

# Deep Space Exploration Society

## Radio Jove Observation Results August 2016

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### **Antenna Setup:**

The antenna was updated this month. The configuration is:

- Dual dipole East-West oriented
- 20 ft. height
- 135 degree phased on the south dipole

### **Observation Methodology:**

The observations were conducted at the Plishner Radio Astronomy and Science Center near Haswell, Colorado. This is a radio quiet zone, however, there was much activity on Saturdays at the site with work parties, therefore readings during these days should be discounted.

The results will consider times that Jupiter is above the horizon also eliminate times when the Sun was also above the horizon.

Radio Jupiter Pro is used as the prediction tool for the analysis. A good detection will be defined when there is a signal that correlates with the Radio Jupiter Pro prediction and is not during a time when the Sun is up. Detections that happen that are not predicted by Radio Jupiter Pro will be flagged.

## **Summary:**

There was only about an hour this month when Jupiter was visible after sunset. There were few detections during this time.

Significant noise was also present that may be from the lightning storms during the evenings.

The radio jove results will be compared with the SuperSIDS data to see if there is any correlation with solar activity.

The following dates had some activity this month:

**August 13, 2016:** Possible IO-A at 0230Z

**August 17, 2016:** Possible transient at 0140Z

**August 18, 2016:** Possible IO-A detection 0130z

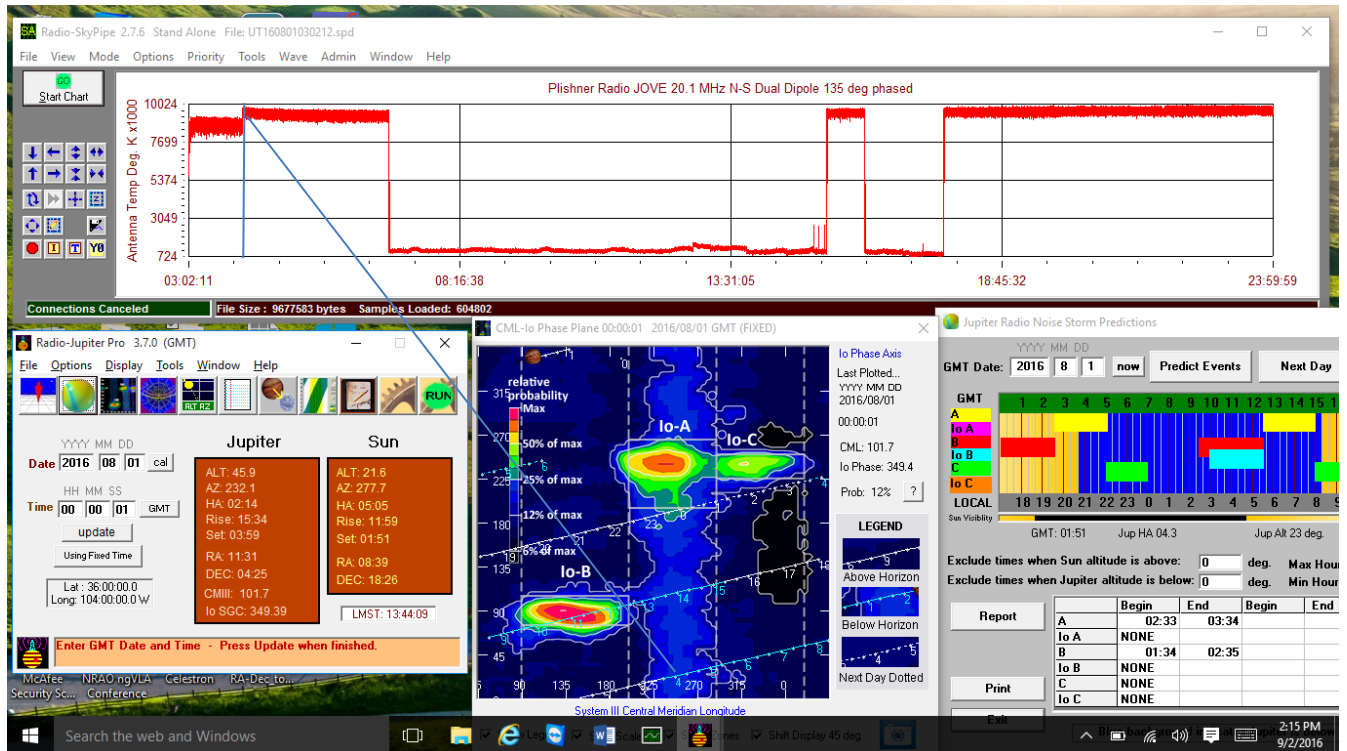
**August 19, 2016:** Possible non-IO C from 0230z to 0300z

