

R O S E T T A
FLIGHT REPORTS
of RPC-MAG

RO-IGEP-TR-0034

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OVERVIEW OF
AVAILABLE RPCMAG DATA
AND
DATA QUALITY ASSESSMENT

Mission Phases: CR5
Time Period: December 2009 - June 2010

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1 Introduction

This document contains information about all available data and its quality for the time period between December 2009 until June 2010. This covers this Mission Phase CR5 which is also called CRUISE5.

The only times where RPCMAG was switched on was in

- February 2010 for the Lander Panel Test.
- March 2010 for the LUTETIA Flyby Rehearsal.
- April 2010 for the Payload Checkout PC12.

For every day where measurement data are available overview plots have been created. The data availability plots show all data calibration levels being available. For RESAMPLED data the average interval is listed as well. An overview table of available data completes the data overview.

Additionally for each measurement day two plots of calibrated LEVEL_F data (s/c coordinates) are available. These plots show

- the OB and IB data and
- the differences of OB-IB

In these plots the phases where the sensors are not in thermal equilibrium have been marked as red areas. The assessment indicator I of these "BAD INTERVALS" has been derived from the first derivative of the difference of the sensor temperatures

$$I = \frac{\partial(T_{\text{OB}} - T_{\text{IB}})}{\partial t}$$

Areas are marked red if I exceeds a certain level.

The science modes of the data are distinguished by different colors.

