

# Common Errors in Digisonde Programming



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The logo for the XIV International Giro Forum (IGF) 2014. It features the text "IGF 2014" in a large, blue, sans-serif font. The number "0" in "2014" is replaced by a blue and white globe showing the Americas. The background of the slide is a sunset over the Earth's horizon, with a bright sun on the right side.

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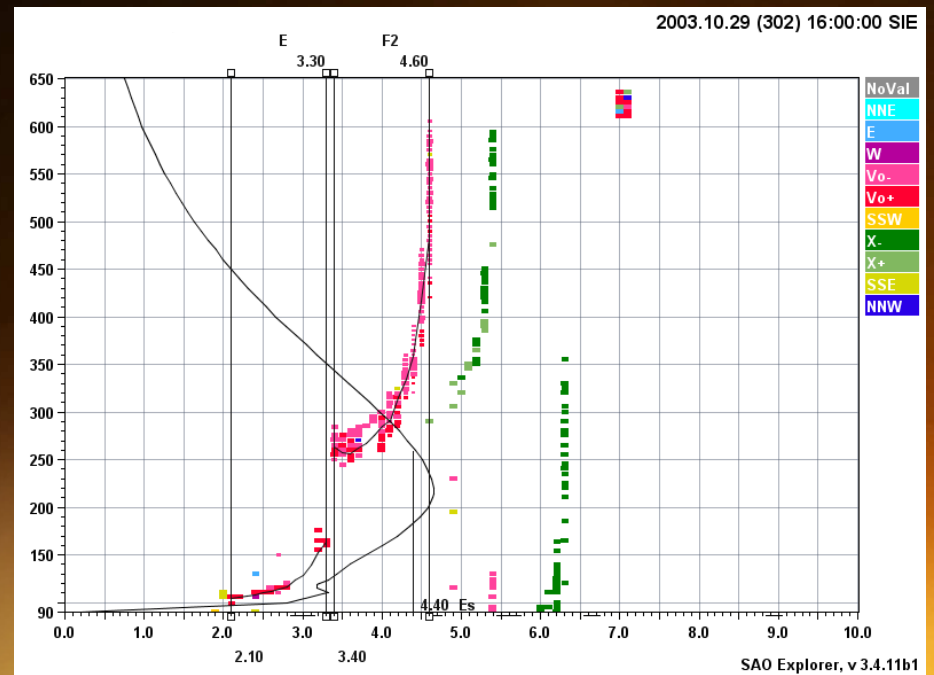
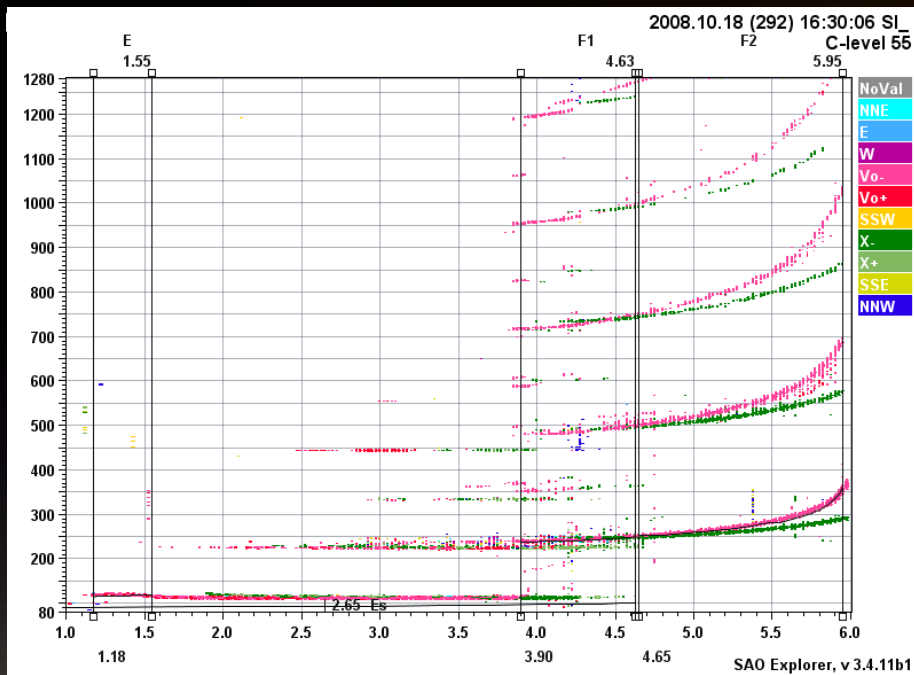
# “What can go wrong” Presentations

