.18 | ± | 13.65 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- Y7A | LCZ | 21.7178 | -85.9498 | 71.9 | ± | 14.4 | 28.08 | ± | 14.35 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |
| X6- Y7B | LCZ | 21.7172 | -85.9426 | 74.3 | ± | 13.5 | 25.70 | ± | 13.51 |  | -- |  |  | -- |  |  | -- |  |  | -- |  |