

2022

133. Beddingfield, C., Cartwright, R., Crane, K., and **Klimczak, C.**: Polygonal impact craters on Mercury's lobate scarps: Implications for contractional tectonism throughout the solar system. *Geological Society of America Abstracts with Programs*, vol. 54, no. 5, doi: 10.1130/abs/2022AM-377737, Denver, CO/virtual.
132. Bernhardt, H., Clark, J. D., Preusker, F., **Klimczak, C.**, Banks M. E., Williams, D. A., Nelson, D. M., and Watters, T. R.: Global map and parameter catalog of shortening structures on Mercury using novel high-resolution topography data. Annual Meeting of the Planetary Geologic Mappers, 2022, #7018, Flagstaff, AZ/virtual.
131. Byrne, P. K., Ghail, R. C., James, P. B., **Klimczak, C.**, Şengör, A. M. C., and Solomon, S. C.: Recent and Possibly Ongoing Formation of Tesserated Rocks on Venus. *53rd Lunar and Planetary Science Conference*, 2022, #1197, virtual meeting.
130. Clark, J. D., Bernhardt, H., Preusker, F., **Klimczak, C.**, Banks M. E., Williams, D. A., Nelson, D. M., and Watters, T. R.: Characterizing Mercury's History of Global Contraction by Cataloging and Dating Shortening Structures: Initial Results for the H-11 Discovery Quadrangle. *American Geophysical Union, Fall Meeting*, 2022, P22C-2105, Chicago, IL, USA.
129. Cheng, H. C. J., **Klimczak, C.**, and Mrazek, J: Displacement-Length Scaling of the Mixed-Mode Koa'e Fault Zone, Hawai'i, HI. *American Geophysical Union, Fall Meeting*, 2022, T12E-0126, Chicago, IL, USA.
128. Cheng, H. C. J., and **Klimczak, C.**: Tectonic Map of Ceres from Polygonal Impact Craters. *53rd Lunar and Planetary Science Conference*, 2022, #1021, virtual meeting.

2021

127. Cheng, H. C. J., and **Klimczak, C.**: A Structural Map of the Rheasilvia basin on Vesta: *Geological Society of America Abstracts with Programs*, 2021, vol. 53, no. 6, doi:10.1130/abs/2021AM-366538, Portland, OR, USA.
126. Cheng H. C. J., **Klimczak, C.**, and Fassett C. I.: Age relationships of large-scale troughs and impact basins on Vesta. *52nd Lunar and Planetary Science Conference*, 2021, #1014, virtual meeting.
125. Cheng H. C. J., and **Klimczak, C.**: Systematic fracture pattern on Vesta revealed by polygonal impact craters. *52nd Lunar and Planetary Science Conference*, 2021, #1015, virtual meeting.
124. Cheng H. C. J., and **Klimczak, C.**: The large-scale troughs on Asteroid 4 Vesta are opening-mode fractures. *EGU General Assembly*, 2021, online, 19–30 Apr 2021, EGU21-79.
123. Collins M. S., Byrne P. K., **Klimczak C.**, and Mazarico E.: Deep-seated thrust ring faults bound elevated mantle plug beneath several lunar basins. *52nd Lunar and Planetary Science Conference*, 2021, #2447, Houston, TX, USA.

122. Hirabayashi M., Fassett, C. I., Montalvo, P., Cheng H. C. J., and **Klimczak, C.**: Efficient topographic degradation on Ceres as revealed by the equilibrium population of small craters. *52nd Lunar and Planetary Science Conference*, 2021, #1585, virtual meeting.
121. Özeren, S., Şengör, A. M. C., Acar, D., Postacioğlu, M. N., **Klimczak, C.**, Byrne, P. K., and Öner, T.: New Analog Experiment for Convergent Regime an example of planet Mercury. *EGU General Assembly*, 2021, online, 19–30 Apr 2021, EGU21-16263.
120. Yazıcı, I. S., and **Klimczak, C.**: Global fracture pattern on Mercury revealed by polygonal impact craters. 1st Annual Meeting of the Mercury Exploration Assessment Group, 2021, #6036, virtual meeting.
119. Yazıcı, I. S., and **Klimczak, C.**: Global fracture pattern on Mercury revealed by polygonal impact craters. *52nd Lunar and Planetary Science Conference*, 2021, #1395, virtual meeting.
118. Yazıcı, I. S., and **Klimczak, C.**: Polygonal impact craters reveal a global fracture pattern on Mercury. *EGU General Assembly*, 2021, online, 19–30 Apr 2021, EGU21-3585.