- Digisonde programming mistakes – IG
- Hardware troubleshooting with BIT and DCART – RH
- Lightning Protection – IL
- Software troubleshooting – IG
- Computer security and Windows XP – RH
- How to find out your digisonde is not working right - IG

# Outline

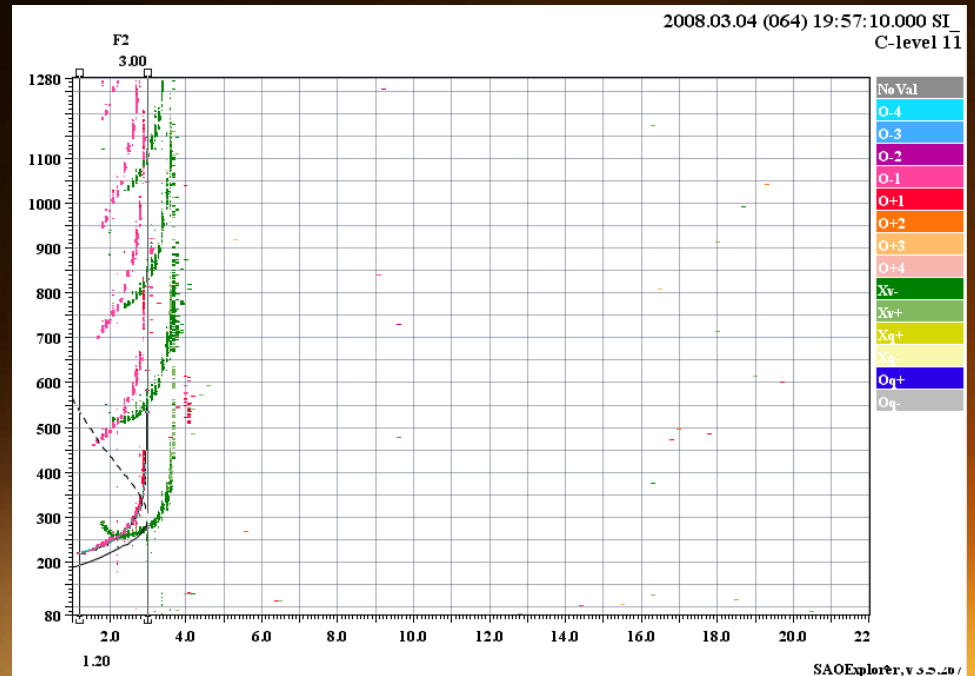
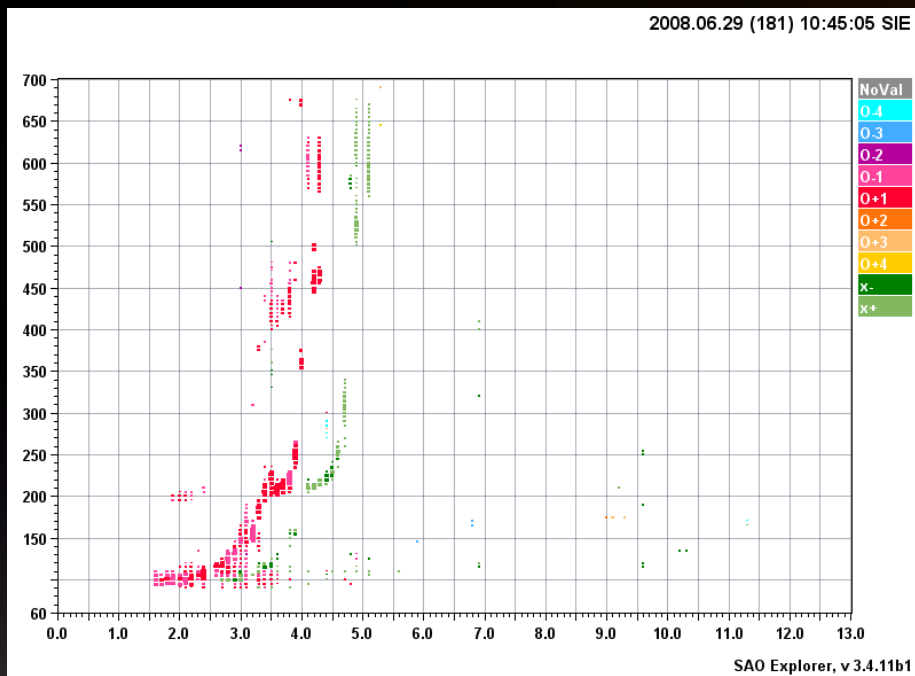
- Errors that can happen to any Digisonde
- Errors that cannot happen to Digisonde 4D
- Error in programming 4D