This document shall give a quick overview of all data available

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2 2010

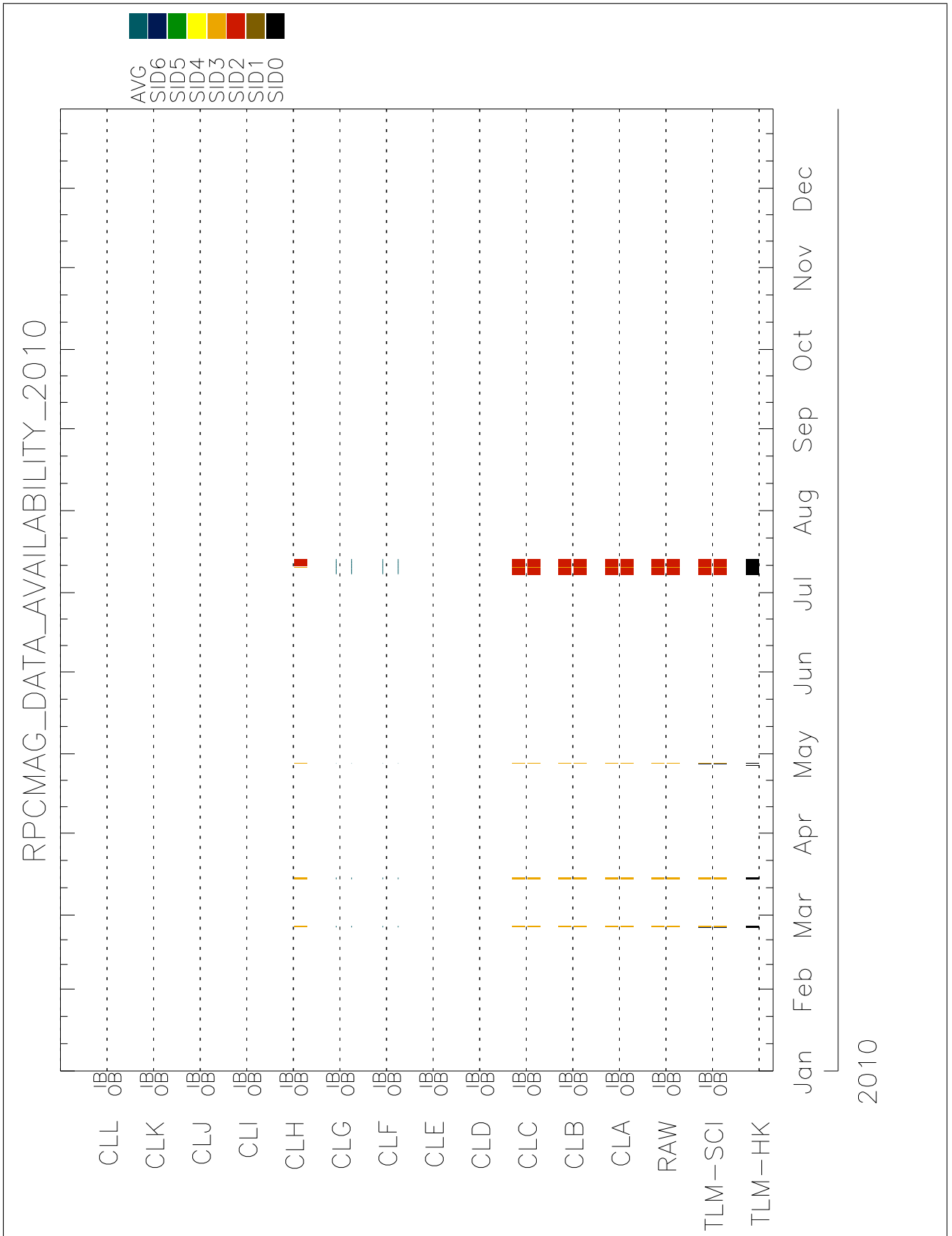