2020

117. Atkins R. M., Byrne P. K., Bohnenstiehl D., and **Klimczak C.**: A Morphometric Investigation of Crustal Shortening Structures on Mars. *51st Lunar and Planetary Science Conference*, 2020, #1602, virtual meeting.
116. Bernhardt H., Williams D. A., and **Klimczak C.**: Mars' Oldest and Largest Caldera Pityusa Patera — Unique Deposits Hint at Magma Chamber at Crust-Mantle Boundary. *51st Lunar and Planetary Science Conference*, 2020, #1087, virtual meeting.
115. Byrne, P. K. Byrne, Ghail, R. C., Gilmore, M. S., Şengör A. M. C., **Klimczak C.**, Senske, D. A., Whitten, J. L., Khawja, S., Ernst, R. E., and Solomon, S. C.: Tesserae on Venus Feature Layered, Folded, and Eroded Rocks. *American Geophysical Union, Fall Meeting*, 2020, virtual meeting.
114. Byrne, P. K. Byrne, Ghail, R. C., Gilmore, M. S., Şengör A. M. C., **Klimczak C.**, Solomon, S. C., Senske, D. A., Whitten, J. L., Khawja, S., and Ernst, R. E.: Some Venus Tesserae Feature Layered, Folded, and Eroded Rocks. *51st Lunar and Planetary Science Conference*, 2020, #2514, virtual meeting.
113. Callihan M. B., **Klimczak C.**, Owens C. A., Lowe R. C. III, and Byrne P. K.: Investigation of Dike-Related Topography at Craters of the Moon National Monument and Preserve, Idaho, Using Unpiloted Aerial Vehicles. *51st Lunar and Planetary Science Conference*, 2020, #1501, virtual meeting.
112. Cheng H. C. J., and **Klimczak, C.**: The large-scale troughs on Asteroid 4 Vesta are opening-mode fractures. *51st Lunar and Planetary Science Conference*, 2020, #1002, virtual meeting.
111. Cheng H. C. J., and **Klimczak, C.**: Opening-Mode Fractures are an Alternative Explanation for Large-Scale Troughs on Asteroid 4 Vesta. *23rd Meeting of the NSAS Small Bodies Assessment Group*, June 2020, virtual meeting.

110. Collins M. S., Byrne P. K., **Klimczak C.**, and Mazarico E.: Searching for Deep-Seated Thrust Faults on the Moon. *51st Lunar and Planetary Science Conference*, 2020, #1555, virtual meeting.

2019

109. Byrne, P. K., Ghail, R. C., Gilmore, M. S., Şengör, A. M. C., **Klimczak, C.**, Solomon, S. C., Khawja, S., and Ernst, R. E.: Geological Significance Of Layering In Venus Tessera Units. *American Geophysical Union, Fall Meeting*, 2019, P11E-3492, San Francisco, CA, USA.
108. Byrne, P. K., Ghail, R. C., Gilmore, M. S., Şengör, A. M. C., **Klimczak, C.**, Solomon, S. C., Khawja, S., and Ernst, R. E.: Geological Significance Of Layering In Venus Tessera Units. *17th Meeting of the Venus Exploration and Analysis Group (VEXAG)*, 2019, Applied Physics Laboratory, Laurel, MD, USA.
107. Byrne, P. K., Ghail, R. C., Şengör, A. M. C., **Klimczak, C.**, and Solomon, S. C.: Mobile Crustal Blocks as Priority Landing Site Targets. Venera-D Landing Sites Selection And Cloud Layer Habitability Workshop, 2019, Moscow, Russia.
106. Collins, M. S., Byrne P. K., **Klimczak C.**, and Mazarico E.: Spatial Relations Between Shortening Structures and Mascons in Lunar Mare Basins . *50th Lunar and Planetary Science Conference*, 2019, #1641, Houston, TX, USA.
105. **Klimczak, C.**, Byrne, P. K., Regensburger, P. V., Bohnenstiel, D.R., Hauck, S. A., Dombard, A. J., Hemmingway, D. J., and Vance, S. D., Melwani Daswani, M., and Elder, C. M.: Strong Ocean Floors Within Europa, Titan, and Ganymede Limit Geological Activity There; Enceladus Less So. *50th Lunar and Planetary Science Conference*, 2019, #2912, Houston, TX, USA.

2018

104. Byrne P. K., Ghail, R., Şengör, A. M. C., James, P. B., **Klimczak, C.**, and Solomon, S. C.: A globally fragmented and mobile lithosphere of Venus. *16th Meeting of the Venus Exploration and Analysis Group (VEXAG)*, 2018, Applied Physics Laboratory, Laurel, MD, USA.
103. Byrne, P. K., Regensburger, P. V., **Klimczak, C.**, Bohnenstiel, D.R., Hauck, S. A., Dombard, A. J., Hemmingway, D. J., and Vance, S. D.: A porous silicate interior for Enceladus, but limited geological activity at the seafloor of Europa. *Geological Society of America, Annual Meeting*, 2018, vol. 50, no. 6, #90-1, Indianapolis, IN, USA.
102. Byrne P. K., Ghail, R., Şengör, A. M. C., James, P. B., **Klimczak, C.**, and Solomon, S. C.: The globally fragmented, mobile lithosphere of Venus may resemble the permobile regime of Archean Earth. *Geological Society of America, Annual Meeting*, 2018, vol. 50, no. 6, #20-8, Indianapolis, IN, USA.
101. Byrne P. K., Ghail, R., Şengör, A. M. C., James, P. B., **Klimczak, C.**, and Solomon, S. C.: A Globally Fragmented and mobile Lithosphere on Venus. *American Geophysical Union, Fall Meeting*, 2018, Washington, DC, USA.