**August 20, 2016:** Appears to be a significant non-IO B burst between 0130z to 0300z

## Observations:

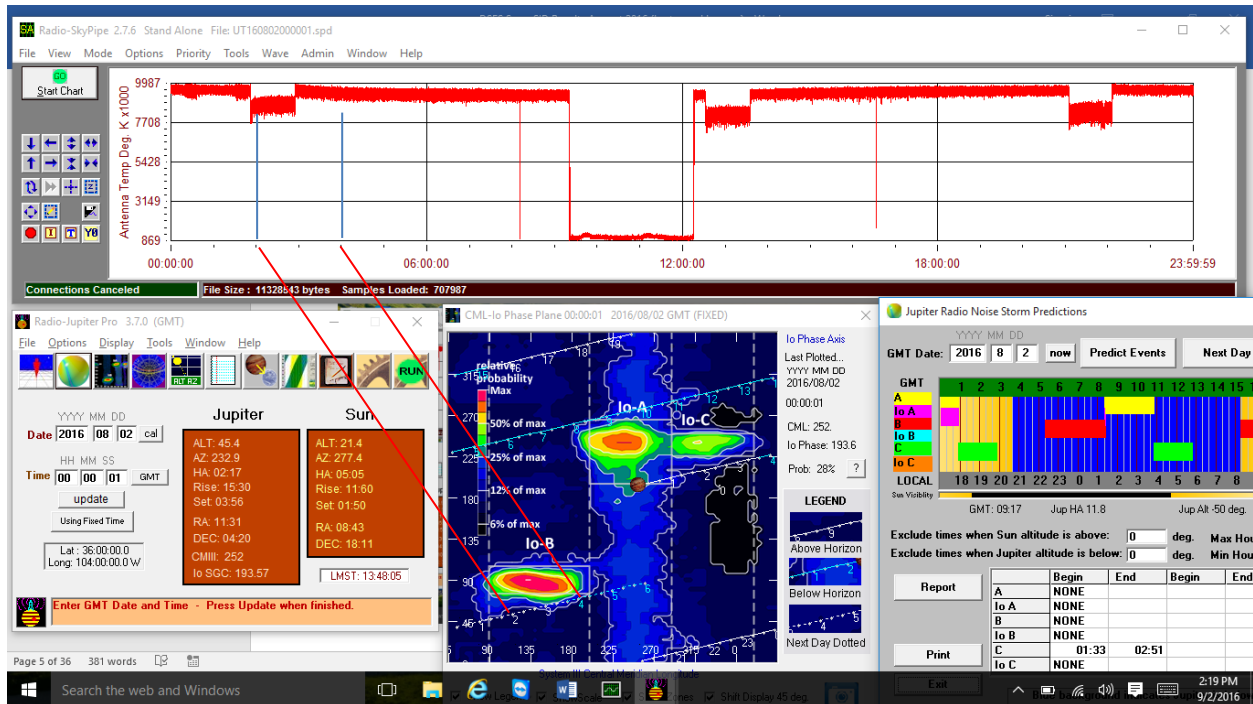
August 1, 2016

Results: No detected activity during Jupiter only visibility



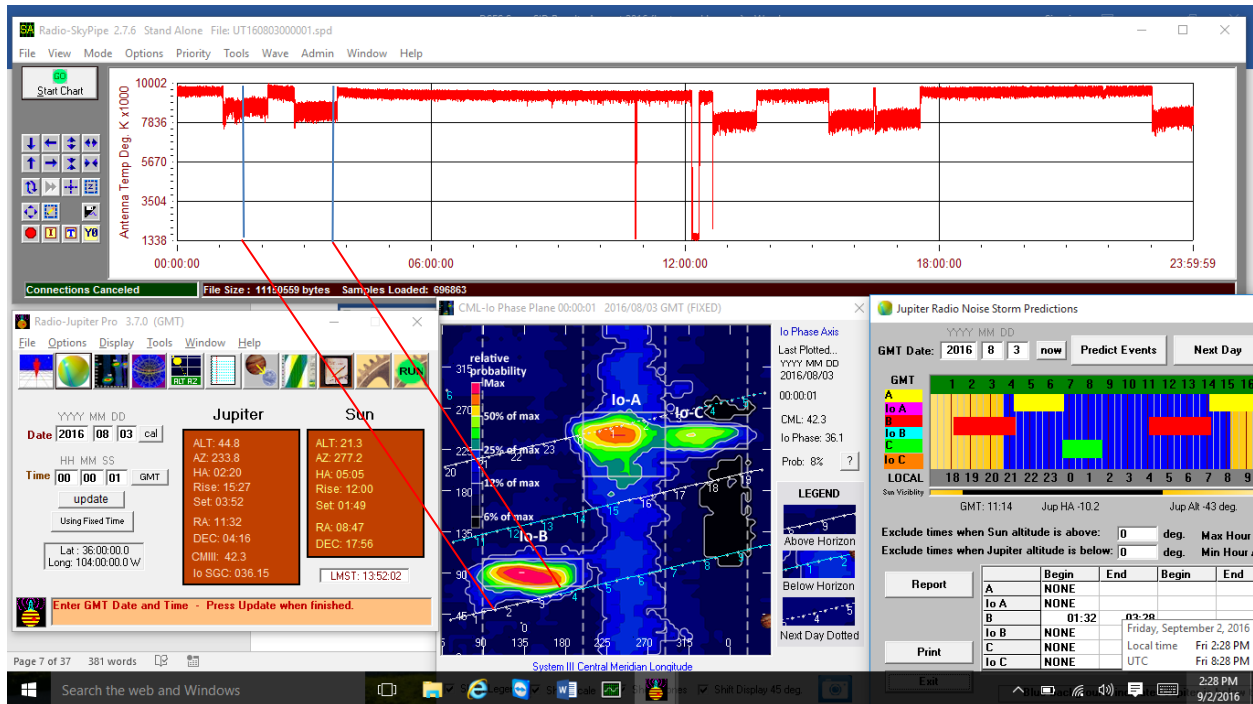
August 2, 2016

Results: No detection noted



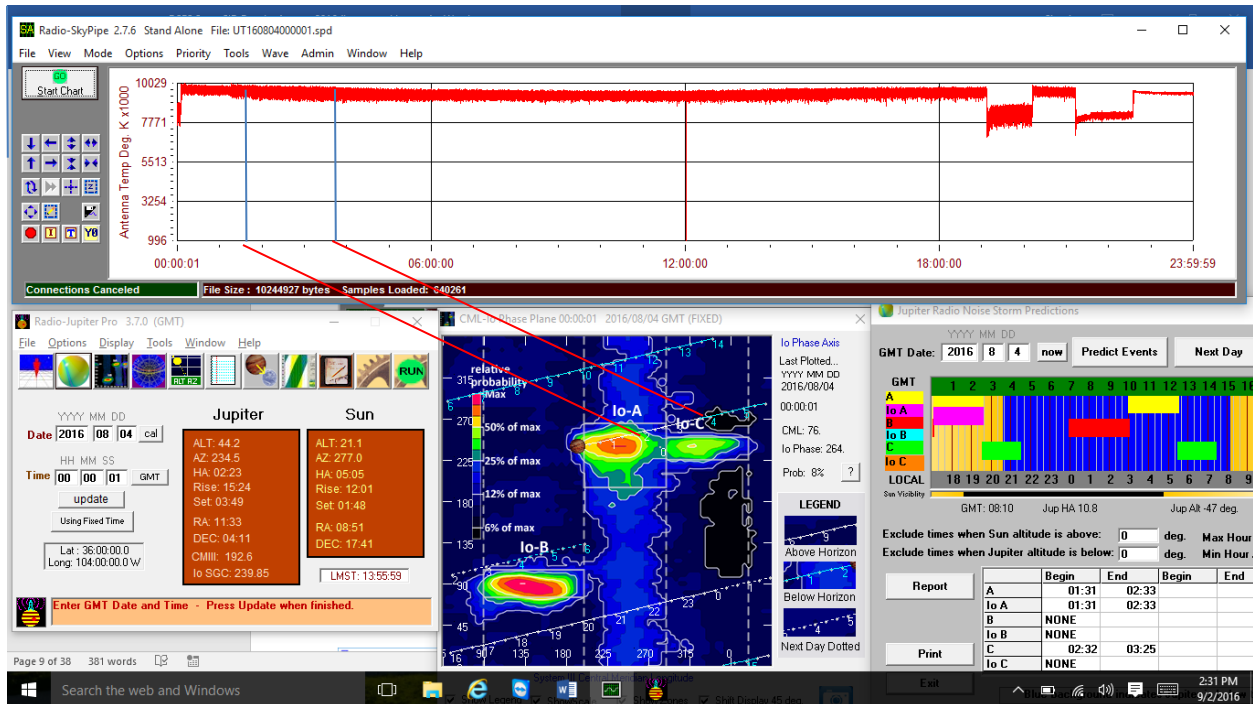
August 3, 2016

Results: No detection noted



August 4, 2016

Results: No Jupiter activity noted today

