

## 5.2.7 CORRIMUDATAS

### Short Corrected IMU Measurements

The CORRIMUDATAS log is the short header version of the CORRIMUDATA log (page 127). This log contains the RAWIMU data corrected for gravity, the earth's rotation and estimated sensor errors. The values in this log are instantaneous, incremental values, in units of radians for the attitude rate and m/s for the accelerations. To get the full attitude rate and acceleration values, multiply the values in the CORRIMUDATAS log by the data rate of your IMU in Hz.

CORRIMUDATAS can be logged with the ONTIME trigger, up to the full data rate of the IMU.



Since the CORRIMUDATA values are instantaneous, if you log at a rate less than full data rate of the IMU, the corrected IMU data is received at the epoch closest to the requested time interval.

For asynchronous, full rate data, see *IMURATECORRIMUS* on page 132.

If the IMU is mounted with the z-axis pointed up, as marked on the enclosure, the SPAN computation frame is the same as the IMU enclosure frame. The x, y, and z axes referenced in this log are of the SPAN computational frame by default. For more information on how the SPAN computational frame relates to the IMU enclosure frame, see the relevant SPAN User Manual and the *SETIMUORIENTATION* command on page 73. If the *APPLYVEHICLEBODYROTATION* command has been enabled (see page 36), the values in CORRIMUDATAS log are in the vehicle frame, not the SPAN computation frame.

**Message ID:** 813

**Log Type:** Synch

**Recommended Input:**

```
log corrimudatasb ontime 0.01
```

**Example log:**

```
%CORRIMUDATASA,1581,341553.000;1581,341552.997500000,-0.000000690,-0.000001549,
0.000001654,0.000061579,-0.000012645,-0.000029988*770c6232
```

Field	Field Type	Description	Format	Binary Bytes	Binary Offset
1	Log Header	Log header	-	H	0
2	Week	GNSS week	Ulong	4	H+
3	Seconds	GNSS seconds from week start	Double	8	H+4
4	PitchRate	About x-axis rotation	Double	8	H+12
5	RollRate	About y-axis rotation	Double	8	H+20
6	YawRate	About z-axis rotation (right-handed)	Double	8	H+28
7	LateralAcc	INS Lateral Acceleration (along x-axis)	Double	8	H+36
8	LongitudinalAcc	INS Longitudinal Acceleration (along y-axis)	Double	8	H+44
9	VerticalAcc	INS Vertical Acceleration (along z-axis)	Double	8	H+52
10	xxxx	32-bit CRC	Hex	4	H+56
11	[CR][LF]	Sentence Terminator (ASCII only)	-	-	-