Figure 1: Overview 2010

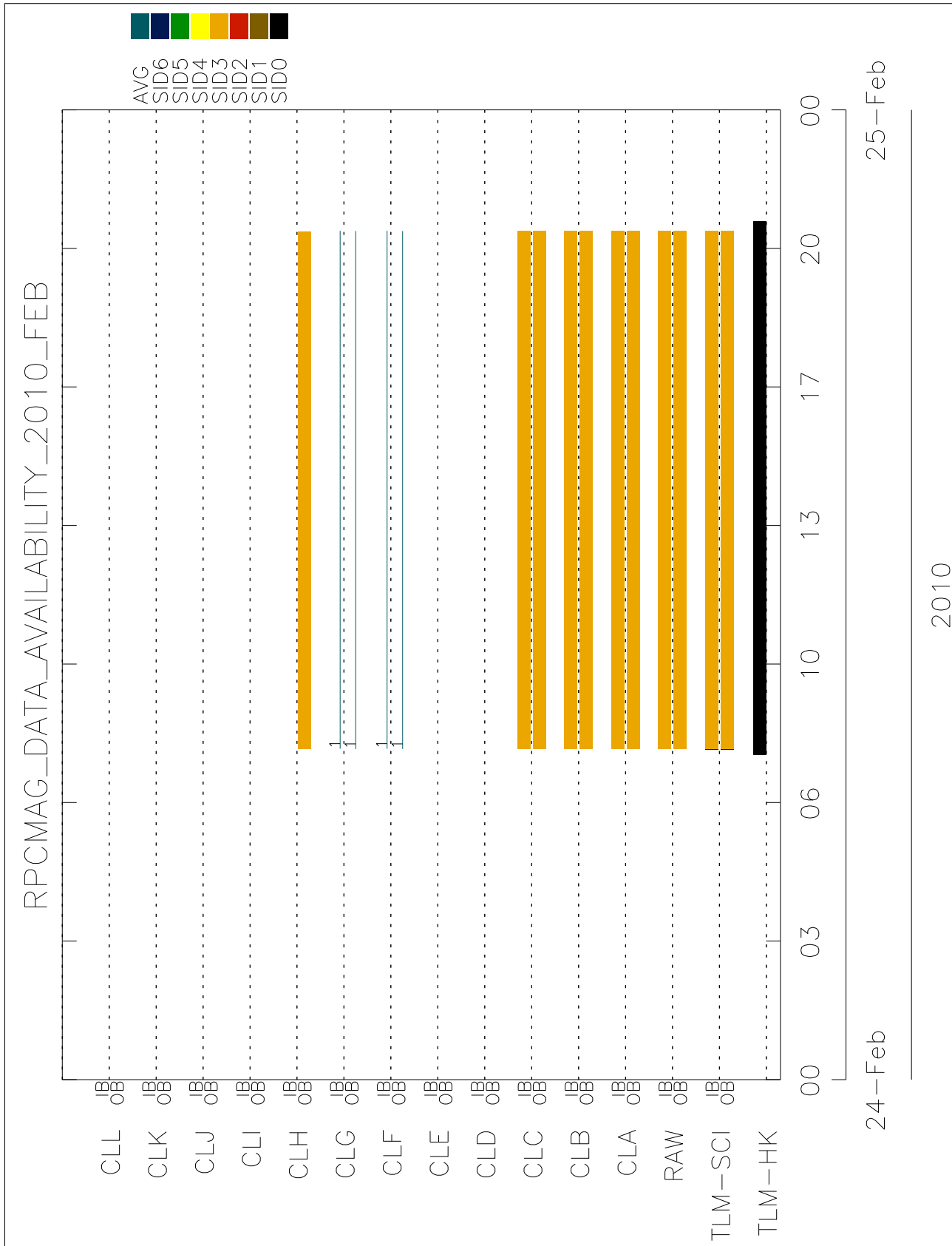


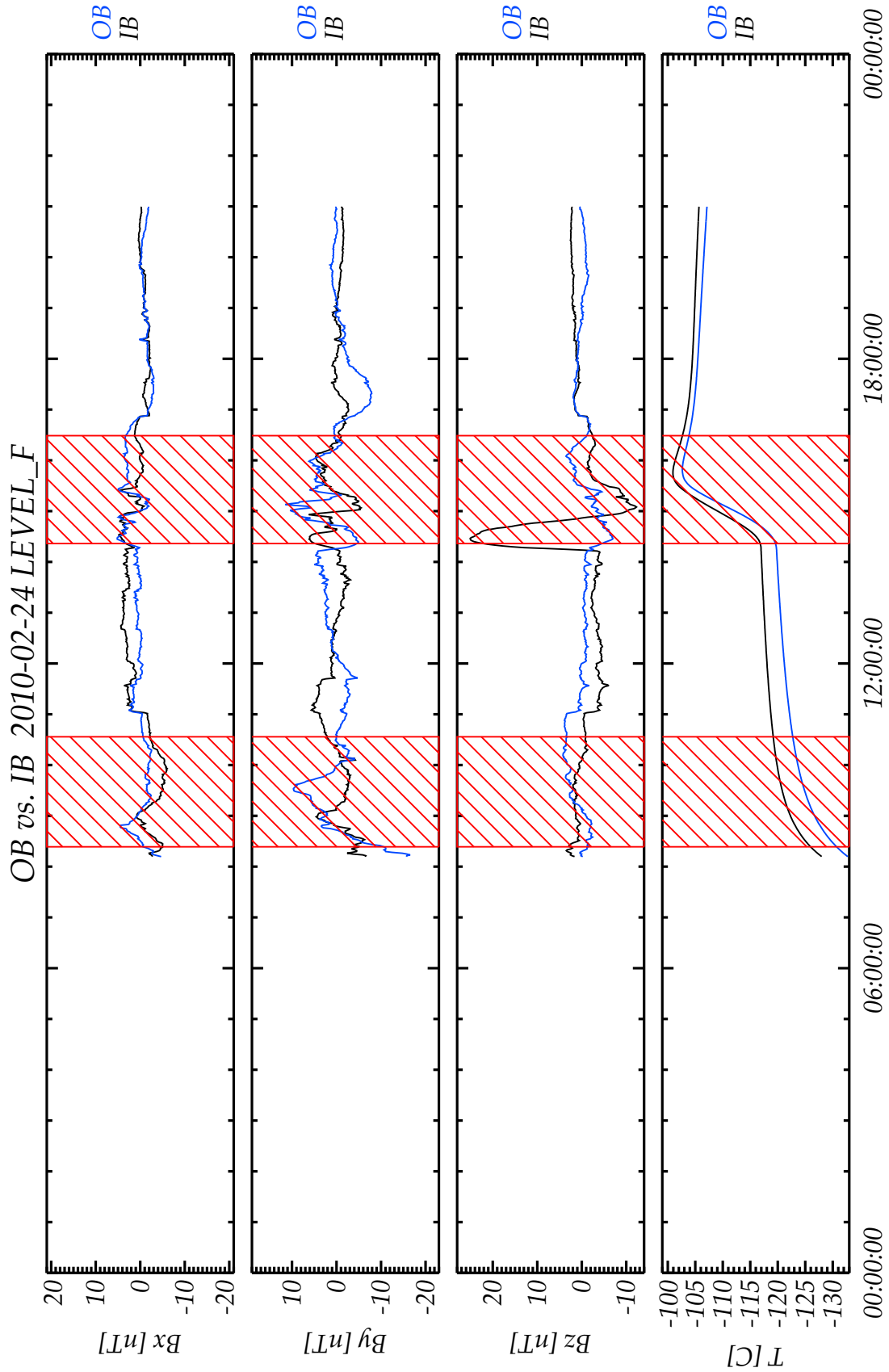
Figure 2: Overview February 2010

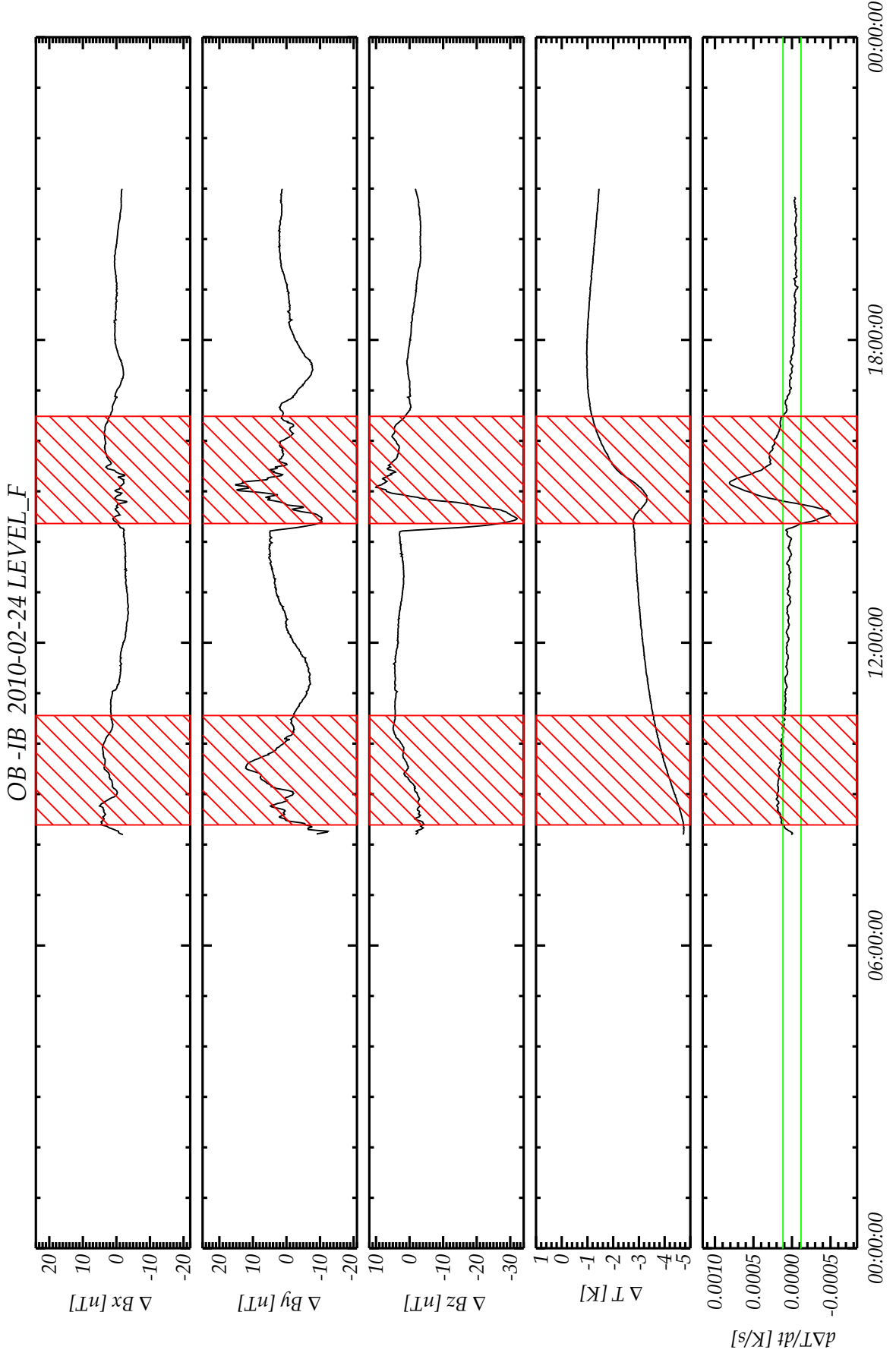
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DATE	LEVEL	AVERAGE [s]	SENSOR
2010-02-24	CLF	1	OB
2010-02-24	CLG	1	OB
2010-02-24	CLF	1	IB
2010-02-24	CLG	1	IB





