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VISIBLE SPIRALS ASSOCIATED WITH POSTNOON UV 'BRIGHT SPOTS' AURORA

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'Bright spots' is an auroral feature well observed on postnoon auroral oval by satellite UV imageries. Because of strong atmospheric absorption on UV emissions, however, UV 'bright spots' cannot be directly observed on the ground. All sky images obtained at Zhongshan in the Antarctic have been used to study the conjugate visible features of 'bright spots' aurora in Polar UV images covering the northern oval. Two case studies shown for the first time that bright spots in satellite UVI might be associated with spirals along a bright arc aurora in all sky images. Ground observation on aurora spirals with high temporal and spatial resolution camera allowed us to clarify that bright spots might be of the scale of 10-100 km and last for less than 1 minute. Investigation with all-sky images indicates that UV bright spots might display same rotation sense as aurora spirals do, namely, counter-clockwise in magnetic field direction.