100. Byrne, P. K., **Klimczak, C.**, Whitten, J. L., Jozwiak, L. M., Denevi, B. W., Vander Kaaden, K. E., McCubbin, F. M., Ostrach, L. R., Rothery, D.A., and Wright J.: Volcanism on Mercury: (Some) Open Questions after MESSENGER. *Mercury: Current and Future Science*, 2018, #6100, Columbia, MD, USA.
99. Byrne, P. K., Regensburger, P. V., **Klimczak, C.**, Bohnenstiel, D.R., Hauck, S. A., Dombard, A. J., and Hemmingway, D. J.: The geology of the rocky interiors of Enceladus, Europa, Titan, and Ganymede. *15th Asia Oceania Geosciences Society Annual Meeting*, 2018, Honolulu, HI, USA.
98. Byrne, P. K., Regensburger, P. V., **Klimczak, C.**, Bohnenstiel, D.R., Hauck, S. A., Dombard, A. J., and Hemmingway, D. J.: The geology of the rocky bodies inside Enceladus, Europa, Titan, and Ganymede. *49th Lunar and Planetary Science Conference*, 2018, #2905, Houston, TX, USA.
97. Byrne P. K., Ghail, R., Şengör, A. M. C., **Klimczak, C.**, Hahn, R. M., James, P. B., and Solomon, S. C.: The lithosphere of Venus has been broken and, in places, mobile. *49th Lunar and Planetary Science Conference*, 2018, #1935, Houston, TX, USA.
96. Crane, K. T., and **Klimczak, C.**: Inside a Wrinkle Ridge: Structural Investigation of an Earth Analogue in the Yakima Fold and Thrust Belt, WA. *Geological Society of America, Annual Meeting*, 2018, vol. 50, no. 6, #67-4, Indianapolis, IN, USA.
95. Jenkins, W. T., **Klimczak C.**, and Crowe, D. E.: Effects of a Blind Strike-Slip Fault System on Hydrothermal Activity and Structure in the Bishop Tuff, CA. *Geological Society of America, Annual Meeting*, 2018, vol. 50, no. 6, #47-17, Indianapolis, IN, USA.
94. **Klimczak, C.**, Kling, C. L., and Byrne, P. K.: Growth and Structural Style of Thrust Systems on Mars. *European Planetary Science Congress*, 2018, Vol. 12, #EPSC2018-197, Berlin, Germany.
93. **Klimczak, C.**, and Byrne, P. K.: Open Questions on the Global Contraction of Mercury. *Mercury: Current and Future Science*, 2018, #6049, Columbia, MD, USA.
92. **Klimczak, C.**, Callihan, M. B., Crane, K. T., Kling, C. L., and Byrne P. K.: Fault Rock Evolution of large Thrust Systems on Mars. *49th Lunar and Planetary Science Conference*, 2018, #1083, Houston, TX, USA.
91. Regensburger, P. V., Byrne, P. K., **Klimczak, C.**, Bohnenstiel, D.R., Hauck, S. A., Dombard, A. J., Hemmingway, D. J., and Vance, S. D.: Limited Prospect for geological Activity at the Seafloors of Europa, Titan, and Ganymede; Enceladus OK. *American Geophysical Union, Fall Meeting*, 2018, Washington, DC, USA.

2017

90. Byrne P. K., and **Klimczak, C.**: The East Kaibab Monocline is a Lobate Scarp on Earth. *European Geosciences Union General Assembly*, 2017, # EGU2017-122, Vienna, Austria.

89. Byrne P. K., Ghail, R., Şengör, A. M. C., **Klimczak, C.**, and Solomon, S. C.: Plate Tectonic-like Motion on Venus. *American Geophysical Union, Fall Meeting*, 2017, New Orleans, LA, USA.
88. Byrne, P. K., Regensburger, P. V., **Klimczak, C.**, Bohnenstiel, D.R., Dombard, A. J., and Hauck, S. A.: An assessment of geological conditions at icy satellite ocean floors. *Geological Society of America, Annual Meeting*, 2017, vol. 49, no. 6, #146-15, Seattle, WA, USA.
87. Byrne P. K., Ghail, R., Şengör, A. M. C., **Klimczak, C.**, and Solomon, S. C.: Block tectonic motion on Venus. *15th Meeting of the Venus Exploration and Analysis Group (VEXAG)*, 2017, Applied Physics Laboratory, Laurel, MD, USA.
86. Byrne P. K., Ghail, R., Şengör, A. M. C., **Klimczak, C.**, and Solomon, S. C.: Lateral Motion of Crustal Blocks has been Widespread on Venus. *48th Lunar and Planetary Science Conference*, 2017, #2708, Houston, TX, USA.
85. Callihan M. B., and **Klimczak, C.**: Growth strategies and fault rock evolution of lunar graben. *Geological Society of America, Annual Meeting*, 2017, vol. 49, no. 6, #25-9, Seattle, WA, USA.
84. Crane, K. T., and **Klimczak, C.**: Tectonic patterns of shortening landforms in Mercury's northern smooth plains. *Geological Society of America, Annual Meeting*, 2017, vol. 49, no. 6, #25-8, Seattle, WA, USA.
83. **Klimczak, C.**, Crane, K. T., Habermann, M.A., and Byrne P. K.: A statistical investigation into the spatial distribution of Mercury's pyroclastic activity. *Geological Society of America, Annual Meeting*, 2017, vol. 49, no. 6, #25-8, Seattle, WA, USA.
82. **Klimczak, C.**, and Byrne P. K., Pit Crater Chains in Craters of the Moon National Monument and Preserve, Idaho, USA. *48th Lunar and Planetary Science Conference*, 2017, #1013, Houston, TX, USA.