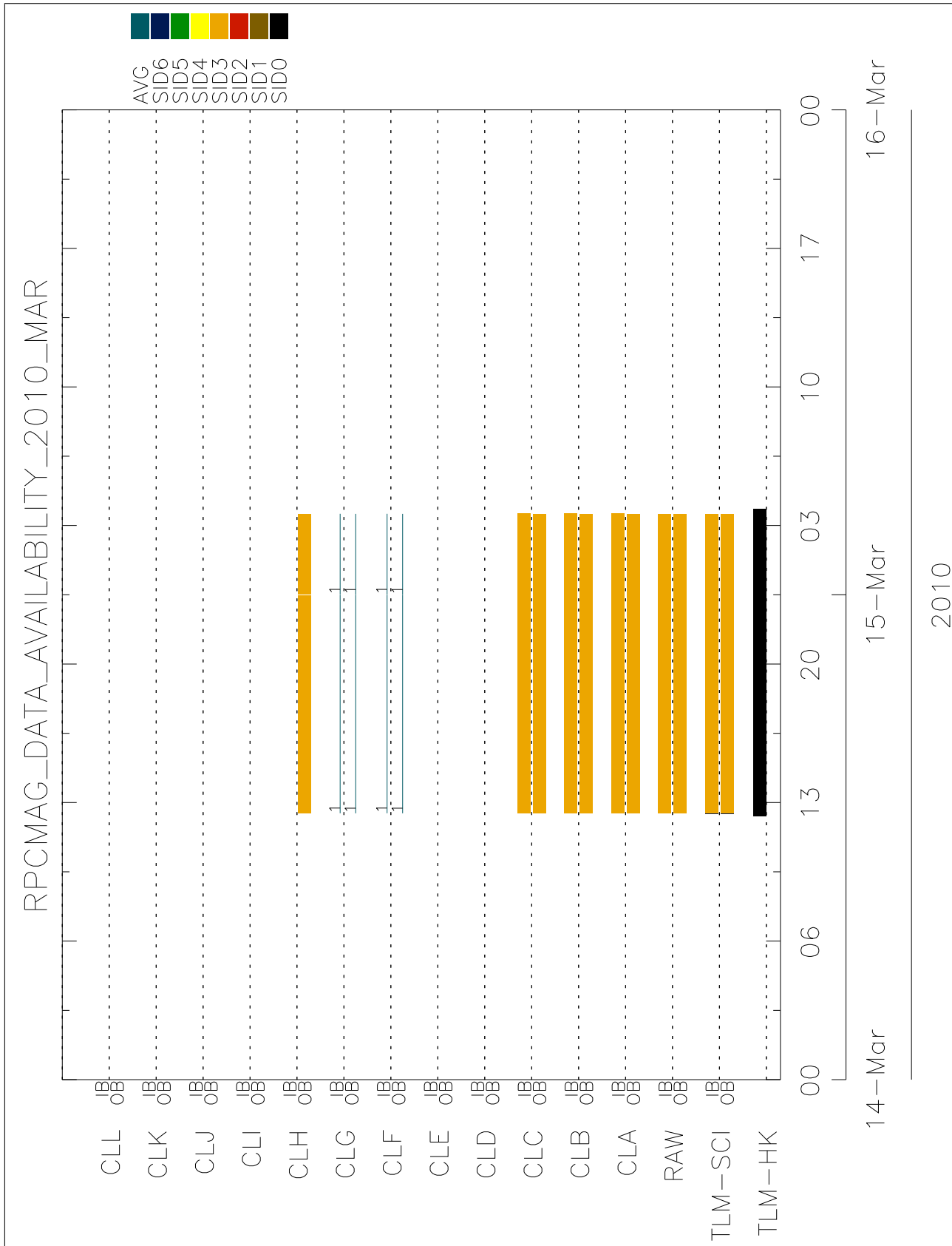


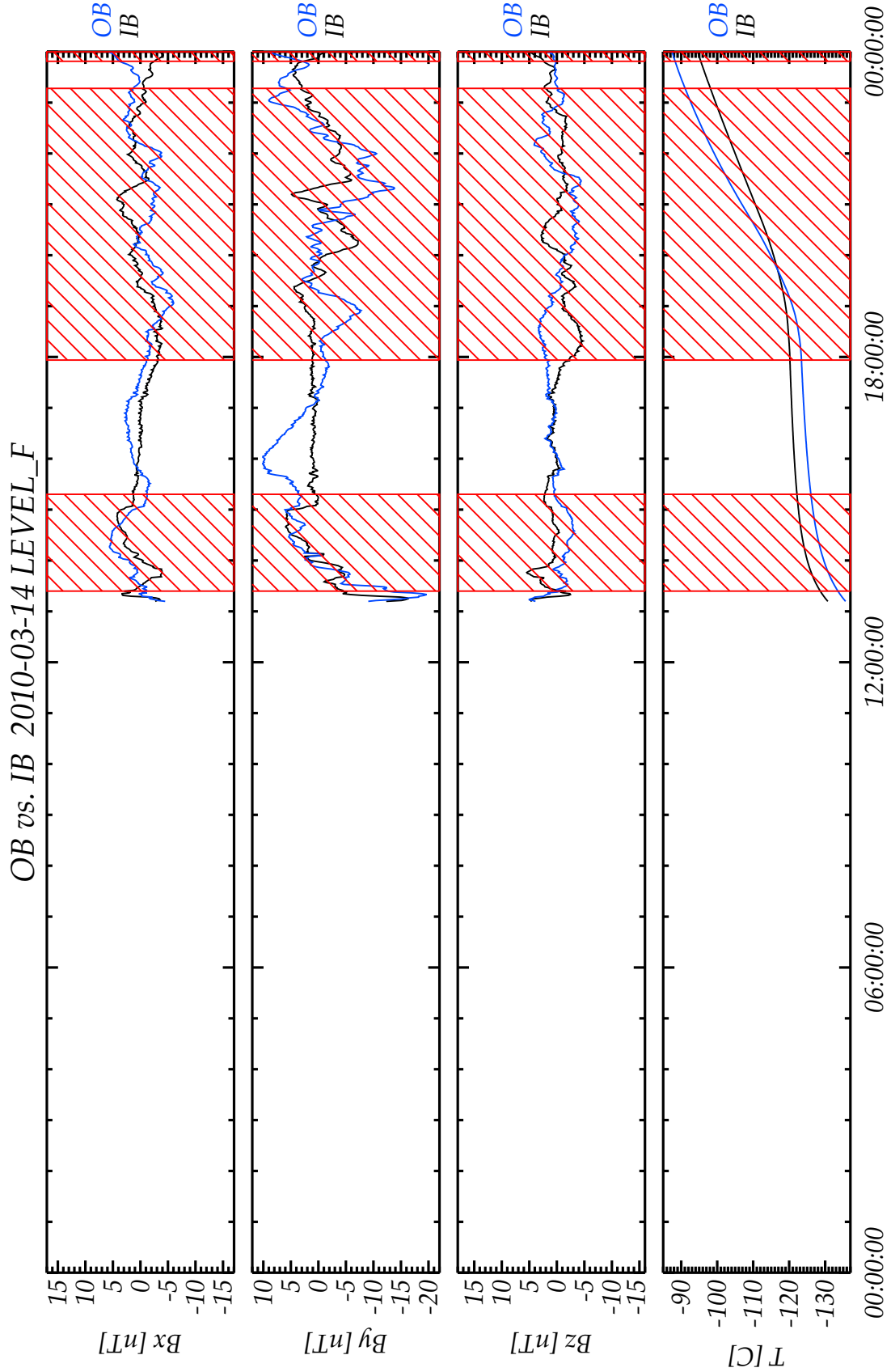
Figure 3: Overview March 2010

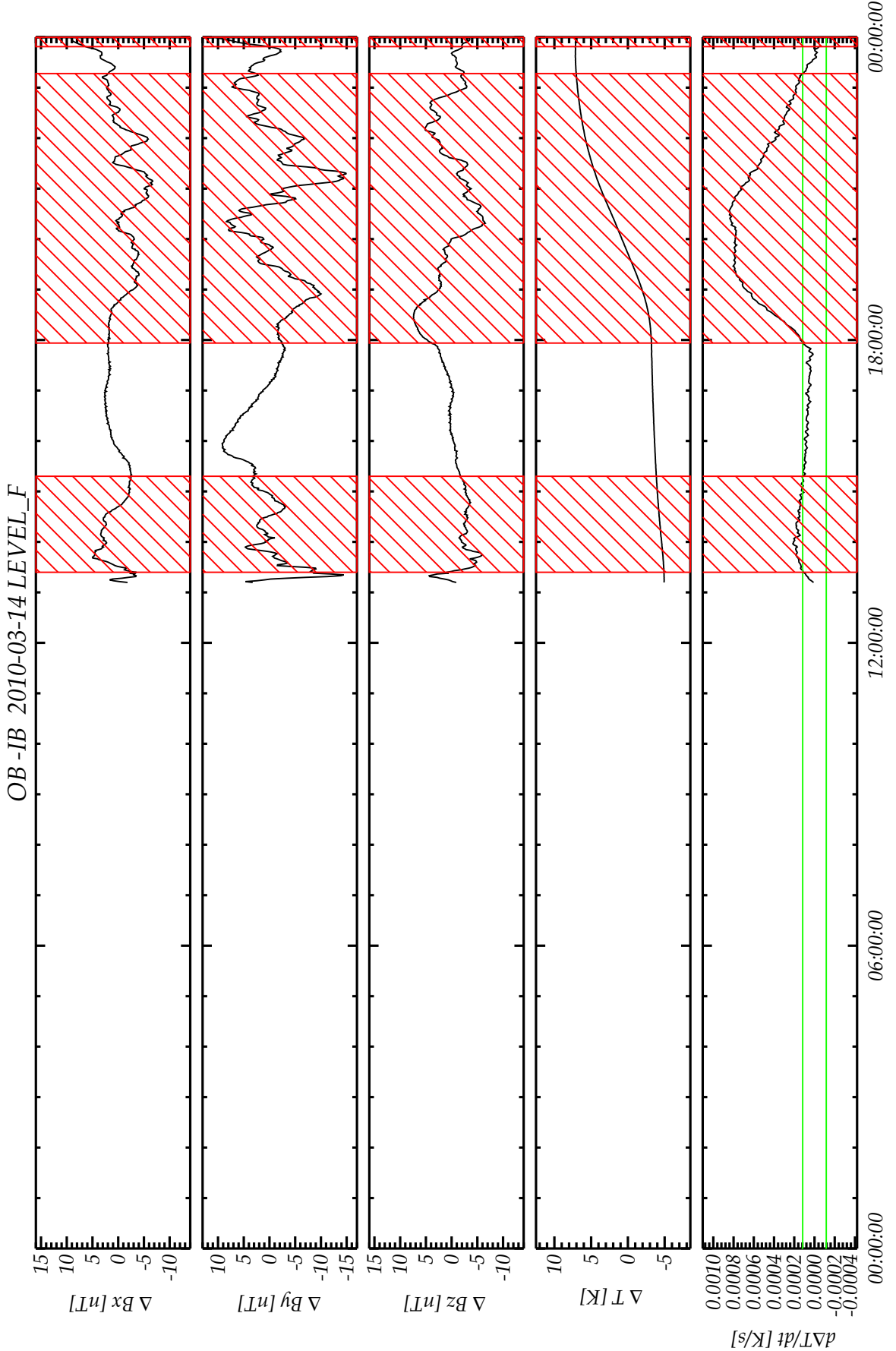