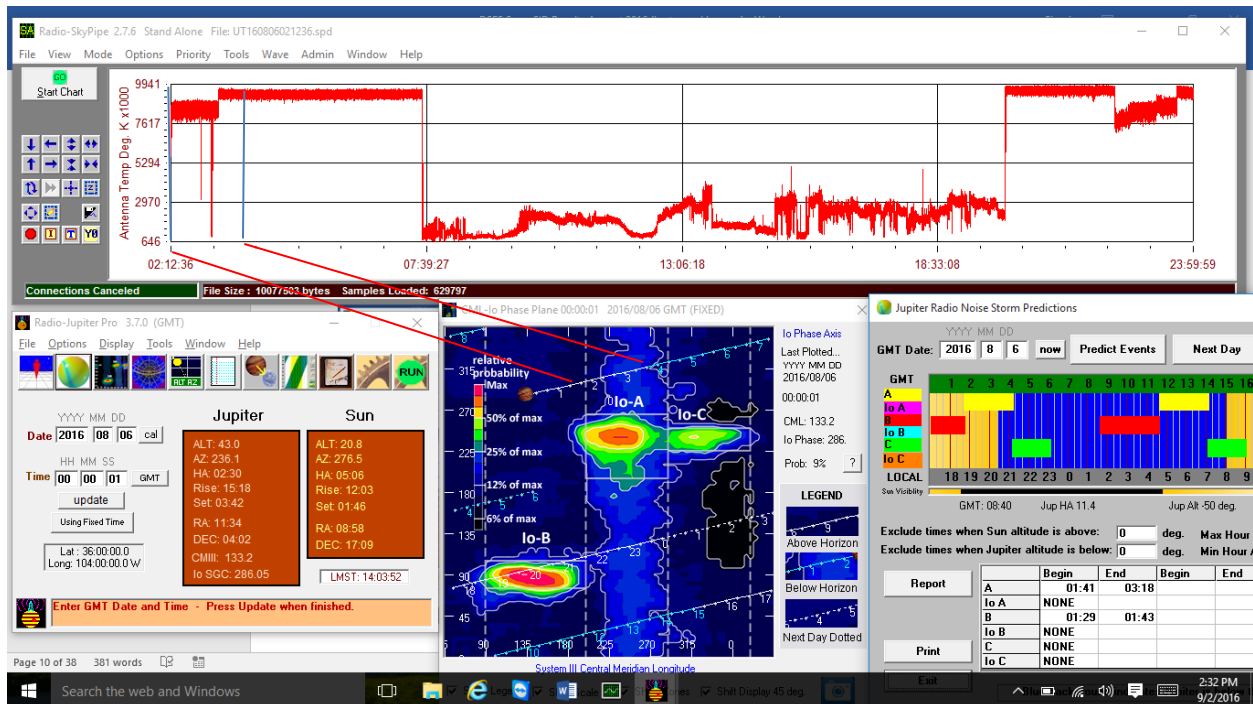


August 5, 2016

Results: System Shutdown

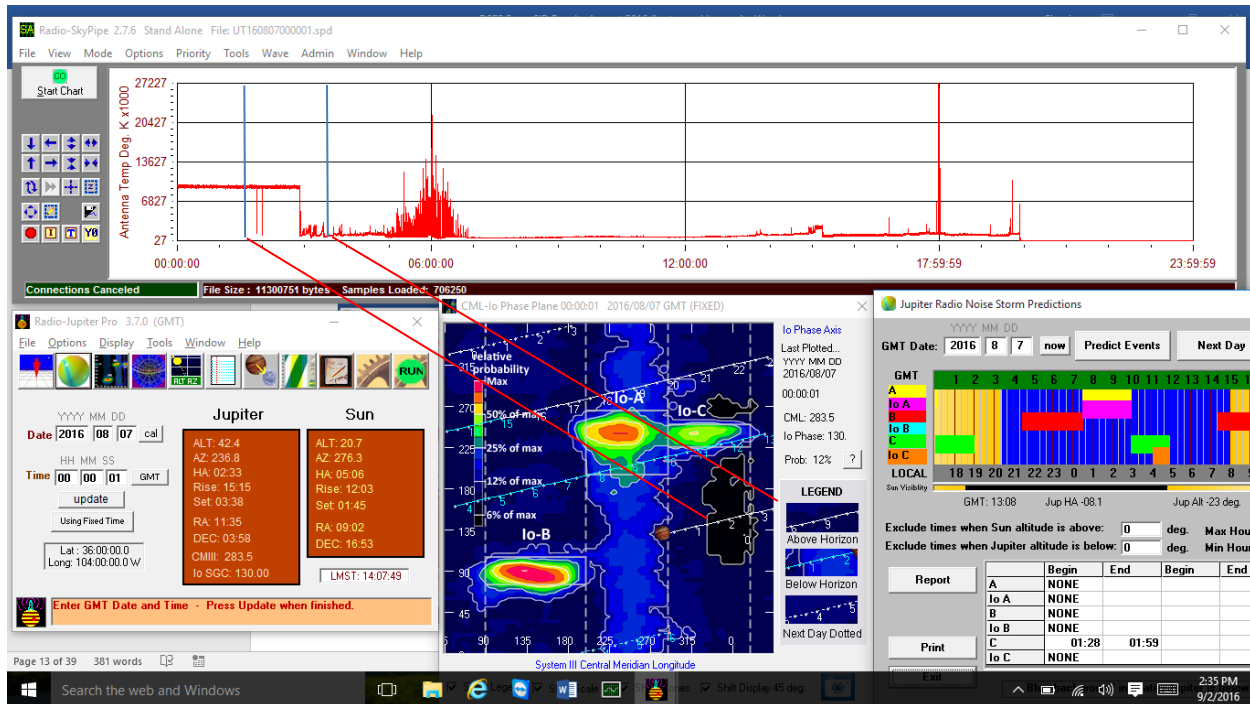
August 6, 2016

Results: No detections noted



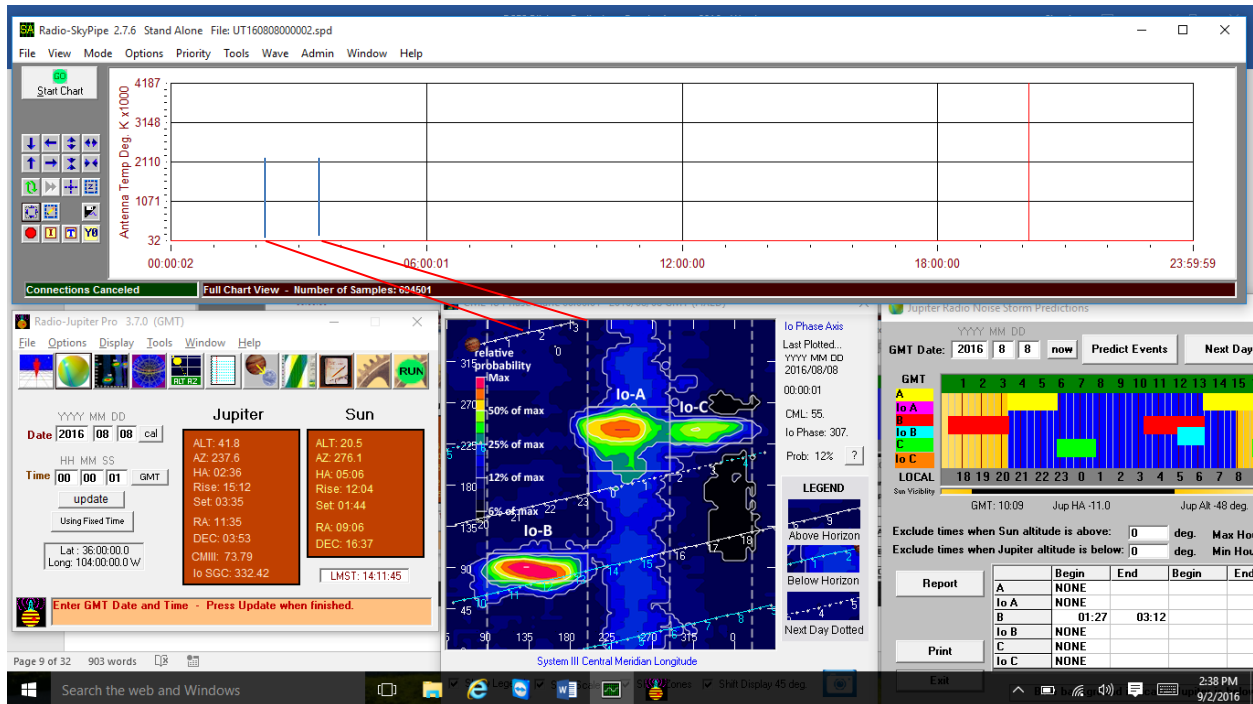
August 7, 2016

Results: No detectable Jupiter output



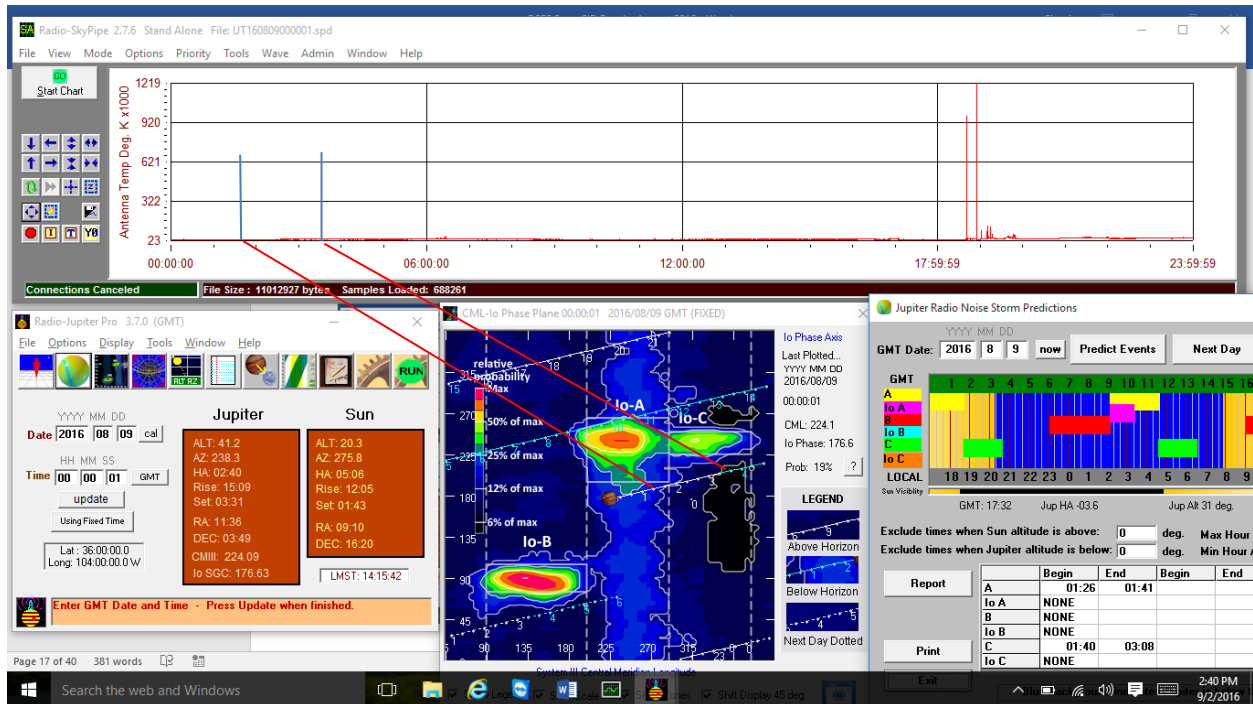
August 8, 2016

**Results:** No detectable Jupiter output – possible receiver problem



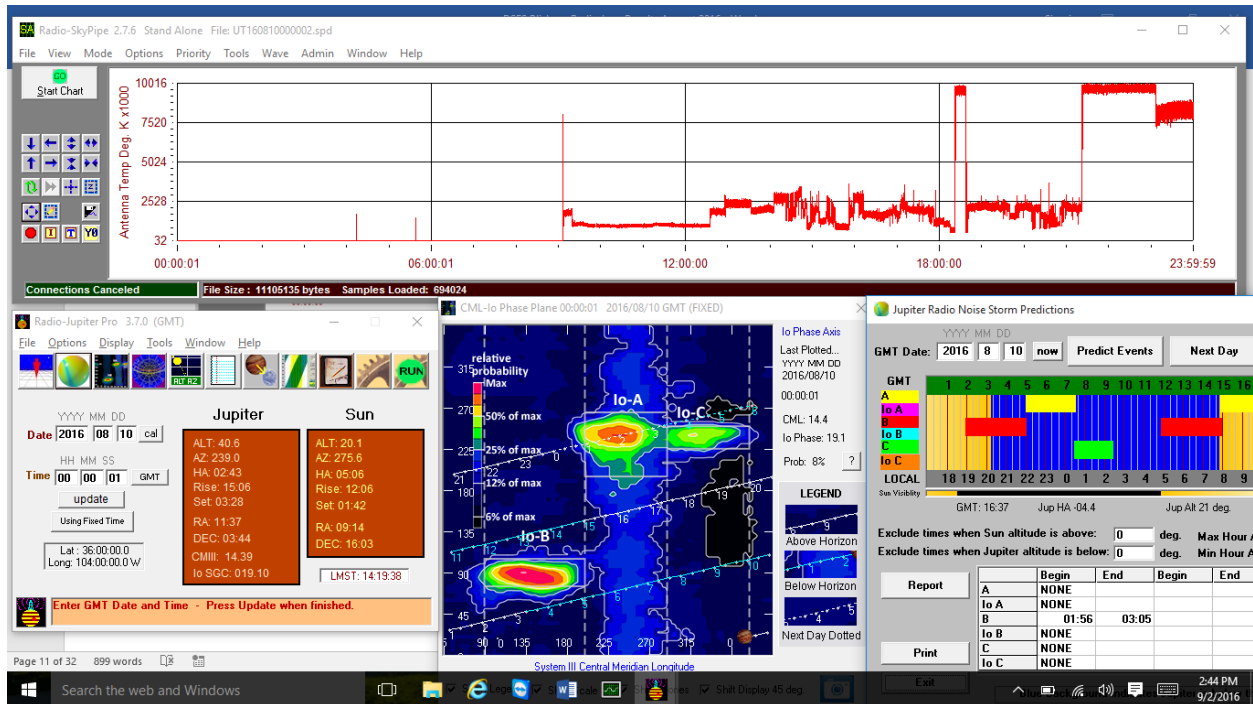