2016

81. Anlian, E. Q., **Klimczak, C.**, and Crowe, D. E.: Laramide Thrust Fault-Related Folding Accommodated by Slipped Deformation Bands in Dakota Group Sandstones, Canon City Embayment, Colorado. *Geological Society of America, Annual Meeting*, 2016, vol. 48, no. 7, #25-2, Denver, CO, USA.
80. Byrne P. K., Şengör, A. M. C., Ghail, R., **Klimczak, C.**, and Solomon, S. C.: Substantial Lateral Motions Accompany Tectonic Deformation on Venus. *American Geophysical Union, Fall Meeting*, 2016, San Francisco, CA, USA.
79. Byrne P. K., and **Klimczak, C.**: The East Kaibab Monocline as a Lobate Scarp on Earth. *Geological Society of America, Annual Meeting*, 2016, vol. 48, no. 7, #21-9, Denver, CO, USA.
78. Byrne P. K., **Klimczak, C.**, Şengör, A. M. C., and Solomon, S. C.: Similarities in large-scale tectonic deformation on Venus and Earth. *International Venus Conference 2016*, 2016, Oxford, UK.

77. Byrne P. K., **Klimczak, C.**, and LaFond, J. K.: The East Kaibab Monocline: A Terran Lobate Scarp? *47th Lunar and Planetary Science Conference*, 2016, #1022, Houston, TX, USA.
76. Byrne P.K., Fassett, C. I., **Klimczak, C.**, Ostrach, L. R., Chapman, C. R., Denevi, B. W., Şengör, A. M. C., Hauck, S. A., Evans, A. J., Banks, M. E., Watters, T. R., Head, J. W., and Solomon, S. C.: The interplay between volcanism and tectonism on Mercury. *47th Lunar and Planetary Science Conference*, 2016, #1227, Houston, TX, USA.
75. Callihan M. B., and **Klimczak, C.**: Topographic Expressions of Lunar Graben. *Geological Society of America, Annual Meeting*, 2016, vol. 48, no. 7, #21-10, Denver, CO, USA.
74. Crane, K. T., and **Klimczak, C.**: Timing and Rate of Mercury's Global Contraction. *Geological Society of America, Annual Meeting*, 2016, vol. 48, no. 7, #21-14. 851, Denver, CO, USA.
73. Crane, K. T., and **Klimczak C.**: Testing the timing and rate of global contraction on Mercury against its cratering record. *47th Lunar and Planetary Science Conference*, 2016, #1023, Houston, TX, USA.
72. John, D. L., Walker, S. E., and **Klimczak, C.**: Diagenesis of Exceptionally Preserved Trilobites from the Wheeler Shale. *Geological Society of America, Annual Meeting*, 2016, vol. 48, no. 7, #162-58, Denver, CO, USA.
71. Kling, C. L., and **Klimczak C.**: Displacement-length scaling relationships of large thrust faults on Mars. *47th Lunar and Planetary Science Conference*, 2016, #2888, Houston, TX, USA.
70. Şengör, A. M. C., Acar, D., Özeren, M. S., Ülgen, S. C., Önsel, İ. E., Öner, A. T., Byrne, P. K., **Klimczak, C.**, and Solomon, S. C.: Valles Marineris and the Martian Chasmata as Thermokarstic Poljes. *47th Lunar and Planetary Science Conference*, 2016, #2257, Houston, TX, USA.

2015

69. Banks, M. E., Barlow, N., **Klimczak, C.**, Xiao, Z., Watters, T. R., and Chapman, C. R.: Duration Of Activity On Lobate-Scarp Thrust Faults On Mercury. *6th Planetary Crater Consortium Meeting*, 2015, #1513, Flagstaff, AZ, USA.
68. Byrne P. K., **Klimczak, C.**, Şengör, A. M. C., Hauck, S. A., and Solomon, S. C.: Understanding the Interior Evolution of Mercury from Its Tectonic History, *American Geophysical Union, Fall Meeting*, 2015, P51D-02, San Francisco, CA, USA.
67. Byrne, P. K., Ostrach, L. R., Fassett, C. I., Chapman, C. R., Evans, A. J., **Klimczak, C.**, Banks, M. E., Head, J. W., and Solomon, S. C.: Widespread Plains Volcanism on Mercury Ended by 3.6 Ga, *American Geophysical Union, Fall Meeting*, 2015, P53A-2100, San Francisco, CA, USA.
66. Byrne, P. K., Ostrach, L. R., Denevi, B. W., Chapman, C. R., Fassett, C. I., Whitten, J. L., **Klimczak, C.**, Mazarico, E., Hauck, S. A., Head, J. W., and Solomon, S. C.: Near-synchronous end to global-scale effusive volcanism on

- Mercury. *46th Lunar and Planetary Science Conference*, 2015, #1731, Houston, TX, USA.
65. Habermann, M. A., and **Klimczak, C.**: Tectonic controls on pyroclastic volcanism on Mercury, *American Geophysical Union, Fall Meeting*, 2015, P53A-2101, San Francisco, CA, USA.
 64. **Klimczak, C.**, and Byrne, P. K., Bimodality of pure compaction bands, Buckskin Gulch, Utah, *American Geophysical Union, Fall Meeting*, 2015, MR41D-2679, San Francisco, CA, USA.
 63. **Klimczak, C.**, Byrne, P. K., Banks, M. E., and Solomon, S. C.: Amount, timing, and rate of global contraction on Mercury, *American Geophysical Union, Fall Meeting*, 2015, P41F-06, San Francisco, CA, USA.
 62. **Klimczak, C.**, and Byrne, P. K.: Depth of jointing and the transition to normal faulting in the lithospheres of solid Solar System bodies. *46th Lunar and Planetary Science Conference*, 2015, #1430, Houston, TX, USA.
 61. Kling, C. L., and **Klimczak, C.**: Thrust fault displacement distributions at the Phlegra Montes lobate scarp system, Mars. *46th Lunar and Planetary Science Conference*, 2015, #1557, Houston, TX, USA.
 60. Watters, T. R., Solomon, S. C., Daud, K. E., Banks, M. E., Selvens, M. M., Robinson, M. S., Murchie, S. L., Chabot, N. L., Denevi, B. W., Ernst, C. M., Chapman, C. R., Fassett, C. I., **Klimczak, C.**, Byrne, P. K., and Blewett, D. T.: Small Fault Scarps on Mercury Revealed in Low-Altitude MESSENGER Images. *46th Lunar and Planetary Science Conference*, 2015, #2240, Houston, TX, USA.