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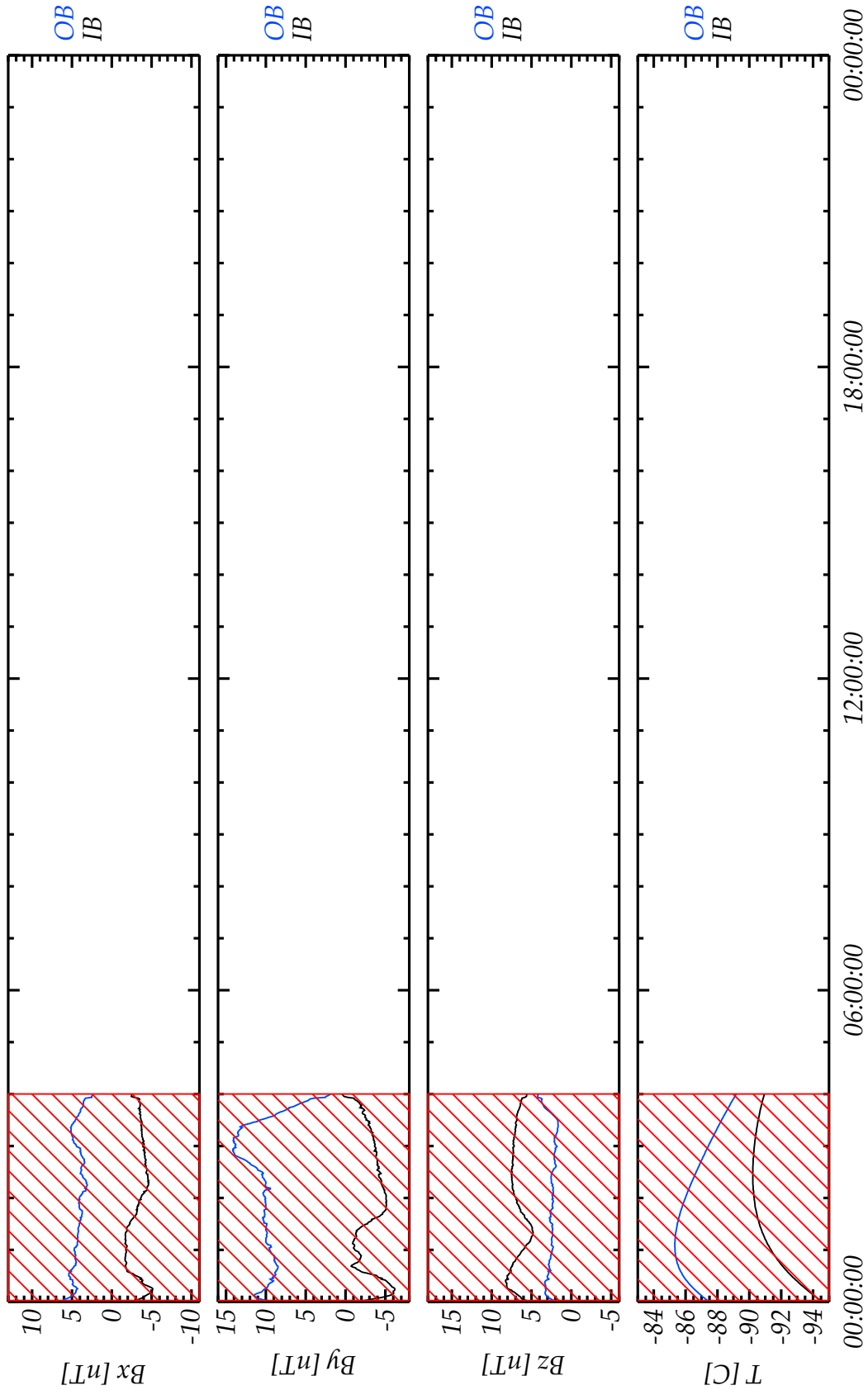
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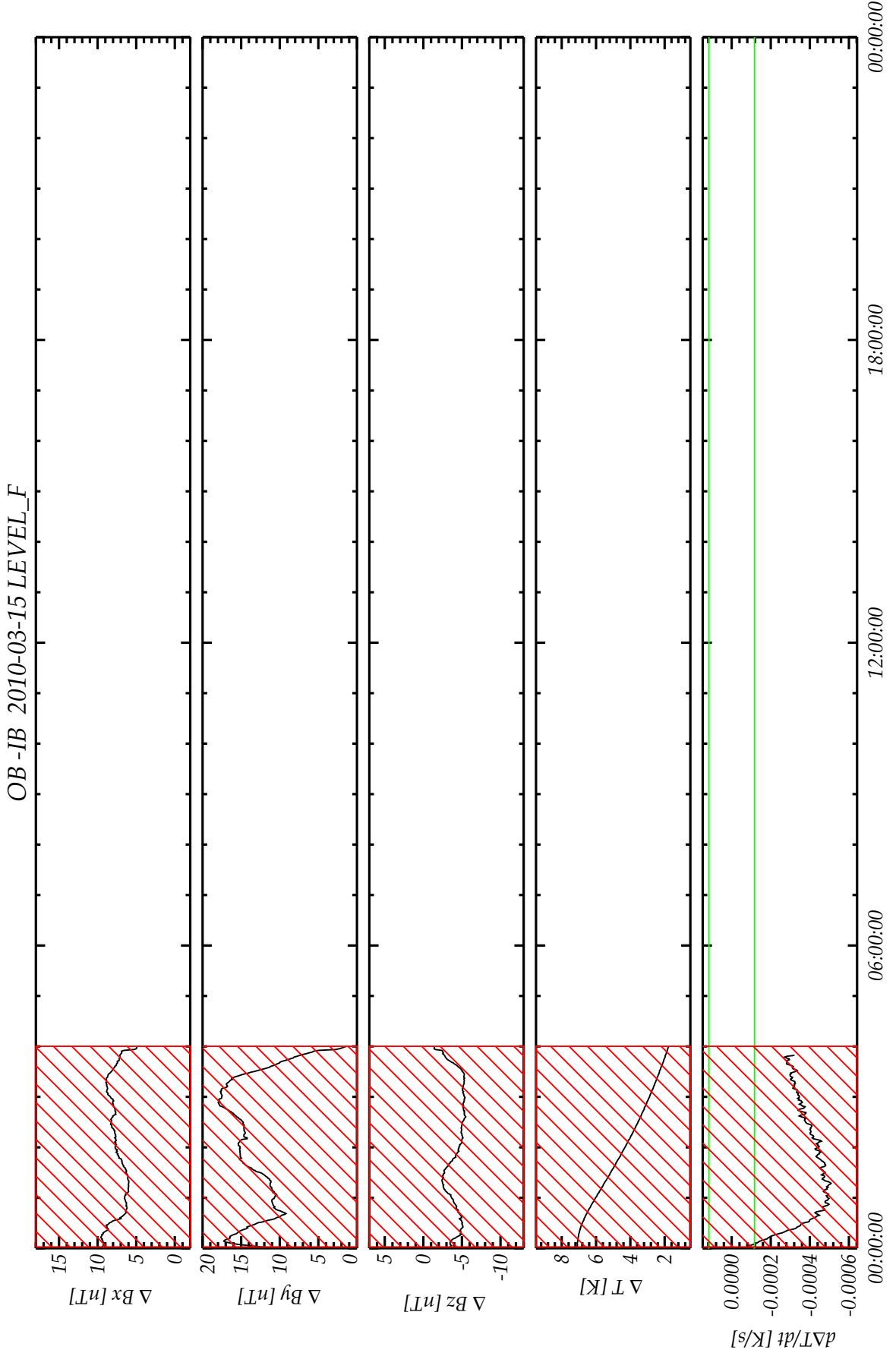
DATE	LEVEL	AVERAGE [s]	SENSOR
2010-03-14	CLG	1	OB
2010-03-14	CLF	1	OB
2010-03-14	CLF	1	IB
2010-03-14	CLG	1	IB
2010-03-15	CLF	1	OB
2010-03-15	CLG	1	OB
2010-03-15	CLG	1	IB
2010-03-15	CLF	1	IB