August 9, 2016

Results: No detectable Jupiter output – possible receiver problem



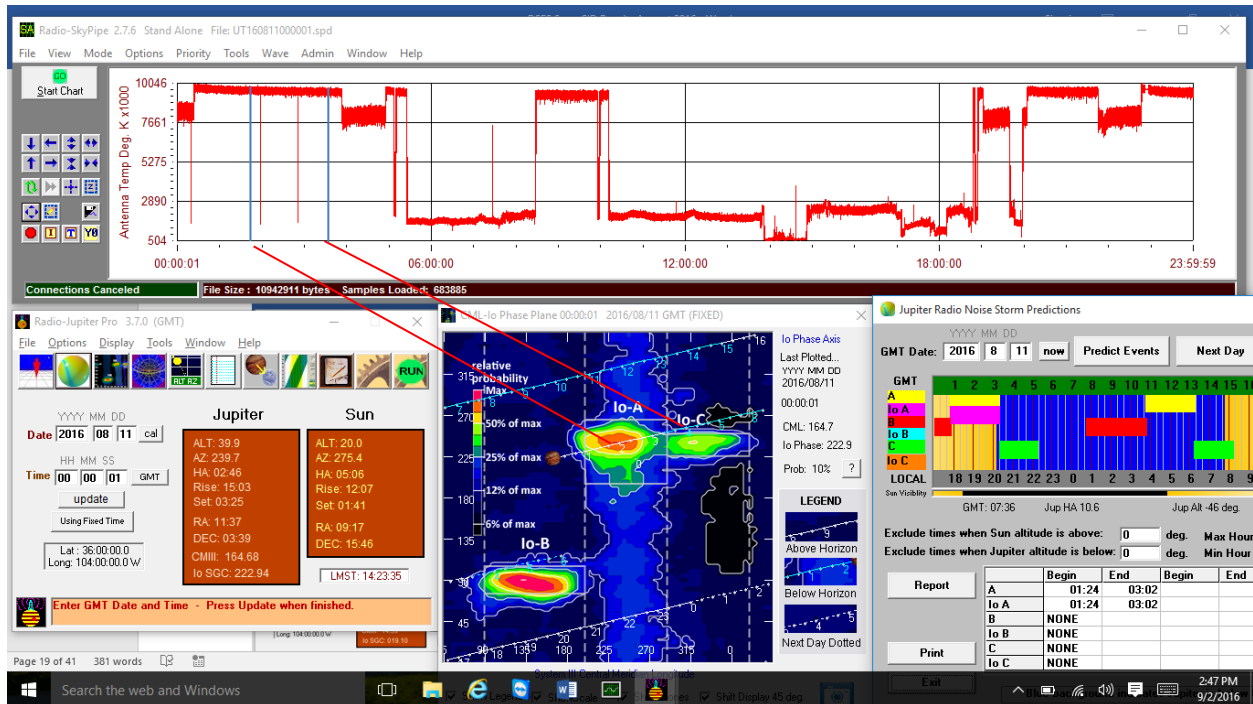
August 10, 2016

Results: No detections noted - Receiver active after 0900Z



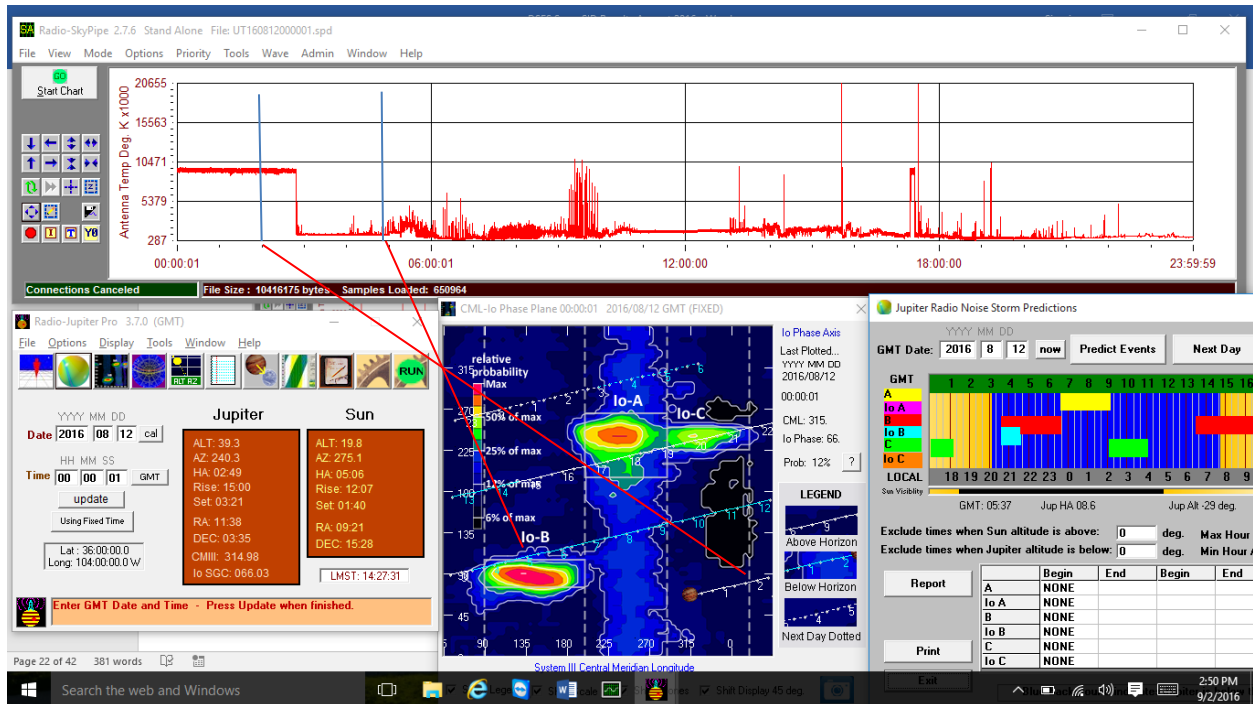
August 11, 2016

Results: No detectable Jupiter output



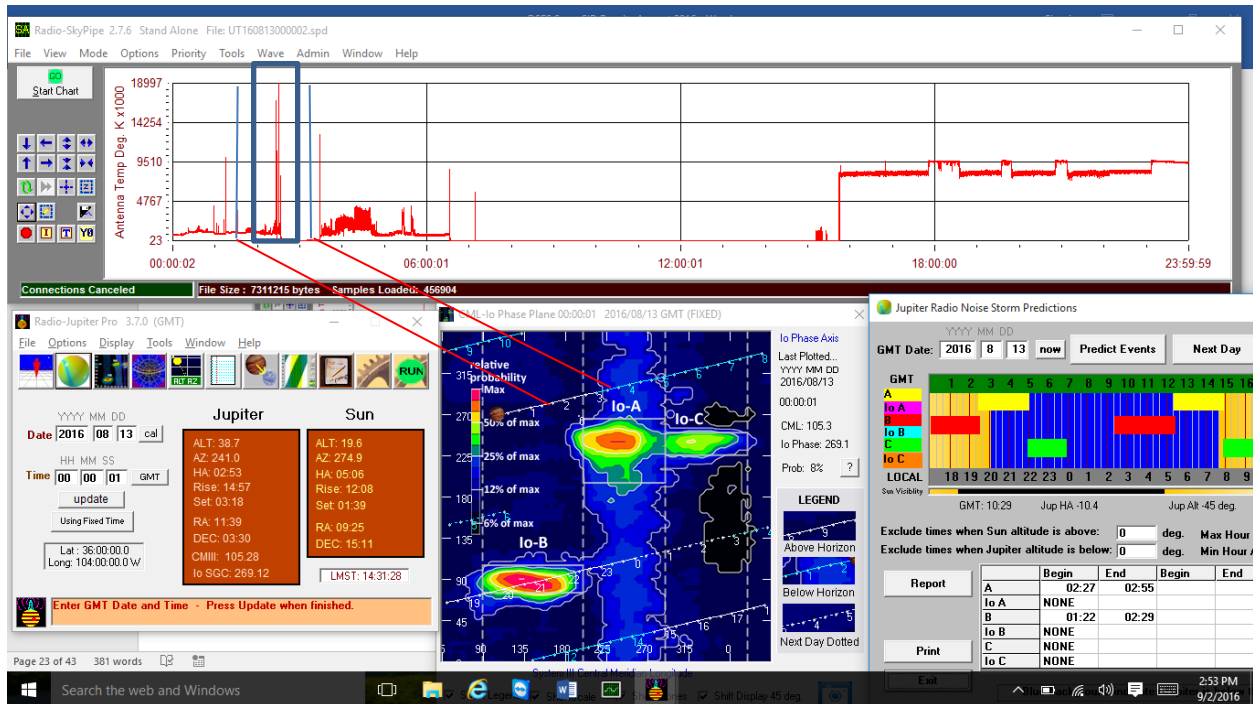
August 12, 2016

Results: No detectable Jupiter output detected



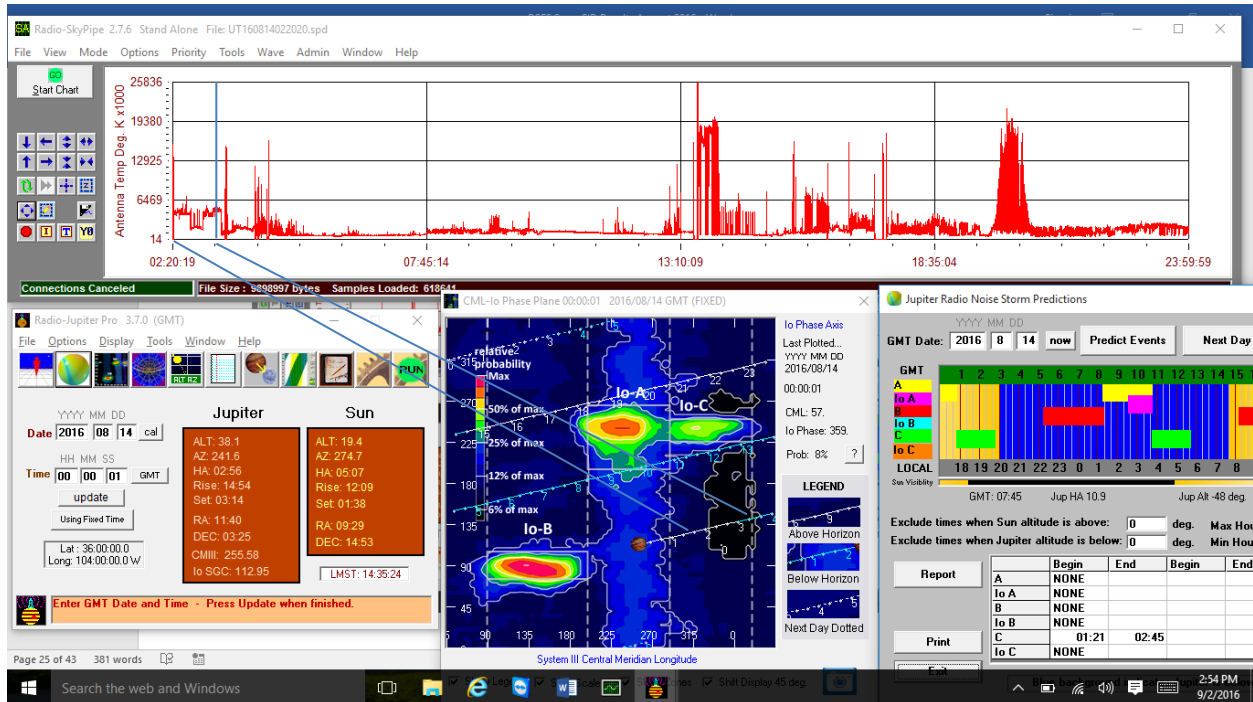
