



Table of Contents

| Topic | Page Number | Description |
|----------------------------|-------------|---|
| Acknowledgements & Funding | 3 | Project Support |
| SDO Image & Details | 4 | Solar Dynamics Observatory Spacecraft |
| Introduction for Teachers | 5 | SDO Curriculum Overview |
| Introduction for Students | 10 | SDO Curriculum Overview |
| Module 1 | | What are the features of the Sun? |
| Activity: 1A | 15 | Structure of Earth's Star |
| Activity: 1B | 28 | Observing the Sun |
| Activity: 1C | 52 | Solar Research in Action: Pinhole Camera |
| Module 2 | | How and why do we study the Sun? |
| Activity: 2A | 64 | The Sun & EM Spectrum |
| Activity: 2B | 114 | Solar Activity & Magnetism |
| Activity: 2C | 161 | Solar Research in Action: Spectroscope |
| Module 3 | | How does the Sun affect the Earth? |
| Activity: 3A | 174 | Sun-Earth Interactions |
| Activity: 3B | 185 | Space Weather |
| Activity: 3C | 200 | Solar Research in Action: Magnetometer |
| Module 4 | | SDO Exploration Museum |
| Performance | 215 | 3-D Solar Exhibit Teacher Guide |
| Assessment | 223 | 3-D Solar Exhibit Student Guide |
| | 230 | Exploration Museum Exhibit Designs |
| Appendices | | |
| A | 282 | SDO Pre & Post Assessment |
| B | 297 | Rubrics |
| C | 301 | NGSS Standards Alignment |
| D | 305 | URL Web Address List |