Odin SMR

Level 2

Algorithms Theoretical Basis Document

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Chalmers University of Technology
Department of Earth and Space Sciences

Contents

Introduction

This is the introduction

A test of references: (Rodgers, 2000)

Notations

Definition of common terms

Sun-synchronous orbit A Sun-synchronous orbit (sometimes called a heliosynchronous orbit) is a geocentric orbit which combines altitude and inclination in such a way that an object on that orbit will appear to orbit in the same position, from the perspective of the Sun, during its orbit around the Earth

PE says: Don't follow, please, give one example.

JR says: Not at all necessary, but may be a nice feature

Abbreviations

OEM Optimal Estimation Method

PE says: Please, set up a table structure and give one example.

JR says: I chose the "description" environment instead of a table

Chapter 1

Overview

1.1 Level 1 Processing

1.2 Level 2 Processing

Chapter 2

Level 2 Algorithm

2.1 Optimal Estimation Method

2.1.1 Physics of the Problem

Text describing the physics of this particular algorithm...

Input Data:

- Number of chickens
- Temperature in the coop
- Number of foxes present

Output Data:

- Omelett
- Chicken pie

2.1.2 Mathematical Description of the Algorithm

1. In order to verticaly displace the yellow of the egg into the frying pan the shell must be removed using a laser incident on the chicken (see Fig. 2.1) while in free fall inside a vacuum. The terminal speed due to the tastefield of the egg is approximated using

$$A = Bx \tag{2.1}$$

where

A	[m/s] is the terminal speed of the chicken
B	[-] is the number of eggs
x	[m^2/kg] the taste coefficient of the egg

2. Step 2
3. Step 3

Figure 2.1: The chicken in question

Bibliography

C.D. Rodgers. *Inverse methods for atmospheric sounding: Theory and practise.* World Scientific Publishing, 1 edition, 2000.