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# **Piecing together the collisional history of the irregular moons of Saturn with the help of 64 new discoveries**

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Over three oppositions from 2019-2021, we imaged roughly 1 square-degree regions both east and west of Saturn using the MegaPrime imager on the Canada-France-Hawaii Telescope. By shifting and stacking 44 sequential images taken over 3-hour time spans we were able to detect objects down to w-band magnitude of roughly 26.5 (although a few tenths of a magnitude shallower when for regions within 10 arcmin of the planet). After painstakingly linking those detections between the 3 different oppositions, we were able to identify and permit the publication of 64 additional irregular moons of Saturn. With these discoveries the number of known irregular moons of Saturn has more than doubled, going from 58 to 122 moons with known orbits. Using the increase in the number saturnian irregulars, we are able to see greater details in the orbital distribution of the moons. Thus providing new clues to the collisional history of the saturnian irregular moon system, like a potential recent collision involving a sub-population of the Norse group.