August 13, 2016

Results: Possible IO-A at 0230Z



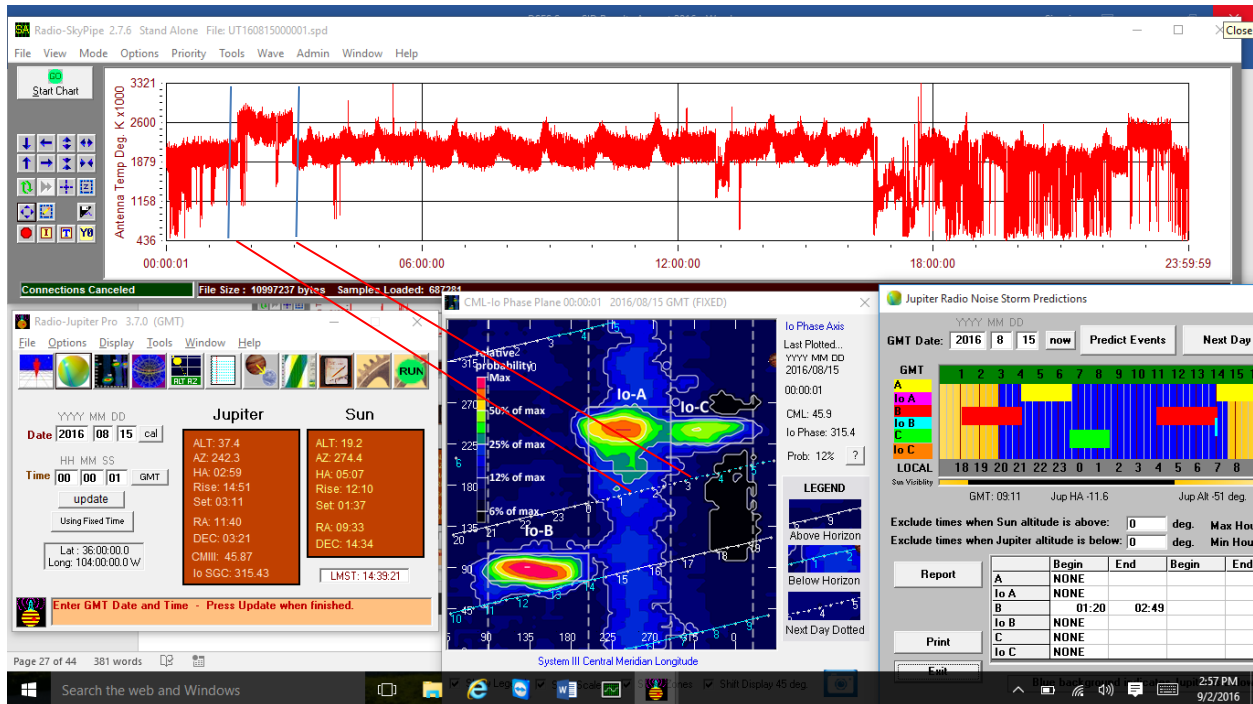
August 14, 2016

Results: No Jupiter results noted



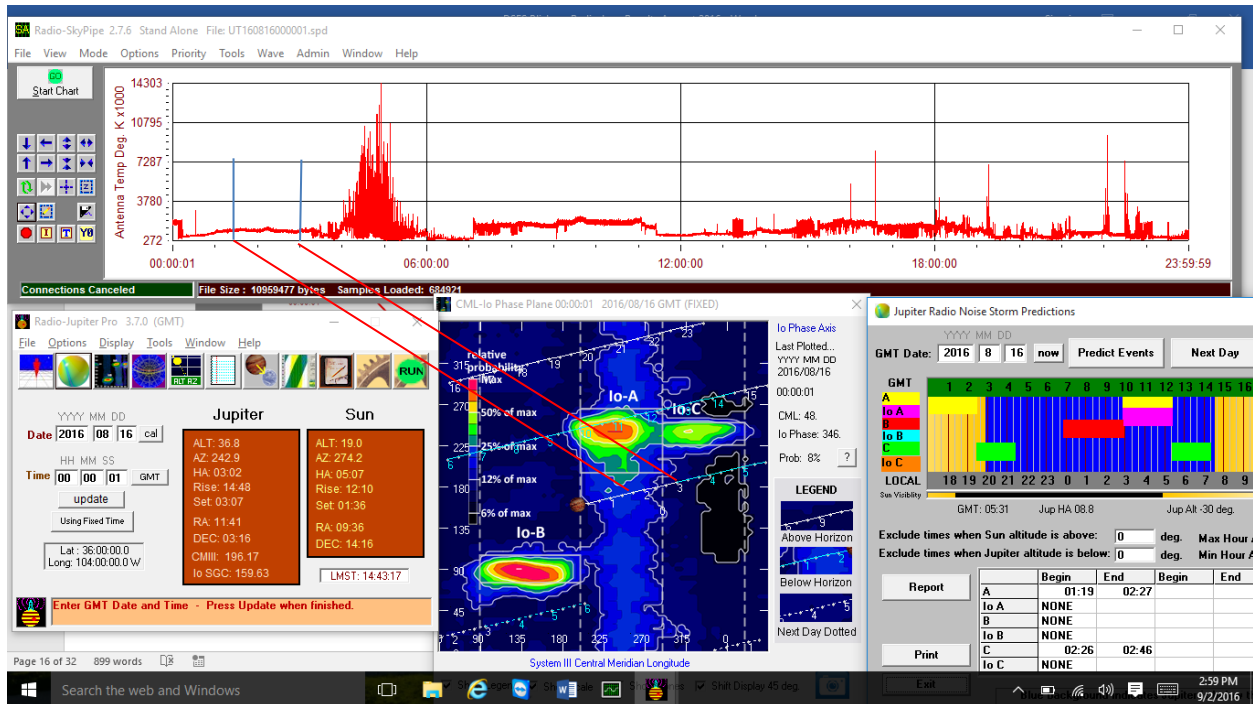
August 15, 2016

**Results:** Too much noise during this period. No Jupiter observations noted.



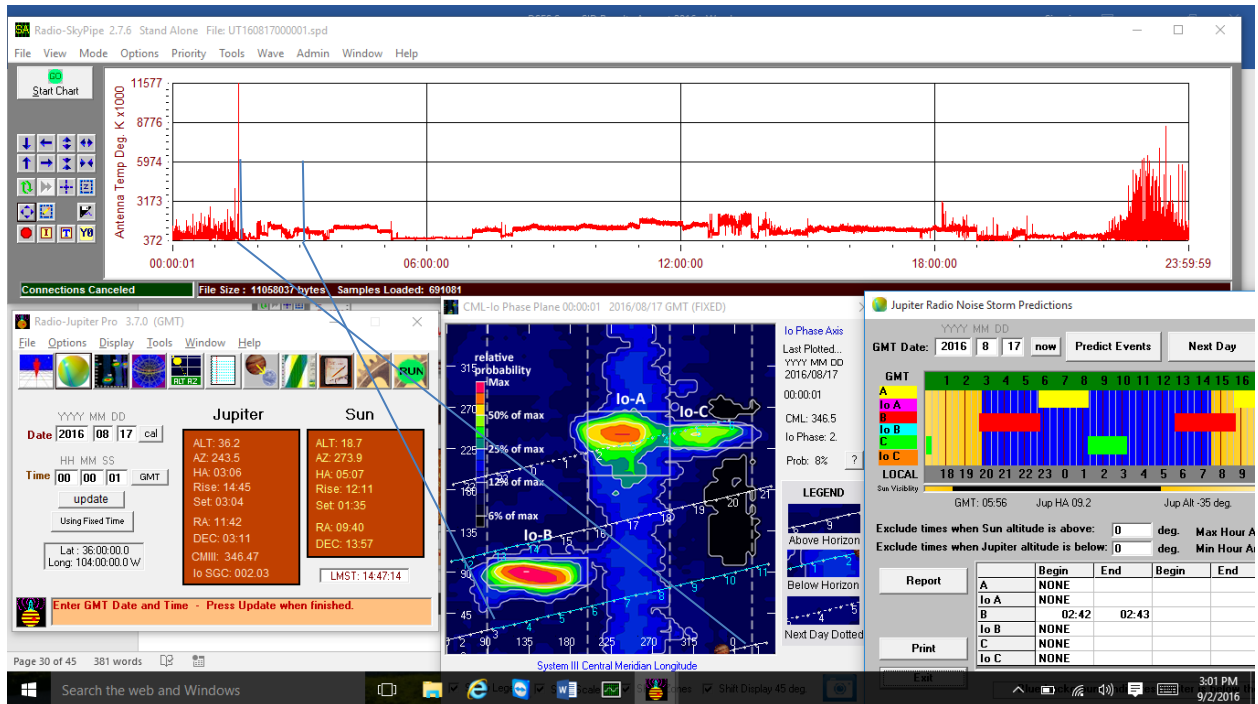
August 16, 2016

**Results:** No significant detections during this period.



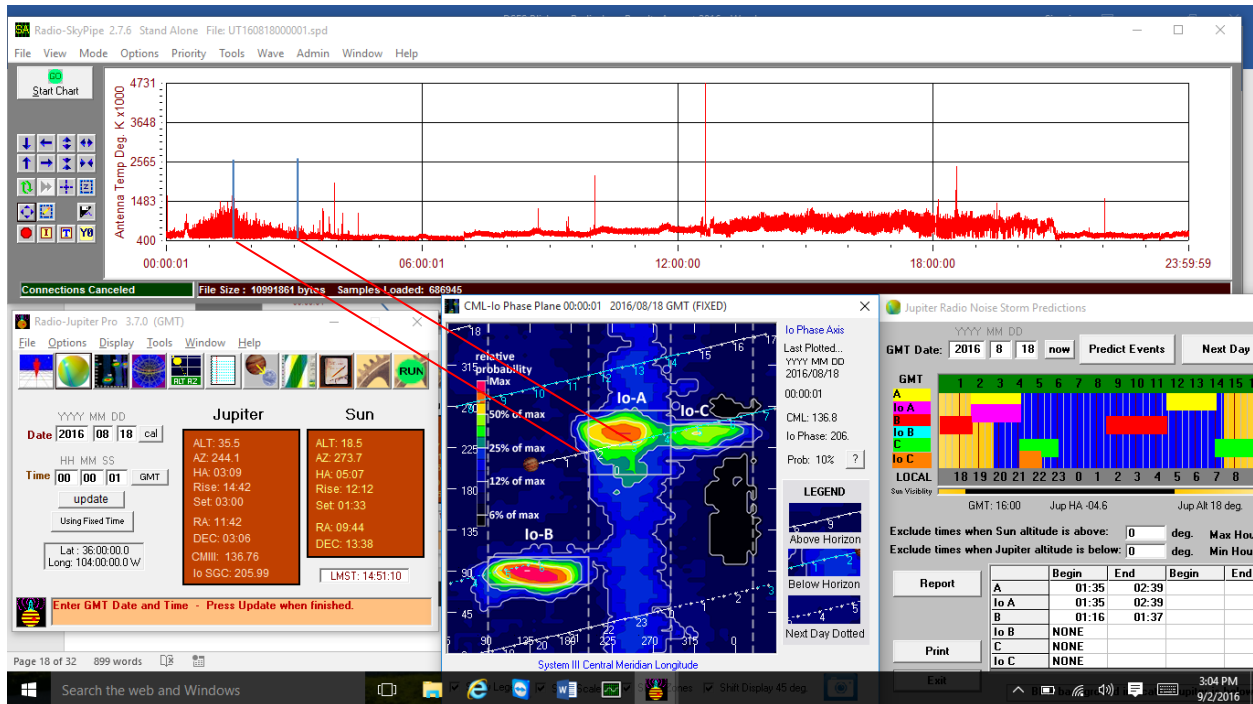
August 17, 2016