2014

59. Banks, M. E., **Klimczak, C.**, Xiao, Z., Watters, T. R., Strom, R. G., Braden, S. E., Chapman, C. R., Solomon, S. C., and Byrne, P. K.: Duration of activity on lobate scarp thrust faults on Mercury. *45th Lunar and Planetary Science Conference*, 2014, #2722, Houston, TX, USA.
58. Byrne, P. K., **Klimczak, C.**, Solomon, S. C., Mazarico, E., Neumann, G. A., and Zuber, M. T.: Deep-Seated Contractional Tectonics in Mare Crisium, the Moon. *45th Lunar and Planetary Science Conference*, 2014, #2396, Houston, TX, USA.
57. Byrne, P. K., **Klimczak, C.**, Şengör, A. M. C., Solomon, S. C., Watters, T. R., Hauck S. A.: The Global Contraction of Mercury. *45th Lunar and Planetary Science Conference*, 2014, #2525, Houston, TX, USA.
56. Byrne, P. K., **Klimczak, C.**, McGovern, P. J., Mazarico, E., James, P. B., Neumann, G. A., Zuber, M. T., and Solomon, S. C.: Deep-seated reverse faults in Mare Crisium, the Moon. *American Geophysical Union, Fall Meeting*, 2014, P34C-04, San Francisco, CA, USA.
55. **Klimczak, C.**, Byrne, P. K., and Solomon, S. C.: Limits on the Brittle Strength of Planetary Lithospheres Undergoing Global Contraction. *45th Lunar and Planetary Science Conference*, 2014, #1542, Houston, TX, USA.

54. **Klimczak, C.**, Byrne, P. K., and Solomon, S. C.: Mercury's global fabric of thrust faults. *American Geophysical Union, Fall Meeting*, 2014, P21C-3940 San Francisco, CA, USA.
53. Watters, T. R., Solomon, S. C., Daud, K. E., Banks, M. E., Selvans, M. M., Robinson, M. S., Murchie, S. L., Chabot, N. L., Denevi, B. W., Ernst, C. M., Chapman, C. R., Fassett, C. I., **Klimczak, C.**, Byrne, P. K., and Blewett, D. T.: Small Fault Scarps on Mercury Detected in Low-Altitude MESSENGER Images. *American Geophysical Union, Fall Meeting*, 2014, P21C-3942, San Francisco, CA, USA.

2013

52. Balcerski, J. A., Hauck, S. A., Sun, P., **Klimczak, C.**, Byrne, P. K., Phillips, R. J., and Solomon, S. C.: New Constraints on Timing and Mechanisms of Regional Tectonism from Mercury's Tilted Craters. *44th Lunar and Planetary Science Conference*, 2013, p. 2444, Houston, TX, USA.
51. Banks, M. E., Watters, T. R., Robinson, M. S., Williams, N. R., Walsh, L. S., Daud, K., **Klimczak, C.**, Burns, K., Mattson, S., Ojha, L., and Gizzi, N.: Displacement-Length Relationship of Thrust Faults Associated with Lobate Scarps on the Moon. *44th Lunar and Planetary Science Conference*, 2013, p. 3042, Houston, TX, USA.
50. Byrne, P. K., **Klimczak, C.**, Blair, D. M., Ferrari, S., Solomon, S. C., Freed, A. M., Watters, T. R., and Murchie, S. L.: Tectonic Complexity Within Volcanically Infilled Craters and Basins on Mercury. *44th Lunar and Planetary Science Conference*, 2013, p. 1261, Houston, TX, USA.
49. Byrne, P. K., **Klimczak, C.**, Blair, D. M., Balcerski, J. A., Solomon, S. C., Denevi, B. W., Hauck II, S. A., and Perry, M. E.: The origin of Mercury's northern volcanic plains. *Geological Society of America, Annual Meeting*, 2013, vol. 45, no. 7, p. 851, Denver, CO, USA.
48. Byrne, P. K., **Klimczak, C.**, and Solomon, S. C.: Investigating the Tectonics of Mare Crisium with Topographic Data. *American Geophysical Union, Fall Meeting*, 2013, P23E-1832, San Francisco, CA, USA.
47. Byrne, P. K.; **Klimczak, C.**; Blair, D. M., Ferrari, S.; Solomon, S. C., Freed, A. M., Watters, T. R., and Murchie, S. L.: Tectonic Complexity within Volcanically Infilled Impact Features on Mercury. *European Geosciences Union, General Assembly*, 2013, p. 2173, Vienna, Austria.
46. Ernst, C. M., Denevi, B. W., Murchie, S. L., Barnouin, O. S., Chabot, N. L., Head, J. W., **Klimczak, C.**, Neumann, G. A., Prockter, L. M., Robinson, M. S., Solomon, S. C., and Watters, T. R.: Volcanic Plains in Caloris Basin: Thickness, Timing, and What Lies Beneath. *Lunar and Planetary Science Conference*, 2013, p. 2364, Houston, TX, USA.
45. Ferrari, S., Massironi, M., Marchi, S., Byrne, P. K., **Klimczak, C.**, and Cremonese, G.: Age Relations of the Rembrandt Basin and Scarp System,