OB vs. IB 2010-03-15 LEVEL_F





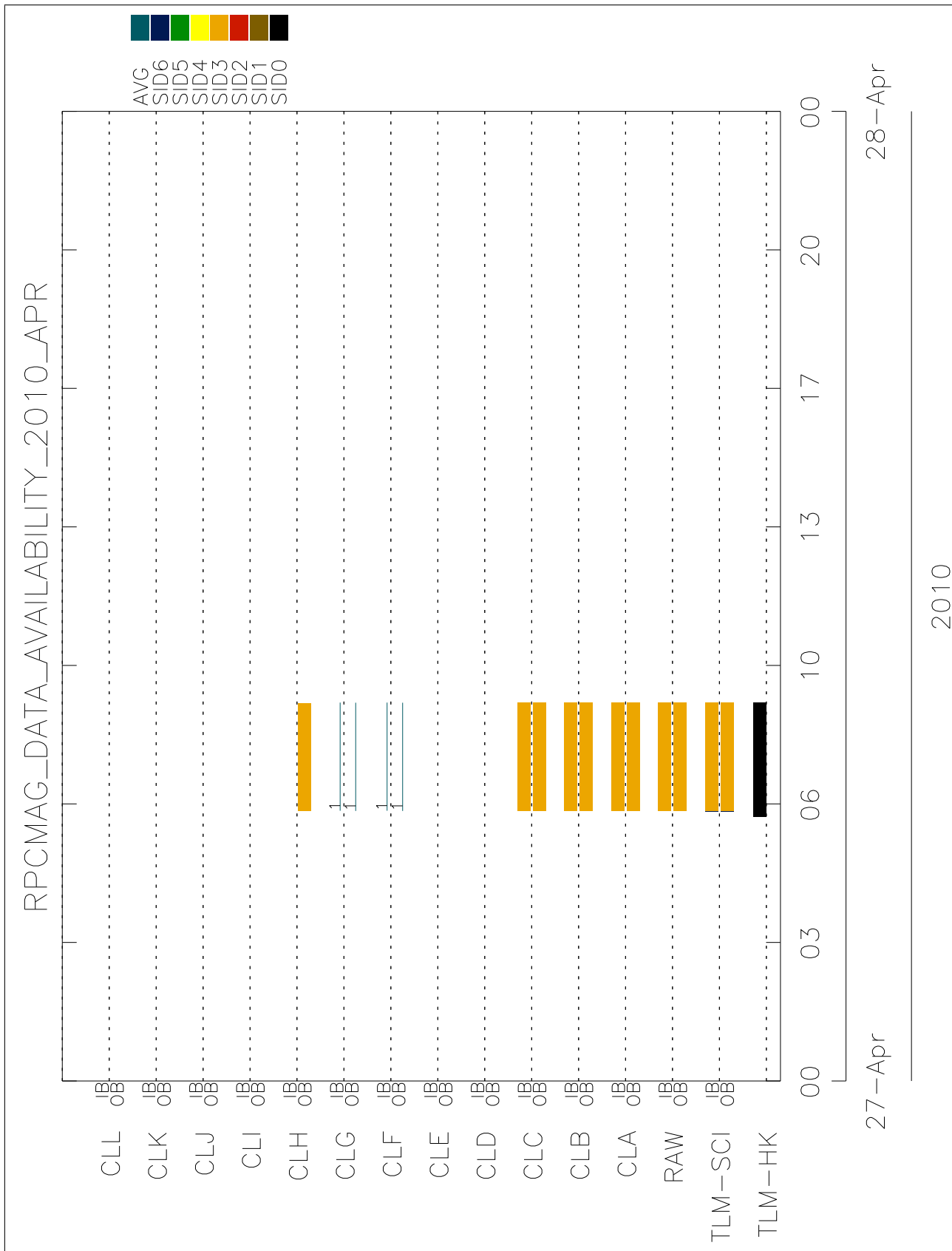


Figure 4: Overview April 2010

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DATE	LEVEL	AVERAGE [s]	SENSOR
2010-04-27	CLF	1	OB
2010-04-27	CLG	1	OB
2010-04-27	CLF	1	IB
2010-04-27	CLG	1	IB