Results: Possible transient at 0140Z



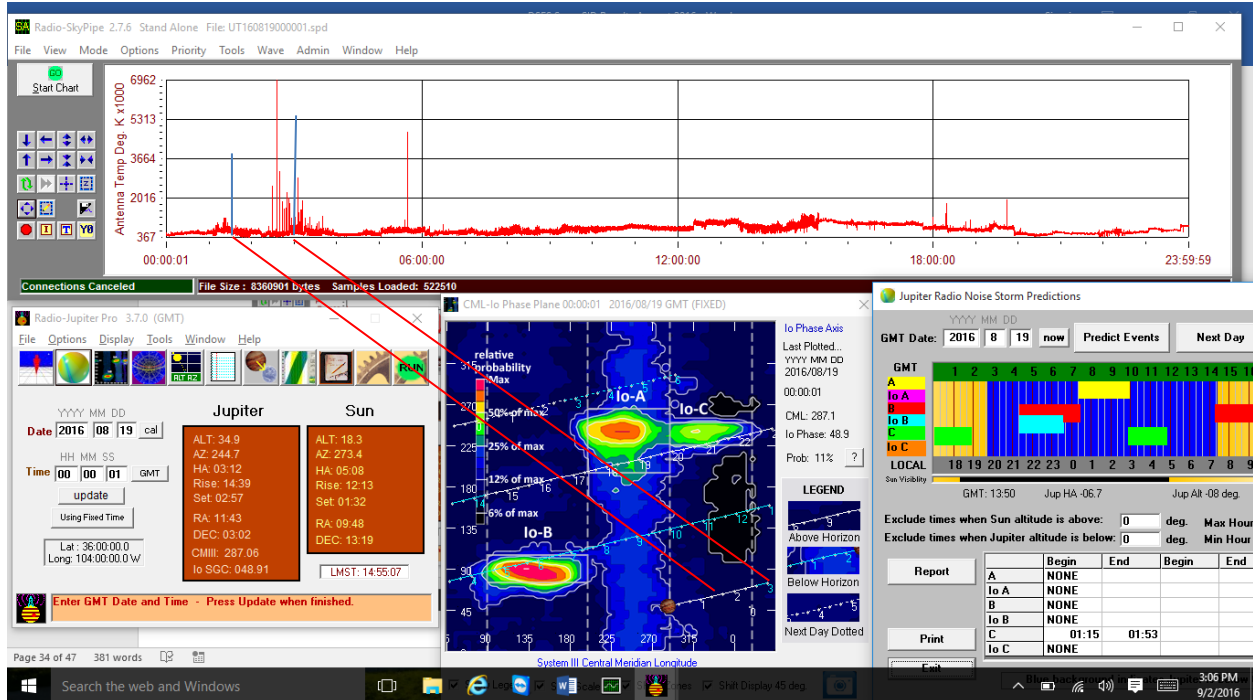
August 18, 2016

Results: Possible IO-A detection 0130z



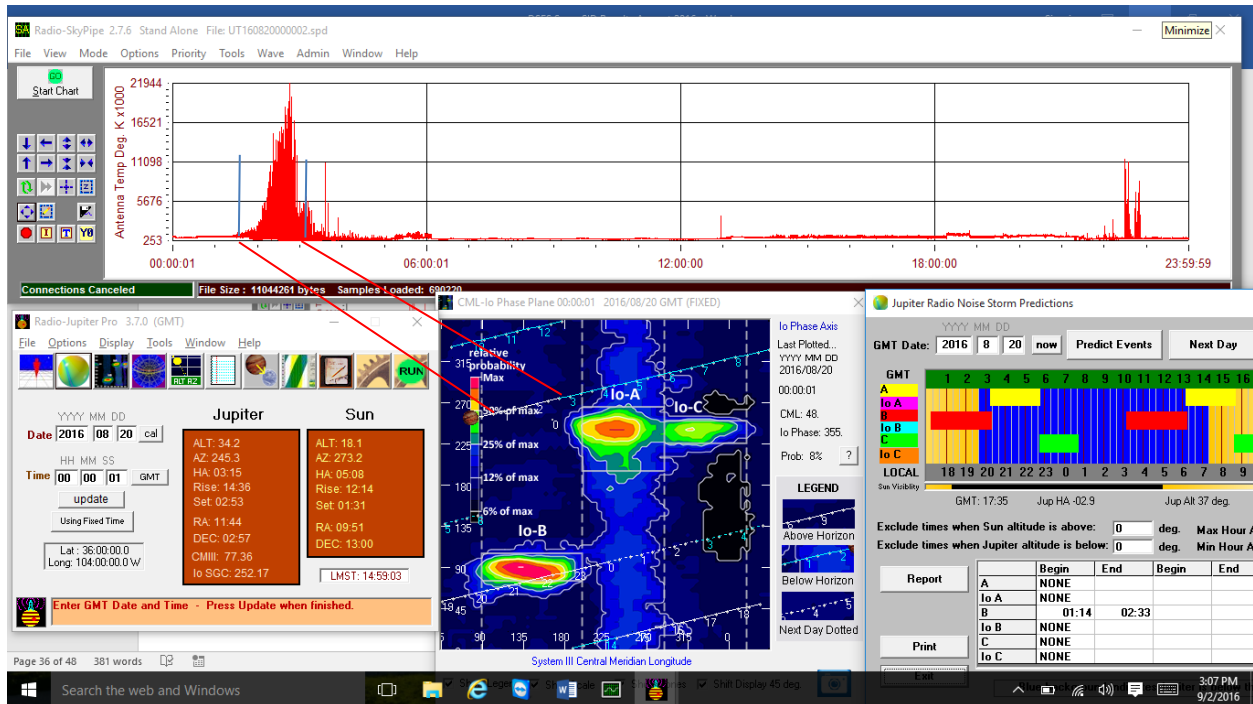
August 19, 2016

Results: Possible non-IO C from 0230z to 0300z



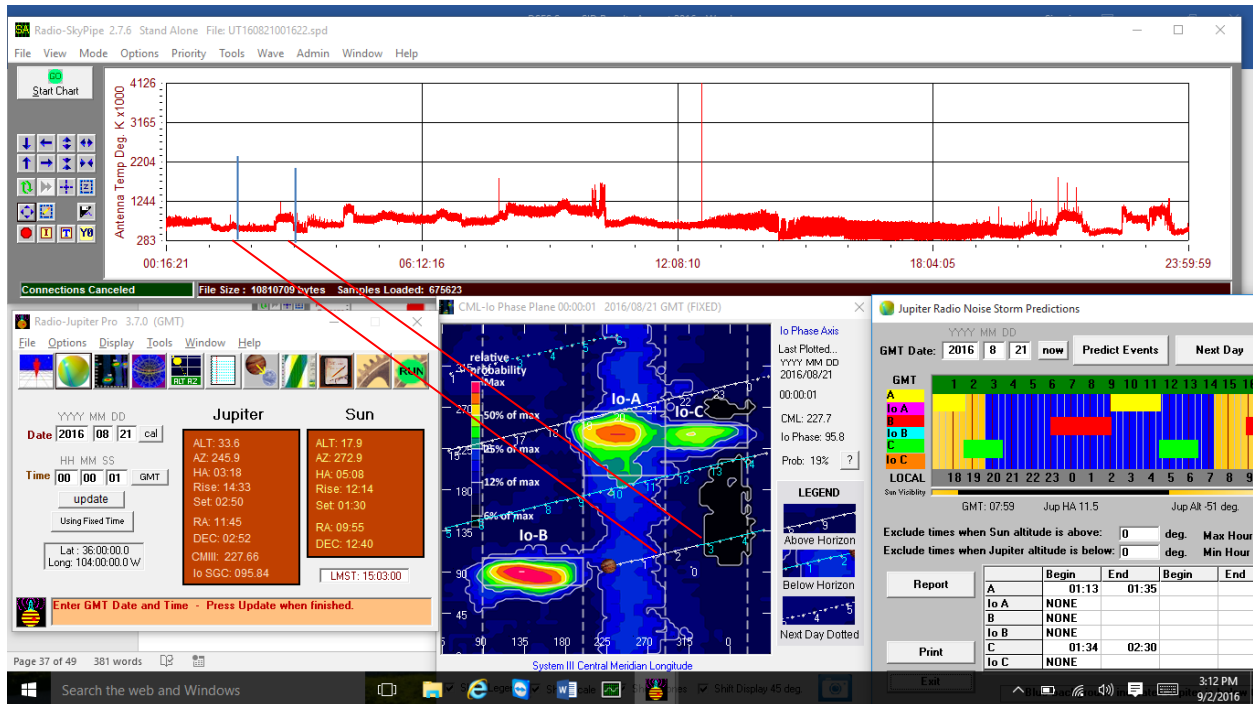
August 20, 2016

**Results:** Appears to be a significant non-IO B burst between 0130z to 0300z



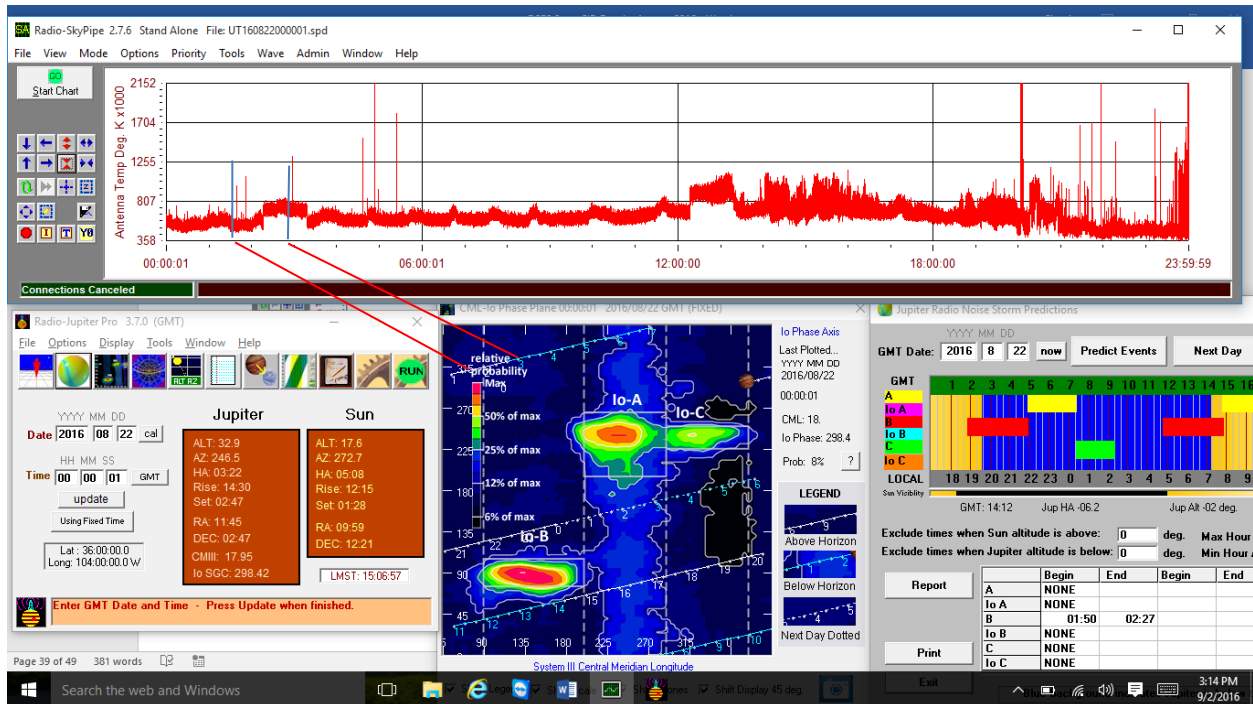
August 21, 2016