- Mercury. *44th Lunar and Planetary Science Conference*, 2013, p. 2102, Houston, TX, USA.
44. Ferrari, S., Massironi, M., Marchi, S., Byrne, P. K., **Klimczak, C.**, and Cremonese, G.: MPF model ages of the Rembrandt basin and scarp system, Mercury. *European Geosciences Union, General Assembly*, 2013, p. 13175, Vienna, Austria.
 43. **Klimczak, C.**: Igneous dikes on the Moon: Evidence from Lunar Orbiter Laser Altimeter topography. *44th Lunar and Planetary Science Conference*, 2013, #1391, Houston, TX, USA.
 42. **Klimczak, C.**, Byrne, P. K., Solomon, S. C., Nimmo, F., Watters, T. R., Denevi, B. W., Ernst, C. M., and Banks, M. E.: The role of thrust faults as conduits for volatiles on Mercury. *44th Lunar and Planetary Science Conference*, 2013, #1390, Houston, TX, USA.
 41. **Klimczak, C.** and Schultz, R. A.: Regional joints and the occurrence of oriented arches in Arches National Park, Utah. *Geological Society of America, Annual Meeting*, 2013, vol. 45, no. 7, p.546, Denver, CO, USA.
 40. **Klimczak, C.**, Byrne, P. K., Banks, M. E., Solomon, S. C., Fassett, C. I., Ostrach, L. R., Ferrari, S., Denevi, B. W., Ernst, C. M., and Preusker, F.: The relative timing of global contraction and plains volcanism on Mercury. Invited presentation at the *Geological Society of America, Annual Meeting*, 2013, vol. 45, no. 7, p.295, Denver, CO, USA.
 39. **Klimczak, C.**, Byrne, P. K., and Solomon, S. C.: Flood volcanism on a contracting planet: Insights from Mercury and the Moon. American Geophysical Union, Fall Meeting, 2013, P13A-1738, San Francisco, CA, USA.
 38. **Klimczak, C.**, and Byrne, P. K.: The prospect of diking on the Moon and Mercury. Invited presentation at the *American Geophysical Union, Fall Meeting*, 2013, P23B-03, San Francisco, CA, USA.
 37. Solomon, S. C., Byrne, P. K., **Klimczak, C.**, Şengör, A. M. C., Watters, T. R., and Hauck II, S. A.: Geological Evidence that Mercury Contracted by more than Previously Recognized. *American Geophysical Union, Fall Meeting*, 2013, P11A-08, San Francisco, CA, USA.
 36. Watters, T. R., Solomon, S. C., **Klimczak, C.**, Selvans, M. M., Walsh, L. S., Banks, M. E., Byrne, P. K., Denevi, B. W., Ernst, C. M., Murchie, S. L., Oberst, J., Preusker, F., Hauck, S. A., Zuber, M. T., and Phillips, R. J.: Distribution of Prominent Lobate Scarps on Mercury: Contribution to Global Radial Contraction. *44th Lunar and Planetary Science Conference*, 2013, p. 2213, Houston, TX, USA.

2012

35. Byrne, P. K., Denevi, B. W., **Klimczak, C.**, Prockter, L. M., Solomon, S. C., Whitten, J. L., and Head, J. W.: Older smooth plains on Mercury obscured by impact features. *American Geophysical Union, Fall Meeting*, 2012, P33B-1943, San Francisco, CA, USA.