# Things that can go wrong





# Things that can go wrong

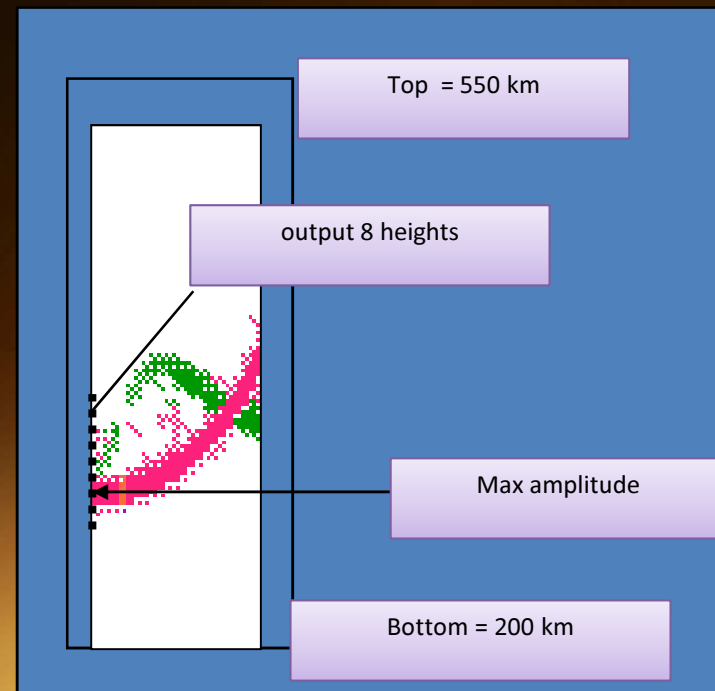


# Other things that can go wrong

- Not using precision ranging in the ionogram mode
- Setting drift measurement with CIT below 10 sec (except polar locations)
- Leaving station site with Digisonde idling – watch for countdown!
- Leaving out list of restricted frequencies

# Common Programming Issues

- Watch for drift selection window
  - Bottom height should not be too low (avoid E-layer echoes if you study F layer)





# Errors that cannot happen in 4D

- A long list of errors in programming 4D are identified by DCART editors
  - Every field comes with allowed value range
  - Selections that are verified automatically
    - Frequency multiplexing
    - Choice of IPP to fit # of samples
    - Schedules without gain creation program
    - Features incompatible with data format and processing selection
      - RSF ionogram without beamforming
      - RSF ionogram with partial Rx array
      - Logarithmic frequency stepping, etc.
    - Zero starting range for measurement
- Warnings and color codes for potential problems
  - High data volume
  - Suppressed output of data files
  - Signal saturation label in raw data display
  - Tracker saturation condition in BIT
  - Radio silent programs

# Error of 4D programming

- Use autogain evaluation program with wrong setting of the constant gain

Dalu

감사합니다

Gracias Danke Ευχαριστίες

THANK YOU

Obrigado

Köszönöm

Tack  
Grazie

Спасибо Dank

谢谢

Merci

ありがとう

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