Results: No Jupiter output discernable



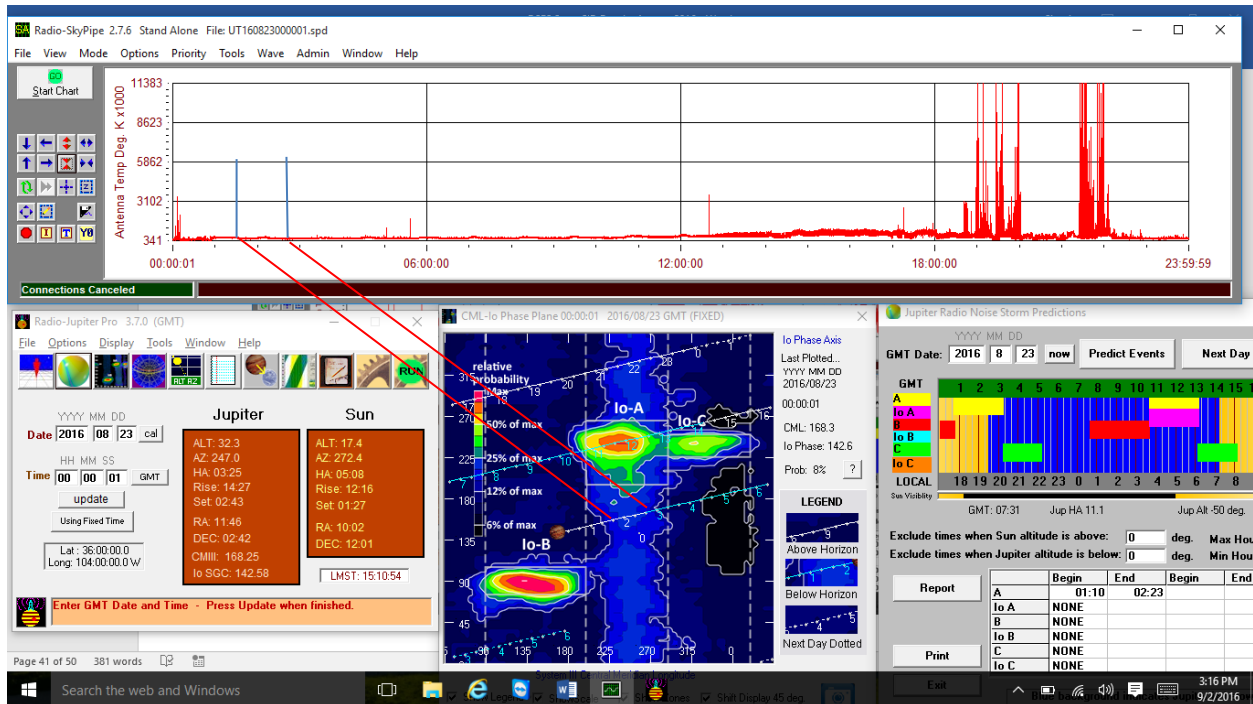
August 22, 2016

Results: Slight increase in signal between 0245z-0300z



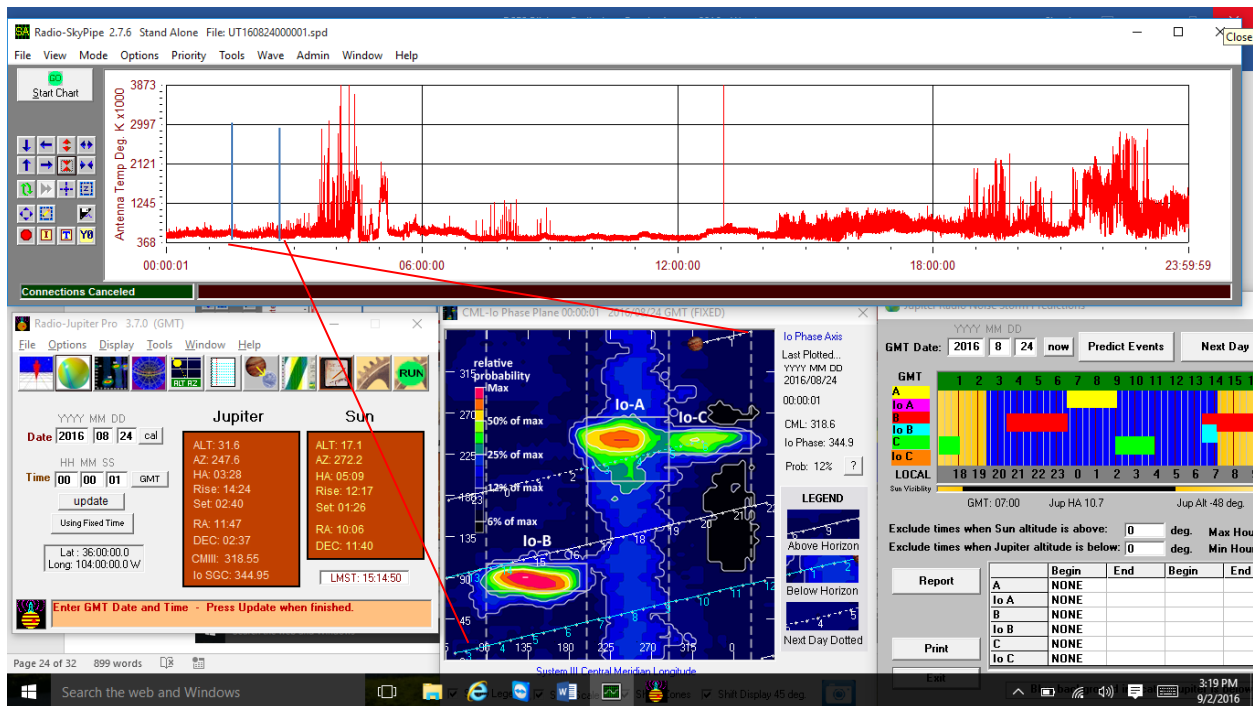
August 23, 2016

Results: No signal during period from Jupiter



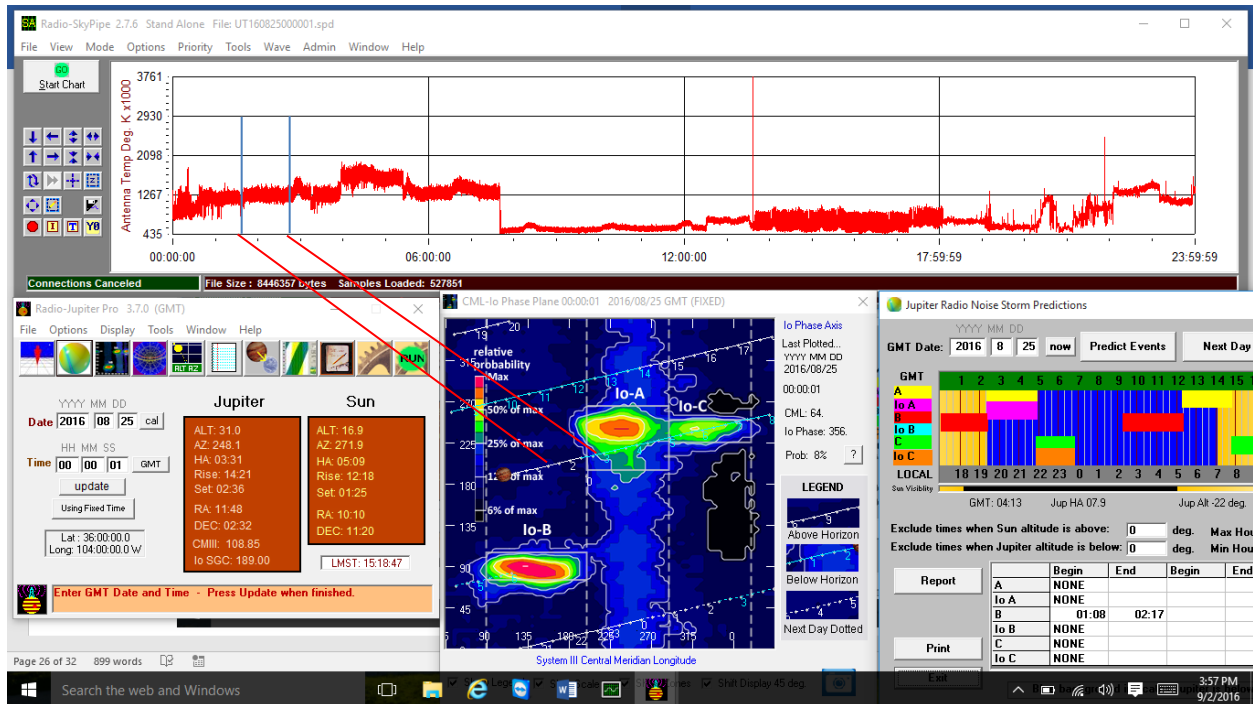
August 24, 2016

Results: No detectable Jupiter activity



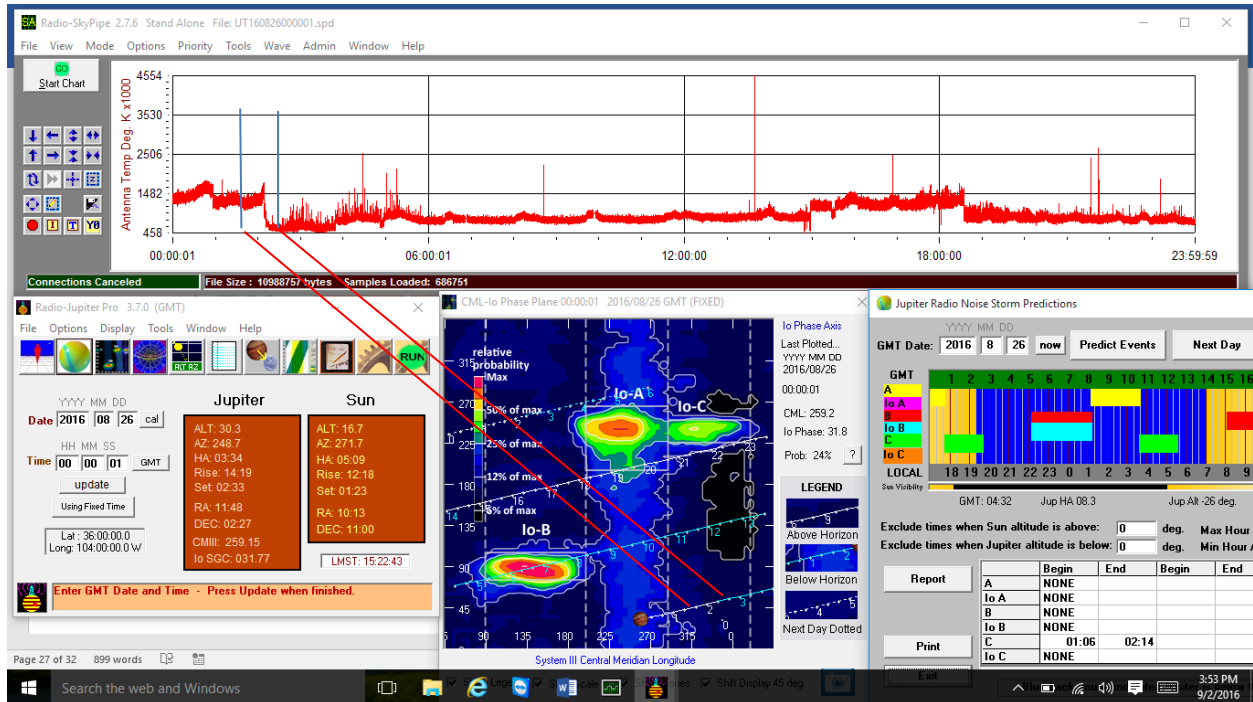
August 25, 2016

Results: No Jupiter activity noted.