34. Byrne, P. K., **Klimczak, C.**, Solomon, S. C., Watters, T. R., and Murchie, S. L.: Tectonic structural complexity in Caloris basin, Mercury. *European Planetary Science Congress*, 2012, p. 765, Madrid, Spain.
33. Byrne, P. K., Watters, T. R., Murchie, S. L., **Klimczak, C.**, Solomon, S. C., Prockter, L. M., and Freed, A. M.: A tectonic survey of the Caloris basin, Mercury, *43rd Lunar and Planetary Science Conference*, 2012, p. 1722, Houston, TX, USA.
32. Byrne, P. K., Şengör, A. M. C., **Klimczak, C.**, Solomon, S. C., and Watters, T. R.: Large-scale crustal deformation on Mercury. *43rd Lunar and Planetary Science Conference*, 2012, p. 2118, Houston, TX, USA.
31. Balcerski, J. A., Hauck, II, S. A., Sun, P., **Klimczak, C.**, Byrne, P. K., Dombard, A. J., Barnouin, O. S., Zuber, M. T., Phillips, R. J., and Solomon, S. C.: Tilted crater floors: Recording the history of Mercury's long-wavelength deformation. *43rd Lunar and Planetary Science Conference*, 2012, p. 1850, Houston, TX, USA.
30. Blair, D. M., Freed, A. M., Byrne, P. K., **Klimczak, C.**, Solomon, S. C., Watters, T. R., Prockter, L. M., Melosh, H. J., and Zuber, M. T.: Thermally induced graben in peak-ring basins and ghost craters on Mercury. *43rd Lunar and Planetary Science Conference*, p. 2501, Houston, TX, USA.
29. Ferrari, S., Massironi, M., **Klimczak, C.**, Byrne, P. K., Cremonese, G., and Solomon, S. C.: Complex history of the Rembrandt basin and scarp system, Mercury. *European Planetary Science Congress*, 2012, p. 874, Madrid, Spain.
28. Head, J. W., Solomon, S. C., Fassett, C. I., Murchie, S. L., Prockter, L. M., Robinson, M. S., Blewett, D. T., Denevi, B. W., Watters, T. R., Whitten, J. L., Goudge, T. A., Baker, D. M., Hurwitz, D. M., Byrne, P. K., and **Klimczak, C.**: Effusive volcanism on Mercury from MESSENGER mission data: Nature and significance for lithospheric stress state and mantle convection. *43rd Lunar and Planetary Science Conference*, 2012, p. 1451, Houston, TX, USA.
27. **Klimczak, C.**, Ernst, C. M., Byrne, P. K., Solomon, S. C., and Watters, T. R.: Fault Restriction in the Caloris Smooth Plains: Implications for Mechanical Stratigraphy. *43rd Lunar and Planetary Science Conference*, 2012, #1659, Houston, TX, USA.
26. **Klimczak, C.**, Byrne, P. K., Solomon, S. C., Ernst, C. M., and Watters, T. R.: Long-wavelength topographic change in the Caloris basin, Mercury. *European Planetary Science Congress*, 2012, #751, Madrid, Spain.
25. **Klimczak, C.**, Byrne, P. K., Solomon, S. C., Ernst, C. M., and Watters, T. R., Murchie, S. L., Preusker, F., and Oberst, J.: Long-wavelength Folding on Mercury: Lithospheric Boudinage in the Caloris Basin? *American Geophysical Union, Fall Meeting*, 2012, P33B-1944, San Francisco, CA, USA.
24. Solomon, S. C., **Klimczak, C.**, Byrne, P. K., Hauck, II, S. A., Balcerski, J. A., Dombard, A. J., Zuber, M. T., Smith, D. E., Phillips, R. J., Head, J. W., and Watters, T. R.: Long-wavelength topographic change on Mercury: Evidence and mechanisms. *43rd Lunar and Planetary Science Conference*, 2012, p. 1578, Houston, TX, USA.
23. Watters, T. R., Solomon, S. C., Robinson, M. S., Head, J. W., Strom, R. G., **Klimczak, C.**, Byrne, P. K., Enns, A. C., Ernst, C. M., Prockter, L. M., Murchie,

S. L., Oberst, J., Preusker, F., Zuber, M. T., Hauck, II, S. A., and Phillips, R. J.: Tectonic features on Mercury: An orbital view with MESSENGER. *43rd Lunar and Planetary Science Conference*, 2012, p. 2121, Houston, TX, USA.

2011

22. Byrne, P. K., **Klimczak, C.**, Denevi, B. W., Solomon, S. C., Nittler, L. R., Watters, T. R., Enns, A. C., Head, J. W., Hurwitz, D. M., and Baker, D. M.: Analysis of surface volcanism on Mercury. *American Geophysical Union, Fall Meeting*, 2011, P41A-1590, San Francisco, CA, USA.
21. Byrne, P. K., **Klimczak, C.**, Denevi, B. W., Watters, T. R., Solomon, S. C., Enns, A. C., Head, J. W., Hurwitz, D. M., and Baker, D. M.: Surface lava flow features on Mercury. *Geological Society of America, Annual Meeting*, 2011, vol. 43, no. 5, p.358, Minneapolis, MN, USA.
20. Ernst, C. M., Murchie, S. L., Barnouin, O. S., Chabot, N. L., Denevi, B. W., Head, J. W., **Klimczak, C.**, Prockter, L. M., Solomon, S. C., and Watters, T. R.: Assessing the Crustal Stratigraphy of Mercury: Results from MESSENGER Orbital Observations. *American Geophysical Union, Fall Meeting*, 2011, P43E-08, San Francisco, CA, USA.
19. Fassett, C. I., Denevi, B. W., Whitten, J. L., Goudge, T. A., Baker, D. M., Hurwitz, D. M., Ostrach, L. R., Xiao, Z., Byrne, P. K., and **Klimczak, C.**: Widespread and voluminous flood volcanism in the northern lowlands of Mercury revealed by MESSENGER. *Geological Society of America, Annual Meeting*, 2011, vol. 43, no. 5, p. 358, Minneapolis, MN, USA.
18. Head, J. W., III, Solomon, S. C., Fassett, C. I., Murchie, S. L., Prockter, L. M., Blewett, D. T., Denevi, B. W., Watters, T. R., Strom, R. G., Chapman, C. R., Gillis-Davis, J. J., Zuber, M. T., Smith, D. E., Oberst, J., Gwinner, K., Ernst, C. M., Ostrach, L. R., Byrne, P. K., **Klimczak, C.**, and Xiao, Z.: Effusive and Explosive Volcanism on Mercury from MESSENGER Orbital Observations, *European Geosciences Union, General Assembly*, 2011, p. 9925, Vienna, Austria.
17. Head, J. W., Chapman, C. R., Strom, R. G., Fassett, C. I., Denevi, B. W., Blewett, D. T., Ernst, C. M., Watters, T. R., Solomon, S. C., Murchie, S. L., Prockter, L. M., Chabot, N. L., Gillis-Davis, J. J., Whitten, J. L., Goudge, T. A., Baker, D. M., Hurwitz, D. M., Ostrach, L. R., Xiao, Z., Merline, W. J., Kerber, L. A., Dickson, J. L., Oberst, J., Byrne, P. K., **Klimczak, C.**, and Nittler, L. R.: Widespread and voluminous flood volcanism in the northern high latitudes of Mercury revealed by MESSENGER: Relation to global volcanic processes. *American Geophysical Union, Fall Meeting*, 2011, P43E-10, San Francisco, CA, USA.
16. Hurwitz, D. M., Head, J. W., Zuber, M. T., Smith, D. E., Neumann, G. A., Strom, R. G., Fassett, C. I., Denevi, B. W., Blewett, D. T., Ernst, C. M., Watters, T. R., Solomon, S. C., Byrne, P. K., **Klimczak, C.**, Murchie, S. L., Prockter, L. M., Chabot, N. L., Gillis-Davis, J. J., Whitten, J. L., Goudge, T. A., Baker, D. M., Ostrach, L. R., Xiao, Z., Merline, W. J., Dickson, J. L., Oberst, J., and Nittler, L. R.: Lava erosion on Mercury: Model results using new observations