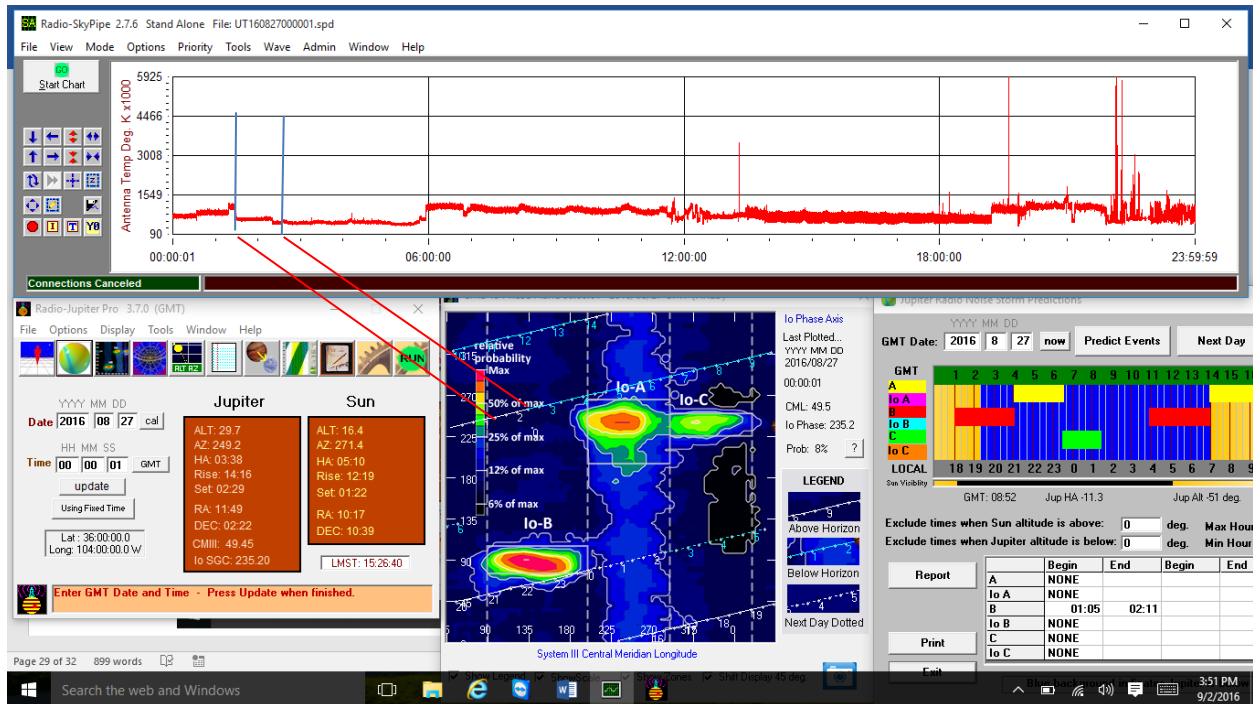
August 26, 2016

Results: No Jupiter activity noted.



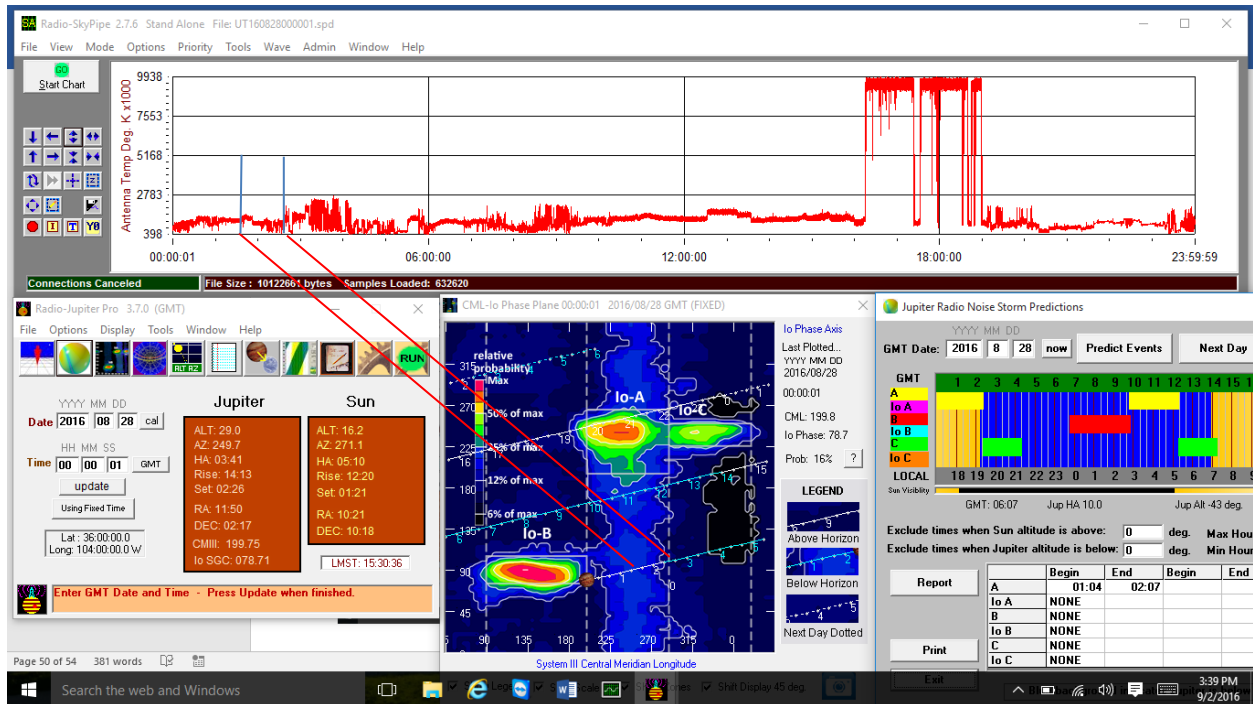
August 27, 2016

Results: No Jupiter detections



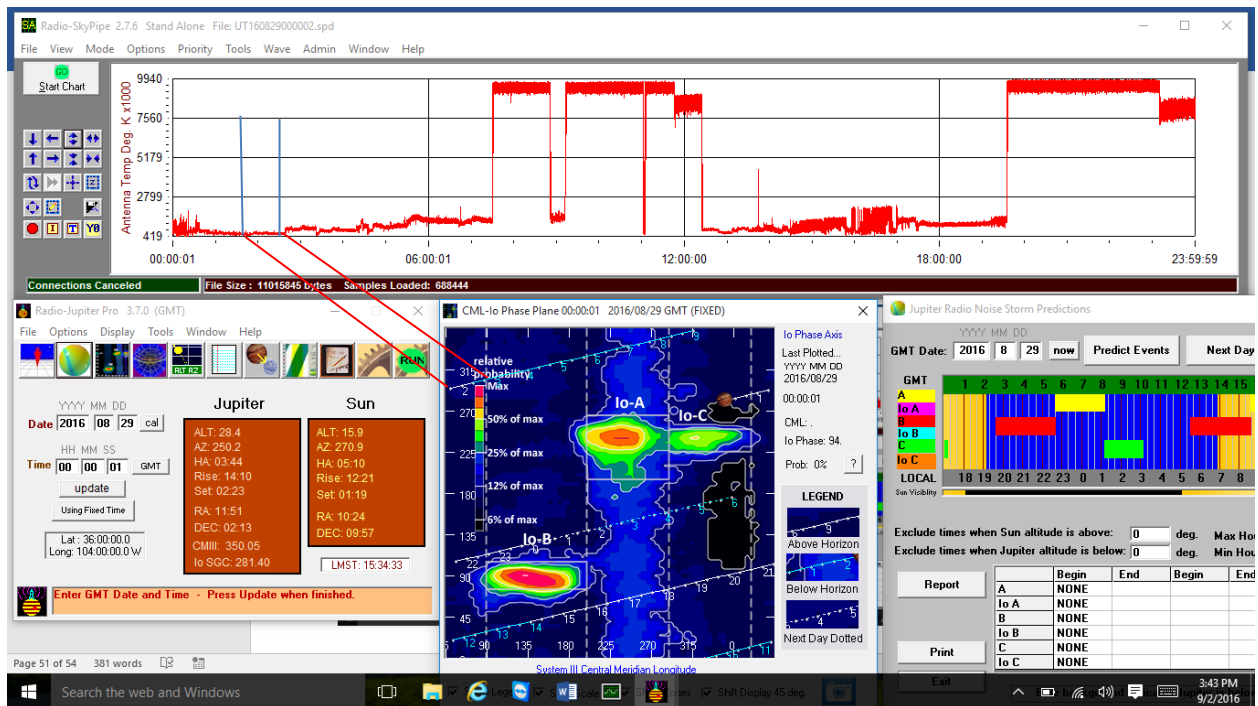
August 28, 2016

Results: No Jupiter detections



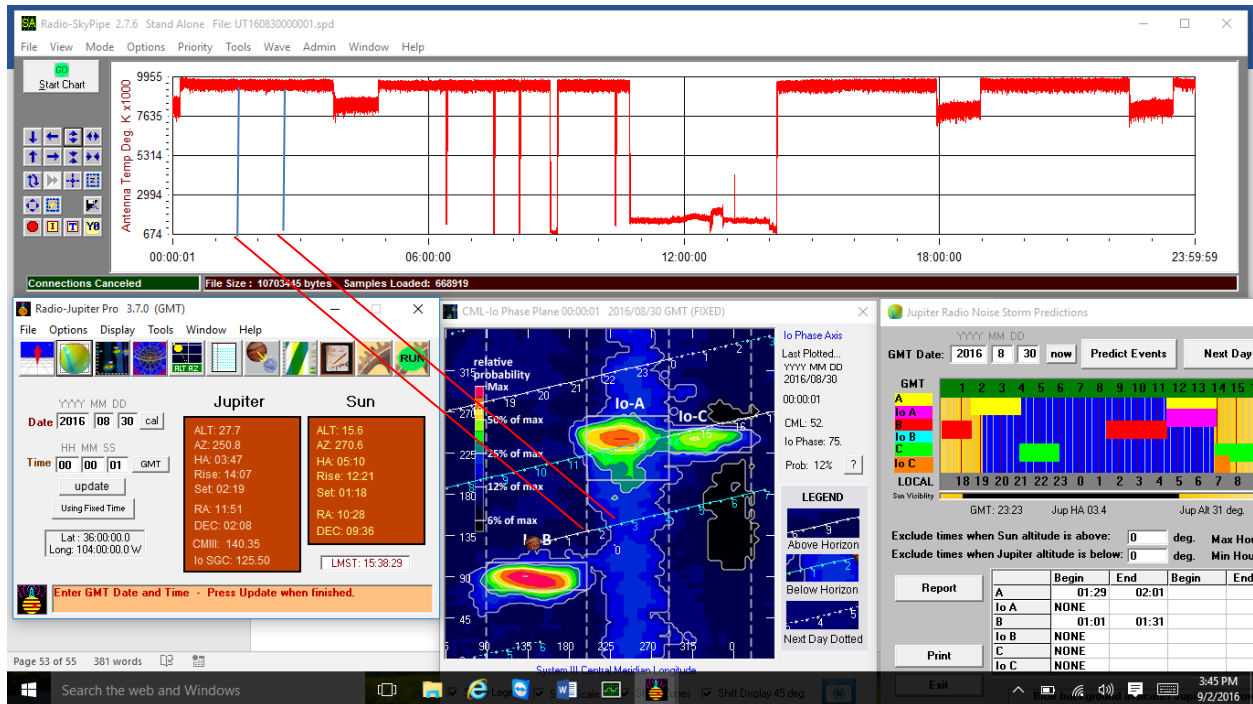
August 29, 2016

Results: No Jupiter detection noted



August 30, 2016

Results: No Jupiter activity noted



August 31, 2016

Results: No Jupiter activity noted