from MESSENGER. *American Geophysical Union, Fall Meeting*, 2011, P41A-1591, San Francisco, CA, USA.

15. **Klimczak, C.**, Soliva, R., Schultz, R. A., and Chery, J.: Growth of deformation bands in a multilayer sequence: Orange quarry, France. *European Geosciences Union, General Assembly*, 2011, #EGU2011-4872, Vienna, Austria.
14. **Klimczak, C.**, Watters, T. R., Byrne, P. K., Ernst, C. M., Solomon, S. C., Goudge, T. A., Head, J. W., and Xiao, Z.: Strain analysis of extension in volcanically flooded impact craters on Mercury. *Geological Society of America, Annual Meeting*, 2011, vol. 43, no. 5, p. 359, Minneapolis, MN, USA.
13. **Klimczak, C.** and Schultz, R. A.: Compactional shear bands in dilational sands and soils. *American Geophysical Union, Fall Meeting*, 2011, T33C-2426, San Francisco, CA, USA.
12. Watters, T. R., Solomon, S. C., Head, J. W., Ernst, C. M., Denevi, B. W., Robinson, M. S., **Klimczak, C.**, and Goudge, T. A.: Extension in the northern plains of Mercury. *Geological Society of America, Annual Meeting*, 2011, vol. 43, no. 5, p. 358, Minneapolis, MN, USA.
11. Watters, T. R., Byrne, P. K., **Klimczak, C.**, Enns, A. C., Banks, M. E., Walsh, L. S., Ernst, C. M., Robinson, M. S., Gillis-Davis, J. J., Solomon, S. C., Strom, R. G., and Gwinner, K.: The Tectonics of Mercury: The View from Orbit. *American Geophysical Union, Fall Meeting*, 2011, P41A-1593, San Francisco, CA, USA.

2010

10. **Klimczak, C.**, Soliva, R., Schultz, R. A., Chery, J., and Summerson, I.: Growth of deformation bands in a multilayer sequence. *American Geophysical Union Fall Meeting*, 2010, T41B-2130, San Francisco, CA, USA.

2009

9. **Klimczak, C.**, Nahm, A. L., and Schultz, R. A.: Evaluation of the Origin Hypotheses of Pantheon Fossae, Mercury. *40th Lunar and Planetary Science Conference*, 2009, #1251, Houston, TX, USA.
8. **Klimczak, C.** and Schultz, R. A.: Strain localization in porous sandstone associated with the Northern Harz Mountains Border Fault, Germany. *American Geophysical Union Fall Meeting*, 2009, T43A-2050, San Francisco, CA, USA.

2008

7. **Klimczak, C.**, Wittek, A., Doman, D., and Riller, U.: Heterogeneous fabric development in the Onaping Formation and the Sudbury Igneous Complex as indications for a fold origin of the NE-lobe of the Sudbury basin, Canada. *39th Lunar and Planetary Science Conference*, 2008, #1391, Houston, TX, USA.

6. **Klimczak, C.** and Schultz, R. A.: Cubic law for fluid flow becomes quintic: An extension of the parallel plate model to natural fracture sets. *Marie Curie Summer School – Knowledge Based Materials (Aqueous and Porous Materials)*, 2008, Třešt, Czech Republic.
5. **Klimczak, C.**, Schultz R. A., Parasar, R., and Reeves, D. M.: The Cubic Law Re-evaluated: Quintic Law for Joint Sets. American Geophysical Union Fall Meeting, 2008, H31B-0832, San Francisco, CA, USA.

2007 and before

4. **Klimczak, C.** and Riller, U.: Deformation of the Onaping Formation in the NE-lobe of the Sudbury Igneous Complex, Canada: Evidence for fold adjustment flow in the core of a km-scale fold. *11. Symposium “Tektonik, Struktur- und Kristallingeologie”*, 2006, Göttingen, Germany.
3. **Klimczak, C.** and Riller, U.: Fold-origin of the Sudbury Igneous Complex, Canada: Fold-adjustment flow in the core of its NE-lobe. IODP-ICDP Kolloquium, 2006, Greifswald, Germany.
2. **Klimczak, C.**, Wittek, A., Doman D., and Riller, U.: Deformation of the Onaping Formation: Mechanisms of orogenic folding of the central Sudbury Impact Structure, Canada. *Impact craters as indicators for planetary environmental evolution and astrobiology conference*, 2006, Lockne, Sweden.
1. Grieve, R., Riller U., and **Klimczak, C.**: Potential new constraints on deformation at the Sudbury Structure, Canada. *15th Deformation Mechanisms, Rheology and Tectonics*, 2005, Zurich, Switzerland.